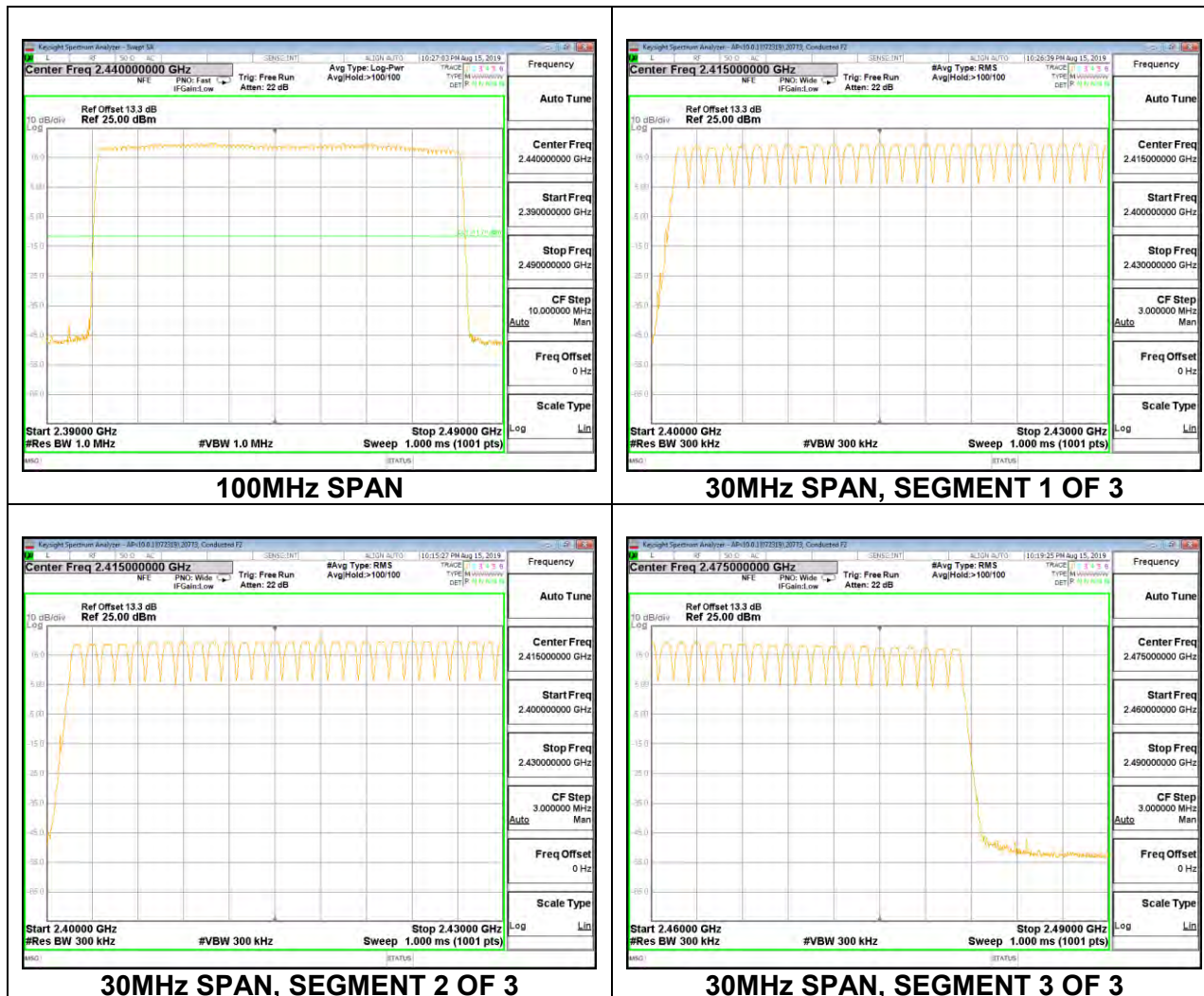
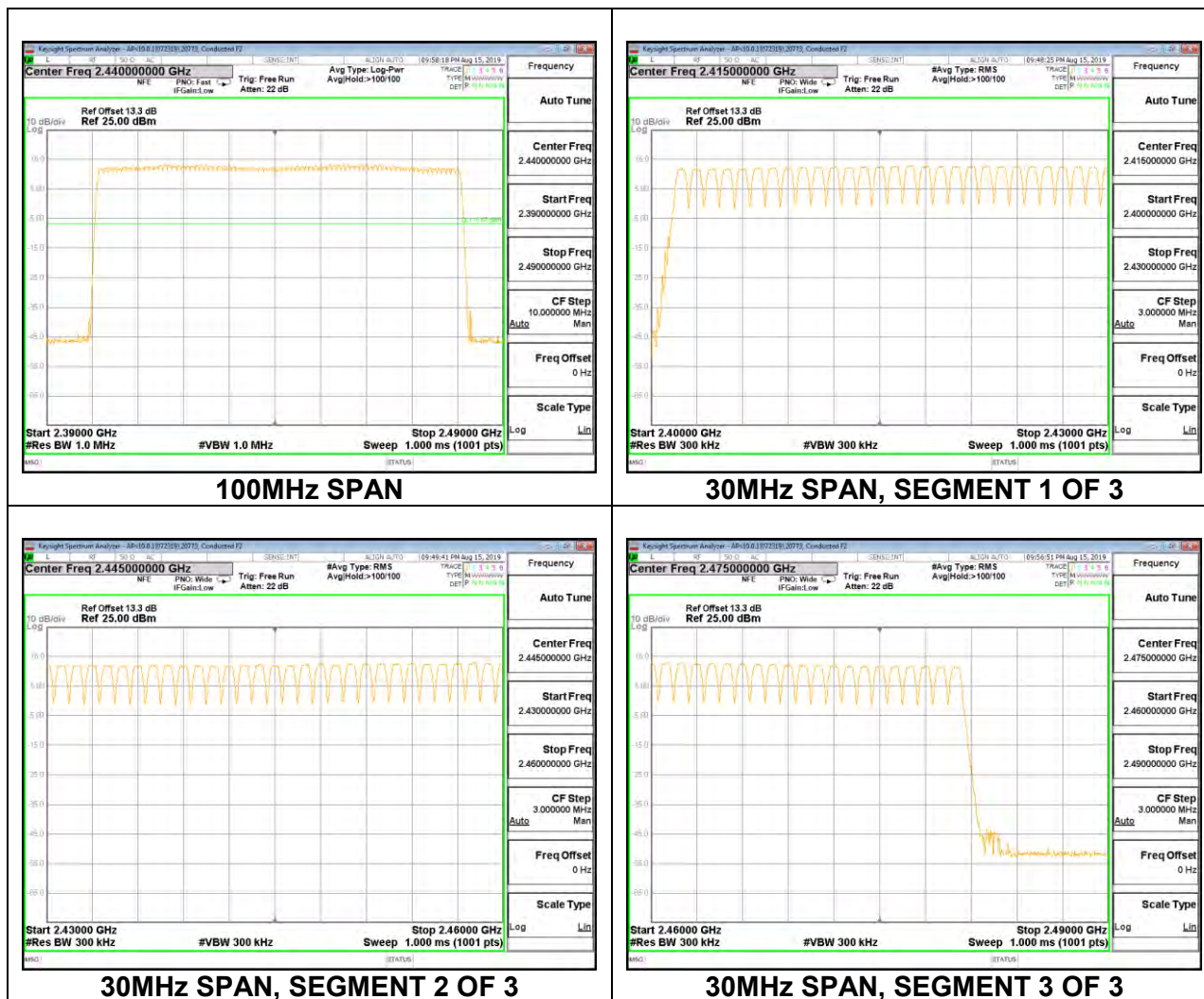


