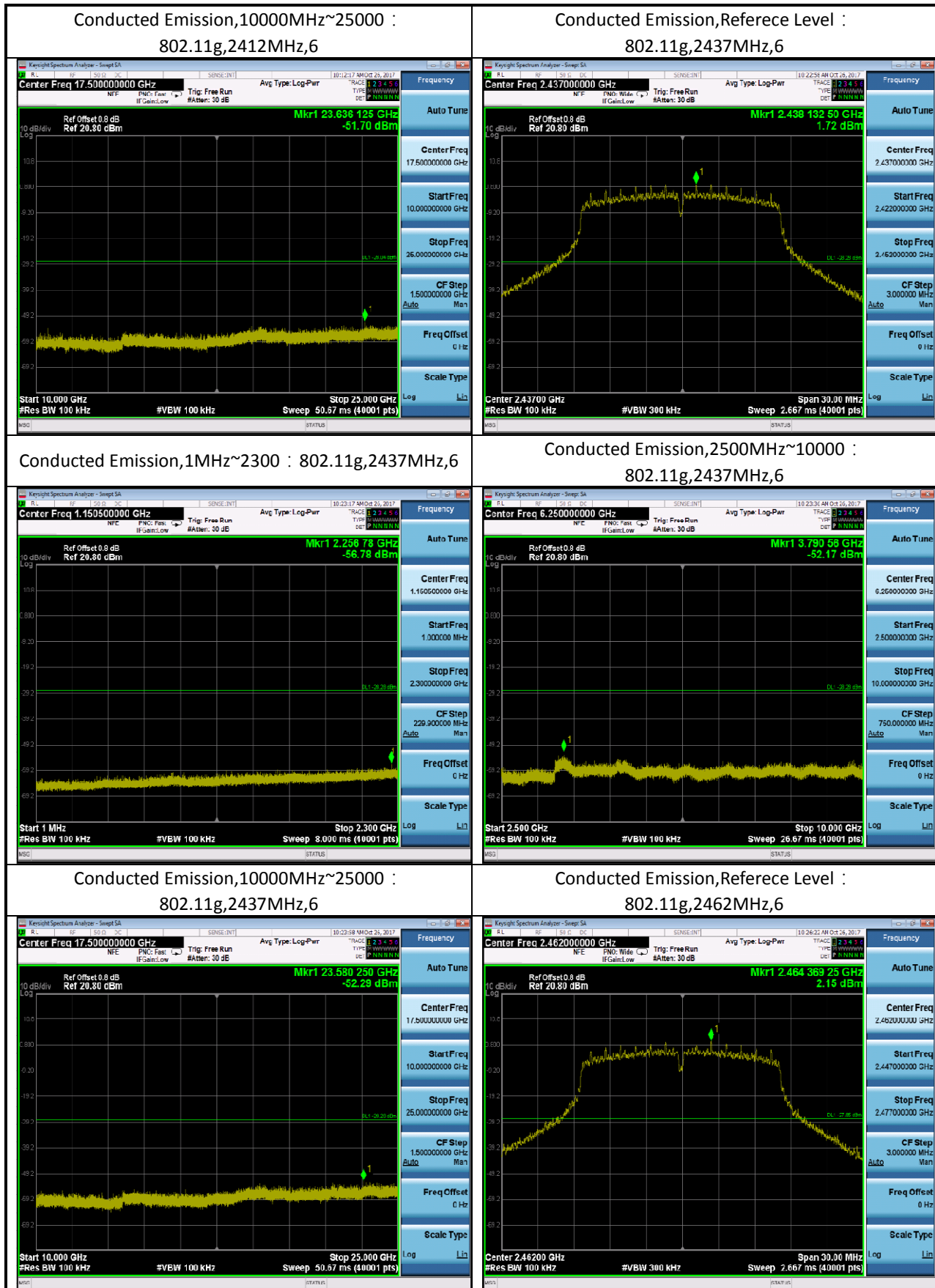
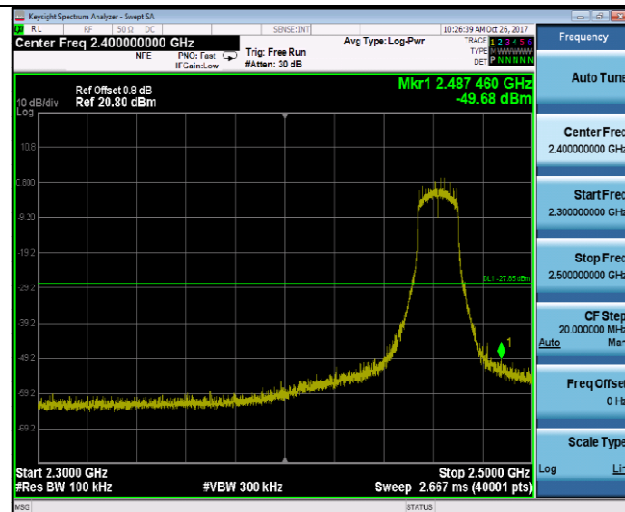
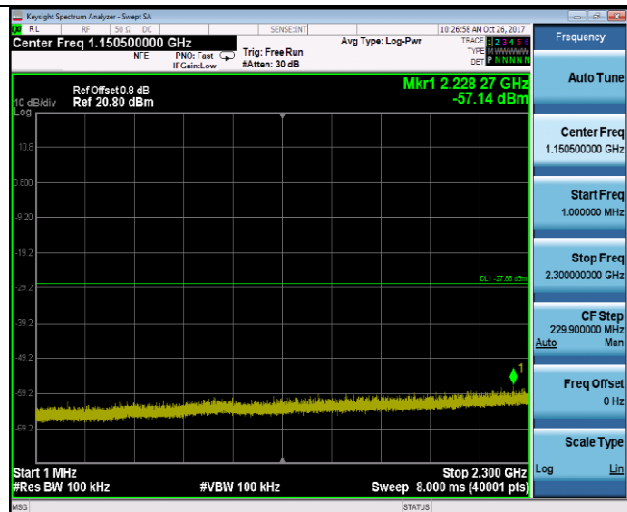




