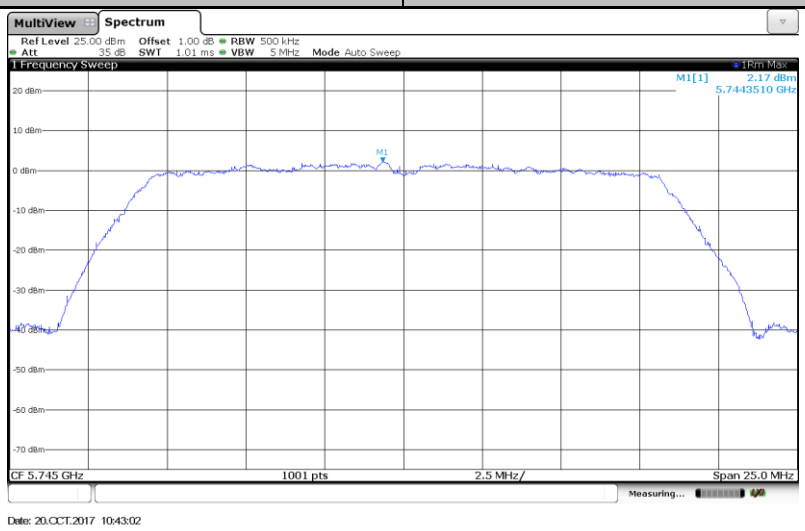
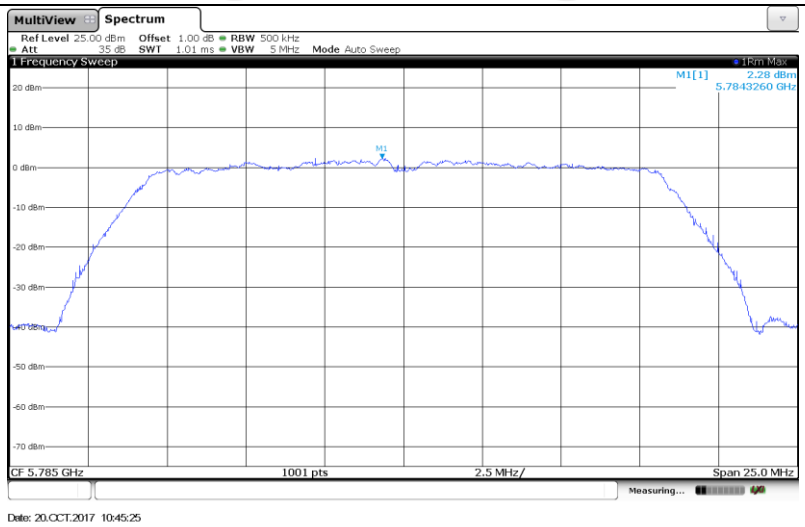
Band IV (5725 – 5850 MHz)

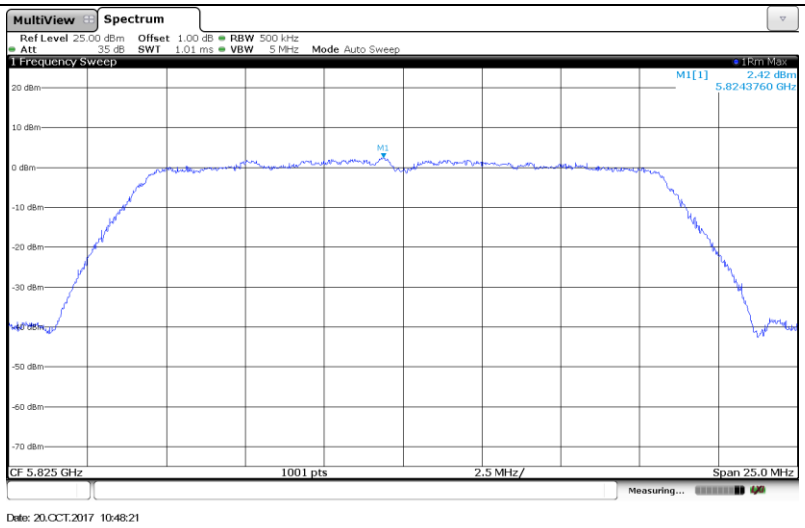
802.11a	Antenna 0



Low

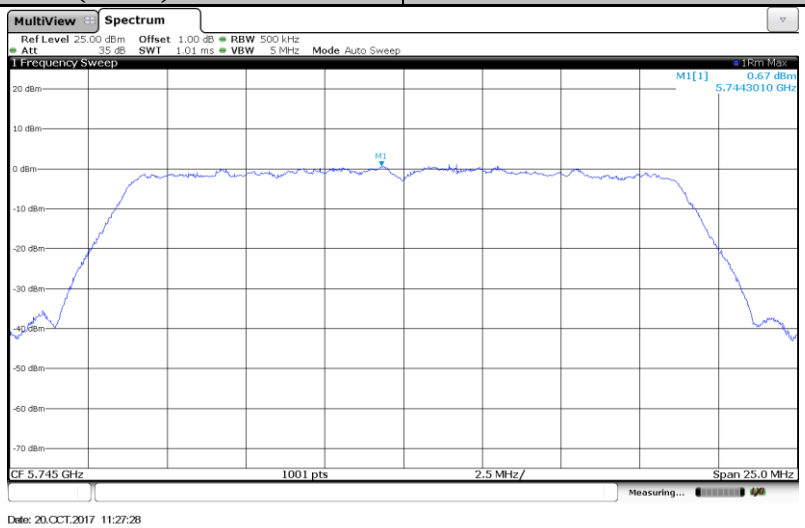


Mid



High

802.11n(HT20)	Antenna 0



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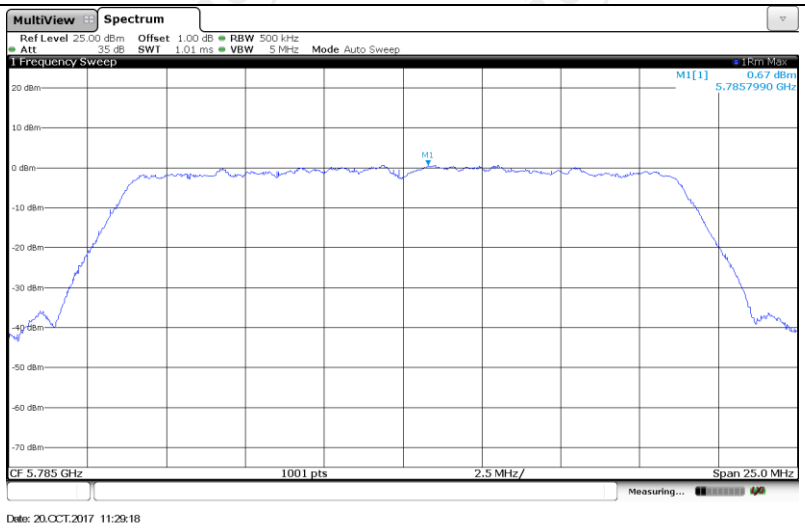

