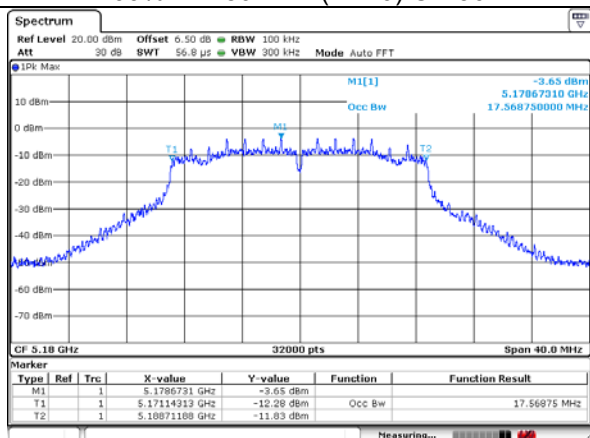
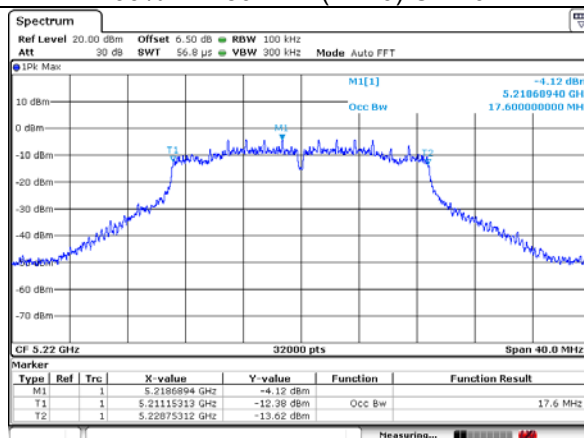


