FCC RF Test Report (WLAN 5GHz)

Report No.:	RF170724C44A
FCC ID:	RSE-589VACV2HP
Equipment Name:	Technicolor xDSL Gateway
Trade Name:	technicolor
Model Number:	TG589vac v2 HP
Gateway code:	DSLWBA589HP
Received Date:	Jul. 26, 2017
Test Date:	Aug. 21 ~ Sep. 14, 2017
Issued Date:	Nov. 03, 2017
Applicant:	Technicolor Delivery Technologies Belgium
Address:	Prins Boudewijnlaan 47 Edegem B-2650 Belgium
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C)
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

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Release Control Record

Issue No.	Description	Date Issued
RF170724C44A	Original release.	Nov. 03, 2017

1 Certificate of Conformity

Equipment Name:	Technicolor xDSL Gateway
Trade Name:	technicolor
Test Model:	TG589vac v2 HP
Gateway code:	DSLWBA589HP
Sample Status:	Product Unit
Applicant:	Technicolor Delivery Technologies Belgium
Test Date:	Aug. 21 ~ Sep. 14, 2017
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Nov. 03, 2017
Polly Chien / Specialist

Approved by : _____ , **Date:** Nov. 03, 2017
Ken Liu / Senior Manager

2 Summary of Test Results

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
3.9	15.203	Antenna Requirements	-	-	PASS
4.1	15.407(b)(6)	AC Power Conducted Emissions	Margin is -17.27dB at 2.20852MHz.	-	PASS
4.2	-	99% Occupied Bandwidth & 26dB Bandwidth	99% Occupied Bandwidth [MHz]: **5250-5350MHz:** 11a: 16.92 11ac(20M): 18.00 11ac(40M): 36.96 11ac(80M): 75.84 **5470-5725MHz:** 11a: 16.92 11ac(20M): 18.00 11ac(40M): 36.96 11ac(80M): 75.84 26dB Bandwidth [MHz]: **5250-5350MHz:** 11a: 20.71 11ac(20M): 21.09 11ac(40M): 45.70 11ac(80M): 83.33 **5470-5725MHz:** 11a: 20.59 11ac(20M): 21.29 11ac(40M): 43.37 11ac(80M): 83.41	-	-

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
4.3	15.407 (a)(1/2/3)	Maximum Conducted Output Power	**5250-5350MHz:** 11a: 1S3T CDD: 20.97 dBm **11ac (20M):** 3S3T SDM: 21.23 dBm 1S3T TxBF: 20.82 dBm 2S3T TxBF: 21.08 dBm **11ac (40M):** 3S3T SDM: 21.24 dBm 1S3T TxBF: 20.93 dBm 2S3T TxBF: 21.24 dBm **11ac (80M):** 3S3T SDM: 16.96 dBm 1S3T TxBF: 17.31 dBm 2S3T TxBF: 17.54 dBm **5470-5725MHz:** 11a: 1S3T CDD: 20.56 dBm **11ac (20M):** 3S3T SDM: 21.13 dBm 1S3T TxBF: 20.61 dBm 2S3T TxBF: 20.94 dBm **11ac (40M):** 3S3T SDM: 20.77 dBm 1S3T TxBF: 20.51 dBm 2S3T TxBF: 20.71 dBm **11ac (80M):** 3S3T SDM: 17.99 dBm 1S3T TxBF: 18.61 dBm 2S3T TxBF: 18.47 dBm	Power [dBm] 5250-5350MHz:24 5470-5725MHz:24	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
4.4	15.407 (a)(1/2/3)	Power Spectral Density	**5250-5350MHz:** dBm/MHz] 11a: 1S3T CDD: 8.56 **11ac (20M):** 3S3T SDM: 8.59 1S3T TxBF: 8.13 2S3T TxBF: 8.47 **11ac (40M):** 3S3T SDM: 6.05 1S3T TxBF: 5.65 2S3T TxBF: 6.11 **11ac (80M):** 3S3T SDM: -1.06 1S3T TxBF: -0.75 2S3T TxBF: -0.21 **5470-5725MHz:** [dBm/MHz] 11a: 1S3T CDD: 8.13 **11ac (20M):** 3S3T SDM: 8.59 1S3T TxBF: 7.27 2S3T TxBF: 8.24 **11ac (40M):** 3S3T SDM: 5.58 1S3T TxBF: 5.01 2S3T TxBF: 5.49 **11ac (80M):** 3S3T SDM: 0.19 1S3T TxBF: 0.44 2S3T TxBF: 0.48	5250-5350MHz: 11 [dBm/MHz] 5470-5725MHz: 11 [dBm/MHz]	PASS
4.5	15.407 (b)(1/2/3/4/6)	Radiated Emissions	Margin is -1.4dB at 43.58MHz.	-	PASS
		Band Edge	Margin is -0.1dB at 5774.00MHz	-	PASS
4.6	15.407(g)	Frequency Stability	-	Signal shall remain in-band	PASS

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.44 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	3.59 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.60 dB
	6GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 Basic Description of Equipment Under Test (WLAN 5GHz)

Items	Description			
Equipment Name	Technicolor xDSL Gateway			
Trade Name	technicolor			
Model Number	TG589vac v2 HP			
Product Code	DSLWBA589HP			
FCC ID	RSE-589VACV2HP			
Power Type	From power adapter			
Antenna	Refer section 3.10			
EUT Stage	■	Product Unit	☐	Pre-Sample
Operating Band and Conducted Output Power	**U-NII-1** 5150~5250MHz		☐	IEEE 802.11a:
			☐	IEEE 802.11ac (20MHz):
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
	U-NII-2A 5250~5350MHz		■	IEEE 802.11a: 1S3T CDD Mode: 20.97 dBm
			■	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 21.23 dBm 1S3T TxBF Mode: 20.82 dBm 2S3T TxBF Mode: 21.08 dBm
			■	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 21.24 dBm 1S3T TxBF Mode: 20.93 dBm 2S3T TxBF Mode: 21.24 dBm
			■	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 16.96 dBm 1S3T TxBF Mode: 17.31 dBm 2S3T TxBF Mode: 17.54 dBm
	U-NII-2C 5470~ 5725 MHz		■	IEEE 802.11a: 1S3T CDD Mode: 20.56 dBm
			■	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 21.13 dBm 1S3T TxBF Mode: 20.61 dBm 2S3T TxBF Mode: 20.94 dBm
			■	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 20.77 dBm 1S3T TxBF Mode: 20.51 dBm 2S3T TxBF Mode: 20.71 dBm
			■	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 17.99 dBm 1S3T TxBF Mode: 18.61 dBm 2S3T TxBF Mode: 18.47 dBm

	U-NII-3 5725~ 5850 MHz		☐	IEEE 802.11a:
			☐	IEEE 802.11ac (20MHz):
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
Product Type	For IEEE 802.11a: WLAN(3TX, 3RX) For IEEE 802.11n: WLAN(3TX, 3RX) For IEEE 802.11ac: WLAN (3TX, 3RX)			
Nominal Bandwidth	20MHz / 40MHz / 80MHz			
Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: (BPSK / QPSK / 16QAM / 64QAM) See the below table 802.11ac: (BPSK / QPSK / 16QAM / 64QAM/ 256QAM) See the below table			
Data Rate (Mbps)	11a mode : OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode : MCS0~MCS23 11n(40MHz) mode : MCS0~MCS23 11ac(20MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table 11ac(40MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table 11ac(80MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table			
TPC Function	■	With TPC	☐	Without TPC
Beam forming Function	■	With Beam forming	☐	Without Beam forming
DFS Operating Mode(s)	■	Master	☐	Slave without radar detection
DFS Function	■	5250~5350MHz		
	■	5470~5725MHz		
	☐	5600~5650MHz		
Off Channel CAC Feature Implemented	■	No		
Ad-hoc/Hotspot Mode	■	No Ad-hoc/Hotspot operation in 5150 - 5350 MHz and 5470 - 5725 MHz.		
User Access Restrictions	■	DFS controls (hardware or software) related to radar detection are NOT accessible to the user.		
I/O Ports	DSL Port x 1 LAN Port x 4 WAN Port x 1 USB 2.0 Port x 1			
Hardware Version	Beta			
Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19			

802.11n Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11n 20MHz Nss=1	MCS0	6.5	7.2	11n 40MHz Nss=1	MCS0	13.5	15
	MCS1	13	14.4		MCS1	27	30
	MCS2	19.5	21.7		MCS2	40.5	45
	MCS3	26	28.9		MCS3	54	60
	MCS4	39	43.3		MCS4	81	90
	MCS5	52	57.8		MCS5	108	120
	MCS6	58.5	65		MCS6	121.5	135
	MCS7	65	72.2		MCS7	135	150
11n 20MHz Nss=2	MCS8	13	14.4	11n 40MHz Nss=2	MCS8	27	30
	MCS9	26	28.9		MCS9	54	60
	MCS10	39	43.3		MCS10	81	90
	MCS11	52	57.8		MCS11	108	120
	MCS12	78	86.7		MCS12	162	180
	MCS13	104	115.6		MCS13	216	240
	MCS14	117	130		MCS14	243	270
	MCS15	130	144.4		MCS15	270	300
11n 20MHz Nss=3	MCS16	19.5	21.7	11n 40MHz Nss=3	MCS16	40.5	45
	MCS17	39	43.3		MCS17	81	90
	MCS18	58.5	65		MCS18	121.5	135
	MCS19	78	86.7		MCS19	162	180
	MCS20	117	130		MCS20	243	270
	MCS21	156	173.3		MCS21	324	360
	MCS22	175.5	195		MCS22	364.5	405
	MCS23	195	216.7		MCS23	405	450

802.11ac Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 1	MCS0	6.5	7.2	11ac 40MHz NSS = 1	MCS0	13.5	15.0	11ac 80MHz NSS = 1	MCS0	29.3	32.5
	MCS1	13.0	14.4		MCS1	27	30.0		MCS1	58.5	65.0
	MCS2	19.5	21.7		MCS2	40.5	45.0		MCS2	87.8	97.5
	MCS3	26	28.9		MCS3	54	60.0		MCS3	117.0	130.0
	MCS4	39	43.3		MCS4	81	90.0		MCS4	175.5	195.0
	MCS5	52	57.8		MCS5	108	120.0		MCS5	234.0	260.0
	MCS6	58.5	65		MCS6	121.5	135.0		MCS6	263.3	292.5
	MCS7	65	72.2		MCS7	135.0	150.0		MCS7	292.5	325.0
	MCS8	78	86.7		MCS8	162.0	180.0		MCS8	351.0	390.0
	MCS9	Note	Note		MCS9	180.0	200.0		MCS9	390.0	433.3
NOTE: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.											

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 2	MCS0	13.0	14.4	11ac 40MHz NSS = 2	MCS0	27.0	30.0	11ac 80MHz NSS = 2	MCS0	58.5	65.0
	MCS1	26.0	28.9		MCS1	54.0	60.0		MCS1	117.0	130.0
	MCS2	39.0	43.3		MCS2	81.0	90.0		MCS2	175.5	195.0
	MCS3	52.0	57.8		MCS3	108.-0	120.0		MCS3	234.0	260.0
	MCS4	78.0	86.7		MCS4	162.0	180.0		MCS4	351.0	390.0
	MCS5	104.0	115.6		MCS5	216.0	240.0		MCS5	468.0	520.0
	MCS6	117.0	130.0		MCS6	243.0	270.0		MCS6	526.5	585.0
	MCS7	130.0	144.4		MCS7	270.0	300.0		MCS7	585.0	650.0
	MCS8	156.0	173.3		MCS8	324.0	360.0		MCS8	702.0	780.0
	MCS9	13.0	14.4		MCS9	360.0	400.0		MCS9	780.0	866.7

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 3	MCS0	19.5	21.7	11ac 40MHz NSS = 3	MCS0	40.5	45.0	11ac 80MHz NSS = 3	MCS0	87.8	97.5
	MCS1	39.0	43.3		MCS1	81.0	90.0		MCS1	175.5	195.0
	MCS2	58.5	65.0		MCS2	121.5	135.0		MCS2	263.3	292.5
	MCS3	78.0	86.7		MCS3	162.0	180.0		MCS3	351.0	190.0
	MCS4	117.0	130		MCS4	243.0	270.0		MCS4	526.5	585.0
	MCS5	156.0	173.3		MCS5	324.0	360.0		MCS5	702.0	780.0
	MCS6	175.5	195.0		MCS6	364.5	405.0		MCS6	Note	Note
	MCS7	195.0	216.7		MCS7	405.0	450.0		MCS7	877.5	975.0
	MCS8	234.0	260.0		MCS8	486.0	540.0		MCS8	1053.0	1170.0
	MCS9	260.0	228.9		MCS9	540.0	600.0		MCS9	1170.0	1300.0
NOTE: MCS 6 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.											

3.2 Accessories

Power supply:

Brand	HONOR
Model	ADS-30FT-12 12027EPCU
P/N	DSL37756990
Input Power	100-240Vac, 50/60Hz, 0.7A
Output Power	12Vdc, 2.25A
Power Line	1.5m power cable without core attached on adapter

3.3 Feature of Equipment Under Test

Please refer to user manual.

3.4 Information Provided by the Manufacturer

Interface Availability

Interface / Model	DC Power	ADSL: (ADSL2+) VDSL2 17a: (B8-8, B7-9)	Ethernet LAN 1000Mbps	Ethernet WAN 1000Mbps	USB 2.0	WLAN IEEE 802.11n (2.4GHz)	WLAN IEEE 802.11ac (5GHz)
TG589vac v2 HP	12Vdc, 2.25A	●Annex A	●(4 port)	●(1 port)	●(1 port)	●	●

●: Equipped
○: Not Equipped

3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v01r04, 05/02/2017
KDB 662911 D01 Multiple Transmitter Output v02r01, 10/31/2013
KDB 644545 D03 Guidance for 802 11ac New Rules v01, 08/14/2014
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

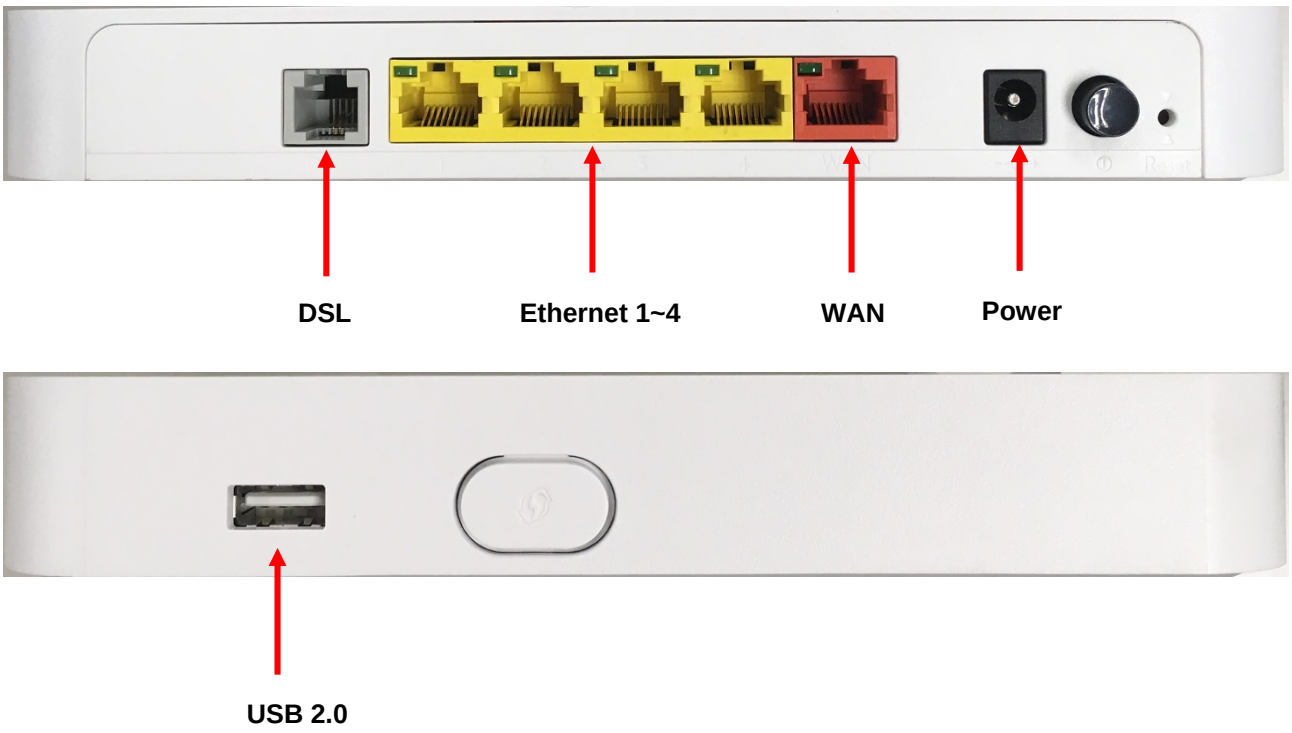
Note: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.6 Cabling Attached to the Equipment

Cable and Interconnection

Interface	Cable type	Cable length delivered with the modem	"Real life" Cable length that can be attached to this type of interface	Cable length to be used for testing	Internal/ external connection
DSL	UTP Cat 3	2 meter flat cable	> 10 meter	10 meter	External
ETH1, WAN	UTP Cat 5	2 meter	> 10 meter	Two 10 meter cables;	Internal
USB 2.0	STP	NA	NA	NA	Internal
AC power	UTP	1.5 meter	>10 meter	1.5 meter	External

3.7 Panel Drawing



3.8 Transmit Operating Mode

For 5250~5350MHz & 5470~5725MHz

Transmit Operating Mode							Transmit Multiple Antennas					
☐	Operating mode 1 (single antenna)						☐	1TX				
■	Operating mode 2 (multiple antenna, no beam forming)						☐	2TX	■	3TX	☐	4TX
■	Operating mode 3 (multiple antenna, with beam forming)						☐	2TX	■	3TX	☐	4TX
■	802.11a	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		
■	802.11n (20MHz)	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		
■	802.11n (40MHz)	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		
■	802.11ac (20MHz)	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		
■	802.11ac (40MHz)	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		
■	802.11ac (80MHz)	Operating mode	☐	1T	☐	2T	■	3TX	☐	4TX		

Note:
For IEEE802.11a, 6Mbps~54Mbps: 1 Stream 3TX
For IEEE802.11n 20MHz/40MHz, MCS0~MCS7: 1 Stream 3TX; MCS8~MCS15: 2 Stream 3TX; MCS16~MCS23: 3 Stream 3TX
For IEEE802.11ac 20MHz, Nss1MCS0~Nss1MCS8: 1 Stream 3TX; Nss2MCS0~Nss2MCS9: 2 Stream 3TX. Nss3MCS0~Nss3MCS9: 3 Stream 3TX
For IEEE802.11ac 40MHz/80MHz, Nss1MCS0~Nss1MCS9: 1 Stream 3TX; Nss2MCS0~Nss2MCS9: 2 Stream 3TX; Nss3MCS0~Nss3MCS9: 3 Stream 3TX

3.9 Antenna Requirements

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

3.10 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	WHA YU	C107-511288-A	PCB Antenna	I-Pex
2	WHA YU	C107-511323-A	PCB Antenna	I-Pex
3	WHA YU	C107-511324-A	PCB Antenna	I-Pex

Antenna & Bandwidth

Antenna	1st (TX)			2nd (TX)			3rd (TX)		
Bandwidth Mode	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz
802.11a	V	X	X	V	X	X	V	X	X
802.11n	V	V	X	V	V	X	V	V	X
802.11ac	V	V	V	V	V	V	V	V	V

Frequency	Maximum Gain (dBi) for CDD mode					
	CDD mode (1 Stream 3 TX) for Power Gain			CDD mode (1 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	4.15	-	-	6.51	-	-
5190MHz	-	4.08	-	-	6.13	-
5200MHz	4.31	-	-	6.33	-	-
5210MHz	-	-	4.28	-	-	7.02
5230MHz	-	4.35	-	-	7.13	-
5240MHz	4.06	-	-	6.28	-	-
5260MHz	4.15	-	-	6.54	-	-
5270MHz	-	4.26	-	-	6.38	-
5290MHz	-	-	4.22	-	-	6.92
5300MHz	4.40	-	-	6.64	-	-
5310MHz	-	4.22	-	-	6.57	-
5320MHz	4.30	-	-	6.45	-	-
5500MHz	4.23	-	-	6.73	-	-
5510MHz	-	4.28	-	-	6.97	-
5530MHz	-	-	3.95	-	-	7.07
5550MHz	-	4.06	-	-	7.25	-
5580MHz	3.96	-	-	6.87	-	-
5670MHz	-	4.38	-	-	6.50	-
5700MHz	4.20	-	-	7.30	-	-
5745MHz	4.19	-	-	7.03	-	-
5755MHz	-	3.78	-	-	7.17	-
5775MHz	-	-	4.16	-	-	7.26
5785MHz	4.39	-	-	7.53	-	-
5795MHz	-	4.25	-	-	7.64	-
5825MHz	4.12	-	-	7.07	-	-

Note:
1. "TG589vac v2 HP_FCC General antenna table_20160112.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for SDM mode					
	SDM mode (3 Stream 3 TX) for Power Gain			SDM mode (3 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	1.77	-	-	1.77	-	-
5190MHz	-	1.75	-	-	1.75	-
5200MHz	1.94	-	-	1.94	-	-
5210MHz	-	-	2.36	-	-	2.36
5230MHz	-	2.48	-	-	2.48	-
5240MHz	1.56	-	-	1.56	-	-
5260MHz	1.95	-	-	1.95	-	-
5270MHz	-	1.64	-	-	1.64	-
5290MHz	-	-	2.34	-	-	2.34
5300MHz	2.10	-	-	2.10	-	-
5310MHz	-	1.92	-	-	1.92	-
5320MHz	1.91	-	-	1.91	-	-
5500MHz	2.00	-	-	2.00	-	-
5510MHz	-	2.28	-	-	2.28	-
5530MHz	-	-	2.33	-	-	2.33
5550MHz	-	2.49	-	-	2.49	-
5580MHz	2.14	-	-	2.14	-	-
5670MHz	-	1.74	-	-	1.74	-
5700MHz	2.57	-	-	2.57	-	-
5745MHz	2.40	-	-	2.40	-	-
5755MHz	-	2.43	-	-	2.43	-
5775MHz	-	-	2.53	-	-	2.53
5785MHz	2.80	-	-	2.80	-	-
5795MHz	-	2.94	-	-	2.94	-
5825MHz	2.31	-	-	2.31	-	-

Note:
1. “TG589vac v2 HP_FCC General antenna table_20160112.xls” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode					
	TXBF mode (1 Stream 3 TX) for Power Gain			TXBF mode (1 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	6.51	-	-	6.51	-	-
5190MHz	-	6.13	-	-	6.13	-
5200MHz	6.33	-	-	6.33	-	-
5210MHz	-	-	7.02	-	-	7.02
5230MHz	-	7.13	-	-	7.13	-
5240MHz	6.28	-	-	6.28	-	-
5260MHz	6.54	-	-	6.54	-	-
5270MHz	-	6.38	-	-	6.38	-
5290MHz	-	-	6.92	-	-	6.92
5300MHz	6.64	-	-	6.64	-	-
5310MHz	-	6.57	-	-	6.57	-
5320MHz	6.45	-	-	6.45	-	-
5500MHz	6.73	-	-	6.73	-	-
5510MHz	-	6.97	-	-	6.97	-
5530MHz	-	-	7.07	-	-	7.07
5550MHz	-	7.25	-	-	7.25	-
5580MHz	6.87	-	-	6.87	-	-
5670MHz	-	6.50	-	-	6.50	-
5700MHz	7.30	-	-	7.30	-	-
5745MHz	7.03	-	-	7.03	-	-
5755MHz	-	7.17	-	-	7.17	-
5775MHz	-	-	7.26	-	-	7.26
5785MHz	7.53	-	-	7.53	-	-
5795MHz	-	7.64	-	-	7.64	-
5825MHz	7.07	-	-	7.07	-	-

Note:
1. “TG589vac v2 HP_FCC General antenna table_20160112.xls” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode					
	TXBF mode (2 Stream 3 TX) for Power Gain			TXBF mode (2 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	4.62	-	-	4.62	-	-
5190MHz	-	4.58	-	-	4.58	-
5200MHz	4.80	-	-	4.80	-	-
5210MHz	-	-	4.92	-	-	4.92
5230MHz	-	5.07	-	-	5.07	-
5240MHz	4.34	-	-	4.34	-	-
5260MHz	4.59	-	-	4.59	-	-
5270MHz	-	4.50	-	-	4.50	-
5290MHz	-	-	5.00	-	-	5.00
5300MHz	5.01	-	-	5.01	-	-
5310MHz	-	4.84	-	-	4.84	-
5320MHz	4.60	-	-	4.60	-	-
5500MHz	4.38	-	-	4.38	-	-
5510MHz	-	4.95	-	-	4.95	-
5530MHz	-	-	4.69	-	-	4.69
5550MHz	-	4.77	-	-	4.77	-
5580MHz	4.52	-	-	4.52	-	-
5670MHz	-	4.38	-	-	4.38	-
5700MHz	5.01	-	-	5.01	-	-
5745MHz	4.98	-	-	4.98	-	-
5755MHz	-	4.88	-	-	4.88	-
5775MHz	-	-	5.02	-	-	5.02
5785MHz	5.24	-	-	5.24	-	-
5795MHz	-	5.42	-	-	5.42	-
5825MHz	4.75	-	-	4.75	-	-

Note:
1. “TG589vac v2 HP_FCC General antenna table_20160112.xls” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

12 channels are provided for 802.11a/ 802.11n (20MHz) / 802.11ac (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	52	5260 MHz	60	5300 MHz
	56	5280 MHz	64	5320 MHz
5470~5725 MHz U-NII-2C	100	5500 MHz	116	5580 MHz
	104	5520 MHz	132	5660 MHz
	108	5540 MHz	136	5680 MHz
	112	5560 MHz	140	5700 MHz

5 channels are provided for 802.11n (40MHz) / 802.11ac (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	54	5270 MHz	62	5310 MHz
5470~5725 MHz U-NII-2C	102	5510 MHz	134	5670 MHz
	110	5550 MHz	-	-

2 channels are provided for 802.11ac (80MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	58	5290 MHz	-	-
5470~5725 MHz U-NII-2C	106	5530 MHz	-	-

3.12 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Note	Channel	Data Rate	Antenna
AC Power Conducted Emissions	11ac(20MHz)	OFDM/BPSK	140	-	1+2+3
Emission Bandwidth	11a	OFDM/BPSK	52/60/64 100/116/140	6Mbps (CDD)	1+2+3
	11ac(20MHz)		52/60/64 100/116/140	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		54/62 102/110/134	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		58 106	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Maximum Peak Output Power Maximum Average Output Power	11a	OFDM/BPSK	52/60/64 100/116/140	6Mbps (CDD)	1+2+3
	11ac(20MHz)		52/60/64 100/116/140	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		54/62 102/110/134	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		58 106	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3

Test Items	Mode	Note	Channel	Data Rate	Antenna
Power Spectral Density	11a	OFDM/BPSK	52/60/64 100/116/140	6Mbps (CDD)	1+2+3
	11ac(20MHz)		52/60/64 100/116/140	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		54/62 102/110/134	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		58 106	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Unwanted Emission in the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	52/60/64 100/116/140	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		54/62 102/110/134	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		58 106	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3

Test Items	Mode	Note	Channel	Data Rate	Antenna
Unwanted Emission out of the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	52/60/64 100/116/140	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		54/62 102/110/134	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		58 106	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Radiated Emissions Below 1GHz(Radiated)	11ac(20MHz)	OFDM/BPSK	140	-	1+2+3
Frequency Stability	20MHz	Un-modulation	52/60/64 100/116/140	-	1, 2, 3
	40MHz		54/62 102/110/134		1, 2, 3
	80MHz		58 106	-	1, 2, 3

Note:

1. The device with multiple operating mode, measurements on the middle channel were tested to determine the worst case mode. (Each modulation family were tested in band edge, spurious emission and in band PSD after investigate worst case mode)
2. Base on txcore command, the 11a default mode is 1S3T CDD, the 802.11ac 20MHz/40MHz/80MHz default mode are 1S3T TxBF, 2S3T TxBF, 3S3T SDM; the CDD mode covered by the TxBF mode with the same setting.
   wl -i wl1 txcore
   txcore enabled bitmap (Nsts {4..1}) 0x00 0x07 0x07 0x07
   txcore mask OFDM 0x07 CCK 0x07

   All test modes are tested in accordance to txcore
3. Base on same power setting with 802.11ac mode, the 802.11a mode were only tested the “Maximum Conducted Output Power”, “Power Spectral Density” and “Bandwidth”.
4. Radiated emission test, the EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-plane.

3.13 Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

The Power Setting Parameter					
Test Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**P_H (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11a (CDD)	1 stream 3TX	5260	19.99	Default(15)	6Mbps
802.11a (CDD)	1 stream 3TX	5300	20.97	Default(16)	6Mbps
802.11a (CDD)	1 stream 3TX	5320	20.97	Default(16)	6Mbps
802.11a (CDD)	1 stream 3TX	5500	20.56	Default(16)	6Mbps
802.11a (CDD)	1 stream 3TX	5580	20.29	Default(15.5)	6Mbps
802.11a (CDD)	1 stream 3TX	5700	20.28	Default(15.5)	6Mbps
802.11ac 20MHz (SDM)	3 stream 3TX	5260	21.23	Default(16.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5300	21.18	Default(16.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5320	20.78	Default(16)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5500	20.82	Default(16.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5580	20.54	Default(16)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5700	21.13	Default(16.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5260	19.79	Default(15)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5300	20.78	Default(16)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5320	20.82	Default(16)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5500	20.61	Default(16)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5580	20.18	Default(15.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5700	20.20	Default(15.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	2 stream 3TX	5260	21.06	Default(16.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5300	21.08	Default(16.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5320	21.07	Default(16.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5500	20.94	Default(16.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5580	19.68	Default(15)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5700	20.54	Default(16)	Nss2MCS0 (13)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	P_H (dBm)	Power Setting	Data Rate / MCS
802.11ac 40MHz (SDM)	3 stream 3TX	5270	21.24	Default(17.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5310	19.46	Default(15.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5510	19.62	Default(16)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5550	20.61	Default(17)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5670	20.77	Default(17)	Nss3MCS0 (40.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5270	20.93	Default(17)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5310	17.77	Default(13.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5510	19.20	Default(15.25)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5550	19.65	Default(15.75)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5670	20.51	Default(16.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	2 stream 3TX	5270	21.24	Default(17.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5310	19.47	Default(15.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5510	19.21	Default(15.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5550	20.70	Default(17)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5670	20.71	Default(17)	Nss2MCS0 (27)
802.11ac 80MHz (SDM)	3 stream 3TX	5290	16.96	Default(12.5)	Nss3MCS0 (87.8)
802.11ac 80MHz (SDM)	3 stream 3TX	5530	17.99	Default(14)	Nss3MCS0 (87.8)
802.11ac 80MHz (TxBF)	1 stream 3TX	5290	17.31	Default(13)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 3TX	5530	18.61	Default(14.5)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	2 stream 3TX	5290	17.54	Default(13.5)	Nss2MCS0 (58.5)
802.11ac 80MHz (TxBF)	2 stream 3TX	5530	18.47	Default(14.5)	Nss2MCS0 (58.5)

The Power Setting Parameter					
Test Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**P_L (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11a (CDD)	1 stream 3TX	5260	13.30	Default(8)	6Mbps
802.11a (CDD)	1 stream 3TX	5300	14.49	Default(9)	6Mbps
802.11a (CDD)	1 stream 3TX	5320	14.62	Default(9)	6Mbps
802.11a (CDD)	1 stream 3TX	5500	14.36	Default(9)	6Mbps
802.11a (CDD)	1 stream 3TX	5580	13.82	Default(8.5)	6Mbps
802.11a (CDD)	1 stream 3TX	5700	13.71	Default(8.5)	6Mbps
802.11ac 20MHz (SDM)	3 stream 3TX	5260	15.09	Default(9.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5300	15.11	Default(9.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5320	14.66	Default(9)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5500	14.78	Default(9.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5580	14.41	Default(9)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5700	15.04	Default(9.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5260	13.58	Default(8)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5300	14.75	Default(9)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5320	14.81	Default(9)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5500	14.41	Default(9)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5580	13.93	Default(8.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5700	13.92	Default(8.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	2 stream 3TX	5260	15.02	Default(9.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5300	14.88	Default(9.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5320	15.06	Default(9.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5500	14.78	Default(9.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5580	13.22	Default(8)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5700	14.50	Default(9)	Nss2MCS0 (13)

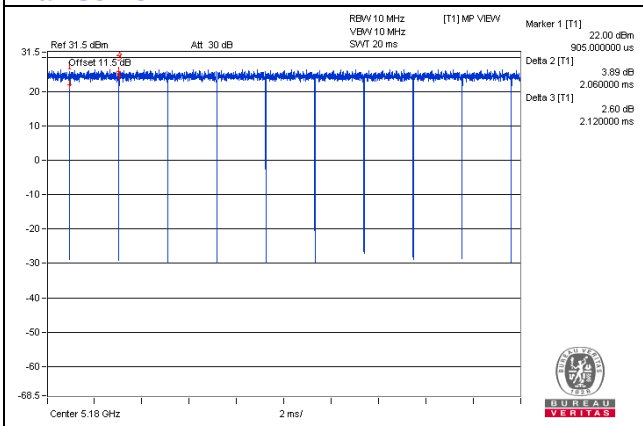
The Power Setting Parameter					
Test Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**P_L (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11ac 40MHz (SDM)	3 stream 3TX	5270	15.19	Default(10.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5310	13.42	Default(8.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5510	13.57	Default(9)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5550	14.58	Default(10)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5670	14.71	Default(10)	Nss3MCS0 (40.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5270	14.84	Default(10)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5310	10.80	Default(6.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5510	12.61	Default(8.25)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5550	13.33	Default(8.75)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5670	14.40	Default(9.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	2 stream 3TX	5270	15.15	Default(10.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5310	13.30	Default(8.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5510	12.99	Default(8.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5550	14.68	Default(10)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5670	14.66	Default(10)	Nss2MCS0 (27)
802.11ac 80MHz (SDM)	3 stream 3TX	5290	10.81	Default(5.5)	Nss3MCS0 (87.8)
802.11ac 80MHz (SDM)	3 stream 3TX	5530	11.95	Default(7)	Nss3MCS0 (87.8)
802.11ac 80MHz (TxBF)	1 stream 3TX	5290	10.37	Default(6)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 3TX	5530	12.59	Default(7.5)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	2 stream 3TX	5290	11.20	Default(6.5)	Nss2MCS0 (58.5)
802.11ac 80MHz (TxBF)	2 stream 3TX	5530	12.44	Default(7.5)	Nss2MCS0 (58.5)

3.14 On Time and Duty Cycle

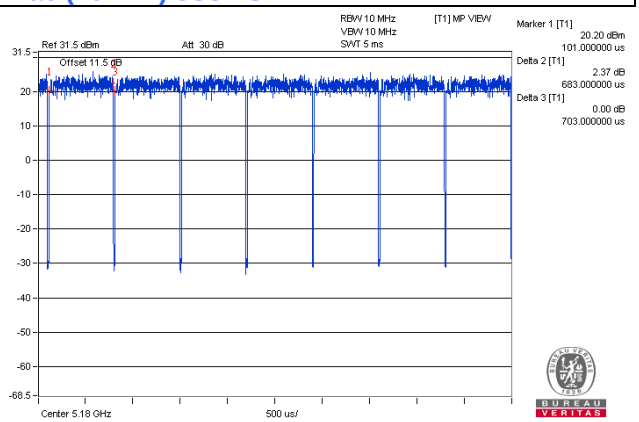
Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
11a 1S3T CDD	2.060	2.120	97.2	0.12	1
11ac (20MHz) 3S3T SDM	0.683	0.703	97.2	0.13	3
11ac (20MHz) 1S3T TxBF	1.925	1.945	99.0	-	-
11ac (20MHz) 2S3T TxBF	0.986	1.006	98.01	-	-
11ac (40MHz) 3S3T SDM	0.355	0.375	94.7	0.24	3
11ac (40MHz) 1S3T TxBF	0.947	0.968	97.8	0.10	3
11ac (40MHz) 2S3T TxBF	0.497	0.518	95.9	0.18	3
11ac (80MHz) 3S3T SDM	0.191	0.218	87.6	0.57	10
11ac (80MHz) 1S3T TxBF	0.458	0.489	93.7	0.28	3
11ac (80MHz) 2S3T TxBF	0.255	0.276	92.4	0.34	10

Note:
1. Power measurement using sweep trigger and gating of the power meter, duty factor is not required.
2. Duty cycle > 98%, duty factor is not required.

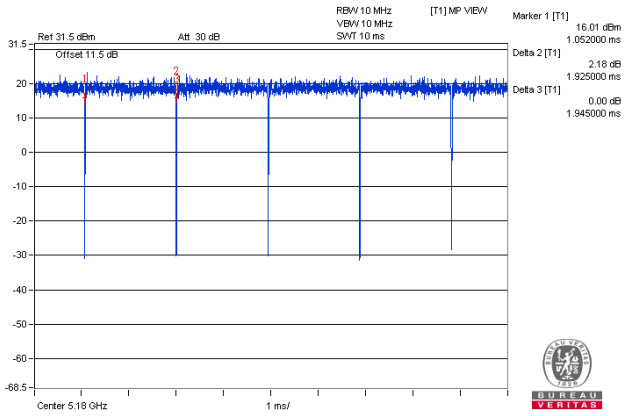
11a 1S3T CDD



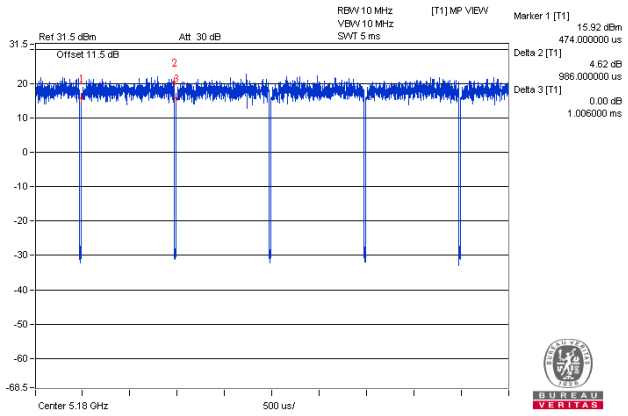
11ac (20MHz) 3S3T SDM



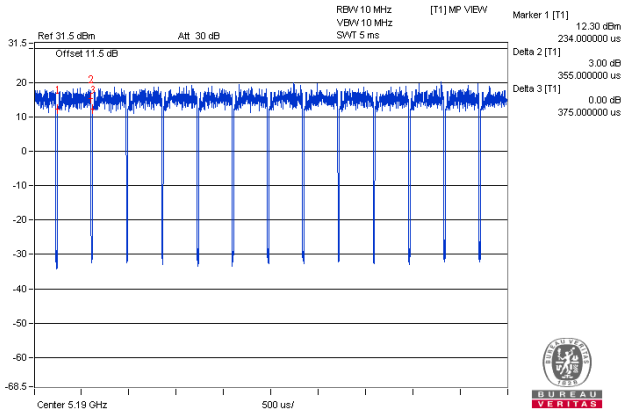
11ac (20MHz) 1S3T TxBF



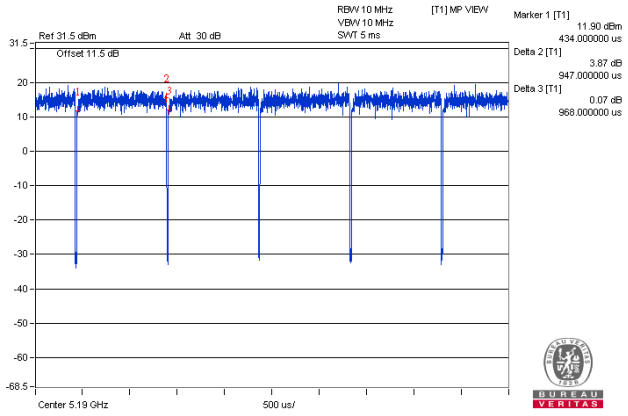
11ac (20MHz) 2S3T TxBF



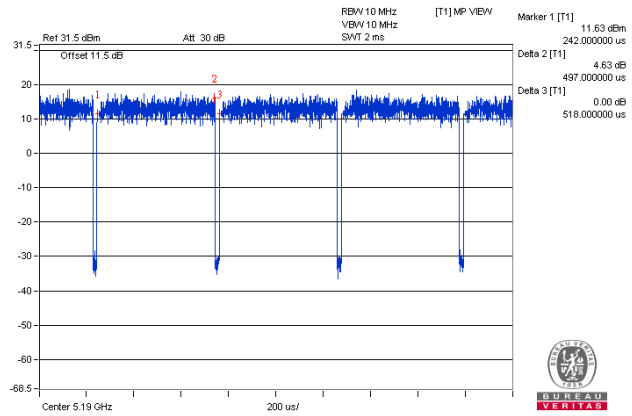
11ac (40MHz) 3S3T SDM



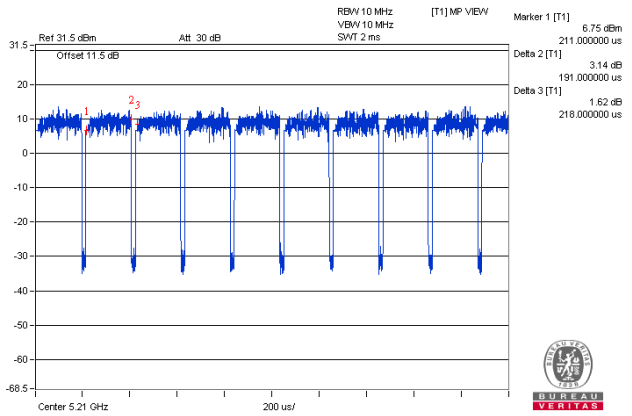
11ac (40MHz) 1S3T TxBF



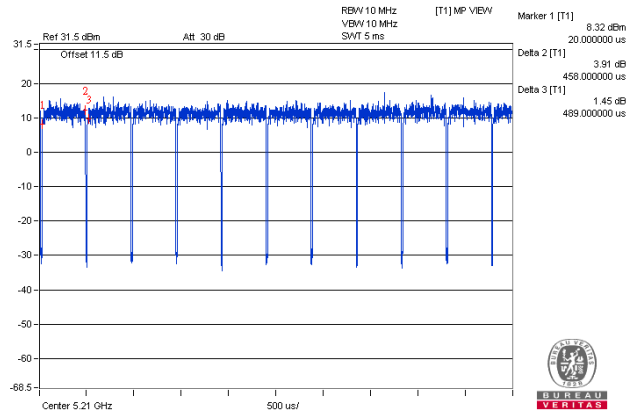
11ac (40MHz) 2S3T TxBF



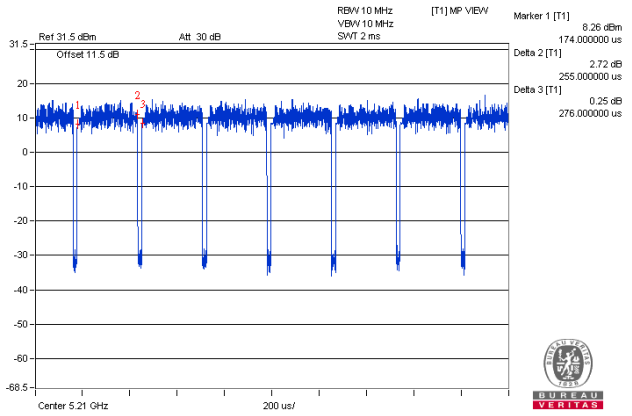
11ac (80MHz) 3S3T SDM



11ac (80MHz) 1S3T TxBF



11ac (80MHz) 2S3T TxBF



3.15 Testing Location Information

Test Site Location					
Address	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)				
TEL	886-3-3183232				
FAX	886-3-3270892				
Test Site No.	**Site Category**	**Location**	**FCC Reg. No.**	**IC Reg. No.**	**VCCI Reg. No**
Conduction 2	Conduction	Hwa Ya	-	-	C-2047
Chamber 4	966 Chamber	Hwa Ya	215374	7450F-9	-
Oven	Oven	Hwa Ya	-	-	-

3.16 EUT Diagram and Support Equipment

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

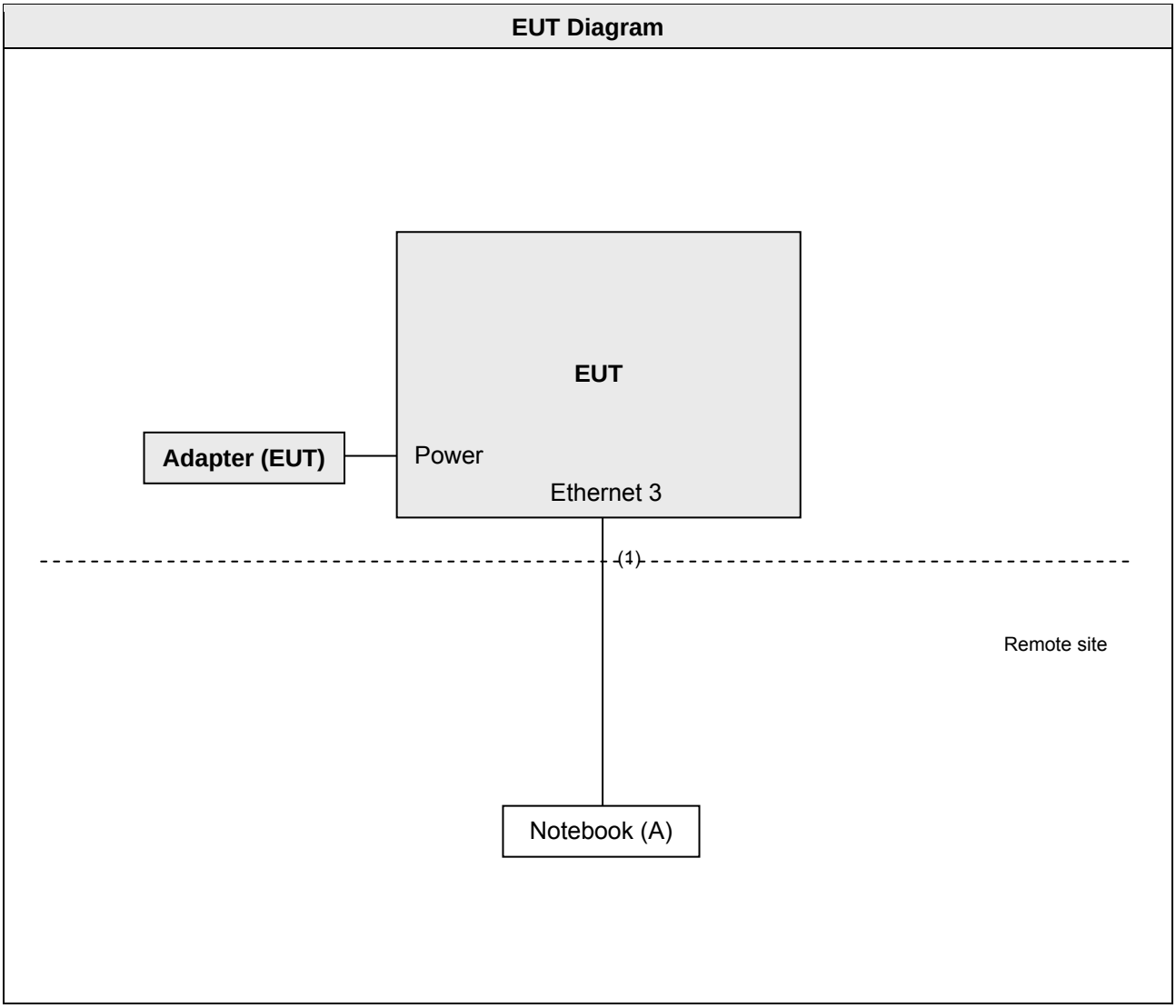
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	D531	CN-0XM006-48643-81U-2973	FCC DoC Approved	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45 cable	1	1.8	N	0	Provided by Lab

EUT Diagram



4 Test Types and Results

4.1 AC Power Conducted Emissions Measurement

4.1.1 Limit

For this product which is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

4.1.2 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver

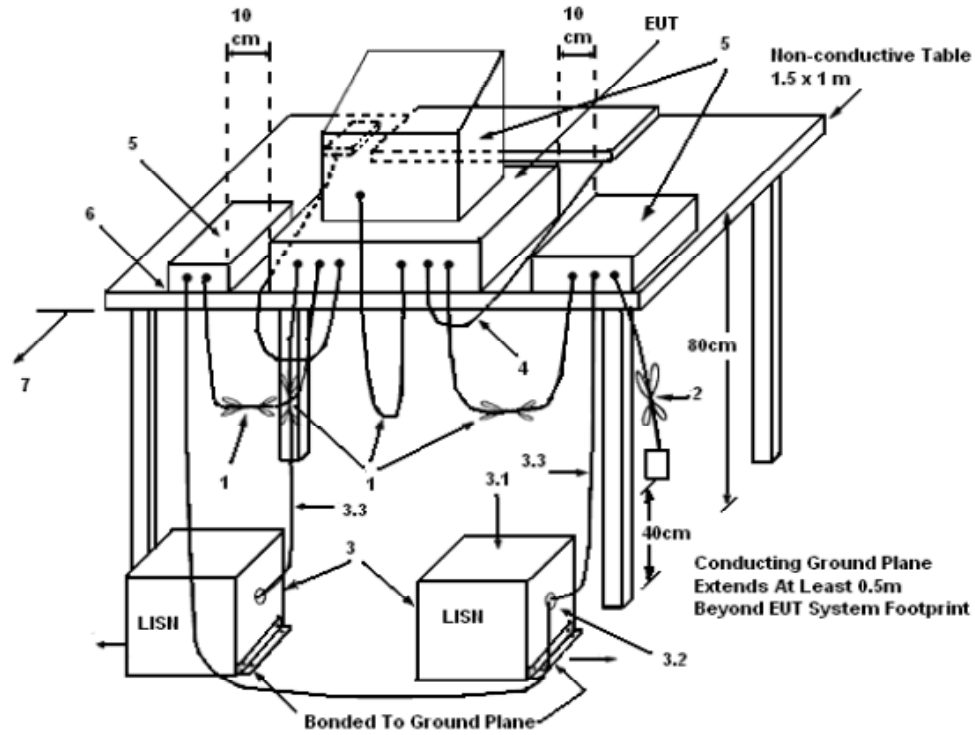
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.1.3 Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

4.1.4 Test Setup Layout

Test Setup



1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
2. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3. EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference ground plane.
4. All other equipment powered from additional LISN(s).
5. Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.
8. Non-EUT components of EUT system being tested.
9. Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.
10. Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

4.1.5 Test Deviation

There are no deviations with the original standard.

4.1.6 EUT Operating during Test

The EUT was placed on the test table and programmed in normal function.

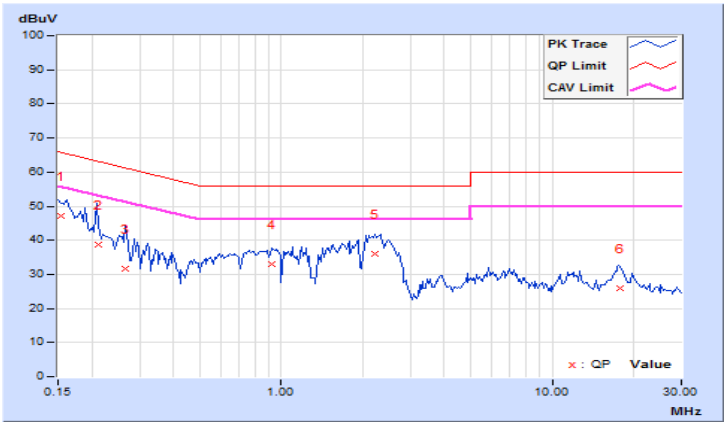
4.1.7 Test Results of AC Power Conducted Emissions

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 75%RH
Tested by	Chris Lin		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15385	10.39	36.85	22.05	47.24	32.44	65.79	55.79	-18.55	-23.35
2	0.21153	10.42	28.23	11.77	38.65	22.19	63.15	53.15	-24.50	-30.96
3	0.26648	10.42	21.39	11.78	31.81	22.20	61.23	51.23	-29.42	-29.03
4	0.91853	10.47	22.41	13.04	32.88	23.51	56.00	46.00	-23.12	-22.49
5	2.21457	10.55	25.42	16.87	35.97	27.42	56.00	46.00	-20.03	-18.58
6	17.91650	10.85	15.07	11.07	25.92	21.92	60.00	50.00	-34.08	-28.08

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

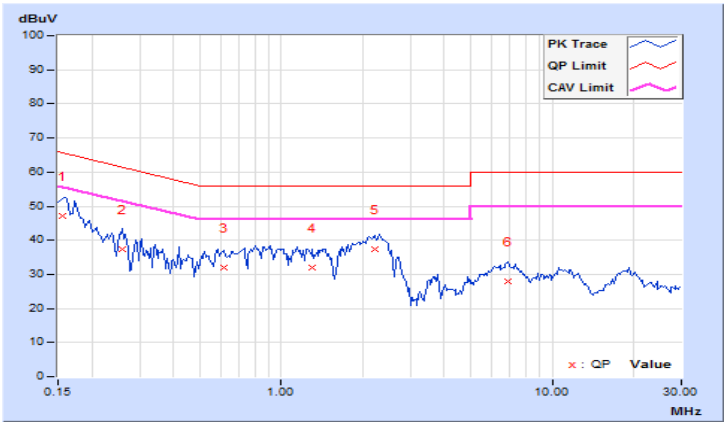


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 75%RH
Tested by	Chris Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15658	10.42	36.57	22.70	46.99	33.12	65.64	55.64	-18.65	-22.52
2	0.25925	10.36	26.87	16.57	37.23	26.93	61.46	51.46	-24.23	-24.53
3	0.61111	10.42	21.42	13.85	31.84	24.27	56.00	46.00	-24.16	-21.73
4	1.30869	10.50	21.53	14.89	32.03	25.39	56.00	46.00	-23.97	-20.61
5	**2.20852**	**10.49**	**26.75**	**18.24**	**37.24**	**28.73**	**56.00**	**46.00**	**-18.76**	**-17.27**
6	6.88756	10.63	17.17	12.56	27.80	23.19	60.00	50.00	-32.20	-26.81

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.2 Occupied Bandwidth and 26dB Bandwidth Measurement

4.2.1 Measuring Instruments and Setting

The following table is the setting of the Spectrum Analyzer.

99% Occupied Bandwidth	
Spectrum Parameter	**Setting**
Attenuation	Auto
Span Frequency	1.5 times to 5.0 times the OBW
RBW	1% to 5% of the anticipated emission bandwidth
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max hold
Sweep Time	Auto
26dB Bandwidth	
Spectrum Parameter	**Setting**
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth.
VBW	> RBW
Detector	Peak
Trace	Max hold
Sweep Time	Auto

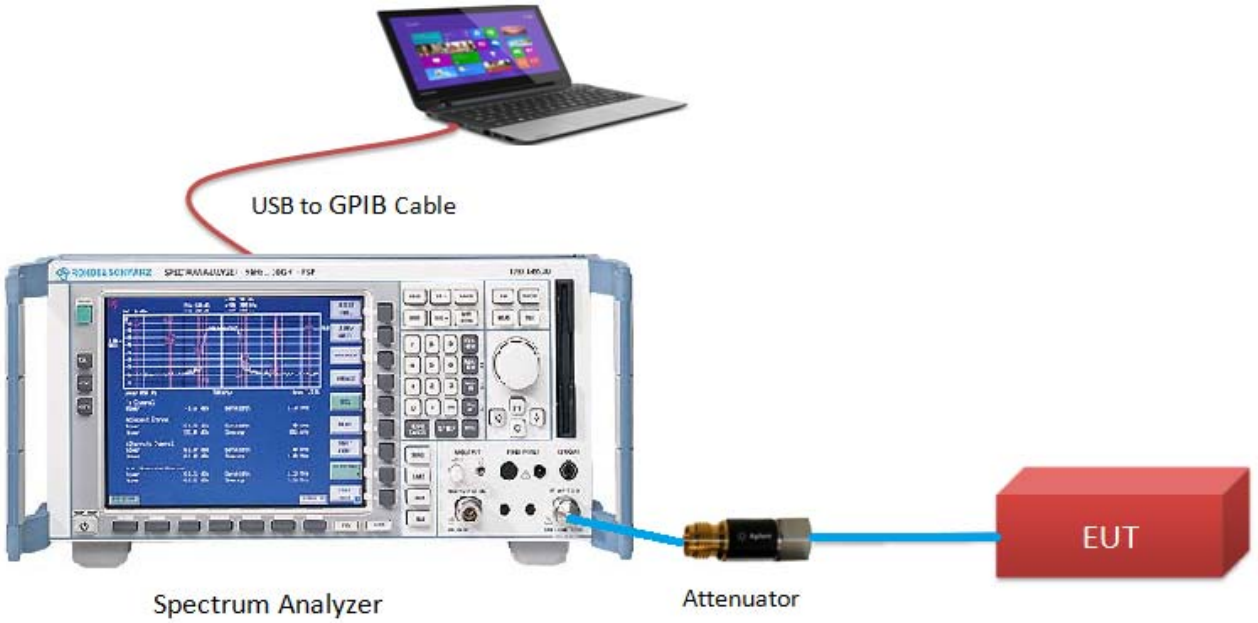
4.2.2 Test Procedure

1 The transmitter output (antenna port) was connected to the spectrum analyzer.

2 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v01r04, in section “Emission bandwidth (C)(1)” & "99 Percent Occupied Bandwidth"(D). 05/02/2017.

3 When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

4.2.3 Test Setup Layout

Setup


4.2.4 Test Deviation

There are no deviations with the original standard.

4.2.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.2.6 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	20.51	20.50	20.49
60	5300	20.54	20.44	20.50
64	5320	20.71	20.46	20.61
100	5500	20.50	20.37	20.51
116	5580	20.59	20.35	20.48
140	5700	20.57	20.37	20.55

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	20.86	20.52	20.56
60	5300	20.83	20.56	20.79
64	5320	21.00	20.79	20.57
100	5500	21.10	20.95	20.55
116	5580	20.98	20.57	20.55
140	5700	20.80	20.70	20.67

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	20.87	20.46	20.61
60	5300	21.09	20.61	20.65
64	5320	20.97	20.49	20.87
100	5500	20.85	20.62	21.29
116	5580	20.80	20.52	20.81
140	5700	20.89	20.62	20.57

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	20.83	20.49	20.65
60	5300	20.75	20.54	20.80
64	5320	20.67	20.55	20.82
100	5500	20.69	20.57	20.90
116	5580	20.80	20.72	20.70
140	5700	20.65	20.53	20.69

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	45.70	41.79	40.68
62	5310	41.35	41.24	40.68
102	5510	41.35	41.40	40.70
110	5550	41.39	41.64	40.62
134	5670	43.08	43.37	40.91

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	40.90	40.90	40.73
62	5310	40.76	40.88	40.67
102	5510	40.85	40.99	40.76
110	5550	40.81	41.03	40.76
134	5670	40.97	41.11	40.82

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	41.03	40.86	41.26
62	5310	41.13	40.88	40.65
102	5510	41.04	40.84	41.25
110	5550	40.99	40.83	41.02
134	5670	41.08	41.01	41.32

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	83.21	82.46	83.33
106	5530	83.41	82.85	82.26

11ac (80MHz) 1S3T TxBF

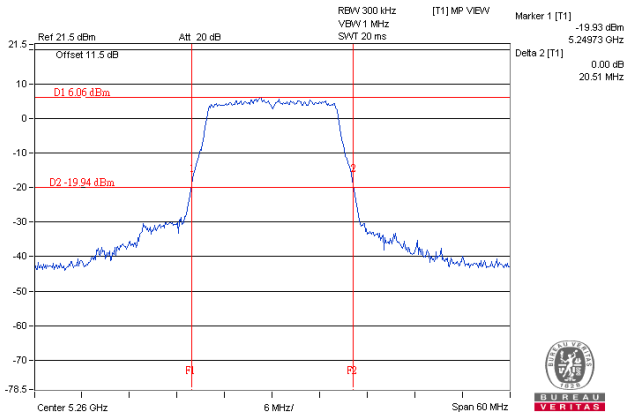
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	82.69	82.69	82.73
106	5530	82.68	82.78	82.98

11ac (80MHz) 2S3T TxBF

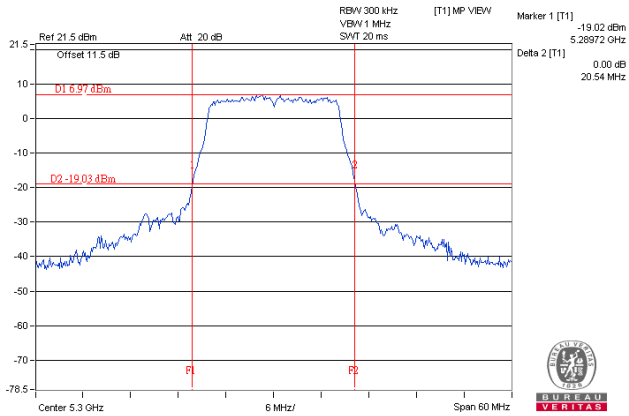
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	82.89	82.81	83.26
106	5530	82.08	82.54	82.85

