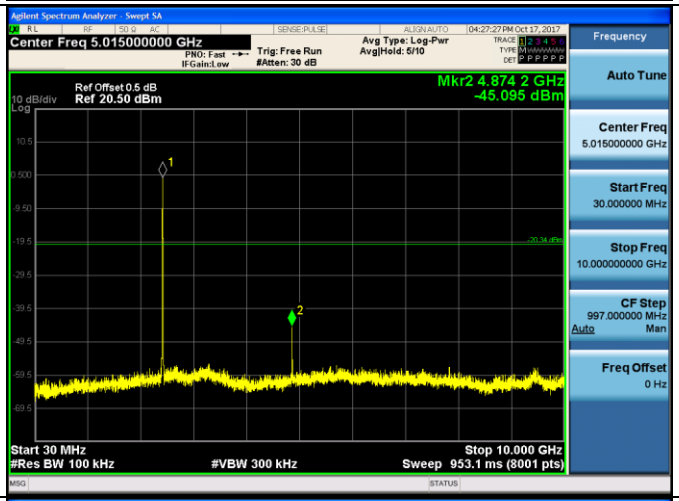
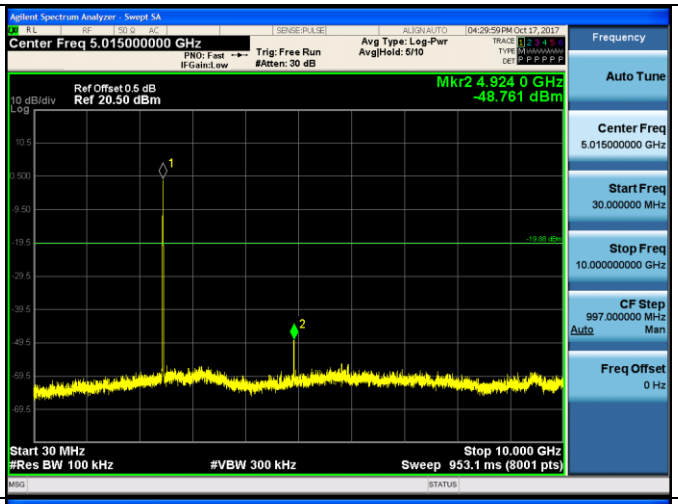
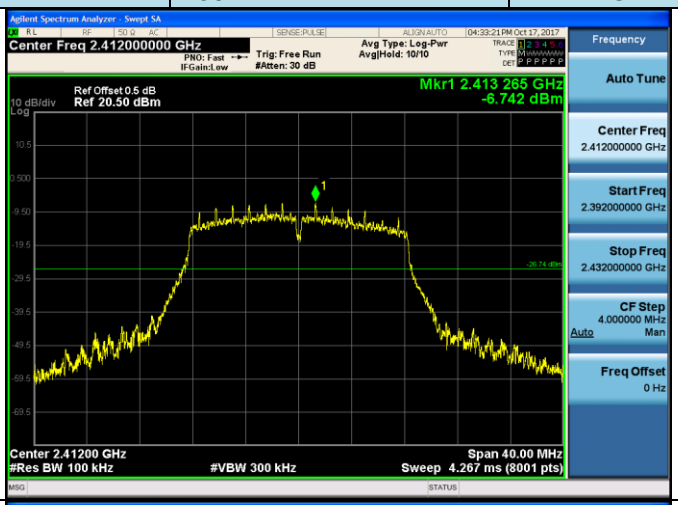
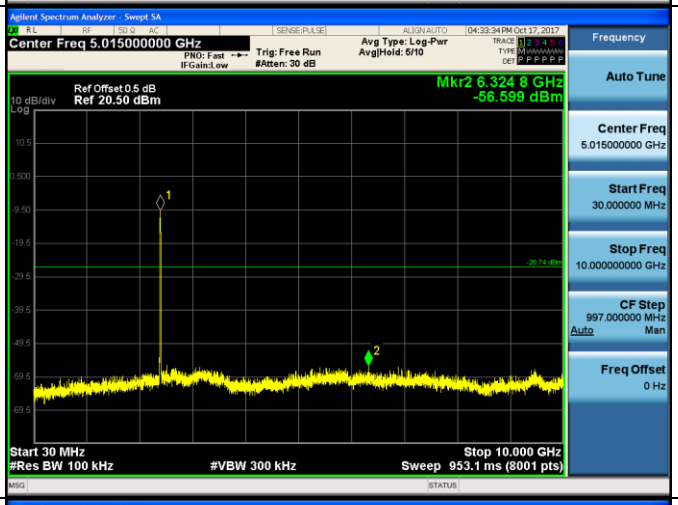
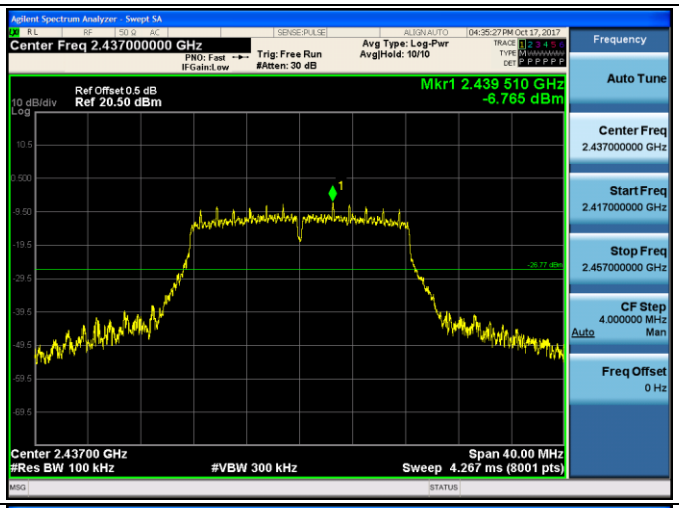
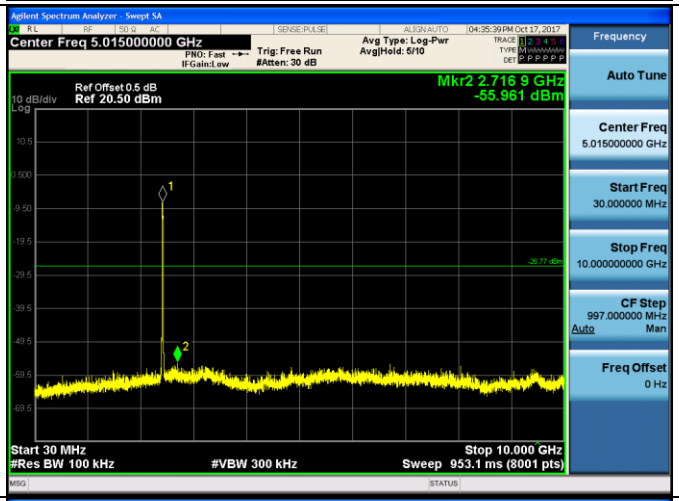