8.11.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

Antenna 3

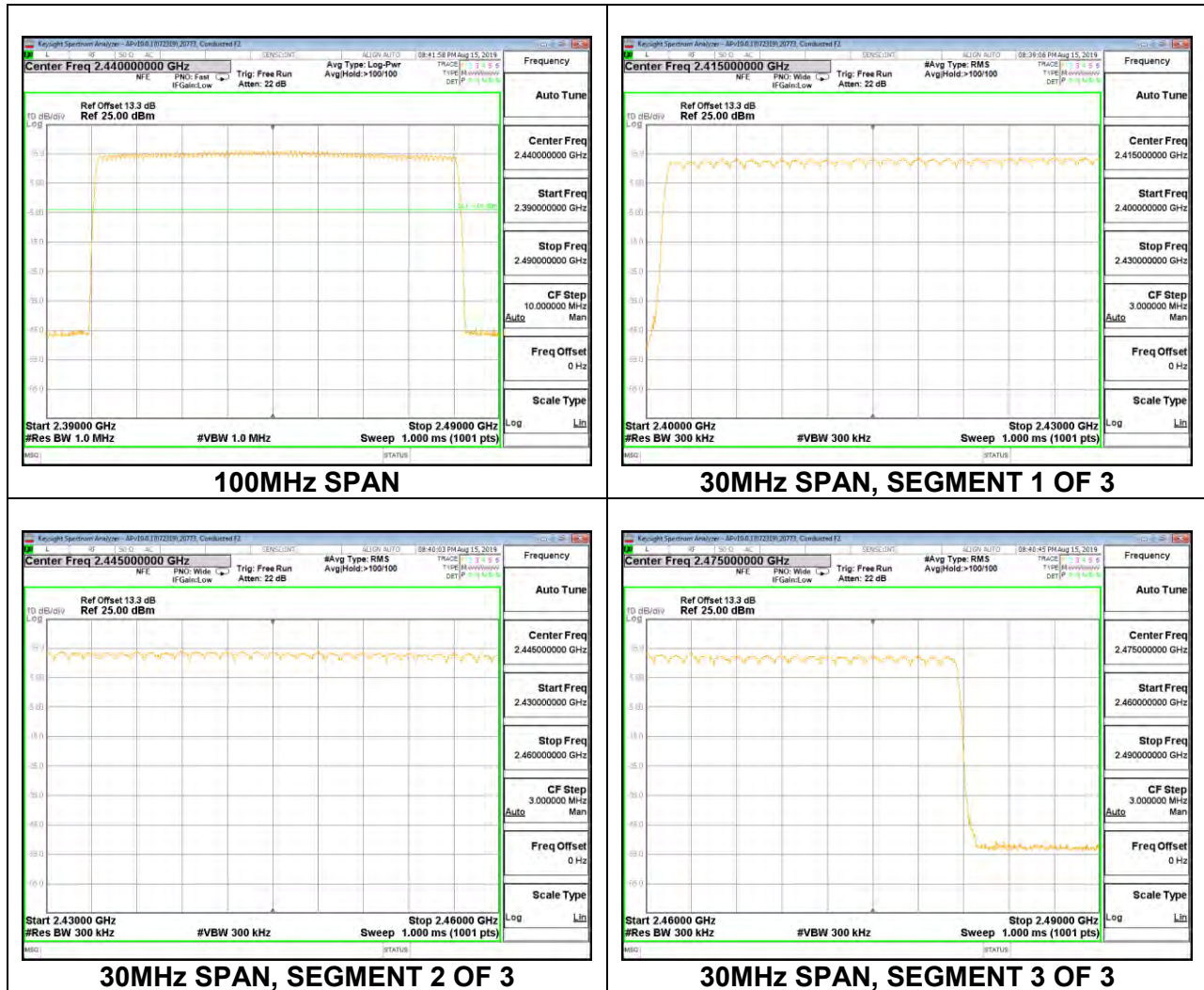


Antenna 4

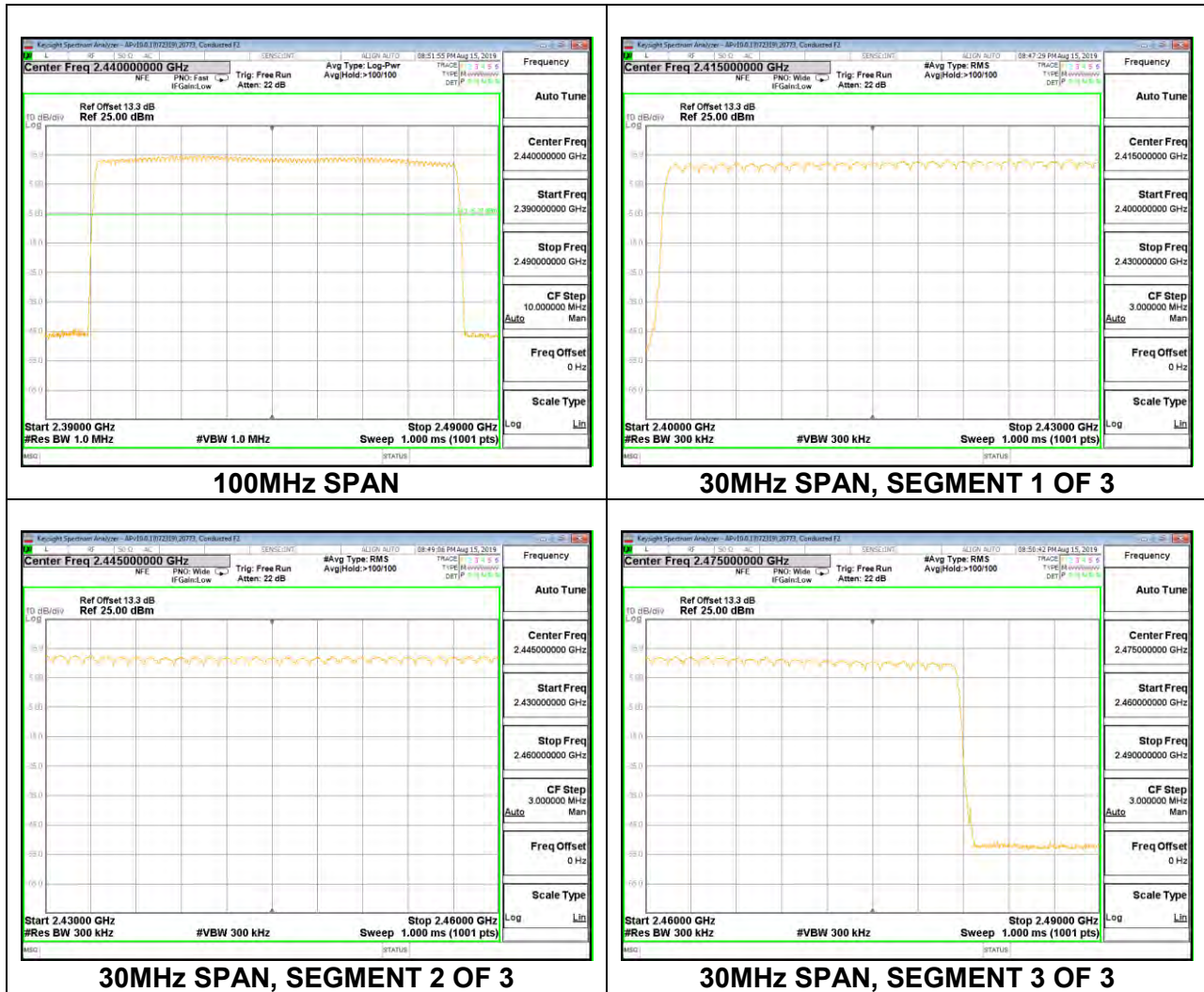


8.11.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

Antenna 3

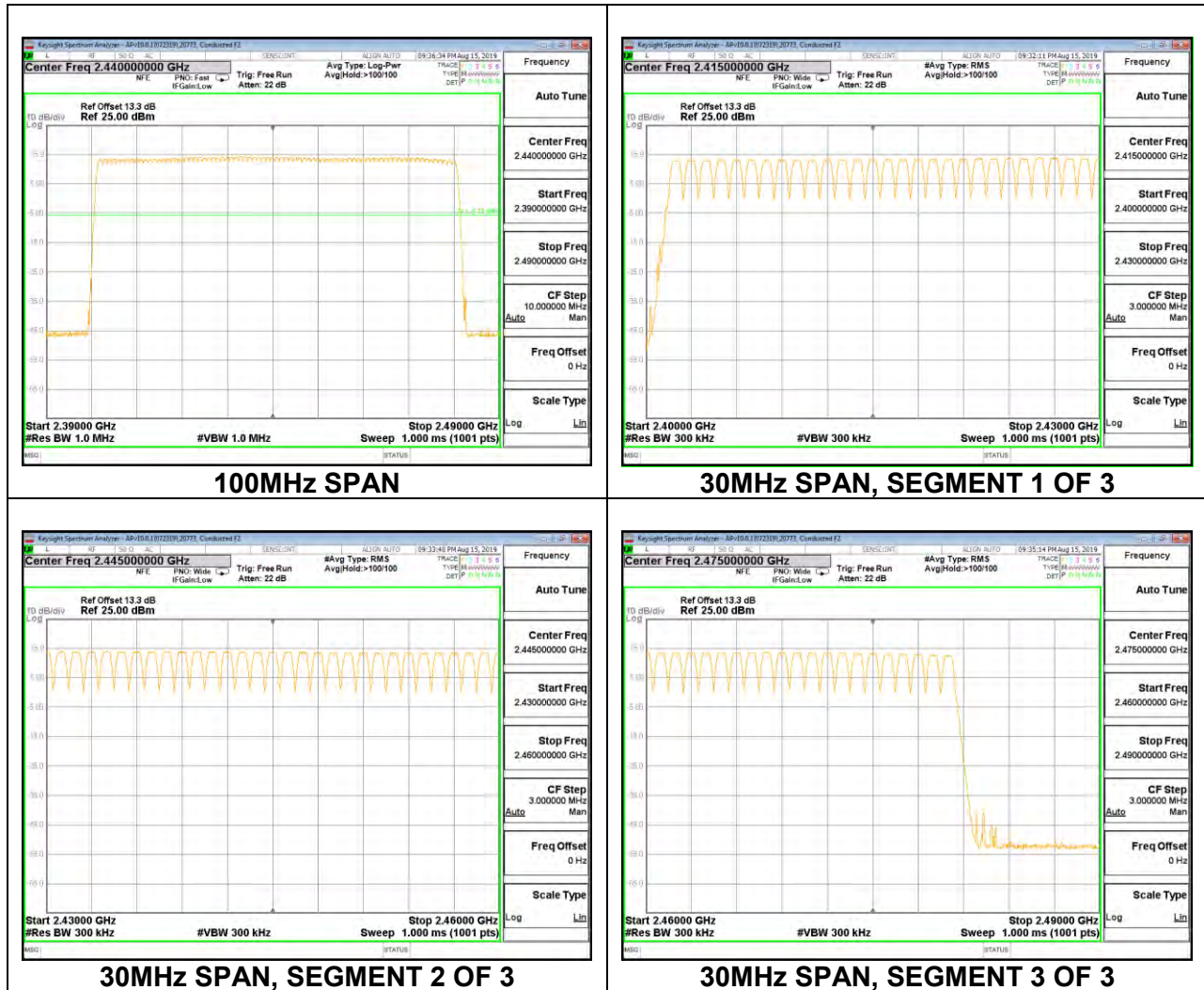


Antenna 4

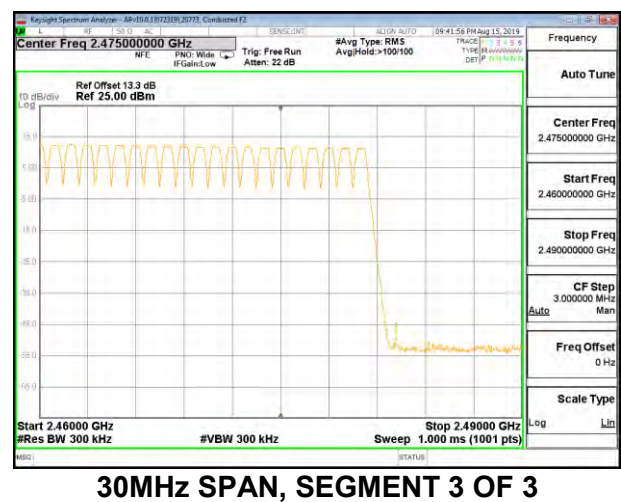
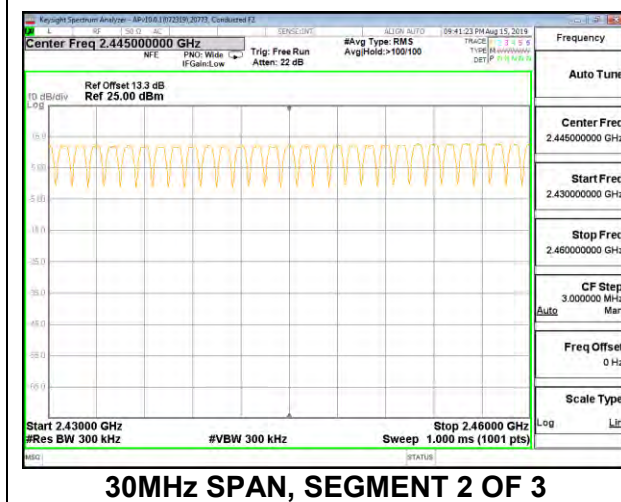
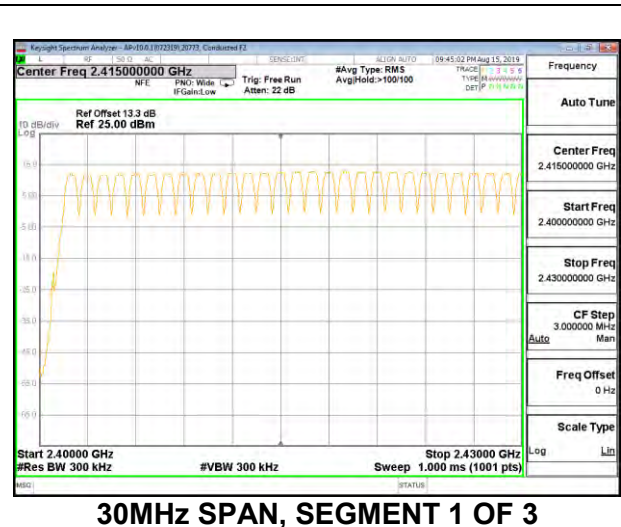
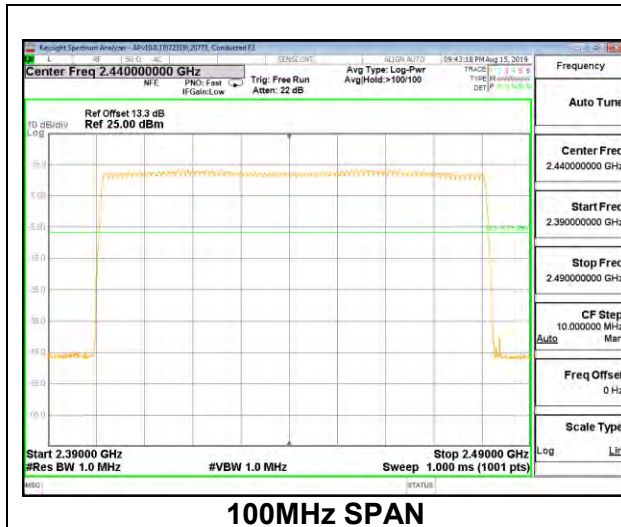


8.11.3. LOW POWER BASIC DATA RATE GFSK MODULATION

Antenna 3

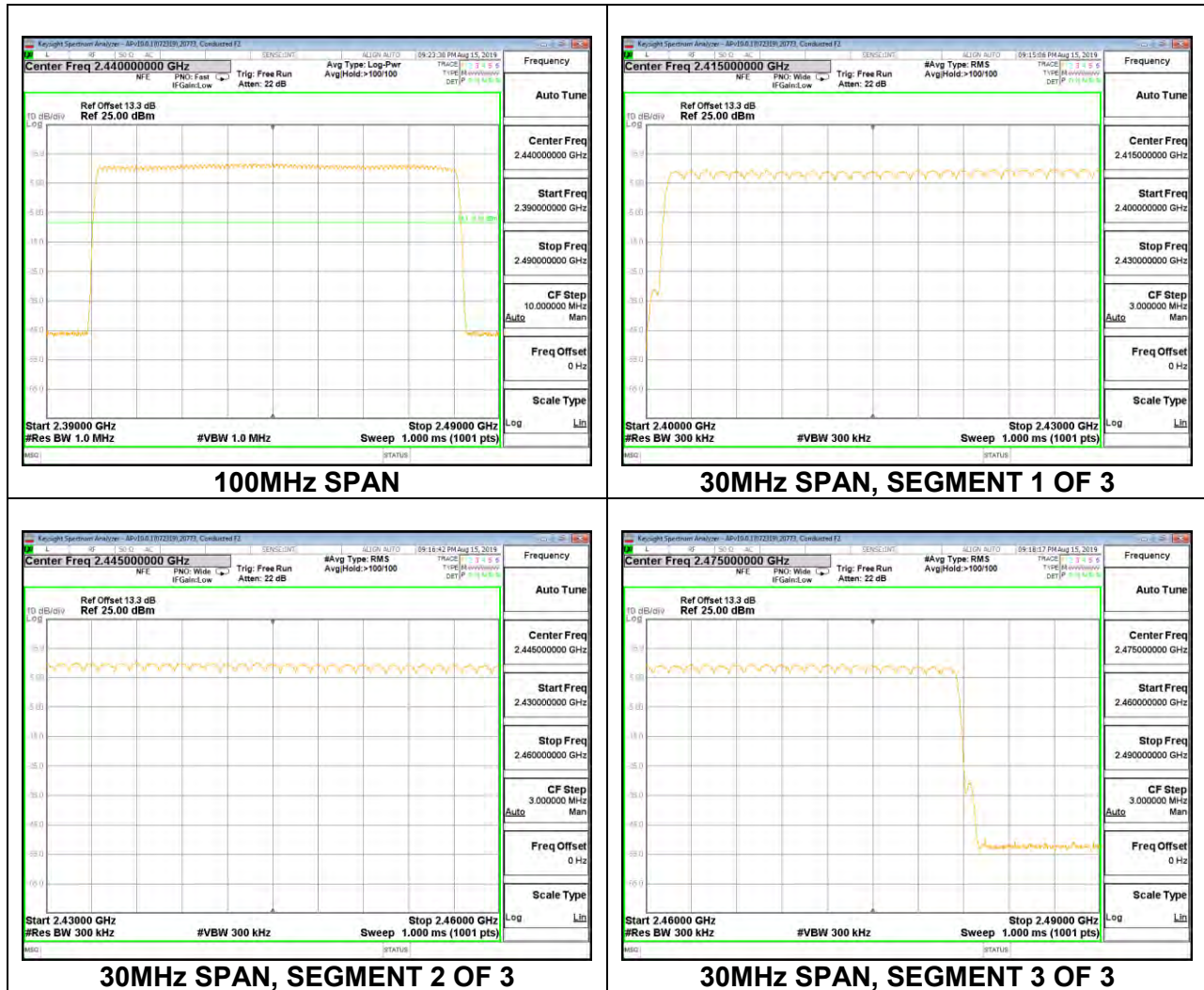


Antenna 4

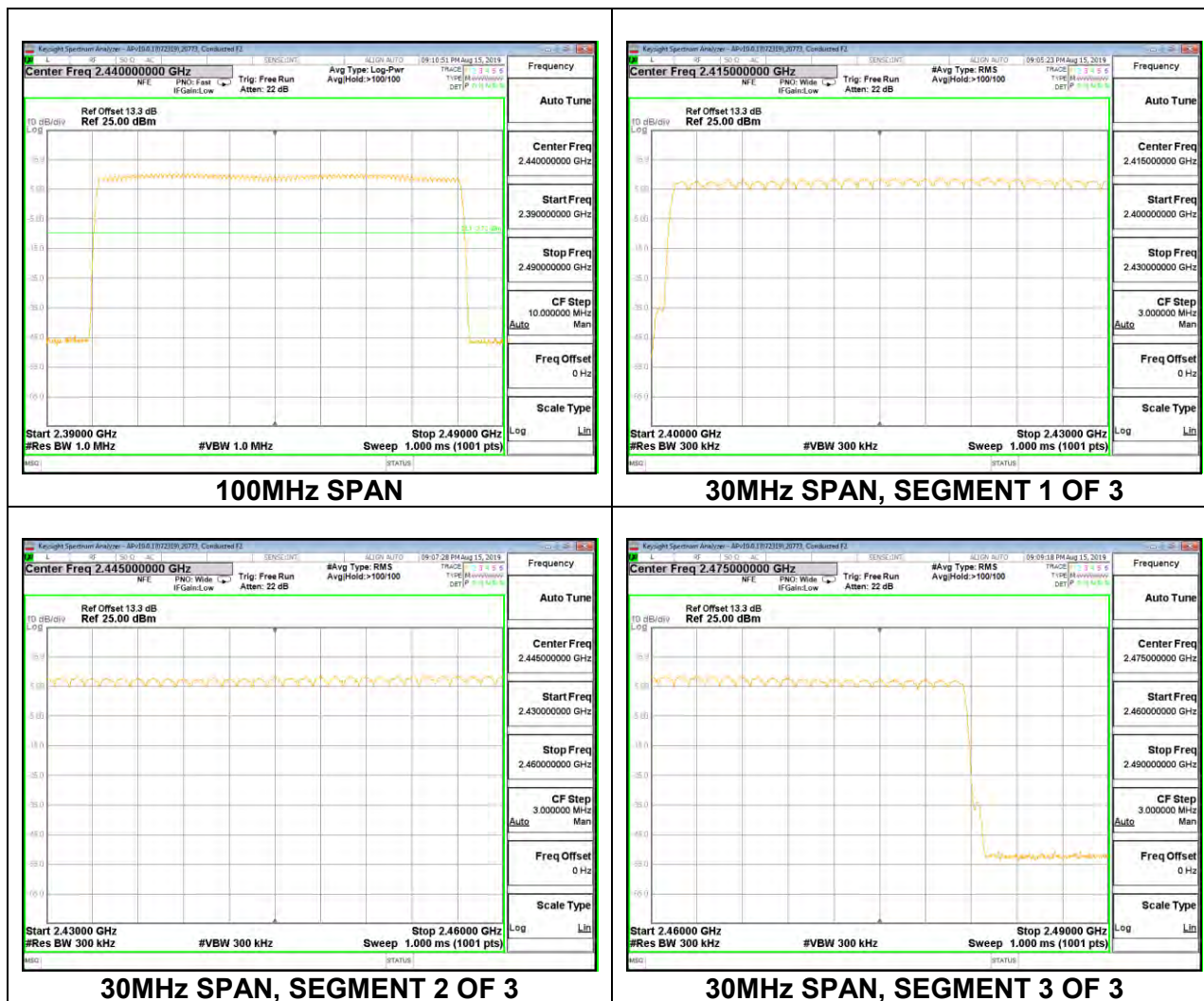


8.11.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

Antenna 3



Antenna 4



8.12. BEAMFORMING, AVERAGE TIME OF OCCUPANCY

LIMITS

FCC §15.247 (a) (1) (iii)

RSS-247 (5.1) (d)

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

TEST PROCEDURE

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

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

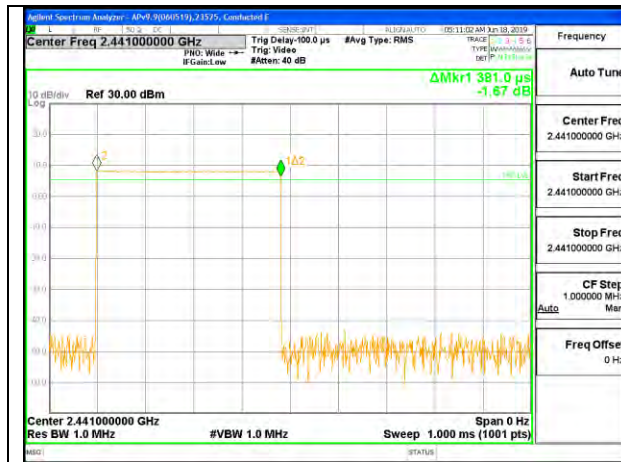
For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to $10 * (\# \text{ of pulses in } 0.8 \text{ s}) * \text{pulse width}$.