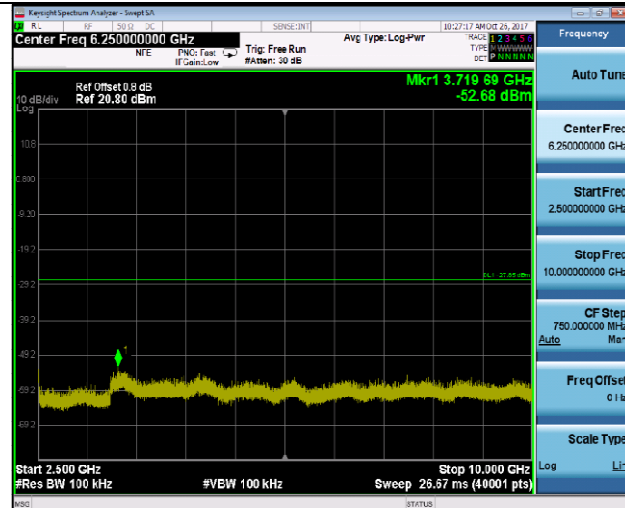
Conducted Emission,Band Edge : 802.11g,2462MHz,6



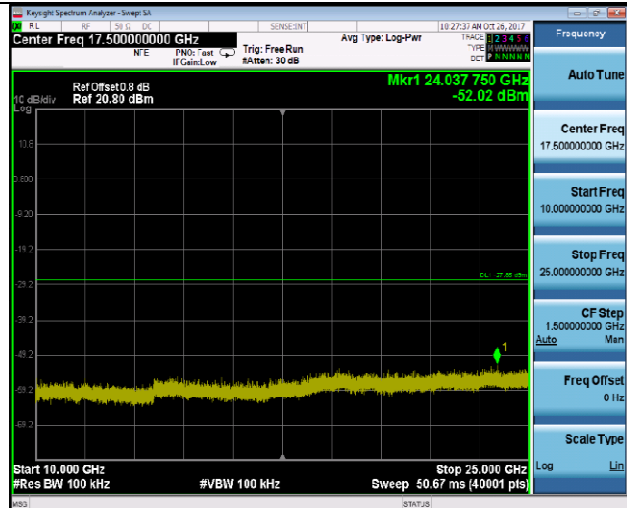
Conducted Emission,1MHz~2300 : 802.11g,2462MHz,6



