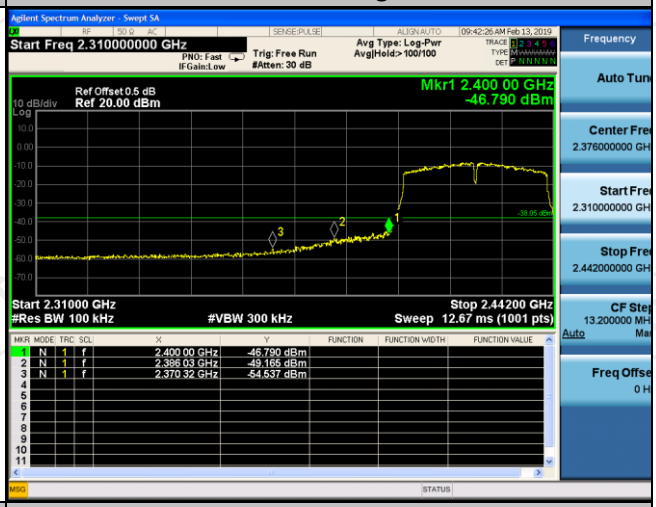
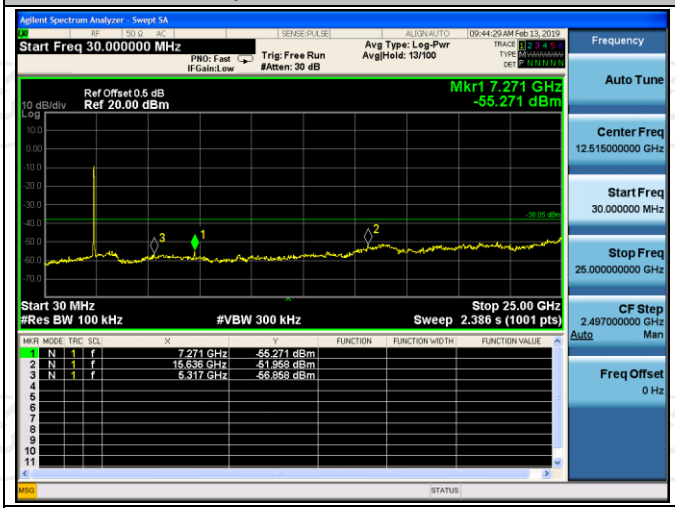
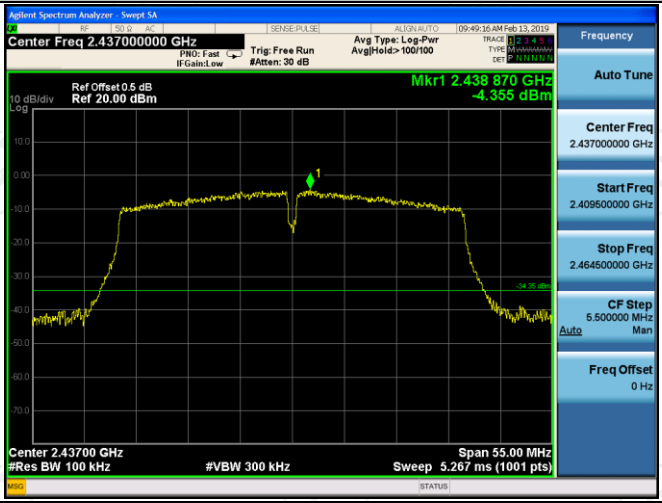
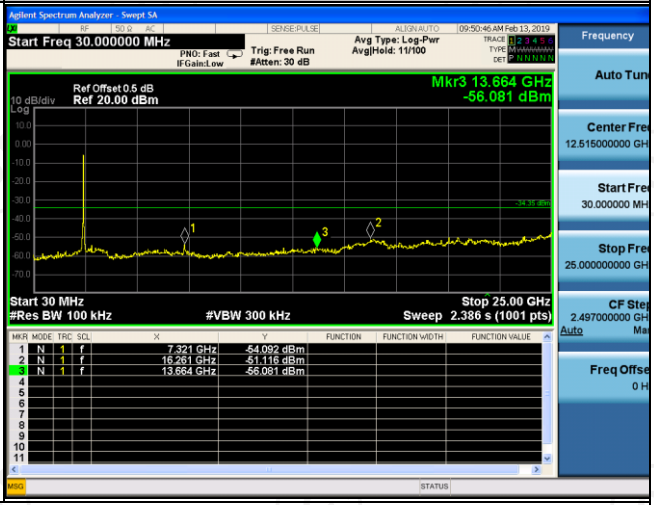
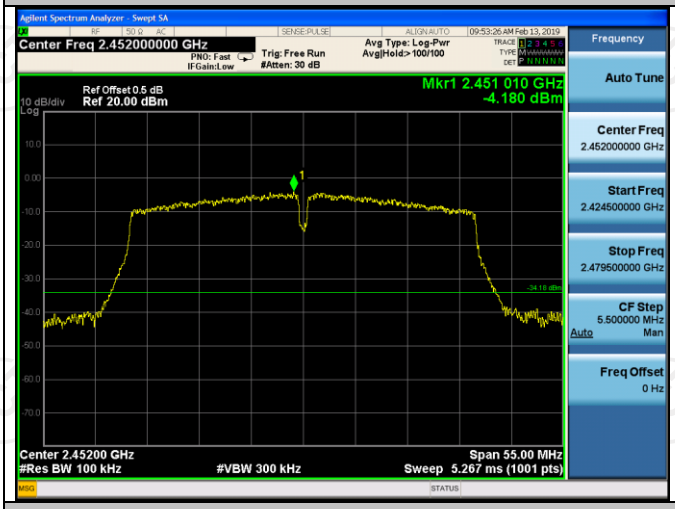
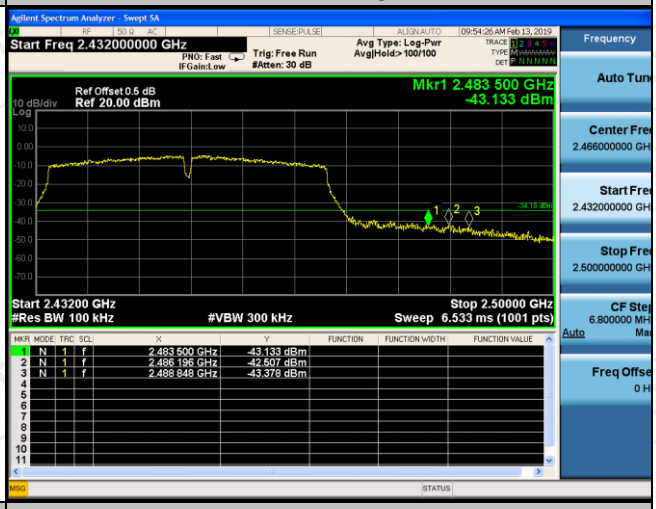
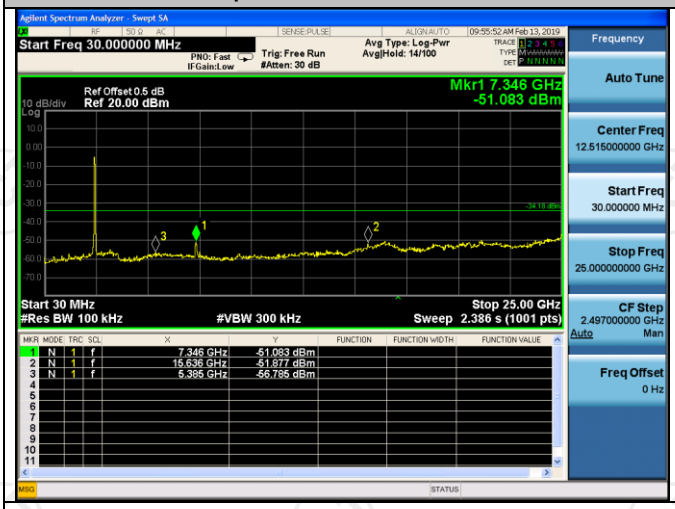
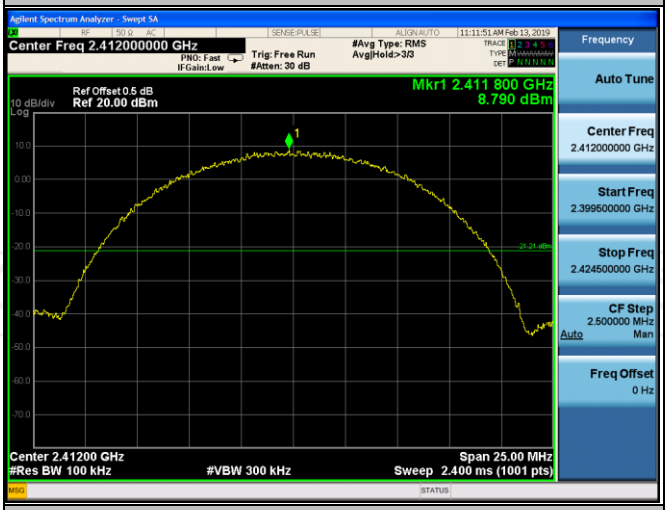
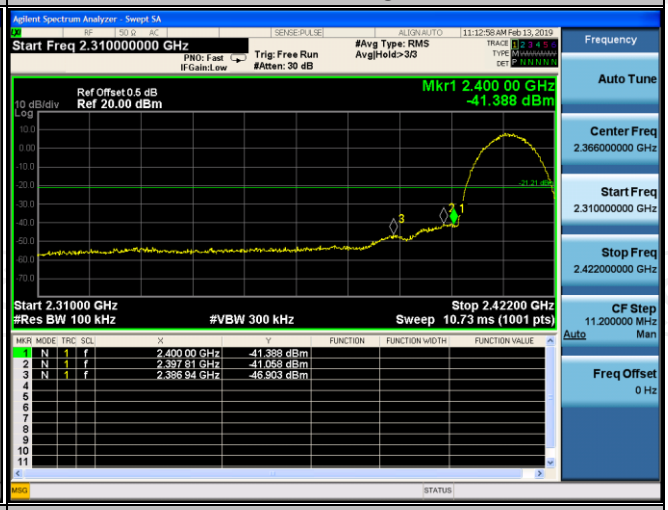
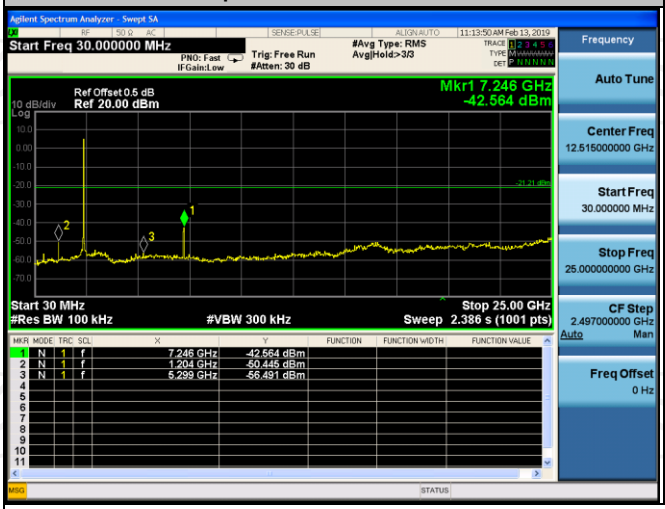
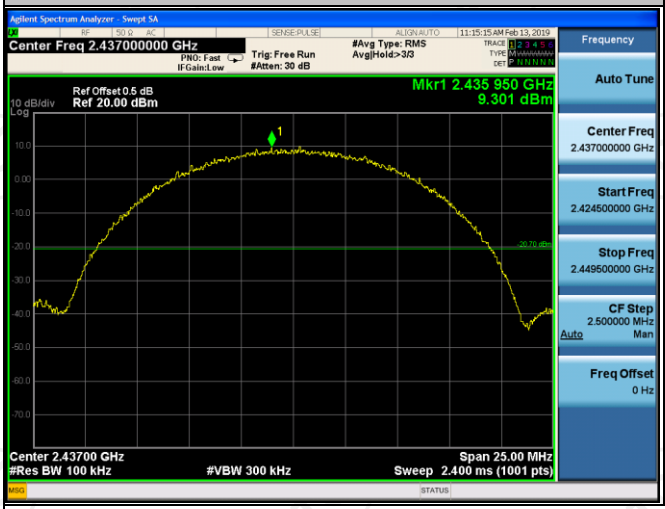
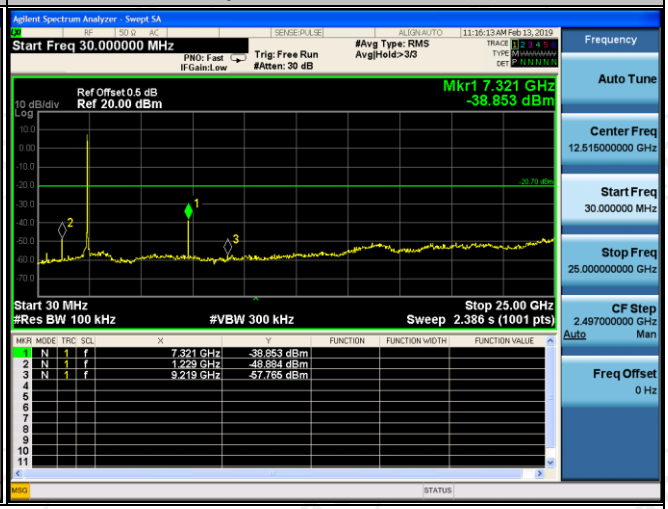
802.11n (HT40) Modulation