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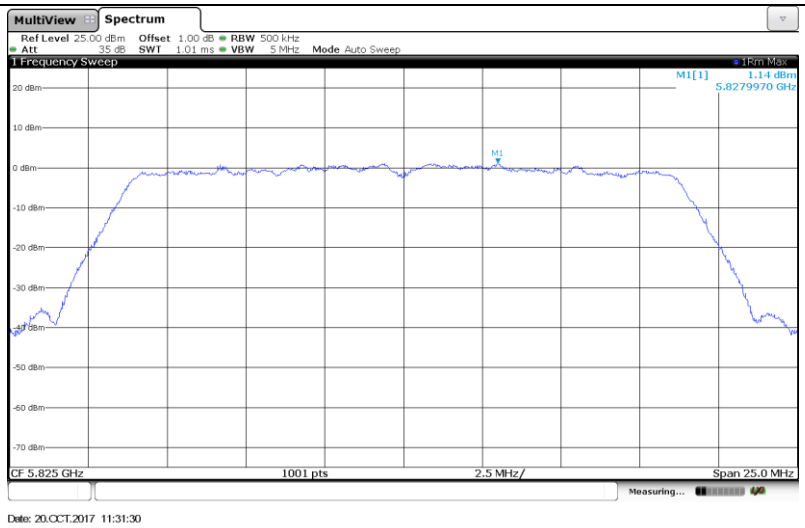
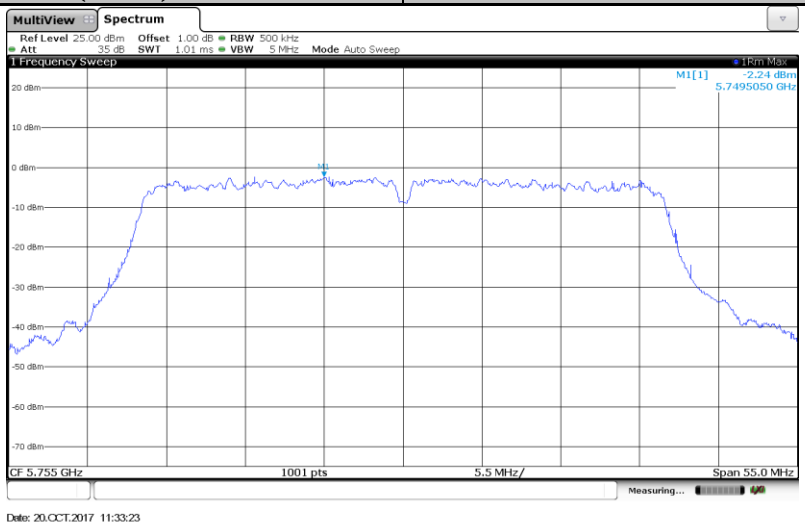
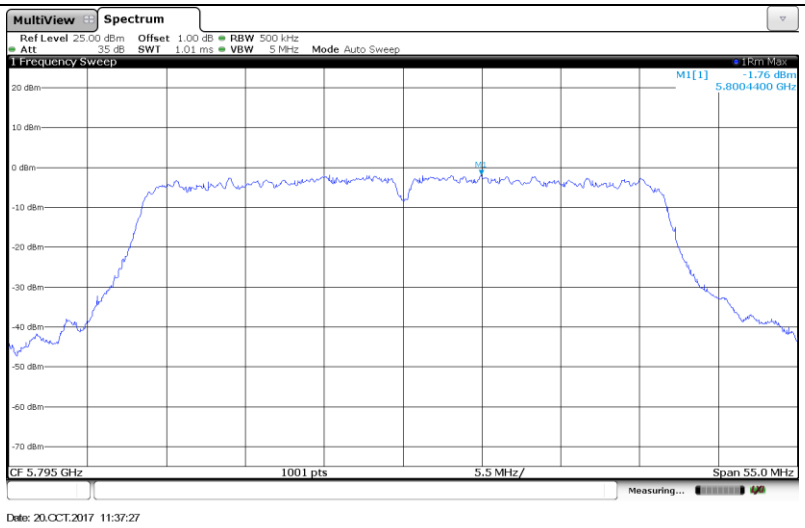


