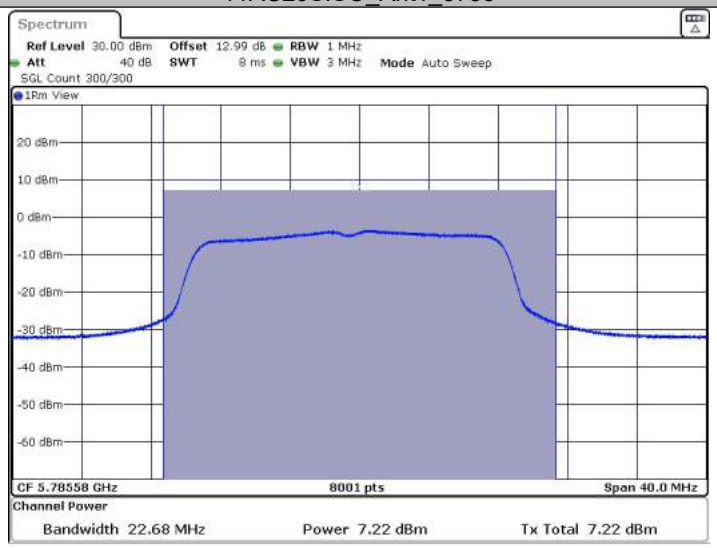
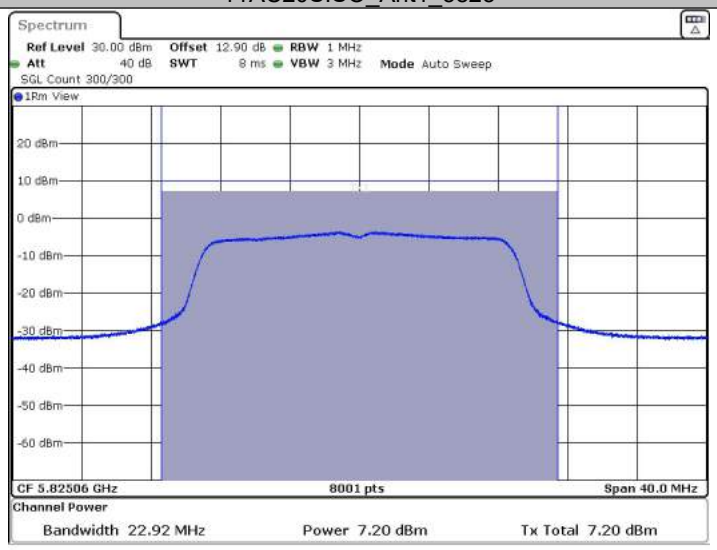
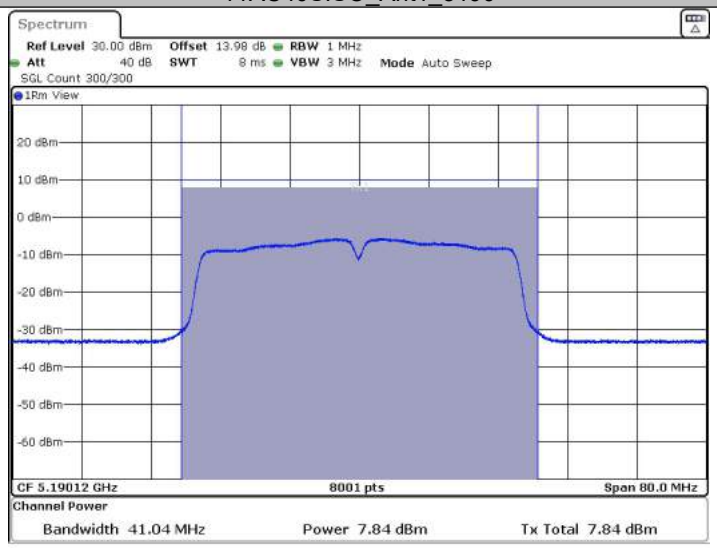
11AC20SISO_Ant1_5785



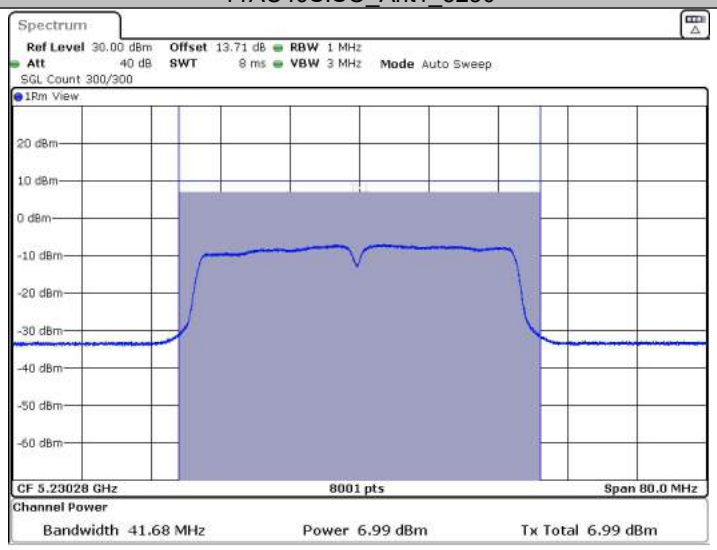
11AC20SISO_Ant1_5825



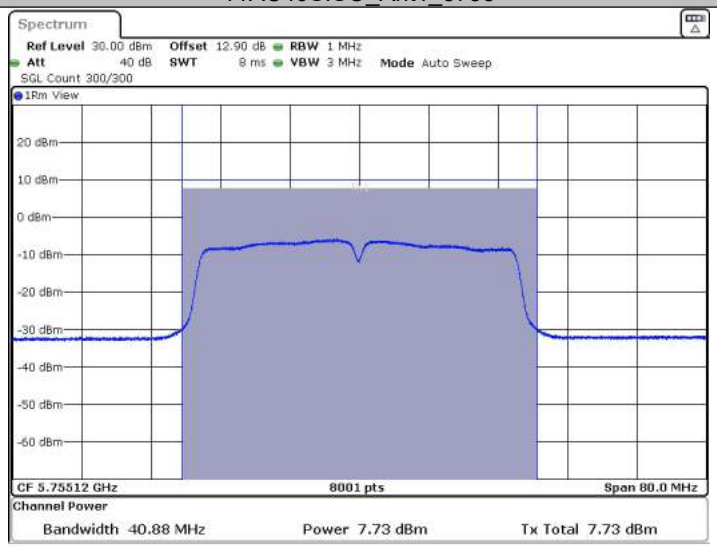
11AC40SISO_Ant1_5190



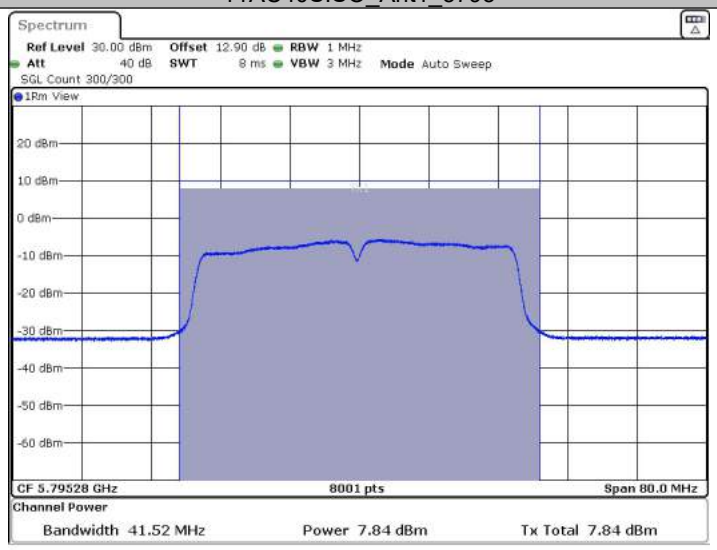
11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755

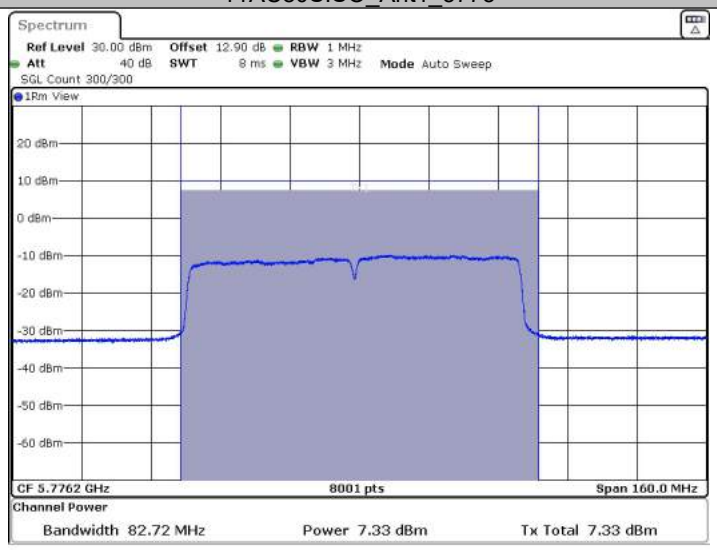


11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5775



Ant1+Ant2

Measurement Data

Test Mode	Antenna	Channel	Av.Power [dBm]	Limit [dBm]	Verdict
11N20	Ant1+Ant2	5180	11.57	22.97	PASS
11N20	Ant1+Ant2	5200	12.48	22.97	PASS
11N20	Ant1+Ant2	5240	12.17	22.97	PASS
11N20	Ant1+Ant2	5745	11.51	28.97	PASS
11N20	Ant1+Ant2	5785	11.35	28.97	PASS
11N20	Ant1+Ant2	5825	11.47	28.97	PASS
11N40	Ant1+Ant2	5190	13.13	22.97	PASS
11N40	Ant1+Ant2	5230	12.7	22.97	PASS
11N40	Ant1+Ant2	5755	11.51	28.97	PASS
11N40	Ant1+Ant2	5795	12.04	28.97	PASS
11AC20	Ant1+Ant2	5180	12.32	22.97	PASS
11AC20	Ant1+Ant2	5200	12.19	22.97	PASS
11AC20	Ant1+Ant2	5240	11.91	22.97	PASS
11AC20	Ant1+Ant2	5745	10.56	28.97	PASS
11AC20	Ant1+Ant2	5785	10.22	28.97	PASS
11AC20	Ant1+Ant2	5825	10.28	28.97	PASS
11AC40	Ant1+Ant2	5190	11.16	22.97	PASS
11AC40	Ant1+Ant2	5230	10.56	22.97	PASS
11AC40	Ant1+Ant2	5755	10.31	28.97	PASS
11AC40	Ant1+Ant2	5795	10.73	28.97	PASS
11AC80	Ant1+Ant2	5210	10.34	22.97	PASS
11AC80	Ant1+Ant2	5775	10.28	28.97	PASS

Note: The EUT supports MIMO and transmit signals are correlated with each other, then

Directional gain = 10 log$[(10^{G1/20}+10^{G2/20}+\ldots+10^{GN/20})^2/N_{ANT}]$ dBi = 7.03 dBi,

The limit of output power = each band power limit-1.03

Appendix C): Maximum Power Spectral Density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

Test Procedure:

For 5150-5725MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 1MHz.
4. Set the VBW ≥3*RBW. Detector = Peak. Trace mode = max hold.

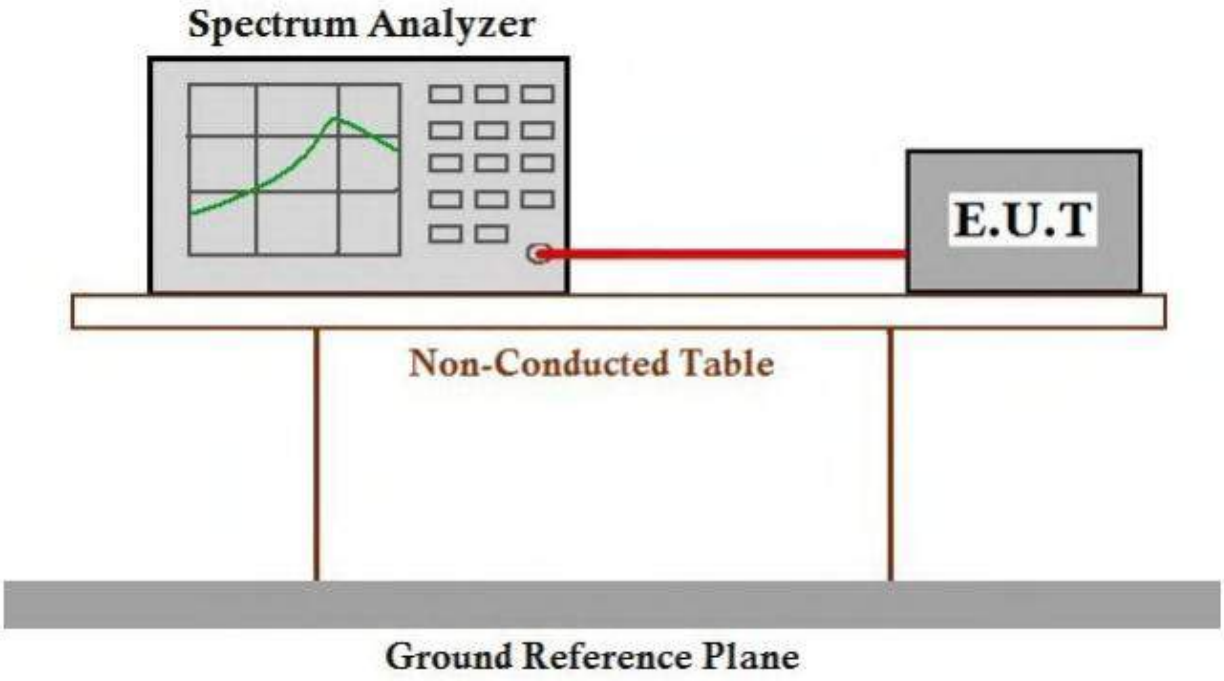
For 5725-5850MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 500KHz.
4. Set the VBW ≥3*RBW. Detector = Peak. Trace mode = max hold.

