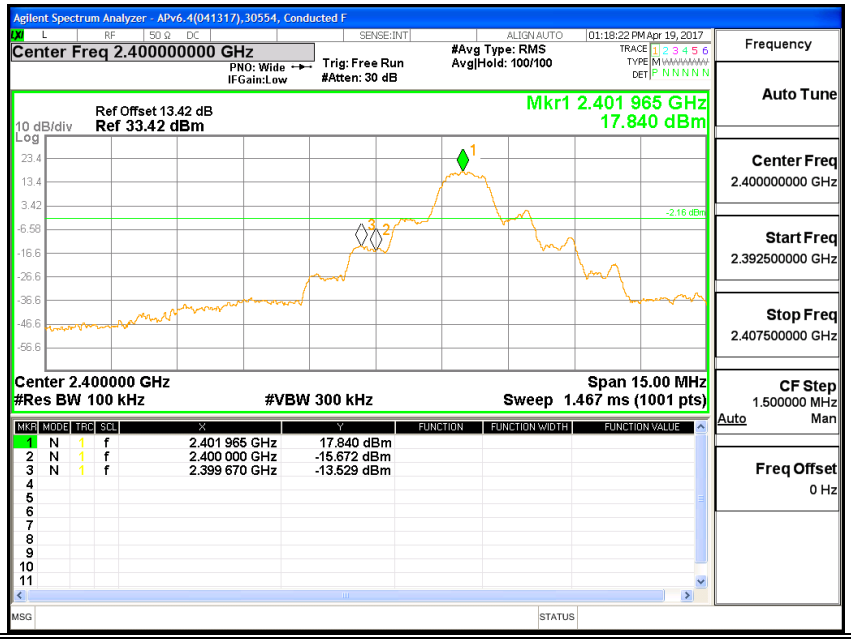
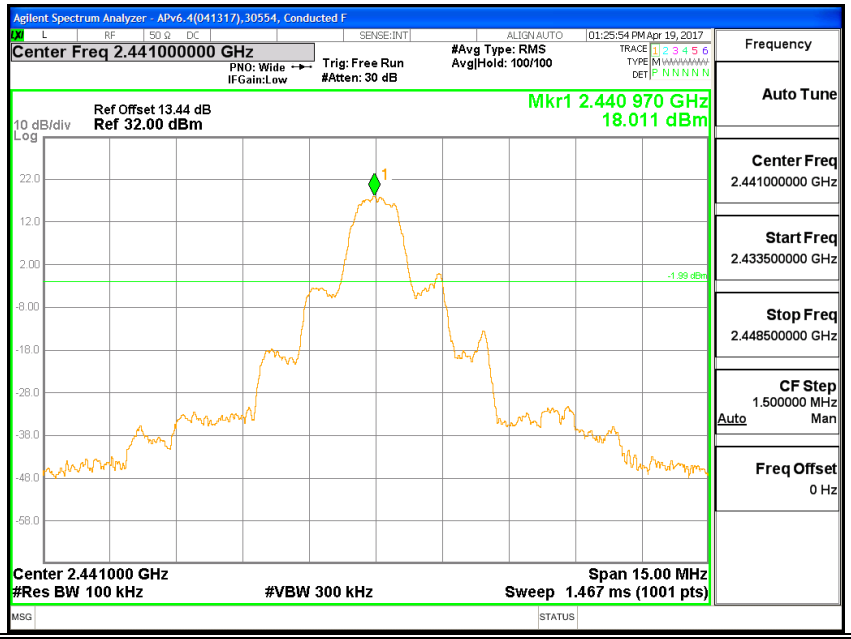
CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

CONDUCTED BANDEDGE LOW CH



CONDUCTED BANDEDGE MID CH



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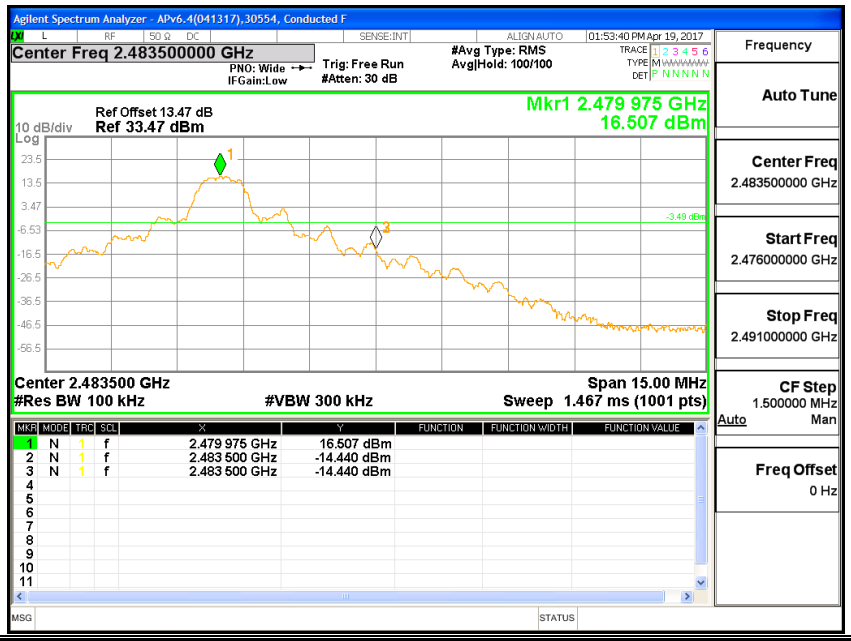
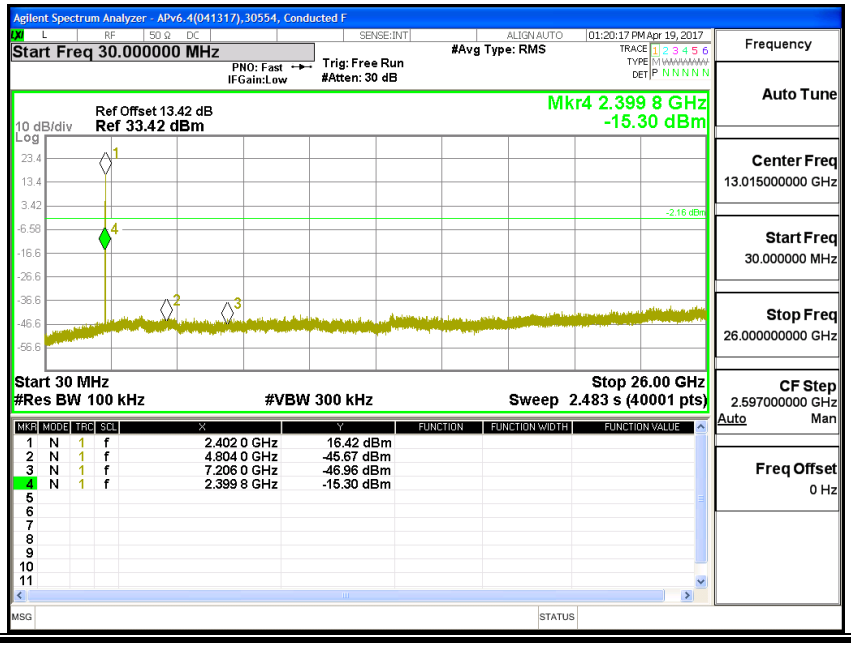
CONDUCTED BANDEDGE HIGH CH



CONDUCTED SPURIOUS EMISSIONS LOW CH



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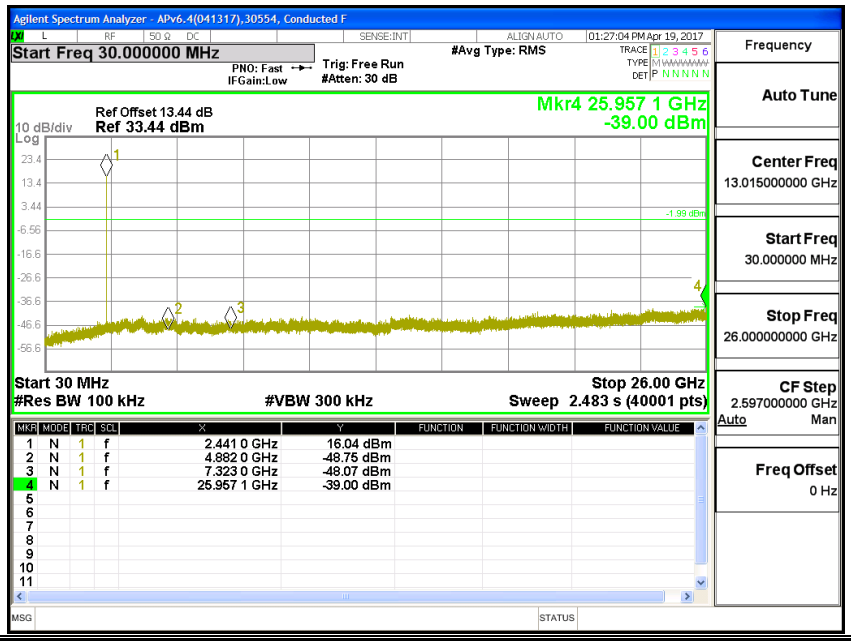
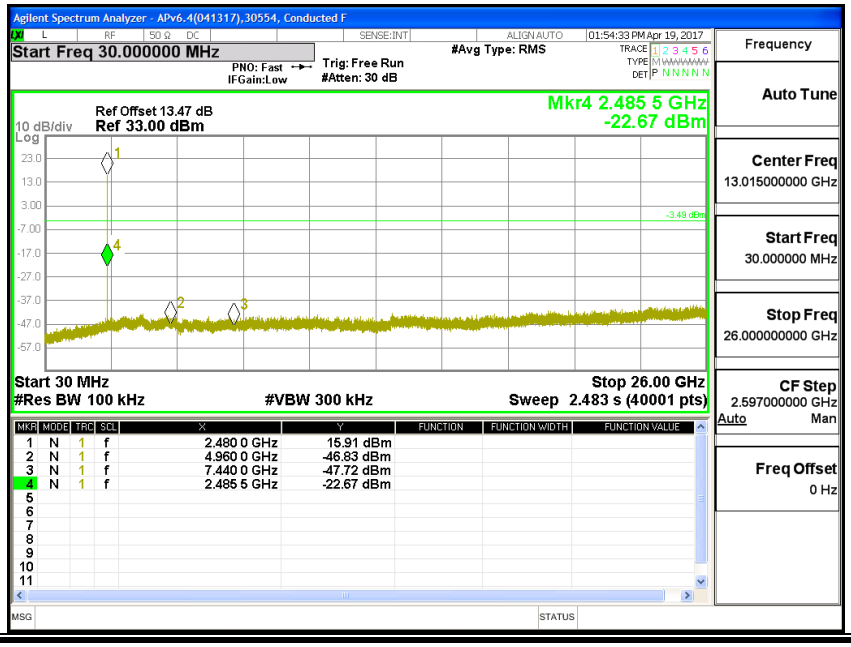
CONDUCTED SPURIOUS EMISSIONS MID CH



CONDUCTED SPURIOUS EMISSIONS HIGH CH



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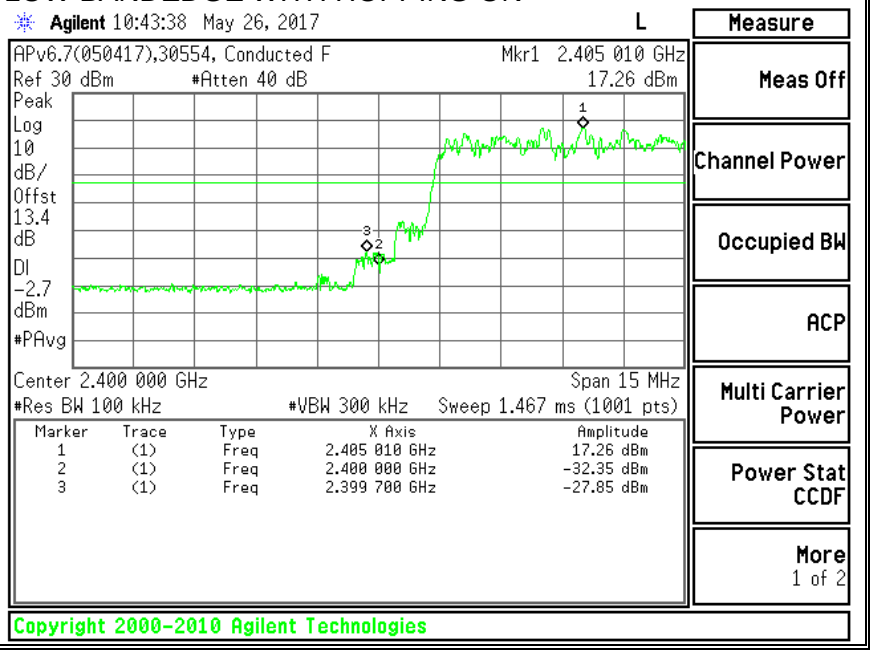
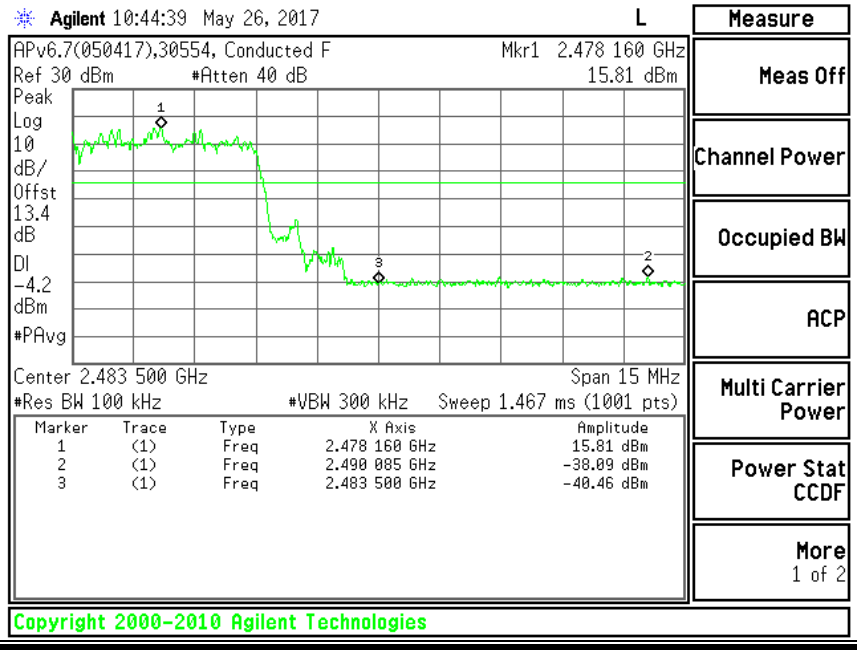
LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



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8.11. LAT 3, Plow BASIC DATA RATE GFSK MODULATION

8.11.1. 20 dB AND 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (KHz)	20 dB Bandwidth (KHz)
Low	2402	926.02	951.14
Middle	2441	887.74	912.60
High	2480	853.34	799.50

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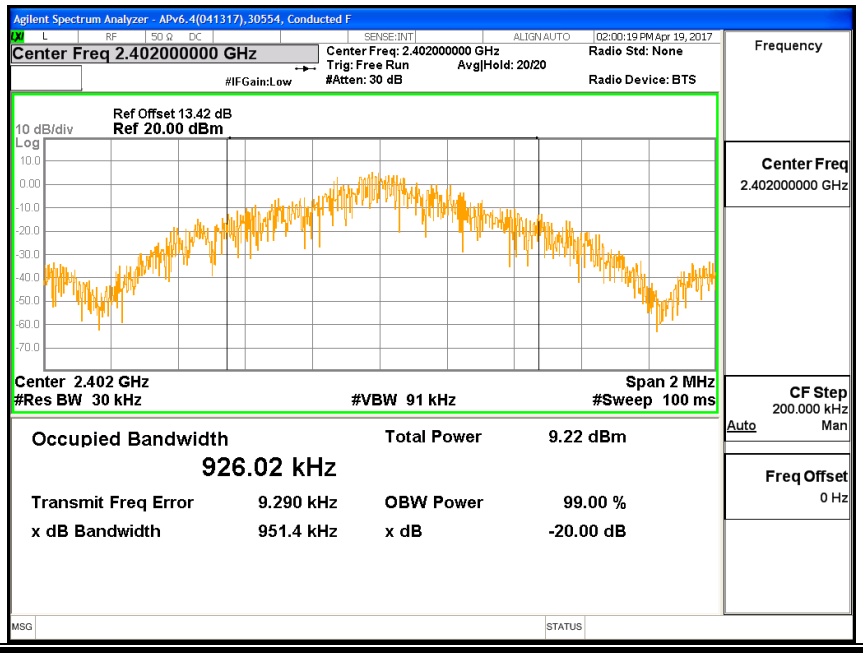
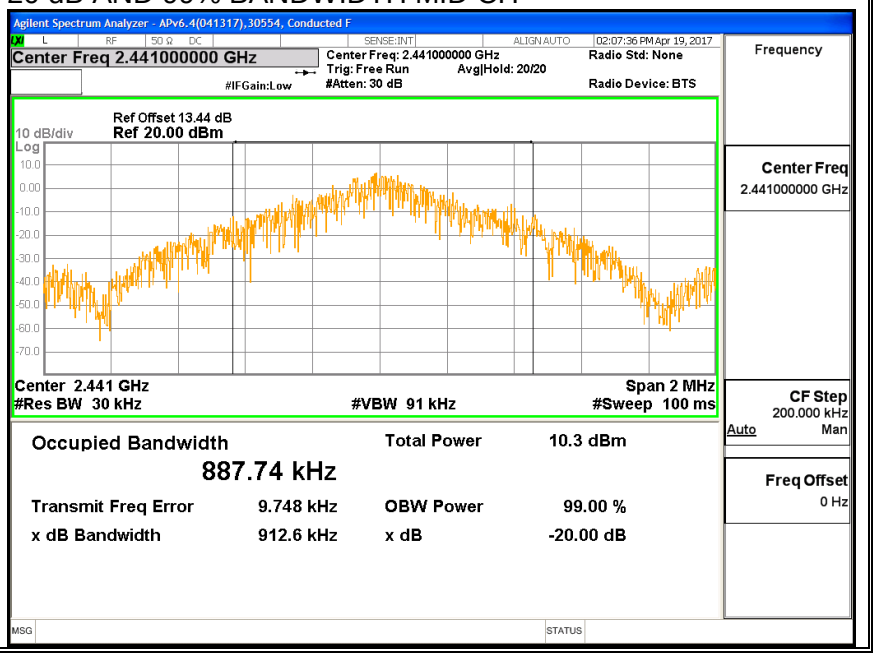
20 dB AND 99% BANDWIDTH LOW CH



20 dB AND 99% BANDWIDTH MID CH



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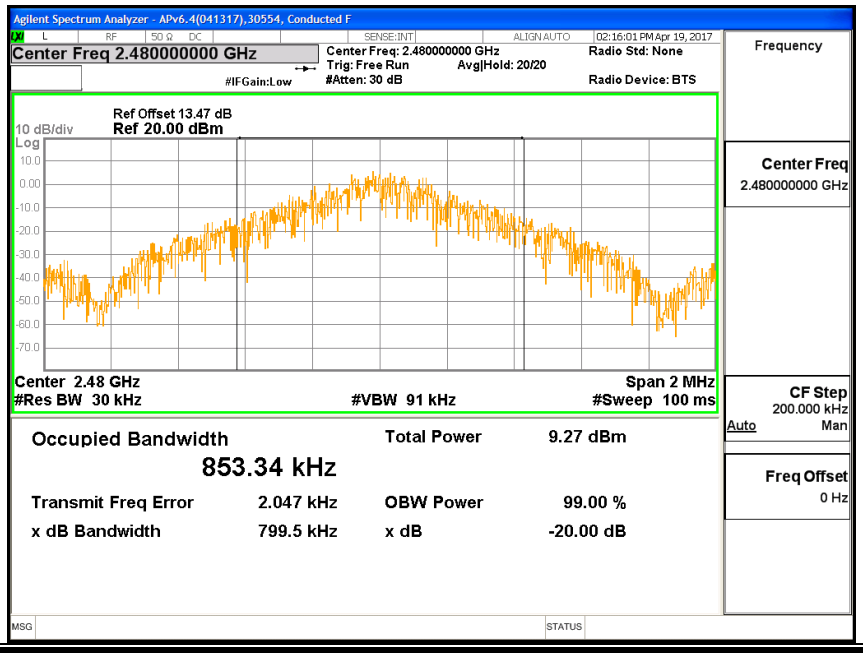
20 dB AND 99% BANDWIDTH HIGH CH



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8.11.2. HOPPING FREQUENCY SEPARATION

LIMITS

FCC §15.247 (a) (1)

IC RSS-247 (5.1) (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

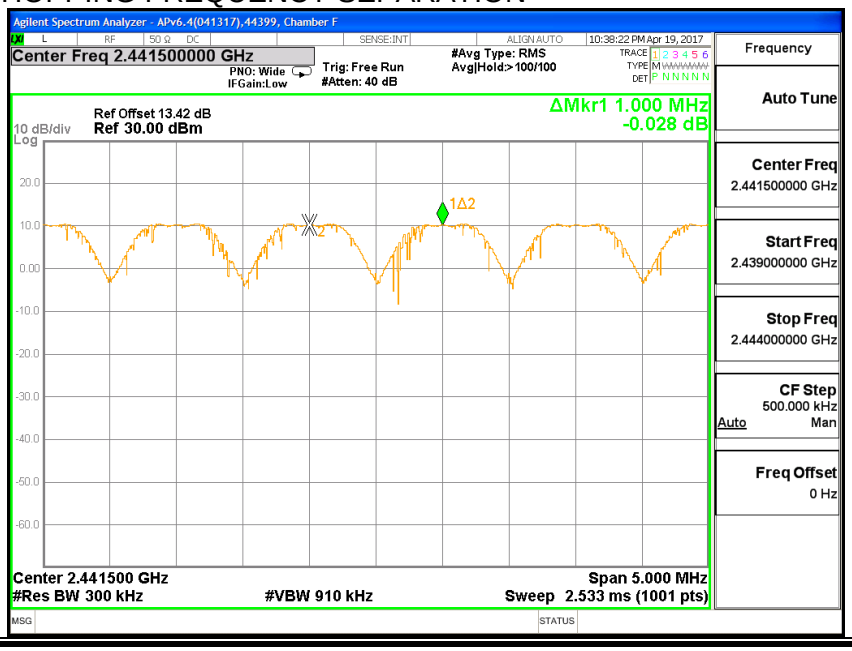
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to 910 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION



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8.11.3. NUMBER OF HOPPING CHANNELS

LIMITS

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

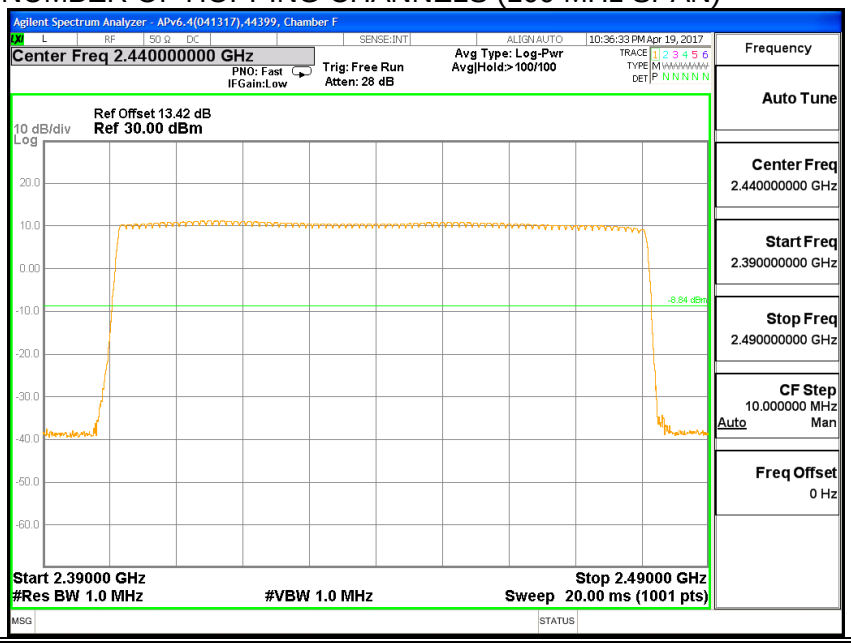
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS (100 MHz SPAN)



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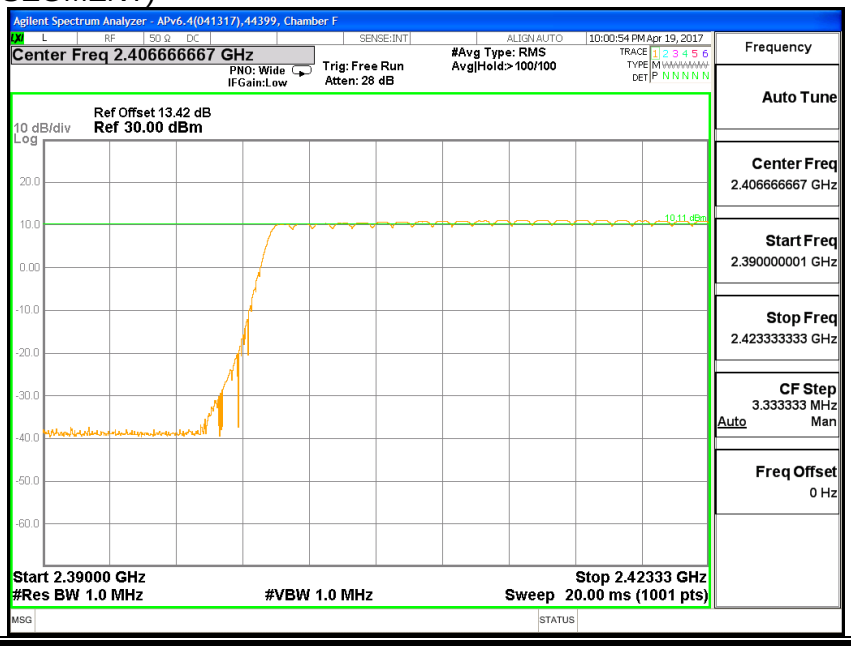
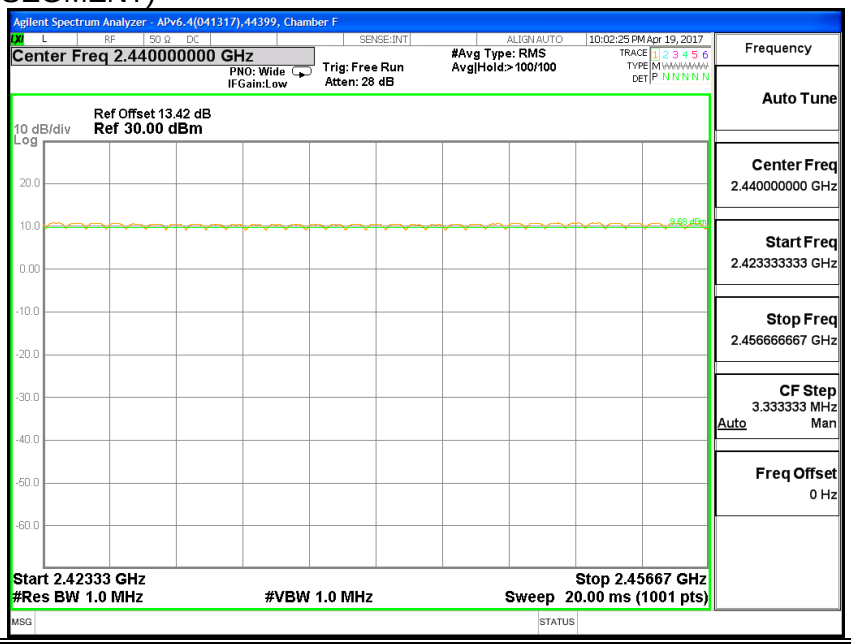
NUMBER OF HOPPING CHANNELS (30 MHz SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHz SPAN, SECOND SEGMENT)



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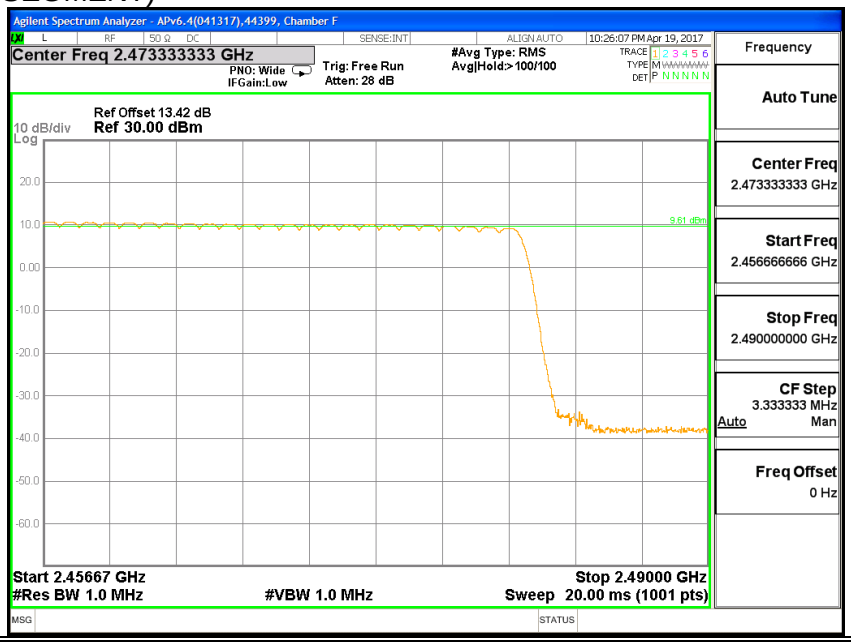
NUMBER OF HOPPING CHANNELS (30 MHz SPAN, THIRD SEGMENT)



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8.11.4. AVERAGE TIME OF OCCUPANCY

LIMITS

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to 10 * (# of pulses in 0.8 s) * pulse width.

RESULTS

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.383	31	0.119	0.4	-0.281
DH3	1.639	14	0.229	0.4	-0.171
DH5	2.887	12	0.346	0.4	-0.054
DH Packet	Pulse Width (msec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.383	7.75	0.030	0.4	-0.370
DH3	1.639	3.5	0.057	0.4	-0.343
DH5	2.887	3	0.087	0.4	-0.313

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PULSE WIDTH - DH1

NUMBER OF PULSES - DH1

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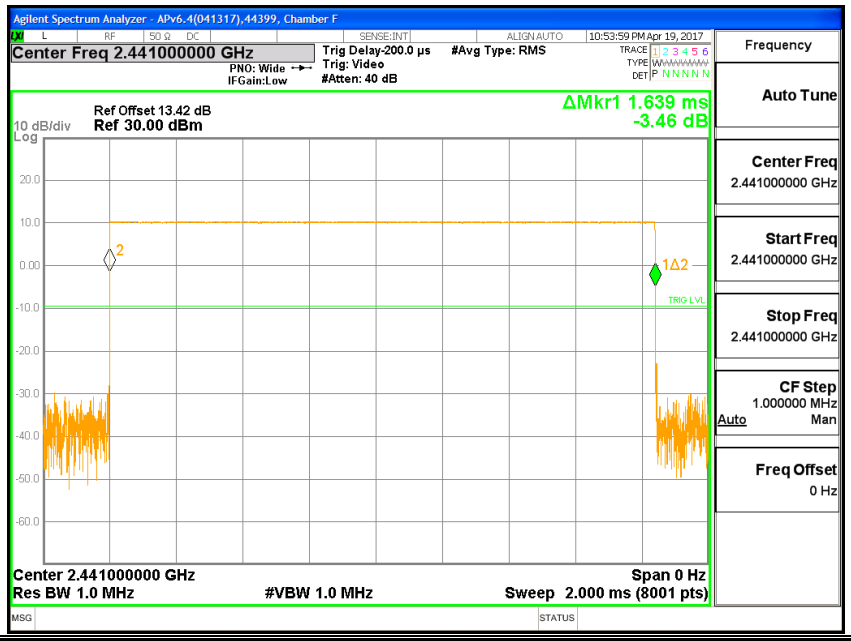
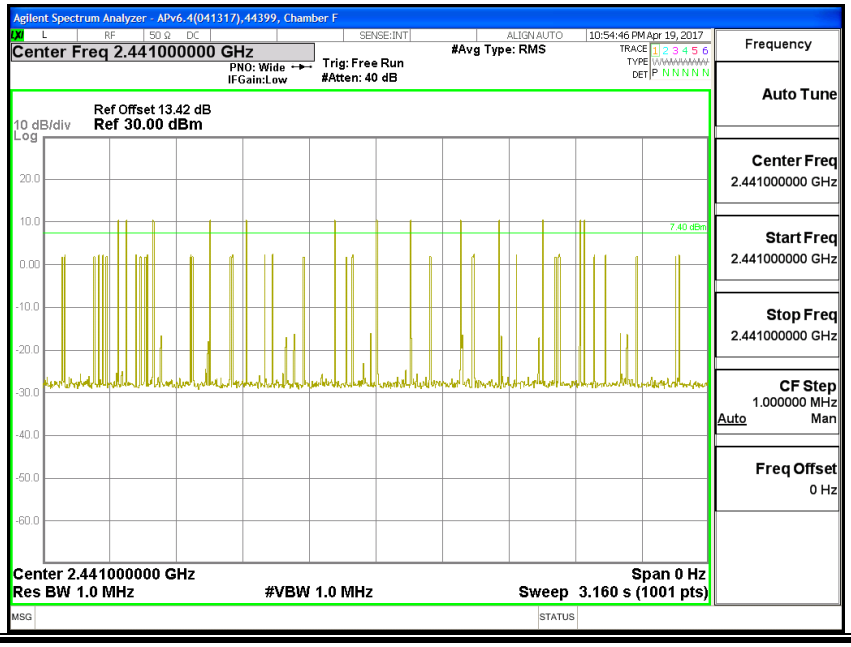
PULSE WIDTH - DH3



NUMBER OF PULSES - DH3



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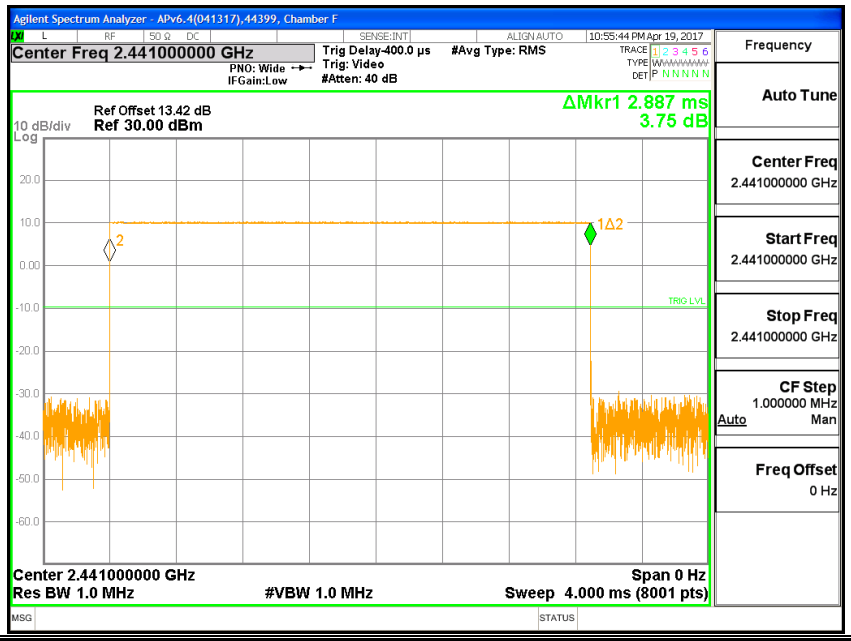
PULSE WIDTH - DH5



NUMBER OF PULSES - DH5

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8.11.5. OUTPUT POWER

ID:	44353	Date:	7/14/2017

LIMITS

§15.247 (b) (1)

RSS-247 (5.4) (b)

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a wideband peak and average power meter.

RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.08	30	-19.92
Middle	2441	10.15	30	-19.85
High	2480	10.05	30	-19.95

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8.11.6. AVERAGE POWER

ID:	44353	Date:	7/14/2017

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	9.80
Middle	2441	9.90
High	2480	9.70

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8.11.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-247 (5.5)

Limit = -20 dBc

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS

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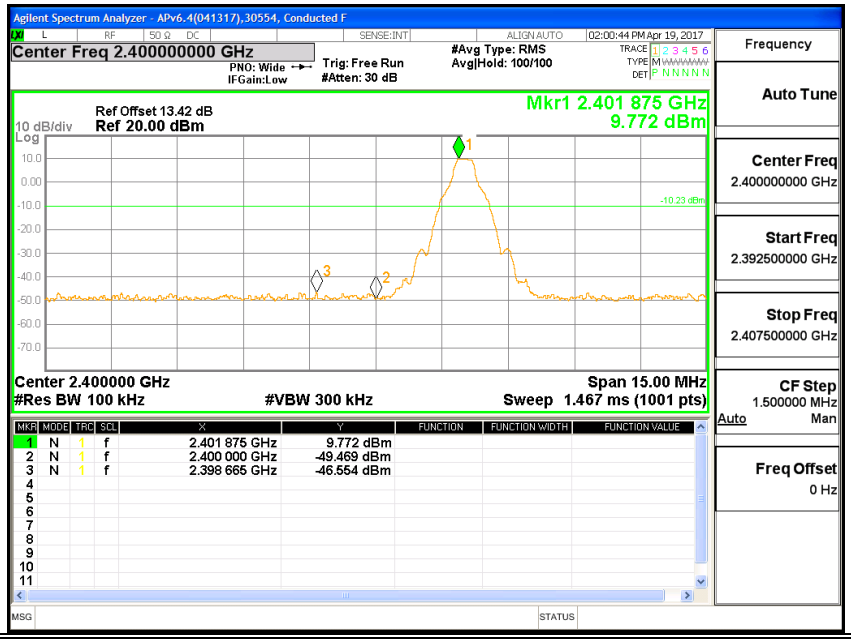
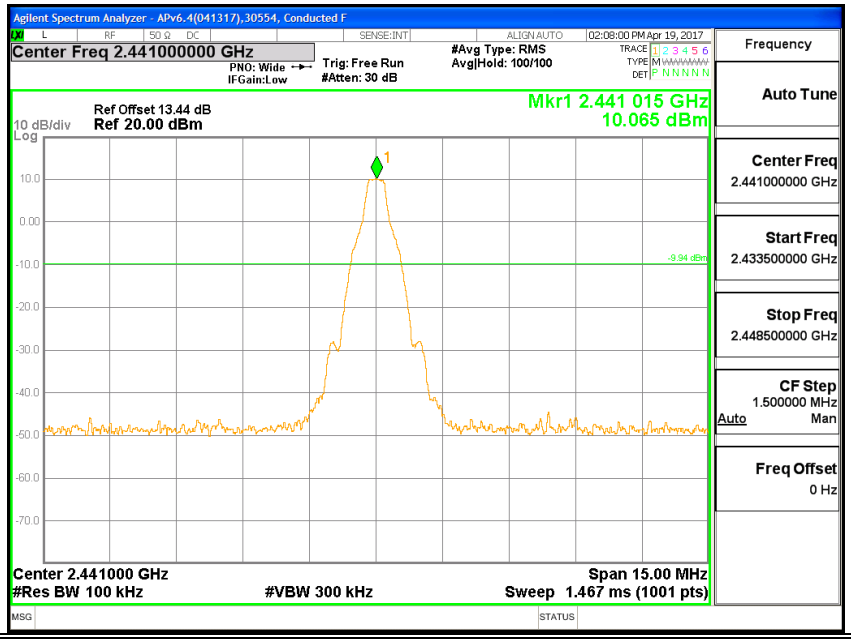
CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

CONDUCTED BANDEDGE LOW CH



CONDUCTED BANDEDGE MID CH



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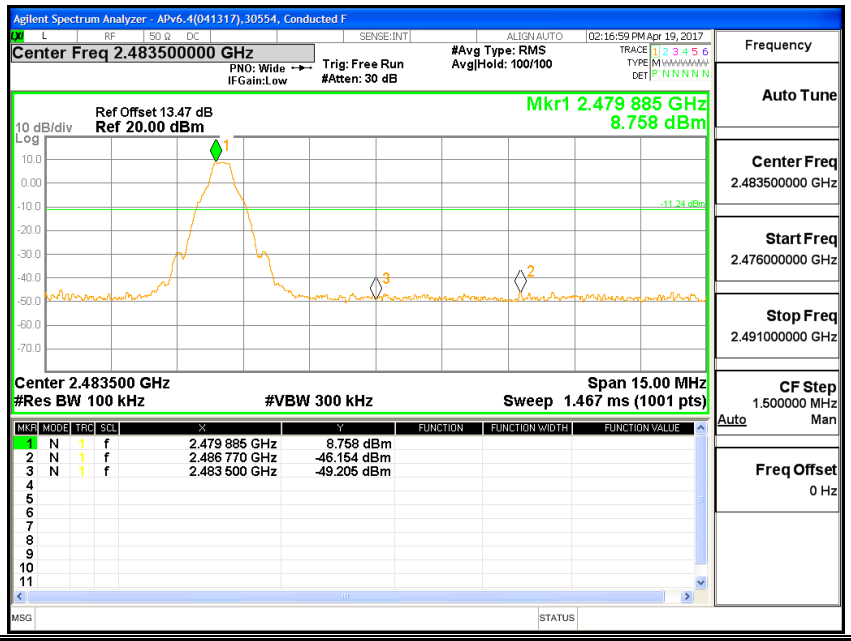
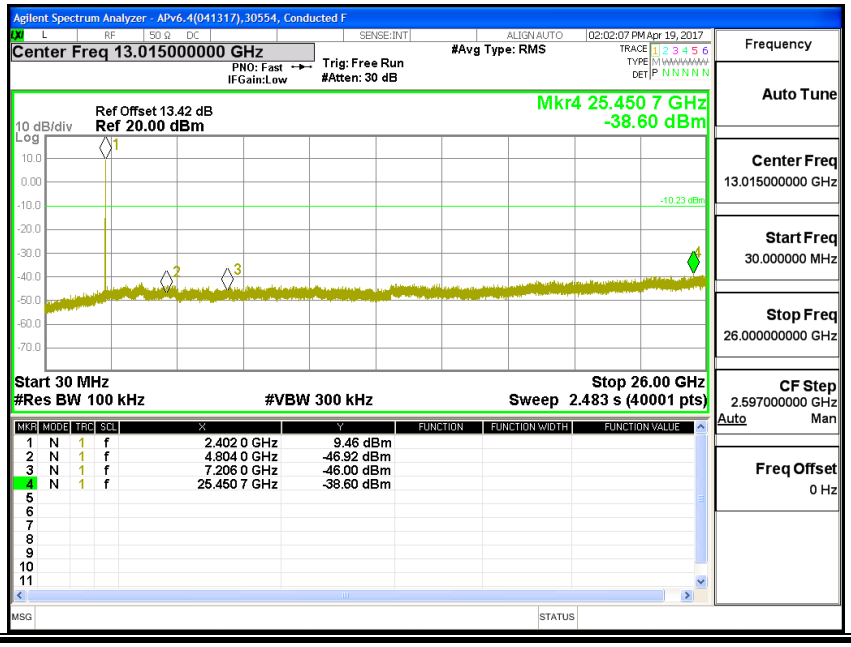
CONDUCTED BANDEDGE HIGH CH



CONDUCTED SPURIOUS EMISSIONS LOW CH



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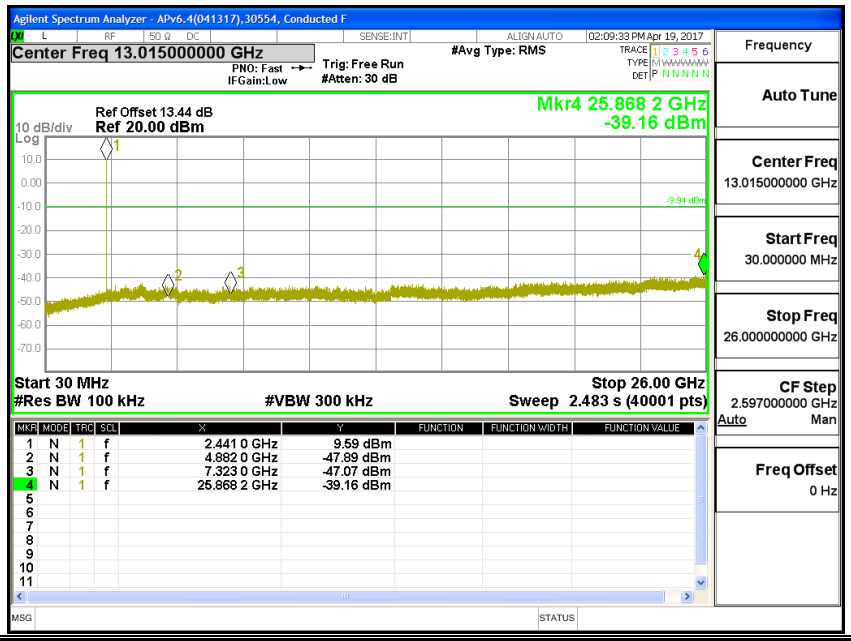
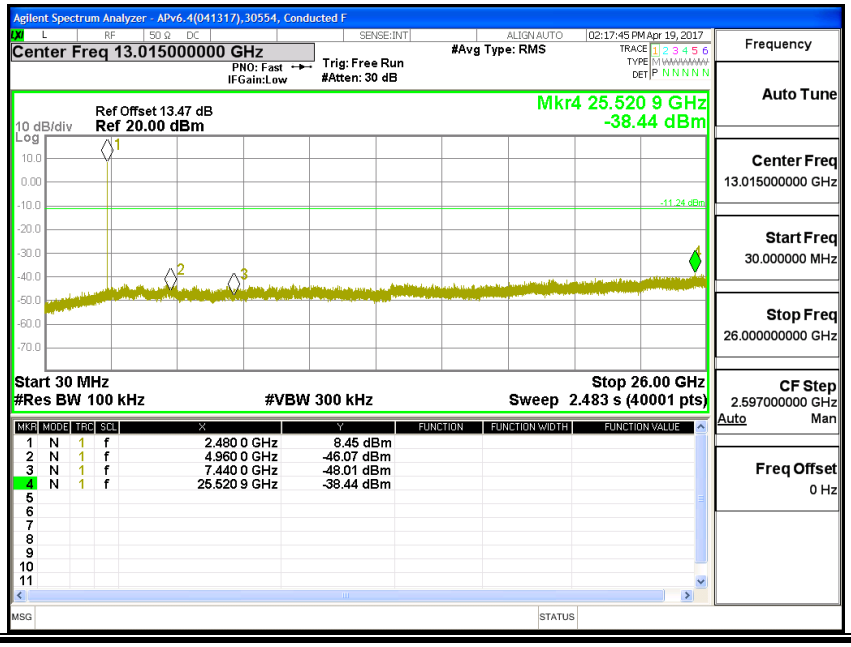
CONDUCTED SPURIOUS EMISSIONS MID CH



CONDUCTED SPURIOUS EMISSIONS HIGH CH



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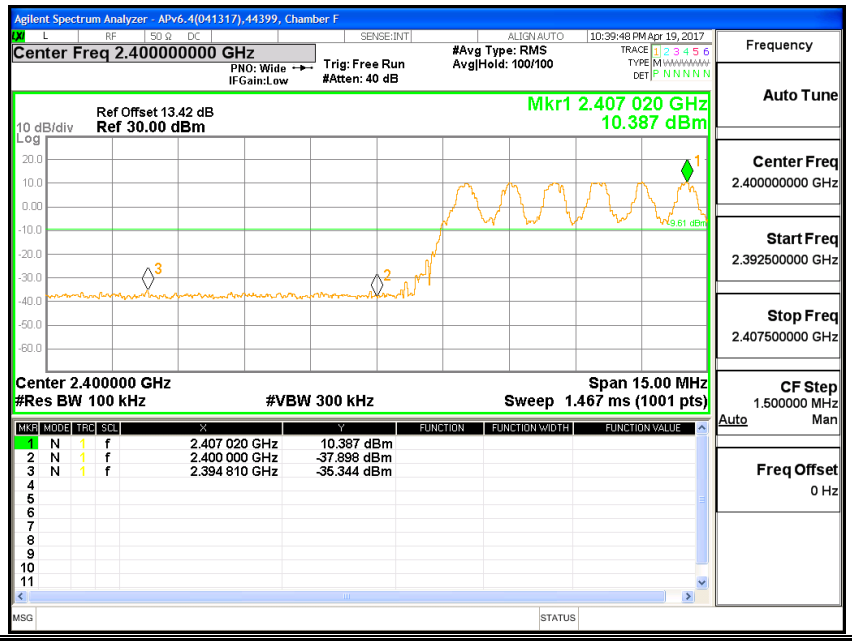
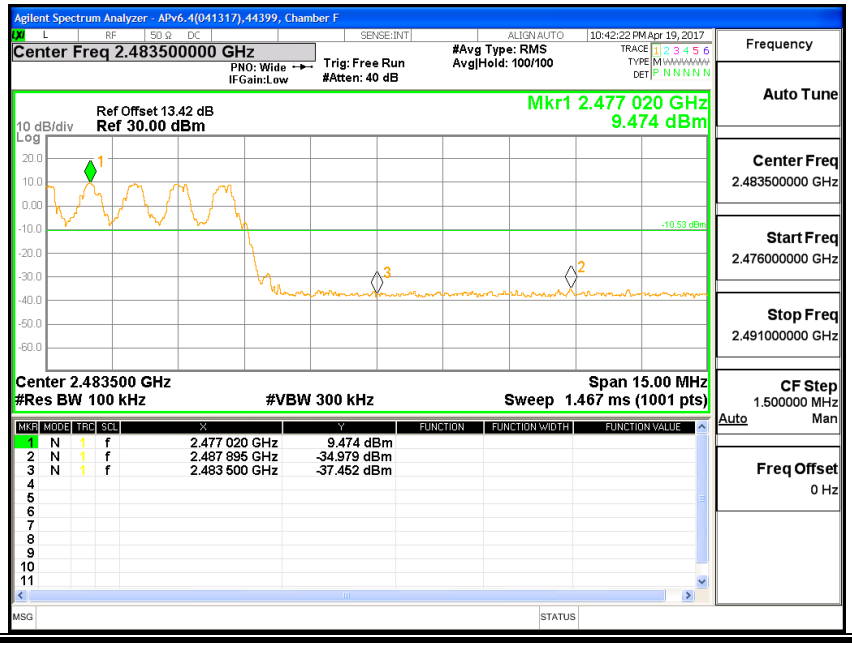
LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



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8.12. LAT 3, Plow ENHANCED DATA RATE DQPSK MODULATION

8.12.1. OUTPUT POWER

ID:	44353	Date:	7/14/2017

LIMITS

§15.247 (b) (1)

RSS-247 (5.4) (b)

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a wideband peak and average power meter.

RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.08	21	-10.92
Middle	2441	10.12	21	-10.83
High	2480	9.90	21	-11.10

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8.12.2. AVERAGE POWER

ID:	44353	Date:	7/14/2017

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.60
Middle	2441	7.68
High	2480	7.47

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8.13. LAT 3, Plow ENHANCED DATA RATE 8PSK MODULATION

8.13.1. 20 dB AND 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)	20 dB Bandwidth (MHz)
Low	2402	1.3135	1.374
Middle	2441	1.2839	1.381
High	2480	1.3127	1.385

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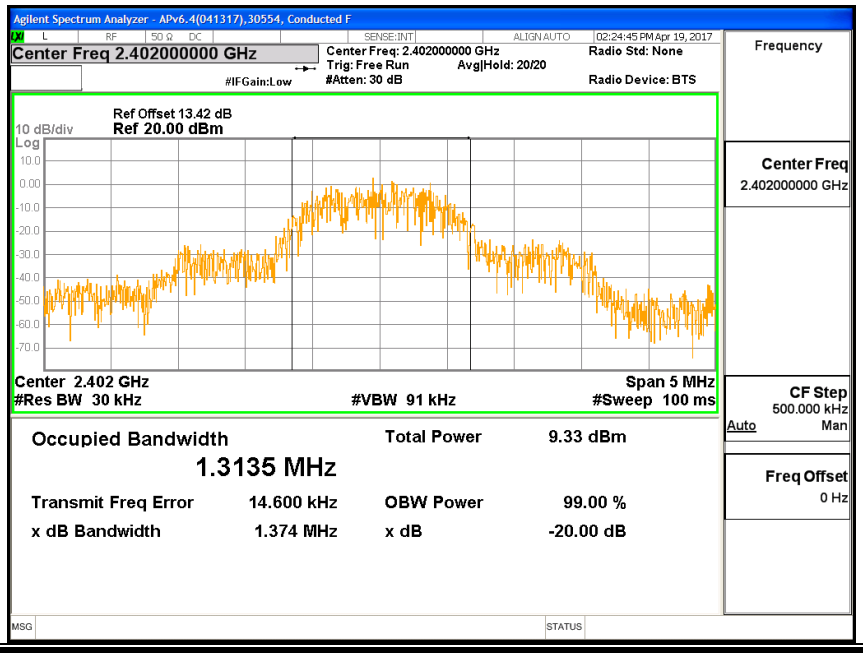
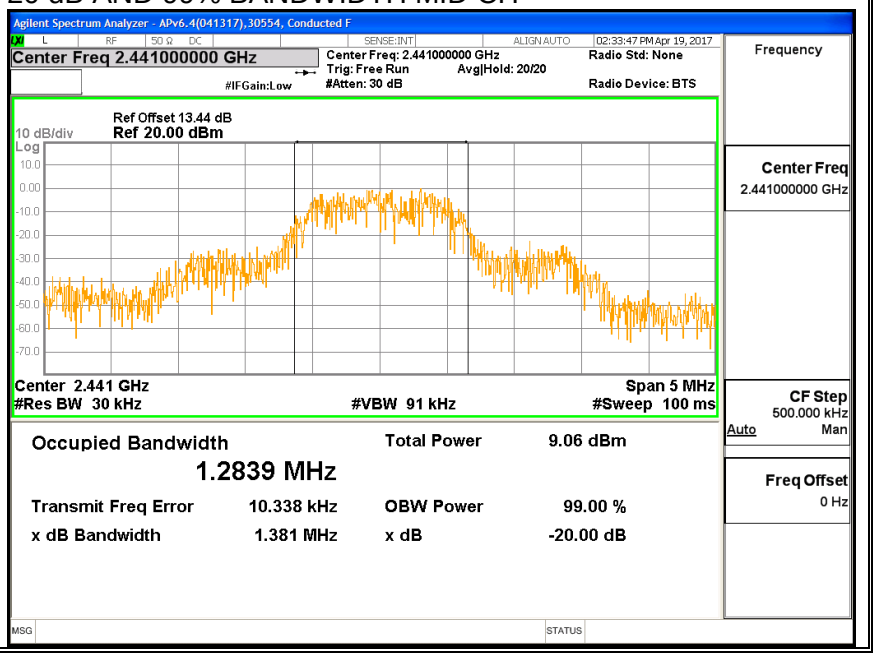
20 dB AND 99% BANDWIDTH LOW CH



20 dB AND 99% BANDWIDTH MID CH



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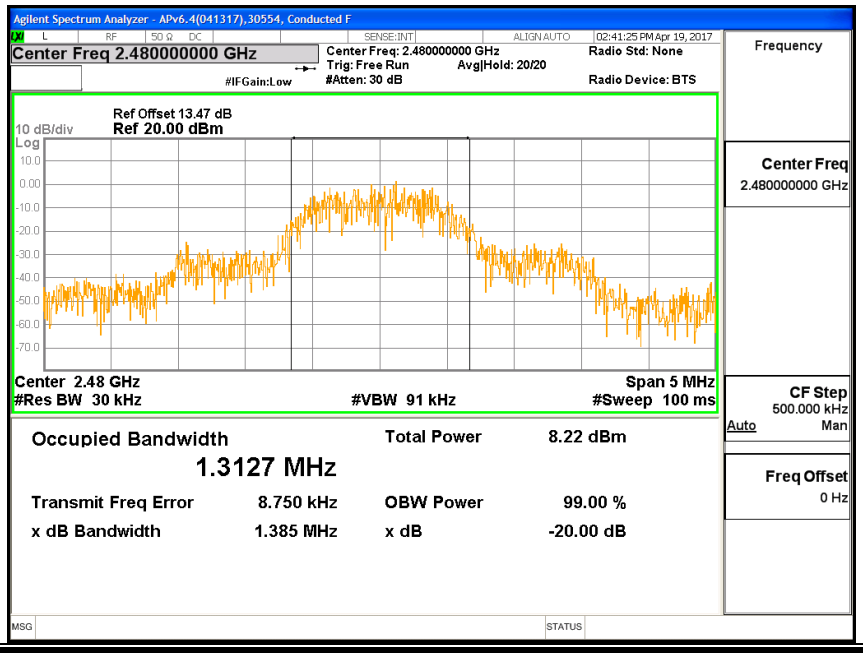
20 dB AND 99% BANDWIDTH HIGH CH



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8.13.2. HOPPING FREQUENCY SEPARATION

LIMITS

FCC §15.247 (a) (1)

IC RSS-247 (5.1) (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

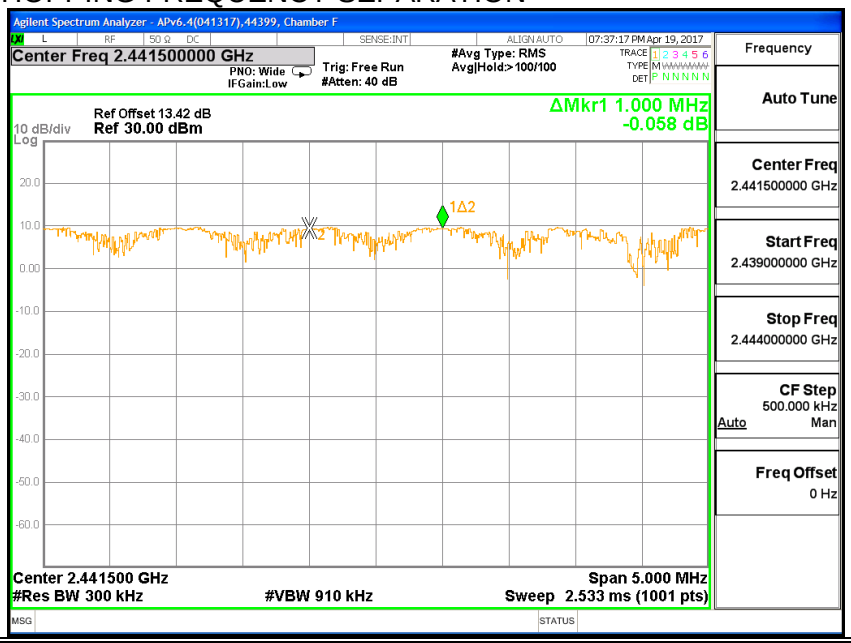
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to 910 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION



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8.13.3. NUMBER OF HOPPING CHANNELS

LIMITS

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

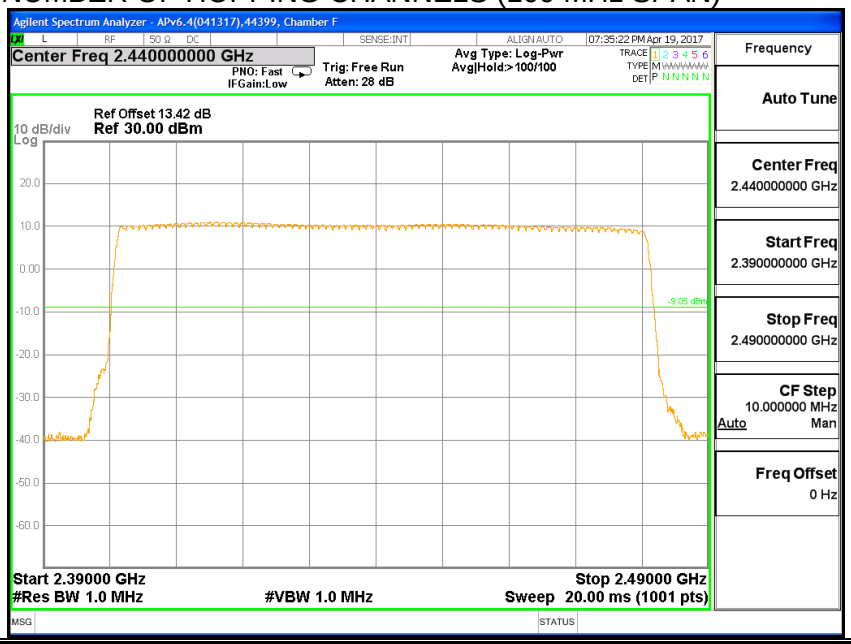
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS (100 MHz SPAN)



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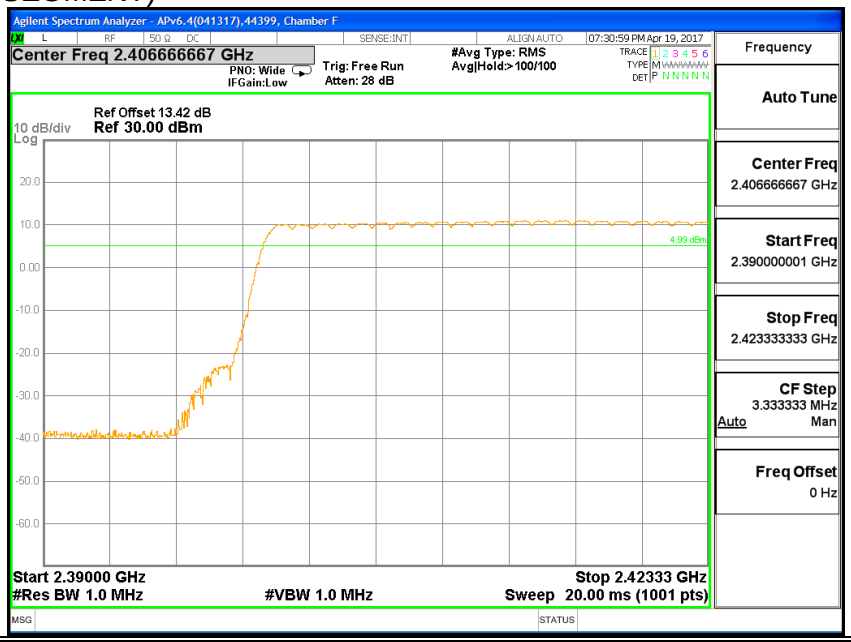
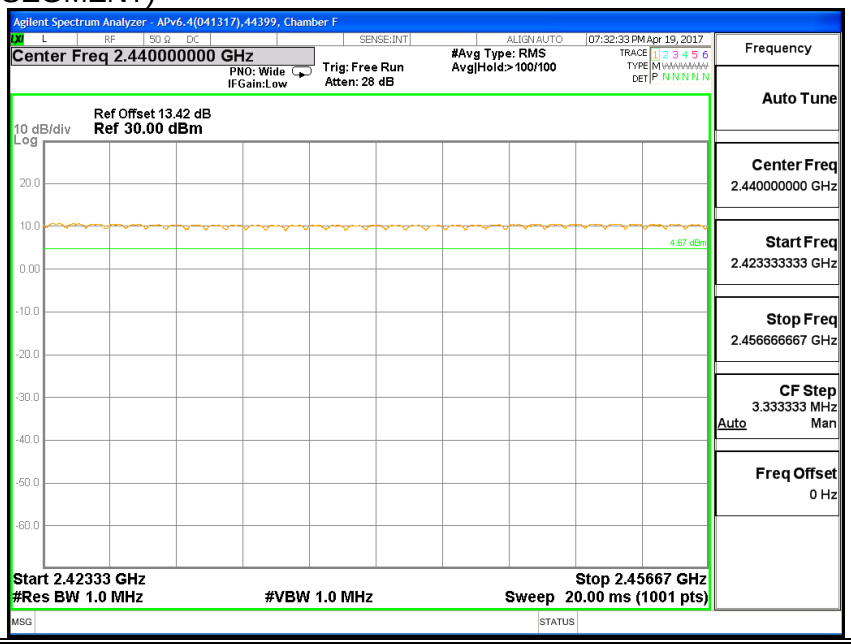
NUMBER OF HOPPING CHANNELS (30 MHz SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHz SPAN, SECOND SEGMENT)



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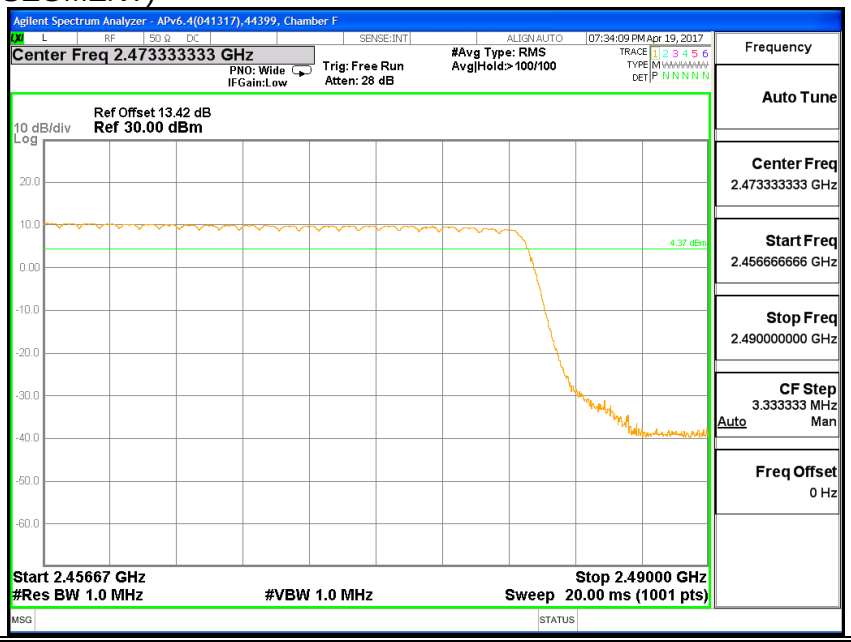
NUMBER OF HOPPING CHANNELS (30 MHz SPAN, THIRD SEGMENT)



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8.13.4. AVERAGE TIME OF OCCUPANCY

LIMITS

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to 10 * (# of pulses in 0.8 s) * pulse width.

RESULTS

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
8PSK (EDR) Mode					
3DH1	0.389	31	0.121	0.4	-0.279
3DH3	1.640	18	0.295	0.4	-0.105
3DH5	2.891	13	0.376	0.4	-0.024

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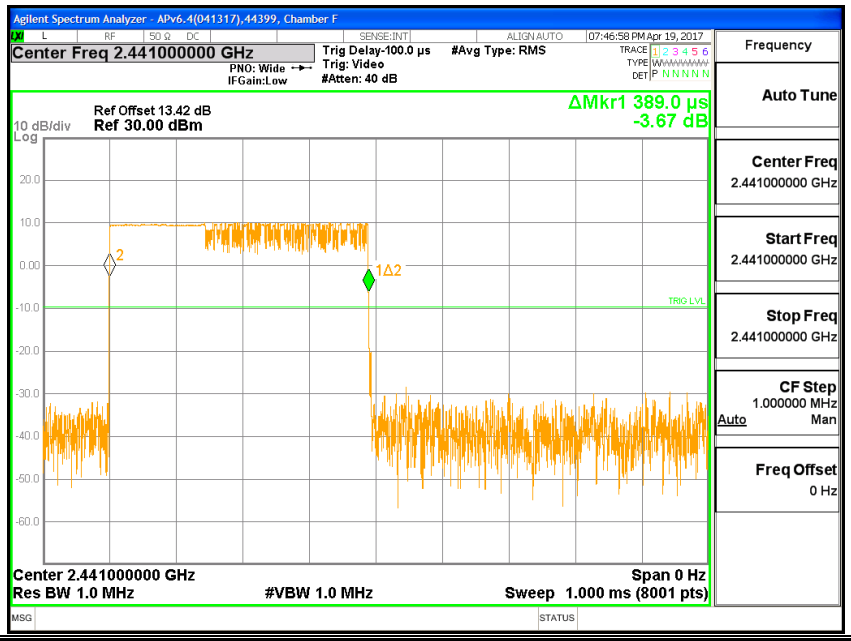
PULSE WIDTH - 3DH1



NUMBER OF PULSES - 3DH1

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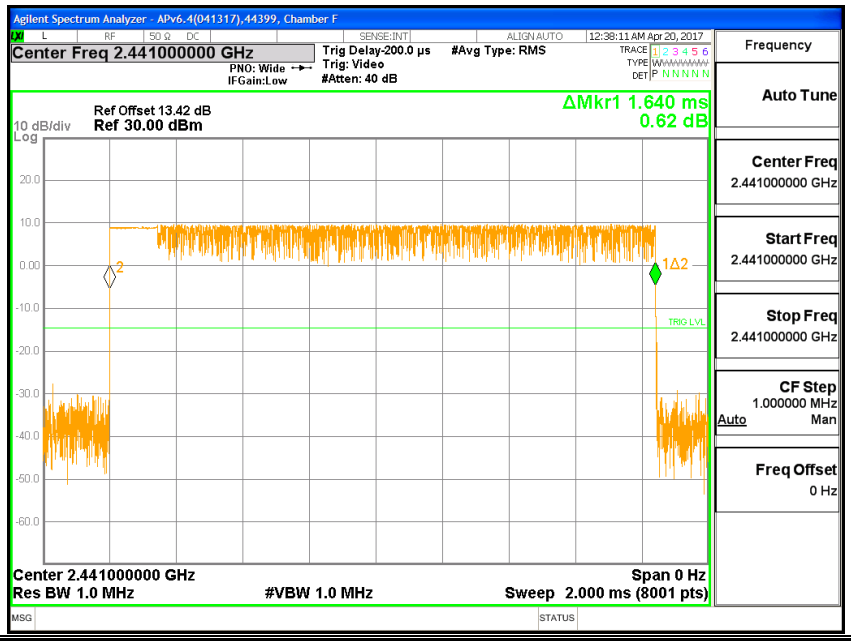
PULSE WIDTH - 3DH3



NUMBER OF PULSES - 3DH3

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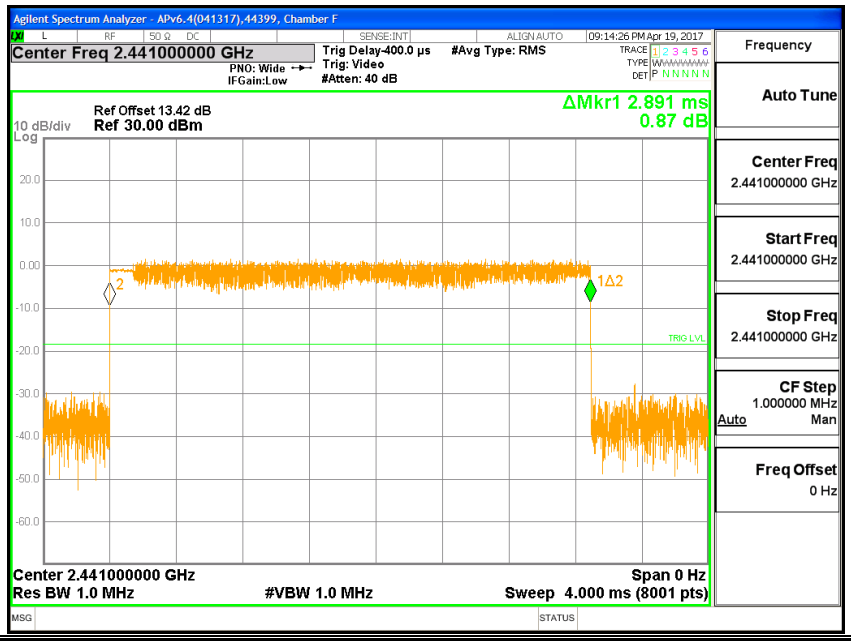
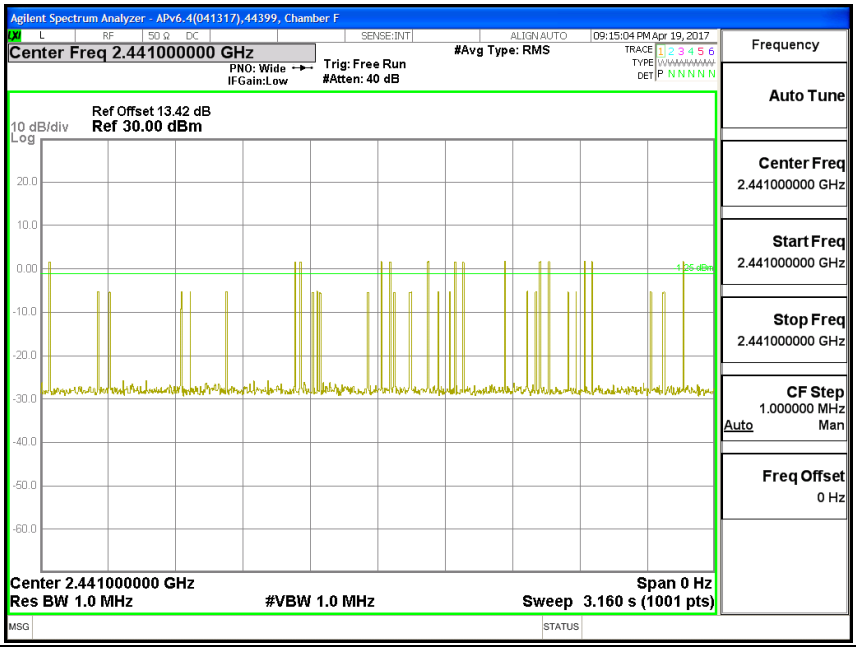
PULSE WIDTH - 3DH5



NUMBER OF PULSES - 3DH5



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8.13.5. OUTPUT POWER

ID:	44353	Date:	7/14/2017

LIMITS

§15.247 (b) (1)

RSS-247 (5.4) (b)

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a wideband peak and average power meter.

RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.15	21	-10.82
Middle	2441	10.13	21	-10.84
High	2480	10.12	21	-10.85

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8.13.6. AVERAGE POWER

ID:	44353	Date:	7/14/2017

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.65
Middle	2441	7.75
High	2480	7.60

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8.13.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-247 (5.5)

Limit = -20 dBc

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS

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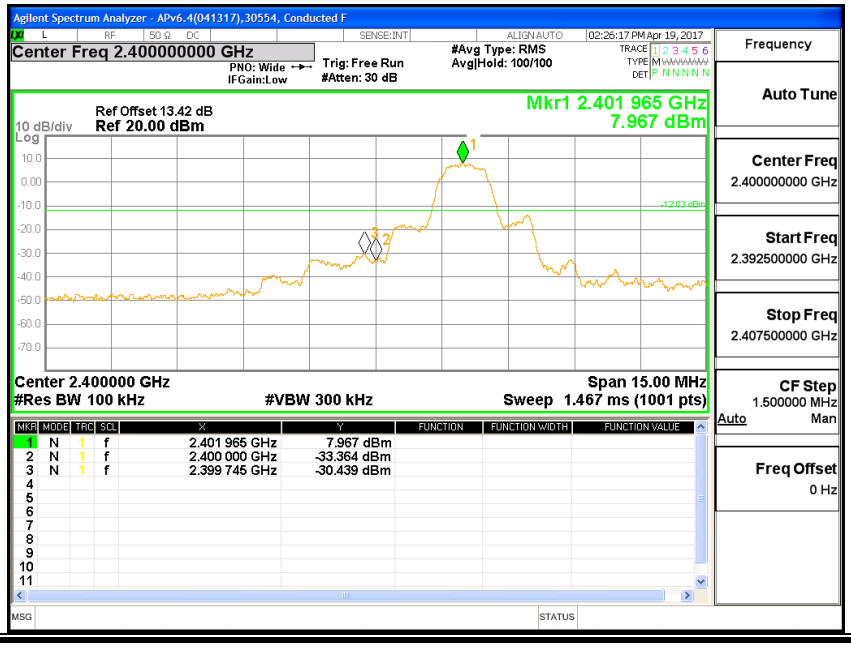
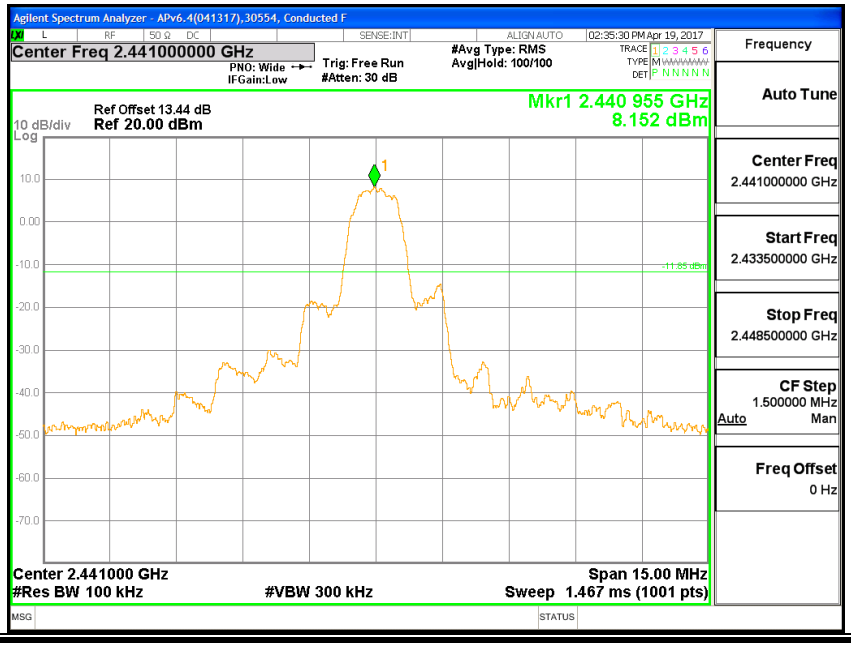
CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

CONDUCTED BANDEDGE LOW CH



CONDUCTED BANDEDGE MID CH



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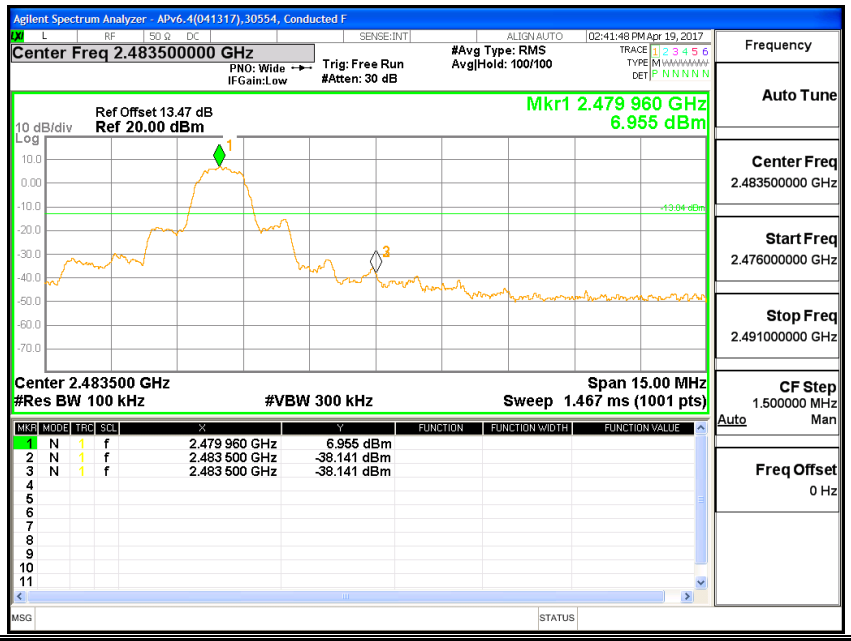
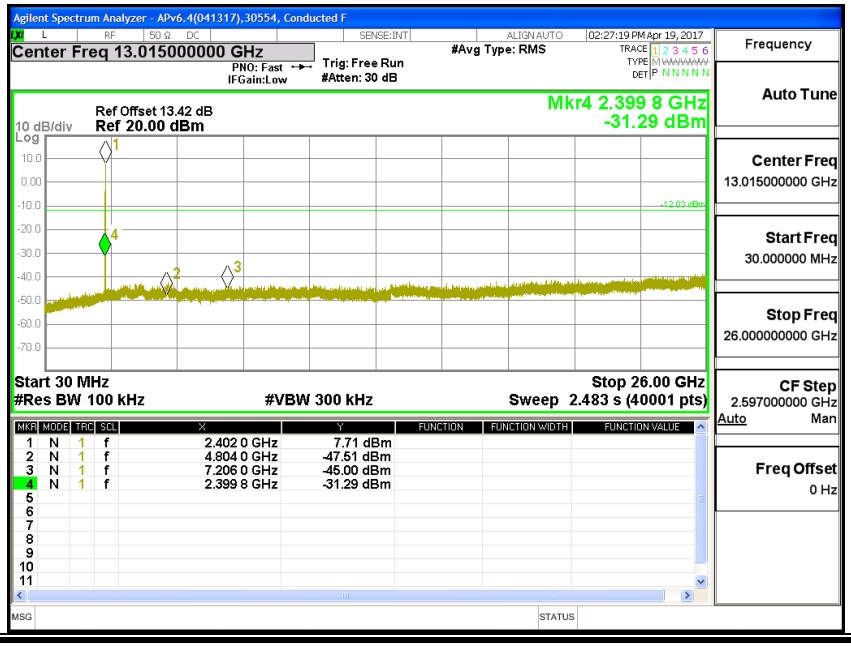
CONDUCTED BANDEDGE HIGH CH



CONDUCTED SPURIOUS EMISSIONS LOW CH



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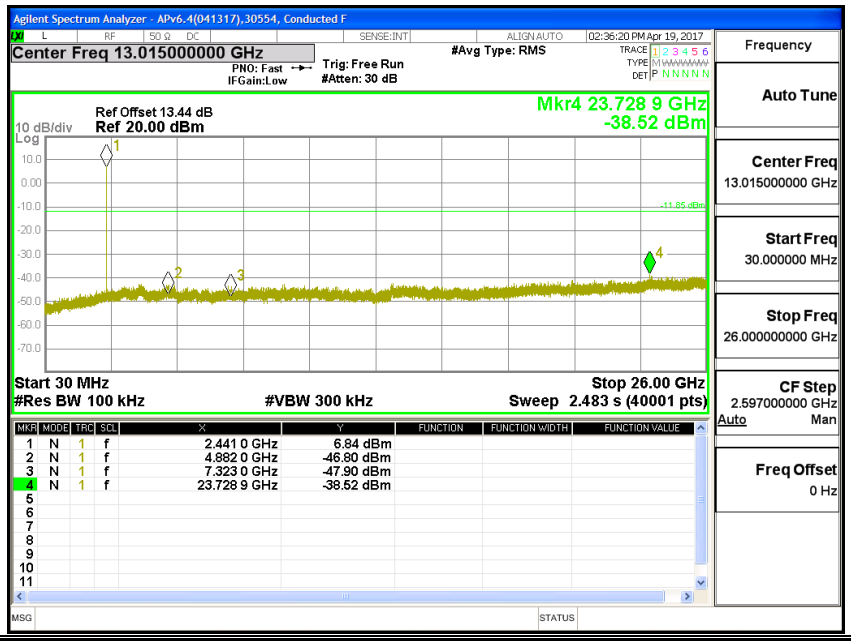
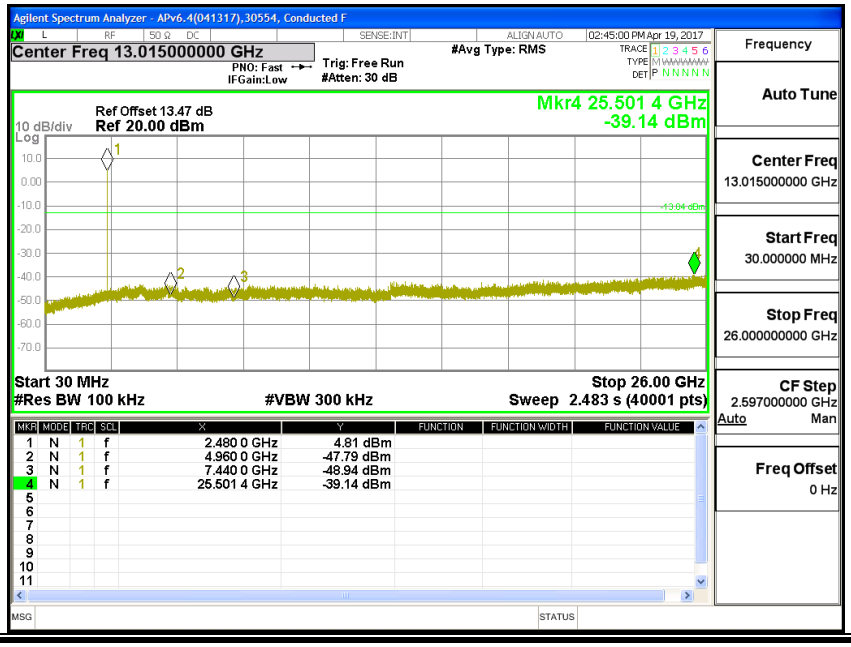
CONDUCTED SPURIOUS EMISSIONS MID CH



CONDUCTED SPURIOUS EMISSIONS HIGH CH



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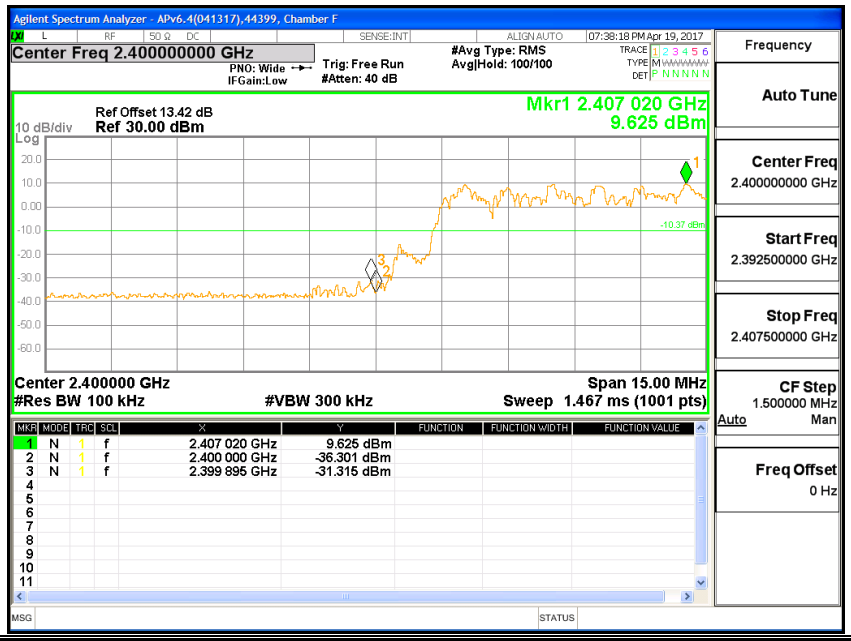
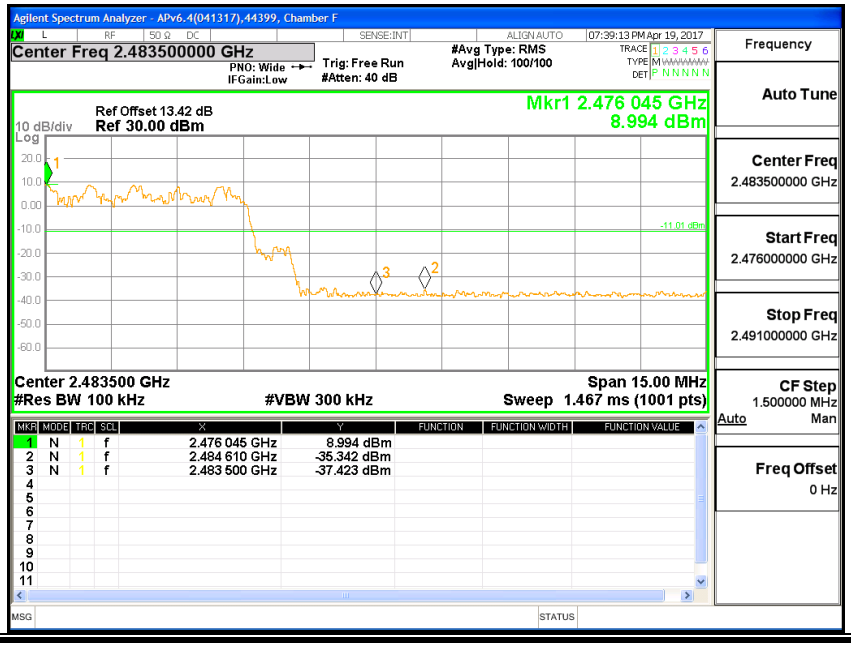
LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



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9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement 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 pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final scans above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T (10 Hz) video bandwidth with peak detector for average measurements.