High

802.11n(HT40)	Antenna 0

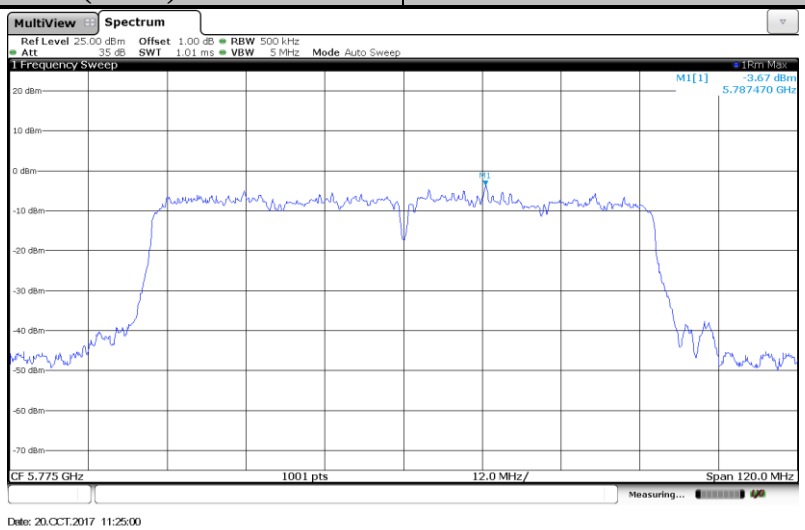


Low



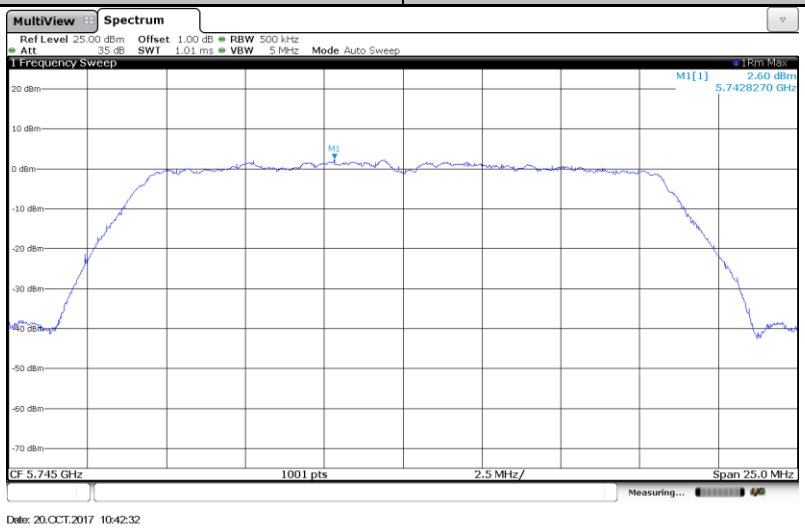
High

802.11ac(HT80)	Antenna 0

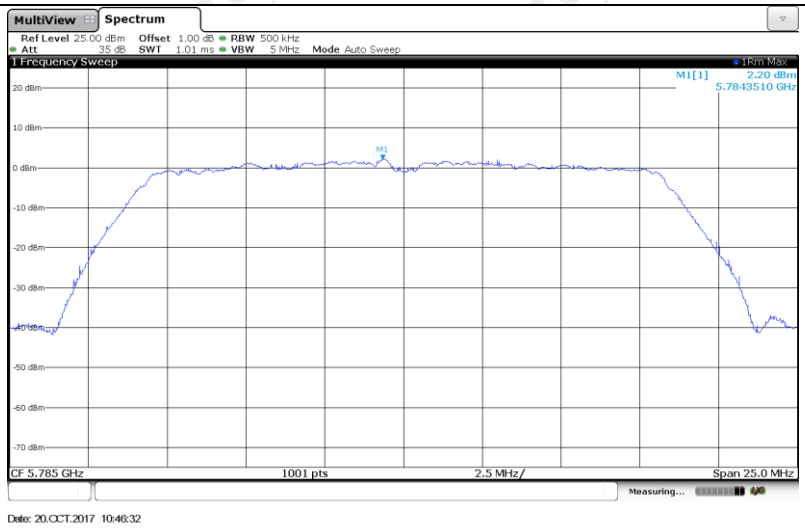


Mid

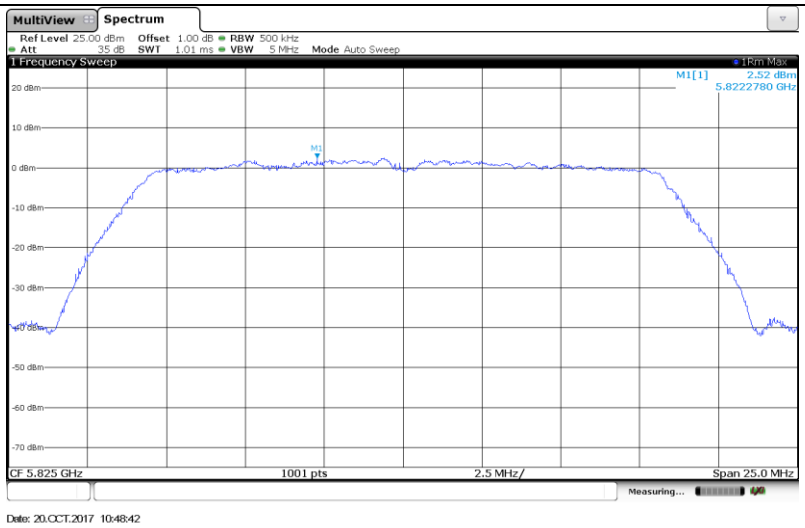
802.11a	Antenna 1



Low

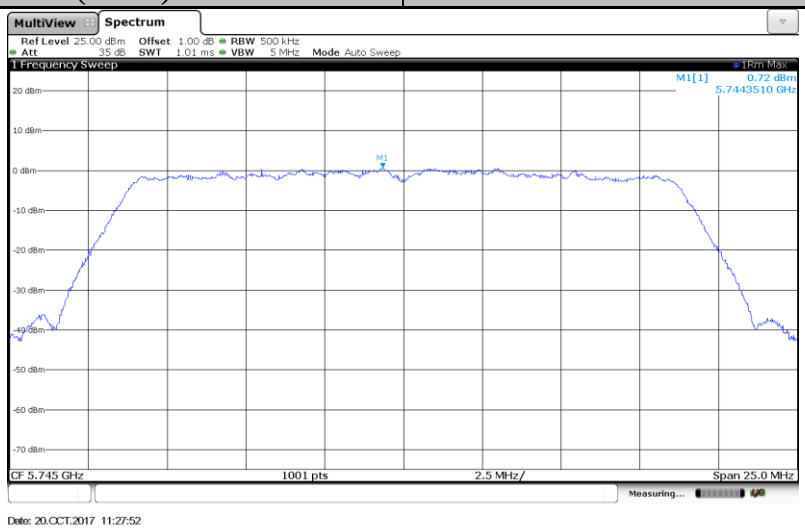


Mid



High

802.11n(HT20)	Antenna 1



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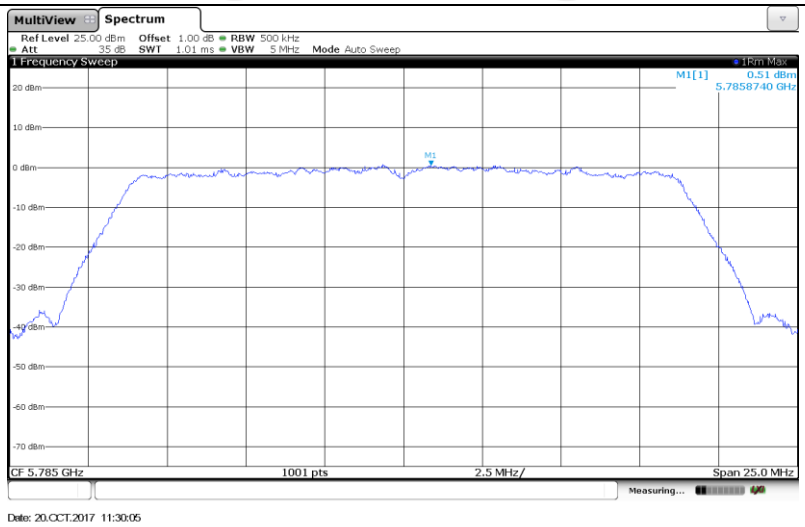

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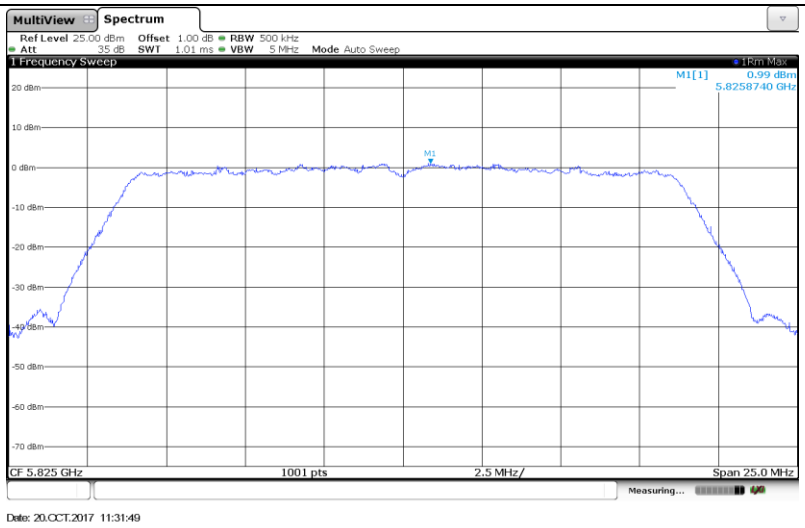
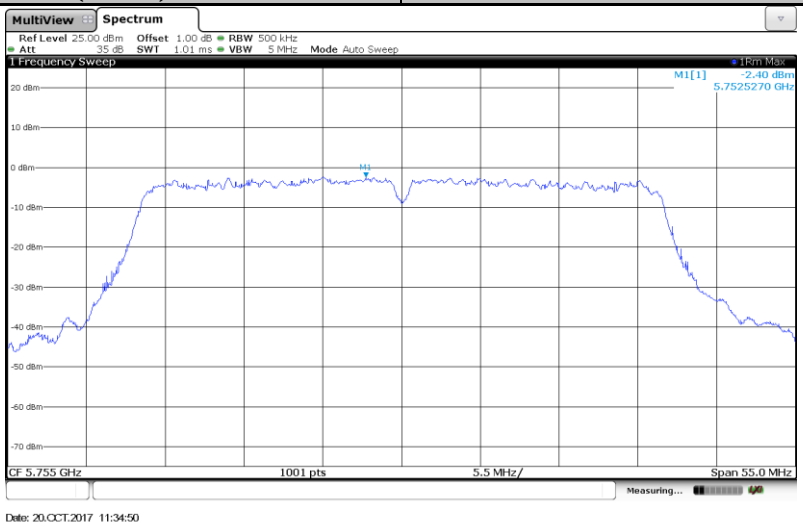


High

802.11n(HT40)	Antenna 1



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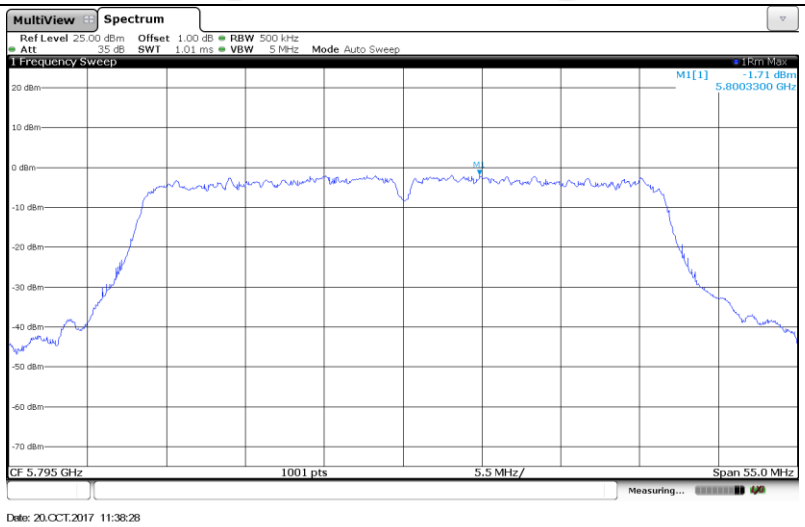
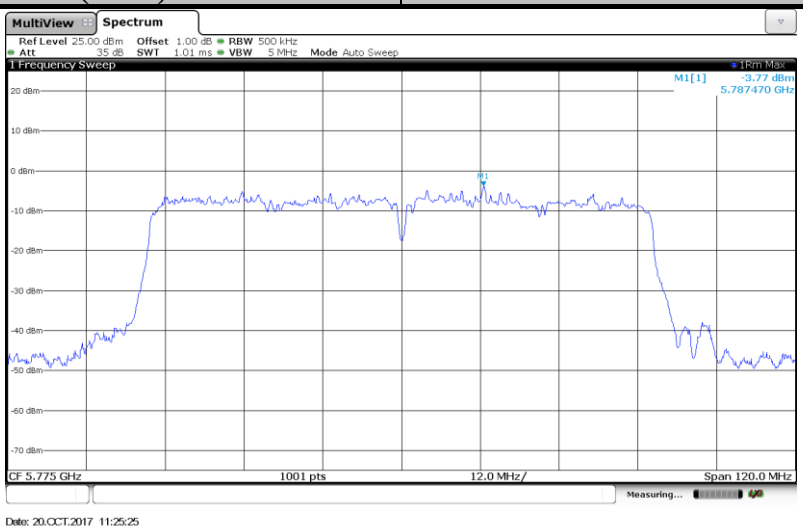


High

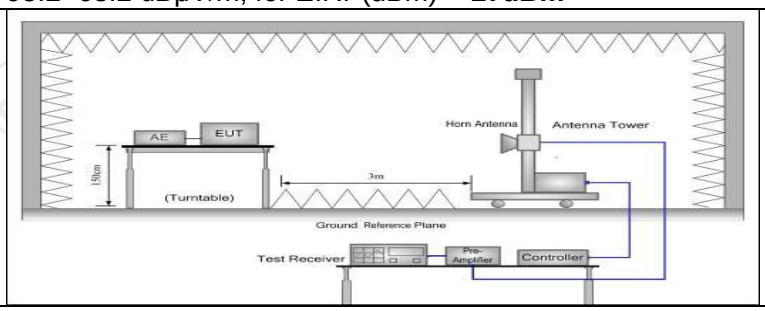
802.11ac(HT80)	Antenna 1



Mid

6.7. Band edge

6.7.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407
Test Method:	ANSI C63.10 2013
Limit:	For band I&II&III: E[dBμV/m] = EIRP[dBm] + 95.2=68.2 dBμV/m, for EIRP(dBm)= **-27dBm** For band IV(5715-5725MHz&5850-5860MHz): E[dBμV/m] = EIRP[dBm] + 95.2=78.2 dBμV/m, for EIRP(dBm)= **-17dBm;** For band IV(other un-restricted band):E[dBμV/m] = EIRP[dBm] + 95.2=68.2 dBμV/m, for EIRP(dBm)= **-27dBm**
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. 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. 4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. 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, quasipeak or average method as specified and then

	reported in a data sheet.
Test Result:	PASS
Remark	1. 802.11n(HT20)& (HT40)/802.11ac test mode is MIMO. 2. 802.11a test mode is SISO, only worse case antenna 0 mode is reported.

