3.3.5.3 Min emission bandwidth

Test Mode	Antenna	Freq (MHz)	6dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5745	15.640	5736.760	5752.400	0.5	PASS
	Ant2	5745	14.720	5738.040	5752.760	0.5	PASS
	Ant1	5785	15.440	5777.000	5792.440	0.5	PASS
	Ant2	5785	11.280	5778.040	5789.320	0.5	PASS
	Ant1	5825	16.280	5816.760	5833.040	0.5	PASS
	Ant2	5825	11.720	5817.320	5829.040	0.5	PASS
11N20MIMO	Ant1	5745	10.920	5741.520	5752.440	0.5	PASS
	Ant2	5745	14.040	5739.000	5753.040	0.5	PASS
	Ant1	5785	14.400	5776.760	5791.160	0.5	PASS
	Ant2	5785	16.360	5777.320	5793.680	0.5	PASS
	Ant1	5825	10.680	5817.360	5828.040	0.5	PASS
	Ant2	5825	15.920	5816.520	5832.440	0.5	PASS
11N40MIMO	Ant1	5755	34.000	5737.800	5771.800	0.5	PASS
	Ant2	5755	23.920	5748.840	5772.760	0.5	PASS
	Ant1	5795	35.280	5777.160	5812.440	0.5	PASS
	Ant2	5795	32.800	5780.200	5813.000	0.5	PASS
11AC20MIMO	Ant1	5745	16.880	5736.400	5753.280	0.5	PASS
	Ant2	5745	16.320	5737.360	5753.680	0.5	PASS
	Ant1	5785	16.280	5776.120	5792.400	0.5	PASS
	Ant2	5785	14.120	5779.520	5793.640	0.5	PASS
	Ant1	5825	16.240	5816.760	5833.000	0.5	PASS
	Ant2	5825	16.040	5816.760	5832.800	0.5	PASS
11AC40MIMO	Ant1	5755	35.600	5736.760	5772.360	0.5	PASS
	Ant2	5755	33.200	5739.880	5773.080	0.5	PASS
	Ant1	5795	35.360	5776.760	5812.120	0.5	PASS
	Ant2	5795	33.840	5778.600	5812.440	0.5	PASS
11AC80MIMO	Ant1	5775	46.880	5750.520	5797.400	0.5	PASS
	Ant2	5775	71.520	5737.080	5808.600	0.5	PASS
11AX20MIMO	Ant1	5745	12.560	5738.600	5751.160	0.5	PASS
	Ant2	5745	11.040	5741.400	5752.440	0.5	PASS
	Ant1	5785	11.320	5779.840	5791.160	0.5	PASS
	Ant2	5785	7.920	5781.720	5789.640	0.5	PASS
	Ant1	5825	14.560	5817.840	5832.400	0.5	PASS
	Ant2	5825	16.760	5815.600	5832.360	0.5	PASS
11AX40MIMO	Ant1	5755	20.320	5742.360	5762.680	0.5	PASS
	Ant2	5755	24.880	5748.360	5773.240	0.5	PASS
	Ant1	5795	37.440	5776.040	5813.480	0.5	PASS
	Ant2	5795	32.560	5779.880	5812.440	0.5	PASS
11AX80MIMO	Ant1	5775	42.560	5747.320	5789.880	0.5	PASS

