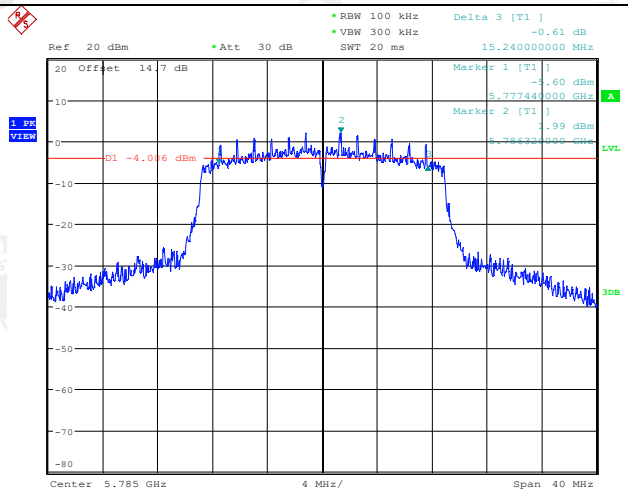
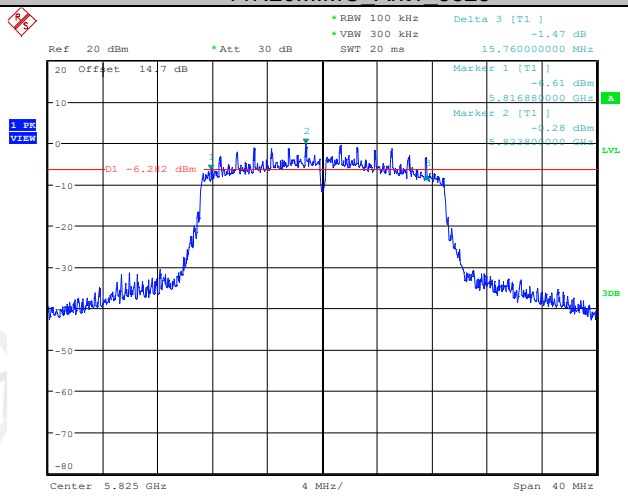
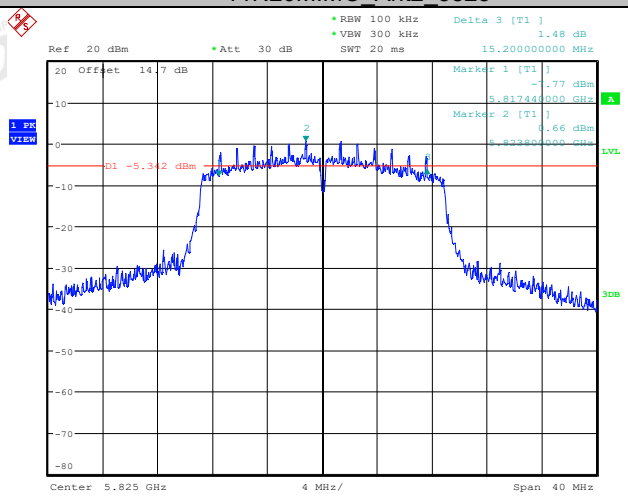


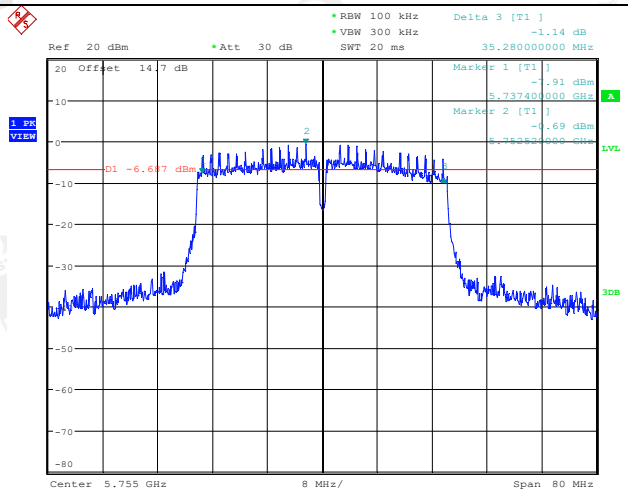
11N20MIMO_Ant1_5825



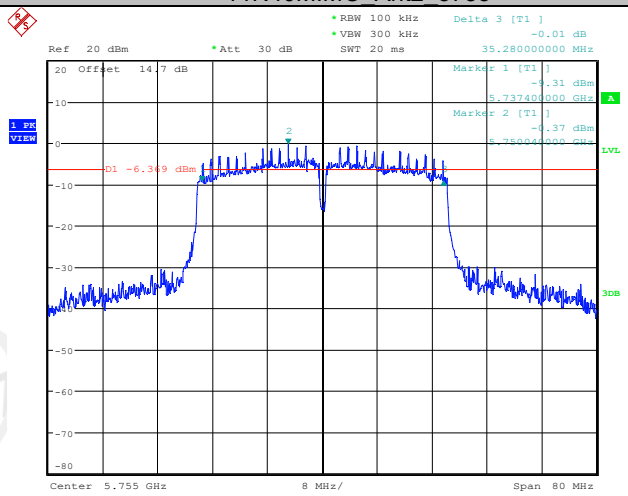
11N20MIMO_Ant2_5825



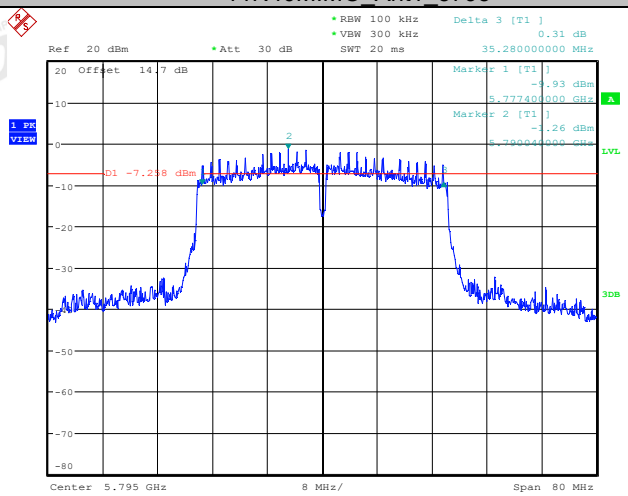
11N40MIMO_Ant1_5755



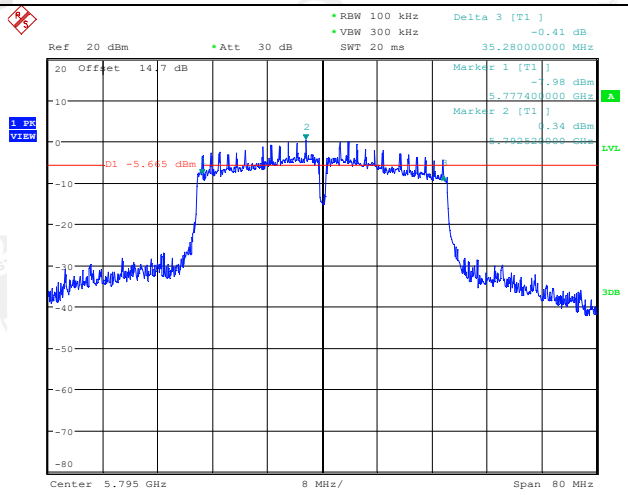
11N40MIMO_Ant2_5755



11N40MIMO_Ant1_5795



11N40MIMO_Ant2_5795



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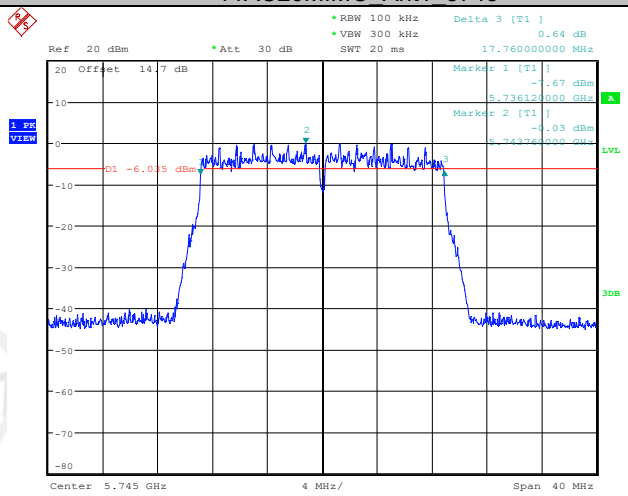
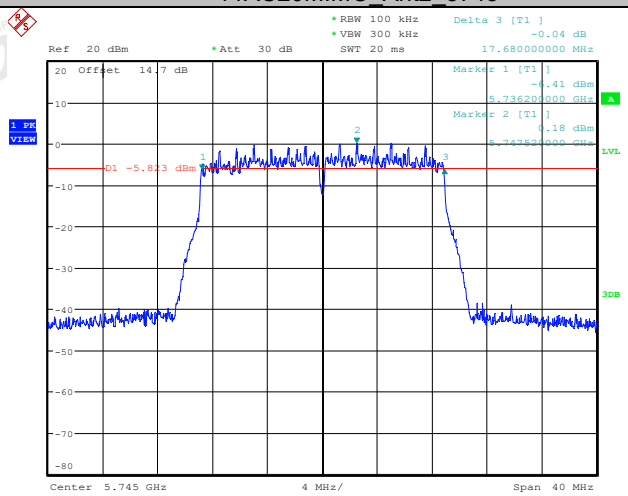
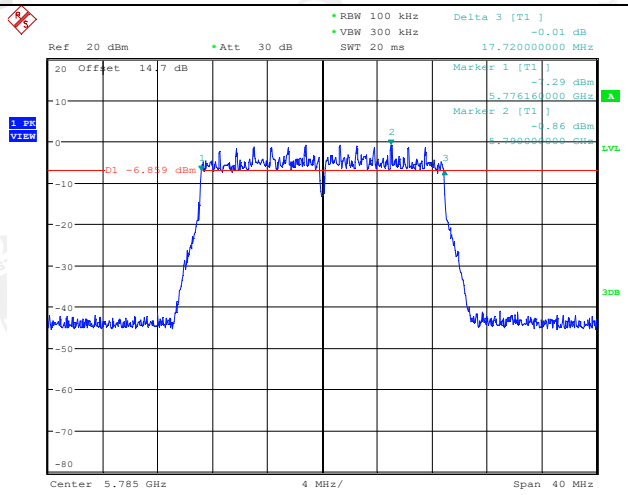


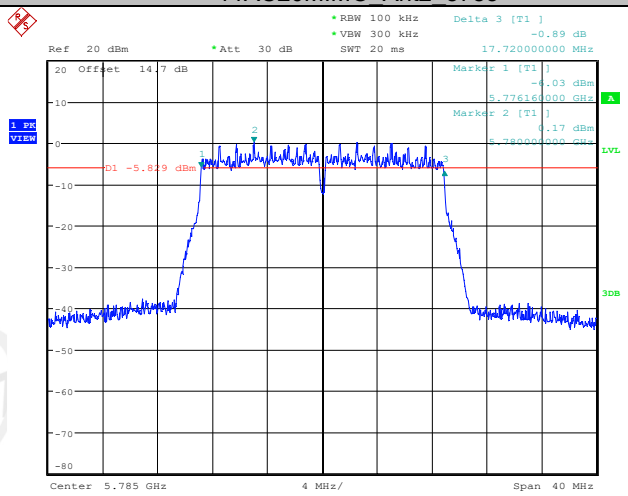
11AC20MIMO_Ant2_5745



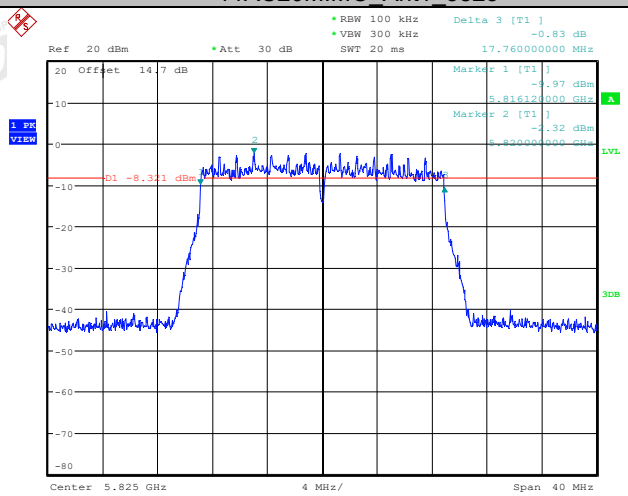
11AC20MIMO_Ant1_5785



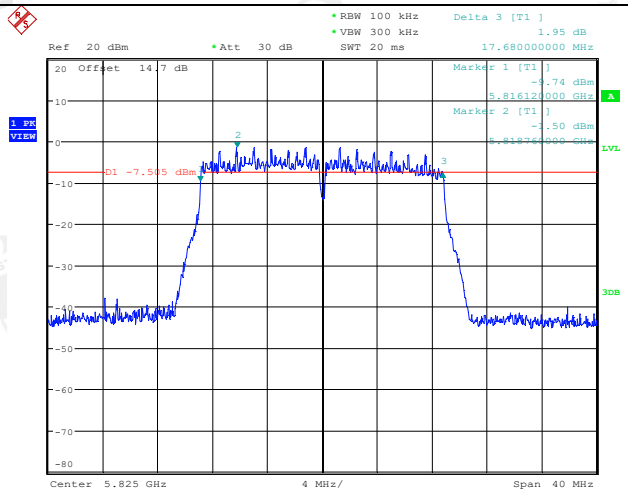
11AC20MIMO_Ant2_5785



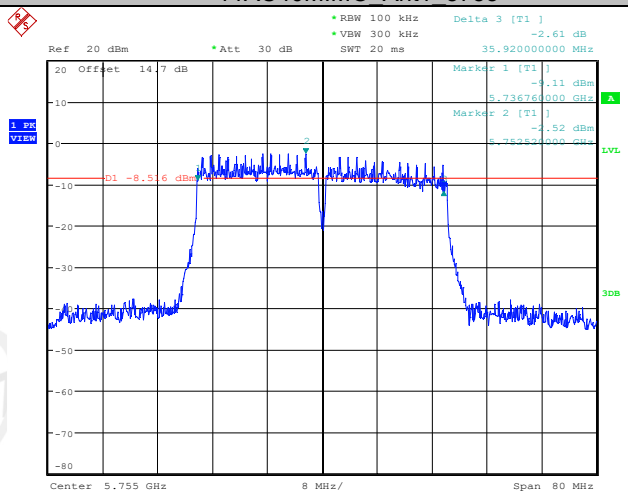
11AC20MIMO_Ant1_5825



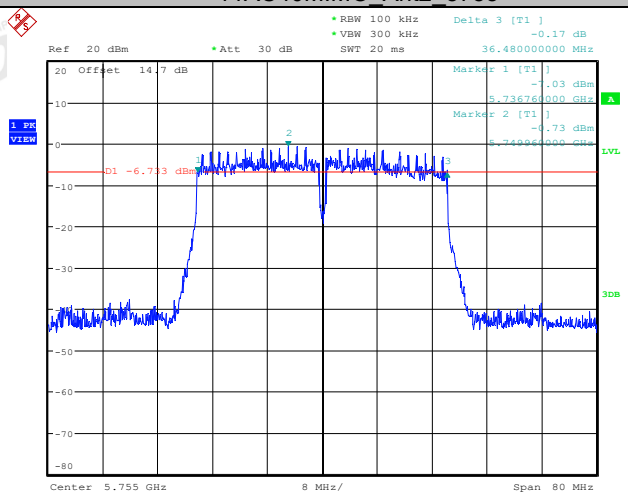
11AC20MIMO_Ant2_5825



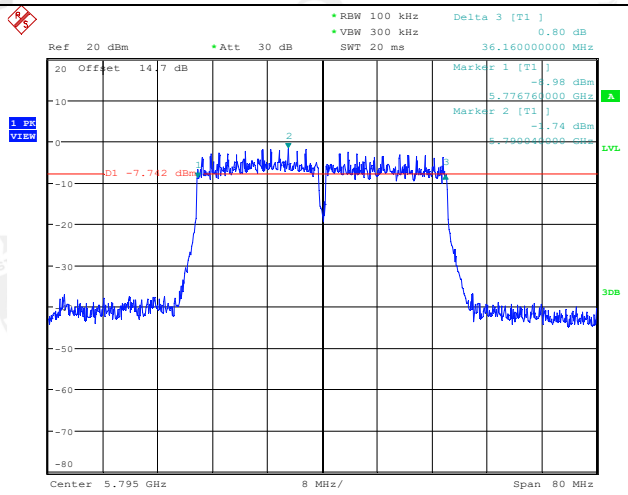
11AC40MIMO_Ant1_5755



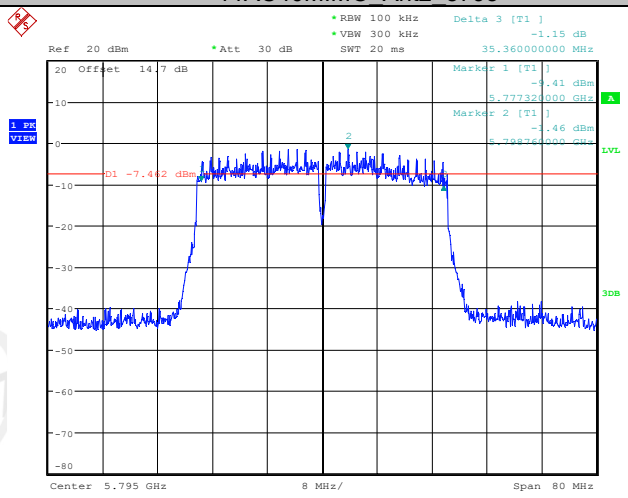
11AC40MIMO_Ant2_5755



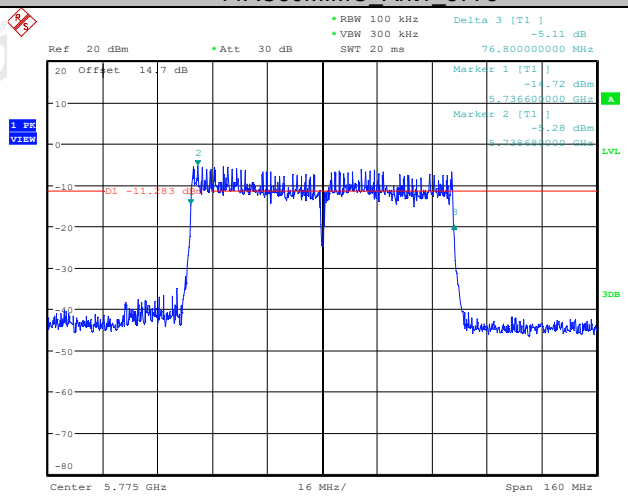
11AC40MIMO_Ant1_5795



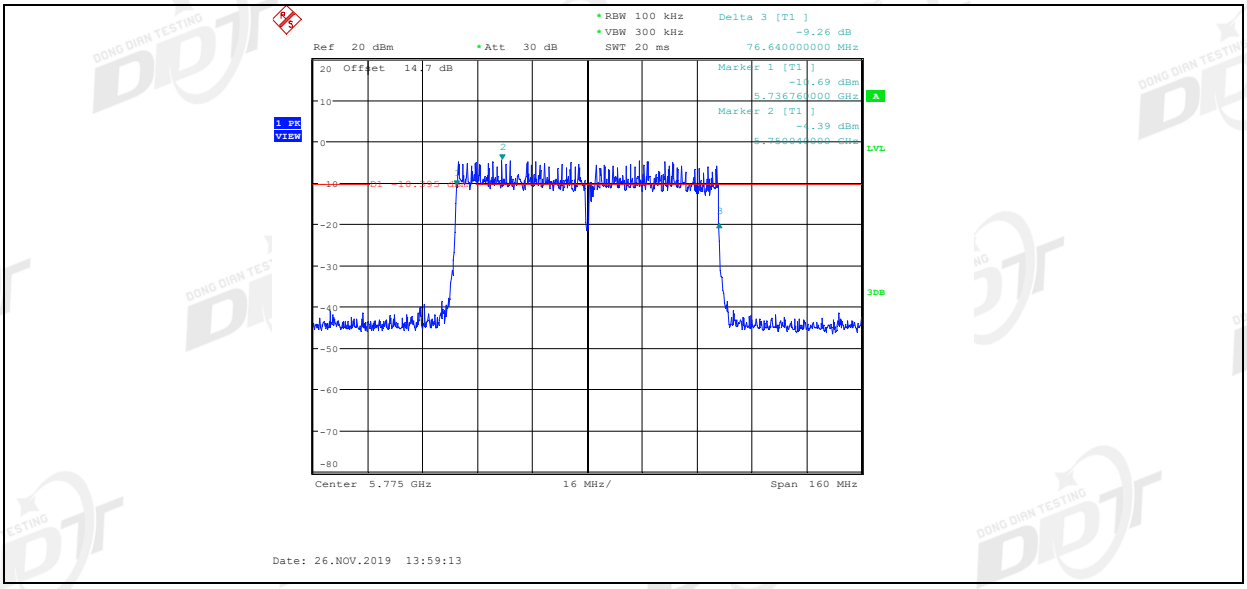
11AC40MIMO_Ant2_5795



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
Delta 3 [T1]
-9.26 dB
76.640000000 MHz
Ref 20 dBm
Att 30 dB
Offset 14.7 dB
Marker 1 [T1]
-10.69 dBm
5.736760000 GHz
Marker 2 [T1]
-4.39 dBm
5.750040000 GHz
1 PK
VIEW
LVL
3DB
Center 5.775 GHz
16 MHz/
Span 160 MHz
Date: 26.NOV.2019 13:59:13

5. Maximum Output Power

5.1. Block diagram of test setup

Same as section 4.1

5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	For FCC client devices: 250 mW (24 dBm)	5150-5250
	For RSS: e.i.r.p. power: not exceed 200 mW (23 dBm) or 10 + 10 $\log_{10}$ B	
	For FCC: 250 mW (24 dBm) or 11 + 10 $\log_{10}$ B	5250-5350
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or 17 + 10 $\log_{10}$ B	
	For FCC: 250 mW (24 dBm) or 11 + 10 $\log_{10}$ B	For FCC:5470-5725 For IC:5470-5600 5650-5725
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or 17 + 10 $\log_{10}$ B	
	1 Watt (30 dBm)	5725-5850
Note: 1. For FCC: B=26 bandwidth; For ISED: B=99% bandwidth. 2. For 802.11n and 802.11ac, the EUT incorporates a MIMO function. The Antenna directional gain is 6.69 dBi. The Output Power limit is the above limits-(6.69-6) (For ISED e.i.r.p. power only for 5725-5850 Band)		

5.3. Test Procedure

(1) Connect each EUT's antenna output to Power Sensor by RF cable and attenuator

(2) Add each antenna port's results to get the total output power of EUT.

5.4. Test Result

Test Mode	Ant	Test Channel	Output Power [dBm]	EIRP [dBm]	FCC LIMIT	ISED LIMIT
11A	ANT1	5180	11.98	15.65	24.00	22.39
11A	ANT2	5180	14.24	17.93	24.00	22.39
11A	ANT1	5200	12.09	15.76	24.00	22.39
11A	ANT2	5200	14.13	17.82	24.00	22.39
11A	ANT1	5240	12.53	16.20	24.00	22.39
11A	ANT2	5240	14.18	17.87	24.00	22.39
11A	ANT1	5260	12.47	16.14	23.98	29.39
11A	ANT2	5260	13.17	16.86	23.98	29.39
11A	ANT1	5300	12.17	15.84	23.98	29.39
11A	ANT2	5300	12.62	16.31	23.98	29.39

11A	ANT1	5320	11.81	15.48	23.98	29.39
11A	ANT2	5320	12.54	16.23	23.98	29.39
11A	ANT1	5500	13.43	17.10	24.00	29.41
11A	ANT2	5500	12.42	16.11	24.00	29.41
11A	ANT1	5580	13.02	16.69	24.00	29.41
11A	ANT2	5580	14.04	17.73	24.00	29.41
11A	ANT1	5700	12.07	15.74	24.00	29.41
11A	ANT2	5700	13.93	17.62	24.00	29.41
11A	ANT1	5745	12.94	16.61	30.00	30.00
11A	ANT2	5745	14.00	17.69	30.00	30.00
11A	ANT1	5785	13.66	17.33	30.00	30.00
11A	ANT2	5785	12.54	16.23	30.00	30.00
11A	ANT1	5825	13.14	16.81	30.00	30.00
11A	ANT2	5825	12.37	16.06	30.00	30.00
11N20MIMO	ANT1	5180	12.17	15.84	23.31	21.83
11N20MIMO	ANT2	5180	10.97	14.66	23.31	21.83
11N20MIMO	total	5180	14.60	18.30	23.31	21.83
11N20MIMO	ANT1	5200	12.31	15.98	23.31	21.83
11N20MIMO	ANT2	5200	10.92	14.61	23.31	21.83
11N20MIMO	total	5200	14.70	18.36	23.31	21.83
11N20MIMO	ANT1	5240	12.15	15.82	23.31	21.83
11N20MIMO	ANT2	5240	10.95	14.64	23.31	21.83
11N20MIMO	total	5240	14.60	18.28	23.31	21.83
11N20MIMO	ANT1	5260	11.64	15.31	23.31	28.82
11N20MIMO	ANT2	5260	11.50	15.19	23.31	28.82
11N20MIMO	total	5260	14.60	18.26	23.31	28.82
11N20MIMO	ANT1	5300	11.13	14.80	23.31	28.82
11N20MIMO	ANT2	5300	11.13	14.82	23.31	28.82
11N20MIMO	total	5300	14.10	17.82	23.31	28.82
11N20MIMO	ANT1	5320	10.47	14.14	23.31	28.82
11N20MIMO	ANT2	5320	10.33	14.02	23.31	28.82
11N20MIMO	total	5320	13.40	17.09	23.31	28.82
11N20MIMO	ANT1	5500	11.16	14.83	23.31	28.82
11N20MIMO	ANT2	5500	12.37	16.06	23.31	28.82
11N20MIMO	total	5500	14.80	18.50	23.31	28.82
11N20MIMO	ANT1	5580	12.67	16.34	23.31	28.82
11N20MIMO	ANT2	5580	11.50	15.19	23.31	28.82
11N20MIMO	total	5580	15.10	18.81	23.31	28.82
11N20MIMO	ANT1	5700	12.57	16.24	23.31	28.82

11N20MIMO	ANT2	5700	10.53	14.22	23.31	28.82
11N20MIMO	total	5700	14.70	18.36	23.31	28.82
11N20MIMO	ANT1	5745	12.59	16.26	29.31	29.31
11N20MIMO	ANT2	5745	11.68	15.37	29.31	29.31
11N20MIMO	total	5745	15.20	18.85	29.31	29.31
11N20MIMO	ANT1	5785	11.22	14.89	29.31	29.31
11N20MIMO	ANT2	5785	12.20	15.89	29.31	29.31
11N20MIMO	total	5785	14.70	18.43	29.31	29.31
11N20MIMO	ANT1	5825	11.24	14.91	29.31	29.31
11N20MIMO	ANT2	5825	11.68	15.37	29.31	29.31
11N20MIMO	total	5825	14.50	18.16	29.31	29.31
11N40MIMO	ANT1	5190	12.31	15.98	23.31	24.95
11N40MIMO	ANT2	5190	10.74	14.43	23.31	24.95
11N40MIMO	total	5190	14.60	18.28	23.31	24.95
11N40MIMO	ANT1	5230	12.13	15.80	23.31	24.95
11N40MIMO	ANT2	5230	10.72	14.41	23.31	24.95
11N40MIMO	total	5230	14.50	18.17	23.31	24.95
11N40MIMO	ANT1	5270	11.13	14.80	23.31	29.31
11N40MIMO	ANT2	5270	11.02	14.71	23.31	29.31
11N40MIMO	total	5270	14.10	17.77	23.31	29.31
11N40MIMO	ANT1	5310	10.21	13.88	23.31	29.31
11N40MIMO	ANT2	5310	10.27	13.96	23.31	29.31
11N40MIMO	total	5310	13.30	16.93	23.31	29.31
11N40MIMO	ANT1	5510	11.71	15.38	23.31	29.31
11N40MIMO	ANT2	5510	12.48	16.17	23.31	29.31
11N40MIMO	total	5510	15.10	18.80	23.31	29.31
11N40MIMO	ANT1	5550	12.02	15.69	23.31	29.31
11N40MIMO	ANT2	5550	12.42	16.11	23.31	29.31
11N40MIMO	total	5550	15.20	18.92	23.31	29.31
11N40MIMO	ANT1	5670	12.38	16.05	23.31	29.31
11N40MIMO	ANT2	5670	11.12	14.81	23.31	29.31
11N40MIMO	total	5670	14.80	18.48	23.31	29.31
11N40MIMO	ANT1	5755	12.45	16.12	29.31	29.31
11N40MIMO	ANT2	5755	12.38	16.07	29.31	29.31
11N40MIMO	total	5755	15.40	19.11	29.31	29.31
11N40MIMO	ANT1	5795	11.30	14.97	29.31	29.31
11N40MIMO	ANT2	5795	12.18	15.87	29.31	29.31
11N40MIMO	total	5795	14.80	18.45	29.31	29.31
11AC20MIMO	ANT1	5180	10.10	13.77	23.31	21.86

11AC20MIMO	ANT2	5180	8.43	12.12	23.31	21.86
11AC20MIMO	total	5180	12.40	16.03	23.31	21.86
11AC20MIMO	ANT1	5200	9.74	13.41	23.31	21.86
11AC20MIMO	ANT2	5200	8.25	11.94	23.31	21.86
11AC20MIMO	total	5200	12.10	15.75	23.31	21.86
11AC20MIMO	ANT1	5240	9.59	13.26	23.31	21.86
11AC20MIMO	ANT2	5240	8.44	12.13	23.31	21.86
11AC20MIMO	total	5240	12.10	15.74	23.31	21.86
11AC20MIMO	ANT1	5260	12.55	16.22	23.31	28.85
11AC20MIMO	ANT2	5260	8.63	12.32	23.31	28.85
11AC20MIMO	total	5260	14.00	17.70	23.31	28.85
11AC20MIMO	ANT1	5280	8.49	12.16	23.31	28.85
11AC20MIMO	ANT2	5280	8.35	12.04	23.31	28.85
11AC20MIMO	total	5280	11.40	15.11	23.31	28.85
11AC20MIMO	ANT1	5320	7.99	11.66	23.31	28.85
11AC20MIMO	ANT2	5320	7.47	11.16	23.31	28.85
11AC20MIMO	total	5320	10.70	14.43	23.31	28.85
11AC20MIMO	ANT1	5500	8.82	12.49	23.31	28.86
11AC20MIMO	ANT2	5500	9.90	13.59	23.31	28.86
11AC20MIMO	total	5500	12.40	16.09	23.31	28.86
11AC20MIMO	ANT1	5580	10.25	13.92	23.31	28.86
11AC20MIMO	ANT2	5580	12.95	16.64	23.31	28.86
11AC20MIMO	total	5580	14.80	18.50	23.31	28.86
11AC20MIMO	ANT1	5700	10.41	14.08	23.31	28.86
11AC20MIMO	ANT2	5700	8.37	12.06	23.31	28.86
11AC20MIMO	total	5700	12.50	16.20	23.31	28.86
11AC20MIMO	ANT1	5745	10.21	13.88	29.31	29.31
11AC20MIMO	ANT2	5745	13.20	16.89	29.31	29.31
11AC20MIMO	total	5745	15.00	18.65	29.31	29.31
11AC20MIMO	ANT1	5785	12.69	16.36	29.31	29.31
11AC20MIMO	ANT2	5785	10.00	13.69	29.31	29.31
11AC20MIMO	total	5785	14.60	18.24	29.31	29.31
11AC20MIMO	ANT1	5825	8.87	12.54	29.31	29.31
11AC20MIMO	ANT2	5825	9.67	13.36	29.31	29.31
11AC20MIMO	total	5825	12.30	15.98	29.31	29.31
11AC40MIMO	ANT1	5190	9.97	13.64	23.31	24.95
11AC40MIMO	ANT2	5190	10.40	14.09	23.31	24.95
11AC40MIMO	total	5190	13.20	16.88	23.31	24.95
11AC40MIMO	ANT1	5230	9.83	13.50	23.31	24.95

11AC40MIMO	ANT2	5230	10.31	14.00	23.31	24.95
11AC40MIMO	total	5230	13.10	16.77	23.31	24.95
11AC40MIMO	ANT1	5270	7.81	11.48	23.31	29.31
11AC40MIMO	ANT2	5270	9.81	13.50	23.31	29.31
11AC40MIMO	total	5270	11.90	15.62	23.31	29.31
11AC40MIMO	ANT1	5310	8.16	11.83	23.31	29.31
11AC40MIMO	ANT2	5310	8.52	12.21	23.31	29.31
11AC40MIMO	total	5310	11.40	15.03	23.31	29.31
11AC40MIMO	ANT1	5510	9.52	13.19	23.31	29.31
11AC40MIMO	ANT2	5510	10.00	13.69	23.31	29.31
11AC40MIMO	total	5510	12.80	16.46	23.31	29.31
11AC40MIMO	ANT1	5550	9.31	12.98	23.31	29.31
11AC40MIMO	ANT2	5550	10.14	13.83	23.31	29.31
11AC40MIMO	total	5550	12.80	16.44	23.31	29.31
11AC40MIMO	ANT1	5670	8.95	12.62	23.31	29.31
11AC40MIMO	ANT2	5670	10.32	14.01	23.31	29.31
11AC40MIMO	total	5670	12.70	16.38	23.31	29.31
11AC40MIMO	ANT1	5755	8.96	12.63	29.31	29.31
11AC40MIMO	ANT2	5755	10.61	14.30	29.31	29.31
11AC40MIMO	total	5755	12.90	16.56	29.31	29.31
11AC40MIMO	ANT1	5795	8.81	12.48	29.31	29.31
11AC40MIMO	ANT2	5795	9.47	13.16	29.31	29.31
11AC40MIMO	total	5795	12.20	15.84	29.31	29.31
11AC80MIMO	ANT1	5210	7.30	10.97	23.31	28.15
11AC80MIMO	ANT2	5210	10.17	13.86	23.31	28.15
11AC80MIMO	total	5210	12.00	15.66	23.31	28.15
11AC80MIMO	ANT1	5290	7.58	11.25	23.31	29.31
11AC80MIMO	ANT2	5290	8.80	12.49	23.31	29.31
11AC80MIMO	total	5290	11.20	14.92	23.31	29.31
11AC80MIMO	ANT1	5530	9.17	12.84	23.31	29.31
11AC80MIMO	ANT2	5530	9.73	13.42	23.31	29.31
11AC80MIMO	total	5530	12.50	12.50	23.31	29.31
11AC80MIMO	ANT1	5610	12.88	16.55	29.31	29.31
11AC80MIMO	ANT2	5610	12.30	15.99	29.31	29.31
11AC80MIMO	total	5610	15.60	19.29	29.31	29.31
11AC80MIMO	ANT1	5775	8.35	12.02	29.31	29.31
11AC80MIMO	ANT2	5775	9.68	13.37	29.31	29.31
11AC80MIMO	total	5775	12.10	15.76	29.31	29.31

6. Power Spectral Density

6.1. Block diagram of test setup

Same with 4.1

6.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz	5150-5250
	For RSS eirp:10 dBm/MHz	
	11 dBm/MHz	5250-5350
	11 dBm/MHz	For FCC:5470-5725 For IC:5470-5600 5650-5725
	30 dBm/500 kHz	5725-5850
Note: For 802.11n and 802.11ac, the EUT incorporates a MIMO function. The Antenna directional gain is 6.69 dBi. The Power Spectral Density limit is the above limits-(6.69-6)		

6.3. Test Procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.
Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Note:
1. For UNII-3, according to KDB publication 789033 D02 General U-NII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
2. The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) which is - 3dB. For example, if the measured value is +10 dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7 dBm/500 kHz.
Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

6.4. Test Result

(5150-5250)

Test Mode	Ant	Test Channel	PSD [dBm/MHz]	PSD eirp [dBm/MHz]	FCC Limit [dBm/MHz]	ISED Limit [dBm/MHz]
11A	ANT1	5180	3.00	6.67	11	10
11A	ANT2	5180	5.43	9.12	11	10
11A	ANT1	5200	3.06	6.73	11	10
11A	ANT2	5200	5.44	9.13	11	10
11A	ANT1	5240	3.61	7.28	11	10
11A	ANT2	5240	4.72	8.41	11	10
11N20MIMO	ANT1	5180	3.16	6.83	10.31	9.31
11N20MIMO	ANT2	5180	1.65	5.34	10.31	9.31
11N20MIMO	total	5180	5.48	9.16	10.31	9.31
11N20MIMO	ANT1	5200	3.5	7.17	10.31	9.31
11N20MIMO	ANT2	5200	1.3	4.99	10.31	9.31
11N20MIMO	total	5200	5.55	9.23	10.31	9.31
11N20MIMO	ANT1	5240	3.47	7.14	10.31	9.31
11N20MIMO	ANT2	5240	1.55	5.24	10.31	9.31
11N20MIMO	total	5240	5.63	9.30	10.31	9.31
11N40MIMO	ANT1	5190	1.15	4.82	10.31	9.31
11N40MIMO	ANT2	5190	-0.99	2.7	10.31	9.31
11N40MIMO	total	5190	3.22	6.90	10.31	9.31
11N40MIMO	ANT1	5230	0.87	4.54	10.31	9.31
11N40MIMO	ANT2	5230	-1.08	2.61	10.31	9.31
11N40MIMO	total	5230	3.01	6.69	10.31	9.31
11AC20MIMO	ANT1	5180	2.82	6.49	10.31	9.31
11AC20MIMO	ANT2	5180	1.28	4.97	10.31	9.31
11AC20MIMO	total	5180	5.13	8.81	10.31	9.31
11AC20MIMO	ANT1	5200	2.45	6.12	10.31	9.31
11AC20MIMO	ANT2	5200	1.32	5.01	10.31	9.31
11AC20MIMO	total	5200	4.93	8.61	10.31	9.31
11AC20MIMO	ANT1	5240	2.01	5.68	10.31	9.31