6.7.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Test Receiver	ROHDE&SCHWARZ	ESVD	100008	Sep. 27, 2018
Spectrum Analyzer	ROHDE&SCHWARZ	FSQ	200061	Sep. 27, 2018
Spectrum Analyzer	ROHDE&SCHWARZ	FSP40	100056	Sep. 27, 2018
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 27, 2018
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 27, 2018
Pre-amplifier	HP	8447D	2727A05017	Sep. 27, 2018
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 27, 2018
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 27, 2018
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 27, 2018
Horn Antenna	Schwarzbeck	BBH 9170	582	Jun. 07, 2018
Coax cable (9KHz-1GHz)	TCT	RE-low-01	N/A	Sep. 27, 2018
Coax cable (9KHz-40GHz)	TCT	RE-high-02	N/A	Sep. 27, 2018
Coax cable (9KHz-1GHz)	TCT	RE-low-03	N/A	Sep. 27, 2018
Coax cable (9KHz-40GHz)	TCT	RE-high-04	N/A	Sep. 27, 2018
Antenna Mast	Keleto	CC-A-4M	N/A	N/A
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

Note: *The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).*

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

6.7.3. Test Data

Band I for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11a		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.15	31.56	9.79	0.00	57.50	68.20	-10.70	Horizontal	Peak
5350.00	16.24	32.04	10.06	0.00	58.34	68.20	-9.86	Horizontal	Peak
5150.00	16.24	31.56	9.79	0.00	57.59	68.20	-10.61	Vertical	Peak
5350.00	16.21	32.04	10.06	0.00	58.31	68.20	-9.89	Vertical	Peak
5150.00	4.98	31.56	9.79	0.00	46.33	54.00	-7.67	Horizontal	Average
5350.00	5.01	32.04	10.06	0.00	47.11	54.00	-6.89	Horizontal	Average
5150.00	5.24	31.56	9.79	0.00	46.59	54.00	-7.41	Vertical	Average
5350.00	5.01	32.04	10.06	0.00	47.11	54.00	-6.89	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11a		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	18.78	31.73	10.47	0.00	60.98	68.20	-7.22	Horizontal	Peak
5850.00	15.87	32.20	10.61	0.00	58.68	68.20	-9.52	Horizontal	Peak
5725.00	20.50	31.73	10.47	0.00	62.70	68.20	-5.50	Vertical	Peak
5850.00	16.28	32.20	10.61	0.00	59.09	68.20	-9.11	Vertical	Peak
5725.00	9.72	31.73	10.47	0.00	51.92	54.00	-2.08	Horizontal	Average
5850.00	6.62	32.20	10.61	0.00	49.43	54.00	-4.57	Horizontal	Average
5725.00	9.88	31.73	10.47	0.00	52.08	54.00	-1.92	Vertical	Average
5850.00	7.16	32.20	10.61	0.00	49.97	54.00	-4.03	Vertical	Average

Band I for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11a	Test channel:		High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.04	31.56	9.79	0.00	57.39	68.20	-10.81	Horizontal	Peak
5350.00	16.35	32.04	10.06	0.00	58.45	68.20	-9.75	Horizontal	Peak
5150.00	15.98	31.56	9.79	0.00	57.33	68.20	-10.87	Vertical	Peak
5350.00	16.11	32.04	10.06	0.00	58.21	68.20	-9.99	Vertical	Peak
5150.00	5.16	31.56	9.79	0.00	46.51	54.00	-7.49	Horizontal	Average
5350.00	5.23	32.04	10.06	0.00	47.33	54.00	-6.67	Horizontal	Average
5150.00	5.24	31.56	9.79	0.00	46.59	54.00	-7.41	Vertical	Average
5350.00	5.33	32.04	10.06	0.00	47.43	54.00	-6.57	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11a	Test channel:		High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	19.61	31.73	10.47	0.00	61.81	68.20	-6.39	Horizontal	Peak
5850.00	19.53	32.20	10.61	0.00	62.34	68.20	-5.86	Horizontal	Peak
5725.00	19.35	31.73	10.47	0.00	61.55	68.20	-6.65	Vertical	Peak
5850.00	20.47	32.20	10.61	0.00	63.28	68.20	-4.92	Vertical	Peak
5725.00	9.88	31.73	10.47	0.00	52.08	54.00	-1.92	Horizontal	Average
5850.00	10.55	32.20	10.61	0.00	53.36	54.00	-0.64	Horizontal	Average
5725.00	9.27	31.73	10.47	0.00	51.47	54.00	-2.53	Vertical	Average
5850.00	10.16	32.20	10.61	0.00	52.97	54.00	-1.03	Vertical	Average

Band I for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11n		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.14	31.56	9.79	0.00	57.49	68.20	-10.71	Horizontal	Peak
5350.00	16.34	32.04	10.06	0.00	58.44	68.20	-9.76	Horizontal	Peak
5150.00	16.24	31.56	9.79	0.00	57.59	68.20	-10.61	Vertical	Peak
5350.00	16.22	32.04	10.06	0.00	58.32	68.20	-9.88	Vertical	Peak
5150.00	4.98	31.56	9.79	0.00	46.33	54.00	-7.67	Horizontal	Average
5350.00	5.16	32.04	10.06	0.00	47.26	54.00	-6.74	Horizontal	Average
5150.00	5.34	31.56	9.79	0.00	46.69	54.00	-7.31	Vertical	Average
5350.00	5.06	32.04	10.06	0.00	47.16	54.00	-6.84	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11n		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	18.49	31.73	10.47	0.00	60.69	68.20	-7.51	Horizontal	Peak
5850.00	16.24	32.20	10.61	0.00	59.05	68.20	-9.15	Horizontal	Peak
5725.00	19.68	31.73	10.47	0.00	61.88	68.20	-6.32	Vertical	Peak
5850.00	16.67	32.20	10.61	0.00	59.48	68.20	-8.72	Vertical	Peak
5725.00	8.59	31.73	10.47	0.00	50.79	54.00	-3.21	Horizontal	Average
5850.00	6.25	32.20	10.61	0.00	49.06	54.00	-4.94	Horizontal	Average
5725.00	8.79	31.73	10.47	0.00	50.99	54.00	-3.01	Vertical	Average
5850.00	6.54	32.20	10.61	0.00	49.35	54.00	-4.65	Vertical	Average

Band I for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11n		Test channel:	High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.55	31.56	9.79	0.00	57.90	68.20	-10.30	Horizontal	Peak
5350.00	16.32	32.04	10.06	0.00	58.42	68.20	-9.78	Horizontal	Peak
5150.00	15.87	31.56	9.79	0.00	57.22	68.20	-10.98	Vertical	Peak
5350.00	16.24	32.04	10.06	0.00	58.34	68.20	-9.86	Vertical	Peak
5150.00	5.14	31.56	9.79	0.00	46.49	54.00	-7.51	Horizontal	Average
5350.00	5.13	32.04	10.06	0.00	47.23	54.00	-6.77	Horizontal	Average
5150.00	5.30	31.56	9.79	0.00	46.65	54.00	-7.35	Vertical	Average
5350.00	5.16	32.04	10.06	0.00	47.26	54.00	-6.74	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		20MHz		Worst mode:		802.11n		Test channel:	High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	19.13	31.73	10.47	0.00	61.33	68.20	-6.87	Horizontal	Peak
5850.00	19.31	32.20	10.61	0.00	62.12	68.20	-6.08	Horizontal	Peak
5725.00	18.97	31.73	10.47	0.00	61.17	68.20	-7.03	Vertical	Peak
5850.00	19.68	32.20	10.61	0.00	62.49	68.20	-5.71	Vertical	Peak
5725.00	9.48	31.73	10.47	0.00	51.68	54.00	-2.32	Horizontal	Average
5850.00	9.98	32.20	10.61	0.00	52.79	54.00	-1.21	Horizontal	Average
5725.00	7.98	31.73	10.47	0.00	50.18	54.00	-3.82	Vertical	Average
5850.00	9.01	32.20	10.61	0.00	51.82	54.00	-2.18	Vertical	Average