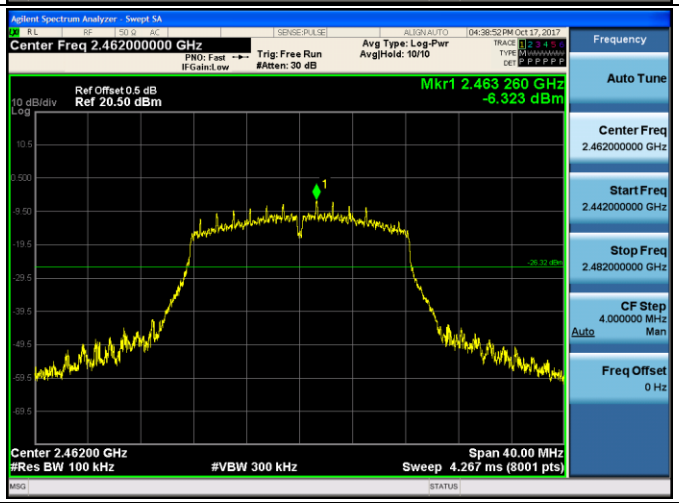
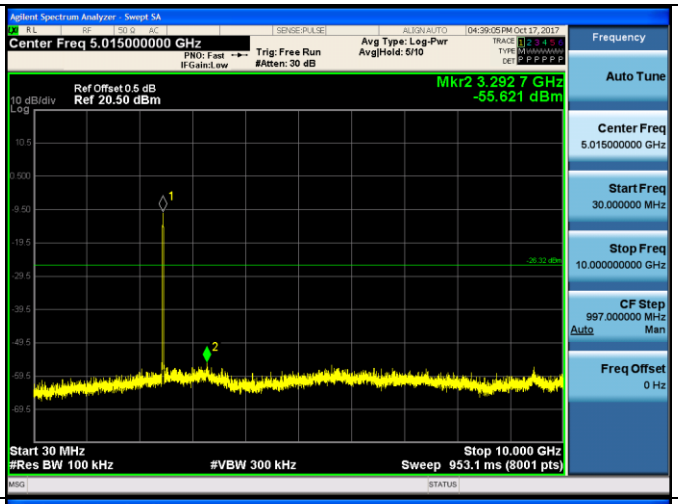
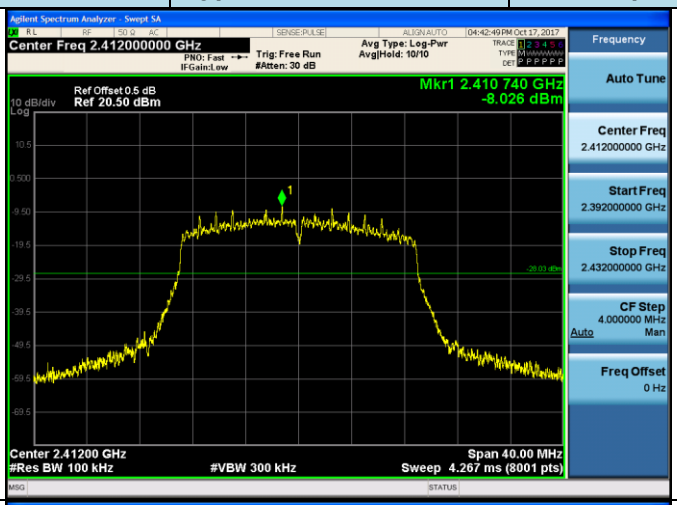
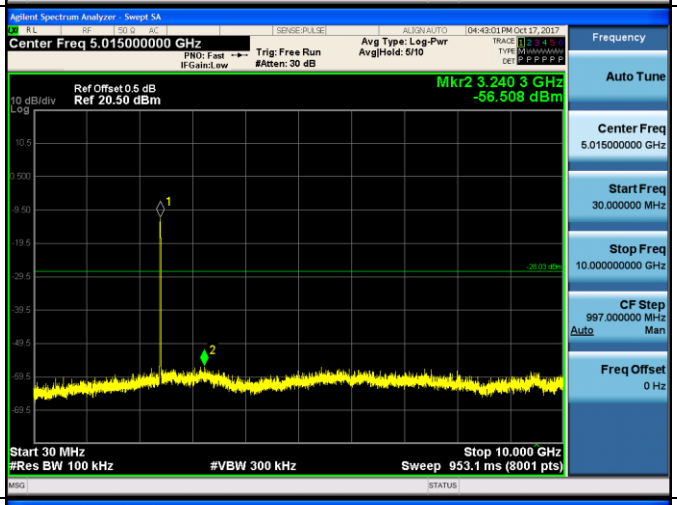
CH06 Reference Level	
CH06 30MHz~10GHz	
CH06 10GHz~26GHz	
CH11 Reference Level	

