7.10.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (4)

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.

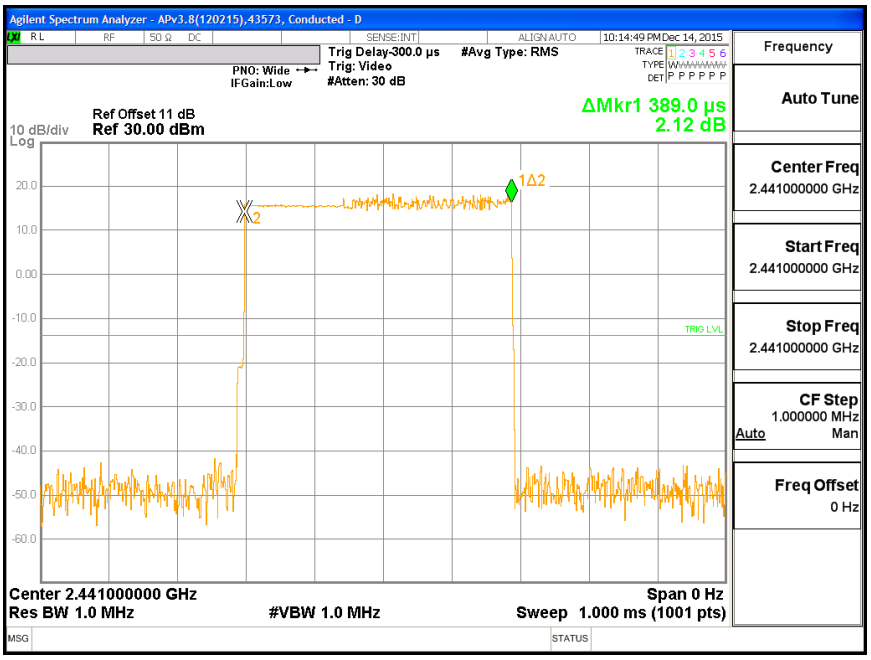
RESULTS

8PSK (EDR) Mode

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
3DH1	0.3890	32	0.124	0.4	-0.276
3DH3	1.6400	18	0.295	0.4	-0.105
3DH5	2.8920	13	0.376	0.4	-0.024

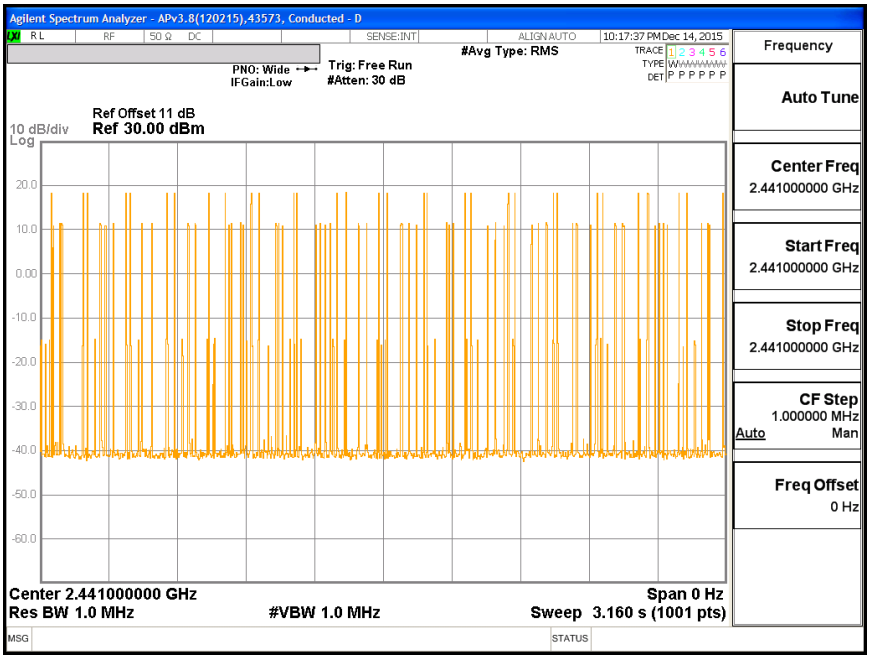
PULSE WIDTH - 3DH1

PULSE WIDTH – 3DH1

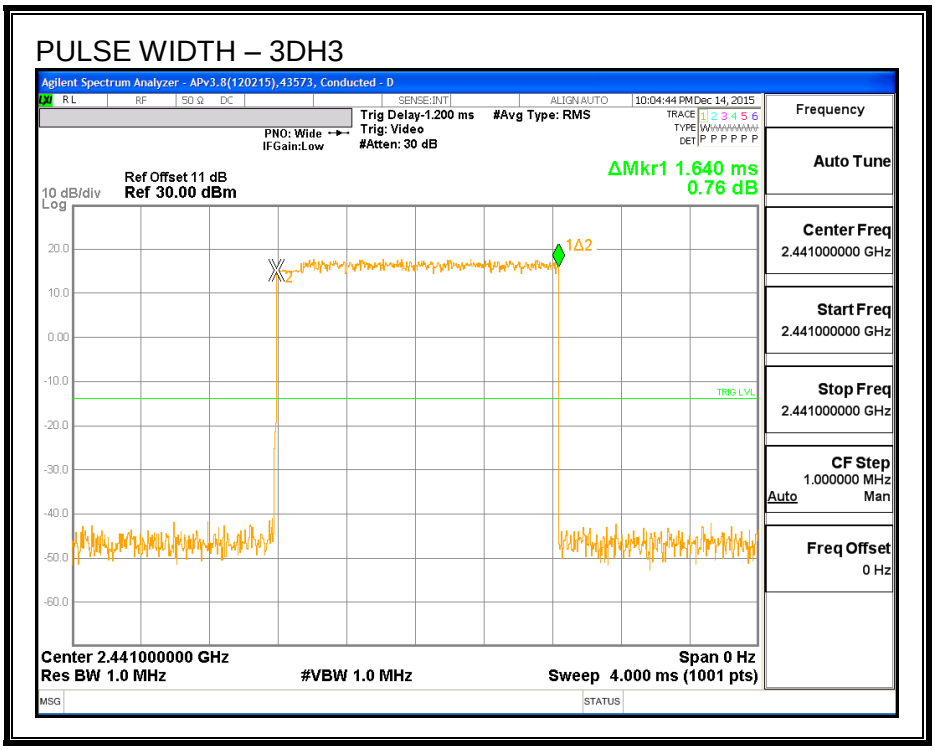


NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH1

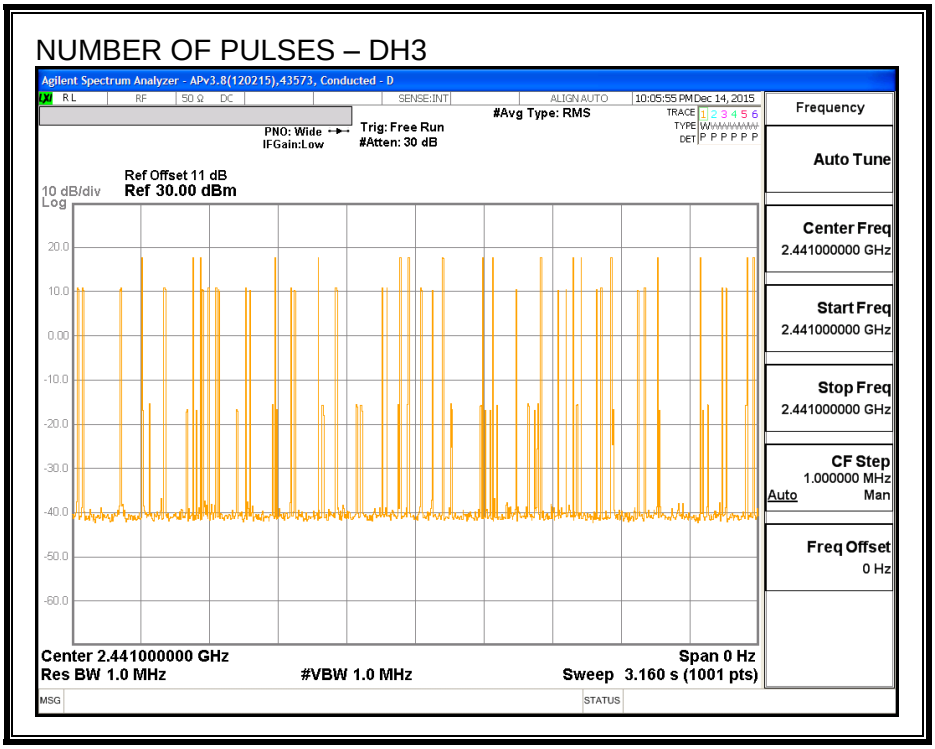
NUMBER OF PULSES – 3DH1



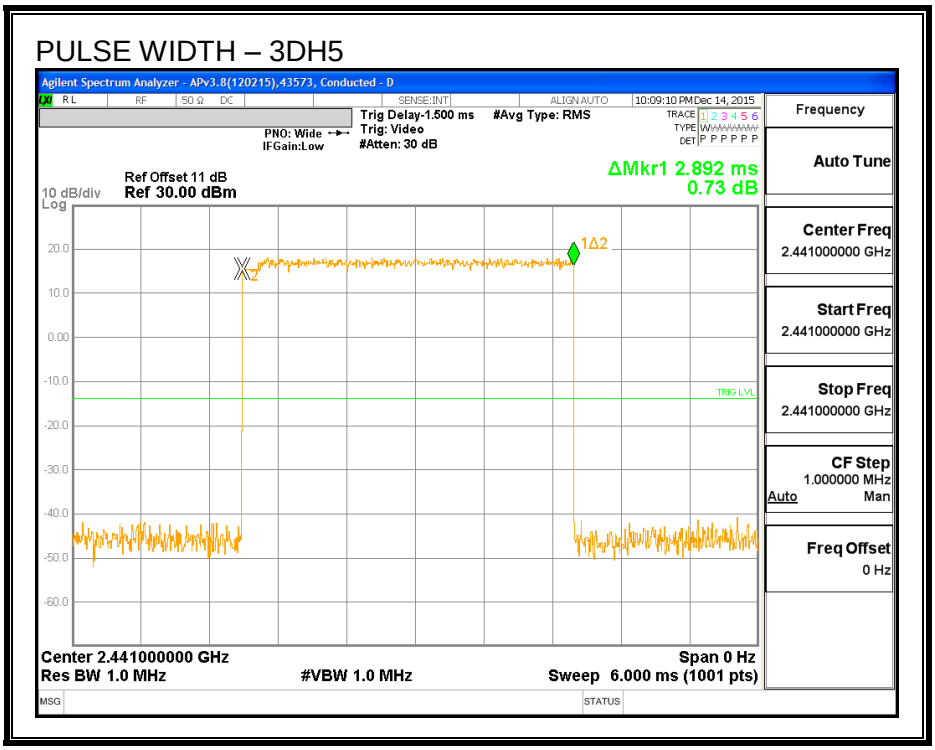
PULSE WIDTH – 3DH3



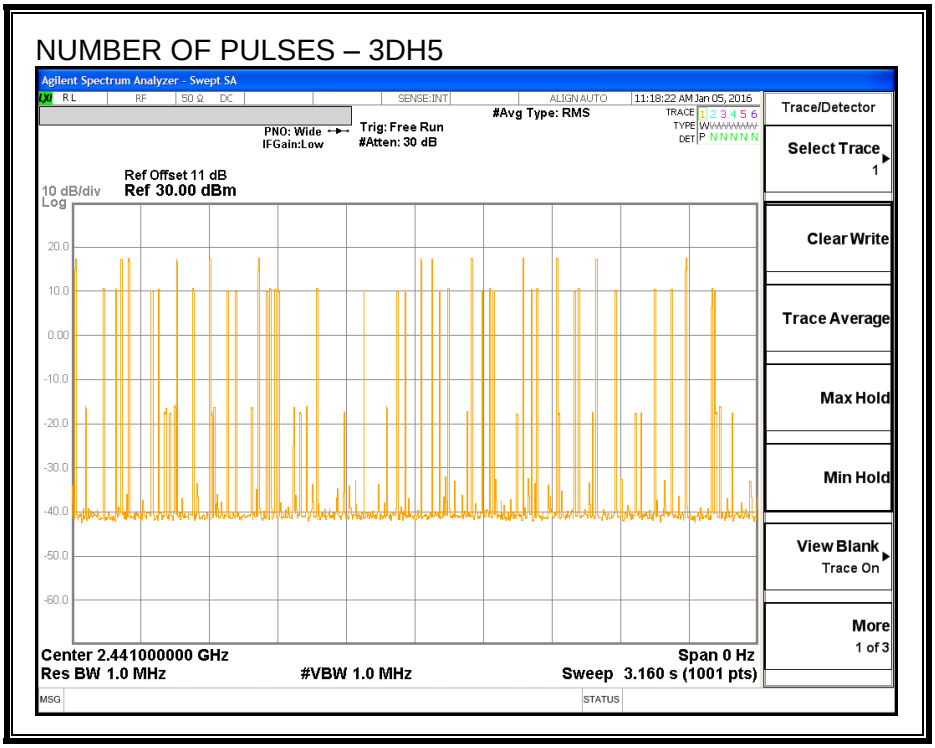
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH3



PULSE WIDTH – 3DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH5



7.10.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-247 (5.4) (2)

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	13.08	21	-7.89
Middle	2441	13.19	21	-7.78
High	2480	13.17	21	-7.80

7.10.6. AVERAGE POWER

LIMIT

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	10.25
Middle	2441	10.50
High	2480	10.49

7.10.7. 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.

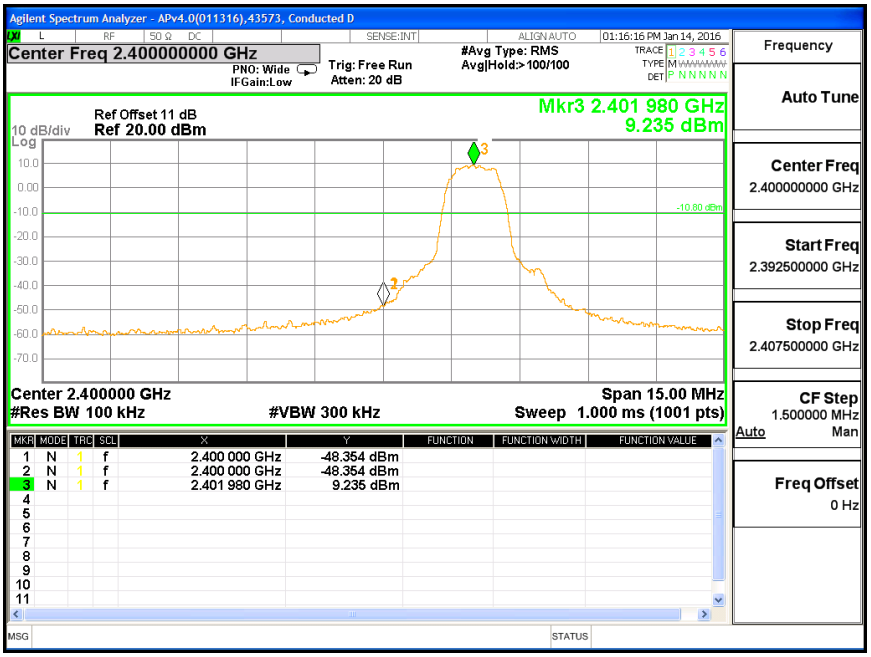
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

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

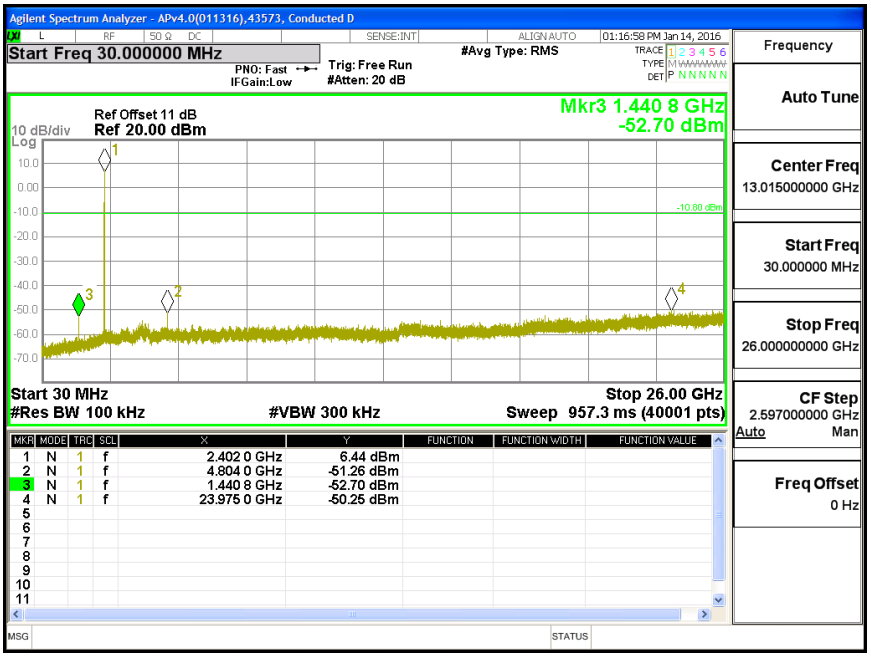
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL BANDEDGE

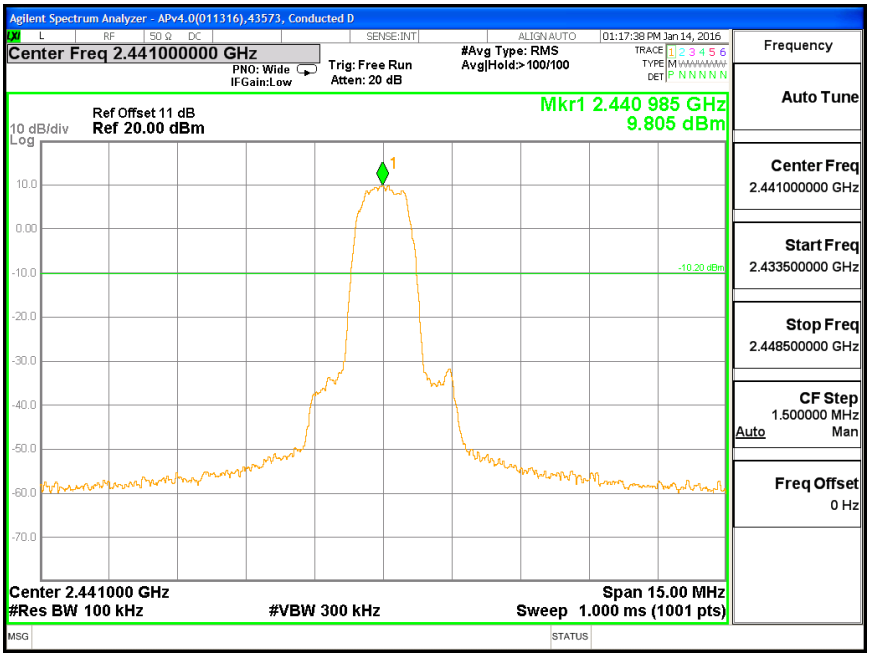


LOW CHANNEL SPURIOUS

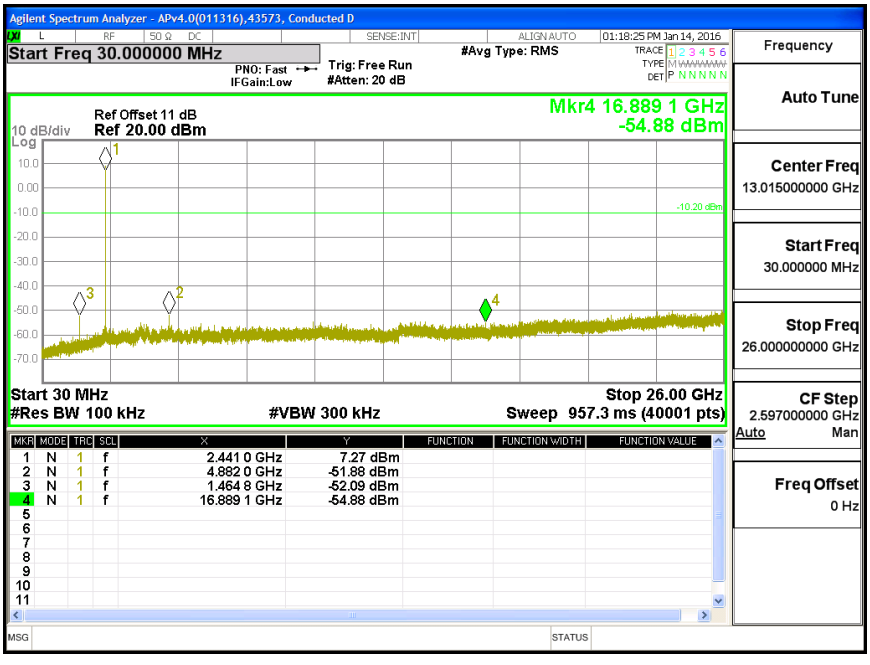


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL

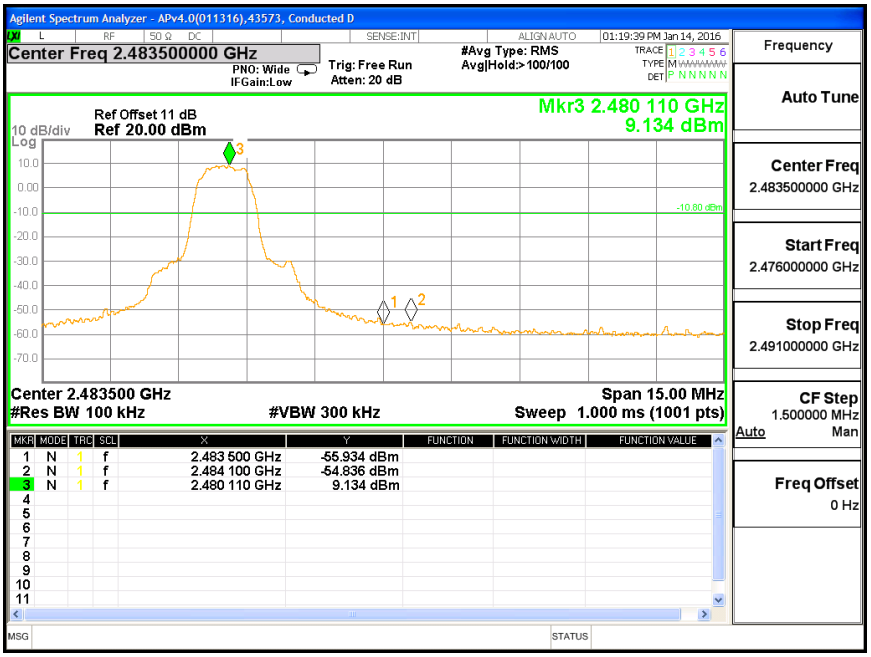


MID CHANNEL SPURIOUS

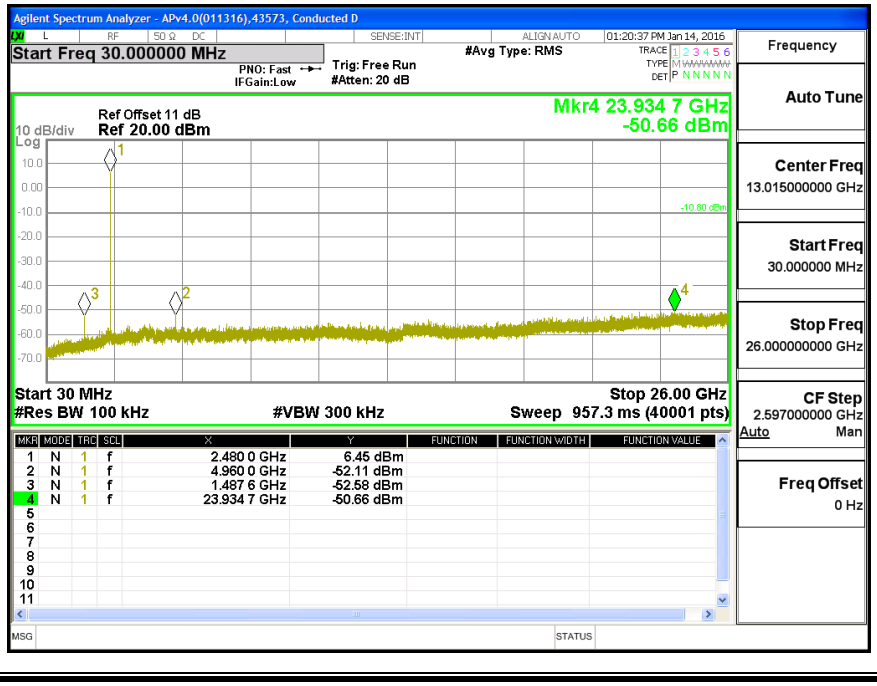


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL BANDEDGE

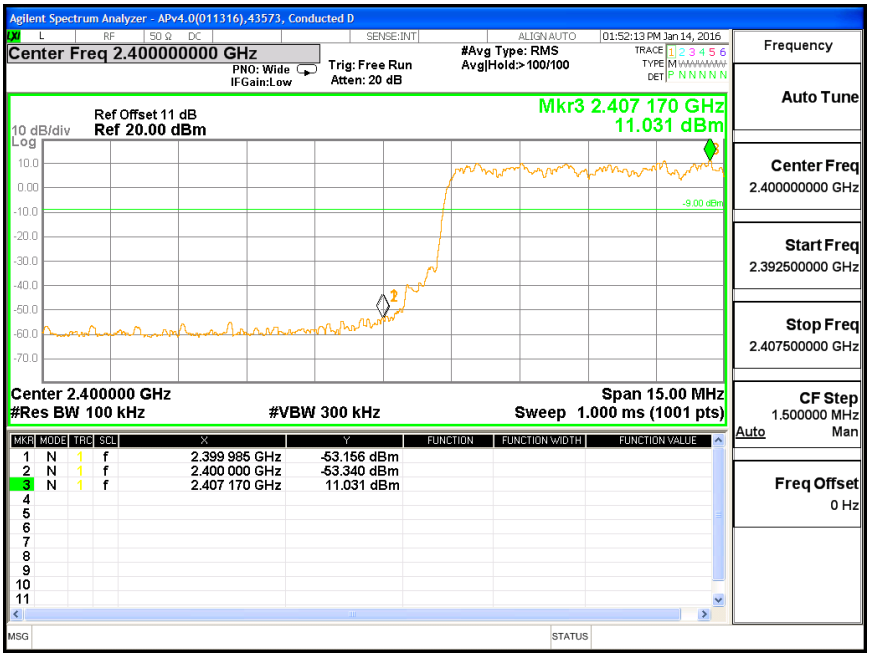


HIGH CHANNEL SPURIOUS

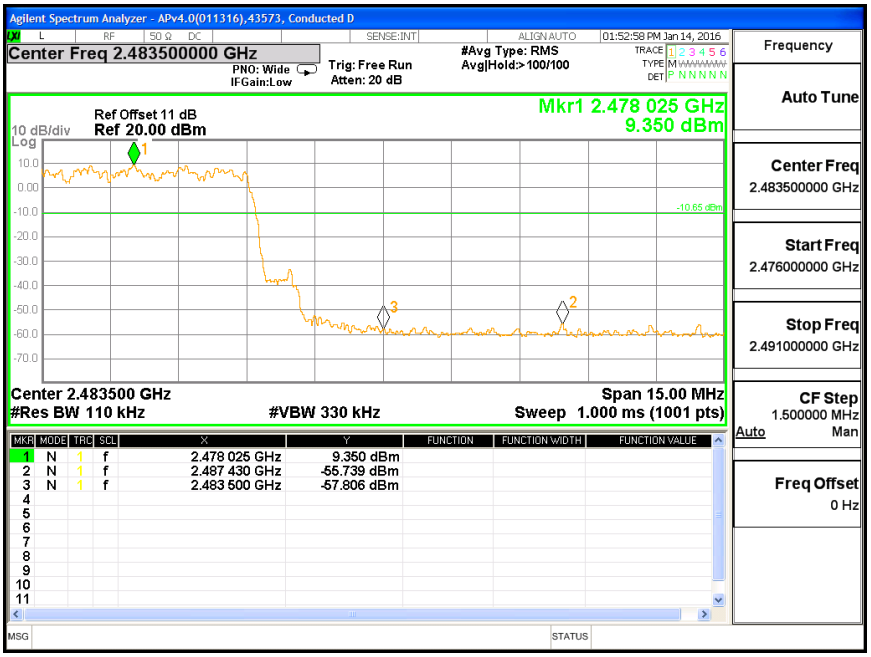


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



7.11. ANTENNA D LOW POWER BASIC DATA RATE GFSK MODULATION

7.11.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

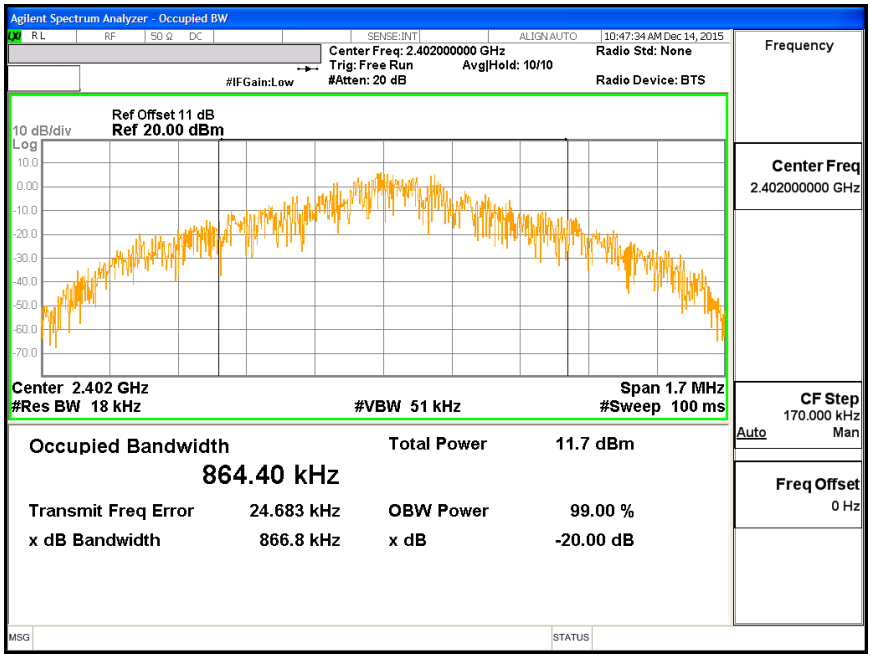
The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

RESULTS

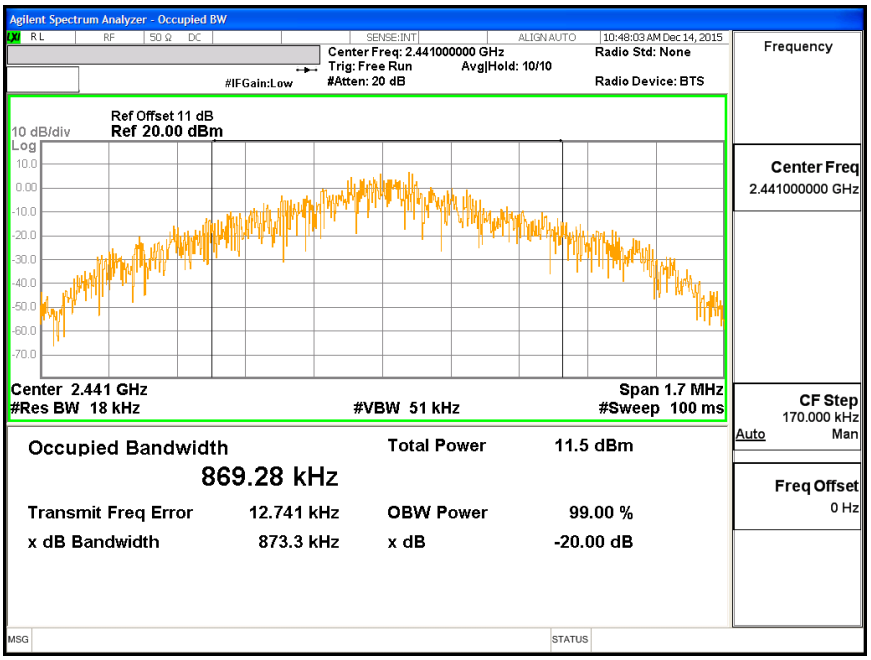
Channel	Frequency (MHz)	20 dB Bandwidth (KHz)	99% Bandwidth (KHz)
Low	2402	866.80	864.40
Middle	2441	873.30	869.28
High	2480	920.00	888.15

20 dB AND 99% BANDWIDTH

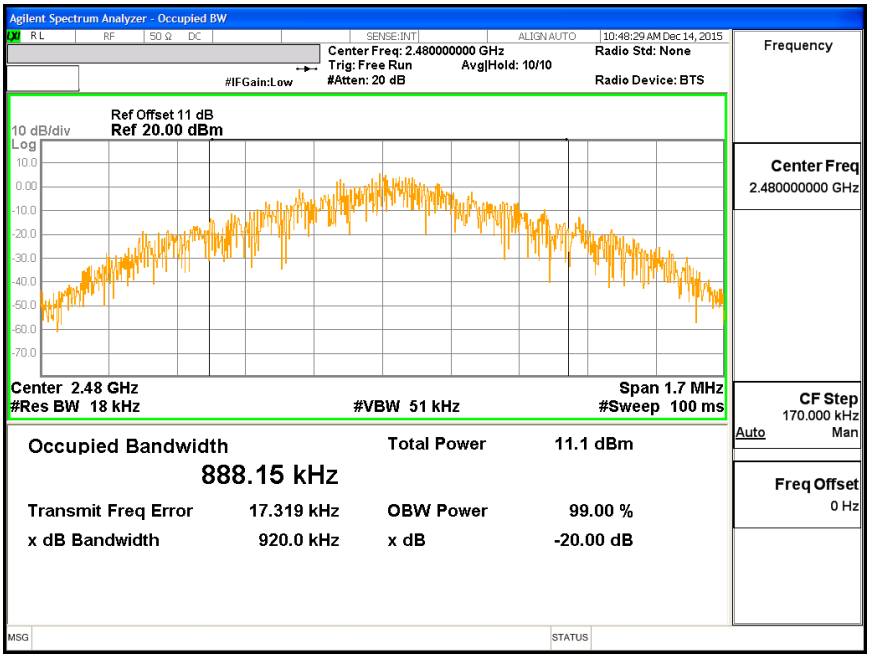
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



7.11.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

IC RSS-247 (5.1) (2)

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.

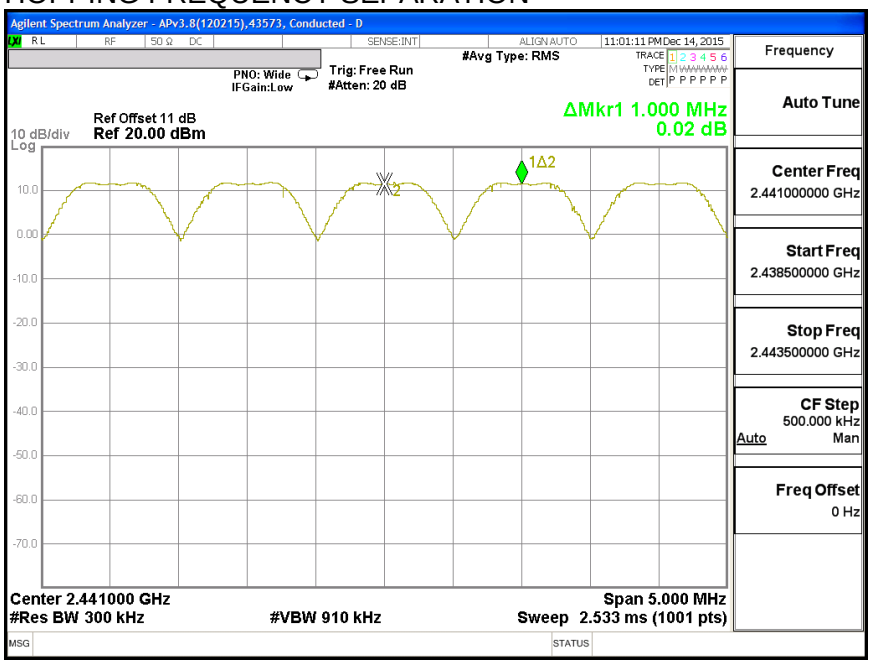
TEST PROCEDURE

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

HOPPING FREQUENCY SEPARATION



7.11.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (4)

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

TEST PROCEDURE

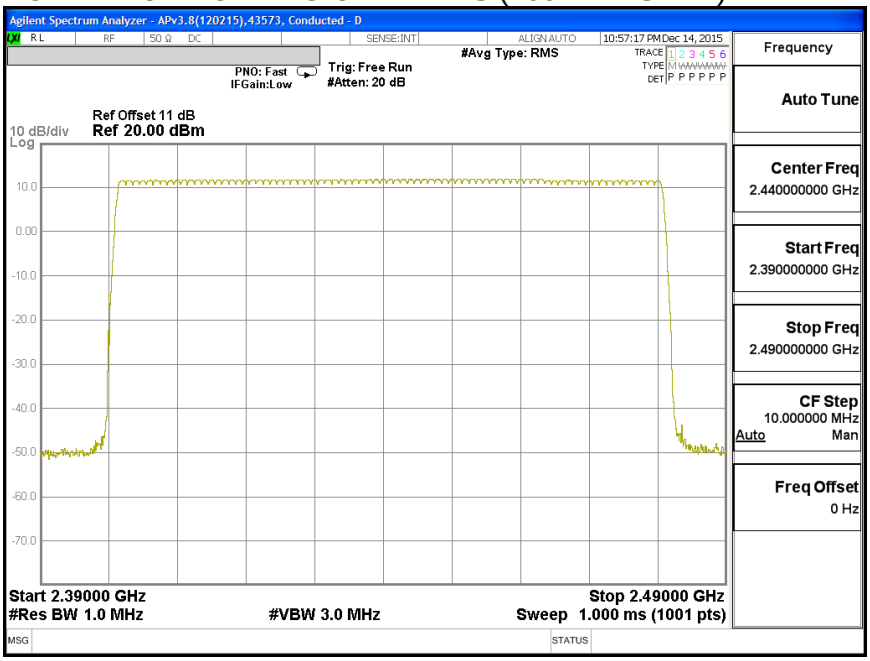
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

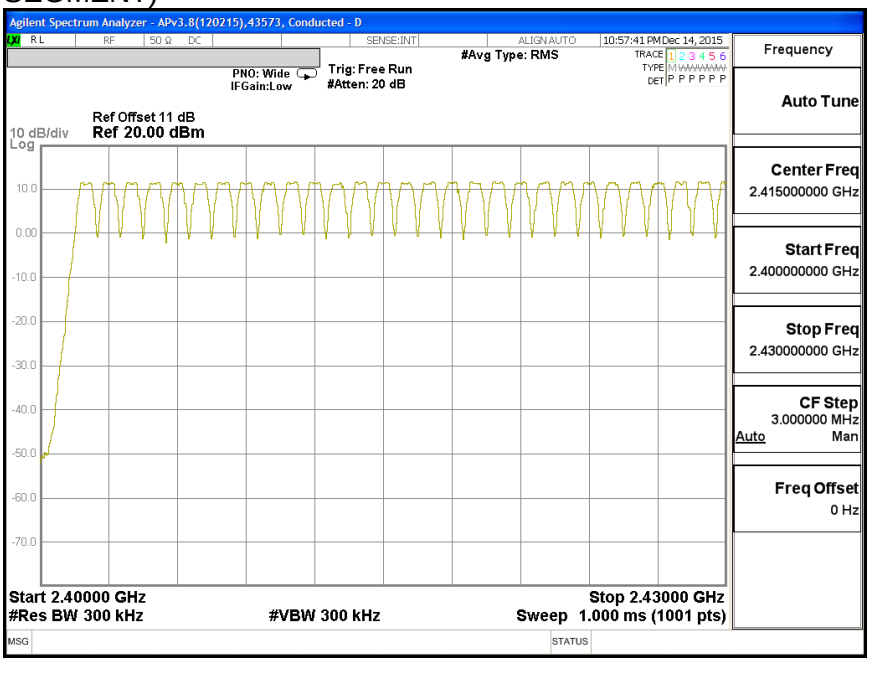
Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS

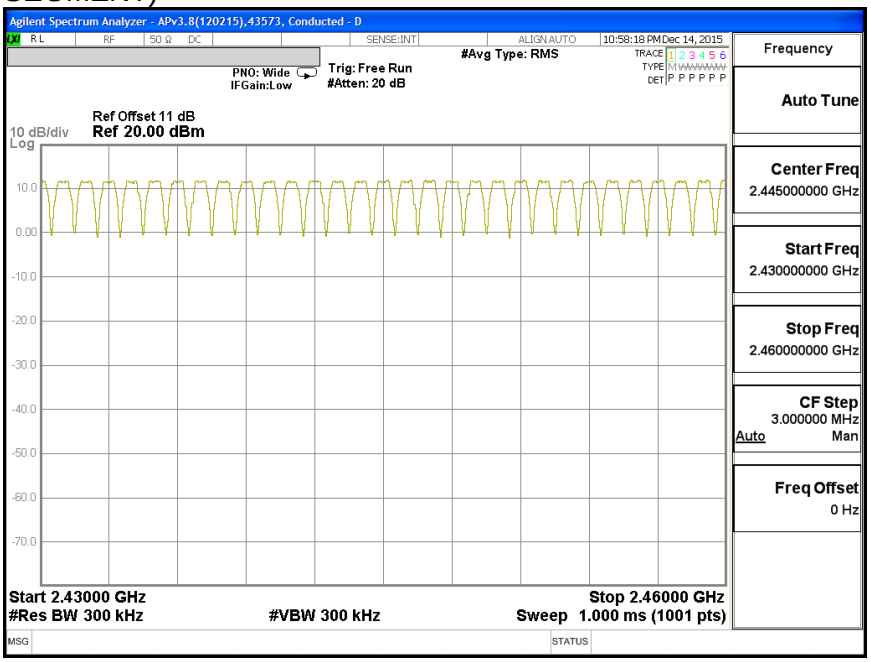
NUMBER OF HOPPING CHANNELS (100 MHZ SPAN)



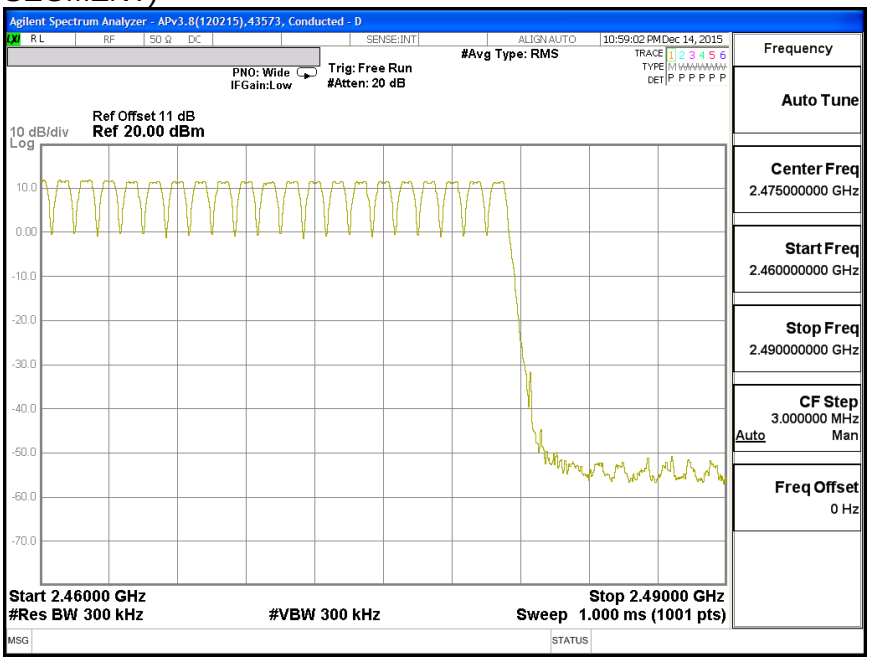
NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



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



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



7.11.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (4)

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.

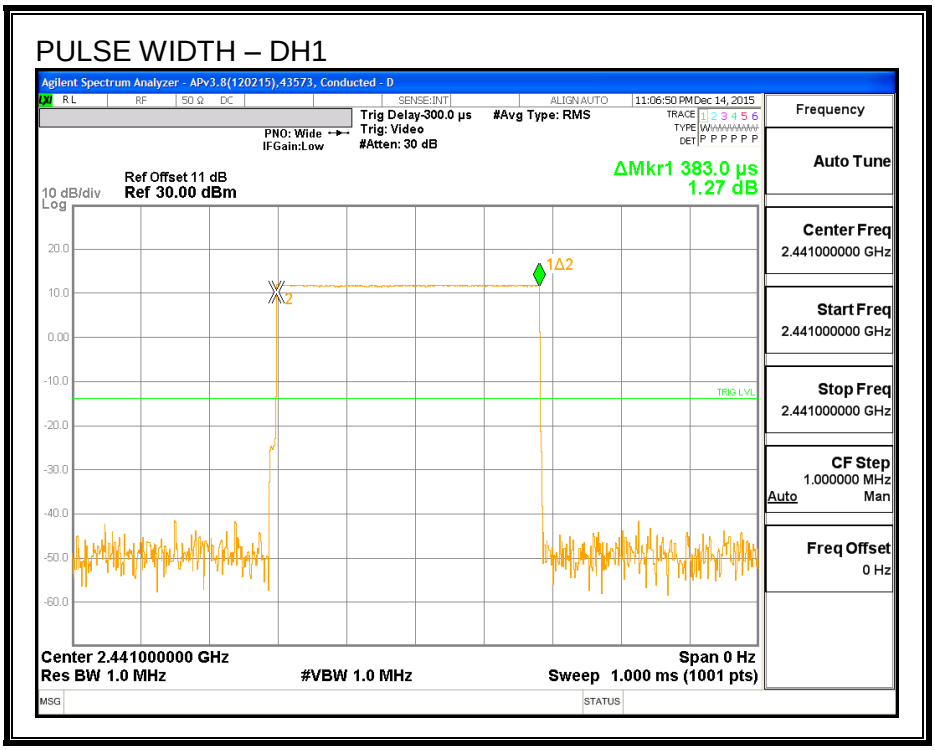
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

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.

