

FCC RF Test Report (WLAN 5GHz)

Report No.: RF170724C40-1

FCC ID: RSE-TG389ACHP

Equipment Name: Media Access Gateway

Trade Name: technicolor

Model Number: TG389ac HP

Product Code: RGWCBA389AM

Received Date: July 24, 2017

Test Date: July 28 to Aug. 09, 2017

Issued Date: Sep. 13, 2017

Applicant: Technicolor Delivery Technologies Belgium

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Release Control Record

Issue No.	Description	Date Issued
RF170724C40-1	Original release.	Sep. 13, 2017

1 Certificate of Conformity

Equipment Name: Media Access Gateway

Trade Name: technicolor

Test Model: TG389ac HP

Product Code: RGWCBA389AM

Sample Status: Product Unit

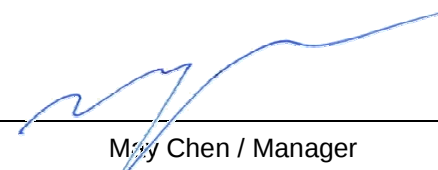
Applicant: Technicolor Delivery Technologies Belgium

Test Date: July 28 to Aug. 09, 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:** Sep. 13, 2017
Claire Kuan / Specialist

Approved by :  , **Date:** Sep. 13, 2017
May Chen / 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 -3.21dB at 0.15000MHz.	-	PASS
4.2	-	99% Occupied Bandwidth & 26dB Bandwidth	5150-5250MHz: 11a: 17.16 MHz 11ac (20M):18.60 MHz 11ac (40M):37.20 MHz 11ac (80M):76.32 MHz 5725-5850MHz: 11a: 22.80 MHz 11ac (20M):24.00 MHz 11ac (40M):40.80 MHz 11ac (80M):80.48 MHz 26dB Bandwidth 5150-5250MHz: 11a: 29.58 MHz 11ac (20M):34.17 MHz 11ac (40M):82.86 MHz 11ac (80M):82.53 MHz	-	-
4.3	15.407(e)	6dB bandwidth for U-NII-3	5725-5850MHz: 11a: 16.35 MHz 11ac (20M):16.97 MHz 11ac (40M):36.16 MHz 11ac (80M):75.53 MHz	≥500kHz	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)	Maximum Conducted Output Power	5150-5250MHz: 11a: 1S3T CDD: 25.44 dBm 11ac (20M): 3S3T SDM: 26.16 dBm 1S3T TxBF: 25.61 dBm 2S3T TxBF: 25.55 dBm 11ac (40M): 3S3T SDM: 23.93 dBm 1S3T TxBF: 23.93 dBm 2S3T TxBF: 24.23 dBm 11ac (80M): 3S3T SDM: 18.16 dBm 1S3T TxBF: 17.98 dBm 2S3T TxBF: 18.33 dBm 5725-5850MHz: 11a: 1S3T CDD: 25.69 dBm 11ac (20M): 3S3T SDM: 26.00 dBm 1S3T TxBF: 25.88 dBm 2S3T TxBF: 25.80 dBm 11ac (40M): 3S3T SDM: 24.13 dBm 1S3T TxBF: 23.95 dBm 2S3T TxBF: 23.89 dBm 11ac (80M): 3S3T SDM: 24.23 dBm 1S3T TxBF: 24.16 dBm 2S3T TxBF: 23.75 dBm	Power [dBm] 5150-5250MHz:30 5725-5850MHz:30	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
4.5	15.407 (a)(1/2/3)	Power Spectral Density	5150-5250MHz: [dBm/MHz] 11a: 1S3T CDD: 11.75 11ac (20M): 3S3T SDM: 11.72 1S3T TxBF: 11.38 2S3T TxBF: 11.42 11ac (40M): 3S3T SDM: 6.80 1S3T TxBF: 7.06 2S3T TxBF: 7.21 11ac (80M): 3S3T SDM: -1.10 1S3T TxBF: -0.50 2S3T TxBF: -0.65 5725-5850MHz: [dBm/500kHz] 11a: 1S3T CDD: 6.97 11ac (20M): 3S3T SDM: 6.63 1S3T TxBF: 6.61 2S3T TxBF: 6.29 11ac (40M): 3S3T SDM: 1.46 1S3T TxBF: 1.38 2S3T TxBF: 1.18 11ac (80M): 3S3T SDM: -2.28 1S3T TxBF: -2.04 2S3T TxBF: -2.33	5150-5250MHz: 17 [dBm/MHz] 5725-5850MHz: 30 [dBm/500kHz]	PASS
4.6	15.407 (b)(1/2/3/4/6)	Radiated Emissions	Margin is -5.0dB at 34.95MHz.	-	PASS
		Band Edge	Margin is -0.1dB at 5098.00MHz	-	PASS
4.7	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) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.84 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.30 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.16 dB
	6GHz ~ 18GHz	4.91 dB
	18GHz ~ 40GHz	5.30 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	Media Access Gateway			
Trade Name	technicolor			
Model Number	TG389ac HP			
Product Code	RGWCBA389AM			
FCC ID	RSE-TG389ACHP			
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: 1S3T CDD Mode: 25.44 dBm
			☒	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 26.16 dBm 1S3T TxBF Mode: 25.61 dBm 2S3T TxBF Mode: 25.55 dBm
			☒	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 23.93 dBm 1S3T TxBF Mode: 23.93 dBm 2S3T TxBF Mode: 24.23 dBm
			☒	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 18.16 dBm 1S3T TxBF Mode: 17.98 dBm 2S3T TxBF Mode: 18.33 dBm
	U-NII-2A 5250~5350MHz	☐	☐	IEEE 802.11a:
			☐	IEEE 802.11ac (20MHz) :
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
	U-NII-2C 5470~ 5725 MHz	☐	☐	IEEE 802.11a:
			☐	IEEE 802.11ac (20MHz):
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
	U-NII-3 5725~ 5850 MHz	☒	☒	IEEE 802.11a: 1S3T CDD Mode: 25.69 dBm
			☒	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 26.00 dBm 1S3T TxBF Mode: 25.88 dBm 2S3T TxBF Mode: 25.80 dBm
			☒	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 24.13 dBm 1S3T TxBF Mode: 23.95 dBm 2S3T TxBF Mode: 23.89 dBm
			☒	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 24.23 dBm 1S3T TxBF Mode: 24.16 dBm 2S3T TxBF Mode: 23.75 dBm

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 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	LAN Port x 4 WAN Port x 1 USB 2.0 Port x 2 FXS Port x 2			
Hardware Version	Beta			
Software Version	17.3.0097-0180000-20170725030736-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19			

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	390.0
	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	AcBel
Model	WAE004
P/N	DSL37751470
ID	ADXG
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	Ethernet LAN 1000Mbps	Ethernet WAN 1000Mbps	FXS	USB 2.0	WLAN IEEE 802.11n (2.4GHz)	WLAN IEEE 802.11ac (5GHz)
TG389ac HP	12Vdc, 2.25A	● (4 port)	● (1 port)	● (2 port)	● (2 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.

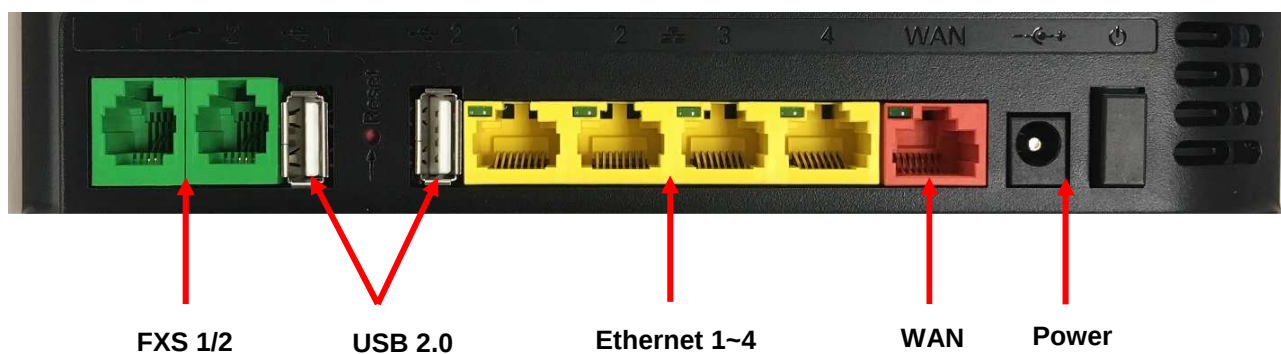
NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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
ETH1, WAN	UTP Cat 5	2 meter	> 10 meter	Two 10 meter cables;	Internal
FXS1/2	UTP Cat 3	2 meter	> 10 meter	1 meter flat cable	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 5150~5250MHz & 5725~5850MHz

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.

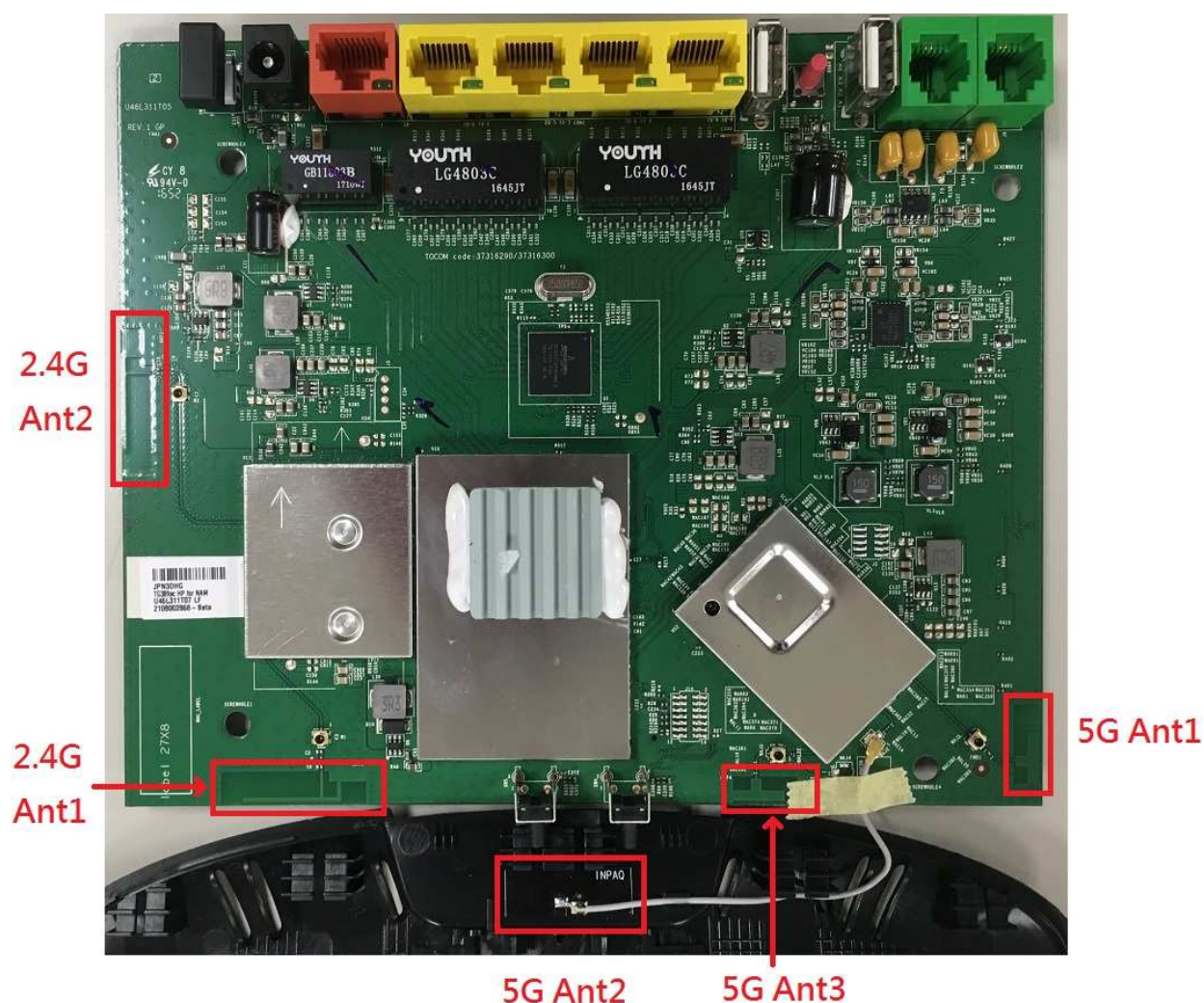
3.10 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	Printed Antenna	Murata
2	INPAQ	WA-T-LC-03-005	PCB Antenna	I-Pex
3	-	-	Printed Antenna	Murata

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

Antenna location



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	3.48	-	-	5.82	-	-
5190MHz	-	3.97	-	-	5.79	-
5200MHz	3.44	-	-	5.52	-	-
5210MHz	-	-	3.47	-	-	5.52
5230MHz	-	3.18	-	-	5.41	-
5240MHz	3.73	-	-	5.66	-	-
5260MHz	3.16	-	-	5.36	-	-
5270MHz	-	3.49	-	-	5.93	-
5290MHz	-	-	3.69	-	-	5.87
5300MHz	3.67	-	-	5.77	-	-
5310MHz	-	3.41	-	-	5.68	-
5320MHz	3.51	-	-	5.69	-	-
5500MHz	3.47	-	-	5.74	-	-
5510MHz	-	3.93	-	-	6.33	-
5530MHz	-	-	3.34	-	-	6.35
5550MHz	-	3.34	-	-	6.05	-
5580MHz	3.77	-	-	6.63	-	-
5670MHz	-	3.67	-	-	6.01	-
5700MHz	3.84	-	-	5.82	-	-
5745MHz	3.94	-	-	6.33	-	-
5755MHz	-	3.97	-	-	7.15	-
5775MHz	-	-	3.96	-	-	6.39
5785MHz	3.92	-	-	6.15	-	-
5795MHz	-	3.90	-	-	5.27	-
5825MHz	3.91	-	-	6.32	-	-

Note:

1. Antenna Gain refer to "TG389ac HP with shielding antenna table_20161012.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ 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	1.27	-	-	1.27	-	-
5190MHz	-	1.67	-	-	1.67	-
5200MHz	1.33	-	-	1.33	-	-
5210MHz	-	-	1.09	-	-	1.09
5230MHz	-	1.01	-	-	1.01	-
5240MHz	1.40	-	-	1.40	-	-
5260MHz	1.04	-	-	1.04	-	-
5270MHz	-	1.30	-	-	1.30	-
5290MHz	-	-	1.35	-	-	1.35
5300MHz	1.37	-	-	1.37	-	-
5310MHz	-	1.20	-	-	1.20	-
5320MHz	1.37	-	-	1.37	-	-
5500MHz	1.18	-	-	1.18	-	-
5510MHz	-	1.64	-	-	1.64	-
5530MHz	-	-	1.64	-	-	1.64
5550MHz	-	1.35	-	-	1.35	-
5580MHz	1.94	-	-	1.94	-	-
5670MHz	-	1.31	-	-	1.31	-
5700MHz	1.19	-	-	1.19	-	-
5745MHz	1.76	-	-	1.76	-	-
5755MHz	-	2.47	-	-	2.47	-
5775MHz	-	-	1.80	-	-	1.80
5785MHz	1.62	-	-	1.62	-	-
5795MHz	-	0.87	-	-	0.87	-
5825MHz	1.60	-	-	1.60	-	-

Note:

1. Antenna Gain refer to "TG389ac HP with shielding antenna table_20161012.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ 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	5.82	-	-	5.82	-	-
5190MHz	-	5.79	-	-	5.79	-
5200MHz	5.52	-	-	5.52	-	-
5210MHz	-	-	5.52	-	-	5.52
5230MHz	-	5.41	-	-	5.41	-
5240MHz	5.66	-	-	5.66	-	-
5260MHz	5.36	-	-	5.36	-	-
5270MHz	-	5.93	-	-	5.93	-
5290MHz	-	-	5.87	-	-	5.87
5300MHz	5.77	-	-	5.77	-	-
5310MHz	-	5.68	-	-	5.68	-
5320MHz	5.69	-	-	5.69	-	-
5500MHz	5.74	-	-	5.74	-	-
5510MHz	-	6.33	-	-	6.33	-
5530MHz	-	-	6.35	-	-	6.35
5550MHz	-	6.05	-	-	6.05	-
5580MHz	6.63	-	-	6.63	-	-
5670MHz	-	6.01	-	-	6.01	-
5700MHz	5.82	-	-	5.82	-	-
5745MHz	6.33	-	-	6.33	-	-
5755MHz	-	7.15	-	-	7.15	-
5775MHz	-	-	6.39	-	-	6.39
5785MHz	6.15	-	-	6.15	-	-
5795MHz	-	5.27	-	-	5.27	-
5825MHz	6.32	-	-	6.32	-	-

Note:

1. Antenna Gain refer to "TG389ac HP with shielding antenna table_20161012.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ 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	3.99	-	-	3.99	-	-
5190MHz	-	4.51	-	-	4.51	-
5200MHz	4.19	-	-	4.19	-	-
5210MHz	-	-	3.88	-	-	3.88
5230MHz	-	3.81	-	-	3.81	-
5240MHz	4.17	-	-	4.17	-	-
5260MHz	3.84	-	-	3.84	-	-
5270MHz	-	4.02	-	-	4.02	-
5290MHz	-	-	4.12	-	-	4.12
5300MHz	4.12	-	-	4.12	-	-
5310MHz	-	3.97	-	-	3.97	-
5320MHz	4.14	-	-	4.14	-	-
5500MHz	3.97	-	-	3.97	-	-
5510MHz	-	4.15	-	-	4.15	-
5530MHz	-	-	4.27	-	-	4.27
5550MHz	-	4.04	-	-	4.04	-
5580MHz	4.46	-	-	4.46	-	-
5670MHz	-	3.82	-	-	3.82	-
5700MHz	3.63	-	-	3.63	-	-
5745MHz	4.16	-	-	4.16	-	-
5755MHz	-	5.01	-	-	5.01	-
5775MHz	-	-	4.23	-	-	4.23
5785MHz	3.95	-	-	3.95	-	-
5795MHz	-	3.33	-	-	3.33	-
5825MHz	4.17	-	-	4.17	-	-

Note:

1. Antenna Gain refer to "TG389ac HP with shielding antenna table_20161012.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

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

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	36	5180 MHz	44	5220 MHz
	40	5200 MHz	48	5240 MHz
5725~5850 MHz	149	5745 MHz	161	5805 MHz
	153	5765 MHz	165	5825 MHz
	157	5785 MHz	-	-

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

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	38	5190 MHz	46	5230 MHz
5725~5850 MHz	151	5755 MHz	159	5795 MHz

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

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	42	5210 MHz	-	-
5725~5850 MHz	155	5775 MHz	-	-

3.12 Table for Test Modes

Test Items	Mode	Note	Channel	Data Rate	Antenna
AC Power Conducted Emissions	11ac(20MHz)	OFDM/BPSK	165	-	1+2+3
Occupied Bandwidth & 26dB Bandwidth	11a	OFDM/BPSK	36/40/48	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
6dB bandwidth (for U-NII-3)	11a	OFDM/BPSK	149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		155	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
Maximum Conducted Output Power (Average)	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42 155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Power Spectral Density	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42 155	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 in the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42 155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Unwanted Emission out of the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42 155	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	165	-	1+2+3
Frequency Stability	20MHz	Un-modulation	36/40/48 149/157/165	-	1, 2, 3
	40MHz		38/46 151/159	-	1, 2, 3
	80MHz		42 155	-	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
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”.

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	17.3.0097-0180000-20170725030736-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19				
Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	Maximum Output Power(dBm)	Power Setting	Data Rate / MCS
802.11a (CDD)	1 stream 3TX	5180	24.11	Default(20)	6Mbps
802.11a (CDD)	1 stream 3TX	5200	24.12	Default(20)	6Mbps
802.11a (CDD)	1 stream 3TX	5240	25.44	Default(21.75)	6Mbps
802.11a (CDD)	1 stream 3TX	5745	25.65	Default(21.75)	6Mbps
802.11a (CDD)	1 stream 3TX	5785	25.63	Default(21.75)	6Mbps
802.11a (CDD)	1 stream 3TX	5825	25.69	Default(21.75)	6Mbps
802.11ac 20MHz (SDM)	3 stream 3TX	5180	25.99	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5200	26.16	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5240	25.87	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5745	26.00	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5785	26.00	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5825	25.94	Default(21.75)	Nss3MCS0 (19.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5180	24.42	Default(20)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5200	24.30	Default(20)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5240	25.61	Default(21.75)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5745	25.86	Default(21.75)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5785	25.85	Default(21.75)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5825	25.88	Default(21.75)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	2 stream 3TX	5180	24.42	Default(20)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5200	24.49	Default(20)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5240	25.55	Default(21.75)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5745	25.80	Default(21.75)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5785	25.59	Default(21.75)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5825	25.78	Default(21.75)	Nss2MCS0 (13)
802.11ac 40MHz (SDM)	3 stream 3TX	5190	19.24	Default(14.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5230	23.93	Default(19.75)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5755	24.13	Default(19.75)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5795	23.97	Default(19.75)	Nss3MCS0 (40.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5190	19.06	Default(13.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5230	23.93	Default(19.75)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5755	23.95	Default(19.75)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5795	23.87	Default(19.75)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	2 stream 3TX	5190	19.33	Default(14.75)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5230	24.23	Default(19.75)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5755	23.86	Default(19.75)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5795	23.89	Default(19.75)	Nss2MCS0 (27)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	Maximum Output Power(dBm)	Power Setting	Data Rate / MCS
802.11ac 80MHz (SDM)	3 stream 3TX	5210	18.16	Default(12.75)	Nss3MCS0 (87.8)
802.11ac 80MHz (SDM)	3 stream 3TX	5775	24.23	Default(18.75)	Nss3MCS0 (87.8)
802.11ac 80MHz (TxBF)	1 stream 3TX	5210	17.98	Default(12.75)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 3TX	5775	24.16	Default(18.75)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	2 stream 3TX	5210	18.33	Default(13)	Nss2MCS0 (58.5)
802.11ac 80MHz (TxBF)	2 stream 3TX	5775	23.75	Default(18.75)	Nss2MCS0 (58.5)

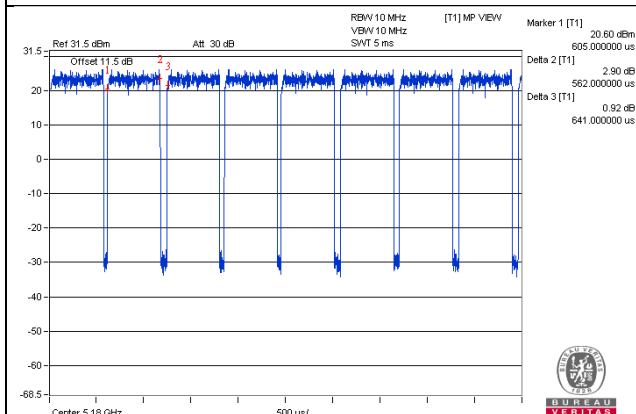
3.14 On Time and Duty Cycle

Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
11a 1S3T CDD	2.061	2.085	98.8	-	-
11ac (20MHz) 3S3T SDM	0.685	0.704	97.3	0.12	3
11ac (20MHz) 1S3T TxBF	1.926	1.947	98.9	-	-
11ac (20MHz) 2S3T TxBF	0.987	1.007	98.0	-	-
11ac (40MHz) 3S3T SDM	0.357	0.375	95.2	0.21	3
11ac (40MHz) 1S3T TxBF	0.951	0.97	98.0	-	-
11ac (40MHz) 2S3T TxBF	0.501	0.519	96.5	0.15	3
11ac (80MHz) 3S3T SDM	0.193	0.21	91.9	0.37	10
11ac (80MHz) 1S3T TxBF	0.46	0.479	96.0	0.18	3
11ac (80MHz) 2S3T TxBF	0.258	0.275	93.8	0.28	10

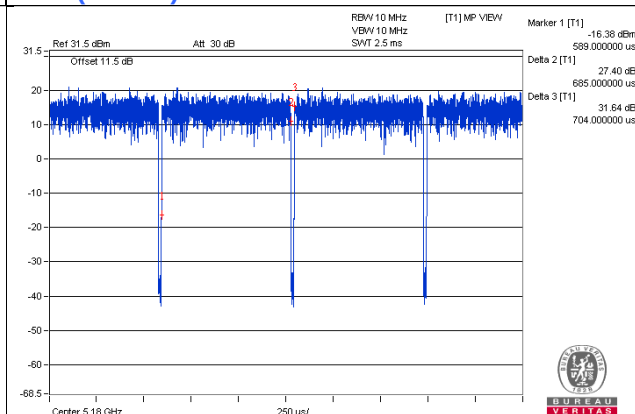
Note:

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.

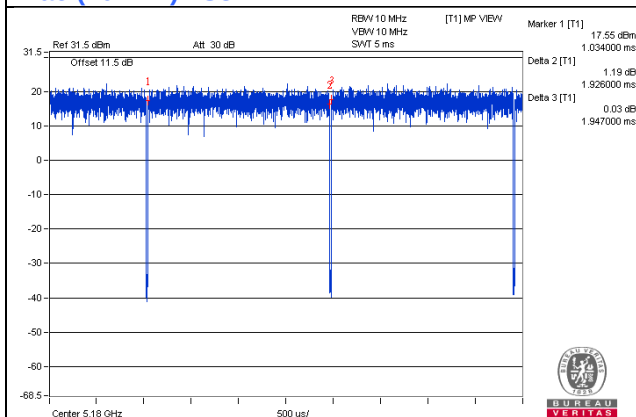
11a 1S3T CDD



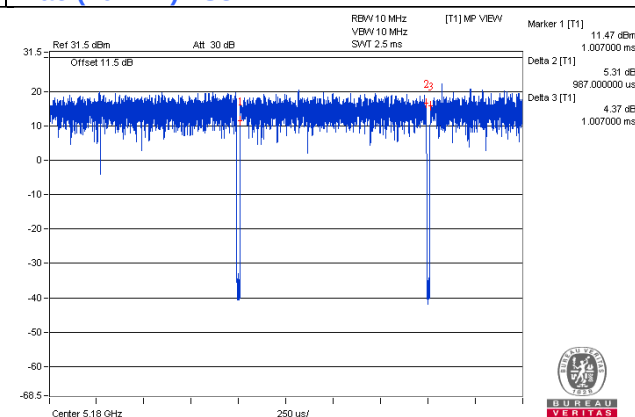
11ac (20MHz) 3S3T SDM



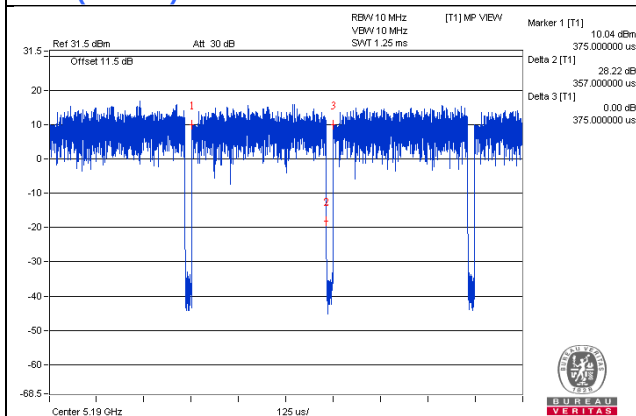
11ac (20MHz) 1S3T TxBF



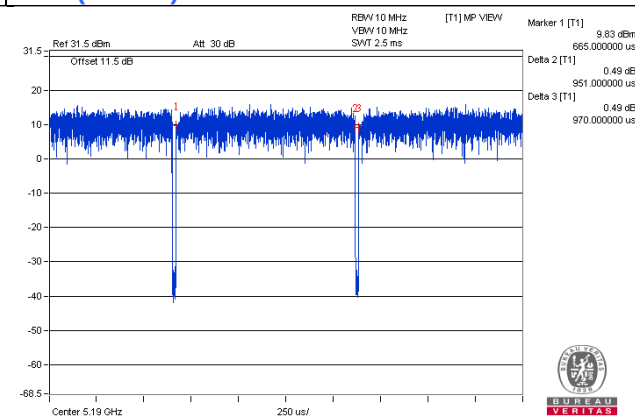
11ac (20MHz) 2S3T TxBF



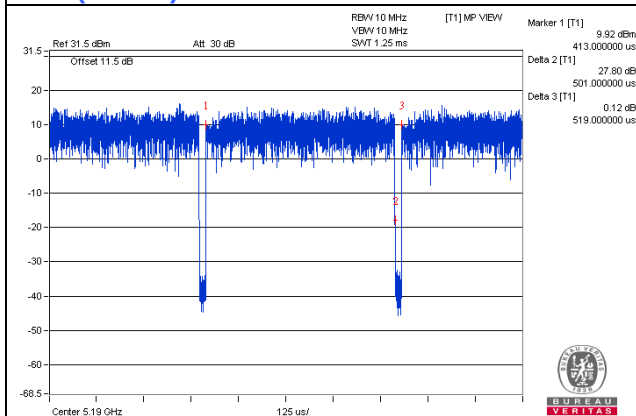
11ac (40MHz) 3S3T SDM



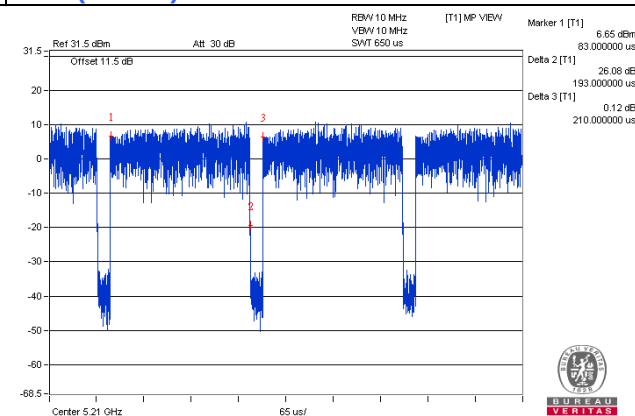
11ac (40MHz) 1S3T TxBF



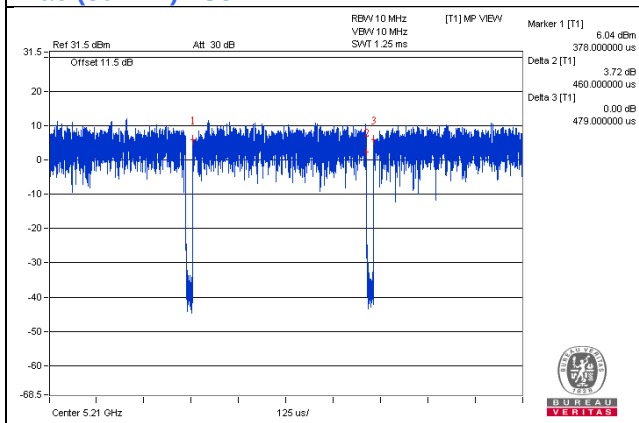
11ac (40MHz) 2S3T TxBF



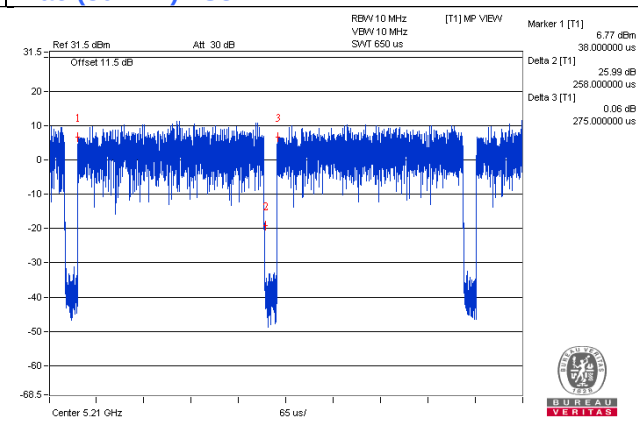
11ac (80MHz) 3S3T SDM



11ac (80MHz) 1S3T TxBF



11ac (80MHz) 2S3T TxBF



3.15 Testing Location Information

Test Site Location				
Address	(1) E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.			
TEL	886-3-6668565			
FAX	886-3-6668323			
Test Site No.	Site Category	Location	IC Reg. No.	VCCI Reg. No
Conduction 1	Conduction	Hsinchu	-	-
Chamber 3	966 Chamber	Hsinchu	20331-1	-
Oven 2	Oven	Hsinchu	-	-

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.

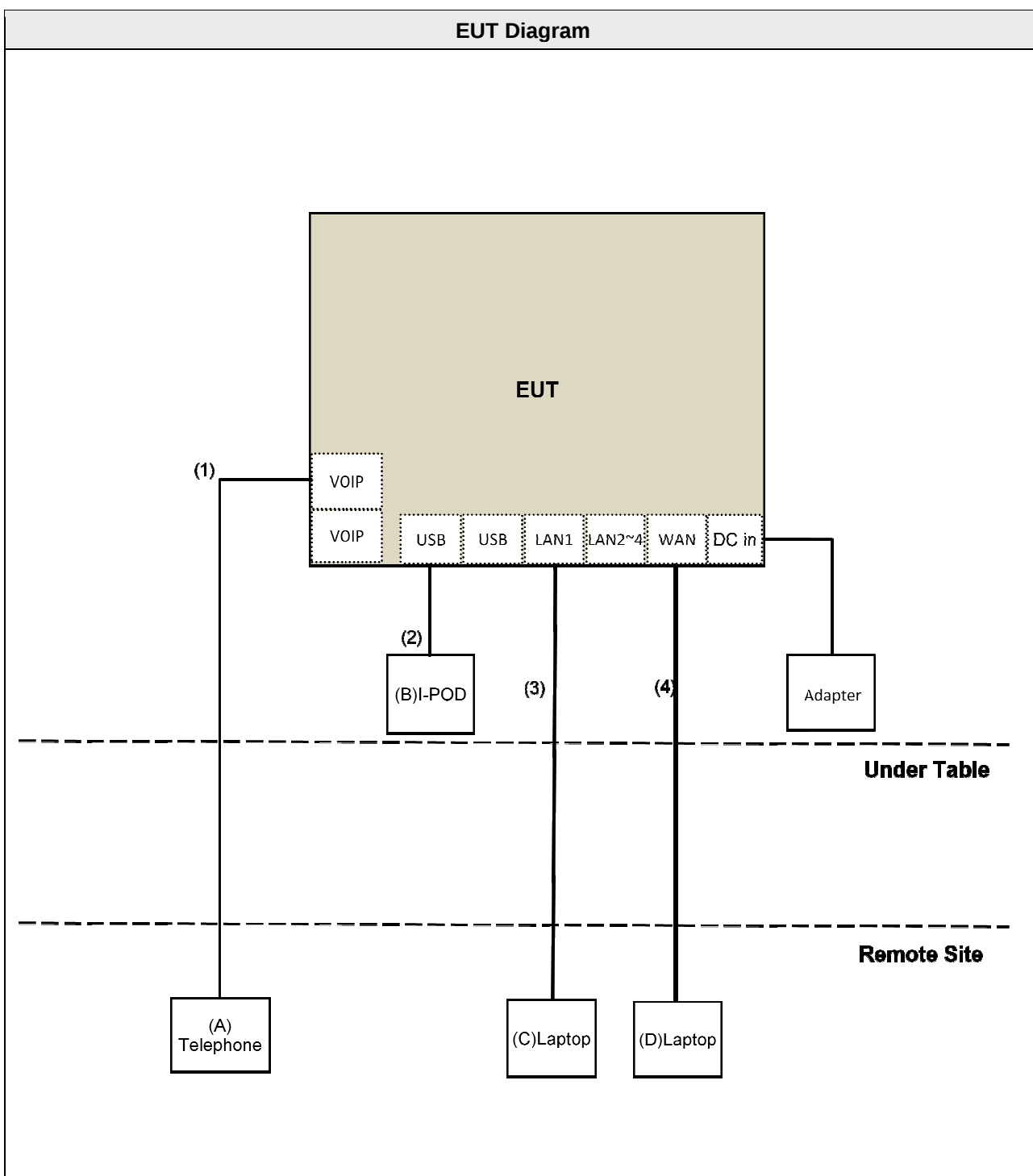
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Telephone	WONDER	WD-303	8C17DA02763	N/A	Provided by Lab
B.	iPod shuffle	Apple	MC749TA/A	CC4DN25WDFDM	FCC DoC	Provided by Lab
C.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
D.	Laptop	DELL	E6440	F9LYQ32	FCC DoC	Provided by Lab

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.	RJ-11 cable	1	10	No	0	Provided by Lab
2.	USB cable	1	0.1	No	0	Provided by Lab
3.	RJ-45 cable	1	10	No	0	Provided by Lab
4.	RJ-45 cable	1	10	No	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

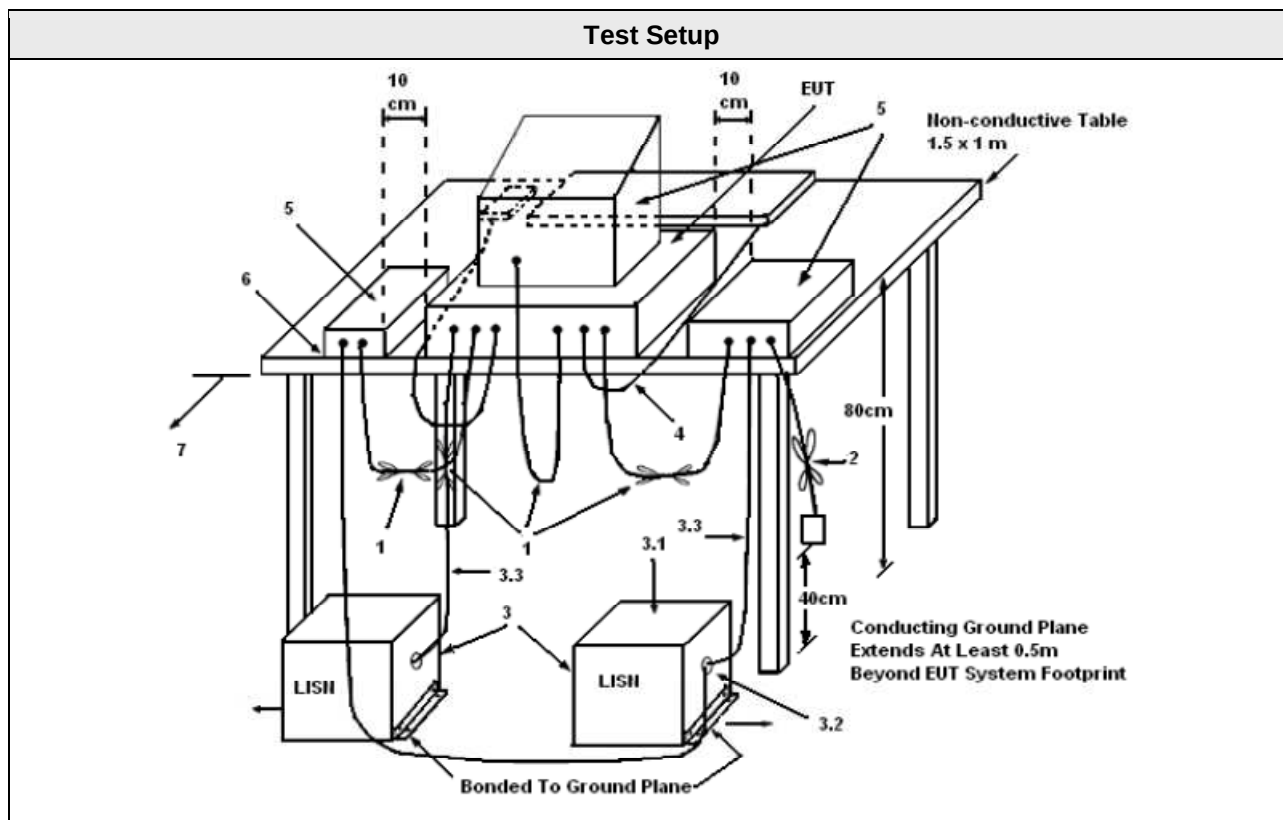
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver

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



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.

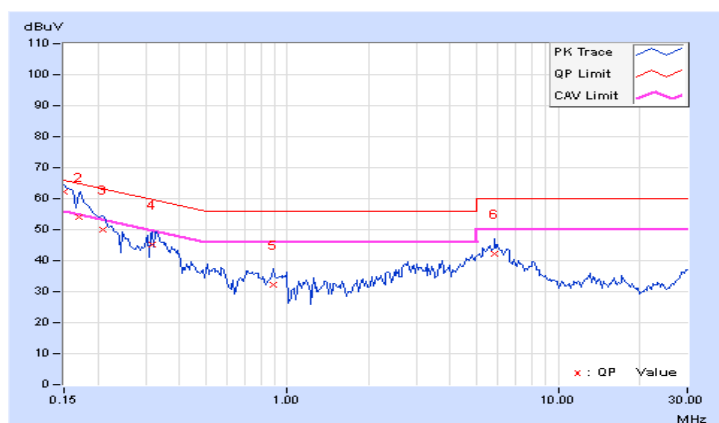
4.1.7 Test Results of AC Power Conducted Emissions

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

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	0.15000	10.08	52.10	38.48	62.18	48.56	66.00	56.00	-3.82	-7.44
2	0.16953	10.08	43.87	21.61	53.95	31.69	64.98	54.98	-11.03	-23.29
3	0.20859	10.07	39.97	19.93	50.04	30.00	63.26	53.26	-13.22	-23.26
4	0.31797	10.10	34.99	20.70	45.09	30.80	59.76	49.76	-14.67	-18.96
5	0.89219	10.15	21.91	11.42	32.06	21.57	56.00	46.00	-23.94	-24.43
6	5.85156	10.50	31.77	25.52	42.27	36.02	60.00	50.00	-17.73	-13.98

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

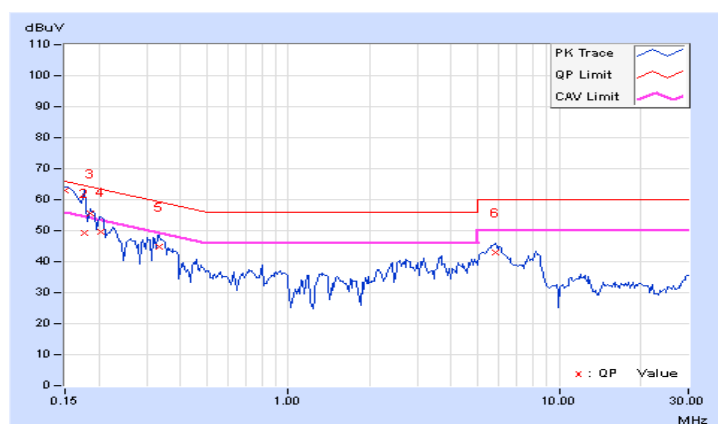


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Tank Wu		

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	0.15000	10.07	52.72	39.94	62.79	50.01	66.00	56.00	-3.21	-5.99
2	0.17734	10.05	39.13	16.43	49.18	26.48	64.61	54.61	-15.43	-28.13
3	0.18516	10.05	45.64	31.41	55.69	41.46	64.25	54.25	-8.56	-12.79
4	0.20469	10.04	39.76	18.40	49.80	28.44	63.42	53.42	-13.62	-24.98
5	0.33359	10.09	34.63	28.72	44.72	38.81	59.36	49.36	-14.64	-10.55
6	5.82813	10.40	32.46	27.23	42.86	37.63	60.00	50.00	-17.14	-12.37

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

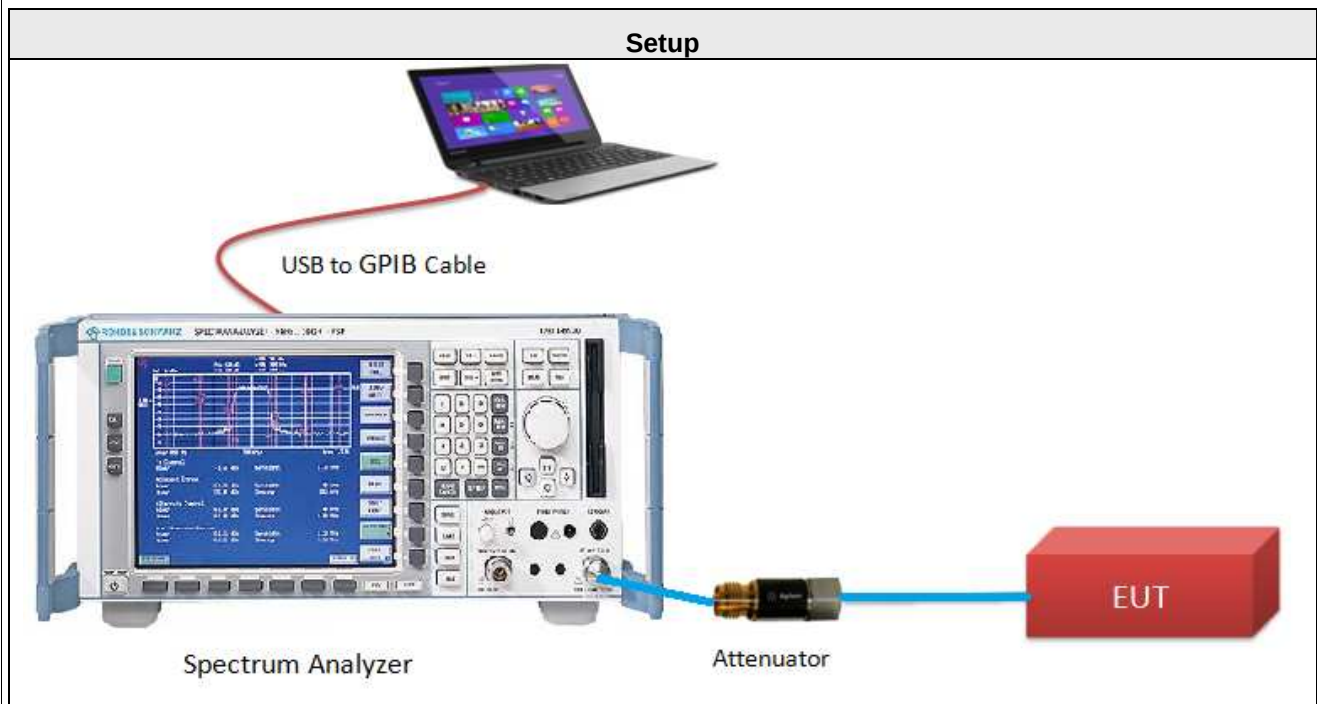
The following table is the setting of the Spectrum Analyzer.

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	$\geq 3 \times \text{RBW}$
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



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	Anderson Chen		

11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	27.88	25.64	29.58
40	5200	29.41	27.15	25.43
48	5240	29.09	29.55	29.56

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	32.92	30.77	30.95
40	5200	31.16	32.20	26.33
48	5240	31.29	32.16	32.96

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	32.90	34.17	28.03
40	5200	30.49	33.24	27.29
48	5240	31.83	31.51	27.14

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	28.84	28.43	31.97
40	5200	28.10	31.32	26.79
48	5240	27.52	29.99	27.31

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	41.96	41.91	43.09
46	5230	81.37	82.86	79.70

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	41.89	41.77	41.07
46	5230	70.88	67.49	58.05

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	41.50	41.68	41.78
46	5230	66.25	68.17	58.70

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	82.43	82.53	82.07

11ac (80MHz) 1S3T TxBF

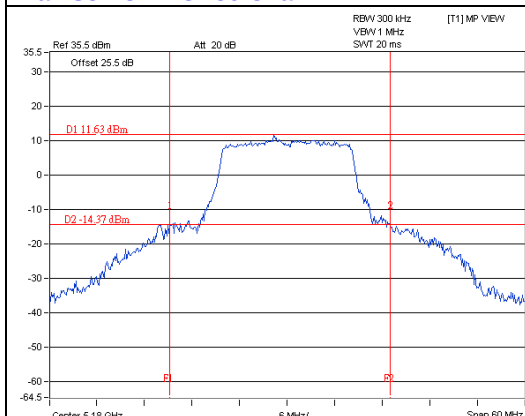
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	82.51	82.20	81.96

11ac (80MHz) 2S3T TxBF

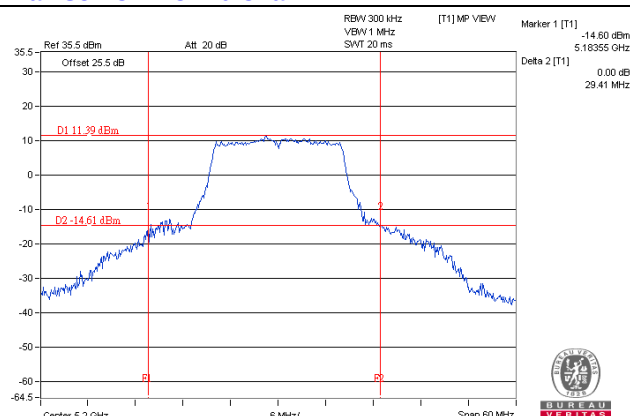
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	81.77	82.05	82.15