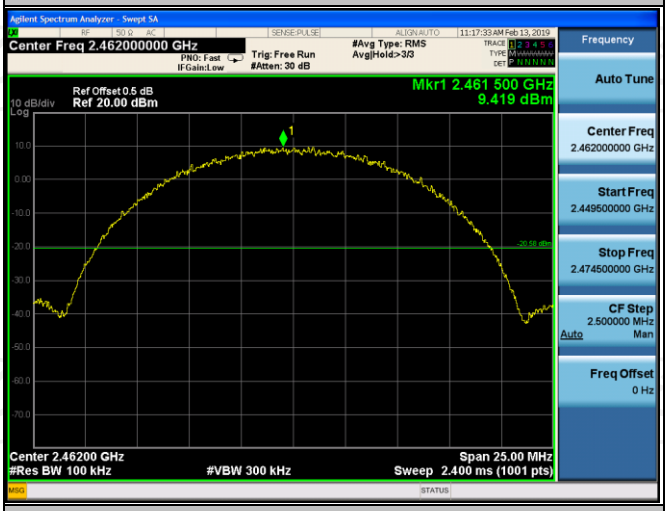
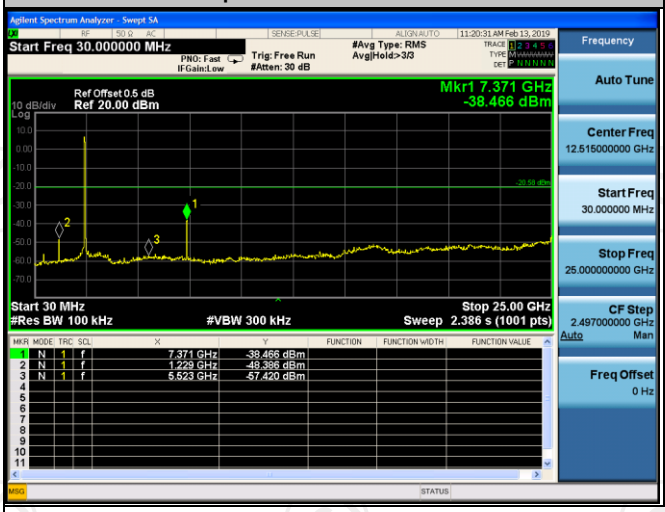
100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Lowest Channel	
100kHz PSD reference Level	**Spurious emission**
	