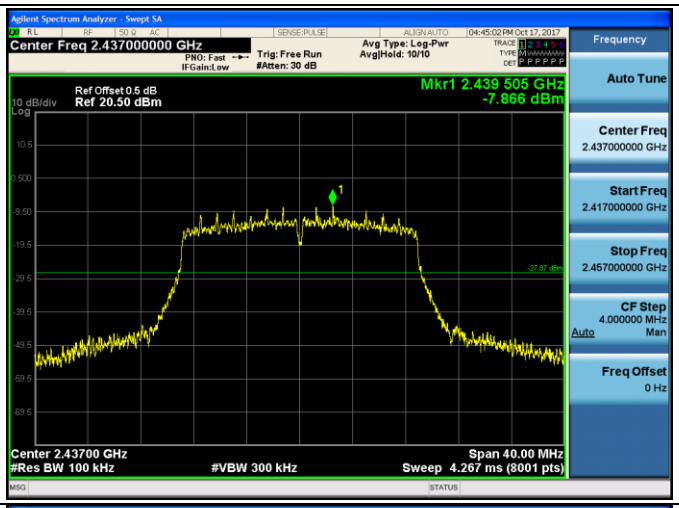
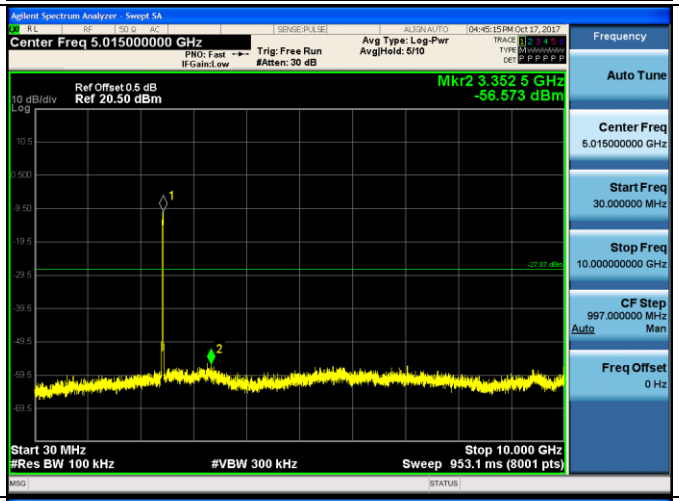
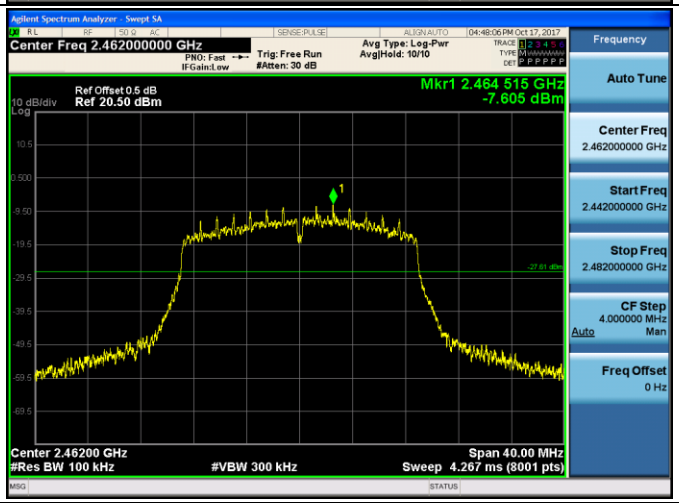
CH11 30MHz~10GHz			
CH11 10GHz~26GHz			

