

10.4. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

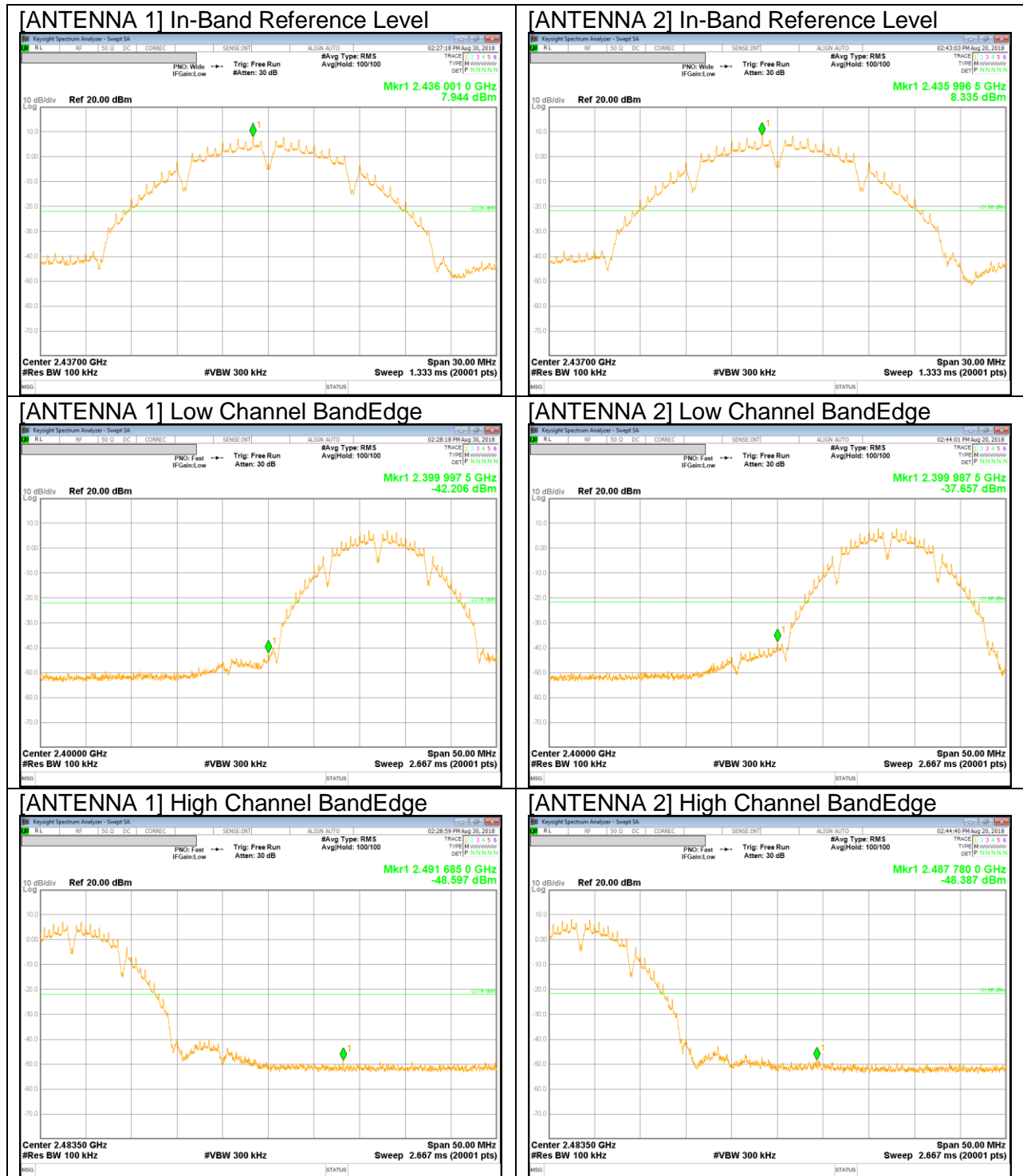
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

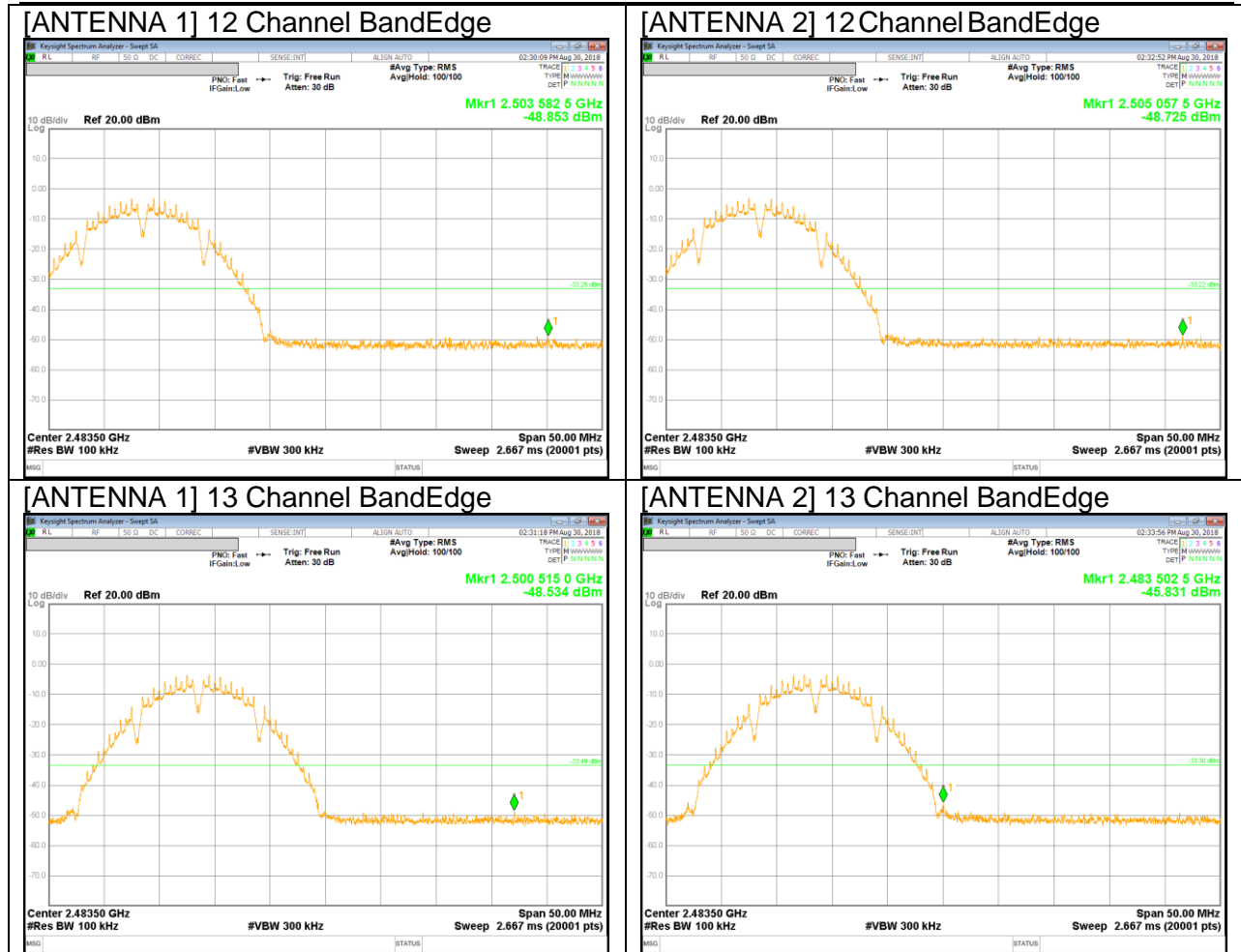
TEST PROCEDURE

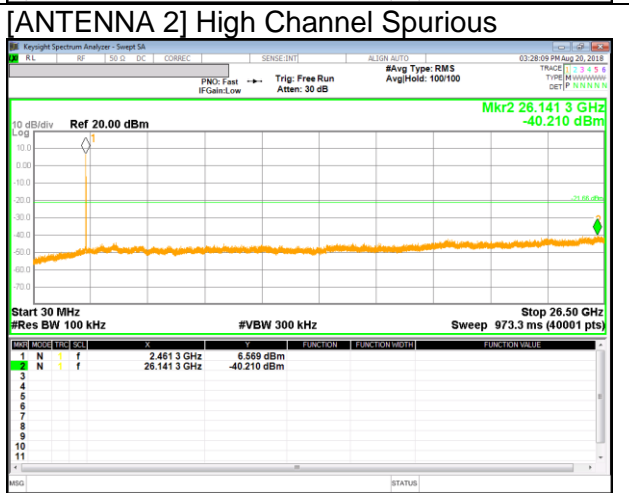
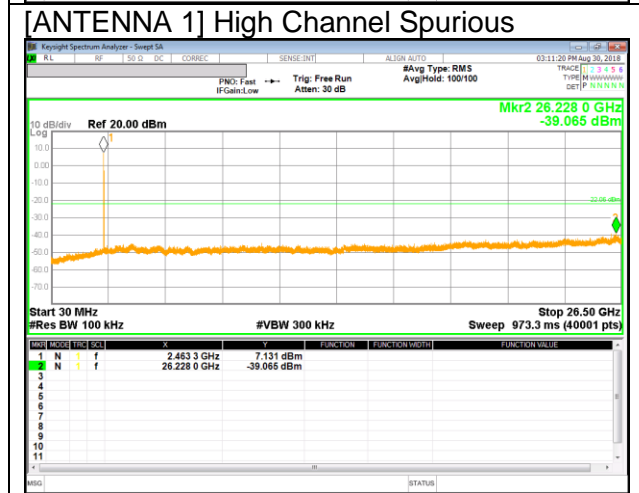
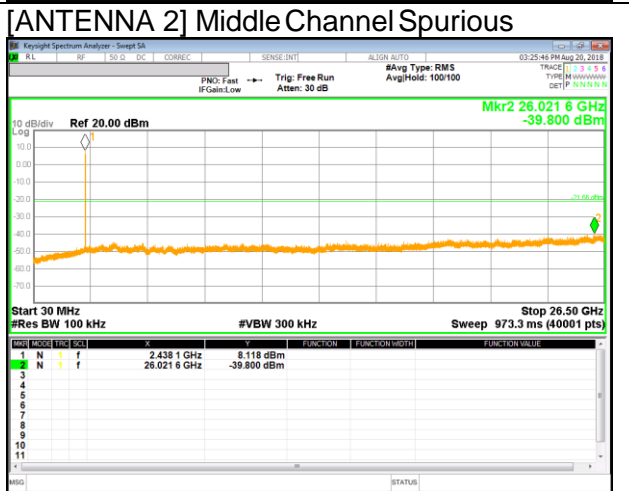
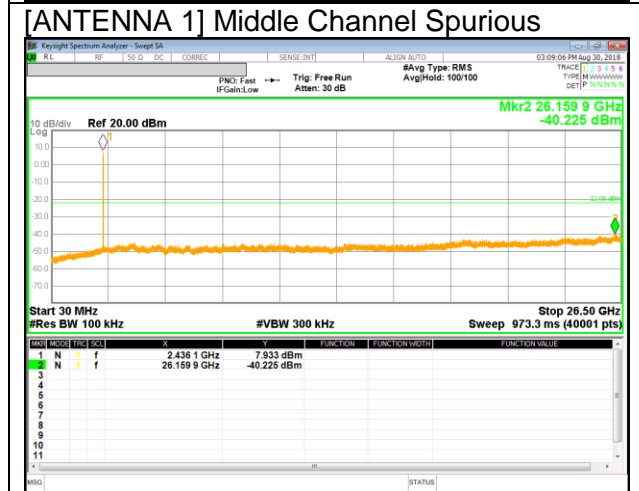
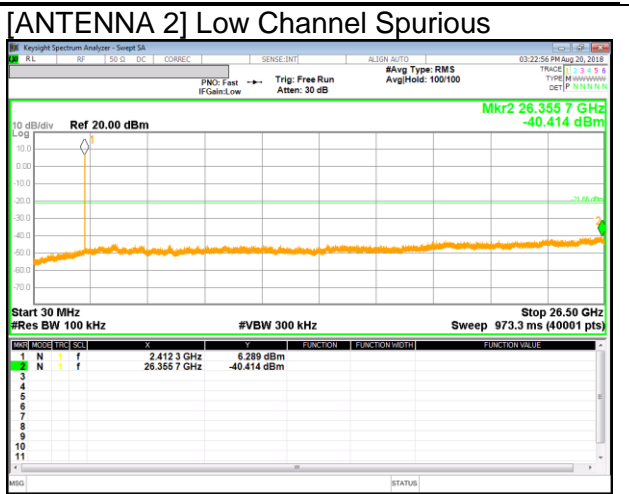
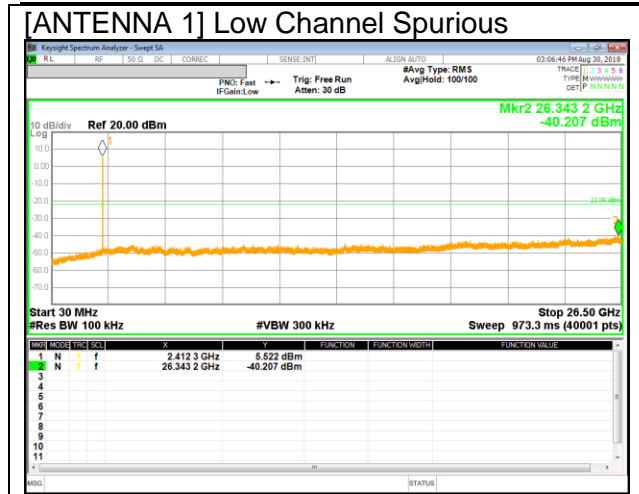
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

