9.4 POWER SPECTRAL DENSITY

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies. The maximum permissible peak power spectral density is 11 dBm/ MHz for UNII 1,2A, 2C and 30 dBm/500 kHz for UNII 3.

▣ **Limit(CDD)**

Power Spectral Density

Band	Mode	Limit
UNII 1	802.11a,n,ac	11 dBm/MHz
UNII 2A	802.11a,n,ac	11 dBm/MHz
UNII 2C	802.11a,n,ac	11 dBm/MHz
UNII 3	802.11a,n,ac	30 dBm/500 kHz

Note : Note : According to KDB644545 D03 v01, emission for straddle channels in each band shall comply with the PSD limits applicable to that band under the appropriate rule section.

Power Spectral Density

Operating Mode	Band	Mode	Operating Ant.	Ant. Gain (dBi)	Limit
SISO	UNII 1	802.11a/n/ac	Ant 0	-0.51	11 dBm/MHz
			Ant 1	-2.61	11 dBm/MHz
	UNII 2A		Ant 0	-0.81	11 dBm/MHz
			Ant 1	-2.85	11 dBm/MHz
	UNII 2C		Ant 0	-2.49	11 dBm/MHz
			Ant 1	-2.53	11 dBm/MHz
	UNII 3		Ant 0	-1.93	30 dBm/500 kHz
			Ant 1	-2.26	30 dBm/500 kHz
MIMO(CDD)	UNII 1	802.11a/n/ac	Ant 0 & 1	1.51	11 dBm/MHz
	UNII 2A			1.24	11 dBm/MHz
	UNII 2C			0.50	11 dBm/MHz
	UNII 3			0.92	30 dBm/500 kHz

Note : 1. If all antenna gains are not equal,

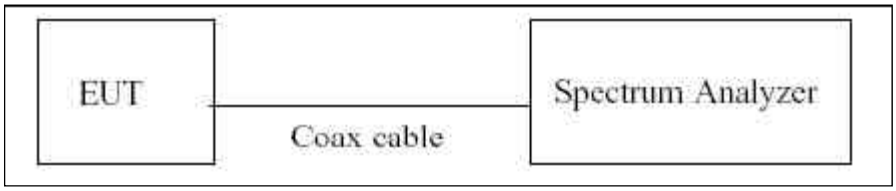
Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20}+\ldots+10^{GN/20})^2/N]$ dBi (CDD, 802.11a/n/ac)

Directional gain = $10*\log[(10^{G1/10} + 10^{G2/10}+\ldots+10^{GN/10})/N]$ dBi (SDM, 802.11n/ac)

(according to KDB662911 D01 v02r01)

2. Limit is calculated by antenna gain.
3. The limits of maximum conducted power were applied the antenna gain. Therefore, if conducted power is pass, e.i.r.p. is also pass. So, we attached only conducted power table.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

We tested according to Method in KDB 789033 D02 v01r04.

The spectrum analyzer is set to :

1. Set span to encompass the entire emission bandwidth(EBW) of the signal.
2. RBW = 1 MHz(510 kHz for UNII 3)
3. VBW ≥ 3 MHz
4. Number of points in sweep ≥ 2*span/RBW.
5. Sweep time = auto.
6. Detector = RMS(i.e., power averaging), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run”.
8. Trace average at least 100 traces in power averaging(RMS) mode
9. Use the peak search function on the spectrum analyzer to find the peak of the spectrum.
10. If Method SA-2 was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum.

▣ Sample Calculation

PSD = Reading Value + ATT loss + Cable loss(1 ea) + Duty Cycle Factor

Output Power = -5 dBm + 10 dB + 0.8 dB + 0.21 dB = 16.01 dBm

Note :

1. Spectrum reading values are not plot data. The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset = Attenuator loss + Cable loss
3. We apply to the offset in the 5.2 GHz, 5.3 GHz and 5.6 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1, 2A , 2C, 3	11.1

(Actual value of loss for the attenuator and cable combination)

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11a	0.230	0.828	1.058	11	Pass
5200	40		0.620	0.828	1.448		Pass
5240	48		-0.130	1.637	1.507		Pass
5260	52		0.730	0.828	1.558		Pass
5300	60		0.685	0.638	1.323		Pass
5320	64		-0.932	1.637	0.705		Pass
5500	100		-0.396	1.637	1.241		Pass
5580	116		0.022	1.637	1.659		Pass
5700	140		1.195	0.828	2.023		Pass
5745	149		-3.134	1.468	-1.666	30	Pass
5785	157		-3.173	1.637	-1.536		Pass
5825	165		-2.665	1.637	-1.028		Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11a	0.650	0.798	1.448	11	Pass
5200	40		0.241	0.798	1.039		Pass
5240	48		0.018	0.798	0.816		Pass
5260	52		-0.098	1.397	1.299		Pass
5300	60		-0.577	1.541	0.964		Pass
5320	64		0.091	0.798	0.889		Pass
5500	100		-0.626	1.397	0.771		Pass
5580	116		0.136	1.397	1.533		Pass
5700	140		0.714	0.798	1.512		Pass
5745	149		-2.400	0.798	-1.602	30	Pass
5785	157		-2.199	0.798	-1.401		Pass
5825	165		-2.538	0.798	-1.740		Pass

▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11a	4.27	11	Pass
5200	40		4.26		Pass
5240	48		4.18		Pass
5260	52		4.44		Pass
5300	60		4.16		Pass
5320	64		3.81		Pass
5500	100		4.02		Pass
5580	116		4.61		Pass
5700	140		4.78		Pass
5745	149		1.38	30	Pass
5785	157		1.54		Pass
5825	165		1.63		Pass

▣ TEST Plot for 802.11a 20MHz BW_Ant.0

802.11a UNII 1 BAND PSD CH 48	802.11a UNII 2A BAND PSD CH 52
	
802.11a UNII 2C BAND PSD CH 140	**802.11a UNII 3 BAND PSD CH 165**
	

▣ TEST Plot for 802.11a 20MHz BW_Ant.1

802.11a UNII 1 BAND PSD CH 36	802.11a UNII 2A BAND PSD CH 52
	
802.11a UNII 2C BAND PSD CH 116	**802.11a UNII 3 BAND PSD CH 157**
	

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11n_ HT20	-1.125	1.131	0.006	11	Pass
5200	40		-1.240	1.131	-0.109		Pass
5240	48		-0.927	1.131	0.204		Pass
5260	52		-0.988	1.131	0.143		Pass
5300	60		-1.035	1.131	0.096		Pass
5320	64		-1.619	1.131	-0.488		Pass
5500	100		-1.285	1.131	-0.154		Pass
5580	116		-0.579	1.131	0.552		Pass
5700	140		-0.195	1.131	0.936		Pass
5745	149		-3.682	1.131	-2.551	30	Pass
5785	157		-3.800	1.131	-2.669		Pass
5825	165		-3.458	1.131	-2.327		Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11n_ HT20	-1.262	1.725	0.463	11	Pass
5200	40		-1.555	1.622	0.067		Pass
5240	48		-2.175	1.622	-0.553		Pass
5260	52		-0.788	0.867	0.079		Pass
5300	60		-1.858	1.622	-0.236		Pass
5320	64		-1.724	1.622	-0.102		Pass
5500	100		-1.596	0.867	-0.729		Pass
5580	116		-1.410	1.622	0.212		Pass
5700	140		-1.289	1.622	0.333		Pass
5745	149		-3.922	1.489	-2.433	30	Pass
5785	157		-4.033	1.489	-2.544		Pass
5825	165		-4.498	1.622	-2.876		Pass

▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11n_ HT20	3.25	11	Pass
5200	40		2.99		Pass
5240	48		2.84		Pass
5260	52		3.12		Pass
5300	60		2.94		Pass
5320	64		2.72		Pass
5500	100		2.57		Pass
5580	116		3.39		Pass
5700	140		3.65		Pass
5745	149		0.52	30	Pass
5785	157		0.40		Pass
5825	165		0.41		Pass

▣ TEST Plot for 802.11n_HT20_Ant.0

802.11n_HT20 UNII 1 BAND PSD CH 48	802.11n_HT20 UNII 2A BAND PSD CH 52
	
802.11n_HT20 UNII 2C BAND PSD CH 140	**802.11n_HT20 UNII 3 BAND PSD CH 165**
	

▣ TEST Plot for 802.11n_HT20_Ant.1

802.11n_HT20 UNII 1 BAND PSD CH 36	802.11n_HT20 UNII 2A BAND PSD CH 52
	
802.11n_HT20 UNII 2C BAND PSD CH 140	**802.11n_HT20 UNII 3 BAND PSD CH 149**
	

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11ac _VHT20	-1.521	1.580	0.059	11	Pass
5200	40		-1.846	1.580	-0.266		Pass
5240	48		-1.388	1.580	0.192		Pass
5260	52		-1.500	1.580	0.080		Pass
5300	60		-1.554	1.580	0.026		Pass
5320	64		-2.051	1.381	-0.670		Pass
5500	100		-1.647	1.580	-0.067		Pass
5580	116		-1.230	1.580	0.350		Pass
5700	140		-0.838	1.580	0.742		Pass
5745	149		-4.390	1.829	-2.561	30	Pass
5785	157		-4.337	1.580	-2.757		Pass
5825	165		-4.041	1.580	-2.461		Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11ac _VHT20	-1.510	1.519	0.009	11	Pass
5200	40		-1.630	1.519	-0.111		Pass
5240	48		-1.451	1.163	-0.288		Pass
5260	52		-1.433	1.163	-0.270		Pass
5300	60		-1.618	1.519	-0.099		Pass
5320	64		-1.872	1.519	-0.353		Pass
5500	100		-2.197	1.519	-0.678		Pass
5580	116		-0.854	1.163	0.309		Pass
5700	140		-0.972	1.519	0.547		Pass
5745	149		-4.370	1.519	-2.851	30	Pass
5785	157		-3.718	1.163	-2.555		Pass
5825	165		-4.595	1.519	-3.076		Pass

▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11ac _VHT20	3.04	11	Pass
5200	40		2.82		Pass
5240	48		2.97		Pass
5260	52		2.92		Pass
5300	60		2.97		Pass
5320	64		2.50		Pass
5500	100		2.64		Pass
5580	116		3.34		Pass
5700	140		3.66		Pass
5745	149		0.31	30	Pass
5785	157		0.35		Pass
5825	165		0.25		Pass

▣ TEST Plot for 802.11ac_VHT20_Ant.0

802.11ac_VHT20 UNII 1 BAND PSD CH 48	802.11ac_VHT20 UNII 2A BAND PSD CH 52
	
802.11ac_VHT20 UNII 2C BAND PSD CH 140	**802.11ac_VHT20 UNII 3 BAND PSD CH 165**
	

▣ TEST Plot for 802.11ac_VHT20_Ant.1

802.11ac_VHT20 UNII 1 BAND PSD CH 36	802.11ac_VHT20 UNII 2A BAND PSD CH 60
	
802.11ac_VHT20 UNII 2C BAND PSD CH 140	**802.11ac_VHT20 UNII 3 BAND PSD CH 157**
	

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11n _HT40	-4.866	1.162	-3.704	11	Pass
5230	46		-5.371	1.452	-3.919		Pass
5270	54		-4.576	0.837	-3.739		Pass
5310	62		-5.860	1.944	-3.916		Pass
5510	102		-4.573	0.837	-3.736		Pass
5550	110		-6.143	2.441	-3.702		Pass
5670	134		-4.910	0.837	-4.073		Pass
5755	151		-7.447	0.837	-6.610	30	Pass
5795	159		-7.519	0.837	-6.682		Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11n _HT40	-4.500	0.853	-3.647	11	Pass
5230	46		-4.391	0.449	-3.942		Pass
5270	54		-4.720	0.853	-3.867		Pass
5310	62		-4.746	0.853	-3.893		Pass
5510	102		-5.234	0.853	-4.381		Pass
5550	110		-5.772	1.452	-4.320		Pass
5670	134		-4.497	0.853	-3.644		Pass
5755	151		-7.219	0.853	-6.366	30	Pass
5795	159		-7.717	1.167	-6.550		Pass

▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5190	38	802.11n _HT40	-0.67	11	Pass
5230	46		-0.92		Pass
5270	54		-0.79		Pass
5310	62		-0.89		Pass
5510	102		-1.04		Pass
5550	110		-1.00		Pass
5670	134		-0.85		Pass
5755	151		-3.48	30	Pass
5795	159		-3.61		Pass

▣ TEST Plot for 802.11n_HT40_Ant.0

802.11n_HT40 UNII 1 BAND PSD CH 38	802.11n_HT40 UNII 2A BAND PSD CH 54
	
802.11n_HT40 UNII 2C BAND PSD CH 110	**802.11n_HT40 UNII 3 BAND PSD CH 151**
	

▣ TEST Plot for 802.11n_HT40_Ant.1

802.11n_HT40 UNII 1 BAND PSD CH 38	802.11n_HT40 UNII 2A BAND PSD CH 54
	
802.11n_HT40 UNII 2C BAND PSD CH 134	**802.11n_HT40 UNII 3 BAND PSD CH 151**
	

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11ac _VHT40	-5.679	1.424	-4.255	11	Pass
5230	46		-4.520	0.834	-3.686		Pass
5270	54		-4.677	0.834	-3.843		Pass
5310	62		-5.732	1.424	-4.308		Pass
5510	102		-4.884	0.834	-4.050		Pass
5550	110		-4.727	0.834	-3.893		Pass
5670	134		-6.356	2.794	-3.562		Pass
5755	151		-9.037	1.903	-7.134	30	Pass
5795	159		-7.446	0.834	-6.612		Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11ac _VHT40	-5.634	2.327	-3.307	11	Pass
5230	46		-6.226	2.327	-3.899		Pass
5270	54		-6.180	2.327	-3.853		Pass
5310	62		-6.152	2.327	-3.825		Pass
5510	102		-5.045	0.470	-4.575		Pass
5550	110		-5.097	1.205	-3.892		Pass
5670	134		-6.157	2.327	-3.830		Pass
5755	151		-8.903	2.327	-6.576	30	Pass
5795	159		-8.777	2.327	-6.450		Pass

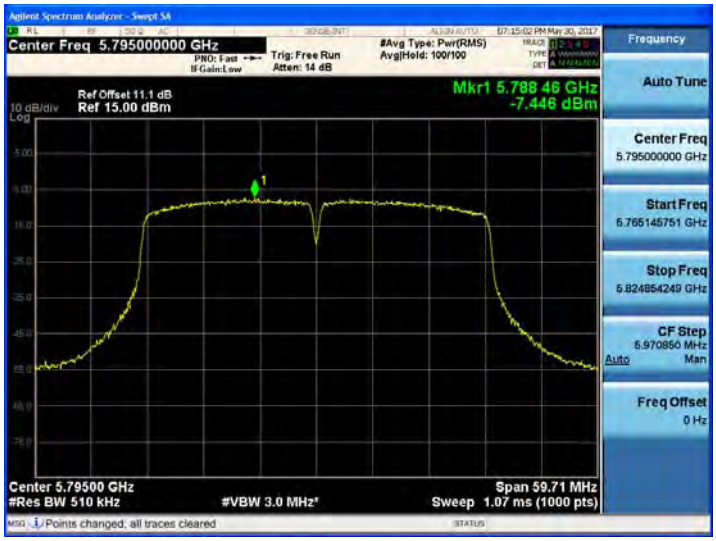
▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5190	38	802.11ac _VHT40	-0.76	11	Pass
5230	46		-0.78		Pass
5270	54		-0.84		Pass
5310	62		-1.05		Pass
5510	102		-1.30		Pass
5550	110		-0.88		Pass
5670	134		-0.68		Pass
5755	151		-3.84	30	Pass
5795	159		-3.52		Pass

▣ TEST Plot for 802.11ac_VHT40_Ant.0

802.11ac_VHT40 UNII 1 BAND PSD CH 46	802.11ac_VHT40 UNII 2A BAND PSD CH 54
	
802.11ac_VHT40 UNII 2C BAND PSD CH 134	**802.11ac_VHT40 UNII 3 BAND PSD CH 159**
	

▣ TEST Plot for 802.11ac_VHT40_Ant.1

802.11ac_VHT40 UNII 1 BAND PSD CH 38	802.11ac_VHT40 UNII 2A BAND PSD CH 62
	
802.11ac_VHT40 UNII 2C BAND PSD CH 134	**802.11ac_VHT40 UNII 3 BAND PSD CH 159**
	

Ant.0

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5210	42	802.11ac _VHT80	-9.456	1.980	-7.476	11	Pass
5290	58		-10.002	3.037	-6.965		Pass
5530	106		-9.265	1.980	-7.285		Pass
5775	155		-11.828	1.980	-9.848	30	Pass