Conducted Emission,2500MHz~10000 :
802.11g,2462MHz,6



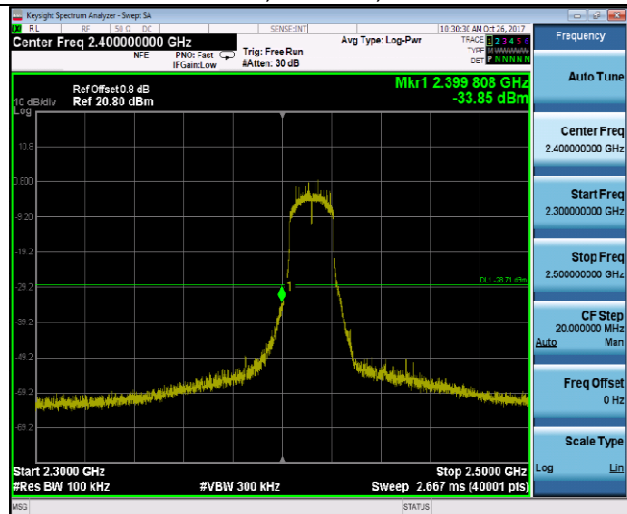
Conducted Emission,10000MHz~25000 :
802.11g,2462MHz,6



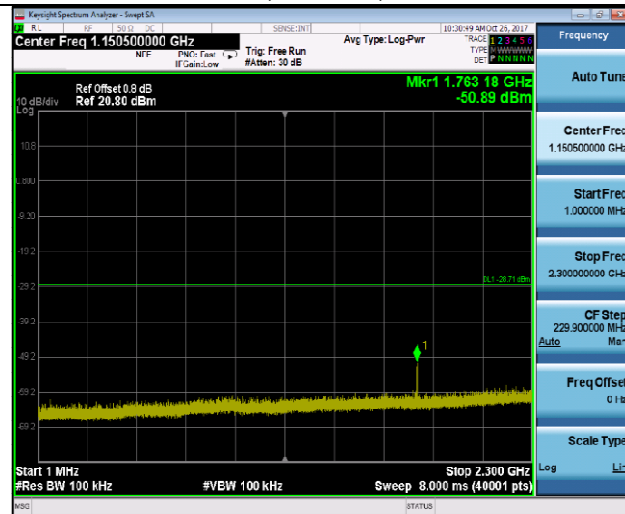
Conducted Emission,Referece Level :
802.11n,2412MHz,MCS0



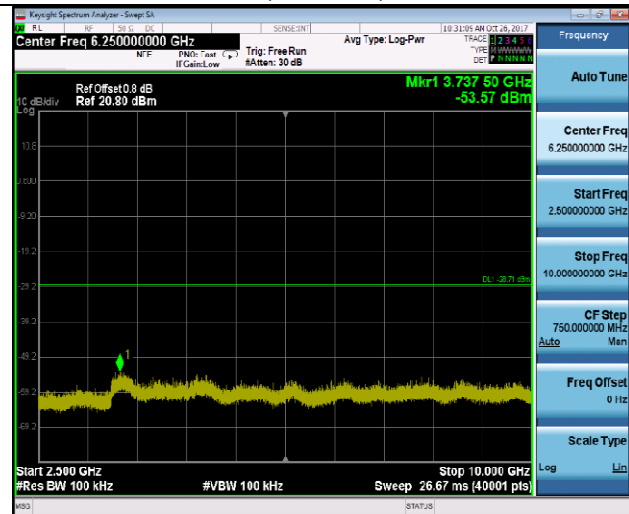
Conducted Emission,Band Edge :
802.11n,2412MHz,MCS0



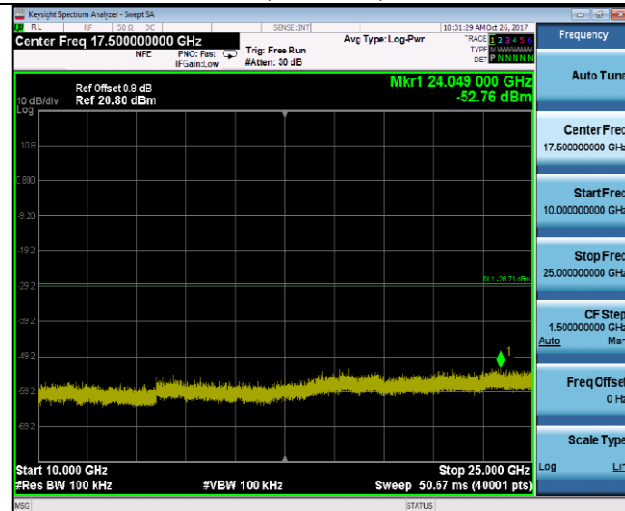
Conducted Emission,1MHz~2300 :
802.11n,2412MHz,MCS0