Band I for Band edge emission									
Bandwidth:		40MHz		Worst mode:		802.11n		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.57	31.56	9.79	0.00	57.92	68.20	-10.28	Horizontal	Peak
5350.00	16.47	32.04	10.06	0.00	58.57	68.20	-9.63	Horizontal	Peak
5150.00	16.34	31.56	9.79	0.00	57.69	68.20	-10.51	Vertical	Peak
5350.00	15.98	32.04	10.06	0.00	58.08	68.20	-10.12	Vertical	Peak
5150.00	4.65	31.56	9.79	0.00	46.00	54.00	-8.00	Horizontal	Average
5350.00	5.01	32.04	10.06	0.00	47.11	54.00	-6.89	Horizontal	Average
5150.00	5.02	31.56	9.79	0.00	46.37	54.00	-7.63	Vertical	Average
5350.00	5.34	32.04	10.06	0.00	47.44	54.00	-6.56	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		40MHz		Worst mode:		802.11n		Test channel:	Low
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	21.99	31.73	10.47	0.00	64.19	68.20	-4.01	Horizontal	Peak
5850.00	16.93	32.20	10.61	0.00	59.74	68.20	-8.46	Horizontal	Peak
5725.00	20.84	31.73	10.47	0.00	63.04	68.20	-5.16	Vertical	Peak
5850.00	15.01	32.20	10.61	0.00	57.82	68.20	-10.38	Vertical	Peak
5725.00	10.34	31.73	10.47	0.00	52.54	54.00	-1.46	Horizontal	Average
5850.00	5.92	32.20	10.61	0.00	48.73	54.00	-5.27	Horizontal	Average
5725.00	9.16	31.73	10.47	0.00	51.36	54.00	-2.64	Vertical	Average
5850.00	4.72	32.20	10.61	0.00	47.53	54.00	-6.47	Vertical	Average

Band I for Band edge emission									
Bandwidth:		40MHz		Worst mode:		802.11n	Test channel:		High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.24	31.56	9.79	0.00	57.59	68.20	-10.61	Horizontal	Peak
5350.00	16.11	32.04	10.06	0.00	58.21	68.20	-9.99	Horizontal	Peak
5150.00	16.37	31.56	9.79	0.00	57.72	68.20	-10.48	Vertical	Peak
5350.00	16.35	32.04	10.06	0.00	58.45	68.20	-9.75	Vertical	Peak
5150.00	5.01	31.56	9.79	0.00	46.36	54.00	-7.64	Horizontal	Average
5350.00	5.22	32.04	10.06	0.00	47.32	54.00	-6.68	Horizontal	Average
5150.00	5.30	31.56	9.79	0.00	46.65	54.00	-7.35	Vertical	Average
5350.00	4.81	32.04	10.06	0.00	46.91	54.00	-7.09	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		40MHz		Worst mode:		802.11n	Test channel:		High
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	19.16	31.73	10.47	0.00	61.36	68.20	-6.84	Horizontal	Peak
5850.00	19.89	32.20	10.61	0.00	62.70	68.20	-5.50	Horizontal	Peak
5725.00	20.67	31.73	10.47	0.00	62.87	68.20	-5.33	Vertical	Peak
5850.00	21.63	32.20	10.61	0.00	64.44	68.20	-3.76	Vertical	Peak
5725.00	7.37	31.73	10.47	0.00	49.57	54.00	-4.43	Horizontal	Average
5850.00	8.93	32.20	10.61	0.00	51.74	54.00	-2.26	Horizontal	Average
5725.00	9.76	31.73	10.47	0.00	51.96	54.00	-2.04	Vertical	Average
5850.00	10.07	32.20	10.61	0.00	52.88	54.00	-1.12	Vertical	Average

Band I for Band edge emission									
Bandwidth:		80MHz		Worst mode:		802.11ac	Test channel:		Mid
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5150.00	16.20	31.56	9.79	0.00	57.55	68.20	-10.65	Horizontal	Peak
5350.00	15.88	32.04	10.06	0.00	57.98	68.20	-10.22	Horizontal	Peak
5150.00	15.78	31.56	9.79	0.00	57.13	68.20	-11.07	Vertical	Peak
5350.00	16.41	32.04	10.06	0.00	58.51	68.20	-9.69	Vertical	Peak
5150.00	5.24	31.56	9.79	0.00	46.59	54.00	-7.41	Horizontal	Average
5350.00	4.98	32.04	10.06	0.00	47.08	54.00	-6.92	Horizontal	Average
5150.00	5.15	31.56	9.79	0.00	46.50	54.00	-7.50	Vertical	Average
5350.00	5.21	32.04	10.06	0.00	47.31	54.00	-6.69	Vertical	Average

Band IV for Band edge emission									
Bandwidth:		80MHz		Worst mode:		802.11ac	Test channel:		Mid
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Detector
5725.00	22.42	31.73	10.47	0.00	64.62	74.00	-9.38	Horizontal	Peak
5850.00	19.50	32.20	10.61	0.00	62.31	74.00	-11.69	Horizontal	Peak
5725.00	23.30	31.73	10.47	0.00	65.50	74.00	-8.50	Vertical	Peak
5850.00	19.86	32.20	10.61	0.00	62.67	74.00	-11.33	Vertical	Peak
5725.00	10.69	31.73	10.47	0.00	52.89	54.00	-1.11	Horizontal	Average
5850.00	8.99	32.20	10.61	0.00	51.80	54.00	-2.20	Horizontal	Average
5725.00	9.82	31.73	10.47	0.00	52.02	54.00	-1.98	Vertical	Average
5850.00	7.88	32.20	10.61	0.00	50.69	54.00	-3.31	Vertical	Average

6.8. Spurious Emission

6.8.1.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205
Test Method:	KDB 789033 D02 v01r04
Frequency Range:	9kHz to 40GHz
Measurement Distance:	3 m
Antenna Polarization:	Horizontal & Vertical
Operation mode:	Transmitting mode with modulation
Receiver Setup:	

Frequency	Detector	RBW	VBW	Remark
9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

Limit:

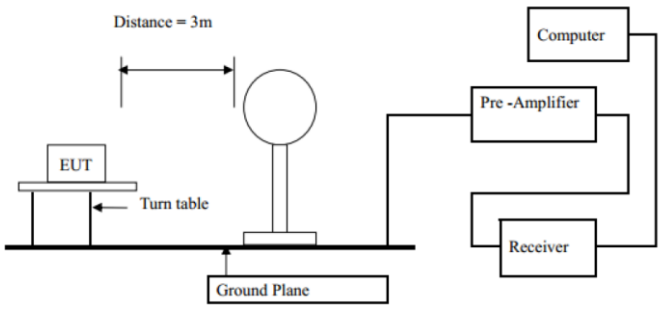
Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

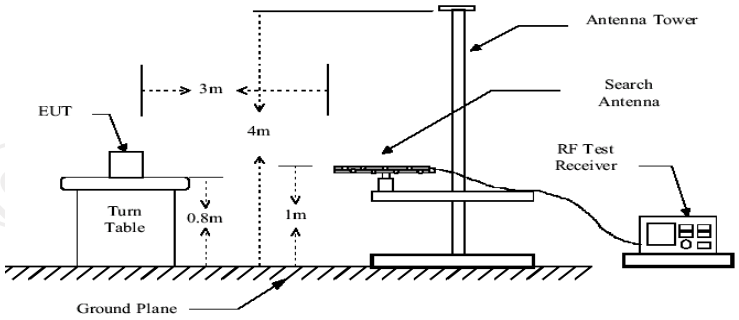
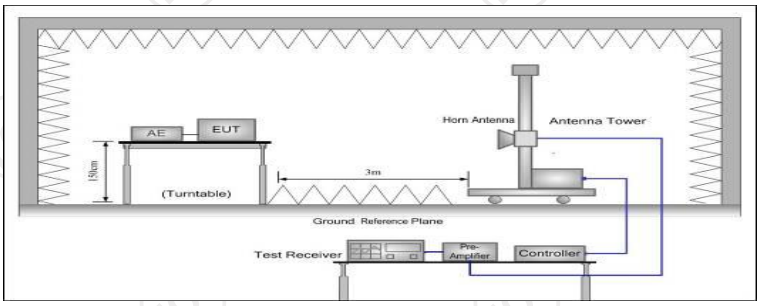
Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(KHz)	300
0.490-1.705	24000/F(KHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Frequency	Limit (dBuV/m @3m)	Detector
Above 1G	74.0	Peak
	54.0	Average

Test setup:

For radiated emissions below 30MHz

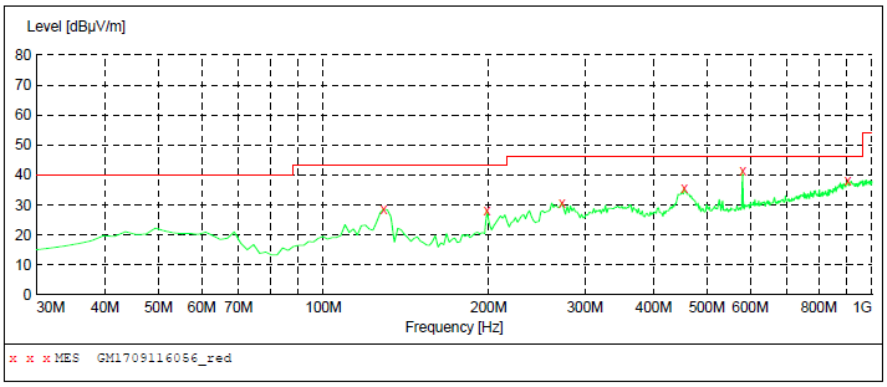


	30MHz to 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. 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. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. 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 results:	PASS