RESULTS

8.12.1. HIGH POWER BASIC DATA RATE GFSK MODULATION)

Antenna 3

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	0.381	32	0.1219	0.4	-0.2781
DH3	1.638	16	0.2621	0.4	-0.1379
DH5	2.884	6	0.1730	0.4	-0.2270
DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.381	8	0.03048	0.4	-0.3695
DH3	1.638	4	0.06552	0.4	-0.3345
DH5	2.884	1.5	0.04326	0.4	-0.3567



PULSE WIDTH – DH1



PULSE WIDTH – DH3



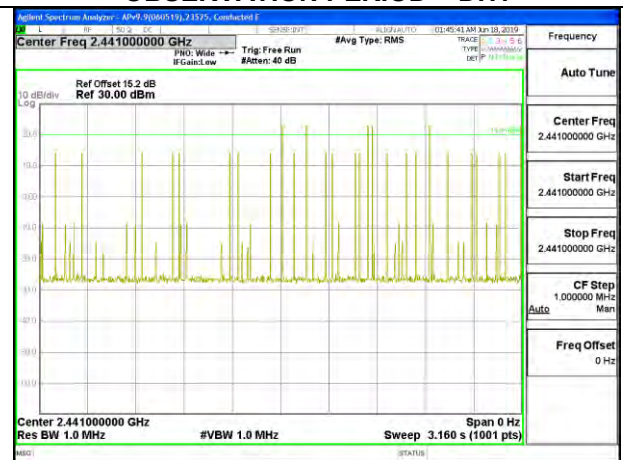
PULSE WIDTH – DH5



NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH1



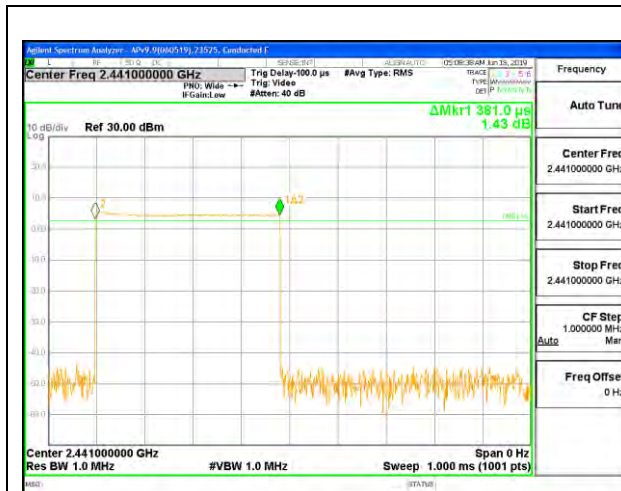
NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH3



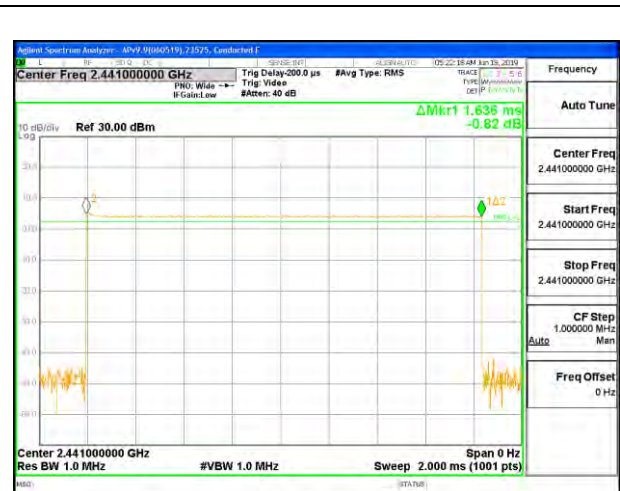
NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH5

Antenna 4

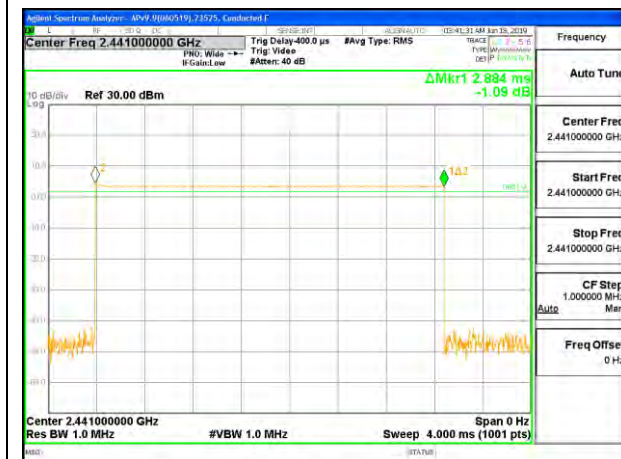
DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.381	31	0.1181	0.4	-0.2819
DH3	1.636	17	0.2781	0.4	-0.1219
DH5	2.884	7	0.2019	0.4	-0.1981
DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.381	7.75	0.02953	0.4	-0.3705
DH3	1.636	4.25	0.06953	0.4	-0.3305
DH5	2.884	1.75	0.05047	0.4	-0.3495



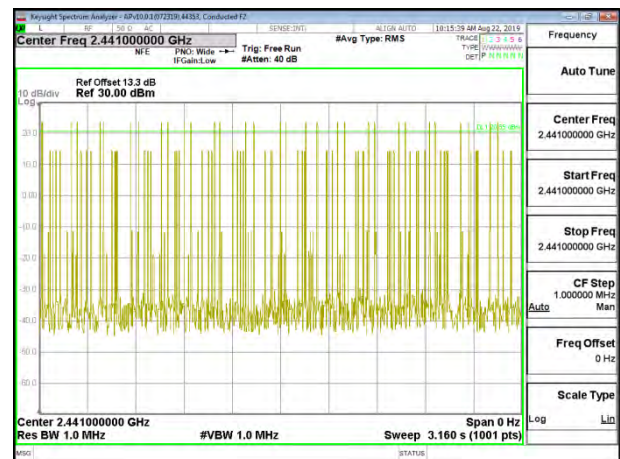
PULSE WIDTH – DH1



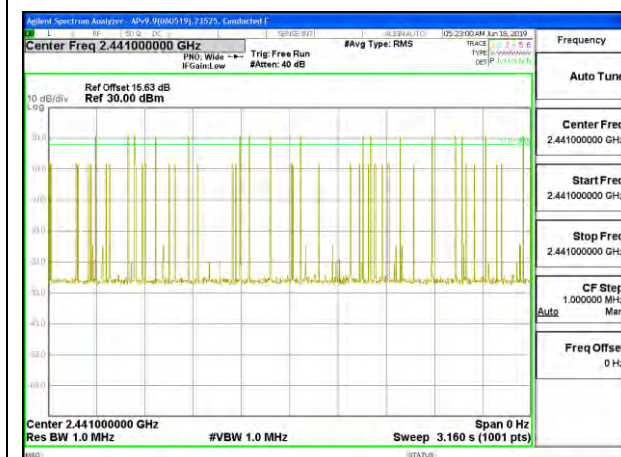
PULSE WIDTH – DH3



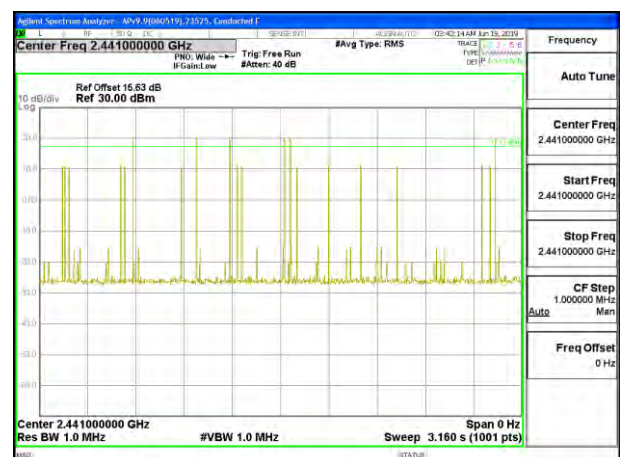
PULSE WIDTH – DH5



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH1**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH3**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH5**

8.12.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

Antenna 3

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
8PSK Normal Mode					
3DH1	0.387	32	0.12384	0.4	-0.27616
3DH3	1.638	17	0.27846	0.4	-0.12154
3DH5	2.888	4	0.11552	0.4	-0.28448

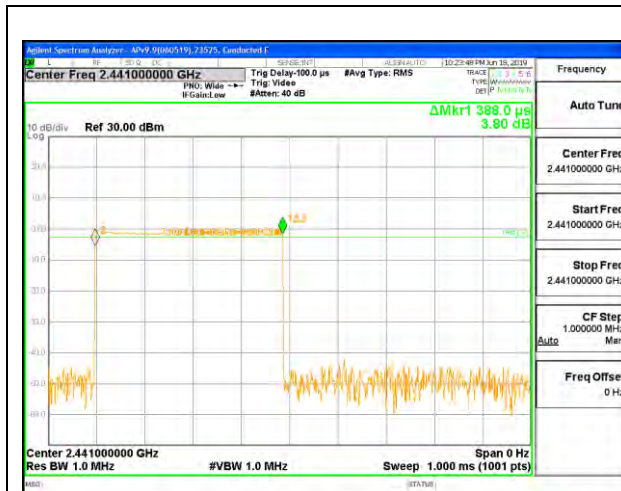
Note: for AFH(8PSK) mode, please refer to the results of AFH(GFSK) mode; the channel selection and hopping rate are the same for both EDR and Basic Rate operation, data for Basic Rate demonstrates compliance with channel occupancy when AFH is employed.



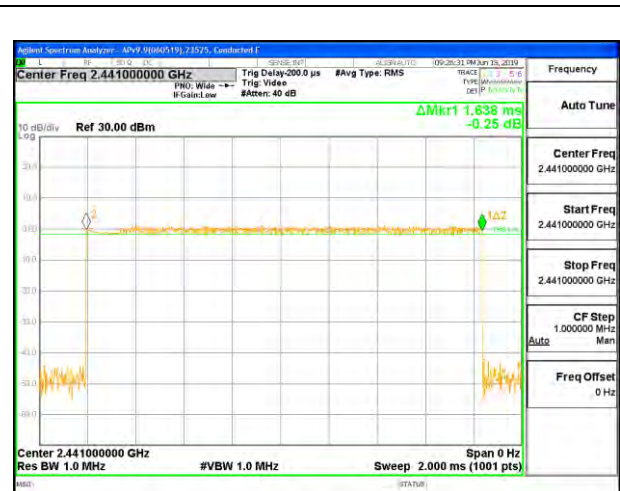
Antenna 4

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
8PSK Normal Mode					
3DH1	0.388	32	0.12416	0.4	-0.27584
3DH3	1.638	17	0.27846	0.4	-0.12154
3DH5	2.888	7	0.20216	0.4	-0.19784

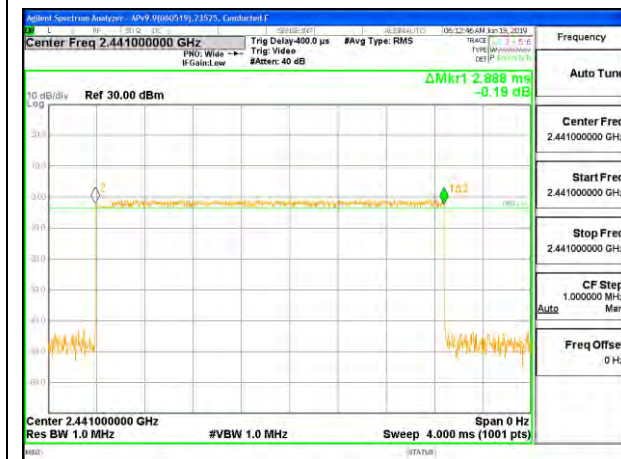
Note: for AFH(8PSK) mode, please refer to the results of AFH(GFSK) mode; the channel selection and hopping rate are the same for both EDR and Basic Rate operation, data for Basic Rate demonstrates compliance with channel occupancy when AFH is employed.



PULSE WIDTH – 3DH1



PULSE WIDTH – 3DH3



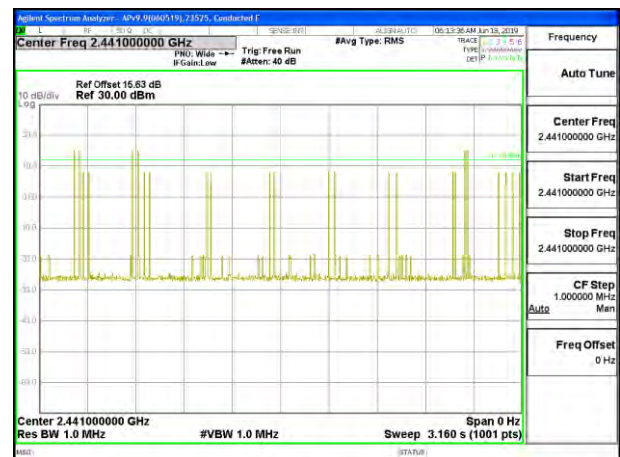
PULSE WIDTH – 3DH5



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH1**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH3**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH5**

8.12.3. LOW POWER BASIC DATA RATE GFSK MODULATION

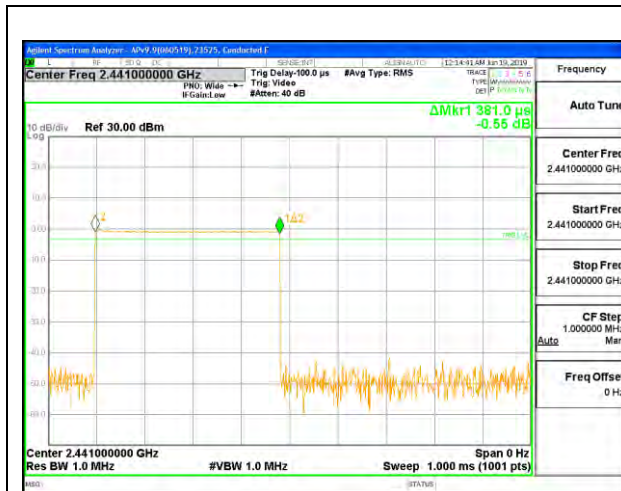
Antenna 3

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	0.381	32	0.1219	0.4	-0.2781
DH3	1.638	17	0.2785	0.4	-0.1215
DH5	2.888	6	0.1733	0.4	-0.2267
DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.381	8	0.03048	0.4	-0.3695
DH3	1.638	4.25	0.06962	0.4	-0.3304
DH5	2.888	1.5	0.04332	0.4	-0.3567

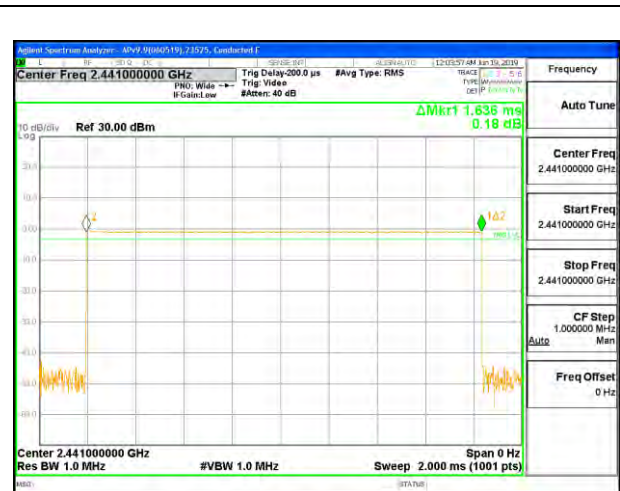


Antenna 4

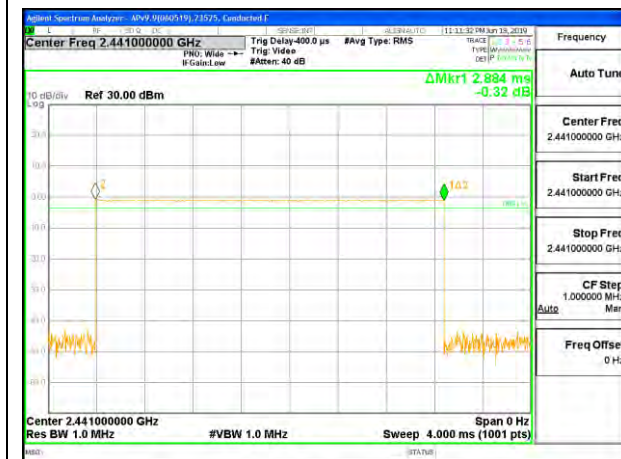
DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.381	31	0.1181	0.4	-0.2819
DH3	1.636	17	0.2781	0.4	-0.1219
DH5	2.884	5	0.1442	0.4	-0.2558
DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.381	7.75	0.02953	0.4	-0.3705
DH3	1.636	4.25	0.06953	0.4	-0.3305
DH5	2.884	1.25	0.03605	0.4	-0.3640



