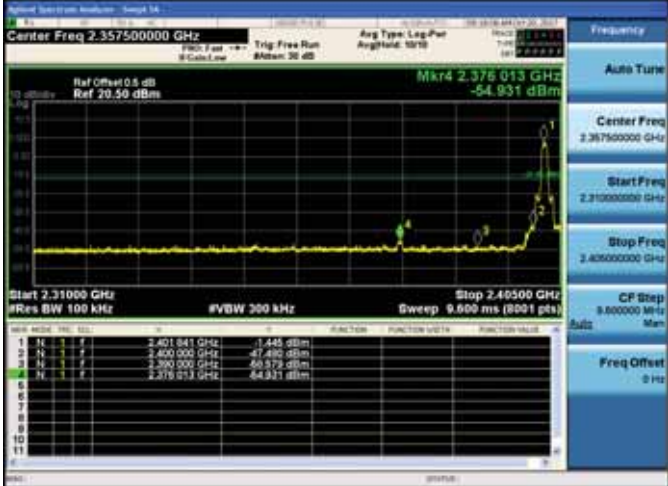
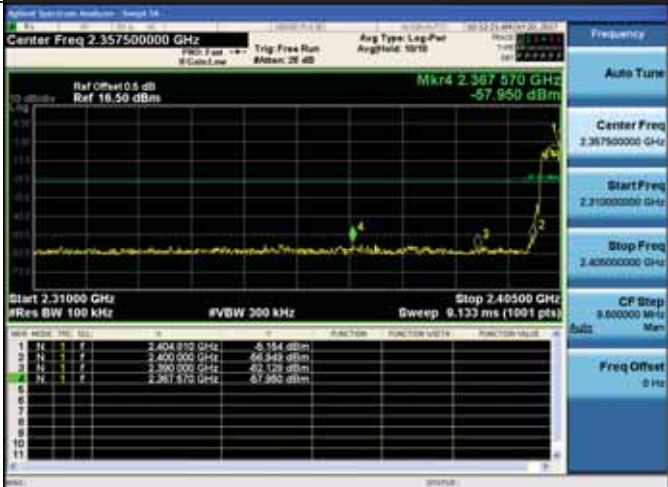
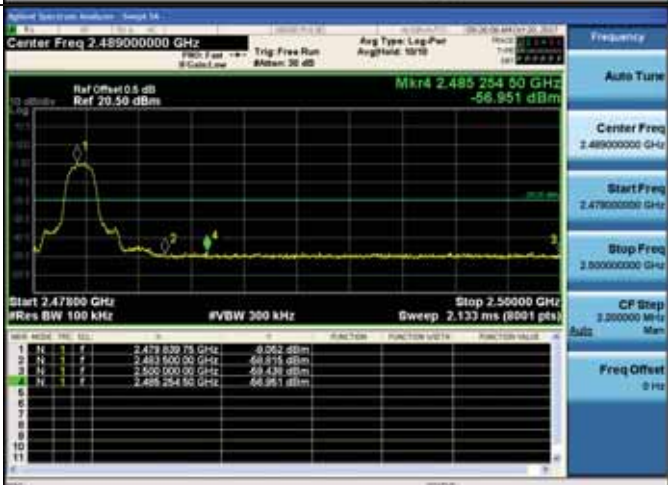
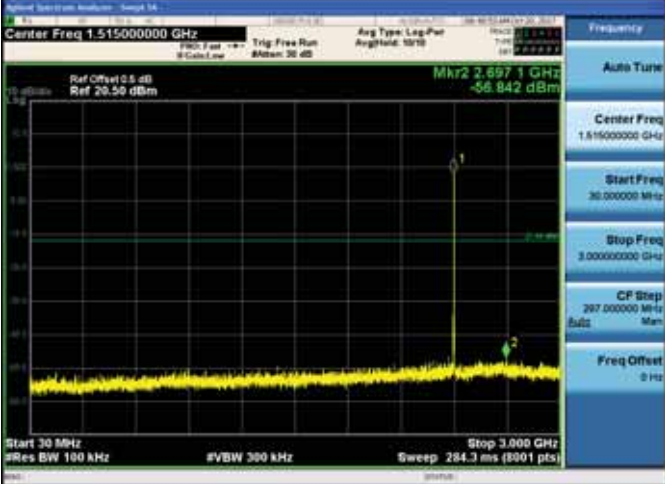

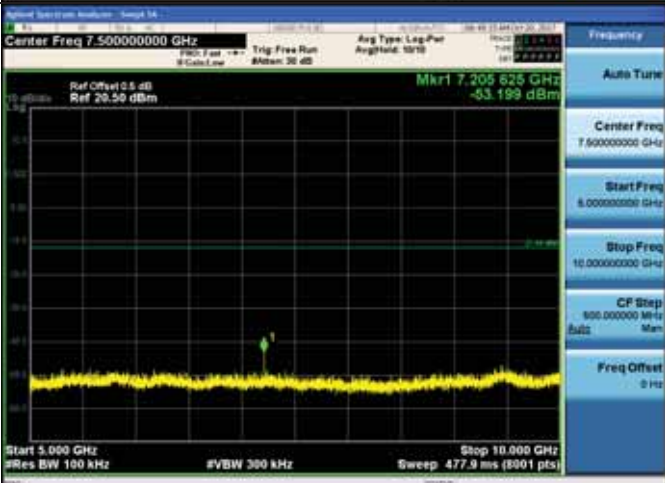
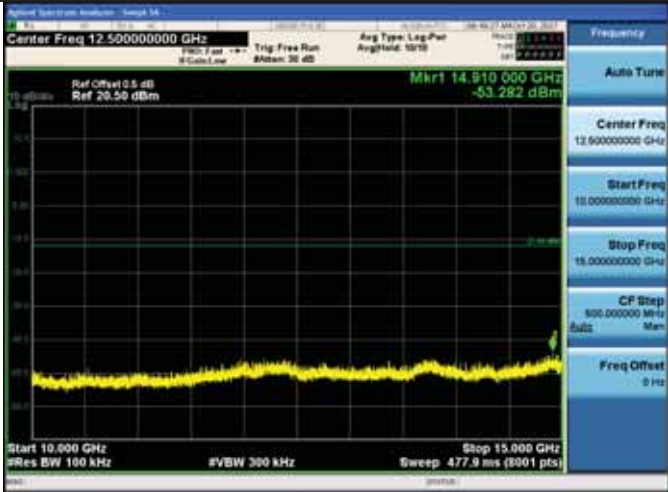