11AC20MIMO	ANT2	5240	1.72	5.41	10.31	9.31
11AC20MIMO	total	5240	4.88	8.56	10.31	9.31
11AC40MIMO	ANT1	5190	2.66	6.33	10.31	9.31
11AC40MIMO	ANT2	5190	2.86	6.55	10.31	9.31
11AC40MIMO	total	5190	5.77	9.45	10.31	9.31
11AC40MIMO	ANT1	5230	2.15	5.82	10.31	9.31
11AC40MIMO	ANT2	5230	2.24	5.93	10.31	9.31
11AC40MIMO	total	5230	5.21	8.89	10.31	9.31
11AC80MIMO	ANT1	5210	-2.17	1.5	10.31	9.31
11AC80MIMO	ANT2	5210	1.13	4.82	10.31	9.31
11AC80MIMO	total	5210	2.80	6.48	10.31	9.31

(5250-5350, 5470-5725)

Test Mode	Ant	Test Channel	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	ANT1	5260	3.35	11	PASS
11A	ANT2	5260	3.41	11	PASS
11A	ANT1	5280	2.27	11	PASS
11A	ANT2	5280	3.1	11	PASS
11A	ANT1	5320	2.74	11	PASS
11A	ANT2	5320	2.69	11	PASS
11A	ANT1	5500	4.38	11	PASS
11A	ANT2	5500	1.95	11	PASS
11A	ANT1	5580	2.64	11	PASS
11A	ANT2	5580	3.25	11	PASS
11A	ANT1	5700	3.75	11	PASS
11A	ANT2	5700	3.96	11	PASS
11N20MIMO	ANT1	5260	2.84	10.31	PASS
11N20MIMO	ANT2	5260	2.54	10.31	PASS
11N20MIMO	total	5260	5.70	10.31	PASS
11N20MIMO	ANT1	5280	2.55	10.31	PASS
11N20MIMO	ANT2	5280	1.33	10.31	PASS
11N20MIMO	total	5280	4.99	10.31	PASS
11N20MIMO	ANT1	5320	1.65	10.31	PASS
11N20MIMO	ANT2	5320	0.95	10.31	PASS
11N20MIMO	total	5320	4.32	10.31	PASS
11N20MIMO	ANT1	5500	1.49	10.31	PASS
11N20MIMO	ANT2	5500	2.45	10.31	PASS
11N20MIMO	total	5500	5.01	10.31	PASS

11N20MIMO	ANT1	5580	3.62	10.31	PASS
11N20MIMO	ANT2	5580	1.45	10.31	PASS
11N20MIMO	total	5580	5.68	10.31	PASS
11N20MIMO	ANT1	5700	3.19	10.31	PASS
11N20MIMO	ANT2	5700	2.13	10.31	PASS
11N20MIMO	total	5700	5.70	10.31	PASS
11N40MIMO	ANT1	5270	-0.06	10.31	PASS
11N40MIMO	ANT2	5270	-0.84	10.31	PASS
11N40MIMO	total	5270	2.58	10.31	PASS
11N40MIMO	ANT1	5310	-1.53	10.31	PASS
11N40MIMO	ANT2	5310	-1.66	10.31	PASS
11N40MIMO	total	5310	1.42	10.31	PASS
11N40MIMO	ANT1	5510	-0.13	10.31	PASS
11N40MIMO	ANT2	5510	0.49	10.31	PASS
11N40MIMO	total	5510	3.20	10.31	PASS
11N40MIMO	ANT1	5550	-0.41	10.31	PASS
11N40MIMO	ANT2	5550	0.43	10.31	PASS
11N40MIMO	total	5550	3.04	10.31	PASS
11N40MIMO	ANT1	5670	1.49	10.31	PASS
11N40MIMO	ANT2	5670	-0.49	10.31	PASS
11N40MIMO	total	5670	3.62	10.31	PASS
11AC20MIMO	ANT1	5260	5.67	10.31	PASS
11AC20MIMO	ANT2	5260	1.49	10.31	PASS
11AC20MIMO	total	5260	7.07	10.31	PASS
11AC20MIMO	ANT1	5280	1.52	10.31	PASS
11AC20MIMO	ANT2	5280	1.07	10.31	PASS
11AC20MIMO	total	5280	4.31	10.31	PASS
11AC20MIMO	ANT1	5320	0.75	10.31	PASS
11AC20MIMO	ANT2	5320	0.59	10.31	PASS
11AC20MIMO	total	5320	3.68	10.31	PASS
11AC20MIMO	ANT1	5500	0.93	10.31	PASS
11AC20MIMO	ANT2	5500	2.2	10.31	PASS
11AC20MIMO	total	5500	4.62	10.31	PASS
11AC20MIMO	ANT1	5580	3.03	10.31	PASS
11AC20MIMO	ANT2	5580	5.08	10.31	PASS
11AC20MIMO	total	5580	7.19	10.31	PASS
11AC20MIMO	ANT1	5700	2.99	10.31	PASS
11AC20MIMO	ANT2	5700	1.66	10.31	PASS

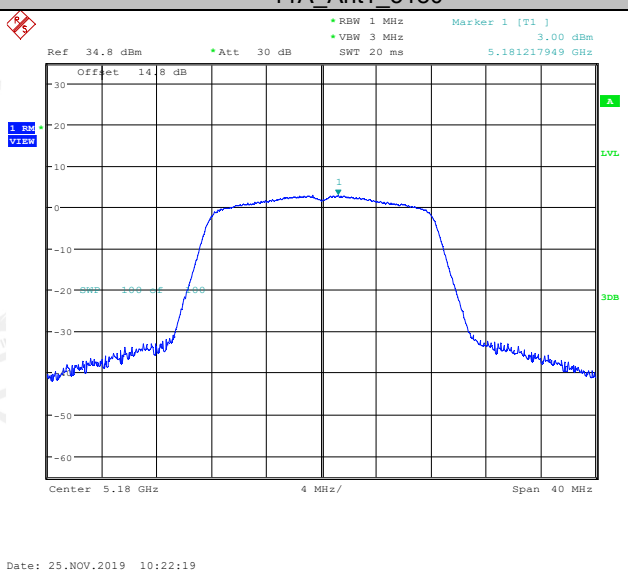
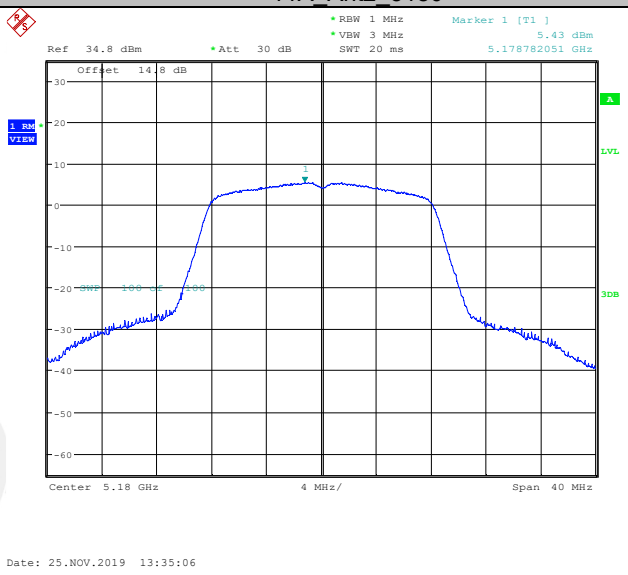
11AC20MIMO	total	5700	5.39	10.31	PASS
11AC40MIMO	ANT1	5270	0.1	10.31	PASS
11AC40MIMO	ANT2	5270	2.43	10.31	PASS
11AC40MIMO	total	5270	4.43	10.31	PASS
11AC40MIMO	ANT1	5310	0.39	10.31	PASS
11AC40MIMO	ANT2	5310	1.51	10.31	PASS
11AC40MIMO	total	5310	4.00	10.31	PASS
11AC40MIMO	ANT1	5510	1.43	10.31	PASS
11AC40MIMO	ANT2	5510	2.22	10.31	PASS
11AC40MIMO	total	5510	4.85	10.31	PASS
11AC40MIMO	ANT1	5550	1.36	10.31	PASS
11AC40MIMO	ANT2	5550	2.48	10.31	PASS
11AC40MIMO	total	5550	4.97	10.31	PASS
11AC40MIMO	ANT1	5670	1.92	10.31	PASS
11AC40MIMO	ANT2	5670	3.12	10.31	PASS
11AC40MIMO	total	5670	5.57	10.31	PASS
11AC80MIMO	ANT1	5290	-2.58	10.31	PASS
11AC80MIMO	ANT2	5290	-1.39	10.31	PASS
11AC80MIMO	total	5290	1.07	10.31	PASS
11AC80MIMO	ANT1	5530	-1.82	10.31	PASS
11AC80MIMO	ANT2	5530	-0.82	10.31	PASS
11AC80MIMO	total	5530	1.72	10.31	PASS
11AC80MIMO	ANT1	5530	-4.12	10.31	PASS
11AC80MIMO	ANT2	5530	-2.14	10.31	PASS
11AC80MIMO	total	5530	-0.01	10.31	PASS

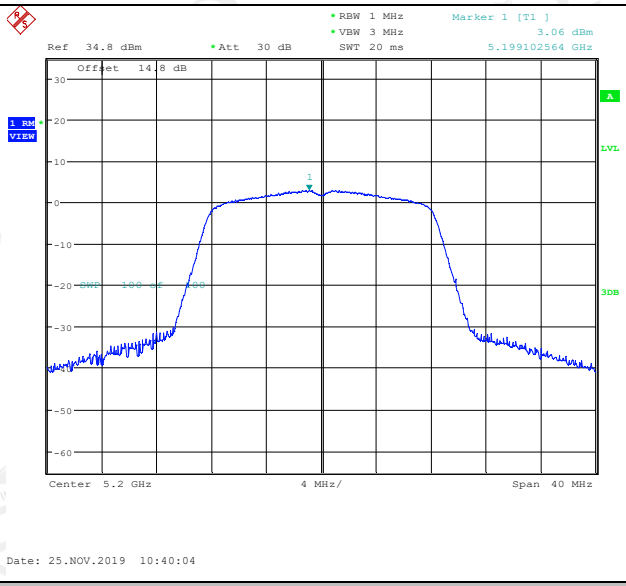
(5725-5850)

Test Mode	Test Channel	Ant	PSD [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	ANT1	5745	2.28	30	PASS
11A	ANT2	5745	3.06	30	PASS
11A	ANT1	5785	3.10	30	PASS
11A	ANT2	5785	2.35	30	PASS
11A	ANT1	5825	2.12	30	PASS
11A	ANT2	5825	-0.17	30	PASS
11N20MIMO	ANT1	5745	1.64	29.31	PASS
11N20MIMO	ANT2	5745	1.07	29.31	PASS
11N20MIMO	total	5745	4.37	29.31	PASS

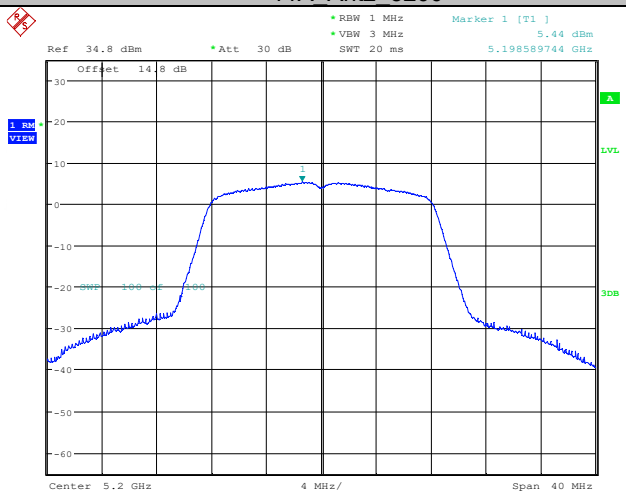
11N20MIMO	ANT1	5785	0.81	29.31	PASS
11N20MIMO	ANT2	5785	0.84	29.31	PASS
11N20MIMO	total	5785	3.84	29.31	PASS
11N20MIMO	ANT1	5825	-0.58	29.31	PASS
11N20MIMO	ANT2	5825	-0.42	29.31	PASS
11N20MIMO	total	5825	2.51	29.31	PASS
11N40MIMO	ANT1	5755	-0.94	29.31	PASS
11N40MIMO	ANT2	5755	-1.13	29.31	PASS
11N40MIMO	total	5755	1.98	29.31	PASS
11N40MIMO	ANT1	5795	-1.34	29.31	PASS
11N40MIMO	ANT2	5795	-0.07	29.31	PASS
11N40MIMO	total	5795	2.35	29.31	PASS
11AC20MIMO	ANT1	5745	1.26	29.31	PASS
11AC20MIMO	ANT2	5745	4.66	29.31	PASS
11AC20MIMO	total	5745	6.29	29.31	PASS
11AC20MIMO	ANT1	5785	4.39	29.31	PASS
11AC20MIMO	ANT2	5785	1.05	29.31	PASS
11AC20MIMO	total	5785	6.04	29.31	PASS
11AC20MIMO	ANT1	5825	-0.96	29.31	PASS
11AC20MIMO	ANT2	5825	-0.35	29.31	PASS
11AC20MIMO	total	5825	2.37	29.31	PASS
11AC40MIMO	ANT1	5755	-0.52	29.31	PASS
11AC40MIMO	ANT2	5755	1.34	29.31	PASS
11AC40MIMO	total	5755	3.52	29.31	PASS
11AC40MIMO	ANT1	5795	0.08	29.31	PASS
11AC40MIMO	ANT2	5795	0.45	29.31	PASS
11AC40MIMO	total	5795	3.28	29.31	PASS
11AC80MIMO	ANT1	5775	-2.39	29.31	PASS
11AC80MIMO	ANT2	5775	-1.35	29.31	PASS
11AC80MIMO	total	5775	1.17	29.31	PASS