PULSE WIDTH – DH1



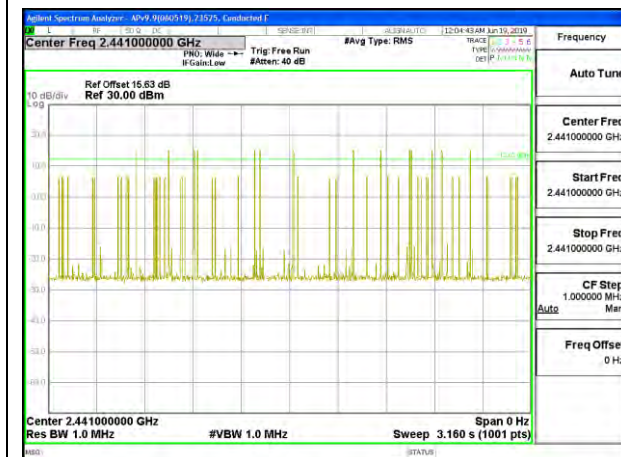
PULSE WIDTH – DH3



PULSE WIDTH – DH5



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH1**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH3**



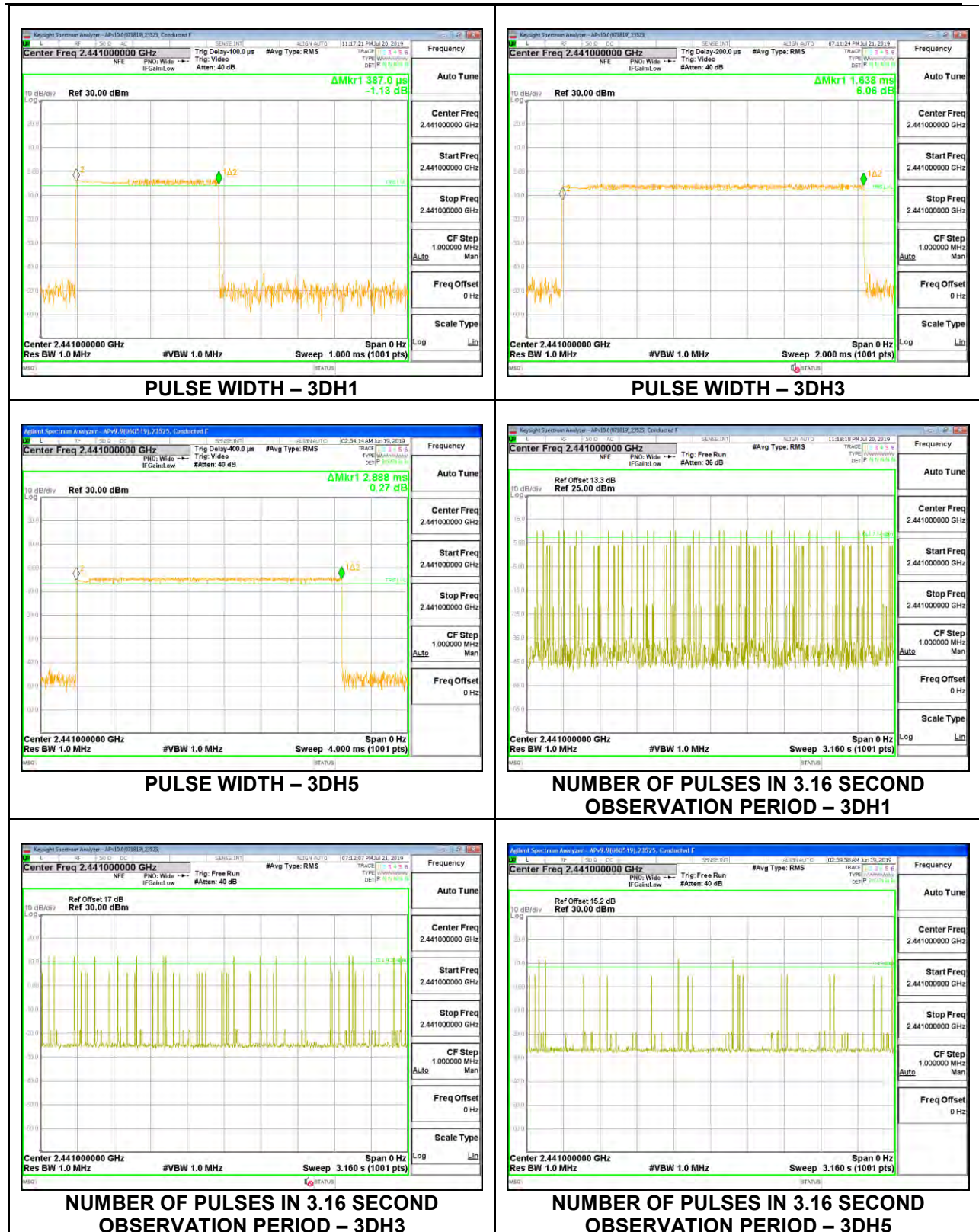
**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – DH5**

8.12.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

Antenna 3

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
8PSK Normal Mode					
3DH1	0.387	32	0.12384	0.4	-0.27616
3DH3	1.638	18	0.29484	0.4	-0.10516
3DH5	2.888	5	0.1444	0.4	-0.2556

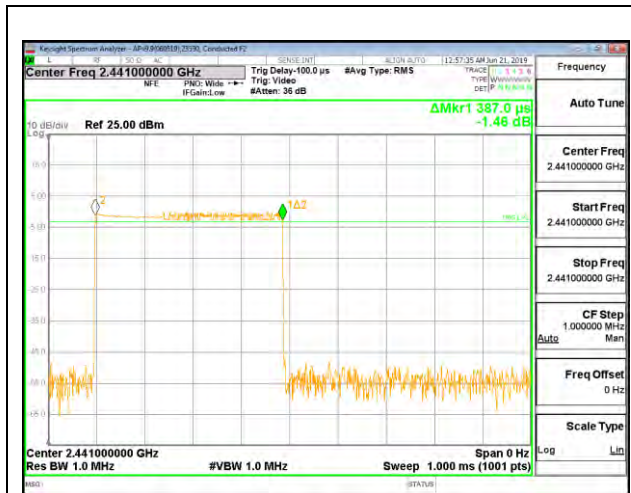
Note: for AFH(8PSK) mode, please refer to the results of AFH(GFSK) mode; the channel selection and hopping rate are the same for both EDR and Basic Rate operation, data for Basic Rate demonstrates compliance with channel occupancy when AFH is employed.



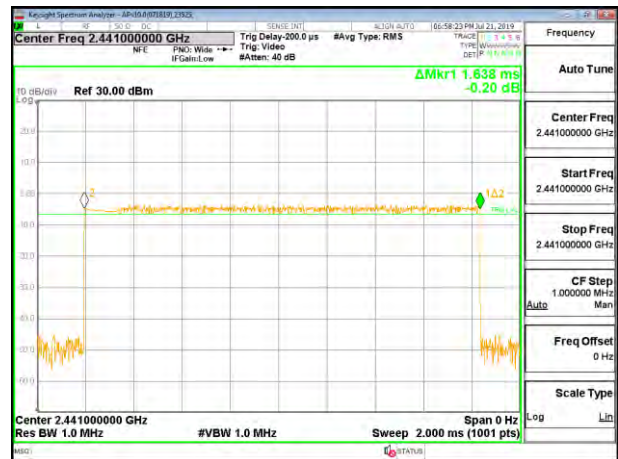
Antenna 4

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
8PSK Normal Mode					
3DH1	0.387	32	0.12384	0.4	-0.27616
3DH3	1.638	18	0.29484	0.4	-0.10516
3DH5	2.888	5	0.1444	0.4	-0.2556

Note: for AFH(8PSK) mode, please refer to the results of AFH(GFSK) mode; the channel selection and hopping rate are the same for both EDR and Basic Rate operation, data for Basic Rate demonstrates compliance with channel occupancy when AFH is employed.



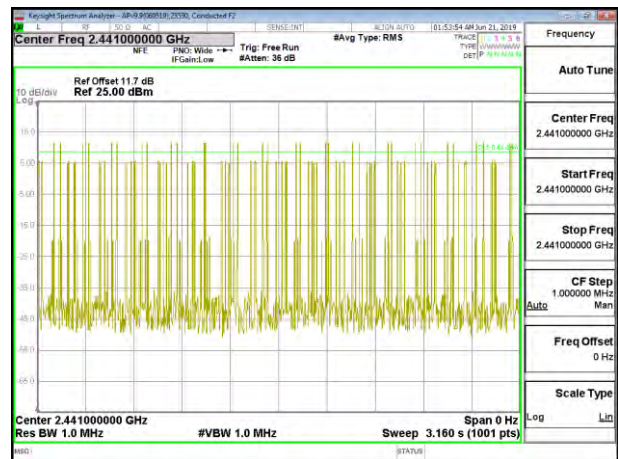
PULSE WIDTH – 3DH1



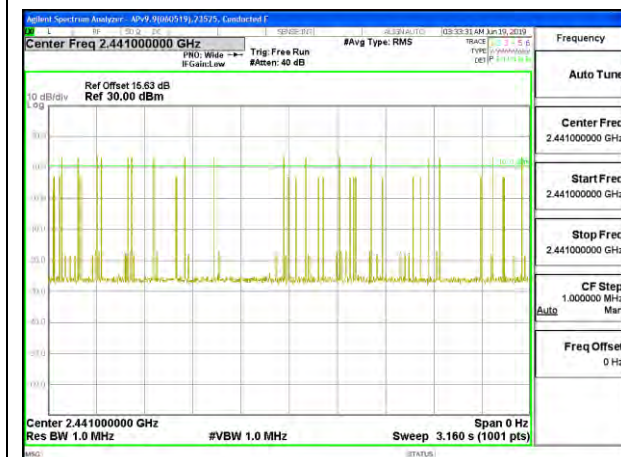
PULSE WIDTH – 3DH3



PULSE WIDTH – 3DH5



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH1**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH3**



**NUMBER OF PULSES IN 3.16 SECOND
OBSERVATION PERIOD – 3DH5**

8.13. BEAMFORMING, OUTPUT POWER

8.13.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	17.13	17.15	20.15	21	-0.85
Middle	2441	17.23	17.24	20.25	21	-0.75
High	2480	17.21	17.17	20.20	21	-0.80

8.13.2. HIGH POWER ENHANCED DATA RATE QPSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	16.96	16.99	19.99	21	-1.01
Middle	2441	17.02	17.04	20.04	21	-0.96
High	2480	16.98	17.01	20.01	21	-0.99

8.13.3. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	17.23	17.21	20.23	21	-0.77
Middle	2441	17.31	17.34	20.34	21	-0.66
High	2480	17.29	17.28	20.30	21	-0.70

8.13.4. LOW POWER BASIC DATA RATE GFSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	12.61	12.64	15.64	21	-5.36
Middle	2441	12.73	12.76	15.76	21	-5.24
High	2480	12.68	12.7	15.70	21	-5.30

8.13.5. LOW POWER ENHANCED DATA RATE QPSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.97	10.99	13.99	21	-7.01
Middle	2441	11.07	11.05	14.07	21	-6.93
High	2480	11.01	11.03	14.03	21	-6.97

8.13.6. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date:	7/24/2019

Channel	Frequency (MHz)	Output Power Antenna 4 (dBm)	Output Power Antenna 3 (dBm)	Total Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	11.21	11.23	14.23	21	-6.77
Middle	2441	11.31	11.34	14.34	21	-6.66
High	2480	11.28	11.29	14.30	21	-6.70

8.14. BEAMFORMING, AVERAGE POWER

8.14.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	16.82	16.84	19.84
Middle	2441	16.95	16.91	19.94
High	2480	16.85	16.87	19.87

8.14.2. HIGH POWER ENHANCED ENHANCED RATE QPSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	14.62	14.66	17.65
Middle	2441	14.69	14.61	17.66
High	2480	14.65	14.67	17.67

8.14.3. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	14.82	14.87	17.86
Middle	2441	14.92	14.94	17.94
High	2480	14.85	14.91	17.89

8.14.4. LOW POWER BASIC DATA RATE GFSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	12.32	12.37	15.36
Middle	2441	12.45	12.41	15.44
High	2480	12.37	12.39	15.39

8.14.5. LOW POWER ENHANCED DATA RATE QPSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	8.62	8.64	11.64
Middle	2441	8.66	8.69	11.69
High	2480	8.6	8.63	11.63

8.14.6. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

2TX Antenna 3 + Antenna 4 TxBF Mode

Tested By:	39919
Date	7/24/2019

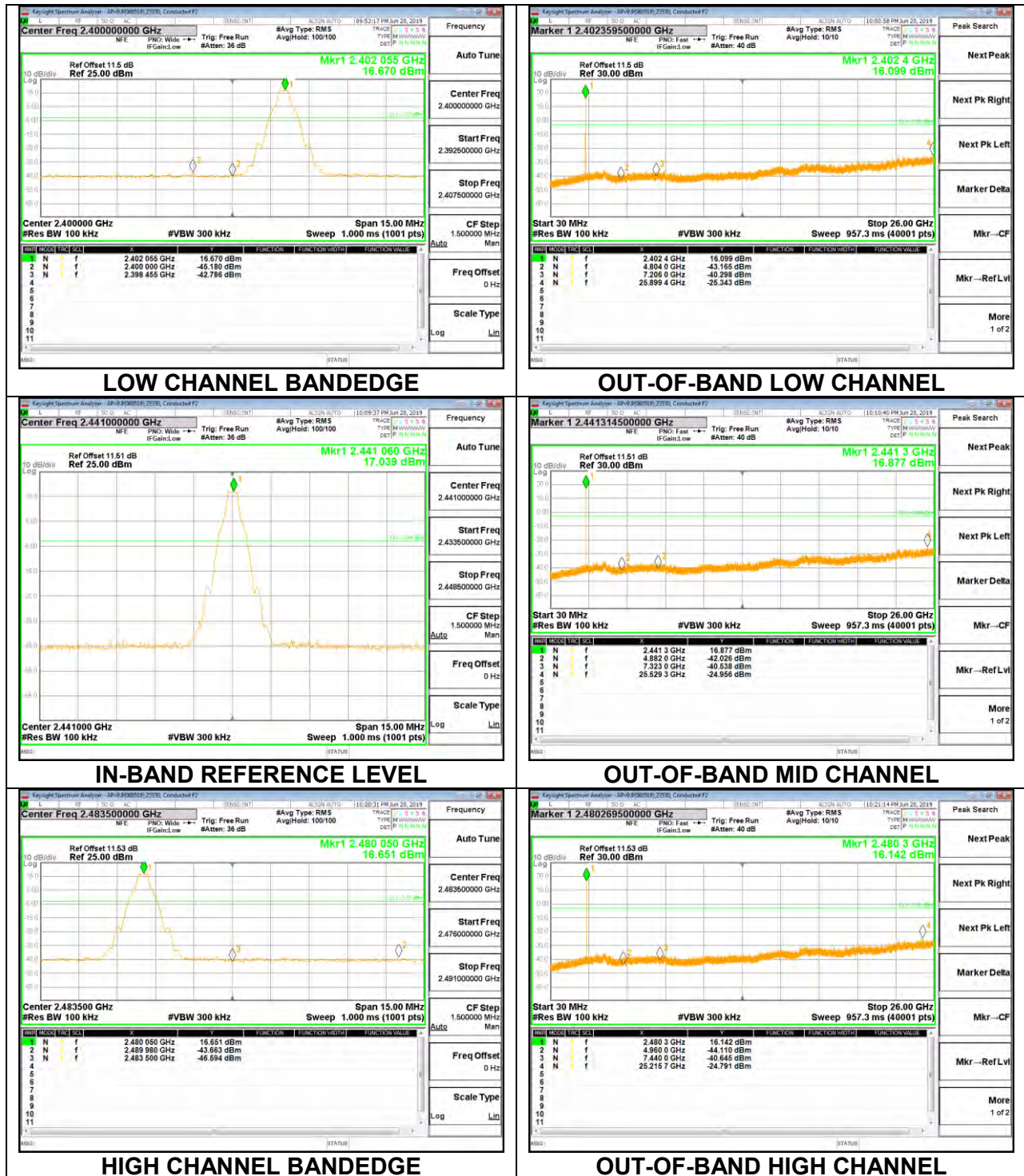
Channel	Frequency (MHz)	Average Power Antenna 4 (dBm)	Average Power Antenna 3 (dBm)	Total Average Power (dBm)
Low	2402	8.82	8.84	11.84
Middle	2441	8.98	8.91	11.96
High	2480	8.9	8.88	11.90