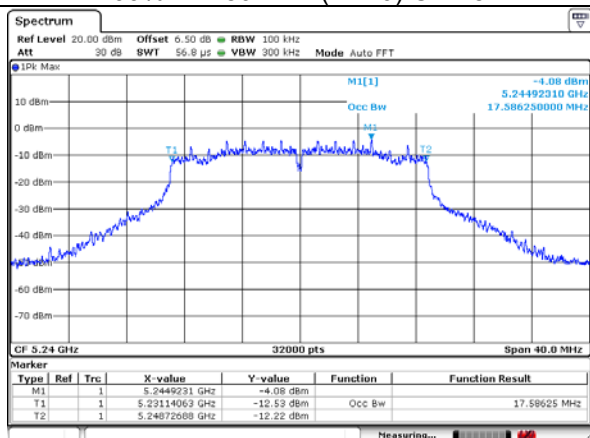
99% BW 802.11n(HT20) CH 36



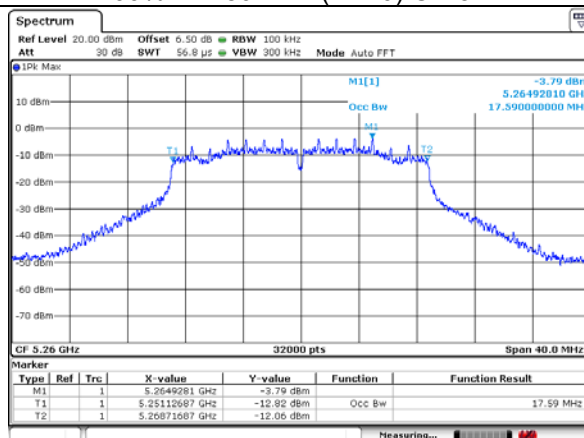
99% BW 802.11n(HT20) CH 40



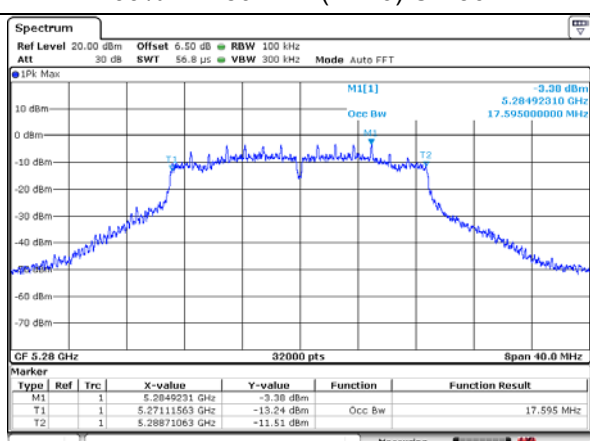
99% BW 802.11n(HT20) CH 48



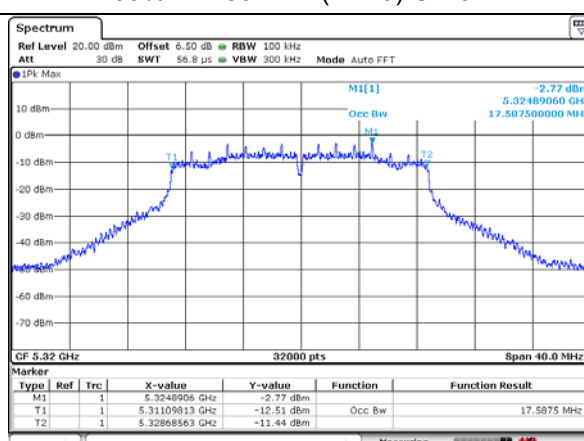
99% BW 802.11n(HT20) CH 52



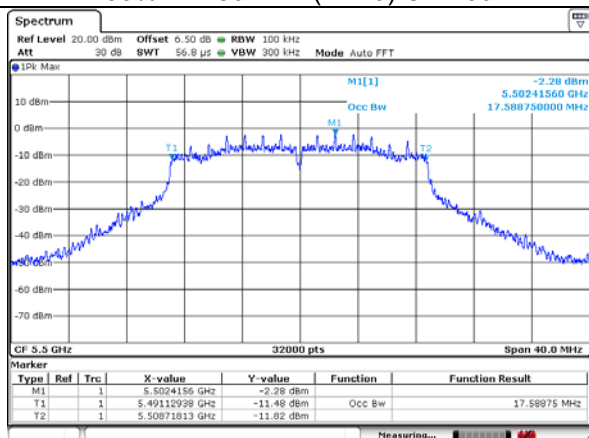
99% BW 802.11n(HT20) CH 56



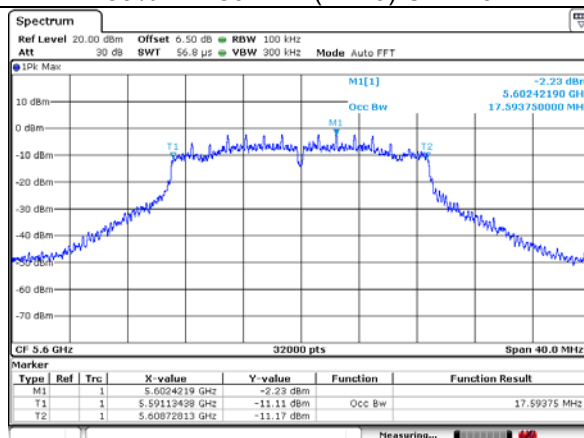
99% BW 802.11n(HT20) CH 64



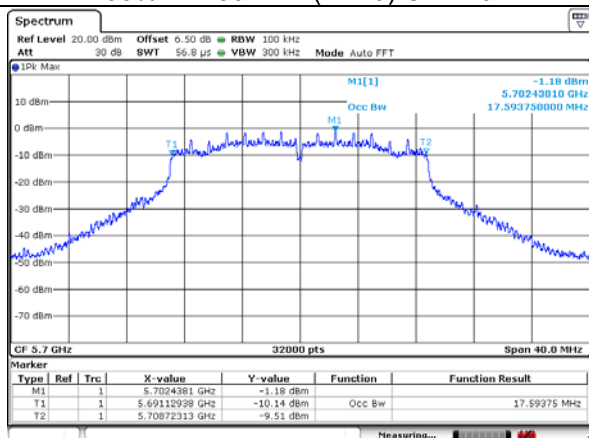
99% BW 802.11n(HT20) CH 100



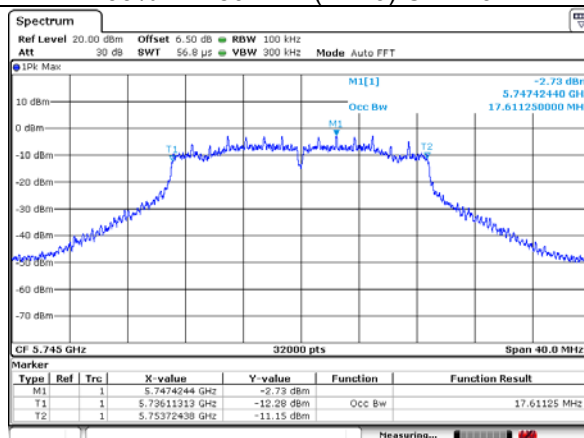
99% BW 802.11n(HT20) CH 120



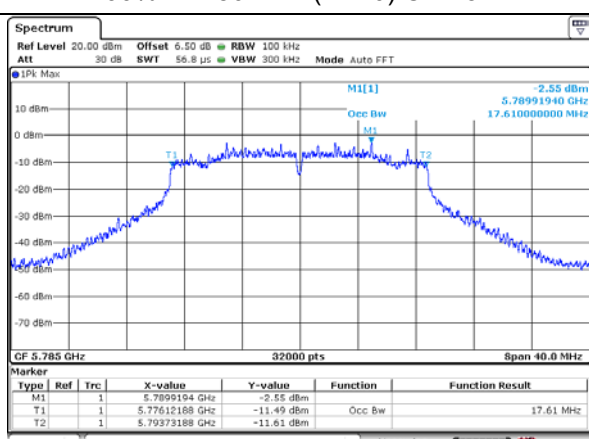
99% BW 802.11n(HT20) CH 140



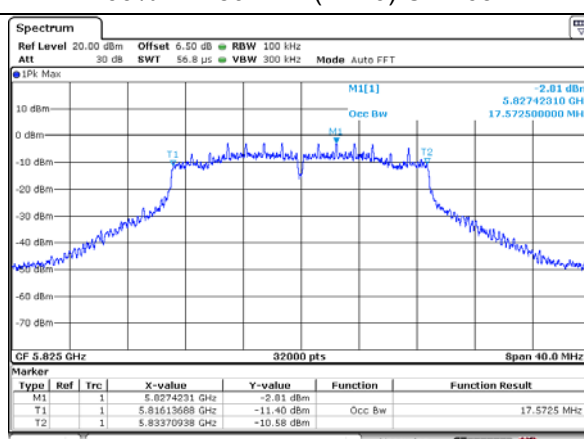
99% BW 802.11n(HT20) CH 149



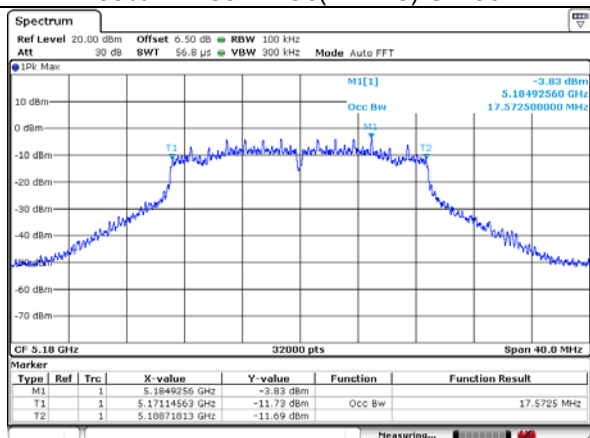
99% BW 802.11n(HT20) CH 157



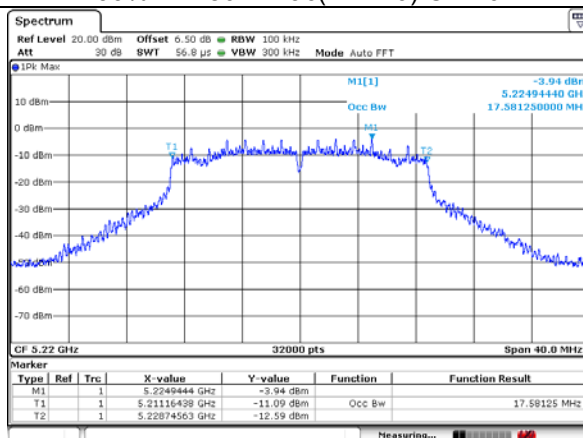
99% BW 802.11n(HT20) CH 165



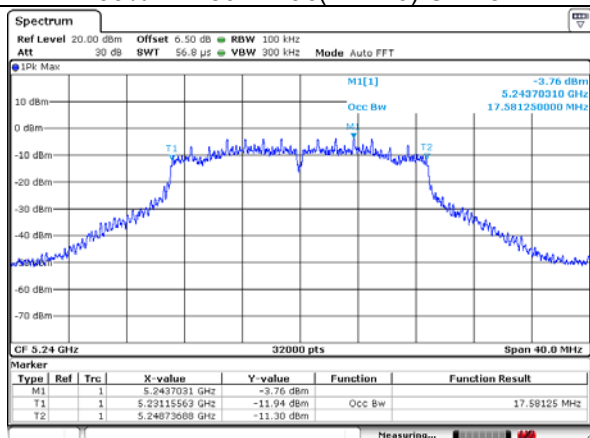
99% BW 802.11ac(VHT20) CH 36



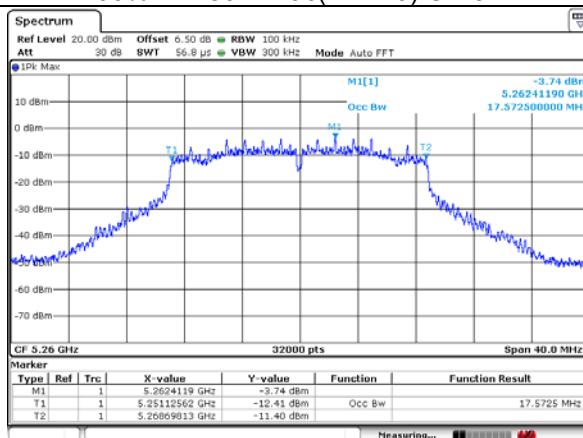
99% BW 802.11ac(VHT20) CH 40



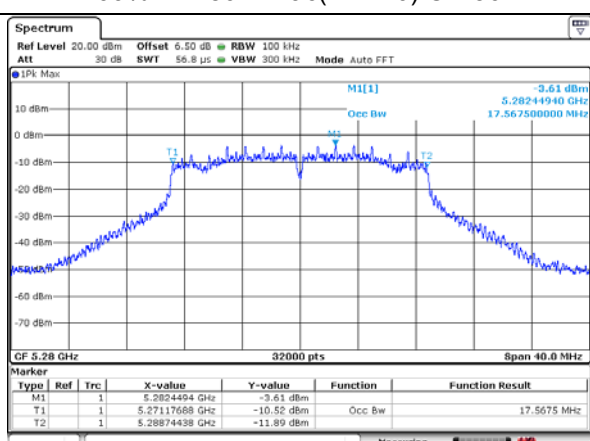
99% BW 802.11ac(VHT20) CH 48



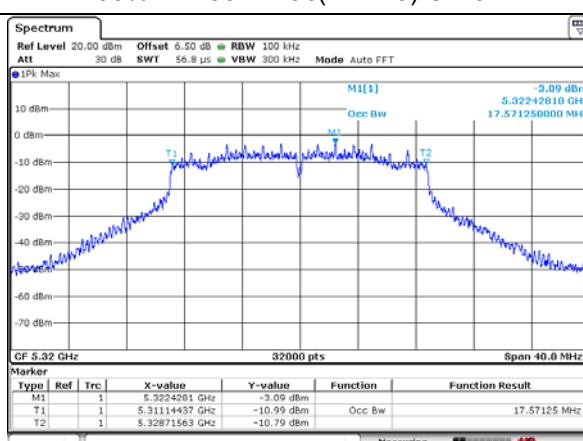
99% BW 802.11ac(VHT20) CH 52



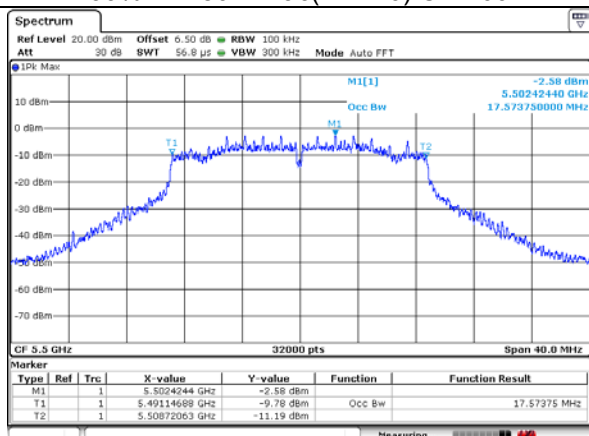
99% BW 802.11ac(VHT20) CH 56



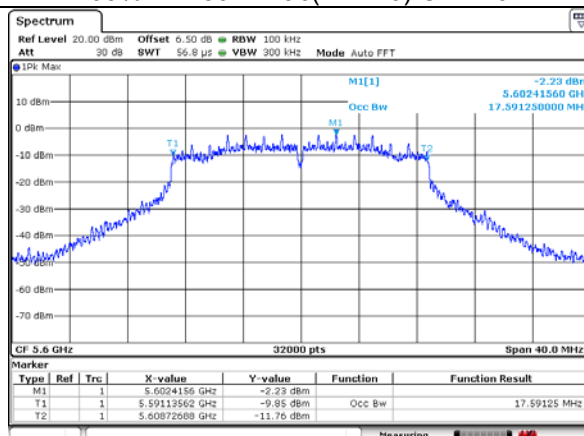
99% BW 802.11ac(VHT20) CH 64



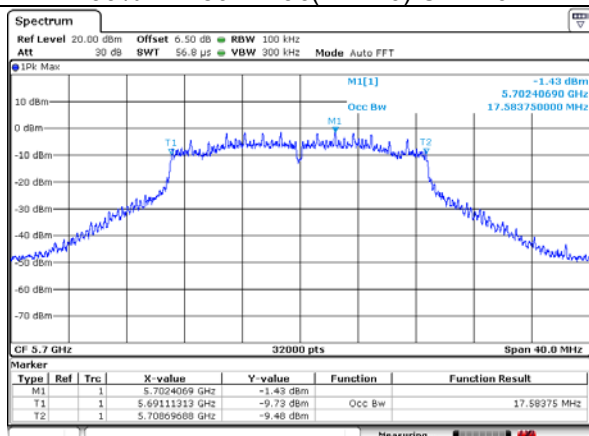
99% BW 802.11ac(VHT20) CH 100



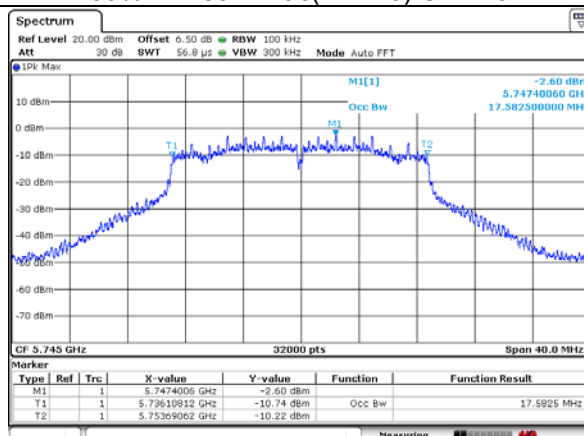
99% BW 802.11ac(VHT20) CH 120



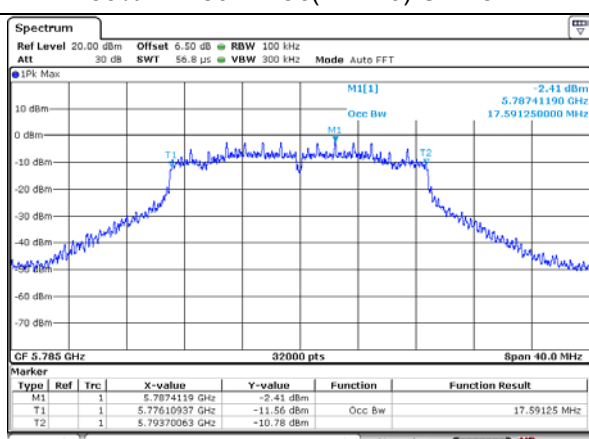
99% BW 802.11ac(VHT20) CH 140



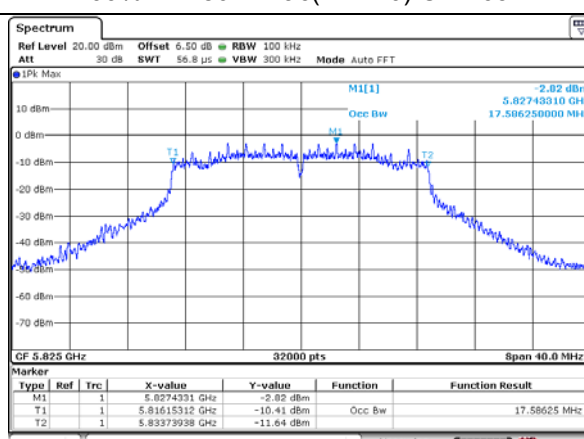
99% BW 802.11ac(VHT20) CH 149



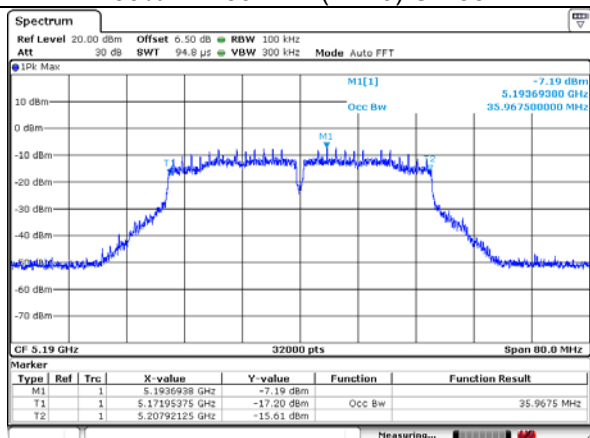
99% BW 802.11ac(VHT20) CH 157



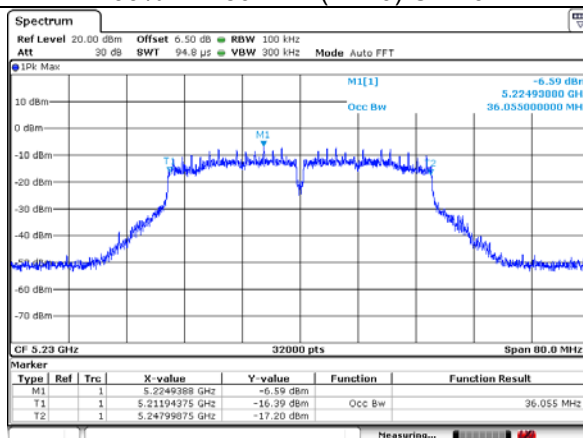
99% BW 802.11ac(VHT20) CH 165



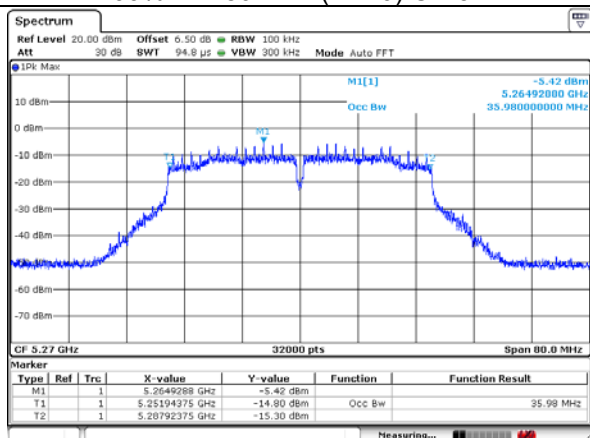
99% BW 802.11n(HT40) CH 38



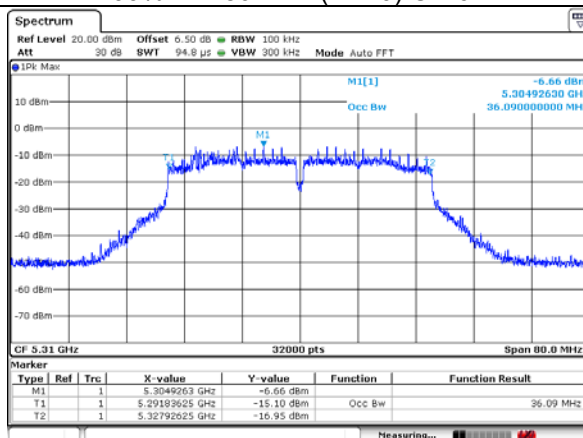
99% BW 802.11n(HT40) CH 46



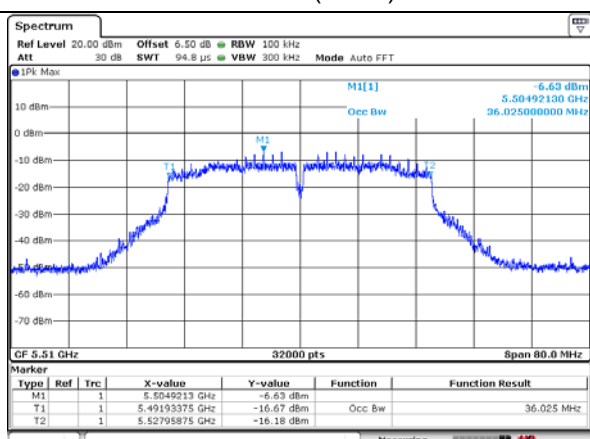
99% BW 802.11n(HT40) CH 54



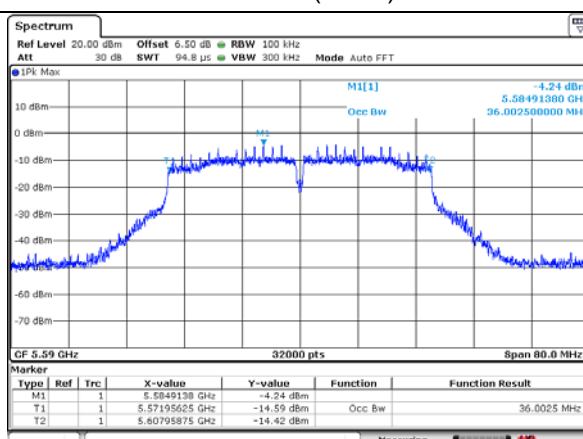
99% BW 802.11n(HT40) CH 62



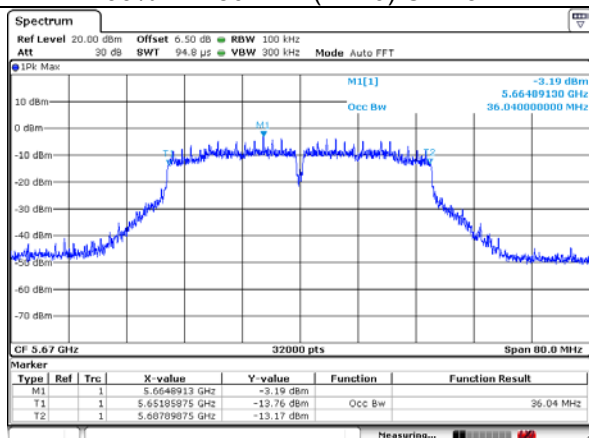
99% BW 802.11n(HT40) CH 102



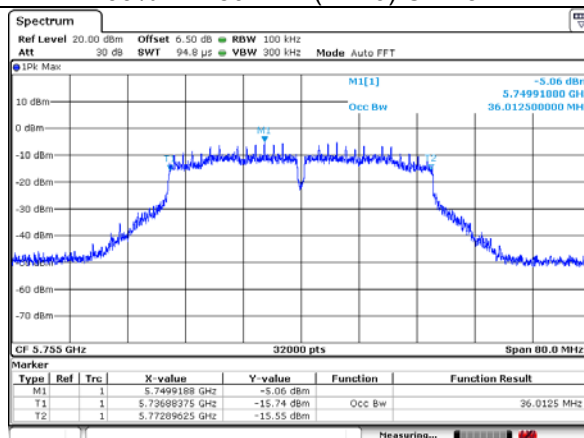
99% BW 802.11n(HT40) CH 110



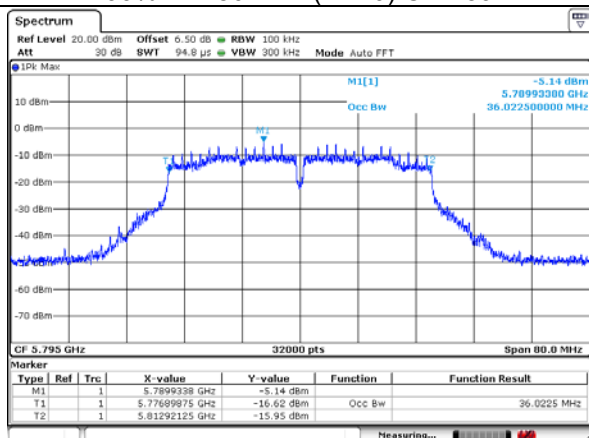
99% BW 802.11n(HT40) CH 134



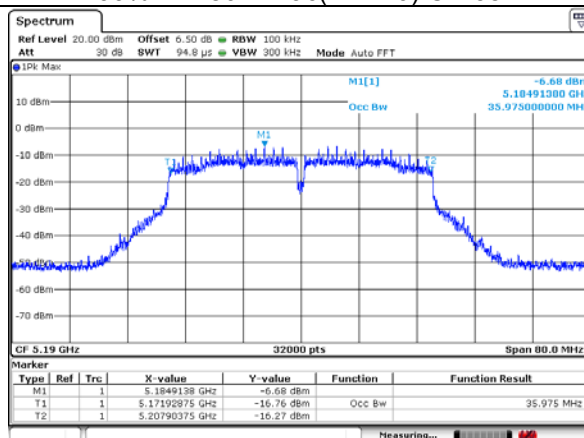
99% BW 802.11n(HT40) CH 151



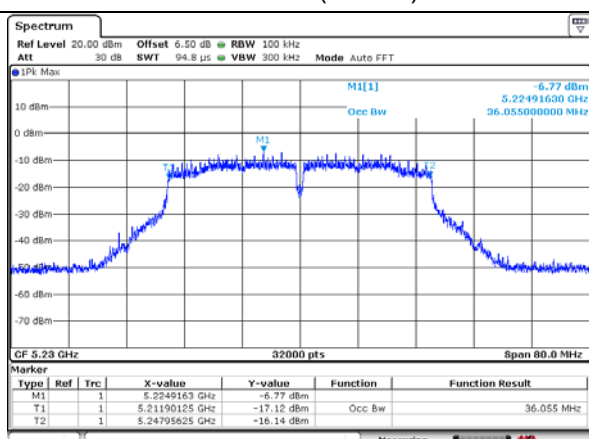
99% BW 802.11n(HT40) CH 159



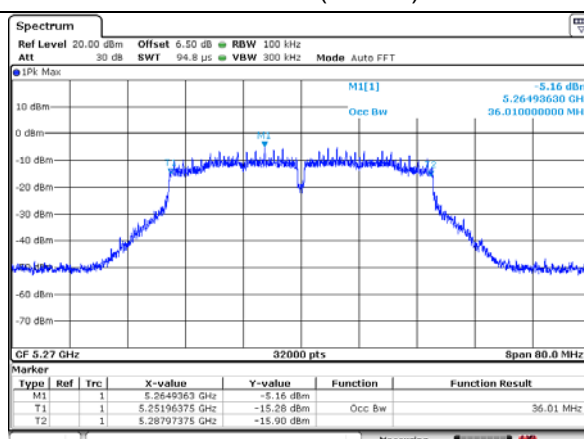
99% BW 802.11ac(VHT40) CH 38



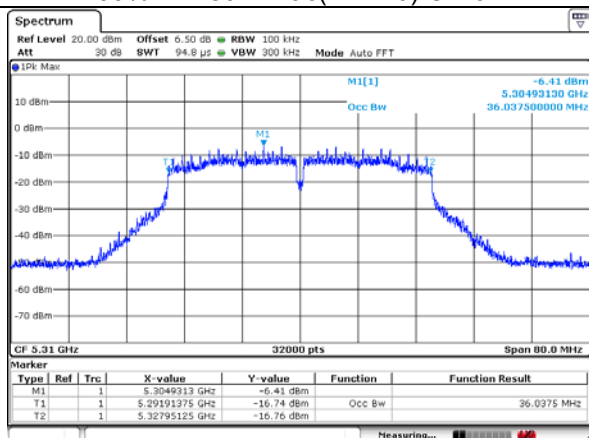
99% BW 802.11ac(VHT40) CH 46



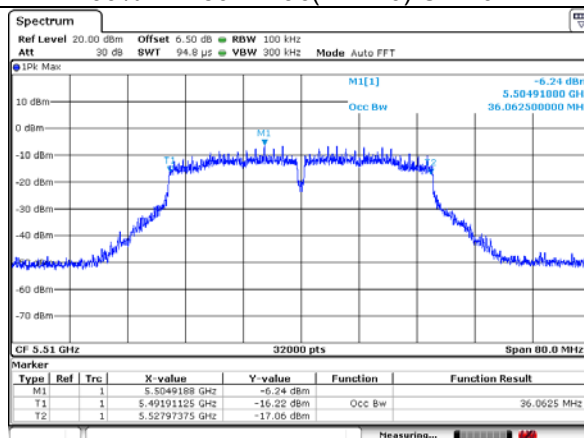
99% BW 802.11ac(VHT40) CH 54



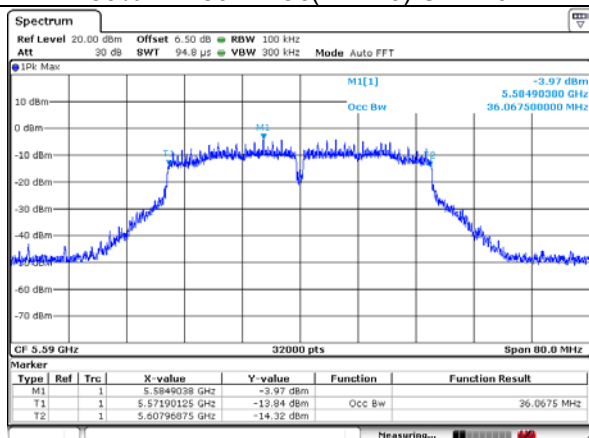
99% BW 802.11ac(VHT40) CH 62



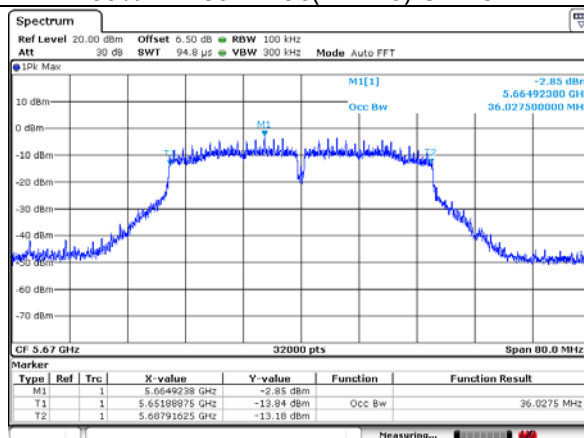
99% BW 802.11ac(VHT40) CH 102



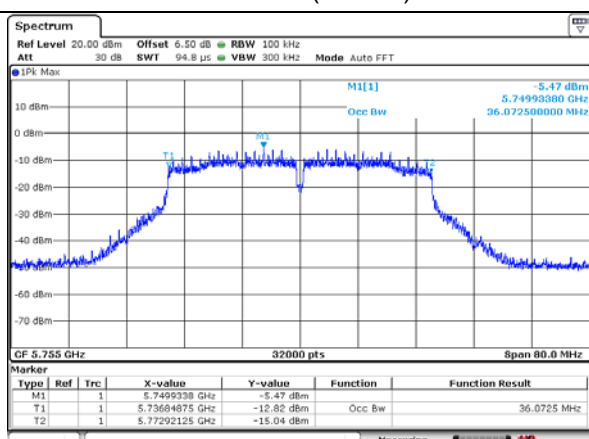
