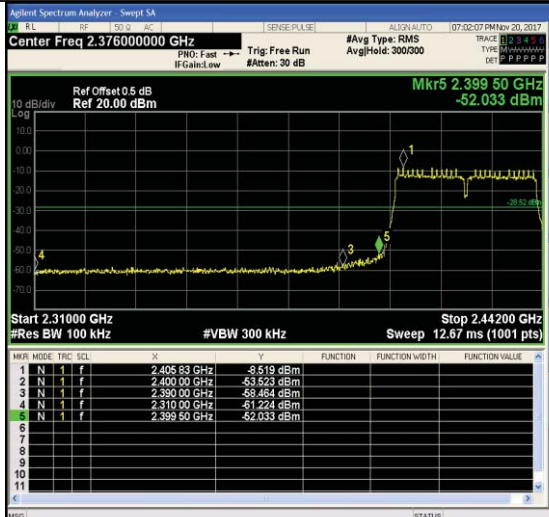
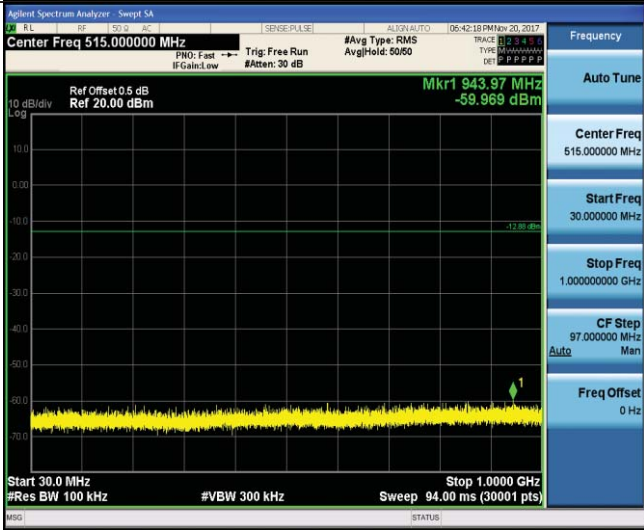


Report Template Version: H01 (2017-03)

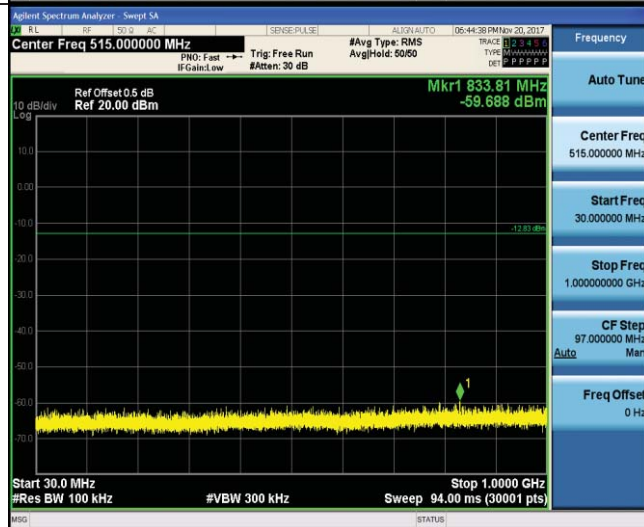
Test Item:	Bandedge	Type:	802.11 n(HT40)																																																																																																			
CH03	 <table><tr><th>MNR</th><th>MODE</th><th>TRIG</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>2.40583 GHz</td><td>-5.519 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>2.40000 GHz</td><td>-53.523 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td>2.39000 GHz</td><td>-58.484 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>1</td><td>f</td><td>2.31000 GHz</td><td>-51.224 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>N</td><td>1</td><td>f</td><td>2.39950 GHz</td><td>-52.033 dBm</td><td></td><td></td><td></td></tr></table>		MNR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.40583 GHz	-5.519 dBm				2	N	1	f	2.40000 GHz	-53.523 dBm				3	N	1	f	2.39000 GHz	-58.484 dBm				4	N	1	f	2.31000 GHz	-51.224 dBm				5	N	1	f	2.39950 GHz	-52.033 dBm				 <table><tr><th>MNR</th><th>MODE</th><th>TRIG</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>2.454508 GHz</td><td>-6.930 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>2.493500 GHz</td><td>-58.563 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td>2.500000 GHz</td><td>-60.294 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>1</td><td>f</td><td>2.484428 GHz</td><td>-54.539 dBm</td><td></td><td></td><td></td></tr></table>	MNR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.454508 GHz	-6.930 dBm				2	N	1	f	2.493500 GHz	-58.563 dBm				3	N	1	f	2.500000 GHz	-60.294 dBm				4	N	1	f	2.484428 GHz	-54.539 dBm			
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CH09																																																																																																						