	Ant2	5775	38.880	5761.400	5800.280	0.5	PASS

11A-CDD_Ant1_5745


11A-CDD_Ant2_5745

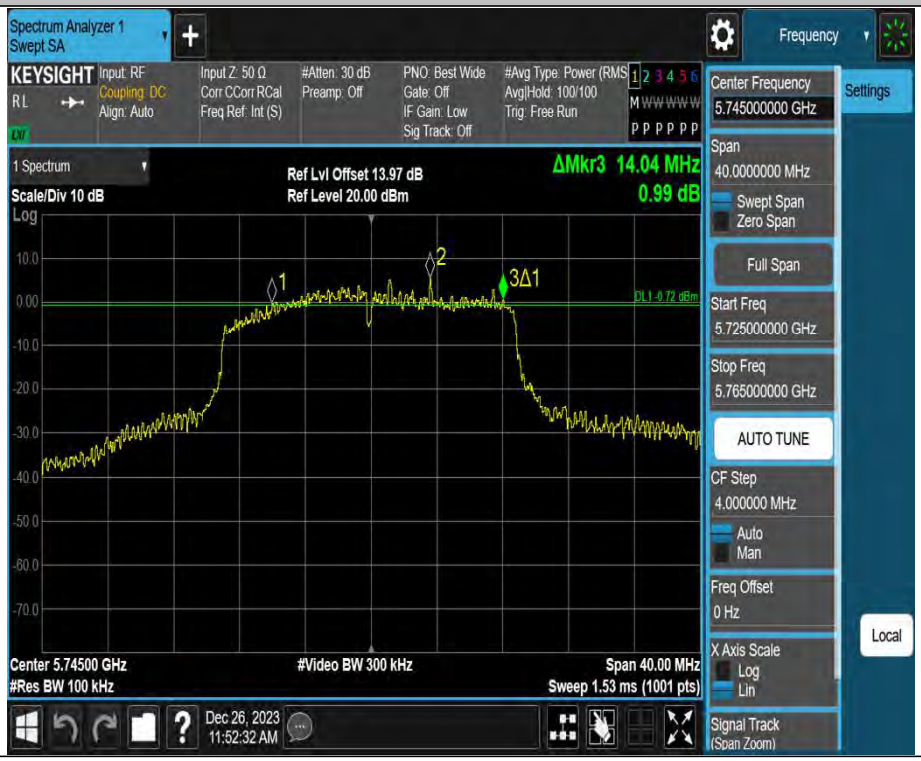

11A-CDD_Ant1_5785

11A-CDD_Ant2_5785

11A-CDD_Ant1_5825

11A-CDD_Ant2_5825


11N20MIMO_Ant1_5745

11N20MIMO_Ant2_5745


11N20MIMO_Ant1_5785

11N20MIMO_Ant2_5785


11N20MIMO_Ant1_5825

11N20MIMO_Ant2_5825


11N40MIMO_Ant1_5755

11N40MIMO_Ant2_5755


11N40MIMO_Ant1_5795

11N40MIMO_Ant2_5795


11AC20MIMO_Ant1_5745

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


11AX20MIMO_Ant1_5745

11AX20MIMO_Ant2_5745


11AX20MIMO_Ant1_5785

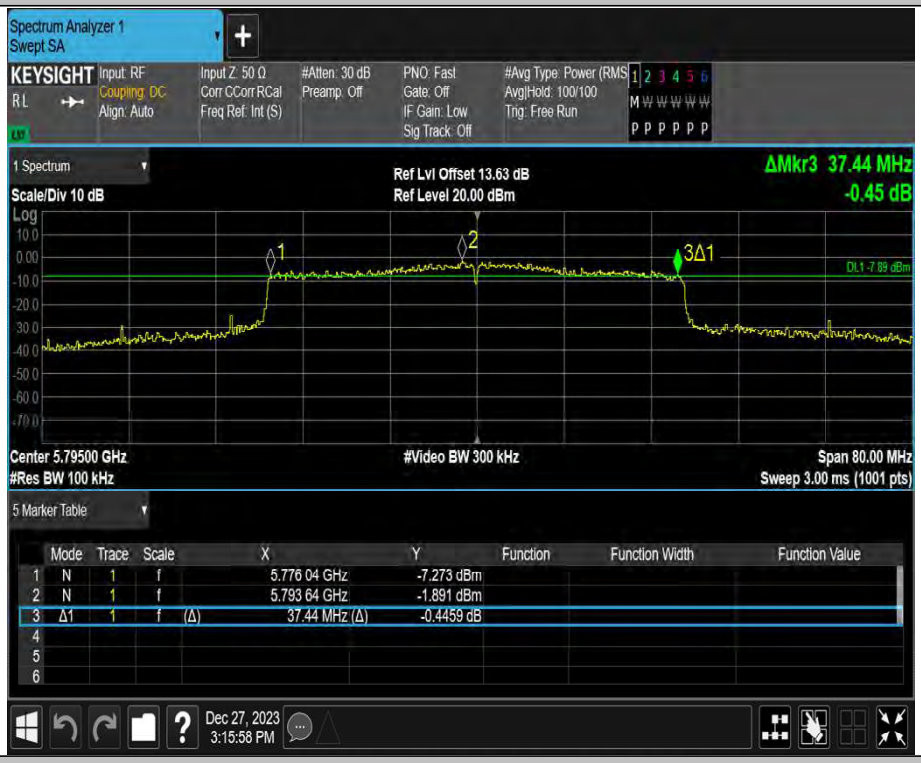
11AX20MIMO_Ant2_5785


11AX20MIMO_Ant1_5825

11AX20MIMO_Ant2_5825


11AX40MIMO_Ant1_5755

11AX40MIMO_Ant2_5755

11AX40MIMO_Ant1_5795


11AX40MIMO_Ant2_5795


11AX80MIMO_Ant1_5775

11AX80MIMO_Ant2_5775

3.4 Conducted Output Power

3.4.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Conducted Output Power	Master device: 1 Watt (30 dBm) Client device: 250 mW (23.98 dBm)	5150-5250
		250 mW (23.98 dBm)	5250-5350
		250 mW (23.98 dBm)	5470-5725
		1 Watt (30dBm)	5725-5850

Note:

a. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

3.4.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

a) The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.

b) Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

3.4.3 Test Setup

3.4.4 Table of Parameters of Text Software Setting

UNII-1			
Test Software Version	QSPR		
Frequency (MHz)	5180	5200	5240
IEEE 802.11a	15	15	15
IEEE 802.11n(HT20)	16	16	16
IEEE 802.11ac(VHT20)	16	16	16
IEEE 802.11ax(HE20)	16	16	16
Frequency (MHz)	5190	5230	
IEEE 802.11n(HT40)	11	11	
IEEE 802.11ac(VHT40)	11	11	
IEEE 802.11ax(HE40)	11	11	
Frequency (MHz)	5210		
IEEE 802.11ac(VHT80)	10		
IEEE 802.11ax(HE80)	10		

UNII-2A			
Test Software Version	QSPR		
Frequency (MHz)	5260	5300	5320
IEEE 802.11a	15	15	15
IEEE 802.11n(HT20)	16	16	16
IEEE 802.11ac(VHT20)	16	16	16
IEEE 802.11ax(HE20)	16	16	16
Frequency (MHz)	5270	5310	
IEEE 802.11n(HT40)	11	11	
IEEE 802.11ac(VHT40)	11	11	
IEEE 802.11ax(HE40)	11	11	
Frequency (MHz)	5290		
IEEE 802.11ac(VHT80)	10		
IEEE 802.11ax(HE80)	10		
Frequency (MHz)	5250		
IEEE 802.11ac(VHT160)	9		
IEEE 802.11ax(HE160)	9		

UNII-2C			
Test Software Version	QSPR		
Frequency (MHz)	5500	5580	5700
IEEE 802.11a	15	15	15
IEEE 802.11n(HT20)	16	16	16
IEEE 802.11ac(VHT20)	16	16	16
IEEE 802.11ax(HE20)	16	16	16
Frequency (MHz)	5510	5550	5670
IEEE 802.11n(HT40)	11	11	11
IEEE 802.11ac(VHT40)	11	11	11
IEEE 802.11ax(HE40)	11	11	11
Frequency (MHz)	5530	5610	
IEEE 802.11ac(VHT80)	10	10	
IEEE 802.11ax(HE80)	10	10	
Frequency (MHz)	5570		
IEEE 802.11ac(VHT160)	9		
IEEE 802.11ax(HE160)	9		

UNII-3			
Test Software Version	QSPR		
Frequency (MHz)	5745	5785	5825
IEEE 802.11a	15	15	15
IEEE 802.11n(HT20)	16	16	16
IEEE 802.11ac(VHT20)	16	16	16
IEEE 802.11ax(HE20)	16	16	16
Frequency (MHz)	5755	5795	
IEEE 802.11n(HT40)	11	11	
IEEE 802.11ac(VHT40)	11	11	
IEEE 802.11ax(HE40)	11	11	
Frequency (MHz)	5775		
IEEE 802.11ac(VHT80)	10		
IEEE 802.11ax(HE80)	10		

3.4.5 The Result

Test Mode	Antenna	Freq (MHz)	TPC Mode	Result [dBm]	Limit [dBm]	Verdict
11A-CDD	Ant1	5180	NA	14.48	≤30.00	PASS
	Ant2	5180	NA	15.63	≤30.00	PASS
	total	5180	NA	**18.10**	≤30.00	PASS
	Ant1	5200	NA	14.16	≤30.00	PASS
	Ant2	5200	NA	15.55	≤30.00	PASS
	total	5200	NA	17.92	≤30.00	PASS
	Ant1	5240	NA	13.86	≤30.00	PASS
	Ant2	5240	NA	14.67	≤30.00	PASS
	total	5240	NA	17.29	≤30.00	PASS
	Ant1	5260	NA	14.24	≤23.98	PASS
	Ant2	5260	NA	14.92	≤23.98	PASS
	total	5260	NA	17.60	≤23.98	PASS
	Ant1	5280	NA	14.08	≤23.98	PASS
	Ant2	5280	NA	14.21	≤23.98	PASS
	total	5280	NA	17.16	≤23.98	PASS
	Ant1	5320	NA	13.91	≤23.98	PASS
	Ant2	5320	NA	14.32	≤23.98	PASS
	total	5320	NA	17.13	≤23.98	PASS
	Ant1	5500	NA	14.73	≤23.98	PASS
	Ant2	5500	NA	14.39	≤23.98	PASS
	total	5500	NA	17.57	≤23.98	PASS
	Ant1	5580	NA	14.61	≤23.98	PASS
	Ant2	5580	NA	14.33	≤23.98	PASS
	total	5580	NA	17.48	≤23.98	PASS
	Ant1	5700	NA	13.19	≤23.98	PASS
	Ant2	5700	NA	15.42	≤23.98	PASS
	total	5700	NA	17.46	≤23.98	PASS
	Ant1	5745	NA	13.77	≤30.00	PASS
	Ant2	5745	NA	15.62	≤30.00	PASS
	total	5745	NA	17.80	≤30.00	PASS
	Ant1	5785	NA	13.33	≤30.00	PASS
	Ant2	5785	NA	15.56	≤30.00	PASS
	total	5785	NA	17.60	≤30.00	PASS
	Ant1	5825	NA	13.29	≤30.00	PASS
	Ant2	5825	NA	16.03	≤30.00	PASS
	total	5825	NA	17.88	≤30.00	PASS
11N20MIMO	Ant1	5180	NA	14.30	≤30.00	PASS
	Ant2	5180	NA	15.06	≤30.00	PASS