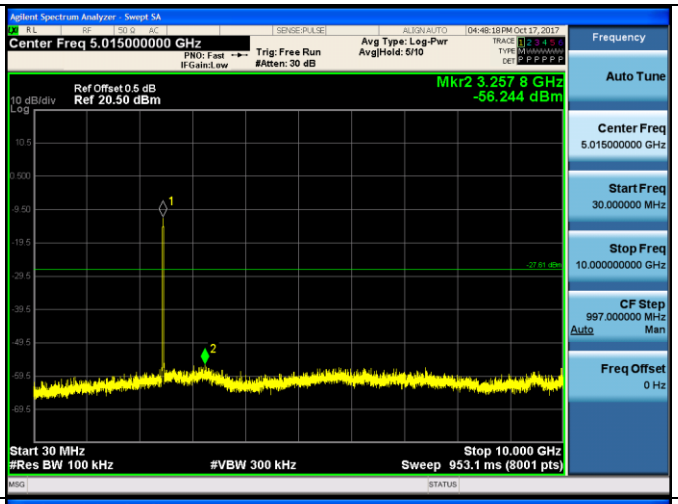
Test Item:	SE	Type:	802.11 g
CH01 Reference Level		
CH01 30MHz~10GHz		
CH01 10GHz~26GHz		