Test Item:	SE	Type:	802.11 b
Reference level CH01			
CH01			
			

Reference level CH06



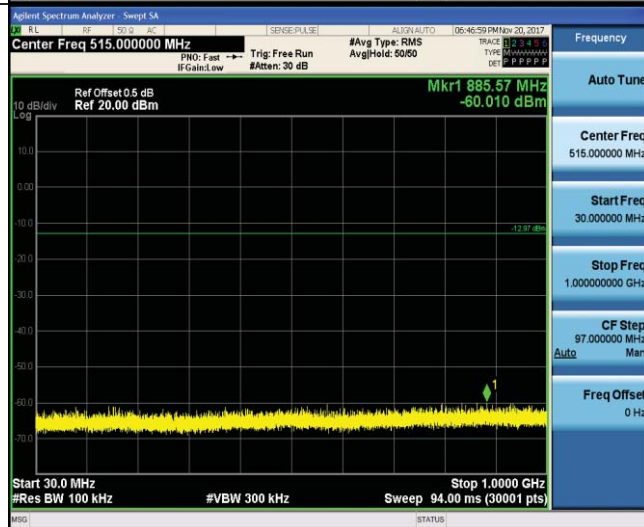
CH06

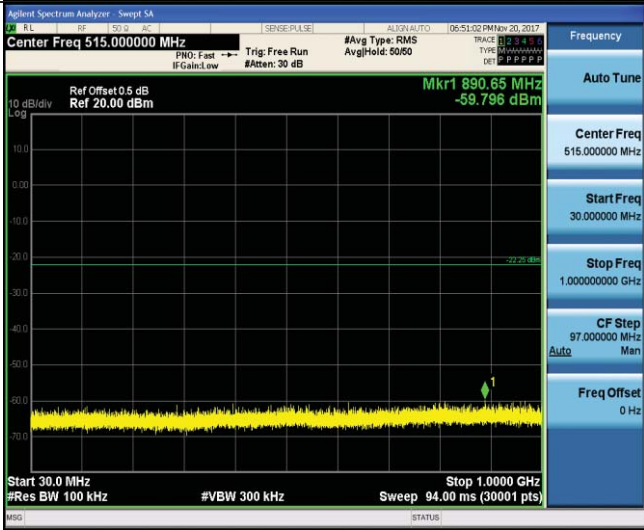
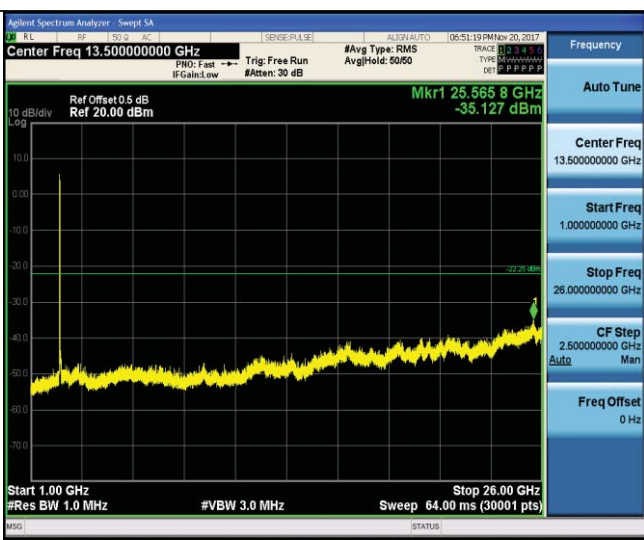


Reference level CH11



CH11

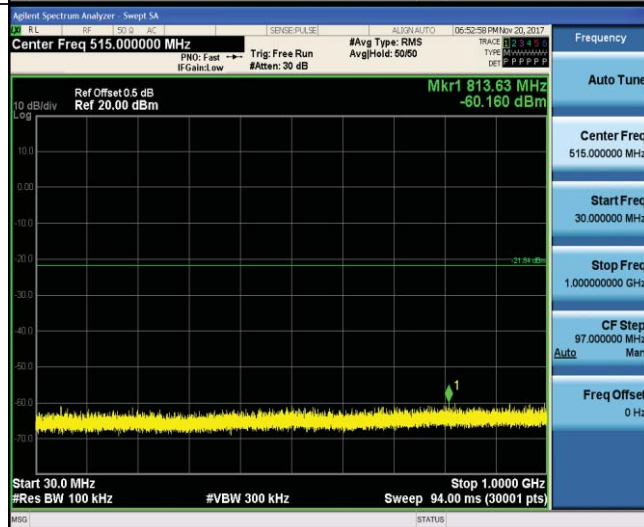


Test Item:	SE	Type:	802.11 g
Reference level CH01			
CH01			
			

Reference level CH06



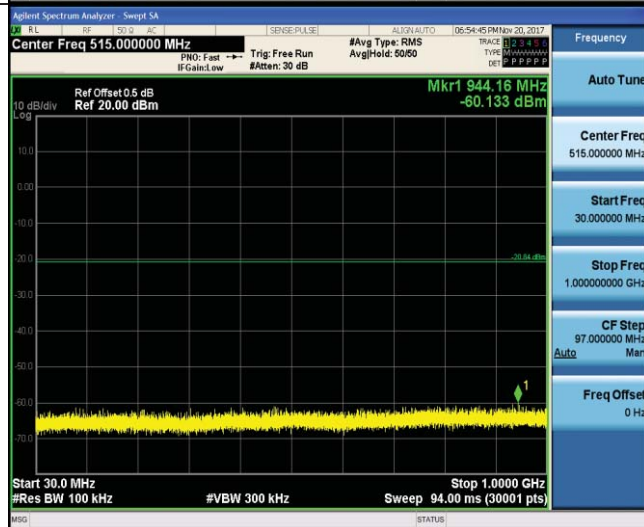
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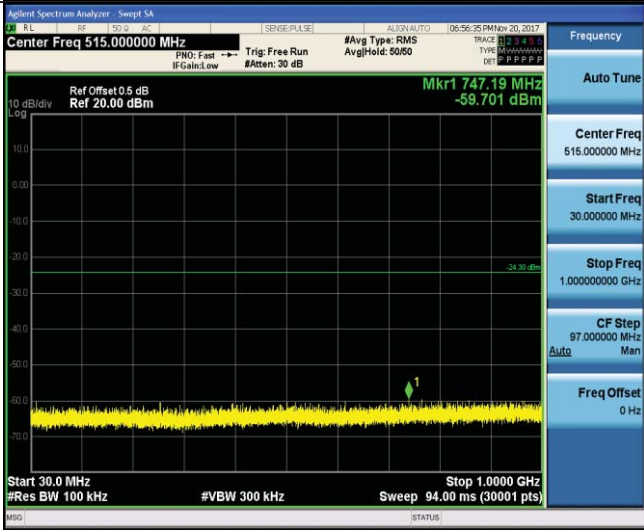