6.5. Original test data

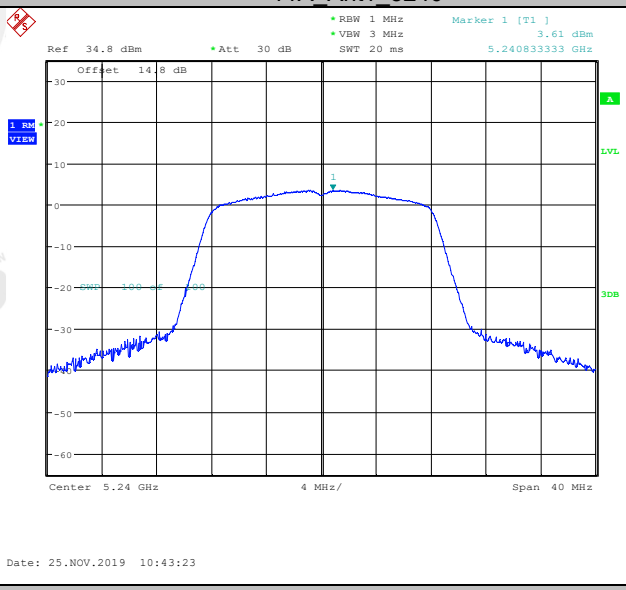
11A_Ant1_5180

11A_Ant2_5180

11A_Ant1_5200



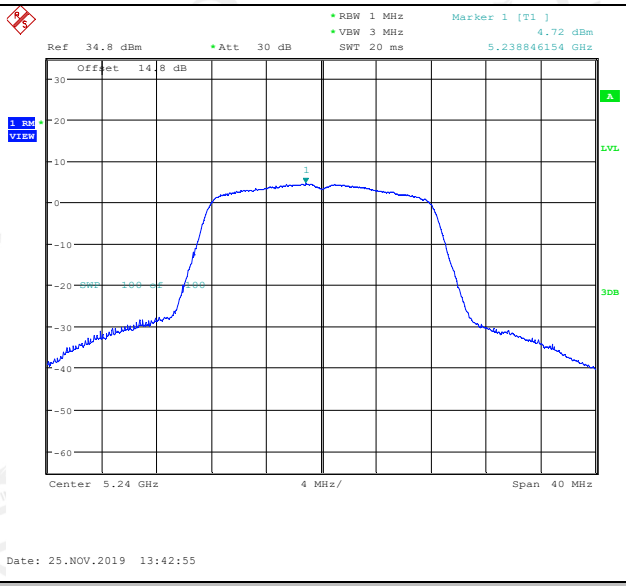
11A_Ant2_5200



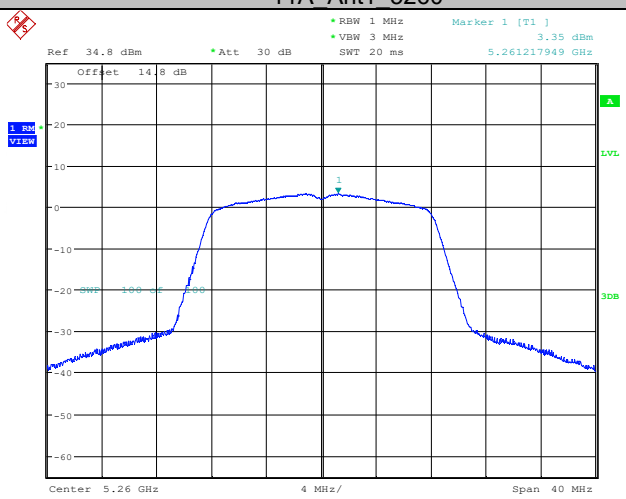
11A_Ant1_5240



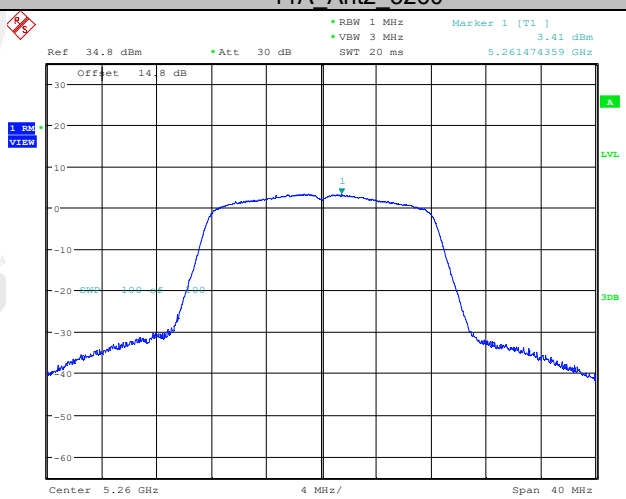
11A_Ant2_5240



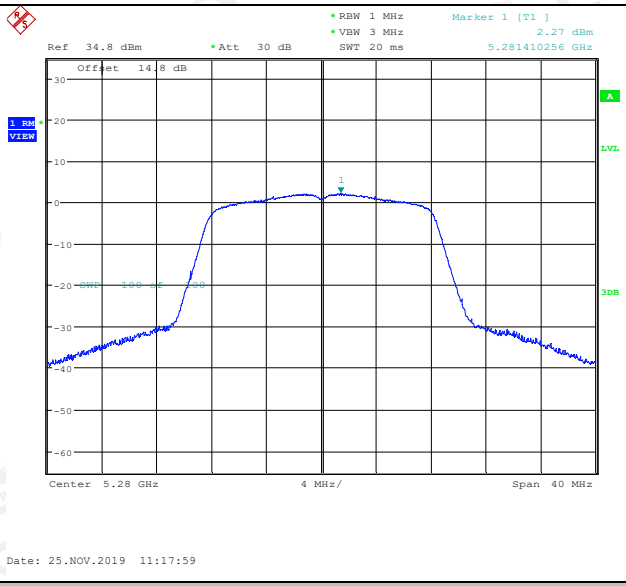
11A_Ant1_5260



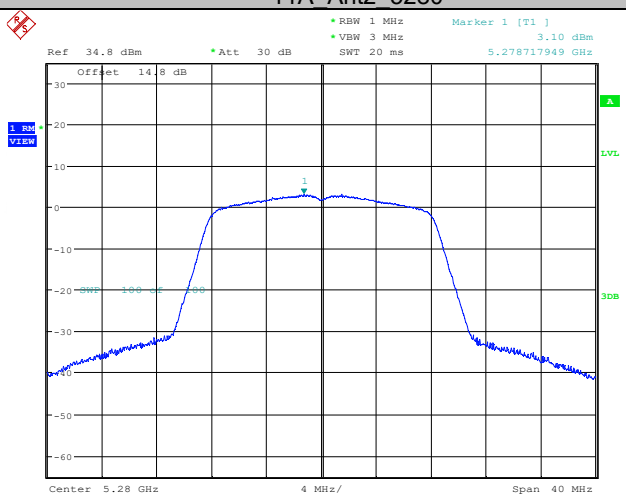
11A_Ant2_5260



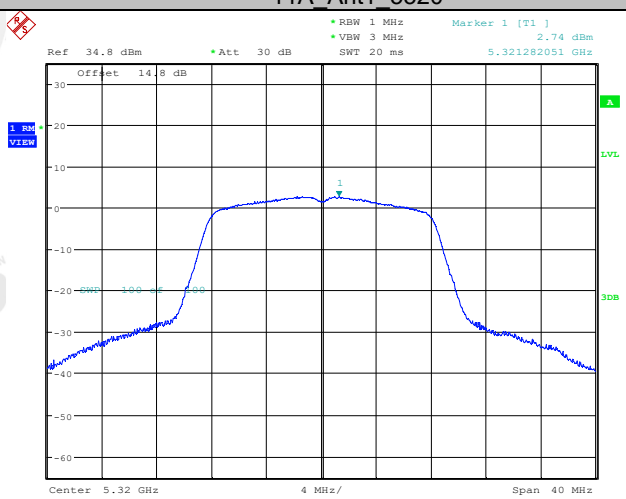
11A_Ant1_5280



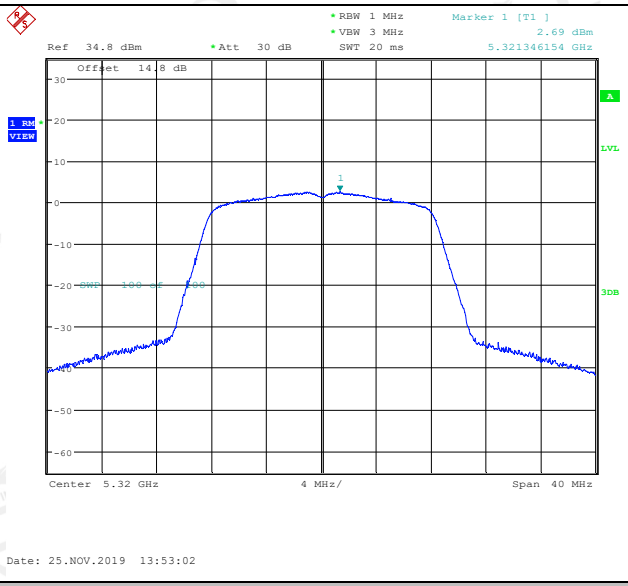
11A_Ant2_5280



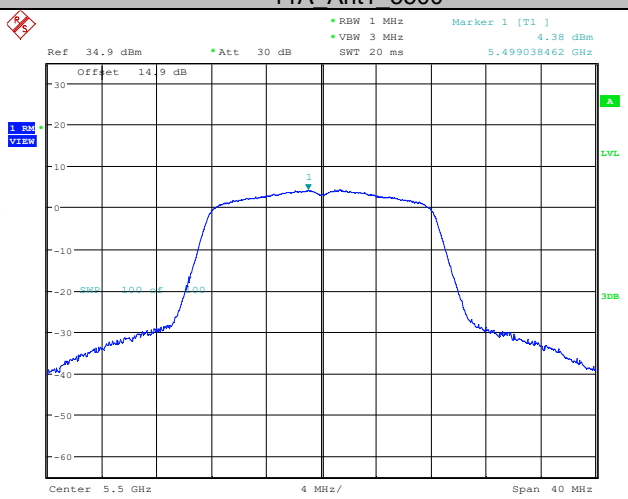
11A_Ant1_5320



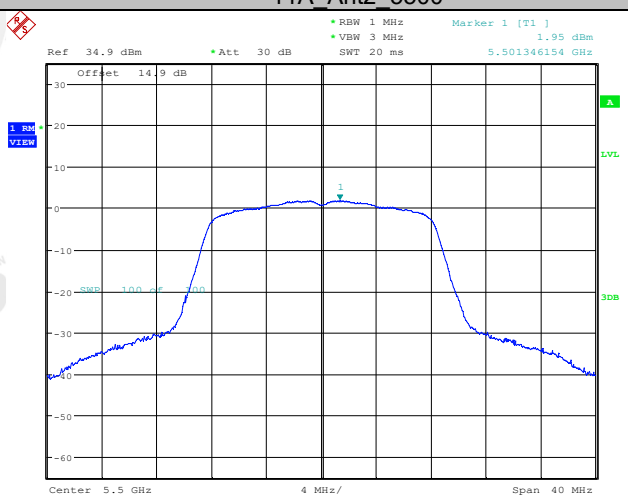
11A_Ant2_5320



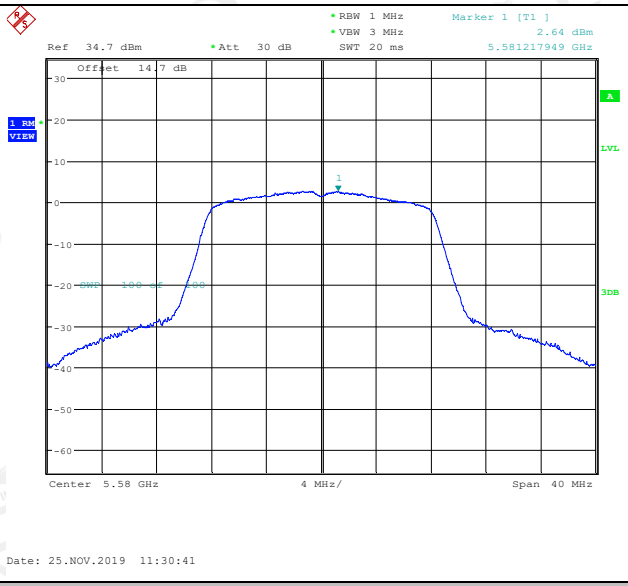
11A_Ant1_5500



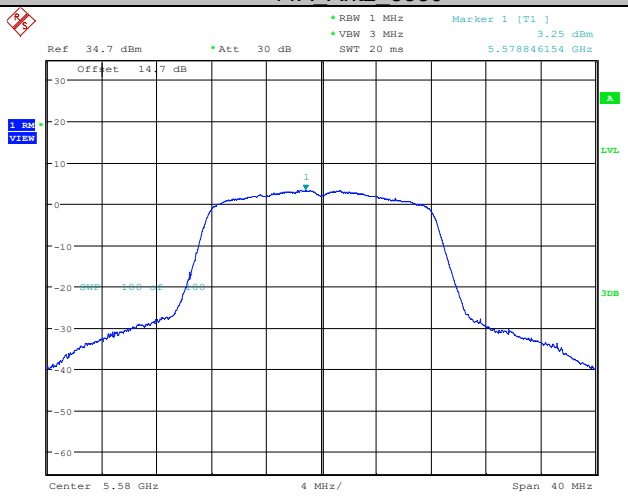
11A_Ant2_5500



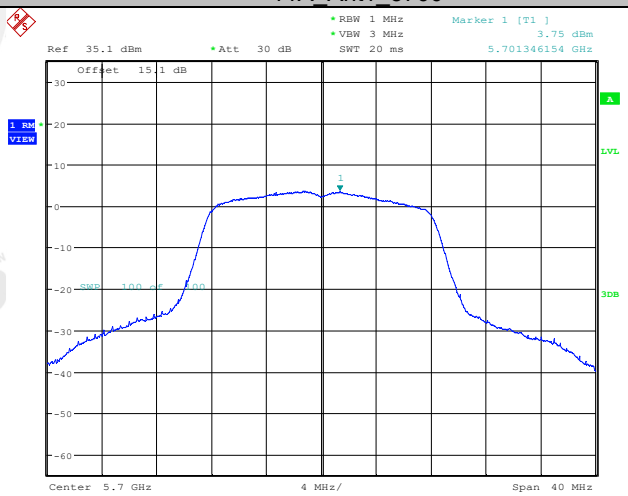
11A_Ant1_5580



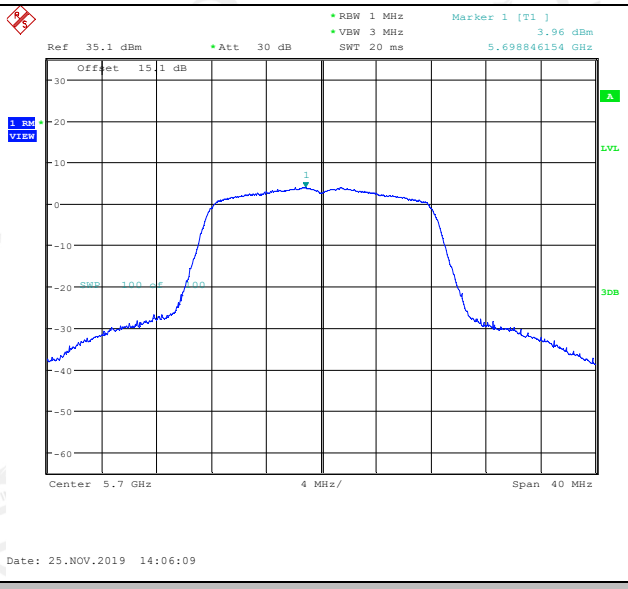
11A_Ant2_5580



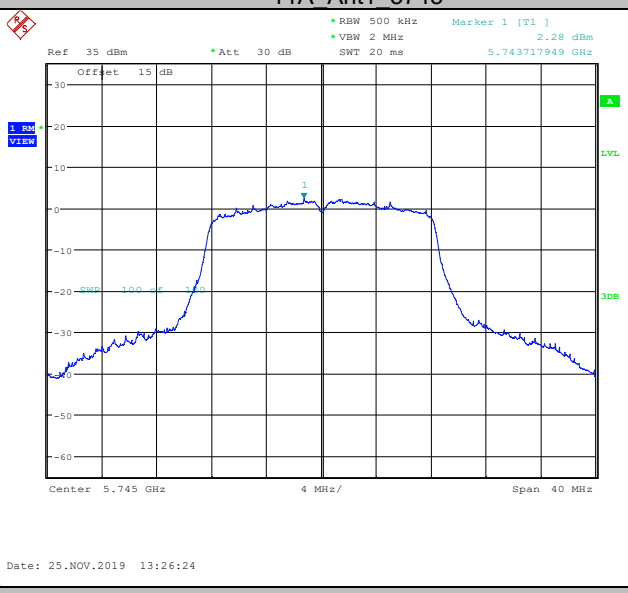
11A_Ant1_5700



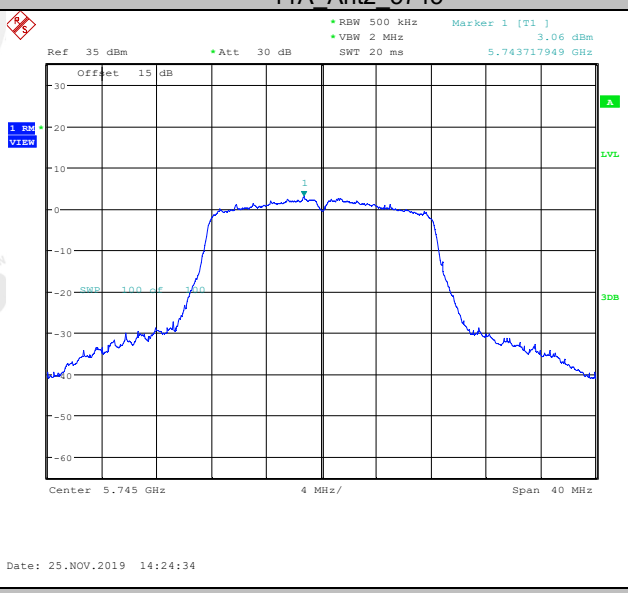
11A_Ant2_5700



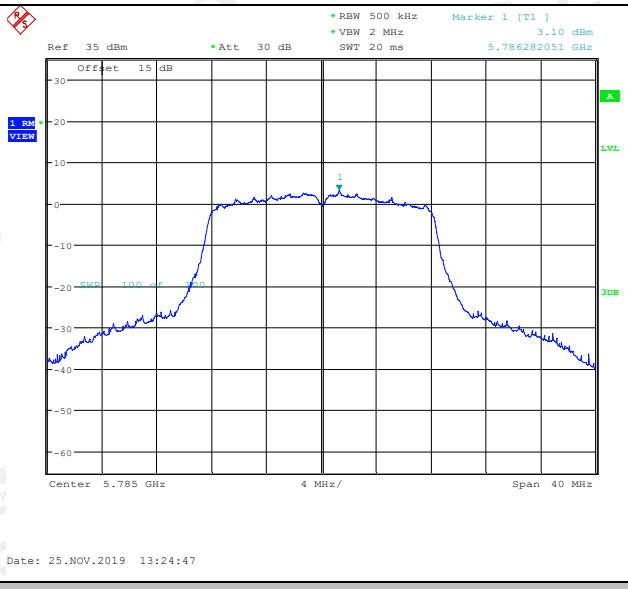
11A_Ant1_5745



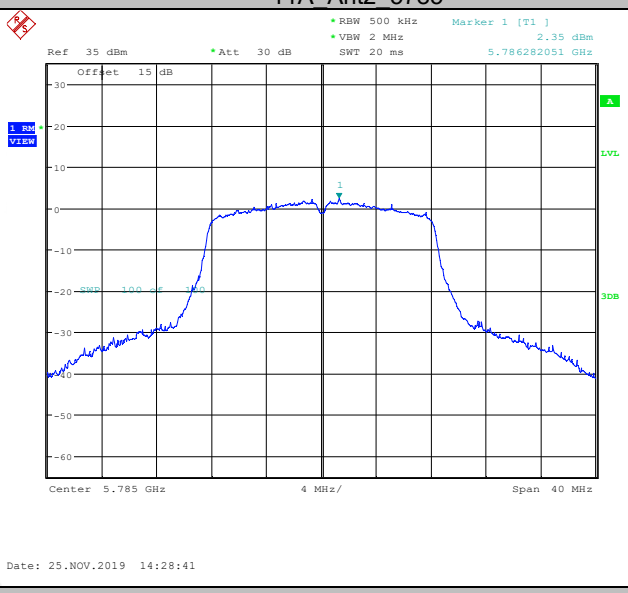
11A_Ant2_5745



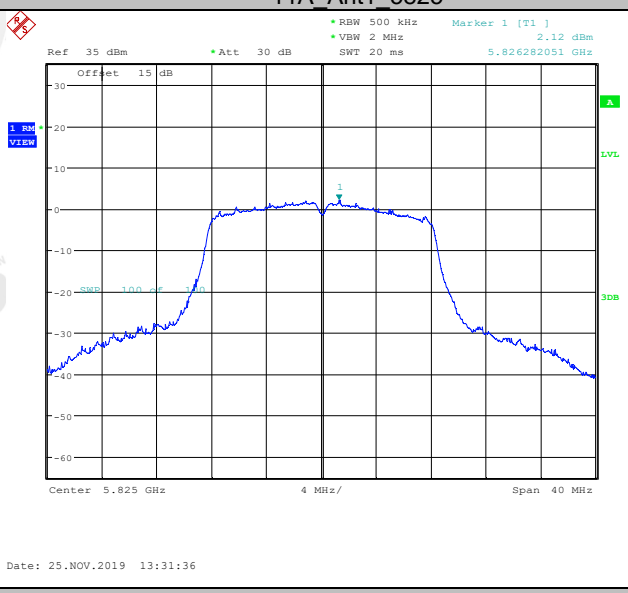
11A_Ant1_5785



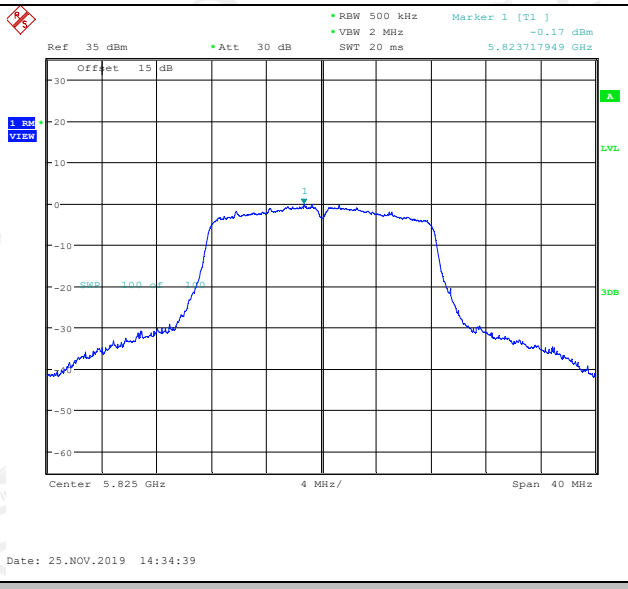
11A_Ant2_5785



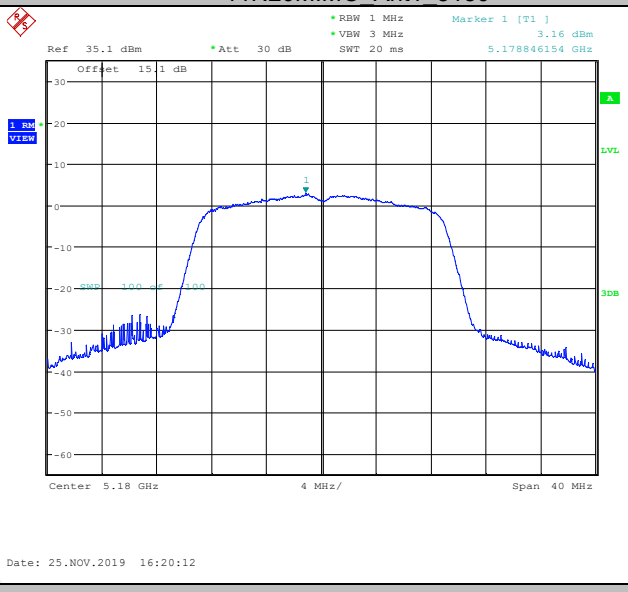
11A_Ant1_5825



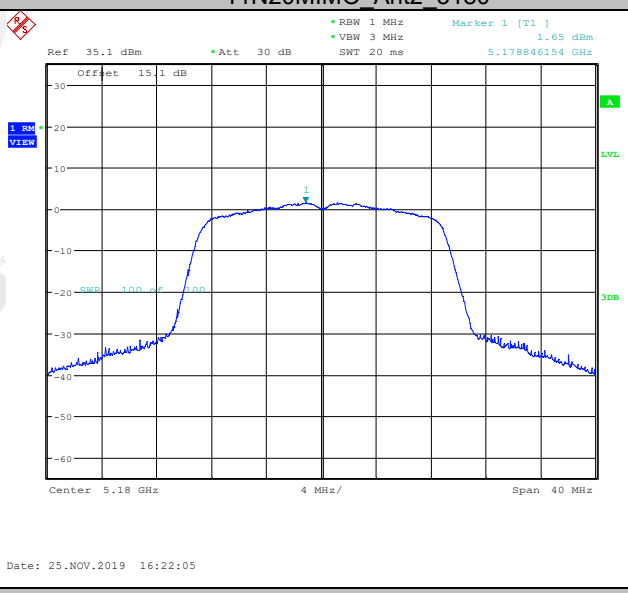
11A_Ant2_5825



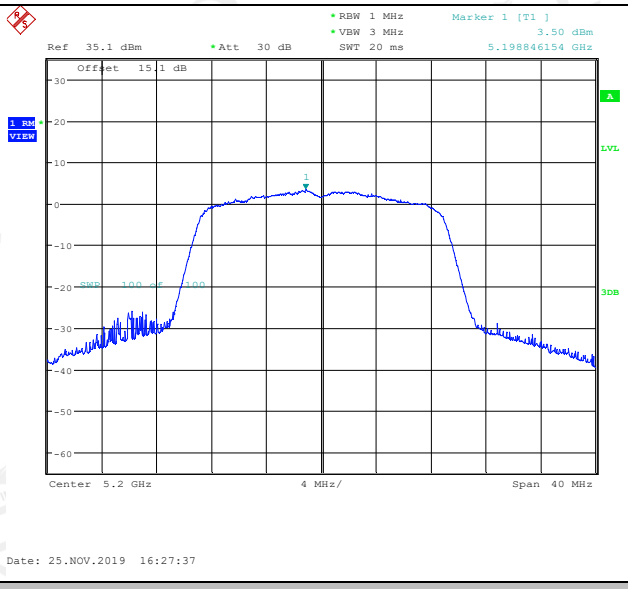
11N20MIMO_Ant1_5180



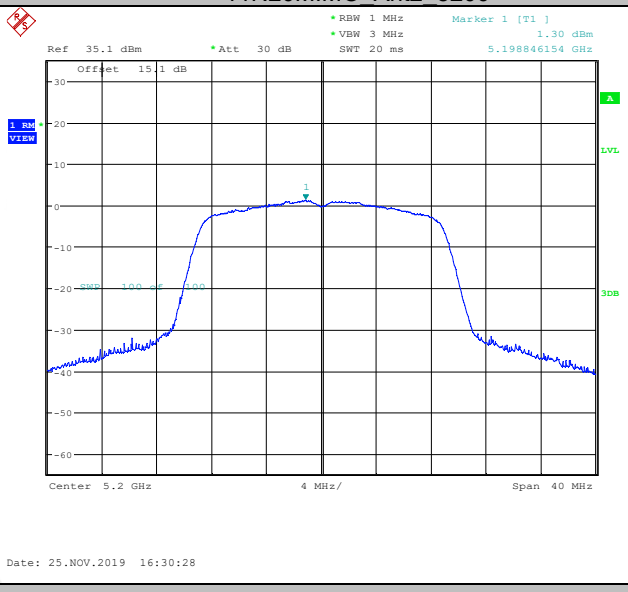
11N20MIMO_Ant2_5180



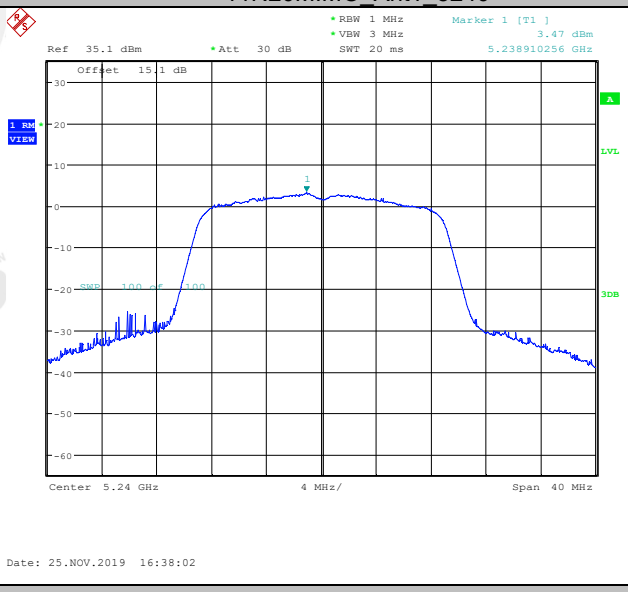
11N20MIMO_Ant1_5200



11N20MIMO_Ant2_5200



11N20MIMO_Ant1_5240



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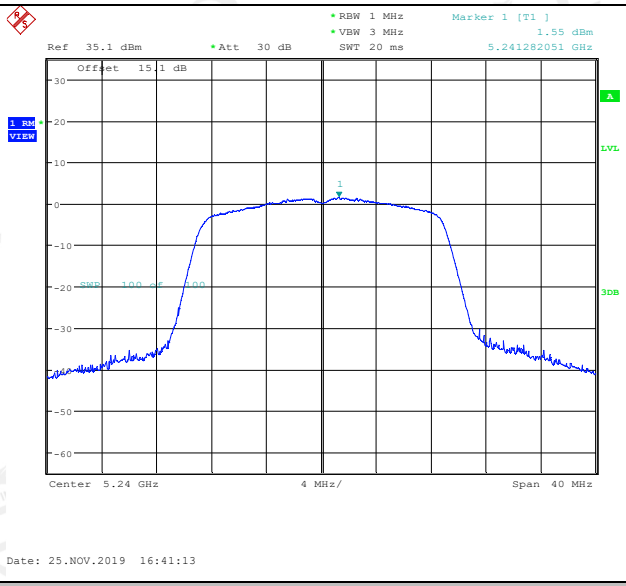

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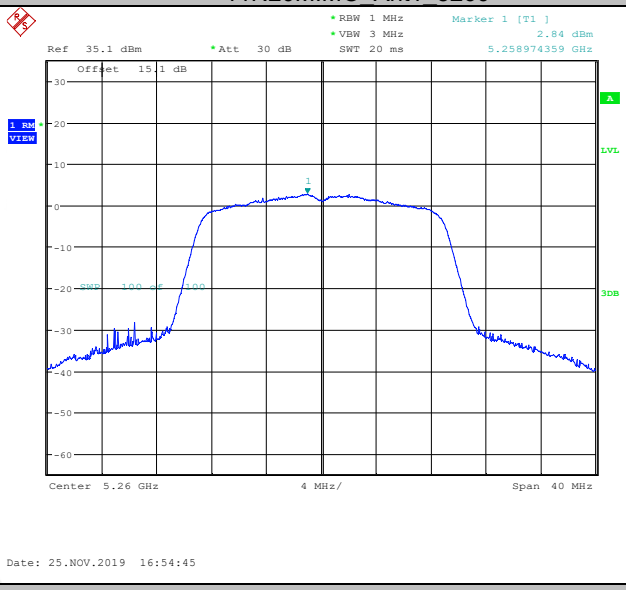

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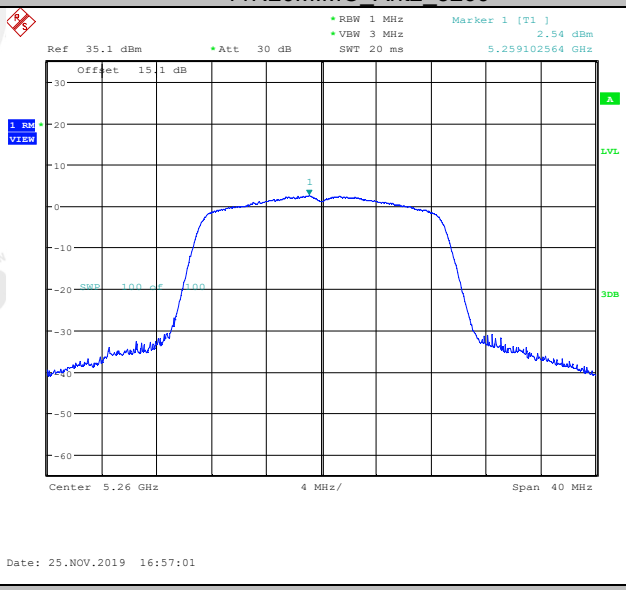
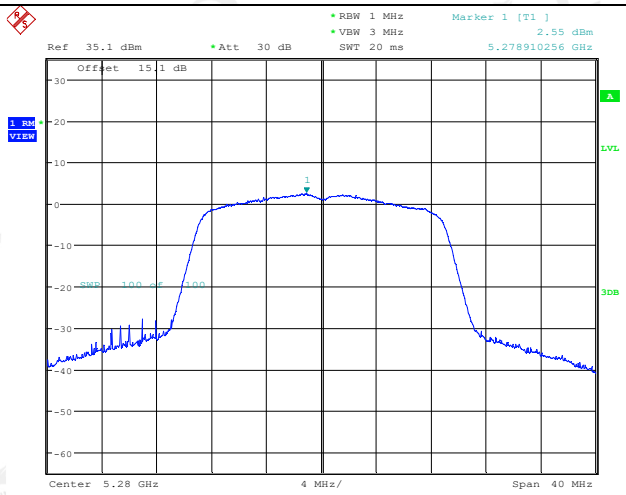


11N20MIMO_Ant1_5280



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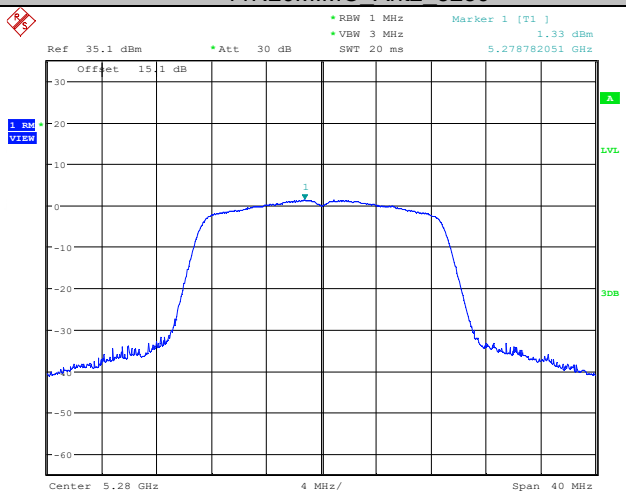
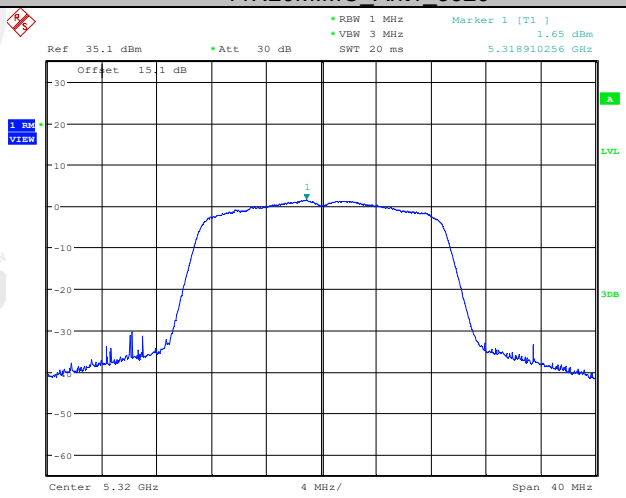


11N20MIMO_Ant1_5320



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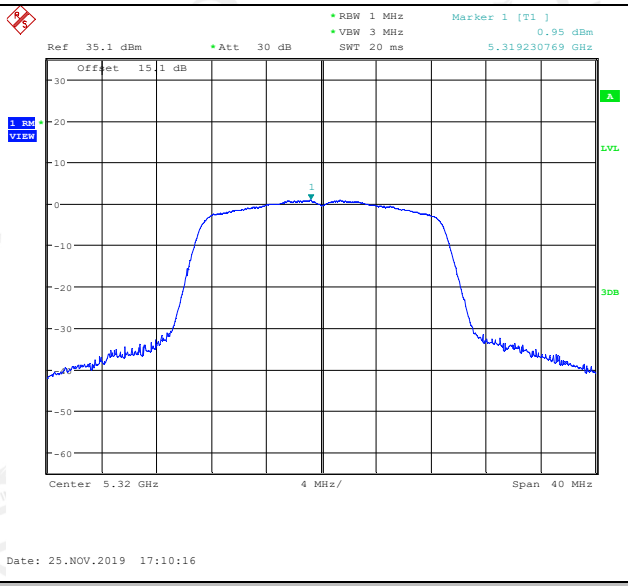
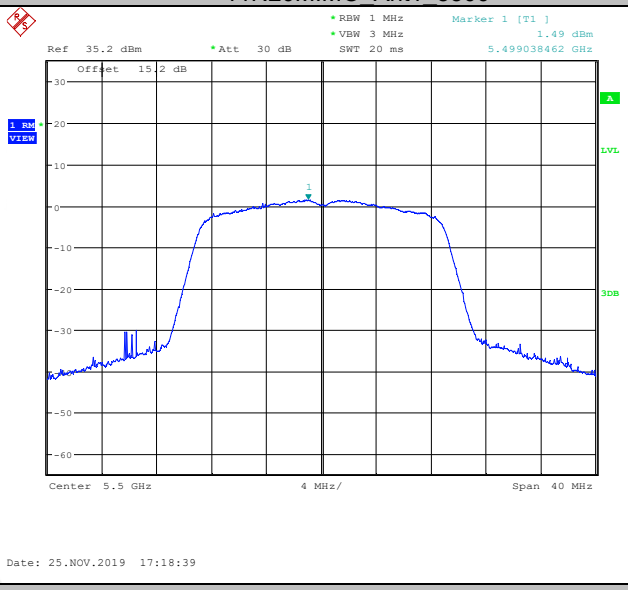


11N20MIMO_Ant1_5500



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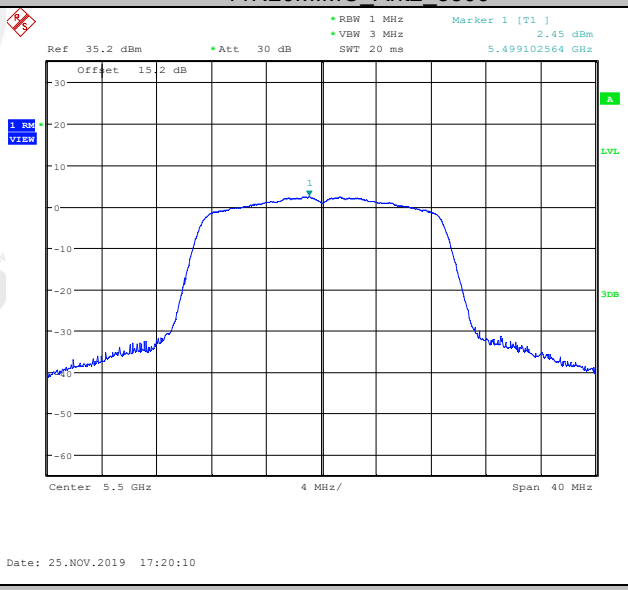

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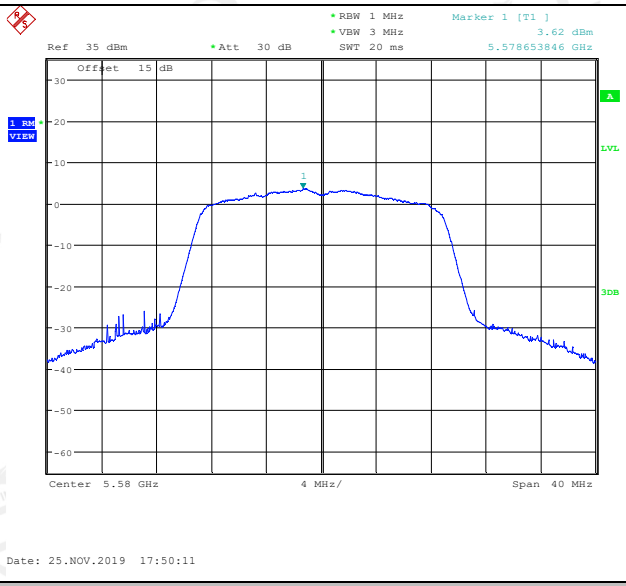

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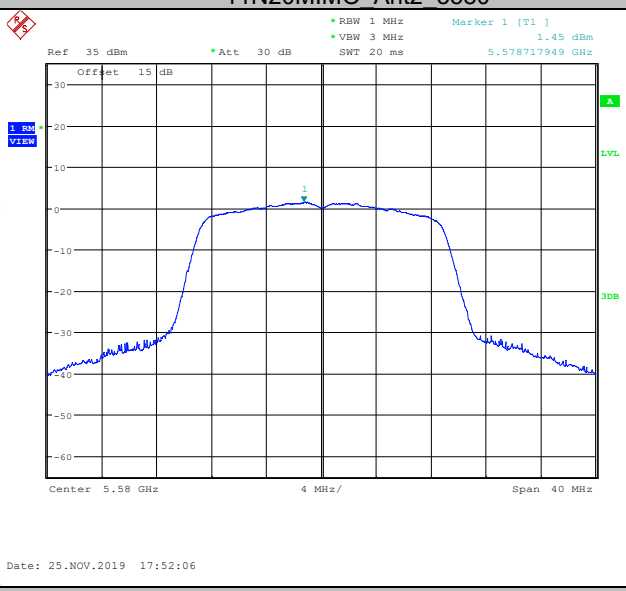
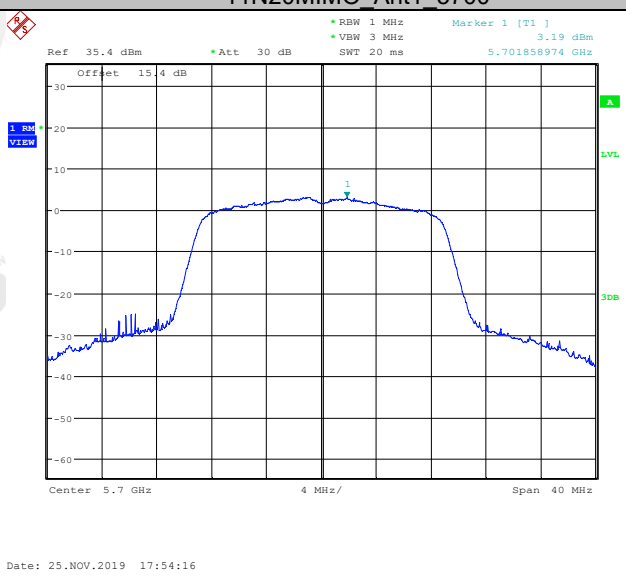


11N20MIMO_Ant1_5700



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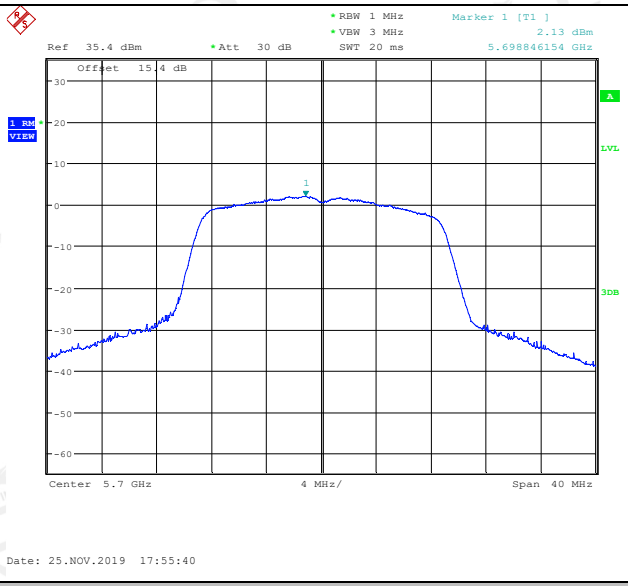

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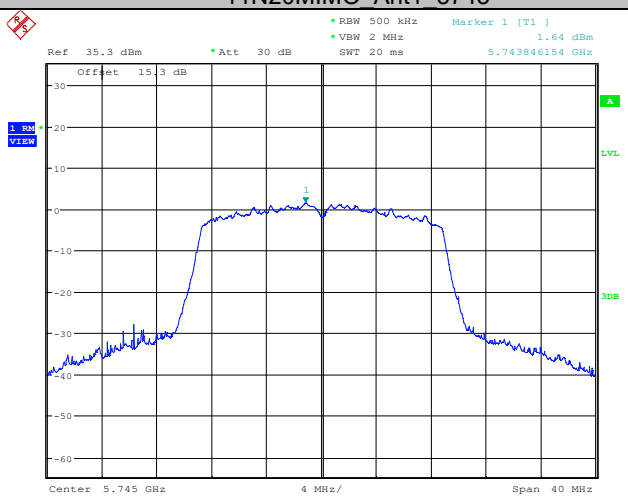

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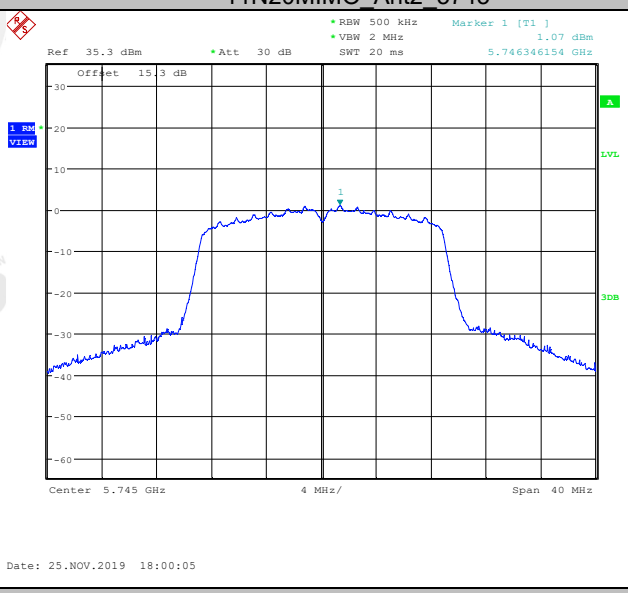
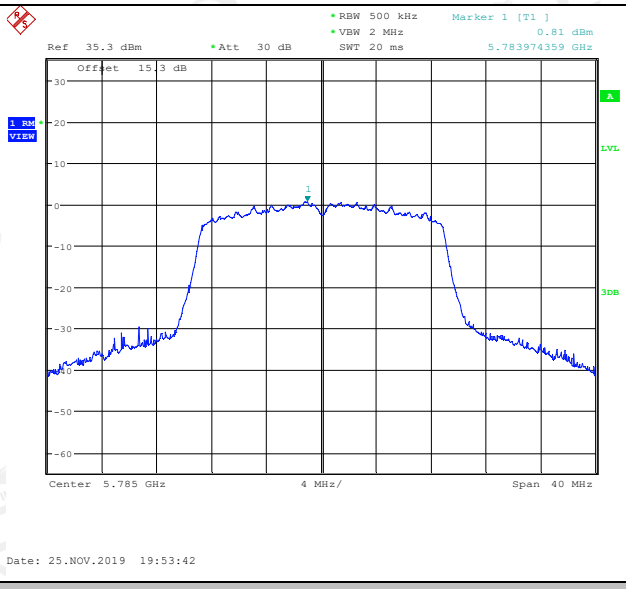


11N20MIMO_Ant1_5785



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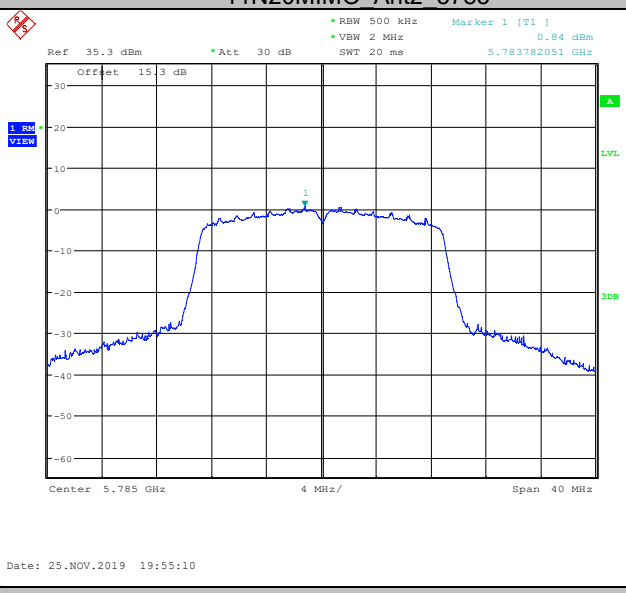

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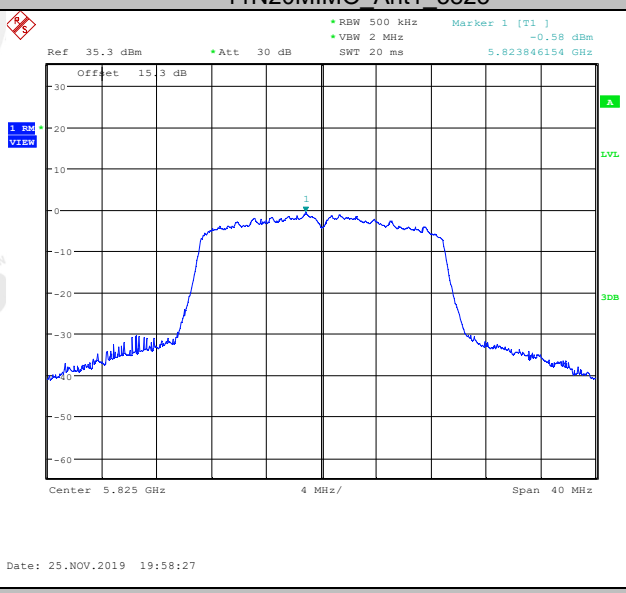

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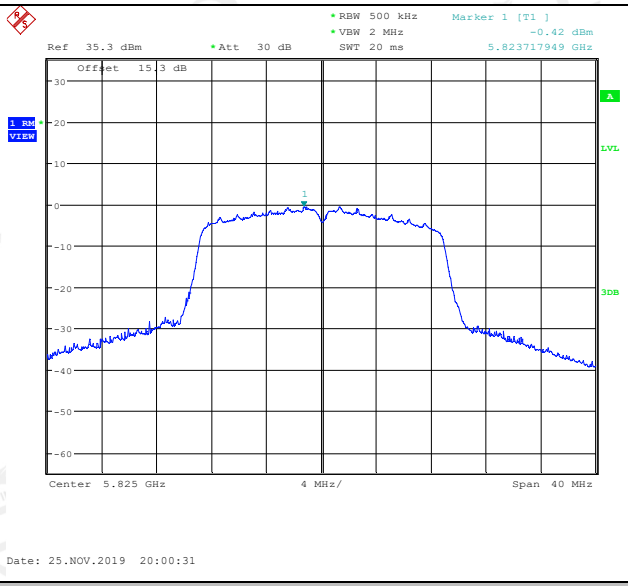

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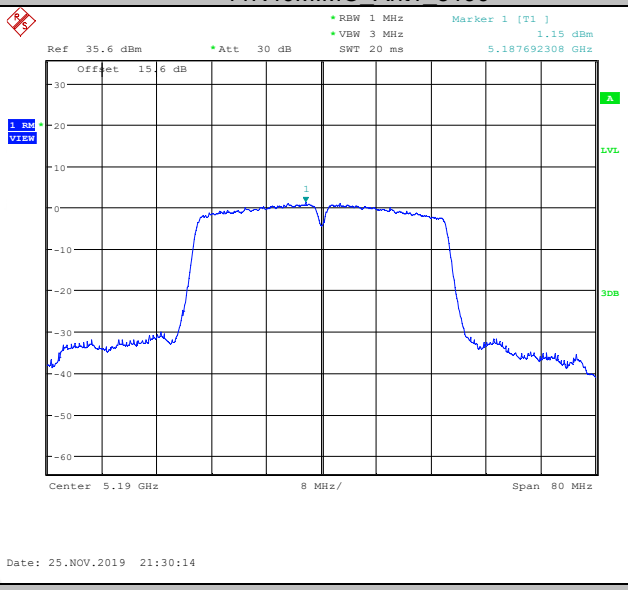

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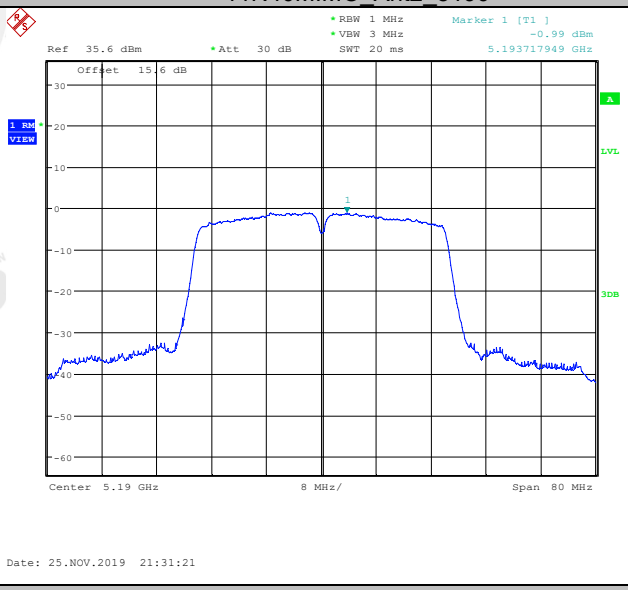

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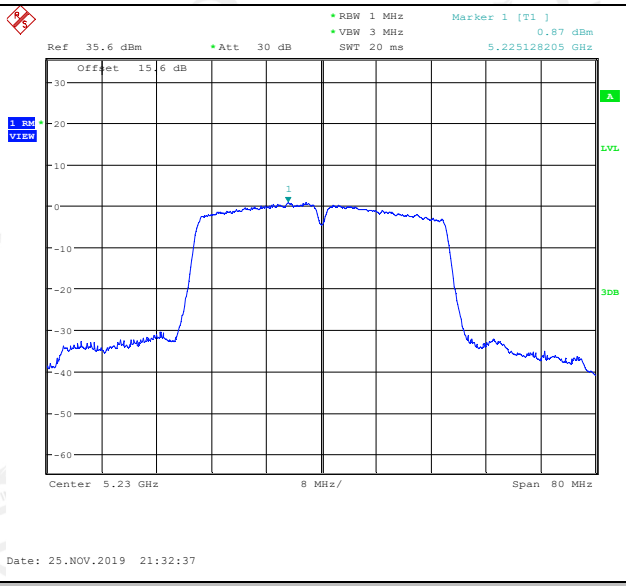

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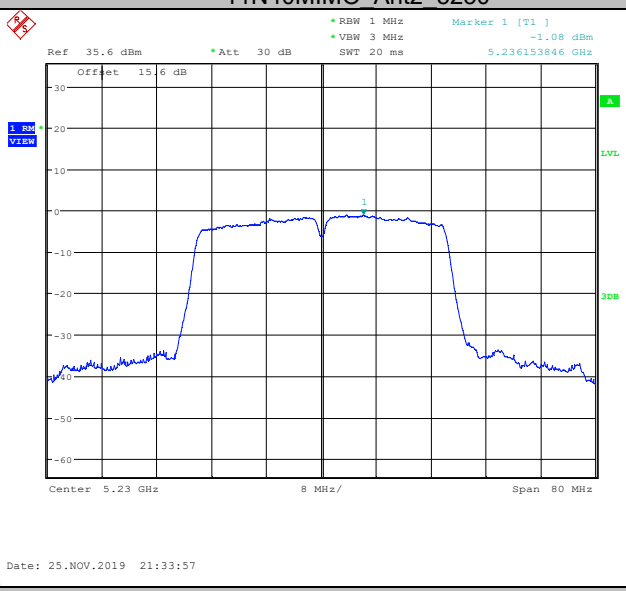

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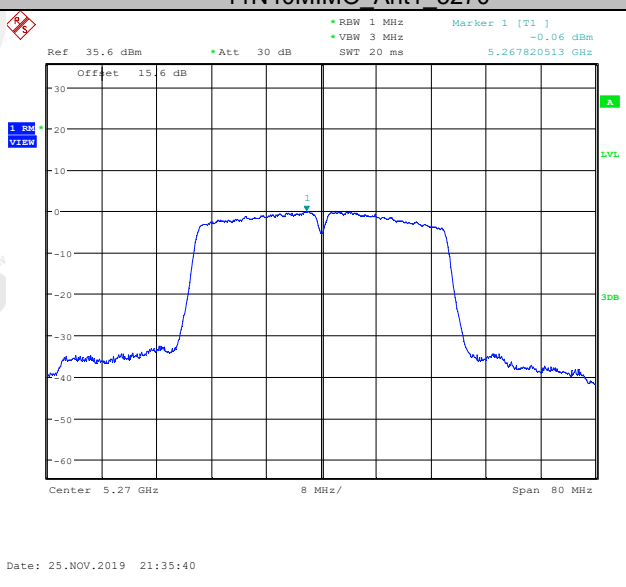

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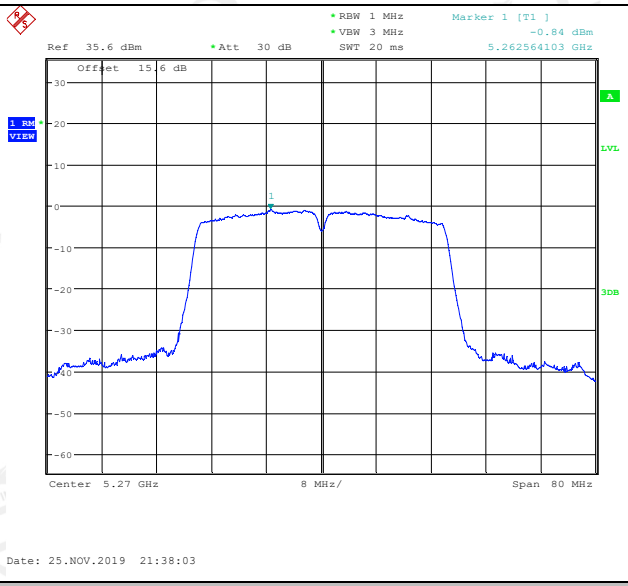

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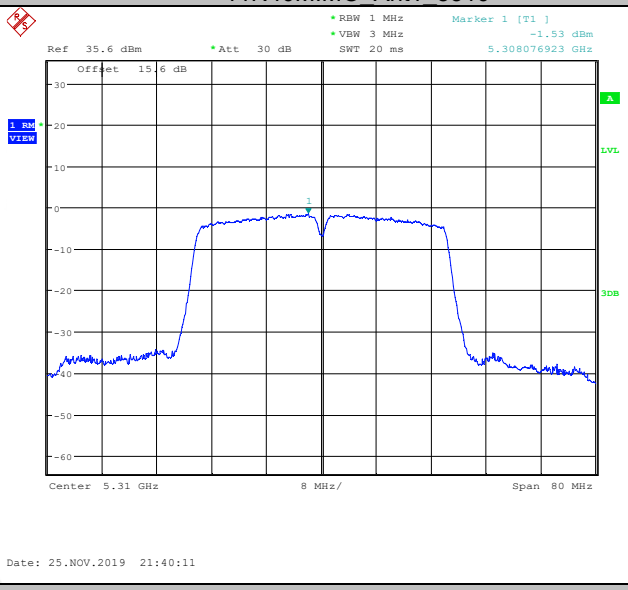

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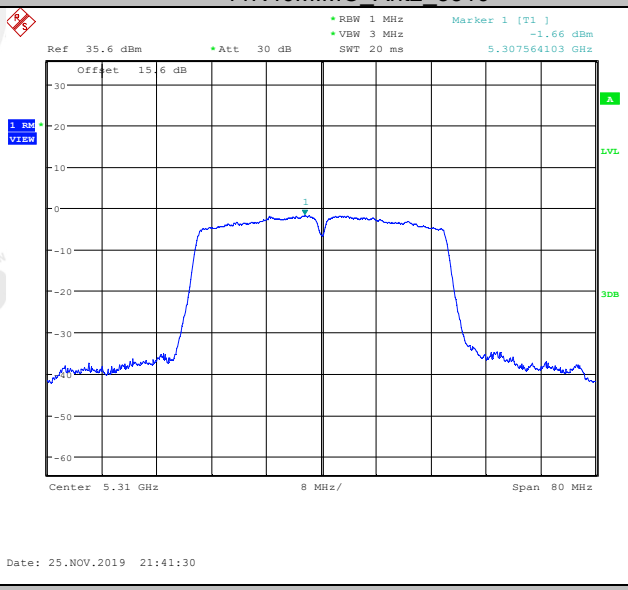