CH06 Reference Level	
CH06 30MHz~10GHz	
CH06 10GHz~26GHz	
CH11 Reference Level	

CH11 30MHz~10GHz			
CH11 10GHz~26GHz			

Test Item:	SE	Type:	802.11 n(HT20)
CH01 Reference Level		
CH01 30MHz~10GHz		
CH01 10GHz~26GHz		

CH06 Reference Level	
CH06 30MHz~10GHz	
CH06 10GHz~26GHz	
CH11 Reference Level	

CH11 30MHz~10GHz			
CH11 10GHz~26GHz			

5.8. Spurious Emissions (radiated)

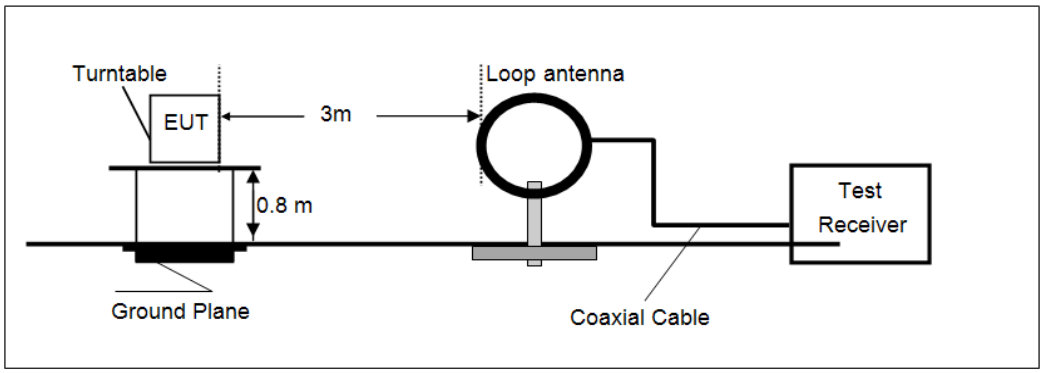
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

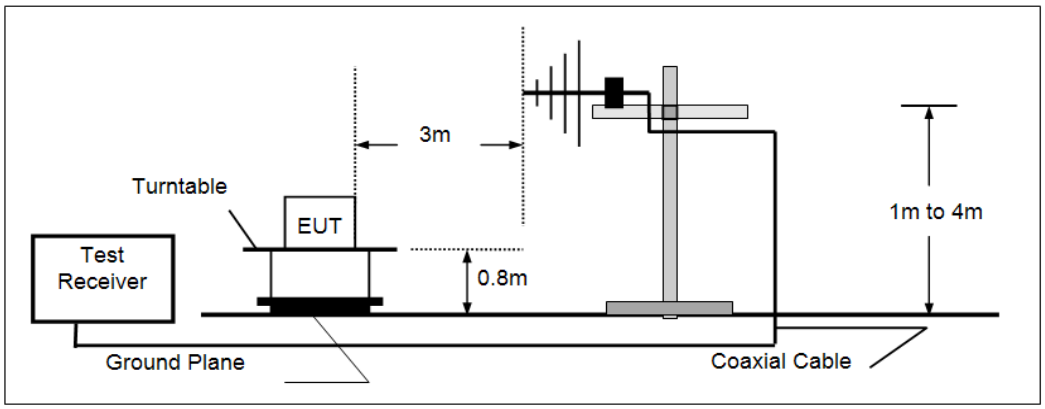
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

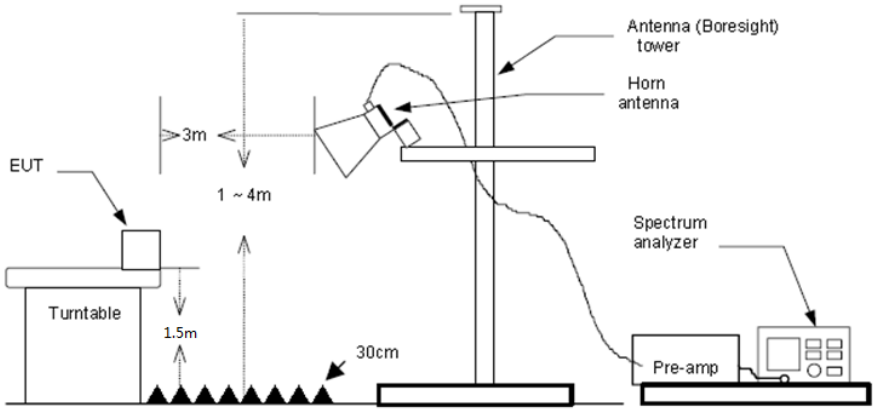
➢ 9kHz ~30MHz



➢ 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 meter above ground. 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=QP, Trace=max hold;
   If the emission level of the EUT measured by the peak detectoris 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.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