26dB BANDWIDTH SPECTRUM PLOT

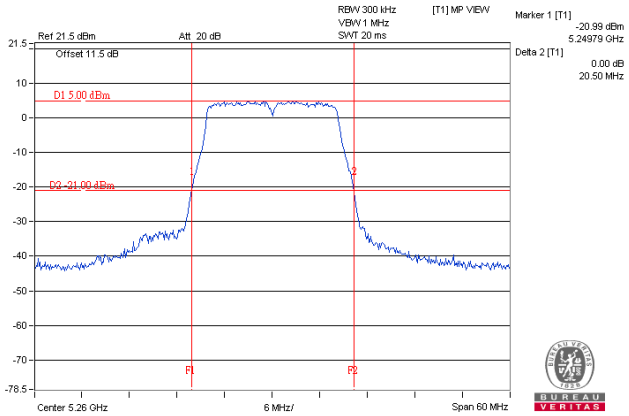
11a 1S3T CDD CH52 Chain1



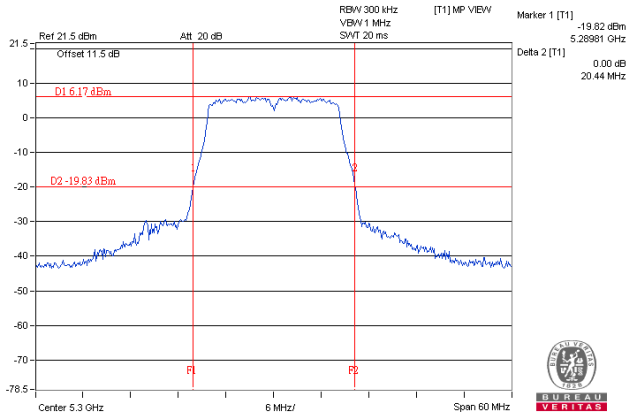
11a 1S3T CDD CH60 Chain1



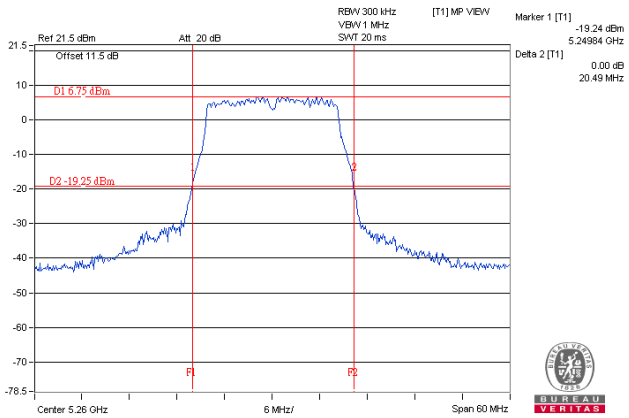
11a 1S3T CDD CH52 Chain2



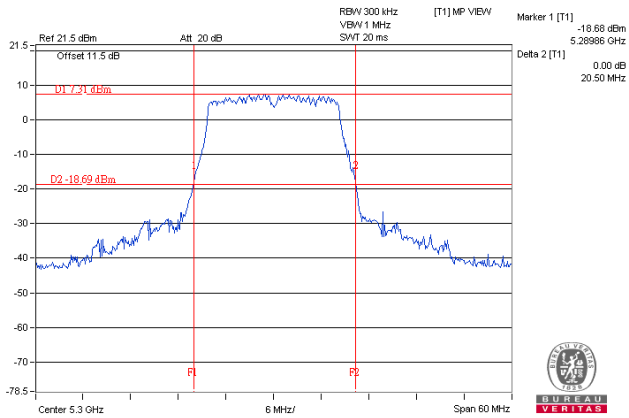
11a 1S3T CDD CH60 Chain2



11a 1S3T CDD CH52 Chain3

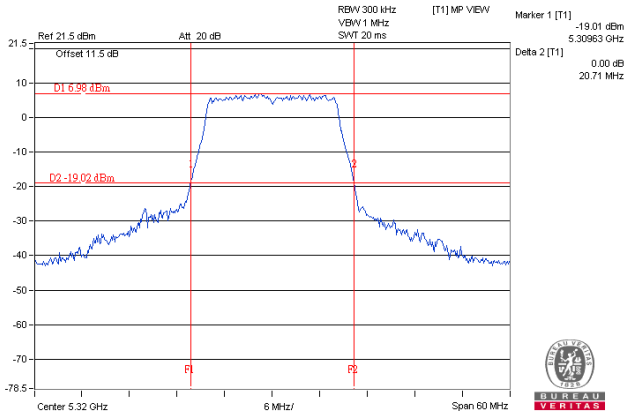


11a 1S3T CDD CH60 Chain3

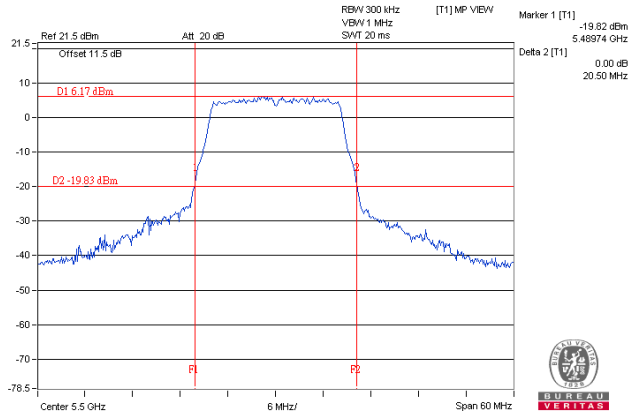


26dB BANDWIDTH SPECTRUM PLOT

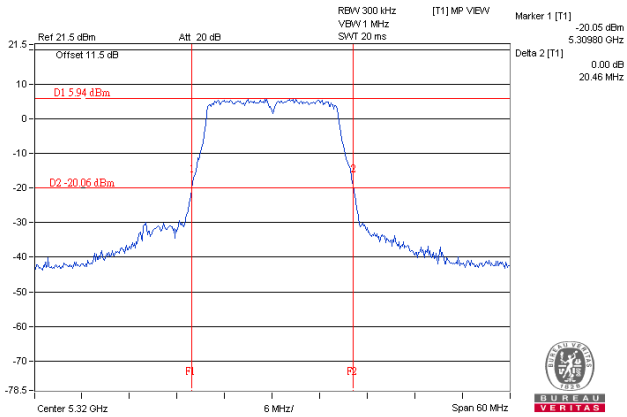
11a 1S3T CDD CH64 Chain1



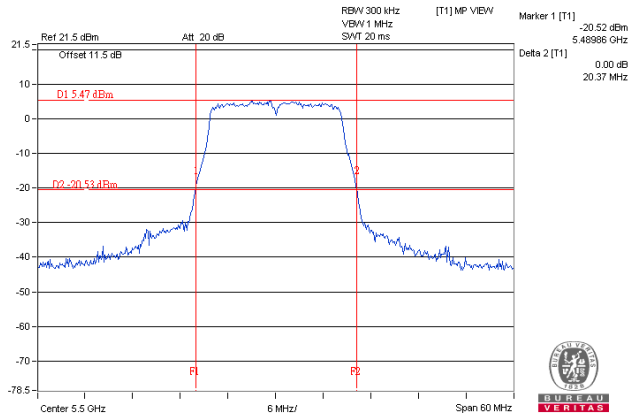
11a 1S3T CDD CH100 Chain1



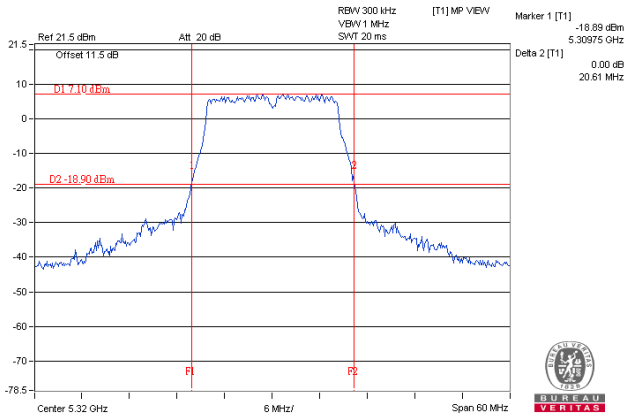
11a 1S3T CDD CH64 Chain2



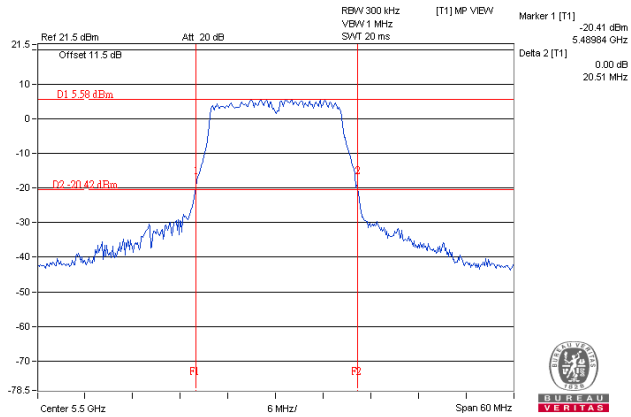
11a 1S3T CDD CH100 Chain2



11a 1S3T CDD CH64 Chain3

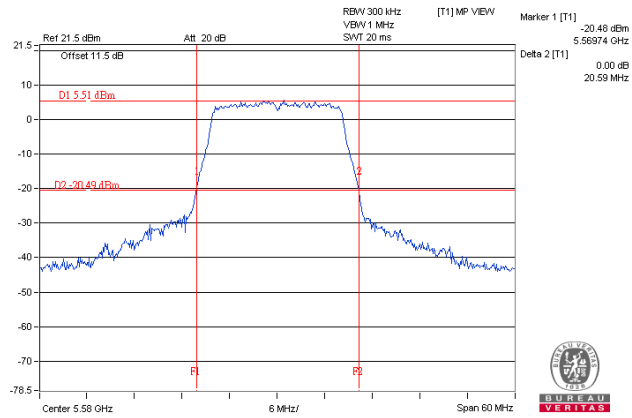


11a 1S3T CDD CH100 Chain3

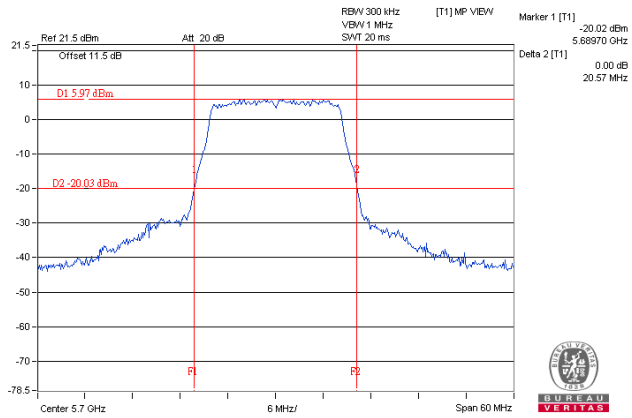


26dB BANDWIDTH SPECTRUM PLOT

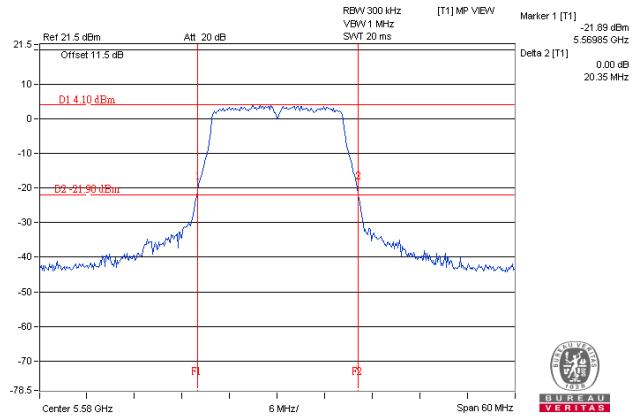
11a 1S3T CDD CH116 Chain1



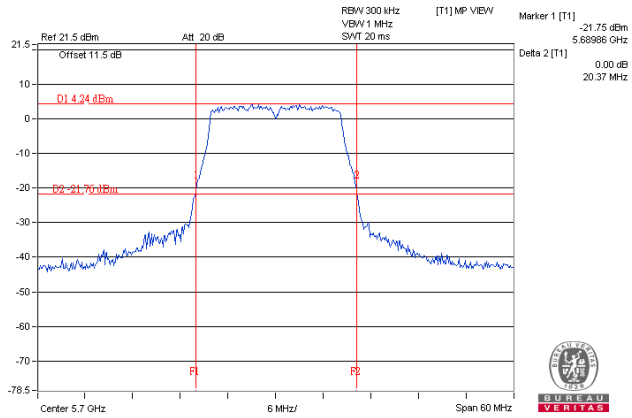
11a 1S3T CDD CH140 Chain1



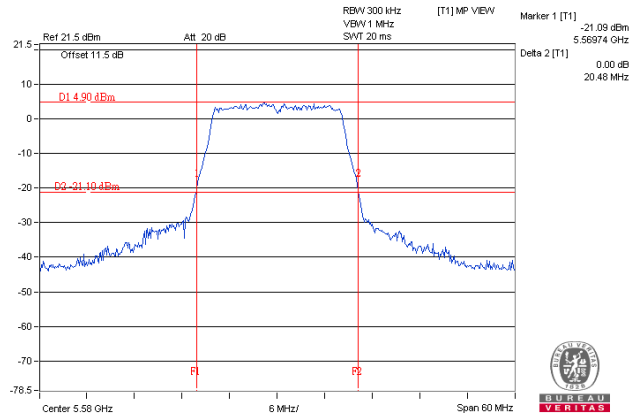
11a 1S3T CDD CH116 Chain2



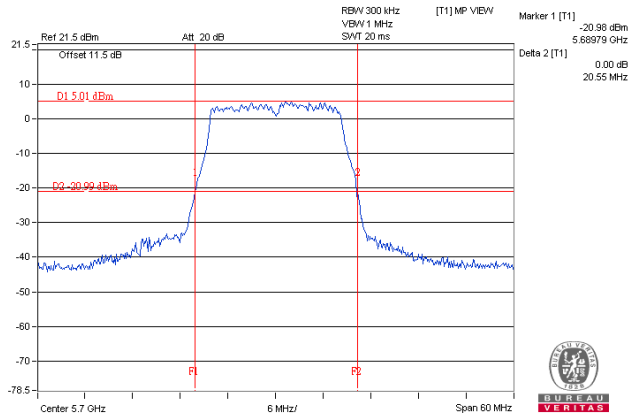
11a 1S3T CDD CH140 Chain2



11a 1S3T CDD CH116 Chain3

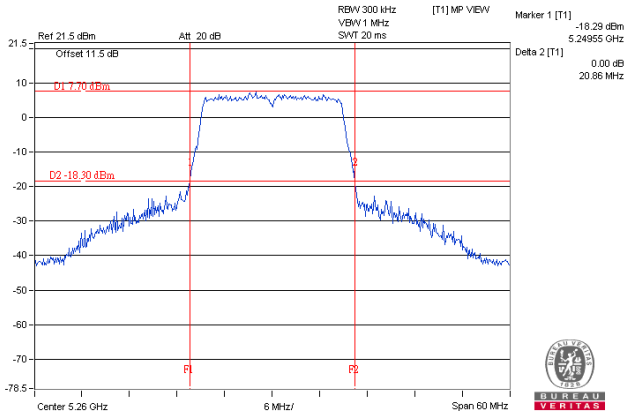


11a 1S3T CDD CH140 Chain3

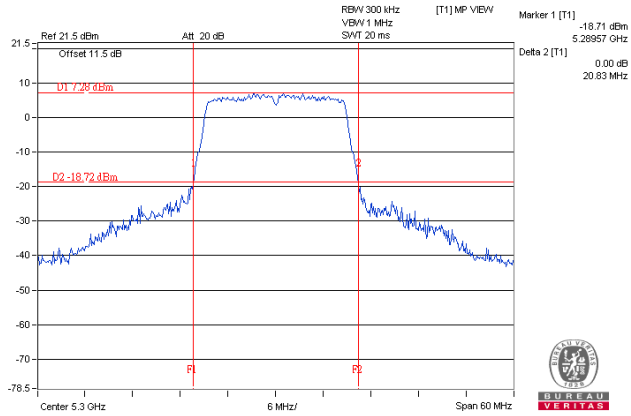


26dB BANDWIDTH SPECTRUM PLOT

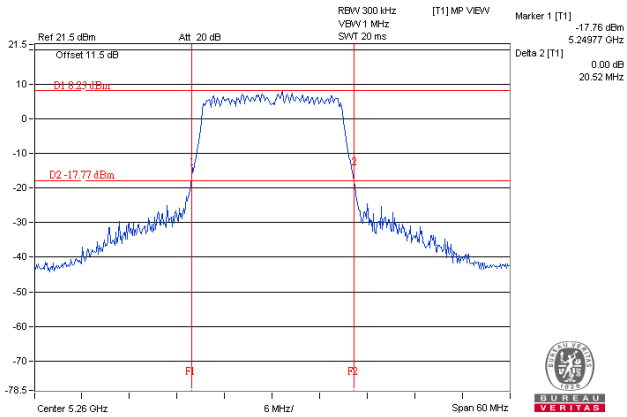
11ac (20MHz) 3S3T SDM CH52 Chain1



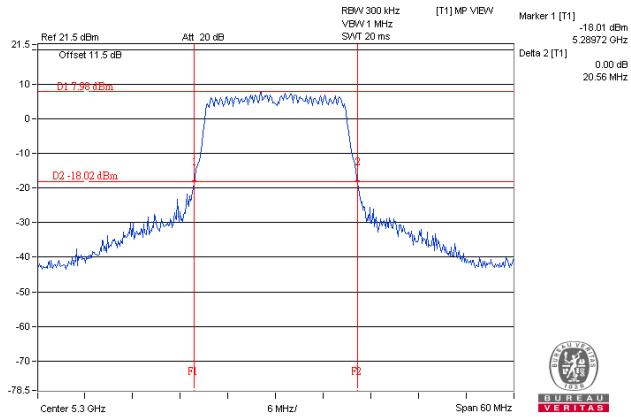
11ac (20MHz) 3S3T SDM CH60 Chain1



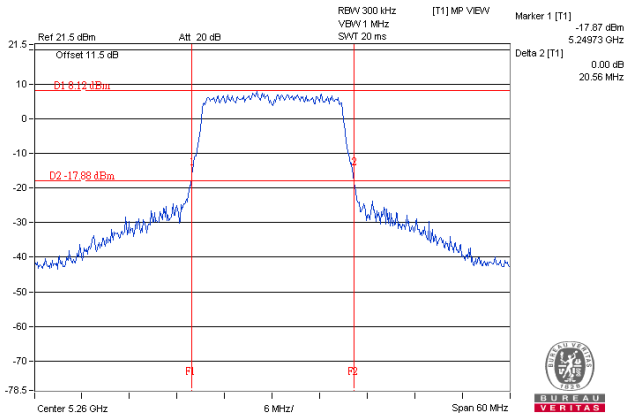
11ac (20MHz) 3S3T SDM CH52 Chain2



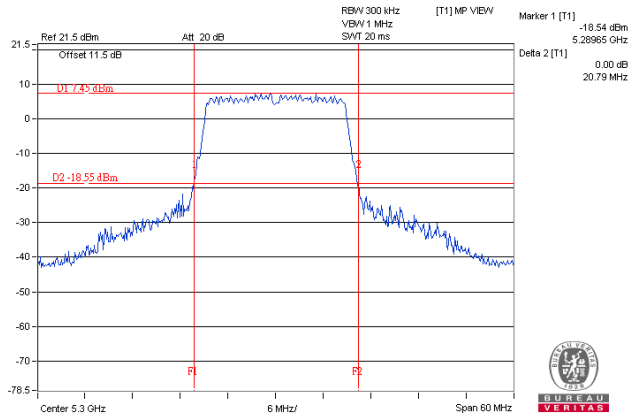
11ac (20MHz) 3S3T SDM CH60 Chain2



11ac (20MHz) 3S3T SDM CH52 Chain3

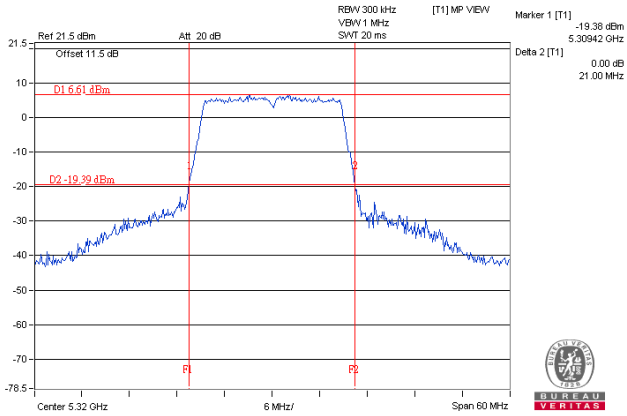


11ac (20MHz) 3S3T SDM CH60 Chain3

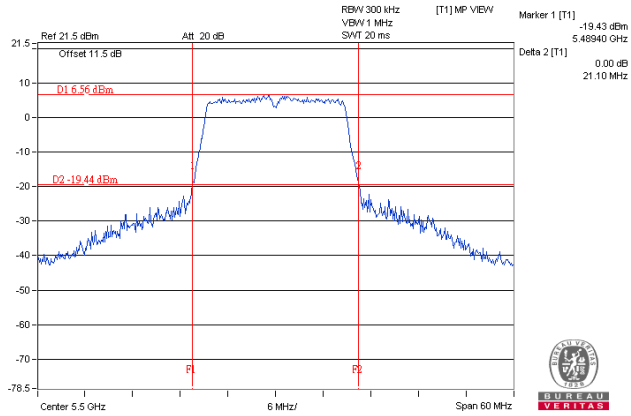


26dB BANDWIDTH SPECTRUM PLOT

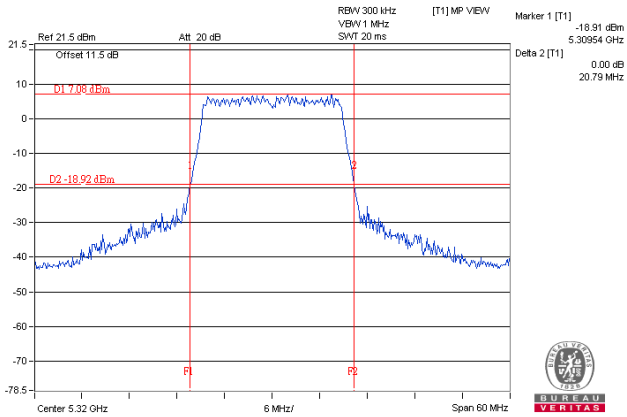
11ac (20MHz) 3S3T SDM CH64 Chain1



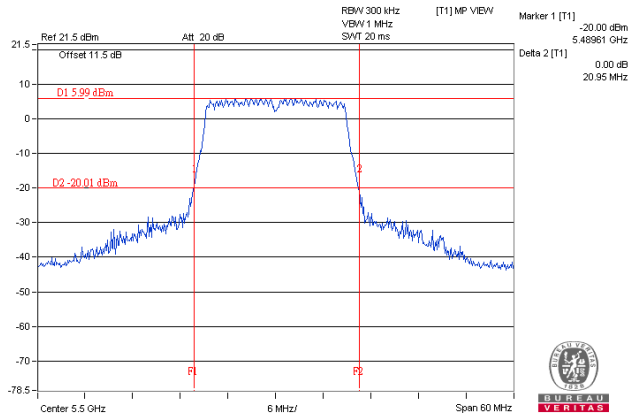
11ac (20MHz) 3S3T SDM CH100 Chain1



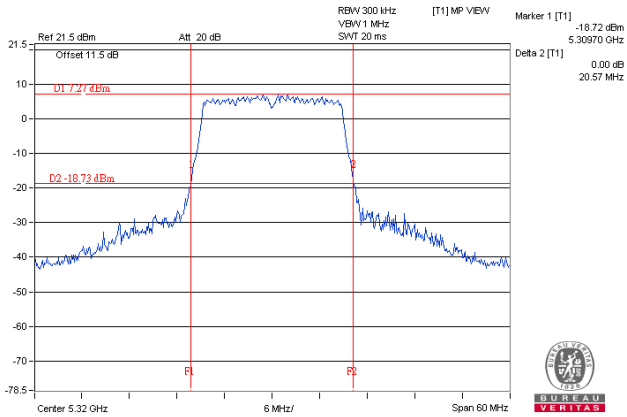
11ac (20MHz) 3S3T SDM CH64 Chain2



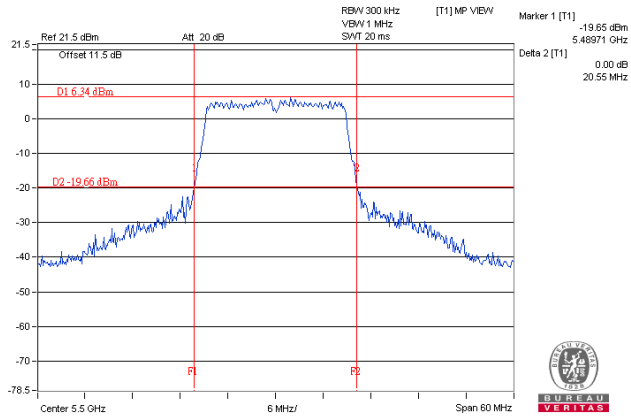
11ac (20MHz) 3S3T SDM CH100 Chain2



11ac (20MHz) 3S3T SDM CH64 Chain3

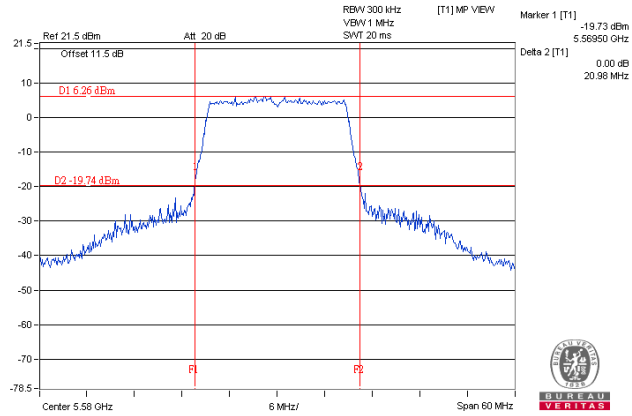


11ac (20MHz) 3S3T SDM CH100 Chain3

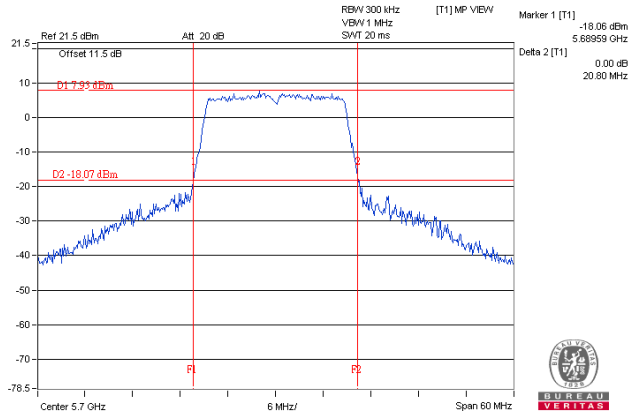


26dB BANDWIDTH SPECTRUM PLOT

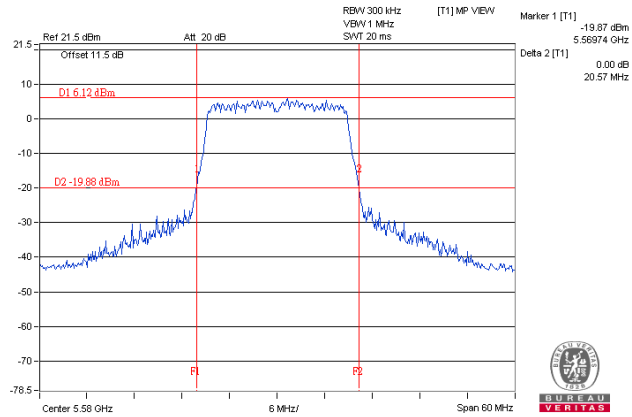
11ac (20MHz) 3S3T SDM CH116 Chain1



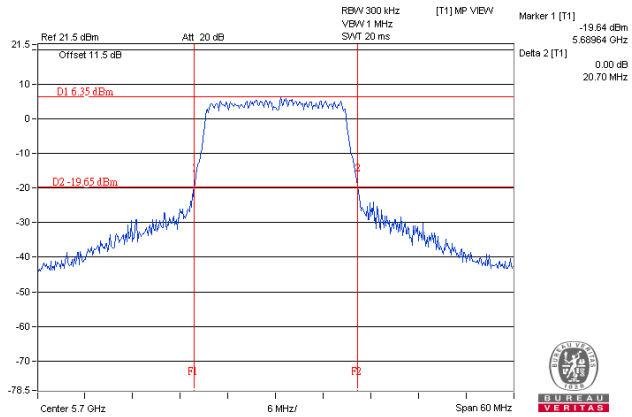
11ac (20MHz) 3S3T SDM CH140 Chain1



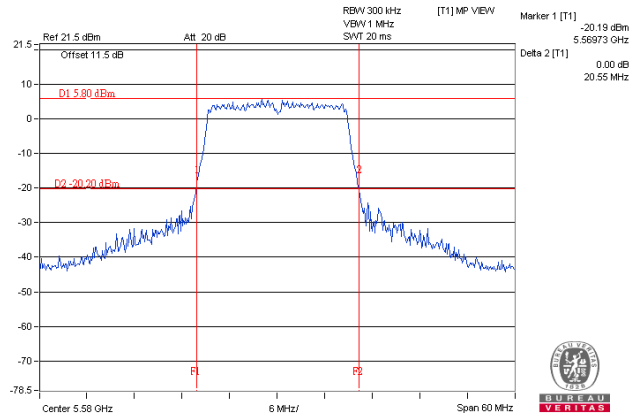
11ac (20MHz) 3S3T SDM CH116 Chain2



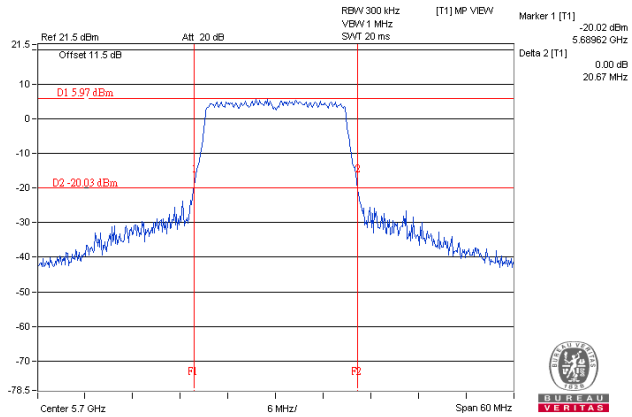
11ac (20MHz) 3S3T SDM CH140 Chain2



11ac (20MHz) 3S3T SDM CH116 Chain3

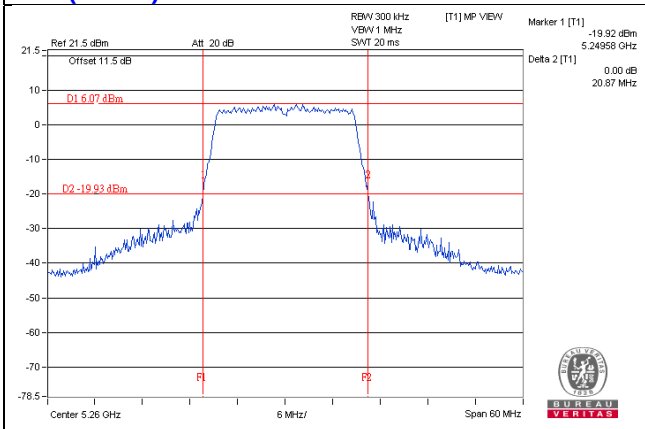


11ac (20MHz) 3S3T SDM CH140 Chain3

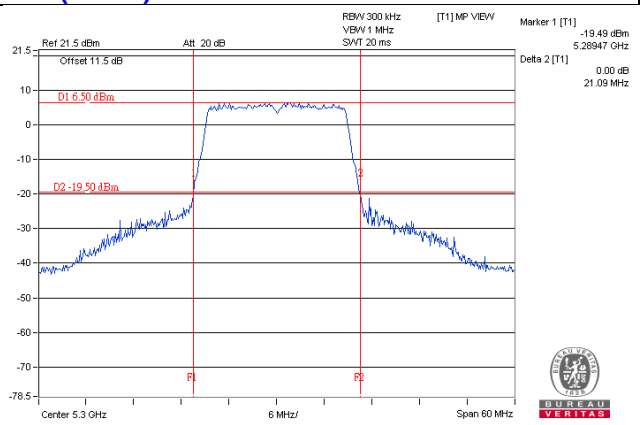


26dB BANDWIDTH SPECTRUM PLOT

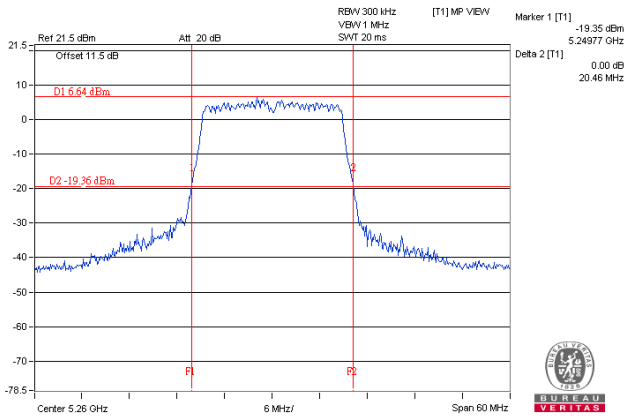
11ac (20MHz) 1S3T TxBF CH52 Chain1



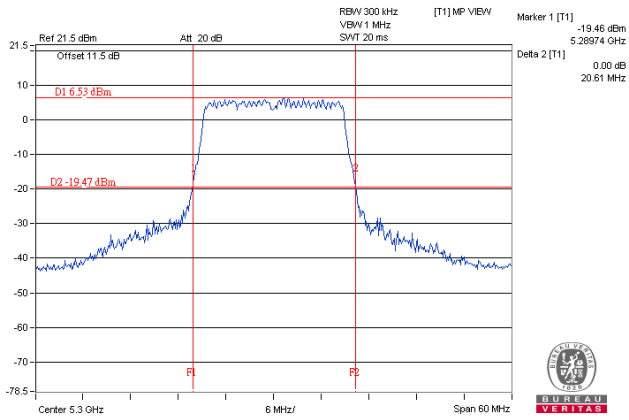
11ac (20MHz) 1S3T TxBF CH60 Chain1



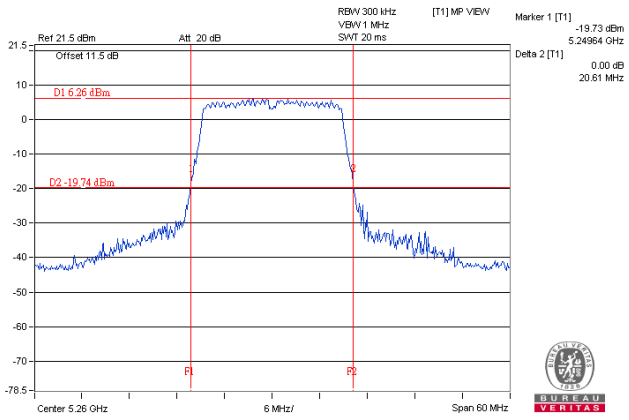
11ac (20MHz) 1S3T TxBF CH52 Chain2



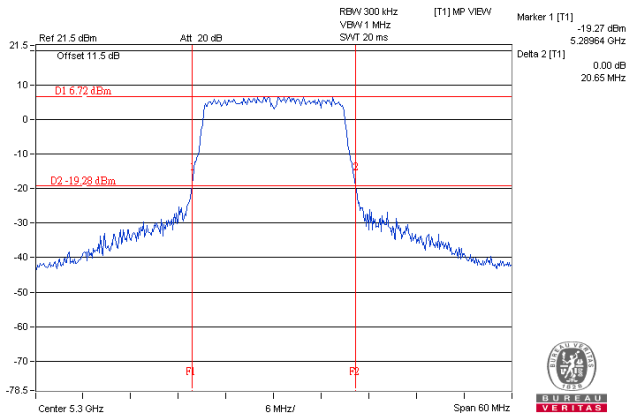
11ac (20MHz) 1S3T TxBF CH60 Chain2



11ac (20MHz) 1S3T TxBF CH52 Chain3

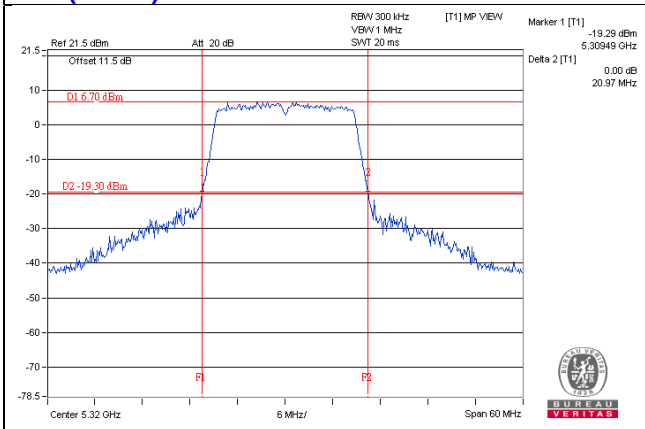


11ac (20MHz) 1S3T TxBF CH60 Chain3

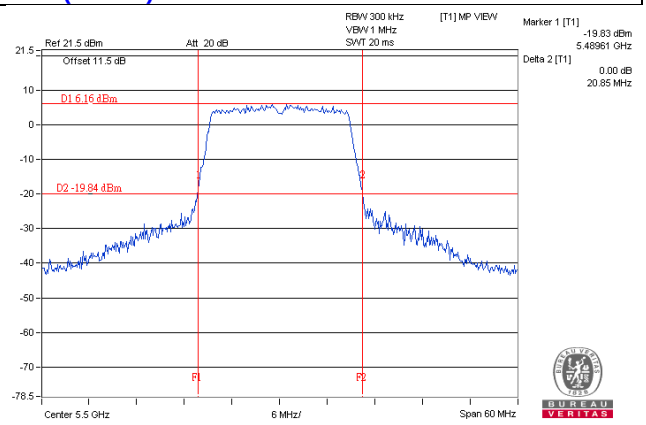


26dB BANDWIDTH SPECTRUM PLOT

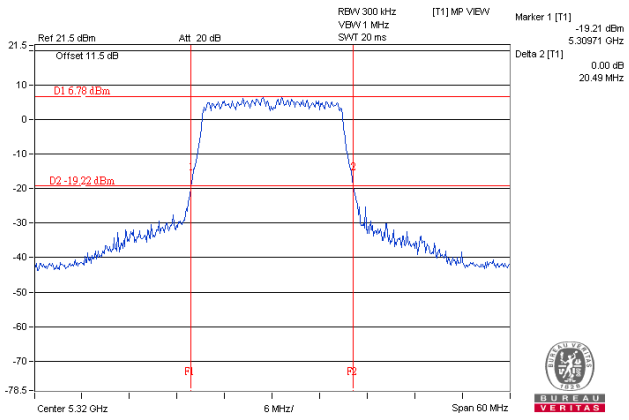
11ac (20MHz) 1S3T TxBF CH64 Chain1



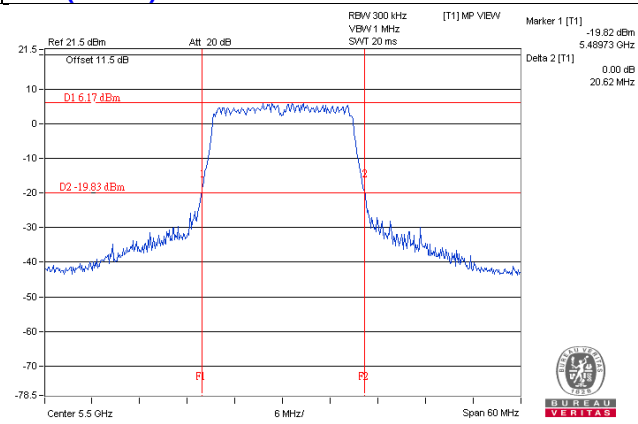
11ac (20MHz) 1S3T TxBF CH100 Chain1



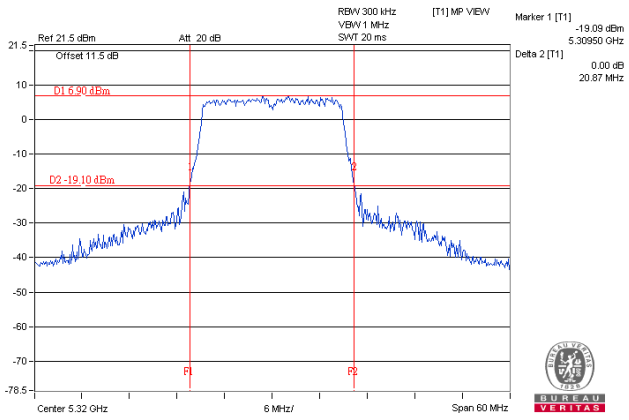
11ac (20MHz) 1S3T TxBF CH64 Chain2



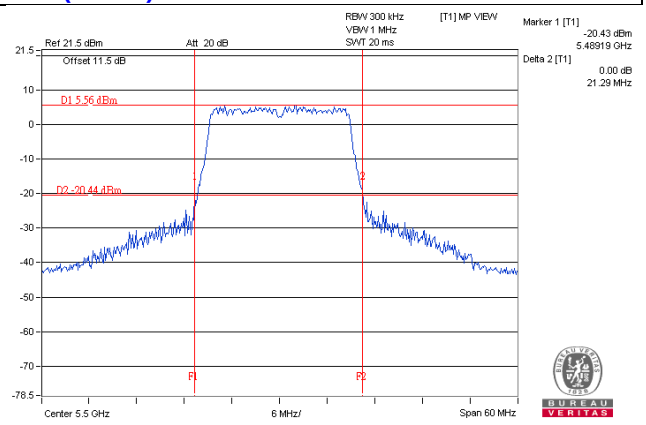
11ac (20MHz) 1S3T TxBF CH100 Chain2



11ac (20MHz) 1S3T TxBF CH64 Chain3

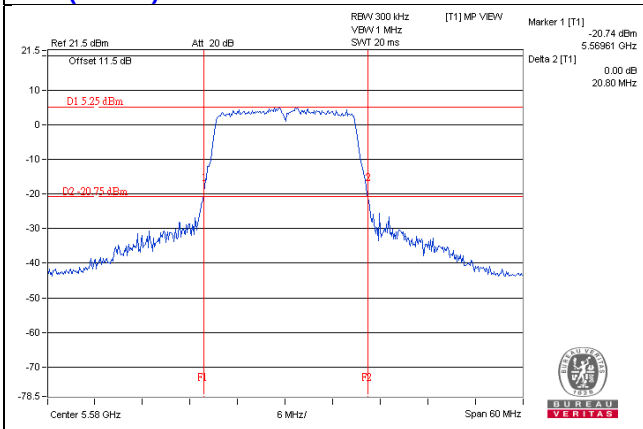


11ac (20MHz) 1S3T TxBF CH100 Chain3

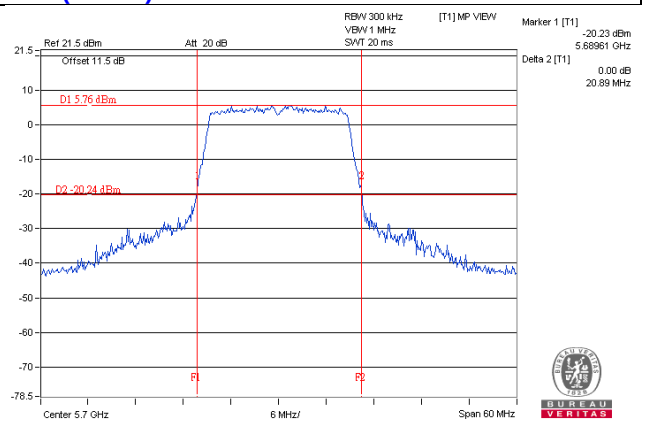


26dB BANDWIDTH SPECTRUM PLOT

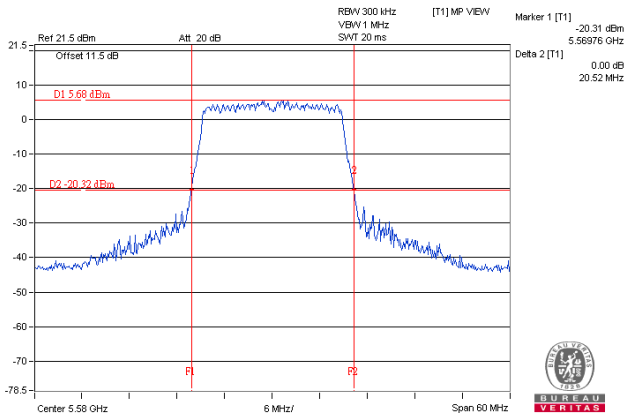
11ac (20MHz) 1S3T TxBF CH116 Chain1



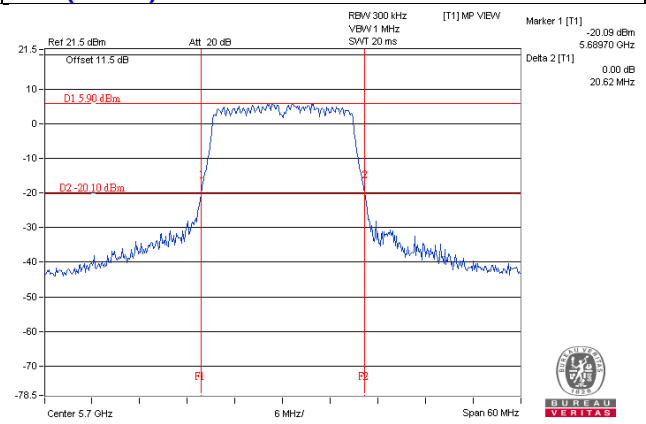
11ac (20MHz) 1S3T TxBF CH140 Chain1



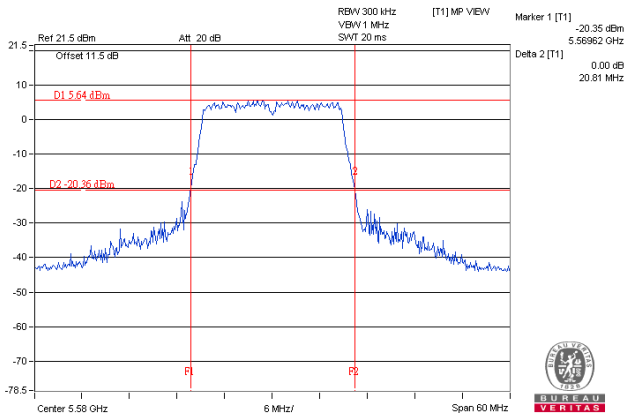
11ac (20MHz) 1S3T TxBF CH116 Chain2



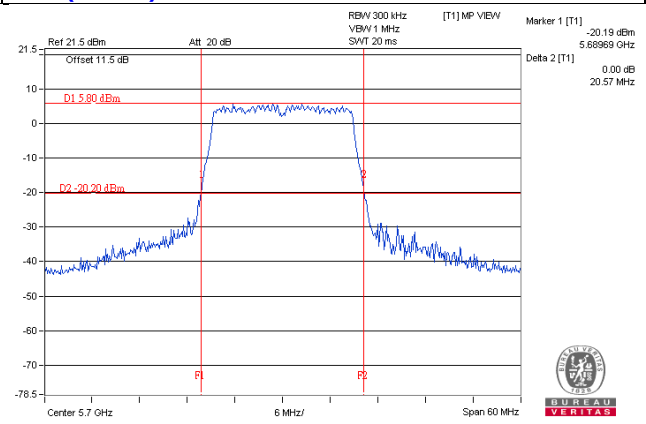
11ac (20MHz) 1S3T TxBF CH140 Chain2



11ac (20MHz) 1S3T TxBF CH116 Chain3

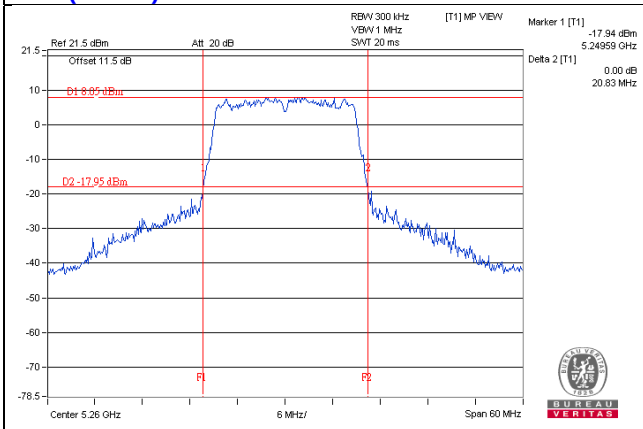


11ac (20MHz) 1S3T TxBF CH140 Chain3

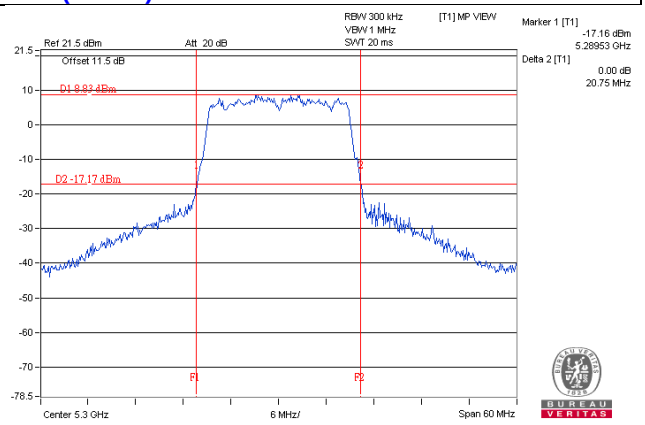


26dB BANDWIDTH SPECTRUM PLOT

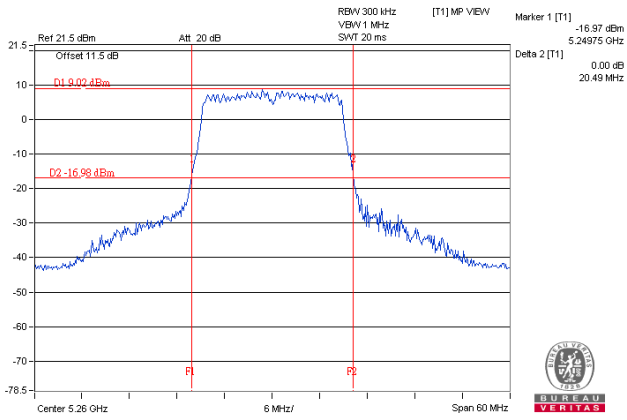
11ac (20MHz) 2S3T TxBF CH52 Chain1



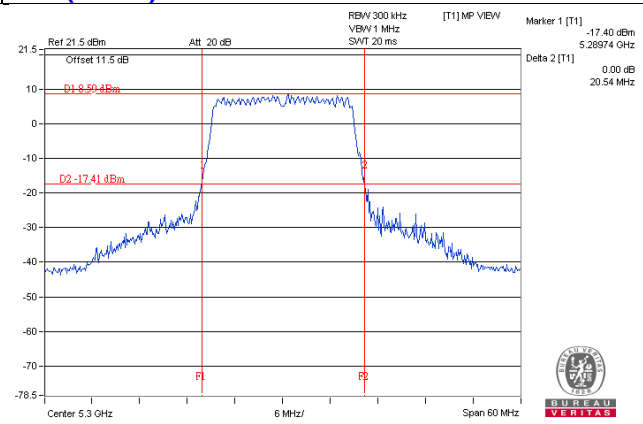
11ac (20MHz) 2S3T TxBF CH60 Chain1



11ac (20MHz) 2S3T TxBF CH52 Chain2



11ac (20MHz) 2S3T TxBF CH60 Chain2



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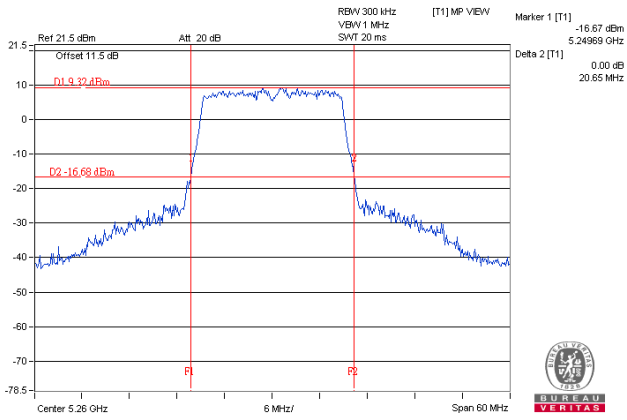
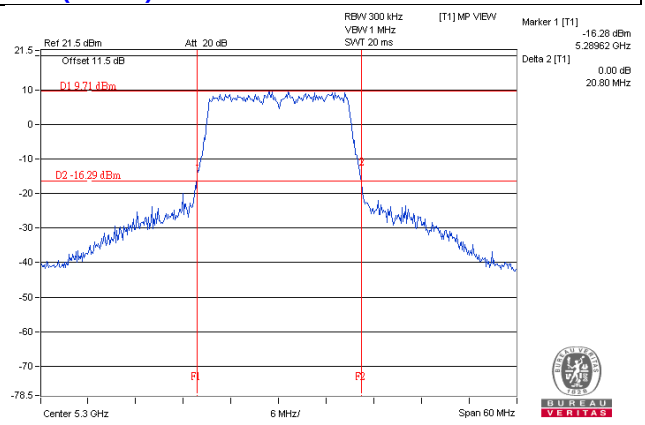
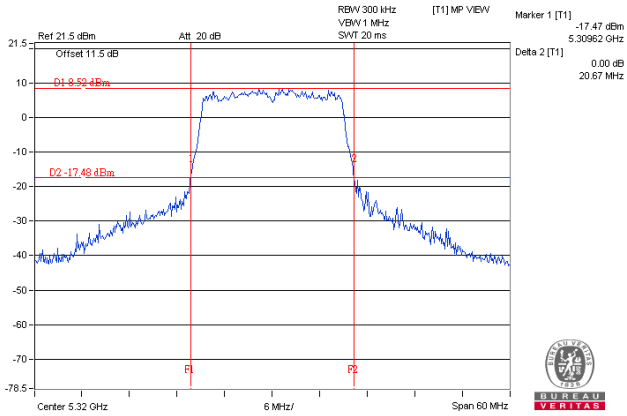