Reference level CH11



CH11

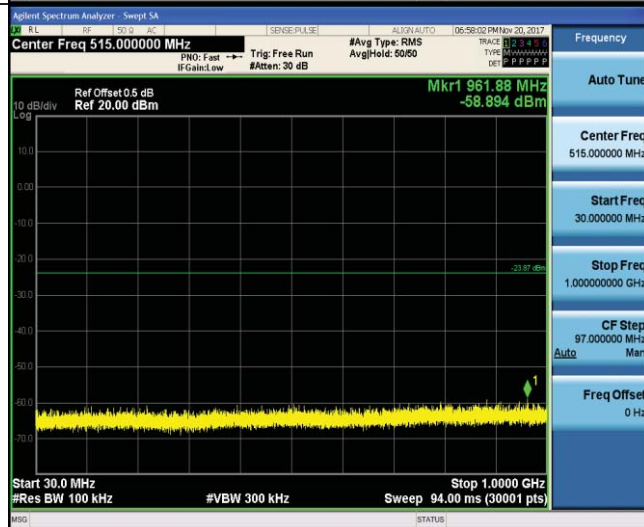


Test Item:	SE	Type:	802.11 n(HT20)
Reference level CH01			
CH01			
			

Reference level CH06



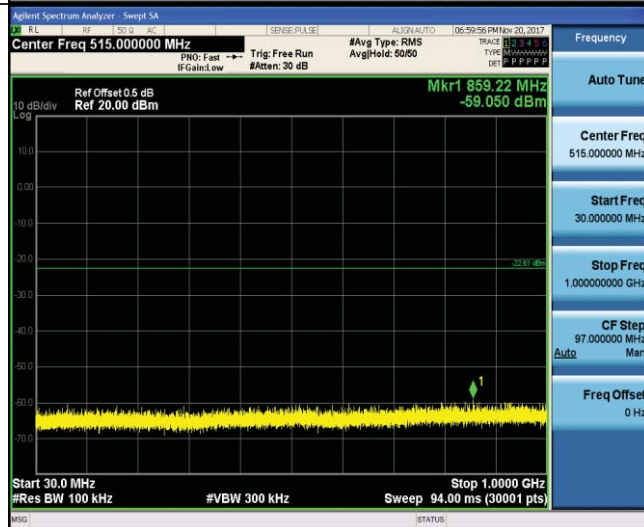
CH06

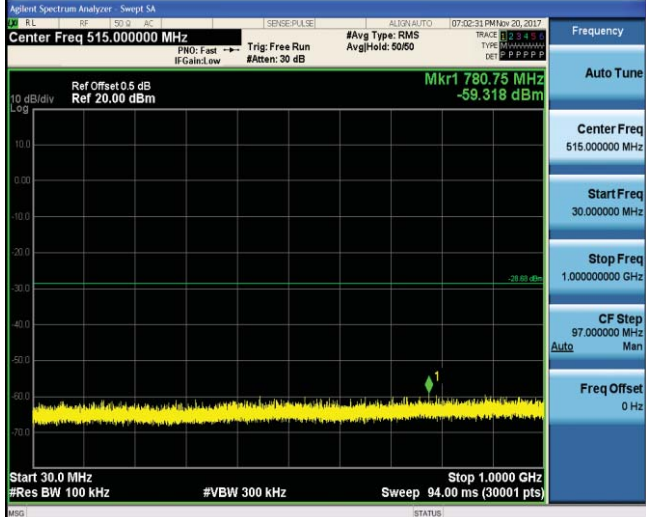


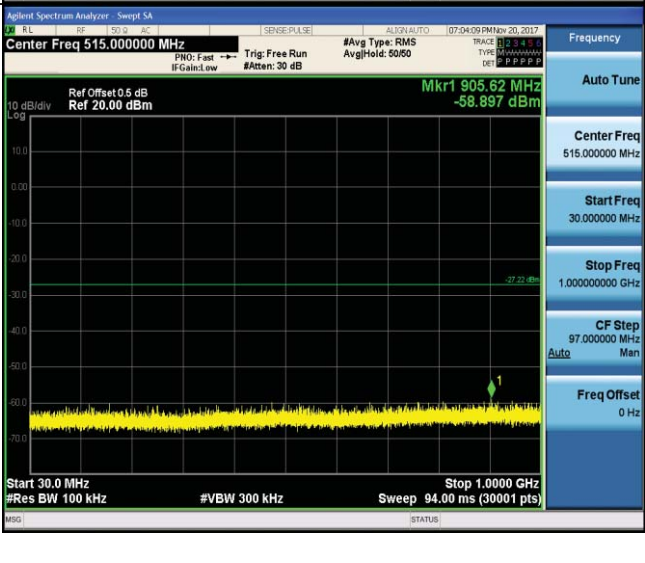
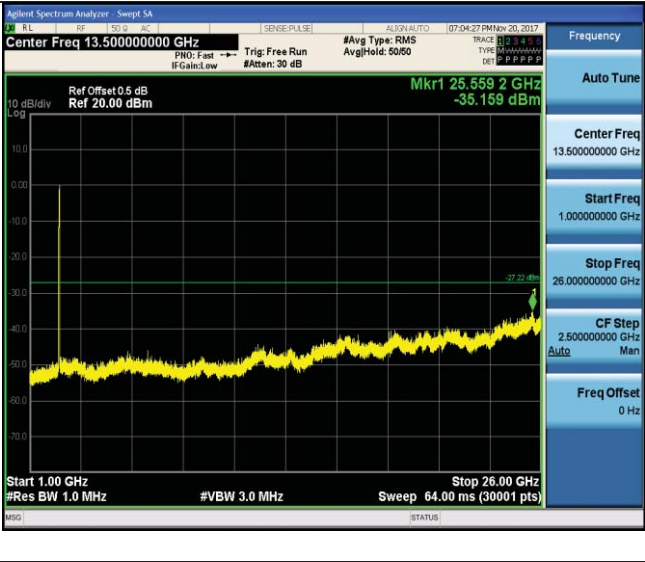
Reference level CH11



CH11



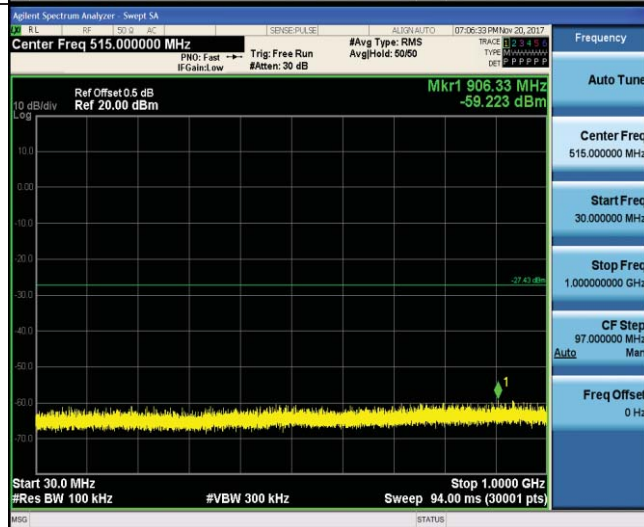
Test Item:	SE	Type:	802.11 n(HT40)
Reference level CH03			
CH03			
			

Reference level CH06		
CH06		
		

Reference level CH09



CH09



5.8. Spurious Emissions (radiated)

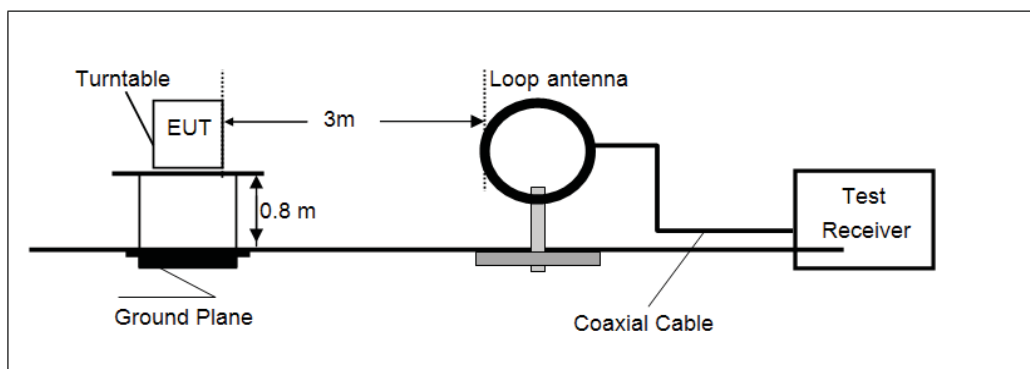
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