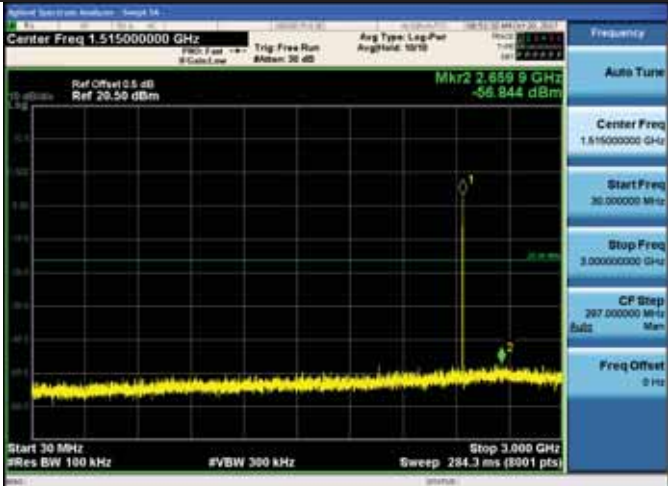


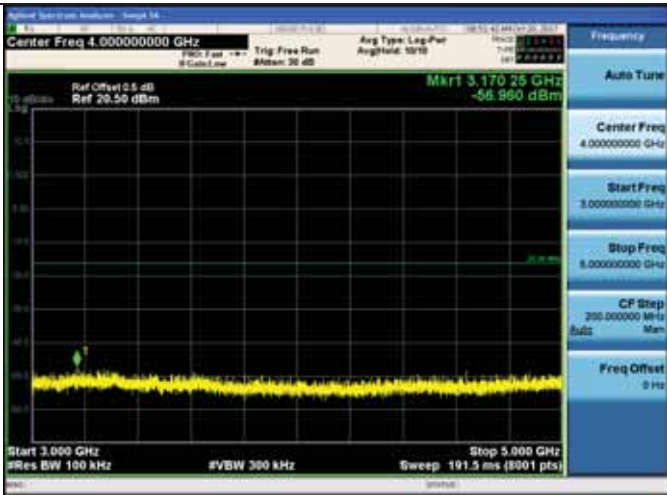
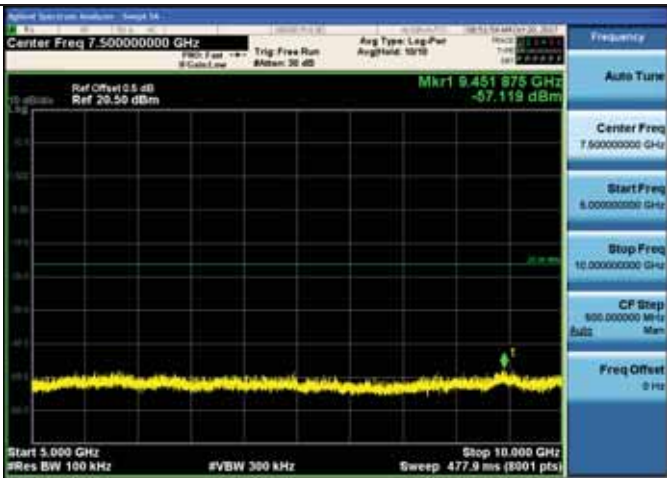
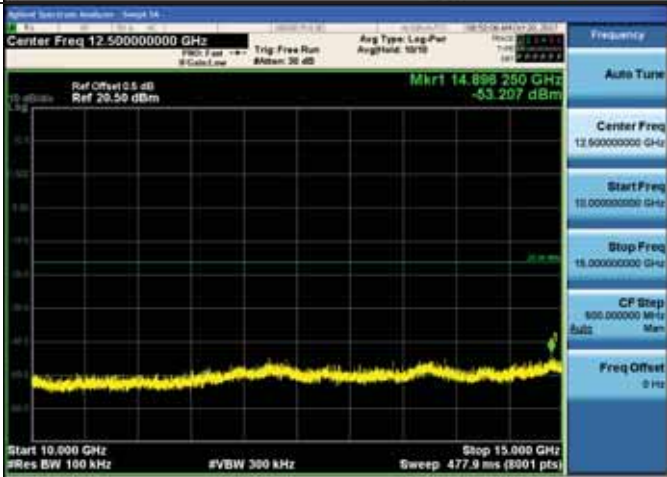



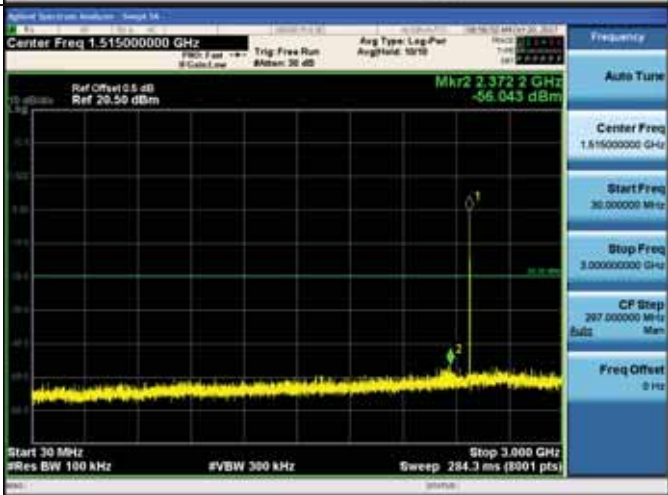
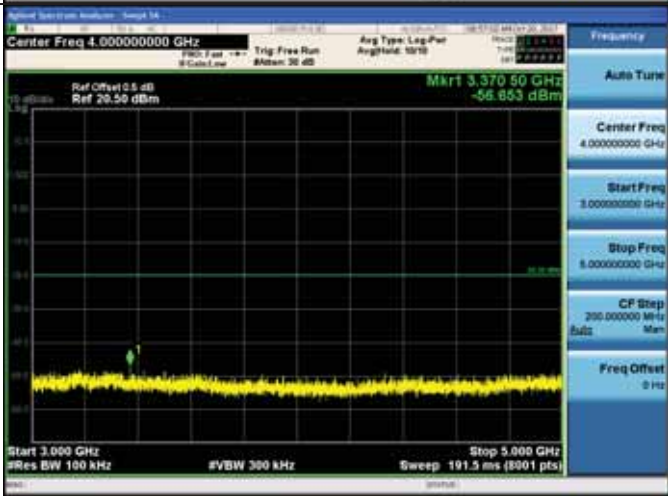

Test Item:	Band edge	Modulation type:	8DPSK
<p>CH00 No hopping mode</p>			
<p>CH00 Hopping mode</p>			
<p>CH78 No hopping mode</p>			

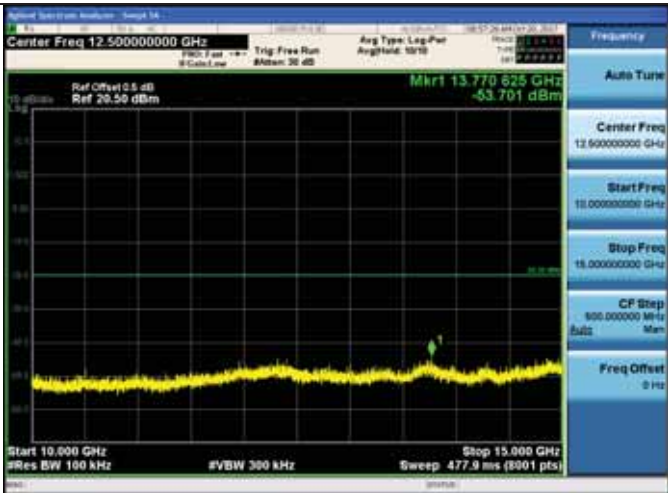



Test Item:	SE	Modulation type:	GFSK
<p>CH00 30MHz~3GHz</p>			
<p>CH00 3GHz~5GHz</p>			
<p>CH00 5GHz~10GHz</p>			