26dB BANDWIDTH SPECTRUM PLOT

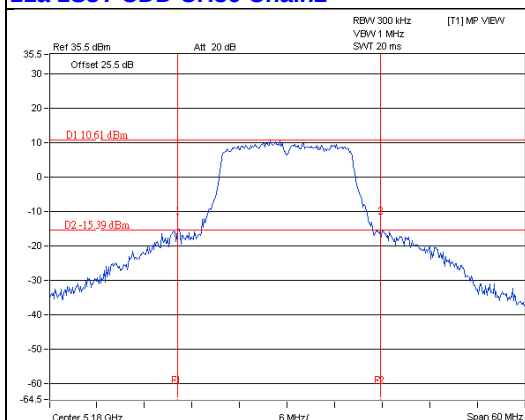
11a 1S3T CDD CH36 Chain1



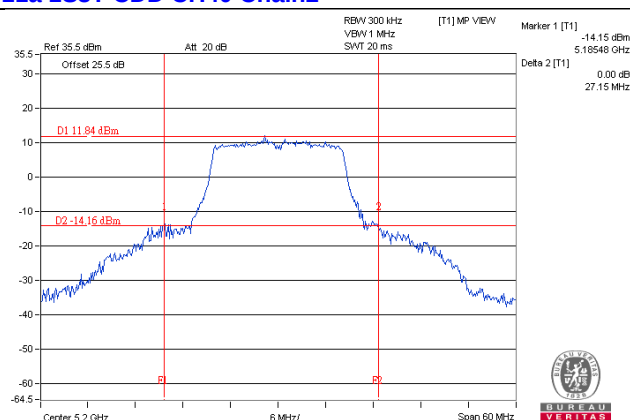
11a 1S3T CDD CH40 Chain1



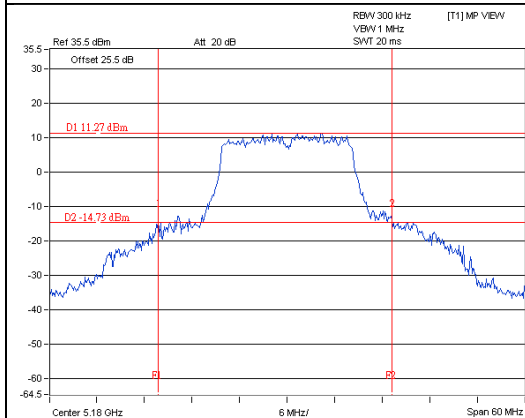
11a 1S3T CDD CH36 Chain2



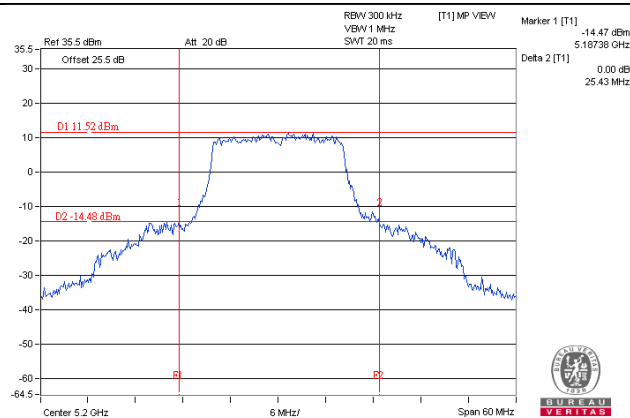
11a 1S3T CDD CH40 Chain2



11a 1S3T CDD CH36 Chain3

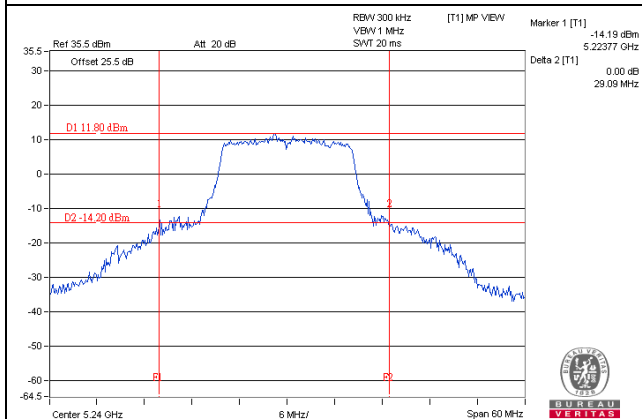


11a 1S3T CDD CH40 Chain3

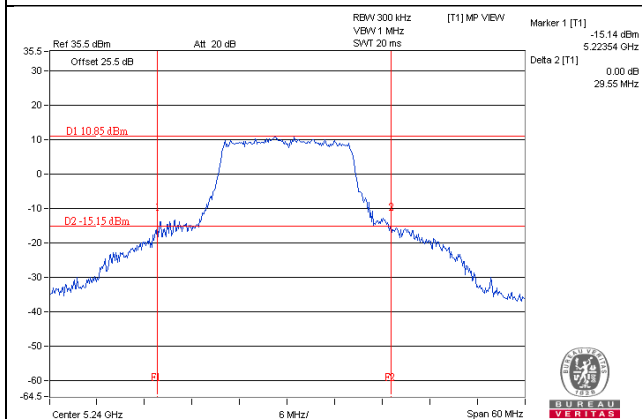


26dB BANDWIDTH SPECTRUM PLOT

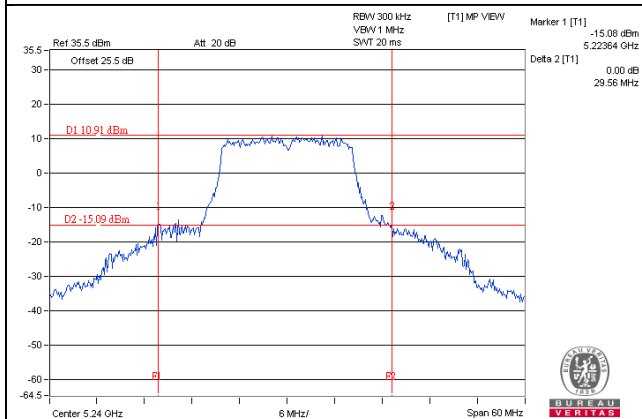
11a 1S3T CDD CH48 Chain1



11a 1S3T CDD CH48 Chain2

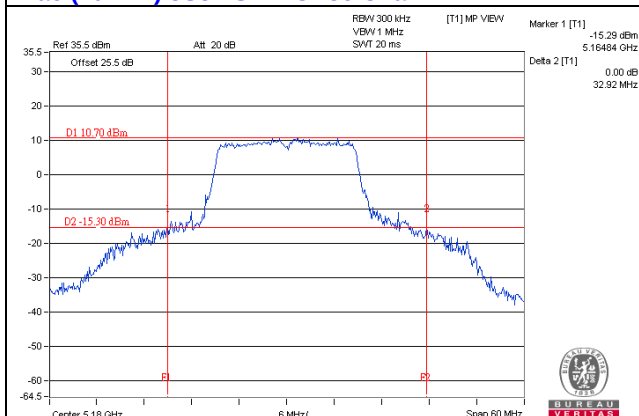


11a 1S3T CDD CH48 Chain3

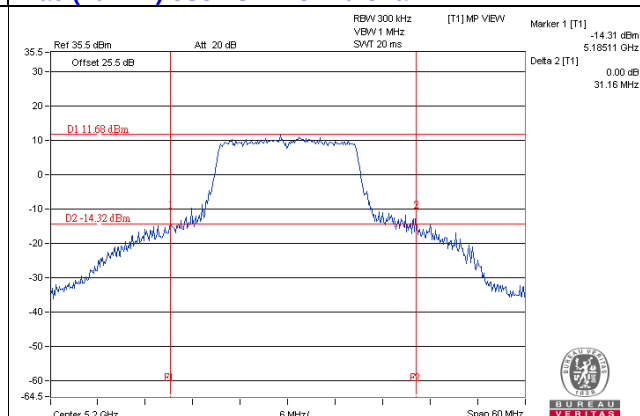


26dB BANDWIDTH SPECTRUM PLOT

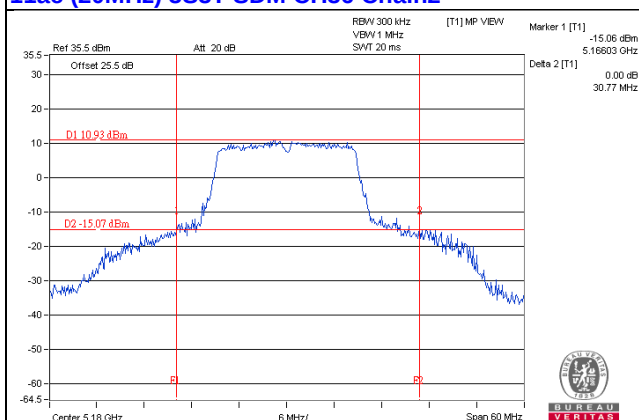
11ac (20MHz) 3S3T SDM CH36 Chain1



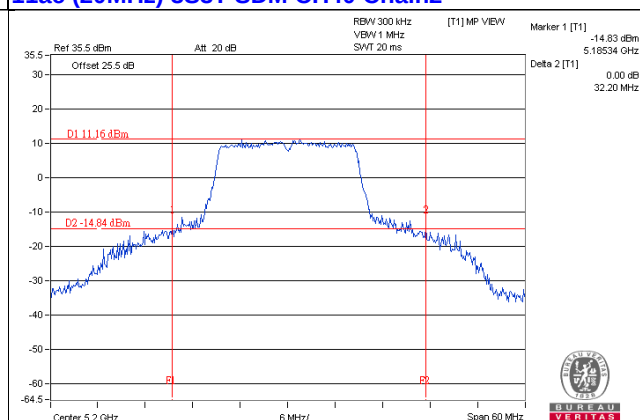
11ac (20MHz) 3S3T SDM CH40 Chain1



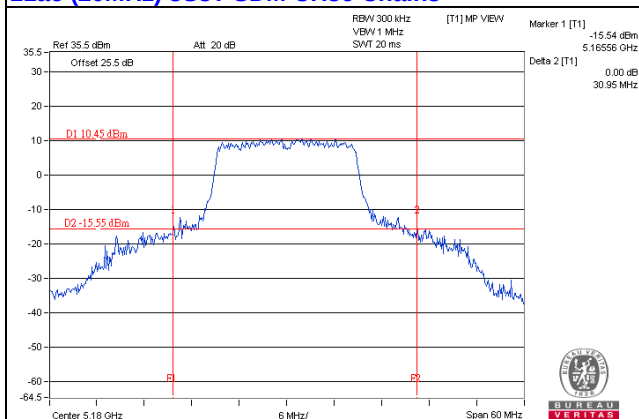
11ac (20MHz) 3S3T SDM CH36 Chain2



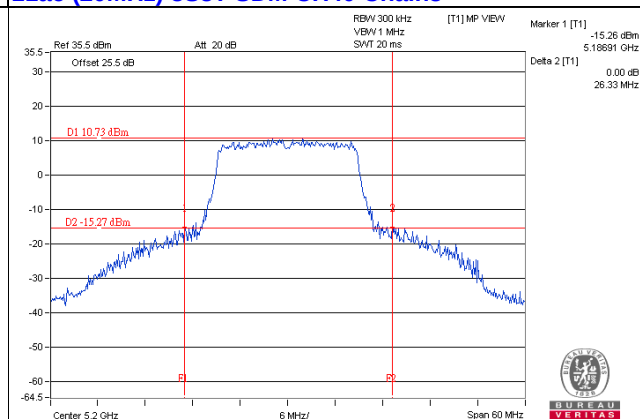
11ac (20MHz) 3S3T SDM CH40 Chain2



11ac (20MHz) 3S3T SDM CH36 Chain3

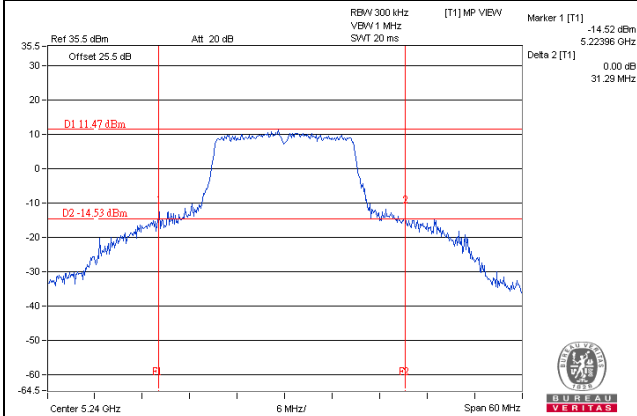


11ac (20MHz) 3S3T SDM CH40 Chain3

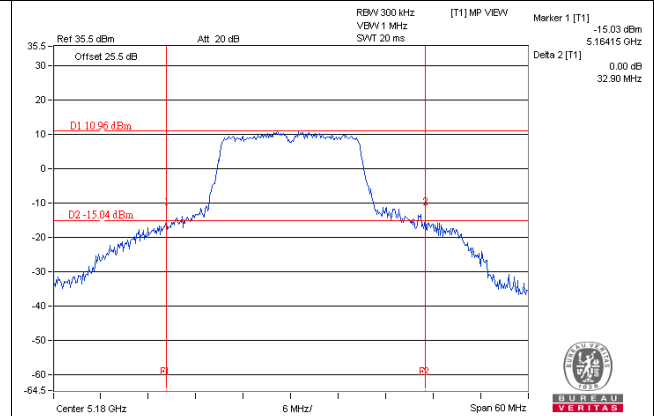


26dB BANDWIDTH SPECTRUM PLOT

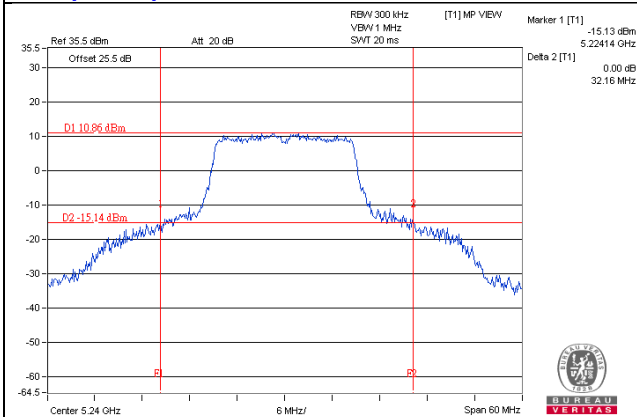
11ac (20MHz) 3S3T SDM CH48 Chain1



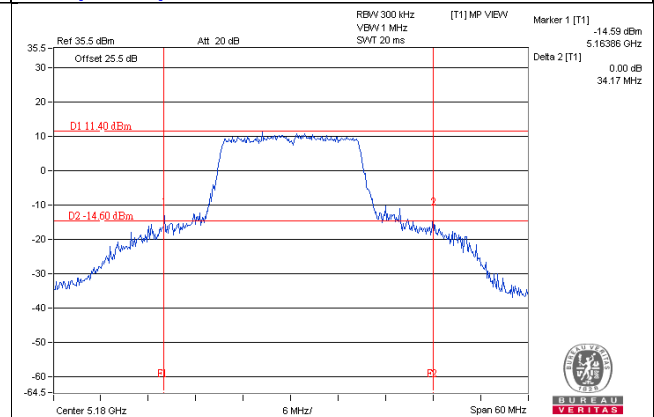
11ac (20MHz) 1S3T TxBF CH36 Chain1



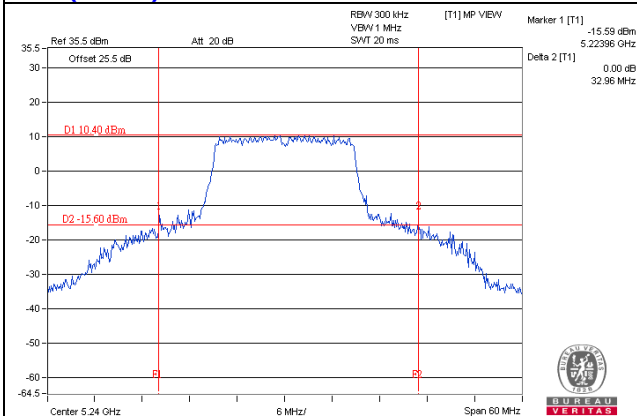
11ac (20MHz) 3S3T SDM CH48 Chain2



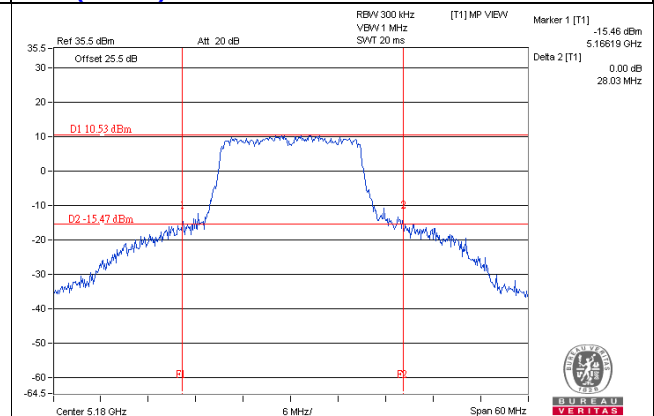
11ac (20MHz) 1S3T TxBF CH36 Chain2



11ac (20MHz) 3S3T SDM CH48 Chain3

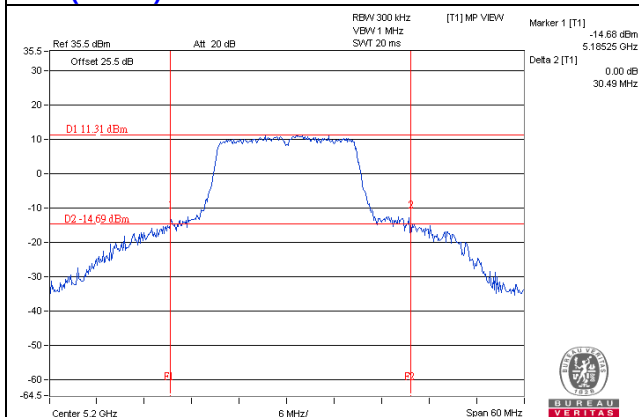


11ac (20MHz) 1S3T TxBF CH36 Chain3

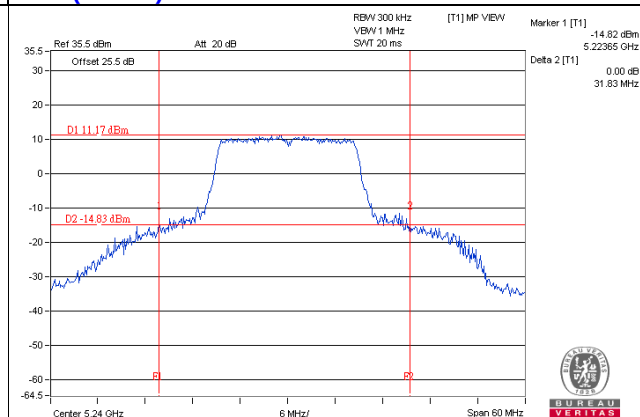


26dB BANDWIDTH SPECTRUM PLOT

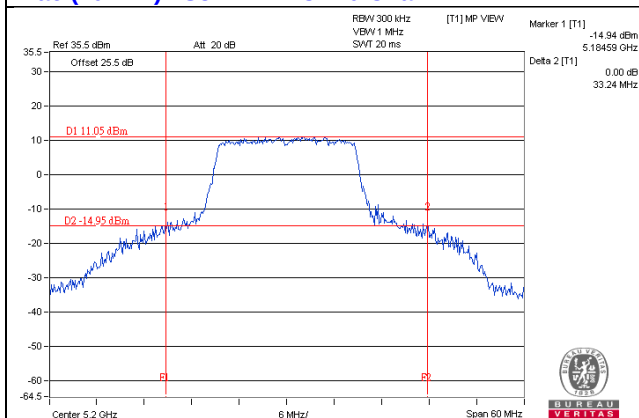
11ac (20MHz) 1S3T TxBF CH40 Chain1



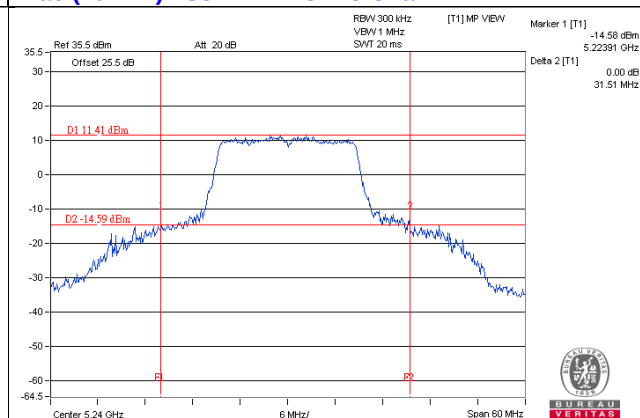
11ac (20MHz) 1S3T TxBF CH48 Chain1



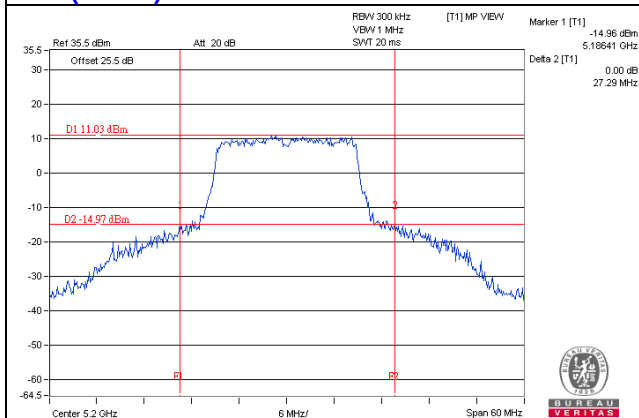
11ac (20MHz) 1S3T TxBF CH40 Chain2



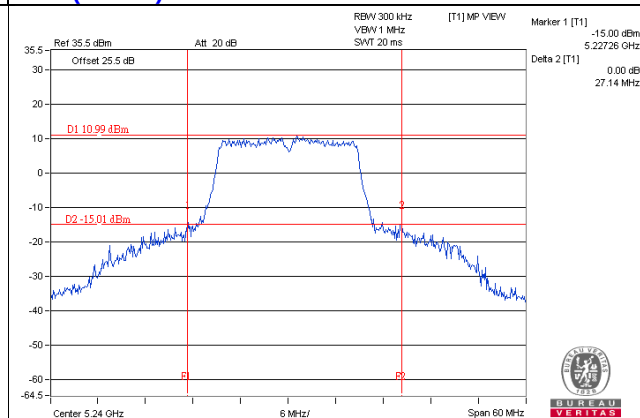
11ac (20MHz) 1S3T TxBF CH48 Chain2



11ac (20MHz) 1S3T TxBF CH40 Chain3

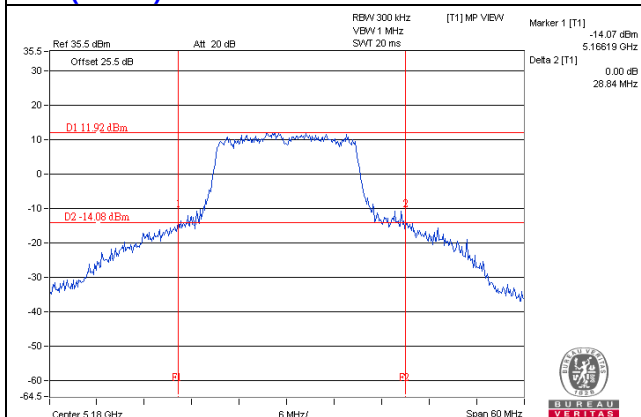


11ac (20MHz) 1S3T TxBF CH48 Chain3

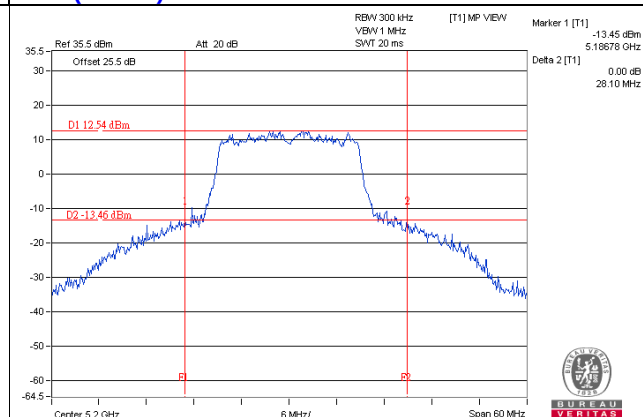


26dB BANDWIDTH SPECTRUM PLOT

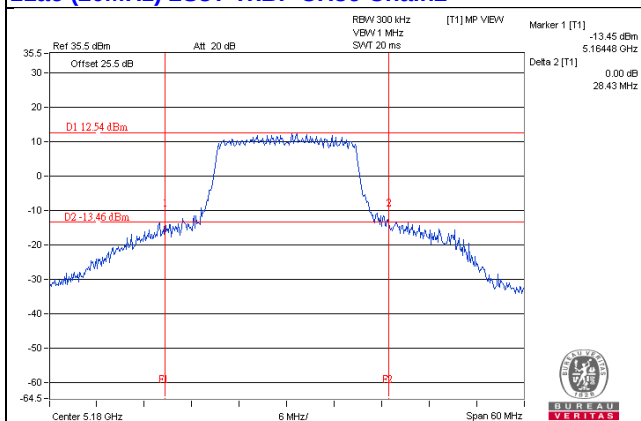
11ac (20MHz) 2S3T TxBF CH36 Chain1



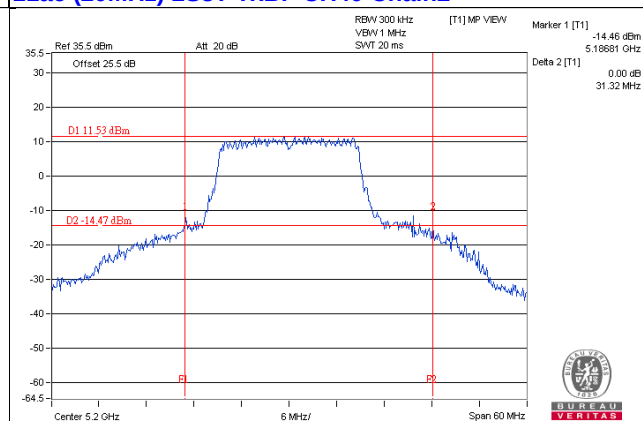
11ac (20MHz) 2S3T TxBF CH40 Chain1



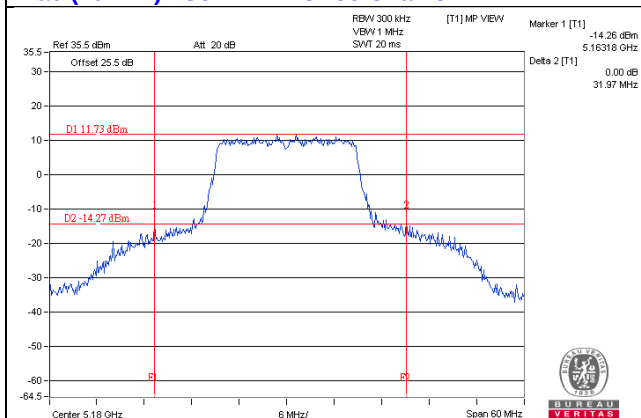
11ac (20MHz) 2S3T TxBF CH36 Chain2



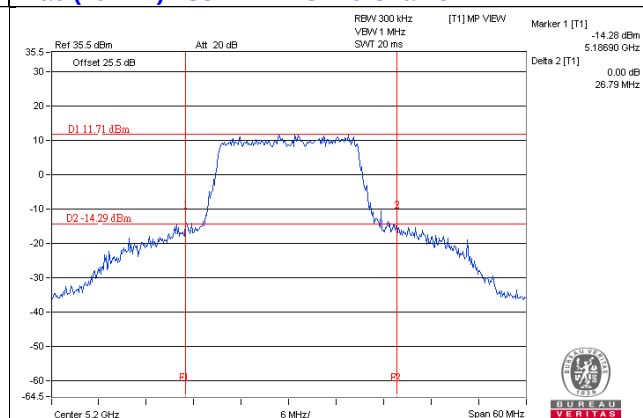
11ac (20MHz) 2S3T TxBF CH40 Chain2



11ac (20MHz) 2S3T TxBF CH36 Chain3

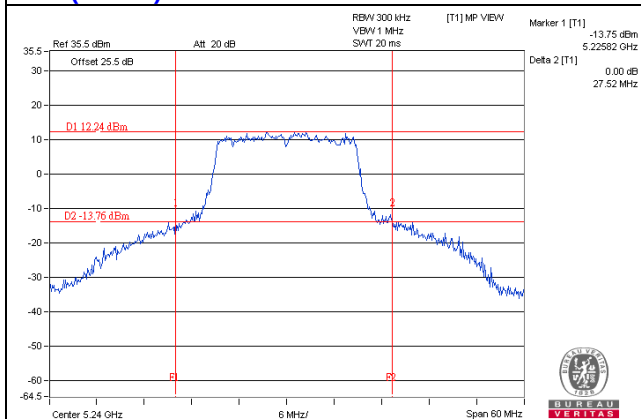


11ac (20MHz) 2S3T TxBF CH40 Chain3

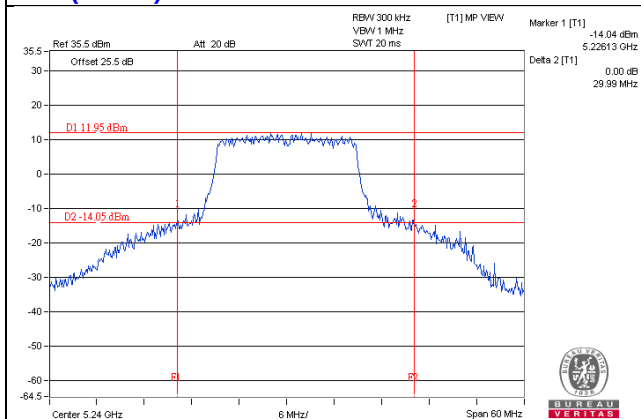


26dB BANDWIDTH SPECTRUM PLOT

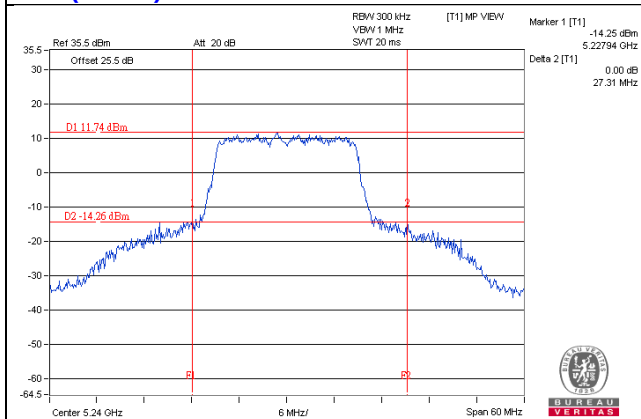
11ac (20MHz) 2S3T TxBF CH48 Chain1



11ac (20MHz) 2S3T TxBF CH48 Chain2

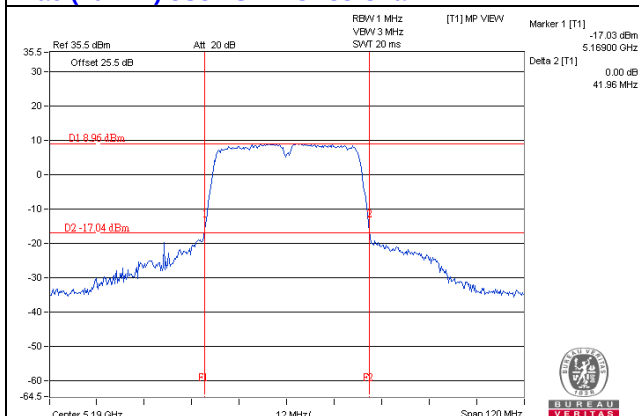


11ac (20MHz) 2S3T TxBF CH48 Chain3

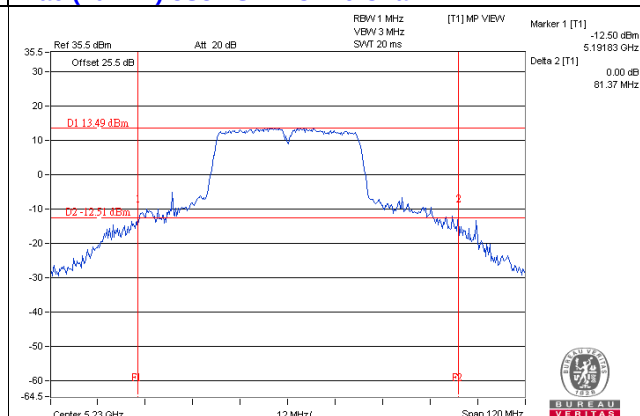


26dB BANDWIDTH SPECTRUM PLOT

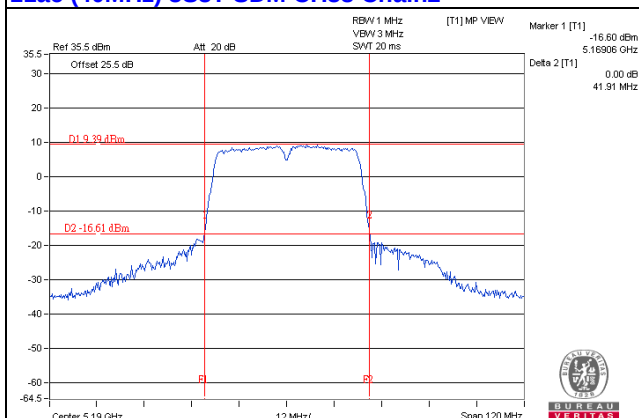
11ac (40MHz) 3S3T SDM CH38 Chain1



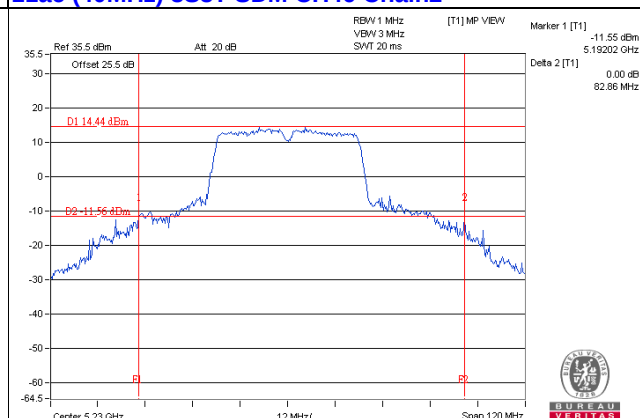
11ac (40MHz) 3S3T SDM CH46 Chain1



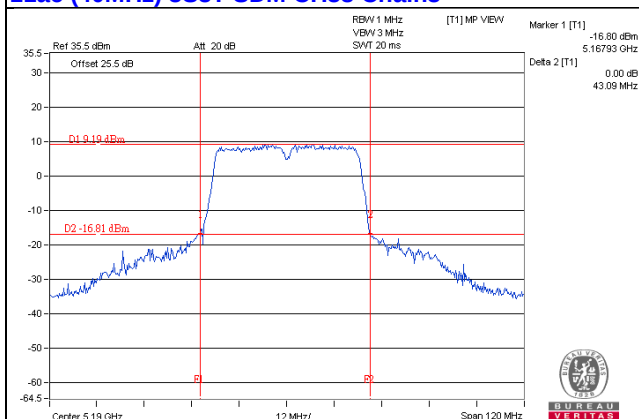
11ac (40MHz) 3S3T SDM CH38 Chain2



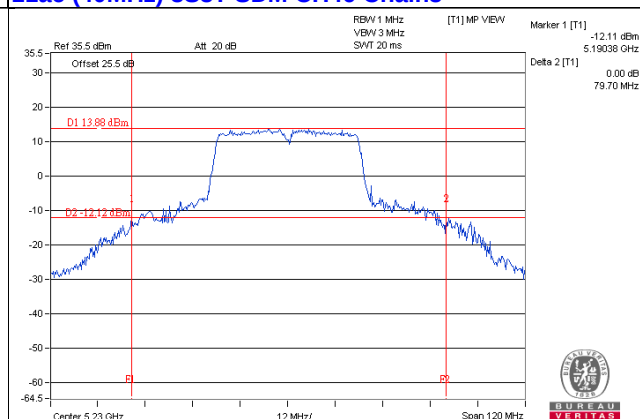
11ac (40MHz) 3S3T SDM CH46 Chain2



11ac (40MHz) 3S3T SDM CH38 Chain3

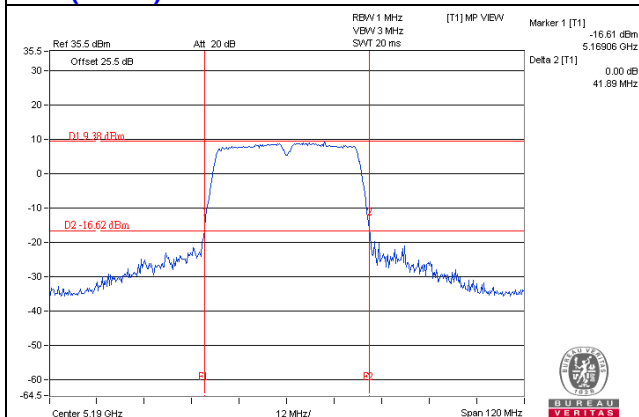


11ac (40MHz) 3S3T SDM CH46 Chain3

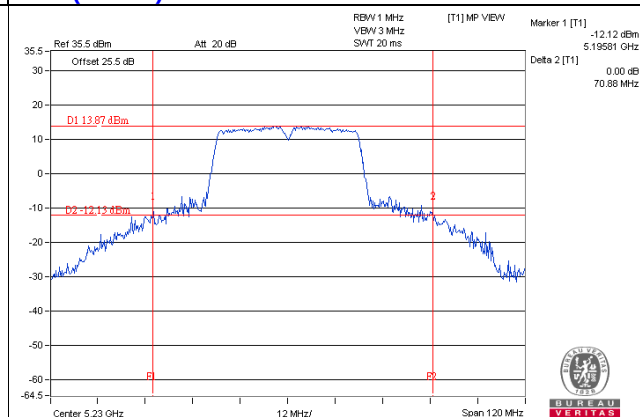


26dB BANDWIDTH SPECTRUM PLOT

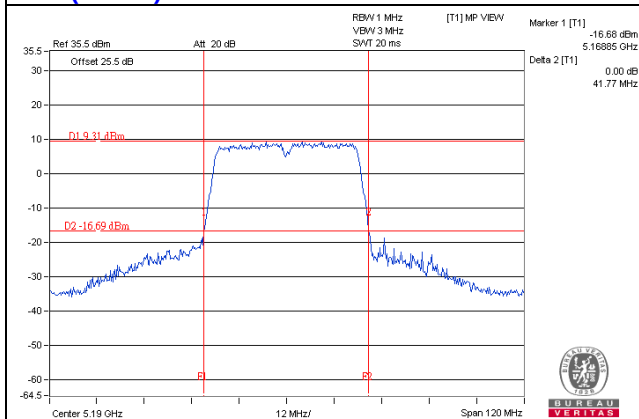
11ac (40MHz) 1S3T TxBF CH38 Chain1



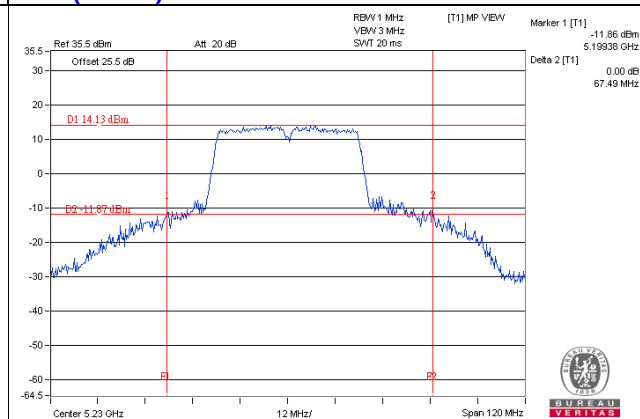
11ac (40MHz) 1S3T TxBF CH46 Chain1



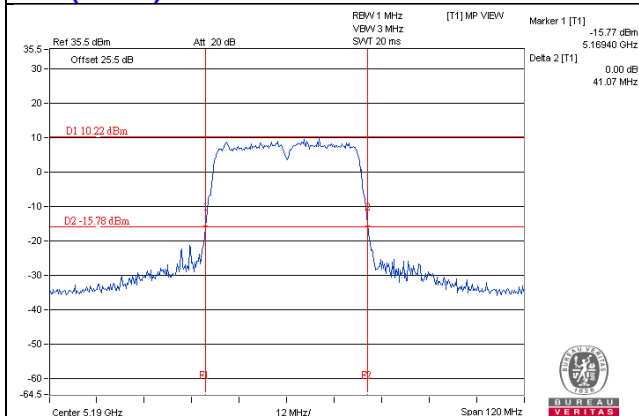
11ac (40MHz) 1S3T TxBF CH38 Chain2



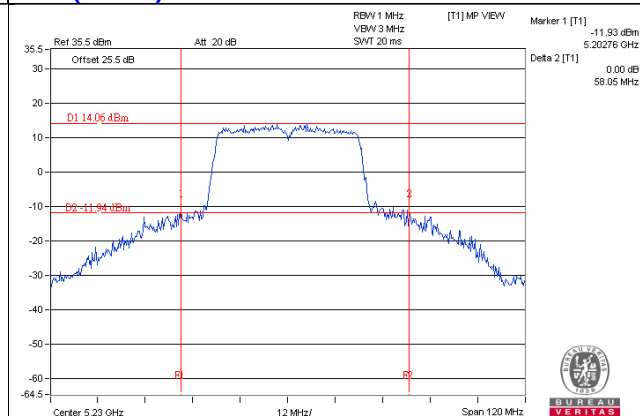
11ac (40MHz) 1S3T TxBF CH46 Chain2



11ac (40MHz) 1S3T TxBF CH38 Chain3

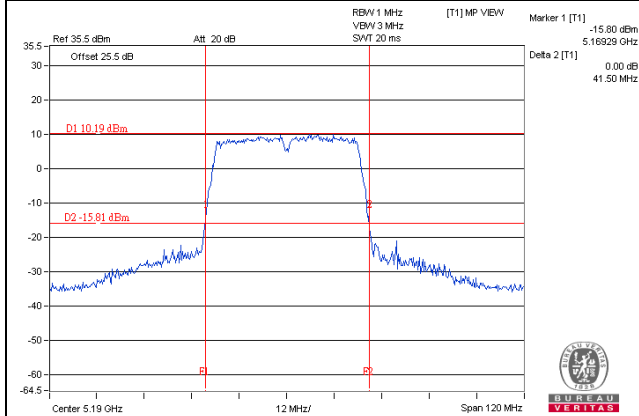


11ac (40MHz) 1S3T TxBF CH46 Chain3

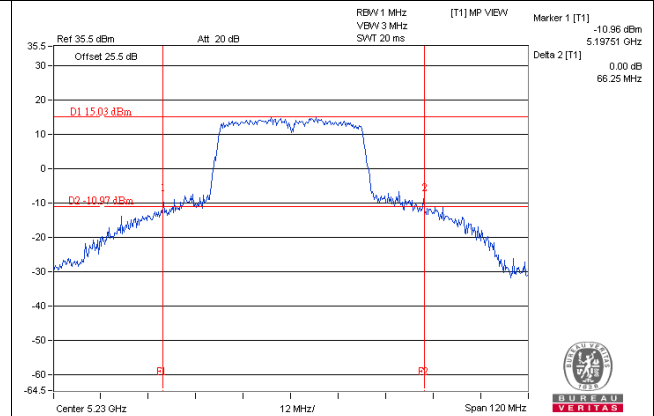


26dB BANDWIDTH SPECTRUM PLOT

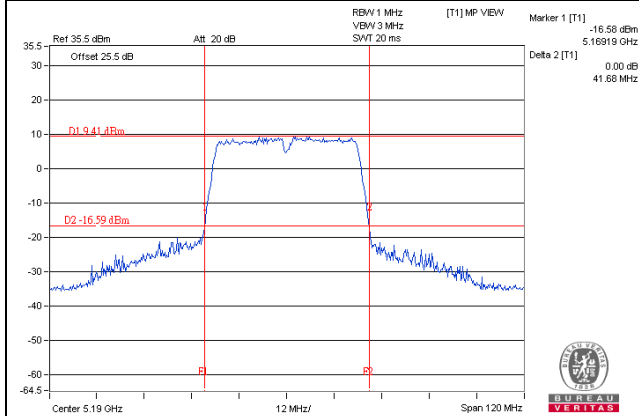
11ac (40MHz) 2S3T TxBF CH38 Chain1



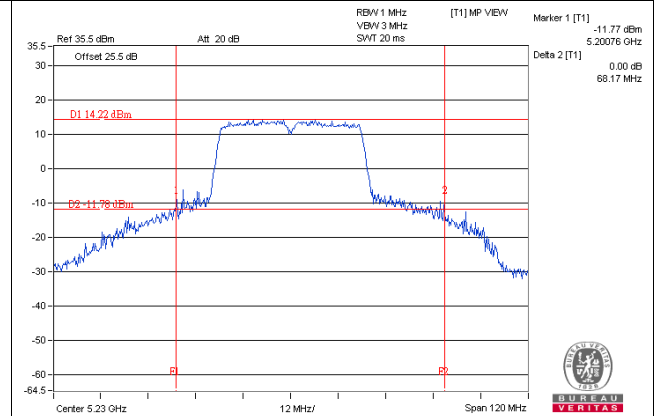
11ac (40MHz) 2S3T TxBF CH46 Chain1



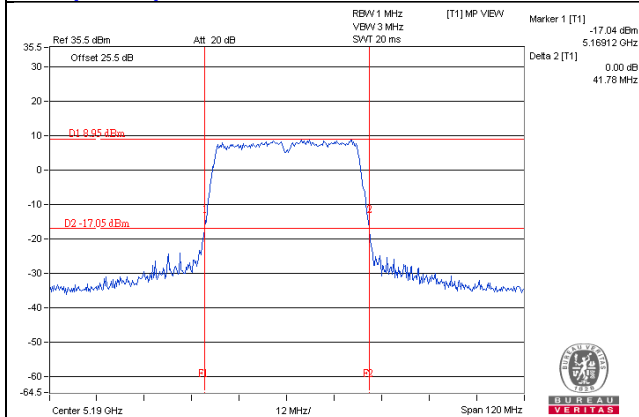
11ac (40MHz) 2S3T TxBF CH38 Chain2



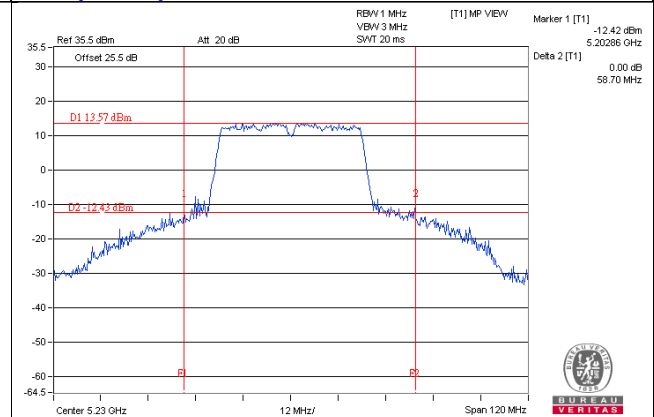
11ac (40MHz) 2S3T TxBF CH46 Chain2



11ac (40MHz) 2S3T TxBF CH38 Chain3

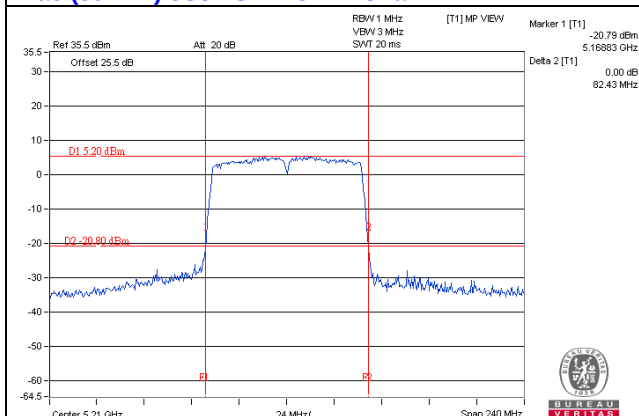


11ac (40MHz) 2S3T TxBF CH46 Chain3

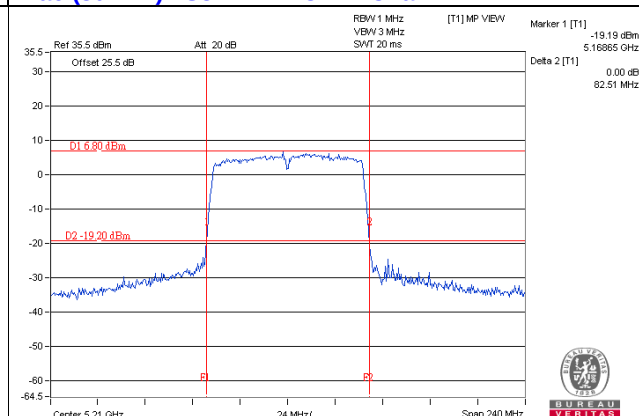


26dB BANDWIDTH SPECTRUM PLOT

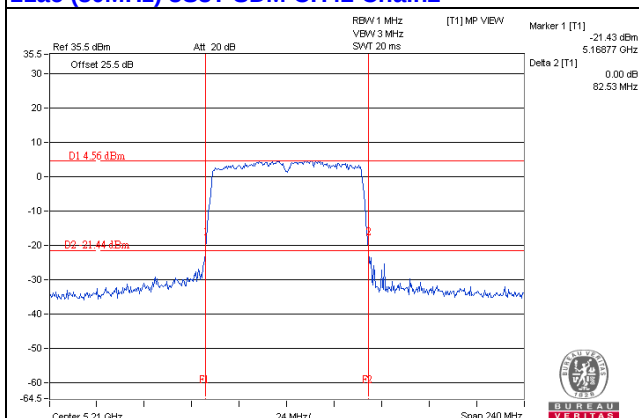
11ac (80MHz) 3S3T SDM CH42 Chain1



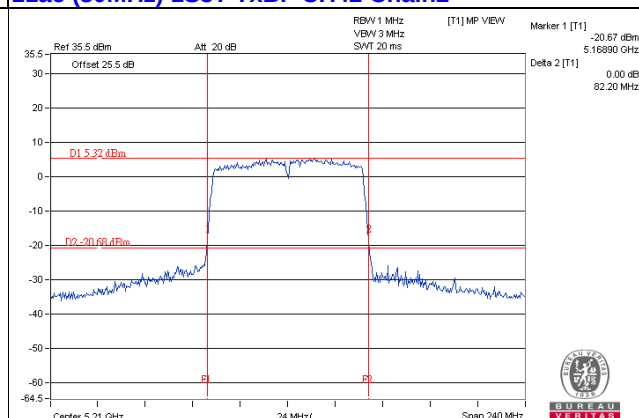
11ac (80MHz) 1S3T TxBF CH42 Chain1



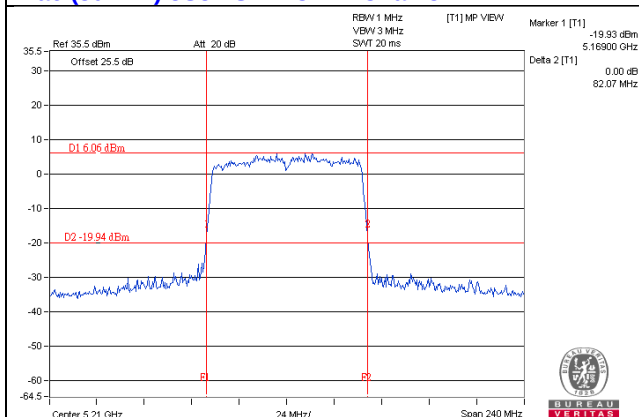
11ac (80MHz) 3S3T SDM CH42 Chain2



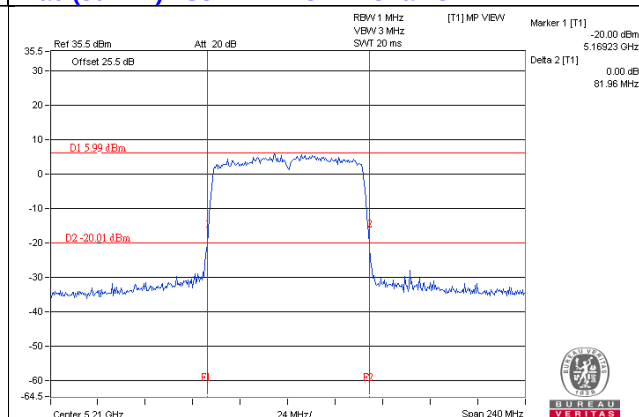
11ac (80MHz) 1S3T TxBF CH42 Chain2



11ac (80MHz) 3S3T SDM CH42 Chain3

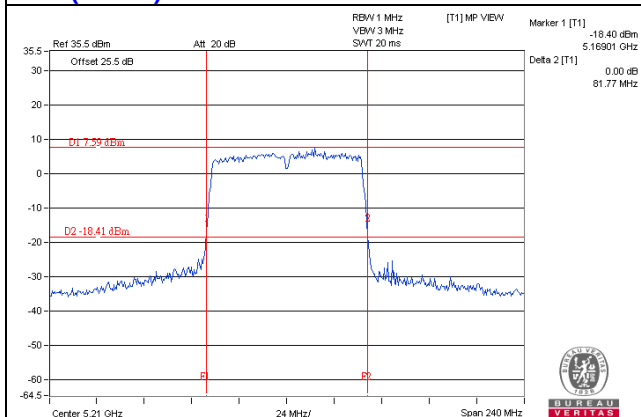


11ac (80MHz) 1S3T TxBF CH42 Chain3

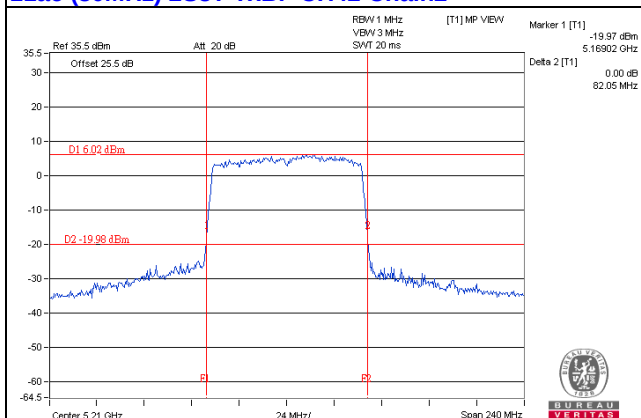


26dB BANDWIDTH SPECTRUM PLOT

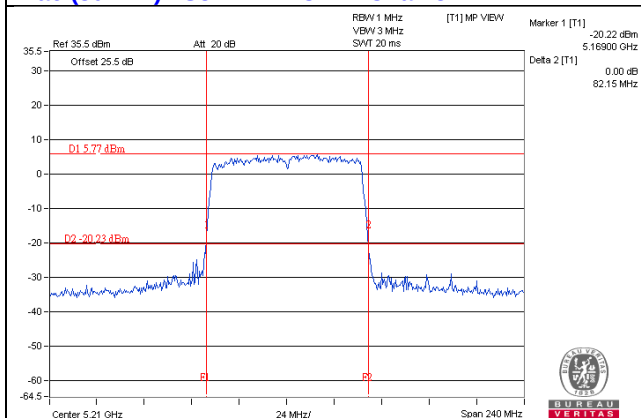
11ac (80MHz) 2S3T TxBF CH42 Chain1



11ac (80MHz) 2S3T TxBF CH42 Chain2



11ac (80MHz) 2S3T TxBF CH42 Chain3



11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	17.04	17.04	16.92
40	5200	17.04	17.04	17.04
48	5240	17.16	17.04	16.80
149	5745	17.76	17.52	22.68
157	5785	17.76	17.76	22.80
165	5825	17.88	17.76	21.12

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.24	18.24	18.12
40	5200	18.24	18.12	18.00
48	5240	18.12	18.12	18.24
149	5745	18.48	20.04	24.00
157	5785	18.60	20.64	23.64
165	5825	18.36	19.44	18.72

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.60	18.12	18.12
40	5200	18.12	18.12	18.00
48	5240	18.12	18.24	18.00
149	5745	18.36	23.64	18.36
157	5785	18.24	22.68	18.36
165	5825	18.36	18.96	18.24

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.36	18.24	18.00
40	5200	18.12	18.12	17.88
48	5240	18.12	18.24	18.12
149	5745	18.00	19.44	18.12
157	5785	18.12	19.08	18.24
165	5825	17.88	18.84	18.24

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.96	36.72	36.96
46	5230	37.20	37.20	37.20
151	5755	37.68	39.84	38.64
159	5795	37.68	40.80	37.92

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.72	36.72	36.72
46	5230	36.96	36.72	36.72
151	5755	37.20	37.44	36.96
159	5795	36.96	37.68	36.96

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.72	36.72	36.72
46	5230	36.96	36.96	36.96
151	5755	36.72	37.44	36.96
159	5795	36.96	37.68	37.44

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	75.84	75.84	76.32
155	5775	76.80	79.68	84.48

11ac (80MHz) 1S3T TxBF

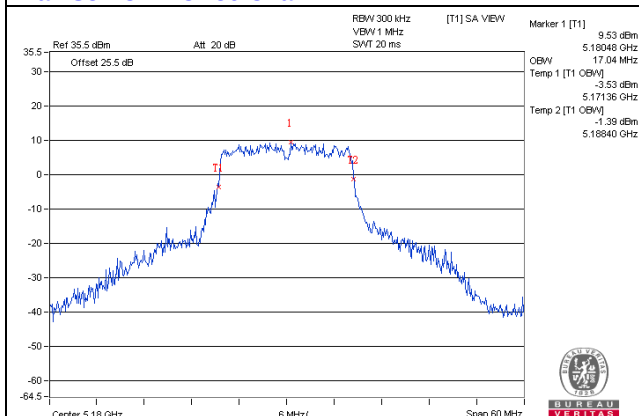
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	76.32	75.84	76.32
155	5775	76.32	77.28	76.32

11ac (80MHz) 2S3T TxBF

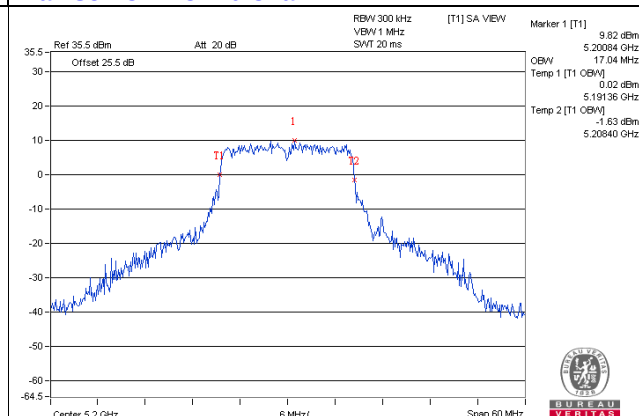
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	75.84	75.84	75.84
155	5775	76.32	76.80	76.32

99% OCCUPIED BANDWIDTH SPECTRUM PLOT

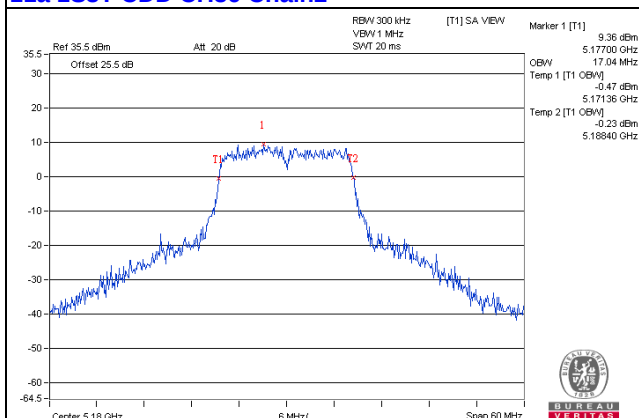
11a 1S3T CDD CH36 Chain1



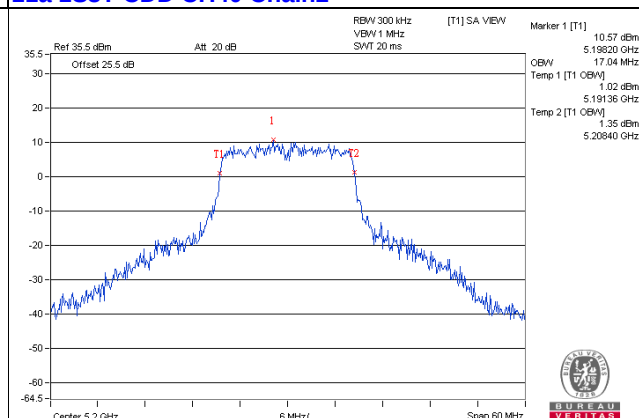
11a 1S3T CDD CH40 Chain1



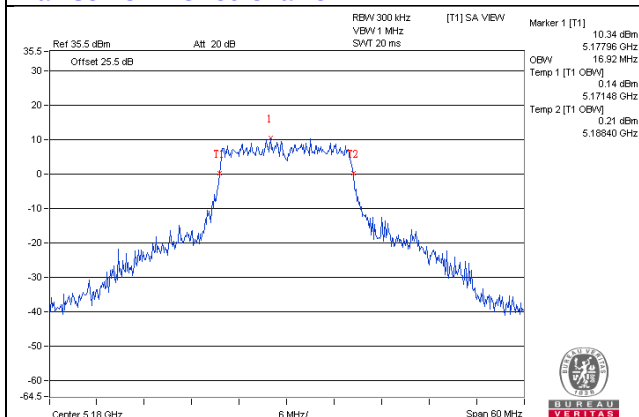
11a 1S3T CDD CH36 Chain2



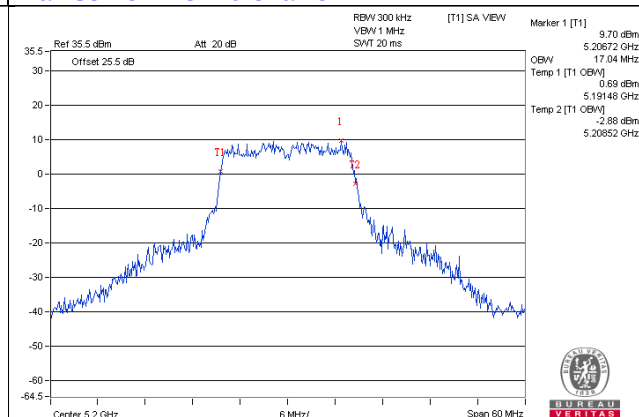
11a 1S3T CDD CH40 Chain2



11a 1S3T CDD CH36 Chain3

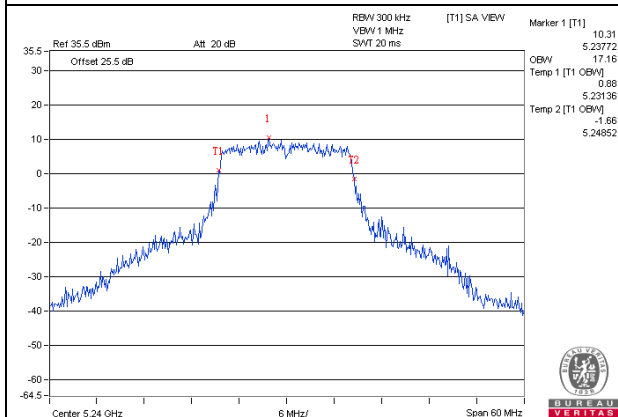


11a 1S3T CDD CH40 Chain3

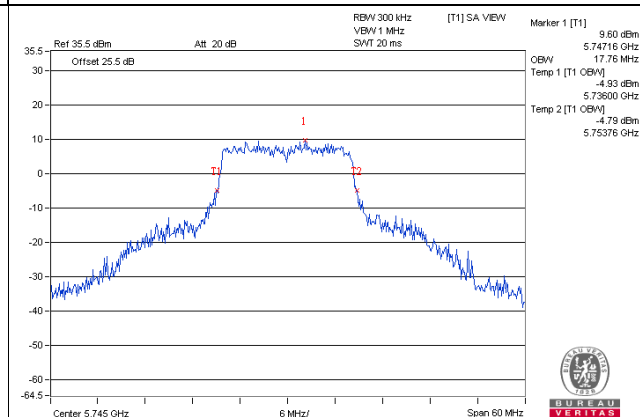


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

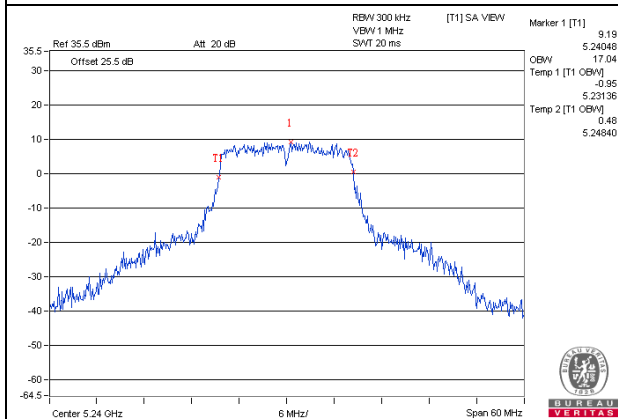
11a 1S3T CDD CH48 Chain1



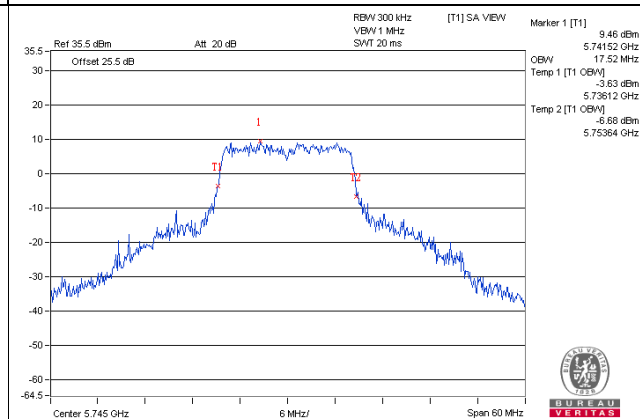
11a 1S3T CDD CH149 Chain1



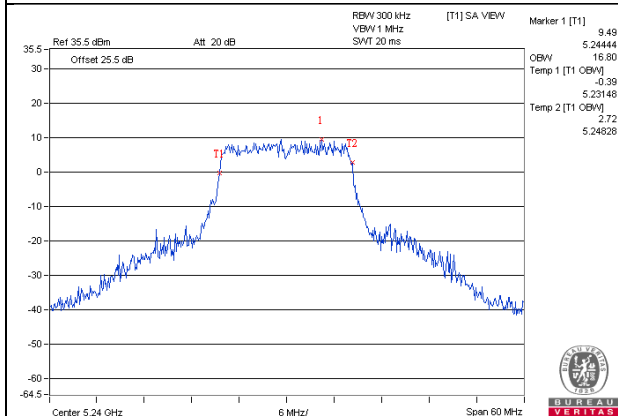
11a 1S3T CDD CH48 Chain2



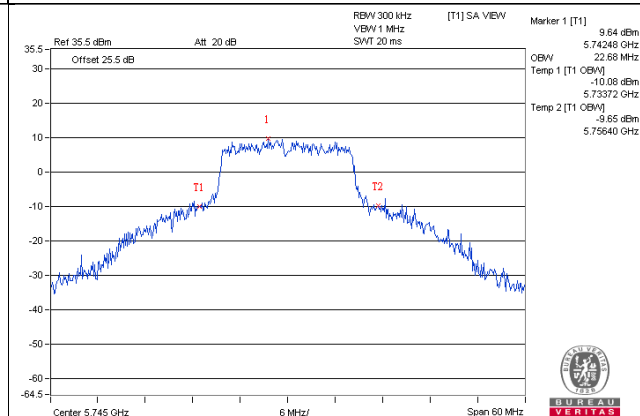
11a 1S3T CDD CH149 Chain2



11a 1S3T CDD CH48 Chain3

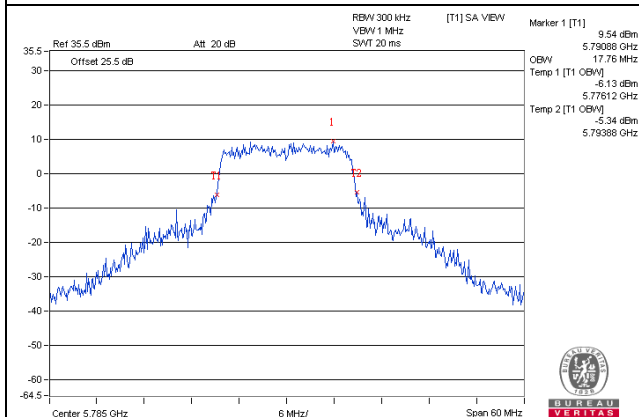


11a 1S3T CDD CH149 Chain3

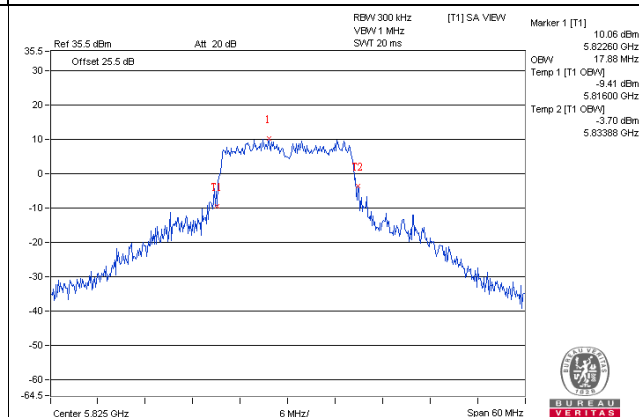


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

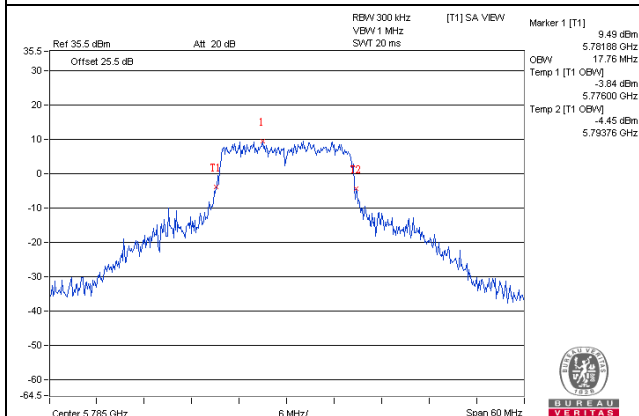
11a 1S3T CDD CH157 Chain1



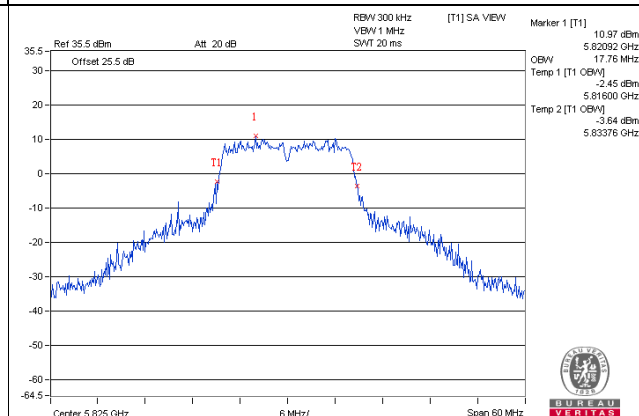
11a 1S3T CDD CH165 Chain1



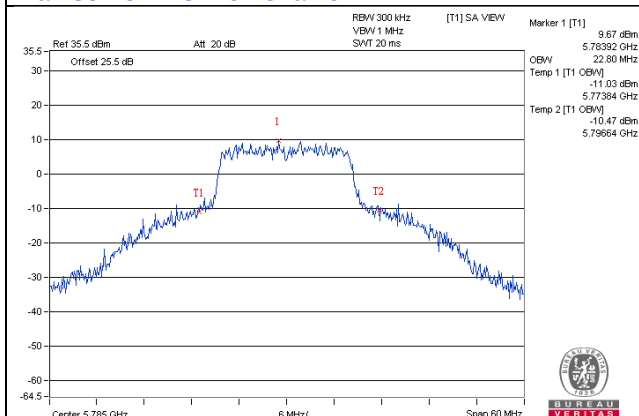
11a 1S3T CDD CH157 Chain2



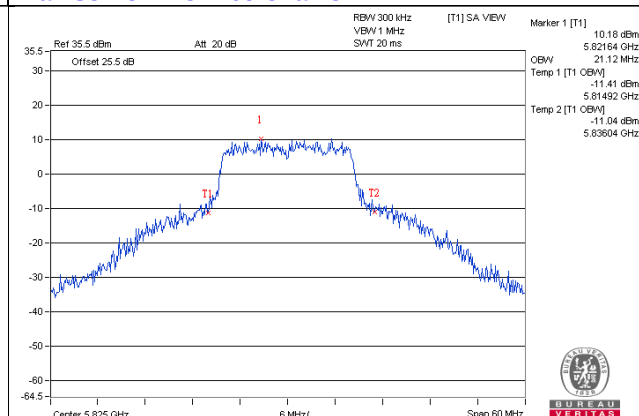
11a 1S3T CDD CH165 Chain2



11a 1S3T CDD CH157 Chain3

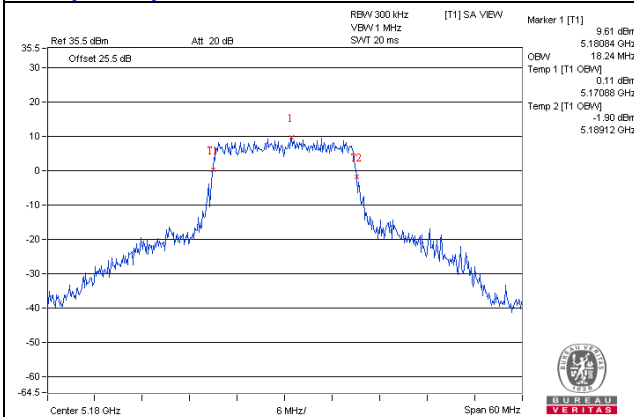


11a 1S3T CDD CH165 Chain3

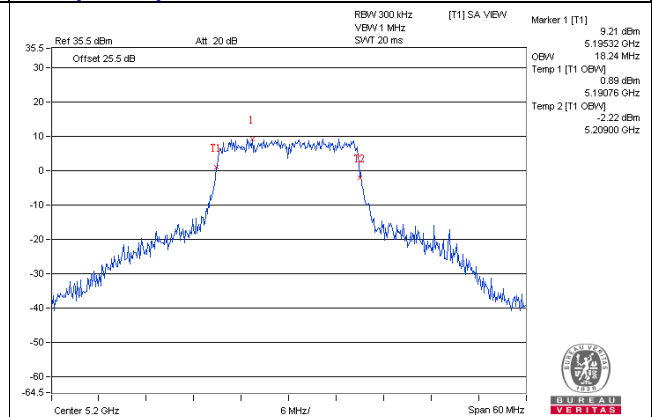


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

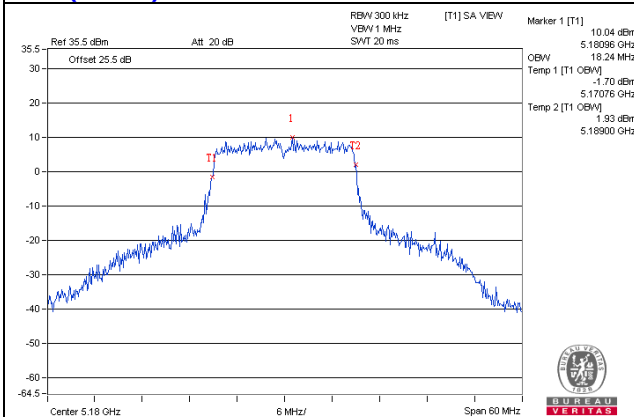
11ac (20MHz) 3S3T SDM CH36 Chain1



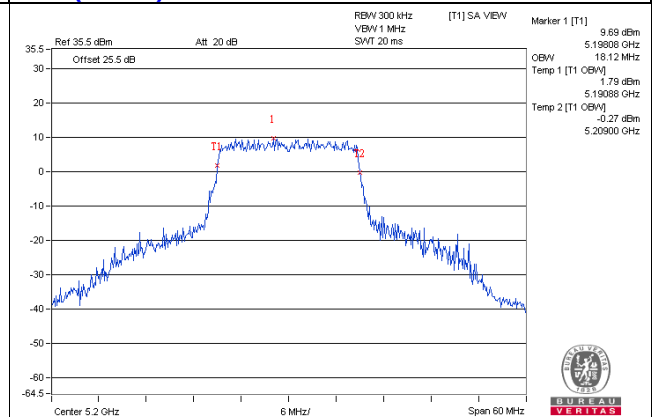
11ac (20MHz) 3S3T SDM CH40 Chain1



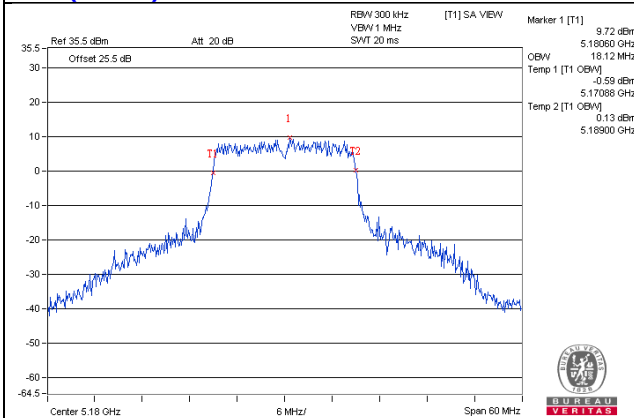
11ac (20MHz) 3S3T SDM CH36 Chain2



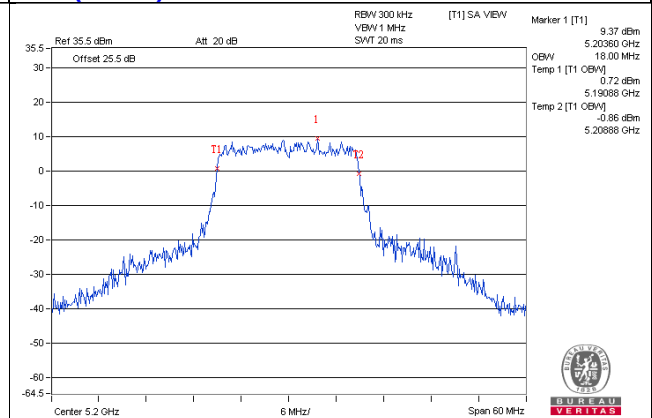
11ac (20MHz) 3S3T SDM CH40 Chain2



11ac (20MHz) 3S3T SDM CH36 Chain3

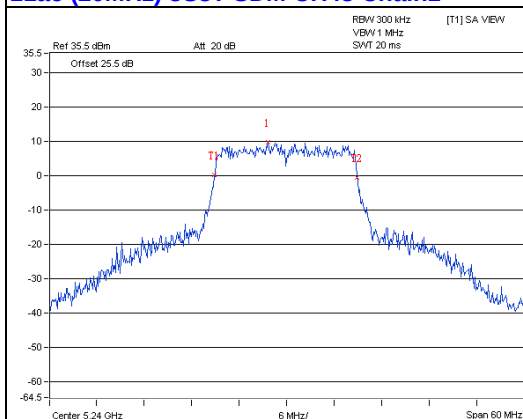


11ac (20MHz) 3S3T SDM CH40 Chain3

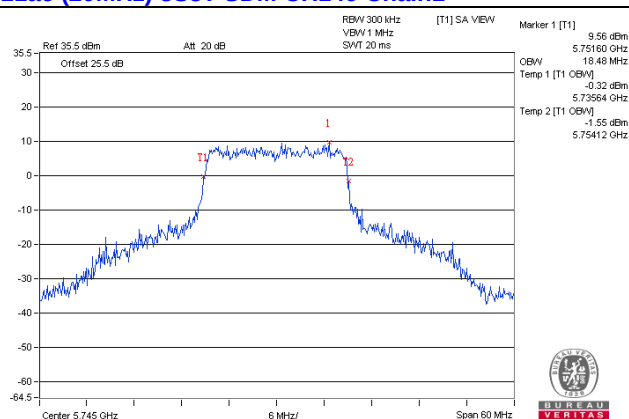


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

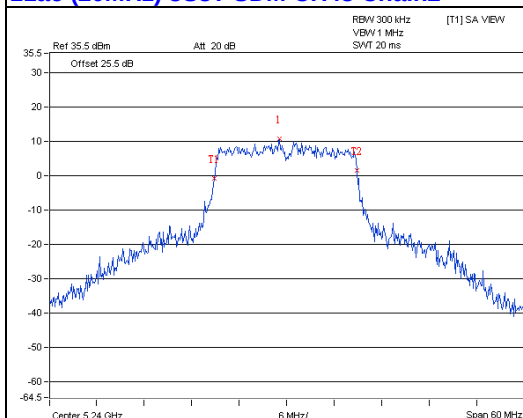
11ac (20MHz) 3S3T SDM CH48 Chain1



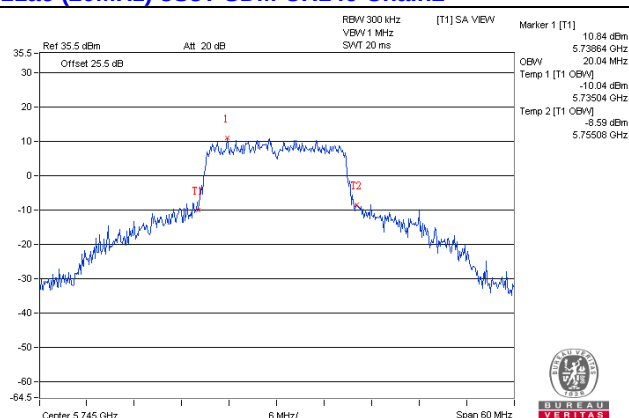
11ac (20MHz) 3S3T SDM CH149 Chain1



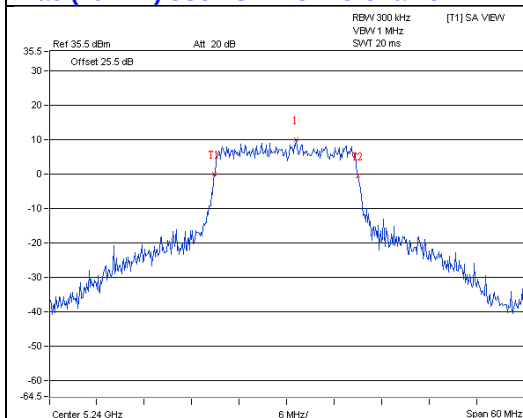
11ac (20MHz) 3S3T SDM CH48 Chain2



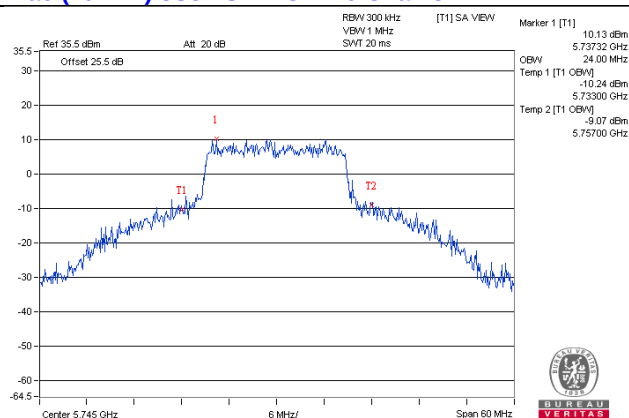
11ac (20MHz) 3S3T SDM CH149 Chain2



11ac (20MHz) 3S3T SDM CH48 Chain3

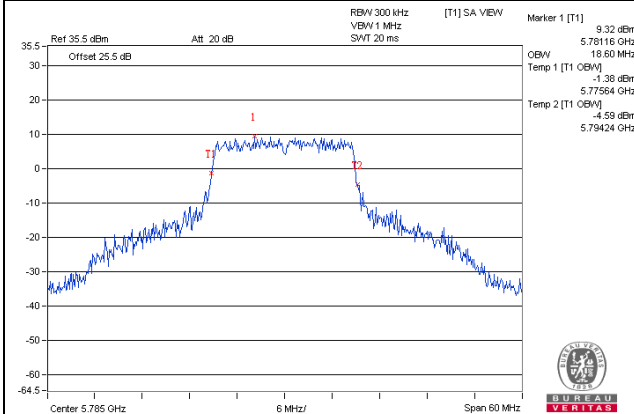


11ac (20MHz) 3S3T SDM CH149 Chain3

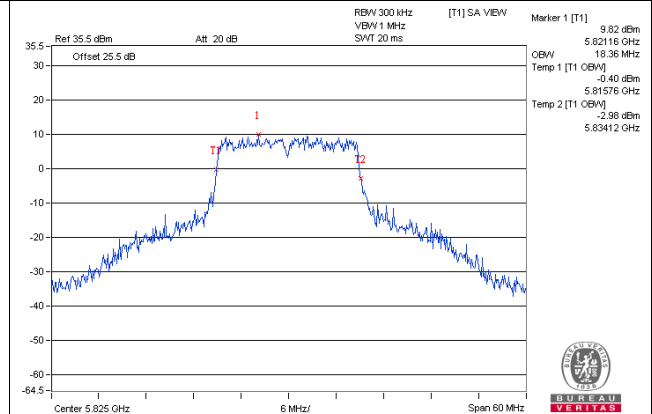


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

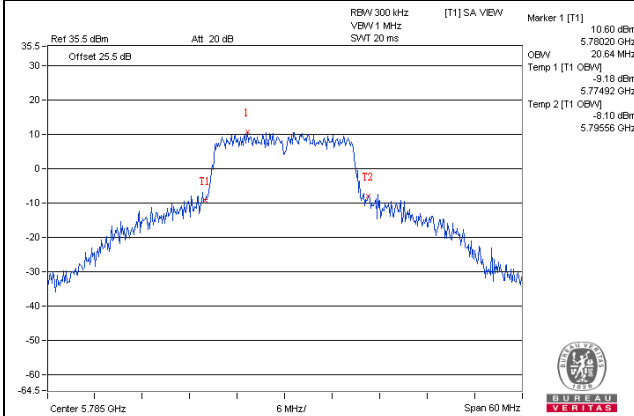
11ac (20MHz) 3S3T SDM CH157 Chain1



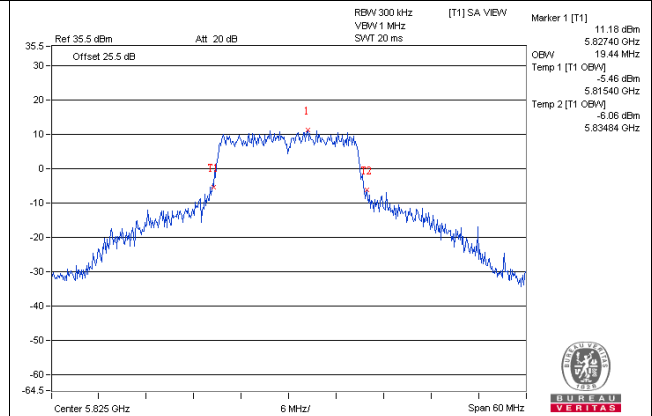
11ac (20MHz) 3S3T SDM CH165 Chain1



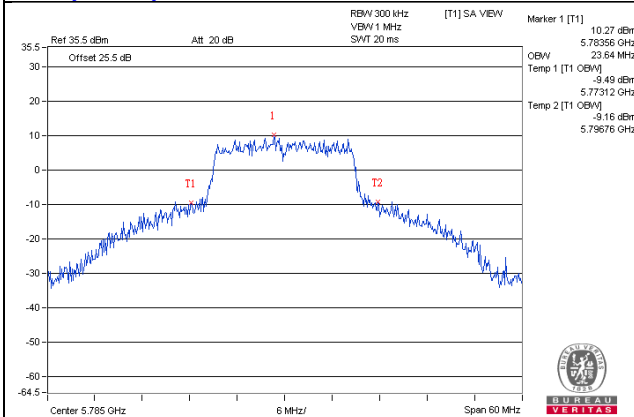
11ac (20MHz) 3S3T SDM CH157 Chain2



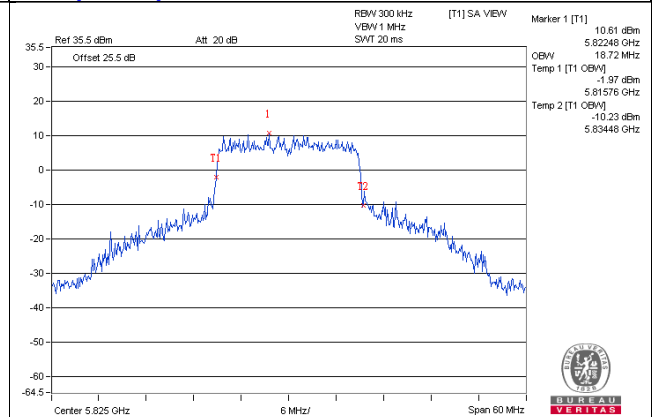
11ac (20MHz) 3S3T SDM CH165 Chain2



11ac (20MHz) 3S3T SDM CH157 Chain3

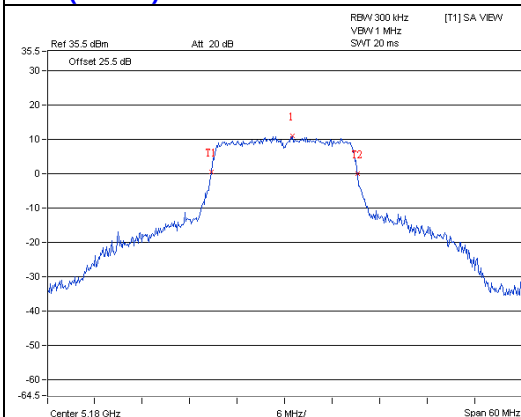


11ac (20MHz) 3S3T SDM CH165 Chain3

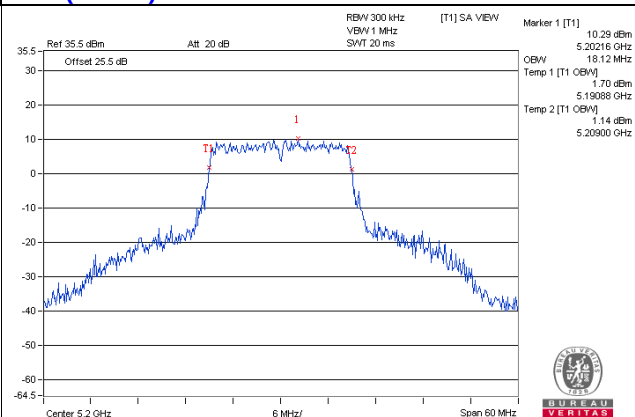


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

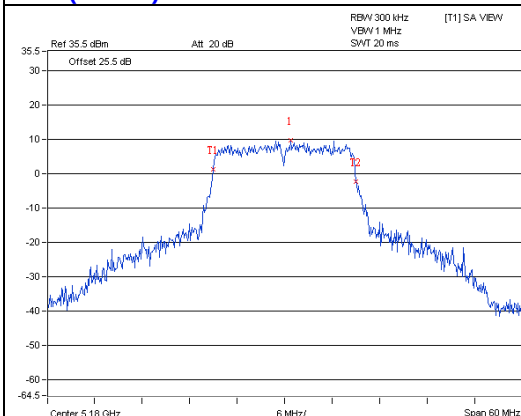
11ac (20MHz) 1S3T TxBF CH36 Chain1



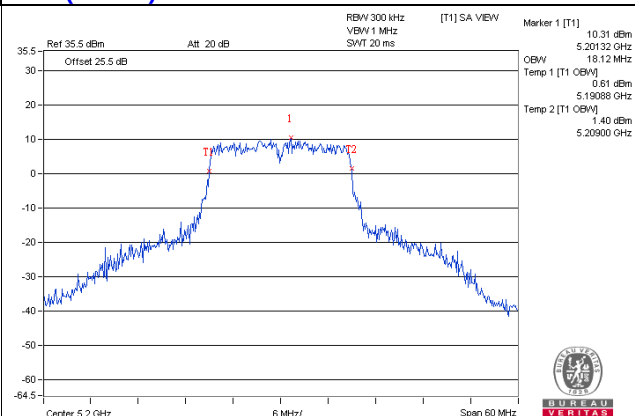
11ac (20MHz) 1S3T TxBF CH40 Chain1



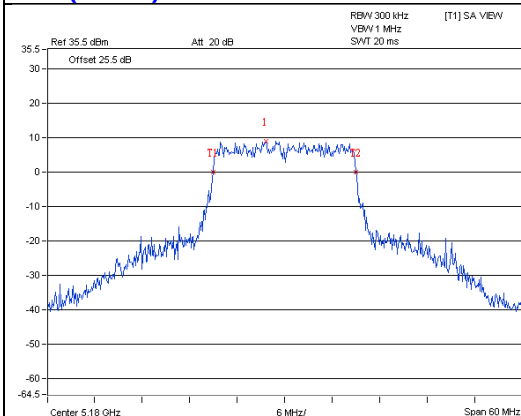
11ac (20MHz) 1S3T TxBF CH36 Chain2



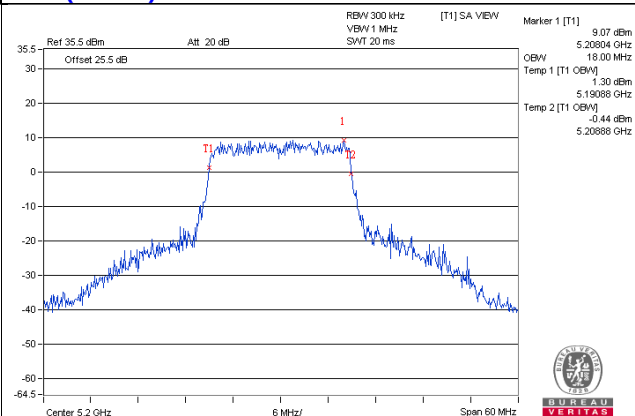
11ac (20MHz) 1S3T TxBF CH40 Chain2



11ac (20MHz) 1S3T TxBF CH36 Chain3

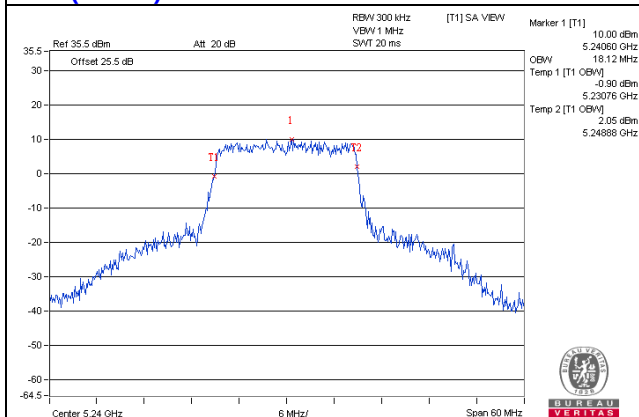


11ac (20MHz) 1S3T TxBF CH40 Chain3

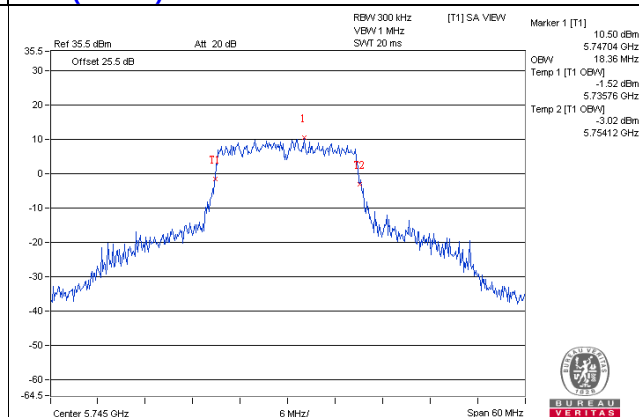


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

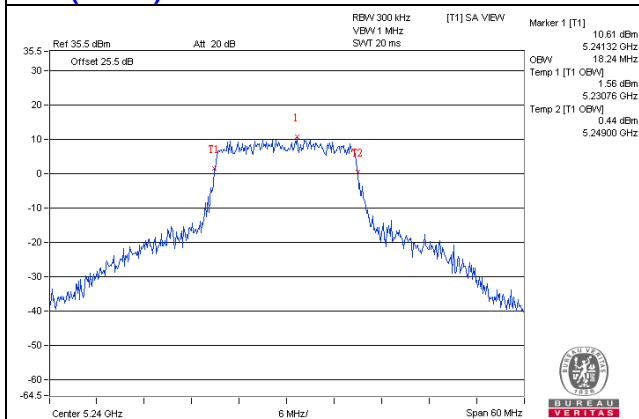
11ac (20MHz) 1S3T TxBF CH48 Chain1



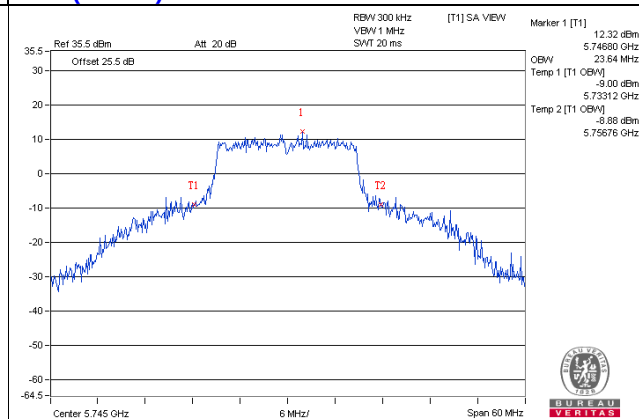
11ac (20MHz) 1S3T TxBF CH149 Chain1



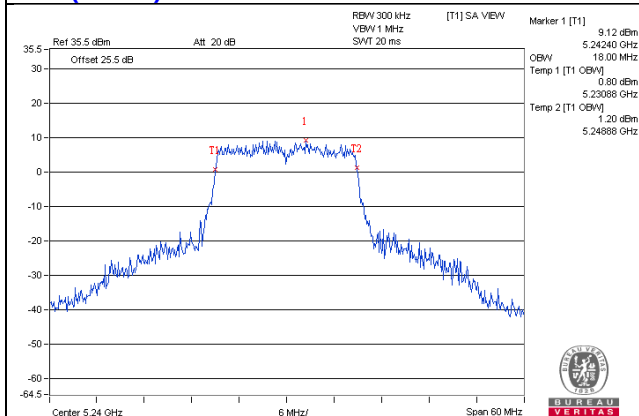
11ac (20MHz) 1S3T TxBF CH48 Chain2



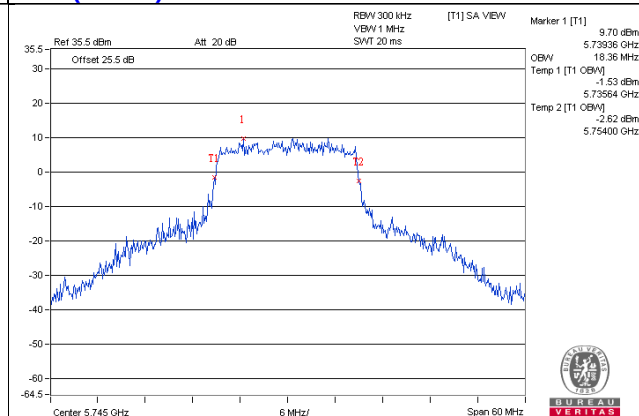
11ac (20MHz) 1S3T TxBF CH149 Chain2



11ac (20MHz) 1S3T TxBF CH48 Chain3

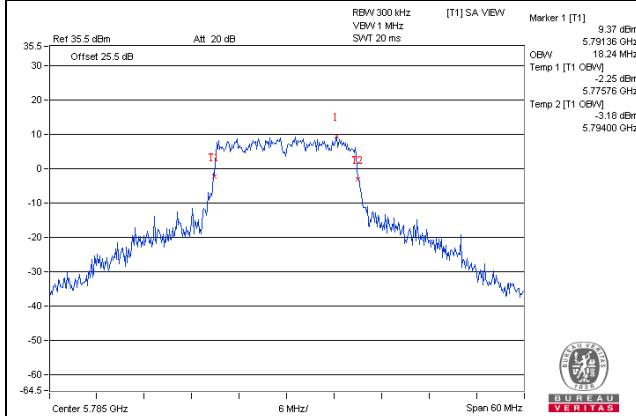


11ac (20MHz) 1S3T TxBF CH149 Chain3

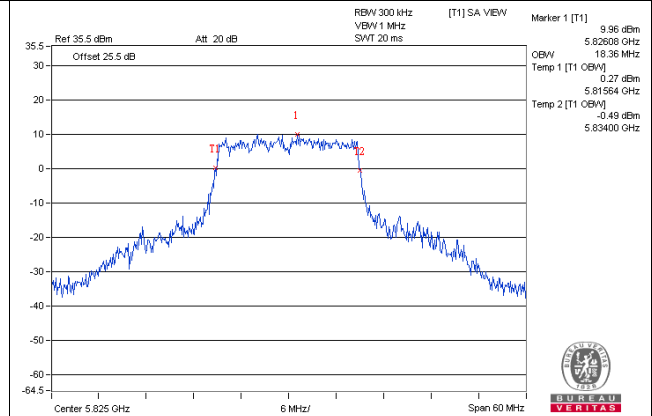


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

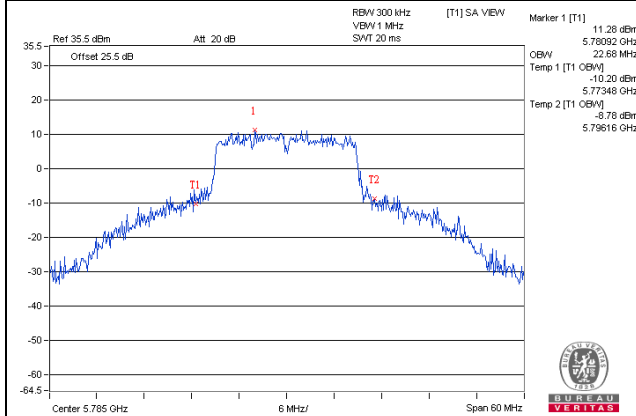
11ac (20MHz) 1S3T TxBF CH157 Chain1



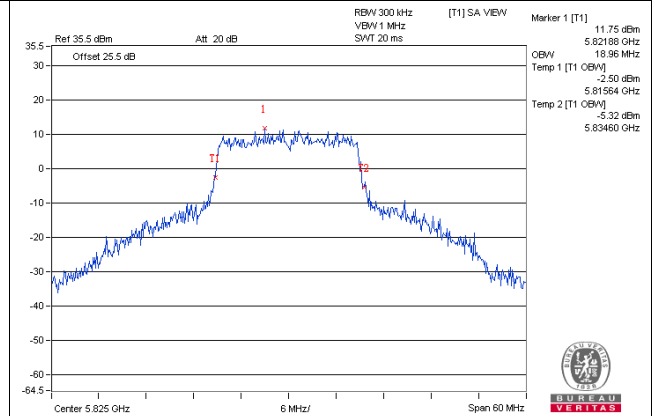
11ac (20MHz) 1S3T TxBF CH165 Chain1



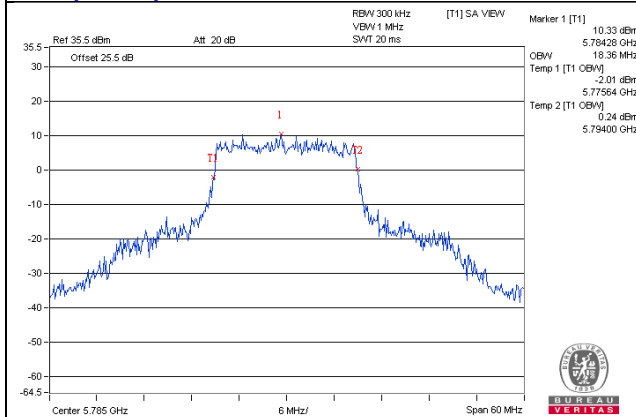
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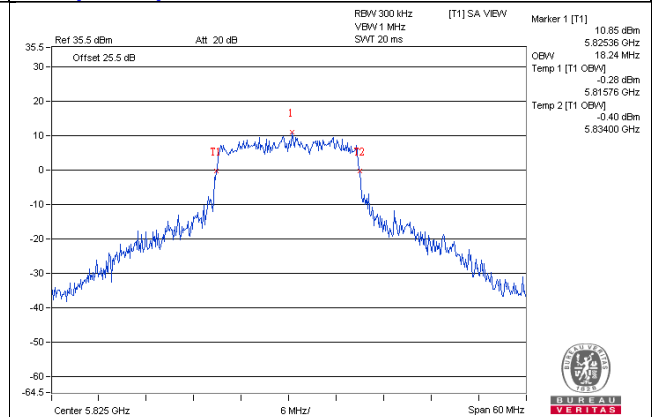
11ac (20MHz) 1S3T TxBF CH165 Chain2



