FCC RF Test Report (WLAN 5GHz)

Report No.:	RF191209E01-2
FCC ID:	RSE-FGA5330
Equipment Name:	Gateway
Trade Name:	Technicolor
Model Number:	FGA5330
Product Code:	FGA5330TCH2
Received Date:	Dec. 09, 2019
Test Date:	Jan. 09 to Apr. 07, 2020
Issued Date:	June 17, 2020
Applicant:	Technicolor Delivery Technologies Belgium
Address:	Prins Boudewinnlaan 47 Edegem B-2650 Belgium
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

Testing Laboratory
2022

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Release Control Record

Issue No.	Description	Date Issued
RF191209E01-2	Original release.	June 17, 2020

1 Certificate of Conformity

Equipment Name:	Gateway
Trade Name:	Technicolor
Test Model:	FGA5330
Product Code:	FGA5330TCH2
Sample Status:	LAB2A
Applicant:	Technicolor Delivery Technologies Belgium
Test Date:	Jan. 09 to Apr. 07, 2020
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 RF characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** June 17, 2020

Claire Kuan / Specialist

Approved by : _____ , **Date:** June 17, 2020

Clark Lin / Technical 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 -16.01dB at 0.34922MHz.	-	PASS
4.2	-	99% Occupied Bandwidth & 26dB Bandwidth	99% Occupied Bandwidth **5150-5250MHz:** 11ax (160M):78.72 MHz **5250-5350MHz:** 11ax (20M):19.32 MHz 11ax (40M):38.16 MHz 11ax (80M):77.28 MHz 11ax (160M):78.61 MHz **5470-5725MHz:** 11ax (20M):19.32 MHz 11ax (40M):37.92 MHz 11ax (80M):77.76 MHz 11ax (160M):156.48 MHz **5725-5850MHz:** 11ax (20M):4.60 MHz 11ax (40M):3.96 MHz 11ax (80M):3.40 MHz 26dB Bandwidth **5150-5250MHz:** 11ax (160M):82.50 MHz **5250-5350MHz:** 11ax (20M):22.12 MHz 11ax (40M):41.69 MHz 11ax (80M):83.15 MHz 11ax (160M):82.48 MHz **5470-5725MHz:** 11ax (20M):22.08 MHz 11ax (40M):41.73 MHz 11ax (80M):83.25 MHz 11ax (160M):165.03 MHz	-	-
4.7	15.407(e)	6dB bandwidth for U-NII-3	**5725-5850MHz:** 11ax (20M):4.52 MHz 11ax (40M):3.84 MHz 11ax (80M):3.83 MHz	≥500KHz	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
4.3	15.407 (a)(1/2/3)	Maximum Conducted Output Power	**5150-5250MHz:** **11ax (160M):** 1S4T CDD: 18.00 dBm 1S4T TxBF: 17.97 dBm 2S4T TxBF: 17.95 dBm 3S4T TxBF: 16.24 dBm **5250-5350MHz:** **11ax (20M):** 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.82 dBm 3S4T TxBF: 23.80 dBm **11ax (40M):** 1S4T CDD: 23.94 dBm 1S4T TxBF: 23.87 dBm 2S4T TxBF: 23.92 dBm 3S4T TxBF: 23.91 dBm **11ax (80M):** 1S4T CDD: 23.83 dBm 1S4T TxBF: 23.89 dBm 2S4T TxBF: 22.57 dBm 3S4T TxBF: 23.87 dBm **11ax (160M):** 1S4T CDD: 17.91 dBm 1S4T TxBF: 18.08 dBm 2S4T TxBF: 17.85 dBm 3S4T TxBF: 16.20 dBm **5470-5725MHz:** **11ax (20M):** 1S4T CDD: 23.93 dBm 1S4T TxBF: 23.81 dBm 2S4T TxBF: 23.79 dBm 3S4T TxBF: 23.81 dBm **11ax (40M):** 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.72 dBm 3S4T TxBF: 23.83 dBm **11ax (80M):** 1S4T CDD: 23.55 dBm 1S4T TxBF: 23.56 dBm 2S4T TxBF: 23.54 dBm 3S4T TxBF: 23.52 dBm **11ax (160M):** 1S4T CDD: 23.61 dBm 1S4T TxBF: 23.37 dBm 2S4T TxBF: 23.57 dBm 3S4T TxBF: 22.15 dBm	Power [dBm] 5150-5250MHz:30 5250-5350MHz:24 5470-5725MHz:24	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
			5725-5850MHz: **11ax (20M):** 1S4T CDD: 15.63 dBm 1S4T TxBF: 15.64 dBm 2S4T TxBF: 15.08 dBm 3S4T TxBF: 14.77 dBm **11ax (40M):** 1S4T CDD: 12.11 dBm 1S4T TxBF: 12.30 dBm 2S4T TxBF: 10.64 dBm 3S4T TxBF: 9.75 dBm **11ax (80M):** 1S4T CDD: 7.86 dBm 1S4T TxBF: 6.68 dBm 2S4T TxBF: 6.01 dBm 3S4T TxBF: 6.07 dBm	5725-5850MHz:30	

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
4.4	15.407 (a)(1/2/3)	Power Spectral Density	**5150-5250MHz:** [dBm/MHz] **11ax (160M):** 1S4T CDD: 0.50 1S4T TxBF: 0.44 2S4T TxBF: 0.79 3S4T TxBF: -0.92 **5250-5350MHz:** [dBm/MHz] **11ax (20M):** 1S4T CDD: 9.46 1S4T TxBF: 9.77 2S4T TxBF: 9.42 3S4T TxBF: 9.44 **11ax (40M):** 1S4T CDD: 7.21 1S4T TxBF: 6.87 2S4T TxBF: 7.56 3S4T TxBF: 7.59 **11ax (80M):** 1S4T CDD: 4.42 1S4T TxBF: 4.42 2S4T TxBF: 3.16 3S4T TxBF: 4.77 **11ax (160M):** 1S4T CDD: 0.40 1S4T TxBF: 0.39 2S4T TxBF: 0.72 3S4T TxBF: -0.94 **5470-5725MHz:** [dBm/MHz] **11ax (20M):** 1S4T CDD: 9.90 1S4T TxBF: 9.66 2S4T TxBF: 9.82 3S4T TxBF: 9.83 **11ax (40M):** 1S4T CDD: 6.79 1S4T TxBF: 6..81 2S4T TxBF: 6.43 3S4T TxBF: 6.61 **11ax (80M):** 1S4T CDD: 4.26 1S4T TxBF: 4.26 2S4T TxBF: 3.61 3S4T TxBF: 3.91 **11ax (160M):** 1S4T CDD: 1.31 1S4T TxBF: 0.90 2S4T TxBF: 1.35 3S4T TxBF: 0.08	5150-5250MHz: 17 [dBm/MHz] 5250-5350MHz: 11 [dBm/MHz] 5470-5725MHz: 11 [dBm/MHz]	PASS

			5470-5725MHz: [dBm/500kHz] **11ax (20M):** 1S4T CDD: 2.44 1S4T TxBF: 2.70 2S4T TxBF: 2.38 3S4T TxBF: 2.50 **11ax (40M):** 1S4T CDD: -1.13 1S4T TxBF: -1.01 2S4T TxBF: -0.86 3S4T TxBF: -0.47 **11ax (80M):** 1S4T CDD: -4.39 1S4T TxBF: -4.91 2S4T TxBF: -4.77 3S4T TxBF: -4.40	5725-5850MHz: 30 [dBm/500kHz]	
4.5	15.407 (b)(1/2/3/4/6)	Radiated Emissions	Margin is -16.2dB at 15780.00MHz	-	PASS
		Band Edge	Margin is -0.1dB at 5139.10MHz, 5470.00MHz	-	PASS
4.6	15.407(g)	Frequency Stability	-	Signal shall remain in-band	PASS

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.8 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.0 dB
	30MHz ~ 1GHz	5.1 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.1 dB
	6GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.2 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	Gateway		
Trade Name	Technicolor		
Model Number	FGA5330		
Product Code	FGA5330TCH2		
FCC ID	RSE-FGA5330		
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 802.11ax (20MHz):
		☐	IEEE 802.11ax (40MHz):
		☐	IEEE 802.11ax (80MHz)
		■	IEEE 802.11ax (160MHz) 1S4T CDD: 18.00 dBm 1S4T TxBF: 17.97 dBm 2S4T TxBF: 17.95 dBm 3S4T TxBF: 16.24 dBm
	U-NII-2A 5250~5350MHz	■	IEEE 802.11ax (20MHz): 1S4T CDD: 23.89 dBms 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.82 dBm 3S4T TxBF: 23.80 dBm
		■	IEEE 802.11ax (40MHz): 1S4T CDD: 23.94 dBm 1S4T TxBF: 23.87 dBm 2S4T TxBF: 23.92 dBm 3S4T TxBF: 23.91 dBm
		■	IEEE 802.11ax (80MHz): 1S4T CDD: 23.83 dBm 1S4T TxBF: 23.89 dBm 2S4T TxBF: 22.57 dBm 3S4T TxBF: 23.87 dBm
		■	IEEE 802.11ax (160MHz): 1S4T CDD: 17.91 dBm 1S4T TxBF: 18.08 dBm 2S4T TxBF: 17.85 dBm 3S4T TxBF: 16.20 dBm

Operating Band and Conducted Output Power	**U-NII-2C** 5470~ 5725 MHz	■	IEEE 802.11ax (20MHz): 1S4T CDD: 23.93 dBm 1S4T TxBF: 23.81 dBm 2S4T TxBF: 23.79 dBm 3S4T TxBF: 23.81 dBm
		■	IEEE 802.11ax (40MHz): 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.72 dBm 3S4T TxBF: 23.83 dBm
		■	IEEE 802.11ax (80MHz): 1S4T CDD: 23.55 dBm 1S4T TxBF: 23.56 dBm 2S4T TxBF: 23.54 dBm 3S4T TxBF: 23.52 dBm
		■	IEEE 802.11ax (160MHz): 1S4T CDD: 23.61 dBm 1S4T TxBF: 23.37 dBm 2S4T TxBF: 23.57 dBm 3S4T TxBF: 22.15 dBm
	U-NII-3 5725~ 5850 MHz	□	IEEE 802.11ax (20MHz):
		□	IEEE 802.11ax (40MHz):
		□	IEEE 802.11ax (80MHz)
Product Type	For IEEE 802.11a: WLAN(4TX, 4RX) For IEEE 802.11n: WLAN(4TX, 4RX) For IEEE 802.11ac: WLAN (4TX, 4RX) For IEEE 802.11ax: WLAN (4TX, 4RX)		
Nominal Bandwidth	20MHz / 40MHz / 80MHz /160MHz		
Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM/ 256QAM) 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM/ 256QAM/ 1024QAM)		
Data Rate (Mbps)	11a mode : OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode : MCS0~MCS31 11n(40MHz) mode : MCS0~MCS31 11ac(20MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(40MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(80MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(160MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ax(20MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(40MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(80MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(160MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table		
TPC Function	■	With TPC	□ Without TPC
Beam forming Function	■	With Beam forming	□ Without Beam forming
DFS Operating Mode(s)	■	Master	□ Slave without radar detection
DFS Function	■	5250~5350MHz	
	■	5470~5725MHz	
	■	5600~5650MHz	
Off Channel CAC Feature Implemented	■	No	

Ad-hoc/Hotspot Mode	■	No Ad-hoc/Hotspot operation in 5150 - 5350 MHz and 5470 - 5725 MHz.
User Access Restrictions	■	DFS controls (hardware or software) related to radar detection are NOT accessible to the user.
I/O Ports	LAN 1G Port x 3 LAN 10G Port x 1 WAN Port x 1 USB 3.0 Port x 1 SFP Port x1 FXS Port x 1	
Hardware Version	LAB2A	
Software Version	19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f14fc9	

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
11n 20MHz Nss=4	MCS24	26	28.9	11n 40MHz Nss=4	MCS24	54	60
	MCS25	52	57.8		MCS25	108	120
	MCS26	78	86.7		MCS26	162	180
	MCS27	104	115.6		MCS27	216	240
	MCS28	156	173.3		MCS28	324	360
	MCS29	208	231.1		MCS29	432	480
	MCS30	234	260		MCS30	486	540
	MCS31	260	288.9		MCS31	540	600

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	Note	Note		MCS9	360.0	400.0		MCS9	780.0	866.7
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 = 3	MCS0	19.5	21.7	11ac 40MHz NSS = 3	MCS0	40.5	45.0	11ac 80MHz NSS = 3	MCS0	87.8	97.5
	MCS1	39.0	43.3		MCS1	81.0	90.0		MCS1	175.5	195.0
	MCS2	58.5	65.0		MCS2	121.5	135.0		MCS2	263.3	292.5
	MCS3	78.0	86.7		MCS3	162.0	180.0		MCS3	351.0	190.0
	MCS4	117.0	130		MCS4	243.0	270.0		MCS4	526.5	585.0
	MCS5	156.0	173.3		MCS5	324.0	360.0		MCS5	702.0	780.0
	MCS6	175.5	195.0		MCS6	364.5	405.0		MCS6	Note	Note
	MCS7	195.0	216.7		MCS7	405.0	450.0		MCS7	877.5	975.0
	MCS8	234.0	260.0		MCS8	486.0	540.0		MCS8	1053.0	1170.0
	MCS9	260.0	228.9		MCS9	540.0	600.0		MCS9	1170.0	1300.0
Note: MCS 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 = 4	MCS0	26.0	28.9	11ac 40MHz NSS = 4	MCS0	54.0	60.0	11ac 80MHz NSS = 4	MCS0	117.0	130.0
	MCS1	52.0	57.8		MCS1	108.0	120.0		MCS1	234.0	260.0
	MCS2	78.0	86.7		MCS2	162.0	180.0		MCS2	351.0	390.0
	MCS3	104.0	115.6		MCS3	216.0	240.0		MCS3	468.0	520.0
	MCS4	156.0	173.3		MCS4	324.0	360.0		MCS4	702.0	780.0
	MCS5	208.0	231.1		MCS5	432.0	480.0		MCS5	936.0	1040.0
	MCS6	234.0	260.0		MCS6	486.0	540.0		MCS6	1053.0	1170.0
	MCS7	260.0	288.9		MCS7	540.0	600.0		MCS7	1170.0	1300.0
	MCS8	312.0	346.7		MCS8	648.0	720.0		MCS8	1404.0	1560.0
	MCS9	Note	Note		MCS9	720.0	800.0		MCS9	1560.0	1733.3
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)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 160MHz NSS = 1	MCS0	58.5	65	11ac 160MHz NSS = 2	MCS0	117	130
	MCS1	117	130		MCS1	234	260
	MCS2	175.5	195		MCS2	351	390
	MCS3	234	260		MCS3	468	520
	MCS4	351	390		MCS4	702	780
	MCS5	468	520		MCS5	936	1040
	MCS6	526.5	585		MCS6	1053	1170
	MCS7	585	650		MCS7	1170	1300
	MCS8	702	780		MCS8	1404	1560
	MCS9	780	866.7		MCS9	1560	1733.3
Standard	Index	Data Rate (Mbps)		Standard	Index	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 160MHz NSS = 3	MCS0	175.5	195	11ac 160MHz NSS = 4	MCS0	234	260
	MCS1	351	390		MCS1	468	520
	MCS2	526.5	585		MCS2	702	780
	MCS3	702	780		MCS3	936	1040
	MCS4	1053	1170		MCS4	1404	1560
	MCS5	1404	1560		MCS5	1872	2080
	MCS6	1579.5	1755		MCS6	2106	2340
	MCS7	1755	1950		MCS7	2340	2600
	MCS8	2106	2340		MCS8	2808	3120
	MCS9	N/A	N/A		MCS9	3120	3466.7
Note: MCS 9 is invalid due to mod (NCBPS/NES, DR) not being equal to 0.							

802.11ax Data Rate spec

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MH NSS=1	MCS0	8.6	8.1	7.3	11ax 40MHz NSS=1	MCS0	17.2	16.3	14.6	11ax 80MHz NSS=1	MCS0	36	34	30.6
	MCS1	17.2	16.3	14.6		MCS1	34.4	32.5	29.3		MCS1	72.1	68.1	61.3
	MCS2	25.8	24.4	21.9		MCS2	51.6	48.8	43.9		MCS2	108.1	102.1	91.9
	MCS3	34.4	32.5	29.3		MCS3	68.8	65	58.5		MCS3	144.1	136.1	122.5
	MCS4	51.6	48.8	43.9		MCS4	103.2	97.5	87.8		MCS4	216.2	204.2	183.8
	MCS5	68.8	65	58.5		MCS5	137.6	130	117		MCS5	288.2	272.2	245
	MCS6	77.4	73.1	65.8		MCS6	154.9	146.3	131.6		MCS6	324.3	306.3	275.6
	MCS7	86	81.3	73.1		MCS7	172.1	162.5	146.3		MCS7	360.3	340.3	306.3
	MCS8	103.2	97.5	87.8		MCS8	206.5	195	175.5		MCS8	432.4	408.3	367.5
	MCS9	114.7	108.3	97.5		MCS9	229.4	216.7	195		MCS9	480.4	453.7	408.3
	MCS10	129	121.9	109.7		MCS10	258.1	243.8	219.4		MCS10	540.4	510.4	459.4
	MCS11	143.4	135.4	121.9		MCS11	286.8	270.8	243.8		MCS11	600.5	567.1	510.4

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=2	MCS0	17.2	16.3	14.6	11ax 40MHz NSS=2	MCS0	34.4	32.5	29.3	11ax 80MHz NSS=2	MCS0	72.1	68.1	61.3
	MCS1	34.4	32.5	29.3		MCS1	68.8	65	58.5		MCS1	144.1	136.1	122.5
	MCS2	51.6	48.8	43.9		MCS2	103.2	97.5	87.8		MCS2	216.2	204.2	183.8
	MCS3	68.8	65	58.5		MCS3	137.6	130	117		MCS3	288.2	272.2	245
	MCS4	103.2	97.5	87.8		MCS4	206.5	195	175.5		MCS4	432.4	408.3	367.5
	MCS5	137.6	130	117		MCS5	275.3	260	234		MCS5	576.5	544.4	490
	MCS6	154.9	146.3	131.6		MCS6	309.7	292.5	263.3		MCS6	648.5	612.5	551.3
	MCS7	172.1	162.5	146.3		MCS7	344.1	325	292.5		MCS7	720.6	680.6	612.5
	MCS8	206.5	195	175.5		MCS8	412.`9	390	351		MCS8	864.7	816.7	735
	MCS9	229.4	216.7	195		MCS9	458.8	433.3	390		MCS9	960.8	907.4	816.7
	MCS10	258.1	243.8	219.4		MCS10	516.2	487.5	438.8		MCS10	1080.9	1020.8	918.8
	MCS11	286.8	270.8	243.8		MCS11	573.5	541.7	487.5		MCS11	1201	1134.3	1020.8

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=3	MCS0	25.8	24.4	21.9	11ax 40MHz NSS=3	MCS0	51.6	48.8	43.9	11ax 80MHz NSS=3	MCS0	108.1	102.1	91.9
	MCS1	51.6	48.8	43.9		MCS1	103.2	97.5	87.8		MCS1	216.2	204.2	183.8
	MCS2	77.4	73.1	65.8		MCS2	154.9	146.3	131.6		MCS2	324.3	306.3	275.6
	MCS3	103.2	97.5	87.8		MCS3	206.5	195	175.5		MCS3	432.4	408.3	367.5
	MCS4	154.9	146.3	131.6		MCS4	309.7	292.5	263.3		MCS4	648.5	612.5	551.3
	MCS5	206.5	195	175.5		MCS5	412.9	390	351		MCS5	864.7	816.7	735
	MCS6	232.3	219.4	197.4		MCS6	464.6	438.8	394.9		MCS6	972.8	918.8	826.9
	MCS7	258.1	243.8	219.4		MCS7	516.2	487.5	438.8		MCS7	1080.9	1020.8	918.8
	MCS8	309.7	292.5	263.3		MCS8	619.4	585	526.5		MCS8	1297.1	1225	1102.5
	MCS9	344.1	325	292.5		MCS9	688.2	650	585		MCS9	1441.2	1361.1	1225
	MCS10	387.1	365.6	329.1		MCS10	774.3	731.3	658.1		MCS10	1621.3	1531.3	1378.1
	MCS11	430.1	406.3	365.6		MCS11	860.3	812.5	731.3		MCS11	1801.5	1701.4	1531.3

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 20MHz NSS=4	MCS0	34.4	32.5	29.3	11ax 40MHz NSS=4	MCS0	68.8	65	58.5	11ax 80MHz NSS=4	MCS0	144.1	136.1	122.5
	MCS1	68.8	65	58.5		MCS1	137.6	130	117		MCS1	288.2	272.2	245
	MCS2	103.2	97.5	87.8		MCS2	206.5	195	175.5		MCS2	432.4	408.3	367.5
	MCS3	137.6	130	117		MCS3	275.3	260	234		MCS3	576.5	544.4	490
	MCS4	206.5	195	175.5		MCS4	412.9	390	351		MCS4	864.7	816.7	735
	MCS5	275.3	260	234		MCS5	550.6	520	468		MCS5	1152.9	1088.9	980
	MCS6	309.7	292.5	263.3		MCS6	619.4	585	526.5		MCS6	1297.1	1225	1102.5
	MCS7	344.1	325	292.5		MCS7	688.2	650	585		MCS7	1441.2	1361.1	1225
	MCS8	412.9	390	351		MCS8	825.9	780	702		MCS8	1729.4	1633.3	1470
	MCS9	458.8	433.3	390		MCS9	917.6	866.7	780		MCS9	1921.6	1814.8	1633.3
	MCS10	516.2	487.5	438.8		MCS10	1032.4	975	877.5		MCS10	2161.8	2041.7	1837.5
	MCS11	573.5	541.7	487.5		MCS11	1147.1	1083.3	975		MCS11	2401.9	2268.5	2041.7

Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 160MHz NSS = 1	MCS0	72.1	68.1	61.3	11ax 160MHz NSS = 2	MCS0	144.1	136.1	122.5
	MCS1	144.1	136.1	122.5		MCS1	288.2	272.2	245
	MCS2	216.2	204.2	183.8		MCS2	432.4	408.3	367.5
	MCS3	288.2	272.2	245		MCS3	576.5	544.4	490
	MCS4	432.4	408.3	367.5		MCS4	864.7	816.7	735
	MCS5	576.5	544.4	490		MCS5	1152.9	1088.9	980
	MCS6	648.5	612.5	551.3		MCS6	1297.1	1225	1102.5
	MCS7	720.6	680.6	612.5		MCS7	1441.2	1361.1	1225
	MCS8	864.7	816.7	735		MCS8	1729.4	1633.3	1470
	MCS9	960.8	907.4	816.7		MCS9	1921.6	1814.8	1633.3
	MCS10	1080.9	1020.8	918.8		MCS10	2161.8	2041.7	1837.5
	MCS11	1201	1134.3	1020.8		MCS11	2402	2268.5	2041.7
Standard	Index	Data Rate (Mbps)			Standard	Index	Data Rate (Mbps)		
		SGI (0.8us)	MGI (1.6us)	LGI (3.2us)			SGI (0.8us)	MGI (1.6us)	LGI (3.2us)
11ax 160MHz NSS = 3	MCS0	216.2	204.2	183.8	11ax 160MHz NSS = 4	MCS0	288.2	272.2	245
	MCS1	432.4	408.3	367.5		MCS1	576.5	544.4	490
	MCS2	648.5	612.5	551.3		MCS2	864.7	816.7	735
	MCS3	864.7	816.7	735		MCS3	1152.9	1088.9	980
	MCS4	1297.1	1225	1102.5		MCS4	1729.4	1633.3	1470
	MCS5	1729.4	1633.3	1470		MCS5	2305.9	2177.8	1960
	MCS6	1945.6	1837.5	1653.8		MCS6	2594.1	2450	2205
	MCS7	2161.8	2041.7	1837.5		MCS7	2882.4	2722.2	2450
	MCS8	2594.1	2450	2205		MCS8	3458.8	3266.7	2940
	MCS9	2882.4	2722.2	2450		MCS9	3843.1	3629.6	3266.7
	MCS10	3242.6	3062.5	2756.3		MCS10	4323.5	4083.3	3675
	MCS11	3602.9	3402.8	3062.5		MCS11	4803.9	4537	4083.3

3.2 Accessories

Power supply:

Brand	HONOR
Model	ADS-36FKJ-12 12036EPCU
P/N	6274615A
ID	03
Input Power	100-240Vac, 50/60Hz, Max.1.0A
Output Power	12Vdc, 3.0A
Power Line	1.8m 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 10Gbps	Ethernet LAN 1000Mbps	Ethernet WAN 1000Mbps	SFP 10Gbps	USB 3. 0	FXS	WLAN IEEE 802.11ax (2.4G+ 5GHz)4X4
FGA5330	12Vdc 3A	●(1 port)	●(3 port)	●(1 port)	●(1 port)	●(1 port)	●(1 port)	●

●: Equipped
○: Not Equipped

3.5 General Description of Applied Standards and references

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

Test standard:

FCC Part 15, Subpart E (15.407)
ANSI C63.10-2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01, 12/14/2017
KDB 662911 D01 Multiple Transmitter Output v02r01, 10/31/2013

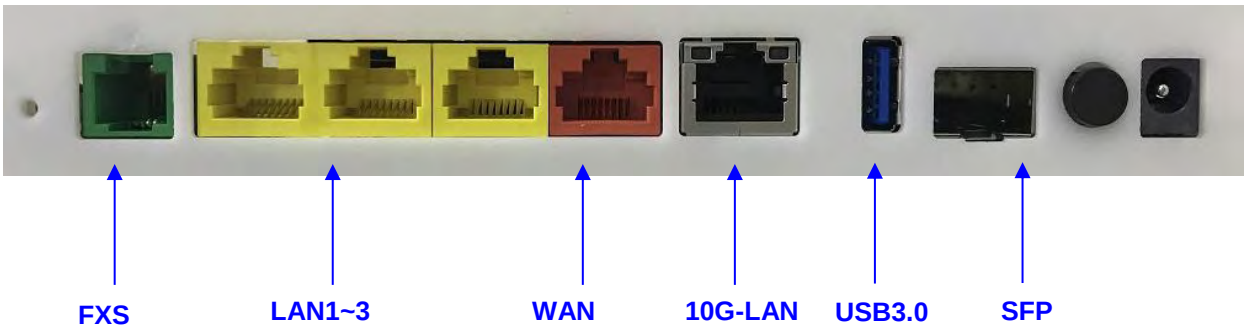
All test items have been performed as a reference to the above KDB test guidance.

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
LAN1, WAN	UTP Cat 5	2 meter	> 10 meter	Two 10 meter cables;	Internal
10G-LAN	UTP Cat 6	2 meter	> 10 meter	10 meter cables;	Internal
SFP	Optical	2 meter	> 10 meter	10 meter cables;	External
FXS	UTP Cat 3	2 meter	> 10 meter	1 meter flat cable	Internal
USB	STP	NA	NA	NA	Internal
AC power	UTP	1.8 meter	>10 meter	1.8 meter	External

3.7 Panel Drawing



3.8 Transmit Operating Mode

For 5250~5350MHz & 5470~5725MHz

Transmit Operating Mode							Transmit Muitiple Antennas					
■	Operating mode 1 (single antenna)						■	1TX				
■	Operating mode 2 (muitiple antenna, no beam forming)						■	2TX	■	3TX	■	4TX
■	Operating mode 3 (muitiple antenna, with beam forming)						■	2TX	■	3TX	■	4TX
■	802.11a	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11n (20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11n (40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac (20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac (40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac (80MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ac (160MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax (20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax (40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax (80MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		
■	802.11ax (160MHz)	Operating mode	■	1TX	■	2TX	■	3TX	■	4TX		

For IEEE802.11a, 6Mbps~54Mbps: 1 Stream 4TX
For IEEE802.11n,
MCS0~MCS7: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX
MCS8~MCS15: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX
MCS16~MCS23: 3 Stream 3TX; 3 Stream 4TX
MCS24~MCS31: 4 Stream 4TX;
For IEEE802.11ac 20MHz
Nss1MCS0~Nss1MCS8: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX
Nss2MCS0~Nss2MCS9: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX
Nss3MCS0~Nss3MCS9: 3 Stream 3TX; 3 Stream 4TX
Nss4MCS0~Nss4MCS8: 4 Stream 4TX
For IEEE802.11ac 40/80MHz/160MHz
Nss1MCS0~Nss1MCS9: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX
Nss2MCS0~Nss2MCS9: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX
Nss3MCS0~Nss3MCS9: 3 Stream 3TX; 3 Stream 4TX
Nss4MCS0~Nss4MCS9: 4 Stream 4TX
For IEEE802.11ax 20/40/80/160MHz
Nss1MCS0~Nss1MCS11: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 4TX, 1 Stream 4TX
Nss2MCS0~Nss2MCS11: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX
Nss3MCS0~Nss3MCS11: 3 Stream 3TX; 3 Stream 4TX
Nss4MCS0~Nss4MCS11: 4 Stream 4TX

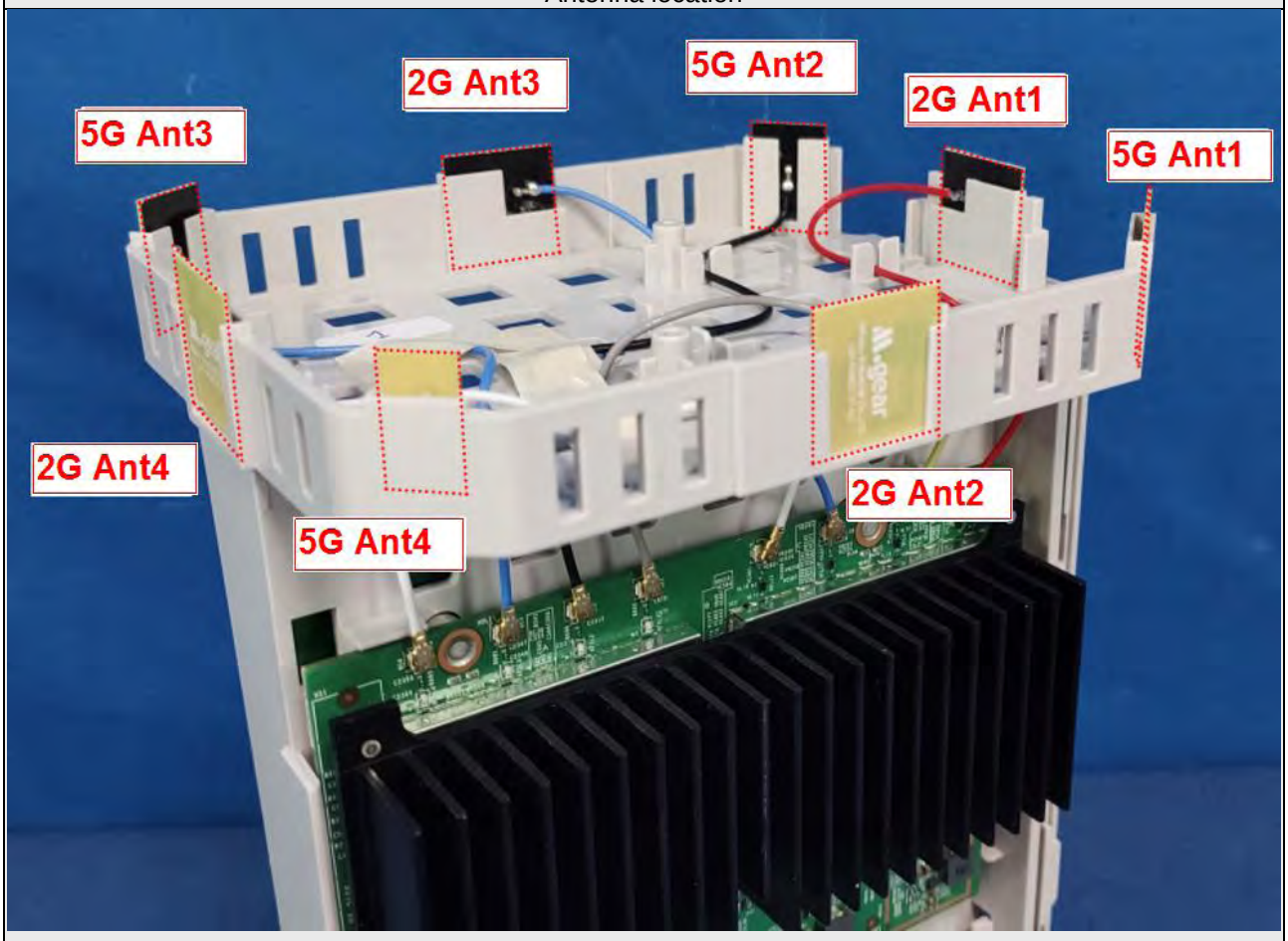
3.9 Antenna Requirements

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
2G-1	WHA YU	C107-511586-A	PCB PIFA	I-pex
2G-2	WHA YU	C107-511589-A	PCB PIFA	I-pex
2G-3	WHA YU	C107-511587-A	PCB PIFA	I-pex
2G-4	WHA YU	C107-511588-A	PCB PIFA	I-pex
5G-1	WHA YU	C107-511590-A	PCB Loop	I-pex
5G-2	WHA YU	C107-511591-A	PCB Dipole	I-pex
5G-3	WHA YU	C107-511592-A	PCB Dipole	I-pex
5G-4	WHA YU	C107-511593-A	PCB Dipole	I-pex

Antenna location



Antenna & Bandwidth

Antenna	1st (TX)				2nd (TX)			
Bandwidth / Mode	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz
802.11a	V	X	X	X	V	X	X	X
802.11n	V	V	X	X	V	V	X	X
802.11ac	V	V	V	V	V	V	V	V
802.11ax	V	V	V	V	V	V	V	V

Antenna	3rd (TX)				4th (TX)			
Bandwidth / Mode	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz
802.11a	V	X	X	X	V	X	X	X
802.11n	V	V	X	X	V	V	X	X
802.11ac	V	V	V	V	V	V	V	V
802.11ax	V	V	V	V	V	V	V	V

Frequency	Maximum Gain (dBi) for CDD mode							
	CDD mode (1 Stream 4 TX) for Power Gain				CDD mode (1 Stream 4 TX) for PSD Gain			
	20 MHz	40 MHz	80 MHz	160 MHz	20 MHz	40 MHz	80 MHz	160 MHz
5250MHz	-	-	-	3.04	-	-	-	6.16
5260MHz	3.04	-	-	-	5.87	-	-	-
5270MHz	-	2.60	-	-	-	6.33	-	-
5290MHz	-	-	2.81	-	-	-	5.98	-
5300MHz	2.69	-	-	-	6.18	-	-	-
5310MHz	-	2.30	-	-	-	6.01	-	-
5320MHz	2.56	-	-	-	5.75	-	-	-
5500MHz	2.38	-	-	-	6.08	-	-	-
5510MHz	-	2.78	-	-	-	6.32	-	-
5530MHz	-	-	2.97	-	-	-	6.59	-
5550MHz	-	2.75	-	-	-	6.00	-	-
5570MHz	-	-	-	3.45	-	-	-	5.70
5580MHz	3.13	-	-	-	6.58	-	-	-
5610MHz	-	-	2.92	-	-	-	5.47	-
5670MHz	-	3.09	-	-	-	5.67	-	-
5690MHz	-	-	3.72	-	-	-	6.63	-
5700MHz	3.17	-	-	-	5.86	-	-	-
5710MHz	-	3.23	-	-	-	5.96	-	-
5720MHz	3.18	-	-	-	5.85	-	-	-

Note:

1. Antenna Gain refer to “FGA5330_Antenna Test Report V1.18.pdf” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TxBF mode			
	TxBF mode (1 Stream 4 TX) for Power Gain & PSD Gain			
	20 MHz	40 MHz	80 MHz	160 MHz
5250MHz	-	-	-	6.16
5260MHz	5.87	-	-	-
5270MHz	-	6.33	-	-
5290MHz	-	-	5.98	-
5300MHz	6.18	-	-	-
5310MHz	-	6.01	-	-
5320MHz	5.75	-	-	-
5500MHz	6.08	-	-	-
5510MHz	-	6.32	-	-
5530MHz	-	-	6.59	-
5550MHz	-	6.00	-	-
5570MHz	-	-	-	5.70
5580MHz	6.58	-	-	-
5610MHz	-	-	5.47	-
5670MHz	-	5.67	-	-
5690MHz	-	-	6.63	-
5700MHz	5.86	-	-	-
5710MHz	-	5.96	-	-
5720MHz	5.85	-	-	-

Note:

1. Antenna Gain refer to “FGA5330_Antenna Test Report V1.18.pdf” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode			
	TXBF mode (2 Stream 4 TX) Power Gain & PSD Gain			
	20 MHz	40 MHz	80 MHz	160 MHz
5250MHz	-	-	-	4.64
5260MHz	4.47	-	-	-
5270MHz	-	4.86	-	-
5290MHz	-	-	4.55	-
5300MHz	4.61	-	-	-
5310MHz	-	4.48	-	-
5320MHz	4.25	-	-	-
5500MHz	4.28	-	-	-
5510MHz	-	4.56	-	-
5530MHz	-	-	4.87	-
5550MHz	-	4.58	-	-
5570MHz	-	-	-	4.27
5580MHz	4.66	-	-	-
5610MHz	-	-	3.87	-
5670MHz	-	4.16	-	-
5690MHz	-	-	5.02	-
5700MHz	4.43	-	-	-
5710MHz	-	4.20	-	-
5720MHz	4.32	-	-	-

Note:

1. Antenna Gain refer to “FGA5330_Antenna Test Report V1.18.pdf” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode			
	TXBF mode (3 Stream 4 TX) Power Gain & PSD Gain			
	20 MHz	40 MHz	80 MHz	160 MHz
5250MHz	-	-	-	2.40
5260MHz	2.25	-	-	-
5270MHz	-	2.66	-	-
5290MHz	-	-	2.32	-
5300MHz	2.31	-	-	-
5310MHz	-	2.17	-	-
5320MHz	1.94	-	-	-
5500MHz	2.19	-	-	-
5510MHz	-	2.58	-	-
5530MHz	-	-	2.88	-
5550MHz	-	2.56	-	-
5570MHz	-	-	-	2.25
5580MHz	2.46	-	-	-
5610MHz	-	-	1.99	-
5670MHz	-	2.26	-	-
5690MHz	-	-	3.05	-
5700MHz	2.57	-	-	-
5710MHz	-	2.31	-	-
5720MHz	2.48	-	-	-

Note:

1. Antenna Gain refer to “FGA5330_Antenna Test Report V1.18.pdf” files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

16 channels are provided for Bandwidth 20MHz:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	52	5260 MHz	60	5300 MHz
	56	5280 MHz	64	5320 MHz
5470~5725 MHz U-NII-2C	100	5500 MHz	124	5620 MHz
	104	5520 MHz	128	5640 MHz
	108	5540 MHz	132	5660 MHz
	112	5560 MHz	136	5680 MHz
	116	5580 MHz	140	5700 MHz
	120	5600 MHz	144	5720 MHz

8 channels are provided for Bandwidth 40MHz:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	54	5270 MHz	62	5310 MHz
5470~5725 MHz U-NII-2C	102	5510 MHz	126	5630 MHz
	110	5550 MHz	134	5670 MHz
	118	5590 MHz	142	5710 MHz

4 channels are provided for Bandwidth 80MHz:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz U-NII-2A	58	5290 MHz	-	-
5470~5725 MHz U-NII-2C	106	5530 MHz	138	5690 MHz
	122	5610 MHz		

2 channels are provided for Bandwidth 160MHz:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5350 MHz U-NII-2A	50	5250 MHz	-	-
5470~5725 MHz U-NII-2C	114	5570 MHz	-	-

3.12 Table for Test Modes

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

Test Items	Mode	Note	Channel	Data Rate	Antenna
AC Power Conducted Emissions	11ax(20MHz)	OFDM/BPSK	116	-	1+2+3+4
Emission Bandwidth	11ax(20MHz)	OFDM/BPSK	52/60/64 100/116/140/144	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(40MHz)		54/62 102/110/134/142	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(80MHz)		58/106 122/138	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(160MHz)		50/114	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Maximum Peak Output Power Maximum Average Output Power	11ax(20MHz)	OFDM/BPSK	52/60/64 100/116/140/144	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(40MHz)		54/62 102/110/134/142	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(80MHz)		58/106 122/138	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(160MHz)		50/114	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Power Spectral Density	11ax(20MHz)	OFDM/BPSK	52/60/64 100/116/140/144	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(40MHz)		54/62 102/110/134/142	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(80MHz)		58/106 122/138	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(160MHz)		50/114	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Unwanted Emission in the restricted bands Above 1GHz (Radiated)	11ax(20MHz)	OFDM/BPSK OFDM/BPSK	52/60/64 100/116/140/144	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(40MHz)		54/62 102/110/134/142	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(80MHz)		58/106 122/138	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(160MHz)		50/114	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Unwanted Emission out of the restricted bands Above 1GHz (Radiated)	11ax(20MHz)	OFDM/BPSK	52/60/64 100/116/140/144	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(40MHz)		54/62 102/110/134/142	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(80MHz)		58/106 122/138	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4
	11ax(160MHz)		50/114	Nss1 MCS0 (1S4T CDD)	1+2+3+4
				Nss1 MCS0 (1S4T TxBF)	1+2+3+4
				Nss1 MCS0 (2S4T TxBF)	1+2+3+4
				Nss1 MCS0 (3S4T TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Radiated Emissions Below 1GHz(Radiated)	11ax(20MHz)	OFDM/BPSK	116	Nss1 MCS0 (TxBF)	1+2+3+4
Frequency Stability	20MHz	Un-modulation	52/60/64 100/116/140/144	-	1, 2, 3, 4
	40MHz		54/62 102/110/134/142		1, 2, 3, 4
	80MHz		58/106 122/138	-	1, 2, 3, 4
	160MHz		50/114		1, 2, 3, 4

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 1S4T CDD, the 802.11ax 20MHz/40MHz/80MHz/160MHz default mode are 1S4T CDD,1S4T TxBF, 2S4T TxBF, 3S4T TxBF; the SDM mode covered by the CDD mode with the same setting.
   wl -i wl1 txcore
   txcore enabled bitmap (Nsts {4..1}) 0x0f 0x0f 0x0f 0x0f
   txcore mask OFDM 0x0f CCK 0x0f

3.13 Parameters of Test Software Settings

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	19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f14fc9				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**P_H (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11ax 20MHz (CDD)	1 stream 4TX	5260	23.89	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5300	23.73	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5320	23.81	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5500	23.93	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5580	23.86	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5700	23.72	17	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5720(UNII-2c) 5720(UNII-3)	21.79 15.63	18.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5260	23.84	17	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5300	23.73	17	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5320	23.82	17	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5500	23.81	17	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5580	23.33	16.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5700	22.53	15.75	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5720(UNII-2c) 5720(UNII-3)	21.69 15.64	18.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	2 stream 4TX	5260	23.82	17	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5300	23.75	17	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5320	23.78	17	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5500	23.79	17	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5580	23.75	17	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5700	23.55	16.75	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5720(UNII-2c) 5720(UNII-3)	21.27 15.08	19	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	3 stream 4TX	5260	23.79	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5300	23.77	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5320	23.80	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5500	23.81	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5580	23.77	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5700	23.80	17	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5720(UNII-2c) 5720(UNII-3)	20.80 14.77	19	Nss3MCS0 (25.8)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	P_H (dBm)	Power Setting	Data Rate / MCS
802.11ax 40MHz (CDD)	1 stream 4TX	5270	23.94	17.25	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5310	23.79	17.00	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5510	23.65	16.50	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5550	23.61	16.50	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5670	23.77	16.75	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5710(UNII-2c) 5710(UNII-3)	23.89 12.11	17.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5270	23.46	16.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5310	23.87	17	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5510	23.15	16	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5550	23.56	16.5	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5670	23.84	16.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5710(UNII-2c) 5710(UNII-3)	23.84 12.30	17.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	2 stream 4TX	5270	23.92	17.25	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5310	23.92	17	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5510	23.15	16	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5550	23.56	16.5	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5670	23.72	16.75	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5710(UNII-2c) 5710(UNII-3)	23.64 10.64	17.75	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	3 stream 4TX	5270	23.90	17.25	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5310	23.91	17	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5510	23.59	16.5	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5550	23.50	16.5	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5670	23.83	16.75	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5710(UNII-2c) 5710(UNII-3)	23.39 9.75	17.75	Nss3MCS0 (51.6)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	P_H (dBm)	Power Setting	Data Rate / MCS
802.11ax 80MHz (CDD)	1 stream 4TX	5290	23.83	17	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5530	23.51	16.25	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5610	23.55	16.5	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5690(UNII-2c) 5690(UNII-3)	23.55 7.86	18	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5290	23.89	17	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5530	22.94	15.75	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5610	23.56	16.5	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5690(UNII-2c) 5690(UNII-3)	22.83 6.68	18	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	2 stream 4TX	5290	22.57	15.5	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5530	23.50	16.25	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5610	23.54	16.5	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5690(UNII-2c) 5690(UNII-3)	23.49 6.01	18	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5290	23.87	17	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5530	22.72	15.5	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5610	23.52	16.5	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5690(UNII-2c) 5690(UNII-3)	23.31 6.07	18	Nss3MCS0 (108.1)
802.11ax 160MHz (CDD)	1 stream 4TX	5250(UNII-1) 5250(UNII-2A)	18.00 17.91	14.75	Nss1MCS0 (72.1)
802.11ax 160MHz (CDD)	1 stream 4TX	5570	23.61	16.50	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	1 stream 4TX	5250(UNII-1) 5250(UNII-2A)	17.97 18.08	14.75	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	1 stream 4TX	5570	23.37	16.25	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	2 stream 4TX	5250(UNII-1) 5250(UNII-2A)	17.95 17.85	14.75	Nss1MCS0 (144.1)
802.11ax 160MHz (TxBF)	2 stream 4TX	5570	23.57	16.50	Nss1MCS0 (144.1)
802.11ax160MHz (TxBF)	3 stream 4TX	5250(UNII-1) 5250(UNII-2A)	16.24 16.20	13.50	Nss1MCS0 (216.2)
802.11ax 160MHz (TxBF)	3 stream 4TX	5570	22.15	15.00	Nss1MCS0 (216.2)

The Power Setting Parameter					
Test Software Version	19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f14fc9				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**P_L (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11ax 20MHz (CDD)	1 stream 4TX	5260	16.86	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5300	16.90	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5320	16.86	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5500	16.83	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5580	16.90	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5700	16.67	10	Nss1MCS0 (8.6)
802.11ax 20MHz (CDD)	1 stream 4TX	5720(UNII-2c) 5720(UNII-3)	14.85 8.50	11.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5260	16.75	10	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5300	16.71	10	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5320	16.80	10	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5500	16.77	10	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5580	16.36	9.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5700	15.56	8.75	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	1 stream 4TX	5720(UNII-2c) 5720(UNII-3)	14.54 8.49	11.5	Nss1MCS0 (8.6)
802.11ax 20MHz (TxBF)	2 stream 4TX	5260	16.75	10	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5300	16.73	10	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5320	16.81	10	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5500	16.82	10	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5580	16.75	10	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5700	16.52	9.75	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	2 stream 4TX	5720(UNII-2c) 5720(UNII-3)	14.51 8.16	12	Nss2MCS0 (17.2)
802.11ax 20MHz (TxBF)	3 stream 4TX	5260	16.85	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5300	16.72	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5320	16.74	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5500	16.67	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5580	16.77	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5700	16.86	10	Nss3MCS0 (25.8)
802.11ax 20MHz (TxBF)	3 stream 4TX	5720(UNII-2c) 5720(UNII-3)	13.91 7.90	12	Nss3MCS0 (25.8)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	P_L (dBm)	Power Setting	Data Rate / MCS
802.11ax 40MHz (CDD)	1 stream 4TX	5270	16.85	10.25	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5310	16.72	10	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5510	16.61	9.5	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5550	16.59	9.5	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5670	16.87	9.75	Nss1MCS0 (17.2)
802.11ax 40MHz (CDD)	1 stream 4TX	5710(UNII-2c) 5710(UNII-3)	17.05 5.29	10.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5270	16.54	9.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5310	16.80	10	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5510	16.14	9	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5550	16.52	9.5	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5670	16.72	9.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	1 stream 4TX	5710(UNII-2c) 5710(UNII-3)	16.85 5.33	10.75	Nss1MCS0 (17.2)
802.11ax 40MHz (TxBF)	2 stream 4TX	5270	16.91	10.25	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5310	16.88	10	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5510	16.21	9	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5550	16.53	9.5	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5670	16.72	9.75	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	2 stream 4TX	5710(UNII-2c) 5710(UNII-3)	16.72 3.66	10.75	Nss2MCS0 (34.4)
802.11ax 40MHz (TxBF)	3 stream 4TX	5270	16.74	10.25	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5310	16.75	10	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5510	16.50	9.5	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5550	16.52	9.5	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5670	16.70	9.75	Nss3MCS0 (51.6)
802.11ax 40MHz (TxBF)	3 stream 4TX	5710(UNII-2c) 5710(UNII-3)	16.43 2.73	10.75	Nss3MCS0 (51.6)

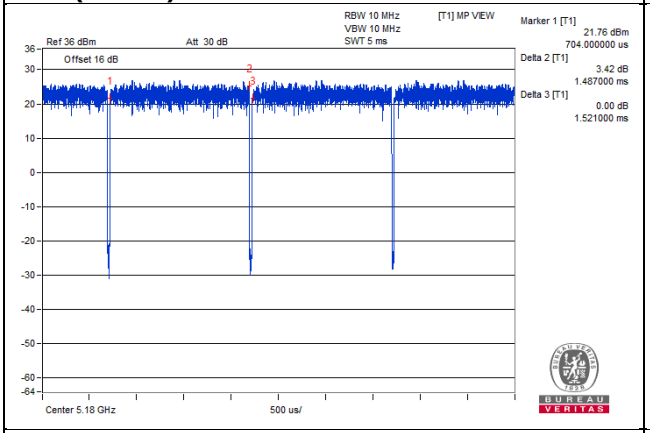
Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	P_L (dBm)	Power Setting	Data Rate / MCS
802.11ax 80MHz (CDD)	1 stream 4TX	5290	16.71	10	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5530	16.30	9.25	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5610	16.55	9.5	Nss1MCS0 (36)
802.11ax 80MHz (CDD)	1 stream 4TX	5690(UNII-2c) 5690(UNII-3)	16.56 0.71	11	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5290	16.84	10	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5530	15.83	8.75	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5610	16.71	9.5	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	1 stream 4TX	5690(UNII-2c) 5690(UNII-3)	15.84 -0.17	11	Nss1MCS0 (36)
802.11ax 80MHz (TxBF)	2 stream 4TX	5290	15.63	8.5	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5530	16.40	9.25	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5610	16.51	9.5	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	2 stream 4TX	5690(UNII-2c) 5690(UNII-3)	16.51 -1.05	11	Nss2MCS0 (72.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5290	16.83	10	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5530	15.57	8.5	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5610	16.50	9.5	Nss3MCS0 (108.1)
802.11ax 80MHz (TxBF)	3 stream 4TX	5690(UNII-2c) 5690(UNII-3)	16.12 -0.95	11	Nss3MCS0 (108.1)
802.11ax 160MHz (CDD)	1 stream 4TX	5250(UNII-1) 5250(UNII-2A)	10.98 10.88	7.75	Nss1MCS0 (72.1)
802.11ax 160MHz (CDD)	1 stream 4TX	5570	16.59	9.5	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	1 stream 4TX	5250(UNII-1) 5250(UNII-2A)	10.95 11.12	7.75	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	1 stream 4TX	5570	16.24	9.25	Nss1MCS0 (72.1)
802.11ax 160MHz (TxBF)	2 stream 4TX	5250(UNII-1) 5250(UNII-2A)	11.16 10.65	7.75	Nss1MCS0 (144.1)
802.11ax 160MHz (TxBF)	2 stream 4TX	5570	16.39	9.5	Nss1MCS0 (144.1)
802.11ax160MHz (TxBF)	3 stream 4TX	5250(UNII-1) 5250(UNII-2A)	9.29 9.14	6.5	Nss1MCS0 (216.2)
802.11ax 160MHz (TxBF)	3 stream 4TX	5570	15.14	8	Nss1MCS0 (216.2)

3.14 On Time and Duty Cycle

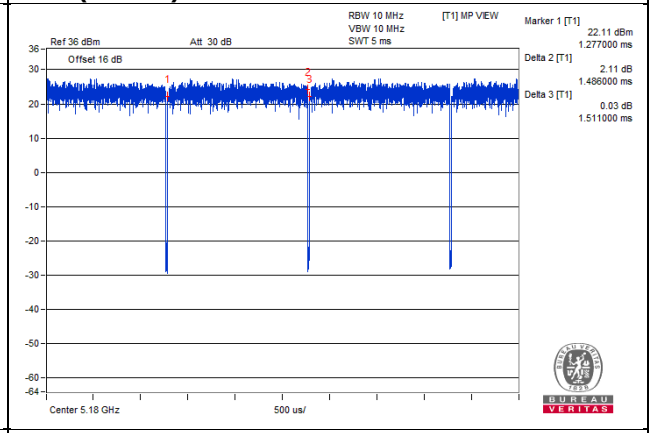
Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
11ax (20MHz) 1S4T CDD	1.487	1.521	97.8	0.10	3
11ax (20MHz) 1S4T TxBF	1.486	1.511	98.3	0	0.01
11ax (20MHz) 2S4T TxBF	0.778	0.812	95.8	0.19	3
11ax (20MHz) 3S4T TxBF	0.556	0.588	94.6	0.24	3
11ax (40MHz) 1S4T CDD	1.703	1.734	98.2	0	0.01
11ax (40MHz) 1S4T TxBF	1.702	1.732	98.3	0	0.01
11ax (40MHz) 2S4T TxBF	0.421	0.444	94.8	0.23	3
11ax (40MHz) 3S4T TxBF	0.317	0.342	92.7	0.33	10
11ax (80MHz) 1S4T CDD	0.400	0.423	94.6	0.24	3
11ax (80MHz) 1S4T TxBF	0.400	0.424	94.3	0.25	3
11ax (80MHz) 2S4T TxBF	0.238	0.260	91.5	0.38	10
11ax (80MHz) 3S4T TxBF	0.195	0.215	90.7	0.42	10
11ax (160MHz) 1S4T CDD	0.231	0.253	91.3	0.40	10
11ax (160MHz) 1S4T TxBF	0.232	0.252	92.1	0.36	10
11ax (160MHz) 2S4T TxBF	0.154	0.176	87.5	0.58	10
11ax (160MHz) 3S4T TxBF	0.137	0.159	86.2	0.65	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.