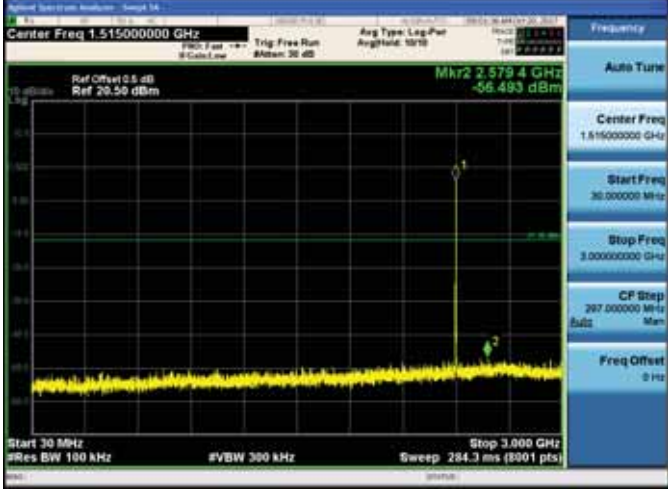


<p>CH00 10GHz~15GHz</p>	
<p>CH00 15GHz~25GHz</p>	
<p>CH39 30MHz~3GHz</p>	

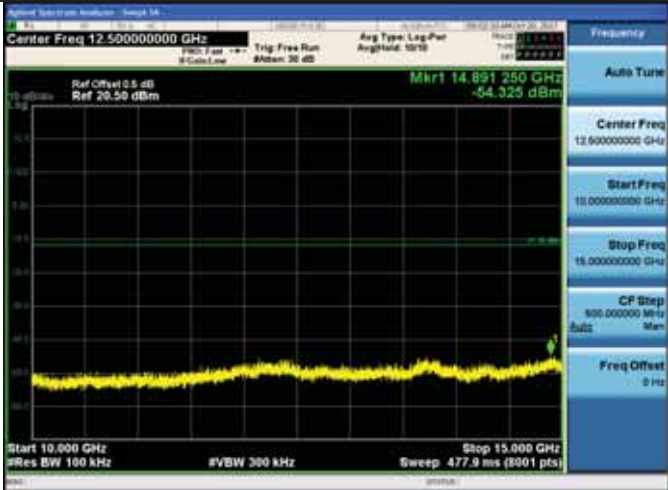

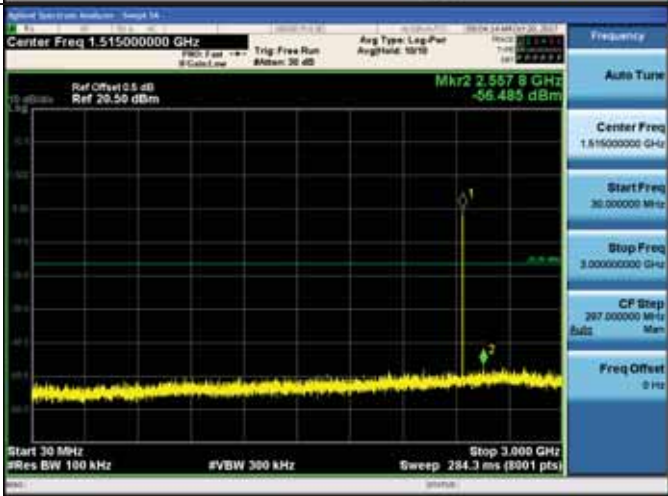
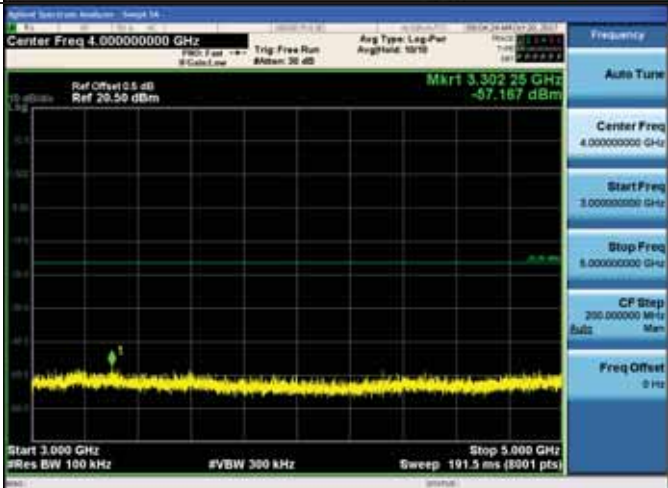
<p>CH39 3GHz~5GHz</p>	
<p>CH39 5GHz~10GHz</p>	
<p>CH39 10GHz~15GHz</p>	

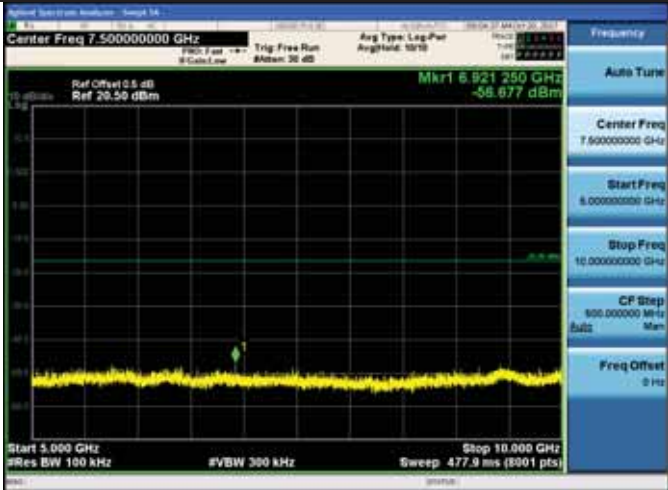
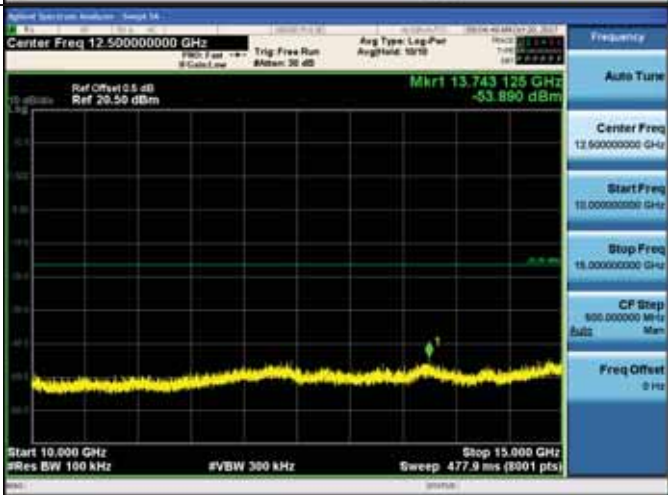

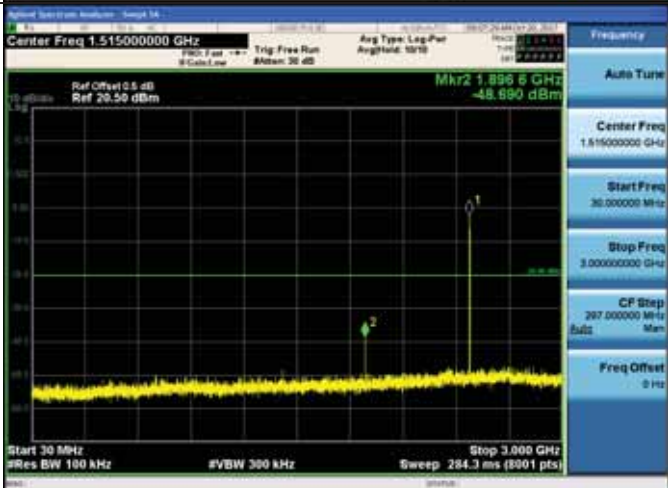
<p>CH39 15GHz~25GHz</p>	 <p>Center Freq 20.00000000 GHz Mkr1 24.490 00 GHz -44.168 dBm Start 15.000 GHz Stop 25.000 GHz Sweep 955.7 ms (8001 pts)</p>
<p>CH78 30MHz~3GHz</p>	 <p>Center Freq 1.51500000 GHz Mkr2 2.372 2 GHz -56.043 dBm Start 30 MHz Stop 3.000 GHz Sweep 284.3 ms (8001 pts)</p>
<p>CH78 3GHz~5GHz</p>	 <p>Center Freq 4.00000000 GHz Mkr1 3.370 50 GHz -56.653 dBm Start 3.000 GHz Stop 5.000 GHz Sweep 191.5 ms (8001 pts)</p>
<p>CH78 5GHz~10GHz</p>	 <p>Center Freq 7.50000000 GHz Mkr1 5.747 500 GHz -57.082 dBm Start 5.000 GHz Stop 10.000 GHz Sweep 477.9 ms (8001 pts)</p>