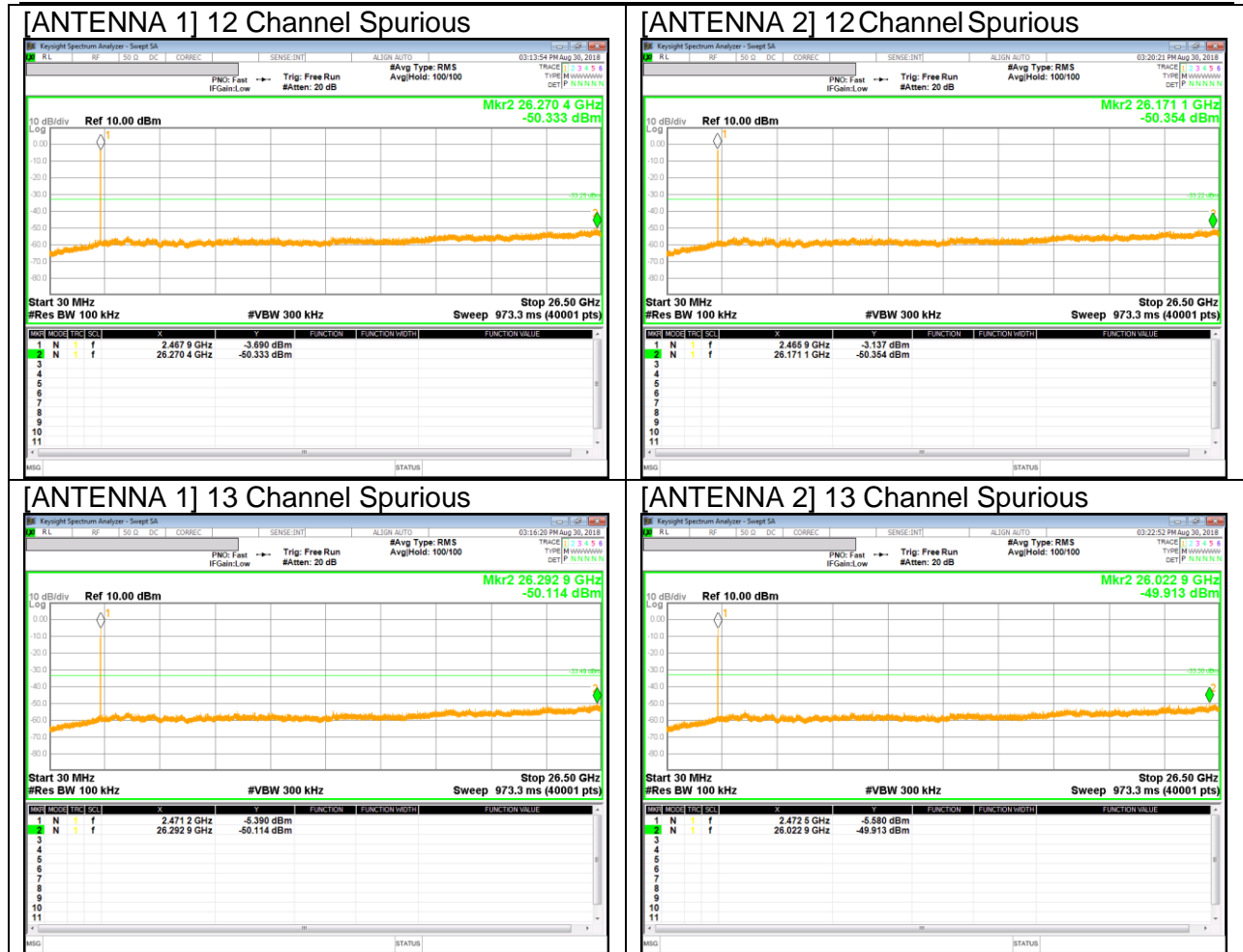
RESULTS

10.4.1. 802.11b MODE IN THE 2.4 GHz BAND

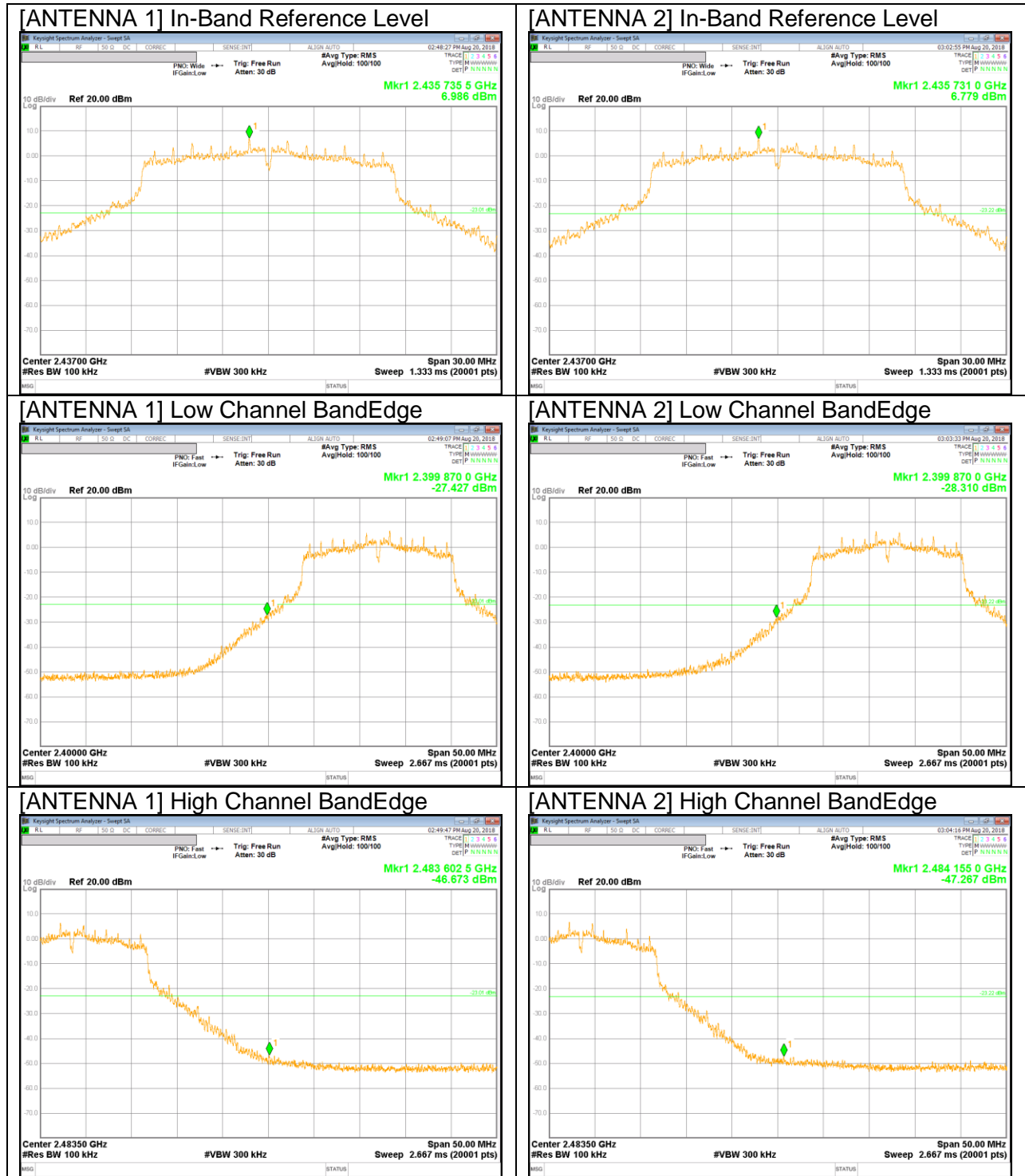


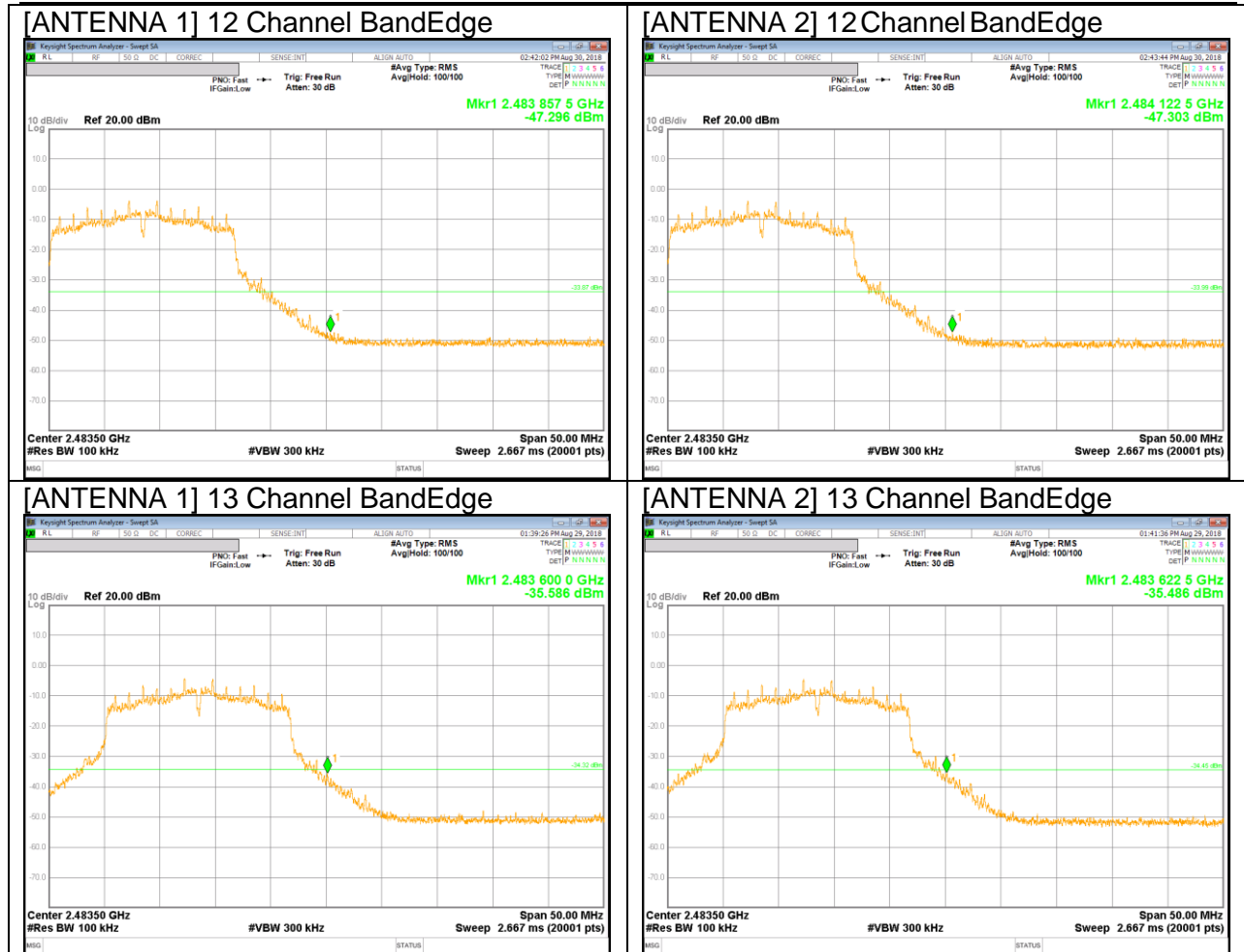


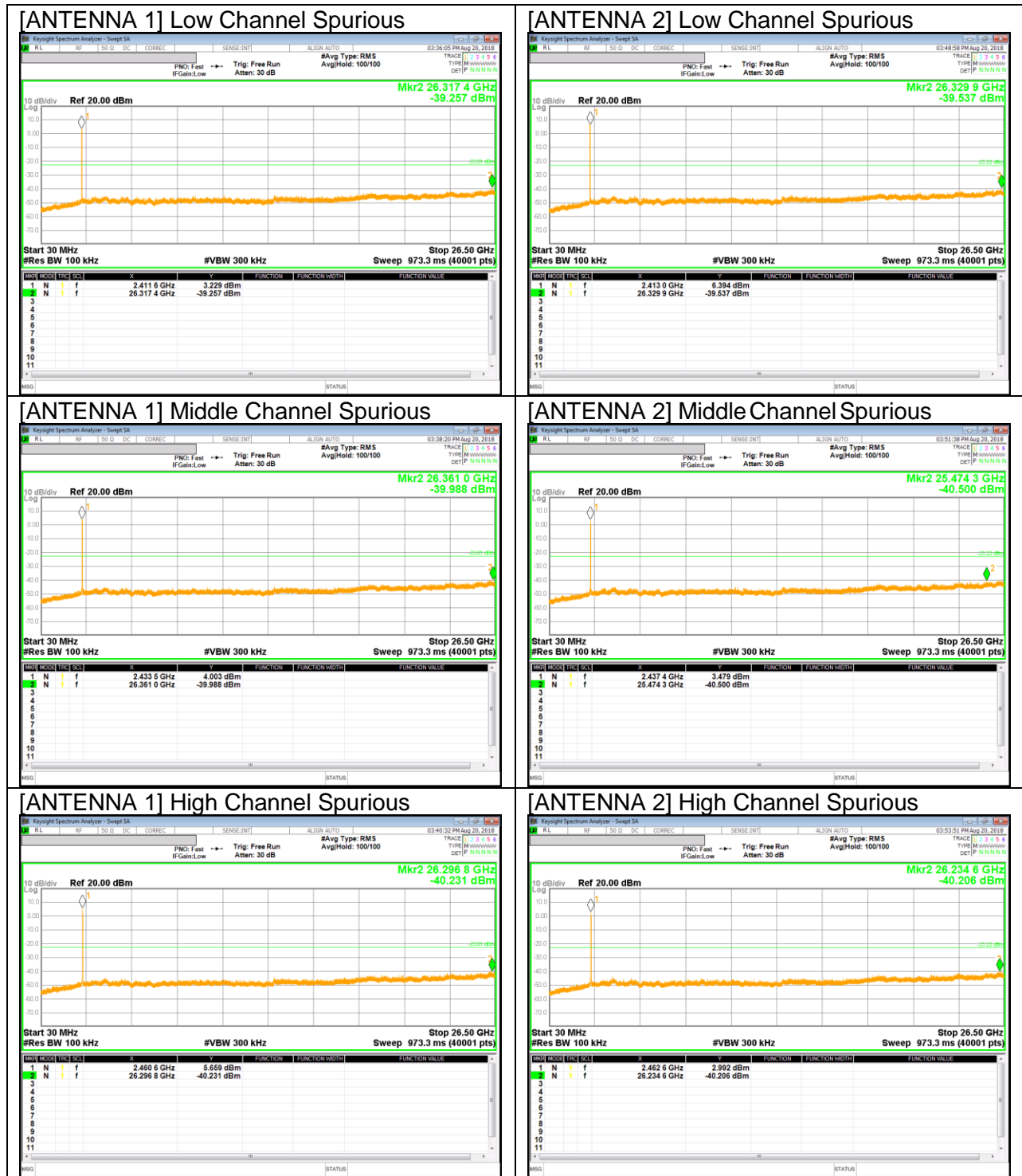


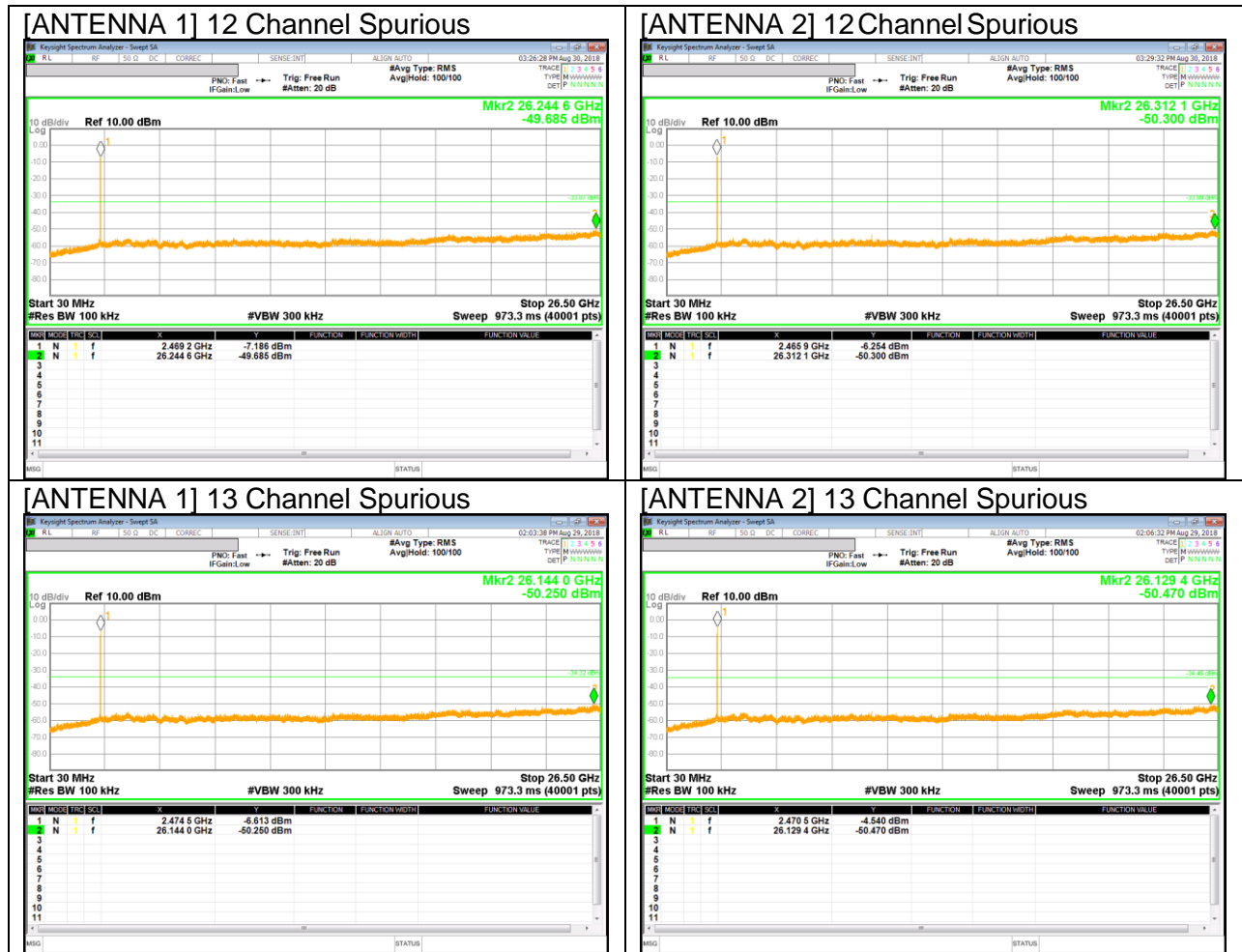


10.4.2. 802.11g MODE IN THE 2.4 GHz BAND

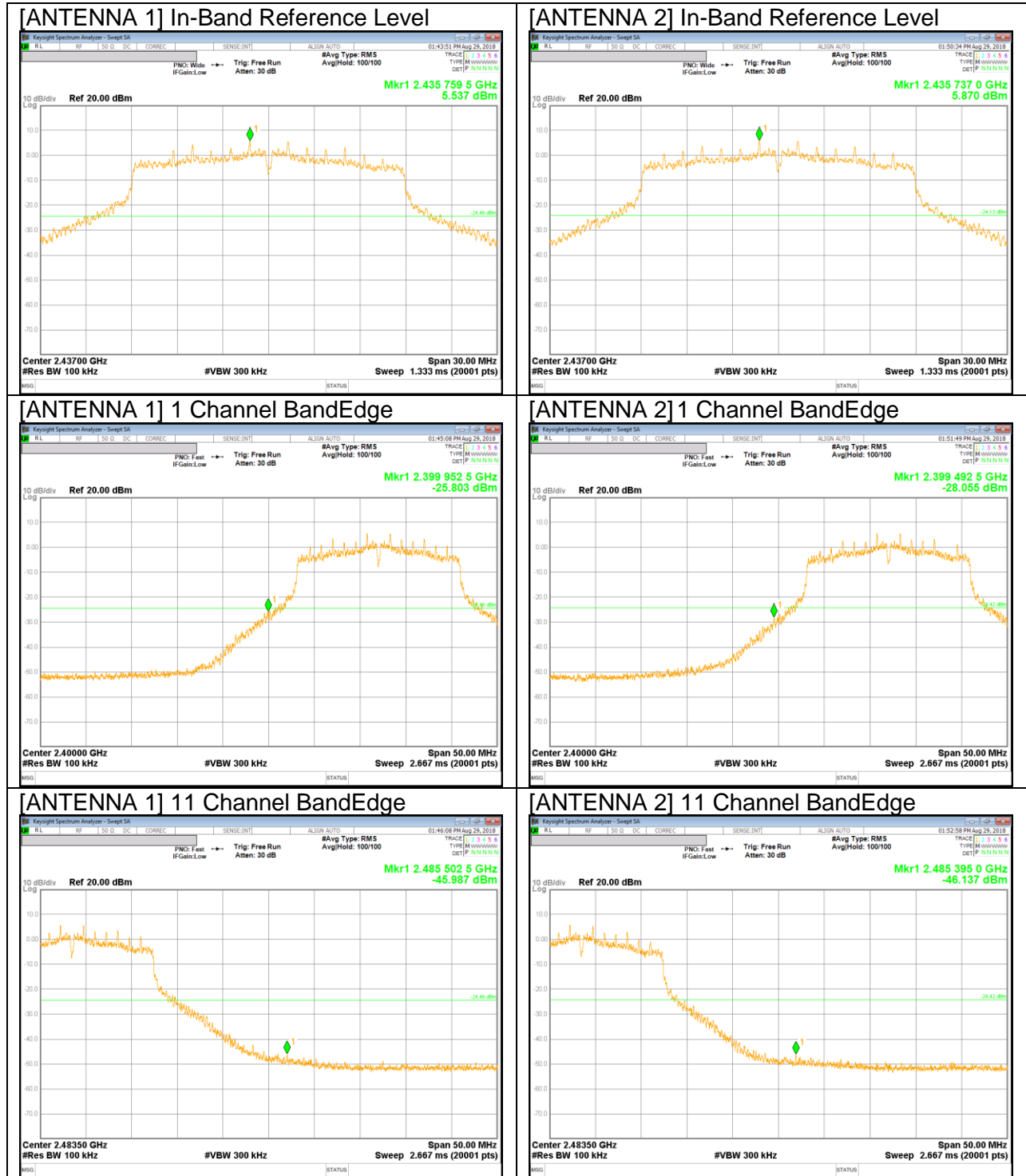


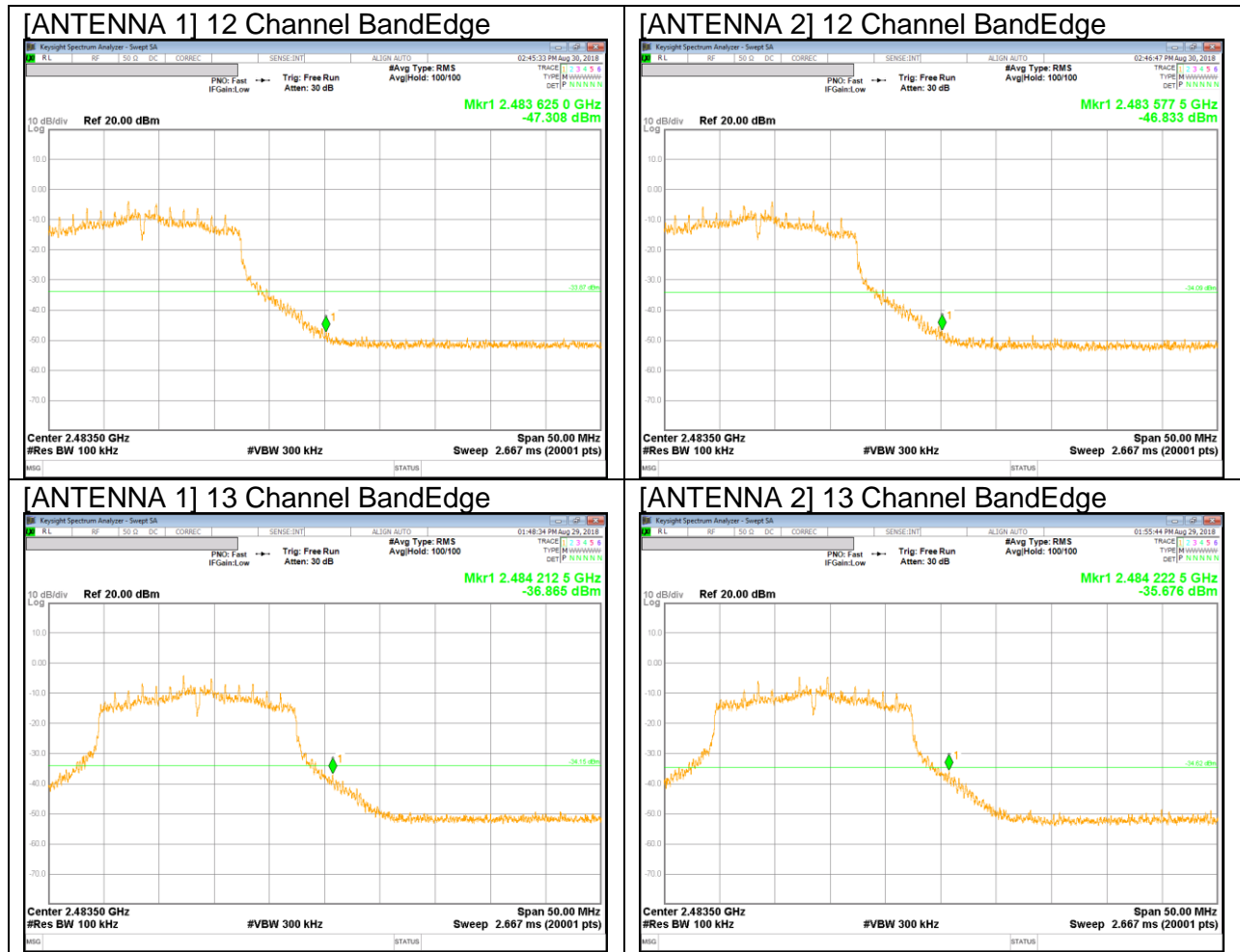


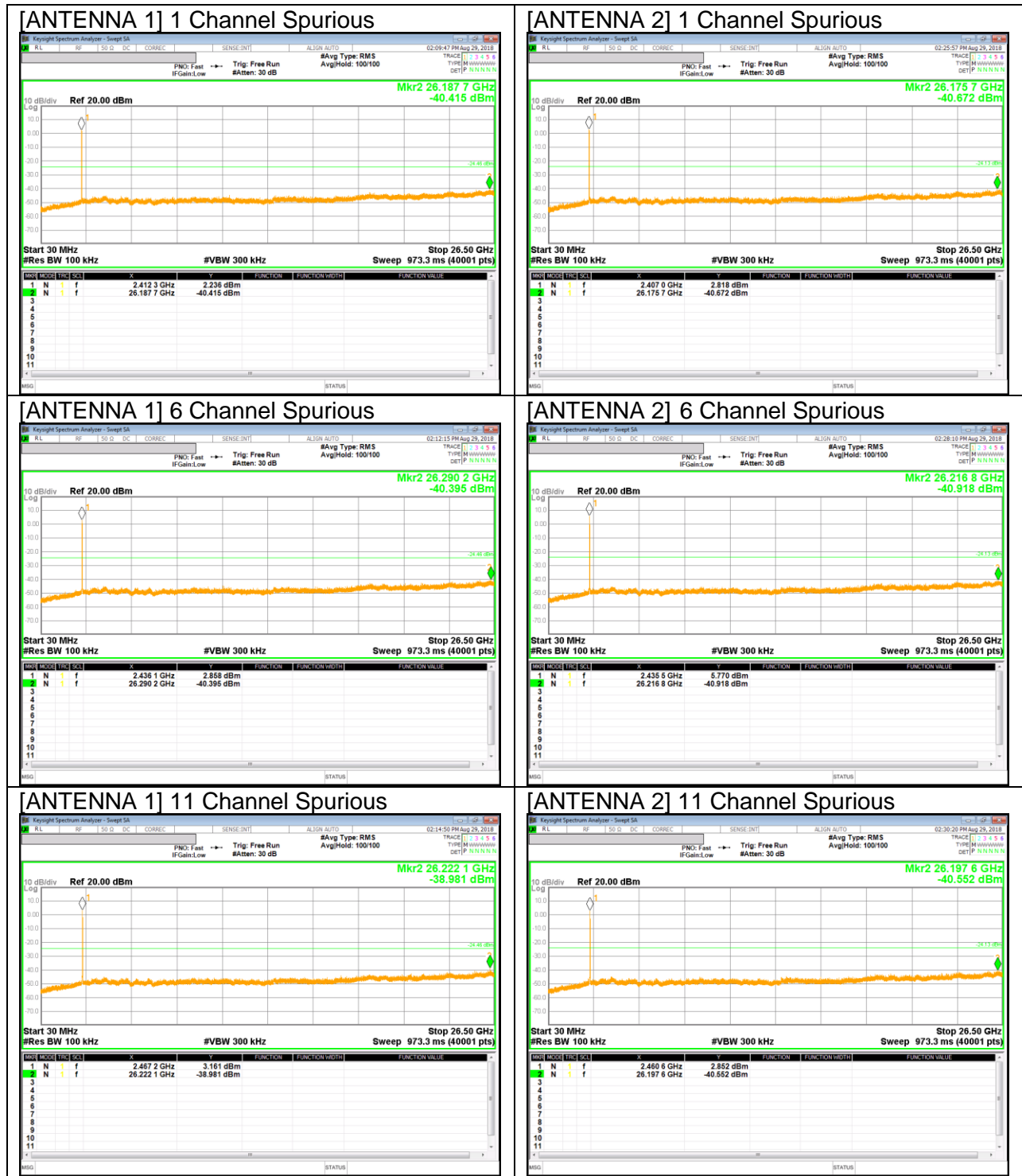


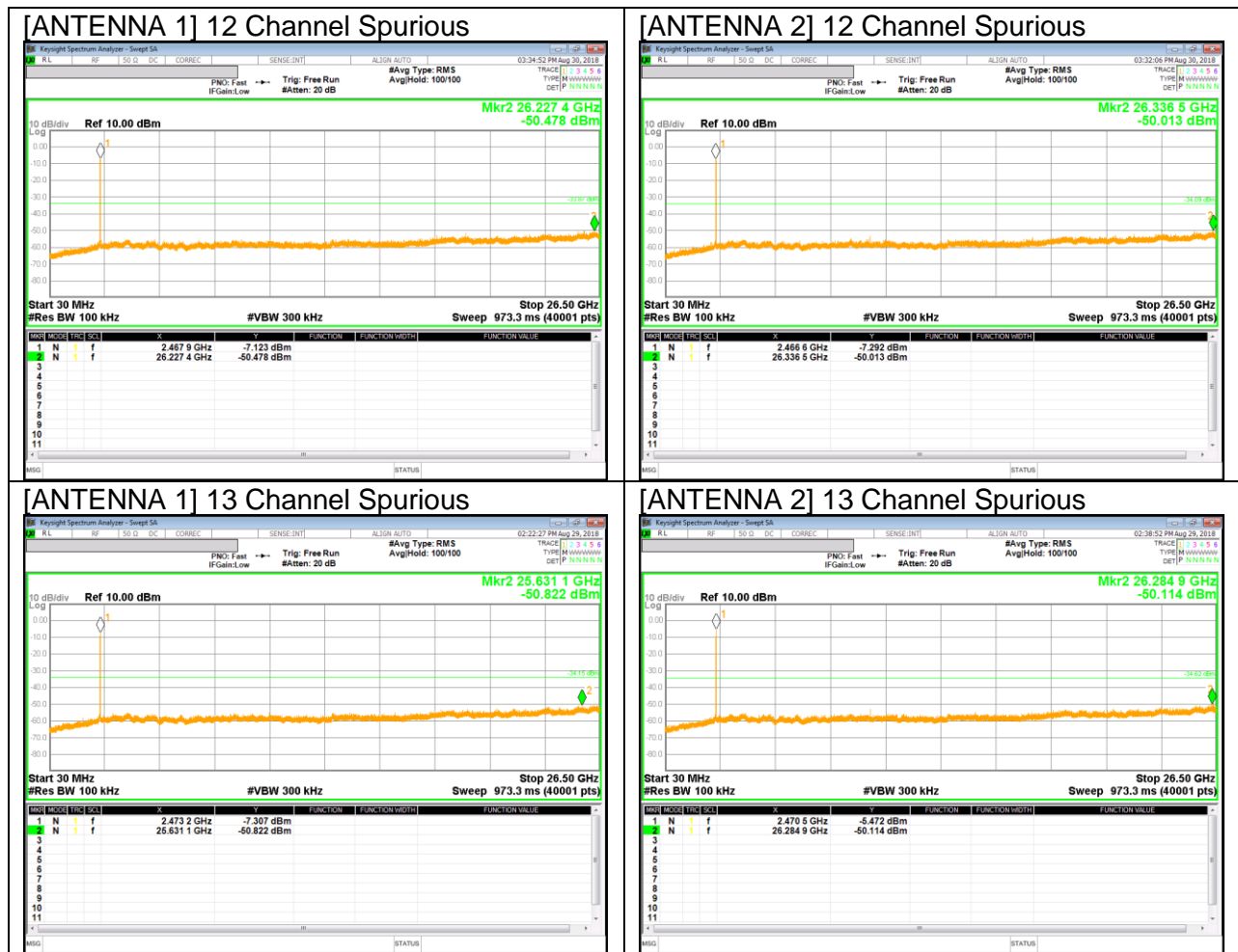


10.4.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND









11. RADIATED TEST RESULTS

11.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
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

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. (Restricted bandedge, Final detection of spurious harmonic emissions)

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