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak→ this is a note from Radiated automation software. When the frequency is below 1G, software is using RB=100kHz; when the frequency is above 1G, software is using RB=1MHz.

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.

RESULTS

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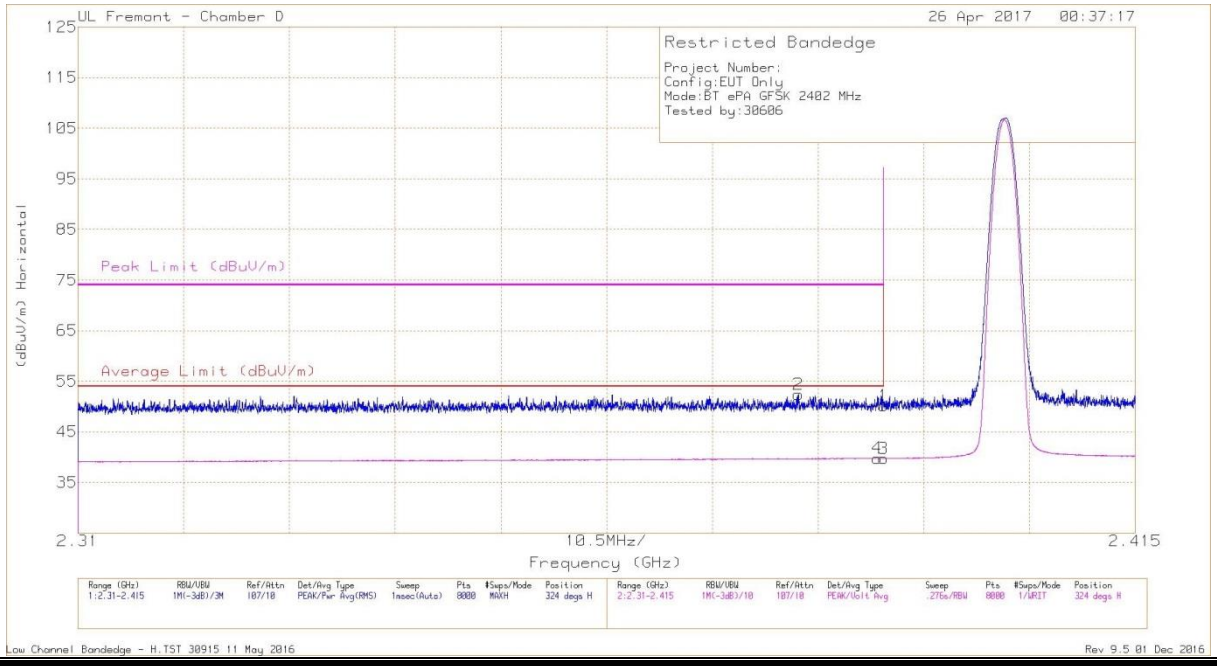
9.2. UAT 1, Pmax BASIC DATA RATE GFSK MODULATION

9.2.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.382	41.32	Pk	31.9	-20.8	52.42	-	-	74	-21.58	324	137	H
4	* 2.389	28.6	VA1T	32	-20.8	39.8	54	-14.2	-	-	324	137	H
1	* 2.39	38.82	Pk	32	-20.7	50.12	-	-	74	-23.88	324	137	H
3	* 2.39	28.47	VA1T	32	-20.7	39.77	54	-14.23	-	-	324	137	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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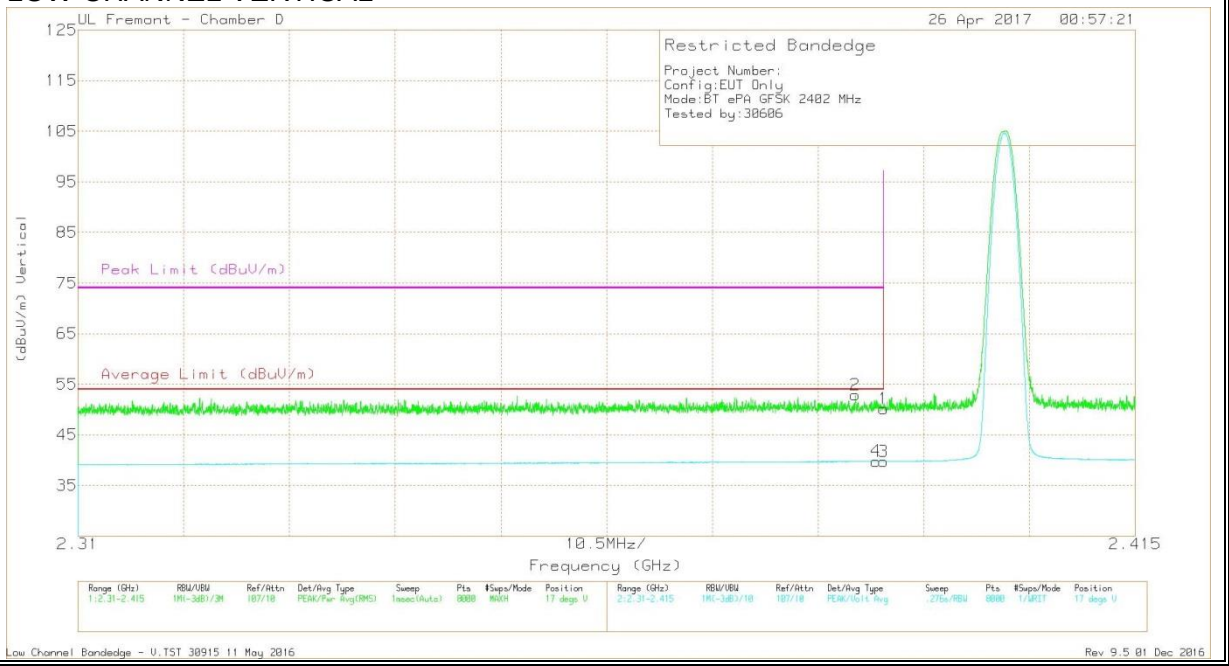
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.387	41.68	Pk	32	-20.8	52.88	-	-	74	-21.12	17	103	V
4	* 2.389	28.6	VA1T	32	-20.8	39.8	54	-14.2	-	-	17	103	V
1	* 2.39	38.9	Pk	32	-20.7	50.2	-	-	74	-23.8	17	103	V
3	* 2.39	28.43	VA1T	32	-20.7	39.73	54	-14.27	-	-	17	103	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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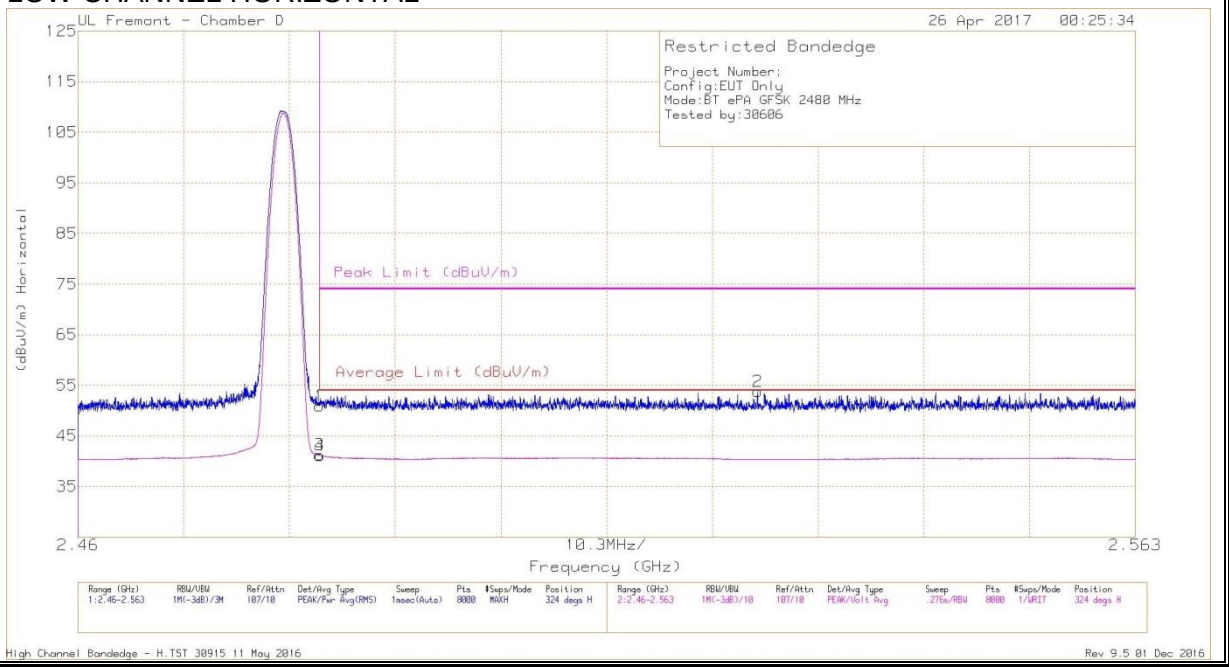
9.2.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.23	Pk	32.5	-20.8	50.93	-	-	74	-23.07	324	153	H
3	* 2.484	29.48	VA1T	32.5	-20.8	41.18	54	-12.82	-	-	324	153	H
4	* 2.484	29.44	VA1T	32.5	-20.8	41.14	54	-12.86	-	-	324	153	H
2	2.526	41.9	Pk	32.6	-20.7	53.8	-	-	74	-20.2	324	153	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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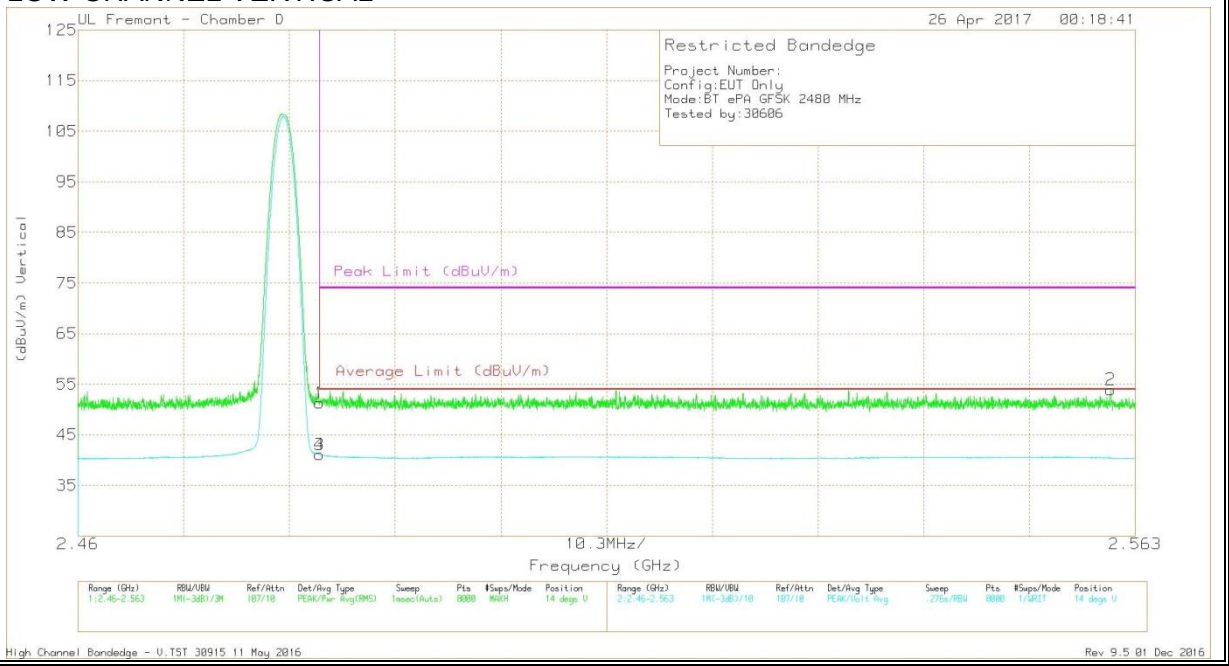
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.54	Pk	32.5	-20.8	51.24	-	-	74	-22.76	14	353	V
3	* 2.484	29.4	VA1T	32.5	-20.8	41.1	54	-12.9	-	-	14	353	V
4	* 2.484	29.41	VA1T	32.5	-20.8	41.11	54	-12.89	-	-	14	353	V
2	2.561	42.15	Pk	32.5	-20.7	53.95	-	-	74	-20.05	14	353	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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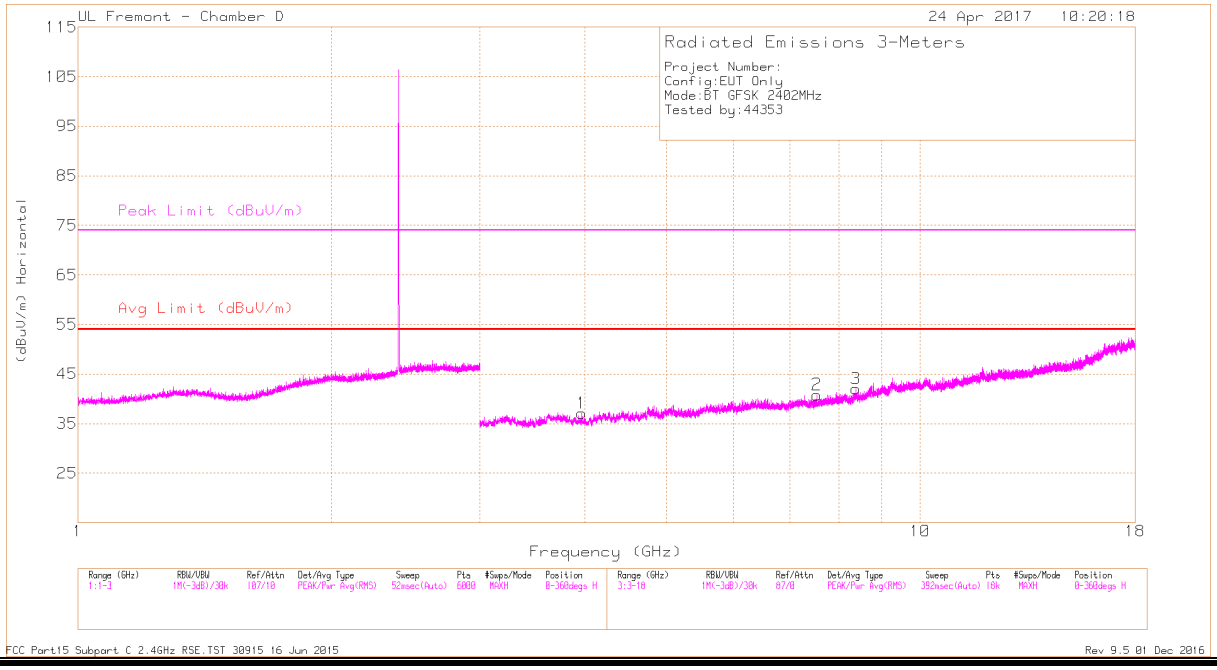
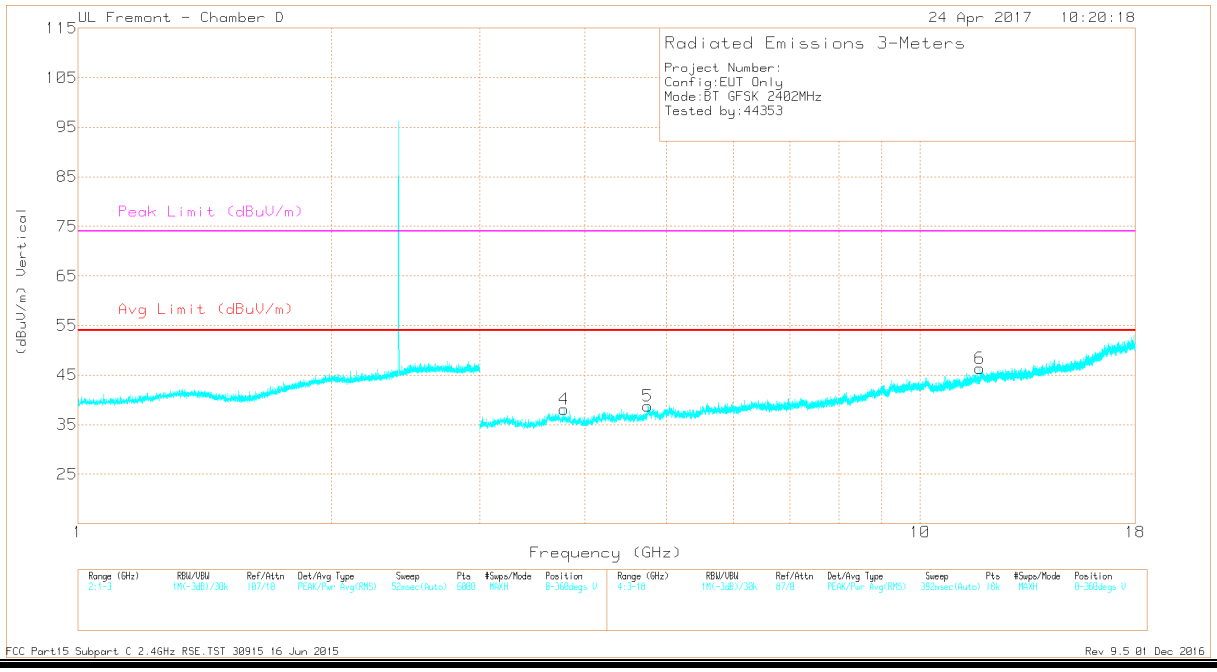
9.2.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.961	37.4	PKFH	33.3	-28.5	42.2	-	-	74	-31.8	238	297	H
	* 3.961	25.52	VA1T	33.3	-28.5	30.32	54	-23.68	-	-	238	297	H
2	* 7.542	35	PKFH	35.7	-25.2	45.5	-	-	74	-28.5	316	175	H
	* 7.539	23.3	VA1T	35.7	-25.2	33.8	54	-20.2	-	-	316	175	H
3	* 8.385	34.05	PKFH	36	-23	47.05	-	-	74	-26.95	192	110	H
	* 8.382	22.19	VA1T	36	-23.1	35.09	54	-18.91	-	-	192	110	H
4	* 3.777	37.66	PKFH	33.2	-28	42.86	-	-	74	-31.14	53	102	V
	* 3.78	25.58	VA1T	33.2	-28.1	30.68	54	-23.32	-	-	53	102	V
5	* 4.745	38.09	PKFH	34	-26.5	45.59	-	-	74	-28.41	240	166	V
	* 4.747	25.42	VA1T	34	-26.5	32.92	54	-21.08	-	-	240	166	V
6	* 11.763	33.25	PKFH	38.7	-21.3	50.65	-	-	74	-23.35	121	298	V
	* 11.762	21.67	VA1T	38.7	-21.3	39.07	54	-14.93	-	-	121	298	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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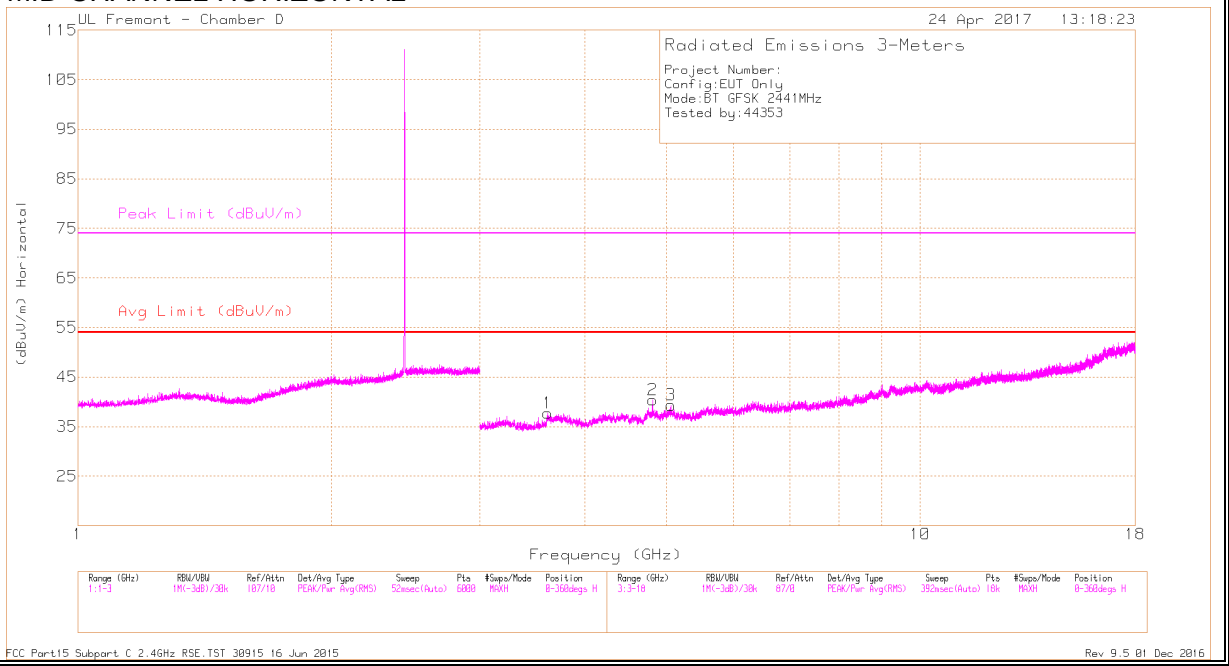
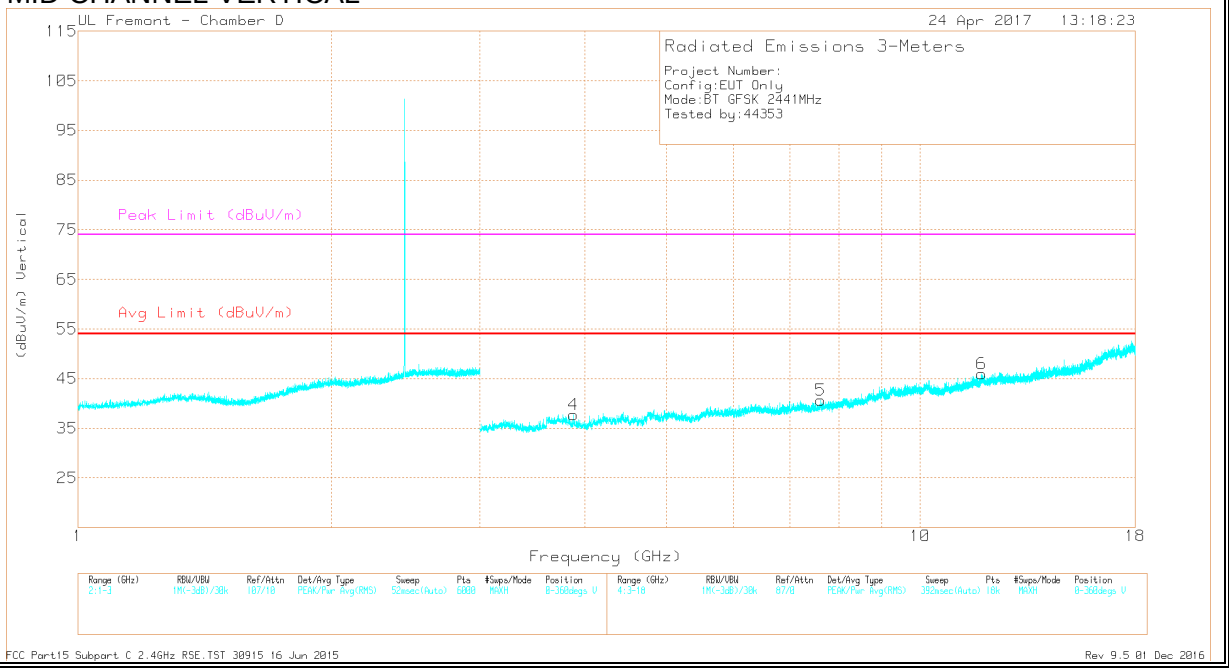
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.81	36.77	PKFH	34.1	-26.9	43.97	-	-	74	-30.03	306	200	H
	* 4.81	24.96	VA1T	34.1	-26.8	32.26	54	-21.74	-	-	306	200	H
2	* 3.613	37.57	PKFH	33.2	-28.3	42.47	-	-	74	-31.53	188	102	H
	* 3.611	25.53	VA1T	33.2	-28.4	30.33	54	-23.67	-	-	188	102	H
3	* 5.054	37.1	PKFH	34.3	-26.5	44.9	-	-	74	-29.1	155	187	H
	* 5.055	24.77	VA1T	34.3	-26.5	32.57	54	-21.43	-	-	155	187	H
4	* 3.873	37.45	PKFH	33.2	-28.5	42.15	-	-	74	-31.85	239	326	V
	* 3.876	25.81	VA1T	33.2	-28.4	30.61	54	-23.39	-	-	239	326	V
5	* 7.619	34.99	PKFH	35.7	-24.7	45.99	-	-	74	-28.01	174	133	V
	* 7.617	23.1	VA1T	35.7	-24.7	34.1	54	-19.9	-	-	174	133	V
6	* 11.828	33.87	PKFH	38.8	-20.6	52.07	-	-	74	-21.93	280	241	V
	* 11.826	21.57	VA1T	38.8	-20.6	39.77	54	-14.23	-	-	280	241	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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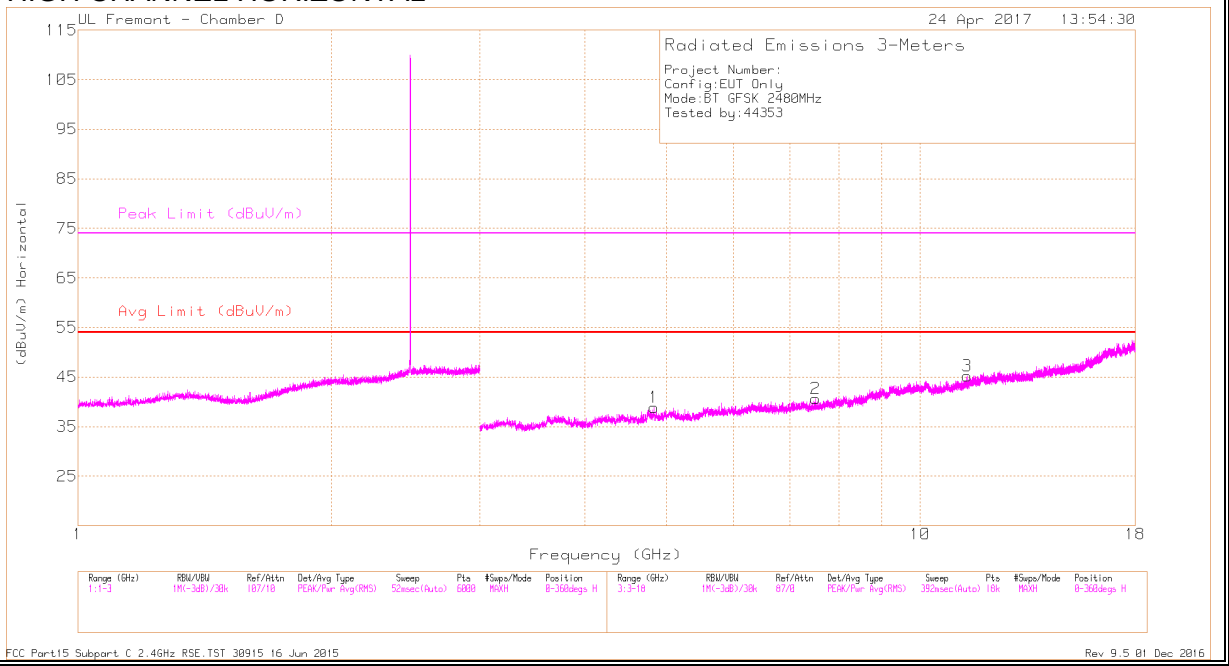
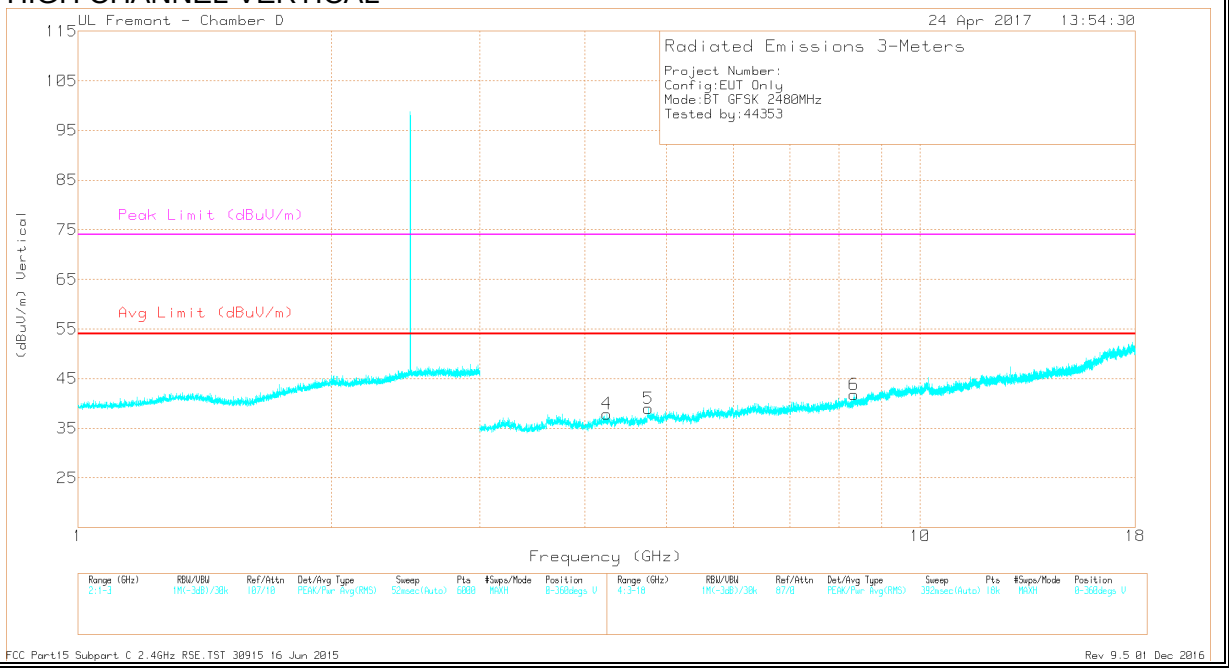
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.829	36.9	PKFH	34.1	-27.4	43.6	-	-	74	-30.4	94	226	H
	* 4.83	25.44	VA1T	34.1	-27.4	32.14	54	-21.86	-	-	94	226	H
2	* 7.509	35.12	PKFH	35.7	-24.8	46.02	-	-	74	-27.98	186	132	H
	* 7.509	23.03	VA1T	35.7	-24.8	33.93	54	-20.07	-	-	186	132	H
3	* 11.379	34.24	PKFH	38.1	-21.3	51.04	-	-	74	-22.96	120	285	H
	* 11.377	21.69	VA1T	38.1	-21.3	38.49	54	-15.51	-	-	120	285	H
4	* 4.245	36.31	PKFH	33.5	-27.6	42.21	-	-	74	-31.79	330	241	V
	* 4.247	25.01	VA1T	33.5	-27.6	30.91	54	-23.09	-	-	330	241	V
5	* 4.756	37.31	PKFH	34	-26.6	44.71	-	-	74	-29.29	289	158	V
	* 4.756	25.47	VA1T	34	-26.6	32.87	54	-21.13	-	-	289	158	V
6	* 8.342	34.49	PKFH	36	-23.3	47.19	-	-	74	-26.81	148	200	V
	* 8.342	22.47	VA1T	36	-23.3	35.17	54	-18.83	-	-	148	200	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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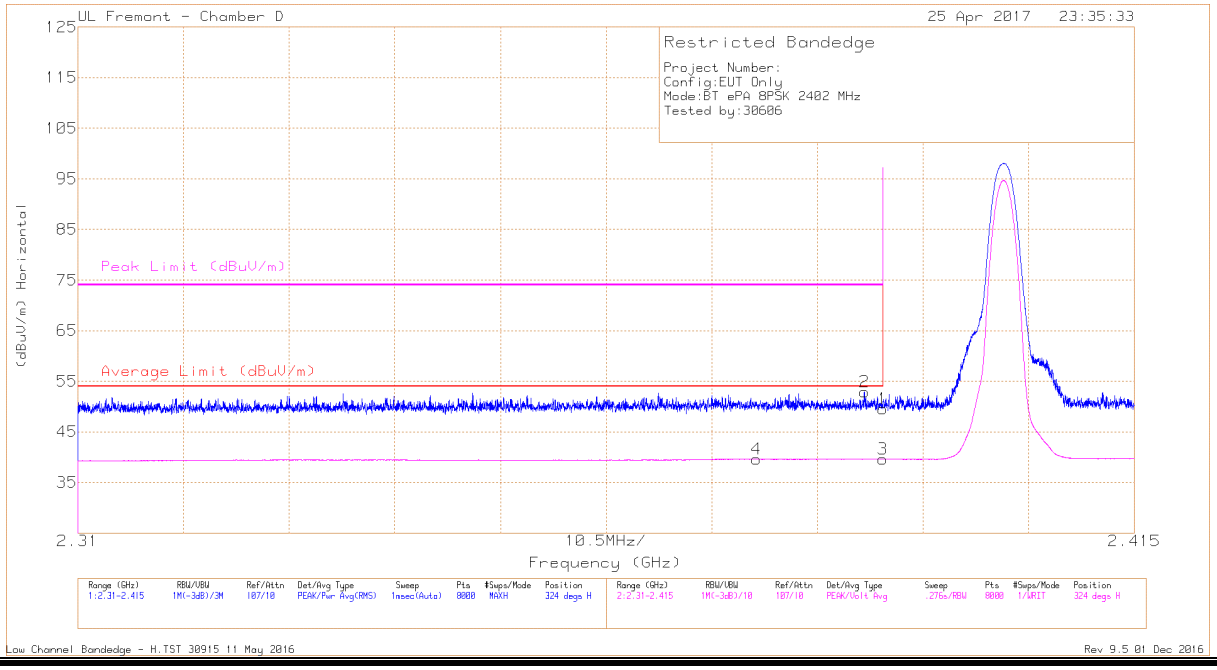
9.3. UAT 1, Pmax ENHANCED DATA RATE 8PSK MODULATION