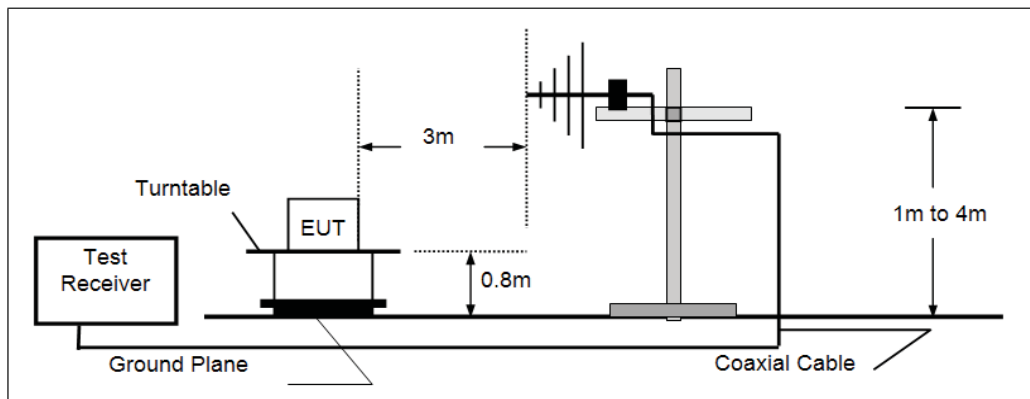
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

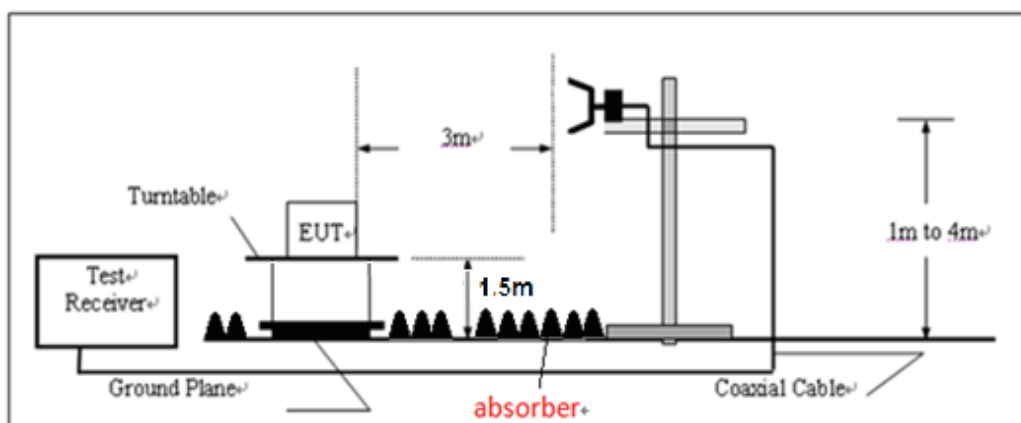
➤ 9KHz ~30MHz



➤ 30MHz ~ 1GHz



➤ Above 1GHz



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT is placed on a turn table which is 0.8/1.5 meter above ground plane. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.
5. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Below 1GHz, RBW=120KHz, VBW=300KHz, Sweep=auto, Detector function=peak, Trace=max hold; 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.
 - (3) Above 1GHz, RBW=1MHz, VBW=3MHz Peak detector for Peak value
RBW=1MHz, VBW=3MHz RMS detector for Average value.

Remark: "floor-standing equipment" Where possible, the antenna(s) of the EUT shall be located at a height of 1.5 m above the floor, and the intentional radiator circuitry shall be located within the system at a height of at least 0.8 m above the floor.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

Note:

- 1) Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2) "*", means this data is too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than the limit and not show in test report.

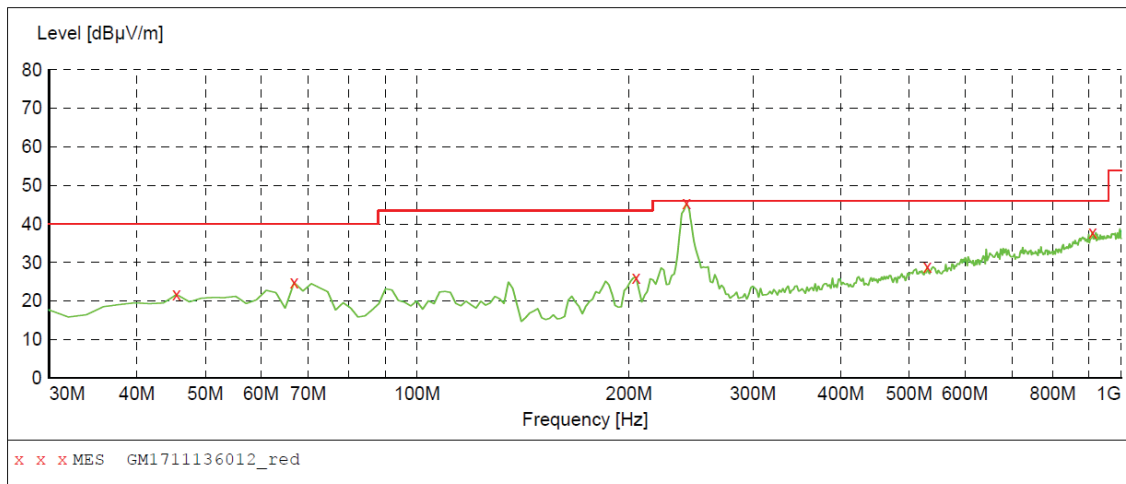
➤ **9kHz ~ 30MHz**

The EUT was pre-scanned the frequency band (9KHz~30MHz), found the radiated level lower than the limit, so don't show on the report.