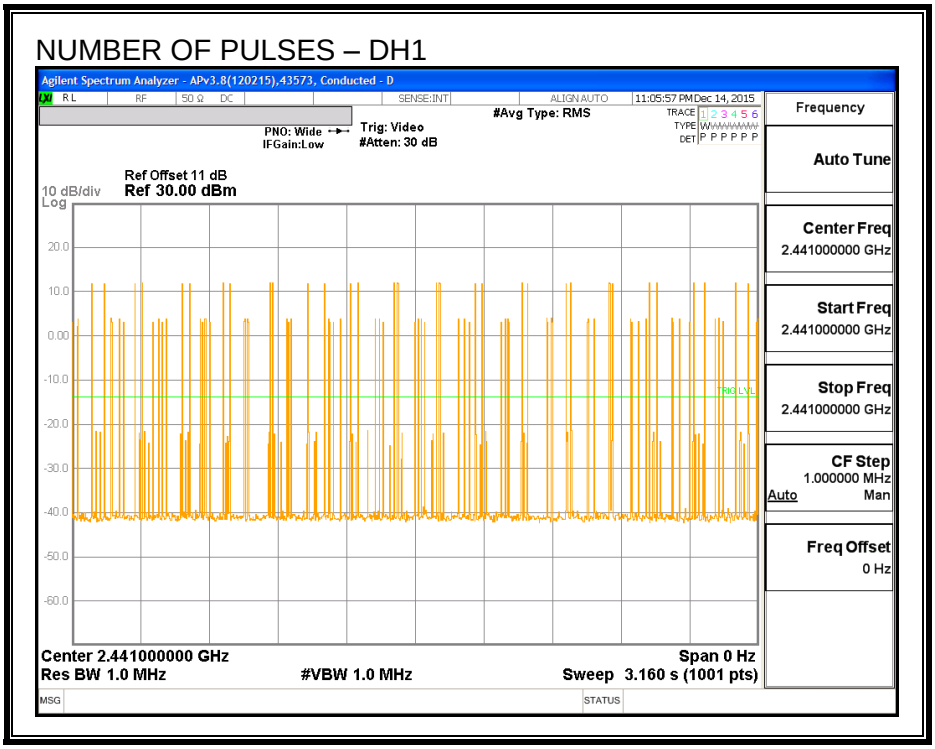
RESULTS

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	32	0.123	0.4	-0.277
DH3	1.640	16	0.262	0.4	-0.138
DH5	2.892	12	0.347	0.4	-0.053

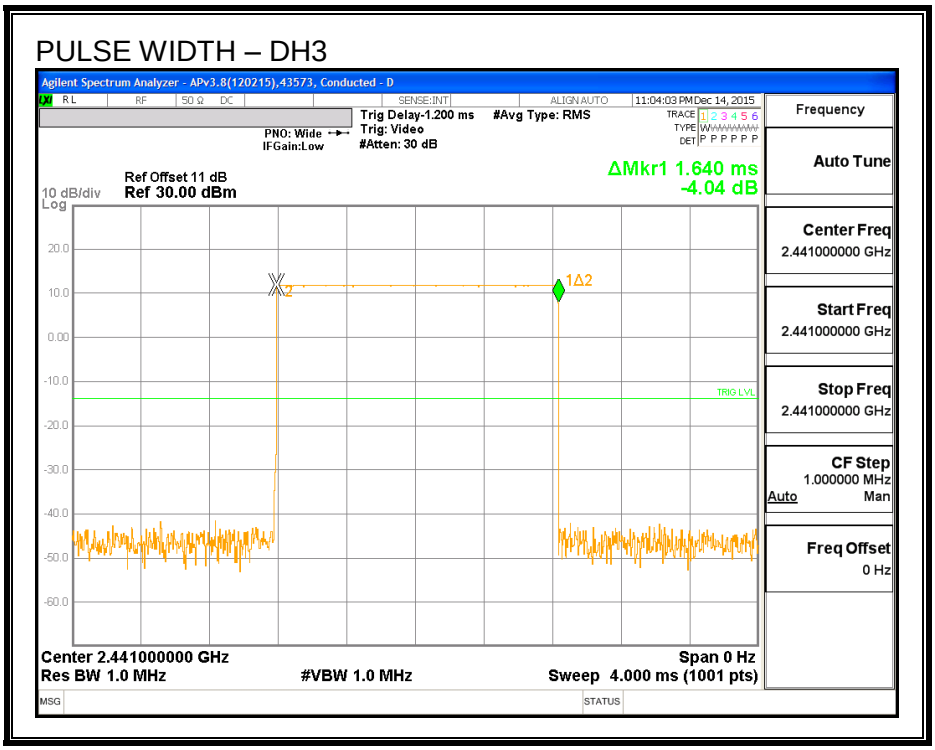
PULSE WIDTH - DH1



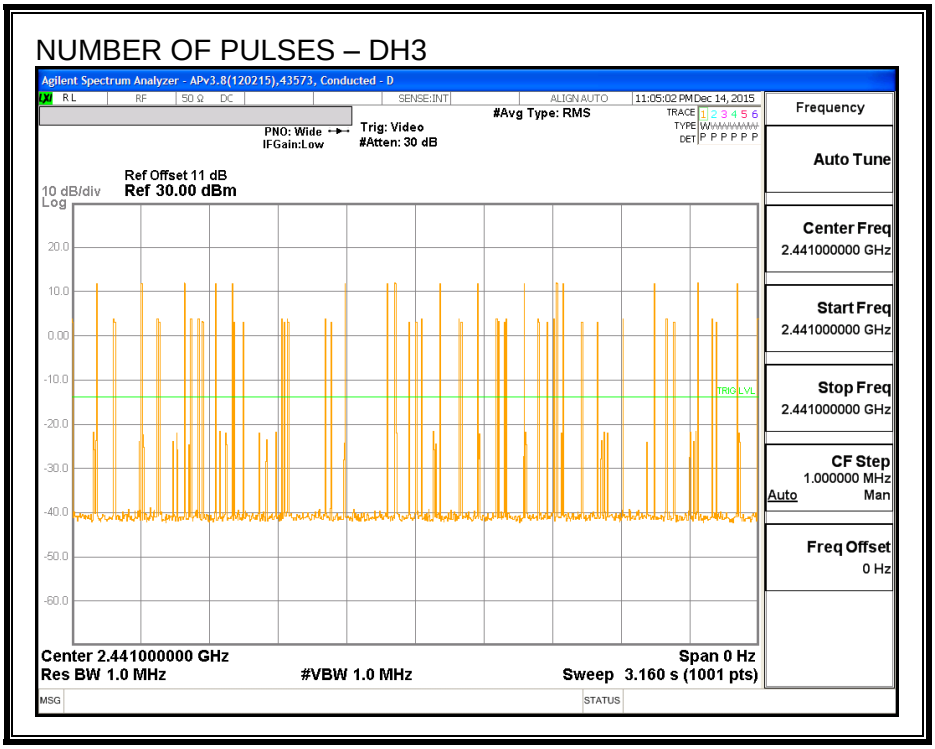
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH1



PULSE WIDTH – DH3

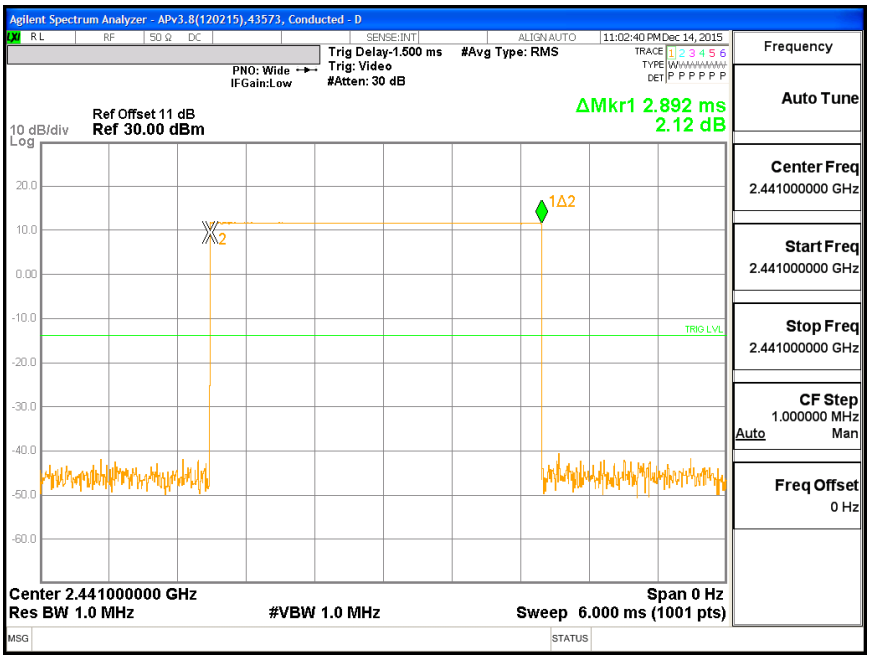


NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH3



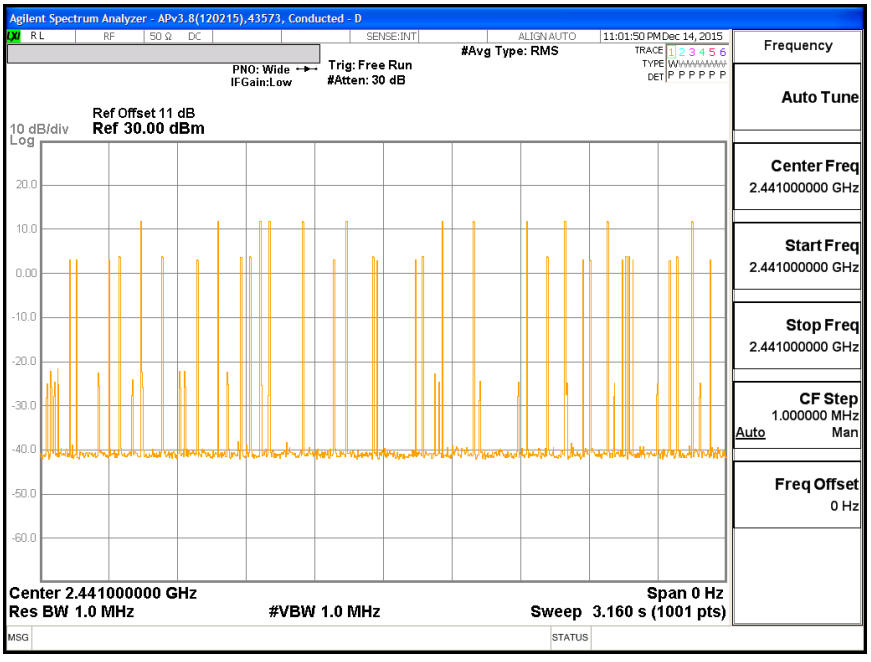
PULSE WIDTH – DH5

PULSE WIDTH – DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH5

NUMBER OF PULSES – DH5



7.11.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-247 (5.4) (2)

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

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	5.08	30	-24.92
Middle	2441	5.02	30	-24.98
High	2480	5.16	30	-24.84

7.11.6. AVERAGE POWER

LIMIT

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	4.90
Middle	2441	4.83
High	2480	4.97

7.11.7. 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.

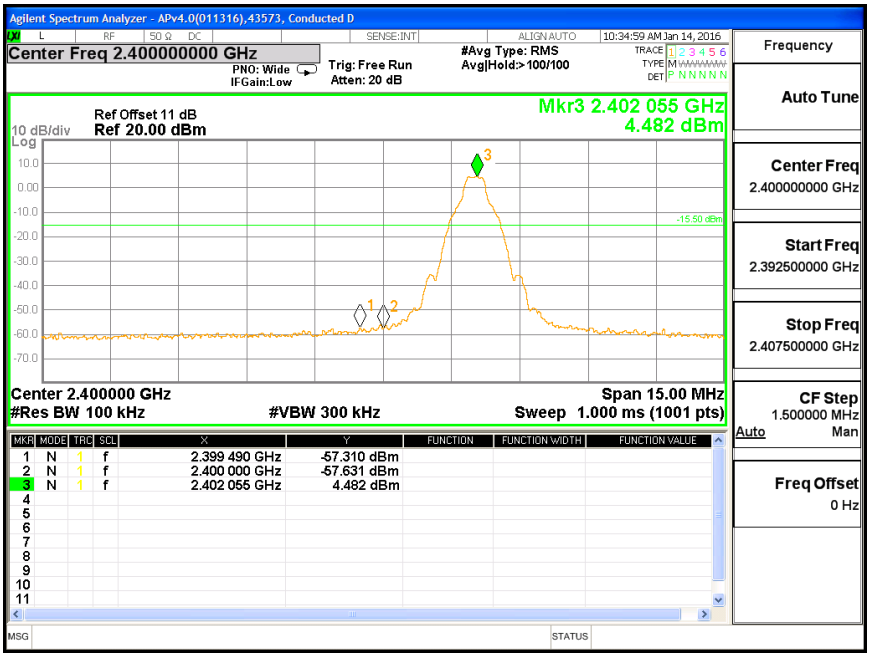
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

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

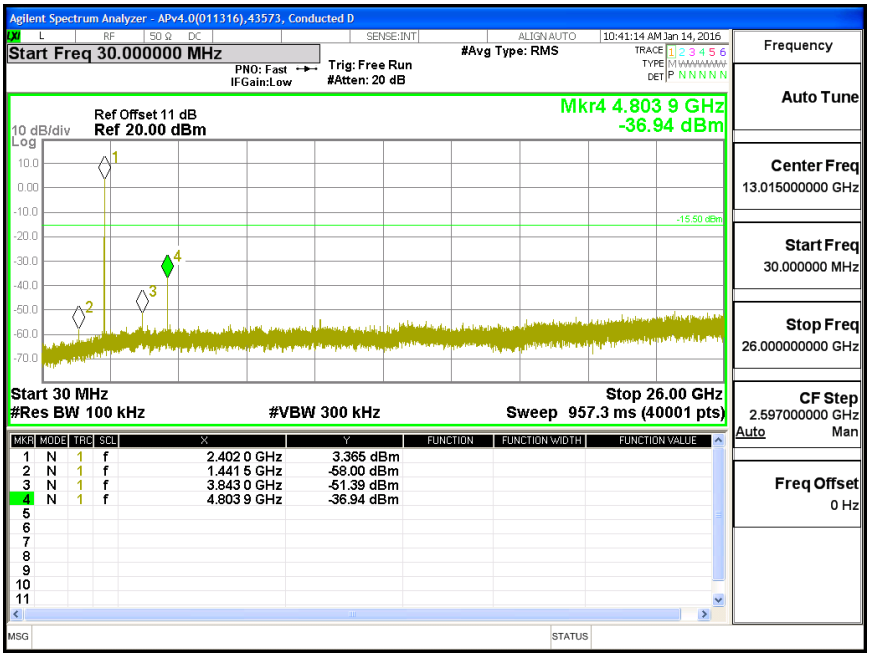
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL BANDEDGE

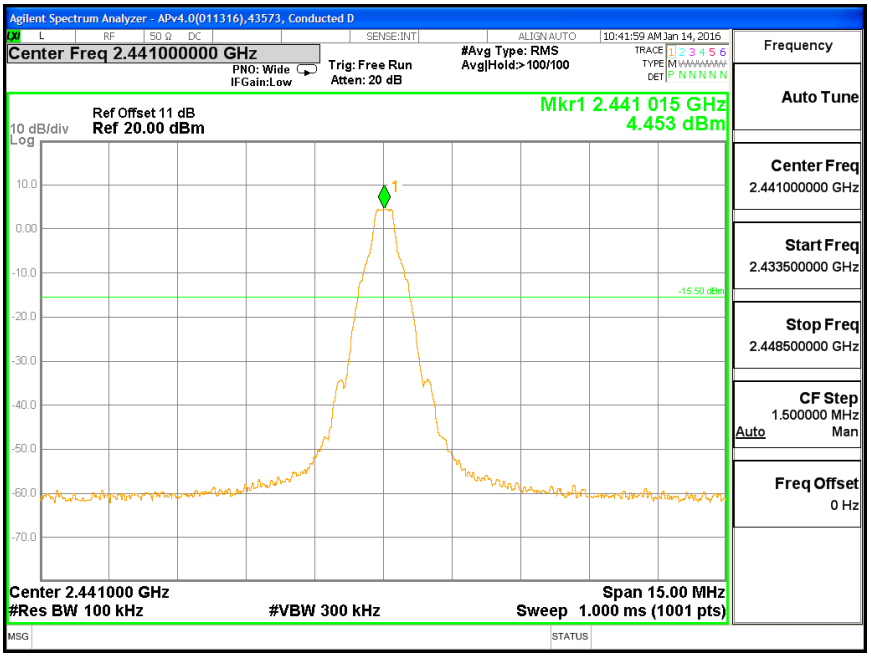


LOW CHANNEL SPURIOUS

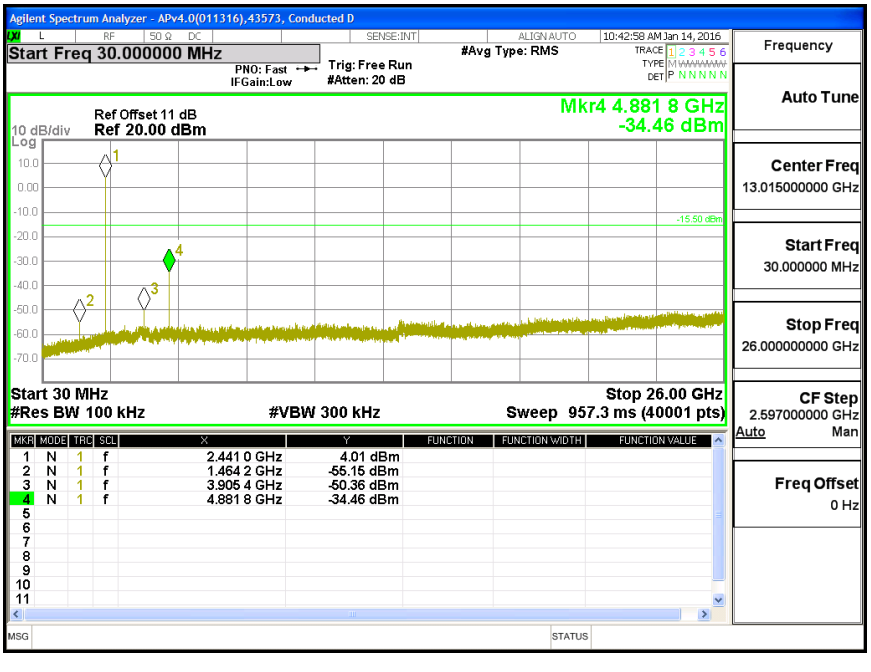


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL

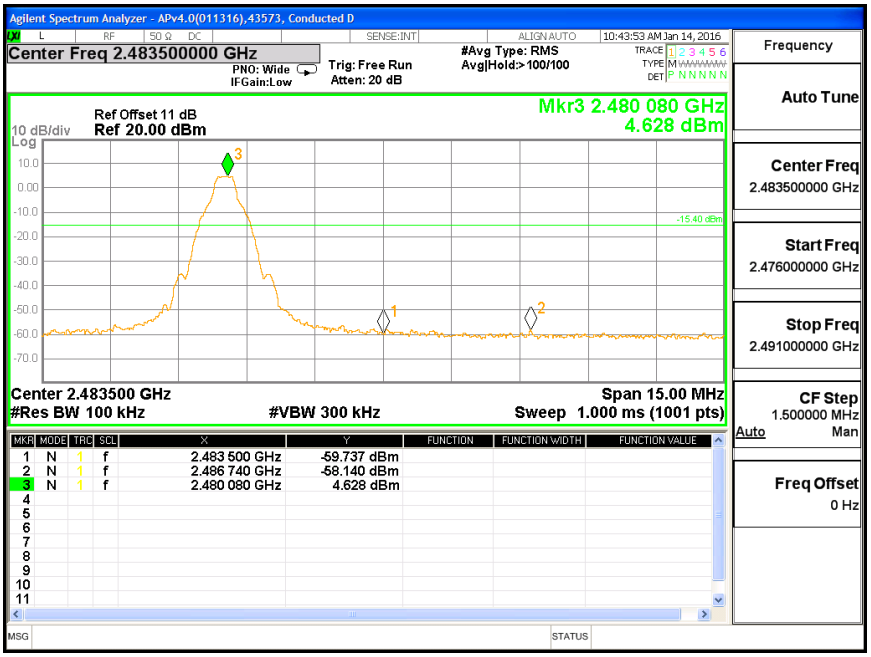


MID CHANNEL SPURIOUS

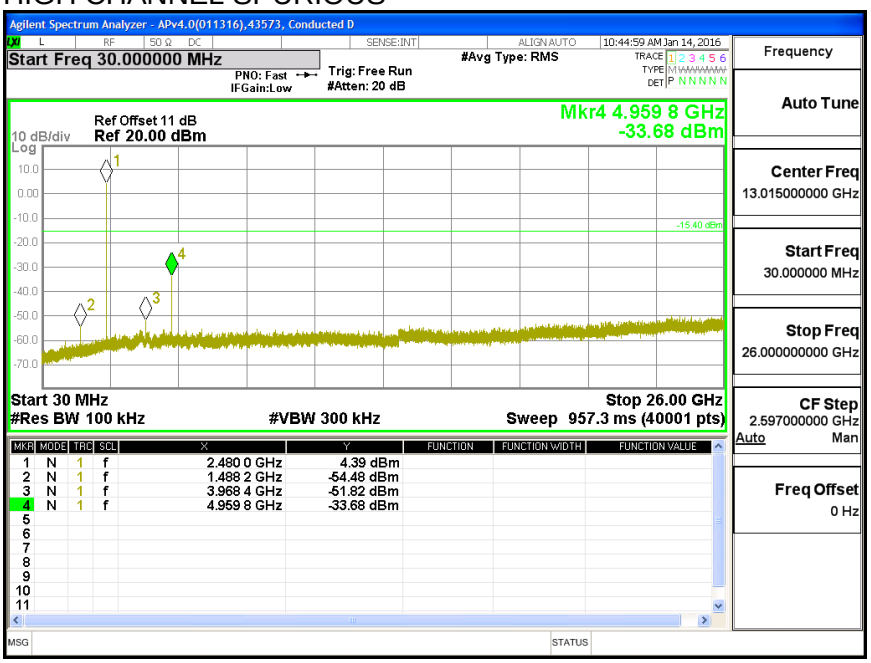


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL BANDEDGE

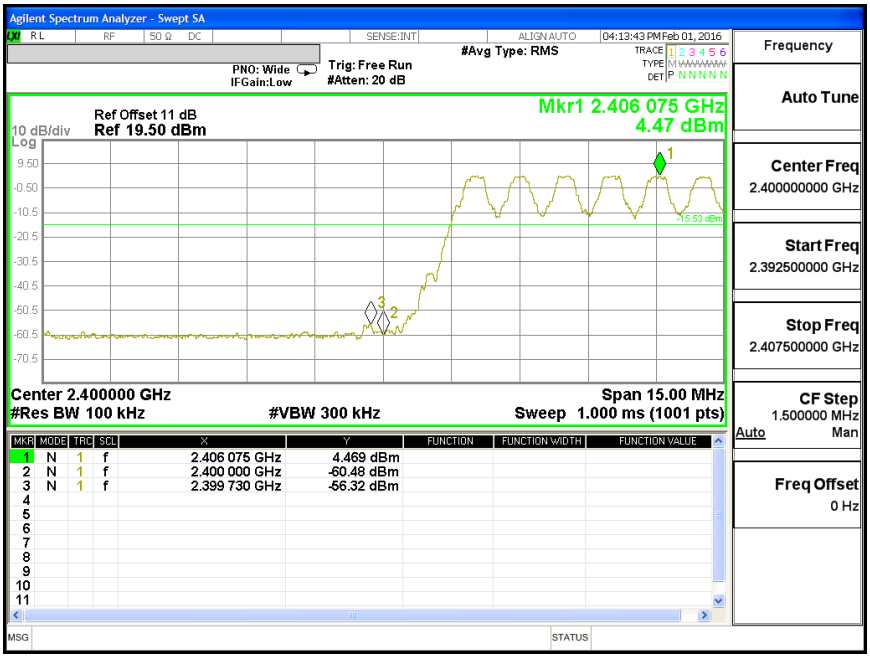


HIGH CHANNEL SPURIOUS

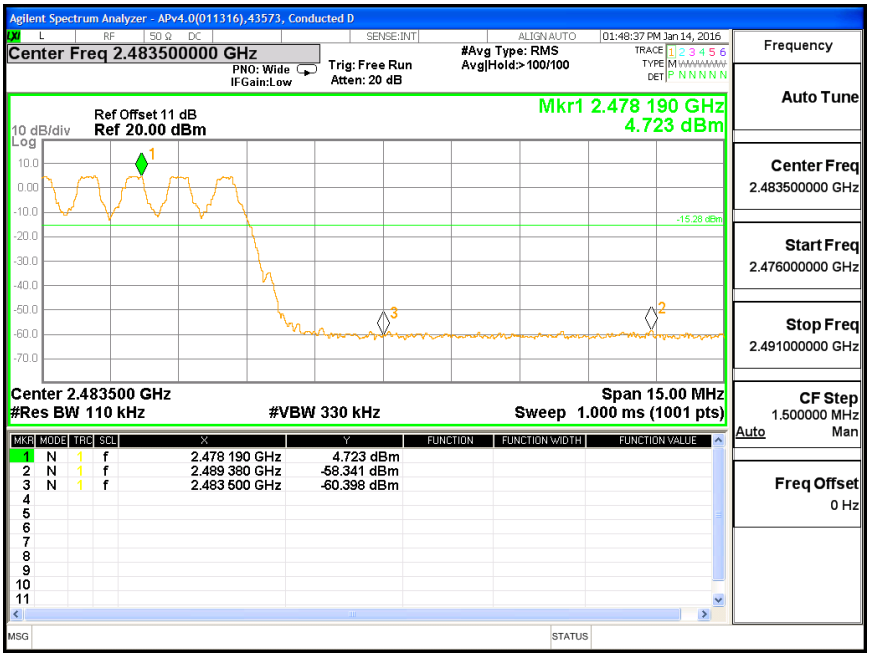


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



7.12. ANTENNA D LOW POWER ENHANCED DATA RATE QPSK MODULATION

7.12.1. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-247 (5.4) (2)

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	6.84	21	-14.13
Middle	2441	6.79	21	-14.18
High	2480	6.65	21	-14.32

7.12.2. AVERAGE POWER

LIMIT

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	4.48
Middle	2441	4.44
High	2480	4.26

7.13. ANTENNA D LOW POWER ENHANCED DATA RATE 8PSK MODULATION

7.13.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

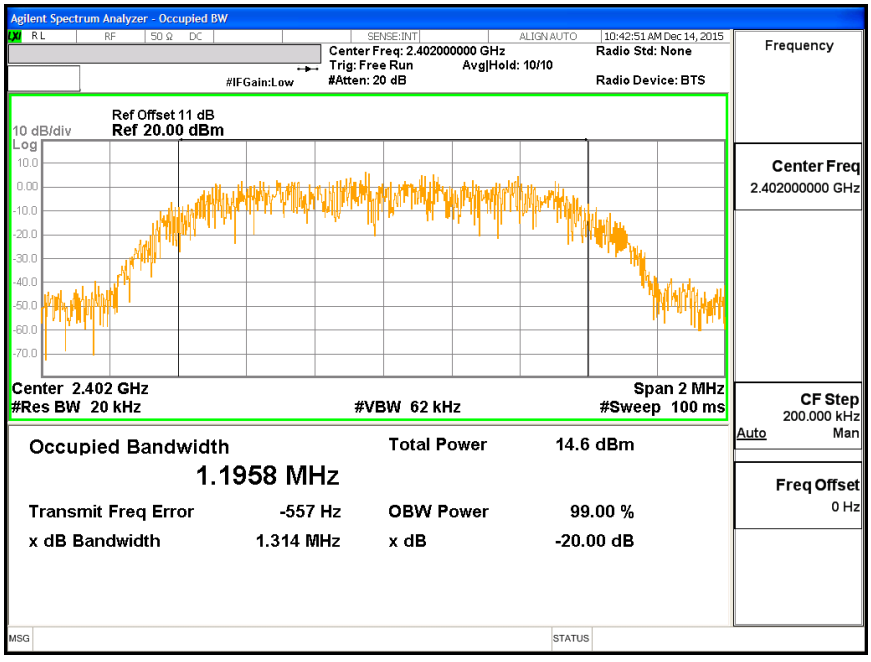
The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

RESULTS

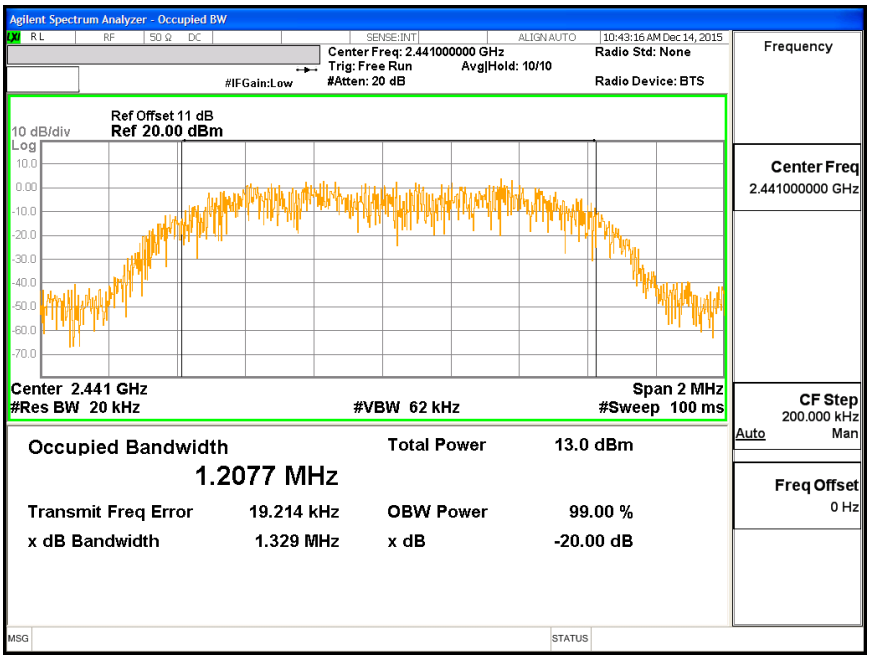
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low	2402	1.3140	1.1958
Middle	2441	1.3290	1.2077
High	2480	1.3440	1.2084

20 dB AND 99% BANDWIDTH

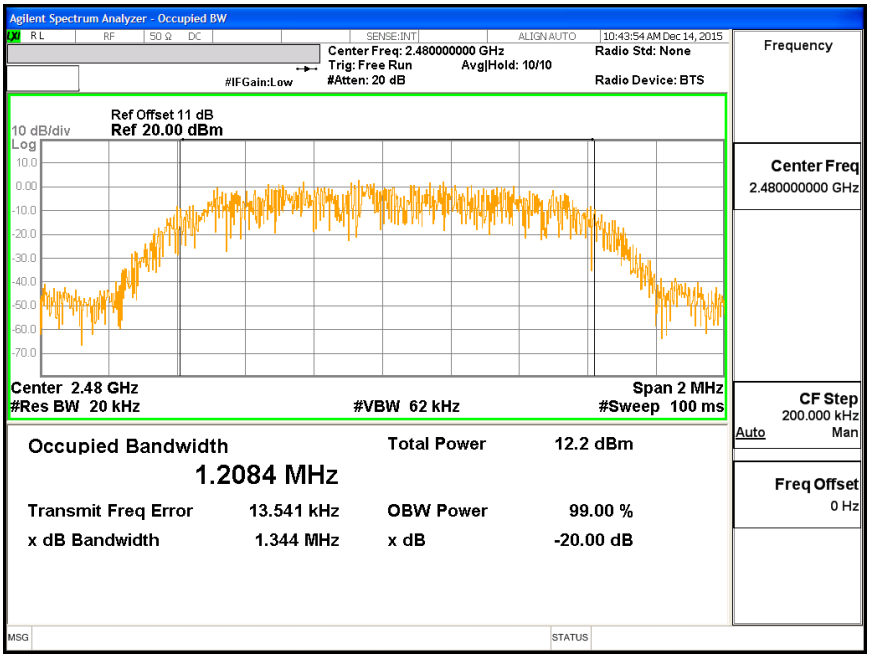
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



7.13.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

IC RSS-247 (5.1) (2)

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.

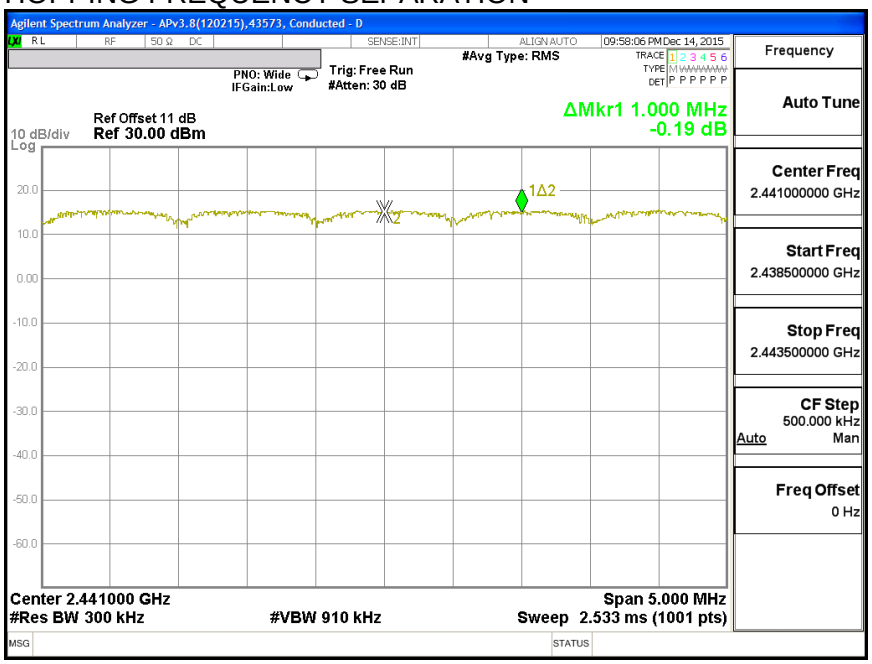
TEST PROCEDURE

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

HOPPING FREQUENCY SEPARATION



7.13.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (4)

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

TEST PROCEDURE

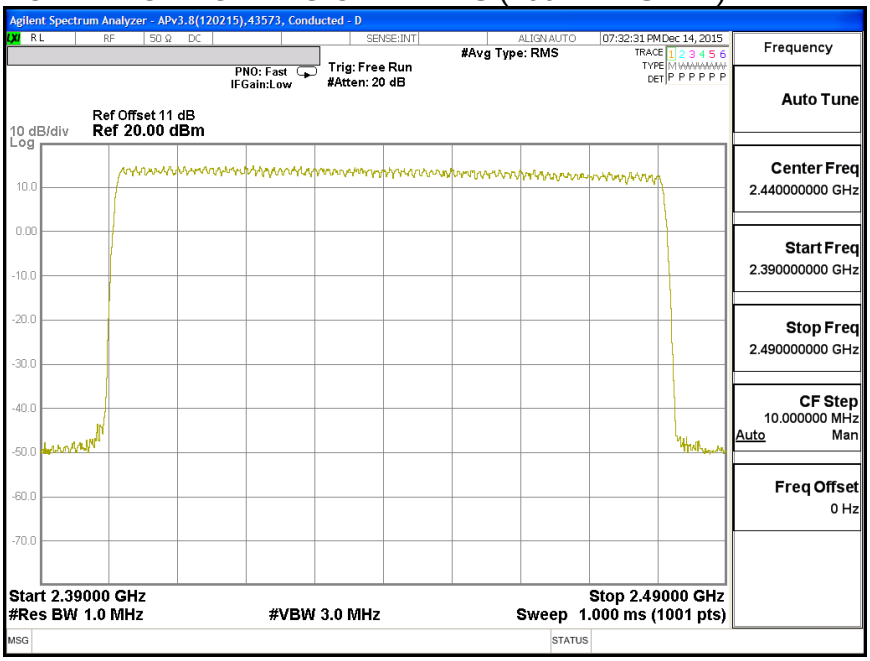
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

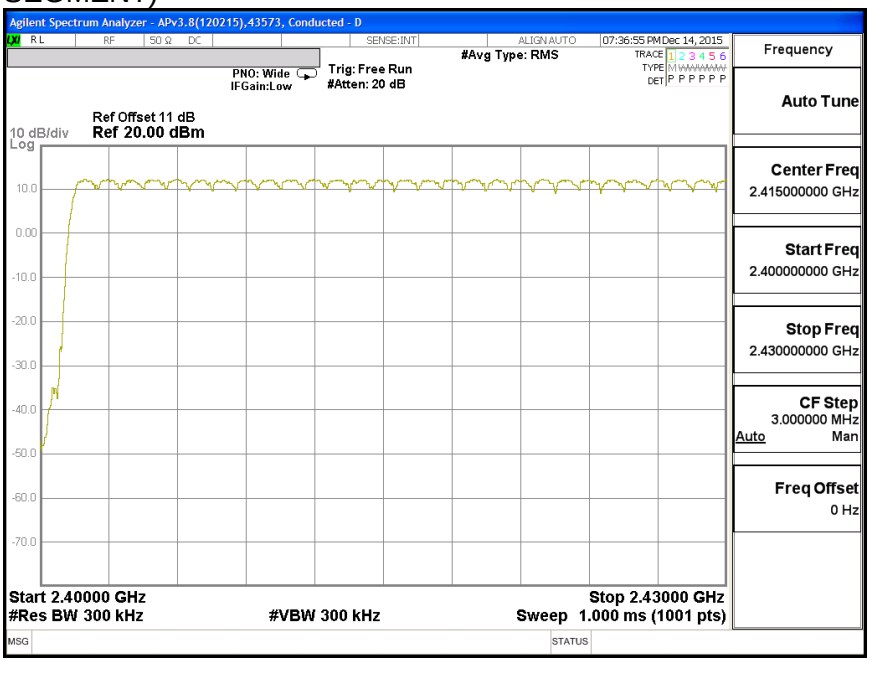
Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS

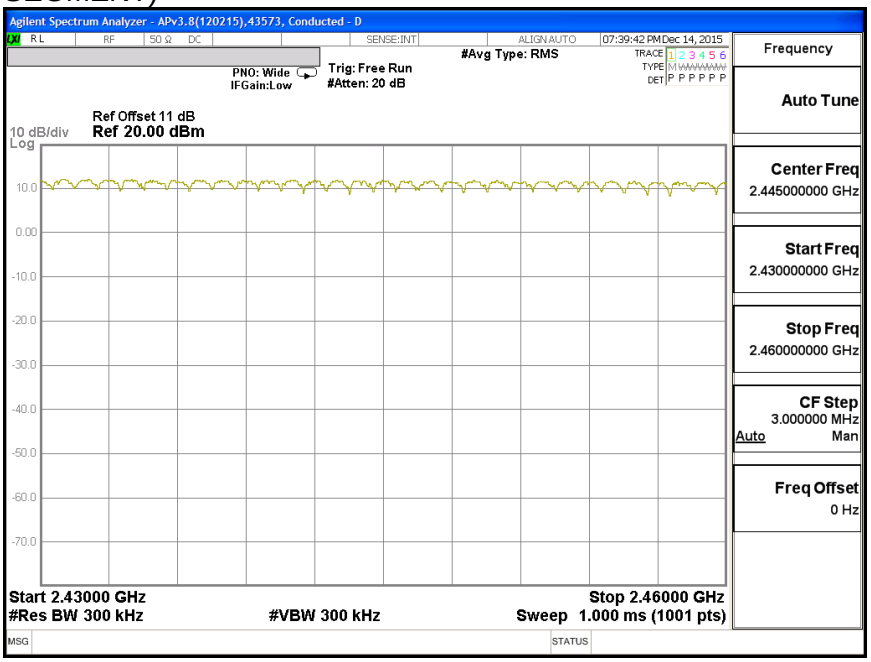
NUMBER OF HOPPING CHANNELS (100 MHZ SPAN)



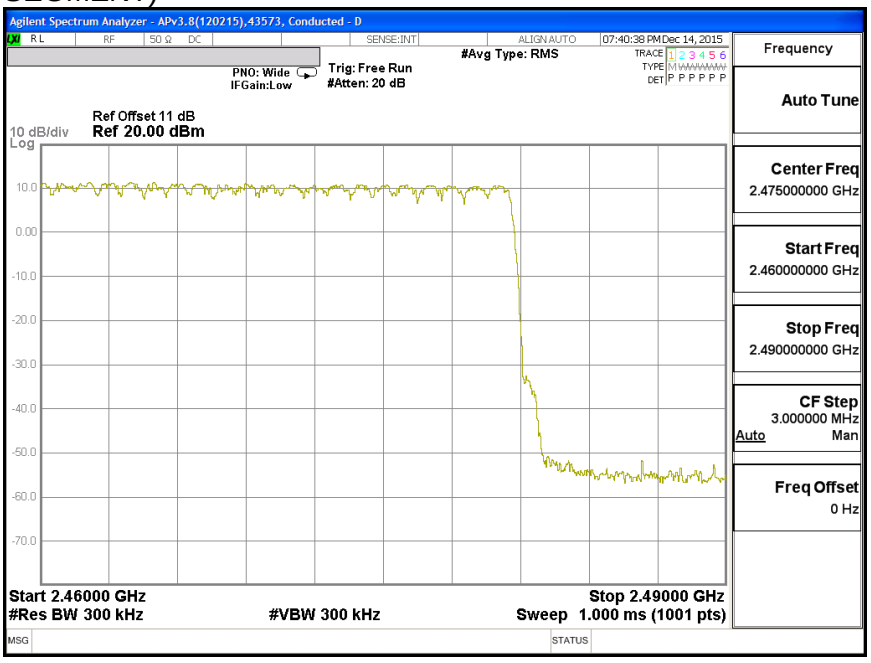
NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



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



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



7.13.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-247 (5.1) (4)

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.