9.3.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	38.3	Pk	32	-20.7	49.6	-	-	74	-24.4	324	232	H
2	* 2.388	41.72	Pk	32	-20.8	52.92	-	-	74	-21.08	324	232	H
3	* 2.39	28.27	VA1T	32	-20.7	39.57	54	-14.43	-	-	324	232	H
4	* 2.377	28.56	VA1T	31.9	-20.8	39.66	54	-14.34	-	-	324	232	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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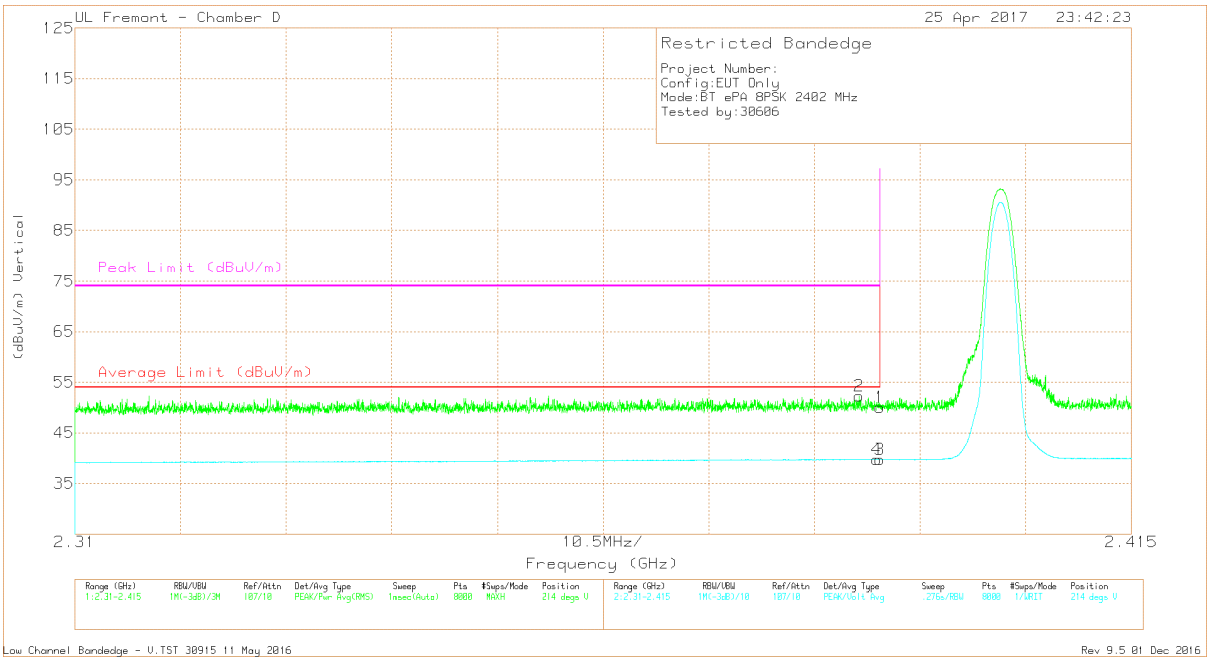
LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.388	41.13	Pk	32	-20.8	52.33	-	-	74	-21.67	214	356	V
1	* 2.39	38.7	Pk	32	-20.7	50	-	-	74	-24	214	356	V
3	* 2.39	28.43	VA1T	32	-20.7	39.73	54	-14.27	-	-	214	356	V
4	* 2.39	28.59	VA1T	32	-20.8	39.79	54	-14.21	-	-	214	356	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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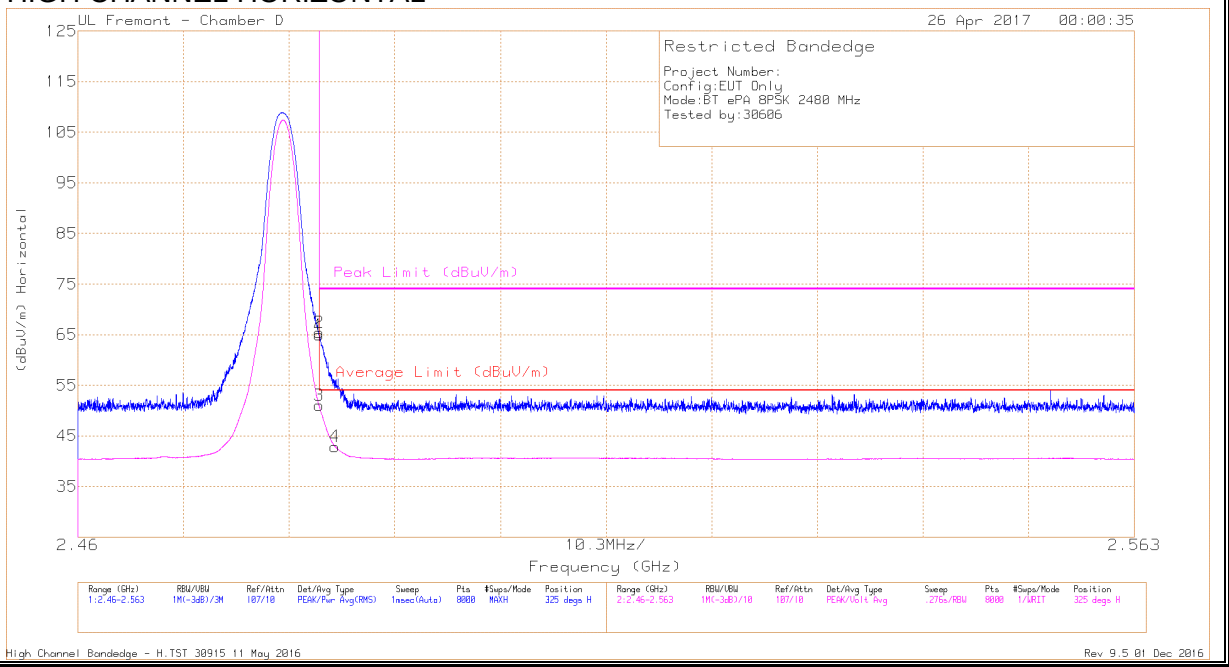
9.3.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	53.27	Pk	32.5	-20.8	64.97	-	-	74	-9.03	325	143	H
2	* 2.484	53.75	Pk	32.5	-20.8	65.45	-	-	74	-8.55	325	143	H
3	* 2.484	39.28	VA1T	32.5	-20.8	50.98	54	-3.02	-	-	325	143	H
4	* 2.485	31.2	VA1T	32.5	-20.8	42.9	54	-11.1	-	-	325	143	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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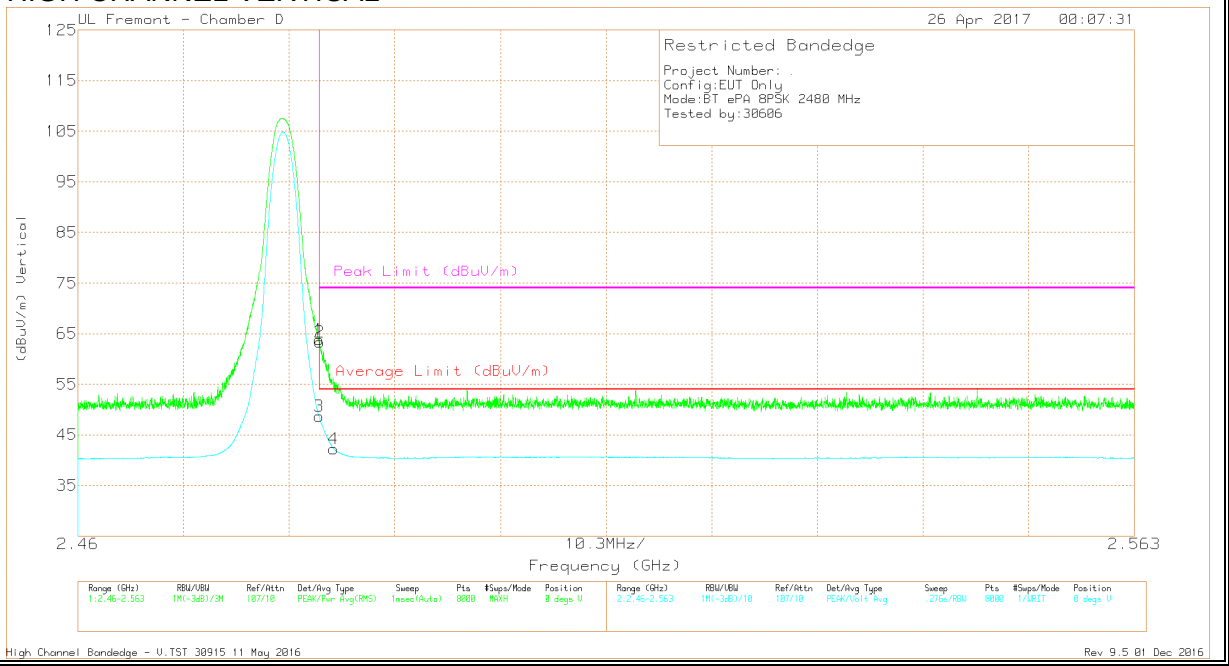
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	52.12	Pk	32.5	-20.8	63.82	-	-	74	-10.18	0	344	V
2	* 2.484	51.59	Pk	32.5	-20.8	63.29	-	-	74	-10.71	0	344	V
3	* 2.484	36.94	VA1T	32.5	-20.8	48.64	54	-5.36	-	-	0	344	V
4	* 2.485	30.5	VA1T	32.5	-20.8	42.2	54	-11.8	-	-	0	344	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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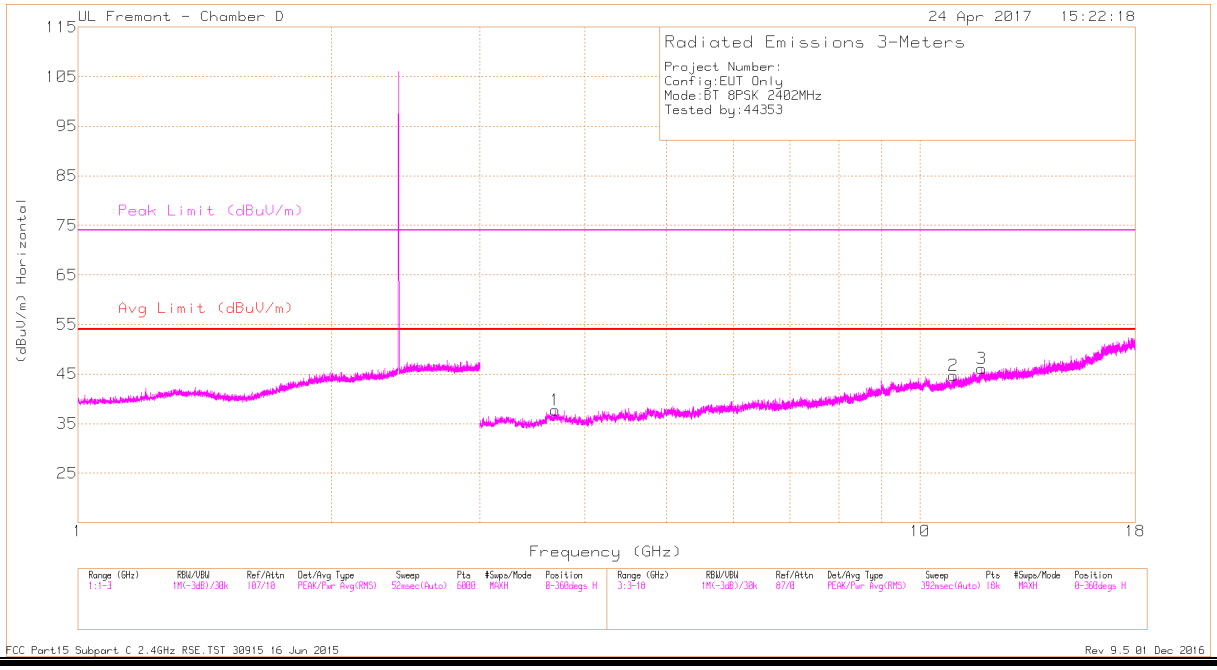
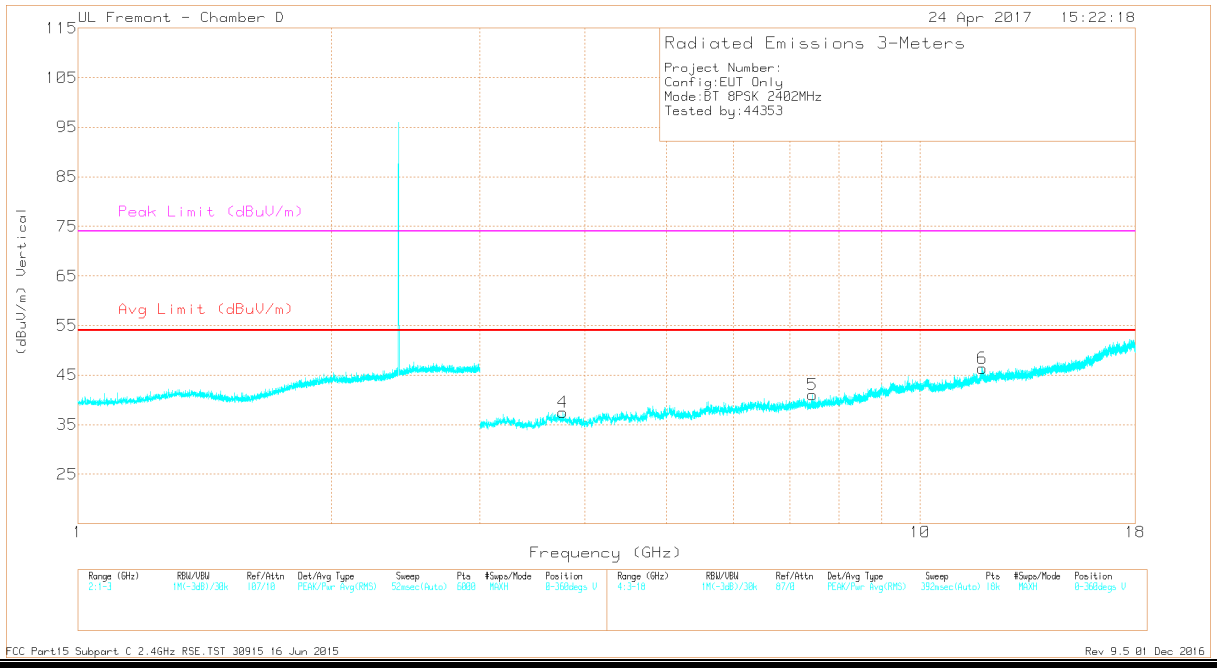
9.3.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.685	37.61	PKFH	33.2	-29.1	41.71	-	-	74	-32.29	191	201	H
	* 3.684	26.04	VA1T	33.2	-29	30.24	54	-23.76	-	-	191	201	H
2	* 10.946	33.52	PKFH	37.5	-20.9	50.12	-	-	74	-23.88	228	132	H
	* 10.948	21.28	VA1T	37.5	-20.9	37.88	54	-16.12	-	-	228	132	H
3	* 11.822	33.58	PKFH	38.8	-20.6	51.78	-	-	74	-22.22	76	124	H
	* 11.821	21.54	VA1T	38.8	-20.6	39.74	54	-14.26	-	-	76	124	H
4	* 3.76	37.98	PKFH	33.2	-28.3	42.88	-	-	74	-31.12	151	317	V
	* 3.761	25.5	VA1T	33.2	-28.3	30.4	54	-23.6	-	-	151	317	V
5	* 7.45	34.41	PKFH	35.6	-24.6	45.41	-	-	74	-28.59	133	290	V
	* 7.448	22.64	VA1T	35.6	-24.6	33.64	54	-20.36	-	-	133	290	V
6	* 11.849	34.21	PKFH	38.8	-20.5	52.51	-	-	74	-21.49	49	276	V
	* 11.848	21.49	VA1T	38.8	-20.6	39.69	54	-14.31	-	-	49	276	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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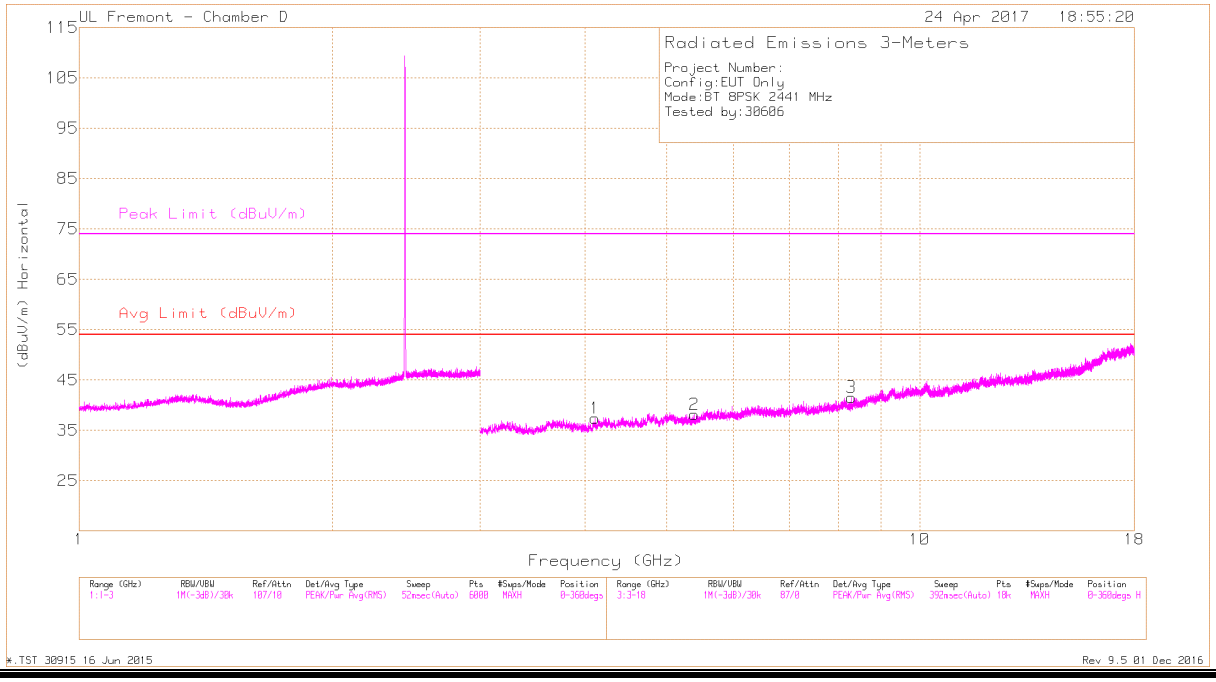
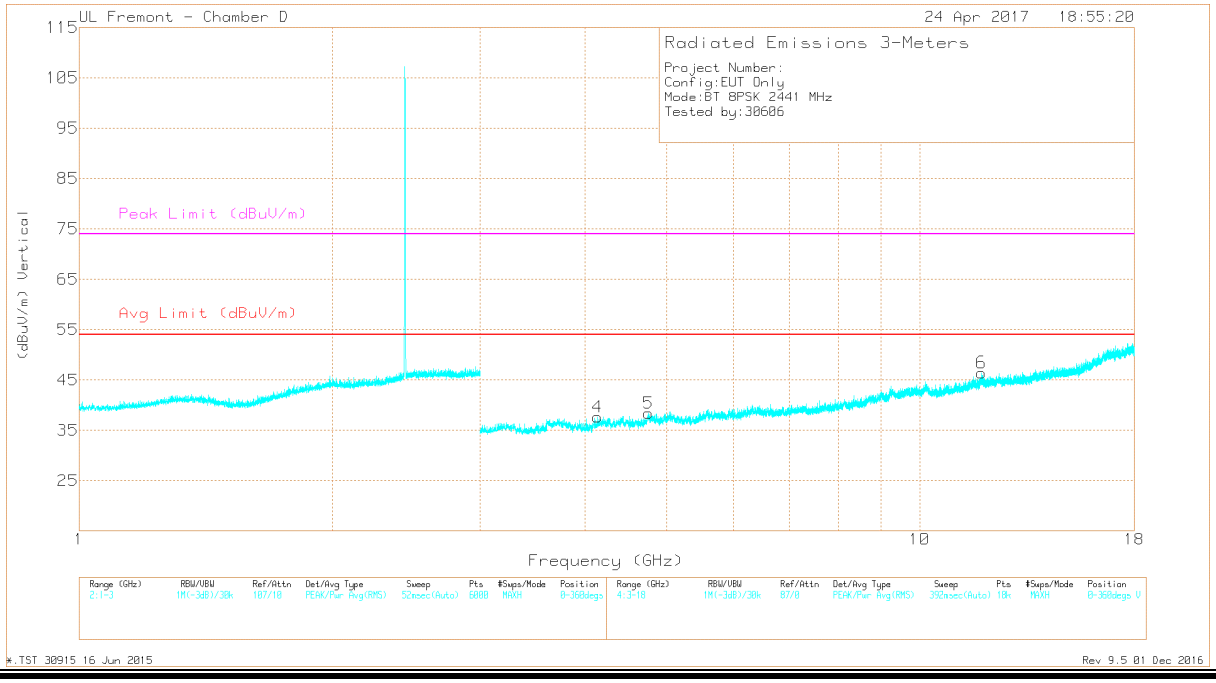
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.109	36.66	PKFH	33.5	-28	42.16	-	-	74	-31.84	49	101	H
	* 4.108	25.16	VA1T	33.5	-28	30.66	54	-23.34	-	-	49	101	H
2	* 5.398	37.32	PKFH	34.6	-27.8	44.12	-	-	74	-29.88	350	101	H
	* 5.395	24.83	VA1T	34.6	-27.8	31.63	54	-22.37	-	-	350	101	H
3	* 8.292	34.94	PKFH	35.9	-24.1	46.74	-	-	74	-27.26	304	201	H
	* 8.292	22.98	VA1T	35.9	-24.1	34.78	54	-19.22	-	-	304	201	H
4	* 4.138	37.05	PKFH	33.5	-28.1	42.45	-	-	74	-31.55	246	201	V
	* 4.136	25.08	VA1T	33.5	-28.1	30.48	54	-23.52	-	-	246	201	V
5	* 4.754	36.99	PKFH	34	-26.5	44.49	-	-	74	-29.51	313	201	V
	* 4.755	25.41	VA1T	34	-26.6	32.81	54	-21.19	-	-	313	201	V
6	* 11.846	33.3	PKFH	38.8	-20.6	51.5	-	-	74	-22.5	340	200	V
	* 11.844	21.51	VA1T	38.8	-20.6	39.71	54	-14.29	-	-	340	200	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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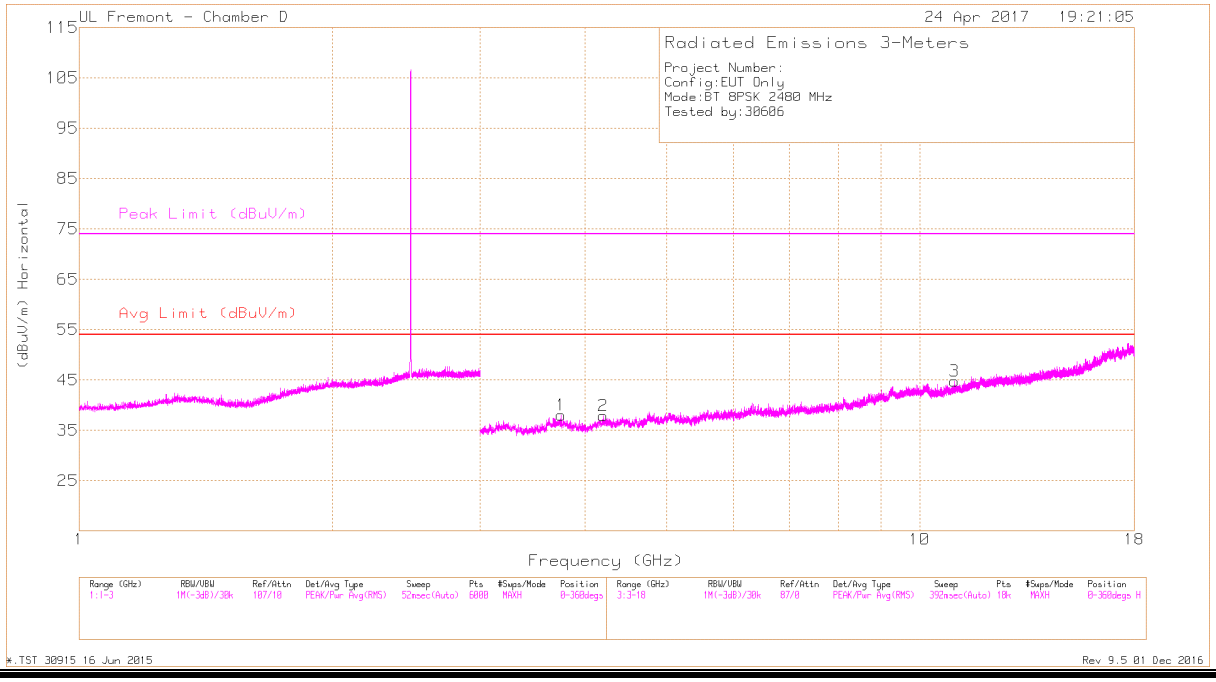
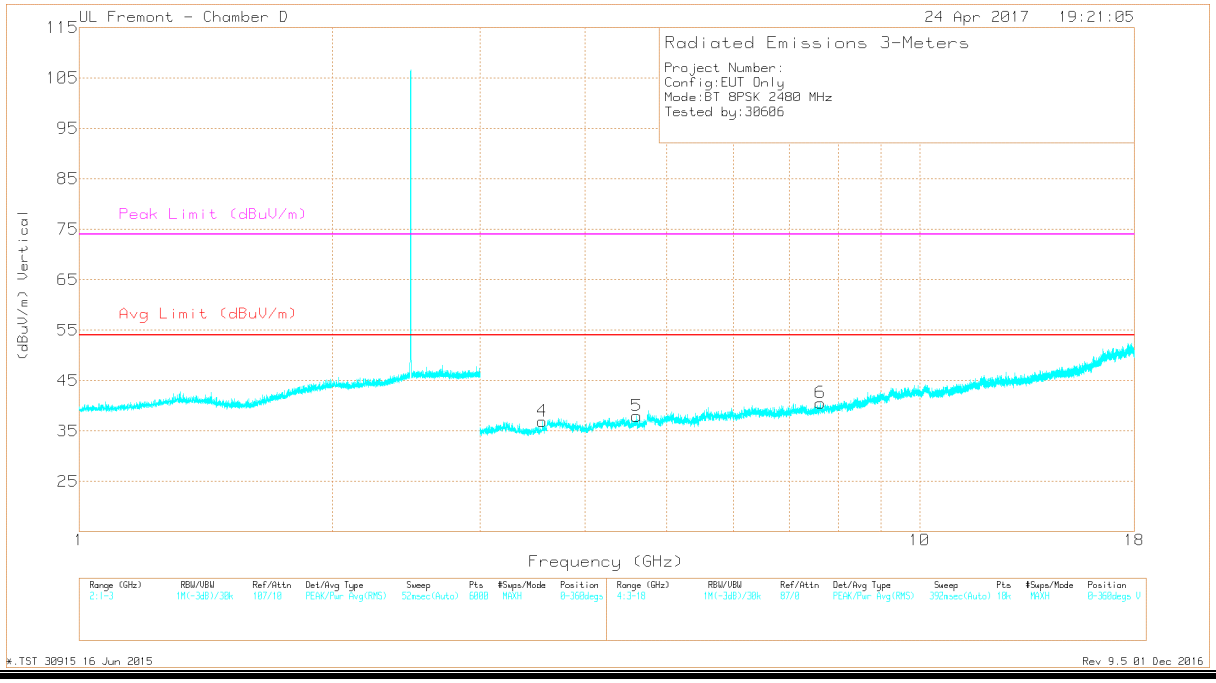
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.744	37.34	PKFH	33.2	-28.5	42.04	-	-	74	-31.96	320	201	H
	* 3.745	25.5	VA1T	33.2	-28.4	30.3	54	-23.7	-	-	320	201	H
2	* 4.204	37.19	PKFH	33.5	-27.5	43.19	-	-	74	-30.81	194	201	H
	* 4.204	25.07	VA1T	33.5	-27.5	31.07	54	-22.93	-	-	194	201	H
3	* 11.005	32.68	PKFH	37.6	-20.6	49.68	-	-	74	-24.32	316	201	H
	* 11.005	21.33	VA1T	37.6	-20.6	38.33	54	-15.67	-	-	316	201	H
4	* 3.558	37.45	PKFH	33.1	-28.3	42.25	-	-	74	-31.75	325	102	V
	* 3.557	25.59	VA1T	33.1	-28.3	30.39	54	-23.61	-	-	325	102	V
5	* 4.606	37.34	PKFH	34.1	-28.3	43.14	-	-	74	-30.86	305	201	V
	* 4.608	25.75	VA1T	34.1	-28.3	31.55	54	-22.45	-	-	305	201	V
6	* 7.619	35.54	PKFH	35.7	-24.7	46.54	-	-	74	-27.46	308	102	V
	* 7.617	23.08	VA1T	35.7	-24.7	34.08	54	-19.92	-	-	308	102	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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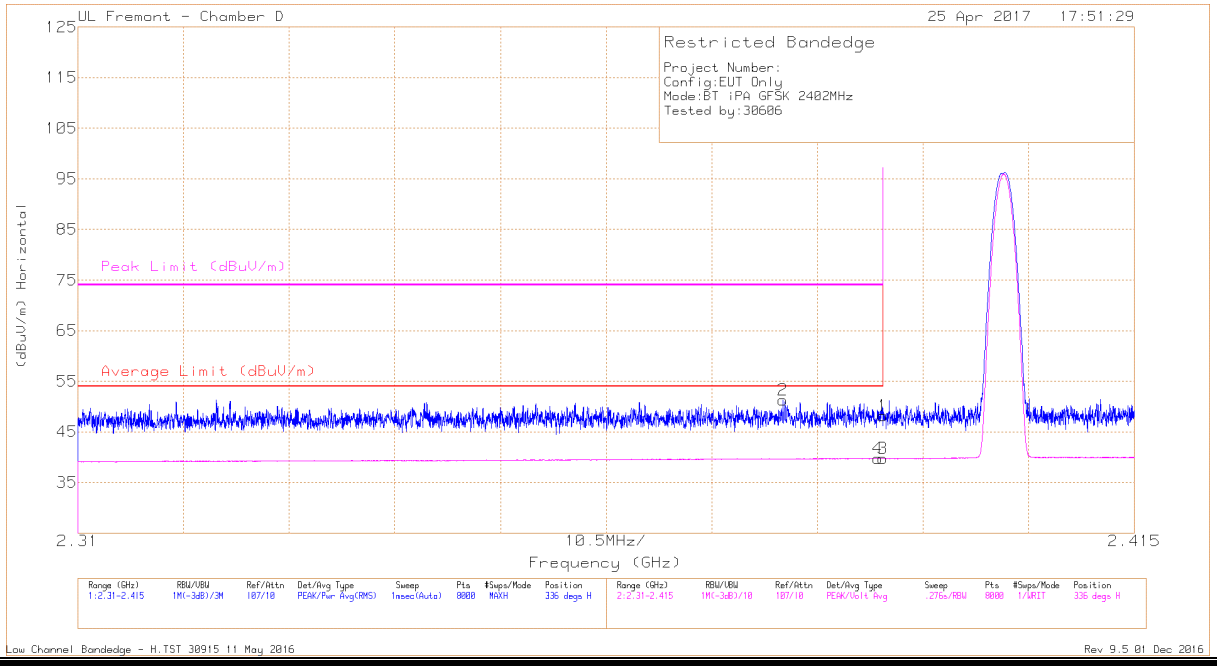
9.4. UAT 1, Plow BASIC DATA RATE GFSK MODULATION

9.4.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	36.87	Pk	32	-20.7	48.17	-	-	74	-25.83	336	227	H
2	* 2.38	40.18	Pk	31.9	-20.8	51.28	-	-	74	-22.72	336	227	H
3	* 2.39	28.44	VA1T	32	-20.7	39.74	54	-14.26	-	-	336	227	H
4	* 2.39	28.57	VA1T	32	-20.8	39.77	54	-14.23	-	-	336	227	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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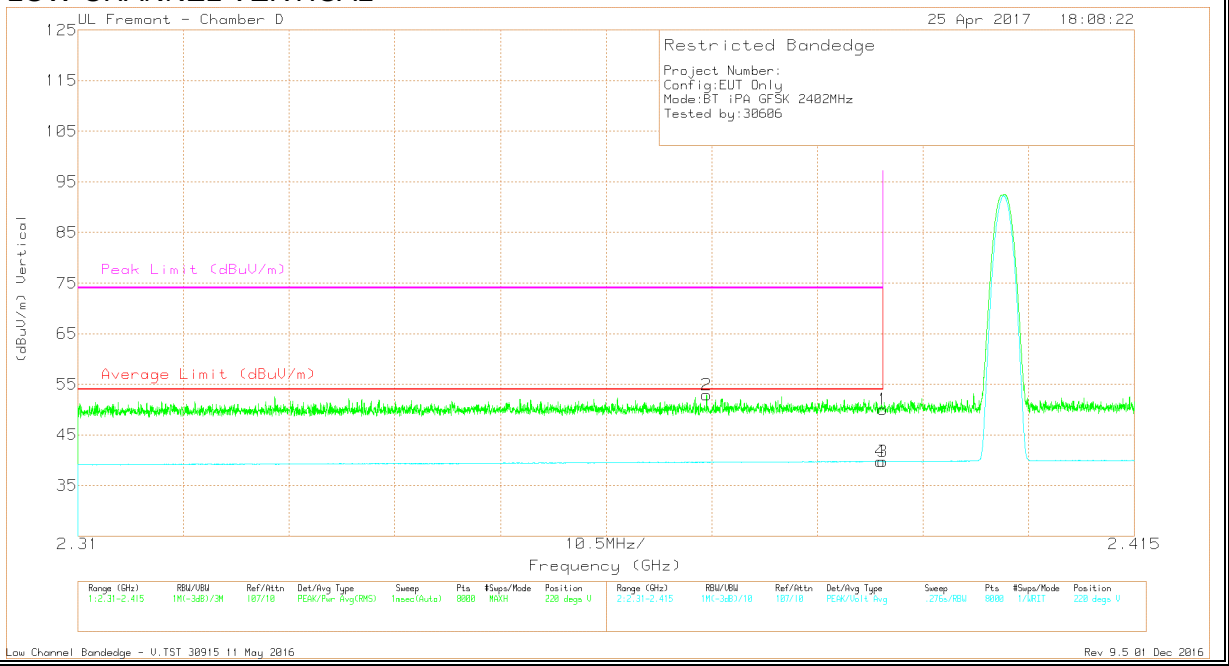
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.372	41.8	Pk	31.9	-20.8	52.9	-	-	74	-21.1	220	275	V
1	* 2.39	38.77	Pk	32	-20.7	50.07	-	-	74	-23.93	220	275	V
3	* 2.39	28.44	VA1T	32	-20.7	39.74	54	-14.26	-	-	220	275	V
4	* 2.39	28.57	VA1T	32	-20.8	39.77	54	-14.23	-	-	220	275	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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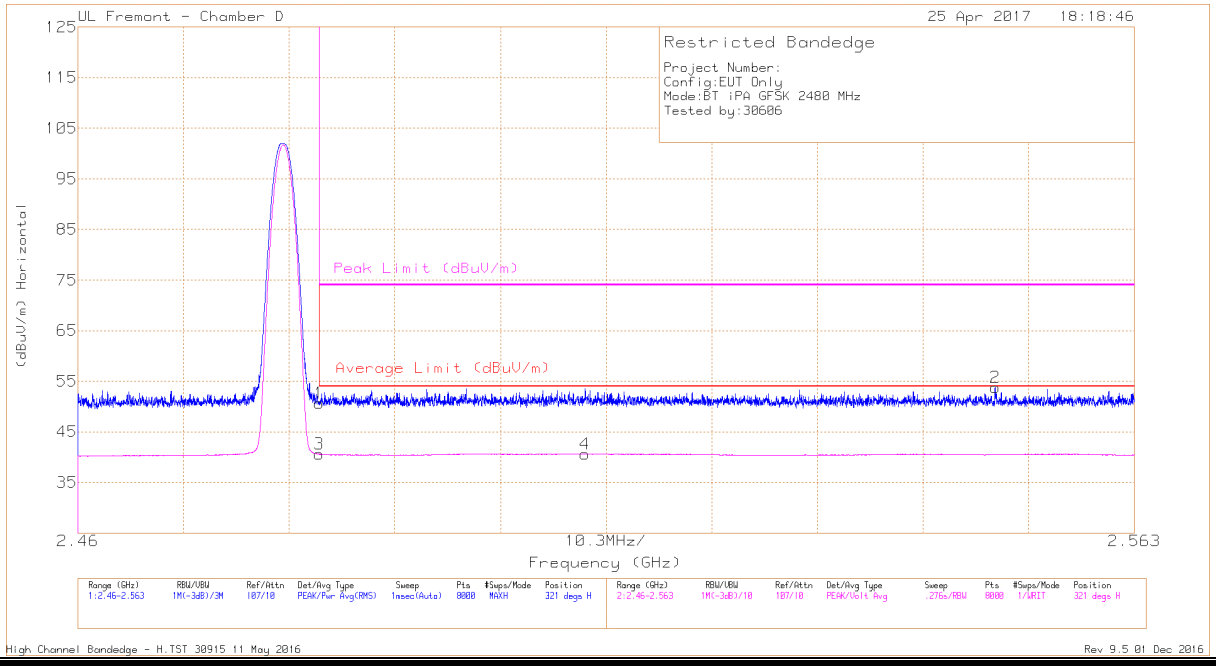
9.4.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.02	Pk	32.5	-20.8	50.72	-	-	74	-23.28	321	158	H
3	* 2.484	28.86	VA1T	32.5	-20.8	40.56	54	-13.44	-	-	321	157	H
4	2.509	28.65	VA1T	32.6	-20.6	40.65	54	-13.35	-	-	321	157	H
2	2.549	41.91	Pk	32.5	-20.6	53.81	-	-	74	-20.19	321	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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HIGH CHANNEL VERTICAL

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.56	Pk	32.5	-20.8	51.26	-	-	74	-22.74	40	103	V
3	* 2.484	28.8	VA1T	32.5	-20.8	40.5	54	-13.5	-	-	40	103	V
2	2.501	42.13	Pk	32.6	-20.7	54.03	-	-	74	-19.97	40	103	V
4	2.508	28.68	VA1T	32.6	-20.6	40.68	54	-13.32	-	-	40	103	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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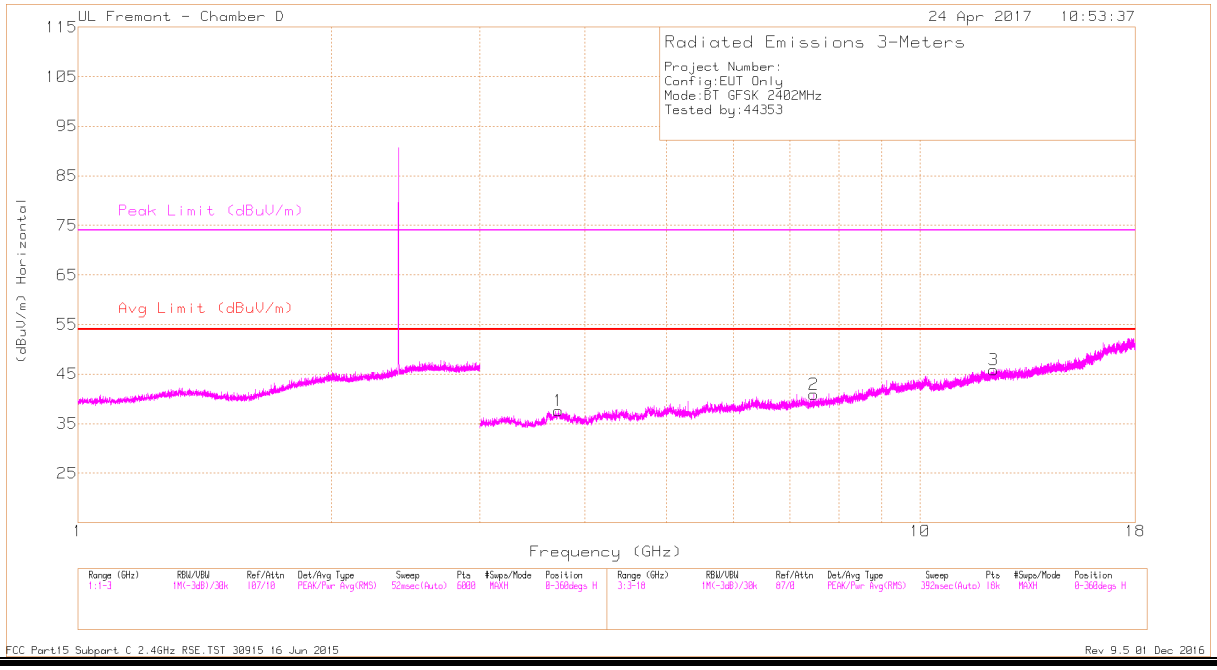
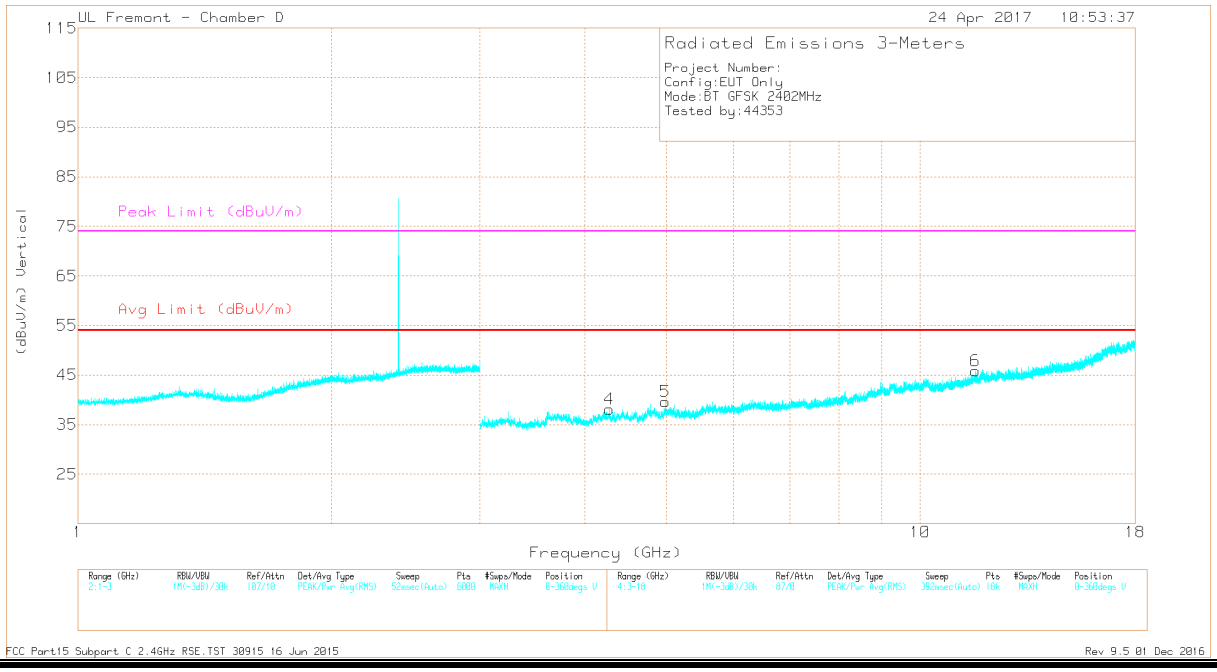
9.4.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.721	37.9	PKFH	33.2	-28.6	42.5	-	-	74	-31.5	230	186	H
	* 3.722	25.92	VA1T	33.2	-28.7	30.42	54	-23.58	-	-	230	186	H
2	* 7.479	34.48	PKFH	35.7	-24.8	45.38	-	-	74	-28.62	182	324	H
	* 7.482	22.99	VA1T	35.7	-24.8	33.89	54	-20.11	-	-	182	324	H
3	* 12.226	34.08	PKFH	39	-21.3	51.78	-	-	74	-22.22	340	299	H
	* 12.228	21.75	VA1T	39	-21.3	39.45	54	-14.55	-	-	340	299	H
4	* 4.275	36.9	PKFH	33.5	-27.9	42.5	-	-	74	-31.5	165	159	V
	* 4.277	25.35	VA1T	33.5	-28	30.85	54	-23.15	-	-	165	159	V
5	* 4.982	35.9	PKFH	34.3	-27.2	43	-	-	74	-31	273	110	V
	* 4.982	24.91	VA1T	34.3	-27.2	32.01	54	-21.99	-	-	273	110	V
6	* 11.638	33.47	PKFH	38.5	-20.6	51.37	-	-	74	-22.63	266	200	V
	* 11.638	21.12	VA1T	38.5	-20.6	39.02	54	-14.98	-	-	266	200	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4701I
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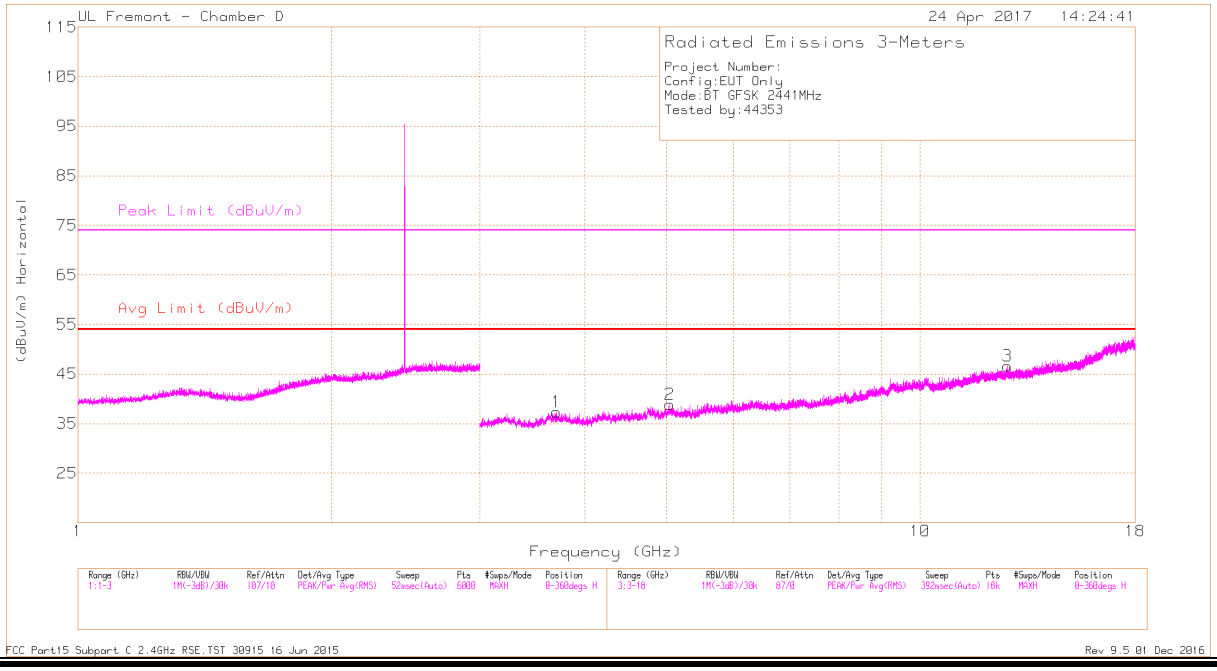
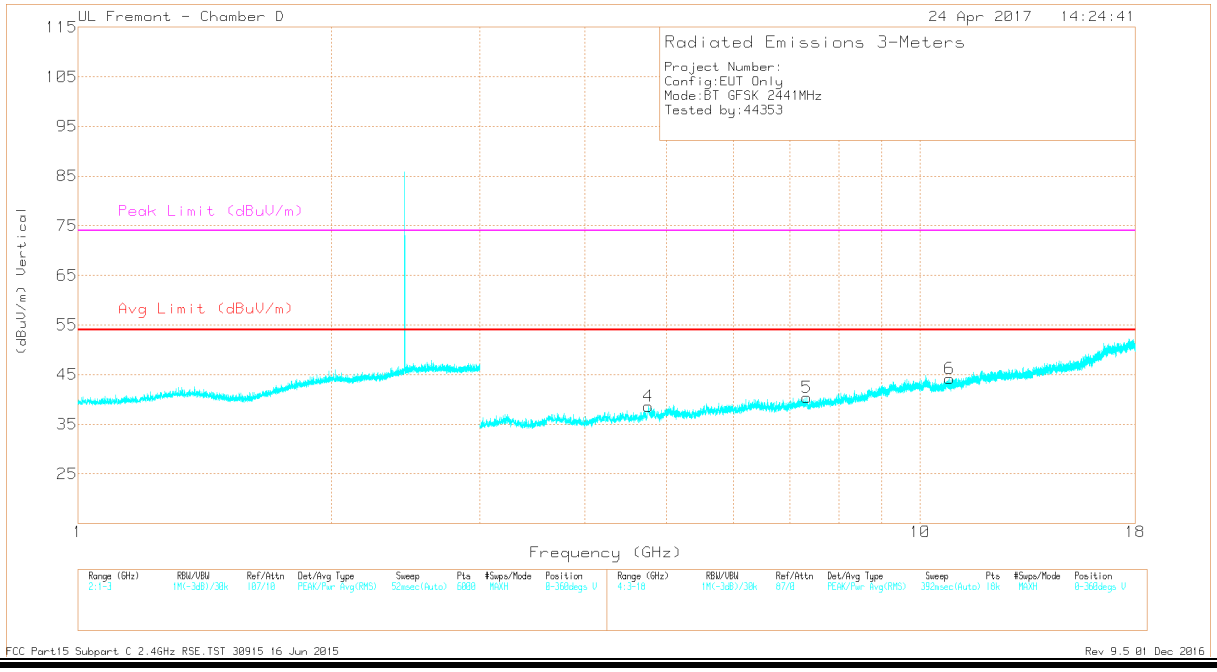
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.702	37.84	PKFH	33.3	-28.9	42.24	-	-	74	-31.76	38	261	H
	* 3.702	26.02	VA1T	33.3	-28.9	30.42	54	-23.58	-	-	38	261	H
2	* 5.044	36.7	PKFH	34.3	-26.6	44.4	-	-	74	-29.6	244	196	H
	* 5.045	24.89	VA1T	34.3	-26.6	32.59	54	-21.41	-	-	244	196	H
3	* 12.683	34.32	PKFH	39.2	-21.4	52.12	-	-	74	-21.88	154	146	H
	* 12.685	22	VA1T	39.2	-21.4	39.8	54	-14.2	-	-	154	146	H
4	* 4.757	36.68	PKFH	34	-26.6	44.08	-	-	74	-29.92	325	201	V
	* 4.756	25.39	VA1T	34	-26.6	32.79	54	-21.21	-	-	325	201	V
5	* 7.341	36.06	PKFH	35.7	-24.9	46.86	-	-	74	-27.14	294	268	V
	* 7.339	23.28	VA1T	35.7	-24.9	34.08	54	-19.92	-	-	294	268	V
6	* 10.844	32.89	PKFH	37.3	-21	49.19	-	-	74	-24.81	12	137	V
	* 10.845	21.12	VA1T	37.3	-21	37.42	54	-16.58	-	-	12	137	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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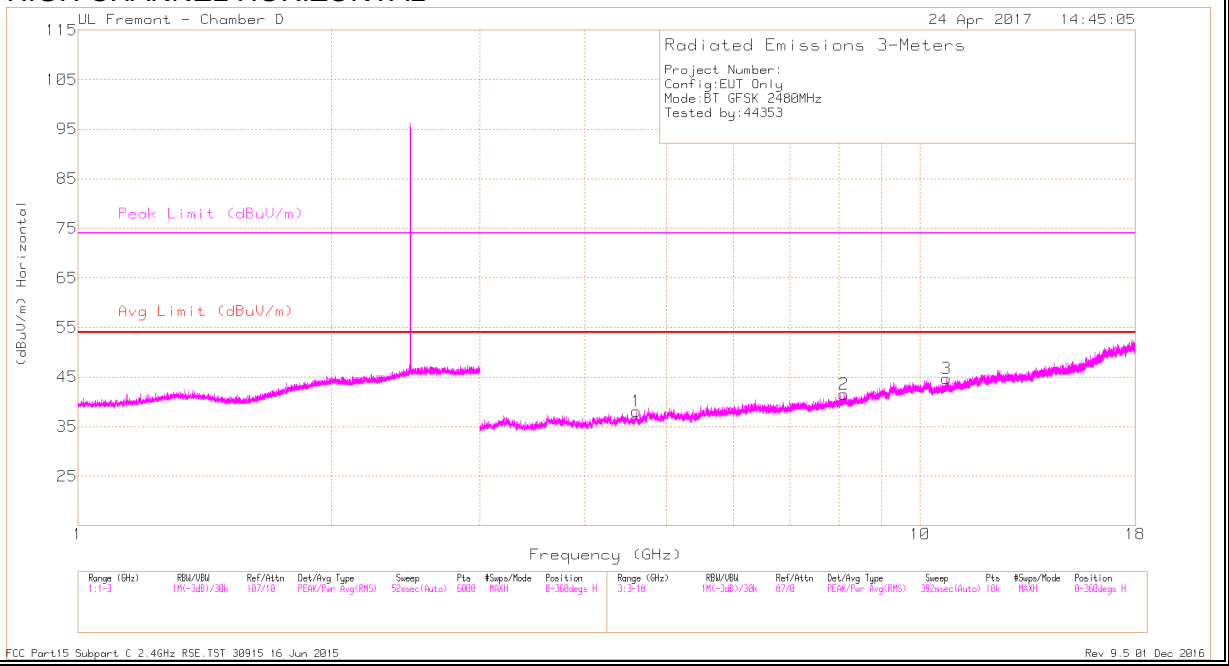
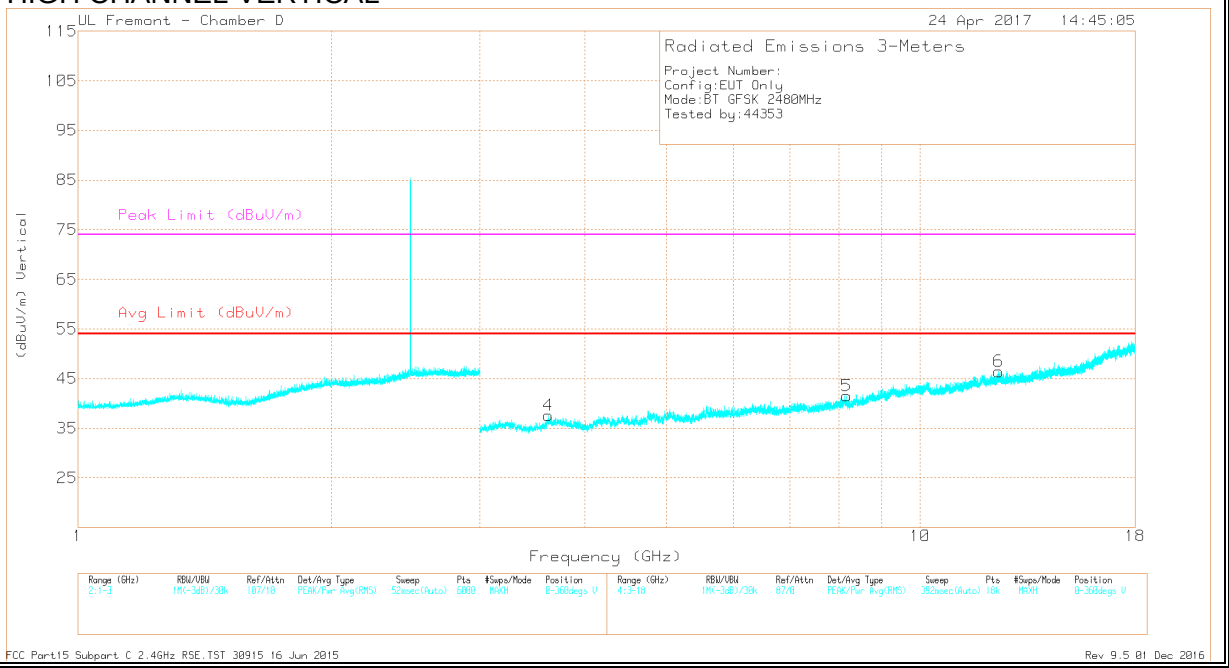
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.602	37.02	PKFH	34.1	-28.2	42.92	-	-	74	-31.08	220	163	H
	* 4.602	25.75	VA1T	34.1	-28.2	31.65	54	-22.35	-	-	220	163	H
2	* 8.118	33.99	PKFH	35.9	-23.2	46.69	-	-	74	-27.31	198	232	H
	* 8.115	22.45	VA1T	35.9	-23.3	35.05	54	-18.95	-	-	198	232	H
3	* 10.749	33.23	PKFH	37.2	-20.4	50.03	-	-	74	-23.97	145	188	H
	* 10.749	20.99	VA1T	37.2	-20.4	37.79	54	-16.21	-	-	145	188	H
4	* 3.619	37.19	PKFH	33.2	-28.5	41.89	-	-	74	-32.11	97	207	V
	* 3.62	25.69	VA1T	33.2	-28.5	30.39	54	-23.61	-	-	97	207	V
5	* 8.179	35.02	PKFH	35.9	-23.4	47.52	-	-	74	-26.48	274	102	V
	* 8.179	22.37	VA1T	35.9	-23.4	34.87	54	-19.13	-	-	274	102	V
6	* 12.392	32.96	PKFH	39	-20.7	51.26	-	-	74	-22.74	133	350	V
	* 12.394	21.42	VA1T	39	-20.6	39.82	54	-14.18	-	-	133	350	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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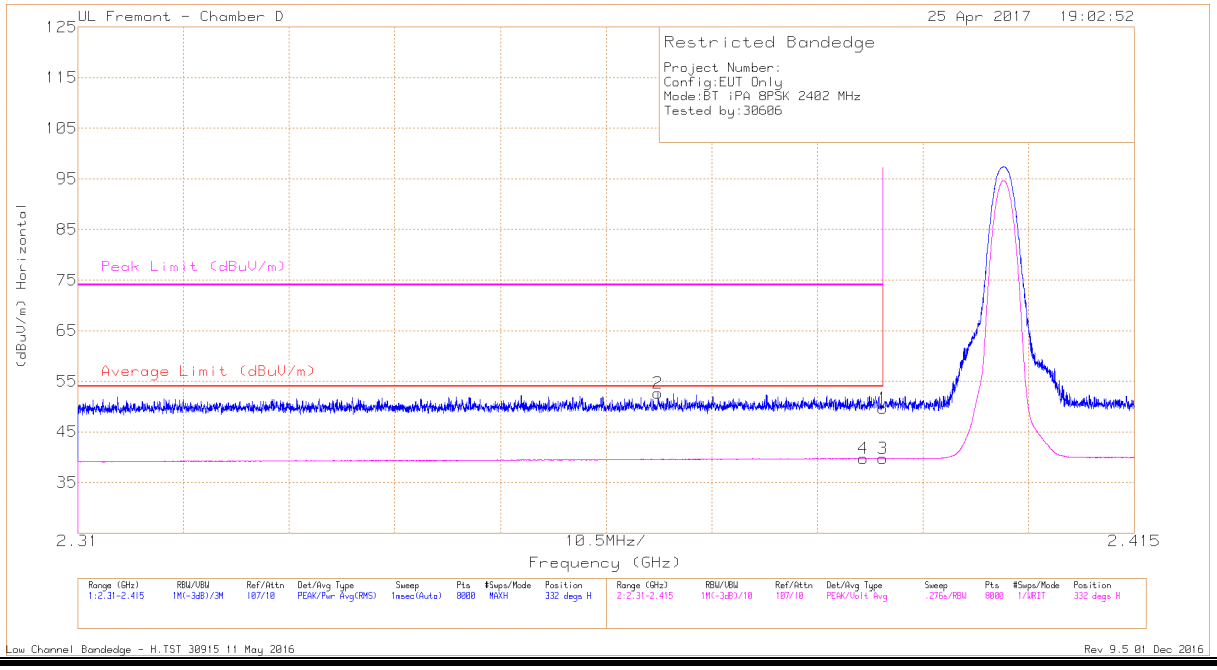
9.5. UAT 1, Plow ENHANCED DATA RATE 8PSK MODULATION