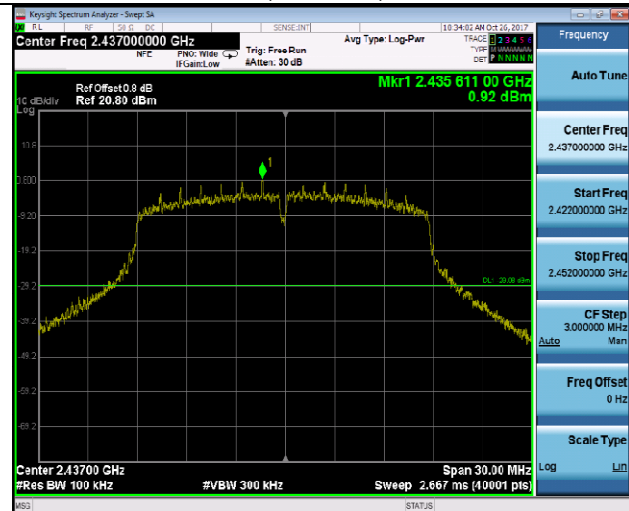
Conducted Emission,2500MHz~10000 :
802.11n,2412MHz,MCS0



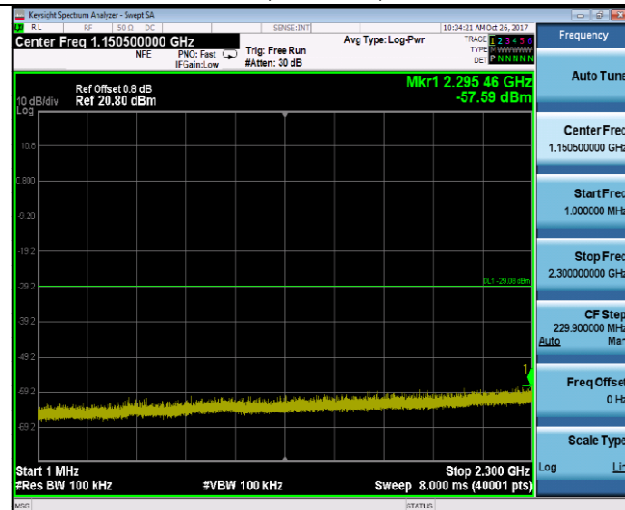
Conducted Emission,10000MHz~25000 :
802.11n,2412MHz,MCS0



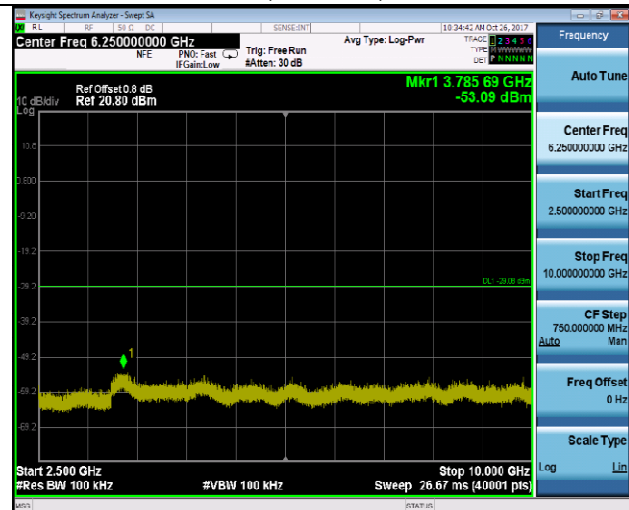
Conducted Emission,Referece Level :
802.11n,2437MHz,MCS0