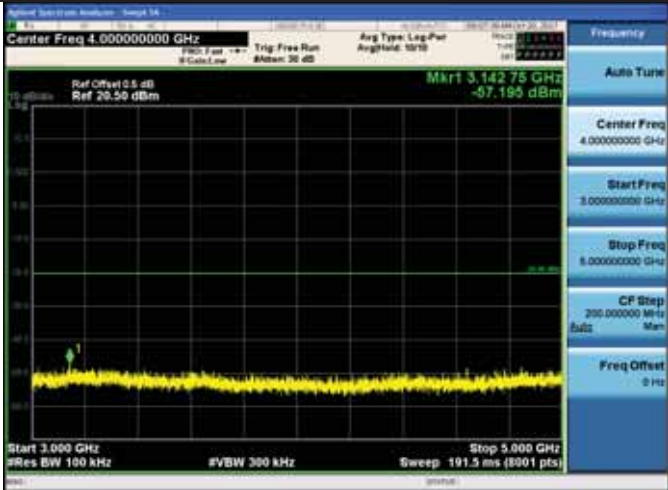
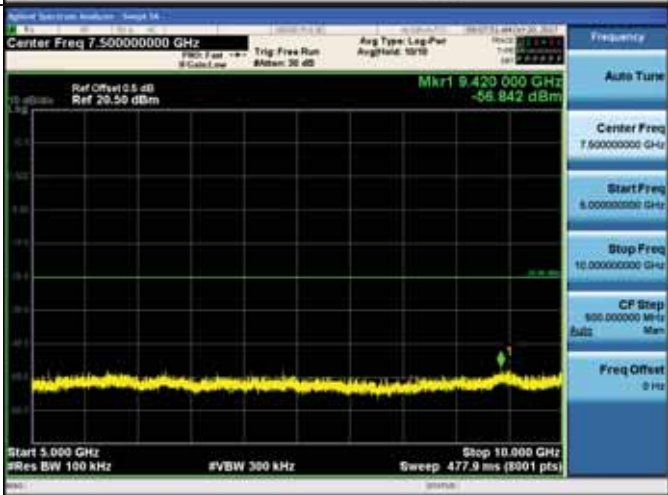


<p>CH78 10GHz~15GHz</p>		
<p>CH78 15GHz~25GHz</p>		

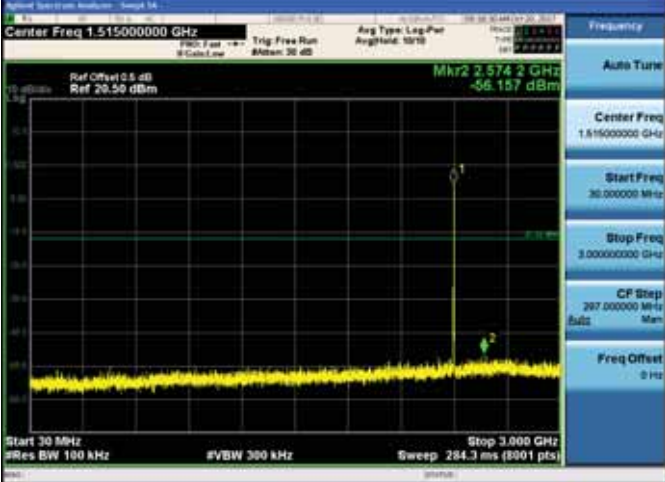
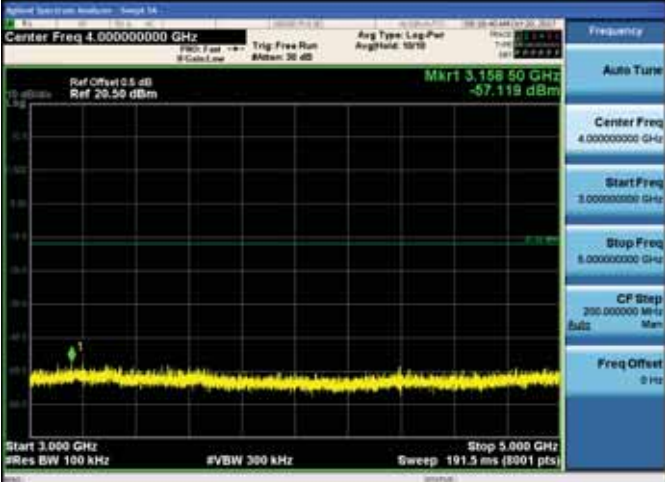
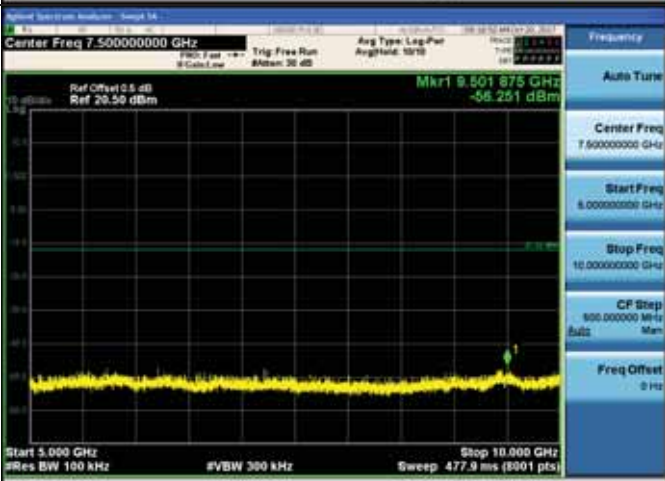