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

Test Setup Diagram



Ant1

Test Result

TestMode	Antenna	Channel	Meas.Level [dBm]	Duty Cycle Factor [dB]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-1.8	0.06	-1.74	11	PASS
11A	Ant1	5200	-1.64	0.06	-1.58	11	PASS
11A	Ant1	5240	-2.13	0.09	-2.04	11	PASS
11A	Ant1	5745	-5.51	0.09	-5.42	30	PASS
11A	Ant1	5785	-5.1	0.09	-5.01	30	PASS
11A	Ant1	5825	-4.94	0.09	-4.85	30	PASS
11N20SISO	Ant1	5180	-2.11	0.53	-1.58	11	PASS
11N20SISO	Ant1	5200	-2.42	0.73	-1.69	11	PASS
11N20SISO	Ant1	5240	-2.89	0.53	-2.36	11	PASS
11N20SISO	Ant1	5745	-5.71	0.73	-4.98	30	PASS
11N20SISO	Ant1	5785	-5.53	0.73	-4.8	30	PASS
11N20SISO	Ant1	5825	-5.53	0.73	-4.8	30	PASS
11N40SISO	Ant1	5190	-3.86	0.9	-2.96	11	PASS
11N40SISO	Ant1	5230	-5.04	1.17	-3.87	11	PASS
11N40SISO	Ant1	5755	-9.13	1.25	-7.88	30	PASS
11N40SISO	Ant1	5795	-8.36	1.25	-7.11	30	PASS
11AC20SISO	Ant1	5180	-2.17	0.07	-2.1	11	PASS
11AC20SISO	Ant1	5200	-2.14	0.07	-2.07	11	PASS
11AC20SISO	Ant1	5240	-2.66	0.07	-2.59	11	PASS
11AC20SISO	Ant1	5745	-6.96	0.07	-6.89	30	PASS
11AC20SISO	Ant1	5785	-6.53	0.09	-6.44	30	PASS
11AC20SISO	Ant1	5825	-6.66	0.07	-6.59	30	PASS
11AC40SISO	Ant1	5190	-5.83	0.14	-5.69	11	PASS
11AC40SISO	Ant1	5230	-6.25	0.18	-6.07	11	PASS
11AC40SISO	Ant1	5755	-10.65	0.14	-10.51	30	PASS
11AC40SISO	Ant1	5795	-9.75	0.18	-9.57	30	PASS
11AC80SISO	Ant1	5210	-10	0.37	-9.63	11	PASS
11AC80SISO	Ant1	5775	-13.25	0.33	-12.92	30	PASS

Remark:

PSD = Meas PSD + Duty Cycle Factor

Test Graphs

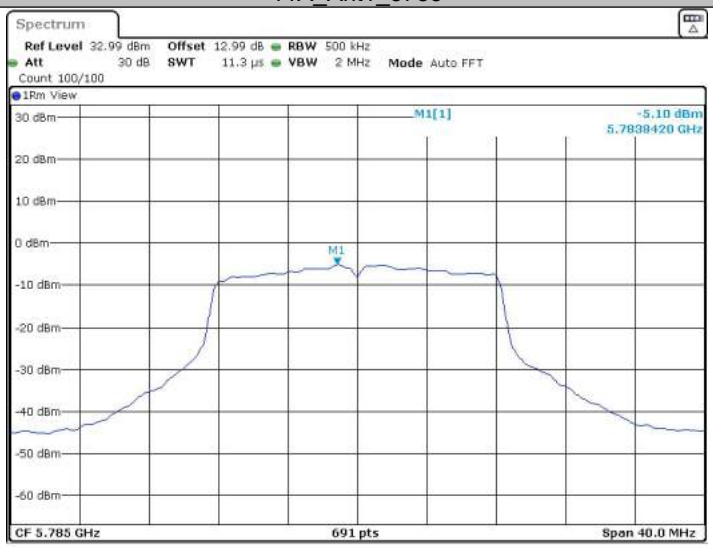
11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5745

11A_Ant1_5785

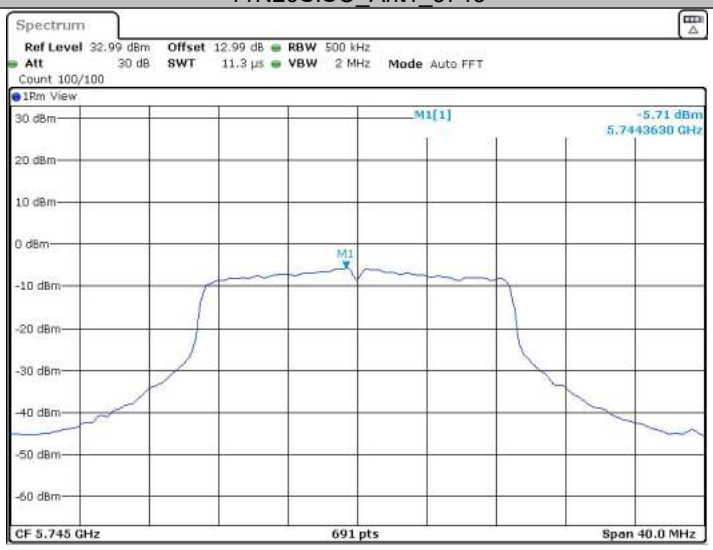


11A_Ant1_5825

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200


11N20SISO_Ant1_5240

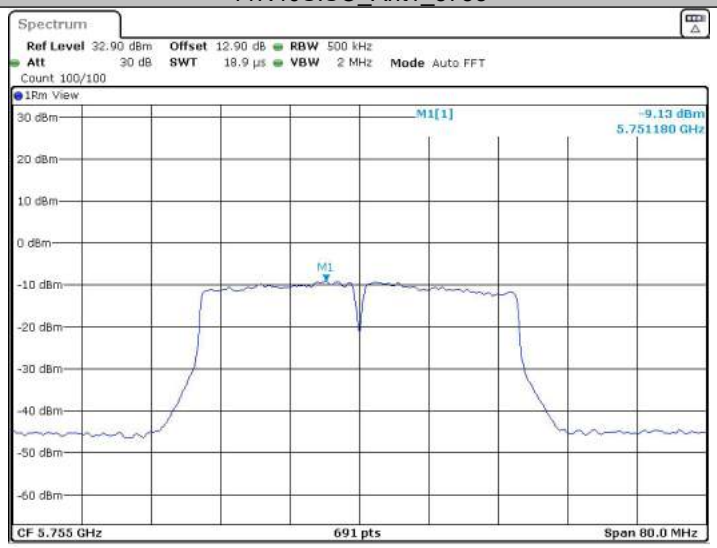
11N20SISO_Ant1_5745


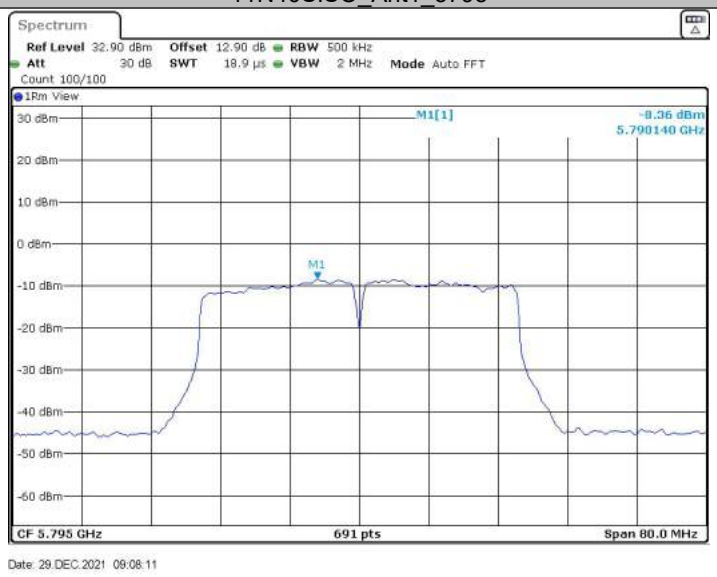
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5755


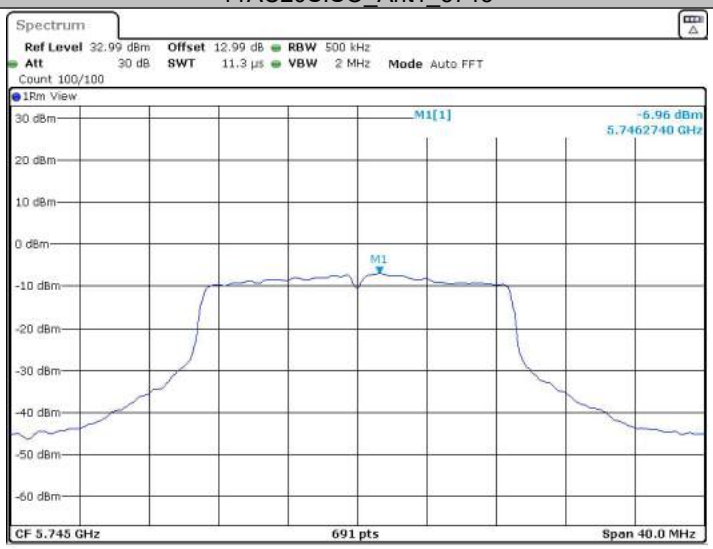
11N40SISO_Ant1_5795


11AC20SISO_Ant1_5180

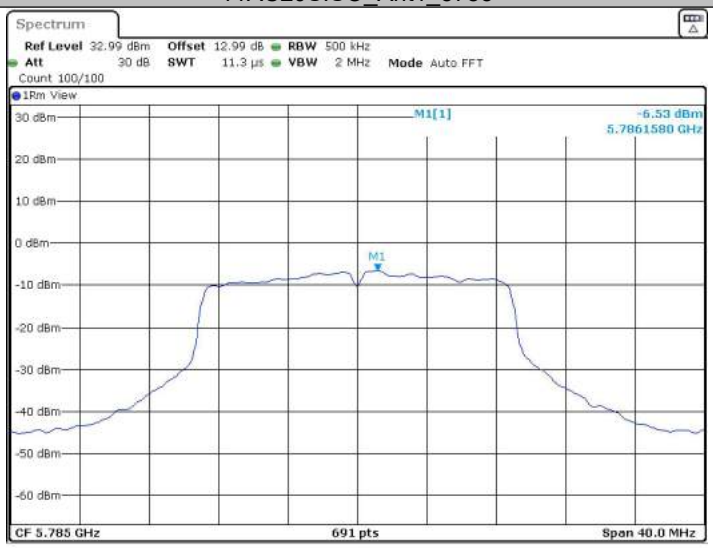
11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785

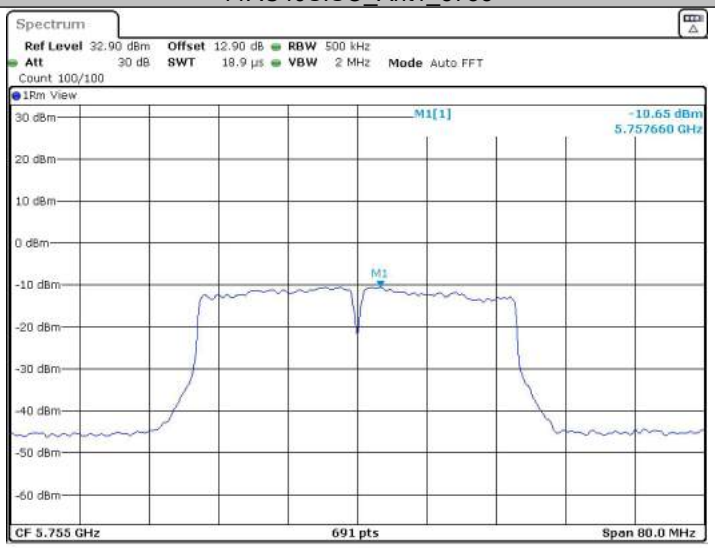


11AC20SISO_Ant1_5825

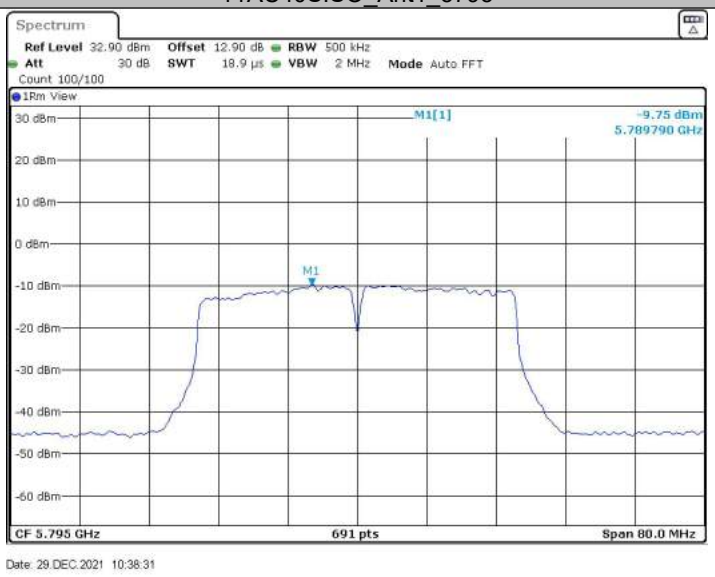
11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

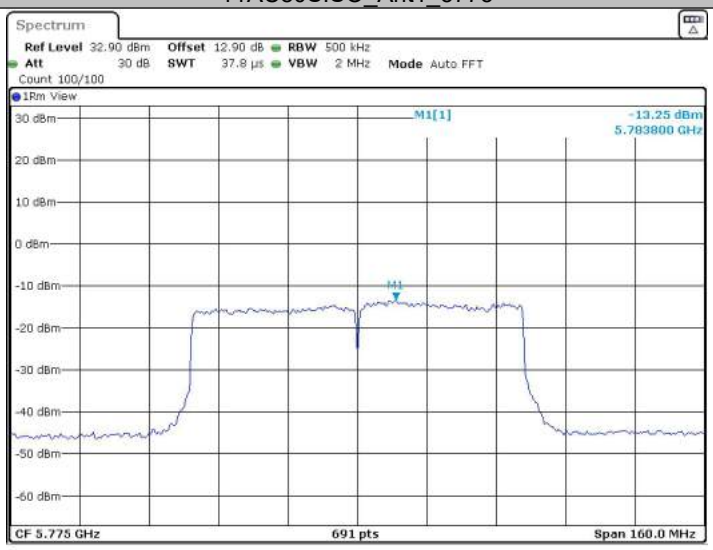
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5775


Ant2

Test Result

TestMode	Antenna	Channel	Meas.Level [dBm]	Duty Cycle Factor [dB]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant2	5180	-3.31	0.09	-3.22	11	PASS
11A	Ant2	5200	-2.64	0.06	-2.58	11	PASS
11A	Ant2	5240	-2.96	0.09	-2.87	11	PASS
11A	Ant2	5745	-6.94	0.09	-6.85	30	PASS
11A	Ant2	5785	-7.43	0.09	-7.34	30	PASS
11A	Ant2	5825	-7.73	0.06	-7.67	30	PASS
11N20SISO	Ant2	5180	-3.8	0.73	-3.07	11	PASS
11N20SISO	Ant2	5200	-1.82	0.07	-1.75	11	PASS
11N20SISO	Ant2	5240	-2.22	0.09	-2.13	11	PASS
11N20SISO	Ant2	5745	-5.34	0.07	-5.27	30	PASS
11N20SISO	Ant2	5785	-6.02	0.09	-5.93	30	PASS
11N20SISO	Ant2	5825	-5.84	0.09	-5.75	30	PASS
11N40SISO	Ant2	5190	-3.02	0.18	-2.84	11	PASS
11N40SISO	Ant2	5230	-4.34	0.14	-4.2	11	PASS
11N40SISO	Ant2	5755	-9.15	0.18	-8.97	30	PASS
11N40SISO	Ant2	5795	-8.49	0.14	-8.35	30	PASS
11AC20SISO	Ant2	5180	-1.49	0.09	-1.4	11	PASS
11AC20SISO	Ant2	5200	-1.79	0.09	-1.7	11	PASS
11AC20SISO	Ant2	5240	-3.18	0.09	-3.09	11	PASS
11AC20SISO	Ant2	5745	-5.91	0.09	-5.82	30	PASS
11AC20SISO	Ant2	5785	-6.47	0.09	-6.38	30	PASS
11AC20SISO	Ant2	5825	-6.7	0.09	-6.61	30	PASS
11AC40SISO	Ant2	5190	-6	0.15	-5.85	11	PASS
11AC40SISO	Ant2	5230	-7.24	0.16	-7.08	11	PASS
11AC40SISO	Ant2	5755	-9.23	0.18	-9.05	30	PASS
11AC40SISO	Ant2	5795	-8.78	0.16	-8.62	30	PASS
11AC80SISO	Ant2	5210	-10.74	0.32	-10.42	11	PASS
11AC80SISO	Ant2	5775	-12.89	0.32	-12.57	30	PASS

Remark:

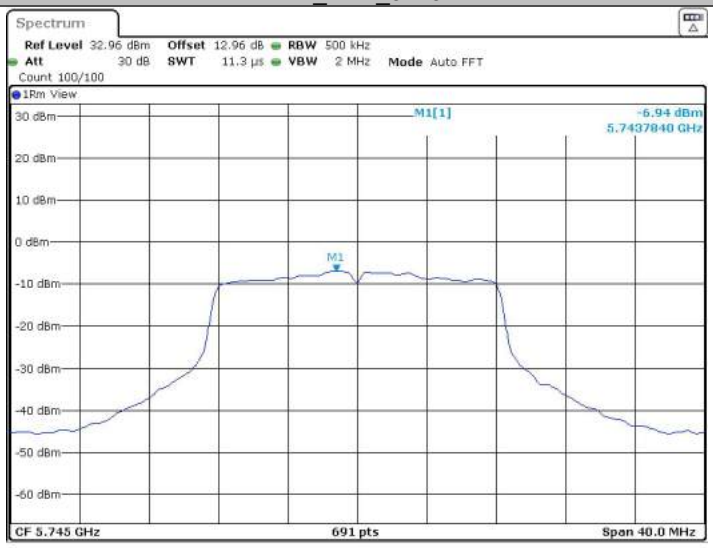
PSD = Meas PSD + Duty Cycle Factor

Test Graphs

11A_Ant1_5180

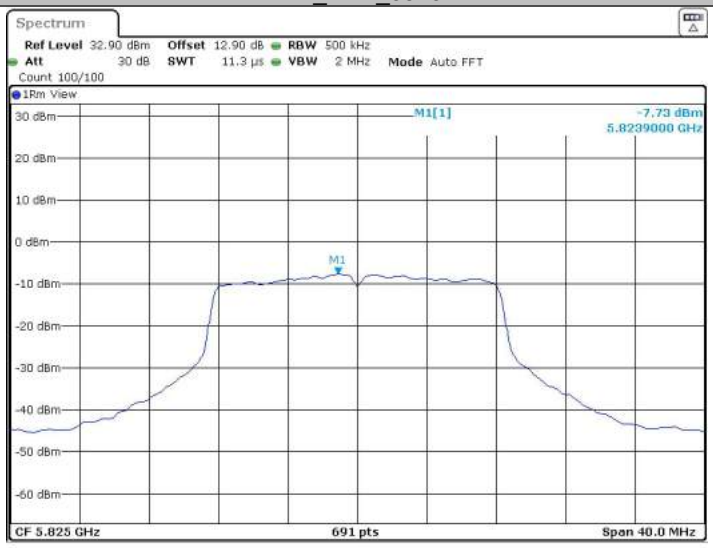
11A_Ant1_5200


11A_Ant1_5240

11A_Ant1_5745


11A_Ant1_5785

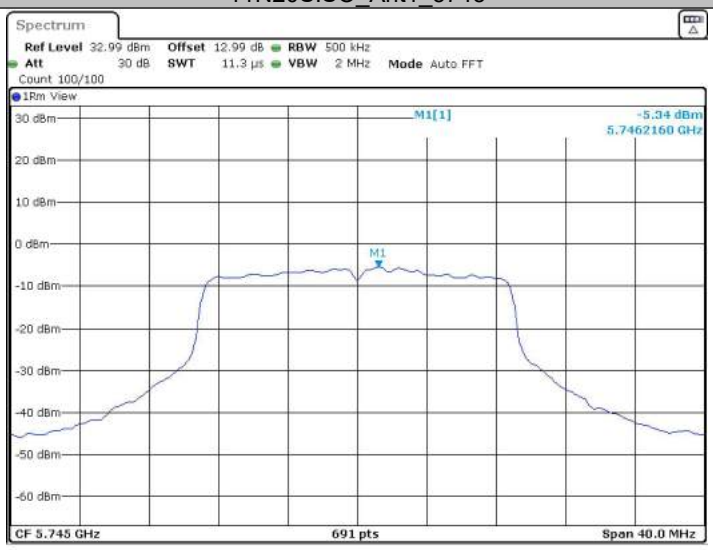
11A_Ant1_5825



11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

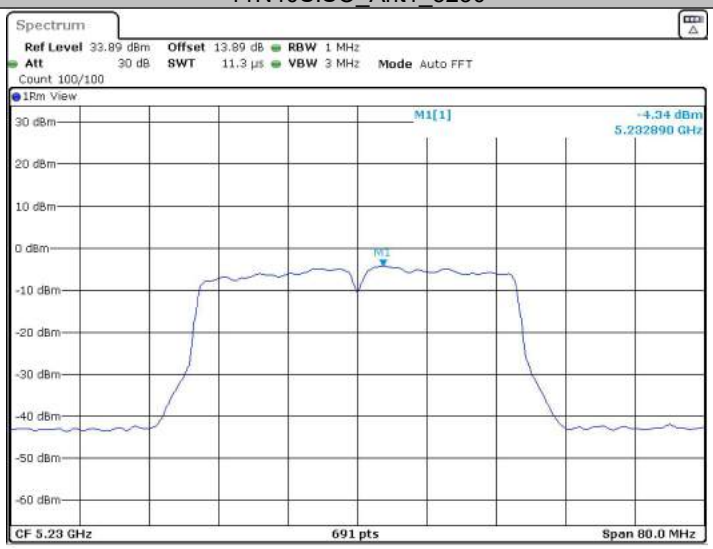
11N20SISO_Ant1_5745


11N20SISO_Ant1_5785

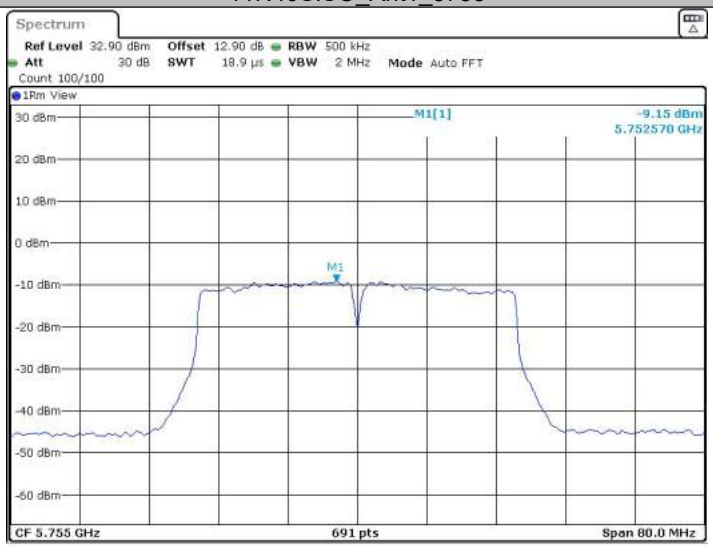
11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

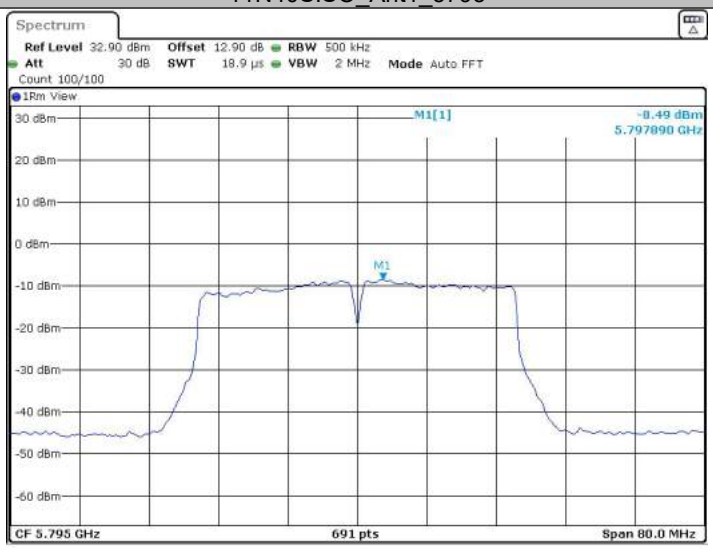
11N40SISO_Ant1_5230



11N40SISO_Ant1_5755

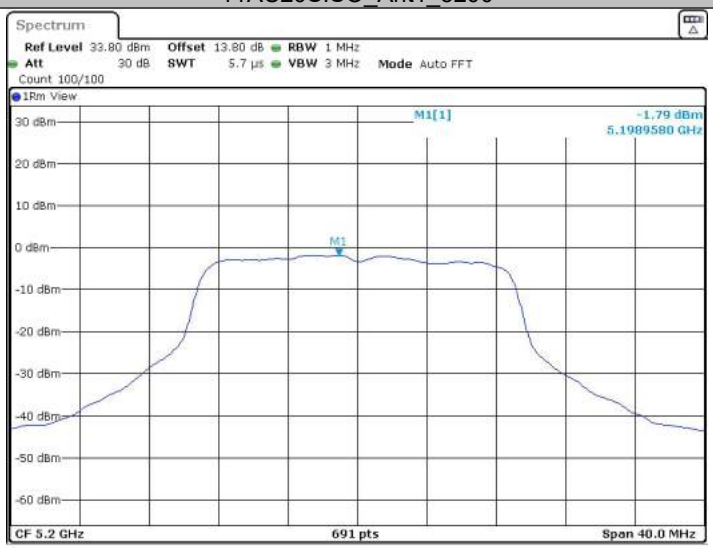


11N40SISO_Ant1_5795



11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

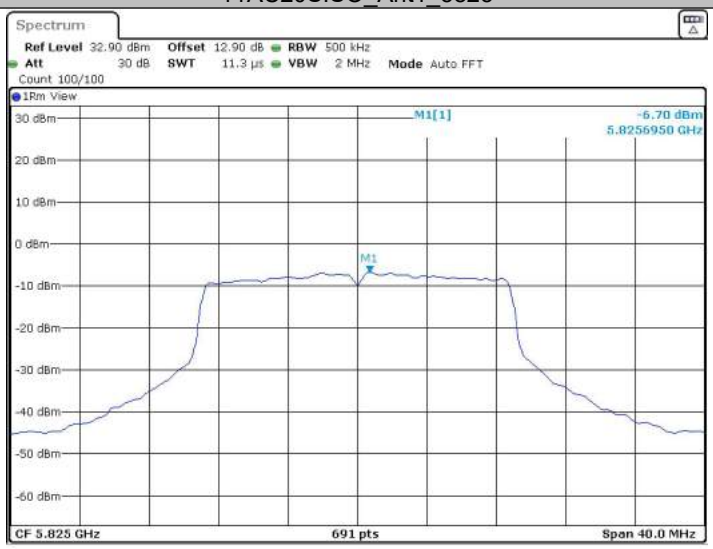


11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5190

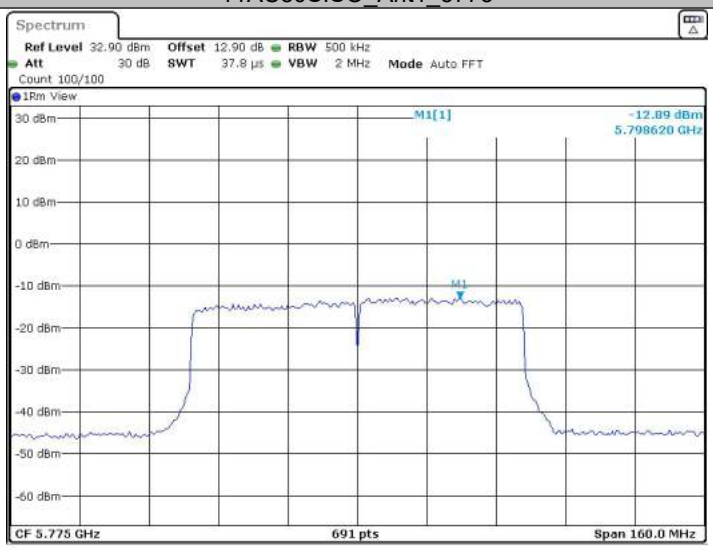
11AC40SISO_Ant1_5230

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5775



Ant1+Ant2

Test Mode	Antenna	Channel	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11N20	Ant1+Ant2	5180	0.75	9.97	PASS
11N20	Ant1+Ant2	5200	1.29	9.97	PASS
11N20	Ant1+Ant2	5240	0.77	9.97	PASS
11N20	Ant1+Ant2	5745	-2.11	28.97	PASS
11N20	Ant1+Ant2	5785	-2.32	28.97	PASS
11N20	Ant1+Ant2	5825	-2.24	28.97	PASS
11N40	Ant1+Ant2	5190	0.11	9.97	PASS
11N40	Ant1+Ant2	5230	-1.02	9.97	PASS
11N40	Ant1+Ant2	5755	-5.38	28.97	PASS
11N40	Ant1+Ant2	5795	-4.68	28.97	PASS
11AC20	Ant1+Ant2	5180	1.27	9.97	PASS
11AC20	Ant1+Ant2	5200	1.13	9.97	PASS
11AC20	Ant1+Ant2	5240	0.18	9.97	PASS
11AC20	Ant1+Ant2	5745	-3.31	28.97	PASS
11AC20	Ant1+Ant2	5785	-3.4	28.97	PASS
11AC20	Ant1+Ant2	5825	-3.59	28.97	PASS
11AC40	Ant1+Ant2	5190	-2.76	9.97	PASS
11AC40	Ant1+Ant2	5230	-3.53	9.97	PASS
11AC40	Ant1+Ant2	5755	-6.71	28.97	PASS
11AC40	Ant1+Ant2	5795	-6.06	28.97	PASS
11AC80	Ant1+Ant2	5210	-7	9.97	PASS
11AC80	Ant1+Ant2	5775	-9.73	28.97	PASS

Note: The EUT supports MIMO and transmit signals are correlated with each other, then

Directional gain = 10 log$[(10^{G1/20}+10^{G2/20}+\ldots+10^{GN/20})^2/N_{ANT}]$ dBi = 7.03 dBi,

The limit of power spectral density = each band PSD limit -1.03

Appendix D): Band Edge Measurements

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Test Procedure:

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.

2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

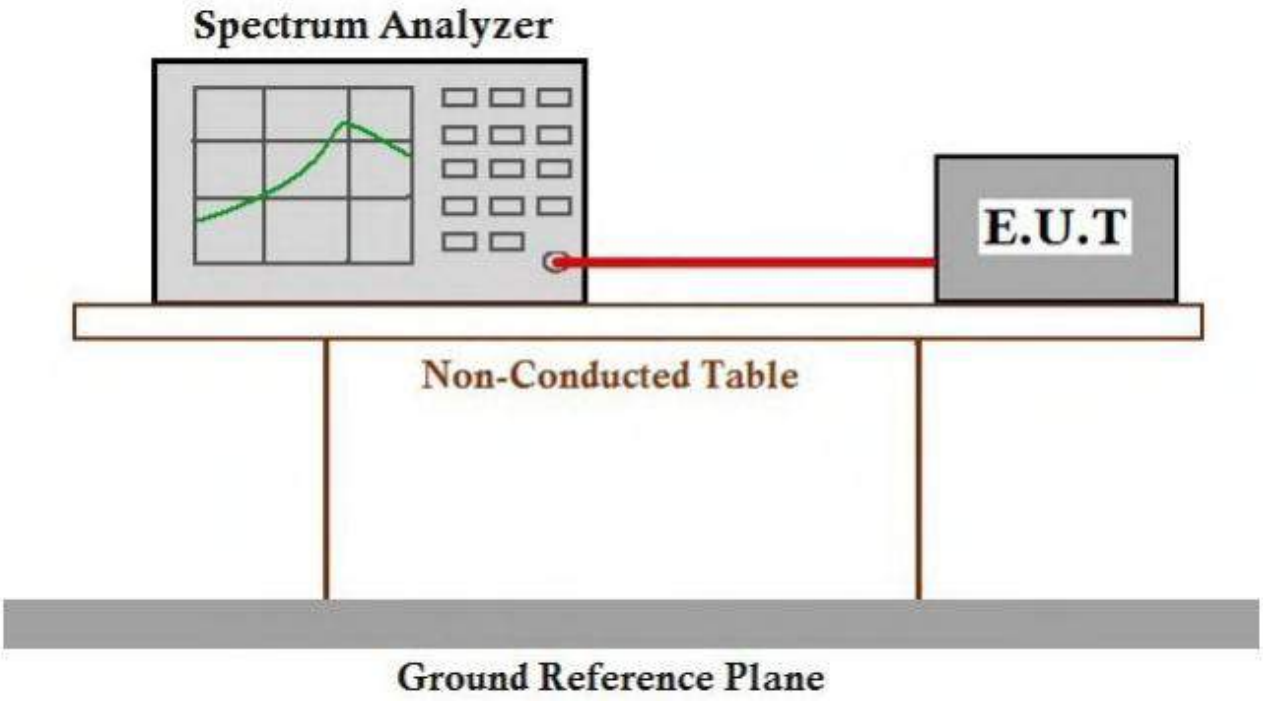
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO

Limit:

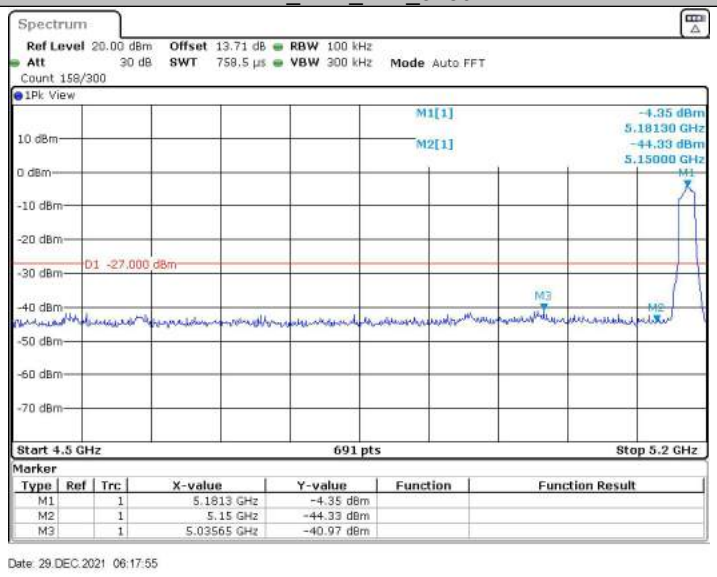
For transmitters operating in the 5.15-5.25 GHz band:	All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.25-5.35 GHz band:	All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.47-5.725 GHz band:	All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.725-5.85 GHz band:	(i) All emissions shall be limited to a level of −27 dBm/MHz (68.2dBuV/m) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz (105.2dBuV/m) at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz (110.8dBuV/m) at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz (122.2dBuV/m) at the band edge.