	total	5180	NA	17.71	≤30.00	PASS
	Ant1	5200	NA	13.98	≤30.00	PASS
	Ant2	5200	NA	15.22	≤30.00	PASS
	total	5200	NA	17.65	≤30.00	PASS
	Ant1	5240	NA	14.60	≤30.00	PASS
	Ant2	5240	NA	13.25	≤30.00	PASS
	total	5240	NA	16.99	≤30.00	PASS
	Ant1	5260	NA	13.61	≤23.98	PASS
	Ant2	5260	NA	14.50	≤23.98	PASS
	total	5260	NA	17.09	≤23.98	PASS
	Ant1	5280	NA	14.72	≤23.98	PASS
	Ant2	5280	NA	14.71	≤23.98	PASS
	total	5280	NA	17.73	≤23.98	PASS
	Ant1	5320	NA	14.53	≤23.98	PASS
	Ant2	5320	NA	15.03	≤23.98	PASS
	total	5320	NA	17.80	≤23.98	PASS
	Ant1	5500	NA	15.53	≤23.98	PASS
	Ant2	5500	NA	14.84	≤23.98	PASS
	total	5500	NA	**18.21**	≤23.98	PASS
	Ant1	5580	NA	14.25	≤23.98	PASS
	Ant2	5580	NA	13.80	≤23.98	PASS
	total	5580	NA	17.04	≤23.98	PASS
	Ant1	5700	NA	11.89	≤23.98	PASS
	Ant2	5700	NA	13.94	≤23.98	PASS
	total	5700	NA	16.05	≤23.98	PASS
	Ant1	5745	NA	13.50	≤30.00	PASS
	Ant2	5745	NA	16.42	≤30.00	PASS
	total	5745	NA	18.21	≤30.00	PASS
	Ant1	5785	NA	13.76	≤30.00	PASS
	Ant2	5785	NA	16.22	≤30.00	PASS
	total	5785	NA	18.17	≤30.00	PASS
	Ant1	5825	NA	13.78	≤30.00	PASS
	Ant2	5825	NA	16.73	≤30.00	PASS
	total	5825	NA	**18.51**	≤30.00	PASS
11N40MIMO	Ant1	5190	NA	11.60	≤30.00	PASS
	Ant2	5190	NA	13.23	≤30.00	PASS
	total	5190	NA	15.50	≤30.00	PASS
	Ant1	5230	NA	11.38	≤30.00	PASS
	Ant2	5230	NA	12.72	≤30.00	PASS
	total	5230	NA	15.11	≤30.00	PASS
	Ant1	5270	NA	11.80	≤23.98	PASS
	Ant2	5270	NA	12.07	≤23.98	PASS

	total	5270	NA	14.95	≤23.98	PASS
	Ant1	5310	NA	11.20	≤23.98	PASS
	Ant2	5310	NA	11.80	≤23.98	PASS
	total	5310	NA	14.52	≤23.98	PASS
	Ant1	5510	NA	12.16	≤23.98	PASS
	Ant2	5510	NA	11.98	≤23.98	PASS
	total	5510	NA	15.08	≤23.98	PASS
	Ant1	5550	NA	11.28	≤23.98	PASS
	Ant2	5550	NA	10.93	≤23.98	PASS
	total	5550	NA	14.12	≤23.98	PASS
	Ant1	5670	NA	11.39	≤23.98	PASS
	Ant2	5670	NA	12.41	≤23.98	PASS
	total	5670	NA	14.94	≤23.98	PASS
	Ant1	5755	NA	11.01	≤30.00	PASS
	Ant2	5755	NA	12.83	≤30.00	PASS
	total	5755	NA	15.02	≤30.00	PASS
	Ant1	5795	NA	11.29	≤30.00	PASS
	Ant2	5795	NA	12.95	≤30.00	PASS
	total	5795	NA	15.21	≤30.00	PASS
11AC20MIMO	Ant1	5180	NA	13.92	≤30.00	PASS
	Ant2	5180	NA	14.81	≤30.00	PASS
	total	5180	NA	17.40	≤30.00	PASS
	Ant1	5200	NA	13.97	≤30.00	PASS
	Ant2	5200	NA	15.38	≤30.00	PASS
	total	5200	NA	17.74	≤30.00	PASS
	Ant1	5240	NA	13.49	≤30.00	PASS
	Ant2	5240	NA	14.31	≤30.00	PASS
	total	5240	NA	16.93	≤30.00	PASS
	Ant1	5260	NA	14.16	≤23.98	PASS
	Ant2	5260	NA	14.70	≤23.98	PASS
	total	5260	NA	17.45	≤23.98	PASS
	Ant1	5280	NA	14.87	≤23.98	PASS
	Ant2	5280	NA	14.98	≤23.98	PASS
	total	5280	NA	**17.94**	≤23.98	PASS
	Ant1	5320	NA	14.62	≤23.94	PASS
	Ant2	5320	NA	15.14	≤23.88	PASS
	total	5320	NA	17.90	≤23.98	PASS
	Ant1	5500	NA	14.69	≤23.98	PASS
	Ant2	5500	NA	14.13	≤23.98	PASS
	total	5500	NA	17.43	≤23.98	PASS
	Ant1	5580	NA	14.38	≤23.98	PASS
	Ant2	5580	NA	14.01	≤23.98	PASS