99% BW 802.11ac(VHT40) CH 110



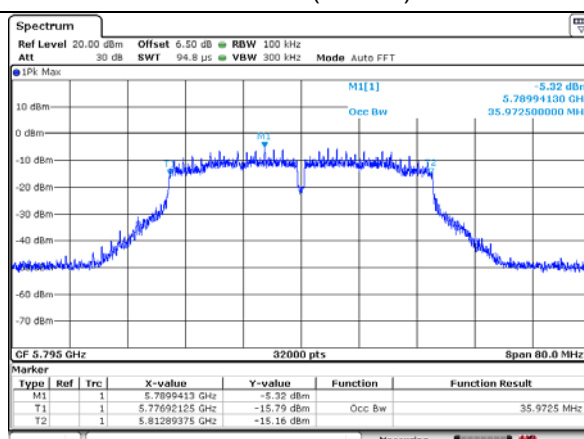
99% BW 802.11ac(VHT40) CH 134



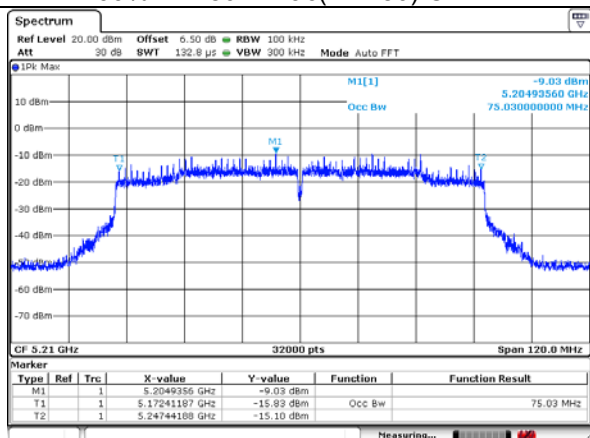
99% BW 802.11ac(VHT40) CH 151



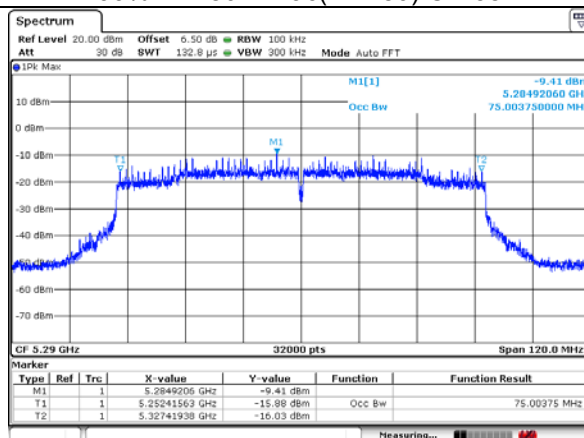
99% BW 802.11ac(VHT40) CH 159



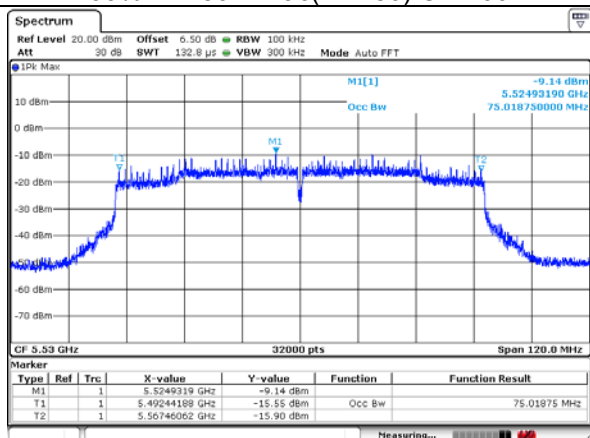
99% BW 802.11ac(VHT80) CH 42



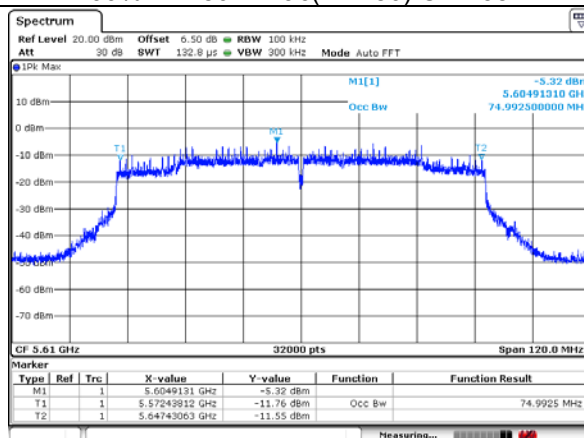
99% BW 802.11ac(VHT80) CH 58



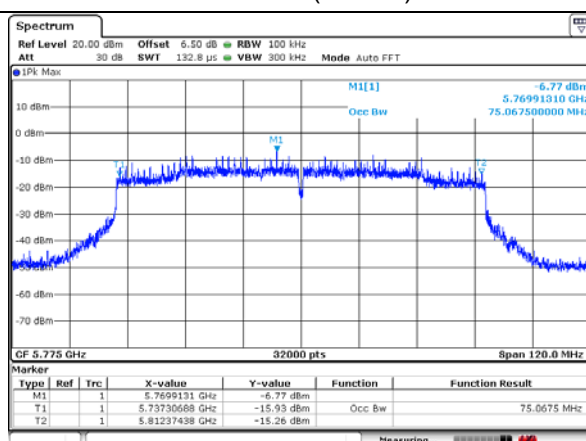
99% BW 802.11ac(VHT80) CH 106



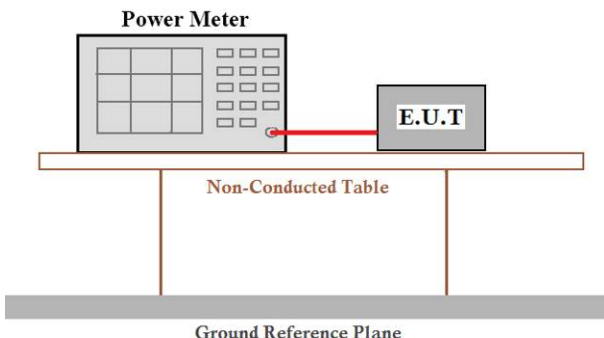
99% BW 802.11ac(VHT80) CH 138



99% BW 802.11ac(VHT80) CH 155



5. MAXIMUM CONDUCTED OUTPUT POWER

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.745-5.850 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 30dBm
Test setup:	 The diagram illustrates the test setup. A 'Power Meter' is connected to an 'E.U.T.' (Equipment Under Test) by a red cable. Both components are positioned on a 'Non-Conducted Table'. This table is supported by two vertical legs. Below the table, a 'Ground Reference Plane' is indicated.
Test procedure:	Measurement using an RF average power meter (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding $10 \log(1/x)$ where x is the duty cycle (e.g., $10 \log(1/0.25)$ if the duty cycle is 25 percent).
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details

5.1. TEST RESULT

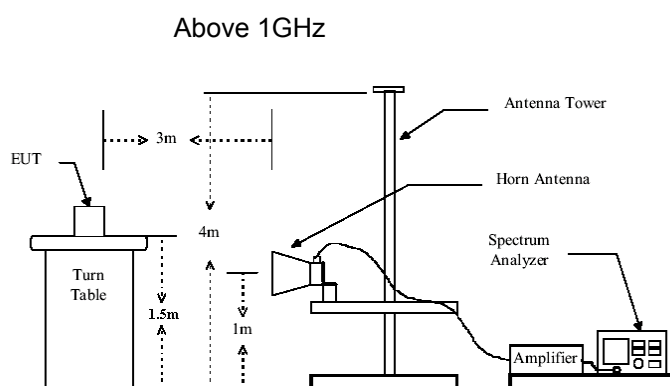
CH. No.	Frequency	Conducted Average Power(dBm)		total power (dBm)	Limit (dBm/MHz)	Result
		ANT A	ANT B			
TX 802.11a Mode						
CH36	5180	12.82	12.25	15.55	24	Pass
CH40	5200	13.18	12.78	15.99	24	Pass
CH48	5240	13.24	13.11	16.19	24	Pass
CH 52	5260	12.59	11.81	15.23	24	Pass
CH 56	5280	12.79	12.04	15.44	24	Pass
CH 64	5320	13.46	13.25	16.37	24	Pass
CH 100	5500	13.41	12.58	16.03	24	Pass
CH 120	5600	13.32	12.38	15.89	24	Pass
CH 140	5700	13.29	12.97	16.14	24	Pass
CH 149	5745	13.16	12.79	15.99	30	Pass
CH 157	5785	12.33	11.46	14.93	30	Pass
CH 165	5825	11.97	11.02	14.53	30	Pass
TX 802.11n20 Mode						
CH36	5180	13.13	12.49	15.83	24	Pass
CH40	5200	13.16	13.13	16.16	24	Pass
CH48	5240	13.45	13.32	16.40	24	Pass
CH 52	5260	13.69	13.12	16.42	24	Pass
CH 56	5280	13.66	12.87	16.29	24	Pass
CH 64	5320	13.74	13.72	16.74	24	Pass
CH 100	5500	13.68	13.07	16.40	24	Pass
CH 120	5600	13.86	13.19	16.55	24	Pass
CH 140	5700	13.64	13.56	16.61	24	Pass
CH 149	5745	13.34	13.35	16.36	30	Pass
CH 157	5785	12.80	12.08	15.47	30	Pass
CH 165	5825	12.65	12.39	15.53	30	Pass
TX 802.11n40 Mode						
CH38	5190	12.32	12.37	15.36	24	Pass
CH46	5230	12.86	12.13	15.52	24	Pass
CH 54	5270	13.76	13.76	16.77	24	Pass
CH 62	5310	13.45	13.13	16.30	24	Pass
CH 102	5510	13.34	12.96	16.16	24	Pass
CH 110	5550	13.45	12.82	16.16	24	Pass
CH 134	5670	13.53	12.94	16.26	24	Pass
CH151	5755	12.32	12.18	15.26	30	Pass
CH159	5795	12.88	12.35	15.63	30	Pass