11ac (20MHz) 2S3T TxBF CH60 Chain3

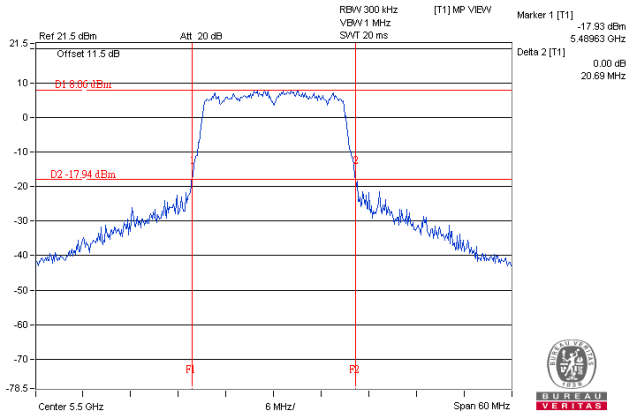


26dB BANDWIDTH SPECTRUM PLOT

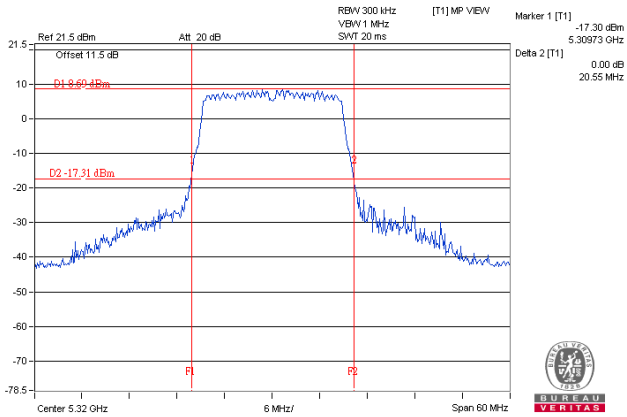
11ac (20MHz) 2S3T TxBF CH64 Chain1



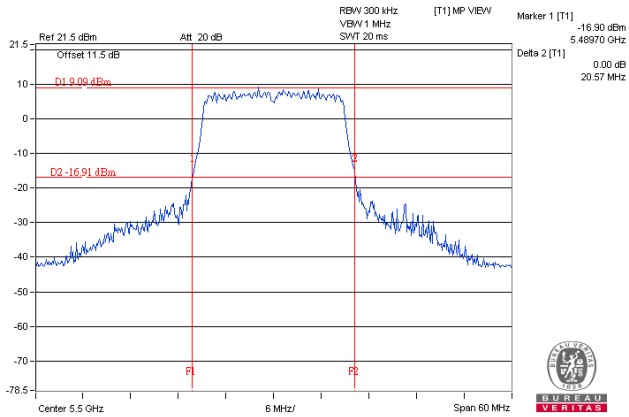
11ac (20MHz) 2S3T TxBF CH100 Chain1



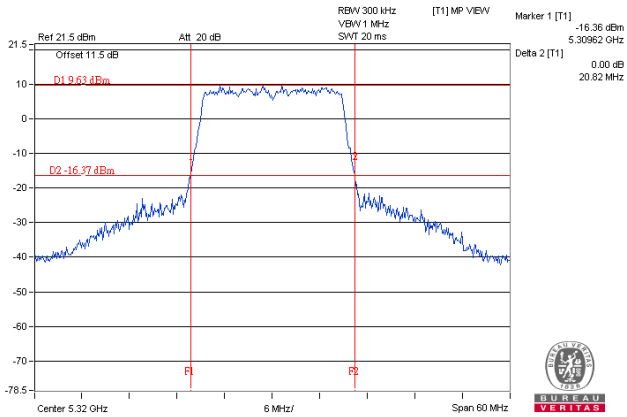
11ac (20MHz) 2S3T TxBF CH64 Chain2



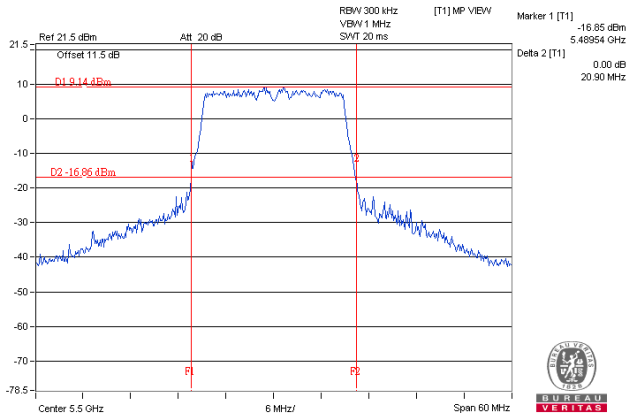
11ac (20MHz) 2S3T TxBF CH100 Chain2



11ac (20MHz) 2S3T TxBF CH64 Chain3

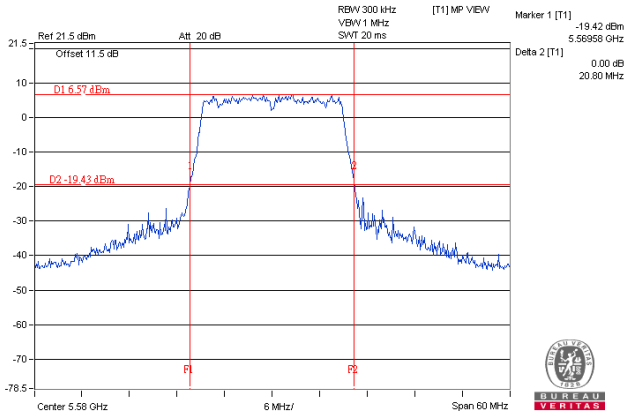


11ac (20MHz) 2S3T TxBF CH100 Chain3

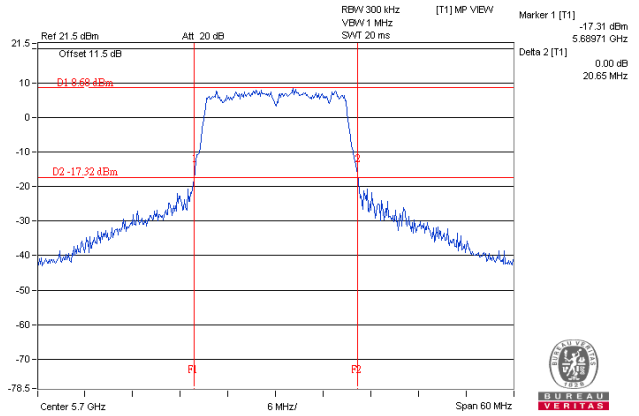


26dB BANDWIDTH SPECTRUM PLOT

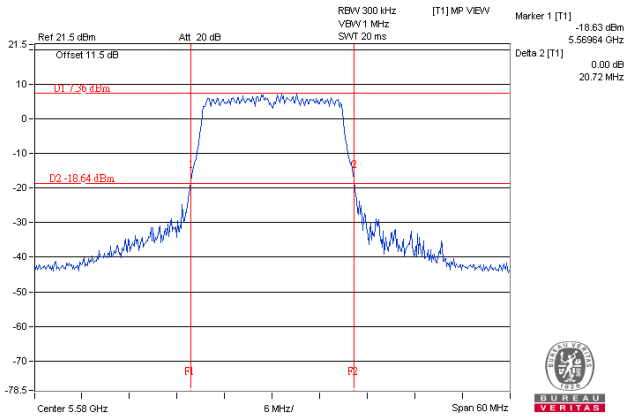
11ac (20MHz) 2S3T TxBF CH116 Chain1



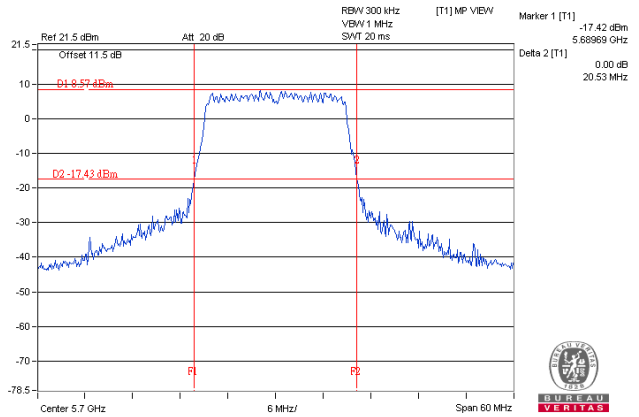
11ac (20MHz) 2S3T TxBF CH140 Chain1



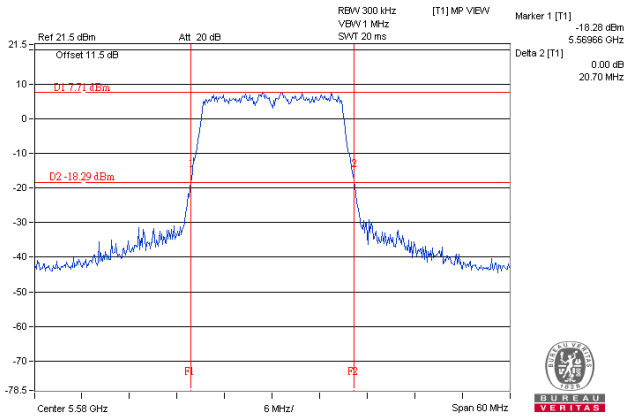
11ac (20MHz) 2S3T TxBF CH116 Chain2



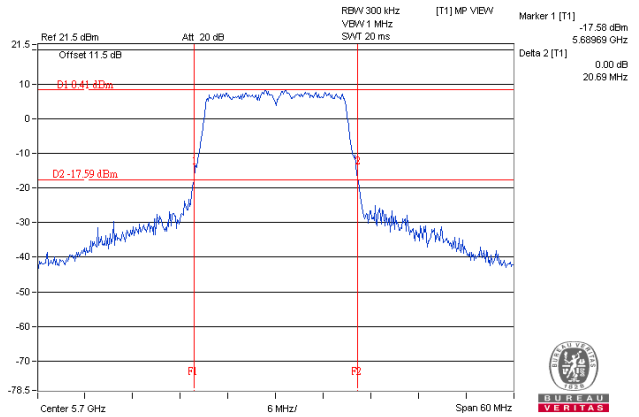
11ac (20MHz) 2S3T TxBF CH140 Chain2



11ac (20MHz) 2S3T TxBF CH116 Chain3

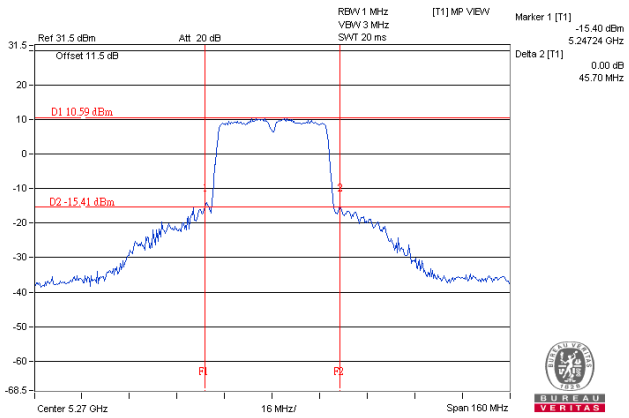


11ac (20MHz) 2S3T TxBF CH140 Chain3

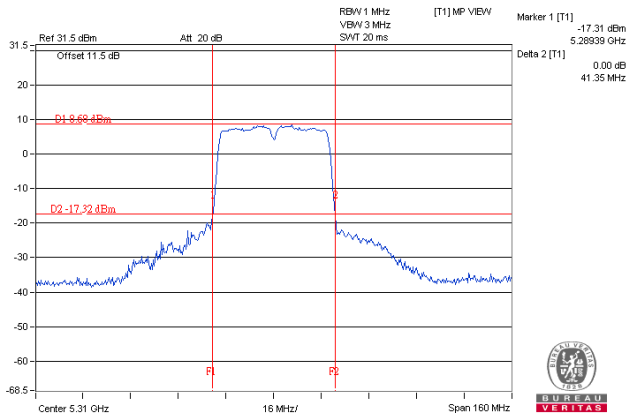


26dB BANDWIDTH SPECTRUM PLOT

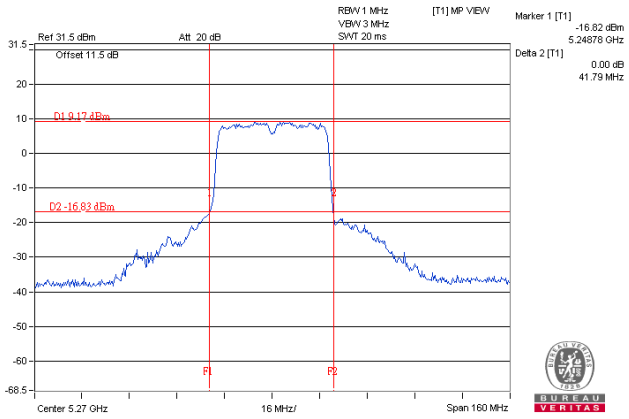
11ac (40MHz) 3S3T SDM CH54 Chain1



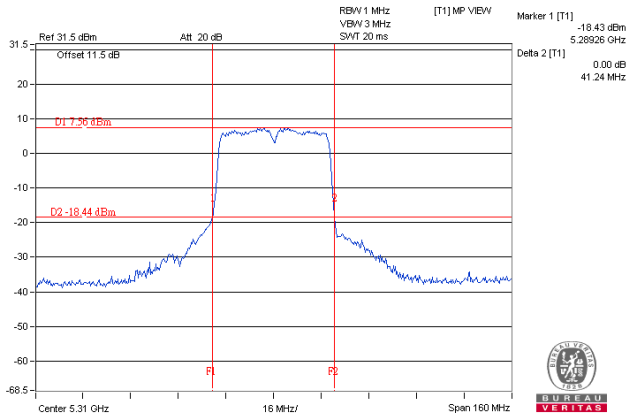
11ac (40MHz) 3S3T SDM CH62 Chain1



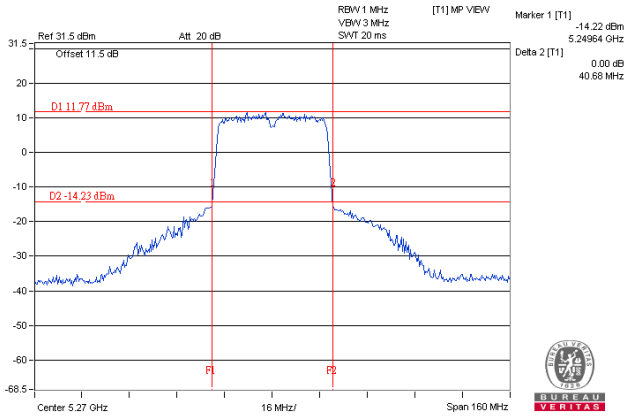
11ac (40MHz) 3S3T SDM CH54 Chain2



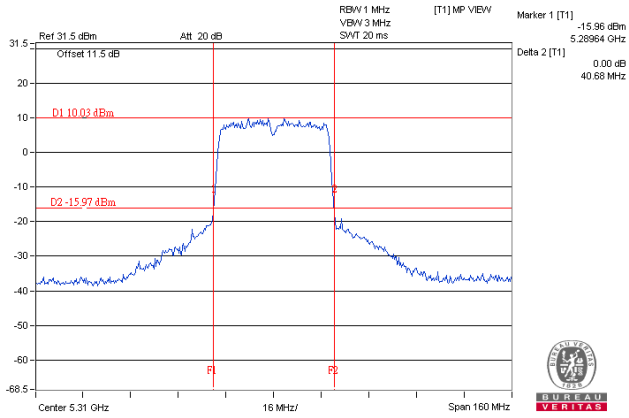
11ac (40MHz) 3S3T SDM CH62 Chain2



11ac (40MHz) 3S3T SDM CH54 Chain3

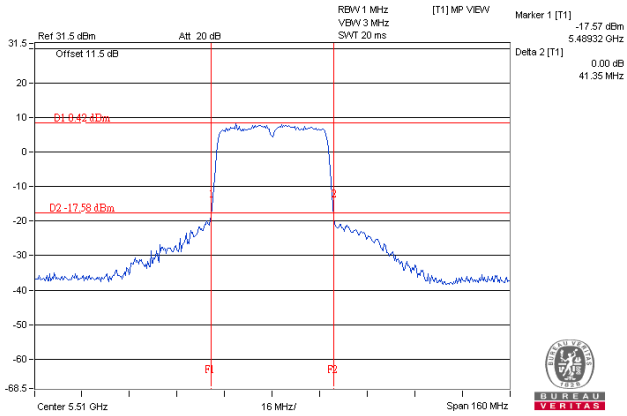


11ac (40MHz) 3S3T SDM CH62 Chain3

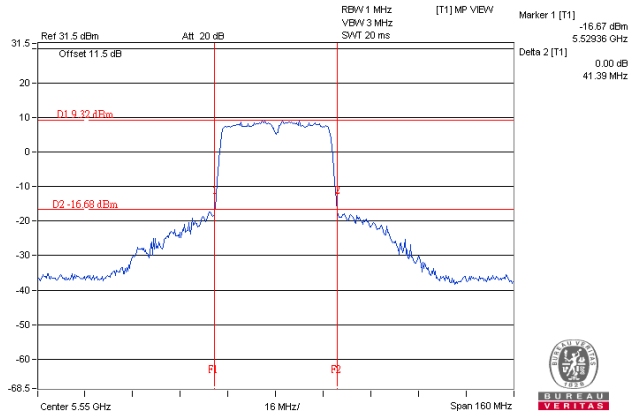


26dB BANDWIDTH SPECTRUM PLOT

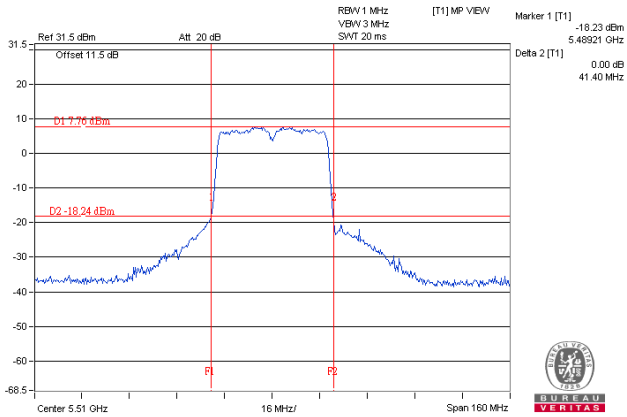
11ac (40MHz) 3S3T SDM CH102 Chain1



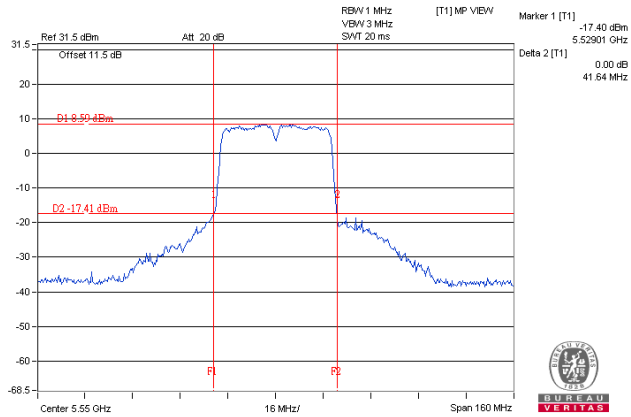
11ac (40MHz) 3S3T SDM CH110 Chain1



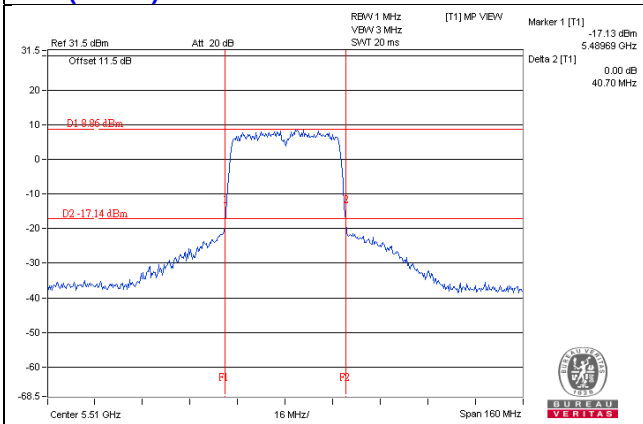
11ac (40MHz) 3S3T SDM CH102 Chain2



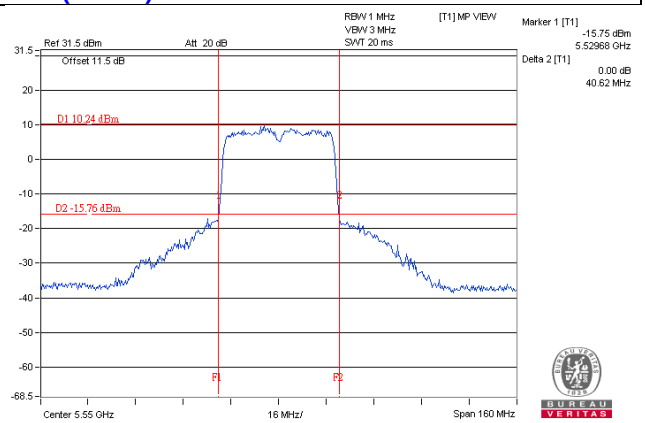
11ac (40MHz) 3S3T SDM CH110 Chain2



11ac (40MHz) 3S3T SDM CH102 Chain3

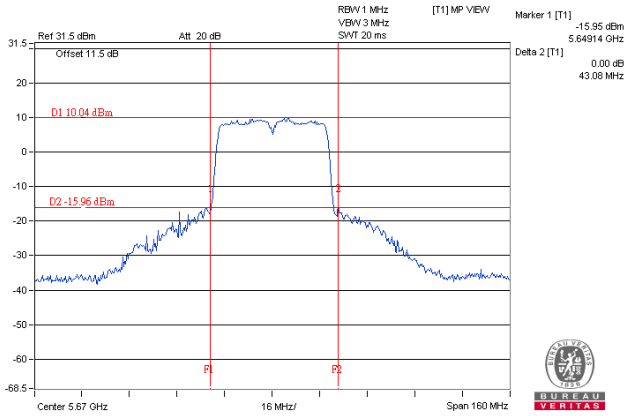


11ac (40MHz) 3S3T SDM CH110 Chain3

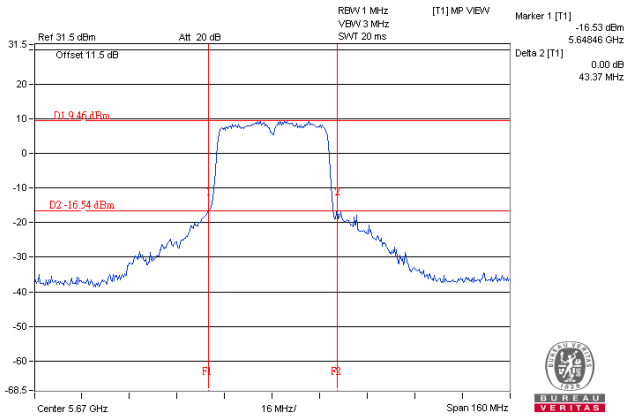


26dB BANDWIDTH SPECTRUM PLOT

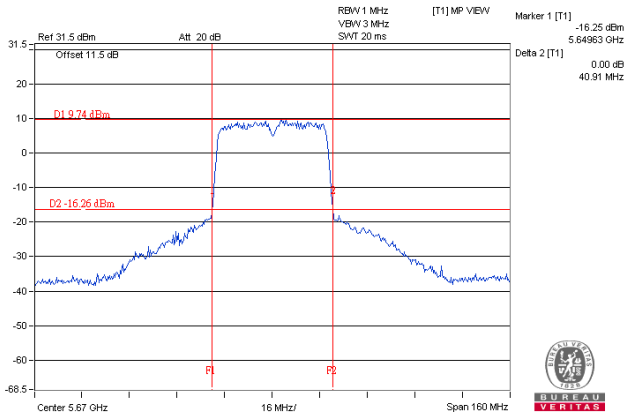
11ac (40MHz) 3S3T SDM CH134 Chain1



11ac (40MHz) 3S3T SDM CH134 Chain2

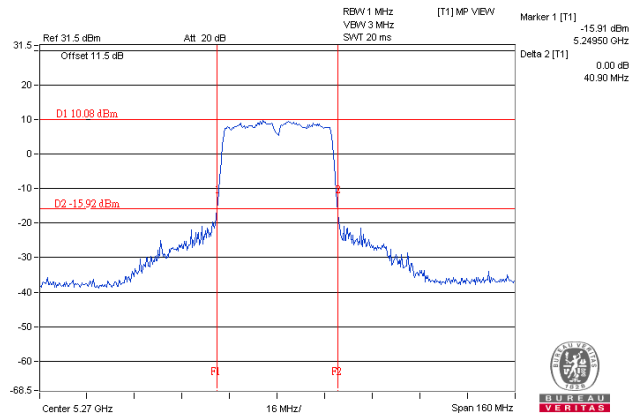


11ac (40MHz) 3S3T SDM CH134 Chain3

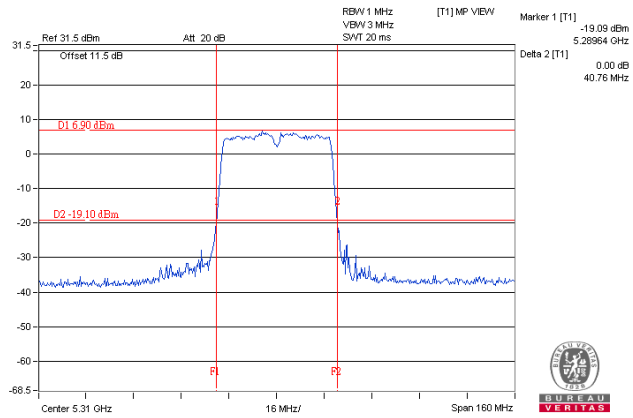


26dB BANDWIDTH SPECTRUM PLOT

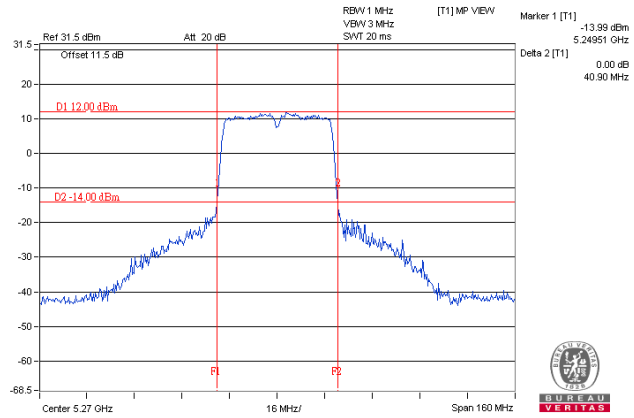
11ac (40MHz) 1S3T TxBF CH54 Chain1



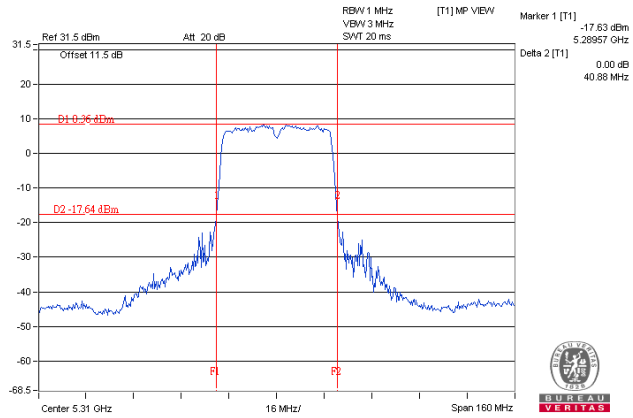
11ac (40MHz) 1S3T TxBF CH62 Chain1



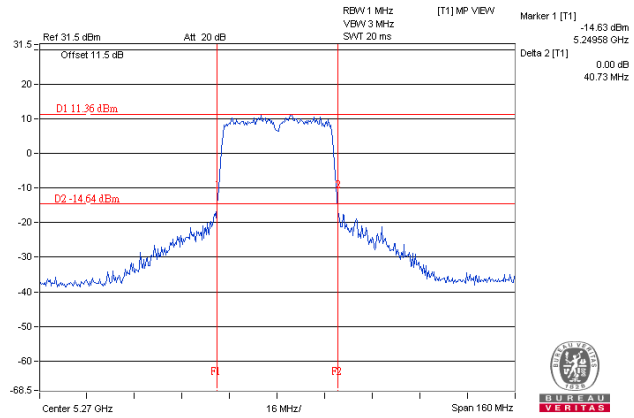
11ac (40MHz) 1S3T TxBF CH54 Chain2



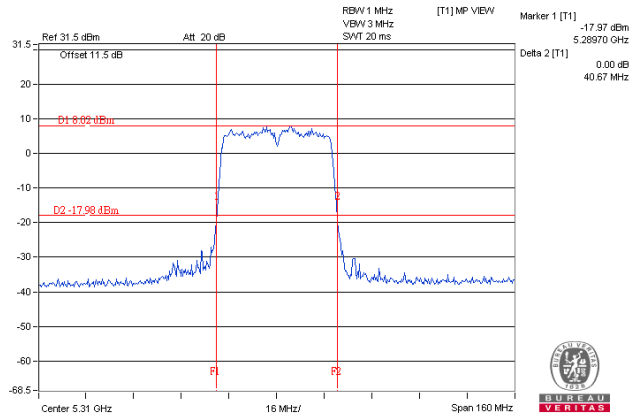
11ac (40MHz) 1S3T TxBF CH62 Chain2



11ac (40MHz) 1S3T TxBF CH54 Chain3

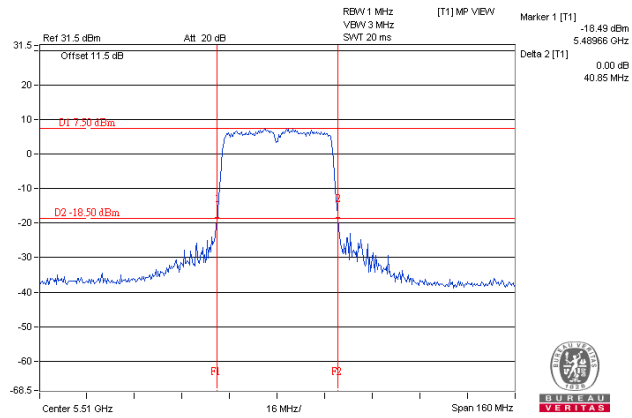


11ac (40MHz) 1S3T TxBF CH62 Chain3

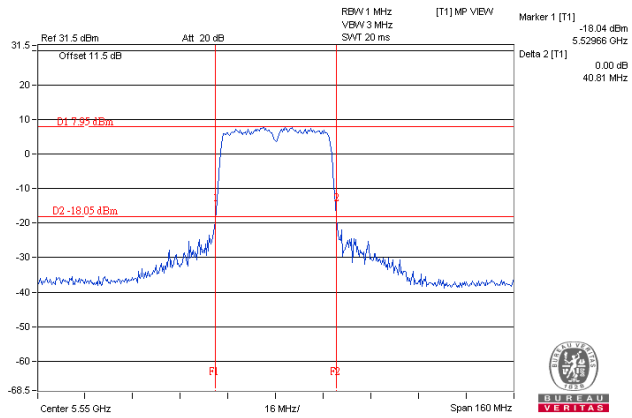


26dB BANDWIDTH SPECTRUM PLOT

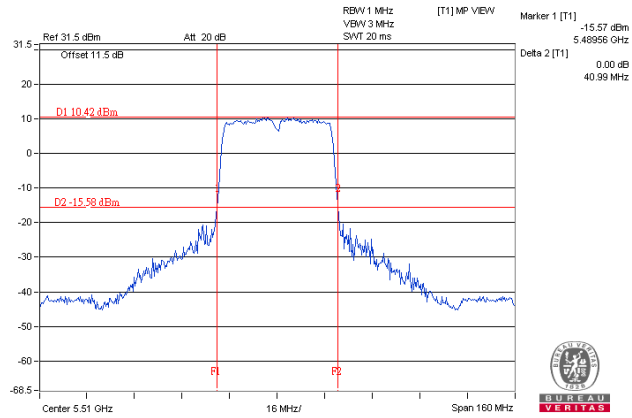
11ac (40MHz) 1S3T TxBF CH102 Chain1



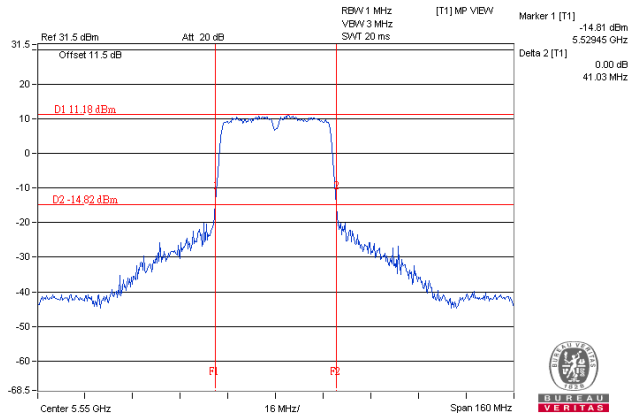
11ac (40MHz) 1S3T TxBF CH110 Chain1



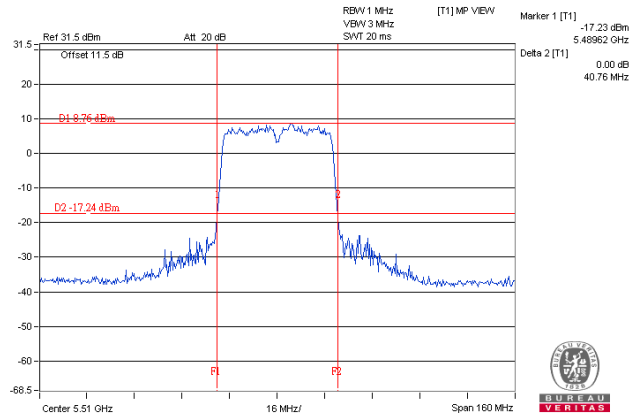
11ac (40MHz) 1S3T TxBF CH102 Chain2



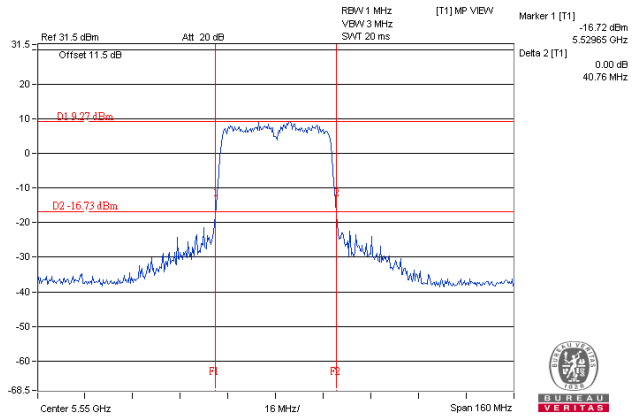
11ac (40MHz) 1S3T TxBF CH110 Chain2



11ac (40MHz) 1S3T TxBF CH102 Chain3

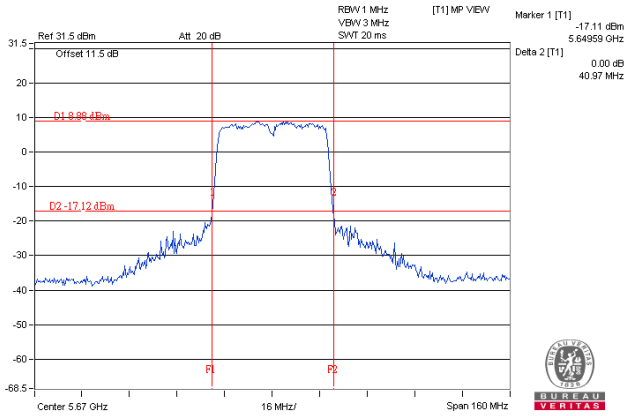


11ac (40MHz) 1S3T TxBF CH110 Chain3

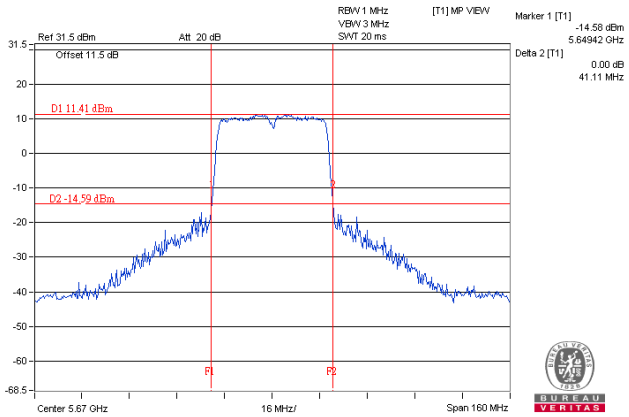


26dB BANDWIDTH SPECTRUM PLOT

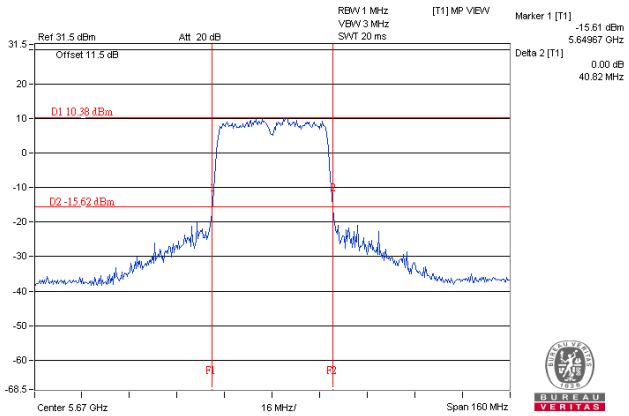
11ac (40MHz) 1S3T TxBF CH134 Chain1



11ac (40MHz) 1S3T TxBF CH134 Chain2

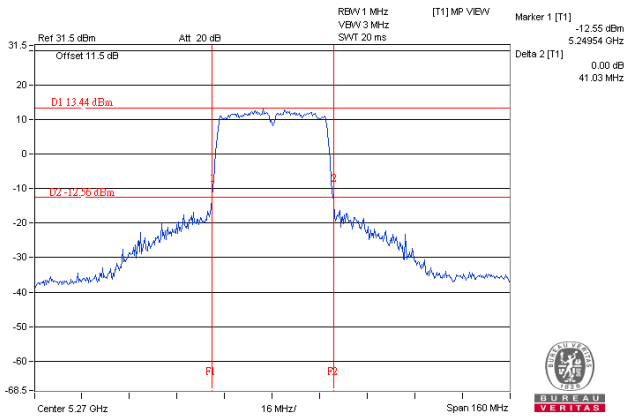


11ac (40MHz) 1S3T TxBF CH134 Chain3

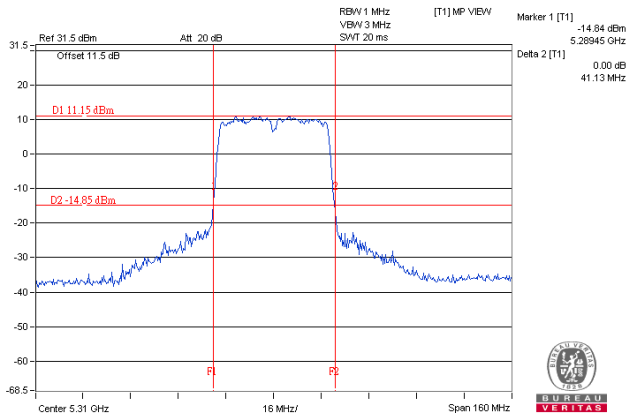


26dB BANDWIDTH SPECTRUM PLOT

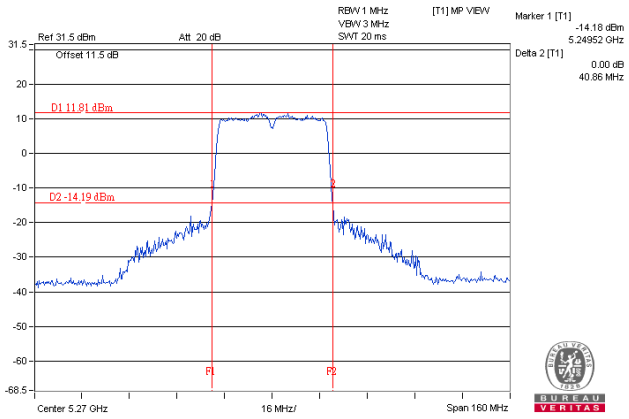
11ac (40MHz) 2S3T TxBF CH54 Chain1



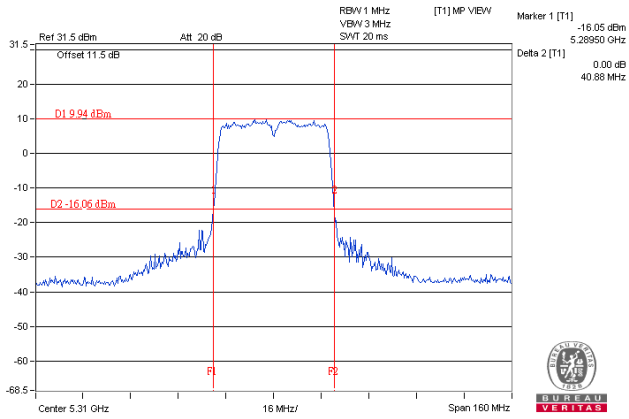
11ac (40MHz) 2S3T TxBF CH62 Chain1



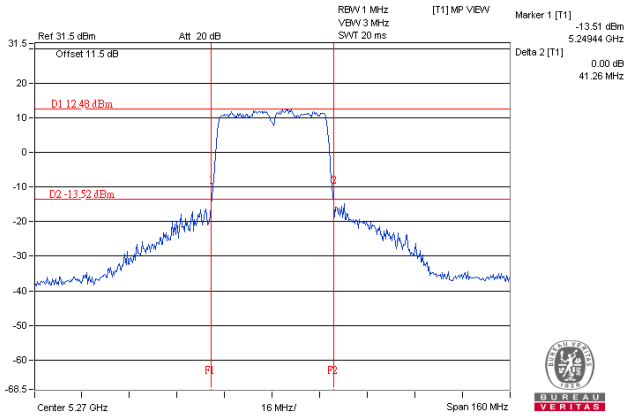
11ac (40MHz) 2S3T TxBF CH54 Chain2



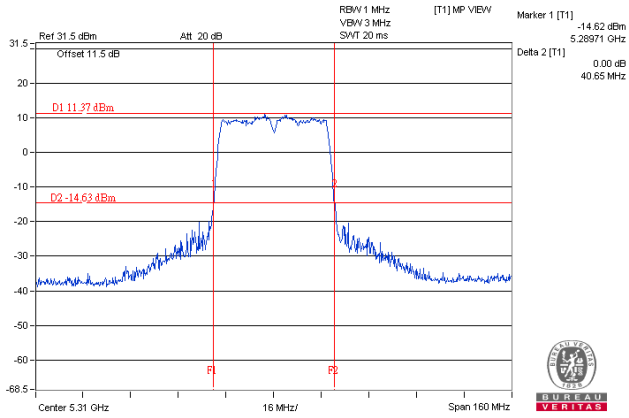
11ac (40MHz) 2S3T TxBF CH62 Chain2



11ac (40MHz) 2S3T TxBF CH54 Chain3

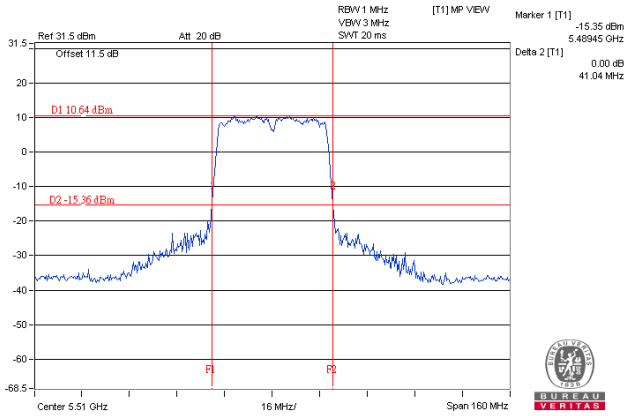


11ac (40MHz) 2S3T TxBF CH62 Chain3

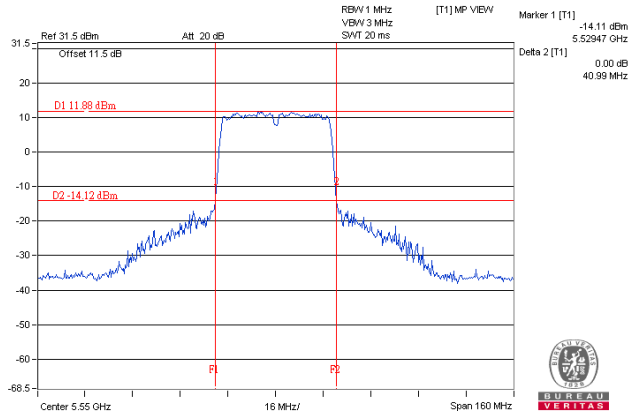


26dB BANDWIDTH SPECTRUM PLOT

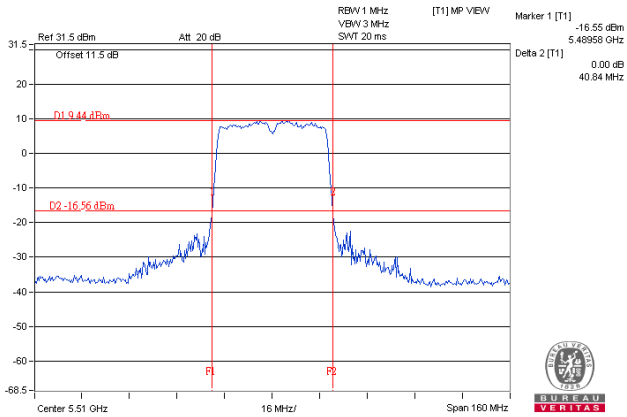
11ac (40MHz) 2S3T TxBF CH102 Chain1



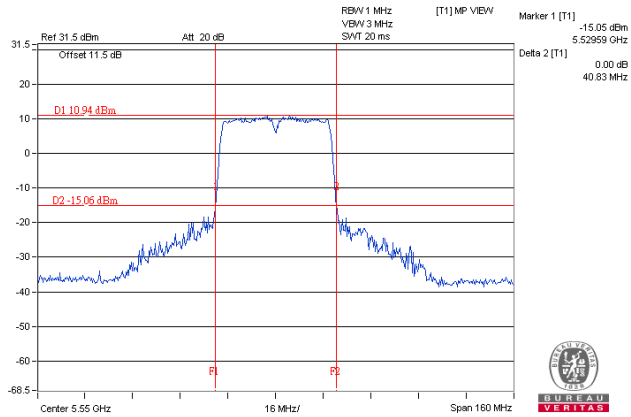
11ac (40MHz) 2S3T TxBF CH110 Chain1



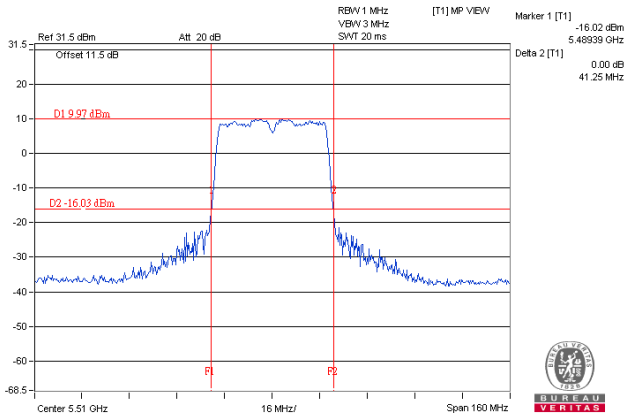
11ac (40MHz) 2S3T TxBF CH102 Chain2



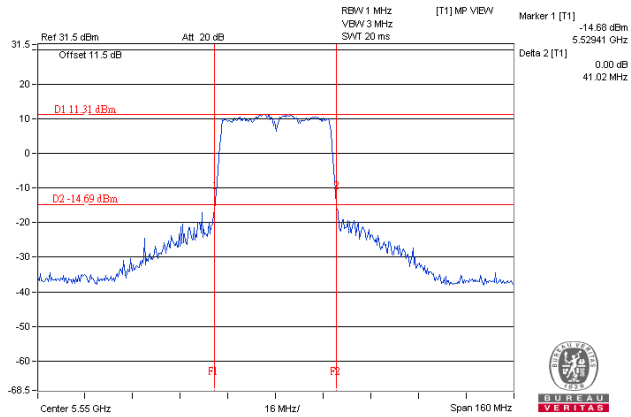
11ac (40MHz) 2S3T TxBF CH110 Chain2



11ac (40MHz) 2S3T TxBF CH102 Chain3

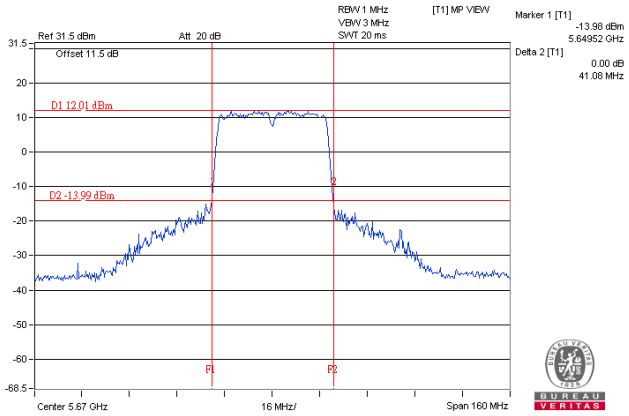


11ac (40MHz) 2S3T TxBF CH110 Chain3

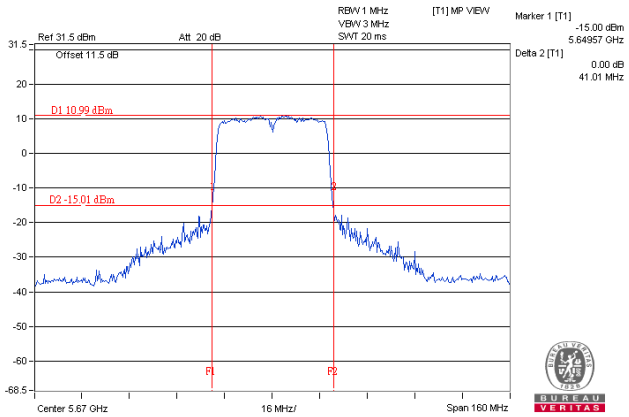


26dB BANDWIDTH SPECTRUM PLOT

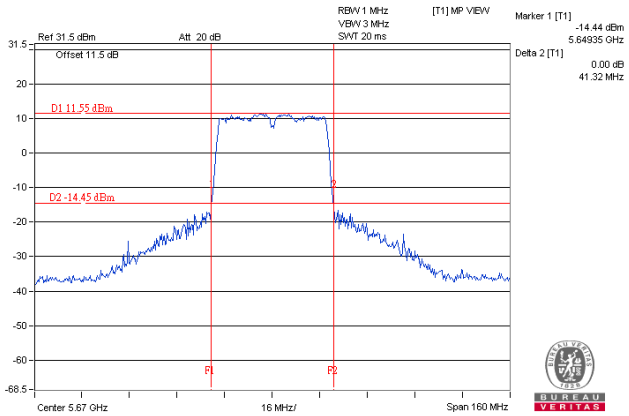
11ac (40MHz) 2S3T TxBF CH134 Chain1



11ac (40MHz) 2S3T TxBF CH134 Chain2

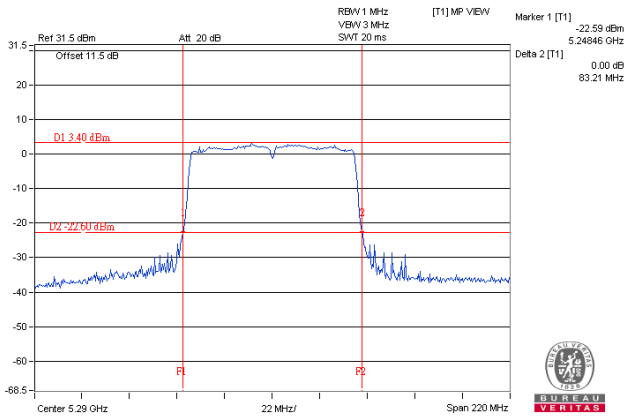


11ac (40MHz) 2S3T TxBF CH134 Chain3

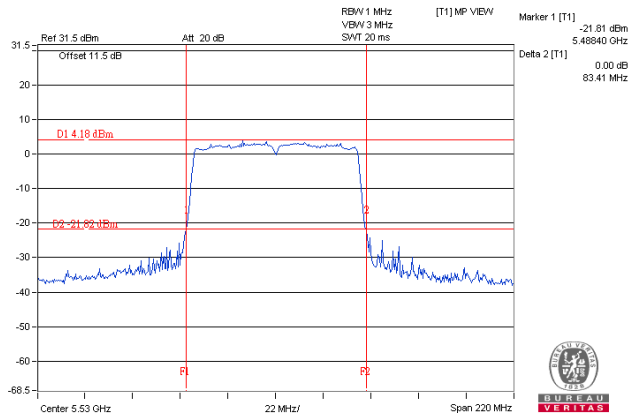


26dB BANDWIDTH SPECTRUM PLOT

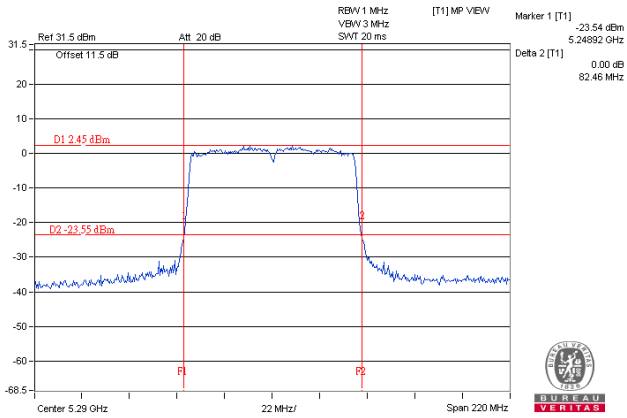
11ac (80MHz) 3S3T SDM CH58 Chain1



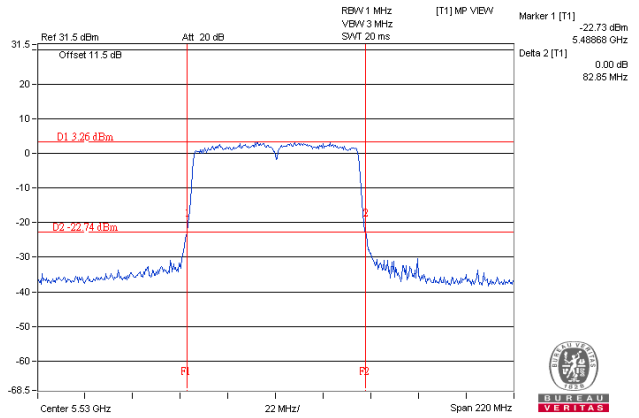
11ac (80MHz) 3S3T SDM CH106 Chain1



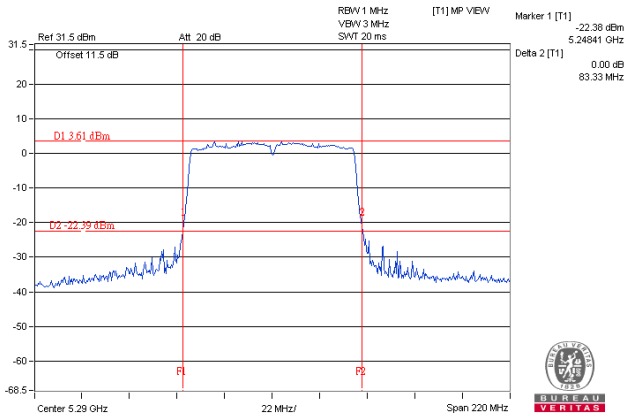
11ac (80MHz) 3S3T SDM CH58 Chain2



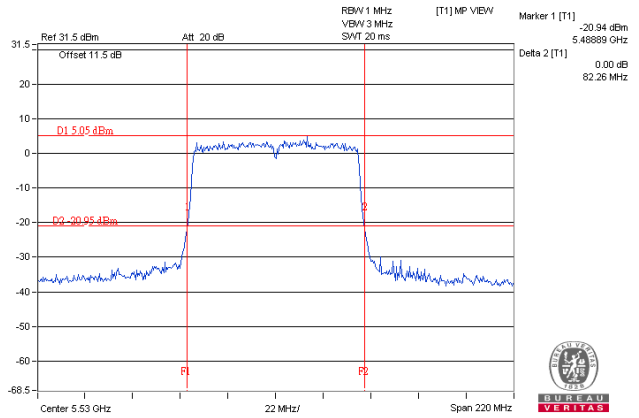
11ac (80MHz) 3S3T SDM CH106 Chain2



11ac (80MHz) 3S3T SDM CH58 Chain3

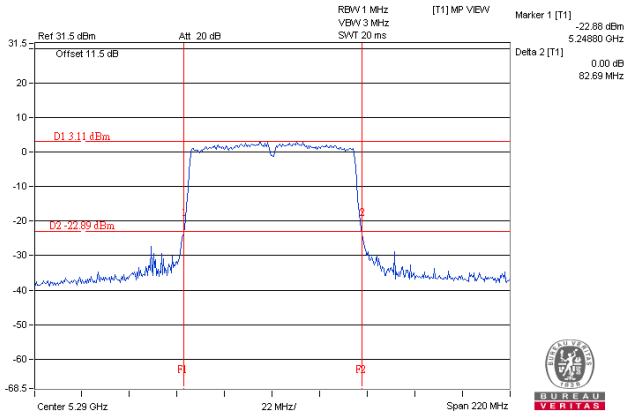


11ac (80MHz) 3S3T SDM CH106 Chain3

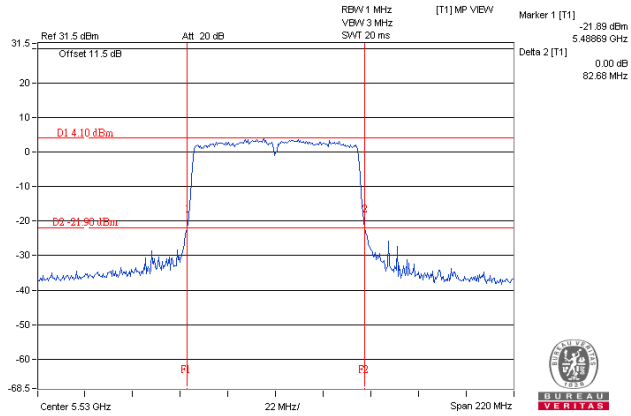


26dB BANDWIDTH SPECTRUM PLOT

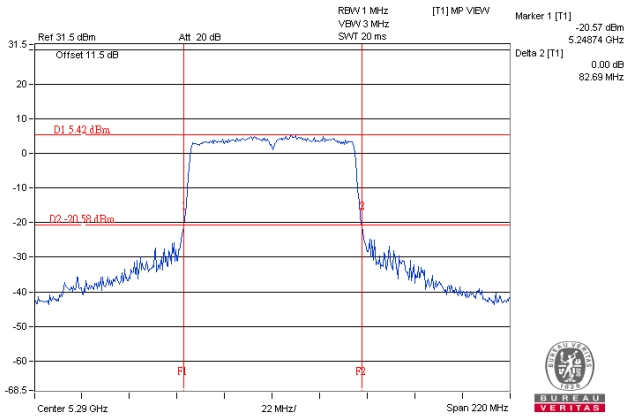
11ac (80MHz) 1S3T TxBF CH58 Chain1



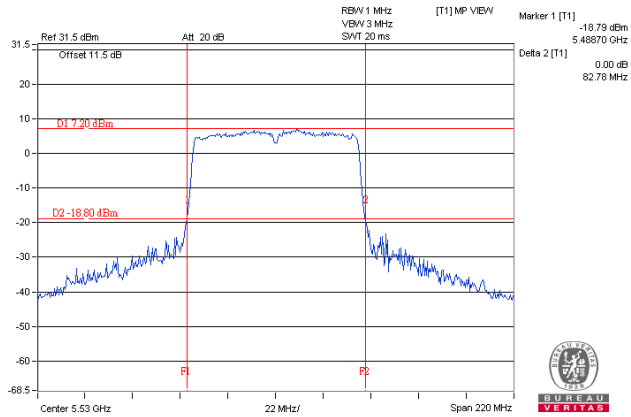
11ac (80MHz) 1S3T TxBF CH106 Chain1



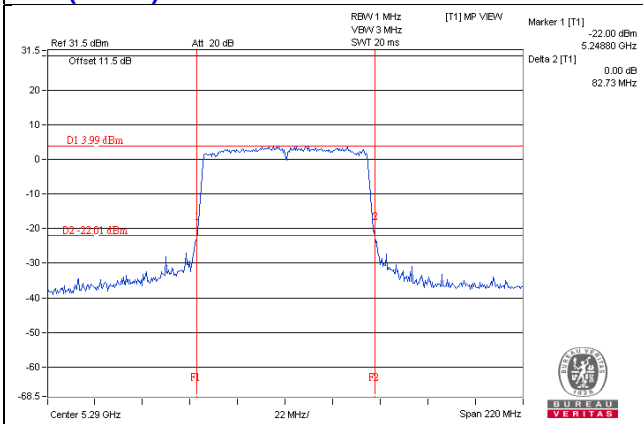
11ac (80MHz) 1S3T TxBF CH58 Chain2



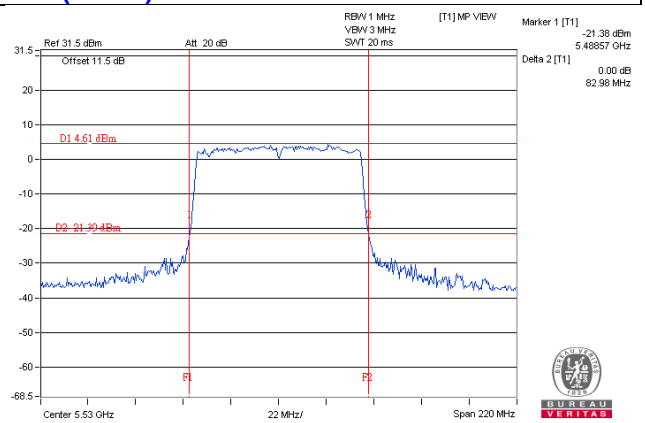
11ac (80MHz) 1S3T TxBF CH106 Chain2



11ac (80MHz) 1S3T TxBF CH58 Chain3

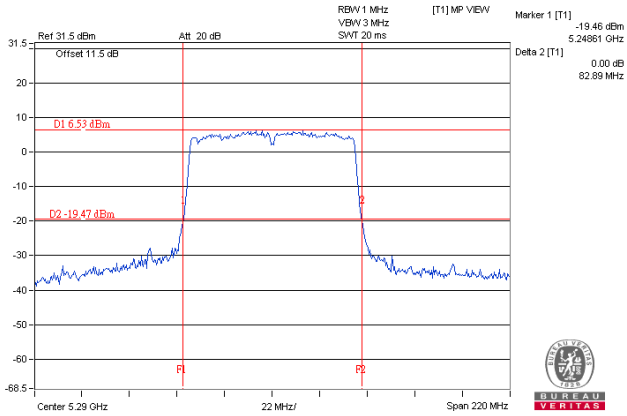


11ac (80MHz) 1S3T TxBF CH106 Chain3

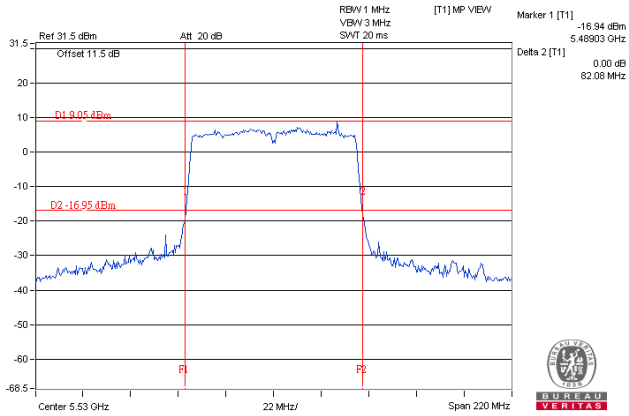


26dB BANDWIDTH SPECTRUM PLOT

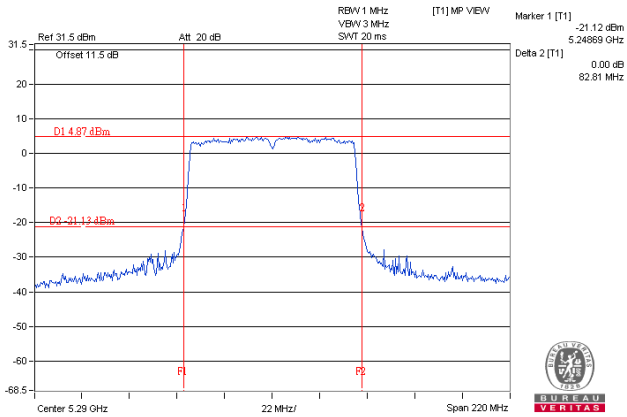
11ac (80MHz) 2S3T TxBF CH58 Chain1



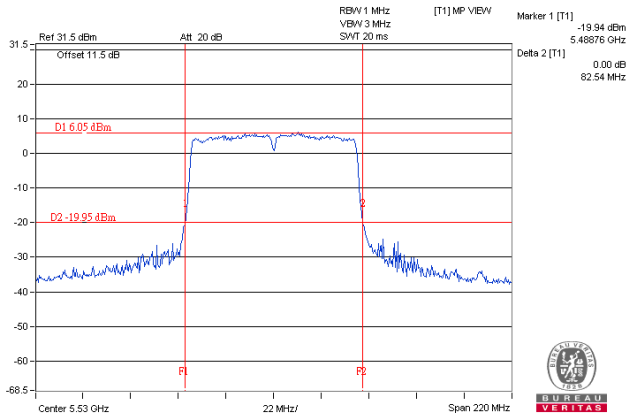
11ac (80MHz) 2S3T TxBF CH106 Chain1



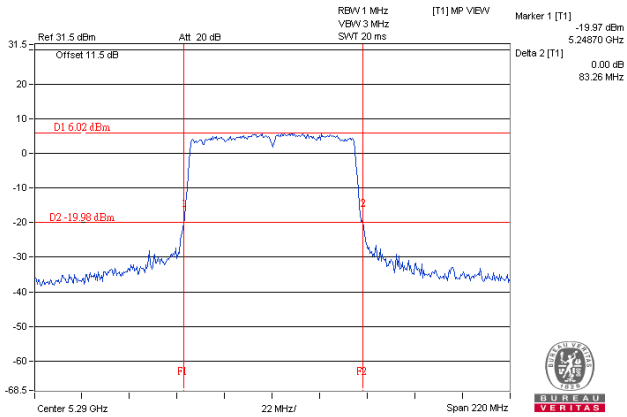
11ac (80MHz) 2S3T TxBF CH58 Chain2



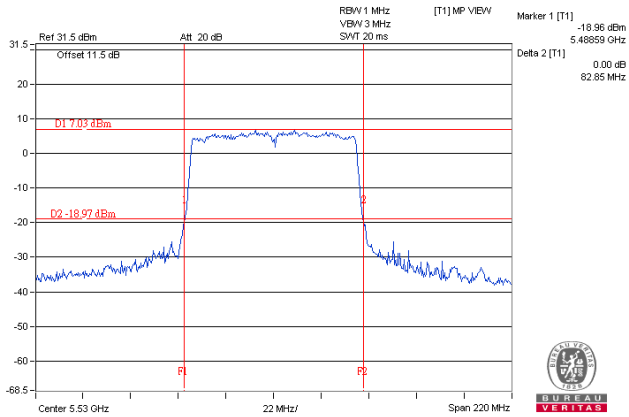
11ac (80MHz) 2S3T TxBF CH106 Chain2



11ac (80MHz) 2S3T TxBF CH58 Chain3



11ac (80MHz) 2S3T TxBF CH106 Chain3



11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	16.92	16.80	16.92
60	5300	16.92	16.80	16.80
64	5320	16.92	16.80	16.92
100	5500	16.92	16.80	16.80
116	5580	16.80	16.80	16.92
140	5700	16.80	16.80	16.80

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	18.00	17.76	17.76
60	5300	18.00	17.76	17.88
64	5320	18.00	17.76	17.88
100	5500	18.00	18.00	17.88
116	5580	18.00	17.76	17.88
140	5700	18.00	17.76	17.88

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	18.00	17.76	17.76
60	5300	18.00	17.76	17.88
64	5320	18.00	17.76	17.76
100	5500	18.00	17.76	17.88
116	5580	17.88	17.76	17.76
140	5700	17.88	17.76	17.76

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
52	5260	18.00	17.76	18.00
60	5300	18.00	17.76	18.00
64	5320	17.88	17.76	18.00
100	5500	18.00	17.76	17.88
116	5580	17.88	17.76	18.00
140	5700	18.00	17.76	17.88

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	36.84	36.84	36.72
62	5310	36.84	36.96	36.72
102	5510	36.72	36.96	36.72
110	5550	36.84	36.84	36.72
134	5670	36.96	36.96	36.72

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	36.48	36.72	36.72
62	5310	36.72	36.60	36.72
102	5510	36.72	36.72	36.72
110	5550	36.72	36.72	36.72
134	5670	36.60	36.60	36.72

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
54	5270	36.84	36.72	36.72
62	5310	36.72	36.72	36.60
102	5510	36.60	36.60	36.72
110	5550	36.60	36.72	36.72
134	5670	36.84	36.72	36.72

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	75.84	75.84	75.84
106	5530	75.84	75.84	75.84

11ac (80MHz) 1S3T TxBF

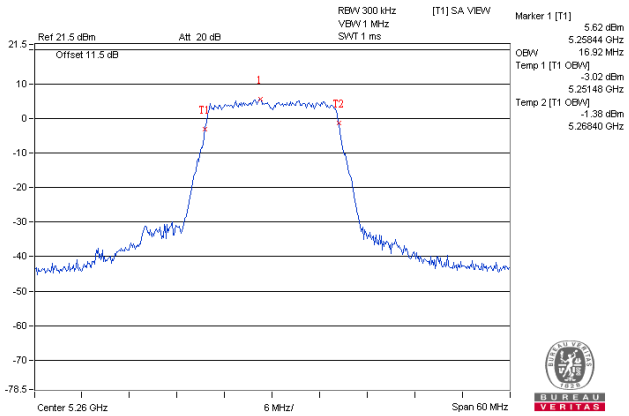
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	75.84	75.84	75.84
106	5530	75.84	75.84	75.84

11ac (80MHz) 2S3T TxBF

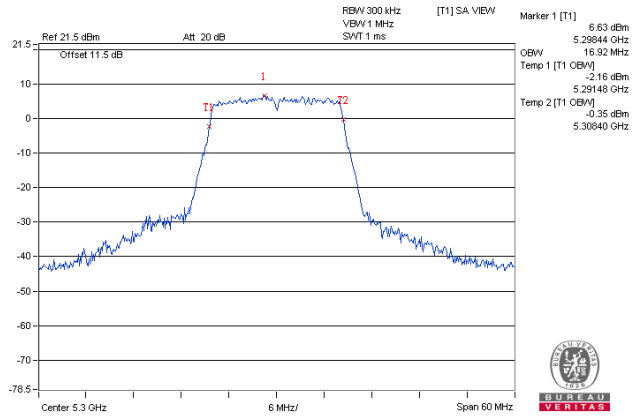
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
58	5290	75.84	75.84	75.84
106	5530	75.84	75.84	75.84