The spectrum from 1 GHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.
(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Note : Emission was pre-scanned from 9KHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

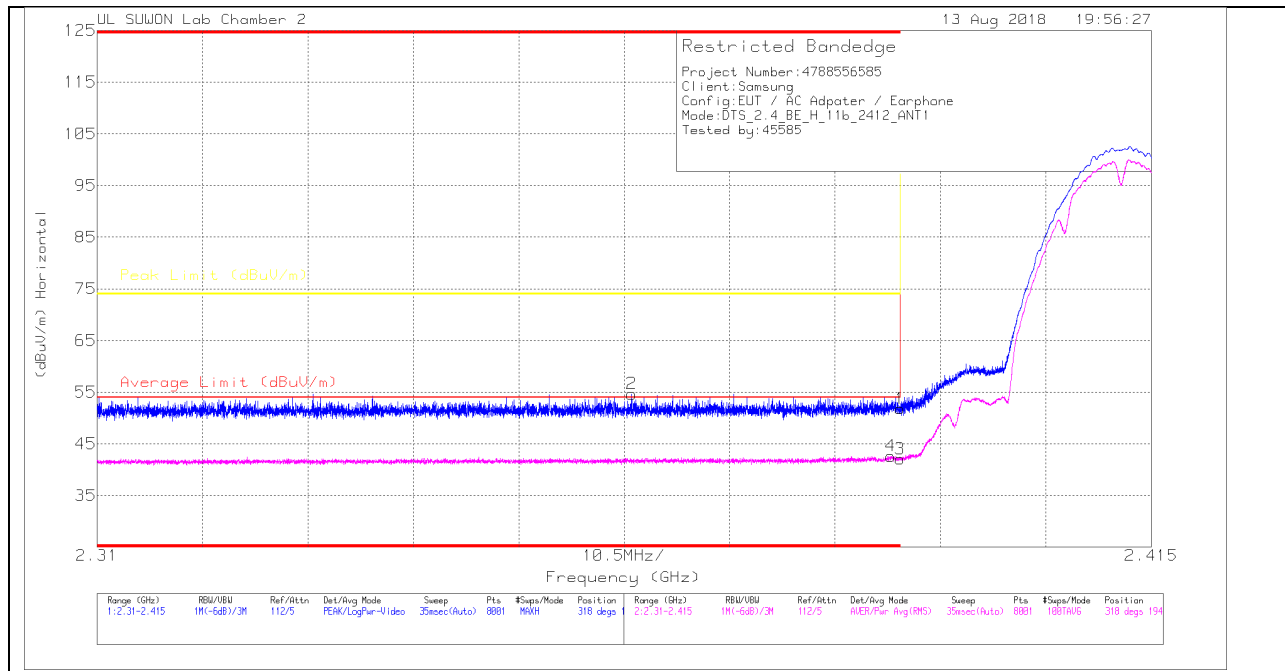
Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

11.2. TRANSMITTER ABOVE 1 GHz

11.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND ANTENNA1

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

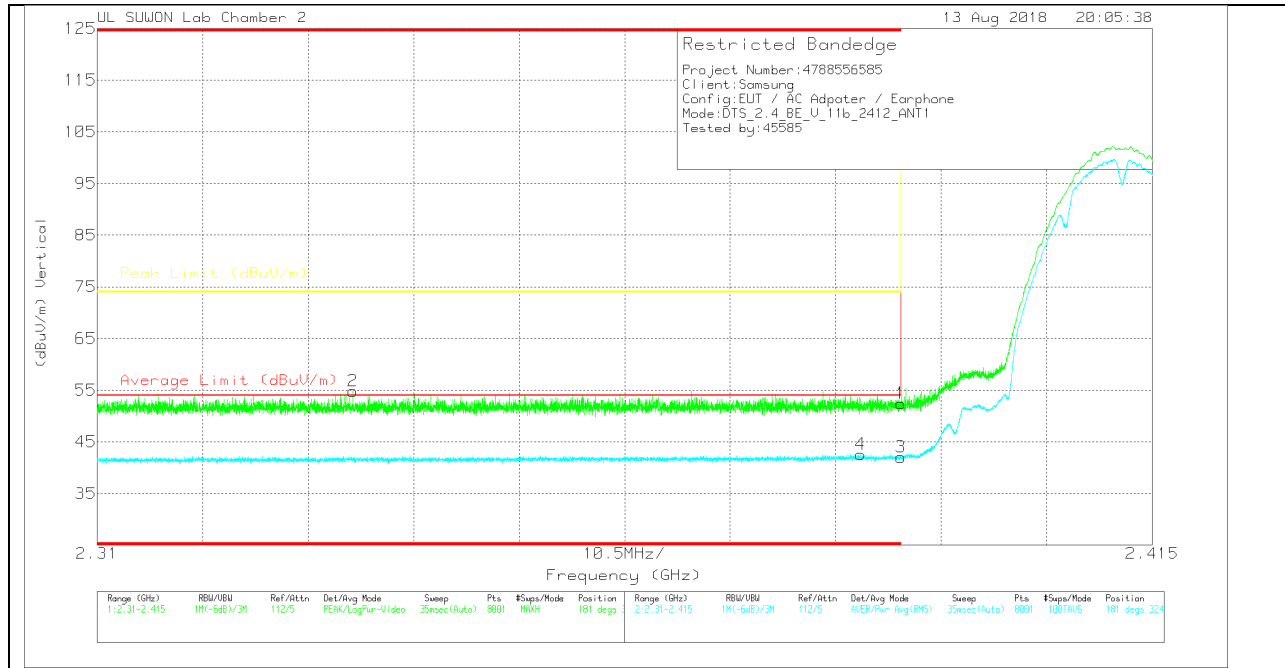
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.01	Pk	31.6	-20.8	0	51.81	-	-	74	-22.19	318	194	H
2	* 2.363	43.89	Pk	31.6	-20.8	0	54.69	-	-	74	-19.31	318	194	H
3	* 2.39	31.26	RMS	31.6	-20.8	0	42.06	54	-11.94	-	-	318	194	H
4	* 2.389	31.84	RMS	31.6	-20.8	0	42.64	54	-11.36	-	-	318	194	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	41.65	Pk	31.6	-20.8	0	52.45	-	-	74	-21.55	181	324	V