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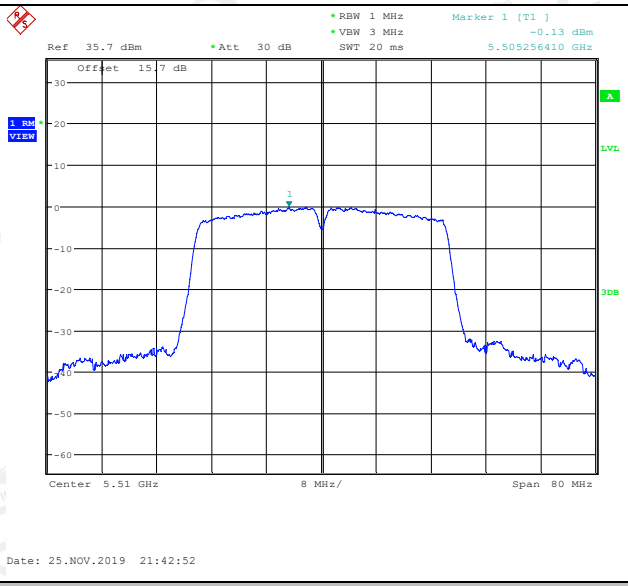

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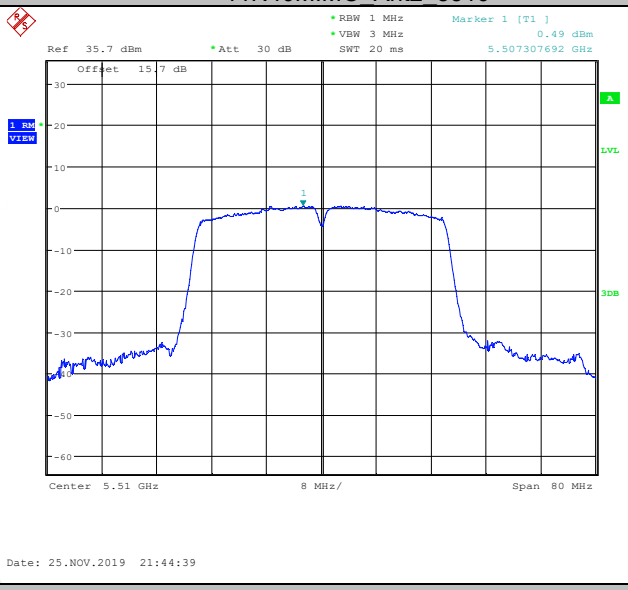

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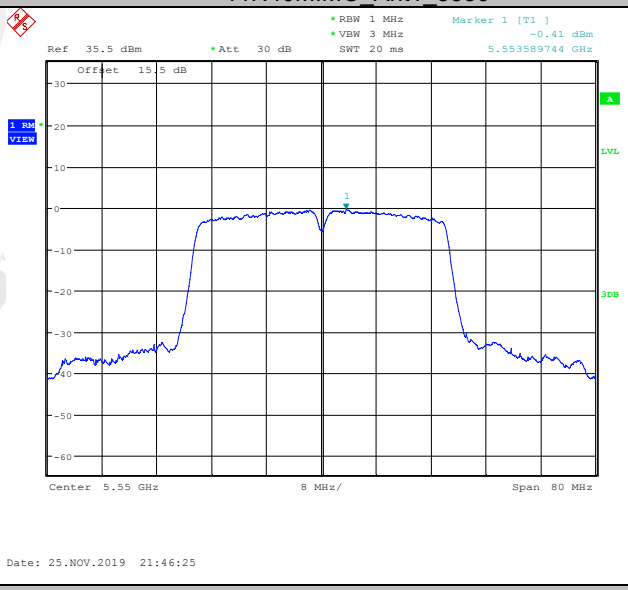

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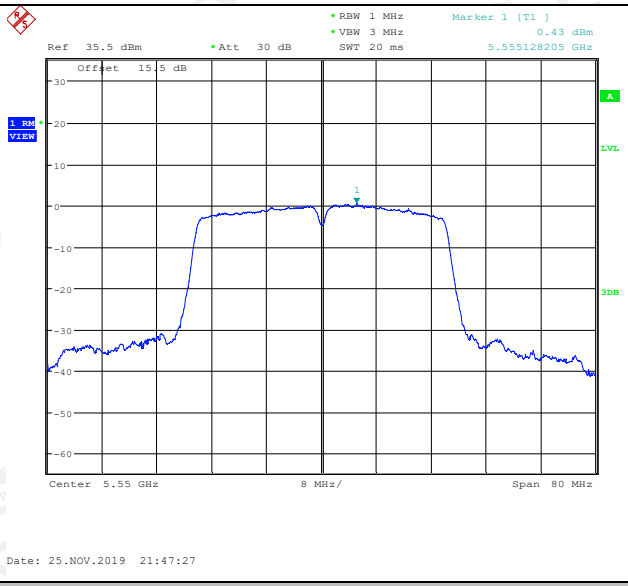

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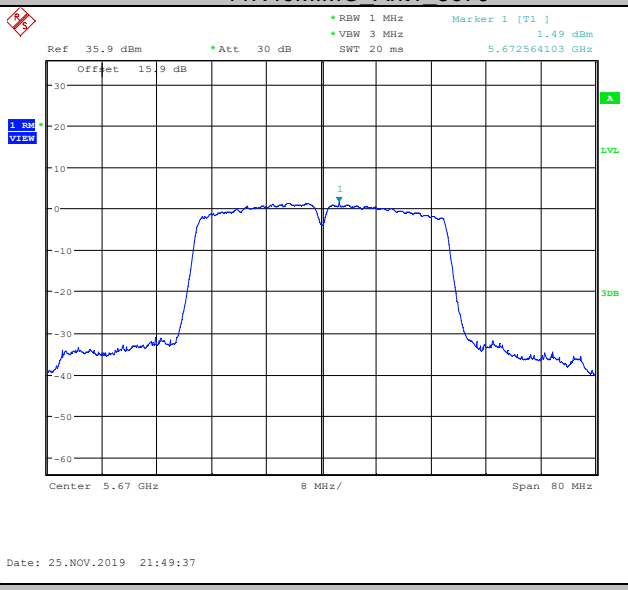
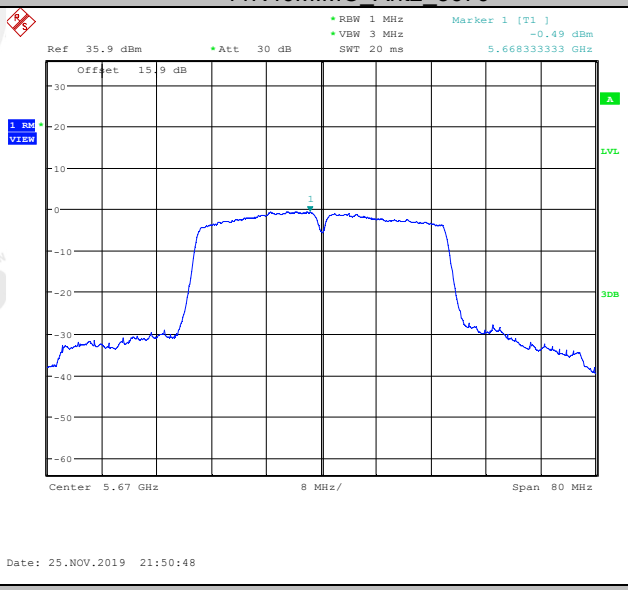


11N40MIMO_Ant2_5670



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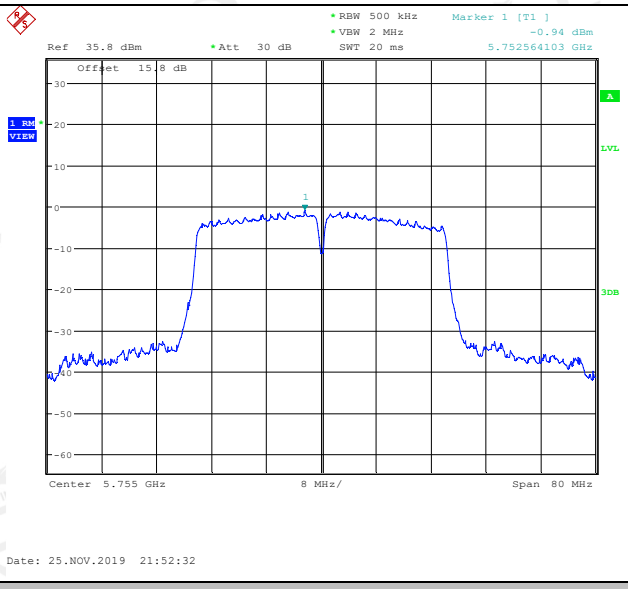

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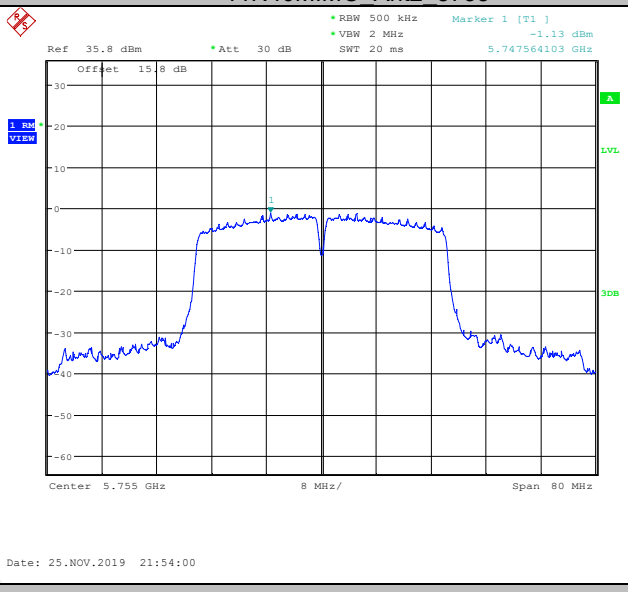

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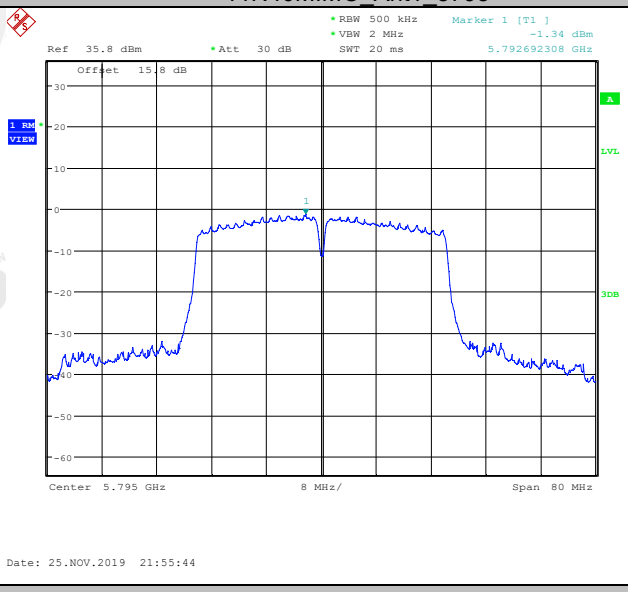

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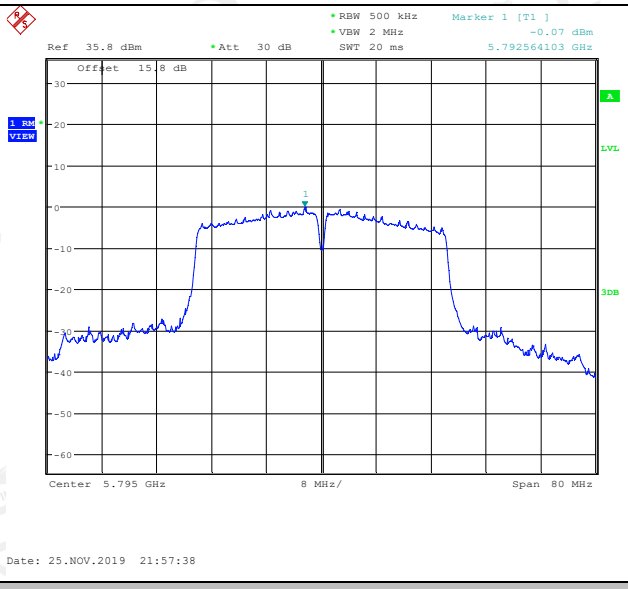
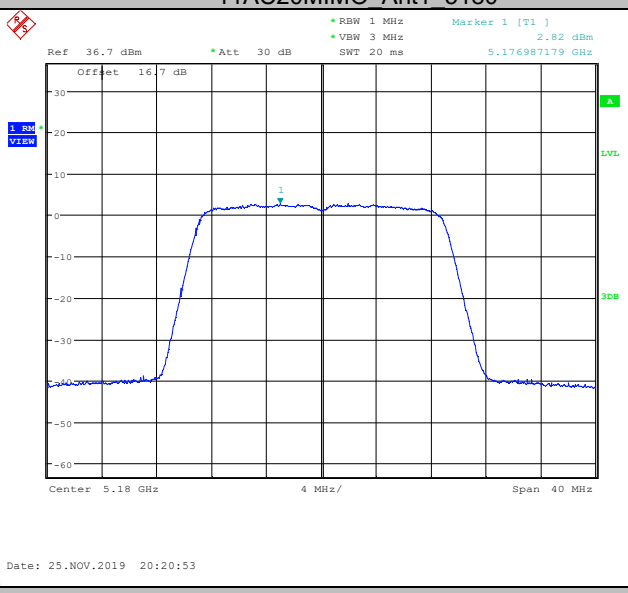


11AC20MIMO_Ant1_5180



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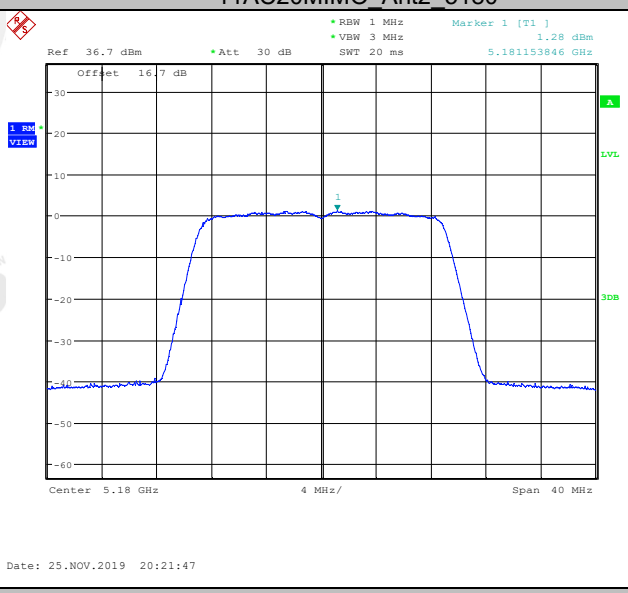

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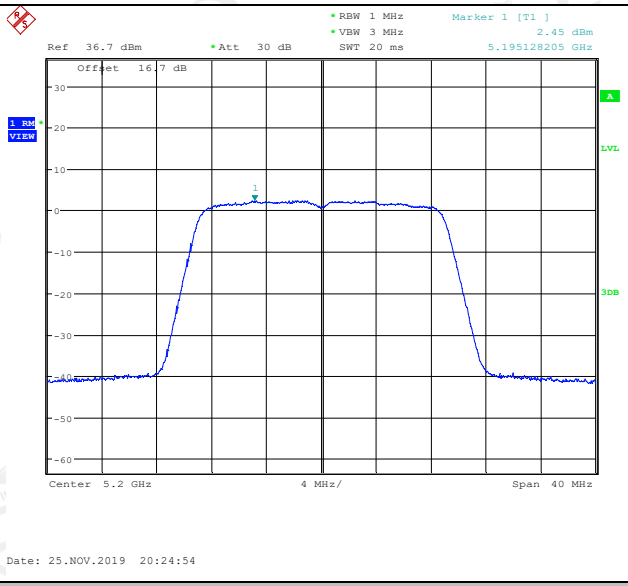

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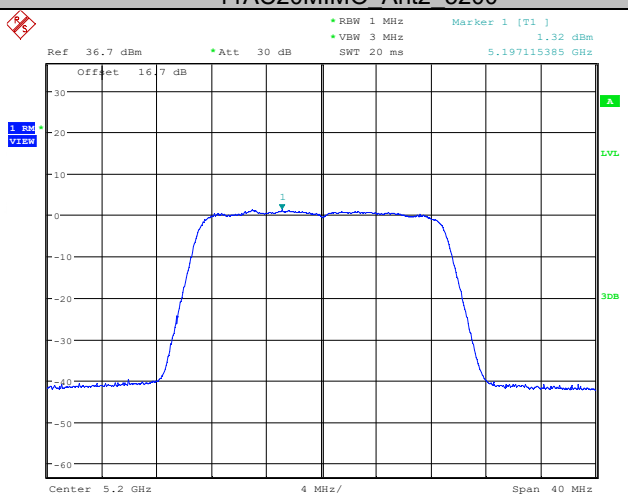

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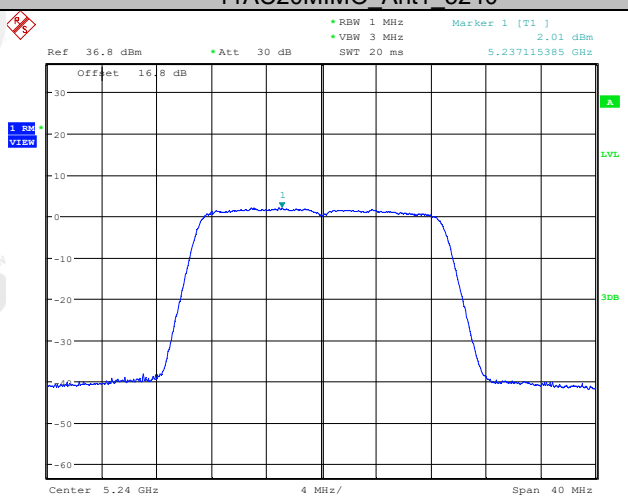

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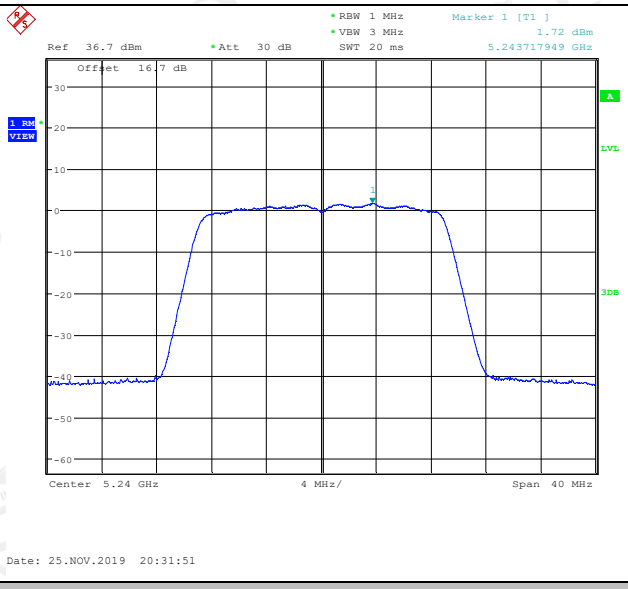

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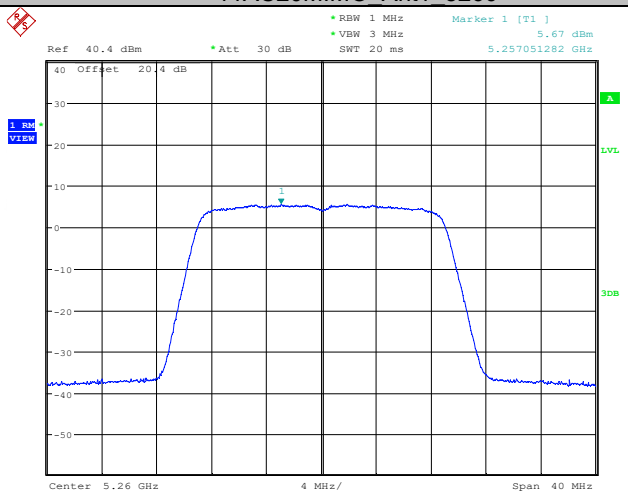

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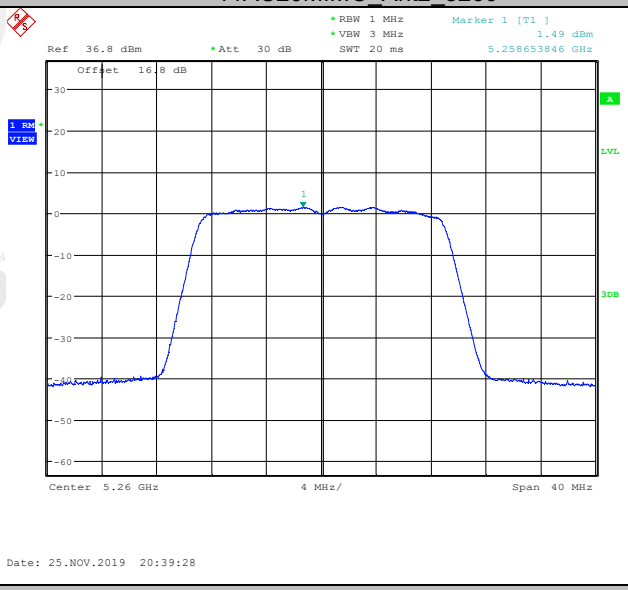

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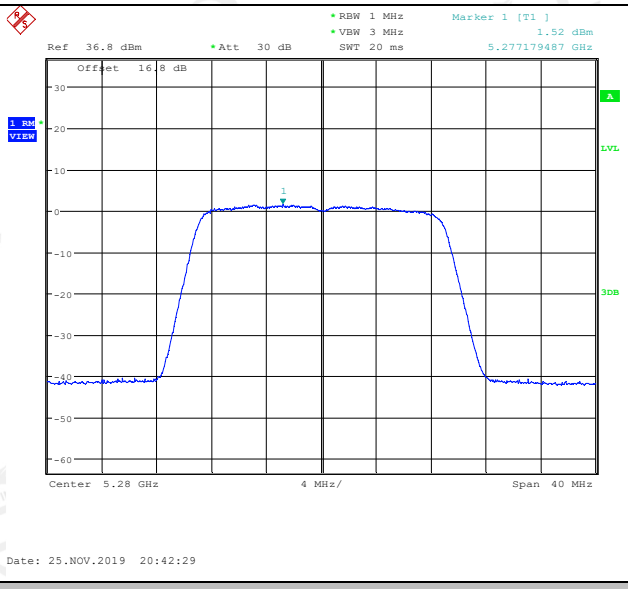

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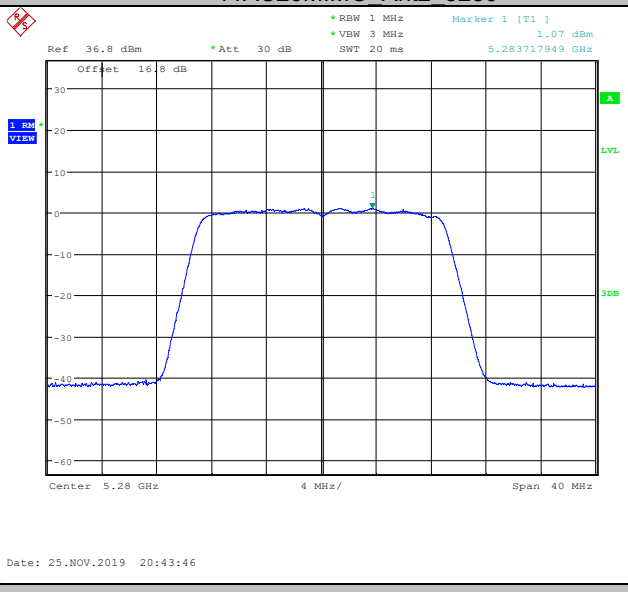

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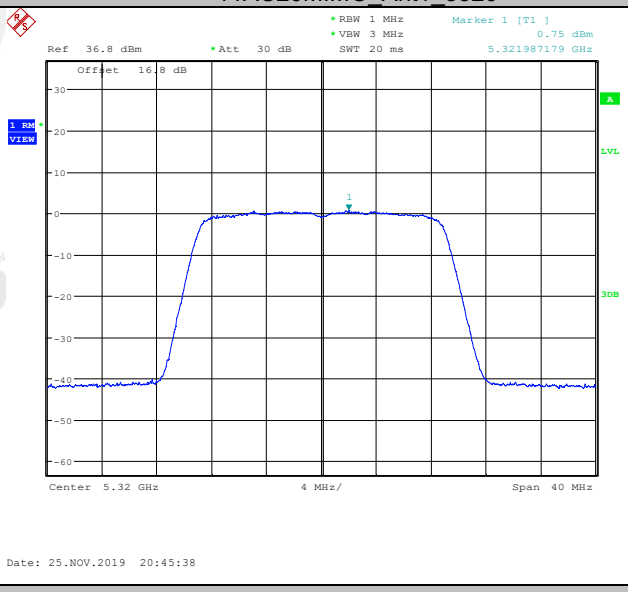

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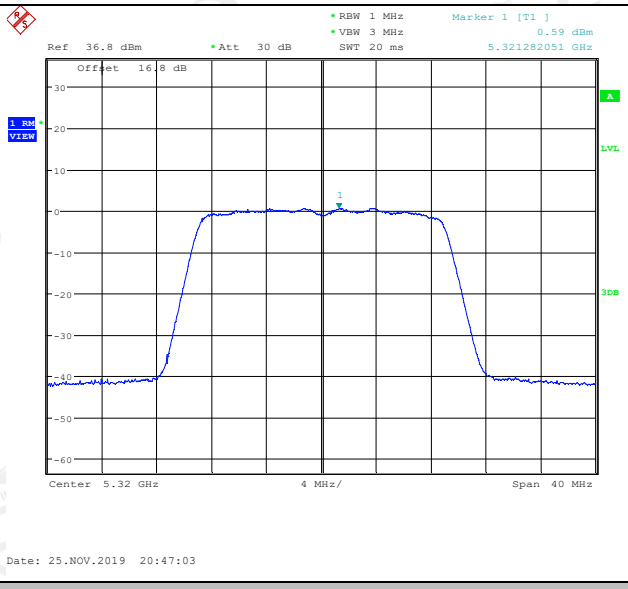

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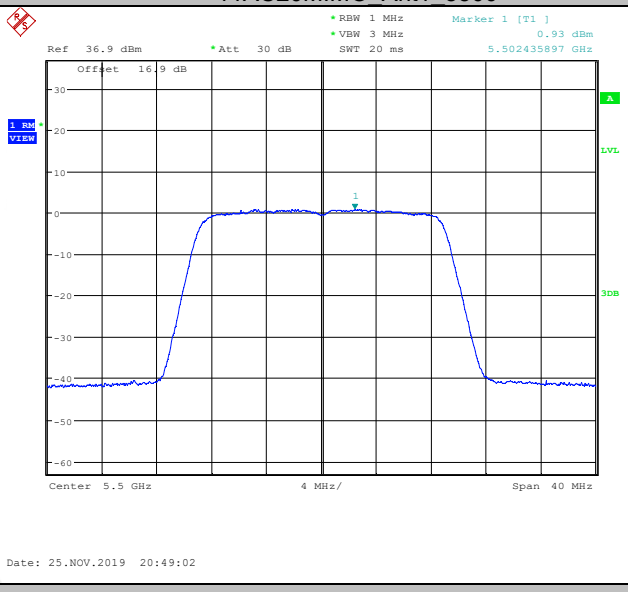
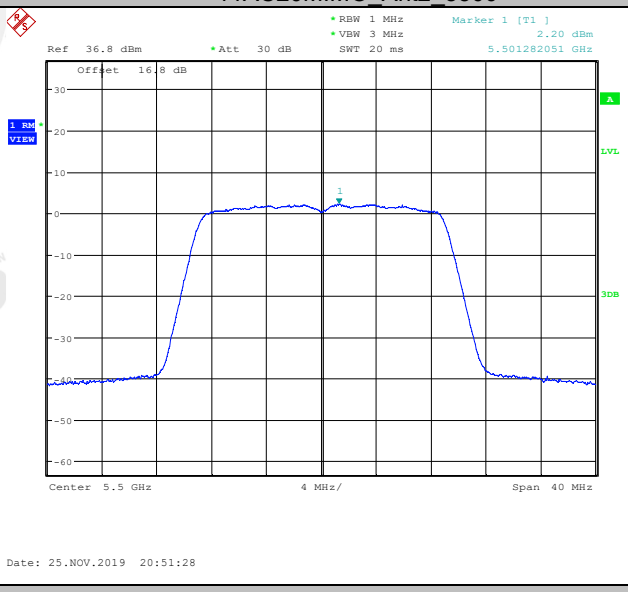


11AC20MIMO_Ant2_5500



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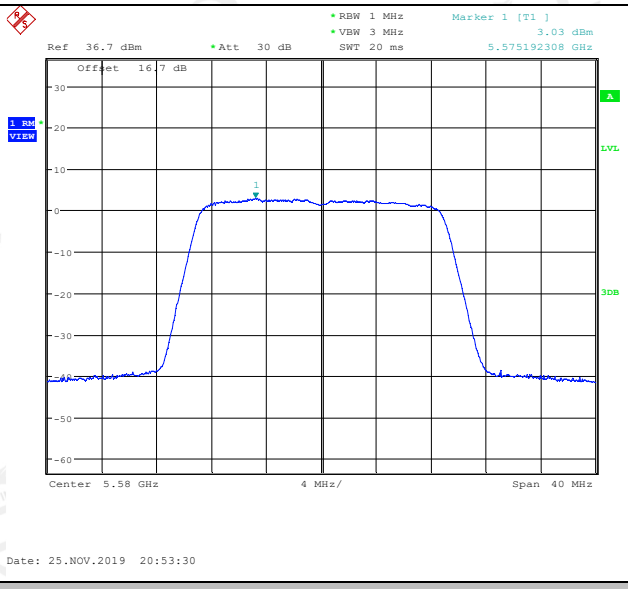

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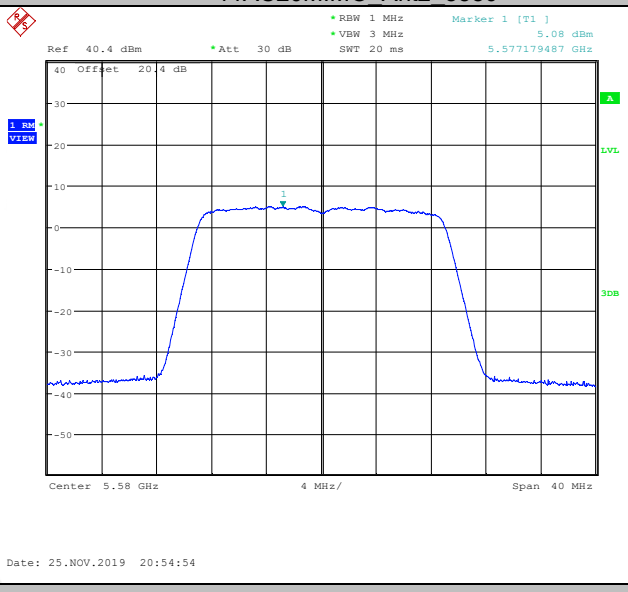

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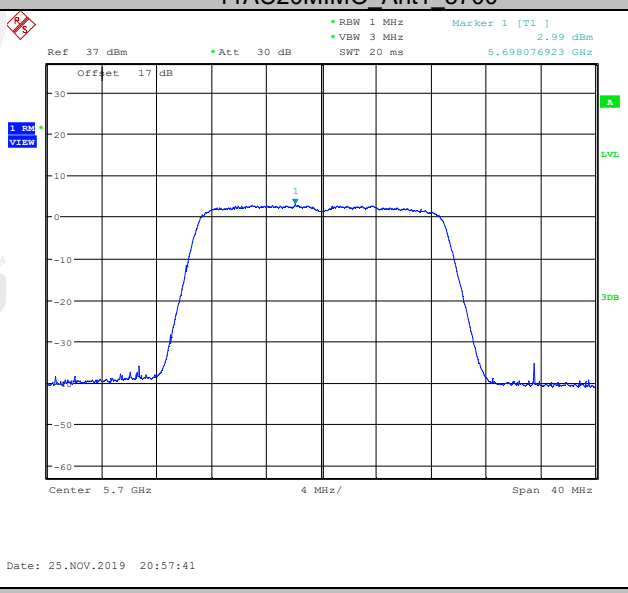
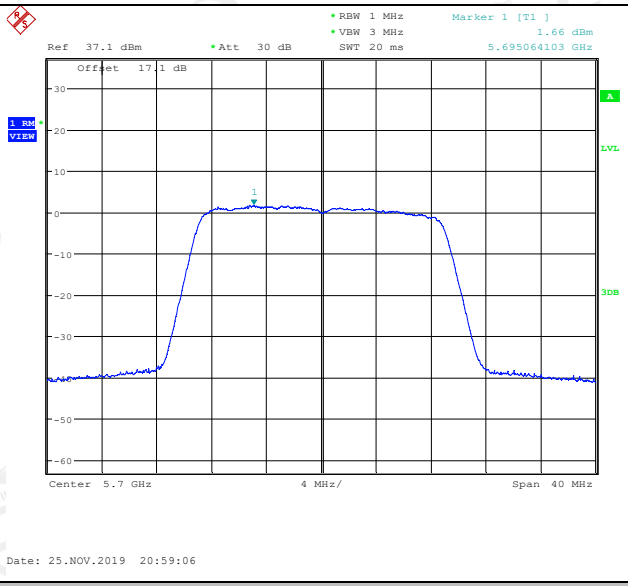


11AC20MIMO_Ant2_5700



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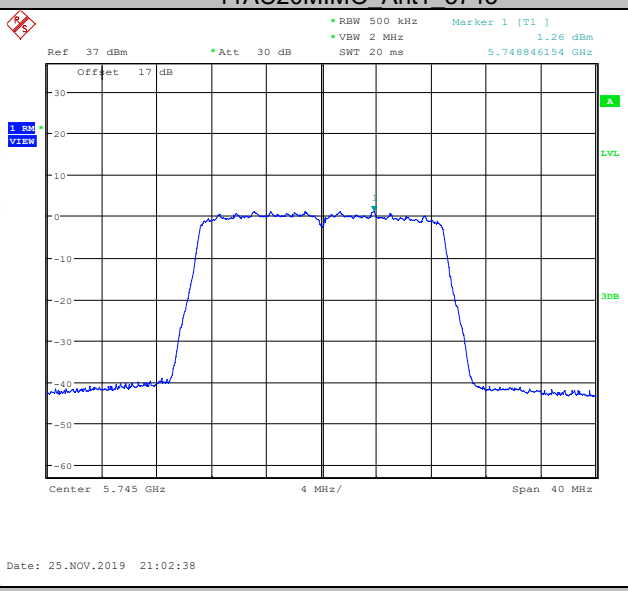

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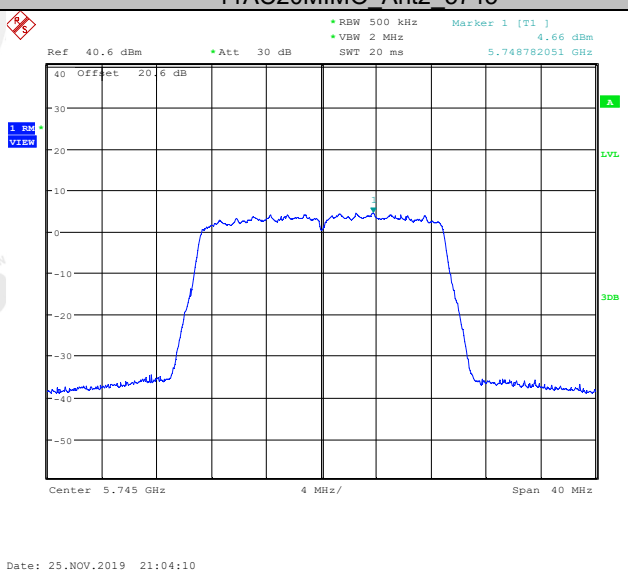

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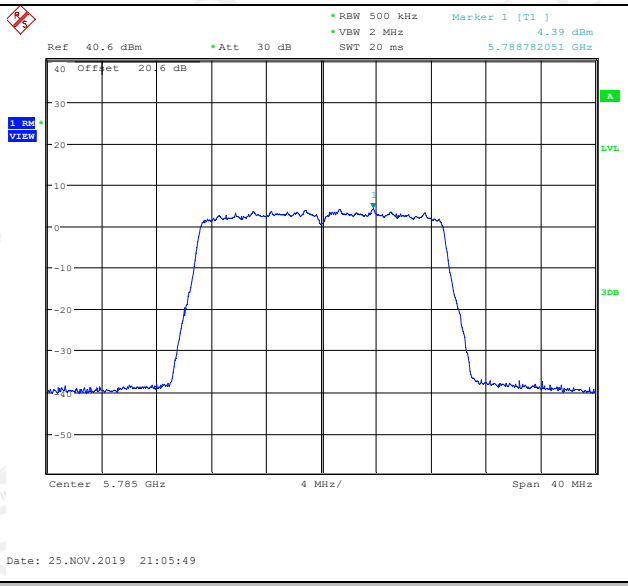

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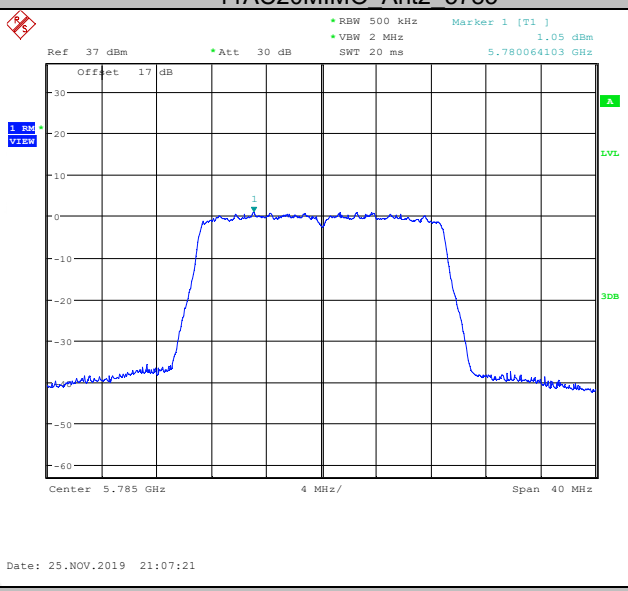