	total	5580	NA	17.21	≤23.98	PASS
	Ant1	5700	NA	12.92	≤23.98	PASS
	Ant2	5700	NA	13.17	≤23.98	PASS
	total	5700	NA	16.06	≤23.98	PASS
	Ant1	5745	NA	13.49	≤30.00	PASS
	Ant2	5745	NA	14.10	≤30.00	PASS
	total	5745	NA	16.82	≤30.00	PASS
	Ant1	5785	NA	14.03	≤30.00	PASS
	Ant2	5785	NA	14.28	≤30.00	PASS
	total	5785	NA	17.17	≤30.00	PASS
	Ant1	5825	NA	14.20	≤30.00	PASS
	Ant2	5825	NA	14.96	≤30.00	PASS
	total	5825	NA	17.61	≤30.00	PASS
11AC40MIMO	Ant1	5190	NA	11.59	≤30.00	PASS
	Ant2	5190	NA	12.33	≤30.00	PASS
	total	5190	NA	14.99	≤30.00	PASS
	Ant1	5230	NA	11.49	≤30.00	PASS
	Ant2	5230	NA	12.67	≤30.00	PASS
	total	5230	NA	15.13	≤30.00	PASS
	Ant1	5270	NA	11.52	≤23.98	PASS
	Ant2	5270	NA	12.28	≤23.98	PASS
	total	5270	NA	14.93	≤23.98	PASS
	Ant1	5310	NA	11.10	≤23.98	PASS
	Ant2	5310	NA	11.94	≤23.98	PASS
	total	5310	NA	14.55	≤23.98	PASS
	Ant1	5510	NA	12.19	≤23.98	PASS
	Ant2	5510	NA	11.95	≤23.98	PASS
	total	5510	NA	15.08	≤23.98	PASS
	Ant1	5550	NA	11.22	≤23.98	PASS
	Ant2	5550	NA	11.16	≤23.98	PASS
	total	5550	NA	14.20	≤23.98	PASS
	Ant1	5670	NA	12.22	≤23.98	PASS
	Ant2	5670	NA	13.41	≤23.98	PASS
	total	5670	NA	15.87	≤23.98	PASS
	Ant1	5755	NA	10.88	≤30.00	PASS
	Ant2	5755	NA	13.97	≤30.00	PASS
	total	5755	NA	15.70	≤30.00	PASS
	Ant1	5795	NA	11.16	≤30.00	PASS
	Ant2	5795	NA	13.85	≤30.00	PASS
	total	5795	NA	15.72	≤30.00	PASS
11AC80MIMO	Ant1	5210	NA	11.91	≤30.00	PASS
	Ant2	5210	NA	12.62	≤30.00	PASS

	total	5210	NA	15.29	≤30.00	PASS
	Ant1	5290	NA	11.19	≤23.98	PASS
	Ant2	5290	NA	11.73	≤23.98	PASS
	total	5290	NA	14.48	≤23.98	PASS
	Ant1	5530	NA	11.87	≤23.98	PASS
	Ant2	5530	NA	11.55	≤23.98	PASS
	total	5530	NA	14.72	≤23.98	PASS
	Ant1	5610	NA	12.18	≤23.98	PASS
	Ant2	5610	NA	12.00	≤23.98	PASS
	total	5610	NA	15.10	≤23.98	PASS
	Ant1	5775	NA	11.06	≤30.00	PASS
	Ant2	5775	NA	13.85	≤30.00	PASS
	total	5775	NA	15.69	≤30.00	PASS
11AC160MIMO	Ant1	5250_UNII-1	NA	11.00	≤30.00	PASS
	Ant2	5250_UNII-1	NA	12.37	≤30.00	PASS
	total	5250_UNII-1	NA	14.75	≤30.00	PASS
	Ant1	5250_UNII-2A	NA	10.25	≤23.98	PASS
	Ant2	5250_UNII-2A	NA	10.85	≤23.98	PASS
	total	5250_UNII-2A	NA	13.57	≤23.98	PASS
	Ant1	5570	NA	13.57	≤23.98	PASS
	Ant2	5570	NA	13.23	≤23.98	PASS
	total	5570	NA	16.41	≤23.98	PASS
11AX20MIMO	Ant1	5180	NA	14.56	≤30.00	PASS
	Ant2	5180	NA	15.24	≤30.00	PASS
	total	5180	NA	17.92	≤30.00	PASS
	Ant1	5200	NA	13.91	≤30.00	PASS
	Ant2	5200	NA	15.03	≤30.00	PASS
	total	5200	NA	17.52	≤30.00	PASS
	Ant1	5240	NA	13.72	≤30.00	PASS
	Ant2	5240	NA	14.46	≤30.00	PASS
	total	5240	NA	17.12	≤30.00	PASS
	Ant1	5260	NA	14.14	≤23.98	PASS
	Ant2	5260	NA	14.74	≤23.98	PASS
	total	5260	NA	17.46	≤23.98	PASS
	Ant1	5280	NA	14.03	≤23.98	PASS
	Ant2	5280	NA	14.07	≤23.98	PASS
	total	5280	NA	17.06	≤23.98	PASS
	Ant1	5320	NA	13.67	≤23.98	PASS
	Ant2	5320	NA	14.22	≤23.98	PASS
	total	5320	NA	16.96	≤23.98	PASS
	Ant1	5500	NA	14.62	≤23.98	PASS
	Ant2	5500	NA	14.26	≤23.98	PASS

	total	5500	NA	17.45	≤23.98	PASS
	Ant1	5580	NA	14.61	≤23.98	PASS
	Ant2	5580	NA	14.09	≤23.98	PASS
	total	5580	NA	17.37	≤23.98	PASS
	Ant1	5700	NA	12.09	≤23.98	PASS
	Ant2	5700	NA	14.17	≤23.98	PASS
	total	5700	NA	16.26	≤23.98	PASS
	Ant1	5745	NA	13.00	≤30.00	PASS
	Ant2	5745	NA	15.64	≤30.00	PASS
	total	5745	NA	17.53	≤30.00	PASS
	Ant1	5785	NA	13.00	≤30.00	PASS
	Ant2	5785	NA	15.32	≤30.00	PASS
	total	5785	NA	17.32	≤30.00	PASS
	Ant1	5825	NA	13.17	≤30.00	PASS
	Ant2	5825	NA	15.87	≤30.00	PASS
	total	5825	NA	17.74	≤30.00	PASS
11AX40MIMO	Ant1	5190	NA	11.25	≤30.00	PASS
	Ant2	5190	NA	12.77	≤30.00	PASS
	total	5190	NA	15.09	≤30.00	PASS
	Ant1	5230	NA	12.11	≤30.00	PASS
	Ant2	5230	NA	13.26	≤30.00	PASS
	total	5230	NA	15.73	≤30.00	PASS
	Ant1	5270	NA	12.26	≤23.98	PASS
	Ant2	5270	NA	12.55	≤23.98	PASS
	total	5270	NA	15.42	≤23.98	PASS
	Ant1	5310	NA	11.89	≤23.98	PASS
	Ant2	5310	NA	12.43	≤23.98	PASS
	total	5310	NA	15.18	≤23.98	PASS
	Ant1	5510	NA	12.46	≤23.98	PASS
	Ant2	5510	NA	12.23	≤23.98	PASS
	total	5510	NA	15.36	≤23.98	PASS
	Ant1	5550	NA	11.88	≤23.98	PASS
	Ant2	5550	NA	11.54	≤23.98	PASS
	total	5550	NA	14.72	≤23.98	PASS
	Ant1	5670	NA	11.81	≤23.98	PASS
	Ant2	5670	NA	13.13	≤23.98	PASS
	total	5670	NA	15.53	≤23.98	PASS
	Ant1	5755	NA	10.73	≤30.00	PASS
	Ant2	5755	NA	13.41	≤30.00	PASS
	total	5755	NA	15.28	≤30.00	PASS
	Ant1	5795	NA	11.10	≤30.00	PASS
	Ant2	5795	NA	13.58	≤30.00	PASS