11ac (20MHz) 1S3T TxBF CH157 Chain3

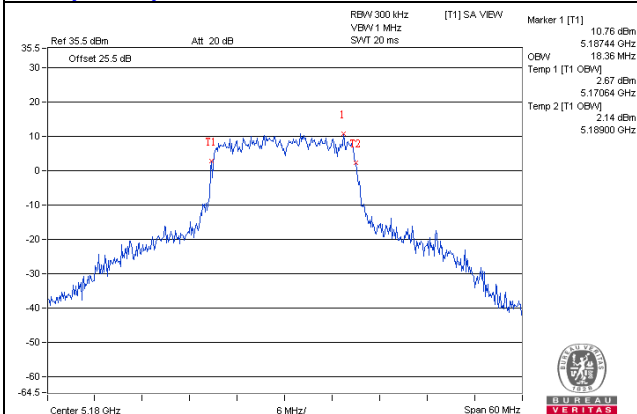


11ac (20MHz) 1S3T TxBF CH165 Chain3

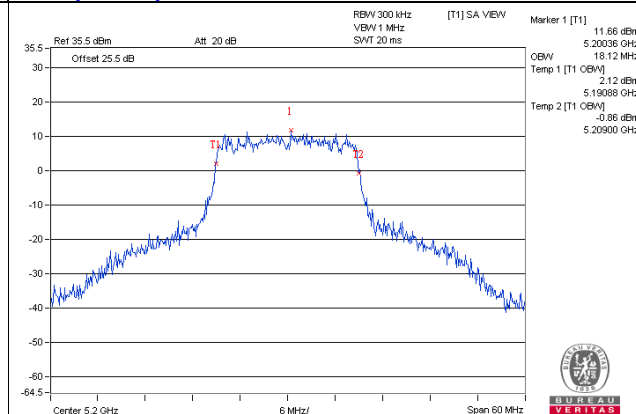


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

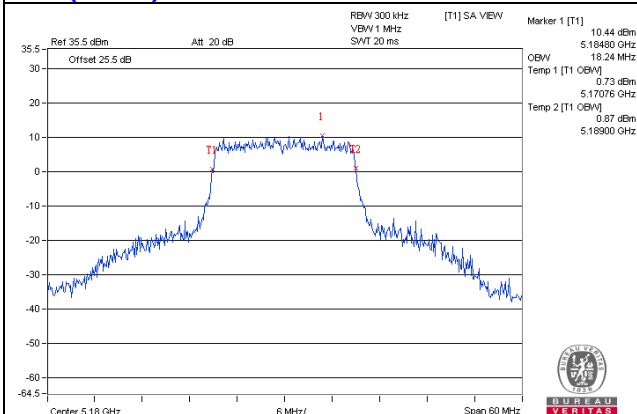
11ac (20MHz) 2S3T TxBF CH36 Chain1



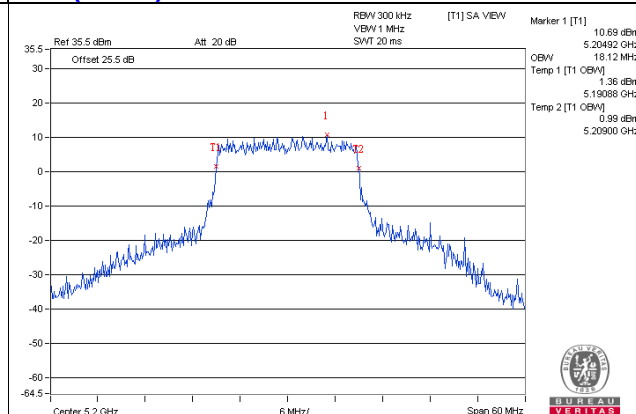
11ac (20MHz) 2S3T TxBF CH40 Chain1



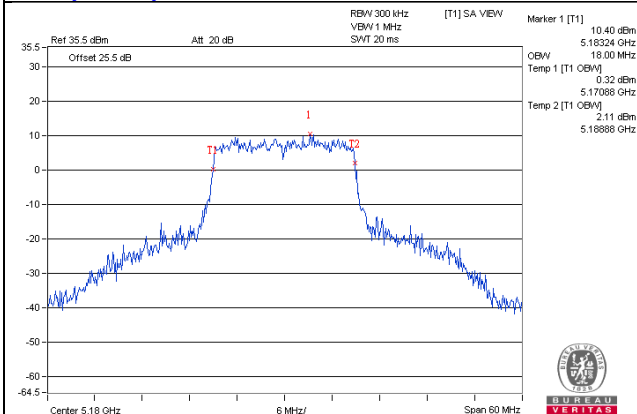
11ac (20MHz) 2S3T TxBF CH36 Chain2



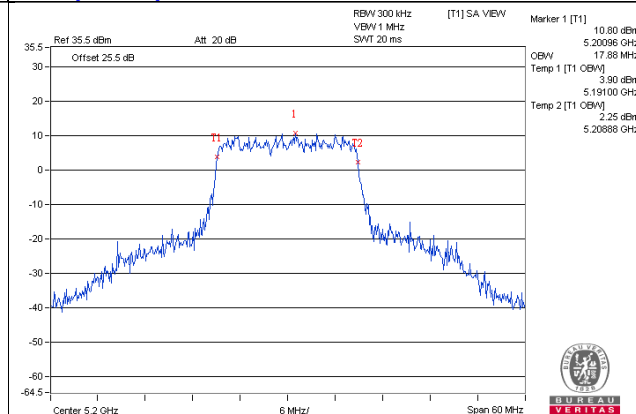
11ac (20MHz) 2S3T TxBF CH40 Chain2



11ac (20MHz) 2S3T TxBF CH36 Chain3

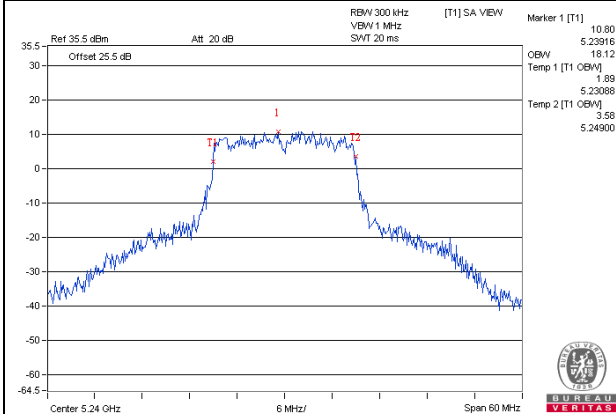


11ac (20MHz) 2S3T TxBF CH40 Chain3

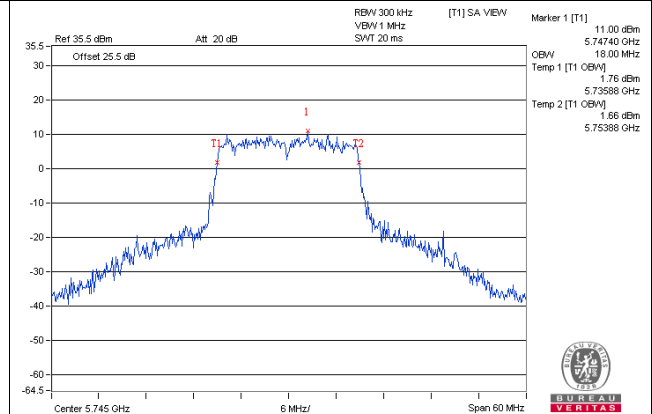


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

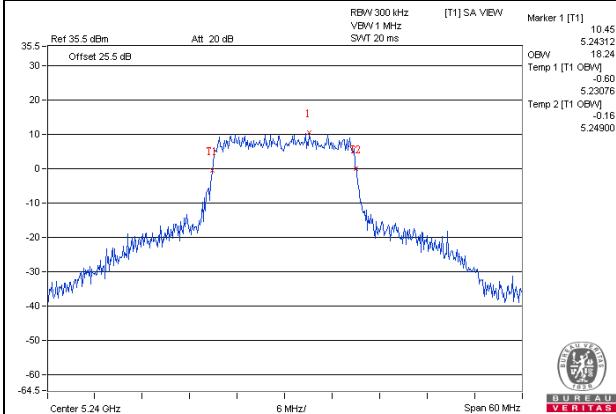
11ac (20MHz) 2S3T TxBF CH48 Chain1



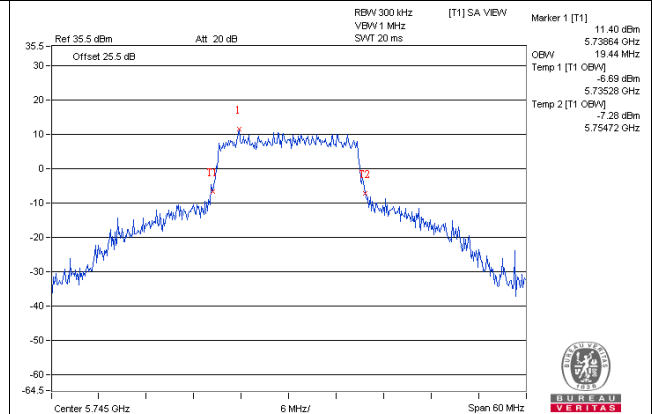
11ac (20MHz) 2S3T TxBF CH149 Chain1



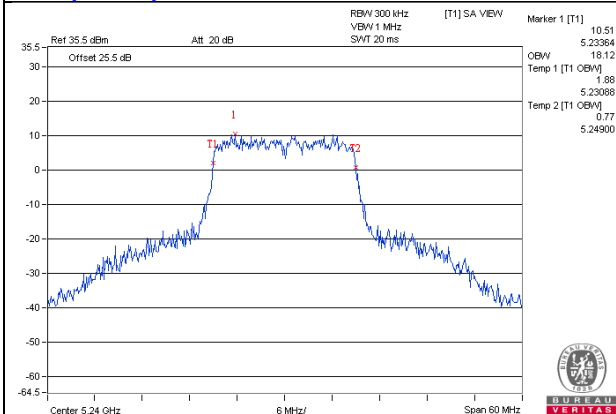
11ac (20MHz) 2S3T TxBF CH48 Chain2



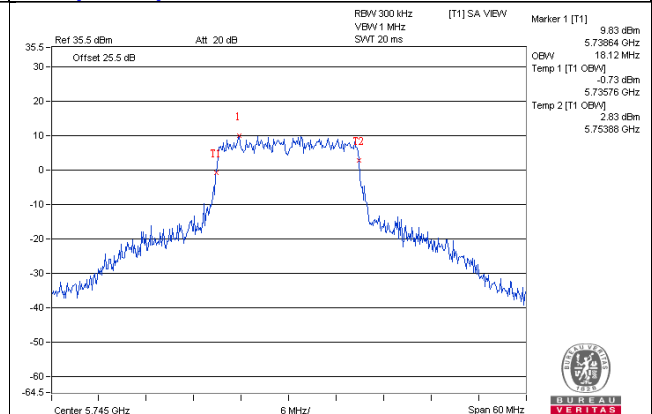
11ac (20MHz) 2S3T TxBF CH149 Chain2



11ac (20MHz) 2S3T TxBF CH48 Chain3

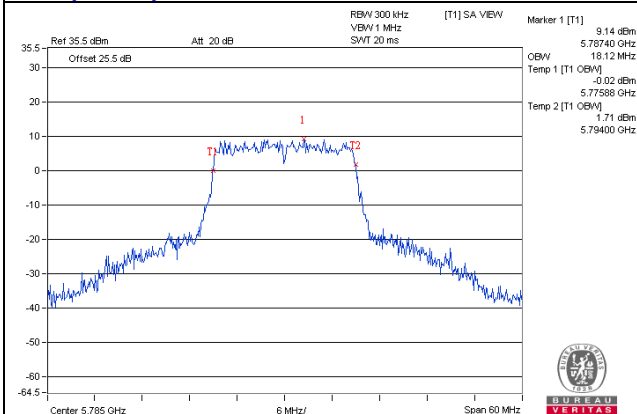


11ac (20MHz) 2S3T TxBF CH149 Chain3

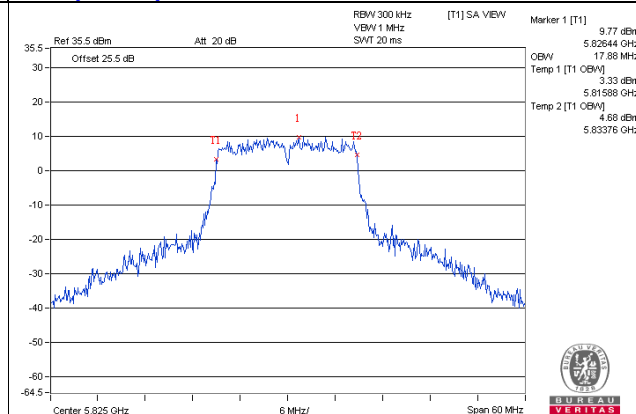


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

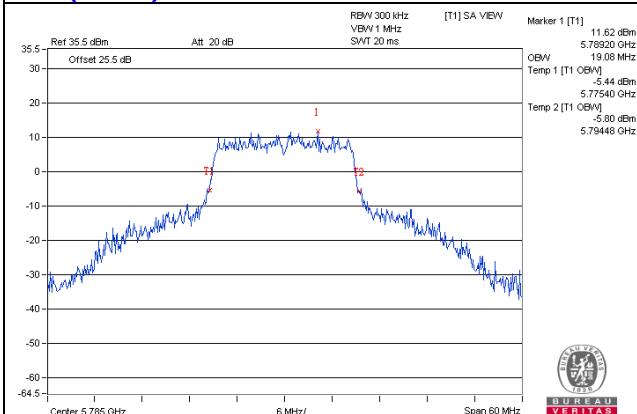
11ac (20MHz) 2S3T TxBF CH157 Chain1



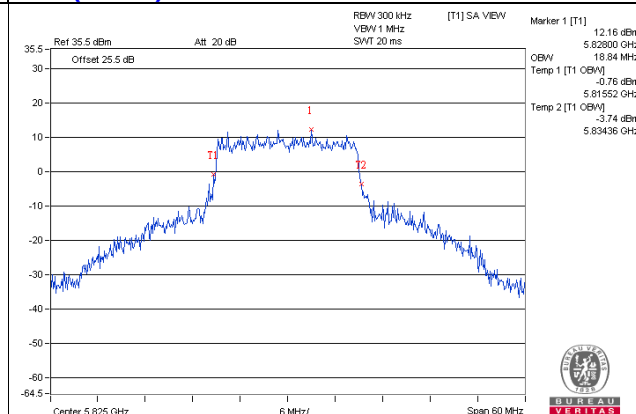
11ac (20MHz) 2S3T TxBF CH165 Chain1



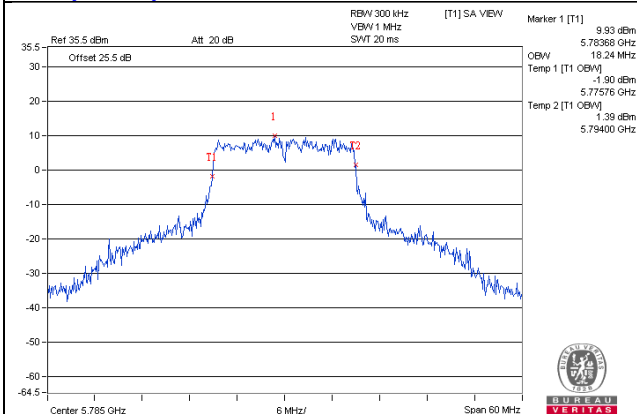
11ac (20MHz) 2S3T TxBF CH157 Chain2



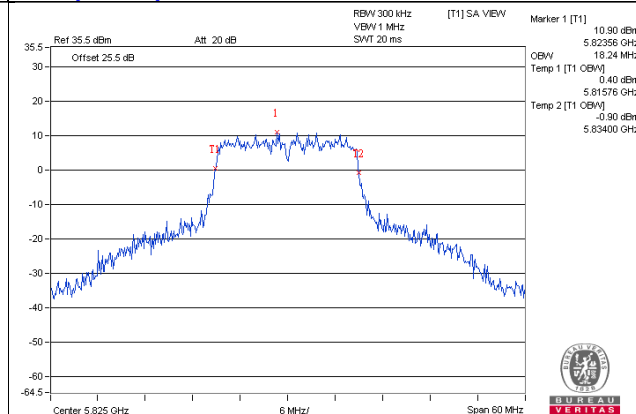
11ac (20MHz) 2S3T TxBF CH165 Chain2



11ac (20MHz) 2S3T TxBF CH157 Chain3

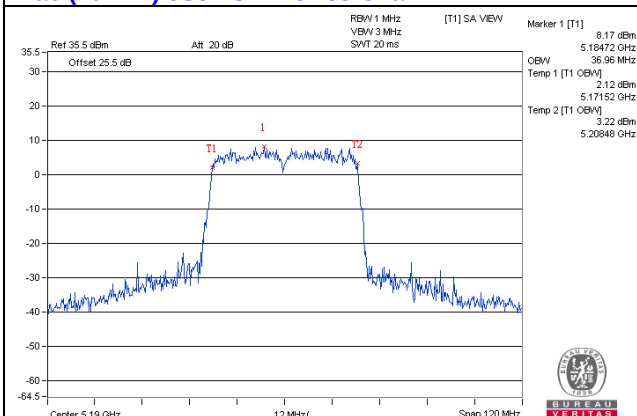


11ac (20MHz) 2S3T TxBF CH165 Chain3

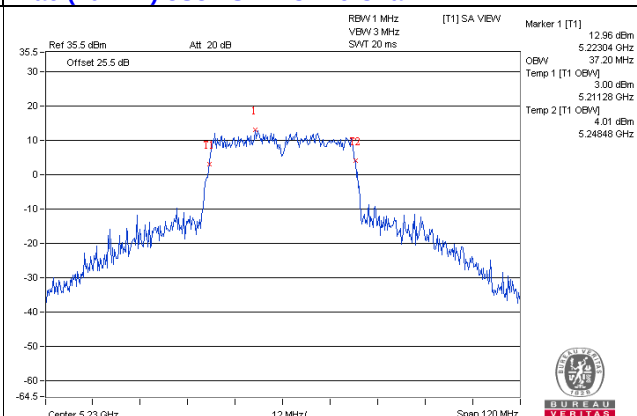


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

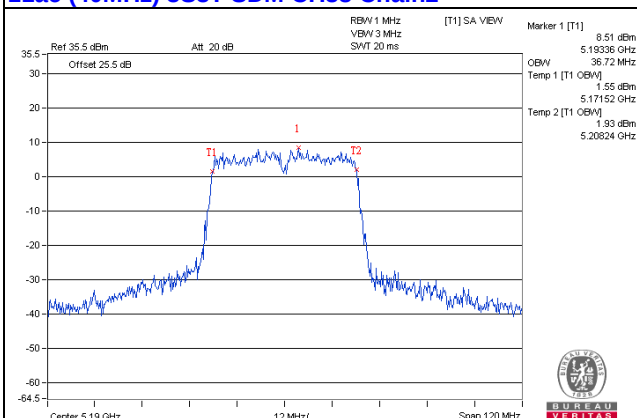
11ac (40MHz) 3S3T SDM CH38 Chain1



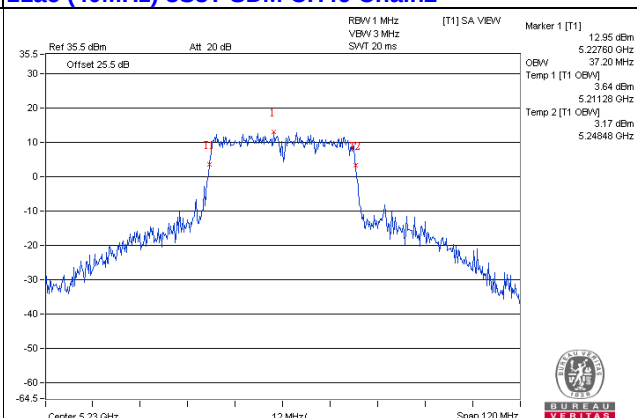
11ac (40MHz) 3S3T SDM CH46 Chain1



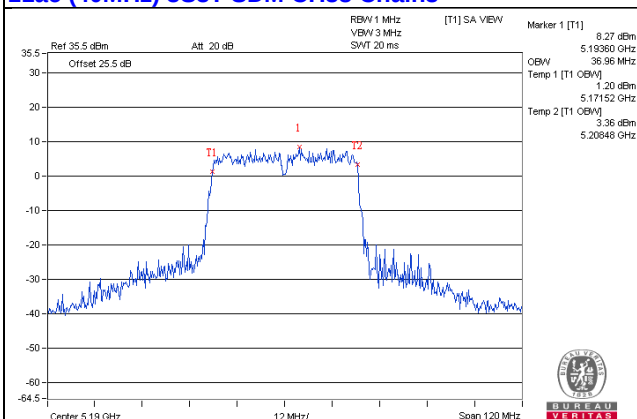
11ac (40MHz) 3S3T SDM CH38 Chain2



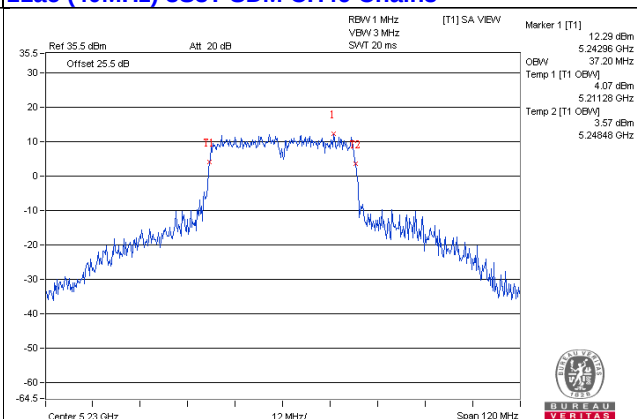
11ac (40MHz) 3S3T SDM CH46 Chain2



11ac (40MHz) 3S3T SDM CH38 Chain3

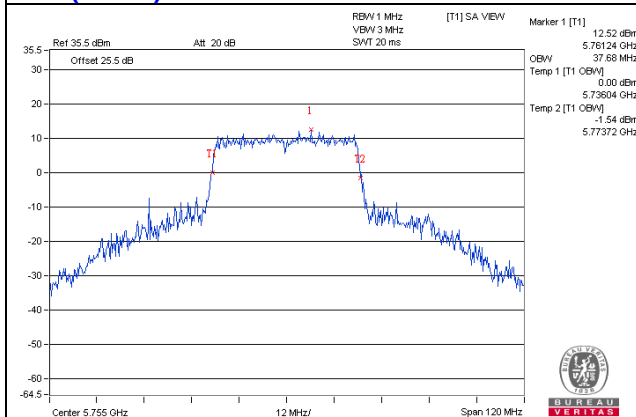


11ac (40MHz) 3S3T SDM CH46 Chain3

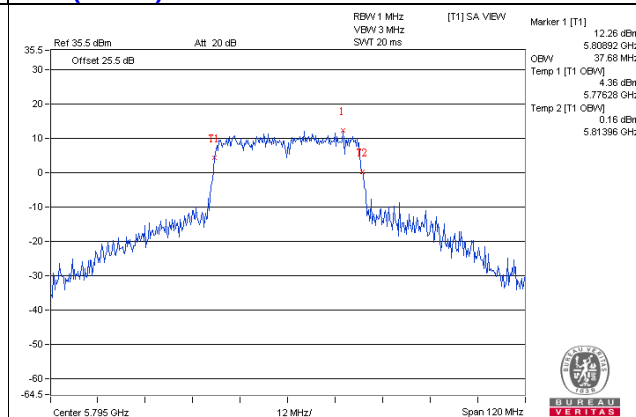


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

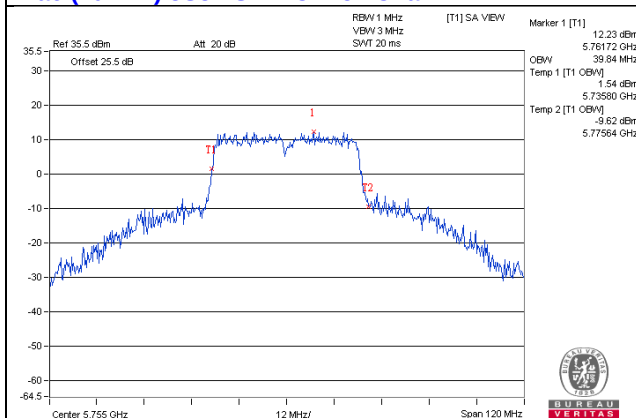
11ac (40MHz) 3S3T SDM CH151 Chain1



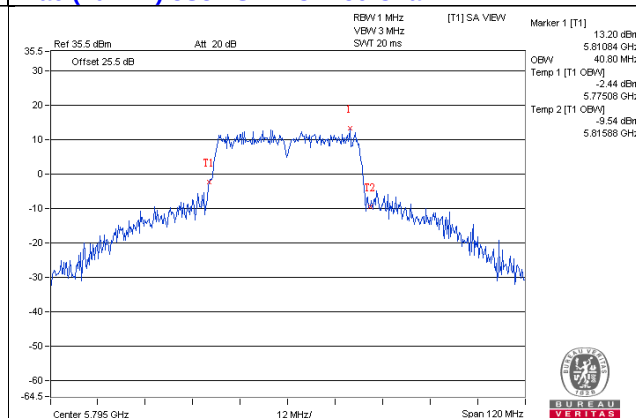
11ac (40MHz) 3S3T SDM CH159 Chain1



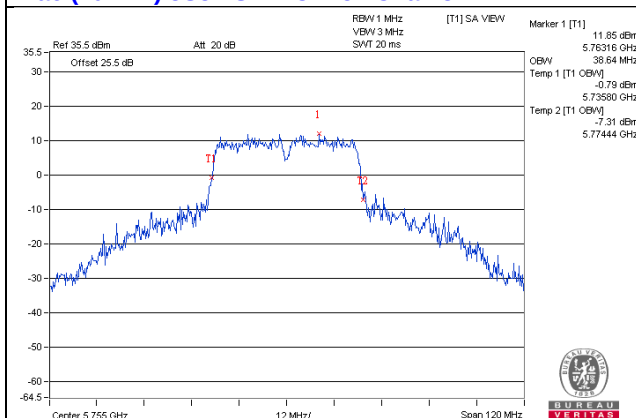
11ac (40MHz) 3S3T SDM CH151 Chain2



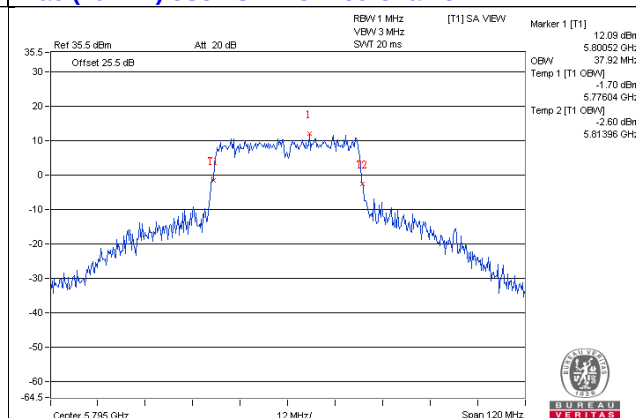
11ac (40MHz) 3S3T SDM CH159 Chain2



11ac (40MHz) 3S3T SDM CH151 Chain3

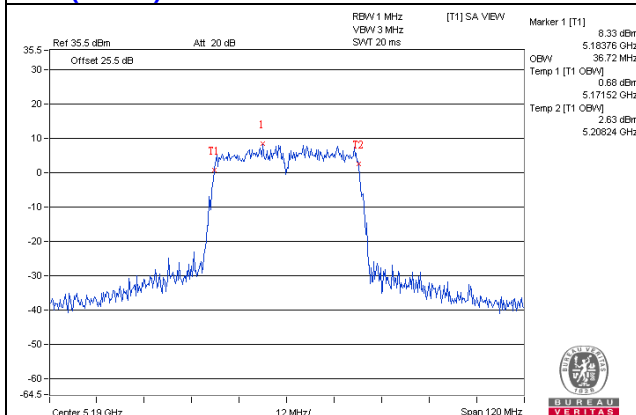


11ac (40MHz) 3S3T SDM CH159 Chain3

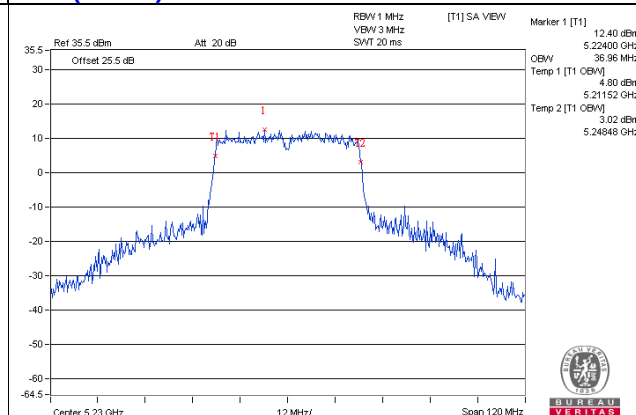


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

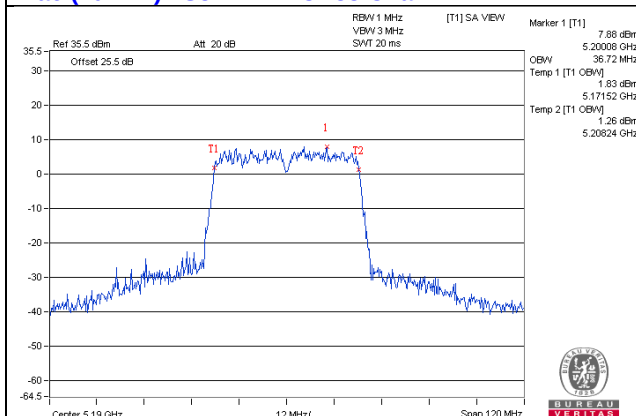
11ac (40MHz) 1S3T TxBF CH38 Chain1



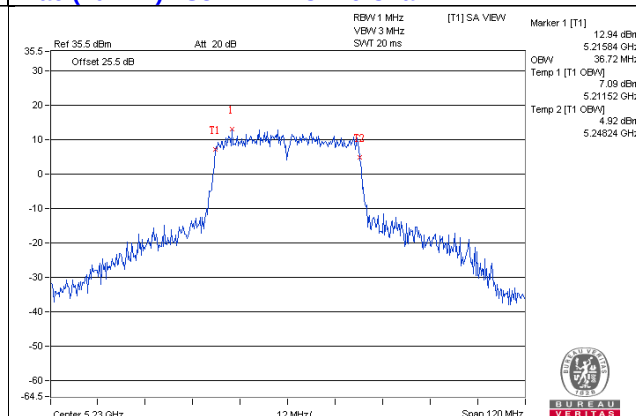
11ac (40MHz) 1S3T TxBF CH46 Chain1



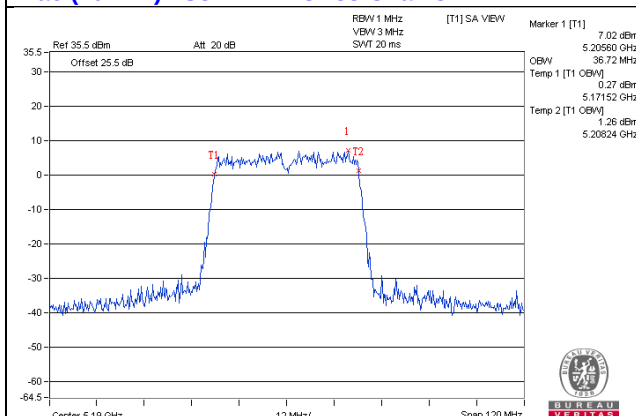
11ac (40MHz) 1S3T TxBF CH38 Chain2



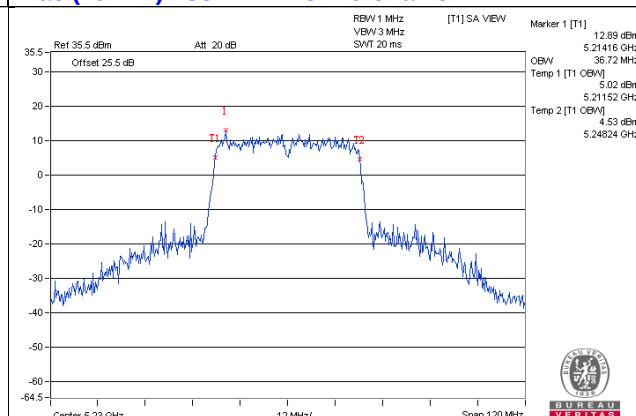
11ac (40MHz) 1S3T TxBF CH46 Chain2



11ac (40MHz) 1S3T TxBF CH38 Chain3

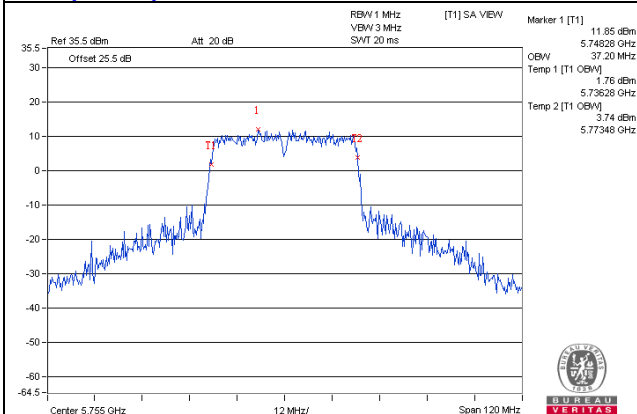


11ac (40MHz) 1S3T TxBF CH46 Chain3

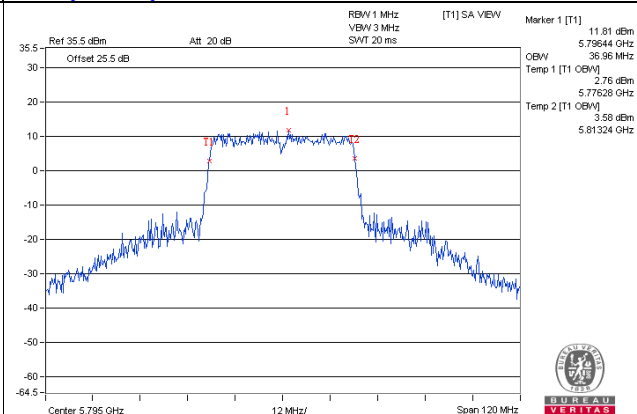


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

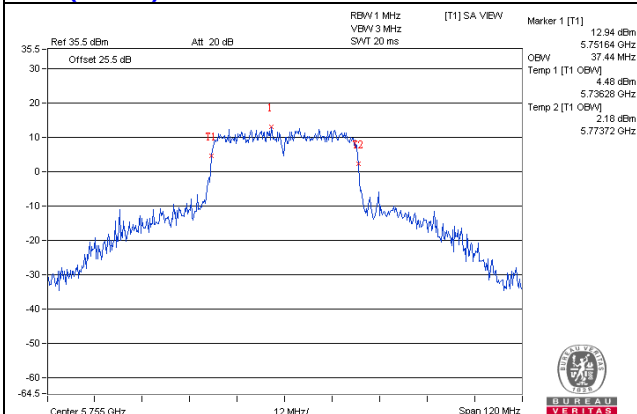
11ac (40MHz) 1S3T TxBF CH151 Chain1



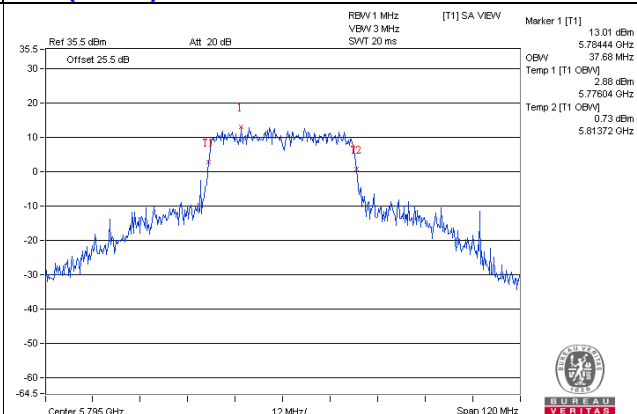
11ac (40MHz) 1S3T TxBF CH159 Chain1



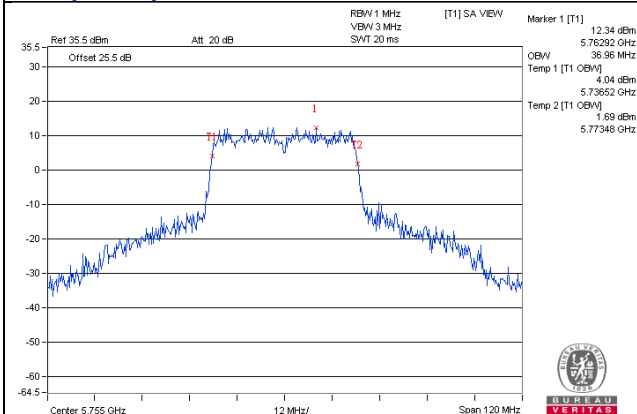
11ac (40MHz) 1S3T TxBF CH151 Chain2



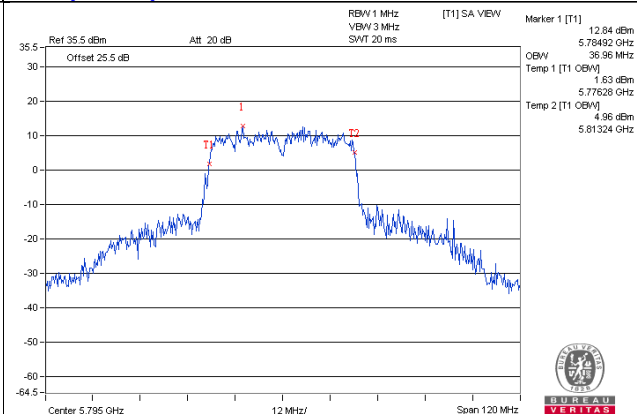
11ac (40MHz) 1S3T TxBF CH159 Chain2



11ac (40MHz) 1S3T TxBF CH151 Chain3

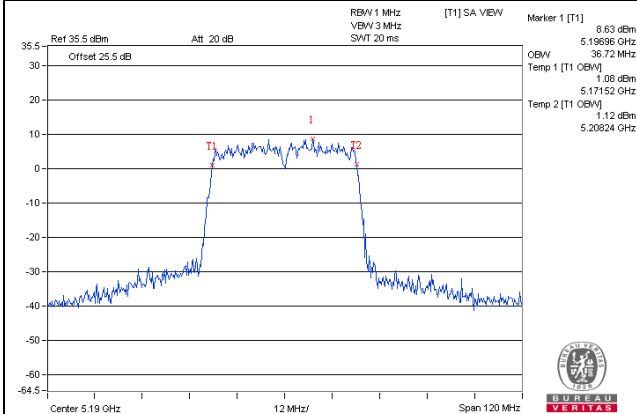


11ac (40MHz) 1S3T TxBF CH159 Chain3

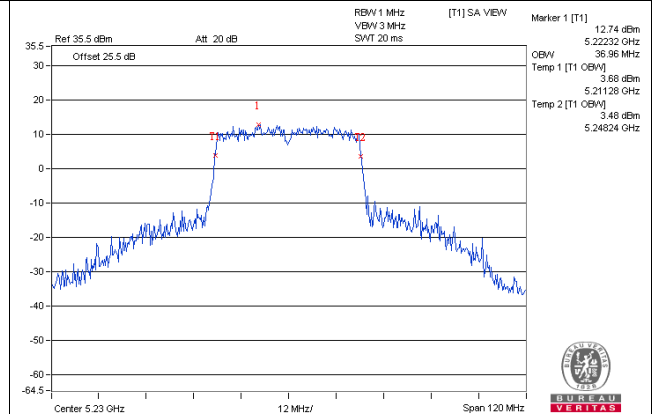


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

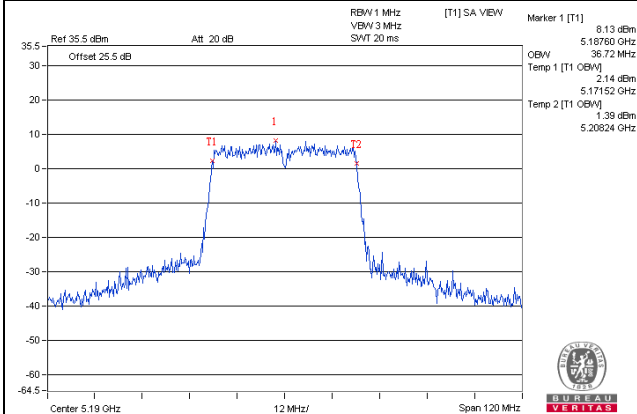
11ac (40MHz) 2S3T TxBF CH38 Chain1



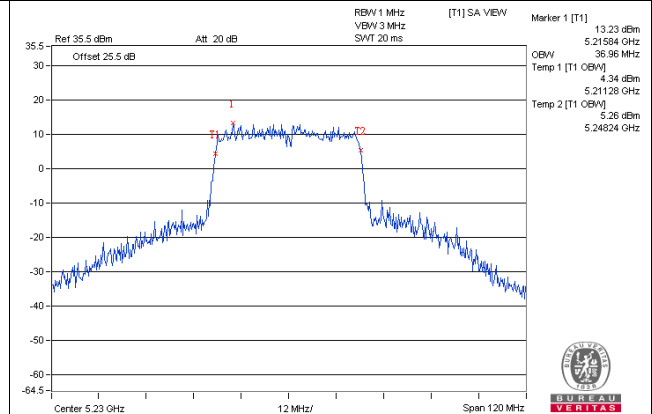
11ac (40MHz) 2S3T TxBF CH46 Chain1



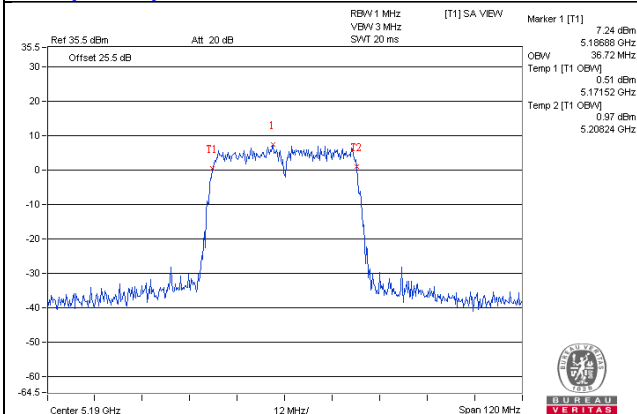
11ac (40MHz) 2S3T TxBF CH38 Chain2



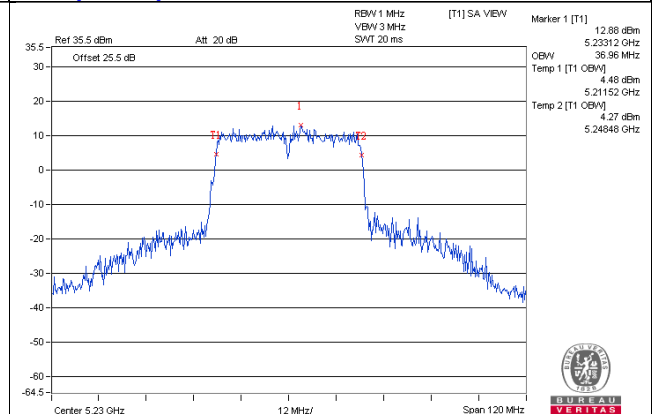
11ac (40MHz) 2S3T TxBF CH46 Chain2



11ac (40MHz) 2S3T TxBF CH38 Chain3

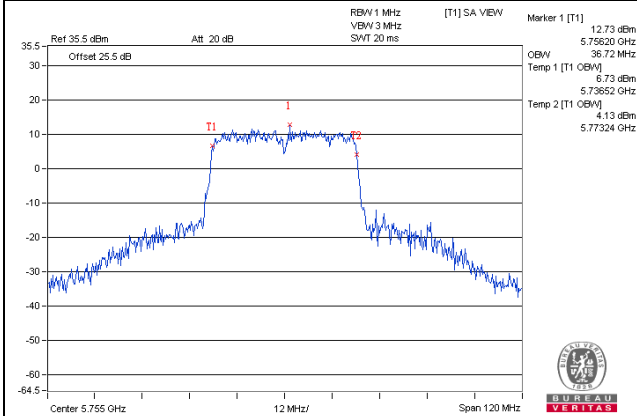


11ac (40MHz) 2S3T TxBF CH46 Chain3

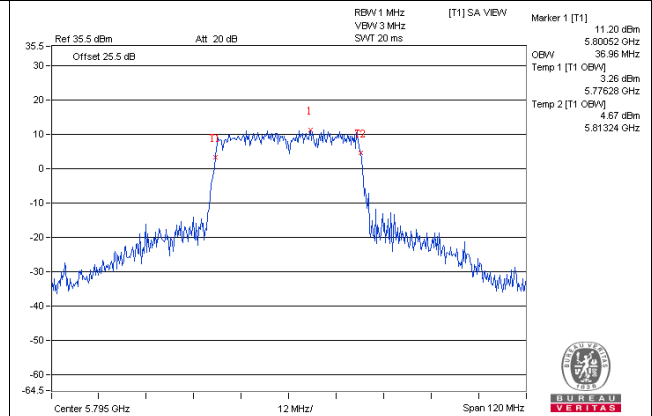


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

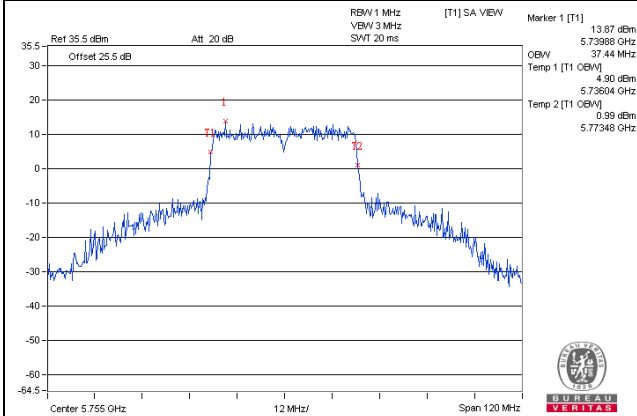
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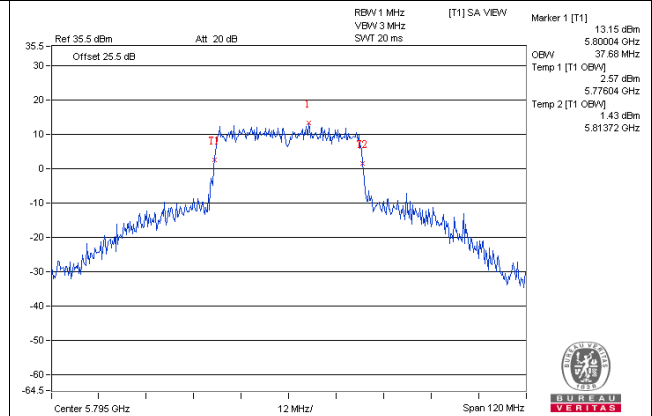
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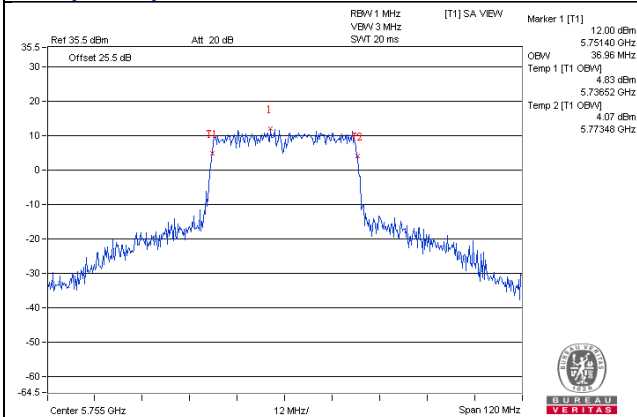
11ac (40MHz) 2S3T TxBF CH151 Chain2



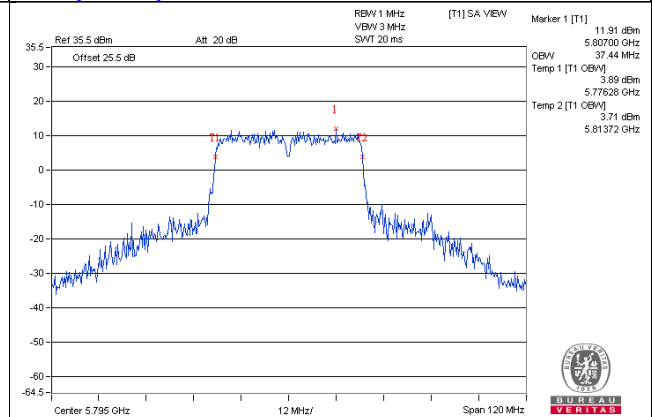
11ac (40MHz) 2S3T TxBF CH159 Chain2



11ac (40MHz) 2S3T TxBF CH151 Chain3

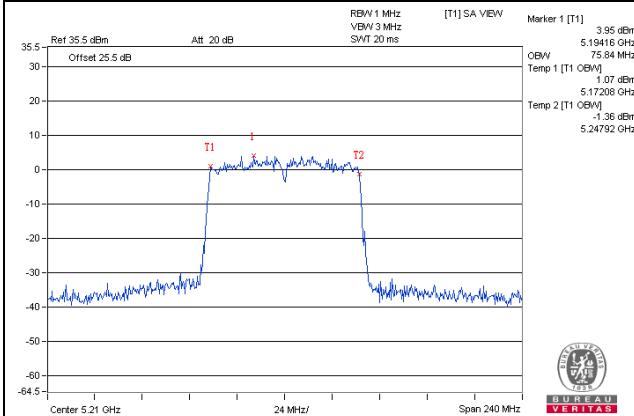


11ac (40MHz) 2S3T TxBF CH159 Chain3

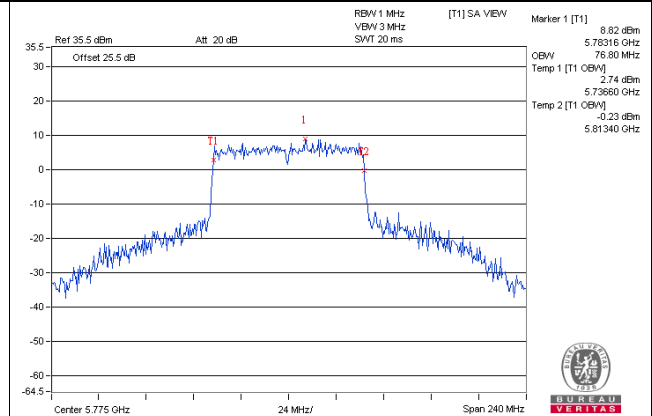


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

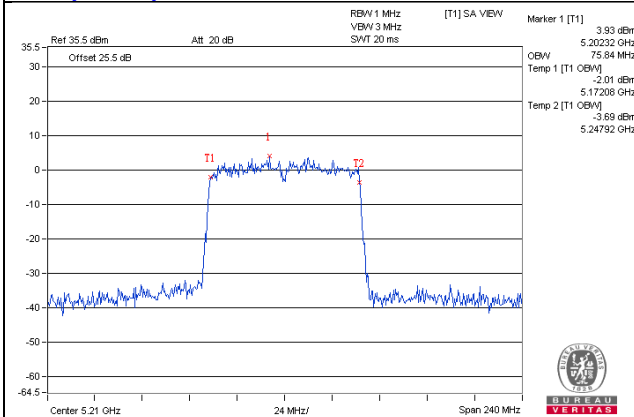
11ac (80MHz) 3S3T SDM CH42 Chain1



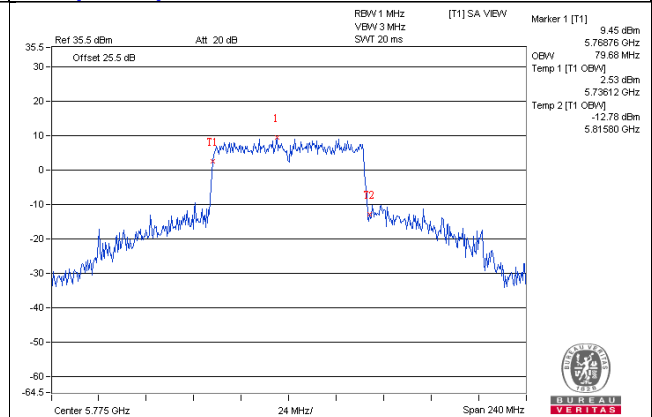
11ac (80MHz) 3S3T SDM CH155 Chain1



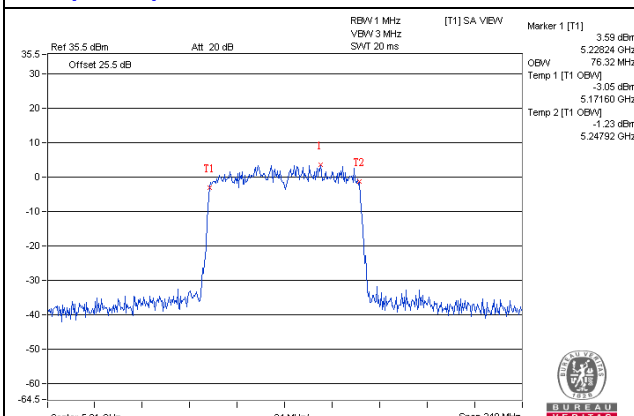
11ac (80MHz) 3S3T SDM CH42 Chain2



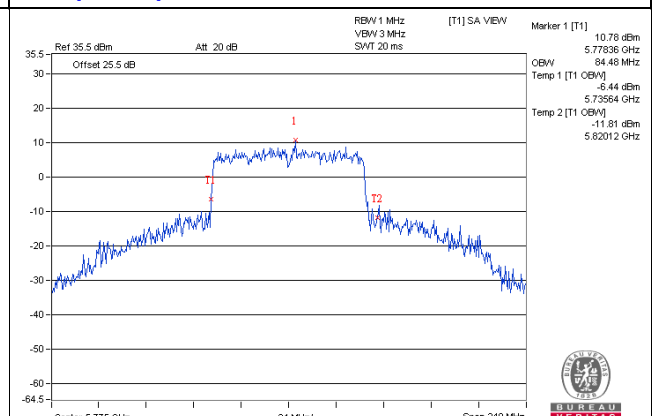
11ac (80MHz) 3S3T SDM CH155 Chain2



11ac (80MHz) 3S3T SDM CH42 Chain3

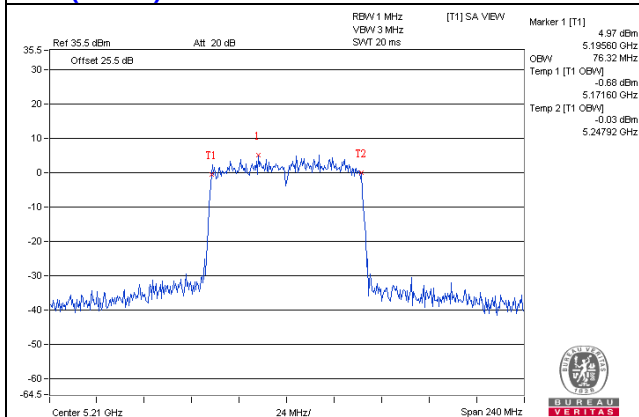


11ac (80MHz) 3S3T SDM CH155 Chain3

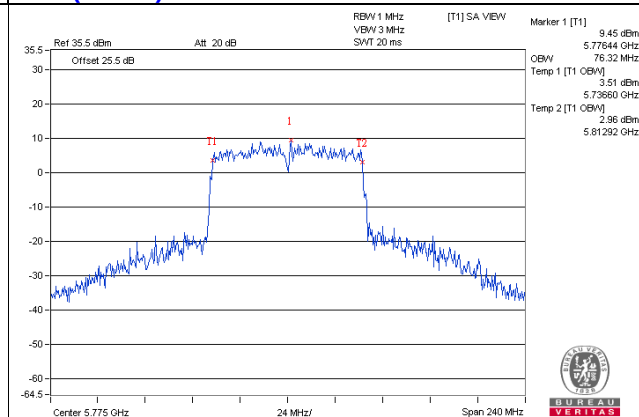


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

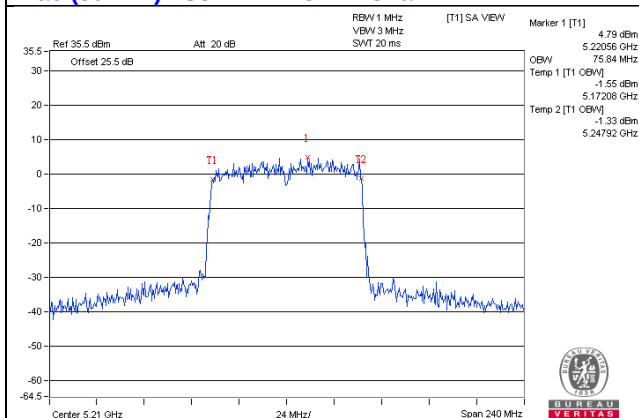
11ac (80MHz) 1S3T TxBF CH42 Chain1



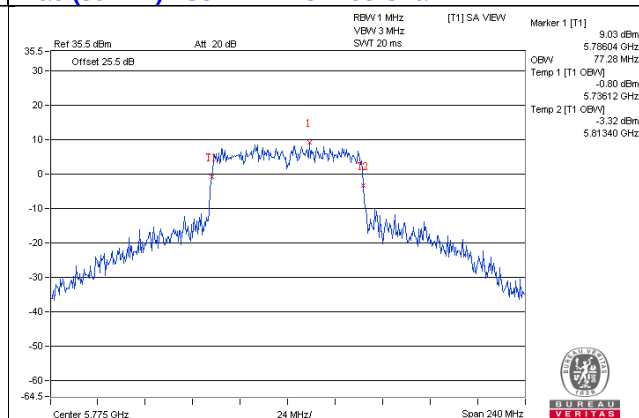
11ac (80MHz) 1S3T TxBF CH155 Chain1



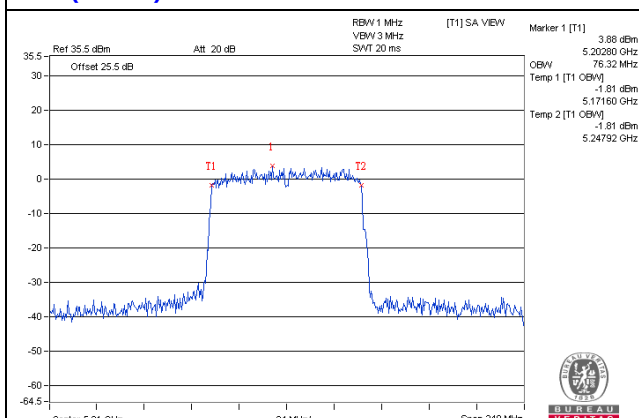
11ac (80MHz) 1S3T TxBF CH42 Chain2



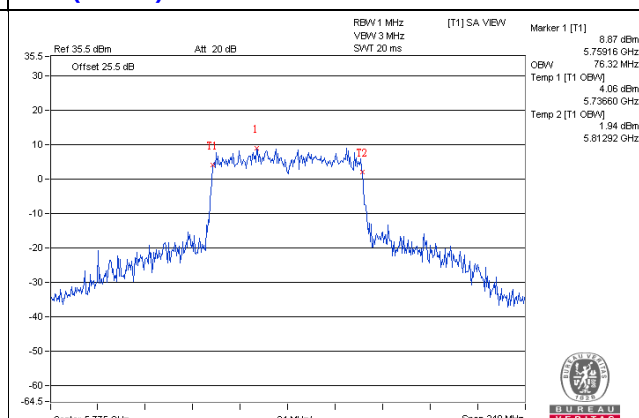
11ac (80MHz) 1S3T TxBF CH155 Chain2



11ac (80MHz) 1S3T TxBF CH42 Chain3

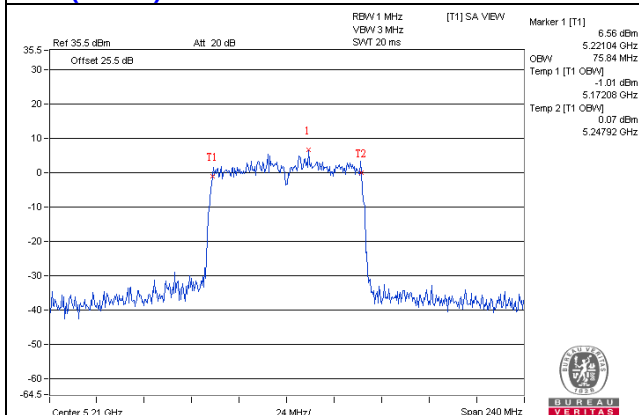


11ac (80MHz) 1S3T TxBF CH155 Chain3

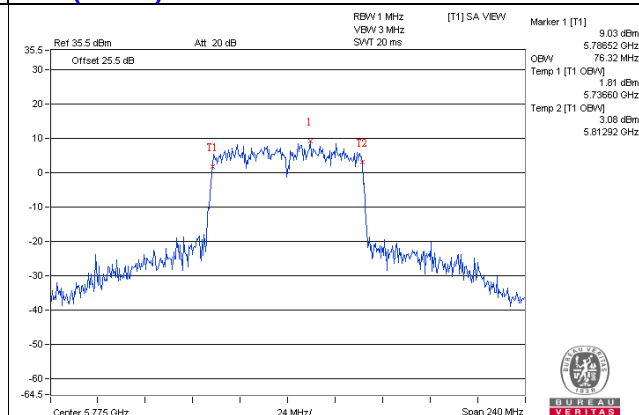


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

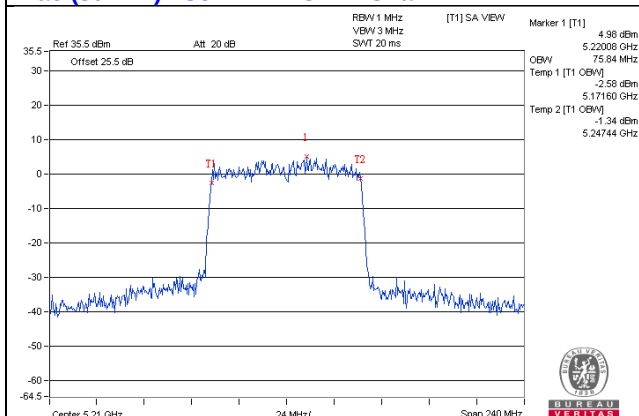
11ac (80MHz) 2S3T TxBF CH42 Chain1



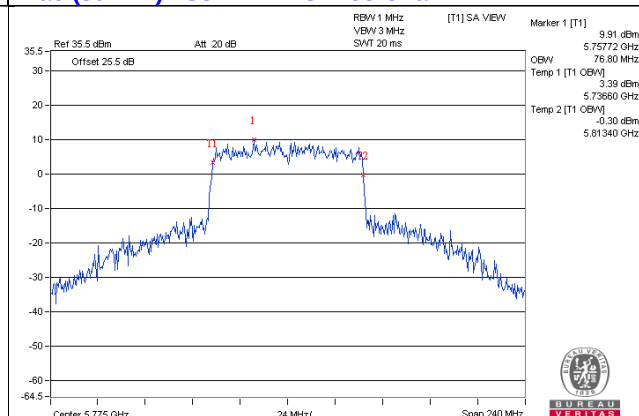
11ac (80MHz) 2S3T TxBF CH155 Chain1



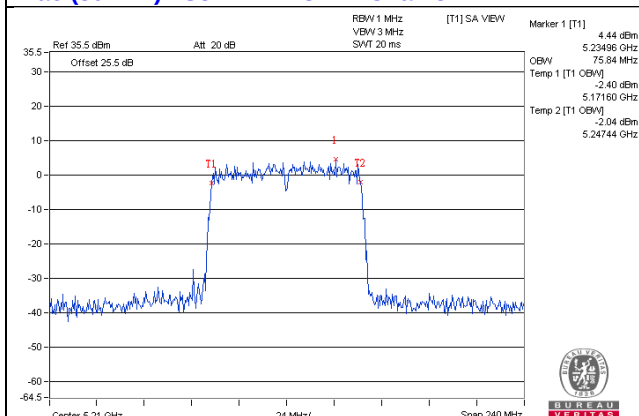
11ac (80MHz) 2S3T TxBF CH42 Chain2



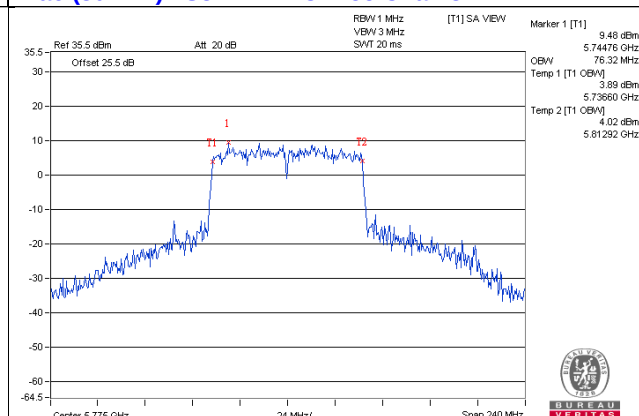
11ac (80MHz) 2S3T TxBF CH155 Chain2



11ac (80MHz) 2S3T TxBF CH42 Chain3



11ac (80MHz) 2S3T TxBF CH155 Chain3



4.3 6dB Bandwidth Measurement

4.3.1 Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz

4.3.2 Measuring Instruments and Setting

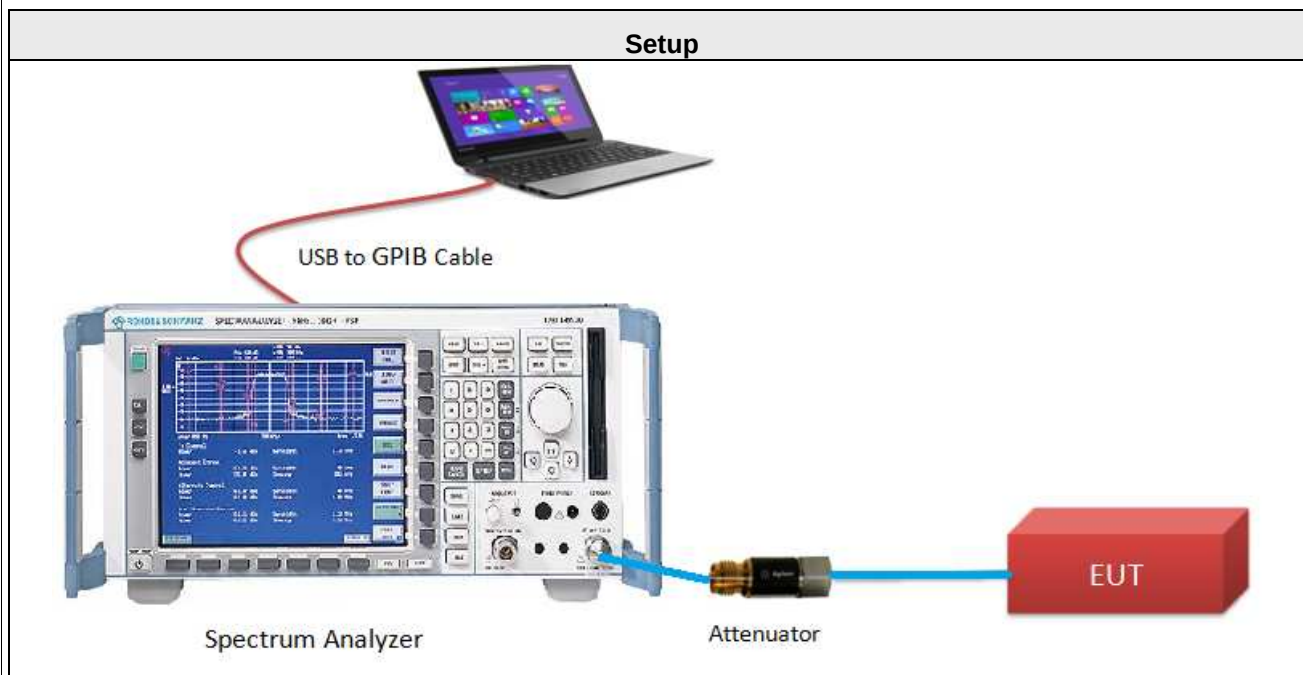
The following table is the setting of the Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	100KHz
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto couple

4.3.3 Test Procedures

- 1 The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
- 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)(2)", 05/02/2017
- 3 Measured the spectrum width with power higher than 6dB account by this measurement.