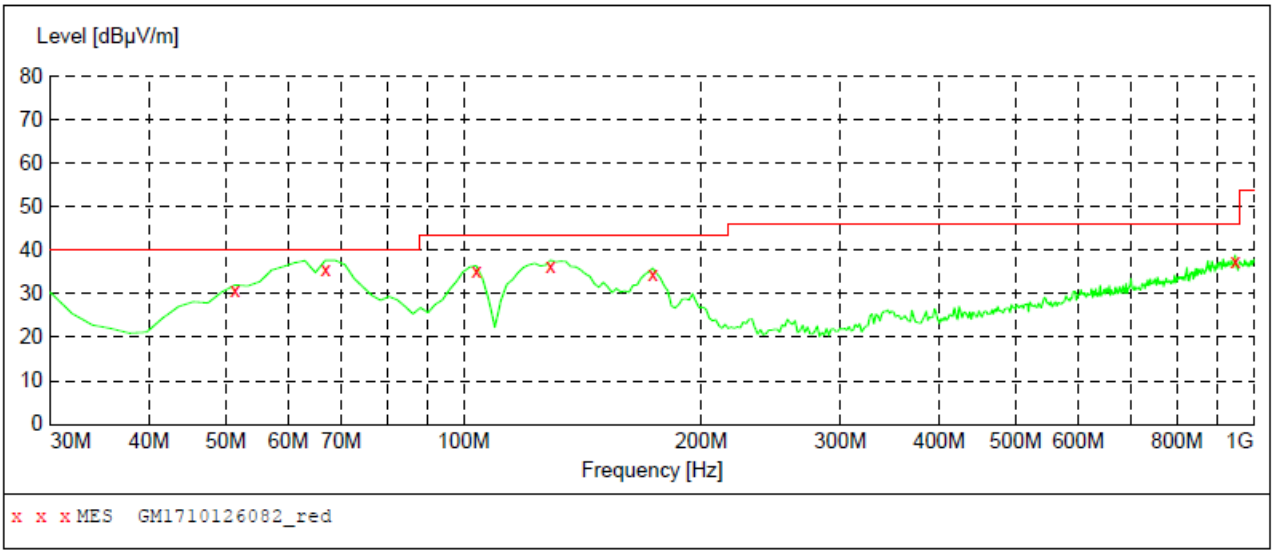
Note:
1) Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2) The emission levels of other frequencies are very lower than the limit and not show in test report.

- **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 ~1000MHz**
  Have pre-scan all modulation mode, found the 802.11b mode CH01 which it was worst case, so only the worst case's data on the test report.

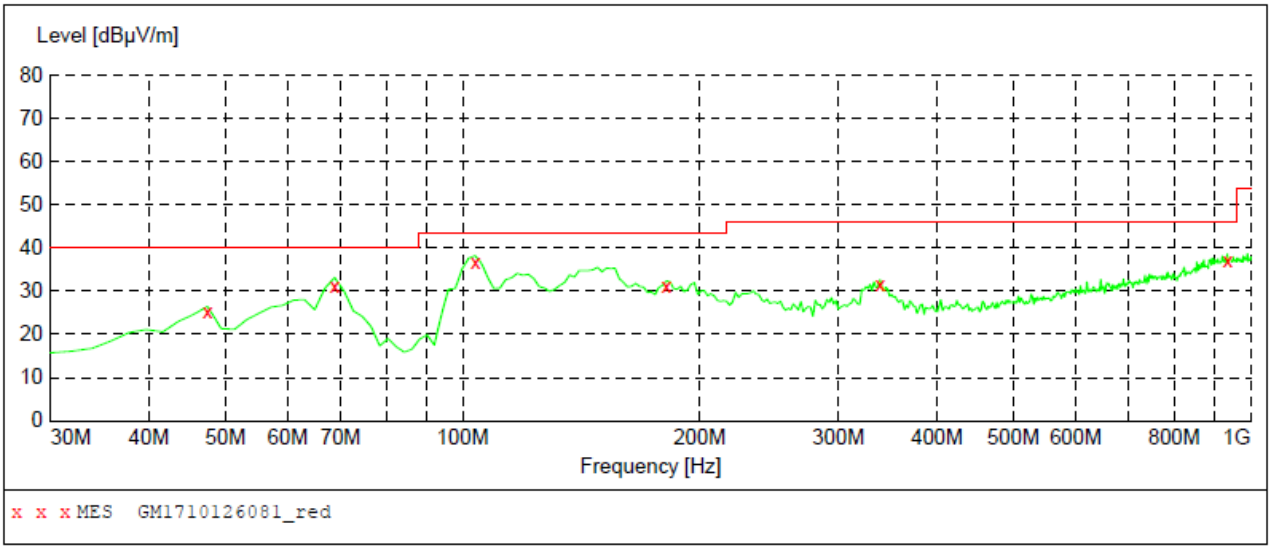
➢ **30MHz ~ 1GHz**

Polarization:	Vertical



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
51.340000	30.00	-8.8	40.0	10.0	QP	100.0	0.00	VERTICAL
66.860000	35.70	-12.0	40.0	4.3	QP	100.0	0.00	VERTICAL
103.720000	34.50	-10.5	43.5	9.0	QP	100.0	90.00	VERTICAL
128.940000	35.70	-13.2	43.5	7.8	QP	100.0	187.00	VERTICAL
173.560000	33.90	-12.8	43.5	9.6	QP	100.0	11.00	VERTICAL
947.620000	36.90	7.2	46.0	9.1	QP	100.0	199.00	VERTICAL