8.15. BEAMFORMING, CONDUCTED SPURIOUS EMISSIONS

8.15.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

Note: Test procedure on beamforming mode is same as BT basic and EDR mode

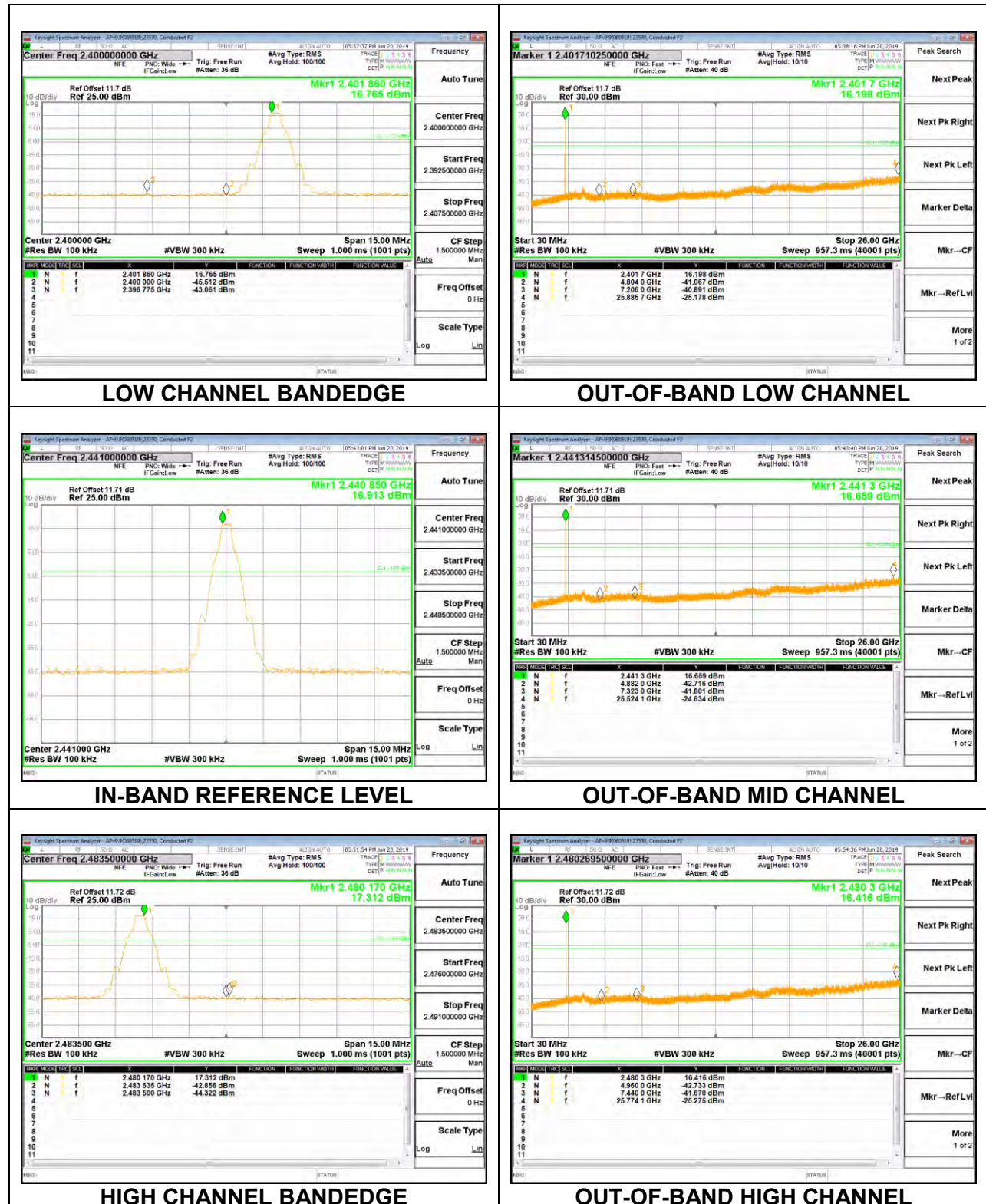
Antenna 3 SPURIOUS EMISSIONS, NON-HOPPING



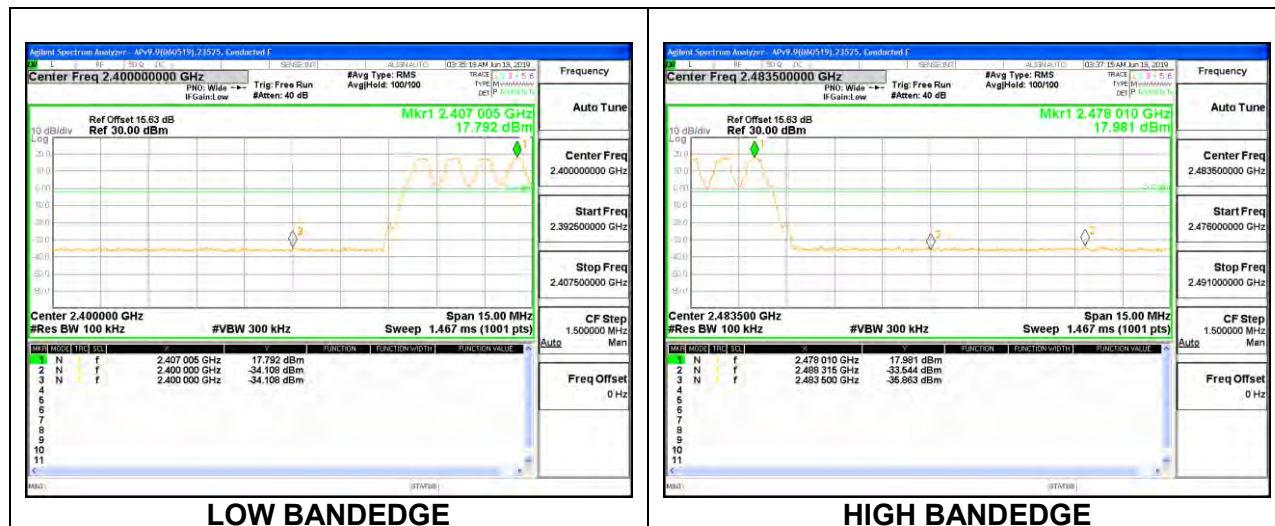
Antenna 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



Antenna 4 SPURIOUS EMISSIONS, NON-HOPPING

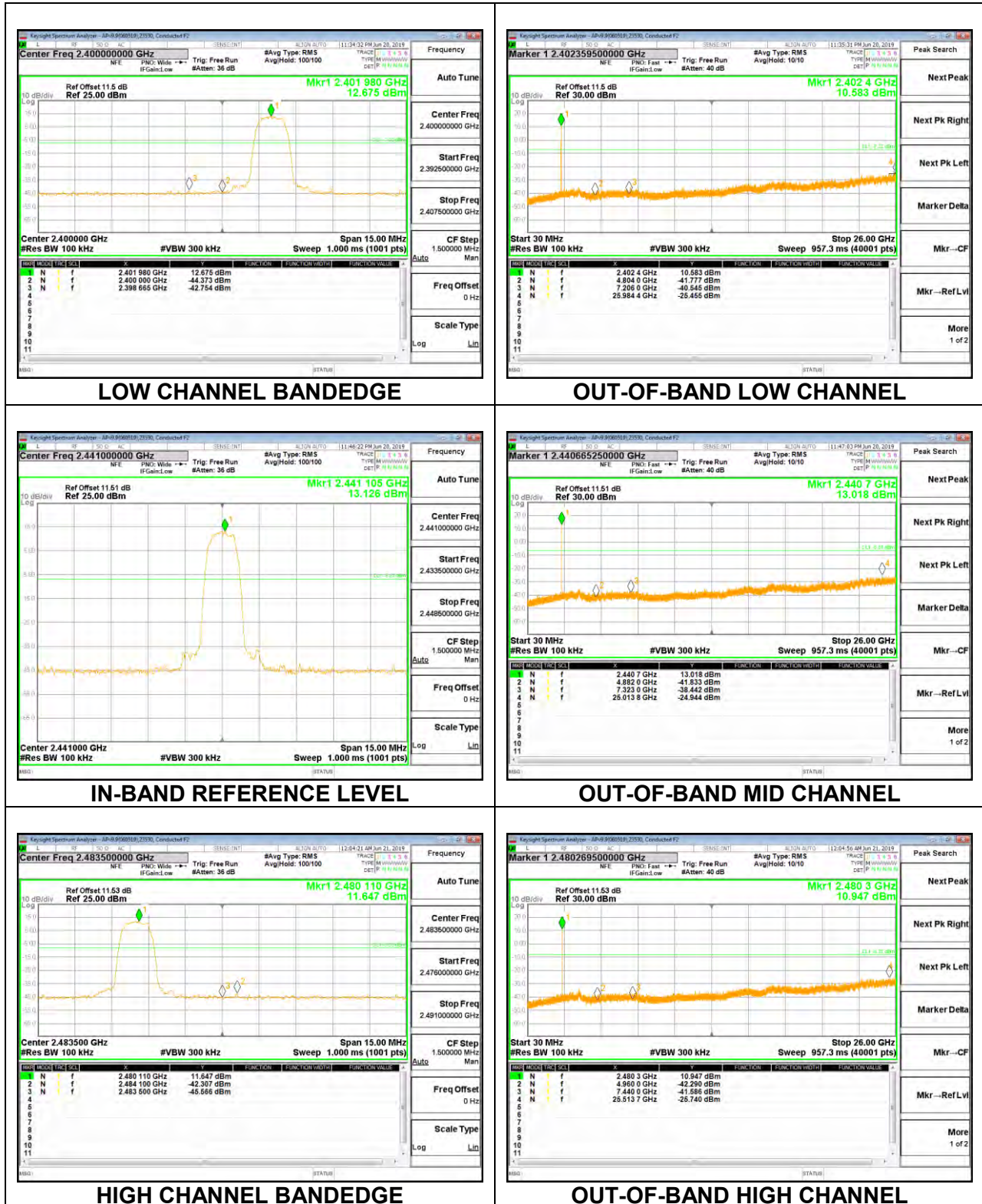


Antenna 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



8.15.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

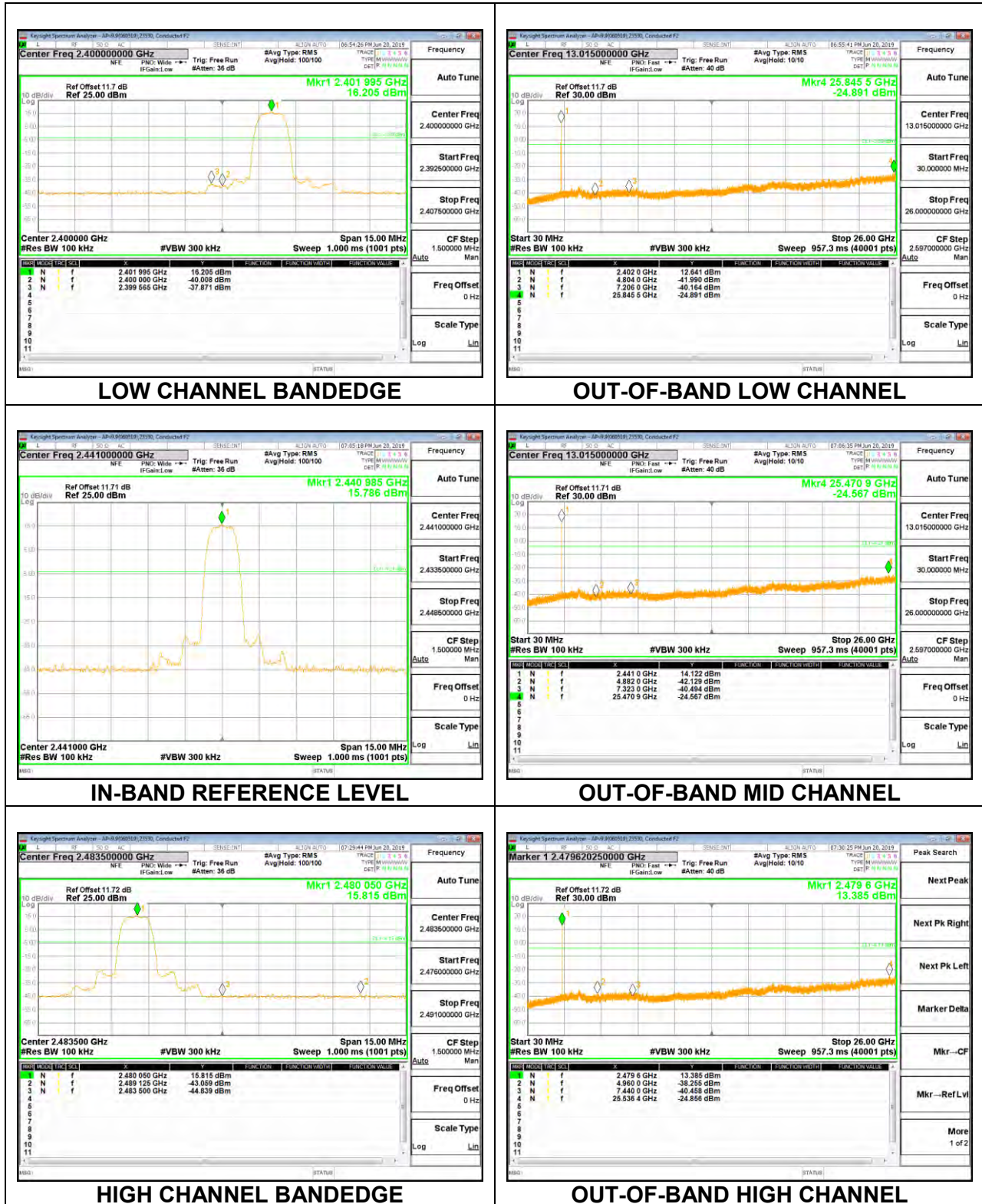
Antenna 3 SPURIOUS EMISSIONS, NON-HOPPING



Antenna 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



Antenna 4 SPURIOUS EMISSIONS, NON-HOPPING

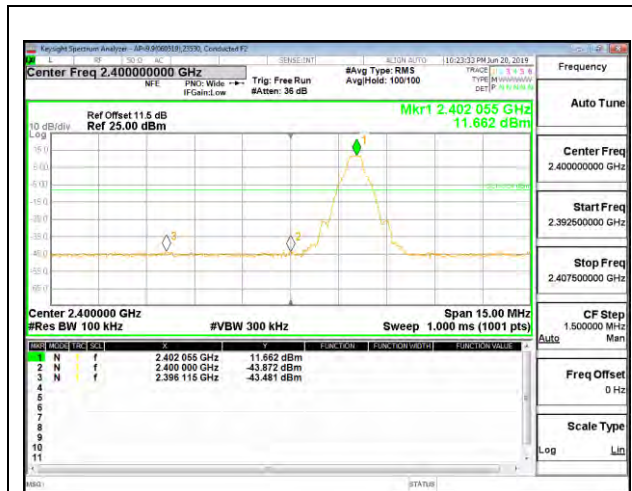


Antenna 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

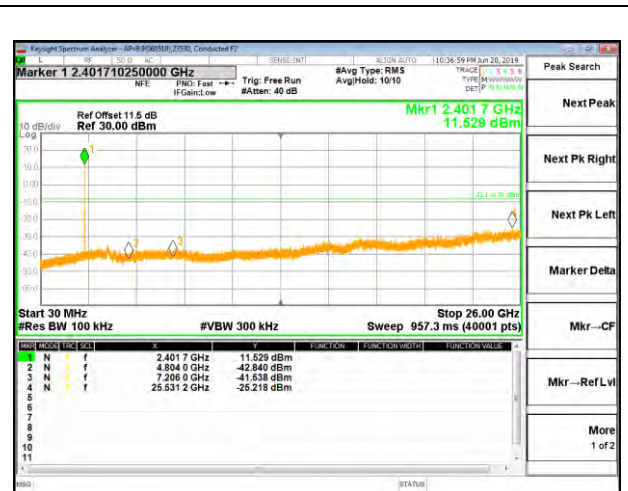


8.15.3. LOW POWER BASIC DATA RATE GFSK MODULATION

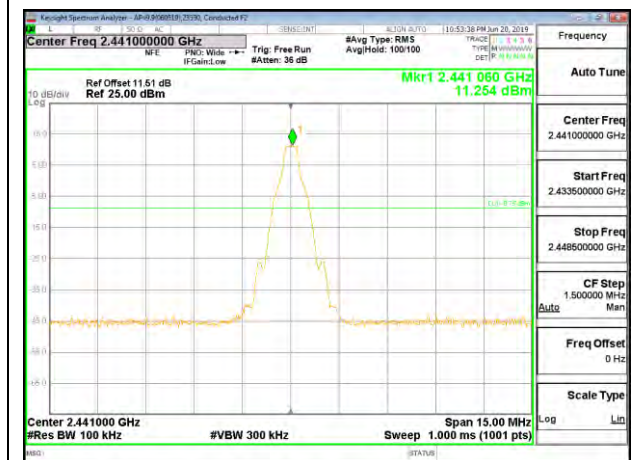
Antenna 3 SPURIOUS EMISSIONS, NON-HOPPING