Middle Channel	

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Highest Channel	

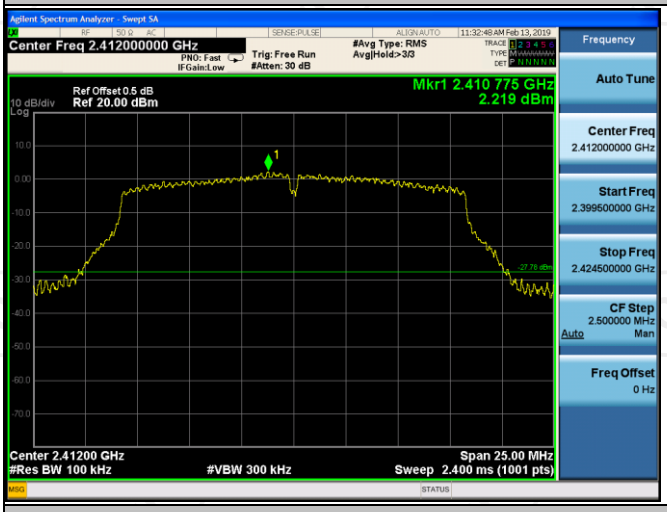
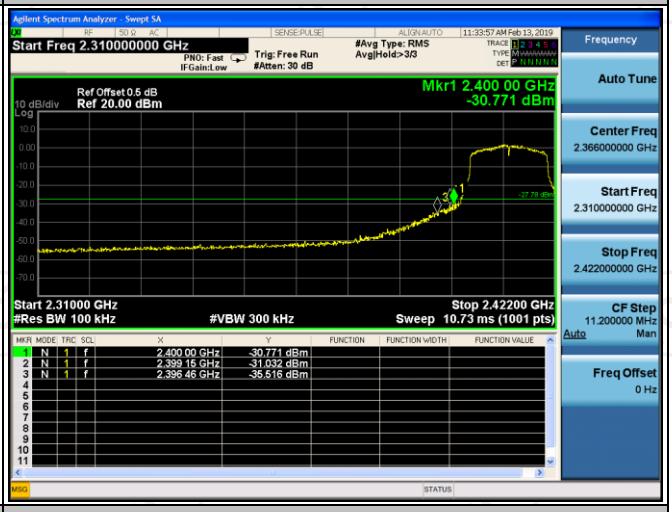
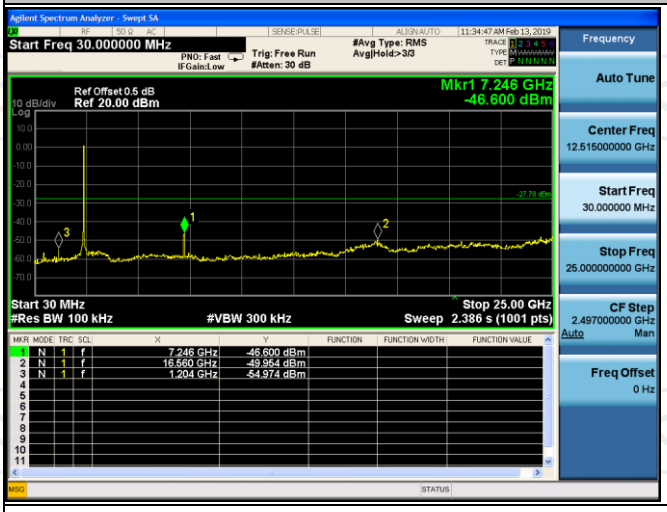
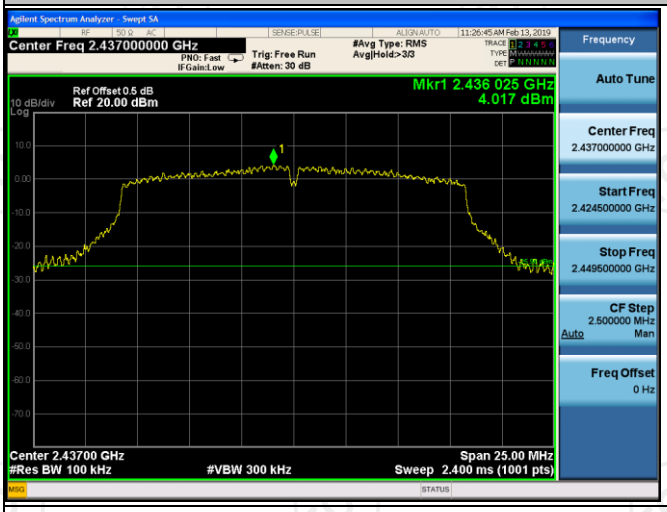
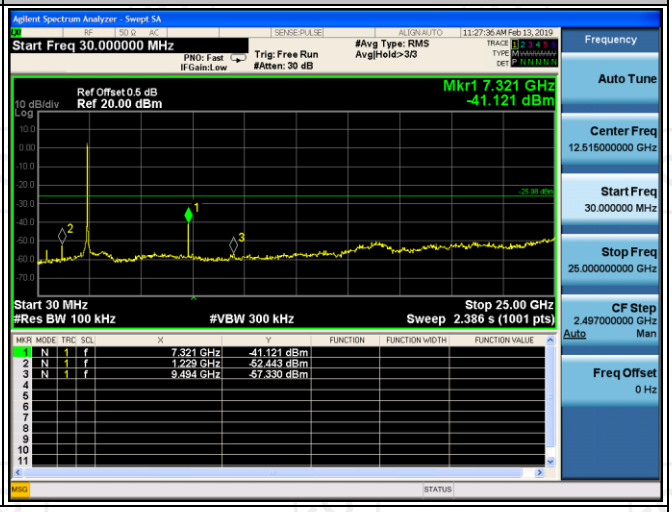
Antenna 1:

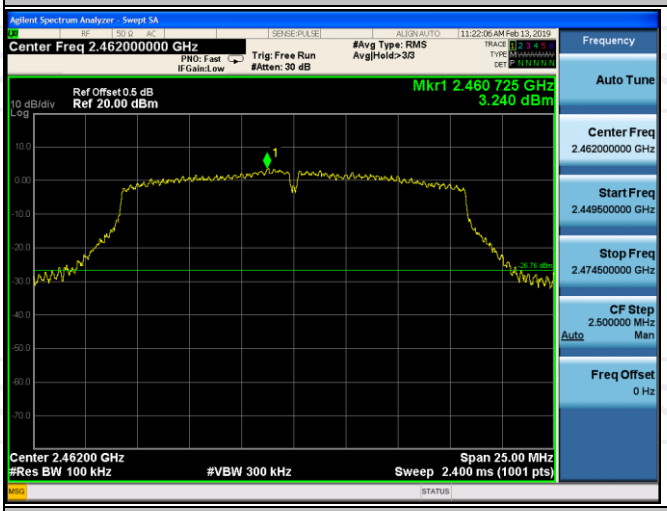
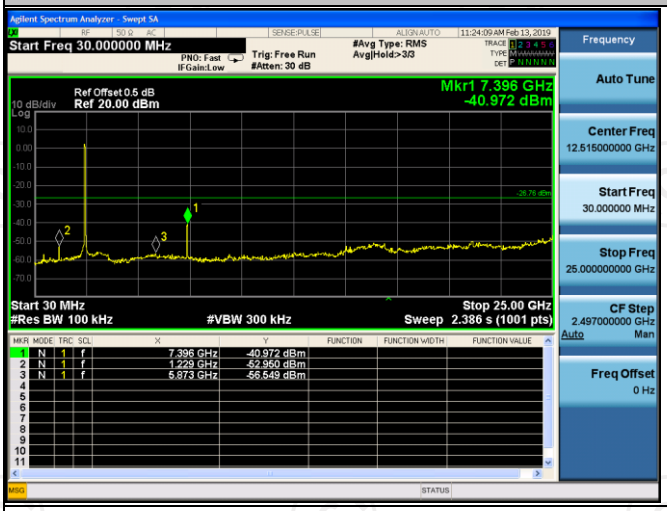
802.11b Modulation

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Lowest Channel	
100kHz PSD reference Level	**Spurious emission**
	
Middle Channel	

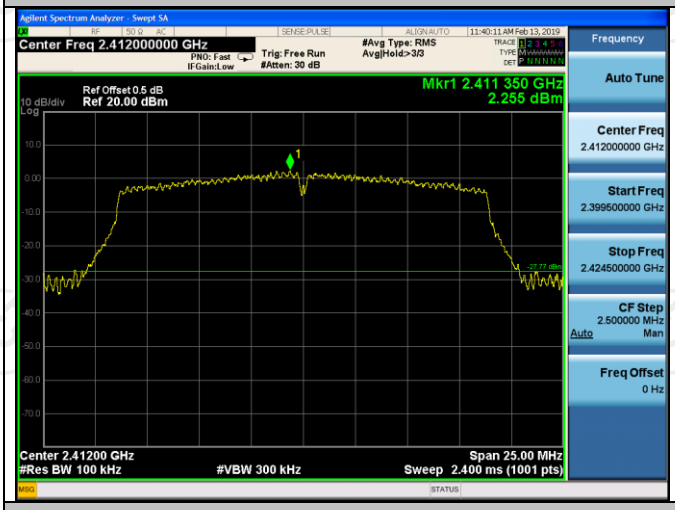
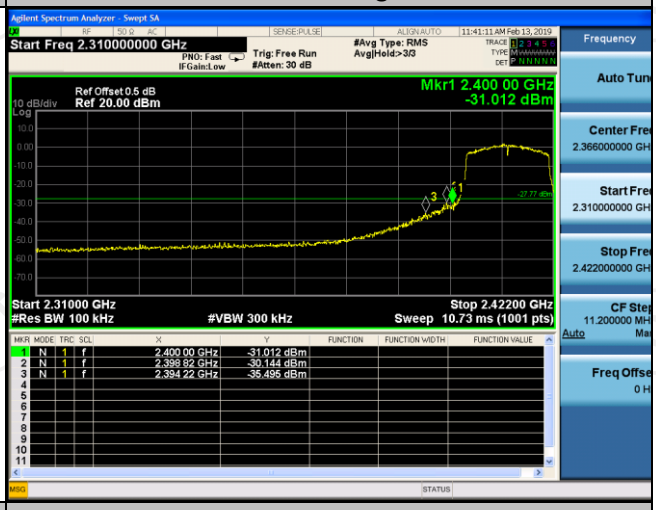
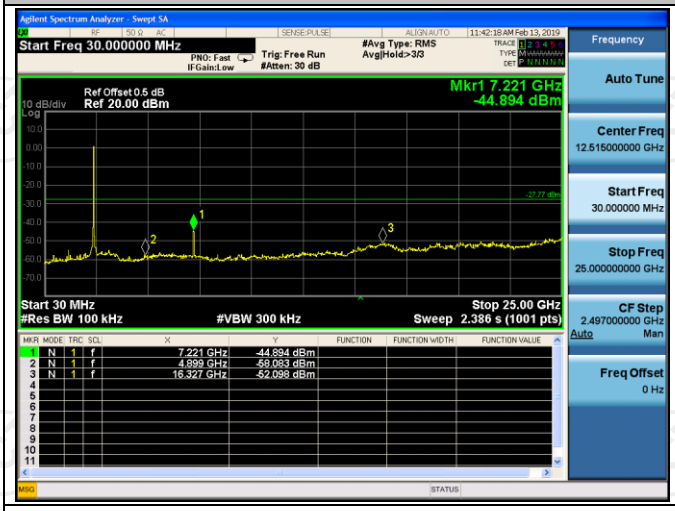
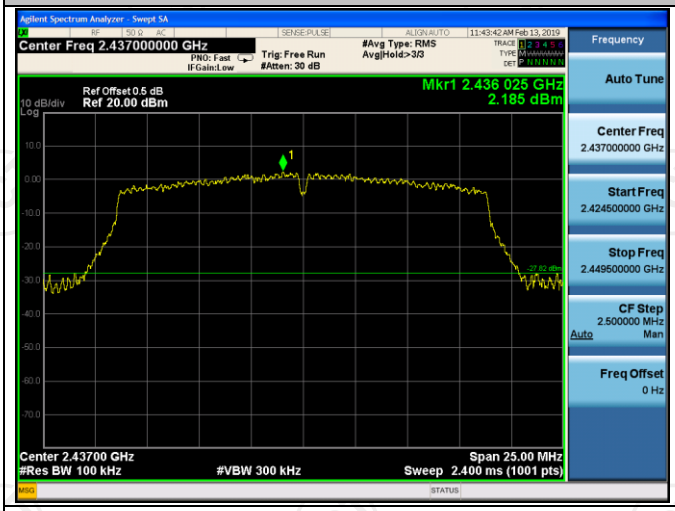
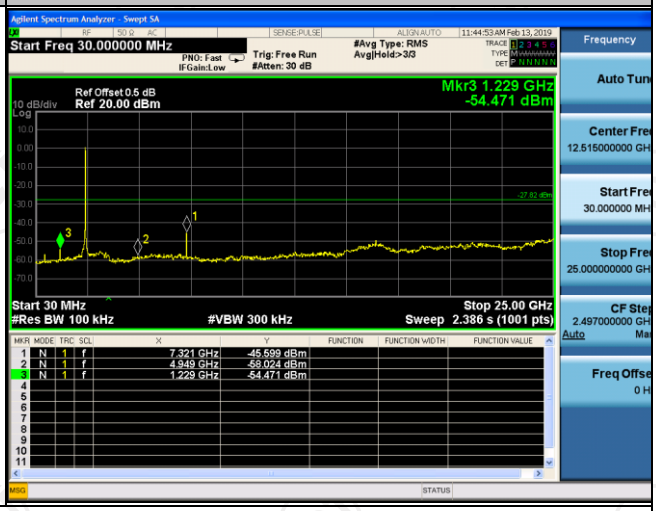
100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Highest Channel	