Ant.1

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5210	42	802.11ac _VHT80	-10.328	3.387	-6.941	11	Pass
5290	58		-9.695	3.203	-6.492		Pass
5530	106		-9.683	1.987	-7.696		Pass
5775	155		-12.432	3.203	-9.229	30	Pass

▣ **Sum Data of Ant.0 and Ant.1**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5210	42	802.11ac _VHT80	-4.19	11	Pass
5290	58		-3.71		Pass
5530	106		-4.48		Pass
5775	155		-6.52	30	Pass

▣ TEST Plot for 802.11ac_VHT80_Ant.0

802.11ac_VHT80 UNII 1 BAND PSD CH 42	802.11ac_VHT80 UNII 2A BAND PSD CH 58
	
802.11ac_VHT80 UNII 2C BAND PSD CH 106	**802.11ac_VHT80 UNII 3 BAND PSD CH 155**
	

▣ TEST Plot for 802.11ac_VHT80_Ant.1

802.11ac_VHT80 UNII 1 BAND PSD CH 42	802.11ac_VHT80 UNII 2A BAND PSD CH 58
	
802.11ac_VHT80 UNII 2C BAND PSD CH 106	**802.11ac_VHT80 UNII 3 BAND PSD CH 155**
	

9.5 FREQUENCY STABILITY.

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 ℃ and 50 ℃. The temperature was incremented by 10 ℃ intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

[Ant.0]

20 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5180045.10	45.10
Normal		-30	5180013.40	13.40
Normal		-20	5180020.50	20.50
Normal		-10	5180028.40	28.40
Normal		0	5180035.50	35.50
Normal		+10	5180040.90	40.90
Normal		+30	5180051.20	51.20
Normal		+40	5180058.70	58.70
Normal		+50	5180066.30	66.30
High	8.80	+20	5180038.00	38.00
Low	7.35	+20	5180034.50	34.50

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,260,000,000 Hz
CHANNEL: 52
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5260038.40	38.40
Normal		-30	5260007.90	7.90
Normal		-20	5260013.80	13.80
Normal		-10	5260021.60	21.60
Normal		0	5260027.90	27.90
Normal		+10	5260033.50	33.50
Normal		+30	5260046.40	46.40
Normal		+40	5260051.10	51.10
Normal		+50	5260057.90	57.90
High	8.80	+20	5260032.10	32.10
Low	7.35	+20	5260029.60	29.60

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5500040.38	40.38
Normal		-30	5500006.08	6.08
Normal		-20	5500013.98	13.98
Normal		-10	5500019.58	19.58
Normal		0	5500027.48	27.48
Normal		+10	5500034.58	34.58
Normal		+30	5500045.38	45.38
Normal		+40	5500052.98	52.98
Normal		+50	5500059.98	59.98
High	8.80	+20	5500032.48	32.48
Low	7.35	+20	5500024.58	24.58

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,745,000,000 Hz
CHANNEL: 149
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5745035.90	35.90
Normal		-30	5745006.30	6.30
Normal		-20	5745012.90	12.90
Normal		-10	5745018.50	18.50
Normal		0	5745025.10	25.10
Normal		+10	5745031.80	31.80
Normal		+30	5745041.00	41.00
Normal		+40	5745047.90	47.90
Normal		+50	5745053.00	53.00
High	8.80	+20	5745029.30	29.30
Low	7.35	+20	5745023.60	23.60

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

40 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5190049.50	49.50
Normal		-30	5190018.30	18.30
Normal		-20	5190023.10	23.10
Normal		-10	5190029.60	29.60
Normal		0	5190034.60	34.60
Normal		+10	5190041.80	41.80
Normal		+30	5190054.40	54.40
Normal		+40	5190059.00	59.00
Normal		+50	5190065.90	65.90
High	8.80	+20	5190044.50	44.50
Low	7.35	+20	5190034.50	34.50

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,270,000,000 Hz
CHANNEL: 54
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5270056.40	56.40
Normal		-30	5270027.00	27.00
Normal		-20	5270032.10	32.10
Normal		-10	5270036.30	36.30
Normal		0	5270042.40	42.40
Normal		+10	5270048.60	48.60
Normal		+30	5270062.40	62.40
Normal		+40	5270067.60	67.60
Normal		+50	5270071.70	71.70
High	8.80	+20	5270050.30	50.30
Low	7.35	+20	5270042.30	42.30

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
OPERATING FREQUENCY: 5,510,000,000 Hz
CHANNEL: 102
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5510049.60	49.60
Normal		-30	5510016.90	16.90
Normal		-20	5510024.90	24.90
Normal		-10	5510029.50	29.50
Normal		0	5510035.90	35.90
Normal		+10	5510042.40	42.40
Normal		+30	5510057.30	57.30
Normal		+40	5510062.10	62.10
Normal		+50	5510068.70	68.70
High	8.80	+20	5510043.20	43.20
Low	7.35	+20	5510037.20	37.20

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,755,000,000 Hz
CHANNEL: 151
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5755043.30	43.30
Normal		-30	5755013.60	13.60
Normal		-20	5755020.20	20.20
Normal		-10	5755025.90	25.90
Normal		0	5755032.80	32.80
Normal		+10	5755037.70	37.70
Normal		+30	5755049.50	49.50
Normal		+40	5755055.00	55.00
Normal		+50	5755061.20	61.20
High	8.80	+20	5755036.40	36.40
Low	7.35	+20	5755032.10	32.10

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

80 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5210048.30	48.30
Normal		-30	5210018.40	18.40
Normal		-20	5210024.30	24.30
Normal		-10	5210031.00	31.00
Normal		0	5210036.00	36.00
Normal		+10	5210041.40	41.40
Normal		+30	5210052.90	52.90
Normal		+40	5210057.90	57.90
Normal		+50	5210062.80	62.80
High	8.80	+20	5210043.30	43.30
Low	7.35	+20	5210035.60	35.60

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,290,000,000 Hz
CHANNEL: 58
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5290056.70	56.70
Normal		-30	5290023.50	23.50
Normal		-20	5290029.40	29.40
Normal		-10	5290037.10	37.10
Normal		0	5290044.70	44.70
Normal		+10	5290050.00	50.00
Normal		+30	5290064.50	64.50
Normal		+40	5290068.90	68.90
Normal		+50	5290073.30	73.30
High	8.80	+20	5290049.10	49.10
Low	7.35	+20	5290044.90	44.90

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,530,000,000 Hz

CHANNEL: 106

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5530060.30	60.30
Normal		-30	5530031.40	31.40
Normal		-20	5530035.60	35.60
Normal		-10	5530040.40	40.40
Normal		0	5530045.90	45.90
Normal		+10	5530053.40	53.40
Normal		+30	5530065.90	65.90
Normal		+40	5530073.20	73.20
Normal		+50	5530080.90	80.90
High	8.80	+20	5530054.80	54.80
Low	7.35	+20	5530046.00	46.00

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,775,000,000 Hz
CHANNEL: 155
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5775057.80	57.80
Normal		-30	5775029.70	29.70
Normal		-20	5775033.90	33.90
Normal		-10	5775039.10	39.10
Normal		0	5775043.80	43.80
Normal		+10	5775050.40	50.40
Normal		+30	5775065.10	65.10
Normal		+40	5775071.80	71.80
Normal		+50	5775078.10	78.10
High	8.80	+20	5775053.10	53.10
Low	7.35	+20	5775046.40	46.40

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

[Ant.1]

20 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5180038.70	38.70
Normal		-30	5180007.70	7.70
Normal		-20	5180015.10	15.10
Normal		-10	5180020.80	20.80
Normal		0	5180025.90	25.90
Normal		+10	5180033.70	33.70
Normal		+30	5180044.70	44.70
Normal		+40	5180051.60	51.60
Normal		+50	5180058.60	58.60
High	8.80	+20	5180033.60	33.60
Low	7.35	+20	5180026.80	26.80

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,260,000,000 Hz
CHANNEL: 52
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5260040.80	40.80
Normal		-30	5260013.00	13.00
Normal		-20	5260017.10	17.10
Normal		-10	5260023.00	23.00
Normal		0	5260028.60	28.60
Normal		+10	5260034.60	34.60
Normal		+30	5260048.70	48.70
Normal		+40	5260056.10	56.10
Normal		+50	5260063.50	63.50
High	8.80	+20	5260035.20	35.20
Low	7.35	+20	5260030.90	30.90

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5500039.40	39.40
Normal		-30	5500007.10	7.10
Normal		-20	5500014.40	14.40
Normal		-10	5500022.10	22.10
Normal		0	5500027.90	27.90
Normal		+10	5500032.40	32.40
Normal		+30	5500045.30	45.30
Normal		+40	5500051.70	51.70
Normal		+50	5500058.10	58.10
High	8.80	+20	5500033.60	33.60
Low	7.35	+20	5500028.00	28.00

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.70	+20(Ref)	5745042.80	42.80
Normal		-30	5745017.90	17.90
Normal		-20	5745022.00	22.00
Normal		-10	5745026.20	26.20
Normal		0	5745031.70	31.70
Normal		+10	5745037.20	37.20
Normal		+30	5745049.40	49.40
Normal		+40	5745055.80	55.80
Normal		+50	5745061.10	61.10
High	8.80	+20	5745037.30	37.30
Low	7.35	+20	5745032.80	32.80

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

40 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5190040.10	40.10
Normal		-30	5190014.80	14.80
Normal		-20	5190019.40	19.40
Normal		-10	5190025.10	25.10
Normal		0	5190029.50	29.50
Normal		+10	5190034.30	34.30
Normal		+30	5190045.60	45.60
Normal		+40	5190052.40	52.40
Normal		+50	5190059.40	59.40
High	8.80	+20	5190035.70	35.70
Low	7.35	+20	5190030.60	30.60

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,270,000,000 Hz
CHANNEL: 54
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5270032.70	32.70
Normal		-30	5270008.40	8.40
Normal		-20	5270013.50	13.50
Normal		-10	5270018.70	18.70
Normal		0	5270023.00	23.00
Normal		+10	5270027.40	27.40
Normal		+30	5270038.90	38.90
Normal		+40	5270045.20	45.20
Normal		+50	5270050.60	50.60
High	8.80	+20	5270028.40	28.40
Low	7.35	+20	5270024.90	24.90

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
OPERATING FREQUENCY: 5,510,000,000 Hz
CHANNEL: 102
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5510036.90	36.90
Normal		-30	5510010.40	10.40
Normal		-20	5510014.60	14.60
Normal		-10	5510020.70	20.70
Normal		0	5510026.60	26.60
Normal		+10	5510032.20	32.20
Normal		+30	5510041.10	41.10
Normal		+40	5510047.00	47.00
Normal		+50	5510053.50	53.50
High	8.80	+20	5510031.00	31.00
Low	7.35	+20	5510024.90	24.90

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,755,000,000 Hz
CHANNEL: 151
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5755034.80	34.80
Normal		-30	5755005.30	5.30
Normal		-20	5755009.80	9.80
Normal		-10	5755016.60	16.60
Normal		0	5755022.30	22.30
Normal		+10	5755027.20	27.20
Normal		+30	5755040.30	40.30
Normal		+40	5755046.30	46.30
Normal		+50	5755050.90	50.90
High	8.80	+20	5755029.10	29.10
Low	7.35	+20	5755022.10	22.10

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

80 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5210041.80	41.80
Normal		-30	5210012.90	12.90
Normal		-20	5210020.00	20.00
Normal		-10	5210024.30	24.30
Normal		0	5210030.60	30.60
Normal		+10	5210035.60	35.60
Normal		+30	5210048.70	48.70
Normal		+40	5210055.00	55.00
Normal		+50	5210059.40	59.40
High	8.80	+20	5210035.50	35.50
Low	7.35	+20	5210031.20	31.20

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
OPERATING FREQUENCY: 5,290,000,000 Hz
CHANNEL: 58
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5290037.40	37.40
Normal		-30	5290005.80	5.80
Normal		-20	5290011.80	11.80
Normal		-10	5290018.50	18.50
Normal		0	5290026.40	26.40
Normal		+10	5290031.80	31.80
Normal		+30	5290044.90	44.90
Normal		+40	5290049.30	49.30
Normal		+50	5290055.90	55.90
High	8.80	+20	5290029.50	29.50
Low	7.35	+20	5290026.00	26.00

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
OPERATING FREQUENCY: 5,530,000,000 Hz
CHANNEL: 106
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5530038.60	38.60
Normal		-30	5530005.30	5.30
Normal		-20	5530012.30	12.30
Normal		-10	5530017.40	17.40
Normal		0	5530025.10	25.10
Normal		+10	5530030.70	30.70
Normal		+30	5530044.20	44.20
Normal		+40	5530051.40	51.40
Normal		+50	5530059.20	59.20
High	8.80	+20	5530030.90	30.90
Low	7.35	+20	5530023.00	23.00

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,775,000,000 Hz
CHANNEL: 155
REFERENCE VOLTAGE: 7.7 VDC

Voltage	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
Normal	7.7	+20(Ref)	5775044.80	44.80
Normal		-30	5775007.50	7.50
Normal		-20	5775013.70	13.70
Normal		-10	5775021.40	21.40
Normal		0	5775029.20	29.20
Normal		+10	5775036.90	36.90
Normal		+30	5775052.80	52.80
Normal		+40	5775059.10	59.10
Normal		+50	5775066.20	66.20
High	8.80	+20	5775037.00	37.00
Low	7.35	+20	5775029.40	29.40

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

9.6 RADIATED MEASUREMENT

9.6.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209, §15.407

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

▣ §15.407, KDB 789033 D02

All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dBμV/m. Espectally, for transmitter operating in the 5725 Mhz – 5850 MHz : all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequency 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

▣ Test case

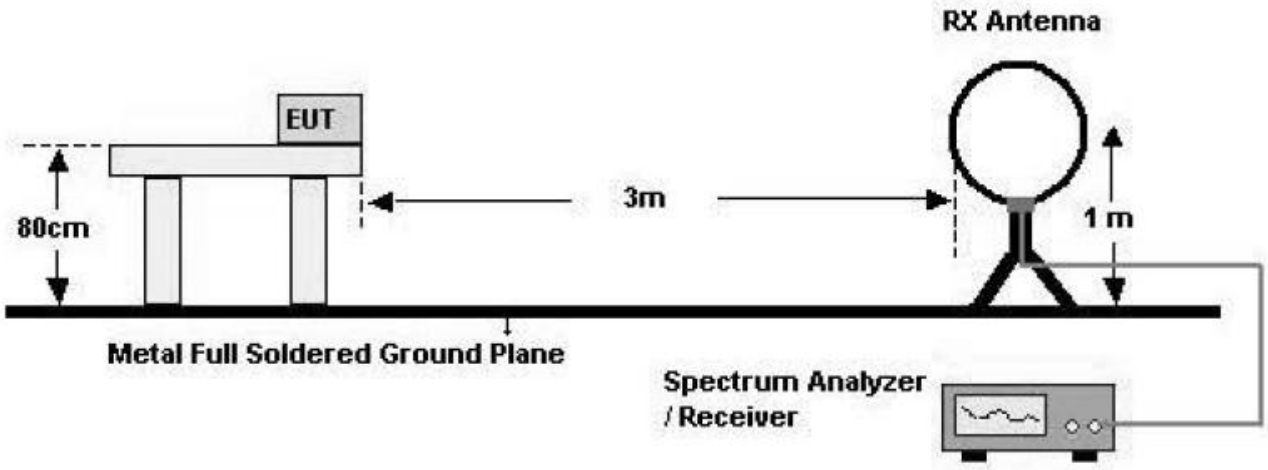
Configuration	
Only Tablet	Tablet+keyboard cover (kickstand)

Note :