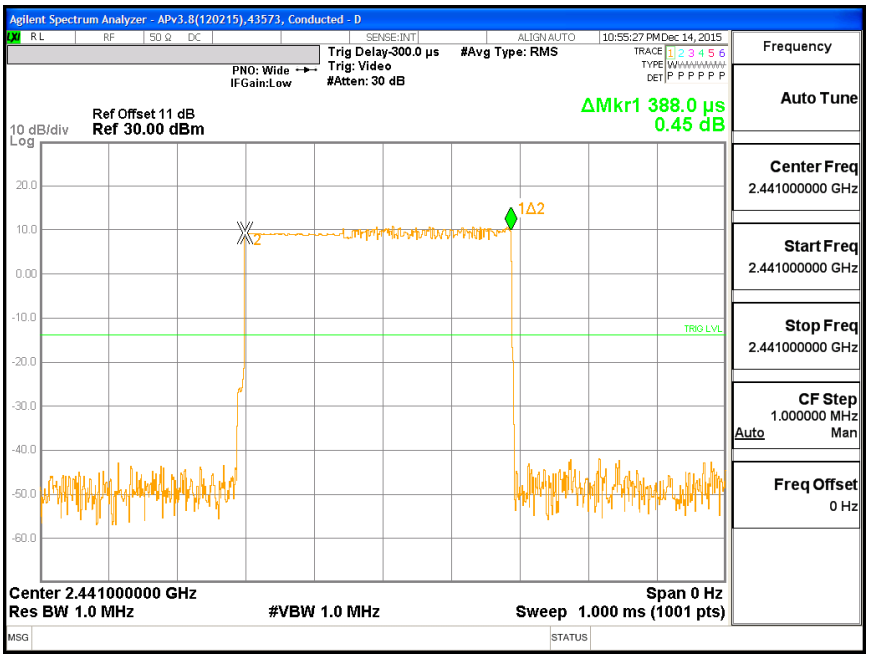
RESULTS

8PSK (EDR) Mode

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
3DH1	0.388	32	0.124	0.4	-0.276
3DH3	1.640	20	0.328	0.4	-0.072
3DH5	2.892	12	0.347	0.4	-0.053

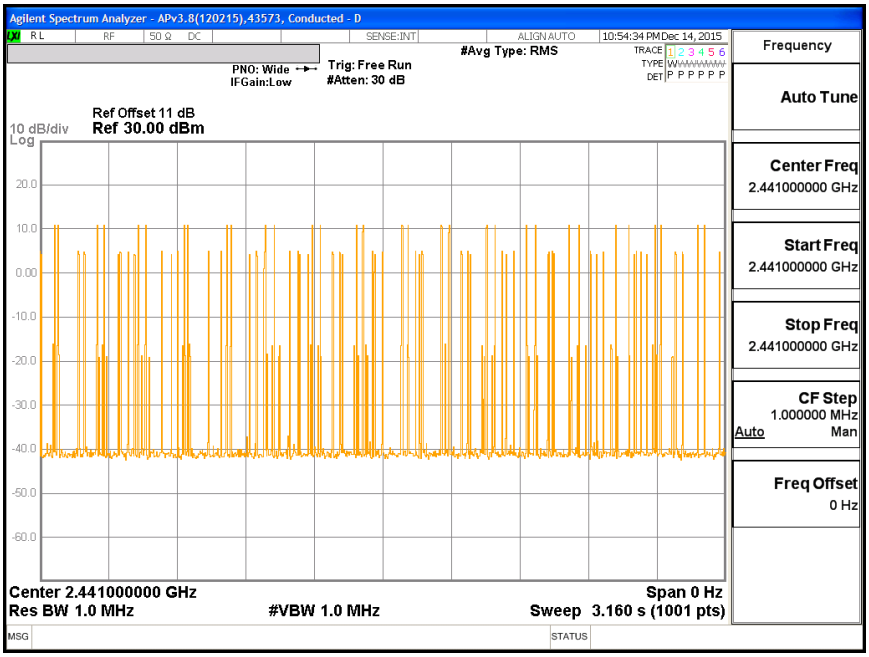
PULSE WIDTH - 3DH1

PULSE WIDTH – 3DH1

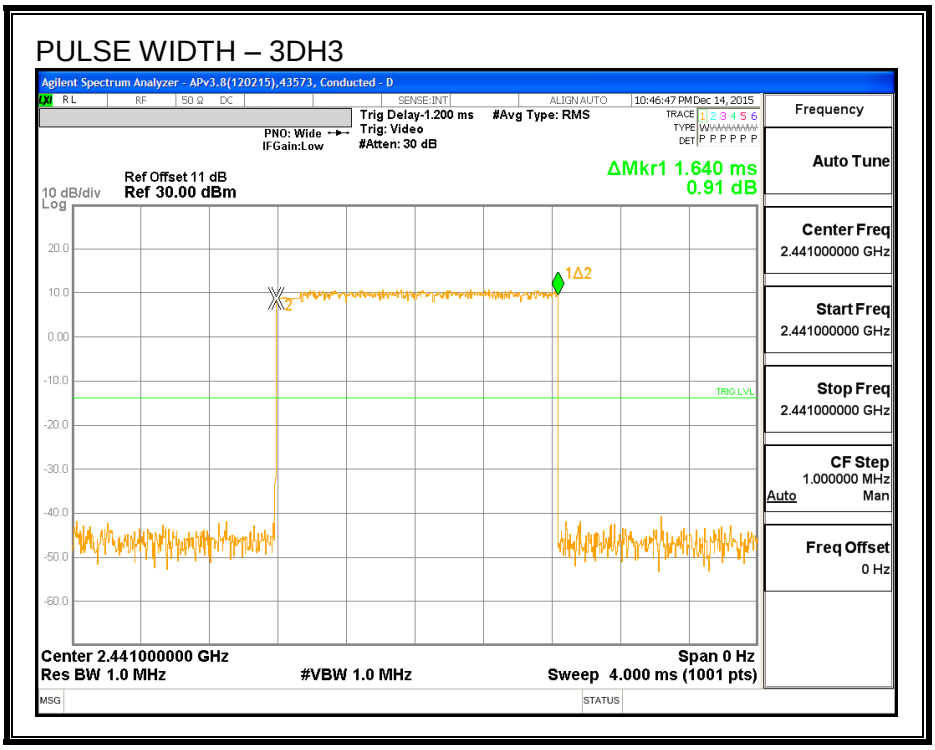


NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH1

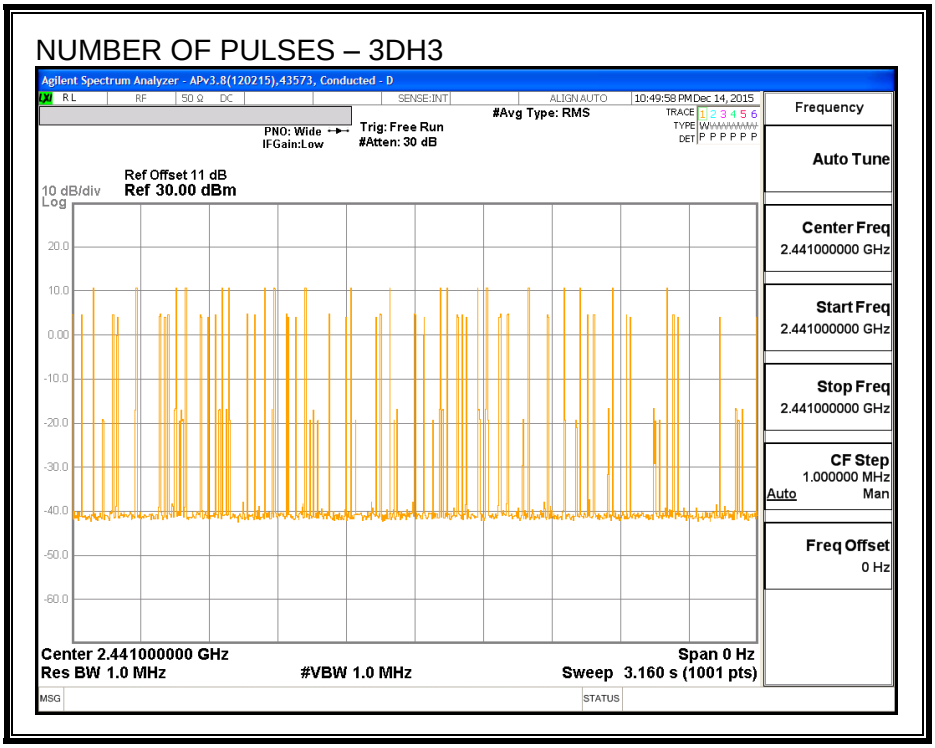
NUMBER OF PULSES – 3DH1



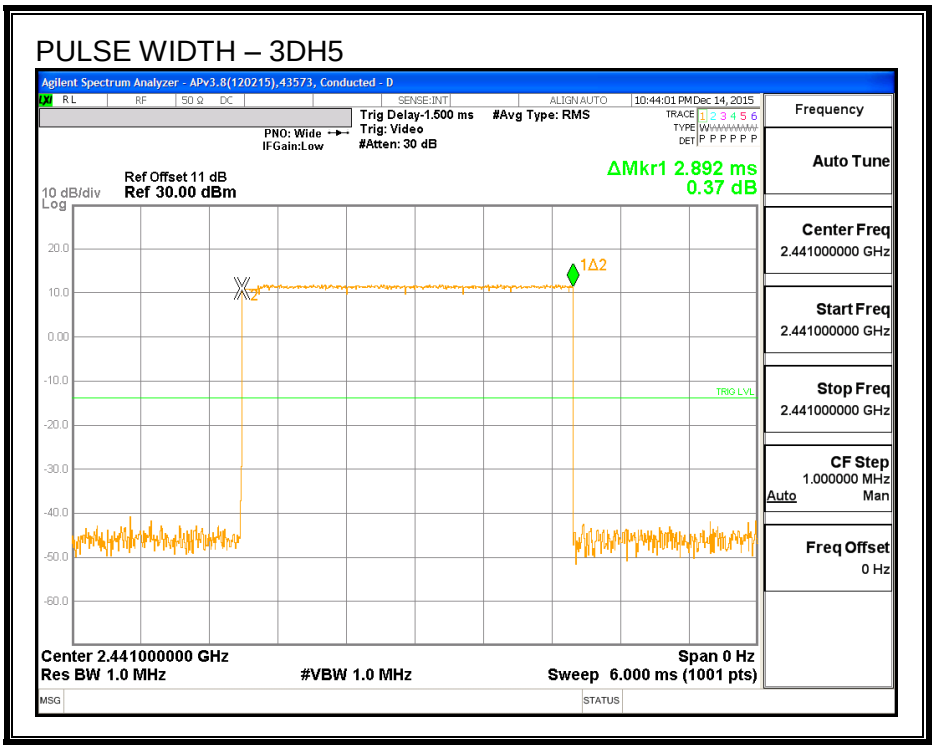
PULSE WIDTH – 3DH3



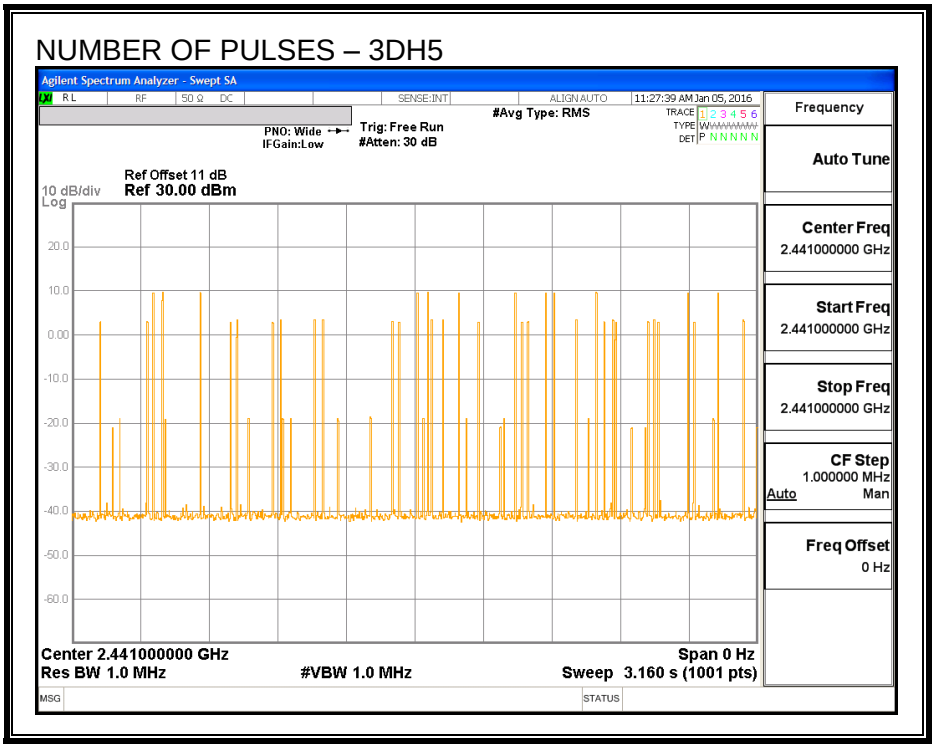
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH3



PULSE WIDTH – 3DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – 3DH5



7.13.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-247 (5.4) (2)

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	6.88	21	-14.09
Middle	2441	6.82	21	-14.15
High	2480	6.70	21	-14.27

7.13.6. AVERAGE POWER

LIMIT

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	4.50
Middle	2441	4.46
High	2480	4.29

7.13.7. 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.

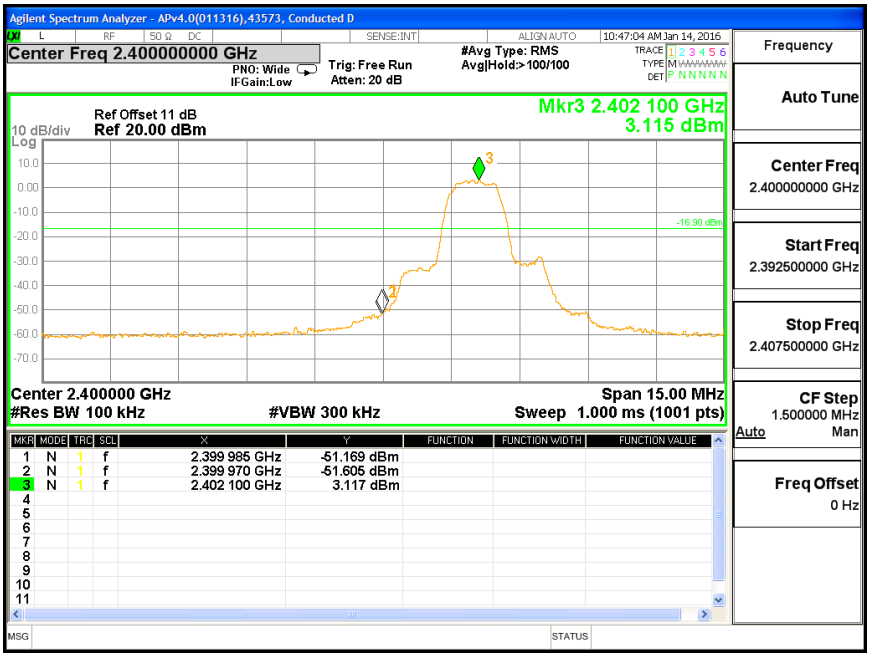
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

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

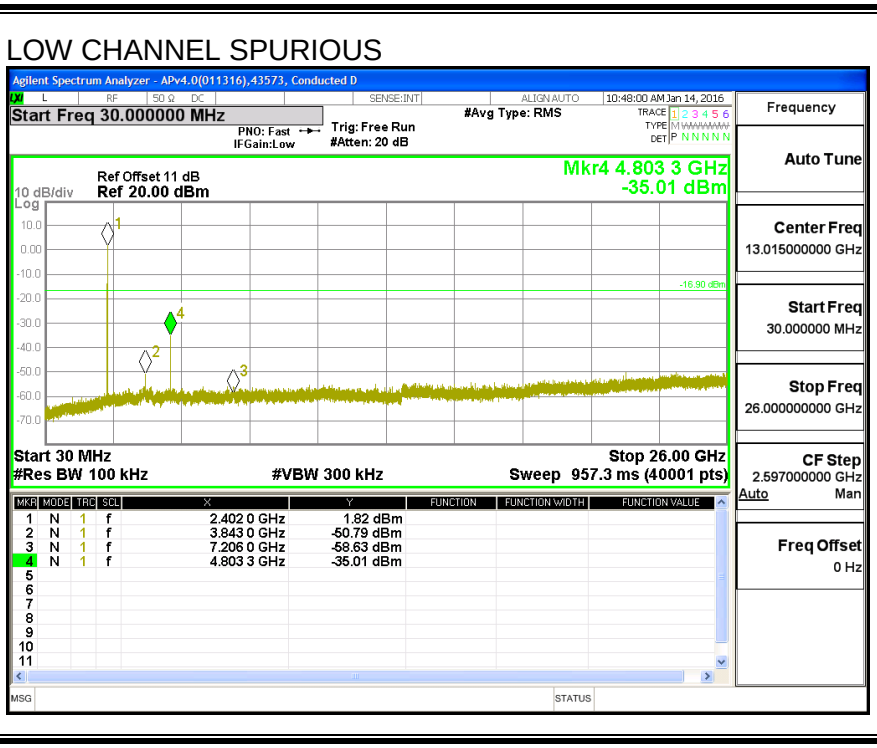
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL BANDEDGE

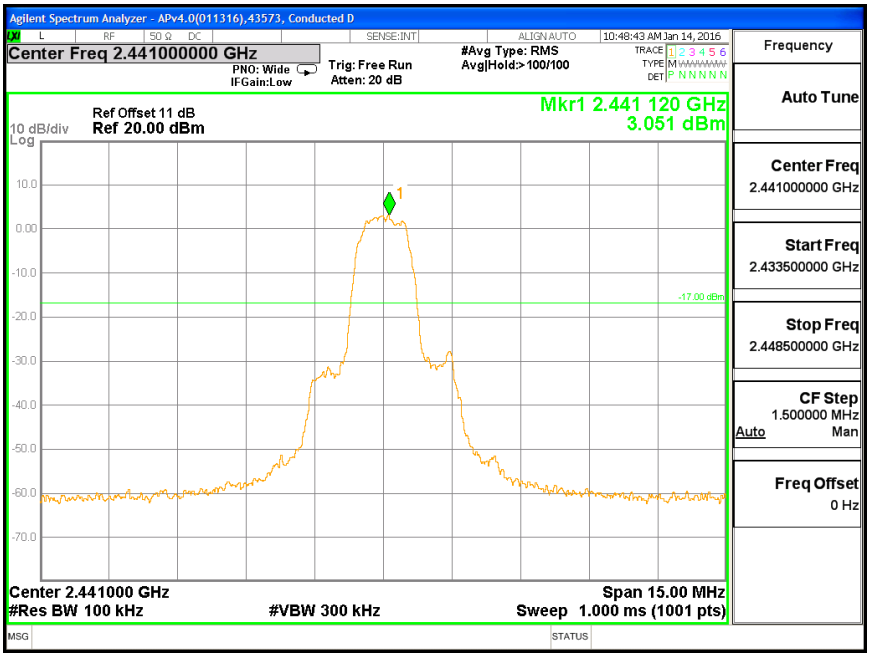


LOW CHANNEL SPURIOUS

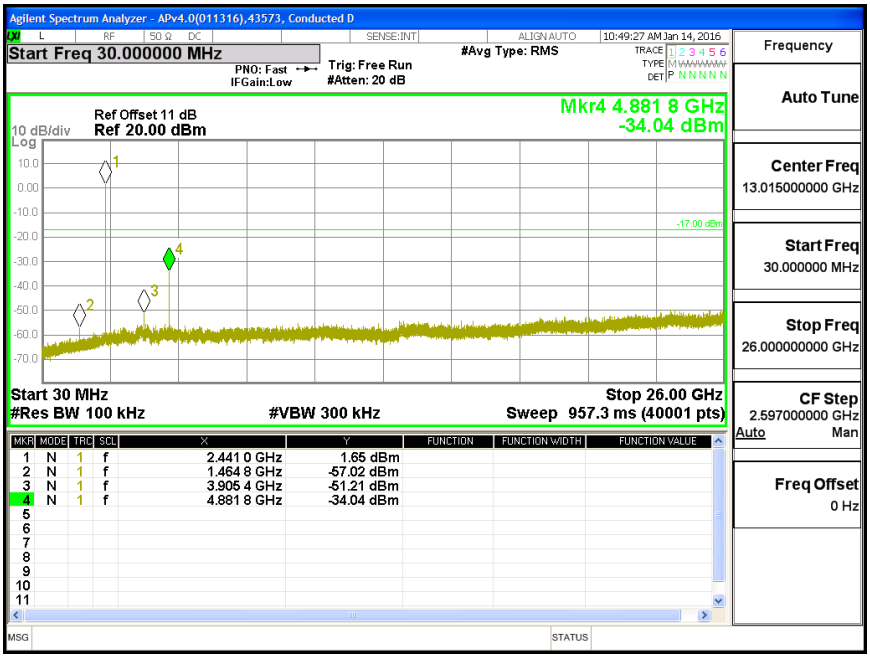


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL

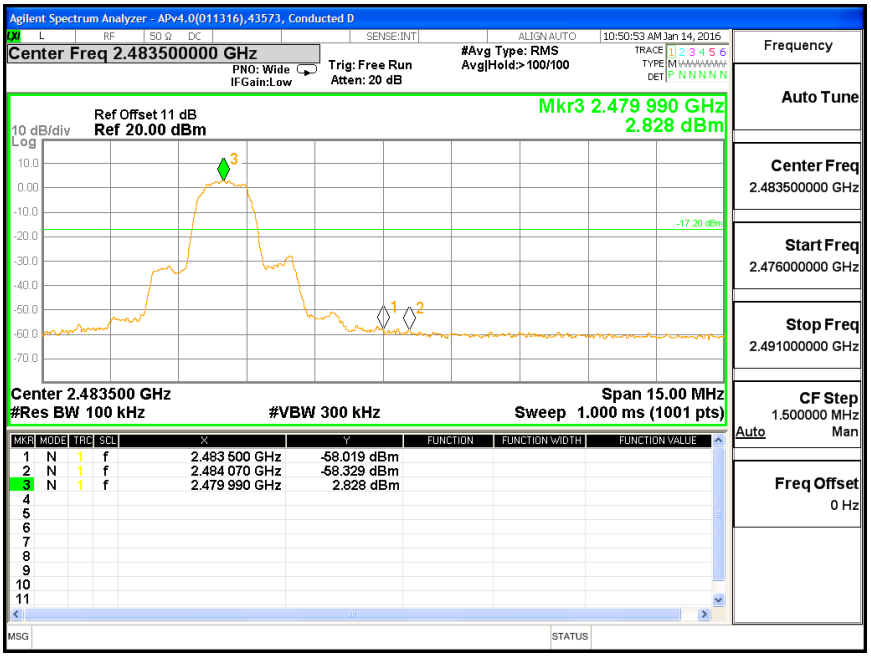


MID CHANNEL SPURIOUS

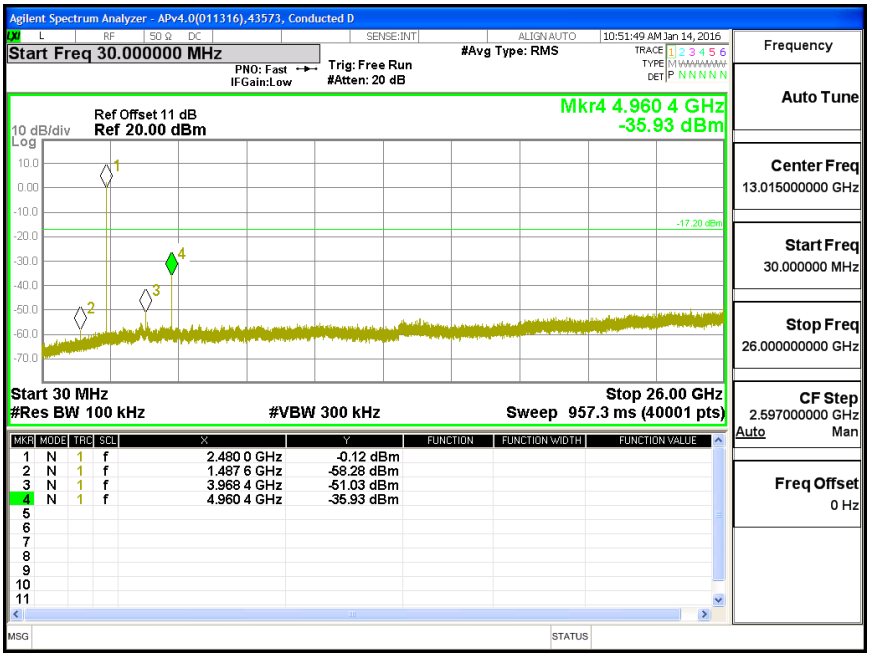


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL BANDEDGE

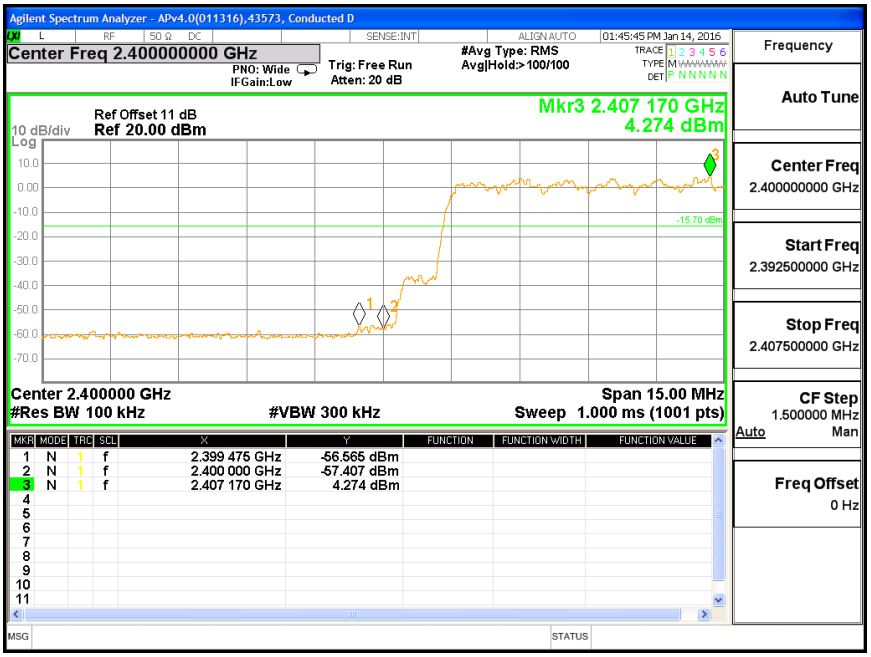


HIGH CHANNEL SPURIOUS

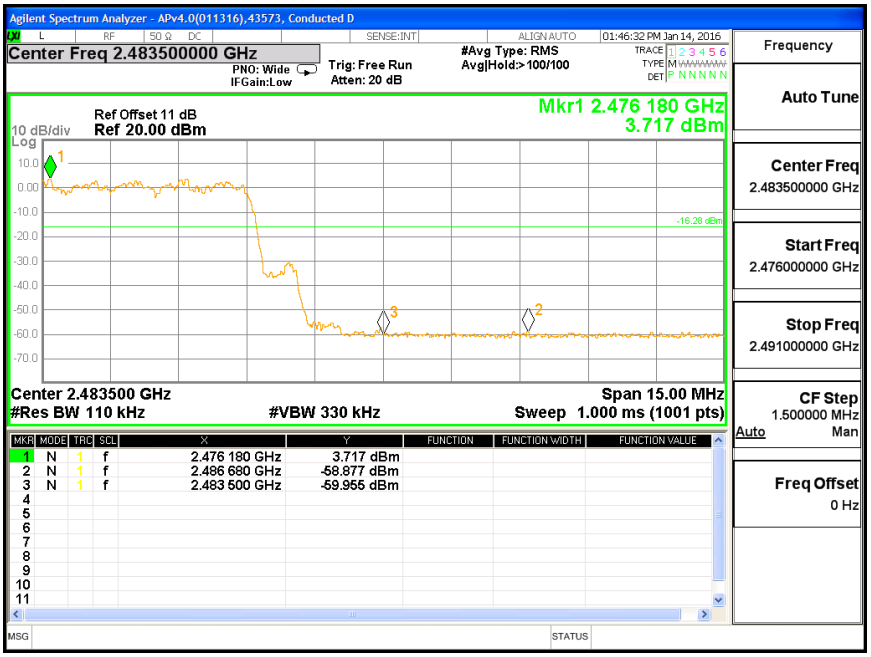


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



8. RADIATED TEST RESULTS

8.1. 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 measurements 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.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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.

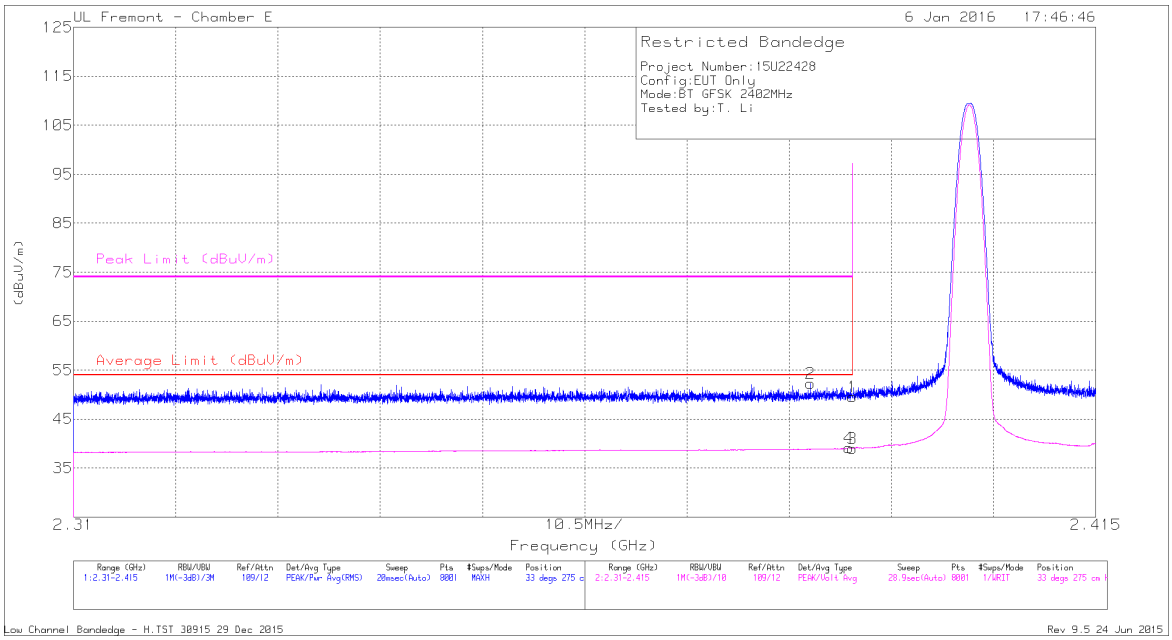
RESULTS

8.2. TRANSMITTER ABOVE 1 GHz

8.2.1. ANTENNA B HIGH POWER MODE BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.386	40.14	Pk	32	-19.9	52.24	-	-	74	-21.76	33	275	H
1	* 2.39	37.29	Pk	32.1	-19.9	49.49	-	-	74	-24.51	33	275	H
3	* 2.39	26.76	VA1T	32.1	-19.9	38.96	54	-15.04	-	-	33	275	H
4	* 2.39	26.91	VA1T	32.1	-19.9	39.11	54	-14.89	-	-	33	275	H

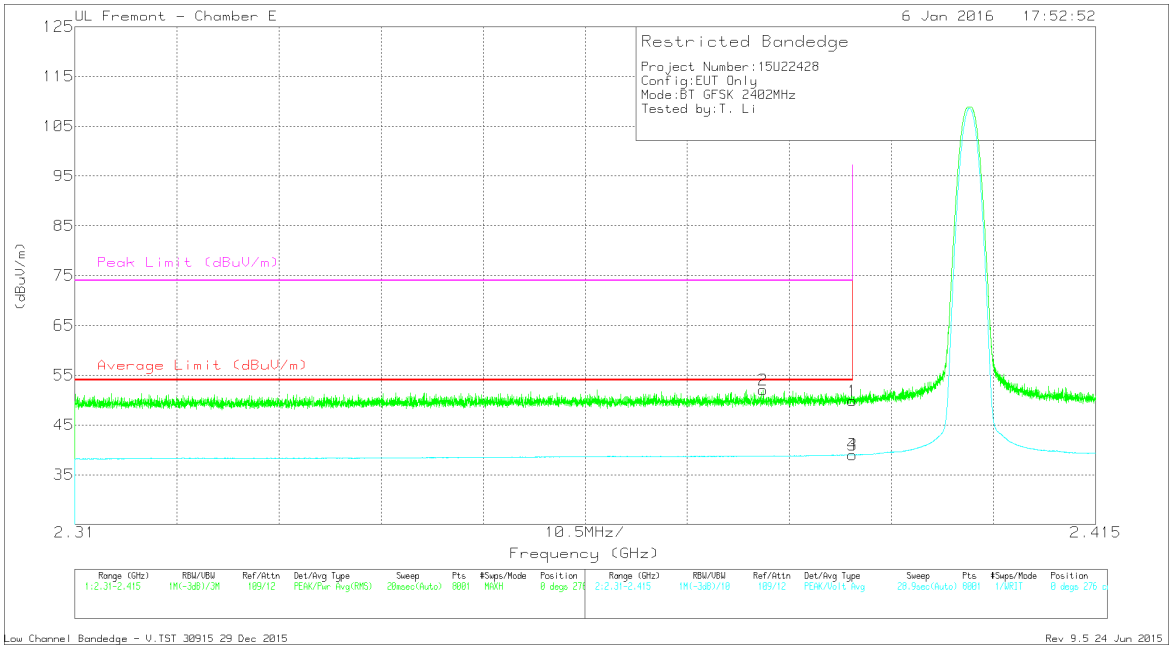
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.381	39.94	Pk	32	-19.9	52.04	-	-	74	-21.96	0	276	V
1	* 2.39	37.63	Pk	32.1	-19.9	49.83	-	-	74	-24.17	0	276	V
3	* 2.39	26.81	VA1T	32.1	-19.9	39.01	54	-14.99	-	-	0	276	V
4	* 2.39	26.81	VA1T	32.1	-19.9	39.01	54	-14.99	-	-	0	276	V

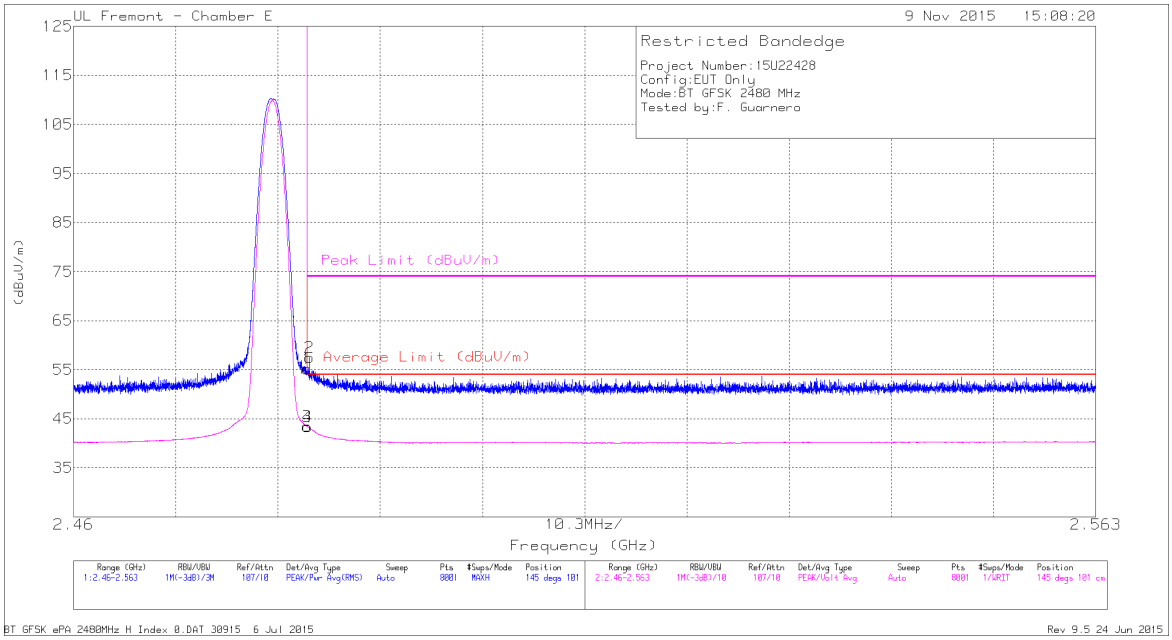
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	43.8	Pk	32.2	-20.8	55.2	-	-	74	-18.8	145	101	H
2	* 2.484	46.13	Pk	32.2	-20.8	57.53	-	-	74	-16.47	145	101	H
3	* 2.484	32.05	VA1T	32.2	-20.8	43.45	54	-10.55	-	-	145	101	H
4	* 2.484	31.99	VA1T	32.2	-20.8	43.39	54	-10.61	-	-	145	101	H

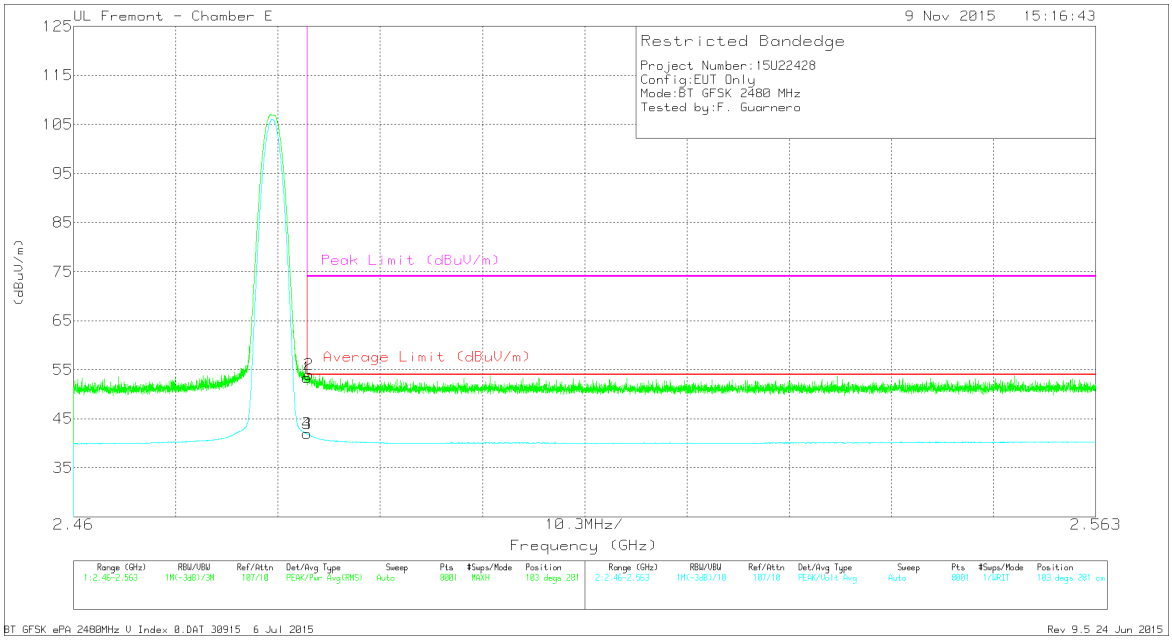
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	Pk	32.2	-20.8	53.4	-	-	74	-20.6	103	281	V
2	* 2.484	42.6	Pk	32.2	-20.8	54	-	-	74	-20	103	281	V
3	* 2.484	30.56	VA1T	32.2	-20.8	41.96	54	-12.04	-	-	103	281	V
4	* 2.484	30.52	VA1T	32.2	-20.8	41.92	54	-12.08	-	-	103	281	V

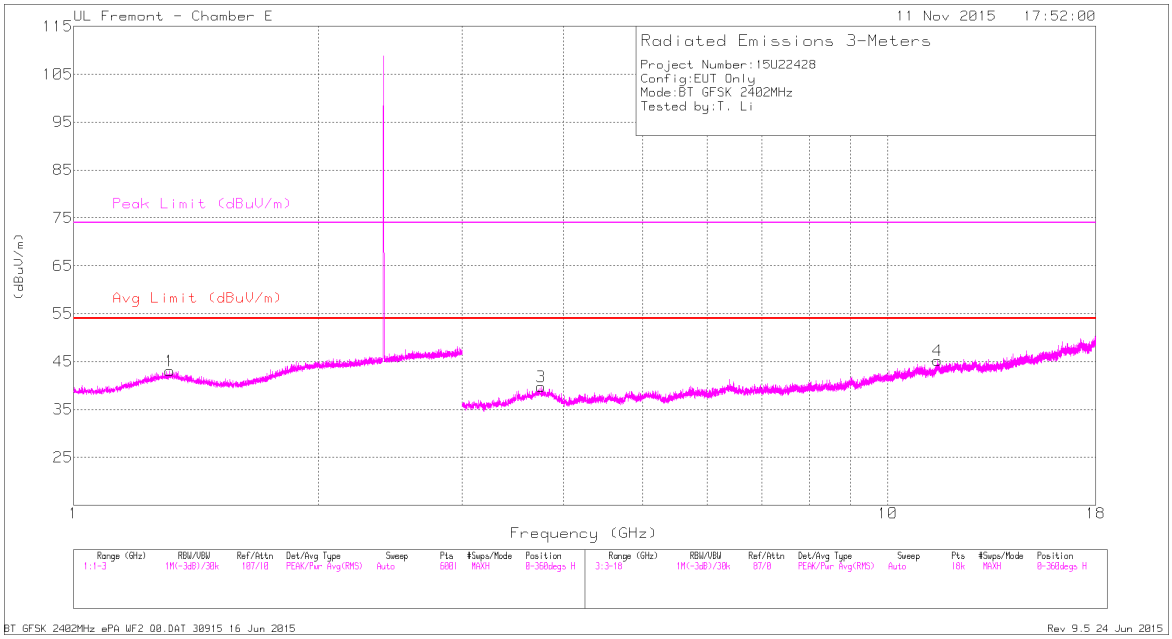
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

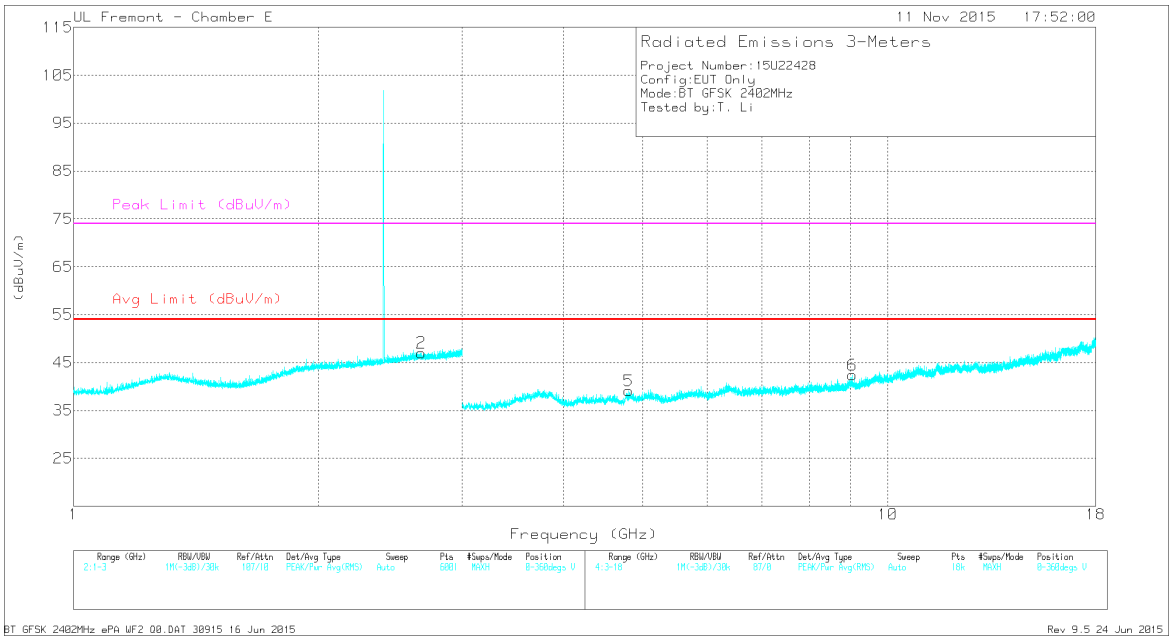
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

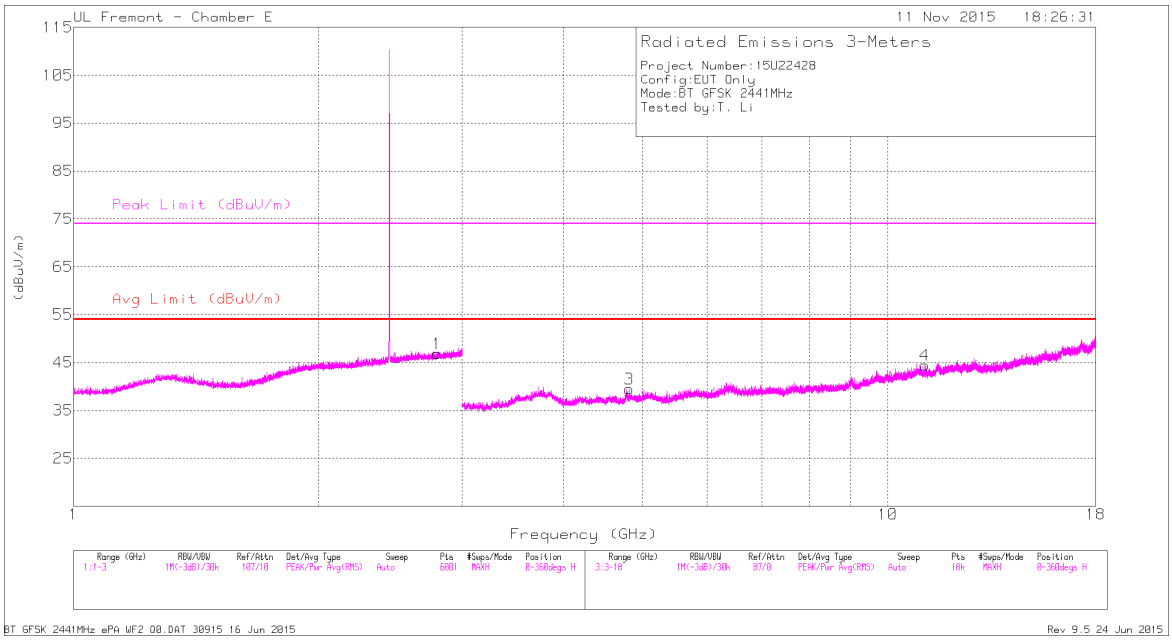
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.312	41.76	PK2	29.9	-22.2	49.46	-	-	74	-24.54	151	236	H
	* 1.311	28.79	VA1T	29.9	-22.2	36.49	54	-17.51	-	-	151	236	H
2	* 2.67	41.9	PK2	32.7	-20.8	53.8	-	-	74	-20.2	151	201	V
	* 2.671	28.67	VA1T	32.7	-20.8	40.57	54	-13.43	-	-	151	201	V
3	* 3.747	38.81	PK2	34.4	-29.3	43.91	-	-	74	-30.09	151	201	H
	* 3.747	26.02	VA1T	34.4	-29.3	31.12	54	-22.88	-	-	151	201	H
4	* 11.507	33.89	PK2	38.6	-21.2	51.29	-	-	74	-22.71	151	201	H
	* 11.508	21.26	VA1T	38.6	-21.2	38.66	54	-15.34	-	-	151	201	H
5	* 4.803	38.72	PK2	34.1	-27.7	45.12	-	-	74	-28.88	151	201	V
	* 4.806	25.11	VA1T	34.1	-27.7	31.51	54	-22.49	-	-	151	201	V
6	* 9.045	35.31	PK2	36.1	-22.7	48.71	-	-	74	-25.29	151	201	V
	* 9.044	21.77	VA1T	36.1	-22.7	35.17	54	-18.83	-	-	151	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

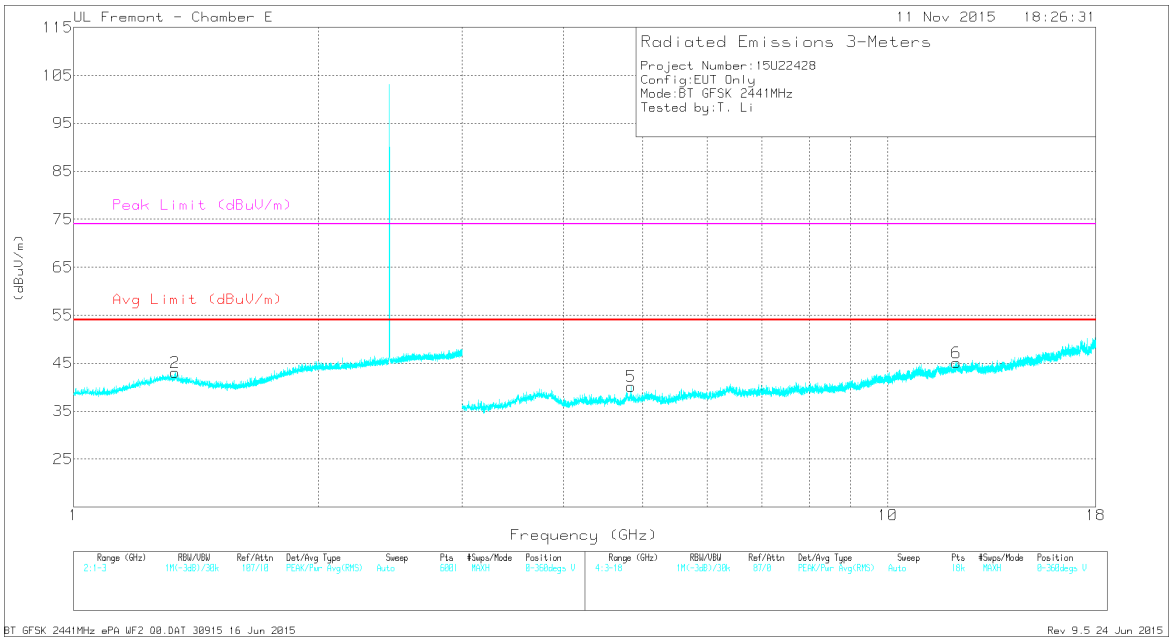
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

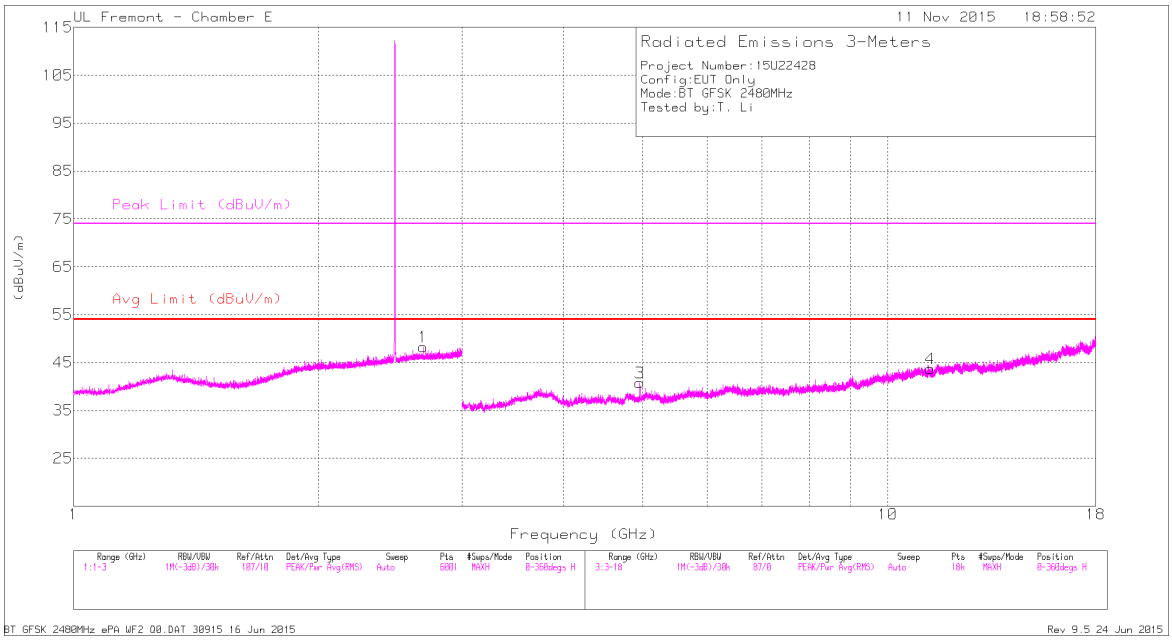
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.796	42.1	PK2	32.7	-20.5	54.3	-	-	74	-19.7	0	202	H
	* 2.797	28.5	VA1T	32.7	-20.6	40.6	54	-13.4	-	-	0	202	H
2	* 2.798	41.89	PK2	32.7	-20.6	53.99	-	-	74	-20.01	0	202	H
	* 2.799	28.51	VA1T	32.7	-20.6	40.61	54	-13.39	-	-	0	202	H
3	* 4.809	38.26	PK2	34.1	-27.6	44.76	-	-	74	-29.24	54	104	H
	* 4.808	24.96	VA1T	34.1	-27.6	31.46	54	-22.54	-	-	54	104	H
4	* 11.107	34.72	PK2	38.1	-22.1	50.72	-	-	74	-23.28	54	100	H
	* 11.105	21.55	VA1T	38.1	-22.1	37.55	54	-16.45	-	-	54	100	H
5	* 4.84	36.94	PK2	34.1	-27.3	43.74	-	-	74	-30.26	270	171	V
	* 4.843	24.54	VA1T	34.1	-27.4	31.24	54	-22.76	-	-	270	171	V
6	* 12.141	34.86	PK2	39.1	-21.9	52.06	-	-	74	-21.94	270	102	V
	* 12.139	21.63	VA1T	39.1	-21.9	38.83	54	-15.17	-	-	270	102	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