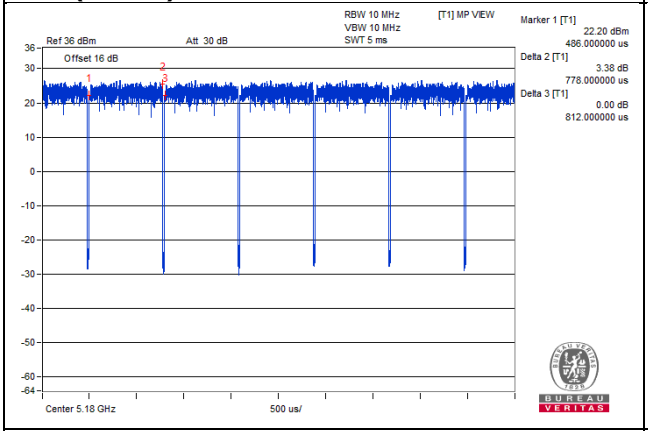
11ax (20MHz) 1S4T CDD



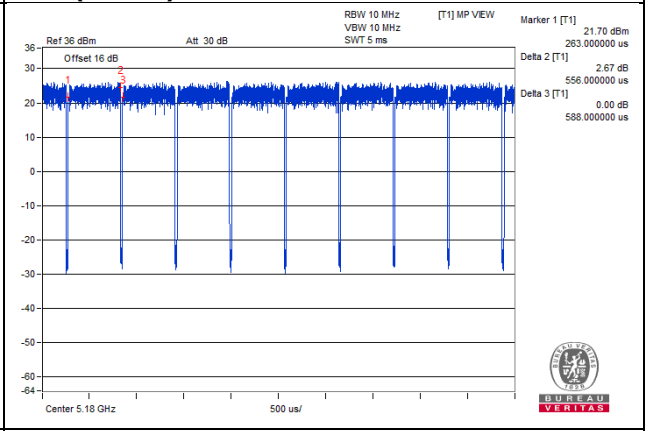
11ax (20MHz) 1S4T TxBF



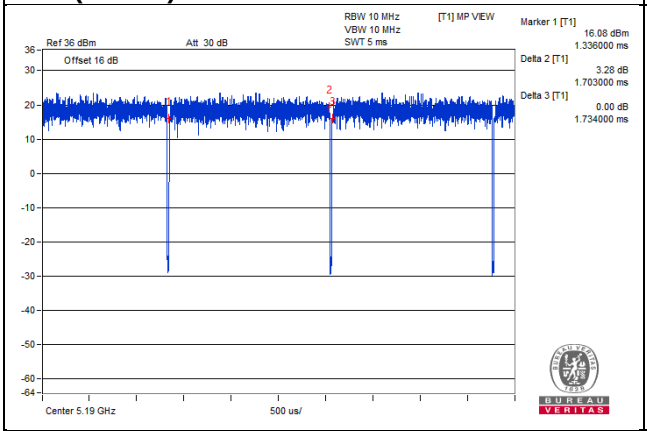
11ax (20MHz) 2S4T TxBF



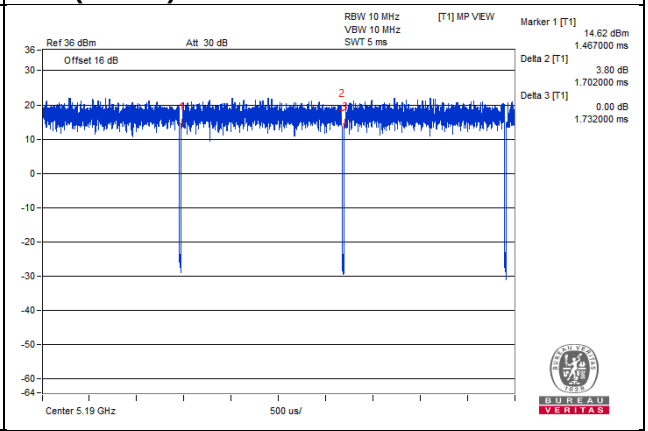
11ax (20MHz) 3S4T TxBF



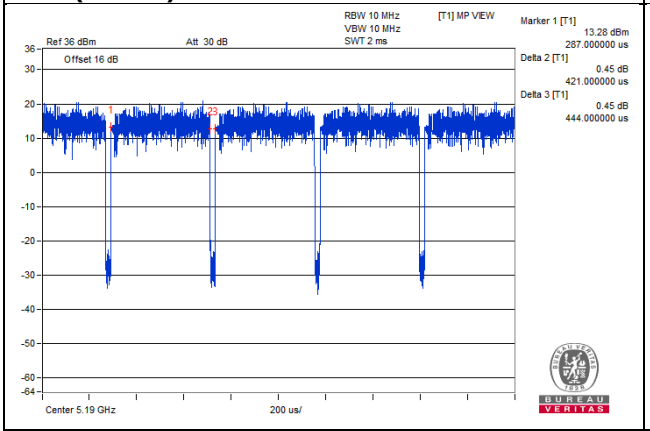
11ax (40MHz) 1S4T CDD



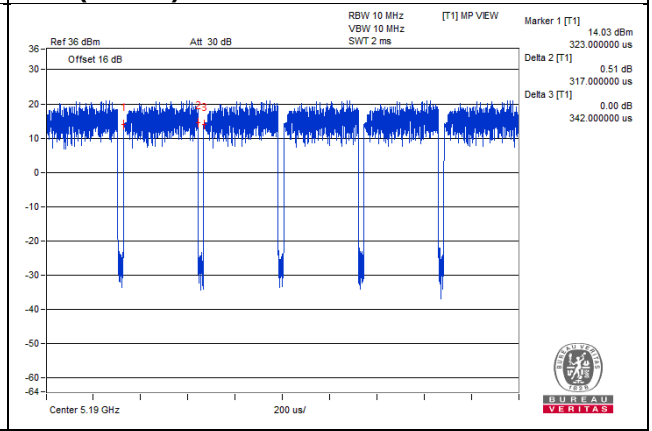
11ax (40MHz) 1S4T TxBF



11ax (40MHz) 2S4T TxBF

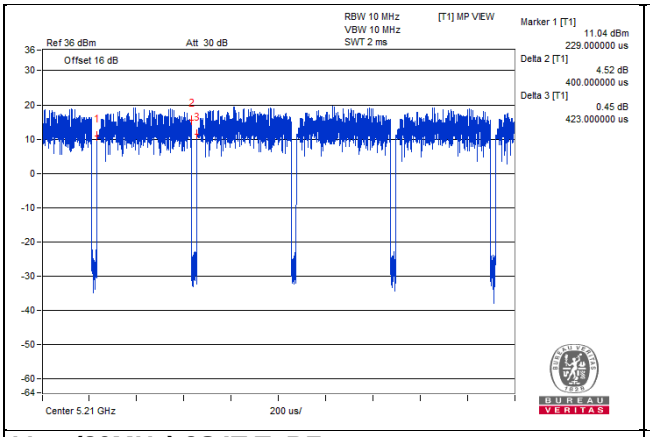


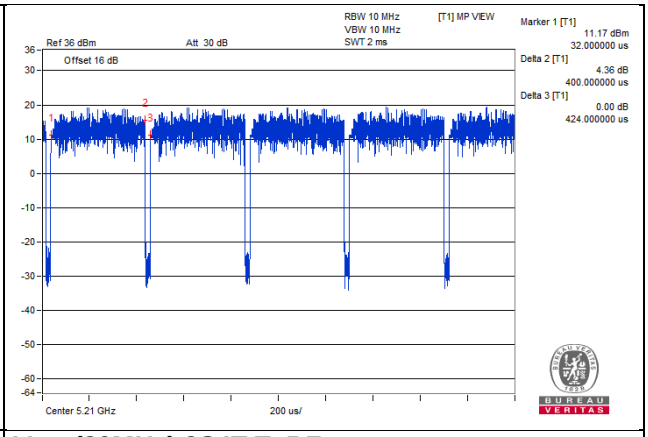
11ax (40MHz) 3S4T TxBF



11ax (80MHz) 1S4T CDD

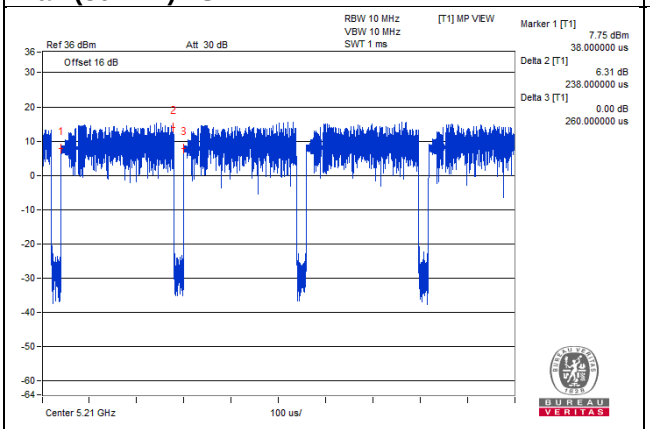
11ax (80MHz) 1S4T TxBF

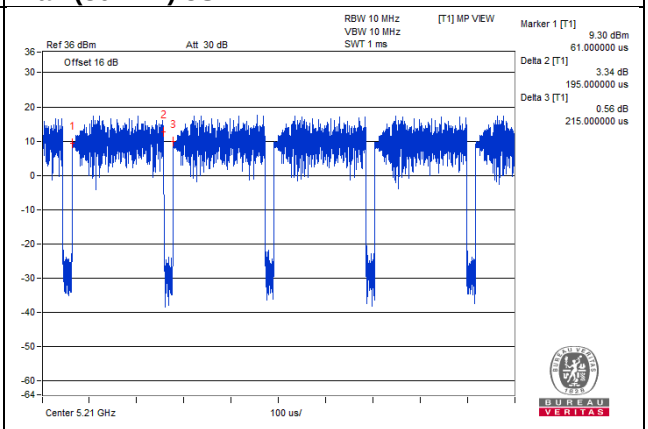




11ax (80MHz) 2S4T TxBF

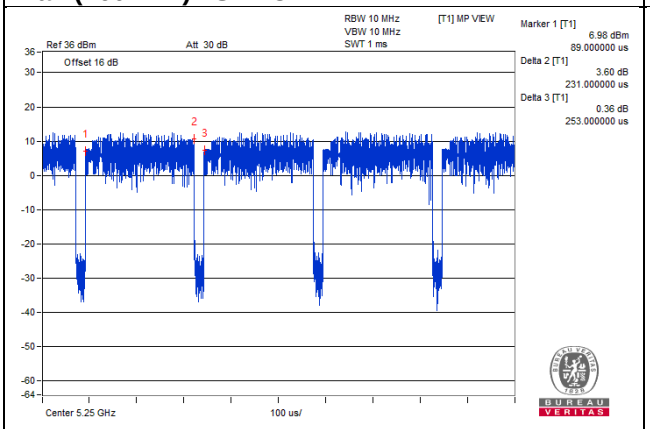
11ax (80MHz) 3S4T TxBF

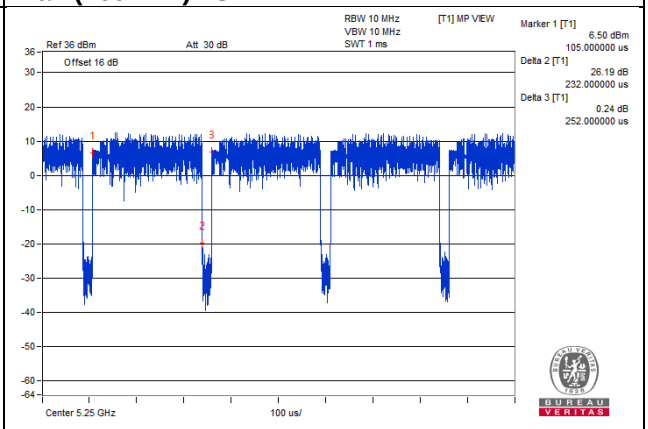




11ax (160MHz) 1S4T CDD

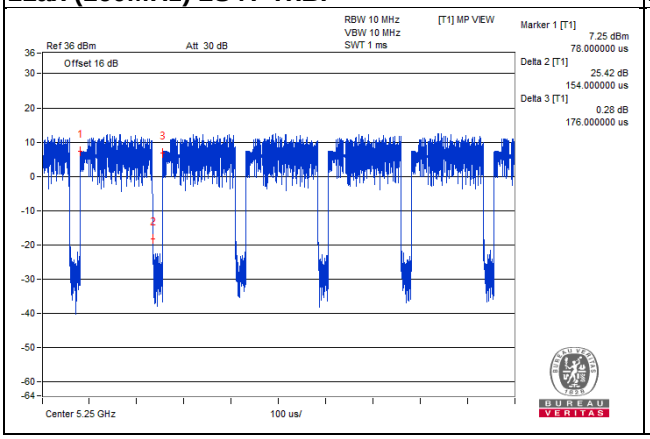
11ax (160MHz) 1S4T TxBF

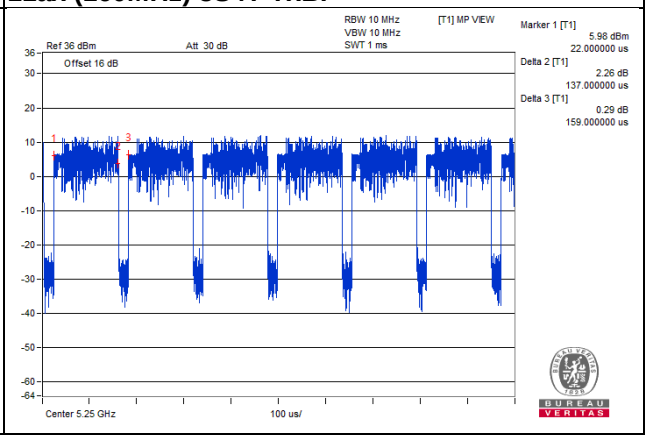




11ax (160MHz) 2S4T TxBF

11ax (160MHz) 3S4T 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			
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	-	-
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.

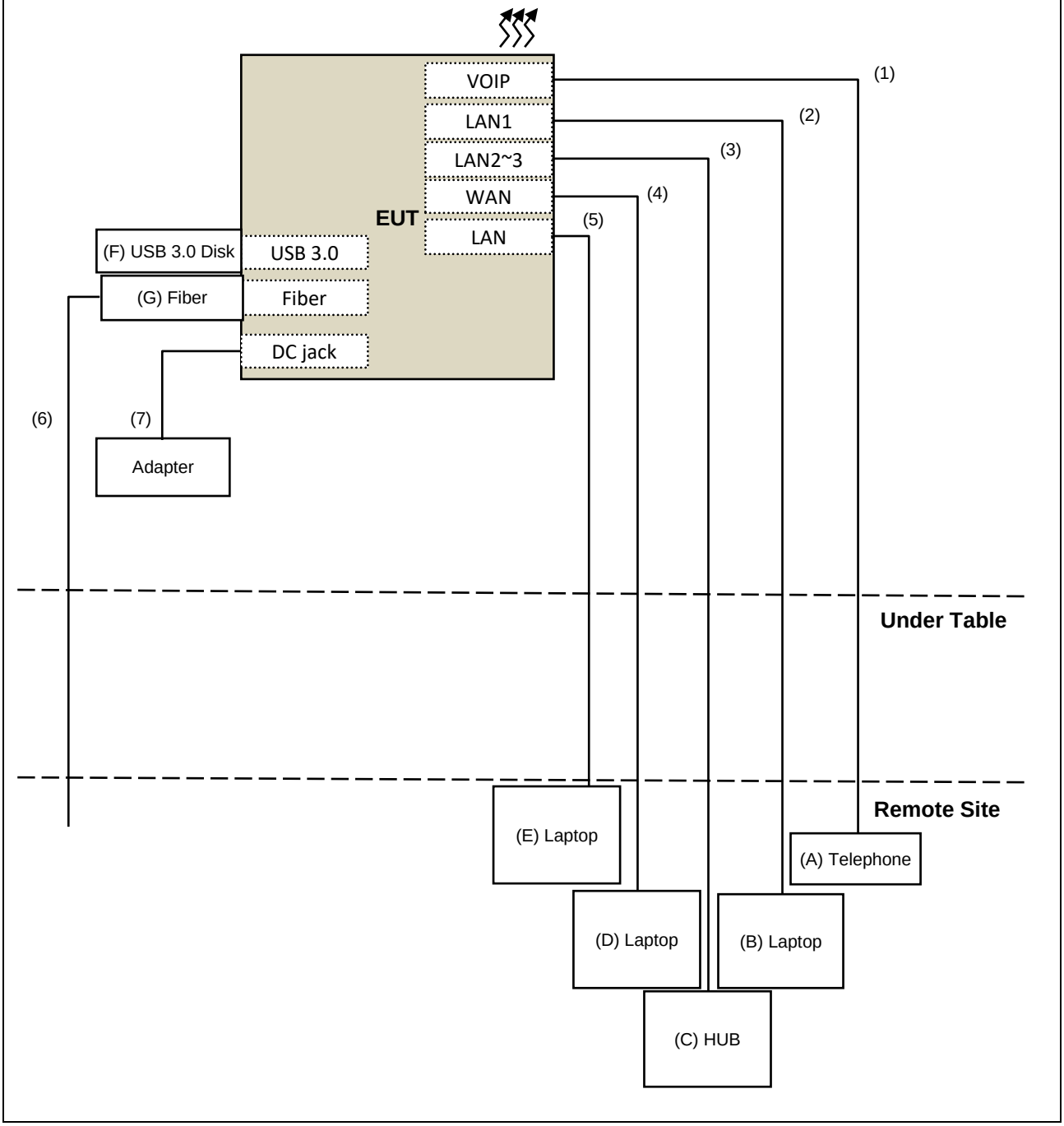
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Telephone	Romeo	TE-812	97280903	NA	Provided by Lab
B.	Laptop	DELL	PP27L	7YLB32S	FCC DoC	Provided by Lab
C.	HUB	ZyXEL	ES-116P	S060H02000215	FCC DoC	Provided by Lab
D.	Laptop	DELL	E5430	GM1SKV1	FCC DoC	Provided by Lab
E.	Laptop	DELL	E5430	DM1SKV1	FCC DoC	Provided by Lab
F.	USB Disk	Sandisk	NA	NA	NA	Provided by Lab
G.	Fiber	RoHS	GFLT210	JHCG94200152	NA	Supplied by client

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-11 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	10	No	0	Provided by Lab (for RF Setup)
3.	RJ-45 Cable	2	10	No	0	Provided by Lab
4.	RJ-45 Cable	1	10	No	0	Provided by Lab
5.	RJ-45 Cable	1	10	No	0	Provided by Lab
6.	Fiber cable	1	10	No	0	Provided by Lab
7.	DC Cable	1	1.8	No	0	Supplied by client

EUT Diagram


VOIP
LAN1
LAN2~3
WAN
LAN
EUT
USB 3.0
Fiber
DC jack
(F) USB 3.0 Disk
(G) Fiber
(1)
(2)
(3)
(4)
(5)
(6)
(7)
Adapter
Under Table
Remote Site
(E) Laptop
(A) Telephone
(D) Laptop
(B) Laptop
(C) HUB

4 TEST TYPES AND RESULTS

4.1 AC Power Conducted Emissions Measurement

4.1.1 Limit

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

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

4.1.2 Measuring Instruments and Setting

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

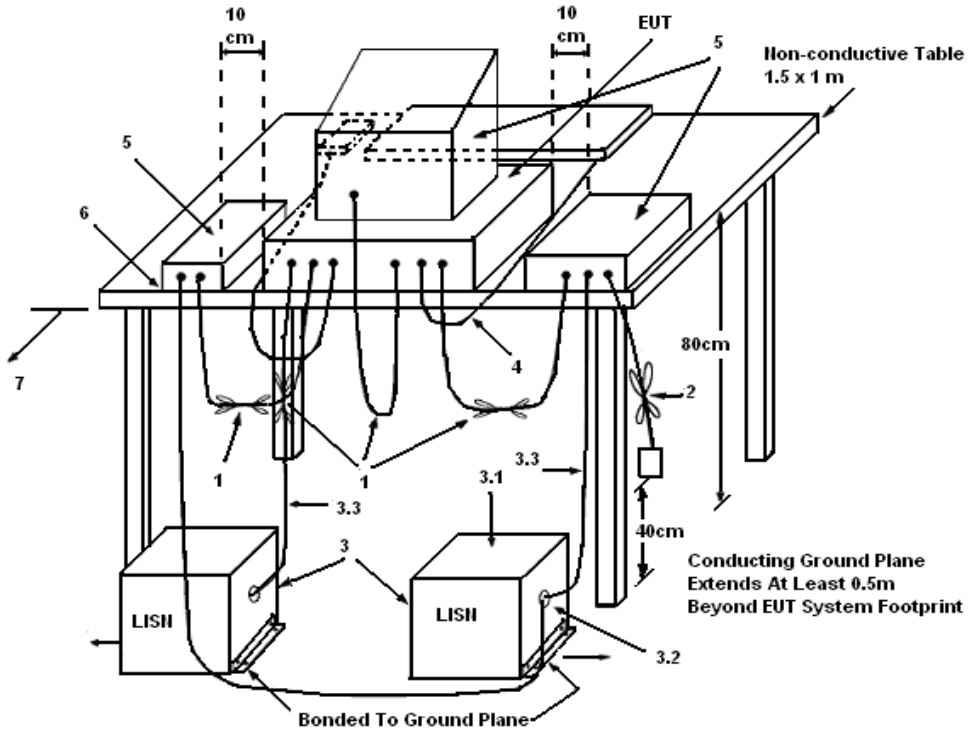
Receiver Parameters	**Setting**
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.1.3 Test Procedures

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

4.1.4 Test Setup Layout

Test Setup



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

4.1.5 Test Deviation

There are no deviations with the original standard.

4.1.6 EUT Operating during Test

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

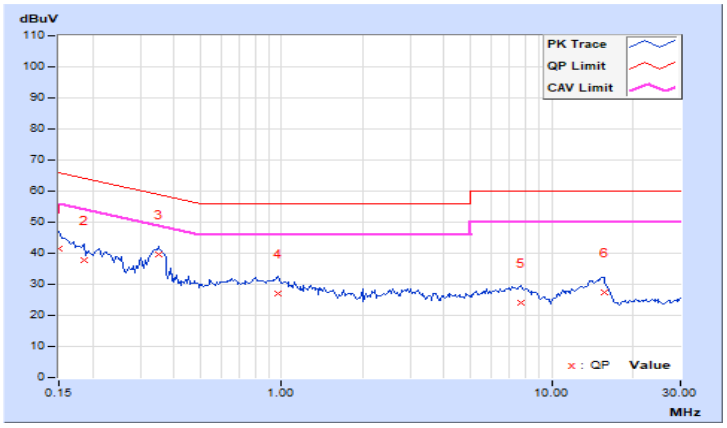
4.1.7 Test Results of AC Power Conducted Emissions

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

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	9.99	31.36	19.95	41.35	29.94	66.00	56.00	-24.65	-26.06
2	0.18516	9.99	27.89	14.78	37.88	24.77	64.25	54.25	-26.37	-29.48
3	**0.34922**	**10.00**	**29.49**	**22.97**	**39.49**	**32.97**	**58.98**	**48.98**	**-19.49**	**-16.01**
4	0.97422	10.05	17.14	12.40	27.19	22.45	56.00	46.00	-28.81	-23.55
5	7.73438	10.50	13.64	8.81	24.14	19.31	60.00	50.00	-35.86	-30.69
6	15.62500	11.06	16.32	11.67	27.38	22.73	60.00	50.00	-32.62	-27.27

Remarks:

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

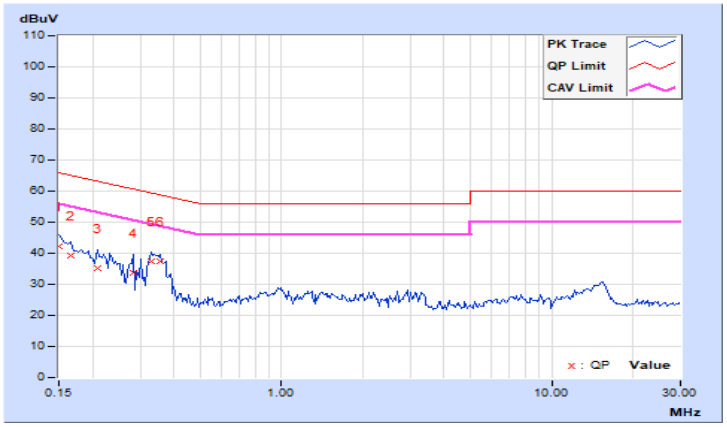


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	25℃, 75%RH
Tested by	Kevin Ko		

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	9.99	32.31	18.13	42.30	28.12	66.00	56.00	-23.70	-27.88
2	0.16562	9.99	29.27	15.50	39.26	25.49	65.18	55.18	-25.92	-29.69
3	0.20859	9.99	25.27	15.14	35.26	25.13	63.26	53.26	-28.00	-28.13
4	0.28281	10.00	23.55	15.78	33.55	25.78	60.73	50.73	-27.18	-24.95
5	0.32969	10.00	27.55	21.40	37.55	31.40	59.46	49.46	-21.91	-18.06
6	0.35703	10.01	27.25	19.65	37.26	29.66	58.80	48.80	-21.54	-19.14

Remarks:

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

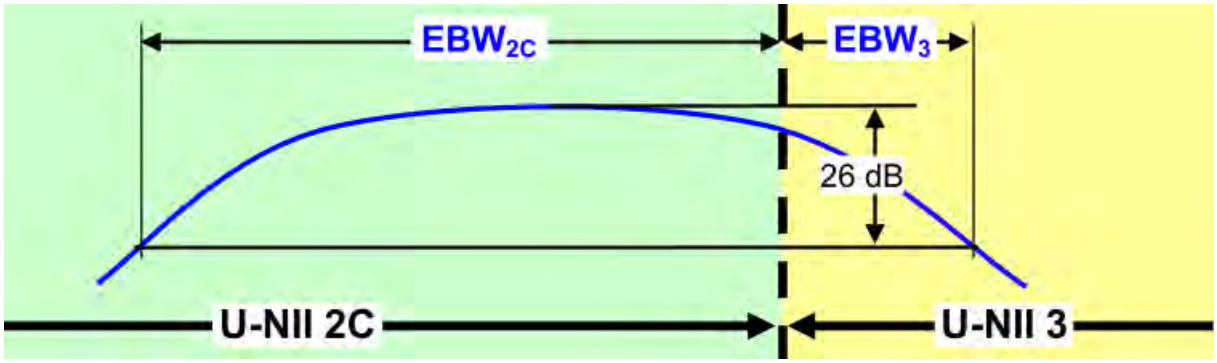


4.2 Occupied Bandwidth and 26dB Bandwidth Measurement

4.2.1 Measuring Instruments and Setting

The following table is the setting of the Spectrum Analyzer.

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



Emission Bandwidth (EBW) withina Band for Band-Crossing Signals

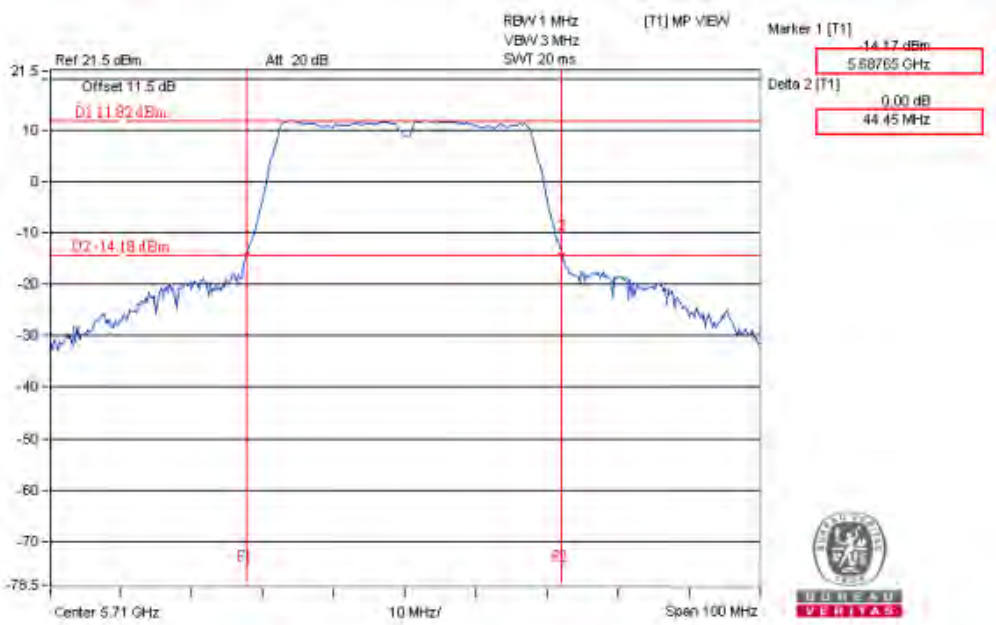
4.2.2 Test Procedure

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 v02r01, in section “Emission bandwidth (C)(1)” & "99 Percent Occupied Bandwidth"(D). 12/14/2017.

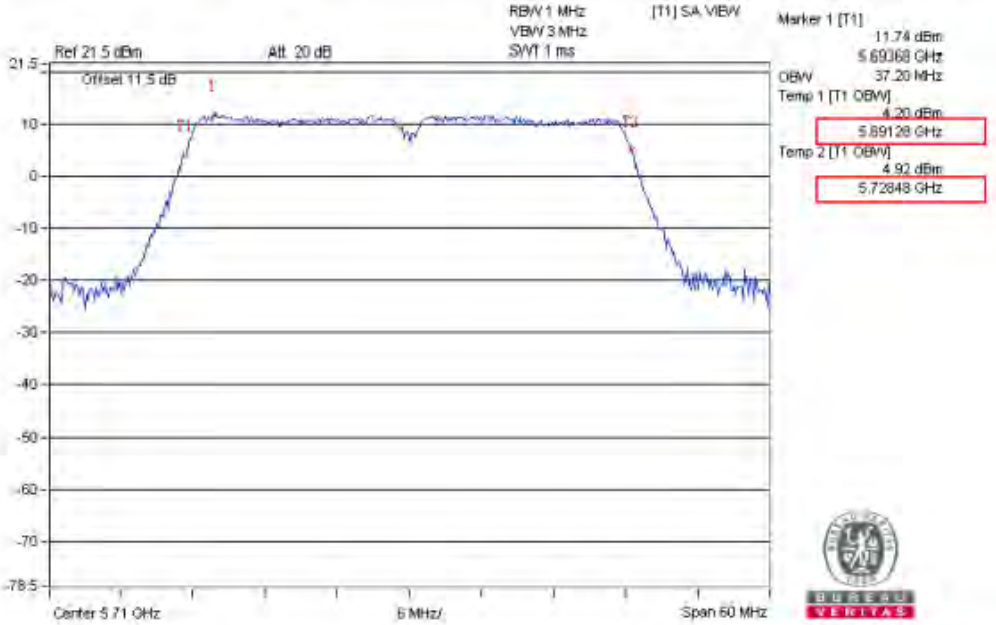
3 When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

For 26dB Bandwitth



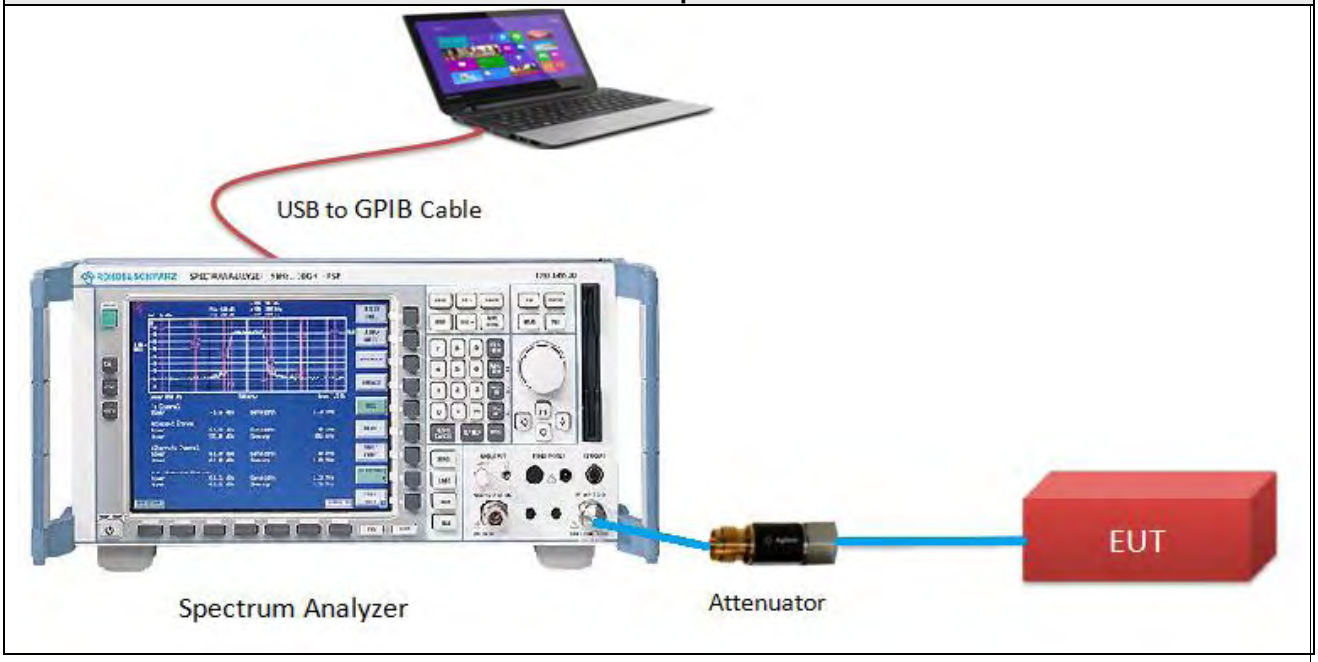
EBW$_{2C}$=5.725GHz-Marker 1[T1]
EBW$_{3}$=Marker 1[T1]+Delta2[T1]MHz-5.725GHz

For 99% Occupied Bandwidch



EBW$_{2C}$=5.725GHz-Marker 1[T1 OBW]
EBW$_{3}$=Temp 2[T1 OBW] -5.725GHz

4.2.3 Test Setup Layout

Setup


4.2.4 Test Deviation

There are no deviations with the original standard.

4.2.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.2.6 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Jyunchun Lin		

11ax (20MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
52	5260	21.89	21.71	21.97	21.92
60	5300	21.91	21.78	21.92	21.95
64	5320	21.94	21.81	21.75	21.97
100	5500	21.90	21.82	21.96	21.89
116	5580	21.92	21.87	21.77	21.99
140	5700	21.93	21.67	21.73	22.08
144 (U-NII-2C Band)	5720	16.01	15.83	16.02	15.95
144 (U-NII-3 Band)	5720	5.82	5.93	5.90	5.98

11ax (20MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
52	5260	21.87	21.80	21.96	21.85
60	5300	21.86	21.75	21.97	21.97
64	5320	21.92	21.84	21.95	21.97
100	5500	21.84	21.80	21.71	21.86
116	5580	21.95	21.81	21.90	21.93
140	5700	21.96	21.80	21.74	21.91
144 (U-NII-2C Band)	5720	15.97	15.84	16.01	16.03
144 (U-NII-3 Band)	5720	5.89	5.84	5.91	6.02

11ax (20MHz) 2S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
52	5260	22.03	21.56	22.00	21.67
60	5300	22.10	21.63	21.99	21.71
64	5320	22.12	21.61	22.00	21.79
100	5500	22.08	21.70	22.02	21.74
116	5580	21.96	21.64	21.94	21.73
140	5700	22.06	21.73	22.18	21.72
144 (U-NII-2C Band)	5720	16.10	15.79	16.08	15.89
144 (U-NII-3 Band)	5720	5.93	5.87	5.95	5.81

11ax (20MHz) 3S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
52	5260	21.74	21.61	21.59	21.74
60	5300	21.98	21.67	21.66	21.79
64	5320	21.86	21.58	21.69	21.75
100	5500	21.85	21.54	21.59	21.73
116	5580	21.94	21.70	21.67	21.79
140	5700	21.93	21.62	21.70	21.79
144 (U-NII-2C Band)	5720	16.06	15.77	15.89	15.90
144 (U-NII-3 Band)	5720	5.82	5.89	5.77	5.79

11ax (40MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
54	5270	41.66	41.63	41.32	41.53
62	5310	41.30	41.69	41.65	41.59
102	5510	41.70	41.60	41.36	41.58
110	5550	41.73	41.63	41.46	41.59
134	5670	41.37	41.54	41.54	41.60
142 (U-NII-2C Band)	5710	35.80	35.77	35.67	35.61
142 (U-NII-3 Band)	5710	5.62	5.55	5.54	5.51

11ax (40MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
54	5270	41.42	41.58	41.47	41.52
62	5310	41.62	41.62	41.50	41.57
102	5510	41.53	41.44	41.36	41.59
110	5550	41.60	41.58	41.27	41.44
134	5670	41.51	41.58	41.36	41.54
142 (U-NII-2C Band)	5710	35.80	35.80	35.72	35.70
142 (U-NII-3 Band)	5710	5.70	5.55	5.47	5.64

11ax (40MHz) 2S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
54	5270	41.34	41.28	41.33	41.27
62	5310	41.32	41.36	41.32	41.28
102	5510	41.30	41.33	41.29	41.42
110	5550	41.31	41.23	41.30	41.28
134	5670	41.34	41.17	41.27	41.40
142 (U-NII-2C Band)	5710	35.54	35.68	35.66	35.70
142 (U-NII-3 Band)	5710	5.49	5.71	5.60	5.69

11ax (40MHz) 3S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
54	5270	41.37	40.97	41.22	41.23
62	5310	41.26	41.03	41.19	41.27
102	5510	41.37	40.96	41.23	41.36
110	5550	41.36	41.05	41.16	41.32
134	5670	41.32	40.94	41.17	41.26
142 (U-NII-2C Band)	5710	35.71	35.53	35.63	35.88
142 (U-NII-3 Band)	5710	5.54	5.47	5.54	5.40

11ax (80MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
58	5290	83.15	83.09	83.03	82.82
106	5530	83.11	83.11	83.25	82.84
122	5610	82.91	83.07	83.04	83.00
138 (U-NII-2C Band)	5690	76.27	76.20	76.30	76.13
138 (U-NII-3 Band)	5690	6.60	6.50	6.03	5.91

11ax (80MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
58	5290	82.15	82.58	82.36	82.55
106	5530	81.94	82.52	82.33	82.53
122	5610	82.08	82.57	82.39	82.46
138 (U-NII-2C Band)	5690	75.74	75.88	75.85	76.06
138 (U-NII-3 Band)	5690	6.31	6.48	6.43	6.34

11ax (80MHz) 2S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
58	5290	82.31	83.04	82.59	82.44
106	5530	82.38	83.10	82.54	82.36
122	5610	82.35	83.04	82.42	82.30
138 (U-NII-2C Band)	5690	76.00	76.36	76.12	76.29
138 (U-NII-3 Band)	5690	6.21	6.62	6.25	6.04

11ax (80MHz) 3S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
58	5290	83.10	82.76	82.95	82.94
106	5530	83.09	83.11	82.76	82.31
122	5610	83.08	83.10	82.74	82.40
138 (U-NII-2C Band)	5690	76.09	76.22	76.46	76.25
138 (U-NII-3 Band)	5690	6.39	6.55	6.09	6.20

11ax (160MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
50	5250	82.08	82.00	81.36	81.58
50 (U-NII-2A Band)	5250	82.15	81.36	81.47	81.83
114	5570	163.10	163.11	163.46	163.48

11ax (160MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
50	5250	82.00	82.05	81.96	81.52
50 (U-NII-2A Band)	5250	82.05	81.47	81.32	82.06
114	5570	163.32	163.43	163.72	163.45

11ax (160MHz) 2S4T TxBF

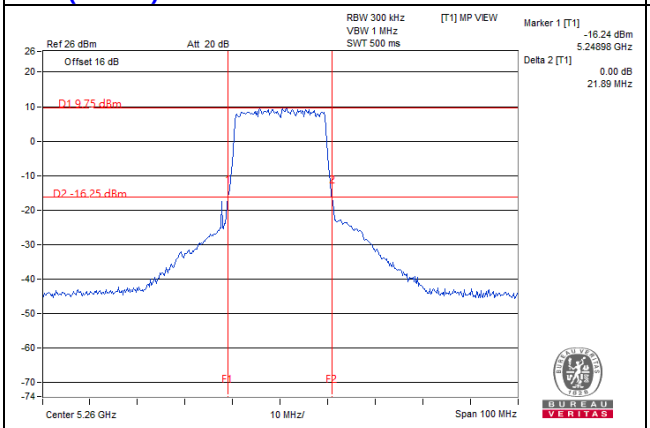
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
50	5250	81.21	81.96	81.65	81.47
50 (U-NII-2A Band)	5250	81.71	80.81	81.37	81.01
114	5570	163.67	163.13	163.55	163.27

11ax (160MHz) 3S4T TxBF

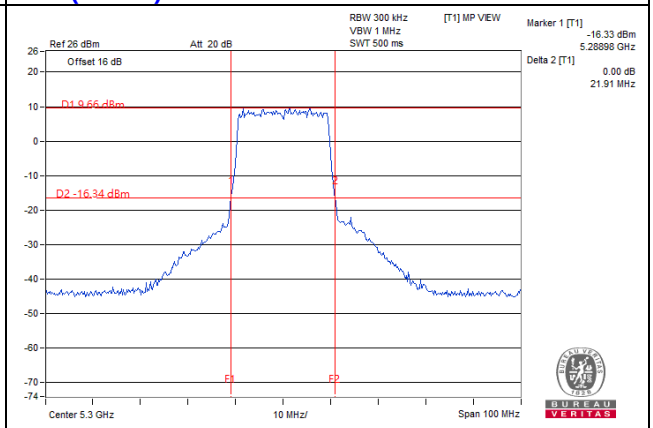
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		ANT 1	ANT 2	ANT 3	ANT 4
50	5250	81.81	82.50	81.71	81.76
50 (U-NII-2A Band)	5250	82.48	81.26	80.99	81.36
114	5570	163.08	163.67	163.87	165.03