99% OCCUPIED BANDWIDTH SPECTRUM PLOT

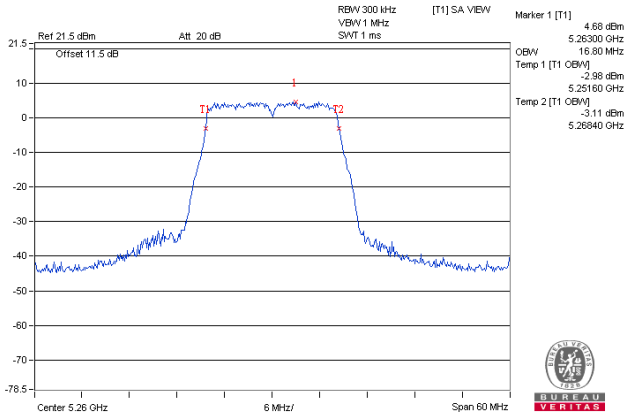
11a 1S3T CDD CH52 Chain1



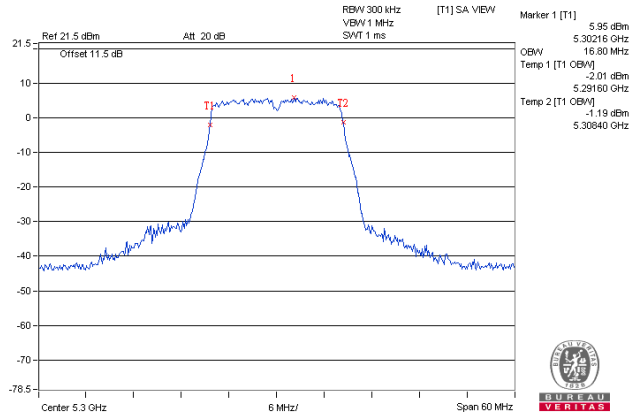
11a 1S3T CDD CH60 Chain1



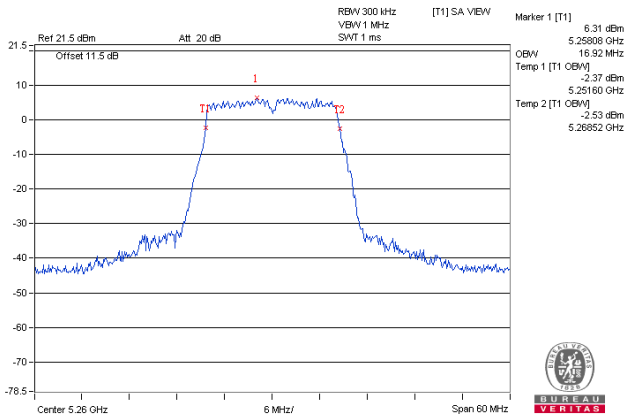
11a 1S3T CDD CH52 Chain2



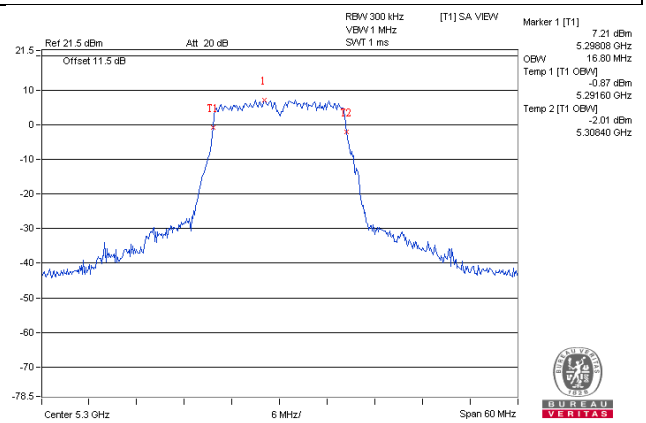
11a 1S3T CDD CH60 Chain2



11a 1S3T CDD CH52 Chain3

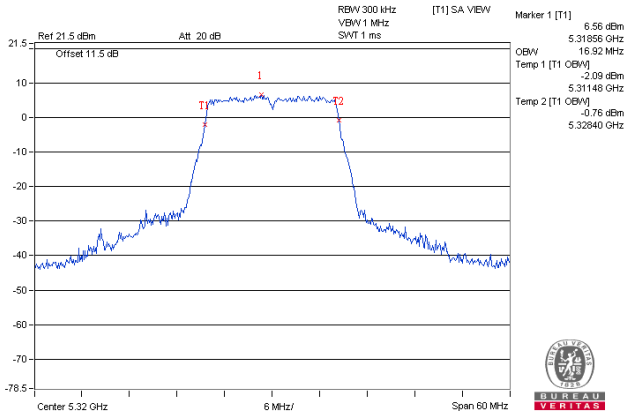


11a 1S3T CDD CH60 Chain3

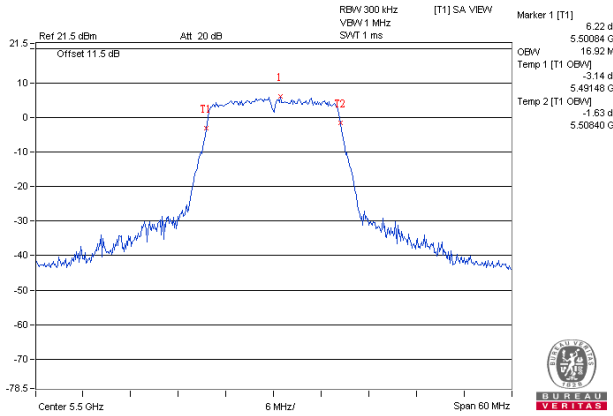


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

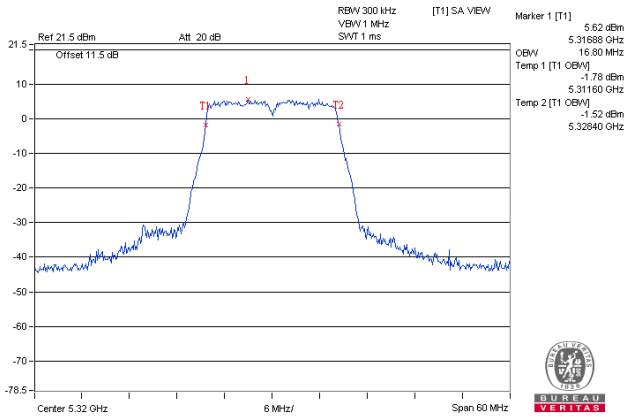
11a 1S3T CDD CH64 Chain1



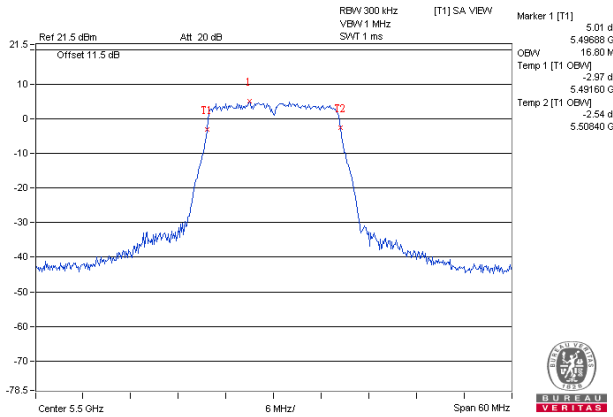
11a 1S3T CDD CH100 Chain1



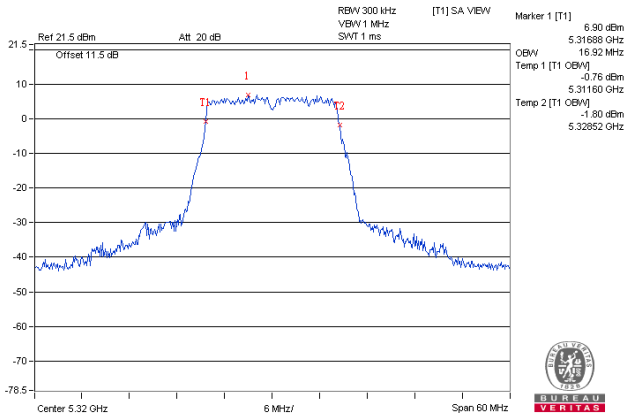
11a 1S3T CDD CH64 Chain2



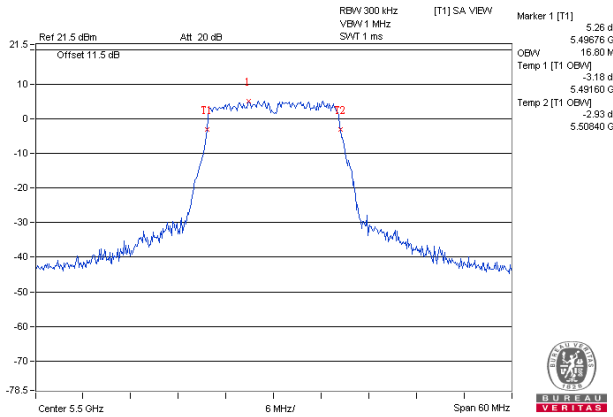
11a 1S3T CDD CH100 Chain2



11a 1S3T CDD CH64 Chain3

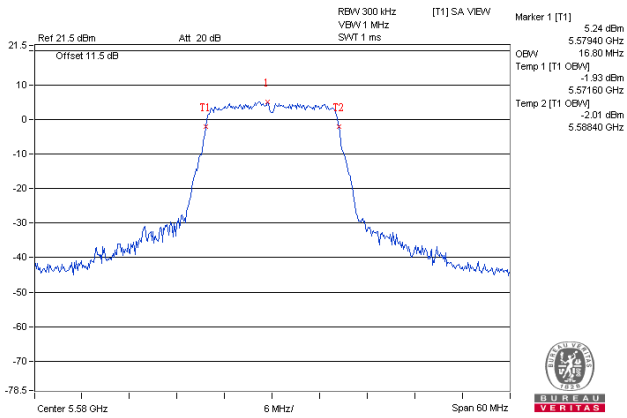


11a 1S3T CDD CH100 Chain3

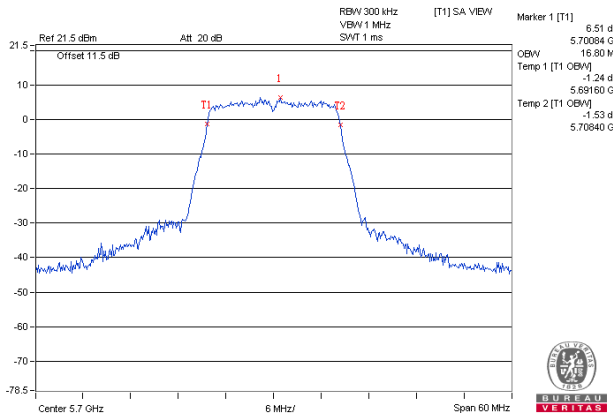


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

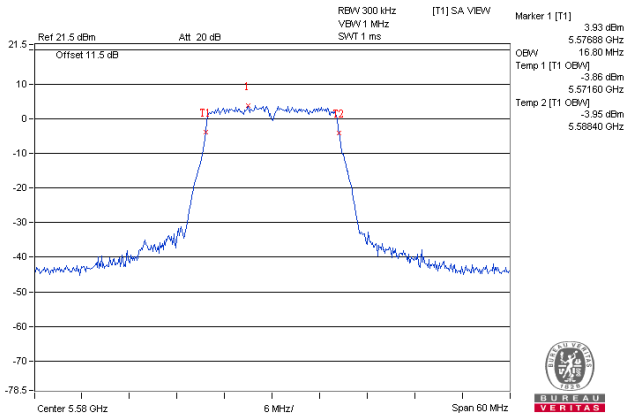
11a 1S3T CDD CH116 Chain1



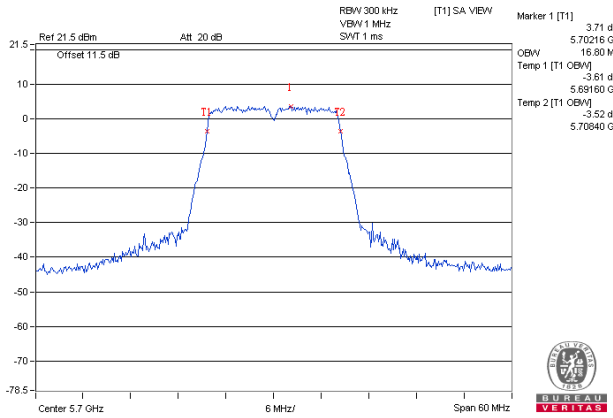
11a 1S3T CDD CH140 Chain1



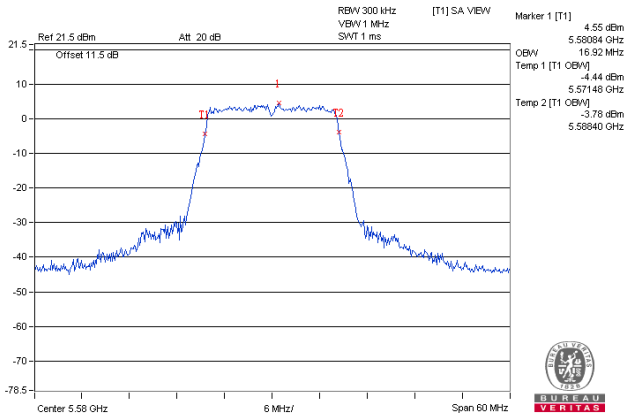
11a 1S3T CDD CH116 Chain2



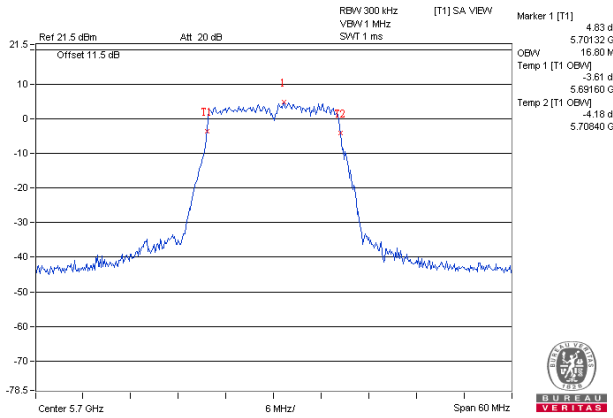
11a 1S3T CDD CH140 Chain2



11a 1S3T CDD CH116 Chain3

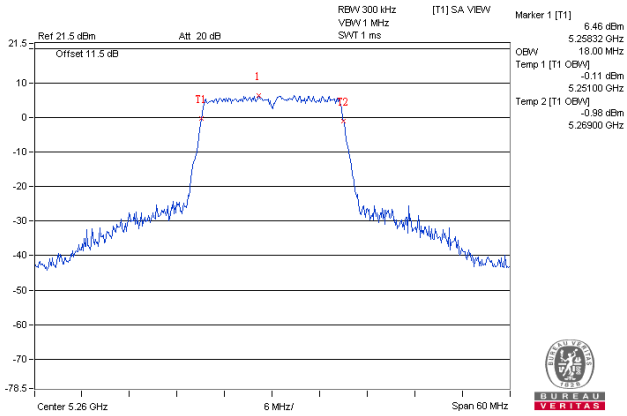


11a 1S3T CDD CH140 Chain3

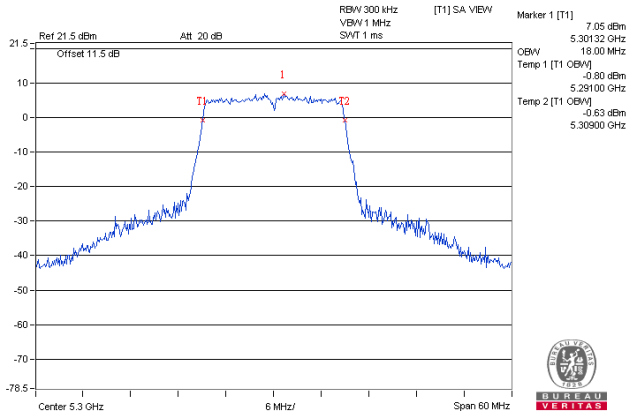


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

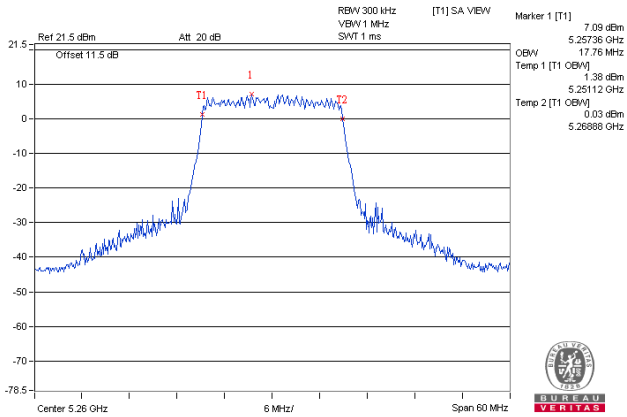
11ac (20MHz) 3S3T SDM CH52 Chain1



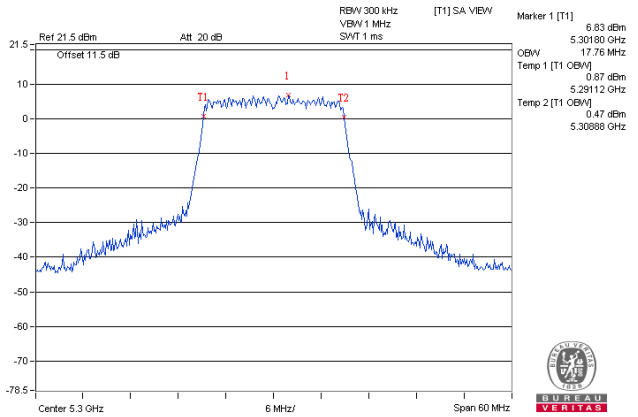
11ac (20MHz) 3S3T SDM CH60 Chain1



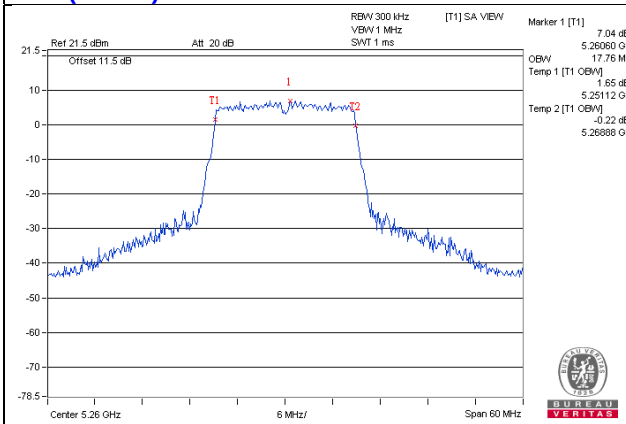
11ac (20MHz) 3S3T SDM CH52 Chain2



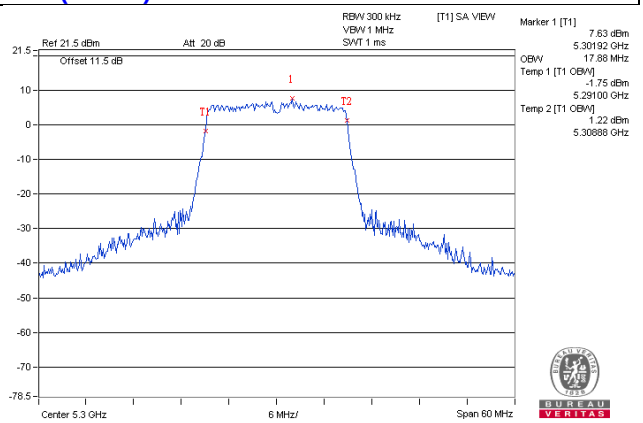
11ac (20MHz) 3S3T SDM CH60 Chain2



11ac (20MHz) 3S3T SDM CH52 Chain3

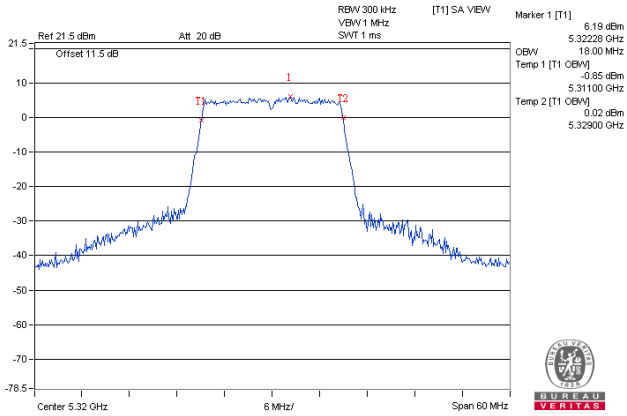


11ac (20MHz) 3S3T SDM CH60 Chain3

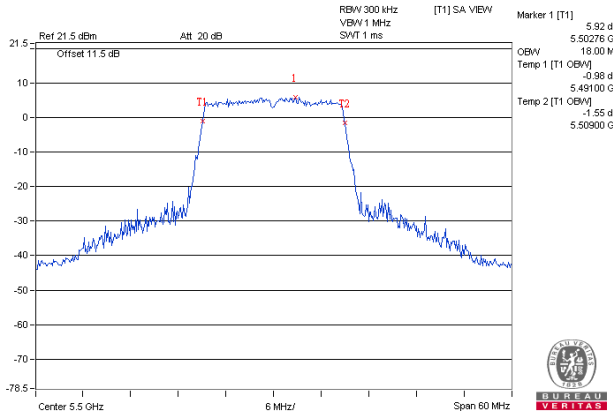


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

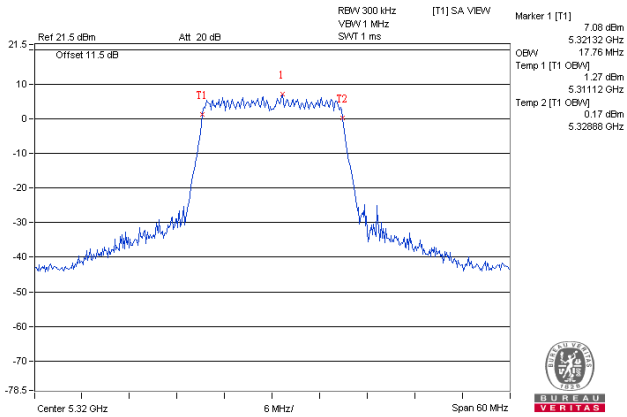
11ac (20MHz) 3S3T SDM CH64 Chain1



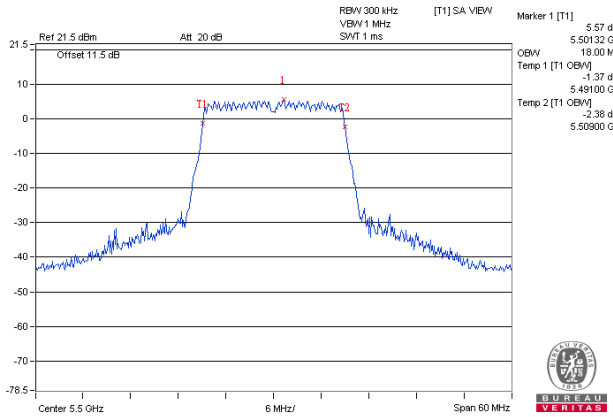
11ac (20MHz) 3S3T SDM CH100 Chain1



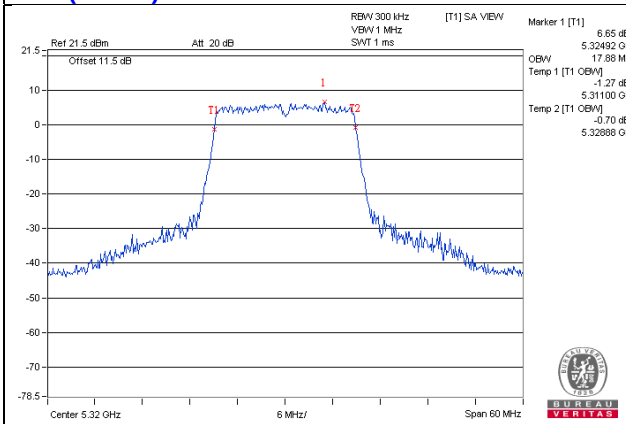
11ac (20MHz) 3S3T SDM CH64 Chain2



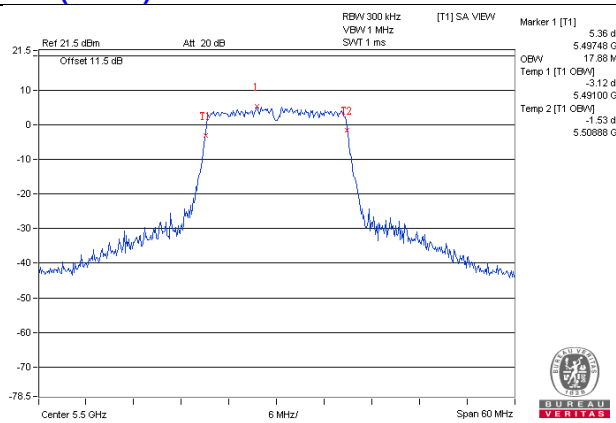
11ac (20MHz) 3S3T SDM CH100 Chain2



11ac (20MHz) 3S3T SDM CH64 Chain3

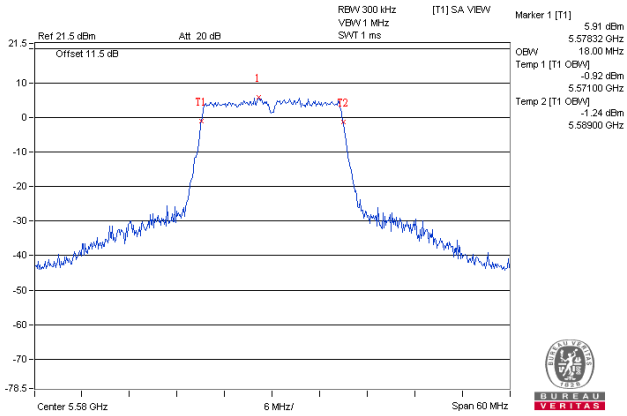


11ac (20MHz) 3S3T SDM CH100 Chain3

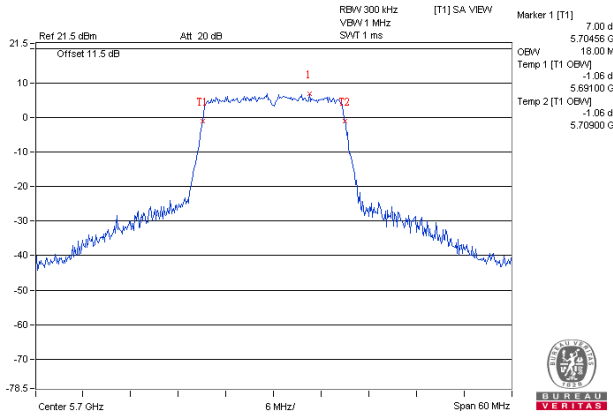


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

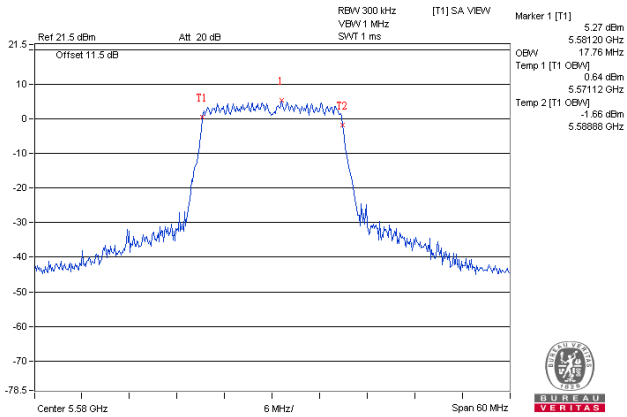
11ac (20MHz) 3S3T SDM CH116 Chain1



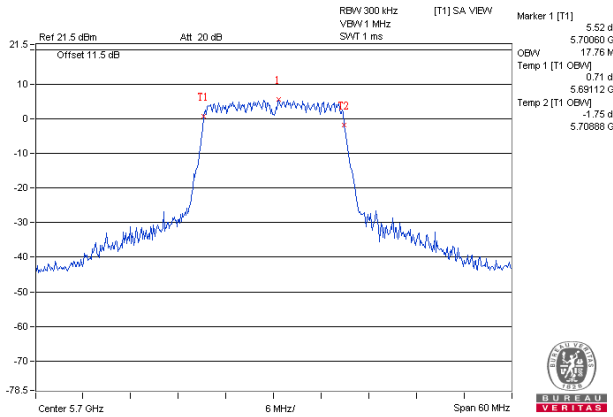
11ac (20MHz) 3S3T SDM CH140 Chain1



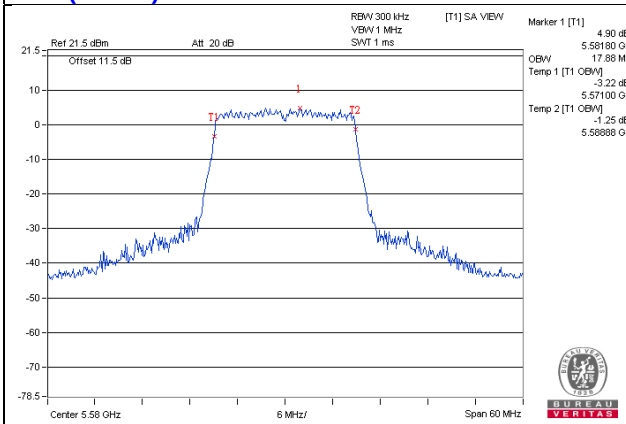
11ac (20MHz) 3S3T SDM CH116 Chain2



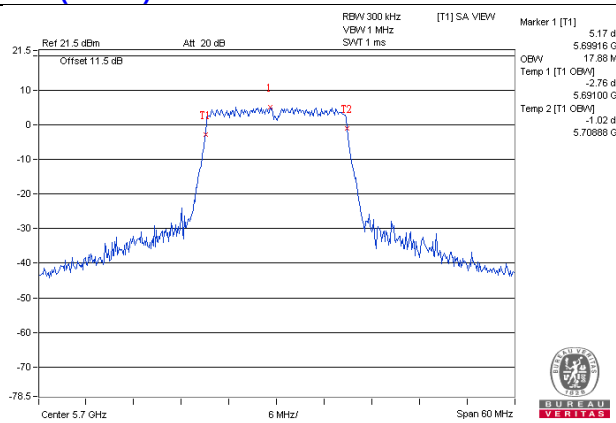
11ac (20MHz) 3S3T SDM CH140 Chain2



11ac (20MHz) 3S3T SDM CH116 Chain3

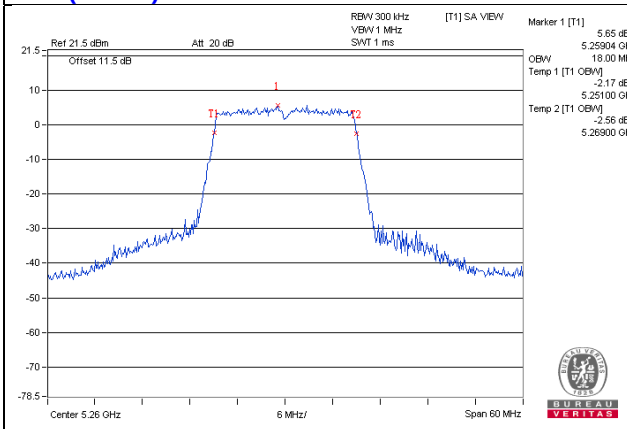


11ac (20MHz) 3S3T SDM CH140 Chain3

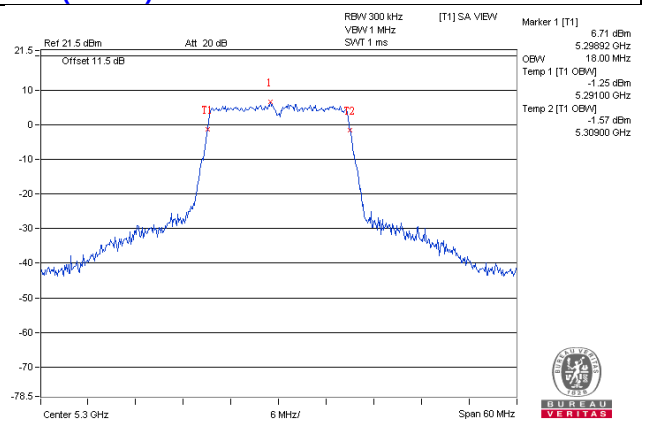


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

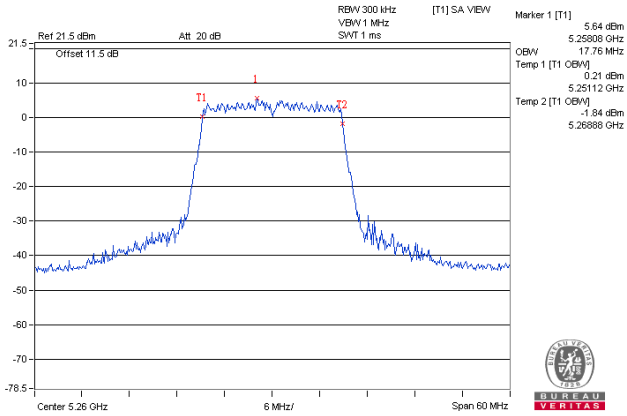
11ac (20MHz) 1S3T TxBF CH52 Chain1



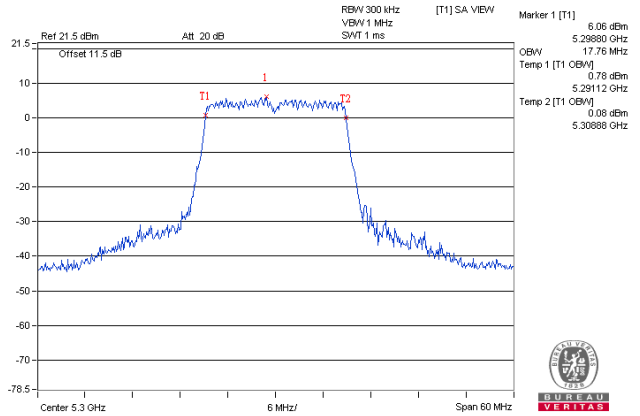
11ac (20MHz) 1S3T TxBF CH60 Chain1



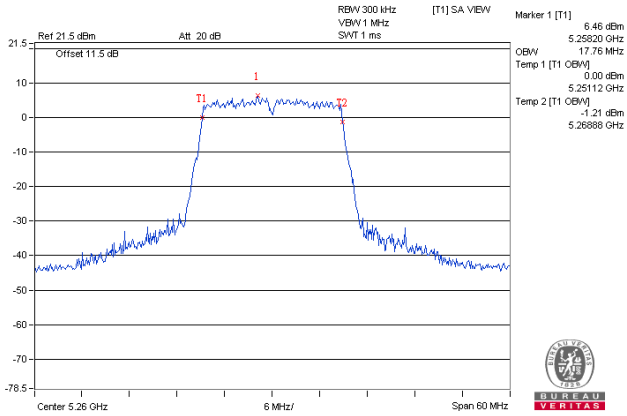
11ac (20MHz) 1S3T TxBF CH52 Chain2



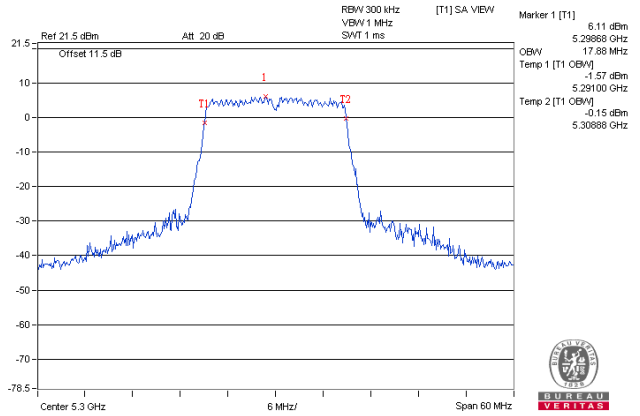
11ac (20MHz) 1S3T TxBF CH60 Chain2



11ac (20MHz) 1S3T TxBF CH52 Chain3

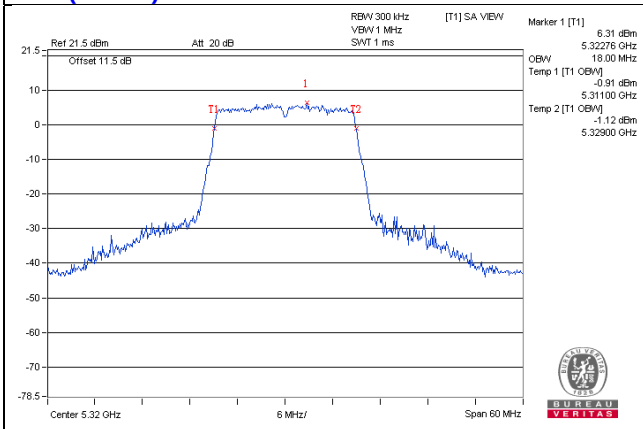


11ac (20MHz) 1S3T TxBF CH60 Chain3

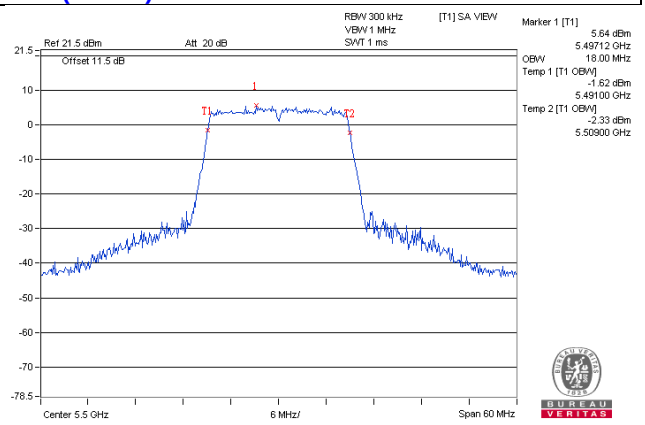


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

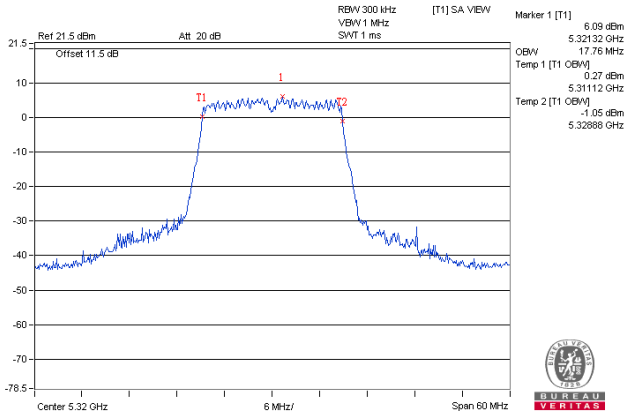
11ac (20MHz) 1S3T TxBF CH64 Chain1



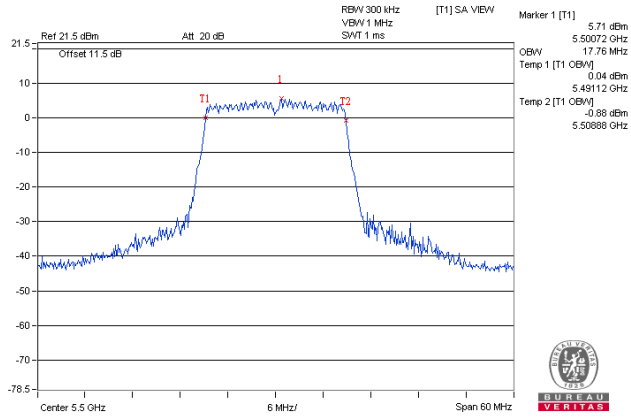
11ac (20MHz) 1S3T TxBF CH100 Chain1



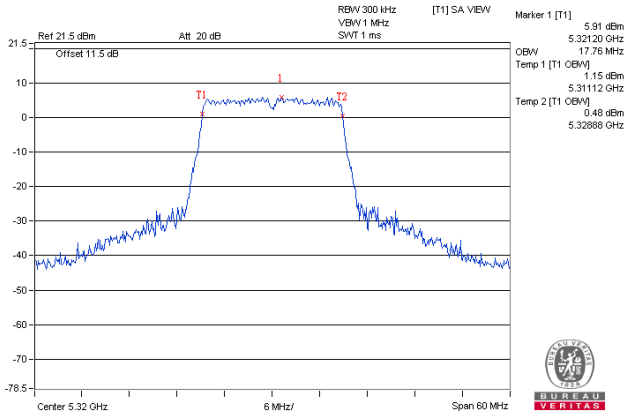
11ac (20MHz) 1S3T TxBF CH64 Chain2



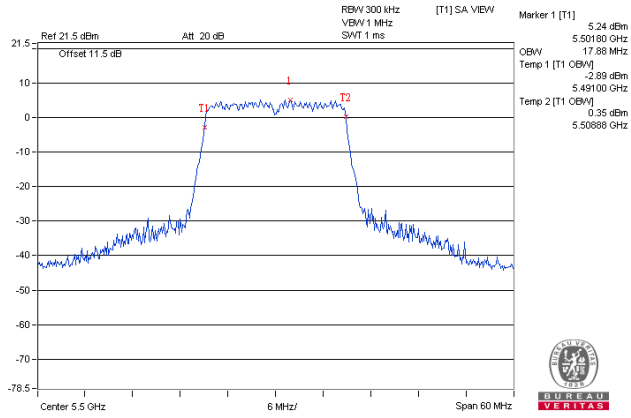
11ac (20MHz) 1S3T TxBF CH100 Chain2



11ac (20MHz) 1S3T TxBF CH64 Chain3

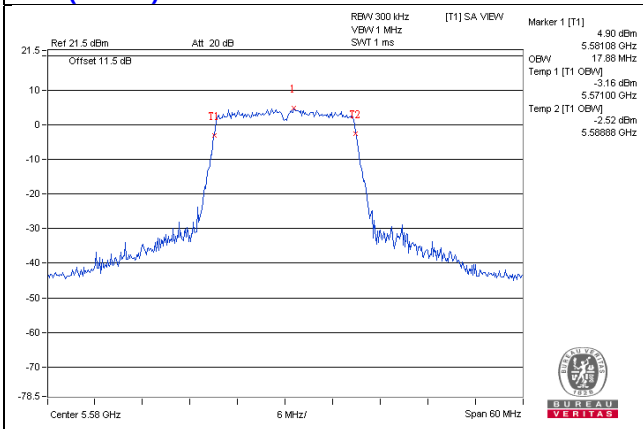


11ac (20MHz) 1S3T TxBF CH100 Chain3

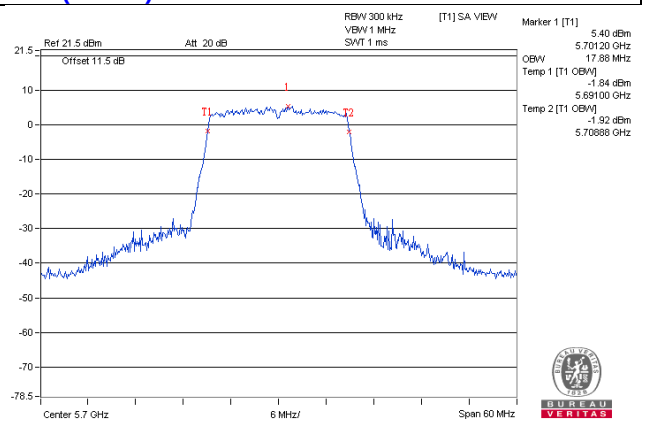


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

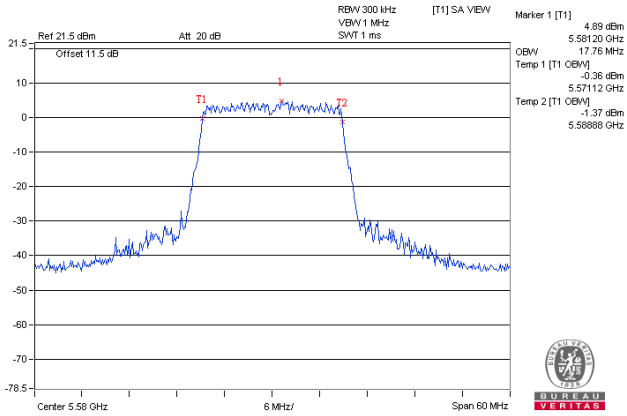
11ac (20MHz) 1S3T TxBF CH116 Chain1



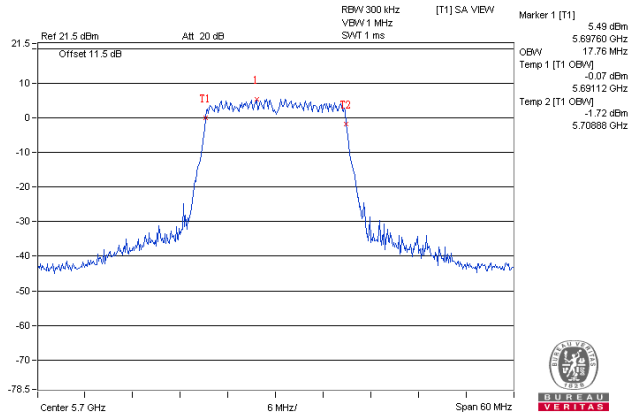
11ac (20MHz) 1S3T TxBF CH140 Chain1



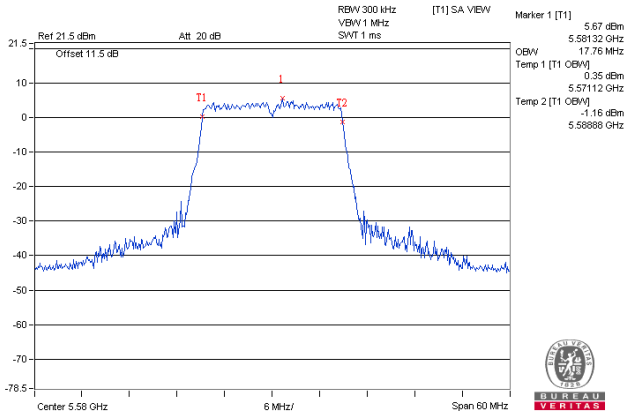
11ac (20MHz) 1S3T TxBF CH116 Chain2



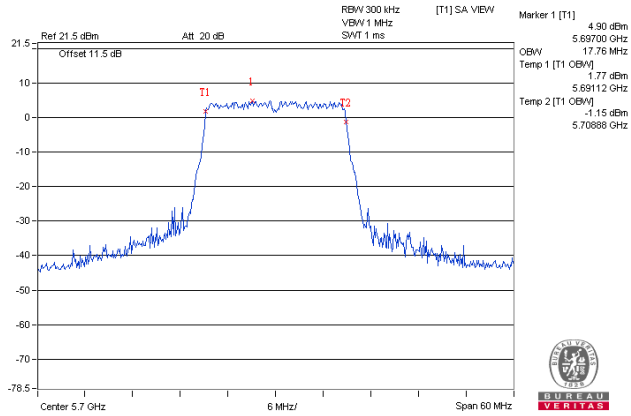
11ac (20MHz) 1S3T TxBF CH140 Chain2



11ac (20MHz) 1S3T TxBF CH116 Chain3

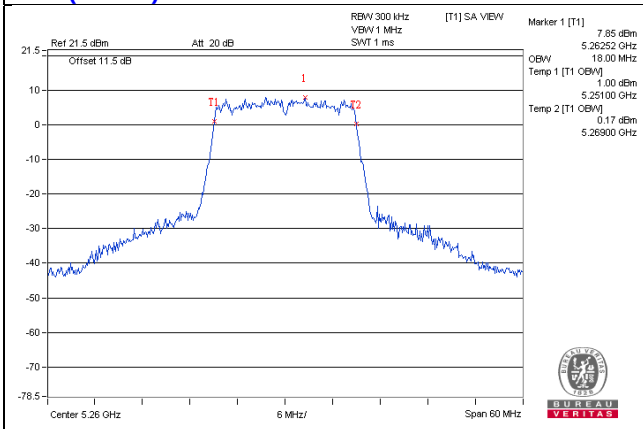


11ac (20MHz) 1S3T TxBF CH140 Chain3

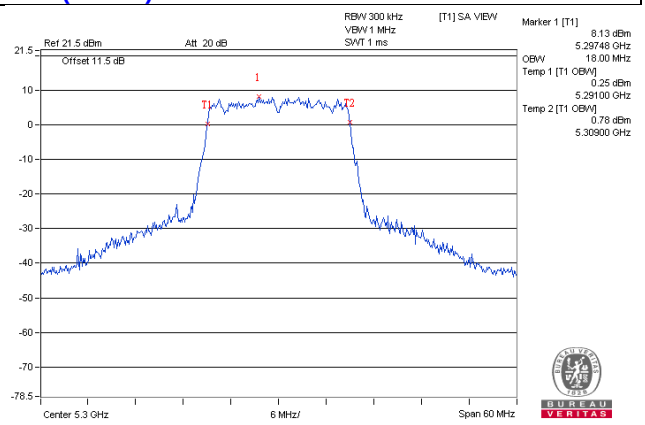


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

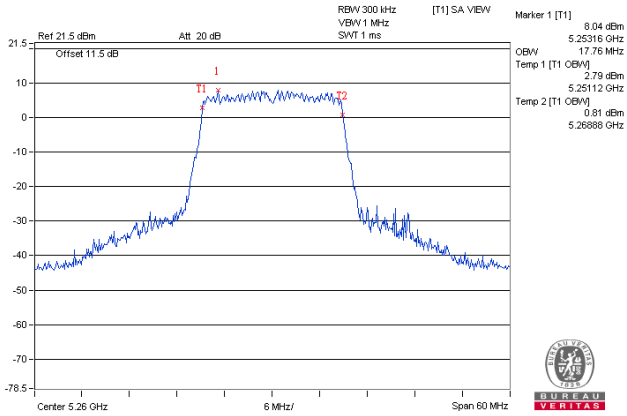
11ac (20MHz) 2S3T TxBF CH52 Chain1



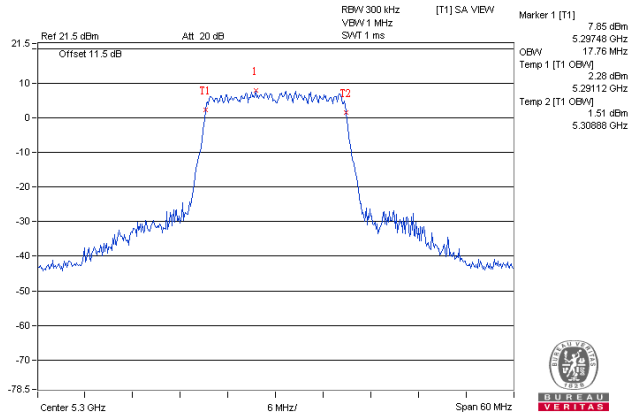
11ac (20MHz) 2S3T TxBF CH60 Chain1



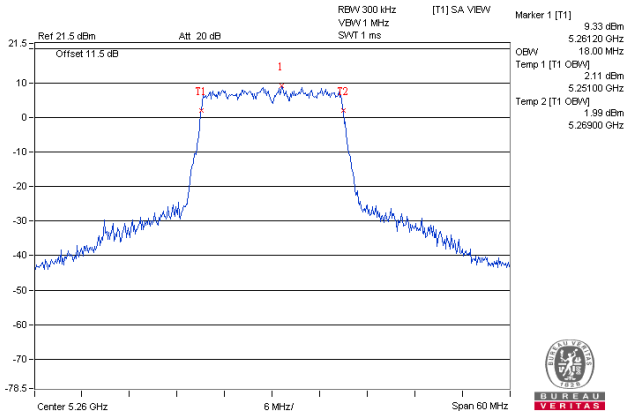
11ac (20MHz) 2S3T TxBF CH52 Chain2



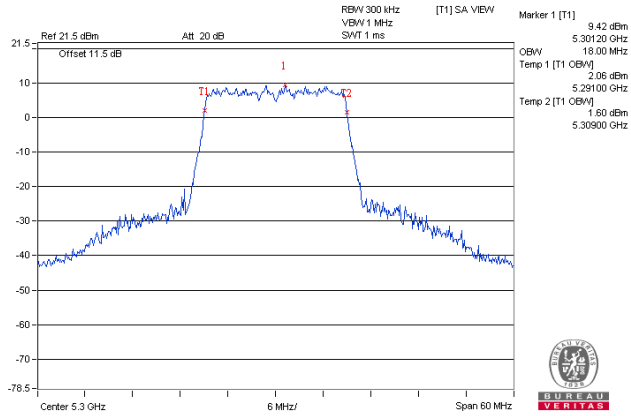
11ac (20MHz) 2S3T TxBF CH60 Chain2



11ac (20MHz) 2S3T TxBF CH52 Chain3

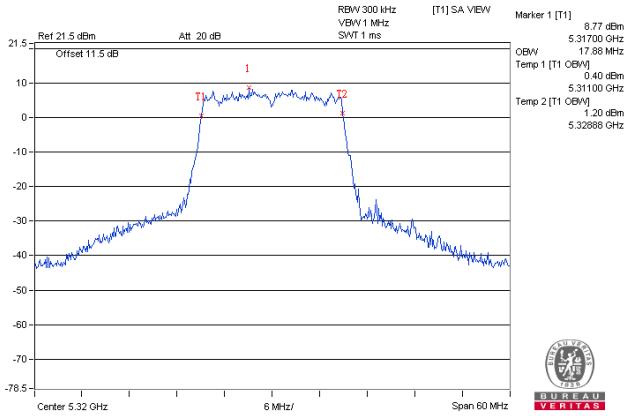


11ac (20MHz) 2S3T TxBF CH60 Chain3

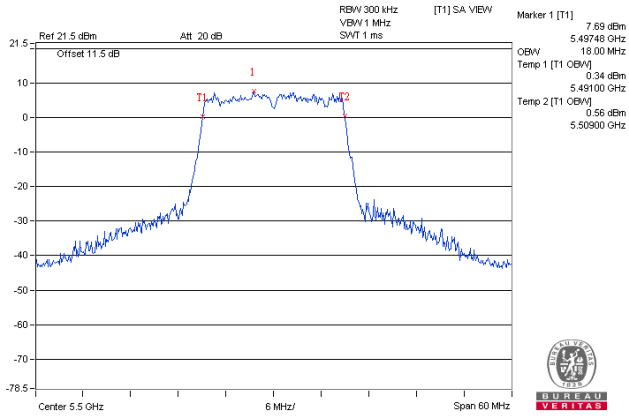


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

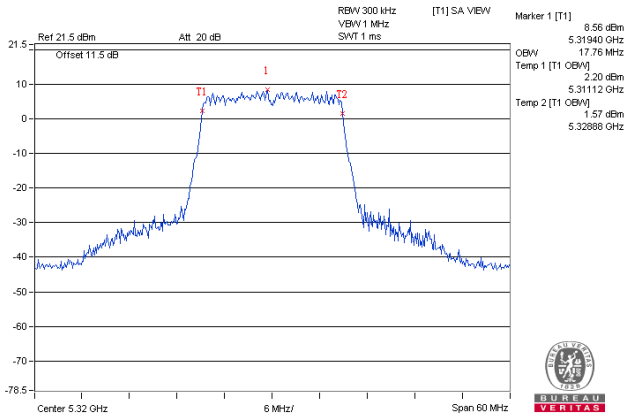
11ac (20MHz) 2S3T TxBF CH64 Chain1



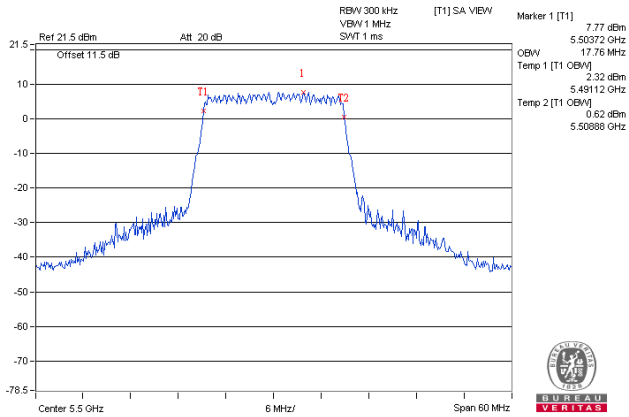
11ac (20MHz) 2S3T TxBF CH100 Chain1



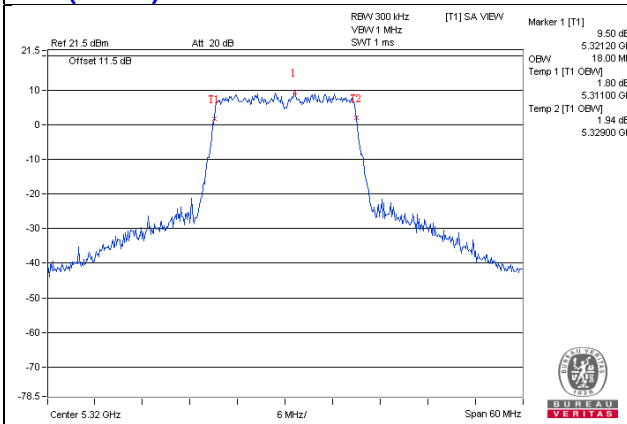
11ac (20MHz) 2S3T TxBF CH64 Chain2



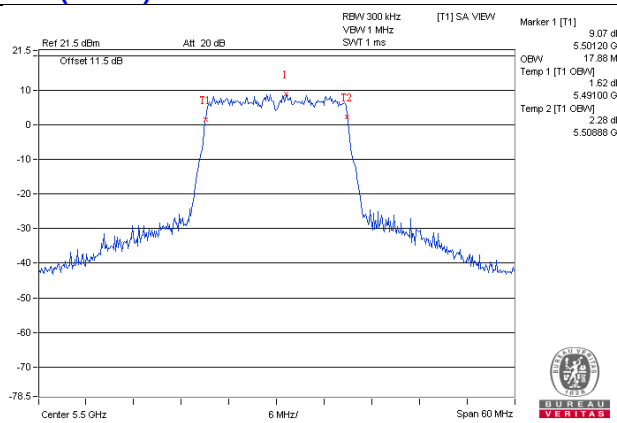
11ac (20MHz) 2S3T TxBF CH100 Chain2



11ac (20MHz) 2S3T TxBF CH64 Chain3

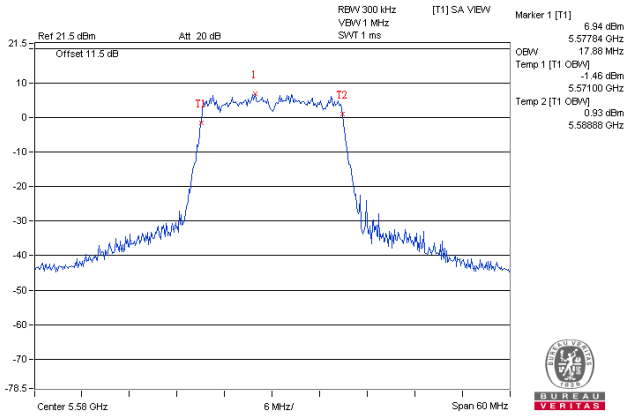


11ac (20MHz) 2S3T TxBF CH100 Chain3

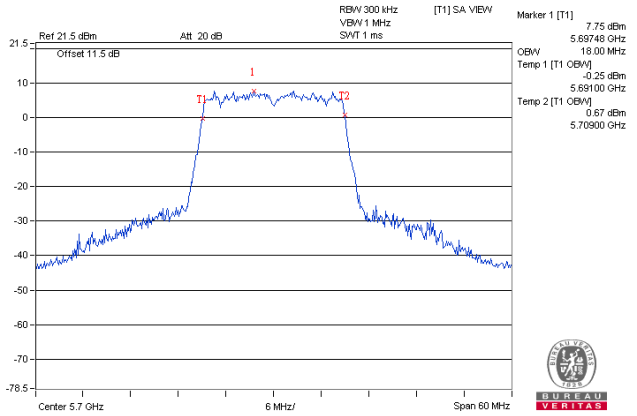


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

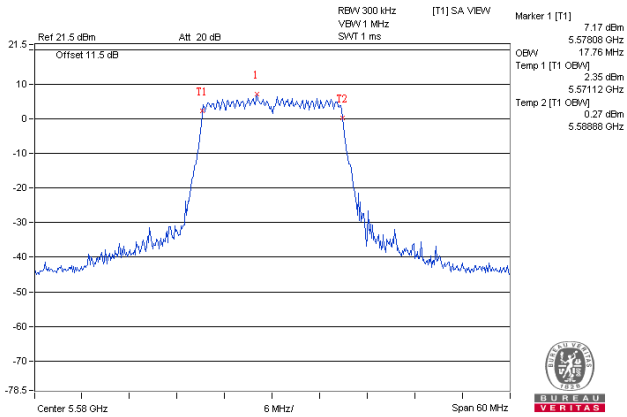
11ac (20MHz) 2S3T TxBF CH116 Chain1



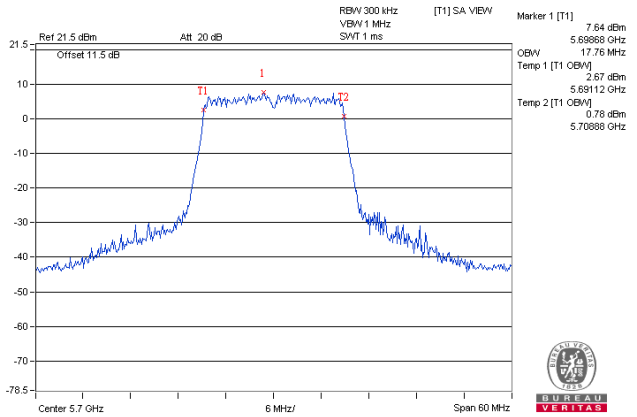
11ac (20MHz) 2S3T TxBF CH140 Chain1



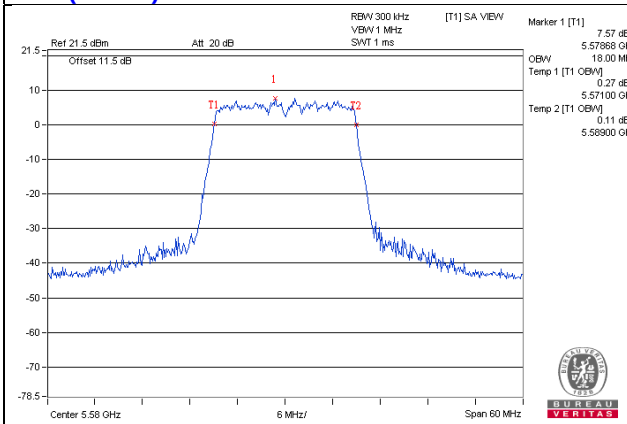
11ac (20MHz) 2S3T TxBF CH116 Chain2



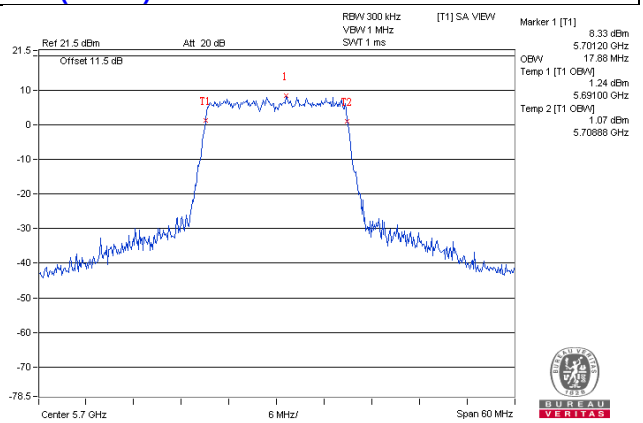
11ac (20MHz) 2S3T TxBF CH140 Chain2



11ac (20MHz) 2S3T TxBF CH116 Chain3

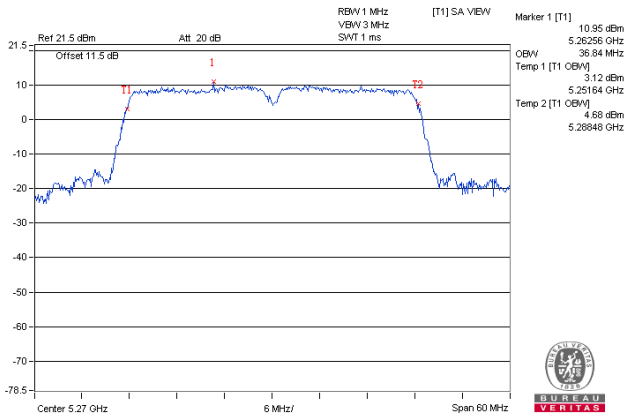


11ac (20MHz) 2S3T TxBF CH140 Chain3

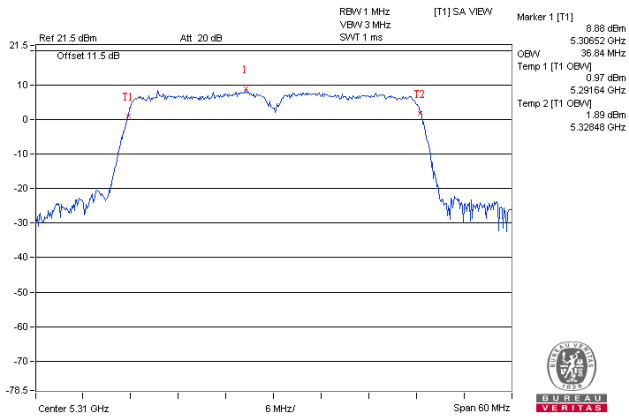


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

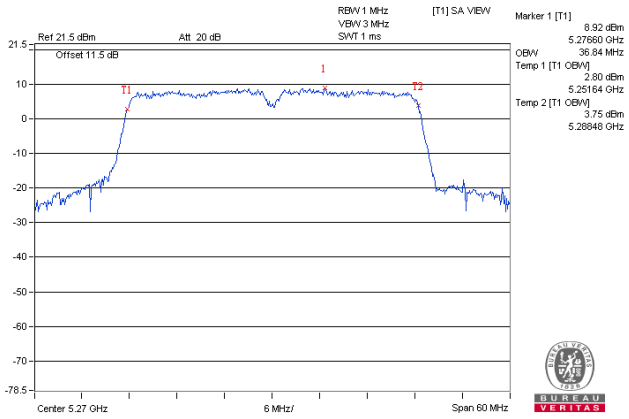
11ac (40MHz) 3S3T SDM CH54 Chain1



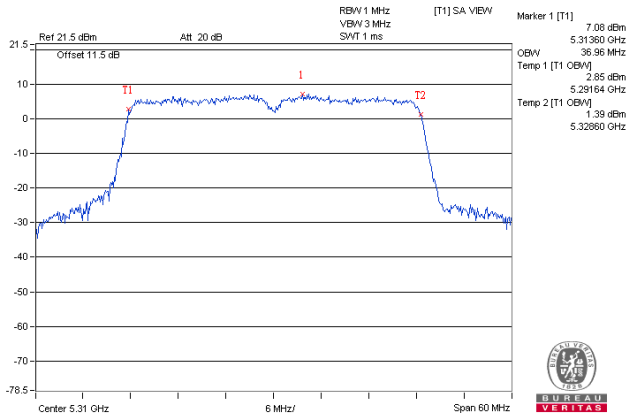
11ac (40MHz) 3S3T SDM CH62 Chain1



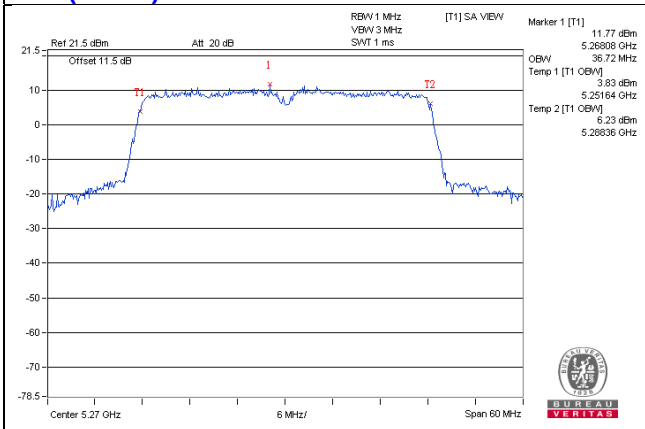
11ac (40MHz) 3S3T SDM CH54 Chain2



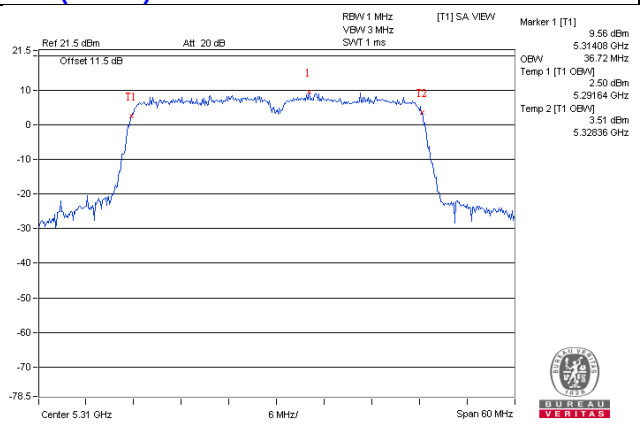
11ac (40MHz) 3S3T SDM CH62 Chain2



11ac (40MHz) 3S3T SDM CH54 Chain3

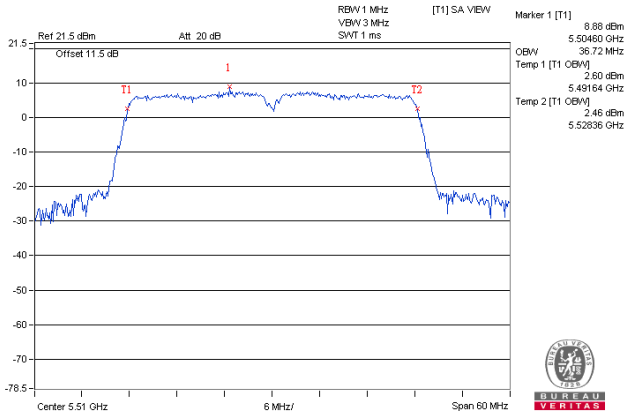


11ac (40MHz) 3S3T SDM CH62 Chain3

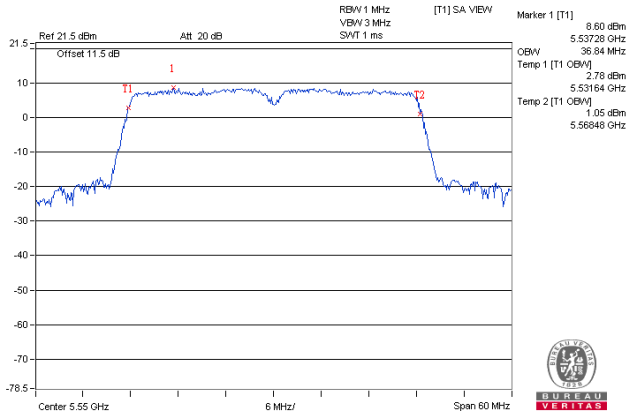


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

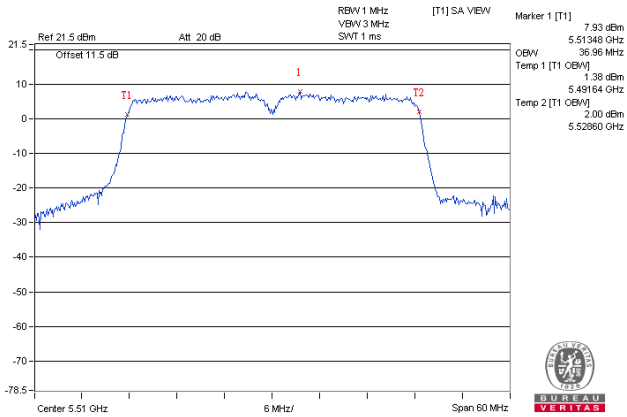
11ac (40MHz) 3S3T SDM CH102 Chain1



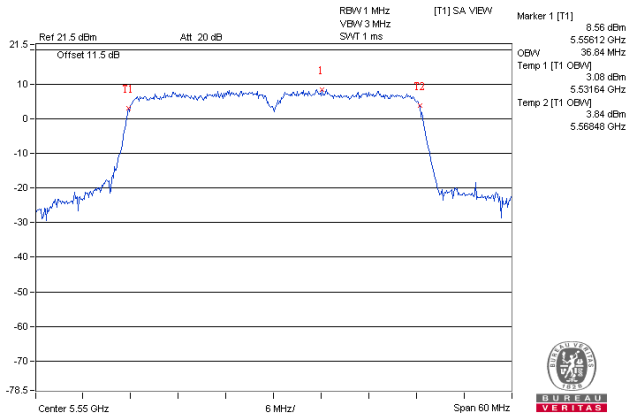
11ac (40MHz) 3S3T SDM CH110 Chain1



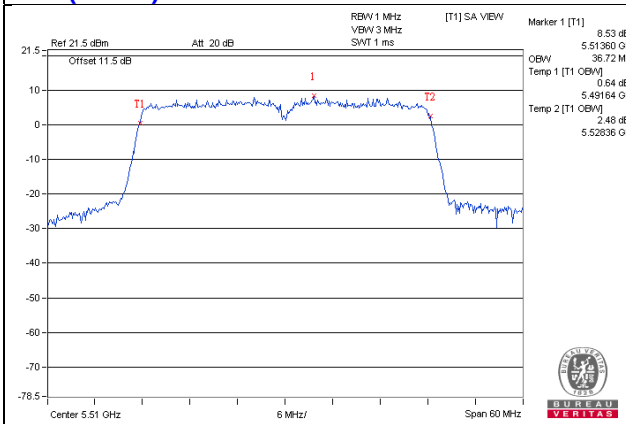
11ac (40MHz) 3S3T SDM CH102 Chain2



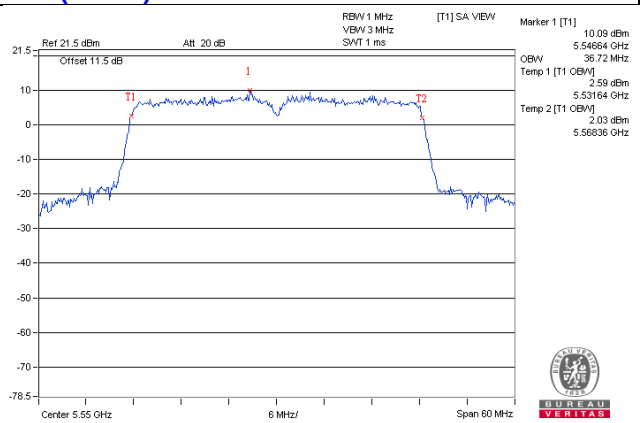
11ac (40MHz) 3S3T SDM CH110 Chain2



11ac (40MHz) 3S3T SDM CH102 Chain3

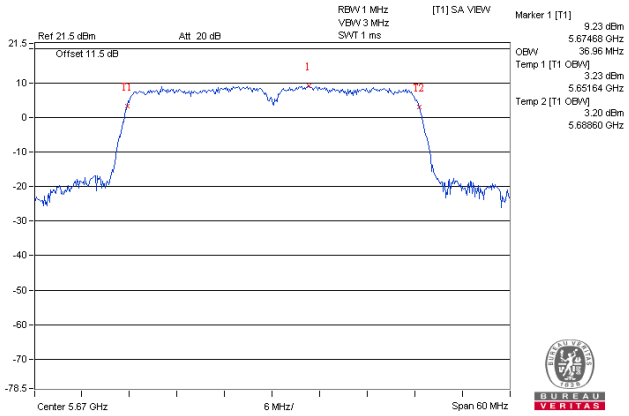


11ac (40MHz) 3S3T SDM CH110 Chain3

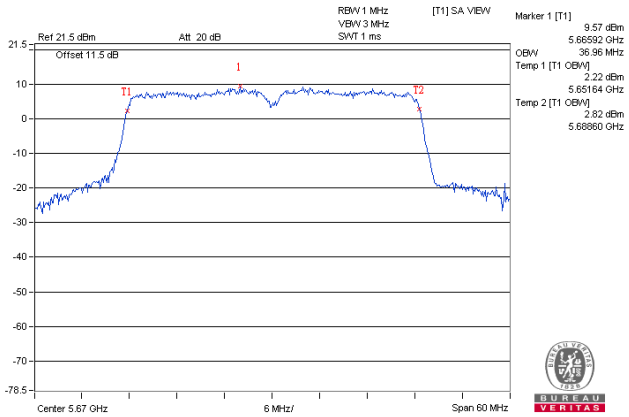


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

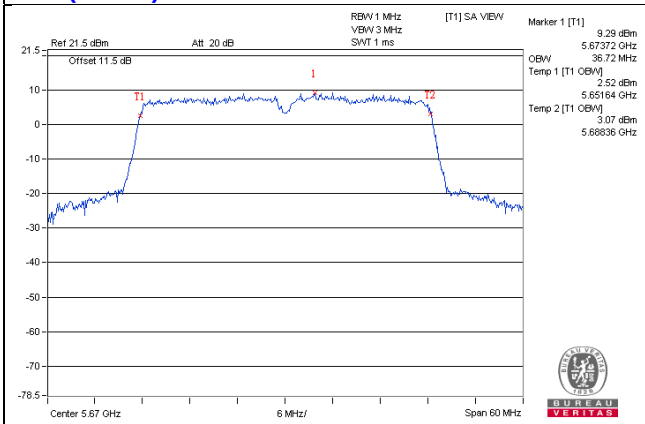
11ac (40MHz) 3S3T SDM CH134 Chain1



11ac (40MHz) 3S3T SDM CH134 Chain2

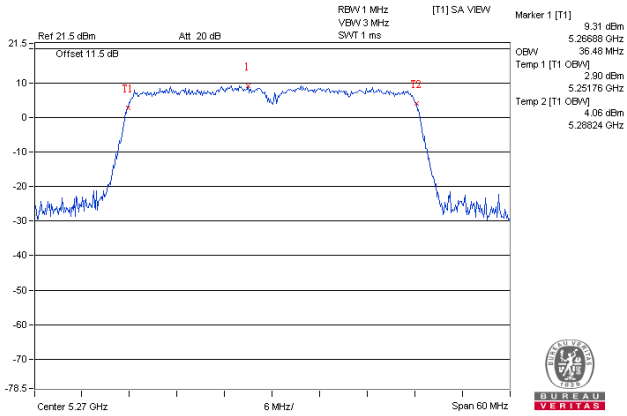


11ac (40MHz) 3S3T SDM CH134 Chain3

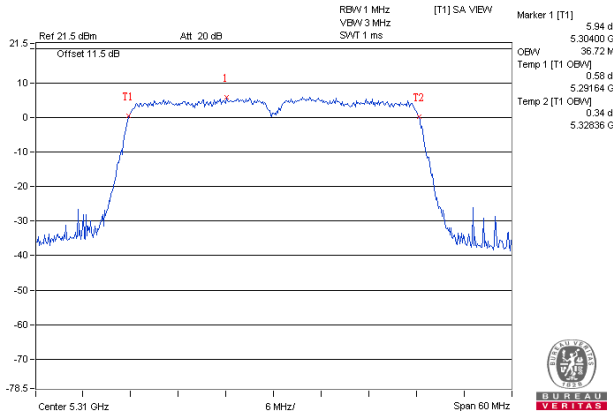


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

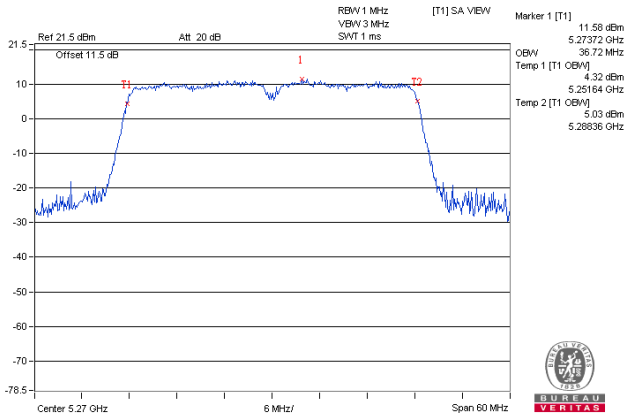
11ac (40MHz) 1S3T TxBF CH54 Chain1



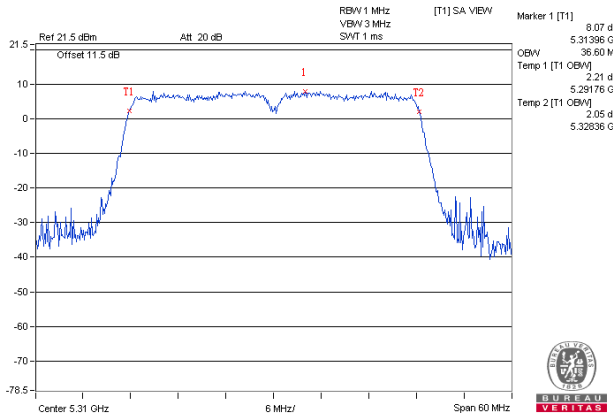
11ac (40MHz) 1S3T TxBF CH62 Chain1



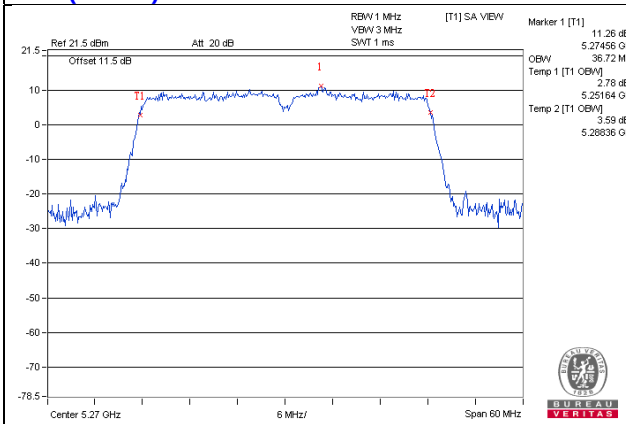
11ac (40MHz) 1S3T TxBF CH54 Chain2



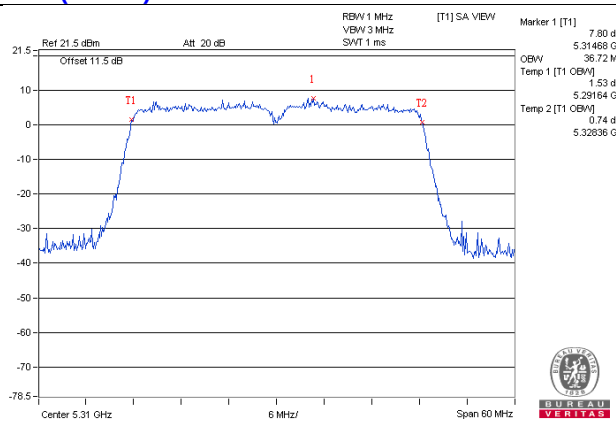
11ac (40MHz) 1S3T TxBF CH62 Chain2



11ac (40MHz) 1S3T TxBF CH54 Chain3

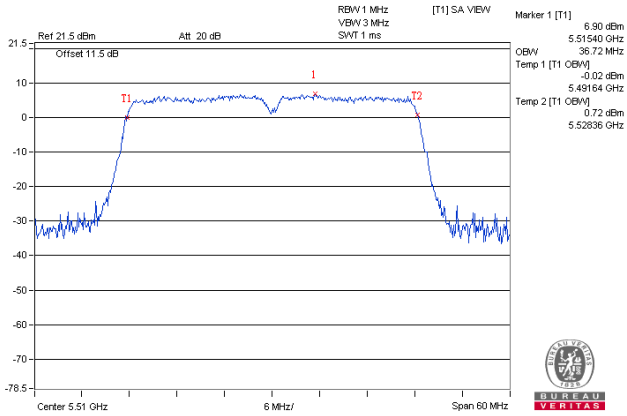


11ac (40MHz) 1S3T TxBF CH62 Chain3

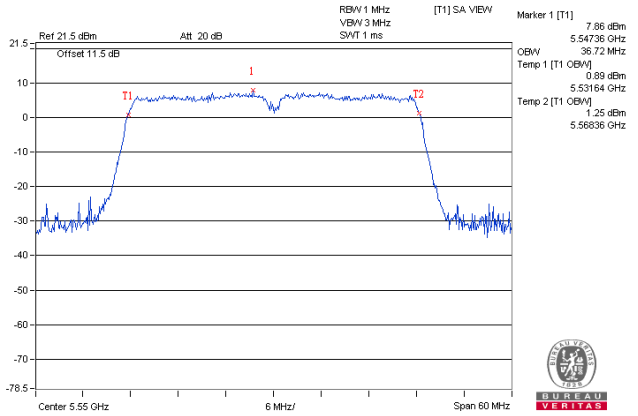


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

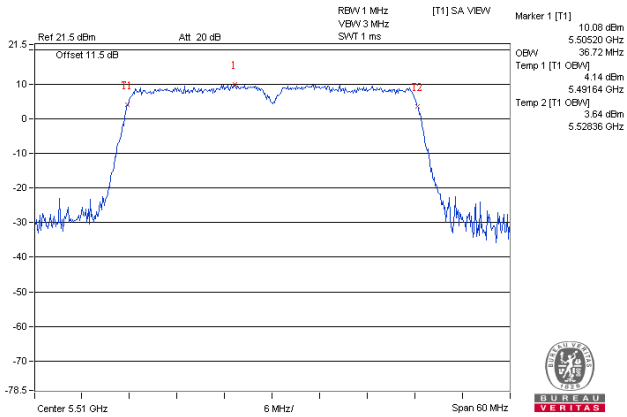
11ac (40MHz) 1S3T TxBF CH102 Chain1



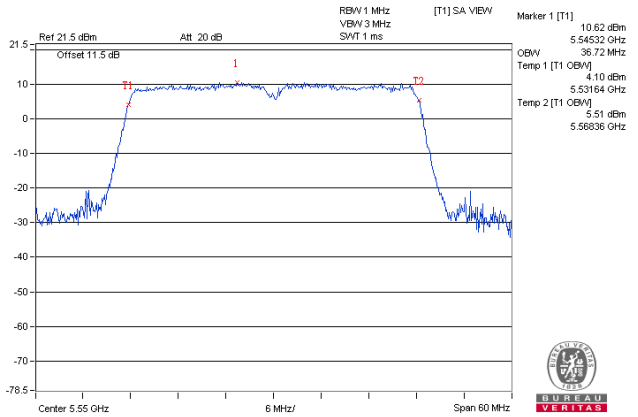
11ac (40MHz) 1S3T TxBF CH110 Chain1



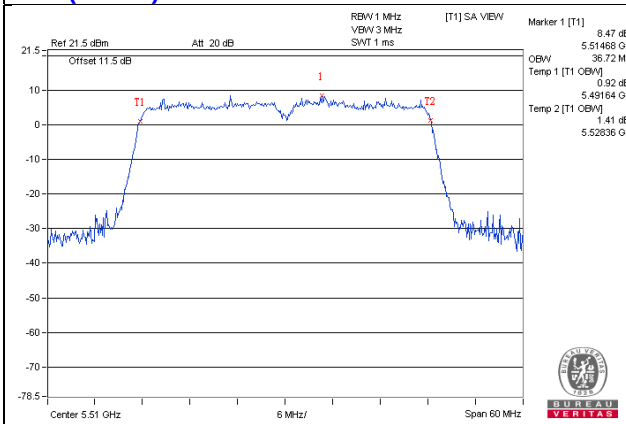
11ac (40MHz) 1S3T TxBF CH102 Chain2



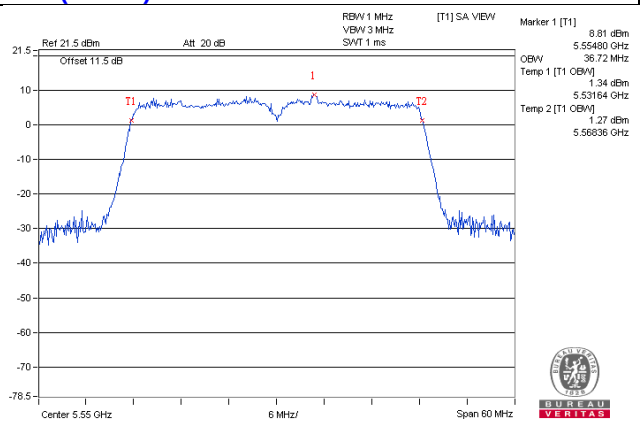
11ac (40MHz) 1S3T TxBF CH110 Chain2



11ac (40MHz) 1S3T TxBF CH102 Chain3

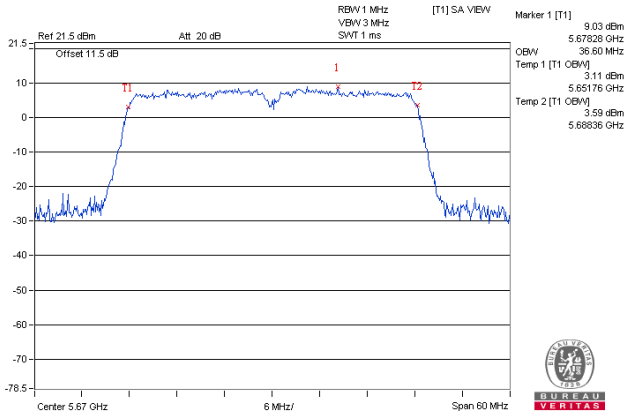


11ac (40MHz) 1S3T TxBF CH110 Chain3

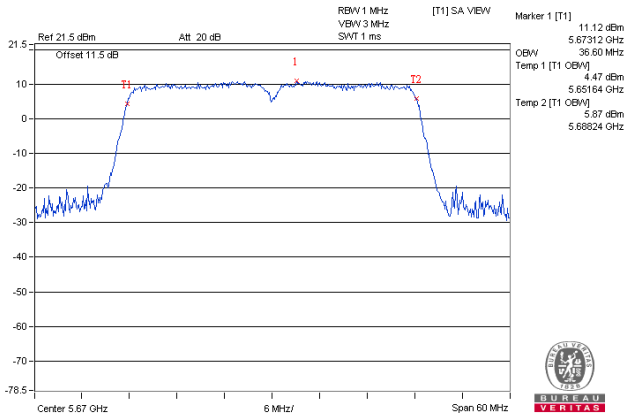


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

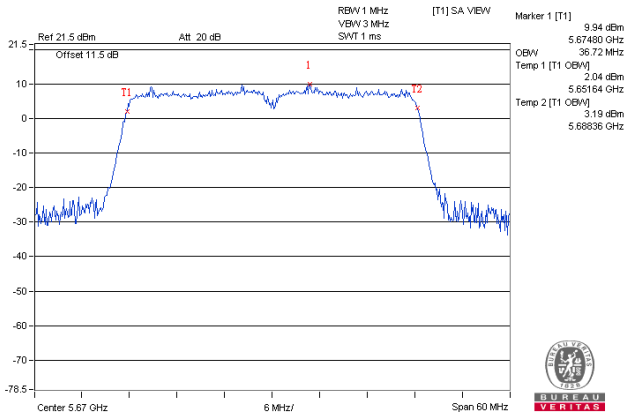
11ac (40MHz) 1S3T TxBF CH134 Chain1



11ac (40MHz) 1S3T TxBF CH134 Chain2

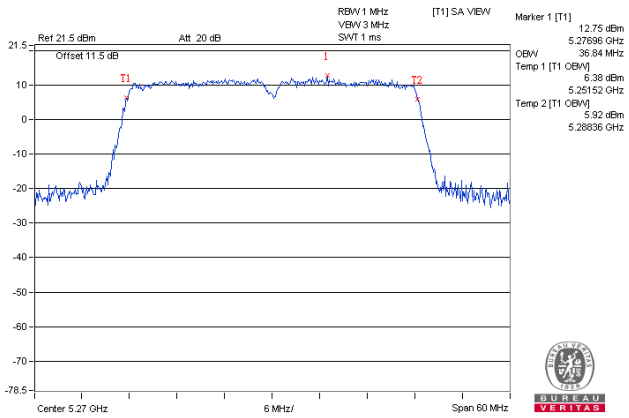


11ac (40MHz) 1S3T TxBF CH134 Chain3

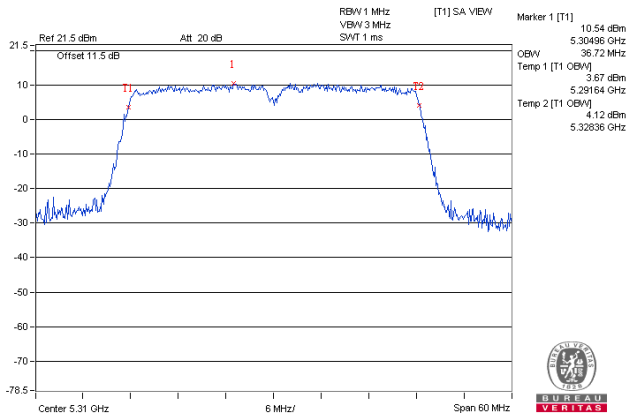


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

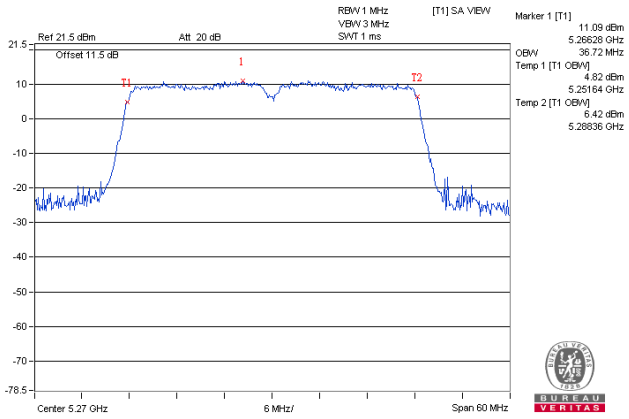
11ac (40MHz) 2S3T TxBF CH54 Chain1



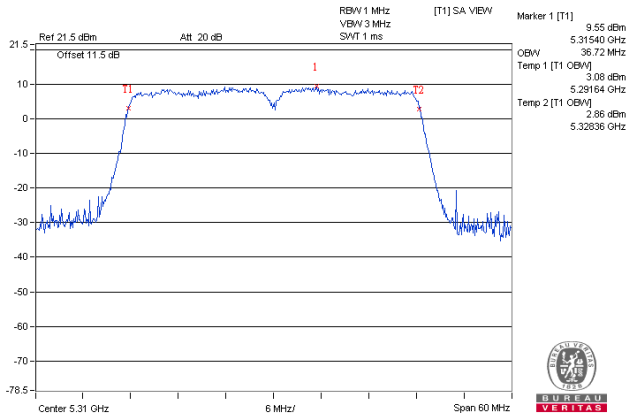
11ac (40MHz) 2S3T TxBF CH62 Chain1



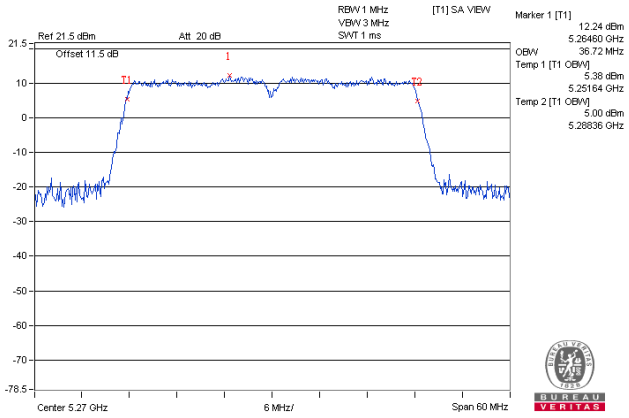
11ac (40MHz) 2S3T TxBF CH54 Chain2



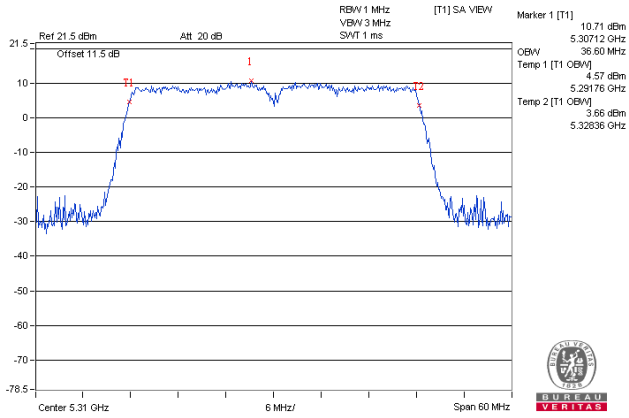
11ac (40MHz) 2S3T TxBF CH62 Chain2



11ac (40MHz) 2S3T TxBF CH54 Chain3

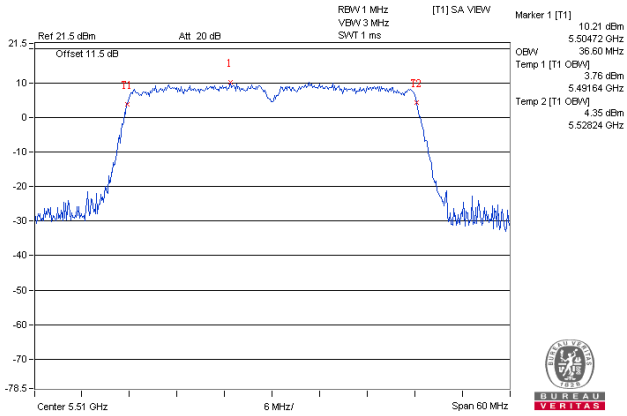


11ac (40MHz) 2S3T TxBF CH62 Chain3

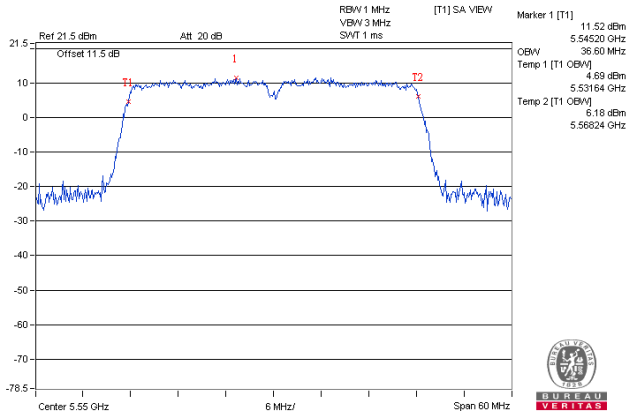


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

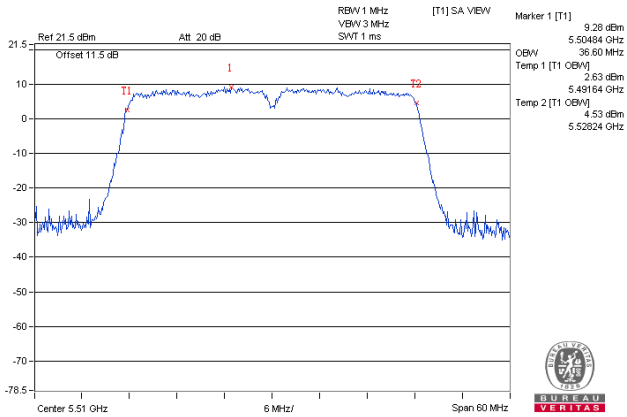
11ac (40MHz) 2S3T TxBF CH102 Chain1



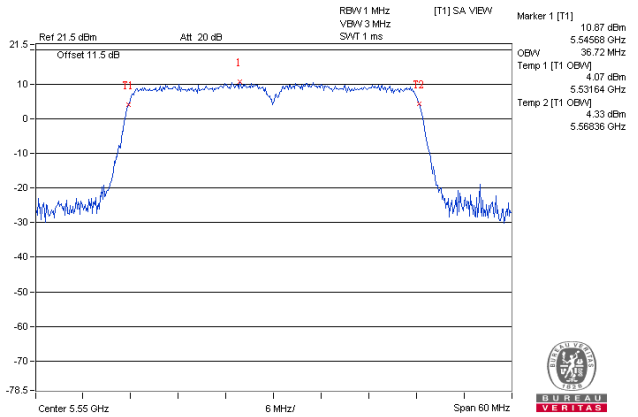
11ac (40MHz) 2S3T TxBF CH110 Chain1



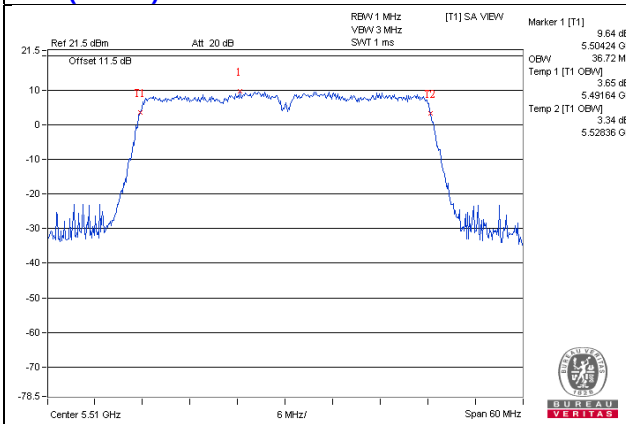
11ac (40MHz) 2S3T TxBF CH102 Chain2



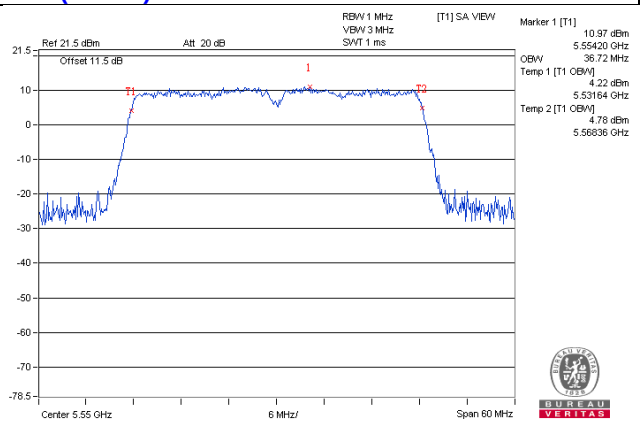
11ac (40MHz) 2S3T TxBF CH110 Chain2



11ac (40MHz) 2S3T TxBF CH102 Chain3

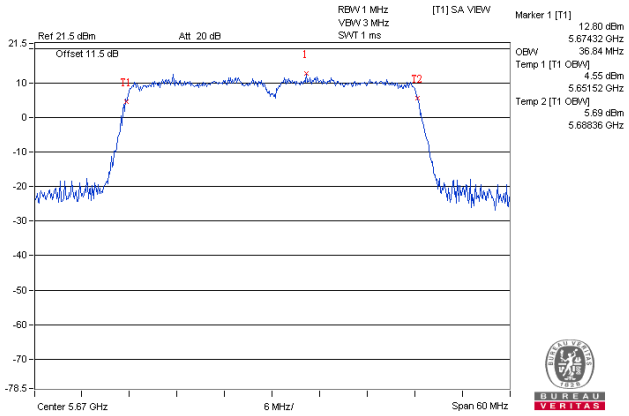


11ac (40MHz) 2S3T TxBF CH110 Chain3

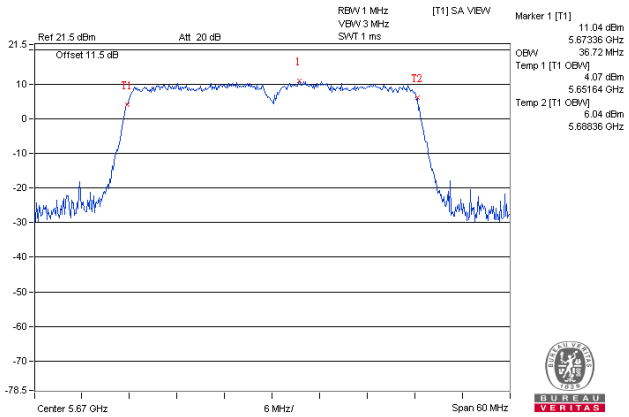


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

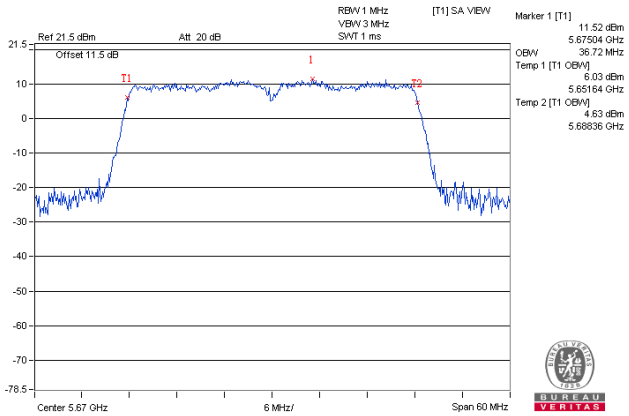
11ac (40MHz) 2S3T TxBF CH134 Chain1



11ac (40MHz) 2S3T TxBF CH134 Chain2

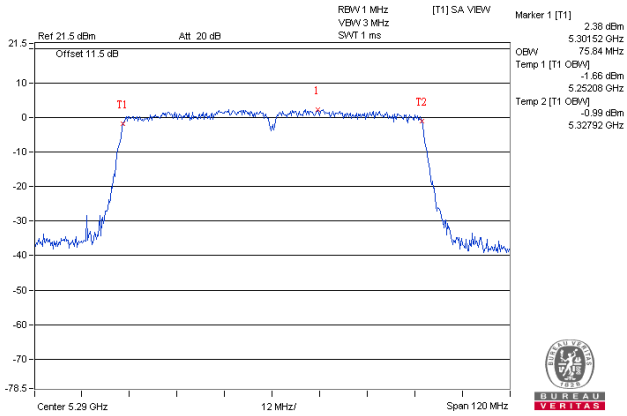


11ac (40MHz) 2S3T TxBF CH134 Chain3

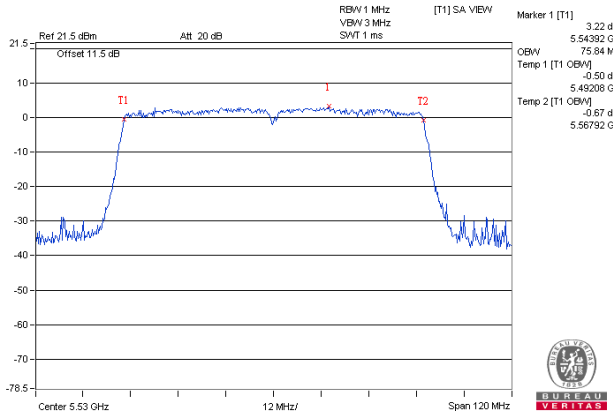


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

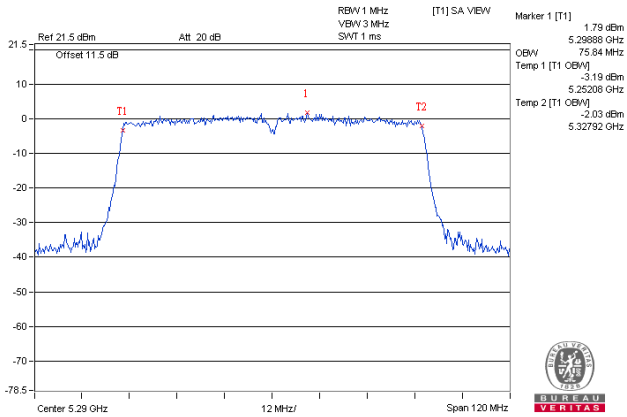
11ac (80MHz) 3S3T SDM CH58 Chain1



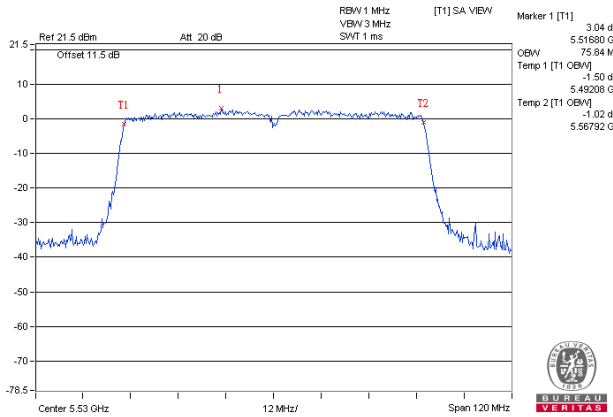
11ac (80MHz) 3S3T SDM CH106 Chain1



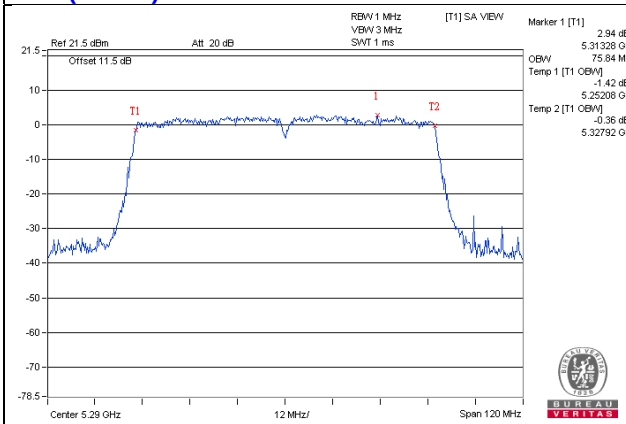
11ac (80MHz) 3S3T SDM CH58 Chain2



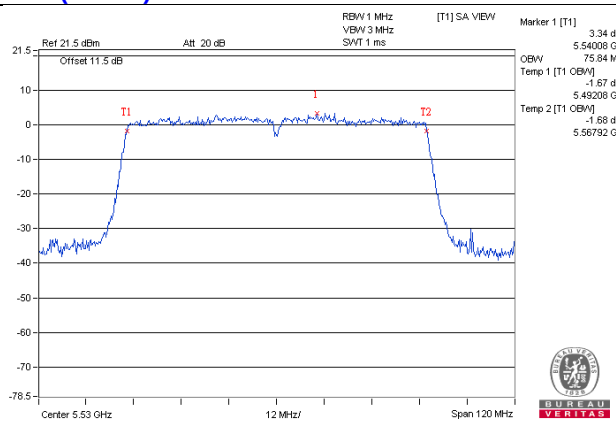
11ac (80MHz) 3S3T SDM CH106 Chain2



11ac (80MHz) 3S3T SDM CH58 Chain3

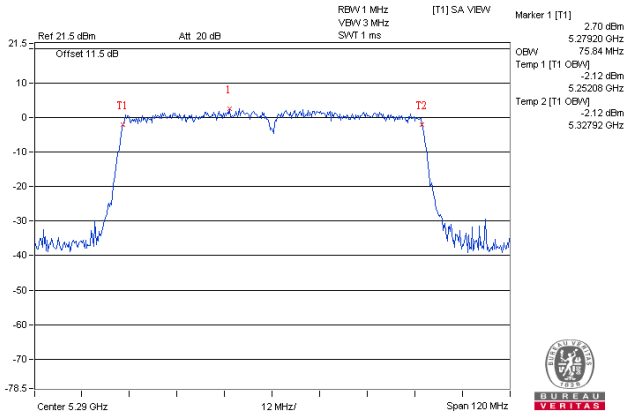


11ac (80MHz) 3S3T SDM CH106 Chain3

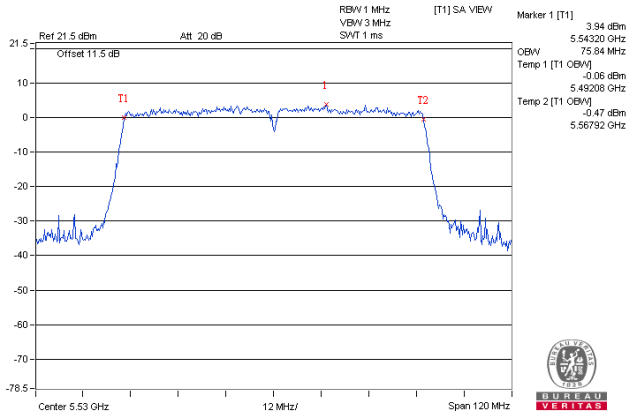


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

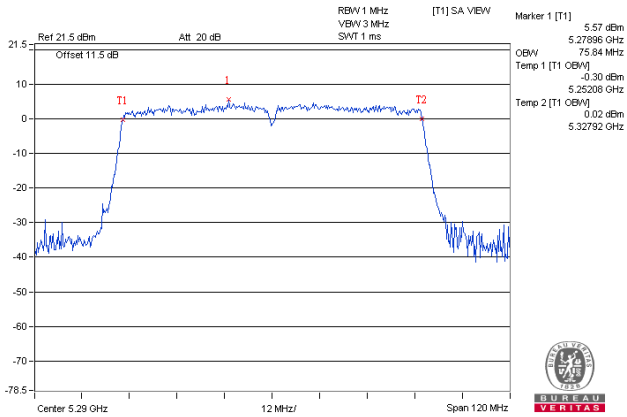
11ac (80MHz) 1S3T TxBF CH58 Chain1



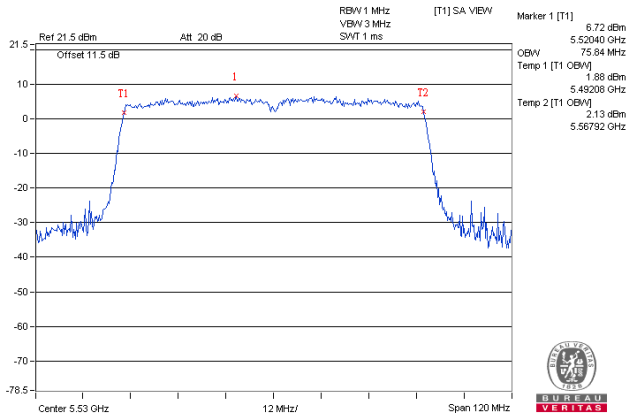
11ac (80MHz) 1S3T TxBF CH106 Chain1



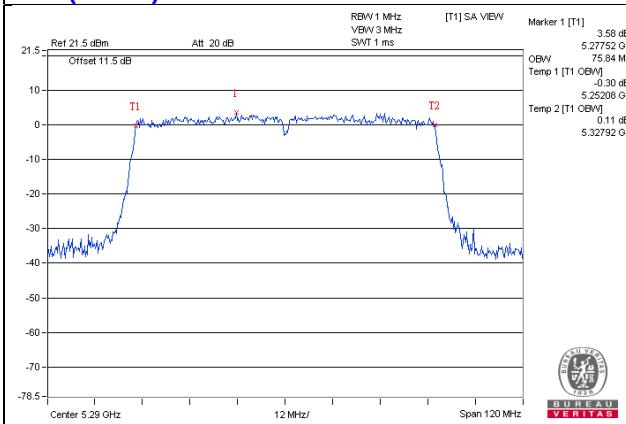
11ac (80MHz) 1S3T TxBF CH58 Chain2



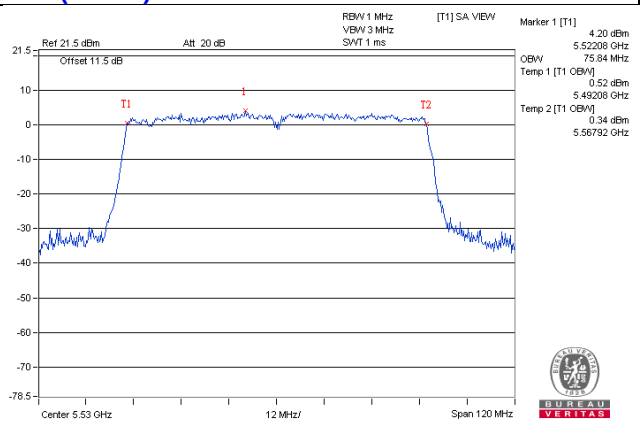
11ac (80MHz) 1S3T TxBF CH106 Chain2



11ac (80MHz) 1S3T TxBF CH58 Chain3

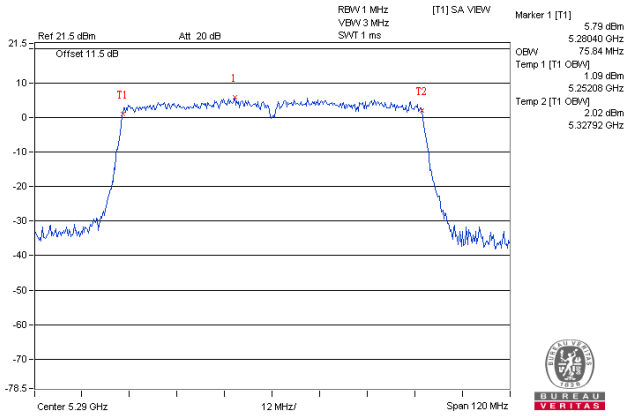


11ac (80MHz) 1S3T TxBF CH106 Chain3

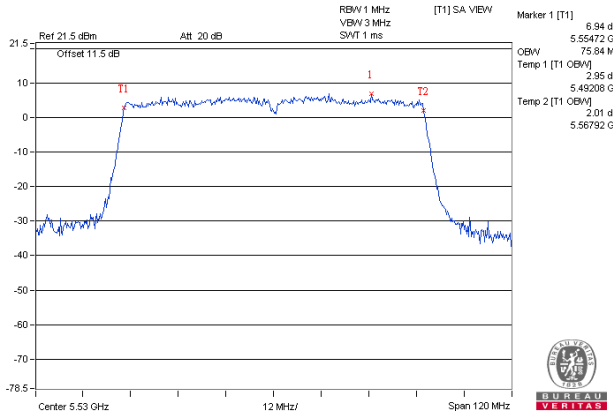


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

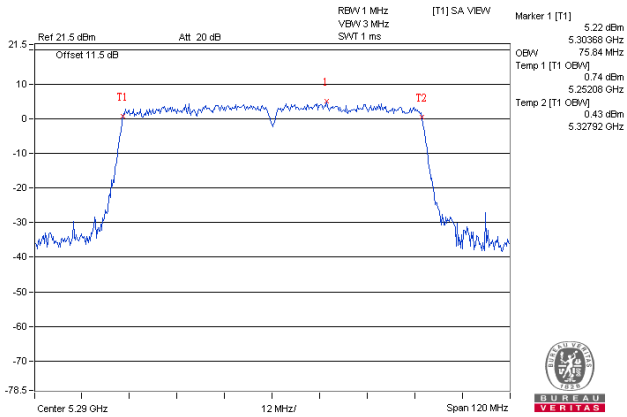
11ac (80MHz) 2S3T TxBF CH58 Chain1



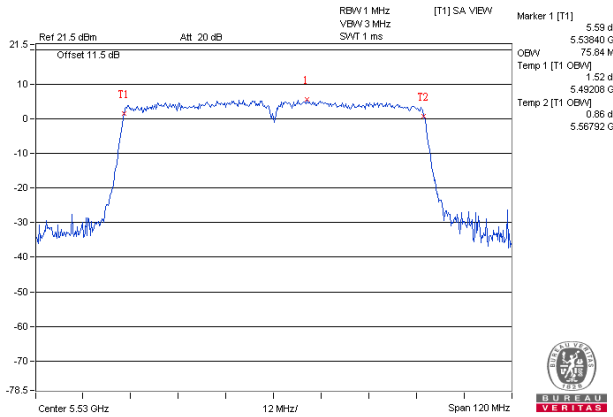
11ac (80MHz) 2S3T TxBF CH106 Chain1



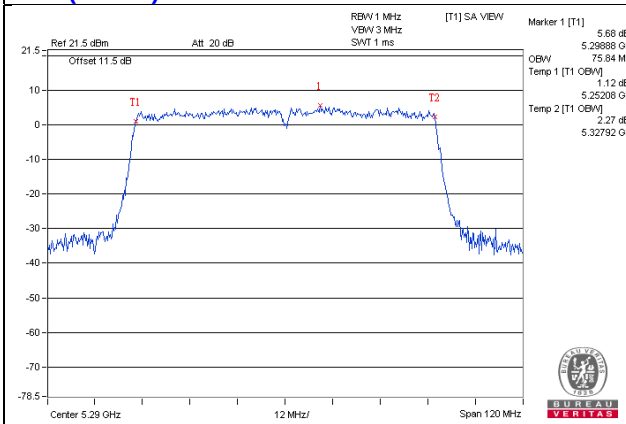
11ac (80MHz) 2S3T TxBF CH58 Chain2



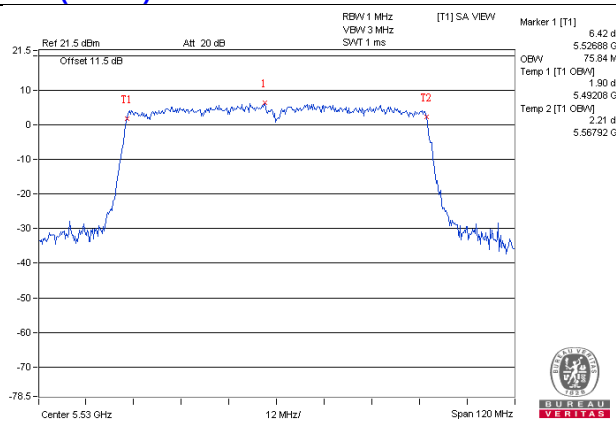
11ac (80MHz) 2S3T TxBF CH106 Chain2



11ac (80MHz) 2S3T TxBF CH58 Chain3



11ac (80MHz) 2S3T TxBF CH106 Chain3



4.3 Maximum Conducted Output Power Measurement

4.3.1 Limit

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
		Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3			1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	**Setting**
Filter No.	Auto
Measurement time	8ns
Power Sensor	MA2411B

4.3.3 Test Procedures

Maximum Conducted Output Power

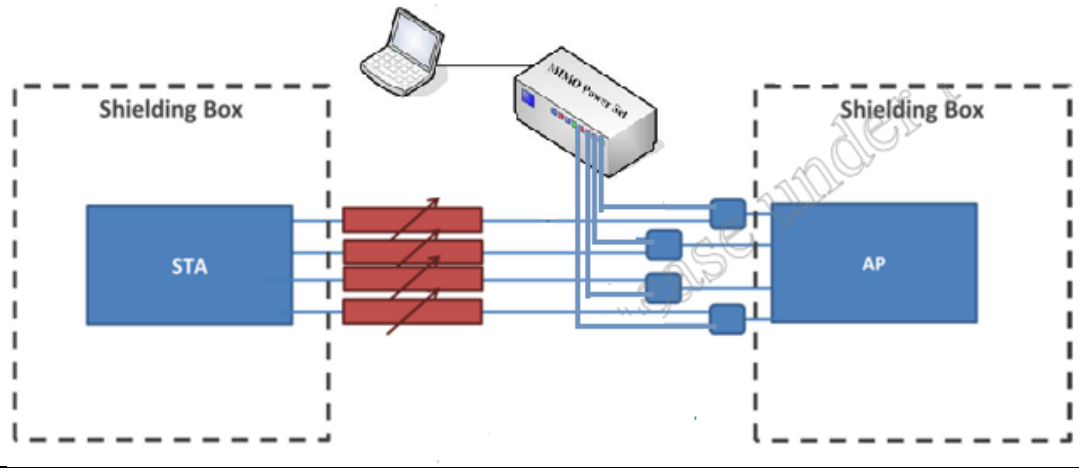
1. Test was performed in accordance with Measurement of Digital Transmission Systems Operating under KDB789033 D02 General UNII Test Procedures New Rules v01r04, in section “Maximum conducted output power Method (3)” , 05/02/2017.
2. The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor to get the all on time transmission. Record the average power level.
3. When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.

Transmit Power Control (TPC)

1. Test was performed in accordance with Measurement of Digital Transmission Systems Operating under KDB789033 D02 General UNII Test Procedures New Rules v01r04, in section “Maximum conducted output power Method (3)” , 05/02/2017.
2. Set the EUT in RF operation mode, and configure the CH, BW and SSID according to test plan at band 2 and band 3.
3. Use the TPC lowest power level command to measurement the TPC lowest power level.
   uci set wireless.radio_5G.tx_power_adjust=-7
   /etc/init.d/hostapd reload
   ubus call wireless.radio get
4. The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor to get the all on time transmission. Record the average power level.
5. When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.

4.3.4 Test Setup Layout

Setup

Transmit Power Control (TPC)


4.3.5 Test Deviation

There are no deviations with the original standard.

4.3.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.3.7 Test Results of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S3T CDD

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
52	5260 MHz	15.32	15.64	14.64	19.99	4.15	24.00	Pass
60	5300 MHz	16.23	16.04	16.31	20.97	4.40	24.00	Pass
64	5320 MHz	16.28	16.78	15.42	20.97	4.30	24.00	Pass
100	5500 MHz	15.62	15.86	15.88	20.56	4.23	24.00	Pass
116	5580 MHz	15.51	15.88	15.12	20.29	3.96	24.00	Pass
140	5700 MHz	15.40	15.56	15.57	20.28	4.20	24.00	Pass

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
52	5260 MHz	9.45	7.63	8.31	13.30	4.15	17.45	24.00	Pass
60	5300 MHz	10.47	9.01	9.54	14.49	4.40	18.89	24.00	Pass
64	5320 MHz	10.45	9.13	9.86	14.62	4.30	18.92	24.00	Pass
100	5500 MHz	10.34	8.71	9.56	14.36	4.23	18.59	24.00	Pass
116	5580 MHz	9.83	8.27	8.91	13.82	3.96	17.78	24.00	Pass
140	5700 MHz	9.83	8.04	8.75	13.71	4.20	17.91	24.00	Pass

11ac (20MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
52	5260 MHz	16.41	16.30	16.66	21.23	1.95	24.00	Pass
60	5300 MHz	16.38	16.30	16.54	21.18	2.10	24.00	Pass
64	5320 MHz	15.92	15.80	16.30	20.78	1.91	24.00	Pass
100	5500 MHz	15.80	16.13	16.20	20.82	2.00	24.00	Pass
116	5580 MHz	15.48	15.98	15.84	20.54	2.14	24.00	Pass
140	5700 MHz	16.16	16.50	16.41	21.13	2.57	24.00	Pass

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
52	5260 MHz	10.95	9.53	10.36	15.09	1.95	17.04	24.00	Pass
60	5300 MHz	10.93	9.54	10.42	15.11	2.10	17.21	24.00	Pass
64	5320 MHz	10.48	9.05	10.03	14.66	1.91	16.57	24.00	Pass
100	5500 MHz	10.58	9.34	10.03	14.78	2.00	16.78	24.00	Pass
116	5580 MHz	10.36	8.89	9.53	14.41	2.14	16.55	24.00	Pass
140	5700 MHz	10.91	9.74	10.06	15.04	2.57	17.61	24.00	Pass

11ac (20MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
52	5260 MHz	15.21	15.52	14.24	19.79	6.54	23.46	Pass
60	5300 MHz	16.12	16.48	15.34	20.78	6.64	23.36	Pass
64	5320 MHz	16.24	16.58	15.20	20.82	6.45	23.55	Pass
100	5500 MHz	15.86	16.35	15.23	20.61	6.73	23.27	Pass
116	5580 MHz	15.39	15.78	15.02	20.18	6.87	23.13	Pass
140	5700 MHz	15.24	15.84	15.16	20.20	7.30	22.70	Pass

Note:
1. For 5260MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.54dBi > 6dBi, so the power limit shall be reduced to 24-(6.54-6) = 23.46dBm.
2. For 5300MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.64dBi > 6dBi, so the power limit shall be reduced to 24-(6.64-6) = 23.36dBm.
3. For 5320MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.45dBi > 6dBi, so the power limit shall be reduced to 24-(6.45-6) = 23.55dBm.
4. For 5500MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.73dBi > 6dBi, so the power limit shall be reduced to 24-(6.73-6) = 23.27dBm.
5. For 5580MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.87dBi > 6dBi, so the power limit shall be reduced to 24-(6.87-6) = 23.13dBm.
6. For 5700MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 7.30dBi > 6dBi, so the power limit shall be reduced to 24-(7.30-6) = 22.70dBm.

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
52	5260 MHz	9.36	8.12	8.86	13.58	6.54	20.12	24.00	Pass
60	5300 MHz	10.4	9.31	10.15	14.75	6.64	21.39	24.00	Pass
64	5320 MHz	10.32	9.33	10.39	14.81	6.45	21.26	24.00	Pass
100	5500 MHz	10.16	9.14	9.56	14.41	6.73	21.14	24.00	Pass
116	5580 MHz	9.73	8.46	9.19	13.93	6.87	20.80	24.00	Pass
140	5700 MHz	9.85	8.56	8.93	13.92	7.30	21.22	24.00	Pass

11ac (20MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
52	5260 MHz	16.56	16.74	15.46	21.06	4.59	24.00	Pass
60	5300 MHz	16.42	16.84	15.56	21.08	5.01	24.00	Pass
64	5320 MHz	16.59	16.82	15.36	21.07	4.60	24.00	Pass
100	5500 MHz	16.22	16.48	15.78	20.94	4.38	24.00	Pass
116	5580 MHz	14.94	15.36	14.38	19.68	4.52	24.00	Pass
140	5700 MHz	15.56	16.44	15.22	20.54	5.01	24.00	Pass

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
52	5260 MHz	10.47	9.92	10.34	15.02	4.59	19.61	24.00	Pass
60	5300 MHz	10.33	9.65	10.32	14.88	5.01	19.89	24.00	Pass
64	5320 MHz	10.73	9.85	10.23	15.06	4.60	19.66	24.00	Pass
100	5500 MHz	10.58	9.34	10.01	14.78	4.38	19.16	24.00	Pass
116	5580 MHz	9.43	7.36	8.32	13.22	4.52	17.74	24.00	Pass
140	5700 MHz	10.56	9.23	9.25	14.50	5.01	19.51	24.00	Pass

11ac (40MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
54	5270 MHz	16.36	16.32	16.71	21.24	1.64	24.00	Pass
62	5310 MHz	14.72	14.42	14.92	19.46	1.92	24.00	Pass
102	5510 MHz	14.73	14.96	14.84	19.62	2.28	24.00	Pass
110	5550 MHz	15.72	15.86	15.92	20.61	2.49	24.00	Pass
134	5670 MHz	16.04	15.90	16.04	20.77	1.74	24.00	Pass

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
54	5270 MHz	10.95	10.02	10.22	15.19	1.64	16.83	24.00	Pass
62	5310 MHz	9.77	7.56	8.32	13.42	1.92	15.34	24.00	Pass
102	5510 MHz	9.62	7.85	8.76	13.57	2.28	15.85	24.00	Pass
110	5550 MHz	10.13	9.18	10.04	14.58	2.49	17.07	24.00	Pass
134	5670 MHz	10.33	9.2	10.19	14.71	1.74	16.45	24.00	Pass

11ac (40MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
54	5270 MHz	16.19	16.68	15.52	20.93	6.38	23.62	PASS
62	5310 MHz	13.08	13.58	12.22	17.77	6.57	23.43	PASS
102	5510 MHz	14.61	14.83	13.78	19.20	6.97	23.03	PASS
110	5550 MHz	15.21	14.32	15.05	19.65	7.25	22.75	PASS
134	5670 MHz	15.74	15.38	16.07	20.51	6.50	23.50	PASS

Note:
1. For 5270MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.38dBi > 6dBi, so the power limit shall be reduced to 24-(6.38-6) = 23.62dBm.
2. For 5310MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.57dBi > 6dBi, so the power limit shall be reduced to 24-(6.57-6) = 23.43dBm.
3. For 5510MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.97dBi > 6dBi, so the power limit shall be reduced to 24-(6.97-6) = 23.03dBm.
4. For 5550MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 7.25dBi > 6dBi, so the power limit shall be reduced to 24-(7.25-6) = 22.75dBm.
5. For 5670MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.50dBi > 6dBi, so the power limit shall be reduced to 24-(6.50-6) = 23.50dBm.

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
54	5270 MHz	10.65	9.33	10.12	14.84	6.38	21.22	24.00	Pass
62	5310 MHz	6.93	5.86	5.11	10.80	6.57	17.37	24.00	Pass
102	5510 MHz	8.73	6.47	8.03	12.61	6.97	19.58	24.00	Pass
110	5550 MHz	9.33	7.38	8.75	13.33	7.25	20.58	24.00	Pass
134	5670 MHz	10.43	8.75	9.53	14.40	6.50	20.90	24.00	Pass

11ac (40MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
54	5270 MHz	16.65	16.01	16.72	21.24	4.50	24.00	PASS
62	5310 MHz	14.94	14.01	15.06	19.47	4.84	24.00	PASS
102	5510 MHz	14.72	14.02	14.56	19.21	4.95	24.00	PASS
110	5550 MHz	16.08	15.56	16.12	20.70	4.77	24.00	PASS
134	5670 MHz	15.94	15.51	16.34	20.71	4.38	24.00	PASS

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
54	5270 MHz	10.75	10.1	10.26	15.15	4.50	19.65	24.00	Pass
62	5310 MHz	9.37	7.73	8.32	13.30	4.84	18.14	24.00	Pass
102	5510 MHz	9.05	7.1	8.29	12.99	4.95	17.94	24.00	Pass
110	5550 MHz	10.35	9.18	10.12	14.68	4.77	19.45	24.00	Pass
134	5670 MHz	10.33	9.15	10.1	14.66	4.38	19.04	24.00	Pass

11ac (80MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
58	5290 MHz	11.91	12.20	12.44	16.96	2.34	24.00	PASS
106	5530 MHz	13.08	13.24	13.32	17.99	2.33	24.00	PASS

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
58	5290 MHz	6.53	5.14	6.31	10.81	2.34	13.15	24.00	Pass
106	5530 MHz	7.93	5.96	7.42	11.95	2.33	14.28	24.00	Pass

11ac (80MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
58	5290 MHz	12.76	11.88	12.92	17.31	6.92	23.08	PASS
106	5530 MHz	14.08	13.32	14.08	18.61	7.07	22.93	PASS

Note: 1. For 5290MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.92dBi > 6dBi, so the power limit shall be reduced to 24-(6.92-6) = 23.08dBm.
2. For 5530MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 7.07dBi > 6dBi, so the power limit shall be reduced to 24-(7.07-6) = 22.93dBm.

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
58	5290 MHz	6.72	4.53	5.25	10.37	6.92	17.29	24.00	Pass
106	5530 MHz	8.72	6.62	7.85	12.59	7.07	19.66	24.00	Pass

11ac (80MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
58	5290 MHz	12.98	12.08	13.18	17.54	5.00	24.00	PASS
106	5530 MHz	13.92	13.31	13.84	18.47	4.69	24.00	PASS

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	TPC Low Power EIRP (dBm)	TPC Low Power EIRP Limit (dBm)	Result
		Chain1	Chain2	Chain3					
58	5290 MHz	7.52	5.32	6.16	11.20	5.00	16.20	24.00	Pass
106	5530 MHz	8.55	6.13	7.98	12.44	4.69	17.13	24.00	Pass

4.4 Power Spectral Density Measurement

4.4.1 Limit

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
		Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3			30dBm/ 500kHz

4.4.2 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter Setting	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to “free run”
Trace average	100 times

4.4.3 Test Procedure

1 The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.

2 For U-NII-1, U-NII-2A & U-NII-2C Bands, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v01r04, in section “Maximum conducted output power (E)(2)(d) Method SA-2”, 05/02/2017.

3 For U-NII-3 Band, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v01r04, in section “Maximum Power Spectral Density (F)(5)” , 05/02/2017.

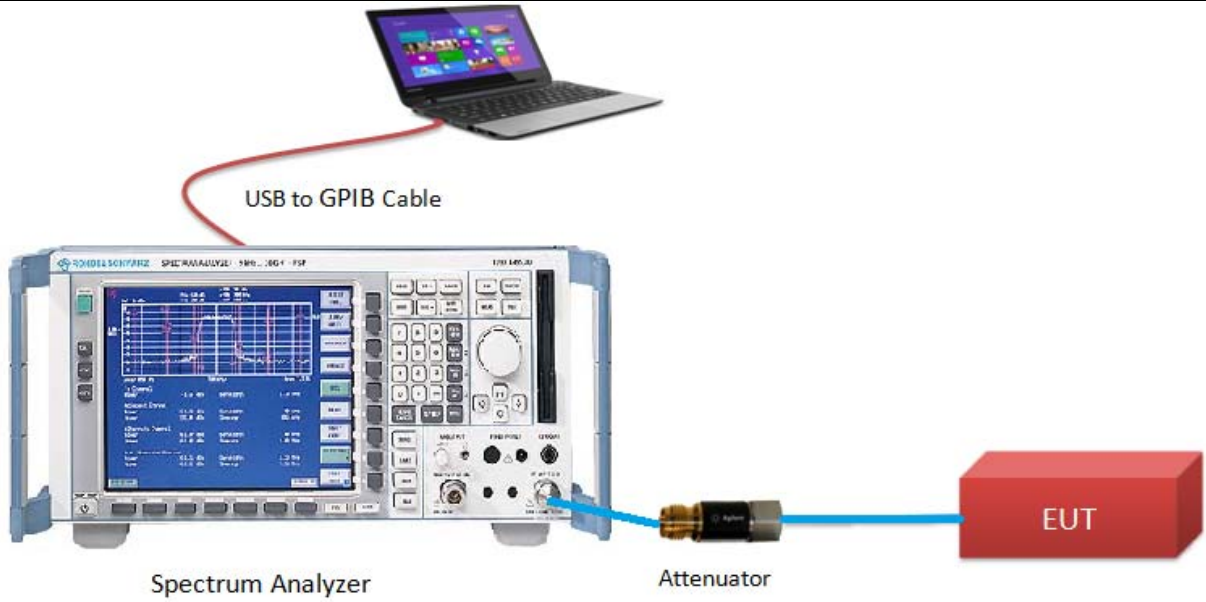
4 Multiple antenna systems was performed in accordance 662911 D01 Multiple Transmitter Output v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs (bin-by-bin summing).

5 When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum.

6 The summed spectrum value for each of the other frequency bins is computed in the same way.

4.4.4 Test Setup Layout

Setup



4.4.5 Test Deviation

There are no deviations with the original standard.

4.4.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.4.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S3T CDD

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
52	5260	7.37	0.12	7.49	6.54	10.46	Pass
60	5300	8.37	0.12	8.49	6.64	10.36	Pass
64	5320	8.44	0.12	8.56	6.45	10.55	Pass
100	5500	7.96	0.12	8.08	6.73	10.27	Pass
116	5580	8.00	0.12	8.12	6.87	10.13	Pass
140	5700	8.01	0.12	8.13	7.30	9.70	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5260MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.54dBi > 6dBi, therefore the limit shall be reduced to 11-(6.54-6) = 10.46dBm.
3. For 5300MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.64dBi > 6dBi, therefore the limit shall be reduced to 11-(6.64-6) = 10.36dBm.
4. For 5320MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.45dBi > 6dBi, therefore the limit shall be reduced to 11-(6.45-6) = 10.55dBm.
5. For 5500MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.73dBi > 6dBi, therefore the limit shall be reduced to 11-(6.73-6) = 10.27dBm.
6. For 5580MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.87dBi > 6dBi, therefore the limit shall be reduced to 11-(6.87-6) = 10.13dBm.
7. For 5700MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 7.30dBi > 6dBi, therefore the limit shall be reduced to 11-(7.30-6) = 9.70dBm.

11ac (20MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
52	5260	8.46	0.13	8.59	1.95	11.00	Pass
60	5300	8.39	0.13	8.52	2.10	11.00	Pass
64	5320	7.97	0.13	8.10	1.91	11.00	Pass
100	5500	8.46	0.13	8.59	2.00	11.00	Pass
116	5580	7.82	0.13	7.95	2.14	11.00	Pass
140	5700	8.32	0.13	8.45	2.57	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5260MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 1.95dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5300MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.10dBi < 6dBi, so the power density limit shall not be reduced.
4. For 5320MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 1.91dBi < 6dBi, so the power density limit shall not be reduced.
5. For 5500MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.00dBi < 6dBi, so the power density limit shall not be reduced.
6. For 5580MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.14dBi < 6dBi, so the power density limit shall not be reduced.
7. For 5700MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.57dBi < 6dBi, so the power density limit shall not be reduced.