	total	5795	NA	15.52	≤30.00	PASS
11AX80MIMO	Ant1	5210	NA	11.45	≤30.00	PASS
	Ant2	5210	NA	12.22	≤30.00	PASS
	total	5210	NA	14.86	≤30.00	PASS
	Ant1	5290	NA	10.74	≤23.98	PASS
	Ant2	5290	NA	11.26	≤23.98	PASS
	total	5290	NA	14.02	≤23.98	PASS
	Ant1	5530	NA	10.51	≤23.98	PASS
	Ant2	5530	NA	10.24	≤23.98	PASS
	total	5530	NA	13.39	≤23.98	PASS
	Ant1	5610	NA	10.43	≤23.98	PASS
	Ant2	5610	NA	11.15	≤23.98	PASS
	total	5610	NA	13.82	≤23.98	PASS
	Ant1	5775	NA	10.08	≤30.00	PASS
	Ant2	5775	NA	12.71	≤30.00	PASS
	total	5775	NA	14.60	≤30.00	PASS
11AX160MIMO	Ant1	5250_UNII-1	NA	11.61	≤30.00	PASS
	Ant2	5250_UNII-1	NA	11.98	≤30.00	PASS
	total	5250_UNII-1	NA	14.81	≤30.00	PASS
	Ant1	5250_UNII-2A	NA	10.64	≤23.98	PASS
	Ant2	5250_UNII-2A	NA	11.46	≤23.98	PASS
	total	5250_UNII-2A	NA	14.08	≤23.98	PASS
	Ant1	5570	NA	13.78	≤23.98	PASS
	Ant2	5570	NA	13.41	≤23.98	PASS
	total	5570	NA	16.61	≤23.98	PASS

Note: The Duty Cycle Factor is compensated in the test system

Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
Directional gain = 10log[$(10^{1.84/20} + 10^{2.74/20})^2 / N_{ANT}$] dBi=5.31

3.5 Power Spectral Density

3.5.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	Master device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250
		11 dBm/MHz	5250-5350
		11 dBm/MHz	5470-5725
		30 dBm/500 kHz	5725-5850

Note:

1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 300kHz and VBW at 1500kHz if the spectrum analyzer does not have 500 kHz RBW. Then, add 10 log (500 kHz/300 kHz) to the measured result, i.e. 2.22 dB.
2. During the test of U-NII 3 PSD, the measurement result with RBW=300kHz has been added 2.22 dB by compensating offset, offset=cable loss+duty factor+10log(500kHz/300kHz).

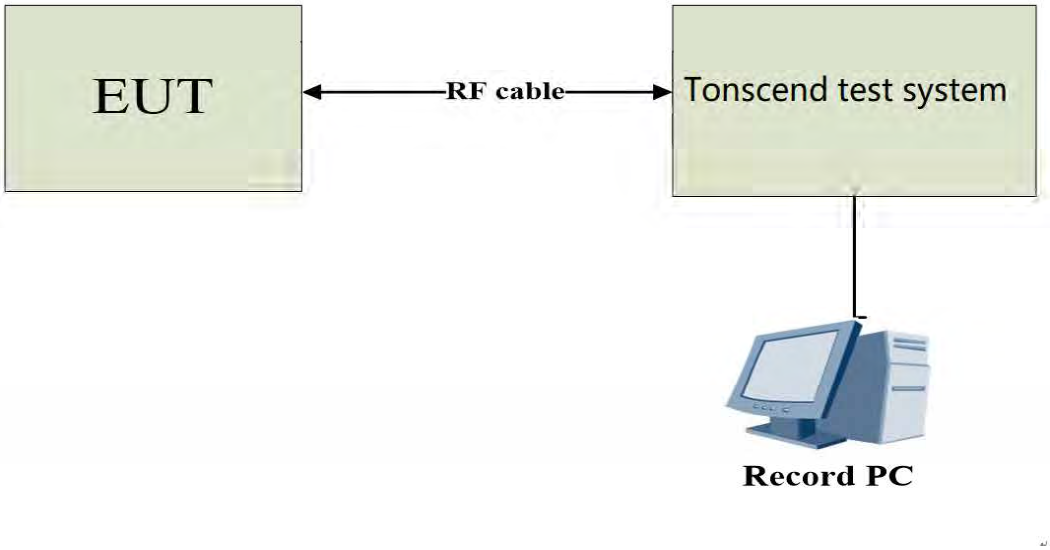
3.5.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

a) The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below. Spectrum analyser settings as following:

Centre Frequency	The centre frequency of the channel under test
RBW	= 1 MHz (Band1/2/3); = 300kHz (Band4)
VBW	≥3 x RBW
Frequency span	2 x Nominal Channel Bandwidth
Detector Mode	RMS
Trace Mode	Max Hold
Sweep Time	Auto Couple

3.5.3 Test Setup



3.5.4 The Result

Test Mode	Antenna	Freq (MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A-CDD	Ant1	5180	5.13	≤17.00	PASS
	Ant2	5180	6.06	≤17.00	PASS
	total	5180	8.63	≤17.00	PASS
	Ant1	5200	4.84	≤17.00	PASS
	Ant2	5200	6.26	≤17.00	PASS
	total	5200	8.62	≤17.00	PASS
	Ant1	5240	4.38	≤17.00	PASS
	Ant2	5240	5.35	≤17.00	PASS
	total	5240	7.90	≤17.00	PASS
	Ant1	5260	4.65	≤11.00	PASS
	Ant2	5260	5.47	≤11.00	PASS
	total	5260	8.09	≤11.00	PASS
	Ant1	5280	4.68	≤11.00	PASS
	Ant2	5280	5.04	≤11.00	PASS
	total	5280	7.87	≤11.00	PASS
	Ant1	5320	4.70	≤11.00	PASS
	Ant2	5320	5.01	≤11.00	PASS
	total	5320	7.87	≤11.00	PASS
	Ant1	5500	5.59	≤11.00	PASS
	Ant2	5500	5.45	≤11.00	PASS
	total	5500	8.53	≤11.00	PASS
	Ant1	5580	4.25	≤11.00	PASS
	Ant2	5580	4.36	≤11.00	PASS
	total	5580	7.32	≤11.00	PASS
	Ant1	5700	4.23	≤11.00	PASS
	Ant2	5700	6.31	≤11.00	PASS
	total	5700	8.40	≤11.00	PASS
	Ant1	5745	2.33	≤30.00	PASS
	Ant2	5745	5.31	≤30.00	PASS
	total	5745	7.08	≤30.00	PASS
	Ant1	5785	2.37	≤30.00	PASS
	Ant2	5785	5.25	≤30.00	PASS
	total	5785	7.05	≤30.00	PASS
	Ant1	5825	2.06	≤30.00	PASS
	Ant2	5825	5.15	≤30.00	PASS
	total	5825	6.88	≤30.00	PASS
11N20MIMO	Ant1	5180	4.47	≤17.00	PASS
	Ant2	5180	5.02	≤17.00	PASS