26dB BANDWIDTH SPECTRUM PLOT

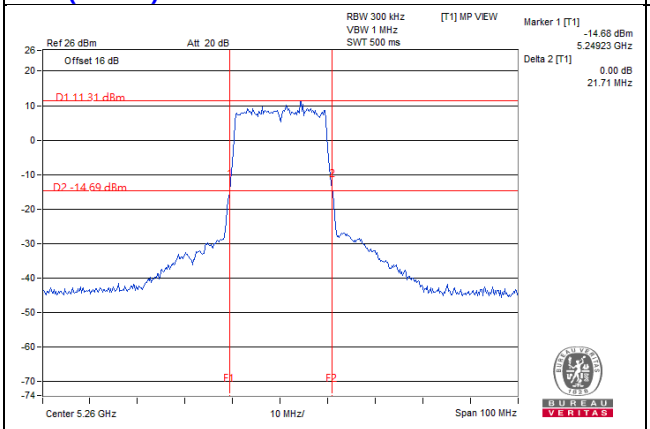
11ax (20MHz) 1S4T CDD CH52 Ant1



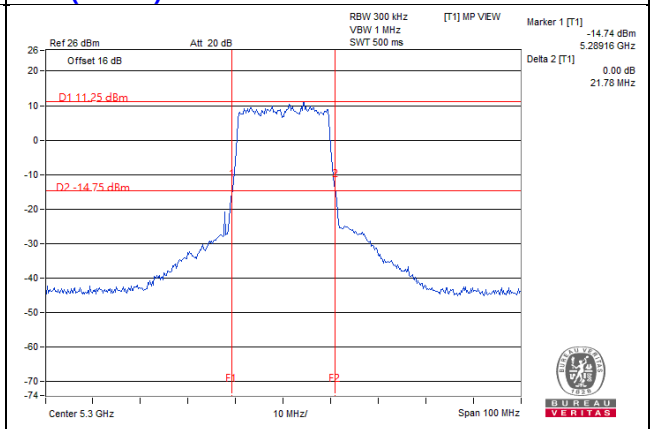
11ax (20MHz) 1S4T CDD CH60 Ant1



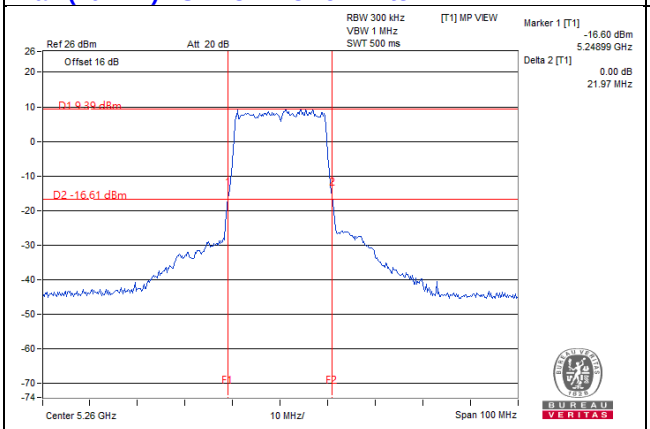
11ax (20MHz) 1S4T CDD CH52 Ant2



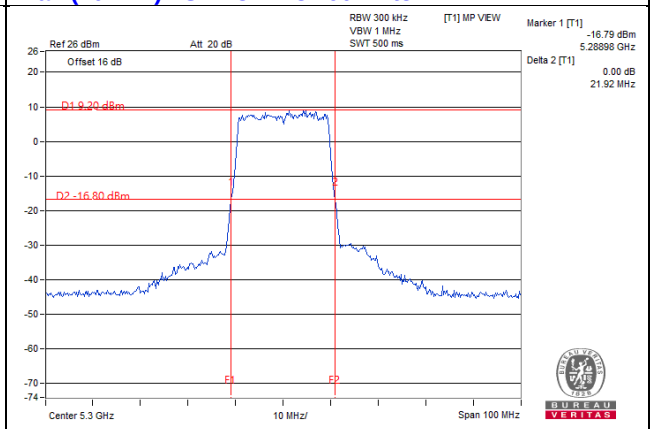
11ax (20MHz) 1S4T CDD CH60 Ant2



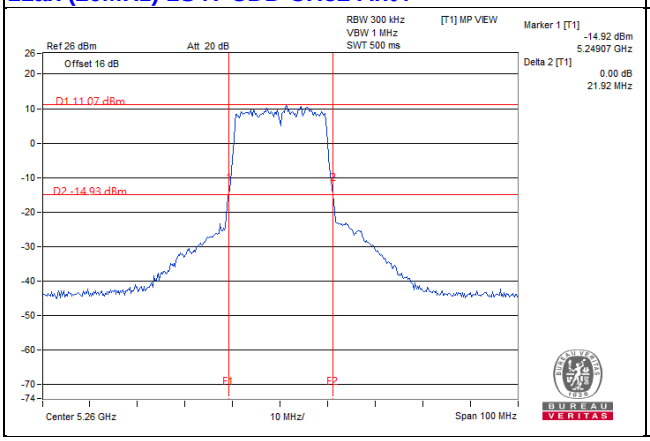
11ax (20MHz) 1S4T CDD CH52 Ant3



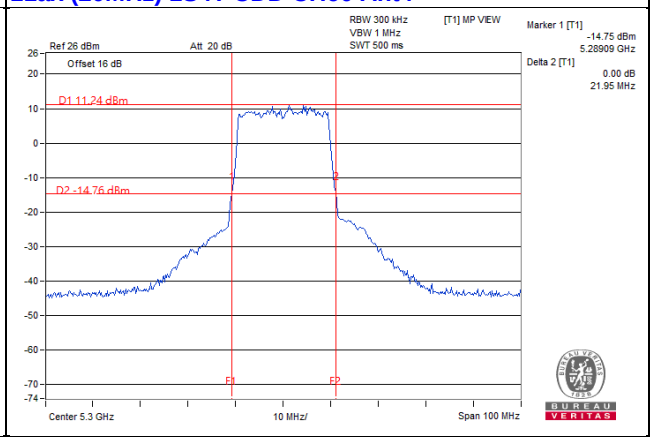
11ax (20MHz) 1S4T CDD CH60 Ant3



11ax (20MHz) 1S4T CDD CH52 Ant4

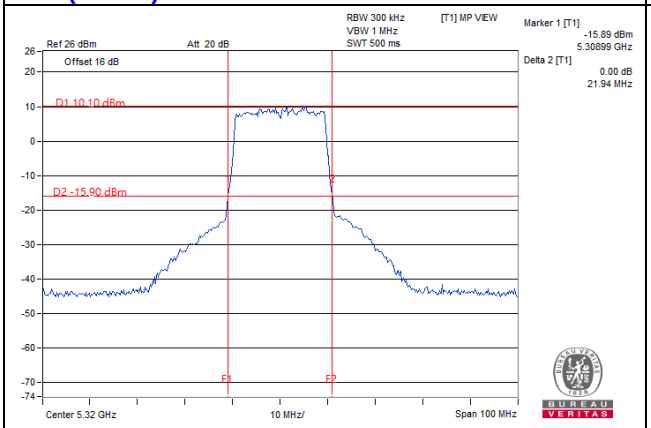


11ax (20MHz) 1S4T CDD CH60 Ant4

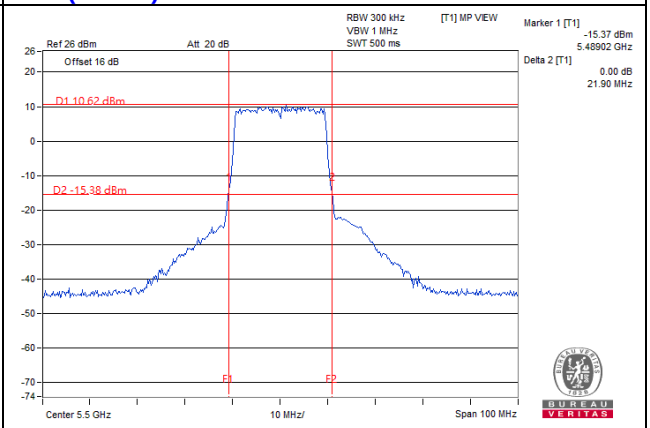


26dB BANDWIDTH SPECTRUM PLOT

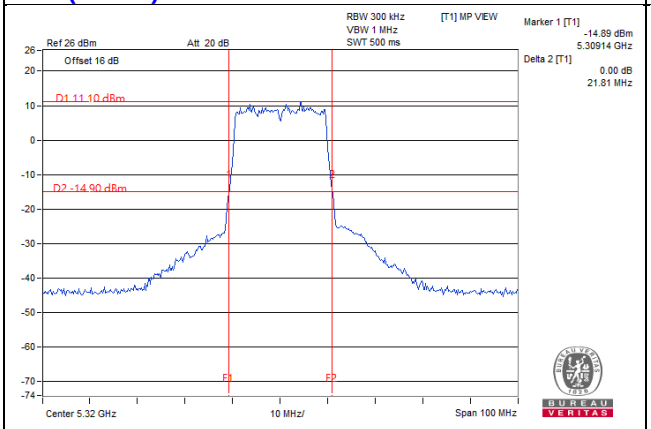
11ax (20MHz) 1S4T CDD CH64 Ant1



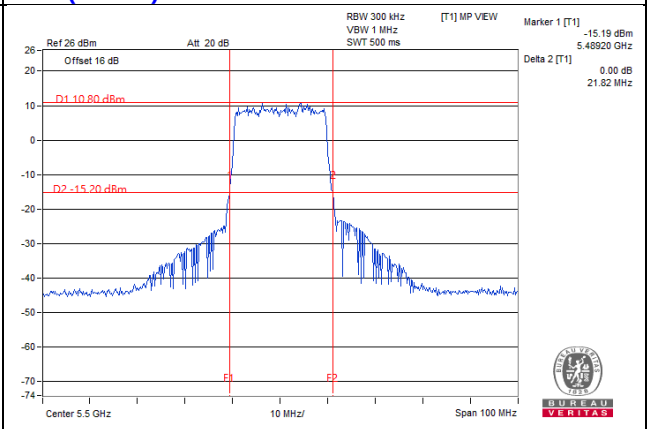
11ax (20MHz) 1S4T CDD CH100 Ant1



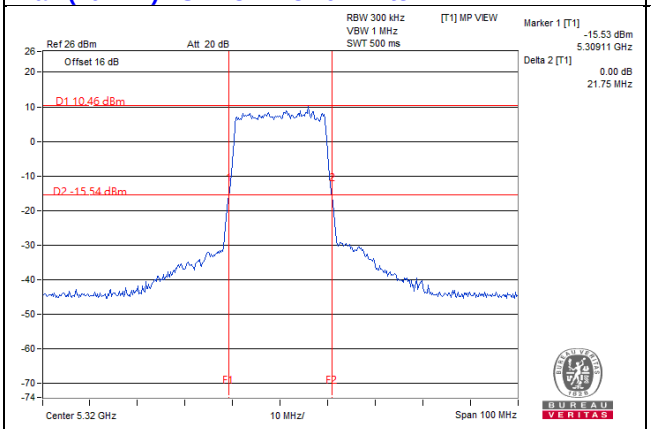
11ax (20MHz) 1S4T CDD CH64 Ant2



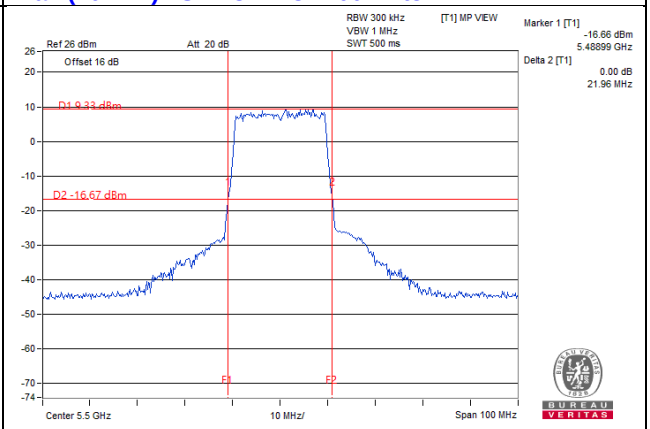
11ax (20MHz) 1S4T CDD CH100 Ant2



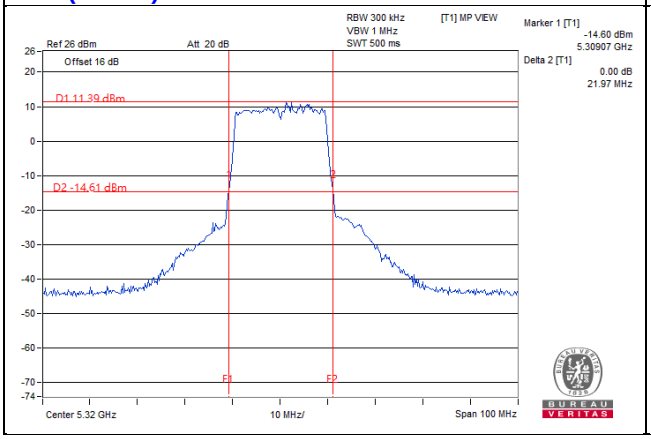
11ax (20MHz) 1S4T CDD CH64 Ant3



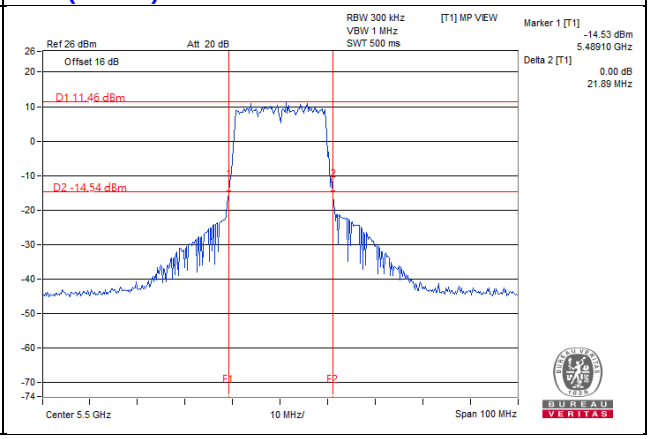
11ax (20MHz) 1S4T CDD CH100 Ant3



11ax (20MHz) 1S4T CDD CH64 Ant4

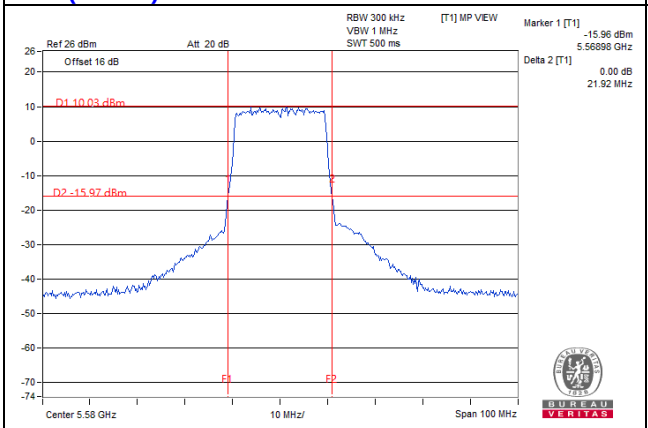


11ax (20MHz) 1S4T CDD CH100 Ant4

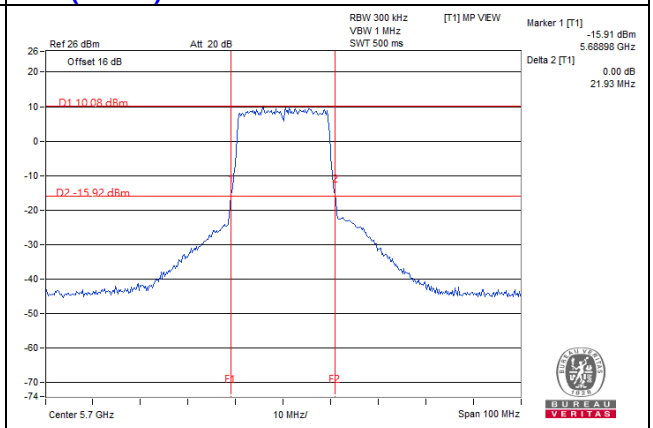


26dB BANDWIDTH SPECTRUM PLOT

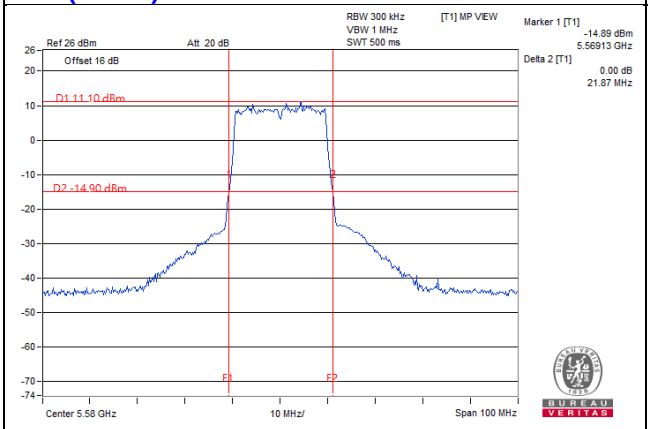
11ax (20MHz) 1S4T CDD CH116 Ant1



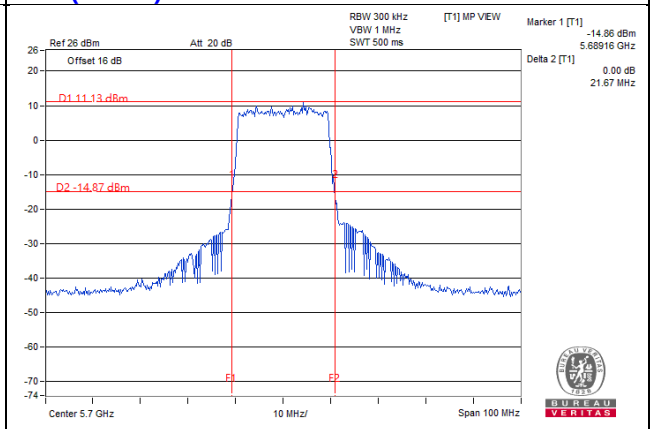
11ax (20MHz) 1S4T CDD CH140 Ant1



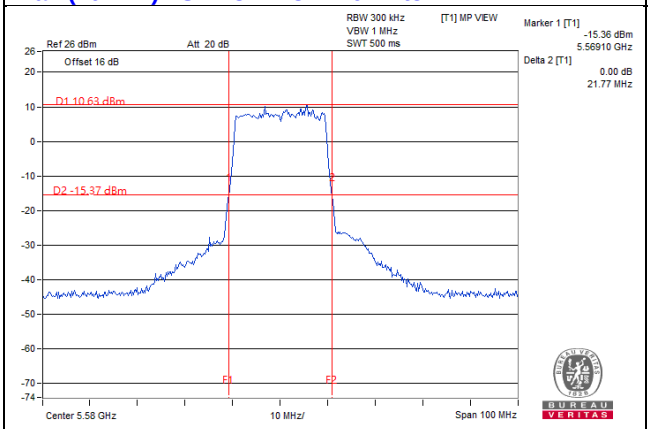
11ax (20MHz) 1S4T CDD CH116 Ant2



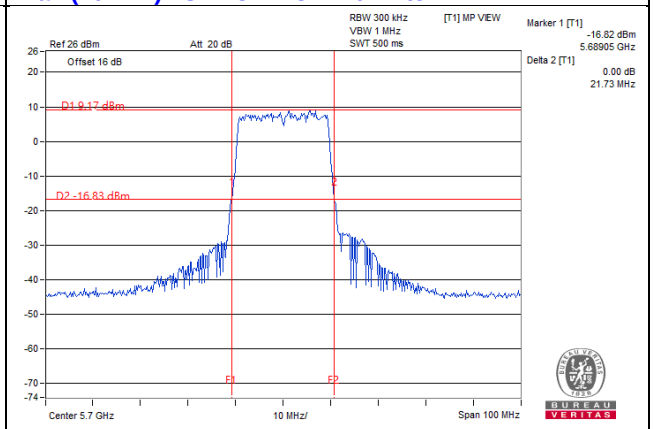
11ax (20MHz) 1S4T CDD CH140 Ant2



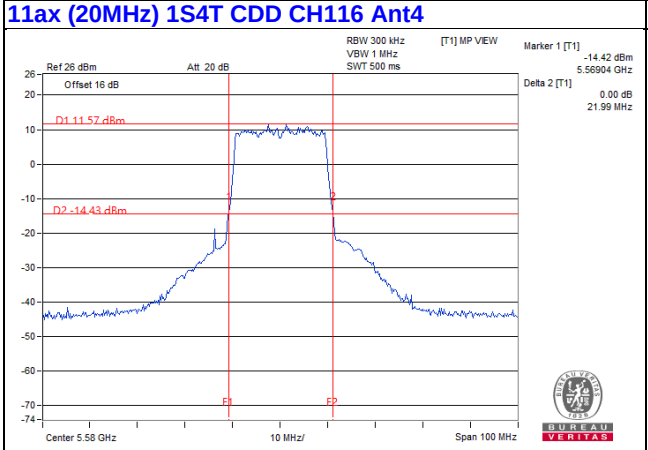
11ax (20MHz) 1S4T CDD CH116 Ant3



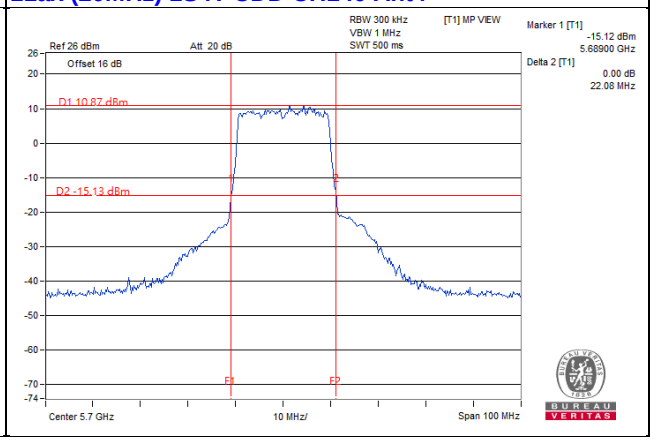
11ax (20MHz) 1S4T CDD CH140 Ant3



11ax (20MHz) 1S4T CDD CH116 Ant4

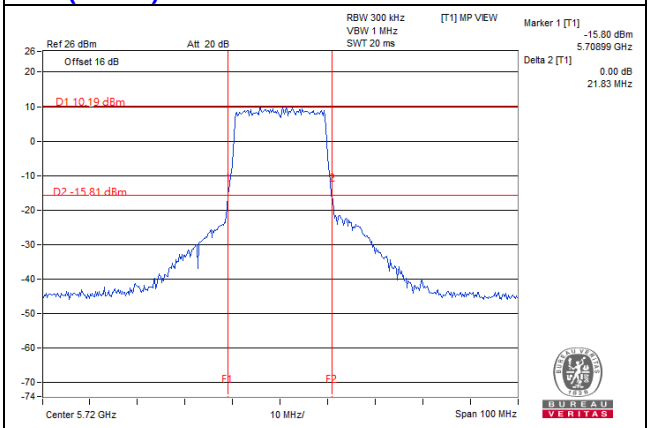


11ax (20MHz) 1S4T CDD CH140 Ant4

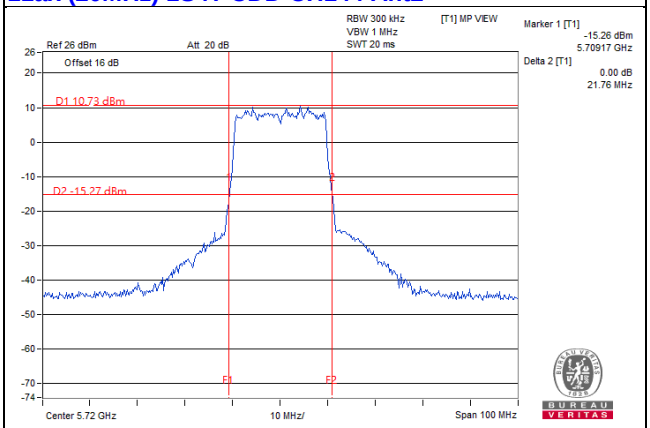


26dB BANDWIDTH SPECTRUM PLOT

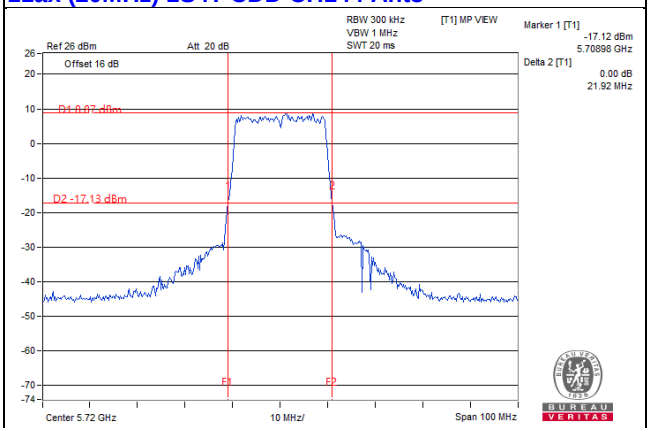
11ax (20MHz) 1S4T CDD CH144 Ant1



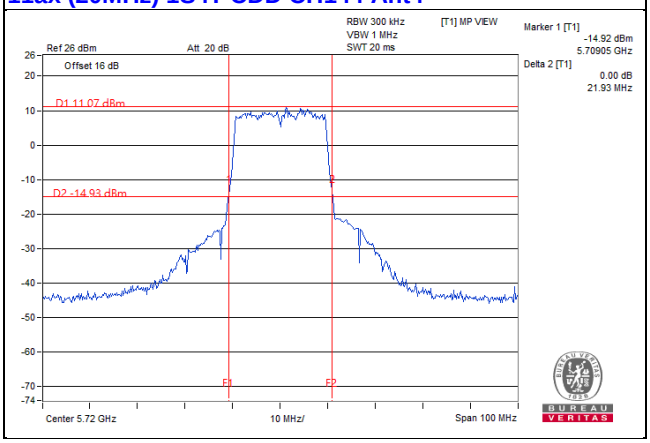
11ax (20MHz) 1S4T CDD CH144 Ant2



11ax (20MHz) 1S4T CDD CH144 Ant3

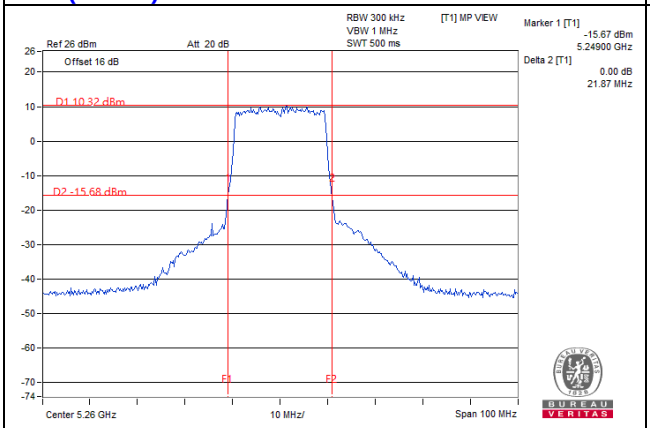


11ax (20MHz) 1S4T CDD CH144 Ant4

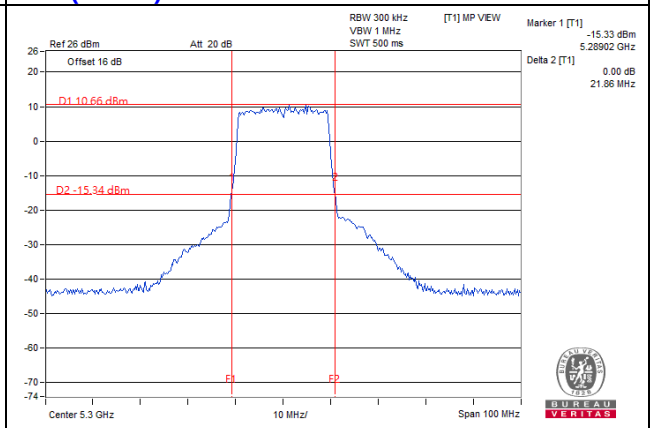


26dB BANDWIDTH SPECTRUM PLOT

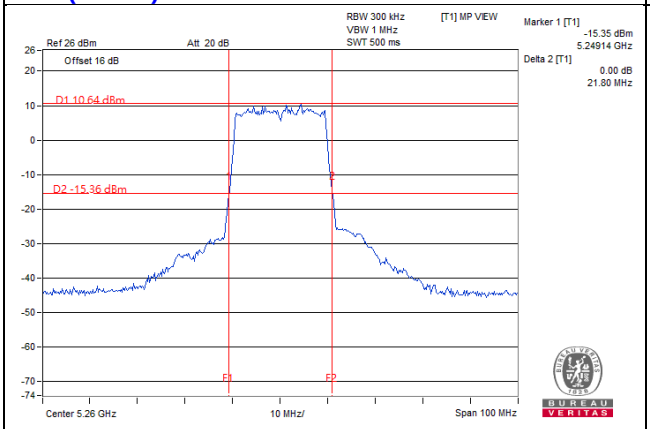
11ax (20MHz) 1S4T TxBF CH52 Ant1



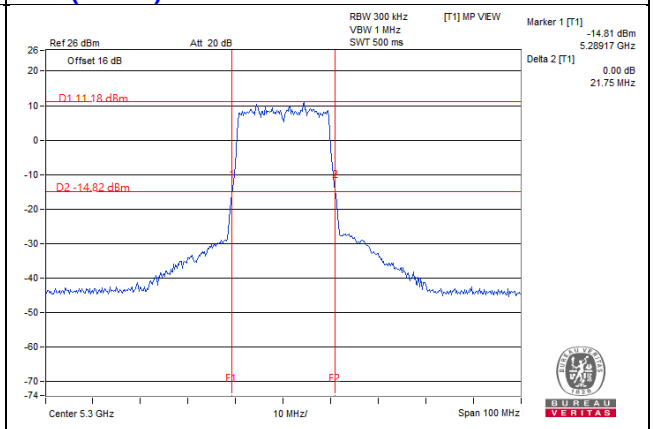
11ax (20MHz) 1S4T TxBF CH60 Ant1



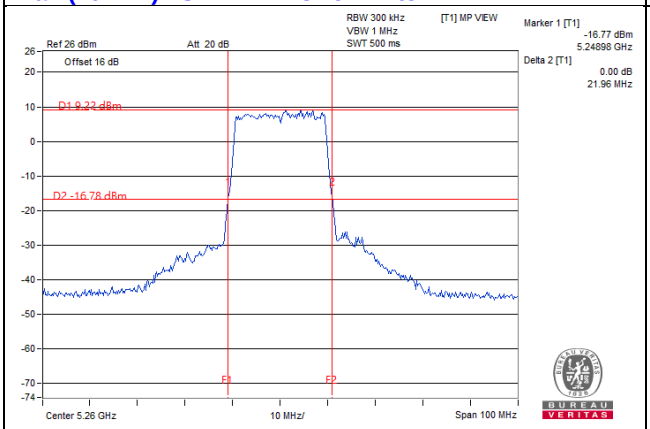
11ax (20MHz) 1S4T TxBF CH52 Ant2



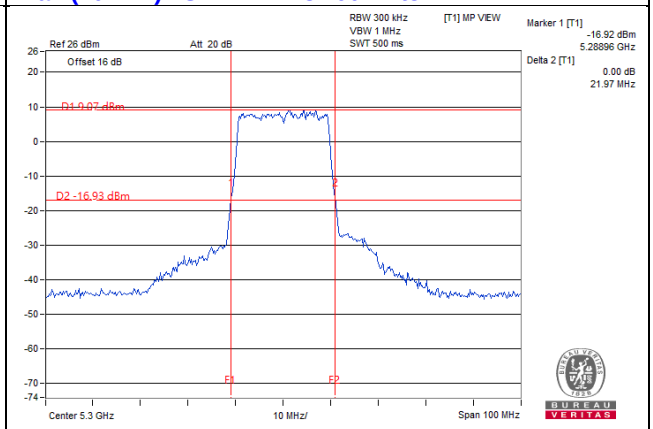
11ax (20MHz) 1S4T TxBF CH60 Ant2



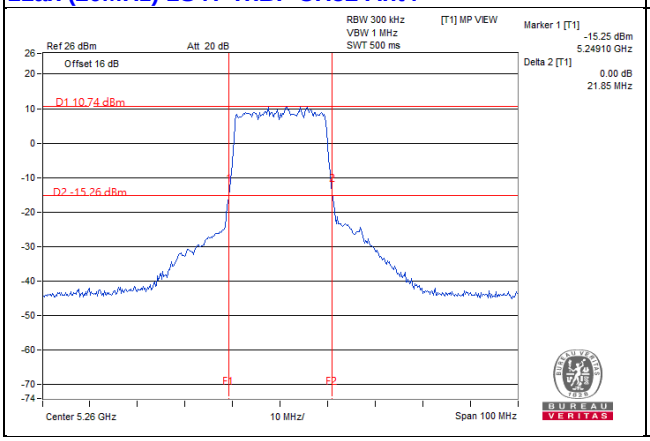
11ax (20MHz) 1S4T TxBF CH52 Ant3



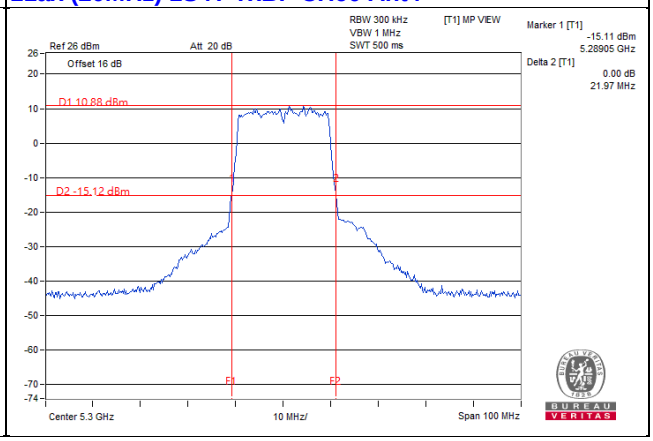
11ax (20MHz) 1S4T TxBF CH60 Ant3



11ax (20MHz) 1S4T TxBF CH52 Ant4

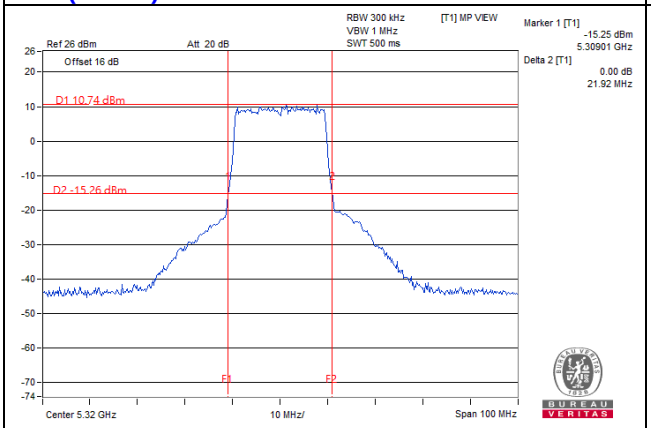


11ax (20MHz) 1S4T TxBF CH60 Ant4

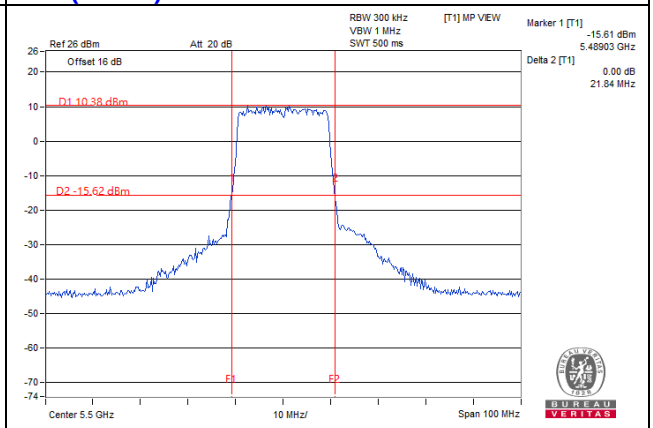


26dB BANDWIDTH SPECTRUM PLOT

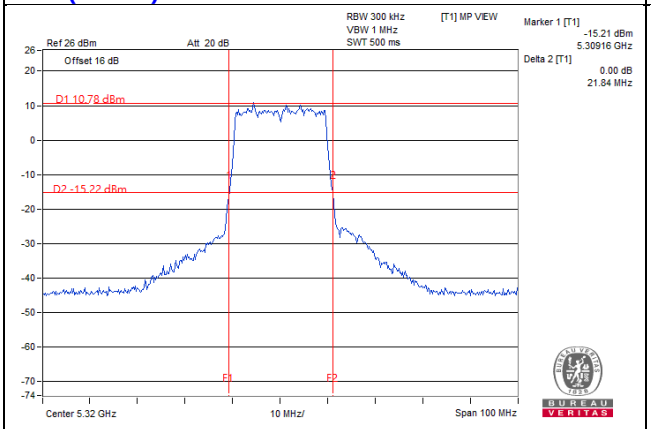
11ax (20MHz) 1S4T TxBF CH64 Ant1



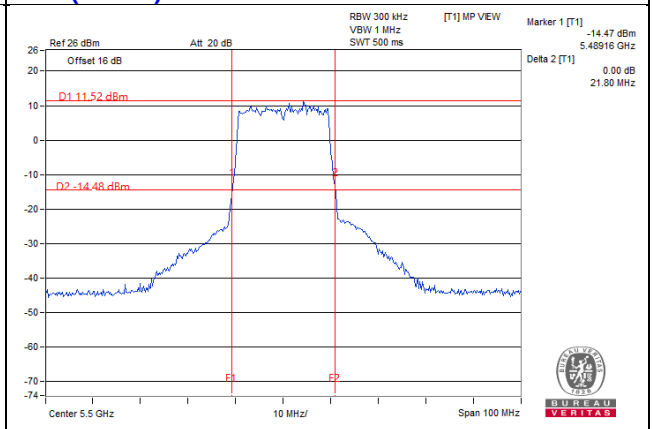
11ax (20MHz) 1S4T TxBF CH100 Ant1



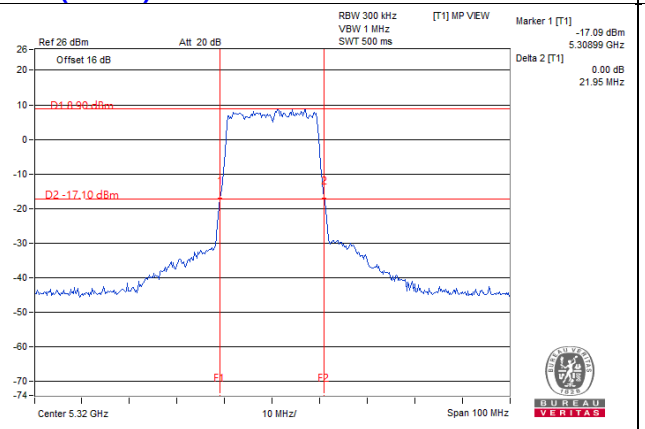
11ax (20MHz) 1S4T TxBF CH64 Ant2



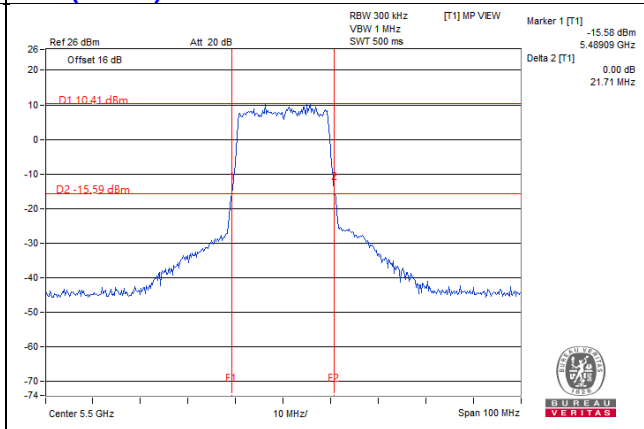
11ax (20MHz) 1S4T TxBF CH100 Ant2



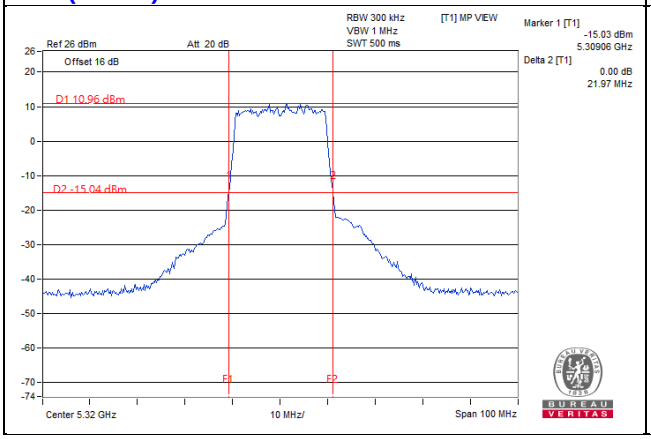
11ax (20MHz) 1S4T TxBF CH64 Ant3



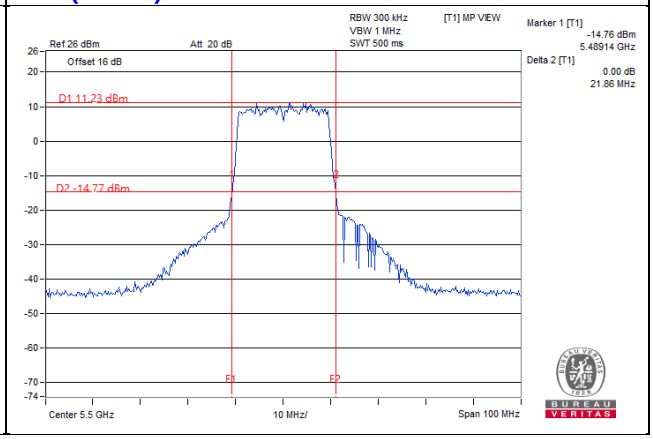
11ax (20MHz) 1S4T TxBF CH100 Ant3



11ax (20MHz) 1S4T TxBF CH64 Ant4

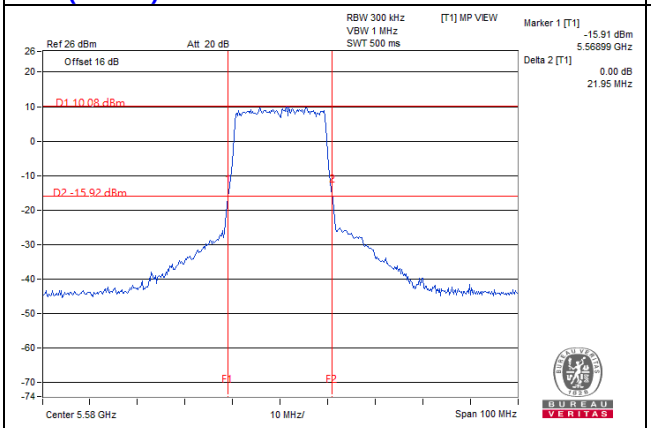


11ax (20MHz) 1S4T TxBF CH100 Ant4

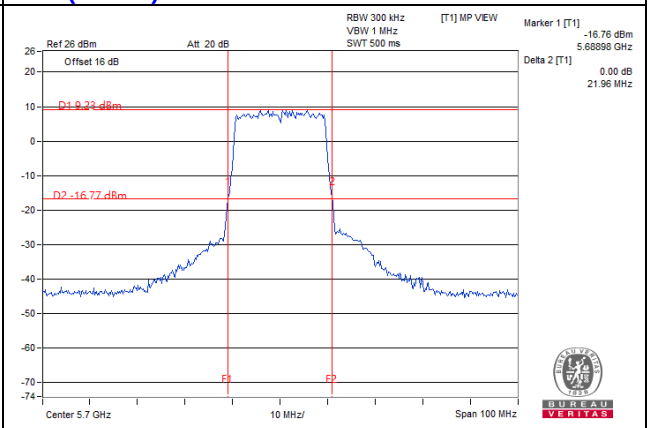


26dB BANDWIDTH SPECTRUM PLOT

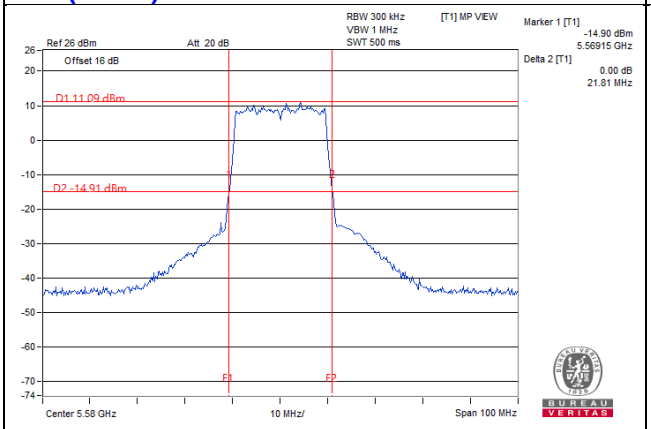
11ax (20MHz) 1S4T TxBF CH116 Ant1



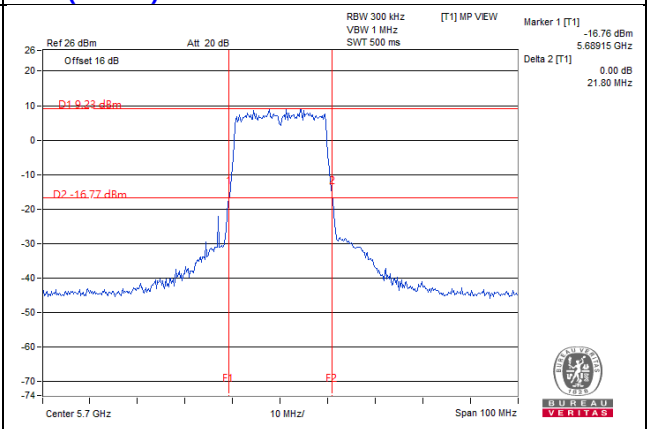
11ax (20MHz) 1S4T TxBF CH140 Ant1



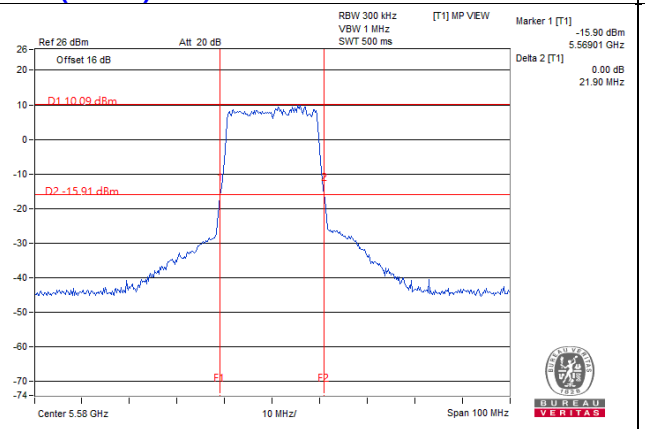
11ax (20MHz) 1S4T TxBF CH116 Ant2



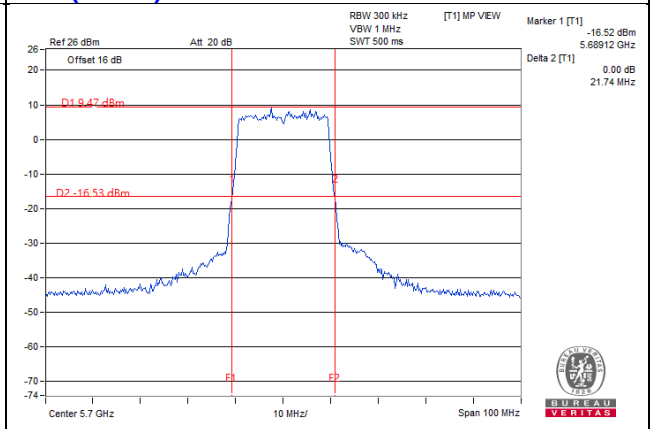
11ax (20MHz) 1S4T TxBF CH140 Ant2



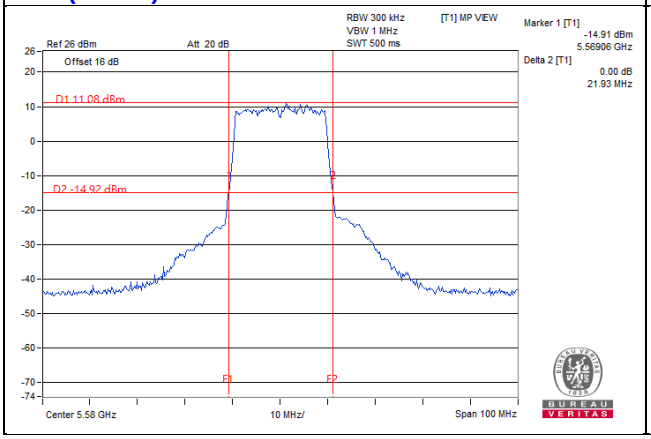
11ax (20MHz) 1S4T TxBF CH116 Ant3



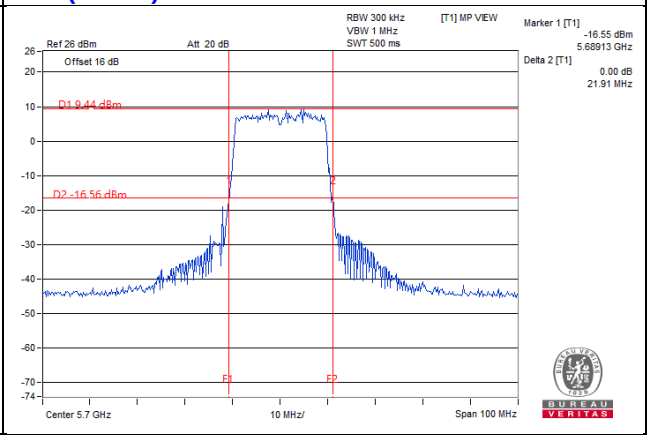
11ax (20MHz) 1S4T TxBF CH140 Ant3



11ax (20MHz) 1S4T TxBF CH116 Ant4

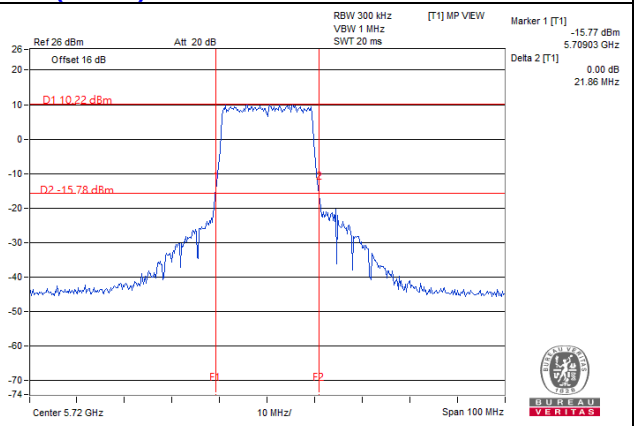


11ax (20MHz) 1S4T TxBF CH140 Ant4

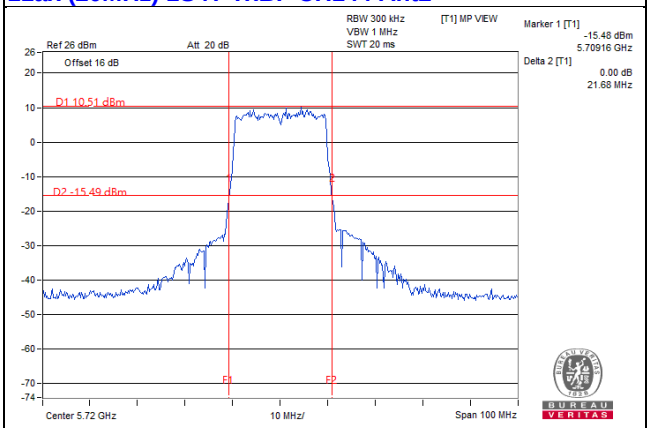


26dB BANDWIDTH SPECTRUM PLOT

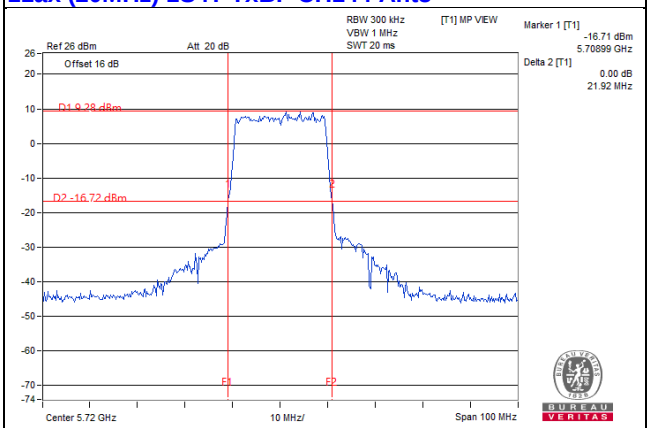
11ax (20MHz) 1S4T TxBF CH144 Ant1



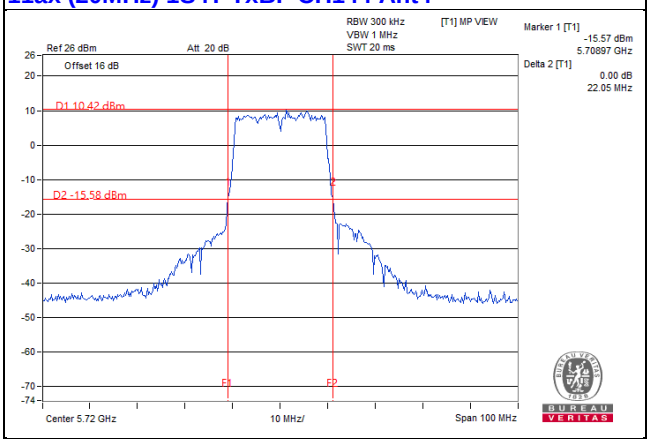
11ax (20MHz) 1S4T TxBF CH144 Ant2



11ax (20MHz) 1S4T TxBF CH144 Ant3

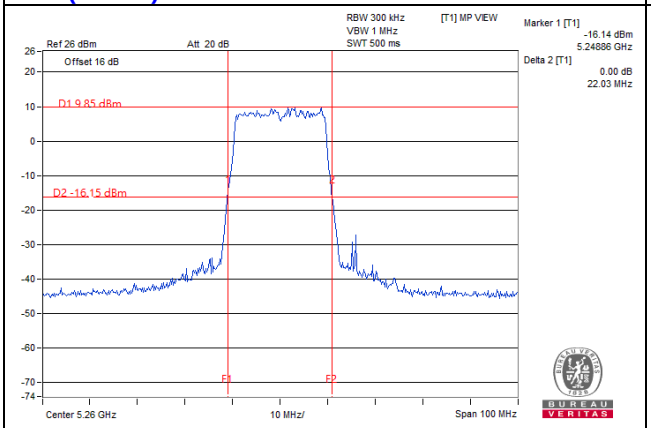


11ax (20MHz) 1S4T TxBF CH144 Ant4

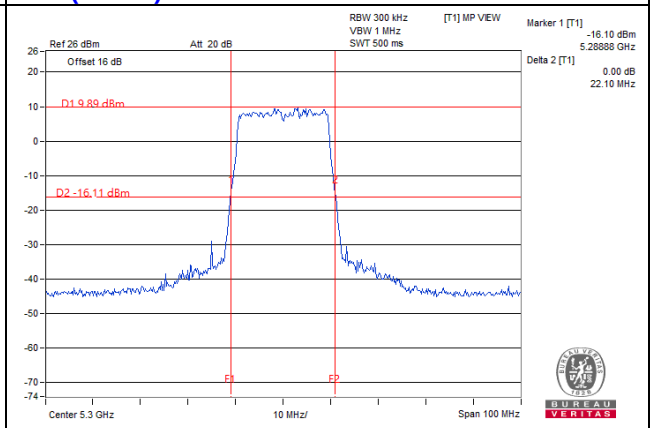


26dB BANDWIDTH SPECTRUM PLOT

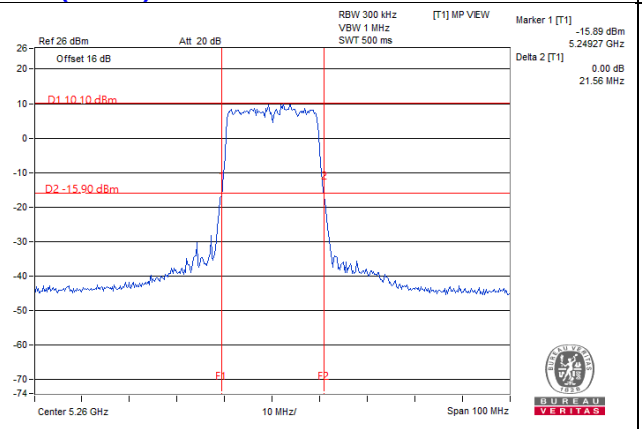
11ax (20MHz) 2S4T TxBF CH52 Ant1



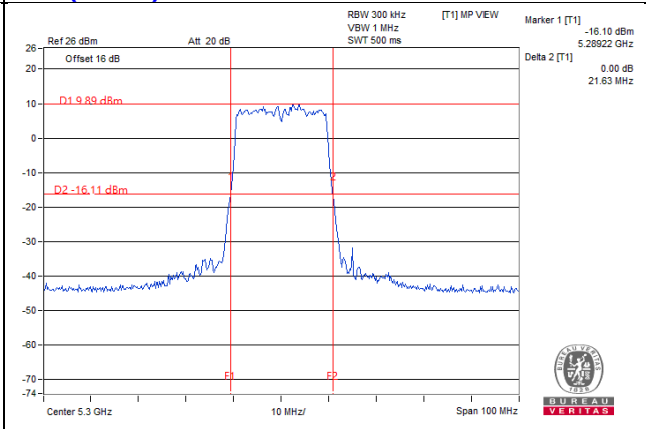
11ax (20MHz) 2S4T TxBF CH60 Ant1