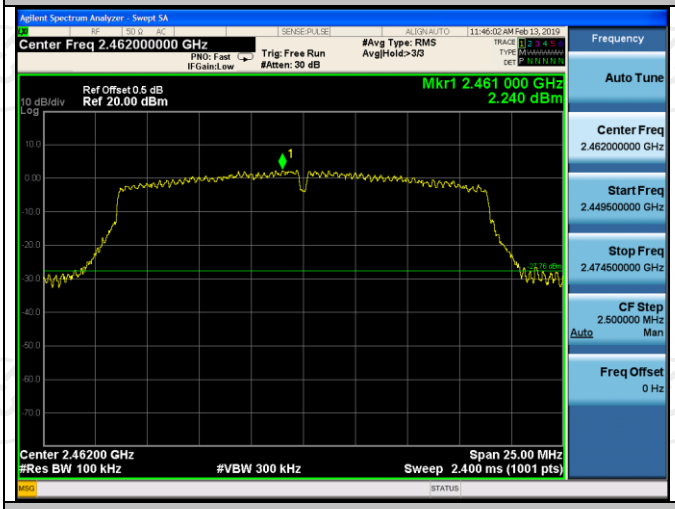
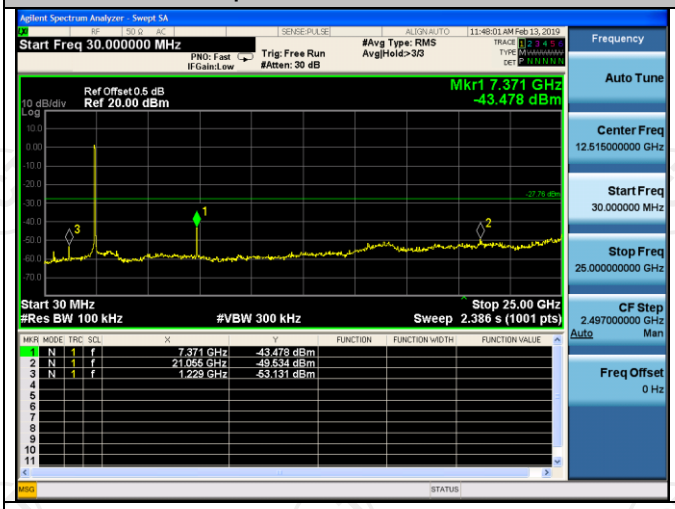
802.11g Modulation

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Lowest Channel	
100kHz PSD reference Level	**Spurious emission**
	
Middle Channel	

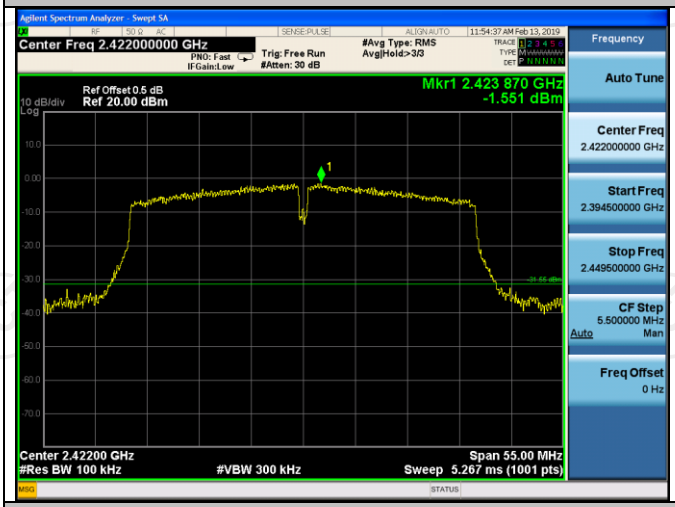
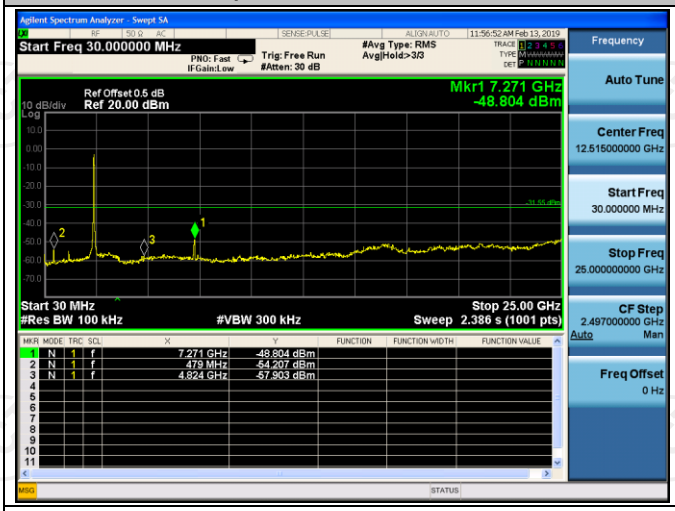
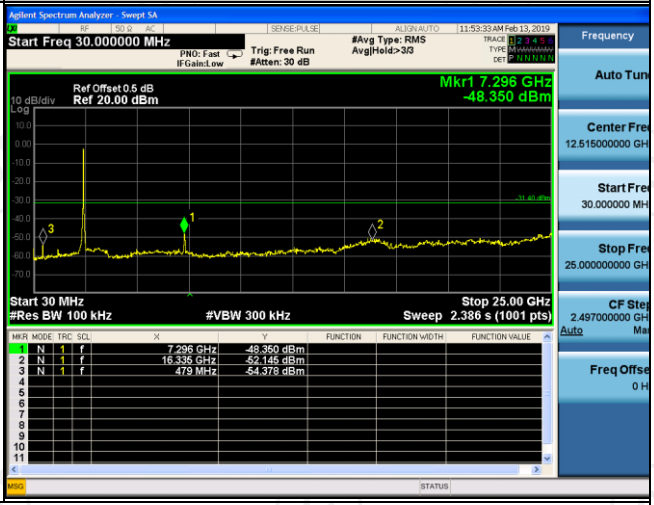
100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Highest Channel	

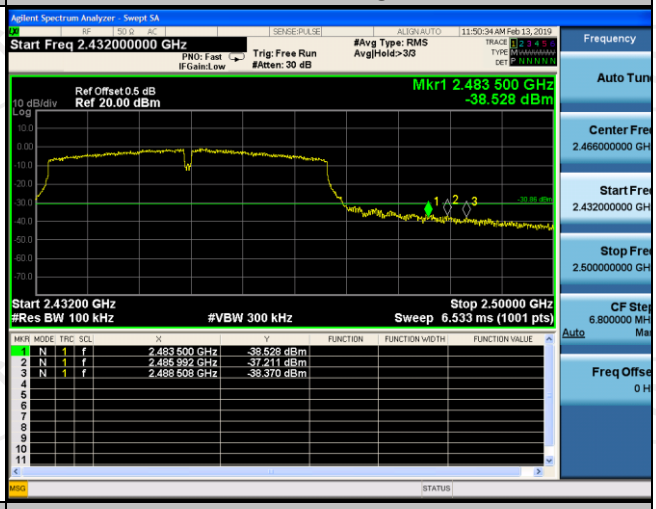
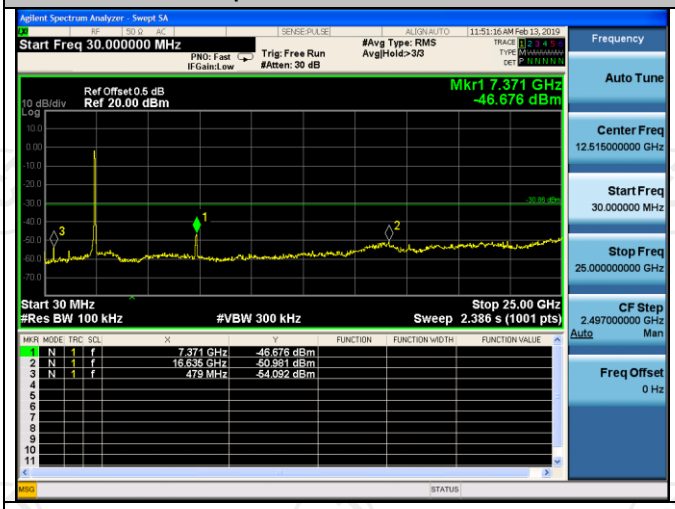
802.11n (HT20) Modulation