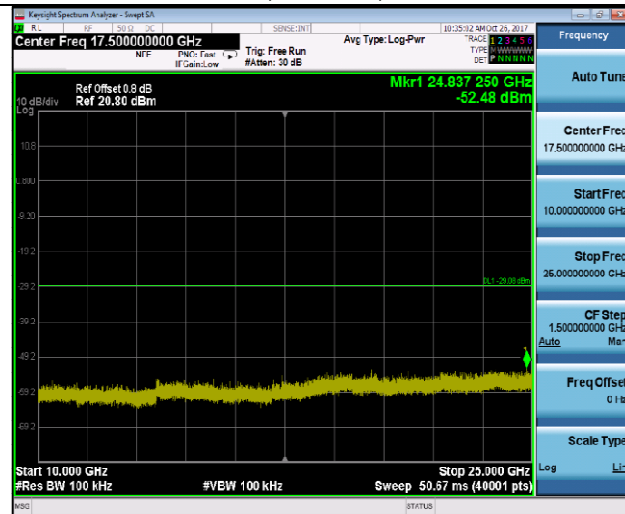
Conducted Emission,1MHz~2300 :
802.11n,2437MHz,MCS0



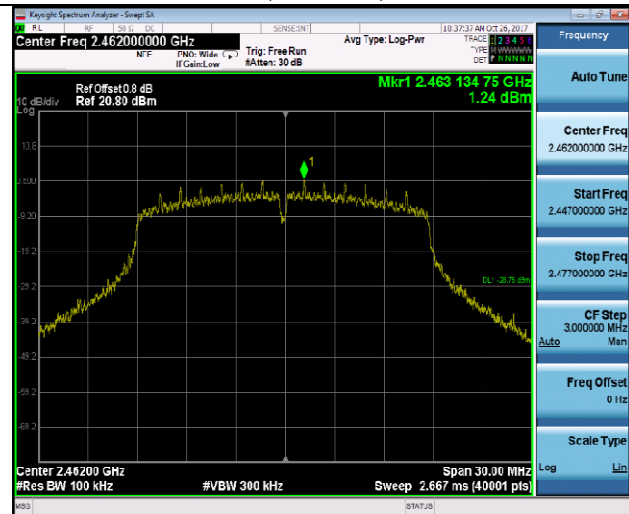
Conducted Emission,2500MHz~10000 :
802.11n,2437MHz,MCS0



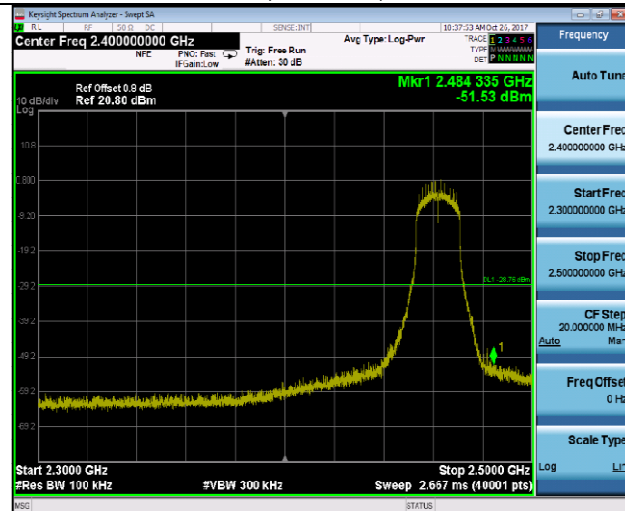
Conducted Emission,10000MHz~25000 :
802.11n,2437MHz,MCS0



Conducted Emission,Referece Level :
802.11n,2462MHz,MCS0



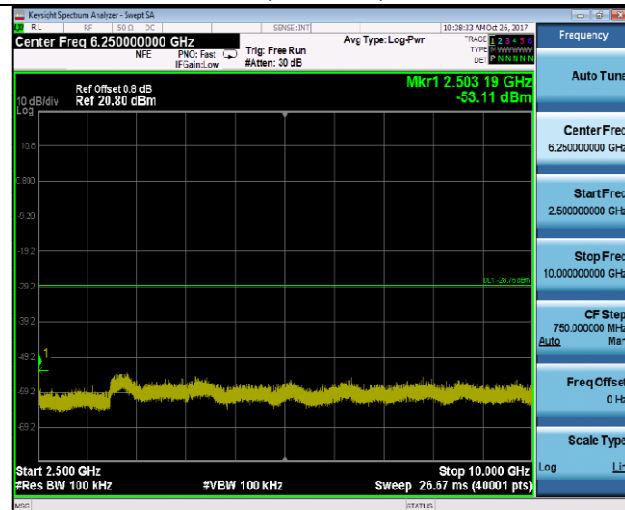
Conducted Emission,Band Edge :
802.11n,2462MHz,MCS0