Test Setup Diagram

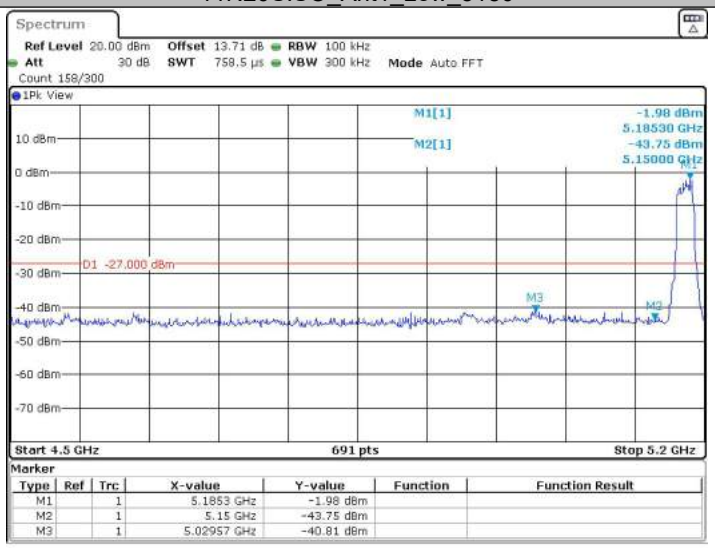


Test Graphs

Ant1

11A_Ant1_Low_5180

11A_Ant1_High_5240


11N20SISO_Ant1_Low_5180



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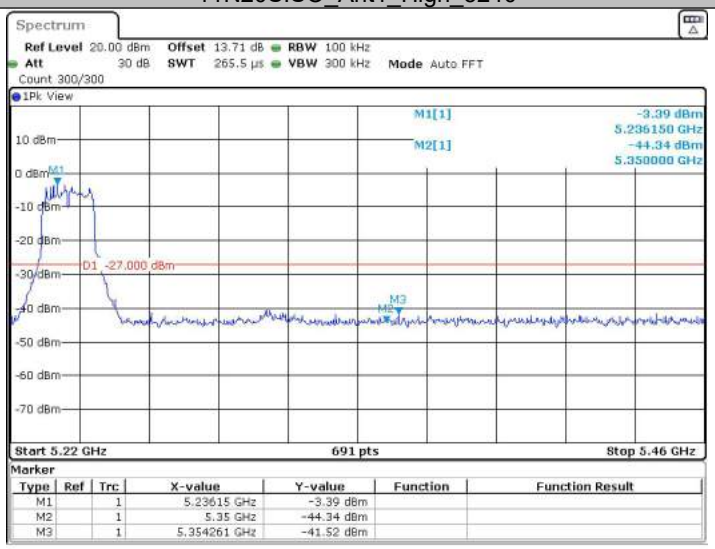
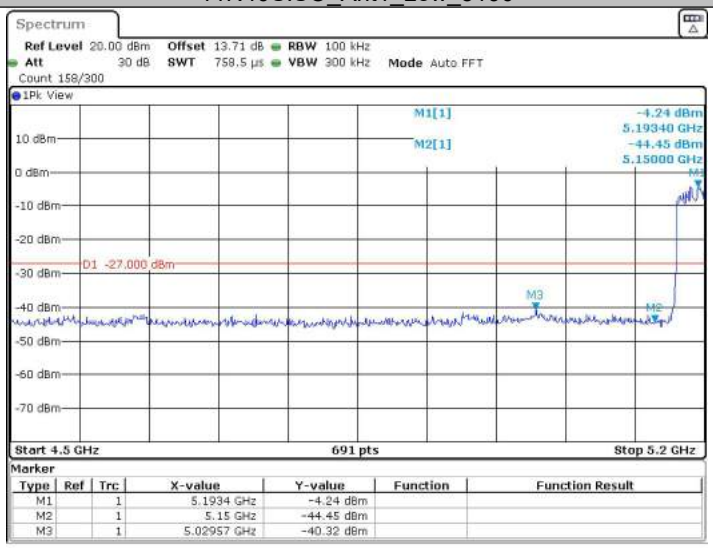
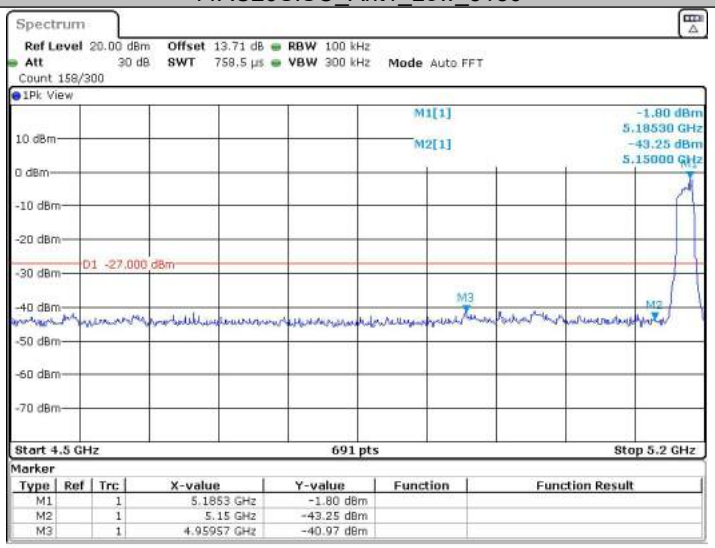


11N40SISO_Ant1_Low_5190

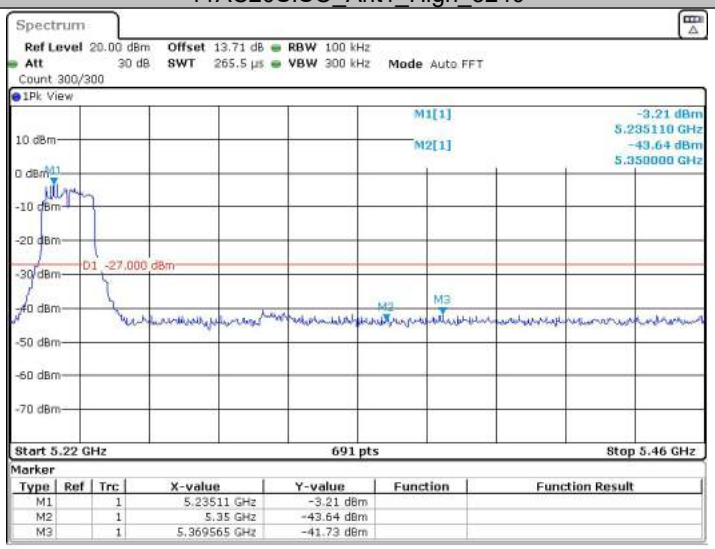


11N40SISO_Ant1_High_5230

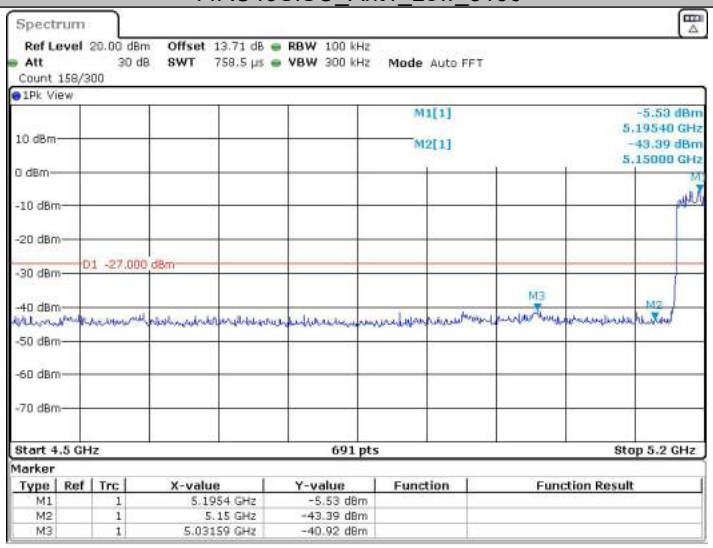
11AC20SISO_Ant1_Low_5180



11AC20SISO_Ant1_High_5240



11AC40SISO_Ant1_Low_5190



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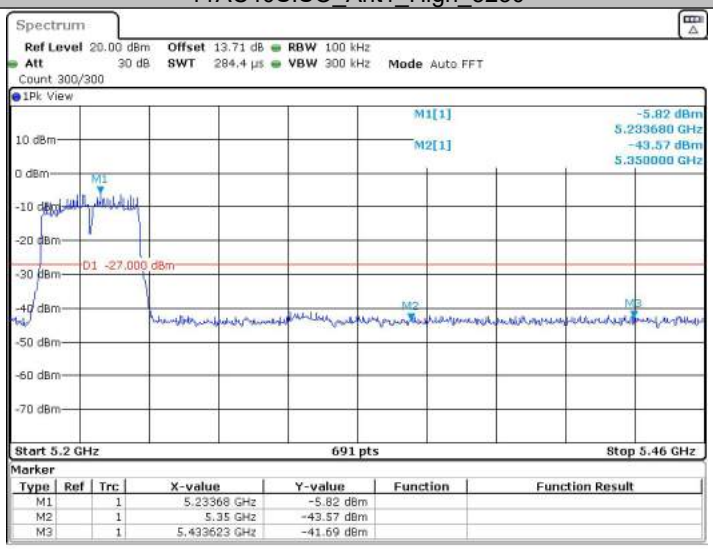
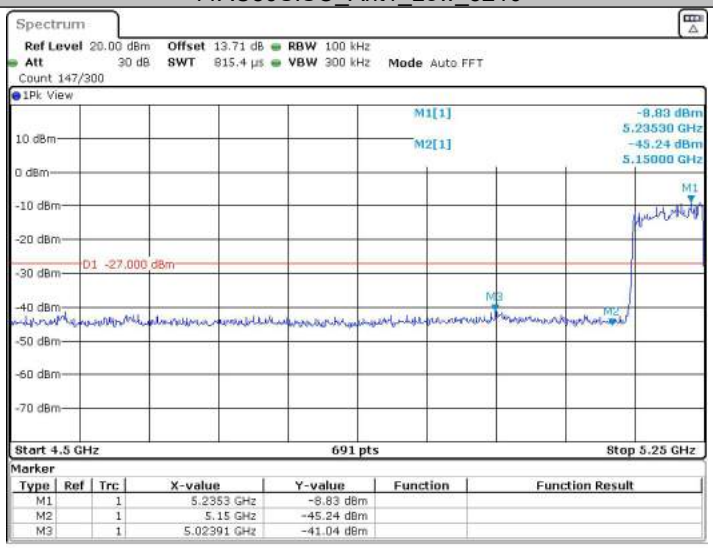


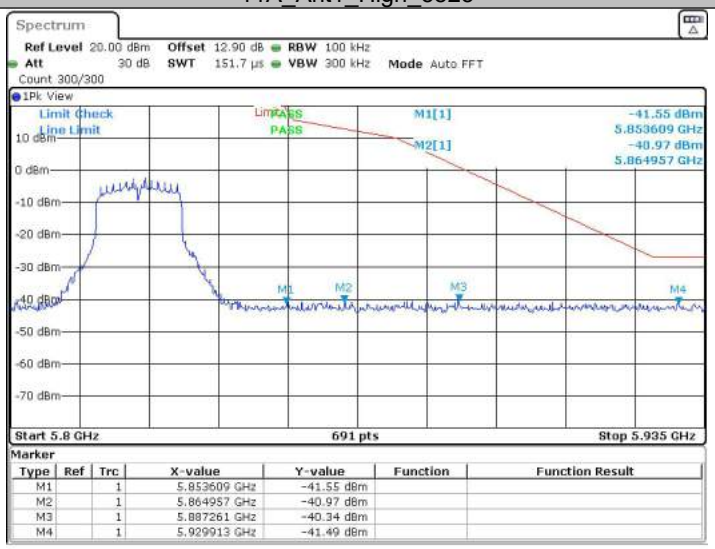
11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210

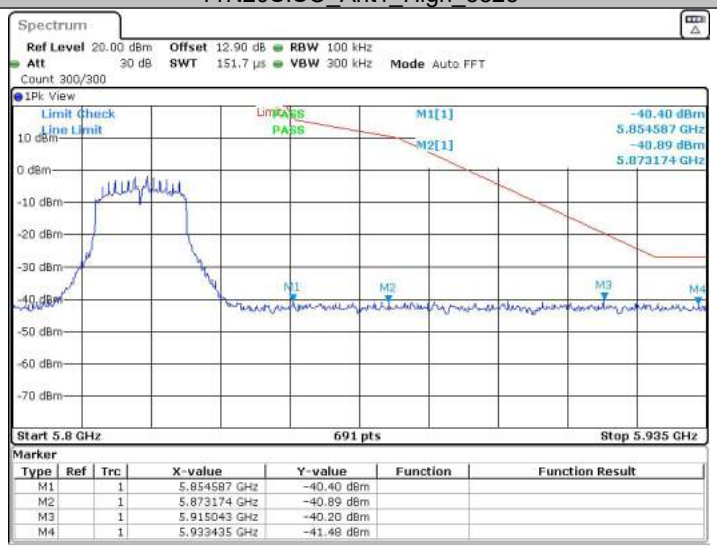
11A_Ant1_Low_5745

11A_Ant1_High_5825



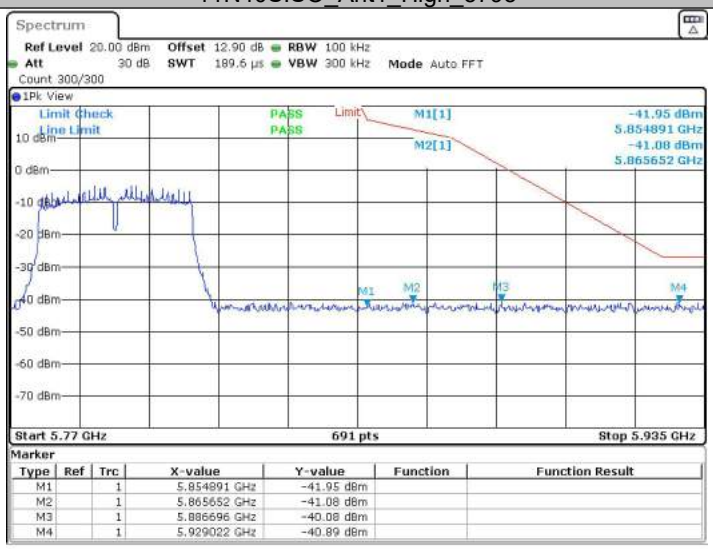
11N20SISO_Ant1_Low_5745

11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755

11N40SISO_Ant1_High_5795



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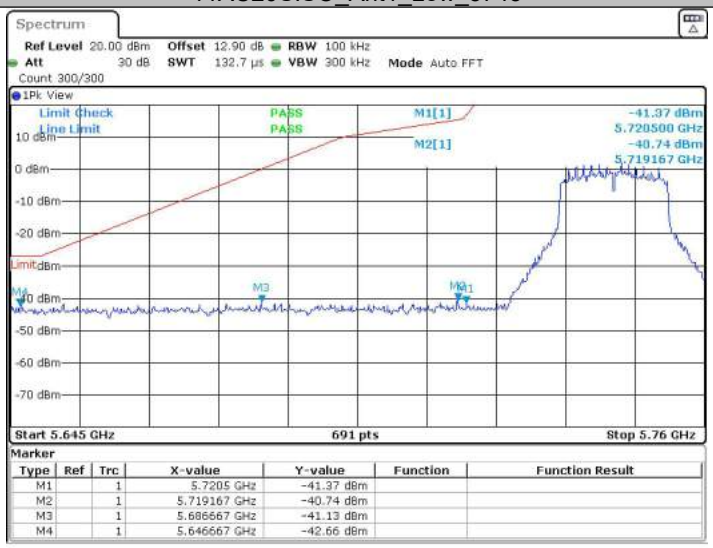