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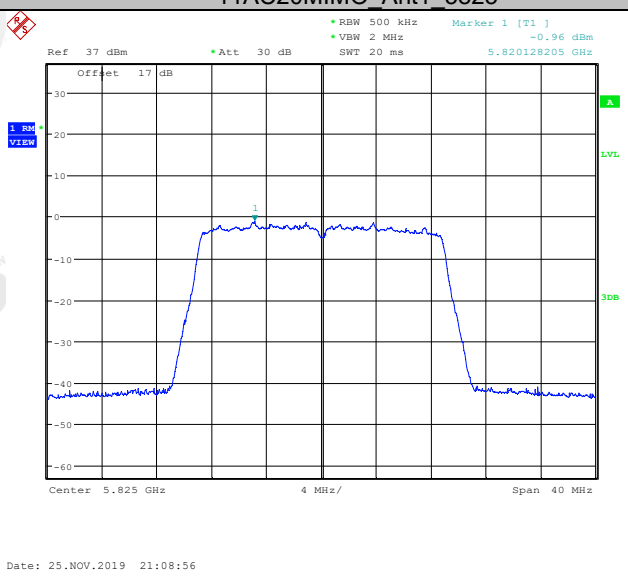

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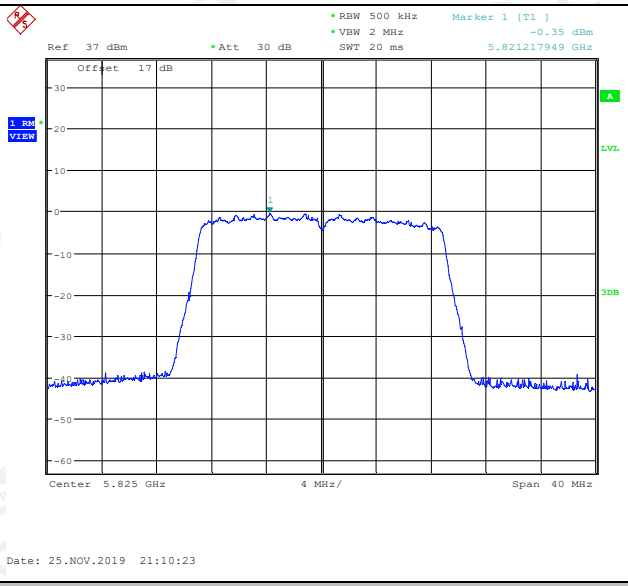

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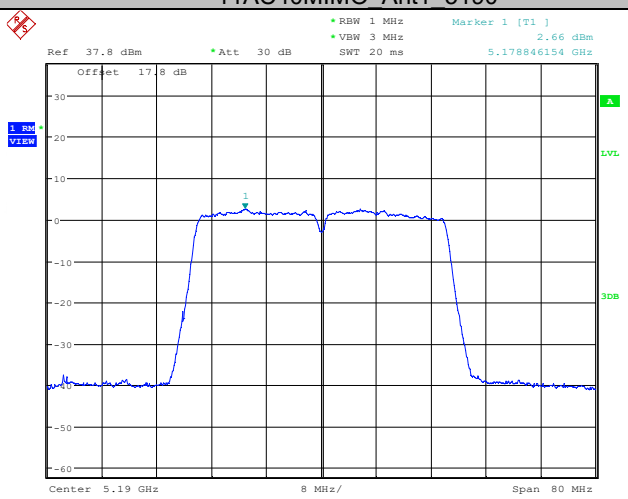

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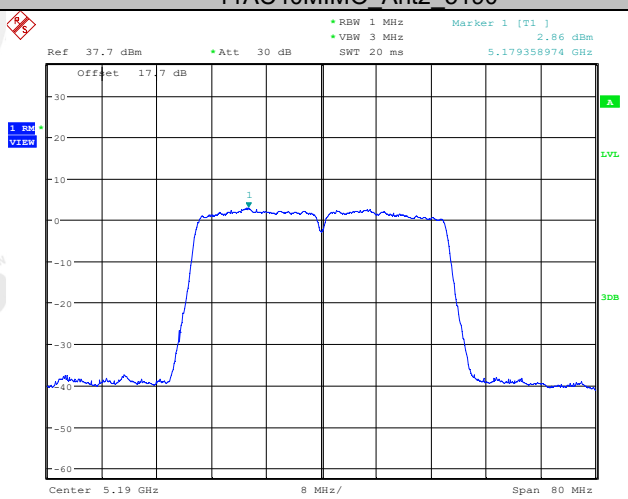

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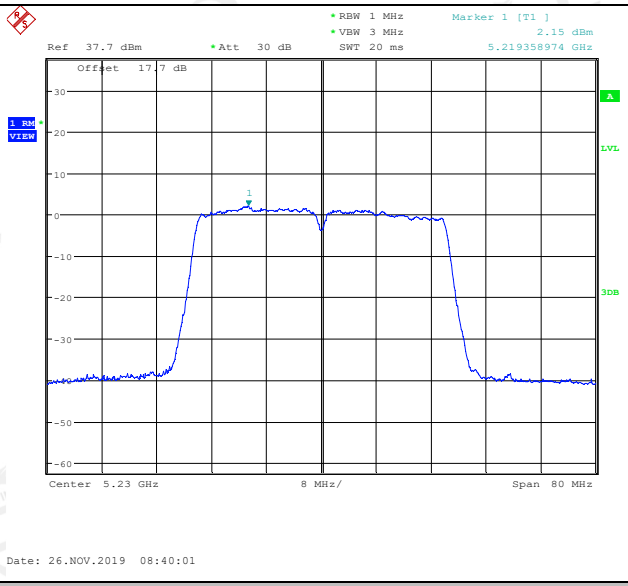

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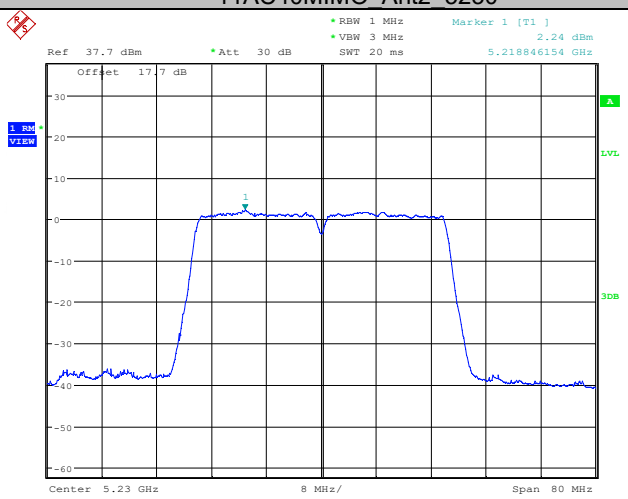

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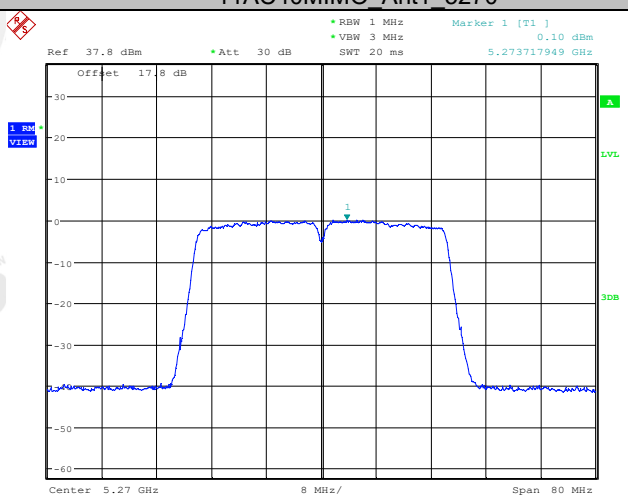

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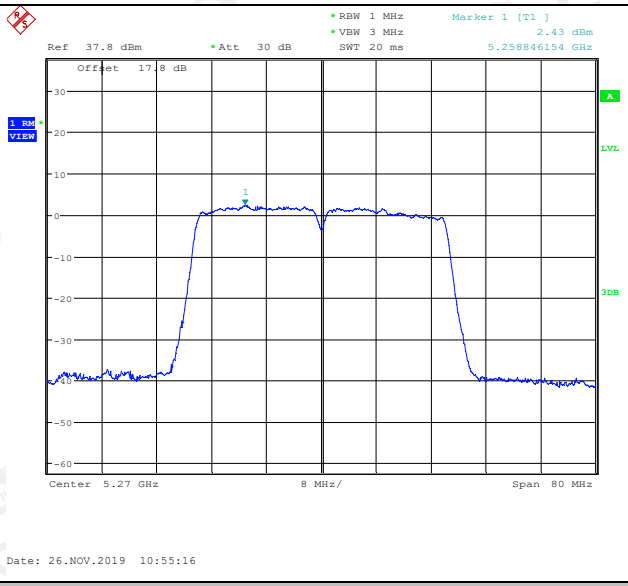

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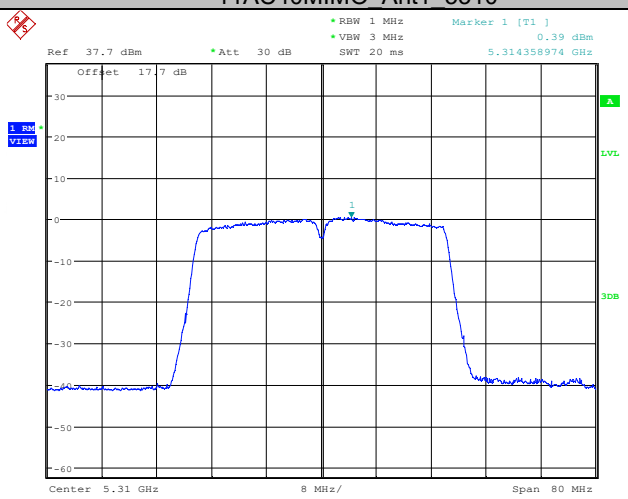

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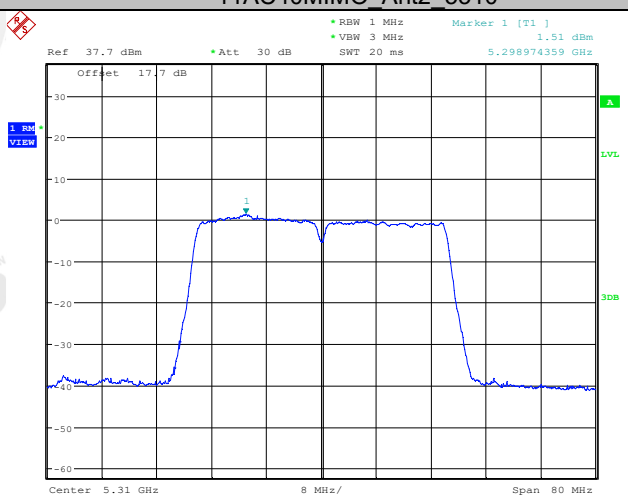

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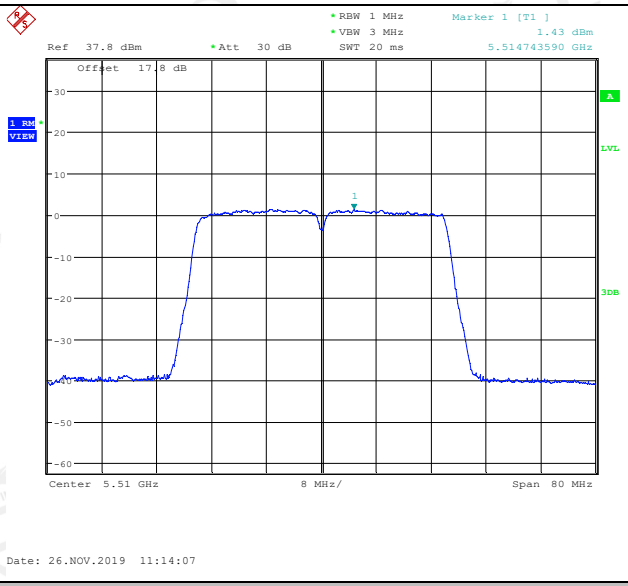

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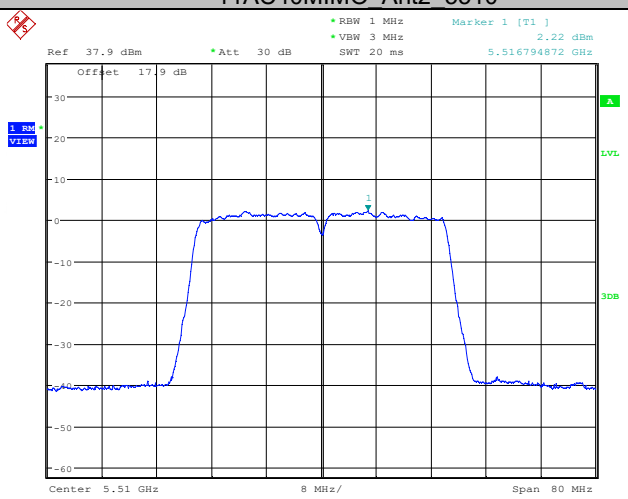

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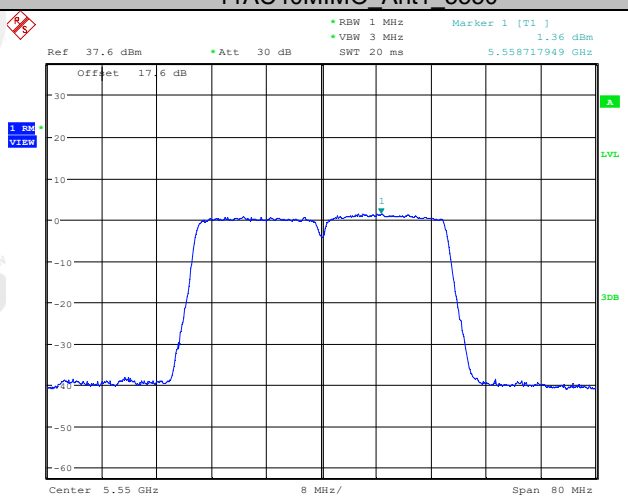

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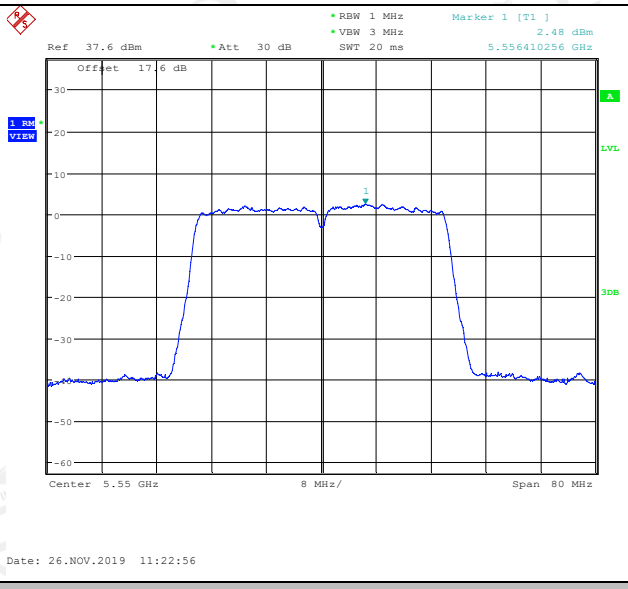

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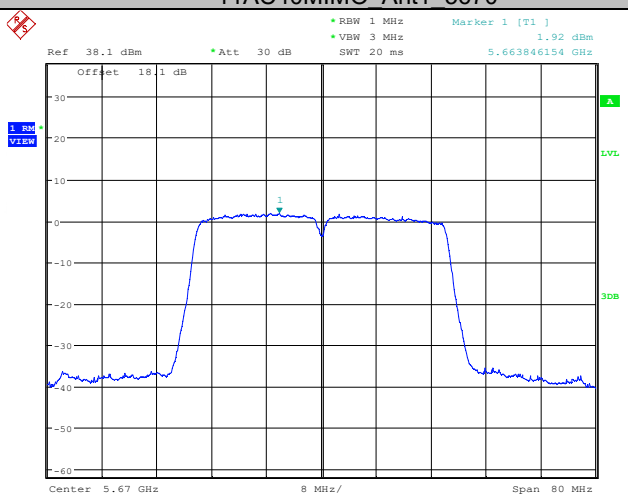

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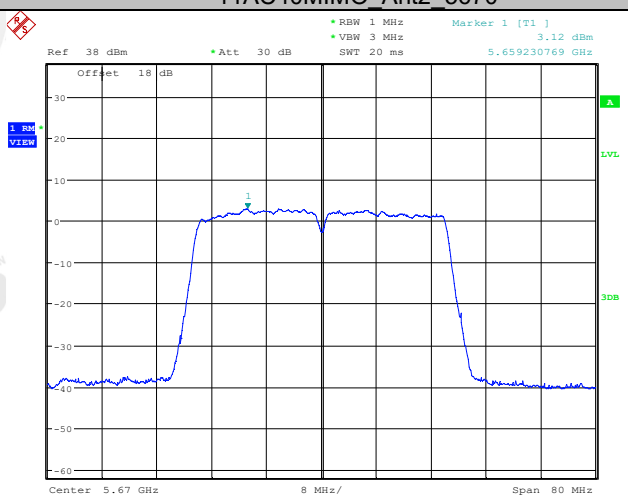

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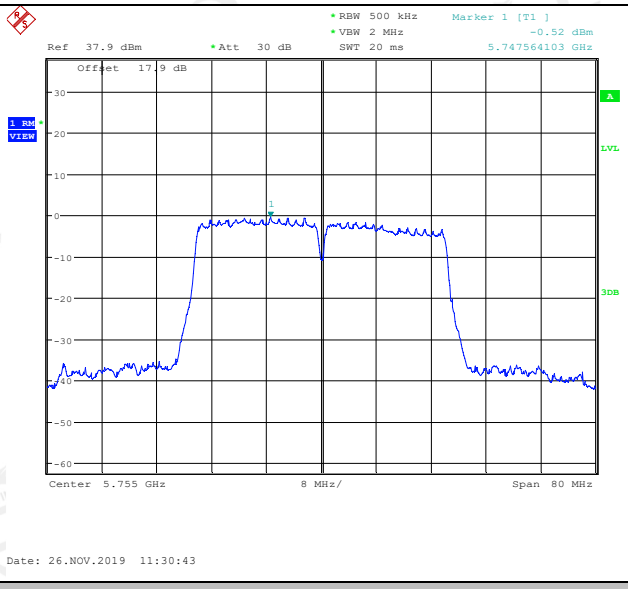

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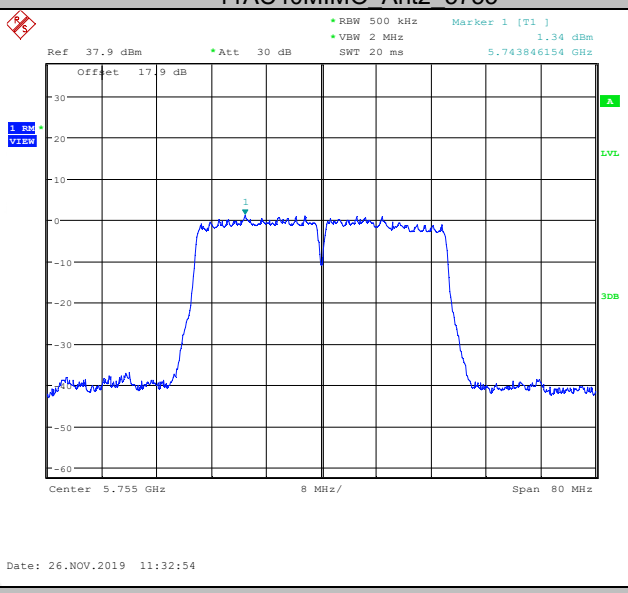

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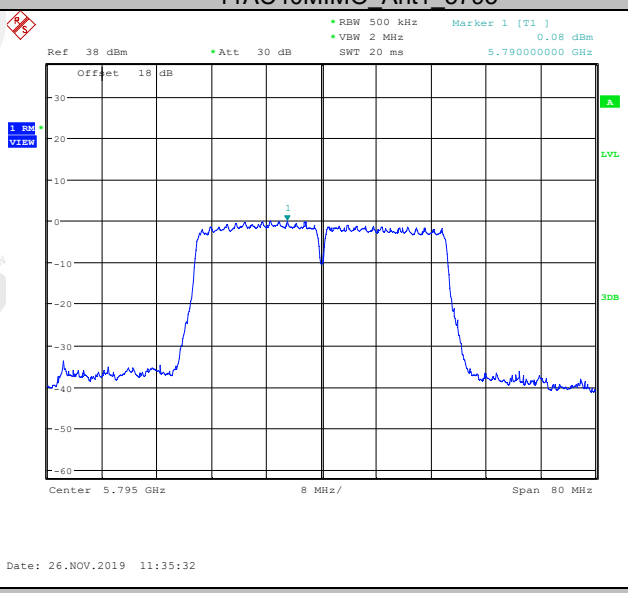

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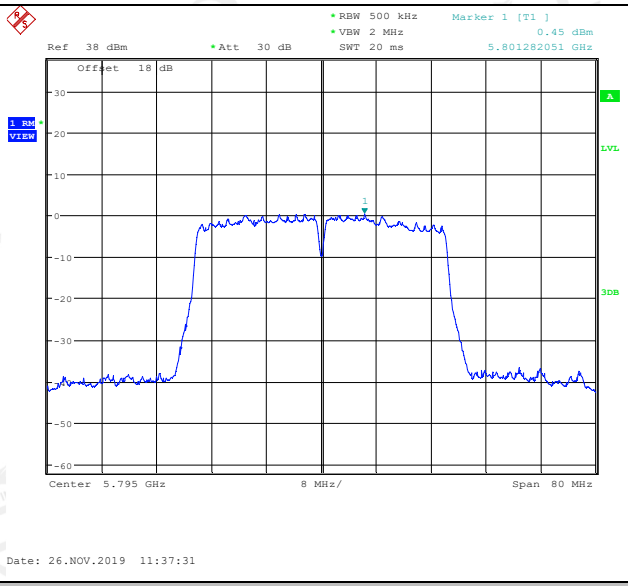

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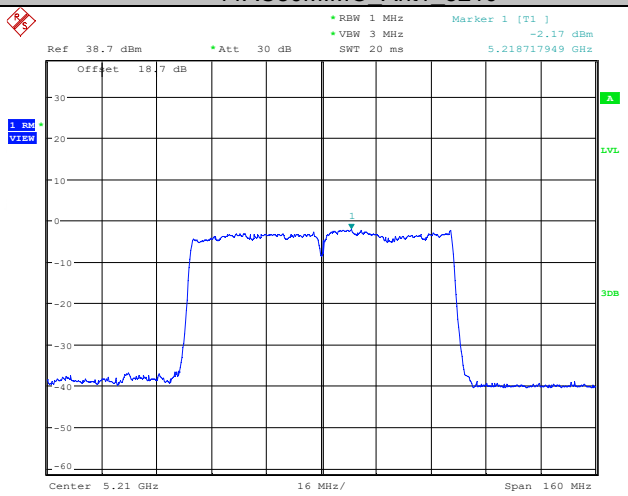

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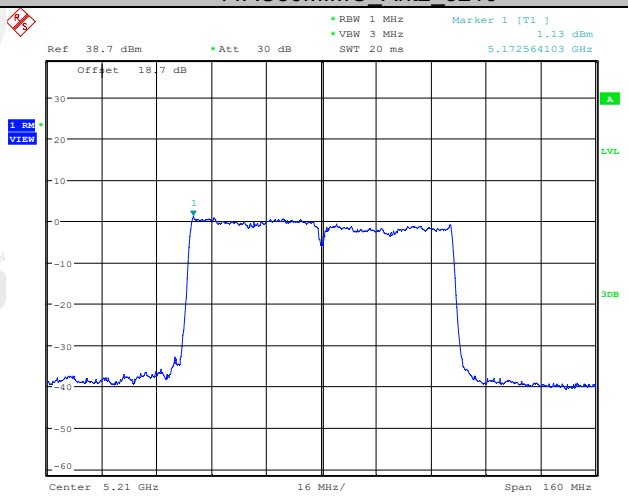

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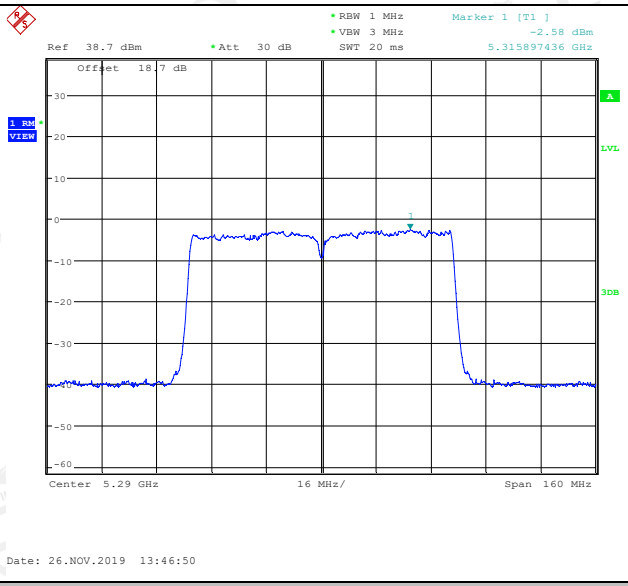

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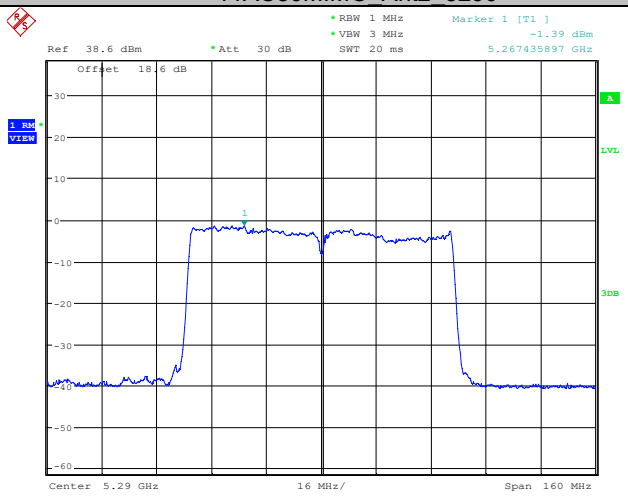

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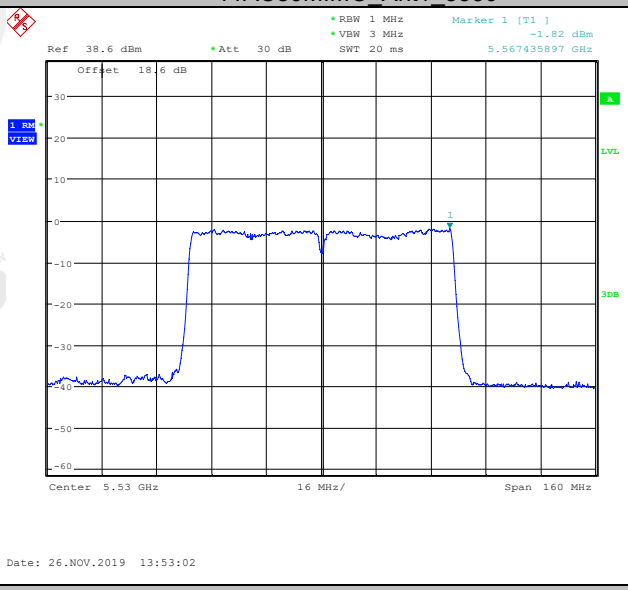

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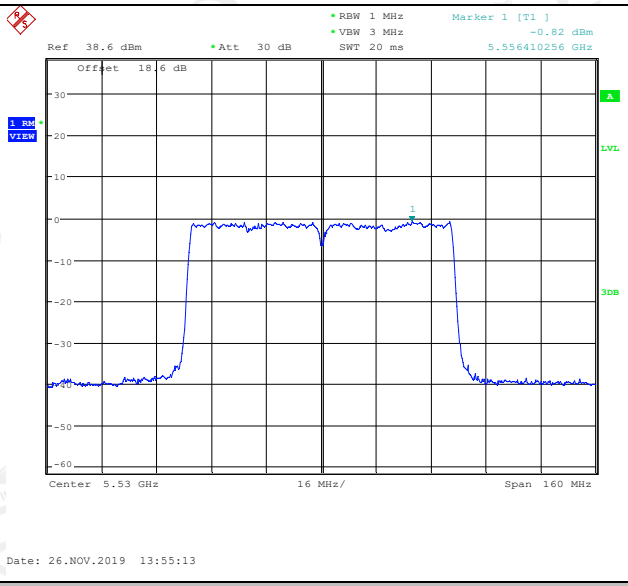

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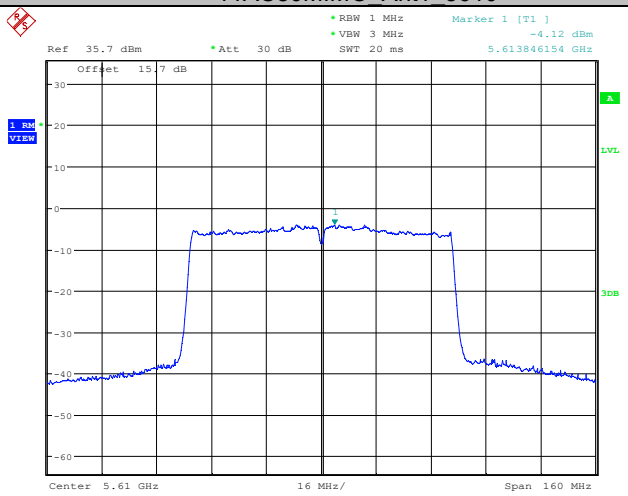

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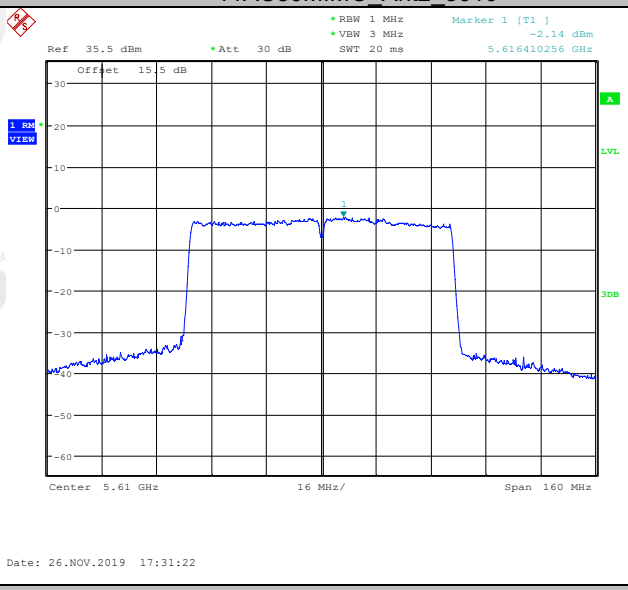

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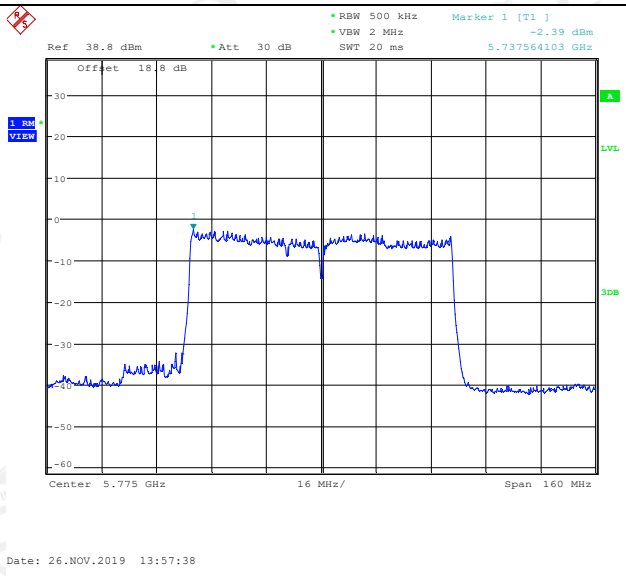

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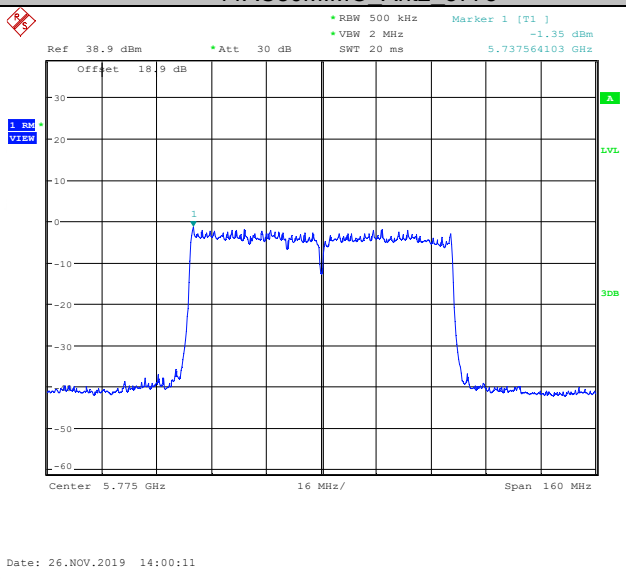


7. Frequency Stability Measurement

7.1. Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

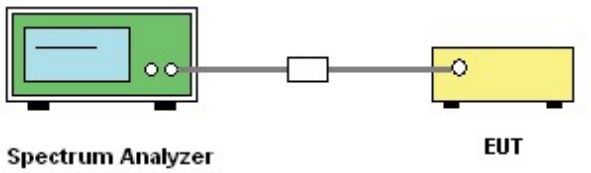
7.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

7.3. Test Procedures

(1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
(2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
(3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

7.4. Test Setup



7.5. Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5180	NV	NT	-12000	-2.316602	20	PASS
11A	ANT1	5180	LV	NT	-11800	-2.277992	20	PASS
11A	ANT1	5180	HV	NT	-11800	-2.277992	20	PASS
11A	ANT2	5180	NV	NT	-4200	-0.810811	20	PASS
11A	ANT2	5180	LV	NT	-4800	-0.926641	20	PASS
11A	ANT2	5180	HV	NT	-5200	-1.003861	20	PASS
11A	ANT1	5190	NV	NT	-12800	-2.466281	20	PASS
11A	ANT1	5190	LV	NT	-11800	-2.273603	20	PASS
11A	ANT1	5190	HV	NT	-11200	-2.157996	20	PASS
11A	ANT2	5190	NV	NT	-12000	-2.312139	20	PASS
11A	ANT2	5190	LV	NT	-11000	-2.119461	20	PASS
11A	ANT2	5190	HV	NT	-10600	-2.042389	20	PASS
11A	ANT1	5200	NV	NT	-12400	-2.384615	20	PASS
11A	ANT1	5200	LV	NT	-12400	-2.384615	20	PASS
11A	ANT1	5200	HV	NT	-12400	-2.384615	20	PASS

11A	ANT2	5200	NV	NT	-9400	-1.807692	20	PASS
11A	ANT2	5200	LV	NT	-9000	-1.730769	20	PASS
11A	ANT2	5200	HV	NT	-9000	-1.730769	20	PASS
11A	ANT1	5210	NV	NT	-6200	-1.190019	20	PASS
11A	ANT1	5210	LV	NT	-3800	-0.729367	20	PASS
11A	ANT1	5210	HV	NT	-1400	-0.268714	20	PASS
11A	ANT2	5210	NV	NT	-5200	-0.998081	20	PASS
11A	ANT2	5210	LV	NT	-2000	-0.383877	20	PASS
11A	ANT2	5210	HV	NT	200	0.038388	20	PASS
11A	ANT1	5230	NV	NT	-9800	-1.873805	20	PASS
11A	ANT1	5230	LV	NT	-8600	-1.644359	20	PASS
11A	ANT1	5230	HV	NT	-8200	-1.567878	20	PASS
11A	ANT2	5230	NV	NT	-9600	-1.835564	20	PASS
11A	ANT2	5230	LV	NT	-8400	-1.606119	20	PASS
11A	ANT2	5230	HV	NT	-8000	-1.529637	20	PASS
11A	ANT1	5240	NV	NT	-12800	-2.442748	20	PASS
11A	ANT1	5240	LV	NT	-12600	-2.40458	20	PASS
11A	ANT1	5240	HV	NT	-12600	-2.40458	20	PASS
11A	ANT2	5240	NV	NT	-11200	-2.137405	20	PASS
11A	ANT2	5240	LV	NT	-11000	-2.099237	20	PASS
11A	ANT2	5240	HV	NT	-11000	-2.099237	20	PASS
11A	ANT1	5260	NV	NT	-12600	-2.395437	20	PASS
11A	ANT1	5260	LV	NT	-12600	-2.395437	20	PASS
11A	ANT1	5260	HV	NT	-12600	-2.395437	20	PASS
11A	ANT2	5260	NV	NT	-11800	-2.243346	20	PASS
11A	ANT2	5260	LV	NT	-11600	-2.205323	20	PASS
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11A	ANT1	5270	LV	NT	-8800	-1.669829	20	PASS
11A	ANT1	5270	HV	NT	-8000	-1.518027	20	PASS
11A	ANT2	5270	NV	NT	-8000	-1.518027	20	PASS
11A	ANT2	5270	LV	NT	-6800	-1.290323	20	PASS
11A	ANT2	5270	HV	NT	-6200	-1.176471	20	PASS
11A	ANT1	5290	NV	NT	-4200	-0.793951	20	PASS
11A	ANT1	5290	LV	NT	0	0	20	PASS
11A	ANT1	5290	HV	NT	1400	0.26465	20	PASS
11A	ANT2	5290	NV	NT	-2600	-0.491493	20	PASS
11A	ANT2	5290	LV	NT	800	0.151229	20	PASS
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11A	ANT1	5300	LV	NT	-12800	-2.415094	20	PASS
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11A	ANT1	5310	LV	NT	-7800	-1.468927	20	PASS
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11A	ANT2	5310	NV	NT	-7000	-1.318267	20	PASS
11A	ANT2	5310	LV	NT	-5800	-1.092279	20	PASS
11A	ANT2	5310	HV	NT	-5200	-0.979284	20	PASS