2	*2.335	44.22	Pk	31.5	-20.9	0	54.82	-	-	74	-19.18	181	324	V
3	*2.39	31.24	RMS	31.6	-20.8	0	42.04	54	-11.96	-	-	181	324	V
4	*2.386	31.79	RMS	31.6	-20.8	0	42.59	54	-11.41	-	-	181	324	V

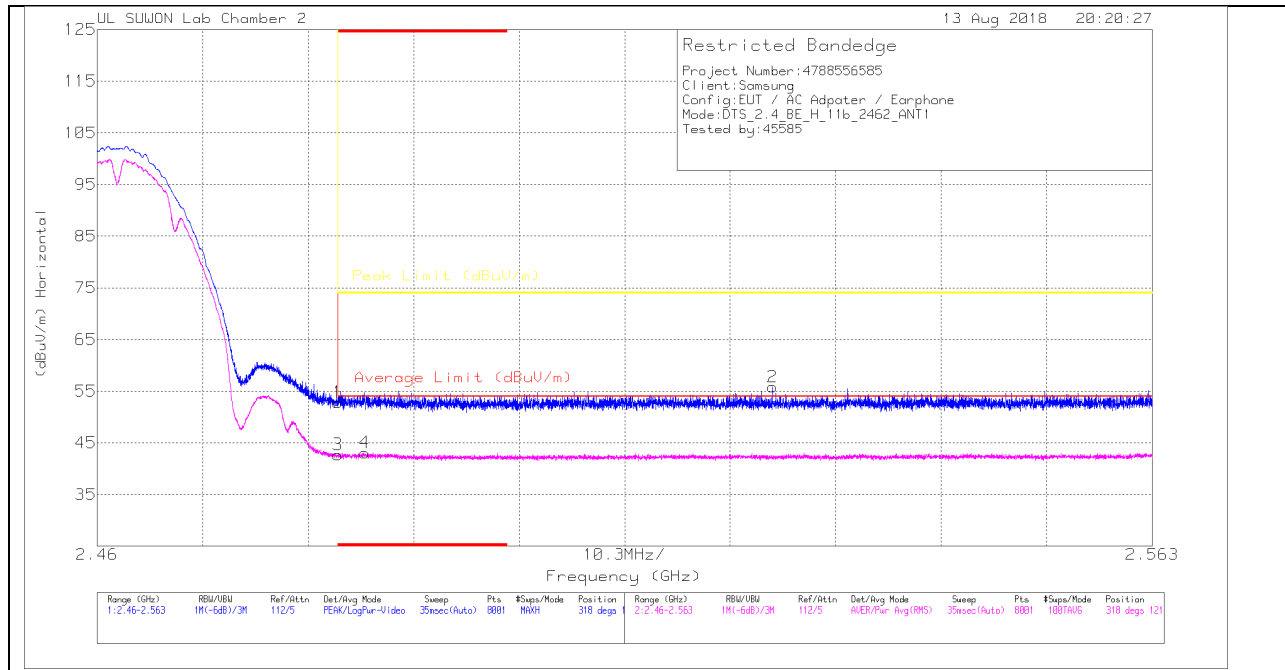
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

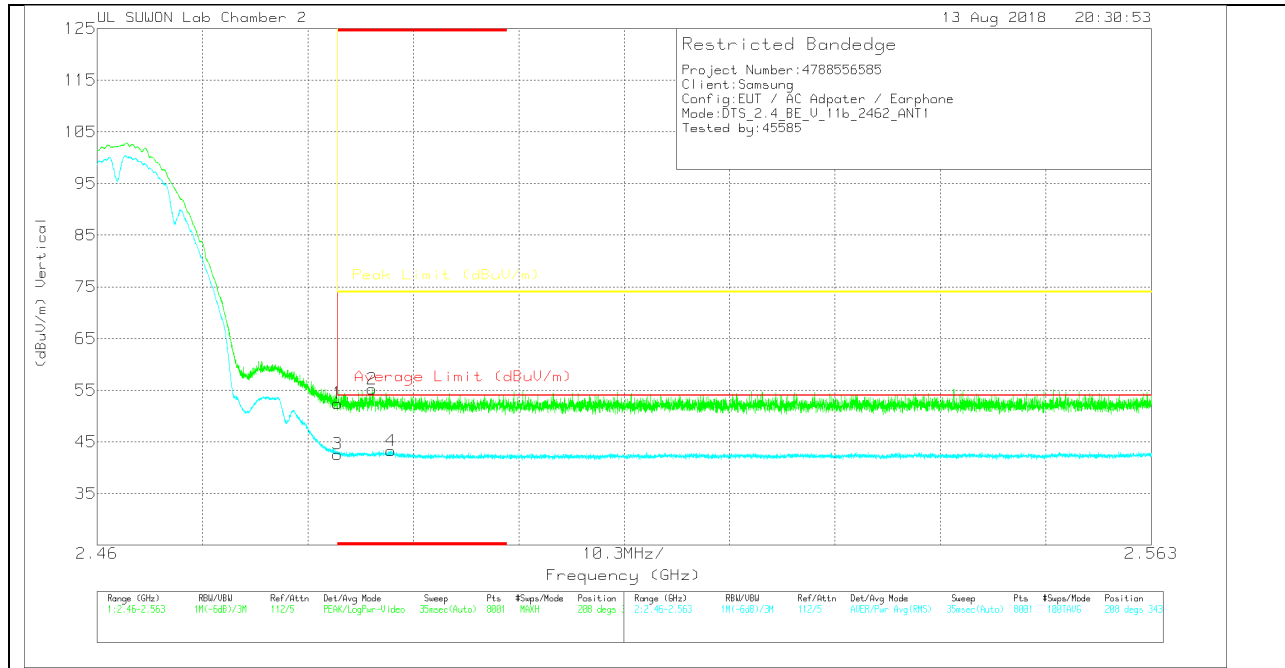
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.54	Pk	31.9	-20.6	0	52.84	-	-	74	-21.16	318	121	H
2	2.526	44.54	Pk	31.9	-20.6	0	55.84	-	-	74	-18.16	318	121	H
3	* 2.484	31.42	RMS	31.9	-20.6	0	42.72	54	-11.28	-	-	318	121	H
4	* 2.486	31.8	RMS	31.9	-20.6	0	43.1	54	-10.9	-	-	318	121	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.18	Pk	31.9	-20.6	0	52.48	-	-	74	-21.52	208	343	V
2	* 2.487	44	Pk	31.9	-20.7	0	55.2	-	-	74	-18.8	208	343	V
3	* 2.484	31.33	RMS	31.9	-20.6	0	42.63	54	-11.37	-	-	208	343	V
4	* 2.489	31.99	RMS	31.9	-20.6	0	43.29	54	-10.71	-	-	208	343	V