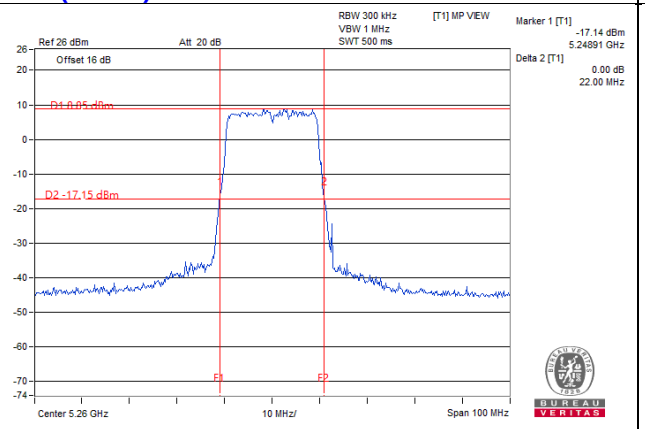
11ax (20MHz) 2S4T TxBF CH52 Ant2



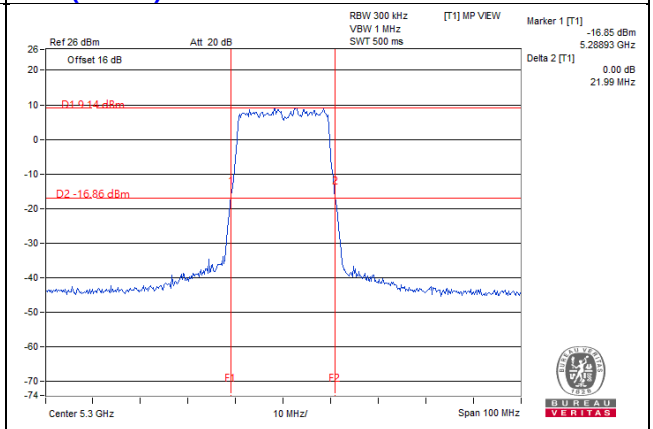
11ax (20MHz) 2S4T TxBF CH60 Ant2



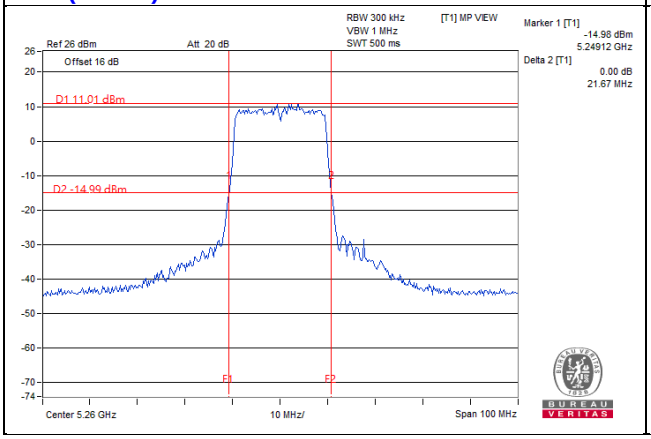
11ax (20MHz) 2S4T TxBF CH52 Ant3



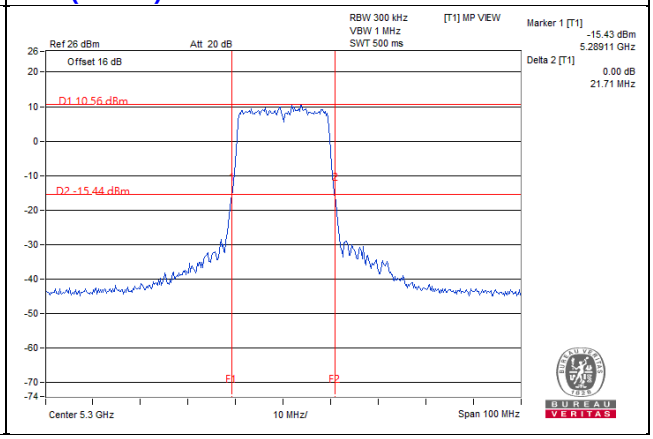
11ax (20MHz) 2S4T TxBF CH60 Ant3



11ax (20MHz) 2S4T TxBF CH52 Ant4

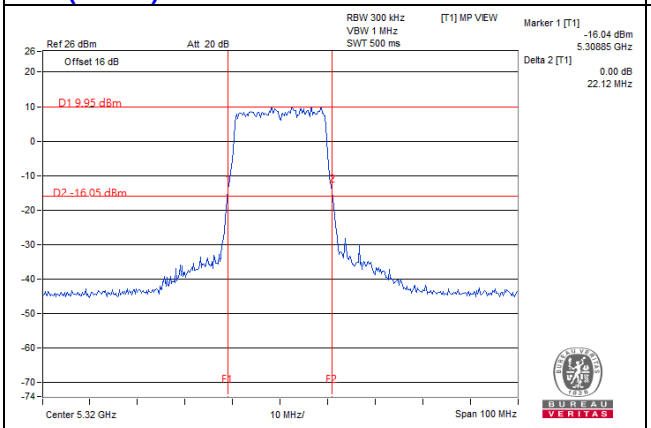


11ax (20MHz) 2S4T TxBF CH60 Ant4

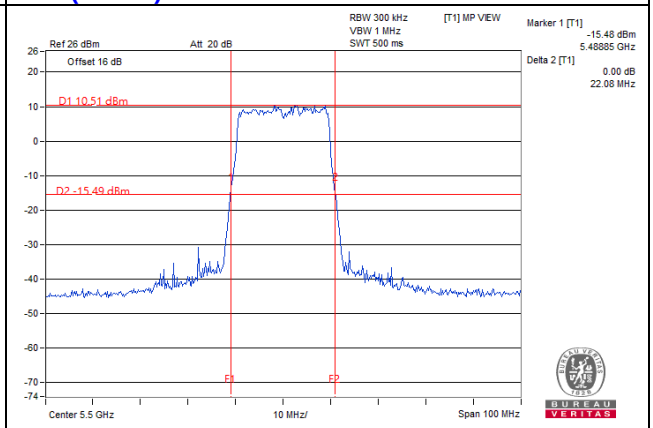


26dB BANDWIDTH SPECTRUM PLOT

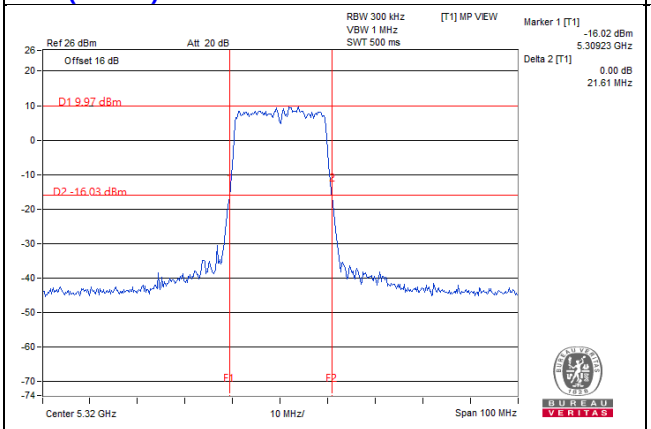
11ax (20MHz) 2S4T TxBF CH64 Ant1



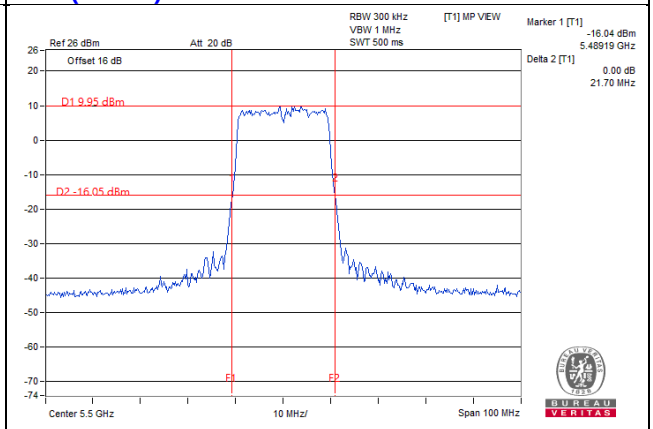
11ax (20MHz) 2S4T TxBF CH100 Ant1



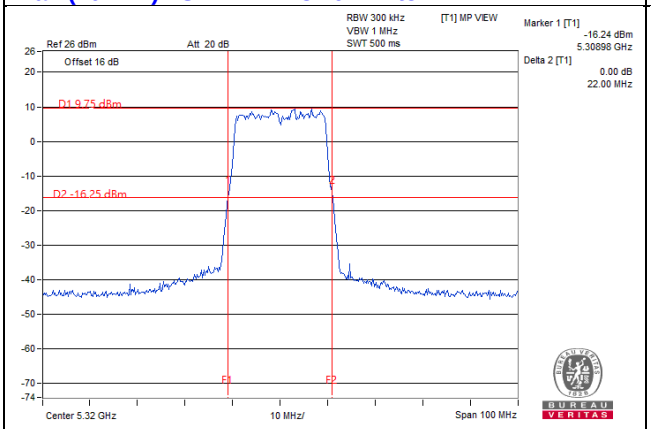
11ax (20MHz) 2S4T TxBF CH64 Ant2



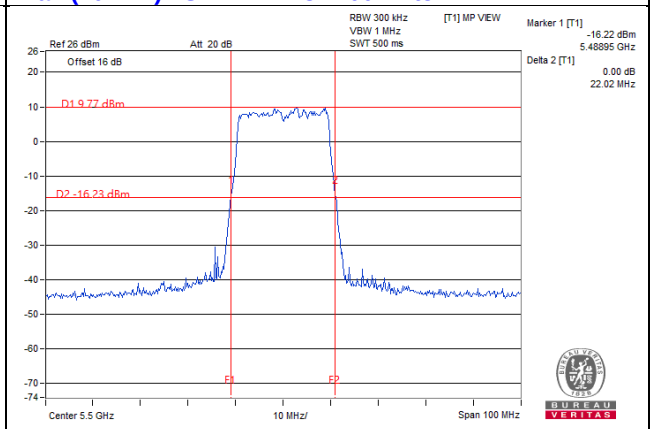
11ax (20MHz) 2S4T TxBF CH100 Ant2



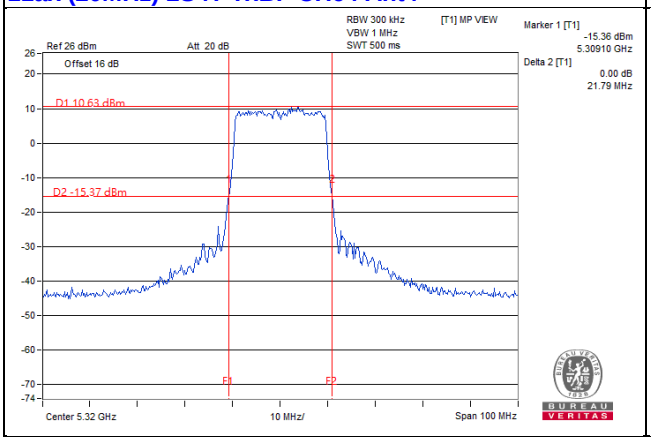
11ax (20MHz) 2S4T TxBF CH64 Ant3



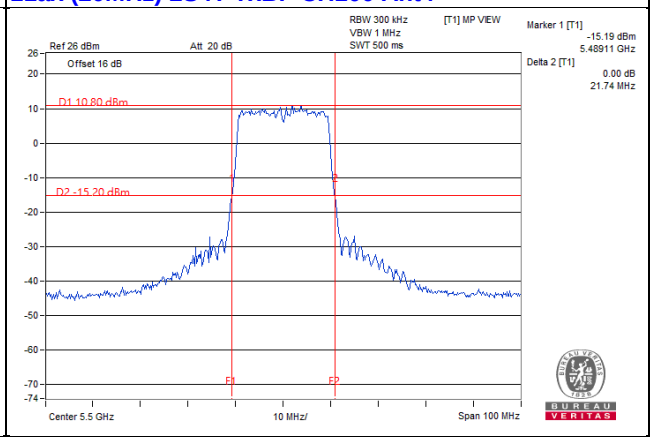
11ax (20MHz) 2S4T TxBF CH100 Ant3



11ax (20MHz) 2S4T TxBF CH64 Ant4

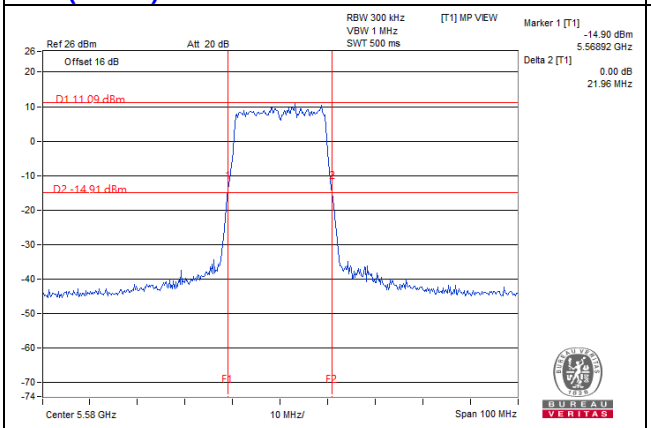


11ax (20MHz) 2S4T TxBF CH100 Ant4

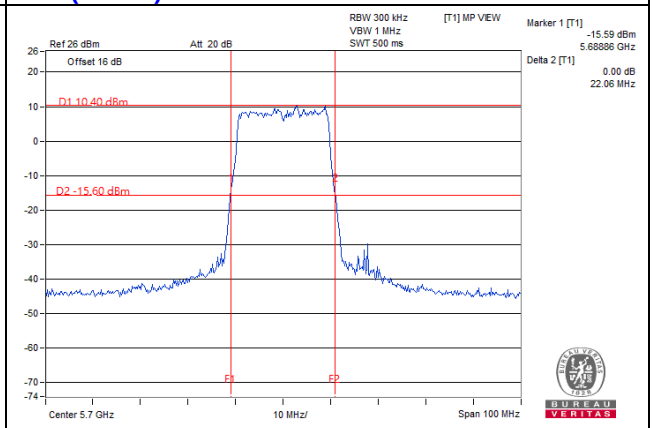


26dB BANDWIDTH SPECTRUM PLOT

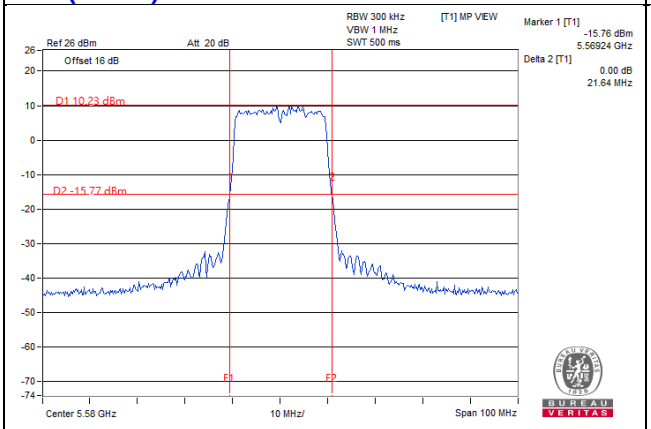
11ax (20MHz) 2S4T TxBF CH116 Ant1



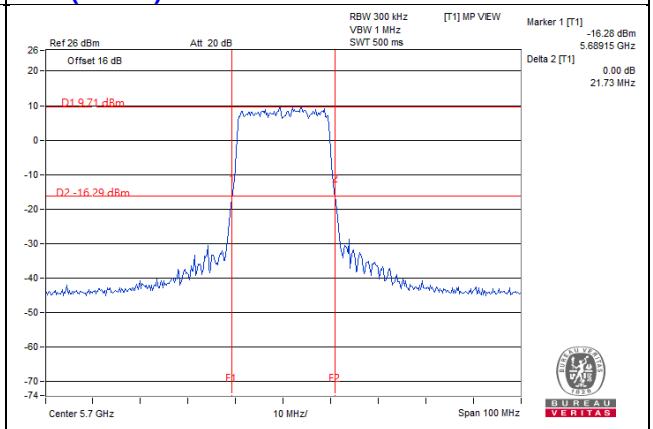
11ax (20MHz) 2S4T TxBF CH140 Ant1



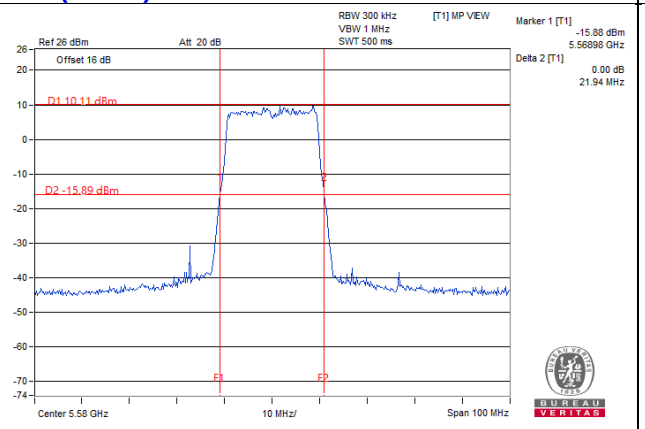
11ax (20MHz) 2S4T TxBF CH116 Ant2



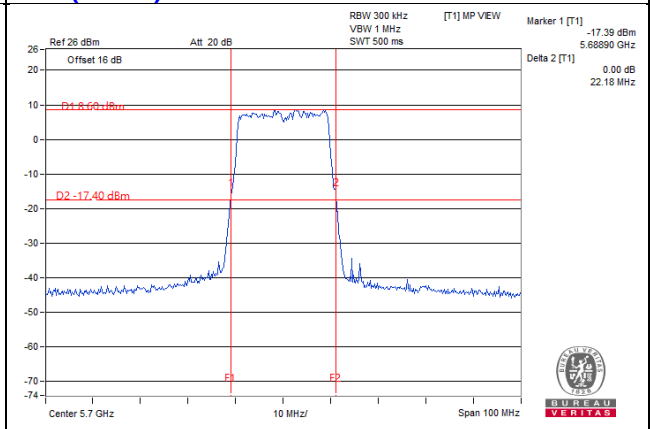
11ax (20MHz) 2S4T TxBF CH140 Ant2



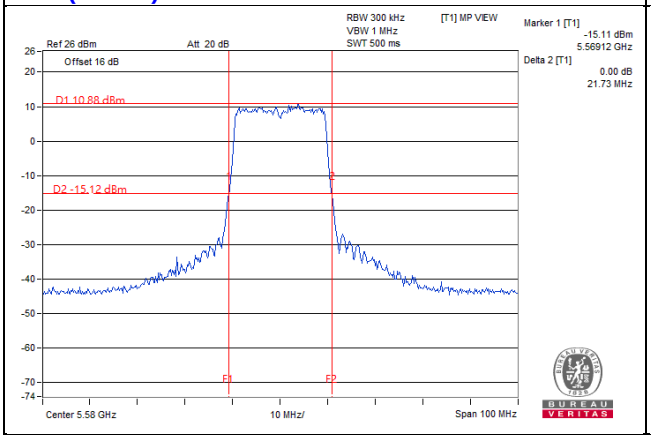
11ax (20MHz) 2S4T TxBF CH116 Ant3



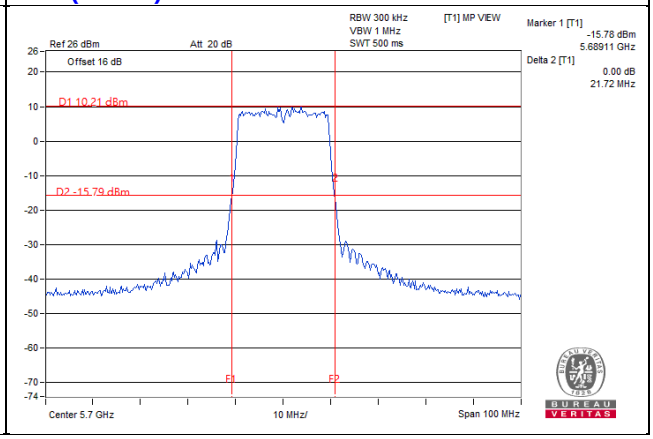
11ax (20MHz) 2S4T TxBF CH140 Ant3



11ax (20MHz) 2S4T TxBF CH116 Ant4

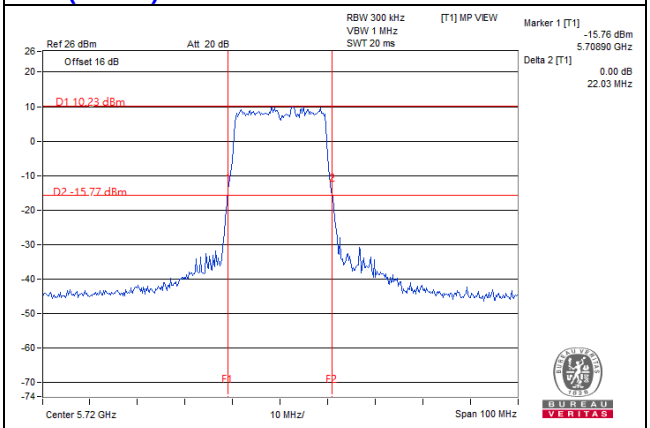


11ax (20MHz) 2S4T TxBF CH140 Ant4

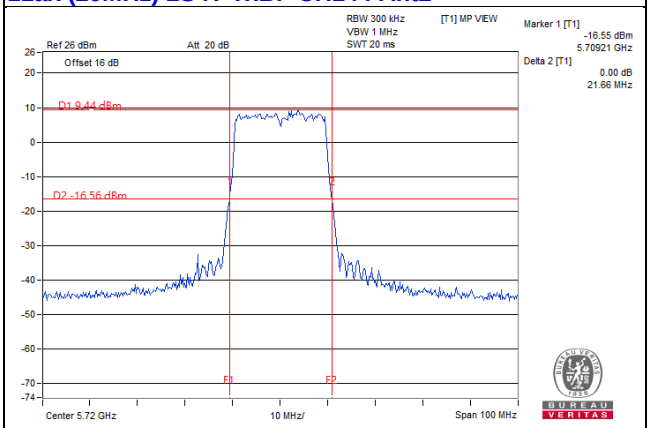


26dB BANDWIDTH SPECTRUM PLOT

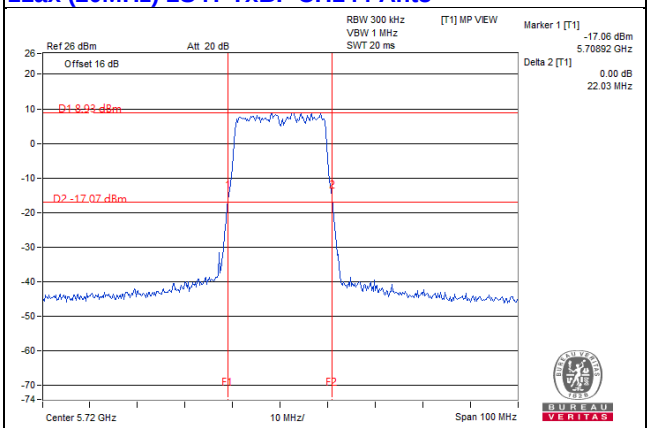
11ax (20MHz) 2S4T TxBF CH144 Ant1



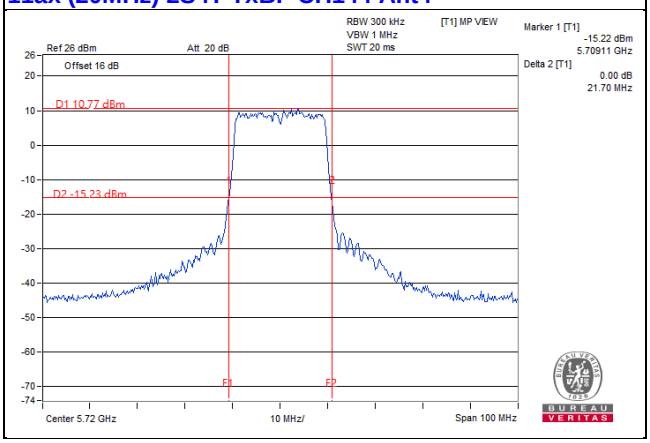
11ax (20MHz) 2S4T TxBF CH144 Ant2



11ax (20MHz) 2S4T TxBF CH144 Ant3

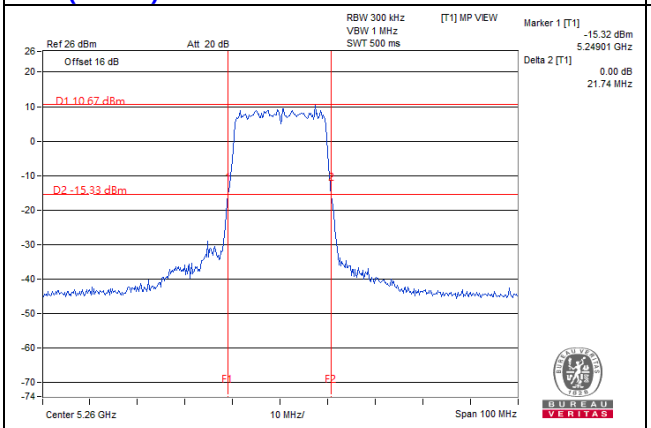


11ax (20MHz) 2S4T TxBF CH144 Ant4

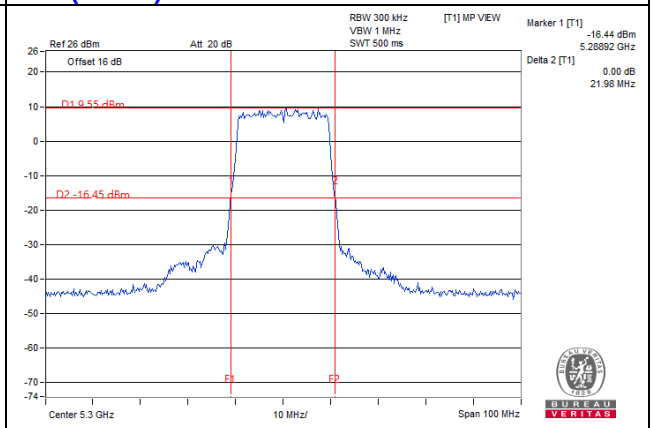


26dB BANDWIDTH SPECTRUM PLOT

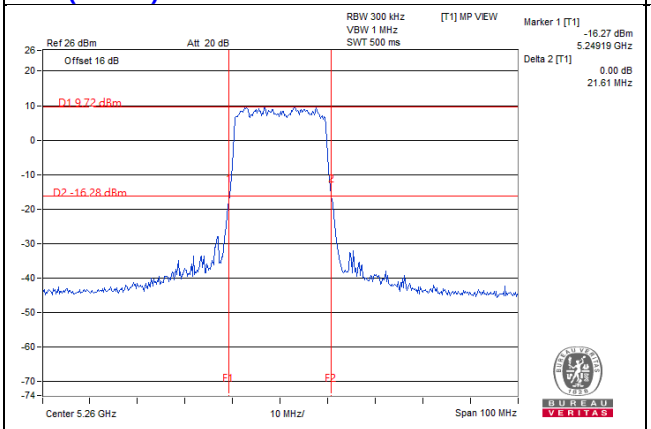
11ax (20MHz) 3S4T TxBF CH52 Ant1



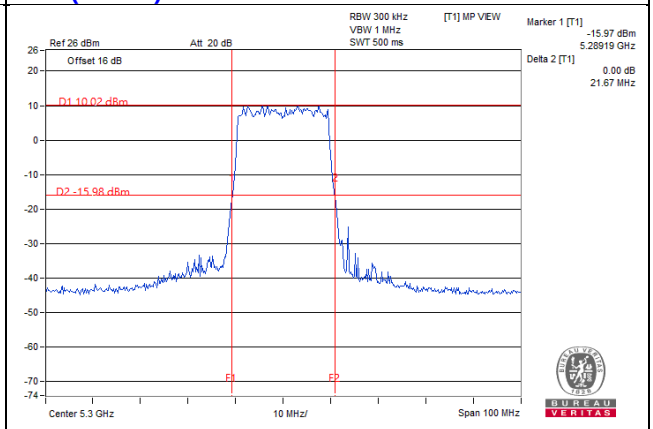
11ax (20MHz) 3S4T TxBF CH60 Ant1



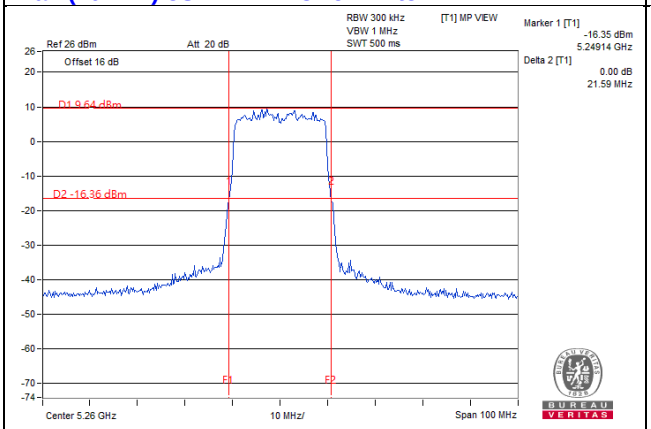
11ax (20MHz) 3S4T TxBF CH52 Ant2



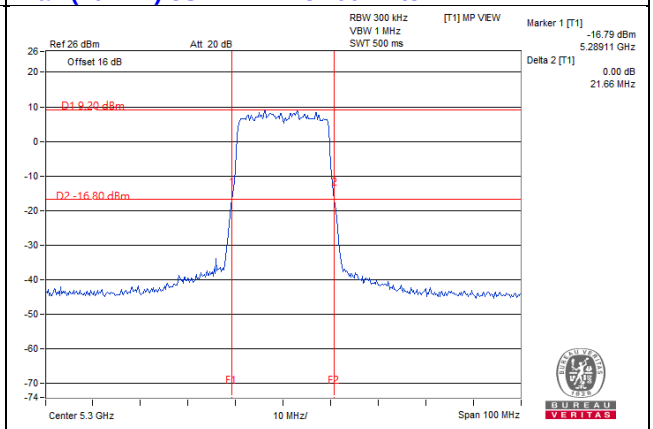
11ax (20MHz) 3S4T TxBF CH60 Ant2



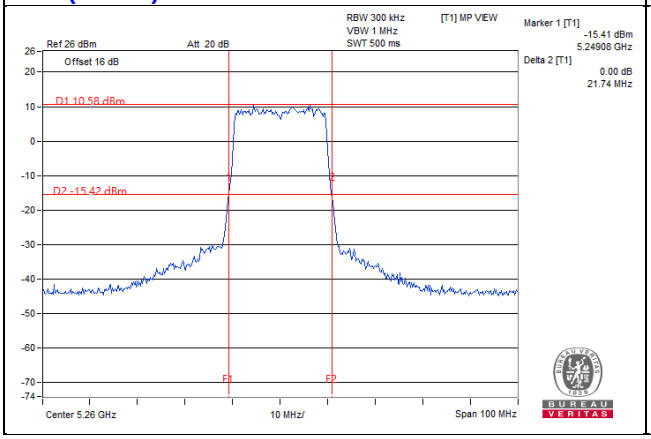
11ax (20MHz) 3S4T TxBF CH52 Ant3



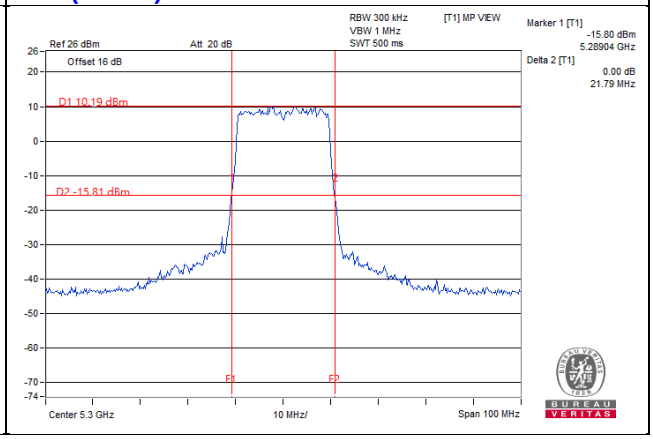
11ax (20MHz) 3S4T TxBF CH60 Ant3



11ax (20MHz) 3S4T TxBF CH52 Ant4

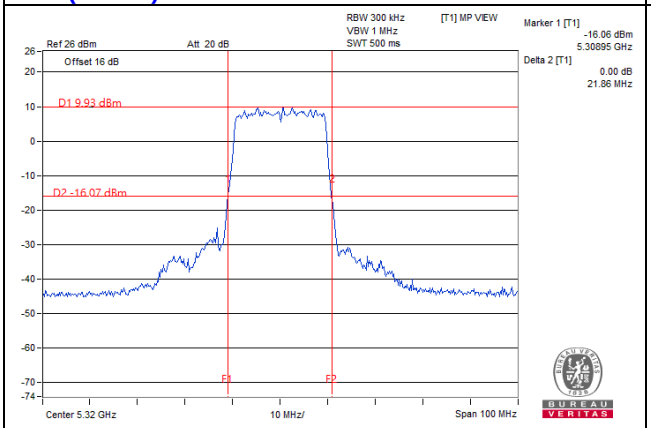


11ax (20MHz) 3S4T TxBF CH60 Ant4

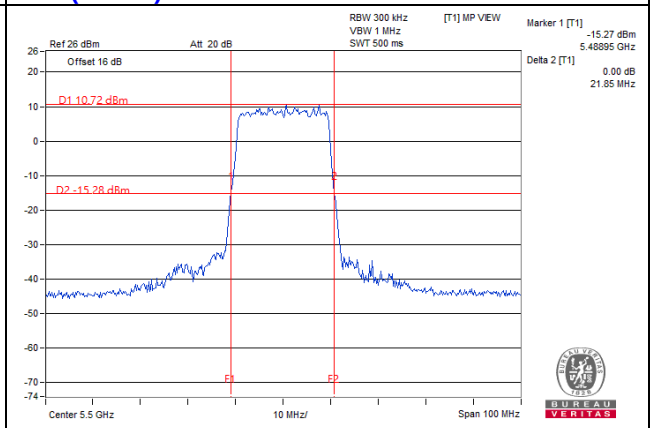


26dB BANDWIDTH SPECTRUM PLOT

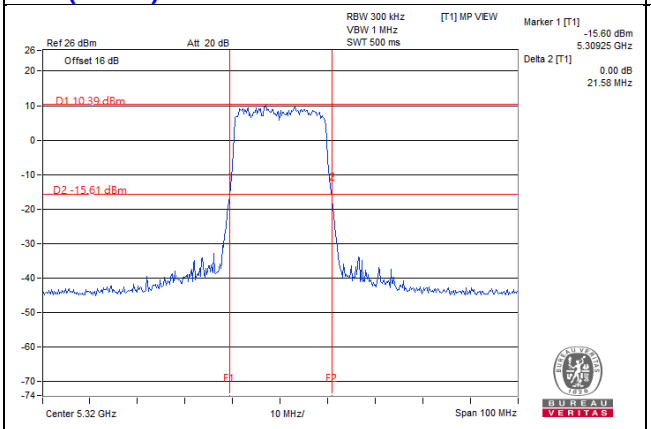
11ax (20MHz) 3S4T TxBF CH64 Ant1



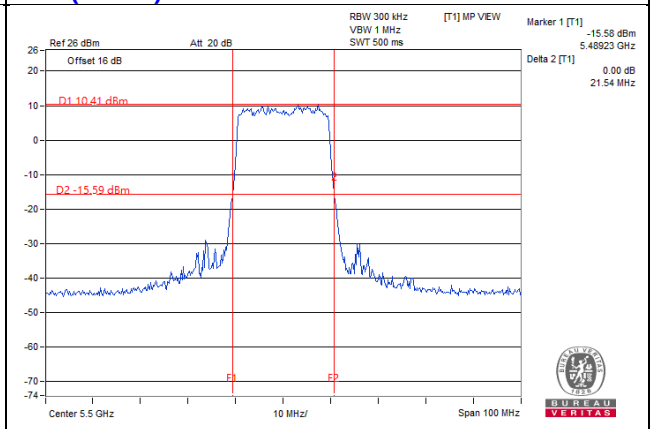
11ax (20MHz) 3S4T TxBF CH100 Ant1



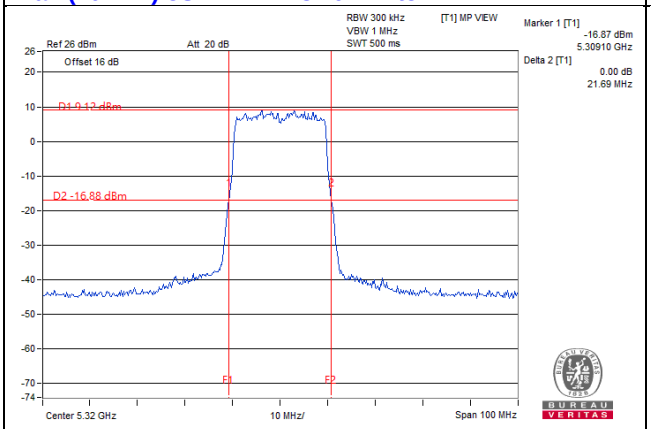
11ax (20MHz) 3S4T TxBF CH64 Ant2



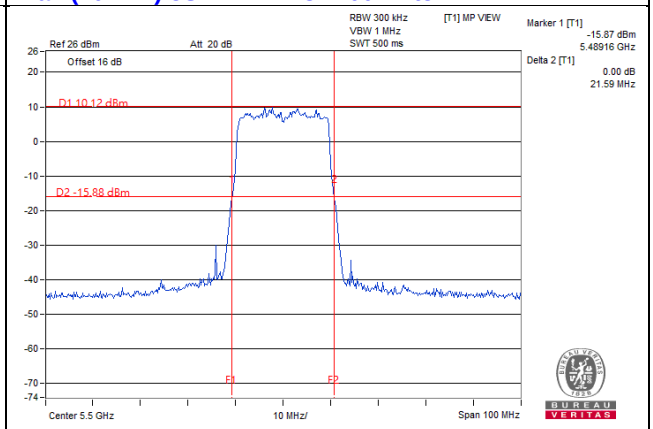
11ax (20MHz) 3S4T TxBF CH100 Ant2



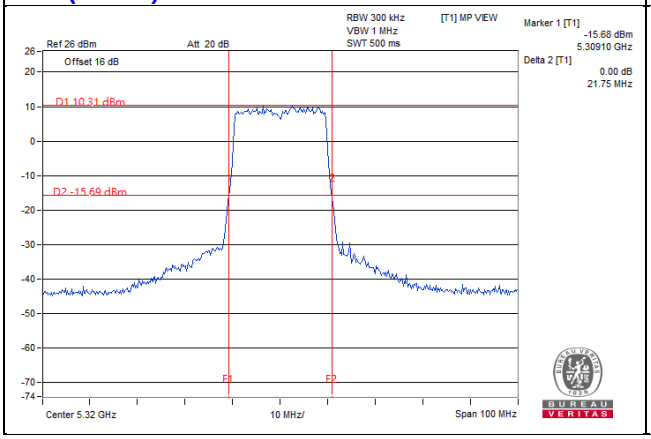
11ax (20MHz) 3S4T TxBF CH64 Ant3



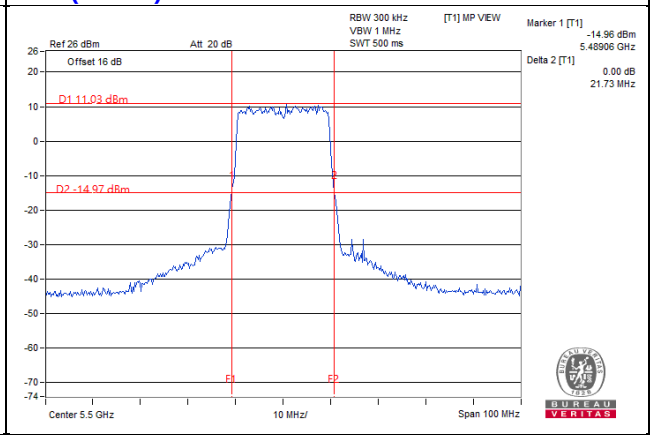
11ax (20MHz) 3S4T TxBF CH100 Ant3



11ax (20MHz) 3S4T TxBF CH64 Ant4

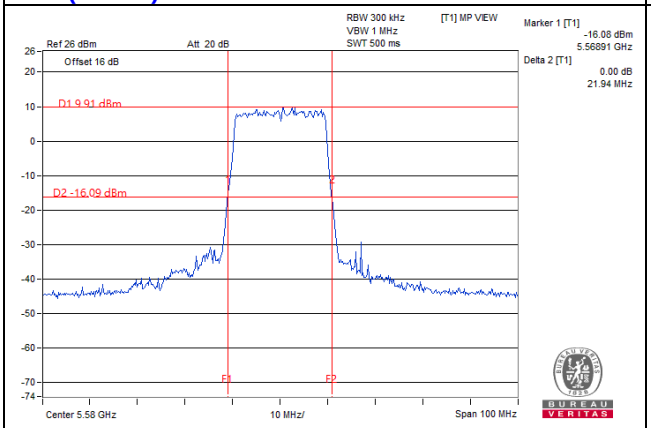


11ax (20MHz) 3S4T TxBF CH100 Ant4

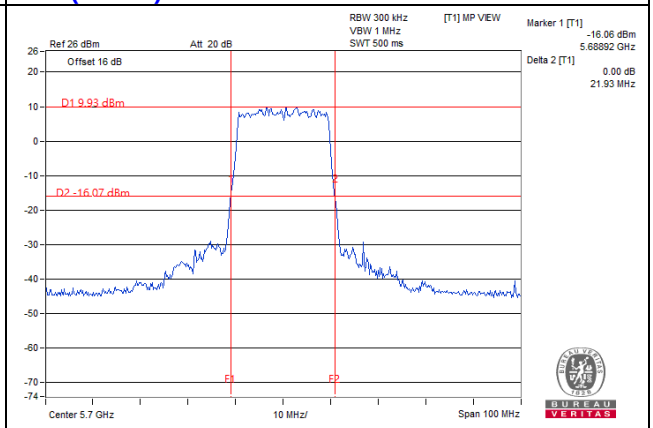


26dB BANDWIDTH SPECTRUM PLOT

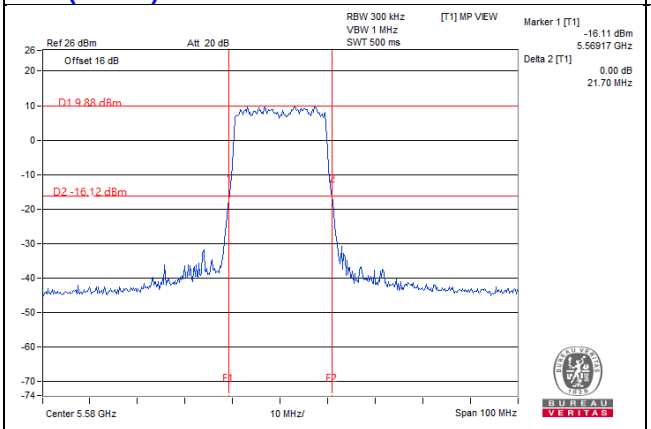
11ax (20MHz) 3S4T TxBF CH116 Ant1



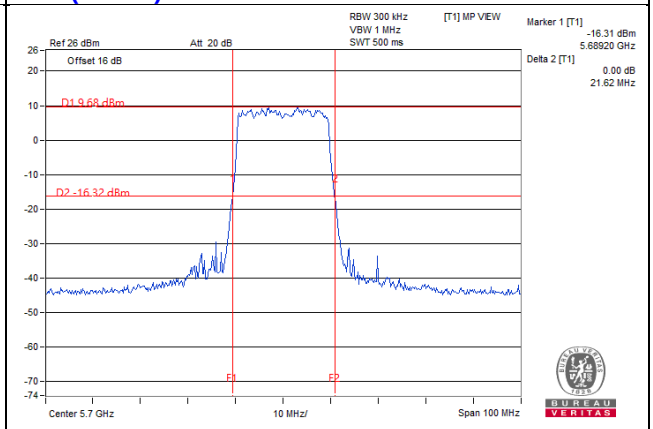
11ax (20MHz) 3S4T TxBF CH140 Ant1



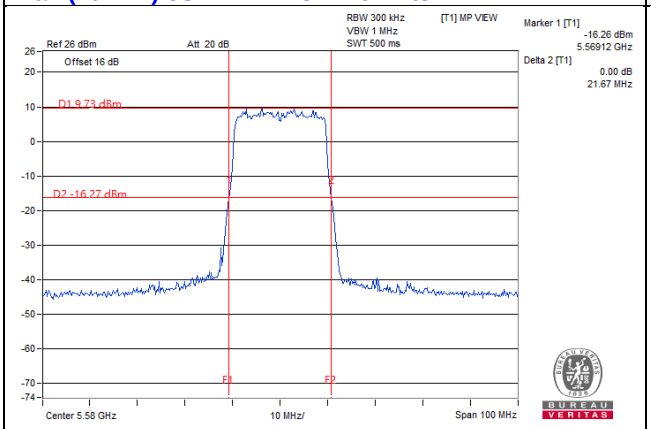
11ax (20MHz) 3S4T TxBF CH116 Ant2



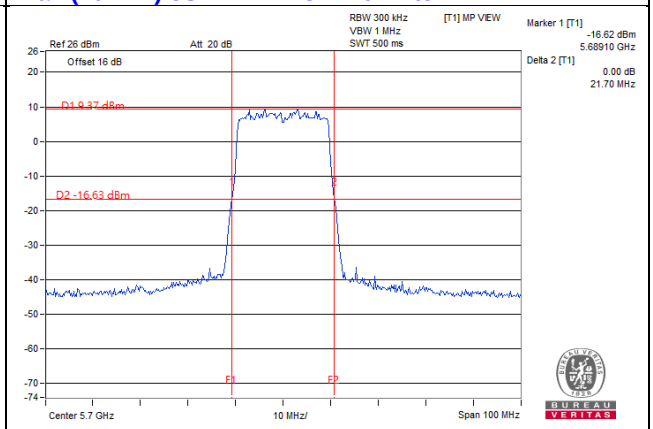
11ax (20MHz) 3S4T TxBF CH140 Ant2



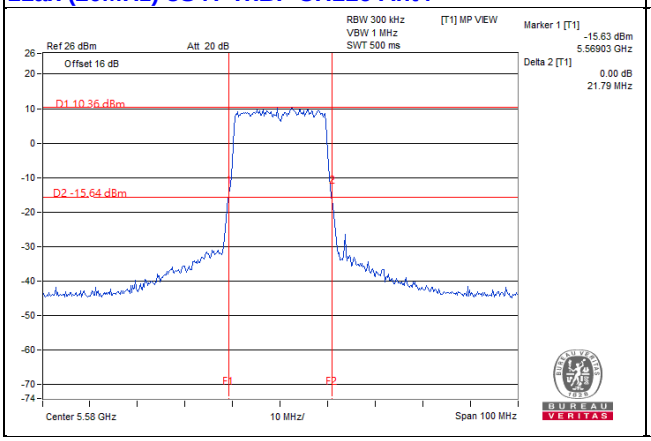
11ax (20MHz) 3S4T TxBF CH116 Ant3



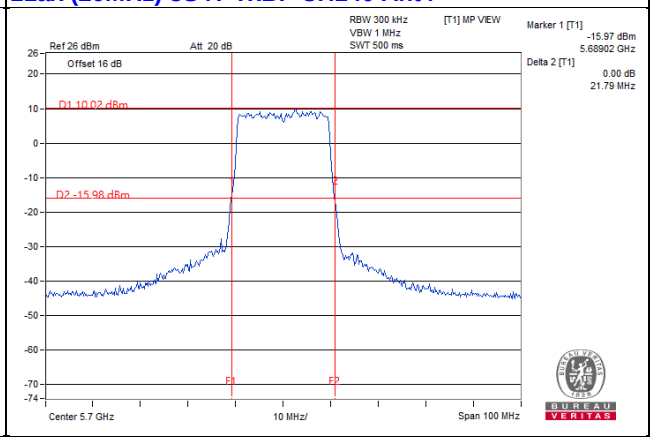
11ax (20MHz) 3S4T TxBF CH140 Ant3



11ax (20MHz) 3S4T TxBF CH116 Ant4

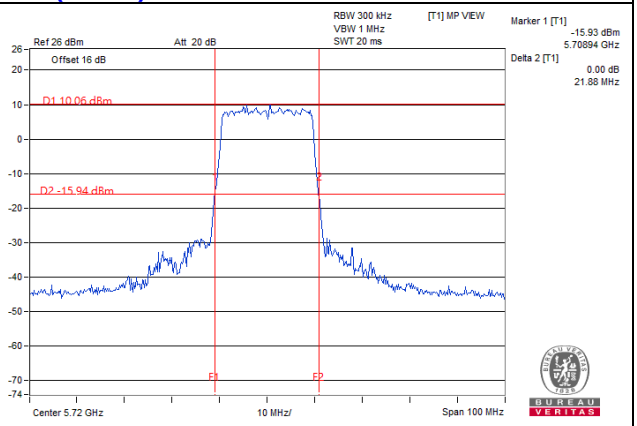


11ax (20MHz) 3S4T TxBF CH140 Ant4

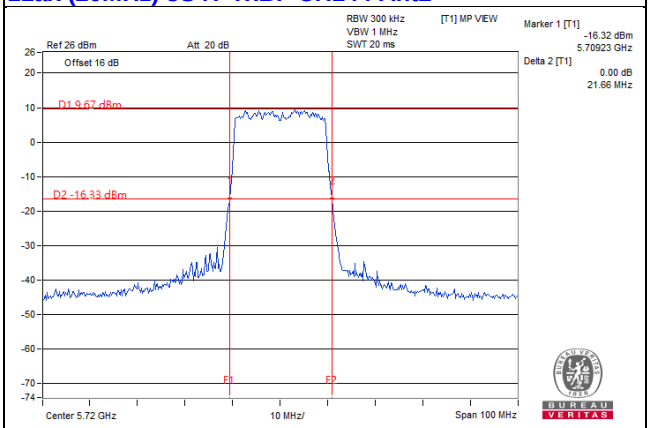


26dB BANDWIDTH SPECTRUM PLOT

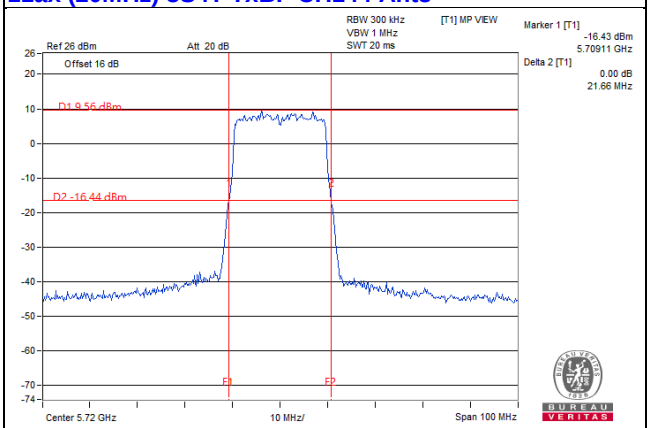
11ax (20MHz) 3S4T TxBF CH144 Ant1



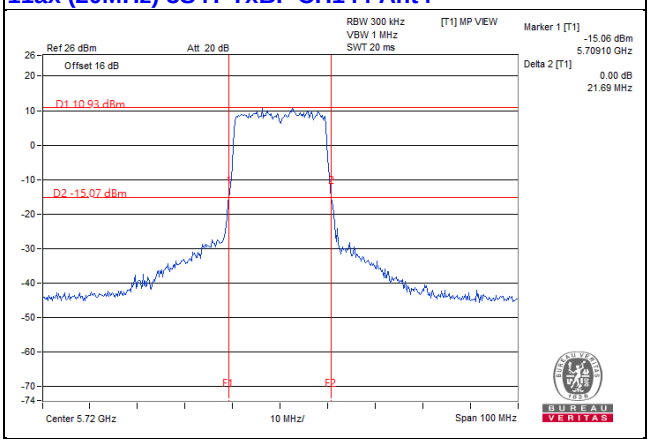
11ax (20MHz) 3S4T TxBF CH144 Ant2



11ax (20MHz) 3S4T TxBF CH144 Ant3

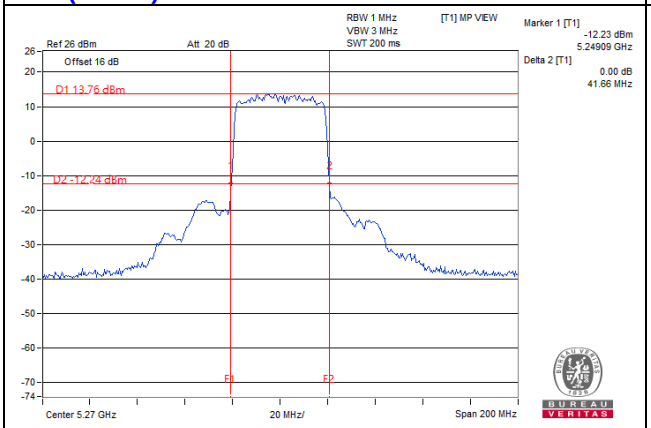


11ax (20MHz) 3S4T TxBF CH144 Ant4

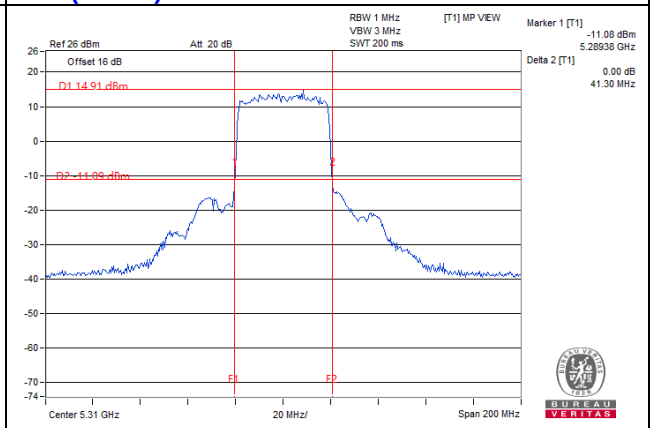


26dB BANDWIDTH SPECTRUM PLOT

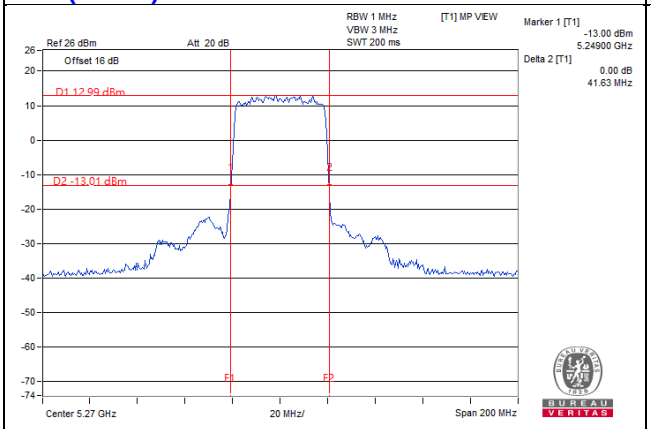
11ax (40MHz) 1S4T CDD CH54 Ant1



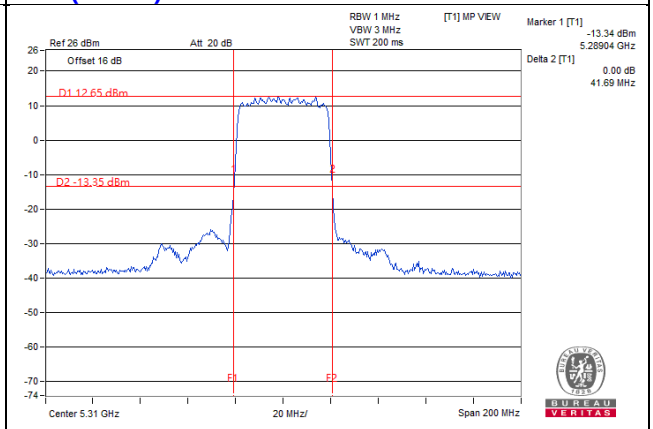
11ax (40MHz) 1S4T CDD CH62 Ant1



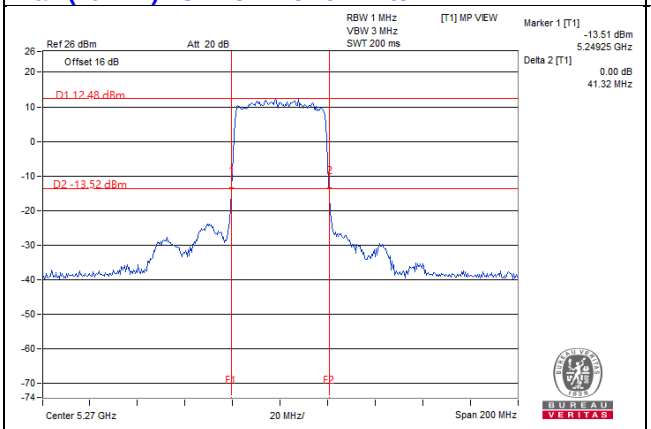
11ax (40MHz) 1S4T CDD CH54 Ant2



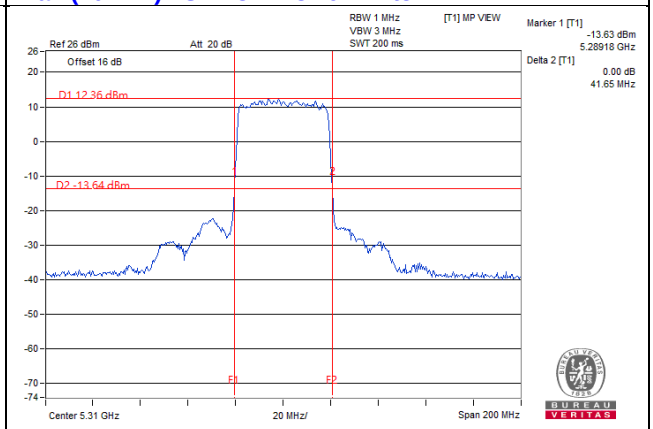
11ax (40MHz) 1S4T CDD CH62 Ant2



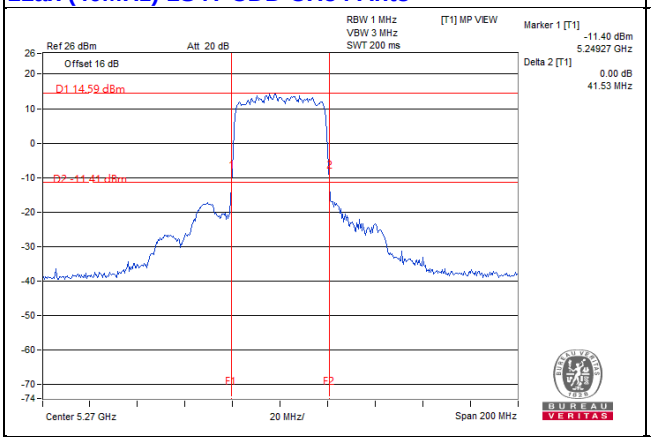