6.8.2. Test Data

Please refer to following diagram for individual

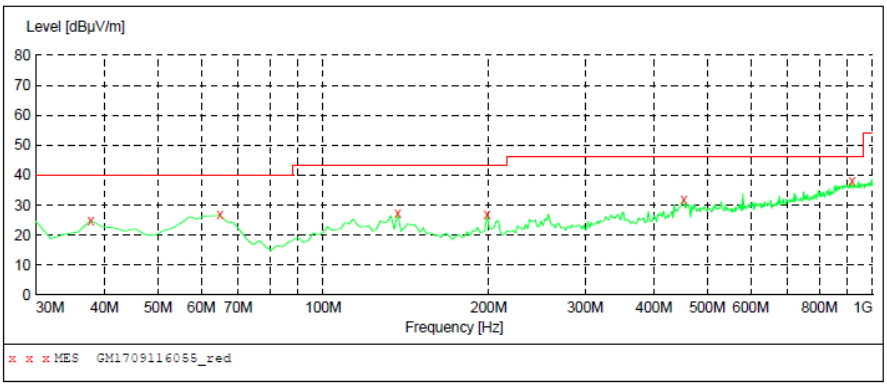
Below 1GHz



MEASUREMENT RESULT: "GM1709116056_red"

9/11/2017 2:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
128.940000	28.60	-13.2	43.5	14.9	---	300.0	353.00	HORIZONTAL
198.780000	28.20	-9.8	43.5	15.3	---	100.0	114.00	HORIZONTAL
272.500000	30.80	-7.9	46.0	15.2	---	100.0	343.00	HORIZONTAL
454.860000	35.40	-3.2	46.0	10.6	---	100.0	23.00	HORIZONTAL
580.960000	41.20	0.3	46.0	4.8	---	100.0	0.00	HORIZONTAL
903.000000	38.10	6.8	46.0	7.9	---	100.0	275.00	HORIZONTAL



MEASUREMENT RESULT: "GM1709116055_red"

9/11/2017 2:19PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
37.760000	24.90	-10.8	40.0	15.1	---	100.0	127.00	VERTICAL
64.920000	26.70	-11.4	40.0	13.3	---	100.0	0.00	VERTICAL
136.700000	27.40	-13.7	43.5	16.1	---	100.0	144.00	VERTICAL
198.780000	26.90	-9.8	43.5	16.6	---	100.0	184.00	VERTICAL
452.920000	31.80	-3.2	46.0	14.2	---	100.0	184.00	VERTICAL
916.580000	38.00	6.9	46.0	8.0	---	100.0	316.00	VERTICAL

Remark:

1. Transd = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level

2. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

3. The 802.11a,802.11n,802.11ac Test mode, found that 802.11a and band 1 mode for low channel was the worst mode, and the report showed only the test results of the worst mode.

Above 1GHz

Band I for Low									
Bandwidth:			20MHz			Worst mode:		802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1432.03	33.34	25.87	5.09	36.50	27.80	74.00	-46.20	Horizontal	Peak
3523.27	33.13	29.07	8.15	38.38	31.97	74.00	-42.03	Horizontal	Peak
6846.33	29.32	34.33	11.66	34.94	40.37	74.00	-33.63	Horizontal	Peak
11914.32	27.39	39.70	14.45	33.47	48.07	74.00	-25.93	Horizontal	Peak
1356.94	32.62	26.03	4.93	36.48	27.10	74.00	-46.90	Vertical	Peak
5019.62	30.87	31.58	9.69	36.38	35.76	74.00	-38.24	Vertical	Peak
6881.54	30.51	34.57	11.70	34.91	41.87	74.00	-32.13	Vertical	Peak
11203.01	29.11	40.30	13.49	33.37	49.53	74.00	-24.47	Vertical	Peak

Band I for Mid									
Bandwidth:			20MHz			Worst mode:		802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1302.38	32.25	26.19	4.83	36.51	26.76	74.00	-47.24	Horizontal	Peak
3756.60	31.59	29.47	8.45	38.24	31.27	74.00	-42.73	Horizontal	Peak
7703.69	29.55	36.10	13.00	35.03	43.62	74.00	-30.38	Horizontal	Peak
12413.45	30.12	39.07	14.39	32.77	50.81	74.00	-23.19	Horizontal	Peak
1246.81	33.69	26.25	4.74	36.54	28.14	74.00	-45.86	Vertical	Peak
4088.41	31.91	29.88	8.85	37.91	32.73	74.00	-41.27	Vertical	Peak
7318.47	29.96	36.30	11.98	34.93	43.31	74.00	-30.69	Vertical	Peak
10642.80	28.90	39.93	13.59	33.52	48.90	74.00	-25.10	Vertical	Peak

Band I for High									
Bandwidth:			20MHz			Worst mode:		802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1421.05	31.31	25.88	5.06	36.49	25.76	74.00	-48.24	Horizontal	Peak
3984.88	31.98	29.70	8.76	38.12	32.32	74.00	-41.68	Horizontal	Peak
6690.09	30.46	34.20	11.47	35.19	40.94	74.00	-33.06	Horizontal	Peak
9956.19	30.15	39.10	13.56	33.71	49.10	74.00	-24.90	Horizontal	Peak
1227.77	32.52	26.27	4.71	36.55	26.95	74.00	-47.05	Vertical	Peak
4541.79	30.30	30.78	9.36	37.33	33.11	74.00	-40.89	Vertical	Peak
7356.11	29.86	36.30	12.02	34.88	43.30	74.00	-30.70	Vertical	Peak
10058.87	29.70	39.10	13.55	33.68	48.67	74.00	-25.33	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11a test mode is SISO, only worse ANT 0 mode is reported.

Band I for Low									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1115.67	34.94	25.63	4.47	36.61	28.43	74.00	-45.57	Horizontal	Peak
2370.11	31.86	27.75	6.72	37.82	28.51	74.00	-45.49	Horizontal	Peak
3943.39	34.71	29.70	8.70	38.14	34.97	74.00	-39.03	Horizontal	Peak
8125.22	31.81	36.92	12.59	34.54	46.78	74.00	-27.22	Horizontal	Peak
1079.36	34.99	25.44	4.39	36.63	28.19	74.00	-45.81	Vertical	Peak
3241.50	35.21	28.55	7.77	38.27	33.26	74.00	-40.74	Vertical	Peak
7154.17	31.92	35.93	11.86	35.01	44.70	74.00	-29.30	Vertical	Peak
9935.05	30.67	39.10	13.57	33.97	49.37	74.00	-24.63	Vertical	Peak

Band I for Mid									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1273.57	33.90	26.23	4.79	36.53	28.39	74.00	-45.61	Horizontal	Peak
2449.85	31.57	27.40	6.80	37.89	27.88	74.00	-46.12	Horizontal	Peak
4159.93	34.58	29.96	8.91	37.74	35.71	74.00	-38.29	Horizontal	Peak
7099.75	31.33	35.60	11.85	34.93	43.85	74.00	-30.15	Horizontal	Peak
1204.21	35.17	26.30	4.67	36.57	29.57	74.00	-44.43	Vertical	Peak
3160.03	36.99	28.80	7.67	38.21	35.25	74.00	-38.75	Vertical	Peak
6331.33	31.04	33.16	11.00	35.30	39.90	74.00	-34.10	Vertical	Peak
9935.05	30.67	39.10	13.57	33.97	49.37	74.00	-24.63	Vertical	Peak

Band I for High									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1244.73	34.31	26.25	4.74	36.55	28.75	74.00	-45.25	Horizontal	Peak
3291.39	34.68	28.25	7.83	38.36	32.40	74.00	-41.60	Horizontal	Peak
6140.85	32.37	32.66	10.91	35.34	40.60	74.00	-33.40	Horizontal	Peak
11226.25	29.84	40.30	13.48	33.47	50.15	74.00	-23.85	Horizontal	Peak
1173.94	34.35	26.10	4.60	36.58	28.47	74.00	-45.53	Vertical	Peak
3026.20	36.71	28.65	7.51	38.23	34.64	74.00	-39.36	Vertical	Peak
5230.96	31.05	31.44	9.88	36.29	36.08	74.00	-37.92	Vertical	Peak
9685.35	31.76	39.10	13.70	35.39	49.17	74.00	-24.83	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11n(HT20), 802.11n(HT40) and 802.11ac all test at MIMO mode.