Conducted Emission,1MHz~2300 :
802.11n,2462MHz,MCS0



Conducted Emission,2500MHz~10000 :
802.11n,2462MHz,MCS0



Conducted Emission,10000MHz~25000 :
802.11n,2462MHz,MCS0



7 Radiated Emissions

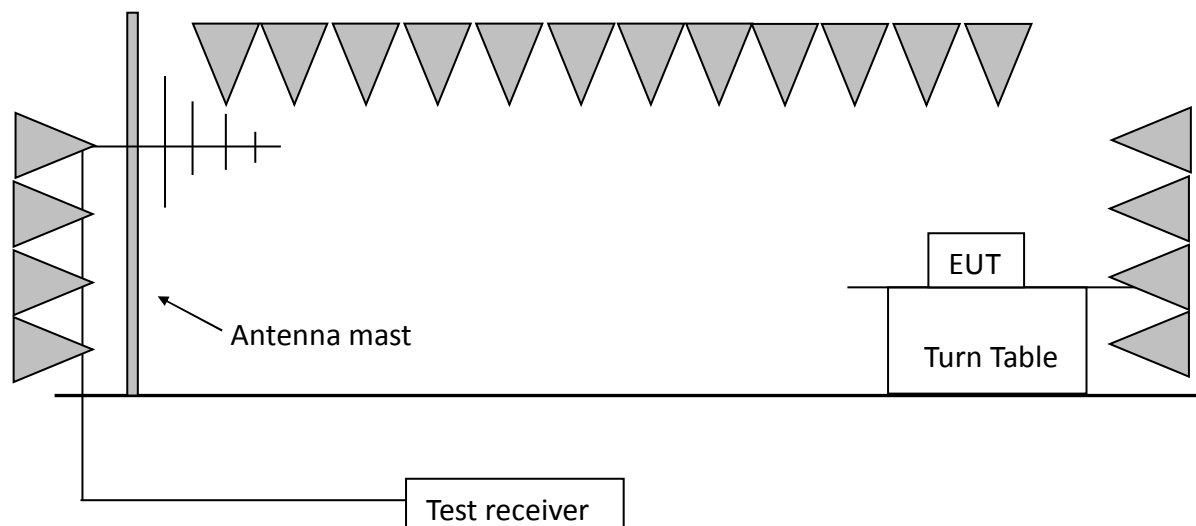
Test result: Pass

7.1 Test limit

The radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) showed as below:

Frequencies (MHz)	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 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

7.2 Test Configuration



7.3 Test procedure and test setup

The measurement was applied in a semi-anechoic chamber. While testing for spurious emission higher than 1GHz, if applied, the pre-amplifier would be equipped just at the output terminal of the antenna.

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m.

The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mast. The antenna moved up and down between from 1meter to 4 meters to find out the maximum emission level.

The EUT was tested according to DTS test procedure of KDB558074 D01 DTS "Meas Guidance" for compliance to FCC 47CFR 15.247 requirements.

The radiated emission was measured using the Spectrum Analyzer with the resolutions bandwidth set as:

RBW = 300 Hz, VBW = 1 kHz (9 kHz~150 kHz);
RBW = 10 kHz, VBW = 30 kHz (150 kHz~30MHz);
RBW = 100 kHz, VBW = 300 kHz (30MHz~1GHz for PK)
RBW = 1MHz, VBW = 3MHz (>1GHz for PK);

Remark:

1. Factor= Antenna Factor + Cable Loss (-Amplifier, is employed)
2. Measured level= Original Receiver Reading + Factor
3. Margin = Limit – Measured level
4. If the PK measured level is lower than AV limit, the AV test can be elided.

Example:

Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV.
Then Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m;
Measured level = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m,
Measured level = 10.20dBuV/m, then Margin = 54 - 10.20 = 43.80dBuV/m.