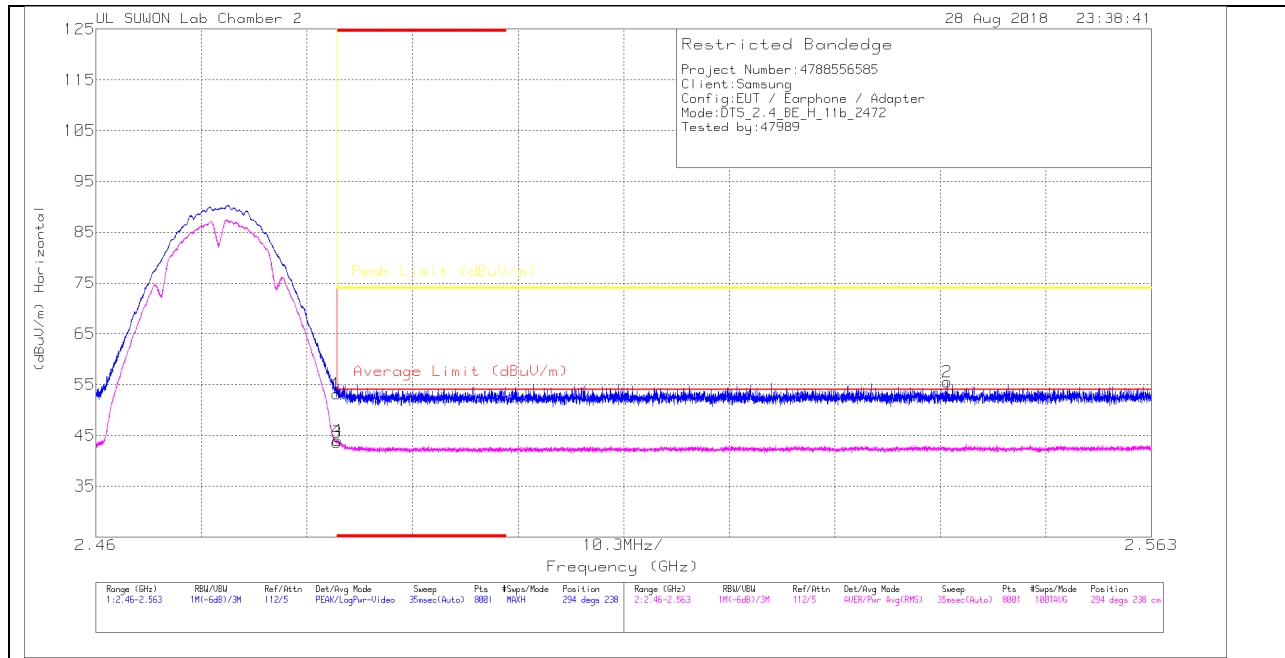
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



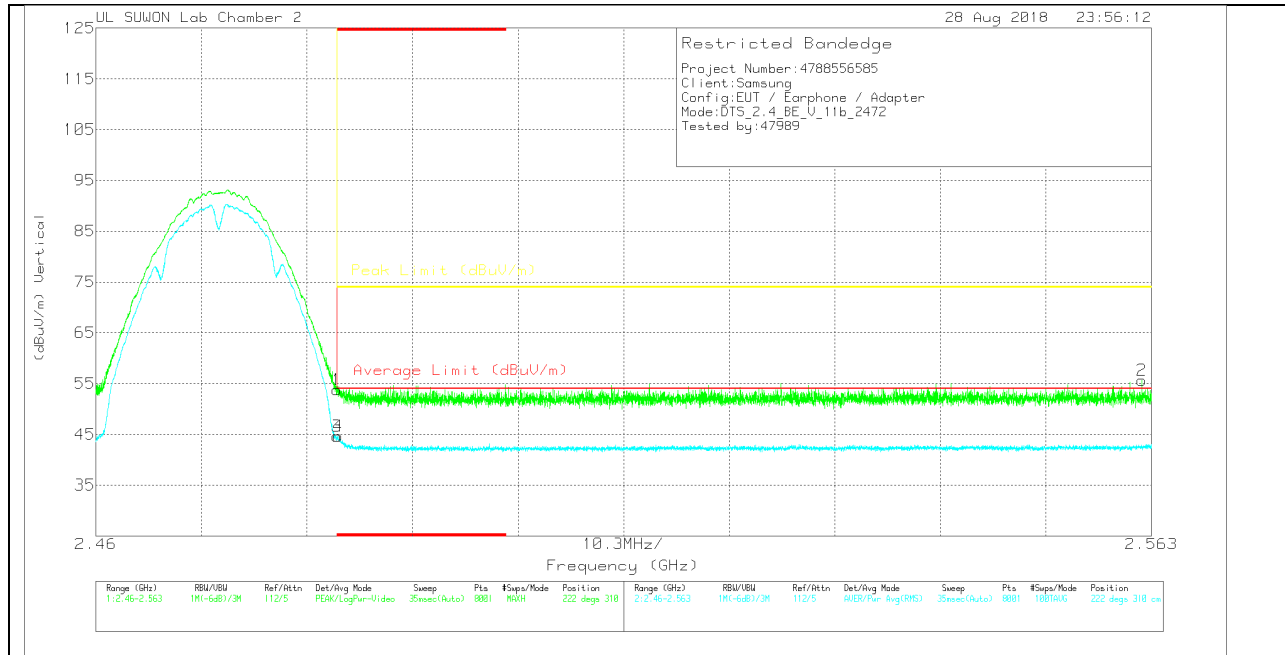
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.82	Pk	31.9	-20.6	0	53.12	-	-	74	-20.88	294	238	H
2	2.543	44.04	Pk	32	-20.5	0	55.54	-	-	74	-18.46	294	238	H
3	* 2.484	32.38	RMS	31.9	-20.6	0	43.68	54	-10.32	-	-	294	238	H
4	* 2.484	32.74	RMS	31.9	-20.6	0	44.04	54	-9.96	-	-	294	238	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.48	Pk	31.9	-20.6	0	53.78	-	-	74	-20.22	222	310	V
2	2.562	43.98	Pk	32	-20.3	0	55.68	-	-	74	-18.32	222	310	V
3	* 2.484	33.35	RMS	31.9	-20.6	0	44.65	54	-9.35	-	-	222	310	V
4	* 2.484	33.36	RMS	31.9	-20.6	0	44.66	54	-9.34	-	-	222	310	V

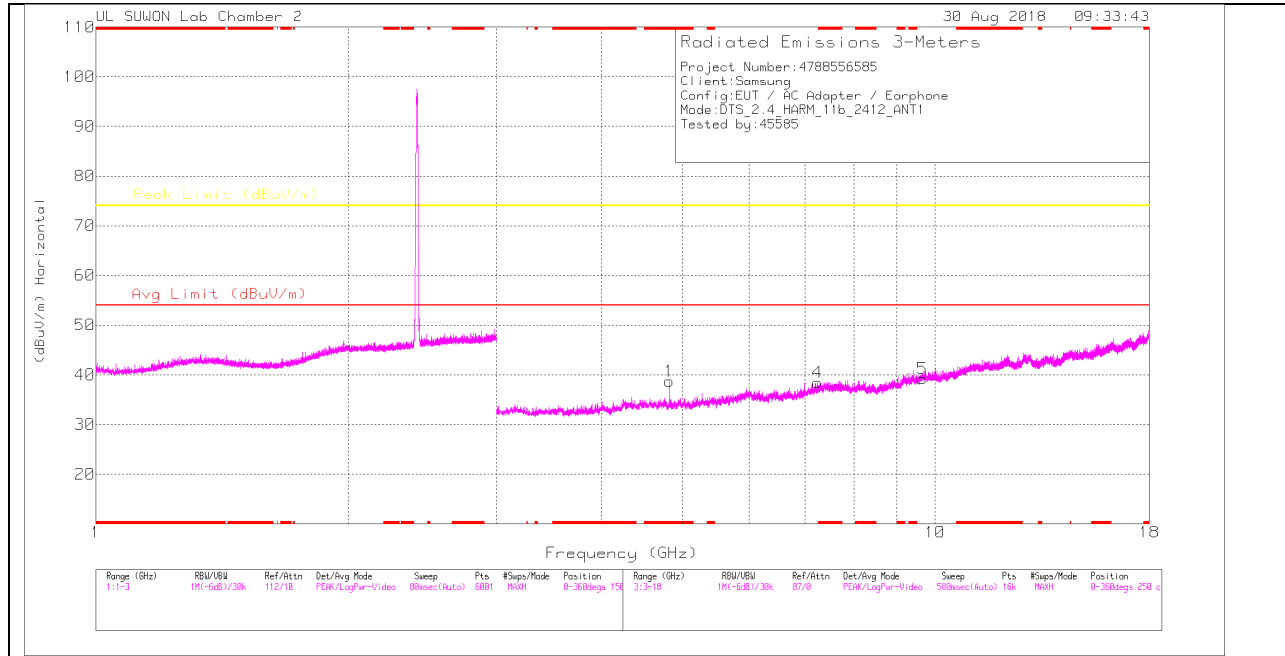
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

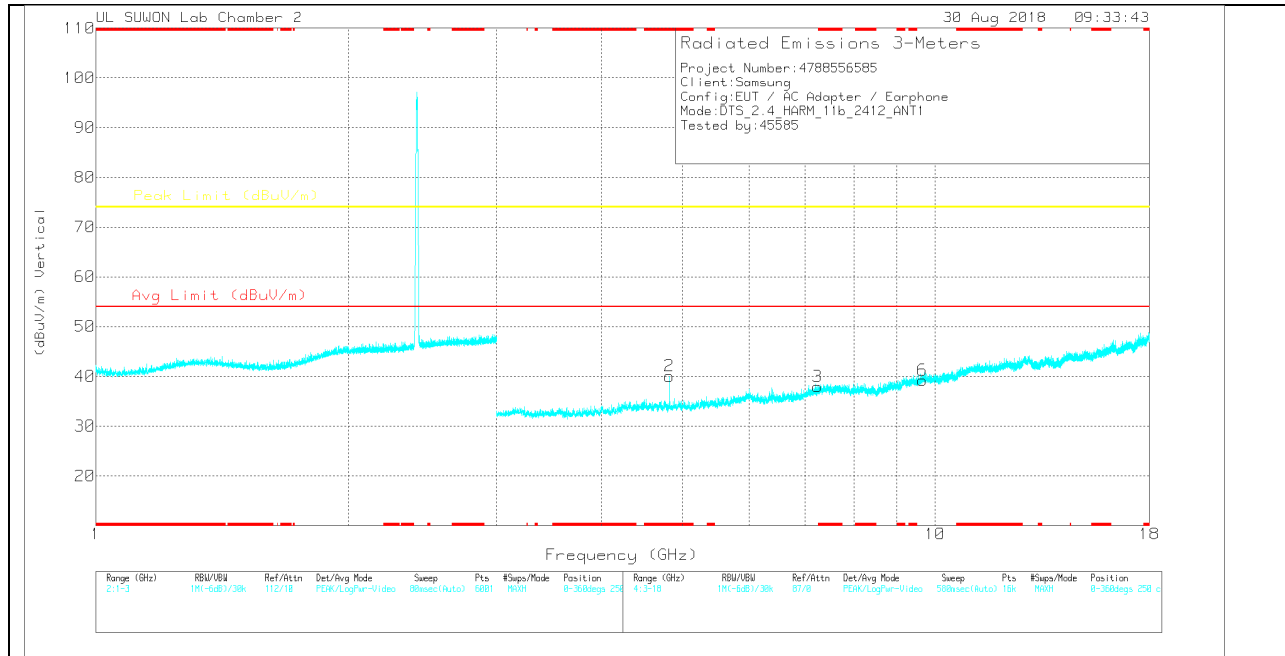
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.823	32.94	PK	34	-28.2	0	38.74	-	-	74	-35.26	0-360	150	H
4	7.235	27.86	PK	36.1	-25.5	0	38.46	-	-	74	-35.54	0-360	150	H
5	9.649	23.86	PK	37	-21.6	0	39.26	-	-	74	-34.74	0-360	250	H
2	* 4.823	34.25	PK	34	-28.2	0	40.05	-	-	74	-33.95	0-360	250	V
3	7.239	27.32	PK	36.1	-25.5	0	37.92	-	-	74	-36.08	0-360	250	V
6	9.648	23.84	PK	37	-21.6	0	39.24	-	-	74	-34.76	0-360	150	V