9.5.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.368	41.7	Pk	31.8	-20.8	52.7	-	-	74	-21.3	332	232	H
4	* 2.388	28.59	VA1T	32	-20.8	39.79	54	-14.21	-	-	332	232	H
1	* 2.39	38.41	Pk	32	-20.7	49.71	-	-	74	-24.29	332	232	H
3	* 2.39	28.43	VA1T	32	-20.7	39.73	54	-14.27	-	-	332	232	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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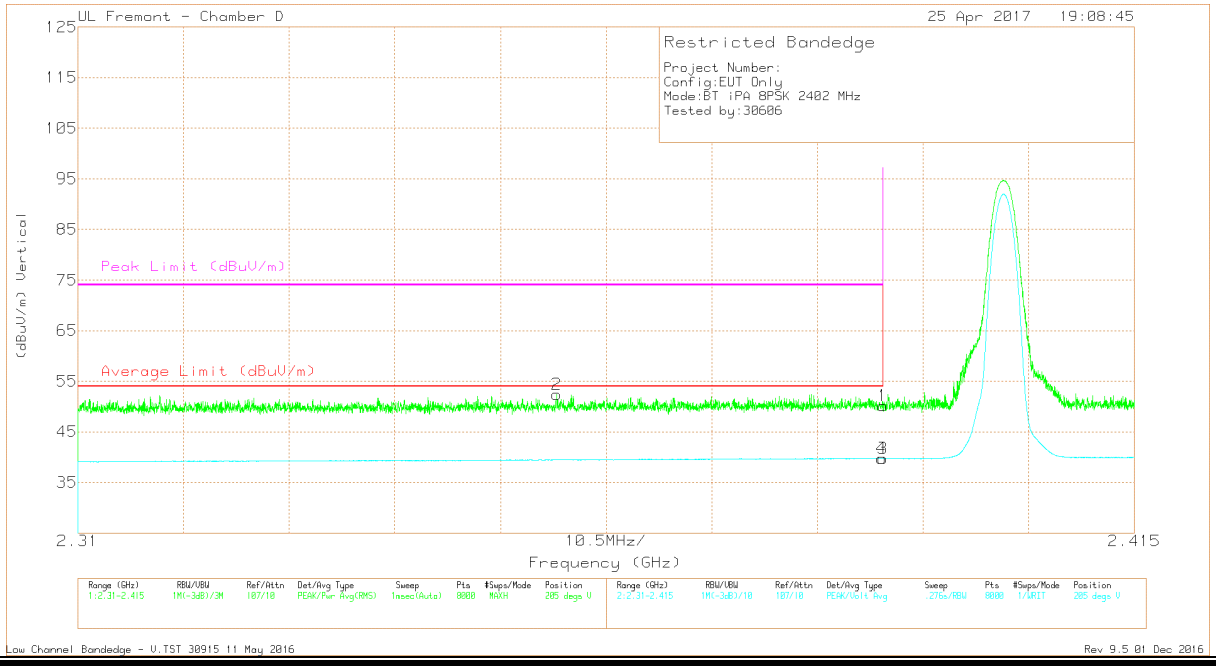
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.358	41.37	Pk	31.8	-20.8	52.37	-	-	74	-21.63	205	317	V
1	* 2.39	38.9	Pk	32	-20.7	50.2	-	-	74	-23.8	205	317	V
3	* 2.39	28.44	VA1T	32	-20.7	39.74	54	-14.26	-	-	205	317	V
4	* 2.39	28.47	VA1T	32	-20.7	39.77	54	-14.23	-	-	205	317	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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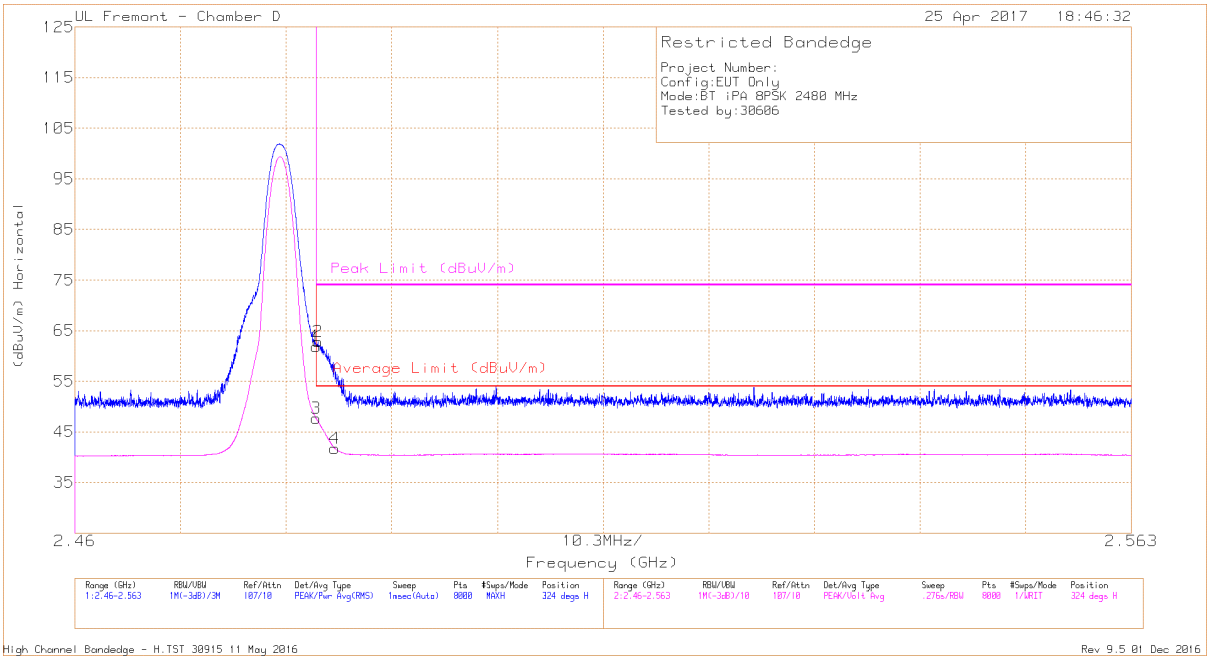
9.5.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	50.2	Pk	32.5	-20.8	61.9	-	-	74	-12.1	324	132	H
2	* 2.484	51.16	Pk	32.5	-20.8	62.86	-	-	74	-11.14	324	132	H
3	* 2.484	35.99	VA1T	32.5	-20.8	47.69	54	-6.31	-	-	324	132	H
4	* 2.485	30.03	VA1T	32.5	-20.8	41.73	54	-12.27	-	-	324	132	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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HIGH CHANNEL VERTICAL

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	49.05	Pk	32.5	-20.8	60.75	-	-	74	-13.25	26	316	V
2	* 2.484	49.17	Pk	32.5	-20.8	60.87	-	-	74	-13.13	26	316	V
3	* 2.484	34.69	VA1T	32.5	-20.8	46.39	54	-7.61	-	-	26	316	V
4	* 2.485	29.71	VA1T	32.5	-20.8	41.41	54	-12.59	-	-	26	316	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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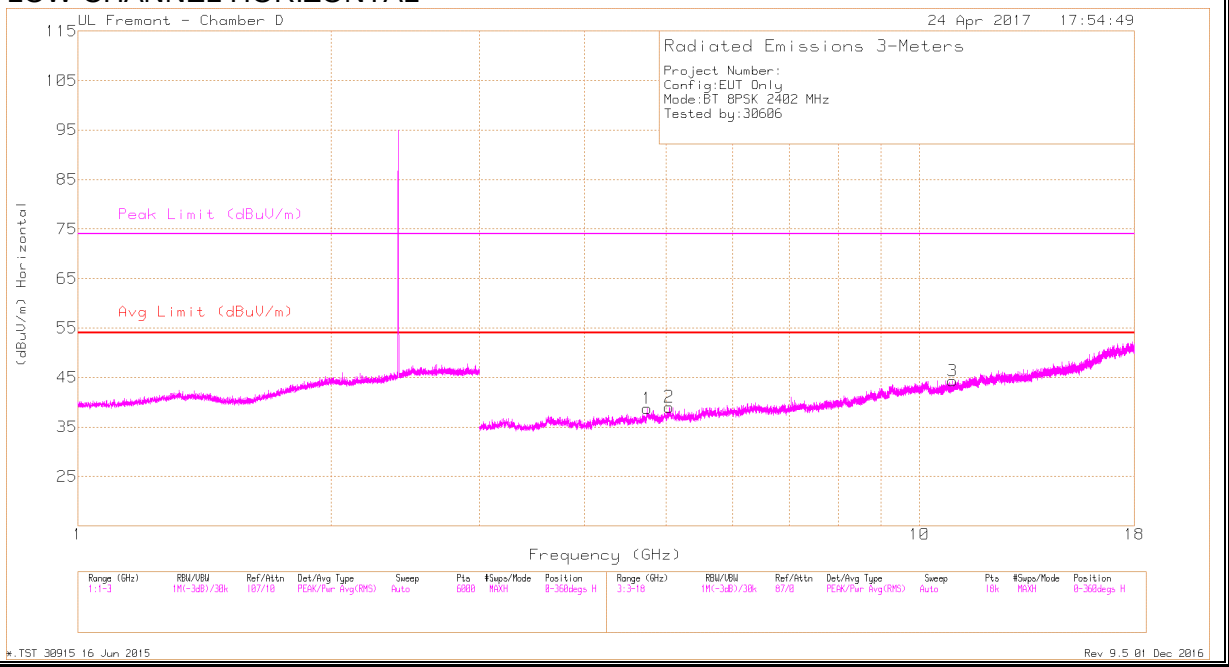
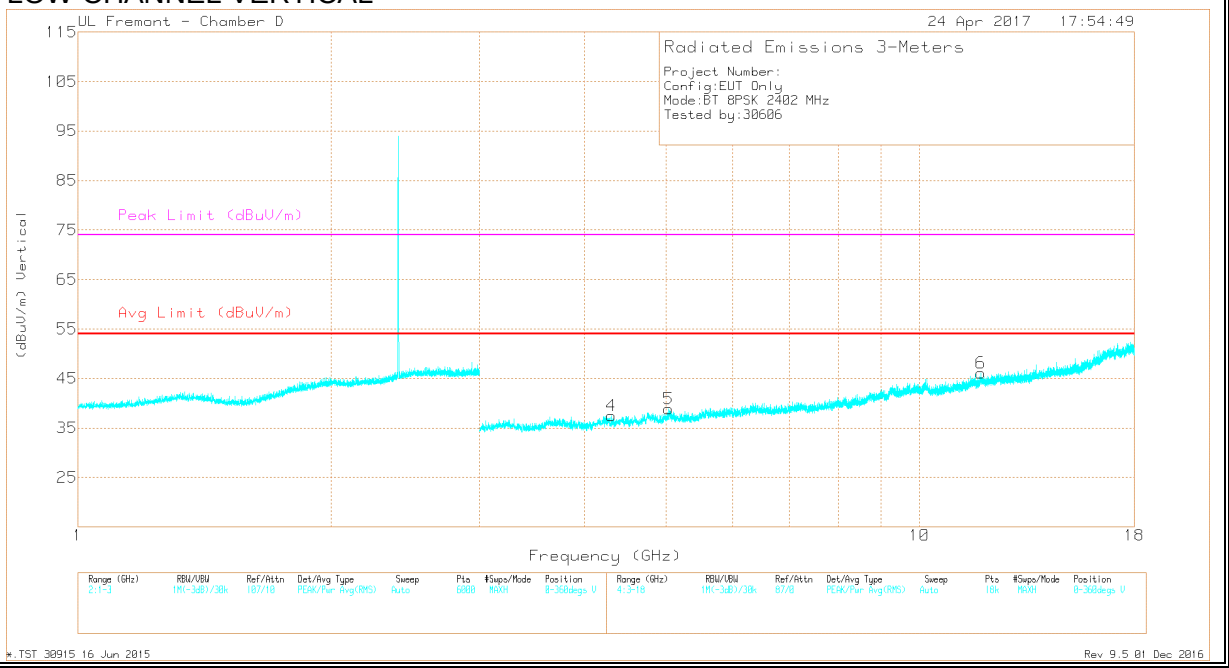
9.5.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.746	37.63	PKFH	34	-26.5	45.13	-	-	74	-28.87	199	100	H
	* 4.746	25.33	VA1T	34	-26.5	32.83	54	-21.17	-	-	199	100	H
2	* 5.045	37.13	PKFH	34.3	-26.7	44.73	-	-	74	-29.27	275	201	H
	* 5.045	24.91	VA1T	34.3	-26.6	32.61	54	-21.39	-	-	275	201	H
3	* 10.949	32.48	PKFH	37.5	-20.9	49.08	-	-	74	-24.92	138	103	H
	* 10.948	21.3	VA1T	37.5	-20.9	37.9	54	-16.1	-	-	138	103	H
4	* 4.303	36.95	PKFH	33.6	-28.5	42.05	-	-	74	-31.95	133	201	V
	* 4.305	25.46	VA1T	33.6	-28.5	30.56	54	-23.44	-	-	133	201	V
5	* 5.033	36.82	PKFH	34.3	-26.5	44.62	-	-	74	-29.38	212	102	V
	* 5.034	24.76	VA1T	34.3	-26.5	32.56	54	-21.44	-	-	212	102	V
6	* 11.82	35.91	PKFH	38.8	-20.6	54.11	-	-	74	-19.89	5	201	V
	* 11.822	21.58	VA1T	38.8	-20.6	39.78	54	-14.22	-	-	5	201	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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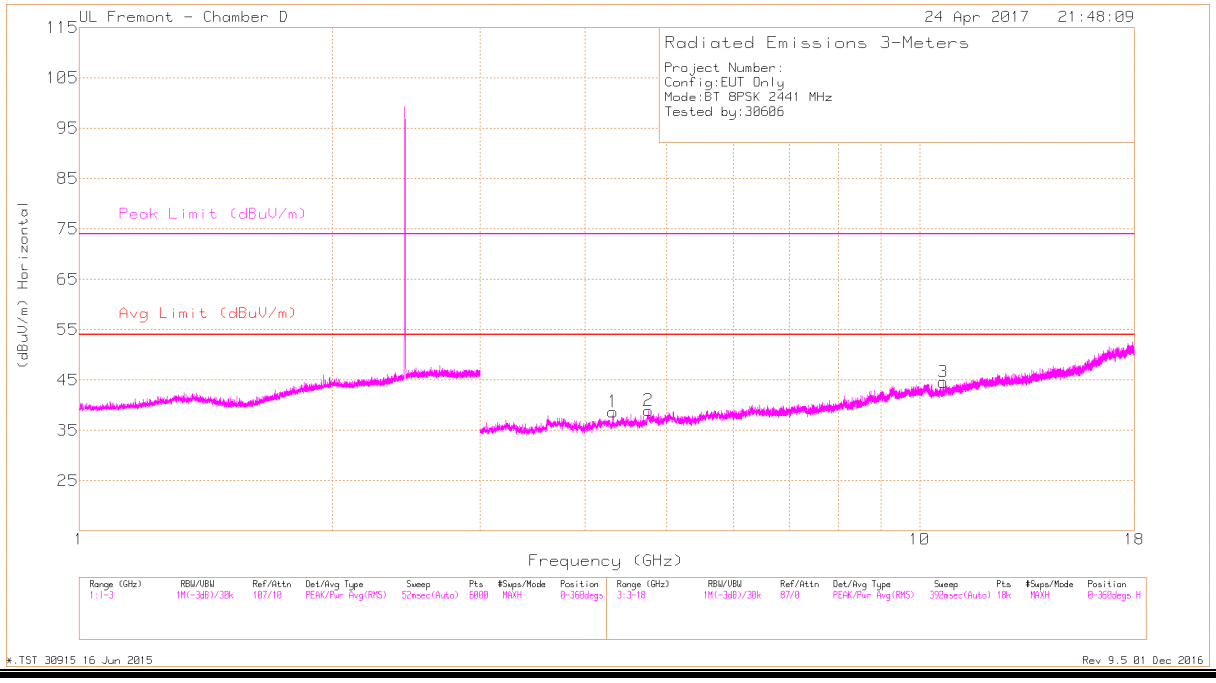
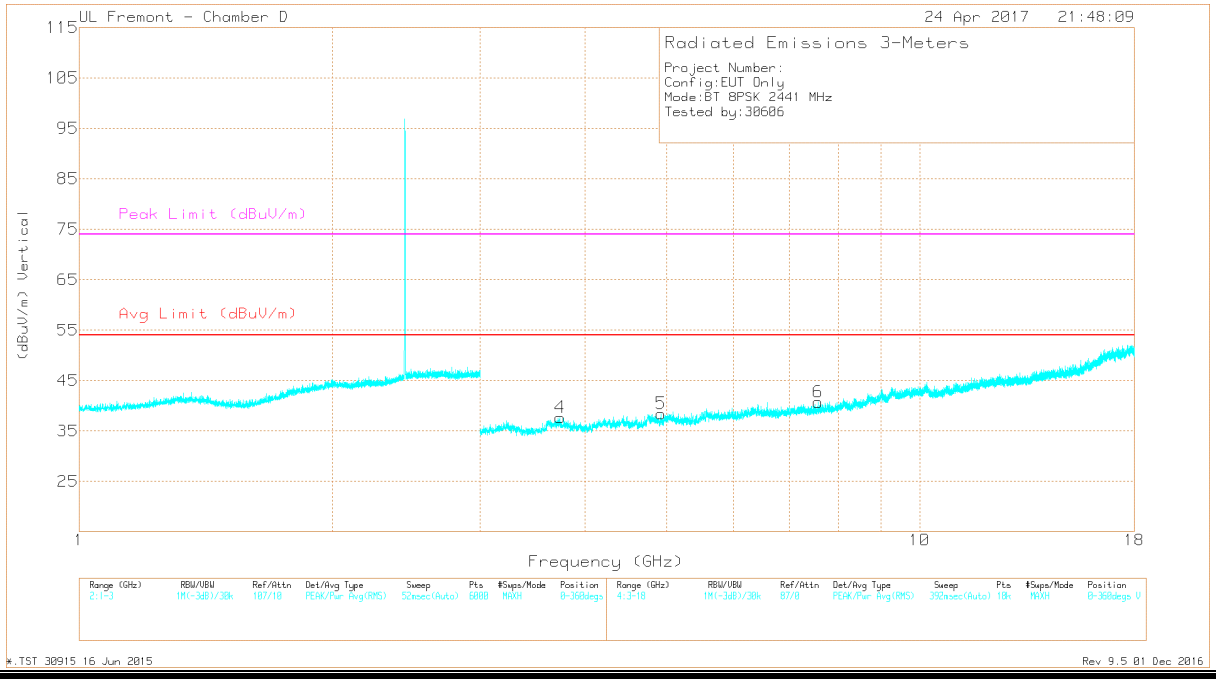
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.315	37.43	PKFH	33.6	-28.5	42.53	-	-	74	-31.47	185	200	H
	* 4.319	25.68	VA1T	33.6	-28.4	30.88	54	-23.12	-	-	185	200	H
2	* 4.754	36.92	PKFH	34	-26.5	44.42	-	-	74	-29.58	324	200	H
	* 4.755	25.44	VA1T	34	-26.6	32.84	54	-21.16	-	-	324	200	H
3	* 10.672	33.52	PKFH	37.1	-21.2	49.42	-	-	74	-24.58	293	200	H
	* 10.671	21.53	VA1T	37.1	-21.3	37.33	54	-16.67	-	-	293	200	H
4	* 3.735	38.07	PKFH	33.2	-28.6	42.67	-	-	74	-31.33	335	200	V
	* 3.737	25.66	VA1T	33.2	-28.6	30.26	54	-23.74	-	-	335	200	V
5	* 4.927	37.11	PKFH	34.2	-27.8	43.51	-	-	74	-30.49	317	102	V
	* 4.927	25.29	VA1T	34.2	-27.8	31.69	54	-22.31	-	-	317	102	V
6	* 7.571	34.77	PKFH	35.7	-25	45.47	-	-	74	-28.53	239	201	V
	* 7.57	22.93	VA1T	35.7	-25	33.63	54	-20.37	-	-	239	201	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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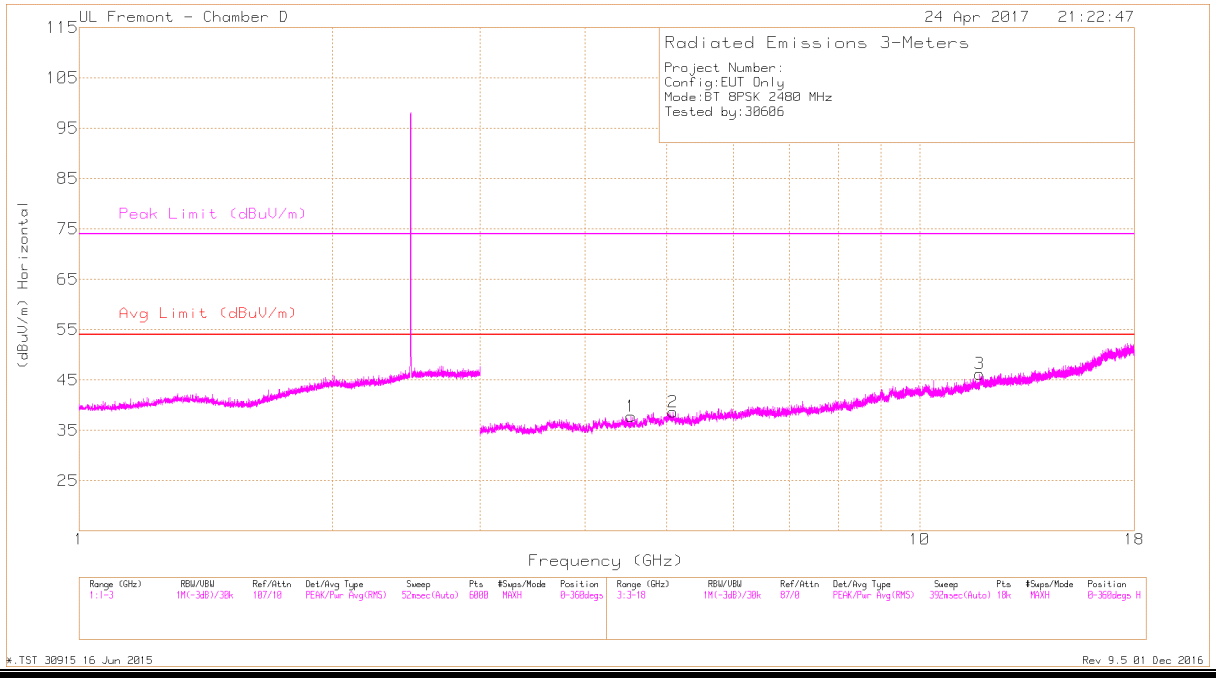
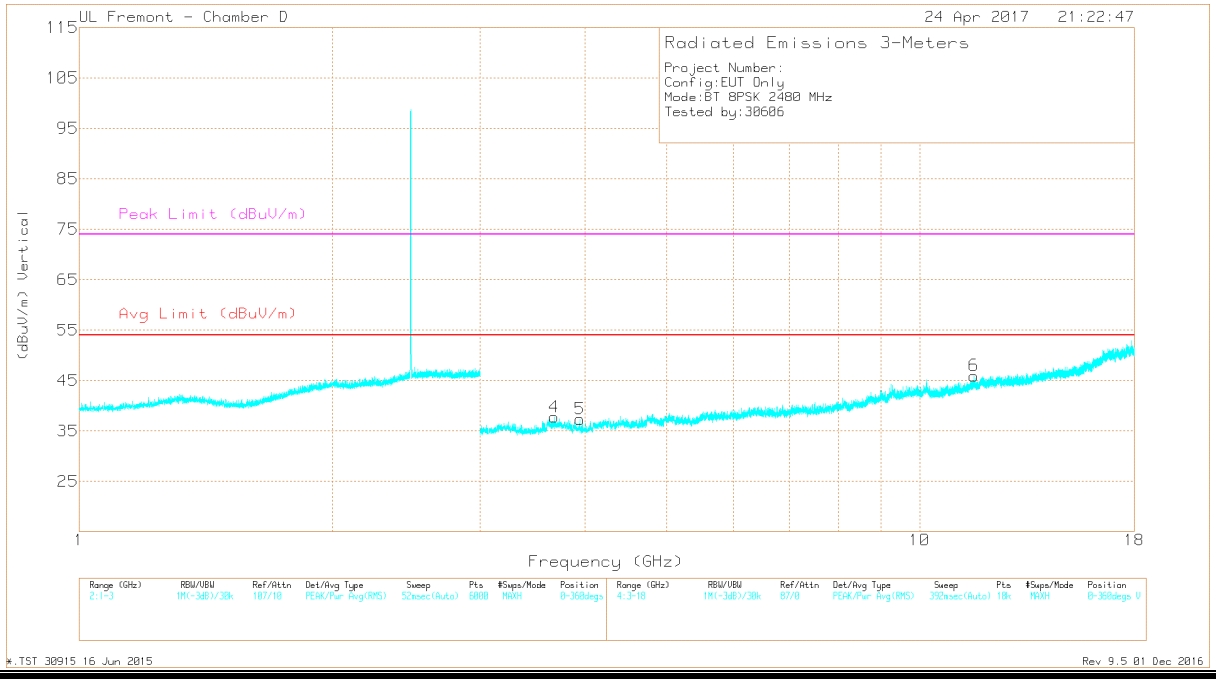
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.536	37.5	PKFH	33.9	-27.9	43.5	-	-	74	-30.5	128	100	H
	* 4.539	25.26	VA1T	33.9	-27.9	31.26	54	-22.74	-	-	128	100	H
2	* 5.09	36.51	PKFH	34.3	-26.6	44.21	-	-	74	-29.79	349	100	H
	* 5.093	25.18	VA1T	34.3	-26.7	32.78	54	-21.22	-	-	349	100	H
3	* 11.791	33.23	PKFH	38.7	-20.9	51.03	-	-	74	-22.97	278	200	H
	* 11.791	21.62	VA1T	38.7	-20.9	39.42	54	-14.58	-	-	278	200	H
4	* 3.675	37.97	PKFH	33.2	-29.1	42.07	-	-	74	-31.93	345	103	V
	* 3.676	26.05	VA1T	33.2	-29.1	30.15	54	-23.85	-	-	345	103	V
5	* 3.941	37.65	PKFH	33.2	-28.2	42.65	-	-	74	-31.35	326	200	V
	* 3.942	25.69	VA1T	33.2	-28.2	30.69	54	-23.31	-	-	326	200	V
6	* 11.596	32.68	PKFH	38.5	-20.6	50.58	-	-	74	-23.42	283	200	V
	* 11.596	21.24	VA1T	38.5	-20.6	39.14	54	-14.86	-	-	283	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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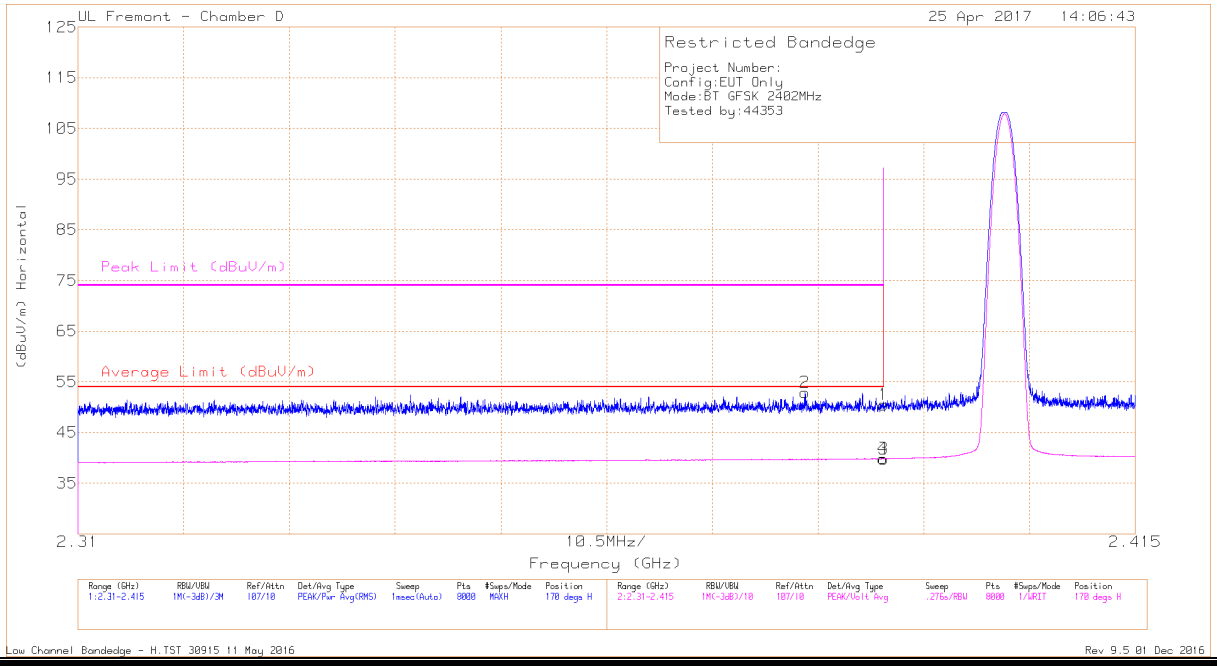
9.6. LAT 3, Pmax BASIC DATA RATE GFSK MODULATION