➤ 30MHz ~ 1GHz

Polarization:

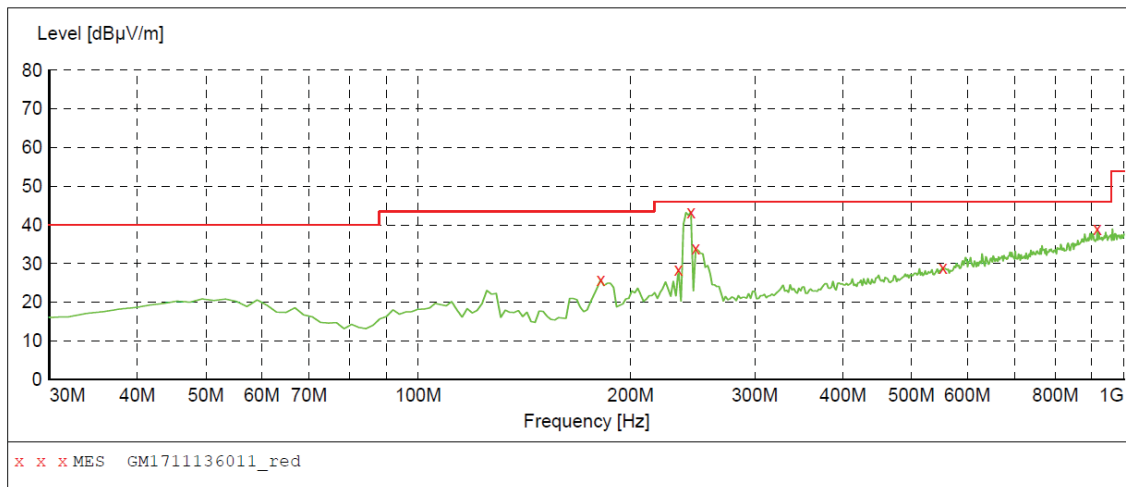
Vertical



Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
45.520000	21.70	-8.8	40.0	18.3	QP	100.0	227.00	VERTICAL
66.860000	24.80	-12.0	40.0	15.2	QP	100.0	238.00	VERTICAL
204.600000	26.20	-10.4	43.5	17.3	QP	100.0	291.00	VERTICAL
241.940000	41.30	-8.7	46.0	4.7	QP	100.0	38.00	VERTICAL
530.520000	28.90	-1.1	46.0	17.1	QP	100.0	147.00	VERTICAL
910.760000	37.90	6.9	46.0	8.1	QP	100.0	331.00	VERTICAL

Polarization:

Horizontal



Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
181.320000	25.90	-12.1	43.5	17.6	QP	100.0	193.00	HORIZONTAL
233.700000	28.40	-9.1	46.0	17.6	QP	100.0	261.00	HORIZONTAL
240.880000	42.00	-8.7	46.0	4.0	QP	100.0	261.00	HORIZONTAL
247.280000	33.90	-8.5	46.0	12.1	QP	100.0	261.00	HORIZONTAL
553.800000	28.90	-0.7	46.0	17.1	QP	300.0	98.00	HORIZONTAL
916.580000	39.00	6.9	46.0	7.0	QP	300.0	75.00	HORIZONTAL

➤ Above 1GHz

802.11b					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1680.83	35.54	25.14	5.73	36.89	29.52	74.00	-44.48	Vertical	Peak
3033.91	35.30	28.67	7.52	38.22	33.27	74.00	-40.73	Vertical	
4213.21	34.53	30.03	8.95	37.64	35.87	74.00	-38.13	Vertical	
5747.59	33.22	31.84	10.51	35.46	40.11	74.00	-33.89	Vertical	
1613.75	35.79	24.94	5.60	36.75	29.58	74.00	-44.42	Horizontal	
3010.83	36.38	28.62	7.49	38.23	34.26	74.00	-39.74	Horizontal	
4181.16	35.77	29.98	8.92	37.69	36.98	74.00	-37.02	Horizontal	
5617.41	33.19	31.76	10.30	35.82	39.43	74.00	-34.57	Horizontal	

802.11b					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1728.56	36.70	25.26	5.82	36.99	30.79	74.00	-43.21	Vertical	Peak
3738.13	35.12	29.42	8.43	38.24	34.73	74.00	-39.27	Vertical	
4871.10	46.61	31.46	9.59	36.76	50.90	74.00	-23.10	Vertical	
7357.33	32.00	36.30	12.03	34.88	45.45	74.00	-28.55	Vertical	
1837.46	34.17	25.36	6.02	37.17	28.38	74.00	-45.62	Horizontal	
3598.09	34.79	29.29	8.27	38.27	34.08	74.00	-39.92	Horizontal	
4871.10	41.68	31.46	9.59	36.76	45.97	74.00	-28.03	Horizontal	
6833.77	31.29	34.24	11.64	34.96	42.21	74.00	-31.79	Horizontal	

802.11b					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1724.17	35.29	25.25	5.81	36.98	29.37	74.00	-44.63	Vertical	Peak
3844.28	34.78	29.64	8.56	38.20	34.78	74.00	-39.22	Vertical	
4920.96	43.27	31.42	9.62	36.62	47.69	74.00	-26.31	Vertical	
7245.81	32.96	36.25	11.91	35.02	46.10	74.00	-27.90	Vertical	
1759.64	36.32	25.32	5.88	37.06	30.46	74.00	-43.54	Horizontal	
3709.69	35.54	29.33	8.40	38.25	35.02	74.00	-38.98	Horizontal	
4920.96	35.11	31.42	9.62	36.62	39.53	74.00	-34.47	Horizontal	
6678.99	33.10	34.20	11.45	35.21	43.54	74.00	-30.46	Horizontal	

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11g					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1746.25	53.91	25.29	5.86	37.03	48.03	74.00	-25.97	Vertical	Peak
3644.18	36.16	29.30	8.32	38.26	35.52	74.00	-38.48	Vertical	
4834.05	38.88	31.53	9.56	36.86	43.11	74.00	-30.89	Vertical	
6594.52	32.99	34.19	11.35	35.36	43.17	74.00	-30.83	Vertical	
1759.64	35.21	25.32	5.88	37.06	29.35	74.00	-44.65	Horizontal	
3088.45	36.43	28.78	7.59	38.22	34.58	74.00	-39.42	Horizontal	
4821.76	35.27	31.56	9.55	36.90	39.48	74.00	-34.52	Horizontal	
7282.79	31.61	36.28	11.95	34.97	44.87	74.00	-29.13	Horizontal	

802.11g					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1913.84	39.14	25.44	6.14	37.23	33.49	74.00	-40.51	Vertical	Peak
3570.71	35.92	29.21	8.22	38.31	35.04	74.00	-38.96	Vertical	
4883.52	39.93	31.43	9.59	36.73	44.22	74.00	-29.78	Vertical	
6645.07	31.57	34.20	11.41	35.28	41.90	74.00	-32.10	Vertical	
2135.22	33.90	26.99	6.38	37.33	29.94	74.00	-44.06	Horizontal	
3057.17	35.84	28.72	7.55	38.22	33.89	74.00	-40.11	Horizontal	
4871.10	36.04	31.46	9.59	36.76	40.33	74.00	-33.67	Horizontal	
5821.21	33.12	32.14	10.60	35.33	40.53	74.00	-33.47	Horizontal	