11A	ANT1	5320	NV	NT	-13000	-2.443609	20	PASS
11A	ANT1	5320	LV	NT	-12800	-2.406015	20	PASS
11A	ANT1	5320	HV	NT	-12800	-2.406015	20	PASS
11A	ANT2	5320	NV	NT	-12200	-2.293233	20	PASS
11A	ANT2	5320	LV	NT	-12000	-2.255639	20	PASS
11A	ANT2	5320	HV	NT	-12000	-2.255639	20	PASS
11A	ANT1	5500	NV	NT	-13600	-2.472727	20	PASS
11A	ANT1	5500	LV	NT	-13400	-2.436364	20	PASS
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11A	ANT2	5500	NV	NT	-12800	-2.327273	20	PASS
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11A	ANT2	5510	NV	NT	-6600	-1.197822	20	PASS
11A	ANT2	5510	LV	NT	-5400	-0.980036	20	PASS
11A	ANT2	5510	HV	NT	-4800	-0.871143	20	PASS
11A	ANT1	5530	NV	NT	-3400	-0.614828	20	PASS
11A	ANT1	5530	LV	NT	1400	0.253165	20	PASS
11A	ANT1	5530	HV	NT	2600	0.470163	20	PASS
11A	ANT2	5530	NV	NT	600	0.108499	20	PASS
11A	ANT2	5530	LV	NT	2600	0.470163	20	PASS
11A	ANT2	5530	HV	NT	3400	0.614828	20	PASS
11A	ANT1	5550	NV	NT	-8200	-1.477477	20	PASS
11A	ANT1	5550	LV	NT	-6200	-1.117117	20	PASS
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11A	ANT2	5550	LV	NT	-4800	-0.864865	20	PASS
11A	ANT2	5550	HV	NT	-3600	-0.648649	20	PASS
11A	ANT1	5580	NV	NT	-13600	-2.437276	20	PASS
11A	ANT1	5580	LV	NT	-13400	-2.401434	20	PASS
11A	ANT1	5580	HV	NT	-13200	-2.365591	20	PASS
11A	ANT2	5580	NV	NT	-12800	-2.293907	20	PASS
11A	ANT2	5580	LV	NT	-12600	-2.258065	20	PASS
11A	ANT2	5580	HV	NT	-12400	-2.222222	20	PASS
11A	ANT1	5610	NV	NT	-2000	-0.356506	20	PASS
11A	ANT1	5610	LV	NT	1600	0.285205	20	PASS
11A	ANT1	5610	HV	NT	3000	0.534759	20	PASS
11A	ANT2	5610	NV	NT	1800	0.320856	20	PASS
11A	ANT2	5610	LV	NT	3600	0.641711	20	PASS
11A	ANT2	5610	HV	NT	4800	0.855615	20	PASS
11A	ANT1	5670	NV	NT	-7000	-1.234568	20	PASS
11A	ANT1	5670	LV	NT	-5000	-0.881834	20	PASS
11A	ANT1	5670	HV	NT	-3200	-0.564374	20	PASS
11A	ANT2	5670	NV	NT	-3200	-0.564374	20	PASS
11A	ANT2	5670	LV	NT	-200	-0.035273	20	PASS
11A	ANT2	5670	HV	NT	800	0.141093	20	PASS
11A	ANT1	5700	NV	NT	-14000	-2.45614	20	PASS
11A	ANT1	5700	LV	NT	-13800	-2.421053	20	PASS
11A	ANT1	5700	HV	NT	-13600	-2.385965	20	PASS

11A	ANT2	5700	NV	NT	-13000	-2.280702	20	PASS
11A	ANT2	5700	LV	NT	-12600	-2.210526	20	PASS
11A	ANT2	5700	HV	NT	-12600	-2.210526	20	PASS
11A	ANT1	5745	NV	NT	-14000	-2.436902	20	PASS
11A	ANT1	5745	LV	NT	-13800	-2.402089	20	PASS
11A	ANT1	5745	HV	NT	-13800	-2.402089	20	PASS
11A	ANT2	5745	NV	NT	-12800	-2.228024	20	PASS
11A	ANT2	5745	LV	NT	-12400	-2.158399	20	PASS
11A	ANT2	5745	HV	NT	-12400	-2.158399	20	PASS
11A	ANT1	5755	NV	NT	-4800	-0.834057	20	PASS
11A	ANT1	5755	LV	NT	-800	-0.13901	20	PASS
11A	ANT1	5755	HV	NT	400	0.069505	20	PASS
11A	ANT2	5755	NV	NT	0	0	20	PASS
11A	ANT2	5755	LV	NT	1600	0.278019	20	PASS
11A	ANT2	5755	HV	NT	2600	0.451781	20	PASS
11A	ANT1	5775	NV	NT	400	0.069264	20	PASS
11A	ANT1	5775	LV	NT	3600	0.623377	20	PASS
11A	ANT1	5775	HV	NT	5400	0.935065	20	PASS
11A	ANT2	5775	NV	NT	2000	0.34632	20	PASS
11A	ANT2	5775	LV	NT	4400	0.761905	20	PASS
11A	ANT2	5775	HV	NT	5600	0.969697	20	PASS
11A	ANT1	5785	NV	NT	-14200	-2.454624	20	PASS
11A	ANT1	5785	LV	NT	-13800	-2.38548	20	PASS
11A	ANT1	5785	HV	NT	-13400	-2.316335	20	PASS
11A	ANT2	5785	NV	NT	-12800	-2.212619	20	PASS
11A	ANT2	5785	LV	NT	-12600	-2.178047	20	PASS
11A	ANT2	5785	HV	NT	-12400	-2.143475	20	PASS
11A	ANT1	5795	NV	NT	-6200	-1.069888	20	PASS
11A	ANT1	5795	LV	NT	-3400	-0.586713	20	PASS
11A	ANT1	5795	HV	NT	-1200	-0.207075	20	PASS
11A	ANT2	5795	NV	NT	0	0	20	PASS
11A	ANT2	5795	LV	NT	1200	0.207075	20	PASS
11A	ANT2	5795	HV	NT	1400	0.241588	20	PASS
11A	ANT1	5825	NV	NT	-14000	-2.403433	20	PASS
11A	ANT1	5825	LV	NT	-13600	-2.334764	20	PASS
11A	ANT1	5825	HV	NT	-13400	-2.300429	20	PASS
11A	ANT2	5825	NV	NT	-13400	-2.300429	20	PASS
11A	ANT2	5825	LV	NT	-13200	-2.266094	20	PASS
11A	ANT2	5825	HV	NT	-13000	-2.23176	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5180	NV	-30	-11800	-2.277992	20	PASS
11A	ANT1	5180	NV	-20	-12000	-2.316602	20	PASS
11A	ANT1	5180	NV	-10	-12000	-2.316602	20	PASS
11A	ANT1	5180	NV	0	-12000	-2.316602	20	PASS
11A	ANT1	5180	NV	10	-12200	-2.355212	20	PASS
11A	ANT1	5180	NV	20	-12200	-2.355212	20	PASS
11A	ANT1	5180	NV	30	-12200	-2.355212	20	PASS
11A	ANT1	5180	NV	40	-12200	-2.355212	20	PASS
11A	ANT1	5180	NV	50	-12200	-2.355212	20	PASS

11A	ANT2	5180	NV	-30	-5800	-1.119691	20	PASS
11A	ANT2	5180	NV	-20	-6000	-1.158301	20	PASS
11A	ANT2	5180	NV	-10	-6200	-1.196911	20	PASS
11A	ANT2	5180	NV	0	-6600	-1.274131	20	PASS
11A	ANT2	5180	NV	10	-6800	-1.312741	20	PASS
11A	ANT2	5180	NV	20	-7000	-1.351351	20	PASS
11A	ANT2	5180	NV	30	-7000	-1.351351	20	PASS
11A	ANT2	5180	NV	40	-7400	-1.428571	20	PASS
11A	ANT2	5180	NV	50	-7600	-1.467181	20	PASS
11A	ANT1	5190	NV	-30	-10600	-2.042389	20	PASS
11A	ANT1	5190	NV	-20	-10400	-2.003854	20	PASS
11A	ANT1	5190	NV	-10	-10000	-1.926782	20	PASS
11A	ANT1	5190	NV	0	-9600	-1.849711	20	PASS
11A	ANT1	5190	NV	10	-9200	-1.77264	20	PASS
11A	ANT1	5190	NV	20	-8800	-1.695568	20	PASS
11A	ANT1	5190	NV	30	-8400	-1.618497	20	PASS
11A	ANT1	5190	NV	40	-8200	-1.579961	20	PASS
11A	ANT1	5190	NV	50	-8000	-1.541426	20	PASS
11A	ANT2	5190	NV	-30	-10200	-1.965318	20	PASS
11A	ANT2	5190	NV	-20	-9800	-1.888247	20	PASS
11A	ANT2	5190	NV	-10	-9400	-1.811175	20	PASS
11A	ANT2	5190	NV	0	-9000	-1.734104	20	PASS
11A	ANT2	5190	NV	10	-8800	-1.695568	20	PASS
11A	ANT2	5190	NV	20	-8400	-1.618497	20	PASS
11A	ANT2	5190	NV	30	-8200	-1.579961	20	PASS
11A	ANT2	5190	NV	40	-8000	-1.541426	20	PASS
11A	ANT2	5190	NV	50	-7800	-1.50289	20	PASS
11A	ANT1	5200	NV	-30	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	-20	-12400	-2.384615	20	PASS
11A	ANT1	5200	NV	-10	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	0	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	10	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	20	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	30	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	40	-12200	-2.346154	20	PASS
11A	ANT1	5200	NV	50	-12200	-2.346154	20	PASS
11A	ANT2	5200	NV	-30	-9000	-1.730769	20	PASS
11A	ANT2	5200	NV	-20	-9200	-1.769231	20	PASS
11A	ANT2	5200	NV	-10	-9200	-1.769231	20	PASS
11A	ANT2	5200	NV	0	-9400	-1.807692	20	PASS
11A	ANT2	5200	NV	10	-9400	-1.807692	20	PASS
11A	ANT2	5200	NV	20	-9600	-1.846154	20	PASS
11A	ANT2	5200	NV	30	-9600	-1.846154	20	PASS
11A	ANT2	5200	NV	40	-9800	-1.884615	20	PASS
11A	ANT2	5200	NV	50	-9800	-1.884615	20	PASS
11A	ANT1	5210	NV	-30	0	0	20	PASS
11A	ANT1	5210	NV	-20	600	0.115163	20	PASS
11A	ANT1	5210	NV	-10	1200	0.230326	20	PASS
11A	ANT1	5210	NV	0	1600	0.307102	20	PASS
11A	ANT1	5210	NV	10	2000	0.383877	20	PASS
11A	ANT1	5210	NV	20	2400	0.460653	20	PASS

11A	ANT1	5210	NV	30	2600	0.49904	20	PASS
11A	ANT1	5210	NV	40	2800	0.537428	20	PASS
11A	ANT1	5210	NV	50	3000	0.575816	20	PASS
11A	ANT2	5210	NV	-30	800	0.153551	20	PASS
11A	ANT2	5210	NV	-20	1400	0.268714	20	PASS
11A	ANT2	5210	NV	-10	2000	0.383877	20	PASS
11A	ANT2	5210	NV	0	2000	0.383877	20	PASS
11A	ANT2	5210	NV	10	2400	0.460653	20	PASS
11A	ANT2	5210	NV	20	2600	0.49904	20	PASS
11A	ANT2	5210	NV	30	2800	0.537428	20	PASS
11A	ANT2	5210	NV	40	3000	0.575816	20	PASS
11A	ANT2	5210	NV	50	3200	0.614203	20	PASS
11A	ANT1	5230	NV	-30	-7800	-1.491396	20	PASS
11A	ANT1	5230	NV	-20	-7400	-1.414914	20	PASS
11A	ANT1	5230	NV	-10	-7200	-1.376673	20	PASS
11A	ANT1	5230	NV	0	-7000	-1.338432	20	PASS
11A	ANT1	5230	NV	10	-6800	-1.300191	20	PASS
11A	ANT1	5230	NV	20	-6800	-1.300191	20	PASS
11A	ANT1	5230	NV	30	-6600	-1.26195	20	PASS
11A	ANT1	5230	NV	40	-6600	-1.26195	20	PASS
11A	ANT1	5230	NV	50	-6400	-1.223709	20	PASS
11A	ANT2	5230	NV	-30	-7600	-1.453155	20	PASS
11A	ANT2	5230	NV	-20	-7600	-1.453155	20	PASS
11A	ANT2	5230	NV	-10	-7400	-1.414914	20	PASS
11A	ANT2	5230	NV	0	-7200	-1.376673	20	PASS
11A	ANT2	5230	NV	10	-7000	-1.338432	20	PASS
11A	ANT2	5230	NV	20	-6800	-1.300191	20	PASS
11A	ANT2	5230	NV	30	-6600	-1.26195	20	PASS
11A	ANT2	5230	NV	40	-6400	-1.223709	20	PASS
11A	ANT2	5230	NV	50	-6200	-1.185468	20	PASS
11A	ANT1	5240	NV	-30	-12600	-2.40458	20	PASS
11A	ANT1	5240	NV	-20	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	-10	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	0	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	10	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	20	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	30	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	40	-12400	-2.366412	20	PASS
11A	ANT1	5240	NV	50	-12400	-2.366412	20	PASS
11A	ANT2	5240	NV	-30	-11000	-2.099237	20	PASS
11A	ANT2	5240	NV	-20	-11000	-2.099237	20	PASS
11A	ANT2	5240	NV	-10	-11000	-2.099237	20	PASS
11A	ANT2	5240	NV	0	-11200	-2.137405	20	PASS
11A	ANT2	5240	NV	10	-11200	-2.137405	20	PASS
11A	ANT2	5240	NV	20	-11200	-2.137405	20	PASS
11A	ANT2	5240	NV	30	-11200	-2.137405	20	PASS
11A	ANT2	5240	NV	40	-11200	-2.137405	20	PASS
11A	ANT2	5240	NV	50	-11400	-2.175573	20	PASS
11A	ANT1	5260	NV	-30	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	-20	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	-10	-12600	-2.395437	20	PASS

11A	ANT1	5260	NV	0	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	10	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	20	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	30	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	40	-12600	-2.395437	20	PASS
11A	ANT1	5260	NV	50	-12600	-2.395437	20	PASS
11A	ANT2	5260	NV	-30	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	-20	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	-10	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	0	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	10	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	20	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	30	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	40	-11400	-2.1673	20	PASS
11A	ANT2	5260	NV	50	-11400	-2.1673	20	PASS
11A	ANT1	5270	NV	-30	-7400	-1.404175	20	PASS
11A	ANT1	5270	NV	-20	-6600	-1.252372	20	PASS
11A	ANT1	5270	NV	-10	-6400	-1.214421	20	PASS
11A	ANT1	5270	NV	0	-6200	-1.176471	20	PASS
11A	ANT1	5270	NV	10	-6000	-1.13852	20	PASS
11A	ANT1	5270	NV	20	-5800	-1.100569	20	PASS
11A	ANT1	5270	NV	30	-5600	-1.062619	20	PASS
11A	ANT1	5270	NV	40	-5600	-1.062619	20	PASS
11A	ANT1	5270	NV	50	-5400	-1.024668	20	PASS
11A	ANT2	5270	NV	-30	-5800	-1.100569	20	PASS
11A	ANT2	5270	NV	-20	-5600	-1.062619	20	PASS
11A	ANT2	5270	NV	-10	-5200	-0.986717	20	PASS
11A	ANT2	5270	NV	0	-5000	-0.948767	20	PASS
11A	ANT2	5270	NV	10	-4800	-0.910816	20	PASS
11A	ANT2	5270	NV	20	-4600	-0.872865	20	PASS
11A	ANT2	5270	NV	30	-4400	-0.834915	20	PASS
11A	ANT2	5270	NV	40	-4400	-0.834915	20	PASS
11A	ANT2	5270	NV	50	-4400	-0.834915	20	PASS
11A	ANT1	5290	NV	-30	2200	0.415879	20	PASS
11A	ANT1	5290	NV	-20	2800	0.529301	20	PASS
11A	ANT1	5290	NV	-10	3200	0.604915	20	PASS
11A	ANT1	5290	NV	0	3800	0.718336	20	PASS
11A	ANT1	5290	NV	10	4000	0.756144	20	PASS
11A	ANT1	5290	NV	20	4200	0.793951	20	PASS
11A	ANT1	5290	NV	30	4400	0.831758	20	PASS
11A	ANT1	5290	NV	40	4600	0.869565	20	PASS
11A	ANT1	5290	NV	50	4600	0.869565	20	PASS
11A	ANT2	5290	NV	-30	2600	0.491493	20	PASS
11A	ANT2	5290	NV	-20	3200	0.604915	20	PASS
11A	ANT2	5290	NV	-10	3600	0.680529	20	PASS
11A	ANT2	5290	NV	0	4000	0.756144	20	PASS
11A	ANT2	5290	NV	10	4200	0.793951	20	PASS
11A	ANT2	5290	NV	20	4600	0.869565	20	PASS
11A	ANT2	5290	NV	30	5200	0.982987	20	PASS
11A	ANT2	5290	NV	40	5200	0.982987	20	PASS
11A	ANT2	5290	NV	50	5400	1.020794	20	PASS

11A	ANT1	5300	NV	-30	-12600	-2.377358	20	PASS
11A	ANT1	5300	NV	-20	-12600	-2.377358	20	PASS
11A	ANT1	5300	NV	-10	-12800	-2.415094	20	PASS
11A	ANT1	5300	NV	0	-12800	-2.415094	20	PASS
11A	ANT1	5300	NV	10	-12600	-2.377358	20	PASS
11A	ANT1	5300	NV	20	-12800	-2.415094	20	PASS
11A	ANT1	5300	NV	30	-12800	-2.415094	20	PASS
11A	ANT1	5300	NV	40	-12600	-2.377358	20	PASS
11A	ANT1	5300	NV	50	-12600	-2.377358	20	PASS
11A	ANT2	5300	NV	-30	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	-20	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	-10	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	0	-11800	-2.226415	20	PASS
11A	ANT2	5300	NV	10	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	20	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	30	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	40	-12000	-2.264151	20	PASS
11A	ANT2	5300	NV	50	-12000	-2.264151	20	PASS
11A	ANT1	5310	NV	-30	-6400	-1.205273	20	PASS
11A	ANT1	5310	NV	-20	-6200	-1.167608	20	PASS
11A	ANT1	5310	NV	-10	-6000	-1.129944	20	PASS
11A	ANT1	5310	NV	0	-5800	-1.092279	20	PASS
11A	ANT1	5310	NV	10	-5400	-1.016949	20	PASS
11A	ANT1	5310	NV	20	-5200	-0.979284	20	PASS
11A	ANT1	5310	NV	30	-5000	-0.94162	20	PASS
11A	ANT1	5310	NV	40	-4800	-0.903955	20	PASS
11A	ANT1	5310	NV	50	-4600	-0.86629	20	PASS
11A	ANT2	5310	NV	-30	-4800	-0.903955	20	PASS
11A	ANT2	5310	NV	-20	-4600	-0.86629	20	PASS
11A	ANT2	5310	NV	-10	-4400	-0.828625	20	PASS
11A	ANT2	5310	NV	0	-4000	-0.753296	20	PASS
11A	ANT2	5310	NV	10	-3800	-0.715631	20	PASS
11A	ANT2	5310	NV	20	-3600	-0.677966	20	PASS
11A	ANT2	5310	NV	30	-3600	-0.677966	20	PASS
11A	ANT2	5310	NV	40	-3600	-0.677966	20	PASS
11A	ANT2	5310	NV	50	-3400	-0.640301	20	PASS
11A	ANT1	5320	NV	-30	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	-20	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	-10	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	0	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	10	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	20	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	30	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	40	-12800	-2.406015	20	PASS
11A	ANT1	5320	NV	50	-12800	-2.406015	20	PASS
11A	ANT2	5320	NV	-30	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	-20	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	-10	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	0	-11800	-2.218045	20	PASS
11A	ANT2	5320	NV	10	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	20	-11800	-2.218045	20	PASS

11A	ANT2	5320	NV	30	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	40	-12000	-2.255639	20	PASS
11A	ANT2	5320	NV	50	-11800	-2.218045	20	PASS
11A	ANT1	5500	NV	-30	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	-20	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	-10	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	0	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	10	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	20	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	30	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	40	-13200	-2.4	20	PASS
11A	ANT1	5500	NV	50	-13200	-2.4	20	PASS
11A	ANT2	5500	NV	-30	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	-20	-12600	-2.290909	20	PASS
11A	ANT2	5500	NV	-10	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	0	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	10	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	20	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	30	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	40	-12400	-2.254545	20	PASS
11A	ANT2	5500	NV	50	-12400	-2.254545	20	PASS
11A	ANT1	5510	NV	-30	-6000	-1.088929	20	PASS
11A	ANT1	5510	NV	-20	-5800	-1.052632	20	PASS
11A	ANT1	5510	NV	-10	-5600	-1.016334	20	PASS
11A	ANT1	5510	NV	0	-5400	-0.980036	20	PASS
11A	ANT1	5510	NV	10	-5000	-0.907441	20	PASS
11A	ANT1	5510	NV	20	-5000	-0.907441	20	PASS
11A	ANT1	5510	NV	30	-5000	-0.907441	20	PASS
11A	ANT1	5510	NV	40	-5000	-0.907441	20	PASS
11A	ANT1	5510	NV	50	-4800	-0.871143	20	PASS
11A	ANT2	5510	NV	-30	-4200	-0.76225	20	PASS
11A	ANT2	5510	NV	-20	-4000	-0.725953	20	PASS
11A	ANT2	5510	NV	-10	-3600	-0.653358	20	PASS
11A	ANT2	5510	NV	0	-3400	-0.61706	20	PASS
11A	ANT2	5510	NV	10	-3200	-0.580762	20	PASS
11A	ANT2	5510	NV	20	-3000	-0.544465	20	PASS
11A	ANT2	5510	NV	30	-3000	-0.544465	20	PASS
11A	ANT2	5510	NV	40	-2600	-0.471869	20	PASS
11A	ANT2	5510	NV	50	-2200	-0.399274	20	PASS
11A	ANT1	5530	NV	-30	3200	0.578662	20	PASS
11A	ANT1	5530	NV	-20	3800	0.687161	20	PASS
11A	ANT1	5530	NV	-10	4200	0.759494	20	PASS
11A	ANT1	5530	NV	0	4400	0.79566	20	PASS
11A	ANT1	5530	NV	10	4600	0.831826	20	PASS
11A	ANT1	5530	NV	20	5000	0.904159	20	PASS
11A	ANT1	5530	NV	30	5400	0.976492	20	PASS
11A	ANT1	5530	NV	40	6000	1.084991	20	PASS
11A	ANT1	5530	NV	50	6000	1.084991	20	PASS
11A	ANT2	5530	NV	-30	4000	0.723327	20	PASS
11A	ANT2	5530	NV	-20	4400	0.79566	20	PASS
11A	ANT2	5530	NV	-10	4800	0.867993	20	PASS

11A	ANT2	5530	NV	0	5400	0.976492	20	PASS
11A	ANT2	5530	NV	10	5600	1.012658	20	PASS
11A	ANT2	5530	NV	20	5600	1.012658	20	PASS
11A	ANT2	5530	NV	30	5800	1.048825	20	PASS
11A	ANT2	5530	NV	40	6000	1.084991	20	PASS
11A	ANT2	5530	NV	50	6200	1.121157	20	PASS
11A	ANT1	5550	NV	-30	-4800	-0.864865	20	PASS
11A	ANT1	5550	NV	-20	-4000	-0.720721	20	PASS
11A	ANT1	5550	NV	-10	-3800	-0.684685	20	PASS
11A	ANT1	5550	NV	0	-3200	-0.576577	20	PASS
11A	ANT1	5550	NV	10	-2400	-0.432432	20	PASS
11A	ANT1	5550	NV	20	-2000	-0.36036	20	PASS
11A	ANT1	5550	NV	30	-1200	-0.216216	20	PASS
11A	ANT1	5550	NV	40	-800	-0.144144	20	PASS
11A	ANT1	5550	NV	50	-400	-0.072072	20	PASS
11A	ANT2	5550	NV	-30	-2600	-0.468468	20	PASS
11A	ANT2	5550	NV	-20	-1800	-0.324324	20	PASS
11A	ANT2	5550	NV	-10	-1200	-0.216216	20	PASS
11A	ANT2	5550	NV	0	-800	-0.144144	20	PASS
11A	ANT2	5550	NV	10	-200	-0.036036	20	PASS
11A	ANT2	5550	NV	20	200	0.036036	20	PASS
11A	ANT2	5550	NV	30	400	0.072072	20	PASS
11A	ANT2	5550	NV	40	600	0.108108	20	PASS
11A	ANT2	5550	NV	50	800	0.144144	20	PASS
11A	ANT1	5580	NV	-30	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	-20	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	-10	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	0	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	10	-13000	-2.329749	20	PASS
11A	ANT1	5580	NV	20	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	30	-13000	-2.329749	20	PASS
11A	ANT1	5580	NV	40	-13200	-2.365591	20	PASS
11A	ANT1	5580	NV	50	-13000	-2.329749	20	PASS
11A	ANT2	5580	NV	-30	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	-20	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	-10	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	0	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	10	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	20	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	30	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	40	-12400	-2.222222	20	PASS
11A	ANT2	5580	NV	50	-12400	-2.222222	20	PASS
11A	ANT1	5610	NV	-30	3800	0.677362	20	PASS
11A	ANT1	5610	NV	-20	4600	0.819964	20	PASS
11A	ANT1	5610	NV	-10	5400	0.962567	20	PASS
11A	ANT1	5610	NV	0	5800	1.033868	20	PASS
11A	ANT1	5610	NV	10	6400	1.14082	20	PASS
11A	ANT1	5610	NV	20	6800	1.212121	20	PASS
11A	ANT1	5610	NV	30	7200	1.283422	20	PASS
11A	ANT1	5610	NV	40	7600	1.354724	20	PASS
11A	ANT1	5610	NV	50	8000	1.426025	20	PASS

11A	ANT2	5610	NV	-30	5400	0.962567	20	PASS
11A	ANT2	5610	NV	-20	6000	1.069519	20	PASS
11A	ANT2	5610	NV	-10	6400	1.14082	20	PASS
11A	ANT2	5610	NV	0	6600	1.176471	20	PASS
11A	ANT2	5610	NV	10	7000	1.247772	20	PASS
11A	ANT2	5610	NV	20	7200	1.283422	20	PASS
11A	ANT2	5610	NV	30	7400	1.319073	20	PASS
11A	ANT2	5610	NV	40	7800	1.390374	20	PASS
11A	ANT2	5610	NV	50	7800	1.390374	20	PASS
11A	ANT1	5670	NV	-30	-2000	-0.352734	20	PASS
11A	ANT1	5670	NV	-20	-1000	-0.176367	20	PASS
11A	ANT1	5670	NV	-10	-400	-0.070547	20	PASS
11A	ANT1	5670	NV	0	0	0	20	PASS
11A	ANT1	5670	NV	10	200	0.035273	20	PASS
11A	ANT1	5670	NV	20	200	0.035273	20	PASS
11A	ANT1	5670	NV	30	400	0.070547	20	PASS
11A	ANT1	5670	NV	40	600	0.10582	20	PASS
11A	ANT1	5670	NV	50	800	0.141093	20	PASS
11A	ANT2	5670	NV	-30	1400	0.246914	20	PASS
11A	ANT2	5670	NV	-20	1600	0.282187	20	PASS
11A	ANT2	5670	NV	-10	2000	0.352734	20	PASS
11A	ANT2	5670	NV	0	2200	0.388007	20	PASS
11A	ANT2	5670	NV	10	2400	0.42328	20	PASS
11A	ANT2	5670	NV	20	2600	0.458554	20	PASS
11A	ANT2	5670	NV	30	2800	0.493827	20	PASS
11A	ANT2	5670	NV	40	3000	0.529101	20	PASS
11A	ANT2	5670	NV	50	3200	0.564374	20	PASS
11A	ANT1	5700	NV	-30	-13600	-2.385965	20	PASS
11A	ANT1	5700	NV	-20	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	-10	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	0	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	10	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	20	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	30	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	40	-13400	-2.350877	20	PASS
11A	ANT1	5700	NV	50	-13400	-2.350877	20	PASS
11A	ANT2	5700	NV	-30	-12600	-2.210526	20	PASS
11A	ANT2	5700	NV	-20	-12400	-2.175439	20	PASS
11A	ANT2	5700	NV	-10	-12400	-2.175439	20	PASS
11A	ANT2	5700	NV	0	-12200	-2.140351	20	PASS
11A	ANT2	5700	NV	10	-12200	-2.140351	20	PASS
11A	ANT2	5700	NV	20	-12200	-2.140351	20	PASS
11A	ANT2	5700	NV	30	-12200	-2.140351	20	PASS
11A	ANT2	5700	NV	40	-12200	-2.140351	20	PASS
11A	ANT2	5700	NV	50	-12200	-2.140351	20	PASS
11A	ANT1	5745	NV	-30	-13600	-2.367276	20	PASS
11A	ANT1	5745	NV	-20	-13600	-2.367276	20	PASS
11A	ANT1	5745	NV	-10	-13600	-2.367276	20	PASS
11A	ANT1	5745	NV	0	-13400	-2.332463	20	PASS
11A	ANT1	5745	NV	10	-13400	-2.332463	20	PASS
11A	ANT1	5745	NV	20	-13400	-2.332463	20	PASS

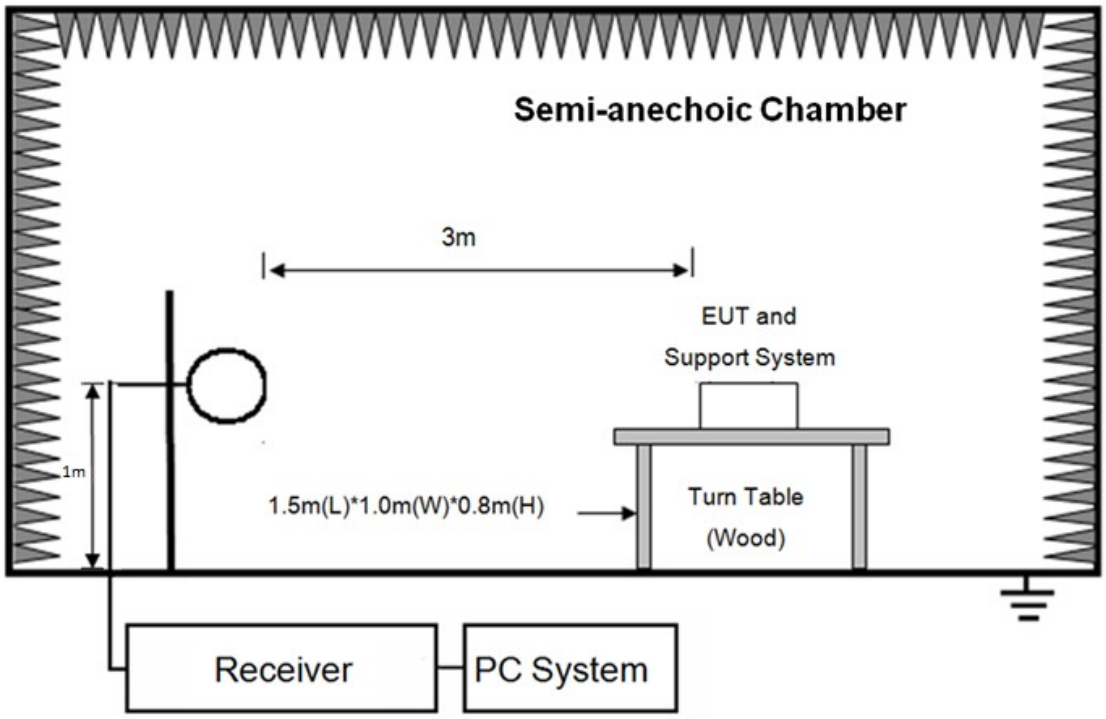
11A	ANT1	5745	NV	30	-13400	-2.332463	20	PASS
11A	ANT1	5745	NV	40	-13400	-2.332463	20	PASS
11A	ANT1	5745	NV	50	-13400	-2.332463	20	PASS
11A	ANT2	5745	NV	-30	-12200	-2.123586	20	PASS
11A	ANT2	5745	NV	-20	-12200	-2.123586	20	PASS
11A	ANT2	5745	NV	-10	-12200	-2.123586	20	PASS
11A	ANT2	5745	NV	0	-12200	-2.123586	20	PASS
11A	ANT2	5745	NV	10	-12000	-2.088773	20	PASS
11A	ANT2	5745	NV	20	-12200	-2.123586	20	PASS
11A	ANT2	5745	NV	30	-12000	-2.088773	20	PASS
11A	ANT2	5745	NV	40	-12000	-2.088773	20	PASS
11A	ANT2	5745	NV	50	-12000	-2.088773	20	PASS
11A	ANT1	5755	NV	-30	800	0.13901	20	PASS
11A	ANT1	5755	NV	-20	1200	0.208514	20	PASS
11A	ANT1	5755	NV	-10	1400	0.243267	20	PASS
11A	ANT1	5755	NV	0	1600	0.278019	20	PASS
11A	ANT1	5755	NV	10	1600	0.278019	20	PASS
11A	ANT1	5755	NV	20	1600	0.278019	20	PASS
11A	ANT1	5755	NV	30	1600	0.278019	20	PASS
11A	ANT1	5755	NV	40	1400	0.243267	20	PASS
11A	ANT1	5755	NV	50	1400	0.243267	20	PASS
11A	ANT2	5755	NV	-30	3000	0.521286	20	PASS
11A	ANT2	5755	NV	-20	3200	0.556038	20	PASS
11A	ANT2	5755	NV	-10	3600	0.625543	20	PASS
11A	ANT2	5755	NV	0	3800	0.660295	20	PASS
11A	ANT2	5755	NV	10	4000	0.695048	20	PASS
11A	ANT2	5755	NV	20	4200	0.7298	20	PASS
11A	ANT2	5755	NV	30	4200	0.7298	20	PASS
11A	ANT2	5755	NV	40	4200	0.7298	20	PASS
11A	ANT2	5755	NV	50	4000	0.695048	20	PASS
11A	ANT1	5775	NV	-30	6400	1.108225	20	PASS
11A	ANT1	5775	NV	-20	6800	1.177489	20	PASS
11A	ANT1	5775	NV	-10	7400	1.281385	20	PASS
11A	ANT1	5775	NV	0	8000	1.385281	20	PASS
11A	ANT1	5775	NV	10	8600	1.489177	20	PASS
11A	ANT1	5775	NV	20	8800	1.52381	20	PASS
11A	ANT1	5775	NV	30	9000	1.558442	20	PASS
11A	ANT1	5775	NV	40	9400	1.627706	20	PASS
11A	ANT1	5775	NV	50	9800	1.69697	20	PASS
11A	ANT2	5775	NV	-30	6400	1.108225	20	PASS
11A	ANT2	5775	NV	-20	7000	1.212121	20	PASS
11A	ANT2	5775	NV	-10	7200	1.246753	20	PASS
11A	ANT2	5775	NV	0	7600	1.316017	20	PASS
11A	ANT2	5775	NV	10	7800	1.350649	20	PASS
11A	ANT2	5775	NV	20	8200	1.419913	20	PASS
11A	ANT2	5775	NV	30	8600	1.489177	20	PASS
11A	ANT2	5775	NV	40	8600	1.489177	20	PASS
11A	ANT2	5775	NV	50	9000	1.558442	20	PASS
11A	ANT1	5785	NV	-30	-13400	-2.316335	20	PASS
11A	ANT1	5785	NV	-20	-13400	-2.316335	20	PASS
11A	ANT1	5785	NV	-10	-13400	-2.316335	20	PASS

11A	ANT1	5785	NV	0	-13400	-2.316335	20	PASS
11A	ANT1	5785	NV	10	-13200	-2.281763	20	PASS
11A	ANT1	5785	NV	20	-13200	-2.281763	20	PASS
11A	ANT1	5785	NV	30	-13200	-2.281763	20	PASS
11A	ANT1	5785	NV	40	-13200	-2.281763	20	PASS
11A	ANT1	5785	NV	50	-13200	-2.281763	20	PASS
11A	ANT2	5785	NV	-30	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	-20	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	-10	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	0	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	10	-12200	-2.108902	20	PASS
11A	ANT2	5785	NV	20	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	30	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	40	-12400	-2.143475	20	PASS
11A	ANT2	5785	NV	50	-12400	-2.143475	20	PASS
11A	ANT1	5795	NV	-30	-200	-0.034513	20	PASS
11A	ANT1	5795	NV	-20	0	0	20	PASS
11A	ANT1	5795	NV	-10	400	0.069025	20	PASS
11A	ANT1	5795	NV	0	600	0.103538	20	PASS
11A	ANT1	5795	NV	10	600	0.103538	20	PASS
11A	ANT1	5795	NV	20	600	0.103538	20	PASS
11A	ANT1	5795	NV	30	600	0.103538	20	PASS
11A	ANT1	5795	NV	40	600	0.103538	20	PASS
11A	ANT1	5795	NV	50	600	0.103538	20	PASS
11A	ANT2	5795	NV	-30	1800	0.310613	20	PASS
11A	ANT2	5795	NV	-20	2000	0.345125	20	PASS
11A	ANT2	5795	NV	-10	2000	0.345125	20	PASS
11A	ANT2	5795	NV	0	2000	0.345125	20	PASS
11A	ANT2	5795	NV	10	1800	0.310613	20	PASS
11A	ANT2	5795	NV	20	1600	0.2761	20	PASS
11A	ANT2	5795	NV	30	1600	0.2761	20	PASS
11A	ANT2	5795	NV	40	1600	0.2761	20	PASS
11A	ANT2	5795	NV	50	1600	0.2761	20	PASS
11A	ANT1	5825	NV	-30	-13400	-2.300429	20	PASS
11A	ANT1	5825	NV	-20	-13200	-2.266094	20	PASS
11A	ANT1	5825	NV	-10	-13400	-2.300429	20	PASS
11A	ANT1	5825	NV	0	-13200	-2.266094	20	PASS
11A	ANT1	5825	NV	10	-13200	-2.266094	20	PASS
11A	ANT1	5825	NV	20	-13200	-2.266094	20	PASS
11A	ANT1	5825	NV	30	-13400	-2.300429	20	PASS
11A	ANT1	5825	NV	40	-13400	-2.300429	20	PASS
11A	ANT1	5825	NV	50	-13400	-2.300429	20	PASS
11A	ANT2	5825	NV	-30	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	-20	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	-10	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	0	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	10	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	20	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	30	-13000	-2.23176	20	PASS
11A	ANT2	5825	NV	40	-13200	-2.266094	20	PASS
11A	ANT2	5825	NV	50	-13200	-2.266094	20	PASS