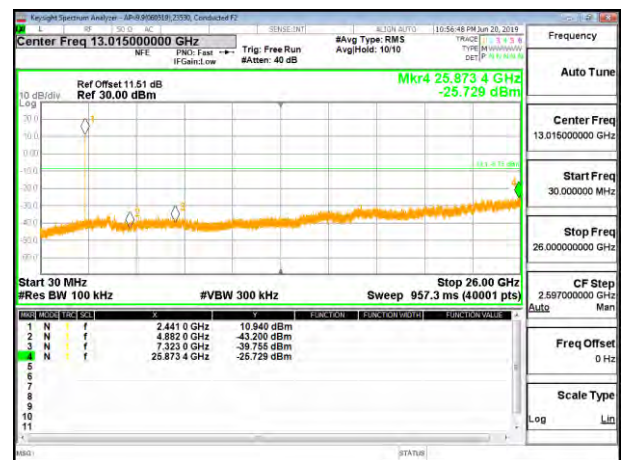
LOW CHANNEL BANDEDGE



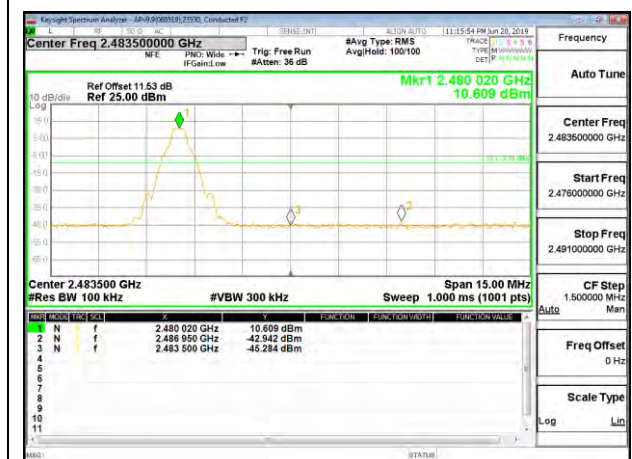
OUT-OF-BAND LOW CHANNEL



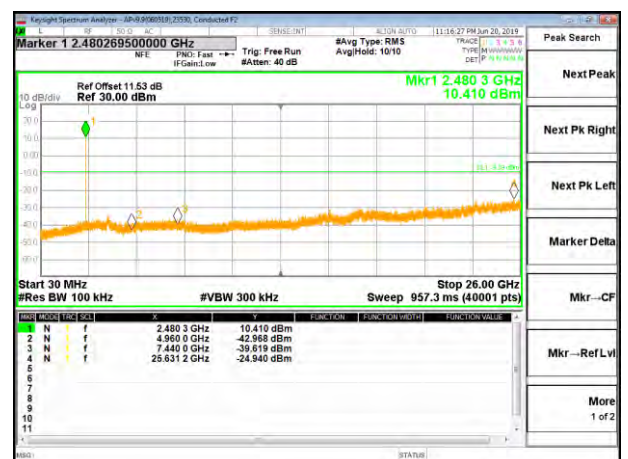
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE

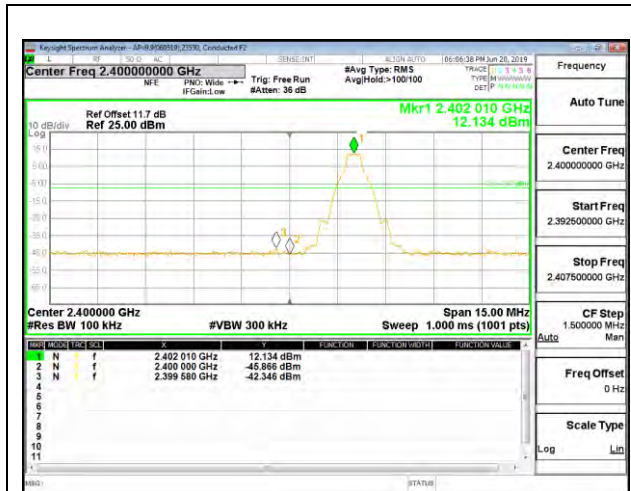


OUT-OF-BAND HIGH CHANNEL

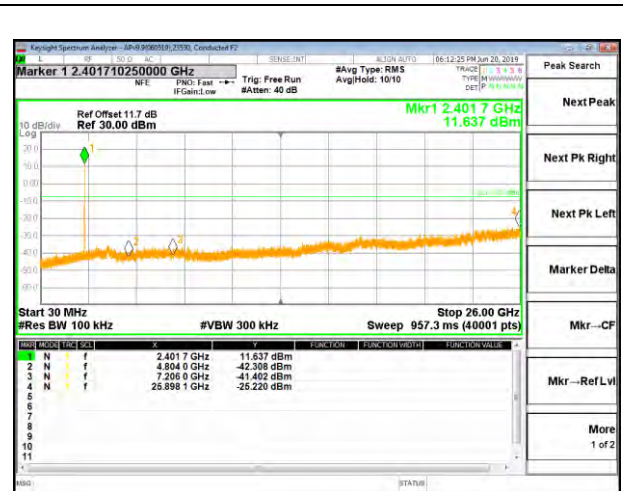
Antenna 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



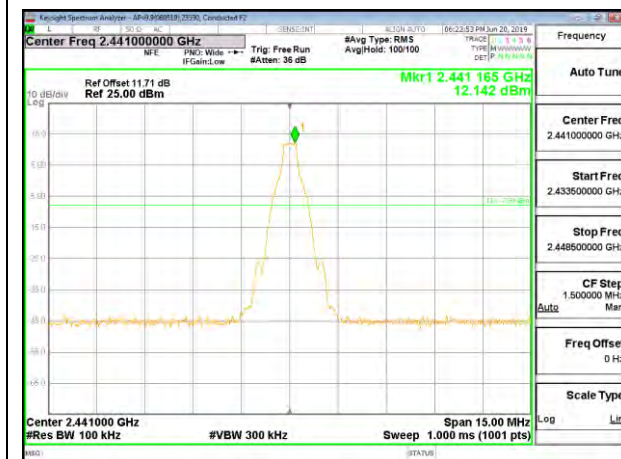
Antenna 4 SPURIOUS EMISSIONS, NON-HOPPING



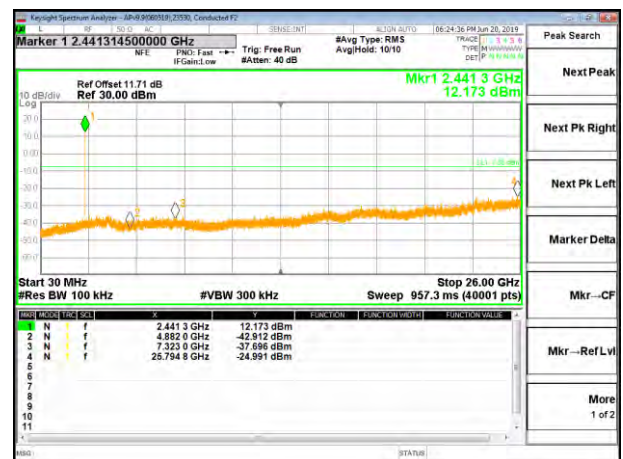
LOW CHANNEL BANDEDGE



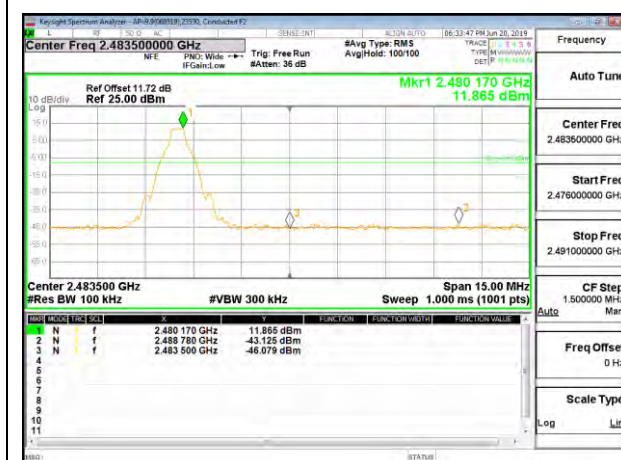
OUT-OF-BAND LOW CHANNEL



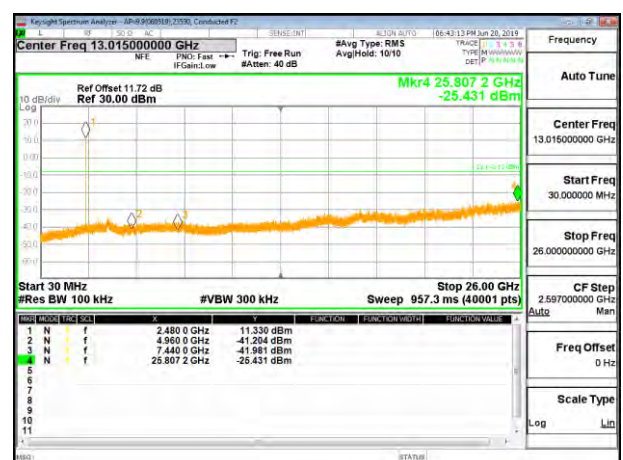
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