	total	5180	7.76	≤17.00	PASS
	Ant1	5200	3.89	≤17.00	PASS
	Ant2	5200	5.13	≤17.00	PASS
	total	5200	7.56	≤17.00	PASS
	Ant1	5240	5.10	≤17.00	PASS
	Ant2	5240	3.25	≤17.00	PASS
	total	5240	7.28	≤17.00	PASS
	Ant1	5260	4.19	≤11.00	PASS
	Ant2	5260	4.43	≤11.00	PASS
	total	5260	7.32	≤11.00	PASS
	Ant1	5280	3.94	≤11.00	PASS
	Ant2	5280	3.71	≤11.00	PASS
	total	5280	6.84	≤11.00	PASS
	Ant1	5320	4.99	≤11.00	PASS
	Ant2	5320	4.88	≤11.00	PASS
	total	5320	7.95	≤11.00	PASS
	Ant1	5500	5.86	≤11.00	PASS
	Ant2	5500	5.40	≤11.00	PASS
	total	5500	8.65	≤11.00	PASS
	Ant1	5580	4.59	≤11.00	PASS
	Ant2	5580	4.28	≤11.00	PASS
	total	5580	7.45	≤11.00	PASS
	Ant1	5700	2.26	≤11.00	PASS
	Ant2	5700	4.53	≤11.00	PASS
	total	5700	6.55	≤11.00	PASS
	Ant1	5745	1.28	≤30.00	PASS
	Ant2	5745	3.97	≤30.00	PASS
	total	5745	5.84	≤30.00	PASS
	Ant1	5785	1.61	≤30.00	PASS
	Ant2	5785	4.32	≤30.00	PASS
	total	5785	6.18	≤30.00	PASS
	Ant1	5825	1.33	≤30.00	PASS
	Ant2	5825	4.40	≤30.00	PASS
	total	5825	6.14	≤30.00	PASS
11N40MIMO	Ant1	5190	3.10	≤17.00	PASS
	Ant2	5190	4.66	≤17.00	PASS
	total	5190	6.96	≤17.00	PASS
	Ant1	5230	2.12	≤17.00	PASS
	Ant2	5230	3.01	≤17.00	PASS
	total	5230	5.60	≤17.00	PASS
	Ant1	5270	2.21	≤11.00	PASS
	Ant2	5270	2.17	≤11.00	PASS

	total	5270	5.20	≤11.00	PASS
	Ant1	5310	1.64	≤11.00	PASS
	Ant2	5310	1.62	≤11.00	PASS
	total	5310	4.64	≤11.00	PASS
	Ant1	5510	2.57	≤11.00	PASS
	Ant2	5510	2.49	≤11.00	PASS
	total	5510	5.54	≤11.00	PASS
	Ant1	5550	2.37	≤11.00	PASS
	Ant2	5550	2.42	≤11.00	PASS
	total	5550	5.41	≤11.00	PASS
	Ant1	5670	-0.17	≤11.00	PASS
	Ant2	5670	1.64	≤11.00	PASS
	total	5670	3.84	≤11.00	PASS
	Ant1	5755	-0.98	≤30.00	PASS
	Ant2	5755	2.26	≤30.00	PASS
	total	5755	3.95	≤30.00	PASS
	Ant1	5795	-0.89	≤30.00	PASS
	Ant2	5795	2.22	≤30.00	PASS
	total	5795	3.95	≤30.00	PASS
11AC20MIMO	Ant1	5180	4.66	≤17.00	PASS
	Ant2	5180	5.50	≤17.00	PASS
	total	5180	8.11	≤17.00	PASS
	Ant1	5200	3.96	≤17.00	PASS
	Ant2	5200	5.53	≤17.00	PASS
	total	5200	7.83	≤17.00	PASS
	Ant1	5240	3.72	≤17.00	PASS
	Ant2	5240	4.45	≤17.00	PASS
	total	5240	7.11	≤17.00	PASS
	Ant1	5260	5.73	≤11.00	PASS
	Ant2	5260	5.49	≤11.00	PASS
	total	5260	8.62	≤11.00	PASS
	Ant1	5280	5.39	≤11.00	PASS
	Ant2	5280	5.25	≤11.00	PASS
	total	5280	8.33	≤11.00	PASS
	Ant1	5320	5.10	≤11.00	PASS
	Ant2	5320	5.47	≤11.00	PASS
	total	5320	8.30	≤11.00	PASS
	Ant1	5500	6.33	≤11.00	PASS
	Ant2	5500	5.49	≤11.00	PASS
	total	5500	8.94	≤11.00	PASS
	Ant1	5580	4.94	≤11.00	PASS
	Ant2	5580	3.98	≤11.00	PASS

	total	5580	7.50	≤11.00	PASS
	Ant1	5700	2.33	≤11.00	PASS
	Ant2	5700	4.56	≤11.00	PASS
	total	5700	6.60	≤11.00	PASS
	Ant1	5745	0.90	≤30.00	PASS
	Ant2	5745	4.06	≤30.00	PASS
	total	5745	5.77	≤30.00	PASS
	Ant1	5785	1.91	≤30.00	PASS
	Ant2	5785	4.39	≤30.00	PASS
	total	5785	6.33	≤30.00	PASS
	Ant1	5825	1.81	≤30.00	PASS
	Ant2	5825	4.76	≤30.00	PASS
	total	5825	6.54	≤30.00	PASS
11AC40MIMO	Ant1	5190	2.08	≤17.00	PASS
	Ant2	5190	3.93	≤17.00	PASS
	total	5190	6.11	≤17.00	PASS
	Ant1	5230	2.06	≤17.00	PASS
	Ant2	5230	3.16	≤17.00	PASS
	total	5230	5.66	≤17.00	PASS
	Ant1	5270	2.66	≤11.00	PASS
	Ant2	5270	2.31	≤11.00	PASS
	total	5270	5.50	≤11.00	PASS
	Ant1	5310	2.15	≤11.00	PASS
	Ant2	5310	2.03	≤11.00	PASS
	total	5310	5.10	≤11.00	PASS
	Ant1	5510	2.44	≤11.00	PASS
	Ant2	5510	2.58	≤11.00	PASS
	total	5510	5.52	≤11.00	PASS
	Ant1	5550	1.74	≤11.00	PASS
	Ant2	5550	2.04	≤11.00	PASS
	total	5550	4.90	≤11.00	PASS
	Ant1	5670	-0.26	≤11.00	PASS
	Ant2	5670	1.47	≤11.00	PASS
	total	5670	3.70	≤11.00	PASS
	Ant1	5755	-1.20	≤30.00	PASS
	Ant2	5755	1.82	≤30.00	PASS
	total	5755	3.58	≤30.00	PASS
	Ant1	5795	-0.52	≤30.00	PASS
	Ant2	5795	2.40	≤30.00	PASS
	total	5795	4.19	≤30.00	PASS
11AC80MIMO	Ant1	5210	0.12	≤17.00	PASS
	Ant2	5210	0.26	≤17.00	PASS