4.3.4 Test Setup Layout



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 6dB Bandwidth

Temperature	25°C	Humidity	60%
Test Engineer	Anderson Chen		

11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	16.37	16.35	16.37	0.5	PASS
157	5785	16.39	16.38	16.36	0.5	PASS
165	5825	16.37	16.38	16.36	0.5	PASS

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.62	17.61	17.63	0.5	PASS
157	5785	17.62	17.61	17.63	0.5	PASS
165	5825	17.60	17.62	17.62	0.5	PASS

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.62	17.64	17.61	0.5	PASS
157	5785	17.63	17.63	17.61	0.5	PASS
165	5825	17.63	17.64	16.97	0.5	PASS

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.68	17.64	17.67	0.5	PASS
157	5785	17.67	17.64	17.66	0.5	PASS
165	5825	17.66	17.62	17.67	0.5	PASS

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.34	36.18	36.45	0.5	PASS
159	5795	36.36	36.34	36.45	0.5	PASS

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.34	36.44	36.37	0.5	PASS
159	5795	36.35	36.43	36.39	0.5	PASS

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.22	36.45	36.42	0.5	PASS
159	5795	36.16	36.40	36.47	0.5	PASS

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.54	75.55	75.61	0.5	PASS

11ac (80MHz) 1S3T TxBF

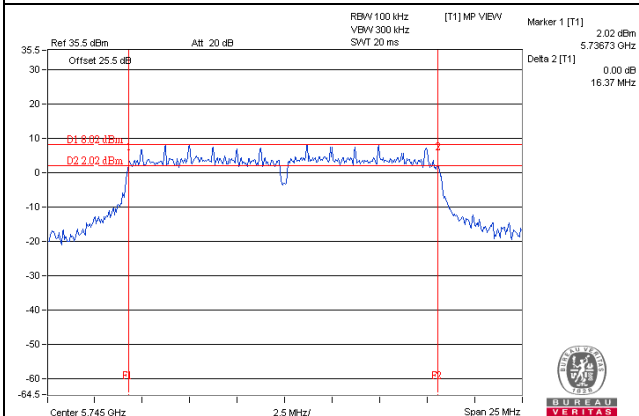
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.53	75.56	75.54	0.5	PASS

11ac (80MHz) 2S3T TxBF

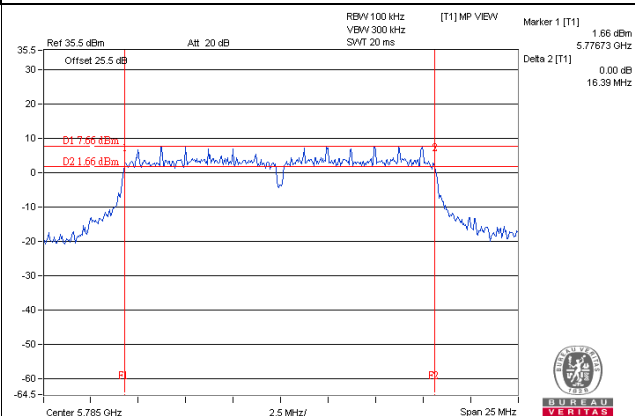
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.97	75.54	75.59	0.5	PASS

6dB BANDWIDTH SPECTRUM PLOT

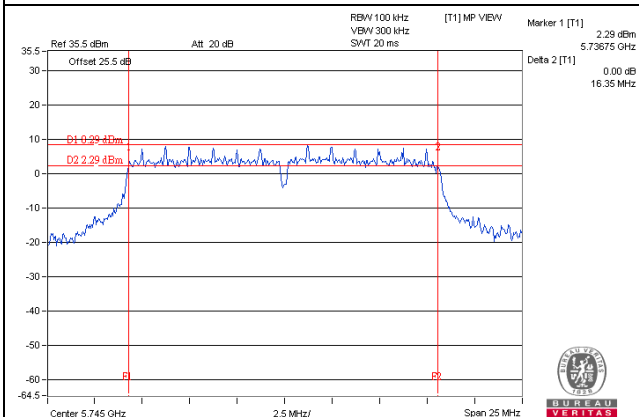
11a 1S3T CDD CH149 Chain1



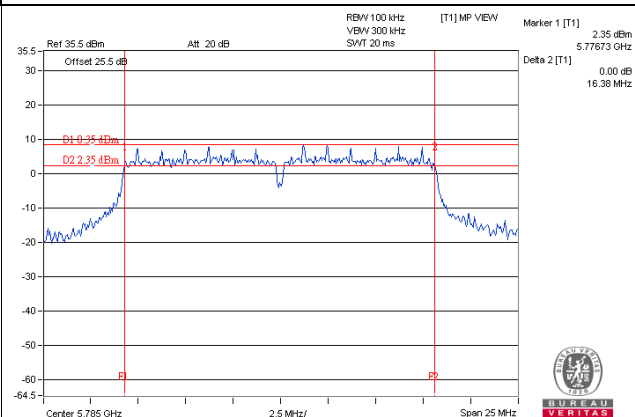
11a 1S3T CDD CH157 Chain1



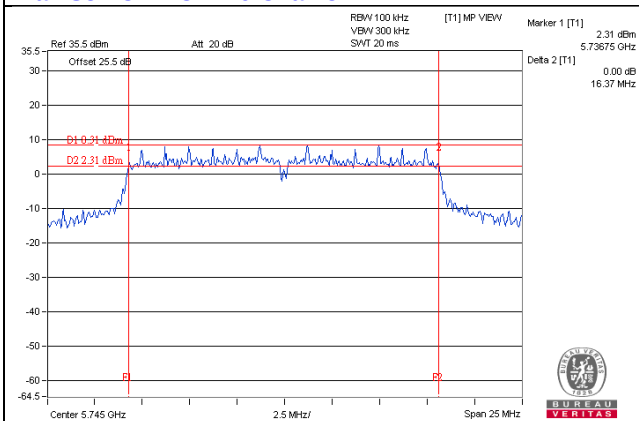
11a 1S3T CDD CH149 Chain2



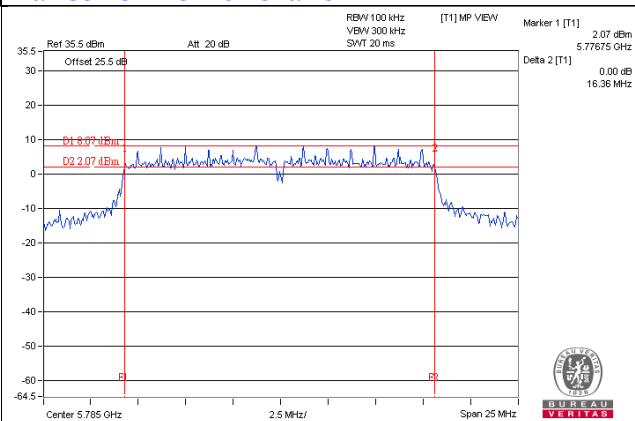
11a 1S3T CDD CH157 Chain2



11a 1S3T CDD CH149 Chain3

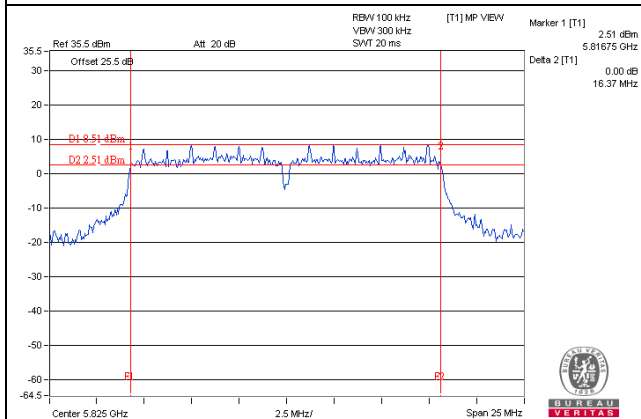


11a 1S3T CDD CH157 Chain3

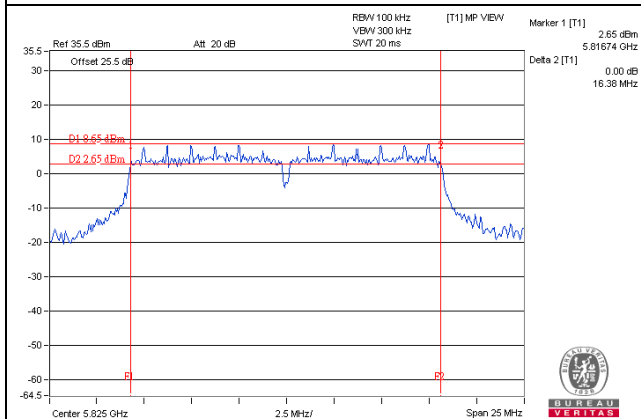


6dB BANDWIDTH SPECTRUM PLOT

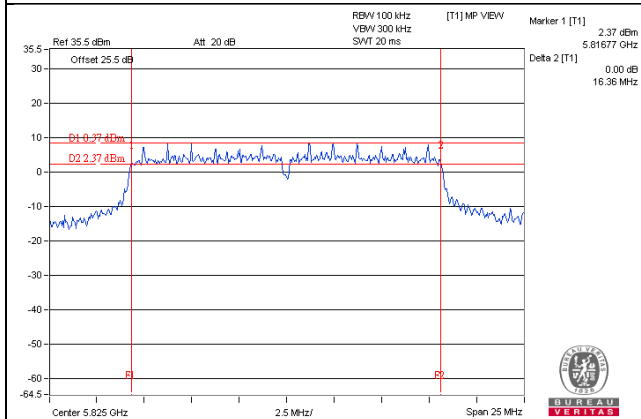
11a 1S3T CDD CH165 Chain1



11a 1S3T CDD CH165 Chain2

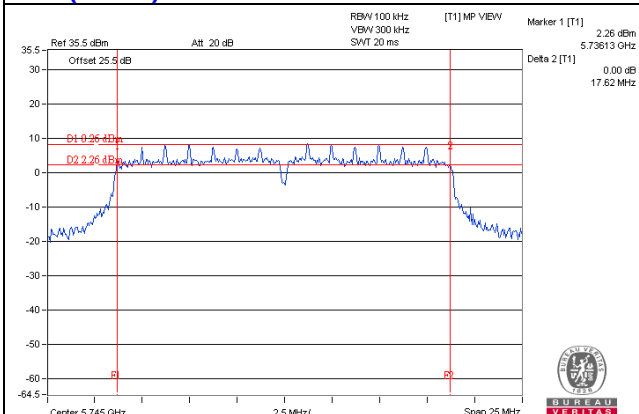


11a 1S3T CDD CH165 Chain3

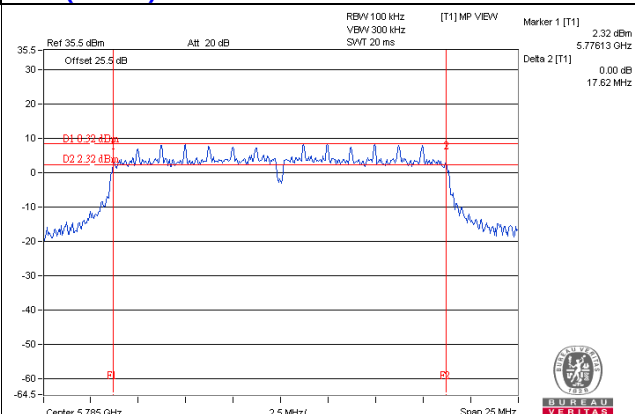


6dB BANDWIDTH SPECTRUM PLOT

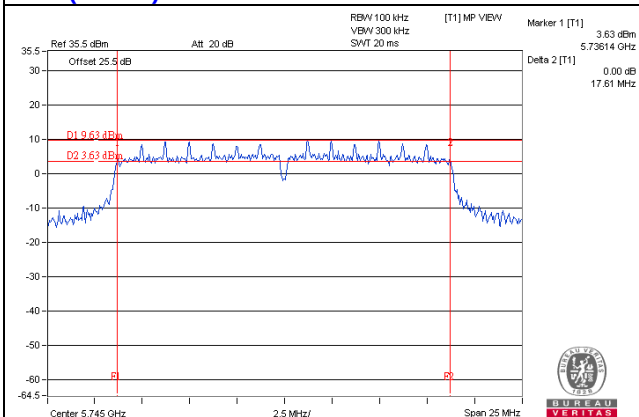
11ac (20MHz) 3S3T SDM CH149 Chain1



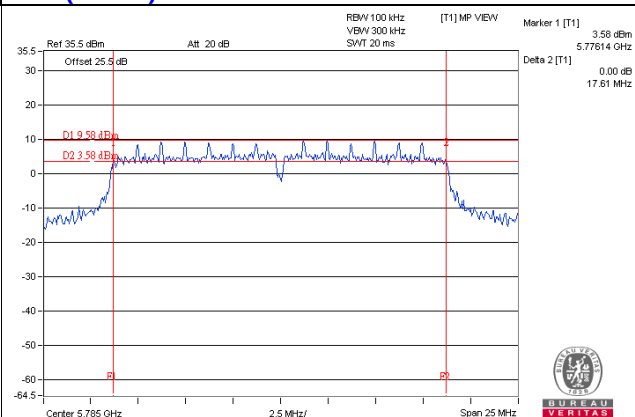
11ac (20MHz) 3S3T SDM CH157 Chain1



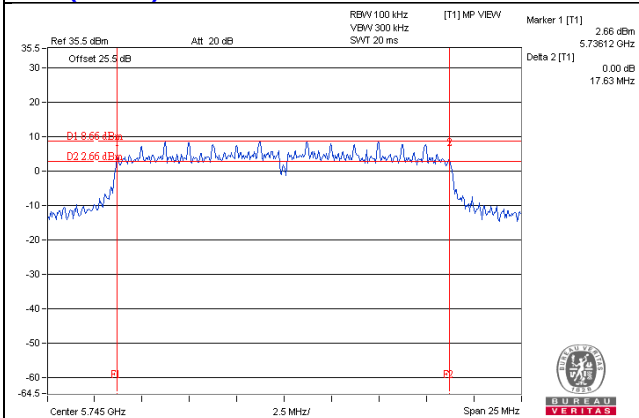
11ac (20MHz) 3S3T SDM CH149 Chain2



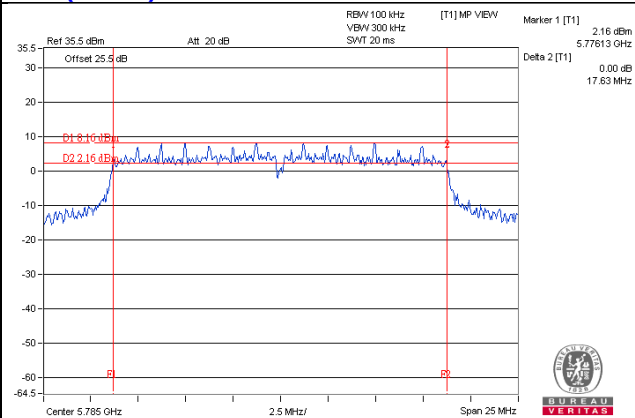
11ac (20MHz) 3S3T SDM CH157 Chain2



11ac (20MHz) 3S3T SDM CH149 Chain3

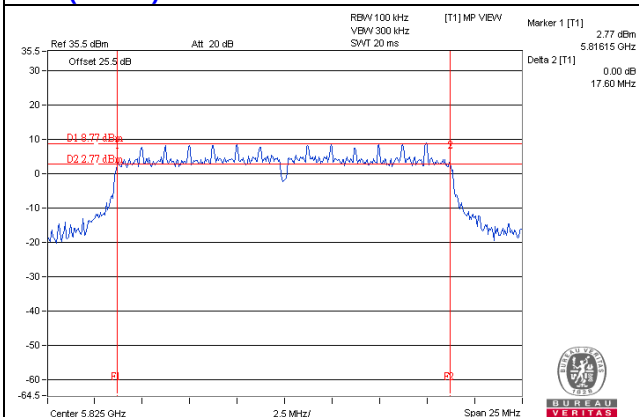


11ac (20MHz) 3S3T SDM CH157 Chain3

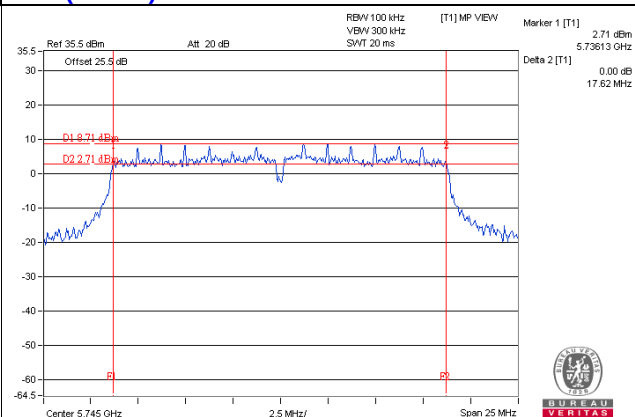


6dB BANDWIDTH SPECTRUM PLOT

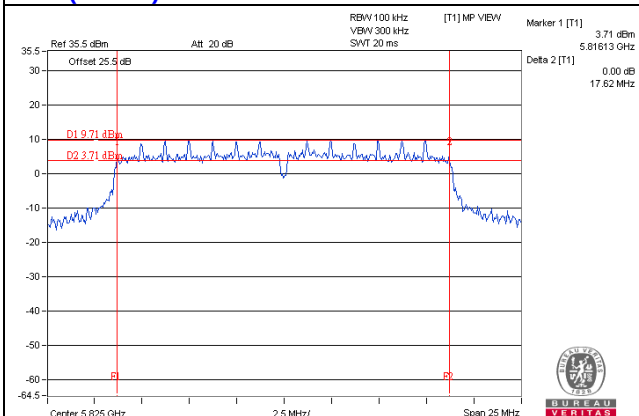
11ac (20MHz) 3S3T SDM CH165 Chain1



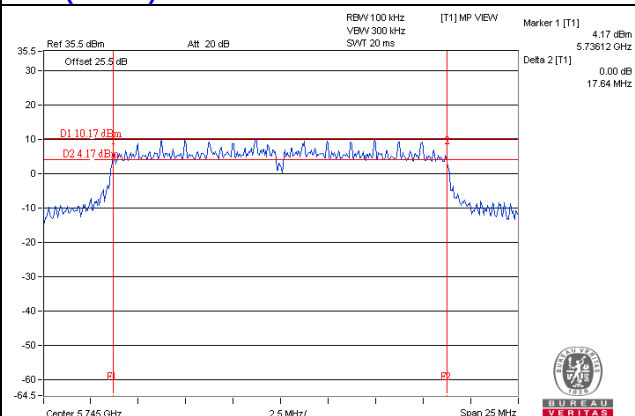
11ac (20MHz) 1S3T TxBF CH149 Chain1



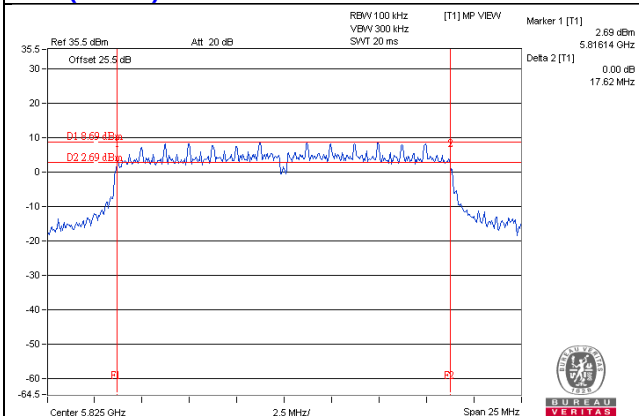
11ac (20MHz) 3S3T SDM CH165 Chain2



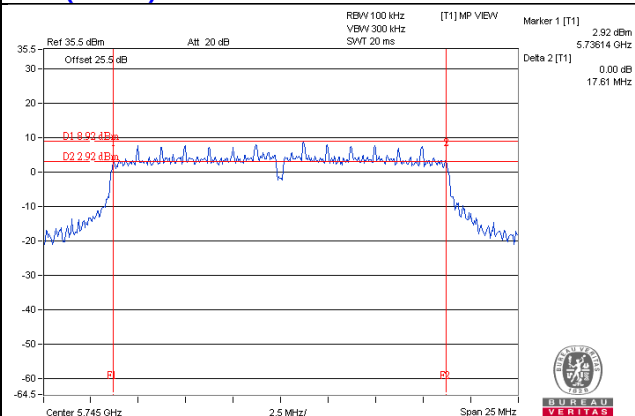
11ac (20MHz) 1S3T TxBF CH149 Chain2



11ac (20MHz) 3S3T SDM CH165 Chain3

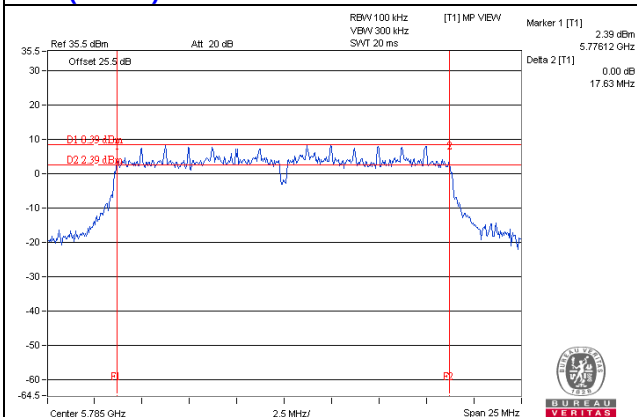


11ac (20MHz) 1S3T TxBF CH149 Chain3

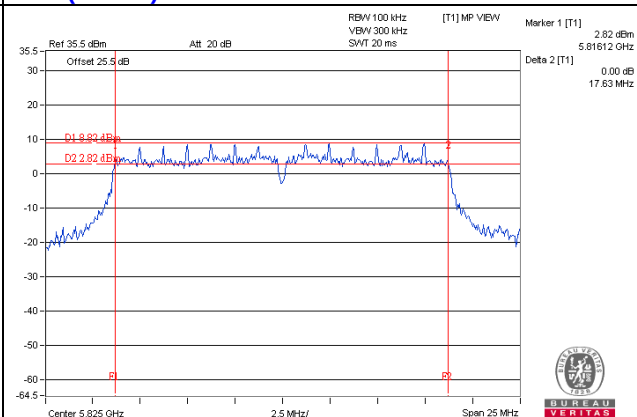


6dB BANDWIDTH SPECTRUM PLOT

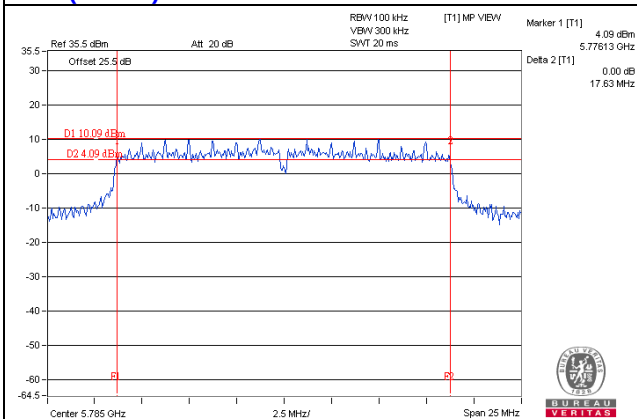
11ac (20MHz) 1S3T TxBF CH157 Chain1



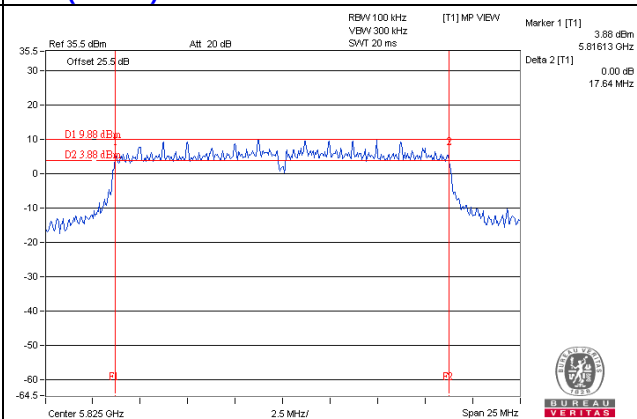
11ac (20MHz) 1S3T TxBF CH165 Chain1



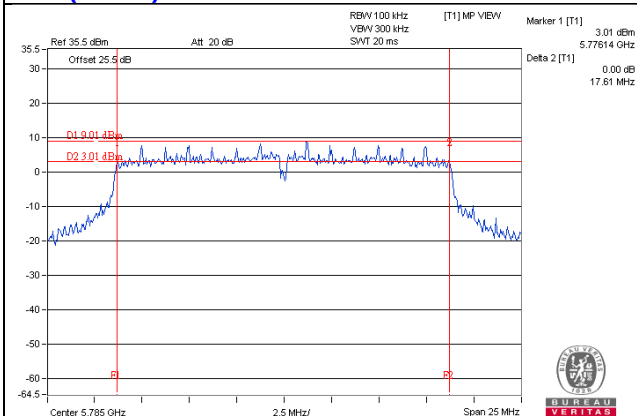
11ac (20MHz) 1S3T TxBF CH157 Chain2



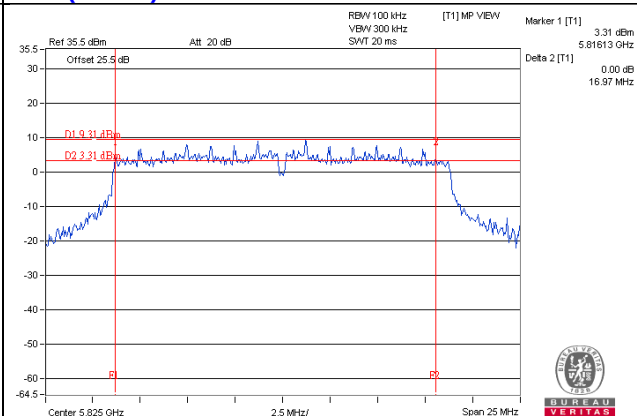
11ac (20MHz) 1S3T TxBF CH165 Chain2



11ac (20MHz) 1S3T TxBF CH157 Chain3

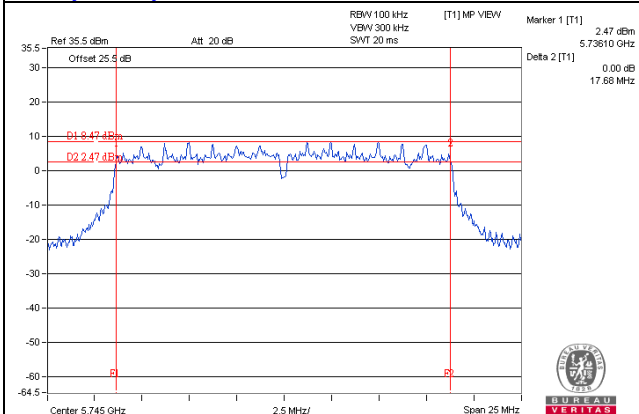


11ac (20MHz) 1S3T TxBF CH165 Chain3

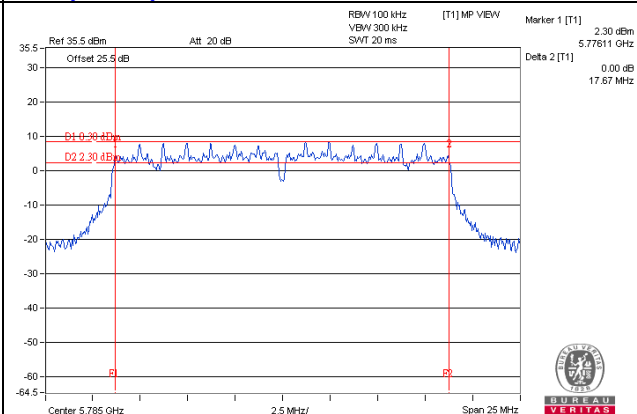


6dB BANDWIDTH SPECTRUM PLOT

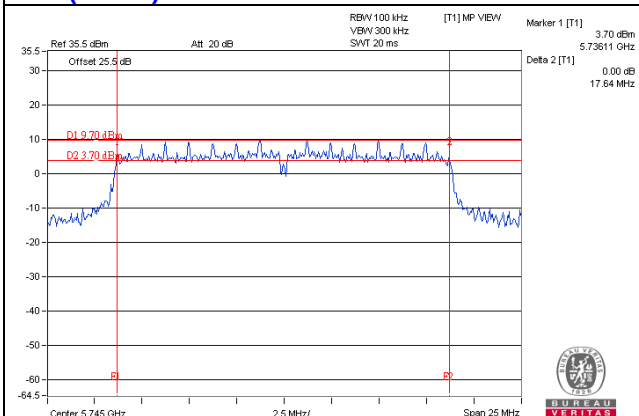
11ac (20MHz) 2S3T TxBF CH149 Chain1



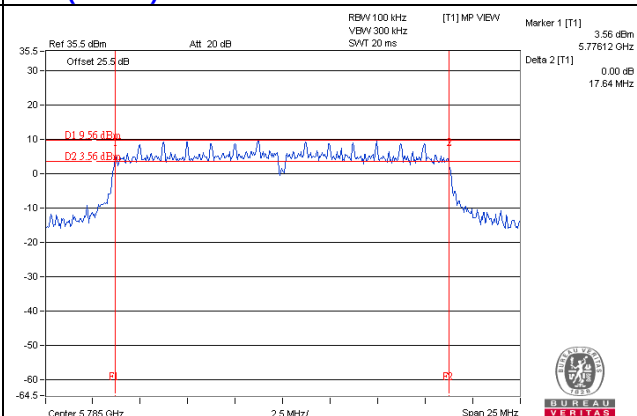
11ac (20MHz) 2S3T TxBF CH157 Chain1



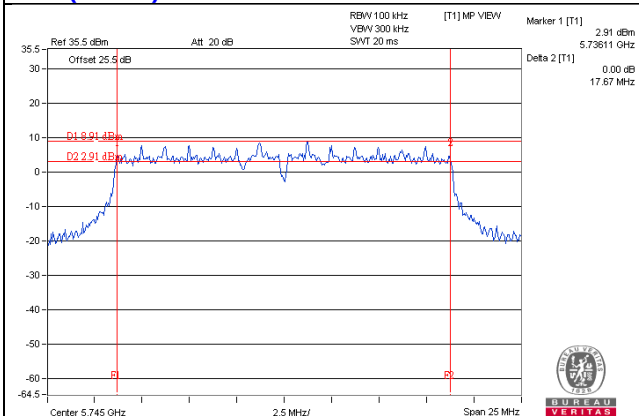
11ac (20MHz) 2S3T TxBF CH149 Chain2



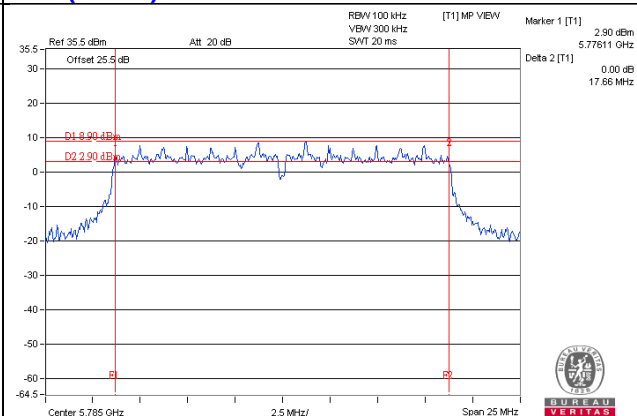
11ac (20MHz) 2S3T TxBF CH157 Chain2



11ac (20MHz) 2S3T TxBF CH149 Chain3

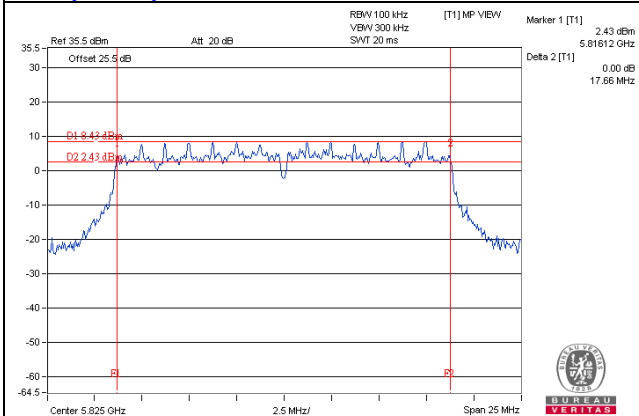


11ac (20MHz) 2S3T TxBF CH157 Chain3

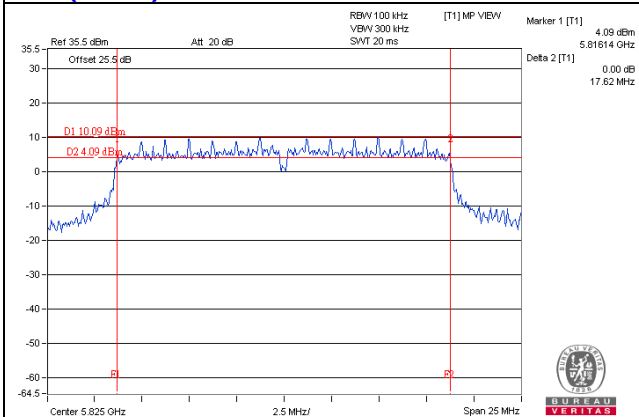


6dB BANDWIDTH SPECTRUM PLOT

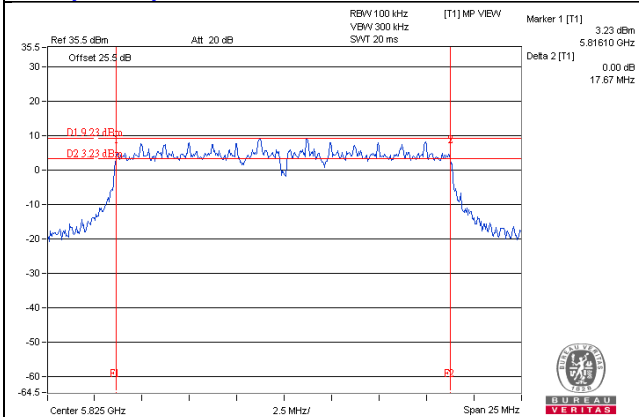
11ac (20MHz) 2S3T TxBF CH165 Chain1



11ac (20MHz) 2S3T TxBF CH165 Chain2

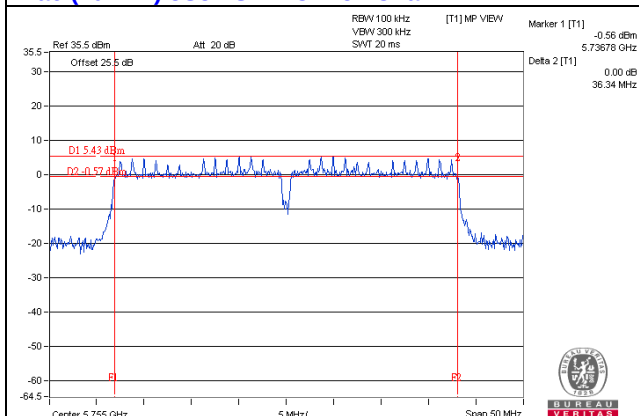


11ac (20MHz) 2S3T TxBF CH165 Chain3

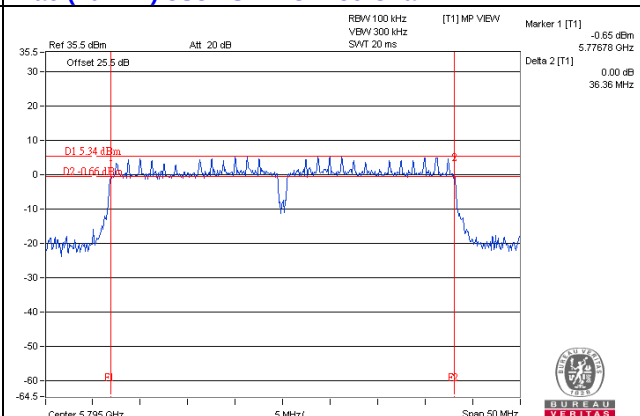


6dB BANDWIDTH SPECTRUM PLOT

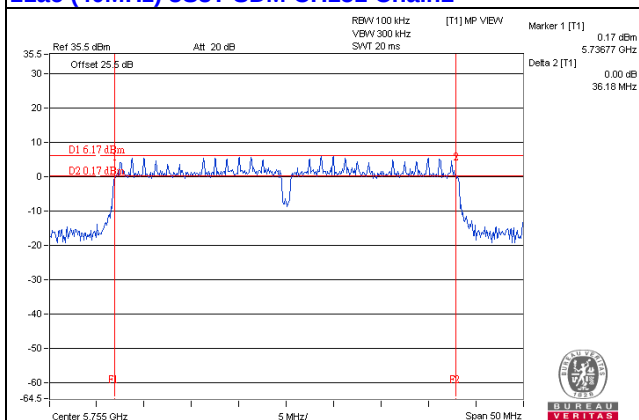
11ac (40MHz) 3S3T SDM CH151 Chain1



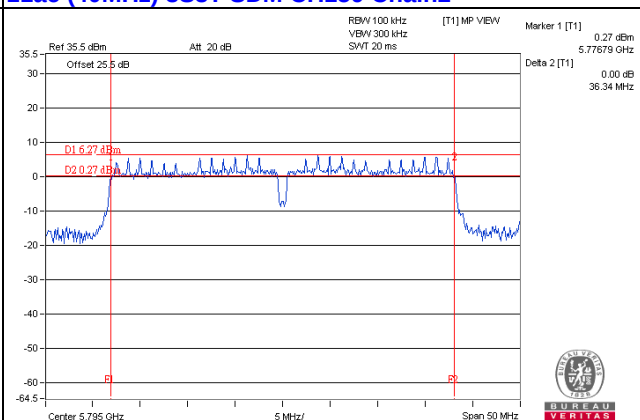
11ac (40MHz) 3S3T SDM CH159 Chain1



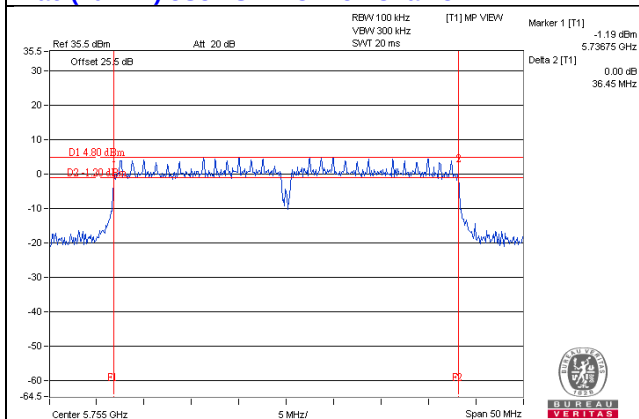
11ac (40MHz) 3S3T SDM CH151 Chain2



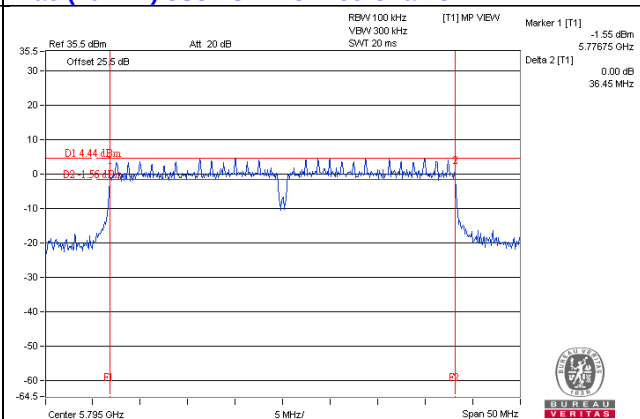
11ac (40MHz) 3S3T SDM CH159 Chain2



11ac (40MHz) 3S3T SDM CH151 Chain3

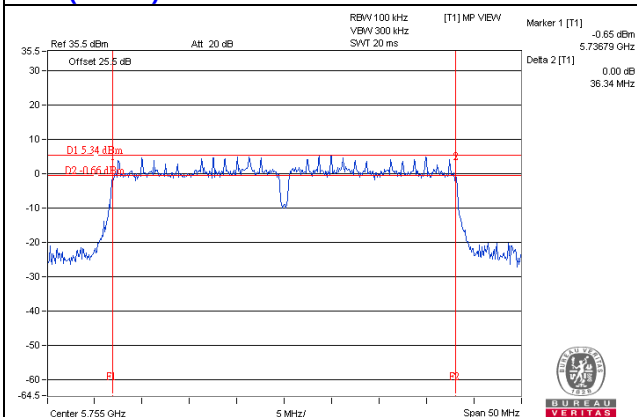


11ac (40MHz) 3S3T SDM CH159 Chain3

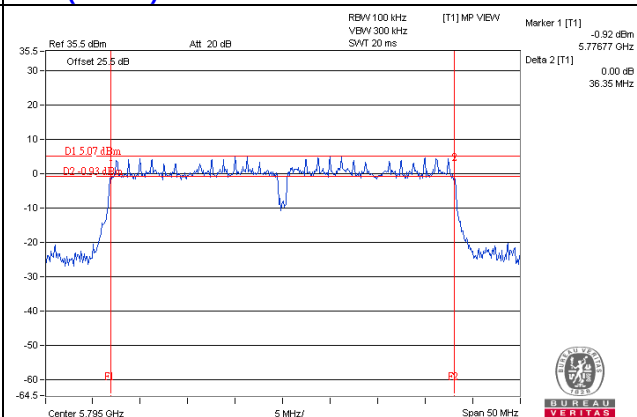


6dB BANDWIDTH SPECTRUM PLOT

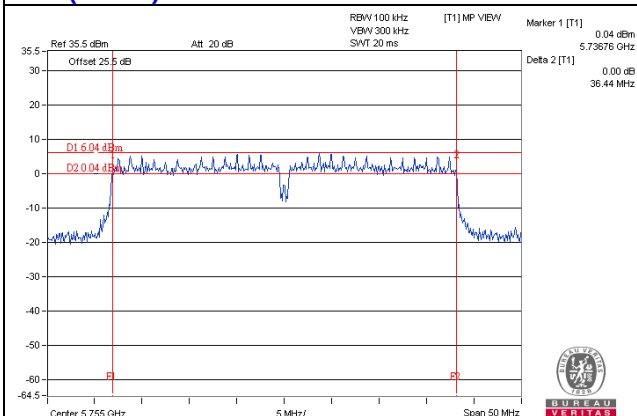
11ac (40MHz) 1S3T TxBF CH151 Chain1



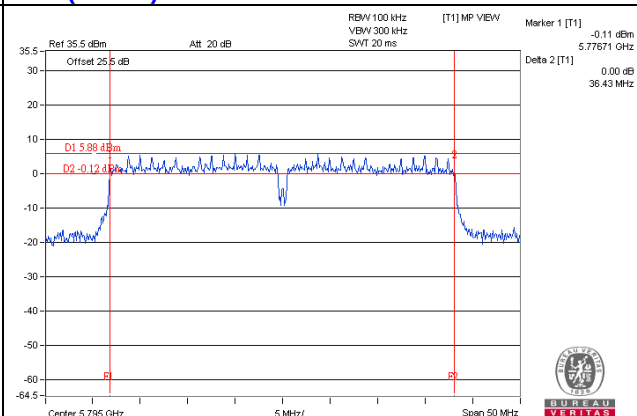
11ac (40MHz) 1S3T TxBF CH159 Chain1



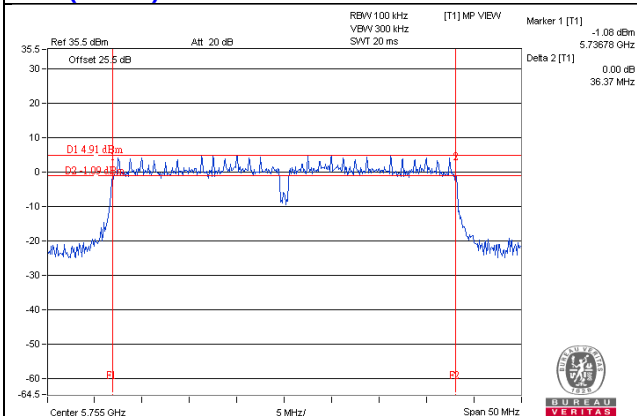
11ac (40MHz) 1S3T TxBF CH151 Chain2



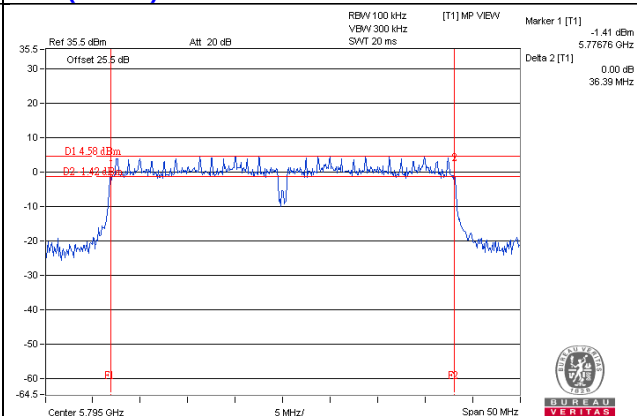
11ac (40MHz) 1S3T TxBF CH159 Chain2



11ac (40MHz) 1S3T TxBF CH151 Chain3

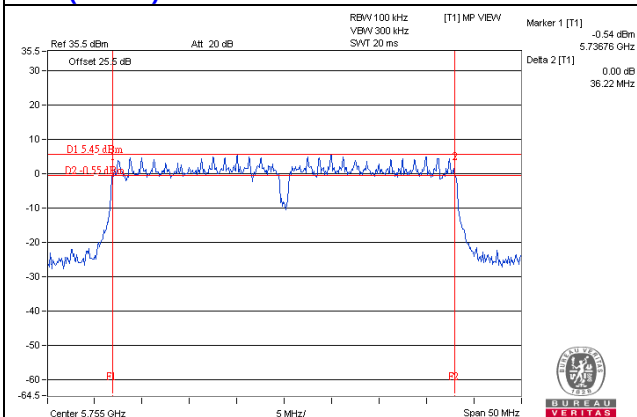


11ac (40MHz) 1S3T TxBF CH159 Chain3

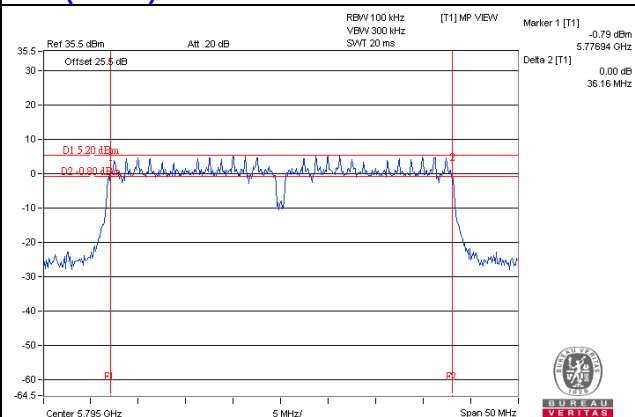


6dB BANDWIDTH SPECTRUM PLOT

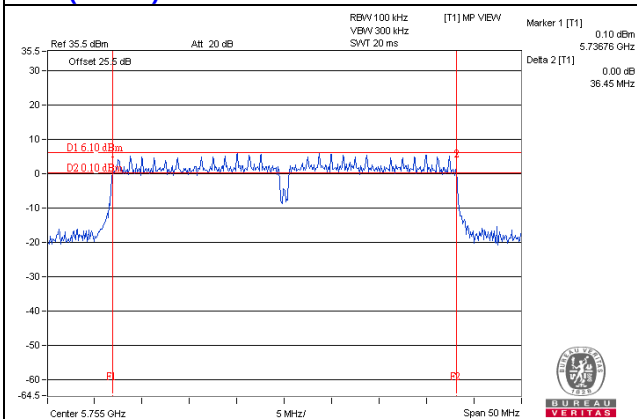
11ac (40MHz) 2S3T TxBF CH151 Chain1



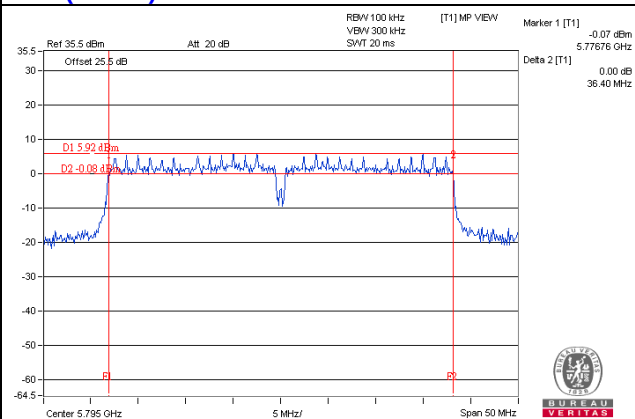
11ac (40MHz) 2S3T TxBF CH159 Chain1



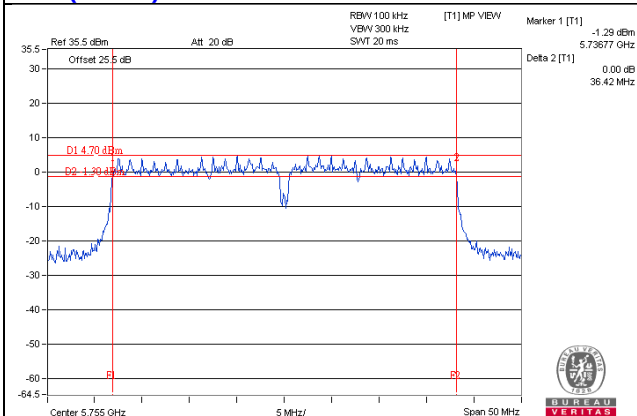
11ac (40MHz) 2S3T TxBF CH151 Chain2



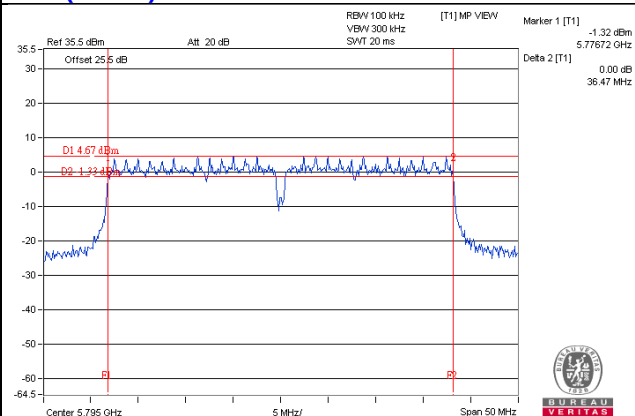
11ac (40MHz) 2S3T TxBF CH159 Chain2



11ac (40MHz) 2S3T TxBF CH151 Chain3

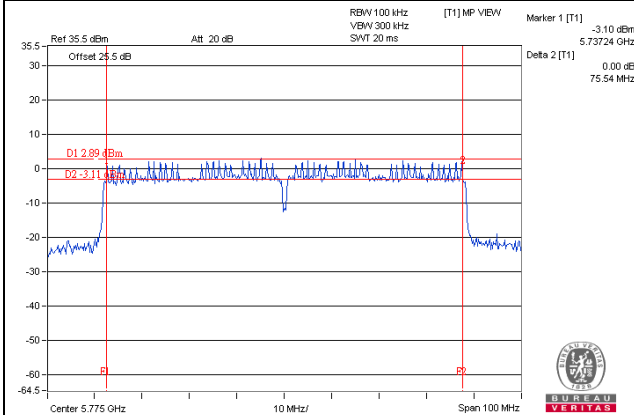


11ac (40MHz) 2S3T TxBF CH159 Chain3

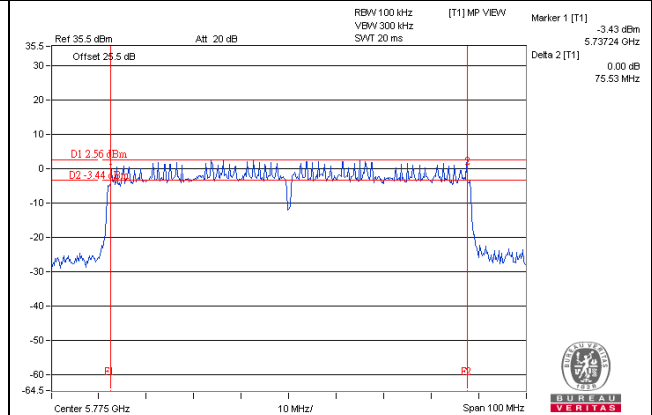


6dB BANDWIDTH SPECTRUM PLOT

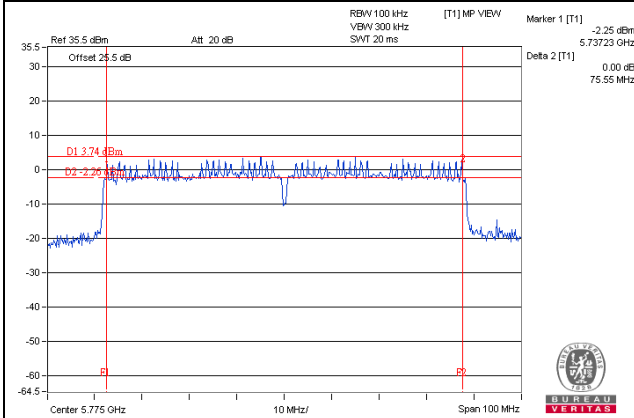
11ac (80MHz) 3S3T SDM CH155 Chain1



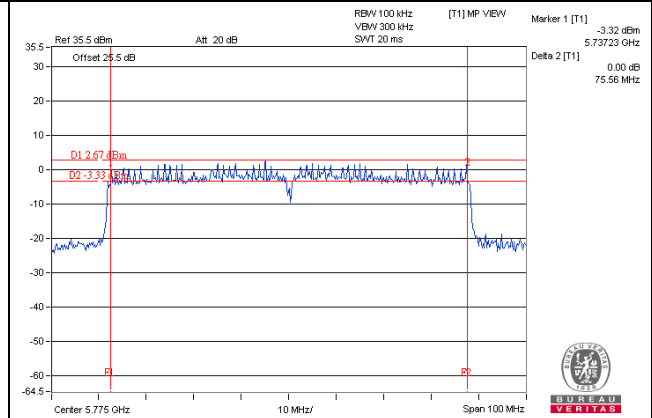
11ac (80MHz) 1S3T TxBF CH155 Chain1



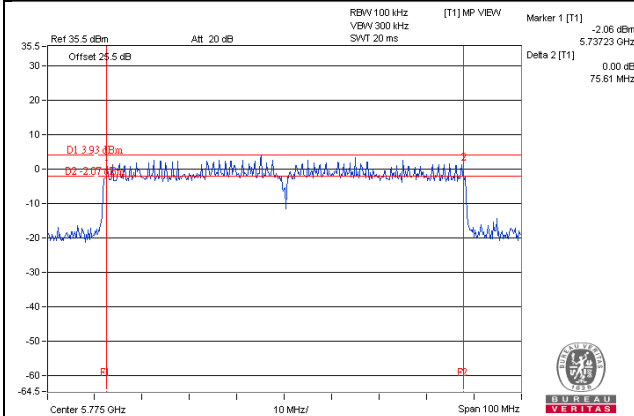
11ac (80MHz) 3S3T SDM CH155 Chain2



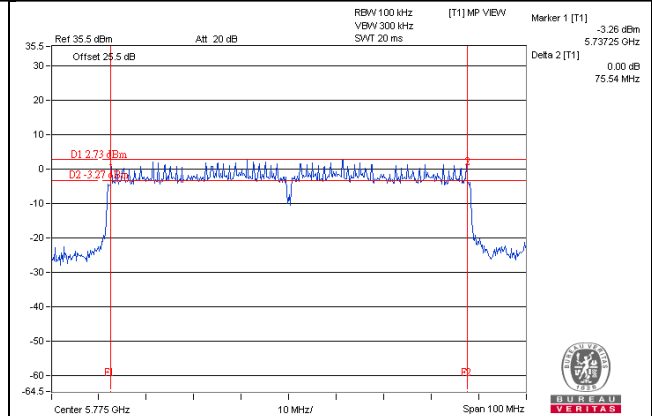
11ac (80MHz) 1S3T TxBF CH155 Chain2



11ac (80MHz) 3S3T SDM CH155 Chain3

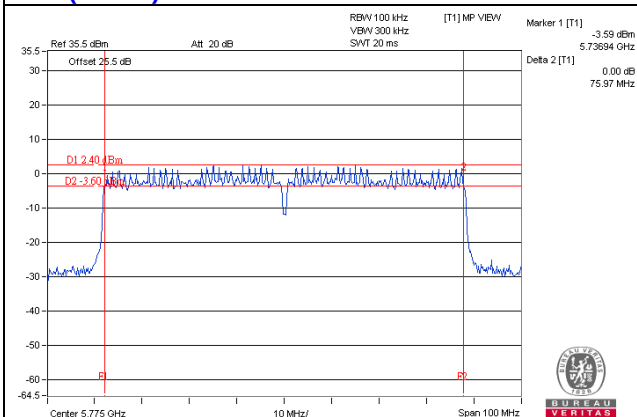


11ac (80MHz) 1S3T TxBF CH155 Chain3

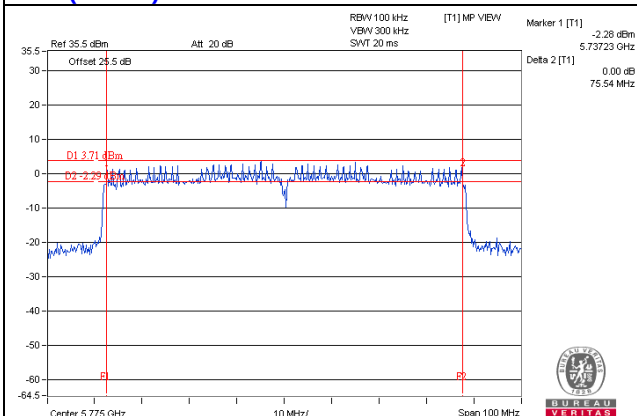


6dB BANDWIDTH SPECTRUM PLOT

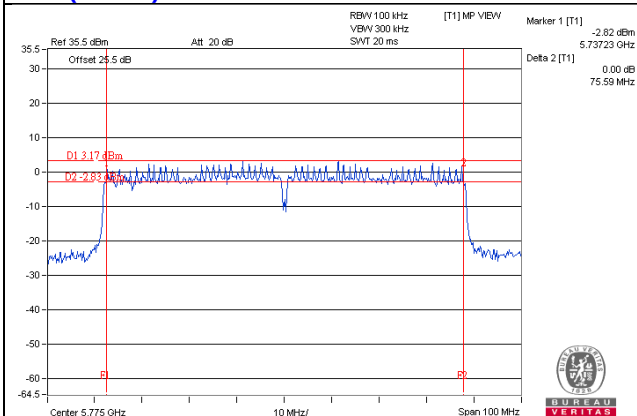
11ac (80MHz) 2S3T TxBF CH155 Chain1



11ac (80MHz) 2S3T TxBF CH155 Chain2



11ac (80MHz) 2S3T TxBF CH155 Chain3



4.4 Maximum Conducted Output Power Measurement

4.4.1 Limit

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 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.

4.4.2 Measuring Instruments and Setting

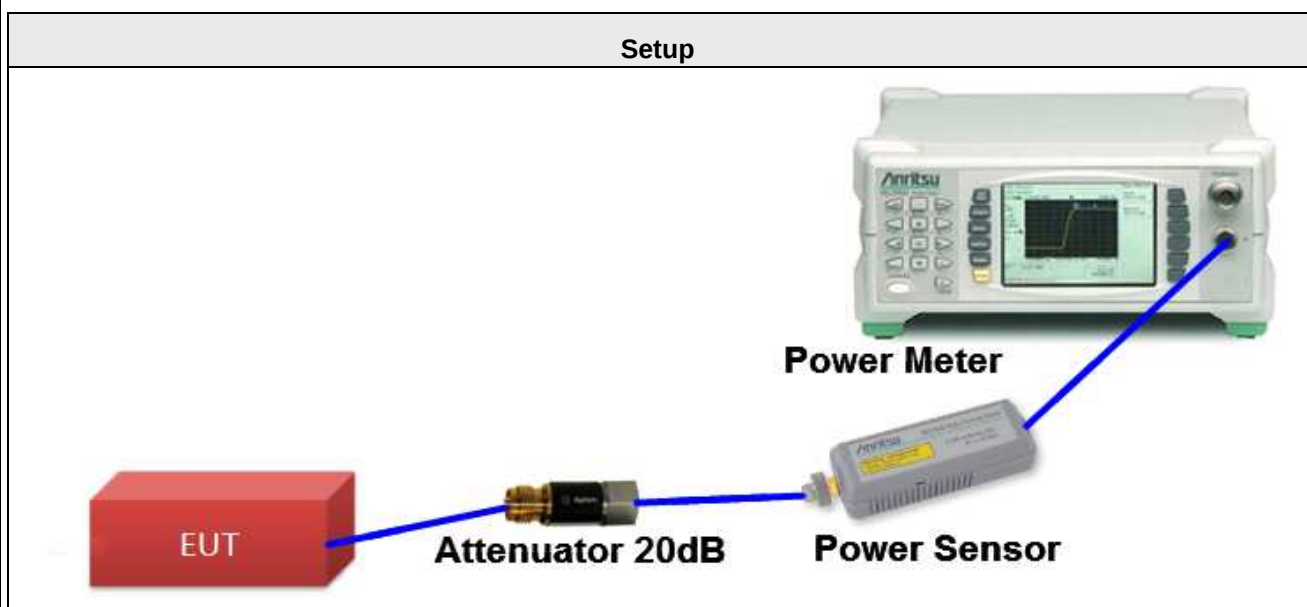
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

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

4.4.3 Test Procedures

- 1 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 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 and enable the trigger function 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.

4.4.4 Test Setup Layout



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 of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Anderson Chen		

11a 1S3T CDD

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	19.62	19.51	18.86	24.11	3.48	30.00	PASS
40	5200 MHz	19.59	19.69	18.71	24.12	3.44	30.00	PASS
48	5240 MHz	20.57	20.88	20.54	25.44	3.73	30.00	PASS
149	5745 MHz	20.55	21.53	20.49	25.65	3.94	30.00	PASS
157	5785 MHz	20.38	21.49	20.62	25.63	3.92	30.00	PASS
165	5825 MHz	20.48	21.66	20.50	25.69	3.91	30.00	PASS

11ac (20MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	21.01	21.06	21.57	25.99	1.27	30.00	PASS
40	5200 MHz	21.11	21.82	21.20	26.16	1.33	30.00	PASS
48	5240 MHz	20.99	21.38	20.91	25.87	1.40	30.00	PASS
149	5745 MHz	20.89	21.99	20.68	26.00	1.76	30.00	PASS
157	5785 MHz	20.78	21.95	20.86	26.00	1.62	30.00	PASS
165	5825 MHz	20.81	21.93	20.66	25.94	1.60	30.00	PASS

11ac (20MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	20.03	19.94	18.90	24.42	5.82	30.00	PASS
40	5200 MHz	19.90	19.83	18.77	24.30	5.52	30.00	PASS
48	5240 MHz	20.84	20.98	20.68	25.61	5.66	30.00	PASS
149	5745 MHz	20.57	21.92	20.63	25.86	6.33	29.67	PASS
157	5785 MHz	20.67	21.78	20.69	25.85	6.15	29.85	PASS
165	5825 MHz	20.70	21.96	20.52	25.88	6.32	29.68	PASS

- Note: 1. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.82\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
2. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.52\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
3. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.66\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
4. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.33 - 6) = 29.67\text{dBm}$.
5. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.15\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.15 - 6) = 29.85\text{dBm}$.
6. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.32\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.32 - 6) = 29.68\text{dBm}$.

11ac (20MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	19.36	20.03	19.52	24.42	3.99	30.00	PASS
40	5200 MHz	19.23	20.18	19.70	24.49	4.19	30.00	PASS
48	5240 MHz	20.91	20.90	20.52	25.55	4.17	30.00	PASS
149	5745 MHz	20.51	21.83	20.62	25.80	4.16	30.00	PASS
157	5785 MHz	20.21	21.67	20.42	25.59	3.95	30.00	PASS
165	5825 MHz	20.45	21.87	20.56	25.78	4.17	30.00	PASS

11ac (40MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	14.90	14.36	14.11	19.24	1.67	30.00	PASS
46	5230 MHz	19.02	19.35	19.11	23.93	1.01	30.00	PASS
151	5755 MHz	19.31	20.06	18.57	24.13	2.47	30.00	PASS
159	5795 MHz	19.08	19.93	18.46	23.97	0.87	30.00	PASS

11ac (40MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	14.06	14.70	14.09	19.06	5.79	30.00	PASS
46	5230 MHz	19.15	19.31	19.01	23.93	5.41	30.00	PASS
151	5755 MHz	18.96	19.74	18.76	23.95	7.15	28.85	PASS
159	5795 MHz	18.88	19.65	18.70	23.87	5.27	30.00	PASS

- Note: 1. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.79\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
2. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.41\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
4. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.15\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (7.15 - 6) = 28.85\text{dBm}$.
5. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.27\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.

11ac (40MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	14.51	14.85	14.29	19.33	4.51	30.00	PASS
46	5230 MHz	19.62	19.42	19.32	24.23	3.81	30.00	PASS
151	5755 MHz	18.76	19.68	18.77	23.86	5.01	30.00	PASS
159	5795 MHz	18.88	19.72	18.69	23.89	3.33	30.00	PASS

11ac (80MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	13.62	13.40	13.12	18.16	1.09	30.00	PASS
155	5775	18.81	19.84	19.65	24.23	1.80	30.00	PASS

11ac (80MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	13.43	13.12	13.06	17.98	5.52	30.00	PASS
155	5775	19.12	19.58	19.44	24.16	6.39	29.61	PASS

- Note: 1. For 5210MHz: Directional gain = $10 \log[(10^{G^1/20} + 10^{G^2/20} + \dots + 10^{G^N/20})^2/3] = 5.52\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
2. For 5775MHz: Directional gain = $10 \log[(10^{G^1/20} + 10^{G^2/20} + \dots + 10^{G^N/20})^2/3] = 6.39\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.39 - 6) = 29.61\text{dBm}$.

11ac (80MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	13.79	13.76	13.10	18.33	3.88	30.00	PASS
155	5775	18.02	19.62	19.15	23.75	4.23	30.00	PASS

4.5 Power Spectral Density Measurement

4.5.1 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 (27.78 dBm/300kHz)

Note: $27.78\text{dBm}/300\text{kHz} = 30\text{dBm}/500\text{kHz} - 10\log\left(\frac{500\text{kHz}}{300\text{kHz}}\right)$

4.5.2 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

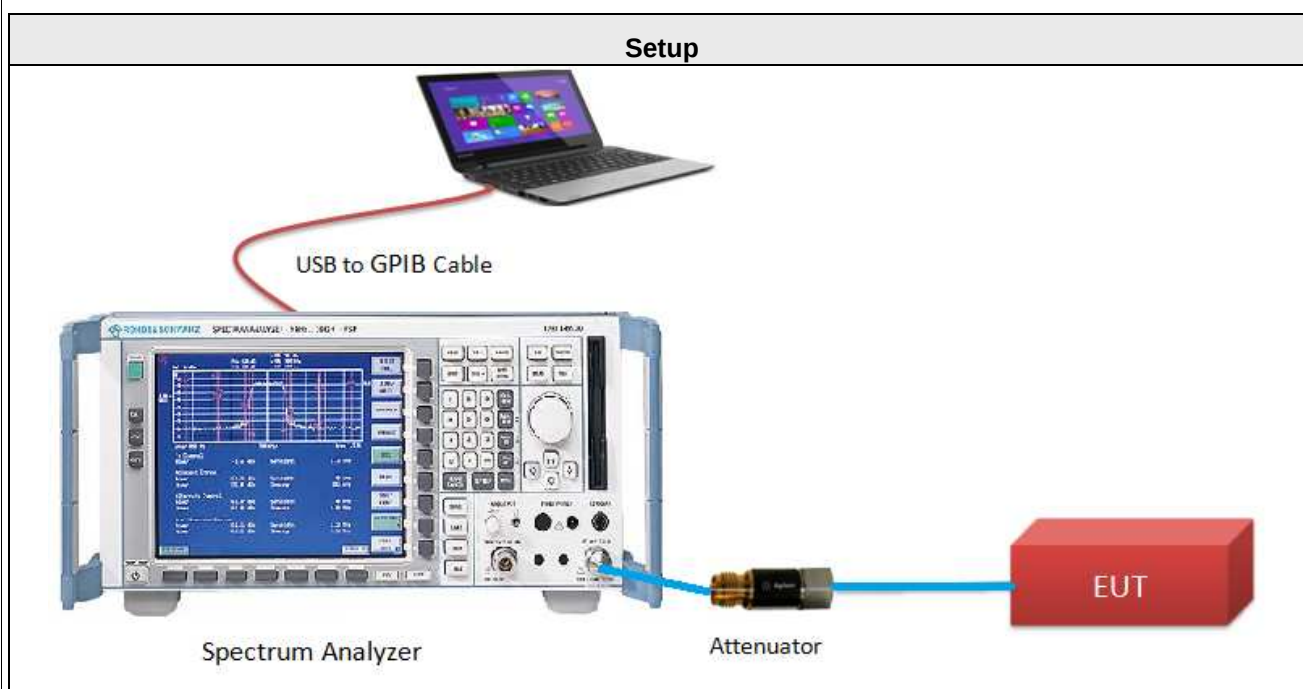
For U-NII-3 band:

Spectrum Parameter Setting	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	300kHz
VBW	≥ 3 RBW
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to "free run"
Trace average	100 times

4.5.3 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.

4.5.4 Test Setup Layout



4.5.5 Test Deviation

There are no deviations with the original standard.

4.5.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.5.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Anderson Chen		

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
36	5180	10.23	0.00	10.23	5.82	17.00	Pass
40	5200	10.62	0.00	10.62	5.52	17.00	Pass
48	5240	11.75	0.00	11.75	5.66	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.82\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.52\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.66\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	4.51	0.00	4.51	6.73	6.33	29.67	Pass
157	5785	4.09	0.00	4.09	6.31	6.15	29.85	Pass
165	5825	4.75	0.00	4.75	6.97	6.32	29.68	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.33 - 6) = 29.67\text{dBm}$.
 3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.15\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.15 - 6) = 29.85\text{dBm}$.
 4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.32\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.32 - 6) = 29.68\text{dBm}$.

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
36	5180	11.16	0.12	11.28	1.27	17.00	Pass
40	5200	11.24	0.12	11.36	1.33	17.00	Pass
48	5240	11.60	0.12	11.72	1.40	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.27\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.33\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.40\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	3.97	0.12	4.09	6.31	1.76	30.00	Pass
157	5785	4.29	0.12	4.41	6.63	1.62	30.00	Pass
165	5825	4.23	0.12	4.35	6.57	1.60	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.76\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5785MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.62\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5825MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.60\text{dBi} < 6\text{dBi}$, 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
36	5180	10.15	0.00	10.15	5.82	17.00	Pass
40	5200	10.51	0.00	10.51	5.52	17.00	Pass
48	5240	11.38	0.00	11.38	5.66	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.82\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.52\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.66\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	4.03	0.00	4.03	6.25	6.33	29.67	Pass
157	5785	4.30	0.00	4.30	6.52	6.15	29.85	Pass
165	5825	4.39	0.00	4.39	6.61	6.32	29.68	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.33 - 6) = 29.67\text{dBm}$.
 3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.15\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.15 - 6) = 29.85\text{dBm}$.
 4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.32\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (6.32 - 6) = 29.68\text{dBm}$.

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
36	5180	9.95	0.00	9.95	3.99	17.00	Pass
40	5200	10.16	0.00	10.16	4.19	17.00	Pass
48	5240	11.42	0.00	11.42	4.17	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = 3.99dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = 4.19dBi < 6dBi, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = 4.17dBi < 6dBi, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	3.89	0.00	3.89	6.11	4.16	30.00	Pass
157	5785	4.07	0.00	4.07	6.29	3.95	30.00	Pass
165	5825	3.85	0.00	3.85	6.07	4.17	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = 4.16dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5785MHz: Directional gain = 3.95dBi < 6dBi, so the power density limit shall not be reduced.
 4. For 5825MHz: Directional gain = 4.17dBi < 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
38	5190	2.32	0.21	2.53	1.67	17.00	Pass
46	5230	6.59	0.21	6.80	1.01	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5190MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.67\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5230MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.01\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-1.03	0.21	-0.82	1.40	2.47	30.00	Pass
159	5795	-0.97	0.21	-0.76	1.46	0.87	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5755MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.47\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5795MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 0.87\text{dBi} < 6\text{dBi}$, 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
38	5190	1.86	0.23	2.09	5.79	17.00	Pass
46	5230	6.83	0.23	7.06	5.41	17.00	Pass

Note: 1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)

2. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.79\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

3. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.41\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-1.30	0.23	-1.07	1.15	7.15	28.85	Pass
159	5795	-1.07	0.23	-0.84	1.38	5.27	30.00	Pass

Note: 1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)

2. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.15\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30 - (7.15 - 6) = 28.85\text{dBm}$.

3. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.27\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced

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
38	5190	1.96	0.15	2.11	4.51	17.00	Pass
46	5230	7.06	0.15	7.21	3.81	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5190MHz: Directional gain = 4.51dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5230MHz: Directional gain = 3.81dBi < 6dBi, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-1.19	0.15	-1.04	1.18	5.01	30.00	Pass
159	5795	-1.39	0.15	-1.24	0.98	3.33	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5755MHz: Directional gain = 5.01dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5795MHz: Directional gain = 3.33dBi < 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
42	5210	-1.47	0.37	-1.10	1.09	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5210MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.09\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-4.87	0.37	-4.50	-2.28	1.80	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5775MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.80\text{dBi} < 6\text{dBi}$, 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
42	5210	-0.68	0.18	-0.50	5.52	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5210MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 5.52\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-4.44	0.18	-4.26	-2.04	6.39	29.61	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5775MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.39\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.39-6) = 29.61\text{dBm}$.

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
42	5210	-0.93	0.28	-0.65	3.88	17.00	Pass

Note: 1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)

2. For 5210MHz: Directional gain = 3.88dBi < 6dBi, so the power density limit shall not be reduced.

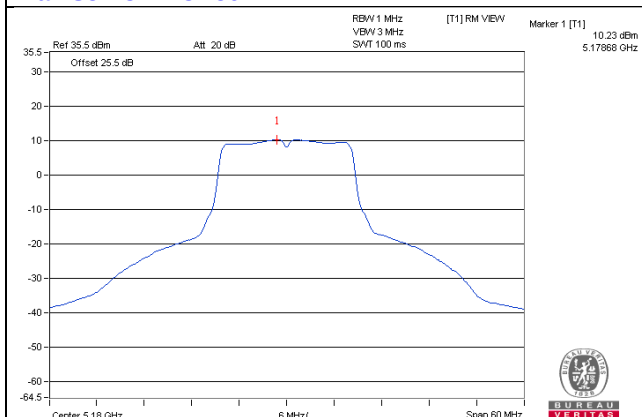
Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-4.83	0.28	-4.55	-2.33	4.23	30.00	Pass

Note: 1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)

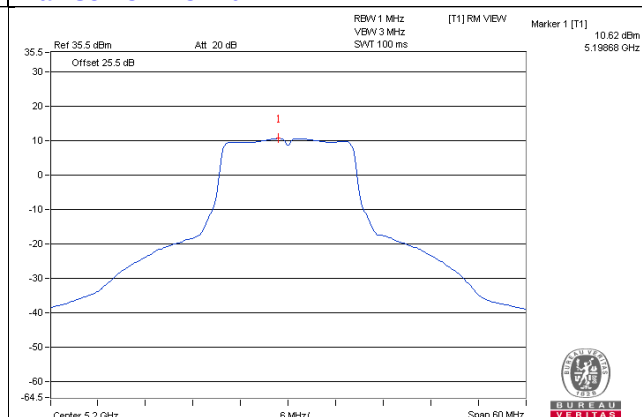
2. For 5775MHz: Directional gain = 4.23dBi < 6dBi, so the power density limit shall not be reduced.