802.11g					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1899.28	38.42	25.30	6.11	37.22	32.61	74.00	-41.39	Vertical	Peak
3625.67	35.35	29.30	8.30	38.26	34.69	74.00	-39.31	Vertical	
4983.99	33.87	31.48	9.66	36.44	38.57	74.00	-35.43	Vertical	
7319.96	31.97	36.30	11.99	34.92	45.34	74.00	-28.66	Vertical	
1795.84	34.94	25.39	5.95	37.13	29.15	74.00	-44.85	Horizontal	
3598.09	35.31	29.29	8.27	38.27	34.60	74.00	-39.40	Horizontal	
6283.16	31.69	33.07	11.00	35.30	40.46	74.00	-33.54	Horizontal	
8681.17	31.40	37.79	12.98	34.42	47.75	74.00	-26.25	Horizontal	

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11n(HT20)					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1764.12	36.24	25.33	5.89	37.06	30.40	74.00	-43.60	Vertical	Peak
3873.75	35.87	29.67	8.60	38.19	35.95	74.00	-38.05	Vertical	
6001.77	31.93	32.50	10.67	35.45	39.65	74.00	-34.35	Vertical	
7470.56	32.26	36.16	12.30	34.88	45.84	74.00	-28.16	Vertical	
1724.17	36.69	25.25	5.81	36.98	30.77	74.00	-43.23	Horizontal	
3738.13	36.51	29.42	8.43	38.24	36.12	74.00	-37.88	Horizontal	
5532.26	33.76	31.87	10.22	36.18	39.67	74.00	-34.33	Horizontal	
7117.84	33.09	35.71	11.86	34.96	45.70	74.00	-28.30	Horizontal	

802.11n(HT20)					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1805.01	35.54	25.39	5.97	37.14	29.76	74.00	-44.24	Vertical	Peak
3088.45	34.74	28.78	7.59	38.22	32.89	74.00	-41.11	Vertical	
4883.52	35.37	31.43	9.59	36.73	39.66	74.00	-34.34	Vertical	
7081.70	30.99	35.55	11.85	34.91	43.48	74.00	-30.52	Vertical	
1773.13	36.87	25.35	5.91	37.08	31.05	74.00	-42.95	Horizontal	
3200.50	36.20	28.80	7.72	38.20	34.52	74.00	-39.48	Horizontal	
4871.10	35.30	31.46	9.59	36.76	39.59	74.00	-34.41	Horizontal	
7045.74	31.95	35.44	11.85	34.86	44.38	74.00	-29.62	Horizontal	

802.11n(HT20)					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1795.84	35.24	25.39	5.95	37.13	29.45	74.00	-44.55	Vertical	Peak
3815.03	35.42	29.62	8.52	38.22	35.34	74.00	-38.66	Vertical	
4920.96	39.83	31.42	9.62	36.62	44.25	74.00	-29.75	Vertical	
7338.62	31.91	36.30	12.01	34.90	45.32	74.00	-28.68	Vertical	
1685.12	36.50	25.16	5.74	36.90	30.50	74.00	-43.50	Horizontal	
3135.99	37.21	28.80	7.64	38.21	35.44	74.00	-38.56	Horizontal	
4797.27	33.95	31.59	9.54	36.96	38.12	74.00	-35.88	Horizontal	
6283.16	33.43	33.07	11.00	35.30	42.20	74.00	-31.80	Horizontal	

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11n(HT40)					CH03				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1634.42	36.84	25.01	5.64	36.79	30.70	74.00	-43.30	Vertical	Peak
3616.45	36.14	29.30	8.29	38.27	35.46	74.00	-38.54	Vertical	
4846.37	36.84	31.51	9.57	36.83	41.09	74.00	-32.91	Vertical	
7961.43	32.44	36.95	12.49	34.63	47.25	74.00	-26.75	Vertical	
1724.17	36.59	25.25	5.81	36.98	30.67	74.00	-43.33	Horizontal	
3192.37	36.19	28.80	7.71	38.20	34.50	74.00	-39.50	Horizontal	
4524.47	34.56	30.75	9.34	37.35	37.30	74.00	-36.70	Horizontal	
6331.33	32.39	33.16	11.00	35.30	41.25	74.00	-32.75	Horizontal	

802.11n(HT40)					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1746.25	37.02	25.29	5.86	37.03	31.14	74.00	-42.86	Vertical	Peak
3192.37	36.99	28.80	7.71	38.20	35.30	74.00	-38.70	Vertical	
4871.10	33.10	31.46	9.59	36.76	37.39	74.00	-36.61	Vertical	
6662.01	32.98	34.20	11.43	35.25	43.36	74.00	-30.64	Vertical	
1800.42	36.72	25.40	5.96	37.14	30.94	74.00	-43.06	Horizontal	
2577.80	47.18	27.67	6.89	37.85	43.89	74.00	-30.11	Horizontal	
3598.09	37.53	29.29	8.27	38.27	36.82	74.00	-37.18	Horizontal	
5689.36	32.58	31.62	10.41	35.62	38.99	74.00	-35.01	Horizontal	

802.11n(HT40)					CH09				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
1741.81	36.51	25.29	5.85	37.02	30.63	74.00	-43.37	Vertical	Peak
3225.04	37.29	28.65	7.75	38.24	35.45	74.00	-38.55	Vertical	
4354.97	34.41	30.37	9.09	37.58	36.29	74.00	-37.71	Vertical	
6662.01	32.36	34.20	11.43	35.25	42.74	74.00	-31.26	Vertical	
1719.78	36.12	25.24	5.80	36.97	30.19	74.00	-43.81	Horizontal	
3200.50	35.69	28.80	7.72	38.20	34.01	74.00	-39.99	Horizontal	
5073.59	33.51	31.80	9.73	36.33	38.71	74.00	-35.29	Horizontal	
7527.83	32.88	36.13	12.49	34.92	46.58	74.00	-27.42	Horizontal	

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

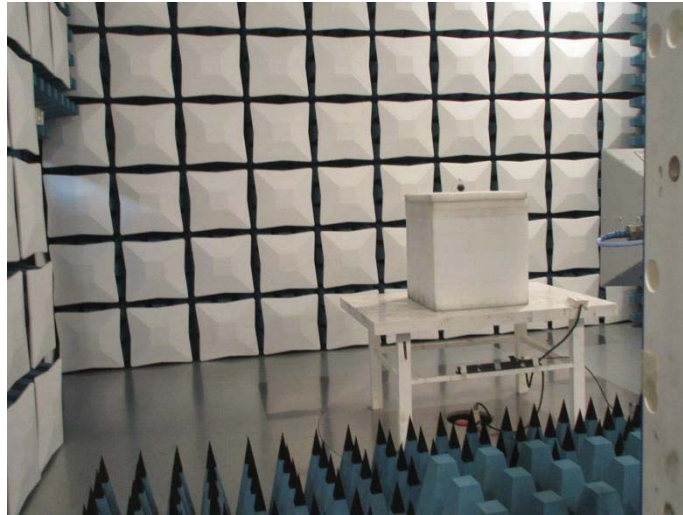
6. Test Setup Photos of the EUT

Conducted Emissions (AC Mains)