	total	5210	3.20	≤17.00	PASS
	Ant1	5290	-0.83	≤11.00	PASS
	Ant2	5290	-1.49	≤11.00	PASS
	total	5290	1.86	≤11.00	PASS
	Ant1	5530	-1.60	≤11.00	PASS
	Ant2	5530	-1.08	≤11.00	PASS
	total	5530	1.68	≤11.00	PASS
	Ant1	5610	-1.99	≤11.00	PASS
	Ant2	5610	-1.81	≤11.00	PASS
	total	5610	1.11	≤11.00	PASS
	Ant1	5775	-3.78	≤30.00	PASS
	Ant2	5775	-0.93	≤30.00	PASS
	total	5775	0.89	≤30.00	PASS
11AC160MIMO	Ant1	5250_UNII-1	-4.35	≤17.00	PASS
	Ant2	5250_UNII-1	-3.42	≤17.00	PASS
	total	5250_UNII-1	-0.85	≤17.00	PASS
	Ant1	5250_UNII-2A	-3.99	≤11.00	PASS
	Ant2	5250_UNII-2A	-3.44	≤11.00	PASS
	total	5250_UNII-2A	-0.70	≤11.00	PASS
	Ant1	5570	-4.81	≤11.00	PASS
	Ant2	5570	-5.10	≤11.00	PASS
	total	5570	-1.94	≤11.00	PASS
11AX20MIMO	Ant1	5180	5.58	≤17.00	PASS
	Ant2	5180	6.26	≤17.00	PASS
	total	5180	8.94	≤17.00	PASS
	Ant1	5200	5.12	≤17.00	PASS
	Ant2	5200	6.35	≤17.00	PASS
	total	5200	8.79	≤17.00	PASS
	Ant1	5240	5.27	≤17.00	PASS
	Ant2	5240	5.37	≤17.00	PASS
	total	5240	8.33	≤17.00	PASS
	Ant1	5260	5.74	≤11.00	PASS
	Ant2	5260	5.53	≤11.00	PASS
	total	5260	8.65	≤11.00	PASS
	Ant1	5280	5.26	≤11.00	PASS
	Ant2	5280	5.03	≤11.00	PASS
	total	5280	8.16	≤11.00	PASS
	Ant1	5320	5.35	≤11.00	PASS
	Ant2	5320	5.30	≤11.00	PASS
	total	5320	8.34	≤11.00	PASS
	Ant1	5500	6.31	≤11.00	PASS
	Ant2	5500	5.89	≤11.00	PASS

	total	5500	9.12	≤11.00	PASS
	Ant1	5580	4.89	≤11.00	PASS
	Ant2	5580	3.95	≤11.00	PASS
	total	5580	7.46	≤11.00	PASS
	Ant1	5700	2.25	≤11.00	PASS
	Ant2	5700	4.49	≤11.00	PASS
	total	5700	6.52	≤11.00	PASS
	Ant1	5745	1.57	≤30.00	PASS
	Ant2	5745	4.14	≤30.00	PASS
	total	5745	6.05	≤30.00	PASS
	Ant1	5785	2.22	≤30.00	PASS
	Ant2	5785	4.46	≤30.00	PASS
	total	5785	6.49	≤30.00	PASS
	Ant1	5825	1.65	≤30.00	PASS
	Ant2	5825	4.65	≤30.00	PASS
	total	5825	6.41	≤30.00	PASS
11AX40MIMO	Ant1	5190	2.63	≤17.00	PASS
	Ant2	5190	4.16	≤17.00	PASS
	total	5190	6.47	≤17.00	PASS
	Ant1	5230	2.66	≤17.00	PASS
	Ant2	5230	3.41	≤17.00	PASS
	total	5230	6.06	≤17.00	PASS
	Ant1	5270	2.88	≤11.00	PASS
	Ant2	5270	3.08	≤11.00	PASS
	total	5270	5.99	≤11.00	PASS
	Ant1	5310	2.42	≤11.00	PASS
	Ant2	5310	2.89	≤11.00	PASS
	total	5310	5.67	≤11.00	PASS
	Ant1	5510	2.82	≤11.00	PASS
	Ant2	5510	3.02	≤11.00	PASS
	total	5510	5.93	≤11.00	PASS
	Ant1	5550	2.21	≤11.00	PASS
	Ant2	5550	2.47	≤11.00	PASS
	total	5550	5.35	≤11.00	PASS
	Ant1	5670	0.65	≤11.00	PASS
	Ant2	5670	2.00	≤11.00	PASS
	total	5670	4.39	≤11.00	PASS
	Ant1	5755	-1.21	≤30.00	PASS
	Ant2	5755	1.66	≤30.00	PASS
	total	5755	3.47	≤30.00	PASS
	Ant1	5795	-1.38	≤30.00	PASS
	Ant2	5795	1.78	≤30.00	PASS

	total	5795	3.49	≤30.00	PASS
11AX80MIMO	Ant1	5210	-1.14	≤17.00	PASS
	Ant2	5210	0.18	≤17.00	PASS
	total	5210	2.58	≤17.00	PASS
	Ant1	5290	-1.24	≤11.00	PASS
	Ant2	5290	-1.58	≤11.00	PASS
	total	5290	1.60	≤11.00	PASS
	Ant1	5530	-1.88	≤11.00	PASS
	Ant2	5530	-1.36	≤11.00	PASS
	total	5530	1.40	≤11.00	PASS
	Ant1	5610	-1.71	≤11.00	PASS
	Ant2	5610	-0.63	≤11.00	PASS
	total	5610	1.87	≤11.00	PASS
	Ant1	5775	-5.09	≤30.00	PASS
	Ant2	5775	-1.47	≤30.00	PASS
	total	5775	0.10	≤30.00	PASS
11AX160MIMO	Ant1	5250_UNII-1	-3.35	≤17.00	PASS
	Ant2	5250_UNII-1	-2.58	≤17.00	PASS
	total	5250_UNII-1	0.06	≤17.00	PASS
	Ant1	5250_UNII-2A	-3.03	≤11.00	PASS
	Ant2	5250_UNII-2A	-2.24	≤11.00	PASS
	total	5250_UNII-2A	0.39	≤11.00	PASS
	Ant1	5570	-3.73	≤11.00	PASS
	Ant2	5570	-3.53	≤11.00	PASS
	total	5570	-0.62	≤11.00	PASS

Note: The Duty Cycle Factor is compensated in the test system

Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
Directional gain = 10log[$(10^{1.84/20} + 10^{2.74/20})^2 / N_{ANT}$] dBi=5.31