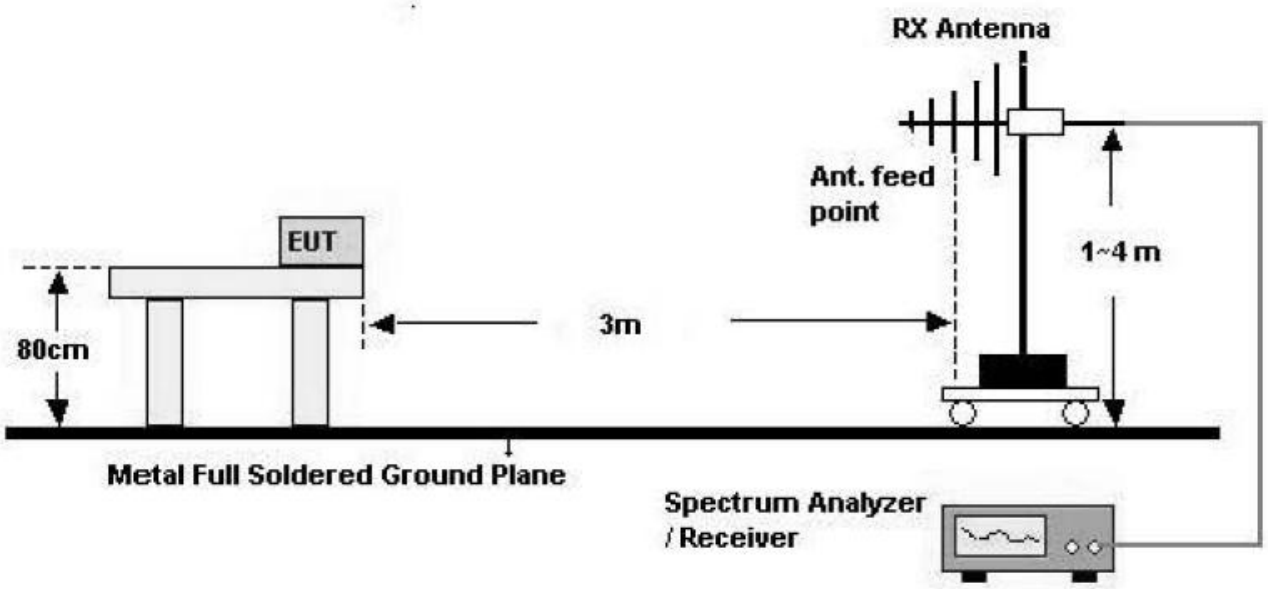
1. In case of radiation test, we have done all test case. Wosrt configuration case is Only Tablet. So, we attached the result of (Only Tablet) and worst case of Table+keyboard cover (kickstand).

Test Configuration

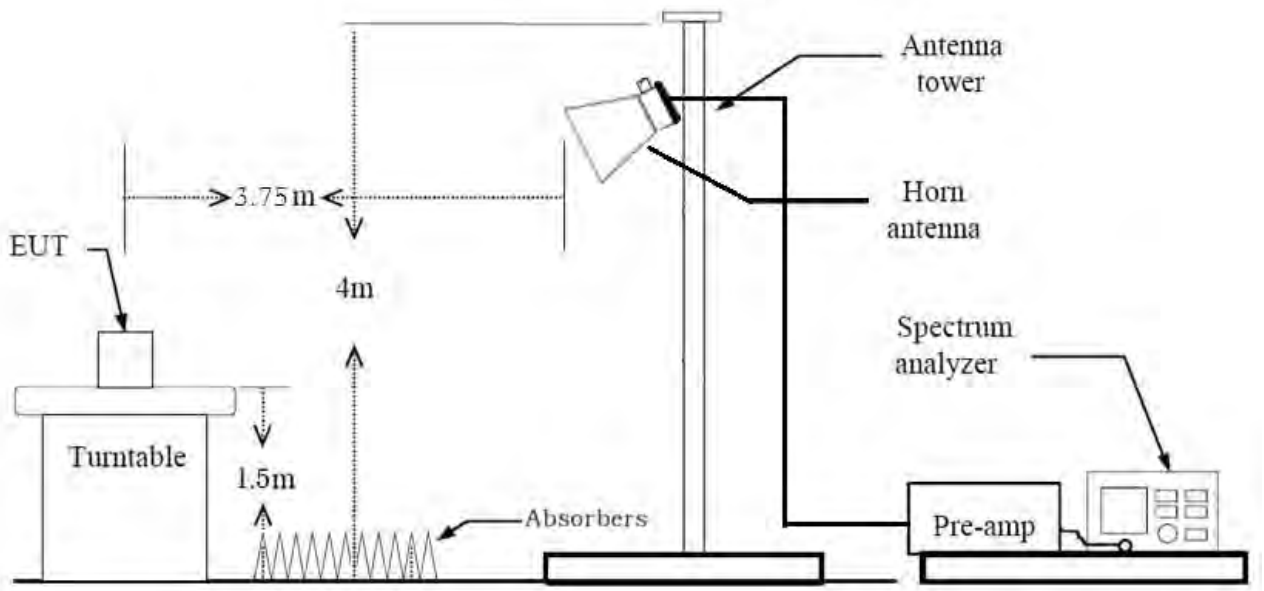
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



TEST PROCEDURE USED

ANSI C63.10:2013

Method G)5) in KDB 789033 D02 v01r04 (Peak)

Method G)6)d) in KDB 789033 D02 v01r04 (Average)

. Spectrum setting:

- Peak.

1. RBW = 1 MHz
2. VBW ≥ 3 MHz
3. Detector = Peak
4. Sweep Time = auto
5. Trace mode = max hold
6. Allow sweeps to continue until the trace stabilizes.
7. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle.

- Average (Method VB :Averaging using reduced video bandwidth)

1. RBW = 1 MHz
2. VBW
   2.1. If the EUT is configured to transmit with duty cycle ≥ 98 percent, set VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
   2.2. If the EUT duty cycle is < 98 percent, set VBW ≥ 1/T, where T is the minimum transmission duration.
3. The analyzer is set to linear detector mode.
4. Detector = Peak.
5. Sweep time = auto.
6. Trace mode = max hold.
7. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimym number of traces by a factor of 1/x, where x is the duty cycle.

Note :

1. We used the Method VB for 802.11a/n_HT20, n_HT40, ac_VHT20, 40, 80 mode to perform the average filed strength measurements.
2. The actual setting value of VBW for 802.11a/n_HT20, n_HT40, ac_VHT20, 40, 80
3. According to SVSWR requirement in ANSI 63.4-2014, We performed the radiated test at 3.75 m distance from center of turn table. So, we applied the distance factor(reference distance : 3 m).
4. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Mode	Worst Data rate (Mbps)	T_{on} (ms)	T_{total} (ms)	Duty Cycle (%)	VBW(1/T) (Hz)	The actual setting value of VBW (Hz)
a	**6**	**2.066**	**2.176**	**0.94953279**	**484**	**1000**
n_HT20	**MCS 0**	**1.924**	**2.033**	**0.94599991**	**520**	**1000**
ac_VHT20	**MCS 0**	**1.932**	**2.037**	**0.94810543**	**518**	**1000**
n_HT40	**MCS 0**	**0.949**	**1.052**	**0.90177103**	**1054**	**3000**
ac_VHT40	**MCS 0**	**0.952**	**1.056**	**0.90128471**	**1050**	**3000**
ac_VHT80	**MCS 0**	**0.600**	**0.710**	**0.84504140**	**1667**	**3000**

TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 9 kHz to the 30MHz.
2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
6. The test results for below 30 MHz is correlated to an open site.
   The result on OATS is about 2 dB higher than semi-anechoic chamber (10 m chamber)

TEST RESULTS

Below 1 GHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 30 MHz to the 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Above 1 GHz

[Only tablet]