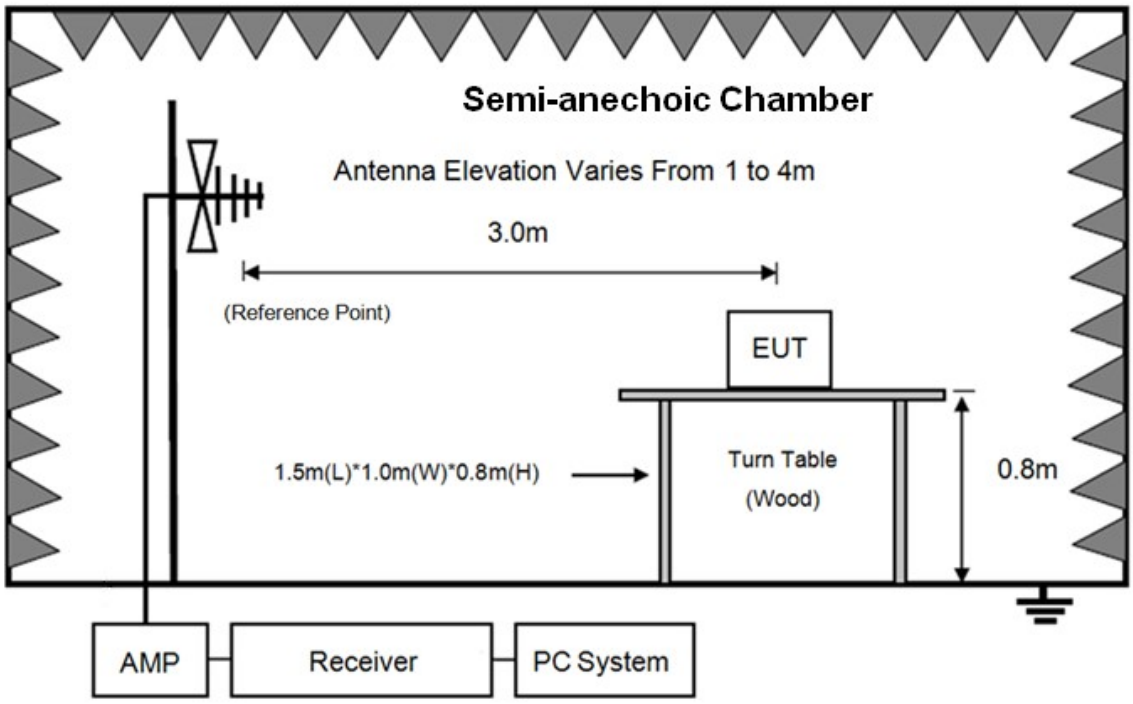
8. Emissions in restricted frequency bands

8.1. Block diagram of test setup

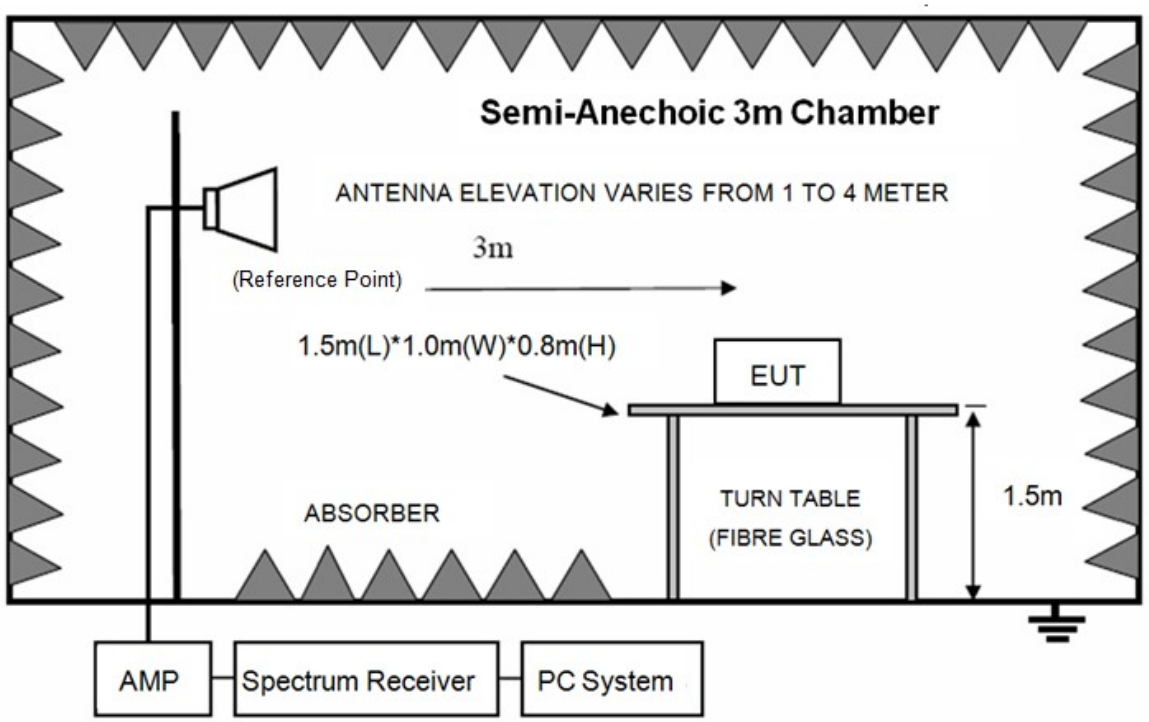
In 3m Anechoic Chamber Test Setup Diagram for 9kHz-30MHz



In 3m Anechoic Chamber Test Setup Diagram for 30MHz-1GHz



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

8.2. Limit

8.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

8.3.2 FCC 15.209 Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz.Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$Limit_{3m}(dBuV/m) = Limit_{30m}(dBuV/m) + 40Log(30m/3m)$$

8.3.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

8.3. Test Procedure

(1) EUT height should be 0.8 m for below 1 GHz at a semi‐anechoic chamber while EUT height should be 1.5 m for above 1GHz at full chamber or semi‐anechoic chamber ground with absorbers

(2) Setup EUT and assistant system according clause 2.3 and 8.2

(3) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test distance
9 kHz-30 MHz	Active Loop antenna	3 m
30 MHz-1 GHz	Trilog Broadband Antenna	3 m
1 GHz-18 GHz	Double Ridged Horn Antenna(1GHz-18GHz)	3 m
18 GHz-40 GHz	Horn Antenna(18GHz-40GHz)	1 m

According ANSI C63.10:2013 clause 6.4.4.2 and 6,5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also

be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30 MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 40 GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 40 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so below final test was performed with frequency range from 30 MHz to 18 GHz.

(5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(6) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz, for emissions from 9 kHz-90kHz,110kHz-490kHz and above 1GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(7) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9 kHz-150 kHz	200 Hz
150 kHz-30 MHz	9 kHz
30 MHz-1 GHz	120 kHz

(8) For emissions above 1 GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3MHz for Peak measure, the RBW is set at 1 MHz, VBW is set at 10 Hz for AV value.

8.4. Test result

PASS. (See below detailed test result)

All the emissions except fundamental emission from 9kHz to 40GHz were comply with 15.209 limit.

Note1: According exploratory test no any obvious emission was detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

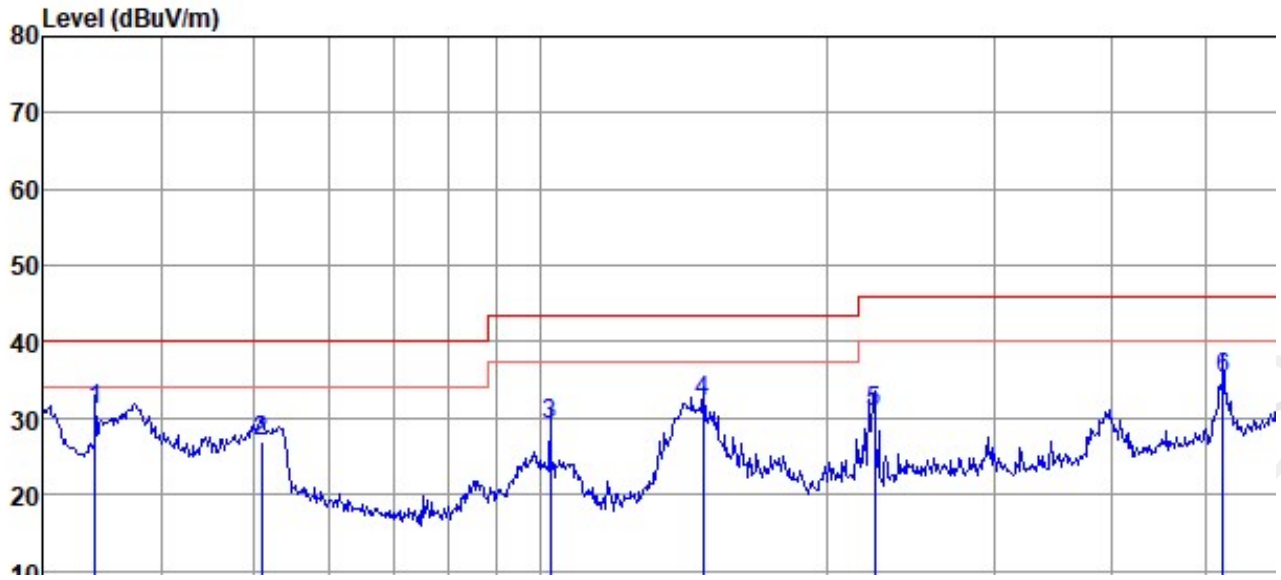
Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in 11a mode.

Note3: For below test data, when the limit tabular marked “/” means this frequency point is the fundamental emission and no need comply with this limit.

Radiated Emission test (below 1GHz)

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC BELOW1G.EM6	
Test Date	: 2019-11-03	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 120 V/ 60Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:101.4kPa	**Antenna/Distance**	: 2018 VULB 9163 1#/3m/VERTICAL
Memo	:		

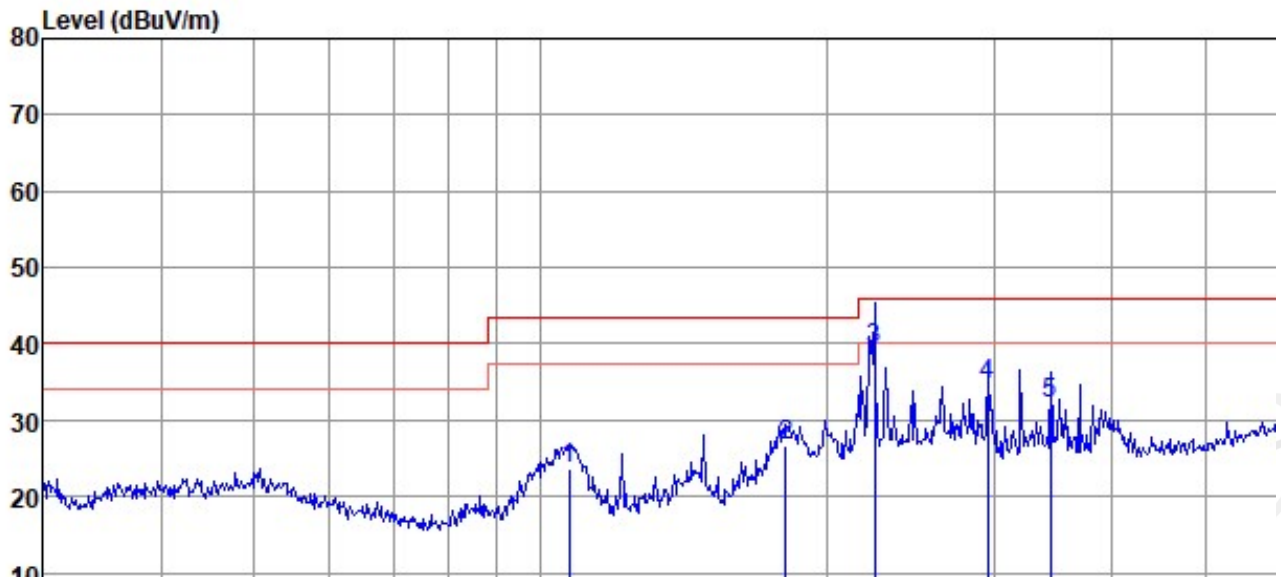


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	34.04	15.21	12.11	3.70	31.02	40.00	-8.98	QP	VERTICAL
2	50.94	8.69	14.27	3.88	26.84	40.00	-13.16	QP	VERTICAL
3	102.36	13.18	11.72	4.22	29.12	43.50	-14.38	QP	VERTICAL
4	148.44	19.16	8.45	4.50	32.11	43.50	-11.39	QP	VERTICAL
5	224.52	13.62	12.14	4.90	30.66	46.00	-15.34	QP	VERTICAL
6	522.72	11.85	17.44	5.89	35.18	46.00	-10.82	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC BELOW1G.EM6	
Test Date	: 2019-11-03	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 120 V/ 60Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:101.4kPa	**Antenna/Distance**	: 2018 VULB 9163 1#/3m/HORIZONTAL
Memo	: 5G		



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	107.13	7.75	11.77	4.24	23.76	43.50	-19.74	QP	HORIZONTAL
2	181.28	12.07	9.74	4.74	26.55	43.50	-16.95	QP	HORIZONTAL
3	224.52	22.20	12.14	4.90	39.24	46.00	-6.76	QP	HORIZONTAL
4	295.15	15.68	13.90	5.17	34.75	46.00	-11.25	QP	HORIZONTAL
5	344.39	12.10	14.77	5.34	32.21	46.00	-13.79	QP	HORIZONTAL
6	890.73	7.12	21.61	6.87	35.60	46.00	-10.40	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Radiated Emission test (above 1GHz)

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor(dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH36									
6406.00	45.10	35.19	43.05	6.43	43.67	74.00	-30.33	Peak	HORIZONTAL
8395.00	43.45	36.70	42.37	7.57	45.35	74.00	-28.65	Peak	HORIZONTAL
11251.00	45.31	38.06	41.95	9.03	50.45	74.00	-23.55	Peak	HORIZONTAL
13750.00	44.43	39.61	42.03	11.00	53.01	74.00	-20.99	Peak	HORIZONTAL
14566.00	43.60	40.35	41.73	11.17	53.39	74.00	-20.61	Peak	HORIZONTAL
15960.00	43.58	41.14	42.52	10.26	52.46	74.00	-21.54	Peak	HORIZONTAL
5505.00	44.59	34.30	43.21	6.10	41.78	74.00	-32.22	Peak	VERTICAL
7800.00	45.35	36.14	43.24	7.10	45.35	74.00	-28.65	Peak	VERTICAL
9364.00	45.40	37.03	42.79	8.22	47.86	74.00	-26.14	Peak	VERTICAL
11285.00	45.14	38.13	42.03	9.03	50.27	74.00	-23.73	Peak	VERTICAL
13444.00	44.41	38.92	42.35	10.88	51.86	74.00	-22.14	Peak	VERTICAL
14821.00	43.37	40.56	41.71	11.20	53.42	74.00	-20.58	Peak	VERTICAL
11a CH40									
6644.00	44.81	35.39	43.06	6.32	43.46	74.00	-30.54	Peak	HORIZONTAL
9041.00	44.08	36.83	42.26	7.95	46.60	74.00	-27.40	Peak	HORIZONTAL
11234.00	44.18	38.02	41.91	9.02	49.31	74.00	-24.69	Peak	HORIZONTAL
12050.00	45.47	38.01	42.70	9.18	49.96	74.00	-24.04	Peak	HORIZONTAL
13495.00	44.26	38.99	42.30	10.90	51.85	74.00	-22.15	Peak	HORIZONTAL
14294.00	43.74	40.26	41.74	11.14	53.40	74.00	-20.60	Peak	HORIZONTAL
5556.00	44.86	34.35	43.19	6.15	42.17	74.00	-31.83	Peak	VERTICAL
7851.00	45.39	36.18	43.22	7.16	45.51	74.00	-28.49	Peak	VERTICAL
9364.00	45.40	37.03	42.79	8.22	47.86	74.00	-26.14	Peak	VERTICAL
11285.00	45.14	38.13	42.03	9.03	50.27	74.00	-23.73	Peak	VERTICAL
13444.00	44.95	38.92	42.35	10.88	52.40	74.00	-21.60	Peak	VERTICAL
15059.00	43.37	40.68	41.74	11.16	53.47	74.00	-20.53	Peak	VERTICAL
11a CH48									
5471.00	45.18	34.28	43.24	6.07	42.29	74.00	-31.71	Peak	HORIZONTAL
8259.00	44.69	36.56	42.64	7.49	46.10	74.00	-27.90	Peak	HORIZONTAL
10809.00	44.41	37.58	41.81	8.95	49.13	74.00	-24.87	Peak	HORIZONTAL
12985.00	44.47	38.29	42.83	10.69	50.62	74.00	-23.38	Peak	HORIZONTAL
13920.00	43.77	40.01	41.84	11.07	53.01	74.00	-20.99	Peak	HORIZONTAL
15569.00	43.24	40.60	42.13	10.65	52.36	74.00	-21.64	Peak	HORIZONTAL
5726.00	43.88	34.49	43.13	6.33	41.57	74.00	-32.43	Peak	VERTICAL
8514.00	43.53	36.80	42.16	7.64	45.81	74.00	-28.19	Peak	VERTICAL
10945.00	43.80	37.52	41.49	8.99	48.82	74.00	-25.18	Peak	VERTICAL
12050.00	45.79	38.01	42.70	9.18	50.28	74.00	-23.72	Peak	VERTICAL
13291.00	44.39	38.71	42.52	10.82	51.40	74.00	-22.60	Peak	VERTICAL
15909.00	43.60	41.07	42.47	10.31	52.51	74.00	-21.49	Peak	VERTICAL

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor(dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH52									
5590.00	44.54	34.37	43.18	6.19	41.92	74.00	-32.08	Peak	HORIZONTAL
8259.00	44.60	36.56	42.64	7.49	46.01	74.00	-27.99	Peak	HORIZONTAL
10384.00	44.91	37.63	42.71	8.84	48.67	74.00	-25.33	Peak	HORIZONTAL
12050.00	45.24	38.01	42.70	9.18	49.73	74.00	-24.27	Peak	HORIZONTAL
13444.00	44.79	38.92	42.35	10.88	52.24	74.00	-21.76	Peak	HORIZONTAL
13920.00	43.97	40.01	41.84	11.07	53.21	74.00	-20.79	Peak	HORIZONTAL
4927.00	44.99	33.86	43.74	5.56	40.67	74.00	-33.33	Peak	VERTICAL
7171.00	45.29	35.70	43.21	6.36	44.14	74.00	-29.86	Peak	VERTICAL
7919.00	46.56	36.24	43.19	7.24	46.85	74.00	-27.15	Peak	VERTICAL
10180.00	45.25	37.51	43.00	8.79	48.55	74.00	-25.45	Peak	VERTICAL
12050.00	45.85	38.01	42.70	9.18	50.34	74.00	-23.66	Peak	VERTICAL
13614.00	45.37	39.28	42.17	10.95	53.43	74.00	-20.57	Peak	VERTICAL
11a CH56									
5029.00	44.68	33.92	43.65	5.61	40.56	74.00	-33.44	Peak	HORIZONTAL
6950.00	45.64	35.57	43.13	6.18	44.26	74.00	-29.74	Peak	HORIZONTAL
9279.00	43.81	36.97	42.65	8.15	46.28	74.00	-27.72	Peak	HORIZONTAL
11251.00	44.81	38.06	41.95	9.03	49.95	74.00	-24.05	Peak	HORIZONTAL
12951.00	45.34	38.28	42.84	10.63	51.41	74.00	-22.59	Peak	HORIZONTAL
14260.00	43.33	40.25	41.74	11.13	52.97	74.00	-21.03	Peak	HORIZONTAL
4366.00	45.59	33.42	44.05	5.39	40.35	74.00	-33.65	Peak	VERTICAL
6474.00	44.59	35.27	43.04	6.40	43.22	74.00	-30.78	Peak	VERTICAL
7936.00	45.53	36.25	43.18	7.26	45.86	74.00	-28.14	Peak	VERTICAL
10605.00	43.72	37.66	42.30	8.90	47.98	74.00	-26.02	Peak	VERTICAL
13376.00	44.46	38.83	42.42	10.86	51.73	74.00	-22.27	Peak	VERTICAL
14515.00	43.64	40.31	41.73	11.16	53.38	74.00	-20.62	Peak	VERTICAL
11a CH64									
5675.00	45.44	34.44	43.15	6.28	43.01	74.00	-30.99	Peak	HORIZONTAL
8089.00	46.14	36.39	42.98	7.39	46.94	74.00	-27.06	Peak	HORIZONTAL
10316.00	44.66	37.59	42.81	8.82	48.26	74.00	-25.74	Peak	HORIZONTAL
12934.00	44.16	38.27	42.85	10.60	50.18	74.00	-23.82	Peak	HORIZONTAL
13971.00	43.67	40.13	41.79	11.09	53.10	74.00	-20.90	Peak	HORIZONTAL
15059.00	43.22	40.68	41.74	11.16	53.32	74.00	-20.68	Peak	HORIZONTAL
5114.00	44.90	33.99	43.57	5.70	41.02	74.00	-32.98	Peak	VERTICAL
7970.00	45.47	36.28	43.17	7.30	45.88	74.00	-28.12	Peak	VERTICAL
10435.00	44.70	37.66	42.64	8.85	48.57	74.00	-25.43	Peak	VERTICAL
12050.00	45.45	38.01	42.70	9.18	49.94	74.00	-24.06	Peak	VERTICAL
13444.00	45.26	38.92	42.35	10.88	52.71	74.00	-21.29	Peak	VERTICAL
16181.00	43.86	41.49	42.49	10.32	53.18	74.00	-20.82	Peak	VERTICAL
Conclusion: Pass									

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor(dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH110									
6474.00	45.63	35.27	43.04	6.40	44.26	74.00	-29.74	Peak	HORIZONTAL
9364.00	44.75	37.03	42.79	8.22	47.21	74.00	-26.79	Peak	HORIZONTAL
11744.00	45.43	38.30	42.60	9.07	50.20	74.00	-23.80	Peak	HORIZONTAL
12951.00	46.17	38.28	42.84	10.63	52.24	74.00	-21.76	Peak	HORIZONTAL
14124.00	43.90	40.23	41.75	11.11	53.49	74.00	-20.51	Peak	HORIZONTAL
16436.00	43.03	41.90	42.40	10.46	52.99	74.00	-21.01	Peak	HORIZONTAL
6474.00	45.63	35.27	43.04	6.40	44.26	74.00	-29.74	Peak	VERTICAL
10214.00	45.57	37.53	42.95	8.80	48.95	74.00	-25.05	Peak	VERTICAL
12050.00	45.31	38.01	42.70	9.18	49.80	74.00	-24.20	Peak	VERTICAL
13070.00	44.29	38.40	42.75	10.74	50.68	74.00	-23.32	Peak	VERTICAL
14481.00	43.84	40.30	41.73	11.16	53.57	74.00	-20.43	Peak	VERTICAL
16351.00	43.90	41.76	42.43	10.42	53.65	74.00	-20.35	Peak	VERTICAL
11a CH116									
6474.00	44.31	35.27	43.04	6.40	42.94	74.00	-31.06	Peak	HORIZONTAL
8735.00	43.84	36.80	42.17	7.77	46.24	74.00	-27.76	Peak	HORIZONTAL
11064.00	43.34	37.64	41.51	9.01	48.48	74.00	-25.52	Peak	HORIZONTAL
13240.00	44.46	38.64	42.57	10.80	51.33	74.00	-22.67	Peak	HORIZONTAL
14141.00	43.44	40.23	41.75	11.12	53.04	74.00	-20.96	Peak	HORIZONTAL
16079.00	44.08	41.33	42.53	10.26	53.14	74.00	-20.86	Peak	HORIZONTAL
5675.00	44.71	34.44	43.15	6.28	42.28	74.00	-31.72	Peak	VERTICAL
7171.00	45.05	35.70	43.21	6.36	43.90	74.00	-30.10	Peak	VERTICAL
10316.00	44.31	37.59	42.81	8.82	47.91	74.00	-26.09	Peak	VERTICAL
12356.00	45.11	38.07	42.88	9.67	49.97	74.00	-24.03	Peak	VERTICAL
14056.00	43.28	40.21	41.76	11.11	52.84	74.00	-21.16	Peak	VERTICAL
16351.00	44.03	41.76	42.43	10.42	53.78	74.00	-20.22	Peak	VERTICAL
11a CH140									
6474.00	44.71	35.27	43.04	6.40	43.34	74.00	-30.66	Peak	HORIZONTAL
9415.00	44.40	37.06	42.88	8.26	46.84	74.00	-27.16	Peak	HORIZONTAL
12050.00	46.91	38.01	42.70	9.18	51.40	74.00	-22.60	Peak	HORIZONTAL
13920.00	43.73	40.01	41.84	11.07	52.97	74.00	-21.03	Peak	HORIZONTAL
14821.00	43.26	40.56	41.71	11.20	53.31	74.00	-20.69	Peak	HORIZONTAL
16334.00	43.89	41.74	42.44	10.41	53.60	74.00	-20.40	Peak	HORIZONTAL
5505.00	45.01	34.30	43.21	6.10	42.20	74.00	-31.80	Peak	VERTICAL
8004.00	45.48	36.30	43.15	7.34	45.97	74.00	-28.03	Peak	VERTICAL
9959.00	45.07	37.38	43.23	8.71	47.93	74.00	-26.07	Peak	VERTICAL
12050.00	46.30	38.01	42.70	9.18	50.79	74.00	-23.21	Peak	VERTICAL
13104.00	44.59	38.45	42.72	10.75	51.07	74.00	-22.93	Peak	VERTICAL
14073.00	43.51	40.21	41.76	11.11	53.07	74.00	-20.93	Peak	VERTICAL

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor(dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH149									
8004.00	44.51	36.30	43.15	7.34	45.00	74.00	-29.00	Peak	HORIZONTAL
10588.00	43.68	37.66	42.34	8.89	47.89	74.00	-26.11	Peak	HORIZONTAL
11965.00	46.08	38.04	42.66	9.10	50.56	74.00	-23.44	Peak	HORIZONTAL
13699.00	43.76	39.48	42.08	10.98	52.14	74.00	-21.86	Peak	HORIZONTAL
15195.00	42.99	40.62	41.84	11.03	52.80	74.00	-21.20	Peak	HORIZONTAL
16555.00	43.28	42.12	42.33	10.53	53.60	74.00	-20.40	Peak	HORIZONTAL
6389.00	44.96	35.17	43.06	6.43	43.50	74.00	-30.50	Peak	VERTICAL
8004.00	45.27	36.30	43.15	7.34	45.76	74.00	-28.24	Peak	VERTICAL
9789.00	45.08	37.28	43.15	8.57	47.78	74.00	-26.22	Peak	VERTICAL
11829.00	45.20	38.20	42.62	9.08	49.86	74.00	-24.14	Peak	VERTICAL
13376.00	44.48	38.83	42.42	10.86	51.75	74.00	-22.25	Peak	VERTICAL
16266.00	43.74	41.63	42.46	10.37	53.28	74.00	-20.72	Peak	VERTICAL
11a CH157									
6406.00	45.34	35.19	43.05	6.43	43.91	74.00	-30.09	Peak	HORIZONTAL
8786.00	43.56	36.80	42.18	7.80	45.98	74.00	-28.02	Peak	HORIZONTAL
11285.00	45.06	38.13	42.03	9.03	50.19	74.00	-23.81	Peak	HORIZONTAL
13121.00	44.86	38.47	42.70	10.76	51.39	74.00	-22.61	Peak	HORIZONTAL
14838.00	43.00	40.57	41.71	11.20	53.06	74.00	-20.94	Peak	HORIZONTAL
16555.00	43.17	42.12	42.33	10.53	53.49	74.00	-20.51	Peak	HORIZONTAL
6440.00	44.68	35.23	43.05	6.41	43.27	74.00	-30.73	Peak	VERTICAL
8021.00	45.43	36.32	43.12	7.35	45.98	74.00	-28.02	Peak	VERTICAL
10435.00	44.06	37.66	42.64	8.85	47.93	74.00	-26.07	Peak	VERTICAL
11880.00	44.97	38.14	42.64	9.09	49.56	74.00	-24.44	Peak	VERTICAL
14039.00	43.38	40.21	41.76	11.10	52.93	74.00	-21.07	Peak	VERTICAL
16334.00	43.71	41.74	42.44	10.41	53.42	74.00	-20.58	Peak	VERTICAL
11a CH165									
6950.00	44.79	35.57	43.13	6.18	43.41	74.00	-30.59	Peak	HORIZONTAL
8021.00	45.57	36.32	43.12	7.35	46.12	74.00	-27.88	Peak	HORIZONTAL
10146.00	44.26	37.49	43.05	8.78	47.48	74.00	-26.52	Peak	HORIZONTAL
11319.00	44.99	38.21	42.11	9.03	50.12	74.00	-23.88	Peak	HORIZONTAL
13325.00	44.75	38.76	42.48	10.84	51.87	74.00	-22.13	Peak	HORIZONTAL
16266.00	43.40	41.63	42.46	10.37	52.94	74.00	-21.06	Peak	HORIZONTAL
5981.00	44.66	34.69	43.16	6.59	42.78	74.00	-31.22	Peak	VERTICAL
8650.00	44.76	36.80	42.17	7.72	47.11	74.00	-26.89	Peak	VERTICAL
10350.00	44.29	37.61	42.76	8.83	47.97	74.00	-26.03	Peak	VERTICAL
12050.00	45.29	38.01	42.70	9.18	49.78	74.00	-24.22	Peak	VERTICAL
14090.00	43.45	40.22	41.75	11.11	53.03	74.00	-20.97	Peak	VERTICAL
16181.00	44.07	41.49	42.49	10.32	53.39	74.00	-20.61	Peak	VERTICAL
Conclusion: Pass									

Note: -27 dBm/MHz Limit=95.2+EIRP[dBm]=95.2-27=68.2 dBμV/m
For transmitters operating in the 5150MHz-5250MHz, 5250MHz-5350MHz, 5470MHz-5725MHz, 5725MHz-5850MHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

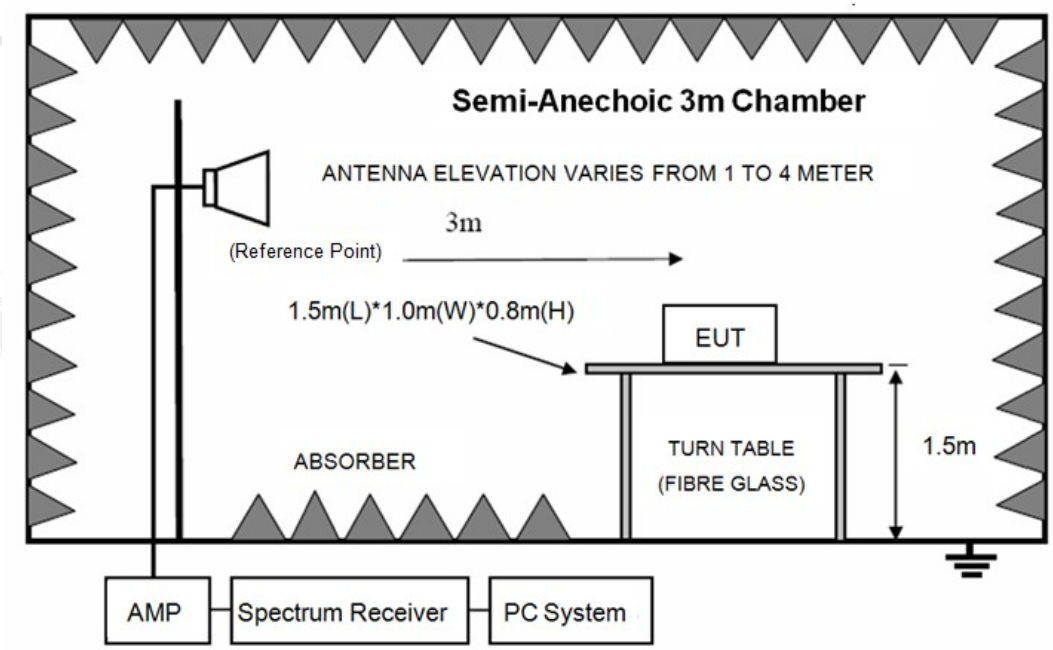
Note: 1. 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40,11ac80 mode all have been tested, only 11a mode is the worst case and reported.)

2. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

9. Band Edge Compliance

9.1. Block diagram of test setup



9.2. Limit

For transmitters operating in the 5.15-5.25 GHz and 5.725-5.85 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
-27 dBm/MHz Limit=95.2+EIRP[dBm]=95.2-27=68.2 dBμV/m

9.3. Test Procedure

Same with clause 8.3 except change investigated frequency range from 5.15-5.25 GHz, 5250-5350 GHz, 5470-5725 GHz, 5.725-5.85 GHz.
Remark: All restriction band have been tested, and only the worst case is shown in report.