9.6.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.18	Pk	32	-20.7	50.48	-	-	74	-23.52	170	109	H
2	* 2.382	41.76	Pk	31.9	-20.8	52.86	-	-	74	-21.14	170	109	H
3	* 2.39	28.5	VA1T	32	-20.7	39.8	54	-14.2	-	-	170	109	H
4	* 2.39	28.54	VA1T	32	-20.7	39.84	54	-14.16	-	-	170	109	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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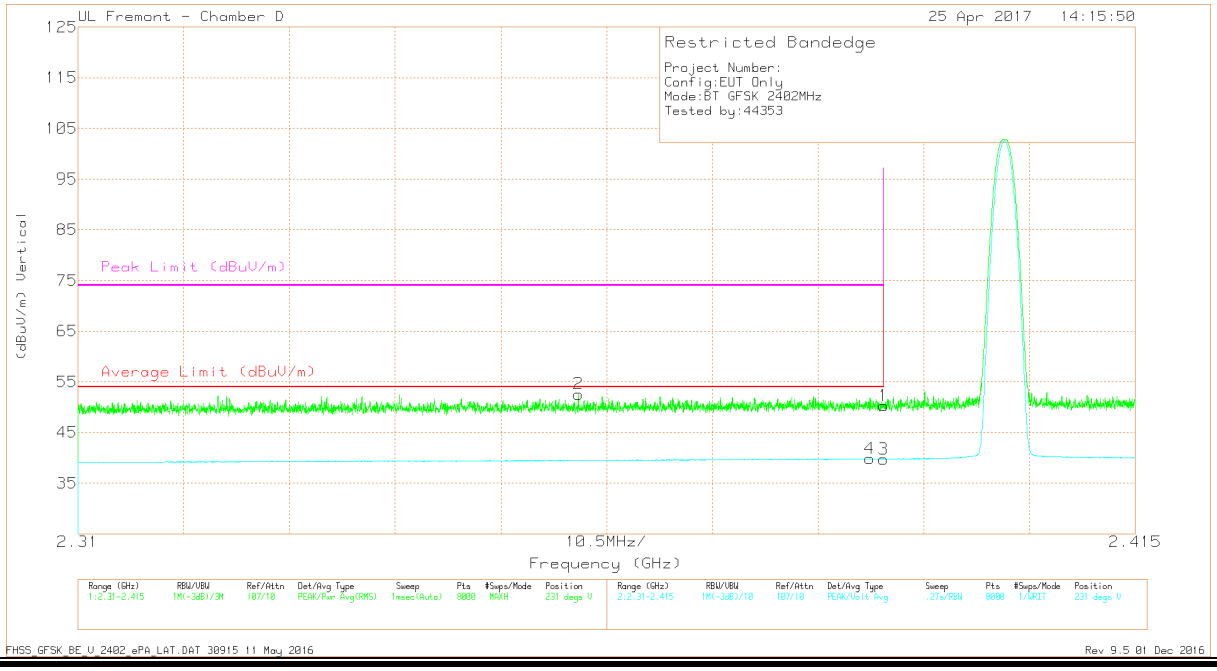
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	38.98	Pk	32	-20.7	50.28	-	-	74	-23.72	231	294	V
2	* 2.36	41.59	Pk	31.8	-20.8	52.59	-	-	74	-21.41	231	294	V
3	* 2.39	28.48	VA1T	32	-20.7	39.78	54	-14.22	-	-	231	294	V
4	* 2.389	28.62	VA1T	32	-20.8	39.82	54	-14.18	-	-	231	294	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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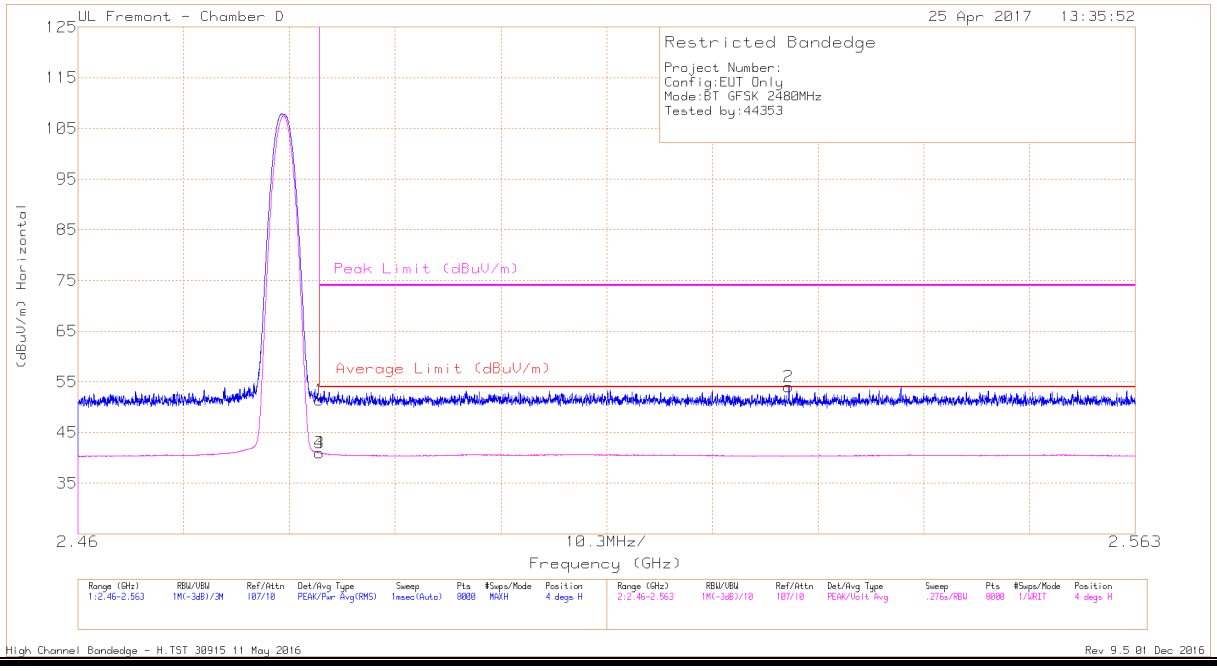
9.6.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.72	Pk	32.5	-20.8	51.42	-	-	74	-22.58	4	106	H
3	* 2.484	29.28	VA1T	32.5	-20.8	40.98	54	-13.02	-	-	4	106	H
4	* 2.484	29.28	VA1T	32.5	-20.8	40.98	54	-13.02	-	-	4	106	H
2	2.529	42.2	Pk	32.5	-20.7	54	-	-	74	-20	4	106	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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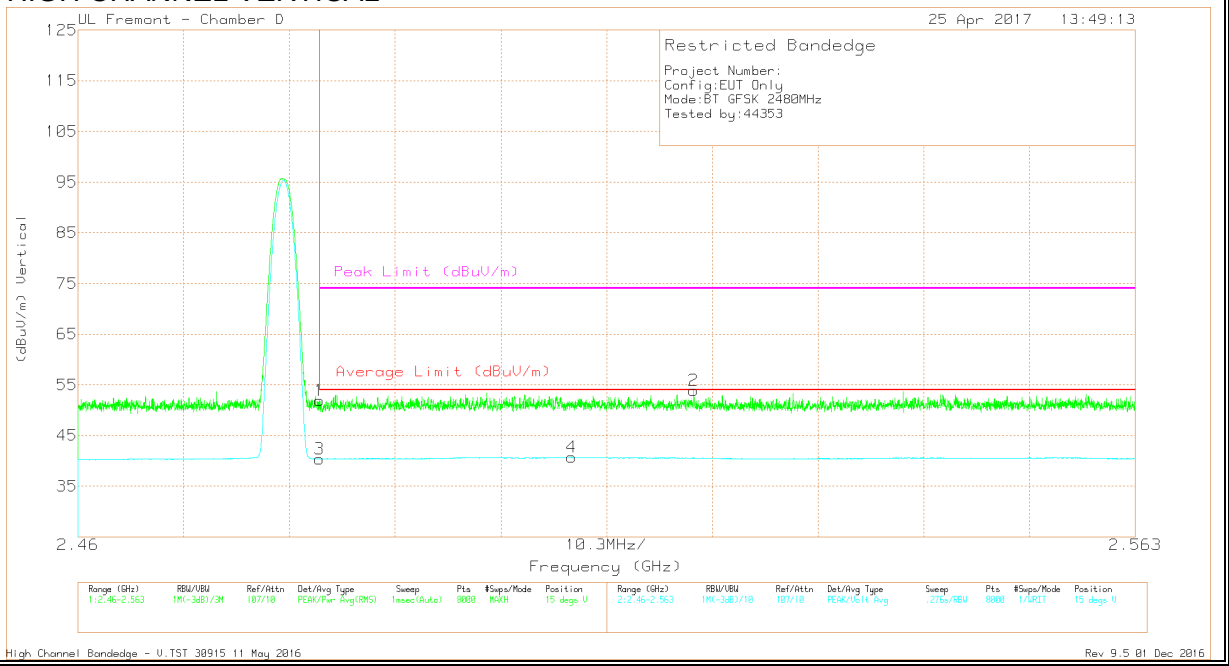
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	40.26	Pk	32.5	-20.8	51.96	-	-	74	-22.04	15	102	V
3	* 2.484	28.68	VA1T	32.5	-20.8	40.38	54	-13.62	-	-	15	102	V
4	2.508	28.7	VA1T	32.6	-20.6	40.7	54	-13.3	-	-	15	102	V
2	2.52	41.95	Pk	32.6	-20.7	53.85	-	-	74	-20.15	15	102	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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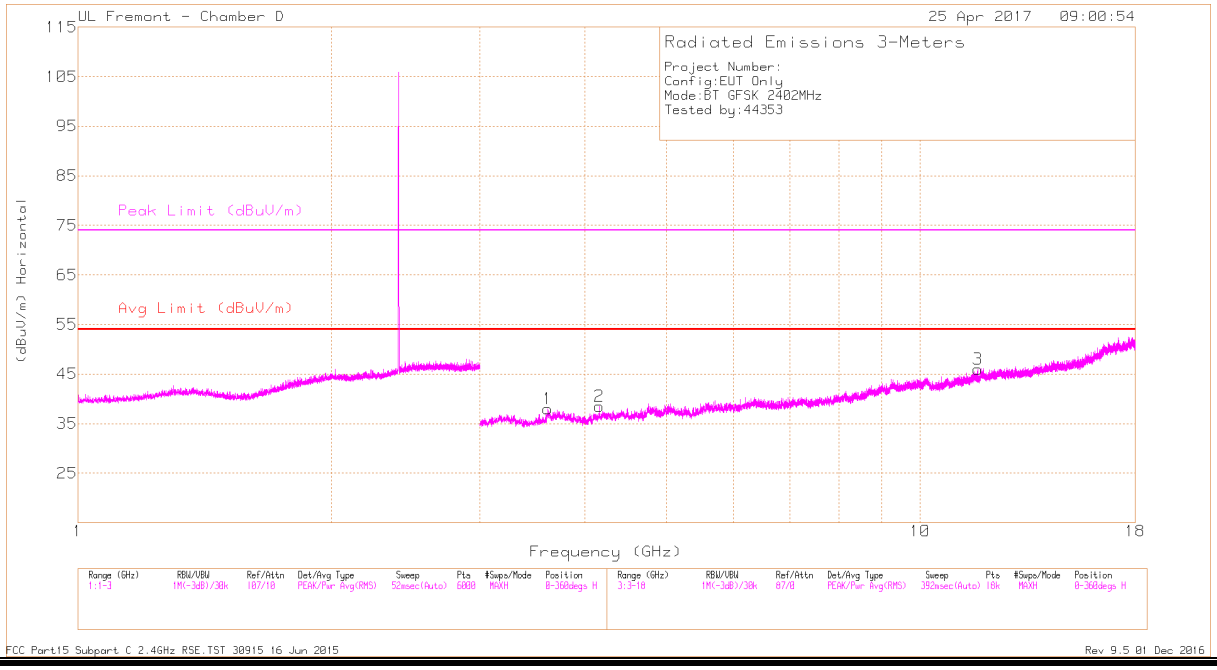
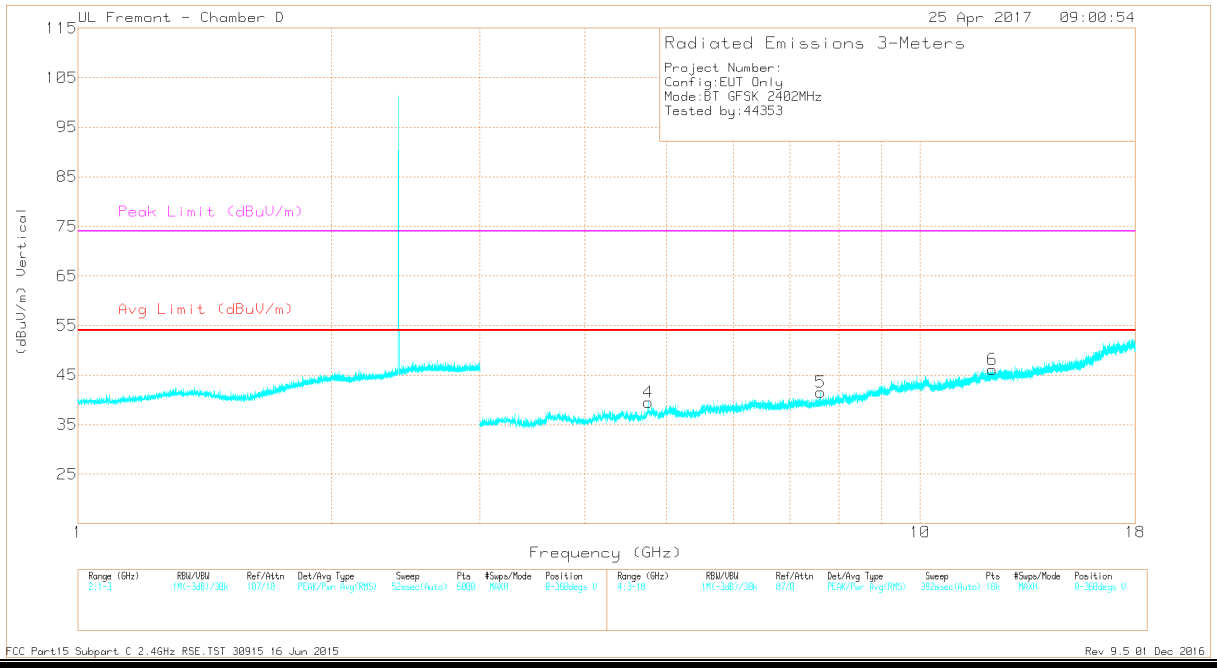
9.6.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.612	37.72	PKFH	33.2	-28.3	42.62	-	-	74	-31.38	152	284	H
	* 3.613	25.7	VA1T	33.2	-28.3	30.6	54	-23.4	-	-	152	284	H
2	* 4.16	37.6	PKFH	33.5	-28	43.1	-	-	74	-30.9	216	133	H
	* 4.161	25.69	VA1T	33.5	-28	31.19	54	-22.81	-	-	216	133	H
3	* 11.711	34.25	PKFH	38.6	-21.1	51.75	-	-	74	-22.25	127	220	H
	* 11.709	21.61	VA1T	38.6	-21.1	39.11	54	-14.89	-	-	127	220	H
4	* 4.75	37.29	PKFH	34	-26.5	44.79	-	-	74	-29.21	85	302	V
	* 4.753	25.53	VA1T	34	-26.5	33.03	54	-20.97	-	-	85	302	V
5	* 7.617	34.91	PKFH	35.7	-24.7	45.91	-	-	74	-28.09	323	102	V
	* 7.614	23.32	VA1T	35.7	-24.8	34.22	54	-19.78	-	-	323	102	V
6	* 12.178	34.14	PKFH	39	-21.1	52.04	-	-	74	-21.96	265	266	V
	* 12.176	21.75	VA1T	39	-21.1	39.65	54	-14.35	-	-	265	266	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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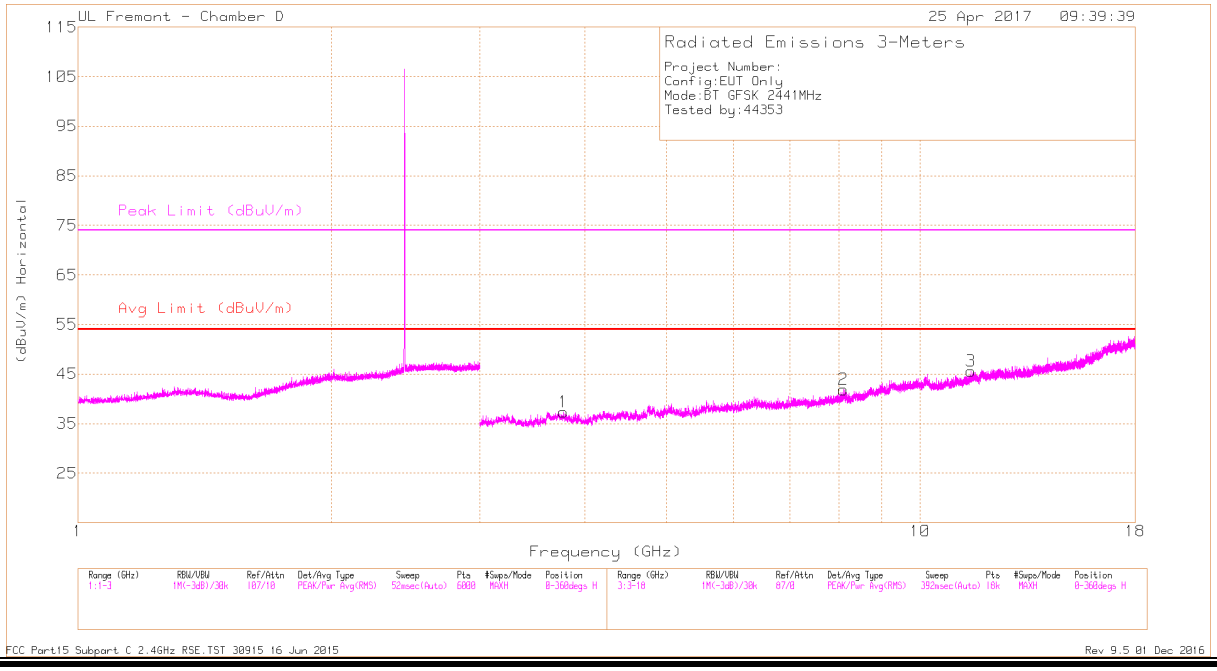
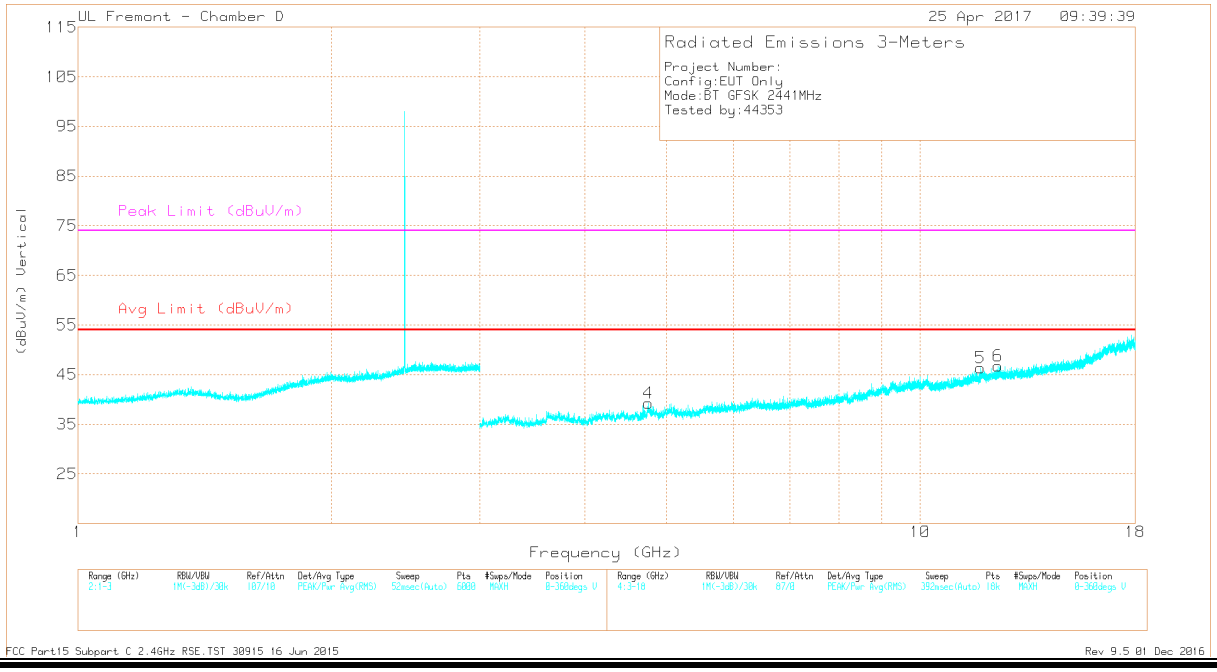
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.771	37.5	PKFH	33.2	-28.1	42.6	-	-	74	-31.4	133	259	H
	* 3.772	25.77	VA1T	33.2	-28.1	30.87	54	-23.13	-	-	133	259	H
2	* 8.1	34.2	PKFH	35.9	-23.6	46.5	-	-	74	-27.5	312	103	H
	* 8.102	22.65	VA1T	35.9	-23.6	34.95	54	-19.05	-	-	312	103	H
3	* 11.493	33.69	PKFH	38.3	-20.9	51.09	-	-	74	-22.91	106	178	H
	* 11.493	21.69	VA1T	38.3	-20.9	39.09	54	-14.91	-	-	106	178	H
4	* 4.76	37.32	PKFH	34	-26.5	44.82	-	-	74	-29.18	99	141	V
	* 4.757	25.61	VA1T	34	-26.6	33.01	54	-20.99	-	-	99	141	V
5	* 11.791	33.61	PKFH	38.7	-20.9	51.41	-	-	74	-22.59	296	287	V
	* 11.794	21.76	VA1T	38.7	-20.9	39.56	54	-14.44	-	-	296	287	V
6	* 12.378	33.53	PKFH	39	-20.5	52.03	-	-	74	-21.97	201	173	V
	* 12.379	21.66	VA1T	39	-20.5	40.16	54	-13.84	-	-	201	173	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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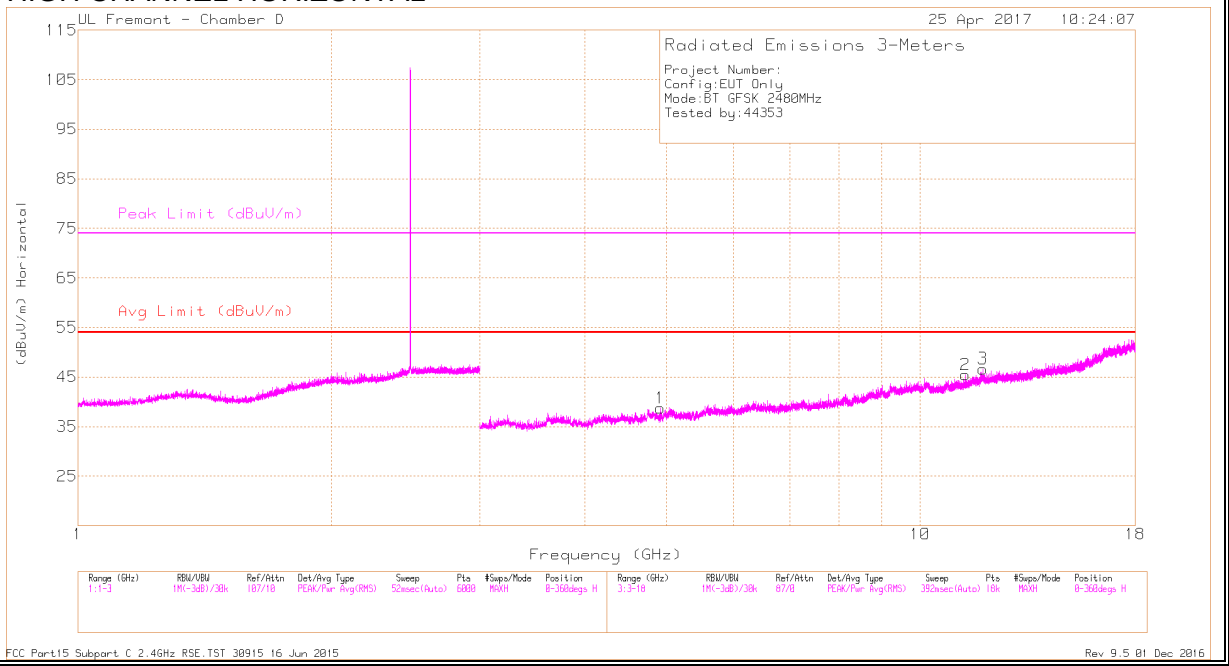
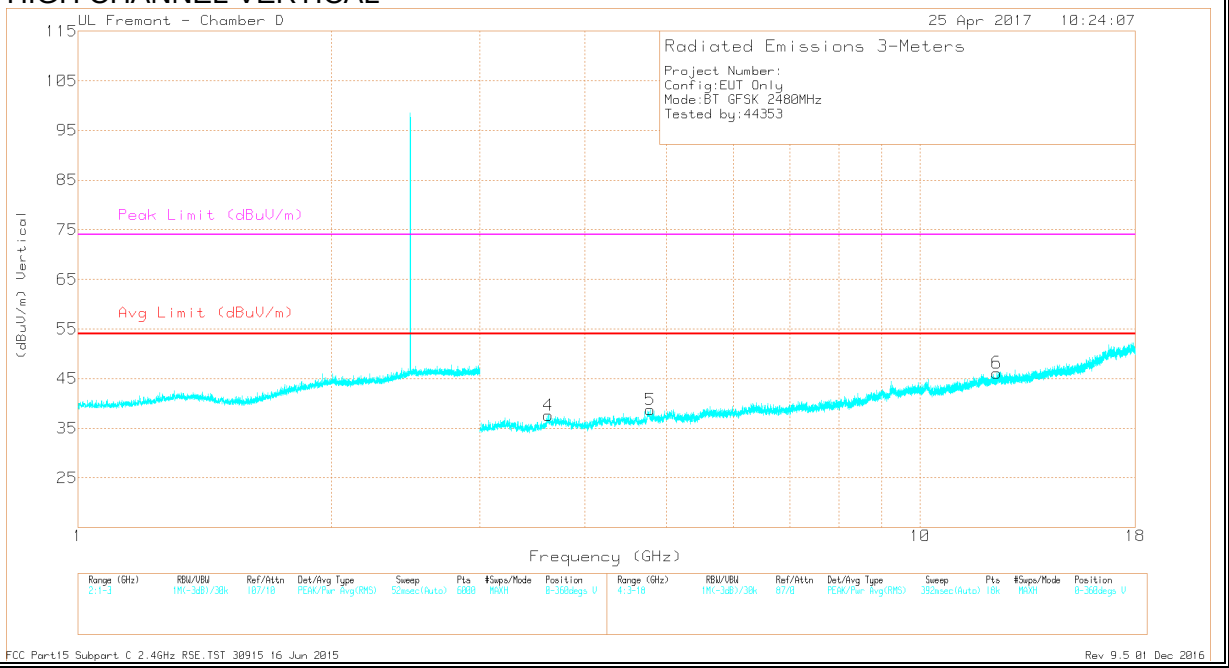
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.915	36.64	PKFH	34.2	-28.1	42.74	-	-	74	-31.26	222	164	H
	* 4.917	25.02	VA1T	34.2	-28.1	31.12	54	-22.88	-	-	222	164	H
2	* 11.317	32.93	PKFH	38	-20.9	50.03	-	-	74	-23.97	293	110	H
	* 11.316	21.38	VA1T	38	-20.9	38.48	54	-15.52	-	-	293	110	H
3	* 11.879	33.28	PKFH	38.8	-20.7	51.38	-	-	74	-22.62	87	322	H
	* 11.879	21.55	VA1T	38.8	-20.7	39.65	54	-14.35	-	-	87	322	H
4	* 3.617	36.63	PKFH	33.2	-28.4	41.43	-	-	74	-32.57	25	136	V
	* 3.619	25.68	VA1T	33.2	-28.5	30.38	54	-23.62	-	-	25	136	V
5	* 4.777	37.76	PKFH	34	-26.6	45.16	-	-	74	-28.84	281	102	V
	* 4.778	25.23	VA1T	34	-26.6	32.63	54	-21.37	-	-	281	102	V
6	* 12.326	33.4	PKFH	38.9	-21.4	50.9	-	-	74	-23.1	324	283	V
	* 12.328	21.93	VA1T	38.9	-21.4	39.43	54	-14.57	-	-	324	283	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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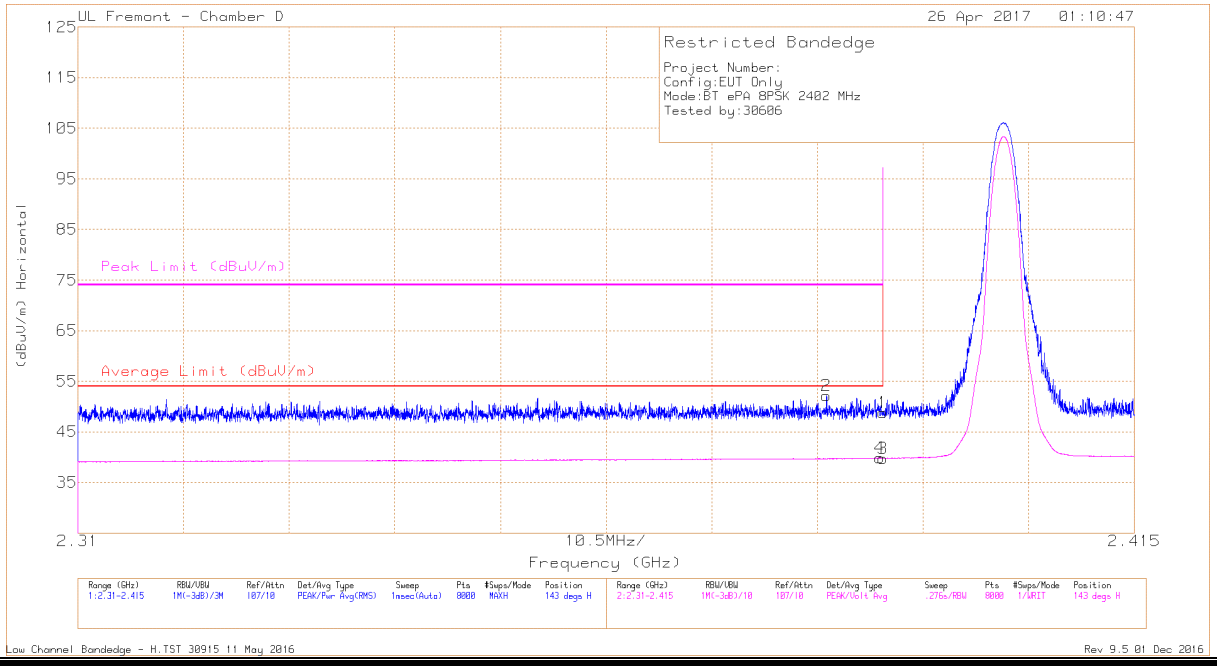
9.7. LAT 3, Pmax ENHANCED DATA RATE 8PSK MODULATION

9.7.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.384	40.9	Pk	32	-20.8	52.1	-	-	74	-21.9	143	101	H
1	* 2.39	37.52	Pk	32	-20.7	48.82	-	-	74	-25.18	143	101	H
3	* 2.39	28.49	VA1T	32	-20.7	39.79	54	-14.21	-	-	143	101	H
4	* 2.39	28.62	VA1T	32	-20.8	39.82	54	-14.18	-	-	143	101	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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LOW CHANNEL VERTICAL

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	41.59	Pk	32	-20.8	52.79	-	-	74	-21.21	219	222	V
4	* 2.389	28.62	VA1T	32	-20.8	39.82	54	-14.18	-	-	219	222	V
1	* 2.39	38.89	Pk	32	-20.7	50.19	-	-	74	-23.81	219	222	V
3	* 2.39	28.49	VA1T	32	-20.7	39.79	54	-14.21	-	-	219	222	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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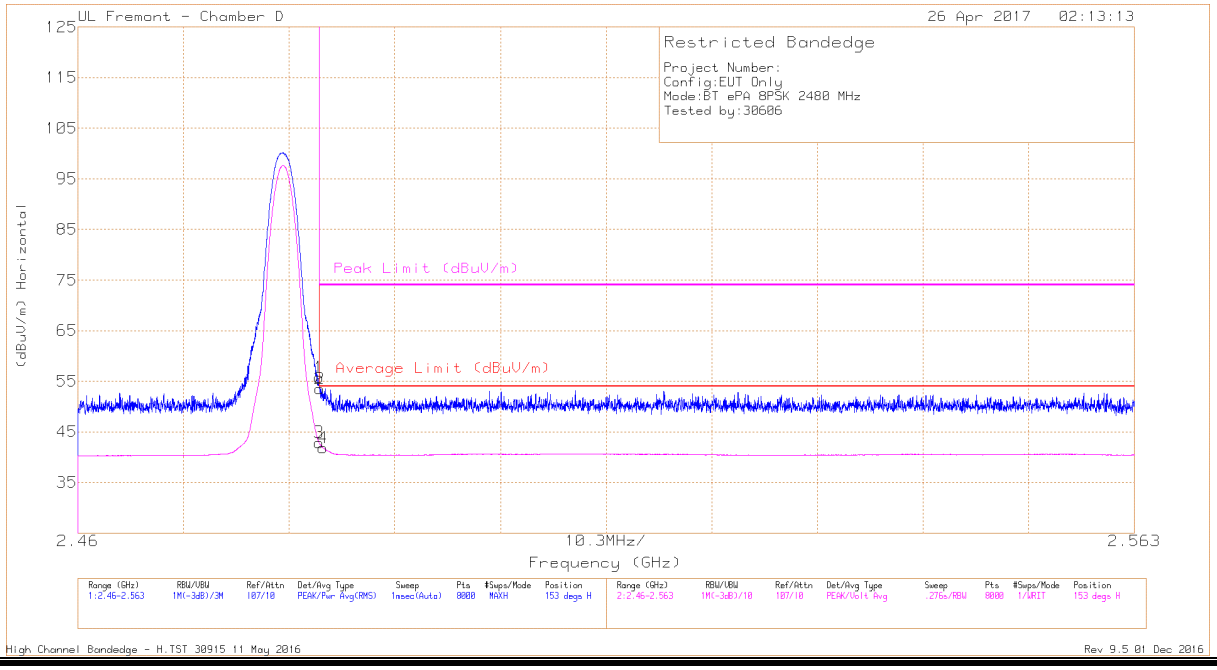
9.7.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	44.09	Pk	32.5	-20.8	55.79	-	-	74	-18.21	153	117	H
2	* 2.484	41.86	Pk	32.5	-20.8	53.56	-	-	74	-20.44	153	117	H
3	* 2.484	31.2	VA1T	32.5	-20.8	42.9	54	-11.1	-	-	153	117	H
4	* 2.484	30.15	VA1T	32.5	-20.8	41.85	54	-12.15	-	-	153	117	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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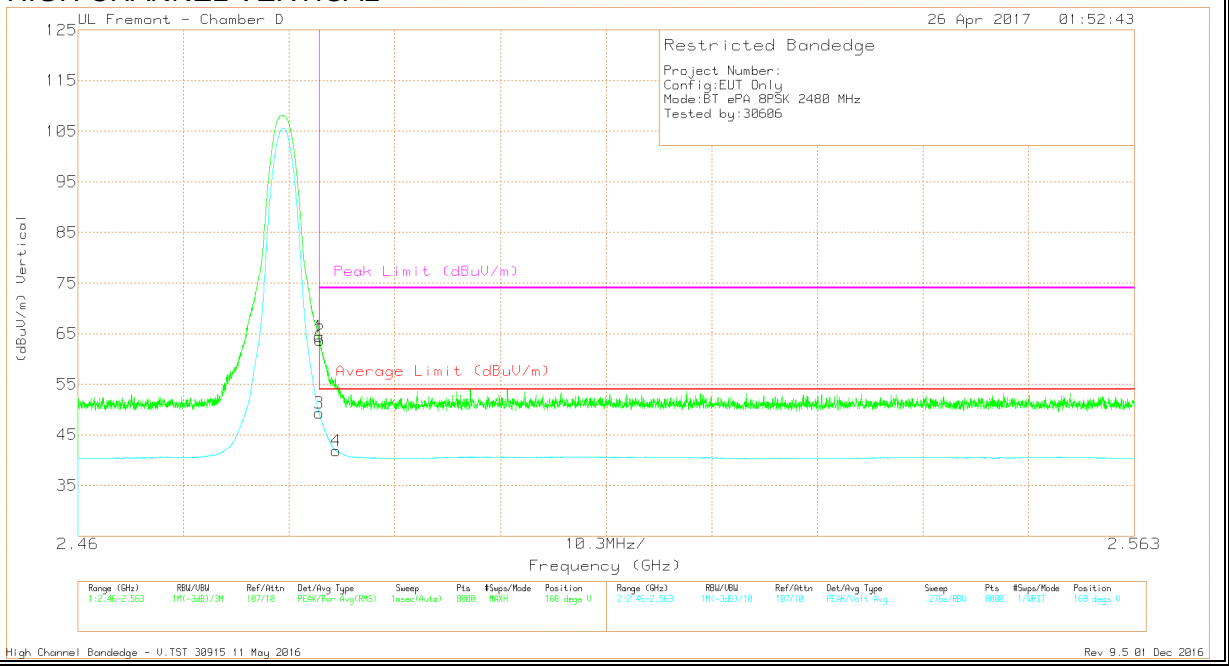
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	52.76	Pk	32.5	-20.8	64.46	-	-	74	-9.54	168	162	V
2	* 2.484	52.04	Pk	32.5	-20.8	63.74	-	-	74	-10.26	168	162	V
3	* 2.484	37.61	VA1T	32.5	-20.8	49.31	54	-4.69	-	-	168	161	V
4	* 2.485	30.13	VA1T	32.5	-20.8	41.83	54	-12.17	-	-	168	161	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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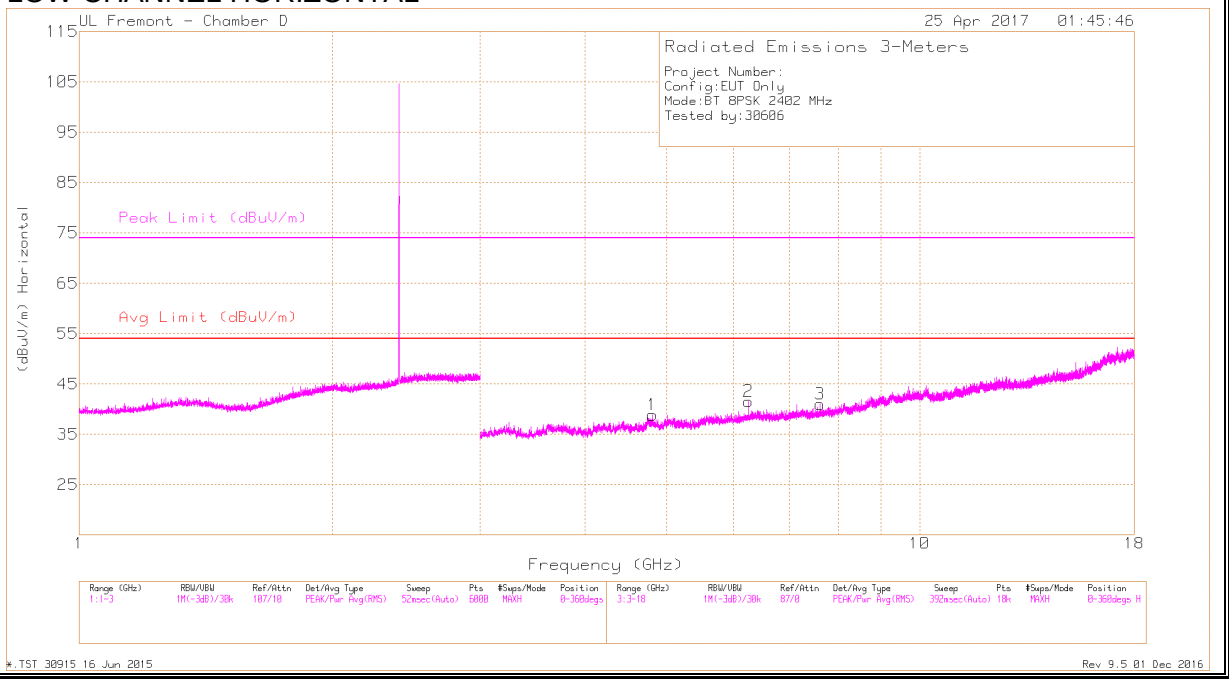
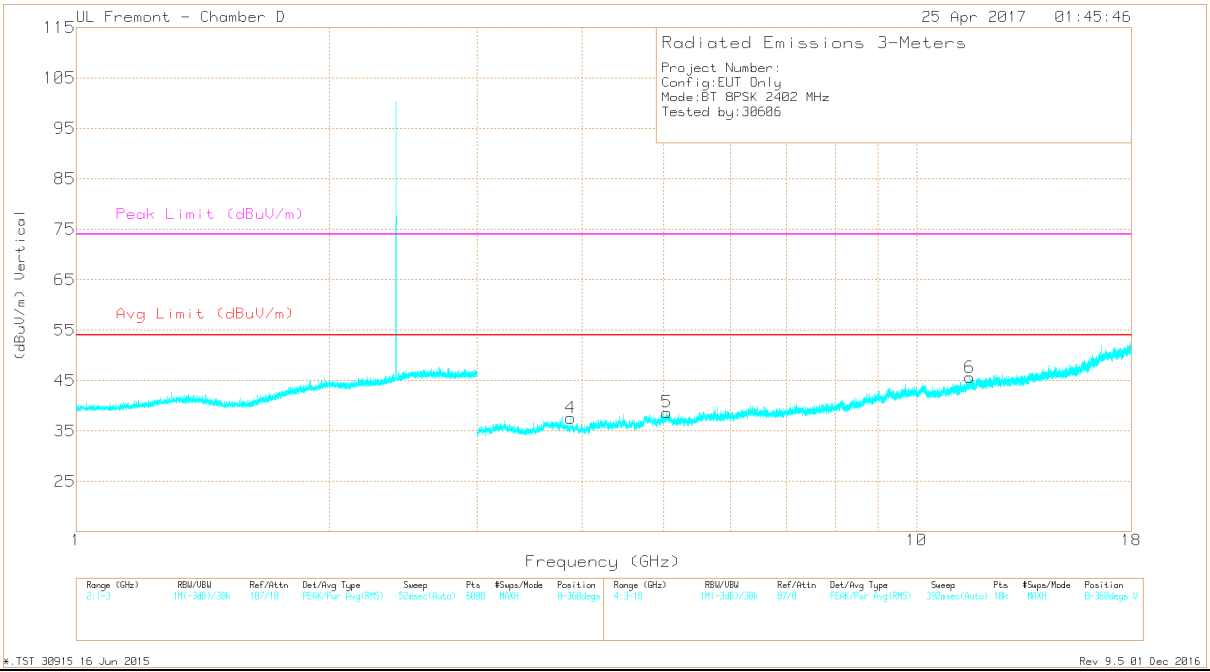
9.7.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.809	36.33	PKFH	34.1	-26.8	43.63	-	-	74	-30.37	259	185	H
	* 4.81	24.94	VA1T	34.1	-26.9	32.14	54	-21.86	-	-	259	185	H
3	* 7.609	35.78	PKFH	35.7	-24.8	46.68	-	-	74	-27.32	299	314	H
	* 7.607	23.25	VA1T	35.7	-24.9	34.05	54	-19.95	-	-	299	314	H
4	* 3.874	38.1	PKFH	33.2	-28.4	42.9	-	-	74	-31.1	124	102	V
	* 3.876	25.99	VA1T	33.2	-28.4	30.79	54	-23.21	-	-	124	102	V
5	* 5.042	36.46	PKFH	34.3	-26.5	44.26	-	-	74	-29.74	203	163	V
	* 5.045	24.9	VA1T	34.3	-26.7	32.5	54	-21.5	-	-	203	163	V
6	* 11.567	33.29	PKFH	38.4	-20.7	50.99	-	-	74	-23.01	199	105	V
	* 11.567	21.3	VA1T	38.4	-20.7	39	54	-15	-	-	199	105	V
2	6.252	35.62	PKFH	35.7	-26.4	44.92	-	-	-	-	112	249	H

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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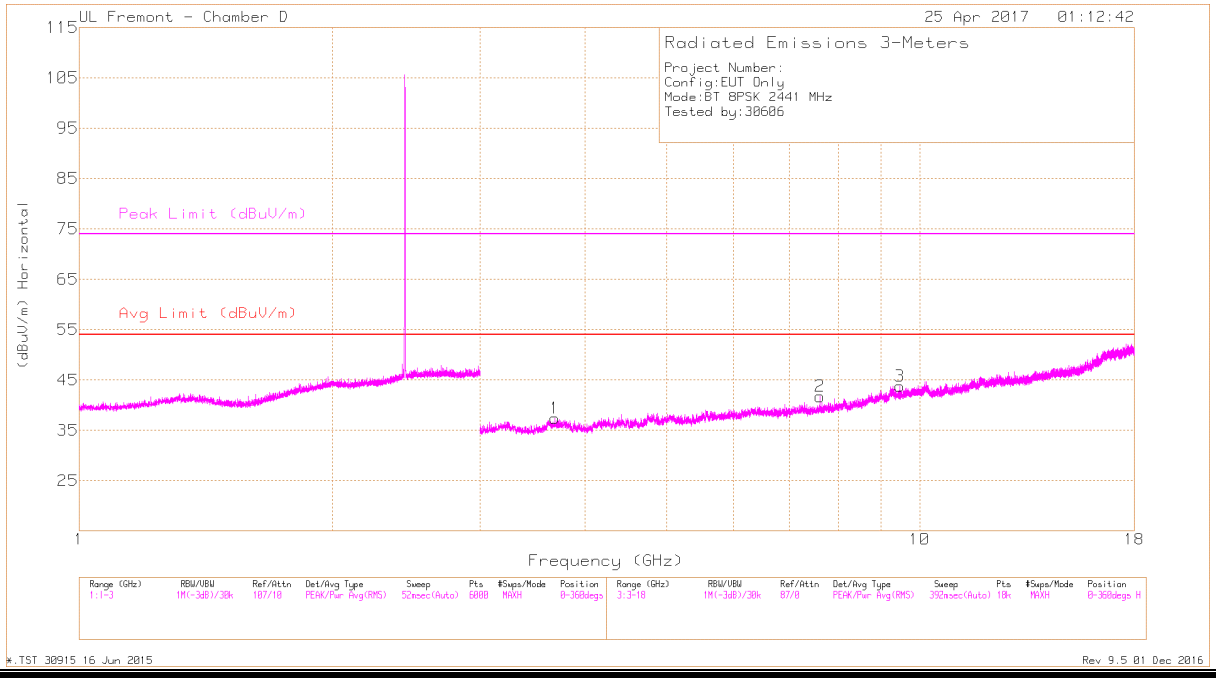
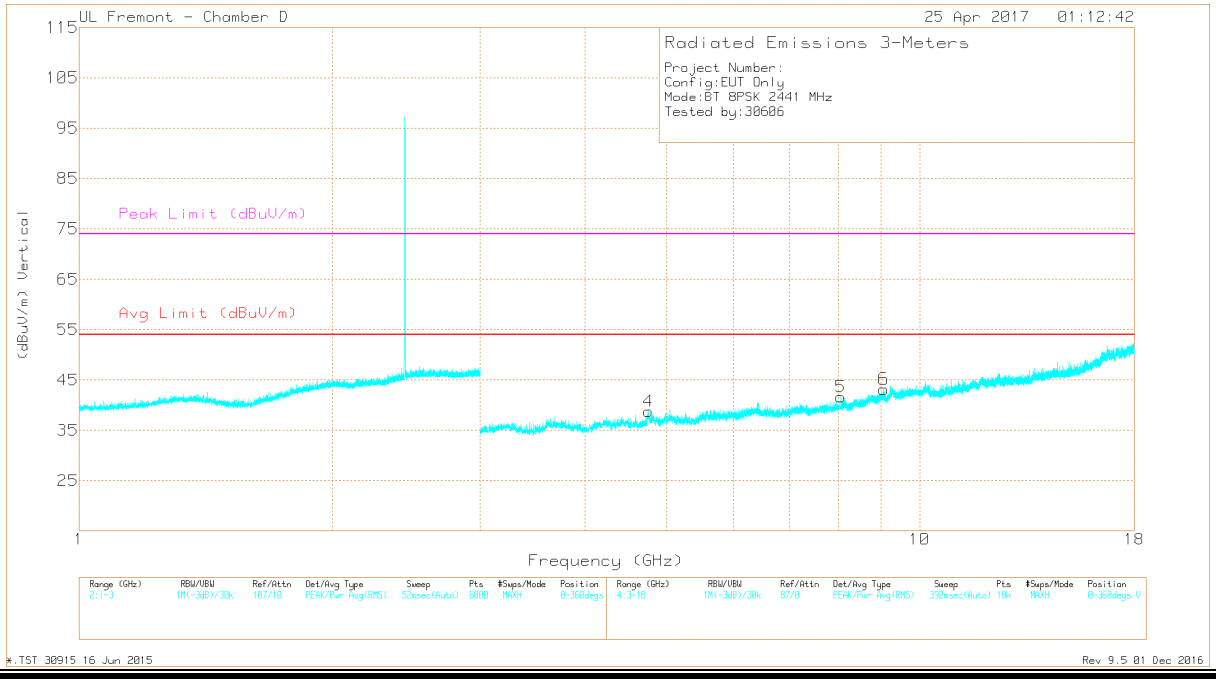
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.684	38.16	PKFH	33.2	-29	42.36	-	-	74	-31.64	23	125	H
	* 3.682	26.11	VA1T	33.2	-29	30.31	54	-23.69	-	-	23	125	H
2	* 7.613	36.22	PKFH	35.7	-24.8	47.12	-	-	74	-26.88	191	191	H
	* 7.61	23.2	VA1T	35.7	-24.8	34.1	54	-19.9	-	-	191	191	H
3	* 9.473	33.7	PKFH	37	-21	49.7	-	-	74	-24.3	37	254	H
	* 9.475	21.02	VA1T	37	-21.1	36.92	54	-17.08	-	-	37	254	H
4	* 4.756	37.01	PKFH	34	-26.6	44.41	-	-	74	-29.59	13	353	V
	* 4.755	25.4	VA1T	34	-26.6	32.8	54	-21.2	-	-	13	353	V
5	* 8.061	35.21	PKFH	35.9	-24.1	47.01	-	-	74	-26.99	2	187	V
	* 8.058	23.09	VA1T	35.9	-24.1	34.89	54	-19.11	-	-	2	187	V
6	* 9.061	33	PKFH	36.7	-21.5	48.2	-	-	74	-25.8	75	182	V
	* 9.063	21.51	VA1T	36.7	-21.6	36.61	54	-17.39	-	-	75	182	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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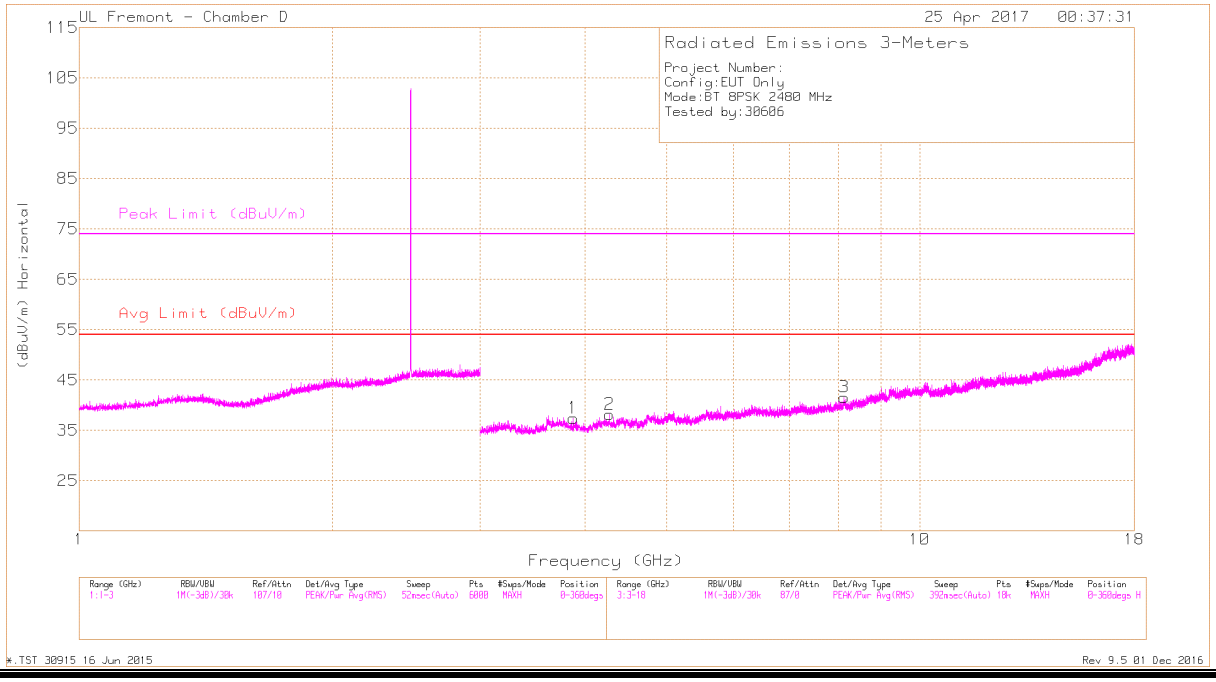
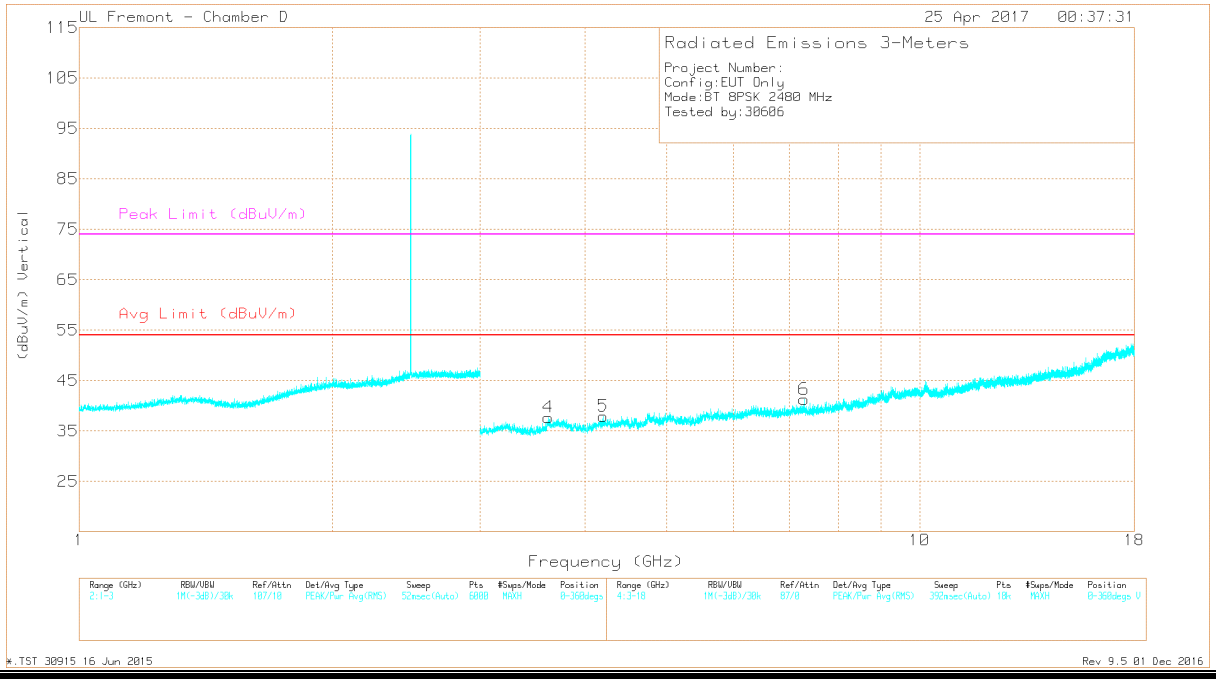
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.873	38.18	PKFH	33.2	-28.5	42.88	-	-	74	-31.12	293	343	H
	* 3.875	25.87	VA1T	33.2	-28.4	30.67	54	-23.33	-	-	293	343	H
2	* 4.276	37.54	PKFH	33.5	-27.9	43.14	-	-	74	-30.86	304	297	H
	* 4.278	25.35	VA1T	33.5	-28	30.85	54	-23.15	-	-	304	297	H
3	* 8.131	34.23	PKFH	35.9	-22.7	47.43	-	-	74	-26.57	91	298	H
	* 8.129	22.14	VA1T	35.9	-22.8	35.24	54	-18.76	-	-	91	298	H
4	* 3.617	37.78	PKFH	33.2	-28.4	42.58	-	-	74	-31.42	40	133	V
	* 3.617	25.55	VA1T	33.2	-28.4	30.35	54	-23.65	-	-	40	133	V
5	* 4.206	36.79	PKFH	33.5	-27.5	42.79	-	-	74	-31.21	5	112	V
	* 4.205	25.08	VA1T	33.5	-27.5	31.08	54	-22.92	-	-	5	112	V
6	* 7.285	35.58	PKFH	35.7	-24.9	46.38	-	-	74	-27.62	35	281	V
	* 7.285	23.43	VA1T	35.7	-24.9	34.23	54	-19.77	-	-	35	281	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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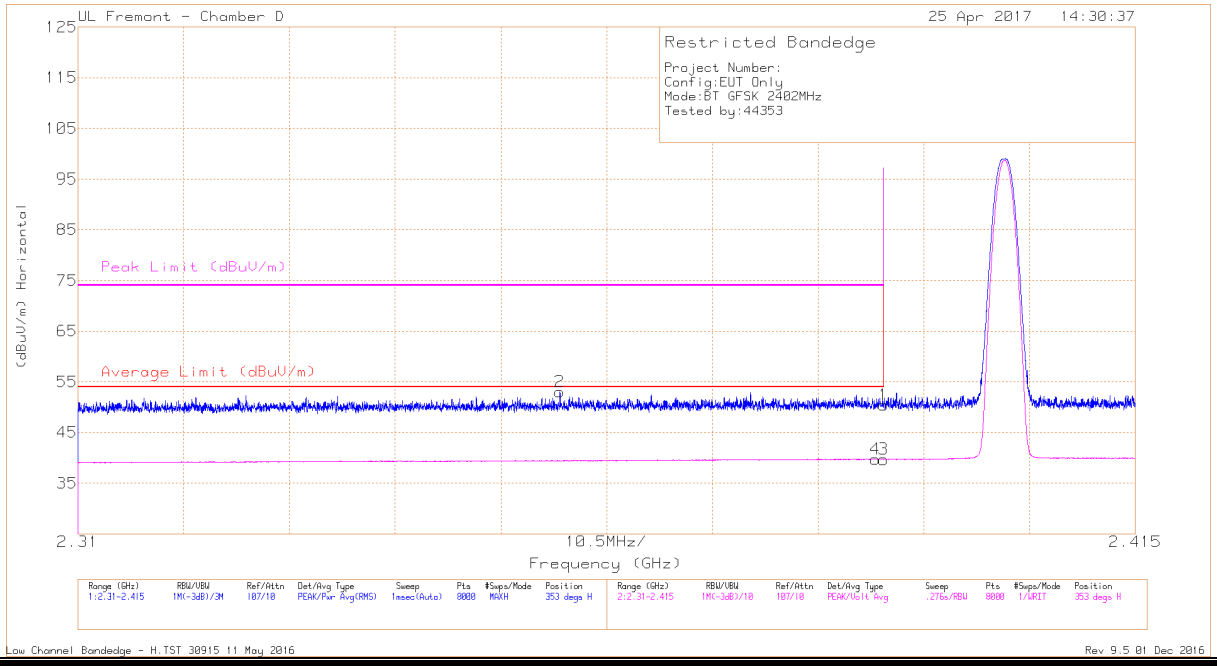
9.8. LAT 3, Plow BASIC DATA RATE GFSK MODULATION