11ac (20MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
52	5260	7.08	0.00	7.08	6.54	10.46	Pass
60	5300	8.03	0.00	8.03	6.64	10.36	Pass
64	5320	8.13	0.00	8.13	6.45	10.55	Pass
100	5500	6.41	0.00	6.41	6.73	10.27	Pass
116	5580	7.27	0.00	7.27	6.87	10.13	Pass
140	5700	7.12	0.00	7.12	7.30	9.70	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5260MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.54dBi > 6dBi, therefore the limit shall be reduced to 11-(6.54-6) = 10.46dBm.
3. For 5300MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.64dBi > 6dBi, therefore the limit shall be reduced to 11-(6.64-6) = 10.36dBm.
4. For 5320MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.45dBi > 6dBi, therefore the limit shall be reduced to 11-(6.45-6) = 10.55dBm.
5. For 5500MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.73dBi > 6dBi, therefore the limit shall be reduced to 11-(6.73-6) = 10.27dBm.
6. For 5580MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 6.87dBi > 6dBi, therefore the limit shall be reduced to 11-(6.87-6) = 10.13dBm.
7. For 5700MHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$] = 7.30dBi > 6dBi, therefore the limit shall be reduced to 11-(7.30-6) = 9.70dBm.

11ac (20MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
52	5260	8.47	0.00	8.47	4.59	11.00	Pass
60	5300	8.35	0.00	8.35	5.01	11.00	Pass
64	5320	8.27	0.00	8.27	4.60	11.00	Pass
100	5500	8.24	0.00	8.24	4.38	11.00	Pass
116	5580	6.81	0.00	6.81	4.52	11.00	Pass
140	5700	7.76	0.00	7.76	5.01	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5260MHz: Directional gain = 4.59dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5300MHz: Directional gain = 5.01dBi < 6dBi, so the power density limit shall not be reduced.
4. For 5320MHz: Directional gain = 4.60dBi < 6dBi, so the power density limit shall not be reduced.
5. For 5500MHz: Directional gain = 4.38dBi < 6dBi, so the power density limit shall not be reduced.
6. For 5580MHz: Directional gain = 4.52dBi < 6dBi, so the power density limit shall not be reduced.
7. For 5700MHz: Directional gain = 5.01dBi < 6dBi, so the power density limit shall not be reduced.

11ac (40MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
54	5270	5.81	0.24	6.05	1.64	11.00	Pass
62	5310	4.07	0.24	4.31	1.92	11.00	Pass
102	5510	4.43	0.24	4.67	2.28	11.00	Pass
110	5550	5.34	0.24	5.58	2.49	11.00	Pass
134	5670	5.32	0.24	5.56	1.74	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5270MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 1.64dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5310MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 1.92dBi < 6dBi, so the power density limit shall not be reduced.
4. For 5510MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.28dBi < 6dBi, so the power density limit shall not be reduced.
5. For 5550MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.49dBi < 6dBi, so the power density limit shall not be reduced.
6. For 5670MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 1.74dBi < 6dBi, so the power density limit shall not be reduced.

11ac (40MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
54	5270	5.55	0.10	5.65	6.38	10.62	Pass
62	5310	2.27	0.10	2.37	6.57	10.43	Pass
102	5510	3.75	0.10	3.85	6.97	10.03	Pass
110	5550	4.22	0.10	4.32	7.25	9.75	Pass
134	5670	4.91	0.10	5.01	6.50	10.50	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5270MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.38dBi > 6dBi, therefore the limit shall be reduced to 11-(6.38-6) = 10.62dBm
3. For 5310MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.57dBi > 6dBi, therefore the limit shall be reduced to 11-(6.57-6) = 10.43dBm
4. For 5510MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.97dBi > 6dBi, therefore the limit shall be reduced to 11-(6.97-6) = 10.03dBm.
5. For 5550MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 7.25dBi > 6dBi, therefore the limit shall be reduced to 11-(7.25-6) = 9.75dBm.
6. For 5670MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.50dBi > 6dBi, therefore the limit shall be reduced to 11-(6.50-6) = 10.50dBm.

11ac (40MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
54	5270	5.93	0.18	6.11	4.50	11.00	Pass
62	5310	4.28	0.18	4.46	4.84	11.00	Pass
102	5510	4.00	0.18	4.18	4.95	11.00	Pass
110	5550	5.31	0.18	5.49	4.77	11.00	Pass
134	5670	5.25	0.18	5.43	4.38	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5270MHz: Directional gain = 4.50dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5310MHz: Directional gain = 4.84dBi < 6dBi, so the power density limit shall not be reduced.
4. For 5510MHz: Directional gain = 4.95dBi < 6dBi, so the power density limit shall not be reduced.
5. For 5550MHz: Directional gain = 4.77dBi < 6dBi, so the power density limit shall not be reduced.
6. For 5670MHz: Directional gain = 4.38dBi < 6dBi, so the power density limit shall not be reduced.

11ac (80MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
58	5290	-1.63	0.57	-1.06	2.34	11.00	Pass
106	5530	-0.38	0.57	0.19	2.33	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5290MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.34dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5530MHz: Directional gain = 10 log[($10^{G1/10}$ + $10^{G2/10}$ + ... + $10^{GN/10}$)/3] = 2.33dBi < 6dBi, so the power density limit shall not be reduced.

11ac (80MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
58	5290	-1.03	0.28	-0.75	6.92	10.08	Pass
106	5530	0.16	0.28	0.44	7.07	9.93	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5290MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 6.92dBi > 6dBi, therefore the limit shall be reduced to 11-(6.92-6) = 10.08dBm.
3. For 5530MHz: Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + ... + $10^{GN/20}$)^2/3] = 7.07dBi > 6dBi, therefore the limit shall be reduced to 11-(7.07-6) = 9.93dBm.

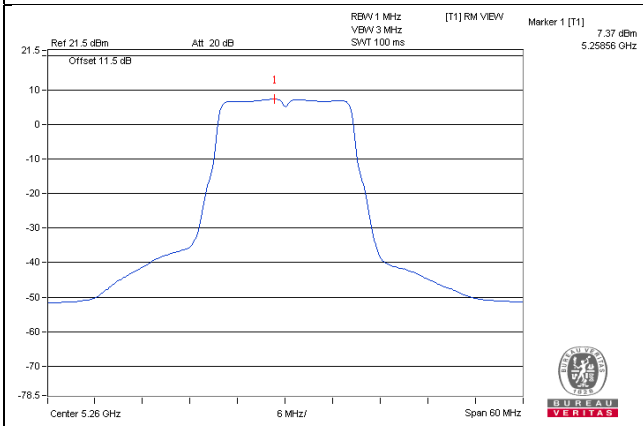
11ac (80MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
58	5290	-0.55	0.34	-0.21	5.00	11.00	Pass
106	5530	0.14	0.34	0.48	4.69	11.00	Pass

Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
2. For 5290MHz: Directional gain = 5.00dBi < 6dBi, so the power density limit shall not be reduced.
3. For 5530MHz: Directional gain = 4.69dBi < 6dBi, so the power density limit shall not be reduced.

PSD SPECTRUM PLOT

11a 1S3T CDD CH52



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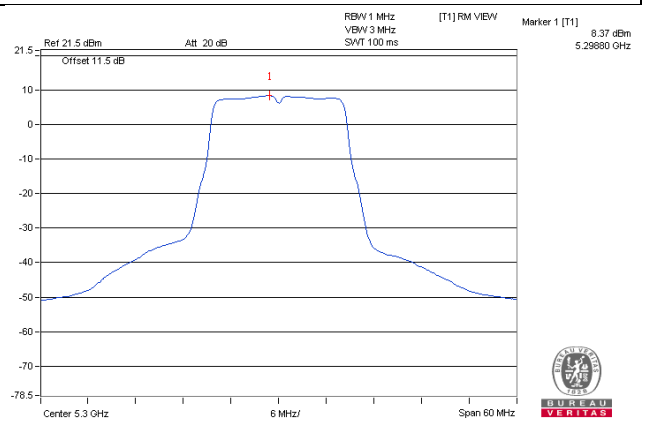

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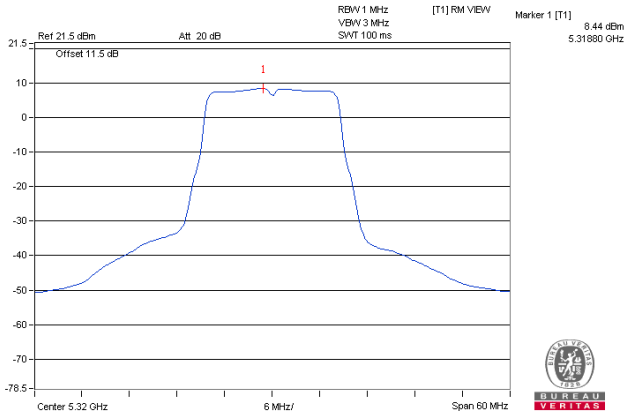

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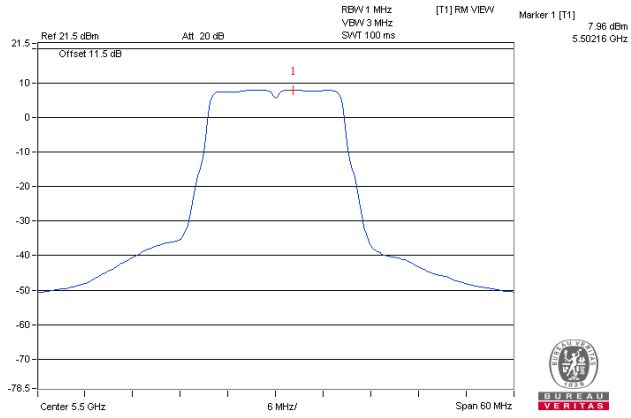

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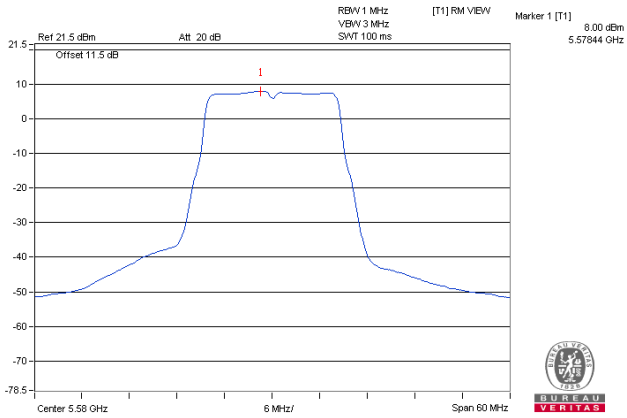

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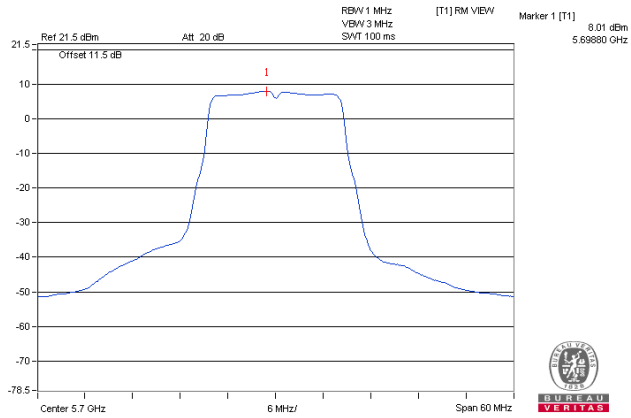
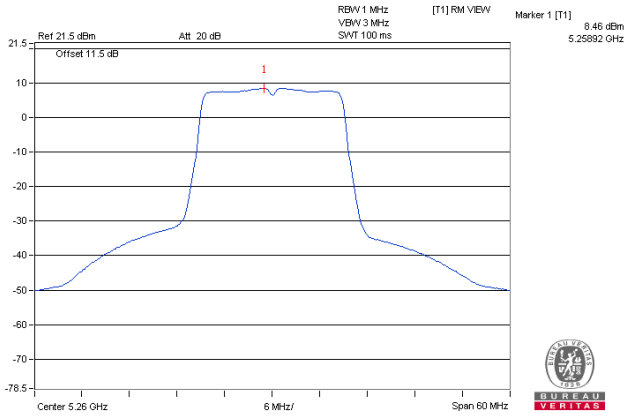
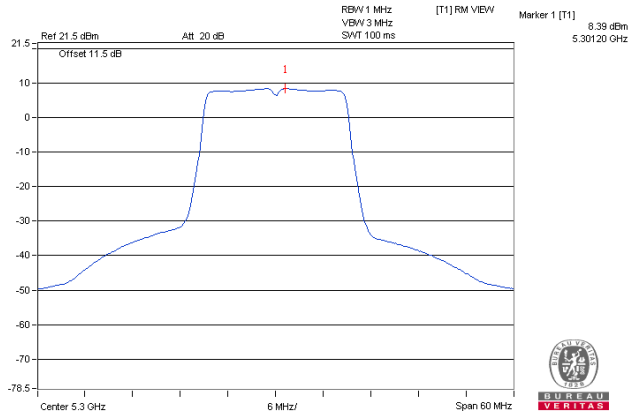


PSD SPECTRUM PLOT

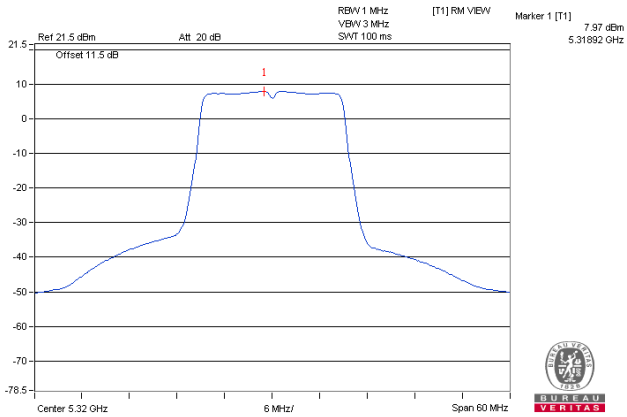
11ac (20MHz) 3S3T SDM CH52



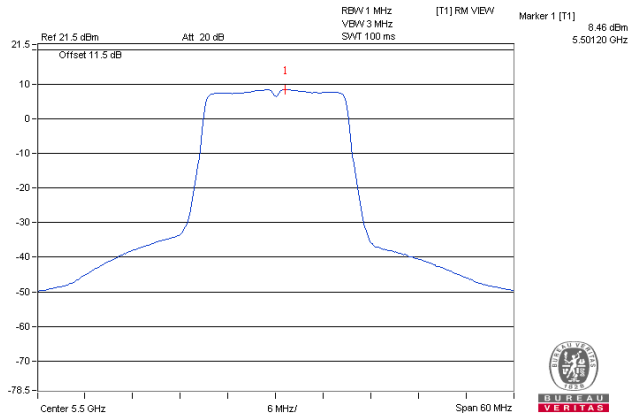
11ac (20MHz) 3S3T SDM CH60



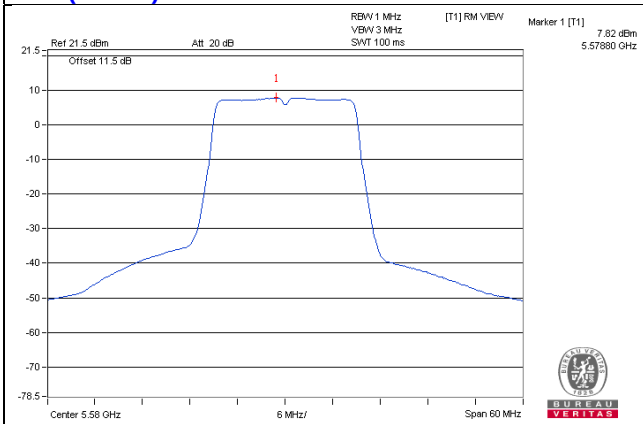
11ac (20MHz) 3S3T SDM CH64



11ac (20MHz) 3S3T SDM CH100



11ac (20MHz) 3S3T SDM CH116



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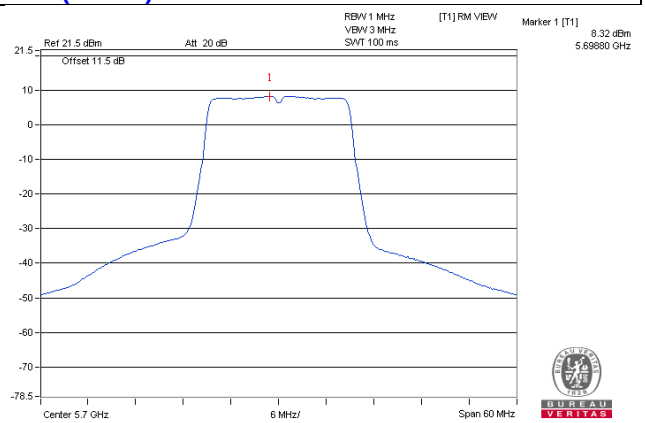
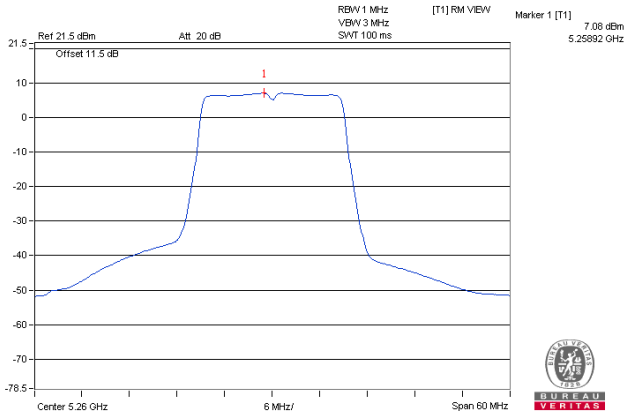
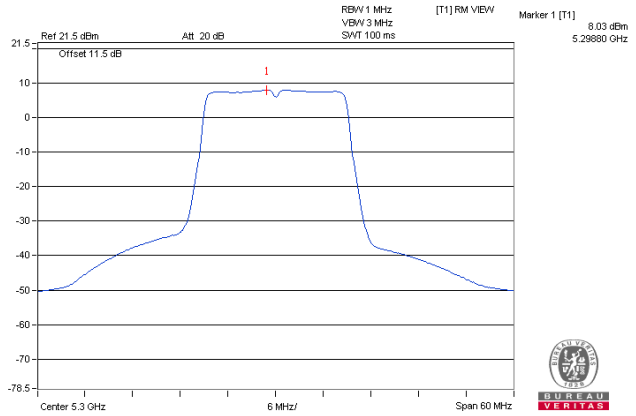


PSD SPECTRUM PLOT

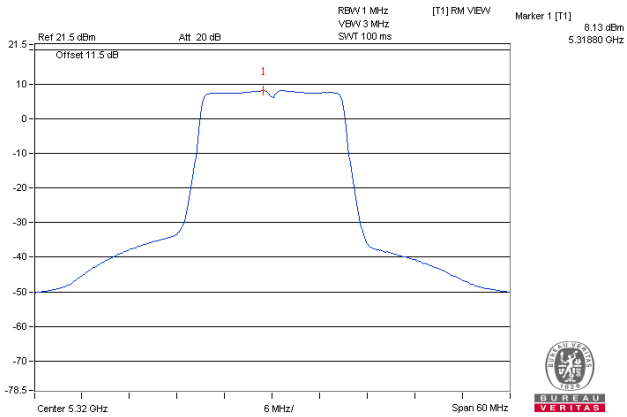
11ac (20MHz) 1S3T TxBF CH52



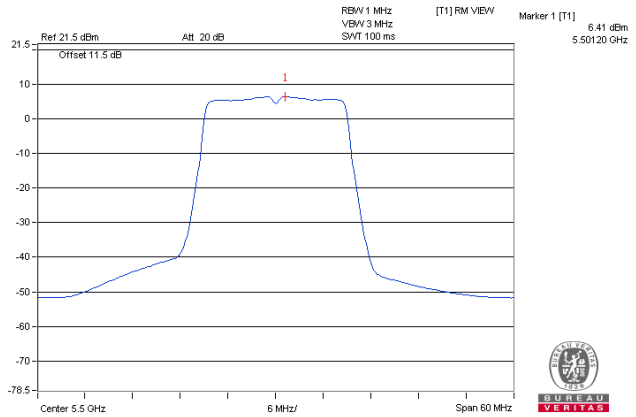
11ac (20MHz) 1S3T TxBF CH60



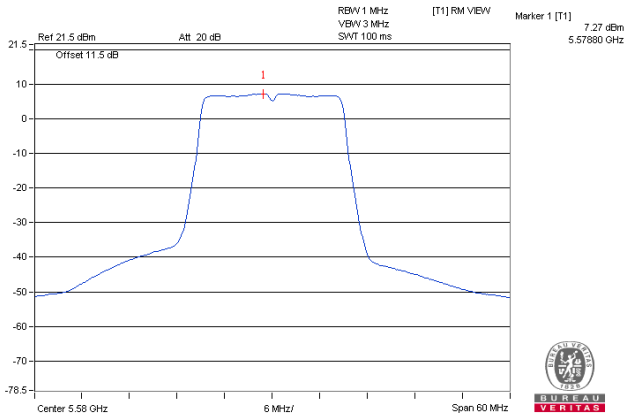
11ac (20MHz) 1S3T TxBF CH64



11ac (20MHz) 1S3T TxBF CH100



11ac (20MHz) 1S3T TxBF CH116



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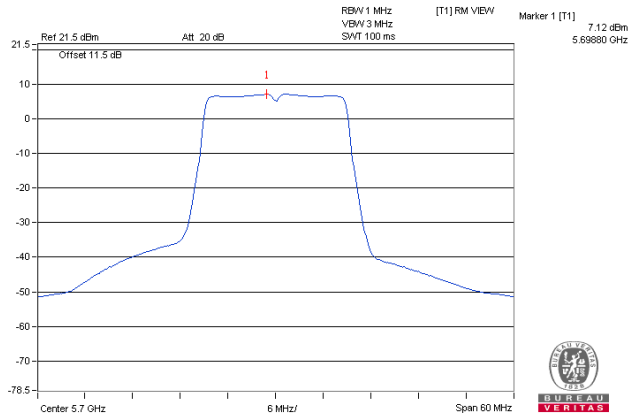
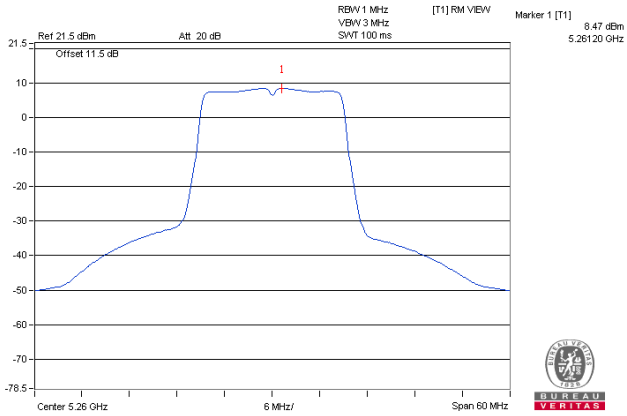
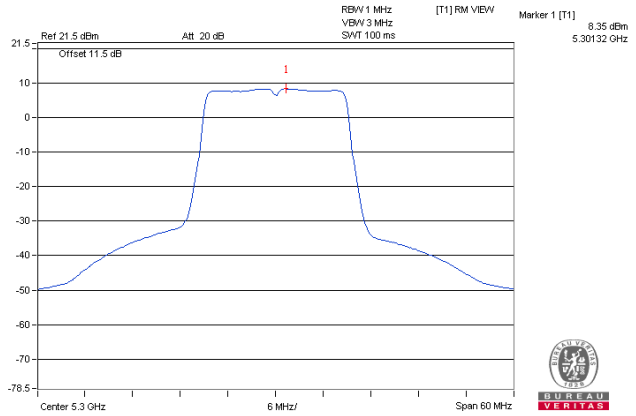


PSD SPECTRUM PLOT

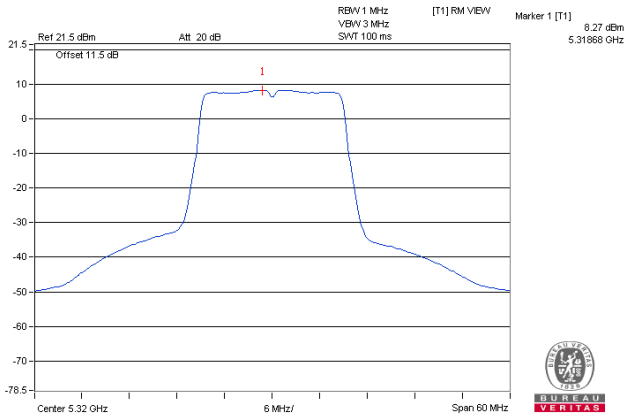
11ac (20MHz) 2S3T TxBF CH52



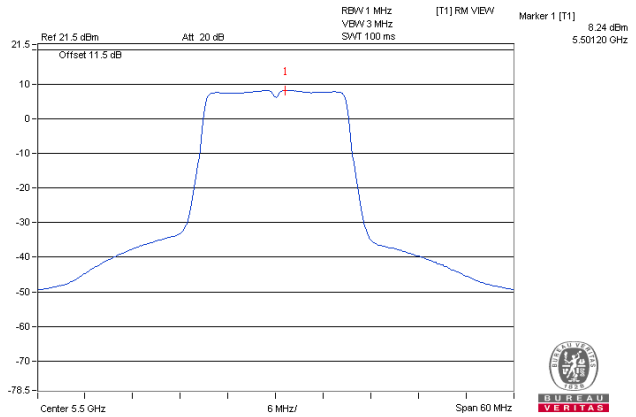
11ac (20MHz) 2S3T TxBF CH60



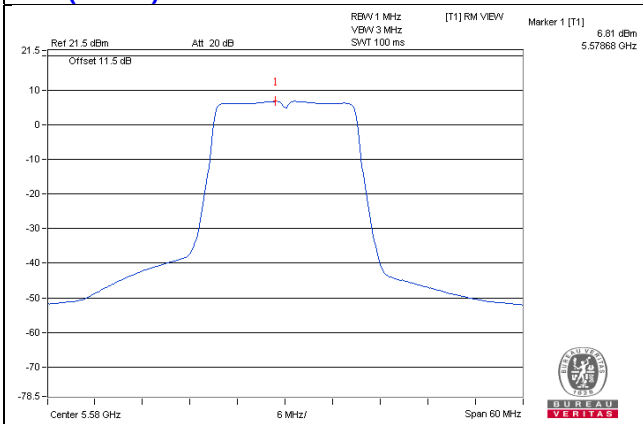
11ac (20MHz) 2S3T TxBF CH64



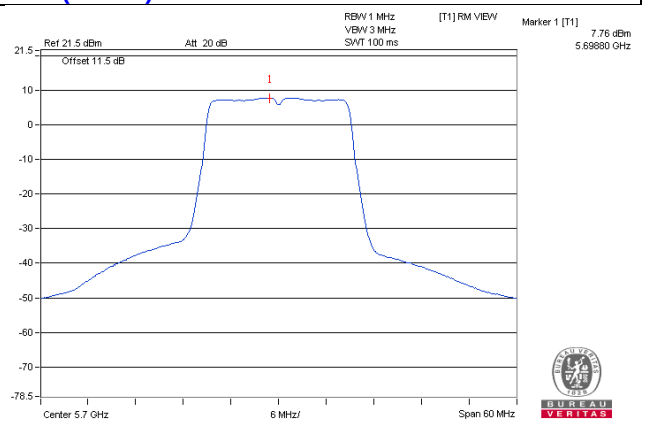
11ac (20MHz) 2S3T TxBF CH100



11ac (20MHz) 2S3T TxBF CH116

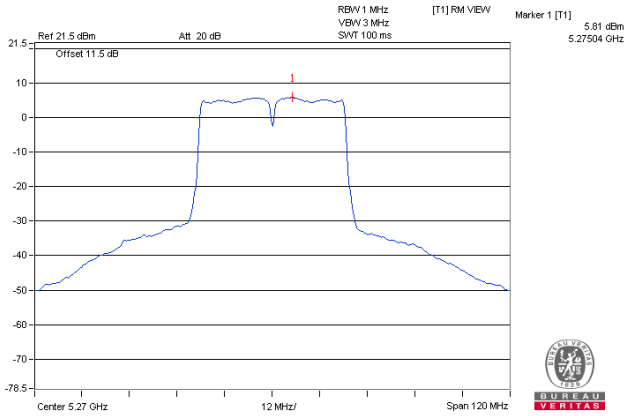


11ac (20MHz) 2S3T TxBF CH140

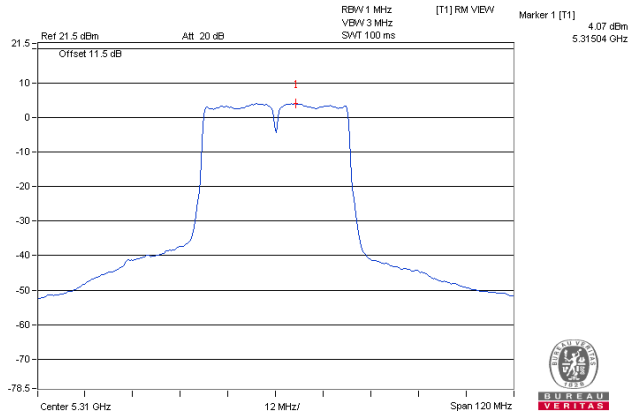


PSD SPECTRUM PLOT

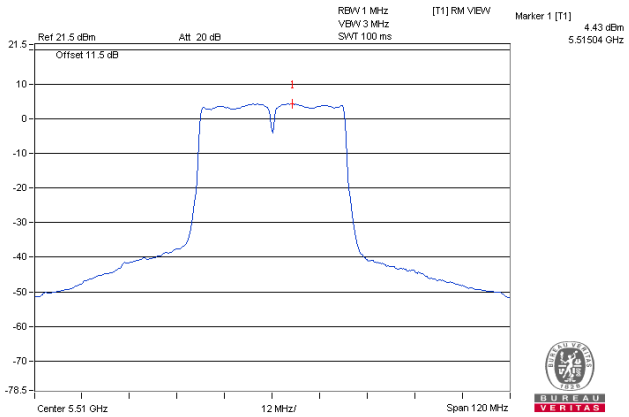
11ac (40MHz) 3S3T SDM CH54



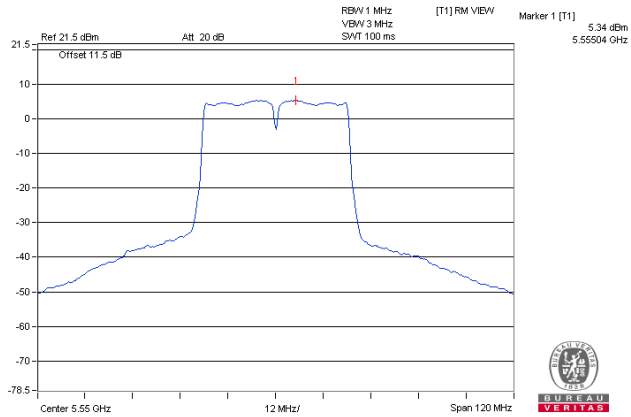
11ac (40MHz) 3S3T SDM CH62



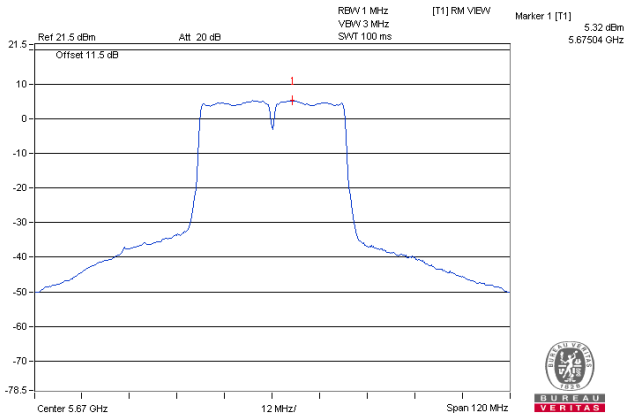
11ac (40MHz) 3S3T SDM CH102



11ac (40MHz) 3S3T SDM CH110

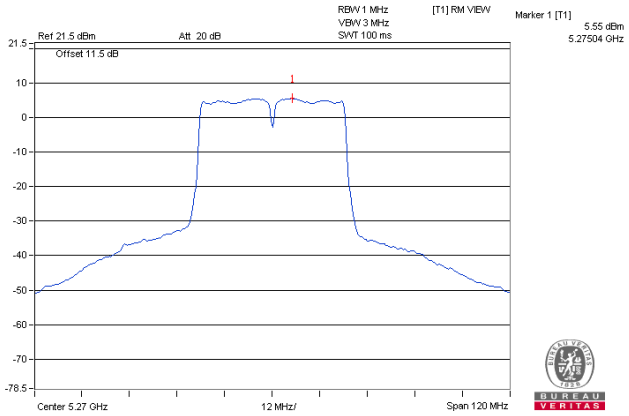


11ac (40MHz) 3S3T SDM CH134

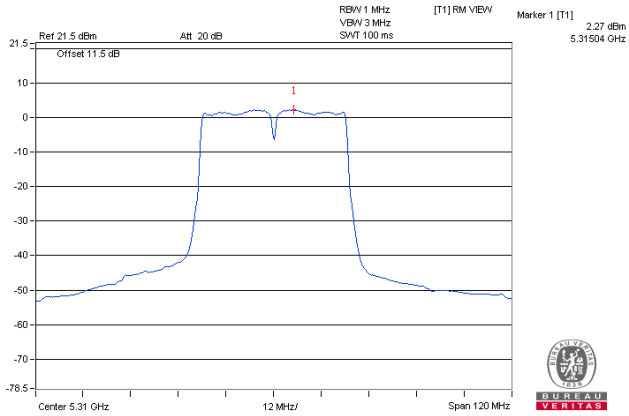


PSD SPECTRUM PLOT

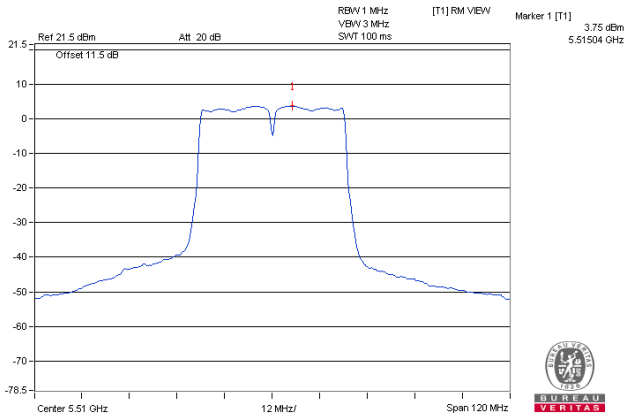
11ac (40MHz) 1S3T TxBF CH54



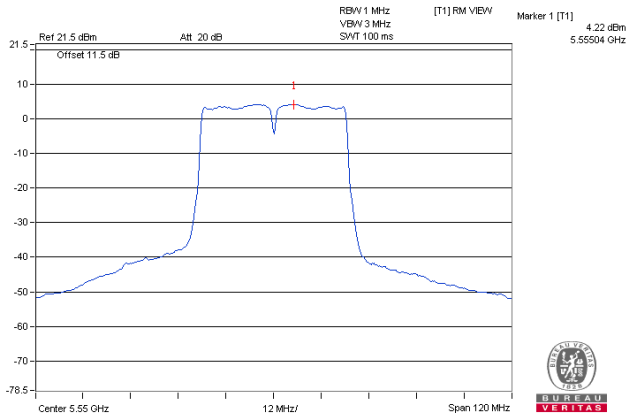
11ac (40MHz) 1S3T TxBF CH62



11ac (40MHz) 1S3T TxBF CH102



11ac (40MHz) 1S3T TxBF CH110



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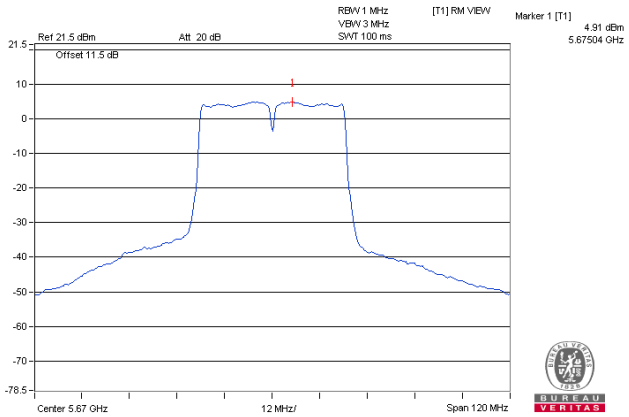
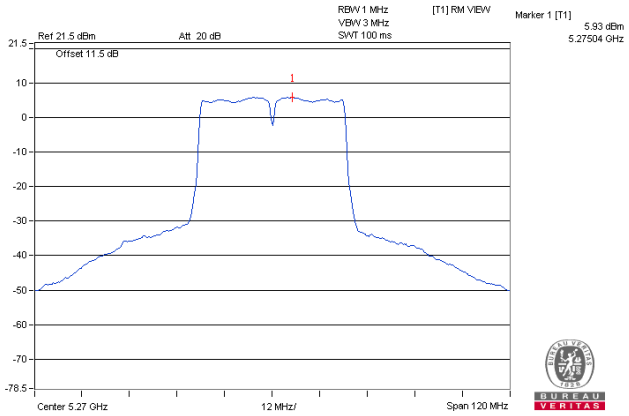
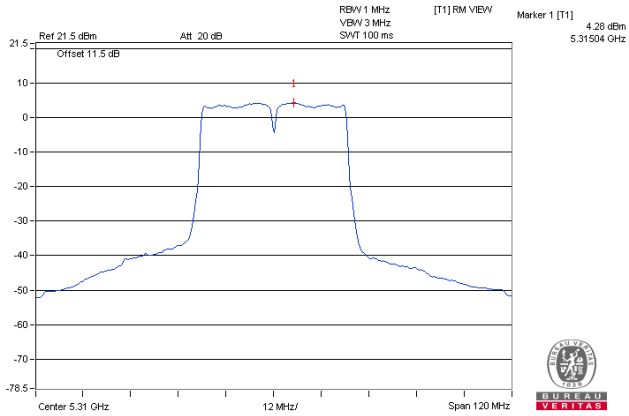


PSD SPECTRUM PLOT

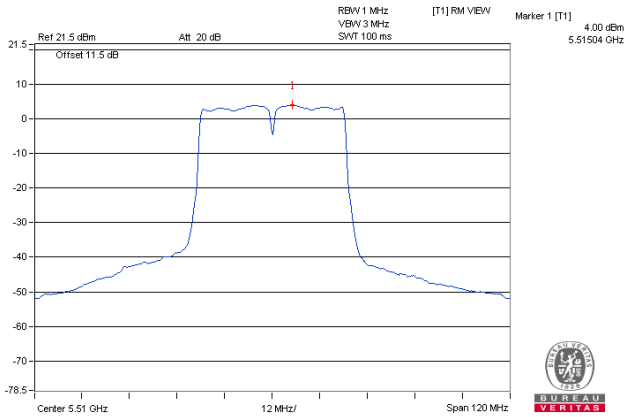
11ac (40MHz) 2S3T TxBF CH54



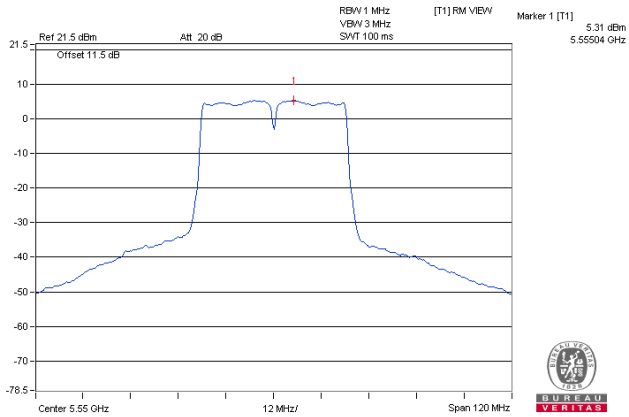
11ac (40MHz) 2S3T TxBF CH62



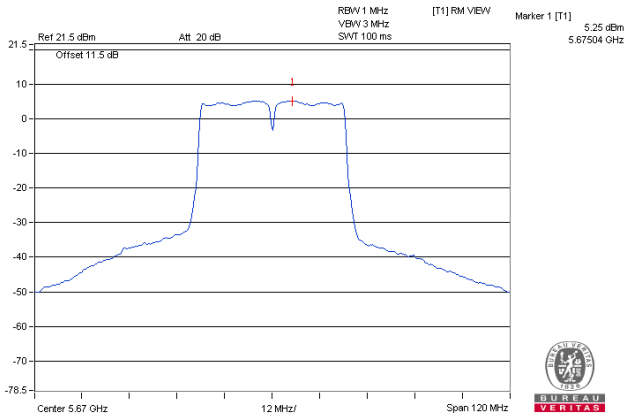
11ac (40MHz) 2S3T TxBF CH102



11ac (40MHz) 2S3T TxBF CH110

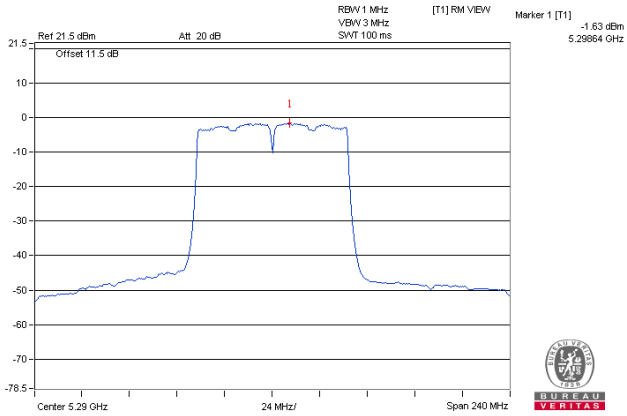


11ac (40MHz) 2S3T TxBF CH134

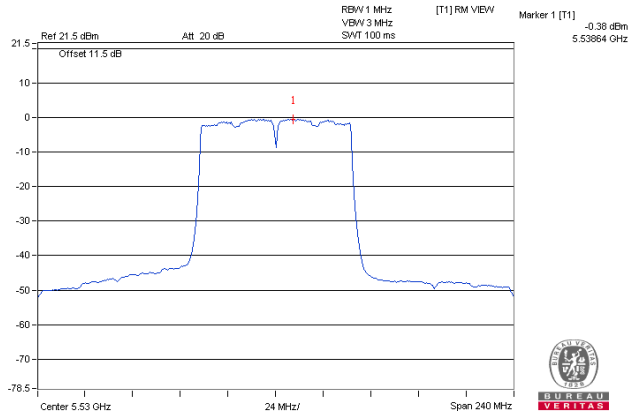


PSD SPECTRUM PLOT

11ac (80MHz) 3S3T SDM CH58

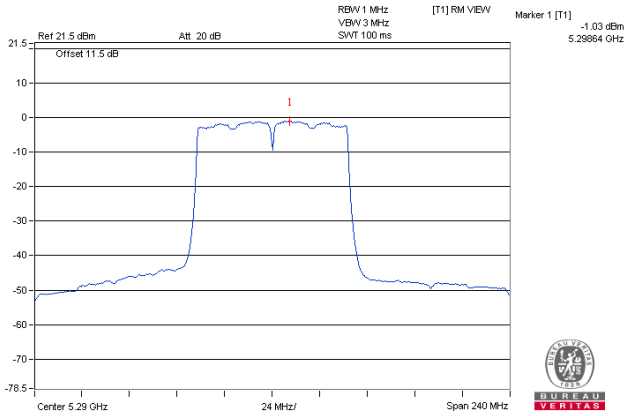


11ac (80MHz) 3S3T SDM CH106

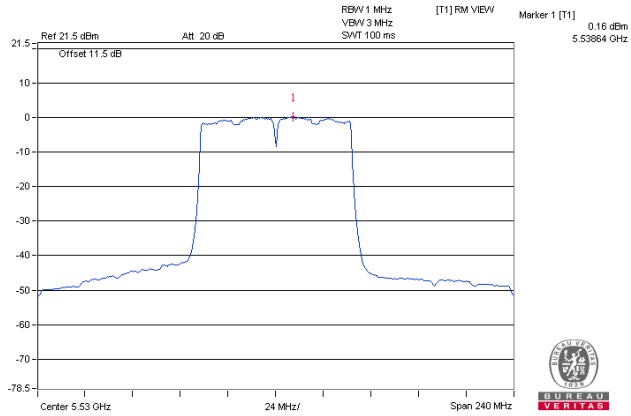


PSD SPECTRUM PLOT

11ac (80MHz) 1S3T TxBF CH58

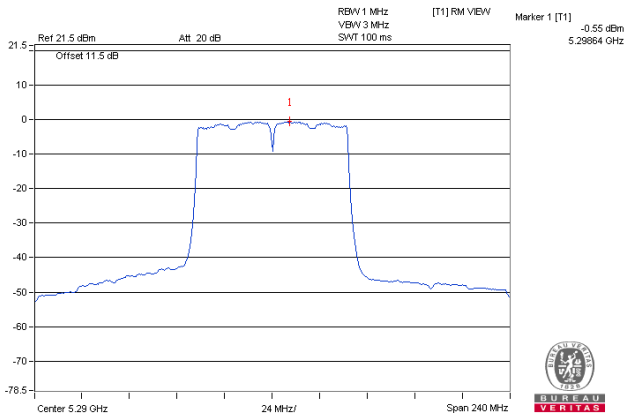


11ac (80MHz) 1S3T TxBF CH106

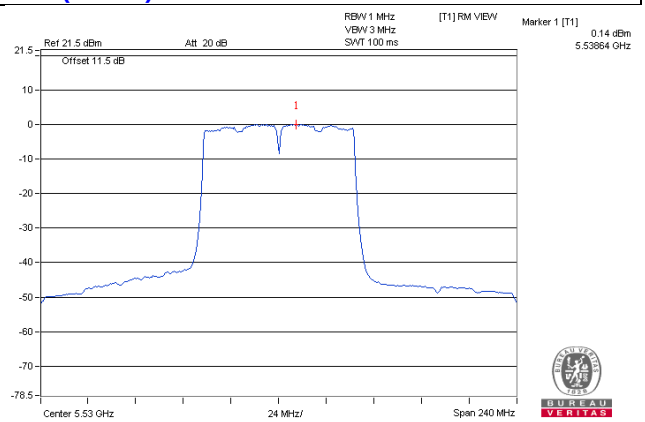


PSD SPECTRUM PLOT

11ac (80MHz) 2S3T TxBF CH58



11ac (80MHz) 2S3T TxBF CH106



4.5 Radiated Emission and Bandedge Measurement

4.5.1 Limits of Unwanted emissions in the restricted bands

Radiated emissions which fall within the restricted band specified on 15.205(a) must comply with the radiated emission limits specified as below table:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.5.2 Limits of Unwanted emissions out of the restricted bands

Applicable To			Limit	
789033 D02 General UNII Test Procedure New Rules v01r04			Field Strength at 3m	
			PK:74 (dBμV/m)	AV:54 (dBμV/m)
Frequency Band	Applicable To		EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)		PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz	15.407(b)(2)			
5470~5725 MHz	15.407(b)(3)			
5725~5850 MHz	☒	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK:122.2 (dBμV/m) *4
	☐	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

*1 beyond 75 MHz or more above of the band edge.

*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

4.5.3 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1GHz
Stop Frequency	10th Carrier Harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, Duty cycle ≧ 98% 1MHz / 10Hz for Average Duty cycle < 98% 1MHz / (1/T) for Average, where T is pulse time.
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for Peak
Detector	Peak
Trace mode	Max Hold.

Note : According to KDB 789033 D02 v01 r04 G. 6. d) Method VB.

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode.

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1GHz / RBW 120kHz for QP

4.5.4 Test Procedures

1 Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

2 Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.

3 The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.

4 For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.

5 Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode

6 For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer for Duty ≥ 98%, 1MHz RBW and VBW is ≥ 1/T for average reading in spectrum analyzer for Duty < 98%.

7 When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

8 If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.

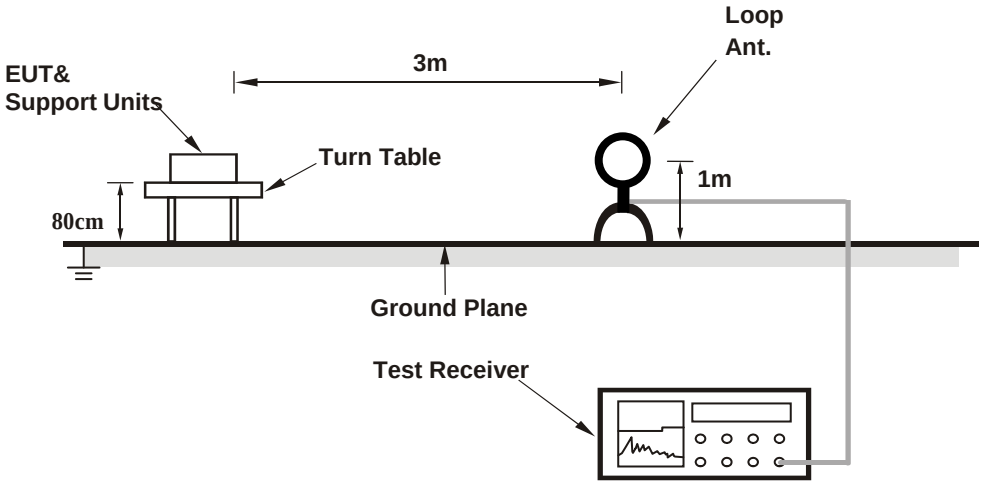
9 For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

10 As the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

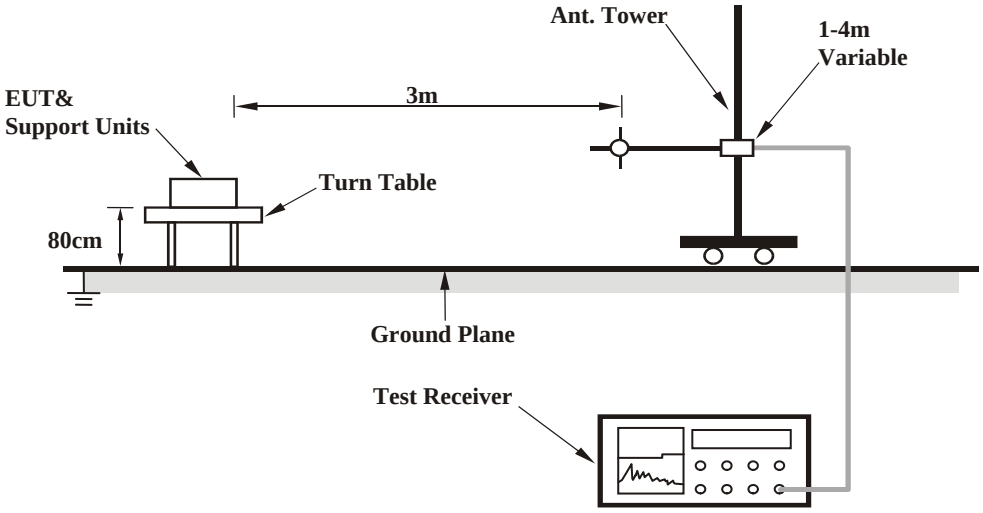
4.5.5 Test Setup Layout

Setup

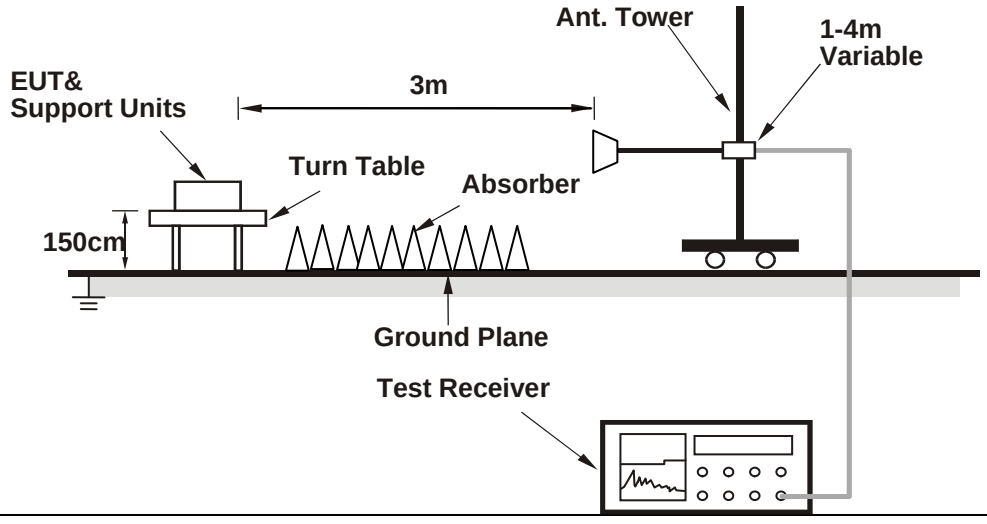
For Radiated Emissions below 1GHz (9kHz~30MHz)



For Radiated Emissions below 1GHz (30MHz~1GHz)



For Radiated Emissions above 1GHz



4.5.6 Test Deviation

There are no deviations with the original standard.

4.5.7 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.5.8 Test Results of Radiated Emissions and Bandedge

Temperature	25°C	Humidity	69%
Test Engineer	Bond Tseng		

Radiated Emissions Range 9kHz~30MHz

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Radiated Emissions Range 30MHz~1GHz

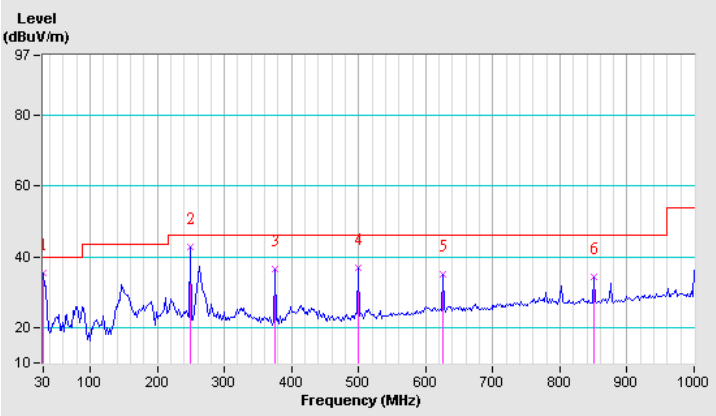
802.11ac (20MHz)

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	35.5 QP	40.0	-4.5	1.49 H	15	51.00	-15.50
2	249.22	42.8 QP	46.0	-3.2	1.00 H	79	57.10	-14.30
3	375.32	36.4 QP	46.0	-9.6	1.00 H	141	47.70	-11.30
4	499.48	37.0 QP	46.0	-9.0	2.00 H	207	46.40	-9.40
5	625.58	35.0 QP	46.0	-11.0	1.24 H	156	42.00	-7.00
6	850.62	34.5 QP	46.0	-11.5	1.49 H	209	38.10	-3.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

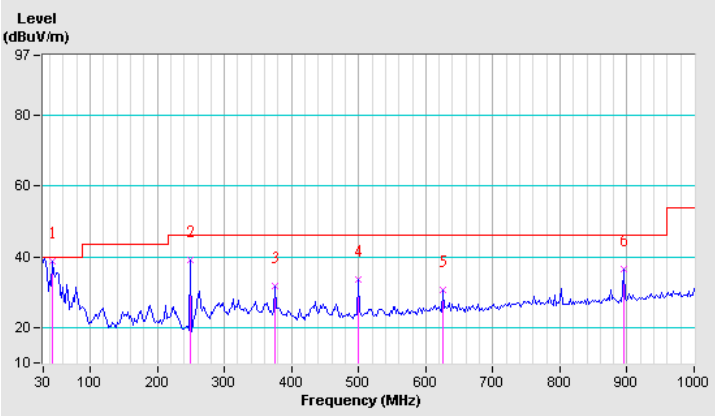


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**43.58**	**38.6 QP**	**40.0**	**-1.4**	**1.00 V**	**71**	**52.60**	**-14.00**
2	249.22	39.3 QP	46.0	-6.7	1.24 V	154	53.60	-14.30
3	375.32	31.7 QP	46.0	-14.3	1.24 V	191	43.00	-11.30
4	499.48	33.6 QP	46.0	-12.4	1.49 V	291	43.00	-9.40
5	625.58	30.7 QP	46.0	-15.3	1.24 V	161	37.70	-7.00
6	895.24	36.5 QP	46.0	-9.5	1.99 V	205	39.60	-3.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



Radiated Emission Range 1GHz~10th Harmonic

SDM Mode

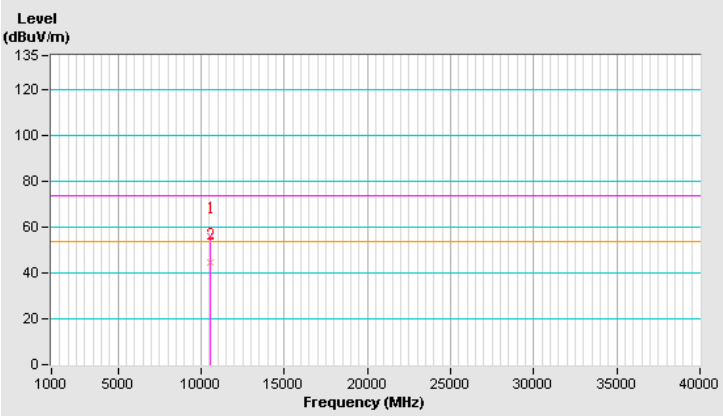
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	55.8 PK	74.0	-18.2	2.54 H	18	40.60	15.20
2	#10520.00	44.4 AV	54.0	-9.6	2.54 H	18	29.20	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

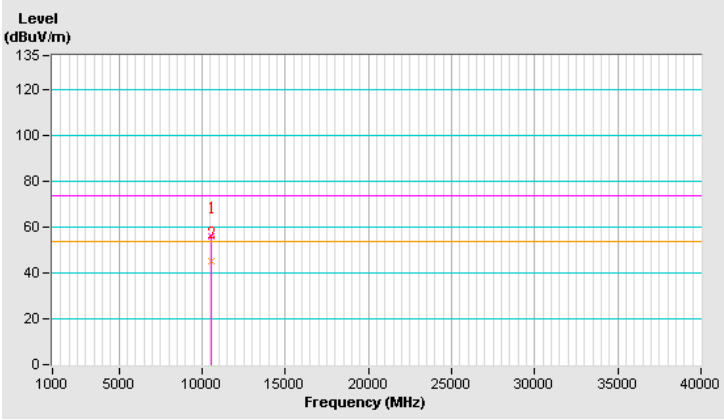


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	56.3 PK	74.0	-17.7	3.21 V	25	41.10	15.20
2	#10520.00	45.3 AV	54.0	-8.7	3.21 V	25	30.10	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

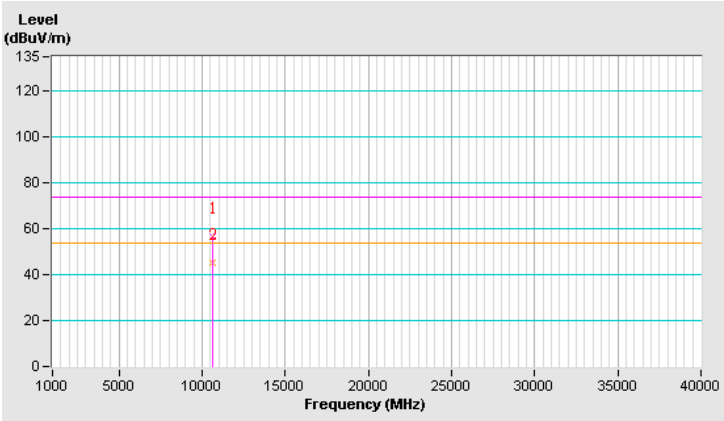


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	56.6 PK	74.0	-17.4	2.53 H	24	40.50	16.10
2	10600.00	45.4 AV	54.0	-8.6	2.53 H	24	29.30	16.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

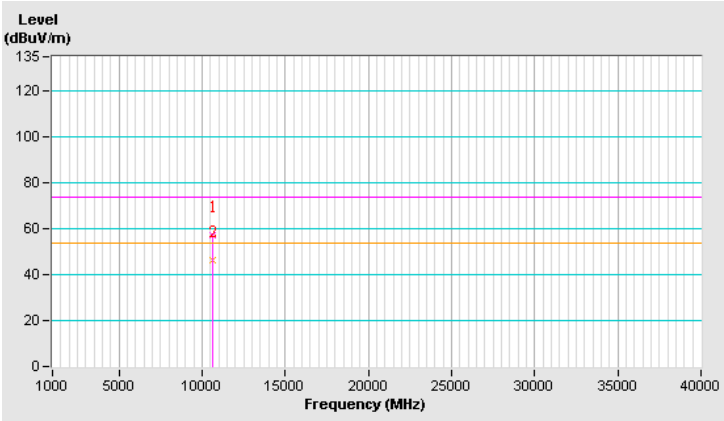


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	57.3 PK	74.0	-16.7	1.25 V	48	41.20	16.10
2	10600.00	46.3 AV	54.0	-7.7	1.25 V	48	30.20	16.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

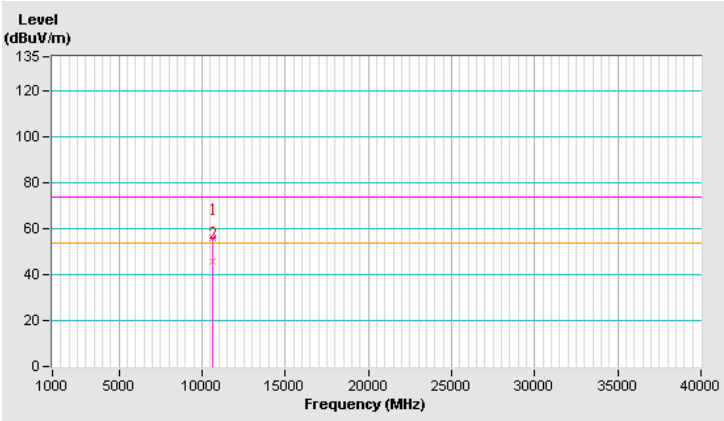


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	55.8 PK	74.0	-18.2	2.57 H	213	39.80	16.00
2	10640.00	45.5 AV	54.0	-8.5	2.57 H	213	29.50	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

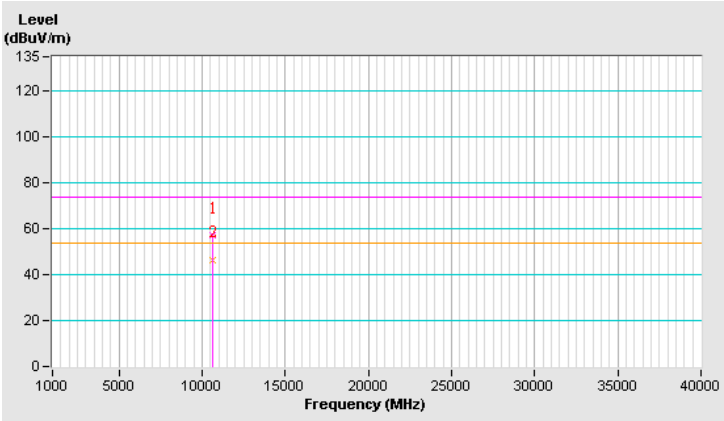


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	56.9 PK	74.0	-17.1	2.33 V	146	40.90	16.00
2	10640.00	46.1 AV	54.0	-7.9	2.33 V	146	30.10	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

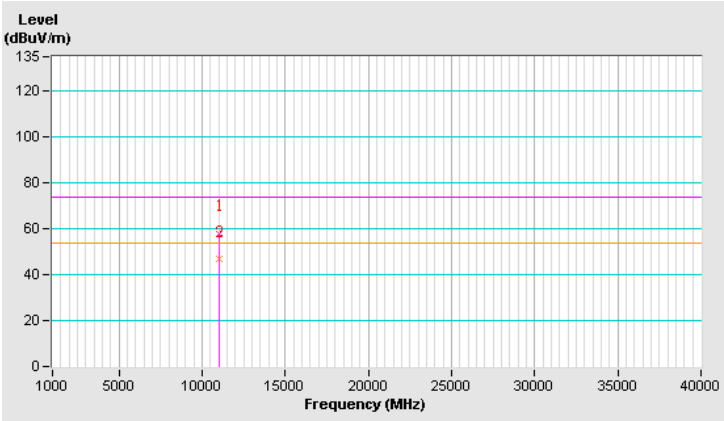


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	57.7 PK	74.0	-16.3	2.57 H	38	40.20	17.50
2	11000.00	46.6 AV	54.0	-7.4	2.57 H	38	29.10	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

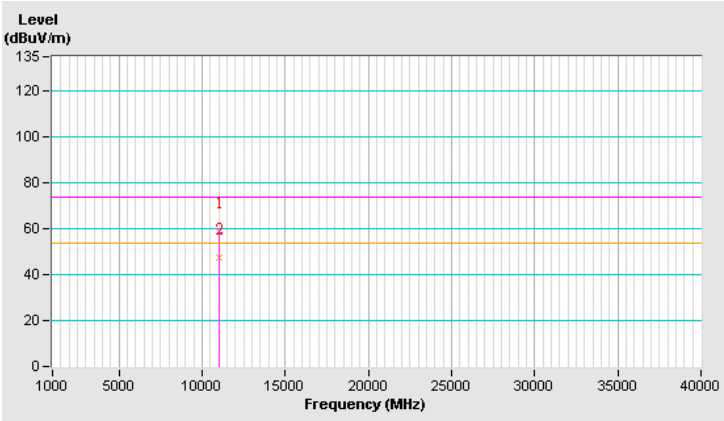


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	58.7 PK	74.0	-15.3	2.53 V	127	41.20	17.50
2	11000.00	47.7 AV	54.0	-6.3	2.53 V	127	30.20	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

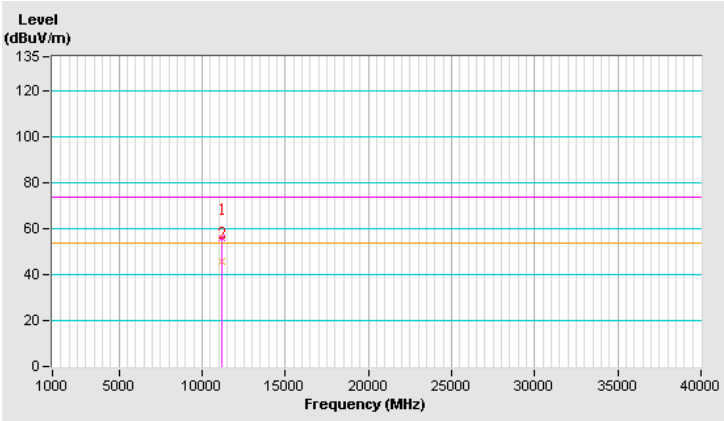


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	56.2 PK	74.0	-17.8	N/A H	N/A	39.80	16.40
2	11160.00	45.5 AV	54.0	-8.5	N/A H	N/A	29.10	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

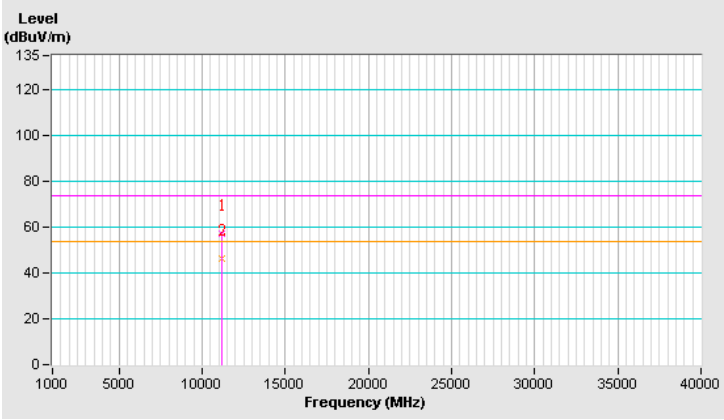


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	57.0 PK	74.0	-17.0	3.12 V	258	40.60	16.40
2	11160.00	46.3 AV	54.0	-7.7	3.12 V	258	29.90	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

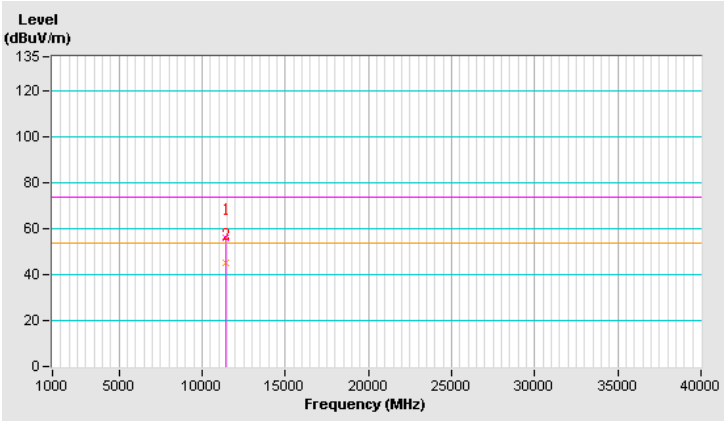


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	56.3 PK	74.0	-17.7	2.85 H	64	40.10	16.20
2	11400.00	45.2 AV	54.0	-8.8	2.85 H	64	29.00	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

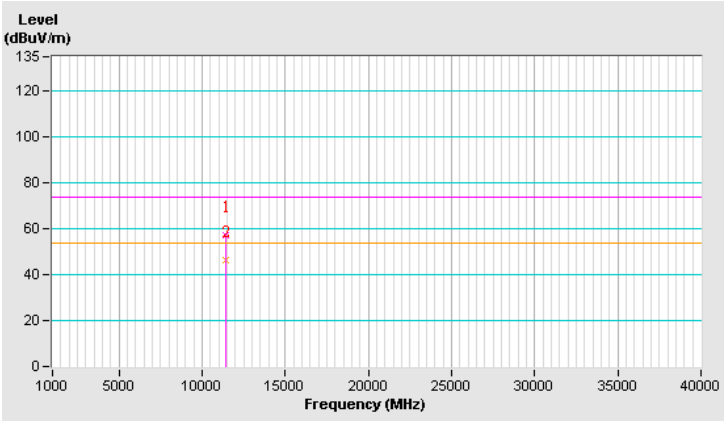


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	57.4 PK	74.0	-16.6	3.24 V	58	41.20	16.20
2	11400.00	46.1 AV	54.0	-7.9	3.24 V	58	29.90	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



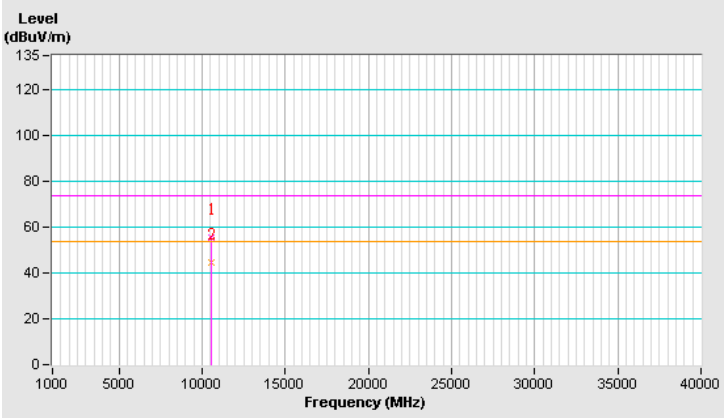
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	55.3 PK	74.0	-18.7	2.47 H	36	39.90	15.40
2	#10540.00	44.5 AV	54.0	-9.5	2.47 H	36	29.10	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

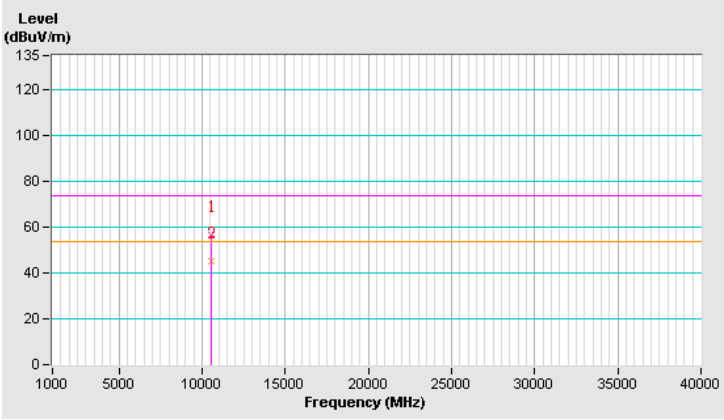


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	56.5 PK	74.0	-17.5	2.58 V	76	41.10	15.40
2	#10540.00	45.4 AV	54.0	-8.6	2.58 V	76	30.00	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

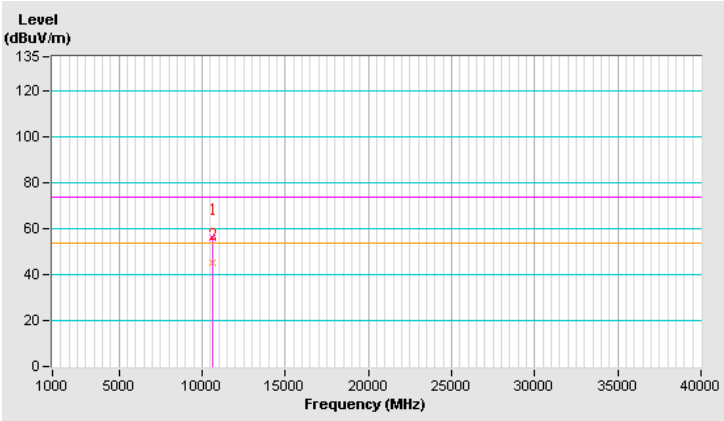


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	56.3 PK	74.0	-17.7	2.36 H	89	40.30	16.00
2	10620.00	45.3 AV	54.0	-8.7	2.36 H	89	29.30	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

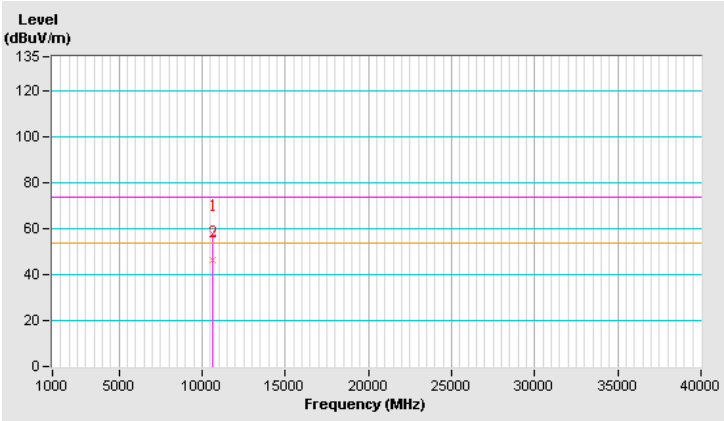


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	57.9 PK	74.0	-16.1	3.24 V	125	41.90	16.00
2	10620.00	46.2 AV	54.0	-7.8	3.24 V	125	30.20	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

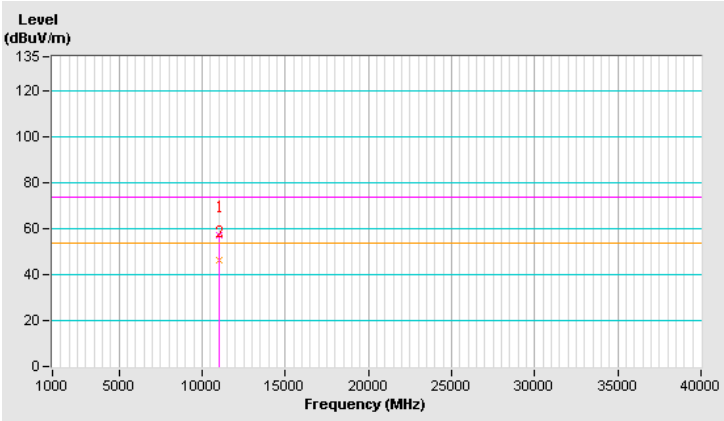


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	57.3 PK	74.0	-16.7	2.58 H	41	40.10	17.20
2	11020.00	46.3 AV	54.0	-7.7	2.58 H	41	29.10	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

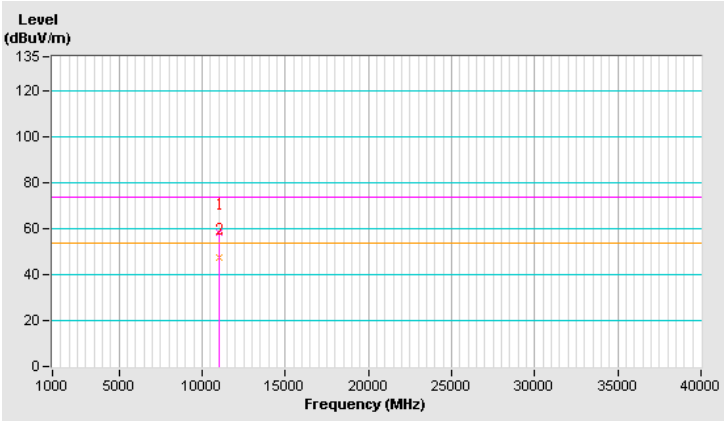


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	58.4 PK	74.0	-15.6	3.18 V	46	41.20	17.20
2	11020.00	47.3 AV	54.0	-6.7	3.18 V	46	30.10	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

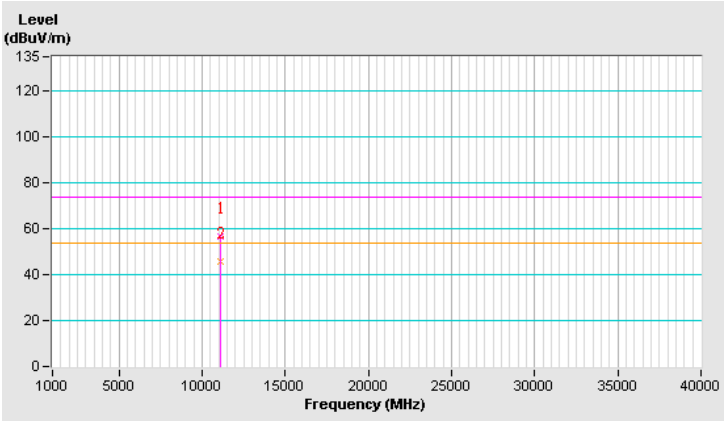


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	56.7 PK	74.0	-17.3	2.68 H	142	40.30	16.40
2	11100.00	45.6 AV	54.0	-8.4	2.68 H	142	29.20	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

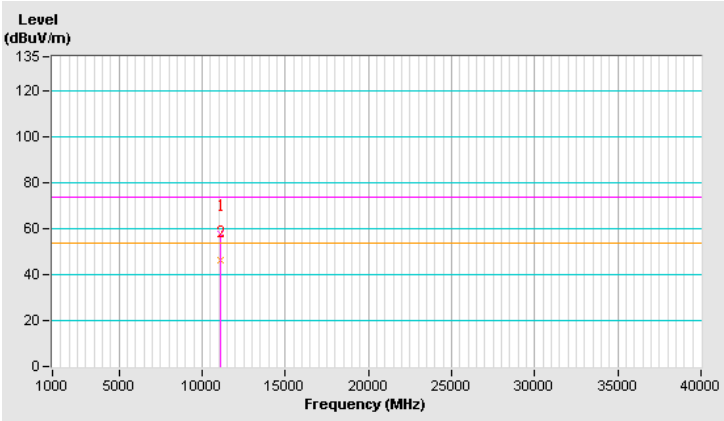


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	57.6 PK	74.0	-16.4	2.67 V	132	41.20	16.40
2	11100.00	46.5 AV	54.0	-7.5	2.67 V	132	30.10	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

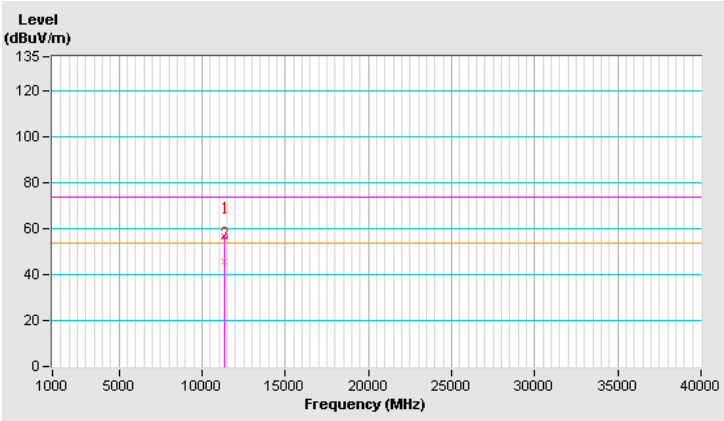


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	56.7 PK	74.0	-17.3	3.24 H	213	40.10	16.60
2	11340.00	45.9 AV	54.0	-8.1	3.24 H	213	29.30	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