7.4 Test Protocol

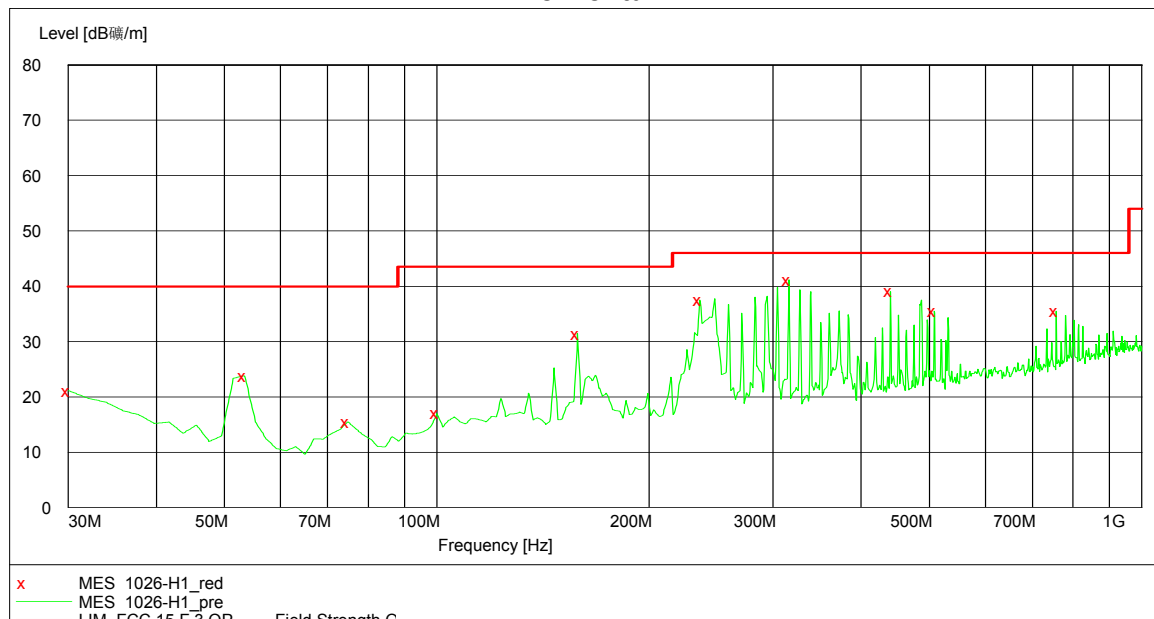
Temperature: 25 °C

Relative Humidity: 55 %

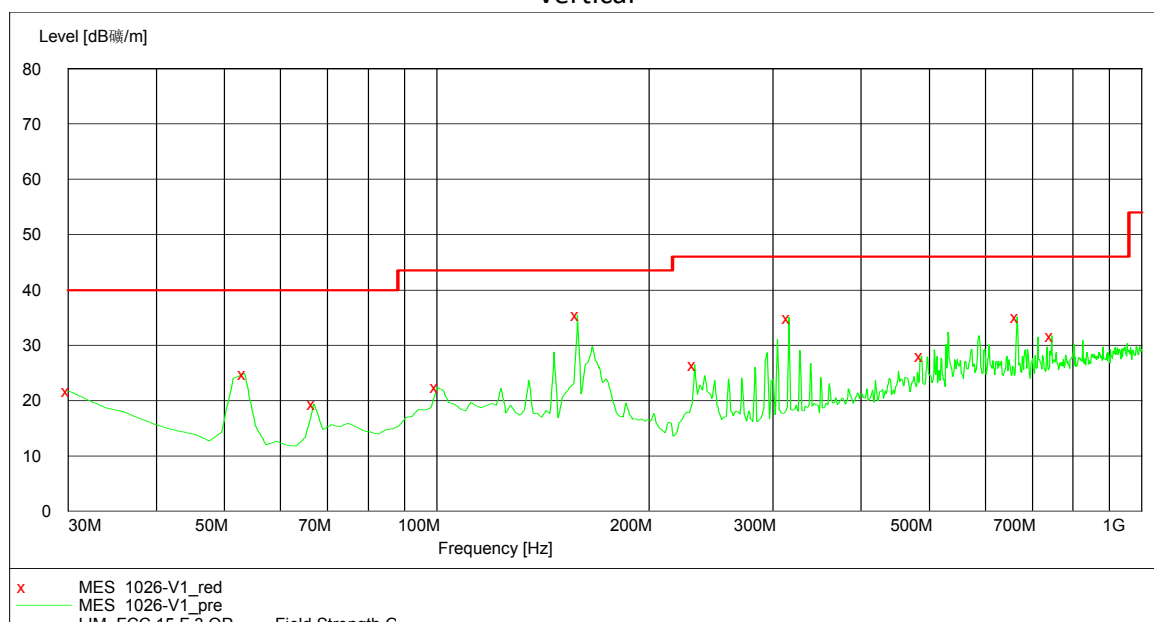
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