11ax (40MHz) 1S4T CDD CH54 Ant3



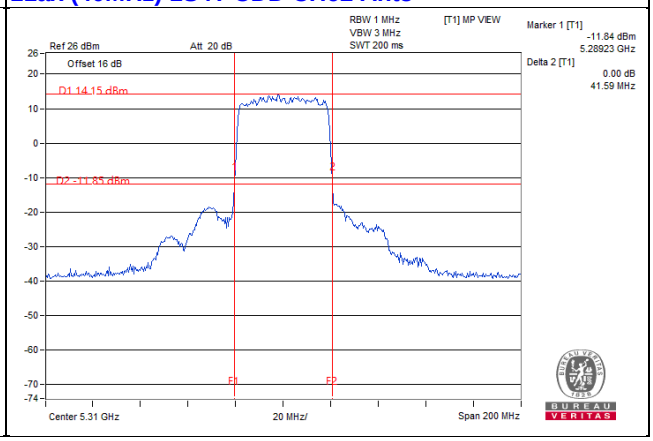
11ax (40MHz) 1S4T CDD CH62 Ant3



11ax (40MHz) 1S4T CDD CH54 Ant3

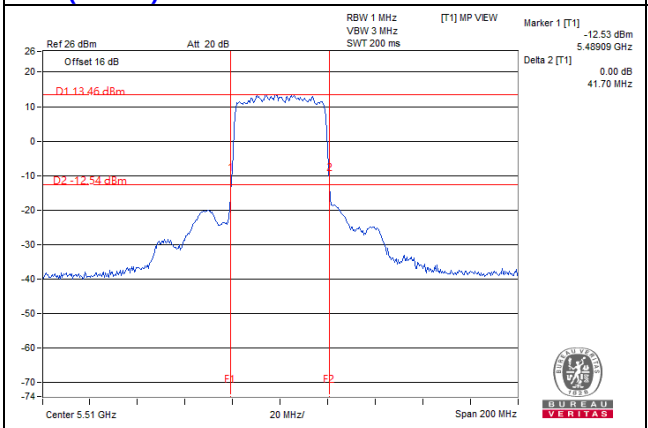


11ax (40MHz) 1S4T CDD CH62 Ant3

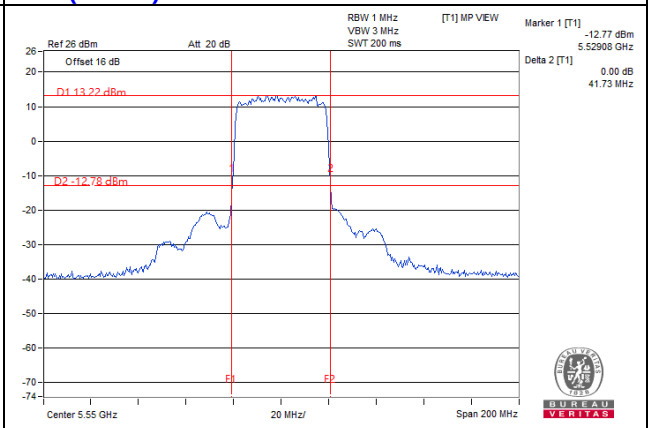


26dB BANDWIDTH SPECTRUM PLOT

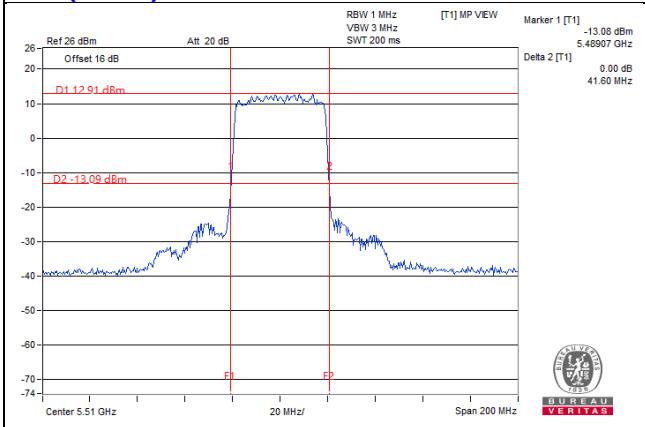
11ax (40MHz) 1S4T CDD CH102 Ant1



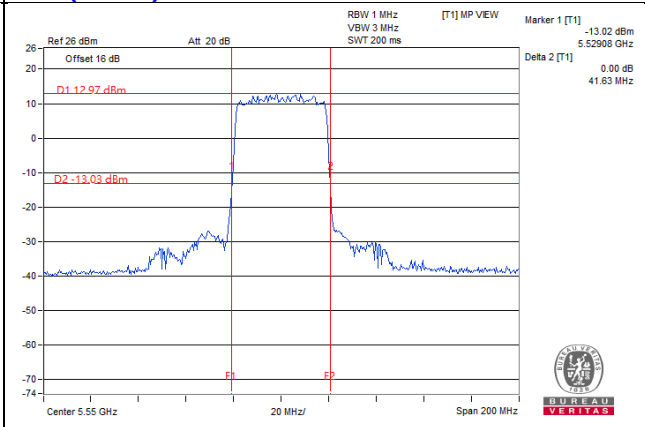
11ax (40MHz) 1S4T CDD CH110 Ant1



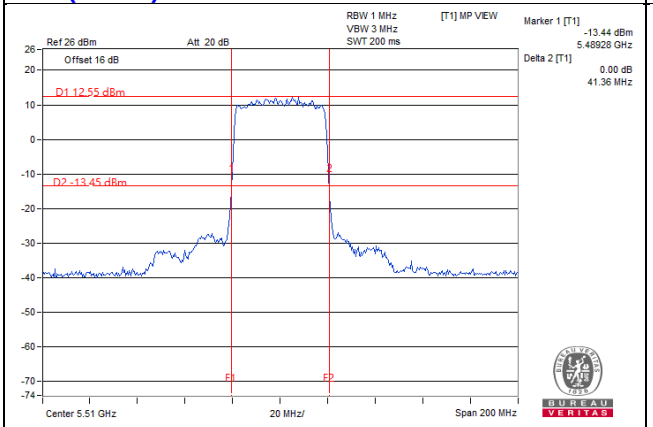
11ax (40MHz) 1S4T CDD CH102 Ant2



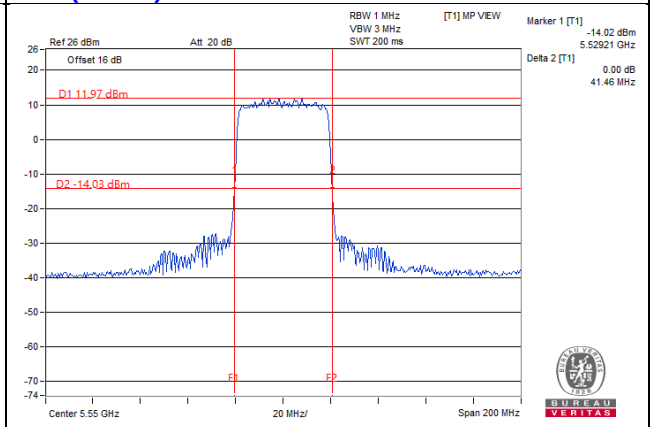
11ax (40MHz) 1S4T CDD CH110 Ant2



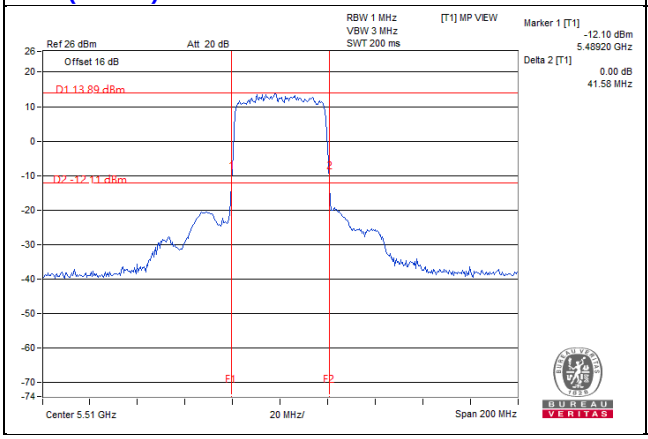
11ax (40MHz) 1S4T CDD CH102 Ant3



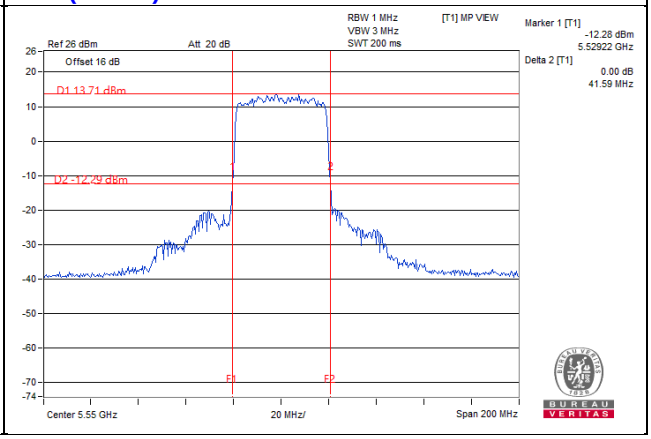
11ax (40MHz) 1S4T CDD CH110 Ant3



11ax (40MHz) 1S4T CDD CH102 Ant4

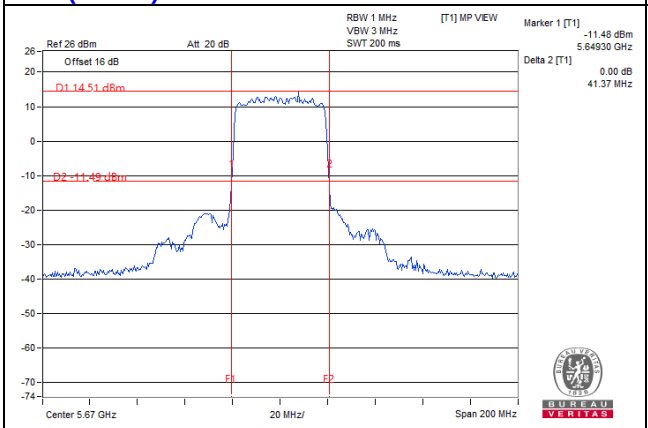


11ax (40MHz) 1S4T CDD CH110 Ant4

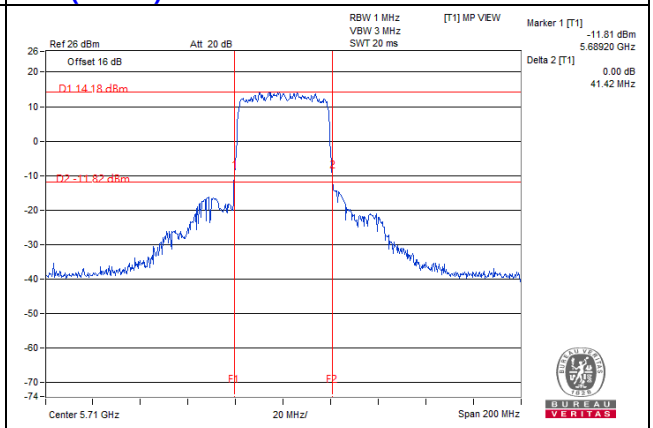


26dB BANDWIDTH SPECTRUM PLOT

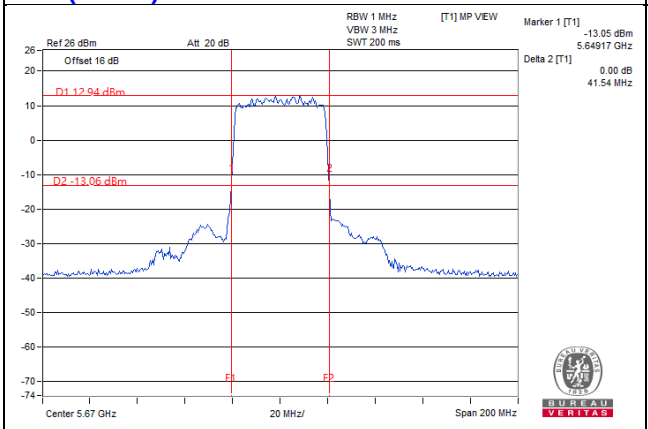
11ax (40MHz) 1S4T CDD CH134 Ant1



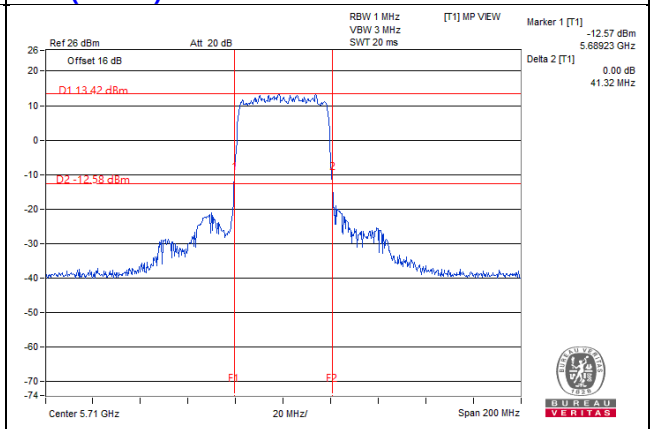
11ax (40MHz) 1S4T CDD CH142 Ant1



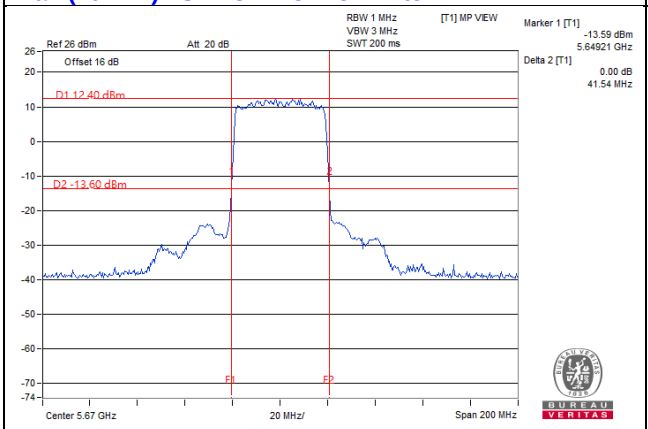
11ax (40MHz) 1S4T CDD CH134 Ant2



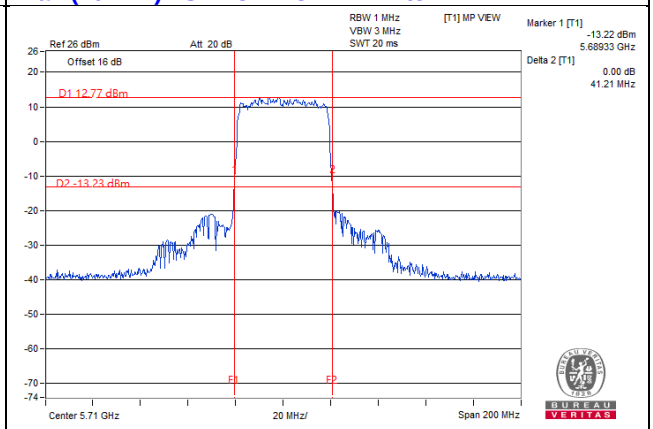
11ax (40MHz) 1S4T CDD CH142 Ant2



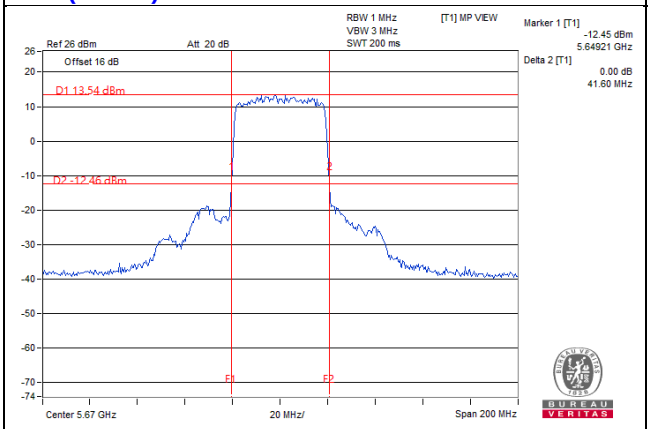
11ax (40MHz) 1S4T CDD CH134 Ant3



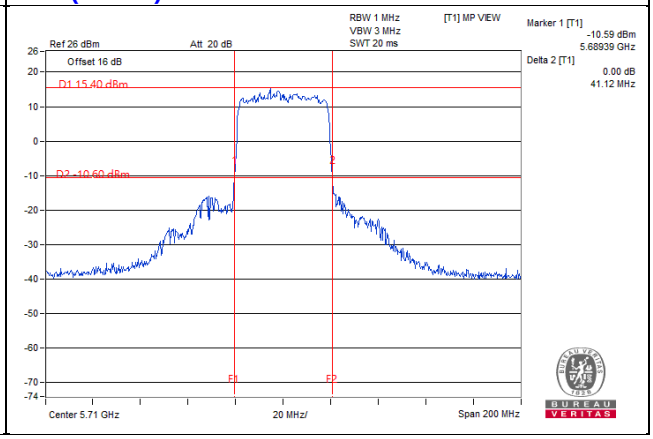
11ax (40MHz) 1S4T CDD CH142 Ant3



11ax (40MHz) 1S4T CDD CH134 Ant4

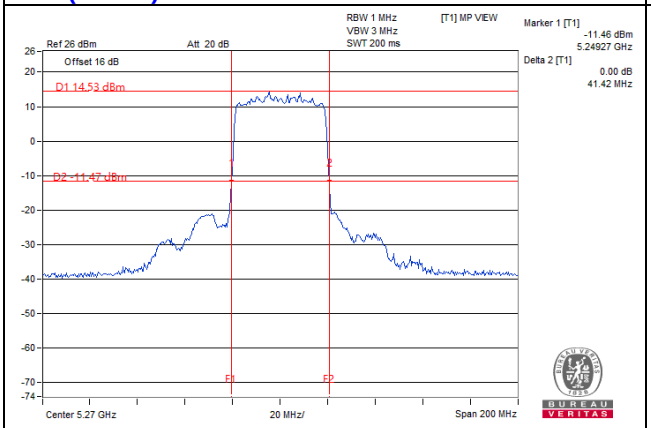


11ax (40MHz) 1S4T CDD CH142 Ant4

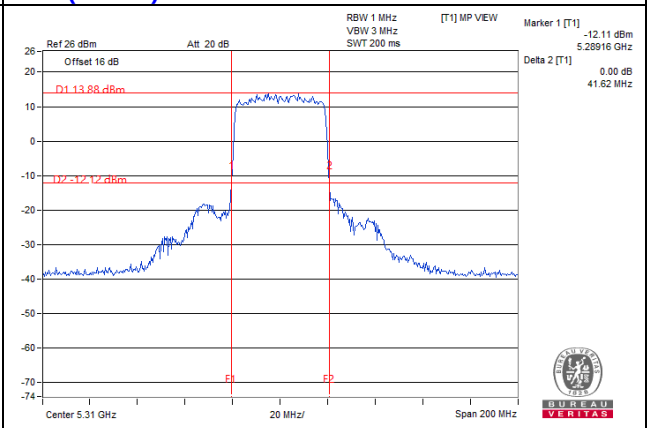


26dB BANDWIDTH SPECTRUM PLOT

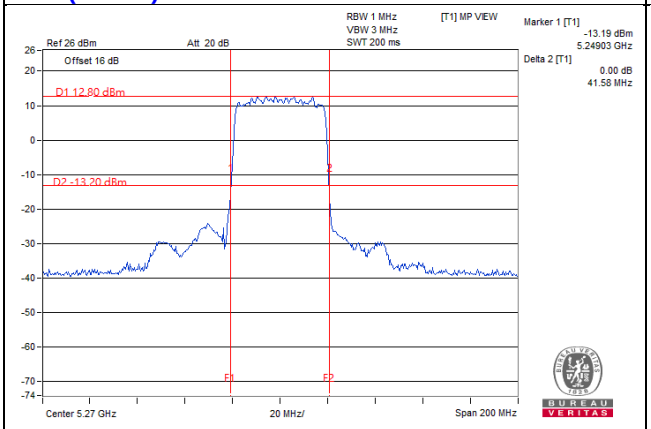
11ax (40MHz) 1S4T TxBF CH54 Ant1



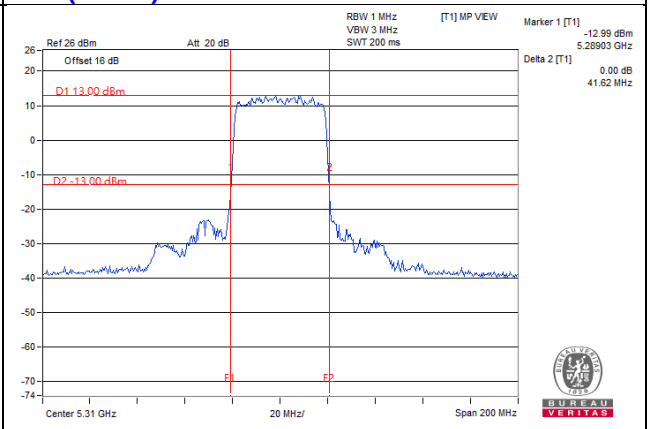
11ax (40MHz) 1S4T TxBF CH62 Ant1



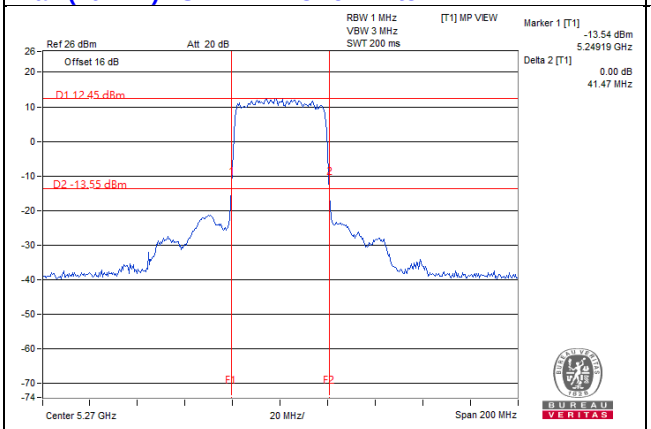
11ax (40MHz) 1S4T TxBF CH54 Ant2



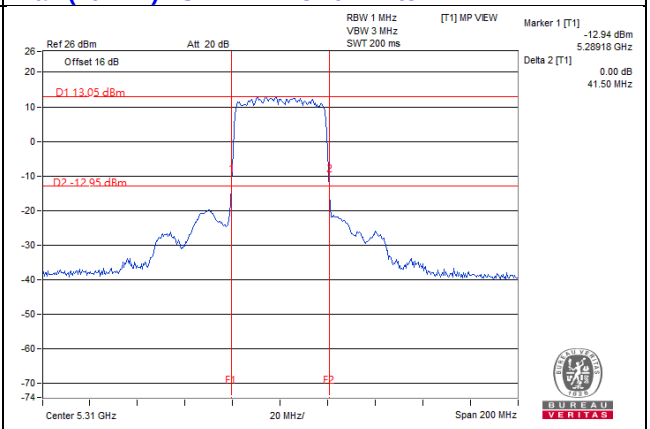
11ax (40MHz) 1S4T TxBF CH62 Ant2



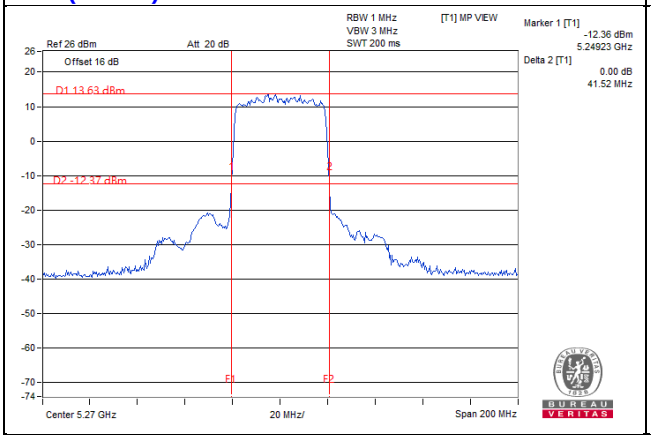
11ax (40MHz) 1S4T TxBF CH54 Ant3



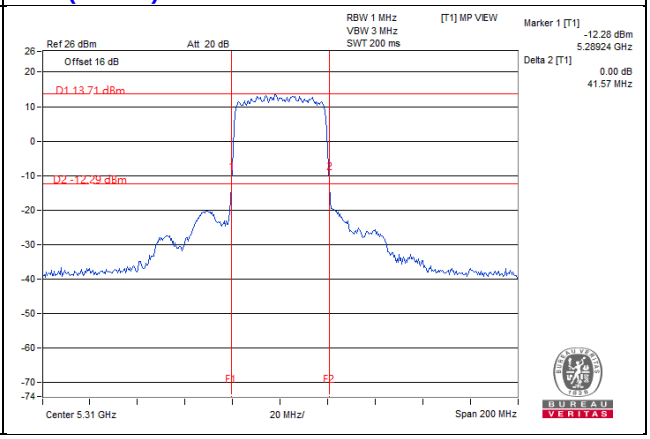
11ax (40MHz) 1S4T TxBF CH62 Ant3



11ax (40MHz) 1S4T TxBF CH54 Ant4

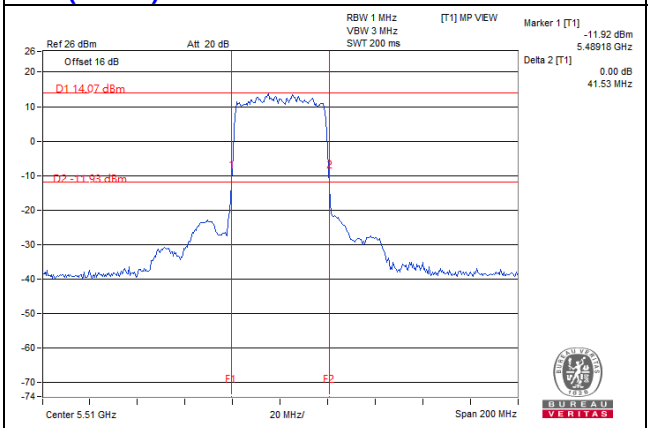


11ax (40MHz) 1S4T TxBF CH62 Ant4

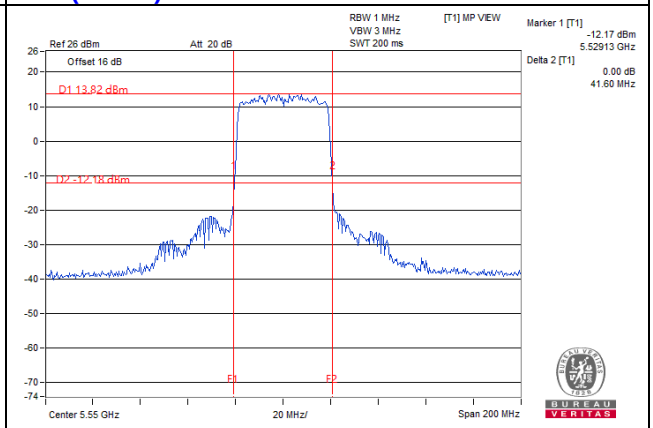


26dB BANDWIDTH SPECTRUM PLOT

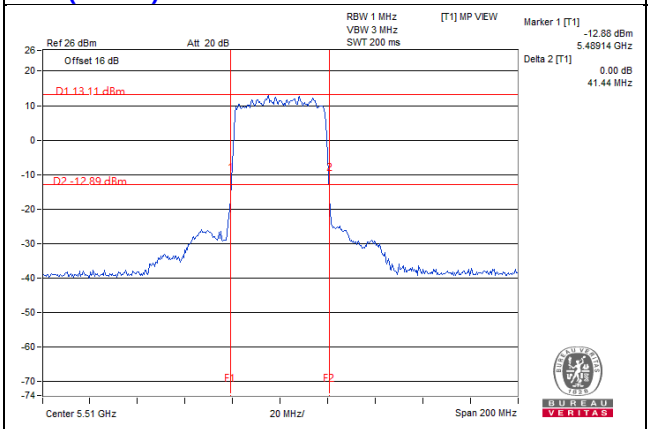
11ax (40MHz) 1S4T TxBF CH102 Ant1



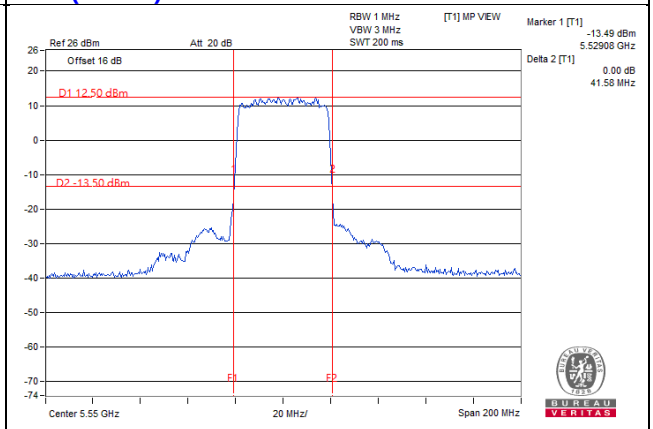
11ax (40MHz) 1S4T TxBF CH110 Ant1



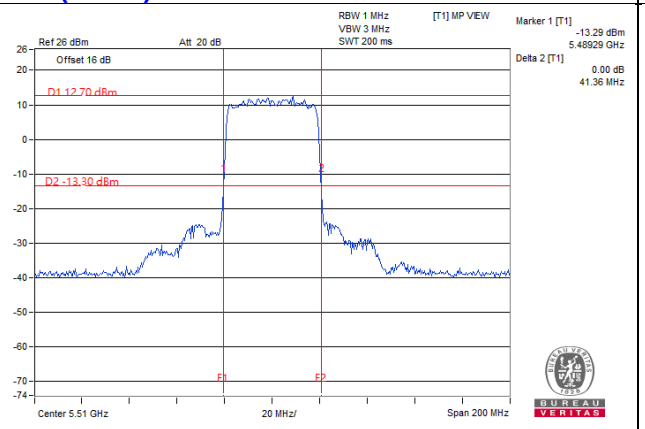
11ax (40MHz) 1S4T TxBF CH102 Ant2



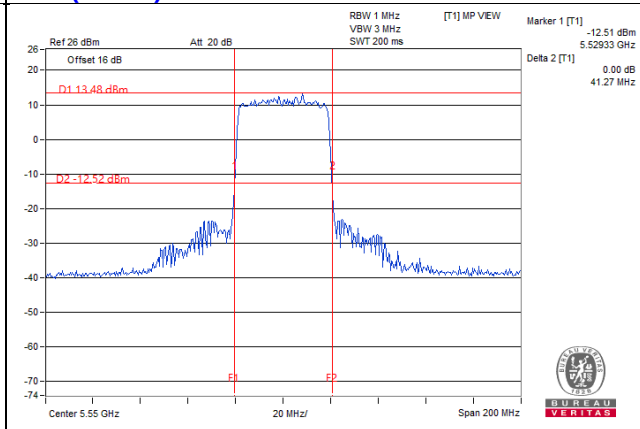
11ax (40MHz) 1S4T TxBF CH110 Ant2



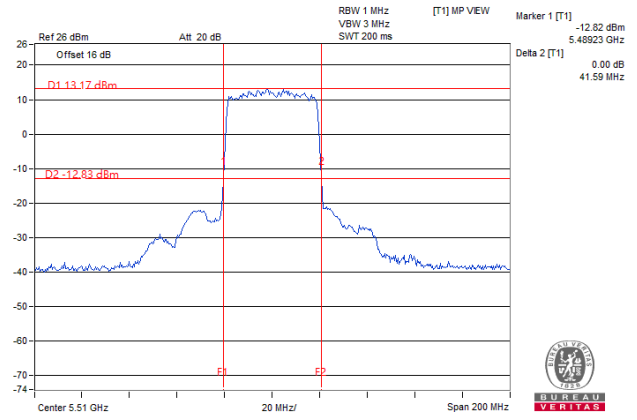
11ax (40MHz) 1S4T TxBF CH102 Ant3



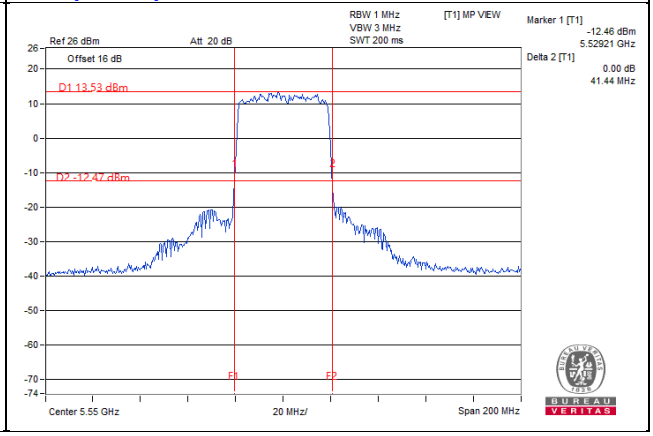
11ax (40MHz) 1S4T TxBF CH110 Ant3



11ax (40MHz) 1S4T TxBF CH102 Ant4

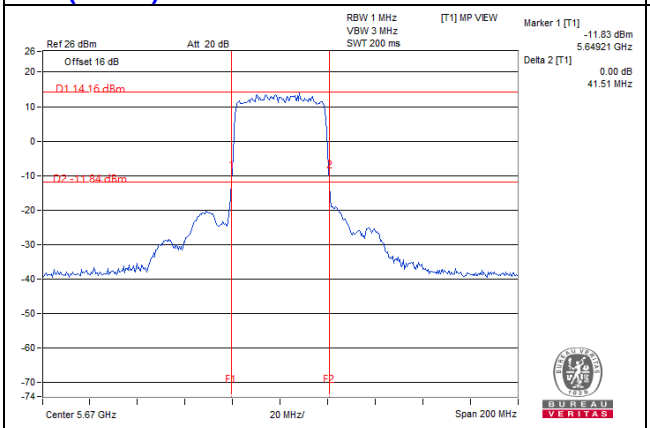


11ax (40MHz) 1S4T TxBF CH110 Ant4

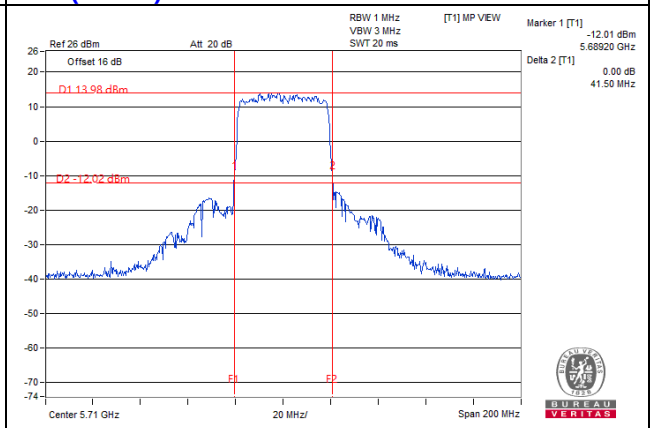


26dB BANDWIDTH SPECTRUM PLOT

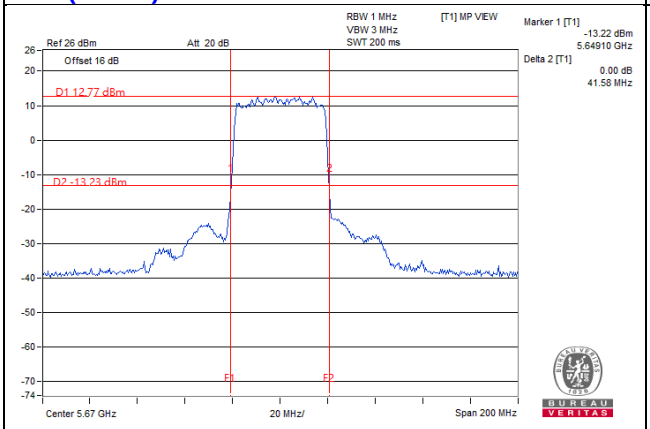
11ax (40MHz) 1S4T TxBF CH134 Ant1



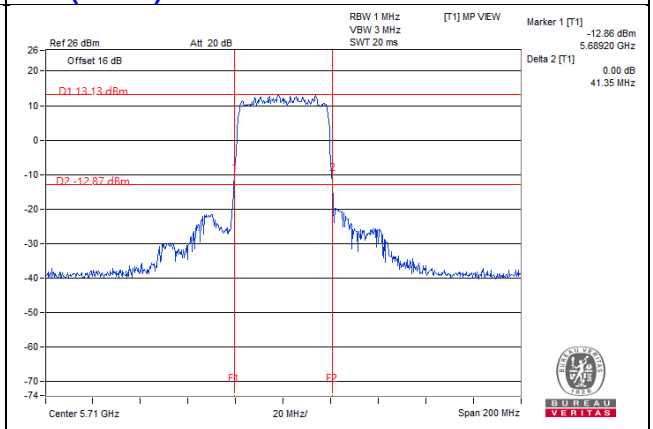
11ax (40MHz) 1S4T TxBF CH142 Ant1



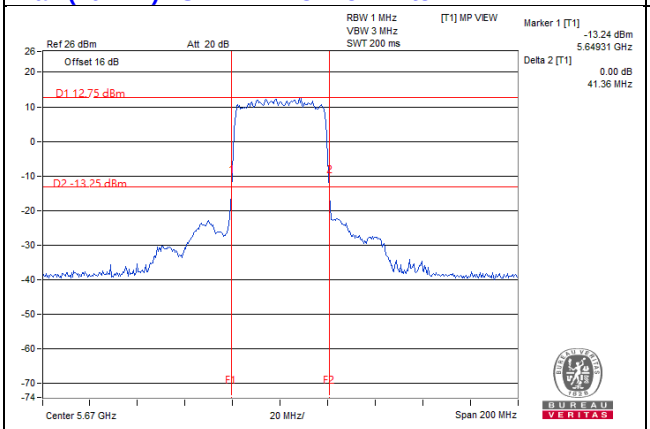
11ax (40MHz) 1S4T TxBF CH134 Ant2



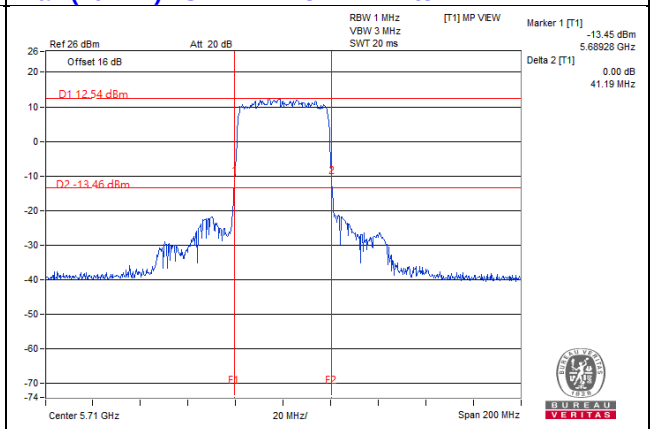
11ax (40MHz) 1S4T TxBF CH142 Ant2



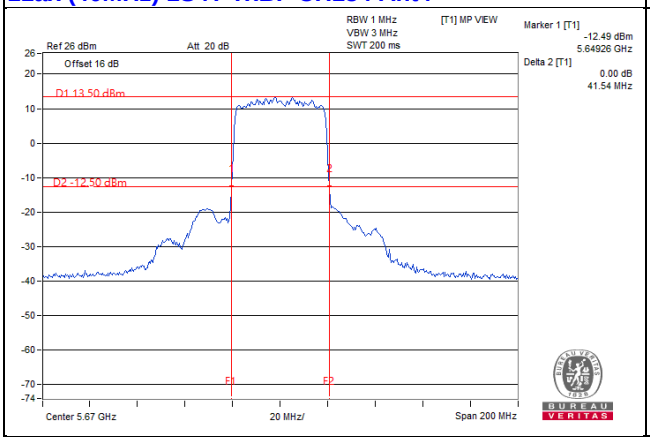
11ax (40MHz) 1S4T TxBF CH134 Ant3



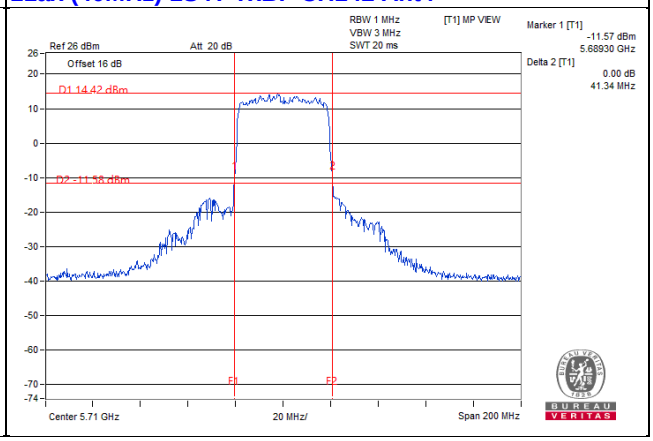
11ax (40MHz) 1S4T TxBF CH142 Ant3



11ax (40MHz) 1S4T TxBF CH134 Ant4

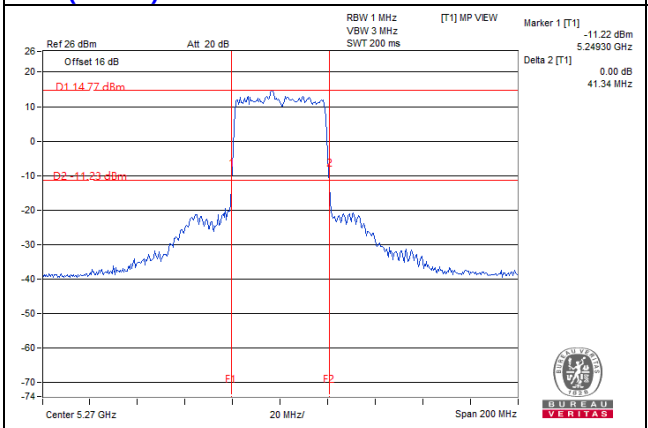


11ax (40MHz) 1S4T TxBF CH142 Ant4

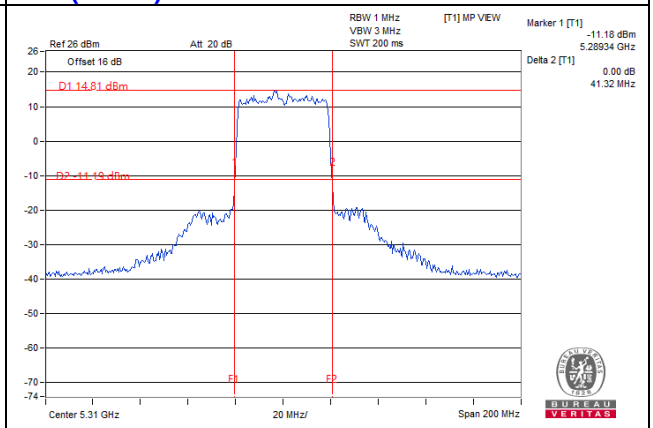


26dB BANDWIDTH SPECTRUM PLOT

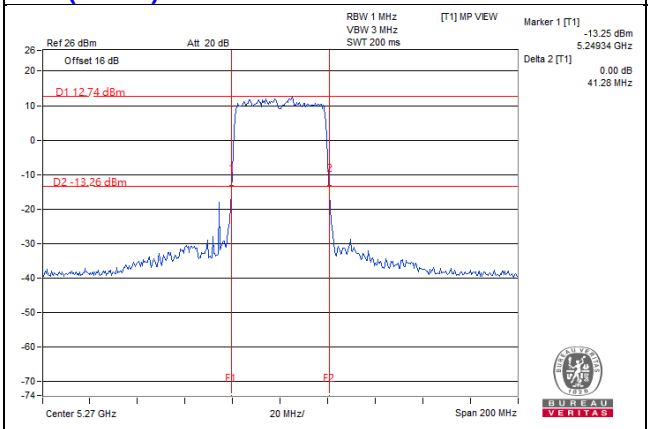
11ax (40MHz) 2S4T TxBF CH54 Ant1



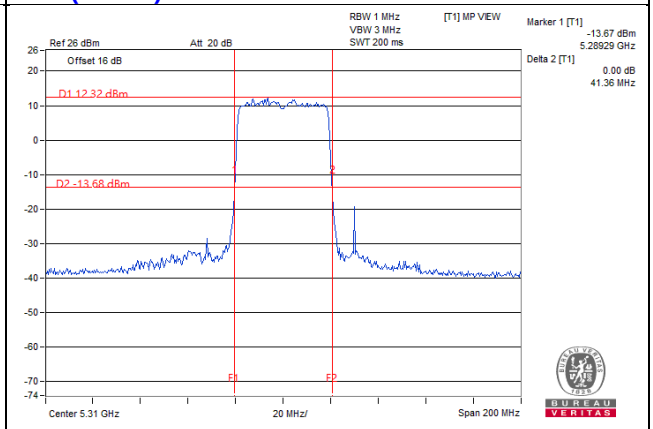
11ax (40MHz) 2S4T TxBF CH62 Ant1



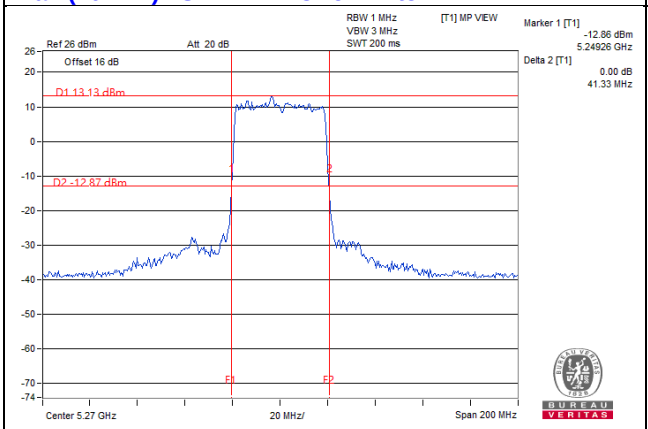
11ax (40MHz) 2S4T TxBF CH54 Ant2



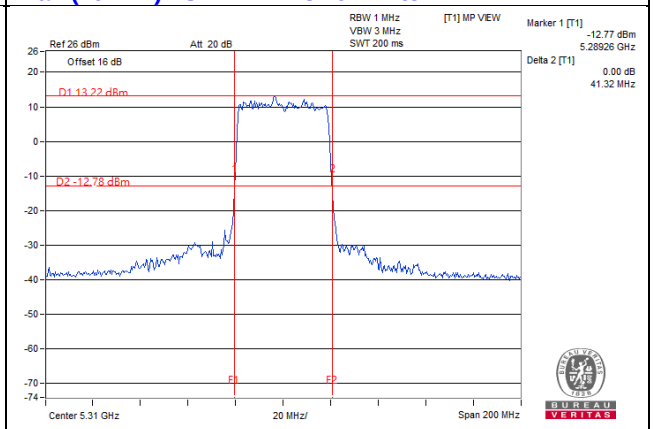
11ax (40MHz) 2S4T TxBF CH62 Ant2



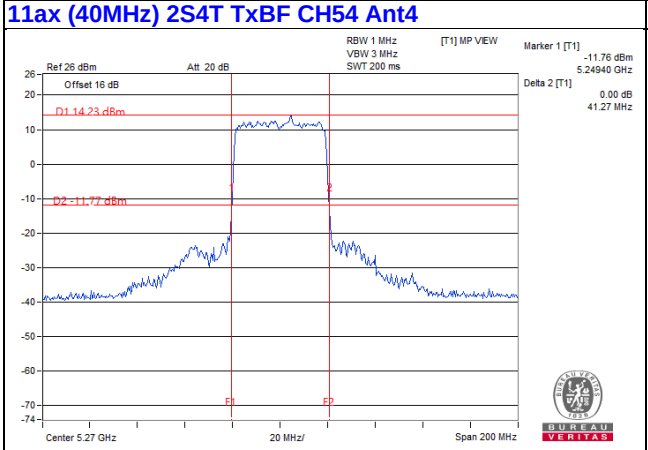
11ax (40MHz) 2S4T TxBF CH54 Ant3



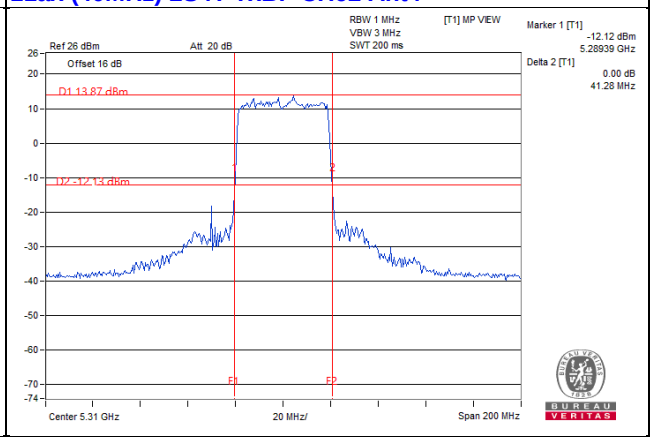
11ax (40MHz) 2S4T TxBF CH62 Ant3



11ax (40MHz) 2S4T TxBF CH54 Ant4

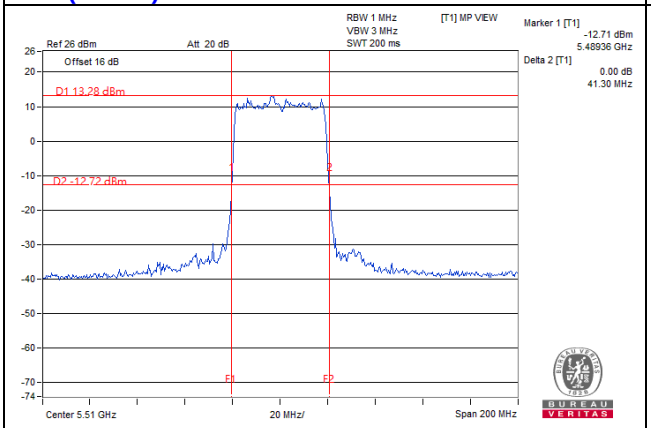


11ax (40MHz) 2S4T TxBF CH62 Ant4

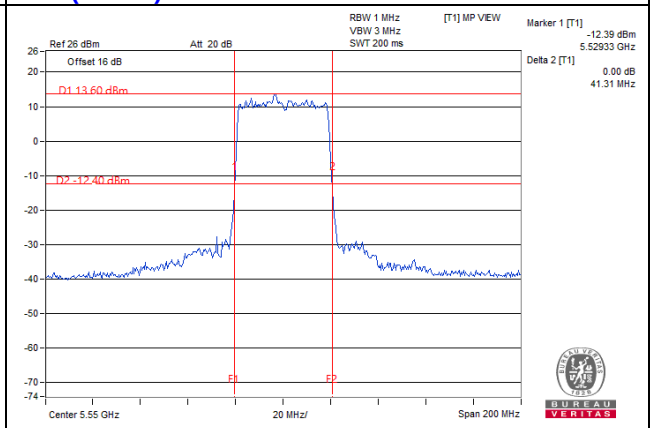


26dB BANDWIDTH SPECTRUM PLOT

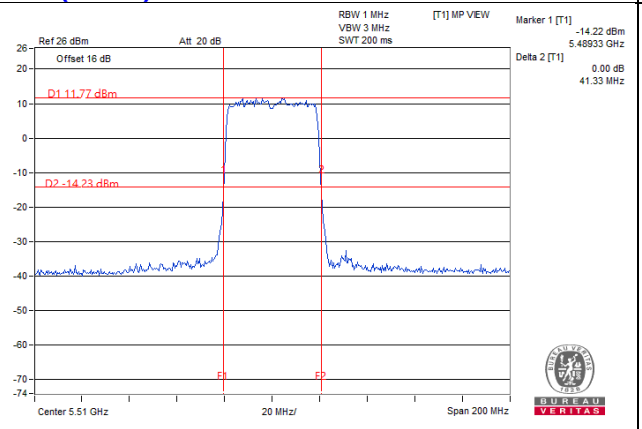
11ax (40MHz) 2S4T TxBF CH102 Ant1



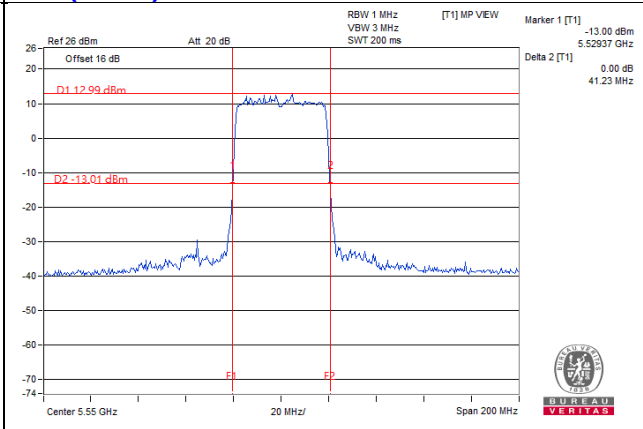
11ax (40MHz) 2S4T TxBF CH110 Ant1



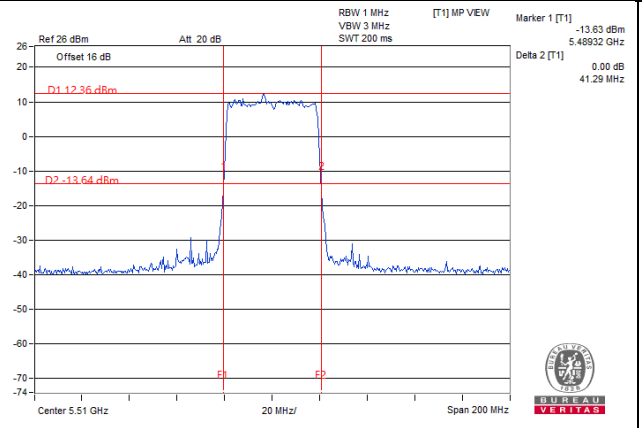
11ax (40MHz) 2S4T TxBF CH102 Ant2



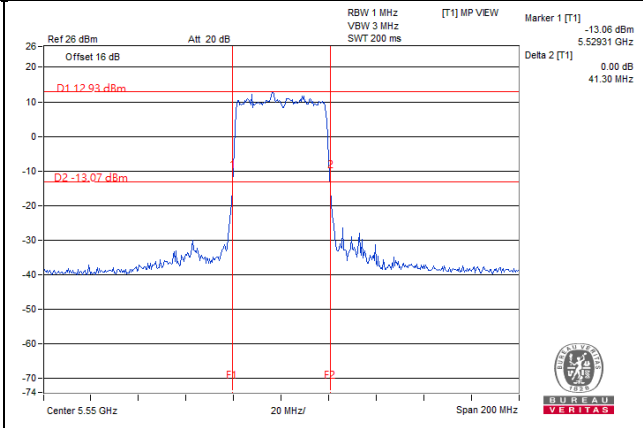
11ax (40MHz) 2S4T TxBF CH110 Ant2



11ax (40MHz) 2S4T TxBF CH102 Ant3



11ax (40MHz) 2S4T TxBF CH110 Ant3



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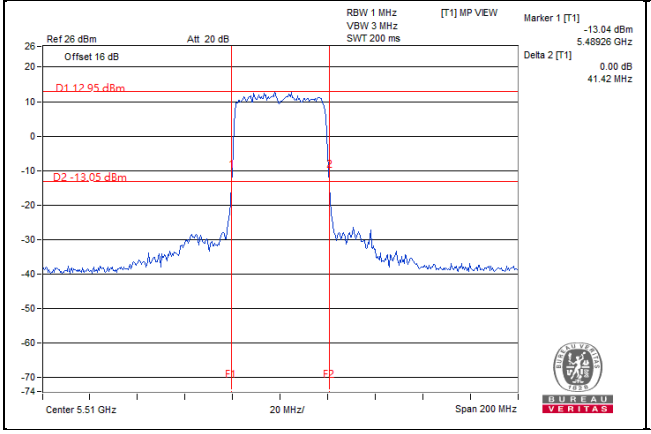
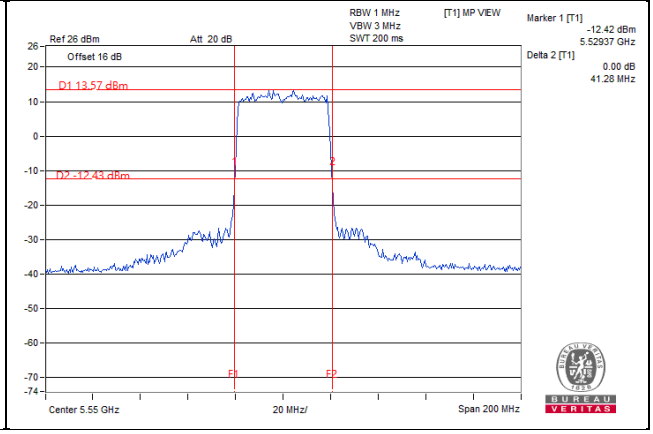
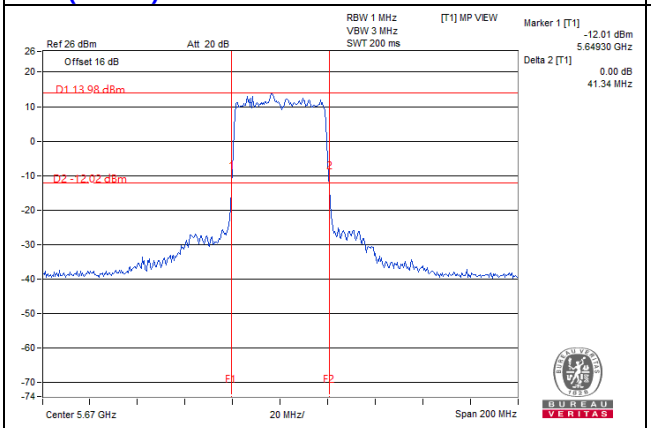