CH. No.	Frequency	Conducted Average Power(dBm)		total power (dBm)	Limit (dBm)	Result
		ANT A	ANT B			
TX 802.11 ac(VHT20) Mode						
CH 36	5180	13.18	12.24	15.75	24	Pass
CH 40	5200	13.36	13.38	16.38	24	Pass
CH 48	5240	13.65	13.07	16.38	24	Pass
CH 52	5260	13.76	13.13	16.47	24	Pass
CH 56	5280	13.54	12.66	16.13	24	Pass
CH 64	5320	13.78	12.96	16.40	24	Pass
CH 100	5500	13.85	13.26	16.58	24	Pass
CH 120	5600	13.69	13.29	16.50	24	Pass
CH 140	5700	13.75	13.00	16.40	24	Pass
CH 149	5745	13.11	13.34	16.24	30	Pass
CH 157	5785	12.54	12.19	15.38	30	Pass
CH 165	5825	12.54	12.18	15.37	30	Pass
TX 802.11 ac(VHT40) Mode						
CH38	5190	12.24	12.08	15.17	24	Pass
CH46	5230	13.13	12.26	15.73	24	Pass
CH 54	5270	13.56	13.56	16.57	24	Pass
CH 62	5310	13.48	13.10	16.30	24	Pass
CH 102	5510	13.62	12.80	16.24	24	Pass
CH 110	5550	13.45	12.50	16.01	24	Pass
CH 134	5670	13.47	13.12	16.31	24	Pass
CH 151	5755	12.20	12.07	15.15	30	Pass
CH 159	5795	12.29	12.22	15.27	30	Pass
TX 802.11 ac(VHT80) Mode						
CH42	5210	12.43	12.29	15.37	24	Pass
CH 58	5290	12.63	12.32	15.49	24	Pass
CH 106	5530	12.54	12.23	15.40	24	Pass
CH 138	5690	12.32	12.17	15.26	24	Pass
CH155	5775	12.56	12.35	15.47	30	Pass

6. Band Edges Measurement

Test Requirement:	FCC Part15 E Section 15.407 and 5.205																								
Test Method:	ANSI C63.10:2013																								
Test site:	Measurement Distance: 3m																								
Receiver setup:	<table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr><tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr></table>					Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value	Above 1GHz	Peak	1MHz	3MHz	Peak Value	AV	1MHz	3MHz	Average Value	
Frequency	Detector	RBW	VBW	Remark																					
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value																					
Above 1GHz	Peak	1MHz	3MHz	Peak Value																					
	AV	1MHz	3MHz	Average Value																					
Limit:	<table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr><tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr><tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr><tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr><tr><td>74.0</td><td>Peak Value</td></tr></table> Undesirable emission limits: (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band. (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.					Frequency	Limit (dBuV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	74.0	Peak Value
Frequency	Limit (dBuV/m @3m)	Remark																							
30MHz-88MHz	40.0	Quasi-peak Value																							
88MHz-216MHz	43.5	Quasi-peak Value																							
216MHz-960MHz	46.0	Quasi-peak Value																							
960MHz-1GHz	54.0	Quasi-peak Value																							
Above 1GHz	54.0	Average Value																							
	74.0	Peak Value																							
Test Procedure:	a. The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.																								

Test setup:



Test Instruments:

Refer to section 5.10 for details

Test mode:

Refer to section 5.3 for details

Test results:

Pass

Remark:

According to KDB 789033 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$

For example, if EIRP = -27dBm

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

6.1. TEST RESULT

Peak value:

Test mode:		802.11a					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	44.35	7.18	51.53	68.2	-16.67	PK	H
5150	43.24	7.18	50.42	68.2	-17.78	PK	V
5350	43.41	7.2	50.61	68.2	-17.59	PK	H
5350	49.23	7.2	56.43	68.2	-11.77	PK	V

Average

Test mode:		802.11a					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	30.19	7.18	37.37	54	-16.63	AV	H
5150	29.49	7.18	36.67	54	-17.33	AV	V
5350	29.49	7.2	36.69	54	-17.31	AV	H
5350	34.90	7.2	42.10	54	-11.90	AV	V

Peak value:

Test mode:		802.11n(HT20)					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	47.51	7.18	54.69	68.2	-13.51	PK	H
5150	54.16	7.18	61.34	68.2	-6.86	PK	V
5350	43.22	7.2	50.42	68.2	-17.78	PK	H
5350	50.11	7.2	57.31	68.2	-10.89	PK	V

Average

Test mode:		802.11n(HT20)					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	33.37	7.18	40.55	54	-13.45	AV	H
5150	40.38	7.18	47.56	54	-6.44	AV	V
5350	28.96	7.2	36.16	54	-17.84	AV	H
5350	35.93	7.2	43.13	54	-10.87	AV	V

Peak value:

Test mode:		802.11n(HT40)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5150	42.81	7.18	49.99	68.2	-18.21	PK	H
5150	43.16	7.18	50.34	68.2	-17.86	PK	V
5350	43.88	7.2	51.08	68.2	-17.12	PK	H
5350	47.14	7.2	54.34	68.2	-13.86	PK	V

Average

Test mode:		802.11n(HT40)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5150	28.80	7.18	35.98	54	-18.02	AV	H
5150	29.30	7.18	36.48	54	-17.52	AV	V
5350	29.74	7.2	36.94	54	-17.06	AV	H
5350	33.61	7.2	40.81	54	-13.19	AV	V

Peak value:

Test mode:		802.11ac(VHT80)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5150	45.23	7.18	52.41	68.2	-15.79	PK	H
5150	48.42	7.18	55.6	68.2	-12.6	PK	V
5350	46.06	7.2	53.26	68.2	-14.94	PK	H
5350	48.29	7.2	55.49	68.2	-12.71	PK	V

Average

Test mode:		802.11ac(VHT80)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5150	30.86	7.18	38.04	54	-15.96	AV	H
5150	33.98	7.18	41.16	54	-12.84	AV	V
5350	32.23	7.2	39.43	54	-14.57	AV	H
5350	33.92	7.2	41.12	54	-12.88	AV	V

Peak value:

Test mode:		802.11a					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5470.000	46.78	8.2	54.98	68.2	-13.22	PK	V
5470.000	44.69	8.2	52.89	68.2	-15.31	PK	H
5725.000	45.62	8.79	54.41	68.2	-13.79	PK	V
5725.000	46.84	8.79	55.63	68.2	-12.57	PK	H

Peak value:

Test mode:		802.11n(HT20)					
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5470.000	45.97	8.2	54.17	68.2	-14.03	PK	V
5470.000	43.63	8.2	51.83	68.2	-16.37	PK	H
5725.000	45.17	8.79	53.96	68.2	-14.24	PK	V
5725.000	42.22	8.79	51.01	68.2	-17.19	PK	H

Peak value:

Test mode:		802.11n(HT40)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5470.000	44.76	8.2	52.96	68.2	-15.24	PK	V
5470.000	41.62	8.2	49.82	68.2	-18.38	PK	H
5725.000	45.37	8.79	54.16	68.2	-14.04	PK	V
5725.000	42.49	8.79	51.28	68.2	-16.92	PK	H

Peak value:

Test mode:		802.11ac(VHT80)					
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5470.000	44.93	8.2	53.13	68.2	-15.07	PK	V
5470.000	42.98	8.2	51.18	68.2	-17.02	PK	H
5725.000	44.43	8.79	53.22	68.2	-14.98	PK	V
5725.000	45.98	8.79	54.77	68.2	-13.43	PK	H

Test mode: 802.11a Test channel: Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	40.16	8.79	48.95	74	-25.05	Horizontal
5741.35	82.32	8.57	90.89	N/A	N/A	Horizontal
5725	40.94	8.79	49.73	74	-24.27	Vertical
5741.35	84.46	8.57	93.03	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	30.09	8.79	38.88	54	-15.12	Horizontal
5741.35	72.22	8.57	80.79	N/A	N/A	Horizontal
5725	30.41	8.79	39.2	54	-14.8	Vertical
5741.35	75.03	8.57	83.6	N/A	N/A	Vertical

Test mode: 802.11a Test channel: Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	78.36	8.79	87.15	N/A	N/A	Horizontal
5850	38.11	8.82	46.93	74	-27.07	Horizontal
5826.2	85.19	8.79	93.98	N/A	N/A	Vertical
5850	39.89	8.82	48.71	74	-25.29	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	69.94	8.79	78.73	N/A	N/A	Horizontal
5850	28.23	8.82	37.05	54	-16.95	Horizontal
5826.2	76.06	8.79	84.85	N/A	N/A	Vertical
5850	28.41	8.82	37.23	54	-16.77	Vertical

Test mode: 802.11n(HT20) Test channel: Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	37.52	8.79	46.31	74	-27.69	Horizontal
5742.19	77.16	8.57	85.73	N/A	N/A	Horizontal
5725	39.81	8.79	48.6	74	-25.4	Vertical
5742.19	84.06	8.57	92.63	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	28.22	8.79	37.01	54	-16.99	Horizontal
5742.19	68.36	8.57	76.93	N/A	N/A	Horizontal
5725	29.24	8.79	38.03	54	-15.97	Vertical
5742.19	75.46	8.57	84.03	N/A	N/A	Vertical

Test mode: 802.11n(HT20) Test channel: Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	77.23	8.79	86.02	N/A	N/A	Horizontal
5850	38.16	8.82	46.98	74	-27.02	Horizontal
5826.2	35.45	8.79	44.24	N/A	N/A	Vertical
5850	40.27	8.82	49.09	74	-24.91	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	68.19	8.79	76.98	N/A	N/A	Horizontal
5850	28.32	8.82	37.14	54	-16.86	Horizontal
5826.2	74.22	8.79	83.01	N/A	N/A	Vertical
5850	28.99	8.82	37.81	54	-16.19	Vertical

Test mode: 802.11n(HT40) Test channel: Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	38.24	8.52	46.76	74	-27.24	Horizontal
5745	74.96	8.57	83.53	N/A	N/A	Horizontal
5725	37.81	8.52	46.33	74	-27.67	Vertical
5745	84.33	8.57	92.9	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	30.19	8.52	38.71	54	-15.29	Horizontal
5745	68.64	8.57	77.21	N/A	N/A	Horizontal
5725	28.21	8.52	36.73	54	-17.27	Vertical
5745	75.11	8.57	83.68	N/A	N/A	Vertical

Test mode: 802.11n(HT40) Test channel: Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5784.88	78.46	8.68	87.14	N/A	N/A	Horizontal
5850	38.51	8.82	47.33	74	-26.67	Horizontal
5784.88	84.36	8.68	93.04	N/A	N/A	Vertical
5850	42.45	8.82	51.27	74	-22.73	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5784.88	71.24	8.68	79.92	N/A	N/A	Horizontal
5850	28.13	8.82	36.95	54	-17.05	Horizontal
5784.88	74.27	8.68	82.95	N/A	N/A	Vertical
5850	27.3	8.82	36.12	54	-17.88	Vertical

Test mode: 802.11ac(VHT80) Test channel: Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.000	37.52	8.52	46.04	74	-27.96	Horizontal
5778.180	78.31	8.68	86.99	N/A	N/A	Horizontal
5850.000	36.25	8.82	45.07	74	-28.93	Horizontal
5725.000	37.46	8.52	45.98	74	-28.02	Vertical
5778.180	82.11	8.68	90.79	N/A	N/A	Vertical
5850.000	40.23	8.82	49.05	74	-24.95	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.000	29.54	8.52	38.06	54	-15.94	Horizontal
5778.180	69.78	8.68	78.46	N/A	N/A	Horizontal
5850.000	28.21	8.82	37.03	54	-16.97	Horizontal
5725.000	28.55	8.52	37.07	54	-16.93	Vertical
5778.180	71.09	8.68	79.77	N/A	N/A	Vertical
5850.000	29.32	8.82	38.14	54	-15.86	Vertical