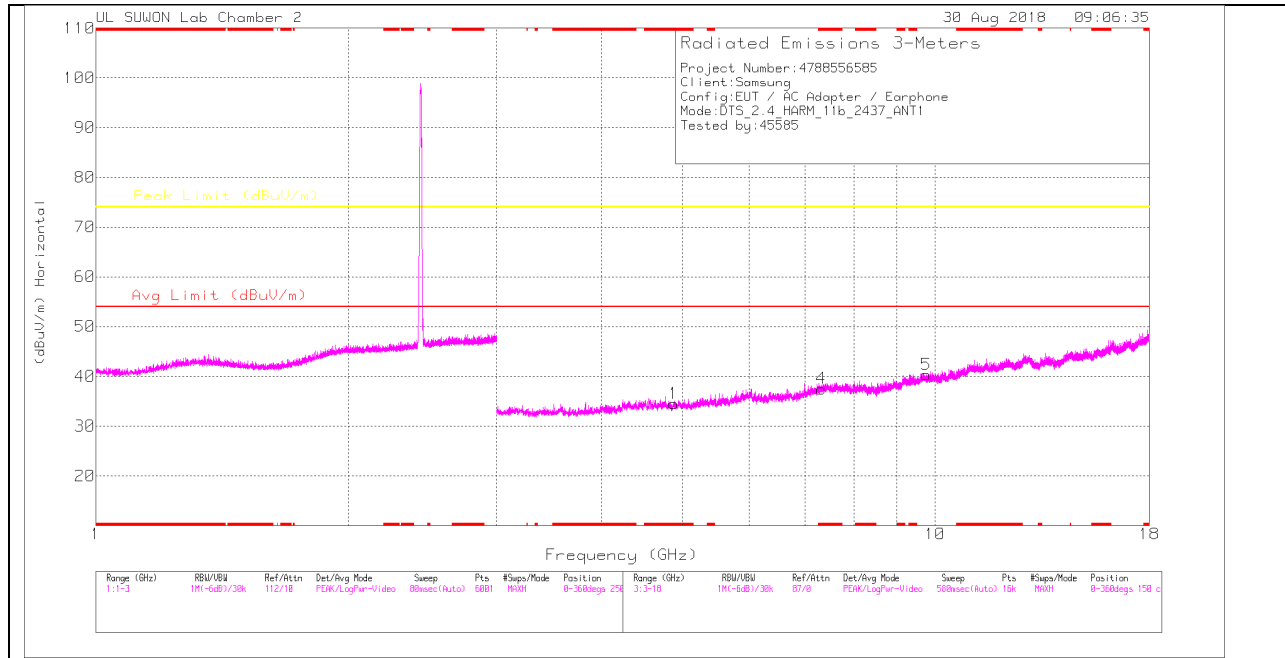
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

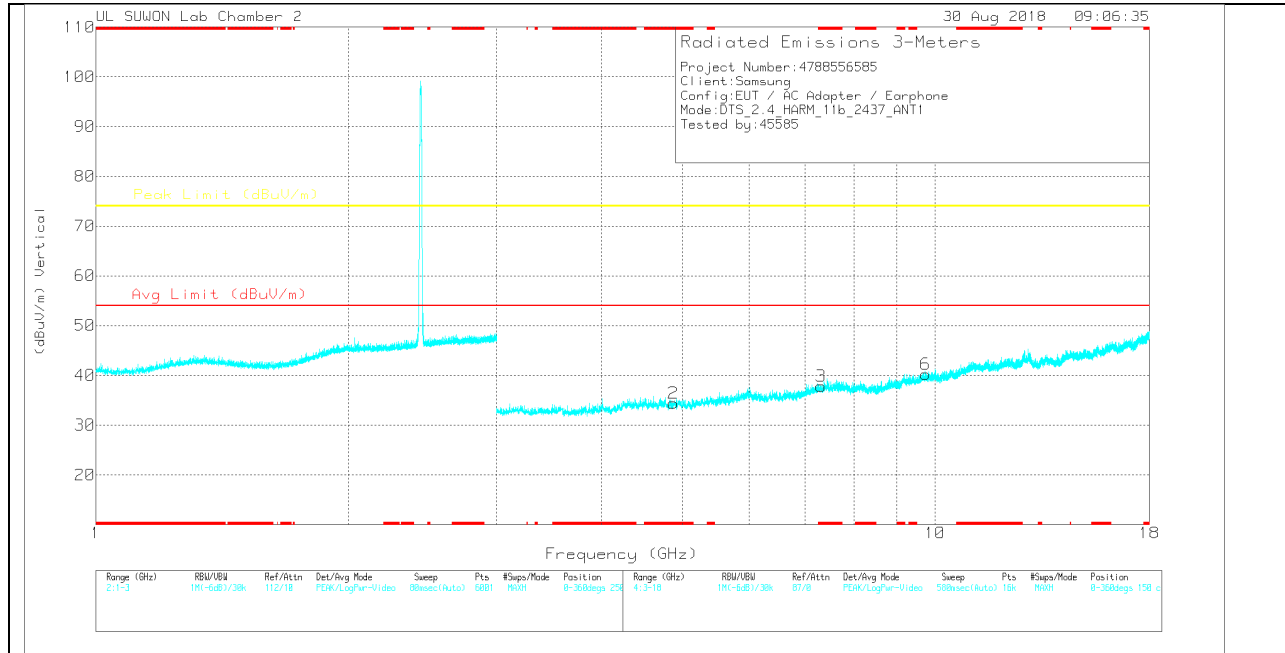
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.824	39.73	PK2	34	-28.1	0	45.63	-	-	74	-28.37	357	139	H
* 4.824	32.5	MAv1	34	-28.1	0	38.4	54	-15.6	-	-	357	139	H
* 4.824	41.3	PK2	34	-28.1	0	47.2	-	-	74	-26.8	187	268	V
* 4.824	34.65	MAv1	34	-28.1	0	40.55	54	-13.45	-	-	187	268	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.881	28.3	PK	34	-27.8	0	34.5	-	-	74	-39.5	0-360	150	H
4	* 7.312	26.32	PK	36.2	-25	0	37.52	-	-	74	-36.48	0-360	150	H
5	9.749	24.53	PK	37.2	-21.4	0	40.33	-	-	74	-33.67	0-360	250	H
2	* 4.876	28.35	PK	34	-27.9	0	34.45	-	-	74	-39.55	0-360	250	V
3	* 7.31	26.58	PK	36.2	-25	0	37.78	-	-	74	-36.22	0-360	250	V
6	9.747	24.42	PK	37.2	-21.4	0	40.22	-	-	74	-33.78	0-360	250	V

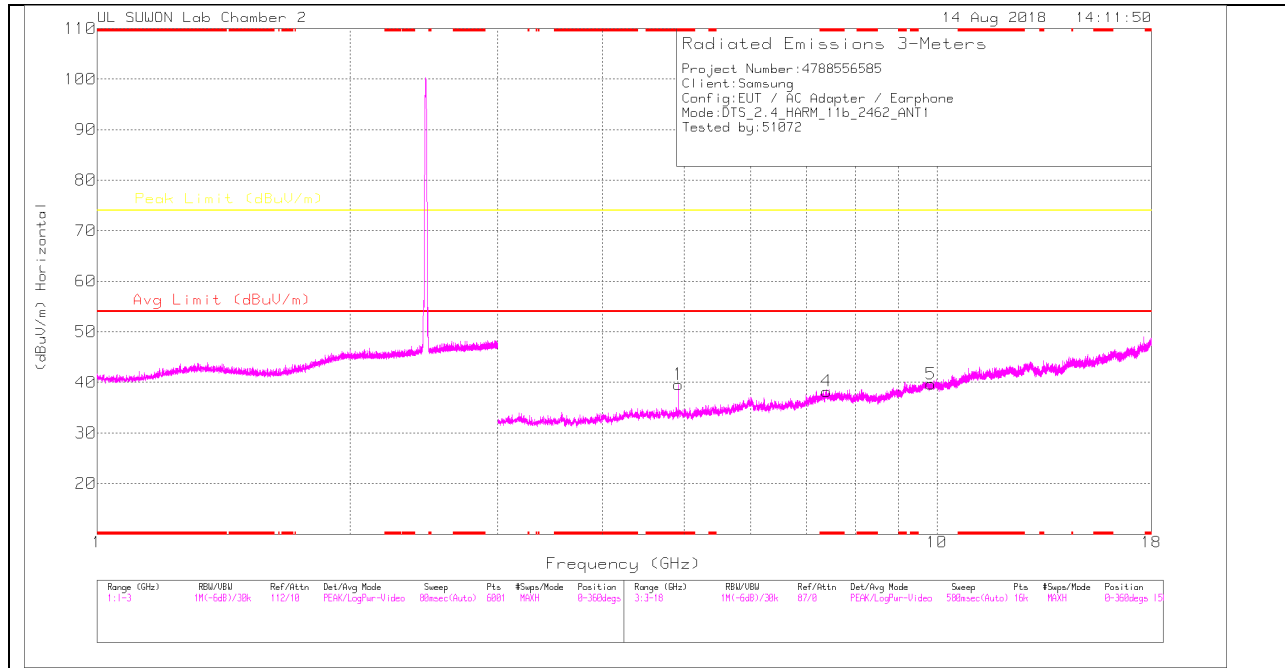
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

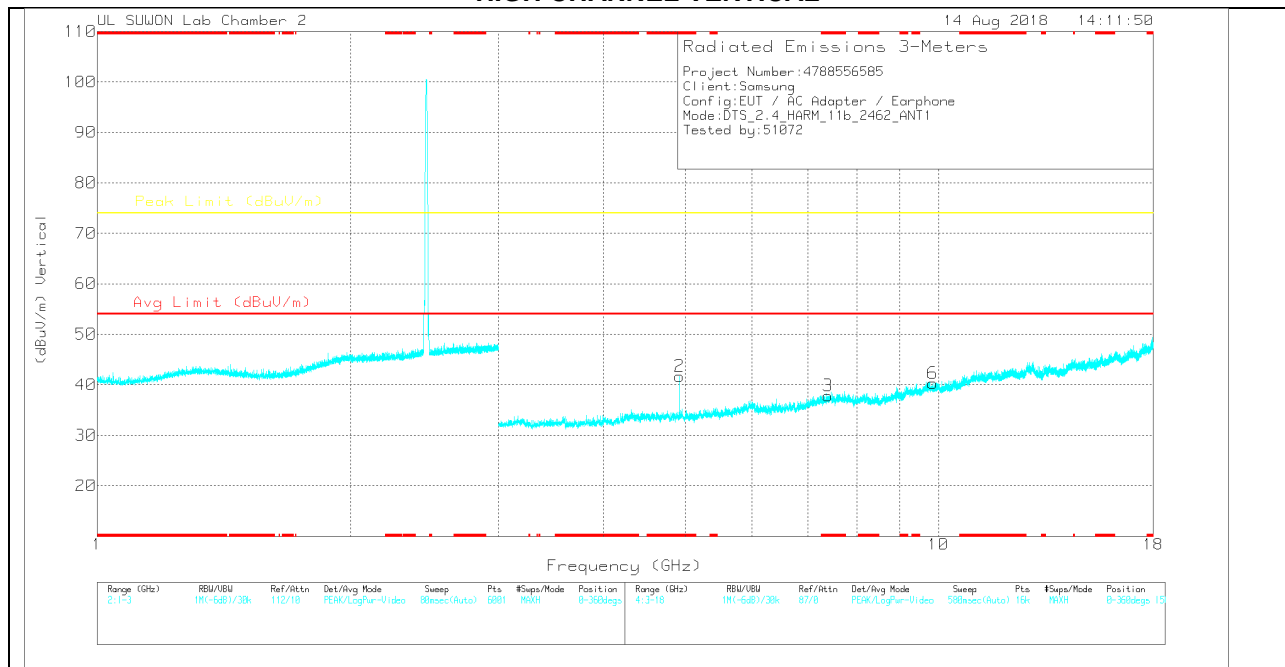
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.869	37.63	PK2	34	-28.1	0	43.53	-	-	74	-30.47	360	129	H
* 4.874	25.24	MAv1	34	-28	0	31.24	54	-22.76	-	-	360	129	H
* 4.872	37.63	PK2	34	-28	0	43.63	-	-	74	-30.37	309	276	V
* 4.877	25.17	MAv1	34	-27.9	0	31.27	54	-22.73	-	-	309	276	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.924	32.89	PK	34	-27.3	0	39.59	-	-	74	-34.41	0-360	150	H
4	* 7.39	26.24	PK	36.2	-24.2	0	38.24	-	-	74	-35.76	0-360	150	H
5	9.841	24.16	PK	37.3	-21.8	0	39.66	-	-	74	-34.34	0-360	150	H
2	* 4.924	35.01	PK	34	-27.3	0	41.71	-	-	74	-32.29	0-360	250	V
3	* 7.388	25.93	PK	36.2	-24.3	0	37.83	-	-	74	-36.17	0-360	150	V
6	9.846	24.81	PK	37.3	-21.8	0	40.31	-	-	74	-33.69	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

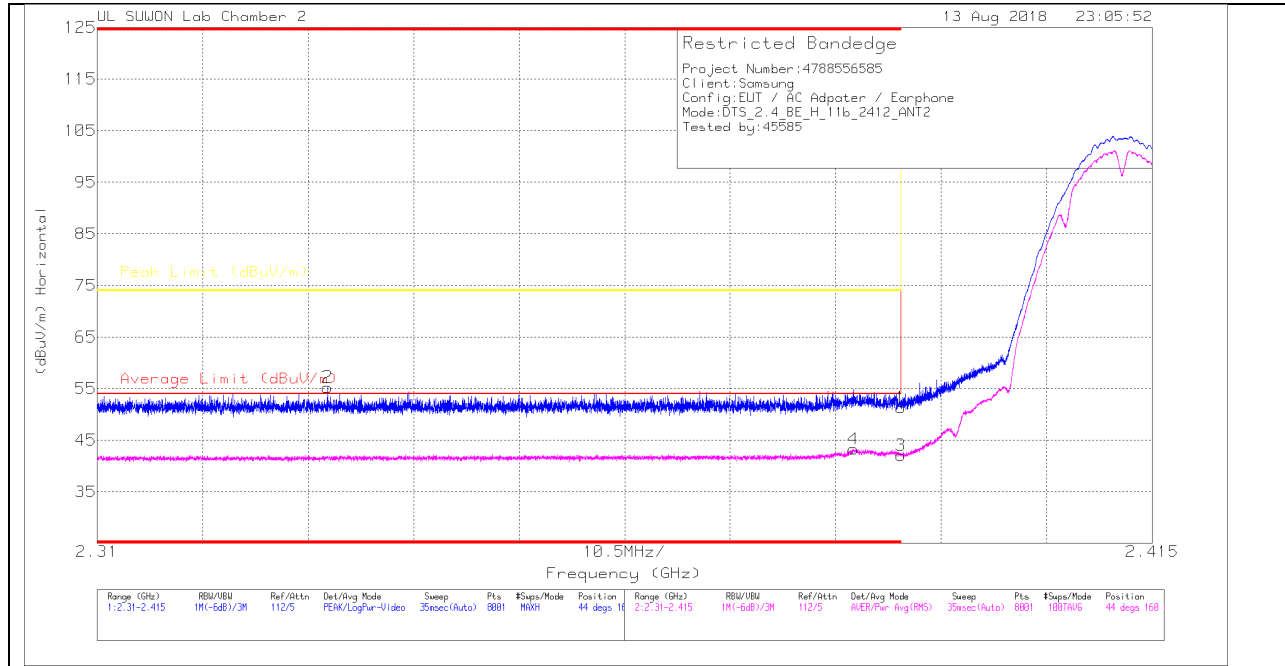
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.924	38.99	PK2	34	-27.3	0	45.69	-	-	74	-28.31	270	279	H
* 4.924	32.53	MAv1	34	-27.3	0	39.23	54	-14.77	-	-	270	279	H
* 4.924	40.42	PK2	34	-27.3	0	47.12	-	-	74	-26.88	81	249	V
* 4.924	34.99	MAv1	34	-27.3	0	41.69	54	-12.31	-	-	81	249	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