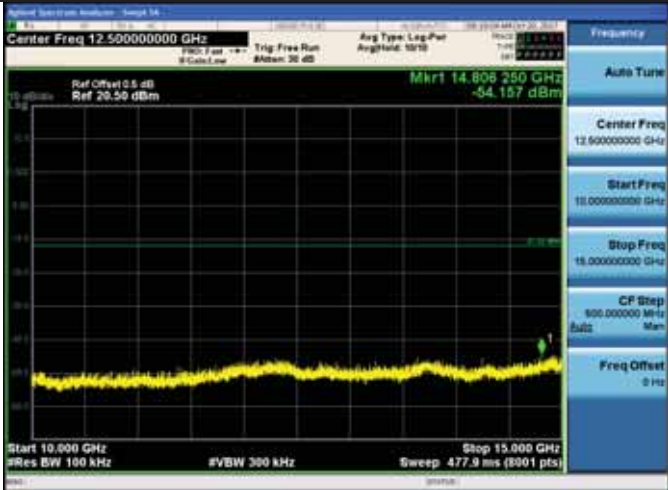

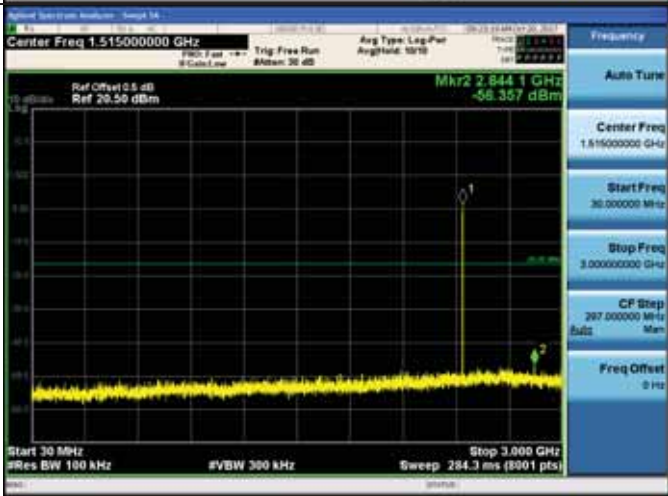
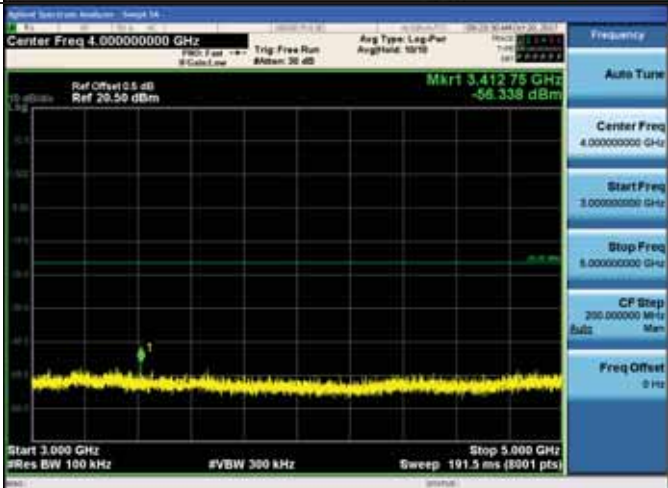
Test Item:	SE	Modulation type:	$\pi/4$ DQPSK
<p>CH00 30MHz~3GHz</p>			
<p>CH00 3GHz~5GHz</p>			
<p>CH00 5GHz~10GHz</p>			

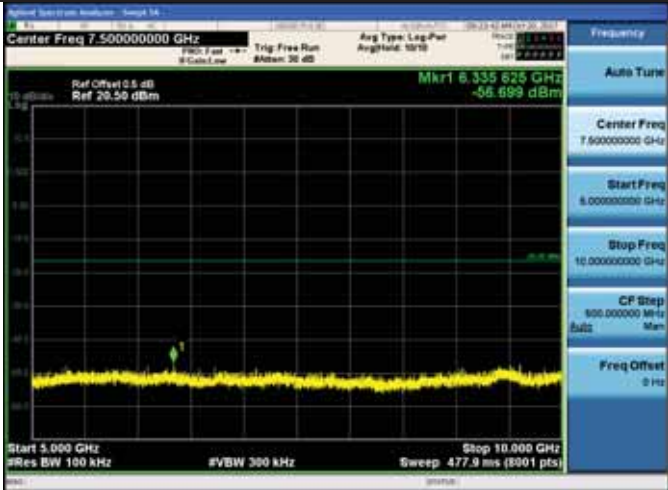
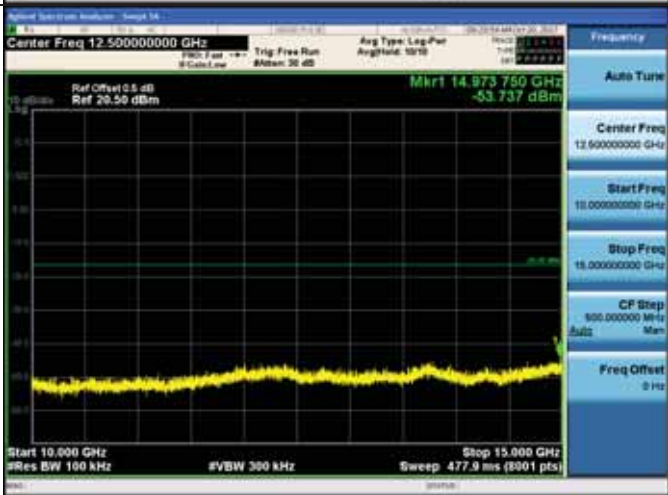

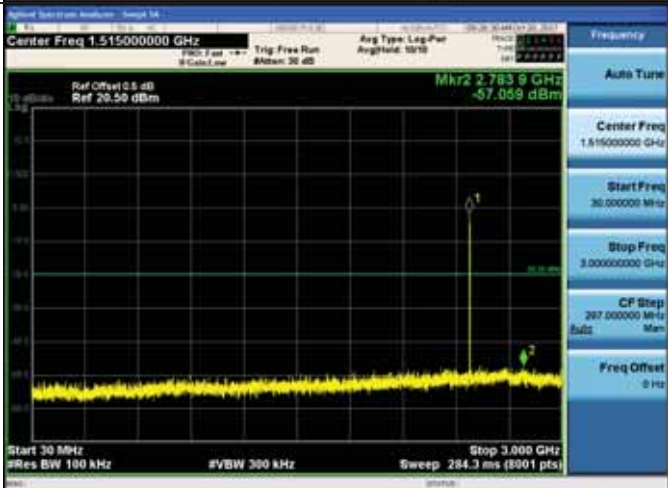
<p>CH00 10GHz~15GHz</p>	
<p>CH00 15GHz~25GHz</p>	
<p>CH39 30MHz~3GHz</p>	
<p>CH39 3GHz~5GHz</p>	

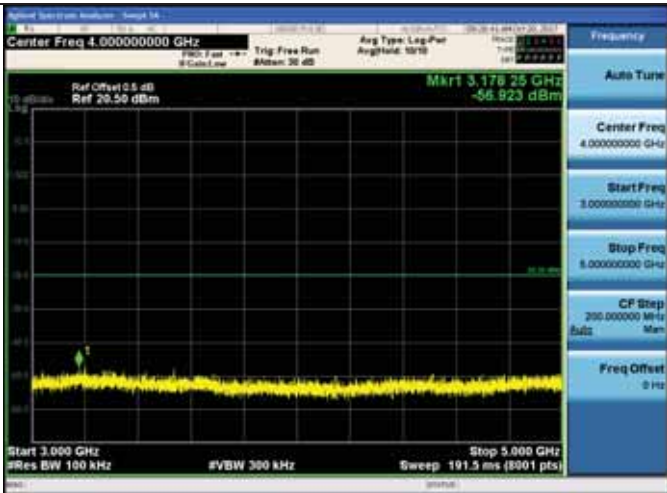

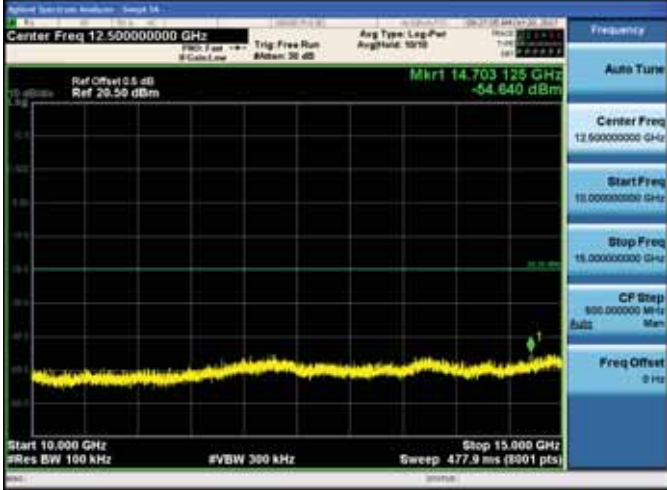

<p>CH39 5GHz~10GHz</p>	
<p>CH39 10GHz~15GHz</p>	
<p>CH39 15GHz~25GHz</p>	
<p>CH78 30MHz~3GHz</p>	

<p>CH78 3GHz~5GHz</p>	
<p>CH78 5GHz~10GHz</p>	
<p>CH78 10GHz~15GHz</p>	
<p>CH78 15GHz~25GHz</p>	

Test Item:	SE	Modulation type:	8DPSK
<p>CH00 30MHz~3GHz</p>			
<p>CH00 3GHz~5GHz</p>			
<p>CH00 5GHz~10GHz</p>			

<p>CH00 10GHz~15GHz</p>	
<p>CH00 15GHz~25GHz</p>	
<p>CH39 30MHz~3GHz</p>	
<p>CH39 3GHz~5GHz</p>	