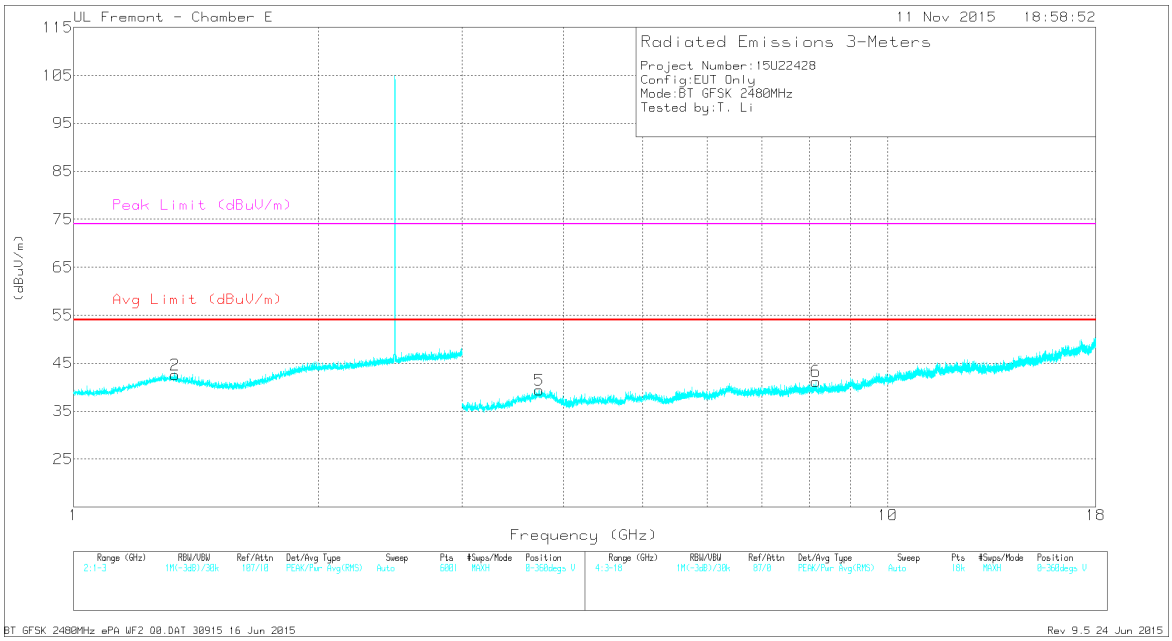
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 2.688	41.97	PK2	32.7	-20.8	53.87	-	-	74	-20.13	0	100	H
	* 2.688	28.66	VA1T	32.7	-20.8	40.56	54	-13.44	-	-	0	100	H
2	* 1.333	42.22	PK2	29.7	-22.2	49.72	-	-	74	-24.28	0	100	V
	* 1.33	28.91	VA1T	29.8	-22.2	36.51	54	-17.49	-	-	0	100	V
3	* 4.96	40.64	PK2	34.1	-28.7	46.04	-	-	74	-27.96	146	121	H
	* 4.96	30.93	VA1T	34.1	-28.7	36.33	54	-17.67	-	-	146	121	H
4	* 11.264	33.95	PK2	38.2	-21.7	50.45	-	-	74	-23.55	146	101	H
	* 11.267	21.16	VA1T	38.3	-21.7	37.76	54	-16.24	-	-	146	101	H
5	* 3.734	39.01	PK2	34.5	-29.3	44.21	-	-	74	-29.79	146	201	V
	* 3.732	26.38	VA1T	34.5	-29.4	31.48	54	-22.52	-	-	146	201	V
6	* 8.157	36.78	PK2	35.8	-24.9	47.68	-	-	74	-26.32	146	101	V
	* 8.156	23.53	VA1T	35.8	-24.9	34.43	54	-19.57	-	-	146	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

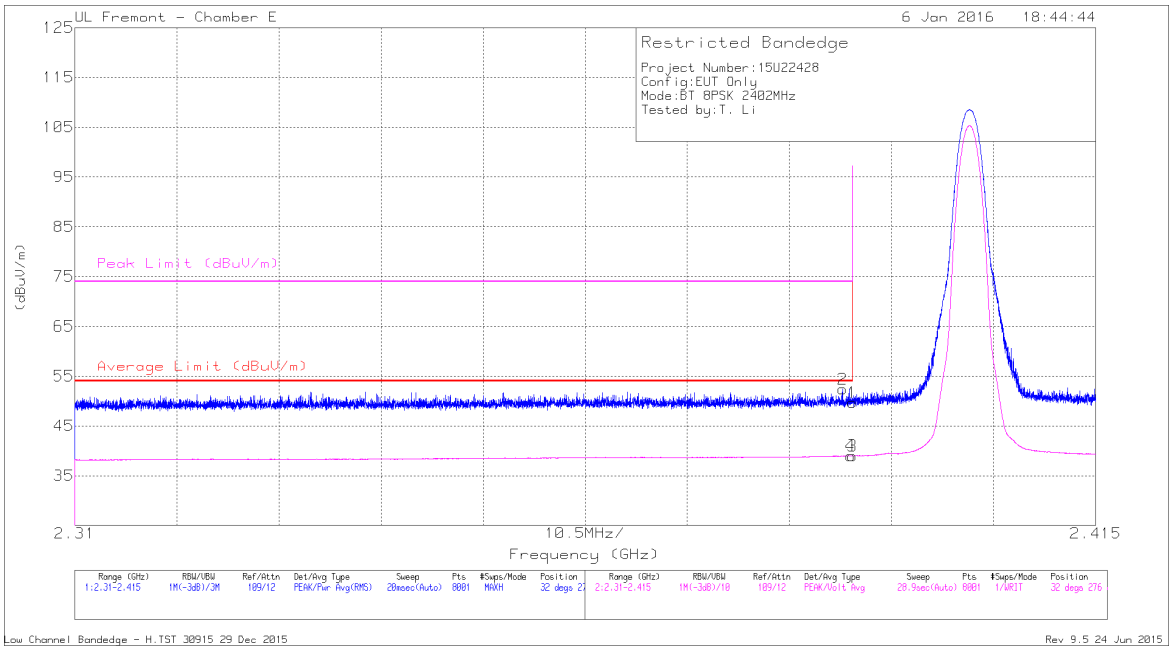
PK2 - KDB558074 Method: Maximum Peak

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

8.2.2. ANTENNA B HIGH POWER MODE ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	40.17	Pk	32.1	-19.9	52.37	-	-	74	-21.63	32	276	H
1	* 2.39	37.5	Pk	32.1	-19.9	49.7	-	-	74	-24.3	32	276	H
3	* 2.39	26.79	VA1T	32.1	-19.9	38.99	54	-15.01	-	-	32	276	H
4	* 2.39	26.8	VA1T	32.1	-19.9	39	54	-15	-	-	32	276	H

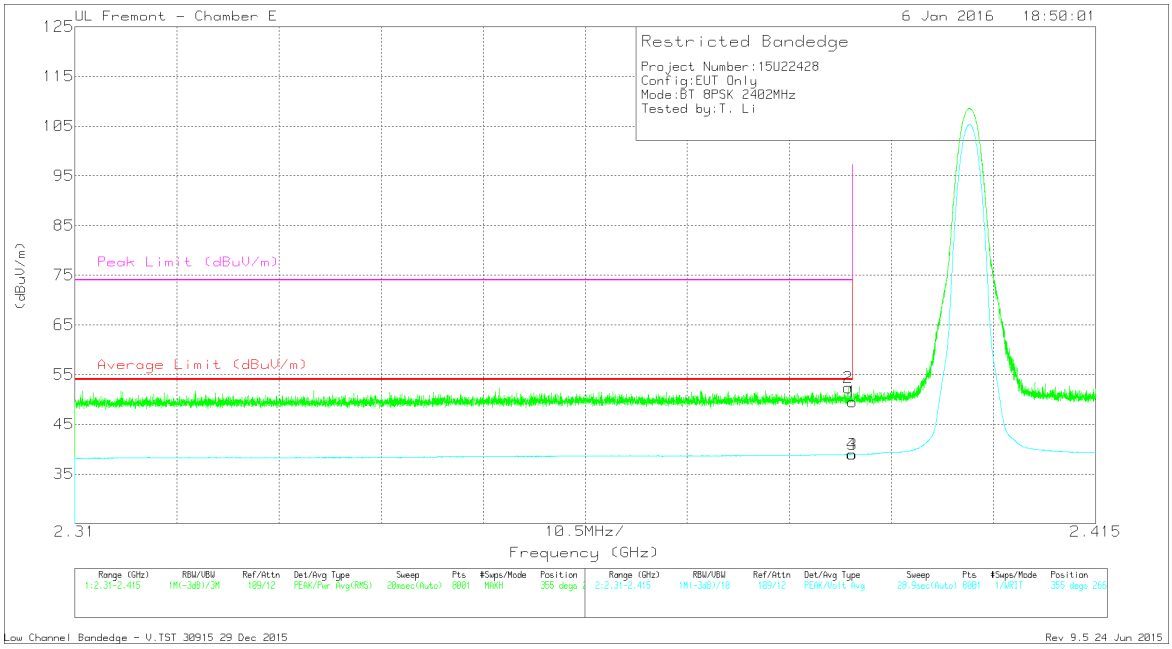
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	37.32	Pk	32.1	-19.9	49.52	-	-	74	-24.48	355	266	V
2	* 2.39	40.16	Pk	32.1	-19.9	52.36	-	-	74	-21.64	355	266	V
3	* 2.39	26.75	VA1T	32.1	-19.9	38.95	54	-15.05	-	-	355	266	V
4	* 2.39	26.77	VA1T	32.1	-19.9	38.97	54	-15.03	-	-	355	266	V

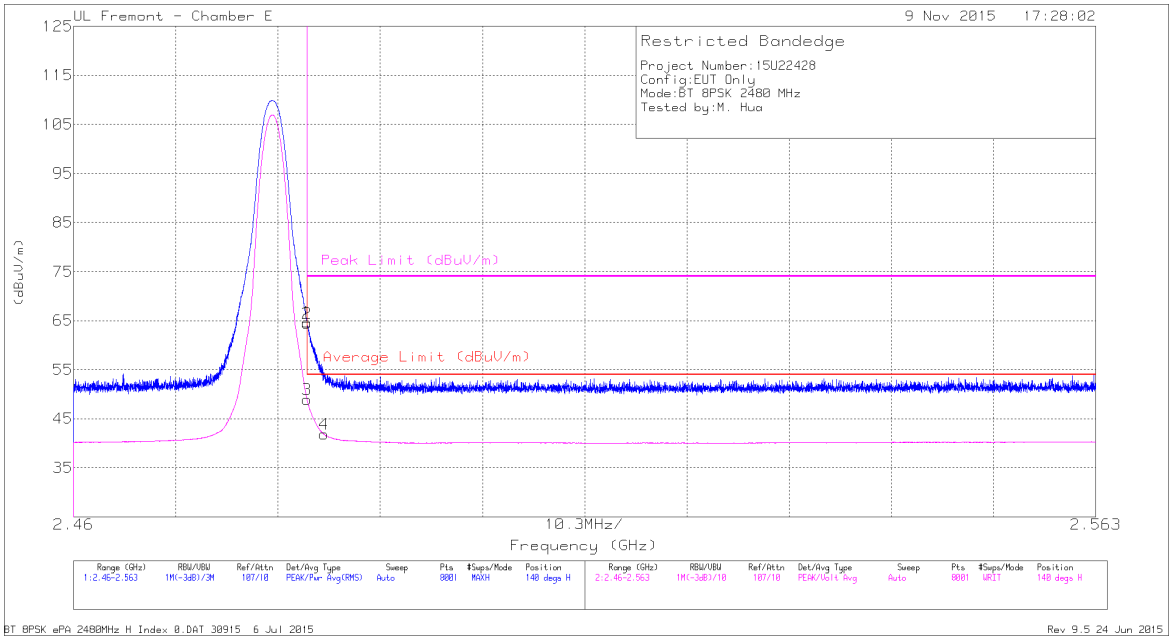
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	53.3	Pk	32.2	-20.8	64.7	-	-	74	-9.3	140	101	H
2	* 2.484	53.05	Pk	32.2	-20.8	64.45	-	-	74	-9.55	140	101	H
3	* 2.484	37.52	VA1T	32.2	-20.8	48.92	54	-5.08	-	-	140	101	H
4	* 2.485	30.42	VA1T	32.2	-20.8	41.82	54	-12.18	-	-	140	101	H

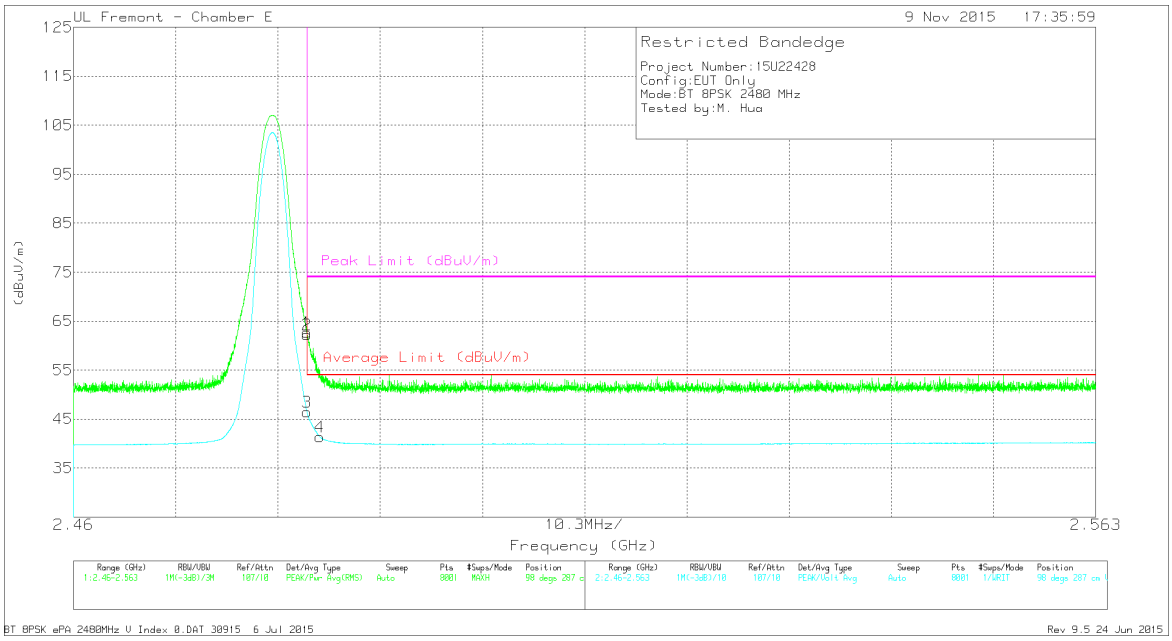
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	51.31	Pk	32.2	-20.8	62.71	-	-	74	-11.29	98	287	V
2	* 2.484	50.78	Pk	32.2	-20.8	62.18	-	-	74	-11.82	98	287	V
3	* 2.484	35.08	VA1T	32.2	-20.8	46.48	54	-7.52	-	-	98	287	V
4	* 2.485	29.91	VA1T	32.2	-20.8	41.31	54	-12.69	-	-	98	287	V

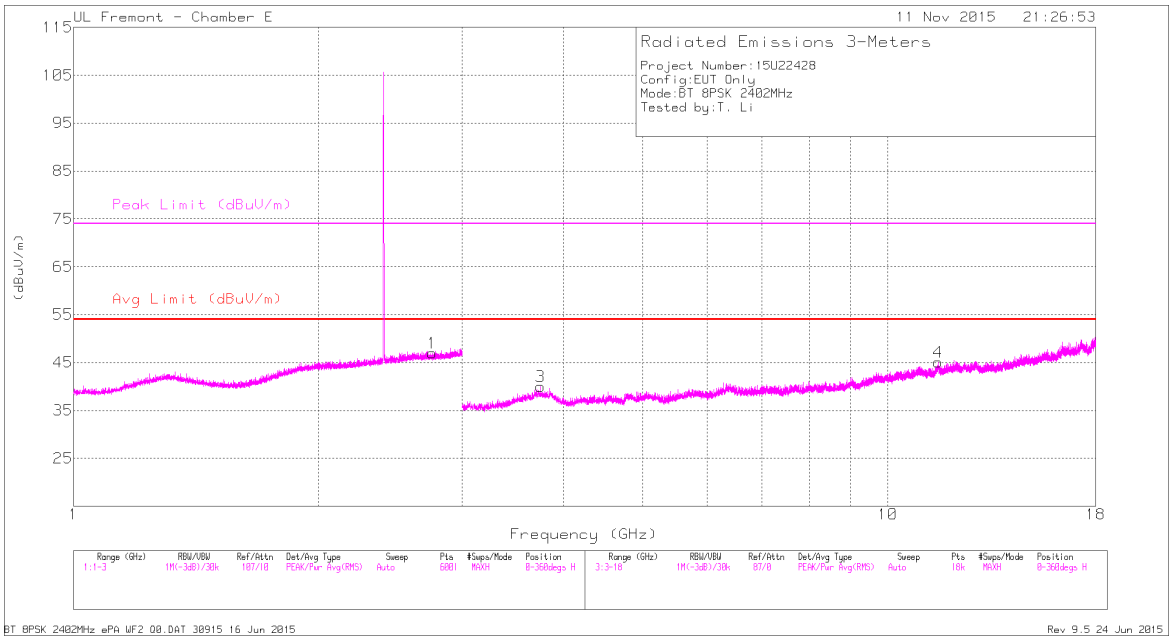
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

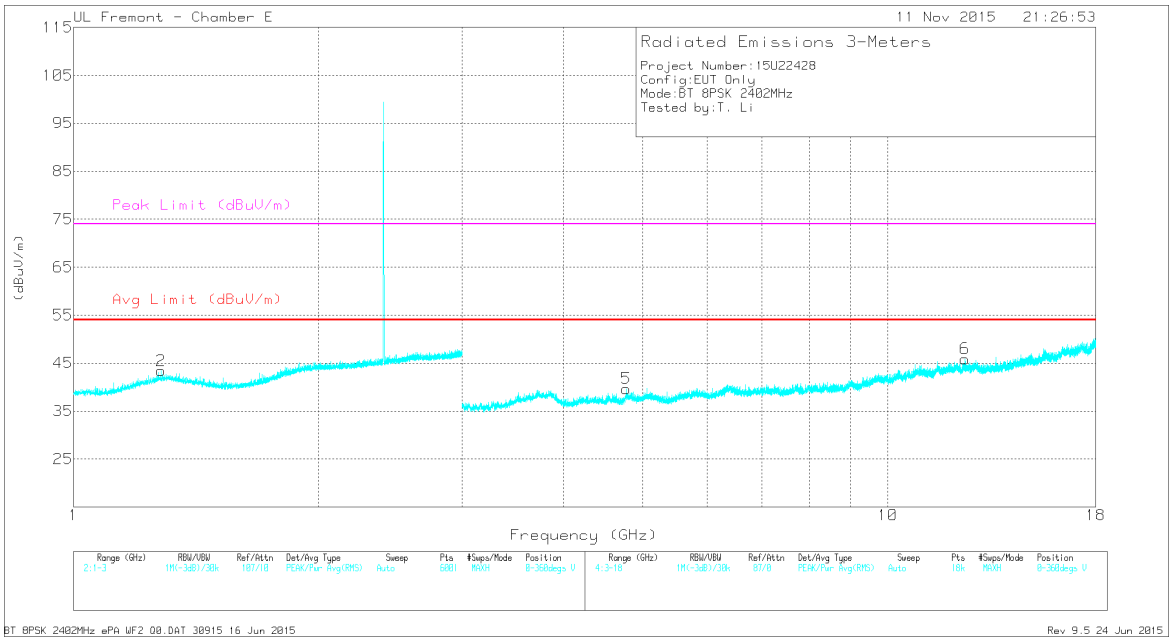
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

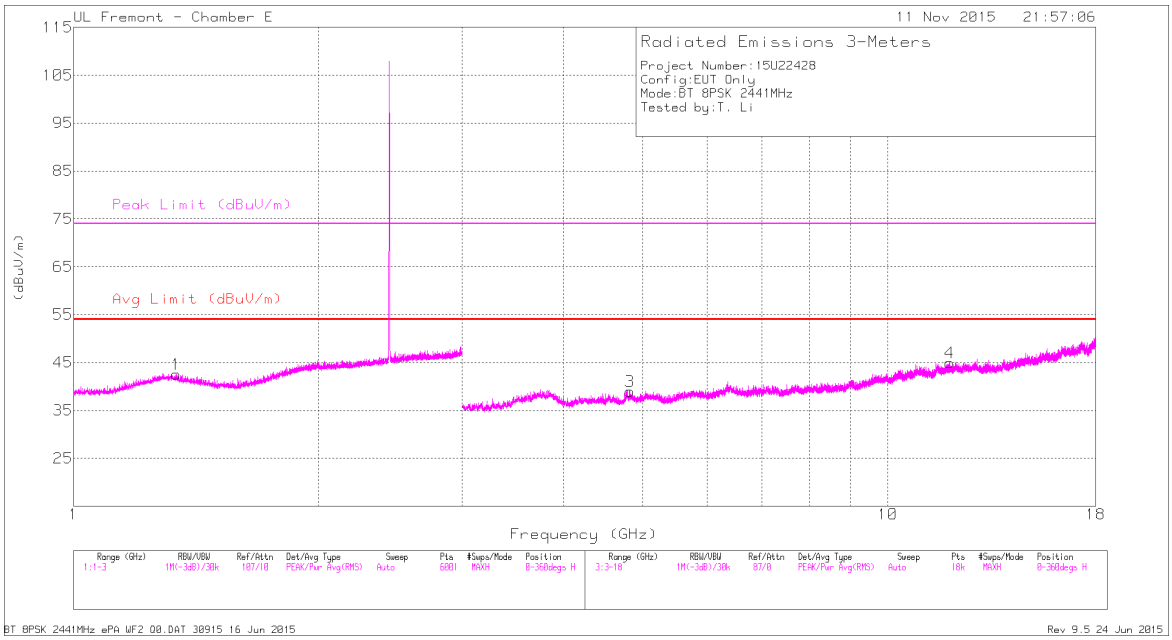
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.758	41.63	PK2	32.7	-20.8	53.53	-	-	74	-20.47	0	202	H
	* 2.76	28.61	VA1T	32.7	-20.7	40.61	54	-13.39	-	-	0	202	H
2	* 1.28	41.99	PK2	29.8	-22.3	49.49	-	-	74	-24.51	0	202	V
	* 1.279	28.99	VA1T	29.8	-22.3	36.49	54	-17.51	-	-	0	202	V
3	* 3.745	39.57	PK2	34.4	-29.3	44.67	-	-	74	-29.33	0	102	H
	* 3.745	26.15	VA1T	34.4	-29.3	31.25	54	-22.75	-	-	0	102	H
4	* 11.535	34	PK2	38.6	-21.3	51.3	-	-	74	-22.7	0	102	H
	* 11.534	21.15	VA1T	38.6	-21.3	38.45	54	-15.55	-	-	0	102	H
5	* 4.772	38.89	PK2	34.1	-28.2	44.79	-	-	74	-29.21	4	249	H
	* 4.775	26.14	VA1T	34.1	-28.1	32.14	54	-21.86	-	-	4	249	H
6	* 12.425	35.1	PK2	39.1	-22.5	51.7	-	-	74	-22.3	4	200	H
	* 12.424	22.04	VA1T	39.1	-22.5	38.64	54	-15.36	-	-	4	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

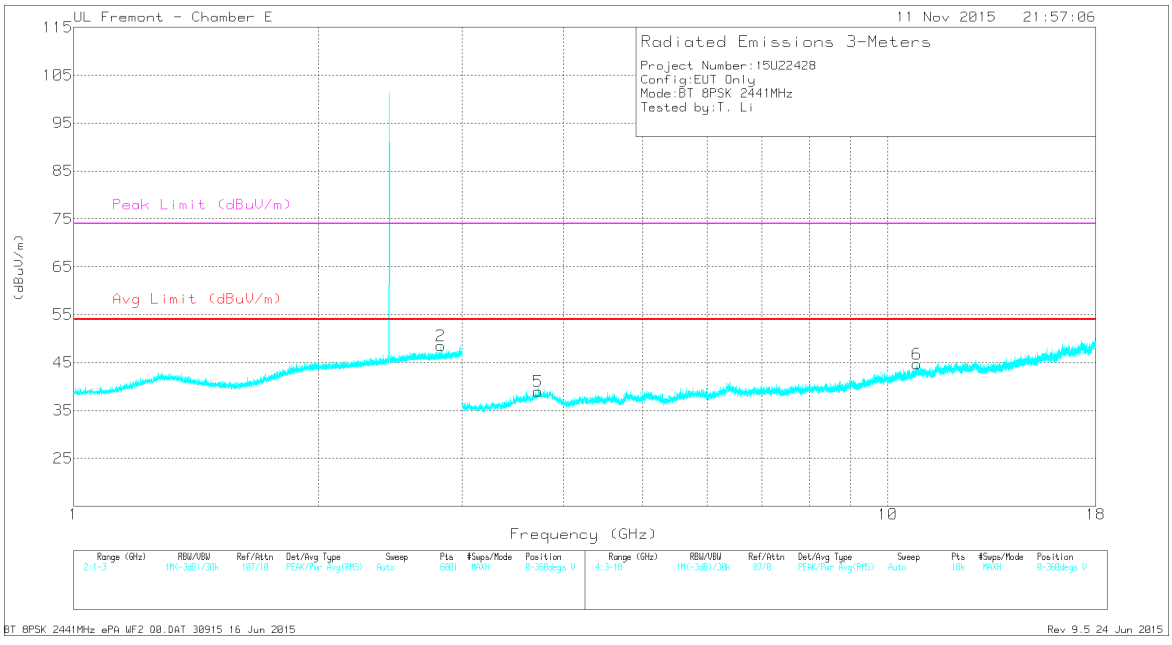
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

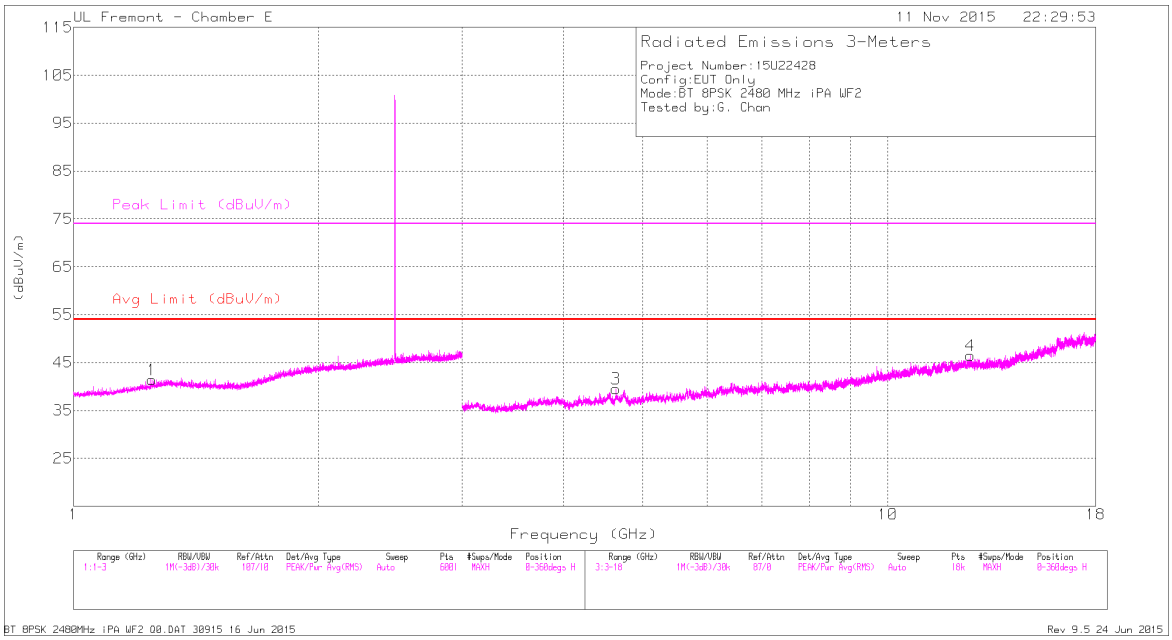
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.336	42.48	PK2	29.7	-22.2	49.98	-	-	74	-24.02	1	202	H
	* 1.338	28.87	VA1T	29.7	-22.2	36.37	54	-17.63	-	-	1	202	H
2	* 2.827	41.71	PK2	32.7	-20.4	54.01	-	-	74	-19.99	174	261	V
	* 2.825	28.46	VA1T	32.7	-20.4	40.76	54	-13.24	-	-	174	261	V
3	* 4.816	37.33	PK2	34.1	-27.4	44.03	-	-	74	-29.97	0	334	H
	* 4.818	24.71	VA1T	34.1	-27.4	31.41	54	-22.59	-	-	0	334	H
4	* 11.903	34.59	PK2	39.1	-22.1	51.59	-	-	74	-22.41	0	202	H
	* 11.903	21.48	VA1T	39.1	-22.1	38.48	54	-15.52	-	-	0	202	H
5	* 3.72	39.31	PK2	34.6	-29.4	44.51	-	-	74	-29.49	0	102	V
	* 3.722	26.62	VA1T	34.6	-29.4	31.82	54	-22.18	-	-	0	102	V
6	* 10.862	35.03	PK2	38.1	-21.7	51.43	-	-	74	-22.57	0	102	V
	* 10.861	21.35	VA1T	38.1	-21.7	37.75	54	-16.25	-	-	0	102	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

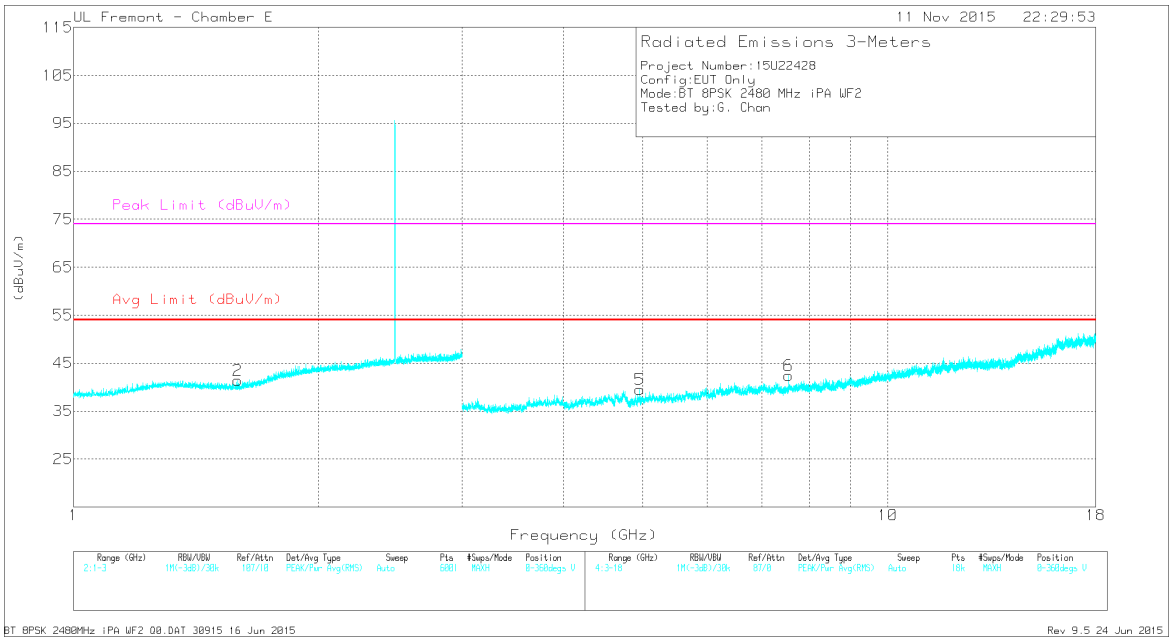
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.339	42.1	PK2	29.7	-22.2	49.6	-	-	74	-24.4	0	202	H
	* 1.339	28.88	VA1T	29.7	-22.2	36.38	54	-17.62	-	-	0	202	H
4	* 1.694	42.73	PK2	28.8	-21.9	49.63	-	-	74	-24.37	0	102	V
	* 1.695	28.79	VA1T	28.8	-21.9	35.69	54	-18.31	-	-	0	102	V
2	* 4.81	37.84	PK2	34.1	-27.5	44.44	-	-	74	-29.56	0	102	H
	* 4.811	25.29	VA1T	34.1	-27.5	31.89	54	-22.11	-	-	0	102	H
3	* 8.298	36.14	PK2	35.8	-25.2	46.74	-	-	74	-27.26	0	202	H
	* 8.3	23.37	VA1T	35.8	-25.2	33.97	54	-20.03	-	-	0	202	H
5	* 3.841	38.66	PK2	34	-28.3	44.36	-	-	74	-29.64	0	202	V
	* 3.84	25.83	VA1T	34	-28.3	31.53	54	-22.47	-	-	0	202	V
6	* 12.179	34.39	PK2	39	-22	51.39	-	-	74	-22.61	0	202	V
	* 12.176	21.53	VA1T	39	-22	38.53	54	-15.47	-	-	0	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

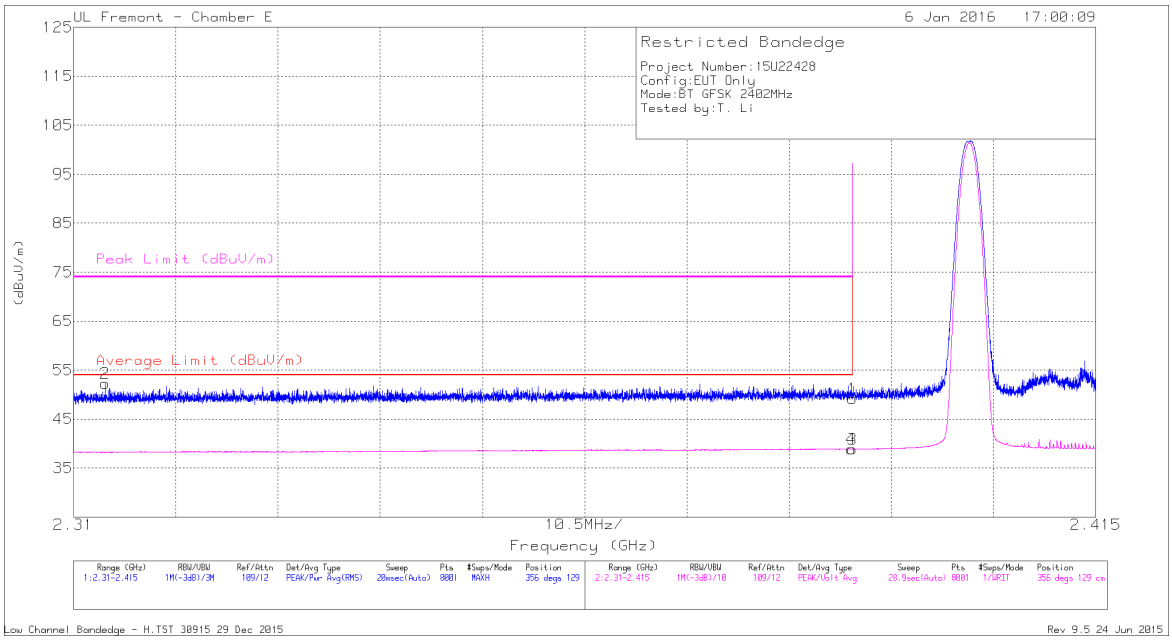
PK2 - KDB558074 Method: Maximum Peak

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

8.2.3. ANTENNA B LOW POWER MODE BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.313	40.55	Pk	31.9	-20.2	52.25	-	-	74	-21.75	356	129	H
1	* 2.39	36.99	Pk	32.1	-19.9	49.19	-	-	74	-24.81	356	129	H
3	* 2.39	26.67	VA1T	32.1	-19.9	38.87	54	-15.13	-	-	356	129	H
4	* 2.39	26.7	VA1T	32.1	-19.9	38.9	54	-15.1	-	-	356	129	H

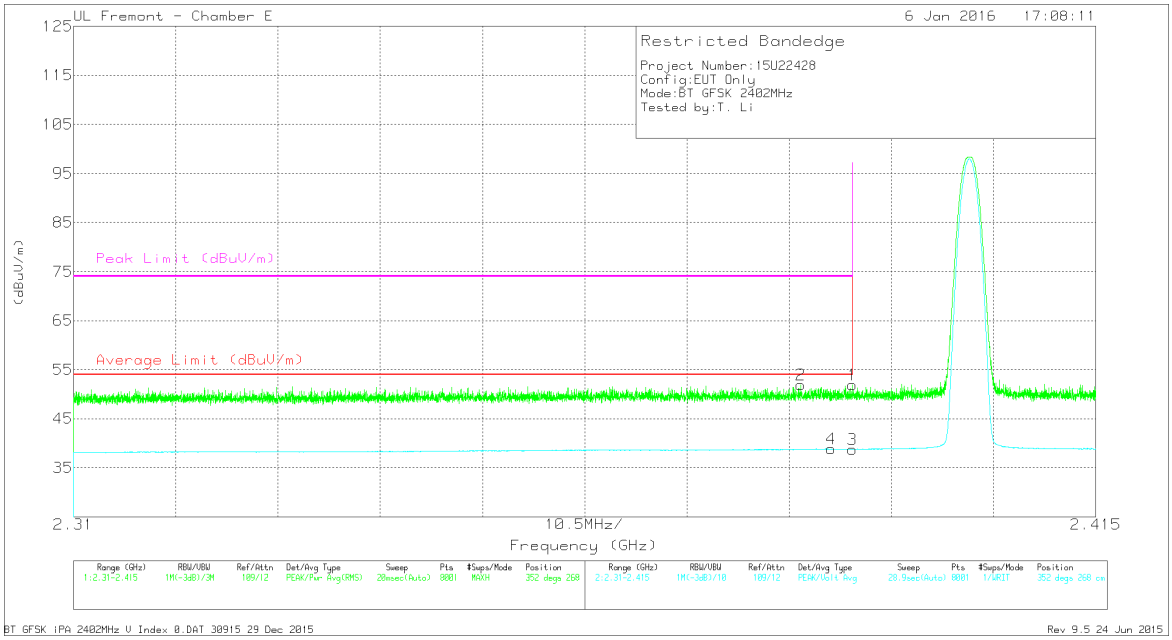
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.385	39.84	Pk	32	-19.9	51.94	-	-	74	-22.06	352	268	V
4	* 2.388	26.62	VA1T	32.1	-19.9	38.82	54	-15.18	-	-	352	268	V
1	* 2.39	39.65	Pk	32.1	-19.9	51.85	-	-	74	-22.15	352	268	V
3	* 2.39	26.54	VA1T	32.1	-19.9	38.74	54	-15.26	-	-	352	268	V

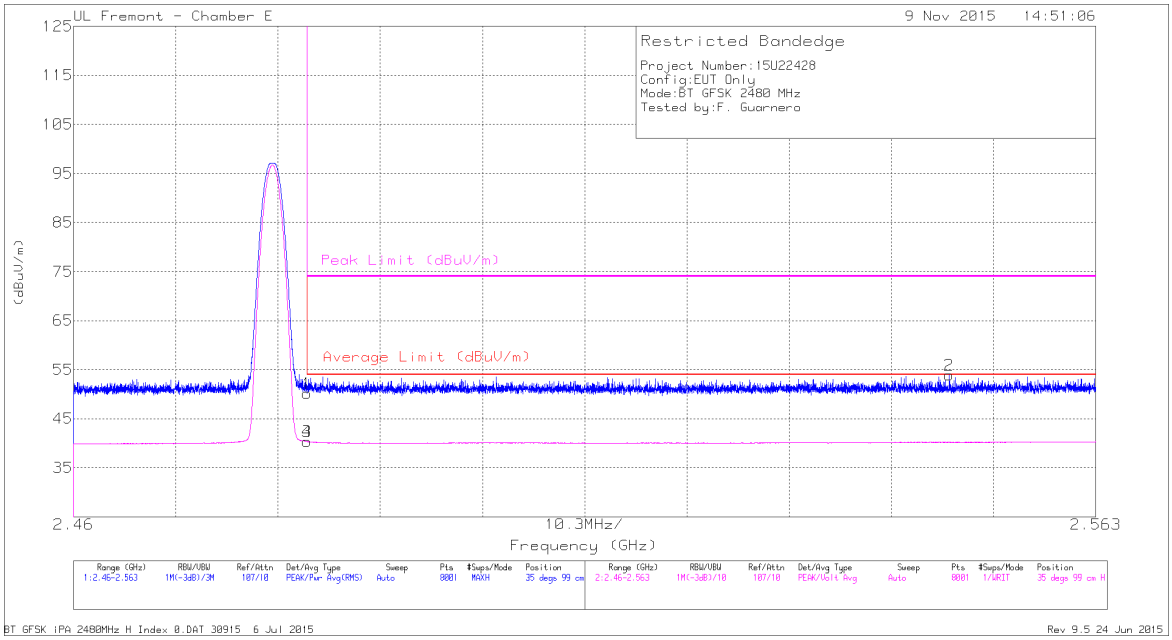
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	38.81	Pk	32.2	-20.8	50.21	-	-	74	-23.79	35	99	H
3	* 2.484	28.94	VA1T	32.2	-20.8	40.34	54	-13.66	-	-	35	99	H
4	* 2.484	28.94	VA1T	32.2	-20.8	40.34	54	-13.66	-	-	35	99	H
2	2.548	42.25	Pk	32.3	-20.7	53.85	-	-	74	-20.15	35	99	H

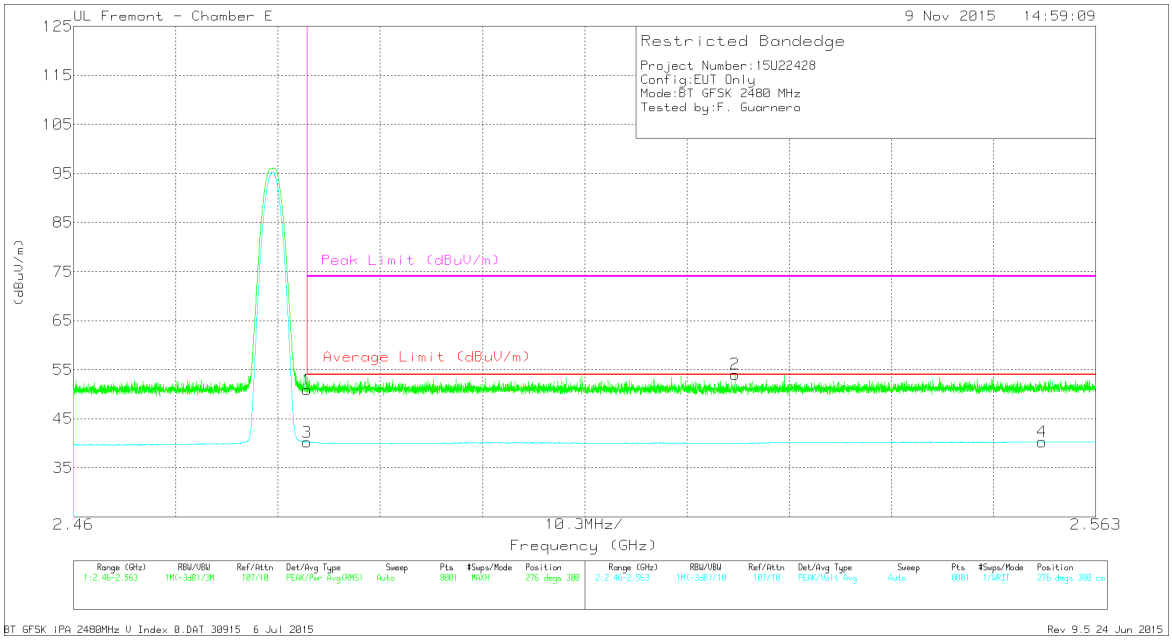
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	39.53	Pk	32.2	-20.8	50.93	-	-	74	-23.07	276	300	V
3	* 2.484	28.87	VA1T	32.2	-20.8	40.27	54	-13.73	-	-	276	300	V
2	2.527	42.48	Pk	32.3	-20.7	54.08	-	-	74	-19.92	276	300	V
4	2.558	28.7	VA1T	32.3	-20.7	40.3	54	-13.7	-	-	276	300	V

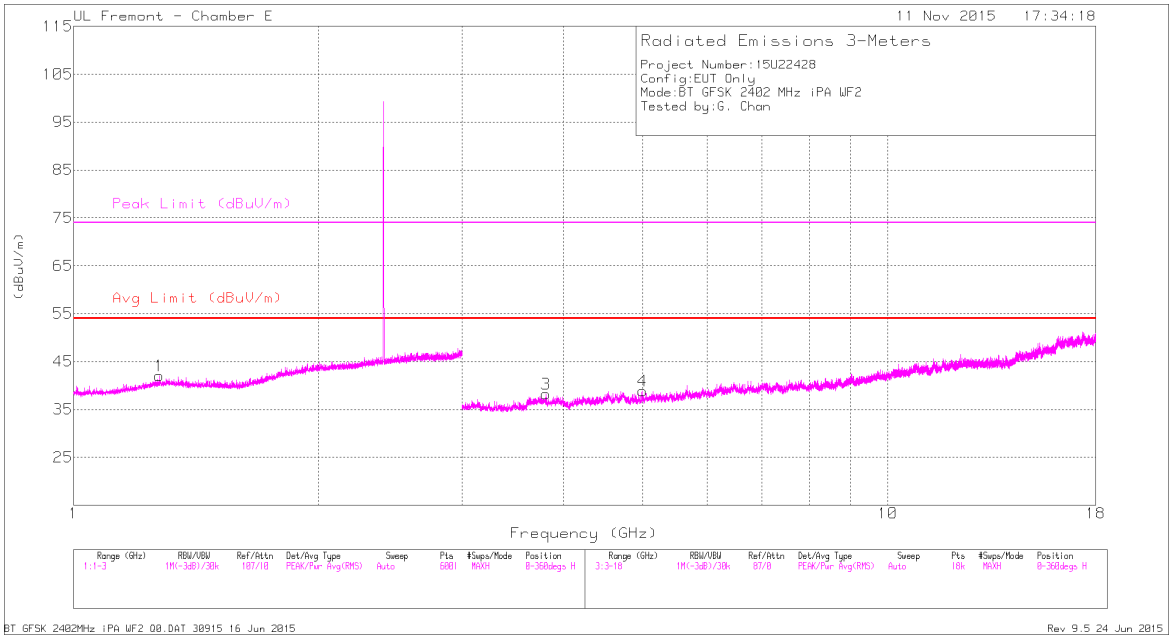
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