11ax (40MHz) 2S4T TxBF CH110 Ant4

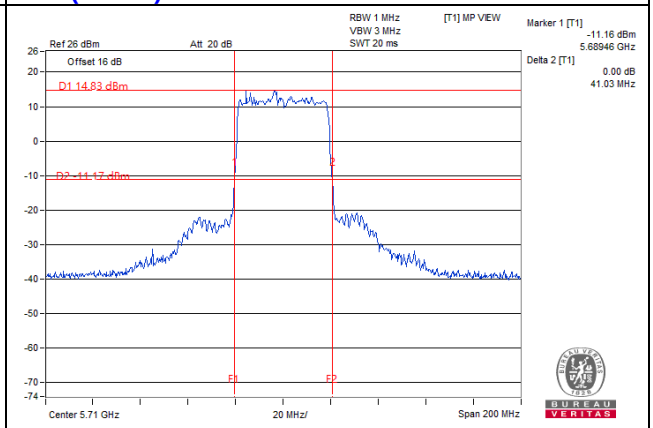


26dB BANDWIDTH SPECTRUM PLOT

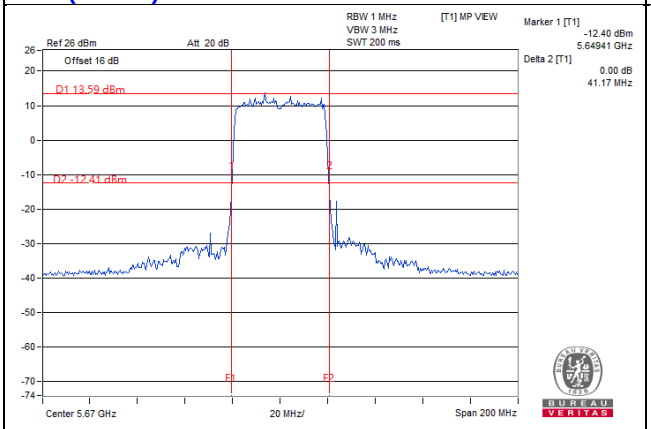
11ax (40MHz) 2S4T TxBF CH134 Ant1



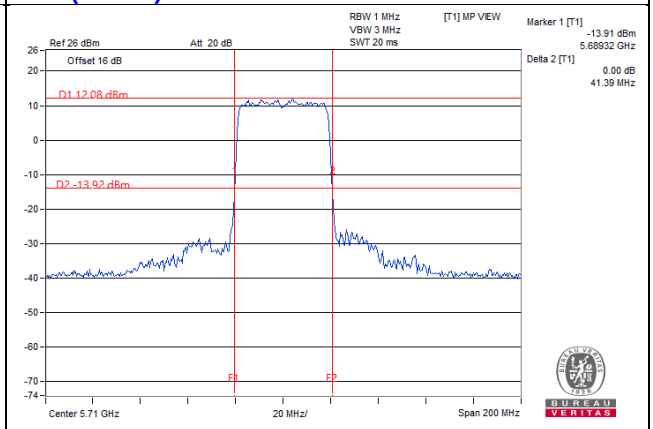
11ax (40MHz) 2S4T TxBF CH142 Ant1



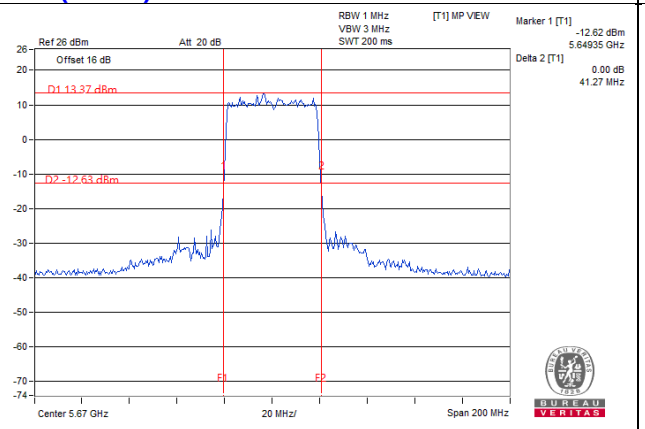
11ax (40MHz) 2S4T TxBF CH134 Ant2



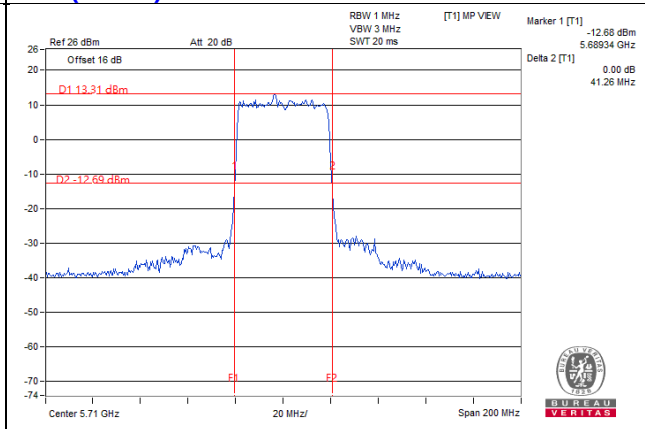
11ax (40MHz) 2S4T TxBF CH142 Ant2



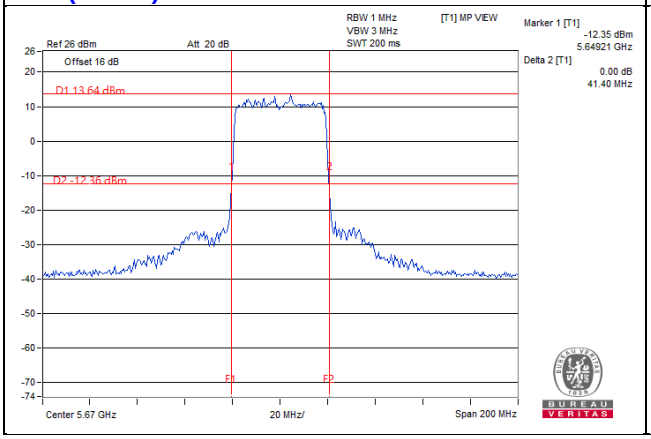
11ax (40MHz) 2S4T TxBF CH134 Ant3



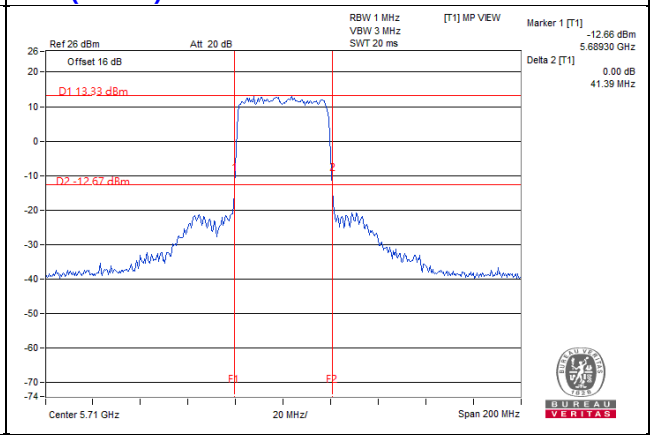
11ax (40MHz) 2S4T TxBF CH142 Ant3



11ax (40MHz) 2S4T TxBF CH134 Ant4

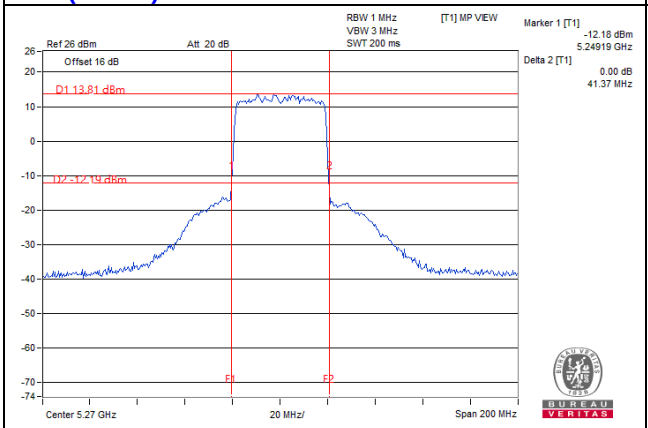


11ax (40MHz) 2S4T TxBF CH142 Ant4

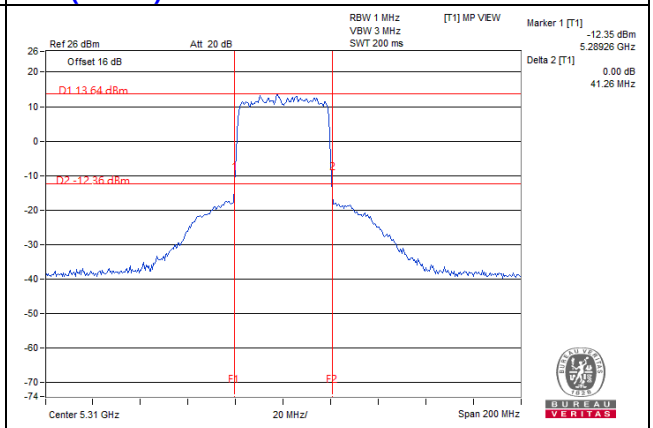


26dB BANDWIDTH SPECTRUM PLOT

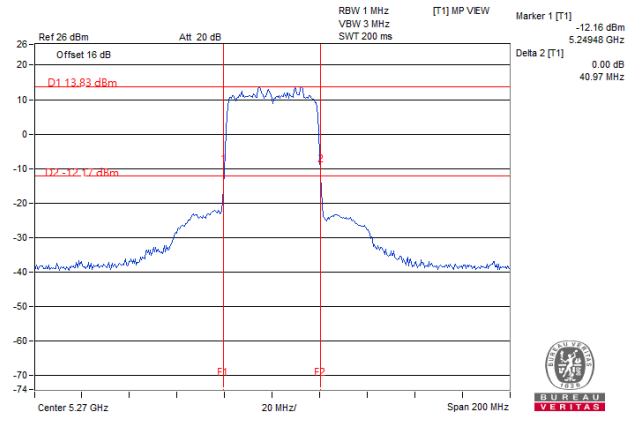
11ax (40MHz) 3S4T TxBF CH54 Ant1



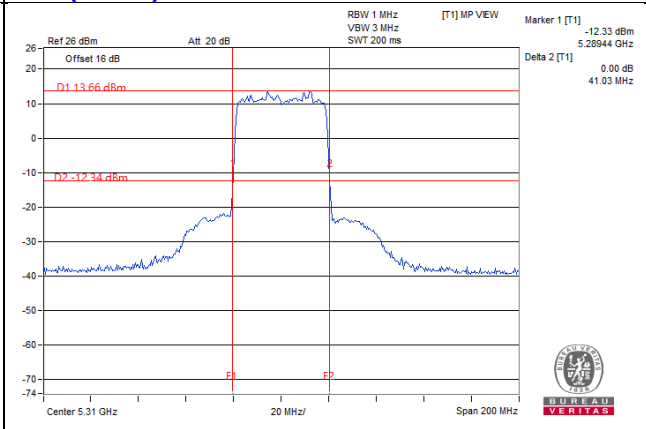
11ax (40MHz) 3S4T TxBF CH62 Ant1



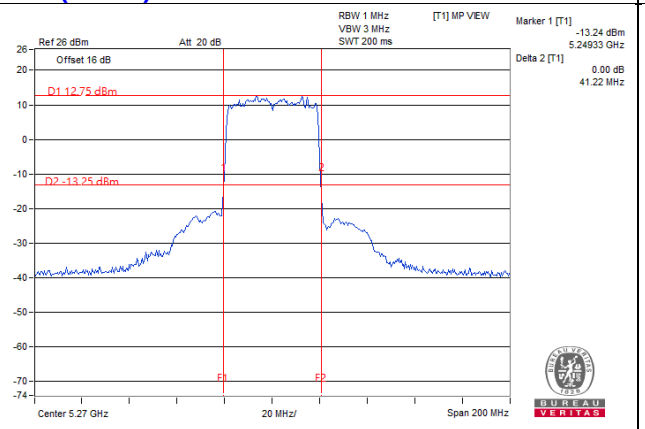
11ax (40MHz) 3S4T TxBF CH54 Ant2



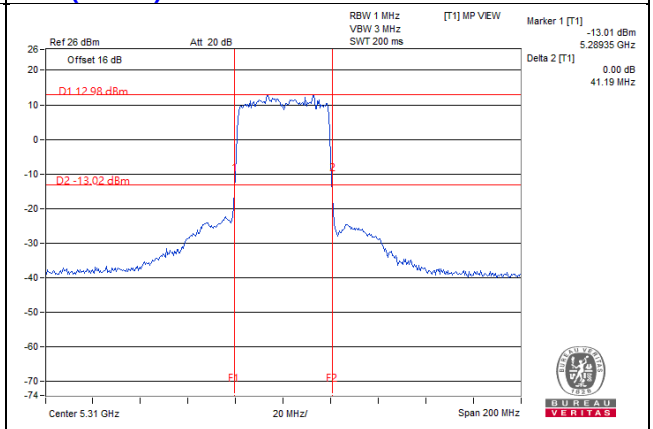
11ax (40MHz) 3S4T TxBF CH62 Ant2



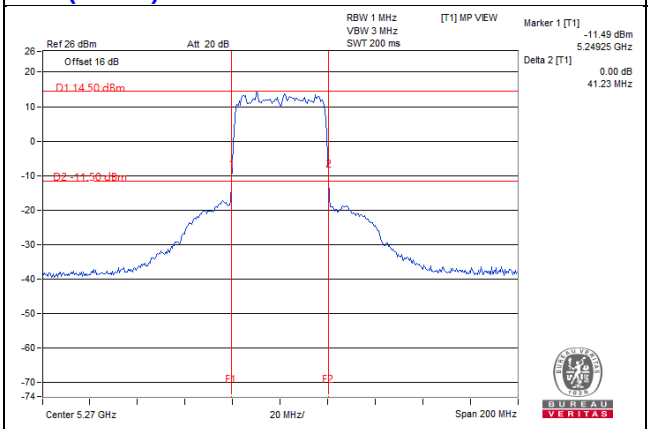
11ax (40MHz) 3S4T TxBF CH54 Ant3



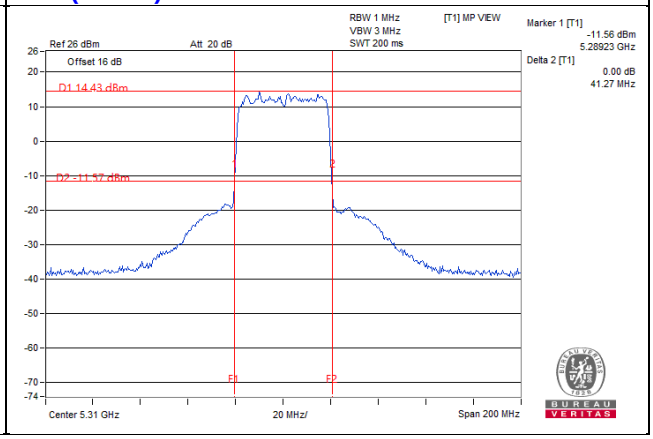
11ax (40MHz) 3S4T TxBF CH62 Ant3



11ax (40MHz) 3S4T TxBF CH54 Ant3

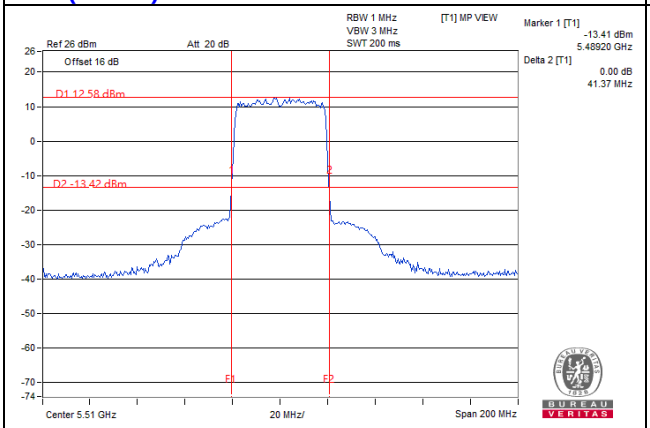


11ax (40MHz) 3S4T TxBF CH62 Ant3

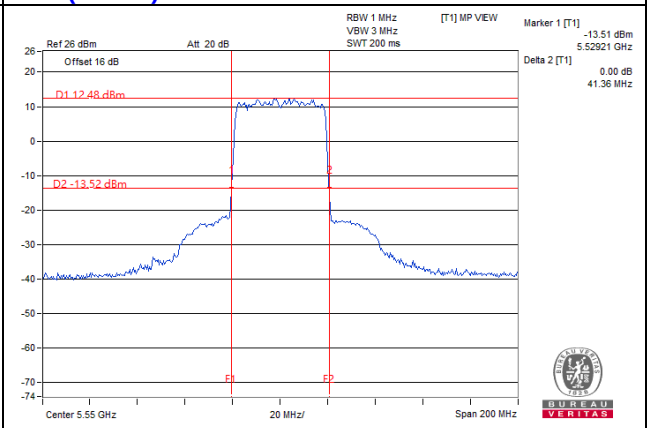


26dB BANDWIDTH SPECTRUM PLOT

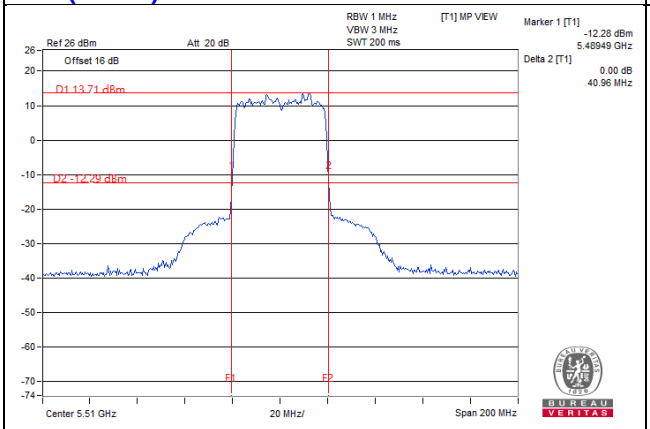
11ax (40MHz) 3S4T TxBF CH102 Ant1



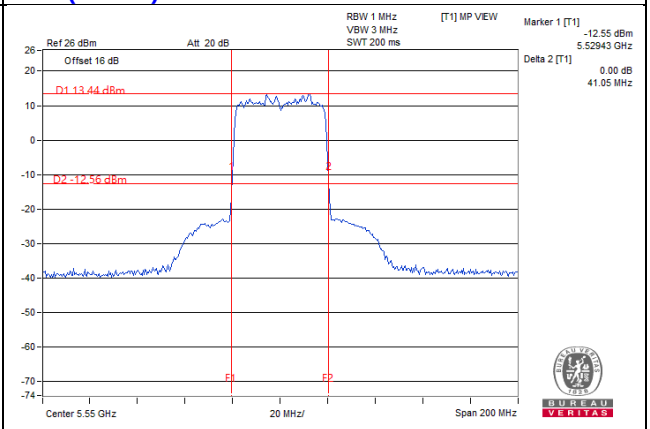
11ax (40MHz) 3S4T TxBF CH110 Ant1



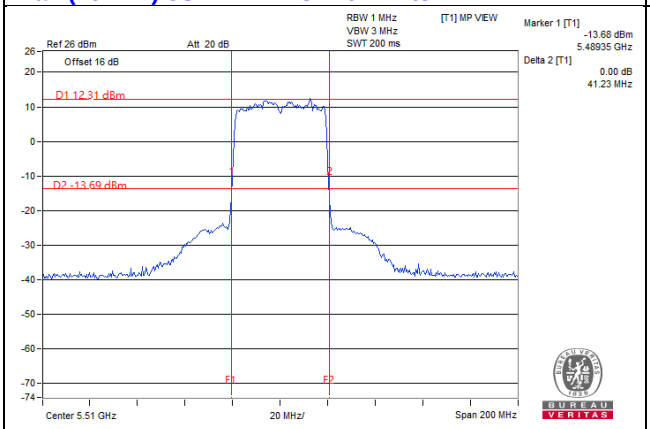
11ax (40MHz) 3S4T TxBF CH102 Ant2



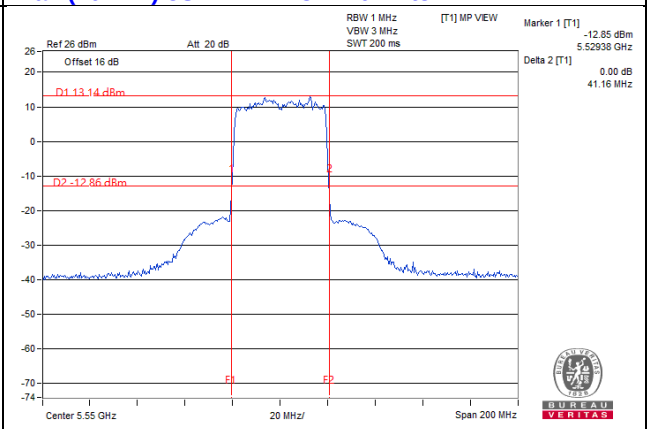
11ax (40MHz) 3S4T TxBF CH110 Ant2



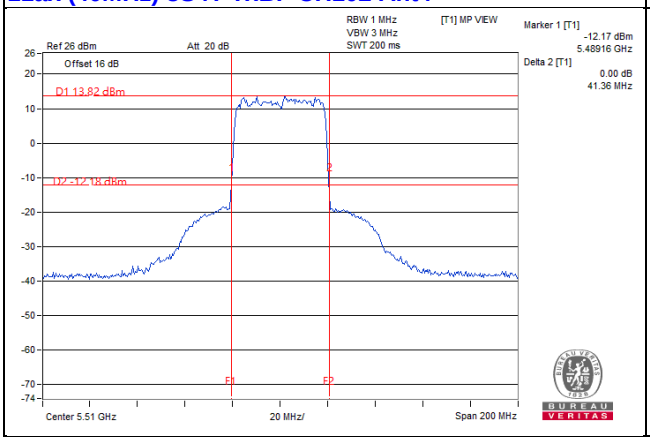
11ax (40MHz) 3S4T TxBF CH102 Ant3



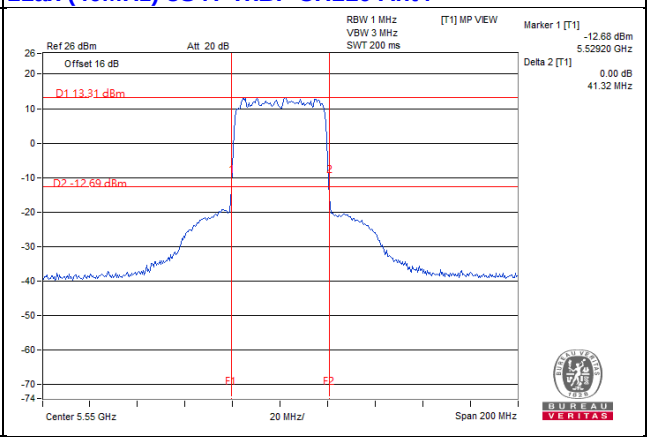
11ax (40MHz) 3S4T TxBF CH110 Ant3



11ax (40MHz) 3S4T TxBF CH102 Ant4

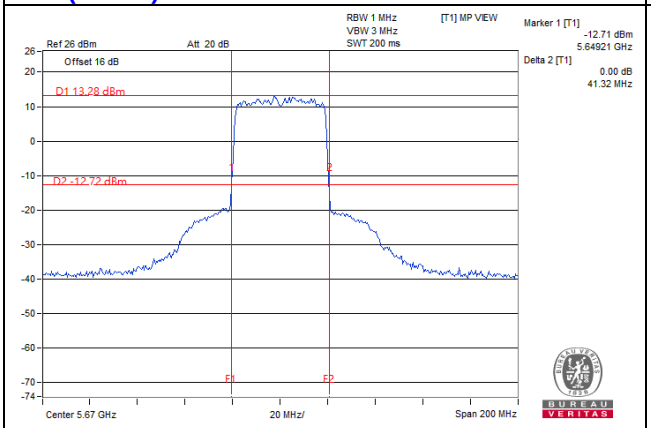


11ax (40MHz) 3S4T TxBF CH110 Ant4

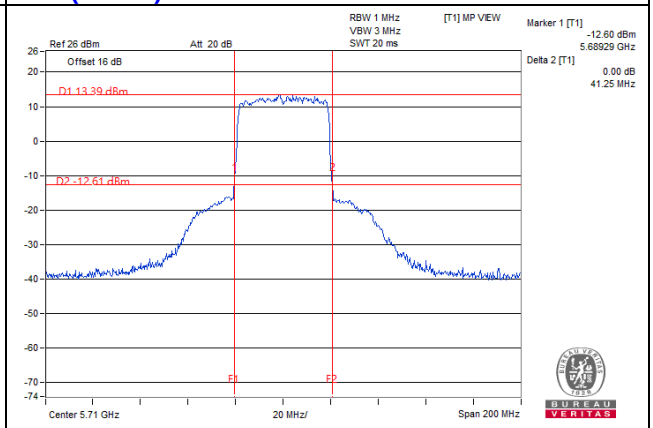


26dB BANDWIDTH SPECTRUM PLOT

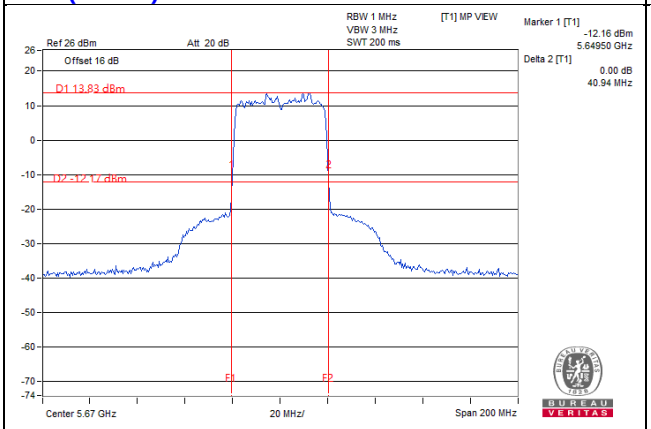
11ax (40MHz) 3S4T TxBF CH134 Ant1



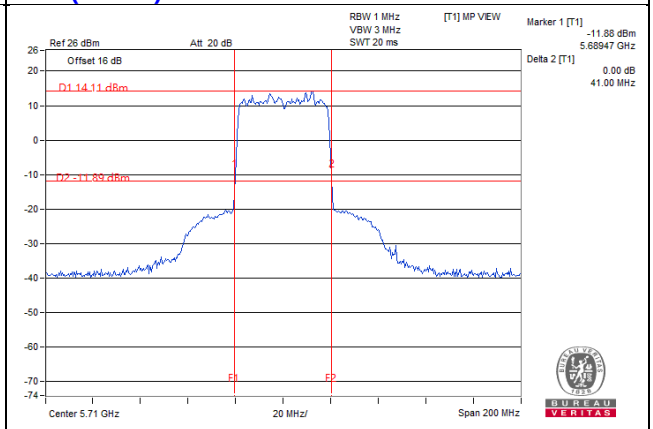
11ax (40MHz) 3S4T TxBF CH142 Ant1



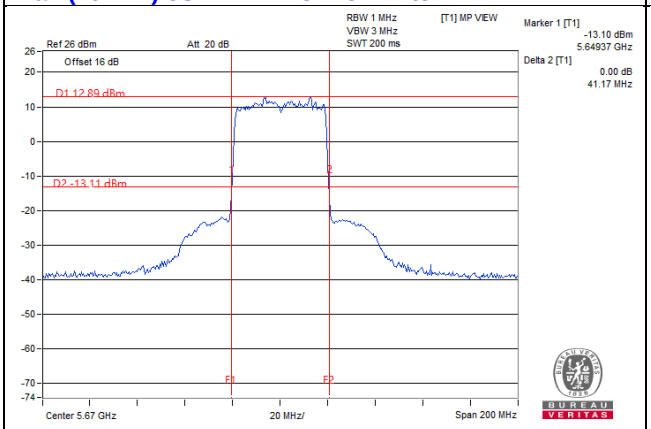
11ax (40MHz) 3S4T TxBF CH134 Ant2



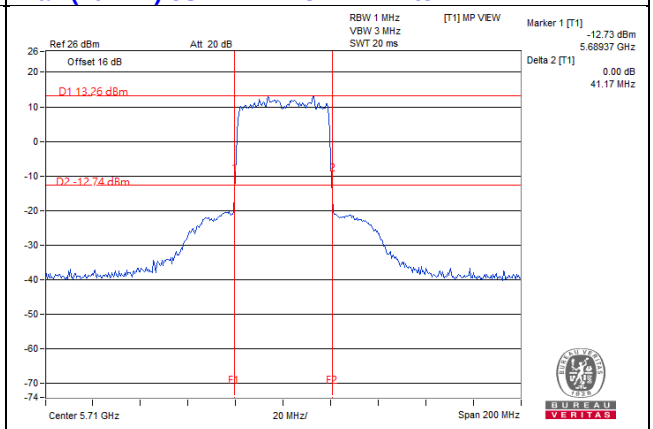
11ax (40MHz) 3S4T TxBF CH142 Ant2



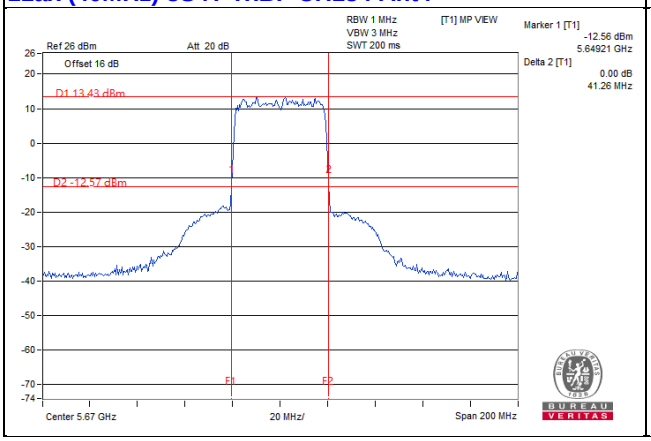
11ax (40MHz) 3S4T TxBF CH134 Ant3



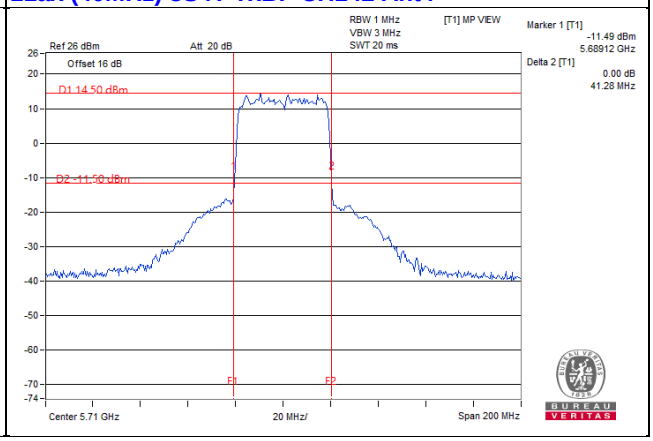
11ax (40MHz) 3S4T TxBF CH142 Ant3



11ax (40MHz) 3S4T TxBF CH134 Ant4

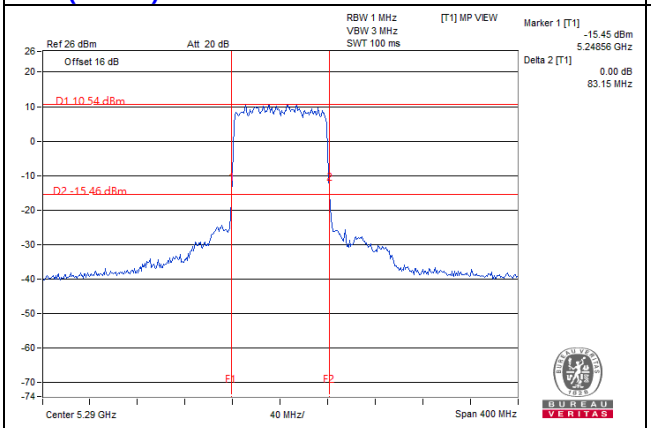


11ax (40MHz) 3S4T TxBF CH142 Ant4

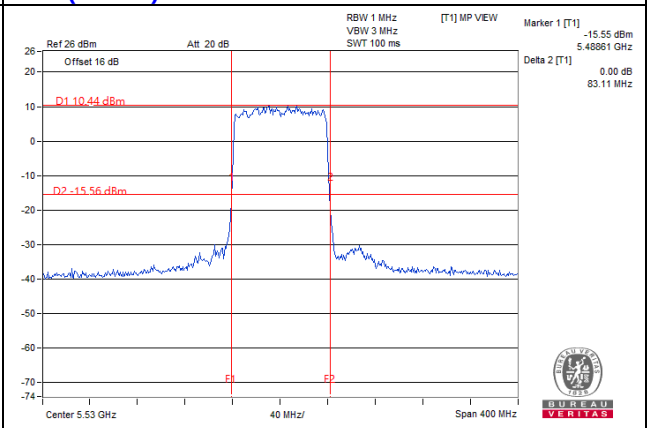


26dB BANDWIDTH SPECTRUM PLOT

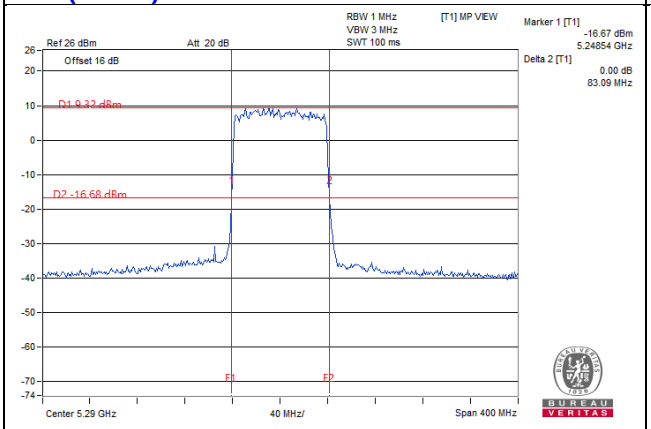
11ax (80MHz) 1S4T CDD CH58 Ant1



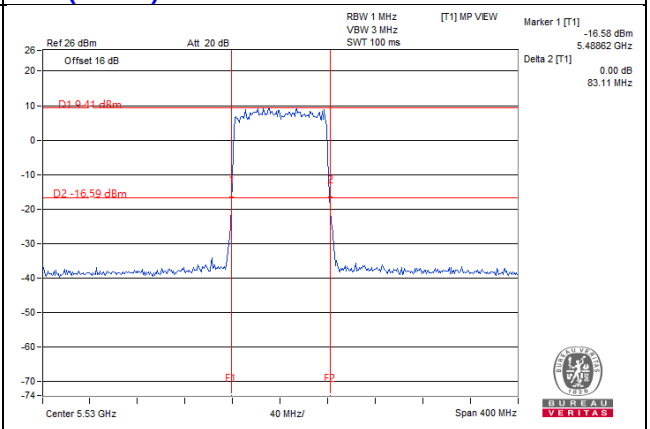
11ax (80MHz) 1S4T CDD CH106 Ant1



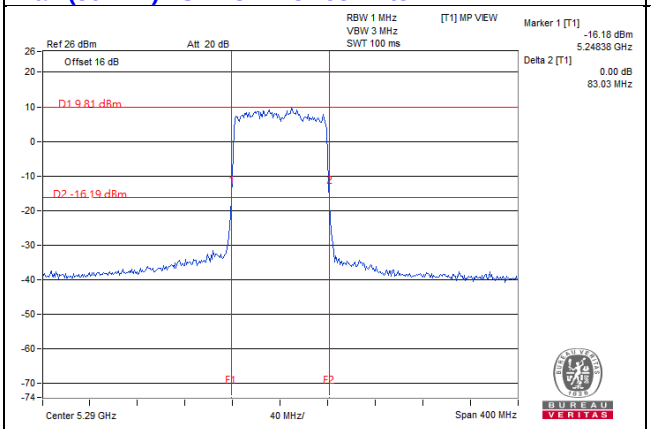
11ax (80MHz) 1S4T CDD CH58 Ant2



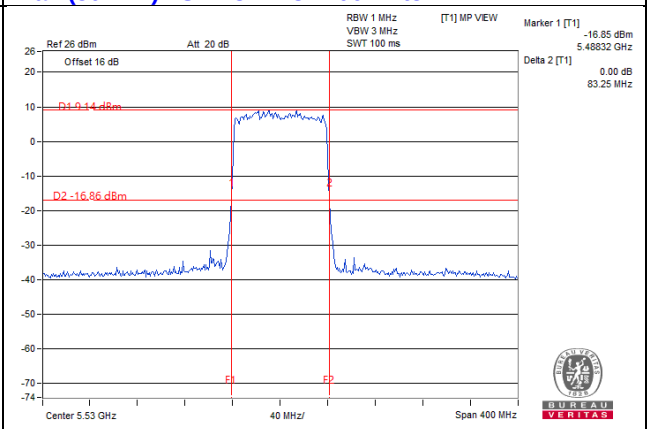
11ax (80MHz) 1S4T CDD CH106 Ant2



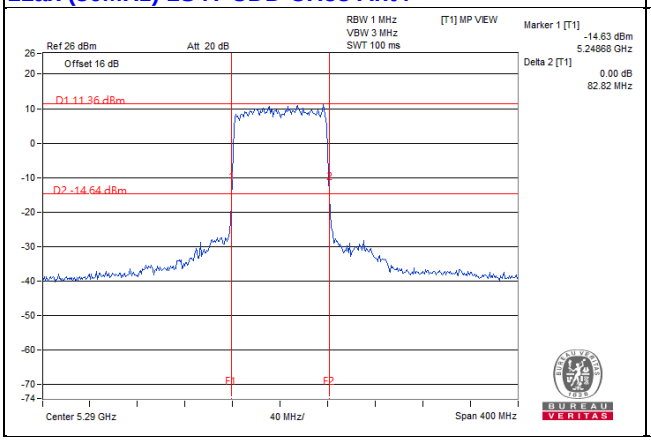
11ax (80MHz) 1S4T CDD CH58 Ant3



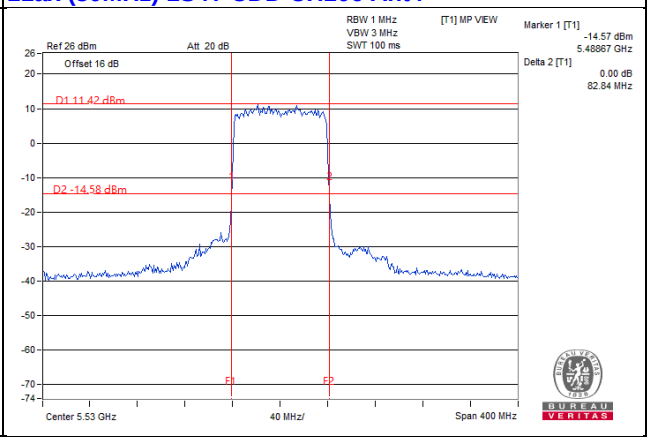
11ax (80MHz) 1S4T CDD CH106 Ant3



11ax (80MHz) 1S4T CDD CH58 Ant4

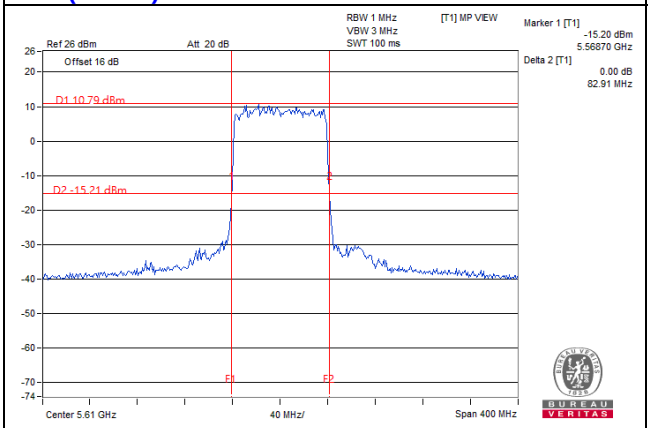


11ax (80MHz) 1S4T CDD CH106 Ant4

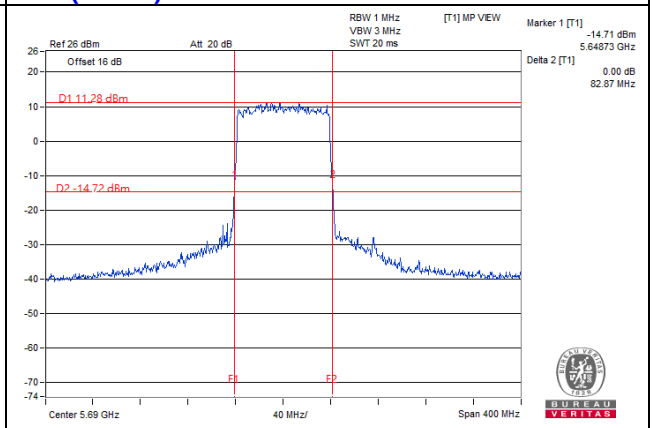


26dB BANDWIDTH SPECTRUM PLOT

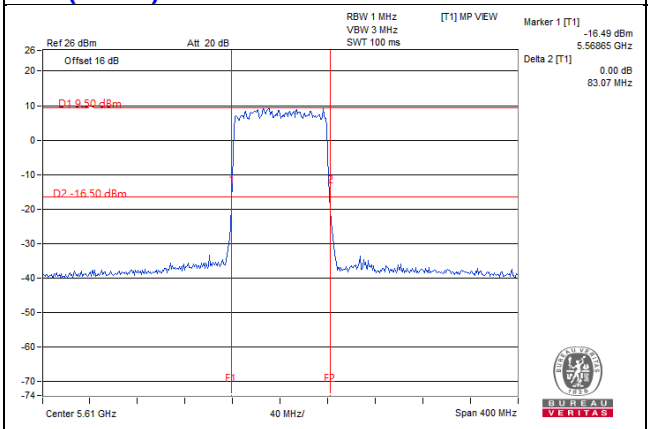
11ax (80MHz) 1S4T CDD CH122 Ant1



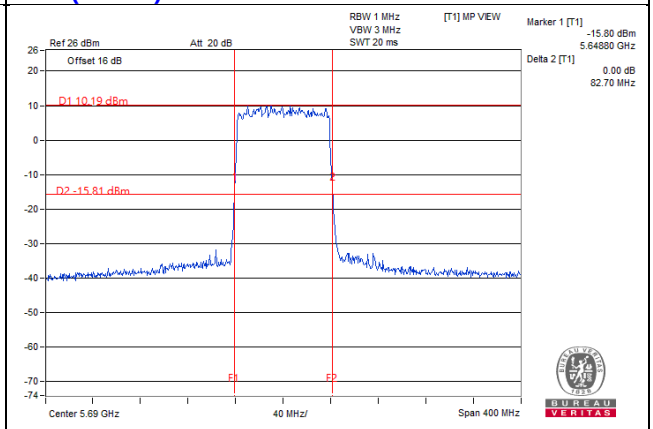