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	54.18	-2.75	V	51.43	68.20	16.77	PK
15540	52.71	-1.23	V	51.48	73.98	22.50	PK
15540	38.55	-1.23	V	37.32	53.98	16.66	AV
10360	54.70	-2.75	H	51.95	68.20	16.25	PK
15540	52.97	-1.23	H	51.74	73.98	22.24	PK
15540	39.02	-1.23	H	37.79	53.98	16.19	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	54.40	-2.60	V	51.80	68.20	16.40	PK
15600	52.46	-2.26	V	50.20	73.98	23.78	PK
15600	38.39	-2.26	V	36.13	53.98	17.85	AV
10400	54.99	-2.60	H	52.39	68.20	15.81	PK
15600	52.67	-2.26	H	50.41	73.98	23.57	PK
15600	38.68	-2.26	H	36.42	53.98	17.56	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	54.41	-3.54	V	50.87	68.20	17.33	PK
15720	52.49	-2.64	V	49.85	73.98	24.13	PK
15720	38.92	-2.64	V	36.28	53.98	17.70	AV
10480	55.20	-3.54	H	51.66	68.20	16.54	PK
15720	53.41	-2.64	H	50.77	73.98	23.21	PK
15720	39.21	-2.64	H	36.57	53.98	17.41	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	54.16	-2.75	V	51.41	68.20	16.79	PK
15540	52.69	-1.23	V	51.46	73.98	22.52	PK
15540	38.53	-1.23	V	37.30	53.98	16.68	AV
10360	54.68	-2.75	H	51.93	68.20	16.27	PK
15540	52.95	-1.23	H	51.72	73.98	22.26	PK
15540	39.01	-1.23	H	37.78	53.98	16.20	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	54.38	-2.60	V	51.78	68.20	16.42	PK
15600	52.44	-2.26	V	50.18	73.98	23.80	PK
15600	38.37	-2.26	V	36.11	53.98	17.87	AV
10400	54.97	-2.60	H	52.37	68.20	15.83	PK
15600	52.65	-2.26	H	50.39	73.98	23.59	PK
15600	38.67	-2.26	H	36.41	53.98	17.57	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	54.39	-3.54	V	50.85	68.20	17.35	PK
15720	52.47	-2.64	V	49.83	73.98	24.15	PK
15720	38.90	-2.64	V	36.26	53.98	17.72	AV
10480	55.18	-3.54	H	51.64	68.20	16.56	PK
15720	53.39	-2.64	H	50.75	73.98	23.23	PK
15720	39.20	-2.64	H	36.56	53.98	17.42	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	54.15	-2.75	V	51.40	68.20	16.80	PK
15540	52.68	-1.23	V	51.45	73.98	22.53	PK
15540	38.55	-1.23	V	37.32	53.98	16.66	AV
10360	54.69	-2.75	H	51.94	68.20	16.26	PK
15540	52.93	-1.23	H	51.70	73.98	22.28	PK
15540	39.00	-1.23	H	37.77	53.98	16.21	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	54.37	-2.60	V	51.77	68.20	16.43	PK
15600	52.43	-2.26	V	50.17	73.98	23.81	PK
15600	38.39	-2.26	V	36.13	53.98	17.85	AV
10400	54.98	-2.60	H	52.38	68.20	15.82	PK
15600	52.63	-2.26	H	50.37	73.98	23.61	PK
15600	38.66	-2.26	H	36.40	53.98	17.58	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	54.38	-3.54	V	50.84	68.20	17.36	PK
15720	52.46	-2.64	V	49.82	73.98	24.16	PK
15720	38.92	-2.64	V	36.28	53.98	17.70	AV
10480	55.19	-3.54	H	51.65	68.20	16.55	PK
15720	53.37	-2.64	H	50.73	73.98	23.25	PK
15720	39.19	-2.64	H	36.55	53.98	17.43	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	54.44	-2.74	V	51.70	68.20	16.50	PK
15570	52.35	-1.95	V	50.40	73.98	23.58	PK
15570	40.00	-1.95	V	38.05	53.98	15.93	AV
10380	55.08	-2.74	H	52.34	68.20	15.86	PK
15570	52.79	-1.95	H	50.84	73.98	23.14	PK
15570	40.24	-1.95	H	38.29	53.98	15.69	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	54.63	-3.07	V	51.56	68.20	16.64	PK
15690	52.61	-0.73	V	51.88	73.98	22.10	PK
15690	40.26	-0.73	V	39.53	53.98	14.45	AV
10460	55.39	-3.07	H	52.32	68.20	15.88	PK
15690	53.00	-0.73	H	52.27	73.98	21.71	PK
15690	40.59	-0.73	H	39.86	53.98	14.12	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	54.42	-2.74	V	51.68	68.20	16.52	PK
15570	52.33	-1.95	V	50.38	73.98	23.60	PK
15570	39.99	-1.95	V	38.04	53.98	15.94	AV
10380	55.06	-2.74	H	52.32	68.20	15.88	PK
15570	52.78	-1.95	H	50.83	73.98	23.15	PK
15570	40.22	-1.95	H	38.27	53.98	15.71	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	54.61	-3.07	V	51.54	68.20	16.66	PK
15690	52.59	-0.73	V	51.86	73.98	22.12	PK
15690	40.25	-0.73	V	39.52	53.98	14.46	AV
10460	55.37	-3.07	H	52.30	68.20	15.90	PK
15690	52.99	-0.73	H	52.26	73.98	21.72	PK
15690	40.57	-0.73	H	39.84	53.98	14.14	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10420	53.46	-2.88	V	50.58	68.20	17.62	PK
15630	52.54	-1.88	V	50.66	73.98	23.32	PK
15630	40.66	-1.88	V	38.78	53.98	15.20	AV
10420	54.33	-2.88	H	51.45	68.20	16.75	PK
15630	52.78	-1.88	H	50.90	73.98	23.08	PK
15630	40.93	-1.88	H	39.05	53.98	14.93	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer MCS Index:	6 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	54.39	-2.97	V	51.42	68.20	16.78	PK
15780	53.67	-1.86	V	51.81	73.98	22.17	PK
15780	39.11	-1.86	V	37.25	53.98	16.73	AV
10520	55.31	-2.97	H	52.34	68.20	15.86	PK
15780	53.26	-1.86	H	51.40	73.98	22.58	PK
15780	39.42	-1.86	H	37.56	53.98	16.42	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	53.84	-3.22	V	50.62	73.98	23.36	PK
10600	40.02	-3.22	V	36.80	53.98	17.18	AV
15900	52.56	-2.44	V	50.12	73.98	23.86	PK
15900	38.81	-2.44	V	36.37	53.98	17.61	AV
10600	54.55	-3.22	H	51.33	73.98	22.65	PK
10600	40.24	-3.22	H	37.02	53.98	16.96	AV
15900	52.81	-2.44	H	50.37	73.98	23.61	PK
15900	39.11	-2.44	H	36.67	53.98	17.31	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	54.34	-3.27	V	51.07	73.98	22.91	PK
10640	40.15	-3.27	V	36.88	53.98	17.10	AV
15960	51.48	-2.89	V	48.59	73.98	25.39	PK
15960	37.65	-2.89	V	34.76	53.98	19.22	AV
10640	54.68	-3.27	H	51.41	73.98	22.57	PK
10640	40.22	-3.27	H	36.95	53.98	17.03	AV
15960	52.16	-2.89	H	49.27	73.98	24.71	PK
15960	38.19	-2.89	H	35.30	53.98	18.68	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	54.37	-2.97	V	51.40	68.20	16.80	PK
15780	53.65	-1.86	V	51.79	73.98	22.19	PK
15780	39.09	-1.86	V	37.23	53.98	16.75	AV
10520	55.29	-2.97	H	52.32	68.20	15.88	PK
15780	53.24	-1.86	H	51.38	73.98	22.60	PK
15780	39.41	-1.86	H	37.55	53.98	16.43	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	53.82	-3.22	V	50.60	73.98	23.38	PK
10600	40.02	-3.22	V	36.80	53.98	17.18	AV
15900	52.54	-2.44	V	50.10	73.98	23.88	PK
15900	38.79	-2.44	V	36.35	53.98	17.63	AV
10600	54.53	-3.22	H	51.31	73.98	22.67	PK
10600	40.21	-3.22	H	36.99	53.98	16.99	AV
15900	52.79	-2.44	H	50.35	73.98	23.63	PK
15900	39.10	-2.44	H	36.66	53.98	17.32	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	54.32	-3.27	V	51.05	73.98	22.93	PK
10640	40.15	-3.27	V	36.88	53.98	17.10	AV
15960	51.46	-2.89	V	48.57	73.98	25.41	PK
15960	37.63	-2.89	V	34.74	53.98	19.24	AV
10640	54.66	-3.27	H	51.39	73.98	22.59	PK
10640	40.19	-3.27	H	36.92	53.98	17.06	AV
15960	52.14	-2.89	H	49.25	73.98	24.73	PK
15960	38.18	-2.89	H	35.29	53.98	18.69	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5260MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	54.36	-2.97	V	51.39	68.20	16.81	PK
15780	53.64	-1.86	V	51.78	73.98	22.20	PK
15780	39.11	-1.86	V	37.25	53.98	16.73	AV
10520	55.30	-2.97	H	52.33	68.20	15.87	PK
15780	53.22	-1.86	H	51.36	73.98	22.62	PK
15780	39.40	-1.86	H	37.54	53.98	16.44	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	53.81	-3.22	V	50.59	73.98	23.39	PK
10600	40.04	-3.22	V	36.82	53.98	17.16	AV
15900	52.53	-2.44	V	50.09	73.98	23.89	PK
15900	38.81	-2.44	V	36.37	53.98	17.61	AV
10600	54.54	-3.22	H	51.32	73.98	22.66	PK
10600	40.20	-3.22	H	36.98	53.98	17.00	AV
15900	52.77	-2.44	H	50.33	73.98	23.65	PK
15900	39.09	-2.44	H	36.65	53.98	17.33	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	54.31	-3.27	V	51.04	73.98	22.94	PK
10640	40.17	-3.27	V	36.90	53.98	17.08	AV
15960	51.45	-2.89	V	48.56	73.98	25.42	PK
15960	37.65	-2.89	V	34.76	53.98	19.22	AV
10640	54.67	-3.27	H	51.40	73.98	22.58	PK
10640	40.18	-3.27	H	36.91	53.98	17.07	AV
15960	52.12	-2.89	H	49.23	73.98	24.75	PK
15960	38.17	-2.89	H	35.28	53.98	18.70	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	54.48	-2.73	V	51.75	68.20	16.45	PK
15810	52.86	-2.52	V	50.34	73.98	23.64	PK
15810	40.49	-2.52	V	37.97	53.98	16.01	AV
10540	54.97	-2.73	H	52.24	68.20	15.96	PK
15810	53.41	-2.52	H	50.89	73.98	23.09	PK
15810	40.82	-2.52	H	38.30	53.98	15.68	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	54.20	-3.38	V	50.82	73.98	23.16	PK
10620	41.59	-3.38	V	38.21	53.98	15.77	AV
15930	51.45	-2.78	V	48.67	73.98	25.31	PK
15930	39.01	-2.78	V	36.23	53.98	17.75	AV
10620	54.70	-3.38	H	51.32	73.98	22.66	PK
10620	41.90	-3.38	H	38.52	53.98	15.46	AV
15930	52.47	-2.78	H	49.69	73.98	24.29	PK
15930	39.44	-2.78	H	36.66	53.98	17.32	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	54.46	-2.73	V	51.73	68.20	16.47	PK
15810	52.84	-2.52	V	50.32	73.98	23.66	PK
15810	40.48	-2.52	V	37.96	53.98	16.02	AV
10540	54.95	-2.73	H	52.22	68.20	15.98	PK
15810	53.40	-2.52	H	50.88	73.98	23.10	PK
15810	40.80	-2.52	H	38.28	53.98	15.70	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	54.18	-3.38	V	50.80	73.98	23.18	PK
10620	41.55	-3.38	V	38.17	53.98	15.81	AV
15930	51.43	-2.78	V	48.65	73.98	25.33	PK
15930	39.00	-2.78	V	36.22	53.98	17.76	AV
10620	54.68	-3.38	H	51.30	73.98	22.68	PK
10620	41.87	-3.38	H	38.49	53.98	15.49	AV
15930	52.46	-2.78	H	49.68	73.98	24.30	PK
15930	39.42	-2.78	H	36.64	53.98	17.34	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10580	53.04	-3.21	V	49.83	68.20	18.37	PK
15870	52.39	-2.62	V	49.77	73.98	24.21	PK
15870	40.44	-2.62	V	37.82	53.98	16.16	AV
10580	53.72	-3.21	H	50.51	68.20	17.69	PK
15870	52.68	-2.62	H	50.06	73.98	23.92	PK
15870	40.79	-2.62	H	38.17	53.98	15.81	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	53.88	-1.60	V	52.28	73.98	21.70	PK
11000	39.65	-1.60	V	38.05	53.98	15.93	AV
16500	51.79	-0.86	V	50.93	68.20	17.27	PK
11000	54.38	-1.60	H	52.78	73.98	21.20	PK
11000	39.79	-1.60	H	38.19	53.98	15.79	AV
16500	52.44	-0.86	H	51.58	68.20	16.62	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	53.30	-2.03	V	51.27	73.98	22.71	PK
11160	38.96	-2.03	V	36.93	53.98	17.05	AV
16740	52.19	0.18	V	52.37	68.20	15.83	PK
11160	54.44	-2.03	H	52.41	73.98	21.57	PK
11160	39.14	-2.03	H	37.11	53.98	16.87	AV
16740	52.85	0.18	H	53.03	68.20	15.17	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	53.85	-1.92	V	51.93	73.98	22.05	PK
11440	39.57	-1.92	V	37.65	53.98	16.33	AV
17160	51.42	2.19	V	53.61	68.20	14.59	PK
11440	54.47	-1.92	H	52.55	73.98	21.43	PK
11440	39.68	-1.92	H	37.76	53.98	16.22	AV
17160	52.01	2.19	H	54.20	68.20	14.00	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	53.86	-1.60	V	52.26	73.98	21.72	PK
11000	39.65	-1.60	V	38.05	53.98	15.93	AV
16500	51.77	-0.86	V	50.91	68.20	17.29	PK
11000	54.36	-1.60	H	52.76	73.98	21.22	PK
11000	39.76	-1.60	H	38.16	53.98	15.82	AV
16500	52.42	-0.86	H	51.56	68.20	16.64	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	53.28	-2.03	V	51.25	73.98	22.73	PK
11160	38.96	-2.03	V	36.93	53.98	17.05	AV
16740	52.17	0.18	V	52.35	68.20	15.85	PK
11160	54.42	-2.03	H	52.39	73.98	21.59	PK
11160	39.11	-2.03	H	37.08	53.98	16.90	AV
16740	52.83	0.18	H	53.01	68.20	15.19	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	53.83	-1.92	V	51.91	73.98	22.07	PK
11440	39.57	-1.92	V	37.65	53.98	16.33	AV
17160	51.40	2.19	V	53.59	68.20	14.61	PK
11440	54.45	-1.92	H	52.53	73.98	21.45	PK
11440	39.65	-1.92	H	37.73	53.98	16.25	AV
17160	51.99	2.19	H	54.18	68.20	14.02	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5500MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	53.85	-1.60	V	52.25	73.98	21.73	PK
11000	39.67	-1.60	V	38.07	53.98	15.91	AV
16500	51.76	-0.86	V	50.90	68.20	17.30	PK
11000	54.37	-1.60	H	52.77	73.98	21.21	PK
11000	39.75	-1.60	H	38.15	53.98	15.83	AV
16500	52.40	-0.86	H	51.54	68.20	16.66	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	53.27	-2.03	V	51.24	73.98	22.74	PK
11160	38.98	-2.03	V	36.95	53.98	17.03	AV
16740	52.16	0.18	V	52.34	68.20	15.86	PK
11160	54.43	-2.03	H	52.40	73.98	21.58	PK
11160	39.10	-2.03	H	37.07	53.98	16.91	AV
16740	52.81	0.18	H	52.99	68.20	15.21	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	53.82	-1.92	V	51.90	73.98	22.08	PK
11440	39.59	-1.92	V	37.67	53.98	16.31	AV
17160	51.39	2.19	V	53.58	68.20	14.62	PK
11440	54.46	-1.92	H	52.54	73.98	21.44	PK
11440	39.64	-1.92	H	37.72	53.98	16.26	AV
17160	51.97	2.19	H	54.16	68.20	14.04	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	53.80	-1.98	V	51.82	73.98	22.16	PK
11020	41.65	-1.98	V	39.67	53.98	14.31	AV
16530	51.89	-1.57	V	50.32	68.20	17.88	PK
11020	54.48	-1.98	H	52.50	73.98	21.48	PK
11020	42.15	-1.98	H	40.17	53.98	13.81	AV
16530	52.64	-1.57	H	51.07	68.20	17.13	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11100	53.74	-2.32	V	51.42	73.98	22.56	PK
11100	40.99	-2.32	V	38.67	53.98	15.31	AV
16650	52.68	-1.17	V	51.51	68.20	16.69	PK
11100	54.43	-2.32	H	52.11	73.98	21.87	PK
11100	41.28	-2.32	H	38.96	53.98	15.02	AV
16650	53.20	-1.17	H	52.03	68.20	16.17	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	53.90	-2.23	V	51.67	73.98	22.31	PK
11420	41.64	-2.23	V	39.41	53.98	14.57	AV
17130	52.41	1.75	V	54.16	68.20	14.04	PK
11420	54.62	-2.23	H	52.39	73.98	21.59	PK
11420	41.85	-2.23	H	39.62	53.98	14.36	AV
17130	52.56	1.75	H	54.31	68.20	13.89	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	53.78	-1.98	V	51.80	73.98	22.18	PK
11020	41.61	-1.98	V	39.63	53.98	14.35	AV
16530	51.87	-1.57	V	50.30	68.20	17.90	PK
11020	54.46	-1.98	H	52.48	73.98	21.50	PK
11020	42.12	-1.98	H	40.14	53.98	13.84	AV
16530	52.63	-1.57	H	51.06	68.20	17.14	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11100	53.72	-2.32	V	51.40	73.98	22.58	PK
11100	40.95	-2.32	V	38.63	53.98	15.35	AV
16650	52.66	-1.17	V	51.49	68.20	16.71	PK
11100	54.41	-2.32	H	52.09	73.98	21.89	PK
11100	41.25	-2.32	H	38.93	53.98	15.05	AV
16650	53.19	-1.17	H	52.02	68.20	16.18	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	53.88	-2.23	V	51.65	73.98	22.33	PK
11420	41.60	-2.23	V	39.37	53.98	14.61	AV
17130	52.39	1.75	V	54.14	68.20	14.06	PK
11420	54.60	-2.23	H	52.37	73.98	21.61	PK
11420	41.82	-2.23	H	39.59	53.98	14.39	AV
17130	52.55	1.75	H	54.30	68.20	13.90	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11060	52.51	-2.21	V	50.30	73.98	23.68	PK
11060	41.50	-2.21	V	39.29	53.98	14.69	AV
16590	51.44	-0.60	V	50.84	68.20	17.36	PK
11060	53.57	-2.21	H	51.36	73.98	22.62	PK
11060	41.94	-2.21	H	39.73	53.98	14.25	AV
16590	51.89	-0.60	H	51.29	68.20	16.91	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5745MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	54.45	-2.50	V	51.95	73.98	22.03	PK
11490	40.09	-2.50	V	37.59	53.98	16.39	AV
17235	51.78	3.09	V	54.87	68.20	13.33	PK
11490	54.87	-2.50	H	52.37	73.98	21.61	PK
11490	40.23	-2.50	H	37.73	53.98	16.25	AV
17235	52.44	3.09	H	55.53	68.20	12.67	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	53.83	-2.87	V	50.96	73.98	23.02	PK
11570	39.84	-2.87	V	36.97	53.98	17.01	AV
17355	50.23	3.45	V	53.68	68.20	14.52	PK
11570	54.98	-2.87	H	52.11	73.98	21.87	PK
11570	40.02	-2.87	H	37.15	53.98	16.83	AV
17355	51.65	3.45	H	55.10	68.20	13.10	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	53.86	-2.84	V	51.02	73.98	22.96	PK
11650	39.81	-2.84	V	36.97	53.98	17.01	AV
17475	51.33	5.68	V	57.01	68.20	11.19	PK
11650	54.81	-2.84	H	51.97	73.98	22.01	PK
11650	40.25	-2.84	H	37.41	53.98	16.57	AV
17475	52.05	5.68	H	57.73	68.20	10.47	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5745 MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	54.43	-2.50	V	51.93	73.98	22.05	PK
11490	40.09	-2.50	V	37.59	53.98	16.39	AV
17235	51.76	3.09	V	54.85	68.20	13.35	PK
11490	54.85	-2.50	H	52.35	73.98	21.63	PK
11490	40.20	-2.50	H	37.70	53.98	16.28	AV
17235	52.42	3.09	H	55.51	68.20	12.69	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	53.81	-2.87	V	50.94	73.98	23.04	PK
11570	39.84	-2.87	V	36.97	53.98	17.01	AV
17355	50.21	3.45	V	53.66	68.20	14.54	PK
11570	54.96	-2.87	H	52.09	73.98	21.89	PK
11570	39.99	-2.87	H	37.12	53.98	16.86	AV
17355	51.63	3.45	H	55.08	68.20	13.12	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	53.84	-2.84	V	51.00	73.98	22.98	PK
11650	39.81	-2.84	V	36.97	53.98	17.01	AV
17475	51.19	5.68	V	56.87	68.20	11.33	PK
11650	54.79	-2.84	H	51.95	73.98	22.03	PK
11650	40.22	-2.84	H	37.38	53.98	16.60	AV
17475	52.07	5.68	H	57.75	68.20	10.45	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5745 MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	54.42	-2.50	V	51.92	73.98	22.06	PK
11490	40.11	-2.50	V	37.61	53.98	16.37	AV
17235	51.75	3.09	V	54.84	68.20	13.36	PK
11490	54.86	-2.50	H	52.36	73.98	21.62	PK
11490	40.19	-2.50	H	37.69	53.98	16.29	AV
17235	52.40	3.09	H	55.49	68.20	12.71	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	53.80	-2.87	V	50.93	73.98	23.05	PK
11570	39.86	-2.87	V	36.99	53.98	16.99	AV
17355	50.20	3.45	V	53.65	68.20	14.55	PK
11570	54.97	-2.87	H	52.10	73.98	21.88	PK
11570	39.98	-2.87	H	37.11	53.98	16.87	AV
17355	51.61	3.45	H	55.06	68.20	13.14	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	53.83	-2.84	V	50.99	73.98	22.99	PK
11650	39.83	-2.84	V	36.99	53.98	16.99	AV
17475	51.34	5.68	V	57.02	68.20	11.18	PK
11650	54.80	-2.84	H	51.96	73.98	22.02	PK
11650	40.21	-2.84	H	37.37	53.98	16.61	AV
17475	51.88	5.68	H	57.56	68.20	10.64	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII3
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5755 MHz
Channel No.	151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	54.39	-2.55	V	51.84	73.98	22.14	PK
11510	41.32	-2.55	V	38.77	53.98	15.21	AV
17265	51.20	3.10	V	54.30	68.20	13.90	PK
11510	54.72	-2.55	H	52.17	73.98	21.81	PK
11510	41.65	-2.55	H	39.10	53.98	14.88	AV
17265	51.71	3.10	H	54.81	68.20	13.39	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	54.39	-3.29	V	51.10	73.98	22.88	PK
11590	41.63	-3.29	V	38.34	53.98	15.64	AV
17385	51.34	4.19	V	55.53	68.20	12.67	PK
11590	54.71	-3.29	H	51.42	73.98	22.56	PK
11590	41.95	-3.29	H	38.66	53.98	15.32	AV
17385	52.02	4.19	H	56.21	68.20	11.99	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5755 MHz
Channel No.	151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	54.37	-2.55	V	51.82	73.98	22.16	PK
11510	41.28	-2.55	V	38.73	53.98	15.25	AV
17265	51.18	3.10	V	54.28	68.20	13.92	PK
11510	54.70	-2.55	H	52.15	73.98	21.83	PK
11510	41.62	-2.55	H	39.07	53.98	14.91	AV
17265	51.70	3.10	H	54.80	68.20	13.40	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	54.37	-3.29	V	51.08	73.98	22.90	PK
11590	41.59	-3.29	V	38.30	53.98	15.68	AV
17385	51.48	4.19	V	55.67	68.20	12.53	PK
11590	54.69	-3.29	H	51.40	73.98	22.58	PK
11590	41.92	-3.29	H	38.63	53.98	15.35	AV
17385	51.78	4.19	H	55.97	68.20	12.23	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5775 MHz
Channel No.	155 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11550	52.71	-2.71	V	50.00	73.98	23.98	PK
11550	41.71	-2.71	V	39.00	53.98	14.98	AV
17325	51.88	3.44	V	55.32	68.20	12.88	PK
11550	53.69	-2.71	H	50.98	73.98	23.00	PK
11550	42.19	-2.71	H	39.48	53.98	14.50	AV
17325	52.38	3.44	H	55.82	68.20	12.38	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