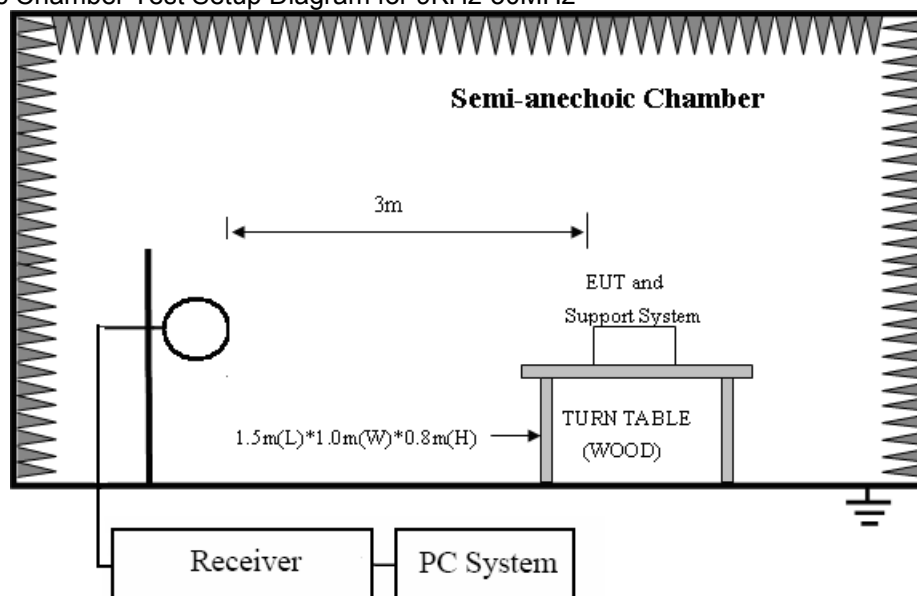
7. RADIATED EMISSION MEASUREMENT

7.1. Test equipment

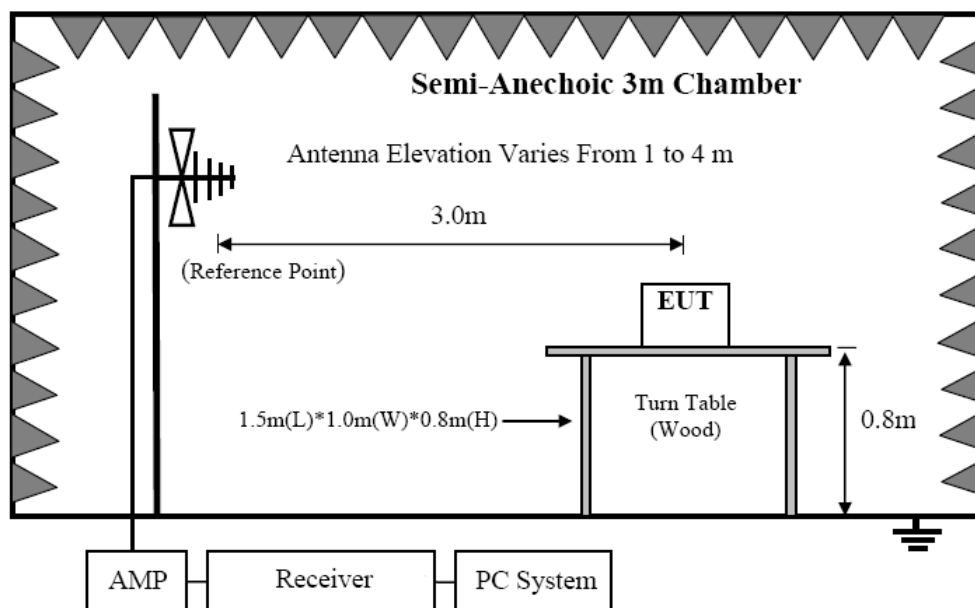
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until	Calibrated Date
1	EMI Test Receiver	R&S	ESCI	101307	12/17/2019	12/18/2018
2	Spectrum analyzer	Agilent	E4407B	US40240708	07/04/2020	07/05/2019
3	Trilog Broadband Antenna	Schwarzbeck	VULB9168	VULB9168-192	03/04/2020	03/05/2019
4	Double Ridged Horn Antenna	SCHWARZBEC K	BBHA 9120D1065	100276	12/17/2019	12/18/2018
5	Double Ridged Horn Antenna	SCHWARZBEC K	BBHA 9120D1065	100546	12/17/2019	12/18/2018
6	Dipole antenna	Schwarzbeck	UHAP	1101	12/17/2019	12/18/2018
7	Dipole antenna	Schwarzbeck	VHAP	1118	12/17/2019	12/18/2018
8	Pre-Amplifier	CY	EMC011830	980136	12/17/2019	12/18/2018
9	Pre-amplifier	HP	8447F	3113A05680	12/17/2019	12/18/2018
10	RF Cable	R&S	R01	10403	12/17/2019	12/18/2018
11	RF Cable	R&S	R02	10512	12/17/2019	12/18/2018
12	RF Cable	R&S	R01	10454	12/17/2019	12/18/2018
13	RF Cable	R&S	R02	10343	12/17/2019	12/18/2018
14	Spectrum analyze	R&S	FSV40	101470	06/28/2020	06/29/2019
15	Measurement Software	Farad	EZ-EMC (Ver.ATT-03 A)	N/A	N/A	N/A
16	Loop antenna	TESEQ	HLA6120	20129	12/17/2019	12/18/2018

7.2. Block diagram of test setup

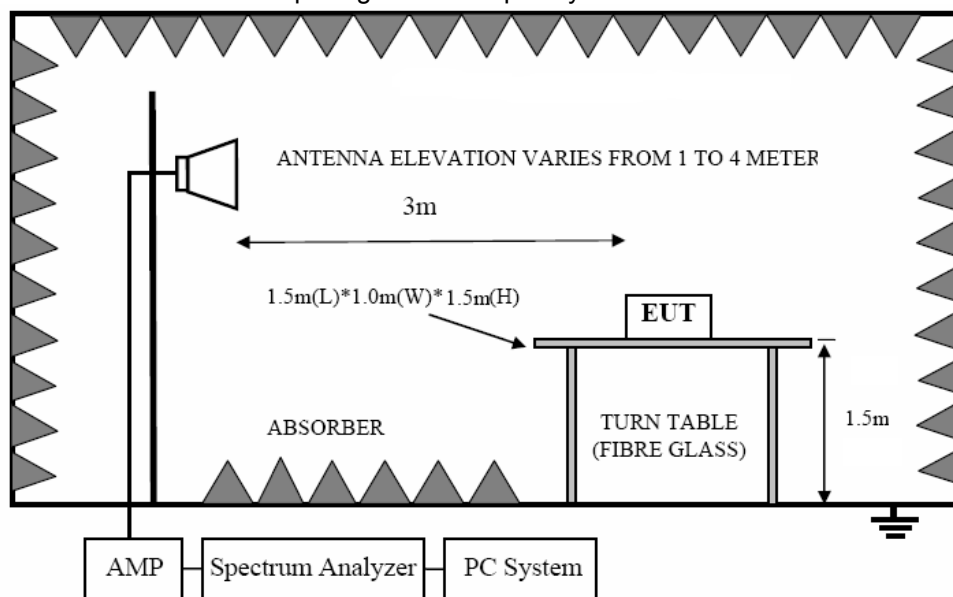
In 3m Anechoic Chamber Test Setup Diagram for 9KHz-30MHz



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



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



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

7.3. Limit

9.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

9.3.2. FCC 15.209 Limit.

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

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

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

$$\text{Limit}_{3m}(\text{dBuV/m}) = \text{Limit}_{30m}(\text{dBuV/m}) + 40\text{Log}(30m/3m)$$

9.3.3. Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 30dB below the fundamental emissions, or comply with 15.209 limits.

7.4. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and assistant system according clause 2.4 and 7.2
- (3) Test antenna was located 3m(except 18GHz-40GHz was 1m) from the EUT on an adjustable mast, and the antenna used as below table.

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

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

- (4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9KHz to 25GHz:
 - (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1m to 4m(Except loop antenna, it's fixed 1m above ground.)
 - (b) Change work frequency or channel of device if practicable.
 - (c) Change modulation type of device if practicable.
 - (d) new battery is used during testing
 - (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18GHz to 25GHz, so below final test was performed with frequency range from 9KHz to 18GHz.

- (5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 2013 on Radiated Emission test.
- (6) The emissions from 9KHz to 1GHz were measured based on CISPR QP detector except for the frequency bands 9-90KHz, 110-490KHz, for emissions from 9KHz-90KHz, 110KHz-490KHz and above 1GHz were measured based on average detector, for emissions above 1GHz, peak emissions also be measured and need comply with Peak limit.
- (7) The emissions from 9KHz to 1GHz, QP or average values were measured with EMI receiver with below RBW

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

- (8) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure(according ANSI C63.10:2013 clause 4.2.3.2.3 procedure for average measure). Peak detector is used for Peak and AV measurement both.

7.5. Test result(Below 30MHz)

EUT:	10.1" Tablet Computer With Rugged Protective Case	Model No.:	FLEX10B
Temperature:	24℃	Relative Humidity:	55%
Distance:	3m	Test Power:	120V 60Hz
Polarization:	--	Test Result:	Pass
Test Mode:	Keeping TX mode	Test By:	Smile

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

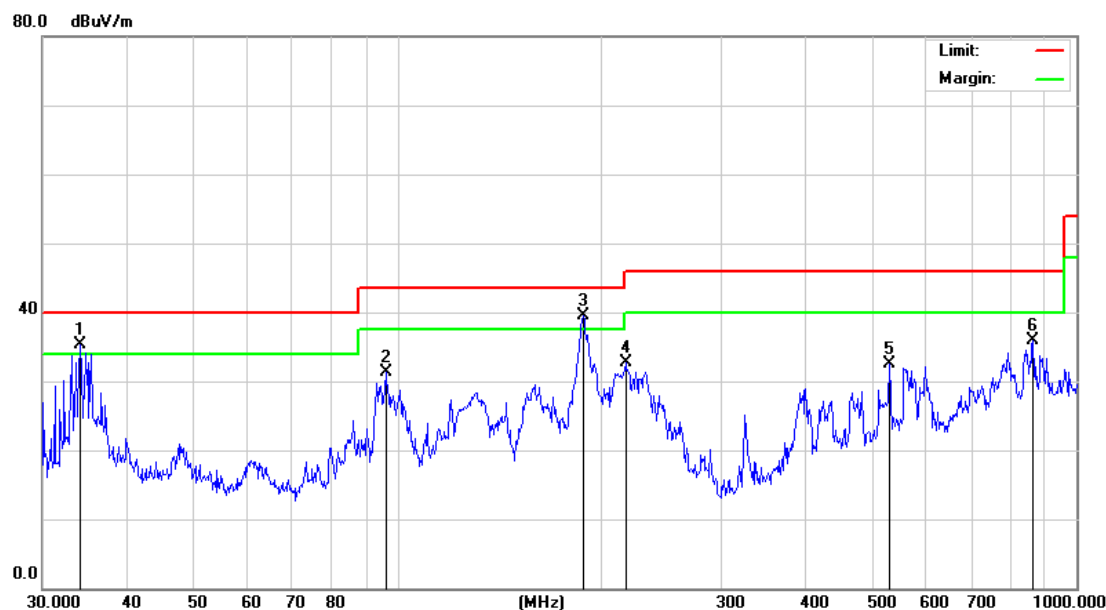
Distance extrapolation factor = $20 \log (\text{specific distance}/\text{test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

Note: The worst data is Antenna A, only shown Antenna A Plot.

TEST RESULTS (Between 30M – 1000 MHz)

EUT:	10.1" Tablet Computer With Rugged Protective Case	Model No.:	FLEX10B
Temperature:	24	Relative Humidity:	55%
Distance:	3m	Test Power:	AC120V/60Hz
Polarization:	Vertical	Test Result:	Pass
Standard:	(RE)FCC PART 15	Test By:	Smile
Test Mode:	Keeping TX mode		

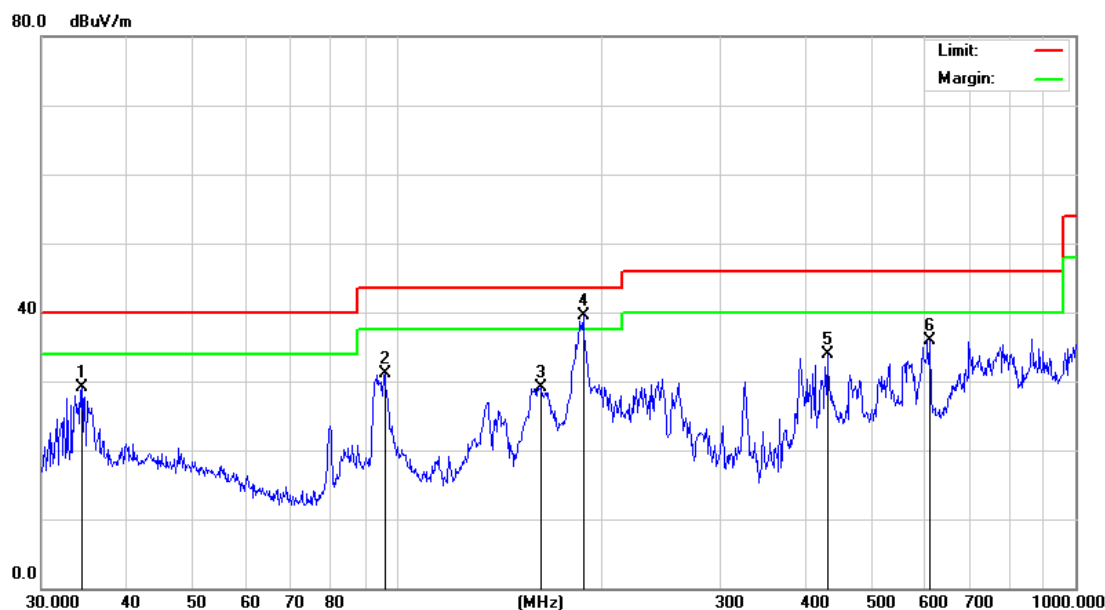


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	!	34.1561	40.17	-4.91	35.26	40.00	-4.74	peak
2		96.0986	40.80	-9.48	31.32	43.50	-12.18	peak
3	*	187.7530	48.15	-8.67	39.48	43.50	-4.02	peak
4		216.7828	38.31	-5.57	32.74	46.00	-13.26	peak
5		530.1014	31.92	0.52	32.44	46.00	-13.56	peak
6		863.0562	30.16	5.75	35.91	46.00	-10.09	peak

The test result is calculated as the following:

- (1) Result = Reading + Correct Factor
- (2) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain + Attenuator
- (3) Margin = Result - Limit

EUT:	10.1" Tablet Computer With Rugged Protective Case	Model No.:	FLEX10B
Temperature:	24	Relative Humidity:	55%
Distance:	3m	Test Power:	AC120V/60Hz
Polarization:	Horizontal	Test Result:	Pass
Standard:	(RE)FCC PART 15	Test By:	Smile
Test Mode:	Keeping TX mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		34.3964	32.77	-3.68	29.09	40.00	-10.91	peak
2		96.0986	39.43	-8.29	31.14	43.50	-12.36	peak
3		163.1818	36.29	-7.15	29.14	43.50	-14.36	peak
4	*	188.4125	46.45	-7.01	39.44	43.50	-4.06	peak
5		431.0316	34.98	-1.09	33.89	46.00	-12.11	peak
6		609.9217	31.92	4.07	35.99	46.00	-10.01	peak

The test result is calculated as the following:

(4) Result = Reading + Correct Factor

(5) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain + Attenuator

(6) Margin = Result - Limit

TEST RESULTS (Above 1000 MHz)

EUT:	10.1" Tablet Computer With Rugged Protective Case	Model No.:	FLEX10B
Temperature:	24℃	Relative Humidity:	55%
Distance:	3m	Test Power:	120V 60Hz
Polarization:		Test Result:	Pass
Test Mode:	TX-802.11a/n20/n40/ac20/ac40/ac/80	Test By:	Smile

Above 1GHz:

Mode	Polar (H/V)	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV/m)	Margin (dB)	Detector (PK/AV)
802.11a-5180MHz	H	10360	34.86	12.56	47.42	74.00	-26.58	PEAK
	H	15540	35.69	16.45	52.14	74.00	-21.86	PEAK
	V	10360	35.79	12.56	48.35	74.00	-25.65	PEAK
	V	15540	36.72	16.45	53.17	74.00	-20.83	PEAK

802.11a-5200 MHz	H	10400	35.76	12.64	48.40	74.00	-25.60	PEAK
	H	15600	35.83	16.53	52.36	74.00	-21.64	PEAK
	V	10400	36.74	12.64	49.38	74.00	-24.62	PEAK
	V	15600	35.01	16.53	51.54	74.00	-22.46	PEAK

802.11a-5240 MHz	H	10480	33.45	12.68	46.13	74.00	-27.87	PEAK
	H	15720	35.18	16.54	51.72	74.00	-22.28	PEAK
	V	10480	35.72	12.68	48.40	74.00	-25.60	PEAK
	V	15720	34.24	16.54	50.78	74.00	-23.22	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV/m)	Margin (dB)	Detector (PK/AV)
802.11a-5260MHz	H	10520	34.70	13.45	48.15	74.00	-25.85	PEAK
	H	15780	35.04	17.52	52.56	74.00	-21.44	PEAK
	V	10520	35.45	13.45	48.90	74.00	-25.10	PEAK
	V	15780	36.38	17.52	53.90	74.00	-20.10	PEAK