9.8.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.15	Pk	32	-20.7	50.45	-	-	74	-23.55	353	110	H
2	* 2.358	42.04	Pk	31.8	-20.8	53.04	-	-	74	-20.96	353	110	H
3	* 2.39	28.38	VA1T	32	-20.7	39.68	54	-14.32	-	-	353	110	H
4	* 2.389	28.56	VA1T	32	-20.8	39.76	54	-14.24	-	-	353	110	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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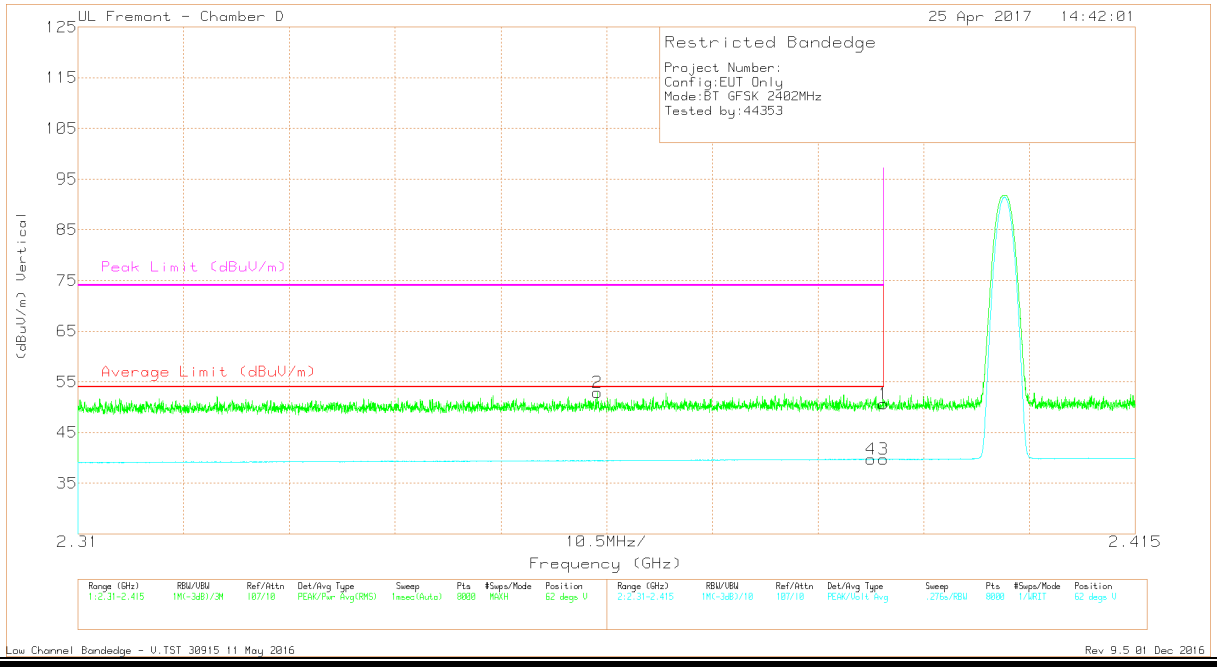
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.34	Pk	32	-20.7	50.64	-	-	74	-23.36	62	291	V
2	* 2.362	41.87	Pk	31.8	-20.8	52.87	-	-	74	-21.13	62	291	V
3	* 2.39	28.4	VA1T	32	-20.7	39.7	54	-14.3	-	-	62	291	V
4	* 2.389	28.54	VA1T	32	-20.8	39.74	54	-14.26	-	-	62	291	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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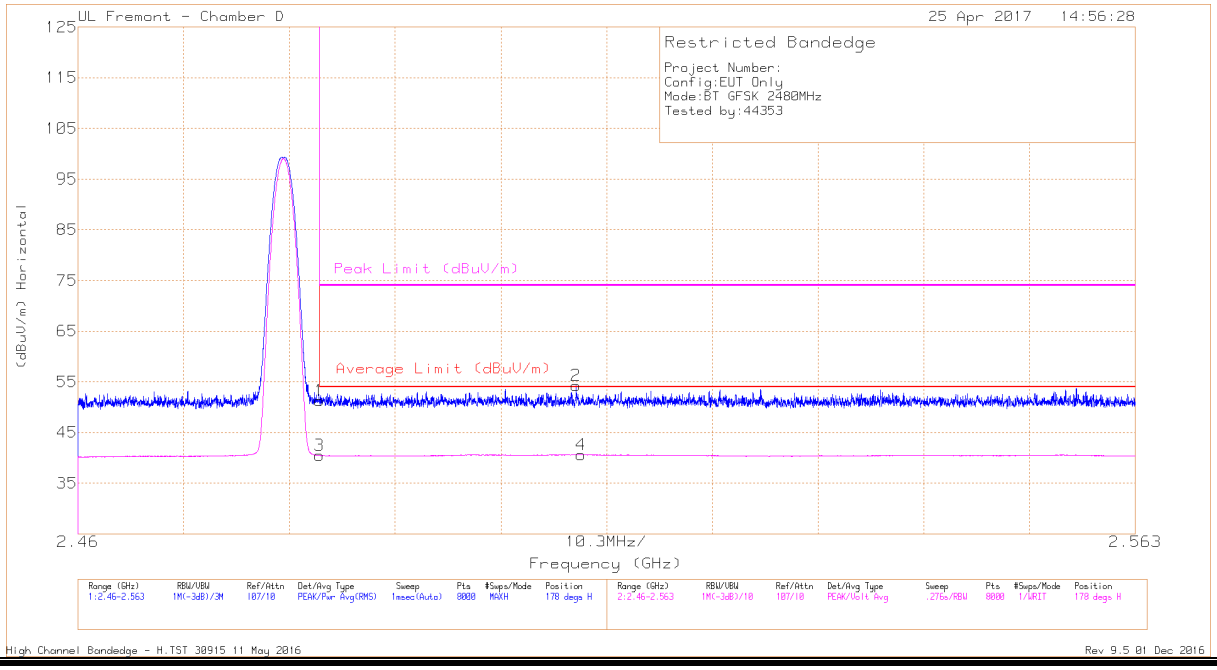
9.8.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.57	Pk	32.5	-20.8	51.27	-	-	74	-22.73	178	106	H
3	* 2.484	28.74	VA1T	32.5	-20.8	40.44	54	-13.56	-	-	178	106	H
2	2.509	42.3	Pk	32.6	-20.6	54.3	-	-	74	-19.7	178	106	H
4	2.509	28.63	VA1T	32.6	-20.6	40.63	54	-13.37	-	-	178	106	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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HIGH CHANNEL VERTICAL

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	39.35	Pk	32.5	-20.8	51.05	-	-	74	-22.95	50	387	V
3	* 2.484	28.6	VA1T	32.5	-20.8	40.3	54	-13.7	-	-	50	387	V
2	2.501	40.66	Pk	32.6	-20.7	52.56	-	-	74	-21.44	50	387	V
4	2.509	28.66	VA1T	32.6	-20.6	40.66	54	-13.34	-	-	50	387	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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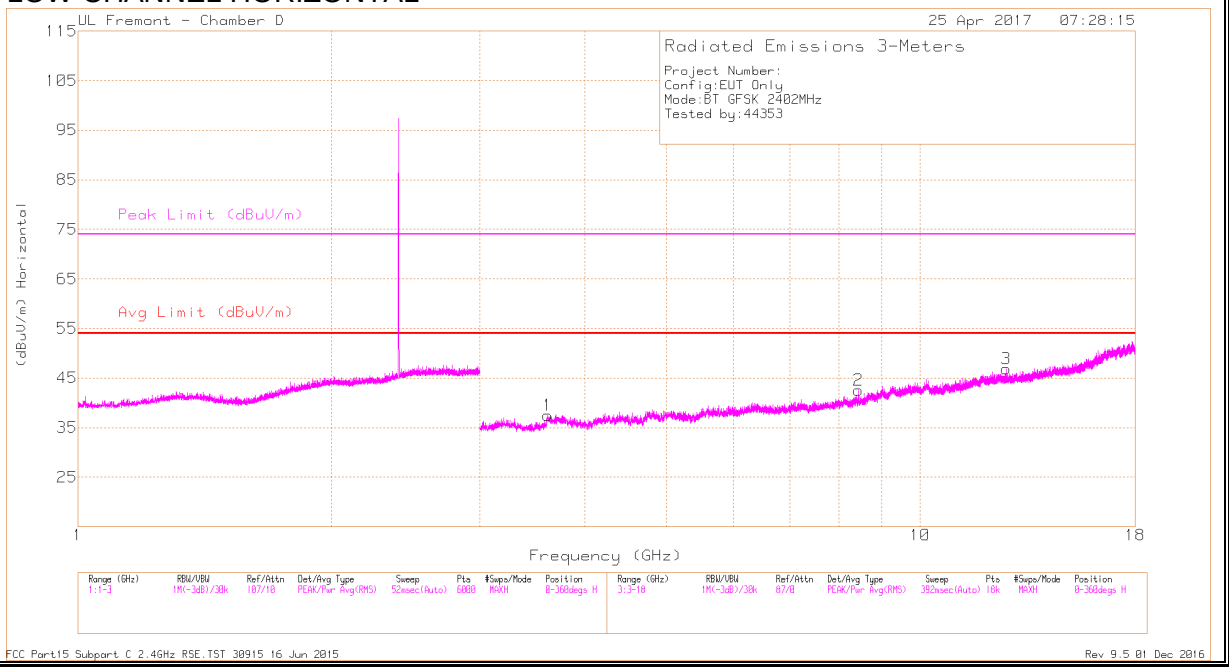
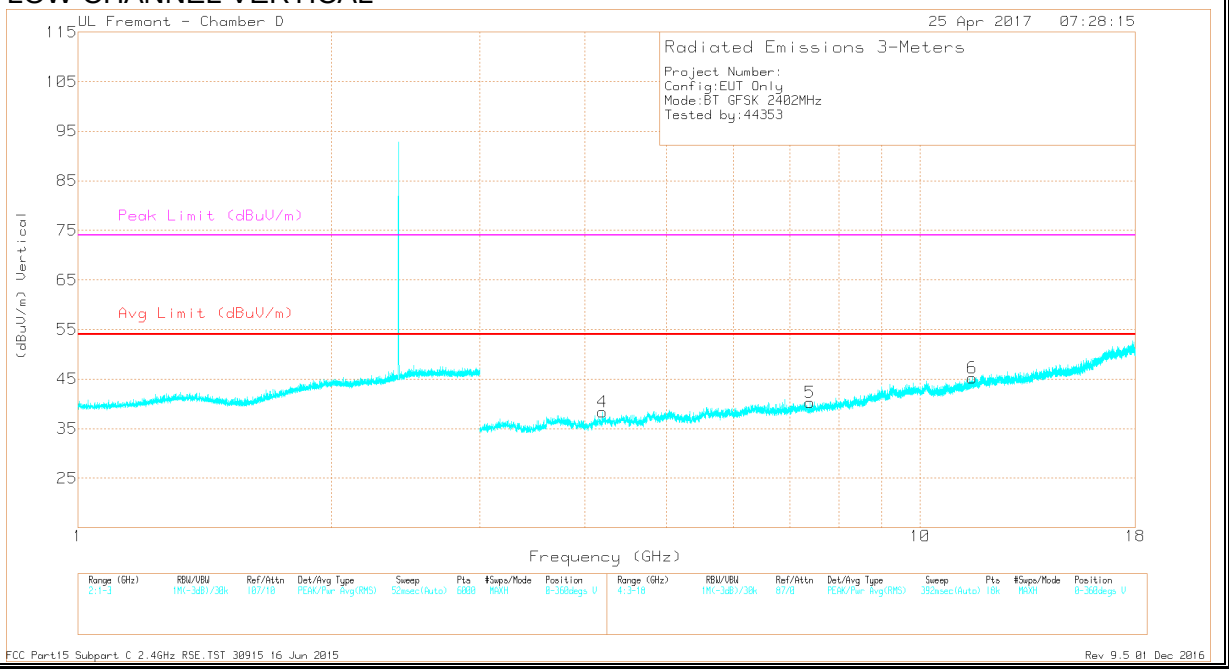
9.8.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.615	37.39	PKFH	33.2	-28.4	42.19	-	-	74	-31.81	331	101	H
	* 3.615	25.61	VA1T	33.2	-28.4	30.41	54	-23.59	-	-	331	101	H
2	* 8.442	34.77	PKFH	36	-23.5	47.27	-	-	74	-26.73	118	240	H
	* 8.442	22.77	VA1T	36	-23.5	35.27	54	-18.73	-	-	118	240	H
3	* 12.656	33.99	PKFH	39.2	-21.2	51.99	-	-	74	-22.01	227	266	H
	* 12.658	21.92	VA1T	39.2	-21.2	39.92	54	-14.08	-	-	227	266	H
4	* 4.193	37.34	PKFH	33.5	-27.7	43.14	-	-	74	-30.86	169	301	V
	* 4.194	25.04	VA1T	33.5	-27.7	30.84	54	-23.16	-	-	169	301	V
5	* 7.398	34.13	PKFH	35.6	-25	44.73	-	-	74	-29.27	264	116	V
	* 7.395	22.95	VA1T	35.6	-25	33.55	54	-20.45	-	-	264	116	V
6	* 11.526	33.73	PKFH	38.4	-20.7	51.43	-	-	74	-22.57	153	297	V
	* 11.526	21.51	VA1T	38.4	-20.7	39.21	54	-14.79	-	-	153	297	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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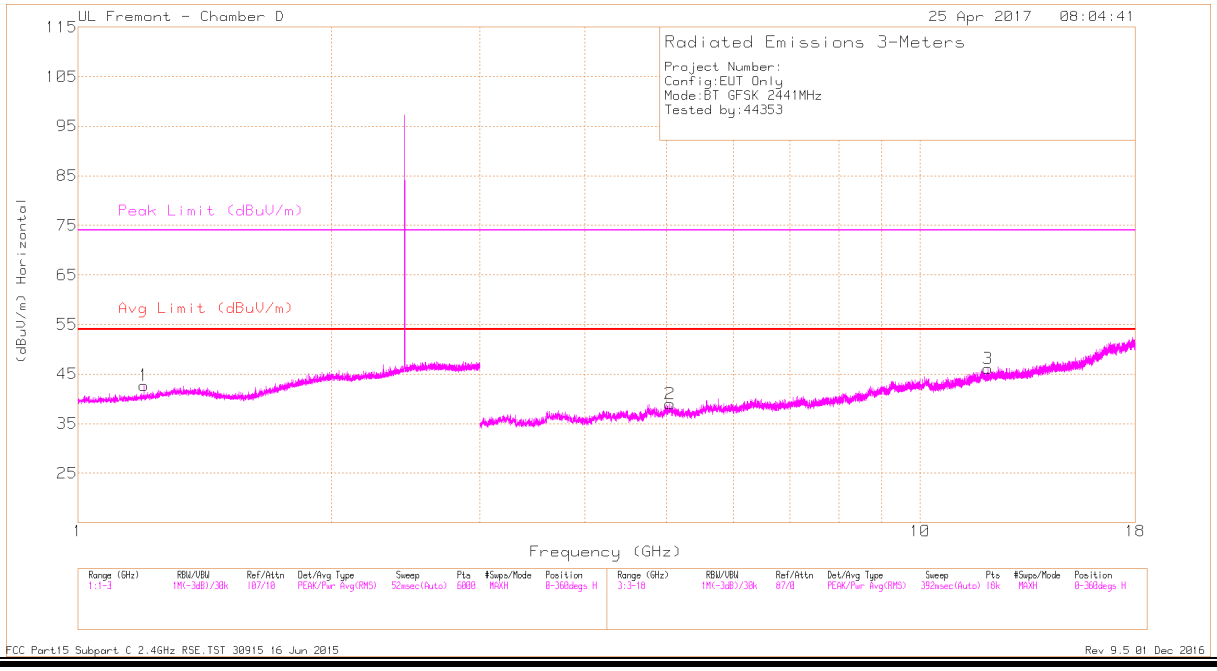
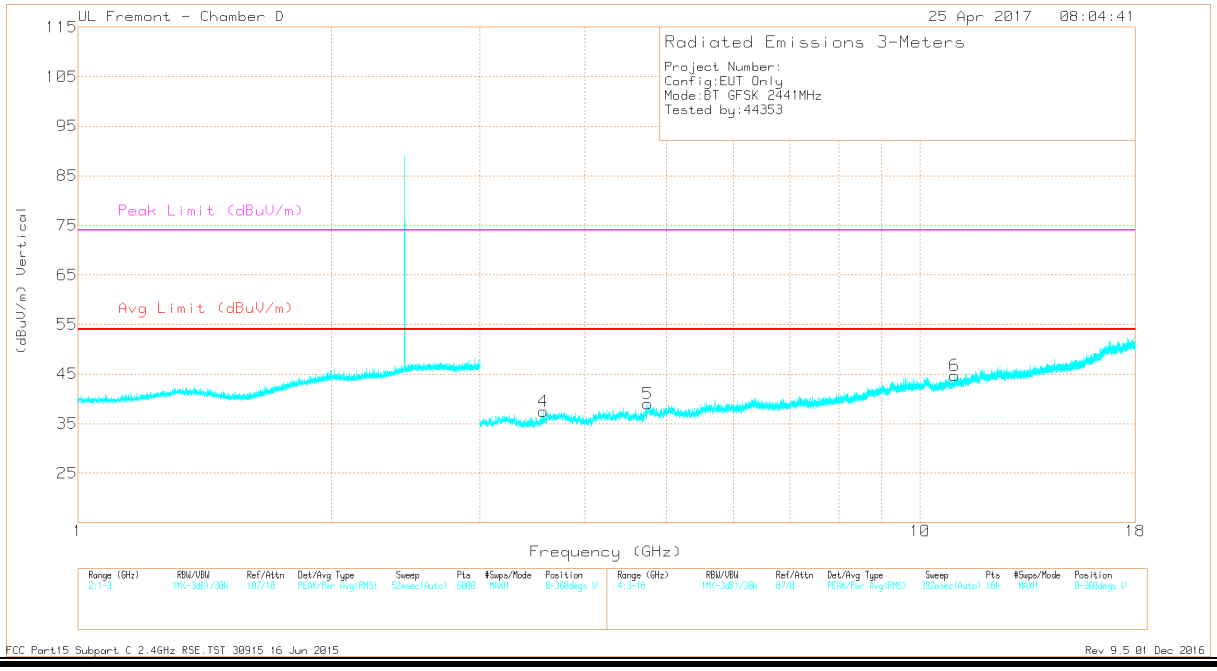
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.198	41.52	PKFH	28.4	-22.4	47.52	-	-	74	-26.48	136	209	H
	* 1.199	28.97	VA1T	28.4	-22.4	34.97	54	-19.03	-	-	136	209	H
2	* 5.045	36.74	PKFH	34.3	-26.6	44.44	-	-	74	-29.56	27	124	H
	* 5.046	24.92	VA1T	34.3	-26.7	32.52	54	-21.48	-	-	27	124	H
3	* 12.024	33.55	PKFH	38.9	-21.2	51.25	-	-	74	-22.75	312	108	H
	* 12.026	21.79	VA1T	38.9	-21.2	39.49	54	-14.51	-	-	312	108	H
4	* 3.566	37.15	PKFH	33.1	-28.1	42.15	-	-	74	-31.85	255	276	V
	* 3.566	25.68	VA1T	33.1	-28.1	30.68	54	-23.32	-	-	255	276	V
5	* 4.75	37.57	PKFH	34	-26.5	45.07	-	-	74	-28.93	204	168	V
	* 4.75	25.41	VA1T	34	-26.5	32.91	54	-21.09	-	-	204	168	V
6	* 10.986	32.77	PKFH	37.5	-21	49.27	-	-	74	-24.73	299	192	V
	* 10.986	21.29	VA1T	37.5	-21	37.79	54	-16.21	-	-	299	192	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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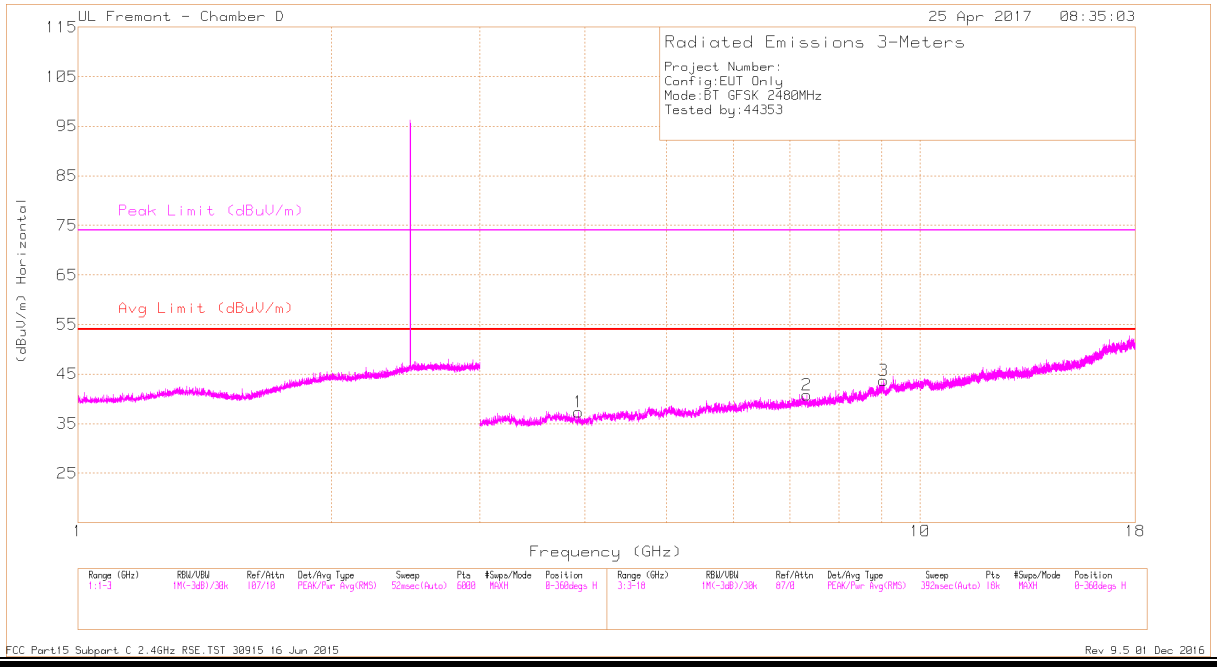
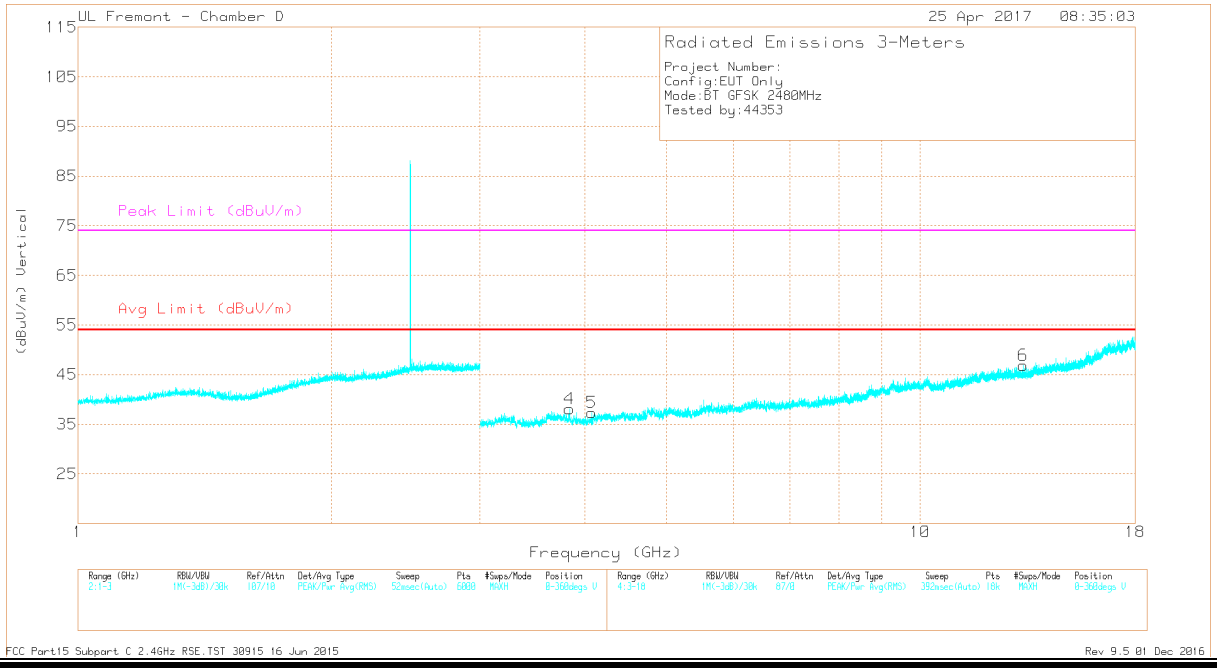
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.927	38.07	PKFH	33.2	-28.1	43.17	-	-	74	-30.83	95	217	H
	* 3.93	25.82	VA1T	33.2	-28.1	30.92	54	-23.08	-	-	95	217	H
2	* 7.34	35.78	PKFH	35.7	-24.9	46.58	-	-	74	-27.42	249	124	H
	* 7.339	23.43	VA1T	35.7	-24.9	34.23	54	-19.77	-	-	249	124	H
3	* 9.048	33.32	PKFH	36.7	-21.6	48.42	-	-	74	-25.58	116	274	H
	* 9.049	21.53	VA1T	36.7	-21.6	36.63	54	-17.37	-	-	116	274	H
4	* 3.831	38.09	PKFH	33.2	-28.5	42.79	-	-	74	-31.21	179	351	V
	* 3.834	26.34	VA1T	33.2	-28.6	30.94	54	-23.06	-	-	179	351	V
5	* 4.07	37.67	PKFH	33.4	-28.7	42.37	-	-	74	-31.63	229	102	V
	* 4.07	25.15	VA1T	33.4	-28.6	29.95	54	-24.05	-	-	229	102	V
6	* 13.254	34.8	PKFH	39.3	-22	52.1	-	-	74	-21.9	188	250	V
	* 13.253	22.77	VA1T	39.3	-22	40.07	54	-13.93	-	-	188	250	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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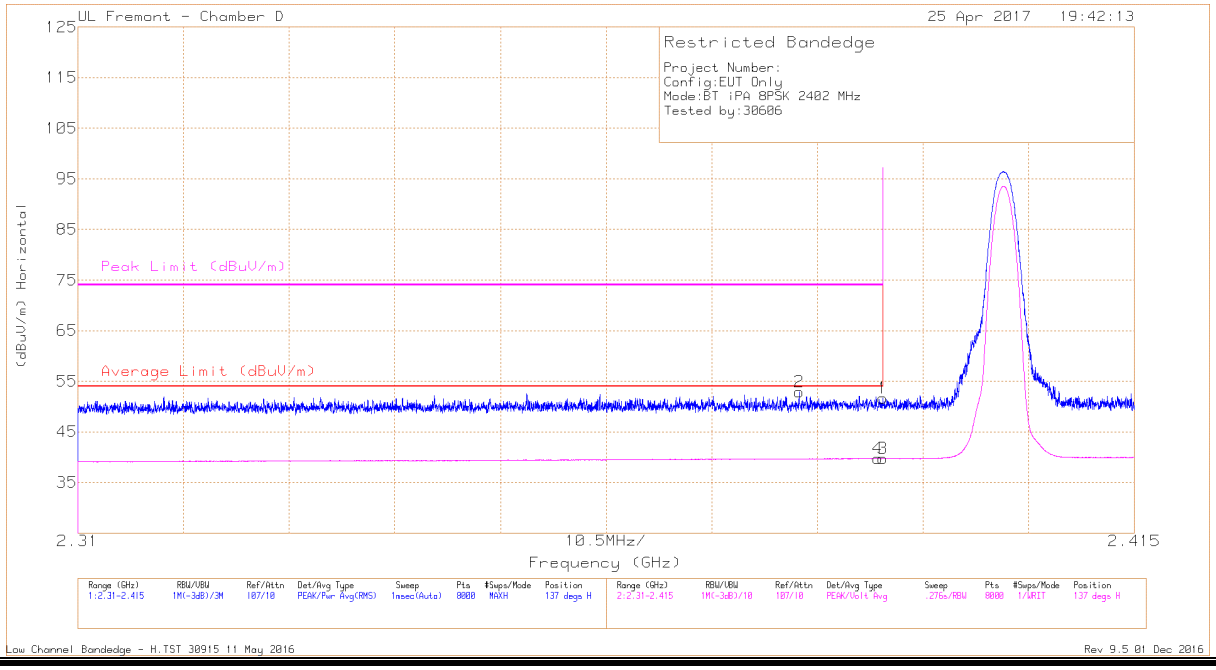
9.9. LAT 3, Plow ENHANCED DATA RATE 8PSK MODULATION