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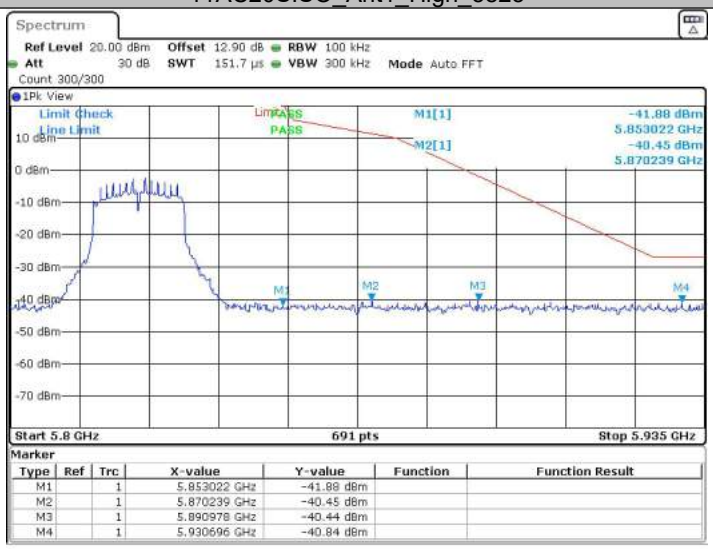
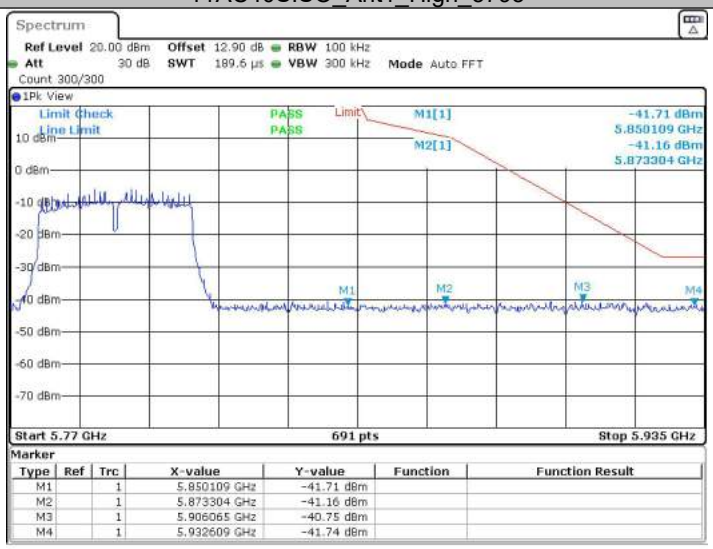


11AC40SISO_Ant1_Low_5755

11AC40SISO_Ant1_High_5795



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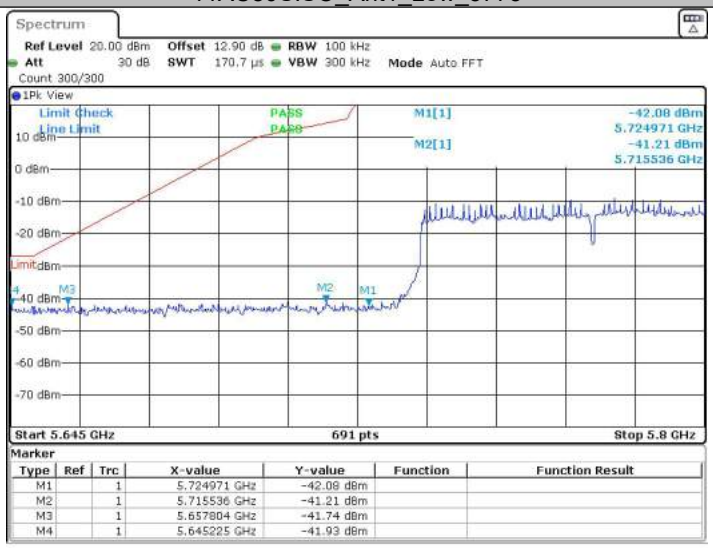
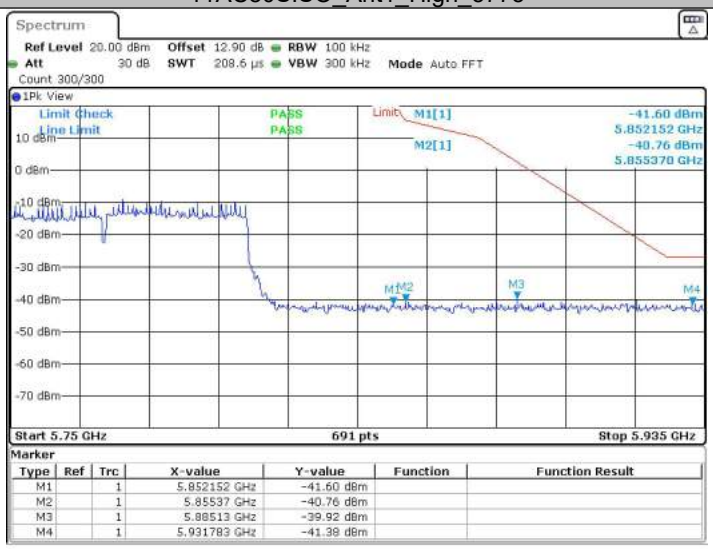
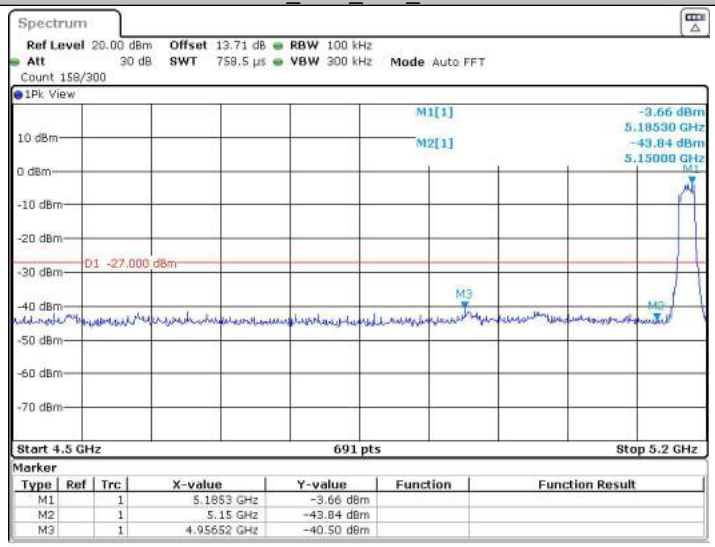


11AC80SISO_Ant1_High_5775

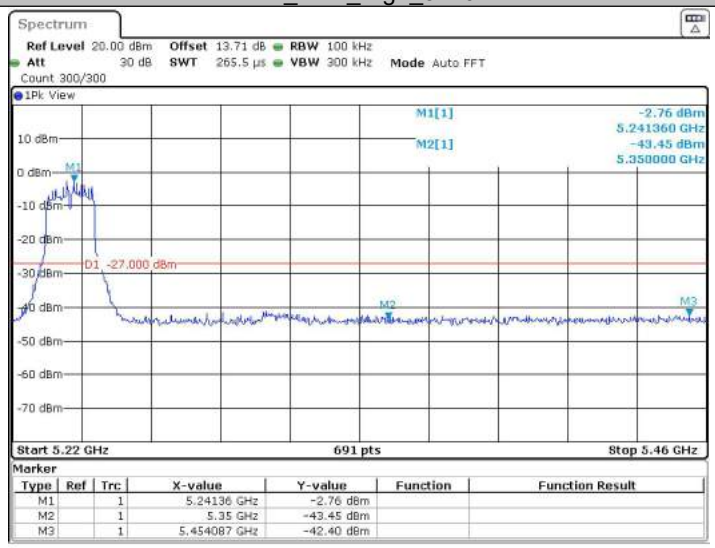


Ant2

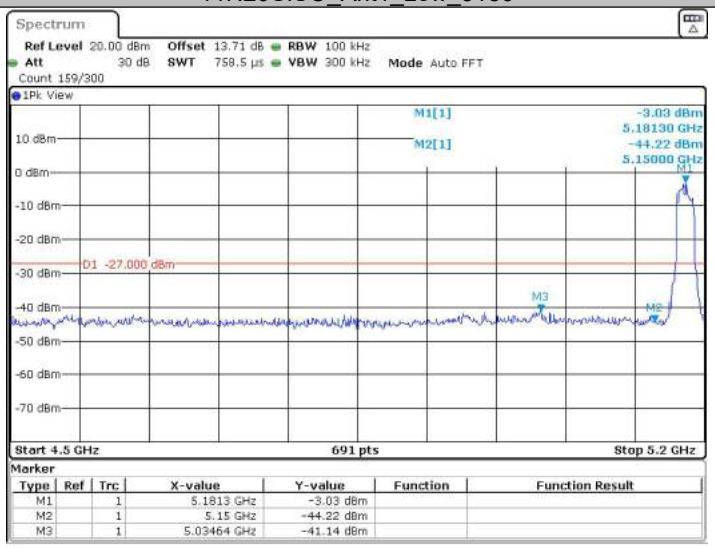
11A_Ant1_Low_5180



11A_Ant1_High_5240



11N20SISO_Ant1_Low_5180



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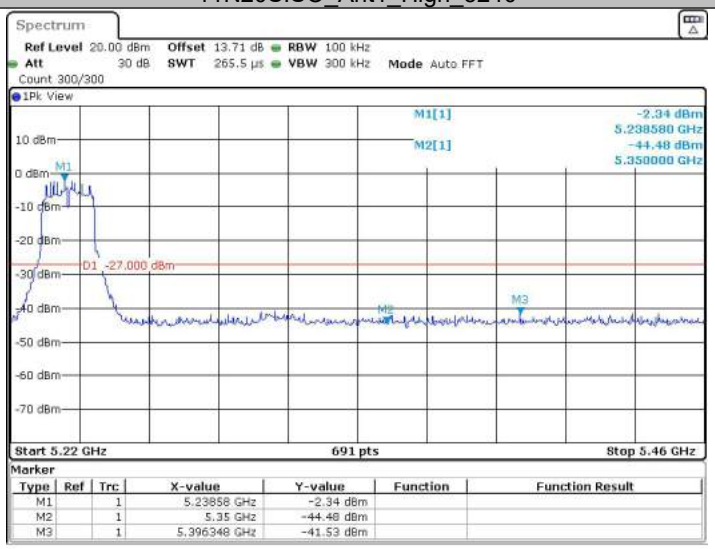

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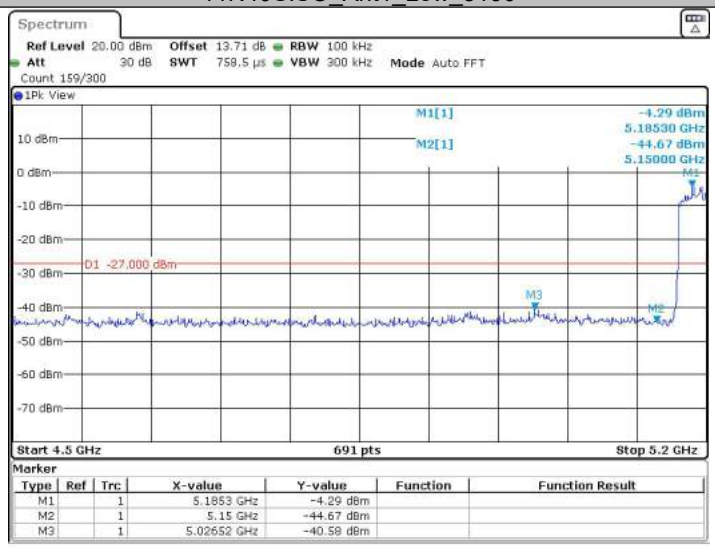
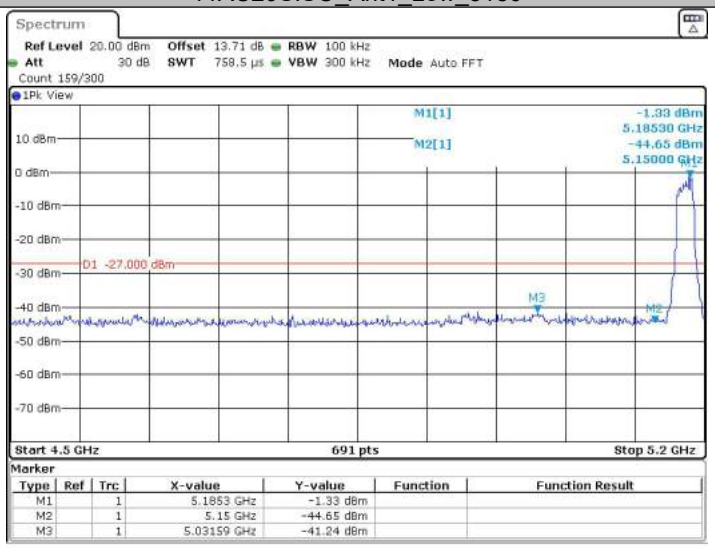


11N40SISO_Ant1_High_5230

11AC20SISO_Ant1_Low_5180



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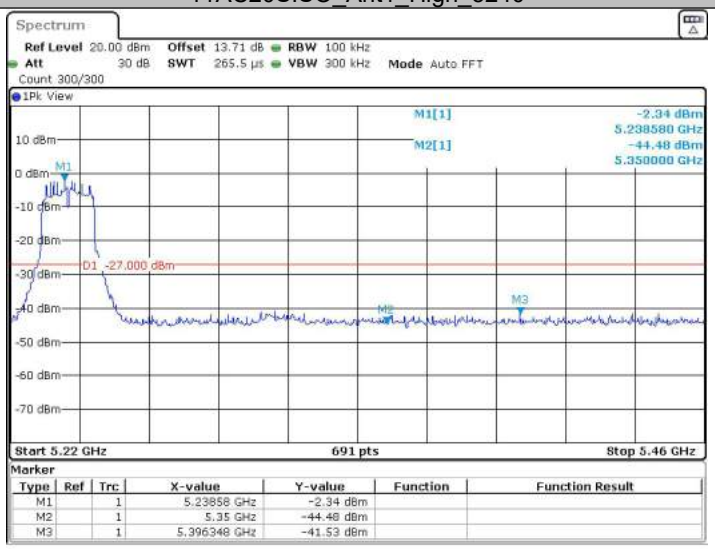

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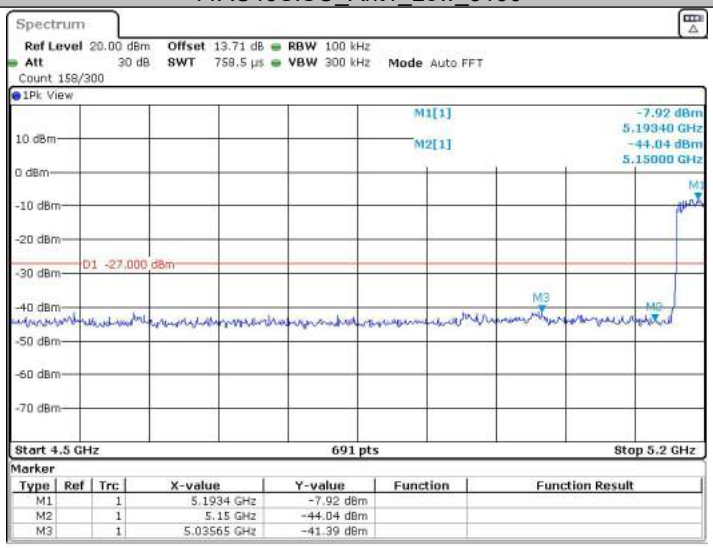

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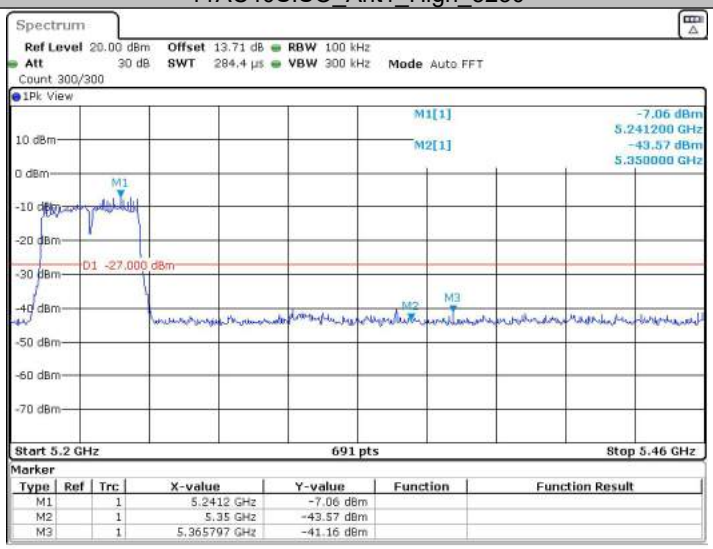