Polarization:	Horizontal



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
47.460000	25.50	-8.8	40.0	14.5	QP	300.0	0.00	HORIZONTAL
68.800000	31.20	-12.6	40.0	8.8	QP	300.0	315.00	HORIZONTAL
103.720000	36.20	-10.5	43.5	7.3	QP	300.0	138.00	HORIZONTAL
181.320000	31.40	-12.1	43.5	12.1	QP	100.0	181.00	HORIZONTAL
338.460000	31.70	-5.7	46.0	14.3	QP	100.0	0.00	HORIZONTAL
934.040000	37.60	7.1	46.0	8.4	QP	300.0	98.00	HORIZONTAL

➢ **Above 1 GHz**

802.11b					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1241.56	36.16	26.26	4.73	36.55	30.60	74.00	-43.40	Vertical	Peak
3143.98	37.26	28.80	7.65	38.21	35.50	74.00	-38.50	Vertical	Peak
4501.49	34.92	30.70	9.30	37.39	37.53	74.00	-36.47	Vertical	Peak
7413.73	31.63	36.27	12.11	34.83	45.18	74.00	-28.82	Vertical	Peak
1446.44	35.59	25.85	5.13	36.52	30.05	74.00	-43.95	Horizontal	Peak
2223.98	36.72	27.65	6.48	37.41	33.44	74.00	-40.56	Horizontal	Peak
3598.09	38.61	29.29	8.27	38.27	37.90	74.00	-36.10	Horizontal	Peak
7357.33	31.75	36.30	12.03	34.88	45.20	74.00	-28.80	Horizontal	Peak

802.11b					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1280.07	36.93	26.22	4.80	36.53	31.42	74.00	-42.58	Vertical	Peak
3598.09	38.88	29.29	8.27	38.27	38.17	74.00	-35.83	Vertical	Peak
5047.83	34.08	31.69	9.71	36.35	39.13	74.00	-34.87	Vertical	Peak
7900.86	31.87	36.70	12.78	34.80	46.55	74.00	-27.45	Vertical	Peak
1768.62	36.25	25.34	5.90	37.07	30.42	74.00	-43.58	Horizontal	Peak
3003.17	39.98	28.61	7.48	38.23	37.84	74.00	-36.16	Horizontal	Peak
5047.83	34.08	31.69	9.71	36.35	39.13	74.00	-34.87	Horizontal	Peak
7961.43	32.77	36.95	12.49	34.63	47.58	74.00	-26.42	Horizontal	Peak

802.11b					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2207.06	37.39	27.54	6.45	37.36	34.02	74.00	-39.98	Vertical	Peak
3598.09	40.04	29.29	8.27	38.27	39.33	74.00	-34.67	Vertical	Peak
4797.27	36.51	31.59	9.54	36.96	40.68	74.00	-33.32	Vertical	Peak
7941.19	33.30	36.87	12.58	34.69	48.06	74.00	-25.94	Vertical	Peak
1472.44	36.26	25.83	5.21	36.55	30.75	74.00	-43.25	Horizontal	Peak
3003.17	39.73	28.61	7.48	38.23	37.59	74.00	-36.41	Horizontal	Peak
4202.50	37.26	30.01	8.94	37.65	38.56	74.00	-35.44	Horizontal	Peak
7941.19	33.30	36.87	12.58	34.69	48.06	74.00	-25.94	Horizontal	Peak

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)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1228.98	36.16	26.27	4.71	36.55	30.59	74.00	-43.41	Vertical	Peak
2987.92	39.41	28.59	7.47	38.24	37.23	74.00	-36.77	Vertical	Peak
3598.09	38.88	29.29	8.27	38.27	38.17	74.00	-35.83	Vertical	Peak
4797.27	36.93	31.59	9.54	36.96	41.10	74.00	-32.90	Vertical	Peak
1782.18	35.78	25.37	5.93	37.10	29.98	74.00	-44.02	Horizontal	Peak
3598.09	38.88	29.29	8.27	38.27	38.17	74.00	-35.83	Horizontal	Peak
5125.52	32.82	31.80	9.77	36.27	38.12	74.00	-35.88	Horizontal	Peak
7981.72	31.42	37.03	12.39	34.58	46.26	74.00	-27.74	Horizontal	Peak