11ax (80MHz) 1S4T CDD CH138 Ant1



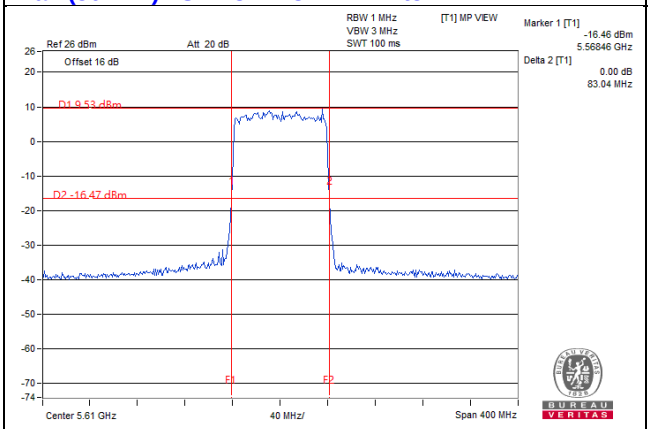
11ax (80MHz) 1S4T CDD CH122 Ant2



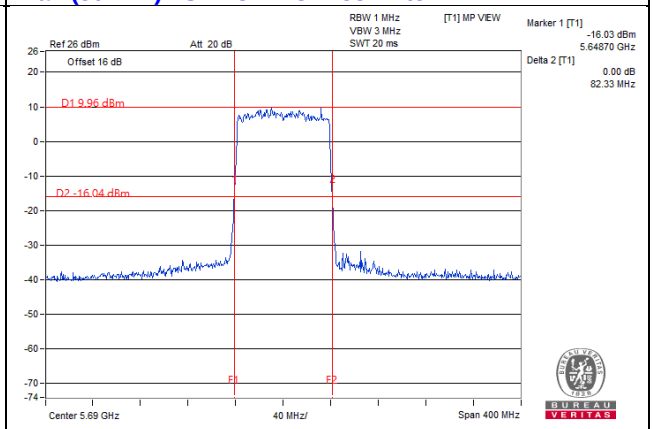
11ax (80MHz) 1S4T CDD CH138 Ant2



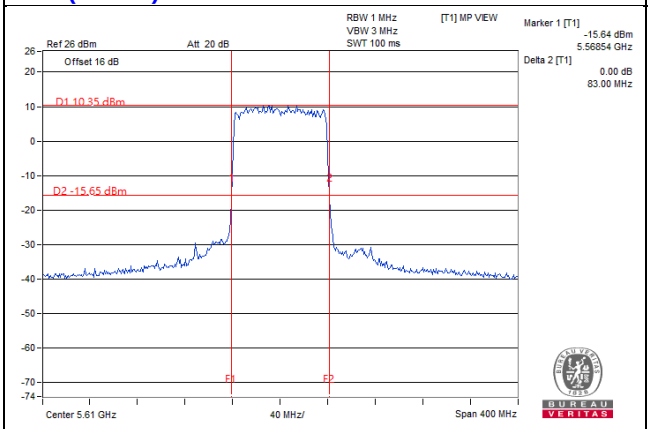
11ax (80MHz) 1S4T CDD CH122 Ant3



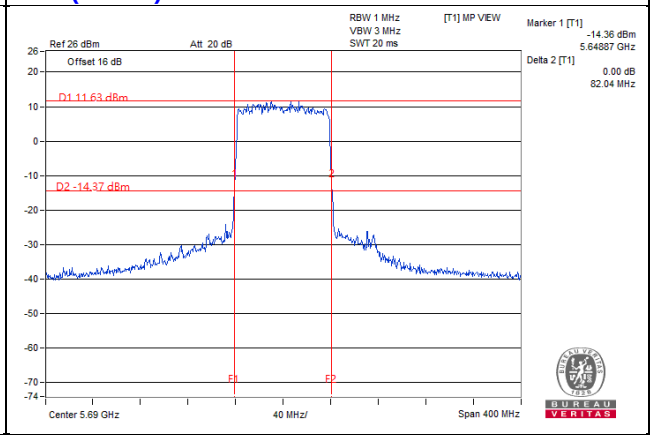
11ax (80MHz) 1S4T CDD CH138 Ant3



11ax (80MHz) 1S4T CDD CH122 Ant4

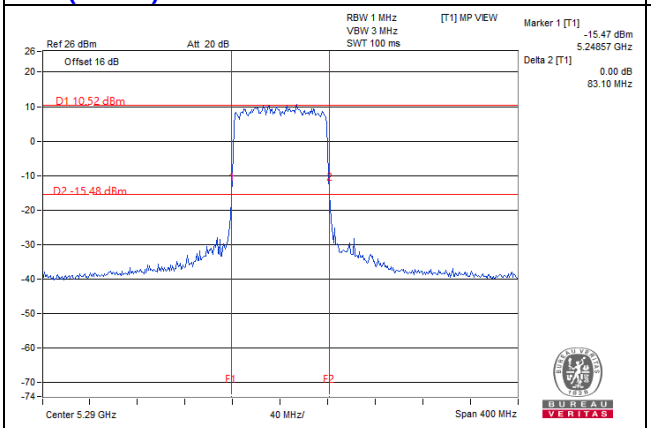


11ax (80MHz) 1S4T CDD CH138 Ant4

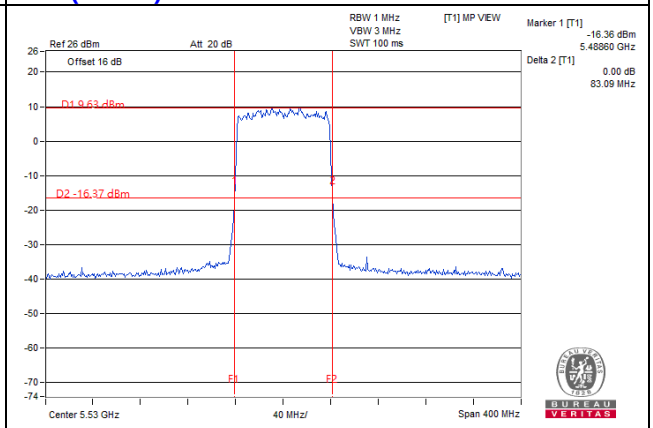


26dB BANDWIDTH SPECTRUM PLOT

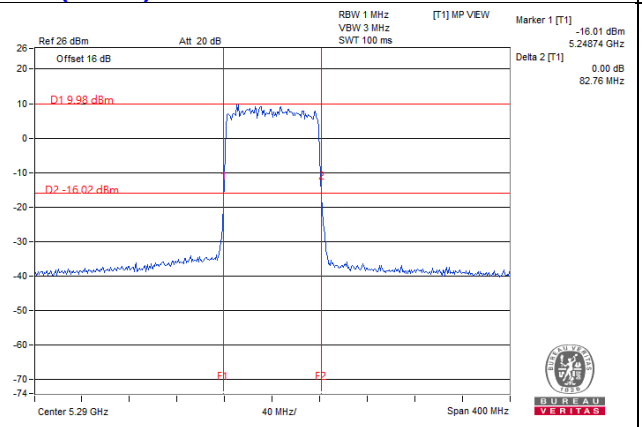
11ax (80MHz) 1S4T TxBF CH58 Ant1



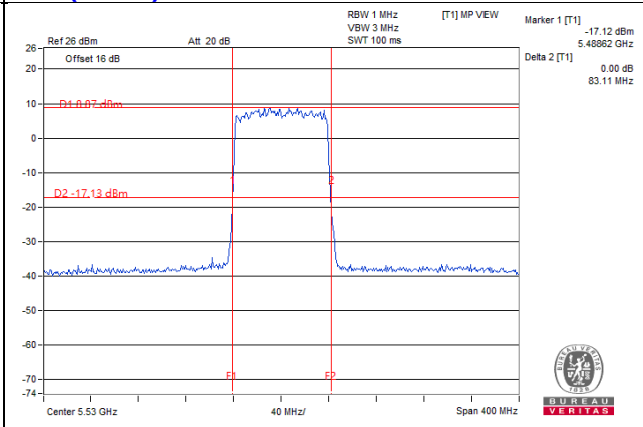
11ax (80MHz) 1S4T TxBF CH106 Ant1



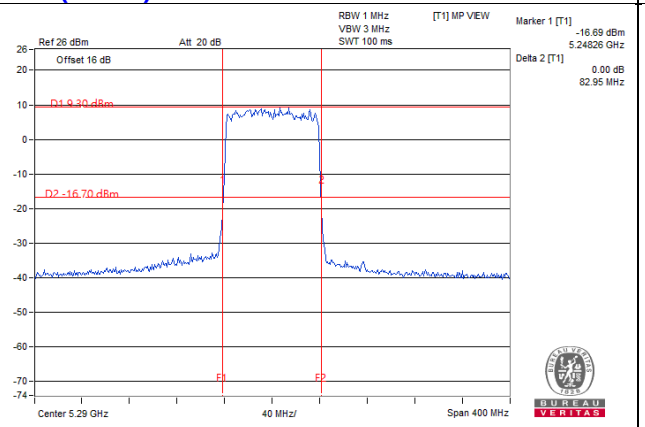
11ax (80MHz) 1S4T TxBF CH58 Ant2



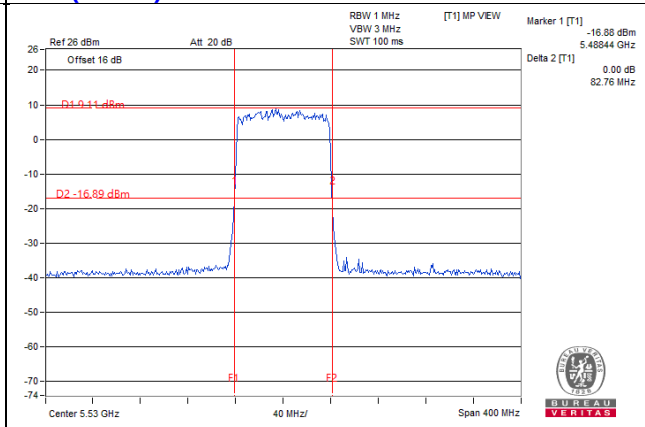
11ax (80MHz) 1S4T TxBF CH106 Ant2



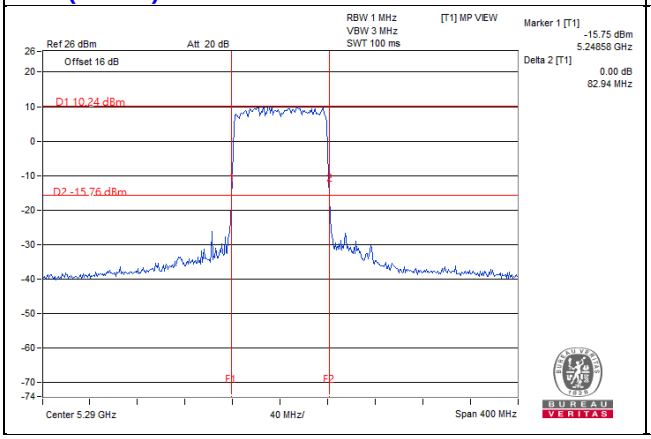
11ax (80MHz) 1S4T TxBF CH58 Ant3



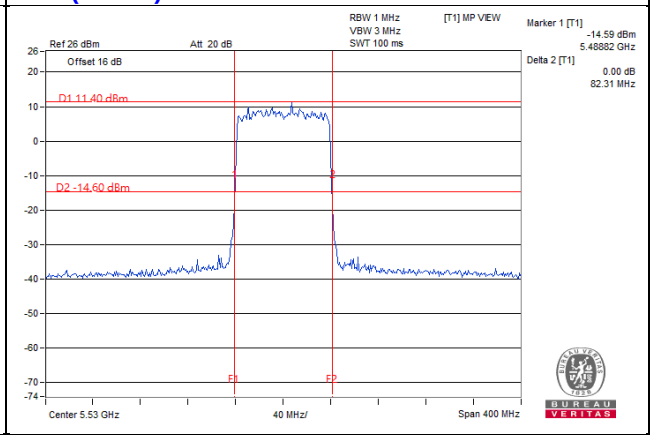
11ax (80MHz) 1S4T TxBF CH106 Ant3



11ax (80MHz) 1S4T TxBF CH58 Ant4

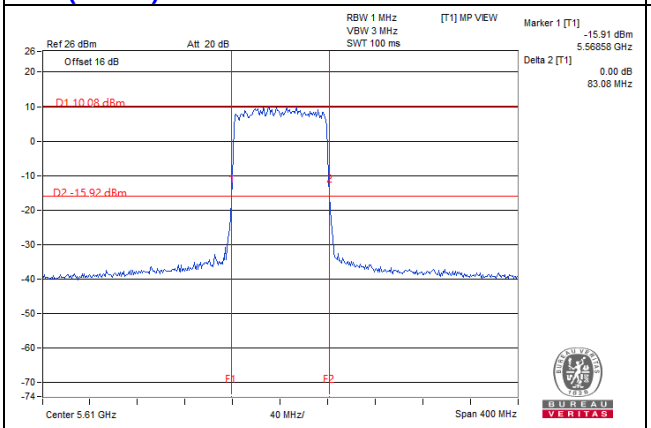


11ax (80MHz) 1S4T TxBF CH106 Ant4

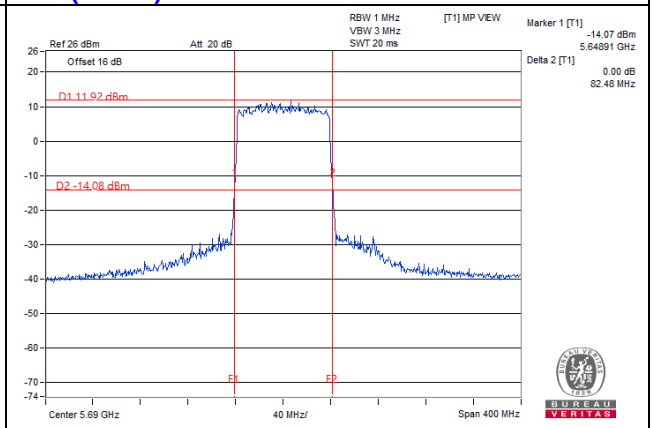


26dB BANDWIDTH SPECTRUM PLOT

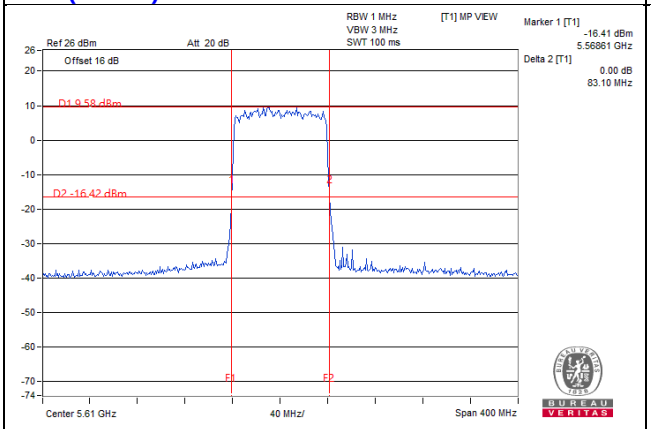
11ax (80MHz) 1S4T TxBF CH122 Ant1



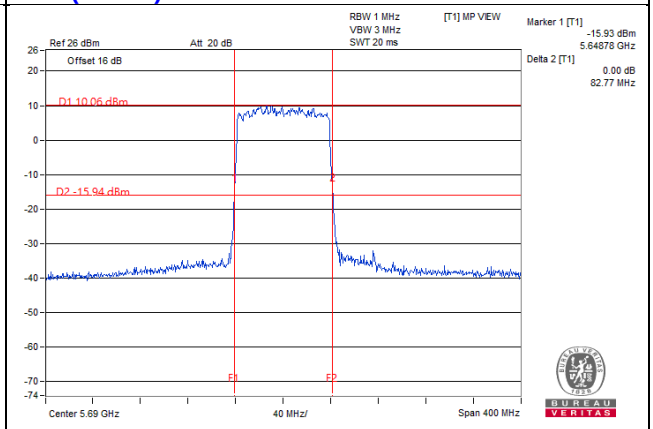
11ax (80MHz) 1S4T TxBF CH138 Ant1



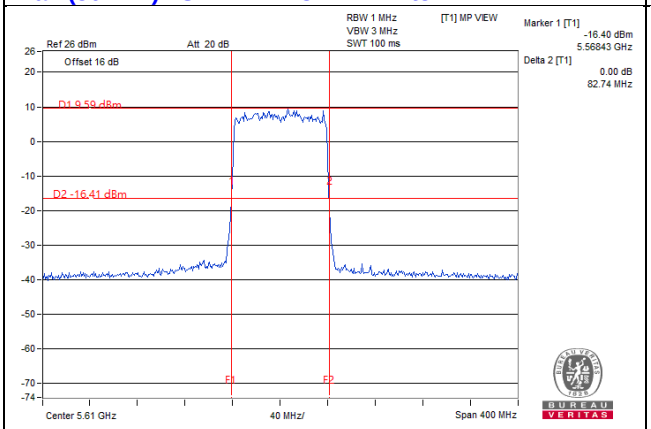
11ax (80MHz) 1S4T TxBF CH122 Ant2



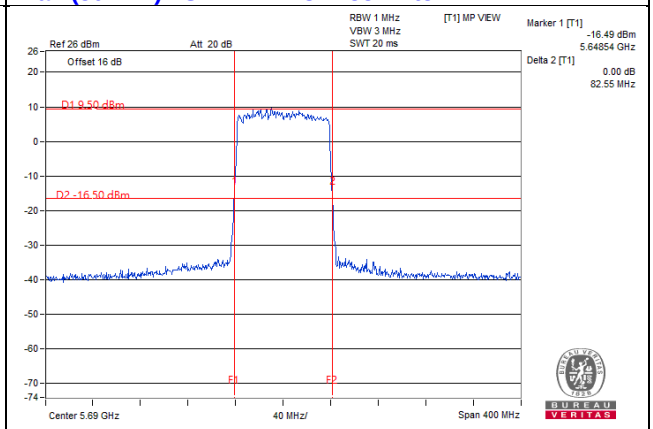
11ax (80MHz) 1S4T TxBF CH138 Ant2



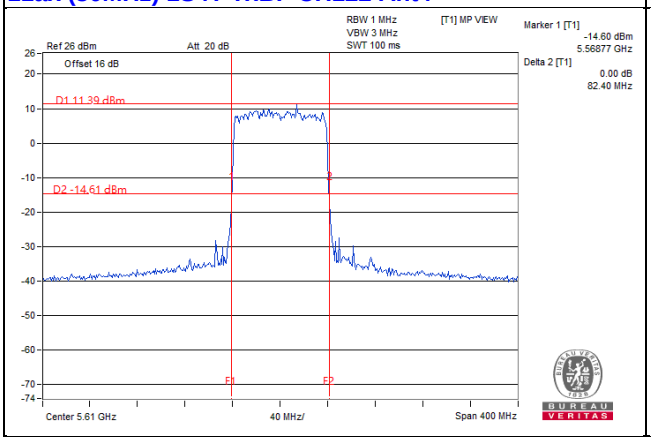
11ax (80MHz) 1S4T TxBF CH122 Ant3



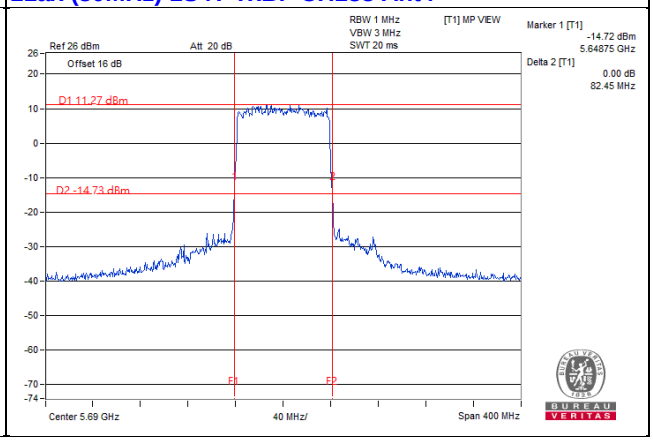
11ax (80MHz) 1S4T TxBF CH138 Ant3



11ax (80MHz) 1S4T TxBF CH122 Ant4

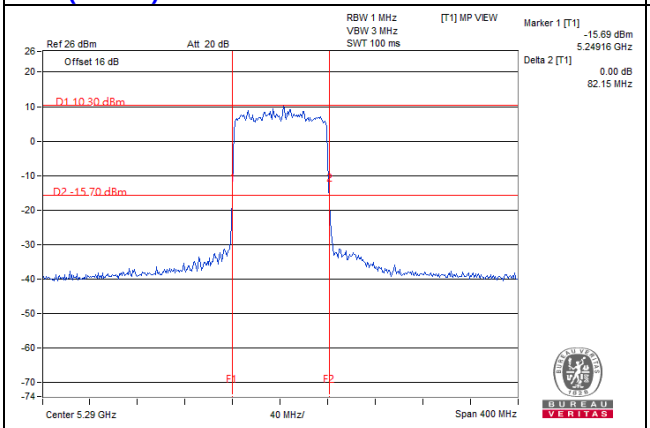


11ax (80MHz) 1S4T TxBF CH138 Ant4

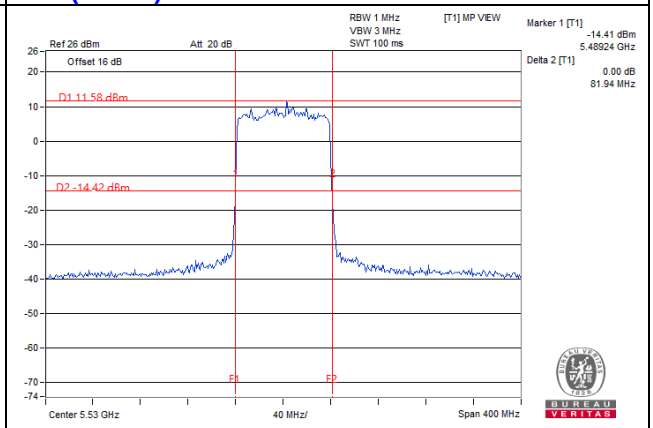


26dB BANDWIDTH SPECTRUM PLOT

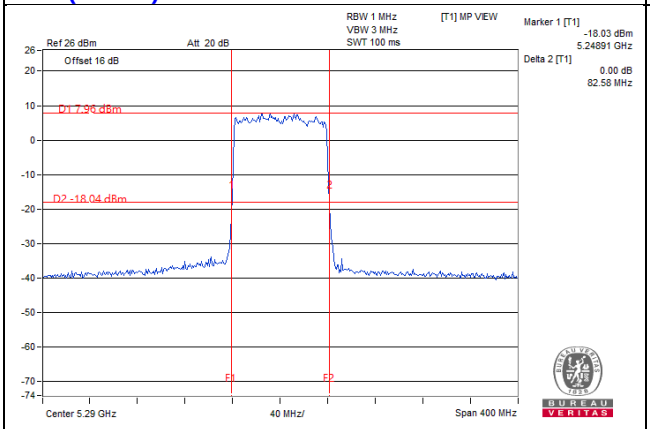
11ax (80MHz) 2S4T TxBF CH58 Ant1



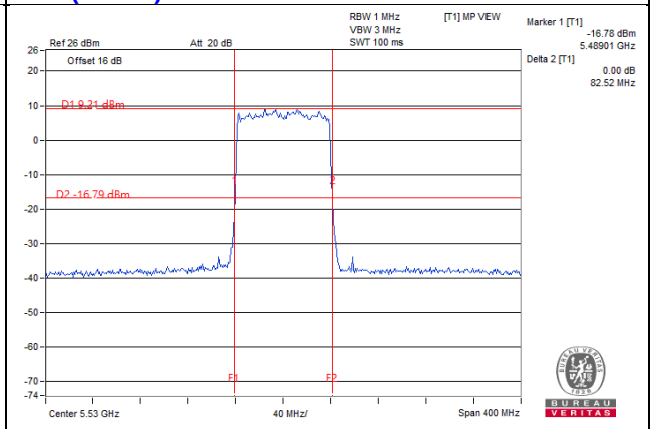
11ax (80MHz) 2S4T TxBF CH106 Ant1



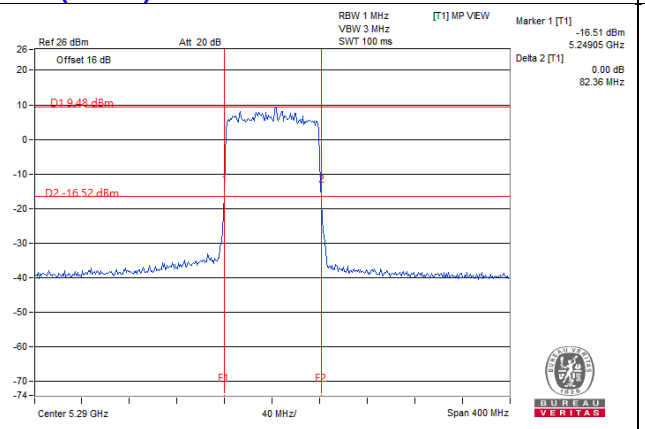
11ax (80MHz) 2S4T TxBF CH58 Ant2



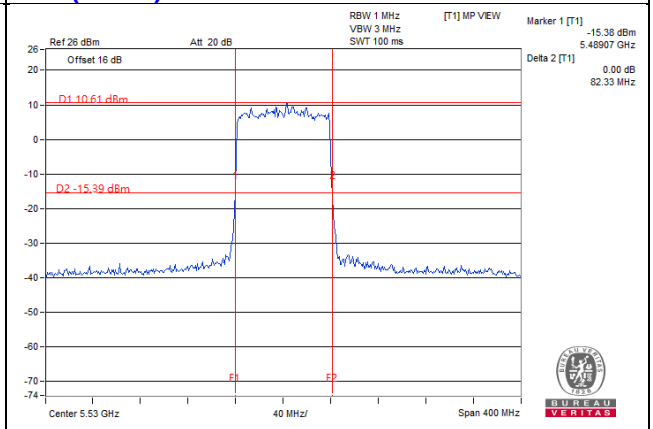
11ax (80MHz) 2S4T TxBF CH106 Ant2



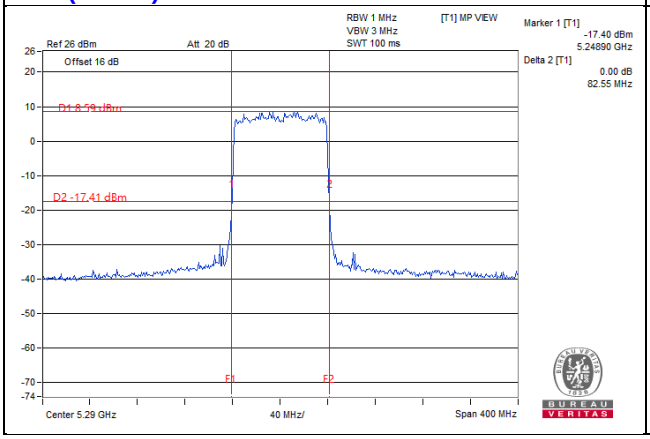
11ax (80MHz) 2S4T TxBF CH58 Ant3



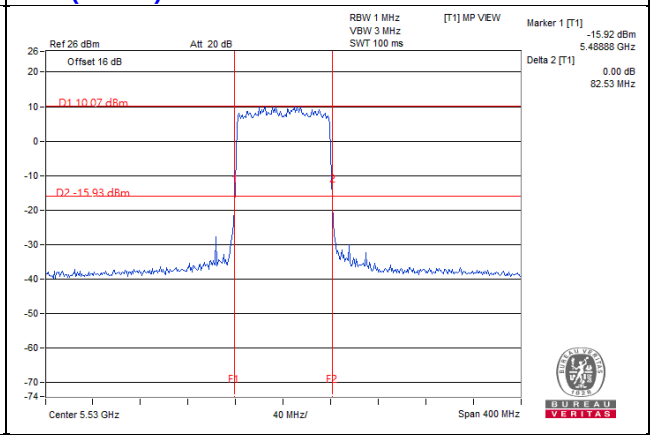
11ax (80MHz) 2S4T TxBF CH106 Ant3



11ax (80MHz) 2S4T TxBF CH58 Ant4

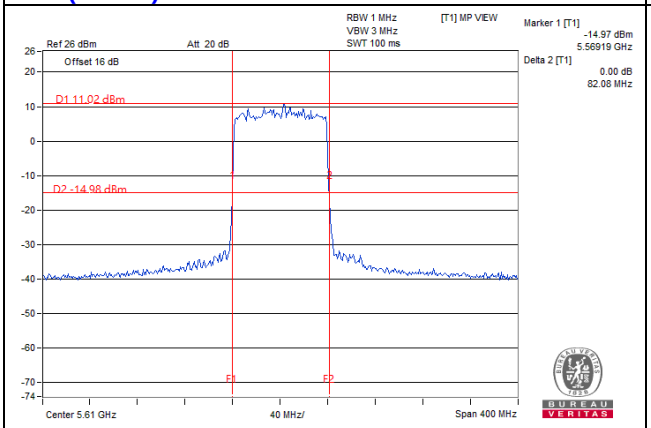


11ax (80MHz) 2S4T TxBF CH106 Ant4

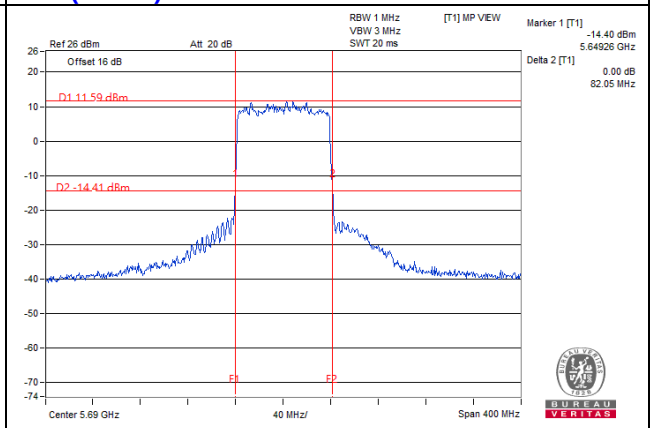


26dB BANDWIDTH SPECTRUM PLOT

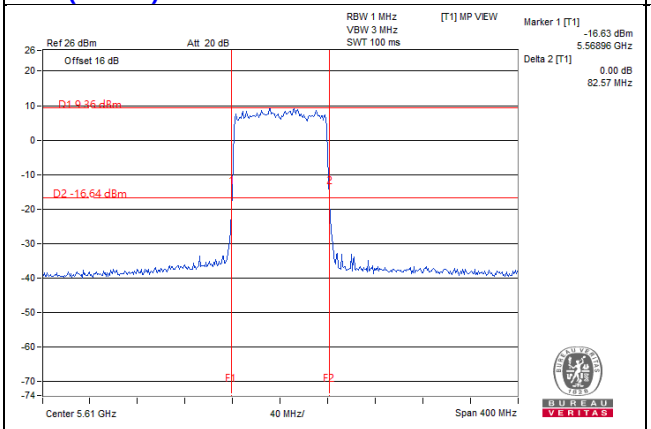
11ax (80MHz) 2S4T TxBF CH122 Ant1



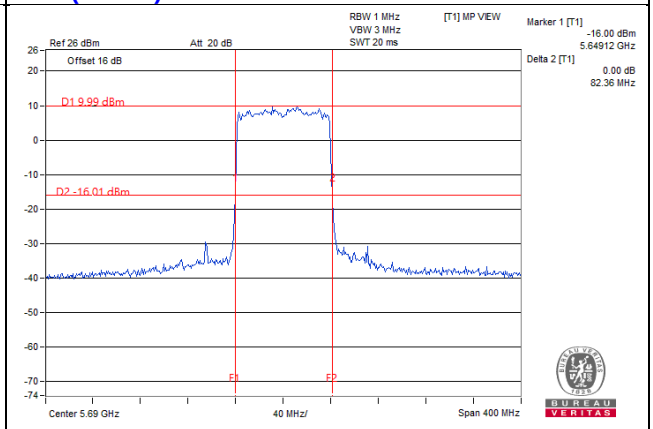
11ax (80MHz) 2S4T TxBF CH138 Ant1



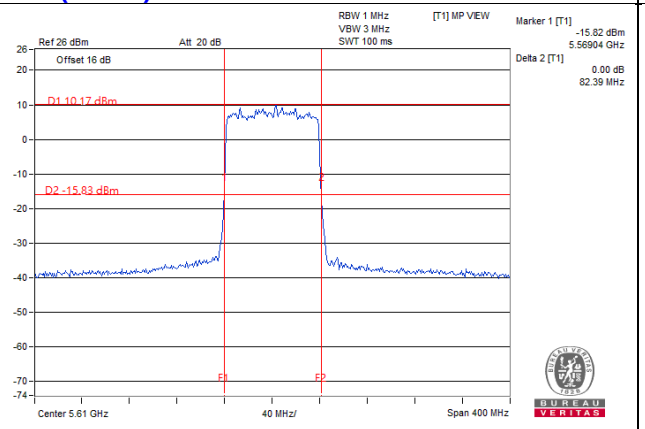
11ax (80MHz) 2S4T TxBF CH122 Ant2



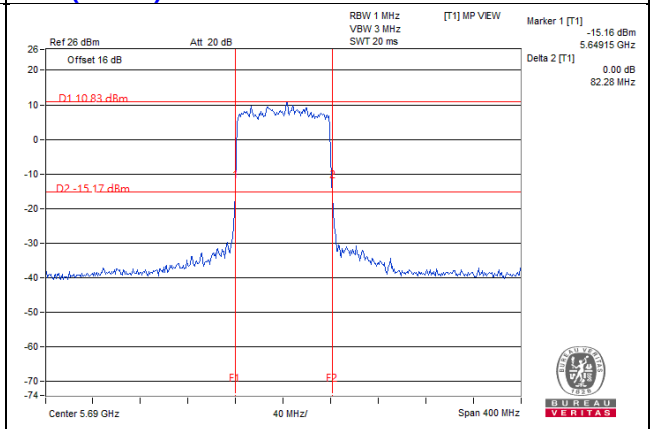
11ax (80MHz) 2S4T TxBF CH138 Ant2



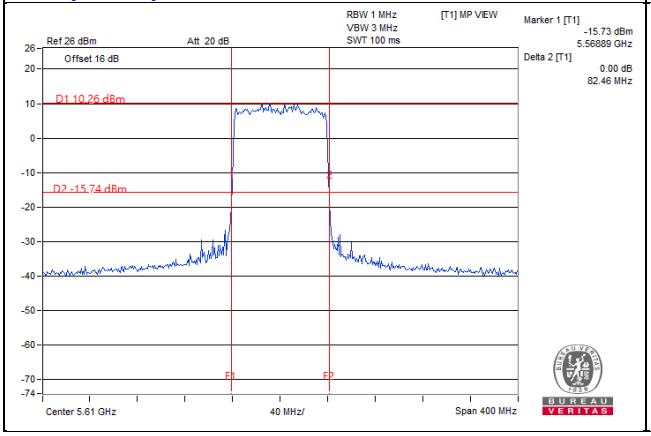
11ax (80MHz) 2S4T TxBF CH122 Ant3



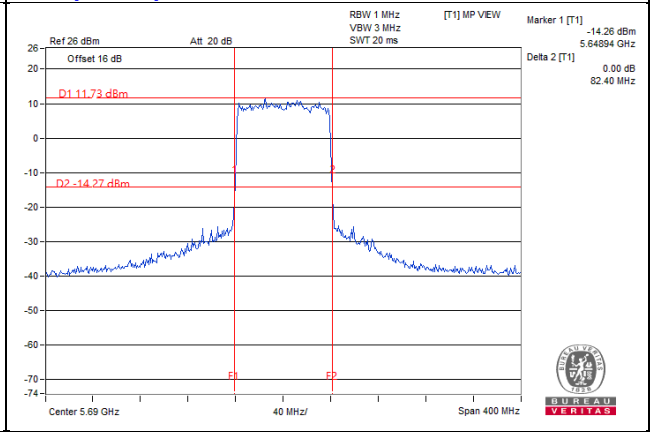
11ax (80MHz) 2S4T TxBF CH138 Ant3



11ax (80MHz) 2S4T TxBF CH122 Ant4

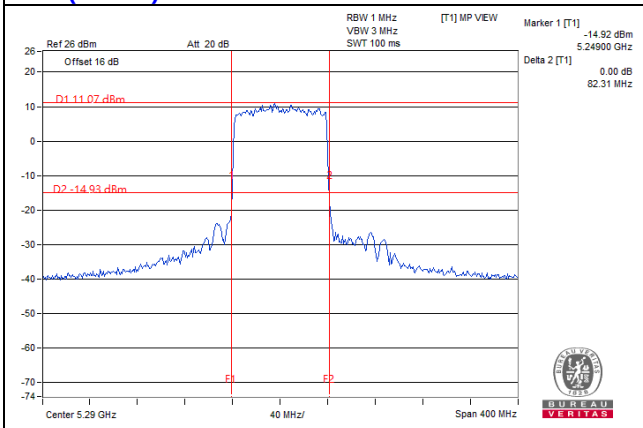


11ax (80MHz) 2S4T TxBF CH138 Ant4

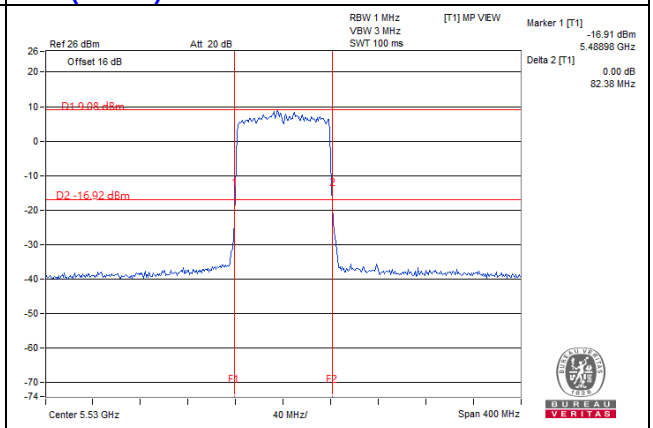


26dB BANDWIDTH SPECTRUM PLOT

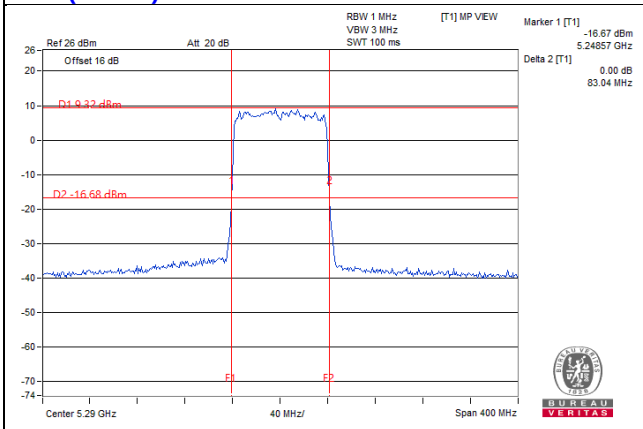
11ax (80MHz) 3S4T TxBF CH58 Ant1



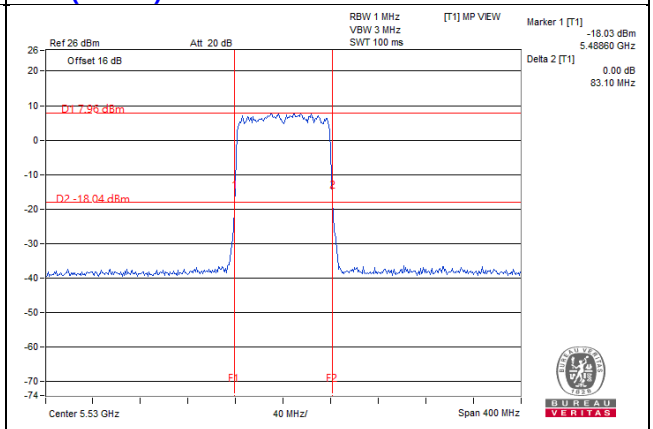
11ax (80MHz) 3S4T TxBF CH106 Ant1



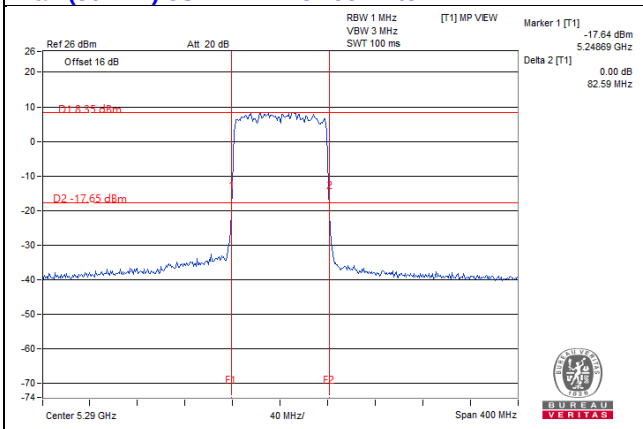
11ax (80MHz) 3S4T TxBF CH58 Ant2



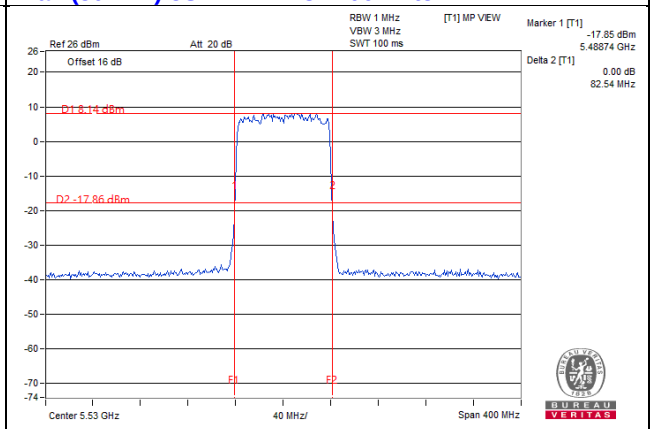
11ax (80MHz) 3S4T TxBF CH106 Ant2