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Lowest Channel	
100kHz PSD reference Level	**Spurious emission**
	
Middle Channel	

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Highest Channel	

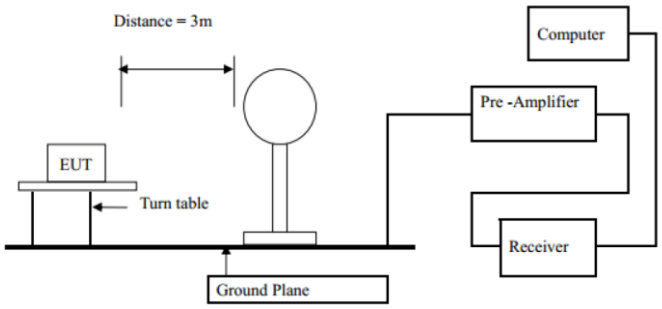
802.11n (HT40) Modulation

100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Lowest Channel	
100kHz PSD reference Level	**Spurious emission**
	
Middle Channel	

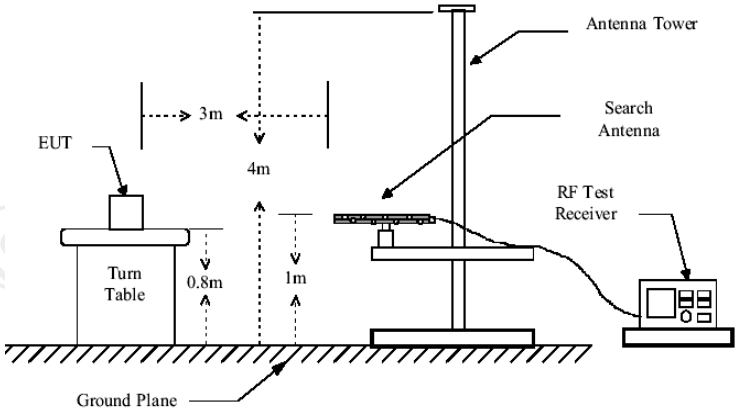
100kHz PSD reference Level	Band Edge
	
Spurious emission	
	
Highest Channel	

6.8. Radiated Spurious Emission Measurement

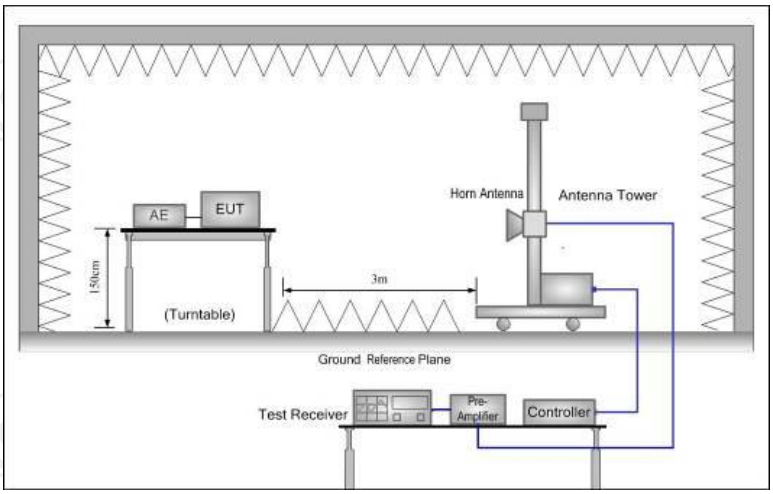
6.8.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10: 2013</td></tr>
<tr><td>Frequency Range:</td><td>9 kHz to 25 GHz</td></tr>
<tr><td>Measurement Distance:</td><td>3 m</td></tr>
<tr><td>Antenna Polarization:</td><td>Horizontal & Vertical</td></tr>
<tr><td>Operation mode:</td><td>Transmitting mode with modulation</td></tr>
<tr><td>Receiver Setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>9kHz- 150kHz</td><td>Quasi-peak</td><td>200Hz</td><td>1kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>150kHz-30MHz</td><td>Quasi-peak</td><td>9kHz</td><td>30kHz</td><td>Quasi-peak Value</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>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Field Strength (microvolts/meter)</td><td>Measurement Distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(KHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(KHz)</td><td>30</td></tr>
<tr><td>1.705-30</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100</td><td>3</td></tr>
<tr><td>88-216</td><td>150</td><td>3</td></tr>
<tr><td>216-960</td><td>200</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
<table>
<tr><td>Frequency</td><td>Field Strength (microvolts/meter)</td><td>Measurement Distance (meters)</td><td>Detector</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500</td><td>3</td><td>Average</td></tr>
<tr><td>5000</td><td>3</td><td>Peak</td></tr>
</table>
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions below 30MHz
 

30MHz to 1GHz</td></tr>
</table>



Above 1GHz



Test Procedure:

1. The testing follows FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05 v05r01.
2. For the radiated emission test below 1GHz:
   The EUT was placed on a turntable with 1.5 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level.
   For the radiated emission test above 1GHz:
   Place the measurement antenna on a turntable with 1.5 meter above ground, which is away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission

	and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. 3. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level 4. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported. 5. Use the following spectrum analyzer settings: (1) Span shall wide enough to fully capture the emission being measured; (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥RBW; Sweep = auto; Detector function = peak; Trace = max hold; (3) Set RBW = 1 MHz, VBW= 3MHz for f 1 GHz for peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW ≥1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Test results:	PASS

6.8.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Test Receiver	ROHDE&SCHWARZ	ESIB7	100197	Jul. 17, 2019
Spectrum Analyzer	ROHDE&SCHWARZ	FSQ40	200061	Sep. 20, 2019
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 16, 2019
Pre-amplifier	HP	8447D	2727A05017	Sep. 16, 2019
Loop antenna	ZHINAN	ZN30900A	12024	Oct. 20, 2019
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 02, 2019
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Oct. 20, 2019
Antenna Mast	Keleto	RE-AM	N/A	N/A
Coax cable (9KHz-1GHz)	TCT	RE-low-01	N/A	Sep. 16, 2019
Coax cable (9KHz-40GHz)	TCT	RE-high-02	N/A	Sep. 16, 2019
Coax cable (9KHz-1GHz)	TCT	RE-low-03	N/A	Sep. 16, 2019
Coax cable (9KHz-40GHz)	TCT	RE-high-04	N/A	Sep. 16, 2019
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

Note: *1. 802.11b/802.11g is SISO, transimitte signal from two antenna is completely uncorrelated. 802.11n(H20)/802.11n(H40) is MIMO, transimitte signal from two antenna is correlated.*

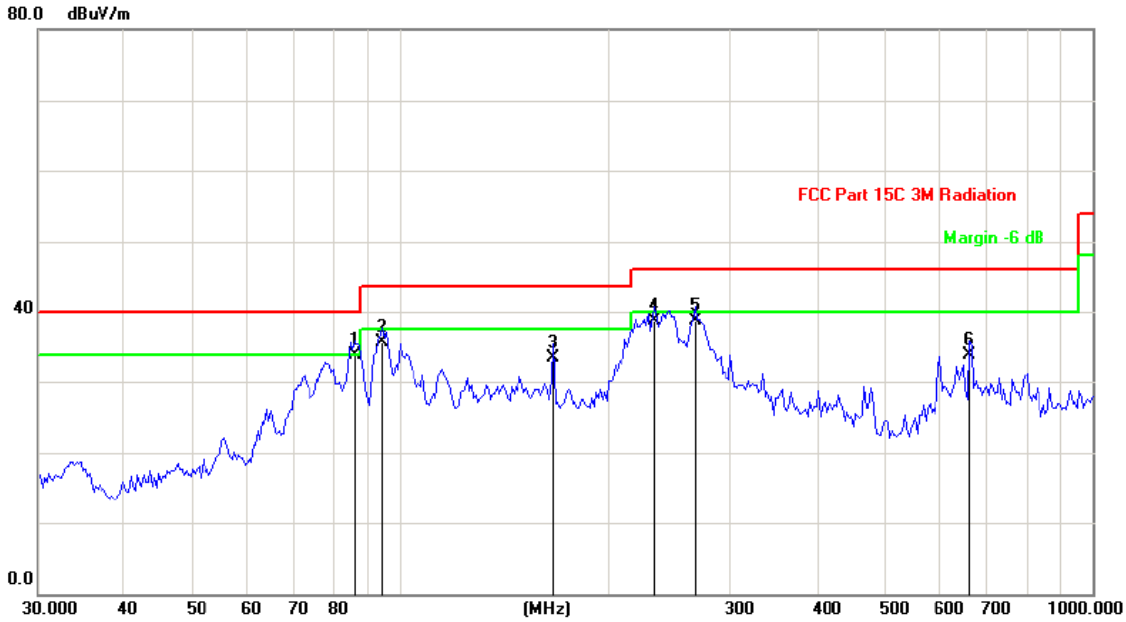
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.8.3. Test Data