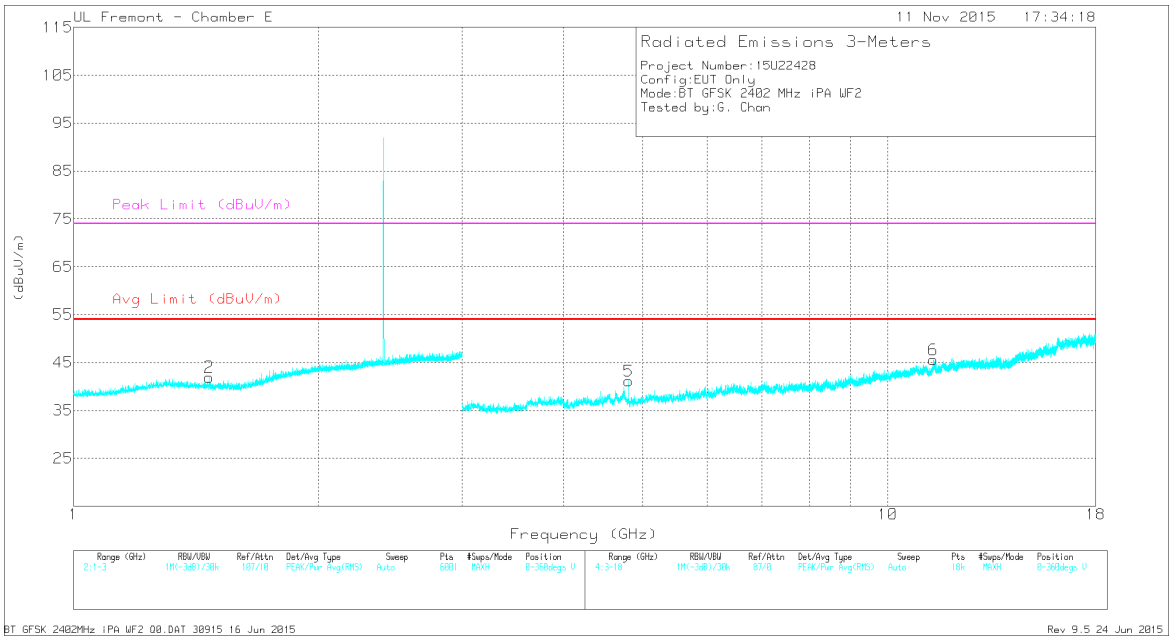
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

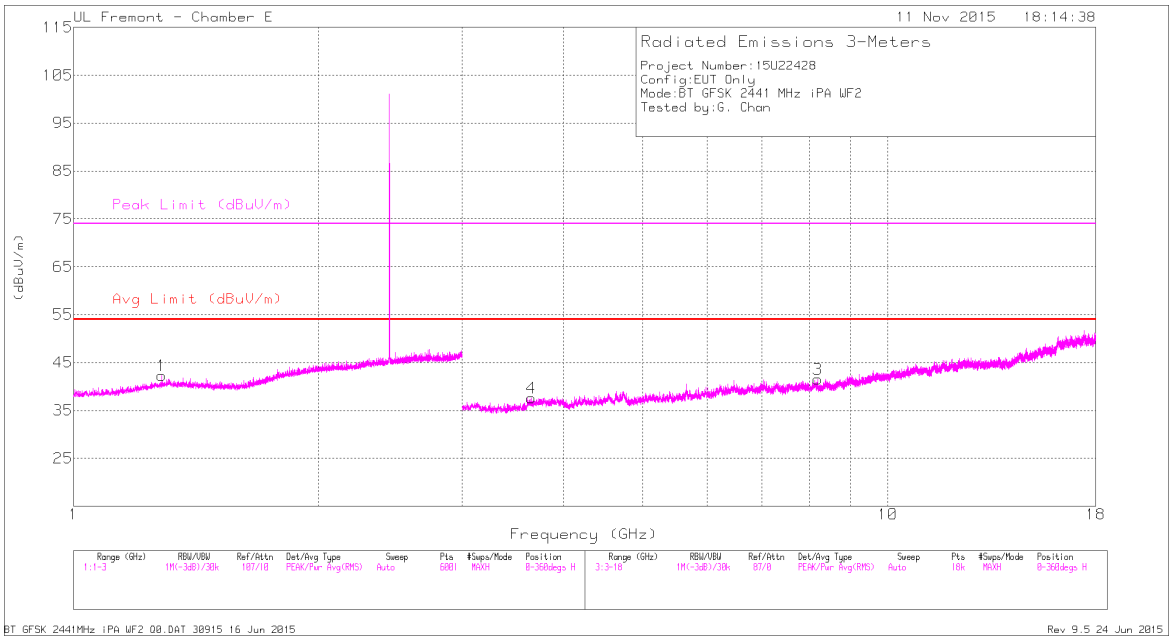
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.275	45.15	PK2	28.8	-25.7	48.25	-	-	74	-25.75	360	101	H
	* 1.273	31.84	VA1T	28.8	-25.7	34.94	54	-19.06	-	-	360	101	H
2	* 1.464	44.62	PK2	28.3	-25.2	47.72	-	-	74	-26.28	360	200	V
	* 1.464	31.57	VA1T	28.3	-25.2	34.67	54	-19.33	-	-	360	200	V
6	* 3.807	41.59	PK2	33.5	-30.9	44.19	-	-	74	-29.81	360	100	H
	* 3.808	29.25	VA1T	33.5	-31	31.75	54	-22.25	-	-	360	100	H
3	* 5	41.02	PK2	34.2	-30.2	45.02	-	-	74	-28.98	360	100	H
	* 4.998	28.25	VA1T	34.2	-30.2	32.25	54	-21.75	-	-	360	100	H
5	* 4.804	43.33	PK2	34.1	-29.8	47.63	-	-	74	-26.37	241	193	V
	* 4.804	34.36	VA1T	34.1	-29.8	38.66	54	-15.34	-	-	241	193	V
4	* 11.379	36.34	PK2	38	-22.6	51.74	-	-	74	-22.26	241	200	V
	* 11.375	23.33	VA1T	38	-22.7	38.63	54	-15.37	-	-	241	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

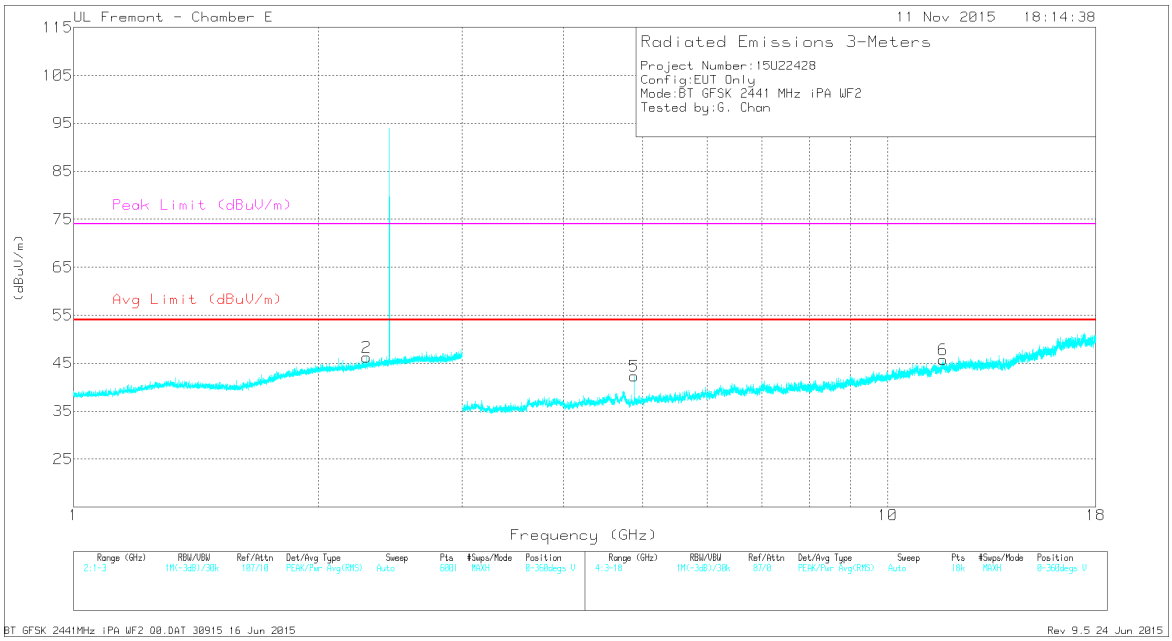
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

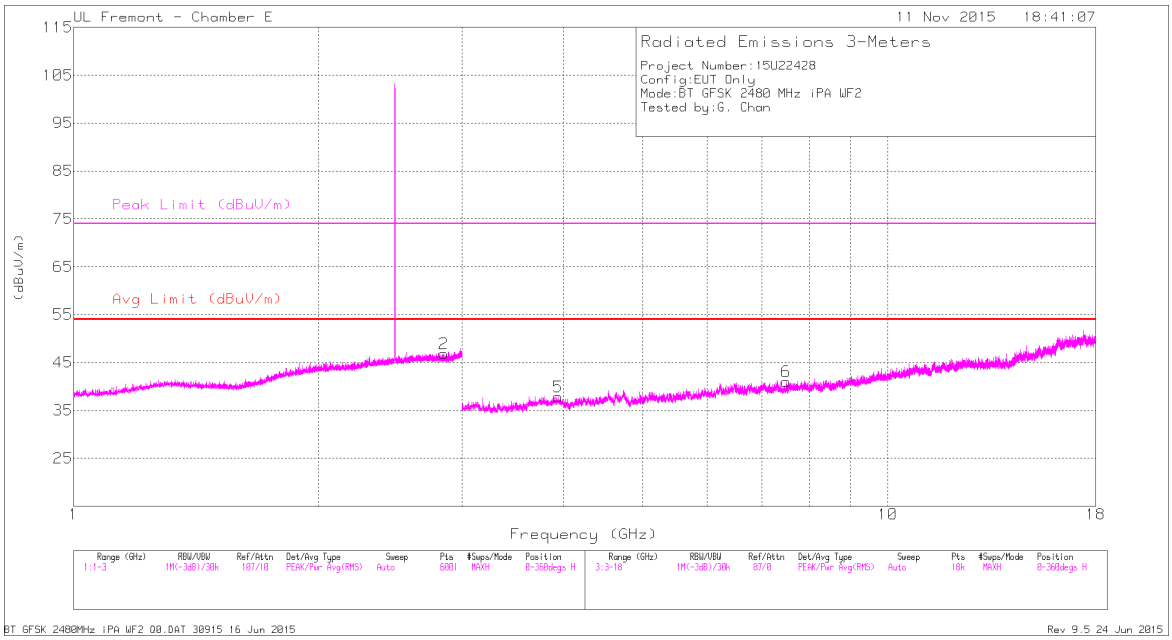
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.283	44.97	PK2	28.9	-25.7	48.17	-	-	74	-25.83	360	100	H
	* 1.283	31.81	VA1T	28.9	-25.7	35.01	54	-18.99	-	-	360	100	H
2	* 2.292	43.66	PK2	31.9	-23.3	52.26	-	-	74	-21.74	360	200	V
	* 2.289	30.47	VA1T	31.8	-23.3	38.97	54	-15.03	-	-	360	200	V
3	* 8.207	38.22	PK2	35.7	-26.6	47.32	-	-	74	-26.68	360	101	H
	* 8.208	25.27	VA1T	35.7	-26.6	34.37	54	-19.63	-	-	360	101	H
4	* 3.649	41.56	PK2	33.1	-30.5	44.16	-	-	74	-29.84	360	101	H
	* 3.649	28.38	VA1T	33.1	-30.5	30.98	54	-23.02	-	-	360	101	H
5	* 4.882	43.07	PK2	34.1	-30.4	46.77	-	-	74	-27.23	243	214	V
	* 4.882	34.31	VA1T	34.1	-30.4	38.01	54	-15.99	-	-	243	214	V
6	* 11.679	36	PK2	38.2	-22.4	51.8	-	-	74	-22.2	243	101	V
	* 11.68	23.25	VA1T	38.2	-22.3	39.15	54	-14.85	-	-	243	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

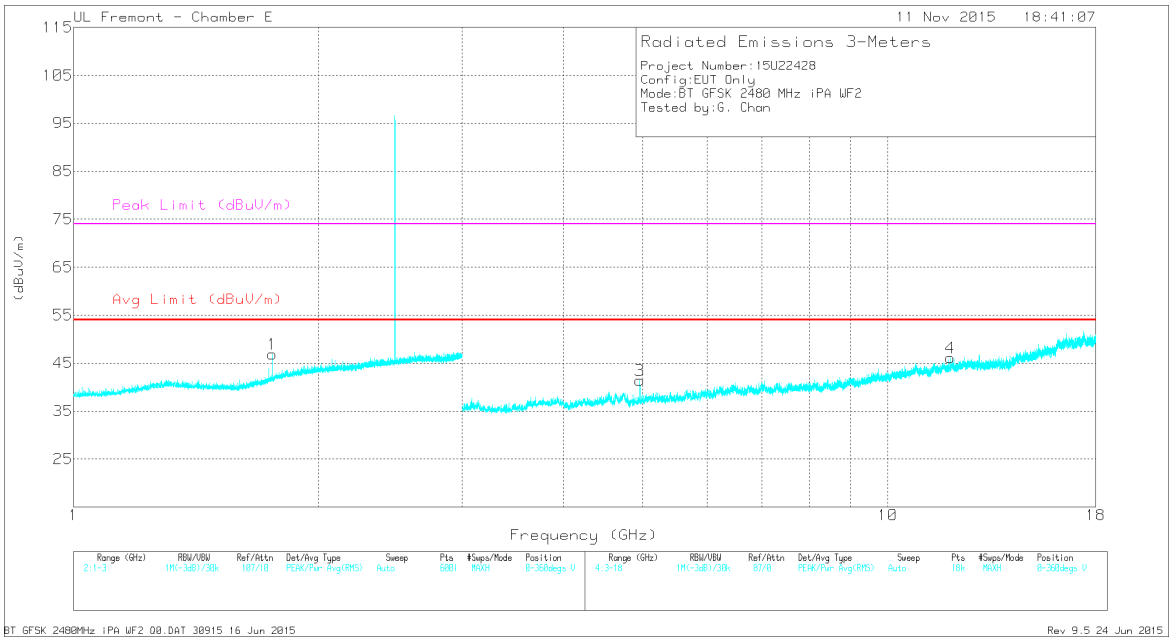
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
2	* 2.851	43.91	PK2	32.4	-22.4	53.91	-	-	74	-20.09	360	100	H
	* 2.85	30.22	VA1T	32.4	-22.4	40.22	54	-13.78	-	-	360	100	H
5	* 3.936	41.05	PK2	33.5	-29.6	44.95	-	-	74	-29.05	0	101	H
	* 3.937	28.21	VA1T	33.5	-29.6	32.11	54	-21.89	-	-	0	101	H
6	* 7.505	38.6	PK2	35.6	-26.9	47.3	-	-	74	-26.7	0	101	H
	* 7.502	25.67	VA1T	35.6	-27	34.27	54	-19.73	-	-	0	101	H
3	* 4.96	44.06	PK2	34.1	-30.5	47.66	-	-	74	-26.34	256	197	V
	* 4.96	35.7	VA1T	34.1	-30.5	39.3	54	-14.7	-	-	256	197	V
4	* 11.933	36.88	PK2	38.5	-23.1	52.28	-	-	74	-21.72	256	200	V
	* 11.93	23.65	VA1T	38.5	-23.2	38.95	54	-15.05	-	-	256	200	V
1	1.755	44.12	PK2	29.7	-24.5	49.32	-	-	-	-	113	221	V
	1.755	31.04	VA1T	29.7	-24.5	36.24	-	-	-	-	113	221	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

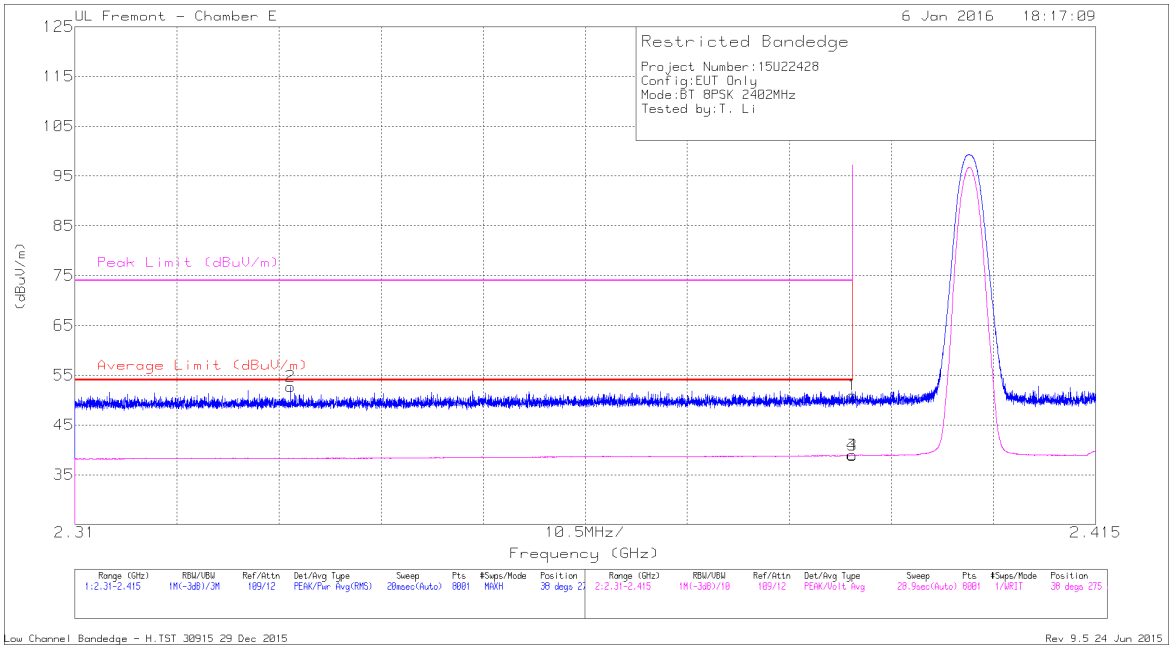
PK2 - KDB558074 Method: Maximum Peak

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

8.2.4. ANTENNA B LOW POWER MODE ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.332	40.91	Pk	32	-20.2	52.71	-	-	74	-21.29	38	275	H
1	* 2.39	38.79	Pk	32.1	-19.9	50.99	-	-	74	-23.01	38	275	H
3	* 2.39	26.72	VA1T	32.1	-19.9	38.92	54	-15.08	-	-	38	275	H
4	* 2.39	26.75	VA1T	32.1	-19.9	38.95	54	-15.05	-	-	38	275	H

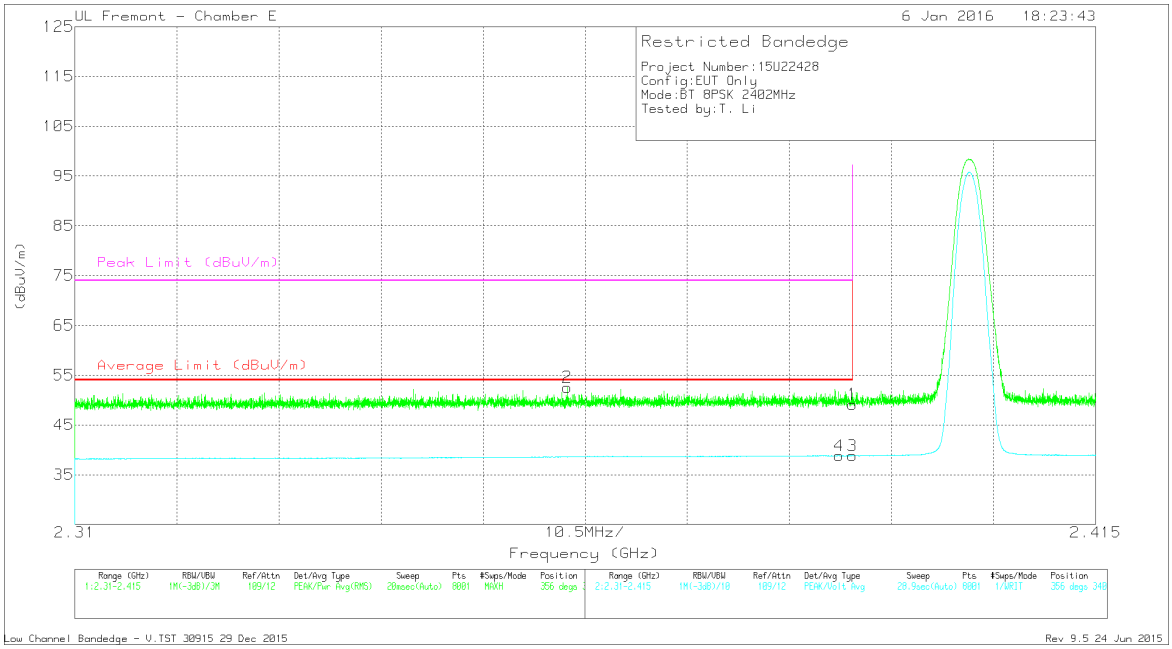
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.361	40.57	Pk	32	-20	52.57	-	-	74	-21.43	356	340	V
4	* 2.389	26.63	VA1T	32.1	-19.9	38.83	54	-15.17	-	-	356	340	V
1	* 2.39	36.95	Pk	32.1	-19.9	49.15	-	-	74	-24.85	356	340	V
3	* 2.39	26.61	VA1T	32.1	-19.9	38.81	54	-15.19	-	-	356	340	V

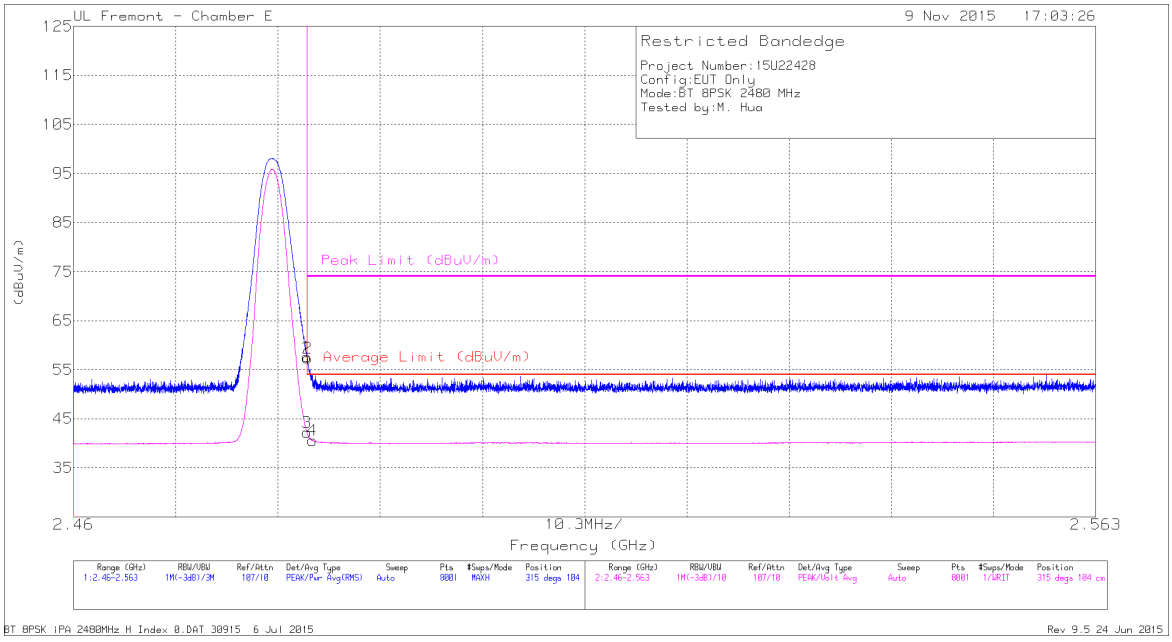
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	46.23	Pk	32.2	-20.8	57.63	-	-	74	-16.37	315	104	H
2	* 2.484	45.93	Pk	32.2	-20.8	57.33	-	-	74	-16.67	315	104	H
3	* 2.484	30.8	VA1T	32.2	-20.8	42.2	54	-11.8	-	-	315	104	H
4	* 2.484	29.15	VA1T	32.2	-20.8	40.55	54	-13.45	-	-	315	104	H

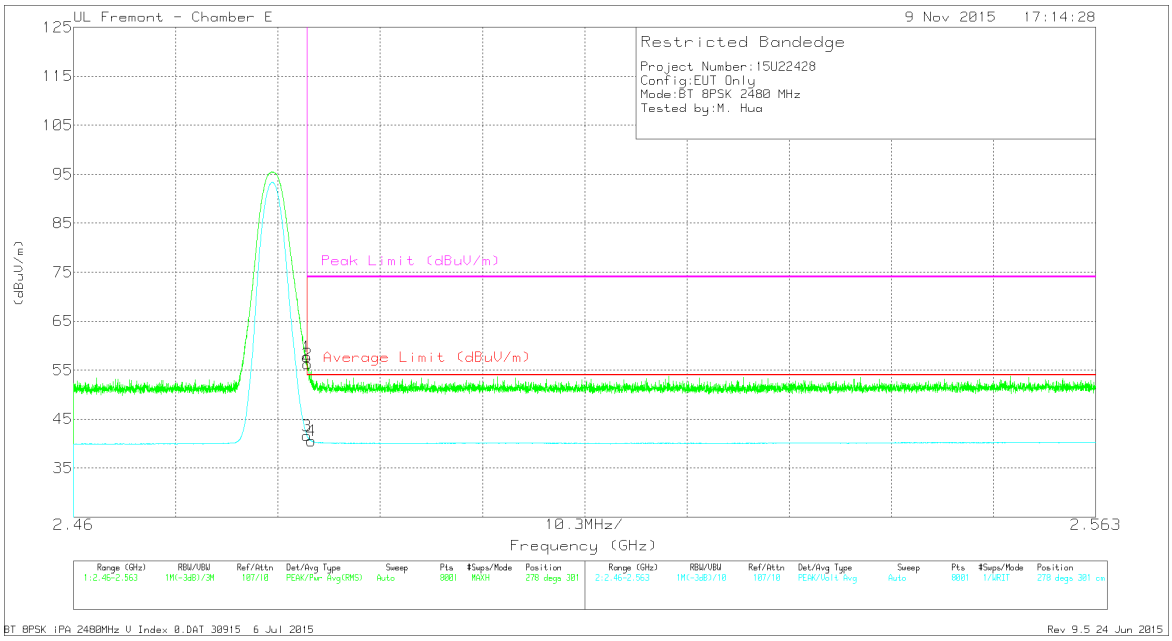
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	46.38	Pk	32.2	-20.8	57.78	-	-	74	-16.22	278	301	V
2	* 2.484	44.83	Pk	32.2	-20.8	56.23	-	-	74	-17.77	278	301	V
3	* 2.484	30.23	VA1T	32.2	-20.8	41.63	54	-12.37	-	-	278	301	V
4	* 2.484	29.15	VA1T	32.2	-20.8	40.55	54	-13.45	-	-	278	301	V

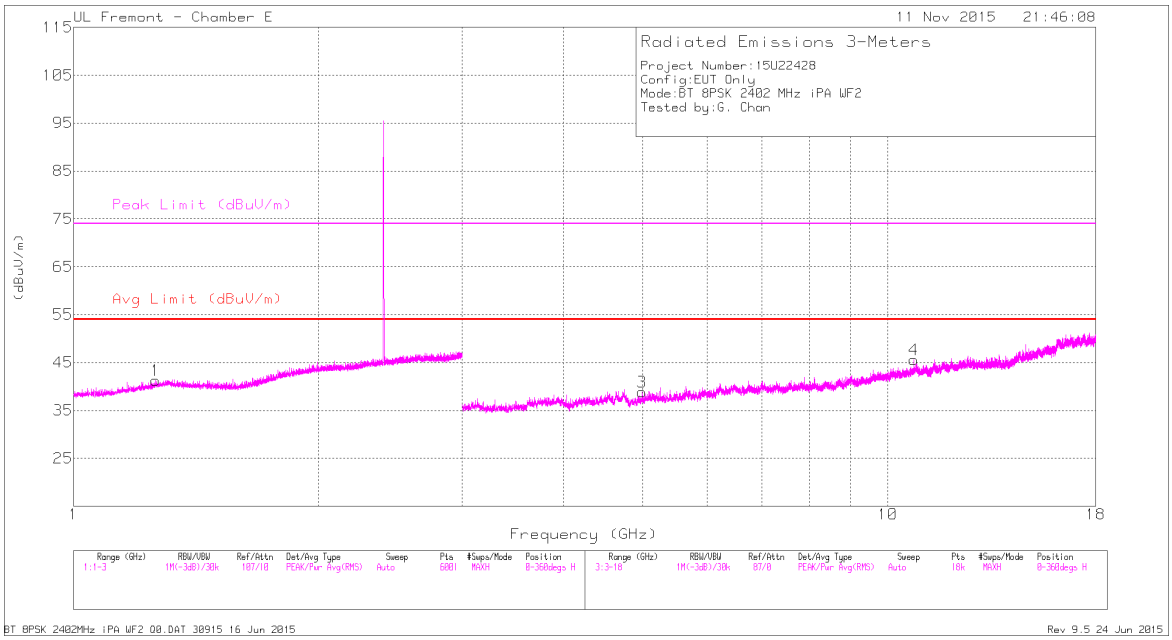
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

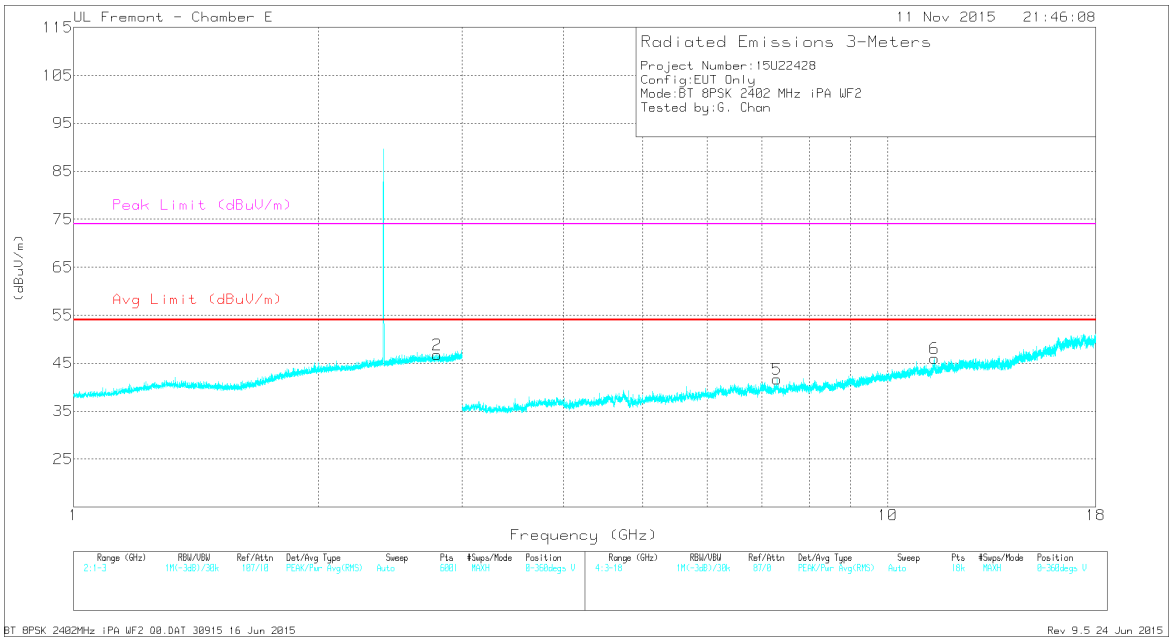
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

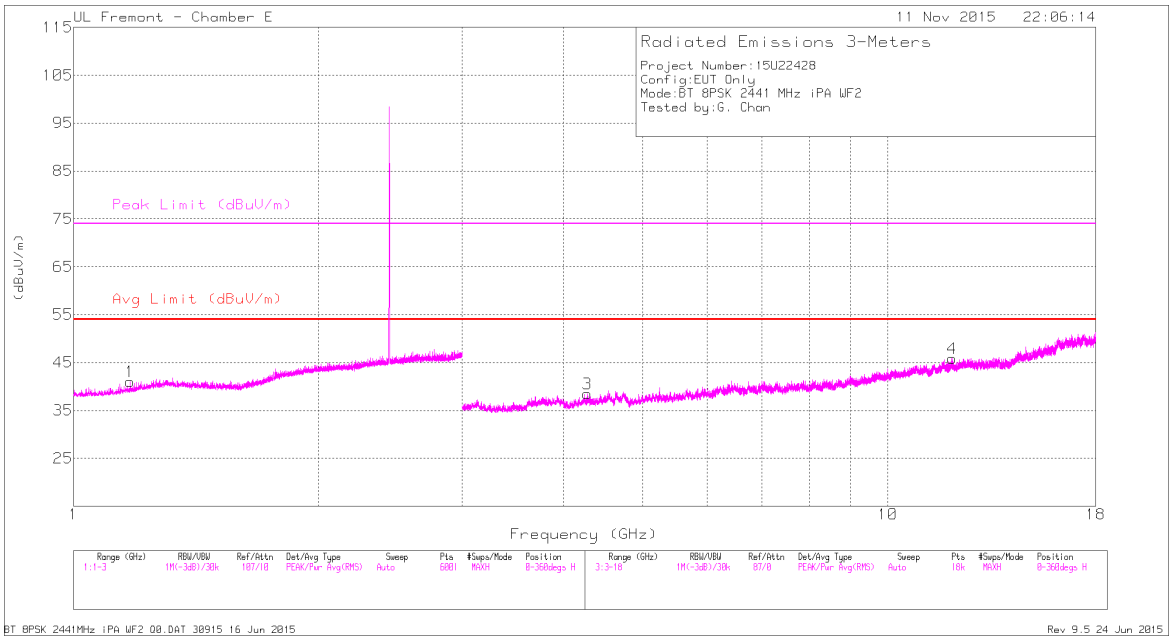
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.259	45.41	PK2	28.6	-25.7	48.31	-	-	74	-25.69	360	101	H
	* 1.261	31.95	VA1T	28.6	-25.7	34.85	54	-19.15	-	-	360	101	H
2	* 2.794	43.69	PK2	32.4	-22.4	53.69	-	-	74	-20.31	360	101	V
	* 2.796	30.24	VA1T	32.4	-22.4	40.24	54	-13.76	-	-	360	101	V
3	* 4.992	40.84	PK2	34.2	-30.1	44.94	-	-	74	-29.06	360	101	H
	* 4.992	28.26	VA1T	34.2	-30.1	32.36	54	-21.64	-	-	360	101	H
4	* 10.755	36.88	PK2	37.9	-23.8	50.98	-	-	74	-23.02	360	101	H
	* 10.754	24.22	VA1T	37.9	-23.8	38.32	54	-15.68	-	-	360	101	H
5	* 7.308	37.77	PK2	35.5	-26.1	47.17	-	-	74	-26.83	360	101	V
	* 7.307	25.25	VA1T	35.5	-26.1	34.65	54	-19.35	-	-	360	101	V
6	* 11.401	36.13	PK2	38	-22	52.13	-	-	74	-21.87	360	101	V
	* 11.401	23.08	VA1T	38	-22	39.08	54	-14.92	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

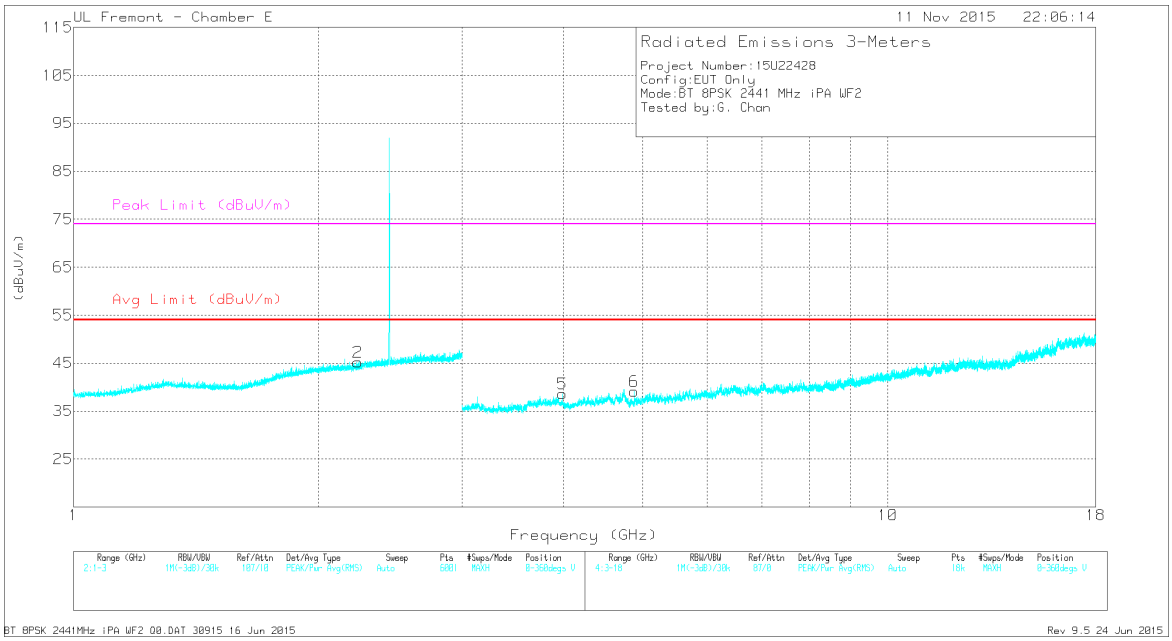
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

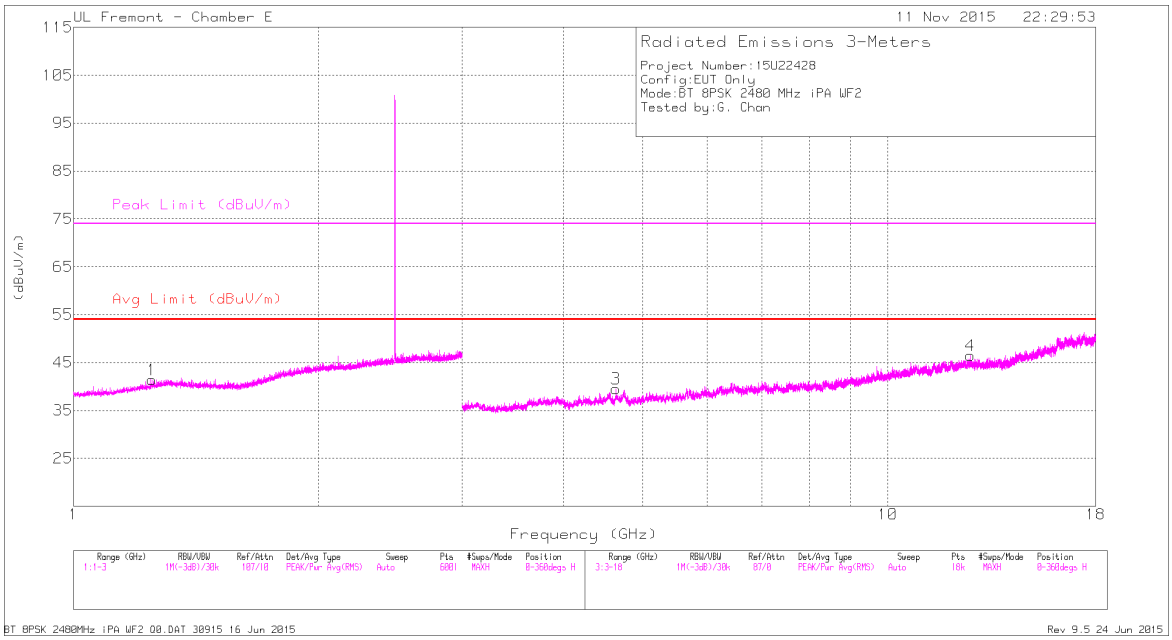
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.174	45.65	PK2	27.8	-25.9	47.55	-	-	74	-26.45	360	101	H
	* 1.173	32.1	VA1T	27.8	-25.9	34	54	-20	-	-	360	101	H
2	* 2.232	43.93	PK2	31.5	-23.4	52.03	-	-	74	-21.97	360	101	V
	* 2.233	30.69	VA1T	31.5	-23.4	38.79	54	-15.21	-	-	360	101	V
3	* 4.272	40.2	PK2	33.5	-29.2	44.5	-	-	74	-29.5	360	101	H
	* 4.273	27.76	VA1T	33.5	-29.2	32.06	54	-21.94	-	-	360	101	H
4	* 11.988	36.25	PK2	38.6	-22.7	52.15	-	-	74	-21.85	360	101	H
	* 11.987	23.46	VA1T	38.6	-22.7	39.36	54	-14.64	-	-	360	101	H
5	* 3.983	40.96	PK2	33.4	-29.6	44.76	-	-	74	-29.24	360	101	V
	* 3.983	27.92	VA1T	33.4	-29.6	31.72	54	-22.28	-	-	360	101	V
6	* 4.883	40.53	PK2	34.1	-30.3	44.33	-	-	74	-29.67	360	101	V
	* 4.882	27.63	VA1T	34.1	-30.4	31.33	54	-22.67	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

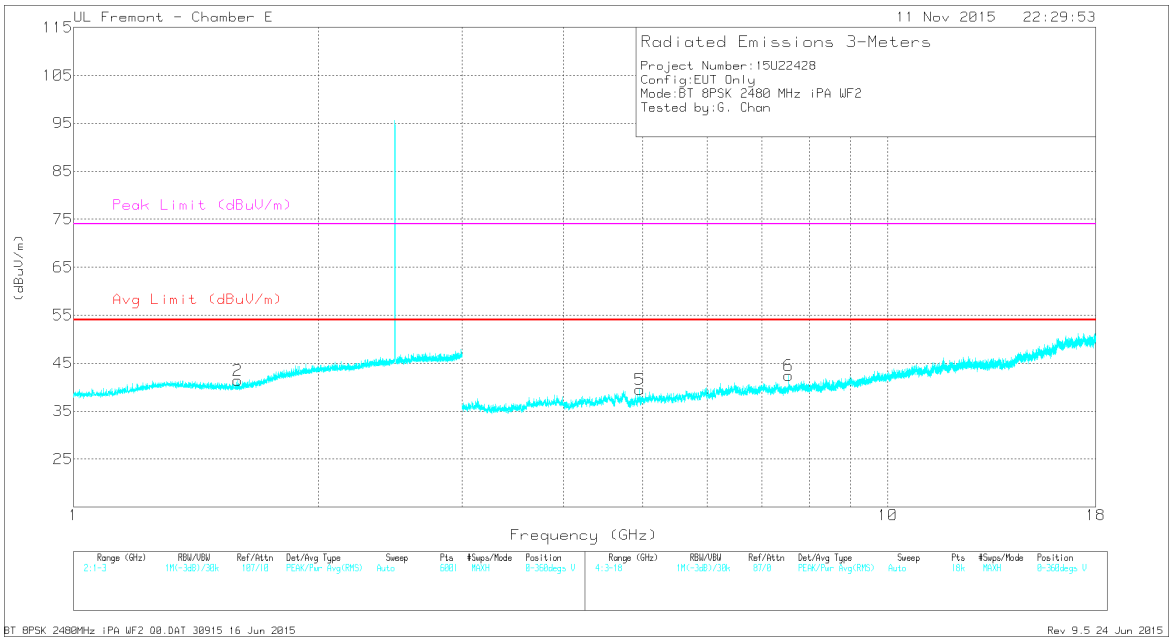
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

.	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 1.246	45.27	PK2	28.5	-25.7	48.07	-	-	74	-25.93	360	101	H
	* 1.248	32	VA1T	28.5	-25.7	34.8	54	-19.2	-	-	360	101	H
2	* 1.591	44.73	PK2	28	-24.8	47.93	-	-	74	-26.07	360	101	V
	* 1.59	31.37	VA1T	28	-24.8	34.57	54	-19.43	-	-	360	101	V
3	* 4.634	42.94	PK2	34.1	-30.6	46.44	-	-	74	-27.56	360	101	H
	* 4.634	29.65	VA1T	34.1	-30.6	33.15	54	-20.85	-	-	360	101	H
4	* 12.626	38.93	PK2	39	-24.5	53.43	-	-	74	-20.57	360	101	H
	* 12.625	24.98	VA1T	39	-24.5	39.48	54	-14.52	-	-	360	101	H
5	* 4.958	40.95	PK2	34.1	-30.5	44.55	-	-	74	-29.45	360	101	V
	* 4.958	28.26	VA1T	34.1	-30.5	31.86	54	-22.14	-	-	360	101	V
6	* 7.558	38.22	PK2	35.7	-25.9	48.02	-	-	74	-25.98	360	101	V
	* 7.555	25.01	VA1T	35.7	-26	34.71	54	-19.29	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

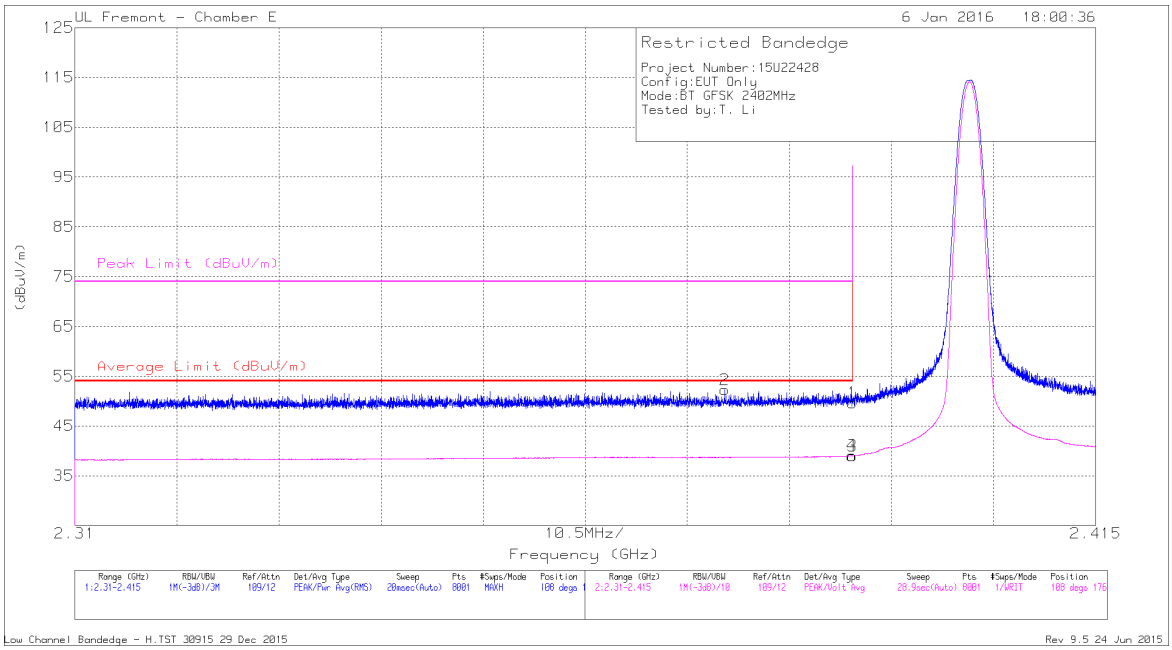
PK2 - KDB558074 Method: Maximum Peak

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

8.2.5. ANTENNA D HIGH POWER MODE BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.377	40.26	Pk	32	-20	52.26	-	-	74	-21.74	108	176	H
1	* 2.39	37.47	Pk	32.1	-19.9	49.67	-	-	74	-24.33	108	176	H
3	* 2.39	26.79	VA1T	32.1	-19.9	38.99	54	-15.01	-	-	108	176	H
4	* 2.39	26.84	VA1T	32.1	-19.9	39.04	54	-14.96	-	-	108	176	H