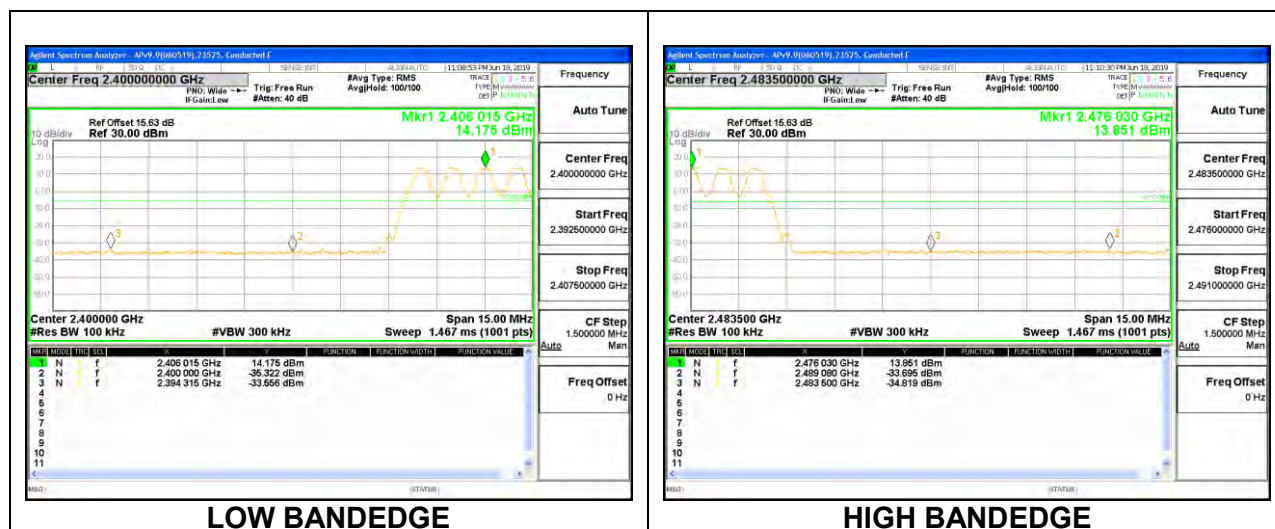


HIGH CHANNEL BANDEDGE



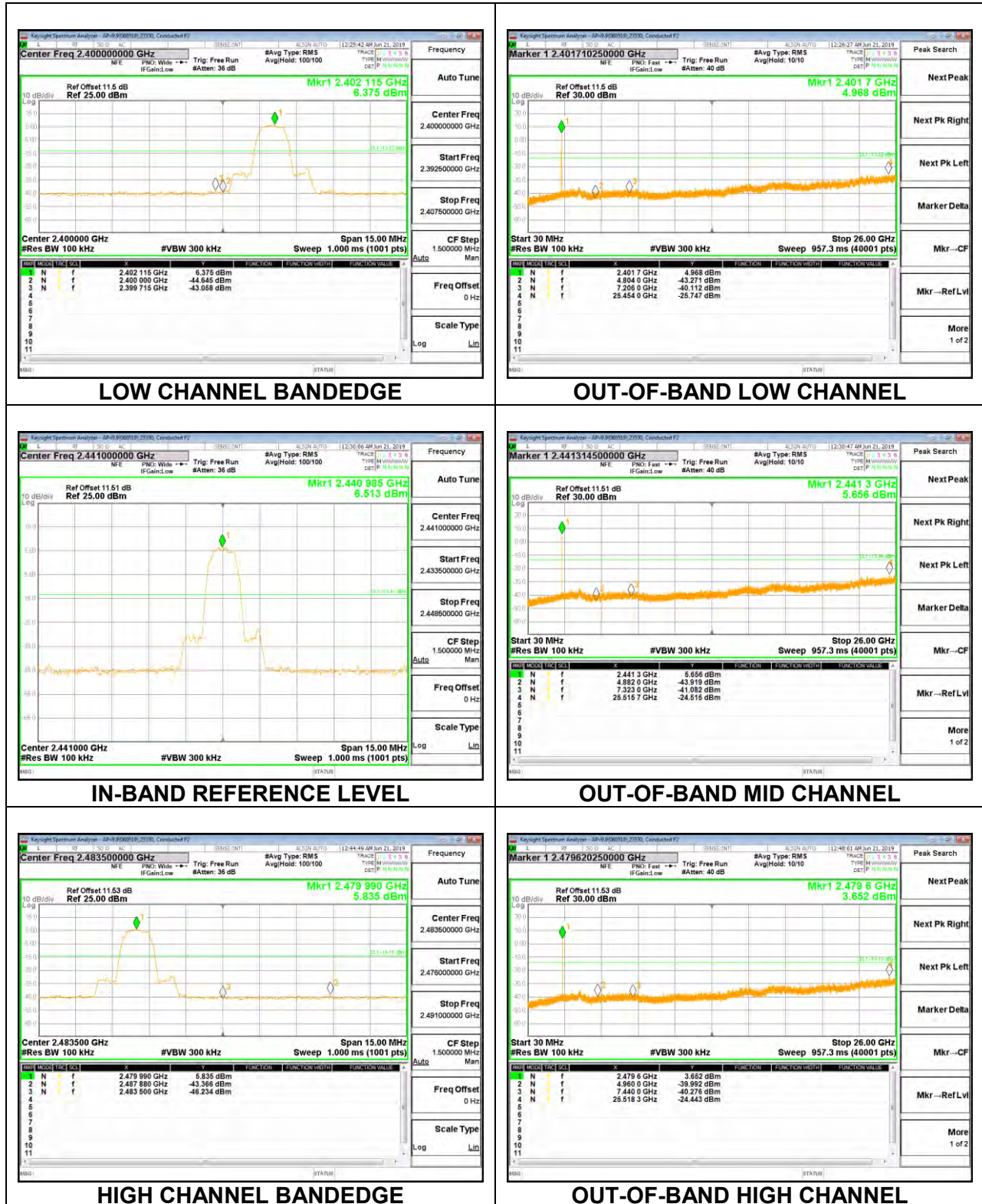
OUT-OF-BAND HIGH CHANNEL

Antenna 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

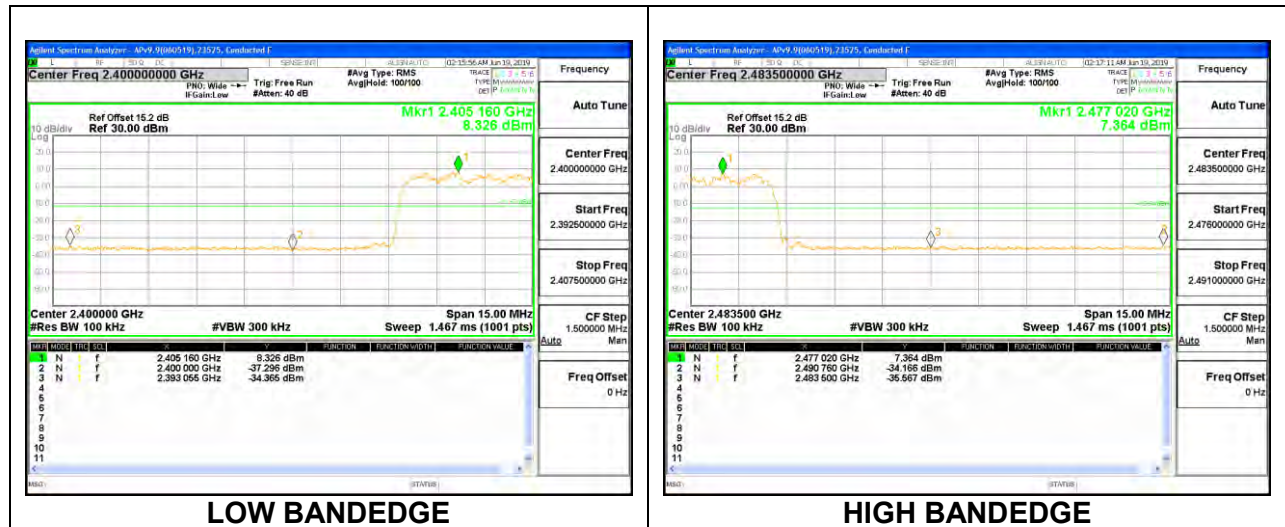


8.15.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

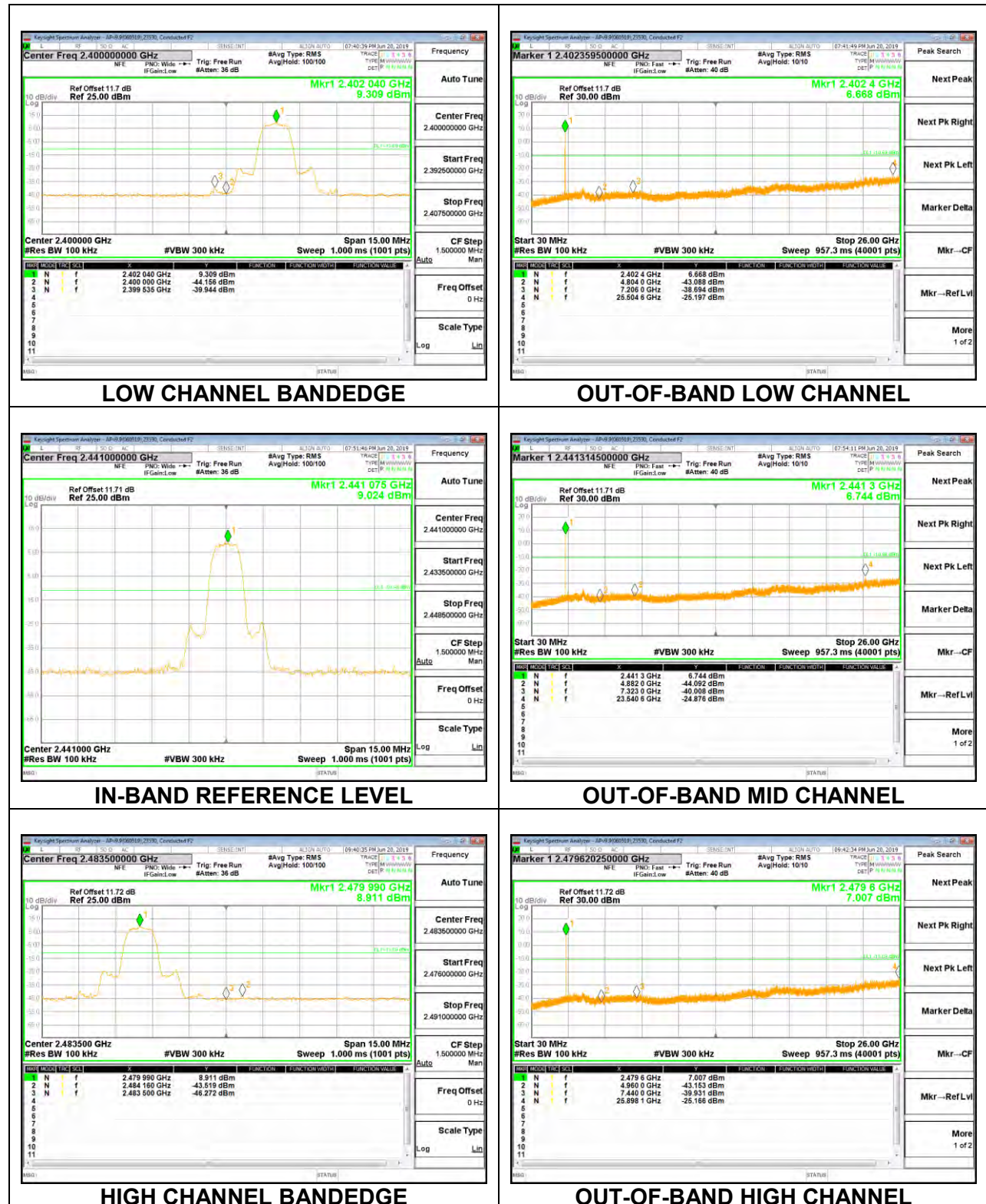
Antenna 3 SPURIOUS EMISSIONS, NON-HOPPING



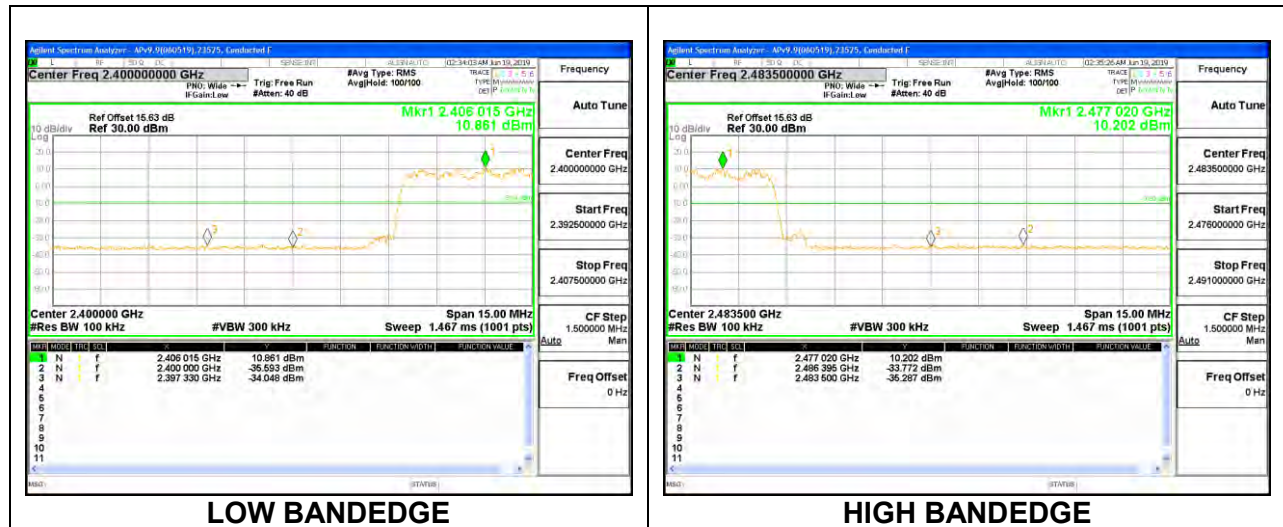
Antenna 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



Antenna 4 SPURIOUS EMISSIONS, NON-HOPPING



Antenna 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



9. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

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
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

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.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

KDB 558074 D01 15.247 Meas Guidance v05r02

Use of a duty cycle correction factor (DCCF) is permitted for calculating average radiated field strength emission levels for an FHSS device in 15.247. This DCCF can be applied when the field strength limit (e.g., within a Government Restricted band) and the conditions specified in Section 15.35(c) can be satisfied. The average radiated field strength is calculated by subtracting the DCCF from the maximum radiated field strength level as determined through measurement. The maximum radiated field strength level represents the worst-case (maximum amplitude) RMS measurement of the emission(s) during continuous transmission (i.e., not including any time intervals during which the transmitter is off or is transmitting at a reduced power level). It is also acceptable to apply the DCCF to a measurement performed with a peak detector instead of the specified RMS power averaging detector. Note that Section 15.35(c) specifies that the DCCF shall represent the worst-case (greatest duty cycle) over any 100 msec transmission period.

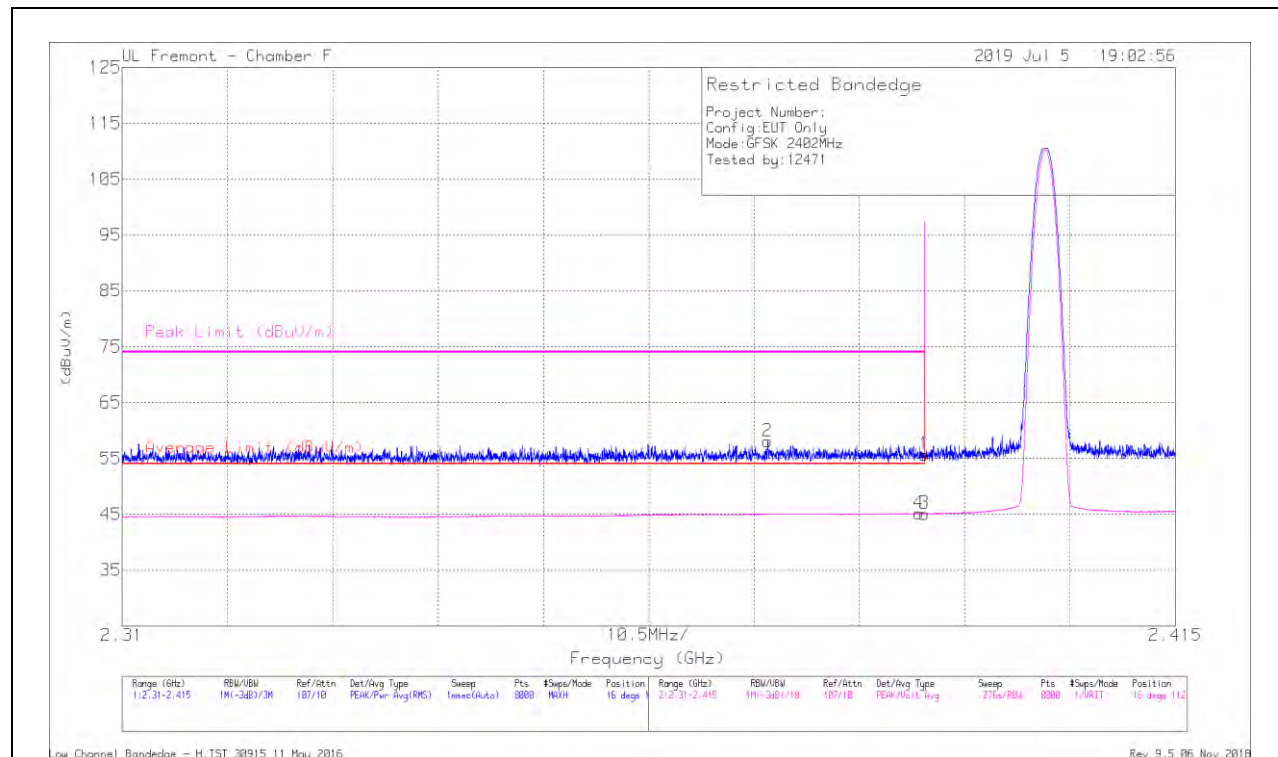
9.1. TRANSMITTER ABOVE 1 GHz

9.1.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



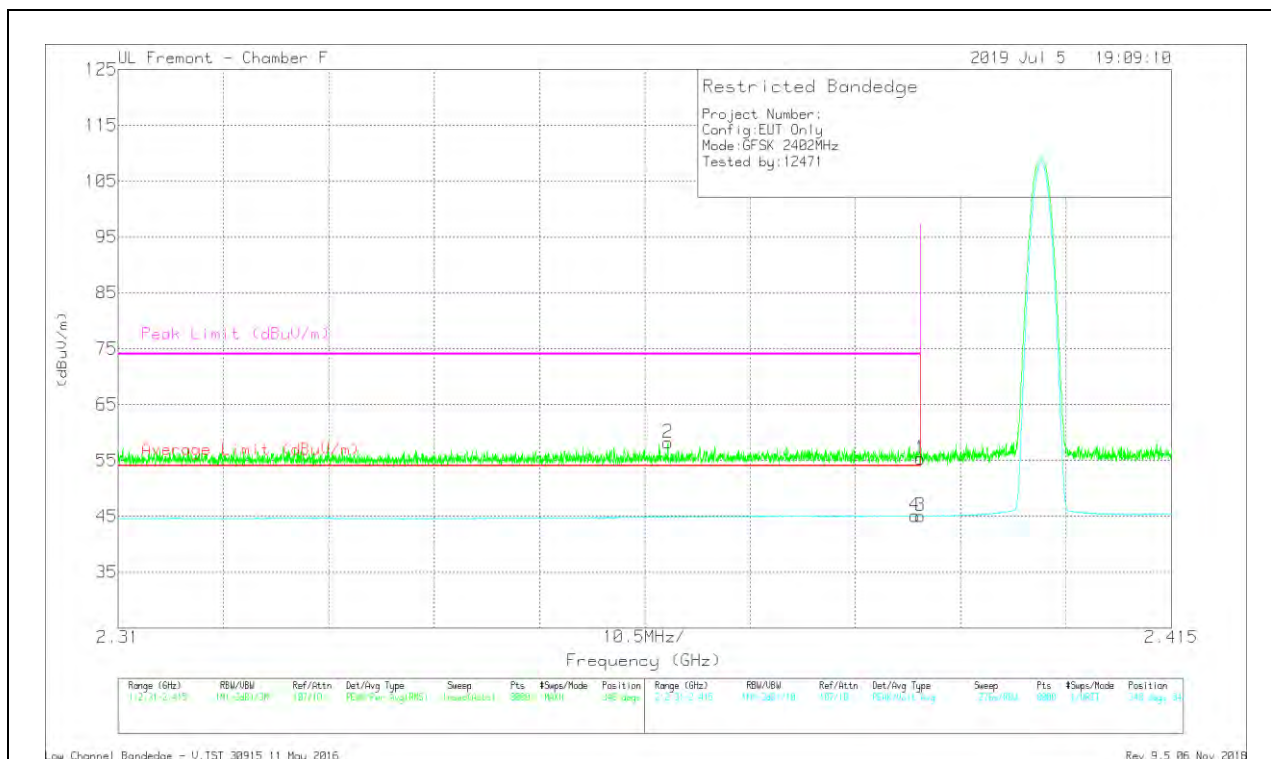
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.19	Pk	32	-14.5	55.69	-	-	74	-18.31	16	112	H
2	* 2.374	40.55	Pk	31.9	-14.4	58.05	-	-	74	-15.95	16	112	H
3	* 2.39	27.59	VA1T	32	-14.5	45.09	54	-8.91	-	-	16	112	H
4	* 2.389	27.65	VA1T	32	-14.5	45.15	54	-8.85	-	-	16	112	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /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	37.83	Pk	32	-14.5	55.33	-	-	74	-18.67	348	342	V
2	* 2.365	40.79	Pk	31.8	-14.4	58.19	-	-	74	-15.81	348	342	V
3	* 2.39	27.58	VA1T	32	-14.5	45.08	54	-8.92	-	-	348	342	V
4	* 2.389	27.61	VA1T	32	-14.5	45.11	54	-8.89	-	-	348	342	V