Band I for Low									
Bandwidth:		40MHz			Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1432.03	33.34	25.87	5.09	36.50	27.80	74.00	-46.20	Horizontal	Peak
3442.87	31.42	28.55	8.03	38.49	29.51	74.00	-44.49	Horizontal	Peak
5576.25	28.71	31.82	10.25	35.98	34.80	74.00	-39.20	Horizontal	Peak
10891.34	29.51	40.57	13.58	34.30	49.36	74.00	-24.64	Horizontal	Peak
1322.57	33.37	26.13	4.87	36.50	27.87	74.00	-46.13	Vertical	Peak
5283.84	30.38	31.33	9.96	36.45	35.22	74.00	-38.78	Vertical	Peak
7489.37	31.42	36.12	12.36	34.89	45.01	74.00	-28.99	Vertical	Peak
11347.61	29.12	40.30	13.43	33.96	48.89	74.00	-25.11	Vertical	Peak

Band I for High									
Bandwidth:		40MHz			Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1586.76	31.74	25.02	5.53	36.70	25.59	74.00	-48.41	Horizontal	Peak
4612.22	32.04	30.94	9.46	37.21	35.23	74.00	-38.77	Horizontal	Peak
8319.88	28.39	36.44	12.82	34.38	43.27	74.00	-30.73	Horizontal	Peak
11464.63	28.10	40.26	13.48	33.84	48.00	74.00	-26.00	Horizontal	Peak
1224.62	34.12	26.27	4.70	36.56	28.53	74.00	-45.47	Vertical	Peak
5084.40	31.02	31.84	9.74	36.32	36.28	74.00	-37.72	Vertical	Peak
8150.90	29.69	36.85	12.65	34.55	44.64	74.00	-29.36	Vertical	Peak
12037.19	29.32	39.68	14.64	33.25	50.39	74.00	-23.61	Vertical	Peak

Band I for Mid									
Bandwidth:		80MHz			Worst mode:			802.11ac	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1246.81	33.69	26.25	4.74	36.54	28.14	74.00	-45.86	Horizontal	Peak
4151.82	31.19	29.95	8.90	37.76	32.28	74.00	-41.72	Horizontal	Peak
6371.87	29.21	33.24	10.99	35.31	38.13	74.00	-35.87	Horizontal	Peak
11553.19	28.57	40.20	13.58	33.39	48.96	74.00	-25.04	Horizontal	Peak
2192.13	32.93	27.44	6.43	37.34	29.46	74.00	-44.54	Vertical	Peak
5243.33	30.09	31.41	9.89	36.33	35.06	74.00	-38.94	Vertical	Peak
8601.98	31.37	37.31	12.89	34.52	47.05	74.00	-26.95	Vertical	Peak
11582.86	28.78	40.18	13.61	33.24	49.33	74.00	-24.67	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11n(HT20), 802.11n(HT40) and 802.11ac all test at MIMO mode.

Band IV for Low									
Bandwidth:			20MHz		Worst mode:			802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1297.74	36.51	26.20	4.83	36.52	31.02	74.00	-42.98	Horizontal	Peak
3294.36	37.42	28.23	7.83	38.37	35.11	74.00	-38.89	Horizontal	Peak
7977.85	34.01	37.01	12.41	34.59	48.84	74.00	-25.16	Horizontal	Peak
12025.29	32.20	39.69	14.65	33.28	53.26	74.00	-20.74	Horizontal	Peak
1241.43	37.49	26.26	4.73	36.55	31.93	74.00	-42.07	Vertical	Peak
2496.66	37.12	27.21	6.84	37.87	33.30	74.00	-40.70	Vertical	Peak
4776.65	33.71	31.51	9.53	36.99	37.76	74.00	-36.24	Vertical	Peak
10703.42	33.28	39.91	13.58	33.95	52.82	74.00	-21.18	Vertical	Peak

Band IV for Mid									
Bandwidth:			20MHz		Worst mode:			802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1364.15	36.55	26.01	4.94	36.48	31.02	74.00	-42.98	Horizontal	Peak
3116.66	37.24	28.80	7.62	38.21	35.45	74.00	-38.55	Horizontal	Peak
5091.18	34.37	31.87	9.74	36.31	39.67	74.00	-34.33	Horizontal	Peak
12640.66	32.07	38.75	14.46	32.58	52.70	74.00	-21.30	Horizontal	Peak
1187.56	38.60	26.20	4.63	36.58	32.85	74.00	-41.15	Vertical	Peak
2924.12	37.17	28.52	7.44	38.28	34.85	74.00	-39.15	Vertical	Peak
5672.56	33.27	31.65	10.39	35.67	39.64	74.00	-34.36	Vertical	Peak
12025.29	32.20	39.69	14.65	33.28	53.26	74.00	-20.74	Vertical	Peak

Band IV for High									
Bandwidth:			20MHz		Worst mode:			802.11a	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1151.89	37.29	25.92	4.55	36.59	31.17	74.00	-42.83	Horizontal	Peak
2524.50	37.91	27.35	6.86	37.86	34.26	74.00	-39.74	Horizontal	Peak
4816.55	34.47	31.57	9.55	36.91	38.68	74.00	-35.32	Horizontal	Peak
12025.29	32.20	39.69	14.65	33.28	53.26	74.00	-20.74	Horizontal	Peak
1269.27	36.56	26.23	4.78	36.53	31.04	74.00	-42.96	Vertical	Peak
3847.71	36.77	29.65	8.57	38.20	36.79	74.00	-37.21	Vertical	Peak
7568.46	33.02	36.17	12.62	34.95	46.86	74.00	-27.14	Vertical	Peak
12640.66	32.07	38.75	14.46	32.58	52.70	74.00	-21.30	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11a test mode is SISO, only worse ANT 0 mode is reported.

Band IV for Low									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1529.75	33.64	25.53	5.37	36.63	27.91	74.00	-46.09	Horizontal	Peak
2950.14	34.06	28.55	7.45	38.26	31.80	74.00	-42.20	Horizontal	Peak
5034.99	31.27	31.64	9.70	36.37	36.24	74.00	-37.76	Horizontal	Peak
7527.83	32.28	36.13	12.49	34.92	45.98	74.00	-28.02	Horizontal	Peak
1225.86	35.01	26.27	4.70	36.56	29.42	74.00	-44.58	Vertical	Peak
3672.11	34.06	29.30	8.35	38.26	33.45	74.00	-40.55	Vertical	Peak
5297.97	32.37	31.30	9.98	36.49	37.16	74.00	-36.84	Vertical	Peak
9809.40	31.67	39.10	13.64	35.57	48.84	74.00	-25.16	Vertical	Peak

Band IV for Mid									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1276.82	34.63	26.22	4.79	36.53	29.11	74.00	-44.89	Horizontal	Peak
3104.22	34.76	28.80	7.61	38.21	32.96	74.00	-41.04	Horizontal	Peak
6251.26	31.53	33.00	11.00	35.30	40.23	74.00	-33.77	Horizontal	Peak
10321.74	30.83	39.38	13.58	35.35	48.44	74.00	-25.56	Horizontal	Peak
1192.01	34.91	26.24	4.64	36.57	29.22	74.00	-44.78	Vertical	Peak
2846.85	33.73	28.29	7.40	38.33	31.09	74.00	-42.91	Vertical	Peak
4748.67	32.58	31.40	9.52	37.03	36.47	74.00	-37.53	Vertical	Peak
9417.91	32.03	39.01	13.69	35.29	49.44	74.00	-24.56	Vertical	Peak

Band IV for High									
Bandwidth:			20MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1270.33	35.21	26.23	4.78	36.53	29.69	74.00	-44.31	Horizontal	Peak
2564.71	32.51	27.59	6.89	37.85	29.14	74.00	-44.86	Horizontal	Peak
4536.00	33.08	30.77	9.35	37.34	35.86	74.00	-38.14	Horizontal	Peak
9960.38	31.23	39.10	13.56	33.65	50.24	74.00	-23.76	Horizontal	Peak
1346.93	33.04	26.06	4.91	36.49	27.52	74.00	-46.48	Vertical	Peak
3225.04	38.10	28.65	7.75	38.24	36.26	74.00	-37.74	Vertical	Peak
4983.99	33.07	31.48	9.66	36.44	37.77	74.00	-36.23	Vertical	Peak
9346.26	31.48	39.11	13.64	35.45	48.78	74.00	-25.22	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11n(HT20), 802.11n(HT40) and 802.11ac all test at MIMO mode.