The worst waveform from 30MHz to 1000MHz is listed as below:

Horizontal



Vertical



Test data 30MHz~1GHz:

Polarization	Frequency (MHz)	Measured level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
H	30.00	21.1	40.0	18.9	PK
	53.33	23.8	40.0	16.2	PK
	74.71	15.5	40.0	24.5	PK
	99.98	17.0	43.5	26.5	PK
	158.30	31.4	43.5	12.1	PK
	236.05	37.5	46.0	8.5	PK
	315.75	41.1	46.0	4.9	PK
	440.16	39.0	46.0	7.0	PK
	508.20	35.5	46.0	10.5	PK
	757.01	35.5	46.0	10.5	PK
V	30.00	21.7	40.0	18.3	PK
	53.33	24.9	40.0	15.1	PK
	66.93	19.4	40.0	20.6	PK
	99.98	22.4	43.5	21.1	PK
	158.30	35.4	43.5	8.1	PK
	232.16	26.5	46.0	19.5	PK
	315.75	35.0	46.0	11.0	PK
	486.81	28.1	46.0	17.9	PK
	665.65	35.1	46.0	10.9	PK
	745.35	31.7	46.0	14.3	PK

Note: The 802.11g channel H (2462MHz) was chosen to test for 30MHz to 1GHz as representative and list in the report.

Test result above 1GHz:

The emission was conducted from 1GHz to 25GHz.

802.11b:

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
L	H	2390.00	50.12	18.92	-23.88	74.00	31.20	PK
	H	2390.00	45.83	14.63	-8.17	54.00	31.20	AV
	H	4824.00	44.56	41.86	-29.44	74.00	2.70	PK
	V	4824.00	43.11	40.41	-30.89	74.00	2.70	PK
M	H	4874.00	44.23	41.56	-29.77	74.00	2.68	PK
	V	4874.00	43.12	40.45	-30.88	74.00	2.68	PK
H	H	2483.50	50.66	19.47	-23.34	74.00	31.19	PK
	H	2483.50	45.67	14.48	-8.33	54.00	31.19	PK
	H	4924.00	44.29	41.53	-29.71	74.00	2.77	PK
	V	4924.00	42.11	39.34	-31.89	74.00	2.77	PK

802.11g:

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
L	V	2390.00	53.21	22.01	-20.79	74.00	31.20	PK
	V	2390.00	44.54	13.34	-9.46	54.00	31.20	AV
	V	4824.00	44.21	41.51	-29.79	74.00	2.70	PK
	V	4824.00	42.47	39.77	-31.53	74.00	2.70	PK
M	V	4874.00	44.37	41.70	-29.63	74.00	2.68	PK
	V	4874.00	43.81	41.14	-30.19	74.00	2.68	PK
	V	7311.00	42.43	34.44	-31.57	74.00	7.99	PK
	V	7311.00	41.36	33.37	-32.64	74.00	7.99	PK
H	V	2483.50	50.31	19.12	-23.69	74.00	31.19	PK
	V	2483.50	44.16	12.97	-29.84	74.00	31.19	AV
	V	4924.00	44.42	41.66	-29.58	74.00	2.77	PK
	V	4924.00	41.33	38.56	-32.67	74.00	2.77	PK

802.11n (HT20):

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
L	V	2390.00	53.43	22.23	-20.57	74.00	31.20	PK
	V	2390.00	44.52	13.32	-9.48	54.00	31.20	AV
	V	4824.00	44.32	41.62	-29.68	74.00	2.70	PK
	V	4824.00	42.46	39.76	-31.54	74.00	2.70	PK
M	V	4874.00	45.32	42.65	-28.68	74.00	2.67	PK
	V	4874.00	43.44	40.77	-30.56	74.00	2.67	PK
H	V	2483.50	52.11	20.92	-21.89	74.00	31.19	PK
	V	2483.50	43.21	12.02	-10.79	54.00	31.19	AV
	V	4924.00	44.52	41.76	-29.48	74.00	2.76	PK
	V	4924.00	43.86	41.10	-30.14	74.00	2.76	PK