[Tablet+keyboard cover(kickstand)]

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17475	51.95	5.68	H	57.63	68.20	10.57	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17475	52.03	5.68	H	57.71	68.20	10.49	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17475	51.79	5.68	H	57.47	68.20	10.73	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17385	51.98	4.19	H	56.17	68.20	12.03	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17385	51.74	4.19	H	55.93	68.20	12.27	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5775 MHz
Channel No.	155 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
17325	52.31	3.44	H	55.75	68.20	12.45	PK

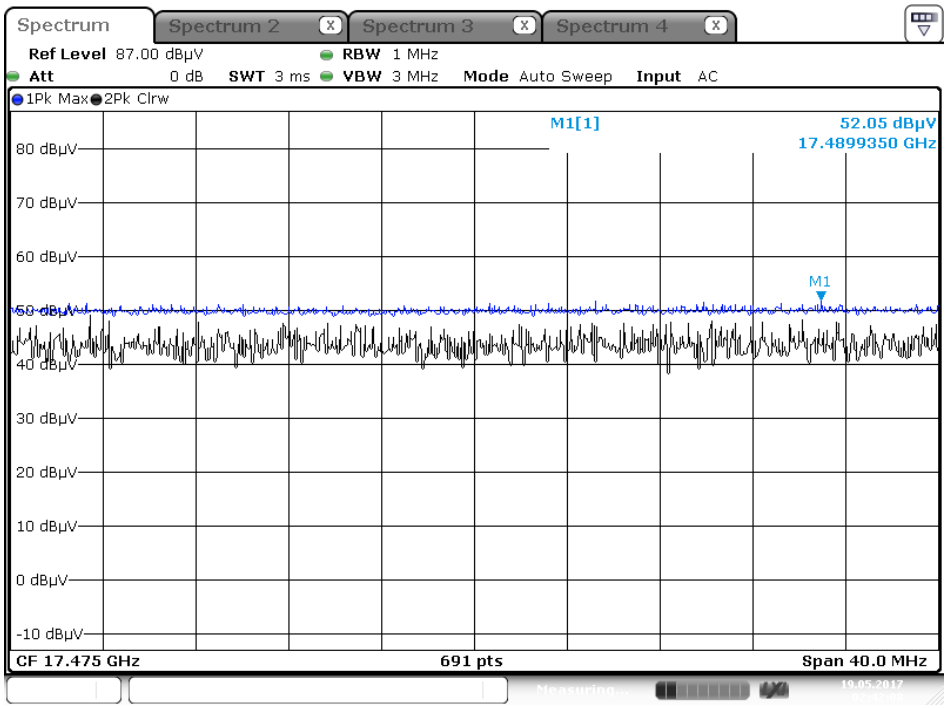
*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

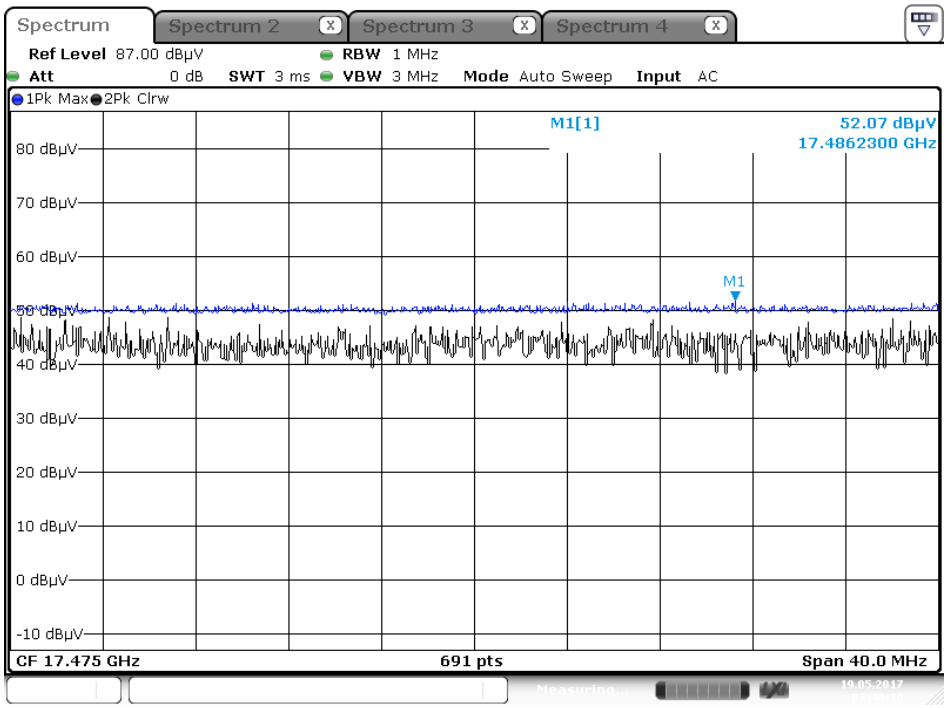
▣ RESULT PLOTS(Only Tablet)

Radiated Spurious Emissions plot –Peak Reading (802.11a, Ch.165 3rd Harmonic, X-H)



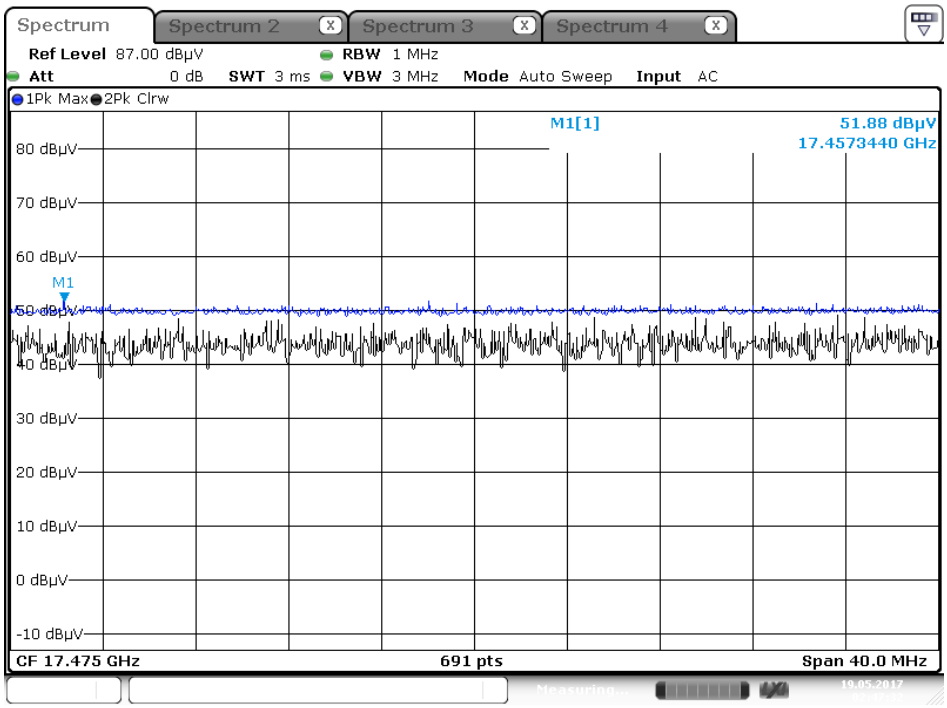
Date: 19.MAY.2017 02:42:08

Radiated Spurious Emissions plot – Peak Reading(802.11n_HT20, Ch.165 3rd Harmonic, X-H)



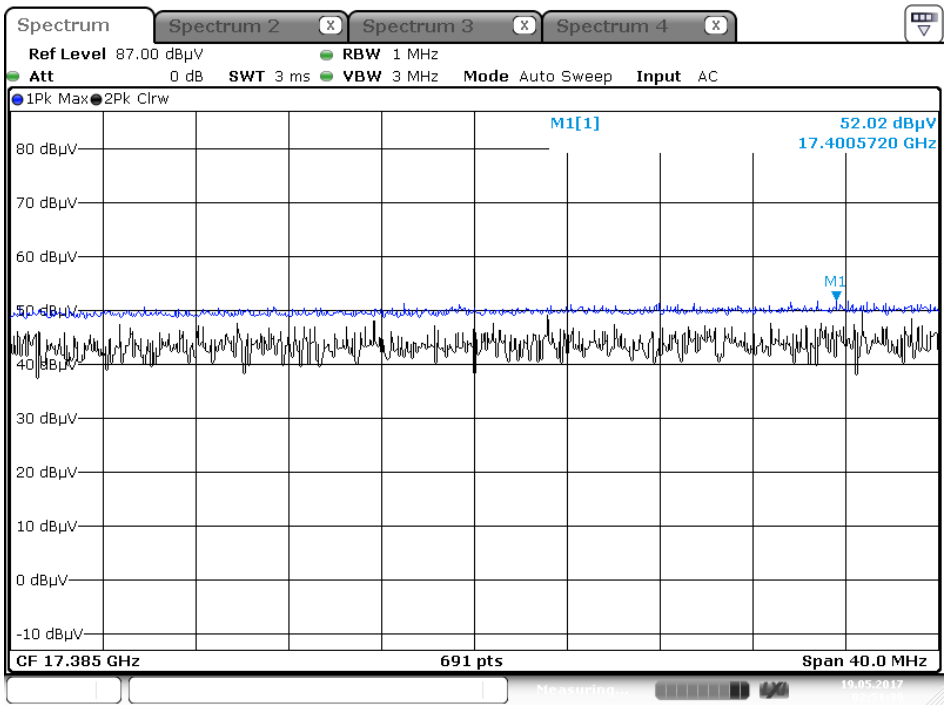
Date: 19.MAY.2017 02:40:10

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT20, Ch.165 3rd Harmonic, X-H)



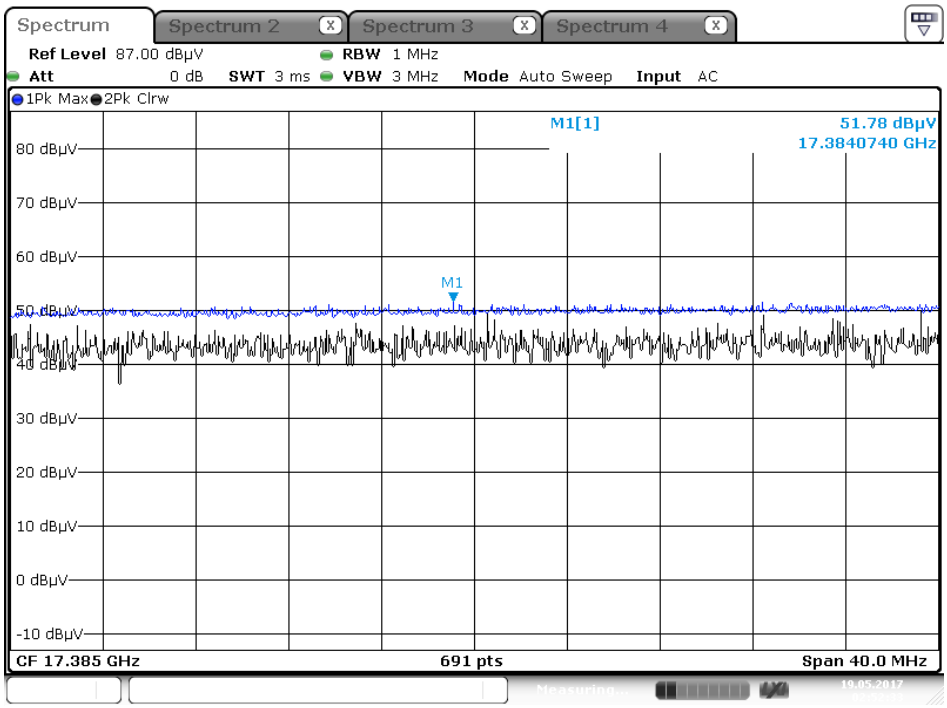
Date: 19.MAY.2017 02:47:32

Radiated Spurious Emissions plot – Peak Reading (802.11n_HT40, Ch.159 3rd Harmonic, X-H)



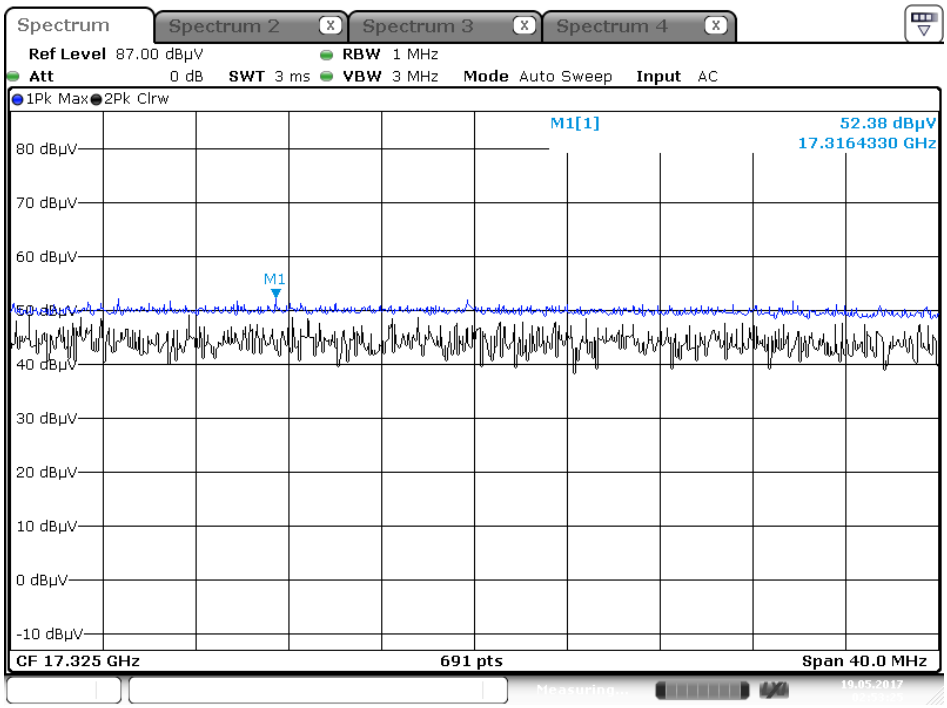
Date: 19.MAY.2017 02:51:39

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT40, Ch.159 3rd Harmonic, X-H)



Date: 19.MAY.2017 02:52:33

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT80, Ch.155 3rd Harmonic, X-H)



Date: 19.MAY.2017 02:53:25

Note : Only the worst case plots for Radiated Spurious Emissions.