PSD SPECTRUM PLOT

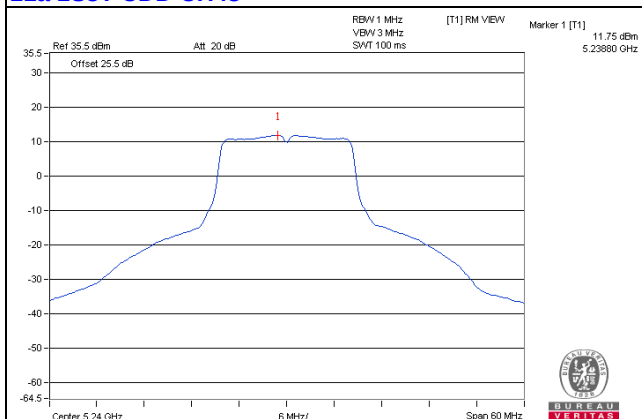
11a 1S3T CDD CH36



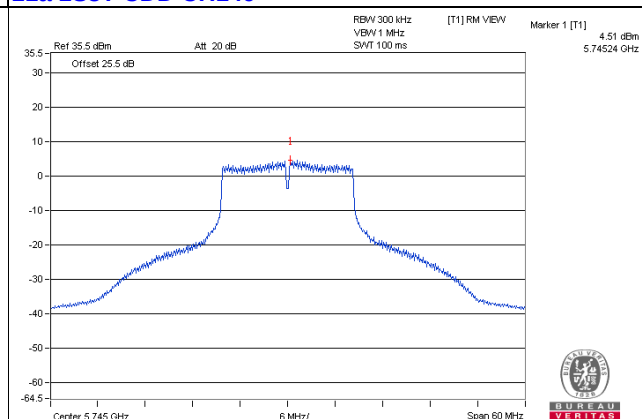
11a 1S3T CDD CH40



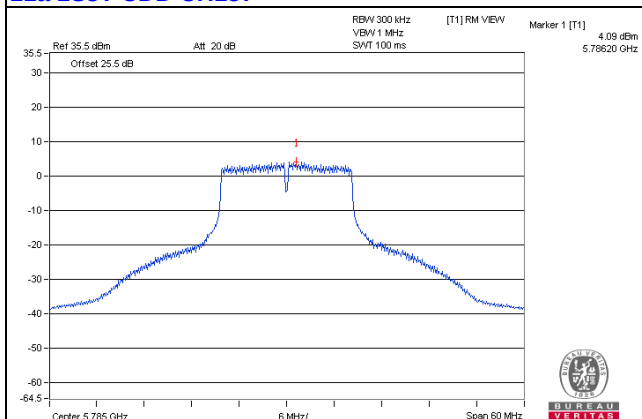
11a 1S3T CDD CH48



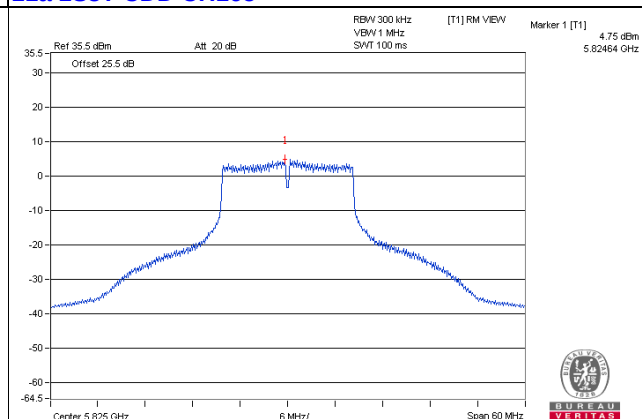
11a 1S3T CDD CH149



11a 1S3T CDD CH157

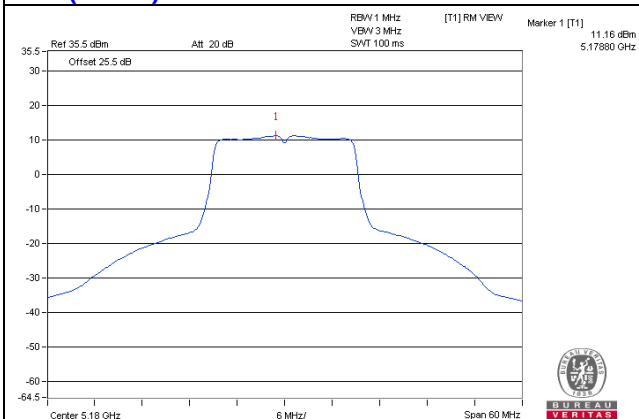


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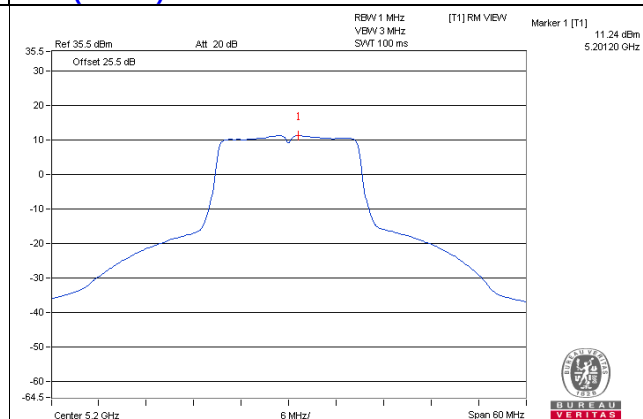


PSD SPECTRUM PLOT

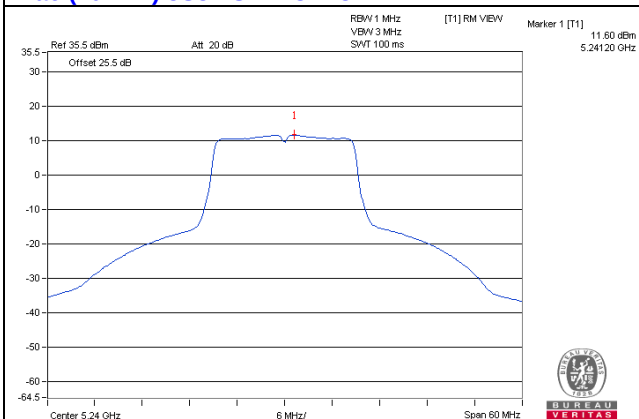
11ac (20MHz) 3S3T SDM CH36



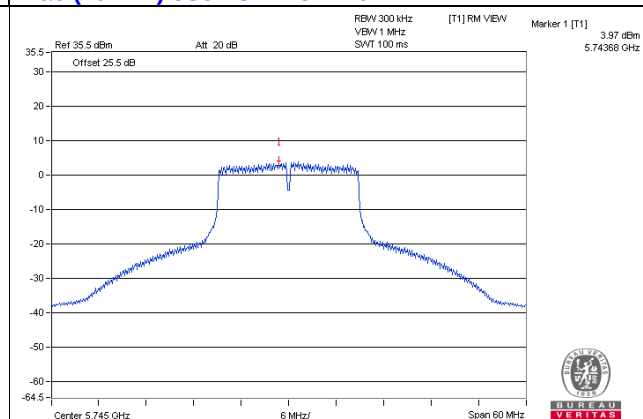
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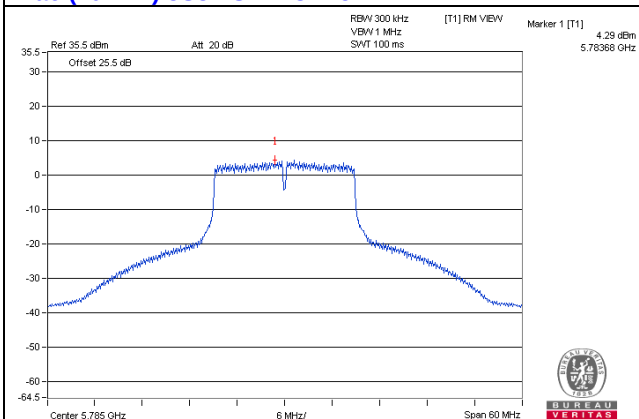
11ac (20MHz) 3S3T SDM CH48



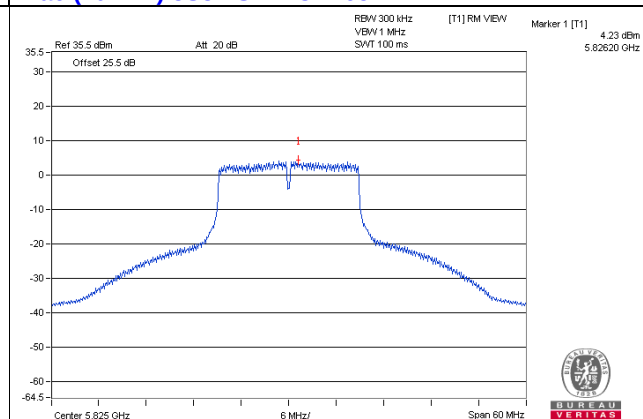
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11ac (20MHz) 3S3T SDM CH157

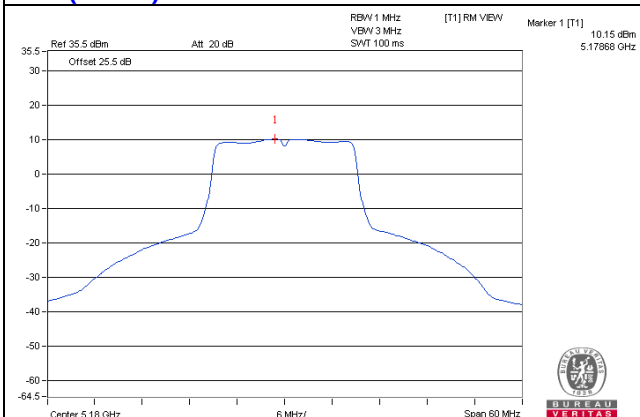


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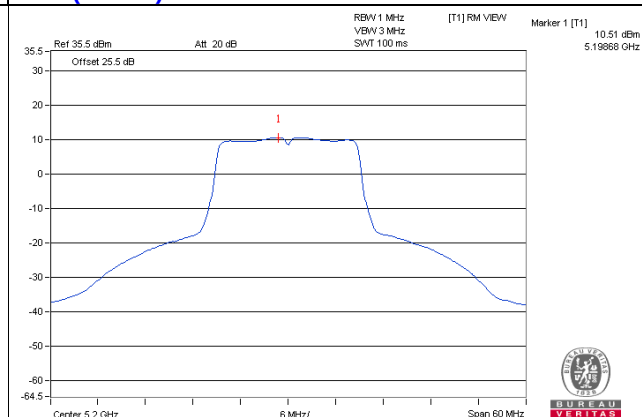


PSD SPECTRUM PLOT

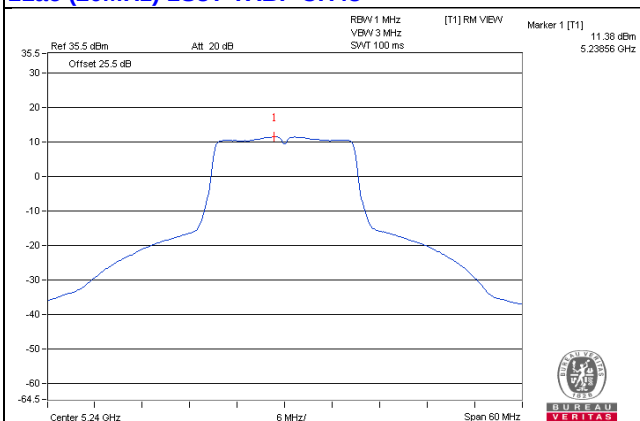
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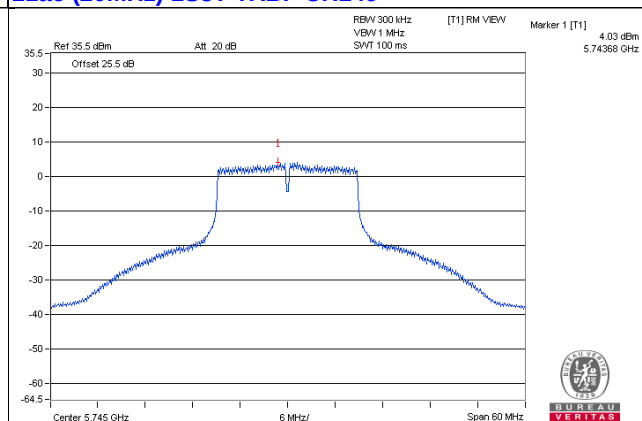
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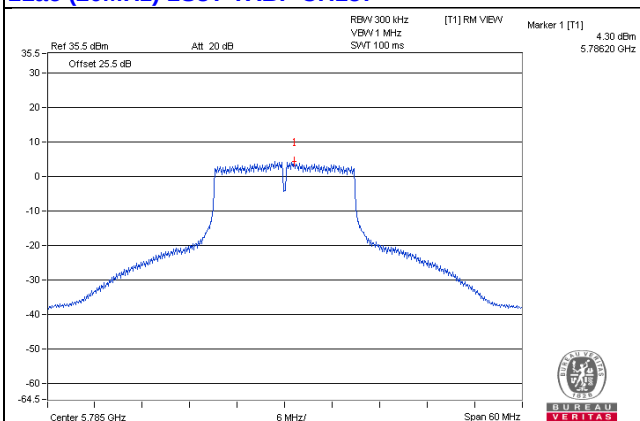
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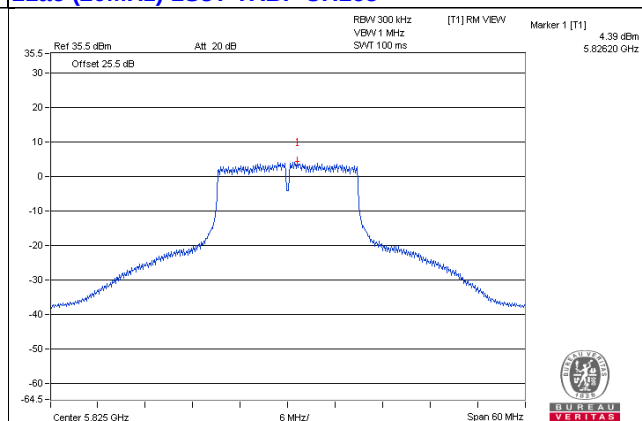
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11ac (20MHz) 1S3T TXBF CH157

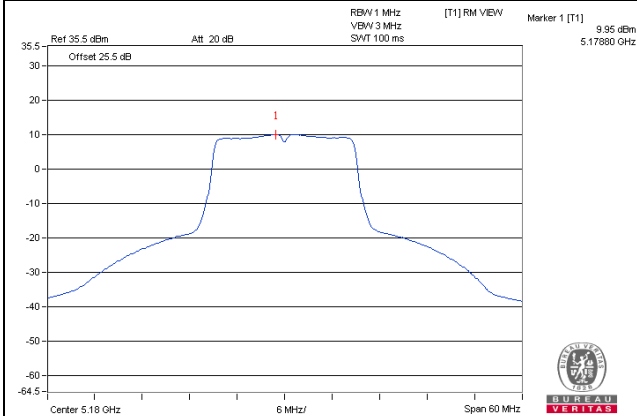


11ac (20MHz) 1S3T TXBF CH165

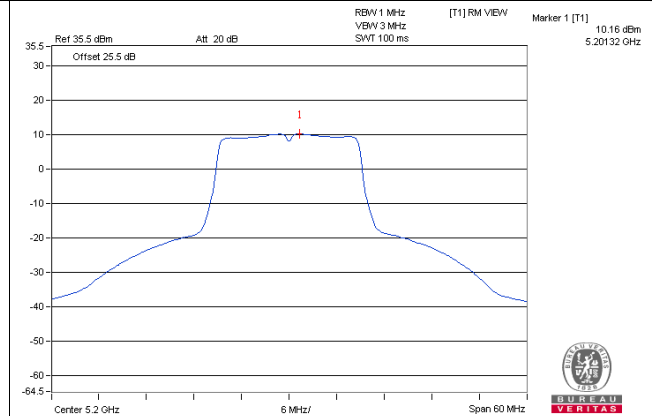


PSD SPECTRUM PLOT

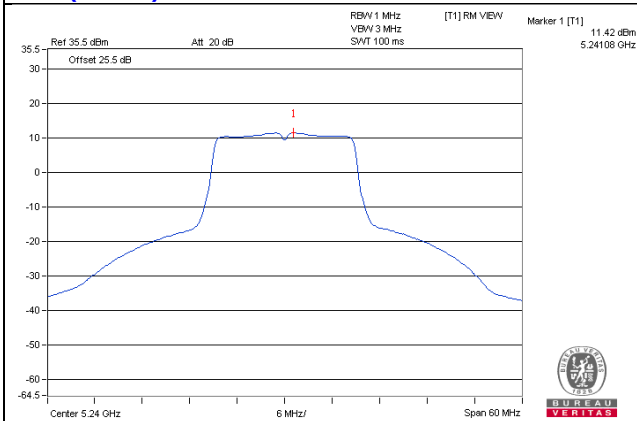
11ac (20MHz) 2S3T TXBF CH36



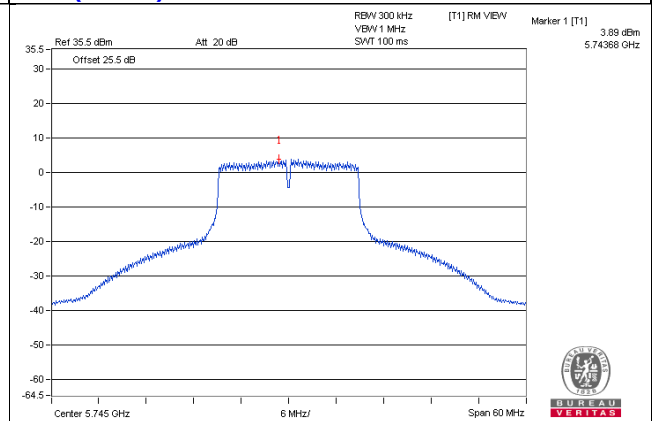
11ac (20MHz) 2S3T TXBF CH40



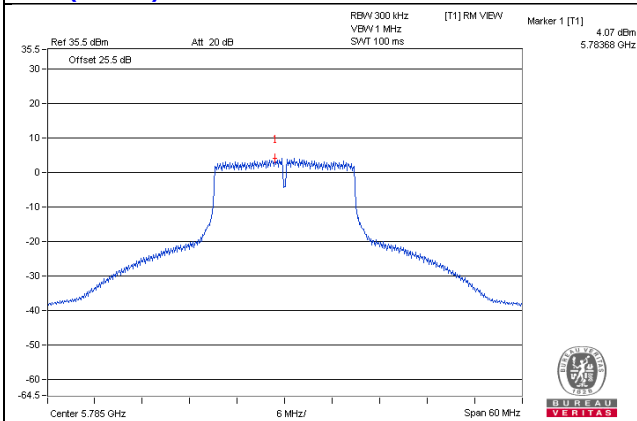
11ac (20MHz) 2S3T TXBF CH48



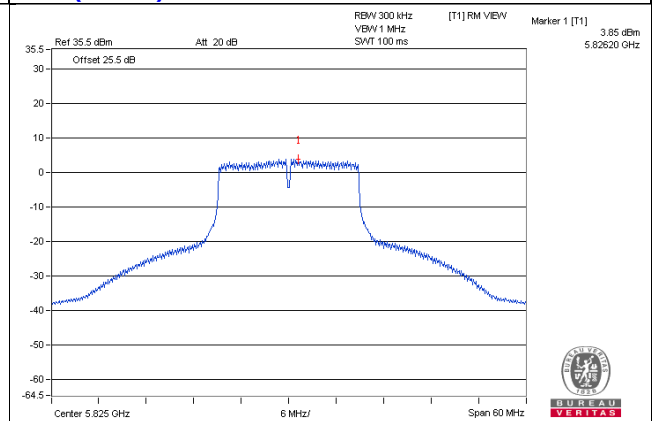
11ac (20MHz) 2S3T TXBF CH149



11ac (20MHz) 2S3T TXBF CH157

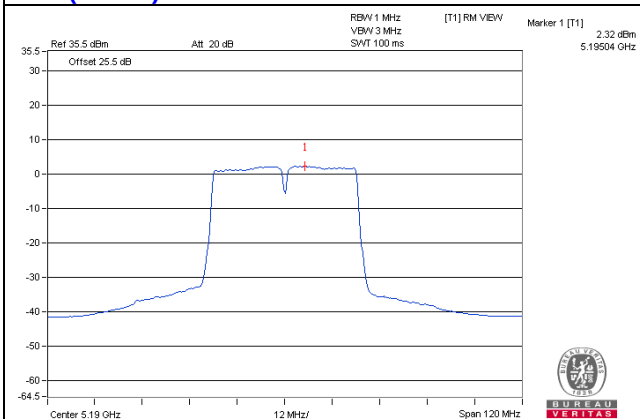


11ac (20MHz) 2S3T TXBF CH165

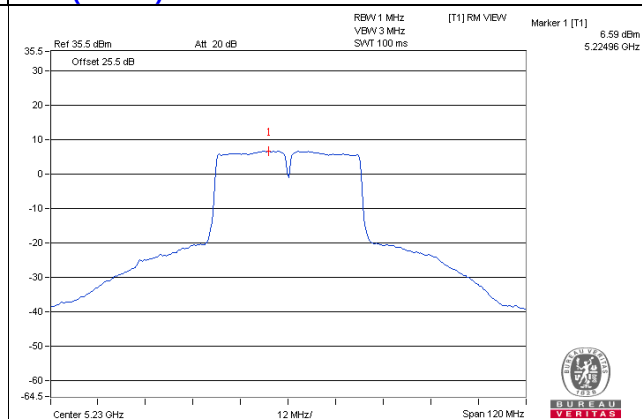


PSD SPECTRUM PLOT

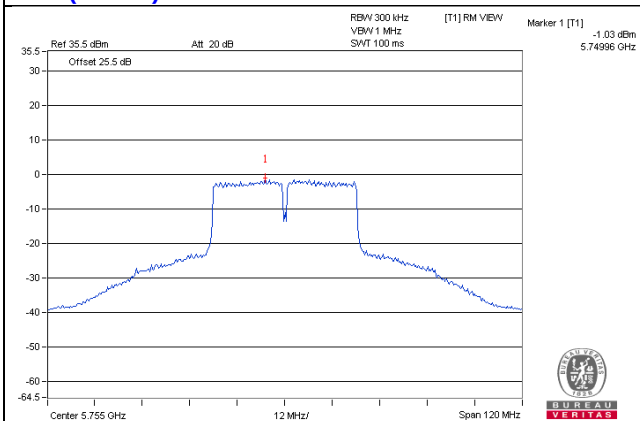
11ac (40MHz) 3S3T SDM CH38



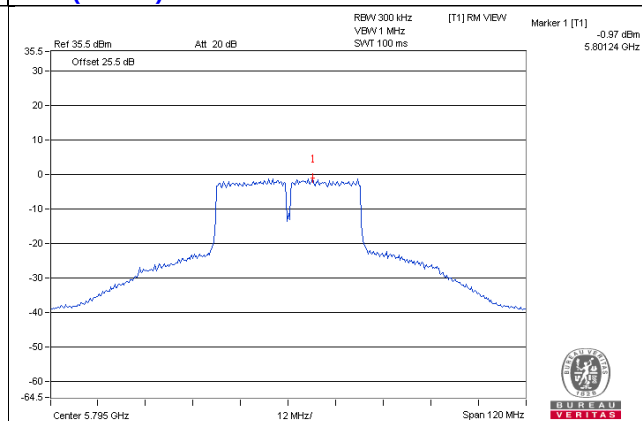
11ac (40MHz) 3S3T SDM CH46



11ac (40MHz) 3S3T SDM CH151

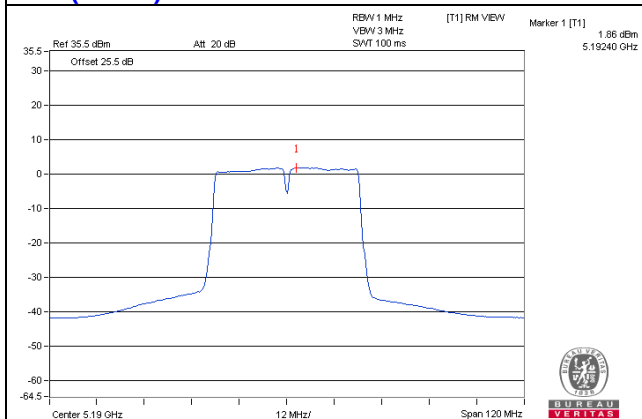


11ac (40MHz) 3S3T SDM CH159

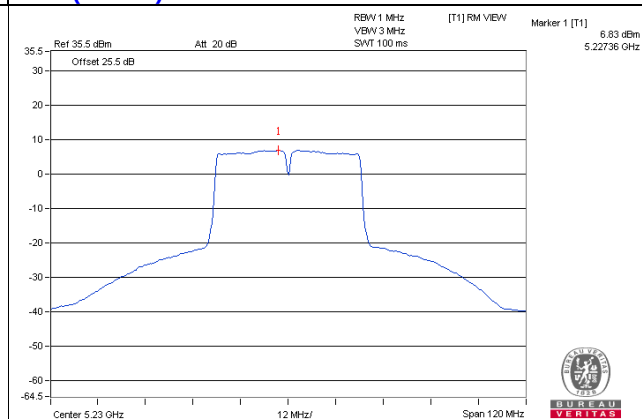


PSD SPECTRUM PLOT

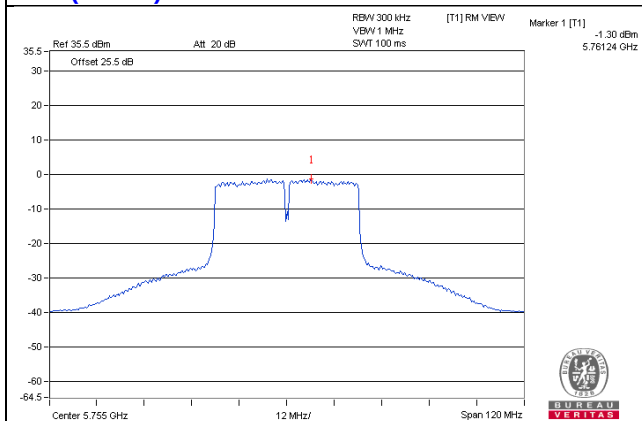
11ac (40MHz) 1S3T TXBF CH38



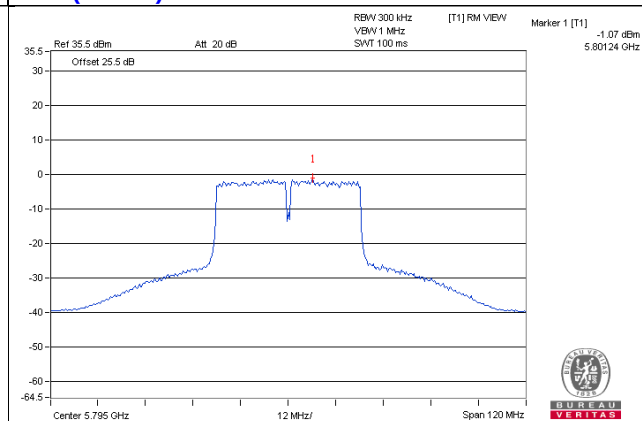
11ac (40MHz) 1S3T TXBF CH46



11ac (40MHz) 1S3T TXBF CH151

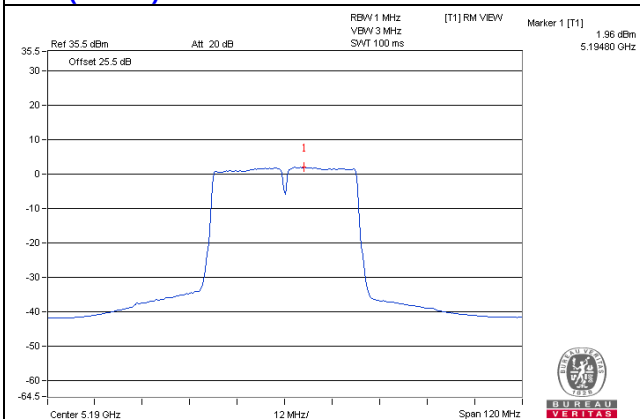


11ac (40MHz) 1S3T TXBF CH159

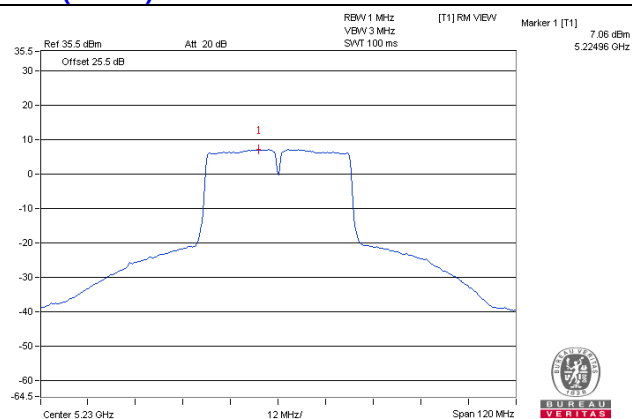


PSD SPECTRUM PLOT

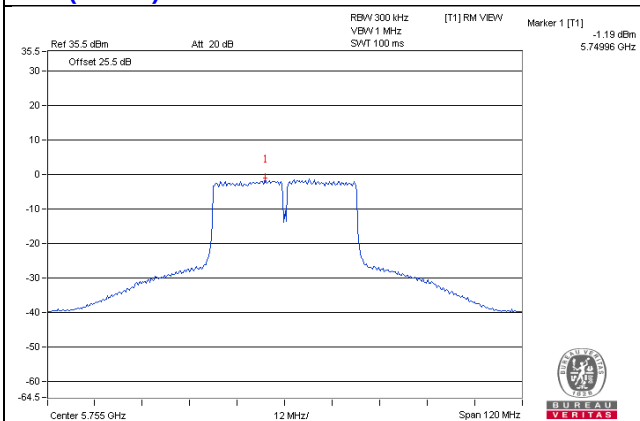
11ac (40MHz) 2S3T TXBF CH38



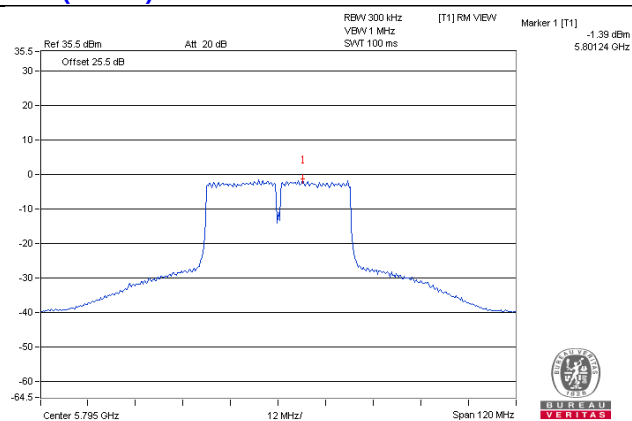
11ac (40MHz) 2S3T TXBF CH46



11ac (40MHz) 2S3T TXBF CH151

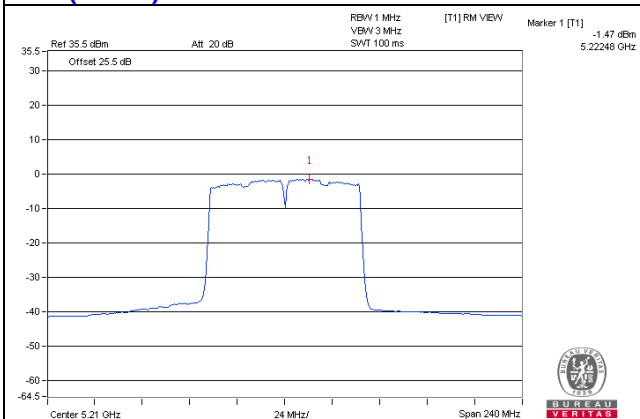


11ac (40MHz) 2S3T TXBF CH159

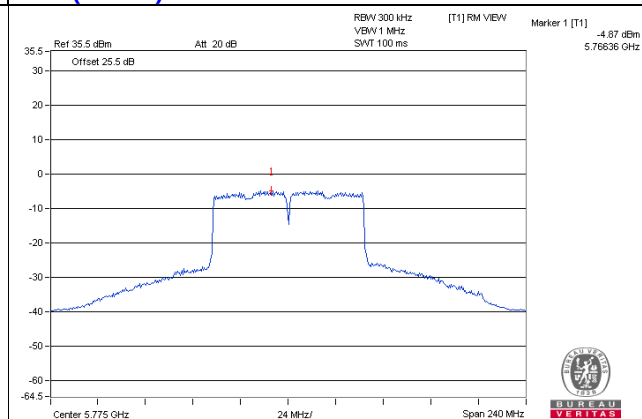


PSD SPECTRUM PLOT

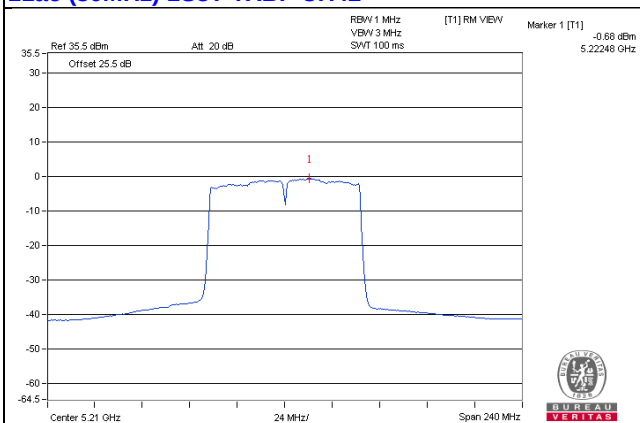
11ac (80MHz) 3S3T SDM CH42



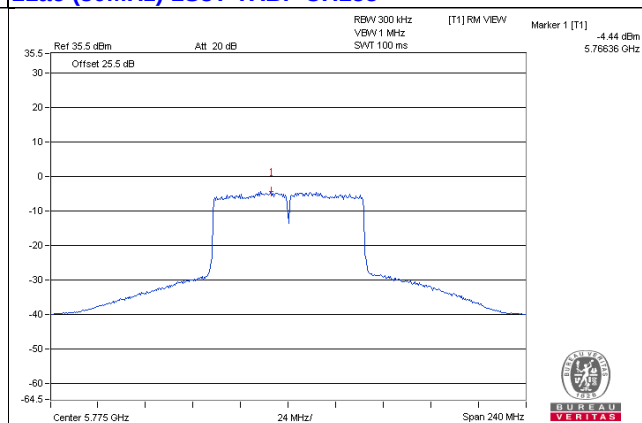
11ac (80MHz) 3S3T SDM CH155



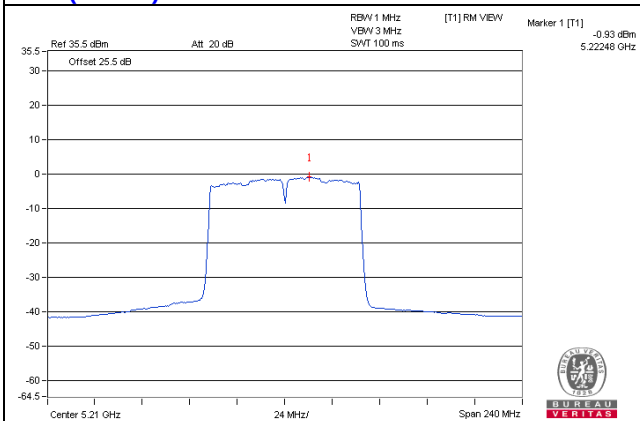
11ac (80MHz) 1S3T TXBF CH42



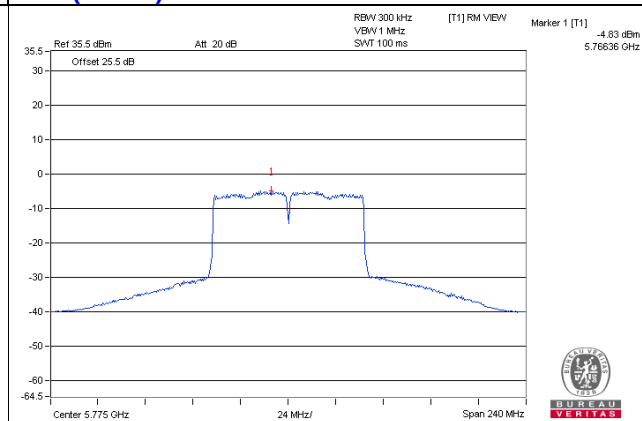
11ac (80MHz) 1S3T TXBF CH155



11ac (80MHz) 2S3T TXBF CH42



11ac (80MHz) 2S3T TXBF CH155



4.6 Radiated Emission and Bandedge Measurement

4.6.1 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.

4.6.2 Limits of Unwanted emissions out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure		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. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 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:

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

4.6.3 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 $\geq 98\%$ 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 r03 G. 6. d) Method VB.

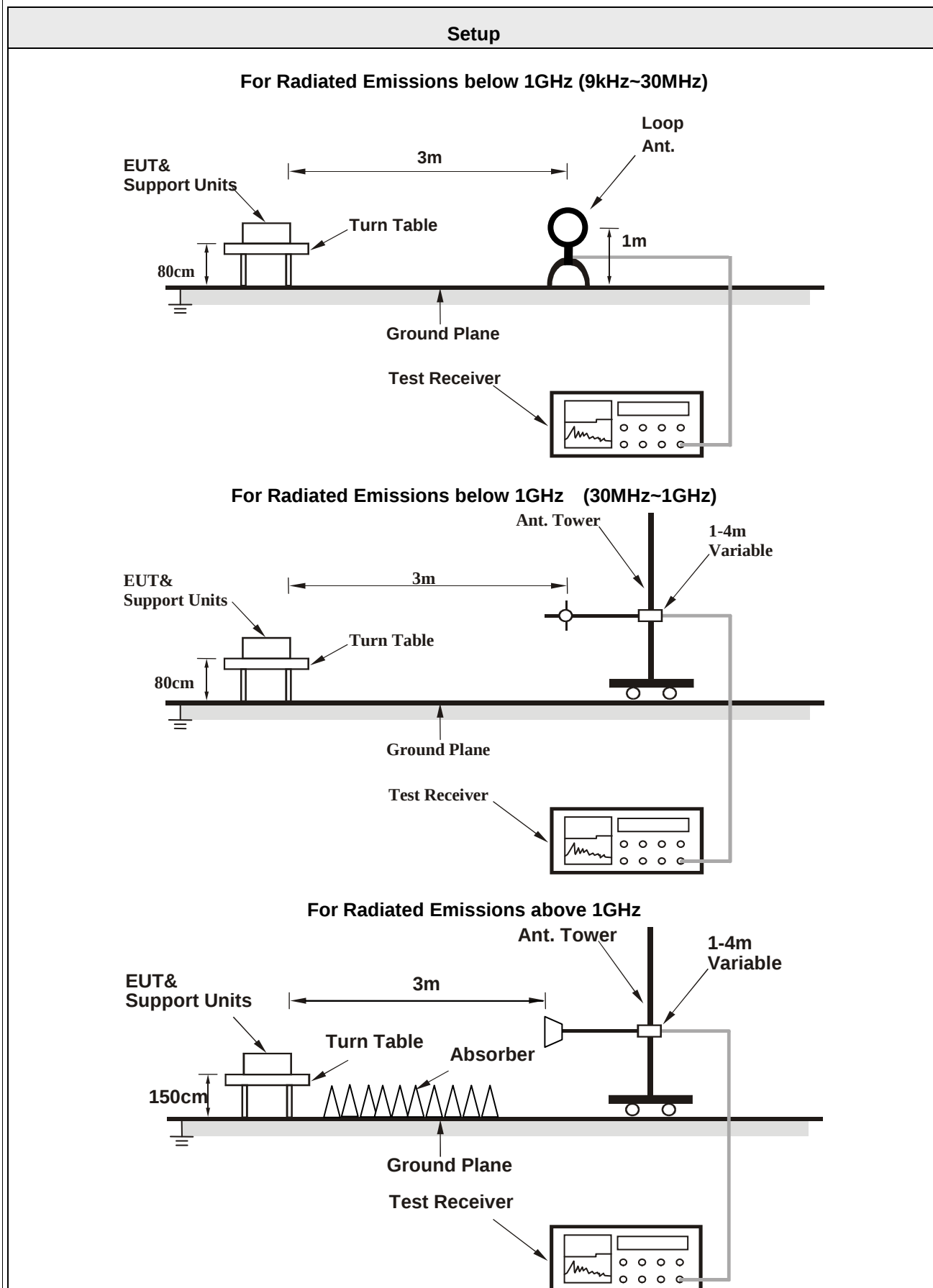
- As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set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

4.6.4 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 $\geq 98\%$, 1MHz RBW and VBW is $\geq 1/T$ 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.

4.6.5 Test Setup Layout



4.6.6 Test Deviation

There are no deviations with the original standard.

4.6.7 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.6.8 Test Results of Radiated Emissions and Bandedge

Temperature	23°C	Humidity	69%
Test Engineer	Rey Chen		

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

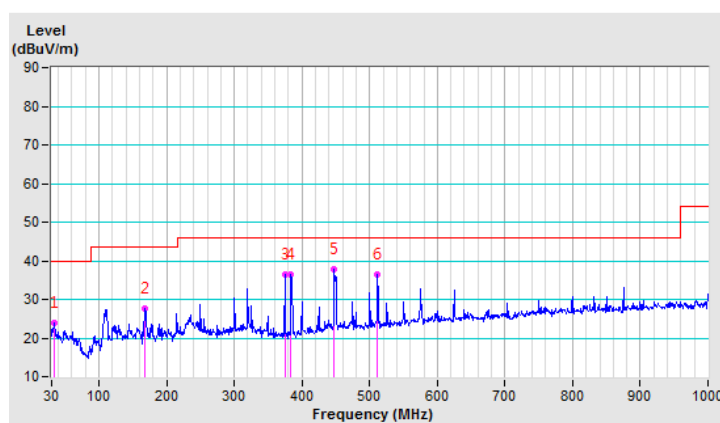
802.11ac (20MHz)

CHANNEL	TX Channel 165	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	34.03	23.9 QP	40.0	-16.1	2.00 H	224	32.9	-9.0
2	167.96	27.7 QP	43.5	-15.8	1.00 H	80	36.4	-8.7
3	375.00	36.5 QP	46.0	-9.5	1.00 H	289	42.4	-5.9
4	384.00	36.6 QP	46.0	-9.4	1.00 H	287	42.3	-5.7
5	448.00	37.8 QP	46.0	-8.2	2.00 H	2	41.5	-3.7
6	511.99	36.5 QP	46.0	-9.5	2.00 H	0	39.2	-2.7

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

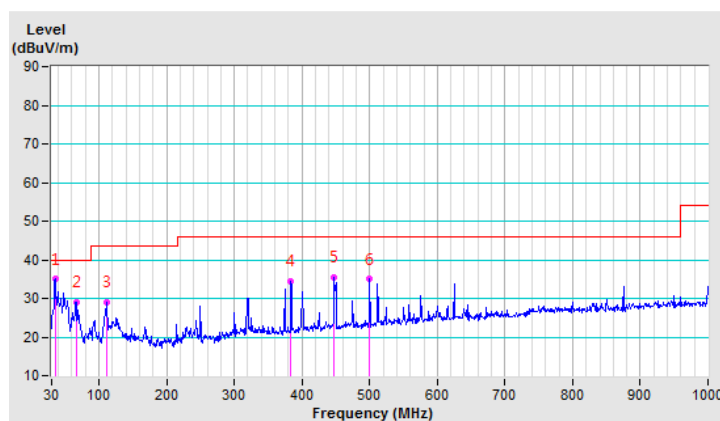


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	34.95	35.0 QP	40.0	-5.0	1.00 V	156	44.1	-9.1
2	66.30	29.0 QP	40.0	-11.0	1.00 V	360	38.9	-9.9
3	110.80	28.9 QP	43.5	-14.6	1.00 V	12	39.9	-11.0
4	384.00	34.5 QP	46.0	-11.5	1.00 V	296	40.2	-5.7
5	448.00	35.5 QP	46.0	-10.5	1.00 V	277	39.2	-3.7
6	500.01	34.9 QP	46.0	-11.1	1.00 V	164	37.9	-3.0

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

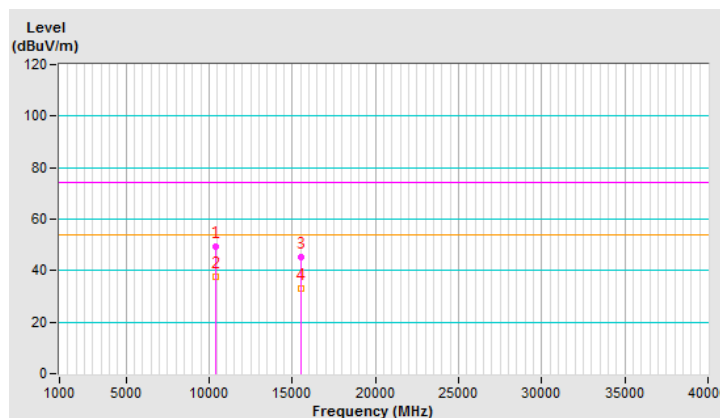
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	49.2 PK	74.0	-24.8	1.38 H	203	36.2	13.0
2	#10360.00	37.6 AV	54.0	-16.4	1.38 H	203	24.6	13.0
3	15540.00	45.2 PK	74.0	-28.8	1.75 H	214	32.1	13.1
4	15540.00	33.0 AV	54.0	-21.0	1.75 H	214	19.9	13.1

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.

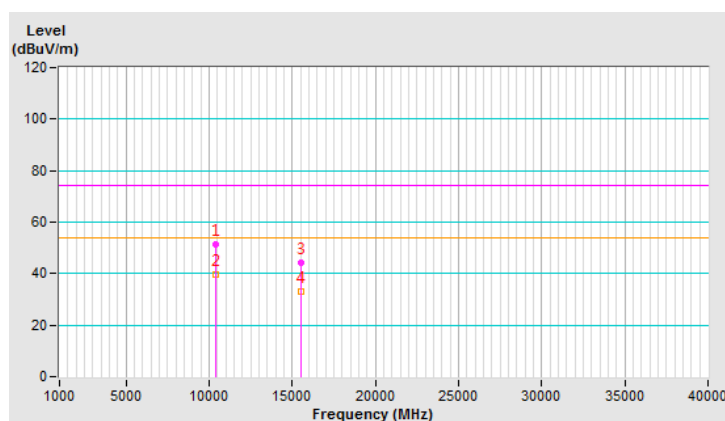


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	51.4 PK	74.0	-22.6	1.62 V	189	38.4	13.0
2	#10360.00	39.9 AV	54.0	-14.1	1.62 V	189	26.9	13.0
3	15540.00	44.4 PK	74.0	-29.6	1.57 V	215	31.3	13.1
4	15540.00	33.0 AV	54.0	-21.0	1.57 V	215	19.9	13.1

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.

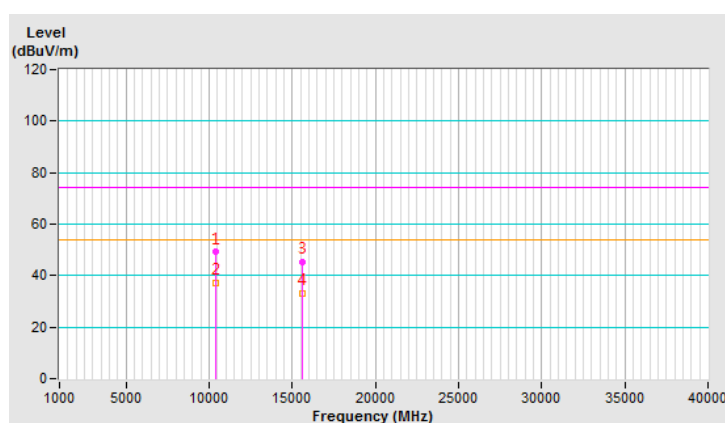


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	49.1 PK	74.0	-24.9	1.41 H	204	36.1	13.0
2	#10400.00	37.2 AV	54.0	-16.8	1.41 H	204	24.2	13.0
3	15600.00	45.1 PK	74.0	-28.9	1.70 H	199	31.8	13.3
4	15600.00	33.0 AV	54.0	-21.0	1.70 H	199	19.7	13.3

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.

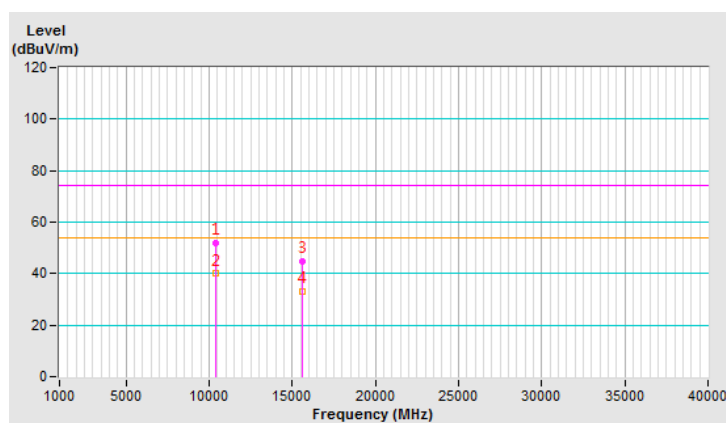


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	51.8 PK	74.0	-22.2	1.61 V	177	38.8	13.0
2	#10400.00	40.0 AV	54.0	-14.0	1.61 V	177	27.0	13.0
3	15600.00	44.9 PK	74.0	-29.1	1.56 V	227	31.6	13.3
4	15600.00	33.3 AV	54.0	-20.7	1.56 V	227	20.0	13.3

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.

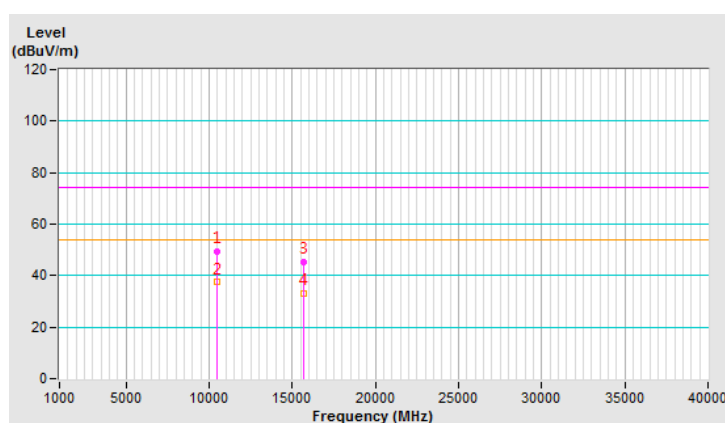


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	49.2 PK	74.0	-24.8	1.37 H	218	36.0	13.2
2	#10480.00	37.4 AV	54.0	-16.6	1.37 H	218	24.2	13.2
3	15720.00	45.1 PK	74.0	-28.9	1.74 H	208	31.5	13.6
4	15720.00	32.9 AV	54.0	-21.1	1.74 H	208	19.3	13.6

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.

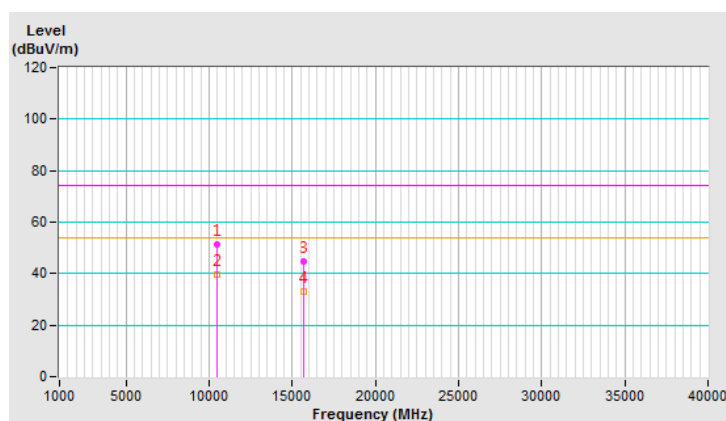


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	51.2 PK	74.0	-22.8	1.64 V	198	38.0	13.2
2	#10480.00	39.8 AV	54.0	-14.2	1.64 V	198	26.6	13.2
3	15720.00	44.7 PK	74.0	-29.3	1.60 V	214	31.1	13.6
4	15720.00	33.0 AV	54.0	-21.0	1.60 V	214	19.4	13.6

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.

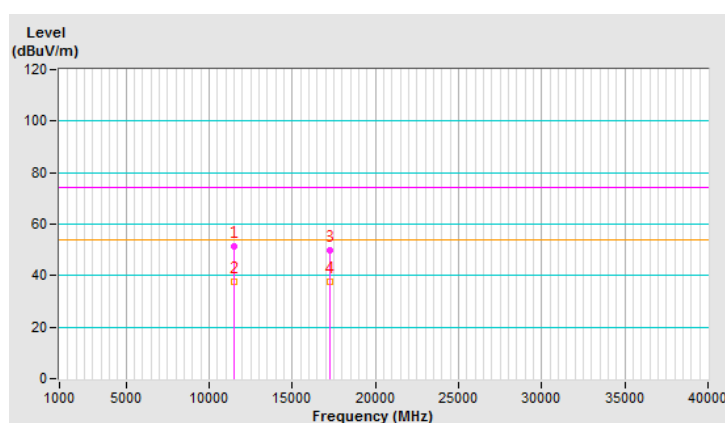


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	51.2 PK	74.0	-22.8	1.41 H	209	37.7	13.5
2	11490.00	37.7 AV	54.0	-16.3	1.41 H	209	24.2	13.5
3	#17235.00	50.0 PK	74.0	-24.0	1.62 H	188	32.7	17.3
4	#17235.00	37.8 AV	54.0	-16.2	1.62 H	188	20.5	17.3

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.

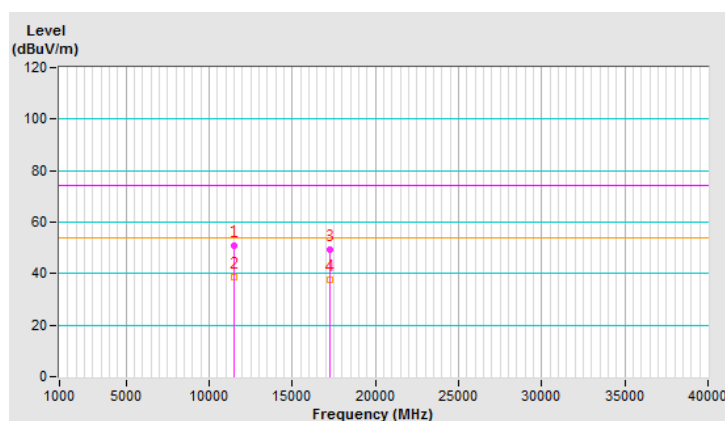


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	50.8 PK	74.0	-23.2	1.52 V	142	37.3	13.5
2	11490.00	38.6 AV	54.0	-15.4	1.52 V	142	25.1	13.5
3	#17235.00	49.2 PK	74.0	-24.8	1.48 V	298	31.9	17.3
4	#17235.00	37.7 AV	54.0	-16.3	1.48 V	298	20.4	17.3

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.

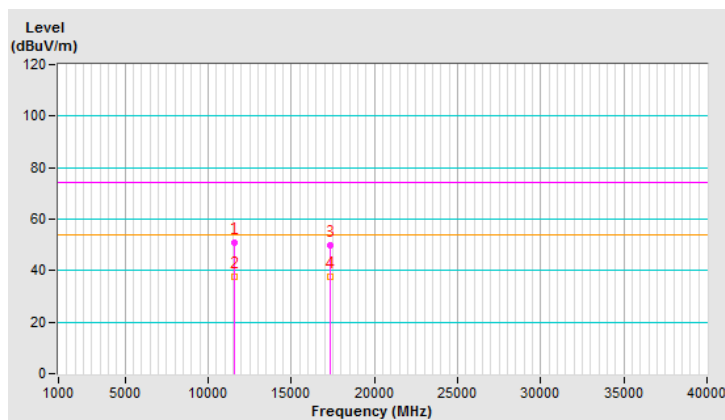


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	51.1 PK	74.0	-22.9	1.36 H	209	37.6	13.5
2	11570.00	37.5 AV	54.0	-16.5	1.36 H	209	24.0	13.5
3	#17355.00	50.0 PK	74.0	-24.0	1.67 H	172	32.0	18.0
4	#17355.00	37.6 AV	54.0	-16.4	1.67 H	172	19.6	18.0

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.

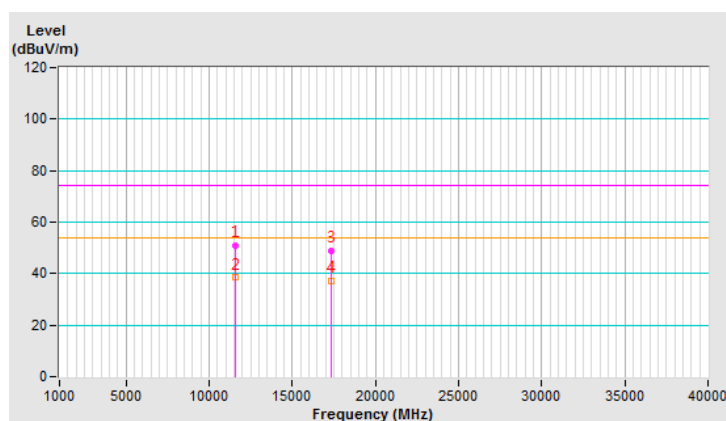


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	50.8 PK	74.0	-23.2	1.57 V	128	37.3	13.5
2	11570.00	38.4 AV	54.0	-15.6	1.57 V	128	24.9	13.5
3	#17355.00	48.9 PK	74.0	-25.1	1.53 V	305	30.9	18.0
4	#17355.00	37.3 AV	54.0	-16.7	1.53 V	305	19.3	18.0

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.

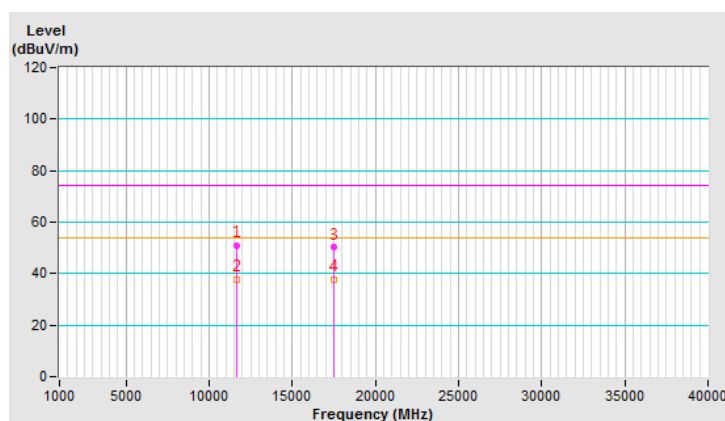


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	51.1 PK	74.0	-22.9	1.37 H	219	37.4	13.7
2	11650.00	37.5 AV	54.0	-16.5	1.37 H	219	23.8	13.7
3	#17475.00	50.1 PK	74.0	-23.9	1.58 H	173	31.5	18.6
4	#17475.00	37.7 AV	54.0	-16.3	1.58 H	173	19.1	18.6

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.

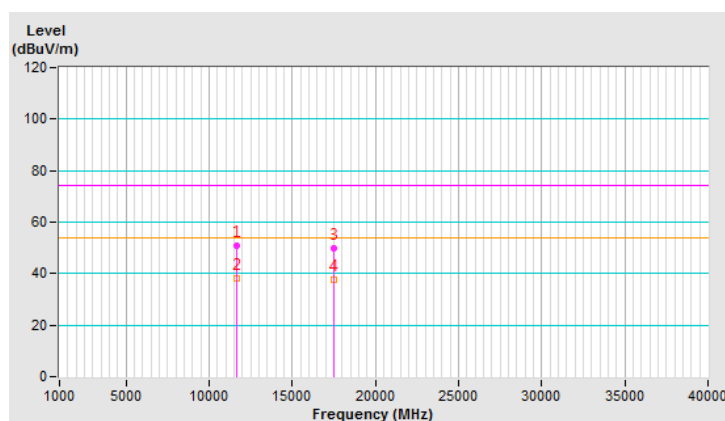


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	50.7 PK	74.0	-23.3	1.53 V	137	37.0	13.7
2	11650.00	38.3 AV	54.0	-15.7	1.53 V	137	24.6	13.7
3	#17475.00	50.0 PK	74.0	-24.0	1.47 V	312	31.4	18.6
4	#17475.00	37.5 AV	54.0	-16.5	1.47 V	312	18.9	18.6

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.



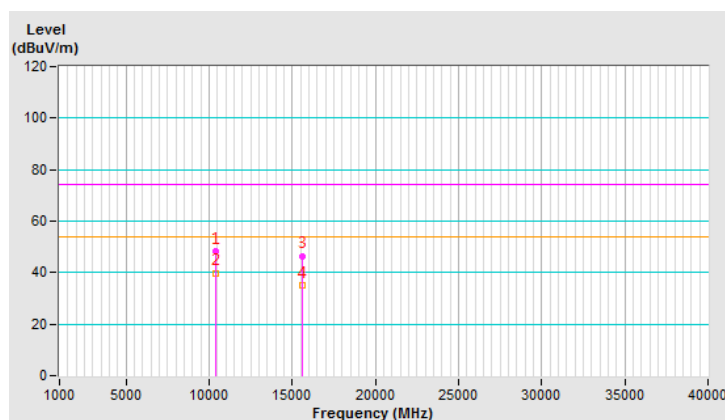
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	48.1 PK	74.0	-25.9	1.38 H	321	35.0	13.1
2	#10380.00	39.8 AV	54.0	-14.2	1.38 H	321	26.7	13.1
3	15570.00	46.5 PK	74.0	-27.5	1.61 H	107	33.2	13.3
4	15570.00	34.9 AV	54.0	-19.1	1.61 H	107	21.6	13.3

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.

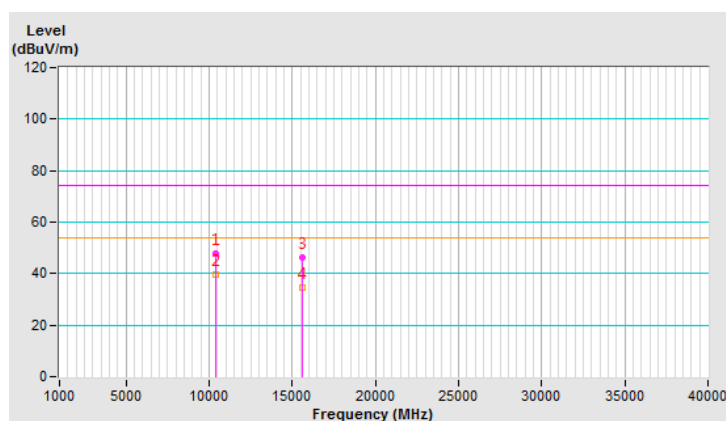


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	47.9 PK	74.0	-26.1	1.97 V	166	34.8	13.1
2	#10380.00	39.7 AV	54.0	-14.3	1.97 V	166	26.6	13.1
3	15570.00	46.4 PK	74.0	-27.6	1.55 V	233	33.1	13.3
4	15570.00	34.7 AV	54.0	-19.3	1.55 V	233	21.4	13.3

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.

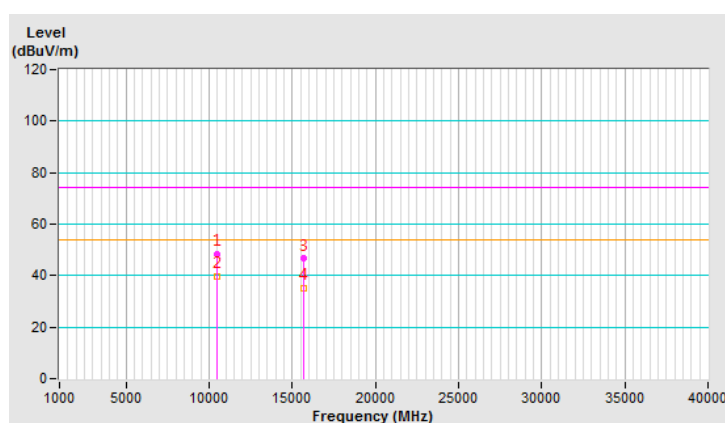


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.2 PK	74.0	-25.8	1.42 H	328	35.1	13.1
2	#10460.00	39.9 AV	54.0	-14.1	1.42 H	328	26.8	13.1
3	15690.00	46.6 PK	74.0	-27.4	1.70 H	91	32.8	13.8
4	15690.00	35.1 AV	54.0	-18.9	1.70 H	91	21.3	13.8

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.

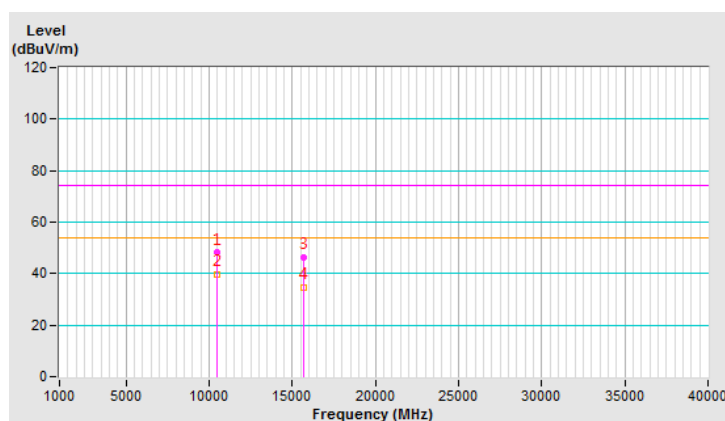


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.1 PK	74.0	-25.9	1.84 V	174	35.0	13.1
2	#10460.00	39.8 AV	54.0	-14.2	1.84 V	174	26.7	13.1
3	15690.00	46.5 PK	74.0	-27.5	1.54 V	245	32.7	13.8
4	15690.00	34.8 AV	54.0	-19.2	1.54 V	245	21.0	13.8

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.

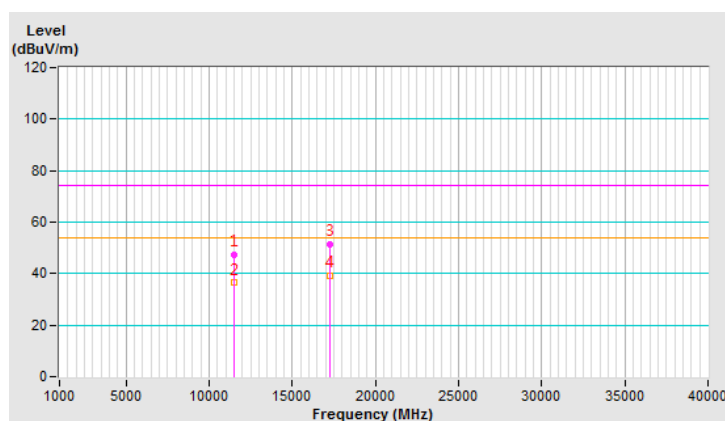


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	47.3 PK	74.0	-26.7	1.44 H	318	33.7	13.6
2	11510.00	36.4 AV	54.0	-17.6	1.44 H	318	22.8	13.6
3	#17265.00	51.5 PK	74.0	-22.5	1.65 H	98	33.9	17.6
4	#17265.00	39.2 AV	54.0	-14.8	1.65 H	98	21.6	17.6

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.

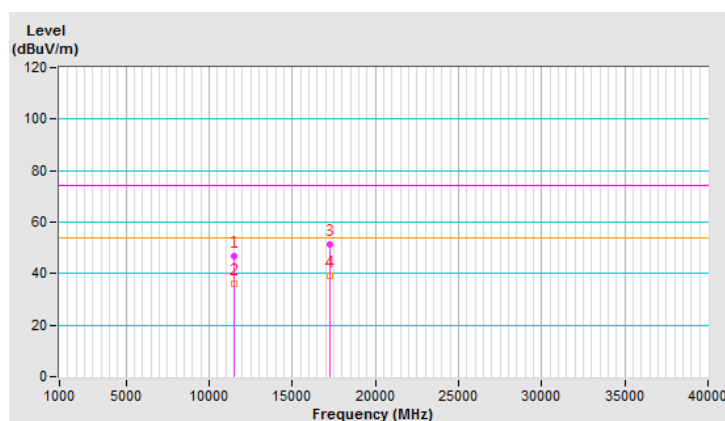


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	46.7 PK	74.0	-27.3	1.90 V	168	33.1	13.6
2	11510.00	36.3 AV	54.0	-17.7	1.90 V	168	22.7	13.6
3	#17265.00	51.4 PK	74.0	-22.6	1.58 V	251	33.8	17.6
4	#17265.00	39.1 AV	54.0	-14.9	1.58 V	251	21.5	17.6

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.

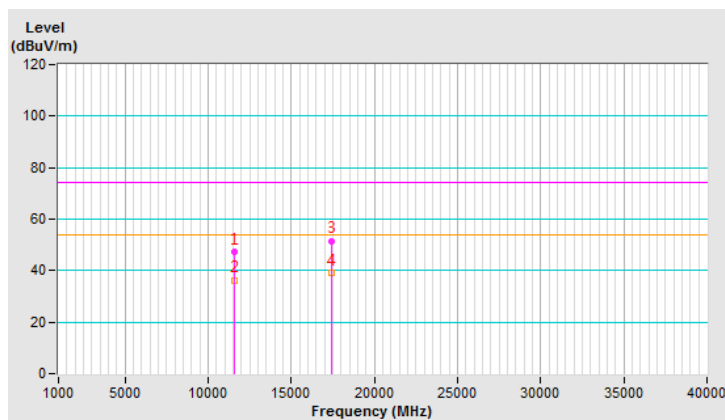


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	47.1 PK	74.0	-26.9	1.48 H	321	33.6	13.5
2	11590.00	36.3 AV	54.0	-17.7	1.48 H	321	22.8	13.5
3	#17385.00	51.3 PK	74.0	-22.7	1.67 H	106	33.0	18.3
4	#17385.00	38.9 AV	54.0	-15.1	1.67 H	106	20.6	18.3

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.

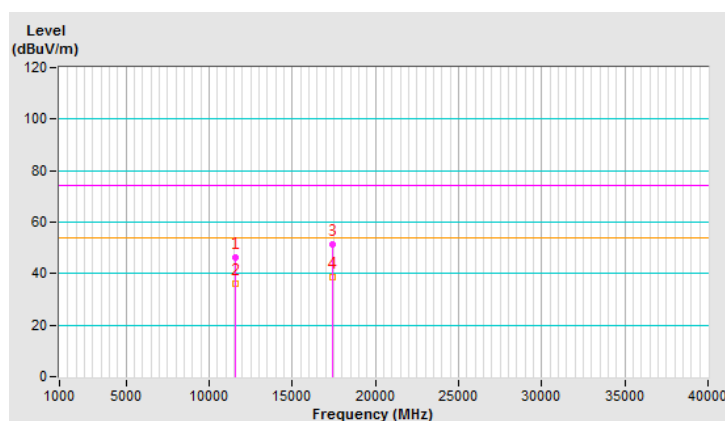


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	46.3 PK	74.0	-27.7	1.84 V	180	32.8	13.5
2	11590.00	36.1 AV	54.0	-17.9	1.84 V	180	22.6	13.5
3	#17385.00	51.2 PK	74.0	-22.8	1.59 V	238	32.9	18.3
4	#17385.00	38.8 AV	54.0	-15.2	1.59 V	238	20.5	18.3

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.



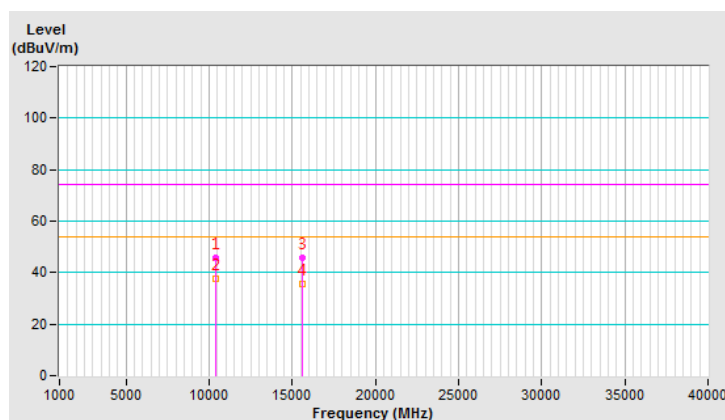
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	46.0 PK	74.0	-28.0	1.60 H	200	32.9	13.1
2	#10420.00	37.5 AV	54.0	-16.5	1.60 H	200	24.4	13.1
3	15630.00	45.9 PK	74.0	-28.1	1.70 H	298	32.3	13.6
4	15630.00	35.7 AV	54.0	-18.3	1.70 H	298	22.1	13.6

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.

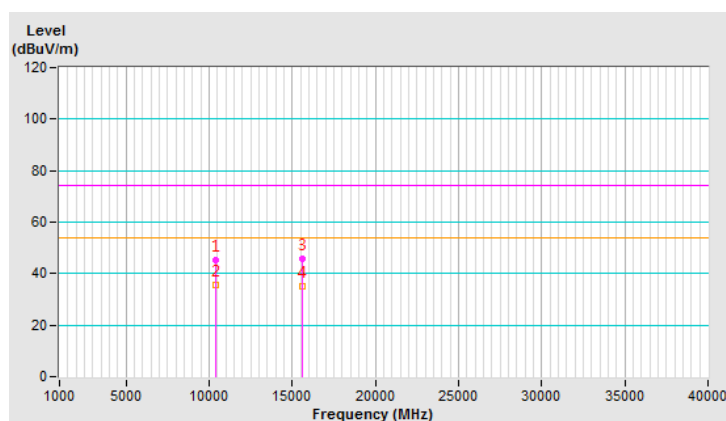


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	45.3 PK	74.0	-28.7	1.38 V	189	32.2	13.1
2	#10420.00	35.8 AV	54.0	-18.2	1.38 V	189	22.7	13.1
3	15630.00	45.7 PK	74.0	-28.3	1.47 V	314	32.1	13.6
4	15630.00	35.3 AV	54.0	-18.7	1.47 V	314	21.7	13.6

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.

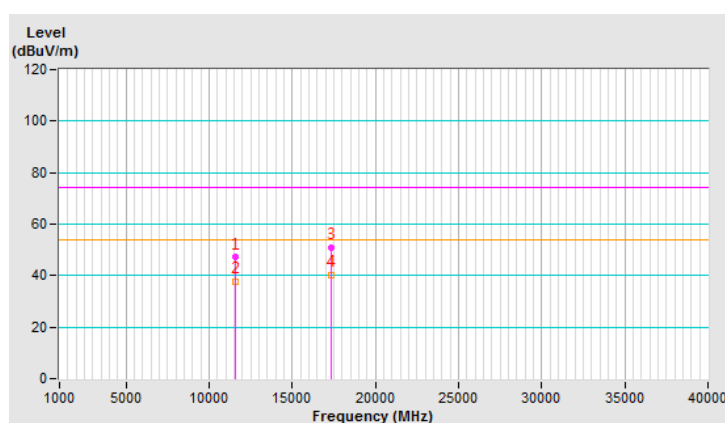


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	47.1 PK	74.0	-26.9	1.43 H	278	33.6	13.5
2	11550.00	37.6 AV	54.0	-16.4	1.43 H	278	24.1	13.5
3	#17325.00	50.8 PK	74.0	-23.2	1.68 H	308	33.0	17.8
4	#17325.00	40.3 AV	54.0	-13.7	1.68 H	308	22.5	17.8

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.

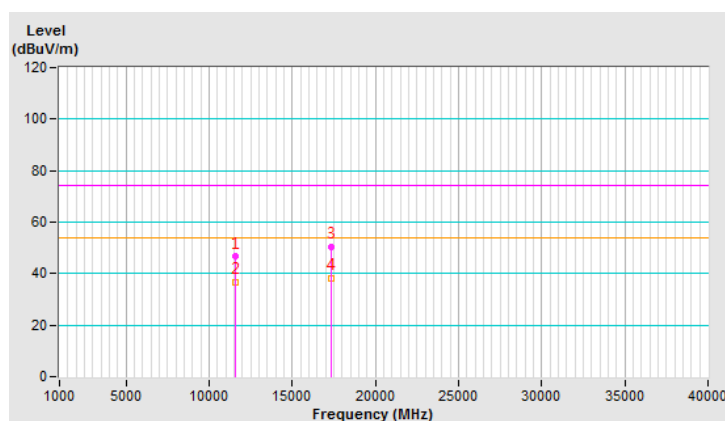


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	46.6 PK	74.0	-27.4	1.40 V	191	33.1	13.5
2	11550.00	36.7 AV	54.0	-17.3	1.40 V	191	23.2	13.5
3	#17325.00	50.5 PK	74.0	-23.5	1.42 V	317	32.7	17.8
4	#17325.00	38.1 AV	54.0	-15.9	1.42 V	317	20.3	17.8

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.



1S3T TxBF Mode

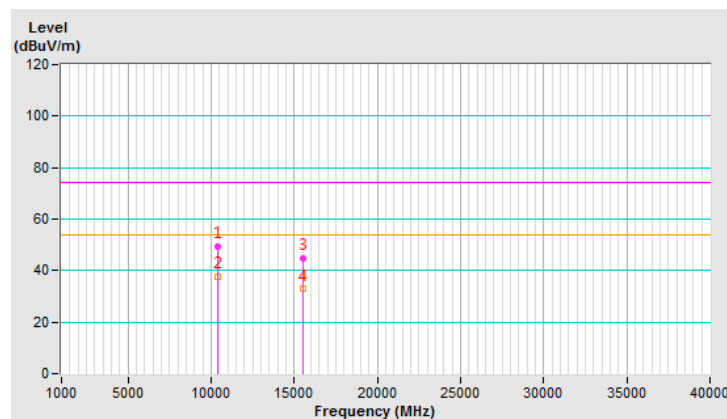
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	49.2 PK	74.0	-24.8	1.40 H	204	36.2	13.0
2	#10360.00	37.7 AV	54.0	-16.3	1.40 H	204	24.7	13.0
3	15540.00	44.8 PK	74.0	-29.2	1.75 H	227	31.7	13.1
4	15540.00	32.8 AV	54.0	-21.2	1.75 H	227	19.7	13.1

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.