**11.2.2. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND
 ANTENNA2**

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

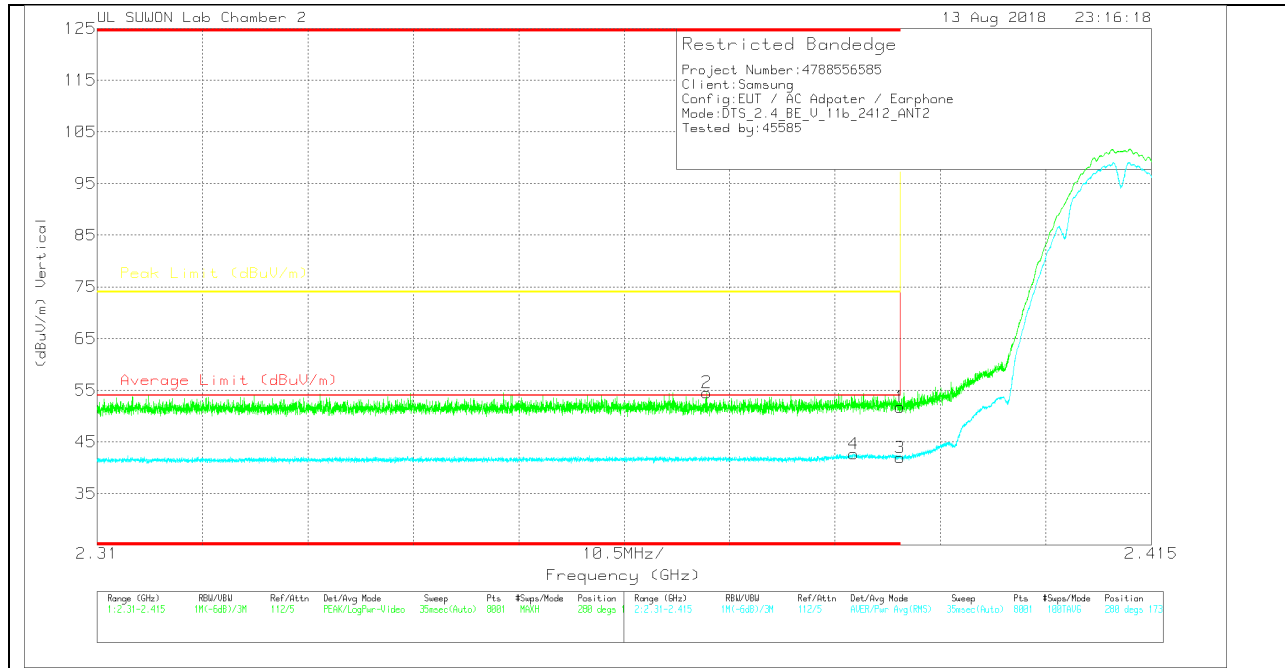
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.54	Pk	31.6	-20.8	0	51.34	-	-	74	-22.66	44	160	H
2	* 2.333	44.66	Pk	31.5	-20.9	0	55.26	-	-	74	-18.74	44	160	H
3	* 2.39	31.26	RMS	31.6	-20.8	0	42.06	54	-11.94	-	-	44	160	H
4	* 2.385	32.51	RMS	31.6	-20.8	0	43.31	54	-10.69	-	-	44	160	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asmuth (Degs)	Height (cm)	Polarity	
1	* 2.39	40.97	Pk		31.6	-20.8	0	51.77	-	-	74	-22.23	280	173	V
2	* 2.371	43.73	Pk		31.6	-20.8	0	54.53	-	-	74	-19.47	280	173	V
3	* 2.39	31.14	RMS		31.6	-20.8	0	41.94	54	-12.06	-	-	280	173	V
4	* 2.385	31.88	RMS		31.6	-20.8	0	42.68	54	-11.32	-	-	280	173	V

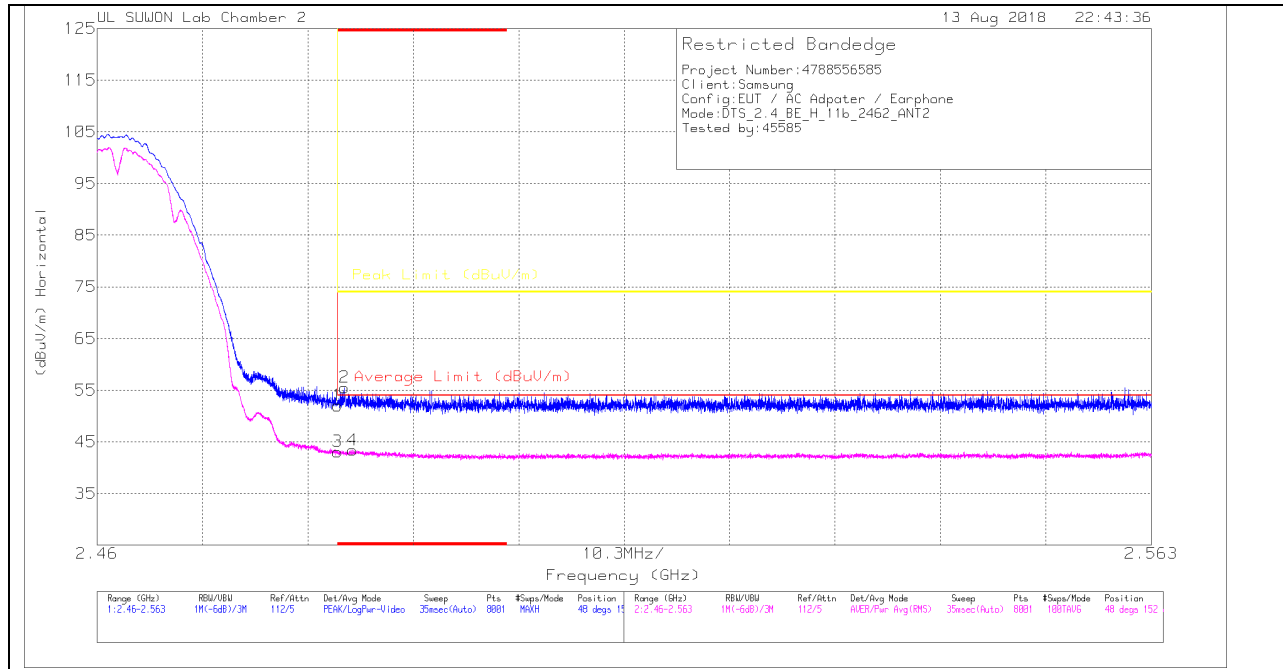
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

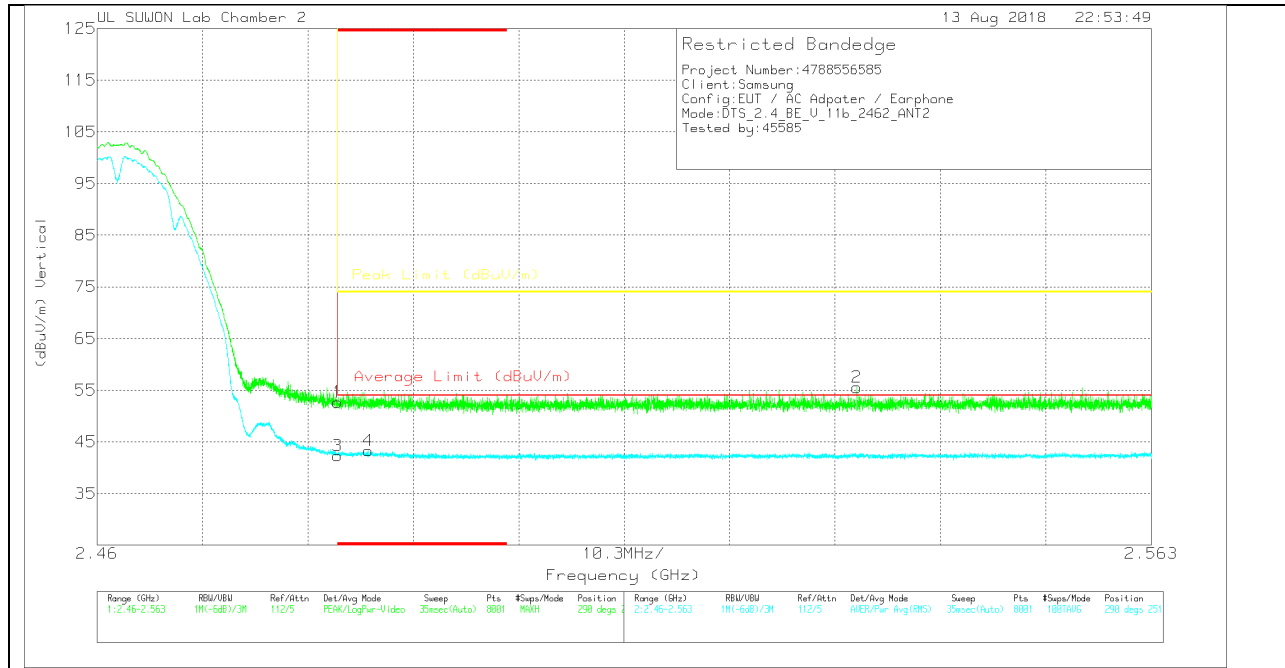
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.73	Pk	31.9	-20.6	0	52.03	-	-	74	-21.97	48	152	H
2	* 2.484	44.23	Pk	31.9	-20.6	0	55.53	-	-	74	-18.47	48	152	H
3	* 2.484	31.82	RMS	31.9	-20.6	0	43.12	54	-10.88	-	-	48	152	H
4	* 2.485	32.2	RMS	31.9	-20.7	0	43.4	54	-10.6	-	-	48	152	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.39	Pk	31.9	-20.6	0	52.69	-	-	74	-21.31	290	251	V
2	2.534	44.05	Pk	32	-20.5	0	55.55	-	-	74	-18.45	290	251	V
3	* 2.484	31.01	RMS	31.9	-20.6	0	42.31	54	-11.69	-	-	290	251	V
4	* 2.487	32.08	RMS	31.9	-20.7	0	43.28	54	-10.72	-	-	290	251	V

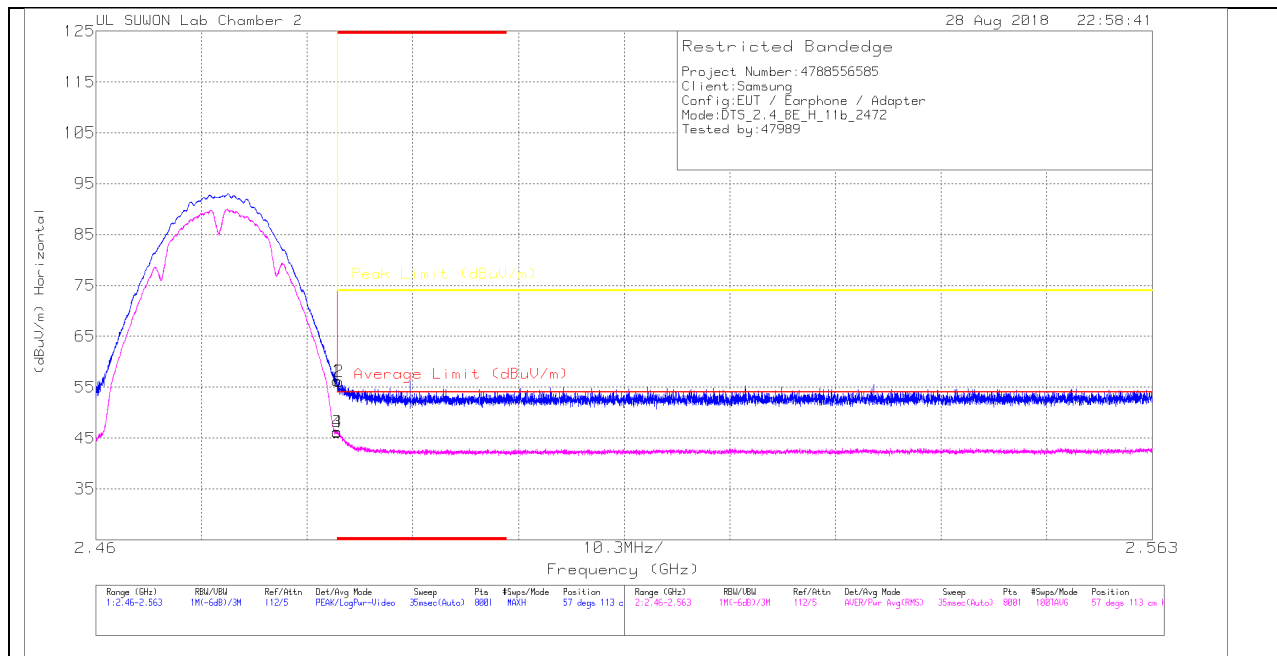
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

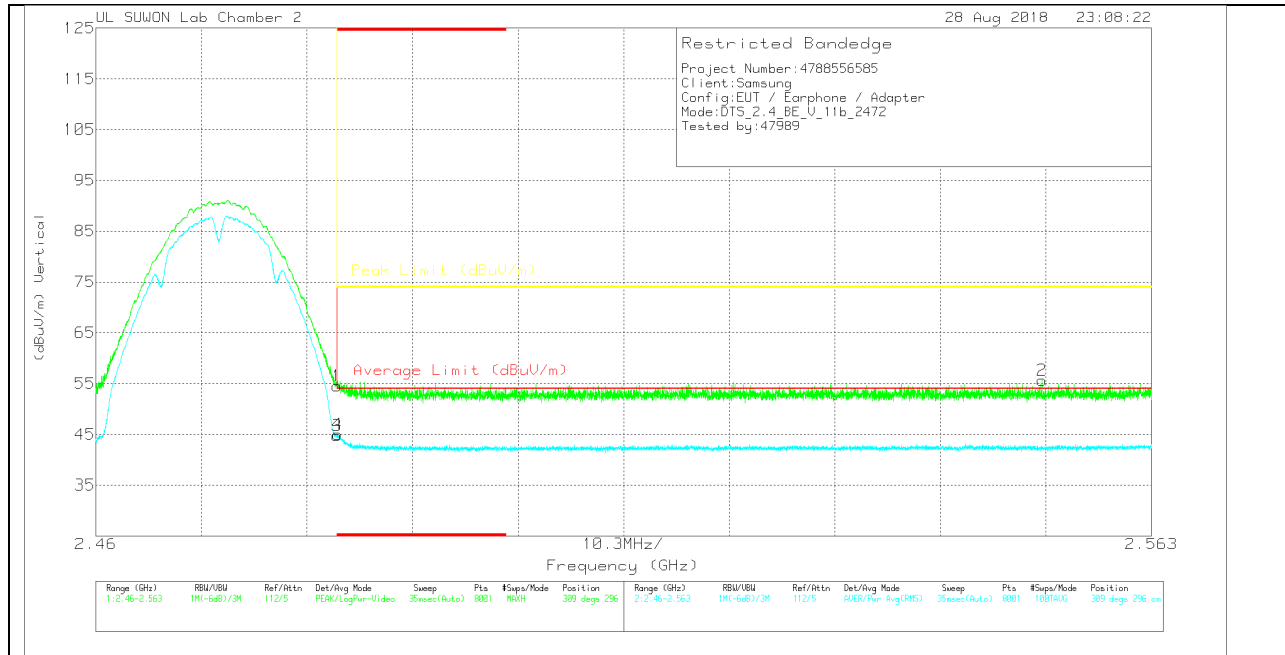
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.94	Pk	31.9	-20.6	0	56.24	-	-	74	-17.76	57	113	H
2	* 2.484	44.88	Pk	31.9	-20.6	0	56.18	-	-	74	-17.82	57	113	H
3	* 2.484	34.98	RMS	31.9	-20.6	0	46.28	54	-7.72	-	-	57	113	H
4	* 2.484	34.79	RMS	31.9	-20.6	0	46.09	54	-7.91	-	-	57	113	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	43.25	Pk	31.9	-20.6	0	54.55	-	-	74	-19.45	309	296	V
2	2.552	44.29	Pk	32	-20.6	0	55.69	-	-	74	-18.31	309	296	V
3	* 2.484	33.51	RMS	31.9	-20.6	0	44.81	54	-9.19	-	-	309	296	V
4	* 2.484	33.68	RMS	31.9	-20.6	0	44.98	54	-9.02	-	-	309	296	V