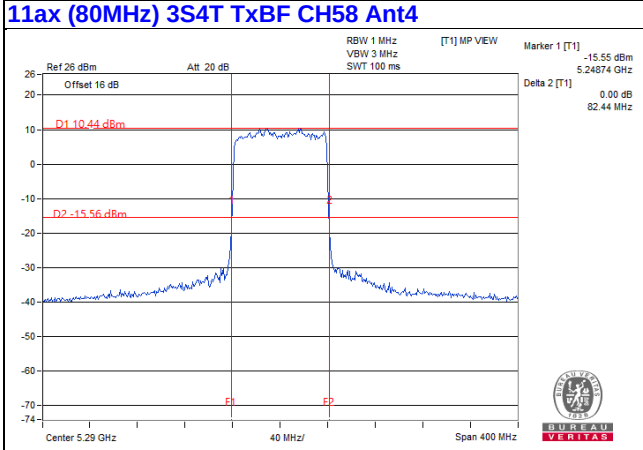
11ax (80MHz) 3S4T TxBF CH58 Ant3



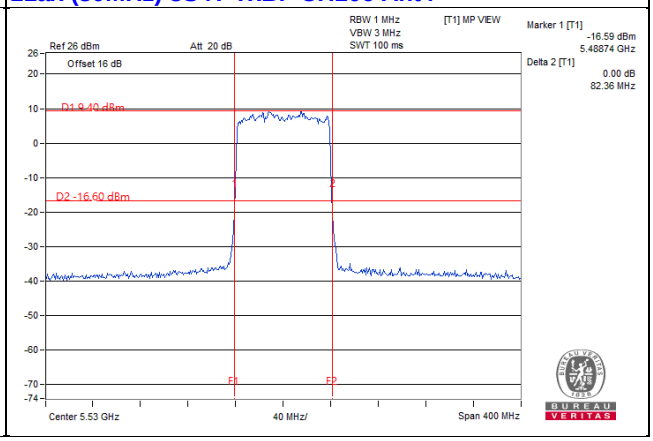
11ax (80MHz) 3S4T TxBF CH106 Ant3



11ax (80MHz) 3S4T TxBF CH58 Ant4

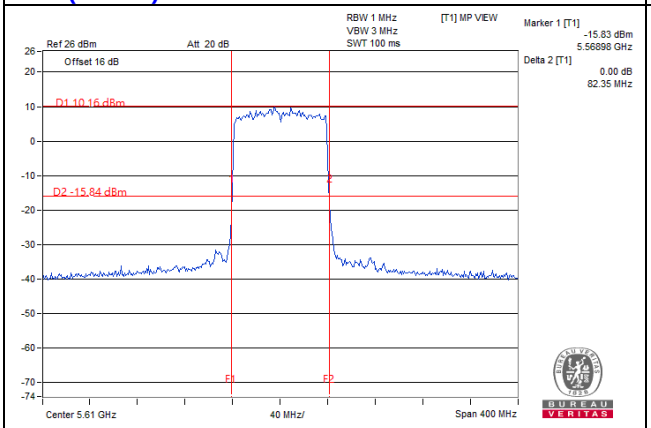


11ax (80MHz) 3S4T TxBF CH106 Ant4

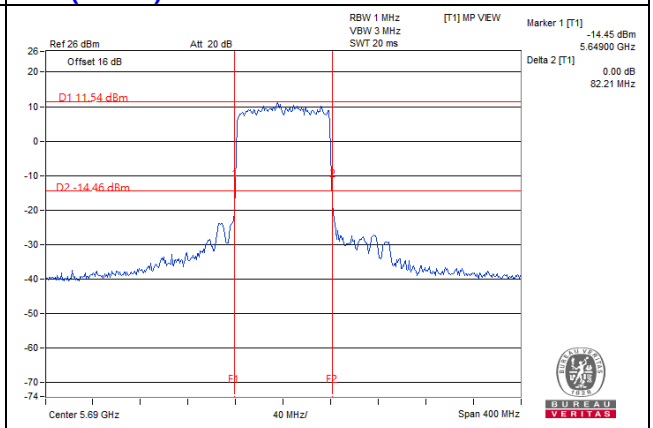


26dB BANDWIDTH SPECTRUM PLOT

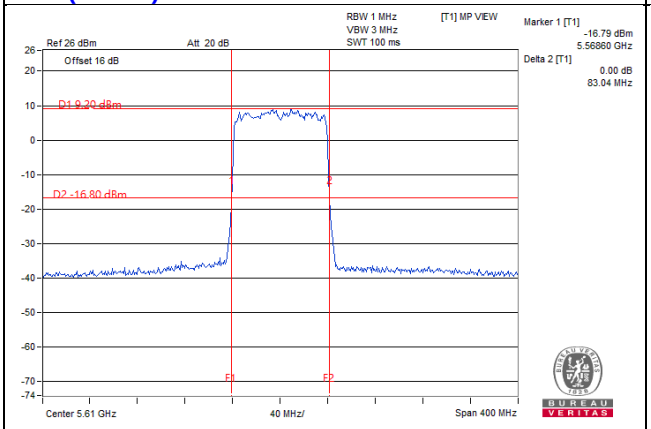
11ax (80MHz) 3S4T TxBF CH122 Ant1



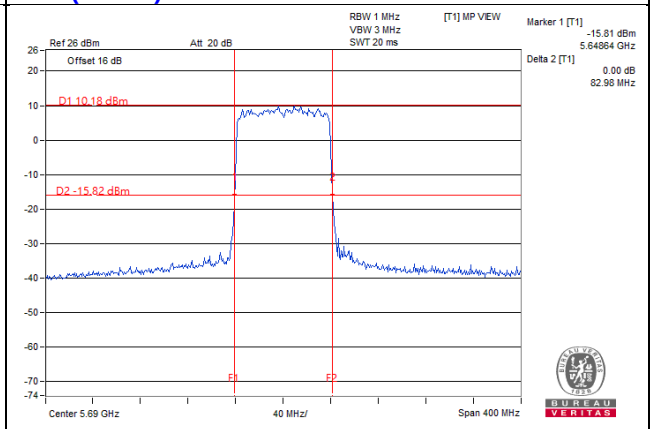
11ax (80MHz) 3S4T TxBF CH138 Ant1



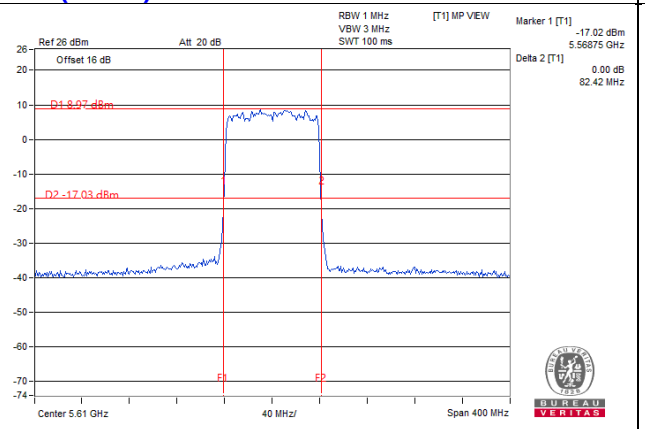
11ax (80MHz) 3S4T TxBF CH122 Ant2



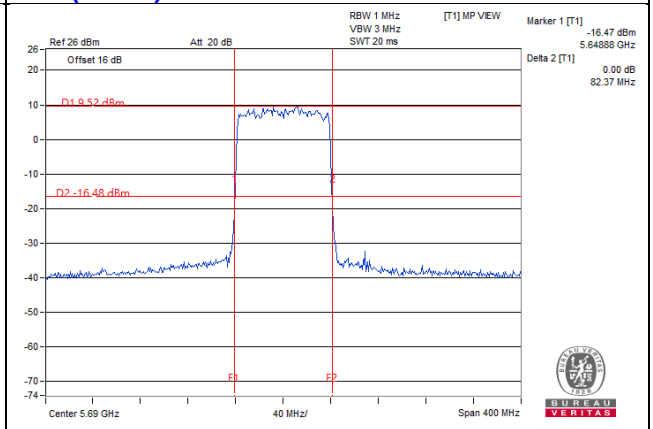
11ax (80MHz) 3S4T TxBF CH138 Ant2



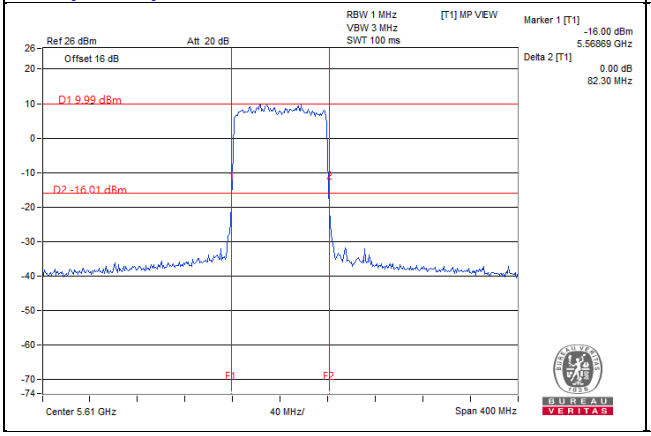
11ax (80MHz) 3S4T TxBF CH122 Ant3



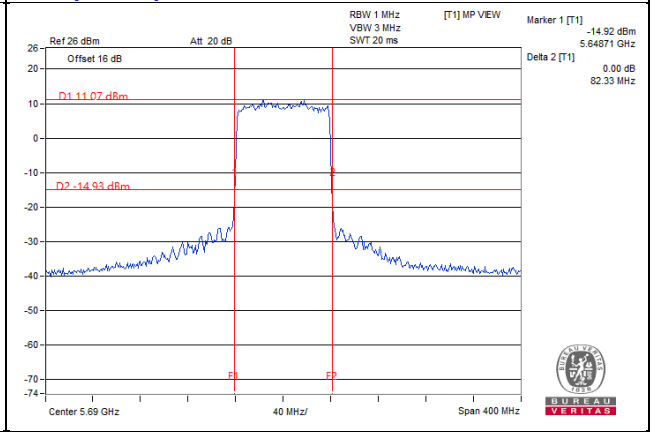
11ax (80MHz) 3S4T TxBF CH138 Ant3



11ax (80MHz) 3S4T TxBF CH122 Ant4

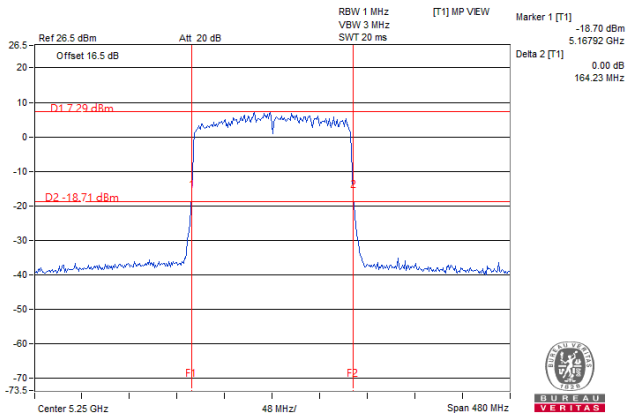


11ax (80MHz) 3S4T TxBF CH138 Ant4

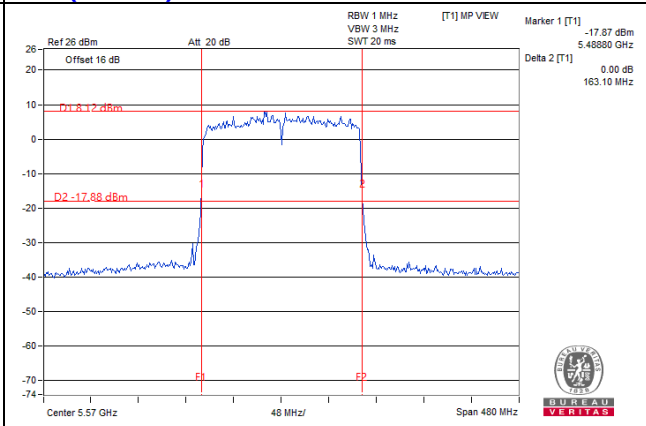


26dB BANDWIDTH SPECTRUM PLOT

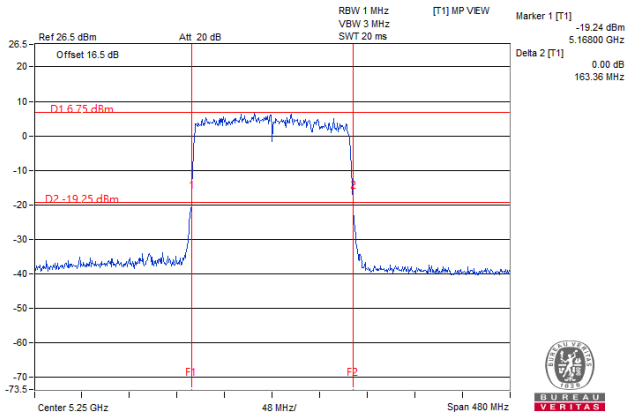
11ax (160MHz) 1S4T CDD CH50 Ant1



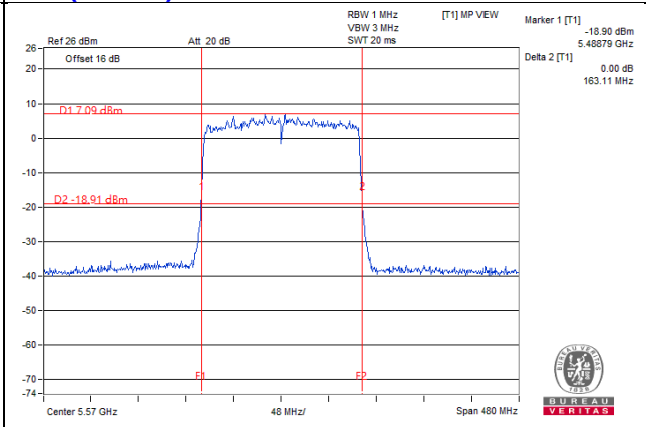
11ax (160MHz) 1S4T CDD CH114 Ant1



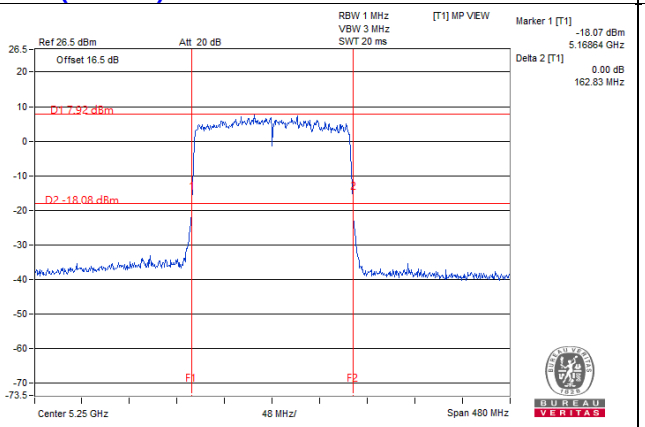
11ax (160MHz) 1S4T CDD CH50 Ant2



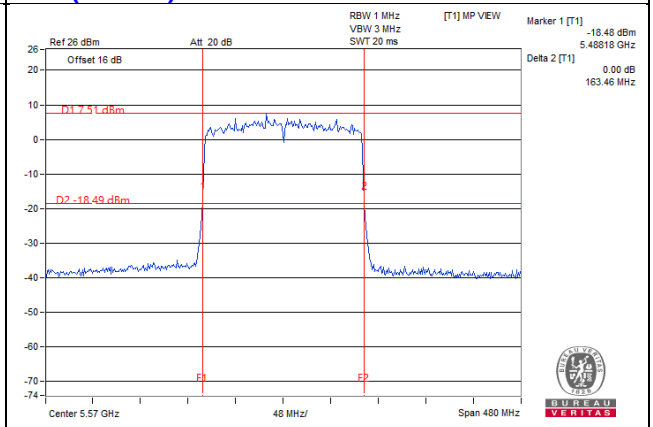
11ax (160MHz) 1S4T CDD CH114 Ant2



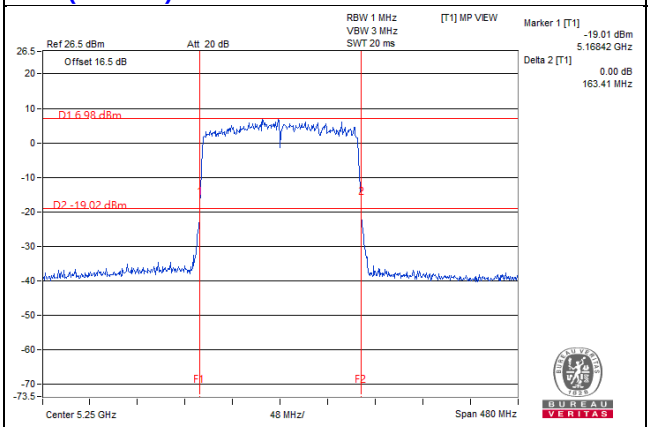
11ax (160MHz) 1S4T CDD CH50 Ant3



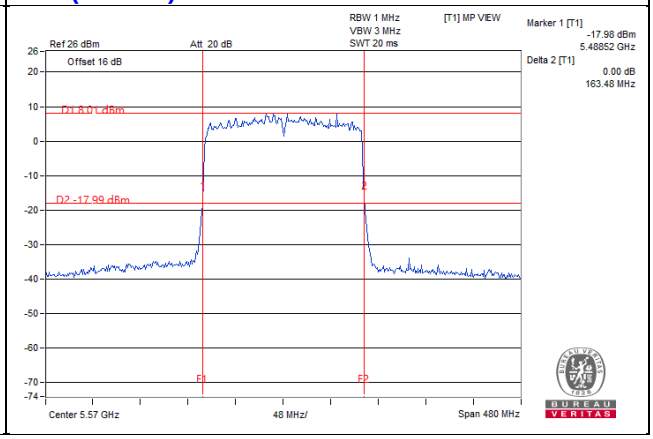
11ax (160MHz) 1S4T CDD CH114 Ant3



11ax (160MHz) 1S4T CDD CH50 Ant4

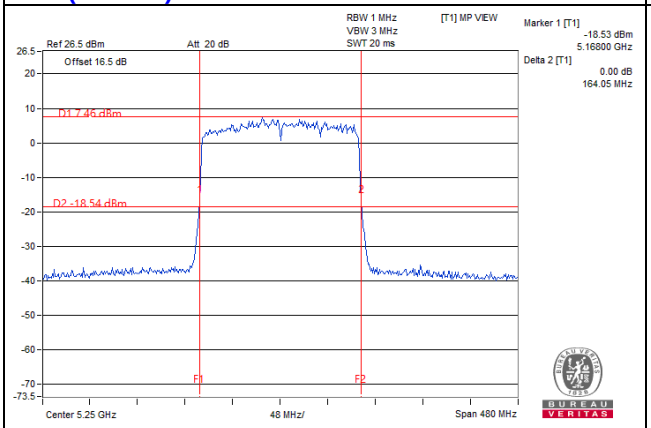


11ax (160MHz) 1S4T CDD CH114 Ant4

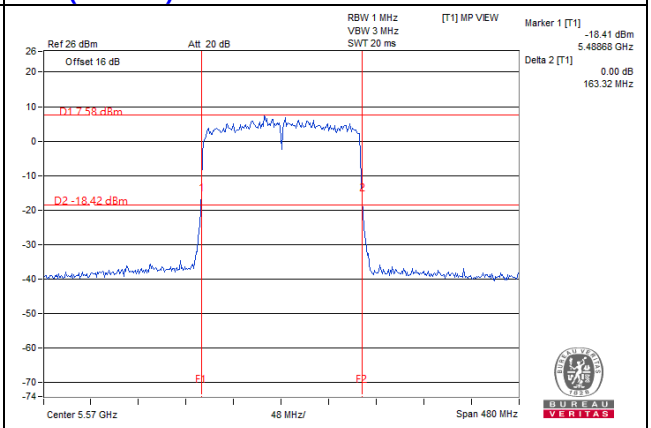


26dB BANDWIDTH SPECTRUM PLOT

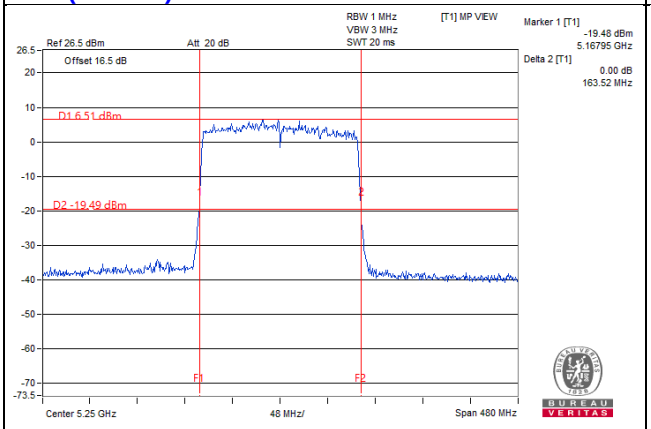
11ax (160MHz) 1S4T TxBF CH50 Ant1



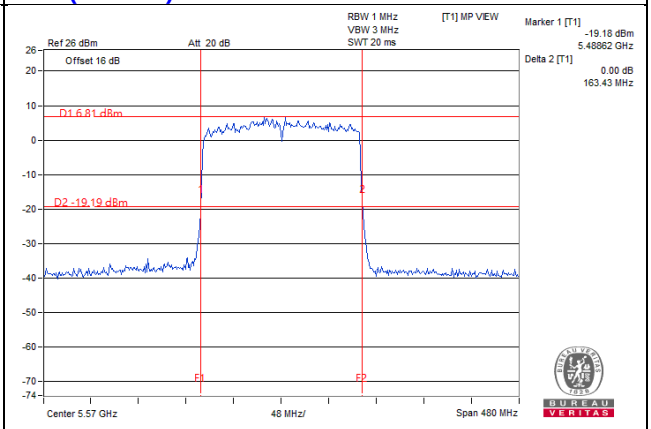
11ax (160MHz) 1S4T TxBF CH114 Ant1



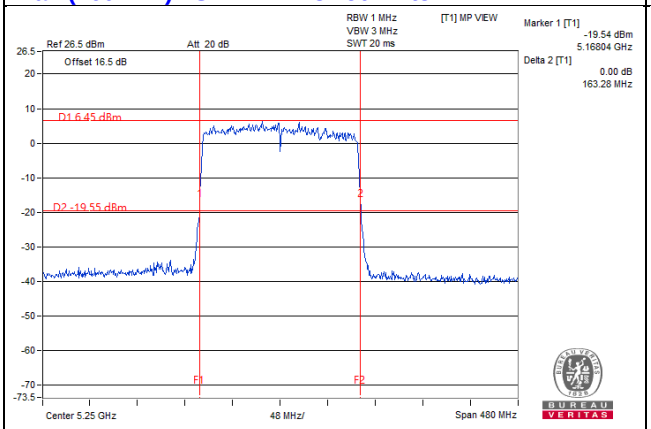
11ax (160MHz) 1S4T TxBF CH50 Ant2



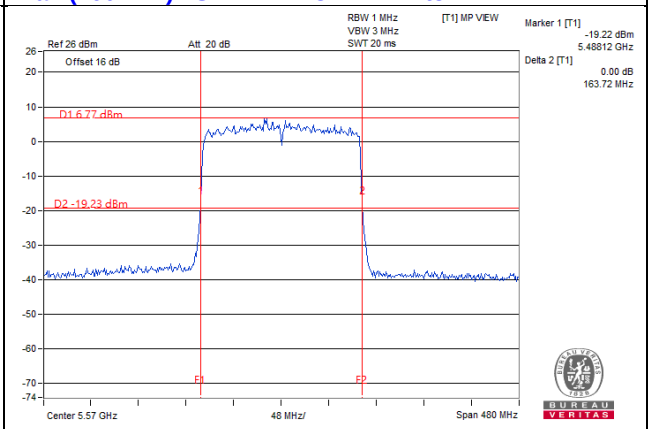
11ax (160MHz) 1S4T TxBF CH114 Ant2



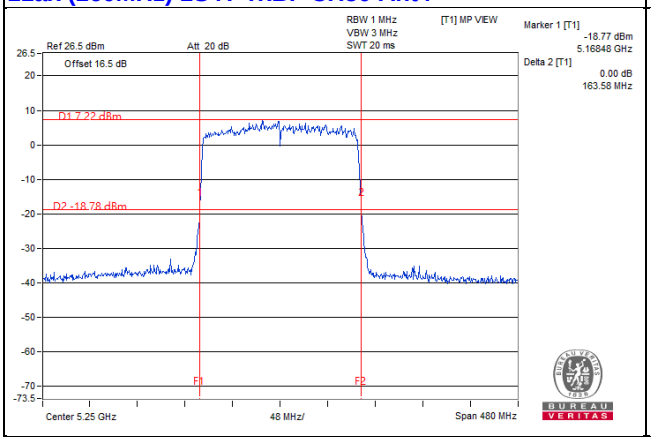
11ax (160MHz) 1S4T TxBF CH50 Ant3



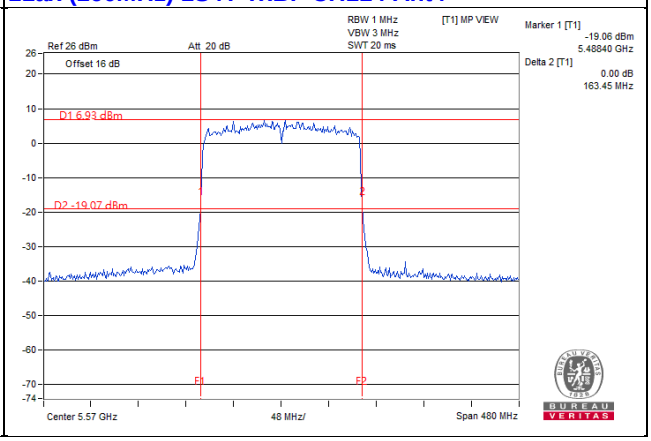
11ax (160MHz) 1S4T TxBF CH114 Ant3



11ax (160MHz) 1S4T TxBF CH50 Ant4

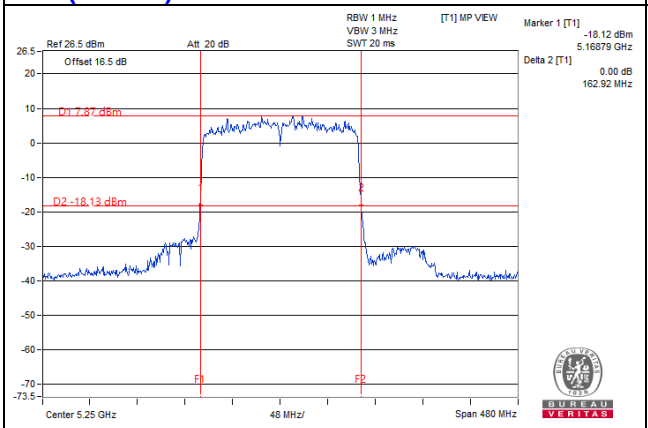


11ax (160MHz) 1S4T TxBF CH114 Ant4

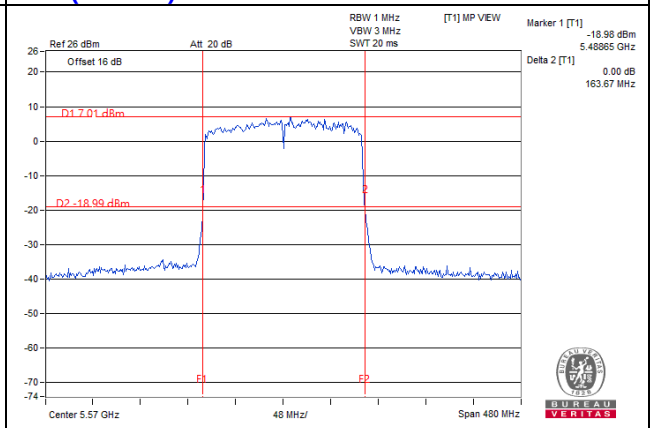


26dB BANDWIDTH SPECTRUM PLOT

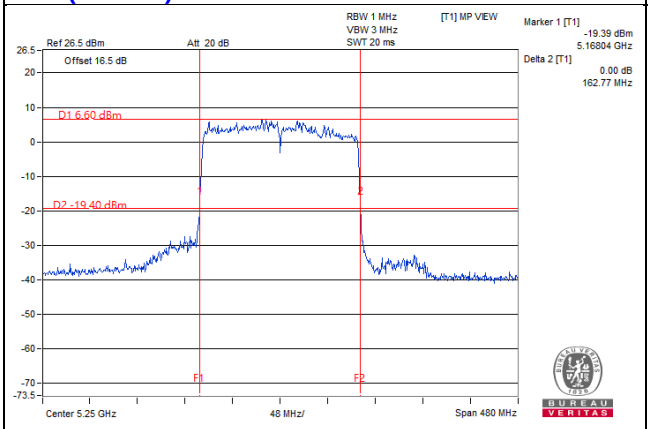
11ax (160MHz) 2S4T TxBF CH50 Ant1



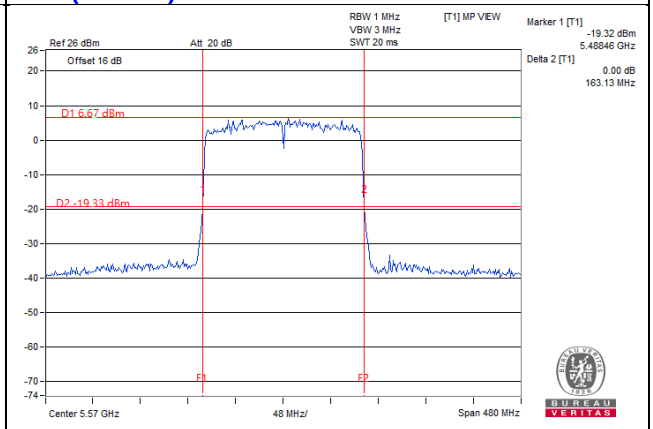
11ax (160MHz) 2S4T TxBF CH114 Ant1



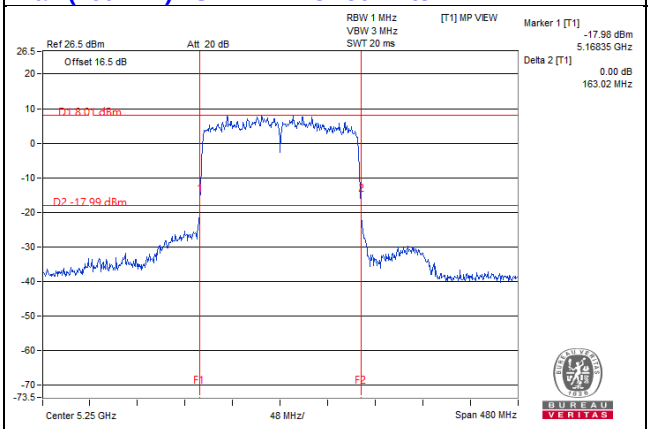
11ax (160MHz) 2S4T TxBF CH50 Ant2



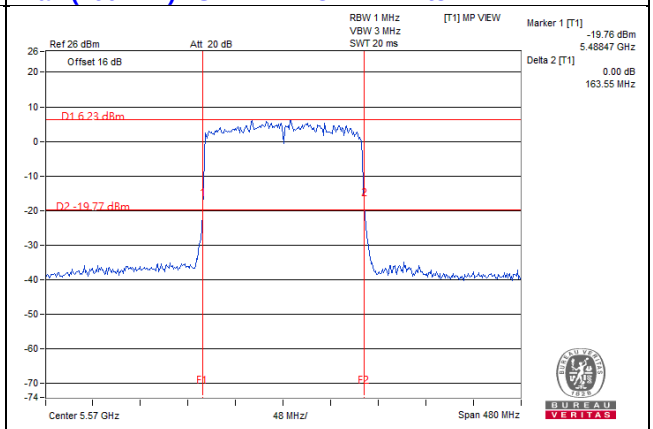
11ax (160MHz) 2S4T TxBF CH114 Ant2



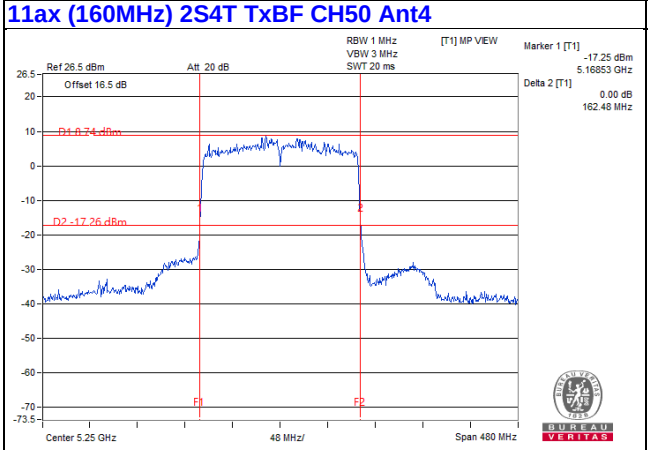
11ax (160MHz) 2S4T TxBF CH50 Ant3



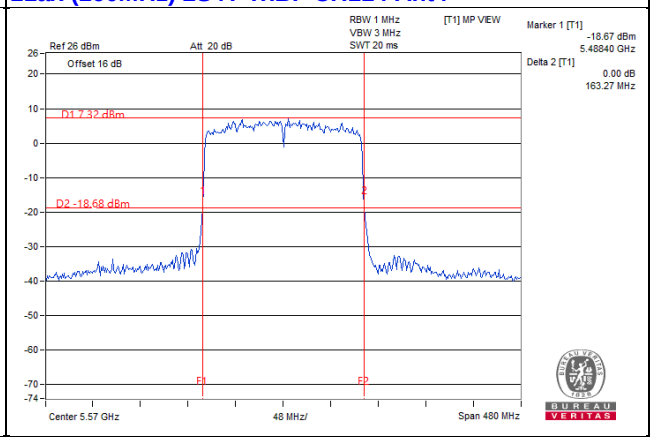
11ax (160MHz) 2S4T TxBF CH114 Ant3



11ax (160MHz) 2S4T TxBF CH50 Ant4

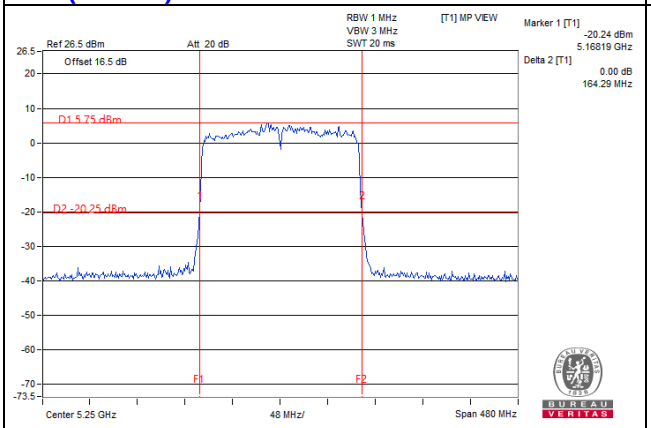


11ax (160MHz) 2S4T TxBF CH114 Ant4

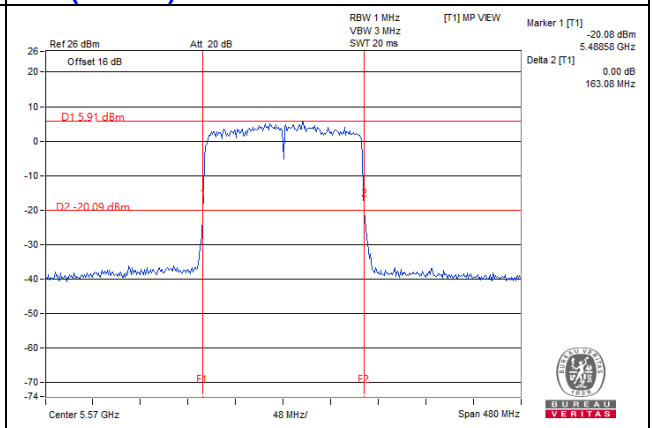


26dB BANDWIDTH SPECTRUM PLOT

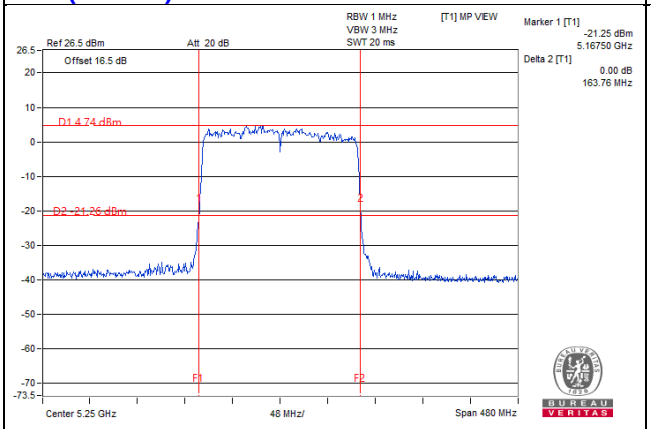
11ax (160MHz) 3S4T TxBF CH50 Ant1



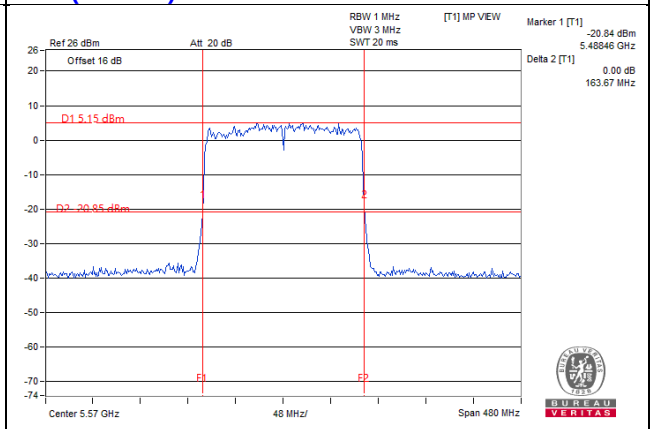
11ax (160MHz) 3S4T TxBF CH114 Ant1



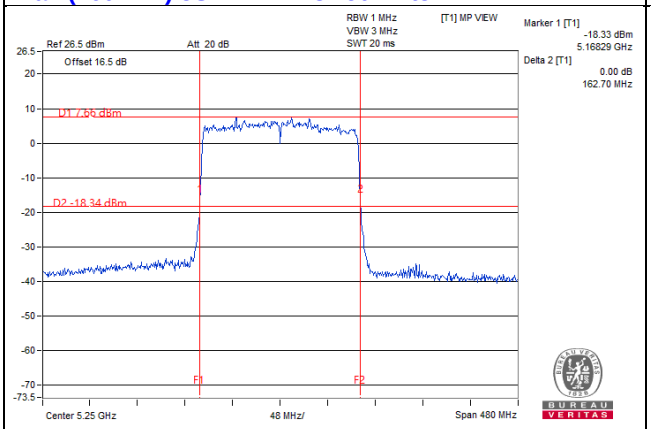
11ax (160MHz) 3S4T TxBF CH50 Ant2



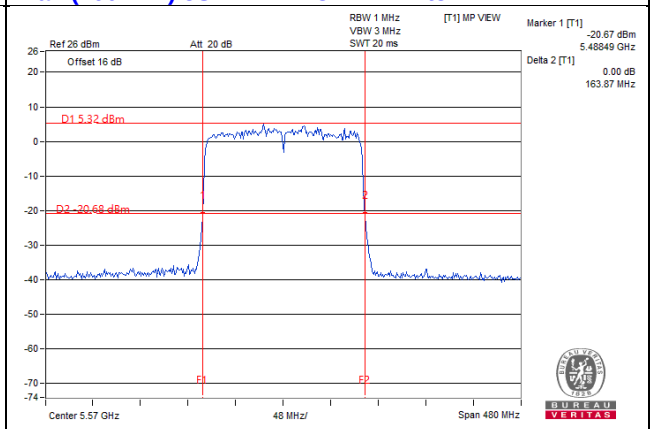
11ax (160MHz) 3S4T TxBF CH114 Ant2



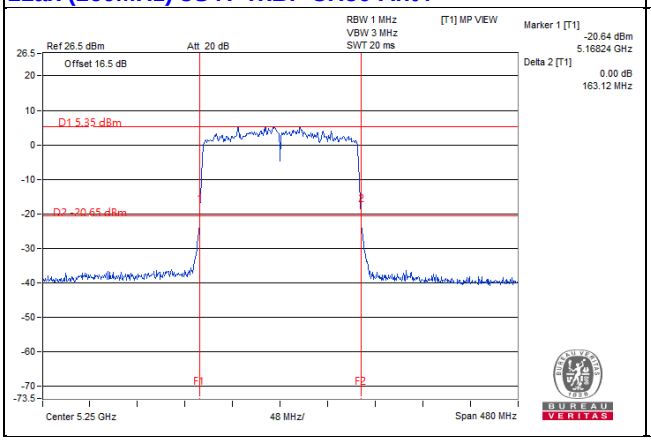
11ax (160MHz) 3S4T TxBF CH50 Ant3



11ax (160MHz) 3S4T TxBF CH114 Ant3



11ax (160MHz) 3S4T TxBF CH50 Ant4



11ax (160MHz) 3S4T TxBF CH114 Ant4