<p>CH39 5GHz~10GHz</p>	
<p>CH39 10GHz~15GHz</p>	
<p>CH39 15GHz~25GHz</p>	
<p>CH78 30MHz~3GHz</p>	

<p>CH78 3GHz~5GHz</p>	
<p>CH78 5GHz~10GHz</p>	
<p>CH78 10GHz~15GHz</p>	
<p>CH78 15GHz~25GHz</p>	



### 5.11. Spurious Emissions (radiated)

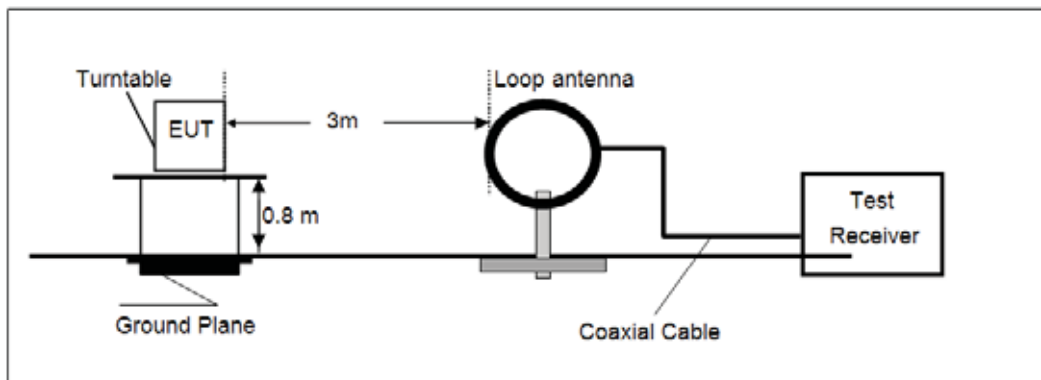
#### LIMIT

#### FCC CFR Title 47 Part 15 Subpart C Section 15.209

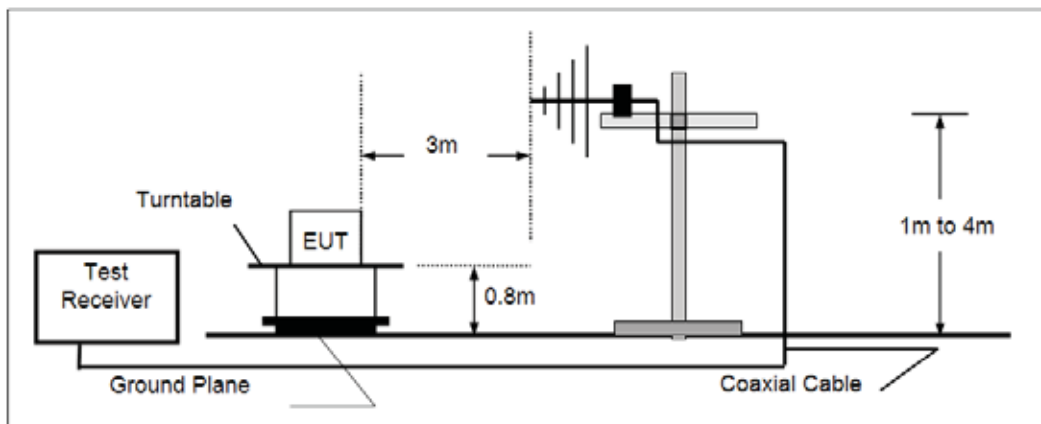
Frequency	Limit (dBuV/m @3m)	Value
30 MHz ~ 88 MHz	40.00	Quasi-peak
88 MHz ~ 216 MHz	43.50	Quasi-peak
216 MHz ~ 960 MHz	46.00	Quasi-peak
960 MHz ~ 1 GHz	54.00	Quasi-peak
Above 1 GHz	54.00	Average
	74.00	Peak

#### TEST CONFIGURATION

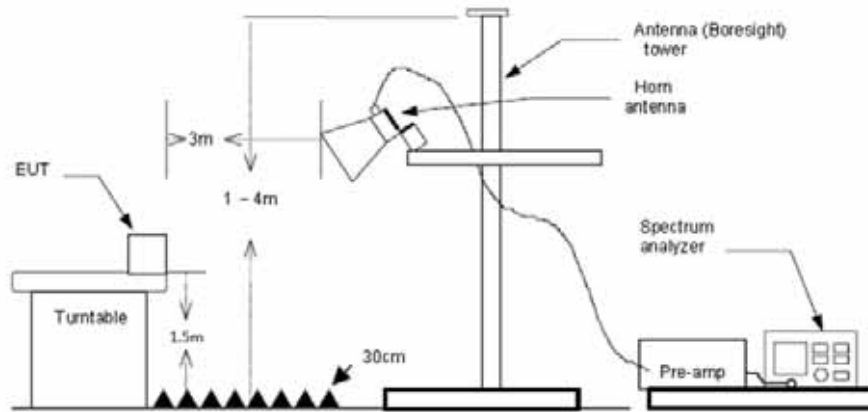
- Below 30 MHz



- 30 MHz ~1000 MHz



- Above 1 GHz



### TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10:2013.
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 1 GHz, RBW=120 kHz, VBW=300 kHz, 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 1 GHz, RBW=1 MHz, VBW=3 MHz Peak detector for Peak value  
RBW=1 MHz, VBW=10 Hz Peak detector for Average value.