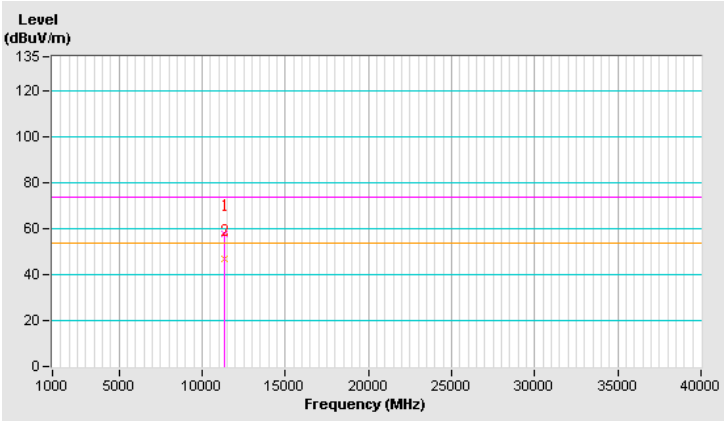


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	57.8 PK	74.0	-16.2	2.54 V	142	41.20	16.60
2	11340.00	47.0 AV	54.0	-7.0	2.54 V	142	30.40	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



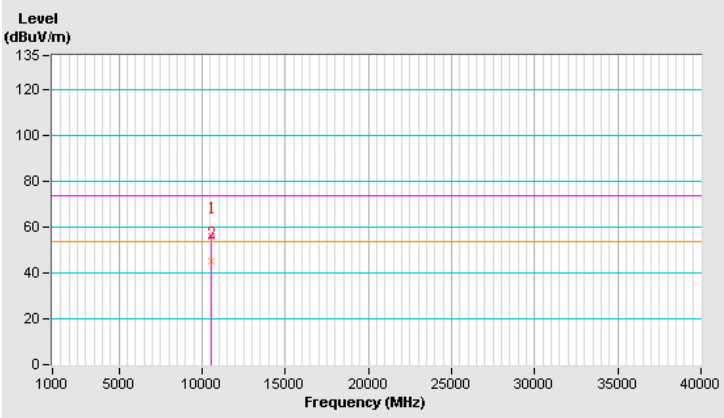
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	55.9 PK	74.0	-18.1	3.17 H	96	40.00	15.90
2	#10580.00	45.2 AV	54.0	-8.8	3.17 H	96	29.30	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

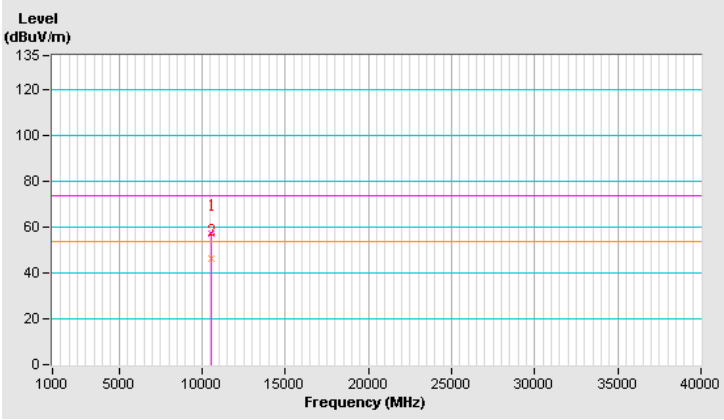


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	57.0 PK	74.0	-17.0	3.26 V	87	41.10	15.90
2	#10580.00	46.1 AV	54.0	-7.9	3.26 V	87	30.20	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

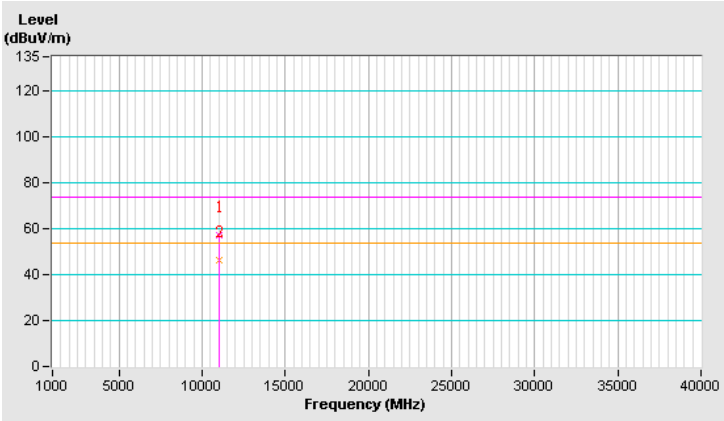


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	57.2 PK	74.0	-16.8	2.36 H	124	40.30	16.90
2	11060.00	46.3 AV	54.0	-7.7	2.36 H	124	29.40	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

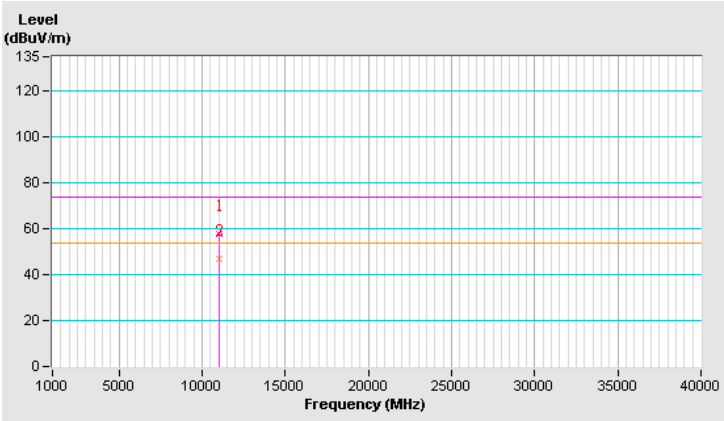


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	58.0 PK	74.0	-16.0	2.15 V	36	41.10	16.90
2	11060.00	47.1 AV	54.0	-6.9	2.15 V	36	30.20	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



1S3T TxBF Mode

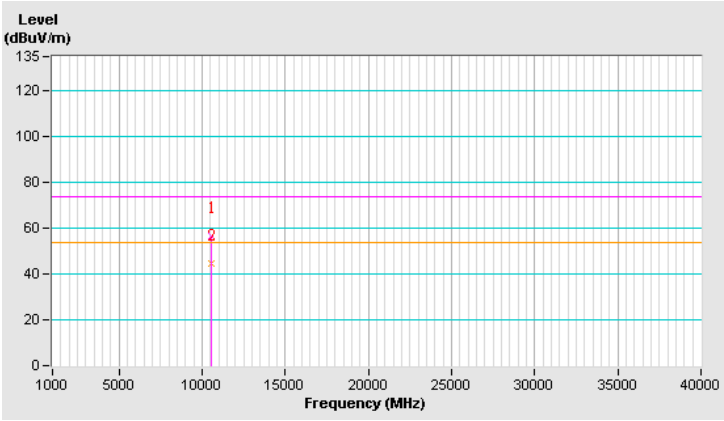
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	56.5 PK	74.0	-17.5	2.51 H	172	41.20	15.30
2	#10520.00	44.8 AV	54.0	-9.2	2.51 H	172	29.50	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

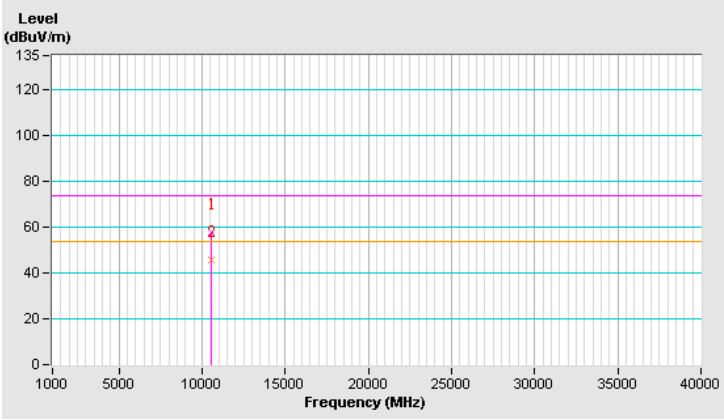


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	57.5 PK	74.0	-16.5	2.51 V	274	42.30	15.20
2	#10520.00	46.0 AV	54.0	-8.0	2.51 V	274	30.80	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

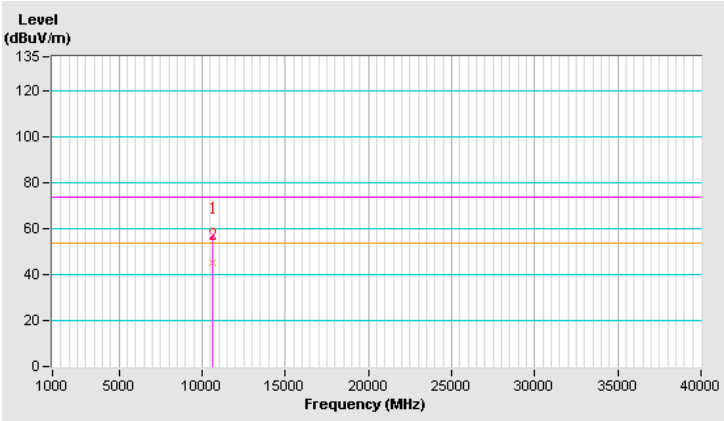


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	56.9 PK	74.0	-17.1	2.94 H	217	41.20	15.70
2	10600.00	45.4 AV	54.0	-8.6	2.94 H	217	29.70	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

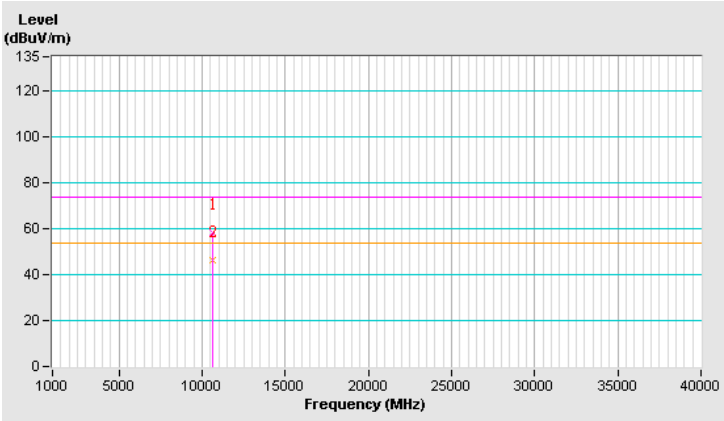


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	58.3 PK	74.0	-15.7	2.94 V	163	42.60	15.70
2	10600.00	46.3 AV	54.0	-7.7	2.94 V	163	30.60	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

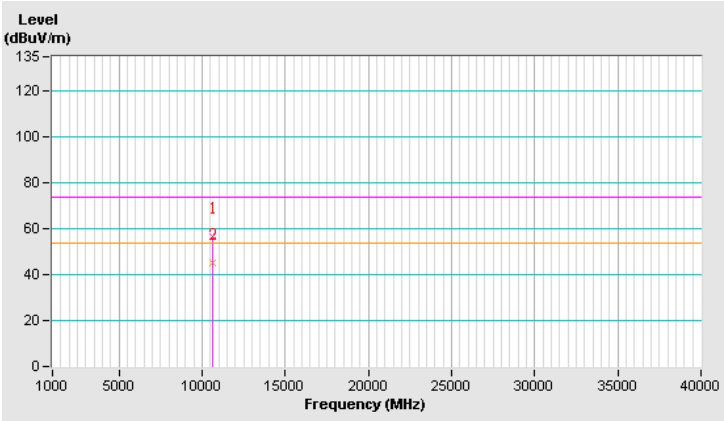


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	56.5 PK	74.0	-17.5	2.76 H	214	40.90	15.60
2	10640.00	45.0 AV	54.0	-9.0	2.76 H	214	29.40	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

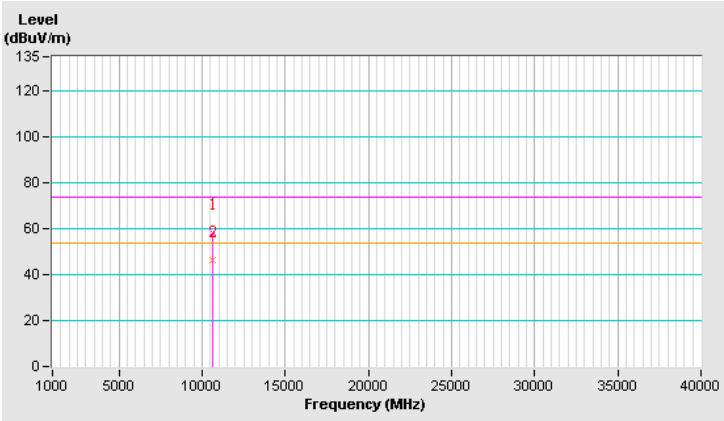


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	58.2 PK	74.0	-15.8	3.19 V	146	42.60	15.60
2	10640.00	46.3 AV	54.0	-7.7	3.19 V	146	30.70	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

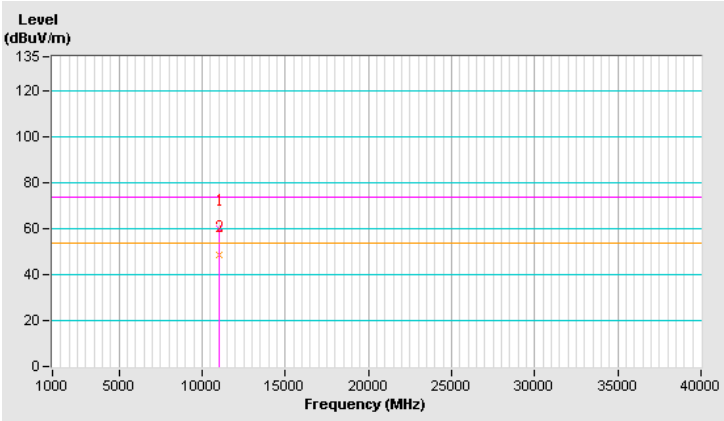


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	59.9 PK	74.0	-14.1	3.71 H	261	42.40	17.50
2	11000.00	48.4 AV	54.0	-5.6	3.71 H	261	30.90	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

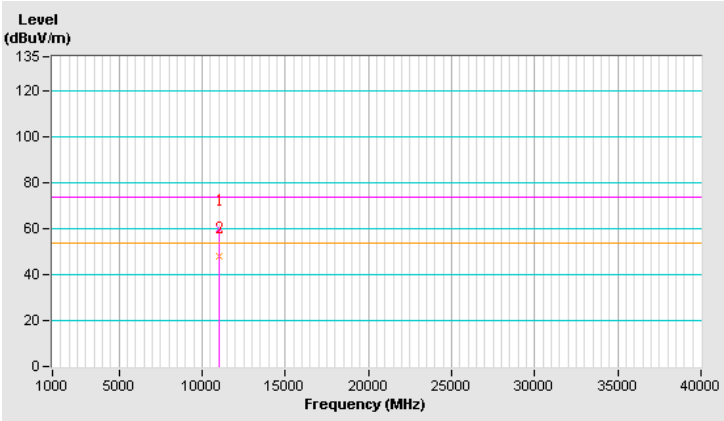


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	60.3 PK	74.0	-13.7	2.78 V	173	42.80	17.50
2	11000.00	48.3 AV	54.0	-5.7	2.78 V	173	30.80	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

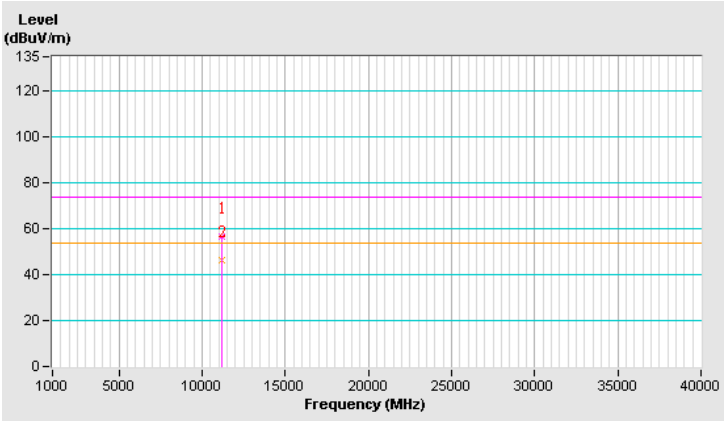


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	56.9 PK	74.0	-17.1	3.43 H	216	40.50	16.40
2	11160.00	46.2 AV	54.0	-7.8	3.43 H	216	29.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

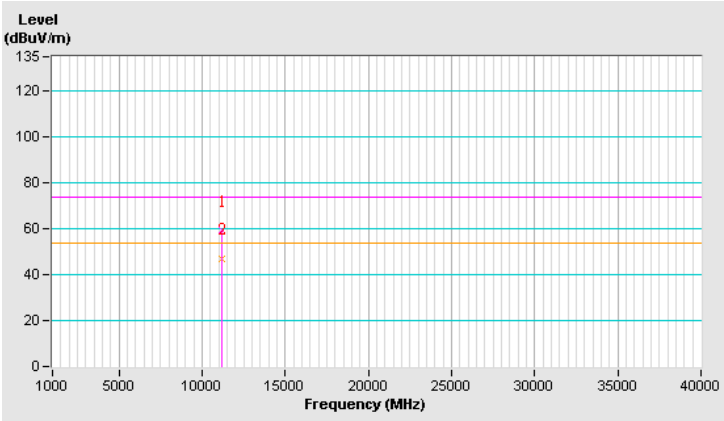


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	59.3 PK	74.0	-14.7	3.18 V	174	42.90	16.40
2	11160.00	47.2 AV	54.0	-6.8	3.18 V	174	30.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

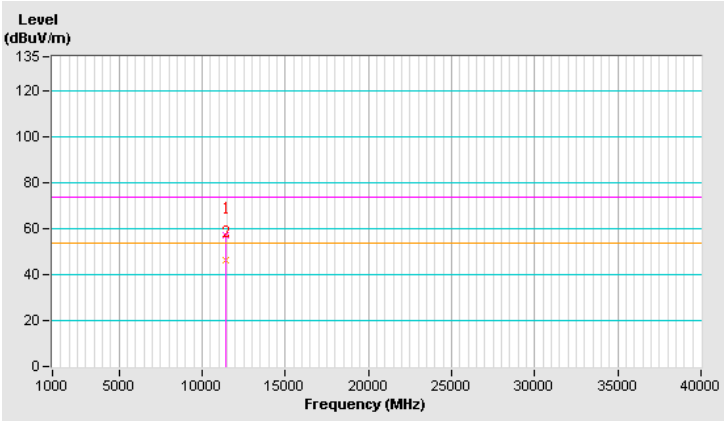


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	56.9 PK	74.0	-17.1	3.42 H	275	40.70	16.20
2	11400.00	46.1 AV	54.0	-7.9	3.42 H	275	29.90	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

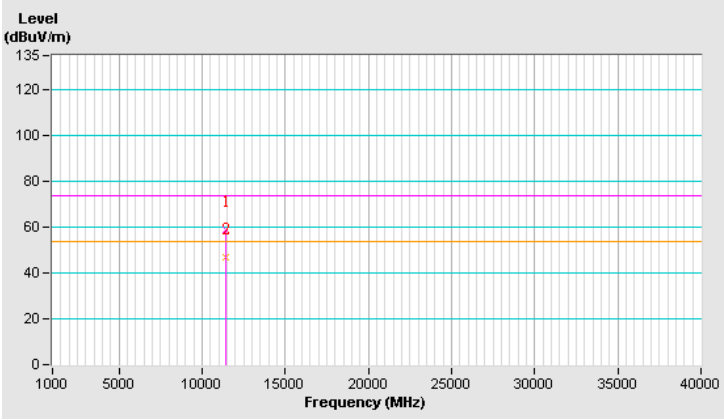


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	59.0 PK	74.0	-15.0	3.75 V	216	42.80	16.20
2	11400.00	47.1 AV	54.0	-6.9	3.75 V	216	30.90	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



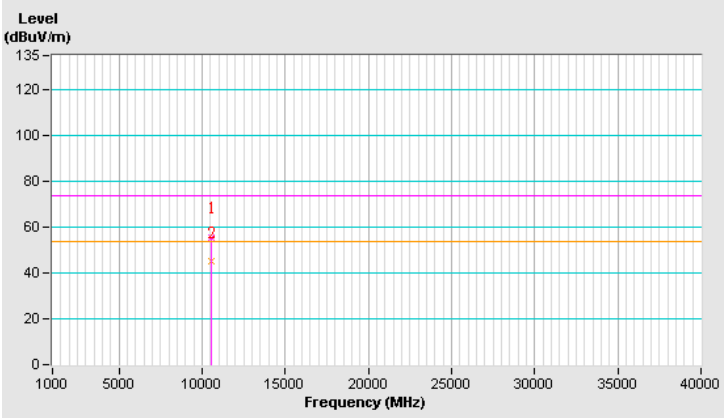
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	55.8 PK	74.0	-18.2	2.43 H	176	40.40	15.40
2	#10540.00	45.1 AV	54.0	-8.9	2.43 H	176	29.70	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

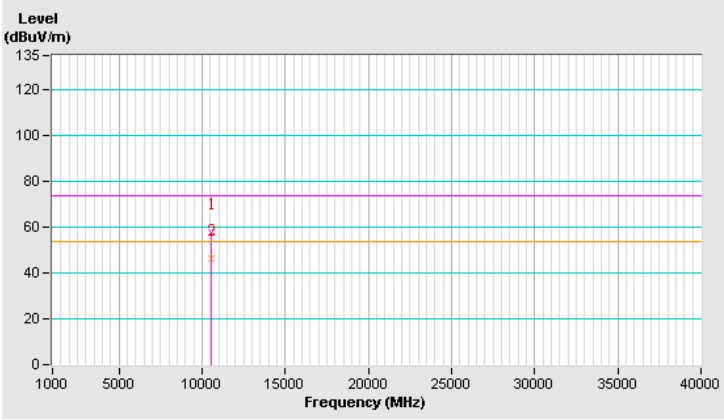


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	57.8 PK	74.0	-16.2	2.17 V	124	42.40	15.40
2	#10540.00	46.2 AV	54.0	-7.8	2.17 V	124	30.80	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

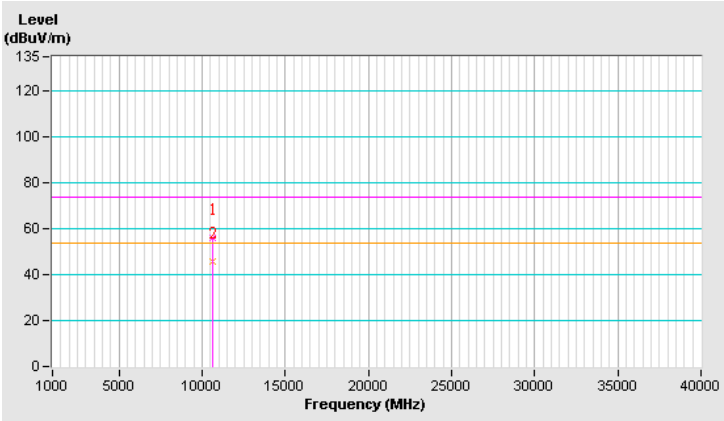


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	56.3 PK	74.0	-17.7	2.93 H	216	40.30	16.00
2	10620.00	45.7 AV	54.0	-8.3	2.93 H	216	29.70	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

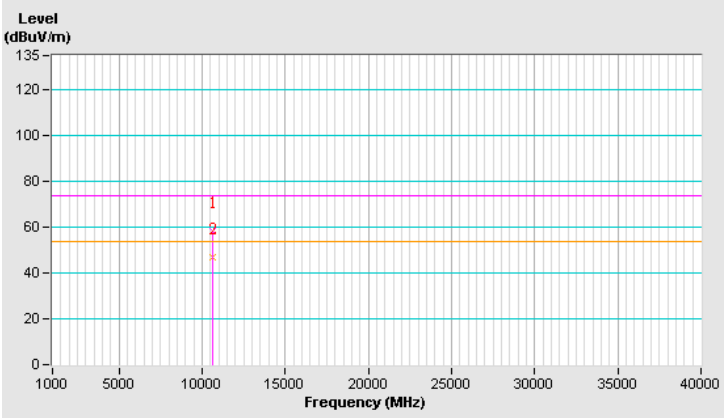


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	58.4 PK	74.0	-15.6	3.76 V	215	42.40	16.00
2	10620.00	46.9 AV	54.0	-7.1	3.76 V	215	30.90	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

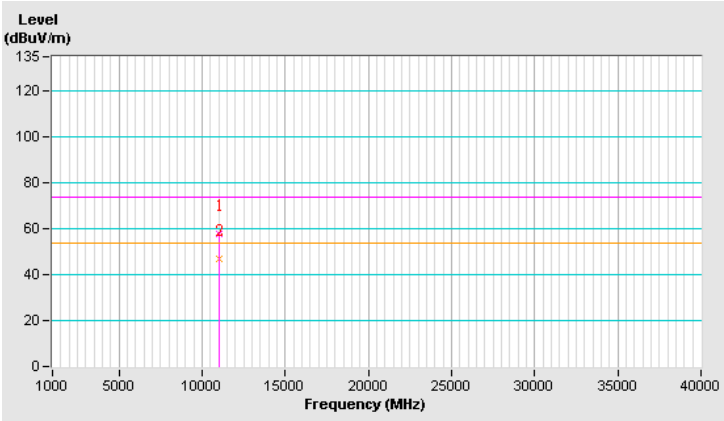


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	57.6 PK	74.0	-16.4	3.47 H	258	40.40	17.20
2	11020.00	47.0 AV	54.0	-7.0	3.47 H	258	29.80	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

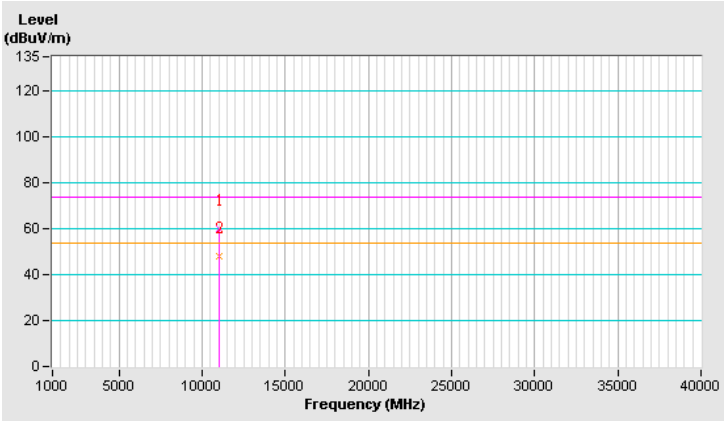


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	60.1 PK	74.0	-13.9	3.26 V	271	42.90	17.20
2	11020.00	48.0 AV	54.0	-6.0	3.26 V	271	30.80	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

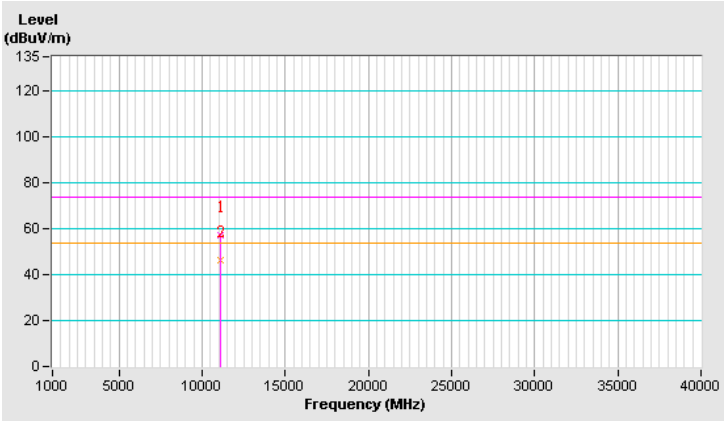


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	57.3 PK	74.0	-16.7	3.17 H	243	40.90	16.40
2	11100.00	46.2 AV	54.0	-7.8	3.17 H	243	29.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

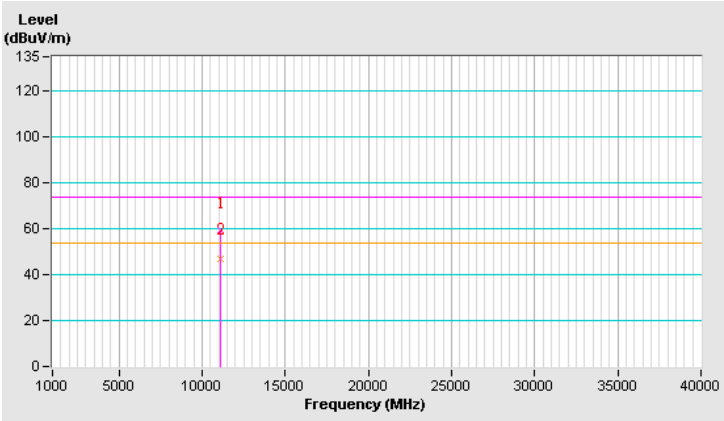


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	59.2 PK	74.0	-14.8	2.86 V	213	42.80	16.40
2	11100.00	47.2 AV	54.0	-6.8	2.86 V	213	30.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

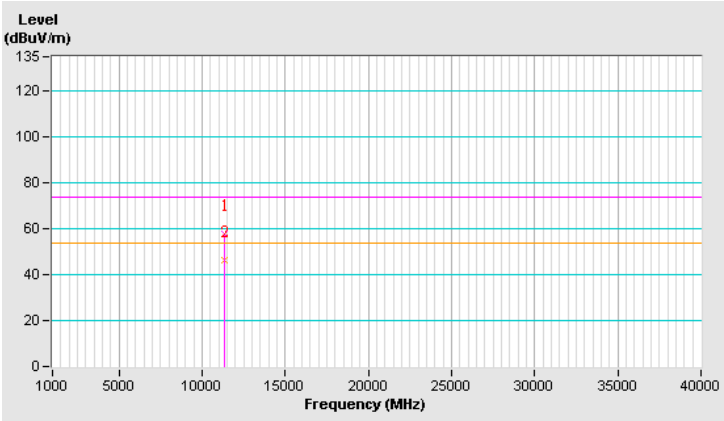


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	57.5 PK	74.0	-16.5	3.47 H	269	40.90	16.60
2	11340.00	46.5 AV	54.0	-7.5	3.47 H	269	29.90	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

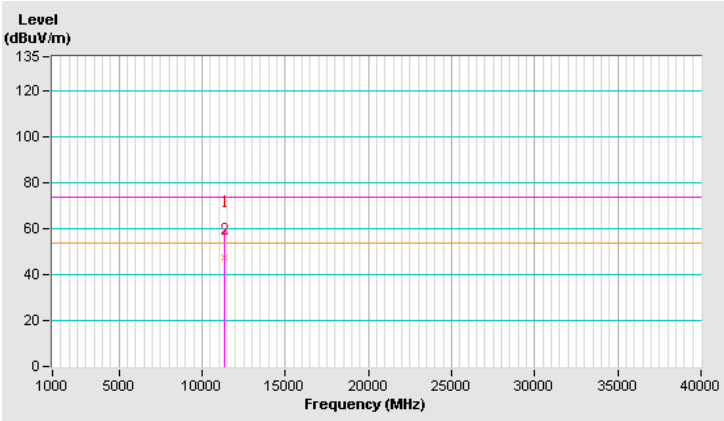


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	59.5 PK	74.0	-14.5	3.42 V	273	42.90	16.60
2	11340.00	47.5 AV	54.0	-6.5	3.42 V	273	30.90	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



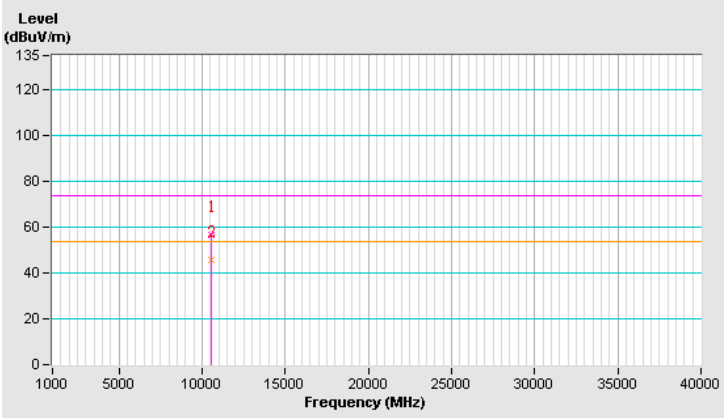
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	56.5 PK	74.0	-17.5	3.26 H	271	40.60	15.90
2	#10580.00	45.7 AV	54.0	-8.3	3.26 H	271	29.80	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

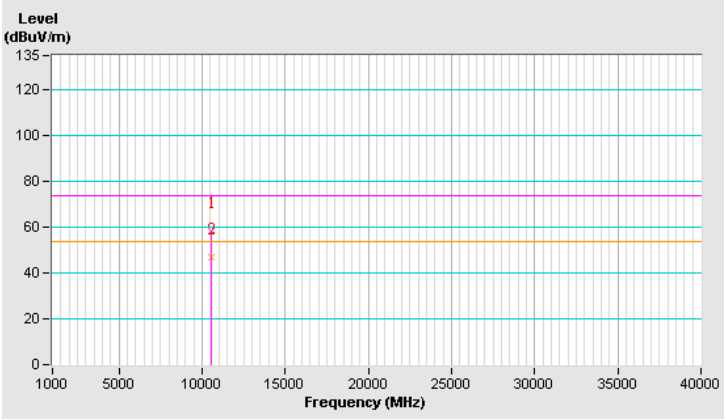


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	58.3 PK	74.0	-15.7	3.17 V	216	42.40	15.90
2	#10580.00	46.7 AV	54.0	-7.3	3.17 V	216	30.80	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

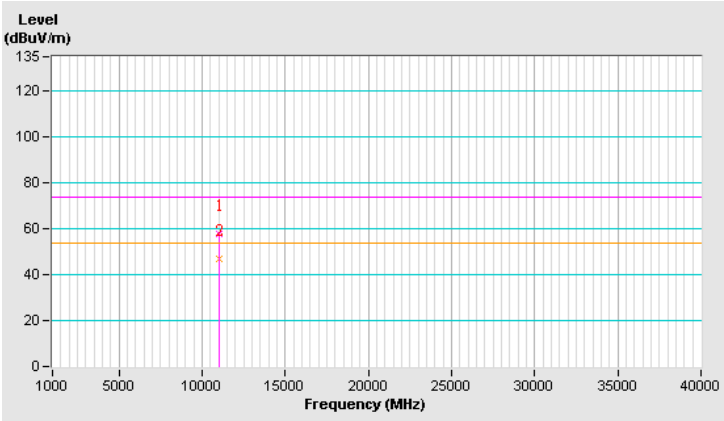


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	57.8 PK	74.0	-16.2	3.26 H	233	40.90	16.90
2	11060.00	46.7 AV	54.0	-7.3	3.26 H	233	29.80	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

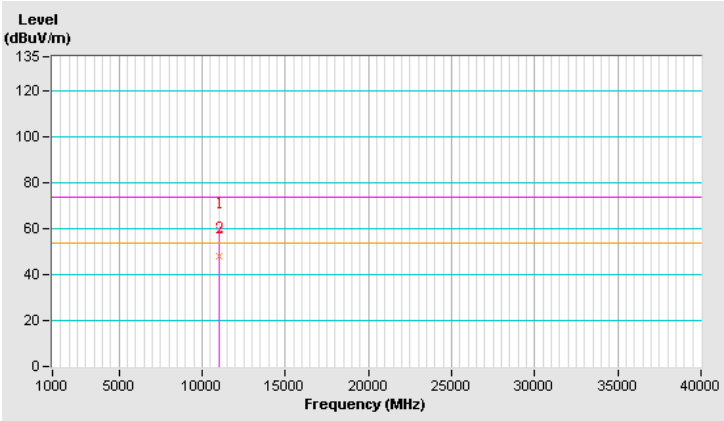


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	59.2 PK	74.0	-14.8	3.62 V	273	42.30	16.90
2	11060.00	47.9 AV	54.0	-6.1	3.62 V	273	31.00	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



2S3T TxBF Mode

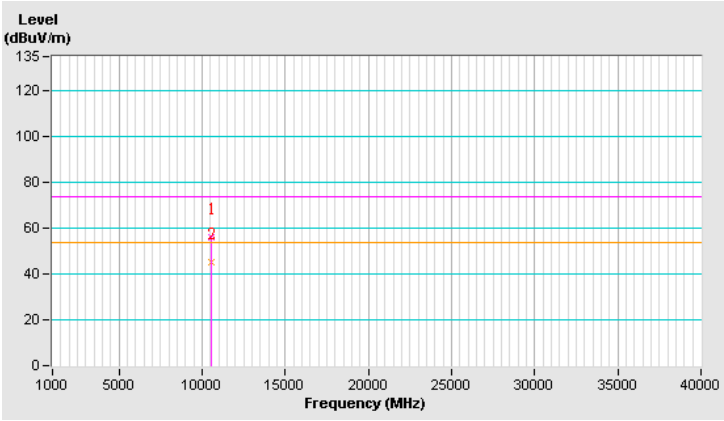
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	55.9 PK	74.0	-18.1	3.21 H	246	40.70	15.20
2	#10520.00	45.0 AV	54.0	-9.0	3.21 H	246	29.80	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

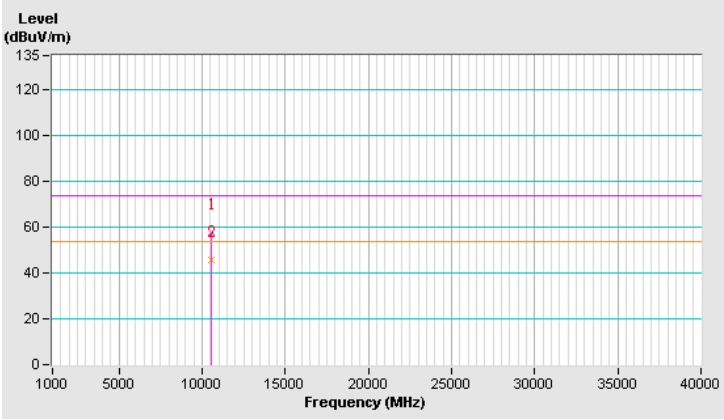


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	58.0 PK	74.0	-16.0	3.17 V	263	42.80	15.20
2	#10520.00	45.9 AV	54.0	-8.1	3.17 V	263	30.70	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

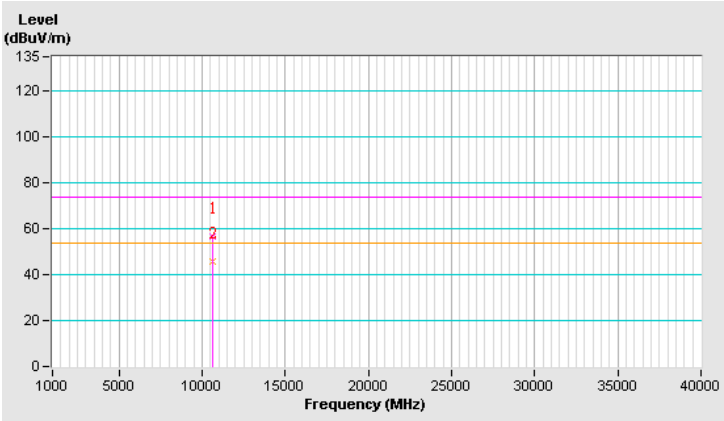


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	56.7 PK	74.0	-17.3	3.24 H	253	40.60	16.10
2	10600.00	45.8 AV	54.0	-8.2	3.24 H	253	29.70	16.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

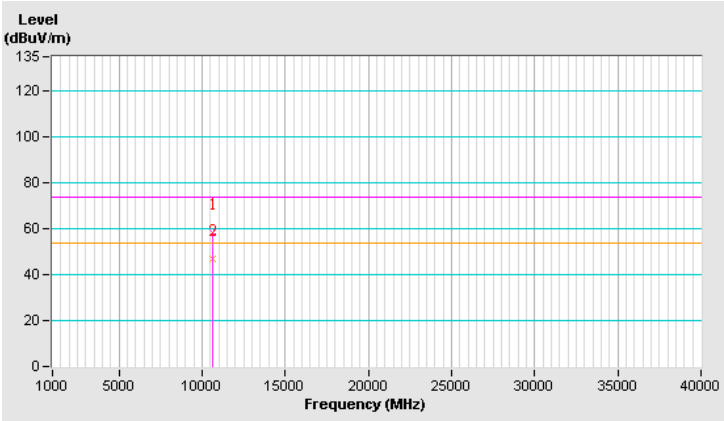


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10600.00	58.3 PK	74.0	-15.7	3.52 V	247	42.20	16.10
2	10600.00	46.9 AV	54.0	-7.1	3.52 V	247	30.80	16.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

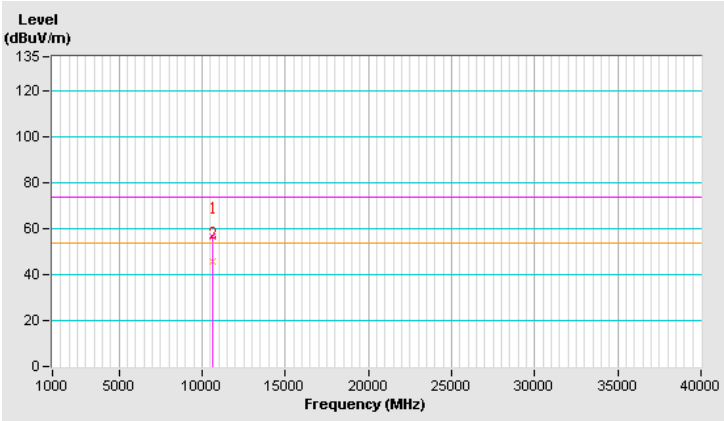


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	56.6 PK	74.0	-17.4	3.16 H	272	40.60	16.00
2	10640.00	45.7 AV	54.0	-8.3	3.16 H	272	29.70	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

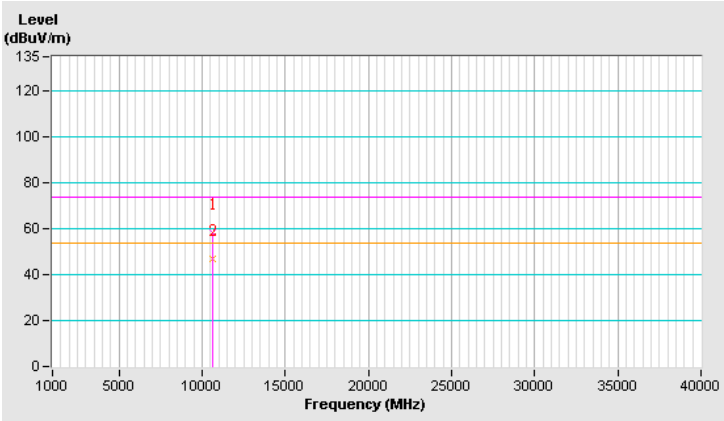


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10640.00	58.4 PK	74.0	-15.6	3.26 V	211	42.40	16.00
2	10640.00	46.8 AV	54.0	-7.2	3.26 V	211	30.80	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

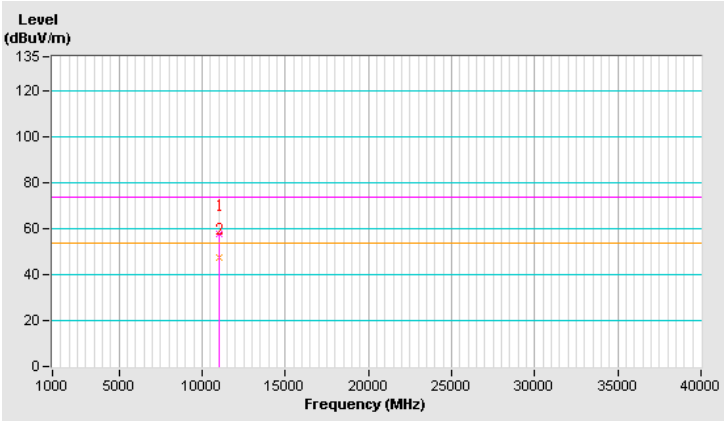


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	57.9 PK	74.0	-16.1	2.47 H	128	40.40	17.50
2	11000.00	47.3 AV	54.0	-6.7	2.47 H	128	29.80	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

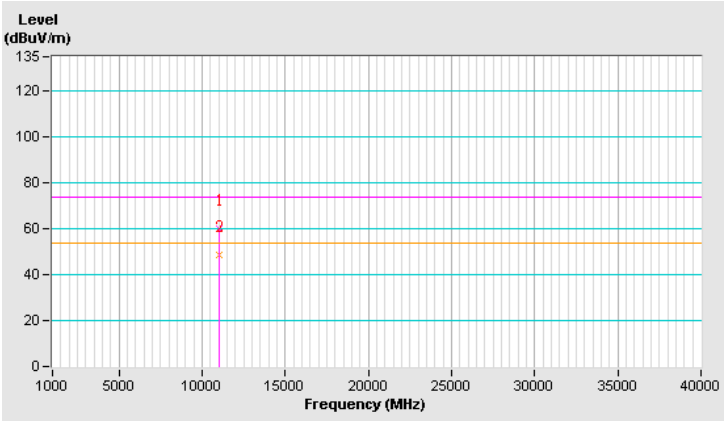


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	59.9 PK	74.0	-14.1	3.24 V	217	42.40	17.50
2	11000.00	48.4 AV	54.0	-5.6	3.24 V	217	30.90	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

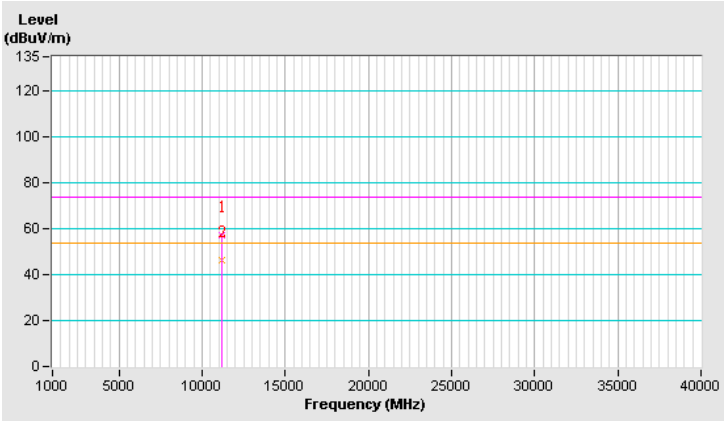


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	57.0 PK	74.0	-17.0	2.29 H	126	40.60	16.40
2	11160.00	46.2 AV	54.0	-7.8	2.29 H	126	29.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

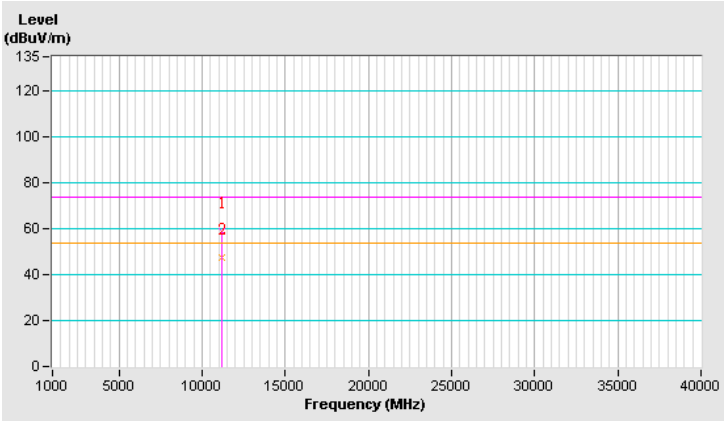


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	59.1 PK	74.0	-14.9	2.46 V	137	42.70	16.40
2	11160.00	47.3 AV	54.0	-6.7	2.46 V	137	30.90	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

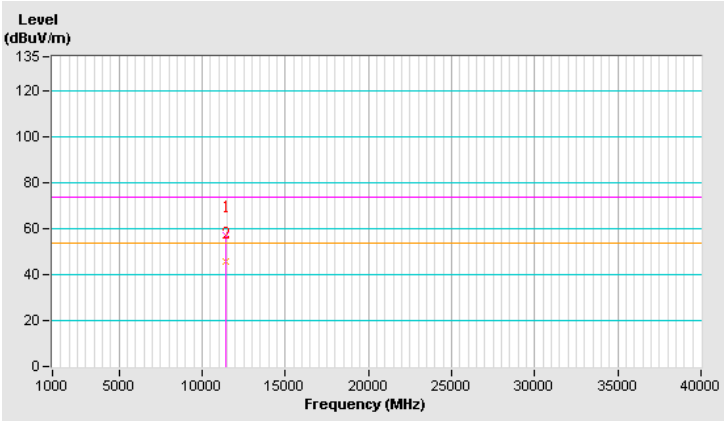


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	57.1 PK	74.0	-16.9	3.16 H	174	40.90	16.20
2	11400.00	45.9 AV	54.0	-8.1	3.16 H	174	29.70	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

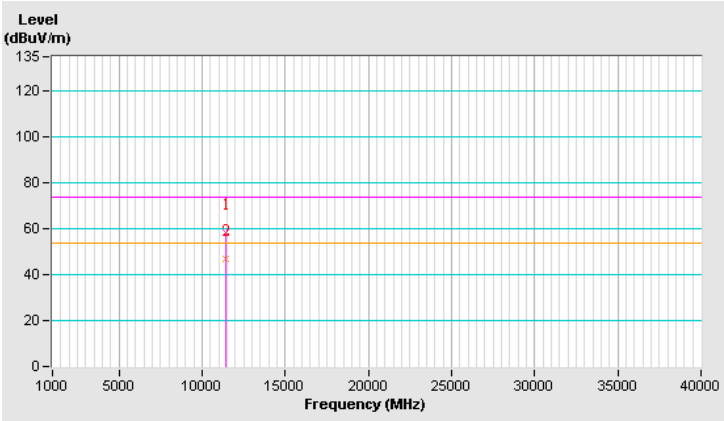


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	58.6 PK	74.0	-15.4	3.11 V	193	42.40	16.20
2	11400.00	47.0 AV	54.0	-7.0	3.11 V	193	30.80	16.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



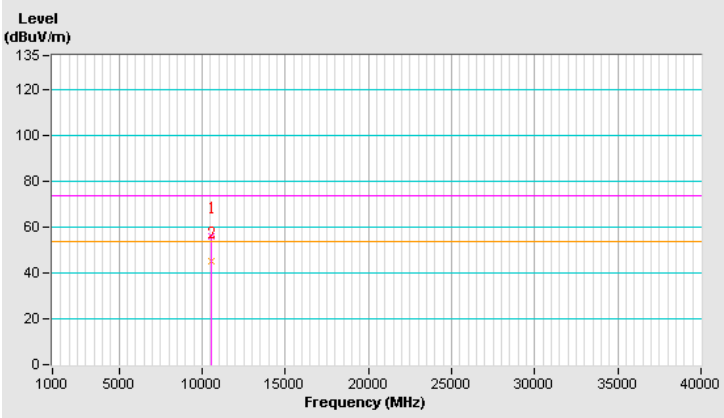
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	56.0 PK	74.0	-18.0	3.42 H	219	40.60	15.40
2	#10540.00	45.2 AV	54.0	-8.8	3.42 H	219	29.80	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

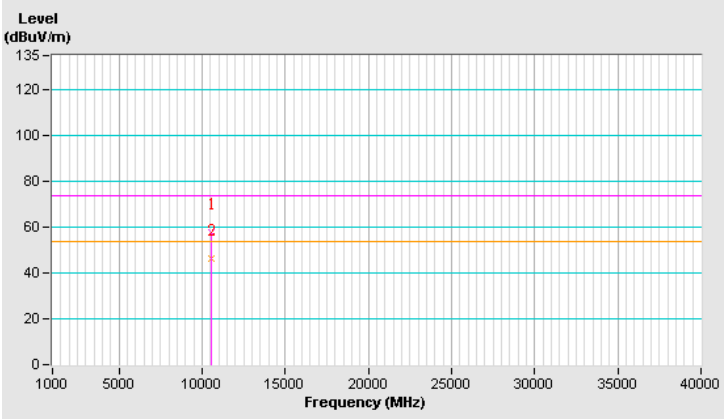


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10540.00	57.8 PK	74.0	-16.2	2.97 V	219	42.40	15.40
2	#10540.00	46.1 AV	54.0	-7.9	2.97 V	219	30.70	15.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

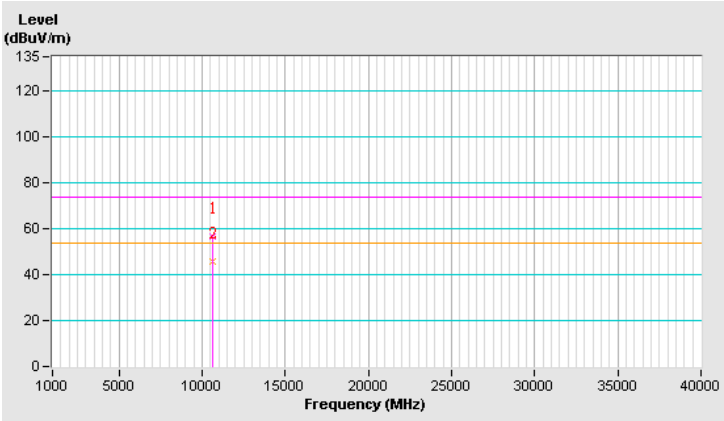


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	56.6 PK	74.0	-17.4	3.27 H	228	40.60	16.00
2	10620.00	45.6 AV	54.0	-8.4	3.27 H	228	29.60	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

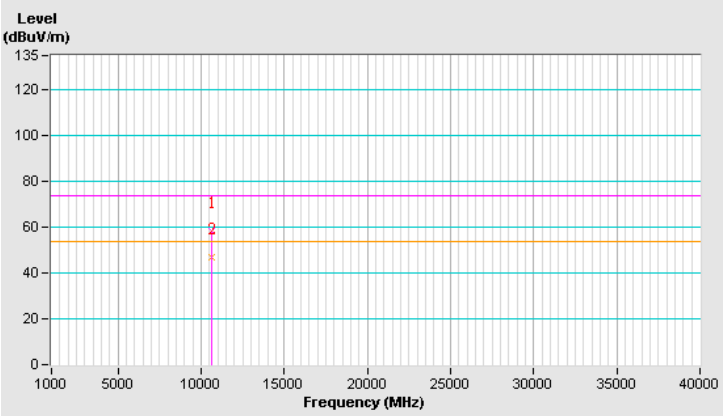


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	10620.00	58.4 PK	74.0	-15.6	3.66 V	244	42.40	16.00
2	10620.00	46.8 AV	54.0	-7.2	3.66 V	244	30.80	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

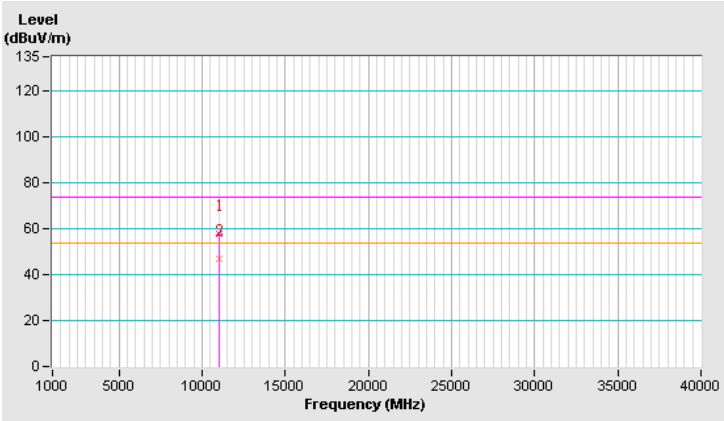


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	57.6 PK	74.0	-16.4	2.49 H	117	40.40	17.20
2	11020.00	46.9 AV	54.0	-7.1	2.49 H	117	29.70	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

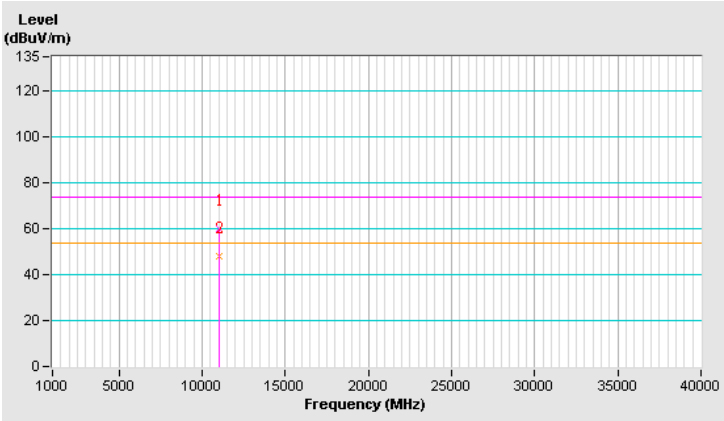


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	59.9 PK	74.0	-14.1	2.29 V	141	42.70	17.20
2	11020.00	48.1 AV	54.0	-5.9	2.29 V	141	30.90	17.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

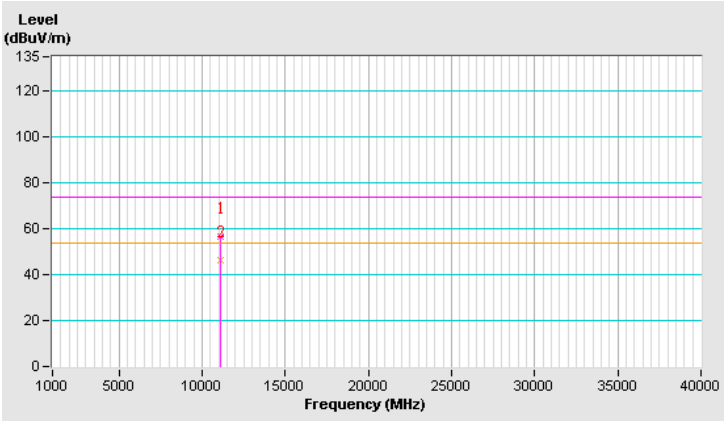


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	56.7 PK	74.0	-17.3	3.13 H	116	40.30	16.40
2	11100.00	46.2 AV	54.0	-7.8	3.13 H	116	29.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

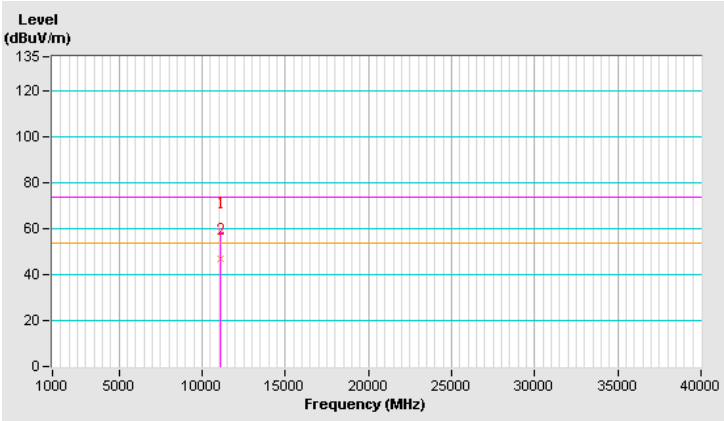


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	59.1 PK	74.0	-14.9	2.66 V	163	42.70	16.40
2	11100.00	47.2 AV	54.0	-6.8	2.66 V	163	30.80	16.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

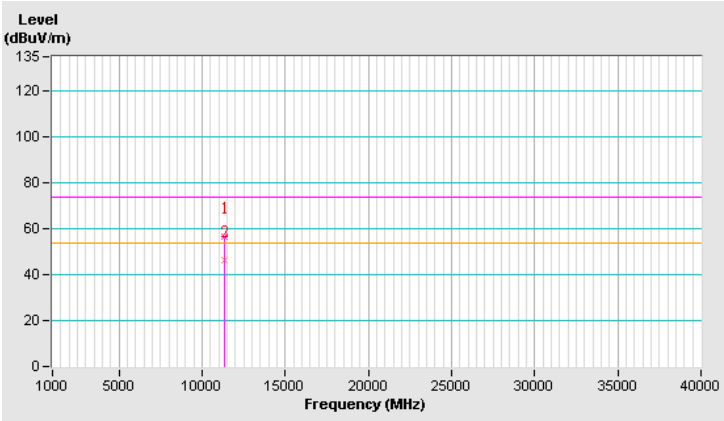


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	56.8 PK	74.0	-17.2	2.89 H	131	40.20	16.60
2	11340.00	46.2 AV	54.0	-7.8	2.89 H	131	29.60	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

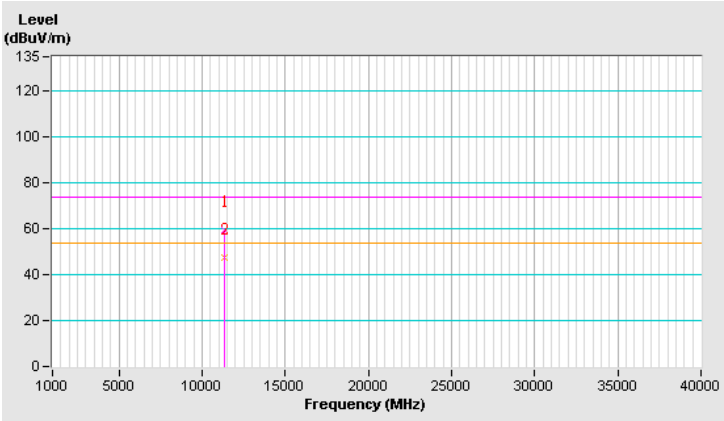


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	59.4 PK	74.0	-14.6	3.34 V	129	42.80	16.60
2	11340.00	47.4 AV	54.0	-6.6	3.34 V	129	30.80	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



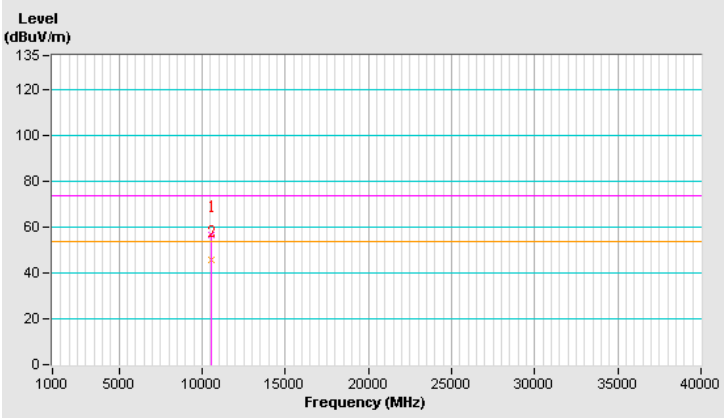
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	56.4 PK	74.0	-17.6	3.36 H	258	40.50	15.90
2	#10580.00	45.6 AV	54.0	-8.4	3.36 H	258	29.70	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

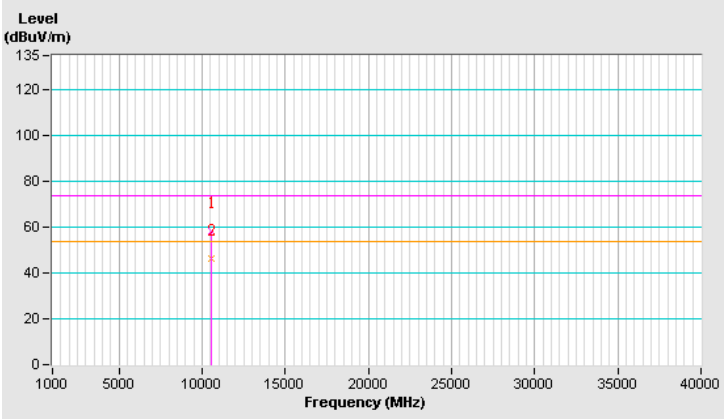


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10580.00	58.5 PK	74.0	-15.5	3.34 V	257	42.60	15.90
2	#10580.00	46.5 AV	54.0	-7.5	3.34 V	257	30.60	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

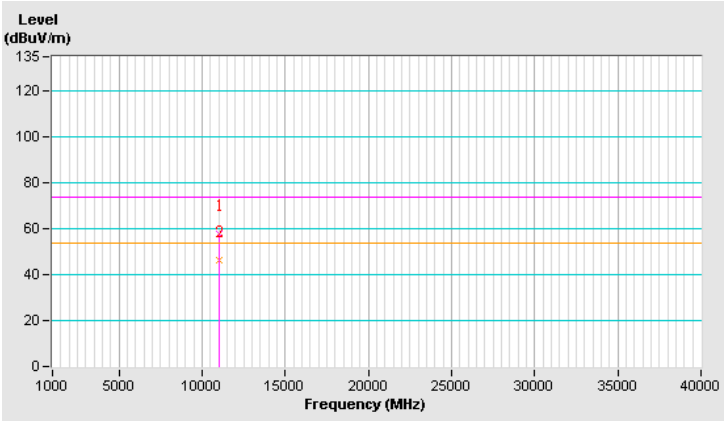


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	57.5 PK	74.0	-16.5	3.47 H	122	40.60	16.90
2	11060.00	46.4 AV	54.0	-7.6	3.47 H	122	29.50	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

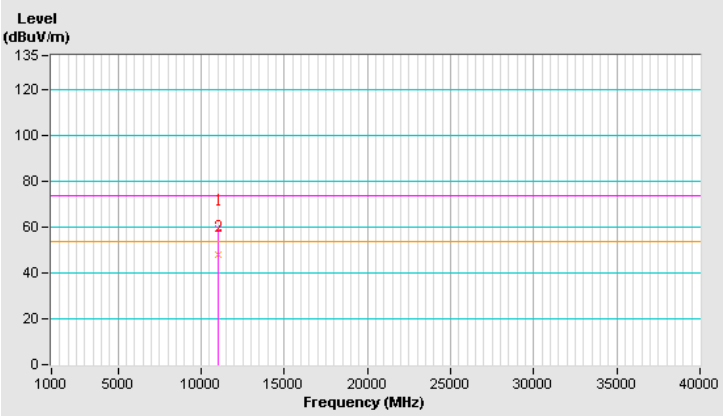


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	59.3 PK	74.0	-14.7	3.15 V	133	42.40	16.90
2	11060.00	47.8 AV	54.0	-6.2	3.15 V	133	30.90	16.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



Radiated Band Edge and Fundamental Emissions

SDM Mode

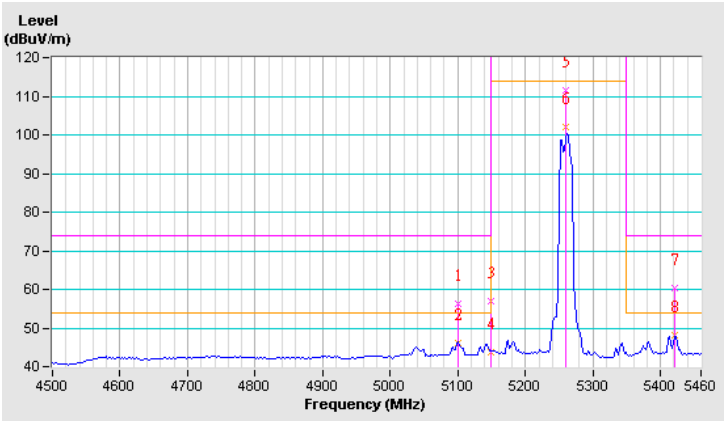
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5101.00	56.4 PK	74.0	-17.6	3.68 H	7	52.60	3.80
2	5101.00	46.2 AV	54.0	-7.8	3.68 H	7	42.40	3.80
3	5150.00	57.0 PK	74.0	-17.0	3.68 H	7	53.10	3.90
4	5150.00	43.7 AV	54.0	-10.3	3.68 H	7	39.80	3.90
5	*5260.00	111.5 PK			3.68 H	7	70.60	40.90
6	*5260.00	102.0 AV			3.68 H	7	61.10	40.90
7	5421.00	60.2 PK	74.0	-13.8	3.68 H	7	55.70	4.50
8	5421.00	48.1 AV	54.0	-5.9	3.68 H	7	43.60	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

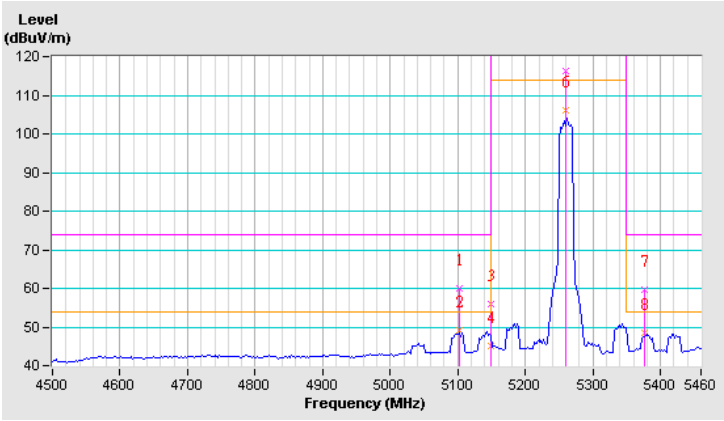


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5102.00	60.1 PK	74.0	-13.9	2.93 V	9	56.30	3.80
2	5102.00	49.0 AV	54.0	-5.0	2.93 V	9	45.20	3.80
3	5150.00	56.0 PK	74.0	-18.0	2.93 V	9	52.10	3.90
4	5150.00	45.0 AV	54.0	-9.0	2.93 V	9	41.10	3.90
5	*5260.00	116.1 PK			2.93 V	9	75.20	40.90
6	*5260.00	106.0 AV			2.93 V	9	65.10	40.90
7	5377.00	59.7 PK	74.0	-14.3	2.93 V	9	55.30	4.40
8	5377.00	48.4 AV	54.0	-5.6	2.93 V	9	44.00	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

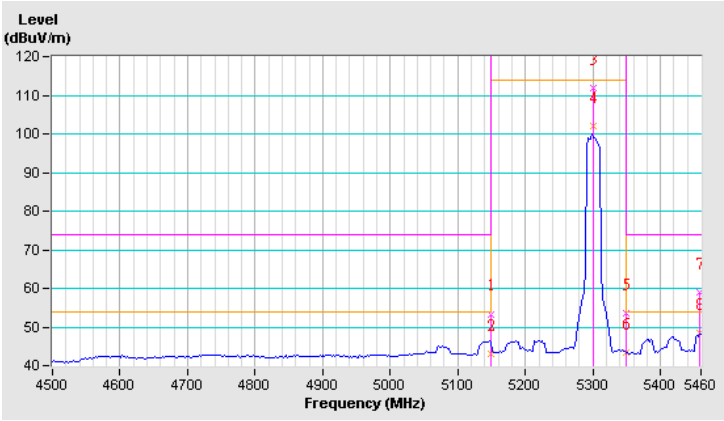


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.4 PK	74.0	-20.6	3.83 H	3	49.50	3.90
2	5150.00	43.2 AV	54.0	-10.8	3.83 H	3	39.30	3.90
3	*5300.00	111.9 PK			3.83 H	3	70.90	41.00
4	*5300.00	101.9 AV			3.83 H	3	60.90	41.00
5	5350.00	53.5 PK	74.0	-20.5	3.83 H	3	49.10	4.40
6	5350.00	43.4 AV	54.0	-10.6	3.83 H	3	39.00	4.40
7	5458.00	59.0 PK	74.0	-15.0	3.83 H	3	54.60	4.40
8	5458.00	48.6 AV	54.0	-5.4	3.83 H	3	44.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

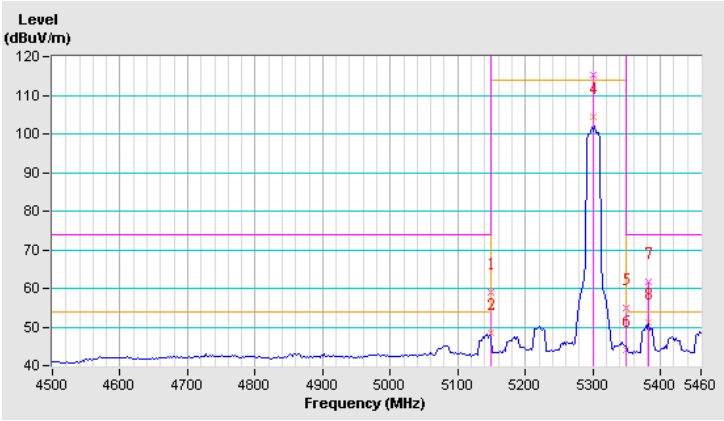


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.0 PK	74.0	-15.0	3.37 V	6	55.10	3.90
2	5150.00	48.5 AV	54.0	-5.5	3.37 V	6	44.60	3.90
3	*5300.00	115.2 PK			3.37 V	6	74.20	41.00
4	*5300.00	104.4 AV			3.37 V	6	63.40	41.00
5	5350.00	54.8 PK	74.0	-19.2	3.37 V	6	50.40	4.40
6	5350.00	44.0 AV	54.0	-10.0	3.37 V	6	39.60	4.40
7	5382.00	61.7 PK	74.0	-12.3	3.37 V	6	57.30	4.40
8	5382.00	51.2 AV	54.0	-2.8	3.37 V	6	46.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

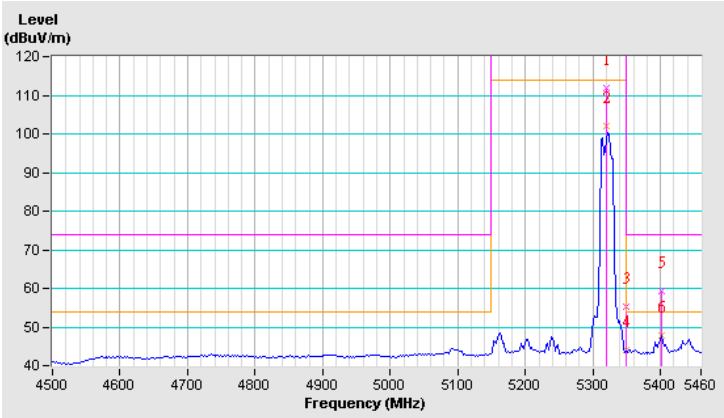


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.8 PK			3.61 H	1	70.80	41.00
2	*5320.00	102.2 AV			3.61 H	1	61.20	41.00
3	5350.00	55.2 PK	74.0	-18.8	3.61 H	1	50.80	4.40
4	5350.00	43.9 AV	54.0	-10.1	3.61 H	1	39.50	4.40
5	5402.00	59.2 PK	74.0	-14.8	3.61 H	1	54.70	4.50
6	5402.00	47.7 AV	54.0	-6.3	3.61 H	1	43.20	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

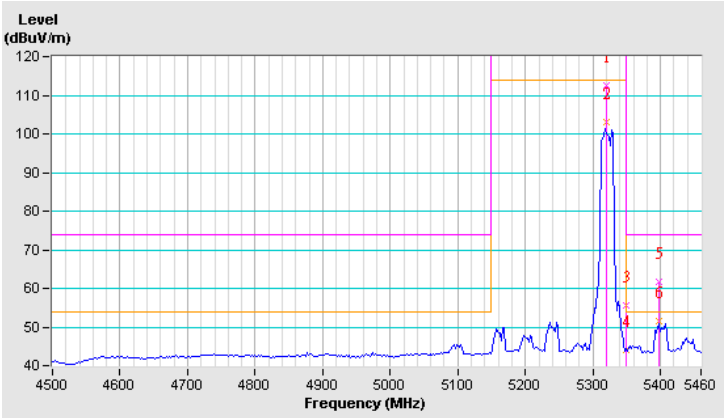


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.5 PK			3.03 V	3	71.50	41.00
2	*5320.00	103.2 AV			3.03 V	3	62.20	41.00
3	5350.00	55.7 PK	74.0	-18.3	3.03 V	3	51.30	4.40
4	5350.00	44.0 AV	54.0	-10.0	3.03 V	3	39.60	4.40
5	5397.00	61.6 PK	74.0	-12.4	3.03 V	3	57.20	4.40
6	5397.00	51.5 AV	54.0	-2.5	3.03 V	3	47.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

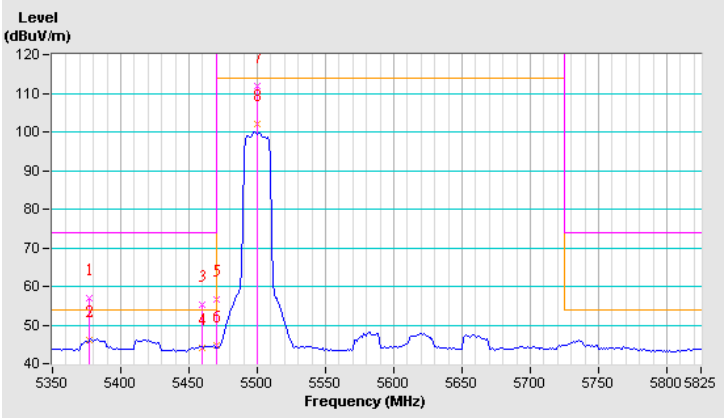


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5377.00	57.0 PK	74.0	-17.0	3.93 H	3	52.60	4.40
2	5377.00	46.1 AV	54.0	-7.9	3.93 H	3	41.70	4.40
3	5460.00	55.4 PK	74.0	-18.6	3.93 H	3	51.00	4.40
4	5460.00	44.1 AV	54.0	-9.9	3.93 H	3	39.70	4.40
5	#5470.00	56.6 PK	74.0	-17.4	3.93 H	3	52.10	4.50
6	#5470.00	44.6 AV	54.0	-9.4	3.93 H	3	40.10	4.50
7	*5500.00	111.8 PK			3.93 H	3	70.50	41.30
8	*5500.00	101.9 AV			3.93 H	3	60.60	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

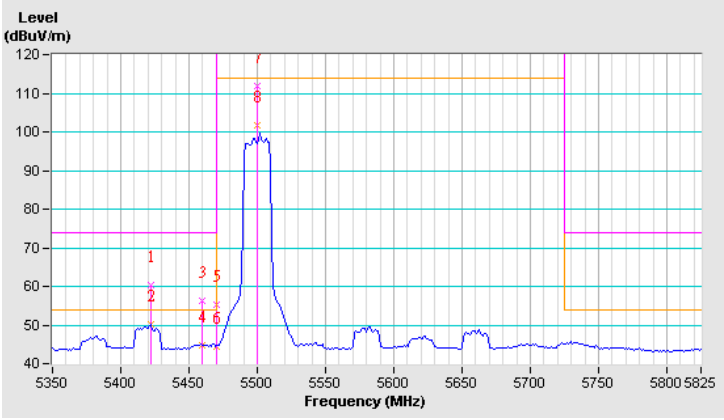


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5422.00	60.2 PK	74.0	-13.8	3.33 V	3	55.70	4.50
2	5422.00	50.2 AV	54.0	-3.8	3.33 V	3	45.70	4.50
3	5460.00	56.3 PK	74.0	-17.7	3.33 V	3	51.90	4.40
4	5460.00	44.6 AV	54.0	-9.4	3.33 V	3	40.20	4.40
5	#5470.00	55.2 PK	74.0	-18.8	3.33 V	3	50.70	4.50
6	#5470.00	44.3 AV	54.0	-9.7	3.33 V	3	39.80	4.50
7	*5500.00	111.9 PK			3.33 V	3	70.60	41.30
8	*5500.00	101.7 AV			3.33 V	3	60.40	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

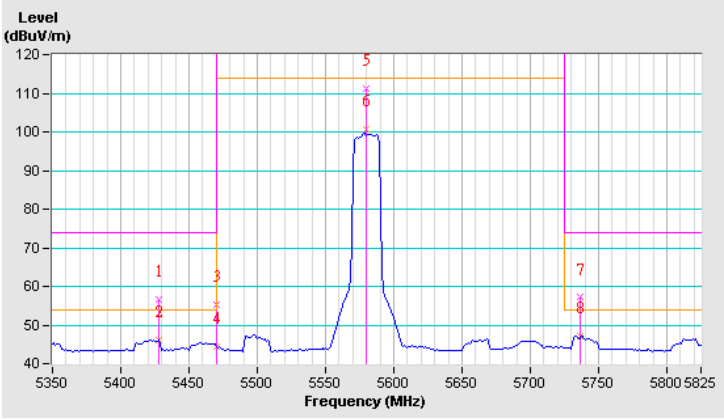


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5428.00	56.7 PK	74.0	-17.3	3.99 H	1	52.20	4.50
2	5428.00	46.2 AV	54.0	-7.8	3.99 H	1	41.70	4.50
3	#5470.00	55.4 PK	74.0	-18.6	3.99 H	1	50.90	4.50
4	#5470.00	44.3 AV	54.0	-9.7	3.99 H	1	39.80	4.50
5	*5580.00	111.3 PK			3.99 H	1	69.80	41.50
6	*5580.00	100.7 AV			3.99 H	1	59.20	41.50
7	#5737.00	57.1 PK	74.0	-16.9	3.99 H	1	52.40	4.70
8	#5737.00	47.2 AV	54.0	-6.8	3.99 H	1	42.50	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

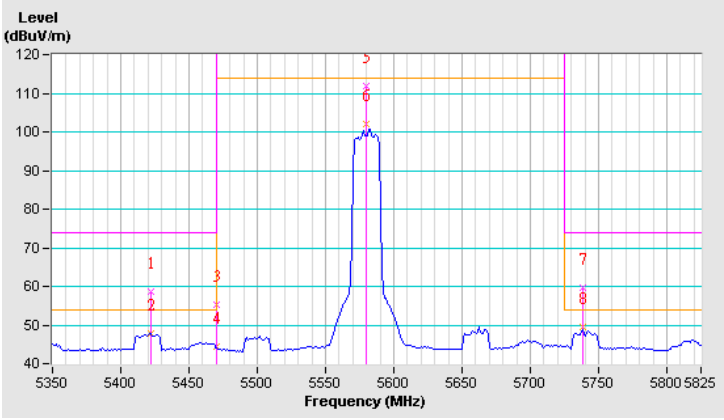


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5422.00	58.7 PK	74.0	-15.3	3.46 V	341	54.20	4.50
2	5422.00	47.9 AV	54.0	-6.1	3.46 V	341	43.40	4.50
3	#5470.00	55.1 PK	74.0	-18.9	3.46 V	341	50.60	4.50
4	#5470.00	44.3 AV	54.0	-9.7	3.46 V	341	39.80	4.50
5	*5580.00	111.8 PK			3.46 V	341	70.30	41.50
6	*5580.00	101.9 AV			3.46 V	341	60.40	41.50
7	#5738.00	59.6 PK	74.0	-14.4	3.46 V	341	54.90	4.70
8	#5738.00	49.4 AV	54.0	-4.6	3.46 V	341	44.70	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