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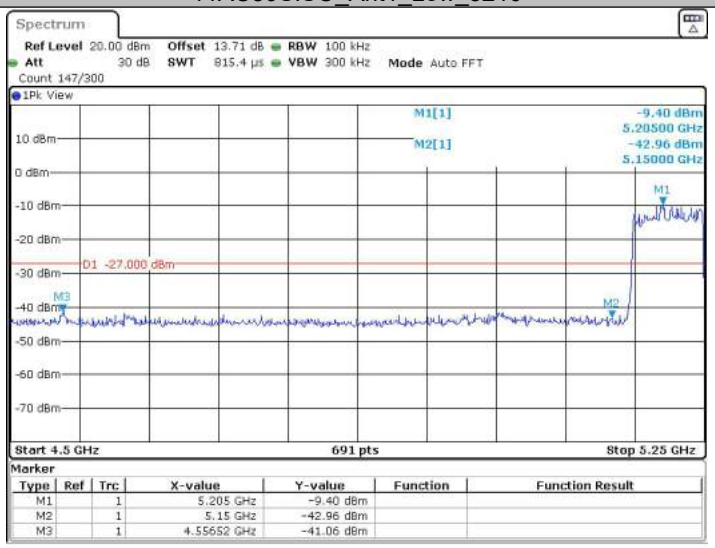


11AC80SISO_Ant1_High_5210

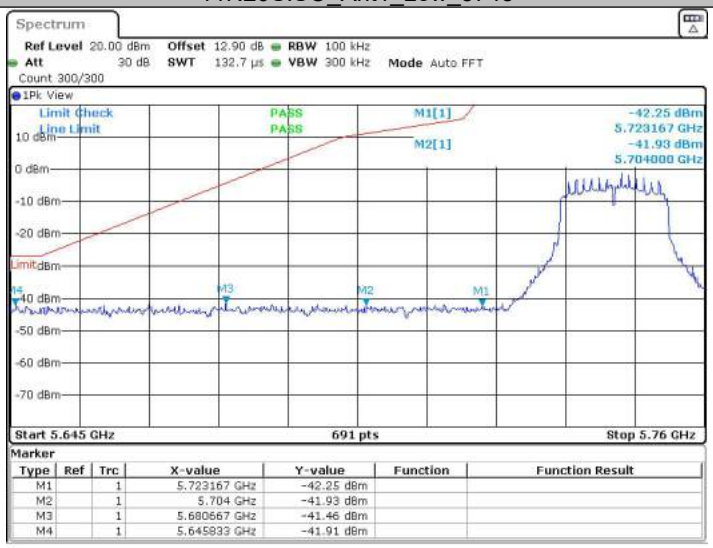
11A_Ant1_Low_5745

Date: 5.JAN.2022 09:57:17

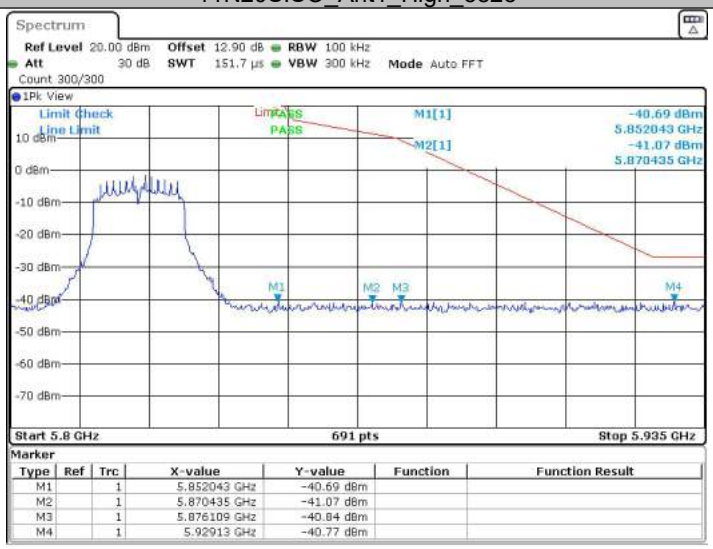
11A_Ant1_High_5825

Date: 5.JAN.2022 10:09:46

11N20SISO_Ant1_Low_5745

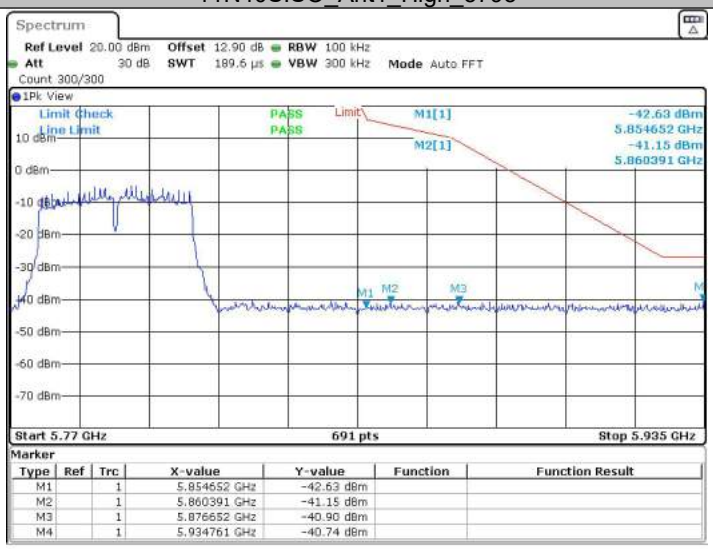


11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755

11N40SISO_Ant1_High_5795



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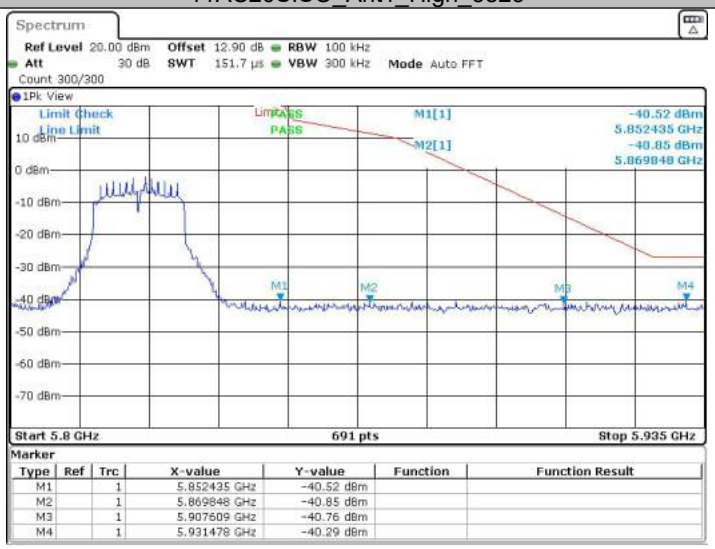

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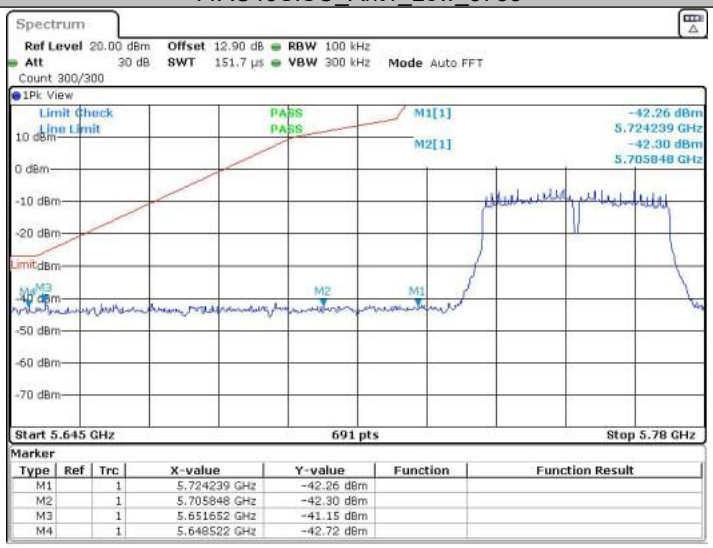

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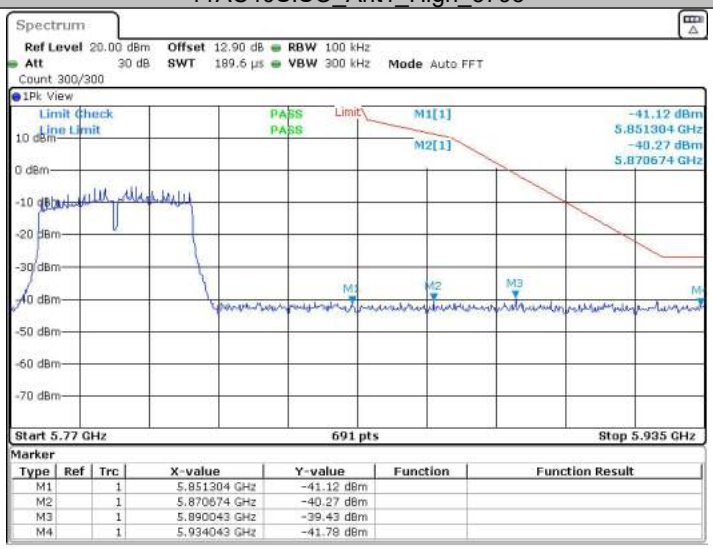

11AC80SISO_Ant1_Low_5775

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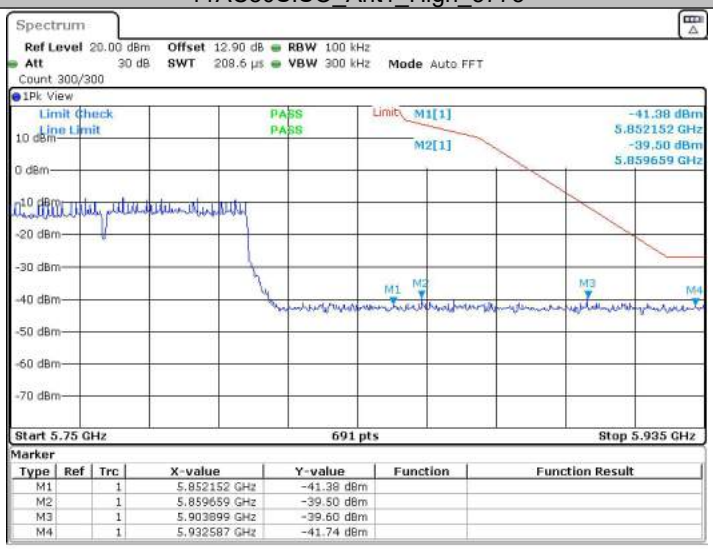


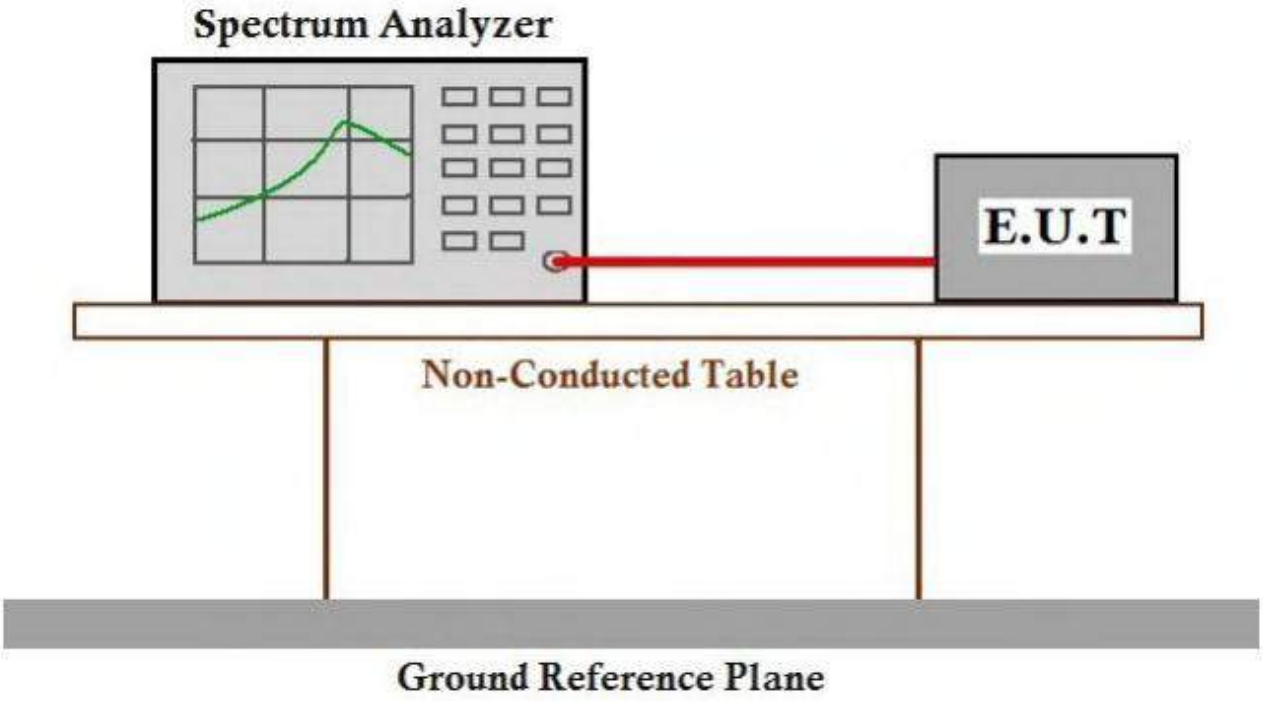
Appendix E): Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit:The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

Test Setup Diagram



Measurement Data

Ant1

Frequency Stability Versus Temp.			
Operating Frequency: 5240 MHz			
Temp (℃)	Voltage	Measured Frequency (MHz)	Frequency Drift (ppm)
50	VN	5240.02	3.81679
40		5240.03	5.72519
30		5240.01	1.90840
20		5240.03	5.72519
10		5240.02	3.81679
0		5240.01	1.90840
-10		5240.02	3.81679
-20		5240.03	5.72519

Frequency Stability Versus Temp.			
Operating Frequency: 5210 MHz			
Temp.	Voltage	Measured Frequency (MHz)	Frequency Drift (ppm)
TN	VL	5210.00	0.00000
	VN	5210.01	1.91938
	VH	5210.02	3.83877

Ant2

Frequency Stability Versus Temp.			
Operating Frequency: 5240 MHz			
Temp (℃)	Voltage	Measured Frequency (MHz)	Frequency Drift (ppm)
50	VN	5240.01	1.90840
40		5240.02	3.81679
30		5240.01	1.90840
20		5240.02	3.81679
10		5240.02	3.81679
0		5240.03	5.72519
-10		5240.02	3.81679
-20		5240.03	5.72519

Frequency Stability Versus Temp.			
Operating Frequency: 5210 MHz			
Temp.	Voltage	Measured Frequency (MHz)	Frequency Drift (ppm)
TN	VL	5210.01	1.91938
	VN	5210.03	5.75816
	VH	5210.02	3.83877

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

Appendix F): Antenna Requirement

15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:	Please refer to the photo documents
The antenna is FPC antenna.3.4dBi@5GHz: Wi-Fi: ant 1, 4.6dBi@5GHz: Wi-Fi: ant 2	

Appendix G): Operation in the absence of information to the transmit

15.407(c) requirement: The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.
Operation in the absence of information to the transmit
While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