9.6.2 RADIATED RESTRICTED BAND EDGE MEASUREMENTS

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

[Only tablet]

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	55.72	2.81	V	58.53	73.98	15.45	PK
5150	43.35	2.81	V	46.16	53.98	7.82	AV

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	56.02	2.81	V	58.83	73.98	15.15	PK
5150	43.38	2.81	V	46.19	53.98	7.79	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	55.29	2.81	V	58.1	73.98	15.88	PK
5150	43.27	2.81	V	46.08	53.98	7.90	AV

Band :	UNII 1
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	63.80	2.81	V	66.61	73.98	7.37	PK
5150	44.22	2.81	V	47.03	53.98	6.95	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	63.94	2.81	V	66.75	73.98	7.23	PK
5150	44.18	2.81	V	46.99	53.98	6.99	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	59.39	2.81	V	62.2	73.98	11.78	PK
5150	47.05	2.81	V	49.86	53.98	4.12	AV

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	54.36	3.86	V	58.22	73.98	15.76	PK
5350	41.44	3.86	V	45.3	53.98	8.68	AV

Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.10	3.86	V	58.96	73.98	15.02	PK
5350	41.45	3.86	V	45.31	53.98	8.67	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.47	3.86	V	59.33	73.98	14.65	PK
5350	41.59	3.86	V	45.45	53.98	8.53	AV

Band :	UNII 2A
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.67	3.86	V	67.53	73.98	6.45	PK
5350	43.12	3.86	V	46.98	53.98	7.00	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.00	3.86	V	66.86	73.98	7.12	PK
5350	43.14	3.86	V	47	53.98	6.98	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	57.90	3.86	V	61.76	73.98	12.22	PK
5350	46.51	3.86	V	50.37	53.98	3.61	AV

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	53.01	5.10	V	58.11	73.98	15.87	PK
5460	40.13	5.10	V	45.23	53.98	8.75	AV
*5470	54.24	5.18	V	59.42	68.20	8.78	PK

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5725	53.48	5.95	V	59.43	68.20	8.77	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	52.78	5.10	V	57.88	73.98	16.10	PK
5460	40.34	5.10	V	45.44	53.98	8.54	AV
*5470	54.80	5.18	V	59.98	68.20	8.22	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5725	53.54	5.95	V	59.49	68.20	8.71	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	54.20	5.10	V	59.3	73.98	14.68	PK
5460	40.34	5.10	V	45.44	53.98	8.54	AV
*5470	54.62	5.18	V	59.8	68.20	8.40	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5725	53.60	5.95	V	59.55	68.20	8.65	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	63.25	5.10	V	68.35	73.98	5.63	PK
5460	40.94	5.10	V	46.04	53.98	7.94	AV
*5470	63.77	5.18	V	68.95	73.98	5.03	PK
*5470	42.51	5.18	V	47.69	53.98	6.29	AV

Band :	UNII 2C
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5725	57.76	5.95	V	63.71	68.20	4.49	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	59.06	5.10	V	64.16	73.98	9.82	PK
5460	40.89	5.10	V	45.99	53.98	7.99	AV
*5470	63.77	5.18	V	68.95	73.98	5.03	PK
*5470	42.60	5.18	V	47.78	53.98	6.20	AV

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5725	57.82	5.95	V	63.77	68.20	4.43	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	55.79	5.10	V	60.89	73.98	13.09	PK
5460	44.86	5.10	V	49.96	53.98	4.02	AV
*5470	56.88	5.18	V	62.06	68.20	6.14	PK

[Tablet+keyboard cover(kickstand)]

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

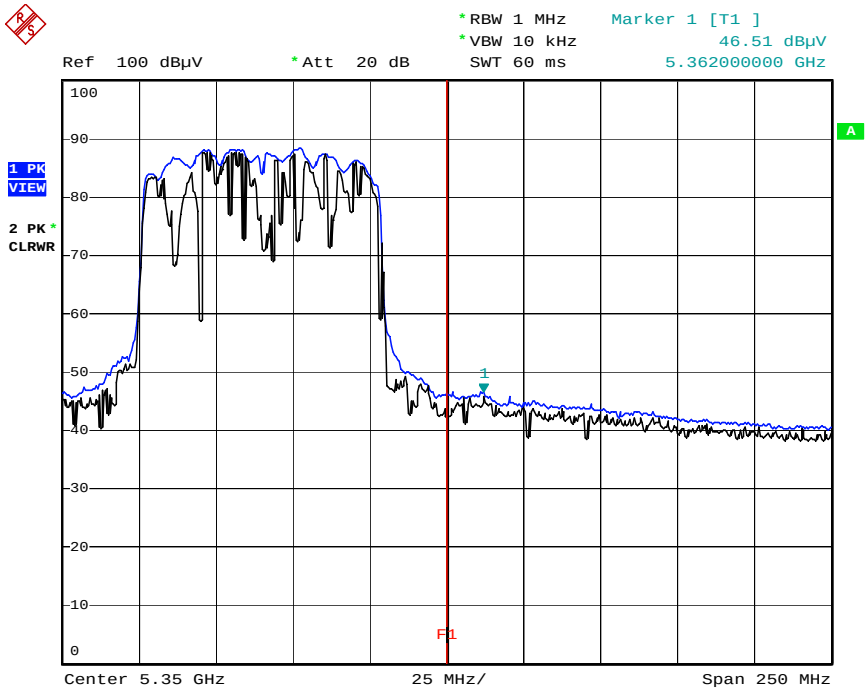
Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	54.49	3.86	V	58.35	73.98	15.63	PK
5350	42.43	3.86	V	46.29	53.98	7.69	AV

Notes:

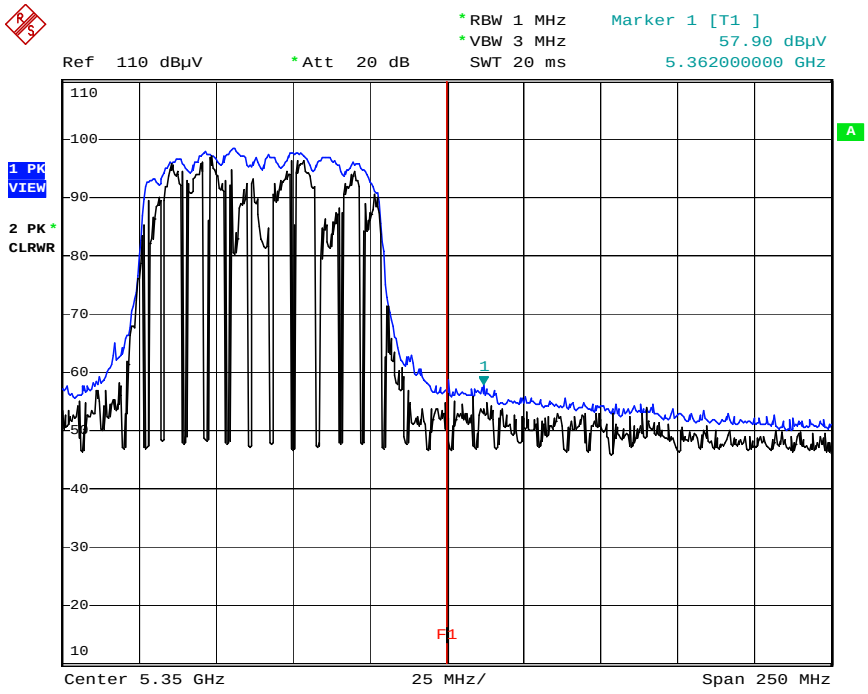
1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT + Distance Factor
2. We have done all data rate in 802.11a/n/ac mode test. . Worst case of EUT is lowest data rate in 802.11a/n/ac.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. '*' is radiated band edge test frequency.(not restricted band emissions)

▣ RESULT PLOTS(Only tablet)

Radiated Restricted Band Edges plot – Average Reading (802.11ac_VHT80, Ch.58, Y-V)



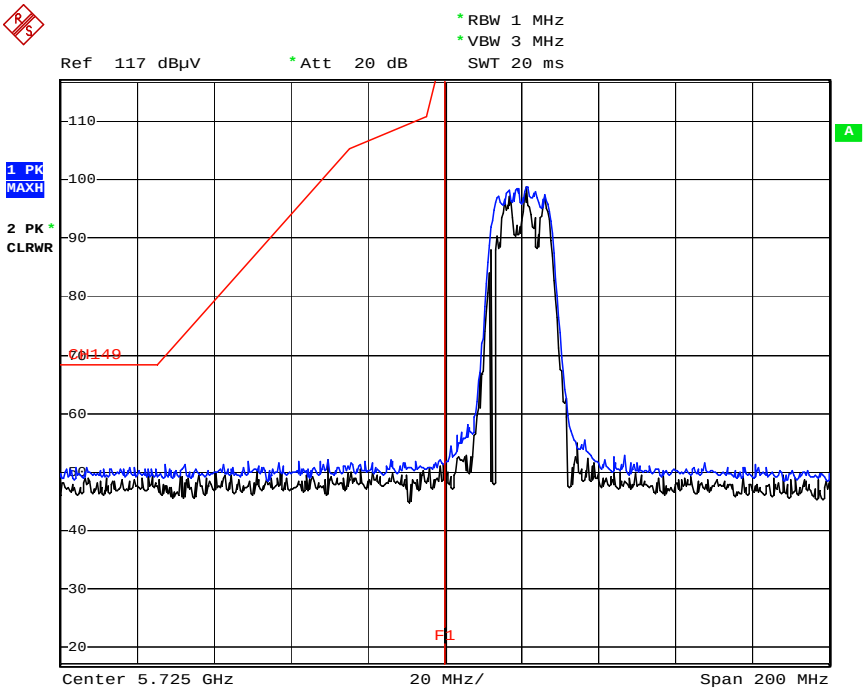
Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT80, Ch.58, Y-V)



Note : Only the worst case plots for RADIATED RESTRICTED BAND EDGE.

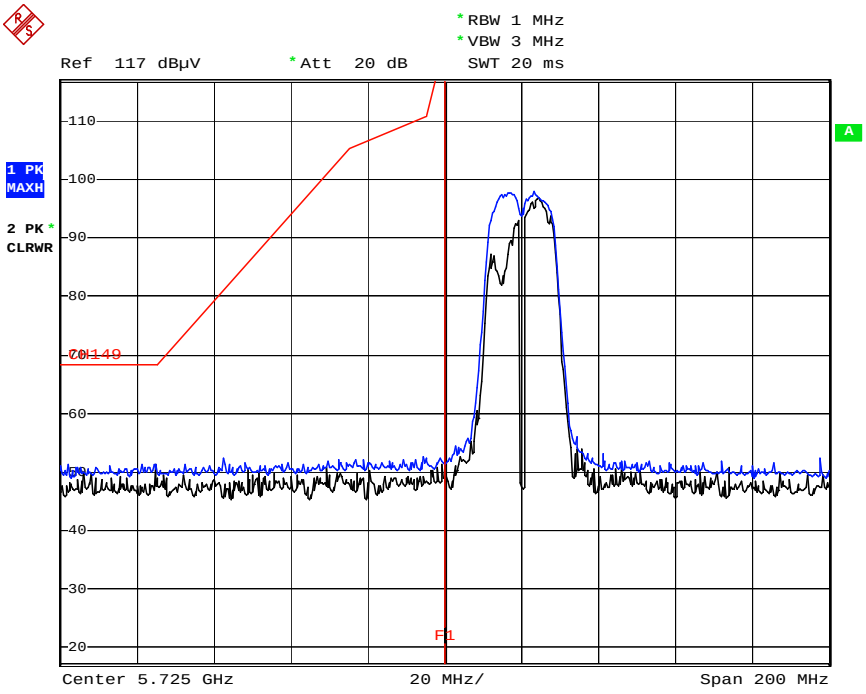
▣ RESULT PLOTS (UNII 3 – ch.149, Only tablet)

Radiated Restricted Band Edges plot – Peak Reading (802.11a)



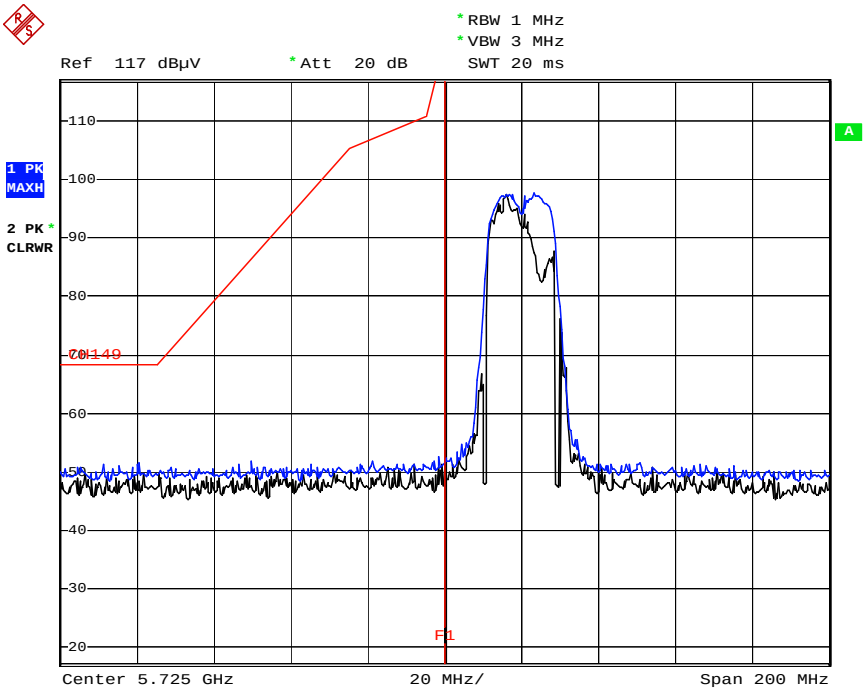
Date: 28.MAY.2017 14:39:32

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT20)



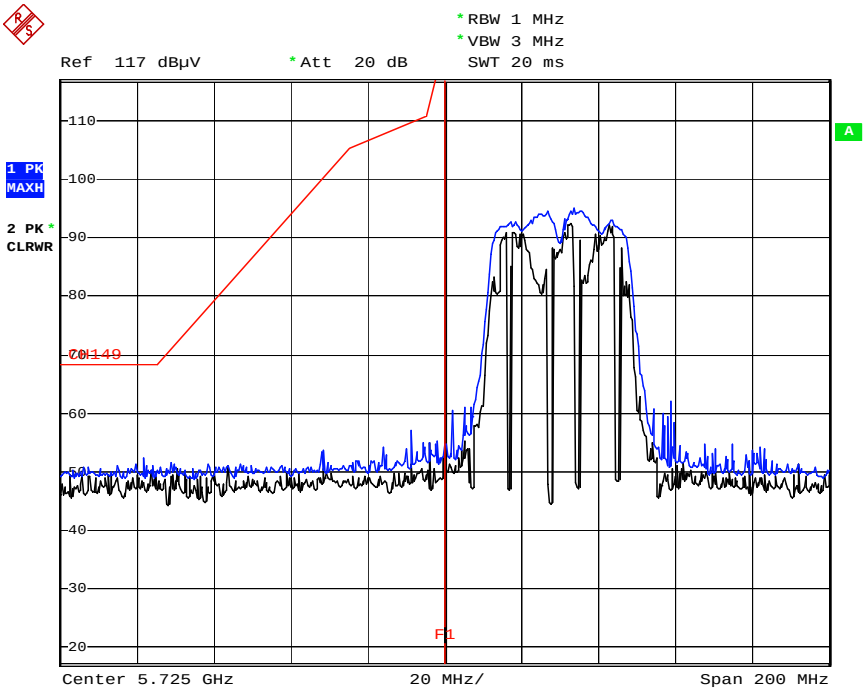
Date: 28.MAY.2017 14:37:22

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT20)



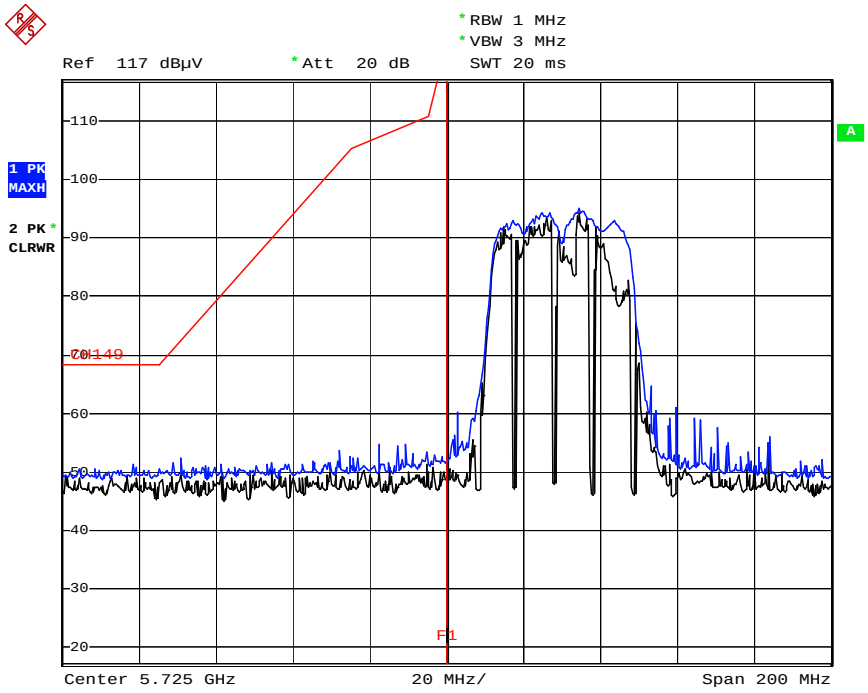
Date: 28.MAY.2017 14:37:58

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT40)