Band IV for Low									
Bandwidth:			40MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1258.76	36.46	26.24	4.76	36.54	30.92	74.00	-43.08	Horizontal	Peak
1835.28	36.76	25.36	6.01	37.17	30.96	74.00	-43.04	Horizontal	Peak
3222.10	37.59	28.67	7.75	38.24	35.77	74.00	-38.23	Horizontal	Peak
11599.57	32.04	40.17	13.63	33.15	52.69	74.00	-21.31	Horizontal	Peak
1297.74	36.51	26.20	4.83	36.52	31.02	74.00	-42.98	Vertical	Peak
3133.99	37.60	28.80	7.64	38.21	35.83	74.00	-38.17	Vertical	Peak
7260.15	32.81	36.26	11.92	35.00	45.99	74.00	-28.01	Vertical	Peak
12640.66	32.07	38.75	14.46	32.58	52.70	74.00	-21.30	Vertical	Peak

Band IV for High									
Bandwidth:			40MHz		Worst mode:			802.11n	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1294.15	36.57	26.21	4.82	36.52	31.08	74.00	-42.92	Horizontal	Peak
3222.10	37.59	28.67	7.75	38.24	35.77	74.00	-38.23	Horizontal	Peak
6164.57	33.55	32.76	10.95	35.32	41.94	74.00	-32.06	Horizontal	Peak
12025.29	32.20	39.69	14.65	33.28	53.26	74.00	-20.74	Horizontal	Peak
1151.89	37.29	25.92	4.55	36.59	31.17	74.00	-42.83	Vertical	Peak
2524.50	37.91	27.35	6.86	37.86	34.26	74.00	-39.74	Vertical	Peak
4346.94	35.55	30.34	9.08	37.58	37.39	74.00	-36.61	Vertical	Peak
12025.29	30.42	39.69	14.65	33.28	51.48	74.00	-22.52	Vertical	Peak

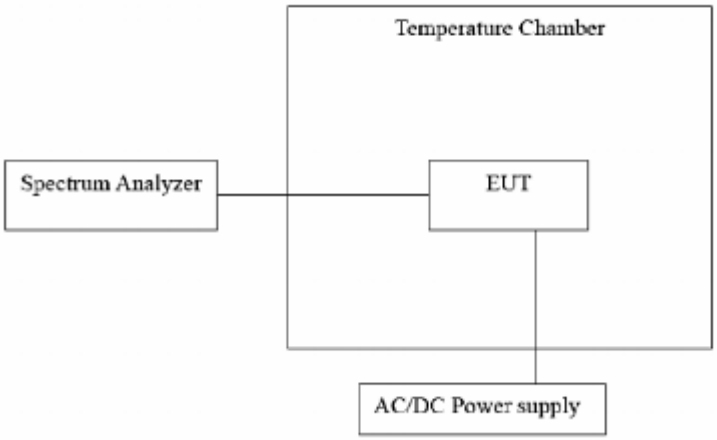
Band IV for Mid									
Bandwidth:			80MHz		Worst mode:			802.11ac	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1241.43	37.49	26.26	4.73	36.55	31.93	74.00	-42.07	Horizontal	Peak
3501.57	37.68	29.00	8.12	38.41	36.39	74.00	-37.61	Horizontal	Peak
6516.06	32.93	34.03	11.20	35.34	42.82	74.00	-31.18	Horizontal	Peak
12640.66	32.07	38.75	14.46	32.58	52.70	74.00	-21.30	Horizontal	Peak
1151.89	37.29	25.92	4.55	36.59	31.17	74.00	-42.83	Vertical	Peak
3133.99	37.60	28.80	7.64	38.21	35.83	74.00	-38.17	Vertical	Peak
5929.87	32.89	32.36	10.64	35.40	40.49	74.00	-33.51	Vertical	Peak
13214.04	32.02	39.16	14.91	32.56	53.53	74.00	-20.47	Vertical	Peak

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Measuring frequencies from 1 GHz to 40GHz of highest fundamental frequency.
4. The 802.11n(HT20), 802.11n(HT40) and 802.11ac all test at MIMO mode.

6.9. Frequency Stability Measurement

6.9.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of -30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	Pre-scan was performed at Low/ Mid /High channel, the worst case was found. Only the test data of Low channel was shown in this report.

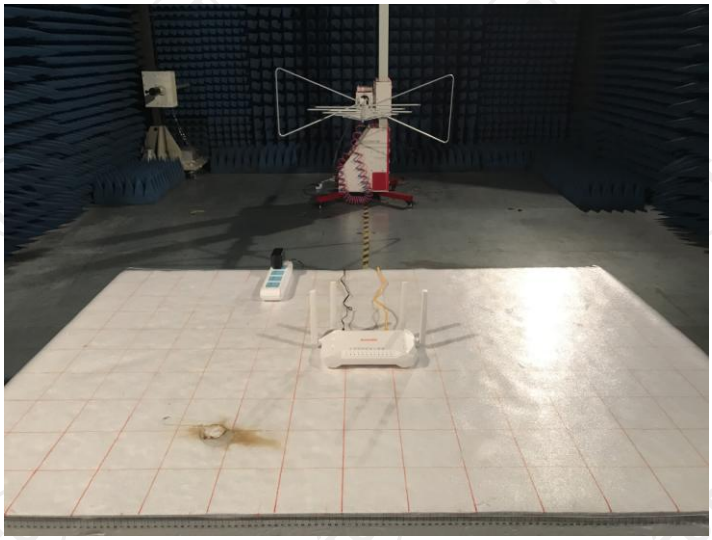
Test plots as follows:

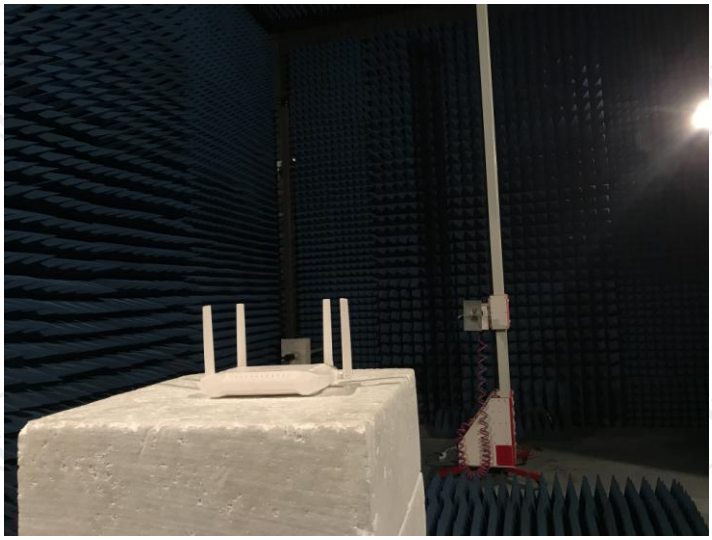
Band I for 802.11a Low					
Antenna 0 (Worst mode)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Frequency (MHz)	Freq.Dev (Hz)	Deviation (ppm)
100%	12.0	-30	5180	-62000.00	-11.97
100%		-20	5180	-62000.00	-11.97
100%		-10	5180	-62000.00	-11.97
100%		0	5180	-61000.00	-11.97
100%		10	5180	-61000.00	-11.97
100%		20	5180	-61000.00	-11.97
100%		30	5180	-61000.00	-11.97
100%		40	5180	-61000.00	-11.97
100%		50	5180	-61000.00	-11.97
85%	10.2	20	5180	-62000.00	-11.97
115%	13.8	20	5180	-62000.00	-11.97

Band IV for 802.11a Low					
Antenna 1 (Worst mode)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Frequency (MHz)	Freq.Dev (Hz)	Deviation (ppm)
100%	12.0	-30	5745	-63000.00	-10.97
100%		-20	5745	-63000.00	-10.97
100%		-10	5745	-63000.00	-10.97
100%		0	5745	-63000.00	-10.97
100%		10	5745	-63000.00	-10.97
100%		20	5745	-63000.00	-10.97
100%		30	5745	-63000.00	-10.97
100%		40	5745	-63000.00	-10.97
100%		50	5745	-62000.00	-10.79
85%	10.2	20	5745	-64000.00	-11.14
115%	13.8	20	5745	-64000.00	-11.14

Appendix A: Photographs of Test Setup

Radiated Emission





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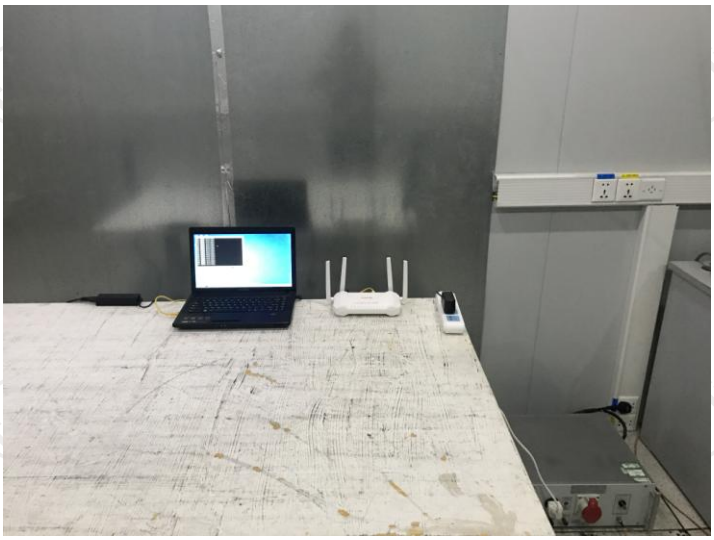

Appendix B: Photographs of EUT

Refer to the test report No.: TRE1708023501.

********END OF REPORT********