11A-CDD_Ant1_5180

11A-CDD_Ant2_5180


11A-CDD_Ant1_5200

11A-CDD_Ant2_5200


11A-CDD_Ant1_5240

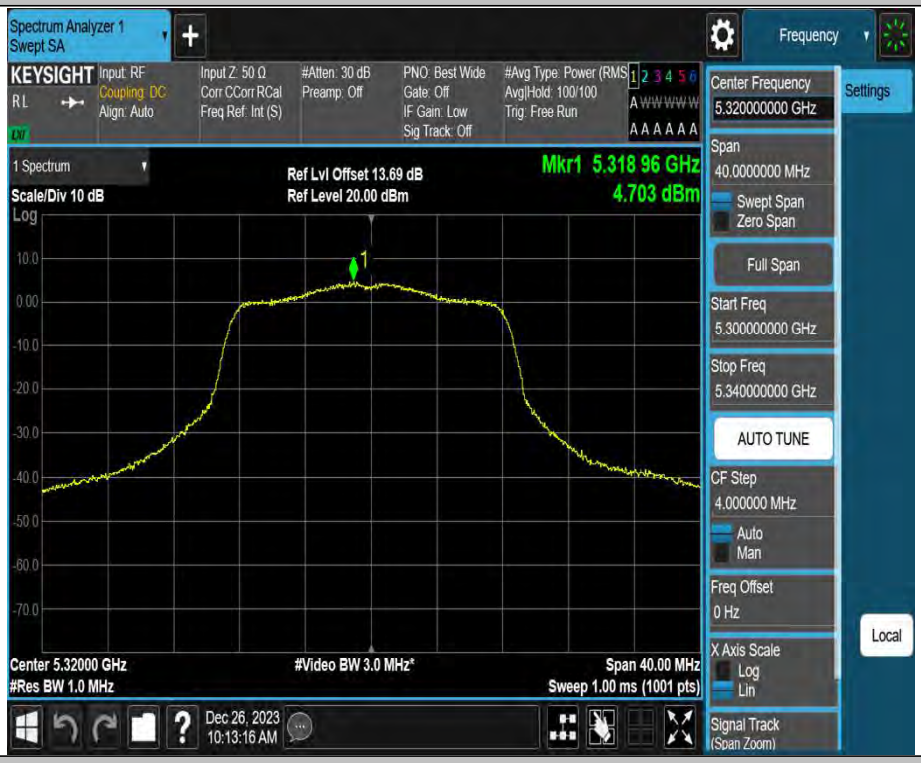
11A-CDD_Ant2_5240


11A-CDD_Ant1_5260

11A-CDD_Ant2_5260

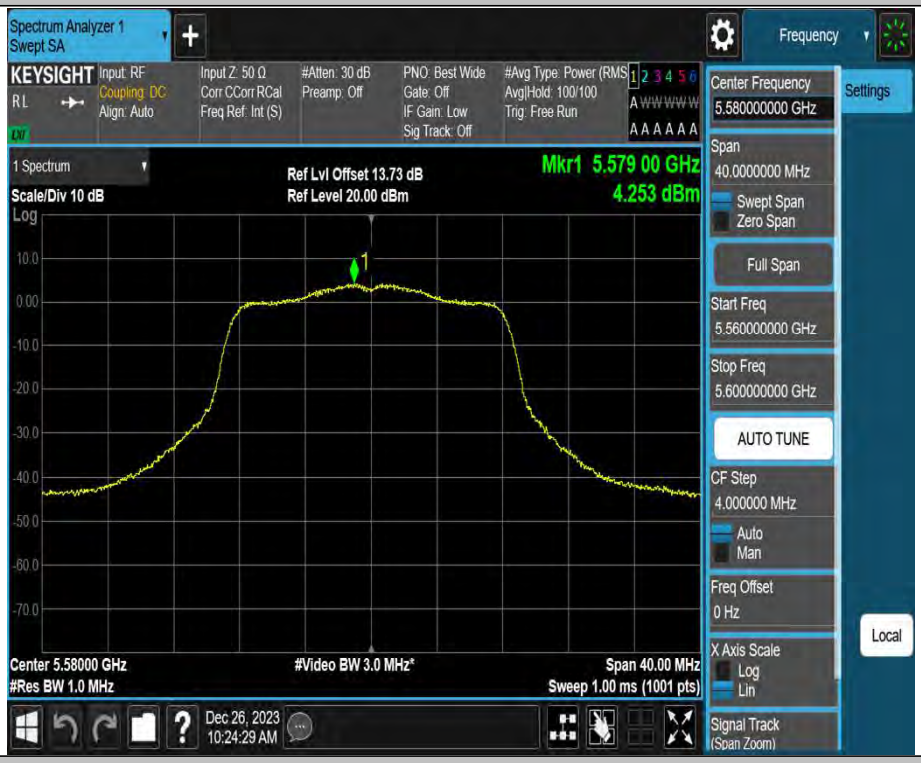
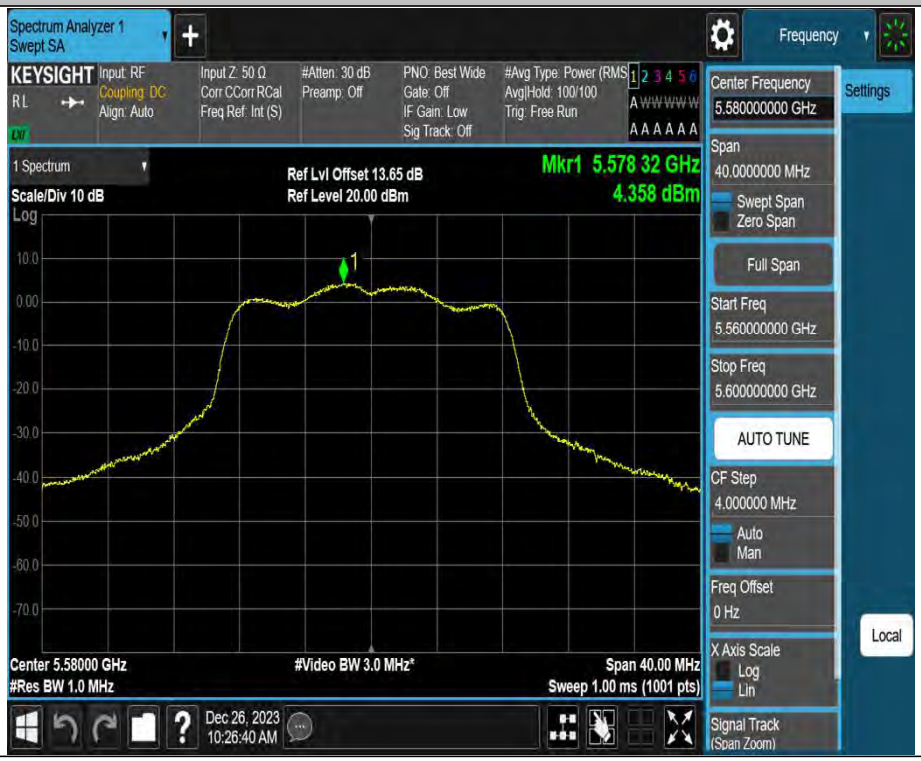

11A-CDD_Ant1_5280

11A-CDD_Ant2_5280


11A-CDD_Ant1_5320

11A-CDD_Ant2_5320


11A-CDD_Ant1_5500

11A-CDD_Ant2_5500


11A-CDD_Ant1_5580

11A-CDD_Ant2_5580


11A-CDD_Ant1_5700

11A-CDD_Ant2_5700


11A-CDD_Ant1_5745

11A-CDD_Ant2_5745


11A-CDD_Ant1_5785

11A-CDD_Ant2_5785


11A-CDD_Ant1_5825

11A-CDD_Ant2_5825


11N20MIMO_Ant1_5180

11N20MIMO_Ant2_5180


11N20MIMO_Ant1_5200

11N20MIMO_Ant2_5200


11N20MIMO_Ant1_5240

11N20MIMO_Ant2_5240