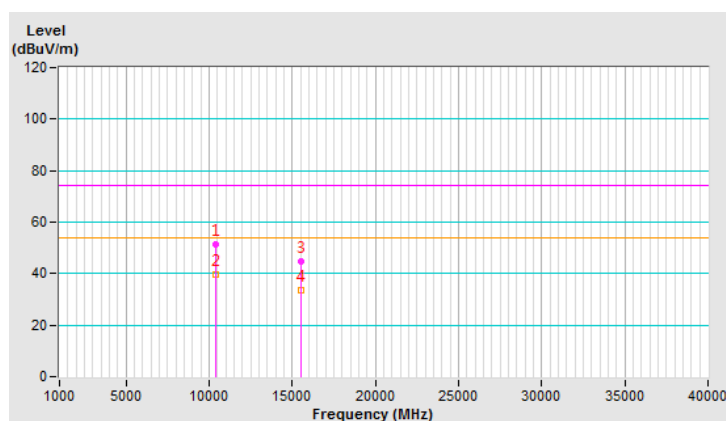


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	51.4 PK	74.0	-22.6	1.64 V	193	38.4	13.0
2	#10360.00	39.7 AV	54.0	-14.3	1.64 V	193	26.7	13.0
3	15540.00	44.7 PK	74.0	-29.3	1.57 V	220	31.6	13.1
4	15540.00	33.4 AV	54.0	-20.6	1.57 V	220	20.3	13.1

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.

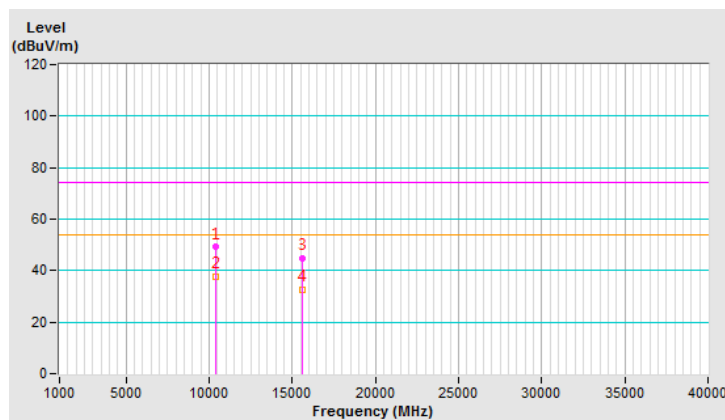


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	49.1 PK	74.0	-24.9	1.36 H	214	36.1	13.0
2	#10400.00	37.7 AV	54.0	-16.3	1.36 H	214	24.7	13.0
3	15600.00	44.8 PK	74.0	-29.2	1.78 H	236	31.5	13.3
4	15600.00	32.7 AV	54.0	-21.3	1.78 H	236	19.4	13.3

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.

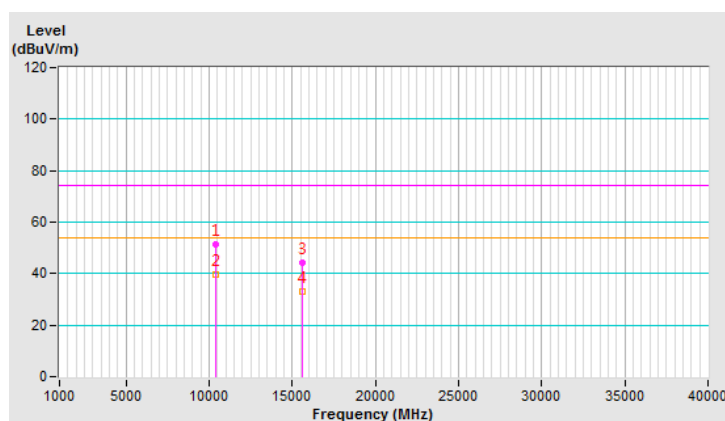


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	51.6 PK	74.0	-22.4	1.66 V	191	38.6	13.0
2	#10400.00	39.8 AV	54.0	-14.2	1.66 V	191	26.8	13.0
3	15600.00	44.4 PK	74.0	-29.6	1.62 V	213	31.1	13.3
4	15600.00	33.3 AV	54.0	-20.7	1.62 V	213	20.0	13.3

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.

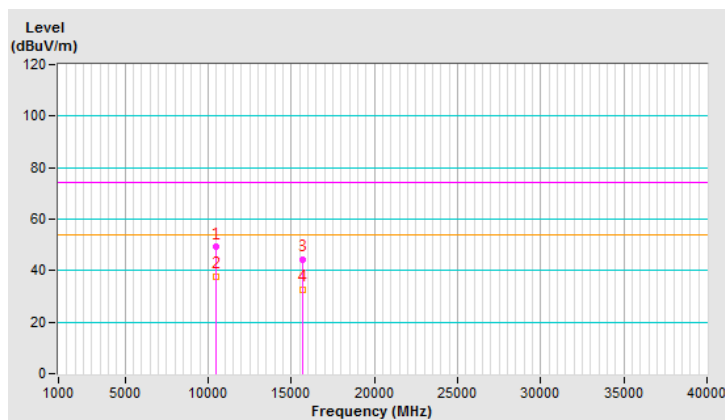


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	49.1 PK	74.0	-24.9	1.37 H	201	35.9	13.2
2	#10480.00	37.6 AV	54.0	-16.4	1.37 H	201	24.4	13.2
3	15720.00	44.4 PK	74.0	-29.6	1.70 H	225	30.8	13.6
4	15720.00	32.7 AV	54.0	-21.3	1.70 H	225	19.1	13.6

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.

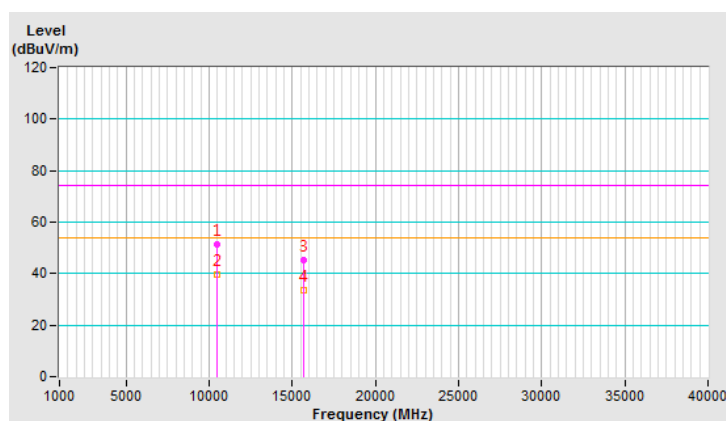


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	51.6 PK	74.0	-22.4	1.65 V	196	38.4	13.2
2	#10480.00	39.9 AV	54.0	-14.1	1.65 V	196	26.7	13.2
3	15720.00	45.1 PK	74.0	-28.9	1.56 V	212	31.5	13.6
4	15720.00	33.8 AV	54.0	-20.2	1.56 V	212	20.2	13.6

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.

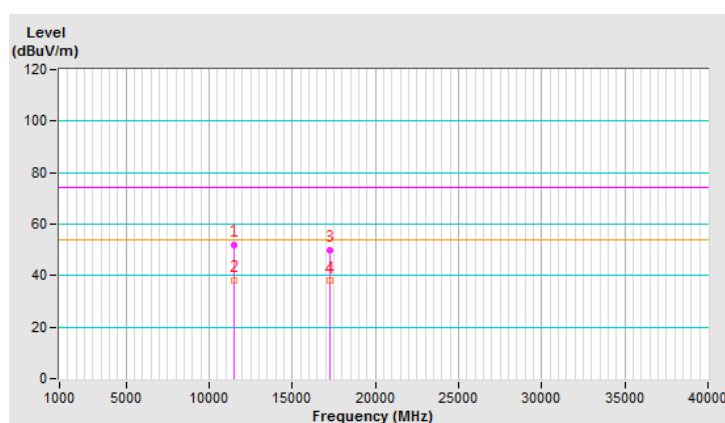


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	51.7 PK	74.0	-22.3	1.43 H	216	38.2	13.5
2	11490.00	38.2 AV	54.0	-15.8	1.43 H	216	24.7	13.5
3	#17235.00	50.0 PK	74.0	-24.0	1.63 H	197	32.7	17.3
4	#17235.00	37.9 AV	54.0	-16.1	1.63 H	197	20.6	17.3

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.

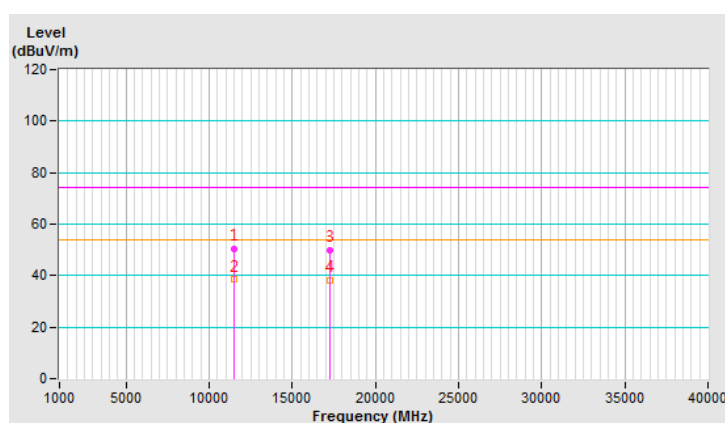


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	50.4 PK	74.0	-23.6	1.51 V	131	36.9	13.5
2	11490.00	38.4 AV	54.0	-15.6	1.51 V	131	24.9	13.5
3	#17235.00	49.7 PK	74.0	-24.3	1.51 V	289	32.4	17.3
4	#17235.00	38.1 AV	54.0	-15.9	1.51 V	289	20.8	17.3

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.

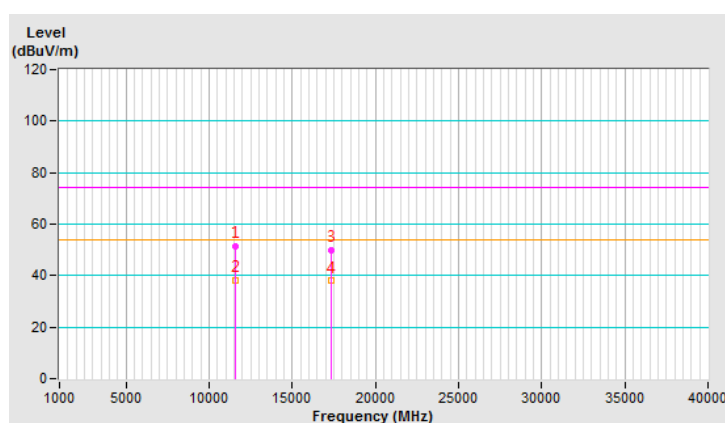


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	51.6 PK	74.0	-22.4	1.47 H	219	38.1	13.5
2	11570.00	38.2 AV	54.0	-15.8	1.47 H	219	24.7	13.5
3	#17355.00	49.9 PK	74.0	-24.1	1.66 H	177	31.9	18.0
4	#17355.00	37.9 AV	54.0	-16.1	1.66 H	177	19.9	18.0

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.

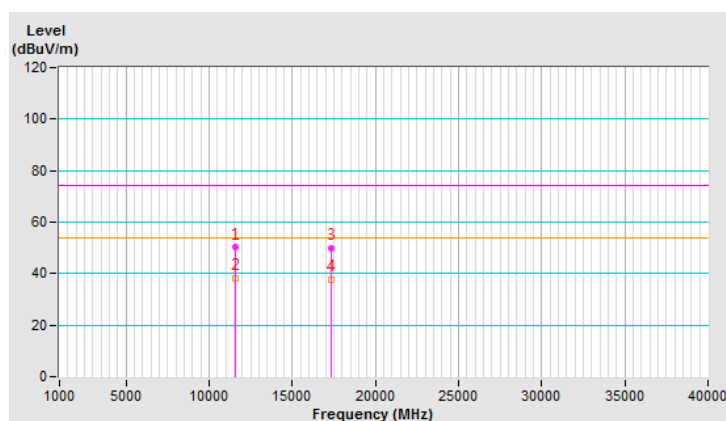


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	50.1 PK	74.0	-23.9	1.51 V	140	36.6	13.5
2	11570.00	38.3 AV	54.0	-15.7	1.51 V	140	24.8	13.5
3	#17355.00	49.8 PK	74.0	-24.2	1.52 V	301	31.8	18.0
4	#17355.00	37.6 AV	54.0	-16.4	1.52 V	301	19.6	18.0

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.

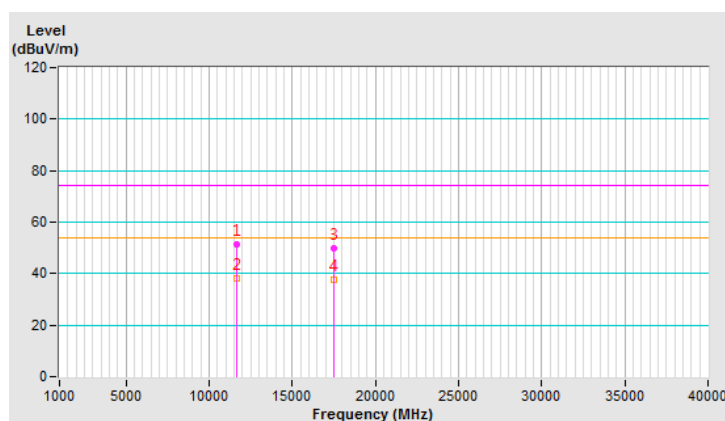


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	51.6 PK	74.0	-22.4	1.46 H	198	37.9	13.7
2	11650.00	38.0 AV	54.0	-16.0	1.46 H	198	24.3	13.7
3	#17475.00	49.8 PK	74.0	-24.2	1.64 H	194	31.2	18.6
4	#17475.00	37.5 AV	54.0	-16.5	1.64 H	194	18.9	18.6

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.

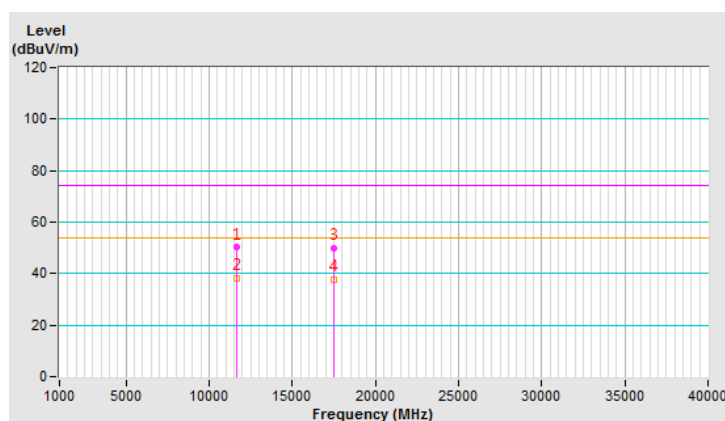


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	50.1 PK	74.0	-23.9	1.46 V	141	36.4	13.7
2	11650.00	38.1 AV	54.0	-15.9	1.46 V	141	24.4	13.7
3	#17475.00	49.9 PK	74.0	-24.1	1.48 V	279	31.3	18.6
4	#17475.00	37.8 AV	54.0	-16.2	1.48 V	279	19.2	18.6

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.



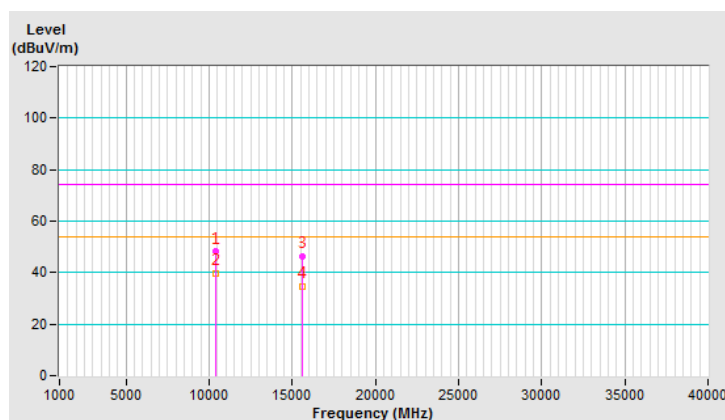
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	48.1 PK	74.0	-25.9	1.44 H	311	35.0	13.1
2	#10380.00	39.9 AV	54.0	-14.1	1.44 H	311	26.8	13.1
3	15570.00	46.3 PK	74.0	-27.7	1.66 H	118	33.0	13.3
4	15570.00	34.7 AV	54.0	-19.3	1.66 H	118	21.4	13.3

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.

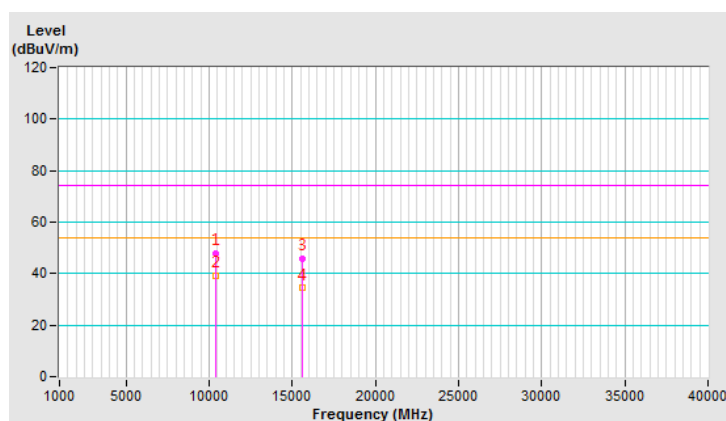


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	47.8 PK	74.0	-26.2	2.02 V	162	34.7	13.1
2	#10380.00	39.3 AV	54.0	-14.7	2.02 V	162	26.2	13.1
3	15570.00	45.9 PK	74.0	-28.1	1.60 V	225	32.6	13.3
4	15570.00	34.4 AV	54.0	-19.6	1.60 V	225	21.1	13.3

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.

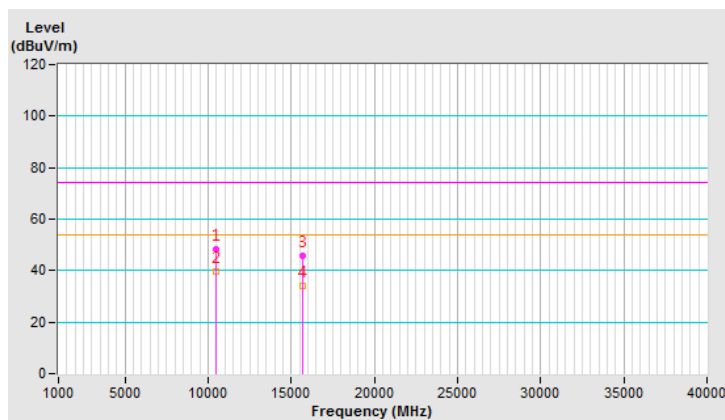


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.3 PK	74.0	-25.7	1.49 H	307	35.2	13.1
2	#10460.00	39.8 AV	54.0	-14.2	1.49 H	307	26.7	13.1
3	15690.00	45.9 PK	74.0	-28.1	1.69 H	110	32.1	13.8
4	15690.00	34.2 AV	54.0	-19.8	1.69 H	110	20.4	13.8

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.

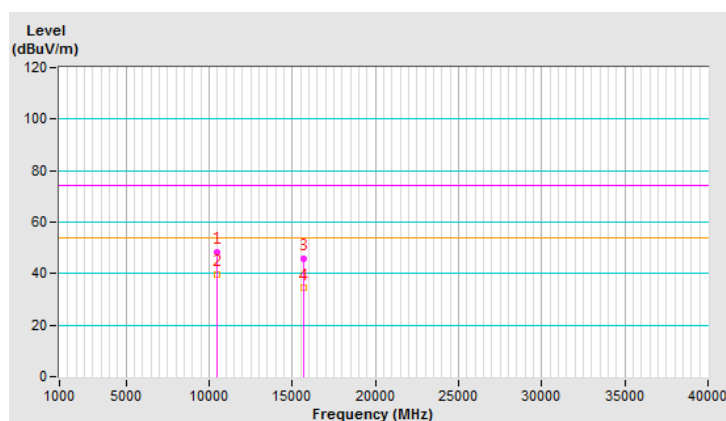


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.3 PK	74.0	-25.7	1.99 V	156	35.2	13.1
2	#10460.00	39.7 AV	54.0	-14.3	1.99 V	156	26.6	13.1
3	15690.00	45.8 PK	74.0	-28.2	1.63 V	216	32.0	13.8
4	15690.00	34.4 AV	54.0	-19.6	1.63 V	216	20.6	13.8

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.

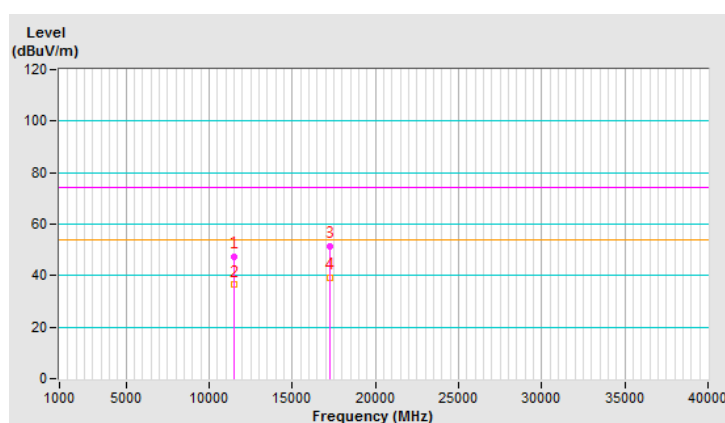


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	47.4 PK	74.0	-26.6	1.47 H	329	33.8	13.6
2	11510.00	36.4 AV	54.0	-17.6	1.47 H	329	22.8	13.6
3	#17265.00	51.4 PK	74.0	-22.6	1.67 H	89	33.8	17.6
4	#17265.00	39.1 AV	54.0	-14.9	1.67 H	89	21.5	17.6

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.

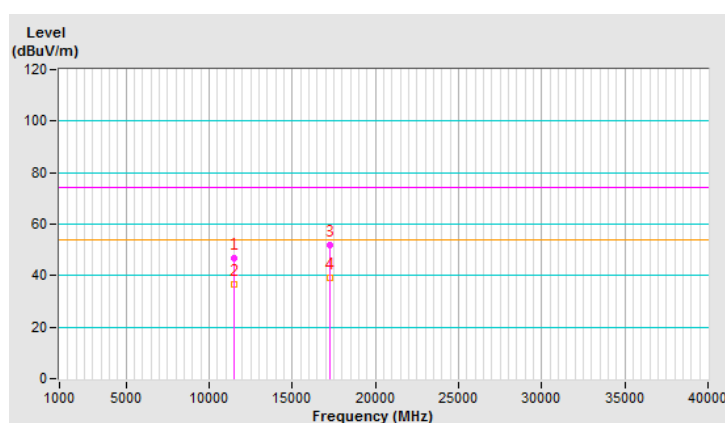


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	47.0 PK	74.0	-27.0	1.89 V	178	33.4	13.6
2	11510.00	36.5 AV	54.0	-17.5	1.89 V	178	22.9	13.6
3	#17265.00	51.9 PK	74.0	-22.1	1.58 V	254	34.3	17.6
4	#17265.00	39.4 AV	54.0	-14.6	1.58 V	254	21.8	17.6

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.

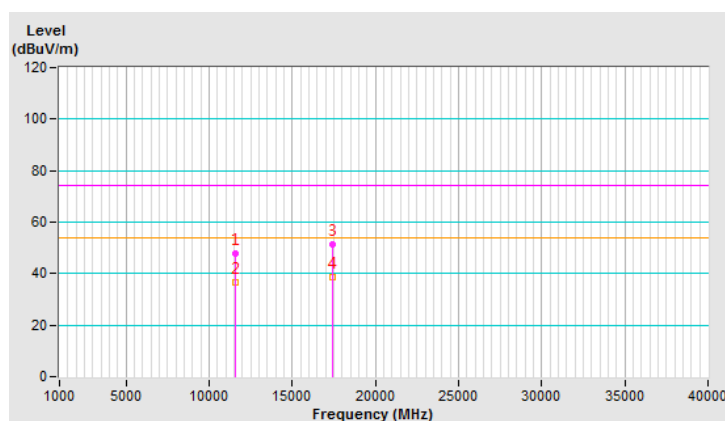


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	47.9 PK	74.0	-26.1	1.44 H	304	34.4	13.5
2	11590.00	36.8 AV	54.0	-17.2	1.44 H	304	23.3	13.5
3	#17385.00	51.3 PK	74.0	-22.7	1.63 H	103	33.0	18.3
4	#17385.00	38.8 AV	54.0	-15.2	1.63 H	103	20.5	18.3

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.

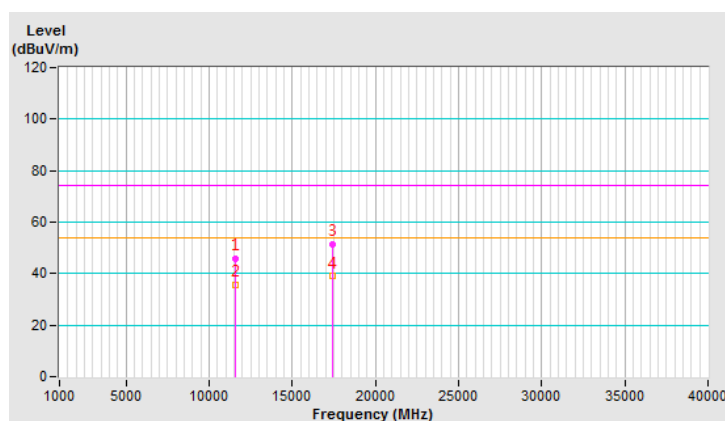


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	46.0 PK	74.0	-28.0	1.85 V	182	32.5	13.5
2	11590.00	35.8 AV	54.0	-18.2	1.85 V	182	22.3	13.5
3	#17385.00	51.4 PK	74.0	-22.6	1.54 V	241	33.1	18.3
4	#17385.00	38.9 AV	54.0	-15.1	1.54 V	241	20.6	18.3

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.



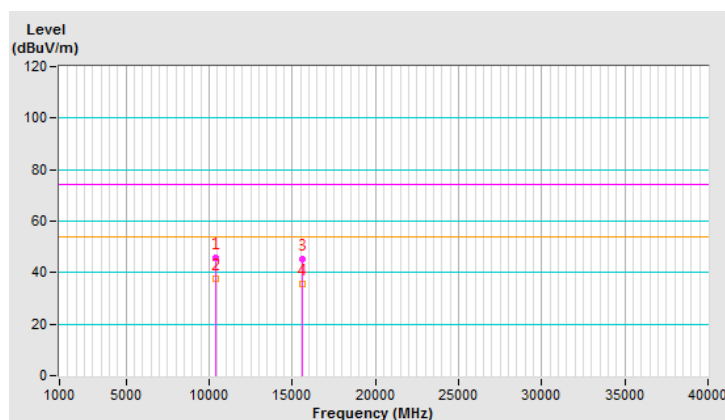
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	45.9 PK	74.0	-28.1	1.60 H	208	32.8	13.1
2	#10420.00	37.5 AV	54.0	-16.5	1.60 H	208	24.4	13.1
3	15630.00	45.5 PK	74.0	-28.5	1.73 H	283	31.9	13.6
4	15630.00	35.6 AV	54.0	-18.4	1.73 H	283	22.0	13.6

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.

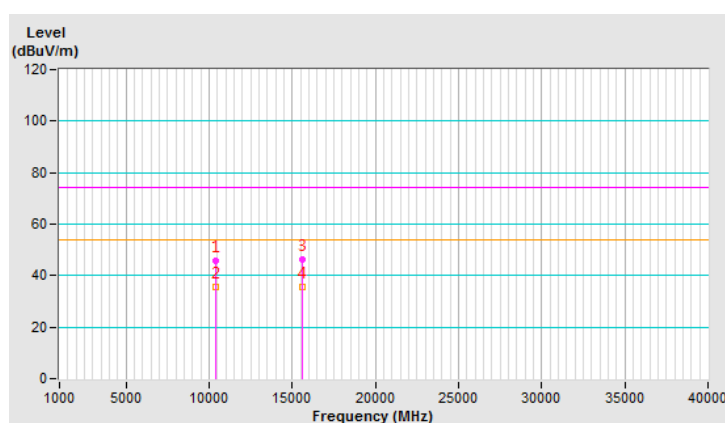


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	45.6 PK	74.0	-28.4	1.42 V	180	32.5	13.1
2	#10420.00	35.8 AV	54.0	-18.2	1.42 V	180	22.7	13.1
3	15630.00	46.2 PK	74.0	-27.8	1.44 V	302	32.6	13.6
4	15630.00	35.5 AV	54.0	-18.5	1.44 V	302	21.9	13.6

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.

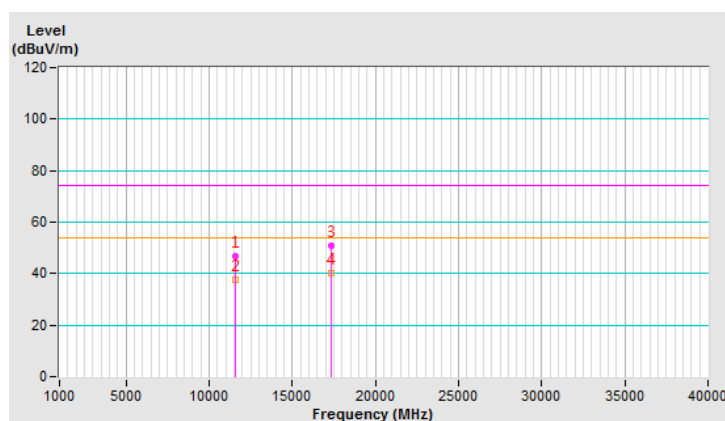


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	46.8 PK	74.0	-27.2	1.42 H	278	33.3	13.5
2	11550.00	37.5 AV	54.0	-16.5	1.42 H	278	24.0	13.5
3	#17325.00	51.0 PK	74.0	-23.0	1.72 H	298	33.2	17.8
4	#17325.00	40.4 AV	54.0	-13.6	1.72 H	298	22.6	17.8

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.

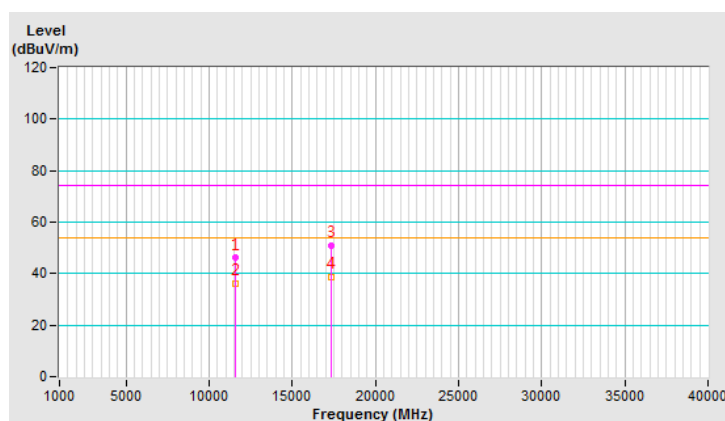


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	46.1 PK	74.0	-27.9	1.37 V	184	32.6	13.5
2	11550.00	36.3 AV	54.0	-17.7	1.37 V	184	22.8	13.5
3	#17325.00	51.1 PK	74.0	-22.9	1.42 V	317	33.3	17.8
4	#17325.00	38.5 AV	54.0	-15.5	1.42 V	317	20.7	17.8

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.



2S3T TxBF Mode

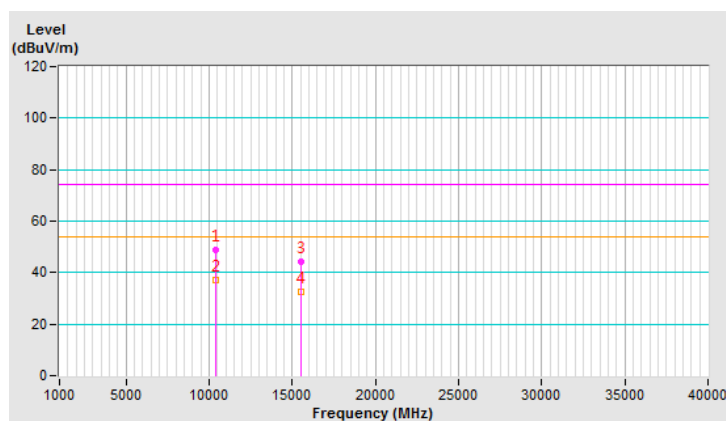
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	48.7 PK	74.0	-25.3	1.38 H	199	35.7	13.0
2	#10360.00	37.3 AV	54.0	-16.7	1.38 H	199	24.3	13.0
3	15540.00	44.3 PK	74.0	-29.7	1.73 H	218	31.2	13.1
4	15540.00	32.5 AV	54.0	-21.5	1.73 H	218	19.4	13.1

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.

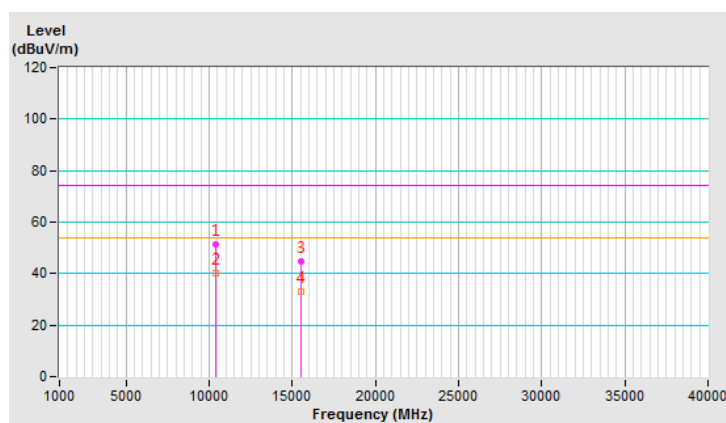


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10360.00	51.6 PK	74.0	-22.4	1.68 V	189	38.6	13.0
2	#10360.00	40.1 AV	54.0	-13.9	1.68 V	189	27.1	13.0
3	15540.00	44.6 PK	74.0	-29.4	1.52 V	226	31.5	13.1
4	15540.00	33.3 AV	54.0	-20.7	1.52 V	226	20.2	13.1

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.

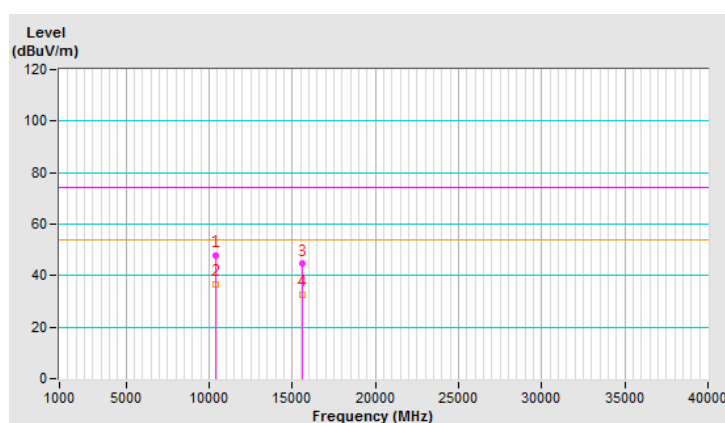


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	47.9 PK	74.0	-26.1	1.38 H	191	34.9	13.0
2	#10400.00	36.8 AV	54.0	-17.2	1.38 H	191	23.8	13.0
3	15600.00	44.5 PK	74.0	-29.5	1.69 H	202	31.2	13.3
4	15600.00	32.6 AV	54.0	-21.4	1.69 H	202	19.3	13.3

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.

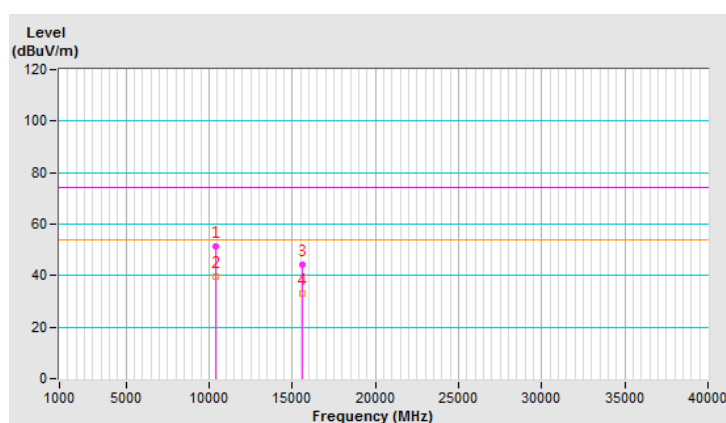


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10400.00	51.2 PK	74.0	-22.8	1.65 V	188	38.2	13.0
2	#10400.00	39.7 AV	54.0	-14.3	1.65 V	188	26.7	13.0
3	15600.00	44.2 PK	74.0	-29.8	1.49 V	217	30.9	13.3
4	15600.00	32.9 AV	54.0	-21.1	1.49 V	217	19.6	13.3

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.

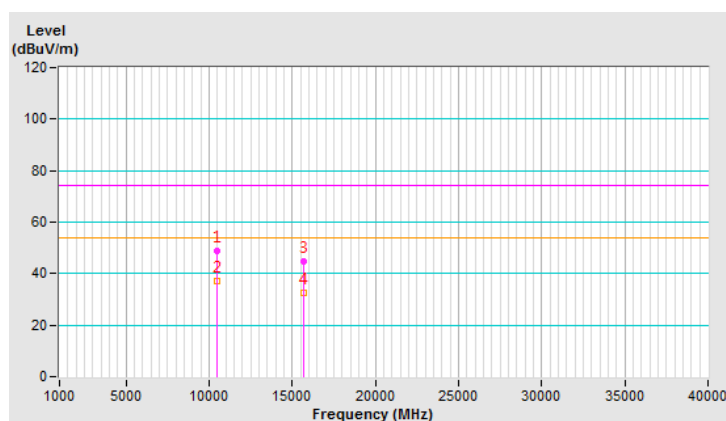


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	48.8 PK	74.0	-25.2	1.44 H	194	35.6	13.2
2	#10480.00	37.3 AV	54.0	-16.7	1.44 H	194	24.1	13.2
3	15720.00	44.6 PK	74.0	-29.4	1.69 H	206	31.0	13.6
4	15720.00	32.6 AV	54.0	-21.4	1.69 H	206	19.0	13.6

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.

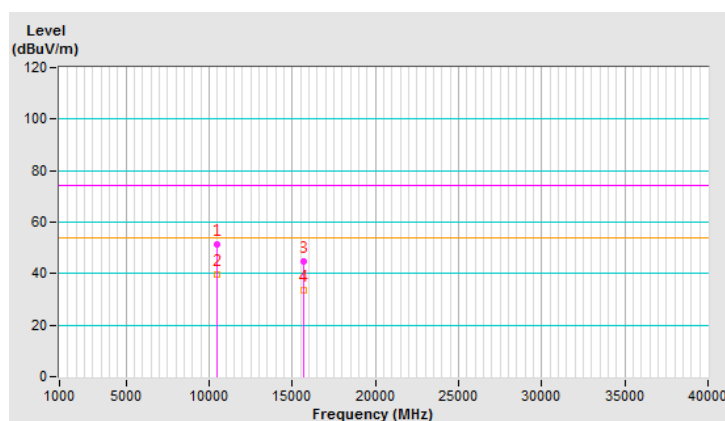


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10480.00	51.5 PK	74.0	-22.5	1.73 V	187	38.3	13.2
2	#10480.00	39.8 AV	54.0	-14.2	1.73 V	187	26.6	13.2
3	15720.00	45.0 PK	74.0	-29.0	1.49 V	231	31.4	13.6
4	15720.00	33.6 AV	54.0	-20.4	1.49 V	231	20.0	13.6

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.

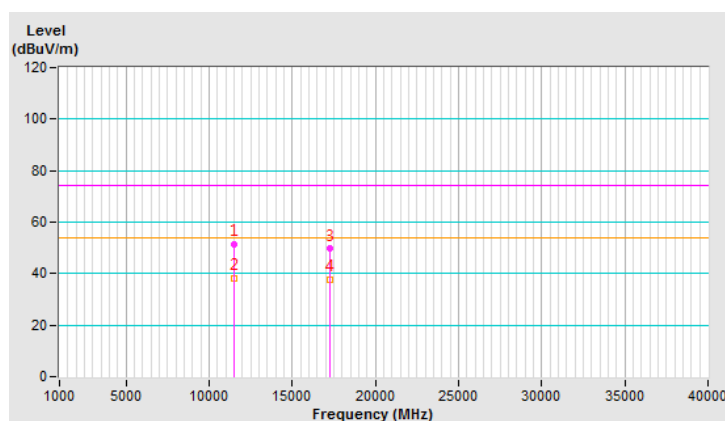


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	51.6 PK	74.0	-22.4	1.40 H	219	38.1	13.5
2	11490.00	38.0 AV	54.0	-16.0	1.40 H	219	24.5	13.5
3	#17235.00	49.6 PK	74.0	-24.4	1.69 H	207	32.3	17.3
4	#17235.00	37.6 AV	54.0	-16.4	1.69 H	207	20.3	17.3

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.

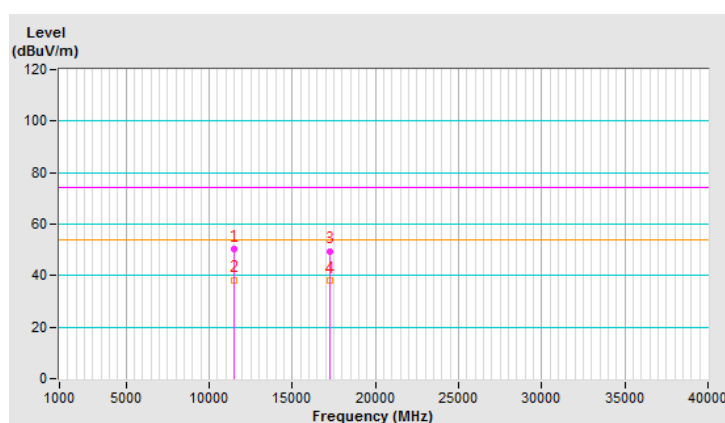


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11490.00	50.1 PK	74.0	-23.9	1.55 V	141	36.6	13.5
2	11490.00	38.3 AV	54.0	-15.7	1.55 V	141	24.8	13.5
3	#17235.00	49.3 PK	74.0	-24.7	1.48 V	299	32.0	17.3
4	#17235.00	37.9 AV	54.0	-16.1	1.48 V	299	20.6	17.3

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.

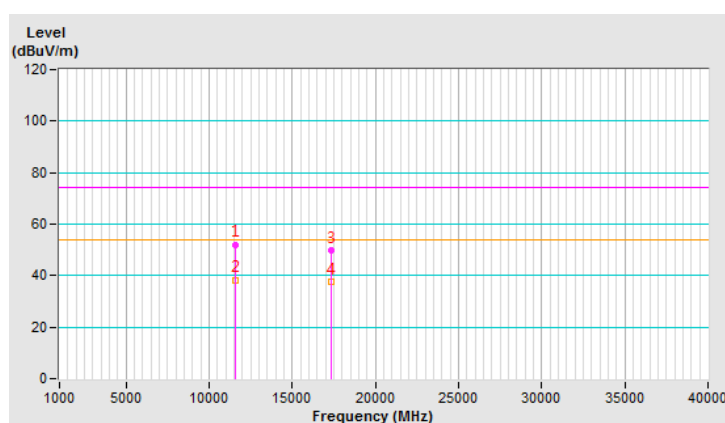


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	51.7 PK	74.0	-22.3	1.42 H	228	38.2	13.5
2	11570.00	38.3 AV	54.0	-15.7	1.42 H	228	24.8	13.5
3	#17355.00	49.6 PK	74.0	-24.4	1.70 H	200	31.6	18.0
4	#17355.00	37.4 AV	54.0	-16.6	1.70 H	200	19.4	18.0

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.

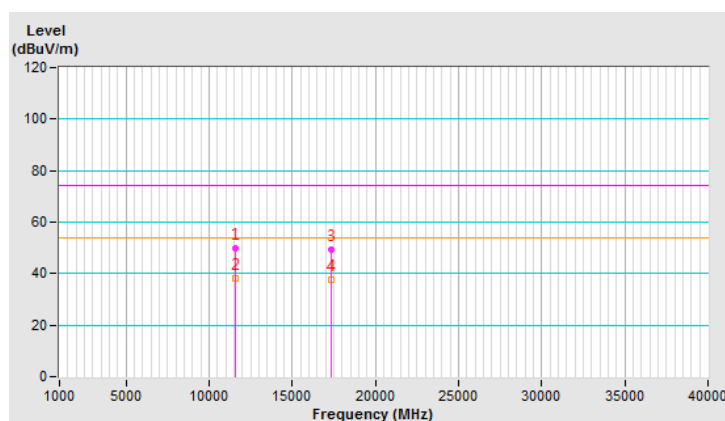


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11570.00	49.8 PK	74.0	-24.2	1.50 V	144	36.3	13.5
2	11570.00	38.0 AV	54.0	-16.0	1.50 V	144	24.5	13.5
3	#17355.00	49.2 PK	74.0	-24.8	1.42 V	314	31.2	18.0
4	#17355.00	37.6 AV	54.0	-16.4	1.42 V	314	19.6	18.0

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.

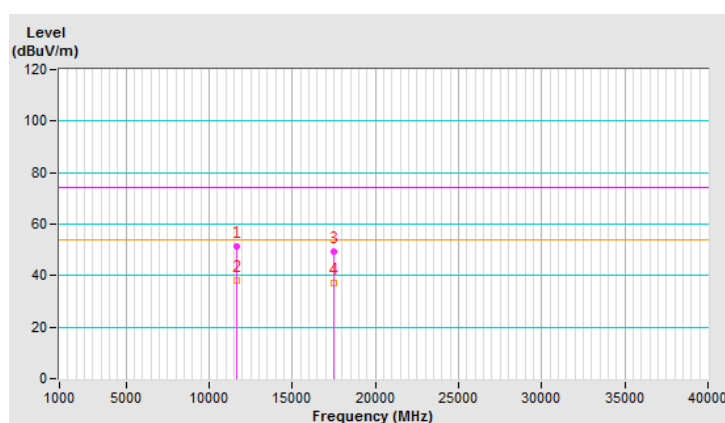


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	51.6 PK	74.0	-22.4	1.44 H	229	37.9	13.7
2	11650.00	38.2 AV	54.0	-15.8	1.44 H	229	24.5	13.7
3	#17475.00	49.5 PK	74.0	-24.5	1.72 H	206	30.9	18.6
4	#17475.00	37.2 AV	54.0	-16.8	1.72 H	206	18.6	18.6

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.

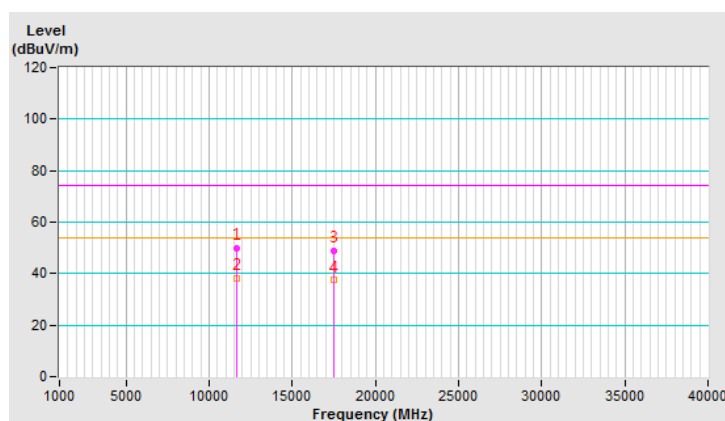


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11650.00	49.9 PK	74.0	-24.1	1.53 V	143	36.2	13.7
2	11650.00	38.3 AV	54.0	-15.7	1.53 V	143	24.6	13.7
3	#17475.00	49.0 PK	74.0	-25.0	1.52 V	284	30.4	18.6
4	#17475.00	37.4 AV	54.0	-16.6	1.52 V	284	18.8	18.6

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.



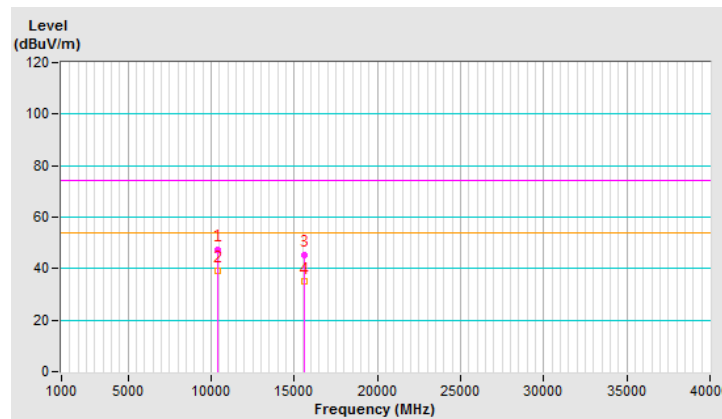
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	47.5 PK	74.0	-26.5	2.03 H	165	34.4	13.1
2	#10380.00	39.2 AV	54.0	-14.8	2.03 H	165	26.1	13.1
3	15570.00	45.2 PK	74.0	-28.8	1.58 H	226	31.9	13.3
4	15570.00	34.9 AV	54.0	-19.1	1.58 H	226	21.6	13.3

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.

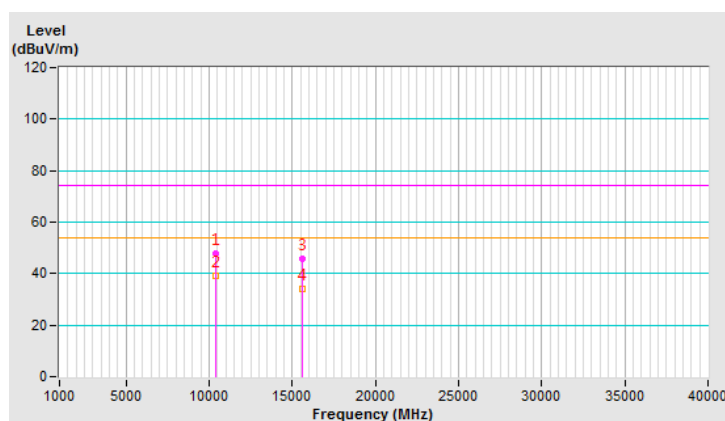


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10380.00	47.7 PK	74.0	-26.3	1.98 V	148	34.6	13.1
2	#10380.00	39.1 AV	54.0	-14.9	1.98 V	148	26.0	13.1
3	15570.00	45.7 PK	74.0	-28.3	1.59 V	210	32.4	13.3
4	15570.00	34.2 AV	54.0	-19.8	1.59 V	210	20.9	13.3

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.

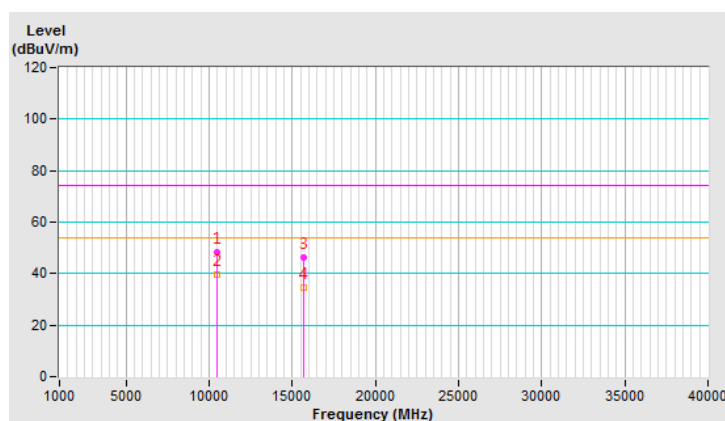


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.2 PK	74.0	-25.8	1.46 H	303	35.1	13.1
2	#10460.00	39.5 AV	54.0	-14.5	1.46 H	303	26.4	13.1
3	15690.00	46.2 PK	74.0	-27.8	1.70 H	122	32.4	13.8
4	15690.00	34.6 AV	54.0	-19.4	1.70 H	122	20.8	13.8

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.

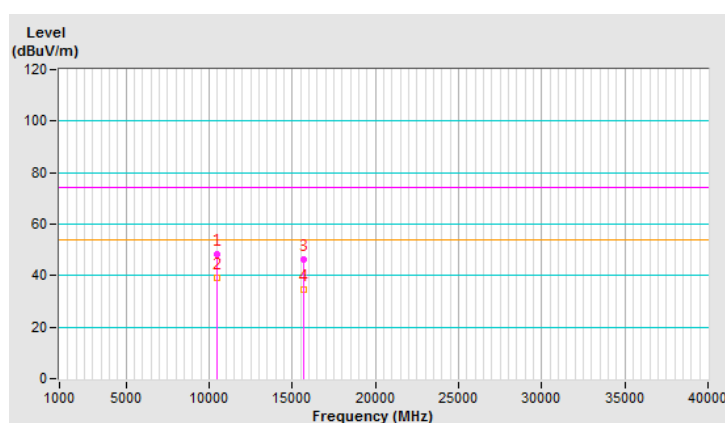


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10460.00	48.2 PK	74.0	-25.8	2.01 V	150	35.1	13.1
2	#10460.00	39.4 AV	54.0	-14.6	2.01 V	150	26.3	13.1
3	15690.00	46.2 PK	74.0	-27.8	1.60 V	200	32.4	13.8
4	15690.00	34.8 AV	54.0	-19.2	1.60 V	200	21.0	13.8

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.

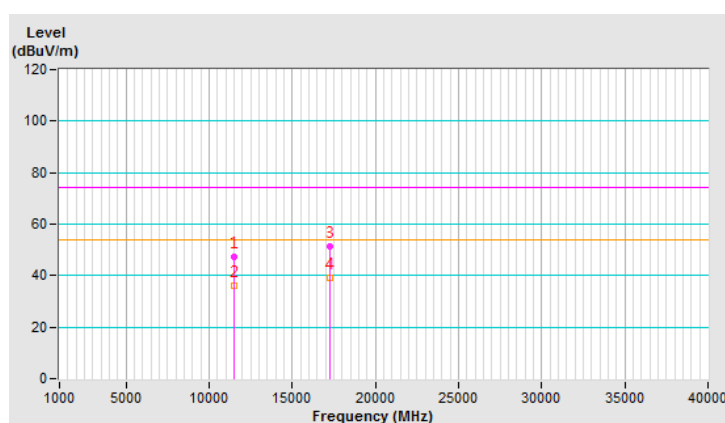


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	47.3 PK	74.0	-26.7	1.42 H	320	33.7	13.6
2	11510.00	36.2 AV	54.0	-17.8	1.42 H	320	22.6	13.6
3	#17265.00	51.6 PK	74.0	-22.4	1.64 H	94	34.0	17.6
4	#17265.00	39.1 AV	54.0	-14.9	1.64 H	94	21.5	17.6

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.

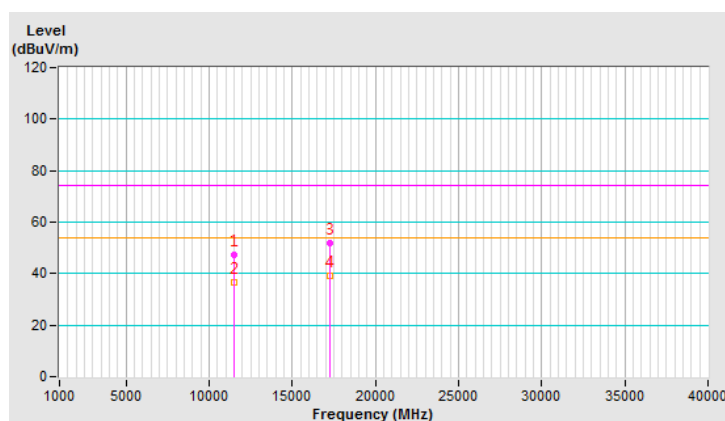


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11510.00	47.3 PK	74.0	-26.7	1.91 V	176	33.7	13.6
2	11510.00	36.6 AV	54.0	-17.4	1.91 V	176	23.0	13.6
3	#17265.00	52.0 PK	74.0	-22.0	1.55 V	239	34.4	17.6
4	#17265.00	39.4 AV	54.0	-14.6	1.55 V	239	21.8	17.6

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.

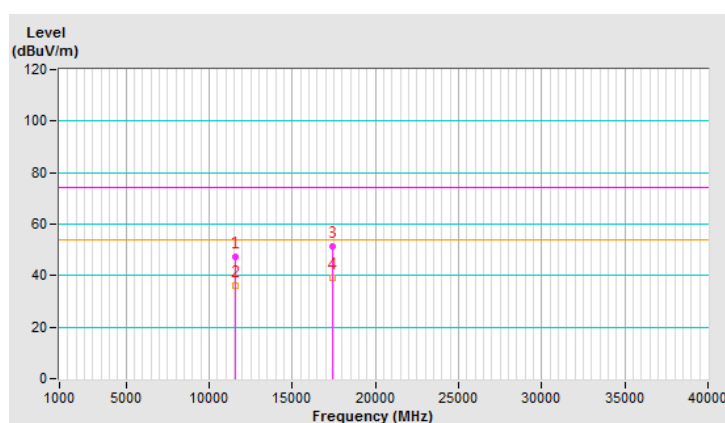


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	47.2 PK	74.0	-26.8	1.47 H	329	33.7	13.5
2	11590.00	36.0 AV	54.0	-18.0	1.47 H	329	22.5	13.5
3	#17385.00	51.2 PK	74.0	-22.8	1.70 H	92	32.9	18.3
4	#17385.00	39.0 AV	54.0	-15.0	1.70 H	92	20.7	18.3

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.

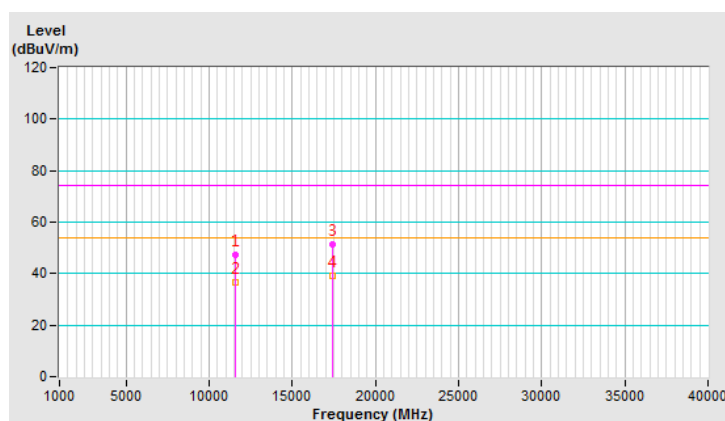


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11590.00	47.5 PK	74.0	-26.5	1.93 V	190	34.0	13.5
2	11590.00	36.7 AV	54.0	-17.3	1.93 V	190	23.2	13.5
3	#17385.00	51.6 PK	74.0	-22.4	1.53 V	252	33.3	18.3
4	#17385.00	39.2 AV	54.0	-14.8	1.53 V	252	20.9	18.3

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.



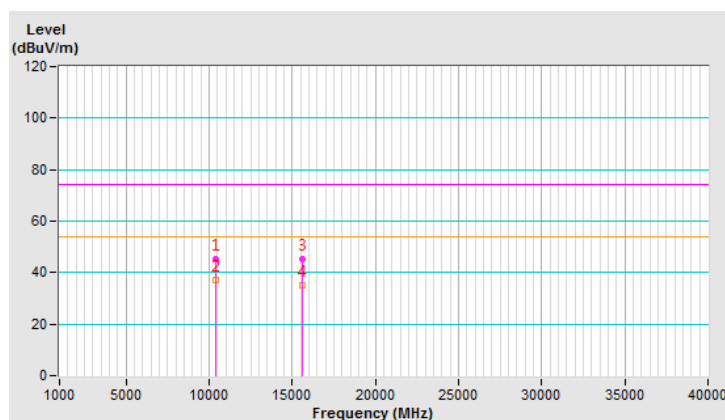
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	45.2 PK	74.0	-28.8	1.59 H	218	32.1	13.1
2	#10420.00	37.1 AV	54.0	-16.9	1.59 H	218	24.0	13.1
3	15630.00	45.1 PK	74.0	-28.9	1.72 H	267	31.5	13.6
4	15630.00	35.2 AV	54.0	-18.8	1.72 H	267	21.6	13.6

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.

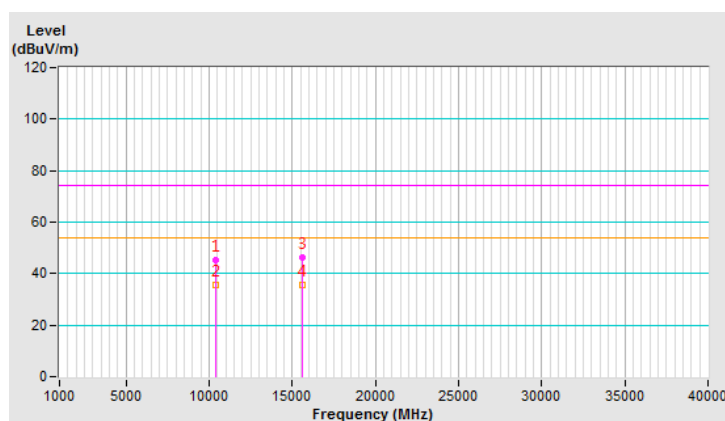


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#10420.00	45.3 PK	74.0	-28.7	1.38 V	167	32.2	13.1
2	#10420.00	35.5 AV	54.0	-18.5	1.38 V	167	22.4	13.1
3	15630.00	46.5 PK	74.0	-27.5	1.39 V	302	32.9	13.6
4	15630.00	35.8 AV	54.0	-18.2	1.39 V	302	22.2	13.6

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.

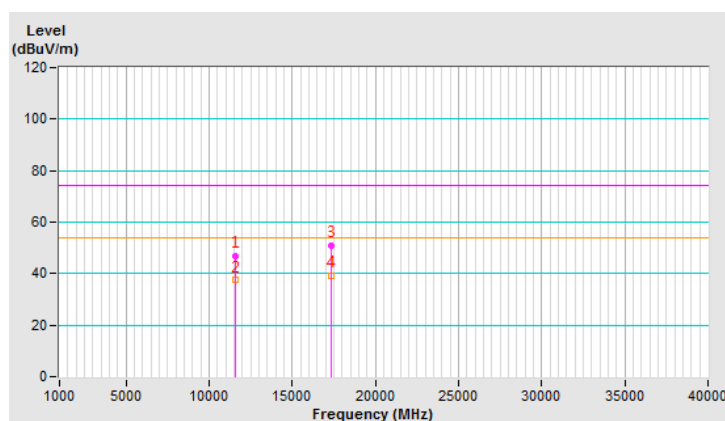


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	47.0 PK	74.0	-27.0	1.38 H	287	33.5	13.5
2	11550.00	37.4 AV	54.0	-16.6	1.38 H	287	23.9	13.5
3	#17325.00	51.0 PK	74.0	-23.0	1.68 H	288	33.2	17.8
4	#17325.00	39.2 AV	54.0	-14.8	1.68 H	288	21.4	17.8

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.

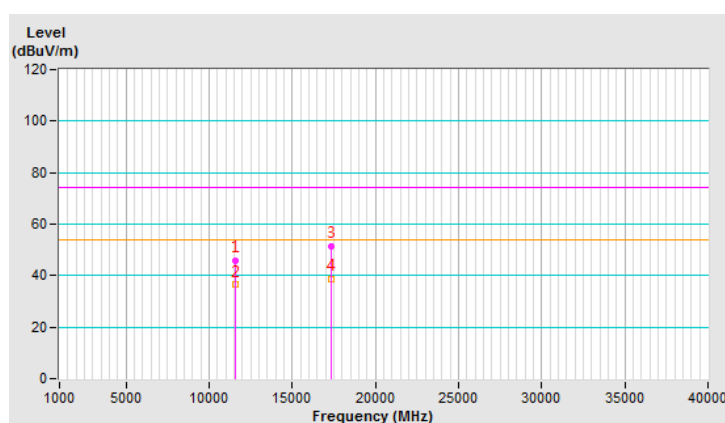


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	11550.00	46.0 PK	74.0	-28.0	1.37 V	198	32.5	13.5
2	11550.00	36.4 AV	54.0	-17.6	1.37 V	198	22.9	13.5
3	#17325.00	51.3 PK	74.0	-22.7	1.44 V	309	33.5	17.8
4	#17325.00	38.8 AV	54.0	-15.2	1.44 V	309	21.0	17.8

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.



Radiated Band Edge and Fundamental Emissions

SDM Mode

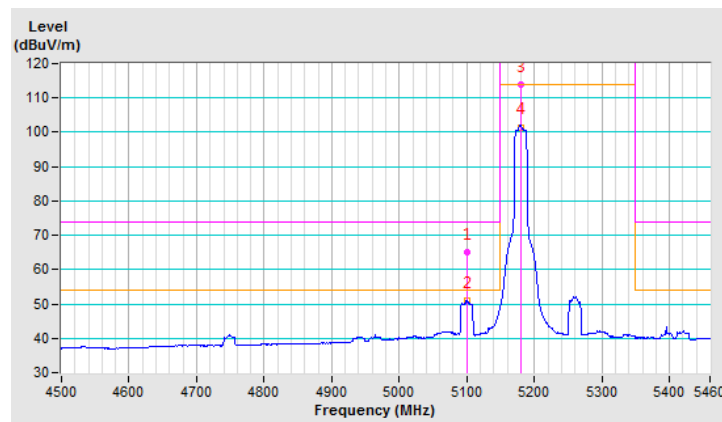
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	65.2 PK	74.0	-8.8	1.63 H	302	61.7	3.5
2	5101.00	50.8 AV	54.0	-3.2	1.63 H	302	47.3	3.5
3	*5180.00	113.8 PK			1.65 H	305	110.1	3.7
4	*5180.00	101.5 AV			1.65 H	305	97.8	3.7

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.

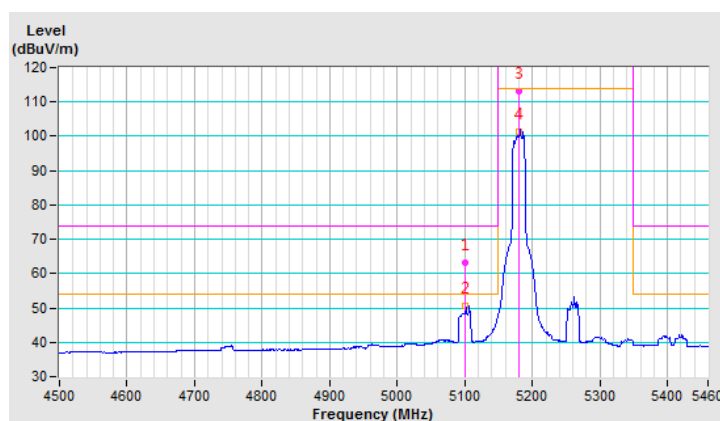


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5101.00	63.0 PK	74.0	-11.0	1.31 V	360	59.5	3.5
2	5101.00	50.6 AV	54.0	-3.4	1.31 V	360	47.1	3.5
3	*5180.00	113.2 PK			1.31 V	360	109.5	3.7
4	*5180.00	101.4 AV			1.31 V	360	97.7	3.7

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.

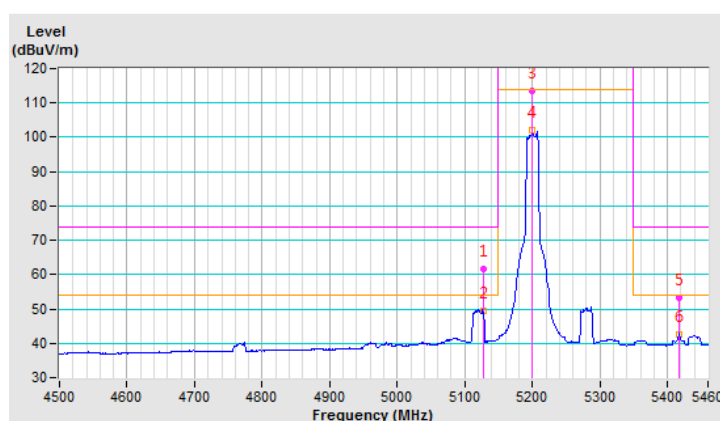


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5127.00	61.7 PK	74.0	-12.3	1.49 H	360	58.2	3.5
2	5127.00	49.4 AV	54.0	-4.6	1.49 H	360	45.9	3.5
3	*5200.00	113.5 PK			1.49 H	360	109.8	3.7
4	*5200.00	101.9 AV			1.49 H	360	98.2	3.7
5	5417.00	53.3 PK	74.0	-20.7	1.49 H	360	49.2	4.1
6	5417.00	42.6 AV	54.0	-11.4	1.49 H	360	38.5	4.1

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.

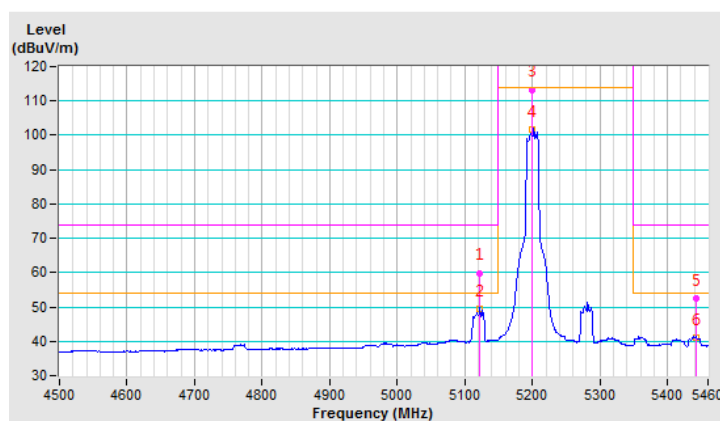


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5122.00	59.9 PK	74.0	-14.1	1.51 V	357	56.4	3.5
2	5122.00	49.4 AV	54.0	-4.6	1.51 V	357	45.9	3.5
3	*5200.00	113.3 PK			1.51 V	357	109.6	3.7
4	*5200.00	101.8 AV			1.51 V	357	98.1	3.7
5	5442.00	52.5 PK	74.0	-21.5	1.51 V	357	48.3	4.2
6	5442.00	40.9 AV	54.0	-13.1	1.51 V	357	36.7	4.2

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.

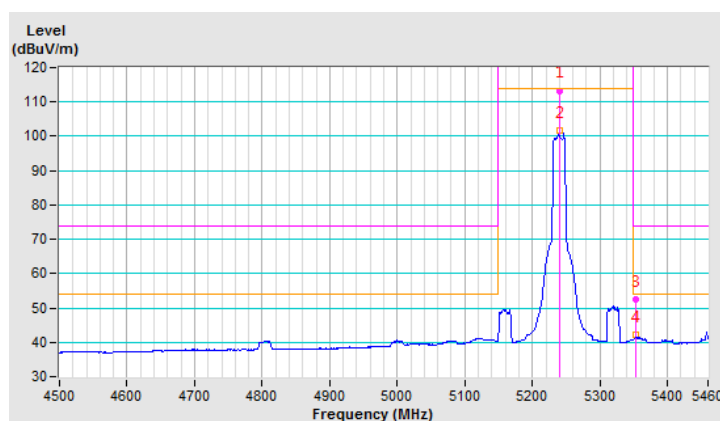


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	113.3 PK			1.47 H	360	109.5	3.8
2	*5240.00	101.6 AV			1.47 H	360	97.8	3.8
3	5352.74	52.5 PK	74.0	-21.5	1.47 H	360	48.4	4.1
4	5352.74	42.3 AV	54.0	-11.7	1.47 H	360	38.2	4.1

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.

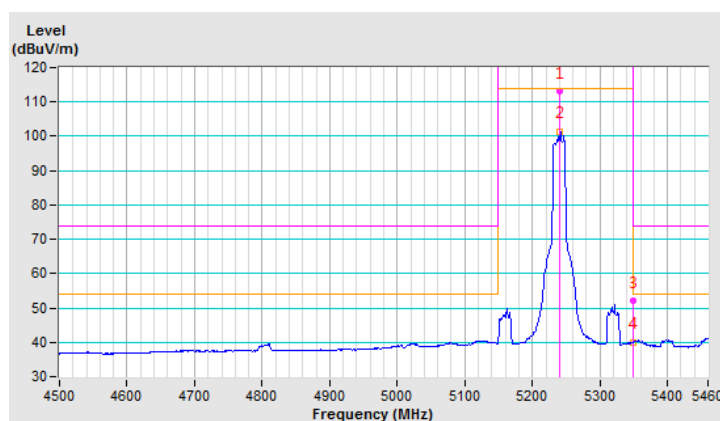


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	113.2 PK			1.37 V	360	109.4	3.8
2	*5240.00	101.5 AV			1.37 V	360	97.7	3.8
3	5350.00	52.2 PK	74.0	-21.8	1.37 V	360	48.1	4.1
4	5350.00	40.1 AV	54.0	-13.9	1.37 V	360	36.0	4.1

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.

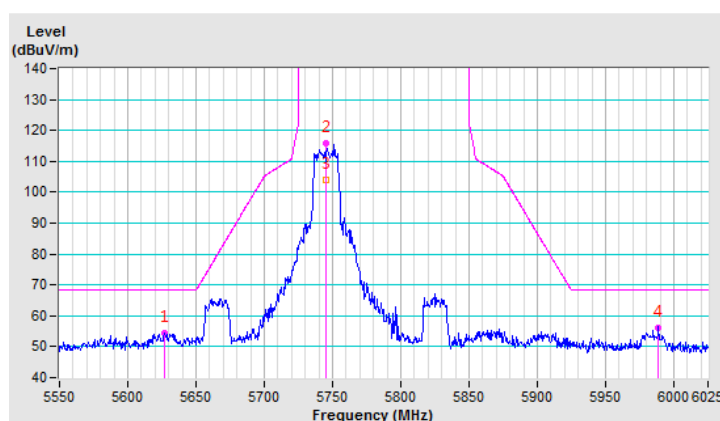


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5626.99	54.6 PK	68.2	-13.6	1.33 H	357	50.2	4.4
2	*5745.00	115.8 PK			1.33 H	357	111.4	4.4
3	*5745.00	104.1 AV			1.33 H	357	99.7	4.4
4	#5988.75	56.3 PK	68.2	-11.9	1.33 H	357	51.6	4.7

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.

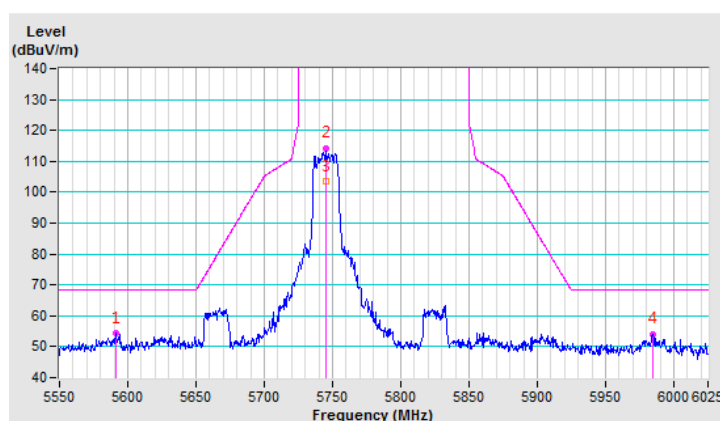


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5591.31	54.2 PK	68.2	-14.0	1.71 V	261	49.9	4.3
2	*5745.00	114.3 PK			1.71 V	261	109.9	4.4
3	*5745.00	103.4 AV			1.71 V	261	99.0	4.4
4	#5984.34	54.0 PK	68.2	-14.2	1.71 V	261	49.3	4.7

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.