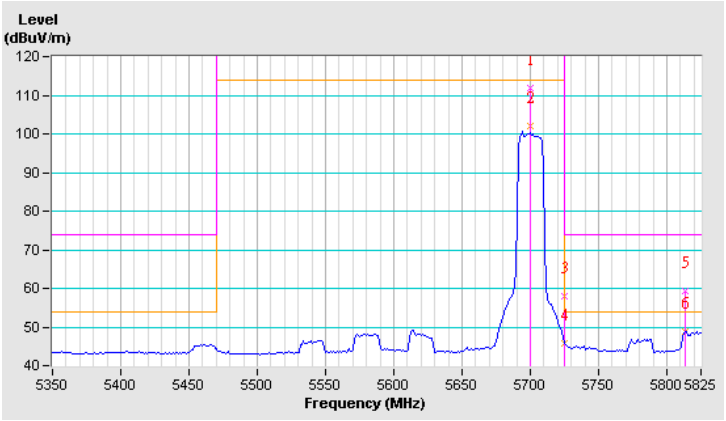


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	111.8 PK			3.98 H	17	70.20	41.60
2	*5700.00	102.0 AV			3.98 H	17	60.40	41.60
3	#5725.00	58.1 PK	74.0	-15.9	3.98 H	17	53.30	4.80
4	#5725.00	45.7 AV	54.0	-8.3	3.98 H	17	40.90	4.80
5	#5813.00	59.3 PK	74.0	-14.7	3.98 H	17	54.70	4.60
6	#5813.00	48.9 AV	54.0	-5.1	3.98 H	17	44.30	4.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

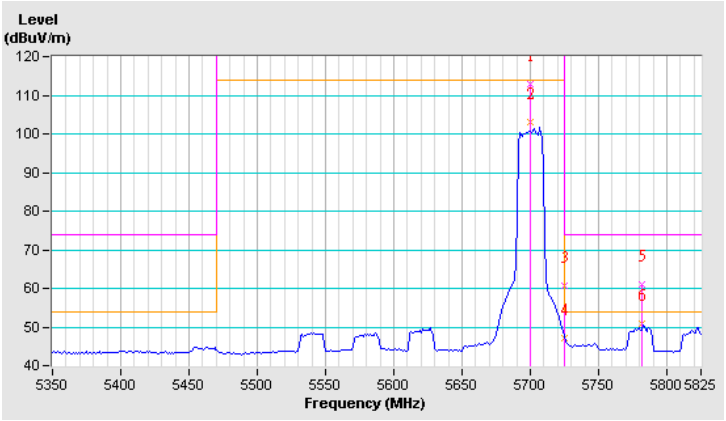


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	113.0 PK			3.30 V	356	71.40	41.60
2	*5700.00	103.0 AV			3.30 V	356	61.40	41.60
3	#5725.00	60.7 PK	74.0	-13.3	3.30 V	356	55.90	4.80
4	#5725.00	47.0 AV	54.0	-7.0	3.30 V	356	42.20	4.80
5	#5782.00	60.9 PK	74.0	-13.1	3.30 V	356	56.30	4.60
6	#5782.00	50.7 AV	54.0	-3.3	3.30 V	356	46.10	4.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



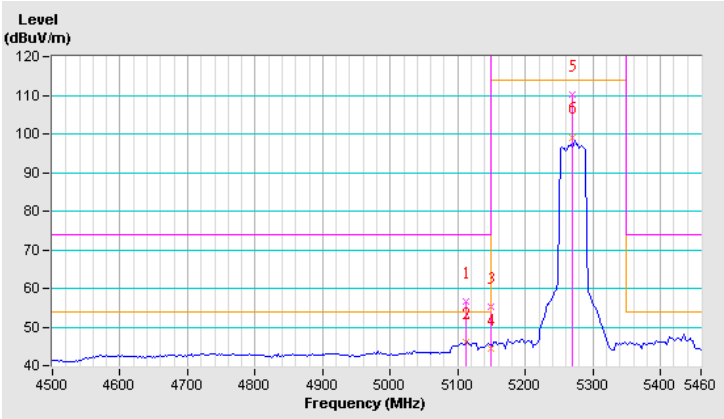
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5113.00	56.5 PK	74.0	-17.5	3.08 H	26	52.70	3.80
2	5113.00	46.2 AV	54.0	-7.8	3.08 H	26	42.40	3.80
3	5150.00	55.2 PK	74.0	-18.8	3.08 H	26	51.30	3.90
4	5150.00	44.3 AV	54.0	-9.7	3.08 H	26	40.40	3.90
5	*5270.00	110.1 PK			3.08 H	26	69.10	41.00
6	*5270.00	99.2 AV			3.08 H	26	58.20	41.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

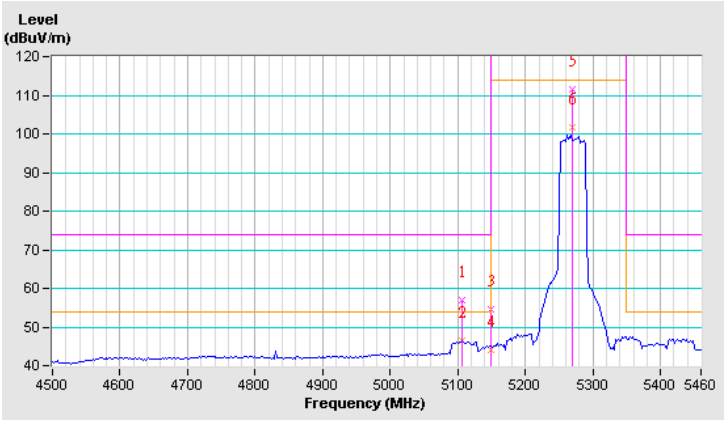


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5106.00	57.0 PK	74.0	-17.0	3.28 V	7	53.20	3.80
2	5106.00	46.6 AV	54.0	-7.4	3.28 V	7	42.80	3.80
3	5150.00	54.6 PK	74.0	-19.4	3.28 V	7	50.70	3.90
4	5150.00	43.9 AV	54.0	-10.1	3.28 V	7	40.00	3.90
5	*5270.00	111.6 PK			3.28 V	7	70.60	41.00
6	*5270.00	101.7 AV			3.28 V	7	60.70	41.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

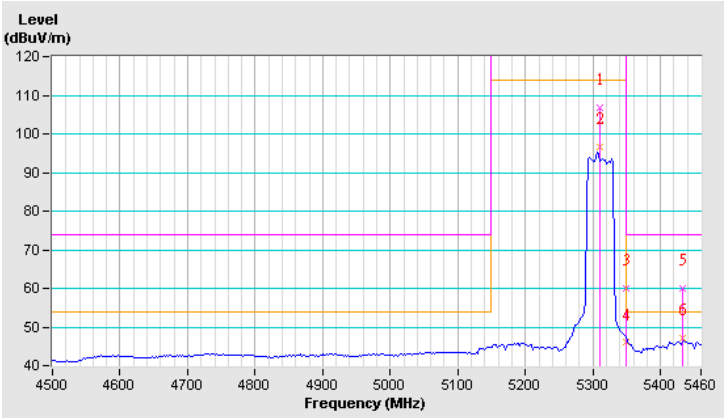


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	106.8 PK			3.58 H	31	65.80	41.00
2	*5310.00	96.5 AV			3.58 H	31	55.50	41.00
3	5350.00	59.9 PK	74.0	-14.1	3.58 H	31	55.50	4.40
4	5350.00	45.9 AV	54.0	-8.1	3.58 H	31	41.50	4.40
5	5433.00	60.1 PK	74.0	-13.9	3.58 H	31	55.60	4.50
6	5433.00	47.0 AV	54.0	-7.0	3.58 H	31	42.50	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

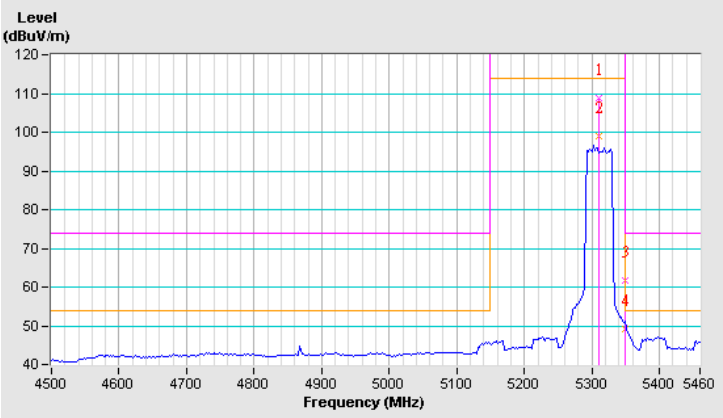


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	108.7 PK			3.31 V	4	67.70	41.00
2	*5310.00	99.0 AV			3.31 V	4	58.00	41.00
3	5350.00	61.6 PK	74.0	-12.4	3.31 V	4	57.20	4.40
4	5350.00	49.2 AV	54.0	-4.8	3.31 V	4	44.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

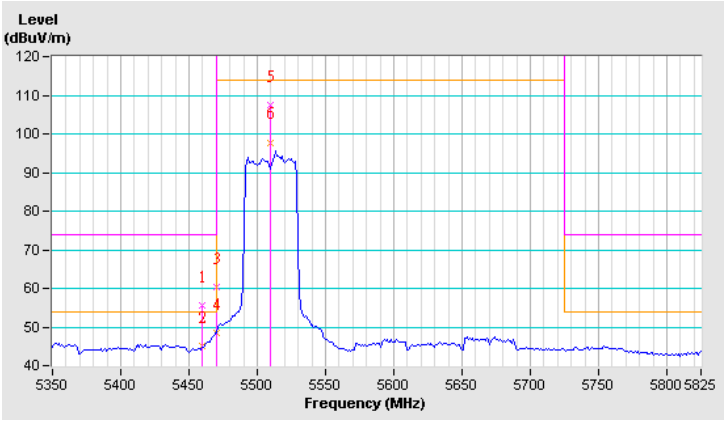


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.6 PK	74.0	-18.4	3.15 H	19	51.20	4.40
2	5460.00	45.0 AV	54.0	-9.0	3.15 H	19	40.60	4.40
3	#5470.00	60.2 PK	74.0	-13.8	3.15 H	19	55.70	4.50
4	#5470.00	48.5 AV	54.0	-5.5	3.15 H	19	44.00	4.50
5	*5510.00	107.5 PK			3.15 H	19	66.20	41.30
6	*5510.00	97.8 AV			3.15 H	19	56.50	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

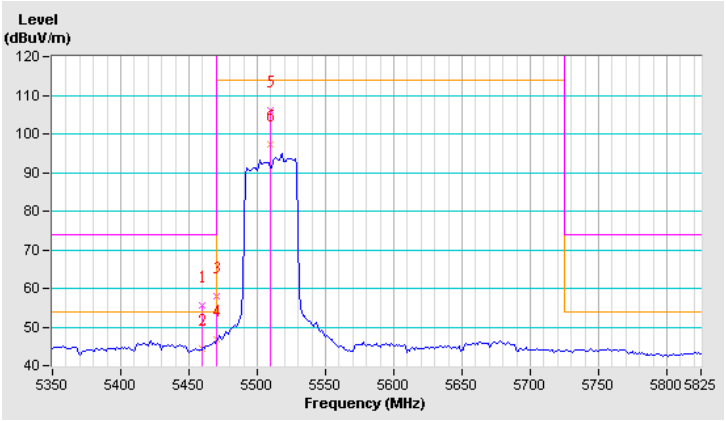


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.5 PK	74.0	-18.5	3.50 V	343	51.10	4.40
2	5460.00	44.5 AV	54.0	-9.5	3.50 V	343	40.10	4.40
3	#5470.00	57.8 PK	74.0	-16.2	3.50 V	343	53.30	4.50
4	#5470.00	46.7 AV	54.0	-7.3	3.50 V	343	42.20	4.50
5	*5510.00	106.0 PK			3.50 V	343	64.70	41.30
6	*5510.00	97.2 AV			3.50 V	343	55.90	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

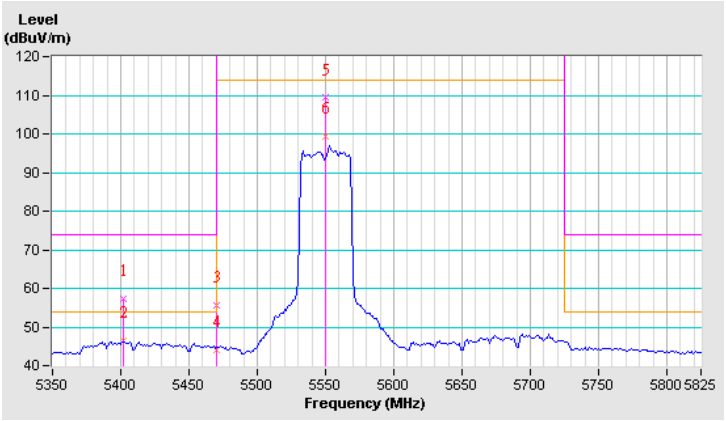


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5402.00	57.2 PK	74.0	-16.8	3.25 H	26	52.70	4.50
2	5402.00	46.4 AV	54.0	-7.6	3.25 H	26	41.90	4.50
3	#5470.00	55.6 PK	74.0	-18.4	3.25 H	26	51.10	4.50
4	#5470.00	44.0 AV	54.0	-10.0	3.25 H	26	39.50	4.50
5	*5550.00	109.3 PK			3.25 H	26	67.80	41.50
6	*5550.00	99.2 AV			3.25 H	26	57.70	41.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

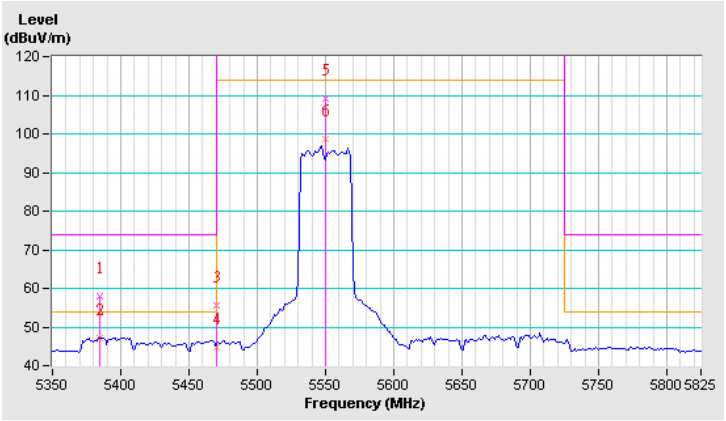


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5385.00	57.9 PK	74.0	-16.1	3.32 V	358	53.50	4.40
2	5385.00	47.2 AV	54.0	-6.8	3.32 V	358	42.80	4.40
3	#5470.00	55.5 PK	74.0	-18.5	3.32 V	358	51.00	4.50
4	#5470.00	44.7 AV	54.0	-9.3	3.32 V	358	40.20	4.50
5	*5550.00	109.2 PK			3.32 V	358	67.70	41.50
6	*5550.00	98.6 AV			3.32 V	358	57.10	41.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

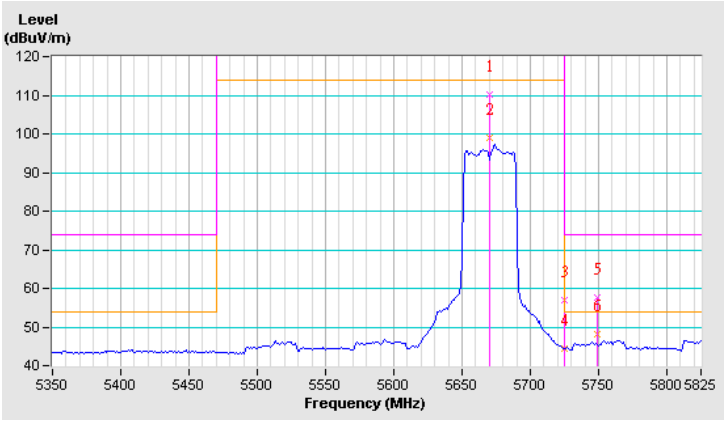


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.2 PK			3.31 H	27	68.70	41.50
2	*5670.00	98.9 AV			3.31 H	27	57.40	41.50
3	#5725.00	57.1 PK	74.0	-16.9	3.31 H	27	52.30	4.80
4	#5725.00	44.4 AV	54.0	-9.6	3.31 H	27	39.60	4.80
5	#5749.00	57.7 PK	74.0	-16.3	3.31 H	27	53.00	4.70
6	#5749.00	48.1 AV	54.0	-5.9	3.31 H	27	43.40	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

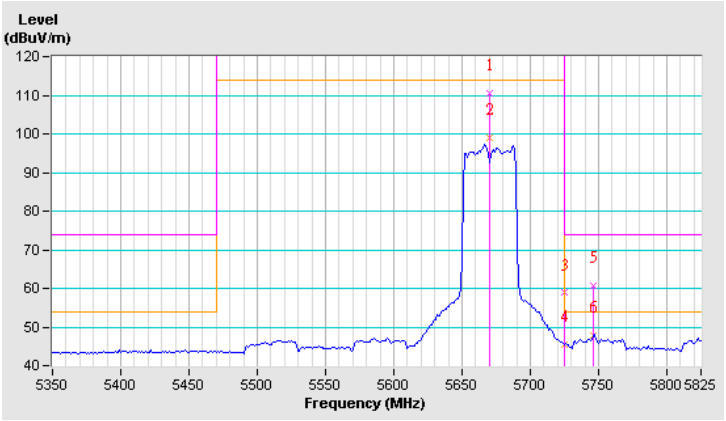


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.4 PK			3.16 V	1	68.90	41.50
2	*5670.00	99.0 AV			3.16 V	1	57.50	41.50
3	#5725.00	58.8 PK	74.0	-15.2	3.16 V	1	54.00	4.80
4	#5725.00	45.5 AV	54.0	-8.5	3.16 V	1	40.70	4.80
5	#5746.00	60.6 PK	74.0	-13.4	3.16 V	1	55.90	4.70
6	#5746.00	47.8 AV	54.0	-6.2	3.16 V	1	43.10	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



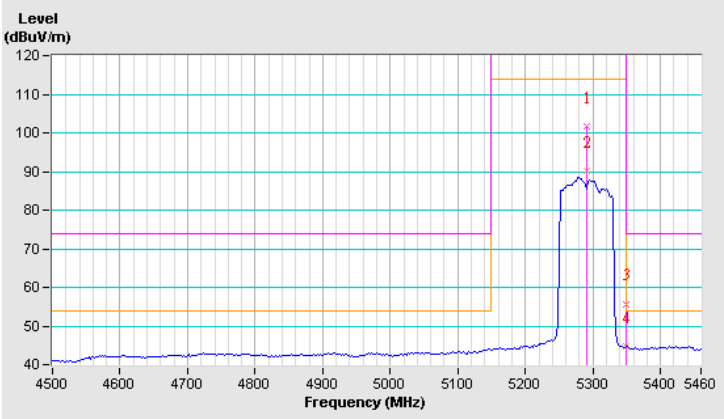
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	101.6 PK			3.64 H	3	60.60	41.00
2	*5290.00	90.2 AV			3.64 H	3	49.20	41.00
3	5350.00	55.8 PK	74.0	-18.2	3.64 H	3	51.40	4.40
4	5350.00	44.8 AV	54.0	-9.2	3.64 H	3	40.40	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

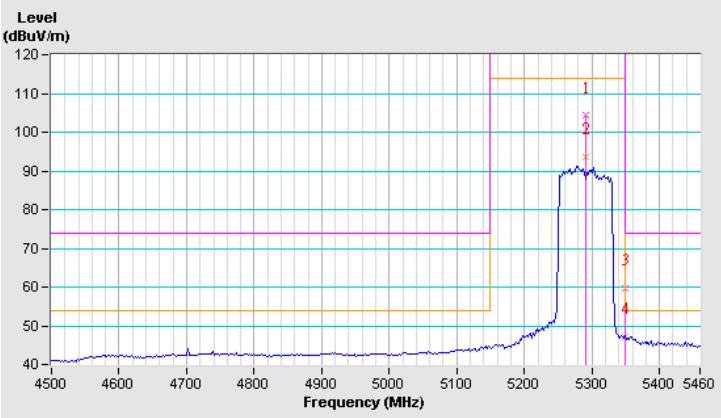


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	104.2 PK			3.10 V	5	63.20	41.00
2	*5290.00	93.7 AV			3.10 V	5	52.70	41.00
3	5350.00	59.7 PK	74.0	-14.3	3.10 V	5	55.30	4.40
4	5350.00	47.2 AV	54.0	-6.8	3.10 V	5	42.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

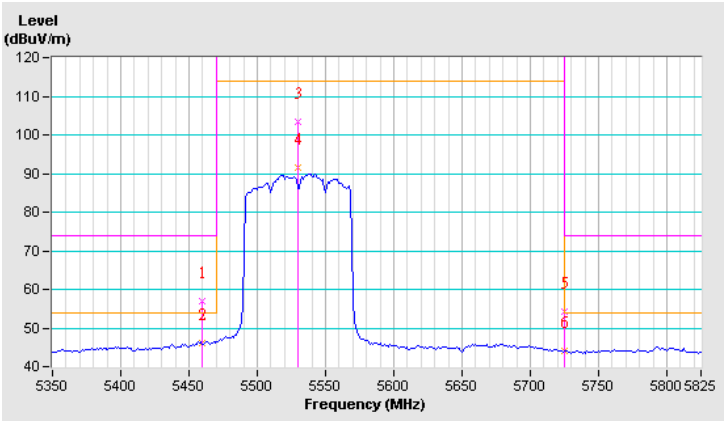


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.8 PK	74.0	-17.2	3.32 H	2	52.40	4.40
2	5460.00	46.0 AV	54.0	-8.0	3.32 H	2	41.60	4.40
3	*5530.00	103.4 PK			3.32 H	2	62.10	41.30
4	*5530.00	91.5 AV			3.32 H	2	50.20	41.30
5	#5725.00	54.4 PK	74.0	-19.6	3.32 H	2	49.60	4.80
6	#5725.00	44.2 AV	54.0	-9.8	3.32 H	2	39.40	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

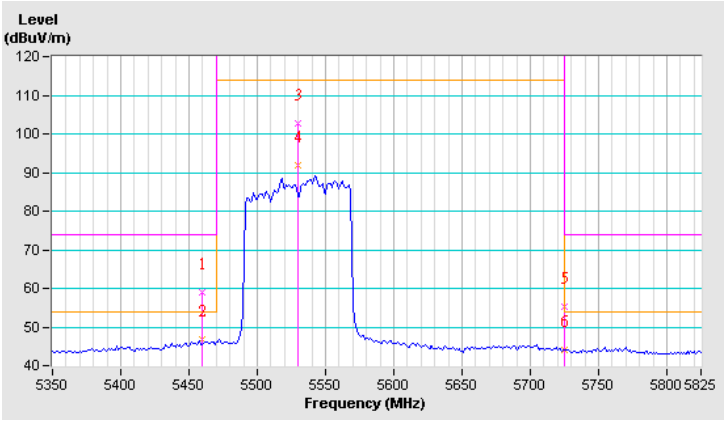


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.1 PK	74.0	-14.9	3.49 V	346	54.70	4.40
2	5460.00	46.7 AV	54.0	-7.3	3.49 V	346	42.30	4.40
3	*5530.00	102.8 PK			3.49 V	346	61.50	41.30
4	*5530.00	92.0 AV			3.49 V	346	50.70	41.30
5	#5725.00	55.2 PK	74.0	-18.8	3.49 V	346	50.40	4.80
6	#5725.00	44.2 AV	54.0	-9.8	3.49 V	346	39.40	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



1S3T TxBF Mode

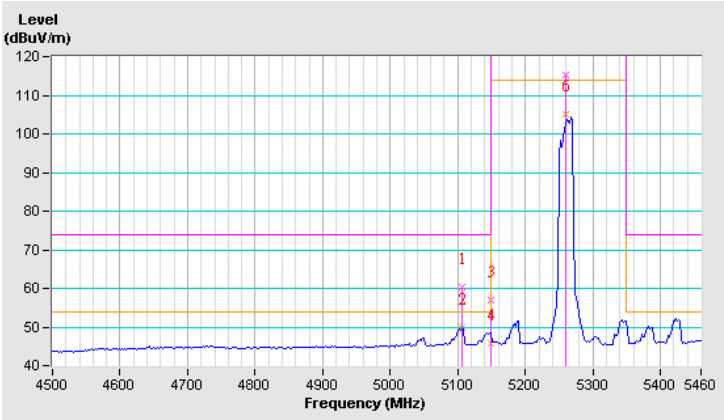
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5107.00	60.2 PK	74.0	-13.8	1.39 H	1	55.60	4.60
2	5107.00	49.9 AV	54.0	-4.1	1.39 H	1	45.30	4.60
3	5150.00	56.9 PK	74.0	-17.1	1.39 H	1	52.40	4.50
4	5150.00	45.6 AV	54.0	-8.4	1.39 H	1	41.10	4.50
5	*5260.00	115.4 PK			1.39 H	1	74.00	41.40
6	*5260.00	105.0 AV			1.39 H	1	63.60	41.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

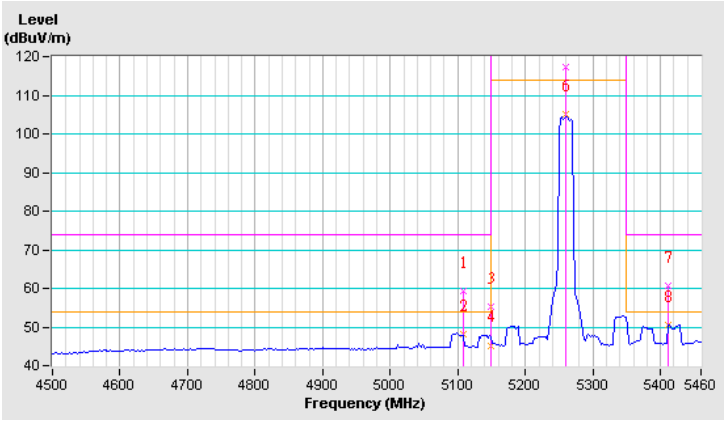


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5108.00	59.4 PK	74.0	-14.6	1.88 V	176	55.60	3.80
2	5108.00	48.0 AV	54.0	-6.0	1.88 V	176	44.20	3.80
3	5150.00	55.1 PK	74.0	-18.9	1.88 V	176	51.20	3.90
4	5150.00	45.3 AV	54.0	-8.7	1.88 V	176	41.40	3.90
5	*5260.00	117.3 PK			1.88 V	176	76.40	40.90
6	*5260.00	105.2 AV			1.88 V	176	64.30	40.90
7	5412.00	60.8 PK	74.0	-13.2	1.88 V	176	56.30	4.50
8	5412.00	50.5 AV	54.0	-3.5	1.88 V	176	46.00	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

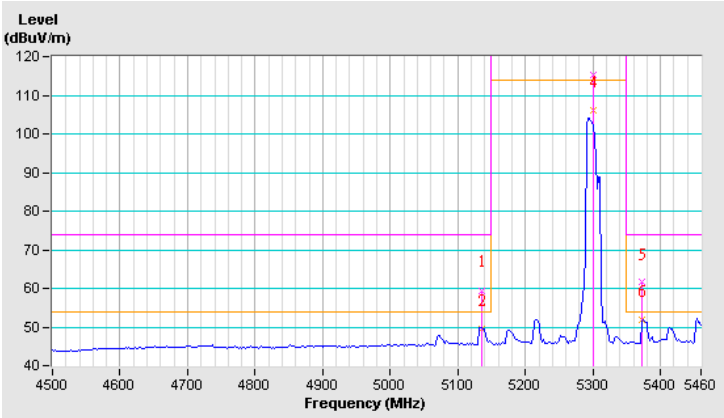


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5135.00	59.5 PK	74.0	-14.5	1.41 H	14	55.00	4.50
2	5135.00	49.4 AV	54.0	-4.6	1.41 H	14	44.90	4.50
3	*5300.00	115.4 PK			1.41 H	14	74.00	41.40
4	*5300.00	106.0 AV			1.41 H	14	64.60	41.40
5	5372.00	61.5 PK	74.0	-12.5	1.41 H	14	56.60	4.90
6	5372.00	51.7 AV	54.0	-2.3	1.41 H	14	46.80	4.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

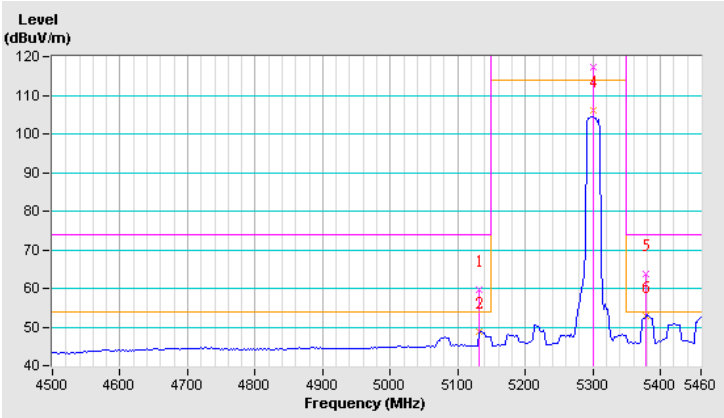


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5132.00	59.8 PK	74.0	-14.2	1.94 V	189	55.30	4.50
2	5132.00	48.8 AV	54.0	-5.2	1.94 V	189	44.30	4.50
3	*5300.00	117.2 PK			1.94 V	189	75.80	41.40
4	*5300.00	106.2 AV			1.94 V	189	64.80	41.40
5	5378.00	63.8 PK	74.0	-10.2	1.94 V	189	58.80	5.00
6	5378.00	53.0 AV	54.0	-1.0	1.94 V	189	48.00	5.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

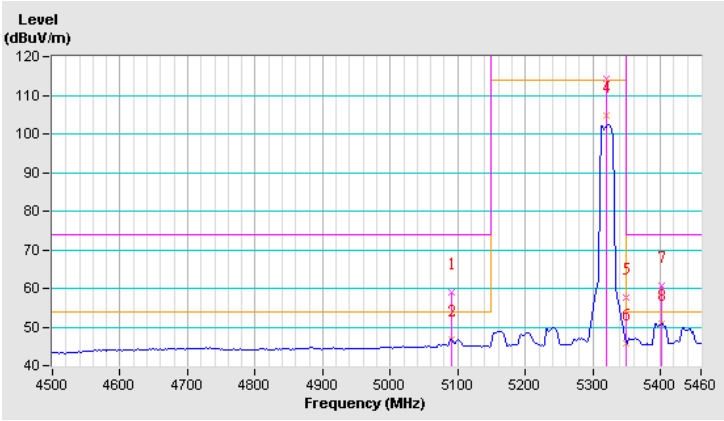


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5090.00	59.0 PK	74.0	-15.0	1.38 H	1	54.40	4.60
2	5090.00	46.8 AV	54.0	-7.2	1.38 H	1	42.20	4.60
3	*5320.00	114.1 PK			1.38 H	1	72.60	41.50
4	*5320.00	104.6 AV			1.38 H	1	63.10	41.50
5	5350.00	57.7 PK	74.0	-16.3	1.38 H	1	52.80	4.90
6	5350.00	45.9 AV	54.0	-8.1	1.38 H	1	41.00	4.90
7	5402.00	60.7 PK	74.0	-13.3	1.38 H	1	55.60	5.10
8	5402.00	50.8 AV	54.0	-3.2	1.38 H	1	45.70	5.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

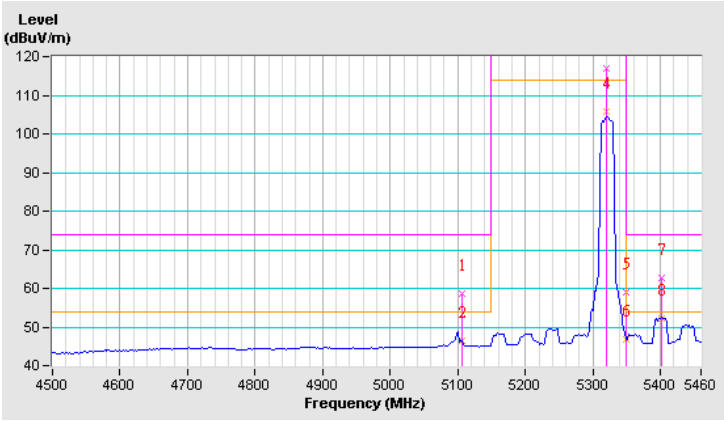


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5106.00	58.5 PK	74.0	-15.5	1.78 V	179	53.90	4.60
2	5106.00	46.6 AV	54.0	-7.4	1.78 V	179	42.00	4.60
3	*5320.00	117.1 PK			1.78 V	179	75.60	41.50
4	*5320.00	105.9 AV			1.78 V	179	64.40	41.50
5	5350.00	59.1 PK	74.0	-14.9	1.78 V	179	54.20	4.90
6	5350.00	46.8 AV	54.0	-7.2	1.78 V	179	41.90	4.90
7	5401.00	62.6 PK	74.0	-11.4	1.78 V	179	57.50	5.10
8	5401.00	52.3 AV	54.0	-1.7	1.78 V	179	47.20	5.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

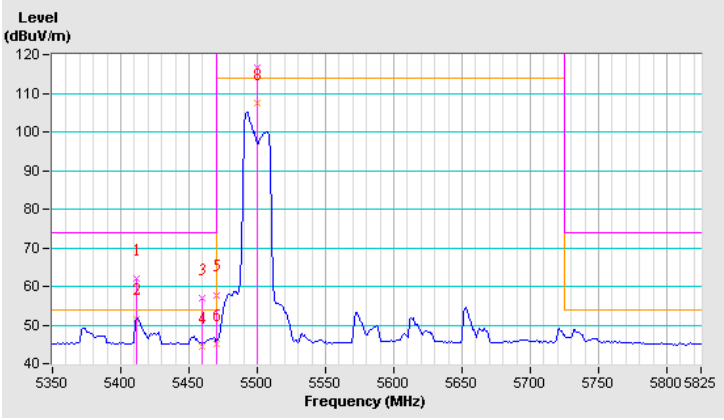


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5412.00	62.0 PK	74.0	-12.0	3.58 H	12	57.50	4.50
2	5412.00	51.7 AV	54.0	-2.3	3.58 H	12	47.20	4.50
3	5460.00	56.9 PK	74.0	-17.1	3.58 H	12	52.50	4.40
4	5460.00	44.4 AV	54.0	-9.6	3.58 H	12	40.00	4.40
5	#5470.00	57.8 PK	74.0	-16.2	3.58 H	12	53.30	4.50
6	#5470.00	45.2 AV	54.0	-8.8	3.58 H	12	40.70	4.50
7	*5500.00	116.8 PK			3.58 H	12	75.50	41.30
8	*5500.00	107.6 AV			3.58 H	12	66.30	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

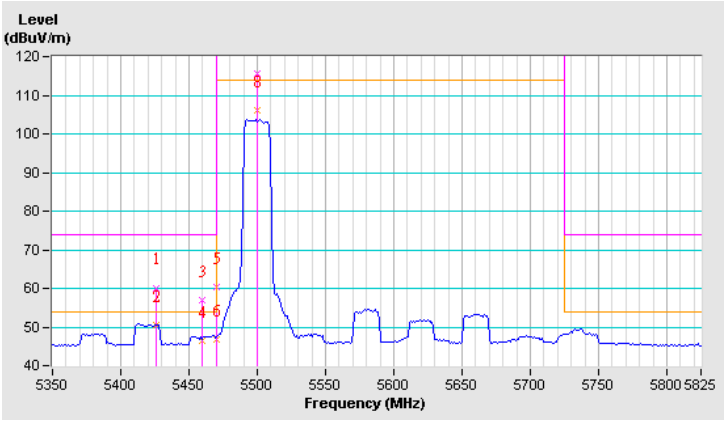


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5426.00	60.2 PK	74.0	-13.8	1.75 V	194	55.70	4.50
2	5426.00	50.4 AV	54.0	-3.6	1.75 V	194	45.90	4.50
3	5460.00	56.9 PK	74.0	-17.1	1.75 V	194	52.50	4.40
4	5460.00	46.3 AV	54.0	-7.7	1.75 V	194	41.90	4.40
5	#5470.00	60.3 PK	74.0	-13.7	1.75 V	194	55.80	4.50
6	#5470.00	46.8 AV	54.0	-7.2	1.75 V	194	42.30	4.50
7	*5500.00	115.6 PK			1.75 V	194	74.30	41.30
8	*5500.00	106.2 AV			1.75 V	194	64.90	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

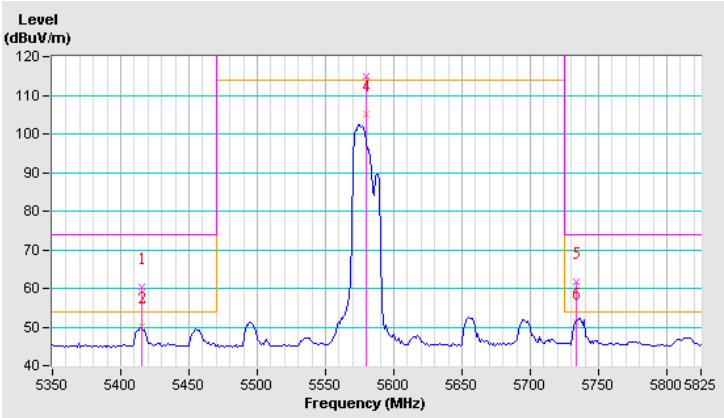


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5415.00	60.5 PK	74.0	-13.5	1.49 H	6	56.00	4.50
2	5415.00	50.2 AV	54.0	-3.8	1.49 H	6	45.70	4.50
3	*5580.00	114.9 PK			1.49 H	6	73.40	41.50
4	*5580.00	105.2 AV			1.49 H	6	63.70	41.50
5	#5734.00	61.8 PK	74.0	-12.2	1.49 H	6	57.10	4.70
6	#5734.00	51.3 AV	54.0	-2.7	1.49 H	6	46.60	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

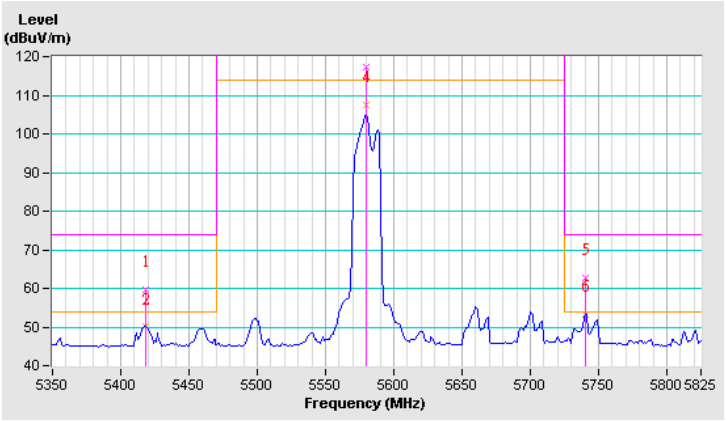


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5418.00	59.8 PK	74.0	-14.2	1.36 V	199	55.30	4.50
2	5418.00	50.0 AV	54.0	-4.0	1.36 V	199	45.50	4.50
3	*5580.00	117.3 PK			1.36 V	199	75.80	41.50
4	*5580.00	107.5 AV			1.36 V	199	66.00	41.50
5	#5740.00	62.7 PK	74.0	-11.3	1.36 V	199	58.00	4.70
6	#5740.00	53.3 AV	54.0	-0.7	1.36 V	199	48.60	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

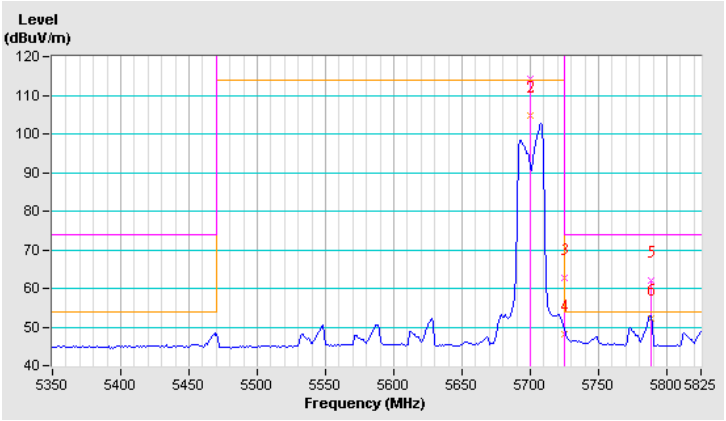


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	114.2 PK			1.67 H	355	72.60	41.60
2	*5700.00	104.9 AV			1.67 H	355	63.30	41.60
3	#5725.00	62.7 PK	74.0	-11.3	1.67 H	355	57.90	4.80
4	#5725.00	48.1 AV	54.0	-5.9	1.67 H	355	43.30	4.80
5	#5788.00	61.9 PK	74.0	-12.1	1.67 H	355	57.30	4.60
6	#5788.00	52.3 AV	54.0	-1.7	1.67 H	355	47.70	4.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

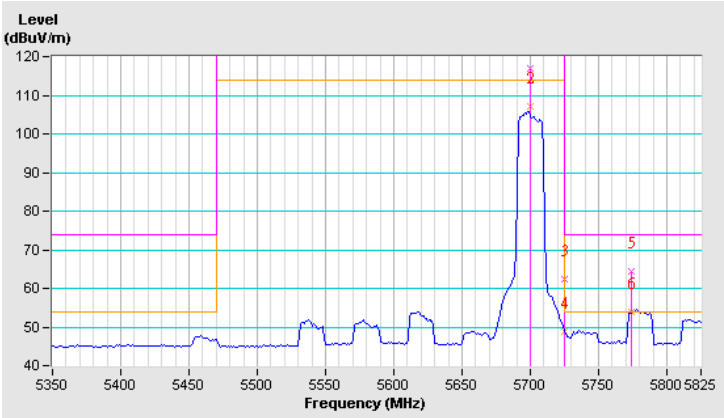


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	116.8 PK			1.47 V	192	75.26	41.52
2	*5700.00	107.1 AV			1.47 V	192	65.58	41.52
3	#5725.00	62.5 PK	74.0	-11.5	1.47 V	192	57.79	4.74
4	#5725.00	48.7 AV	54.0	-5.3	1.47 V	192	43.99	4.74
5	#5774.00	64.5 PK	74.0	-9.5	1.47 V	192	59.84	4.70
6	**#5774.00**	**53.9 AV**	**54.0**	**-0.1**	**1.47 V**	**192**	**49.20**	**4.70**

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



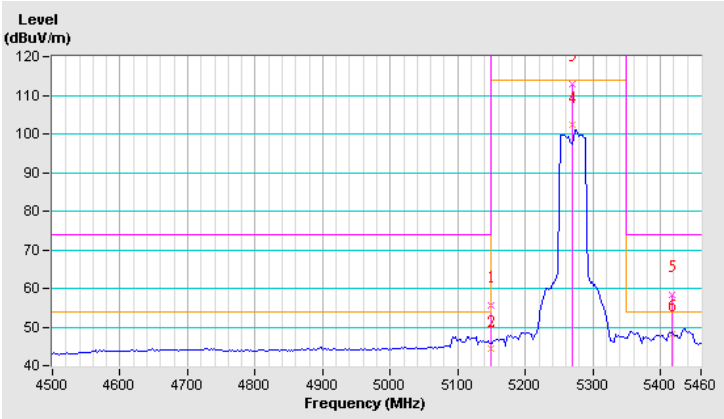
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.5 PK	74.0	-18.5	1.20 H	3	51.60	3.90
2	5150.00	44.2 AV	54.0	-9.8	1.20 H	3	40.30	3.90
3	*5270.00	113.0 PK			1.20 H	3	72.00	41.00
4	*5270.00	102.2 AV			1.20 H	3	61.20	41.00
5	5417.00	58.3 PK	74.0	-15.7	1.20 H	3	53.80	4.50
6	5417.00	48.3 AV	54.0	-5.7	1.20 H	3	43.80	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

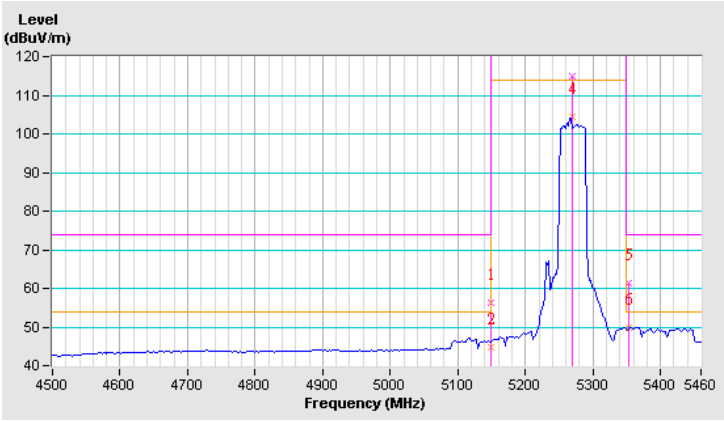


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.32 V	185	52.50	3.90
2	5150.00	44.8 AV	54.0	-9.2	1.32 V	185	40.90	3.90
3	*5270.00	114.9 PK			1.32 V	185	73.90	41.00
4	*5270.00	104.4 AV			1.32 V	185	63.40	41.00
5	5354.00	61.4 PK	74.0	-12.6	1.32 V	185	57.00	4.40
6	5354.00	49.9 AV	54.0	-4.1	1.32 V	185	45.50	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

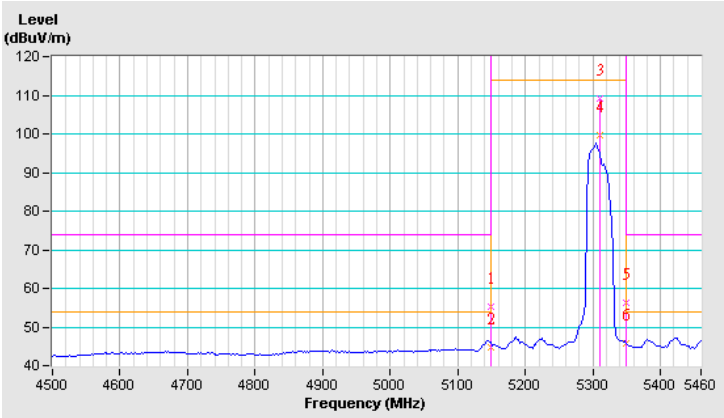


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.2 PK	74.0	-18.8	1.92 H	18	51.30	3.90
2	5150.00	44.9 AV	54.0	-9.1	1.92 H	18	41.00	3.90
3	*5310.00	109.2 PK			1.92 H	18	68.20	41.00
4	*5310.00	99.8 AV			1.92 H	18	58.80	41.00
5	5350.00	56.2 PK	74.0	-17.8	1.92 H	18	51.80	4.40
6	5350.00	45.6 AV	54.0	-8.4	1.92 H	18	41.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

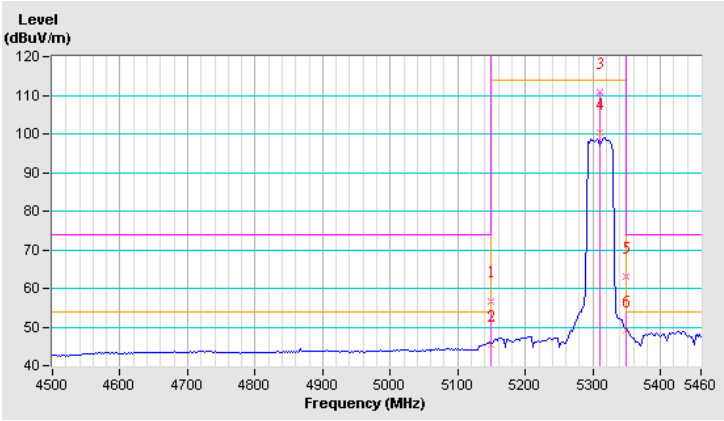


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.8 PK	74.0	-17.2	1.56 V	184	52.90	3.90
2	5150.00	45.3 AV	54.0	-8.7	1.56 V	184	41.40	3.90
3	*5310.00	111.0 PK			1.56 V	184	70.00	41.00
4	*5310.00	100.4 AV			1.56 V	184	59.40	41.00
5	5350.00	63.0 PK	74.0	-11.0	1.56 V	184	58.60	4.40
6	5350.00	49.2 AV	54.0	-4.8	1.56 V	184	44.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

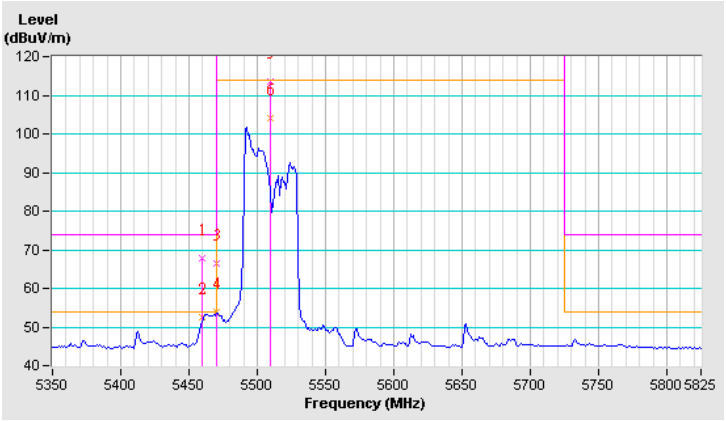


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	67.9 PK	74.0	-6.1	2.42 H	11	63.50	4.40
2	5460.00	52.4 AV	54.0	-1.6	2.42 H	11	48.00	4.40
3	#5470.00	66.6 PK	74.0	-7.4	2.42 H	11	62.10	4.50
4	#5470.00	53.8 AV	54.0	-0.2	2.42 H	11	49.30	4.50
5	*5510.00	113.6 PK			2.42 H	11	72.30	41.30
6	*5510.00	103.9 AV			2.42 H	11	62.60	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

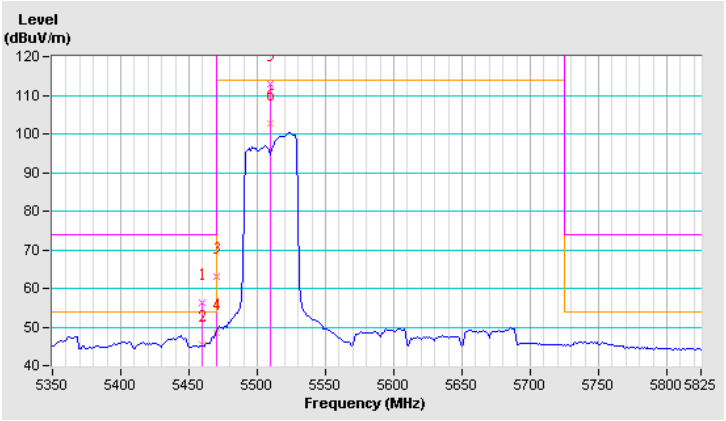


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.4 PK	74.0	-17.6	1.68 V	183	52.00	4.40
2	5460.00	45.4 AV	54.0	-8.6	1.68 V	183	41.00	4.40
3	#5470.00	63.0 PK	74.0	-11.0	1.68 V	183	58.50	4.50
4	#5470.00	48.5 AV	54.0	-5.5	1.68 V	183	44.00	4.50
5	*5510.00	113.0 PK			1.68 V	183	71.70	41.30
6	*5510.00	102.6 AV			1.68 V	183	61.30	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

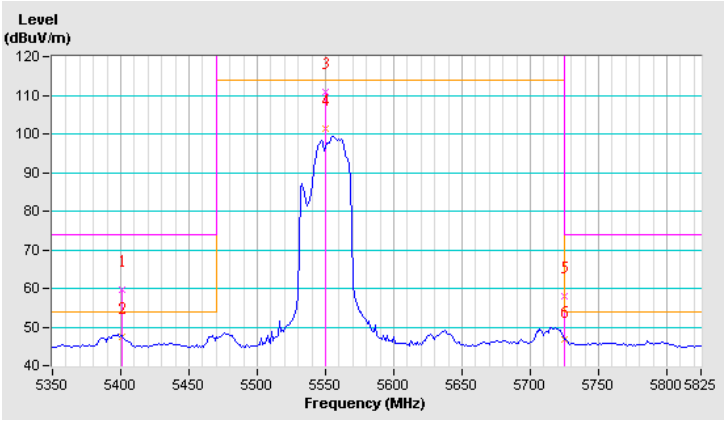


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5401.00	59.5 PK	74.0	-14.5	1.13 H	21	55.00	4.50
2	5401.00	47.6 AV	54.0	-6.4	1.13 H	21	43.10	4.50
3	*5550.00	111.0 PK			1.13 H	21	69.50	41.50
4	*5550.00	101.4 AV			1.13 H	21	59.90	41.50
5	#5725.00	58.1 PK	74.0	-15.9	1.13 H	21	53.30	4.80
6	#5725.00	46.6 AV	54.0	-7.4	1.13 H	21	41.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

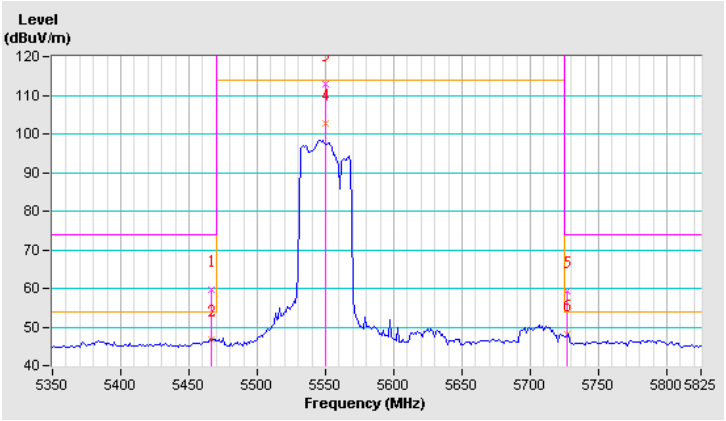


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5466.00	59.5 PK	74.0	-14.5	1.31 V	187	55.10	4.40
2	#5466.00	46.9 AV	54.0	-7.1	1.31 V	187	42.50	4.40
3	*5550.00	112.8 PK			1.31 V	187	71.30	41.50
4	*5550.00	102.8 AV			1.31 V	187	61.30	41.50
5	#5727.00	59.3 PK	74.0	-14.7	1.31 V	187	54.50	4.80
6	#5727.00	48.1 AV	54.0	-5.9	1.31 V	187	43.30	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

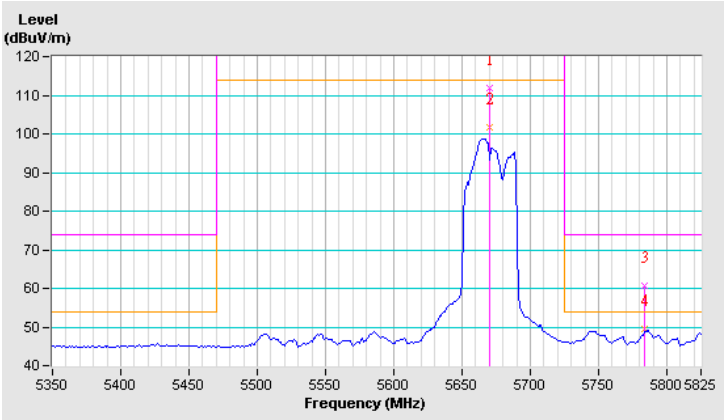


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	111.7 PK			1.06 H	353	70.20	41.50
2	*5670.00	101.8 AV			1.06 H	353	60.30	41.50
3	#5784.00	60.6 PK	74.0	-13.4	1.06 H	353	56.00	4.60
4	#5784.00	49.4 AV	54.0	-4.6	1.06 H	353	44.80	4.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

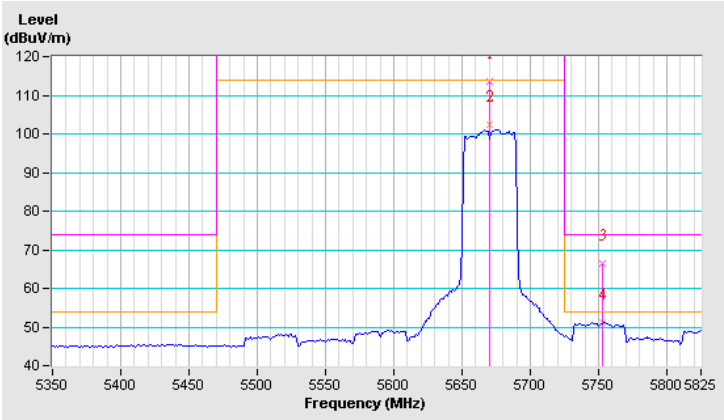


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	113.5 PK			1.77 V	191	72.00	41.50
2	*5670.00	102.5 AV			1.77 V	191	61.00	41.50
3	#5753.00	66.5 PK	74.0	-7.5	1.77 V	191	61.80	4.70
4	#5753.00	51.1 AV	54.0	-2.9	1.77 V	191	46.40	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



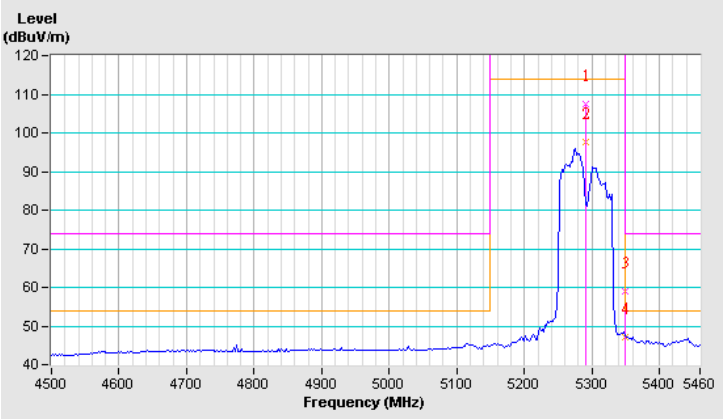
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	107.6 PK			1.76 H	17	66.60	41.00
2	*5290.00	97.5 AV			1.76 H	17	56.50	41.00
3	5350.00	59.1 PK	74.0	-14.9	1.76 H	17	54.70	4.40
4	5350.00	47.2 AV	54.0	-6.8	1.76 H	17	42.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

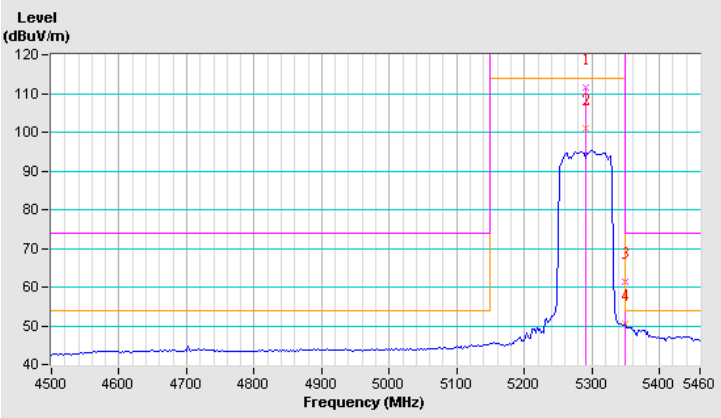


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	111.6 PK			1.59 V	180	70.60	41.00
2	*5290.00	100.9 AV			1.59 V	180	59.90	41.00
3	5350.00	61.2 PK	74.0	-12.8	1.59 V	180	56.80	4.40
4	5350.00	50.5 AV	54.0	-3.5	1.59 V	180	46.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

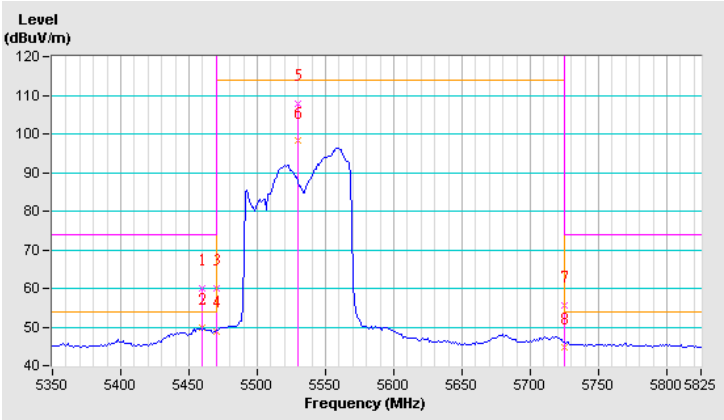


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	60.1 PK	74.0	-13.9	3.86 H	8	55.70	4.40
2	5460.00	50.0 AV	54.0	-4.0	3.86 H	8	45.60	4.40
3	#5470.00	60.0 PK	74.0	-14.0	3.86 H	8	55.50	4.50
4	#5470.00	49.0 AV	54.0	-5.0	3.86 H	8	44.50	4.50
5	*5530.00	107.7 PK			3.86 H	8	66.40	41.30
6	*5530.00	98.1 AV			3.86 H	8	56.80	41.30
7	#5725.00	55.5 PK	74.0	-18.5	3.86 H	8	50.70	4.80
8	#5725.00	44.8 AV	54.0	-9.2	3.86 H	8	40.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

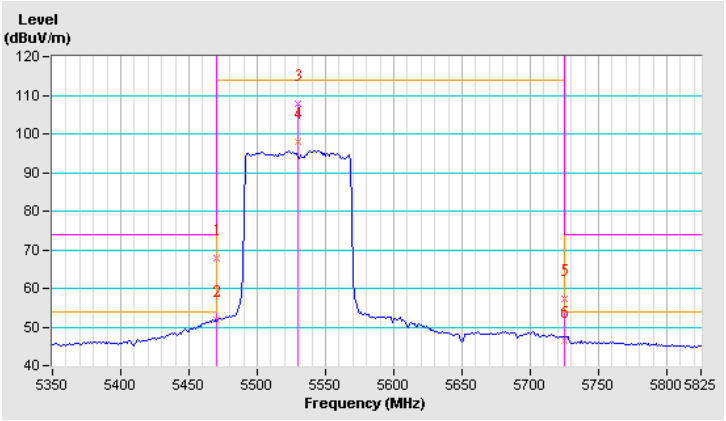


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	67.7 PK	74.0	-6.3	1.81 V	194	63.20	4.50
2	#5470.00	51.8 AV	54.0	-2.2	1.81 V	194	47.30	4.50
3	*5530.00	107.7 PK			1.81 V	194	66.40	41.30
4	*5530.00	97.9 AV			1.81 V	194	56.60	41.30
5	#5725.00	57.2 PK	74.0	-16.8	1.81 V	194	52.40	4.80
6	#5725.00	46.6 AV	54.0	-7.4	1.81 V	194	41.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



2S3T TxBF Mode

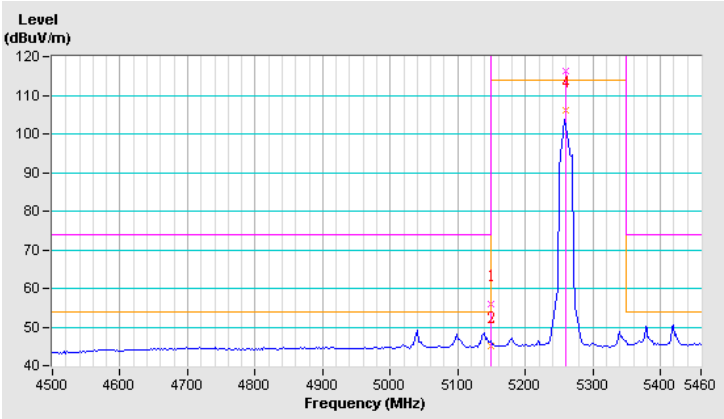
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.8 PK	74.0	-18.2	3.97 H	356	51.90	3.90
2	5150.00	45.1 AV	54.0	-8.9	3.97 H	356	41.20	3.90
3	*5260.00	116.1 PK			3.97 H	356	75.20	40.90
4	*5260.00	106.1 AV			3.97 H	356	65.20	40.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

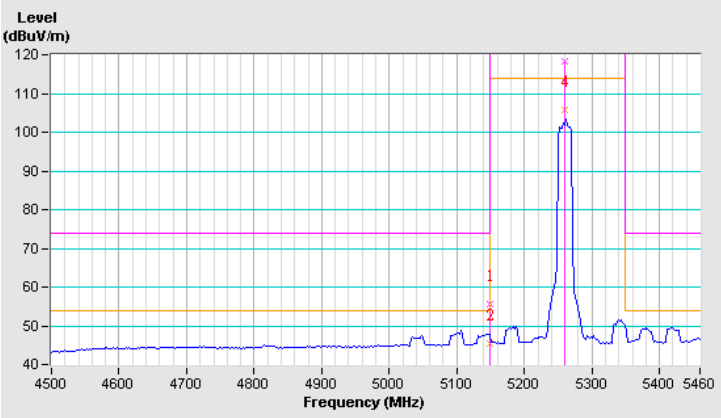


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.7 PK	74.0	-18.3	1.35 V	175	51.80	3.90
2	5150.00	45.4 AV	54.0	-8.6	1.35 V	175	41.50	3.90
3	*5260.00	118.2 PK			1.35 V	175	77.30	40.90
4	*5260.00	105.9 AV			1.35 V	175	65.00	40.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

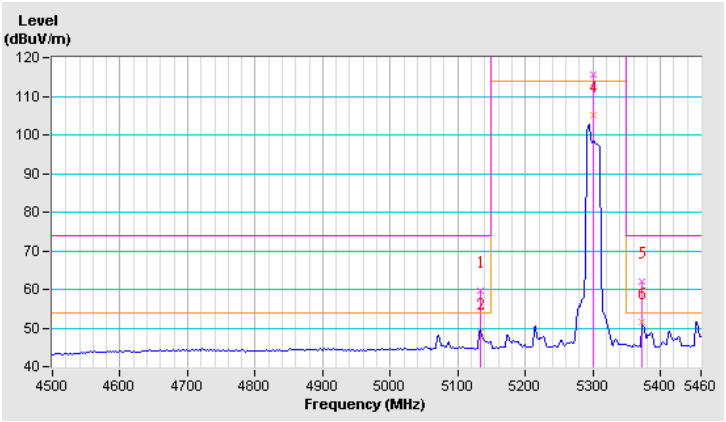


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5133.00	59.7 PK	74.0	-14.3	1.50 H	17	55.90	3.80
2	5133.00	48.8 AV	54.0	-5.2	1.50 H	17	45.00	3.80
3	*5300.00	115.5 PK			1.50 H	17	74.50	41.00
4	*5300.00	105.0 AV			1.50 H	17	64.00	41.00
5	5373.00	62.1 PK	74.0	-11.9	1.50 H	17	57.70	4.40
6	5373.00	51.6 AV	54.0	-2.4	1.50 H	17	47.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

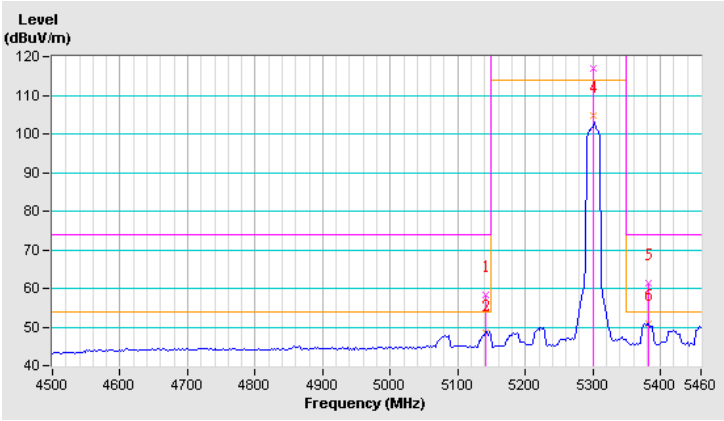


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5142.00	58.3 PK	74.0	-15.7	1.26 V	203	54.40	3.90
2	5142.00	48.3 AV	54.0	-5.7	1.26 V	203	44.40	3.90
3	*5300.00	116.9 PK			2.03 V	126	75.90	41.00
4	*5300.00	104.7 AV			2.03 V	126	63.70	41.00
5	5382.00	61.2 PK	74.0	-12.8	1.26 V	203	56.80	4.40
6	5382.00	51.0 AV	54.0	-3.0	1.26 V	203	46.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

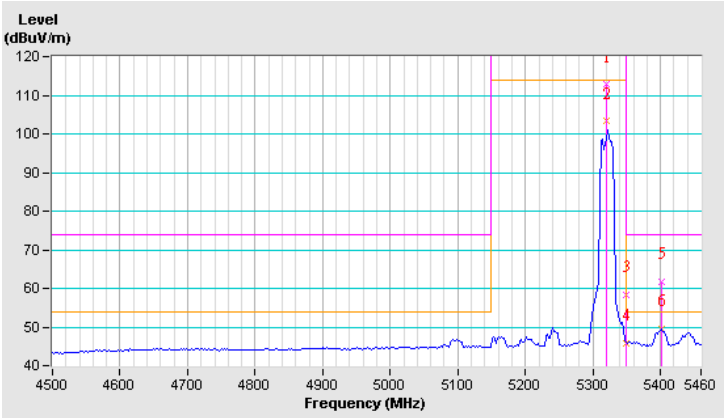


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.7 PK			2.03 H	10	71.70	41.00
2	*5320.00	103.2 AV			2.03 H	10	62.20	41.00
3	5350.00	58.3 PK	74.0	-15.7	2.03 H	10	53.90	4.40
4	5350.00	45.7 AV	54.0	-8.3	2.03 H	10	41.30	4.40
5	5401.00	61.6 PK	74.0	-12.4	2.03 H	10	57.10	4.50
6	5401.00	49.6 AV	54.0	-4.4	2.03 H	10	45.10	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

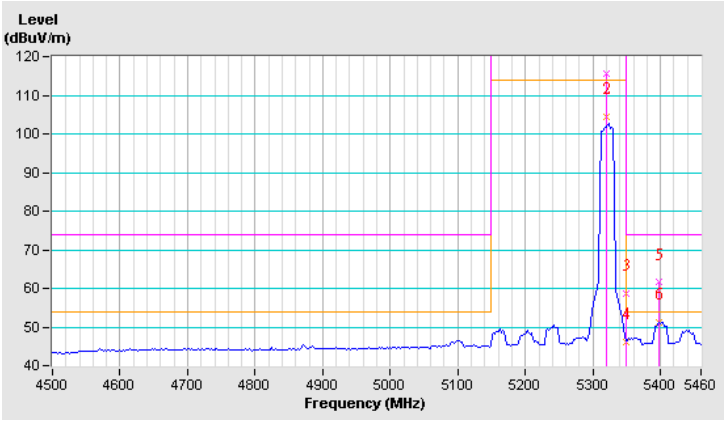


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	115.6 PK			1.31 V	203	74.60	41.00
2	*5320.00	104.5 AV			1.31 V	203	63.50	41.00
3	5350.00	58.5 PK	74.0	-15.5	1.31 V	203	54.10	4.40
4	5350.00	46.1 AV	54.0	-7.9	1.31 V	203	41.70	4.40
5	5397.00	61.5 PK	74.0	-12.5	1.31 V	203	57.10	4.40
6	5397.00	51.2 AV	54.0	-2.8	1.31 V	203	46.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

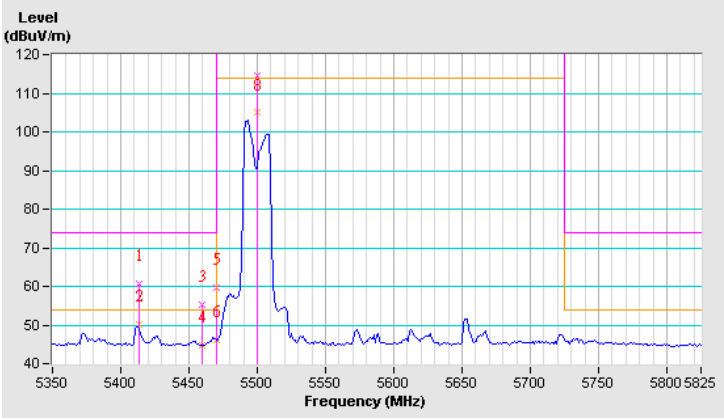


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5413.00	60.7 PK	74.0	-13.3	3.78 H	337	56.20	4.50
2	5413.00	50.3 AV	54.0	-3.7	3.78 H	337	45.80	4.50
3	5460.00	55.4 PK	74.0	-18.6	3.78 H	337	51.00	4.40
4	5460.00	44.8 AV	54.0	-9.2	3.78 H	337	40.40	4.40
5	#5470.00	59.5 PK	74.0	-14.5	3.78 H	337	55.00	4.50
6	#5470.00	46.1 AV	54.0	-7.9	3.78 H	337	41.60	4.50
7	*5500.00	114.7 PK			3.78 H	337	73.40	41.30
8	*5500.00	104.9 AV			3.78 H	337	63.60	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

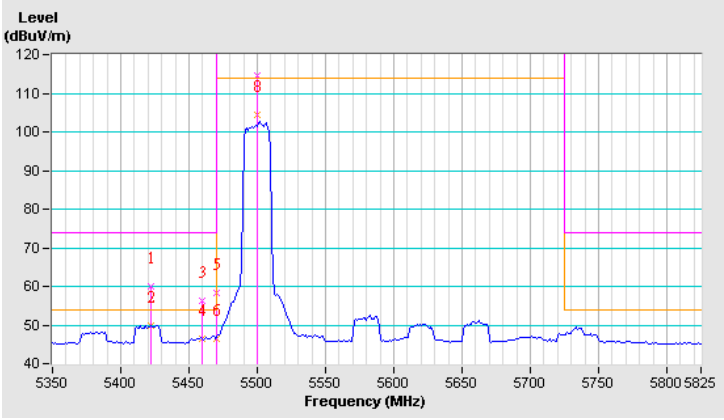


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5422.00	60.0 PK	74.0	-14.0	1.24 V	192	55.50	4.50
2	5422.00	49.7 AV	54.0	-4.3	1.24 V	192	45.20	4.50
3	5460.00	56.2 PK	74.0	-17.8	1.24 V	192	51.80	4.40
4	5460.00	46.3 AV	54.0	-7.7	1.24 V	192	41.90	4.40
5	#5470.00	58.3 PK	74.0	-15.7	1.24 V	192	53.80	4.50
6	#5470.00	46.4 AV	54.0	-7.6	1.24 V	192	41.90	4.50
7	*5500.00	114.7 PK			1.24 V	192	73.40	41.30
8	*5500.00	104.3 AV			1.24 V	192	63.00	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

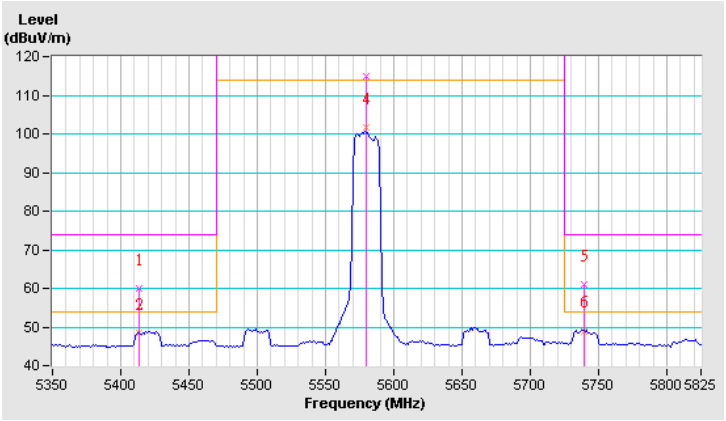


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5413.00	59.9 PK	74.0	-14.1	2.12 H	357	55.40	4.50
2	5413.00	48.6 AV	54.0	-5.4	2.12 H	357	44.10	4.50
3	*5580.00	115.1 PK			2.12 H	357	73.60	41.50
4	*5580.00	101.8 AV			2.12 H	357	60.30	41.50
5	#5739.00	61.0 PK	74.0	-13.0	2.12 H	357	56.30	4.70
6	#5739.00	49.0 AV	54.0	-5.0	2.12 H	357	44.30	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

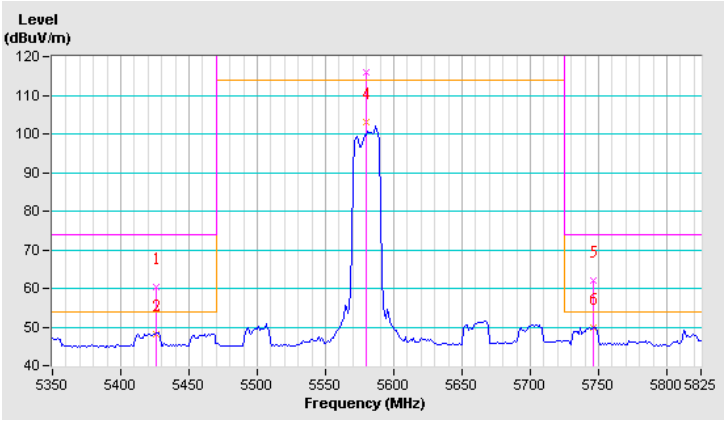


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5426.00	60.3 PK	74.0	-13.7	1.54 V	190	55.80	4.50
2	5426.00	48.2 AV	54.0	-5.8	1.54 V	190	43.70	4.50
3	*5580.00	115.8 PK			1.54 V	190	74.30	41.50
4	*5580.00	103.0 AV			1.54 V	190	61.50	41.50
5	#5746.00	62.2 PK	74.0	-11.8	1.54 V	190	57.50	4.70
6	#5746.00	49.9 AV	54.0	-4.1	1.54 V	190	45.20	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

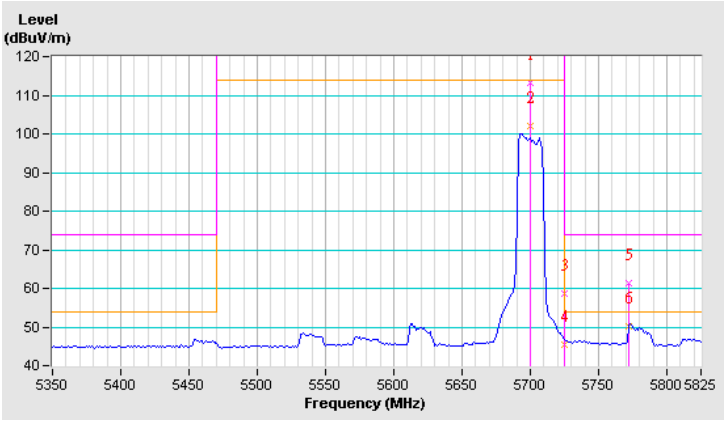


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	113.1 PK			2.89 H	17	71.50	41.60
2	*5700.00	102.2 AV			2.89 H	17	60.60	41.60
3	#5725.00	58.5 PK	74.0	-15.5	2.89 H	17	53.70	4.80
4	#5725.00	45.4 AV	54.0	-8.6	2.89 H	17	40.60	4.80
5	#5772.00	61.4 PK	74.0	-12.6	2.89 H	17	56.70	4.70
6	#5772.00	50.3 AV	54.0	-3.7	2.89 H	17	45.60	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

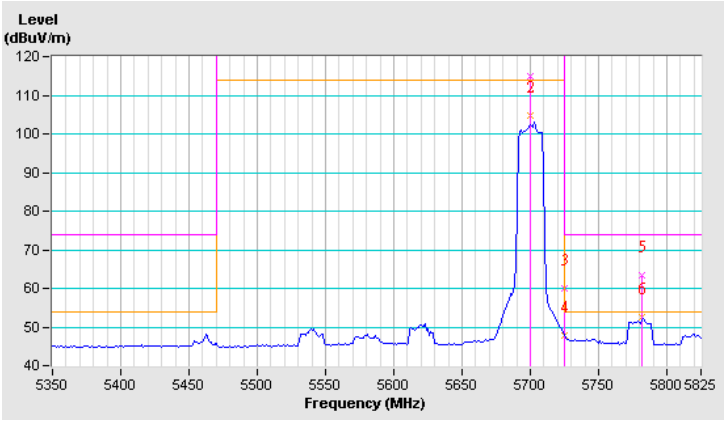


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	114.8 PK			1.33 V	188	73.20	41.60
2	*5700.00	104.6 AV			1.33 V	188	63.00	41.60
3	#5725.00	60.0 PK	74.0	-14.0	1.33 V	188	55.20	4.80
4	#5725.00	47.7 AV	54.0	-6.3	1.33 V	188	42.90	4.80
5	#5782.00	63.5 PK	74.0	-10.5	1.33 V	188	58.90	4.60
6	#5782.00	52.5 AV	54.0	-1.5	1.33 V	188	47.90	4.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