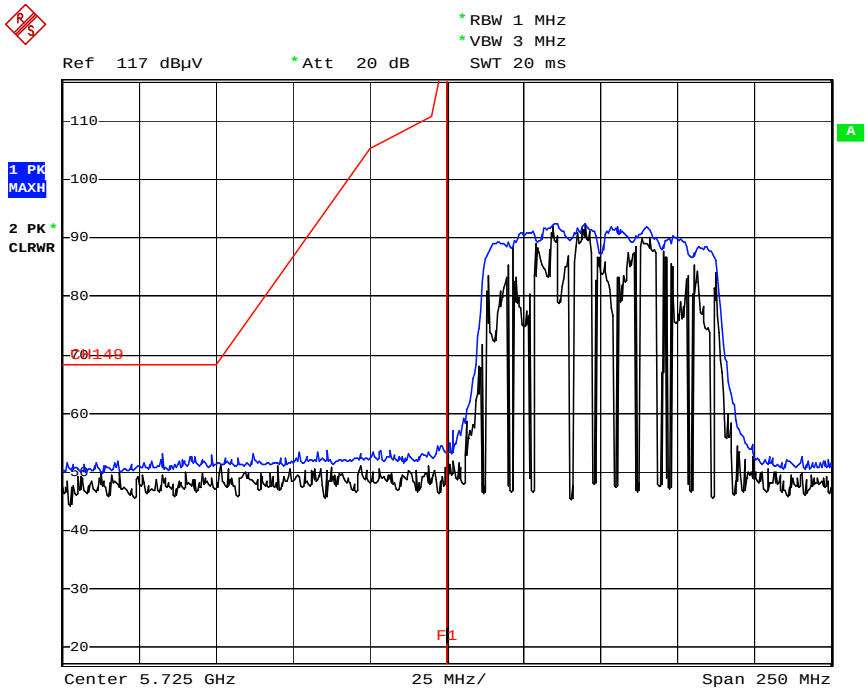
Date: 28.MAY.2017 14:40:39

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT40)



Date: 28.MAY.2017 14:40:56

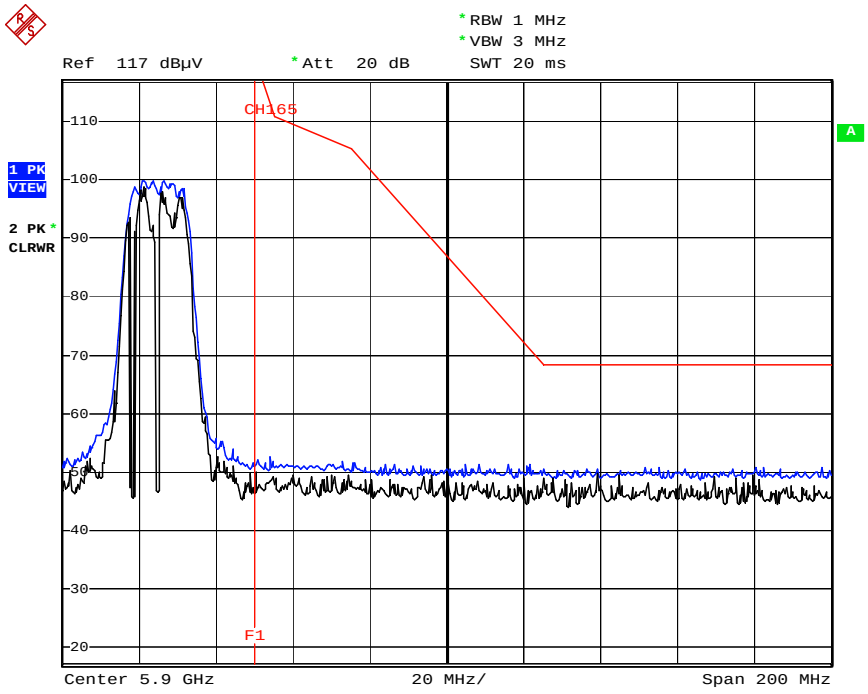
Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT80)



Date: 28.MAY.2017 14:31:24

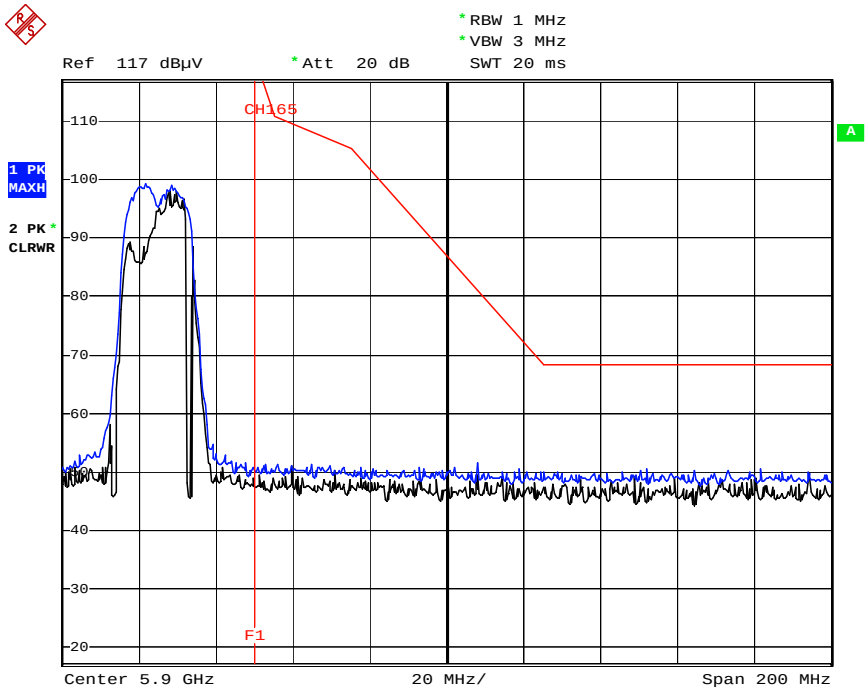
▣ RESULT PLOTS (UNII 3 – ch.165, Only tablet)

Radiated Restricted Band Edges plot – Peak Reading (802.11a)



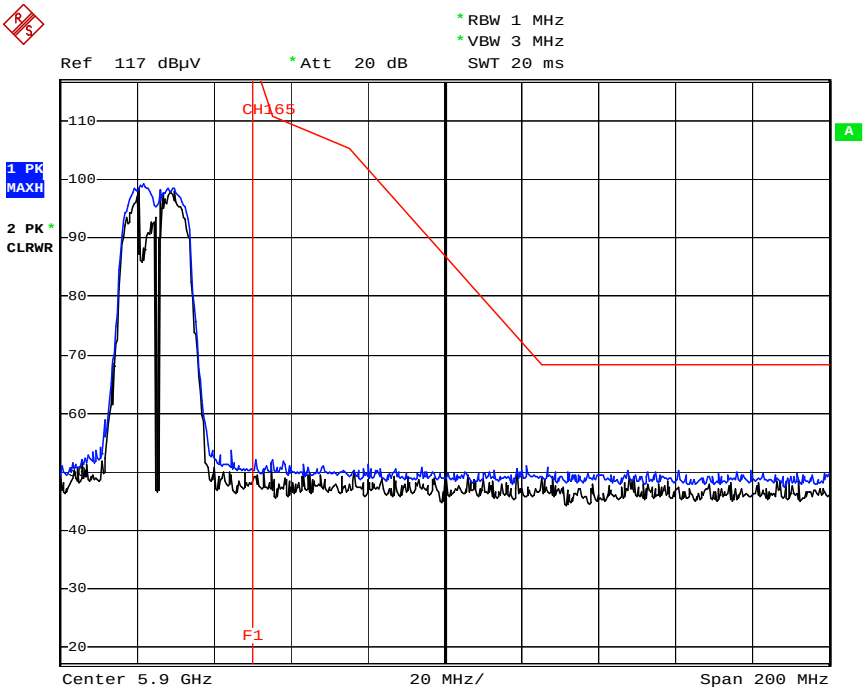
Date: 28.MAY.2017 14:22:19

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT20)

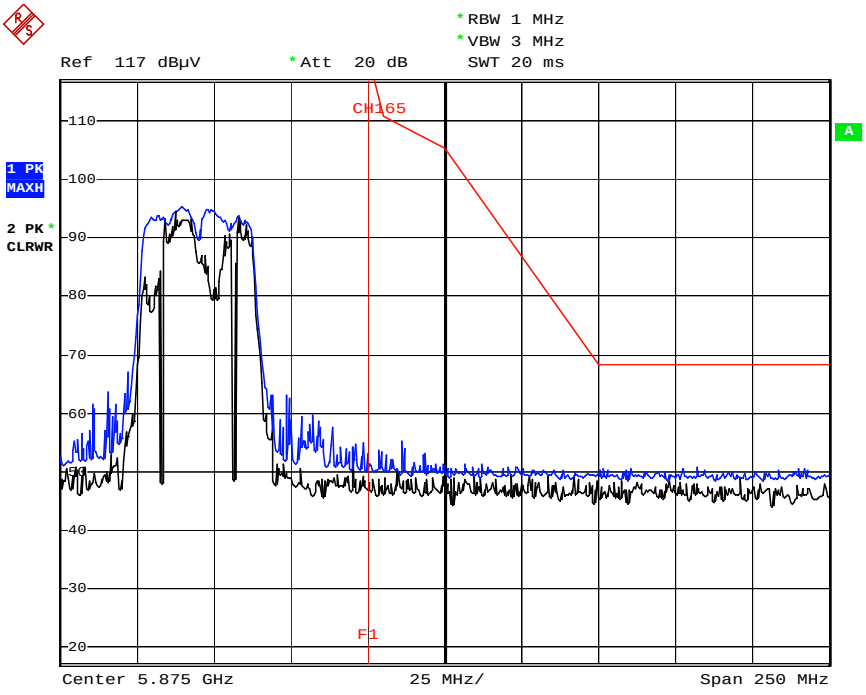


Date: 28.MAY.2017 14:25:19

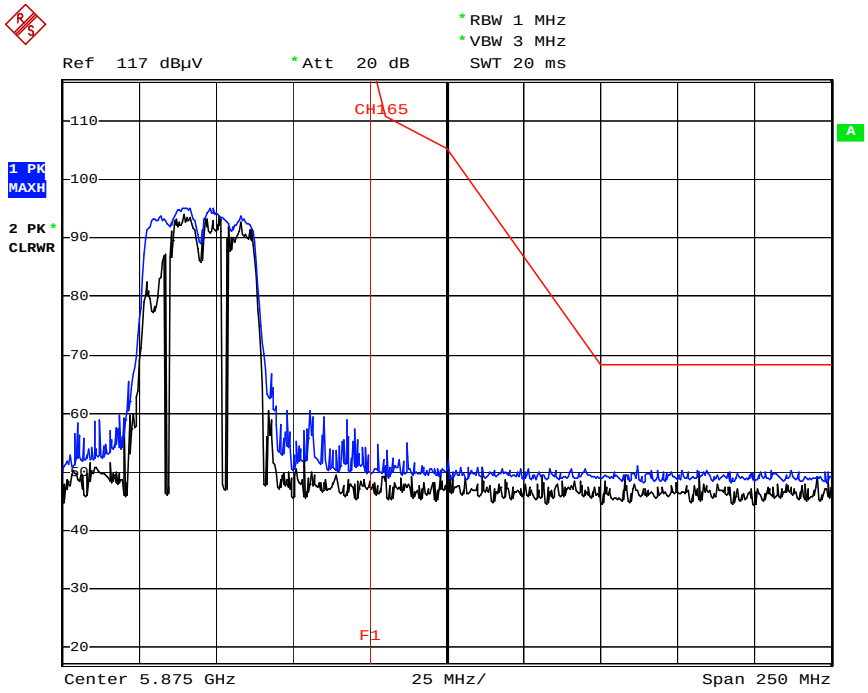
Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT20)



Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT40)

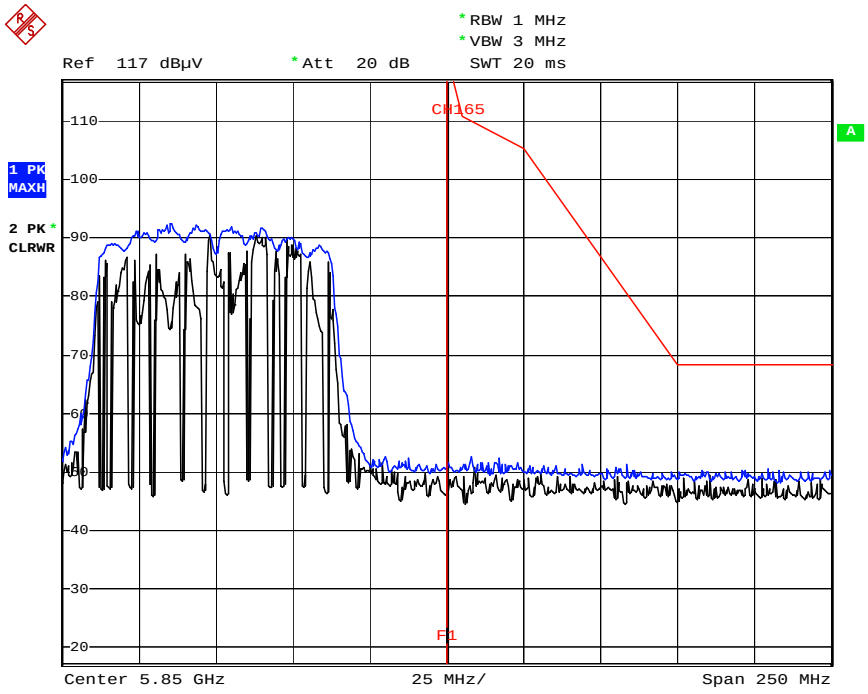


Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT40)



Date: 28.MAY.2017 14:29:19

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT80)



Date: 28.MAY.2017 14:30:03

9.7 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBµV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference groundplane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor

▣ RESULT PLOTS (Only tablet)

Conducted Emissions (Line 1)

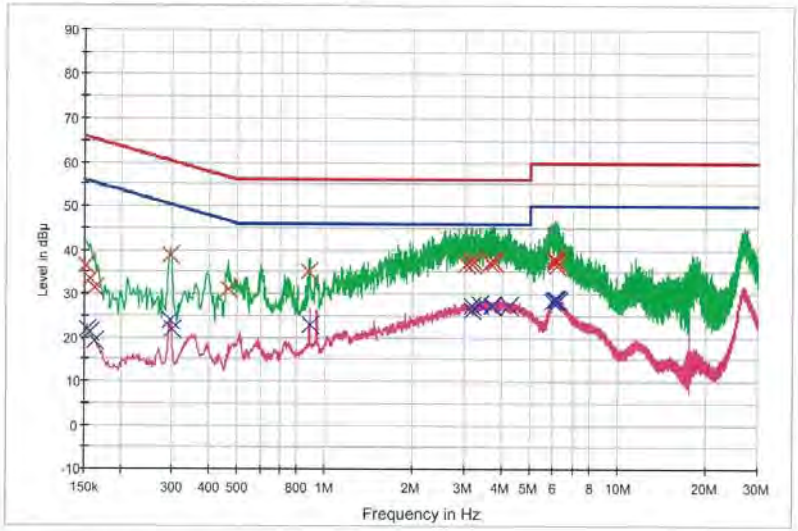
EMI Auto Test(12) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-W728Y
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5GHz MODE_L1

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	36.5	9.000	Off	L1	9.6	29.4	65.9
0.158000	33.5	9.000	Off	L1	9.6	32.1	65.6
0.162000	31.4	9.000	Off	L1	9.6	33.9	65.4
0.296000	38.7	9.000	Off	L1	9.7	21.7	60.4
0.464000	31.0	9.000	Off	L1	9.7	25.6	56.6
0.882000	35.2	9.000	Off	L1	9.7	20.8	56.0
3.020000	36.9	9.000	Off	L1	9.8	19.1	56.0
3.160000	37.9	9.000	Off	L1	9.8	18.1	56.0
3.190000	36.7	9.000	Off	L1	9.8	19.3	56.0
3.642000	37.1	9.000	Off	L1	9.8	18.9	56.0
3.762000	37.5	9.000	Off	L1	9.8	18.5	56.0
3.790000	37.1	9.000	Off	L1	9.8	18.9	56.0
6.036000	38.2	9.000	Off	L1	10.0	21.8	60.0
6.048000	38.3	9.000	Off	L1	10.0	21.7	60.0
6.092000	37.5	9.000	Off	L1	10.0	22.5	60.0
6.116000	37.9	9.000	Off	L1	10.0	22.1	60.0
6.168000	37.4	9.000	Off	L1	10.0	22.6	60.0
6.218000	36.4	9.000	Off	L1	10.0	23.6	60.0