9.9.1. RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.382	41.79	Pk	31.9	-20.8	52.89	-	-	74	-21.11	137	110	H
1	* 2.39	40.41	Pk	32	-20.7	51.71	-	-	74	-22.29	137	110	H
3	* 2.39	28.44	VA1T	32	-20.7	39.74	54	-14.26	-	-	137	110	H
4	* 2.39	28.57	VA1T	32	-20.8	39.77	54	-14.23	-	-	137	110	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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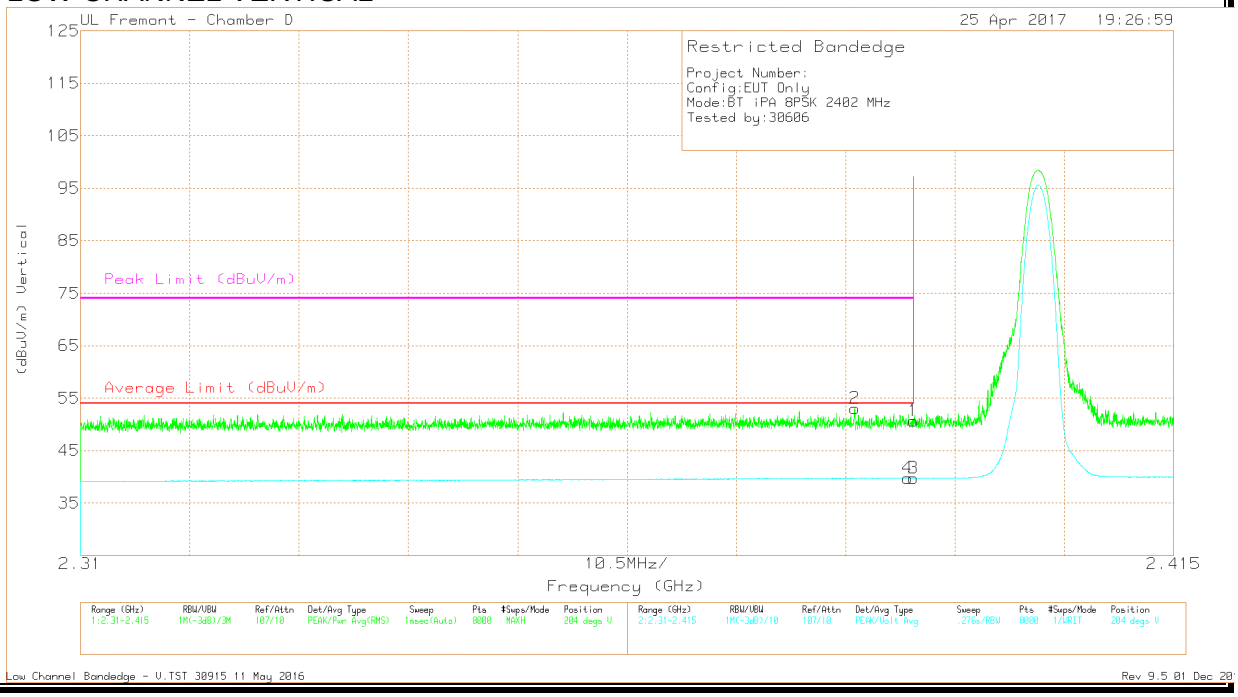
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.384	41.78	Pk	32	-20.8	52.98	-	-	74	-21.02	204	199	V
4	* 2.389	28.57	VA1T	32	-20.8	39.77	54	-14.23	-	-	204	199	V
1	* 2.39	39.41	Pk	32	-20.7	50.71	-	-	74	-23.29	204	199	V
3	* 2.39	28.41	VA1T	32	-20.7	39.71	54	-14.29	-	-	204	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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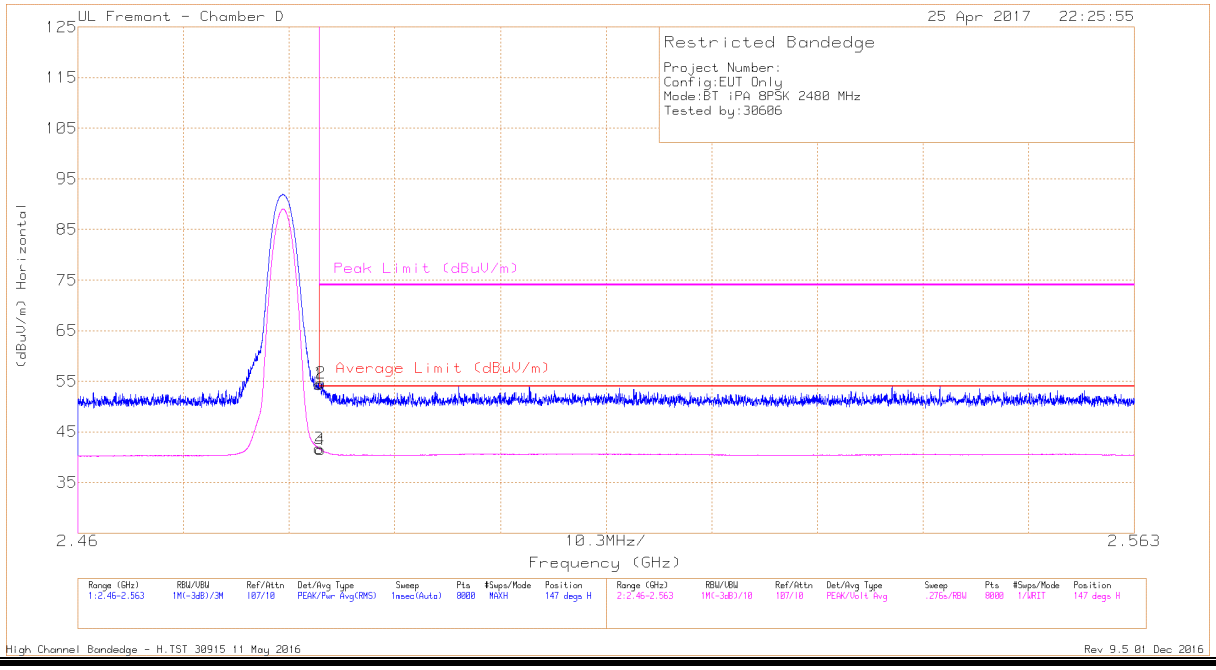
9.9.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	42.66	Pk	32.5	-20.8	54.36	-	-	74	-19.64	147	118	H
2	* 2.484	42.96	Pk	32.5	-20.8	54.66	-	-	74	-19.34	147	118	H
3	* 2.484	30	VA1T	32.5	-20.8	41.7	54	-12.3	-	-	147	117	H
4	* 2.484	29.82	VA1T	32.5	-20.8	41.52	54	-12.48	-	-	147	117	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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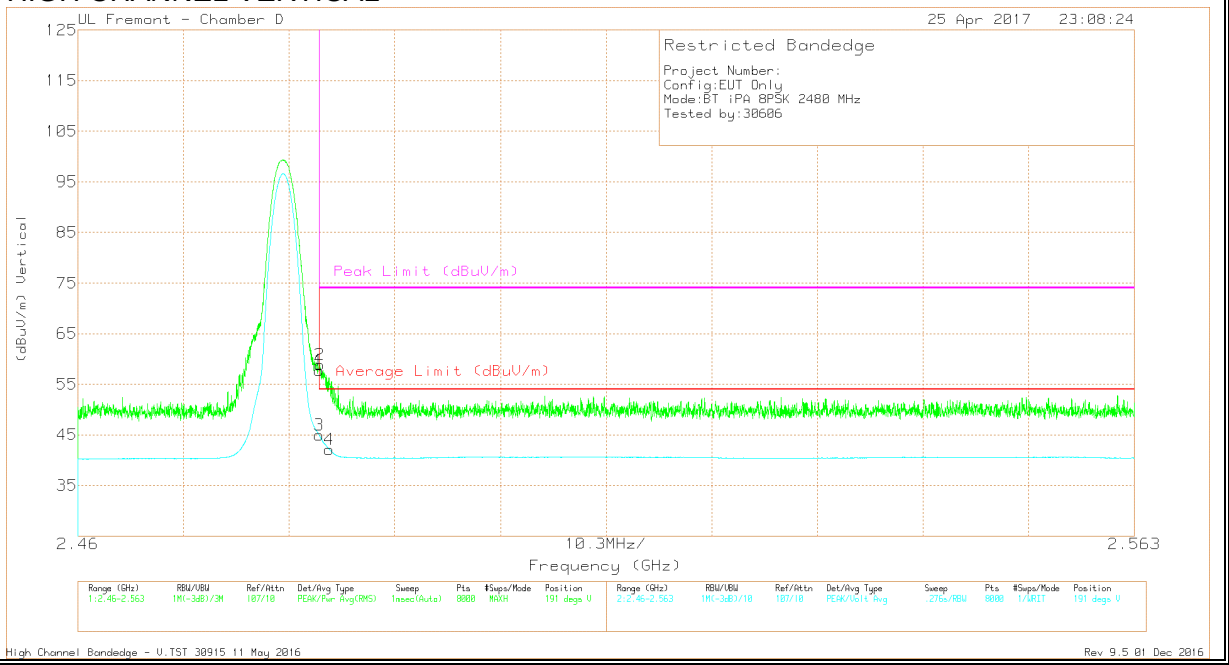
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl /Fltr/Pad (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	46.09	Pk	32.5	-20.8	57.79	-	-	74	-16.21	191	185	V
2	* 2.484	47.21	Pk	32.5	-20.8	58.91	-	-	74	-15.09	191	185	V
3	* 2.484	33.27	VA1T	32.5	-20.8	44.97	54	-9.03	-	-	191	185	V
4	* 2.485	30.39	VA1T	32.5	-20.8	42.09	54	-11.91	-	-	191	185	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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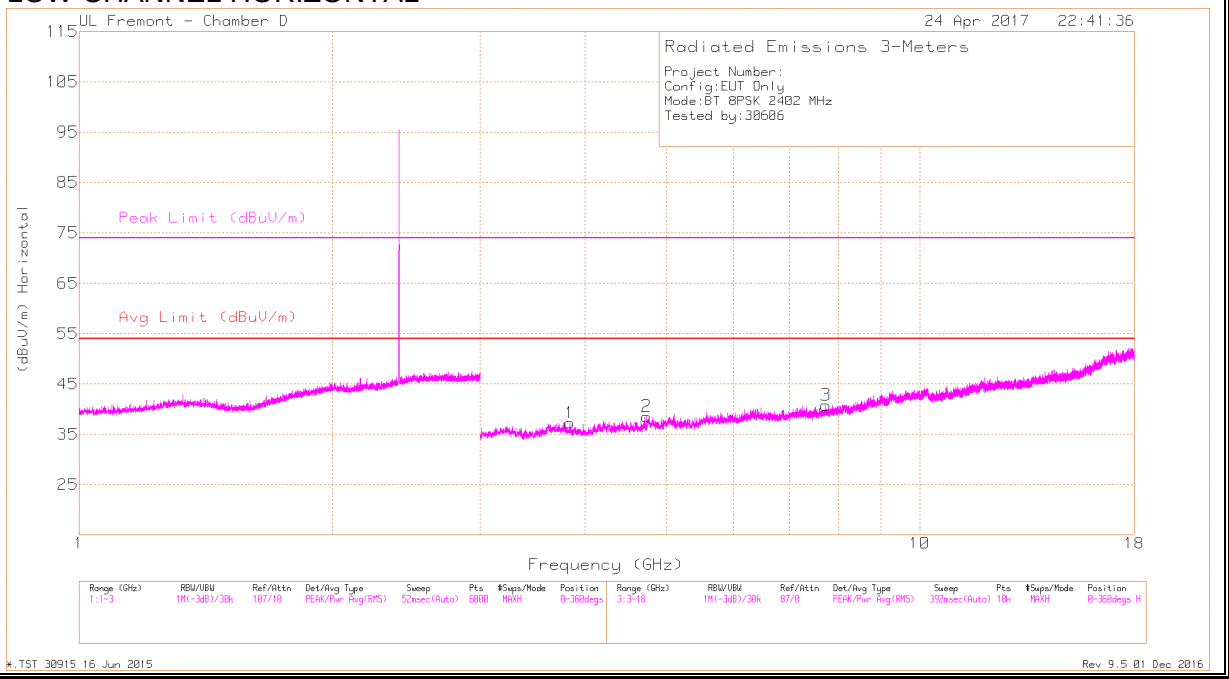
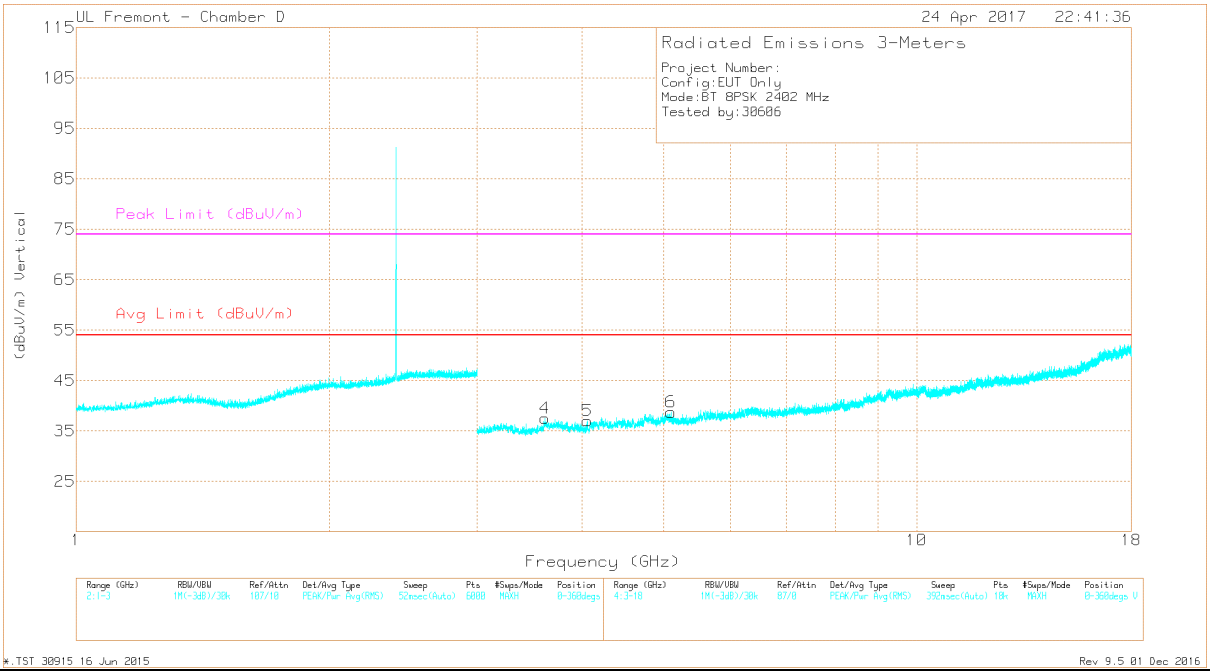
9.9.3. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.835	38.67	PKFH	33.2	-28.6	43.27	-	-	74	-30.73	198	200	H
	* 3.834	26.26	VA1T	33.2	-28.6	30.86	54	-23.14	-	-	198	200	H
2	* 4.734	37.55	PKFH	34	-27	44.55	-	-	74	-29.45	318	103	H
	* 4.735	25	VA1T	34	-26.9	32.1	54	-21.9	-	-	318	103	H
3	* 7.735	34.9	PKFH	35.8	-24.5	46.2	-	-	74	-27.8	249	103	H
	* 7.733	23.11	VA1T	35.8	-24.5	34.41	54	-19.59	-	-	249	103	H
4	* 3.613	37.46	PKFH	33.2	-28.3	42.36	-	-	74	-31.64	322	201	V
	* 3.616	25.65	VA1T	33.2	-28.4	30.45	54	-23.55	-	-	322	201	V
5	* 4.058	37.69	PKFH	33.4	-28.4	42.69	-	-	74	-31.31	343	102	V
	* 4.057	25.45	VA1T	33.4	-28.4	30.45	54	-23.55	-	-	343	102	V
6	* 5.103	36.8	PKFH	34.3	-27.1	44	-	-	74	-30	229	102	V
	* 5.104	25.35	VA1T	34.3	-27.1	32.55	54	-21.45	-	-	229	102	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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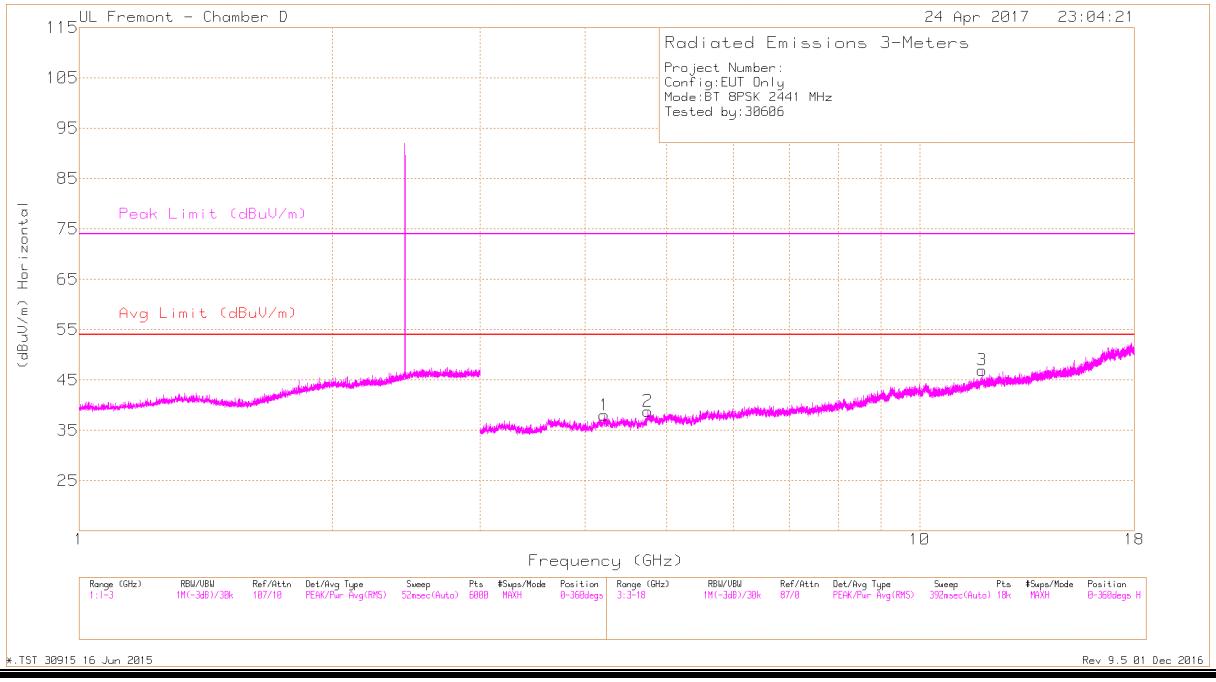
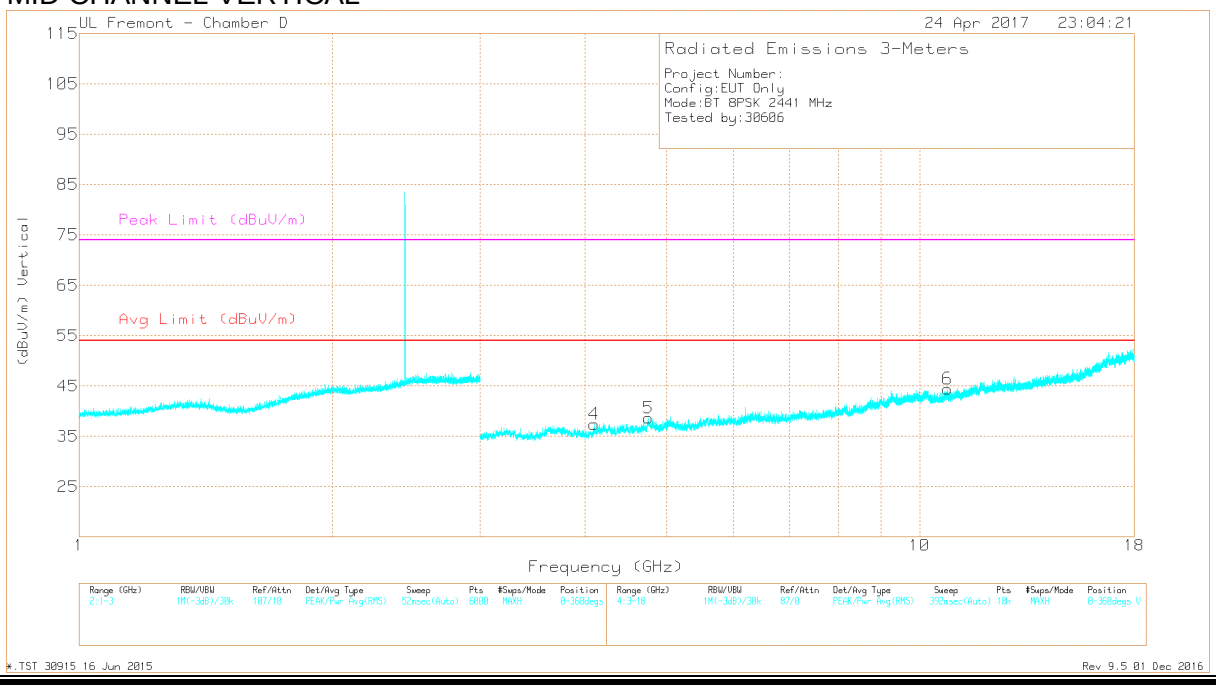
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.215	37.44	PKFH	33.5	-27.5	43.44	-	-	74	-30.56	256	200	H
	* 4.215	25.09	VA1T	33.5	-27.5	31.09	54	-22.91	-	-	256	200	H
2	* 4.749	36.94	PKFH	34	-26.5	44.44	-	-	74	-29.56	0	200	H
	* 4.748	25.41	VA1T	34	-26.5	32.91	54	-21.09	-	-	0	200	H
3	* 11.857	33.64	PKFH	38.8	-20.4	52.04	-	-	74	-21.96	71	103	H
	* 11.857	21.42	VA1T	38.8	-20.4	39.82	54	-14.18	-	-	71	103	H
4	* 4.098	37.64	PKFH	33.5	-28	43.14	-	-	74	-30.86	329	259	V
	* 4.098	25.39	VA1T	33.5	-28	30.89	54	-23.11	-	-	329	259	V
5	* 4.758	37.56	PKFH	34	-26.6	44.96	-	-	74	-29.04	256	397	V
	* 4.755	25.43	VA1T	34	-26.6	32.83	54	-21.17	-	-	256	397	V
6	* 10.79	33.24	PKFH	37.3	-20.2	50.34	-	-	74	-23.66	149	247	V
	* 10.791	20.91	VA1T	37.3	-20.2	38.01	54	-15.99	-	-	149	247	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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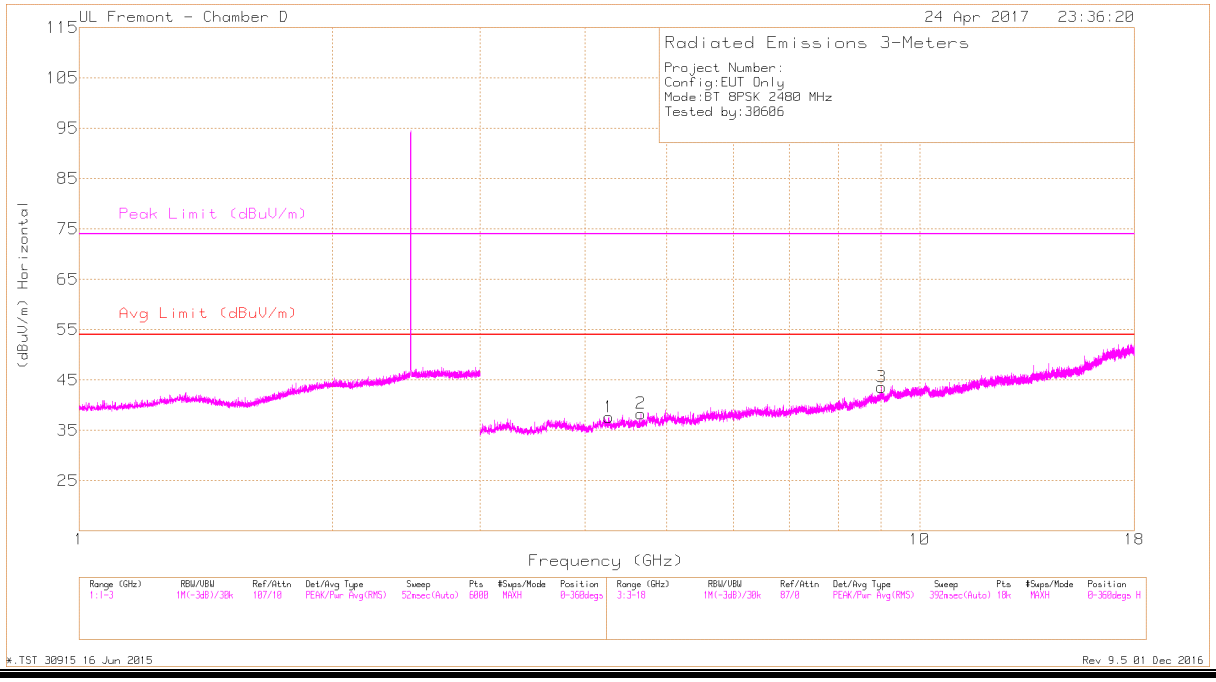
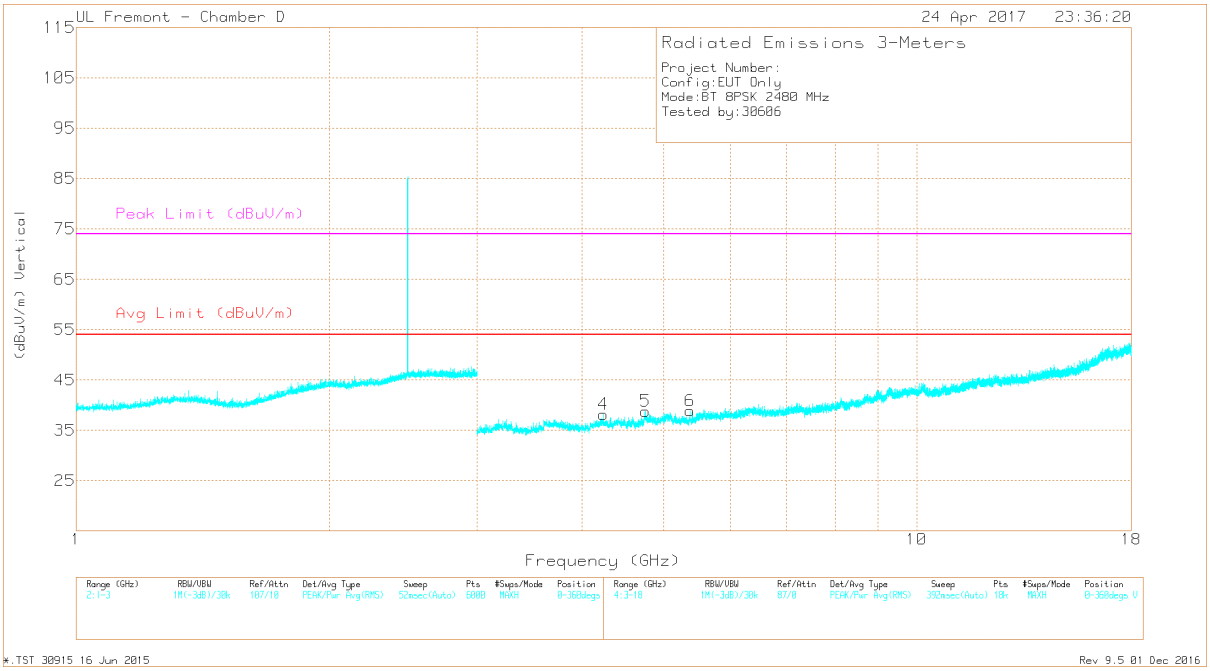
HIGH CHANNEL HORIZONTAL



HIGH C



HANNEL VERTICAL

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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.265	37.43	PKFH	33.5	-27.7	43.23	-	-	74	-30.77	235	257	H
	* 4.266	25.28	VA1T	33.5	-27.7	31.08	54	-22.92	-	-	235	257	H
2	* 4.662	37.31	PKFH	34	-28.1	43.21	-	-	74	-30.79	319	113	H
	* 4.663	25.81	VA1T	34	-28.1	31.71	54	-22.29	-	-	319	113	H
3	* 9.011	33.85	PKFH	36.7	-21.4	49.15	-	-	74	-24.85	333	172	H
	* 9.01	21.73	VA1T	36.7	-21.4	37.03	54	-16.97	-	-	333	172	H
4	* 4.238	36.17	PKFH	33.5	-27.5	42.17	-	-	74	-31.83	36	359	V
	* 4.238	24.81	VA1T	33.5	-27.5	30.81	54	-23.19	-	-	36	359	V
5	* 4.754	37.5	PKFH	34	-26.5	45	-	-	74	-29	109	305	V
	* 4.756	25.43	VA1T	34	-26.6	32.83	54	-21.17	-	-	109	305	V
6	* 5.379	36.87	PKFH	34.6	-27.6	43.87	-	-	74	-30.13	170	146	V
	* 5.376	25	VA1T	34.6	-27.5	32.1	54	-21.9	-	-	170	146	V

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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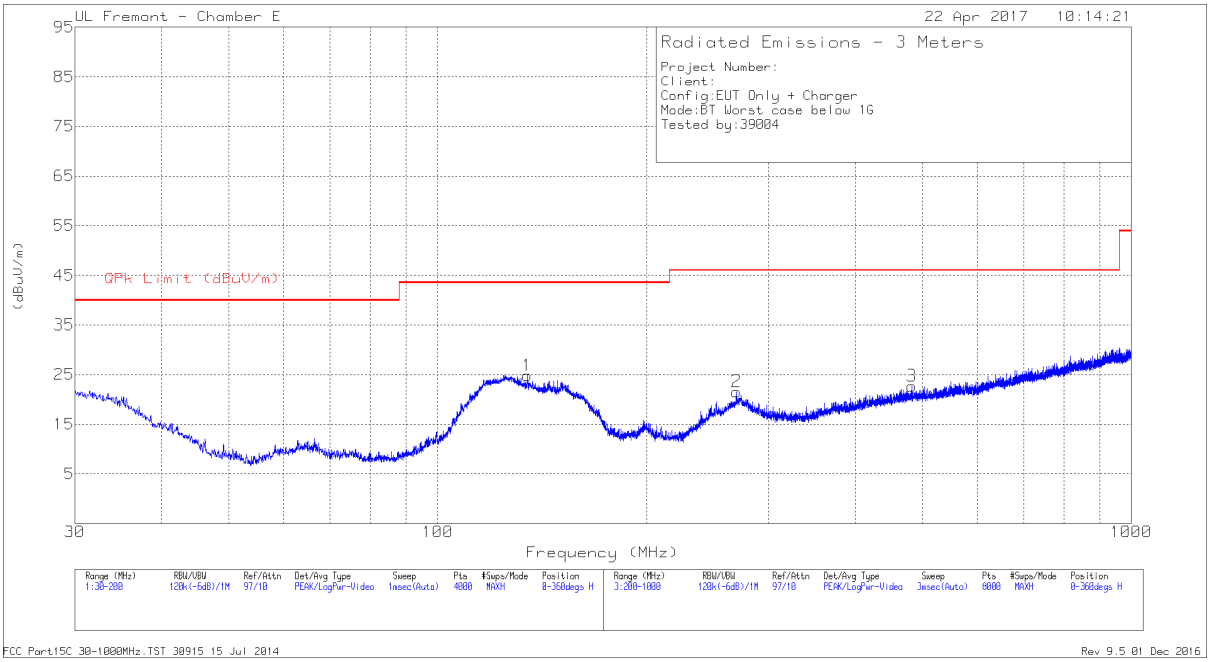
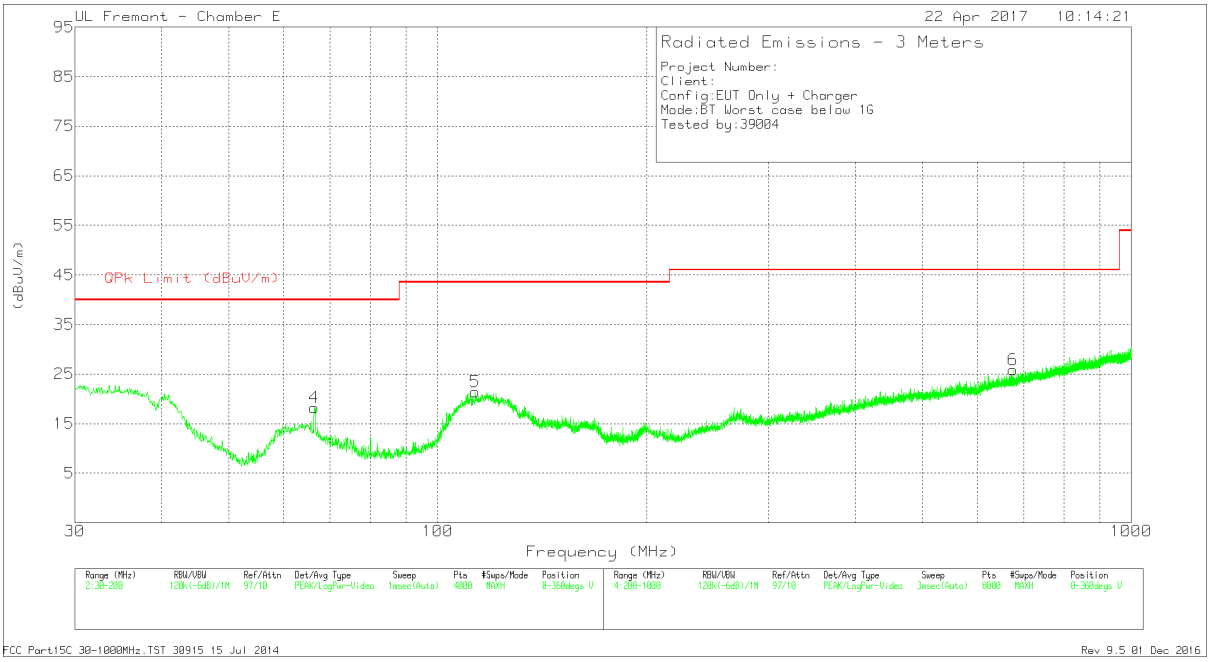
9.10. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T899 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 134.7046	37.91	Pk	17.5	-30.6	24.81	43.52	-18.71	0-360	200	H
5	* 113.279	34.98	Pk	17.1	-30.7	21.38	43.52	-22.14	0-360	100	V
2	* 270.0091	33.9	Pk	17.2	-29.5	21.6	46.02	-24.42	0-360	99	H
4	66.3894	37.34	Pk	12.1	-31.2	18.24	40	-21.76	0-360	100	V
3	482.3367	29.54	Pk	21.5	-28.3	22.74	46.02	-23.28	0-360	99	H
6	675.3618	29.53	Pk	23.7	-27.4	25.83	46.02	-20.19	0-360	100	V

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

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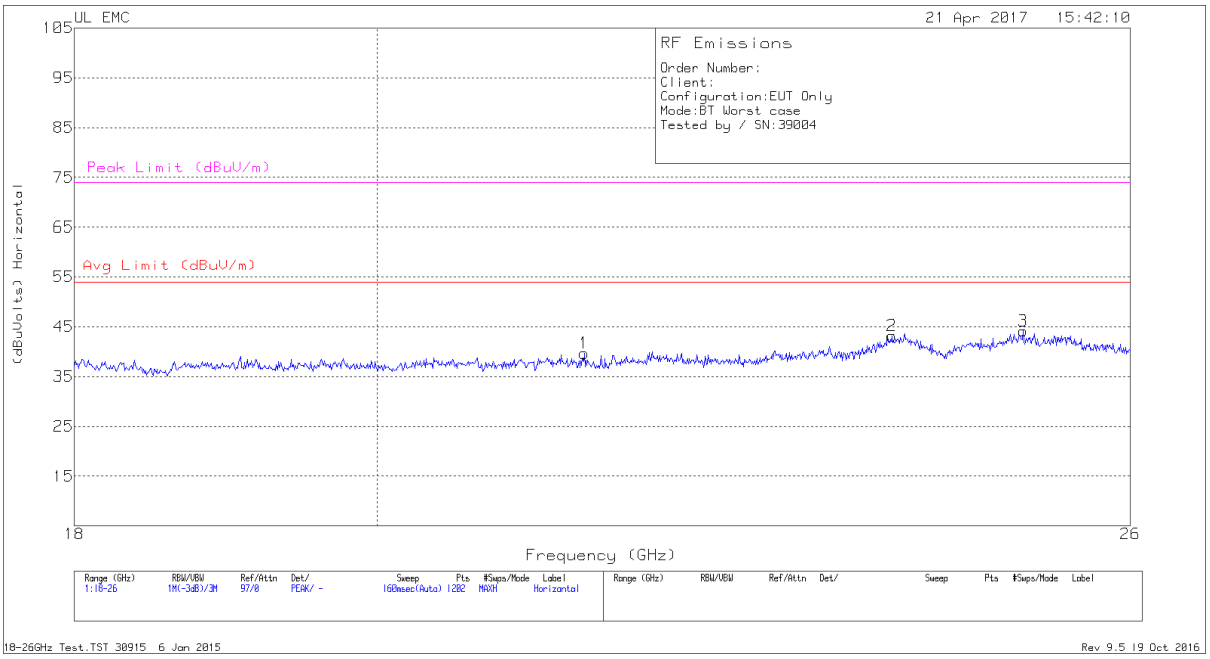
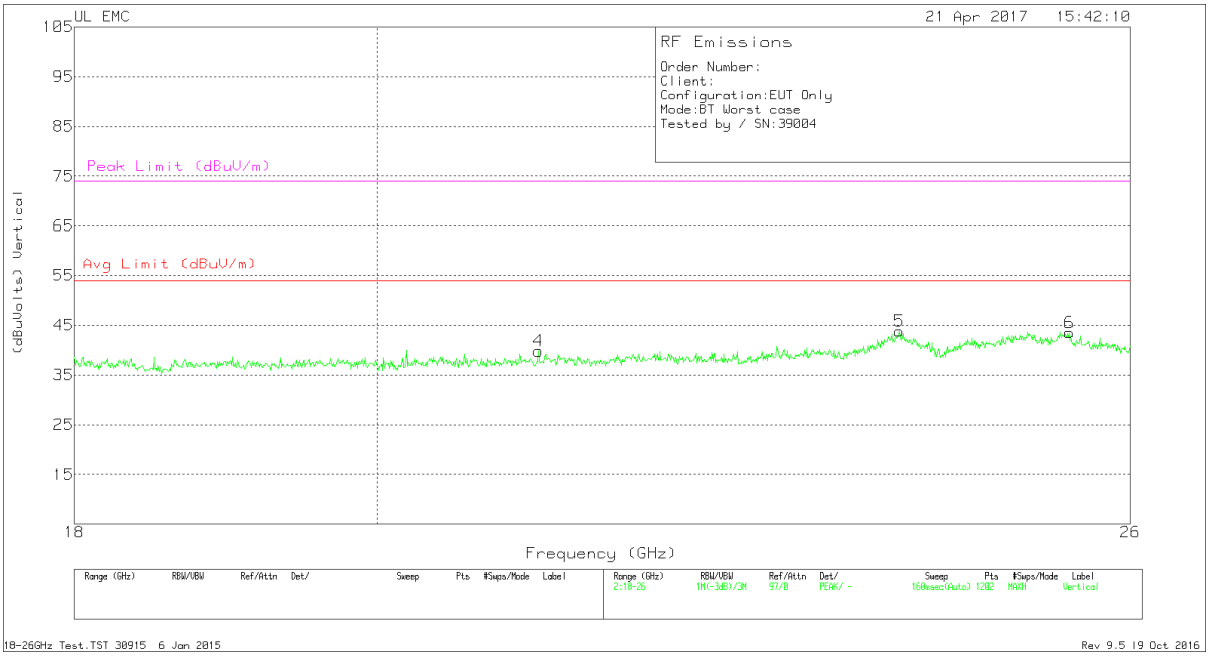
9.11. WORST-CASE ABOVE 18 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



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Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	21.497	41.37	Pk	33.2	-25.4	-9.5	39.67	54	-14.33	74	-34.33
2	23.928	42.67	Pk	34	-24	-9.5	43.17	54	-10.83	74	-30.83
3	25.047	44.07	Pk	34.3	-24.7	-9.5	44.17	54	-9.83	74	-29.83
4	21.157	41.43	Pk	33.1	-25.2	-9.5	39.84	54	-14.16	74	-34.16
5	23.988	43.63	Pk	34	-24.3	-9.5	43.84	54	-10.16	74	-30.16
6	25.454	43.1	Pk	34.4	-24.5	-9.5	43.50	54	-10.5	74	-30.5

Pk - Peak detector

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

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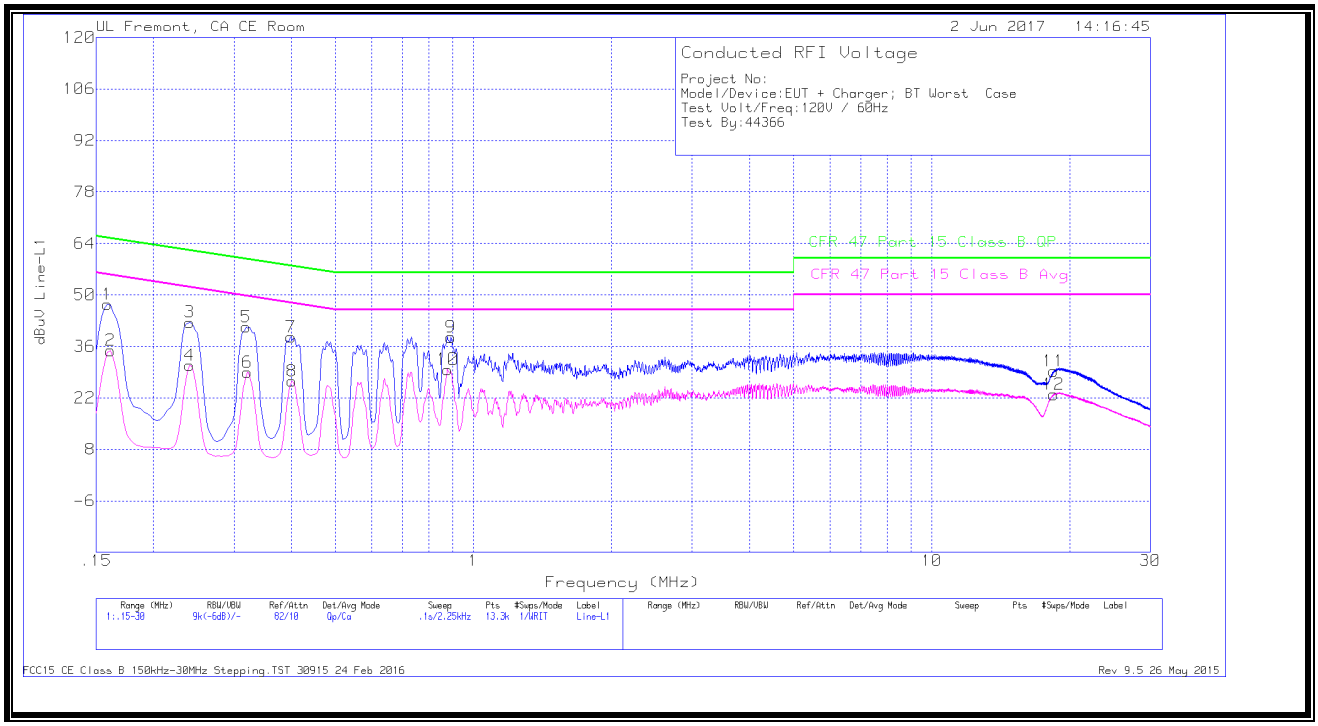
10.1. EUT POWERED BY AC/DC ADAPTER VIA USB CABLE

LINE 1 RESULTS



WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.159	37.2	Qp	0	.1	10.1	47.4	65.52	-18.12	-	-
2	.16125	24.68	Ca	0	.1	10.1	34.88	-	-	55.4	-20.52
3	.24	32.37	Qp	0	.1	10.1	42.57	62.1	-19.53	-	-
4	.24	20.61	Ca	0	.1	10.1	30.81	-	-	52.1	-21.29
5	.31875	31.1	Qp	0	.1	10.1	41.3	59.74	-18.44	-	-
6	.321	18.74	Ca	0	.1	10.1	28.94	-	-	49.68	-20.74
7	.39975	28.36	Qp	0	.1	10.1	38.56	57.86	-19.3	-	-
8	.402	16.37	Ca	0	.1	10.1	26.57	-	-	47.81	-21.24
9	.8925	28.28	Qp	0	.1	10.1	38.48	56	-17.52	-	-
10	.879	19.51	Ca	0	.1	10.1	29.71	-	-	46	-16.29
11	18.4515	18.66	Qp	0	.3	10.3	29.26	60	-30.74	-	-
12	18.4549	12.31	Ca	0	.3	10.3	22.91	-	-	50	-27.09

Qp - Quasi-Peak detector

Ca - CISPR average detection

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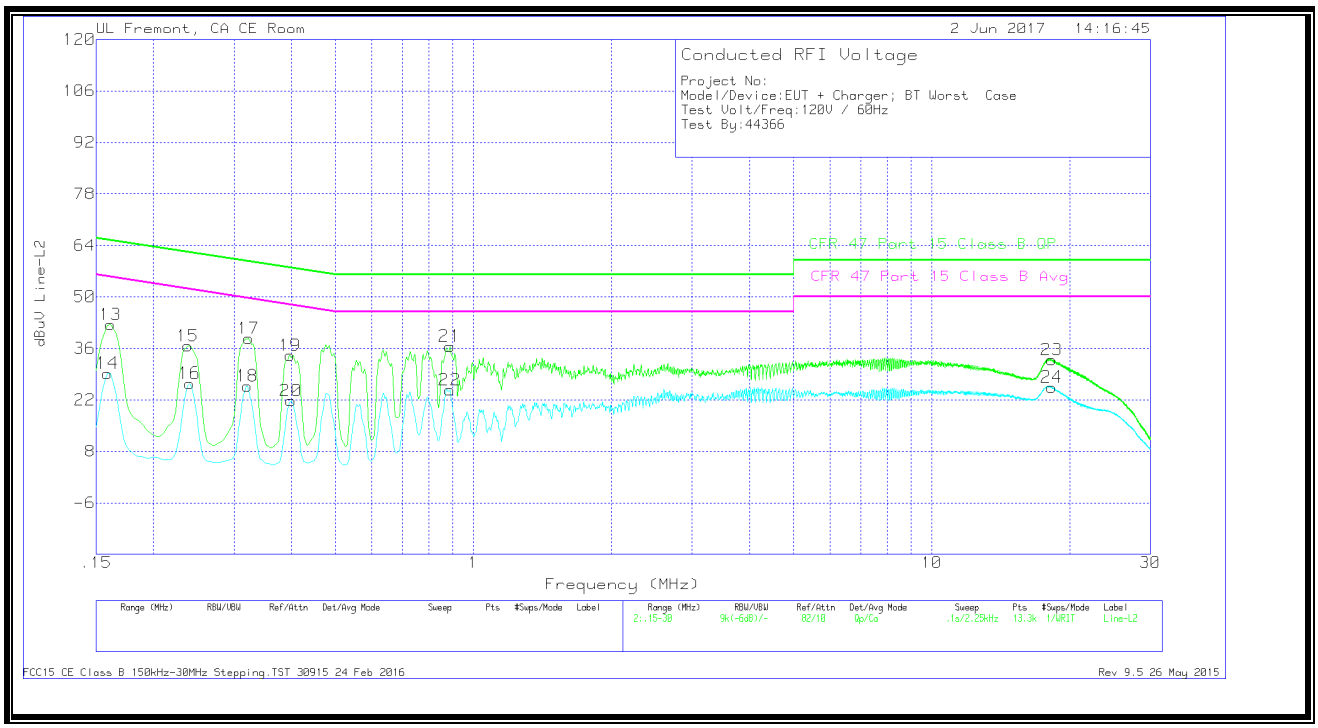
LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.16125	32.29	Qp	0	.1	10.1	42.49	65.4	-22.91	-	-
14	.159	19	Ca	0	.1	10.1	29.2	-	-	55.52	-26.32
15	.23775	26.48	Qp	0	.1	10.1	36.68	62.17	-25.49	-	-
16	.24	16.25	Ca	0	.1	10.1	26.45	-	-	52.1	-25.65
17	.32325	28.53	Qp	0	.1	10.1	38.73	59.62	-20.89	-	-
18	.321	15.54	Ca	0	.1	10.1	25.74	-	-	49.68	-23.94
19	.3975	23.86	Qp	0	.1	10.1	34.06	57.91	-23.85	-	-
20	.39975	11.59	Ca	0	.1	10.1	21.79	-	-	47.86	-26.07
21	.888	26.35	Qp	0	.1	10.1	36.55	56	-19.45	-	-
22	.888	14.47	Ca	0	.1	10.1	24.67	-	-	46	-21.33
23	18.2828	22.26	Qp	0	.3	10.3	32.86	60	-27.14	-	-
24	18.2715	14.81	Ca	0	.3	10.3	25.41	-	-	50	-24.59

Qp - Quasi-Peak detector

Ca - CISPR average detection

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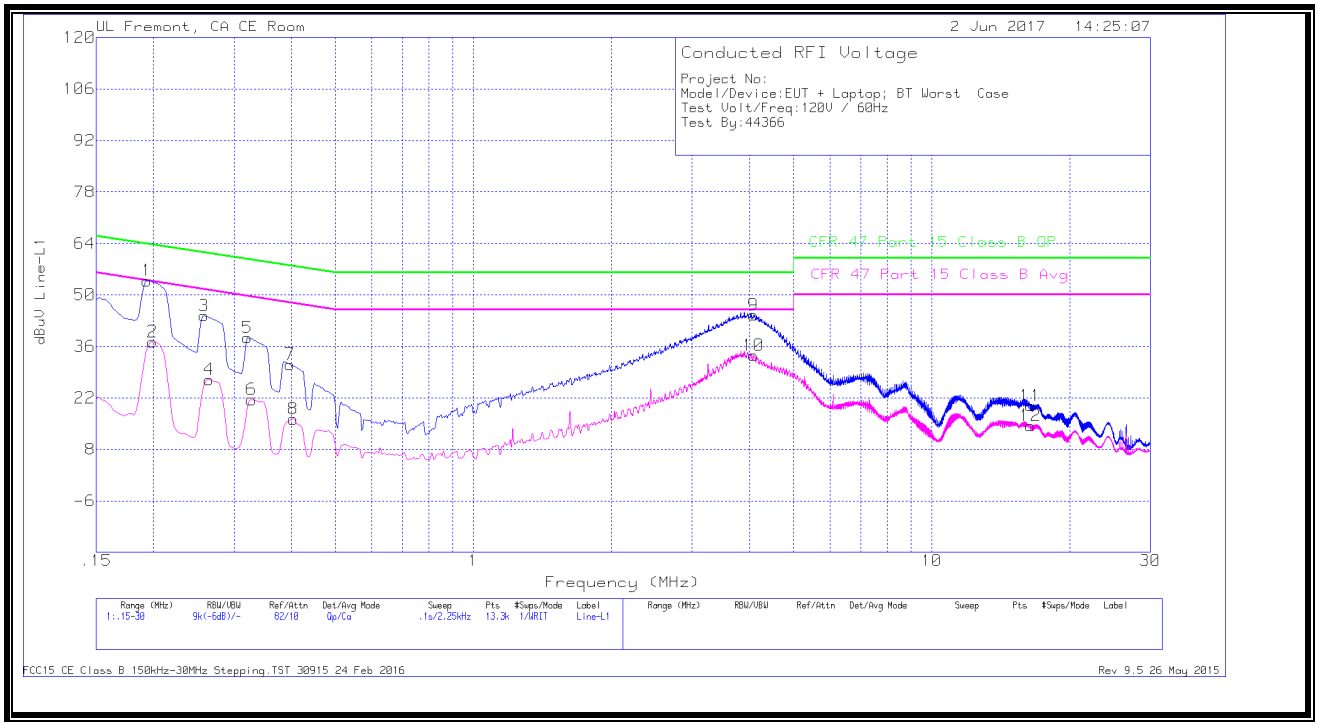
10.2. EUT POWERED BY HOST PC VIA USB CABLE

LINE 1 RESULTS



WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.19388	43.76	Qp	0	0	10.1	53.86	63.87	-10.01	-	-
2	.1995	27.02	Ca	0	.1	10.1	37.22	-	-	53.63	-16.41
3	.258	34.17	Qp	0	.1	10.1	44.37	61.5	-17.13	-	-
4	.26475	16.78	Ca	0	.1	10.1	26.98	-	-	51.28	-24.3
5	.321	28.17	Qp	0	.1	10.1	38.37	59.68	-21.31	-	-
6	.32775	11.34	Ca	0	.1	10.1	21.54	-	-	49.51	-27.97
7	.3975	20.87	Qp	0	.1	10.1	31.07	57.91	-26.84	-	-
8	.40425	6.06	Ca	0	.1	10.1	16.26	-	-	47.77	-31.51
9	4.0875	34.3	Qp	0	.1	10.1	44.5	56	-11.5	-	-
10	4.08525	23.34	Ca	0	.1	10.1	33.54	-	-	46	-12.46
11	16.4018	9.31	Qp	0	.3	10.3	19.91	60	-40.09	-	-
12	16.4018	3.85	Ca	0	.3	10.3	14.45	-	-	50	-35.55

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