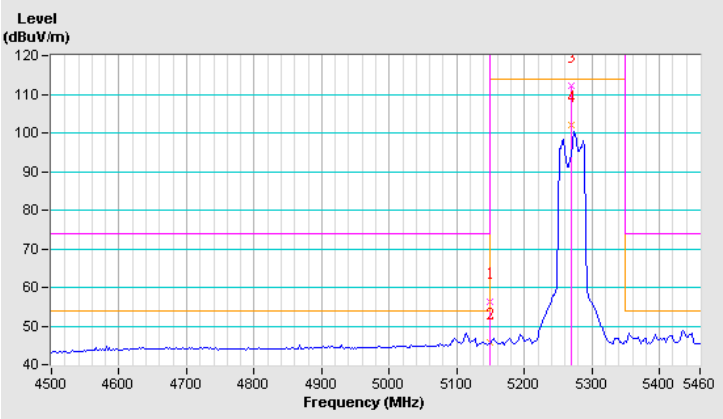
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.77 H	17	52.50	3.90
2	5150.00	45.6 AV	54.0	-8.4	1.77 H	17	41.70	3.90
3	*5270.00	112.1 PK			1.77 H	17	71.10	41.00
4	*5270.00	101.9 AV			1.77 H	17	60.90	41.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

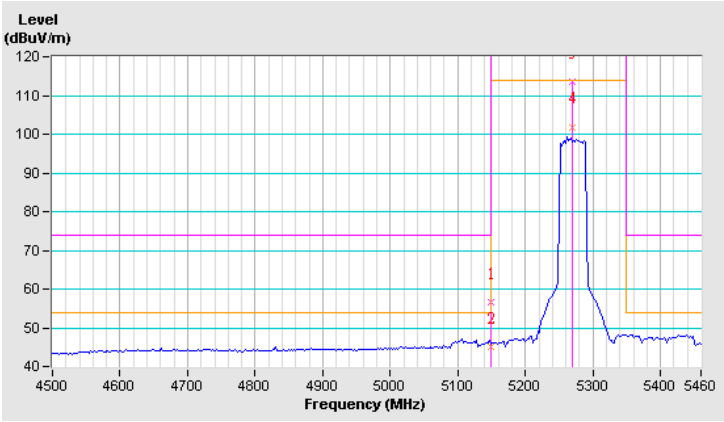


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.6 PK	74.0	-17.4	1.43 V	201	52.70	3.90
2	5150.00	45.0 AV	54.0	-9.0	1.43 V	201	41.10	3.90
3	*5270.00	113.4 PK			1.43 V	201	72.40	41.00
4	*5270.00	101.9 AV			1.43 V	201	60.90	41.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

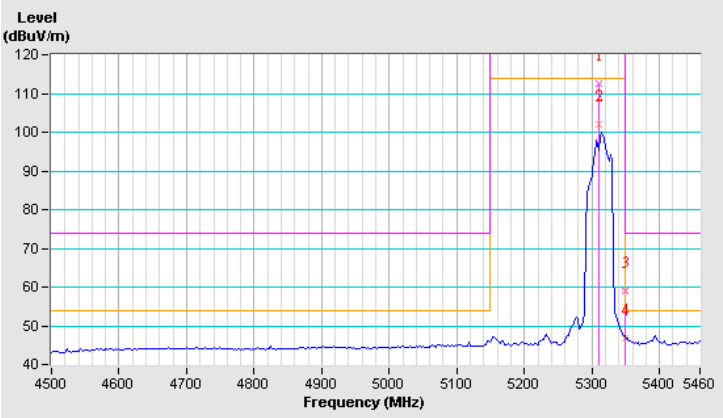


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	112.4 PK			3.61 H	13	71.40	41.00
2	*5310.00	101.9 AV			3.61 H	13	60.90	41.00
3	5350.00	59.1 PK	74.0	-14.9	3.61 H	13	54.70	4.40
4	5350.00	46.9 AV	54.0	-7.1	3.61 H	13	42.50	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

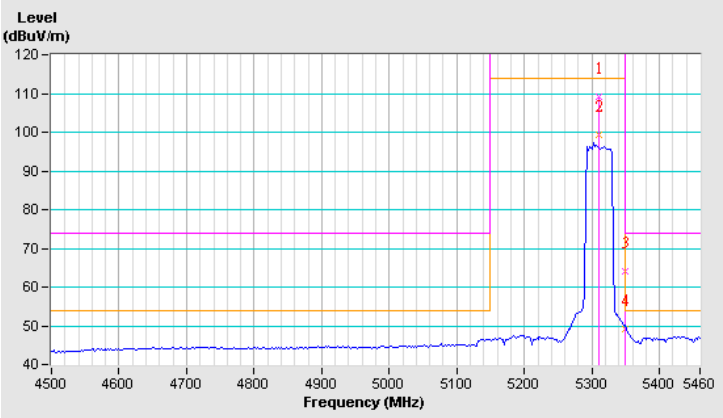


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	109.1 PK			1.06 V	227	68.10	41.00
2	*5310.00	99.3 AV			1.06 V	227	58.30	41.00
3	5350.00	64.2 PK	74.0	-9.8	1.06 V	227	59.80	4.40
4	5350.00	49.0 AV	54.0	-5.0	1.06 V	227	44.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

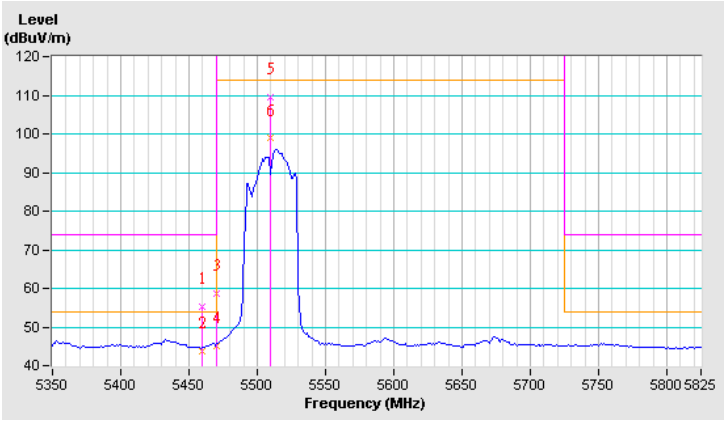


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.2 PK	74.0	-18.8	1.67 H	345	50.80	4.40
2	5460.00	43.6 AV	54.0	-10.4	1.67 H	345	39.20	4.40
3	#5470.00	58.6 PK	74.0	-15.4	1.67 H	345	54.10	4.50
4	#5470.00	45.0 AV	54.0	-9.0	1.67 H	345	40.50	4.50
5	*5510.00	109.6 PK			1.67 H	345	68.30	41.30
6	*5510.00	98.8 AV			1.67 H	345	57.50	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

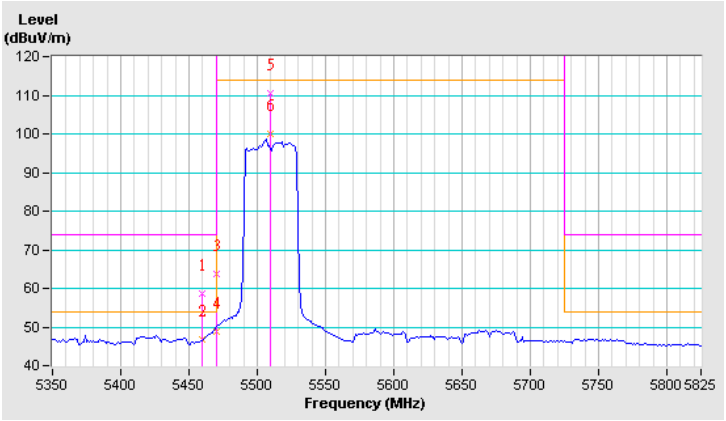


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.6 PK	74.0	-15.4	1.19 V	191	54.20	4.40
2	5460.00	46.7 AV	54.0	-7.3	1.19 V	191	42.30	4.40
3	#5470.00	63.8 PK	74.0	-10.2	1.19 V	191	59.30	4.50
4	#5470.00	48.7 AV	54.0	-5.3	1.19 V	191	44.20	4.50
5	*5510.00	110.5 PK			1.19 V	191	69.20	41.30
6	*5510.00	100.0 AV			1.19 V	191	58.70	41.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

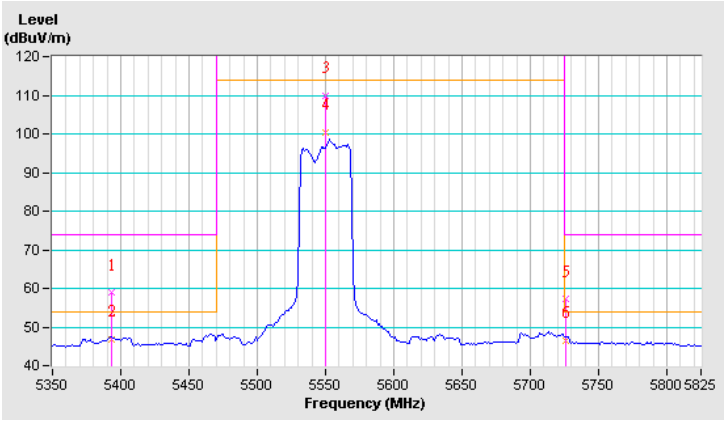


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5393.00	58.8 PK	74.0	-15.2	2.10 H	10	54.40	4.40
2	5393.00	46.9 AV	54.0	-7.1	2.10 H	10	42.50	4.40
3	*5550.00	109.8 PK			2.10 H	10	68.30	41.50
4	*5550.00	100.2 AV			2.10 H	10	58.70	41.50
5	#5726.00	57.1 PK	74.0	-16.9	2.10 H	10	52.30	4.80
6	#5726.00	46.3 AV	54.0	-7.7	2.10 H	10	41.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

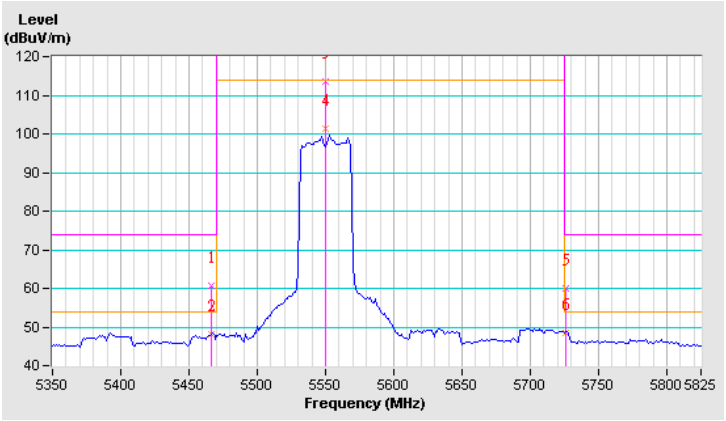


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5466.00	60.6 PK	74.0	-13.4	1.74 V	186	56.20	4.40
2	#5466.00	48.1 AV	54.0	-5.9	1.74 V	186	43.70	4.40
3	*5550.00	113.5 PK			1.74 V	186	72.00	41.50
4	*5550.00	101.3 AV			1.74 V	186	59.80	41.50
5	#5726.00	60.0 PK	74.0	-14.0	1.74 V	186	55.20	4.80
6	#5726.00	48.4 AV	54.0	-5.6	1.74 V	186	43.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

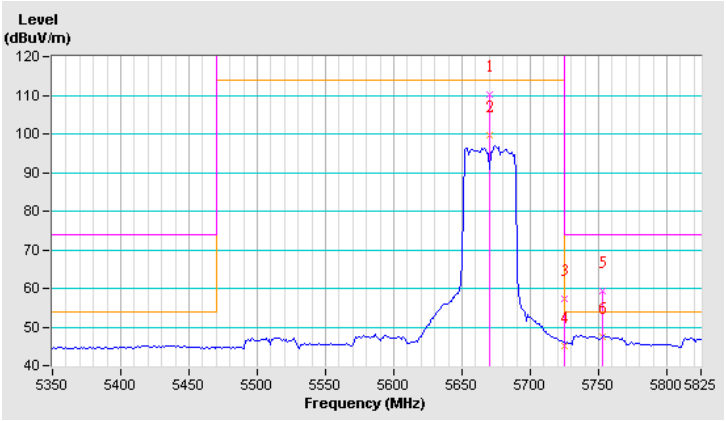


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.1 PK			1.17 H	4	68.60	41.50
2	*5670.00	99.6 AV			1.17 H	4	58.10	41.50
3	#5725.00	57.3 PK	74.0	-16.7	1.17 H	4	52.50	4.80
4	#5725.00	45.0 AV	54.0	-9.0	1.17 H	4	40.20	4.80
5	#5753.00	59.2 PK	74.0	-14.8	1.17 H	4	54.50	4.70
6	#5753.00	47.6 AV	54.0	-6.4	1.17 H	4	42.90	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

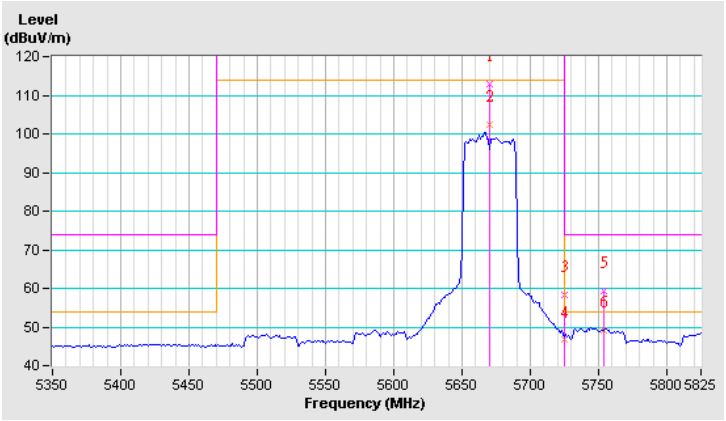


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	113.0 PK			1.52 V	185	71.50	41.50
2	*5670.00	102.5 AV			1.52 V	185	61.00	41.50
3	#5725.00	58.2 PK	74.0	-15.8	1.52 V	185	53.40	4.80
4	#5725.00	46.6 AV	54.0	-7.4	1.52 V	185	41.80	4.80
5	#5754.00	59.3 PK	74.0	-14.7	1.52 V	185	54.60	4.70
6	#5754.00	49.2 AV	54.0	-4.8	1.52 V	185	44.50	4.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



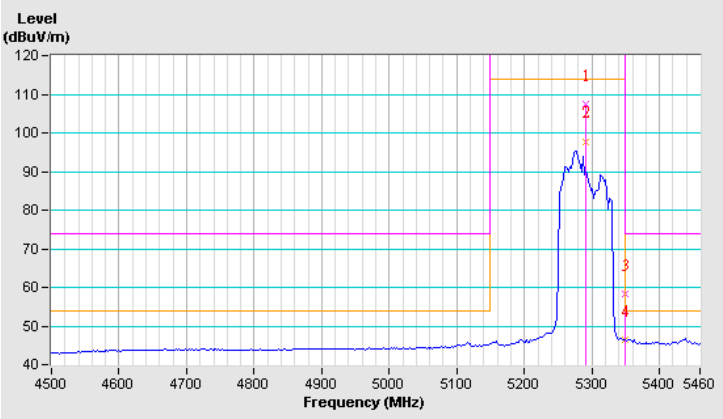
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	107.3 PK			2.96 H	15	66.30	41.00
2	*5290.00	97.8 AV			2.96 H	15	56.80	41.00
3	5350.00	58.4 PK	74.0	-15.6	2.96 H	15	54.00	4.40
4	5350.00	46.6 AV	54.0	-7.4	2.96 H	15	42.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

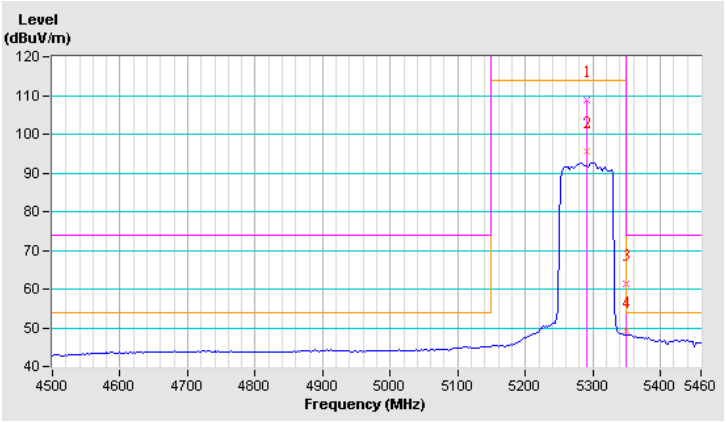


CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	108.8 PK			1.26 V	189	67.80	41.00
2	*5290.00	95.6 AV			1.26 V	189	54.60	41.00
3	5350.00	61.4 PK	74.0	-12.6	1.26 V	189	57.00	4.40
4	5350.00	49.0 AV	54.0	-5.0	1.26 V	189	44.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

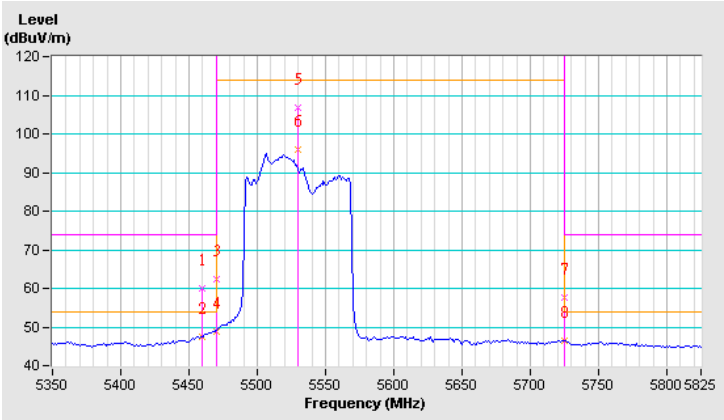


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.9 PK	74.0	-14.1	3.95 H	5	55.50	4.40
2	5460.00	47.4 AV	54.0	-6.6	3.95 H	5	43.00	4.40
3	#5470.00	62.3 PK	74.0	-11.7	3.95 H	5	57.80	4.50
4	#5470.00	48.8 AV	54.0	-5.2	3.95 H	5	44.30	4.50
5	*5530.00	106.8 PK			3.95 H	5	65.50	41.30
6	*5530.00	96.0 AV			3.95 H	5	54.70	41.30
7	#5725.00	57.6 PK	74.0	-16.4	3.95 H	5	52.80	4.80
8	#5725.00	46.5 AV	54.0	-7.5	3.95 H	5	41.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

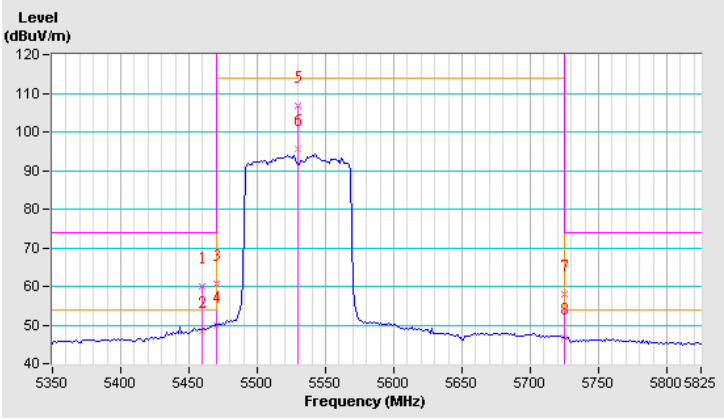


CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.9 PK	74.0	-14.1	1.74 V	190	55.50	4.40
2	5460.00	48.4 AV	54.0	-5.6	1.74 V	190	44.00	4.40
3	#5470.00	60.7 PK	74.0	-13.3	1.74 V	190	56.20	4.50
4	#5470.00	49.9 AV	54.0	-4.1	1.74 V	190	45.40	4.50
5	*5530.00	106.9 PK			1.74 V	190	65.60	41.30
6	*5530.00	95.7 AV			1.74 V	190	54.40	41.30
7	#5725.00	57.9 PK	74.0	-16.1	1.74 V	190	53.10	4.80
8	#5725.00	46.7 AV	54.0	-7.3	1.74 V	190	41.90	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



4.6 Frequency Stability Measurement

4.6.1 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or ±20ppm (IEEE 802.11n specification).

4.6.2 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

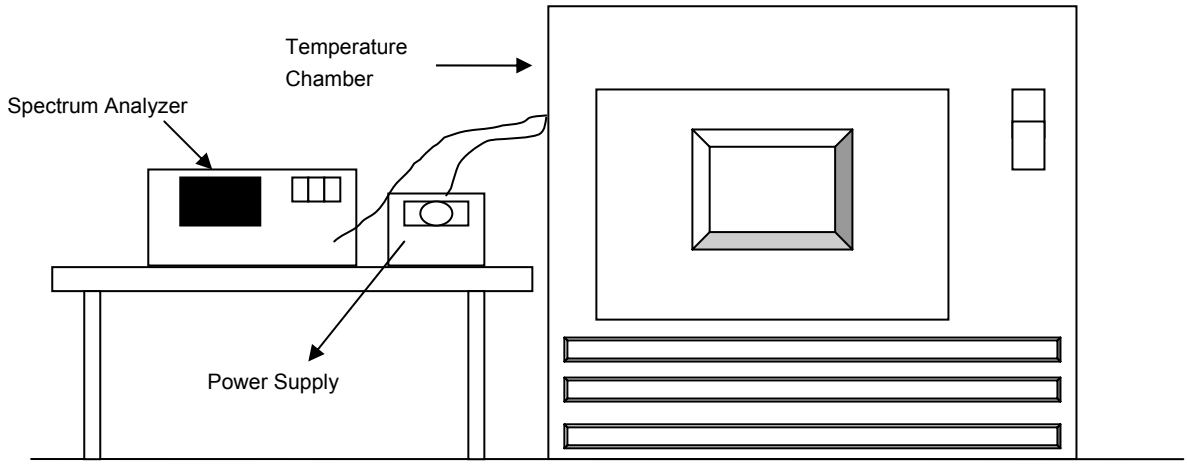
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

4.6.3 Test Procedure

1 The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
2 The EUT was programmed to be in continuously un-modulation transmitting mode.
3 Set the spectrum analyzer span to view the entire un-modulation emissions bandwidth.
4 Turn the EUT on and couple its output to a spectrum analyzer.
5 Turn the EUT off and set the chamber to the highest temperature specified.
6 Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7 Extreme temperature rule is -30°C~50°C.
8 Repeat step 4 and 5 with the temperature chamber set to the lowest temperature.
9 The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.4 Test Setup Layout

Setup



4.6.5 Test Deviation

There are no deviations with the original standard.

4.6.6 EUT Operating Conditions

The EUT was programmed to be in continuously un-modulation transmitting mode.

4.6.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11ac (20MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5259.9799	PASS	5259.9809	PASS	5259.9794	PASS	5259.9768	PASS
40	120	5259.9973	PASS	5259.993	PASS	5259.9961	PASS	5259.9938	PASS
30	120	5259.9979	PASS	5259.9988	PASS	5259.9959	PASS	5259.9992	PASS
20	120	5259.9747	PASS	5259.9729	PASS	5259.9755	PASS	5259.9766	PASS
10	120	5260.0092	PASS	5260.0091	PASS	5260.0125	PASS	5260.0104	PASS
0	120	5260.0072	PASS	5260.0071	PASS	5260.0075	PASS	5260.0094	PASS
-10	120	5260.0286	PASS	5260.027	PASS	5260.0268	PASS	5260.0261	PASS
-20	120	5260.0139	PASS	5260.0126	PASS	5260.0096	PASS	5260.0144	PASS
-30	120	5260.023	PASS	5260.0231	PASS	5260.0218	PASS	5260.0251	PASS
Max. Deviation (ppm)		5.437262	PASS	-5.152091	PASS	5.095057	PASS	4.961977	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5259.9757	PASS	5259.9726	PASS	5259.9757	PASS	5259.9759	PASS
	120	5259.9747	PASS	5259.9729	PASS	5259.9755	PASS	5259.9766	PASS
	102	5259.9747	PASS	5259.9737	PASS	5259.9749	PASS	5259.9766	PASS
Max. Deviation (ppm)		-4.809886	PASS	-5.209125	PASS	-4.771863	PASS	-4.581749	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5259.9727	PASS	5259.9747	PASS	5259.9751	PASS	5259.9759	PASS
40	120	5259.9818	PASS	5259.9849	PASS	5259.9862	PASS	5259.9827	PASS
30	120	5260.0009	PASS	5259.9984	PASS	5259.9986	PASS	5260.0009	PASS
20	120	5260.0127	PASS	5260.0108	PASS	5260.012	PASS	5260.0102	PASS
10	120	5260.0000	PASS	5260.0007	PASS	5260.0007	PASS	5259.9998	PASS
0	120	5260.0194	PASS	5260.0215	PASS	5260.0194	PASS	5260.0193	PASS
-10	120	5260.011	PASS	5260.0108	PASS	5260.0113	PASS	5260.0073	PASS
-20	120	5260.0118	PASS	5260.0112	PASS	5260.012	PASS	5260.0107	PASS
-30	120	5259.9922	PASS	5259.9936	PASS	5259.9937	PASS	5259.9909	PASS
Max. Deviation (ppm)		-5.190114	PASS	-4.809886	PASS	-4.733840	PASS	-4.581749	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5260.0122	PASS	5260.0099	PASS	5260.0113	PASS	5260.011	PASS
	120	5260.0127	PASS	5260.0108	PASS	5260.012	PASS	5260.0102	PASS
	102	5260.0121	PASS	5260.0101	PASS	5260.0125	PASS	5260.011	PASS
Max. Deviation (ppm)		2.414449	PASS	2.053232	PASS	2.376426	PASS	2.091255	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5260.011	PASS	5260.0094	PASS	5260.009	PASS	5260.0097	PASS
40	120	5260.0128	PASS	5260.0119	PASS	5260.0097	PASS	5260.0114	PASS
30	120	5260.0153	PASS	5260.017	PASS	5260.0169	PASS	5260.0155	PASS
20	120	5260.0081	PASS	5260.0069	PASS	5260.006	PASS	5260.0052	PASS
10	120	5260.0111	PASS	5260.0144	PASS	5260.0129	PASS	5260.0135	PASS
0	120	5260.0019	PASS	5260.0038	PASS	5260.0008	PASS	5260.0031	PASS
-10	120	5260.0086	PASS	5260.006	PASS	5260.0086	PASS	5260.0083	PASS
-20	120	5259.9781	PASS	5259.9772	PASS	5259.9819	PASS	5259.9813	PASS
-30	120	5259.99	PASS	5259.9912	PASS	5259.9935	PASS	5259.9898	PASS
Max. Deviation (ppm)		-4.163498	PASS	-4.334601	PASS	-3.441065	PASS	-3.555133	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5260.0083	PASS	5260.0066	PASS	5260.0069	PASS	5260.0045	PASS
	120	5260.0081	PASS	5260.0069	PASS	5260.006	PASS	5260.0052	PASS
	102	5260.0071	PASS	5260.006	PASS	5260.0069	PASS	5260.0056	PASS
Max. Deviation (ppm)		1.577947	PASS	1.311787	PASS	1.311787	PASS	1.064639	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5300 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5300.0138	PASS	5300.0127	PASS	5300.0143	PASS	5300.0131	PASS
40	120	5300.016	PASS	5300.0125	PASS	5300.0132	PASS	5300.0138	PASS
30	120	5300.0121	PASS	5300.0149	PASS	5300.0148	PASS	5300.0121	PASS
20	120	5300.0103	PASS	5300.0132	PASS	5300.0134	PASS	5300.0146	PASS
10	120	5300.0212	PASS	5300.0262	PASS	5300.0263	PASS	5300.0262	PASS
0	120	5300.0225	PASS	5300.0216	PASS	5300.0204	PASS	5300.0191	PASS
-10	120	5300.0155	PASS	5300.0118	PASS	5300.0152	PASS	5300.0133	PASS
-20	120	5299.9832	PASS	5299.9798	PASS	5299.9818	PASS	5299.981	PASS
-30	120	5300.0098	PASS	5300.0088	PASS	5300.0134	PASS	5300.0092	PASS
Max. Deviation (ppm)		4.245283	PASS	4.943396	PASS	4.962264	PASS	4.943396	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5300 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5300.0111	PASS	5300.0137	PASS	5300.0145	PASS	5300.0136	PASS
	120	5300.0103	PASS	5300.0132	PASS	5300.0134	PASS	5300.0146	PASS
	102	5300.0106	PASS	5300.0124	PASS	5300.0133	PASS	5300.0139	PASS
Max. Deviation (ppm)		2.094340	PASS	2.584906	PASS	2.735849	PASS	2.754717	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5300 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5299.9974	PASS	5299.9963	PASS	5299.9966	PASS	5299.9953	PASS
40	120	5300.0216	PASS	5300.0185	PASS	5300.0211	PASS	5300.0194	PASS
30	120	5300.0027	PASS	5300.0012	PASS	5299.9995	PASS	5300.0006	PASS
20	120	5300.025	PASS	5300.0238	PASS	5300.023	PASS	5300.0227	PASS
10	120	5299.9757	PASS	5299.9774	PASS	5299.9779	PASS	5299.977	PASS
0	120	5299.9749	PASS	5299.9714	PASS	5299.9749	PASS	5299.9719	PASS
-10	120	5299.9876	PASS	5299.9873	PASS	5299.9873	PASS	5299.9884	PASS
-20	120	5299.9951	PASS	5299.9969	PASS	5299.9951	PASS	5300.0003	PASS
-30	120	5299.9867	PASS	5299.9908	PASS	5299.9874	PASS	5299.9883	PASS
Max. Deviation (ppm)		-4.735849	PASS	-5.396226	PASS	-4.735849	PASS	-5.301887	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5300 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5300.0255	PASS	5300.0247	PASS	5300.0238	PASS	5300.0225	PASS
	120	5300.025	PASS	5300.0238	PASS	5300.023	PASS	5300.0227	PASS
	102	5300.0243	PASS	5300.0246	PASS	5300.024	PASS	5300.0217	PASS
Max. Deviation (ppm)		4.811321	PASS	4.660377	PASS	4.490566	PASS	4.283019	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5300 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5300.0011	PASS	5300.0042	PASS	5300.0041	PASS	5299.9999	PASS
40	120	5300.0035	PASS	5300.0003	PASS	5300.0035	PASS	5300.0012	PASS
30	120	5300.003	PASS	5300.0012	PASS	5300.0023	PASS	5300.0061	PASS
20	120	5300.0229	PASS	5300.0227	PASS	5300.0271	PASS	5300.0247	PASS
10	120	5299.9816	PASS	5299.9784	PASS	5299.9771	PASS	5299.9788	PASS
0	120	5299.9919	PASS	5299.9903	PASS	5299.9932	PASS	5299.9936	PASS
-10	120	5300.0032	PASS	5300.0014	PASS	5300.0059	PASS	5300.0051	PASS
-20	120	5299.9927	PASS	5299.9882	PASS	5299.9888	PASS	5299.9895	PASS
-30	120	5299.977	PASS	5299.9781	PASS	5299.9776	PASS	5299.9787	PASS
Max. Deviation (ppm)			PASS		PASS		PASS		PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5300 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5300.0235	PASS	5300.0234	PASS	5300.028	PASS	5300.0255	PASS
	120	5300.0229	PASS	5300.0227	PASS	5300.0271	PASS	5300.0247	PASS
	102	5300.0235	PASS	5300.0234	PASS	5300.0269	PASS	5300.0242	PASS
Max. Deviation (ppm)			PASS		PASS		PASS		PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5320.0053	PASS	5320.0082	PASS	5320.0079	PASS	5320.0062	PASS
40	120	5319.9905	PASS	5319.99	PASS	5319.9882	PASS	5319.9896	PASS
30	120	5320.0054	PASS	5320.005	PASS	5320.0058	PASS	5320.0083	PASS
20	120	5320.0197	PASS	5320.0158	PASS	5320.0157	PASS	5320.0189	PASS
10	120	5319.9973	PASS	5319.994	PASS	5319.9938	PASS	5319.9984	PASS
0	120	5320.0041	PASS	5320.0031	PASS	5320.0023	PASS	5320.0022	PASS
-10	120	5320.002	PASS	5320.0051	PASS	5320.0061	PASS	5320.0022	PASS
-20	120	5320.0032	PASS	5320.0076	PASS	5320.0065	PASS	5320.005	PASS
-30	120	5319.979	PASS	5319.9763	PASS	5319.9781	PASS	5319.9772	PASS
Max. Deviation (ppm)		-3.947368	PASS	-4.454887	PASS	-4.116541	PASS	-4.285714	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5320 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5320.0207	PASS	5320.016	PASS	5320.015	PASS	5320.0197	PASS
	120	5320.0197	PASS	5320.0158	PASS	5320.0157	PASS	5320.0189	PASS
	102	5320.0202	PASS	5320.0164	PASS	5320.0163	PASS	5320.018	PASS
Max. Deviation (ppm)		3.890977	PASS	3.082707	PASS	3.063910	PASS	3.703008	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5319.9767	PASS	5319.979	PASS	5319.9807	PASS	5319.9783	PASS
40	120	5320.0268	PASS	5320.0266	PASS	5320.0284	PASS	5320.0284	PASS
30	120	5320.0204	PASS	5320.0166	PASS	5320.0209	PASS	5320.0178	PASS
20	120	5320.0061	PASS	5320.0094	PASS	5320.0099	PASS	5320.0098	PASS
10	120	5320.0057	PASS	5320.0057	PASS	5320.0009	PASS	5320.0052	PASS
0	120	5320.0156	PASS	5320.0122	PASS	5320.0147	PASS	5320.0125	PASS
-10	120	5319.984	PASS	5319.9875	PASS	5319.9837	PASS	5319.9855	PASS
-20	120	5319.9778	PASS	5319.9785	PASS	5319.9786	PASS	5319.9778	PASS
-30	120	5319.9824	PASS	5319.9831	PASS	5319.9821	PASS	5319.9843	PASS
Max. Deviation (ppm)		5.037594	PASS	5.000000	PASS	5.338346	PASS	5.338346	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5320 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5320.006	PASS	5320.0092	PASS	5320.0105	PASS	5320.0088	PASS
	120	5320.0061	PASS	5320.0094	PASS	5320.0099	PASS	5320.0098	PASS
	102	5320.0063	PASS	5320.0101	PASS	5320.0089	PASS	5320.0096	PASS
Max. Deviation (ppm)		1.146617	PASS	1.766917	PASS	1.973684	PASS	1.842105	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5319.9717	PASS	5319.971	PASS	5319.9761	PASS	5319.971	PASS
40	120	5319.9765	PASS	5319.9749	PASS	5319.9775	PASS	5319.9758	PASS
30	120	5319.9943	PASS	5319.9959	PASS	5319.9966	PASS	5319.9948	PASS
20	120	5320.0061	PASS	5320.0082	PASS	5320.0087	PASS	5320.0054	PASS
10	120	5320.0198	PASS	5320.0187	PASS	5320.0207	PASS	5320.0166	PASS
0	120	5319.9853	PASS	5319.9853	PASS	5319.9871	PASS	5319.9867	PASS
-10	120	5319.9869	PASS	5319.9822	PASS	5319.9842	PASS	5319.9836	PASS
-20	120	5319.9777	PASS	5319.982	PASS	5319.9818	PASS	5319.9783	PASS
-30	120	5319.9823	PASS	5319.9821	PASS	5319.9809	PASS	5319.978	PASS
Max. Deviation (ppm)		-5.319549	PASS	-5.451128	PASS	-4.492481	PASS	-5.451128	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5320 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5320.0056	PASS	5320.0072	PASS	5320.0089	PASS	5320.005	PASS
	120	5320.0061	PASS	5320.0082	PASS	5320.0087	PASS	5320.0054	PASS
	102	5320.0052	PASS	5320.0093	PASS	5320.0082	PASS	5320.0061	PASS
Max. Deviation (ppm)		1.052632	PASS	1.353383	PASS	1.672932	PASS	0.939850	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5500 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5500.0281	PASS	5500.0255	PASS	5500.0274	PASS	5500.0262	PASS
40	120	5500.0068	PASS	5500.0075	PASS	5500.007	PASS	5500.0088	PASS
30	120	5500.0199	PASS	5500.0203	PASS	5500.0232	PASS	5500.0197	PASS
20	120	5500.0214	PASS	5500.0208	PASS	5500.0179	PASS	5500.016	PASS
10	120	5499.9994	PASS	5499.9961	PASS	5499.9985	PASS	5499.996	PASS
0	120	5500.0211	PASS	5500.0204	PASS	5500.0166	PASS	5500.0182	PASS
-10	120	5500.0288	PASS	5500.0277	PASS	5500.0255	PASS	5500.0275	PASS
-20	120	5499.9986	PASS	5499.9973	PASS	5499.9998	PASS	5499.9985	PASS
-30	120	5500.0029	PASS	5500.0025	PASS	5500.0046	PASS	5500.0047	PASS
Max. Deviation (ppm)		5.236364	PASS	5.036364	PASS	4.981818	PASS	5.000000	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5500 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5500.0225	PASS	5500.0198	PASS	5500.0182	PASS	5500.0162	PASS
	120	5500.0214	PASS	5500.0208	PASS	5500.0179	PASS	5500.016	PASS
	102	5500.0221	PASS	5500.0217	PASS	5500.0178	PASS	5500.0153	PASS
Max. Deviation (ppm)		4.090909	PASS	3.945455	PASS	3.309091	PASS	2.945455	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5500 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5500.0025	PASS	5500.0008	PASS	5500.0018	PASS	5500.0035	PASS
40	120	5499.9926	PASS	5499.9933	PASS	5499.9933	PASS	5499.9928	PASS
30	120	5500.0218	PASS	5500.0262	PASS	5500.0216	PASS	5500.0215	PASS
20	120	5499.9815	PASS	5499.9794	PASS	5499.9784	PASS	5499.978	PASS
10	120	5499.9737	PASS	5499.9718	PASS	5499.9714	PASS	5499.9723	PASS
0	120	5500.0195	PASS	5500.0206	PASS	5500.0171	PASS	5500.0166	PASS
-10	120	5499.9939	PASS	5499.9975	PASS	5499.9967	PASS	5499.9975	PASS
-20	120	5500.0144	PASS	5500.014	PASS	5500.0168	PASS	5500.0167	PASS
-30	120	5500.0234	PASS	5500.027	PASS	5500.0243	PASS	5500.0226	PASS
Max. Deviation (ppm)		-4.781818	PASS	-5.127273	PASS	-5.200000	PASS	-5.036364	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5500 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5499.9811	PASS	5499.9792	PASS	5499.978	PASS	5499.9782	PASS
	120	5499.9815	PASS	5499.9794	PASS	5499.9784	PASS	5499.978	PASS
	102	5499.981	PASS	5499.9796	PASS	5499.9786	PASS	5499.9784	PASS
Max. Deviation (ppm)		-3.436364	PASS	-3.781818	PASS	-4.000000	PASS	-4.000000	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5500 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5500.012	PASS	5500.0141	PASS	5500.0155	PASS	5500.0153	PASS
40	120	5500.0177	PASS	5500.0161	PASS	5500.017	PASS	5500.0166	PASS
30	120	5500.0199	PASS	5500.0166	PASS	5500.0208	PASS	5500.017	PASS
20	120	5499.9888	PASS	5499.9907	PASS	5499.9891	PASS	5499.9907	PASS
10	120	5500.0001	PASS	5500.0001	PASS	5499.9955	PASS	5499.9951	PASS
0	120	5499.9852	PASS	5499.988	PASS	5499.9892	PASS	5499.9854	PASS
-10	120	5500.0182	PASS	5500.018	PASS	5500.0165	PASS	5500.0184	PASS
-20	120	5500.0215	PASS	5500.0214	PASS	5500.0213	PASS	5500.0209	PASS
-30	120	5499.9872	PASS	5499.9849	PASS	5499.9848	PASS	5499.9843	PASS
Max. Deviation (ppm)		3.618182	PASS	3.272727	PASS	3.781818	PASS	3.345455	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5500 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5499.9884	PASS	5499.9905	PASS	5499.9891	PASS	5499.9902	PASS
	120	5499.9888	PASS	5499.9907	PASS	5499.9891	PASS	5499.9907	PASS
	102	5499.9898	PASS	5499.9914	PASS	5499.9889	PASS	5499.991	PASS
Max. Deviation (ppm)		-2.109091	PASS	-1.727273	PASS	-1.981818	PASS	-1.781818	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5580 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5580.0233	PASS	5580.0222	PASS	5580.0223	PASS	5580.0271	PASS
40	120	5580.0294	PASS	5580.0269	PASS	5580.0272	PASS	5580.0275	PASS
30	120	5579.9979	PASS	5580.0026	PASS	5579.9986	PASS	5580.0005	PASS
20	120	5580.0244	PASS	5580.0208	PASS	5580.0196	PASS	5580.0197	PASS
10	120	5579.9724	PASS	5579.972	PASS	5579.9749	PASS	5579.9734	PASS
0	120	5580.0223	PASS	5580.0217	PASS	5580.0208	PASS	5580.023	PASS
-10	120	5580.0152	PASS	5580.0153	PASS	5580.0152	PASS	5580.0189	PASS
-20	120	5579.9748	PASS	5579.9734	PASS	5579.9754	PASS	5579.9762	PASS
-30	120	5579.9753	PASS	5579.9754	PASS	5579.9751	PASS	5579.9774	PASS
Max. Deviation (ppm)		5.268817	PASS	-5.017921	PASS	4.874552	PASS	4.928315	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5580 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5580.0236	PASS	5580.0199	PASS	5580.0189	PASS	5580.0205	PASS
	120	5580.0244	PASS	5580.0208	PASS	5580.0196	PASS	5580.0197	PASS
	102	5580.0239	PASS	5580.0203	PASS	5580.0199	PASS	5580.0199	PASS
Max. Deviation (ppm)		4.372760	PASS	3.727599	PASS	3.566308	PASS	3.673835	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5580 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5579.9951	PASS	5579.9955	PASS	5579.9972	PASS	5579.9996	PASS
40	120	5580.0042	PASS	5580.0019	PASS	5580.0014	PASS	5580.0042	PASS
30	120	5580.0244	PASS	5580.0237	PASS	5580.0244	PASS	5580.0235	PASS
20	120	5580.0109	PASS	5580.0078	PASS	5580.0103	PASS	5580.0103	PASS
10	120	5579.9944	PASS	5579.9972	PASS	5579.9954	PASS	5579.9973	PASS
0	120	5580.0068	PASS	5580.0081	PASS	5580.0084	PASS	5580.0077	PASS
-10	120	5579.9863	PASS	5579.9863	PASS	5579.9862	PASS	5579.9841	PASS
-20	120	5579.9983	PASS	5579.9961	PASS	5580.0008	PASS	5579.9964	PASS
-30	120	5579.9887	PASS	5579.9869	PASS	5579.9913	PASS	5579.9914	PASS
Max. Deviation (ppm)		4.372760	PASS	4.247312	PASS	4.372760	PASS	4.211470	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5580 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5580.0098	PASS	5580.0085	PASS	5580.0114	PASS	5580.0098	PASS
	120	5580.0109	PASS	5580.0078	PASS	5580.0103	PASS	5580.0103	PASS
	102	5580.0101	PASS	5580.0077	PASS	5580.0102	PASS	5580.0094	PASS
Max. Deviation (ppm)		1.953405	PASS	1.523297	PASS	2.043011	PASS	1.845878	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5580 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5580.0091	PASS	5580.0138	PASS	5580.0137	PASS	5580.0129	PASS
40	120	5579.9807	PASS	5579.9837	PASS	5579.9839	PASS	5579.9805	PASS
30	120	5579.9951	PASS	5579.9952	PASS	5579.9936	PASS	5579.9952	PASS
20	120	5579.9864	PASS	5579.9854	PASS	5579.9887	PASS	5579.989	PASS
10	120	5579.9777	PASS	5579.9763	PASS	5579.9793	PASS	5579.9808	PASS
0	120	5579.9706	PASS	5579.9733	PASS	5579.9702	PASS	5579.9724	PASS
-10	120	5580.0171	PASS	5580.0169	PASS	5580.0189	PASS	5580.0182	PASS
-20	120	5579.9808	PASS	5579.9807	PASS	5579.9845	PASS	5579.985	PASS
-30	120	5580.0025	PASS	5580.0015	PASS	5580.0024	PASS	5580.0014	PASS
Max. Deviation (ppm)		-5.268817	PASS	-4.784946	PASS	-5.340502	PASS	-4.946237	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5580 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5579.9864	PASS	5579.986	PASS	5579.989	PASS	5579.9896	PASS
	120	5579.9864	PASS	5579.9854	PASS	5579.9887	PASS	5579.989	PASS
	102	5579.9864	PASS	5579.9847	PASS	5579.9876	PASS	5579.99	PASS
Max. Deviation (ppm)		-2.437276	PASS	-2.508961	PASS	-1.971326	PASS	-1.863799	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5700 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5700.0279	PASS	5700.0286	PASS	5700.0287	PASS	5700.0301	PASS
40	120	5700.0229	PASS	5700.0238	PASS	5700.021	PASS	5700.0218	PASS
30	120	5700.011	PASS	5700.0132	PASS	5700.0129	PASS	5700.0111	PASS
20	120	5699.9744	PASS	5699.972	PASS	5699.9736	PASS	5699.9754	PASS
10	120	5700.0294	PASS	5700.0243	PASS	5700.0264	PASS	5700.0276	PASS
0	120	5700.014	PASS	5700.0177	PASS	5700.0153	PASS	5700.0176	PASS
-10	120	5699.9759	PASS	5699.9791	PASS	5699.9803	PASS	5699.9776	PASS
-20	120	5699.998	PASS	5700.0006	PASS	5700.0014	PASS	5699.9971	PASS
-30	120	5700.0144	PASS	5700.0169	PASS	5700.0173	PASS	5700.0177	PASS
Max. Deviation (ppm)		5.157895	PASS	5.017544	PASS	5.035088	PASS	5.280702	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5700 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5699.9747	PASS	5699.973	PASS	5699.9731	PASS	5699.9744	PASS
	120	5699.9744	PASS	5699.972	PASS	5699.9736	PASS	5699.9754	PASS
	102	5699.975	PASS	5699.9711	PASS	5699.9744	PASS	5699.9764	PASS
Max. Deviation (ppm)		-4.491228	PASS	-5.070175	PASS	-4.719298	PASS	-4.491228	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5700 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5700.0225	PASS	5700.0214	PASS	5700.023	PASS	5700.0192	PASS
40	120	5700.0226	PASS	5700.0239	PASS	5700.02	PASS	5700.023	PASS
30	120	5699.9998	PASS	5699.9966	PASS	5699.9953	PASS	5699.996	PASS
20	120	5700.0035	PASS	5699.9987	PASS	5700.0022	PASS	5700.001	PASS
10	120	5699.9961	PASS	5699.9953	PASS	5699.995	PASS	5699.999	PASS
0	120	5699.9971	PASS	5699.996	PASS	5699.9981	PASS	5699.9983	PASS
-10	120	5700.0244	PASS	5700.0227	PASS	5700.0237	PASS	5700.0256	PASS
-20	120	5699.9795	PASS	5699.9784	PASS	5699.9805	PASS	5699.9825	PASS
-30	120	5700.0007	PASS	5700.0033	PASS	5700.0025	PASS	5700.0019	PASS
Max. Deviation (ppm)		4.280702	PASS	4.192982	PASS	4.157895	PASS	4.491228	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5700 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5700.0035	PASS	5699.9995	PASS	5700.002	PASS	5700.0008	PASS
	120	5700.0035	PASS	5699.9987	PASS	5700.0022	PASS	5700.001	PASS
	102	5700.0037	PASS	5699.9997	PASS	5700.0018	PASS	5700.0021	PASS
Max. Deviation (ppm)		0.614035	PASS	-0.228070	PASS	0.385965	PASS	0.175439	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5700 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5700.0144	PASS	5700.0165	PASS	5700.0161	PASS	5700.0149	PASS
40	120	5699.9808	PASS	5699.9824	PASS	5699.9822	PASS	5699.9805	PASS
30	120	5699.9925	PASS	5699.9892	PASS	5699.9911	PASS	5699.9931	PASS
20	120	5699.9761	PASS	5699.9769	PASS	5699.9802	PASS	5699.9791	PASS
10	120	5699.9902	PASS	5699.9902	PASS	5699.9855	PASS	5699.9897	PASS
0	120	5700.022	PASS	5700.0218	PASS	5700.0252	PASS	5700.0235	PASS
-10	120	5699.9822	PASS	5699.986	PASS	5699.9865	PASS	5699.9843	PASS
-20	120	5700.0043	PASS	5700.0015	PASS	5700.001	PASS	5700.003	PASS
-30	120	5699.9813	PASS	5699.9808	PASS	5699.9805	PASS	5699.9793	PASS
Max. Deviation (ppm)		-4.192982	PASS	-4.052632	PASS	4.421053	PASS	4.122807	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5700 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5699.9772	PASS	5699.9769	PASS	5699.9811	PASS	5699.9792	PASS
	120	5699.9761	PASS	5699.9769	PASS	5699.9802	PASS	5699.9791	PASS
	102	5699.9769	PASS	5699.9763	PASS	5699.9802	PASS	5699.9796	PASS
Max. Deviation (ppm)		-4.000000	PASS	-4.052632	PASS	-3.315789	PASS	-3.649123	PASS
IEEE Limit (ppm)		±20ppm							

11ac (40MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5270 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5270.0124	PASS	5270.0108	PASS	5270.0132	PASS	5270.0081	PASS
40	120	5270.0216	PASS	5270.0206	PASS	5270.0188	PASS	5270.0182	PASS
30	120	5269.9914	PASS	5269.9923	PASS	5269.9917	PASS	5269.9943	PASS
20	120	5270.0038	PASS	5270.0082	PASS	5270.0054	PASS	5270.007	PASS
10	120	5270.0095	PASS	5270.0078	PASS	5270.0098	PASS	5270.0078	PASS
0	120	5270.0072	PASS	5270.0078	PASS	5270.0064	PASS	5270.011	PASS
-10	120	5269.9993	PASS	5270.0041	PASS	5270.0034	PASS	5270.0039	PASS
-20	120	5269.9891	PASS	5269.9898	PASS	5269.9902	PASS	5269.9905	PASS
-30	120	5269.9856	PASS	5269.9862	PASS	5269.9831	PASS	5269.9848	PASS
Max. Deviation (ppm)		4.098672	PASS	3.908918	PASS	3.567362	PASS	3.453510	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5270 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5270.0028	PASS	5270.0077	PASS	5270.006	PASS	5270.0064	PASS
	120	5270.0038	PASS	5270.0082	PASS	5270.0054	PASS	5270.007	PASS
	102	5270.0034	PASS	5270.0087	PASS	5270.0059	PASS	5270.0072	PASS
Max. Deviation (ppm)		0.721063	PASS	1.650854	PASS	1.138520	PASS	1.366224	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5270 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5269.9775	PASS	5269.9779	PASS	5269.9804	PASS	5269.9774	PASS
40	120	5270.0182	PASS	5270.018	PASS	5270.0154	PASS	5270.0177	PASS
30	120	5270.016	PASS	5270.0171	PASS	5270.0143	PASS	5270.0131	PASS
20	120	5270.0246	PASS	5270.0231	PASS	5270.0248	PASS	5270.0261	PASS
10	120	5270.0004	PASS	5270.0011	PASS	5270.0023	PASS	5269.999	PASS
0	120	5270.0208	PASS	5270.0171	PASS	5270.0205	PASS	5270.0186	PASS
-10	120	5269.9841	PASS	5269.9869	PASS	5269.9831	PASS	5269.9879	PASS
-20	120	5270.0115	PASS	5270.0069	PASS	5270.0115	PASS	5270.0073	PASS
-30	120	5270.0227	PASS	5270.0273	PASS	5270.0253	PASS	5270.0268	PASS
Max. Deviation (ppm)		4.667932	PASS	5.180266	PASS	4.800759	PASS	5.085389	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5270 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5270.0253	PASS	5270.0224	PASS	5270.0253	PASS	5270.0256	PASS
	120	5270.0246	PASS	5270.0231	PASS	5270.0248	PASS	5270.0261	PASS
	102	5270.0255	PASS	5270.0234	PASS	5270.0242	PASS	5270.0265	PASS
Max. Deviation (ppm)		4.838710	PASS	4.440228	PASS	4.800759	PASS	5.028463	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5270 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5269.976	PASS	5269.975	PASS	5269.9743	PASS	5269.9792	PASS
40	120	5269.9915	PASS	5269.994	PASS	5269.9937	PASS	5269.9923	PASS
30	120	5270.0151	PASS	5270.0151	PASS	5270.0164	PASS	5270.0134	PASS
20	120	5270.0097	PASS	5270.011	PASS	5270.0108	PASS	5270.0117	PASS
10	120	5270.0007	PASS	5269.9975	PASS	5269.9976	PASS	5269.9965	PASS
0	120	5270.0157	PASS	5270.0142	PASS	5270.0133	PASS	5270.0143	PASS
-10	120	5269.9998	PASS	5269.9986	PASS	5269.9995	PASS	5269.9997	PASS
-20	120	5270.0133	PASS	5270.0131	PASS	5270.012	PASS	5270.0161	PASS
-30	120	5270.0157	PASS	5270.0165	PASS	5270.0149	PASS	5270.014	PASS
Max. Deviation (ppm)		2.979127	PASS	-4.743833	PASS	-4.876660	PASS	-3.946869	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5270 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5270.0104	PASS	5270.0103	PASS	5270.0113	PASS	5270.0111	PASS
	120	5270.0097	PASS	5270.011	PASS	5270.0108	PASS	5270.0117	PASS
	102	5270.0105	PASS	5270.0104	PASS	5270.0105	PASS	5270.0124	PASS
Max. Deviation (ppm)		1.992410	PASS	2.087287	PASS	2.144213	PASS	2.352941	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5310 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5309.9955	PASS	5309.9961	PASS	5309.9961	PASS	5309.9979	PASS
40	120	5309.9934	PASS	5309.9929	PASS	5309.9959	PASS	5309.9914	PASS
30	120	5310.0245	PASS	5310.0248	PASS	5310.0249	PASS	5310.027	PASS
20	120	5309.9923	PASS	5309.9885	PASS	5309.9887	PASS	5309.9909	PASS
10	120	5309.9927	PASS	5309.9912	PASS	5309.9939	PASS	5309.9936	PASS
0	120	5309.9887	PASS	5309.9888	PASS	5309.9853	PASS	5309.988	PASS
-10	120	5310.0021	PASS	5310.0013	PASS	5310.002	PASS	5309.9994	PASS
-20	120	5309.977	PASS	5309.9772	PASS	5309.9751	PASS	5309.9761	PASS
-30	120	5309.9826	PASS	5309.9865	PASS	5309.9845	PASS	5309.9851	PASS
Max. Deviation (ppm)		4.613936	PASS	4.670433	PASS	4.689266	PASS	5.084746	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5310 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5309.9932	PASS	5309.9887	PASS	5309.9889	PASS	5309.992	PASS
	120	5309.9923	PASS	5309.9885	PASS	5309.9887	PASS	5309.9909	PASS
	102	5309.993	PASS	5309.9895	PASS	5309.9886	PASS	5309.9908	PASS
Max. Deviation (ppm)		-1.450094	PASS	-2.165725	PASS	-2.146893	PASS	-1.732580	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5310 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5309.9968	PASS	5309.998	PASS	5309.9977	PASS	5310.0001	PASS
40	120	5309.9798	PASS	5309.9766	PASS	5309.9798	PASS	5309.9759	PASS
30	120	5310.0094	PASS	5310.0068	PASS	5310.0118	PASS	5310.0088	PASS
20	120	5309.9862	PASS	5309.9872	PASS	5309.9867	PASS	5309.9856	PASS
10	120	5309.9978	PASS	5309.9994	PASS	5309.9976	PASS	5310.0004	PASS
0	120	5309.9767	PASS	5309.98	PASS	5309.9761	PASS	5309.9771	PASS
-10	120	5309.9999	PASS	5310.0007	PASS	5310.0014	PASS	5309.9988	PASS
-20	120	5310.0265	PASS	5310.0229	PASS	5310.024	PASS	5310.028	PASS
-30	120	5310.0147	PASS	5310.0121	PASS	5310.0094	PASS	5310.0126	PASS
Max. Deviation (ppm)		4.990584	PASS	-4.406780	PASS	4.519774	PASS	5.273070	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5310 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5309.9852	PASS	5309.9875	PASS	5309.9868	PASS	5309.9859	PASS
	120	5309.9862	PASS	5309.9872	PASS	5309.9867	PASS	5309.9856	PASS
	102	5309.9866	PASS	5309.9871	PASS	5309.9863	PASS	5309.9847	PASS
Max. Deviation (ppm)		-2.787194	PASS	-2.429379	PASS	-2.580038	PASS	-2.881356	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5310 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5310.0184	PASS	5310.02	PASS	5310.0225	PASS	5310.0181	PASS
40	120	5310.0127	PASS	5310.0161	PASS	5310.0169	PASS	5310.0126	PASS
30	120	5310.0193	PASS	5310.0204	PASS	5310.0209	PASS	5310.0193	PASS
20	120	5310.0169	PASS	5310.0177	PASS	5310.0176	PASS	5310.0132	PASS
10	120	5310.0227	PASS	5310.0216	PASS	5310.021	PASS	5310.0219	PASS
0	120	5309.9932	PASS	5309.99	PASS	5309.9909	PASS	5309.9927	PASS
-10	120	5309.995	PASS	5309.9957	PASS	5309.9965	PASS	5309.9921	PASS
-20	120	5309.9819	PASS	5309.9783	PASS	5309.9783	PASS	5309.9811	PASS
-30	120	5309.9907	PASS	5309.9902	PASS	5309.9898	PASS	5309.9897	PASS
Max. Deviation (ppm)		4.274953	PASS	-4.086629	PASS	4.237288	PASS	4.124294	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5310 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5310.016	PASS	5310.0186	PASS	5310.0167	PASS	5310.014	PASS
	120	5310.0169	PASS	5310.0177	PASS	5310.0176	PASS	5310.0132	PASS
	102	5310.0161	PASS	5310.0179	PASS	5310.0168	PASS	5310.0136	PASS
Max. Deviation (ppm)		3.182674	PASS	3.502825	PASS	3.314501	PASS	2.636535	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5510 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5509.9723	PASS	5509.9734	PASS	5509.9746	PASS	5509.974	PASS
40	120	5509.9859	PASS	5509.9883	PASS	5509.9871	PASS	5509.9846	PASS
30	120	5509.9913	PASS	5509.9919	PASS	5509.9934	PASS	5509.9923	PASS
20	120	5509.9819	PASS	5509.9798	PASS	5509.9841	PASS	5509.9804	PASS
10	120	5509.9768	PASS	5509.9776	PASS	5509.9777	PASS	5509.981	PASS
0	120	5509.984	PASS	5509.9838	PASS	5509.9821	PASS	5509.9844	PASS
-10	120	5509.991	PASS	5509.991	PASS	5509.9904	PASS	5509.9912	PASS
-20	120	5509.9955	PASS	5509.9922	PASS	5509.9943	PASS	5509.9935	PASS
-30	120	5510.0069	PASS	5510.0111	PASS	5510.0111	PASS	5510.0114	PASS
Max. Deviation (ppm)		-5.027223	PASS	-4.827586	PASS	-4.609800	PASS	-4.718693	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5510 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5509.9827	PASS	5509.9804	PASS	5509.983	PASS	5509.9812	PASS
	120	5509.9819	PASS	5509.9798	PASS	5509.9841	PASS	5509.9804	PASS
	102	5509.9816	PASS	5509.98	PASS	5509.984	PASS	5509.9804	PASS
Max. Deviation (ppm)		-3.339383	PASS	-3.666062	PASS	-3.085299	PASS	-3.557169	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5510 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5510.0264	PASS	5510.025	PASS	5510.0283	PASS	5510.0288	PASS
40	120	5510.0054	PASS	5510.0062	PASS	5510.0058	PASS	5510.0051	PASS
30	120	5510.0033	PASS	5510.0033	PASS	5510.0073	PASS	5510.0054	PASS
20	120	5509.978	PASS	5509.9768	PASS	5509.9773	PASS	5509.975	PASS
10	120	5509.9971	PASS	5509.9981	PASS	5509.9994	PASS	5509.9961	PASS
0	120	5510.0044	PASS	5510.0057	PASS	5510.0061	PASS	5510.0015	PASS
-10	120	5509.9876	PASS	5509.9877	PASS	5509.9898	PASS	5509.9865	PASS
-20	120	5510.0099	PASS	5510.0129	PASS	5510.0133	PASS	5510.0118	PASS
-30	120	5509.9785	PASS	5509.9788	PASS	5509.9769	PASS	5509.9767	PASS
Max. Deviation (ppm)		4.791289	PASS	4.537205	PASS	5.136116	PASS	5.226860	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5510 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5509.9778	PASS	5509.9764	PASS	5509.9772	PASS	5509.974	PASS
	120	5509.978	PASS	5509.9768	PASS	5509.9773	PASS	5509.975	PASS
	102	5509.9789	PASS	5509.9773	PASS	5509.9776	PASS	5509.9743	PASS
Max. Deviation (ppm)		-4.029038	PASS	-4.283122	PASS	-4.137931	PASS	-4.718693	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5510 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5510.0159	PASS	5510.0147	PASS	5510.0138	PASS	5510.0131	PASS
40	120	5510.0012	PASS	5510.0014	PASS	5510.0061	PASS	5510.004	PASS
30	120	5510.0101	PASS	5510.0101	PASS	5510.0096	PASS	5510.009	PASS
20	120	5509.992	PASS	5509.9921	PASS	5509.9965	PASS	5509.9951	PASS
10	120	5510.0267	PASS	5510.0257	PASS	5510.0263	PASS	5510.0264	PASS
0	120	5510.0188	PASS	5510.017	PASS	5510.0204	PASS	5510.0177	PASS
-10	120	5509.9788	PASS	5509.9796	PASS	5509.9774	PASS	5509.9801	PASS
-20	120	5509.9721	PASS	5509.9708	PASS	5509.972	PASS	5509.9747	PASS
-30	120	5510.0212	PASS	5510.0204	PASS	5510.0193	PASS	5510.0219	PASS
Max. Deviation (ppm)		-5.063521	PASS	-5.299456	PASS	-5.081670	PASS	4.791289	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5510 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5509.991	PASS	5509.9914	PASS	5509.9961	PASS	5509.9961	PASS
	120	5509.992	PASS	5509.9921	PASS	5509.9965	PASS	5509.9951	PASS
	102	5509.9922	PASS	5509.993	PASS	5509.9968	PASS	5509.9941	PASS
Max. Deviation (ppm)		-1.633394	PASS	-1.560799	PASS	-0.707804	PASS	-1.070780	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5550 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5550.0104	PASS	5550.0106	PASS	5550.012	PASS	5550.011	PASS
40	120	5549.981	PASS	5549.9795	PASS	5549.977	PASS	5549.9775	PASS
30	120	5550.0158	PASS	5550.0157	PASS	5550.0125	PASS	5550.0165	PASS
20	120	5550.0222	PASS	5550.0259	PASS	5550.0227	PASS	5550.0225	PASS
10	120	5549.9769	PASS	5549.9797	PASS	5549.978	PASS	5549.9779	PASS
0	120	5549.9834	PASS	5549.9826	PASS	5549.9838	PASS	5549.9835	PASS
-10	120	5549.9807	PASS	5549.98	PASS	5549.9784	PASS	5549.9787	PASS
-20	120	5549.9767	PASS	5549.9804	PASS	5549.9804	PASS	5549.9777	PASS
-30	120	5550.0225	PASS	5550.0214	PASS	5550.019	PASS	5550.0196	PASS
Max. Deviation (ppm)		-4.198198	PASS	4.666667	PASS	-4.144144	PASS	4.054054	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5550 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5550.0222	PASS	5550.0267	PASS	5550.0222	PASS	5550.0223	PASS
	120	5550.0222	PASS	5550.0259	PASS	5550.0227	PASS	5550.0225	PASS
	102	5550.0217	PASS	5550.0268	PASS	5550.0235	PASS	5550.023	PASS
Max. Deviation (ppm)		4.000000	PASS	4.828829	PASS	4.234234	PASS	4.144144	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5550 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5550.0188	PASS	5550.0208	PASS	5550.0199	PASS	5550.0171	PASS
40	120	5550.0048	PASS	5550.0004	PASS	5550.0017	PASS	5550.0053	PASS
30	120	5550.0243	PASS	5550.0279	PASS	5550.0256	PASS	5550.0247	PASS
20	120	5549.9875	PASS	5549.9874	PASS	5549.9869	PASS	5549.9878	PASS
10	120	5550.0207	PASS	5550.0237	PASS	5550.0237	PASS	5550.0227	PASS
0	120	5550.0083	PASS	5550.0126	PASS	5550.0092	PASS	5550.0131	PASS
-10	120	5549.9907	PASS	5549.992	PASS	5549.9916	PASS	5549.9885	PASS
-20	120	5550.0077	PASS	5550.008	PASS	5550.0097	PASS	5550.0103	PASS
-30	120	5549.9771	PASS	5549.9781	PASS	5549.9795	PASS	5549.9772	PASS
Max. Deviation (ppm)		4.378378	PASS	5.027027	PASS	4.612613	PASS	4.450450	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5550 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5549.987	PASS	5549.9877	PASS	5549.9861	PASS	5549.987	PASS
	120	5549.9875	PASS	5549.9874	PASS	5549.9869	PASS	5549.9878	PASS
	102	5549.9883	PASS	5549.9871	PASS	5549.9862	PASS	5549.9881	PASS
Max. Deviation (ppm)		-2.342342	PASS	-2.324324	PASS	-2.504505	PASS	-2.342342	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5550 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5549.9944	PASS	5549.9969	PASS	5549.9967	PASS	5549.9928	PASS
40	120	5549.9858	PASS	5549.9877	PASS	5549.9889	PASS	5549.9889	PASS
30	120	5549.9945	PASS	5549.9945	PASS	5549.9943	PASS	5549.9995	PASS
20	120	5550.0074	PASS	5550.0087	PASS	5550.0103	PASS	5550.0105	PASS
10	120	5549.9712	PASS	5549.9738	PASS	5549.9701	PASS	5549.9751	PASS
0	120	5550.0224	PASS	5550.0238	PASS	5550.0193	PASS	5550.0197	PASS
-10	120	5550.0151	PASS	5550.0127	PASS	5550.014	PASS	5550.0149	PASS
-20	120	5550.0105	PASS	5550.0099	PASS	5550.0109	PASS	5550.0095	PASS
-30	120	5550.0138	PASS	5550.0101	PASS	5550.0127	PASS	5550.015	PASS
Max. Deviation (ppm)		-5.189189	PASS	-4.720721	PASS	-5.387387	PASS	-4.486486	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5550 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5550.0081	PASS	5550.0089	PASS	5550.011	PASS	5550.0096	PASS
	120	5550.0074	PASS	5550.0087	PASS	5550.0103	PASS	5550.0105	PASS
	102	5550.0079	PASS	5550.0087	PASS	5550.01	PASS	5550.0096	PASS
Max. Deviation (ppm)		1.459459	PASS	1.603604	PASS	1.981982	PASS	1.891892	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5670 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5669.9819	PASS	5669.9852	PASS	5669.9826	PASS	5669.9864	PASS
40	120	5669.9986	PASS	5669.9987	PASS	5669.9944	PASS	5669.9993	PASS
30	120	5669.983	PASS	5669.9834	PASS	5669.9803	PASS	5669.9819	PASS
20	120	5670.0081	PASS	5670.0052	PASS	5670.0082	PASS	5670.0049	PASS
10	120	5669.9883	PASS	5669.9867	PASS	5669.985	PASS	5669.9879	PASS
0	120	5670.0131	PASS	5670.0101	PASS	5670.0132	PASS	5670.0123	PASS
-10	120	5669.9855	PASS	5669.9869	PASS	5669.983	PASS	5669.9861	PASS
-20	120	5670.0005	PASS	5669.9981	PASS	5670.0004	PASS	5670.002	PASS
-30	120	5670.017	PASS	5670.0132	PASS	5670.0147	PASS	5670.0128	PASS
Max. Deviation (ppm)		-3.192240	PASS	-2.927690	PASS	-3.474427	PASS	-3.192240	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5670 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5670.0076	PASS	5670.0062	PASS	5670.0072	PASS	5670.005	PASS
	120	5670.0081	PASS	5670.0052	PASS	5670.0082	PASS	5670.0049	PASS
	102	5670.0084	PASS	5670.0041	PASS	5670.0086	PASS	5670.0038	PASS
Max. Deviation (ppm)		1.481481	PASS	1.093474	PASS	1.516755	PASS	0.881834	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5670 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5669.9797	PASS	5669.9771	PASS	5669.9757	PASS	5669.9786	PASS
40	120	5670.0227	PASS	5670.0193	PASS	5670.021	PASS	5670.02	PASS
30	120	5669.9794	PASS	5669.9791	PASS	5669.9817	PASS	5669.9829	PASS
20	120	5669.9891	PASS	5669.9925	PASS	5669.9902	PASS	5669.989	PASS
10	120	5669.9733	PASS	5669.9729	PASS	5669.9757	PASS	5669.9734	PASS
0	120	5669.9947	PASS	5669.996	PASS	5669.9944	PASS	5669.9932	PASS
-10	120	5669.9981	PASS	5670.0002	PASS	5670.0022	PASS	5670.0022	PASS
-20	120	5669.9914	PASS	5669.9874	PASS	5669.9872	PASS	5669.9886	PASS
-30	120	5669.9827	PASS	5669.9784	PASS	5669.9782	PASS	5669.9783	PASS
Max. Deviation (ppm)		-4.708995	PASS	-4.779541	PASS	-4.285714	PASS	-4.691358	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5670 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5669.9891	PASS	5669.9926	PASS	5669.991	PASS	5669.9897	PASS
	120	5669.9891	PASS	5669.9925	PASS	5669.9902	PASS	5669.989	PASS
	102	5669.9899	PASS	5669.9915	PASS	5669.9913	PASS	5669.9892	PASS
Max. Deviation (ppm)		-1.922399	PASS	-1.499118	PASS	-1.728395	PASS	-1.940035	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5670 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5670.0134	PASS	5670.0137	PASS	5670.0131	PASS	5670.012	PASS
40	120	5669.9881	PASS	5669.9913	PASS	5669.9893	PASS	5669.9894	PASS
30	120	5670.0015	PASS	5670.0043	PASS	5670.0012	PASS	5670.0014	PASS
20	120	5669.9945	PASS	5669.9965	PASS	5669.9964	PASS	5669.9925	PASS
10	120	5669.9864	PASS	5669.9848	PASS	5669.9879	PASS	5669.9883	PASS
0	120	5669.9842	PASS	5669.9834	PASS	5669.9879	PASS	5669.9854	PASS
-10	120	5669.9835	PASS	5669.9807	PASS	5669.9851	PASS	5669.9856	PASS
-20	120	5670.0167	PASS	5670.017	PASS	5670.0202	PASS	5670.0181	PASS
-30	120	5669.9957	PASS	5669.9968	PASS	5669.9959	PASS	5670.0008	PASS
Max. Deviation (ppm)		2.945326	PASS	-3.403880	PASS	3.562610	PASS	3.192240	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5670 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5669.9936	PASS	5669.9959	PASS	5669.9961	PASS	5669.9929	PASS
	120	5669.9945	PASS	5669.9965	PASS	5669.9964	PASS	5669.9925	PASS
	102	5669.995	PASS	5669.996	PASS	5669.9967	PASS	5669.9928	PASS
Max. Deviation (ppm)		-1.128748	PASS	-0.723104	PASS	-0.687831	PASS	-1.322751	PASS
IEEE Limit (ppm)		±20ppm							

11ac (80MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5290 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5290.0059	PASS	5290.0026	PASS	5290.0036	PASS	5290.0017	PASS
40	120	5290.0235	PASS	5290.0242	PASS	5290.0214	PASS	5290.0236	PASS
30	120	5290.0000	PASS	5290.0033	PASS	5290.0022	PASS	5290.0043	PASS
20	120	5289.9905	PASS	5289.9942	PASS	5289.9919	PASS	5289.9935	PASS
10	120	5289.9768	PASS	5289.9766	PASS	5289.977	PASS	5289.9775	PASS
0	120	5290.0165	PASS	5290.0198	PASS	5290.0162	PASS	5290.0161	PASS
-10	120	5289.9787	PASS	5289.9758	PASS	5289.979	PASS	5289.9794	PASS
-20	120	5289.976	PASS	5289.9744	PASS	5289.9782	PASS	5289.9748	PASS
-30	120	5290.0225	PASS	5290.0192	PASS	5290.0192	PASS	5290.0184	PASS
Max. Deviation (ppm)		-4.536862	PASS	-4.839319	PASS	-4.347826	PASS	-4.763705	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5290 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5289.9905	PASS	5289.9936	PASS	5289.9915	PASS	5289.9937	PASS
	120	5289.9905	PASS	5289.9942	PASS	5289.9919	PASS	5289.9935	PASS
	102	5289.9907	PASS	5289.9951	PASS	5289.9929	PASS	5289.9932	PASS
Max. Deviation (ppm)		-1.795841	PASS	-1.209830	PASS	-1.606805	PASS	-1.285444	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5290 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5289.9906	PASS	5289.992	PASS	5289.9874	PASS	5289.9906	PASS
40	120	5290.0138	PASS	5290.0141	PASS	5290.0139	PASS	5290.0118	PASS
30	120	5289.9845	PASS	5289.9844	PASS	5289.9875	PASS	5289.9867	PASS
20	120	5290.0141	PASS	5290.0159	PASS	5290.0159	PASS	5290.0177	PASS
10	120	5290.0047	PASS	5290.0055	PASS	5290.0047	PASS	5290.006	PASS
0	120	5290.0026	PASS	5290.0035	PASS	5290.0045	PASS	5290.0058	PASS
-10	120	5290.0185	PASS	5290.0224	PASS	5290.0224	PASS	5290.0204	PASS
-20	120	5289.9752	PASS	5289.9782	PASS	5289.9734	PASS	5289.9781	PASS
-30	120	5289.9935	PASS	5289.9938	PASS	5289.9922	PASS	5289.992	PASS
Max. Deviation (ppm)		-4.688091	PASS	4.234405	PASS	-5.028355	PASS	-4.139887	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5290 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5290.0151	PASS	5290.0161	PASS	5290.0154	PASS	5290.018	PASS
	120	5290.0141	PASS	5290.0159	PASS	5290.0159	PASS	5290.0177	PASS
	102	5290.0149	PASS	5290.0168	PASS	5290.0155	PASS	5290.0186	PASS
Max. Deviation (ppm)		2.854442	PASS	3.175803	PASS	3.005671	PASS	3.516068	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5290 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5289.9925	PASS	5289.9949	PASS	5289.9967	PASS	5289.9957	PASS
40	120	5290.0211	PASS	5290.0228	PASS	5290.0232	PASS	5290.0224	PASS
30	120	5289.9968	PASS	5289.9955	PASS	5289.993	PASS	5289.9959	PASS
20	120	5289.9923	PASS	5289.9919	PASS	5289.9938	PASS	5289.995	PASS
10	120	5289.9819	PASS	5289.9823	PASS	5289.9801	PASS	5289.9787	PASS
0	120	5290.0087	PASS	5290.011	PASS	5290.0084	PASS	5290.01	PASS
-10	120	5290.0108	PASS	5290.0108	PASS	5290.0104	PASS	5290.0098	PASS
-20	120	5289.9773	PASS	5289.9773	PASS	5289.9784	PASS	5289.9756	PASS
-30	120	5289.9892	PASS	5289.9873	PASS	5289.9872	PASS	5289.9886	PASS
Max. Deviation (ppm)		-4.291115	PASS	4.310019	PASS	4.385633	PASS	-4.612476	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5290 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5289.9916	-0.00016	5289.9922	-0.00015	5289.9935	-0.00012	5289.9941	PASS
	120	5289.9923	-0.00015	5289.9919	-0.00015	5289.9938	-0.00012	5289.995	PASS
	102	5289.9921	-0.00015	5289.9915	-0.00016	5289.9934	-0.00012	5289.9954	PASS
Max. Deviation (ppm)		-1.587902	PASS	-1.606805	PASS	-1.247637	PASS	-1.115312	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5530 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	20	5529.9848	PASS	5529.9842	PASS	5529.9817	PASS	5529.9845	PASS
40	120	5530.0011	PASS	5530.0013	PASS	5530.0044	PASS	5530.0059	PASS
30	120	5529.9983	PASS	5530.0005	PASS	5529.9997	PASS	5529.9967	PASS
20	120	5529.9754	PASS	5529.9795	PASS	5529.9755	PASS	5529.976	PASS
10	120	5530.0139	PASS	5530.0166	PASS	5530.0147	PASS	5530.0169	PASS
0	120	5529.9924	PASS	5529.9914	PASS	5529.9884	PASS	5529.9924	PASS
-10	120	5530.0034	PASS	5530.0005	PASS	5530.0027	PASS	5529.9998	PASS
-20	120	5529.9839	PASS	5529.9831	PASS	5529.9856	PASS	5529.9853	PASS
-30	120	5530.0106	PASS	5530.0086	PASS	5530.0117	PASS	5530.0098	PASS
Max. Deviation (ppm)		-4.448463	PASS	-3.707052	PASS	-4.430380	PASS	-4.339964	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5530 MHz Chain1									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5529.9748	PASS	5529.9788	PASS	5529.9757	PASS	5529.9754	PASS
	120	5529.9754	PASS	5529.9795	PASS	5529.9755	PASS	5529.976	PASS
	102	5529.9755	PASS	5529.9804	PASS	5529.9747	PASS	5529.9763	PASS
Max. Deviation (ppm)		-4.556962	PASS	-3.833635	PASS	-4.575045	PASS	-4.448463	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5530 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5529.976	PASS	5529.9743	PASS	5529.9748	PASS	5529.9767	PASS
40	120	5529.976	PASS	5529.9788	PASS	5529.9796	PASS	5529.9796	PASS
30	120	5529.9819	PASS	5529.9834	PASS	5529.9817	PASS	5529.982	PASS
20	120	5529.9803	PASS	5529.9851	PASS	5529.9798	PASS	5529.9846	PASS
10	120	5530.0019	PASS	5530.0023	PASS	5530.0038	PASS	5530.0035	PASS
0	120	5530.0095	PASS	5530.0095	PASS	5530.0123	PASS	5530.0089	PASS
-10	120	5529.9749	PASS	5529.9738	PASS	5529.9758	PASS	5529.9723	PASS
-20	120	5530.0003	PASS	5530.0007	PASS	5529.9973	PASS	5529.9972	PASS
-30	120	5529.9743	PASS	5529.9721	PASS	5529.972	PASS	5529.9766	PASS
Max. Deviation (ppm)		-4.647378	PASS	-5.045208	PASS	-5.063291	PASS	-5.009042	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5530 MHz Chain2									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5529.9803	PASS	5529.9853	PASS	5529.9807	PASS	5529.9854	PASS
	120	5529.9803	PASS	5529.9851	PASS	5529.9798	PASS	5529.9846	PASS
	102	5529.9802	PASS	5529.9844	PASS	5529.9805	PASS	5529.9848	PASS
Max. Deviation (ppm)		-3.580470	PASS	-2.820976	PASS	-3.652803	PASS	-2.784810	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5530 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5530.0052	PASS	5530.0072	PASS	5530.006	PASS	5530.009	PASS
40	120	5529.9838	PASS	5529.9845	PASS	5529.9828	PASS	5529.9854	PASS
30	120	5529.9983	PASS	5529.9973	PASS	5529.9988	PASS	5529.999	PASS
20	120	5529.9988	PASS	5529.9971	PASS	5529.9982	PASS	5529.9971	PASS
10	120	5530.0189	PASS	5530.0207	PASS	5530.0216	PASS	5530.0196	PASS
0	120	5530.0134	PASS	5530.0118	PASS	5530.0152	PASS	5530.013	PASS
-10	120	5529.9748	PASS	5529.9764	PASS	5529.9766	PASS	5529.977	PASS
-20	120	5529.9774	PASS	5529.9787	PASS	5529.9772	PASS	5529.9808	PASS
-30	120	5530.0174	PASS	5530.0168	PASS	5530.0171	PASS	5530.0176	PASS
Max. Deviation (ppm)		-4.556962	PASS	-4.267631	PASS	-4.231465	PASS	-4.159132	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5530 MHz Chain3									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5529.999	PASS	5529.9976	PASS	5529.9987	PASS	5529.9978	PASS
	120	5529.9988	PASS	5529.9971	PASS	5529.9982	PASS	5529.9971	PASS
	102	5529.999	PASS	5529.9969	PASS	5529.9983	PASS	5529.9966	PASS
Max. Deviation (ppm)		-0.216998	PASS	-0.560579	PASS	-0.325497	PASS	-0.614828	PASS
IEEE Limit (ppm)		±20ppm							

5 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCS 30	100288	Aug. 17, 2017	Aug. 16, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Dec. 22, 2016	Dec. 21, 2017
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 17, 2017	Jan. 16, 2018
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 02, 2017	Aug. 01, 2018
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2040.

Tested date: Aug. 17 ~ Sep. 14, 2017

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Mar. 27, 2017	Mar. 26, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	May. 11, 2017	May. 10, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-148	Dec. 28, 2016	Dec. 27, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Dec. 27, 2016	Dec. 26, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 14, 2016	Dec. 13, 2017
Loop Antenna EMCI	EM-6879	269	Aug. 10, 2017	Aug. 09, 2018
Preamplifier Agilent	8449B	3008A01638	Feb. 22, 2017	Feb. 21, 2018
Preamplifier Agilent	8447D	2944A10638	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-02 (248780+MY13377)	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Aug. 08, 2017	Aug. 07, 2018
RF signal cable Woken	8D-FB	Cable-CH9-01	Aug. 01, 2017	Jul. 31, 2018
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA

Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
5. The IC Site Registration No. is IC 7450F-9.

Tested date: Aug. 23, 2017

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
High Speed Peak Power Meter	ML2495A	0824012	Aug. 18, 2017	Aug. 17, 2018
Power Sensor	MA2411B	0738171	Aug. 18, 2017	Aug. 17, 2018

Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
5. The IC Site Registration No. is IC 7450F-9.

Appendix - Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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