### TEST MODE:

Please refer to the clause 3.3

### TEST RESULTS

Passed       Not Applicable

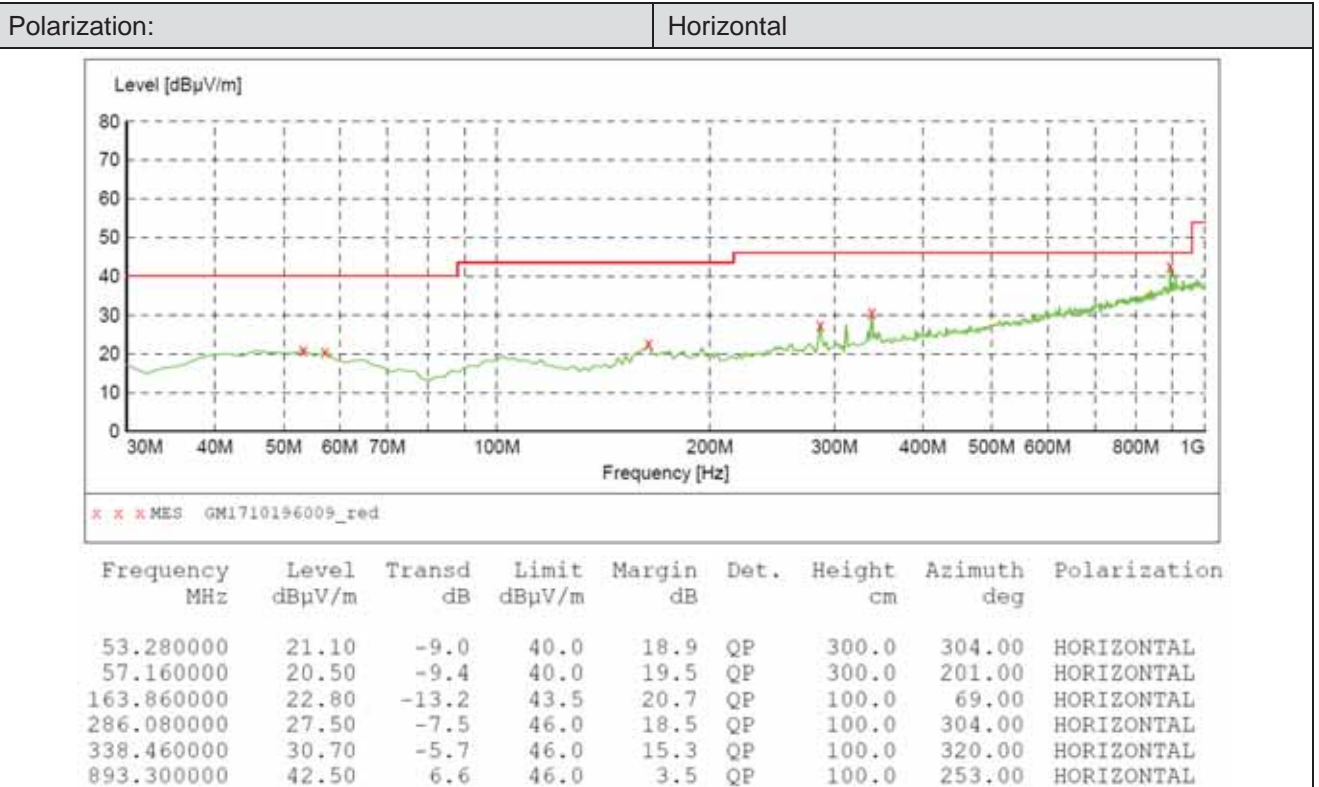
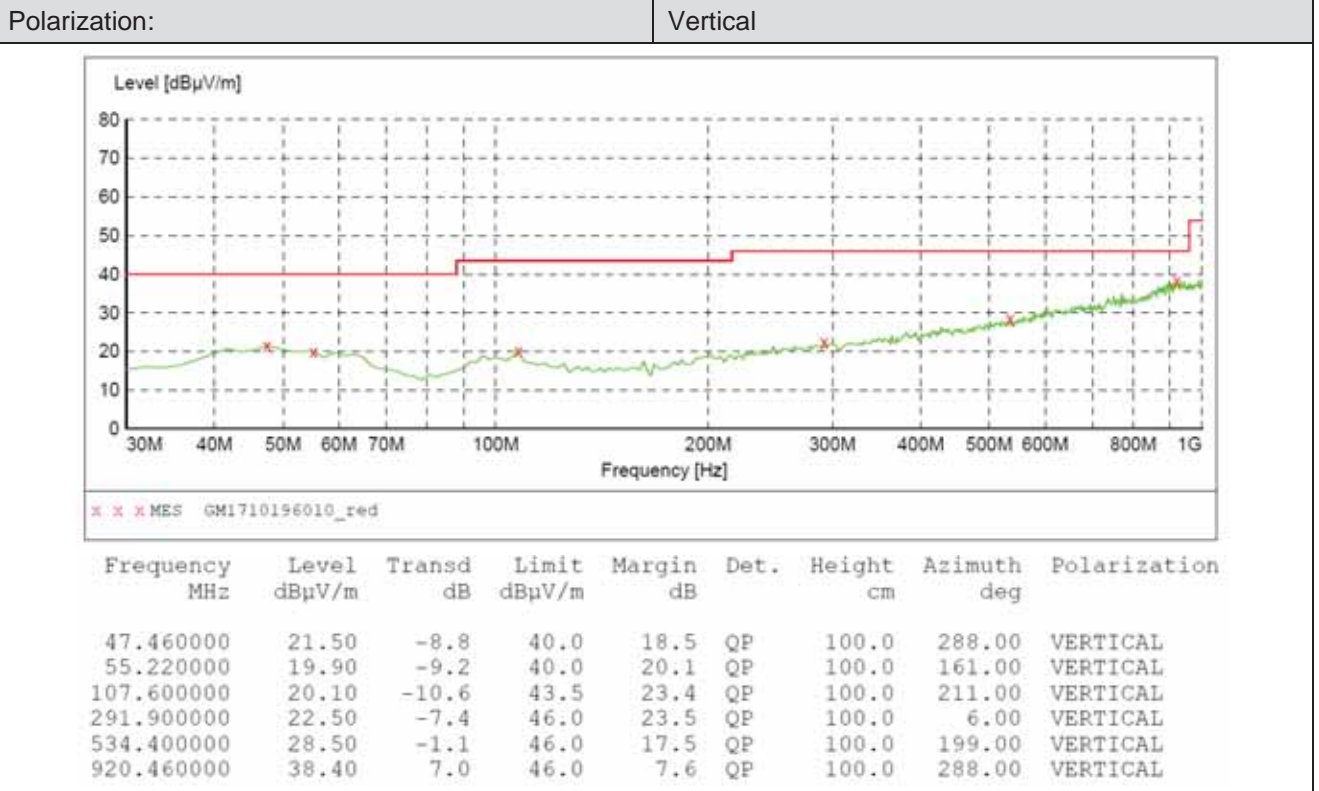
Note:

- 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.
- 3) Below 1 GHz, Have pre-scan all modulation mode, found the GFSK modulation High channel which it was worst case, so only the worst case's data on the test report.
- 4) Above 1 GHz, Have pre-scan all modulation mode, found the GFSK modulation which it was worst case, so only the worst case's data on the test report
- 5) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.

#### ➤ 9 kHz ~ 30 MHz

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

➤ 30 MHz ~ 1 GHz



## ➤ Above 1 GHz

CH00									
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
1533.65	52.56	25.49	5.38	36.63	46.80	74.00	-27.20	Vertical	Peak
2995.54	44.26	28.60	7.48	38.23	42.11	74.00	-31.89	Vertical	Peak
4809.50	41.16	31.58	9.55	36.93	45.36	74.00	-28.64	Vertical	Peak
7209.02	41.29	36.21	11.87	35.07	54.30	74.00	-19.70	Vertical	Peak
4809.50	23.74	31.58	9.55	36.93	27.94	54.00	-26.06	Vertical	Average
7209.02	23.15	36.21	11.87	35.07	36.16	54.00	-17.84	Vertical	Average
1533.65	53.42	25.49	5.38	36.63	47.66	74.00	-26.34	Horizontal	Peak
3064.96	39.79	28.73	7.56	38.22	37.86	74.00	-36.14	Horizontal	Peak
4809.50	48.29	31.58	9.55	36.93	52.49	74.00	-21.51	Horizontal	Peak
7209.02	39.62	36.21	11.87	35.07	52.63	74.00	-21.37	Horizontal	Peak
4809.50	33.52	31.58	9.55	36.93	37.72	54.00	-16.28	Horizontal	Average
7209.02	23.59	36.21	11.87	35.07	36.60	54.00	-17.40	Horizontal	Average

CH39									
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
1533.65	52.81	25.49	5.38	36.63	47.05	74.00	-26.95	Vertical	Peak
1800.42	47.57	25.40	5.96	37.14	41.79	74.00	-32.21	Vertical	Peak
2995.54	44.42	28.60	7.48	38.23	42.27	74.00	-31.73	Vertical	Peak
4996.69	45.03	31.50	9.67	36.41	49.79	74.00	-24.21	Vertical	Peak
1533.65	52.36	25.49	5.38	36.63	46.60	74.00	-27.40	Horizontal	Peak
1800.42	41.90	25.40	5.96	37.14	36.12	74.00	-37.88	Horizontal	Peak
2995.54	42.40	28.60	7.48	38.23	40.25	74.00	-33.75	Horizontal	Peak
4883.52	41.84	31.43	9.59	36.73	46.13	74.00	-27.87	Horizontal	Peak

CH78									
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
1498.91	40.39	25.80	5.28	36.59	34.88	74.00	-39.12	Vertical	Peak
3299.78	39.25	28.20	7.84	38.37	36.92	74.00	-37.08	Vertical	Peak
5086.52	32.78	31.85	9.74	36.31	38.06	74.00	-35.94	Vertical	Peak
7663.17	32.55	36.14	12.89	35.01	46.57	74.00	-27.43	Vertical	Peak
1533.65	52.51	25.49	5.38	36.63	46.75	74.00	-27.25	Horizontal	Peak
2097.51	45.08	26.69	6.35	37.32	40.80	74.00	-33.20	Horizontal	Peak
2995.54	40.89	28.60	7.48	38.23	38.74	74.00	-35.26	Horizontal	Peak
4996.69	38.66	31.50	9.67	36.41	43.42	74.00	-30.58	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.