Appendix H): AC Power Line Conducted Emission

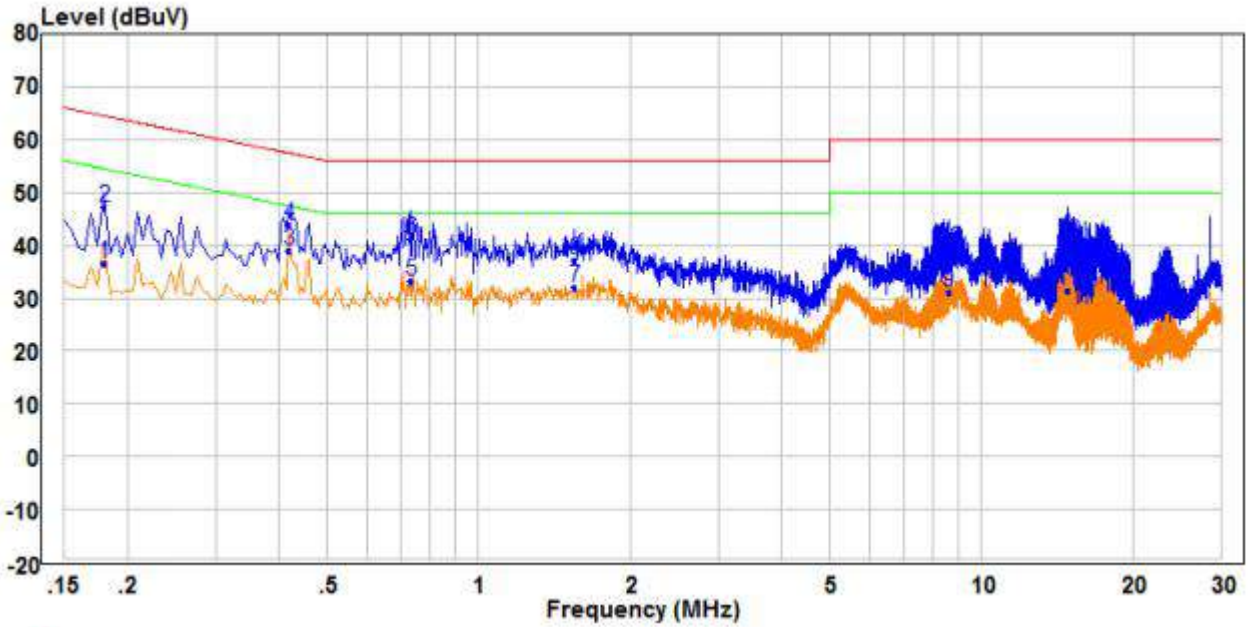
<table>
<tr><td>Test Procedure:</td><td>Test frequency range :150KHz-30MHz
1)The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>Quasi-peak</th><th>Average</th></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.
NOTE : The lower limit is applicable at the transition frequency</td></tr>
</table>

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

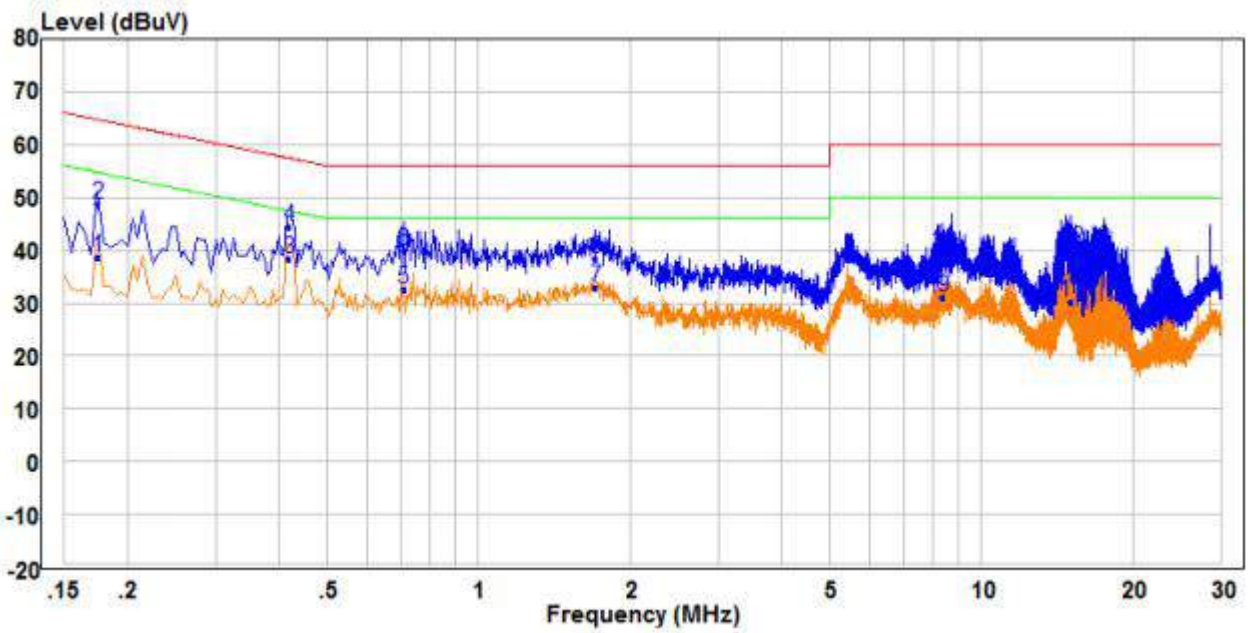
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.180	27.03	9.49	36.52	54.49	-17.97	Average	Line
2		0.180	37.68	9.49	47.17	64.49	-17.32	QP	Line
3	PP	0.420	29.54	9.51	39.05	47.45	-8.40	Average	Line
4	QP	0.420	34.42	9.51	43.93	57.45	-13.52	QP	Line
5		0.735	23.33	9.83	33.16	46.00	-12.84	Average	Line
6		0.735	31.21	9.83	41.04	56.00	-14.96	QP	Line
7		1.555	22.44	9.53	31.97	46.00	-14.03	Average	Line
8		1.555	27.60	9.53	37.13	56.00	-18.87	QP	Line
9		8.585	21.18	9.75	30.93	50.00	-19.07	Average	Line
10		8.585	29.63	9.75	39.38	60.00	-20.62	QP	Line
11		14.820	21.47	9.89	31.36	50.00	-18.64	Average	Line
12		14.820	30.60	9.89	40.49	60.00	-19.51	QP	Line

Neutral line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.175	29.32	9.48	38.80	54.72	-15.92	Average	Neutral
2		0.175	39.32	9.48	48.80	64.72	-15.92	QP	Neutral
3	PP	0.420	28.78	9.55	38.33	47.45	-9.12	Average	Neutral
4	QP	0.420	34.91	9.55	44.46	57.45	-12.99	QP	Neutral
5		0.710	22.68	9.82	32.50	46.00	-13.50	Average	Neutral
6		0.710	30.20	9.82	40.02	56.00	-15.98	QP	Neutral
7		1.710	23.16	9.72	32.88	46.00	-13.12	Average	Neutral
8		1.710	28.75	9.72	38.47	56.00	-17.53	QP	Neutral
9		8.370	21.23	9.86	31.09	50.00	-18.91	Average	Neutral
10		8.370	29.71	9.86	39.57	60.00	-20.43	QP	Neutral
11		15.030	20.31	9.92	30.23	50.00	-19.77	Average	Neutral
12		15.030	30.19	9.92	40.11	60.00	-19.89	QP	Neutral

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A_5240 is the worst case, only the worst data recorded in the report.

Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel , the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Limit (dBμV/m @3cm)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test plot as follows:

Worse case mode:		802.11a(6Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	57.88	-3.63	54.25	74	-19.75	peak	H
5150	43.82	-3.63	40.19	54	-13.81	AVG	H
5150	57.91	-3.63	54.28	74	-19.72	peak	V
5150	46.43	-3.63	42.80	54	-11.20	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350	58.31	-3.59	54.72	74	-19.28	peak	H
5350	44.06	-3.59	40.47	54	-13.53	AVG	H
5350	57.94	-3.59	54.35	74	-19.65	peak	V
5350	45.85	-3.59	42.26	54	-11.74	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	57.92	-3.44	54.48	74	-19.52	peak	H
5725	43.48	-3.44	40.04	54	-13.96	AV	H
5725	58.26	-3.44	54.82	74	-19.18	peak	V
5725	45.65	-3.44	42.21	54	-11.79	AV	V

Worse case mode:		802.11a(6Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	57.97	-3.42	54.55	74	-19.45	peak	H
5850	44.05	-3.42	40.63	54	-13.37	AV	H
5850	57.98	-3.42	54.56	74	-19.44	peak	V
5850	45.96	-3.42	42.54	54	-11.46	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	58.08	-3.63	54.45	74	-19.55	peak	H
5150	43.70	-3.63	40.07	54	-13.93	AVG	H
5150	57.97	-3.63	54.34	74	-19.66	peak	V
5150	45.65	-3.63	42.02	54	-11.98	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350	57.73	-3.59	54.14	74	-19.86	peak	H
5350	43.59	-3.59	40.00	54	-14.00	AVG	H
5350	57.69	-3.59	54.10	74	-19.90	peak	V
5350	45.90	-3.59	42.31	54	-11.69	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	58.04	-3.44	54.60	74	-19.40	peak	H
5725	43.47	-3.44	40.03	54	-13.97	AV	H
5725	57.77	-3.44	54.33	74	-19.67	peak	V
5725	46.08	-3.44	42.64	54	-11.36	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	57.88	-3.42	54.46	74	-19.54	peak	H
5850	43.91	-3.42	40.49	54	-13.51	AV	H
5850	57.74	-3.42	54.32	74	-19.68	peak	V
5850	45.57	-3.42	42.15	54	-11.85	AV	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	57.80	-3.63	54.17	74	-19.83	peak	H
5150	43.56	-3.63	39.93	54	-14.07	AVG	H
5150	58.42	-3.63	54.79	74	-19.21	peak	V
5150	46.27	-3.63	42.64	54	-11.36	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350	58.26	-3.59	54.67	74	-19.33	peak	H
5350	43.86	-3.59	40.27	54	-13.73	AVG	H
5350	58.02	-3.59	54.43	74	-19.57	peak	V
5350	45.75	-3.59	42.16	54	-11.84	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	57.62	-3.44	54.18	74	-19.82	peak	H
5725	44.17	-3.44	40.73	54	-13.27	AV	H
5725	58.40	-3.44	54.96	74	-19.04	peak	V
5725	45.88	-3.44	42.44	54	-11.56	AV	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	57.55	-3.42	54.13	74	-19.87	peak	H
5850	44.41	-3.42	40.99	54	-13.01	AV	H
5850	57.50	-3.42	54.08	74	-19.92	peak	V
5850	45.81	-3.42	42.39	54	-11.61	AV	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	58.11	-3.63	54.48	74	-19.52	peak	H
5150	44.10	-3.63	40.47	54	-13.53	AVG	H
5150	57.88	-3.63	54.25	74	-19.75	peak	V
5150	46.43	-3.63	42.80	54	-11.20	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350	58.12	-3.59	54.53	74	-19.47	peak	H
5350	44.44	-3.59	40.85	54	-13.15	AVG	H
5350	57.96	-3.59	54.37	74	-19.63	peak	V
5350	46.31	-3.59	42.72	54	-11.28	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	57.79	-3.44	54.35	74	-19.65	peak	H
5725	43.64	-3.44	40.20	54	-13.80	AV	H
5725	57.68	-3.44	54.24	74	-19.76	peak	V
5725	45.56	-3.44	42.12	54	-11.88	AV	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	57.54	-3.42	54.12	74	-19.88	peak	H
5850	44.01	-3.42	40.59	54	-13.41	AV	H
5850	58.36	-3.42	54.94	74	-19.06	peak	V
5850	46.37	-3.42	42.95	54	-11.05	AV	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	57.74	-3.63	54.11	74	-19.89	peak	H
5150	44.26	-3.63	40.63	54	-13.37	AVG	H
5150	58.24	-3.63	54.61	74	-19.39	peak	V
5150	46.40	-3.63	42.77	54	-11.23	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350	58.11	-3.59	54.52	74	-19.48	peak	H
5350	44.22	-3.59	40.63	54	-13.37	AVG	H
5350	58.13	-3.59	54.54	74	-19.46	peak	V
5350	46.11	-3.59	42.52	54	-11.48	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	58.07	-3.44	54.63	74	-19.37	peak	H
5725	43.66	-3.44	40.22	54	-13.78	AV	H
5725	57.66	-3.44	54.22	74	-19.78	peak	V
5725	45.77	-3.44	42.33	54	-11.67	AV	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
5850	57.86	-3.42	54.44	74	-19.56		H
5850	44.10	-3.42	40.68	54	-13.32	AV	H
5850	57.82	-3.42	54.40	74	-19.60	peak	V
5850	46.27	-3.42	42.85	54	-11.15	AV	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	57.99	-3.63	54.36	74	-19.64	peak	H
5150	43.71	-3.63	40.08	54	-13.92	AVG	H
5150	58.17	-3.63	54.54	74	-19.46	peak	V
5150	46.32	-3.63	42.69	54	-11.31	AVG	V
5350	58.13	-3.59	54.54	74	-19.46	peak	H
5350	44.23	-3.59	40.64	54	-13.36	AVG	H
5350	58.24	-3.59	54.65	74	-19.35	peak	V
5350	45.69	-3.59	42.10	54	-11.90	AVG	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	58.20	-3.44	54.76	74	-19.24	peak	H
5725	43.73	-3.44	40.29	54	-13.71	AV	H
5725	57.53	-3.44	54.09	74	-19.91	peak	V
5725	45.51	-3.44	42.07	54	-11.93	AV	V
5850	58.15	-3.42	54.73	74	-19.27	peak	H
5850	44.26	-3.42	40.84	54	-13.16	AV	H
5850	58.42	-3.42	55.00	74	-19.00	peak	V
5850	46.17	-3.42	42.75	54	-11.25	AV	V

Note:
1) Through Pre-scan transmitting mode with all kind of modulation and data rate, Only the worst case is recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading - Correct Factor
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Appendix J): Radiated Spurious Emissions

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre)
h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBμV/cm)	Remark	Measurement distance (cm)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

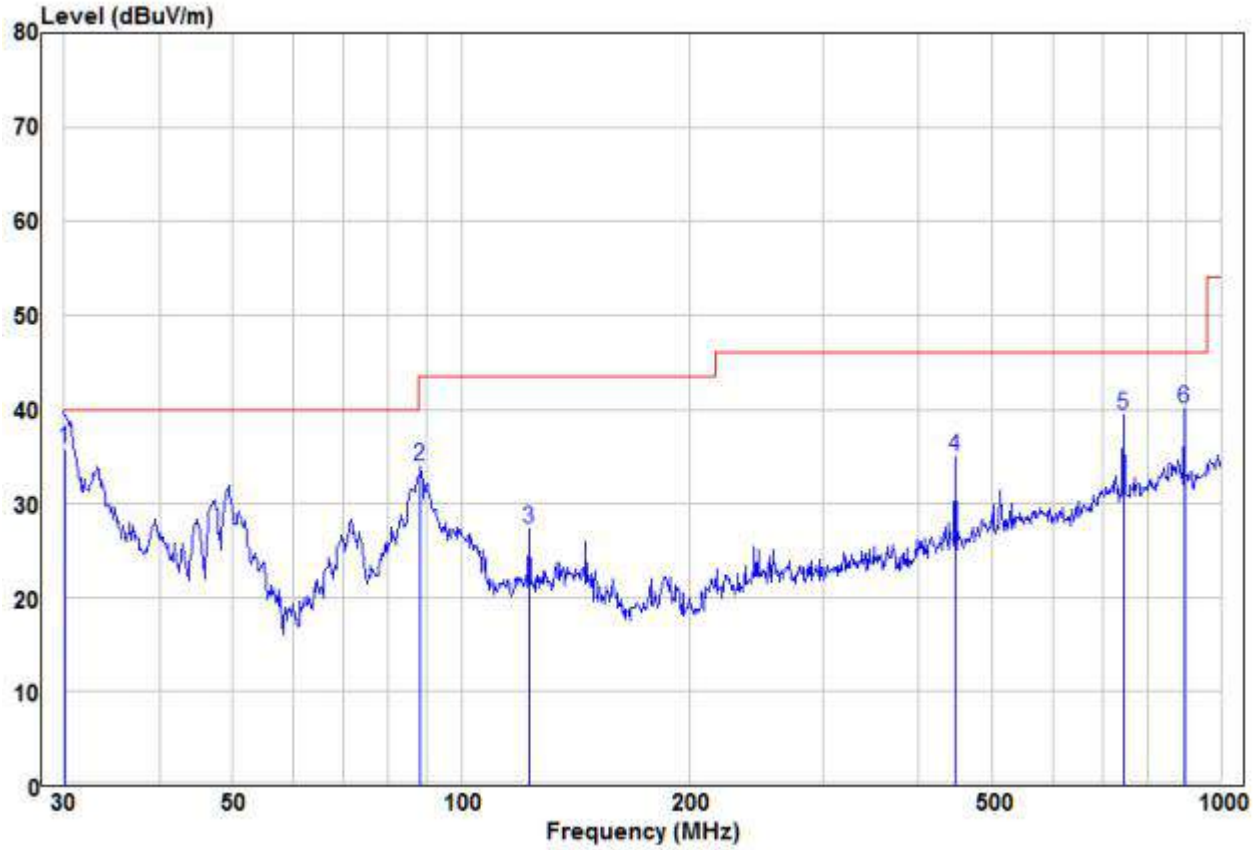
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test result: PASS