802.11a-5280 MHz	H	10560	35.65	13.67	49.32	74.00	-24.68	PEAK
	H	15840	35.25	17.84	53.09	74.00	-20.91	PEAK
	V	10560	36.43	13.67	50.10	74.00	-23.90	PEAK
	V	15840	34.45	17.84	52.29	74.00	-21.71	PEAK

802.11a-5320 MHz	H	10640	32.72	13.73	46.45	74.00	-27.55	PEAK
	H	15960	35.18	17.98	53.16	74.00	-20.84	PEAK
	V	10640	35.34	13.73	49.07	74.00	-24.93	PEAK
	V	15960	33.27	17.98	51.25	74.00	-22.75	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11a-5500MHz	H	11000	33.89	13.25	47.14	74.00	-26.86	PEAK
	H	16500	34.87	18.78	53.65	74.00	-20.35	PEAK
	V	11000	35.01	13.25	48.26	74.00	-25.74	PEAK
	V	16500	36.60	18.78	55.38	74.00	-18.62	PEAK
802.11a-5580 MHz	H	11160	35.38	13.57	48.95	74.00	-25.05	PEAK
	H	16740	35.13	19.37	54.50	74.00	-19.50	PEAK
	V	11160	36.59	13.57	50.16	74.00	-23.84	PEAK
	V	16740	35.00	19.37	54.37	74.00	-19.63	PEAK
802.11a-5700 MHz	H	11400	33.41	14.53	47.94	74.00	-26.06	PEAK
	H	17100	34.98	22.12	57.10	74.00	-16.90	PEAK
	V	11400	34.80	14.53	49.33	74.00	-24.67	PEAK
	V	17100	34.15	22.12	56.27	74.00	-17.73	PEAK
802.11a-5745 MHz	H	11490	32.32	16.82	49.14	74.00	-24.86	PEAK
	H	17235	29.33	22.93	52.26	74.00	-21.74	PEAK
	V	11490	30.75	16.82	47.57	74.00	-26.43	PEAK
	V	17235	29.41	22.93	52.34	74.00	-21.66	PEAK
802.11a-5785 MHz	H	11570	32.45	16.71	49.16	74.00	-24.84	PEAK
	H	17355	27.44	24.37	51.81	74.00	-22.19	PEAK
	V	11570	30.26	16.71	46.97	74.00	-27.03	PEAK
	V	17355	28.42	24.37	52.79	74.00	-21.21	PEAK
802.11a-5825 MHz	H	11650	34.13	16.61	50.74	74.00	-23.26	PEAK
	H	17475	27.30	25.01	52.31	74.00	-21.69	PEAK
	V	11650	32.12	16.61	48.73	74.00	-25.27	PEAK
	V	17475	28.75	25.01	53.76	74.00	-20.24	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT20-5180MHz	H	10360	32.61	12.56	45.17	74.00	-28.83	PEAK
	H	15540	35.22	16.45	51.67	74.00	-22.33	PEAK
	V	10360	35.19	12.56	47.75	74.00	-26.25	PEAK
	V	15540	35.64	16.45	52.09	74.00	-21.91	PEAK

802.11n HT20-5200MHz	H	10400	35.20	12.64	47.84	74.00	-26.16	PEAK
	H	15600	33.28	16.53	49.81	74.00	-24.19	PEAK
	V	10400	36.36	12.64	49.00	74.00	-25.00	PEAK
	V	15600	35.76	16.53	52.29	74.00	-21.71	PEAK

802.11n HT20-5240MHz	H	10480	34.75	12.68	47.43	74.00	-26.57	PEAK
	H	15720	32.41	16.54	48.95	74.00	-25.05	PEAK
	V	10480	34.43	12.68	47.11	74.00	-26.89	PEAK
	V	15720	33.75	16.54	50.29	74.00	-23.71	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT20-5260MHz	H	10520	36.04	13.45	49.49	74.00	-24.51	PEAK
	H	15780	34.48	17.52	52.00	74.00	-22.00	PEAK
	V	10520	37.18	13.45	50.63	74.00	-23.37	PEAK
	V	15780	35.69	17.52	53.21	74.00	-20.79	PEAK

802.11n HT20-5280 MHz	H	10560	35.31	13.67	48.98	74.00	-25.02	PEAK
	H	15840	34.64	17.84	52.48	74.00	-21.52	PEAK
	V	10560	38.45	13.67	52.12	74.00	-21.88	PEAK
	V	15840	35.66	17.84	53.50	74.00	-20.50	PEAK

802.11n HT20-5320 MHz	H	10640	33.97	13.73	47.70	74.00	-26.30	PEAK
	H	15960	35.63	17.98	53.61	74.00	-20.39	PEAK
	V	10640	36.31	13.73	50.04	74.00	-23.96	PEAK
	V	15960	34.50	17.98	52.48	74.00	-21.52	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT20-5500MHz	H	11000	33.20	13.25	46.45	74.00	-27.55	PEAK
	H	16500	34.31	18.78	53.09	74.00	-20.91	PEAK
	V	11000	34.11	13.25	47.36	74.00	-26.64	PEAK
	V	16500	34.90	18.78	53.68	74.00	-20.32	PEAK
802.11n HT20-5580 MHz	H	11160	35.77	13.57	49.34	74.00	-24.66	PEAK
	H	16740	32.45	19.37	51.82	74.00	-22.18	PEAK
	V	11160	36.89	13.57	50.46	74.00	-23.54	PEAK
	V	16740	33.13	19.37	52.50	74.00	-21.50	PEAK
802.11n HT20-5700 MHz	H	11400	34.97	14.53	49.50	74.00	-24.50	PEAK
	H	17100	30.71	22.12	52.83	74.00	-21.17	PEAK
	V	11400	37.06	14.53	51.59	74.00	-22.41	PEAK
	V	17100	29.27	22.12	51.39	74.00	-22.61	PEAK
802.11n HT20-5745MHz	H	11490	31.03	16.82	47.85	74.00	-26.15	PEAK
	H	17235	29.91	22.93	52.84	74.00	-21.16	PEAK
	V	11570	32.22	16.71	48.93	74.00	-25.07	PEAK
	V	17235	28.52	22.93	51.45	74.00	-22.55	PEAK
802.11n HT20-5785MHz	H	11570	30.20	16.71	46.91	74.00	-27.09	PEAK
	H	17355	27.99	24.37	52.36	74.00	-21.64	PEAK
	V	11570	32.80	16.71	49.51	74.00	-24.49	PEAK
	V	17355	29.11	24.37	53.48	74.00	-20.52	PEAK
802.11n HT20-5825MHz	H	11650	31.73	16.61	48.34	74.00	-25.66	PEAK
	H	17475	27.29	25.01	52.30	74.00	-21.70	PEAK
	V	11650	33.97	16.61	50.58	74.00	-23.42	PEAK
	V	17475	28.19	25.01	53.20	74.00	-20.80	PEAK
802.11n HT40-5190MHz	H	10380	35.91	12.58	48.49	74.00	-25.51	PEAK
	H	15570	34.48	16.48	50.96	74.00	-23.04	PEAK
	V	10380	36.62	12.58	49.20	74.00	-24.80	PEAK
	V	15570	33.48	16.48	49.96	74.00	-24.04	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5230MHz	H	10460	37.36	12.66	50.02	74.00	-23.98	PEAK
	H	15690	34.96	16.53	51.49	74.00	-22.51	PEAK
	V	10460	35.43	12.66	48.09	74.00	-25.91	PEAK
	V	15690	34.34	16.53	50.87	74.00	-23.13	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5270MHz	H	10540	37.27	13.72	50.99	74.00	-23.01	PEAK
	H	15810	34.96	17.67	52.63	74.00	-21.37	PEAK
	V	10540	35.50	13.72	49.22	74.00	-24.78	PEAK
	V	15810	34.04	17.67	51.71	74.00	-22.29	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5310MHz	H	10620	38.33	13.71	52.04	74.00	-21.96	PEAK
	H	15930	35.03	17.93	52.96	74.00	-21.04	PEAK
	V	10620	35.44	13.71	49.15	74.00	-24.85	PEAK
	V	15930	35.28	17.93	53.21	74.00	-20.79	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5510MHz	H	11020	37.95	13.5	51.45	74.00	-22.55	PEAK
	H	16530	33.39	18.95	52.34	74.00	-21.66	PEAK
	V	11020	35.92	13.5	49.42	74.00	-24.58	PEAK
	V	16530	34.80	18.87	53.67	74.00	-20.33	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5550MHz	H	11100	39.38	13.58	52.96	74.00	-21.04	PEAK
	H	16650	32.53	19.41	51.94	74.00	-22.06	PEAK
	V	11100	37.05	13.58	50.63	74.00	-23.37	PEAK
	V	16650	33.34	19.41	52.75	74.00	-21.25	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5670MHz	H	11340	37.09	14.38	51.47	74.00	-22.53	PEAK
	H	17010	30.62	21.78	52.40	74.00	-21.60	PEAK
	V	11340	35.74	14.38	50.12	74.00	-23.88	PEAK
	V	17010	31.88	21.78	53.66	74.00	-20.34	PEAK

802.11n HT40-5755MHz	H	11510	31.71	16.78	48.49	74.00	-25.51	PEAK
	H	17265	27.64	23.29	50.93	74.00	-23.07	PEAK
	V	11510	33.18	16.78	49.96	74.00	-24.04	PEAK
	V	17265	28.90	23.29	52.19	74.00	-21.81	PEAK
802.11n HT40-5795MHz	H	11590	30.31	16.69	47.00	74.00	-27.00	PEAK
	H	17385	26.57	24.73	51.30	74.00	-22.70	PEAK
	V	11590	32.69	16.69	49.38	74.00	-24.62	PEAK
	V	17385	27.34	24.73	52.07	74.00	-21.93	PEAK
802.11ac HT20-5180MHz	H	10360	33.72	12.56	46.28	74.00	-27.72	PEAK
	H	15540	33.58	16.45	50.03	74.00	-23.97	PEAK
	V	10360	33.15	12.56	45.71	74.00	-28.29	PEAK
	V	15540	34.65	16.45	51.10	74.00	-22.90	PEAK
802.11ac HT20-5200MHz	H	10400	33.79	12.64	46.43	74.00	-27.57	PEAK
	H	15600	31.54	16.53	48.07	74.00	-25.93	PEAK
	V	10400	32.64	12.64	45.28	74.00	-28.72	PEAK
	V	15600	31.31	16.53	47.84	74.00	-26.16	PEAK
802.11ac HT20-5240MHz	H	10480	33.92	12.68	46.60	74.00	-27.40	PEAK
	H	15720	31.97	16.54	48.51	74.00	-25.49	PEAK
	V	10480	32.69	12.68	45.37	74.00	-28.63	PEAK
	V	15720	33.60	16.54	50.14	74.00	-23.86	PEAK
802.11ac HT20-5260MHz	H	10520	35.73	13.45	49.18	74.00	-24.82	PEAK
	H	15780	32.18	17.52	49.70	74.00	-24.30	PEAK
	V	10520	37.49	13.45	50.94	74.00	-23.06	PEAK
	V	15780	31.96	17.52	49.48	74.00	-24.52	PEAK
802.11ac HT20-5280MHz	H	10560	34.93	13.67	48.60	74.00	-25.40	PEAK
	H	15840	32.78	17.84	50.62	74.00	-23.38	PEAK
	V	10560	33.28	13.67	46.95	74.00	-27.05	PEAK
	V	15840	32.19	17.84	50.03	74.00	-23.97	PEAK
802.11ac HT20-5320MHz	H	10640	35.23	13.73	48.96	74.00	-25.04	PEAK
	H	15960	33.41	17.98	51.39	74.00	-22.61	PEAK
	V	10640	33.71	13.73	47.44	74.00	-26.56	PEAK
	V	15960	34.81	17.98	52.79	74.00	-21.21	PEAK

802.11ac HT20-5500MHz	H	11000	33.69	13.25	46.94	74.00	-27.06	PEAK
	H	16500	34.99	18.78	53.77	74.00	-20.23	PEAK
	V	11000	35.19	13.25	48.44	74.00	-25.56	PEAK
	V	16500	35.14	18.78	53.92	74.00	-20.08	PEAK

802.11ac HT20-5580MHz	H	11160	33.11	13.57	46.68	74.00	-27.32	PEAK
	H	16740	32.28	19.37	51.65	74.00	-22.35	PEAK
	V	11160	33.46	13.57	47.03	74.00	-26.97	PEAK
	V	16740	32.25	19.37	51.62	74.00	-22.38	PEAK

802.11ac HT20-5700MHz	H	11400	34.74	14.53	49.27	74.00	-24.73	PEAK
	H	17100	30.33	22.12	52.45	74.00	-21.55	PEAK
	V	11400	33.34	14.53	47.87	74.00	-26.13	PEAK
	V	17100	31.30	22.12	53.42	74.00	-20.58	PEAK

802.11ac HT20-5745MHz	H	11490	31.73	16.82	48.55	74.00	-25.45	PEAK
	H	17235	30.03	22.93	52.96	74.00	-21.04	PEAK
	V	11490	31.84	16.82	48.66	74.00	-25.34	PEAK
	V	17235	28.49	22.93	51.42	74.00	-22.58	PEAK

802.11ac HT20-5785MHz	H	11570	32.90	16.71	49.61	74.00	-24.39	PEAK
	H	17355	27.83	24.37	52.20	74.00	-21.80	PEAK
	V	11570	31.24	16.71	47.95	74.00	-26.05	PEAK
	V	17355	28.26	24.37	52.63	74.00	-21.37	PEAK

802.11ac HT20-5825MHz	H	11650	31.44	16.61	48.05	74.00	-25.95	PEAK
	H	17475	26.05	25.01	51.06	74.00	-22.94	PEAK
	V	11650	32.10	16.61	48.71	74.00	-25.29	PEAK
	V	17475	27.60	25.01	52.61	74.00	-21.39	PEAK

802.11ac HT40-5190MHz	H	10380	32.89	12.58	45.47	74.00	-28.53	PEAK
	H	15570	34.92	16.48	51.40	74.00	-22.60	PEAK
	V	10380	34.58	12.58	47.16	74.00	-26.84	PEAK
	V	15570	32.73	16.48	49.21	74.00	-24.79	PEAK

802.11ac HT40-5230MHz	H	10460	34.46	12.66	47.12	74.00	-26.88	PEAK
	H	15690	31.63	16.53	48.16	74.00	-25.84	PEAK
	V	10460	33.82	12.66	46.48	74.00	-27.52	PEAK
	V	15690	32.37	16.53	48.90	74.00	-25.10	PEAK

802.11ac HT40-5270MHz	H	10540	35.83	13.72	49.55	74.00	-24.45	PEAK
	H	15810	33.39	17.67	51.06	74.00	-22.94	PEAK
	V	10540	35.12	13.72	48.84	74.00	-25.16	PEAK
	V	15810	33.65	17.67	51.32	74.00	-22.68	PEAK