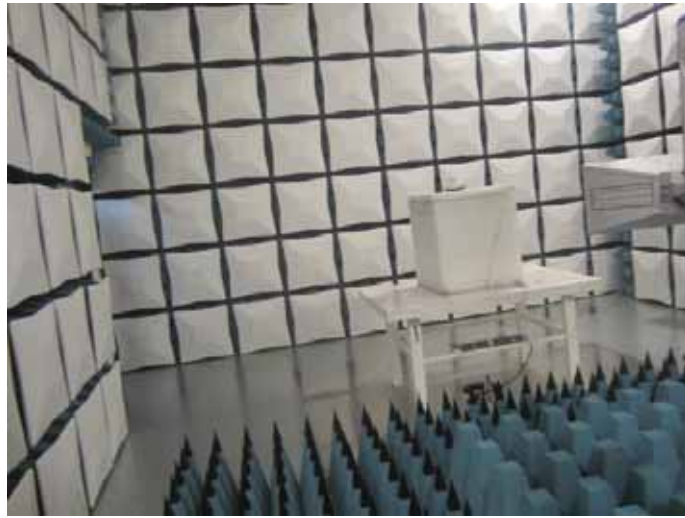
## 6. TEST SETUP PHOTOS

Conducted Emissions (AC Mains)



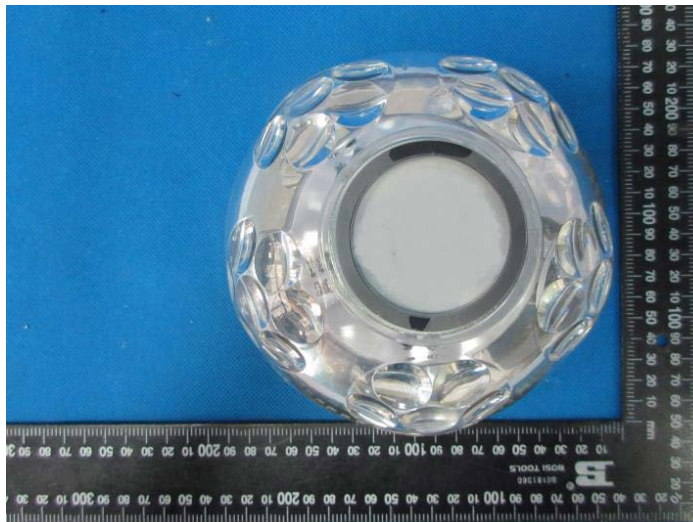
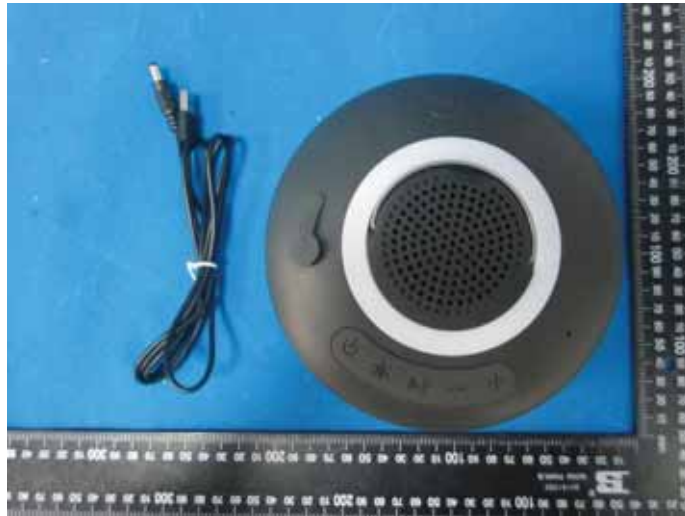
Radiated Emissions





## 7. EXTERANAL AND INTERNAL PHOTOS

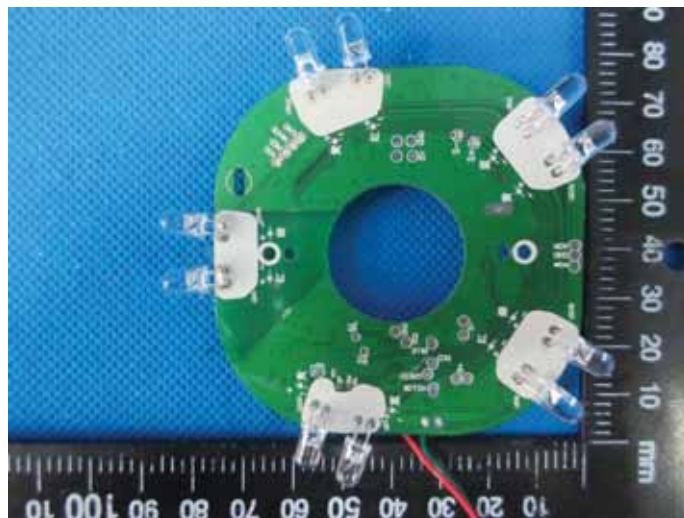
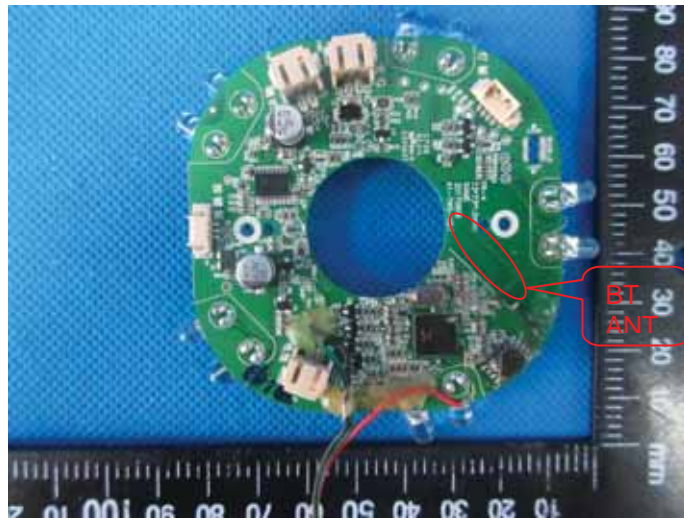
### EXTERNAL PHOTOS

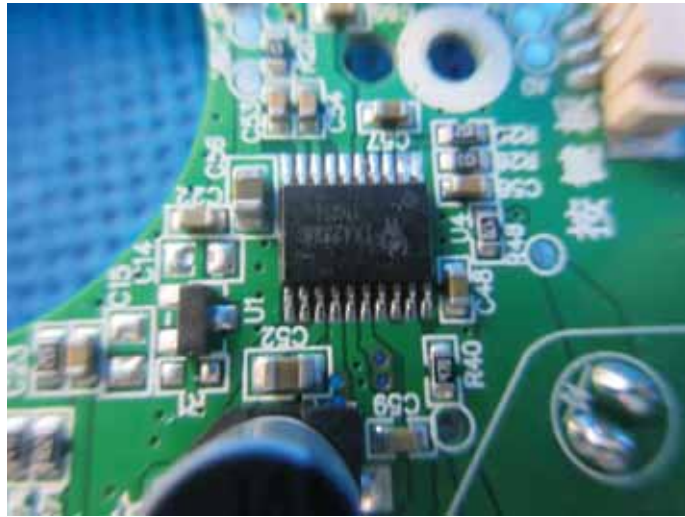






### INTERNAL PHOTOS





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