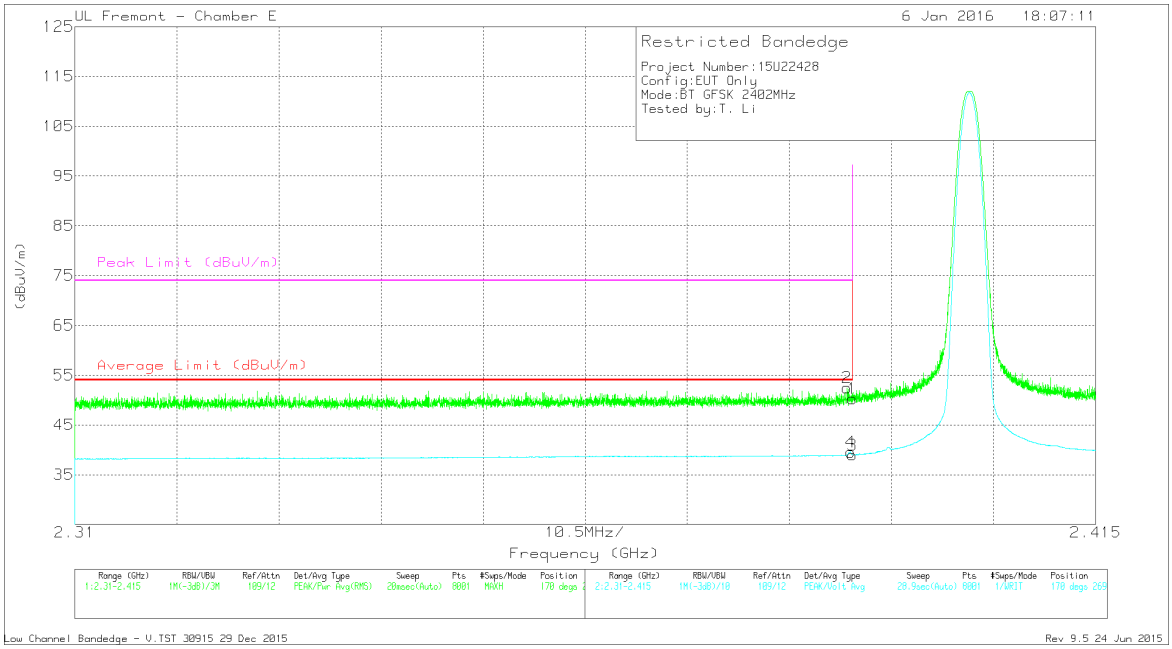
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	40.27	Pk	32.1	-19.9	52.47	-	-	74	-21.53	170	269	V
1	* 2.39	38.08	Pk	32.1	-19.9	50.28	-	-	74	-23.72	170	269	V
3	* 2.39	26.77	VA1T	32.1	-19.9	38.97	54	-15.03	-	-	170	269	V
4	* 2.39	27.34	VA1T	32.1	-19.9	39.54	54	-14.46	-	-	170	269	V

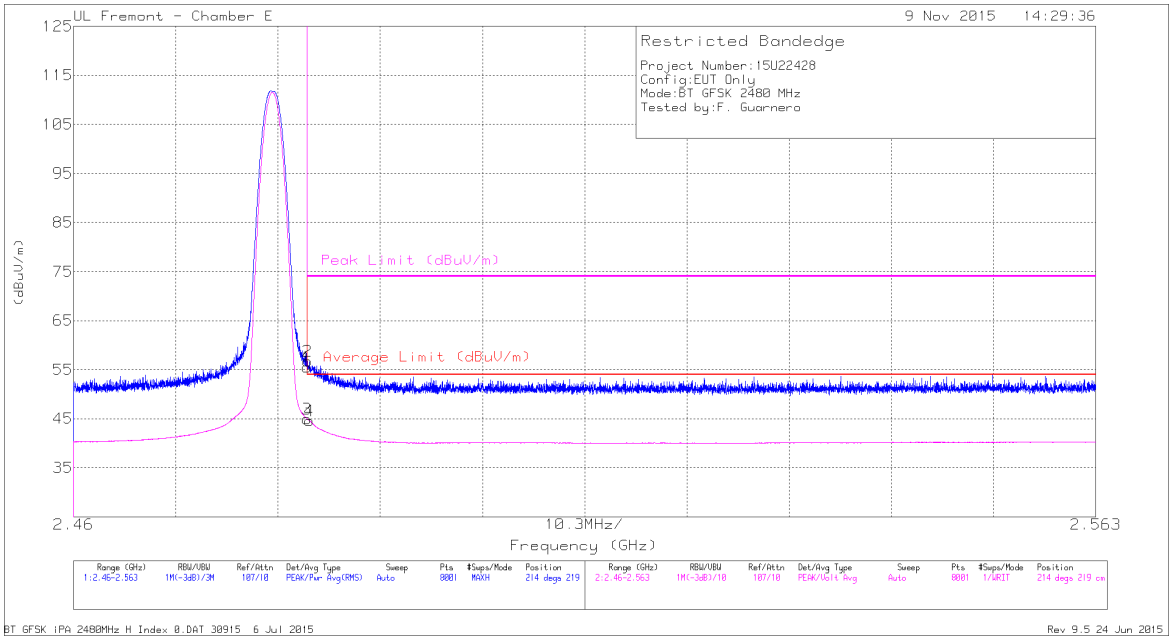
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	44.15	Pk	32.2	-20.8	55.55	-	-	74	-18.45	214	219	H
2	* 2.484	45.4	Pk	32.2	-20.8	56.8	-	-	74	-17.2	214	219	H
3	* 2.484	33.59	VA1T	32.2	-20.8	44.99	54	-9.01	-	-	214	219	H
4	* 2.484	33.21	VA1T	32.2	-20.8	44.61	54	-9.39	-	-	214	219	H

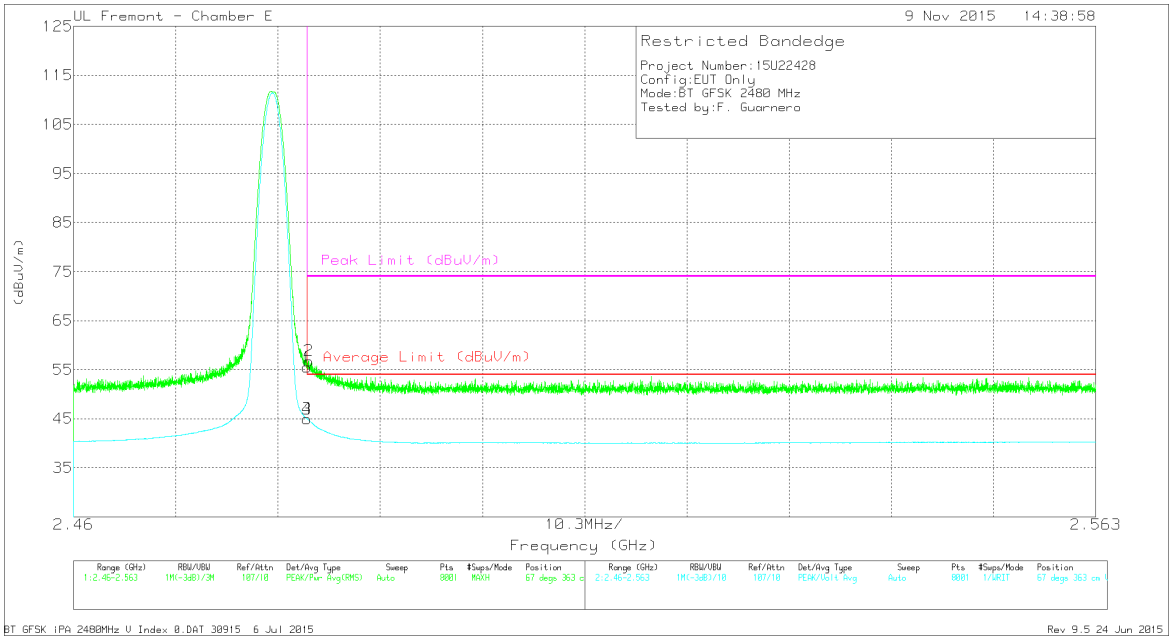
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	44.12	Pk	32.2	-20.8	55.52	-	-	74	-18.48	67	363	V
2	* 2.484	45.41	Pk	32.2	-20.8	56.81	-	-	74	-17.19	67	363	V
3	* 2.484	33.61	VA1T	32.2	-20.8	45.01	54	-8.99	-	-	67	363	V
4	* 2.484	33.61	VA1T	32.2	-20.8	45.01	54	-8.99	-	-	67	363	V

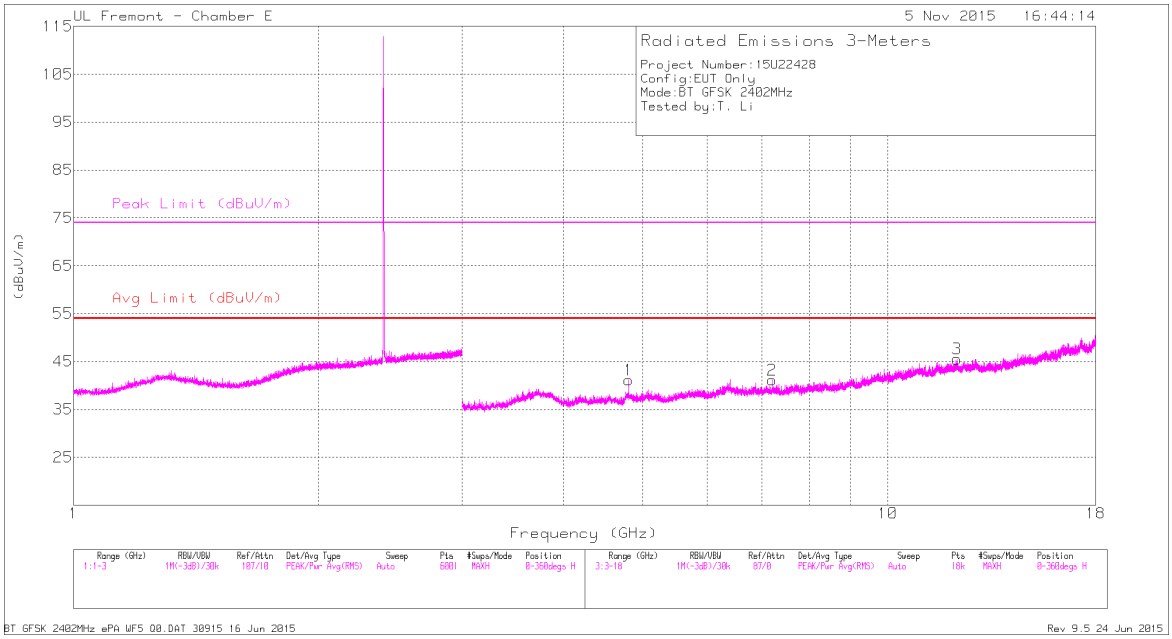
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

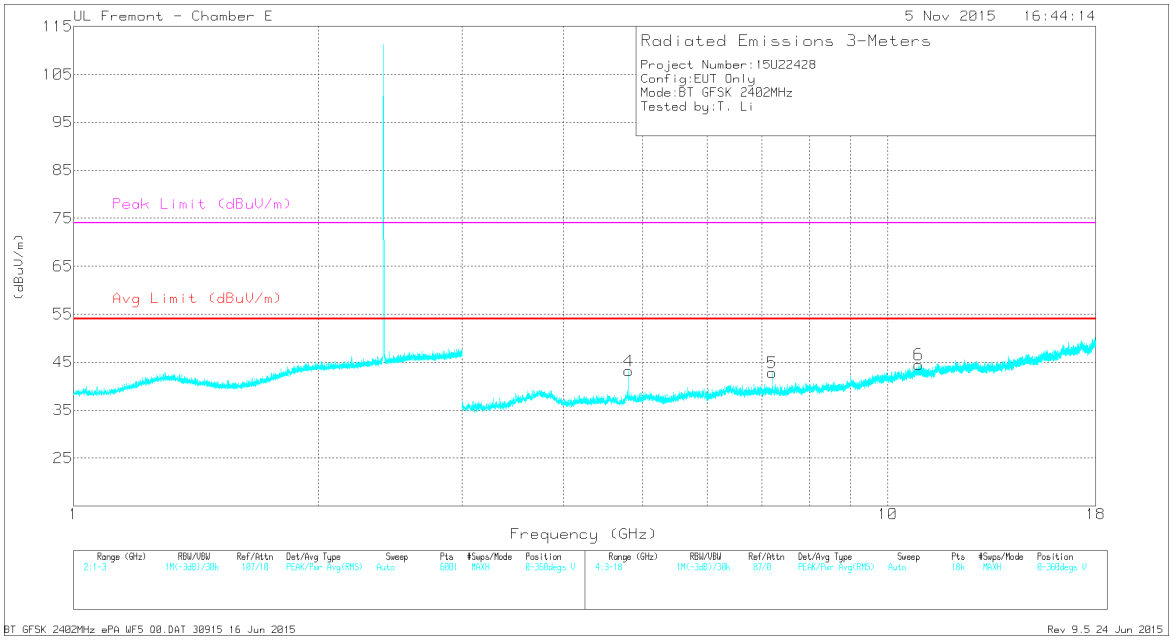
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

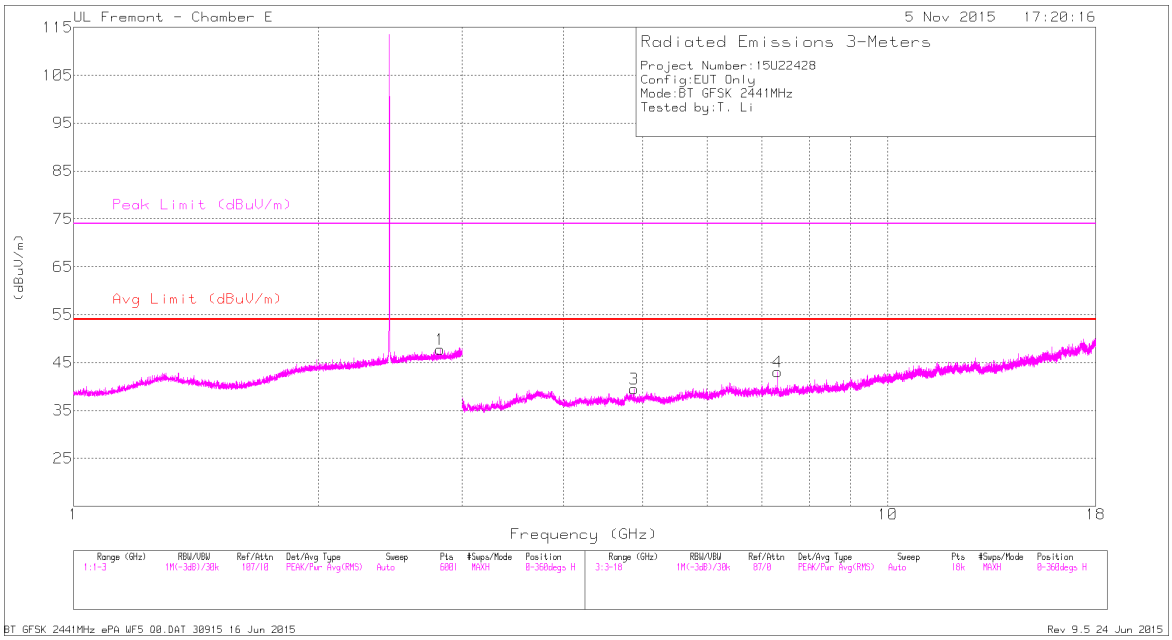
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.804	40.47	PK2	34.1	-27.7	46.87	-	-	74	-27.13	56	181	H
	* 4.804	32.3	VA1T	34.1	-27.7	38.7	54	-15.3	-	-	56	181	H
2	7.206	39.33	PK2	35.6	-26.5	48.43	-	-	-	-	0	108	H
	7.206	28	VA1T	35.6	-26.5	37.1	-	-	-	-	0	108	H
3	* 12.152	34.5	PK2	39.1	-21.9	51.7	-	-	74	-22.3	230	384	H
	* 12.155	21.68	VA1T	39.1	-21.9	38.88	54	-15.12	-	-	230	384	H
4	* 4.804	41.29	PK2	34.1	-27.7	47.69	-	-	74	-26.31	7	205	V
	* 4.804	33.49	VA1T	34.1	-27.7	39.89	54	-14.11	-	-	7	205	V
5	7.207	39.7	PK2	35.6	-26.5	48.8	-	-	-	-	33	154	V
	7.206	30.49	VA1T	35.6	-26.5	39.59	-	-	-	-	33	154	V
6	* 10.918	34.78	PK2	38.1	-21.7	51.18	-	-	74	-22.82	33	101	V
	* 10.917	21.28	VA1T	38.1	-21.7	37.68	54	-16.32	-	-	33	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

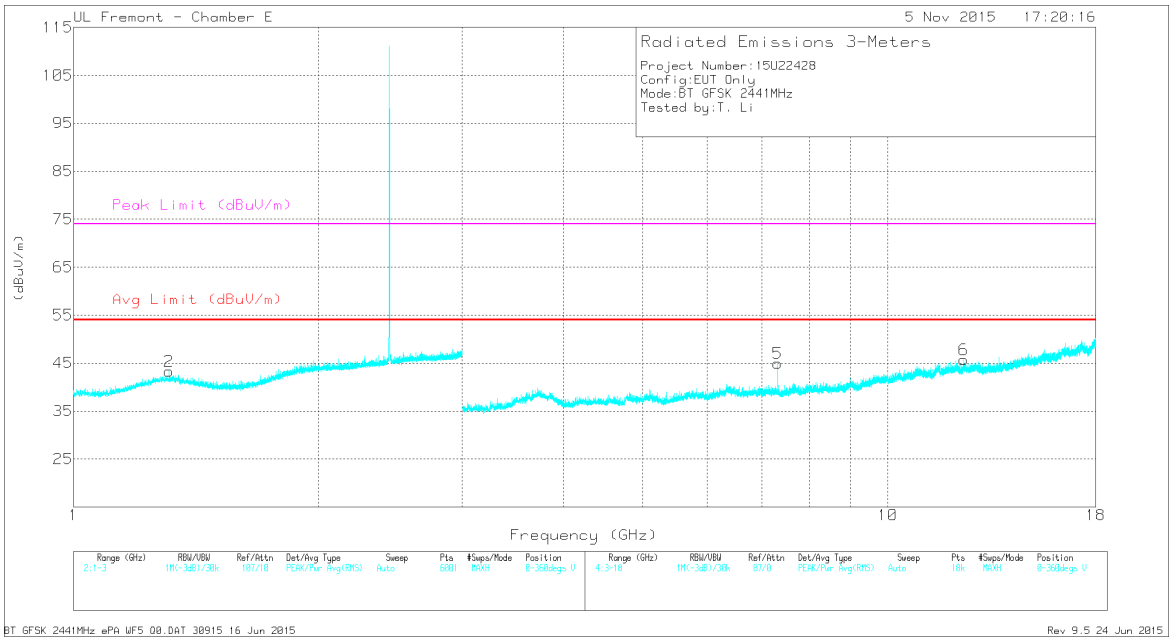
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

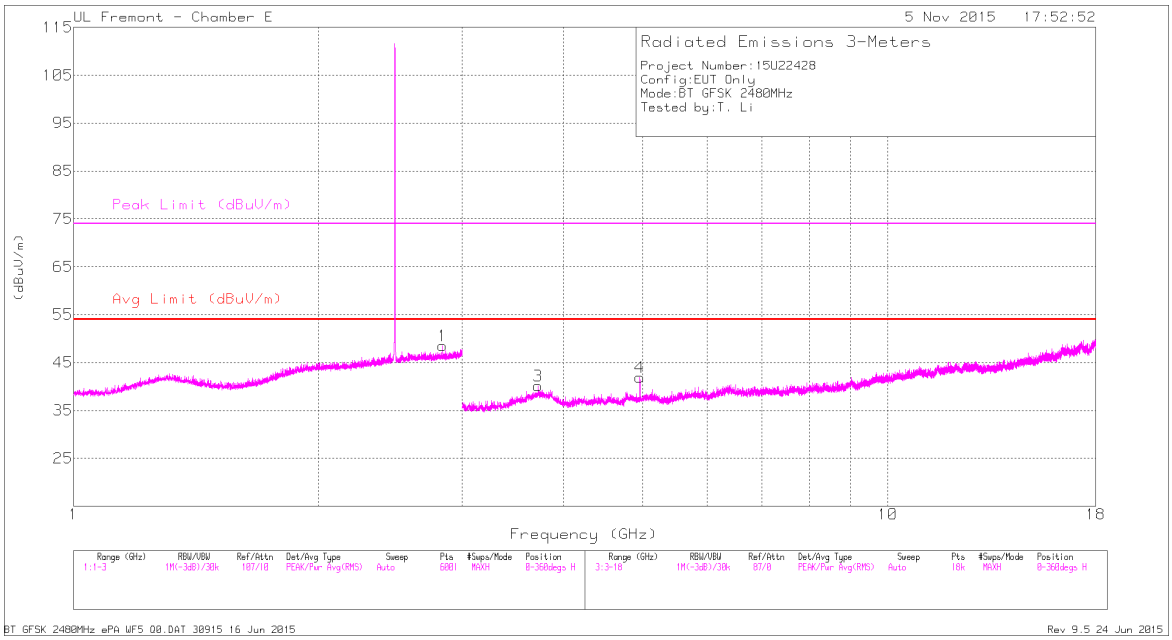
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.821	42.43	PK2	32.7	-20.5	54.63	-	-	74	-19.37	0	101	H
	* 2.82	28.52	VA1T	32.7	-20.5	40.72	54	-13.28	-	-	0	101	H
2	* 1.31	41.89	PK2	30	-22.2	49.69	-	-	74	-24.31	0	201	V
	* 1.31	28.8	VA1T	30	-22.2	36.6	54	-17.4	-	-	0	201	V
3	* 4.877	37.18	PK2	34.1	-27.9	43.38	-	-	74	-30.62	31	262	H
	* 4.876	24.82	VA1T	34.1	-27.9	31.02	54	-22.98	-	-	31	262	H
4	* 7.322	39.09	PK2	35.7	-26.6	48.19	-	-	74	-25.81	3	101	H
	* 7.323	28.67	VA1T	35.7	-26.6	37.77	54	-16.23	-	-	3	101	H
5	* 7.324	41.3	PK2	35.7	-26.6	50.4	-	-	74	-23.6	30	148	V
	* 7.323	33.42	VA1T	35.7	-26.6	42.52	54	-11.48	-	-	30	148	V
6	* 12.391	35.42	PK2	39.1	-22.5	52.02	-	-	74	-21.98	30	201	V
	* 12.391	22.31	VA1T	39.1	-22.5	38.91	54	-15.09	-	-	30	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

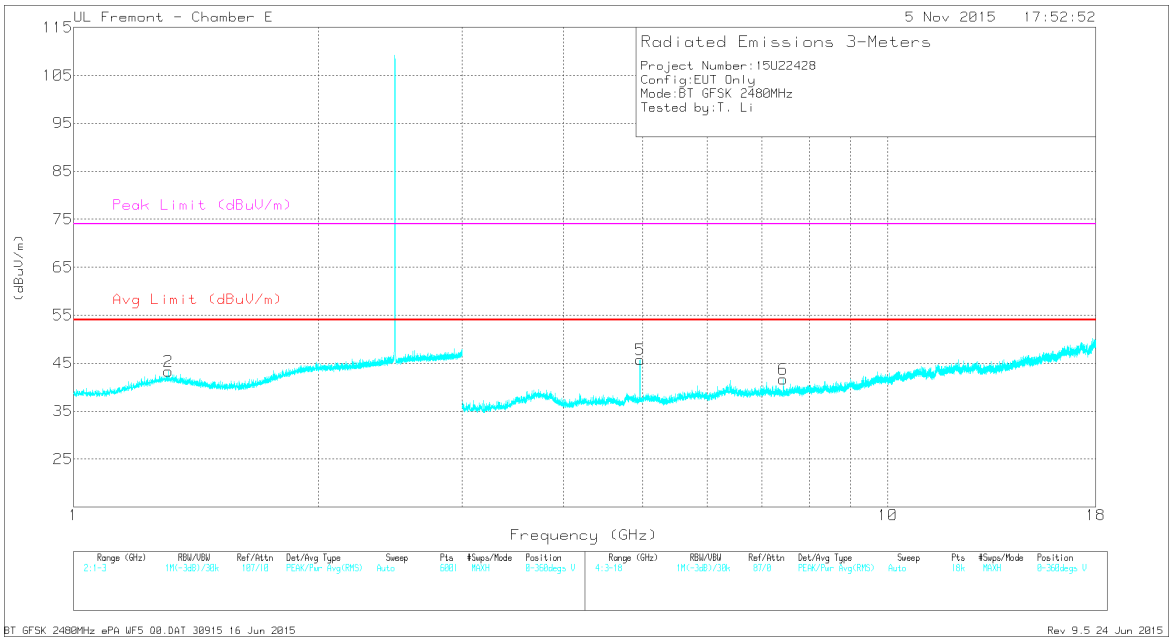
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 2.84	41.57	PK2	32.7	-20.4	53.87	-	-	74	-20.13	253	382	H
	* 2.838	28.45	VA1T	32.7	-20.4	40.75	54	-13.25	-	-	253	382	H
2	* 1.305	42.28	PK2	30	-22.2	50.08	-	-	74	-23.92	253	200	V
	* 1.307	28.75	VA1T	30	-22.2	36.55	54	-17.45	-	-	253	200	V
3	* 3.717	39.22	PK2	34.6	-29.4	44.42	-	-	74	-29.58	253	200	H
	* 3.715	26.33	VA1T	34.6	-29.5	31.43	54	-22.57	-	-	253	200	H
4	* 4.96	41.13	PK2	34.1	-28.7	46.53	-	-	74	-27.47	30	102	H
	* 4.96	33.06	VA1T	34.1	-28.7	38.46	54	-15.54	-	-	30	102	H
5	* 4.96	43.92	PK2	34.1	-28.7	49.32	-	-	74	-24.68	24	132	V
	* 4.96	37.87	VA1T	34.1	-28.7	43.27	54	-10.73	-	-	24	132	V
6	* 7.44	39.14	PK2	35.7	-26.1	48.74	-	-	74	-25.26	29	157	V
	* 7.44	29.53	VA1T	35.7	-26.1	39.13	54	-14.87	-	-	29	157	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

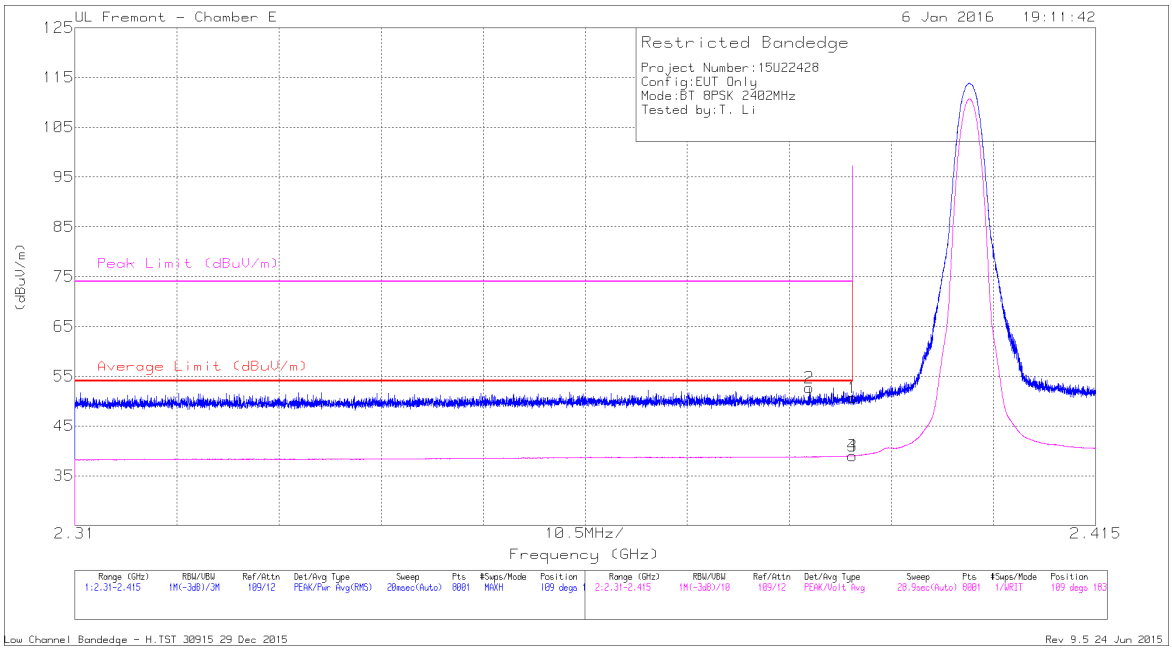
PK2 - KDB558074 Method: Maximum Peak

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

8.2.6. ANTENNA D HIGH POWER MODE ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.386	40.57	Pk	32	-19.9	52.67	-	-	74	-21.33	109	183	H
1	* 2.39	38.46	Pk	32.1	-19.9	50.66	-	-	74	-23.34	109	183	H
3	* 2.39	26.8	VA1T	32.1	-19.9	39	54	-15	-	-	109	183	H
4	* 2.39	26.81	VA1T	32.1	-19.9	39.01	54	-14.99	-	-	109	183	H

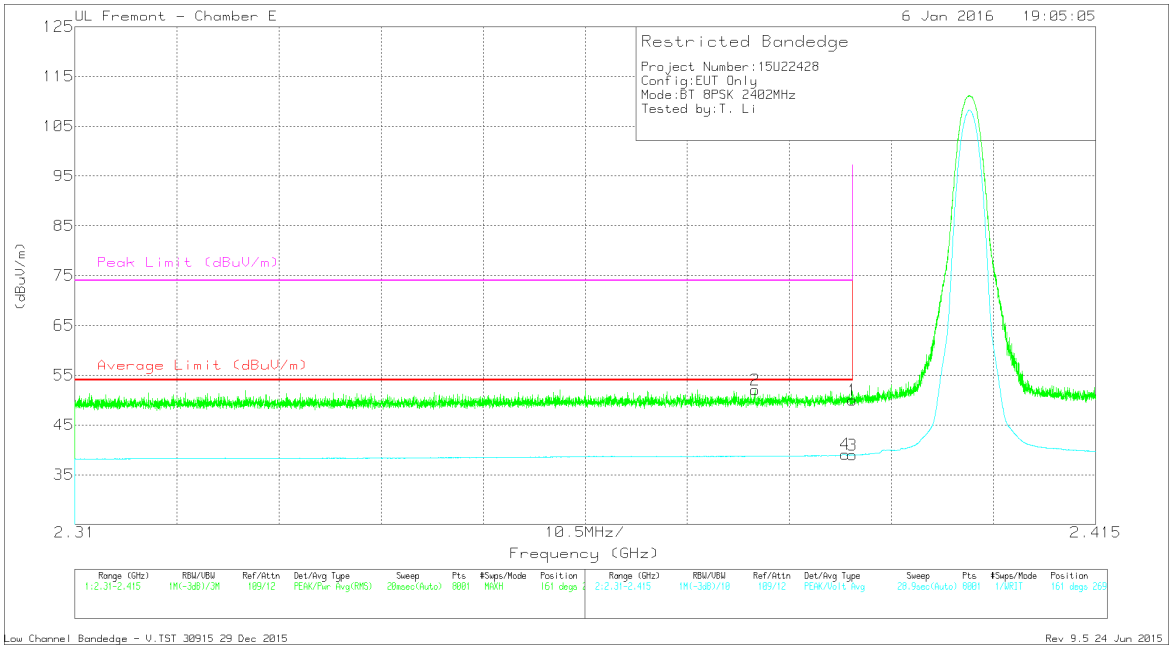
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.38	39.93	Pk	32	-19.9	52.03	-	-	74	-21.97	161	269	V
4	* 2.389	26.92	VA1T	32.1	-19.9	39.12	54	-14.88	-	-	161	269	V
1	* 2.39	37.78	Pk	32.1	-19.9	49.98	-	-	74	-24.02	161	269	V
3	* 2.39	26.75	VA1T	32.1	-19.9	38.95	54	-15.05	-	-	161	269	V

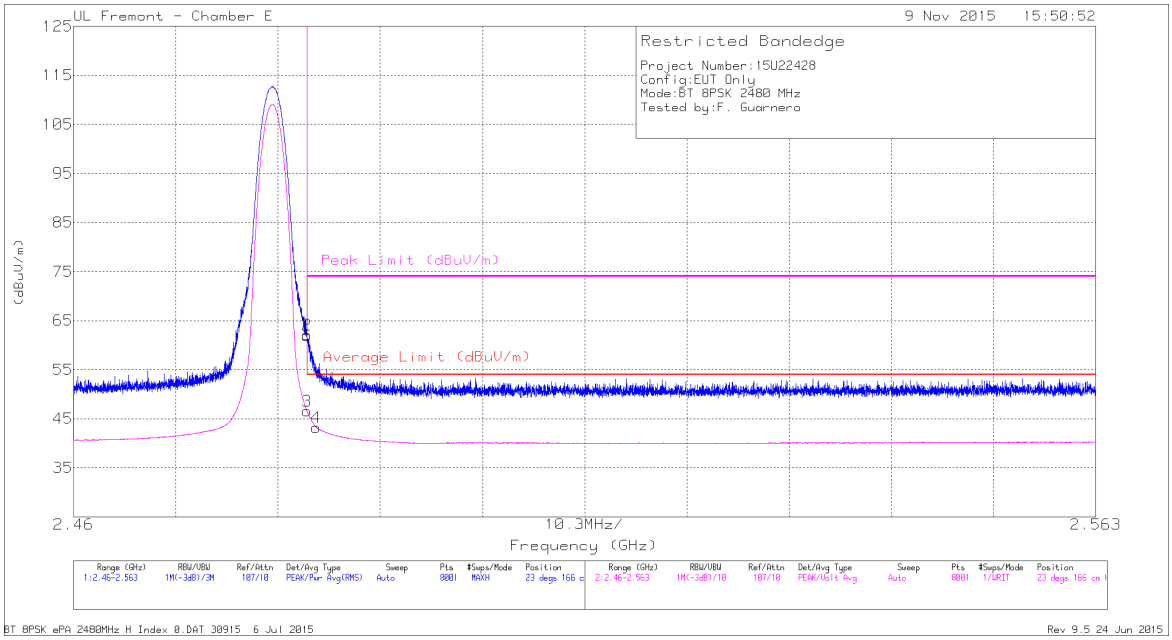
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	50.62	Pk	32.2	-20.8	62.02	-	-	74	-11.98	23	166	H
2	* 2.484	50.72	Pk	32.2	-20.8	62.12	-	-	74	-11.88	23	166	H
3	* 2.484	35.12	VA1T	32.2	-20.8	46.52	54	-7.48	-	-	23	166	H
4	* 2.484	31.84	VA1T	32.2	-20.8	43.24	54	-10.76	-	-	23	166	H

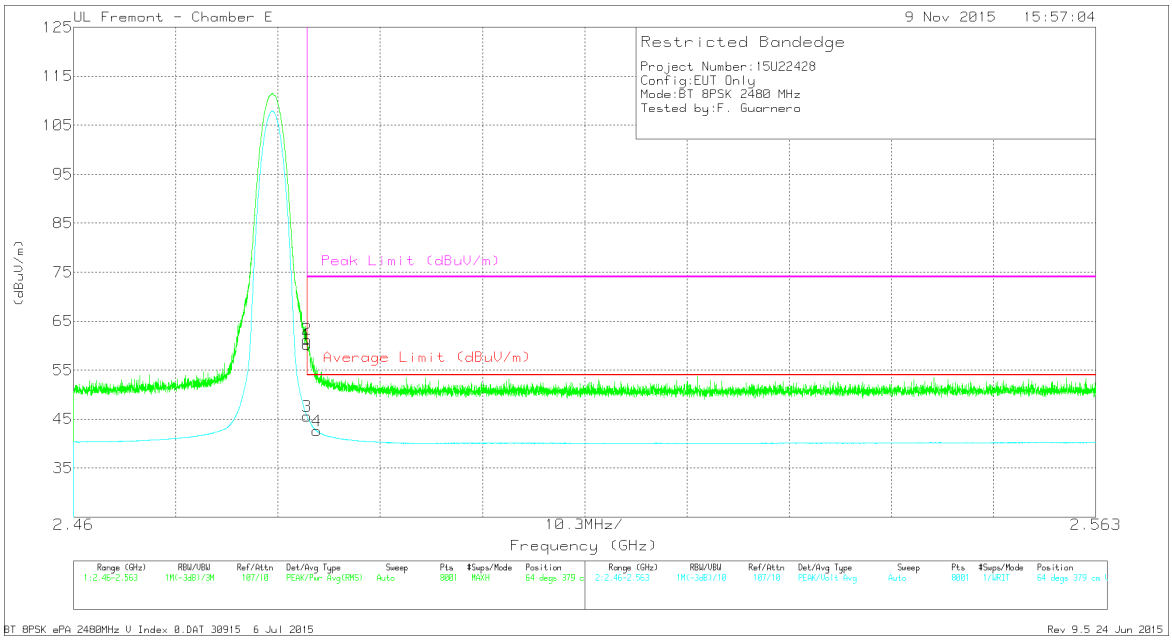
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	48.78	Pk	32.2	-20.8	60.18	-	-	74	-13.82	64	379	V
2	* 2.484	49.88	Pk	32.2	-20.8	61.28	-	-	74	-12.72	64	379	V
3	* 2.484	34.15	VA1T	32.2	-20.8	45.55	54	-8.45	-	-	64	379	V
4	* 2.484	31.2	VA1T	32.2	-20.8	42.6	54	-11.4	-	-	64	379	V

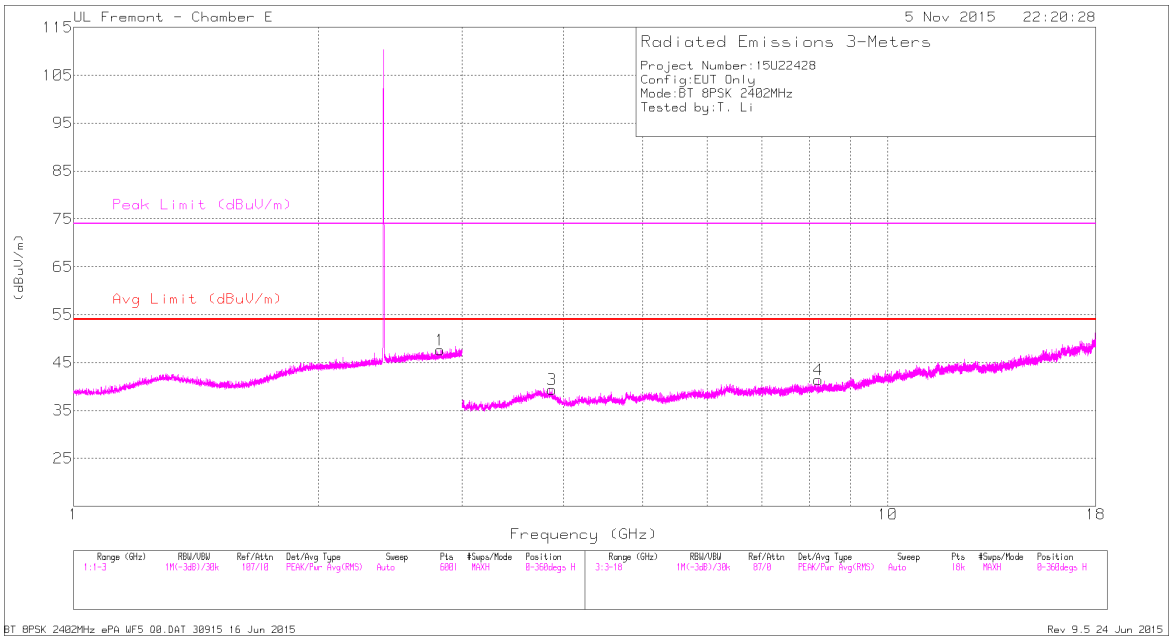
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

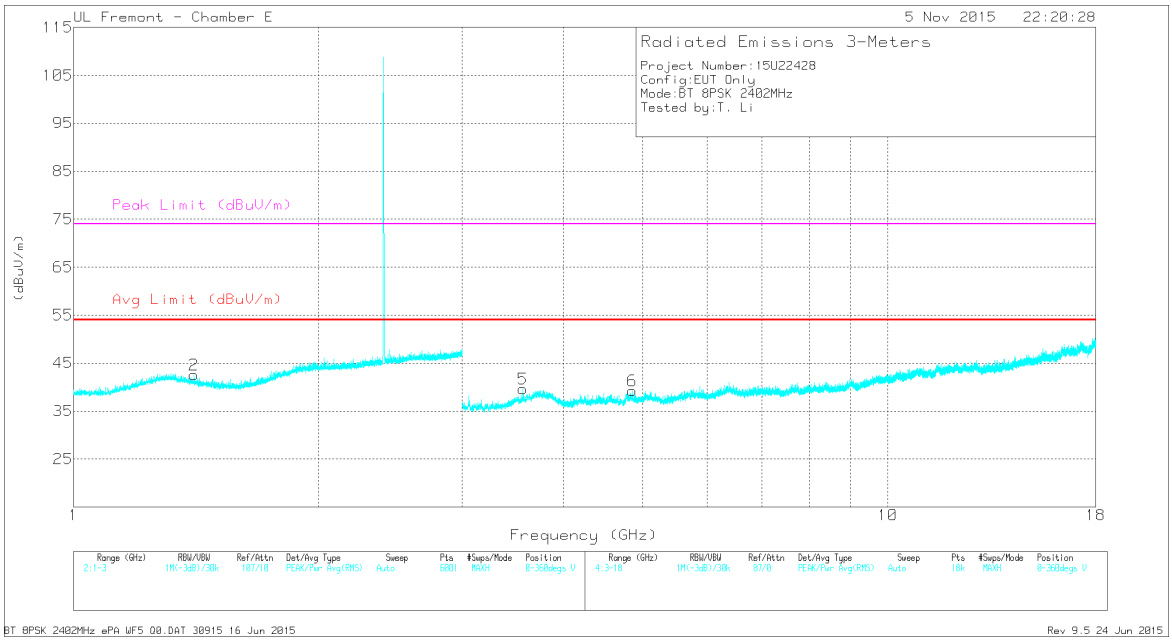
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

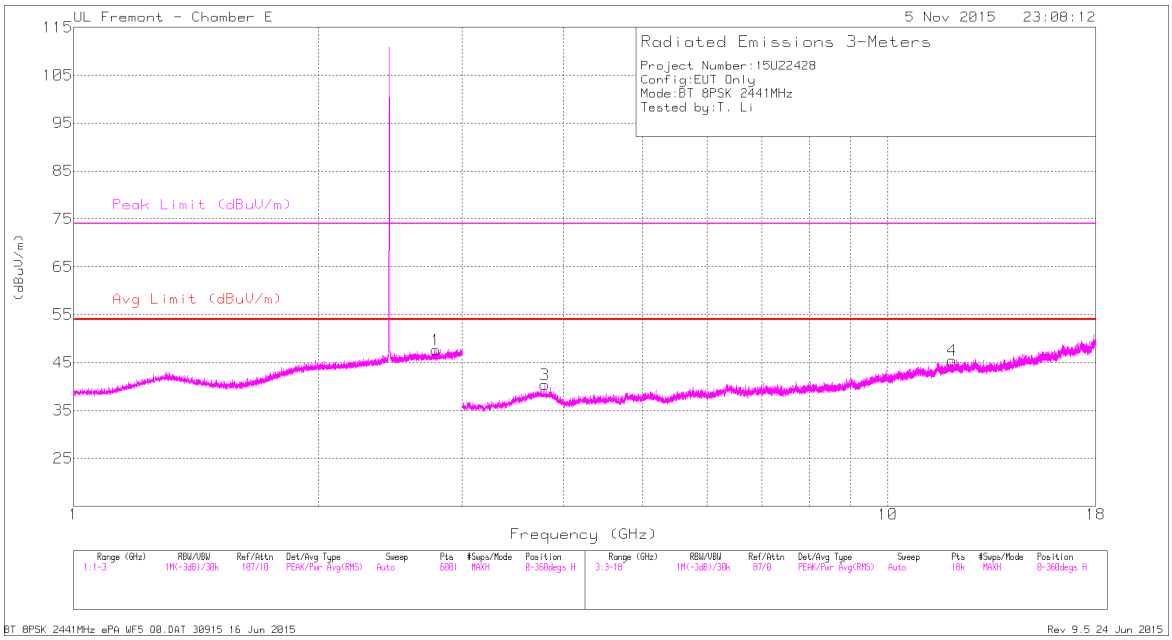
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.821	41.7	PK2	32.7	-20.5	53.9	-	-	74	-20.1	360	202	H
	* 2.822	28.53	VA1T	32.7	-20.5	40.73	54	-13.27	-	-	360	202	H
2	* 1.405	41.62	PK2	29	-22.1	48.52	-	-	74	-25.48	360	202	V
	* 1.406	28.72	VA1T	29	-22.1	35.62	54	-18.38	-	-	360	202	V
3	* 3.865	38.61	PK2	33.9	-28.4	44.11	-	-	74	-29.89	360	101	H
	* 3.867	25.91	VA1T	33.9	-28.4	31.41	54	-22.59	-	-	360	101	H
4	* 8.218	36.12	PK2	35.8	-25.3	46.62	-	-	74	-27.38	360	101	H
	* 8.217	23.43	VA1T	35.8	-25.3	33.93	54	-20.07	-	-	360	101	H
5	* 3.566	39.71	PK2	34.9	-28.8	45.81	-	-	74	-28.19	360	101	V
	* 3.567	26.47	VA1T	34.9	-28.9	32.47	54	-21.53	-	-	360	101	V
6	* 4.854	37.25	PK2	34.1	-27.6	43.75	-	-	74	-30.25	360	201	V
	* 4.852	24.51	VA1T	34.1	-27.5	31.11	54	-22.89	-	-	360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

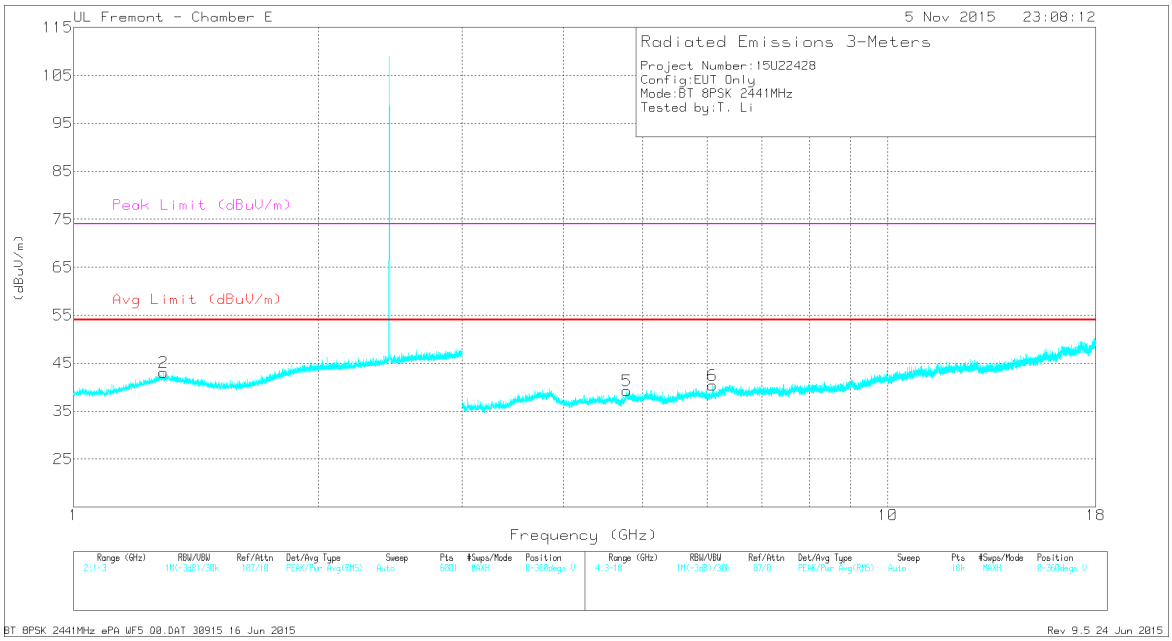
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