802.11ac HT40-5310MHz	H	10620	35.41	13.71	49.12	74.00	-24.88	PEAK
	H	15930	30.93	17.93	48.86	74.00	-25.14	PEAK
	V	10620	36.33	13.71	50.04	74.00	-23.96	PEAK
	V	15930	32.34	17.93	50.27	74.00	-23.73	PEAK

802.11ac HT40-5510MHz	H	11020	33.55	13.50	47.05	74.00	-26.95	PEAK
	H	16530	32.54	18.95	51.49	74.00	-22.51	PEAK
	V	11020	34.52	13.50	48.02	74.00	-25.98	PEAK
	V	16530	33.15	18.87	52.02	74.00	-21.98	PEAK

802.11ac HT40-5550MHz	H	11100	34.65	13.58	48.23	74.00	-25.77	PEAK
	H	16650	29.91	19.41	49.32	74.00	-24.68	PEAK
	V	11100	34.21	13.58	47.79	74.00	-26.21	PEAK
	V	16650	30.38	19.41	49.79	74.00	-24.21	PEAK

802.11ac HT40-5670MHz	H	11340	33.09	14.38	47.47	74.00	-26.53	PEAK
	H	17010	28.83	21.78	50.61	74.00	-23.39	PEAK
	V	11340	32.64	14.38	47.02	74.00	-26.98	PEAK
	V	17010	28.91	21.78	50.69	74.00	-23.31	PEAK

802.11ac HT40-5755MHz	H	11510	31.79	16.78	48.57	74.00	-25.43	PEAK
	H	17265	27.10	23.29	50.39	74.00	-23.61	PEAK
	V	11510	31.40	16.78	48.18	74.00	-25.82	PEAK
	V	17265	27.50	23.29	50.79	74.00	-23.21	PEAK

802.11ac HT40-5795MHz	H	11590	32.00	16.69	48.69	74.00	-25.31	PEAK
	H	17385	26.44	24.73	51.17	74.00	-22.83	PEAK
	V	11590	31.07	16.69	47.76	74.00	-26.24	PEAK
	V	17385	27.11	24.73	51.84	74.00	-22.16	PEAK

802.11ac HT80-5210MHz	H	10420	32.91	12.62	45.53	74.00	-28.47	PEAK
	H	15630	32.76	16.52	49.28	74.00	-24.72	PEAK
	V	10420	33.04	12.62	45.66	74.00	-28.34	PEAK
	V	15630	31.40	16.52	47.92	74.00	-26.08	PEAK

802.11ac HT80-5290MHz	H	10580	34.45	13.35	47.80	74.00	-26.20	PEAK
	H	15870	33.74	17.67	51.41	74.00	-22.59	PEAK
	V	10580	34.68	13.35	48.03	74.00	-25.97	PEAK
	V	15870	32.32	17.67	49.99	74.00	-24.01	PEAK

802.11ac HT80-5530MHz	H	11060	34.00	13.52	47.52	74.00	-26.48	PEAK
	H	16590	33.63	19.34	52.97	74.00	-21.03	PEAK
	V	11060	34.64	13.52	48.16	74.00	-25.84	PEAK
	V	16590	33.06	19.34	52.40	74.00	-21.60	PEAK

802.11ac HT80-5690MHz	H	11380	34.31	14.54	48.85	74.00	-25.15	PEAK
	H	17070	29.84	21.82	51.66	74.00	-22.34	PEAK
	V	11380	34.47	14.54	49.01	74.00	-24.99	PEAK
	V	17070	30.66	21.82	52.48	74.00	-21.52	PEAK

Mode	Polar (H/V)	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV/m)	Margin (dB)	Detector (PK/AV)
802.11ac HT80-5775MHz	H	11550	31.59	16.73	48.32	74.00	-25.68	PEAK
	H	17325	26.24	24.01	50.25	74.00	-23.75	PEAK
	V	11550	29.25	16.73	45.98	74.00	-28.02	PEAK
	V	17325	25.49	24.01	49.50	74.00	-24.50	PEAK

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor.

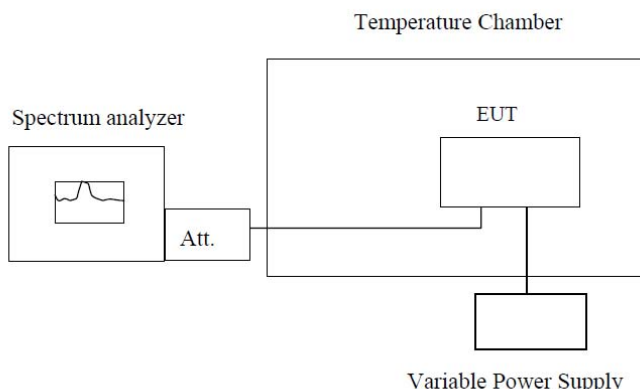
Average measurement was not performed if peak level lower than average limit.

No any other emissions level very low which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.

8. FREQUENCY STABILITY

Test Requirement:	FCC Part15 C Section 15.407(g)
Test Method:	ANSI C63.10:2013, FCC Part 2.1055
Limit:	Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified
Test Procedure:	The EUT was setup to ANSI C63.4, 2014; tested to 2.1055 for compliance to FCC Part 15.407(g) requirements.
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Frequency stability versus Temp.					
Power Supply: DC 7.6V					
Temp. (°C)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
-30	5180	5180.0277	5180.0868	5180.3821	5179.9272
	5200	5199.9963	5200.8422	5199.9505	5199.3159
	5220	5219.8063	5220.3181	5220.4859	5220.0618
	5240	5239.9478	5240.6941	5240.2101	5239.6616
	5260	5259.1771	5260.2084	5259.5574	5260.3774
	5270	5270.9248	5270.5619	5270.3819	5270.7206
	5280	5280.7280	5280.7102	5279.9087	5280.3815
	5310	5310.8150	5311.1598	5310.5326	5310.8451
	5320	5320.4204	5320.5563	5319.8886	5320.9211
	5500	5501.1423	5500.8552	5501.1138	5501.0896
	5510	5510.5986	5510.5618	5510.4643	5510.3536
	5530	5530.8854	5530.4249	5529.8033	5530.4936
	5550	5550.8838	5550.8906	5550.6714	5551.3071
	5580	5580.6305	5581.1910	5580.4301	5581.3014
	5670	5671.0093	5671.5805	5670.3782	5670.6559
	5690	5690.8304	5690.4988	5690.8121	5690.5372
	5700	5700.3752	5700.7597	5700.3813	5699.9617
	5745	5745.0042	5745.0753	5745.0896	5745.1580
	5785	5784.9512	5785.0571	5785.0649	5785.0647
	5825	5825.0134	5825.0640	5825.1324	5824.9185
-20	5180	5179.8107	5180.3083	5180.5447	5179.9329
	5200	5199.4925	5200.5183	5200.2066	5199.7750
	5220	5219.4807	5220.4902	5220.1852	5219.6651
	5240	5239.2352	5240.2261	5240.4605	5239.0199
	5260	5260.2711	5259.3429	5258.8152	5259.4311
	5270	5270.7304	5270.1739	5269.9577	5270.2299
	5280	5280.3257	5280.3062	5279.8304	5280.4582
	5310	5311.4962	5310.7919	5310.5874	5311.2837
	5320	5320.4193	5320.7432	5320.2684	5320.4870
	5500	5500.9126	5500.2576	5499.9162	5500.6465
	5510	5510.6387	5511.4133	5510.4219	5510.9145
	5530	5531.2005	5531.2072	5530.1068	5530.5814
	5550	5551.8201	5551.4573	5550.7607	5551.5399
	5580	5580.7138	5580.5218	5579.9741	5580.9876
	5670	5670.7980	5670.4129	5670.1795	5670.4973
	5690	5690.6934	5690.8784	5691.1706	5691.3412
	5700	5700.3179	5700.1669	5700.3013	5699.9624
	5745	5744.9561	5744.8729	5745.0397	5745.0382
	5785	5784.8803	5785.0630	5785.0416	5784.8525
	5825	5824.8946	5825.0386	5824.9463	5824.9506
-10	5180	5179.0571	5180.3766	5180.1767	5178.9596
	5200	5199.9289	5200.7507	5200.8966	5199.0634
	5220	5219.6564	5220.6702	5220.1536	5219.5465
	5240	5239.4799	5240.6293	5240.8690	5239.2351

	5260	5259.0351	5260.5159	5259.3625	5260.0439
	5270	5271.2932	5271.5101	5271.0589	5271.1408
	5280	5280.1002	5280.5250	5280.2052	5280.7624
	5310	5310.8224	5310.4165	5310.4408	5310.4903
	5320	5320.4566	5320.8905	5320.0493	5320.4085
	5500	5500.2273	5499.9026	5500.0260	5499.7072
	5510	5511.8490	5512.0650	5511.5634	5511.4426
	5530	5530.6244	5530.9129	5530.4112	5530.5793
	5550	5551.1579	5551.0372	5551.0944	5551.0264
	5580	5580.4733	5580.9701	5580.0555	5580.9931
	5670	5670.5888	5671.0973	5670.5062	5670.9584
	5690	5690.9708	5690.5307	5689.8759	5690.4296
	5700	5701.1668	5700.7164	5700.3518	5701.0787
	5745	5744.8798	5745.0731	5745.0007	5745.0231
	5785	5785.0640	5784.8509	5785.1275	5784.9117
	5825	5824.9422	5824.9879	5825.0053	5825.0313
0	5180	5180.0490	5180.6005	5180.3467	5179.3446
	5200	5199.4503	5200.6680	5200.7492	5199.8630
	5220	5219.1149	5219.9097	5219.9868	5219.9018
	5240	5239.4125	5240.7923	5240.2024	5239.4531
	5260	5259.9181	5260.1537	5259.7079	5260.6762
	5270	5270.7404	5270.5808	5270.0108	5269.8313
	5280	5281.3583	5281.0671	5280.7105	5281.3238
	5310	5310.2947	5310.7905	5310.4173	5310.6707
	5320	5320.4521	5320.5255	5320.5183	5320.9280
	5500	5501.0378	5500.6246	5500.7155	5500.1838
	5510	5511.4858	5510.8019	5511.1239	5511.1482
	5530	5530.4050	5530.9574	5529.9085	5530.6756
	5550	5550.9771	5550.7437	5550.0965	5550.6910
	5580	5580.3573	5580.6952	5580.7750	5581.1525
	5670	5670.3768	5670.0384	5670.1200	5669.9035
	5690	5691.3869	5691.2528	5690.6900	5690.3809
	5700	5700.6484	5700.0638	5700.1840	5700.0520
	5745	5744.9066	5745.0235	5744.9358	5745.0889
	5785	5785.0324	5785.0054	5784.9673	5784.8381
	5825	5825.1169	5824.8916	5825.0385	5824.9837

10	5180	5179.8436	5180.0661	5180.1752	5179.8430
	5200	5199.9026	5200.1270	5200.6027	5199.7190
	5220	5219.0841	5220.2818	5220.0601	5220.0017
	5240	5239.8056	5240.4354	5240.6364	5239.6698
	5260	5260.4028	5261.1012	5260.6366	5260.6085
	5270	5269.8063	5270.1611	5269.8622	5270.4131
	5280	5280.6756	5280.8995	5280.5063	5281.1286
	5310	5310.1541	5310.5413	5310.1423	5310.6780
	5320	5320.2479	5320.3527	5320.5526	5320.2396
	5500	5499.6172	5500.5035	5499.2458	5500.0160
	5510	5510.8008	5510.8057	5509.9860	5510.2742
	5530	5530.8668	5530.2917	5530.1636	5530.8111
	5550	5551.3903	5550.3504	5551.1100	5551.1640
	5580	5581.1523	5580.9367	5581.4861	5581.5901
	5670	5670.4520	5670.0620	5670.5525	5670.6806
	5690	5692.2543	5690.7250	5691.1176	5692.1639
	5700	5700.8617	5700.1212	5700.1957	5700.6406
	5745	5744.8979	5744.9767	5745.1872	5745.1250
	5785	5785.0119	5785.0046	5785.0006	5785.0347
	5825	5825.0049	5825.0175	5824.9160	5825.0265
20	5180	5179.8968	5180.0435	5180.3442	5179.3197
	5200	5199.5505	5200.2741	5200.7853	5199.4282
	5220	5219.4505	5220.8103	5220.3957	5219.5161
	5240	5239.1767	5240.9325	5240.3036	5239.3475
	5260	5259.4603	5260.7527	5260.4813	5260.8315
	5270	5270.2445	5270.5307	5270.2480	5269.9524
	5280	5280.3993	5280.9828	5280.3620	5280.6591
	5310	5311.2363	5311.7958	5310.8645	5311.7249
	5320	5321.5945	5322.1919	5321.7042	5321.9272
	5500	5500.4724	5499.9740	5500.4046	5499.7652
	5510	5509.6808	5510.3208	5509.4596	5510.1331
	5530	5531.2780	5530.9277	5530.7290	5530.7127
	5550	5550.9614	5551.2692	5550.9048	5551.0660
	5580	5582.0754	5582.1258	5581.1329	5581.1913
	5670	5670.5157	5671.0690	5669.9015	5670.3535
	5690	5691.4056	5691.8010	5691.1624	5691.6237
	5700	5700.6495	5700.9219	5700.3988	5700.7514
	5745	5745.0782	5744.9704	5745.1251	5744.8111
	5785	5784.8895	5784.8751	5784.9440	5785.0899
	5825	5824.8765	5824.9357	5825.0983	5824.9854

30	5180	5179.8272	5180.0749	5180.2773	5179.8130
	5200	5199.2887	5200.1858	5200.3973	5199.6039
	5220	5219.2839	5220.4641	5220.8846	5219.4948
	5240	5239.5995	5240.2536	5240.7082	5239.9878
	5260	5260.3299	5261.4152	5260.4631	5261.2302
	5270	5270.0005	5270.0361	5269.9586	5269.6704
	5280	5280.5249	5280.8238	5279.7339	5280.4769
	5310	5311.1498	5311.4963	5311.2874	5311.6378
	5320	5321.6903	5321.7332	5320.6283	5321.4949
	5500	5500.1124	5500.5753	5499.8610	5500.2667
	5510	5509.8449	5509.4357	5509.2286	5510.2079
	5530	5530.9696	5531.3575	5530.3322	5531.1982
	5550	5550.5897	5550.6343	5550.0490	5550.8406
	5580	5581.4161	5582.3811	5581.8632	5581.6894
	5670	5670.4193	5671.1208	5670.1491	5671.1611
	5690	5691.4724	5691.5727	5690.4275	5690.9179
	5700	5700.5536	5701.4141	5700.8794	5700.4760
	5745	5744.9390	5744.9203	5744.9784	5745.1017
	5785	5785.0306	5784.8355	5784.7839	5784.7760
	5825	5824.9628	5825.0624	5824.8212	5824.7950
40	5180	5179.7777	5180.5906	5180.1990	5180.0189
	5200	5199.3176	5200.6572	5200.9044	5199.7816
	5220	5219.4788	5220.6848	5220.6310	5219.7759
	5240	5239.2129	5240.8234	5240.8016	5240.0228
	5260	5259.7649	5261.0420	5260.7041	5260.7143
	5270	5269.5670	5269.9954	5269.6777	5269.6817
	5280	5280.6325	5280.3485	5280.4888	5280.5235
	5310	5310.7977	5311.2741	5310.9655	5311.2644
	5320	5321.0143	5321.2550	5320.6739	5321.1816
	5500	5500.3292	5500.2354	5500.1315	5500.0831
	5510	5510.4272	5509.6113	5509.0912	5510.0622
	5530	5530.2678	5530.5867	5529.6702	5529.7349
	5550	5550.4755	5550.5972	5549.7244	5550.5422
	5580	5580.8438	5581.6650	5580.9275	5581.0132
	5670	5670.4308	5670.6485	5669.4527	5669.9728
	5690	5690.6528	5690.8195	5689.7797	5690.5327
	5700	5700.2995	5700.7769	5699.9635	5699.9037
	5745	5744.9419	5745.0190	5745.1410	5745.1177
	5785	5785.0248	5785.1318	5784.9372	5785.1186
	5825	5825.0375	5825.1471	5824.9446	5824.8779