Please refer to following diagram for individual

Below 1GHz

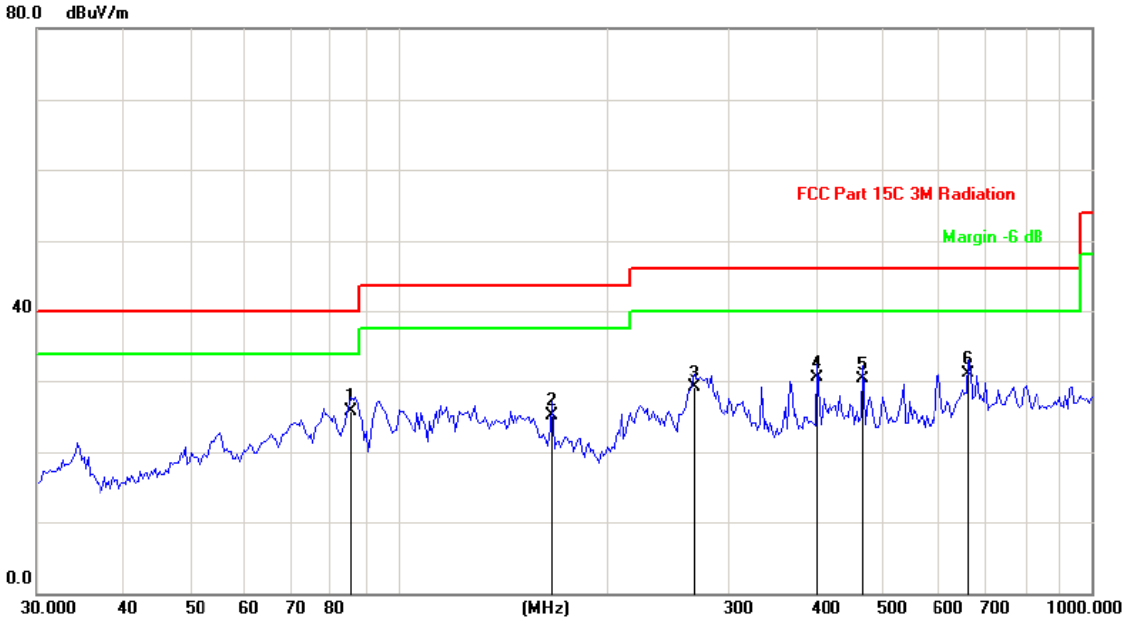
Horizontal:



Site	Polarization:	***Horizontal***	Temperature: 25
Limit: FCC Part 15C 3M Radiation	Power:		Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	*	86.0795	46.79	-12.87	33.92	40.00	-6.08	QP			
2		94.3137	45.05	-9.37	35.68	43.50	-7.82	QP			
3		166.6385	48.93	-15.50	33.43	43.50	-10.07	QP			
4		233.4881	51.83	-13.04	38.79	46.00	-7.21	QP			
5		266.8395	50.68	-12.01	38.67	46.00	-7.33	QP			
6		665.2610	39.52	-5.55	33.97	46.00	-12.03	QP			

Vertical:



Site

Limit: FCC Part 15C 3M Radiation

Polarization: *Vertical*

Power:

Temperature: 25

Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	*	85.4769	38.94	-13.26	25.68	40.00	-14.32	QP			
2		166.6385	40.58	-15.50	25.08	43.50	-18.42	QP			
3		266.8395	41.07	-12.01	29.06	46.00	-16.94	QP			
4		401.1050	39.37	-8.94	30.43	46.00	-15.57	QP			
5		468.1650	38.36	-7.99	30.37	46.00	-15.63	QP			
6		665.2610	36.57	-5.55	31.02	46.00	-14.98	QP			

Note: *1.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*

2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)), and the worst case Mode (Middle channel and 802.11b)

Test Result of Radiated Spurious at Band edges

Modulation Type: 802.11b

Low channel: 2412 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2310	H	46.24	-4.20	42.04	74.00	54.00
2377.38	H	48.65	-4.10	44.55	74.00	54.00
2390	H	52.87	-3.94	48.93	74.00	54.00
2310	V	45.03	-4.20	40.83	74.00	54.00
2377.38	V	54.46	-4.10	50.36	74.00	54.00
2390	V	52.61	-3.94	48.67	74.00	54.00

Modulation Type: 802.11b

High channel: 2462 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2483.5	H	46.59	-3.60	42.99	74.00	54.00
2487.09	H	47.38	-3.50	43.88	74.00	54.00
2500	H	46.20	-3.34	42.86	74.00	54.00
2483.5	V	50.17	-3.60	46.57	74.00	54.00
2487.09	V	47.96	-3.50	44.46	74.00	54.00
2500	V	42.32	-3.34	38.98	74.00	54.00

Modulation Type: 802.11g

Low channel: 2412 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2310	H	44.73	-4.20	40.53	74.00	54.00
2388.96	H	51.21	-4.10	47.11	74.00	54.00
2390	H	53.67	-3.94	49.73	74.00	54.00
2310	V	45.24	-4.20	41.04	74.00	54.00
2388.96	V	48.86	-4.10	44.76	74.00	54.00
2390	V	53.35	-3.94	49.41	74.00	54.00

Modulation Type: 802.11g

High channel: 2462 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2483.5	H	51.84	-3.60	48.24	74.00	54.00
2487.59	H	52.76	-3.50	49.26	74.00	54.00
2500	H	48.57	-3.34	45.23	74.00	54.00
2483. 5	V	50.25	-3.60	46.65	74.00	54.00
2487.59	V	49.61	-3.50	46.11	74.00	54.00
2500	V	48.19	-3.34	44.85	74.00	54.00

Modulation Type: 802.11n(20MHz)

Low channel: 2412 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2310	H	48.76	-4.20	44.56	74.00	54.00
2388.01	H	52.14	-4.10	48.04	74.00	54.00
2390	H	53.32	-3.94	49.38	74.00	54.00
2310	V	48.57	-4.20	44.37	74.00	54.00
2388.01	V	53.29	-4.10	49.19	74.00	54.00
2390	V	52.64	-3.94	48.70	74.00	54.00

Modulation Type: 802.11n(20MHz)

High channel: 2462 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2483.5	H	53.71	-3.60	50.11	74.00	54.00
2392.55	H	53.96	-3.50	50.46	74.00	54.00
2500	H	48.75	-3.34	45.41	74.00	54.00
2483. 5	V	54.28	-3.60	50.68	74.00	54.00
2392.55	V	53.49	-3.50	49.99	74.00	54.00
2500	V	48.06	-3.34	44.72	74.00	54.00

Modulation Type: 802.11n(40MHz)

Low channel: 2422 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2310	H	49.73	-4.20	45.53	74.00	54.00
2387.85	H	54.49	-4.10	50.39	74.00	54.00
2390	H	53.76	-3.94	49.82	74.00	54.00
2310	V	51.54	-4.20	47.34	74.00	54.00
2389.98	V	53.82	-4.10	49.72	74.00	54.00
2390	V	54.15	-3.94	50.21	74.00	54.00

Modulation Type: 802.11n(40MHz)

High channel: 2452 MHz						
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	Correction Factor (dB/m)	Peak Final Emission Level	Peak limit (dBμV/m)	AV limit (dBμV/m)
2483.5	H	50.81	-3.60	47.21	74.00	54.00
2493.51	H	52.53	-3.50	49.03	74.00	54.00
2500	H	51.07	-3.34	47.73	74.00	54.00
2493.51	V	52.29	-3.60	48.69	74.00	54.00
2489.36	V	54.75	-3.46	51.25	74.00	54.00
2500	V	51.46	-3.34	48.12	74.00	54.00

Note:

1. *Peak Final Emission Level=Peak Reading + Correction Factor;*
2. *Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*

Above 1GHz

Modulation Type: 802.11b

Low channel: 2412 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	42.71	---	0.75	43.46	---	74	54	-10.54
7236	H	32.42	---	9.87	42.29	---	74	54	-11.71
---	H	---	---	---	---	---	---	---	---
4824	V	44.07	---	0.75	44.82	---	74	54	-9.18
7236	V	32.63	---	9.87	42.50	---	74	54	-11.50
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	40.29	---	0.97	41.26	---	74	54	-12.74
7311	H	34.86	---	9.83	44.69	---	74	54	-9.31
---	H	---	---	---	---	---	---	---	---
4874	V	40.57	---	0.97	41.54	---	74	54	-12.46
7311	V	32.92	---	9.83	42.75	---	74	54	-11.25
---	V	---	---	---	---	----	---	---	---

High channel: 2462 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	40.18	---	1.18	41.36	---	74	54	-12.64
7386	H	34.30	---	10.07	44.37	---	74	54	-9.63
---	H	---	---	---	---	---	---	---	---
4924	V	39.62	---	1.18	40.8	---	74	54	-13.20
7386	V	31.46	---	10.07	41.53	---	74	54	-12.47
---	V	---	---	---	---	---	---	---	---

Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

Modulation Type: 802.11g

Low channel: 2412 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	41.27	---	0.75	42.02	---	74	54	-11.98
7236	H	33.65	---	9.87	43.52	---	74	54	-10.48
---	H	---	---	---	---	---	---	---	---
4824	V	42.78	---	0.75	43.53	---	74	54	-10.47
7236	V	33.12	---	9.87	42.99	---	74	54	-11.01
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	42.35	---	0.97	43.32	---	74	54	-10.68
7311	H	35.09	---	9.83	44.92	---	74	54	-9.08
---	H	---	---	---	---	---	---	---	---
4874	V	42.81	---	0.97	43.78	---	74	54	-10.22
7311	V	34.46	---	9.83	44.29	---	74	54	-9.71
---	V	---	---	---	---	----	---	---	---

High channel: 2462 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	42.50	---	1.18	43.68	---	74	54	-10.32
7386	H	34.93	---	10.07	45.00	---	74	54	-9.00
---	H	---	---	---	---	---	---	---	---
4924	V	41.46	---	1.18	42.64	---	74	54	-11.36
7386	V	32.79	---	10.07	42.86	---	74	54	-11.14
---	V	---	---	---	---	---	---	---	---

Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

Modulation Type: 802.11n (HT20)

Low channel: 2412 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	44.91	---	0.75	45.66	---	74	54	-8.34
7236	H	35.07	---	9.87	44.94	---	74	54	-9.06
---	H	---	---	---	---	---	---	---	---
4824	V	44.84	---	0.75	45.59	---	74	54	-8.41
7236	V	34.39	---	9.87	44.26	---	74	54	-9.74
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	46.58	---	0.97	47.55	---	74	54	-6.45
7311	H	35.26	---	9.83	45.09	---	74	54	-8.91
---	H	---	---	---	---	---	---	---	---
4874	V	44.60	---	0.97	45.57	---	74	54	-8.43
7311	V	34.43	---	9.83	44.26	---	74	54	-9.74
---	V	---	---	---	---	----	---	---	---

High channel: 2462 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	43.15	---	1.18	44.33	---	74	54	-9.67
7386	H	33.72	---	10.07	43.79	---	74	54	-10.21
---	H	---	---	---	---	---	---	---	---
4924	V	42.69	---	1.18	43.87	---	74	54	-10.13
7386	V	33.47	---	10.07	43.54	---	74	54	-10.46
---	V	---	---	---	---	---	---	---	---

Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

Modulation Type: 802.11n (HT40)

Low channel: 2422 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
4844	H	42.62	---	0.75	43.37	---	74	54	-10.63
7266	H	33.19	---	9.87	43.06	---	74	54	-10.94
---	H	---	---	---	---	---	---	---	---
4824	V	42.86	---	0.75	43.61	---	74	54	-10.39
7236	V	32.31	---	9.87	42.18	---	74	54	-11.82
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
4874	H	43.83	---	0.97	44.80	---	74	54	-9.20
7311	H	33.05	---	9.83	42.88	---	74	54	-11.12
---	H	---	---	---	---	---	---	---	---
4874	V	42.27	---	0.97	43.24	---	74	54	-10.76
7311	V	32.94	---	9.83	42.77	---	74	54	-11.23
---	V	---	---	---	---	----	---	---	---

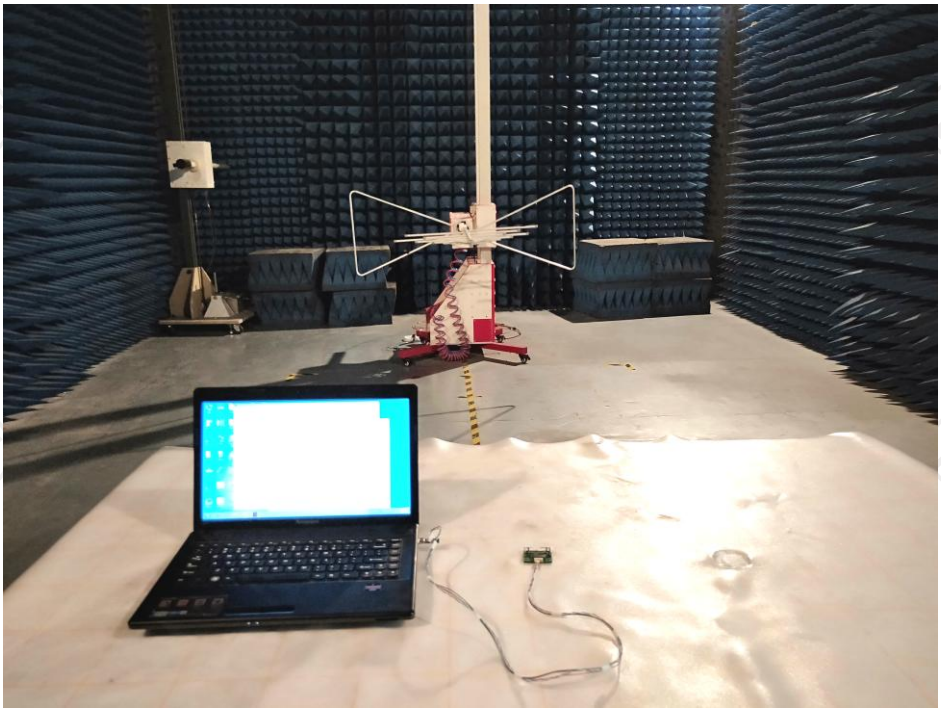
High channel: 2452 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
4904	H	43.39	---	1.18	44.57	---	74	54	-9.43
7356	H	33.70	---	10.07	43.77	---	74	54	-10.23
---	H	---	---	---	---	---	---	---	---
4904	V	42.16	---	1.18	43.34	---	74	54	-10.66
7356	V	34.82	---	10.07	44.89	---	74	54	-9.11
---	V	---	---	---	---	---	---	---	---

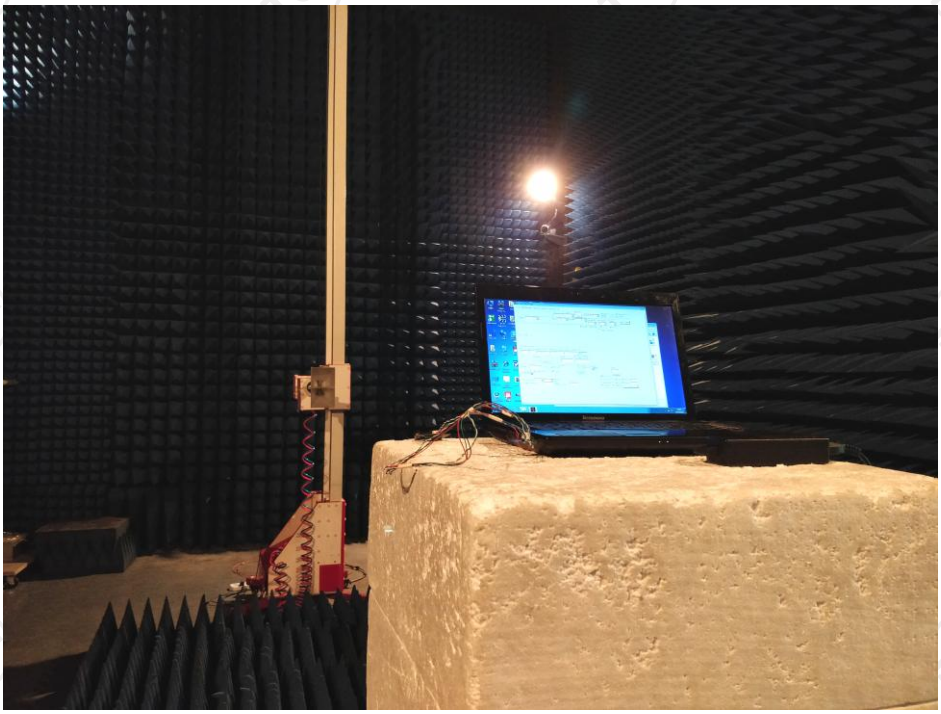
Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBµV/m)-Average limit (dBµV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