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EMI Auto Test(12) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	22.0	9.000	Off	L1	9.6	33.8	55.8
0.158000	21.0	9.000	Off	L1	9.6	34.5	55.6
0.162000	19.3	9.000	Off	L1	9.6	36.1	55.4
0.294000	23.9	9.000	Off	L1	9.7	26.6	50.4
0.298000	21.8	9.000	Off	L1	9.7	28.5	50.3
0.886000	22.9	9.000	Off	L1	9.7	23.1	46.0
3.160000	27.3	9.000	Off	L1	9.8	18.7	46.0
3.190000	26.4	9.000	Off	L1	9.8	19.6	46.0
3.372000	27.6	9.000	Off	L1	9.8	18.4	46.0
3.714000	27.1	9.000	Off	L1	9.8	18.9	46.0
3.762000	27.3	9.000	Off	L1	9.8	18.7	46.0
4.258000	27.2	9.000	Off	L1	9.9	18.8	46.0
5.964000	28.2	9.000	Off	L1	9.9	21.8	50.0
6.036000	28.6	9.000	Off	L1	10.0	21.4	50.0
6.116000	28.8	9.000	Off	L1	10.0	21.2	50.0
6.184000	28.7	9.000	Off	L1	10.0	21.3	50.0
6.218000	28.5	9.000	Off	L1	10.0	21.5	50.0
6.258000	28.4	9.000	Off	L1	10.0	21.6	50.0

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Conducted Emissions (Line 2)

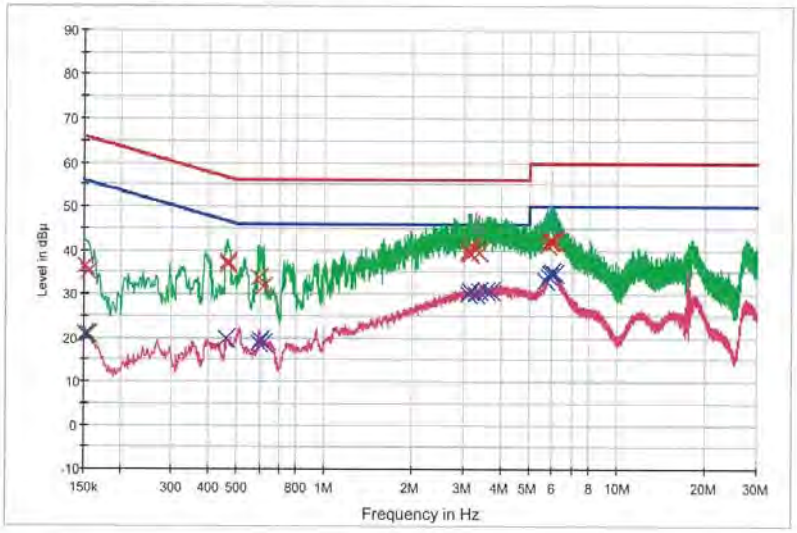
EMI Auto Test(12) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-W728Y
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5GHz MODE_N

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	36.4	9.000	Off	N	9.6	29.5	65.9
0.156000	35.0	9.000	Off	N	9.6	30.6	65.7
0.464000	37.4	9.000	Off	N	9.7	19.2	56.6
0.468000	36.7	9.000	Off	N	9.7	19.9	56.5
0.594000	33.6	9.000	Off	N	9.7	22.4	56.0
0.620000	31.7	9.000	Off	N	9.7	24.3	56.0
3.088000	40.0	9.000	Off	N	9.8	16.0	56.0
3.104000	39.3	9.000	Off	N	9.8	16.7	56.0
3.144000	39.2	9.000	Off	N	9.8	16.8	56.0
3.164000	41.1	9.000	Off	N	9.8	14.9	56.0
3.290000	40.1	9.000	Off	N	9.8	15.9	56.0
3.360000	39.4	9.000	Off	N	9.8	16.6	56.0
5.782000	41.2	9.000	Off	N	9.9	18.8	60.0
5.874000	41.8	9.000	Off	N	9.9	18.2	60.0
5.914000	42.1	9.000	Off	N	9.9	17.9	60.0
5.940000	42.5	9.000	Off	N	9.9	17.5	60.0
6.020000	42.1	9.000	Off	N	9.9	17.9	60.0
6.088000	41.9	9.000	Off	N	9.9	18.1	60.0

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EMI Auto Test(12) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	20.7	9.000	Off	N	9.6	35.1	55.9
0.156000	20.8	9.000	Off	N	9.6	34.9	55.7
0.462000	19.7	9.000	Off	N	9.7	26.9	46.7
0.594000	18.7	9.000	Off	N	9.7	27.3	46.0
0.602000	19.6	9.000	Off	N	9.7	26.4	46.0
0.620000	18.7	9.000	Off	N	9.7	27.3	46.0
3.088000	30.0	9.000	Off	N	9.8	16.0	46.0
3.144000	30.6	9.000	Off	N	9.8	15.4	46.0
3.276000	29.9	9.000	Off	N	9.8	16.1	46.0
3.360000	30.7	9.000	Off	N	9.8	15.3	46.0
3.564000	30.8	9.000	Off	N	9.8	15.2	46.0
3.676000	30.7	9.000	Off	N	9.8	15.3	46.0
5.724000	33.1	9.000	Off	N	9.9	16.9	50.0
5.810000	34.0	9.000	Off	N	9.9	16.0	50.0
5.914000	34.8	9.000	Off	N	9.9	15.2	50.0
5.940000	35.0	9.000	Off	N	9.9	15.0	50.0
5.978000	34.9	9.000	Off	N	9.9	15.1	50.0
6.088000	34.8	9.000	Off	N	9.9	15.2	50.0

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▣ RESULT PLOTS (Tablet+keyboard cover(kickstand))

Conducted Emissions (Line 1)

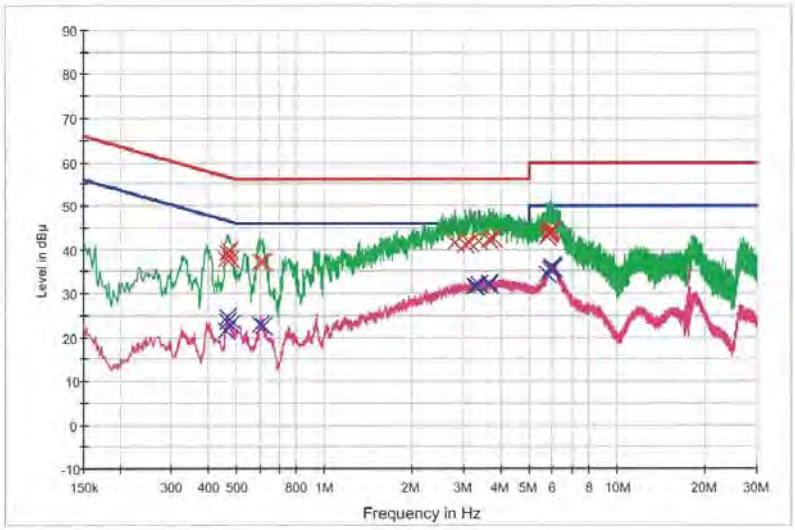
EMI Auto Test(12) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-W728Y
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5GHz MODE_L1

FCC CLASS B



FCC CLASS B_QP FCC CLASS B_AV Preview Result 1-PK+
Preview Result 2-AVG Final Result 1-QPK Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.460000	37.9	9.000	Off	L1	9.7	18.8	56.7
0.464000	39.2	9.000	Off	L1	9.7	17.4	56.6
0.470000	39.7	9.000	Off	L1	9.7	16.8	56.5
0.478000	37.8	9.000	Off	L1	9.7	18.6	56.4
0.600000	37.3	9.000	Off	L1	9.7	18.7	56.0
0.616000	37.3	9.000	Off	L1	9.7	18.7	56.0
2.802000	41.7	9.000	Off	L1	9.8	14.3	56.0
3.018000	41.1	9.000	Off	L1	9.8	14.9	56.0
3.136000	41.6	9.000	Off	L1	9.8	14.4	56.0
3.380000	41.8	9.000	Off	L1	9.8	14.2	56.0
3.674000	42.3	9.000	Off	L1	9.8	13.7	56.0
3.778000	42.7	9.000	Off	L1	9.8	13.3	56.0
5.778000	42.9	9.000	Off	L1	9.9	17.1	60.0
5.832000	43.4	9.000	Off	L1	9.9	16.6	60.0
5.876000	44.0	9.000	Off	L1	9.9	16.0	60.0
5.914000	44.2	9.000	Off	L1	9.9	15.8	60.0
5.934000	43.9	9.000	Off	L1	9.9	16.1	60.0
5.988000	44.5	9.000	Off	L1	9.9	15.5	60.0

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EMI Auto Test(12) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.460000	21.5	9.000	Off	L1	9.7	25.2	46.7
0.464000	23.5	9.000	Off	L1	9.7	23.1	46.6
0.468000	24.5	9.000	Off	L1	9.7	22.1	46.5
0.478000	22.8	9.000	Off	L1	9.7	23.6	46.4
0.606000	22.9	9.000	Off	L1	9.7	23.1	46.0
0.616000	22.7	9.000	Off	L1	9.7	23.3	46.0
3.238000	31.6	9.000	Off	L1	9.8	14.4	46.0
3.284000	31.8	9.000	Off	L1	9.8	14.2	46.0
3.380000	32.1	9.000	Off	L1	9.8	13.9	46.0
3.656000	32.3	9.000	Off	L1	9.8	13.7	46.0
3.662000	32.2	9.000	Off	L1	9.8	13.8	46.0
3.674000	32.1	9.000	Off	L1	9.8	13.9	46.0
5.778000	34.3	9.000	Off	L1	9.9	15.7	50.0
5.876000	35.4	9.000	Off	L1	9.9	14.6	50.0
5.908000	35.3	9.000	Off	L1	9.9	14.7	50.0
5.988000	36.1	9.000	Off	L1	9.9	13.9	50.0
6.002000	35.7	9.000	Off	L1	10.0	14.3	50.0
6.054000	35.8	9.000	Off	L1	10.0	14.2	50.0

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Conducted Emissions (Line 2)

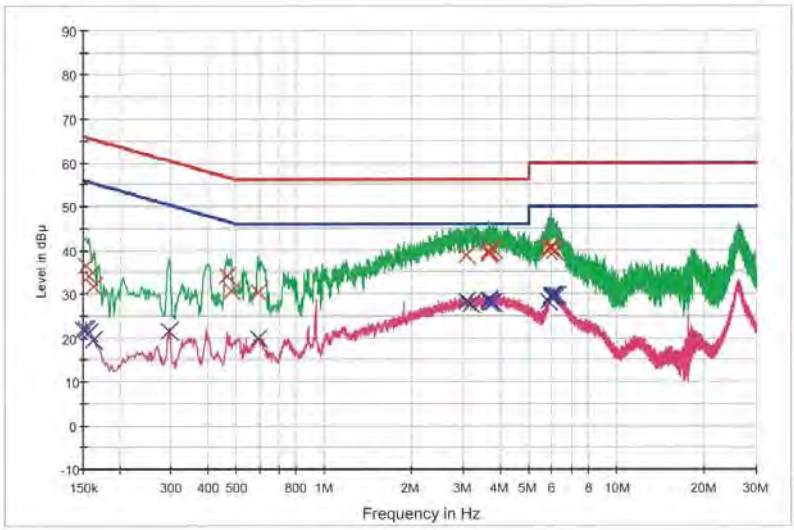
EMI Auto Test(12) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-W728Y
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5GHz MODE_N

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	36.4	9.000	Off	N	9.6	29.4	65.8
0.158000	34.1	9.000	Off	N	9.6	31.5	65.6
0.162000	31.9	9.000	Off	N	9.6	33.5	65.4
0.466000	34.0	9.000	Off	N	9.7	22.6	56.6
0.482000	30.7	9.000	Off	N	9.7	25.6	56.3
0.594000	30.3	9.000	Off	N	9.7	25.7	56.0
3.072000	38.9	9.000	Off	N	9.8	17.1	56.0
3.642000	39.1	9.000	Off	N	9.8	16.9	56.0
3.656000	39.8	9.000	Off	N	9.8	16.2	56.0
3.686000	39.4	9.000	Off	N	9.8	16.6	56.0
3.698000	39.6	9.000	Off	N	9.8	16.4	56.0
3.764000	40.1	9.000	Off	N	9.8	15.9	56.0
5.858000	39.8	9.000	Off	N	9.9	20.2	60.0
5.864000	39.9	9.000	Off	N	9.9	20.1	60.0
5.908000	40.4	9.000	Off	N	9.9	19.6	60.0
5.938000	40.8	9.000	Off	N	9.9	19.2	60.0
5.968000	40.7	9.000	Off	N	9.9	19.3	60.0
6.104000	39.9	9.000	Off	N	9.9	20.1	60.0

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EMI Auto Test(12) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	21.9	9.000	Off	N	9.6	34.1	56.0
0.154000	22.0	9.000	Off	N	9.6	33.8	55.8
0.158000	21.1	9.000	Off	N	9.6	34.5	55.6
0.162000	19.5	9.000	Off	N	9.6	35.8	55.4
0.294000	21.4	9.000	Off	N	9.6	29.0	50.4
0.594000	19.8	9.000	Off	N	9.7	26.2	46.0
3.072000	28.3	9.000	Off	N	9.8	17.7	46.0
3.188000	27.5	9.000	Off	N	9.8	18.5	46.0
3.642000	28.2	9.000	Off	N	9.8	17.8	46.0
3.656000	28.5	9.000	Off	N	9.8	17.5	46.0
3.686000	27.9	9.000	Off	N	9.8	18.1	46.0
3.764000	28.1	9.000	Off	N	9.8	17.9	46.0
5.858000	28.2	9.000	Off	N	9.9	21.8	50.0
5.938000	29.4	9.000	Off	N	9.9	20.6	50.0
6.004000	29.5	9.000	Off	N	9.9	20.5	50.0
6.022000	29.7	9.000	Off	N	9.9	20.3	50.0
6.104000	29.8	9.000	Off	N	9.9	20.2	50.0
6.228000	29.5	9.000	Off	N	9.9	20.5	50.0

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10. LIST OF TEST EQUIPMENT

10.1 LIST OF TEST EQUIPMENT(Conducted Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	12/23/2016	Annual	100073
Rohde & Schwarz	ESCI / Test Receiver	12/23/2016	Annual	100584
Agilent	N9020A / Signal Analyzer	06/24/2016	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/30/2016	Annual	MY49431210
Agilent	N1911A / Power Meter	04/17/2017	Annual	MY45100523
Agilent	N1921A / Power Sensor	04/17/2017	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/23/2016	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/14/2016	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	07/07/2016	Annual	KR75303960
Agilent	8493C / Attenuator(10 dB)	07/15/2016	Annual	07560

10.2 LIST OF TEST EQUIPMENT(Radiated Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Audix	AM4000 / Antenna Position Tower	N/A	N/A	N/A
Audix	Turn Table	N/A	N/A	N/A
Audix	EM1000 / Controller	N/A	N/A	060520
Rohde & Schwarz	Loop Antenna	04/19/2017	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/06/2017	Biennial	760
Schwarzbeck	BBHA 9120D / Horn Antenna	08/25/2016	Biennial	9120D-1300
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	09/04/2015	Biennial	BBHA9170541
Rohde & Schwarz	FSP / Spectrum Analyzer	09/10/2016	Annual	100688
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/23/2016	Annual	101068-SZ
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	06/24/2016	Annual	8
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/15/2017	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	07/06/2016	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/24/2017	Annual	2
Agilent	8493C-10 / Attenuator(10 dB)	08/11/2016	Annual	76649
CERNEX	CBLU1183540 / Power Amplifier	07/15/2016	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	07/15/2016	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	01/23/2017	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	07/11/2016	Annual	25956