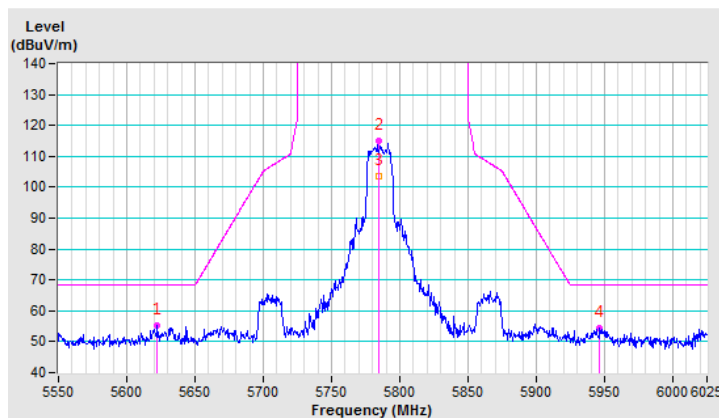


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5622.33	55.2 PK	68.2	-13.0	1.47 H	352	50.8	4.4
2	*5785.00	115.2 PK			1.47 H	352	110.8	4.4
3	*5785.00	103.5 AV			1.47 H	352	99.1	4.4
4	#5946.24	54.3 PK	68.2	-13.9	1.47 H	352	49.6	4.7

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.

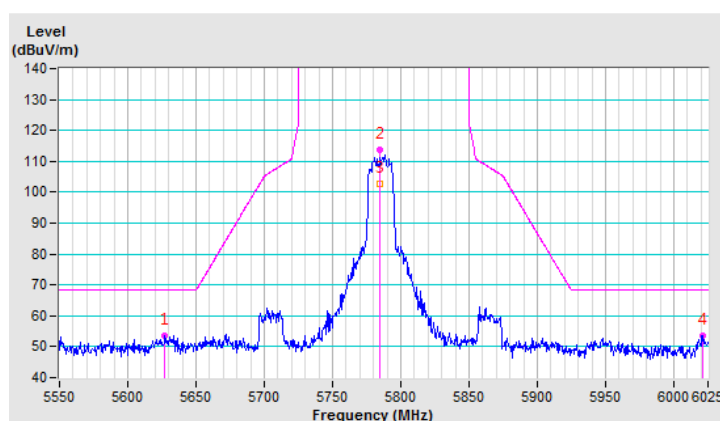


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5627.10	53.6 PK	68.2	-14.6	1.72 V	260	49.2	4.4
2	*5785.00	113.7 PK			1.72 V	260	109.3	4.4
3	*5785.00	102.8 AV			1.72 V	260	98.4	4.4
4	#6020.82	53.6 PK	68.2	-14.6	1.72 V	260	48.7	4.9

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.

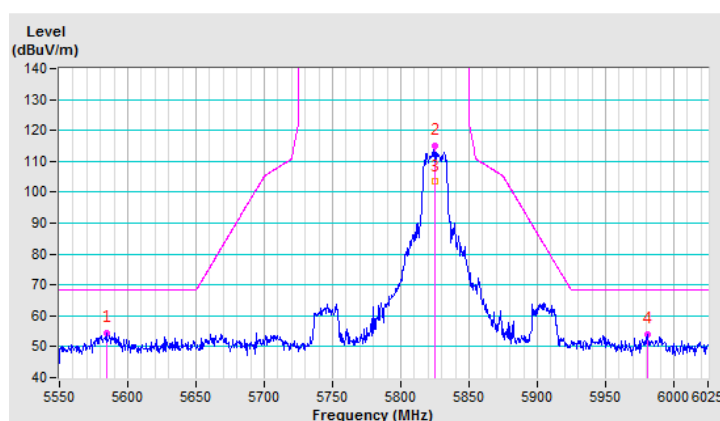


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5584.30	54.3 PK	68.2	-13.9	1.38 H	355	50.1	4.2
2	*5825.00	115.1 PK			1.38 H	355	110.7	4.4
3	*5825.00	103.4 AV			1.38 H	355	99.0	4.4
4	#5980.43	54.1 PK	68.2	-14.1	1.38 H	355	49.4	4.7

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.

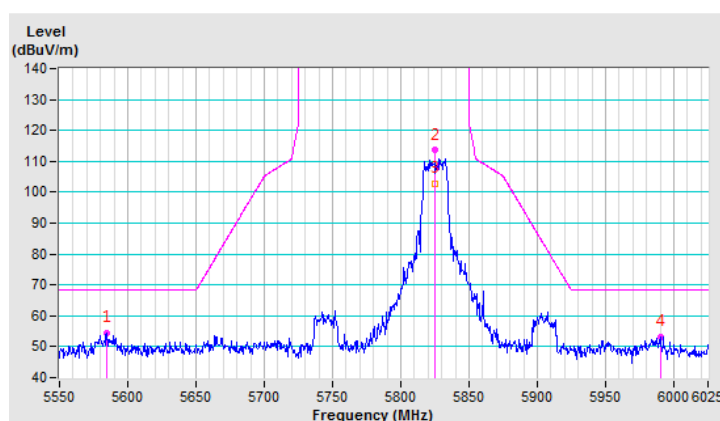


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5584.71	54.4 PK	68.2	-13.8	2.56 V	267	50.2	4.2
2	*5825.00	113.6 PK			2.56 V	267	109.2	4.4
3	*5825.00	102.8 AV			2.56 V	267	98.4	4.4
4	#5990.16	53.1 PK	68.2	-15.1	2.56 V	267	48.4	4.7

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.



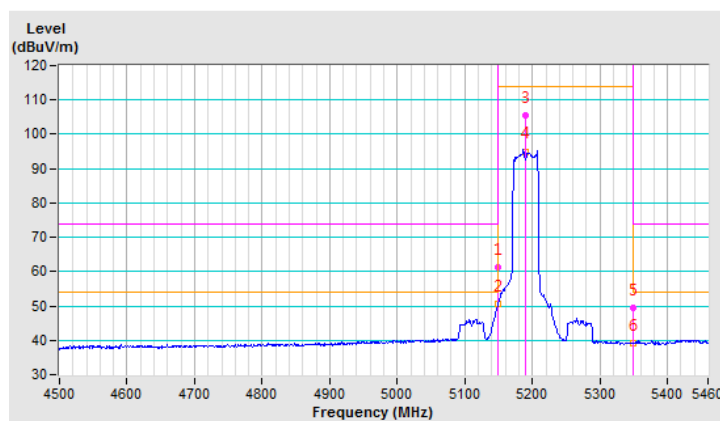
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.2 PK	74.0	-12.8	1.61 H	360	57.5	3.7
2	5150.00	50.5 AV	54.0	-3.5	1.61 H	360	46.8	3.7
3	*5190.00	105.6 PK			1.61 H	360	101.9	3.7
4	*5190.00	95.0 AV			1.61 H	360	91.3	3.7
5	5350.00	49.4 PK	74.0	-24.6	1.61 H	360	45.3	4.1
6	5350.00	39.1 AV	54.0	-14.9	1.61 H	360	35.0	4.1

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.

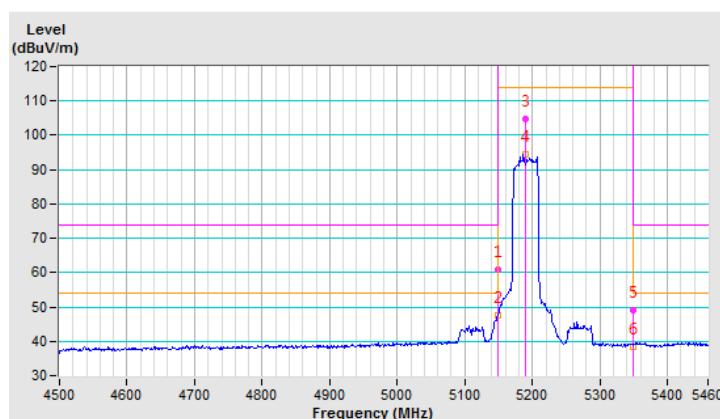


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.8 PK	74.0	-13.2	2.07 V	360	57.1	3.7
2	5150.00	47.6 AV	54.0	-6.4	2.07 V	360	43.9	3.7
3	*5190.00	104.6 PK			2.07 V	360	100.9	3.7
4	*5190.00	94.3 AV			2.07 V	360	90.6	3.7
5	5350.00	49.2 PK	74.0	-24.8	2.07 V	360	45.1	4.1
6	5350.00	38.5 AV	54.0	-15.5	2.07 V	360	34.4	4.1

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.

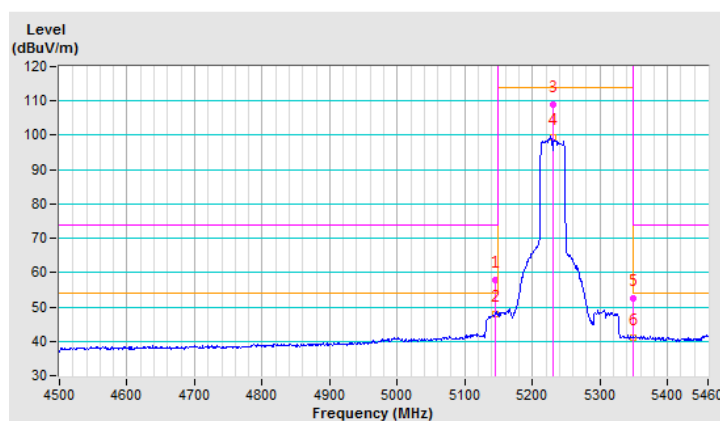


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5146.00	57.8 PK	74.0	-16.2	1.62 H	360	54.2	3.6
2	5146.00	47.8 AV	54.0	-6.2	1.62 H	360	44.2	3.6
3	*5230.00	109.0 PK			1.62 H	360	105.2	3.8
4	*5230.00	99.5 AV			1.62 H	360	95.7	3.8
5	5350.00	52.4 PK	74.0	-21.6	1.62 H	360	48.3	4.1
6	5350.00	41.0 AV	54.0	-13.0	1.62 H	360	36.9	4.1

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.

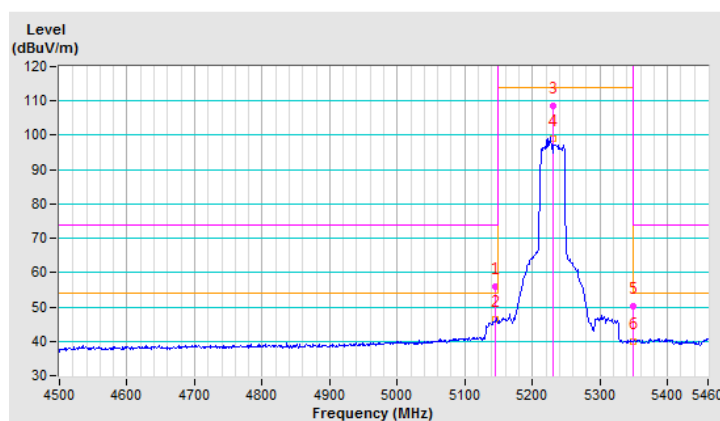


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5146.00	55.9 PK	74.0	-18.1	2.07 V	360	52.3	3.6
2	5146.00	46.5 AV	54.0	-7.5	2.07 V	360	42.9	3.6
3	*5230.00	108.7 PK			2.07 V	360	104.9	3.8
4	*5230.00	99.1 AV			2.07 V	360	95.3	3.8
5	5350.00	50.3 PK	74.0	-23.7	2.07 V	360	46.2	4.1
6	5350.00	39.8 AV	54.0	-14.2	2.07 V	360	35.7	4.1

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.

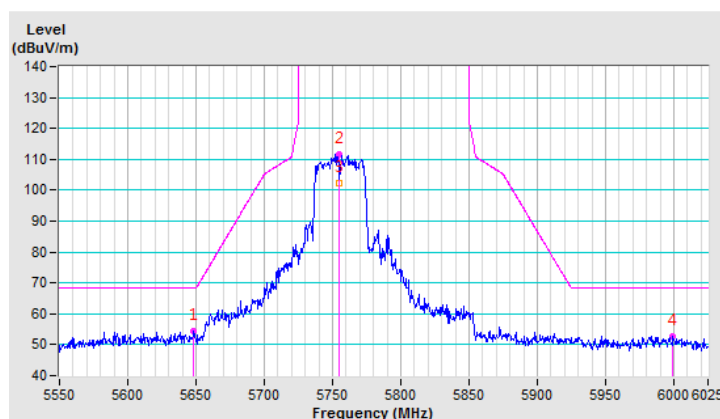


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5648.53	54.3 PK	68.2	-13.9	1.48 H	360	49.9	4.4
2	*5755.00	111.8 PK			1.48 H	360	107.4	4.4
3	*5755.00	102.4 AV			1.48 H	360	98.0	4.4
4	#5999.20	52.9 PK	68.2	-15.3	1.48 H	360	48.2	4.7

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.

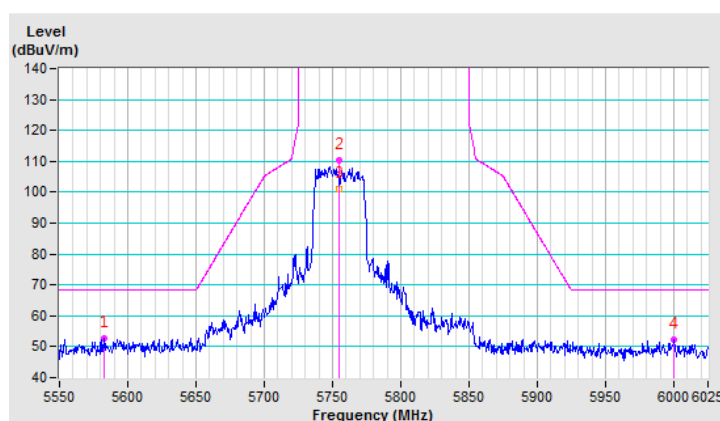


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5582.91	52.9 PK	68.2	-15.3	2.79 V	268	48.7	4.2
2	*5755.00	110.5 PK			2.79 V	268	106.1	4.4
3	*5755.00	101.0 AV			2.79 V	268	96.6	4.4
4	#5999.97	52.2 PK	68.2	-16.0	2.79 V	268	47.5	4.7

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.

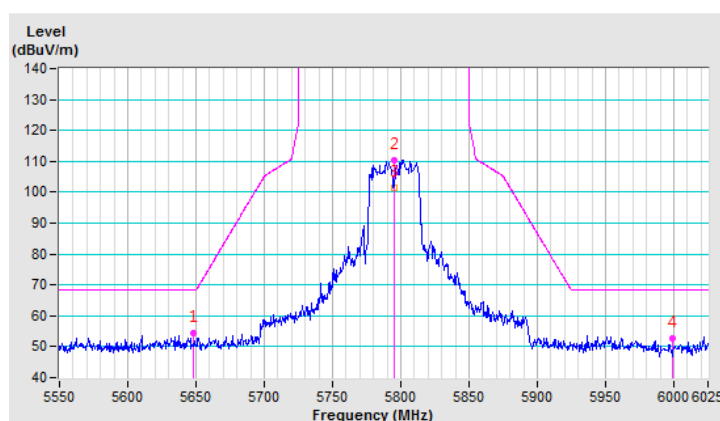


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5648.53	54.3 PK	68.2	-13.9	1.51 H	360	49.9	4.4
2	*5795.00	110.3 PK			1.51 H	360	105.9	4.4
3	*5795.00	101.5 AV			1.51 H	360	97.1	4.4
4	#5999.20	52.9 PK	68.2	-15.3	1.51 H	360	48.2	4.7

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.

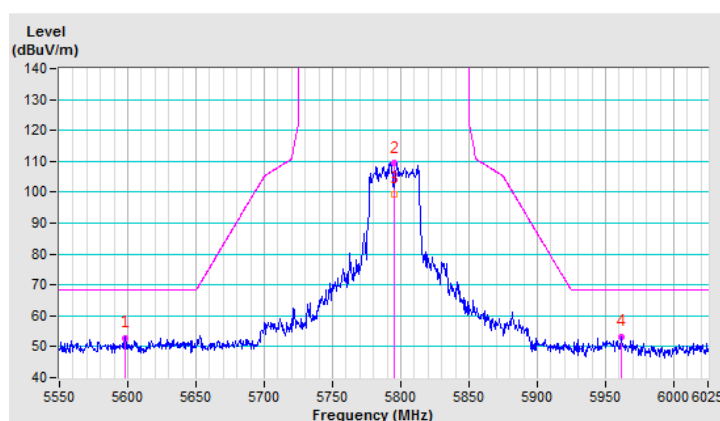


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5597.63	52.9 PK	68.2	-15.3	2.84 V	269	48.5	4.4
2	*5795.00	109.3 PK			2.84 V	269	104.9	4.4
3	*5795.00	99.5 AV			2.84 V	269	95.1	4.4
4	#5961.30	53.1 PK	68.2	-15.1	2.84 V	269	48.4	4.7

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.



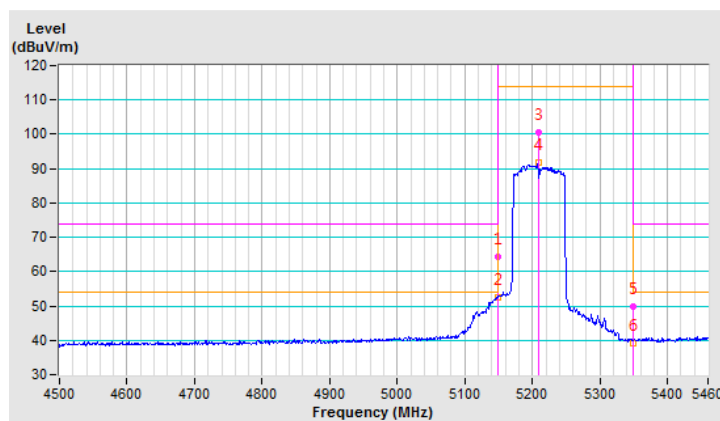
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	64.2 PK	74.0	-9.8	1.48 H	360	60.5	3.7
2	5150.00	52.4 AV	54.0	-1.6	1.48 H	360	48.7	3.7
3	*5210.00	100.5 PK			1.48 H	360	96.8	3.7
4	*5210.00	91.6 AV			1.48 H	360	87.9	3.7
5	5350.00	49.8 PK	74.0	-24.2	1.48 H	360	45.7	4.1
6	5350.00	39.3 AV	54.0	-14.7	1.48 H	360	35.2	4.1

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.

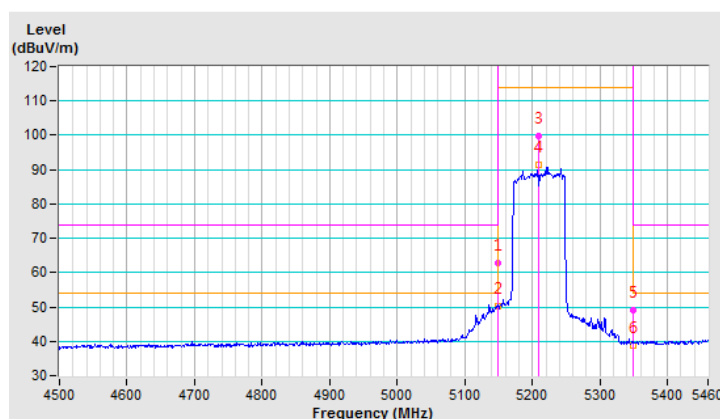


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.9 PK	74.0	-11.1	1.83 V	360	59.2	3.7
2	5150.00	50.2 AV	54.0	-3.8	1.83 V	360	46.5	3.7
3	*5210.00	99.7 PK			1.83 V	360	96.0	3.7
4	*5210.00	91.3 AV			1.83 V	360	87.6	3.7
5	5350.00	49.0 PK	74.0	-25.0	1.83 V	360	44.9	4.1
6	5350.00	38.9 AV	54.0	-15.1	1.83 V	360	34.8	4.1

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.

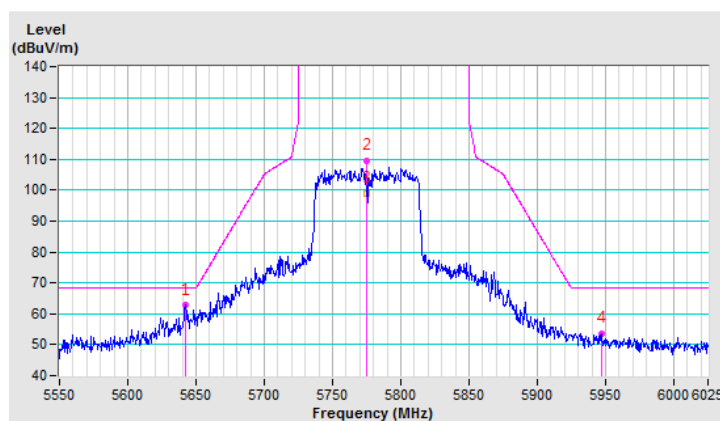


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5642.27	62.7 PK	68.2	-5.5	1.43 H	360	58.3	4.4
2	*5775.00	109.7 PK			1.43 H	360	105.3	4.4
3	*5775.00	98.8 AV			1.43 H	360	94.4	4.4
4	#5946.96	53.6 PK	68.2	-14.6	1.43 H	360	48.9	4.7

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.

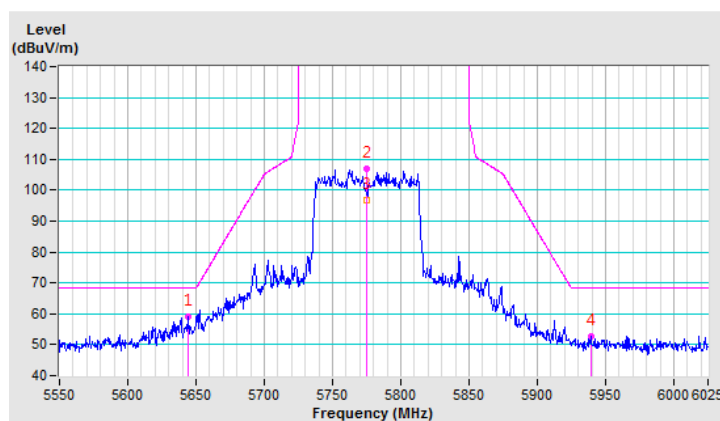


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5644.63	59.2 PK	68.2	-9.0	1.68 V	271	54.8	4.4
2	*5775.00	106.9 PK			1.68 V	271	102.5	4.4
3	*5775.00	96.8 AV			1.68 V	271	92.4	4.4
4	#5938.98	52.7 PK	68.2	-15.5	1.68 V	271	48.0	4.7

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

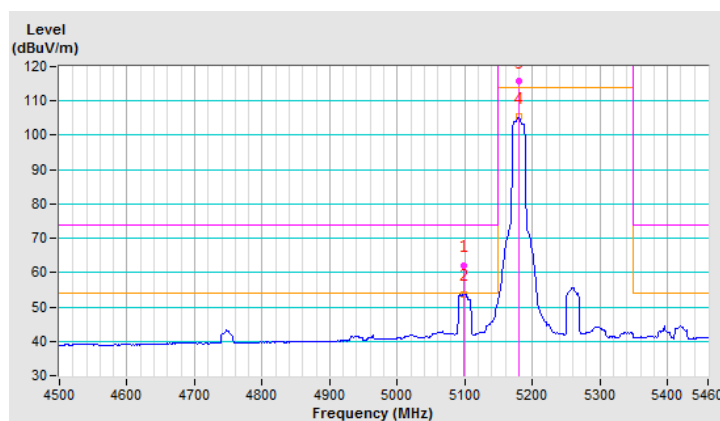
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5098.00	62.2 PK	74.0	-11.8	1.59 H	301	58.7	3.5
2	5098.00	53.8 AV	54.0	-0.2	1.59 H	301	50.3	3.5
3	*5180.00	115.8 PK			1.59 H	301	112.1	3.7
4	*5180.00	105.6 AV			1.59 H	301	101.9	3.7

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.

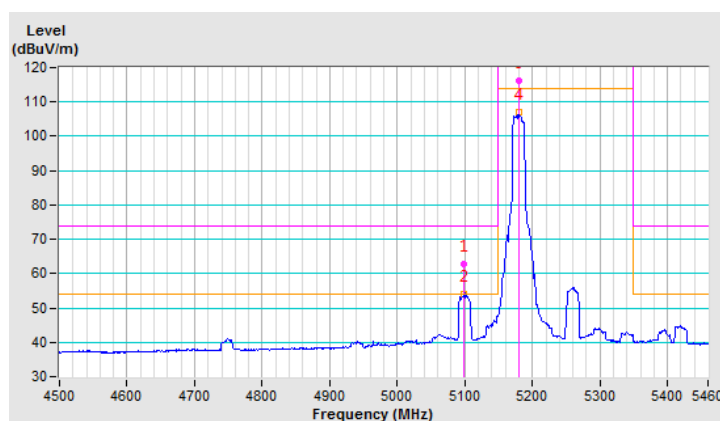


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5098.00	62.7 PK	74.0	-11.3	1.71 V	269	59.2	3.5
2	5098.00	53.9 AV	54.0	-0.1	1.71 V	269	50.4	3.5
3	*5180.00	116.2 PK			1.71 V	269	112.5	3.7
4	*5180.00	106.9 AV			1.71 V	269	103.2	3.7

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.

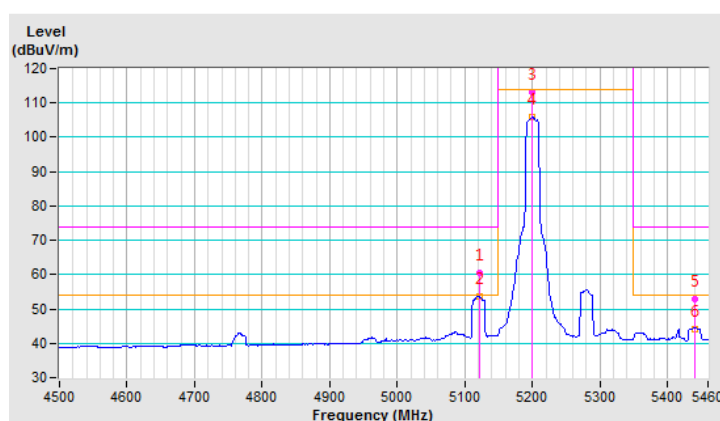


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5121.00	60.4 PK	74.0	-13.6	1.60 H	300	56.9	3.5
2	5121.00	53.7 AV	54.0	-0.3	1.60 H	300	50.2	3.5
3	*5200.00	113.1 PK			1.60 H	300	109.4	3.7
4	*5200.00	105.8 AV			1.60 H	300	102.1	3.7
5	5441.00	52.9 PK	74.0	-21.1	1.60 H	300	48.7	4.2
6	5441.00	44.2 AV	54.0	-9.8	1.60 H	300	40.0	4.2

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.

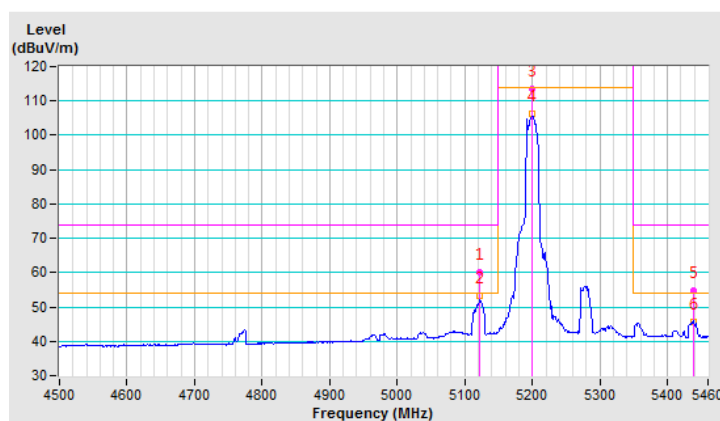


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5121.00	60.2 PK	74.0	-13.8	1.77 V	244	56.7	3.5
2	5121.00	53.3 AV	54.0	-0.7	1.77 V	244	49.8	3.5
3	*5200.00	113.5 PK			1.77 V	244	109.8	3.7
4	*5200.00	106.1 AV			1.77 V	244	102.4	3.7
5	5438.00	54.9 PK	74.0	-19.1	1.77 V	244	50.7	4.2
6	5438.00	45.6 AV	54.0	-8.4	1.77 V	244	41.4	4.2

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.

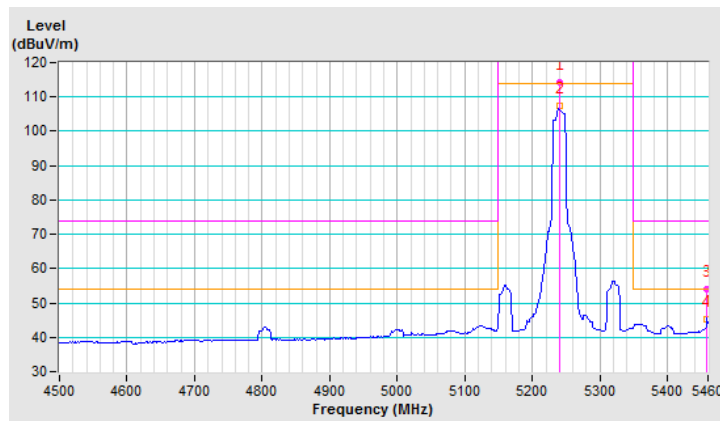


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	114.2 PK			1.58 H	314	110.4	3.8
2	*5240.00	107.5 AV			1.58 H	314	103.7	3.8
3	5458.00	53.9 PK	74.0	-20.1	1.58 H	314	49.7	4.2
4	5458.00	45.3 AV	54.0	-8.7	1.58 H	314	41.1	4.2

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.

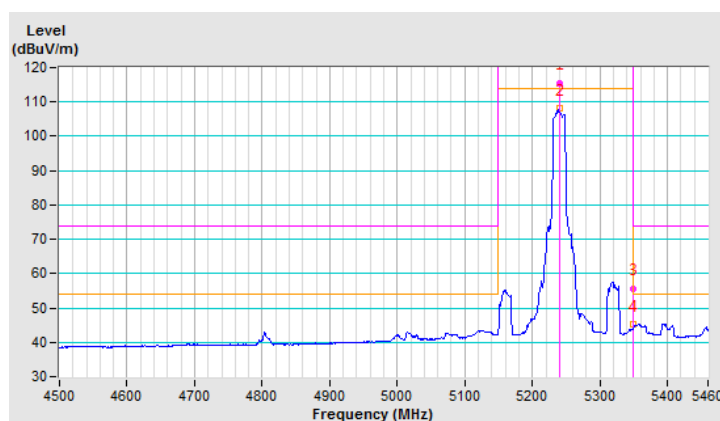


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	115.6 PK			1.78 V	260	111.8	3.8
2	*5240.00	108.1 AV			1.78 V	260	104.3	3.8
3	5350.00	55.7 PK	74.0	-18.3	1.78 V	260	51.6	4.1
4	5350.00	45.2 AV	54.0	-8.8	1.78 V	260	41.1	4.1

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.

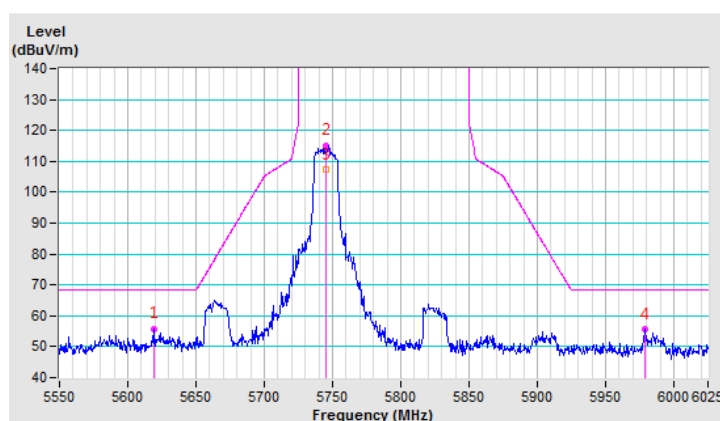


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5619.05	55.6 PK	68.2	-12.6	1.64 H	312	51.2	4.4
2	*5745.00	115.1 PK			1.64 H	312	110.7	4.4
3	*5745.00	107.2 AV			1.64 H	312	102.8	4.4
4	#5978.90	55.5 PK	68.2	-12.7	1.64 H	312	50.8	4.7

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.

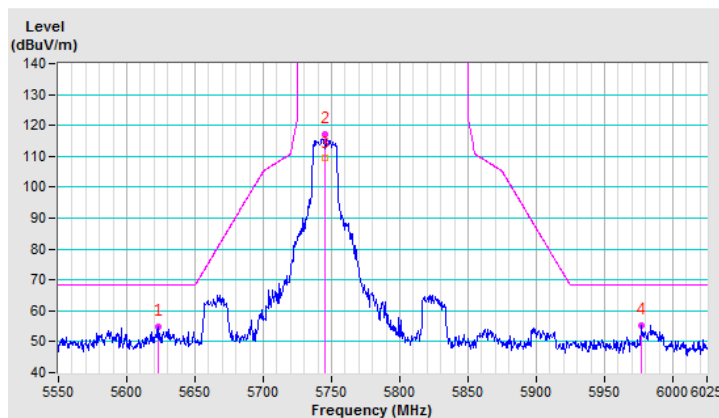


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5623.28	54.8 PK	68.2	-13.4	1.62 V	263	50.4	4.4
2	*5745.00	117.3 PK			1.62 V	263	112.9	4.4
3	*5745.00	109.3 AV			1.62 V	263	104.9	4.4
4	#5976.78	55.3 PK	68.2	-12.9	1.62 V	263	50.6	4.7

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.

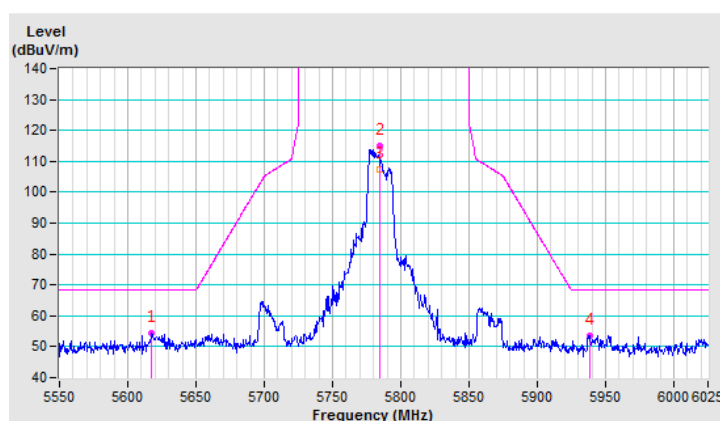


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5617.39	54.6 PK	68.2	-13.6	1.59 H	319	50.2	4.4
2	*5785.00	115.2 PK			1.59 H	319	110.8	4.4
3	*5785.00	107.3 AV			1.59 H	319	102.9	4.4
4	#5938.04	53.5 PK	68.2	-14.7	1.59 H	319	48.8	4.7

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.

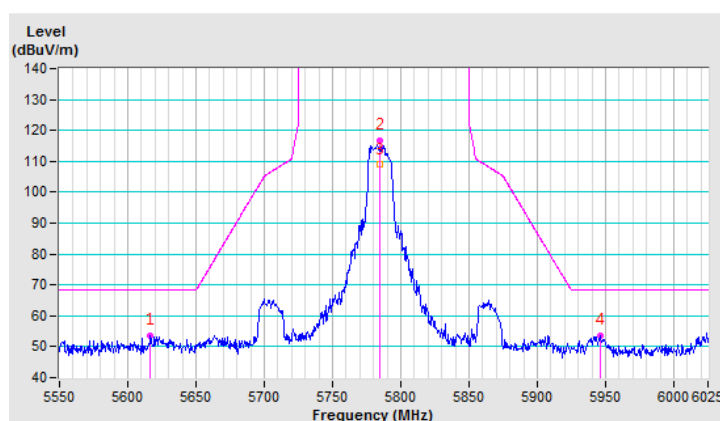


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5616.63	53.5 PK	68.2	-14.7	1.63 V	262	49.1	4.4
2	*5785.00	116.6 PK			1.63 V	262	112.2	4.4
3	*5785.00	108.9 AV			1.63 V	262	104.5	4.4
4	#5946.39	53.5 PK	68.2	-14.7	1.63 V	262	48.8	4.7

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.

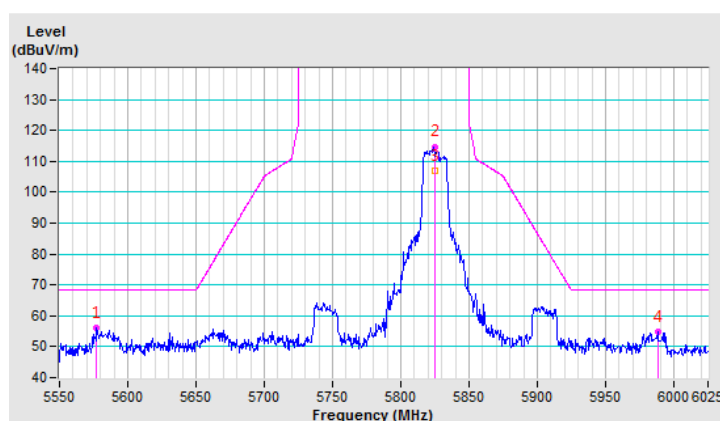


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5576.96	55.9 PK	68.2	-12.3	1.54 H	318	51.7	4.2
2	*5825.00	114.5 PK			1.54 H	318	110.1	4.4
3	*5825.00	106.8 AV			1.54 H	318	102.4	4.4
4	#5988.35	54.7 PK	68.2	-13.5	1.54 H	318	50.0	4.7

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.

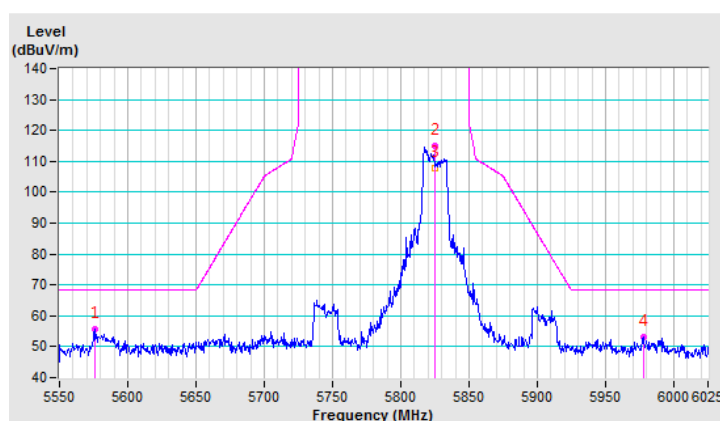


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5576.04	55.6 PK	68.2	-12.6	1.65 V	256	51.4	4.2
2	*5825.00	115.0 PK			1.65 V	256	110.6	4.4
3	*5825.00	107.7 AV			1.65 V	256	103.3	4.4
4	#5977.64	53.3 PK	68.2	-14.9	1.65 V	256	48.6	4.7

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.



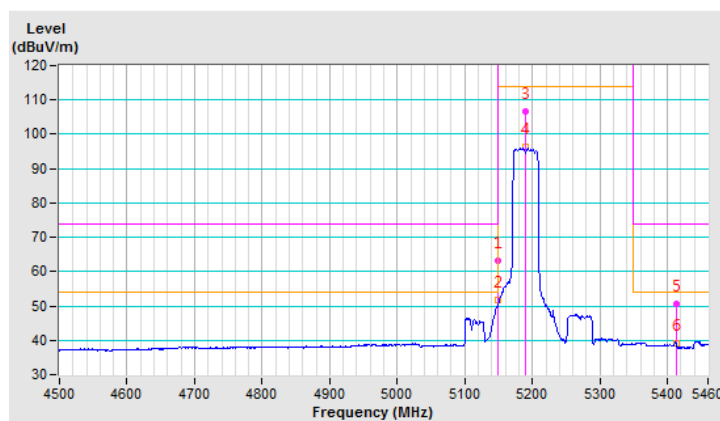
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	63.3 PK	74.0	-10.7	1.81 H	311	59.6	3.7
2	5150.00	51.8 AV	54.0	-2.2	1.81 H	311	48.1	3.7
3	*5190.00	106.7 PK			1.81 H	311	103.0	3.7
4	*5190.00	96.3 AV			1.81 H	311	92.6	3.7
5	5414.00	50.6 PK	74.0	-23.4	1.81 H	311	46.5	4.1
6	5414.00	39.0 AV	54.0	-15.0	1.81 H	311	34.9	4.1

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.

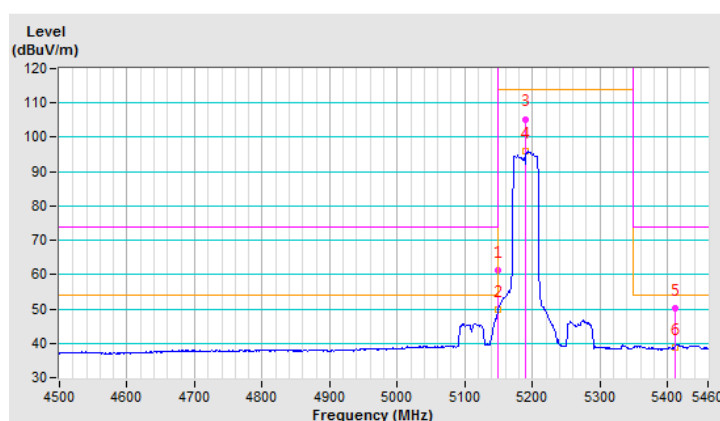


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.3 PK	74.0	-12.7	1.60 V	310	57.6	3.7
2	5150.00	49.9 AV	54.0	-4.1	1.60 V	310	46.2	3.7
3	*5190.00	105.3 PK			1.60 V	310	101.6	3.7
4	*5190.00	95.9 AV			1.60 V	310	92.2	3.7
5	5412.00	50.3 PK	74.0	-23.7	1.60 V	310	46.2	4.1
6	5412.00	38.9 AV	54.0	-15.1	1.60 V	310	34.8	4.1

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.

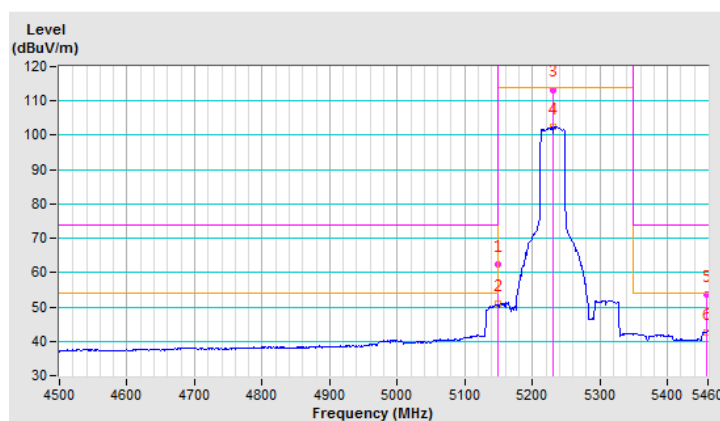


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.3 PK	74.0	-11.7	1.68 H	303	58.6	3.7
2	5150.00	50.8 AV	54.0	-3.2	1.68 H	303	47.1	3.7
3	*5230.00	113.3 PK			1.68 H	303	109.5	3.8
4	*5230.00	102.3 AV			1.68 H	303	98.5	3.8
5	5459.00	53.6 PK	74.0	-20.4	1.68 H	303	49.4	4.2
6	5459.00	42.4 AV	54.0	-11.6	1.68 H	303	38.2	4.2

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.

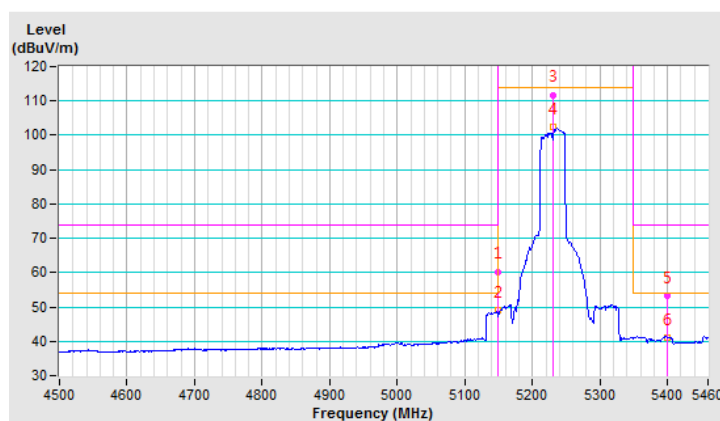


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.3 PK	74.0	-13.7	1.60 V	310	56.6	3.7
2	5150.00	48.9 AV	54.0	-5.1	1.60 V	310	45.2	3.7
3	*5230.00	111.8 PK			1.57 V	292	108.0	3.8
4	*5230.00	102.4 AV			1.57 V	292	98.6	3.8
5	5399.00	53.3 PK	74.0	-20.7	1.57 V	292	49.2	4.1
6	5399.00	41.1 AV	54.0	-12.9	1.57 V	292	37.0	4.1

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.

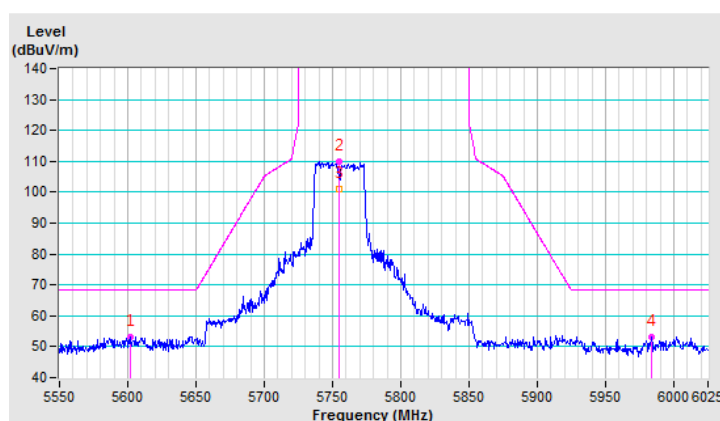


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5601.68	53.3 PK	68.2	-14.9	1.74 H	303	48.9	4.4
2	*5755.00	109.9 PK			1.74 H	303	105.5	4.4
3	*5755.00	101.2 AV			1.74 H	303	96.8	4.4
4	#5984.00	53.3 PK	68.2	-14.9	1.74 H	303	48.6	4.7

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.

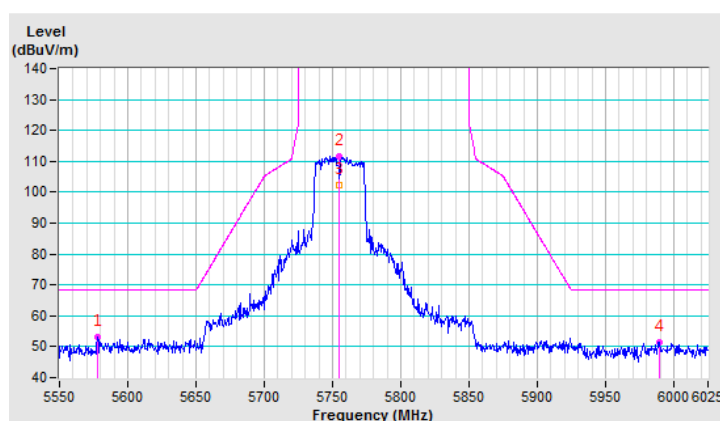


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5577.89	53.1 PK	68.2	-15.1	1.48 V	286	48.9	4.2
2	*5755.00	111.6 PK			1.48 V	286	107.2	4.4
3	*5755.00	102.5 AV			1.48 V	286	98.1	4.4
4	#5989.72	51.5 PK	68.2	-16.7	1.48 V	286	46.8	4.7

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.

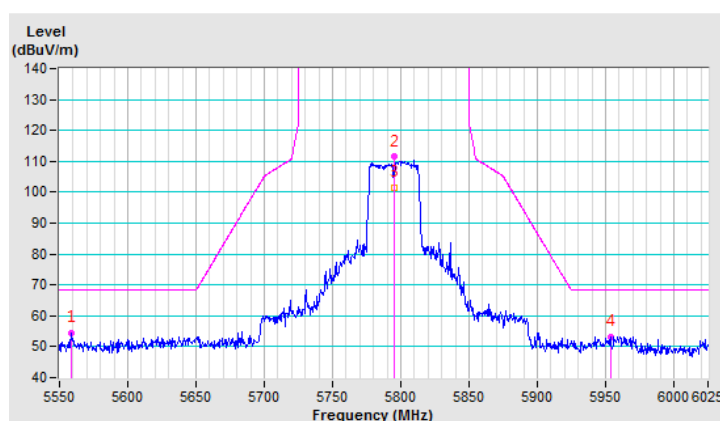


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5559.01	54.3 PK	68.2	-13.9	1.68 H	302	50.1	4.2
2	*5795.00	111.4 PK			1.68 H	302	107.0	4.4
3	*5795.00	101.6 AV			1.68 H	302	97.2	4.4
4	#5953.86	53.3 PK	68.2	-14.9	1.68 H	302	48.6	4.7

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.

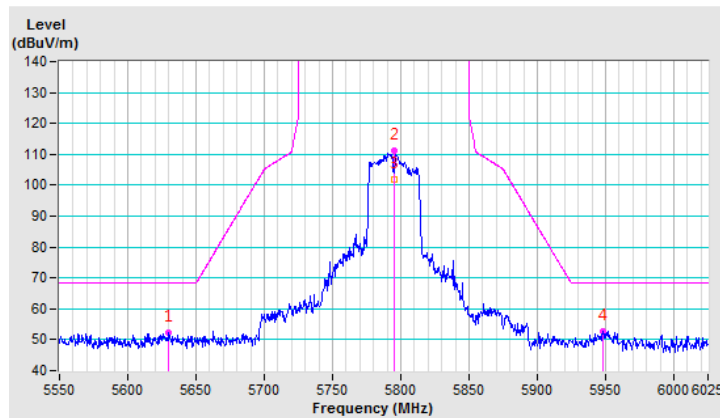


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5629.90	52.2 PK	68.2	-16.0	1.48 V	275	47.8	4.4
2	*5795.00	111.2 PK			1.48 V	275	106.8	4.4
3	*5795.00	102.0 AV			1.48 V	275	97.6	4.4
4	#5948.09	52.7 PK	68.2	-15.5	1.48 V	275	48.0	4.7

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.



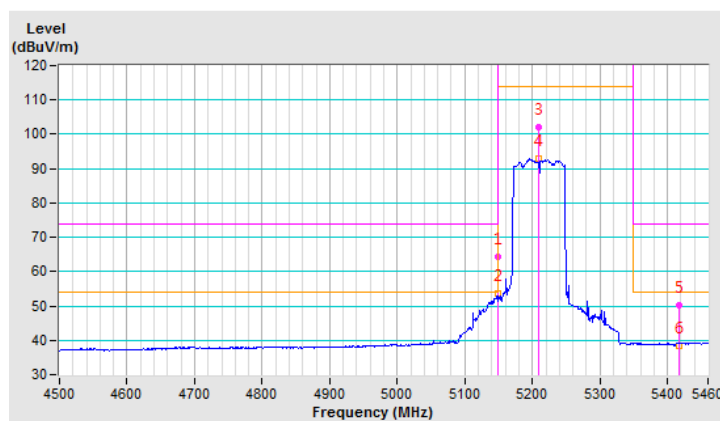
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	64.2 PK	74.0	-9.8	1.75 H	295	60.5	3.7
2	5150.00	53.6 AV	54.0	-0.4	1.75 H	295	49.9	3.7
3	*5210.00	102.2 PK			1.75 H	295	98.5	3.7
4	*5210.00	92.8 AV			1.75 H	295	89.1	3.7
5	5418.00	50.3 PK	74.0	-23.7	1.75 H	295	46.2	4.1
6	5418.00	38.5 AV	54.0	-15.5	1.75 H	295	34.4	4.1

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.

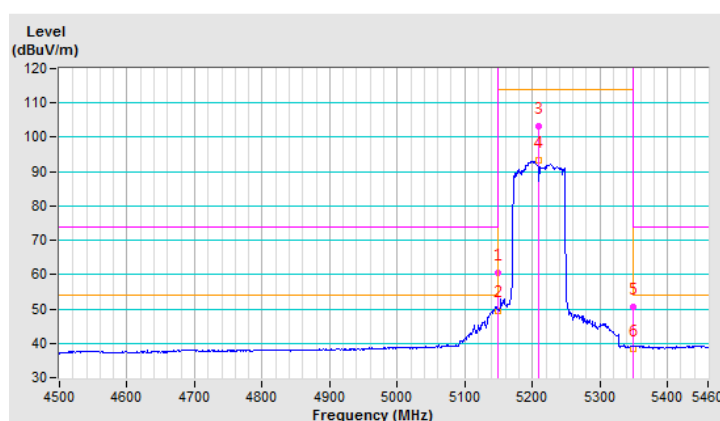


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.4 PK	74.0	-13.6	1.48 V	279	56.7	3.7
2	5150.00	49.6 AV	54.0	-4.4	1.48 V	279	45.9	3.7
3	*5210.00	103.2 PK			1.48 V	279	99.5	3.7
4	*5210.00	93.3 AV			1.48 V	279	89.6	3.7
5	5350.00	50.6 PK	74.0	-23.4	1.48 V	279	46.5	4.1
6	5350.00	38.2 AV	54.0	-15.8	1.48 V	279	34.1	4.1

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.

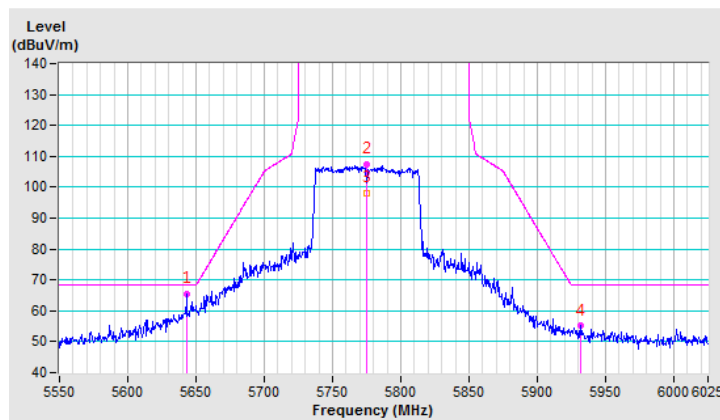


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5643.40	65.3 PK	68.2	-2.9	1.71 H	306	60.9	4.4
2	*5775.00	107.5 PK			1.71 H	306	103.1	4.4
3	*5775.00	98.0 AV			1.71 H	306	93.6	4.4
4	#5931.97	55.1 PK	68.2	-13.1	1.71 H	306	50.4	4.7

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.

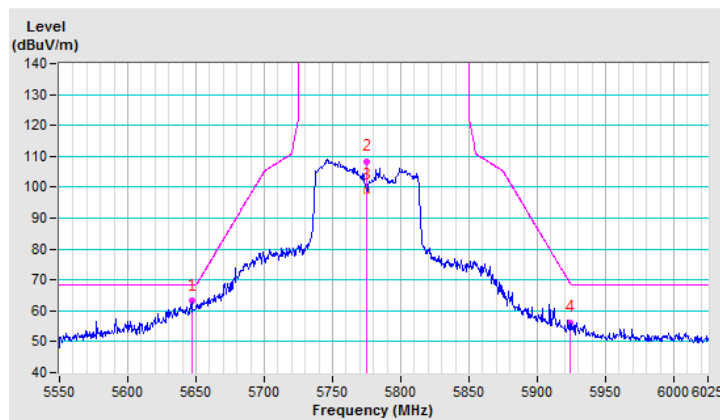


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5646.89	63.1 PK	68.2	-5.1	1.52 V	247	58.7	4.4
2	*5775.00	108.4 PK			1.52 V	247	104.0	4.4
3	*5775.00	99.1 AV			1.52 V	247	94.7	4.4
4	#5924.28	56.3 PK	68.7	-12.4	1.52 V	247	51.6	4.7

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

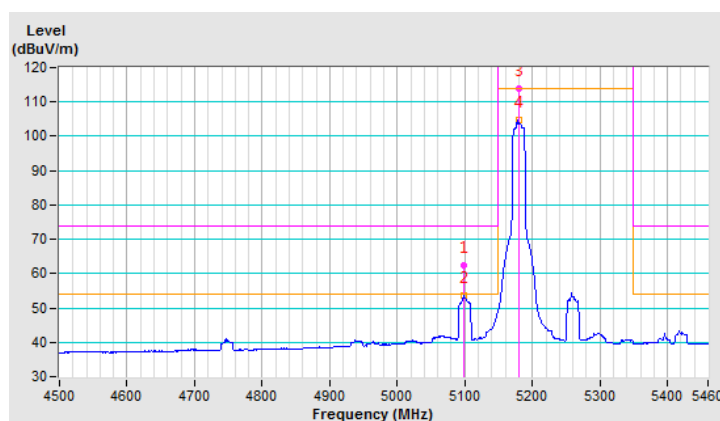
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5098.00	62.5 PK	74.0	-11.5	1.76 H	360	59.0	3.5
2	5098.00	53.7 AV	54.0	-0.3	1.76 H	360	50.2	3.5
3	*5180.00	114.0 PK			1.76 H	360	110.3	3.7
4	*5180.00	104.7 AV			1.76 H	360	101.0	3.7

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.

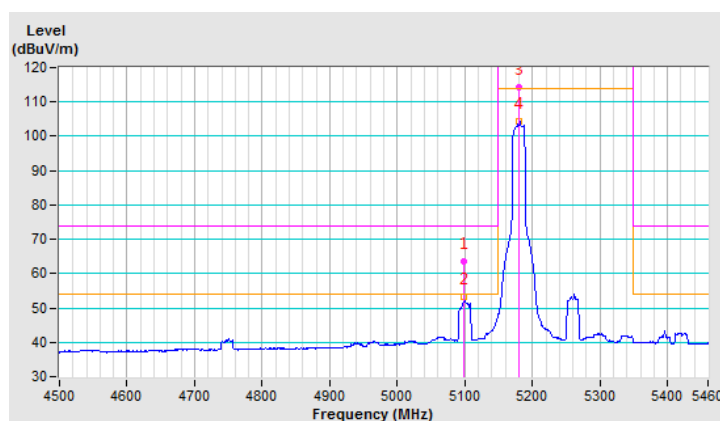


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5098.00	63.6 PK	74.0	-10.4	1.86 V	236	60.1	3.5
2	5098.00	53.1 AV	54.0	-0.9	1.86 V	236	49.6	3.5
3	*5180.00	114.4 PK			1.86 V	236	110.7	3.7
4	*5180.00	104.5 AV			1.86 V	236	100.8	3.7

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.

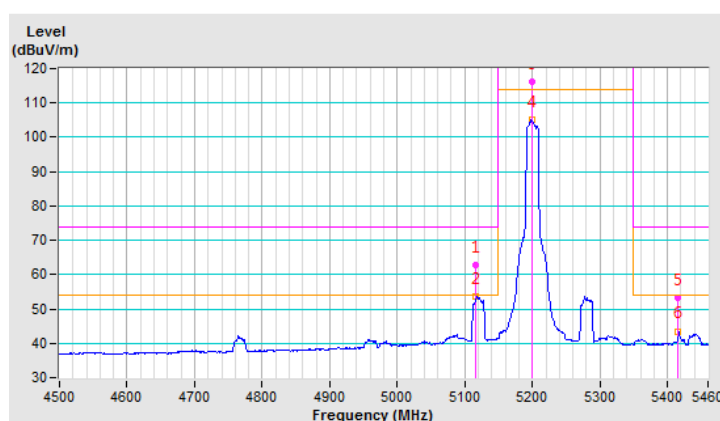


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5117.00	62.9 PK	74.0	-11.1	1.77 H	360	59.4	3.5
2	5117.00	53.5 AV	54.0	-0.5	1.77 H	360	50.0	3.5
3	*5200.00	116.3 PK			1.77 H	360	112.6	3.7
4	*5200.00	105.2 AV			1.77 H	360	101.5	3.7
5	5416.00	53.2 PK	74.0	-20.8	1.77 H	360	49.1	4.1
6	5416.00	43.5 AV	54.0	-10.5	1.77 H	360	39.4	4.1

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.

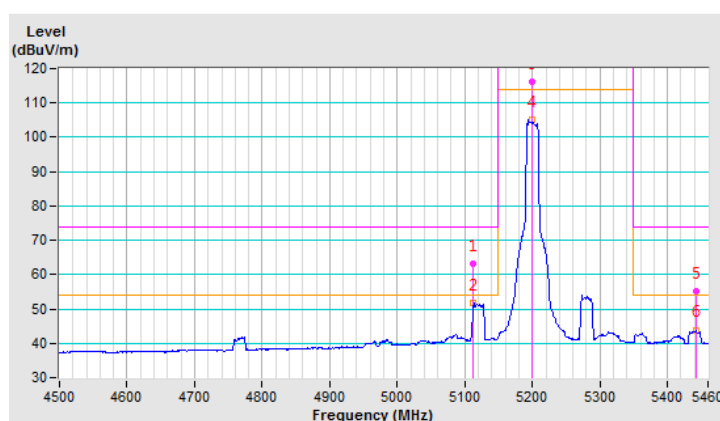


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5113.00	63.3 PK	74.0	-10.7	1.85 V	258	59.8	3.5
2	5113.00	51.6 AV	54.0	-2.4	1.85 V	258	48.1	3.5
3	*5200.00	116.3 PK			1.88 V	258	112.6	3.7
4	*5200.00	105.0 AV			1.88 V	258	101.3	3.7
5	5442.00	55.3 PK	74.0	-18.7	1.85 V	258	51.1	4.2
6	5442.00	43.9 AV	54.0	-10.1	1.85 V	258	39.7	4.2

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.

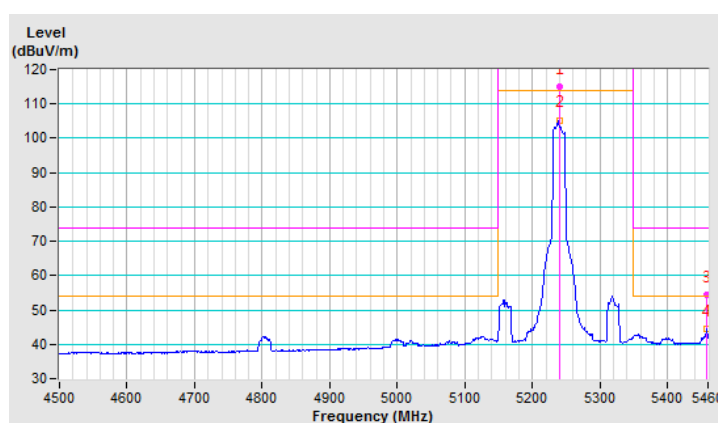


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	115.1 PK			1.50 H	360	111.3	3.8
2	*5240.00	105.3 AV			1.50 H	360	101.5	3.8
3	5458.00	54.5 PK	74.0	-19.5	1.50 H	360	50.3	4.2
4	5458.00	44.5 AV	54.0	-9.5	1.50 H	360	40.3	4.2

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.

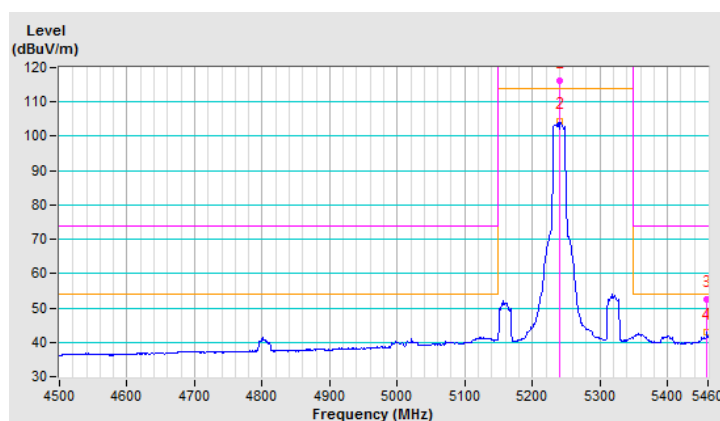


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	116.2 PK			2.20 V	254	112.4	3.8
2	*5240.00	104.5 AV			2.20 V	254	100.7	3.8
3	5458.00	52.5 PK	74.0	-21.5	2.20 V	254	48.3	4.2
4	5458.00	42.9 AV	54.0	-11.1	2.20 V	254	38.7	4.2

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.

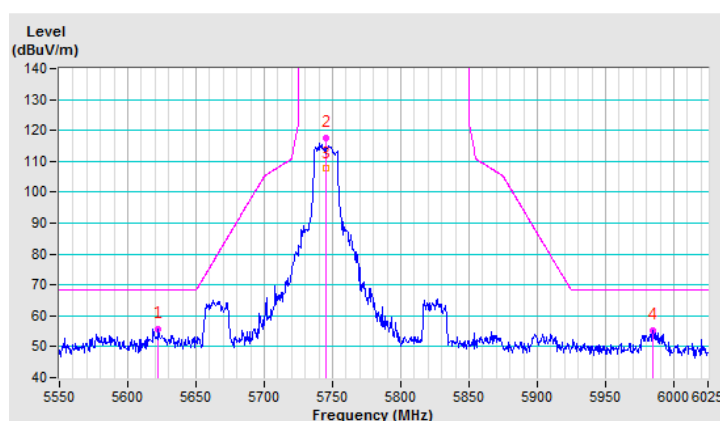


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5622.38	55.8 PK	68.2	-12.4	1.51 H	360	51.4	4.4
2	*5745.00	117.5 PK			1.51 H	360	113.1	4.4
3	*5745.00	107.6 AV			1.51 H	360	103.2	4.4
4	#5984.76	55.2 PK	68.2	-13.0	1.51 H	360	50.5	4.7

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.

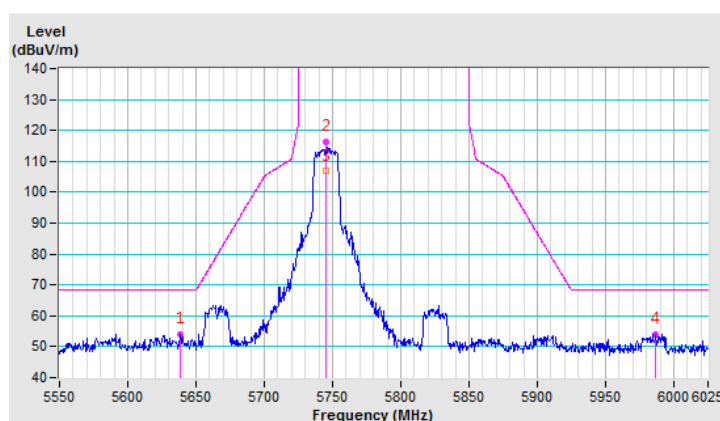


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5638.31	54.1 PK	68.2	-14.1	2.18 V	285	49.7	4.4
2	*5745.00	116.3 PK			2.18 V	285	111.9	4.4
3	*5745.00	106.8 AV			2.18 V	285	102.4	4.4
4	#5986.95	54.1 PK	68.2	-14.1	2.18 V	285	49.4	4.7

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.

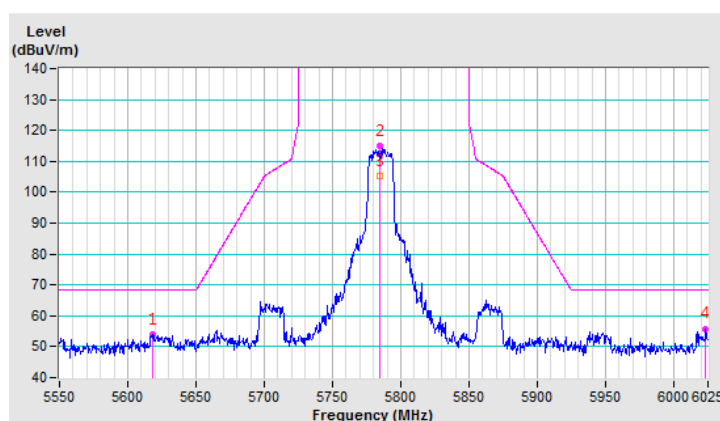


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5617.81	53.8 PK	68.2	-14.4	1.54 H	360	49.4	4.4
2	*5785.00	114.8 PK			1.54 H	360	110.4	4.4
3	*5785.00	105.1 AV			1.54 H	360	100.7	4.4
4	#6023.48	55.7 PK	68.2	-12.5	1.54 H	360	50.9	4.8

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.

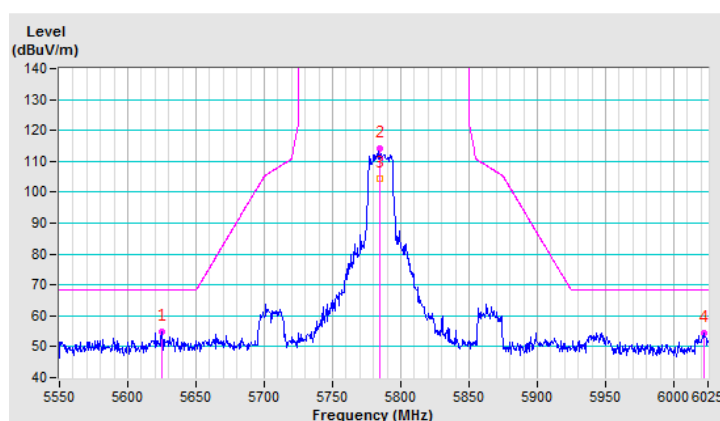


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5624.55	54.8 PK	68.2	-13.4	2.19 V	270	50.4	4.4
2	*5785.00	114.3 PK			2.19 V	270	109.9	4.4
3	*5785.00	104.3 AV			2.19 V	270	99.9	4.4
4	#6022.06	54.5 PK	68.2	-13.7	2.19 V	270	49.6	4.9

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.

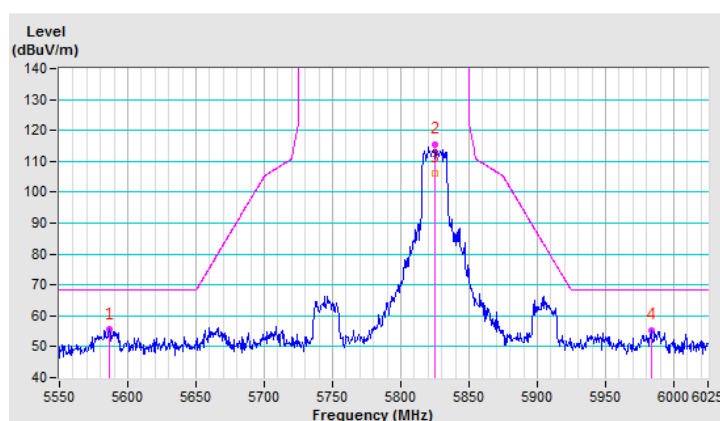


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5586.65	55.5 PK	68.2	-12.7	1.57 H	360	51.3	4.2
2	*5825.00	115.5 PK			1.58 H	360	111.1	4.4
3	*5825.00	106.3 AV			1.58 H	360	101.9	4.4
4	#5983.47	55.4 PK	68.2	-12.8	1.57 H	360	50.7	4.7

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.

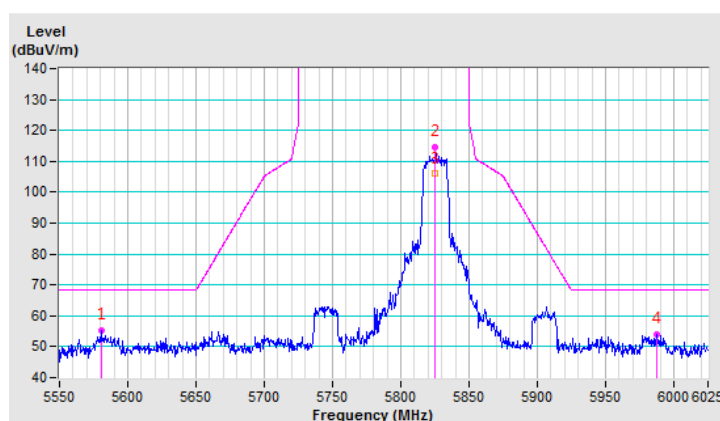


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5580.73	55.3 PK	68.2	-12.9	2.08 V	272	51.1	4.2
2	*5825.00	114.6 PK			2.08 V	272	110.2	4.4
3	*5825.00	105.9 AV			2.08 V	272	101.5	4.4
4	#5987.30	53.9 PK	68.2	-14.3	2.08 V	272	49.2	4.7

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.



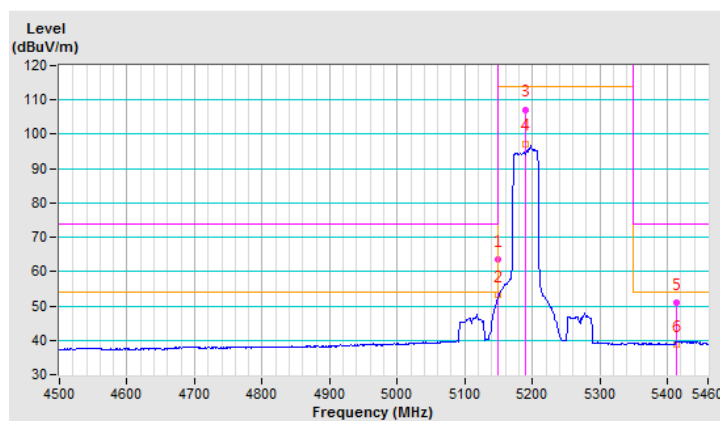
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	63.6 PK	74.0	-10.4	1.57 H	360	59.9	3.7
2	5150.00	53.2 AV	54.0	-0.8	1.57 H	360	49.5	3.7
3	*5190.00	107.2 PK			1.57 H	360	103.5	3.7
4	*5190.00	97.3 AV			1.57 H	360	93.6	3.7
5	5413.00	50.8 PK	74.0	-23.2	1.57 H	360	46.7	4.1
6	5413.00	38.9 AV	54.0	-15.1	1.57 H	360	34.8	4.1

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.

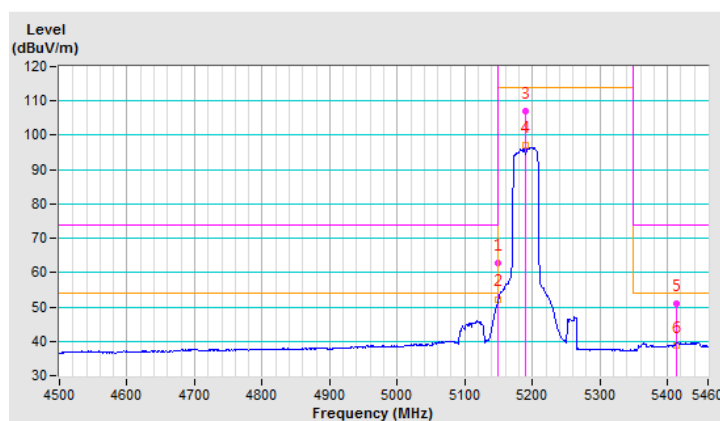


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.9 PK	74.0	-11.1	2.28 V	281	59.2	3.7
2	5150.00	52.3 AV	54.0	-1.7	2.28 V	281	48.6	3.7
3	*5190.00	106.9 PK			2.28 V	281	103.2	3.7
4	*5190.00	97.2 AV			2.28 V	281	93.5	3.7
5	5413.00	50.8 PK	74.0	-23.2	2.28 V	281	46.7	4.1
6	5413.00	38.7 AV	54.0	-15.3	2.28 V	281	34.6	4.1

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.