Test Data:

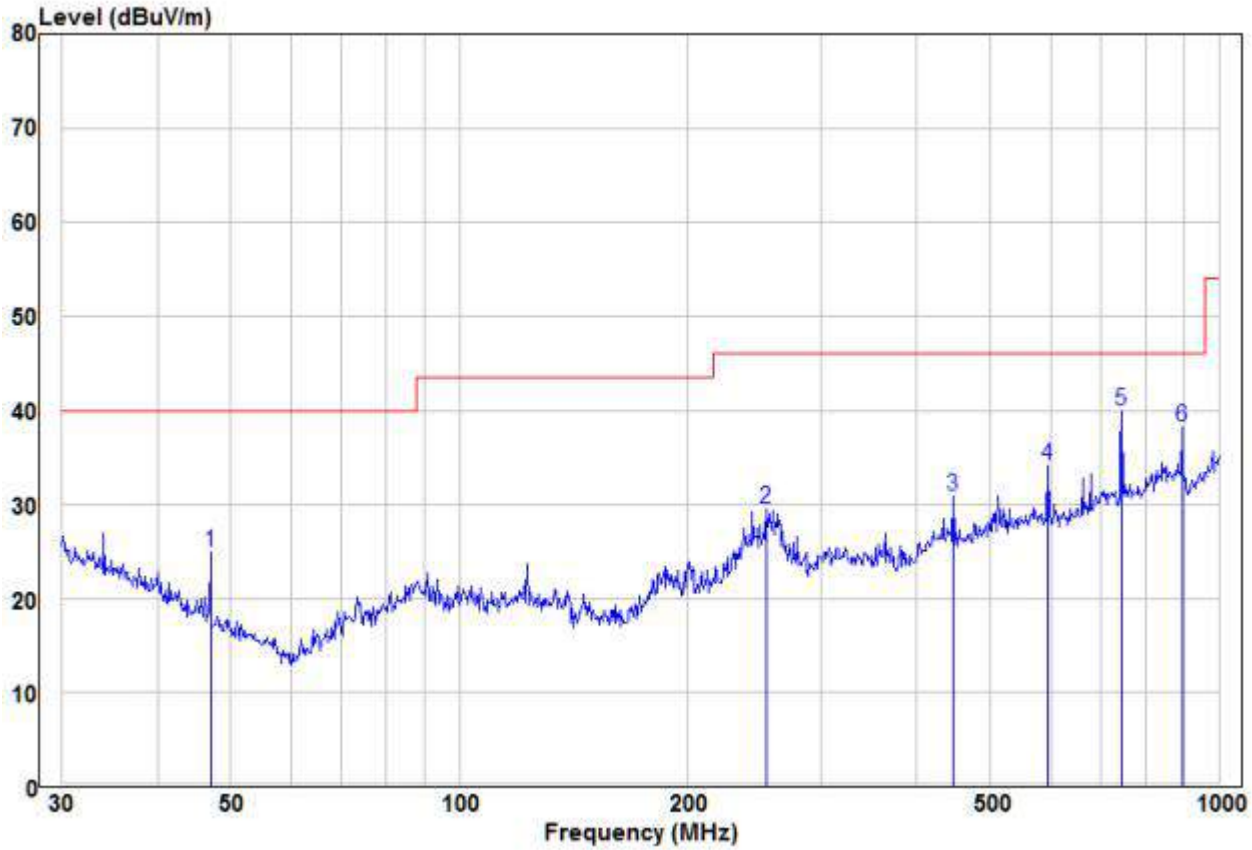
Radiated Emission below 1GHz

30MHz~1GHz		
Test mode:	Transmitting (802.11a 36CH)	Vertical



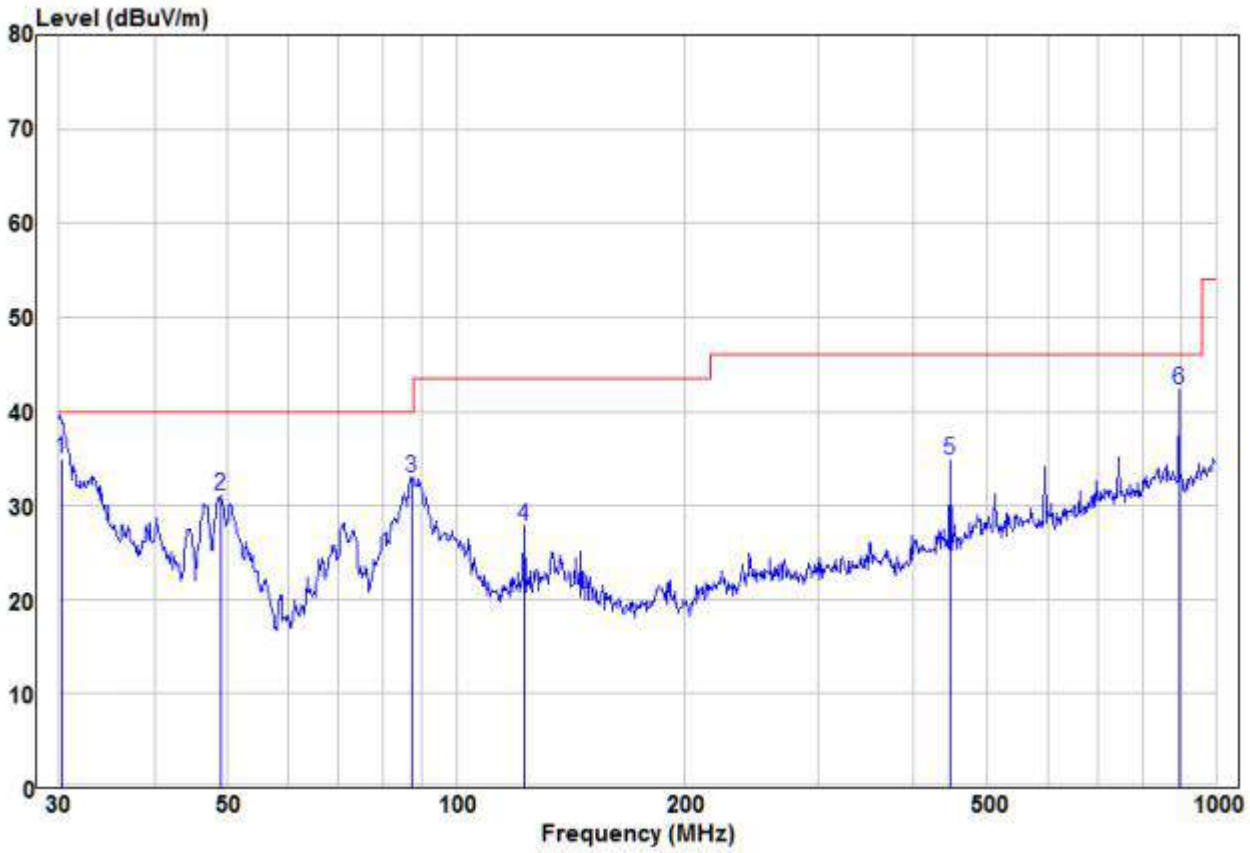
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1 pp	30.11	19.90	15.88	35.78	40.00	-4.22	QP	VERTICAL
2	88.34	23.92	9.98	33.90	43.50	-9.60	Peak	VERTICAL
3	122.83	16.71	10.59	27.30	43.50	-16.20	Peak	VERTICAL
4	446.41	18.36	16.62	34.98	46.00	-11.02	Peak	VERTICAL
5	744.87	17.56	21.88	39.44	46.00	-6.56	Peak	VERTICAL
6 pk	893.86	16.17	23.87	40.04	46.00	-5.96	Peak	VERTICAL

Test mode:	Transmitting (802.11a 36CH)	Horizontal



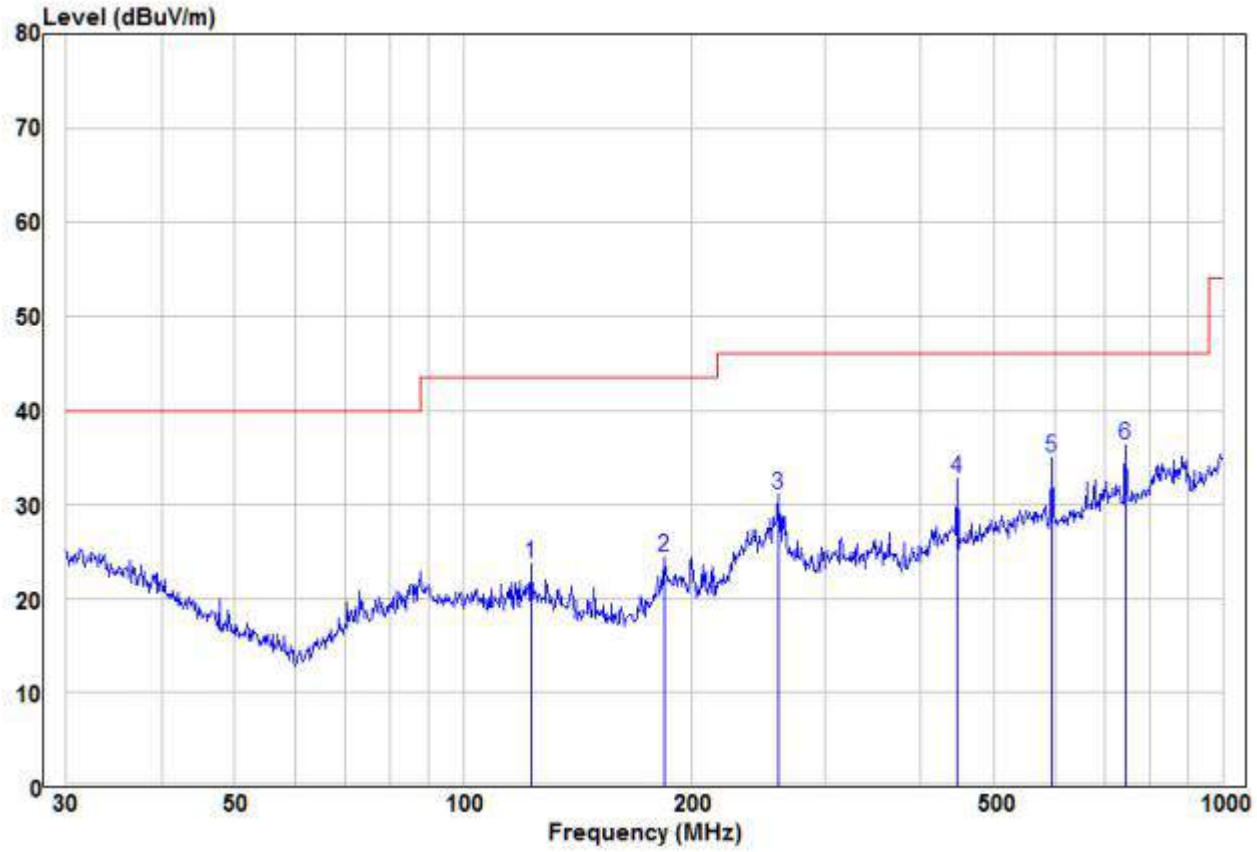
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	46.99	15.38	9.50	24.88	40.00	-15.12	Peak	HORIZONTAL
2	253.84	17.35	12.21	29.56	46.00	-16.44	Peak	HORIZONTAL
3	446.41	14.25	16.62	30.87	46.00	-15.13	Peak	HORIZONTAL
4	595.13	15.36	18.76	34.12	46.00	-11.88	Peak	HORIZONTAL
5 pp	744.87	18.10	21.88	39.98	46.00	-6.02	Peak	HORIZONTAL
6	893.86	14.27	23.87	38.14	46.00	-7.86	Peak	HORIZONTAL

30MHz~1GHz		
Test mode:	Transmitting (802.11a 149CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1 qp	30.21	19.20	15.85	35.05	40.00	-4.95	QP	VERTICAL
2	48.84	22.39	8.63	31.02	40.00	-8.98	Peak	VERTICAL
3	87.42	22.97	9.96	32.93	40.00	-7.07	Peak	VERTICAL
4	122.83	17.30	10.59	27.89	43.50	-15.61	Peak	VERTICAL
5	446.41	18.21	16.62	34.83	46.00	-11.17	Peak	VERTICAL
6 pp	893.86	18.36	23.87	42.23	46.00	-3.77	Peak	VERTICAL

Test mode:	Transmitting (802.11a 149CH)	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	122.83	13.13	10.59	23.72	43.50	-19.78	Peak	HORIZONTAL
2	183.84	16.13	8.20	24.33	43.50	-19.17	Peak	HORIZONTAL
3	260.14	18.66	12.41	31.07	46.00	-14.93	Peak	HORIZONTAL
4	446.41	16.16	16.62	32.78	46.00	-13.22	Peak	HORIZONTAL
5	595.13	16.19	18.76	34.95	46.00	-11.05	Peak	HORIZONTAL
6 pp	744.87	14.44	21.88	36.32	46.00	-9.68	Peak	HORIZONTAL

Transmitter Emission above 1GHz

Test mode:	802.11a(6Mbps)			Test channel:		36 CH	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
10360	48.37	2.26	50.63	74	-23.37	peak	H
10360	31.82	2.26	34.08	54	-19.92	AVG	H
15540	48.73	3.75	52.48	74	-21.52	peak	H
15540	31.74	3.75	35.49	54	-18.51	AVG	H
10360	48.89	2.26	51.15	74	-22.85	peak	V
10360	31.89	2.26	34.15	54	-19.85	AVG	V
15540	43.54	3.75	47.29	74	-26.71	peak	V
15540	32.25	3.75	36.00	54	-18.00	AVG	V

Test mode:	802.11a(6Mbps)			Test channel:		48 CH	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
10480	50.15	2.31	52.46	74	-21.54	peak	H
10480	32.55	2.31	34.86	54	-19.14	AVG	H
15720	48.61	3.79	52.40	74	-21.60	peak	H
15720	32.17	3.79	35.96	54	-18.04	AVG	H
10480	49.27	2.31	51.58	74	-22.42	peak	V
10480	31.62	2.31	33.93	54	-20.07	AVG	V
15720	42.46	3.79	46.25	74	-27.75	peak	V
15720	33.03	3.79	36.82	54	-17.18	AVG	V

Test mode:	802.11a(6Mbps)			Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol. H/V
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		
11490	48.20	2.54	50.74	68.2	-17.46	peak	H
11490	33.01	2.54	35.55	54	-18.45	AVG	H
17235	50.35	3.94	54.29	68.2	-13.91	peak	H
17235	33.42	3.94	37.36	54	-16.64	AVG	H
11490	48.65	2.54	51.19	68.2	-17.01	peak	V
11490	32.91	2.54	35.45	54	-18.55	AVG	V
17235	40.84	3.94	44.78	68.2	-23.42	peak	V
17235	32.57	3.94	36.51	54	-17.49	AVG	V

Test mode:	802.11a(6Mbps)			Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol. H/V
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		
11650	49.09	2.58	51.67	68.2	-16.53	peak	H
11650	33.40	2.58	35.98	54	-18.02	AVG	H
17475	48.62	4.02	52.64	68.2	-15.56	peak	H
17475	32.65	4.02	36.67	54	-17.33	AVG	H
11650	49.97	2.58	52.55	68.2	-15.65	peak	V
11650	32.71	2.58	35.29	54	-18.71	AVG	V
17475	42.31	4.02	46.33	68.2	-21.87	peak	V
17475	32.25	4.02	36.27	54	-17.73	AVG	V

Remark:

1) The 802.11a 6Mbps of rate is the worst case, only the worst data recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
3) Scan from 9kHz to 40GHz,The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

*** END OF REPORT ***