Radiated Emissions

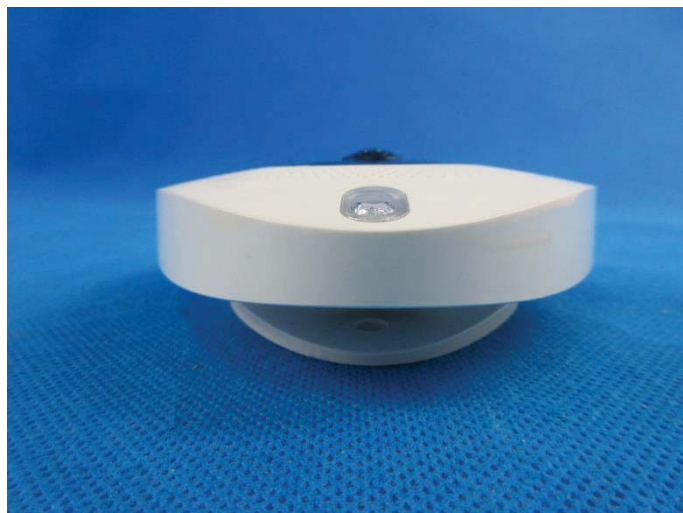
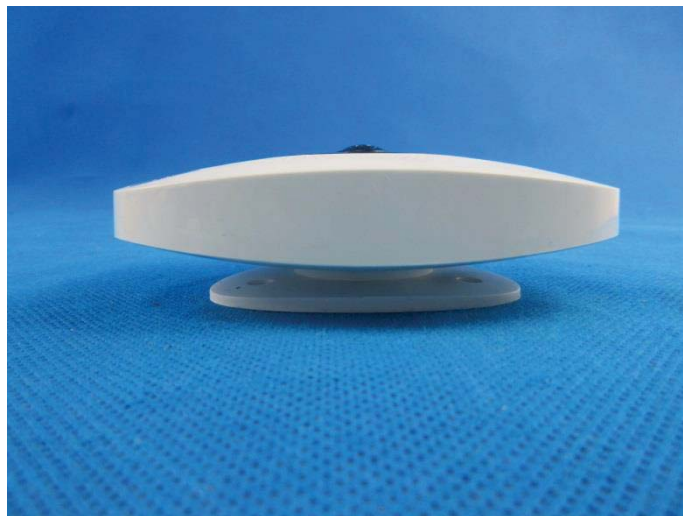
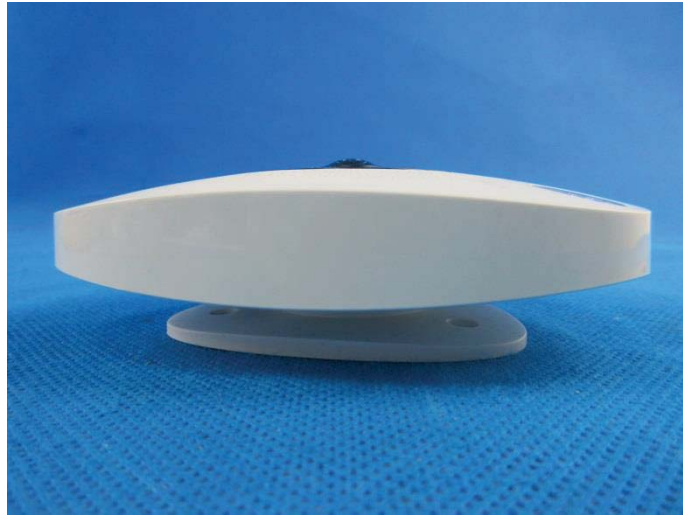




7. External and Internal Photos of the EUT

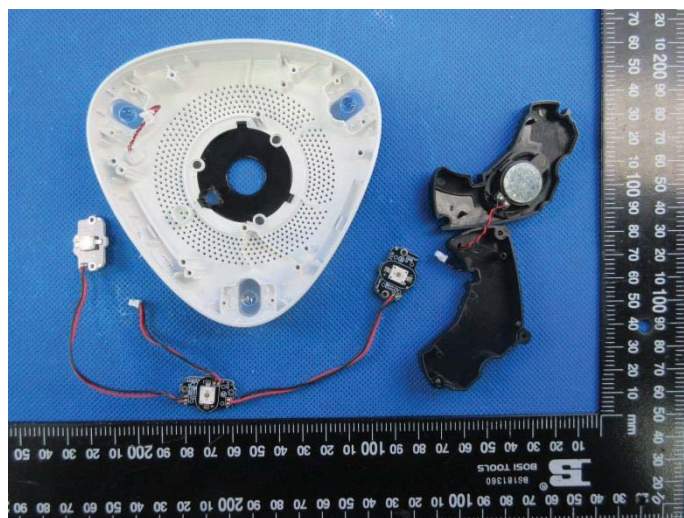
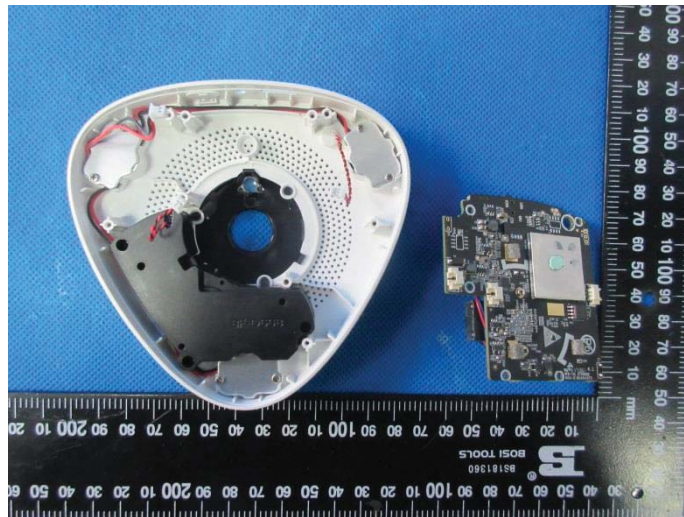
External Photos of the EUT