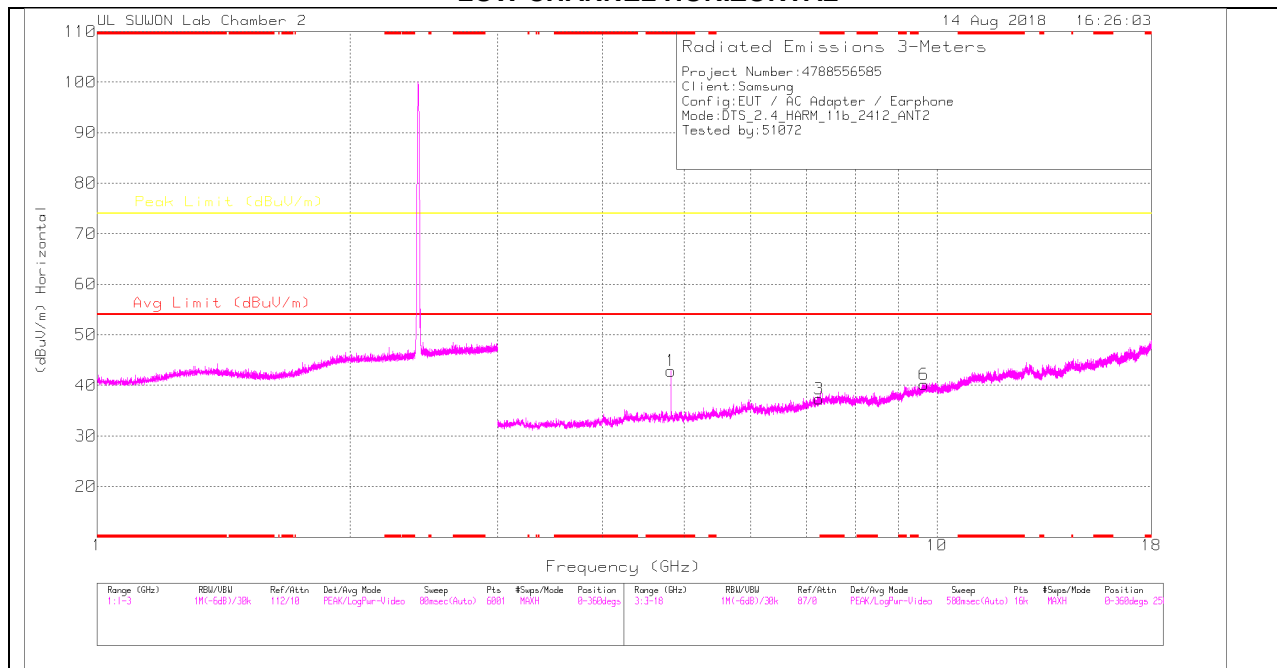
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

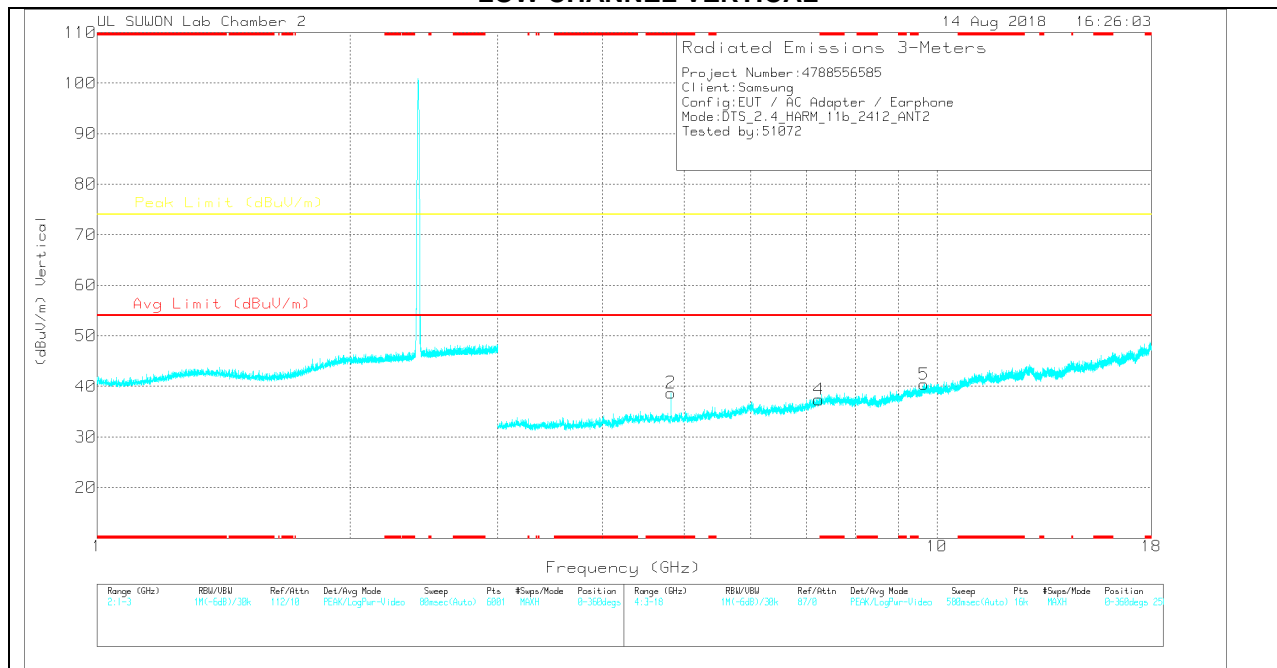
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Aimuth (Degs)	Height (cm)	Polarity
1	* 4.823	37.06	PK	34	-28.2	0	42.86	-	-	74	-31.14	0-360	150	H
3	7.236	26.7	PK	36.1	-25.5	0	37.3	-	-	74	-36.7	0-360	250	H
6	9.648	24.74	PK	37	-21.6	0	40.14	-	-	74	-33.86	0-360	250	H
2	* 4.823	32.91	PK	34	-28.2	0	38.71	-	-	74	-35.29	0-360	250	V
4	7.234	26.78	PK	36.1	-25.5	0	37.38	-	-	74	-36.62	0-360	250	V
5	9.648	24.99	PK	37	-21.6	0	40.39	-	-	74	-33.61	0-360	250	V

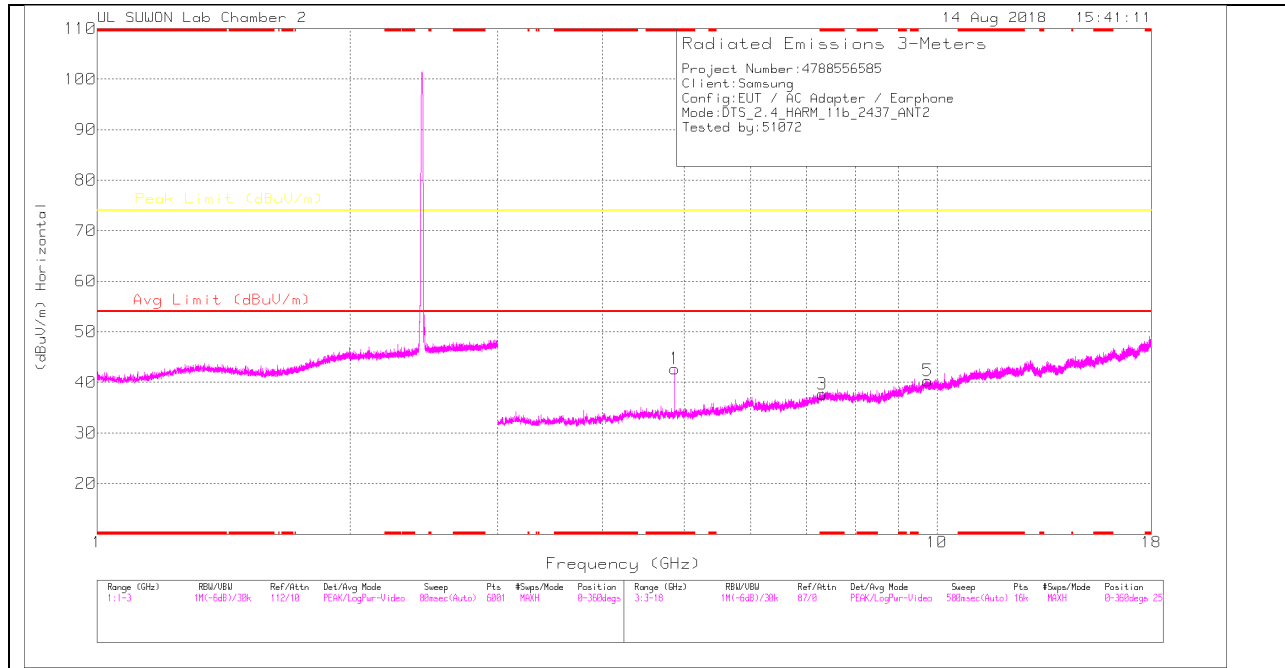
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

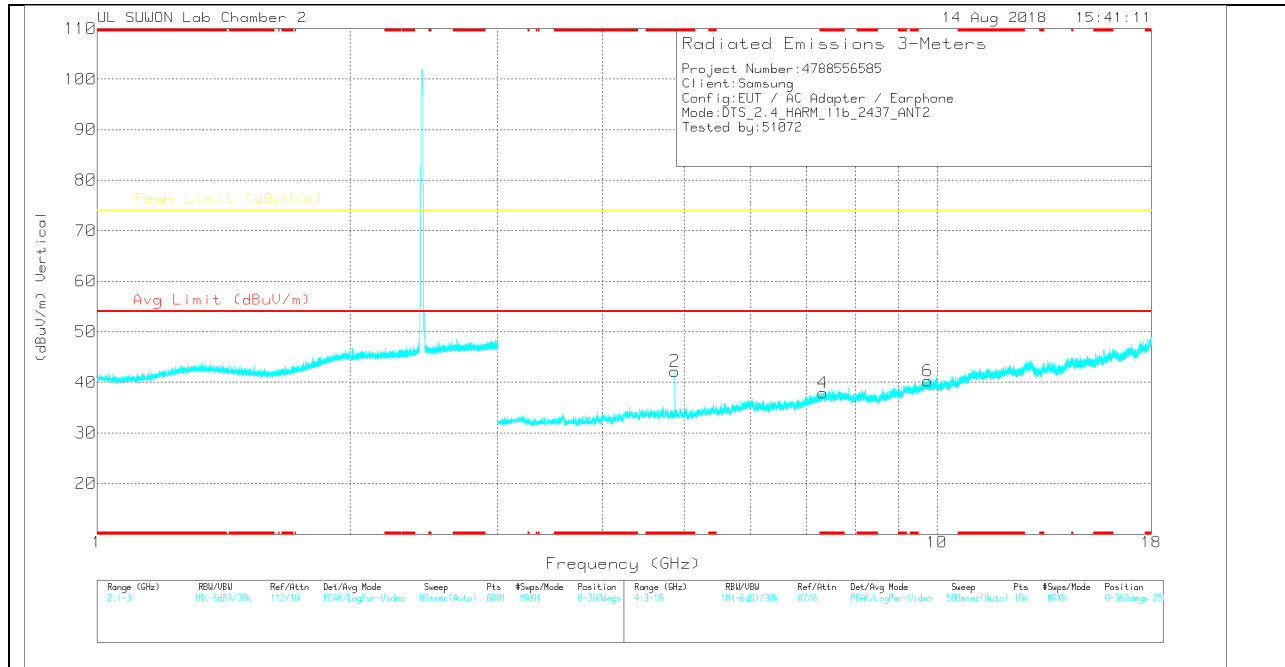
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.824	43.23	PK2	34	-28.1	0	49.13	-	-	74	-24.87	161	180	H
* 4.824	38.72	MAv1	34	-28.1	0	44.62	54	-9.38	-	-	161	180	H
* 4.824	41.42	PK2	34	-28.1	0	47.32	-	-	74	-26.68	287	351	V
* 4.824	35.03	MAv1	34	-28.1	0	40.93	54	-13.07	-	-	287	351	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.874	36.7	PK	34	-28	0	42.7	-	-	74	-31.3	0-360	150	H
3	* 7.308	26.46	PK	36.2	-25	0	37.66	-	-	74	-36.34	0-360	250	H
5	9.747	24.53	PK	37.2	-21.4	0	40.33	-	-	74	-33.67	0-360	250	H
2	* 4.874	36.18	PK	34	-28	0	42.18	-	-	74	-31.82	0-360	250	V
4	* 7.313	26.74	PK	36.2	-25	0	37.94	-	-	74	-36.06	0-360	250	V
6	9.748	24.48	PK	37.2	-21.4	0	40.28	-	-	74	-33.72	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.874	42.36	PK2	34	-28	0	48.36	-	-	74	-25.64	114	133	H
* 4.874	36.66	MAv1	34	-28	0	42.66	54	-11.34	-	-	114	133	H
* 4.874	40.19	PK2	34	-28	0	46.19	-	-	74	-27.81	279	145	V
* 4.874	34.36	MAv1	34	-28	0	40.36	54	-13.64	-	-	279	145	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average