50	5180	5179.4134	5180.5832	5180.3777	5179.1745
	5200	5199.3490	5200.8674	5200.2790	5199.2496
	5220	5219.7035	5220.7766	5220.5040	5219.4211
	5240	5239.5462	5240.2674	5239.9857	5239.3446
	5260	5260.0244	5261.5187	5260.6761	5261.0642
	5270	5269.9961	5270.5971	5269.7197	5269.7437
	5280	5280.4487	5280.5738	5280.4122	5281.0914
	5310	5310.5110	5310.4649	5310.6725	5310.4637
	5320	5321.4596	5321.1078	5320.6986	5321.0520
	5500	5501.1144	5500.9009	5499.8676	5500.9218
	5510	5510.5622	5510.7665	5509.7504	5510.6543
	5530	5529.3692	5529.9936	5529.8697	5530.2572
	5550	5550.0467	5550.3736	5550.1343	5550.5103
	5580	5581.2048	5581.1244	5580.9447	5580.9671
	5670	5670.3260	5670.0953	5669.9017	5670.2471
	5690	5691.4143	5691.3361	5690.3905	5691.0721
	5700	5701.2435	5700.8088	5700.2091	5700.4104
	5745	5745.0497	5744.9527	5745.0178	5744.9264
	5785	5784.9748	5784.9486	5785.0387	5785.0123
	5825	5824.9864	5824.9157	5825.1436	5825.0805

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VDC)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
6.7	5180	5180.0307	5179.9976	5179.9821	5180.0629
	5200	5199.9664	5200.1429	5199.7644	5200.0289
	5220	5220.0208	5220.3151	5219.9200	5219.8401
	5240	5240.8361	5240.6709	5239.8912	5239.4962
	5260	5259.7306	5261.2366	5260.3041	5260.8781
	5270	5270.4089	5270.4116	5270.1980	5270.0876
	5280	5280.4513	5280.3212	5280.2359	5280.6263
	5310	5310.3867	5309.7940	5309.4138	5310.4364
	5320	5320.9464	5321.1803	5320.8804	5320.8623
	5500	5500.6509	5500.5116	5499.9563	5500.5114
	5510	5510.6463	5510.7600	5510.1799	5510.1635
	5530	5530.0062	5530.1781	5530.0685	5529.6292
	5550	5550.7929	5551.1207	5550.6362	5550.0810
	5580	5580.4235	5580.9334	5579.9568	5580.8293
	5670	5669.5608	5670.3777	5669.2750	5669.9979
	5690	5690.4923	5690.9225	5690.1882	5690.7771
	5700	5700.4046	5700.5347	5700.5916	5700.5474
	5745	5745.0007	5744.8499	5744.8966	5745.0880
	5785	5784.8106	5785.0776	5784.8497	5785.0848
	5825	5824.9984	5824.8418	5825.0111	5824.9828
7.4	5180	5181.0745	5180.2221	5179.2738	5179.2492
	5200	5200.1640	5200.5092	5199.8811	5199.1999
	5220	5220.0970	5220.1827	5219.8447	5219.6235
	5240	5240.0493	5240.8873	5239.2812	5239.7471
	5260	5259.4222	5260.5053	5260.5728	5260.4617
	5270	5270.1902	5270.4335	5270.1946	5270.1754
	5280	5280.4602	5280.4501	5280.0950	5280.7160
	5310	5310.8238	5310.9429	5309.9835	5310.4186
	5320	5320.9077	5320.0602	5320.6625	5320.9768
	5500	5500.9355	5500.7713	5500.2796	5500.7483
	5510	5510.6274	5510.1951	5510.1236	5510.5794
	5530	5530.8073	5530.8418	5529.8604	5530.5161
	5550	5550.4042	5550.4039	5550.3904	5550.3651
	5580	5580.0921	5580.0976	5580.4304	5580.6777
	5670	5670.2744	5670.5460	5669.8320	5670.5669
	5690	5690.0512	5691.0622	5690.2559	5690.4709
	5700	5700.1695	5701.0077	5700.3142	5700.6626
	5745	5744.9503	5744.8903	5745.1004	5745.0375
	5785	5784.8728	5785.1265	5785.0992	5785.0385
	5825	5824.9524	5824.9752	5824.9221	5824.9011

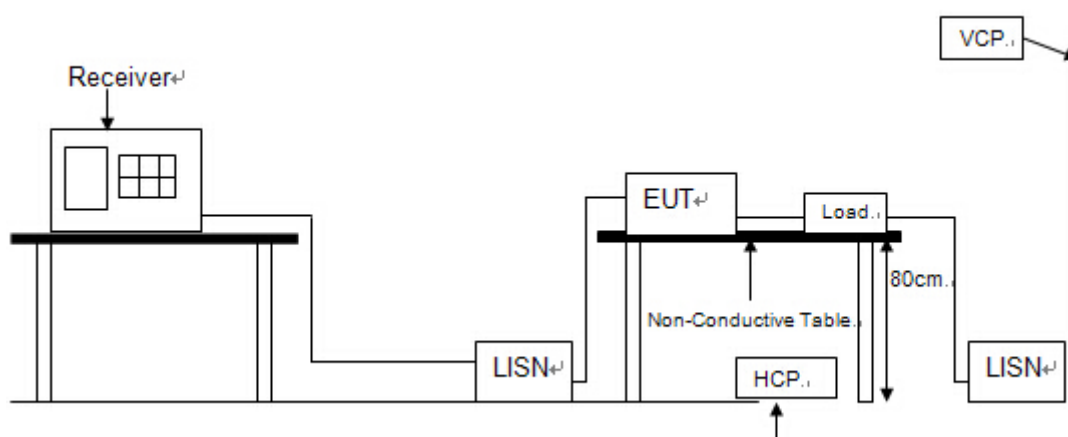
8.2	5180	5180.0796	5180.6286	5179.1720	5179.1962
	5200	5200.3700	5200.4116	5199.2115	5199.2478
	5220	5219.8450	5220.6826	5219.0497	5219.3094
	5240	5240.7180	5240.3970	5239.5422	5239.0429
	5260	5260.3657	5260.6525	5260.3639	5260.5729
	5270	5270.3456	5270.5324	5270.6235	5270.0615
	5280	5280.8635	5280.9775	5281.5049	5280.5601
	5310	5310.6535	5310.3805	5310.2867	5310.6044
	5320	5320.2576	5320.7725	5320.0229	5319.6402
	5500	5500.6467	5500.5207	5500.6801	5500.5515
	5510	5510.6484	5510.8893	5510.9276	5510.0922
	5530	5530.4563	5530.4293	5531.0324	5530.0033
	5550	5550.4563	5550.7949	5551.0582	5550.0870
	5580	5580.7375	5581.0715	5580.8764	5580.5755
	5670	5670.2463	5670.4901	5670.4902	5670.3394
	5690	5690.5735	5690.6551	5690.7569	5690.6869
	5700	5700.3573	5700.6538	5700.6663	5699.7815
	5745	5744.8755	5744.9984	5745.0308	5744.9859
	5785	5784.7975	5784.8083	5784.9587	5784.8571
	5825	5824.8248	5824.8750	5824.8094	5824.9731

Power Line Conducted Emission

9.1 Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Pulse Limiter	MTS-systemtechnik	MTS-IMP-136	261115-010-0024	12/17/2019
2	EMI Test Receiver	R&S	ESCI	101308	12/17/2019
3	LISN	AFJ	LS16	16011103219	12/17/2019
4	LISN	Schwarzbeck	NSLK 8127	8127-432	12/17/2019
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A
6	MeasurementSoftware	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

9.2 Block diagram of test setup



9.3 Power Line Conducted Emission Limits(Class B)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

9.4 TEST PROCEDURE

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 KHz.

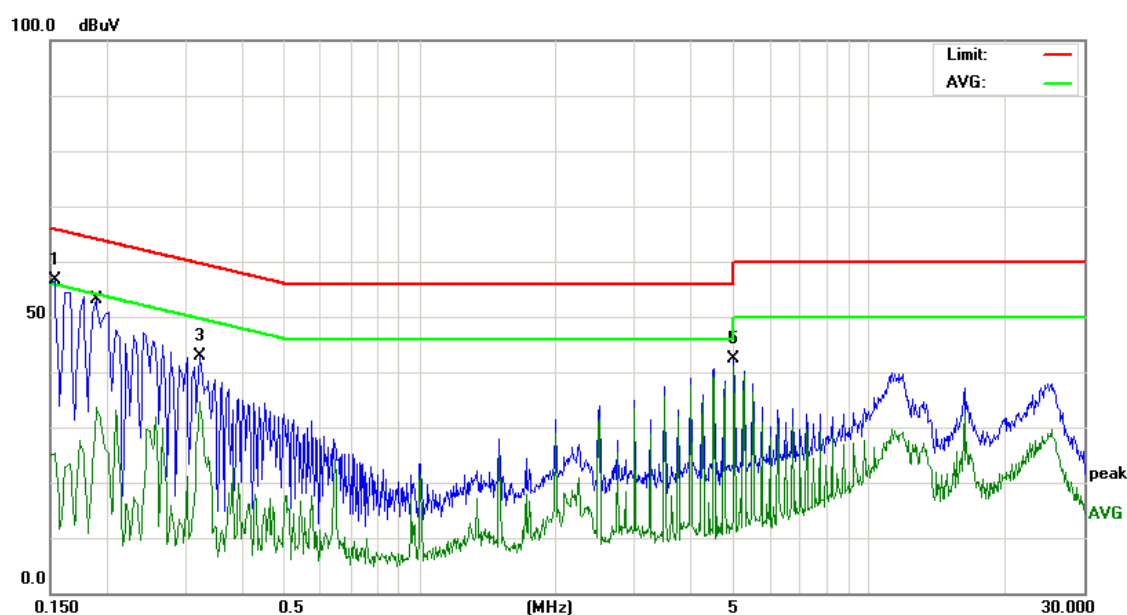
9.5 Test Result

PASS. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: "-----" means peak detection; "-----" mans average detection

EUT:	Table PC	Model No.:	FLEX10B
Temperature:	23℃	Relative Humidity:	52%
Probe:	N	Test Power:	AC 120V/60Hz
Test Time:	2019-9-29	Test Result:	Pass
Standard:	(CE)FCC PART 15 class B_QP		
Test Mode:	TX		
Note:			

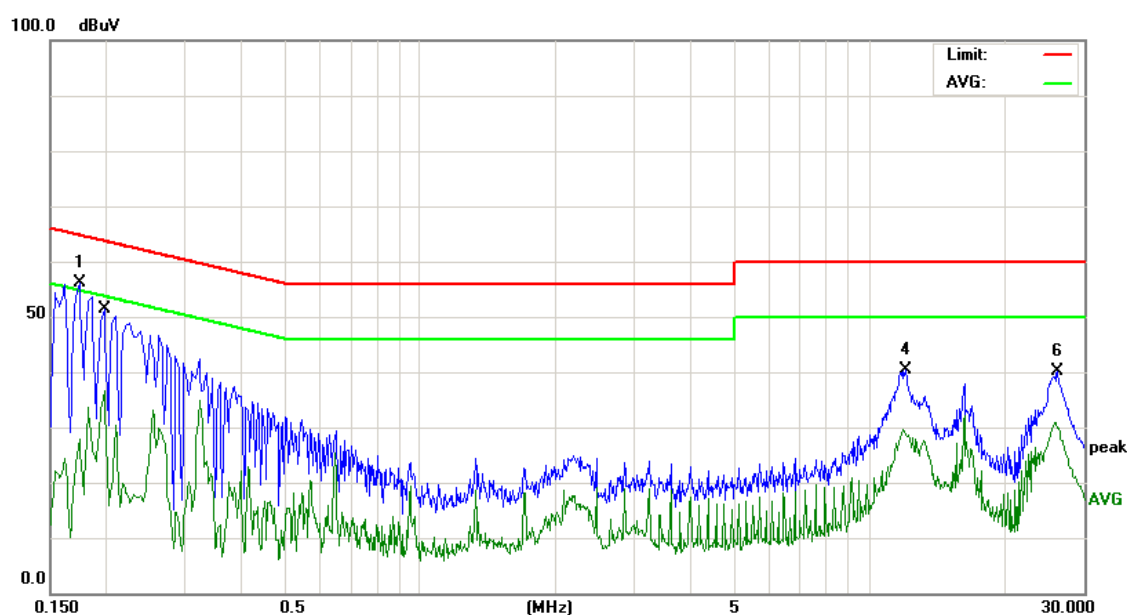


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1539	44.76	11.84	56.60	65.78	-9.18	peak
2		0.1900	22.30	11.26	33.56	54.03	-20.47	AVG
3		0.3220	32.66	10.15	42.81	59.65	-16.84	peak
4		0.3220	24.48	10.15	34.63	49.65	-15.02	AVG
5		5.0019	32.34	10.05	42.39	60.00	-17.61	peak
6	*	5.0019	31.03	10.05	41.08	50.00	-8.92	AVG

The test result is calculated as the following:

- (1) Result = Reading + Correct Factor
- (2) Correct Factor = (LISN, ISN, PLC or Current Probe) Factor + Cable Loss +Attenuator
- (3) Margin = Result - Limit

EUT:	Table PC	Model No.:	FLEX10B
Temperature:	23℃	Relative Humidity:	52%
Probe:	L	Test Power:	AC 120V/60Hz
Test Time:	2019-9-29	Test Result:	Pass
Standard:	(CE)FCC PART 15 class B_QP		
Test Mode:	TX		
Note:			



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1740	44.55	11.48	56.03	64.76	-8.73	peak
2		0.1980	25.36	11.16	36.52	53.69	-17.17	AVG
3		11.9180	19.47	10.24	29.71	50.00	-20.29	AVG
4		12.0100	30.13	10.24	40.37	60.00	-19.63	peak
5		26.1380	19.48	11.36	30.84	50.00	-19.16	AVG
6		26.1580	28.66	11.37	40.03	60.00	-19.97	peak

The test result is calculated as the following:

- (1) Result = Reading + Correct Factor
- (2) Correct Factor = (LISN, ISN, PLC or Current Probe) Factor + Cable Loss +Attenuator
- (3) Margin = Result - Limit

9. ANTENNA REQUIREMENTS

9.1. Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2. EUT ANTENNA

The EUT antenna is permanent attached antenna. It comply with the standard requirement.