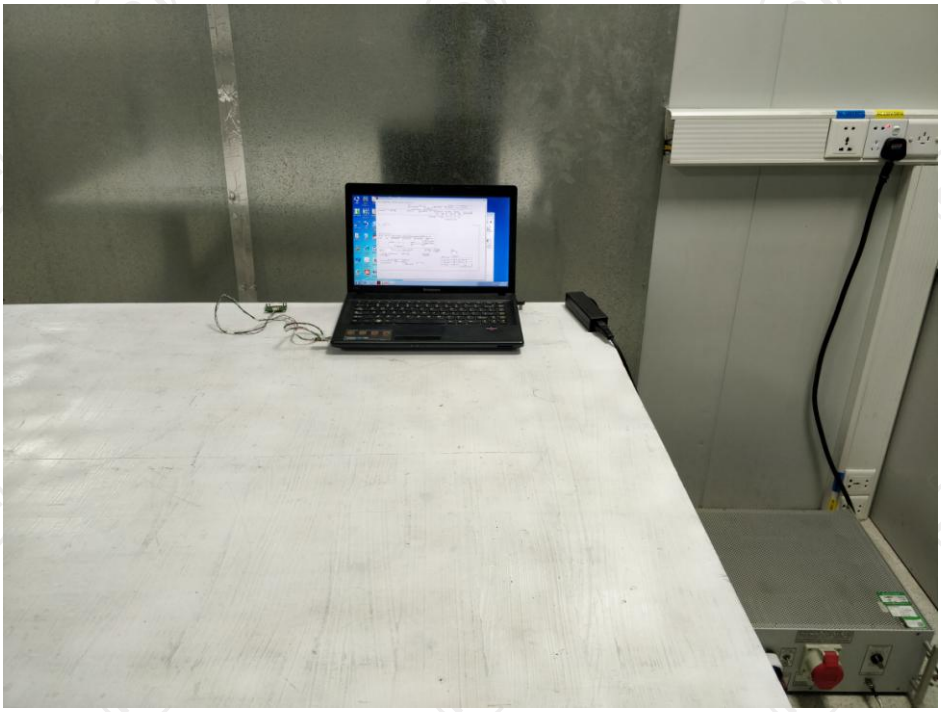
Appendix B: Photographs of Test Setup

Product: WIFI Module
Model: W2NM2510
Radiated Emission



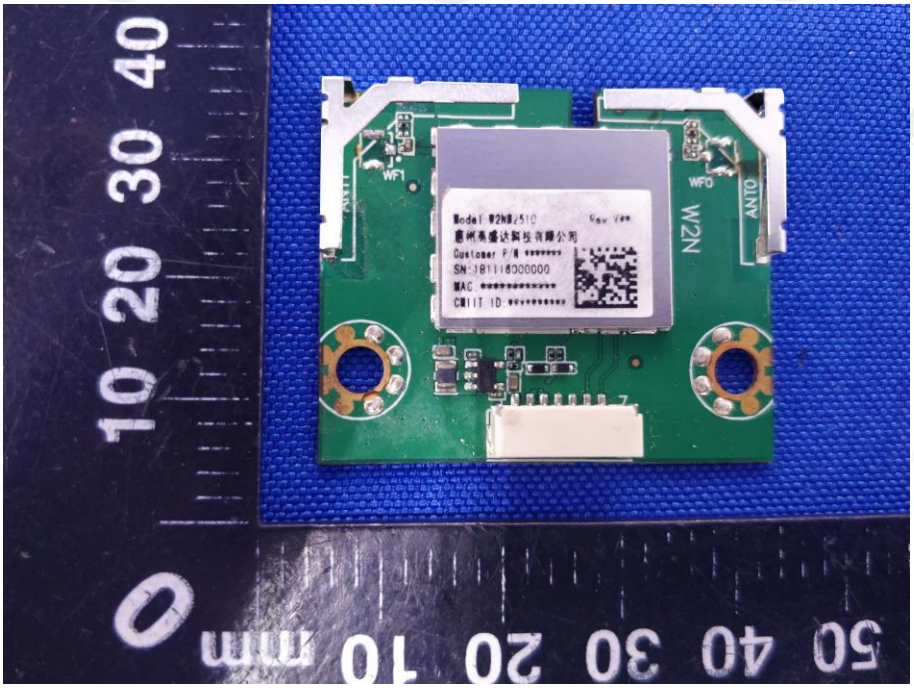


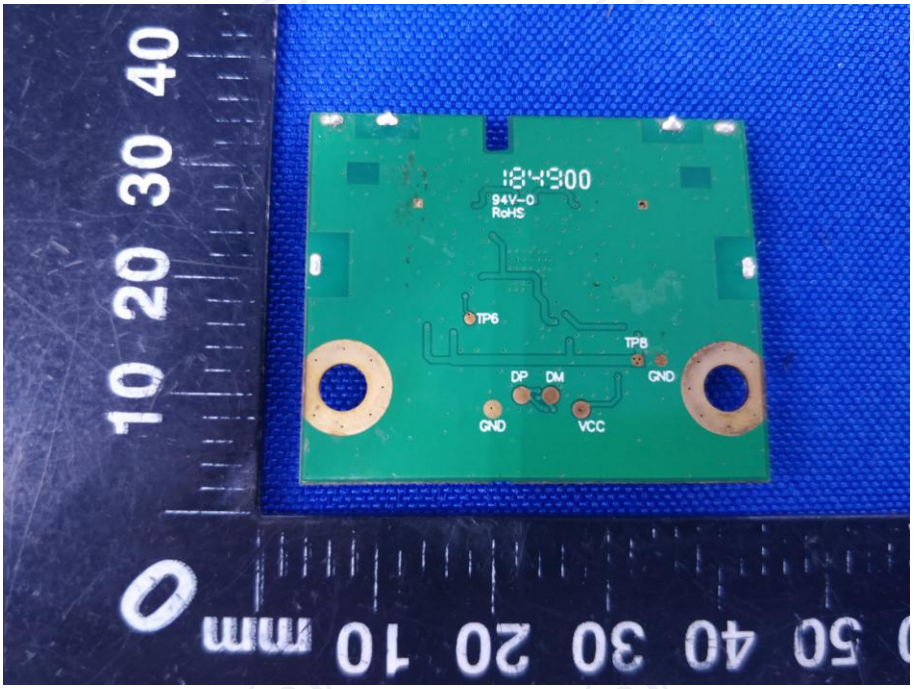
Conducted Emission



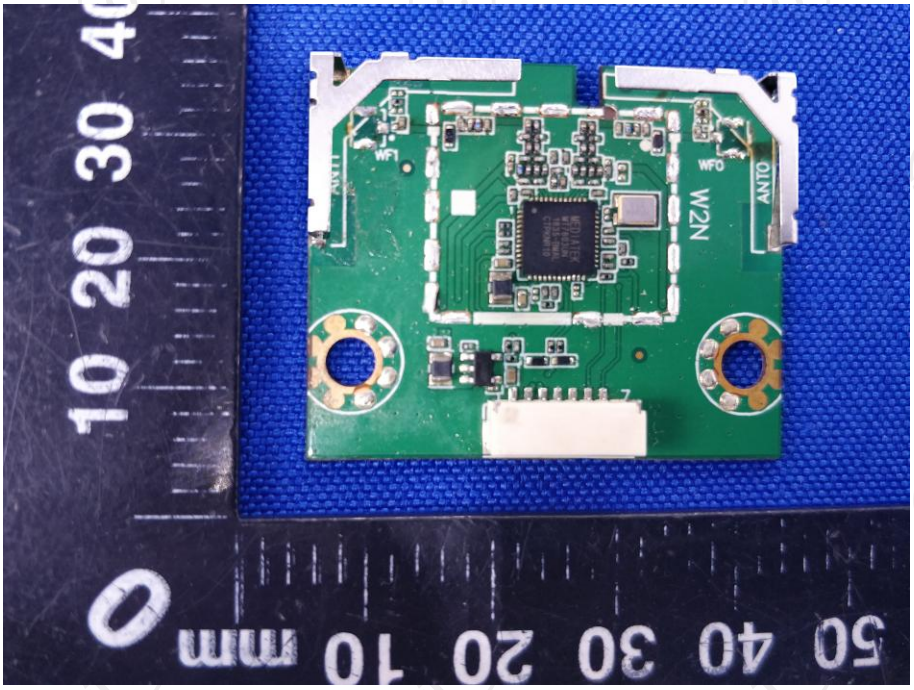
Appendix C: Photographs of EUT

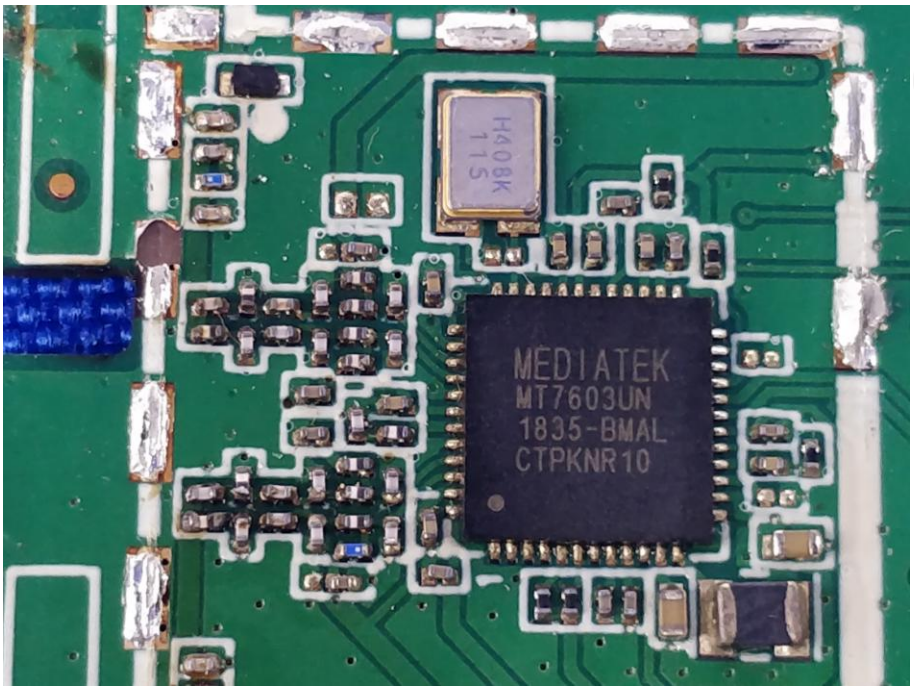
Product: WIFI Module
Model: W2NM2510
External Photos





Product: WIFI Module
Model: W2NM2510
Internal Photos





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