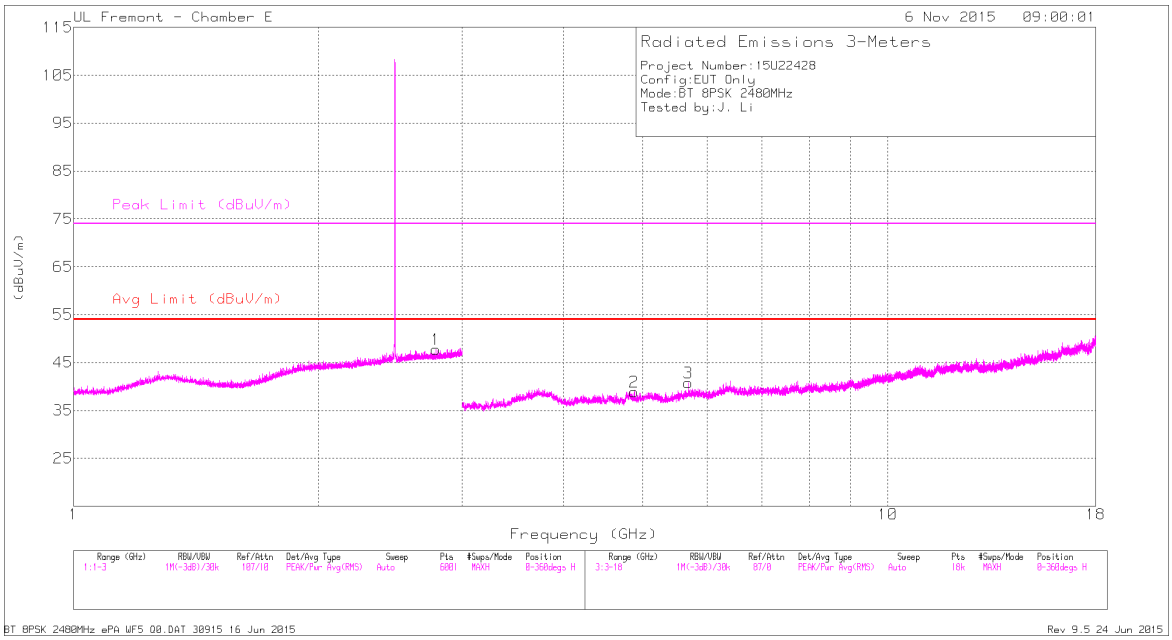
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.785	41.63	PK2	32.7	-20.6	53.73	-	-	74	-20.27	360	202	H
	* 2.786	28.52	VA1T	32.7	-20.6	40.62	54	-13.38	-	-	360	202	H
2	* 1.288	42.39	PK2	29.9	-22.3	49.99	-	-	74	-24.01	360	202	V
	* 1.287	28.92	VA1T	29.9	-22.3	36.52	54	-17.48	-	-	360	202	V
3	* 3.792	38.59	PK2	34.2	-28.9	43.89	-	-	74	-30.11	360	102	H
	* 3.79	26.06	VA1T	34.2	-28.9	31.36	54	-22.64	-	-	360	102	H
4	* 11.999	35.07	PK2	39.1	-23	51.17	-	-	74	-22.83	360	202	H
	* 11.995	22.2	VA1T	39.1	-23	38.3	54	-15.7	-	-	360	202	H
5	* 4.78	39.07	PK2	34.1	-28.1	45.07	-	-	74	-28.93	360	202	V
	* 4.778	26.14	VA1T	34.1	-28.1	32.14	54	-21.86	-	-	360	202	V
6	6.091	37.78	PK2	35.5	-27.3	45.98	-	-	-	-	360	202	V
	6.093	24.57	VA1T	35.5	-27.3	32.77	-	-	-	-	360	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

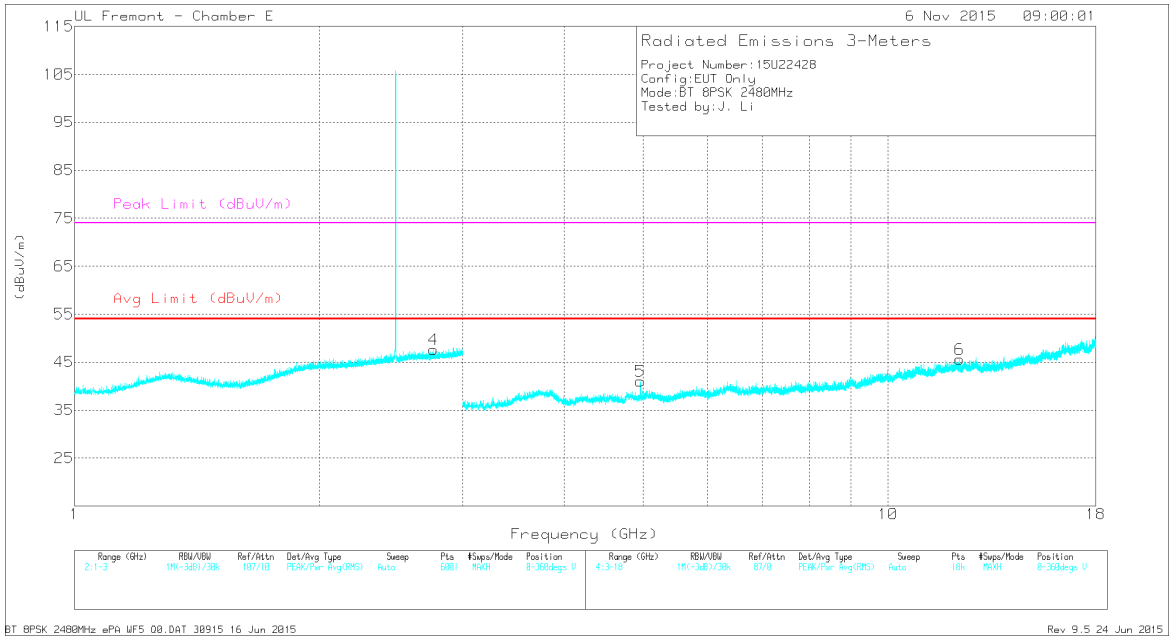
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
* 2.786	41.87	PK2	32.7	-20.6	53.97	-	-	74	-20.03	360	202	H
* 2.787	28.62	VA1T	32.7	-20.6	40.72	54	-13.28	-	-	360	202	H
* 2.76	42.14	PK2	32.7	-20.7	54.14	-	-	74	-19.86	360	102	V
* 2.762	28.67	VA1T	32.7	-20.7	40.67	54	-13.33	-	-	360	102	V
* 4.878	37.58	PK2	34.1	-27.9	43.78	-	-	74	-30.22	360	102	H
* 4.877	24.86	VA1T	34.1	-27.9	31.06	54	-22.94	-	-	360	102	H
5.687	37.5	PK2	34.8	-27.3	45	-	-	-	-	14	101	H
5.686	24.74	VA1T	34.8	-27.3	32.24	-	-	-	-	14	101	H
* 4.96	42.2	PK2	34.1	-28.7	47.6	-	-	74	-26.4	14	114	V
* 4.96	31.44	VA1T	34.1	-28.7	36.84	54	-17.16	-	-	14	114	V
* 12.238	34.81	PK2	39	-22.5	51.31	-	-	74	-22.69	14	101	V
* 12.239	21.93	VA1T	39	-22.5	38.43	54	-15.57	-	-	14	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

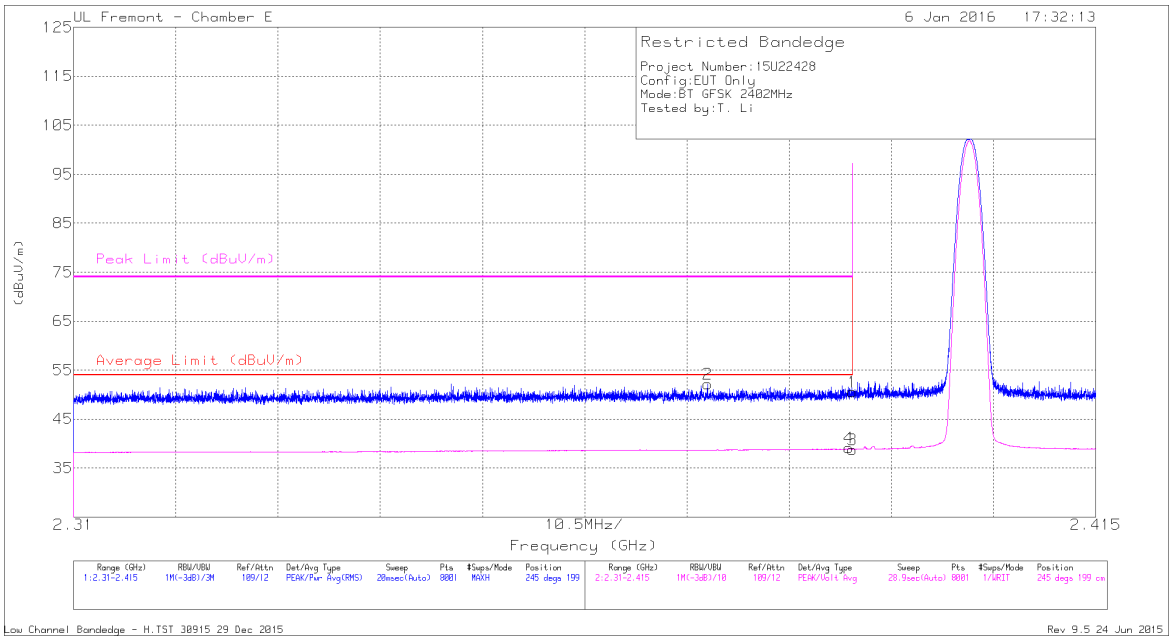
PK2 - KDB558074 Method: Maximum Peak

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

8.2.7. ANTENNA D LOW POWER MODE BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.375	40.16	Pk	32	-20	52.16	-	-	74	-21.84	245	199	H
1	* 2.39	38.37	Pk	32.1	-19.9	50.57	-	-	74	-23.43	245	199	H
3	* 2.39	26.6	VA1T	32.1	-19.9	38.8	54	-15.2	-	-	245	199	H
4	* 2.39	26.87	VA1T	32.1	-19.9	39.07	54	-14.93	-	-	245	199	H

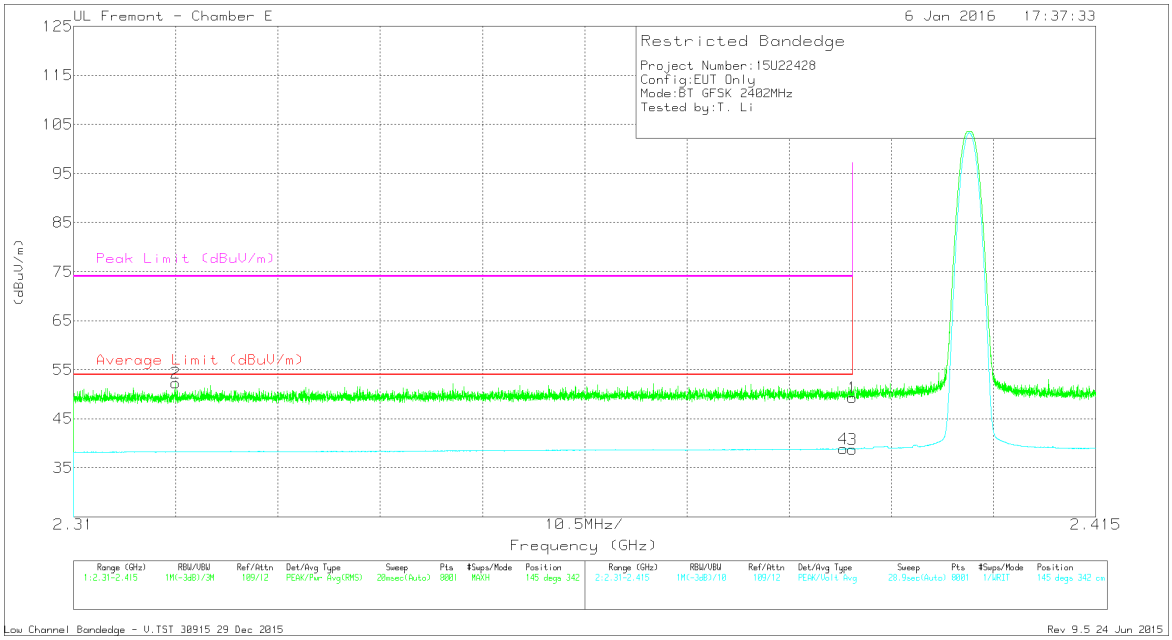
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.32	40.46	Pk	31.9	-20.1	52.26	-	-	74	-21.74	145	342	V
4	* 2.389	26.68	VA1T	32.1	-19.9	38.88	54	-15.12	-	-	145	342	V
1	* 2.39	37.14	Pk	32.1	-19.9	49.34	-	-	74	-24.66	145	342	V
3	* 2.39	26.58	VA1T	32.1	-19.9	38.78	54	-15.22	-	-	145	342	V

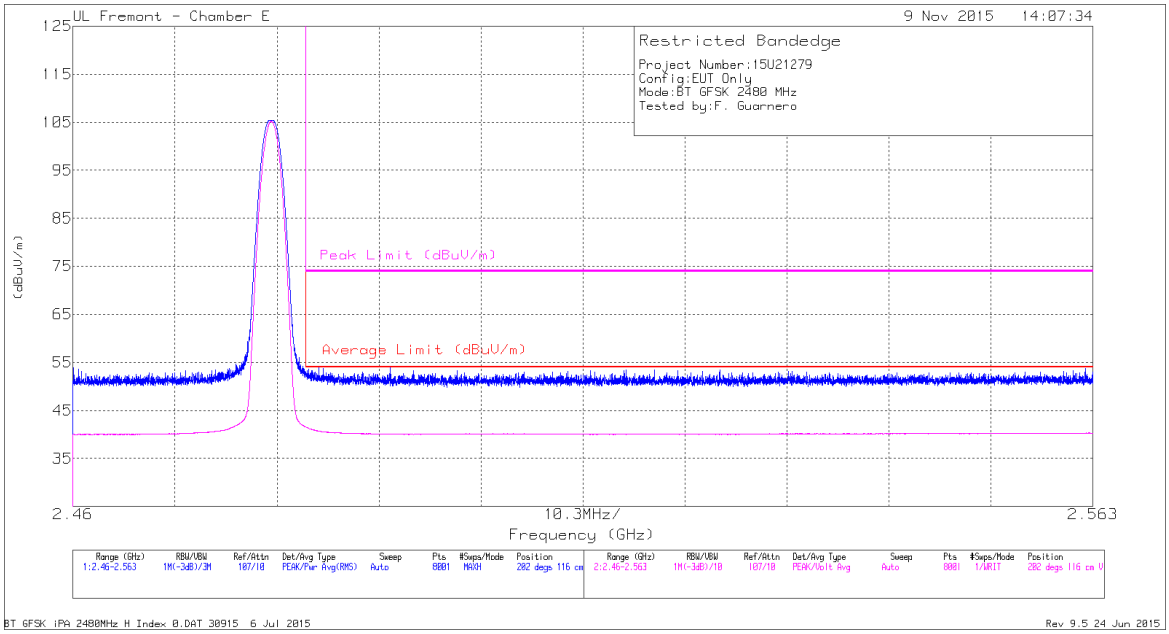
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	40.58	Pk	32.2	-20.8	51.98	-	-	74	-22.02	202	116	H
3	* 2.484	30.14	VA1T	32.2	-20.8	41.54	54	-12.46	-	-	202	116	H
4	* 2.484	30.09	VA1T	32.2	-20.8	41.49	54	-12.51	-	-	202	116	H
2	* 2.485	42.67	Pk	32.2	-20.8	54.07	-	-	74	-19.93	202	116	H

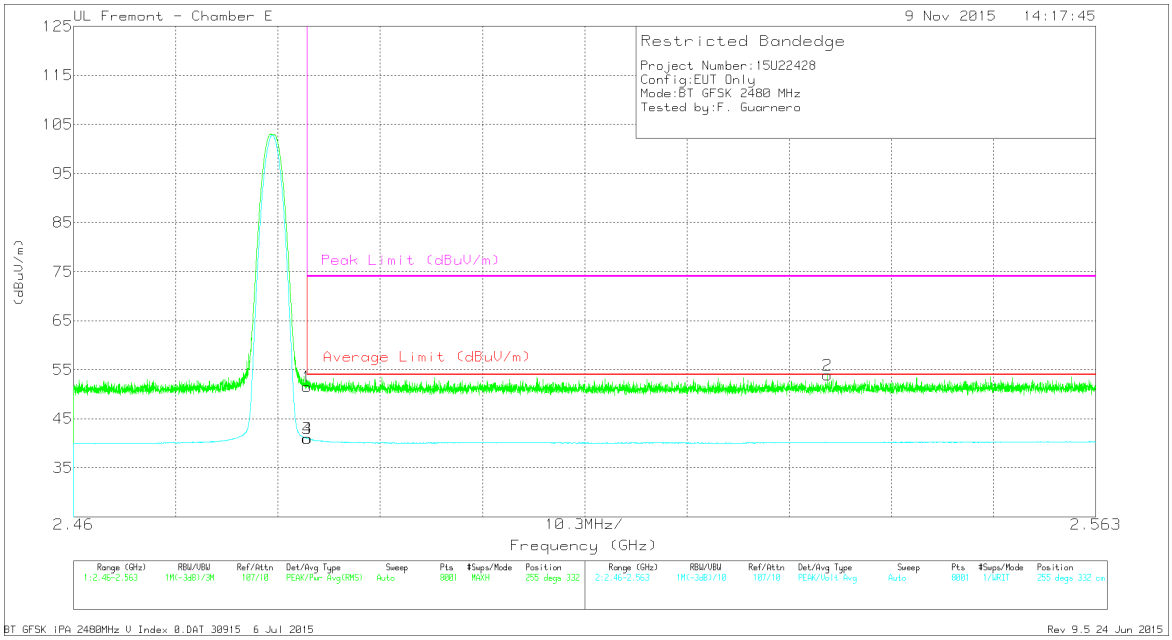
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	40.17	Pk	32.2	-20.8	51.57	-	-	74	-22.43	255	332	V
3	* 2.484	29.57	VA1T	32.2	-20.8	40.97	54	-13.03	-	-	255	332	V
4	* 2.484	29.57	VA1T	32.2	-20.8	40.97	54	-13.03	-	-	255	332	V
2	2.536	42.29	Pk	32.3	-20.7	53.89	-	-	74	-20.11	255	332	V

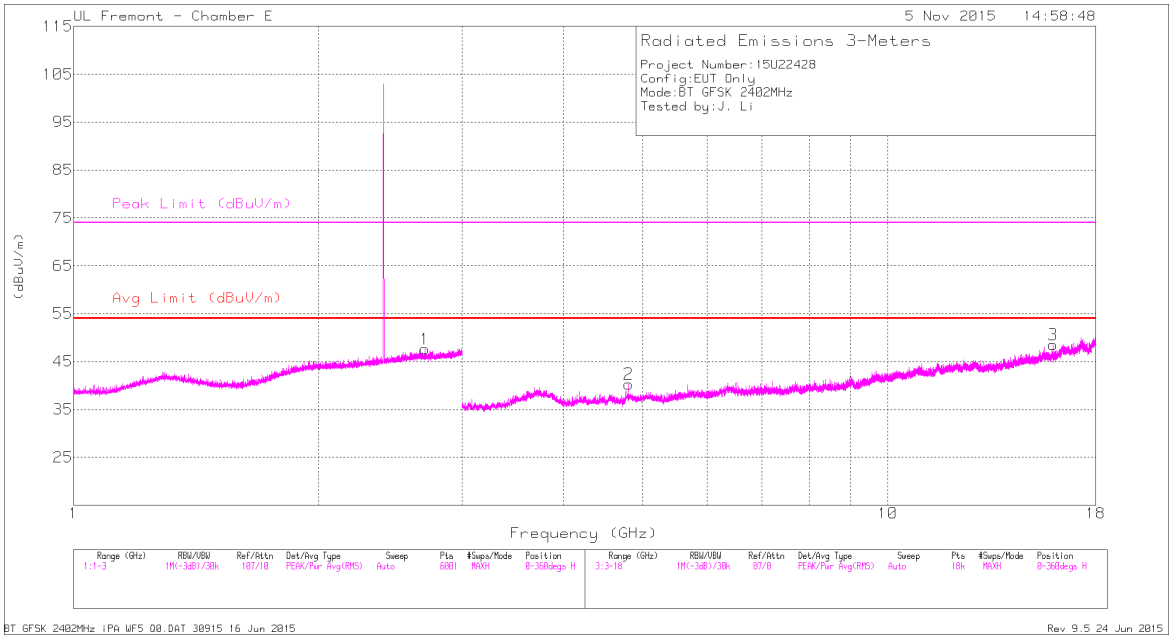
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

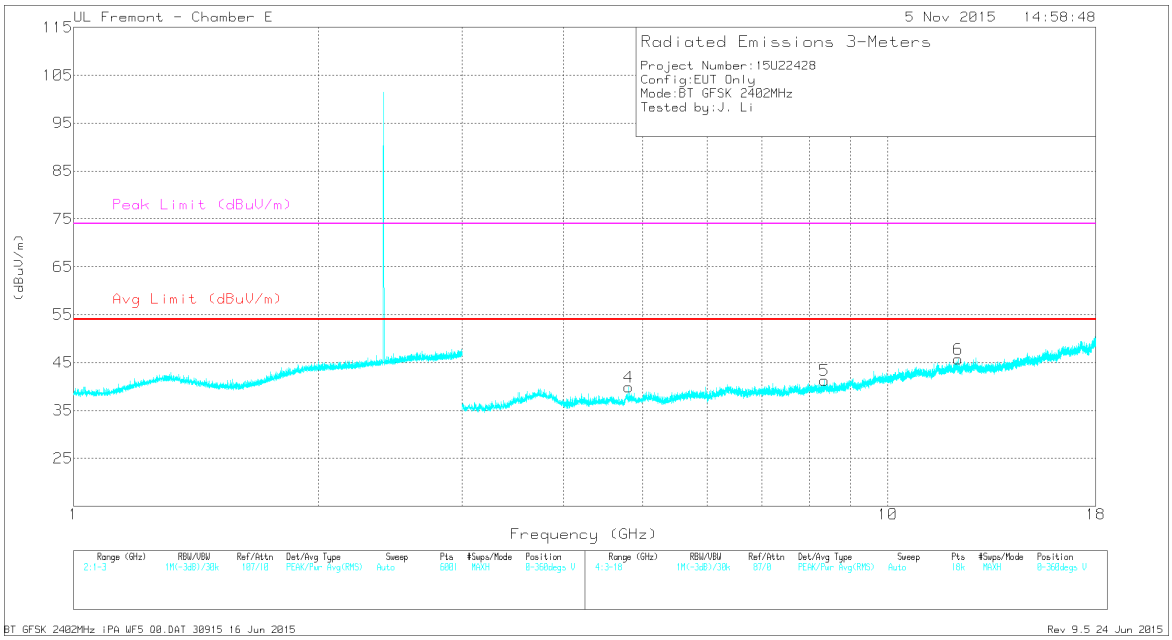
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

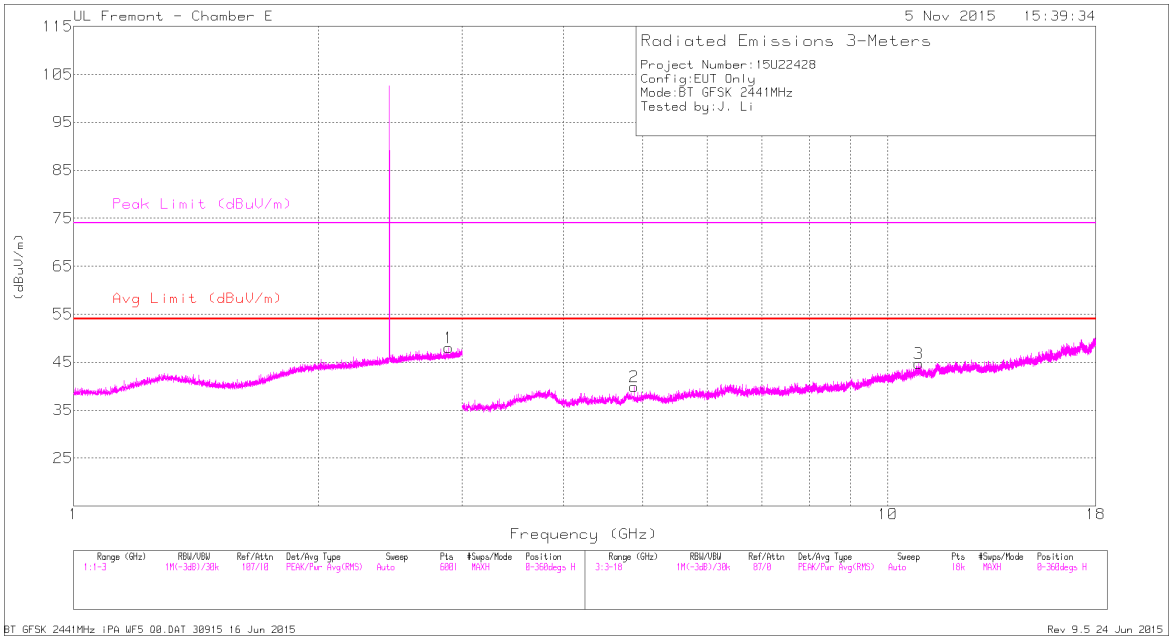
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.701	42.62	PK2	32.7	-20.8	54.52	-	-	74	-19.48	28	202	H
* 2.701	28.62	VA1T	32.7	-20.8	40.52	54	-13.48	-	-	28	202	H
* 4.804	39.69	PK2	34.1	-27.7	46.09	-	-	74	-27.91	335	197	H
* 4.804	30.26	VA1T	34.1	-27.7	36.66	54	-17.34	-	-	335	197	H
* 15.953	35.98	PK2	40.6	-22.1	54.48	-	-	74	-19.52	335	100	H
* 15.951	22.57	VA1T	40.6	-22.1	41.07	54	-12.93	-	-	335	100	H
* 4.804	39.18	PK2	34.1	-27.7	45.58	-	-	74	-28.42	309	167	V
* 4.804	28.29	VA1T	34.1	-27.7	34.69	54	-19.31	-	-	309	167	V
* 8.351	36.03	PK2	35.8	-24.7	47.13	-	-	74	-26.87	309	102	V
* 8.351	23.21	VA1T	35.8	-24.7	34.31	54	-19.69	-	-	309	102	V
* 12.195	34.68	PK2	39	-22.2	51.48	-	-	74	-22.52	309	102	V
* 12.196	21.69	VA1T	39	-22.2	38.49	54	-15.51	-	-	309	102	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

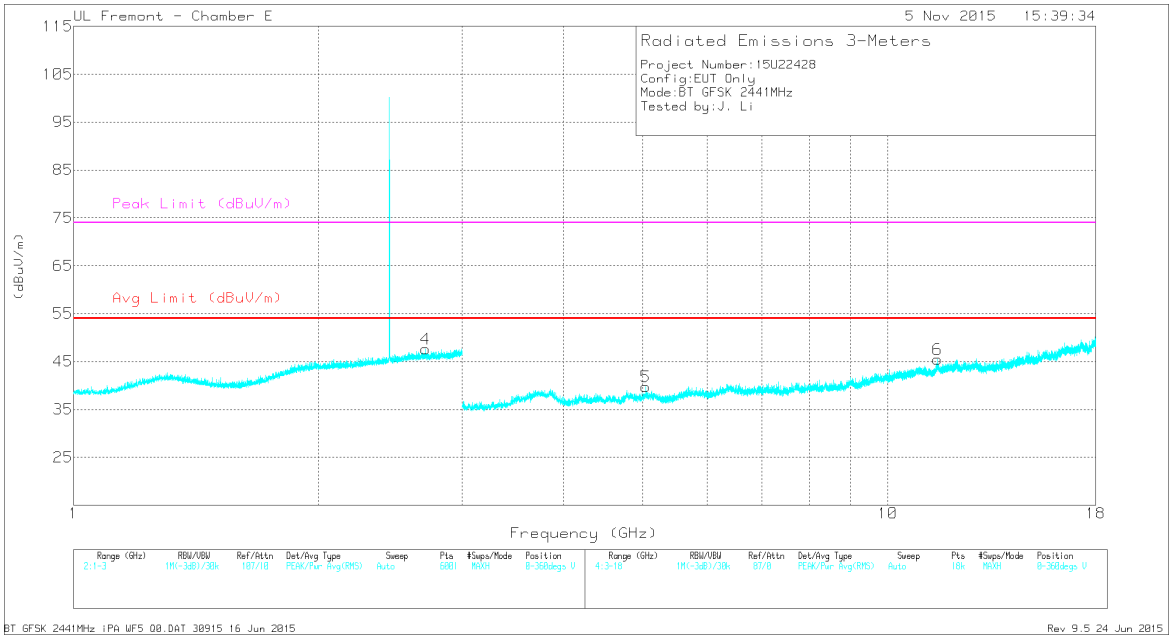
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

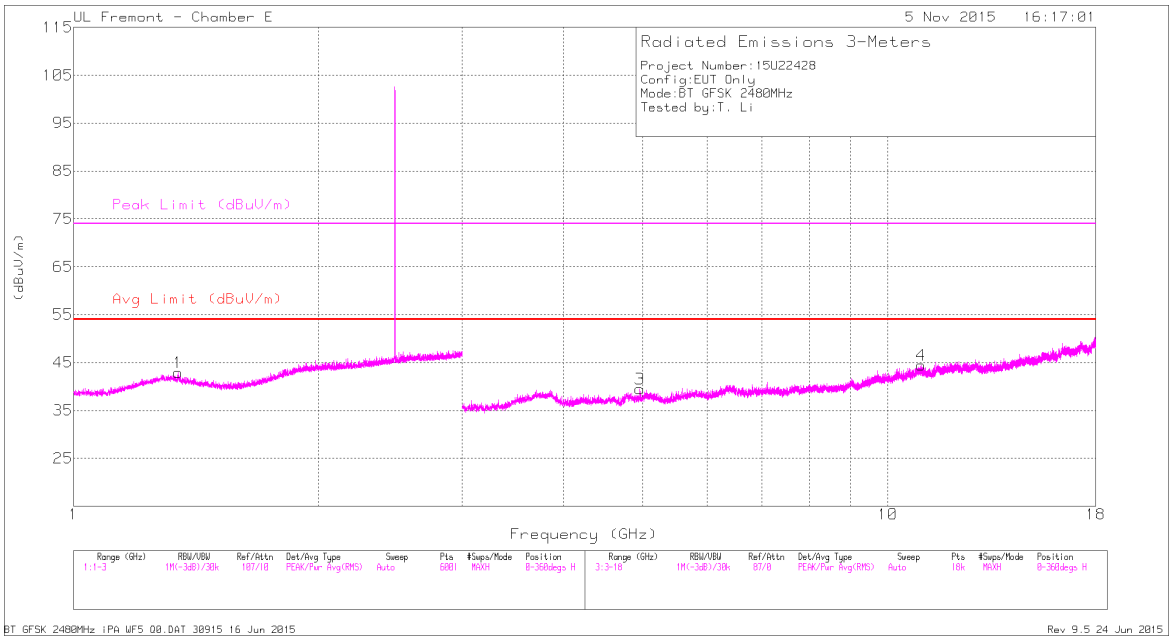
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.888	42	PK2	32.8	-20.5	54.3	-	-	74	-19.7	360	101	H
* 2.888	28.49	VA1T	32.8	-20.5	40.79	54	-13.21	-	-	360	101	H
* 2.705	41.63	PK2	32.7	-20.7	53.63	-	-	74	-20.37	360	201	V
* 2.708	28.65	VA1T	32.7	-20.8	40.55	54	-13.45	-	-	360	201	V
* 4.882	40.43	PK2	34.1	-27.9	46.63	-	-	74	-27.37	56	123	H
* 4.882	30.58	VA1T	34.1	-27.9	36.78	54	-17.22	-	-	56	123	H
* 10.914	34.36	PK2	38.1	-21.7	50.76	-	-	74	-23.24	56	101	H
* 10.915	21.28	VA1T	38.1	-21.7	37.68	54	-16.32	-	-	56	101	H
* 5.046	39.36	PK2	34.2	-28.4	45.16	-	-	74	-28.84	56	201	V
* 5.043	25.87	VA1T	34.2	-28.5	31.57	54	-22.43	-	-	56	201	V
* 11.516	34.01	PK2	38.6	-21.2	51.41	-	-	74	-22.59	56	201	V
* 11.516	21.32	VA1T	38.6	-21.2	38.72	54	-15.28	-	-	56	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

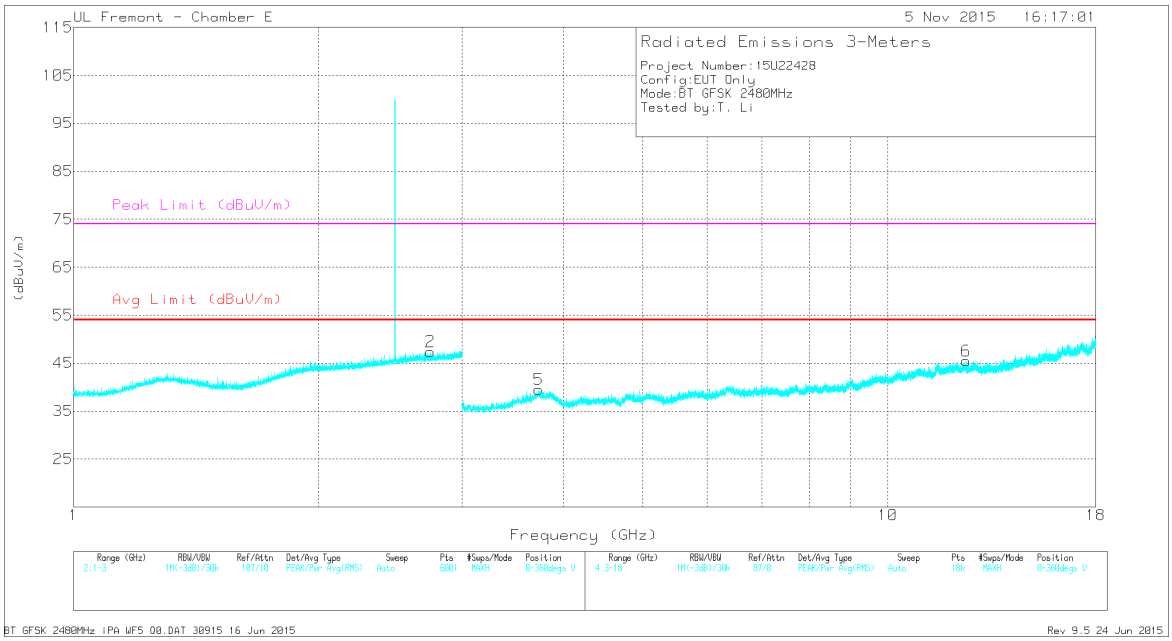
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.345	42.22	PK2	29.6	-22.2	49.62	-	-	74	-24.38	0	100	H
	* 1.342	28.77	VA1T	29.6	-22.2	36.17	54	-17.83	-	-	0	100	H
2	* 2.742	41.78	PK2	32.7	-20.8	53.68	-	-	74	-20.32	0	201	V
	* 2.743	28.59	VA1T	32.7	-20.8	40.49	54	-13.51	-	-	0	201	V
3	* 4.96	41.21	PK2	34.1	-28.7	46.61	-	-	74	-27.39	54	134	H
	* 4.96	32.23	VA1T	34.1	-28.7	37.63	54	-16.37	-	-	54	134	H
4	* 10.986	34.5	PK2	38.1	-21.7	50.9	-	-	74	-23.1	54	101	H
	* 10.988	21.46	VA1T	38.1	-21.7	37.86	54	-16.14	-	-	54	101	H
5	* 3.729	38.77	PK2	34.5	-29.4	43.87	-	-	74	-30.13	54	101	V
	* 3.728	26.19	VA1T	34.5	-29.4	31.29	54	-22.71	-	-	54	101	V
6	* 12.476	35.59	PK2	39.2	-22.8	51.99	-	-	74	-22.01	54	201	V
	* 12.479	22.15	VA1T	39.2	-22.8	38.55	54	-15.45	-	-	54	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

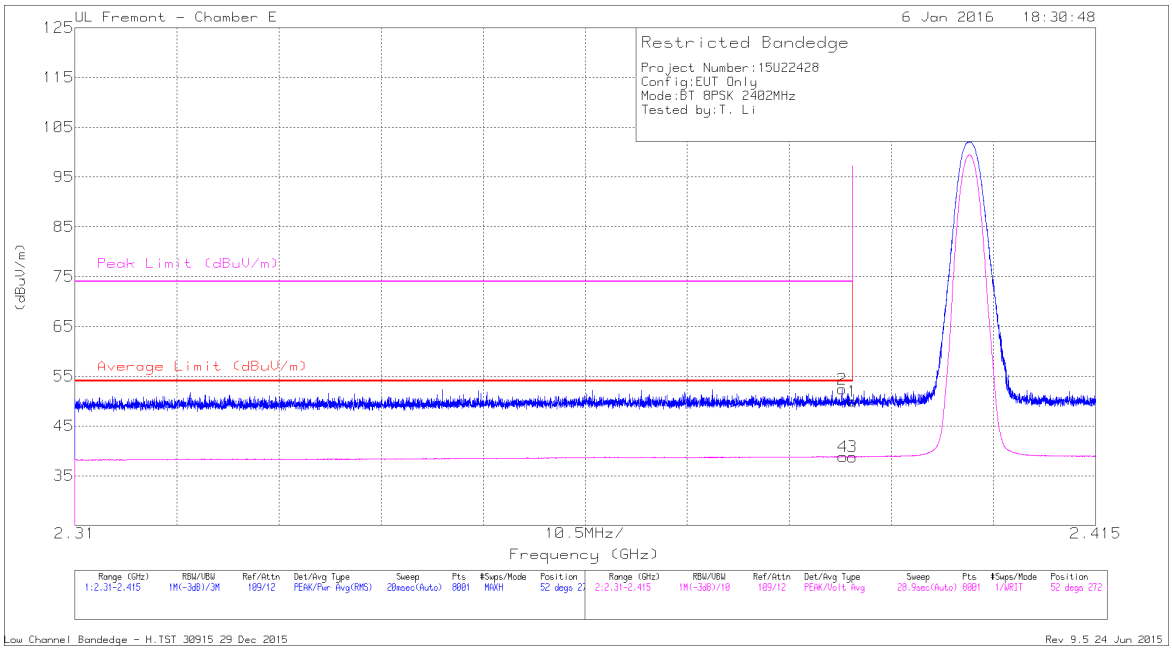
PK2 - KDB558074 Method: Maximum Peak

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

8.2.8. ANTENNA D LOW POWER MODE ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

LOW CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	40.17	Pk	32.1	-19.9	52.37	-	-	74	-21.63	52	272	H
4	* 2.389	26.64	VA1T	32.1	-19.9	38.84	54	-15.16	-	-	52	272	H
1	* 2.39	37.74	Pk	32.1	-19.9	49.94	-	-	74	-24.06	52	272	H
3	* 2.39	26.59	VA1T	32.1	-19.9	38.79	54	-15.21	-	-	52	272	H

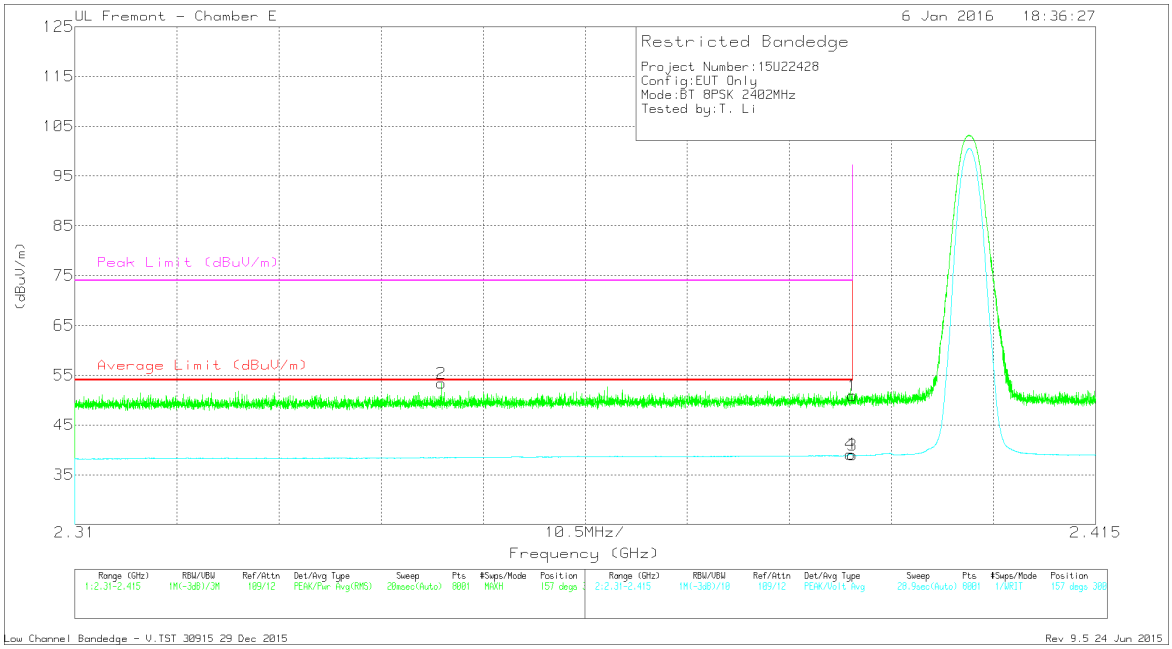
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 2.348	41.49	Pk	32	-20.1	53.39	-	-	74	-20.61	157	300	V
1	* 2.39	38.7	Pk	32.1	-19.9	50.9	-	-	74	-23.1	157	300	V
3	* 2.39	26.76	VA1T	32.1	-19.9	38.96	54	-15.04	-	-	157	300	V
4	* 2.39	26.94	VA1T	32.1	-19.9	39.14	54	-14.86	-	-	157	300	V

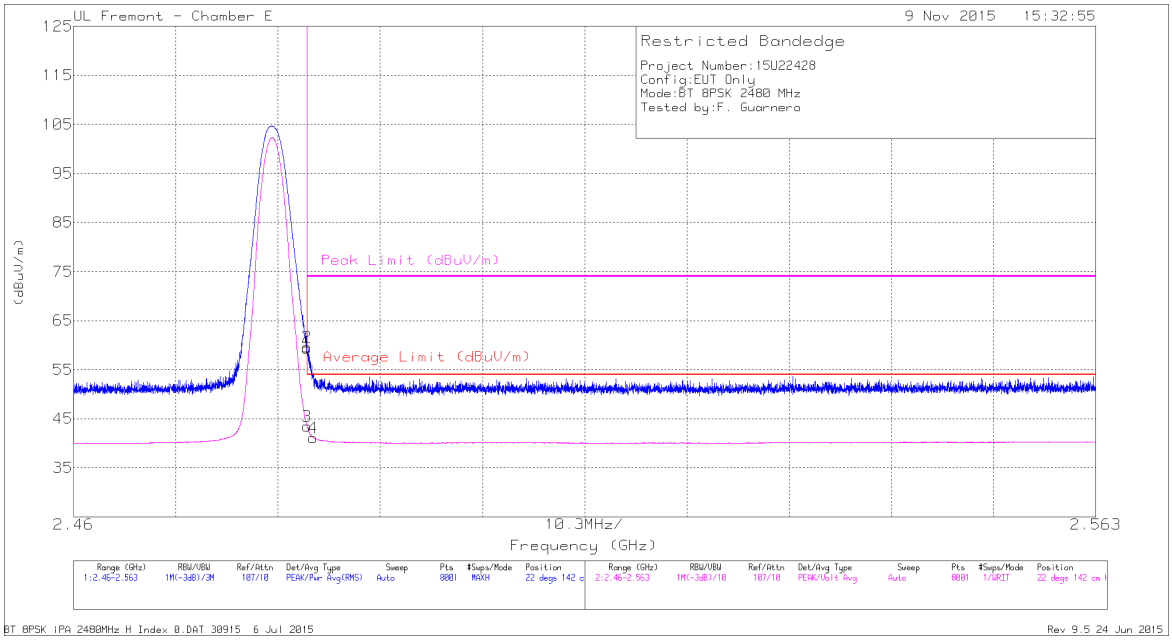
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

HIGH CHANNEL HORIZONTAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	47.99	Pk	32.2	-20.8	59.39	-	-	74	-14.61	22	142	H
2	* 2.484	48.25	Pk	32.2	-20.8	59.65	-	-	74	-14.35	22	142	H
3	* 2.484	32.06	VA1T	32.2	-20.8	43.46	54	-10.54	-	-	22	142	H
4	* 2.484	29.75	VA1T	32.2	-20.8	41.15	54	-12.85	-	-	22	142	H

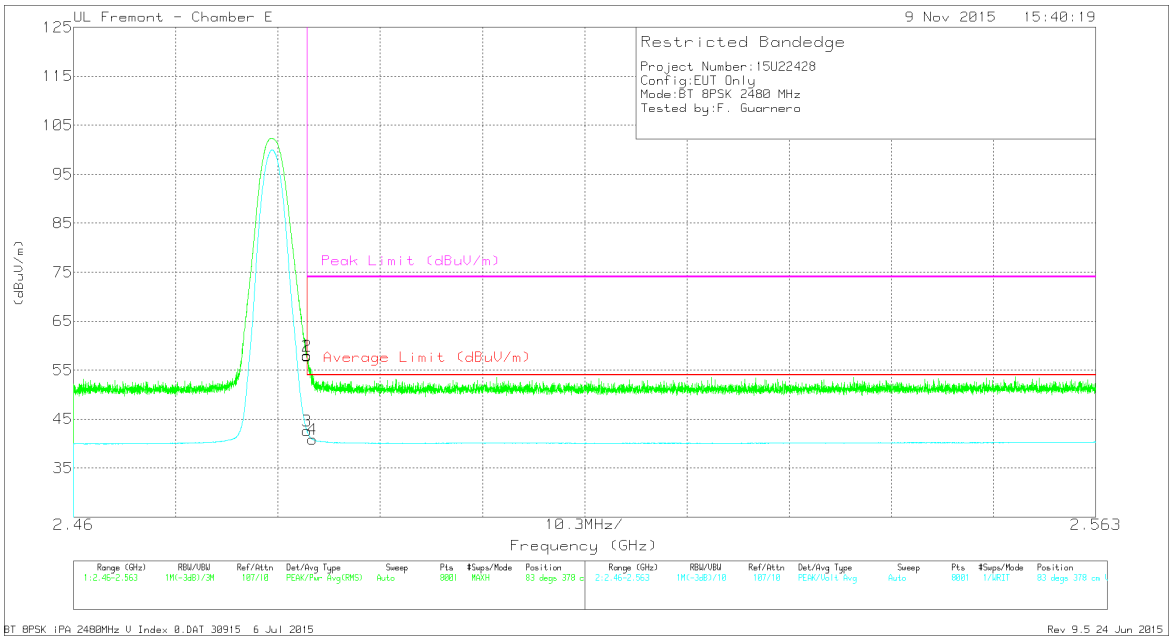
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	46.64	Pk	32.2	-20.8	58.04	-	-	74	-15.96	83	378	V
2	* 2.484	46.5	Pk	32.2	-20.8	57.9	-	-	74	-16.1	83	378	V
3	* 2.484	31.17	VA1T	32.2	-20.8	42.57	54	-11.43	-	-	83	378	V
4	* 2.484	29.47	VA1T	32.2	-20.8	40.87	54	-13.13	-	-	83	378	V