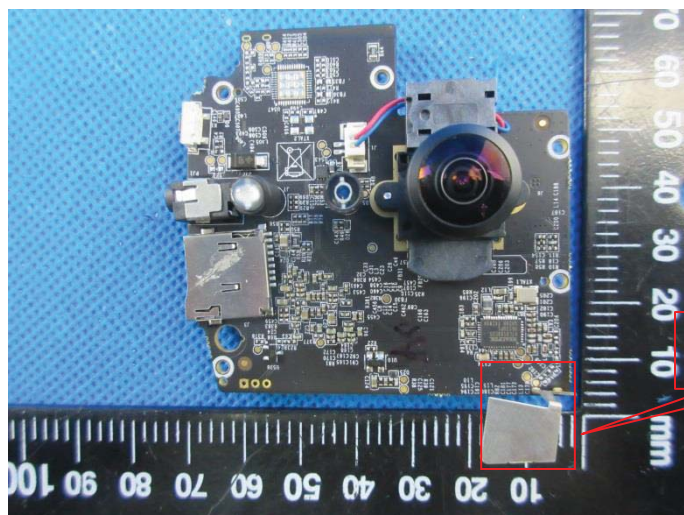
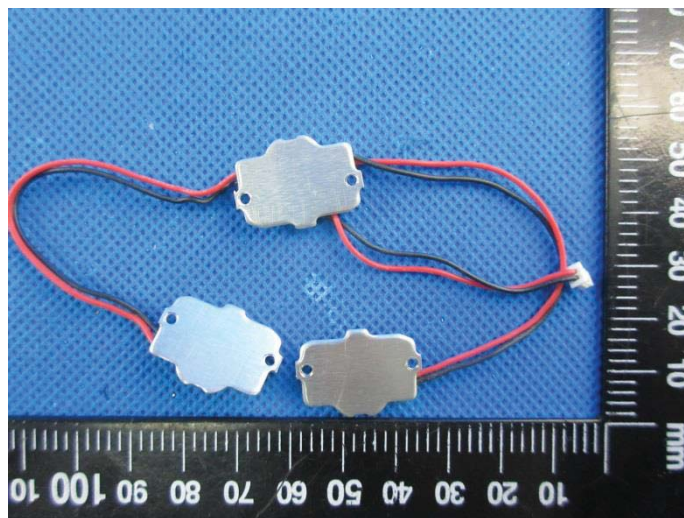
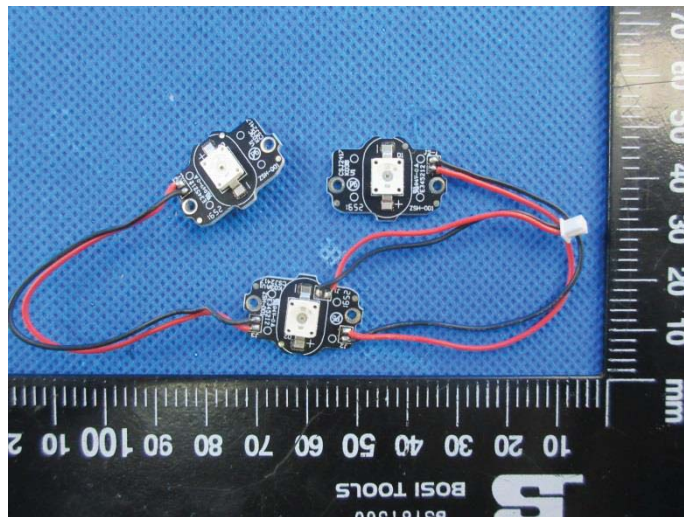


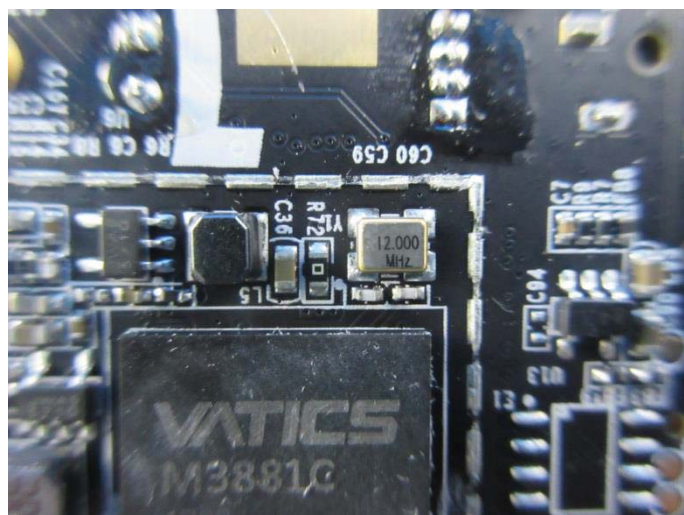
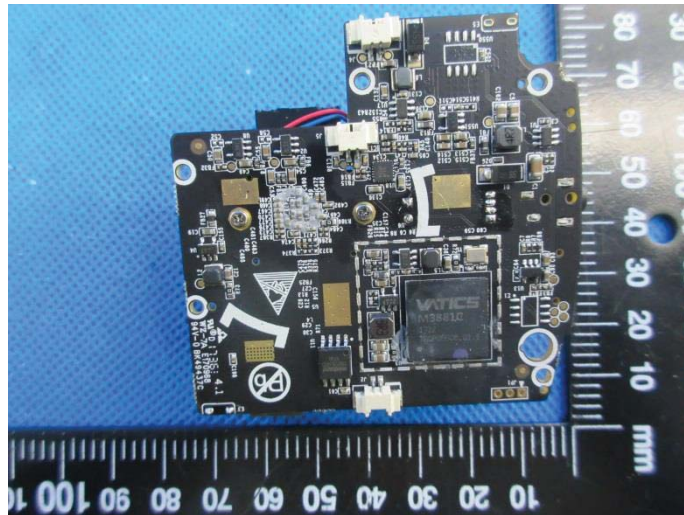




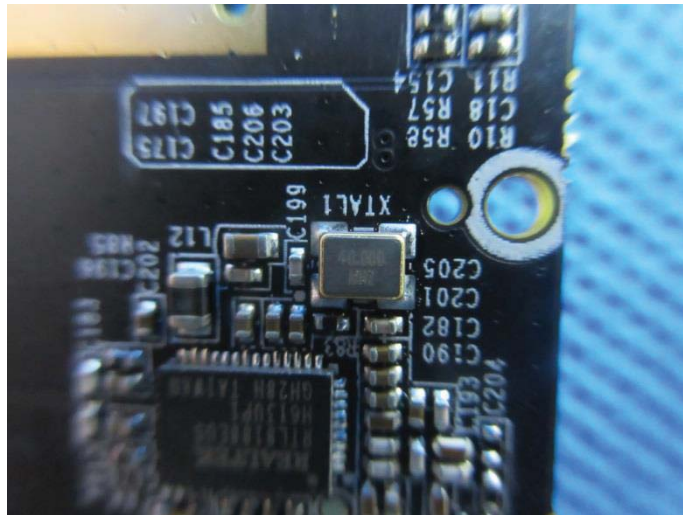
Internal Photos of the EUT











-----End of Report-----