802.11g					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1809.61	37.56	25.39	5.97	37.15	31.77	74.00	-42.23	Vertical	Peak
3598.09	41.02	29.29	8.27	38.27	40.31	74.00	-33.69	Vertical	Peak
4797.27	34.54	31.59	9.54	36.96	38.71	74.00	-35.29	Vertical	Peak
7800.94	32.66	36.11	13.26	35.07	46.96	74.00	-27.04	Vertical	Peak
2184.70	36.37	27.38	6.43	37.34	32.84	74.00	-41.16	Horizontal	Peak
3507.65	36.25	29.02	8.13	38.40	35.00	74.00	-39.00	Horizontal	Peak
5034.99	33.22	31.64	9.70	36.37	38.19	74.00	-35.81	Horizontal	Peak
7394.88	32.32	36.30	12.06	34.83	45.85	74.00	-28.15	Horizontal	Peak

802.11g					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2195.85	36.48	27.47	6.44	37.34	33.05	74.00	-40.95	Vertical	Peak
3003.17	41.61	28.61	7.48	38.23	39.47	74.00	-34.53	Vertical	Peak
4321.84	35.90	30.27	9.06	37.60	37.63	74.00	-36.37	Vertical	Peak
8022.46	33.45	37.08	12.35	34.53	48.35	74.00	-25.65	Vertical	Peak
1428.14	36.74	25.87	5.08	36.50	31.19	74.00	-42.81	Horizontal	Peak
2195.85	36.48	27.47	6.44	37.34	33.05	74.00	-40.95	Horizontal	Peak
3598.09	39.49	29.29	8.27	38.27	38.78	74.00	-35.22	Horizontal	Peak
6544.35	32.79	34.09	11.26	35.35	42.79	74.00	-31.21	Horizontal	Peak

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)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2207.06	36.28	27.54	6.45	37.36	32.91	74.00	-41.09	Vertical	Peak
3241.50	38.37	28.55	7.77	38.27	36.42	74.00	-37.58	Vertical	Peak
3598.09	40.51	29.29	8.27	38.27	39.80	74.00	-34.20	Vertical	Peak
7376.08	32.53	36.30	12.04	34.85	46.02	74.00	-27.98	Vertical	Peak
2218.32	36.64	27.61	6.47	37.39	33.33	74.00	-40.67	Horizontal	Peak
3003.17	40.86	28.61	7.48	38.23	38.72	74.00	-35.28	Horizontal	Peak
3598.09	40.51	29.29	8.27	38.27	39.80	74.00	-34.20	Horizontal	Peak
7527.83	32.58	36.13	12.49	34.92	46.28	74.00	-27.72	Horizontal	Peak

802.11n(HT20)					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1741.81	36.20	25.29	5.85	37.02	30.32	74.00	-43.68	Vertical	Peak
3216.84	37.49	28.70	7.74	38.23	35.70	74.00	-38.30	Vertical	Peak
3598.09	38.80	29.29	8.27	38.27	38.09	74.00	-35.91	Vertical	Peak
7566.25	31.88	36.17	12.61	34.95	45.71	74.00	-28.29	Vertical	Peak
1741.81	36.20	25.29	5.85	37.02	30.32	74.00	-43.68	Horizontal	Peak
2995.54	37.46	28.60	7.48	38.23	35.31	74.00	-38.69	Horizontal	Peak
5073.59	33.41	31.80	9.73	36.33	38.61	74.00	-35.39	Horizontal	Peak
7547.01	31.30	36.15	12.55	34.94	45.06	74.00	-28.94	Horizontal	Peak

802.11n(HT20)					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1948.25	35.68	25.79	6.19	37.26	30.40	74.00	-43.60	Vertical	Peak
3003.17	42.94	28.61	7.48	38.23	40.80	74.00	-33.20	Vertical	Peak
5009.43	34.90	31.54	9.68	36.39	39.73	74.00	-34.27	Vertical	Peak
7961.43	32.61	36.95	12.49	34.63	47.42	74.00	-26.58	Vertical	Peak
1289.89	36.80	26.21	4.81	36.52	31.30	74.00	-42.70	Horizontal	Peak
3003.17	42.94	28.61	7.48	38.23	40.80	74.00	-33.20	Horizontal	Peak
3598.09	39.39	29.29	8.27	38.27	38.68	74.00	-35.32	Horizontal	Peak
7961.43	32.61	36.95	12.49	34.63	47.42	74.00	-26.58	Horizontal	Peak

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.