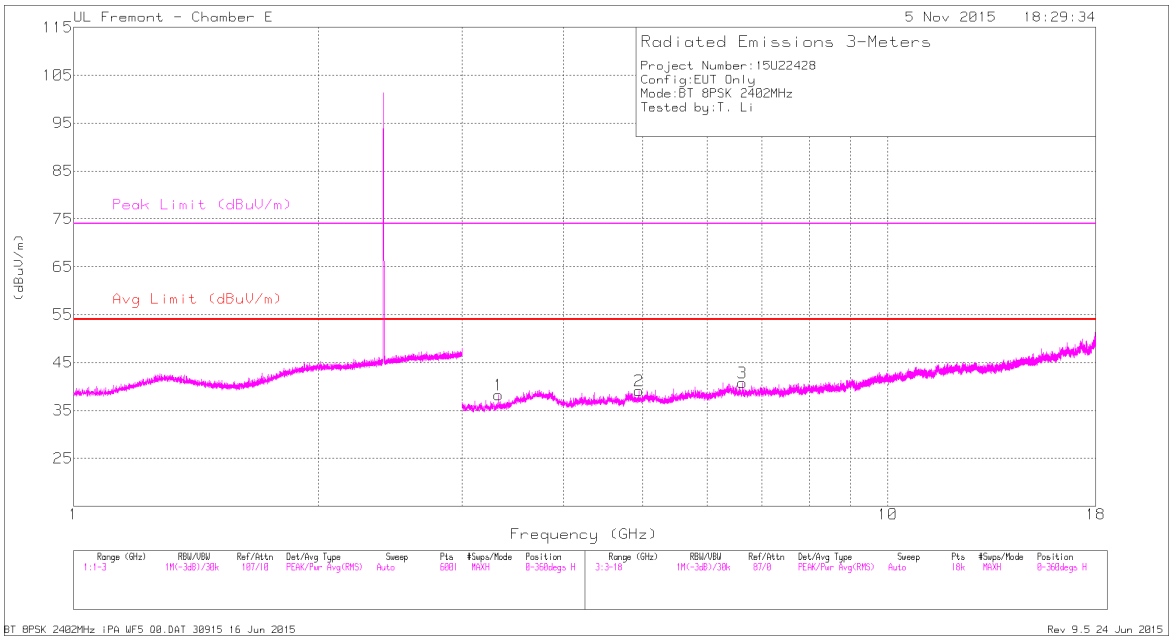
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

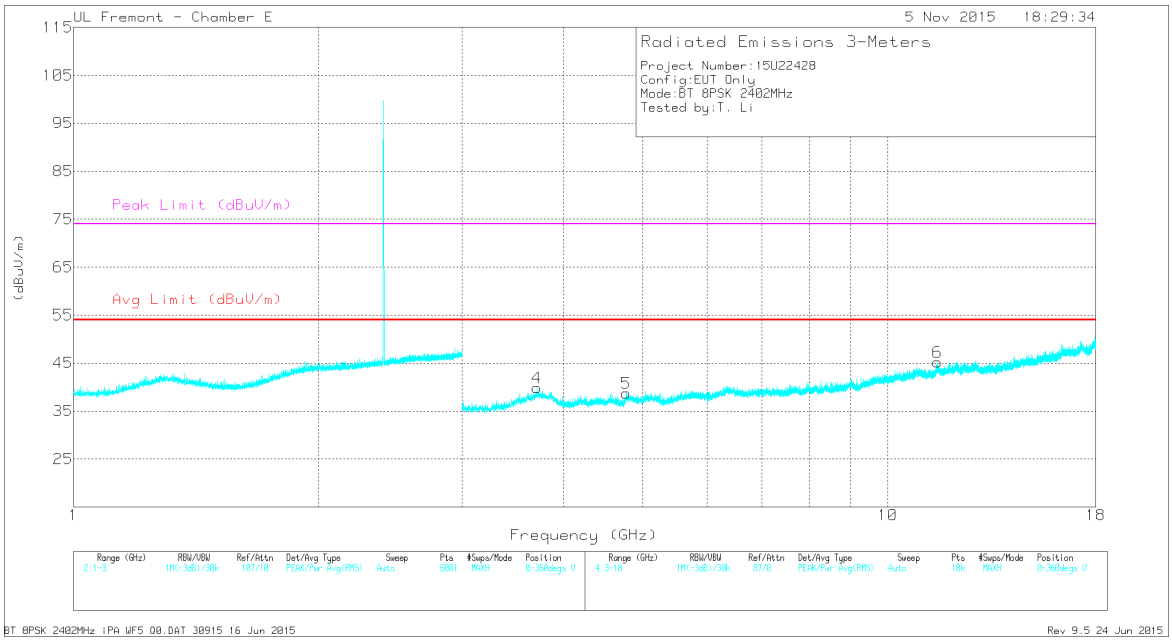
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

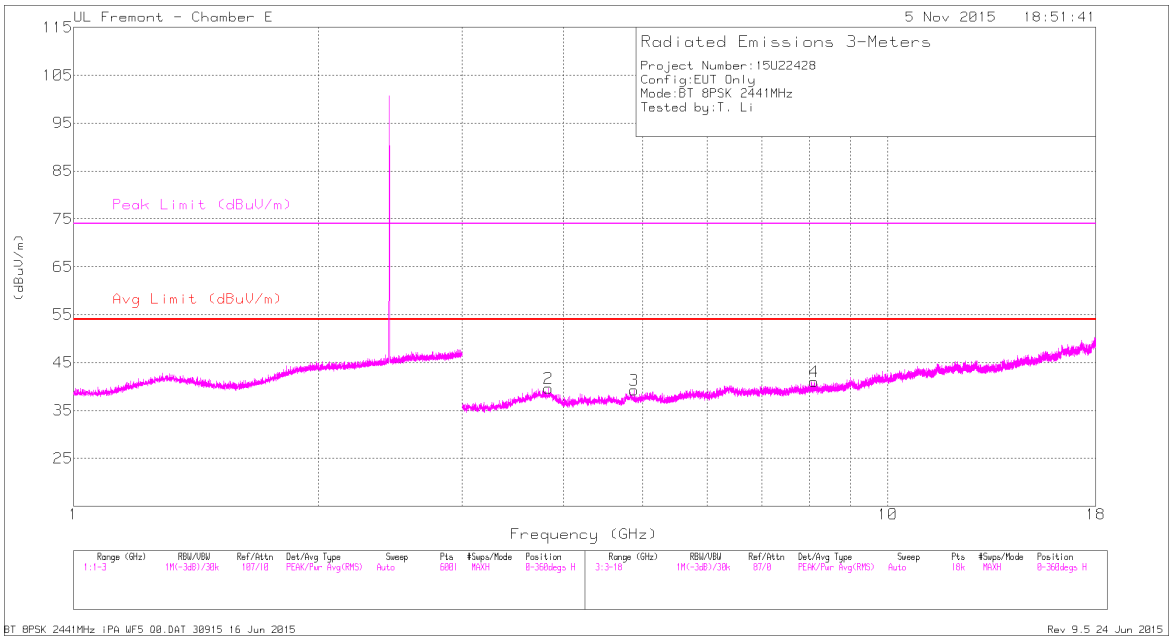
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.327	40.22	PK2	33.5	-28.9	44.82	-	-	-	-	0	100	H
	3.326	26.51	VA1T	33.5	-28.9	31.11	-	-	-	-	0	100	H
2	* 4.944	38.6	PK2	34.1	-28.6	44.1	-	-	74	-29.9	0	202	H
	* 4.942	25.62	VA1T	34.1	-28.6	31.12	54	-22.88	-	-	0	202	H
3	6.63	37.91	PK2	35.8	-27	46.71	-	-	-	-	0	202	H
	6.632	24.76	VA1T	35.8	-27	33.56	-	-	-	-	0	202	H
4	* 3.707	39.48	PK2	34.6	-29.5	44.58	-	-	74	-29.42	0	101	V
	* 3.707	26.29	VA1T	34.6	-29.5	31.39	54	-22.61	-	-	0	101	V
5	* 4.773	38.91	PK2	34.1	-28.1	44.91	-	-	74	-29.09	0	201	V
	* 4.776	26.23	VA1T	34.1	-28.1	32.23	54	-21.77	-	-	0	201	V
6	* 11.509	34.34	PK2	38.6	-21.2	51.74	-	-	74	-22.26	0	201	V
	* 11.51	21.29	VA1T	38.6	-21.2	38.69	54	-15.31	-	-	0	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

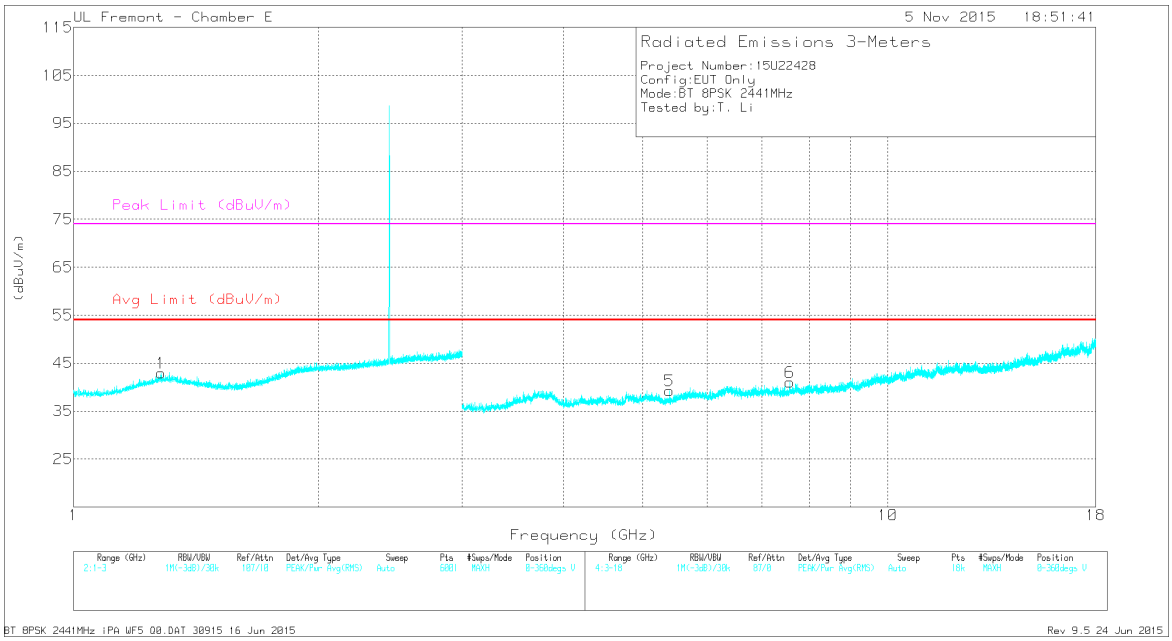
PK2 - KDB558074 Method: Maximum Peak

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

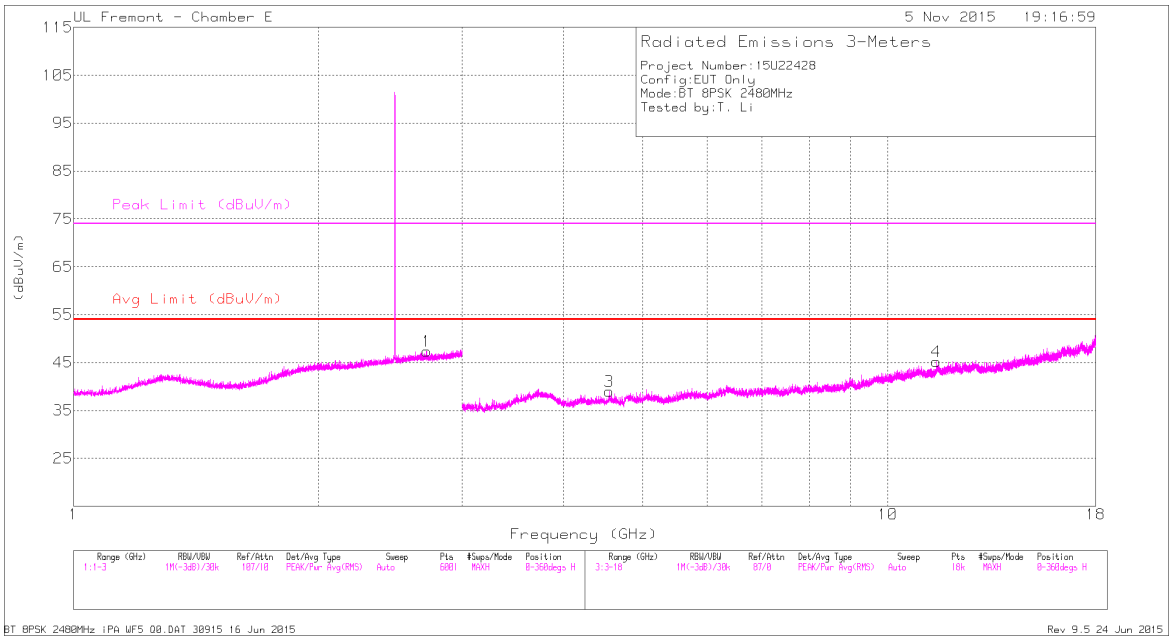
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.282	42.7	PK2	29.8	-22.3	50.2	-	-	74	-23.8	0	101	V
	* 1.281	28.94	VA1T	29.8	-22.3	36.44	54	-17.56	-	-	0	101	V
2	* 3.832	38.88	PK2	34	-28.4	44.48	-	-	74	-29.52	0	202	H
	* 3.833	25.94	VA1T	34	-28.4	31.54	54	-22.46	-	-	0	202	H
3	* 4.882	38.99	PK2	34.1	-27.9	45.19	-	-	74	-28.81	279	157	H
	* 4.882	28.52	VA1T	34.1	-27.9	34.72	54	-19.28	-	-	279	157	H
4	* 8.109	36.4	PK2	35.8	-25	47.2	-	-	74	-26.8	279	100	H
	* 8.109	23.46	VA1T	35.8	-25	34.26	54	-19.74	-	-	279	100	H
5	* 5.392	38.02	PK2	34.6	-28.1	44.52	-	-	74	-29.48	279	100	V
	* 5.392	25.26	VA1T	34.6	-28.1	31.76	54	-22.24	-	-	279	100	V
6	* 7.578	36.69	PK2	35.8	-25.6	46.89	-	-	74	-27.11	280	201	V
	* 7.577	23.81	VA1T	35.8	-25.7	33.91	54	-20.09	-	-	280	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

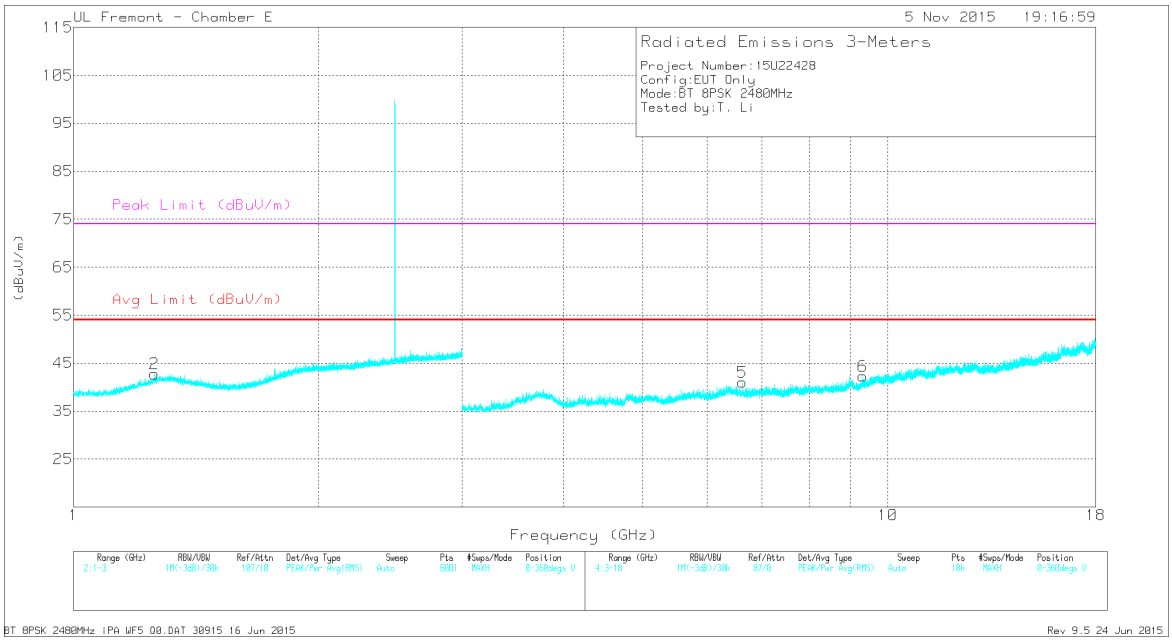
PK2 - KDB558074 Method: Maximum Peak

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 2.716	42.56	PK2	32.7	-20.7	54.56	-	-	74	-19.44	360	100	H
	* 2.712	28.67	VA1T	32.7	-20.8	40.57	54	-13.43	-	-	360	100	H
2	* 1.256	42.95	PK2	29.5	-22.3	50.15	-	-	74	-23.85	360	100	V
	* 1.258	28.94	VA1T	29.5	-22.3	36.14	54	-17.86	-	-	360	100	V
3	* 4.546	38.21	PK2	33.9	-28.1	44.01	-	-	74	-29.99	360	202	H
	* 4.545	25.41	VA1T	33.9	-28.1	31.21	54	-22.79	-	-	360	202	H
4	* 11.469	34.51	PK2	38.5	-21.8	51.21	-	-	74	-22.79	360	101	H
	* 11.466	21.69	VA1T	38.5	-21.9	38.29	54	-15.71	-	-	360	101	H
5	6.625	37.55	PK2	35.8	-27	46.35	-	-	-	-	360	101	V
	6.628	24.78	VA1T	35.8	-27	33.58	-	-	-	-	360	101	V
6	* 9.317	35.12	PK2	36.4	-22.7	48.82	-	-	74	-25.18	360	101	V
	* 9.316	21.78	VA1T	36.4	-22.7	35.48	54	-18.52	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

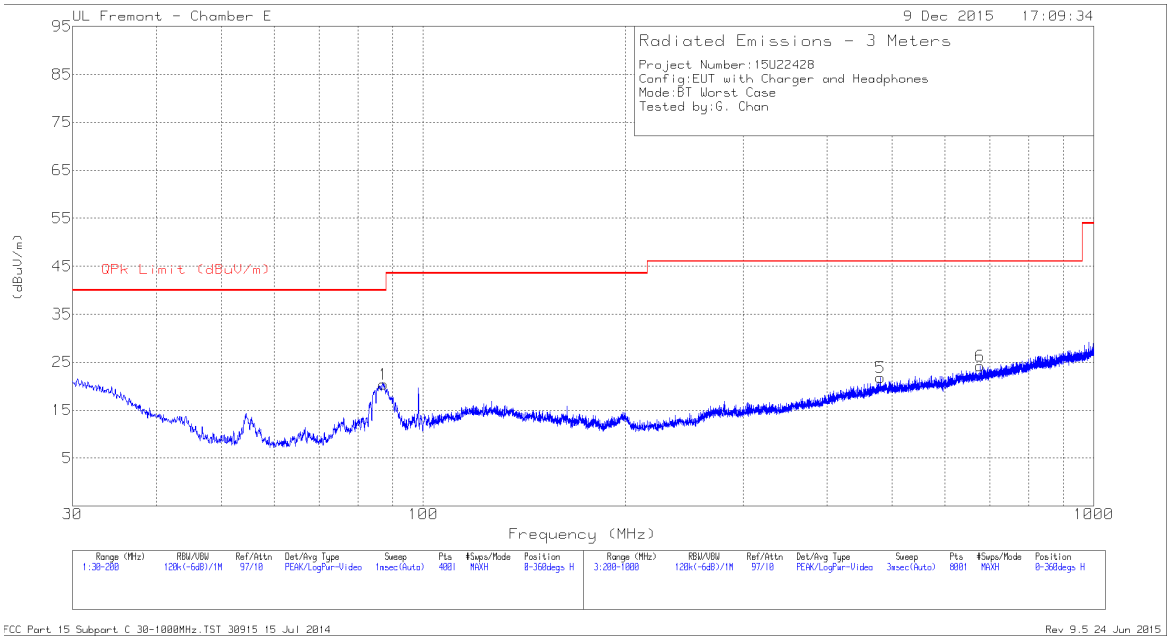
PK2 - KDB558074 Method: Maximum Peak

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

8.3. WORST-CASE BELOW 1 GHz

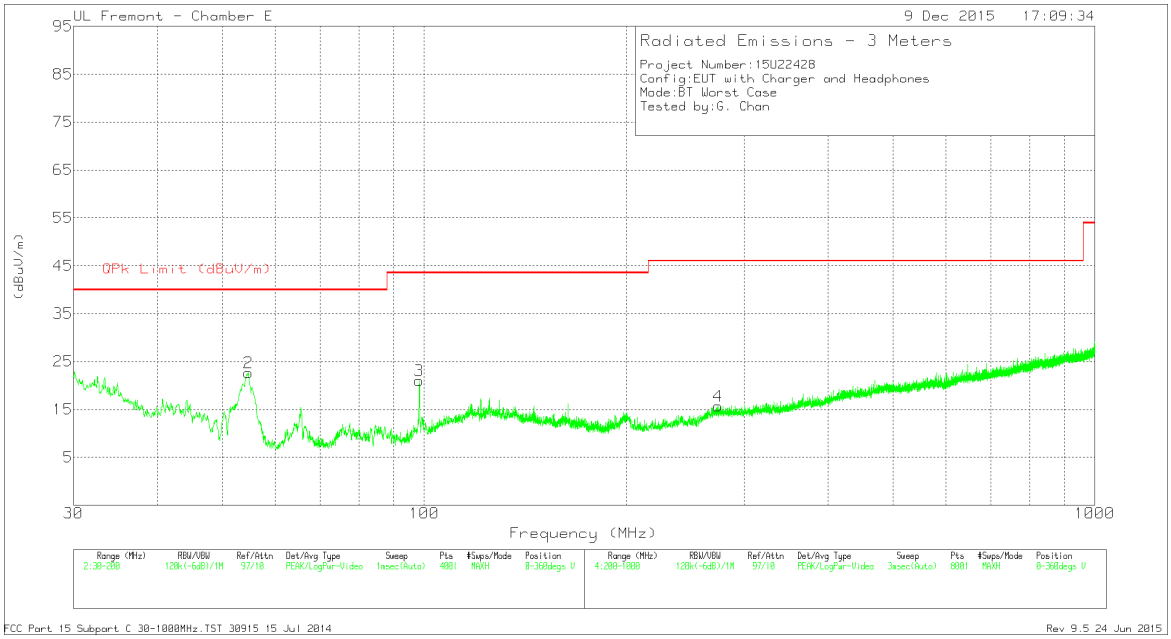
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



DATA

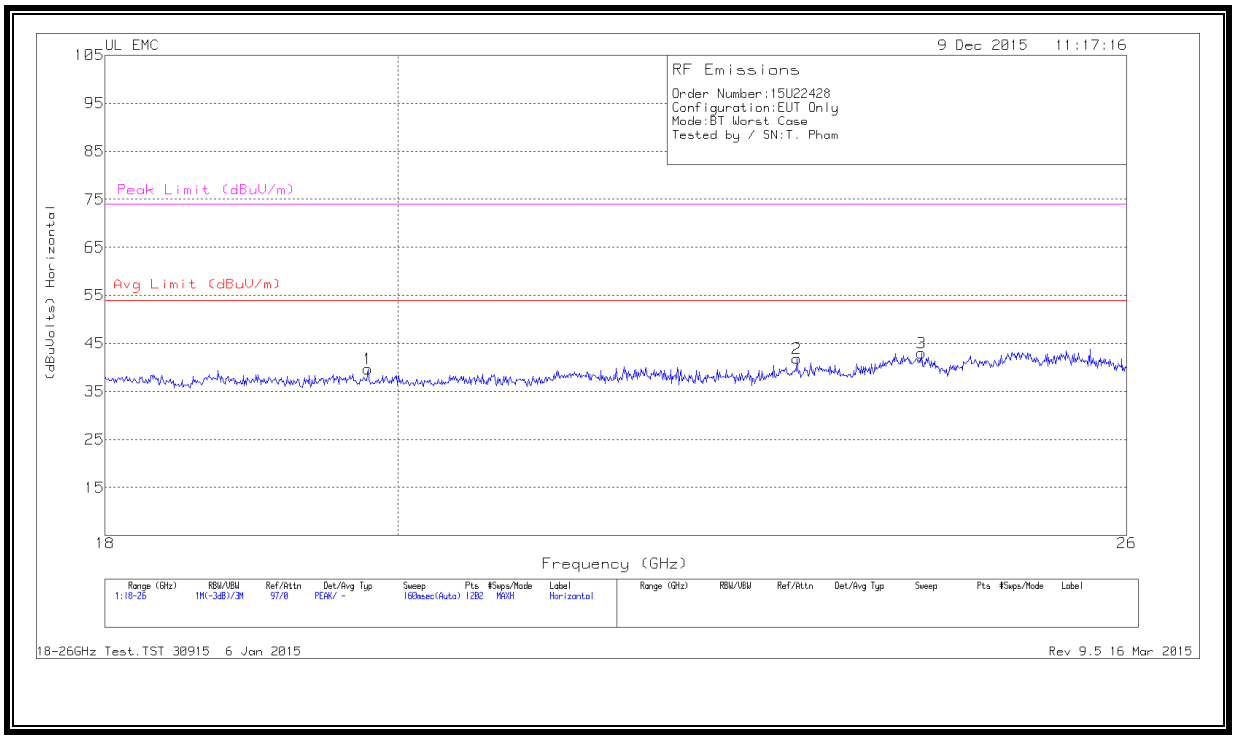
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 274.3	28.75	Pk	17.4	-30.5	15.65	46.02	-30.37	0-360	301	V
2	54.65	43.14	Pk	11.2	-31.7	22.64	40	-17.36	0-360	100	V
1	87.2475	40.49	Pk	11.3	-31.4	20.39	40	-19.61	0-360	201	H
3	98.34	38.78	Pk	13.7	-31.4	21.08	43.52	-22.44	0-360	100	V
5	480.4	29.84	Pk	21.6	-29.7	21.74	46.02	-24.28	0-360	201	H
6	676.4	29.84	Pk	23.7	-29.3	24.24	46.02	-21.78	0-360	401	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

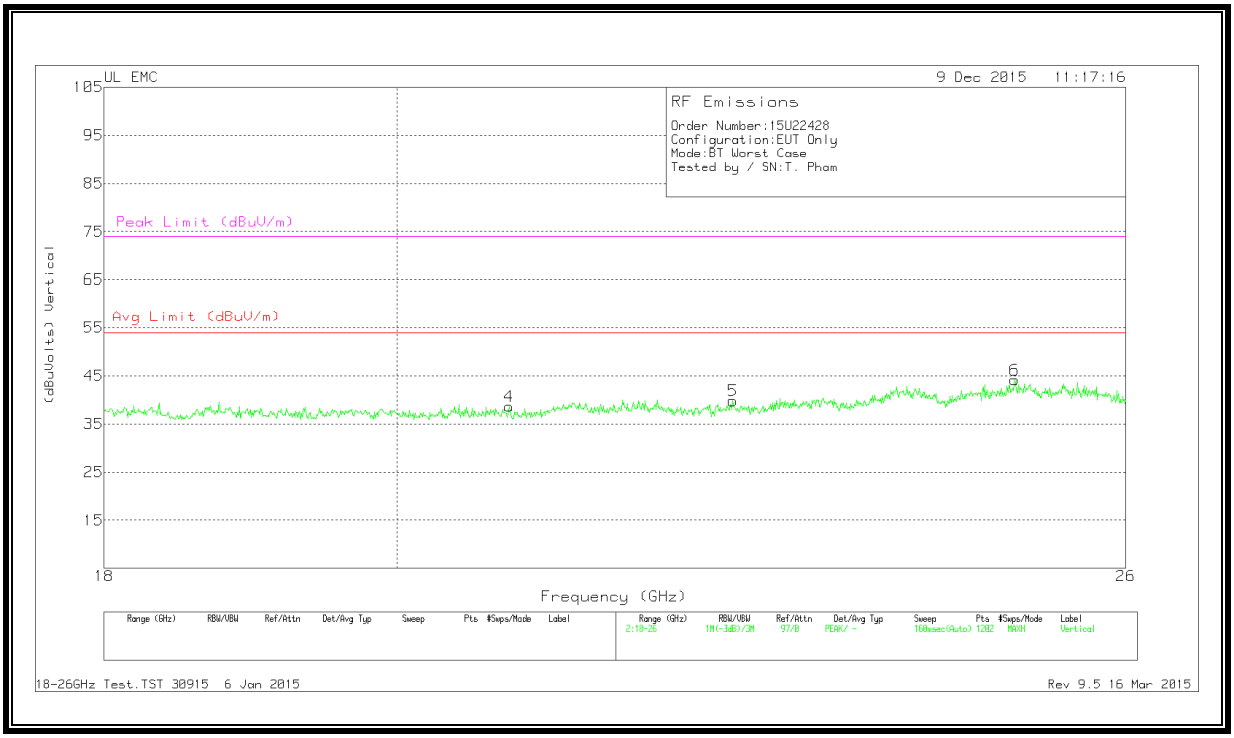
Pk - Peak detector

8.4. WORST-CASE ABOVE 18 GHz

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



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



Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (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	19.785	41.27	Pk	32.6	-24.7	-9.5	39.67	54	-14.33	74	-34.33
2	23.089	42.73	Pk	33.6	-25	-9.5	41.83	54	-12.17	74	-32.17
3	24.148	43.4	Pk	33.4	-24.3	-9.5	43	54	-11	74	-31
4	20.824	40.77	Pk	32.7	-25.3	-9.5	38.67	54	-15.33	74	-35.33
5	22.57	40.93	Pk	33.3	-24.9	-9.5	39.83	54	-14.17	74	-34.17
6	24.981	43.67	Pk	34.2	-24.2	-9.5	44.17	54	-9.83	74	-29.83

Pk - Peak detector

9. 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.

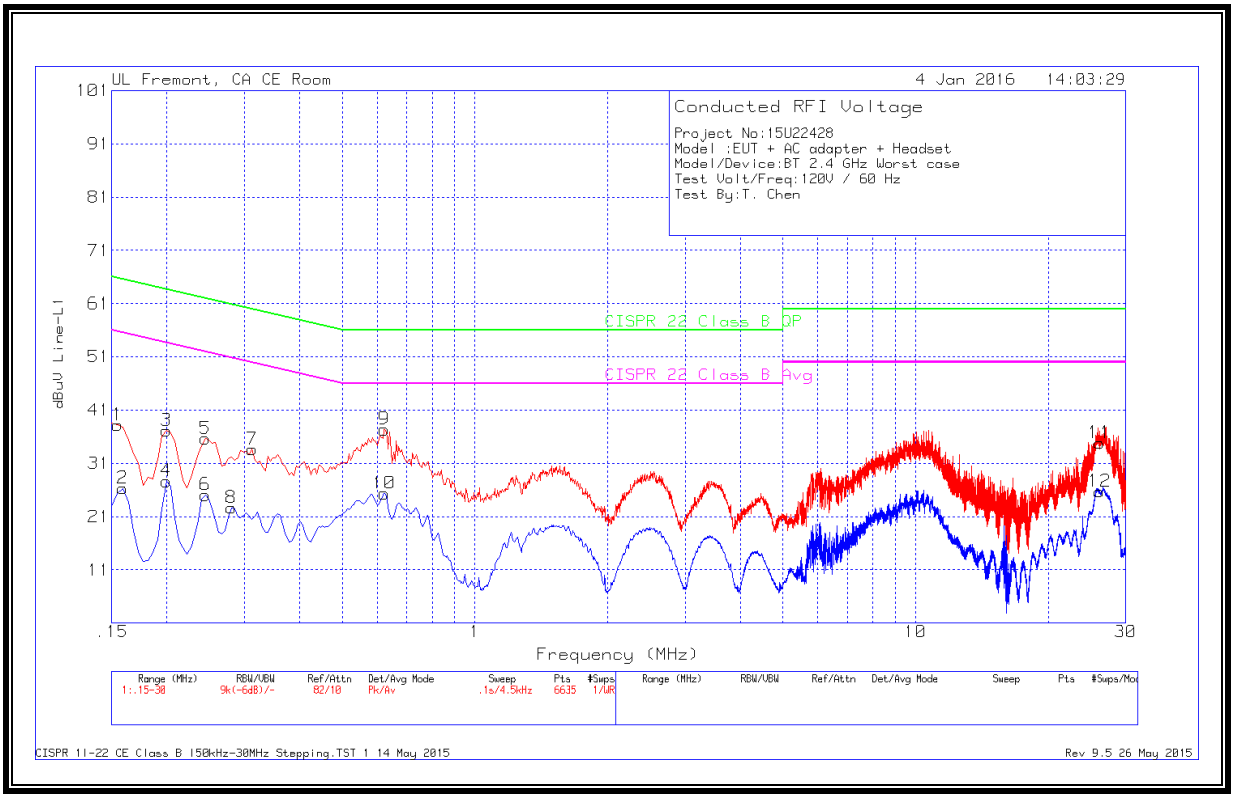
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

12 WORST EMISSIONS

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

LINE 1 RESULTS



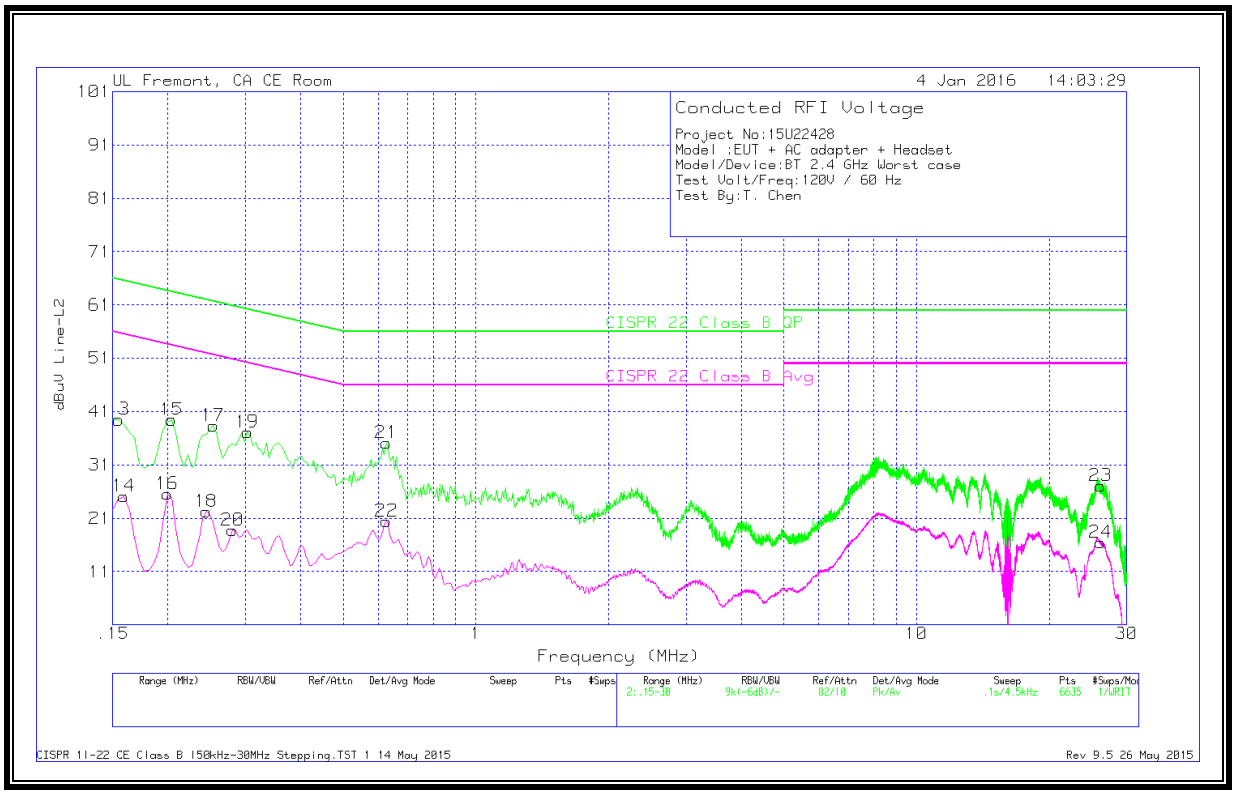
WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.1545	36.89	Pk	1.3	0	38.19	65.75	-27.56	-	-
2	.159	25	Av	1.3	0	26.3	-	-	55.52	-29.22
3	.1995	36.24	Pk	.9	0	37.14	63.63	-26.49	-	-
4	.1995	26.72	Av	.9	0	27.62	-	-	53.63	-26.01
5	.2445	34.95	Pk	.7	0	35.65	61.94	-26.29	-	-
6	.2445	24.34	Av	.7	0	25.04	-	-	51.94	-26.9
7	.312	33.15	Pk	.5	0	33.65	59.92	-26.27	-	-
8	.2805	22.03	Av	.6	0	22.63	-	-	50.8	-28.17
9	.6225	37.05	Pk	.3	0	37.35	56	-18.65	-	-
10	.6225	25.02	Av	.3	0	25.32	-	-	46	-20.68
11	26.169	34.18	Pk	.3	.3	34.78	60	-25.22	-	-
12	26.1465	25.11	Av	.3	.3	25.71	-	-	50	-24.29

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

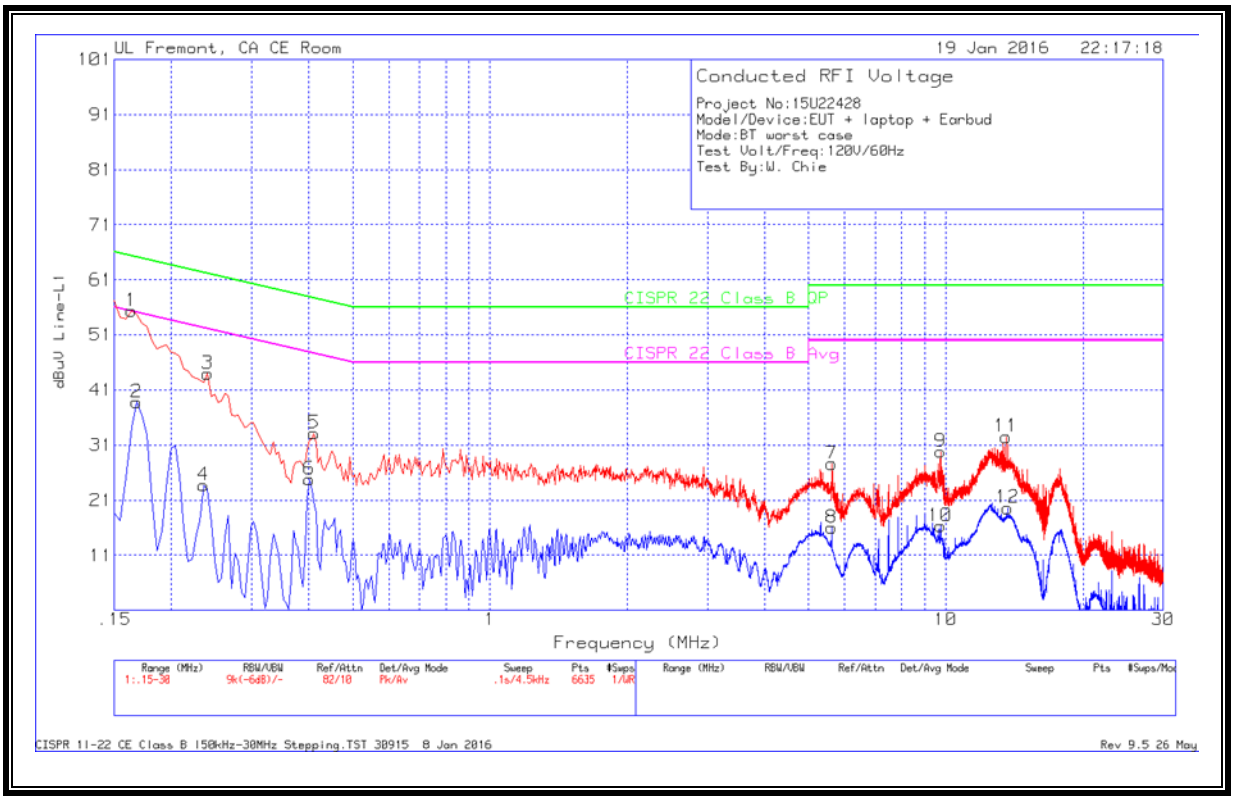
Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
13	.1545	38.08	Pk	1.4	0	39.48	65.75	-26.27	-	-
14	.159	23.69	Av	1.4	0	25.09	-	-	55.52	-30.43
15	.204	38.46	Pk	1	0	39.46	63.45	-23.99	-	-
16	.1995	24.53	Av	1	0	25.53	-	-	53.63	-28.1
17	.2535	37.63	Pk	.7	0	38.33	61.64	-23.31	-	-
18	.2445	21.44	Av	.8	0	22.24	-	-	51.94	-29.7
19	.303	36.55	Pk	.6	0	37.15	60.16	-23.01	-	-
20	.2805	18.14	Av	.6	0	18.74	-	-	50.8	-32.06
21	.627	34.79	Pk	.3	0	35.09	56	-20.91	-	-
22	.627	20.12	Av	.3	0	20.42	-	-	46	-25.58
23	26.16	26.48	Pk	.3	.3	27.08	60	-32.92	-	-
24	26.16	15.8	Av	.3	.3	16.4	-	-	50	-33.6

Pk - Peak detector

Av - Average detection

9.2. EUT POWERED BY HOST PC VIA USB CABLE

LINE 1 RESULTS



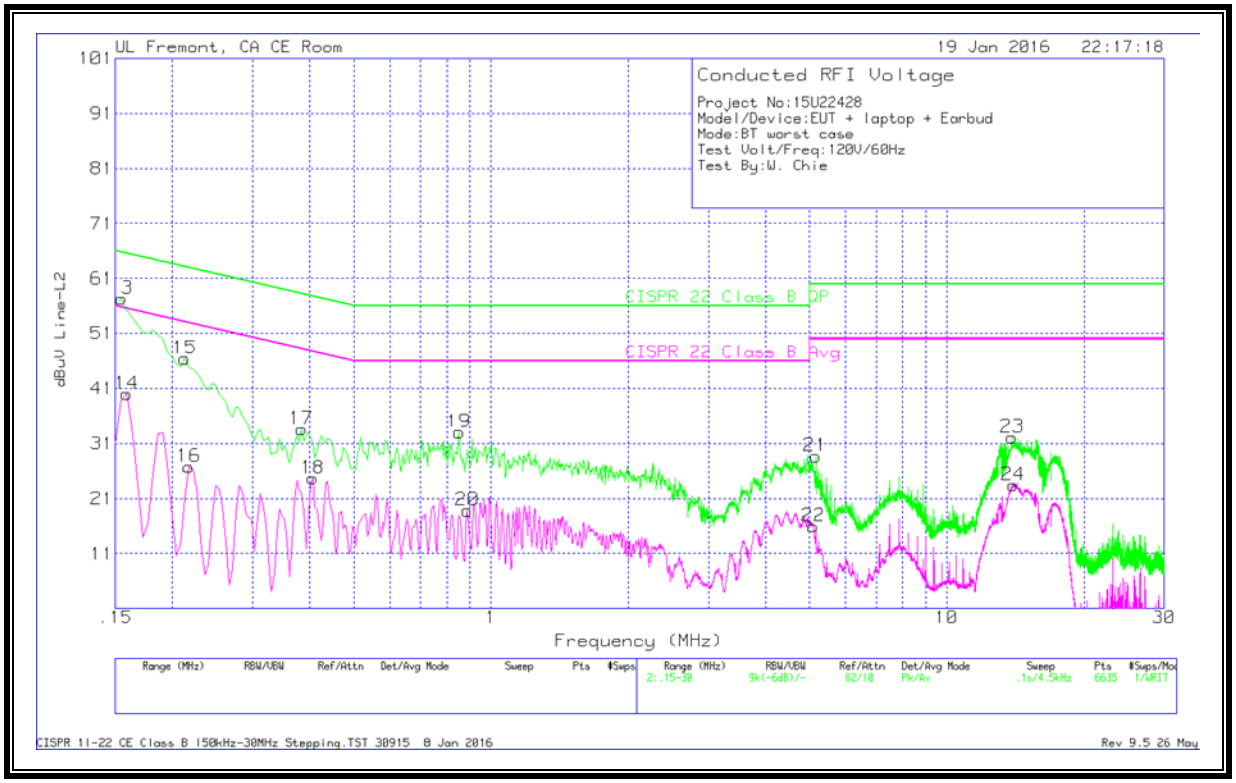
WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T1310 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.1635	55.35	Pk	0	0	55.35	65.28	-9.93	-	-
2	.168	38.79	Av	0	0	38.79	-	-	55.06	-16.27
3	.24	44	Pk	0	0	44	62.1	-18.1	-	-
4	.2355	23.69	Av	0	0	23.69	-	-	52.25	-28.56
5	.411	33.11	Pk	0	0	33.11	57.63	-24.52	-	-
6	.402	24.8	Av	0	0	24.8	-	-	47.81	-23.01
7	5.622	27.51	Pk	0	.1	27.61	60	-32.39	-	-
8	5.622	15.9	Av	0	.1	16	-	-	50	-34
9	9.7395	29.62	Pk	0	.2	29.82	60	-30.18	-	-
10	9.735	16.1	Av	0	.2	16.3	-	-	50	-33.7
11	13.5735	32.19	Pk	.1	.2	32.49	60	-27.51	-	-
12	13.6725	19.27	Av	.1	.2	19.57	-	-	50	-30.43

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T1310 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
13	.1545	57.36	Pk	0	0	57.36	65.75	-8.39	-	-
14	.159	40.03	Av	0	0	40.03	-	-	55.52	-15.49
15	.213	46.45	Pk	0	0	46.45	63.09	-16.64	-	-
16	.2175	26.75	Av	0	0	26.75	-	-	52.91	-26.16
17	.384	33.63	Pk	0	0	33.63	58.19	-24.56	-	-
18	.4065	24.67	Av	0	0	24.67	-	-	47.72	-23.05
19	.852	33.08	Pk	0	0	33.08	56	-22.92	-	-
20	.888	18.8	Av	0	0	18.8	-	-	46	-27.2
21	5.1585	28.58	Pk	0	.1	28.68	60	-31.32	-	-
22	5.0955	15.89	Av	0	.1	15.99	-	-	50	-34.01
23	13.92	31.83	Pk	.1	.2	32.13	60	-27.87	-	-
24	13.992	23.16	Av	.1	.2	23.46	-	-	50	-26.54

Pk - Peak detector

Av - Average detection