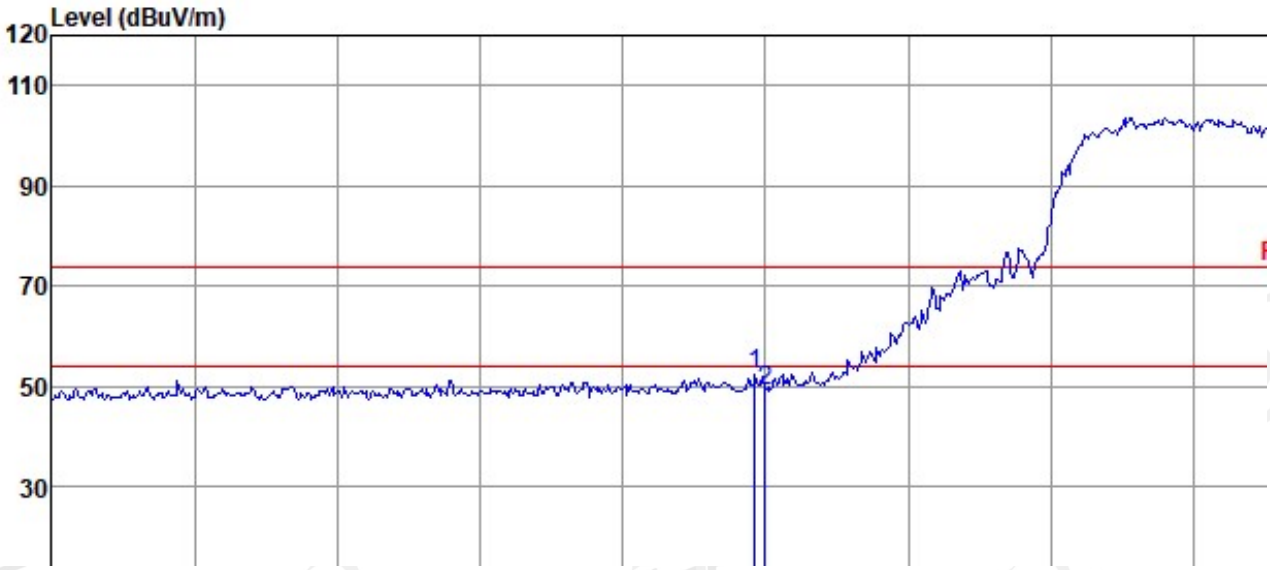
9.4. Test result

PASS. (See below detailed test result)

Note1: As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit
Note2: 11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5180 ANT1		

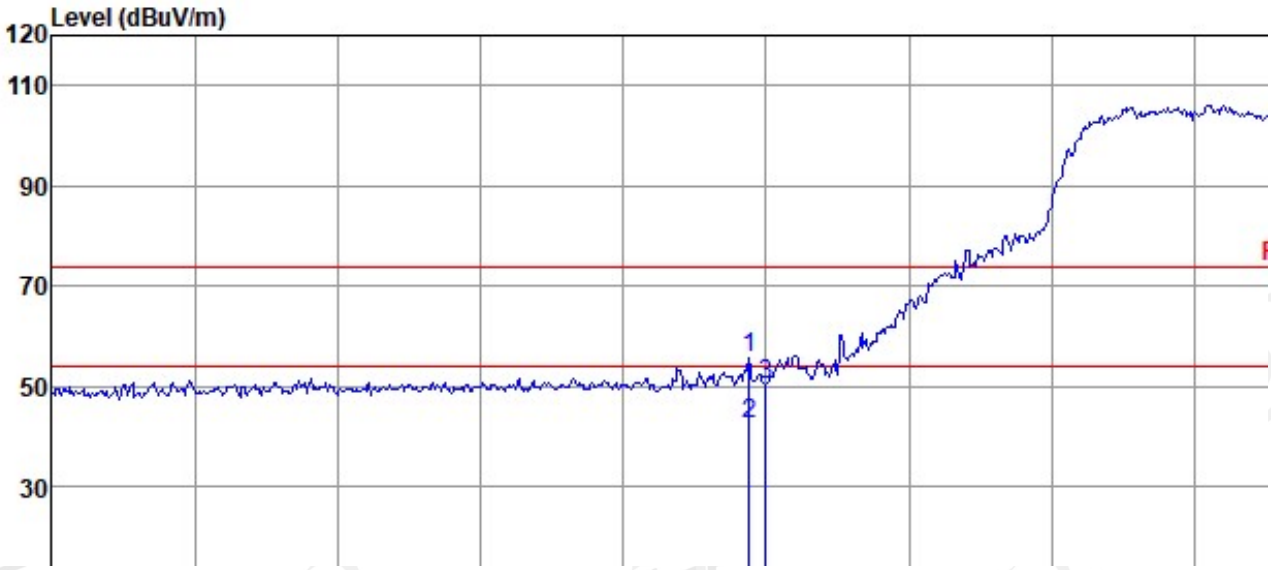


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	5149.30	55.98	34.02	43.53	5.73	52.20	74.00	-21.80	Peak	VERTICAL
2	5150.00	52.98	34.02	43.53	5.73	49.20	74.00	-24.80	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5180 ANT1		

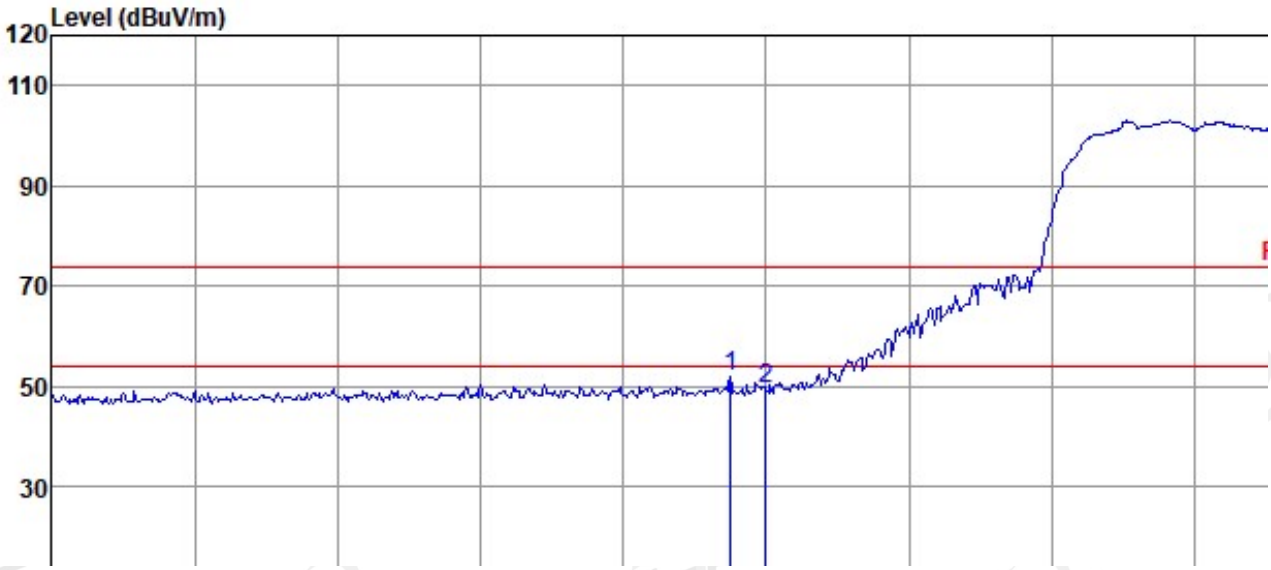


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.80	59.51	34.02	43.53	5.73	55.73	74.00	-18.27	Peak	HORIZONTAL
2	5148.80	46.34	34.02	43.53	5.73	42.56	54.00	-11.44	Average	HORIZONTAL
3	5150.00	53.95	34.02	43.53	5.73	50.17	74.00	-23.83	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5180 ANT2		

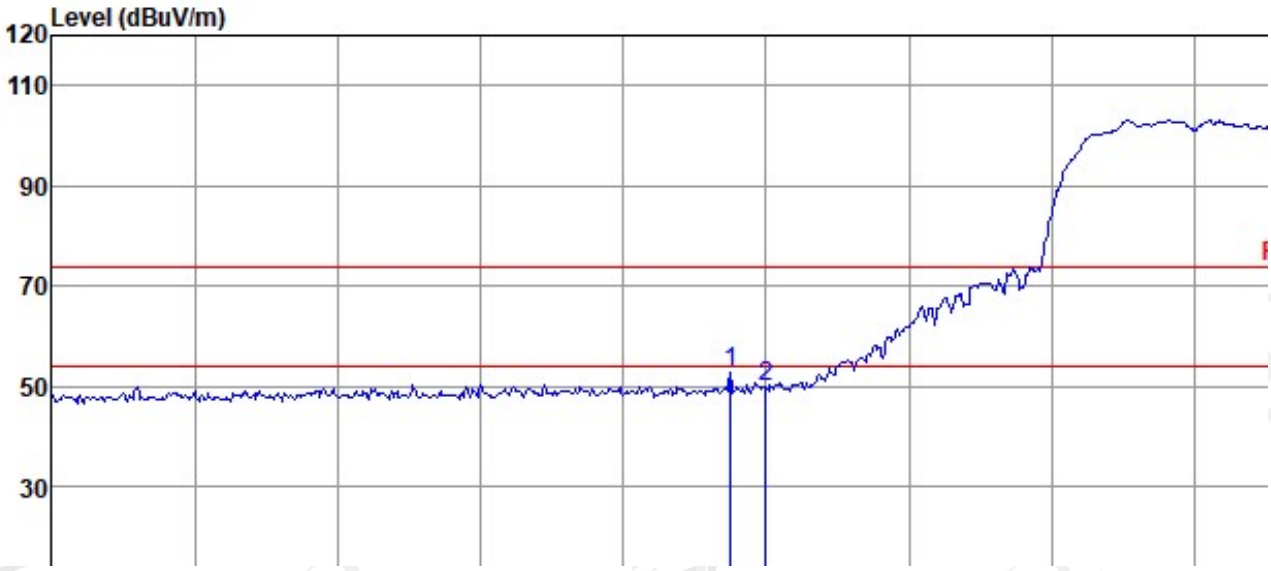


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5147.50	55.62	34.02	43.53	5.73	51.84	74.00	-22.16	Peak	VERTICAL
2	5150.00	53.32	34.02	43.53	5.73	49.54	74.00	-24.46	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5180 ANT2		

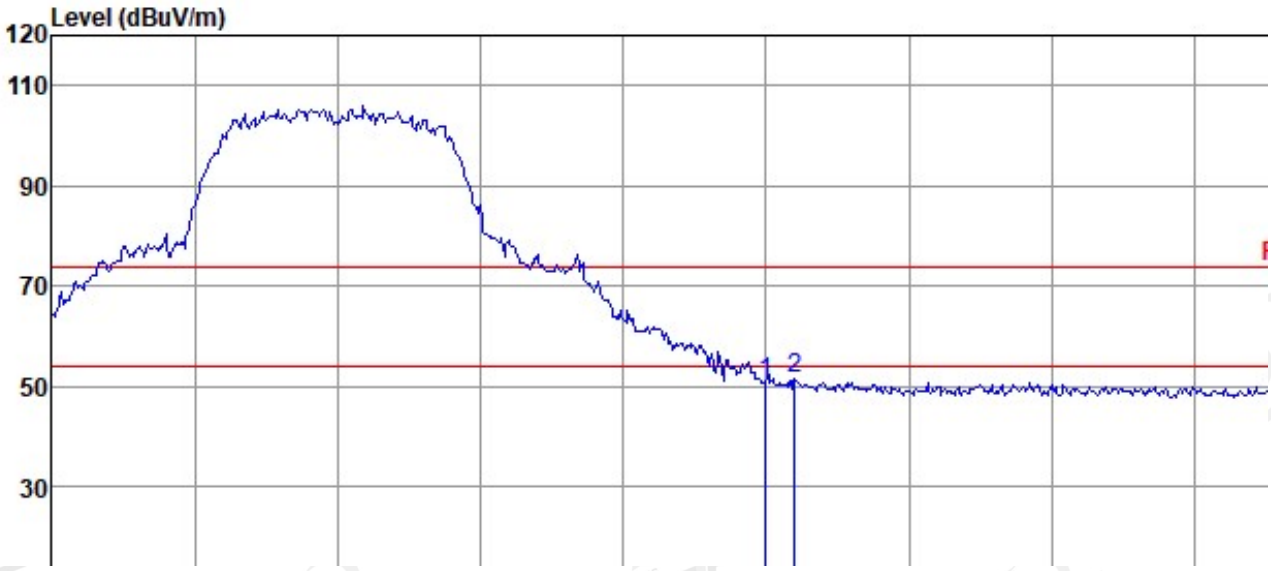


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5147.50	56.62	34.02	43.53	5.73	52.84	74.00	-21.16	Peak	HORIZONTAL
2	5150.00	53.62	34.02	43.53	5.73	49.84	74.00	-24.16	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5320 ANT1		

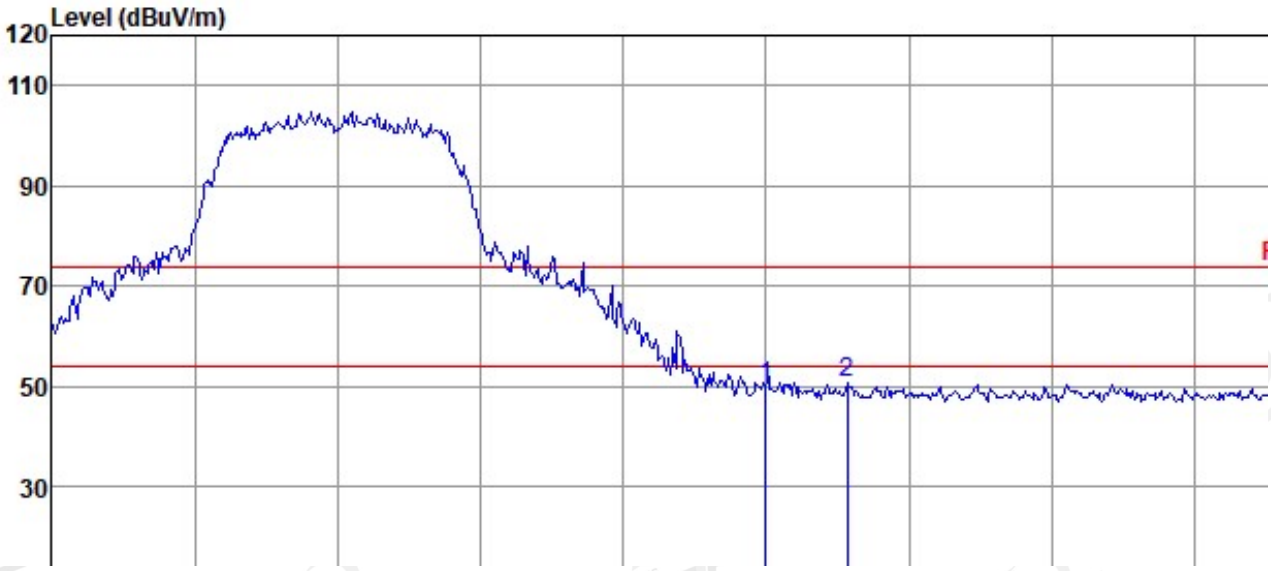


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	54.06	34.18	43.34	5.94	50.84	74.00	-23.16	Peak	HORIZONTAL
2	5352.00	54.95	34.19	43.34	5.94	51.74	74.00	-22.26	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5320 ANT1		

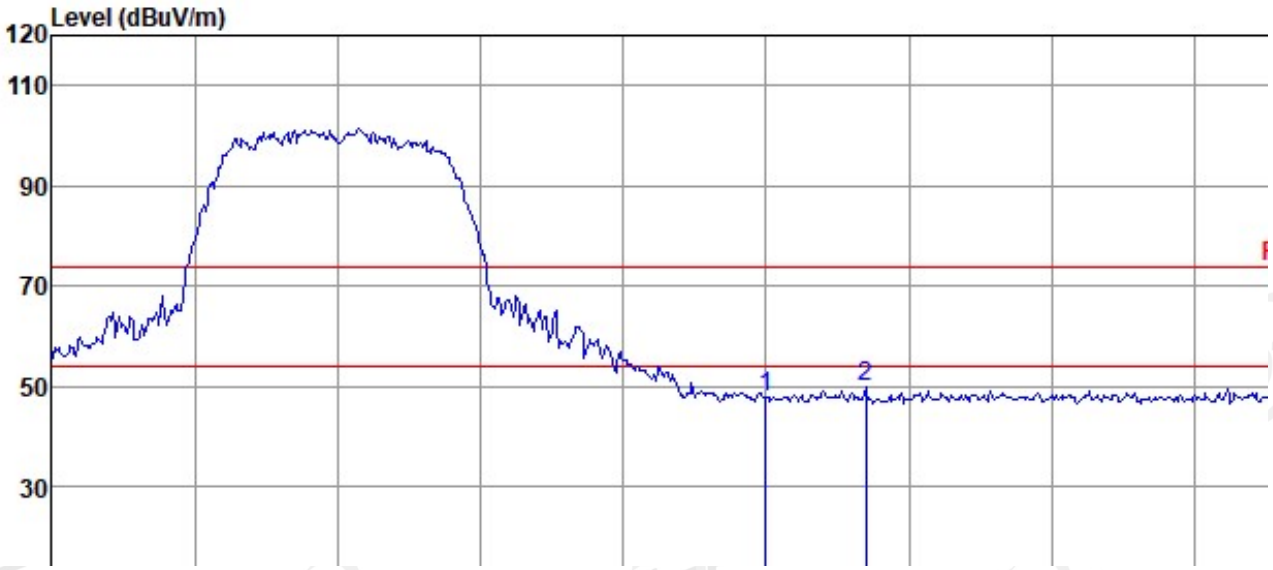


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	53.04	34.18	43.34	5.94	49.82	74.00	-24.18	Peak	VERTICAL
2	5355.70	54.09	34.19	43.34	5.95	50.89	74.00	-23.11	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5320 ANT2		

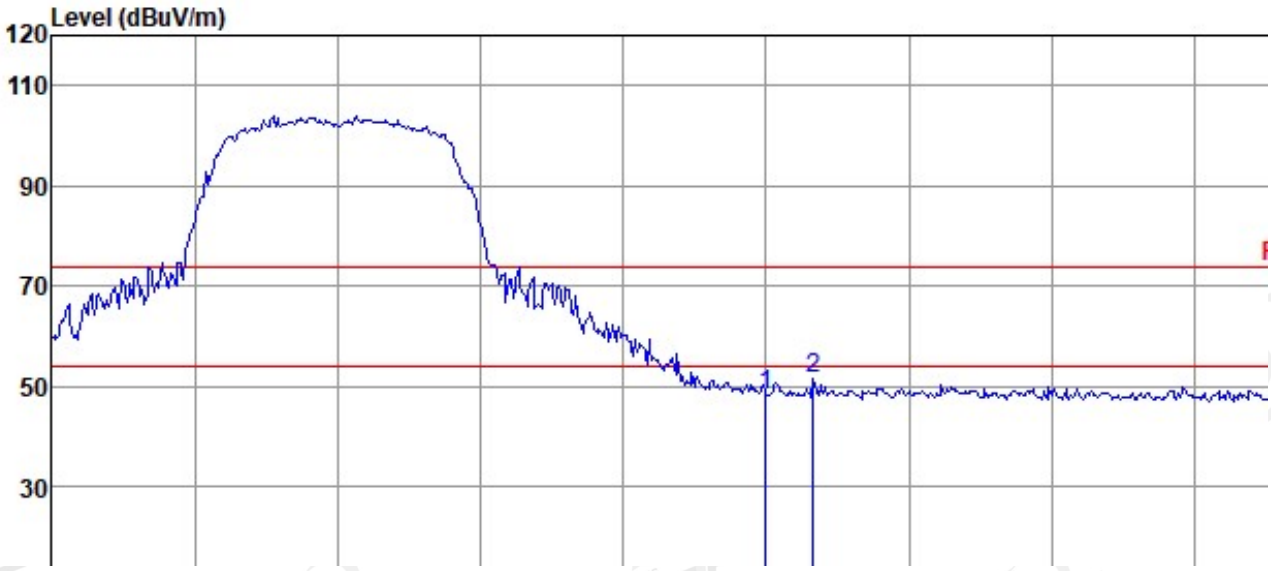


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	51.06	34.18	43.34	5.94	47.84	74.00	-26.16	Peak	VERTICAL
2	5357.00	53.10	34.19	43.34	5.95	49.90	74.00	-24.10	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5320 ANT2		

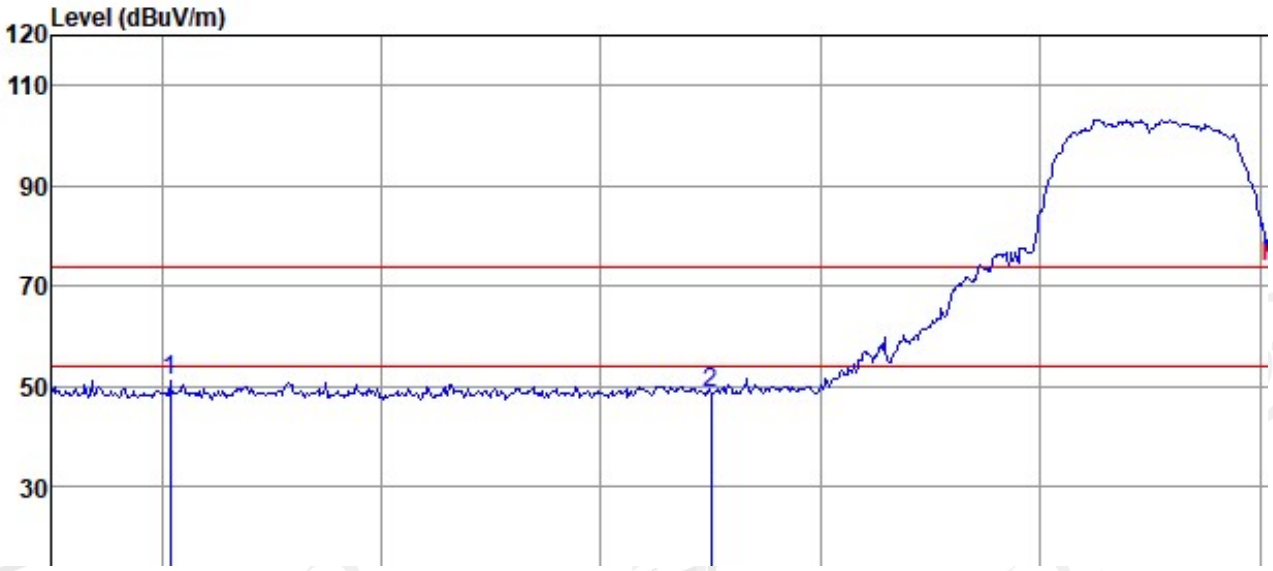


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	51.49	34.18	43.34	5.94	48.27	74.00	-25.73	Peak	HORIZONTAL
2	5353.30	54.77	34.19	43.34	5.94	51.56	74.00	-22.44	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5500 ANT1		

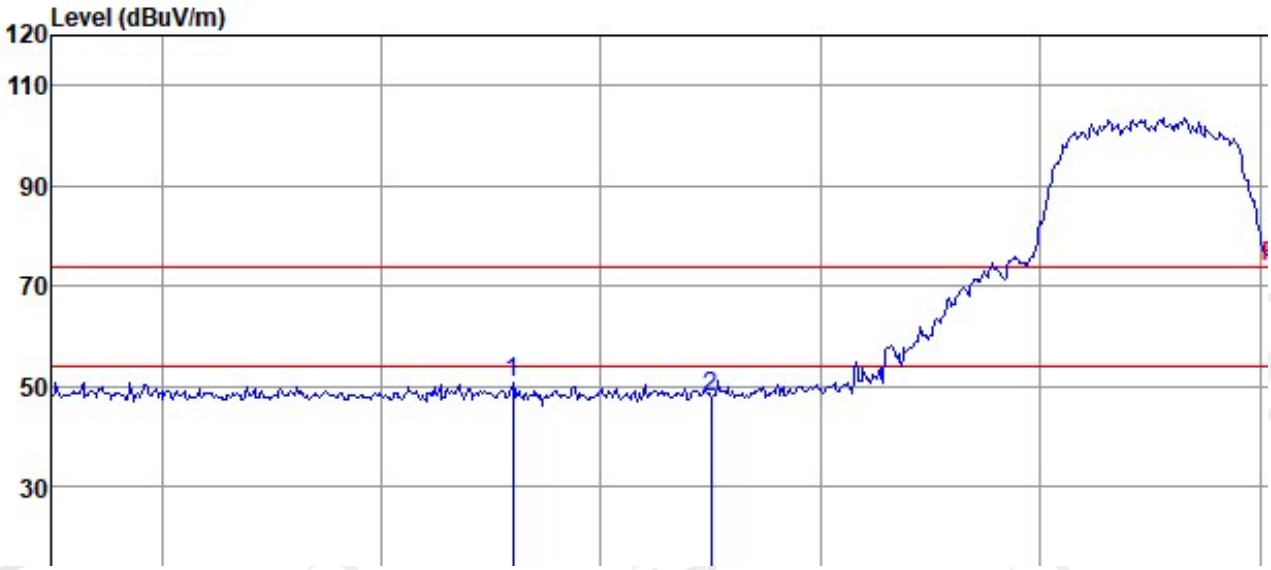


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5410.79	54.22	34.23	43.29	6.00	51.16	74.00	-22.84	Peak	HORIZONTAL
2	5460.00	51.56	34.27	43.25	6.05	48.63	74.00	-25.37	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5500 ANT1		

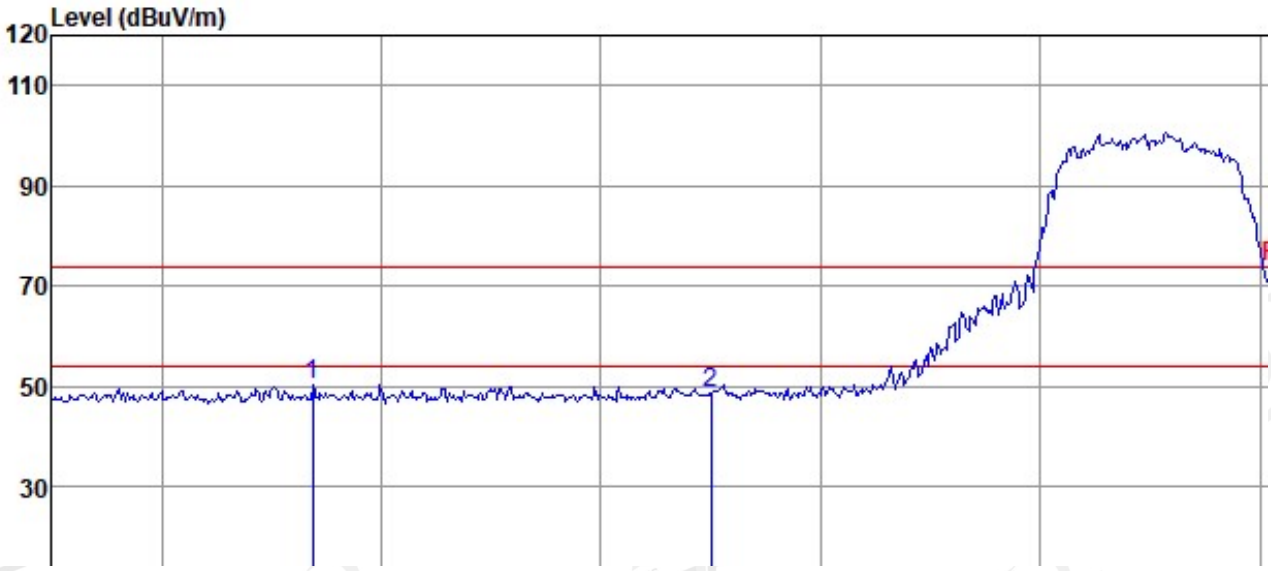


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	5441.99	53.76	34.26	43.26	6.04	50.80	74.00	-23.20	Peak	VERTICAL
2	5460.00	50.95	34.27	43.25	6.05	48.02	74.00	-25.98	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11A 5500 ANT2		

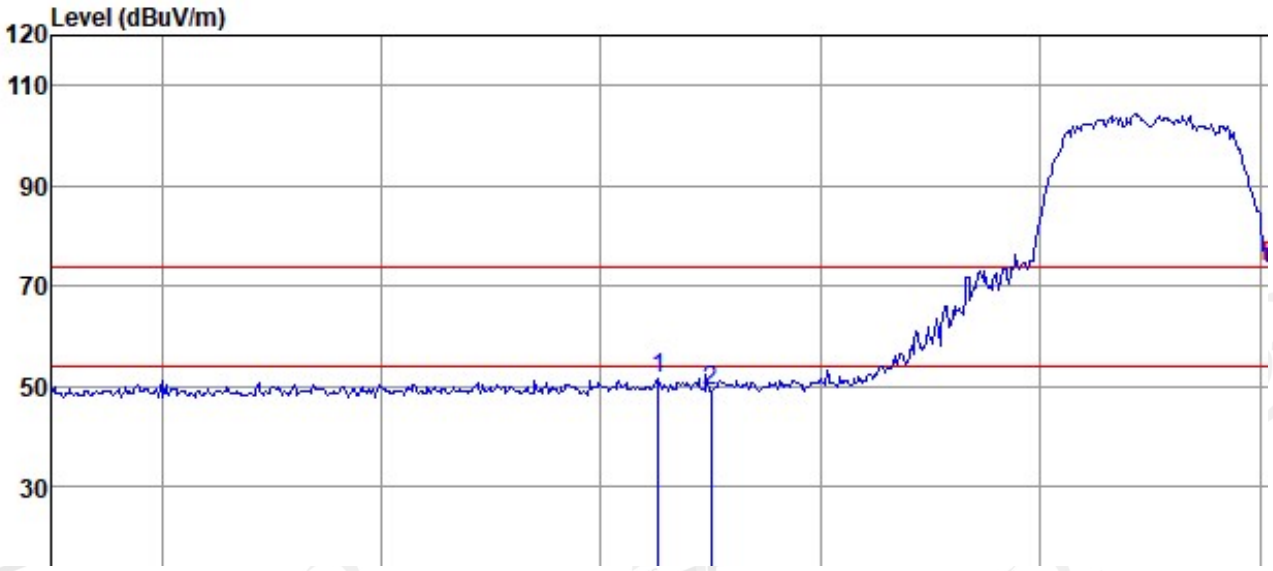


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5423.79	53.16	34.24	43.28	6.02	50.14	74.00	-23.86	Peak	VERTICAL
2	5460.00	51.78	34.27	43.25	6.05	48.85	74.00	-25.15	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11A 5500 ANT2		

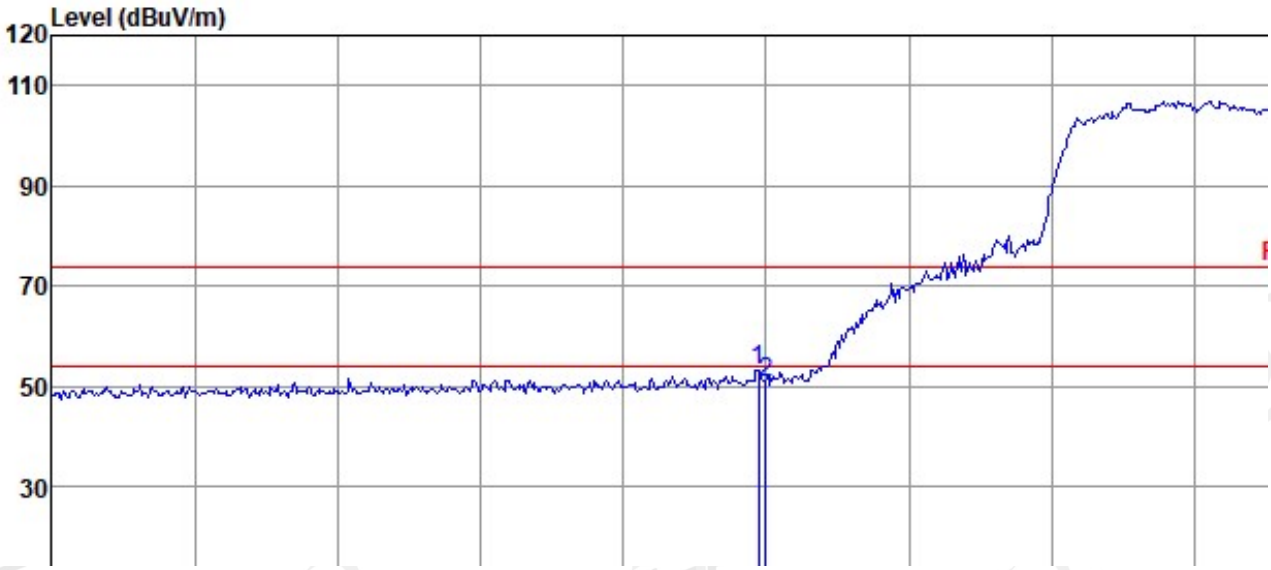


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5455.25	54.66	34.27	43.25	6.05	51.73	74.00	-22.27	Peak	HORIZONTAL
2	5460.00	51.92	34.27	43.25	6.05	48.99	74.00	-25.01	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11N20 5180		

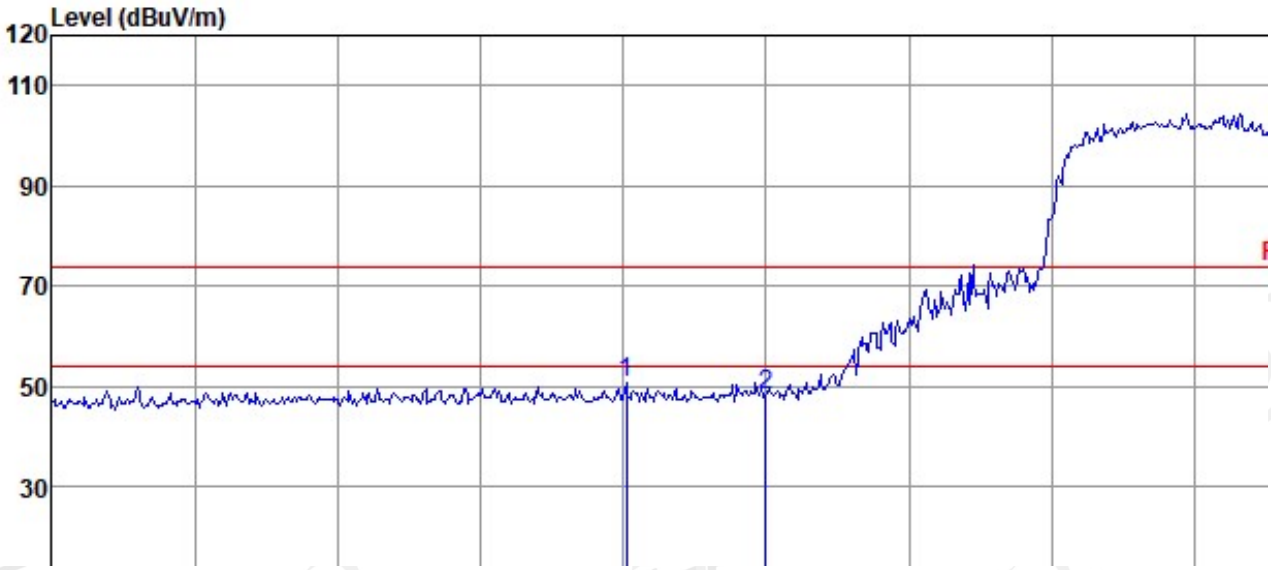


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5149.50	57.03	34.02	43.53	5.73	53.25	74.00	-20.75	Peak	HORIZONTAL
2	5150.00	54.47	34.02	43.53	5.73	50.69	74.00	-23.31	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	:	DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6		
Test Date	:	2019-10-29	**Tested By**	:	Jacky
EUT	:	SOUNDBAR	**Model Number**	:	BAR 9.1 CNTR
Power Supply	:	AC 230V/50Hz	**Test Mode**	:	Tx mode
Condition	:	Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	:	2018 HF 907/3m/VERTICAL
Memo	:	11N20 5180			

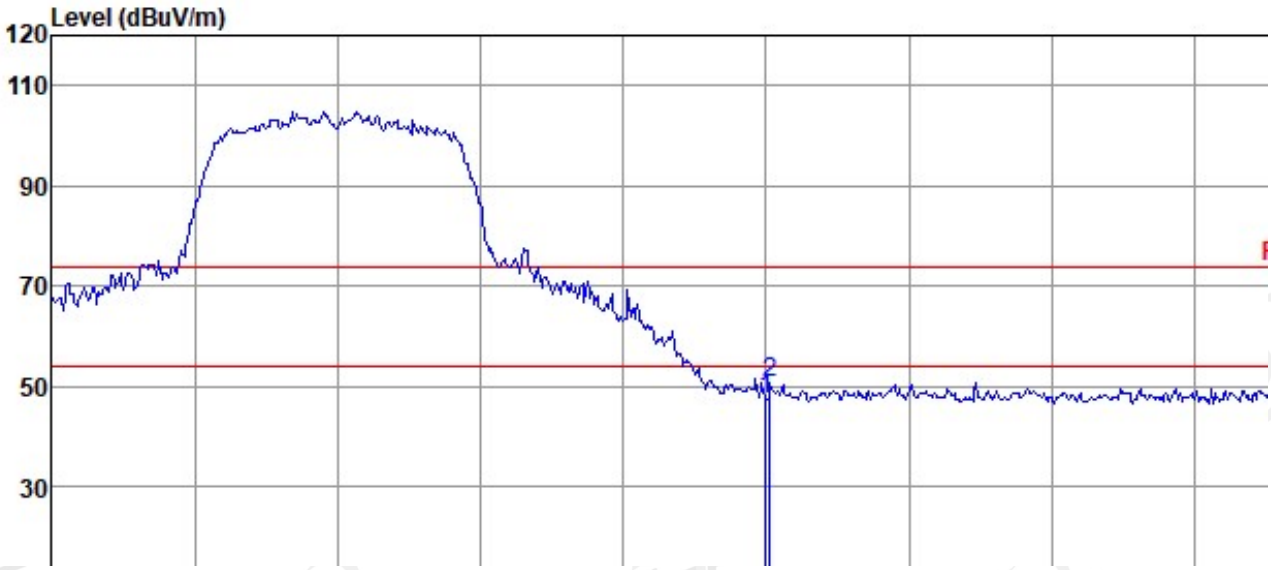


Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5140.20	54.37	34.02	43.54	5.72	50.57	74.00	-23.43	Peak	VERTICAL
2	5150.00	52.06	34.02	43.53	5.73	48.28	74.00	-25.72	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/VERTICAL
Memo	: 11N20 5320		

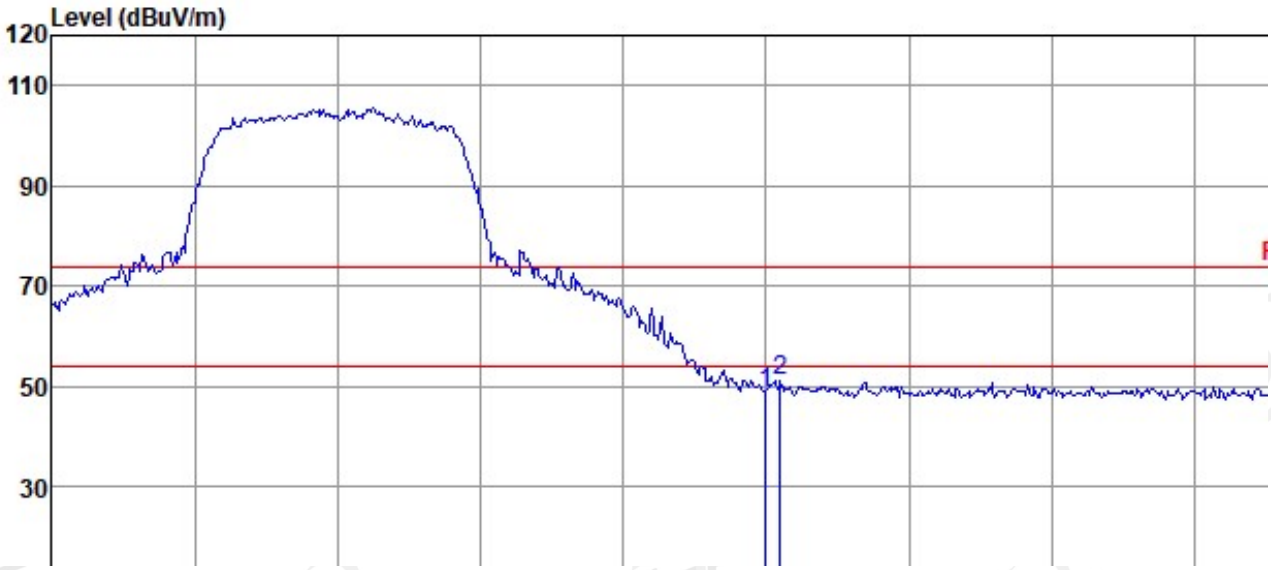


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	50.48	34.18	43.34	5.94	47.26	74.00	-26.74	Peak	VERTICAL
2	5350.30	54.10	34.18	43.34	5.94	50.88	74.00	-23.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2019 RE1# Report Data\Q19080513-1E Bar9.1\FCC ABOVE 1G.EM6	
Test Date	: 2019-10-29	**Tested By**	: Jacky
EUT	: SOUNDBAR	**Model Number**	: BAR 9.1 CNTR
Power Supply	: AC 230V/50Hz	**Test Mode**	: Tx mode
Condition	: Temp:24.5'C,Humi:55%,Press:100.1kPa	**Antenna/Distance**	: 2018 HF 907/3m/HORIZONTAL
Memo	: 11N20 5320		



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	51.76	34.18	43.34	5.94	48.54	74.00	-25.46	Peak	HORIZONTAL
2	5351.00	54.46	34.18	43.34	5.94	51.24	74.00	-22.76	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.