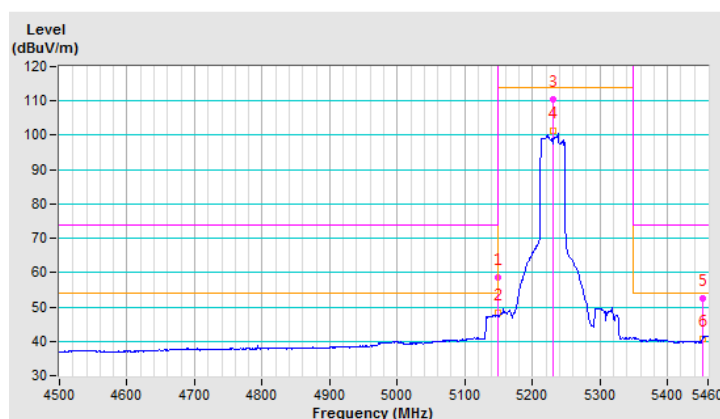


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	58.6 PK	74.0	-15.4	1.58 H	360	54.9	3.7
2	5150.00	48.2 AV	54.0	-5.8	1.58 H	360	44.5	3.7
3	*5230.00	110.4 PK			1.58 H	360	106.6	3.8
4	*5230.00	101.2 AV			1.58 H	360	97.4	3.8
5	5453.00	52.5 PK	74.0	-21.5	1.58 H	360	48.3	4.2
6	5453.00	40.8 AV	54.0	-13.2	1.58 H	360	36.6	4.2

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.

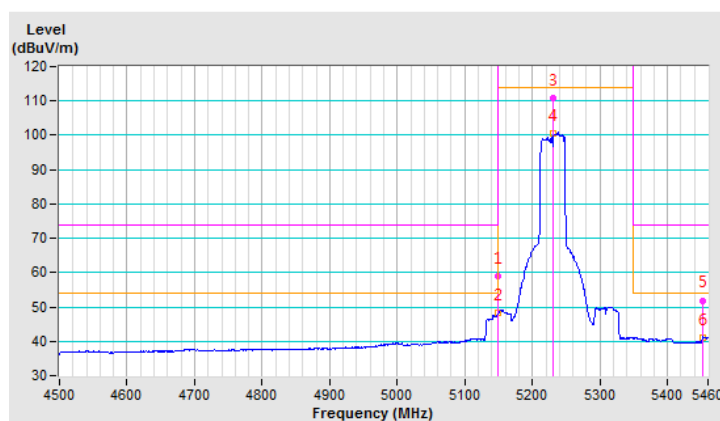


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	58.8 PK	74.0	-15.2	2.27 V	284	55.1	3.7
2	5150.00	48.3 AV	54.0	-5.7	2.27 V	284	44.6	3.7
3	*5230.00	110.8 PK			2.27 V	284	107.0	3.8
4	*5230.00	100.6 AV			2.27 V	284	96.8	3.8
5	5453.00	51.9 PK	74.0	-22.1	2.27 V	284	47.7	4.2
6	5453.00	40.9 AV	54.0	-13.1	2.27 V	284	36.7	4.2

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.

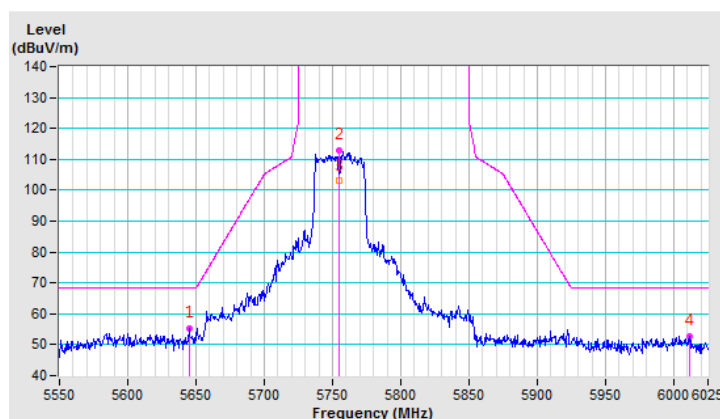


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5645.00	55.4 PK	68.2	-12.8	1.62 H	360	51.0	4.4
2	*5755.00	112.8 PK			1.62 H	360	108.4	4.4
3	*5755.00	103.0 AV			1.62 H	360	98.6	4.4
4	#6011.34	52.8 PK	68.2	-15.4	1.62 H	360	48.0	4.8

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.

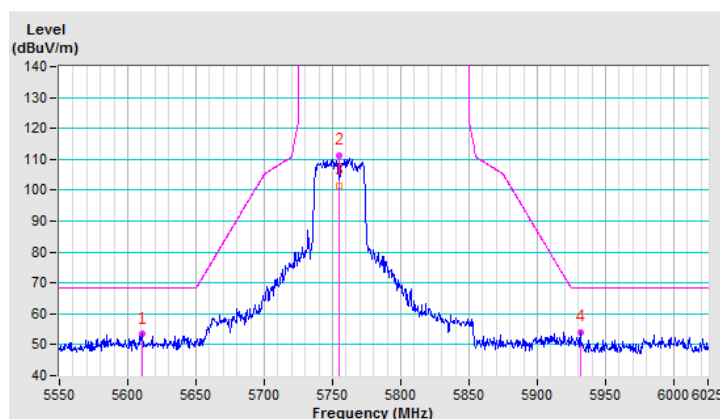


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5610.18	53.4 PK	68.2	-14.8	2.28 V	274	49.0	4.4
2	*5755.00	111.2 PK			2.28 V	274	106.8	4.4
3	*5755.00	101.6 AV			2.28 V	274	97.2	4.4
4	#5931.60	54.0 PK	68.2	-14.2	2.28 V	274	49.3	4.7

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.

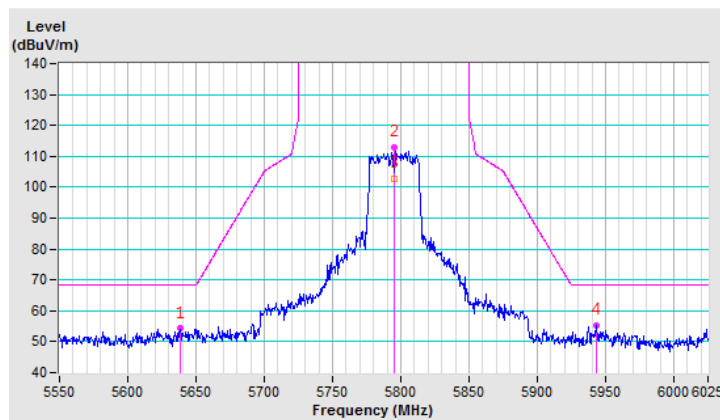


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5638.55	54.2 PK	68.2	-14.0	1.50 H	360	49.8	4.4
2	*5795.00	112.9 PK			1.50 H	360	108.5	4.4
3	*5795.00	102.6 AV			1.50 H	360	98.2	4.4
4	#5943.28	55.3 PK	68.2	-12.9	1.50 H	360	50.6	4.7

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.

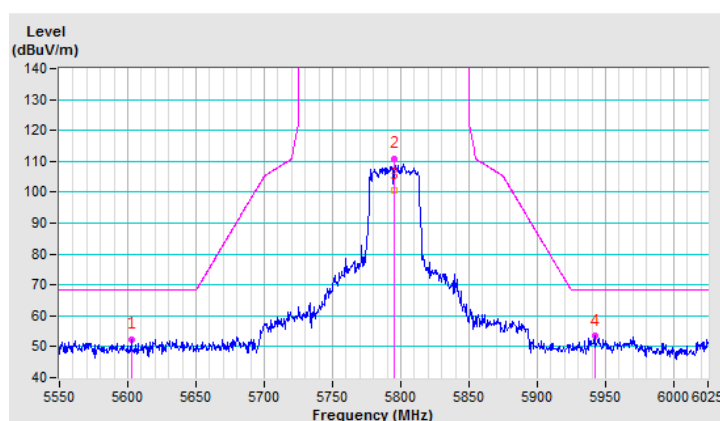


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5602.57	52.5 PK	68.2	-15.7	2.16 V	279	48.1	4.4
2	*5795.00	110.8 PK			2.16 V	279	106.4	4.4
3	*5795.00	100.8 AV			2.16 V	279	96.4	4.4
4	#5942.06	53.4 PK	68.2	-14.8	2.16 V	279	48.7	4.7

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.



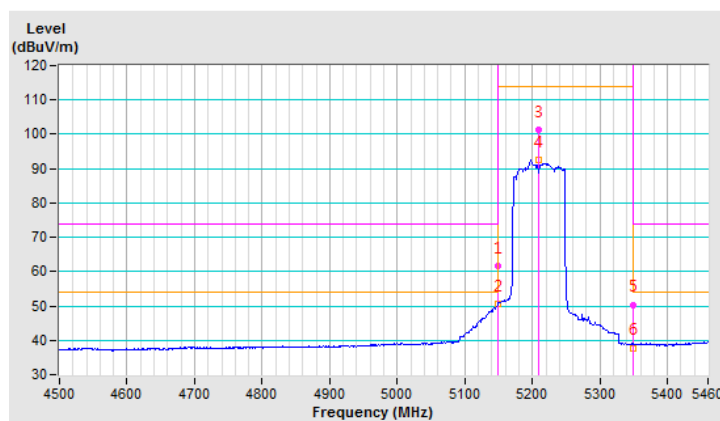
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.7 PK	74.0	-12.3	1.60 H	360	58.0	3.7
2	5150.00	50.6 AV	54.0	-3.4	1.60 H	360	46.9	3.7
3	*5210.00	101.3 PK			1.60 H	360	97.6	3.7
4	*5210.00	92.5 AV			1.60 H	360	88.8	3.7
5	5350.00	50.4 PK	74.0	-23.6	1.60 H	360	46.3	4.1
6	5350.00	37.8 AV	54.0	-16.2	1.60 H	360	33.7	4.1

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.

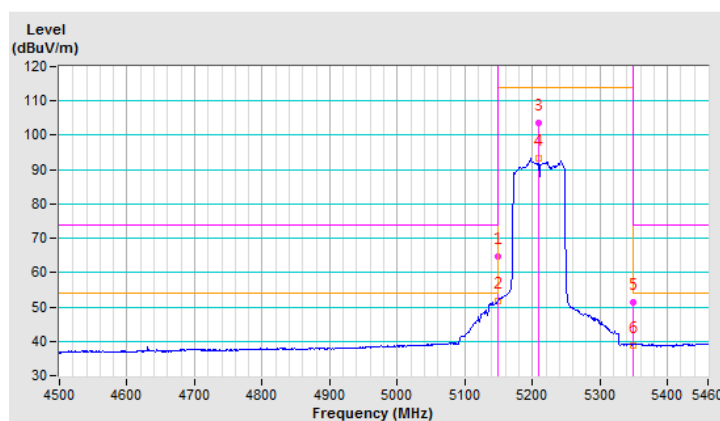


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	64.6 PK	74.0	-9.4	2.31 V	275	60.9	3.7
2	5150.00	51.6 AV	54.0	-2.4	2.31 V	275	47.9	3.7
3	*5210.00	103.5 PK			2.31 V	275	99.8	3.7
4	*5210.00	93.2 AV			2.31 V	275	89.5	3.7
5	5350.00	51.2 PK	74.0	-22.8	2.31 V	275	47.1	4.1
6	5350.00	38.6 AV	54.0	-15.4	2.31 V	275	34.5	4.1

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.

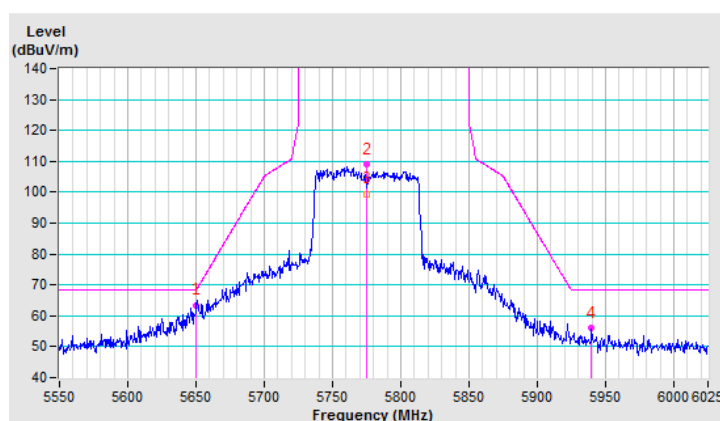


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5650.21	63.4 PK	68.4	-5.0	1.51 H	360	59.1	4.3
2	*5775.00	108.9 PK			1.51 H	360	104.5	4.4
3	*5775.00	99.2 AV			1.51 H	360	94.8	4.4
4	#5939.64	55.9 PK	68.2	-12.3	1.51 H	360	51.2	4.7

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.

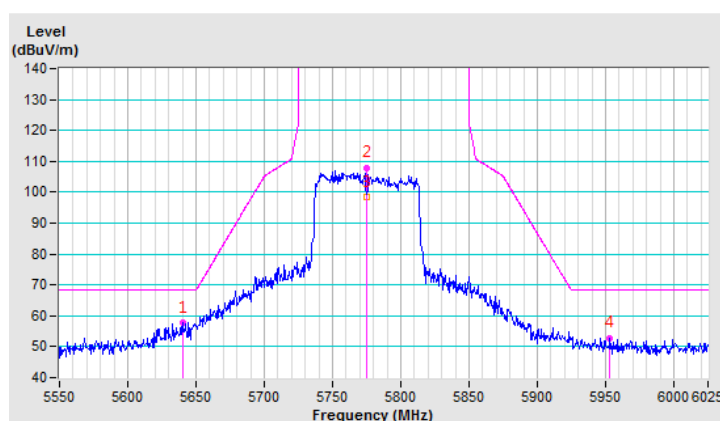


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5640.70	57.6 PK	68.2	-10.6	2.31 V	271	53.2	4.4
2	*5775.00	107.7 PK			2.31 V	271	103.3	4.4
3	*5775.00	98.3 AV			2.31 V	271	93.9	4.4
4	#5953.10	52.7 PK	68.2	-15.5	2.31 V	271	48.0	4.7

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.



4.7 Frequency Stability Measurement

4.7.1 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 $\pm 20\text{ppm}$ (IEEE 802.11n specification).

4.7.2 Measuring Instruments and Setting

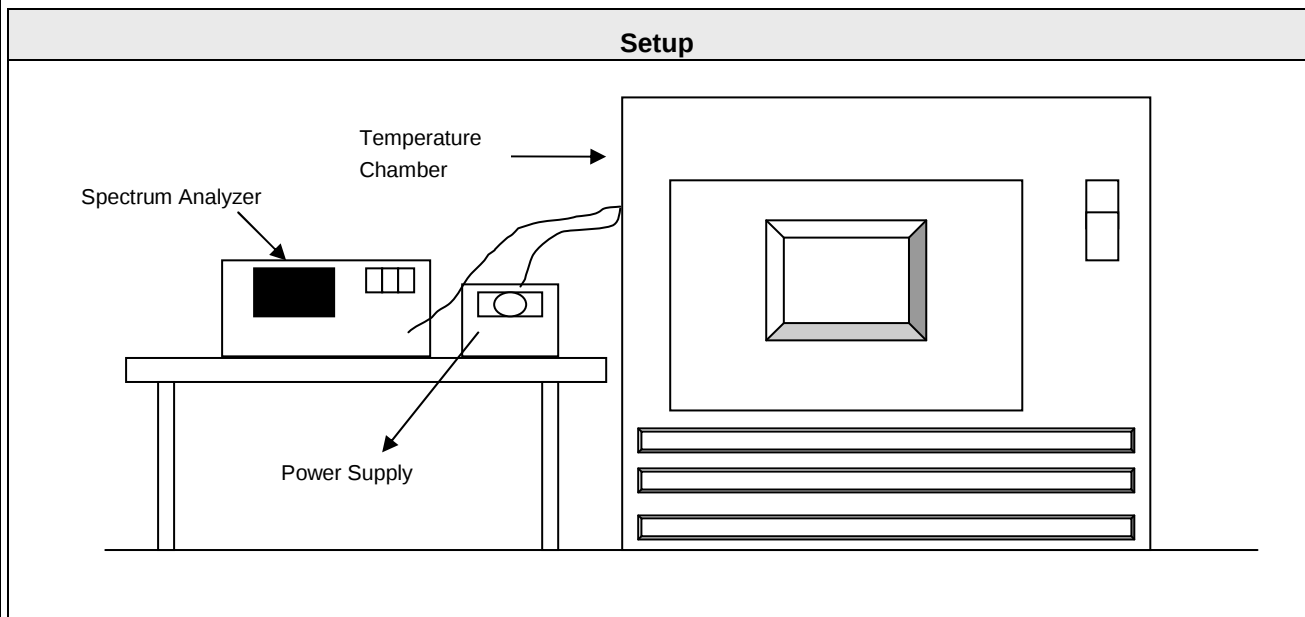
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

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

4.7.3 Test Procedure

- 1 The EUT was placed inside the environmental test chamber and powered by nominal 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.

4.7.4 Test Setup Layout



4.7.5 Test Deviation

There are no deviations with the original standard.

4.7.6 EUT Operating Conditions

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

4.7.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Anderson Chen		

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz Chain1									
TEMP. (°C)	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	5180.0139	PASS	5180.0154	PASS	5180.0123	PASS	5180.0154	PASS
40	120	5180.0008	PASS	5180.0022	PASS	5180.0031	PASS	5180.0003	PASS
30	120	5179.9817	PASS	5179.9842	PASS	5179.9831	PASS	5179.9842	PASS
20	120	5179.9775	PASS	5179.9775	PASS	5179.9756	PASS	5179.9739	PASS
10	120	5179.993	PASS	5179.9922	PASS	5179.9938	PASS	5179.99	PASS
0	120	5180.0183	PASS	5180.0175	PASS	5180.0167	PASS	5180.0181	PASS
-10	120	5180.0203	PASS	5180.02	PASS	5180.0242	PASS	5180.0236	PASS
-20	120	5180.0034	PASS	5180.0048	PASS	5180.0074	PASS	5180.0076	PASS
-30	120	5180.0179	PASS	5180.0161	PASS	5180.0205	PASS	5180.0191	PASS
Max. Deviation (ppm)		-4.343629	PASS	-4.343629	PASS	-4.710425	PASS	-5.038610	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz Chain1									
TEMP. (°C)	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	5179.9778	PASS	5179.9782	PASS	5179.9764	PASS	5179.9745	PASS
	120	5179.9775	PASS	5179.9775	PASS	5179.9756	PASS	5179.9739	PASS
	102	5179.9777	PASS	5179.9773	PASS	5179.9748	PASS	5179.974	PASS
Max. Deviation (ppm)		-4.343629	PASS	-4.382239	PASS	-4.864865	PASS	-5.038610	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5180 MHz Chain2

TEMP. (°C)	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	5179.9959	PASS	5179.9989	PASS	5179.9971	PASS	5179.9997	PASS
40	120	5180.0172	PASS	5180.0194	PASS	5180.021	PASS	5180.0169	PASS
30	120	5179.9867	PASS	5179.9872	PASS	5179.9873	PASS	5179.9882	PASS
20	120	5179.9797	PASS	5179.9815	PASS	5179.9825	PASS	5179.9828	PASS
10	120	5179.9834	PASS	5179.9864	PASS	5179.9824	PASS	5179.983	PASS
0	120	5179.9937	PASS	5179.9948	PASS	5179.9913	PASS	5179.9962	PASS
-10	120	5180.0068	PASS	5180.006	PASS	5180.002	PASS	5180.0033	PASS
-20	120	5179.9833	PASS	5179.9864	PASS	5179.9871	PASS	5179.9832	PASS
-30	120	5179.9898	PASS	5179.9878	PASS	5179.9883	PASS	5179.9861	PASS
Max. Deviation (ppm)		-3.918919	PASS	-3.571429	PASS	-3.397683	PASS	3.262548	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5180 MHz Chain2

TEMP. (°C)	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	5179.98	PASS	5179.9812	PASS	5179.9831	PASS	5179.9828	PASS
	120	5179.9797	PASS	5179.9815	PASS	5179.9825	PASS	5179.9828	PASS
	102	5179.9795	PASS	5179.9811	PASS	5179.9828	PASS	5179.9827	PASS
Max. Deviation (ppm)		-3.957529	PASS	-3.648649	PASS	-3.378378	PASS	-3.339768	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5180 MHz Chain3

TEMP. (°C)	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	5785.028	PASS	5785.0241	PASS	5785.0234	PASS	5785.0245	PASS
40	120	5785.0199	PASS	5785.0184	PASS	5785.0158	PASS	5785.0197	PASS
30	120	5785.006	PASS	5785.0091	PASS	5785.0037	PASS	5785.0081	PASS
20	120	5785.024	PASS	5785.0224	PASS	5785.0237	PASS	5785.0201	PASS
10	120	5784.997	PASS	5784.9974	PASS	5784.9971	PASS	5784.998	PASS
0	120	5785.0245	PASS	5785.0232	PASS	5785.0264	PASS	5785.0229	PASS
-10	120	5785.0204	PASS	5785.017	PASS	5785.0165	PASS	5785.0204	PASS
-20	120	5785.0236	PASS	5785.0213	PASS	5785.0238	PASS	5785.025	PASS
-30	120	5784.9809	PASS	5784.9844	PASS	5784.9814	PASS	5784.9817	PASS
Max. Deviation (ppm)		4.840104	PASS	4.165946	PASS	4.563526	PASS	4.321521	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5180 MHz Chain3

TEMP. (°C)	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	5785.024	PASS	5785.0214	PASS	5785.0248	PASS	5785.0204	PASS
	120	5785.024	PASS	5785.0224	PASS	5785.0237	PASS	5785.0201	PASS
	102	5785.0246	PASS	5785.0218	PASS	5785.0247	PASS	5785.0193	PASS
Max. Deviation (ppm)		4.252377	PASS	3.872083	PASS	4.286949	PASS	3.526361	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.									
Operating Frequency: 5200 MHz Chain1									
TEMP. (°C)	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	5199.9936	PASS	5199.9932	PASS	5199.9973	PASS	5199.9957	PASS
40	120	5199.9797	PASS	5199.9794	PASS	5199.9829	PASS	5199.9793	PASS
30	120	5199.991	PASS	5199.992	PASS	5199.9914	PASS	5199.9922	PASS
20	120	5200.0237	PASS	5200.0251	PASS	5200.0267	PASS	5200.0281	PASS
10	120	5199.9845	PASS	5199.9848	PASS	5199.9825	PASS	5199.9864	PASS
0	120	5199.9878	PASS	5199.9862	PASS	5199.9838	PASS	5199.9858	PASS
-10	120	5200.0016	PASS	5200.0016	PASS	5199.9987	PASS	5199.9965	PASS
-20	120	5200.0244	PASS	5200.0241	PASS	5200.0242	PASS	5200.0232	PASS
-30	120	5199.9864	PASS	5199.9857	PASS	5199.9886	PASS	5199.9862	PASS
Max. Deviation (ppm)		4.692308	PASS	4.826923	PASS	5.134615	PASS	5.403846	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5200 MHz Chain1									
TEMP. (°C)	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	5200.0244	PASS	5200.0244	PASS	5200.0277	PASS	5200.0286	PASS
	120	5200.0237	PASS	5200.0251	PASS	5200.0267	PASS	5200.0281	PASS
	102	5200.0233	PASS	5200.0254	PASS	5200.0268	PASS	5200.0277	PASS
Max. Deviation (ppm)		4.692308	PASS	4.884615	PASS	5.326923	PASS	5.500000	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain2

TEMP. (°C)	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	5199.9913	PASS	5199.9886	PASS	5199.9915	PASS	5199.993	PASS
40	120	5199.999	PASS	5199.9984	PASS	5199.998	PASS	5200.0011	PASS
30	120	5200	PASS	5199.9974	PASS	5199.9998	PASS	5200.001	PASS
20	120	5199.9847	PASS	5199.9814	PASS	5199.9817	PASS	5199.9816	PASS
10	120	5200.0084	PASS	5200.0075	PASS	5200.0111	PASS	5200.0076	PASS
0	120	5199.9852	PASS	5199.9864	PASS	5199.9848	PASS	5199.9849	PASS
-10	120	5200.0055	PASS	5200.0034	PASS	5200.006	PASS	5200.0062	PASS
-20	120	5200.0162	PASS	5200.0167	PASS	5200.02	PASS	5200.0204	PASS
-30	120	5200.001	PASS	5199.9985	PASS	5199.9987	PASS	5199.9984	PASS
Max. Deviation (ppm)		3.115385	PASS	-3.576923	PASS	-3.519231	PASS	-3.538462	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain2

TEMP. (°C)	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	5199.9849	PASS	5199.9815	PASS	5199.9813	PASS	5199.9821	PASS
	120	5199.9847	PASS	5199.9814	PASS	5199.9817	PASS	5199.9816	PASS
	102	5199.9856	PASS	5199.9823	PASS	5199.9825	PASS	5199.9809	PASS
Max. Deviation (ppm)		-2.942308	PASS	-3.576923	PASS	-3.596154	PASS	-3.673077	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain3

TEMP. (°C)	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	5199.9813	PASS	5199.9818	PASS	5199.9799	PASS	5199.9773	PASS
40	120	5200.0176	PASS	5200.0203	PASS	5200.0186	PASS	5200.0167	PASS
30	120	5199.9804	PASS	5199.984	PASS	5199.9852	PASS	5199.9806	PASS
20	120	5199.9891	PASS	5199.9931	PASS	5199.9898	PASS	5199.9891	PASS
10	120	5200.0127	PASS	5200.0118	PASS	5200.012	PASS	5200.0145	PASS
0	120	5200.0087	PASS	5200.0097	PASS	5200.0077	PASS	5200.0081	PASS
-10	120	5200.0217	PASS	5200.0195	PASS	5200.0174	PASS	5200.0171	PASS
-20	120	5200.0213	PASS	5200.0252	PASS	5200.0247	PASS	5200.0235	PASS
-30	120	5199.9733	PASS	5199.9778	PASS	5199.9754	PASS	5199.9759	PASS
Max. Deviation (ppm)		-5.134615	PASS	-4.269231	PASS	-4.730769	PASS	-4.634615	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain3

TEMP. (°C)	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	5199.9892	PASS	5199.9932	PASS	5199.9904	PASS	5199.9899	PASS
	120	5199.9891	PASS	5199.9931	PASS	5199.9898	PASS	5199.9891	PASS
	102	5199.9888	PASS	5199.9933	PASS	5199.9905	PASS	5199.9884	PASS
Max. Deviation (ppm)		-2.153846	PASS	-1.326923	PASS	-1.961538	PASS	-2.230769	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain1

TEMP. (°C)	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	5239.9944	PASS	5239.996	PASS	5239.9922	PASS	5239.9943	PASS
40	120	5239.9987	PASS	5240.0015	PASS	5240.0022	PASS	5239.9989	PASS
30	120	5240.0226	PASS	5240.0209	PASS	5240.0178	PASS	5240.0212	PASS
20	120	5240.0007	PASS	5240.0006	PASS	5240.0012	PASS	5240.0006	PASS
10	120	5239.9942	PASS	5239.9946	PASS	5239.9976	PASS	5239.9954	PASS
0	120	5240.011	PASS	5240.0092	PASS	5240.0113	PASS	5240.0097	PASS
-10	120	5240.0267	PASS	5240.0242	PASS	5240.0249	PASS	5240.0232	PASS
-20	120	5239.9815	PASS	5239.9845	PASS	5239.9844	PASS	5239.9812	PASS
-30	120	5239.9965	PASS	5239.997	PASS	5239.9974	PASS	5239.9993	PASS
Max. Deviation (ppm)		5.095420	PASS	4.618321	PASS	4.751908	PASS	4.427481	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain1

TEMP. (°C)	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	5240.001	PASS	5240.0015	PASS	5240.0021	PASS	5240.0009	PASS
	120	5240.0007	PASS	5240.0006	PASS	5240.0012	PASS	5240.0006	PASS
	102	5240.0007	PASS	5240.0006	PASS	5240.0012	PASS	5240.0007	PASS
Max. Deviation (ppm)		0.190840	PASS	0.286260	PASS	0.400763	PASS	0.171756	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain2

TEMP. (°C)	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	5239.9926	PASS	5239.9922	PASS	5239.9945	PASS	5239.9945	PASS
40	120	5239.9732	PASS	5239.9756	PASS	5239.9768	PASS	5239.9754	PASS
30	120	5240.0032	PASS	5240.0039	PASS	5240.0066	PASS	5240.0071	PASS
20	120	5239.9941	PASS	5239.9955	PASS	5239.9925	PASS	5239.9964	PASS
10	120	5239.9983	PASS	5239.9996	PASS	5240.0003	PASS	5239.9999	PASS
0	120	5239.9758	PASS	5239.9756	PASS	5239.9797	PASS	5239.979	PASS
-10	120	5240.0219	PASS	5240.0206	PASS	5240.0199	PASS	5240.0223	PASS
-20	120	5239.9824	PASS	5239.9841	PASS	5239.9796	PASS	5239.9795	PASS
-30	120	5240.0195	PASS	5240.0209	PASS	5240.0197	PASS	5240.0195	PASS
Max. Deviation (ppm)		-5.114504	PASS	-4.656489	PASS	-4.427481	PASS	-4.694656	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain2

TEMP. (°C)	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	5239.9946	PASS	5239.9955	PASS	5239.9925	PASS	5239.9965	PASS
	120	5239.9941	PASS	5239.9955	PASS	5239.9925	PASS	5239.9964	PASS
	102	5239.9936	PASS	5239.9951	PASS	5239.9924	PASS	5239.9963	PASS
Max. Deviation (ppm)		-1.221374	PASS	-0.935115	PASS	-1.450382	PASS	-0.706107	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain3

TEMP. (°C)	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	5240.0163	PASS	5240.0127	PASS	5240.015	PASS	5240.0139	PASS
40	120	5239.978	PASS	5239.9798	PASS	5239.9792	PASS	5239.9789	PASS
30	120	5240.0172	PASS	5240.0204	PASS	5240.0174	PASS	5240.0204	PASS
20	120	5239.9996	PASS	5239.9974	PASS	5239.9963	PASS	5239.9958	PASS
10	120	5240.0092	PASS	5240.0097	PASS	5240.0094	PASS	5240.0075	PASS
0	120	5240.0012	PASS	5240.004	PASS	5240.0044	PASS	5240.005	PASS
-10	120	5239.9802	PASS	5239.9767	PASS	5239.9791	PASS	5239.9788	PASS
-20	120	5240.0139	PASS	5240.0166	PASS	5240.0151	PASS	5240.015	PASS
-30	120	5239.9961	PASS	5239.9939	PASS	5239.9949	PASS	5239.9943	PASS
Max. Deviation (ppm)		-4.198473	PASS	-4.446565	PASS	-3.988550	PASS	-4.045802	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain3

TEMP. (°C)	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	5239.9988	PASS	5239.9979	PASS	5239.9959	PASS	5239.9955	PASS
	120	5239.9996	PASS	5239.9974	PASS	5239.9963	PASS	5239.9958	PASS
	102	5240.0004	PASS	5239.9983	PASS	5239.9953	PASS	5239.9949	PASS
Max. Deviation (ppm)		-0.229008	PASS	-0.496183	PASS	-0.896947	PASS	-0.973282	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain1

TEMP. (°C)	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	5744.9839	PASS	5744.9836	PASS	5744.9836	PASS	5744.9833	PASS
40	120	5744.9869	PASS	5744.9902	PASS	5744.99	PASS	5744.9883	PASS
30	120	5745.0097	PASS	5745.0124	PASS	5745.0104	PASS	5745.0091	PASS
20	120	5745.0249	PASS	5745.0225	PASS	5745.0194	PASS	5745.0208	PASS
10	120	5744.979	PASS	5744.9824	PASS	5744.9789	PASS	5744.9778	PASS
0	120	5744.9969	PASS	5744.9959	PASS	5744.9944	PASS	5744.9937	PASS
-10	120	5744.9757	PASS	5744.9751	PASS	5744.9761	PASS	5744.9807	PASS
-20	120	5745.0155	PASS	5745.0146	PASS	5745.0155	PASS	5745.0135	PASS
-30	120	5744.9813	PASS	5744.9823	PASS	5744.984	PASS	5744.9843	PASS
Max. Deviation (ppm)		4.334204	PASS	3.916449	PASS	3.376849	PASS	3.620540	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain1

TEMP. (°C)	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	5745.0249	PASS	5745.0234	PASS	5745.0204	PASS	5745.0218	PASS
	120	5745.0249	PASS	5745.0225	PASS	5745.0194	PASS	5745.0208	PASS
	102	5745.0257	PASS	5745.0216	PASS	5745.0198	PASS	5745.0204	PASS
Max. Deviation (ppm)		4.473455	PASS	4.073107	PASS	3.550914	PASS	3.794604	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain2

TEMP. (°C)	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	5745.0151	PASS	5745.0148	PASS	5745.0147	PASS	5745.0106	PASS
40	120	5744.9968	PASS	5744.9999	PASS	5744.9995	PASS	5744.9967	PASS
30	120	5745.0165	PASS	5745.019	PASS	5745.0193	PASS	5745.0192	PASS
20	120	5745.0022	PASS	5745.0019	PASS	5745.0029	PASS	5745.0019	PASS
10	120	5745.007	PASS	5745.0064	PASS	5745.0061	PASS	5745.0059	PASS
0	120	5745.0276	PASS	5745.0286	PASS	5745.0281	PASS	5745.0281	PASS
-10	120	5745.014	PASS	5745.0149	PASS	5745.016	PASS	5745.0141	PASS
-20	120	5744.9773	PASS	5744.9769	PASS	5744.9739	PASS	5744.9749	PASS
-30	120	5745.0059	PASS	5745.0049	PASS	5745.0086	PASS	5745.0052	PASS
Max. Deviation (ppm)		4.804178	PASS	4.978242	PASS	4.891210	PASS	4.891210	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain2

TEMP. (°C)	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	5745.003	PASS	5745.0028	PASS	5745.003	PASS	5745.0024	PASS
	120	5745.0022	PASS	5745.0019	PASS	5745.0029	PASS	5745.0019	PASS
	102	5745.0017	PASS	5745.0009	PASS	5745.0025	PASS	5745.003	PASS
Max. Deviation (ppm)		0.522193	PASS	0.487380	PASS	0.522193	PASS	0.522193	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain3

TEMP. (°C)	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	5745.0283	PASS	5745.0269	PASS	5745.0256	PASS	5745.0288	PASS
40	120	5745.0226	PASS	5745.0177	PASS	5745.018	PASS	5745.0215	PASS
30	120	5744.976	PASS	5744.9802	PASS	5744.9784	PASS	5744.9765	PASS
20	120	5745.0121	PASS	5745.0092	PASS	5745.0125	PASS	5745.0116	PASS
10	120	5744.9972	PASS	5744.9995	PASS	5744.9981	PASS	5744.9971	PASS
0	120	5745.0073	PASS	5745.0067	PASS	5745.0062	PASS	5745.0043	PASS
-10	120	5745.0016	PASS	5745.004	PASS	5745.0008	PASS	5745.0006	PASS
-20	120	5744.9859	PASS	5744.987	PASS	5744.9885	PASS	5744.9905	PASS
-30	120	5744.9931	PASS	5744.9963	PASS	5744.9957	PASS	5744.9929	PASS
Max. Deviation (ppm)		4.926023	PASS	4.682332	PASS	4.456049	PASS	5.013055	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain3

TEMP. (°C)	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	5745.0121	PASS	5745.0099	PASS	5745.0134	PASS	5745.0115	PASS
	120	5745.0121	PASS	5745.0092	PASS	5745.0125	PASS	5745.0116	PASS
	102	5745.0128	PASS	5745.0103	PASS	5745.0125	PASS	5745.0106	PASS
Max. Deviation (ppm)		2.228024	PASS	1.792863	PASS	2.332463	PASS	2.019147	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain1

TEMP. (°C)	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	5784.9987	PASS	5784.9992	PASS	5784.997	PASS	5784.9953	PASS
40	120	5785.0179	PASS	5785.0209	PASS	5785.0179	PASS	5785.0172	PASS
30	120	5784.9761	PASS	5784.978	PASS	5784.9765	PASS	5784.9781	PASS
20	120	5784.9713	PASS	5784.9727	PASS	5784.9729	PASS	5784.9709	PASS
10	120	5784.9693	PASS	5784.9723	PASS	5784.9737	PASS	5784.974	PASS
0	120	5785.0261	PASS	5785.0289	PASS	5785.0287	PASS	5785.0247	PASS
-10	120	5784.9761	PASS	5784.9724	PASS	5784.9768	PASS	5784.9763	PASS
-20	120	5784.9998	PASS	5785.0026	PASS	5785.0024	PASS	5785.0011	PASS
-30	120	5784.9934	PASS	5784.9958	PASS	5784.9961	PASS	5784.9914	PASS
Max. Deviation (ppm)		-5.306828	PASS	-4.788245	PASS	-4.684529	PASS	-5.030251	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain1

TEMP. (°C)	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	5784.9702	PASS	5784.9718	PASS	5784.973	PASS	5784.9711	PASS
	120	5784.9713	PASS	5784.9727	PASS	5784.9729	PASS	5784.9709	PASS
	102	5784.9713	PASS	5784.9721	PASS	5784.974	PASS	5784.9708	PASS
Max. Deviation (ppm)		-5.151253	PASS	-4.874676	PASS	-4.684529	PASS	-5.047537	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain2

TEMP. (°C)	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	5784.9995	PASS	5785.0041	PASS	5785	PASS	5785.0035	PASS
40	120	5784.9817	PASS	5784.9778	PASS	5784.9773	PASS	5784.9786	PASS
30	120	5785.0059	PASS	5785.0024	PASS	5785.0072	PASS	5785.0039	PASS
20	120	5785.0015	PASS	5785.0017	PASS	5785.0041	PASS	5785.0006	PASS
10	120	5784.9964	PASS	5784.9973	PASS	5784.9981	PASS	5784.9938	PASS
0	120	5784.976	PASS	5784.9714	PASS	5784.9753	PASS	5784.9736	PASS
-10	120	5784.9892	PASS	5784.9866	PASS	5784.9873	PASS	5784.9888	PASS
-20	120	5784.9959	PASS	5784.9909	PASS	5784.9932	PASS	5784.9907	PASS
-30	120	5784.996	PASS	5784.9969	PASS	5784.9979	PASS	5784.9979	PASS
Max. Deviation (ppm)		-4.148660	PASS	-4.943820	PASS	-4.269663	PASS	-4.563526	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain2

TEMP. (°C)	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	5785.0025	PASS	5785.0023	PASS	5785.0043	PASS	5785.0011	PASS
	120	5785.0015	PASS	5785.0017	PASS	5785.0041	PASS	5785.0006	PASS
	102	5785.0024	PASS	5785.0015	PASS	5785.004	PASS	5785.0013	PASS
Max. Deviation (ppm)		0.432152	PASS	0.397580	PASS	0.743302	PASS	0.224719	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain3

TEMP. (°C)	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	5784.9806	PASS	5784.9828	PASS	5784.9813	PASS	5784.9802	PASS
40	120	5785.0017	PASS	5784.9983	PASS	5785.0017	PASS	5784.9996	PASS
30	120	5784.9974	PASS	5784.9989	PASS	5784.9975	PASS	5784.9992	PASS
20	120	5784.9977	PASS	5784.9954	PASS	5784.9955	PASS	5784.9947	PASS
10	120	5784.9983	PASS	5785.0014	PASS	5785.0016	PASS	5784.9999	PASS
0	120	5785.0193	PASS	5785.0214	PASS	5785.0189	PASS	5785.02	PASS
-10	120	5784.992	PASS	5784.9915	PASS	5784.9909	PASS	5784.9944	PASS
-20	120	5784.9995	PASS	5784.9977	PASS	5784.9999	PASS	5784.9996	PASS
-30	120	5784.9979	PASS	5784.9942	PASS	5784.9981	PASS	5784.9941	PASS
Max. Deviation (ppm)		-3.353500	PASS	3.699222	PASS	3.267070	PASS	-3.422645	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain3

TEMP. (°C)	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	5784.9973	PASS	5784.9954	PASS	5784.9955	PASS	5784.9937	PASS
	120	5784.9977	PASS	5784.9954	PASS	5784.9955	PASS	5784.9947	PASS
	102	5784.9977	PASS	5784.9953	PASS	5784.9962	PASS	5784.9949	PASS
Max. Deviation (ppm)		-0.466724	PASS	-0.812446	PASS	-0.777874	PASS	-1.089023	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain1

TEMP. (°C)	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	5785.0051	PASS	5785.0048	PASS	5785.0014	PASS	5785.0009	PASS
40	120	5784.9767	PASS	5784.9786	PASS	5784.978	PASS	5784.9773	PASS
30	120	5784.9967	PASS	5784.9995	PASS	5784.9979	PASS	5785.0023	PASS
20	120	5785.0007	PASS	5785.0031	PASS	5785	PASS	5785.0004	PASS
10	120	5785.0007	PASS	5784.9983	PASS	5785.0006	PASS	5784.9962	PASS
0	120	5784.9869	PASS	5784.9862	PASS	5784.9871	PASS	5784.9835	PASS
-10	120	5784.9749	PASS	5784.9738	PASS	5784.9731	PASS	5784.972	PASS
-20	120	5784.9739	PASS	5784.9715	PASS	5784.9742	PASS	5784.9721	PASS
-30	120	5784.9947	PASS	5784.9968	PASS	5784.9938	PASS	5784.9929	PASS
Max. Deviation (ppm)		-4.511668	PASS	-4.926534	PASS	-4.649957	PASS	-4.840104	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain1

TEMP. (°C)	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	5784.9996	PASS	5785.0031	PASS	5784.9994	PASS	5785.0004	PASS
	120	5785.0007	PASS	5785.0031	PASS	5785	PASS	5785.0004	PASS
	102	5785.0009	PASS	5785.0037	PASS	5785.0004	PASS	5785.0006	PASS
Max. Deviation (ppm)		0.155575	PASS	0.639585	PASS	-0.103717	PASS	0.103717	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain2

TEMP. (°C)	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	5784.9872	PASS	5784.9878	PASS	5784.9893	PASS	5784.9876	PASS
40	120	5785.0043	PASS	5785.003	PASS	5785.0034	PASS	5785.0043	PASS
30	120	5785	PASS	5785.0009	PASS	5784.9995	PASS	5785.0036	PASS
20	120	5785.0206	PASS	5785.0204	PASS	5785.0181	PASS	5785.0216	PASS
10	120	5785.023	PASS	5785.0219	PASS	5785.0269	PASS	5785.0252	PASS
0	120	5784.9795	PASS	5784.9806	PASS	5784.9778	PASS	5784.9814	PASS
-10	120	5784.9818	PASS	5784.981	PASS	5784.9833	PASS	5784.9801	PASS
-20	120	5785.0262	PASS	5785.029	PASS	5785.026	PASS	5785.0296	PASS
-30	120	5785.0163	PASS	5785.0158	PASS	5785.0193	PASS	5785.0156	PASS
Max. Deviation (ppm)		4.528954	PASS	5.012965	PASS	4.649957	PASS	5.116681	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain2

TEMP. (°C)	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	5785.0213	PASS	5785.0206	PASS	5785.0175	PASS	5785.0212	PASS
	120	5785.0206	PASS	5785.0204	PASS	5785.0181	PASS	5785.0216	PASS
	102	5785.0209	PASS	5785.0203	PASS	5785.0178	PASS	5785.0218	PASS
Max. Deviation (ppm)		3.681936	PASS	3.560933	PASS	3.128781	PASS	3.768366	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain3

TEMP. (°C)	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	5785.028	PASS	5785.0241	PASS	5785.0234	PASS	5785.0245	PASS
40	120	5785.0199	PASS	5785.0184	PASS	5785.0158	PASS	5785.0197	PASS
30	120	5785.006	PASS	5785.0091	PASS	5785.0037	PASS	5785.0081	PASS
20	120	5785.024	PASS	5785.0224	PASS	5785.0237	PASS	5785.0201	PASS
10	120	5784.997	PASS	5784.9974	PASS	5784.9971	PASS	5784.998	PASS
0	120	5785.0245	PASS	5785.0232	PASS	5785.0264	PASS	5785.0229	PASS
-10	120	5785.0204	PASS	5785.017	PASS	5785.0165	PASS	5785.0204	PASS
-20	120	5785.0236	PASS	5785.0213	PASS	5785.0238	PASS	5785.025	PASS
-30	120	5784.9809	PASS	5784.9844	PASS	5784.9814	PASS	5784.9817	PASS
Max. Deviation (ppm)		4.840104	PASS	4.165946	PASS	4.563526	PASS	4.321521	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain3

TEMP. (°C)	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	5785.024	PASS	5785.0214	PASS	5785.0248	PASS	5785.0204	PASS
	120	5785.024	PASS	5785.0224	PASS	5785.0237	PASS	5785.0201	PASS
	102	5785.0246	PASS	5785.0218	PASS	5785.0247	PASS	5785.0193	PASS
Max. Deviation (ppm)		4.252377	PASS	3.872083	PASS	4.286949	PASS	3.526361	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain1

TEMP. (°C)	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	5189.9971	PASS	5190.0001	PASS	5190.0012	PASS	5190.002	PASS
40	120	5189.9834	PASS	5189.9803	PASS	5189.9841	PASS	5189.979	PASS
30	120	5190.0036	PASS	5190.0018	PASS	5190.0039	PASS	5190.0029	PASS
20	120	5189.9906	PASS	5189.9926	PASS	5189.9921	PASS	5189.9894	PASS
10	120	5190.0232	PASS	5190.02	PASS	5190.022	PASS	5190.0218	PASS
0	120	5189.9973	PASS	5189.9938	PASS	5189.9957	PASS	5189.995	PASS
-10	120	5190.0212	PASS	5190.0198	PASS	5190.0177	PASS	5190.0173	PASS
-20	120	5189.997	PASS	5190.001	PASS	5189.9982	PASS	5189.9973	PASS
-30	120	5190.0162	PASS	5190.0154	PASS	5190.0151	PASS	5190.017	PASS
Max. Deviation (ppm)		4.470135	PASS	3.853565	PASS	4.238921	PASS	4.200385	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain1

TEMP. (°C)	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	5189.99	PASS	5189.992	PASS	5189.9917	PASS	5189.99	PASS
	120	5189.9906	PASS	5189.9926	PASS	5189.9921	PASS	5189.9894	PASS
	102	5189.991	PASS	5189.9933	PASS	5189.9911	PASS	5189.9888	PASS
Max. Deviation (ppm)		-1.926782	PASS	-1.541426	PASS	-1.714836	PASS	-2.157996	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain2

TEMP. (°C)	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	5189.9852	PASS	5189.985	PASS	5189.9816	PASS	5189.9821	PASS
40	120	5190.0151	PASS	5190.0165	PASS	5190.0169	PASS	5190.0128	PASS
30	120	5190.0014	PASS	5190.0002	PASS	5190.0028	PASS	5190.0001	PASS
20	120	5189.9979	PASS	5189.9938	PASS	5189.9974	PASS	5189.9954	PASS
10	120	5189.9924	PASS	5189.9911	PASS	5189.9936	PASS	5189.9951	PASS
0	120	5189.9747	PASS	5189.9738	PASS	5189.9721	PASS	5189.9756	PASS
-10	120	5190.0239	PASS	5190.0245	PASS	5190.0229	PASS	5190.0237	PASS
-20	120	5190.0238	PASS	5190.0205	PASS	5190.023	PASS	5190.0252	PASS
-30	120	5189.9785	PASS	5189.9746	PASS	5189.9742	PASS	5189.9749	PASS
Max. Deviation (ppm)		-4.874759	PASS	-5.048170	PASS	-5.375723	PASS	-4.836224	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain2

TEMP. (°C)	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	5189.9974	PASS	5189.9945	PASS	5189.9976	PASS	5189.9964	PASS
	120	5189.9979	PASS	5189.9938	PASS	5189.9974	PASS	5189.9954	PASS
	102	5189.9979	PASS	5189.9939	PASS	5189.9971	PASS	5189.9952	PASS
Max. Deviation (ppm)		-0.500963	PASS	-1.194605	PASS	-0.558767	PASS	-0.924855	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain3

TEMP. (°C)	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	5189.9932	PASS	5189.9939	PASS	5189.9941	PASS	5189.9928	PASS
40	120	5189.9904	PASS	5189.9878	PASS	5189.9881	PASS	5189.9908	PASS
30	120	5190.0215	PASS	5190.0249	PASS	5190.0259	PASS	5190.0245	PASS
20	120	5189.9914	PASS	5189.9929	PASS	5189.9944	PASS	5189.9928	PASS
10	120	5190.0232	PASS	5190.0261	PASS	5190.0251	PASS	5190.0269	PASS
0	120	5190.022	PASS	5190.0235	PASS	5190.0209	PASS	5190.02	PASS
-10	120	5190.0031	PASS	5190.0021	PASS	5190.0037	PASS	5190.0016	PASS
-20	120	5190.0058	PASS	5190.0054	PASS	5190.0072	PASS	5190.0098	PASS
-30	120	5190.022	PASS	5190.0223	PASS	5190.0256	PASS	5190.0245	PASS
Max. Deviation (ppm)		4.470135	PASS	5.028902	PASS	4.990366	PASS	5.183044	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain3

TEMP. (°C)	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	5189.9913	PASS	5189.9936	PASS	5189.9942	PASS	5189.9921	PASS
	120	5189.9914	PASS	5189.9929	PASS	5189.9944	PASS	5189.9928	PASS
	102	5189.992	PASS	5189.9933	PASS	5189.9954	PASS	5189.9938	PASS
Max. Deviation (ppm)		-1.676301	PASS	-1.368015	PASS	-1.117534	PASS	-1.522158	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain1

TEMP. (°C)	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	5229.9761	PASS	5229.9796	PASS	5229.979	PASS	5229.9794	PASS
40	120	5230.0264	PASS	5230.0229	PASS	5230.0253	PASS	5230.0247	PASS
30	120	5229.981	PASS	5229.9802	PASS	5229.9825	PASS	5229.9813	PASS
20	120	5230.018	PASS	5230.0211	PASS	5230.0183	PASS	5230.0189	PASS
10	120	5230.0152	PASS	5230.0188	PASS	5230.0151	PASS	5230.0175	PASS
0	120	5230.0151	PASS	5230.0134	PASS	5230.0123	PASS	5230.0118	PASS
-10	120	5230.0096	PASS	5230.0119	PASS	5230.0129	PASS	5230.0121	PASS
-20	120	5229.9783	PASS	5229.9741	PASS	5229.9746	PASS	5229.974	PASS
-30	120	5229.9983	PASS	5229.9987	PASS	5229.9998	PASS	5229.9971	PASS
Max. Deviation (ppm)		5.047801	PASS	4.378585	PASS	4.837476	PASS	4.722753	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain1

TEMP. (°C)	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	5230.019	PASS	5230.0219	PASS	5230.0192	PASS	5230.0181	PASS
	120	5230.018	PASS	5230.0211	PASS	5230.0183	PASS	5230.0189	PASS
	102	5230.0175	PASS	5230.0202	PASS	5230.019	PASS	5230.0195	PASS
Max. Deviation (ppm)		3.632887	PASS	4.187380	PASS	3.671128	PASS	3.728489	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain2

TEMP. (°C)	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	5230.0007	PASS	5230.0019	PASS	5230.0009	PASS	5230	PASS
40	120	5230.024	PASS	5230.0253	PASS	5230.0256	PASS	5230.0223	PASS
30	120	5229.9922	PASS	5229.9946	PASS	5229.994	PASS	5229.9928	PASS
20	120	5229.978	PASS	5229.979	PASS	5229.9792	PASS	5229.9815	PASS
10	120	5229.9916	PASS	5229.9929	PASS	5229.9894	PASS	5229.9913	PASS
0	120	5229.9869	PASS	5229.9845	PASS	5229.9888	PASS	5229.9846	PASS
-10	120	5230.0036	PASS	5230.0046	PASS	5230.0043	PASS	5230.0035	PASS
-20	120	5229.9935	PASS	5229.9891	PASS	5229.993	PASS	5229.9901	PASS
-30	120	5230.0071	PASS	5230.0077	PASS	5230.0094	PASS	5230.0079	PASS
Max. Deviation (ppm)		4.588910	PASS	4.837476	PASS	4.894837	PASS	4.263862	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain2

TEMP. (°C)	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	5229.9778	PASS	5229.979	PASS	5229.9792	PASS	5229.9808	PASS
	120	5229.978	PASS	5229.979	PASS	5229.9792	PASS	5229.9815	PASS
	102	5229.9779	PASS	5229.9789	PASS	5229.9797	PASS	5229.9811	PASS
Max. Deviation (ppm)		-4.244742	PASS	-4.034417	PASS	-3.977055	PASS	-3.671128	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain3

TEMP. (°C)	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	5230.0203	PASS	5230.0184	PASS	5230.0211	PASS	5230.017	PASS
40	120	5229.9881	PASS	5229.9881	PASS	5229.9881	PASS	5229.9888	PASS
30	120	5229.9849	PASS	5229.9822	PASS	5229.9831	PASS	5229.9835	PASS
20	120	5229.9833	PASS	5229.9873	PASS	5229.9865	PASS	5229.9848	PASS
10	120	5230.001	PASS	5230.0012	PASS	5230.0011	PASS	5230.0053	PASS
0	120	5229.995	PASS	5229.9987	PASS	5229.9984	PASS	5229.9937	PASS
-10	120	5229.9986	PASS	5229.9985	PASS	5229.9978	PASS	5229.9944	PASS
-20	120	5230.0121	PASS	5230.0147	PASS	5230.0124	PASS	5230.0118	PASS
-30	120	5230.005	PASS	5230.0044	PASS	5230.0046	PASS	5230.0029	PASS
Max. Deviation (ppm)		3.881453	PASS	3.518164	PASS	4.034417	PASS	3.250478	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain3

TEMP. (°C)	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	5229.9823	PASS	5229.9871	PASS	5229.9858	PASS	5229.9841	PASS
	120	5229.9833	PASS	5229.9873	PASS	5229.9865	PASS	5229.9848	PASS
	102	5229.984	PASS	5229.9877	PASS	5229.9859	PASS	5229.9856	PASS
Max. Deviation (ppm)		-3.384321	PASS	-2.466539	PASS	-2.715105	PASS	-3.040153	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain1

TEMP. (°C)	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	5754.9847	PASS	5754.9866	PASS	5754.9884	PASS	5754.9847	PASS
40	120	5755.0081	PASS	5755.0057	PASS	5755.0078	PASS	5755.0078	PASS
30	120	5754.981	PASS	5754.982	PASS	5754.983	PASS	5754.9833	PASS
20	120	5755.0092	PASS	5755.0093	PASS	5755.0102	PASS	5755.009	PASS
10	120	5755.0117	PASS	5755.0113	PASS	5755.0079	PASS	5755.0104	PASS
0	120	5755.0107	PASS	5755.0077	PASS	5755.0102	PASS	5755.0071	PASS
-10	120	5754.9805	PASS	5754.9761	PASS	5754.9773	PASS	5754.9794	PASS
-20	120	5755.0079	PASS	5755.0105	PASS	5755.008	PASS	5755.0103	PASS
-30	120	5755.004	PASS	5754.9994	PASS	5755.001	PASS	5754.9997	PASS
Max. Deviation (ppm)		-3.388358	PASS	-4.152911	PASS	-3.944396	PASS	-3.579496	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain1

TEMP. (°C)	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	5755.0088	PASS	5755.0101	PASS	5755.0093	PASS	5755.0093	PASS
	120	5755.0092	PASS	5755.0093	PASS	5755.0102	PASS	5755.009	PASS
	102	5755.0093	PASS	5755.0103	PASS	5755.0092	PASS	5755.01	PASS
Max. Deviation (ppm)		1.615986	PASS	1.789748	PASS	1.772372	PASS	1.737619	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain2

TEMP. (°C)	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	5754.9828	PASS	5754.9841	PASS	5754.9875	PASS	5754.9868	PASS
40	120	5755.0243	PASS	5755.0248	PASS	5755.0256	PASS	5755.0262	PASS
30	120	5754.9706	PASS	5754.9751	PASS	5754.9733	PASS	5754.9724	PASS
20	120	5754.9893	PASS	5754.9917	PASS	5754.9923	PASS	5754.9909	PASS
10	120	5755.0141	PASS	5755.0143	PASS	5755.0115	PASS	5755.0122	PASS
0	120	5755.0009	PASS	5754.9985	PASS	5754.9992	PASS	5754.9974	PASS
-10	120	5754.9747	PASS	5754.9743	PASS	5754.9743	PASS	5754.9774	PASS
-20	120	5755.0151	PASS	5755.0127	PASS	5755.0135	PASS	5755.0143	PASS
-30	120	5755.007	PASS	5755.0092	PASS	5755.0099	PASS	5755.0114	PASS
Max. Deviation (ppm)		-5.108601	PASS	-4.465682	PASS	-4.639444	PASS	-4.795830	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain2

TEMP. (°C)	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	5754.9902	PASS	5754.9914	PASS	5754.9929	PASS	5754.992	PASS
	120	5754.9893	PASS	5754.9917	PASS	5754.9923	PASS	5754.9909	PASS
	102	5754.989	PASS	5754.9915	PASS	5754.9914	PASS	5754.9901	PASS
Max. Deviation (ppm)		-1.911381	PASS	-1.494353	PASS	-1.494353	PASS	-1.720243	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain3

TEMP. (°C)	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	5754.9763	PASS	5754.973	PASS	5754.9747	PASS	5754.9753	PASS
40	120	5754.9792	PASS	5754.9799	PASS	5754.9795	PASS	5754.9752	PASS
30	120	5754.9952	PASS	5754.9954	PASS	5754.9952	PASS	5754.9952	PASS
20	120	5754.9908	PASS	5754.9949	PASS	5754.9926	PASS	5754.9947	PASS
10	120	5755.0265	PASS	5755.03	PASS	5755.0272	PASS	5755.0273	PASS
0	120	5755.0051	PASS	5755.0048	PASS	5755.0067	PASS	5755.0039	PASS
-10	120	5754.9855	PASS	5754.9875	PASS	5754.9895	PASS	5754.9895	PASS
-20	120	5754.9839	PASS	5754.9861	PASS	5754.9854	PASS	5754.9839	PASS
-30	120	5755.0143	PASS	5755.0099	PASS	5755.0108	PASS	5755.0143	PASS
Max. Deviation (ppm)		4.604692	PASS	-4.691573	PASS	4.726325	PASS	4.743701	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain3

TEMP. (°C)	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	5754.9911	PASS	5754.9954	PASS	5754.9928	PASS	5754.9937	PASS
	120	5754.9908	PASS	5754.9949	PASS	5754.9926	PASS	5754.9947	PASS
	102	5754.9906	PASS	5754.9952	PASS	5754.9929	PASS	5754.9936	PASS
Max. Deviation (ppm)		-1.633362	PASS	-0.886186	PASS	-1.285838	PASS	-1.112076	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain1

TEMP. (°C)	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	5794.9801	PASS	5794.9805	PASS	5794.9828	PASS	5794.9833	PASS
40	120	5795.0234	PASS	5795.0258	PASS	5795.0232	PASS	5795.0257	PASS
30	120	5795.0146	PASS	5795.019	PASS	5795.0143	PASS	5795.0184	PASS
20	120	5795.0212	PASS	5795.024	PASS	5795.0183	PASS	5795.0211	PASS
10	120	5795.0098	PASS	5795.0052	PASS	5795.0106	PASS	5795.0091	PASS
0	120	5794.9933	PASS	5794.996	PASS	5794.9946	PASS	5794.9928	PASS
-10	120	5795.022	PASS	5795.0219	PASS	5795.0258	PASS	5795.025	PASS
-20	120	5794.9958	PASS	5794.9954	PASS	5794.9976	PASS	5794.9991	PASS
-30	120	5794.9774	PASS	5794.9744	PASS	5794.972	PASS	5794.9739	PASS
Max. Deviation (ppm)		4.037964	PASS	-4.417601	PASS	-4.831752	PASS	-4.503883	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain1

TEMP. (°C)	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	5795.0214	PASS	5795.0243	PASS	5795.0181	PASS	5795.0206	PASS
	120	5795.0212	PASS	5795.024	PASS	5795.0183	PASS	5795.0211	PASS
	102	5795.0201	PASS	5795.024	PASS	5795.0189	PASS	5795.0202	PASS
Max. Deviation (ppm)		3.692839	PASS	4.193270	PASS	3.261432	PASS	3.641070	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain2

TEMP. (°C)	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	5794.9802	PASS	5794.9764	PASS	5794.9772	PASS	5794.9803	PASS
40	120	5794.981	PASS	5794.9755	PASS	5794.9769	PASS	5794.9756	PASS
30	120	5794.9843	PASS	5794.9842	PASS	5794.9875	PASS	5794.9859	PASS
20	120	5794.996	PASS	5794.992	PASS	5794.9923	PASS	5794.9922	PASS
10	120	5794.9882	PASS	5794.9883	PASS	5794.9887	PASS	5794.9883	PASS
0	120	5794.9786	PASS	5794.978	PASS	5794.9786	PASS	5794.9781	PASS
-10	120	5795.0011	PASS	5794.9989	PASS	5795.0011	PASS	5795.001	PASS
-20	120	5795.0178	PASS	5795.0168	PASS	5795.0158	PASS	5795.0144	PASS
-30	120	5795.0111	PASS	5795.0122	PASS	5795.0155	PASS	5795.0113	PASS
Max. Deviation (ppm)		-3.692839	PASS	-4.227783	PASS	-3.986195	PASS	-4.210526	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain2

TEMP. (°C)	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	5794.9951	PASS	5794.9918	PASS	5794.9933	PASS	5794.9931	PASS
	120	5794.996	PASS	5794.992	PASS	5794.9923	PASS	5794.9922	PASS
	102	5794.9961	PASS	5794.992	PASS	5794.9926	PASS	5794.9921	PASS
Max. Deviation (ppm)		-0.845557	PASS	-1.415013	PASS	-1.328732	PASS	-1.363244	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain3

TEMP. (°C)	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	5794.9817	PASS	5794.9818	PASS	5794.9862	PASS	5794.9858	PASS
40	120	5794.9913	PASS	5794.9967	PASS	5794.9923	PASS	5794.9926	PASS
30	120	5795.02	PASS	5795.0227	PASS	5795.0203	PASS	5795.0233	PASS
20	120	5795.0292	PASS	5795.027	PASS	5795.0308	PASS	5795.03	PASS
10	120	5794.9959	PASS	5794.9956	PASS	5794.9938	PASS	5794.9934	PASS
0	120	5795.0044	PASS	5795.0066	PASS	5795.0052	PASS	5795.0056	PASS
-10	120	5795.0016	PASS	5795.0062	PASS	5795.0042	PASS	5795.0043	PASS
-20	120	5794.981	PASS	5794.9803	PASS	5794.9832	PASS	5794.9803	PASS
-30	120	5795.0021	PASS	5795.004	PASS	5795.0026	PASS	5795.0039	PASS
Max. Deviation (ppm)		5.038827	PASS	4.659189	PASS	5.314927	PASS	5.176877	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain3

TEMP. (°C)	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	5795.0281	PASS	5795.0279	PASS	5795.0302	PASS	5795.0309	PASS
	120	5795.0292	PASS	5795.027	PASS	5795.0308	PASS	5795.03	PASS
	102	5795.03	PASS	5795.028	PASS	5795.0307	PASS	5795.029	PASS
Max. Deviation (ppm)		5.176877	PASS	4.831752	PASS	5.314927	PASS	5.332183	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain1

TEMP. (°C)	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	5210.0182	PASS	5210.0218	PASS	5210.0178	PASS	5210.0186	PASS
40	120	5209.9868	PASS	5209.9889	PASS	5209.9878	PASS	5209.991	PASS
30	120	5209.9919	PASS	5209.9874	PASS	5209.9914	PASS	5209.9877	PASS
20	120	5209.9797	PASS	5209.9786	PASS	5209.98	PASS	5209.9786	PASS
10	120	5209.9966	PASS	5209.9969	PASS	5209.9952	PASS	5209.9959	PASS
0	120	5209.9918	PASS	5209.9946	PASS	5209.9934	PASS	5209.9908	PASS
-10	120	5209.9969	PASS	5209.9965	PASS	5209.9957	PASS	5209.9946	PASS
-20	120	5209.9938	PASS	5209.9944	PASS	5209.9942	PASS	5209.9925	PASS
-30	120	5210.012	PASS	5210.0103	PASS	5210.0091	PASS	5210.0087	PASS
Max. Deviation (ppm)		-3.896353	PASS	-4.107486	PASS	-3.838772	PASS	-4.107486	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain1

TEMP. (°C)	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	5209.9802	PASS	5209.9792	PASS	5209.9797	PASS	5209.9796	PASS
	120	5209.9797	PASS	5209.9786	PASS	5209.98	PASS	5209.9786	PASS
	102	5209.9793	PASS	5209.9788	PASS	5209.9804	PASS	5209.9776	PASS
Max. Deviation (ppm)		-3.973129	PASS	-4.107486	PASS	-3.896353	PASS	-4.299424	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain2

TEMP. (°C)	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	5210.0135	PASS	5210.0135	PASS	5210.0125	PASS	5210.0125	PASS
40	120	5209.9783	PASS	5209.9775	PASS	5209.9812	PASS	5209.9779	PASS
30	120	5209.984	PASS	5209.9856	PASS	5209.9856	PASS	5209.9842	PASS
20	120	5210.0123	PASS	5210.0171	PASS	5210.0138	PASS	5210.0147	PASS
10	120	5209.979	PASS	5209.9822	PASS	5209.9792	PASS	5209.9781	PASS
0	120	5210.0059	PASS	5210.0065	PASS	5210.0072	PASS	5210.0094	PASS
-10	120	5210.0098	PASS	5210.0145	PASS	5210.0116	PASS	5210.0101	PASS
-20	120	5210.0026	PASS	5209.9984	PASS	5209.9974	PASS	5210.0026	PASS
-30	120	5210.0111	PASS	5210.0078	PASS	5210.0086	PASS	5210.0074	PASS
Max. Deviation (ppm)		-4.165067	PASS	-4.318618	PASS	-3.992322	PASS	-4.241843	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain2

TEMP. (°C)	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	5210.0119	PASS	5210.0164	PASS	5210.0147	PASS	5210.0147	PASS
	120	5210.0123	PASS	5210.0171	PASS	5210.0138	PASS	5210.0147	PASS
	102	5210.0128	PASS	5210.0178	PASS	5210.0136	PASS	5210.0156	PASS
Max. Deviation (ppm)		2.456814	PASS	3.416507	PASS	2.821497	PASS	2.994242	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain3

TEMP. (°C)	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	5209.996	PASS	5209.9943	PASS	5209.995	PASS	5209.9982	PASS
40	120	5210.006	PASS	5210.0029	PASS	5210.0044	PASS	5210.001	PASS
30	120	5209.9833	PASS	5209.988	PASS	5209.9835	PASS	5209.9833	PASS
20	120	5209.9885	PASS	5209.9902	PASS	5209.9896	PASS	5209.9892	PASS
10	120	5210.0091	PASS	5210.0125	PASS	5210.0102	PASS	5210.0115	PASS
0	120	5210.025	PASS	5210.0246	PASS	5210.0228	PASS	5210.0255	PASS
-10	120	5210.0027	PASS	5210.0034	PASS	5210.0008	PASS	5209.999	PASS
-20	120	5210.0197	PASS	5210.0208	PASS	5210.0176	PASS	5210.0175	PASS
-30	120	5209.9987	PASS	5209.9978	PASS	5209.999	PASS	5209.9966	PASS
Max. Deviation (ppm)		4.798464	PASS	4.721689	PASS	4.376200	PASS	4.894434	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain3

TEMP. (°C)	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	5209.9882	PASS	5209.991	PASS	5209.99	PASS	5209.9897	PASS
	120	5209.9885	PASS	5209.9902	PASS	5209.9896	PASS	5209.9892	PASS
	102	5209.9891	PASS	5209.9893	PASS	5209.9886	PASS	5209.9902	PASS
Max. Deviation (ppm)		-2.264875	PASS	-2.053743	PASS	-2.188100	PASS	-2.072937	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain1

TEMP. (°C)	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	5775.0143	PASS	5775.0164	PASS	5775.0132	PASS	5775.0174	PASS
40	120	5774.9941	PASS	5774.9942	PASS	5774.9911	PASS	5774.9911	PASS
30	120	5774.9915	PASS	5774.9941	PASS	5774.989	PASS	5774.9915	PASS
20	120	5774.9836	PASS	5774.9823	PASS	5774.9806	PASS	5774.9812	PASS
10	120	5774.9808	PASS	5774.9768	PASS	5774.9758	PASS	5774.9813	PASS
0	120	5775.0179	PASS	5775.0187	PASS	5775.02	PASS	5775.0218	PASS
-10	120	5774.9805	PASS	5774.9858	PASS	5774.9839	PASS	5774.9833	PASS
-20	120	5775.0001	PASS	5775.0014	PASS	5775.0026	PASS	5774.9983	PASS
-30	120	5774.9882	PASS	5774.9862	PASS	5774.9873	PASS	5774.9911	PASS
Max. Deviation (ppm)		-3.376623	PASS	-4.017316	PASS	-4.190476	PASS	-3.255411	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain1

TEMP. (°C)	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	5774.9827	PASS	5774.9814	PASS	5774.98	PASS	5774.9811	PASS
	120	5774.9836	PASS	5774.9823	PASS	5774.9806	PASS	5774.9812	PASS
	102	5774.9841	PASS	5774.9834	PASS	5774.9795	PASS	5774.9809	PASS
Max. Deviation (ppm)		-2.995671	PASS	-3.220779	PASS	-3.549784	PASS	-3.307359	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain2

TEMP. (°C)	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	5774.9882	PASS	5774.9893	PASS	5774.9867	PASS	5774.9862	PASS
40	120	5775.0234	PASS	5775.0276	PASS	5775.0278	PASS	5775.0242	PASS
30	120	5774.9742	PASS	5774.9749	PASS	5774.9734	PASS	5774.9731	PASS
20	120	5775.014	PASS	5775.0118	PASS	5775.0117	PASS	5775.0134	PASS
10	120	5775.03	PASS	5775.0258	PASS	5775.0285	PASS	5775.0263	PASS
0	120	5774.9937	PASS	5774.9946	PASS	5774.9921	PASS	5774.9947	PASS
-10	120	5774.9739	PASS	5774.9718	PASS	5774.9747	PASS	5774.9729	PASS
-20	120	5774.9932	PASS	5774.9905	PASS	5774.9902	PASS	5774.992	PASS
-30	120	5774.9797	PASS	5774.9753	PASS	5774.9755	PASS	5774.979	PASS
Max. Deviation (ppm)		5.194805	PASS	4.779221	PASS	4.935065	PASS	4.554113	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain2

TEMP. (°C)	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	5775.0151	PASS	5775.0111	PASS	5775.011	PASS	5775.0145	PASS
	120	5775.014	PASS	5775.0118	PASS	5775.0117	PASS	5775.0134	PASS
	102	5775.0145	PASS	5775.012	PASS	5775.0121	PASS	5775.0137	PASS
Max. Deviation (ppm)		2.614719	PASS	2.077922	PASS	2.095238	PASS	2.510823	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain3

TEMP. (°C)	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	5774.982	PASS	5774.9789	PASS	5774.9835	PASS	5774.9793	PASS
40	120	5775.0188	PASS	5775.017	PASS	5775.0197	PASS	5775.0167	PASS
30	120	5775.025	PASS	5775.027	PASS	5775.0301	PASS	5775.0268	PASS
20	120	5775.0275	PASS	5775.0223	PASS	5775.0258	PASS	5775.0221	PASS
10	120	5775.0039	PASS	5775	PASS	5775.0045	PASS	5775.0019	PASS
0	120	5775.0119	PASS	5775.0131	PASS	5775.0119	PASS	5775.0109	PASS
-10	120	5775.0213	PASS	5775.025	PASS	5775.0229	PASS	5775.0234	PASS
-20	120	5774.9948	PASS	5774.9926	PASS	5774.9958	PASS	5774.9962	PASS
-30	120	5774.9984	PASS	5774.9946	PASS	5774.9969	PASS	5774.9956	PASS
Max. Deviation (ppm)		4.761905	PASS	4.675325	PASS	5.212121	PASS	4.640693	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain3

TEMP. (°C)	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	5775.0274	PASS	5775.0223	PASS	5775.0254	PASS	5775.0223	PASS
	120	5775.0275	PASS	5775.0223	PASS	5775.0258	PASS	5775.0221	PASS
	102	5775.0283	PASS	5775.0221	PASS	5775.0256	PASS	5775.0226	PASS
Max. Deviation (ppm)		4.900433	PASS	3.861472	PASS	4.467532	PASS	3.913420	PASS
IEEE Limit (ppm)		±20ppm							

5 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 24, 2016	Oct. 23, 2017
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 26, 2016	Oct. 25, 2017
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 03, 2017	June 02, 2018
50 ohms Terminator	N/A	EMC-02	Sep. 29, 2016	Sep. 28, 2017
RF Cable	5D-FB	COCCAB-001	Sep. 30, 2016	Sep. 29, 2017
10 dB PAD Mini-Circuits	HAT-10+	CONATT-004	June 18, 2017	June 17, 2018
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 1.
3. Tested Date: Aug. 02, 2017

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	July 12, 2017	July 11, 2018
Pre-Amplifier ^(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna ^(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 17, 2017	Jan. 16, 2018
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	May 06, 2017	May 05, 2018
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Dec. 29, 2016	Dec. 28, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 01, 2017	Mar. 31, 2018
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Oct. 05, 2016	Oct. 04, 2017
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Dec. 28, 2016	Dec. 27, 2017
Pre-Amplifier EMCI	EMC12630SE	980384	Feb. 02, 2017	Feb. 01, 2018
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160922 150317 150322	Feb. 02, 2017 Mar. 29, 2017 Mar. 29, 2017	Feb. 01, 2018 Mar. 28, 2018 Mar. 28, 2018
Spectrum Analyzer Keysight	N9030A	MY54490679	July 25, 2017	July 24, 2018
Pre-Amplifier EMCI	EMC184045SE	980386	Feb. 02, 2017	Feb. 01, 2018
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 15, 2016	Dec. 14, 2017
RF Cable	SUCOFLEX 102	36432/2 36433/2	Jan. 15, 2017	Jan. 14, 2018
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Spectrum Analyzer Agilent	E4446A	MY48250253	Dec. 21, 2016	Dec. 20, 2017
Power meter Anritsu	ML2495A	1014008	May 11, 2017	May 10, 2018
Power sensor Anritsu	MA2411B	0917122	May 11, 2017	May 10, 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 966 Chamber No. 3.
3. The CANADA Site Registration No. is 20331-1
4. Tested Date: July 27 to Aug. 09, 2017

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:

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

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