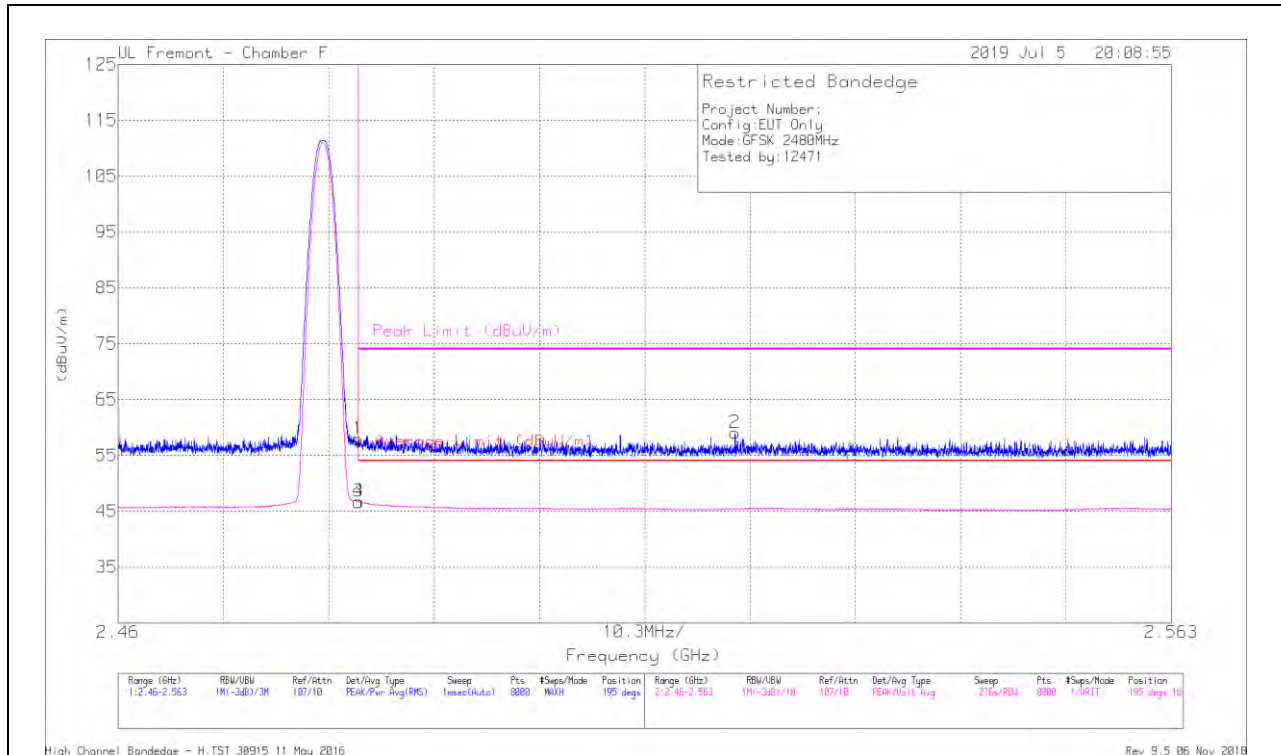
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



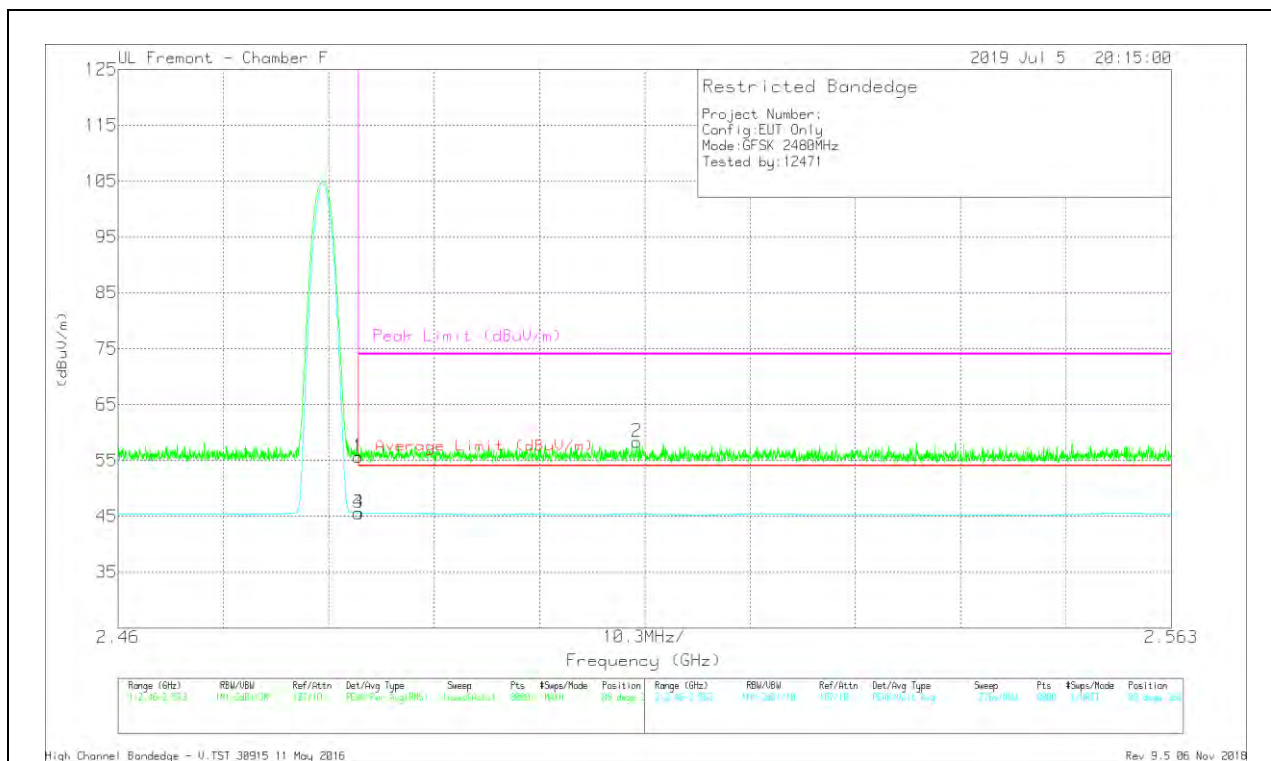
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.19	Pk	32.4	-14.7	57.89	-	-	74	-16.11	195	104	H
2	2.52	41.32	Pk	32.3	-14.6	59.02	-	-	74	-14.98	195	104	H
3	* 2.484	29.01	VA1T	32.4	-14.7	46.71	54	-7.29	-	-	195	104	H
4	* 2.484	29.01	VA1T	32.4	-14.7	46.71	54	-7.29	-	-	195	104	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /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	37.91	Pk	32.4	-14.7	55.61	-	-	74	-18.39	89	368	V
2	2.511	40.62	Pk	32.4	-14.7	58.32	-	-	74	-15.68	89	368	V
3	* 2.484	27.91	VA1T	32.4	-14.7	45.61	54	-8.39	-	-	89	368	V
4	* 2.484	27.92	VA1T	32.4	-14.7	45.62	54	-8.38	-	-	89	368	V

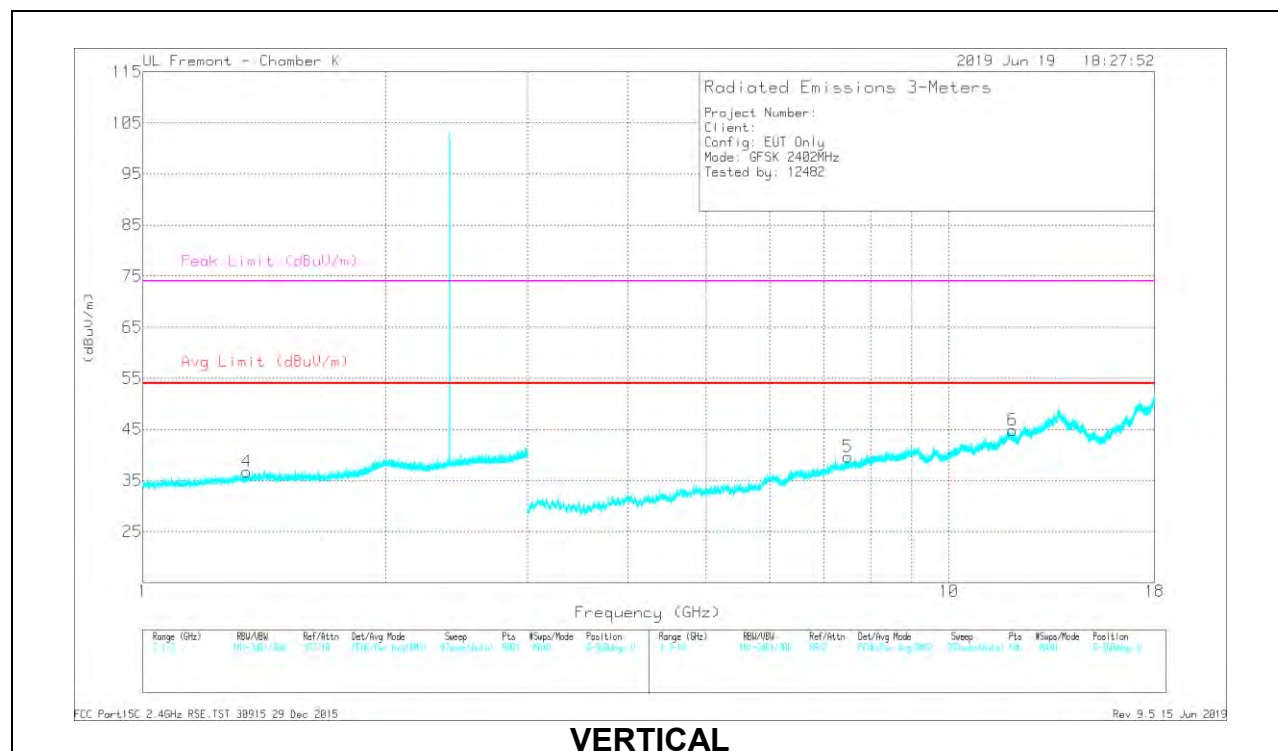
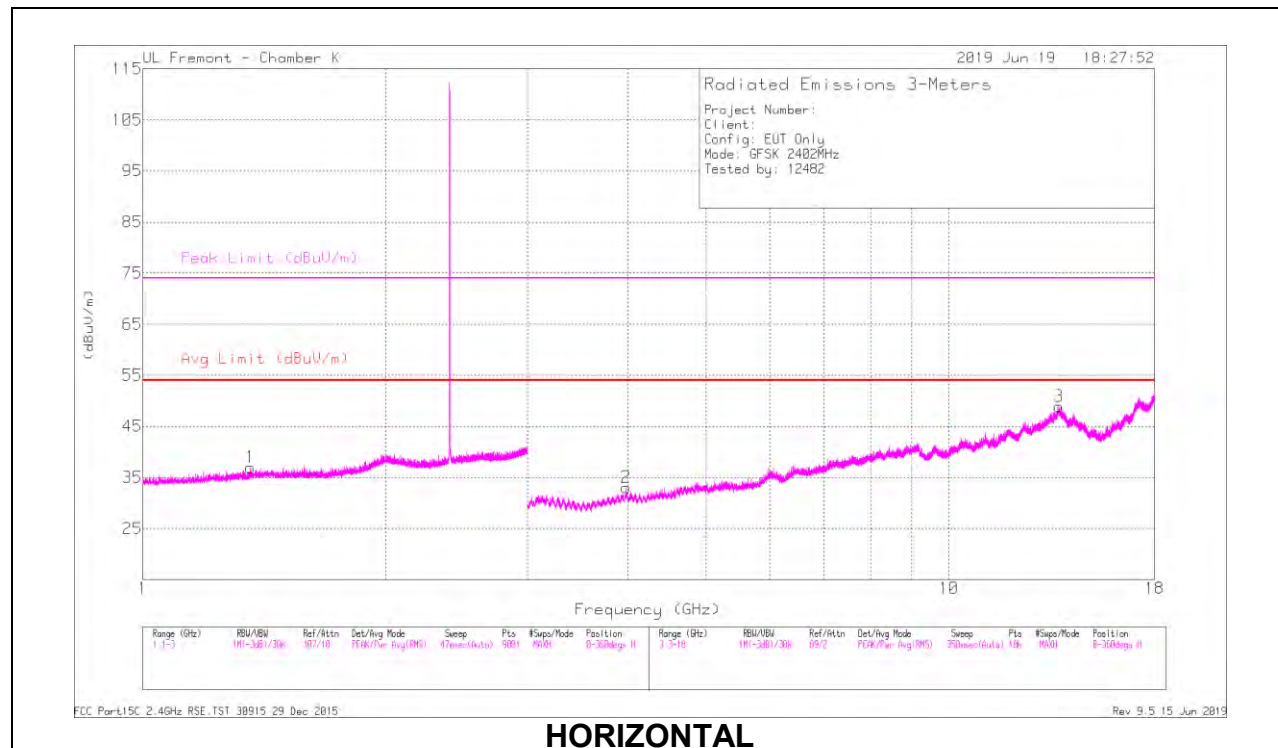
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



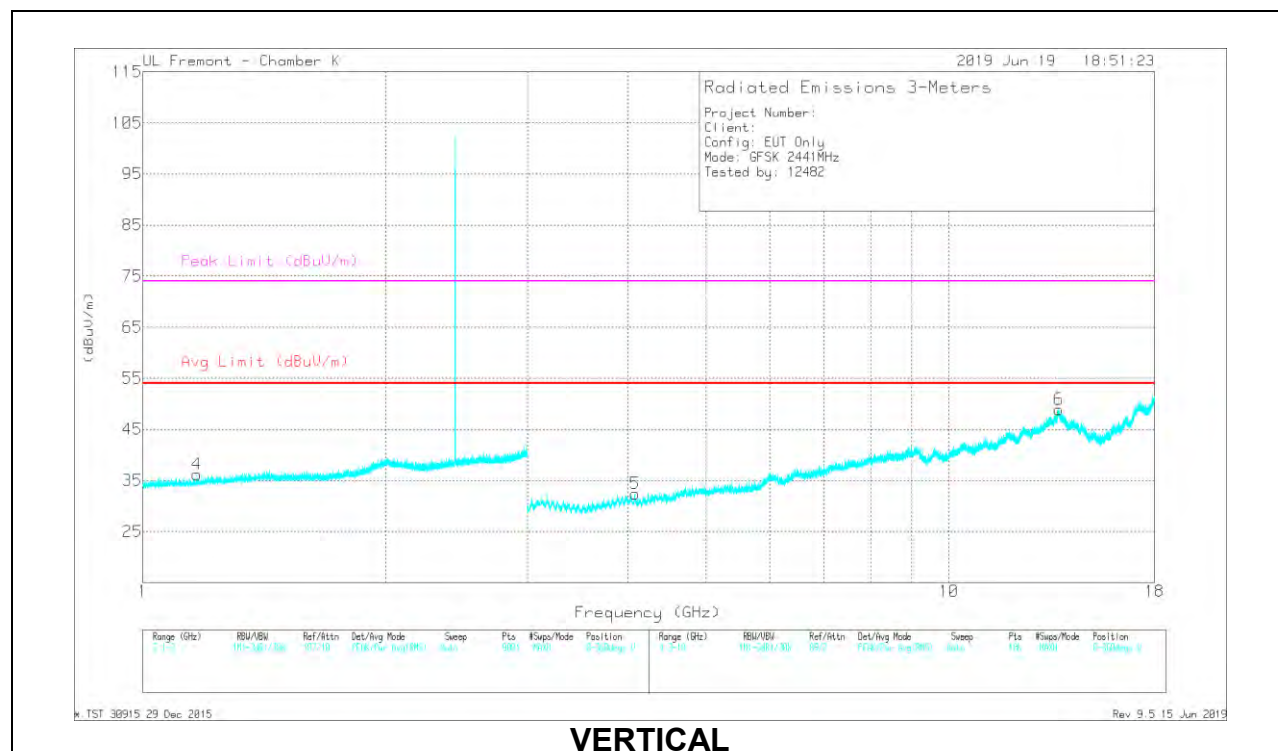
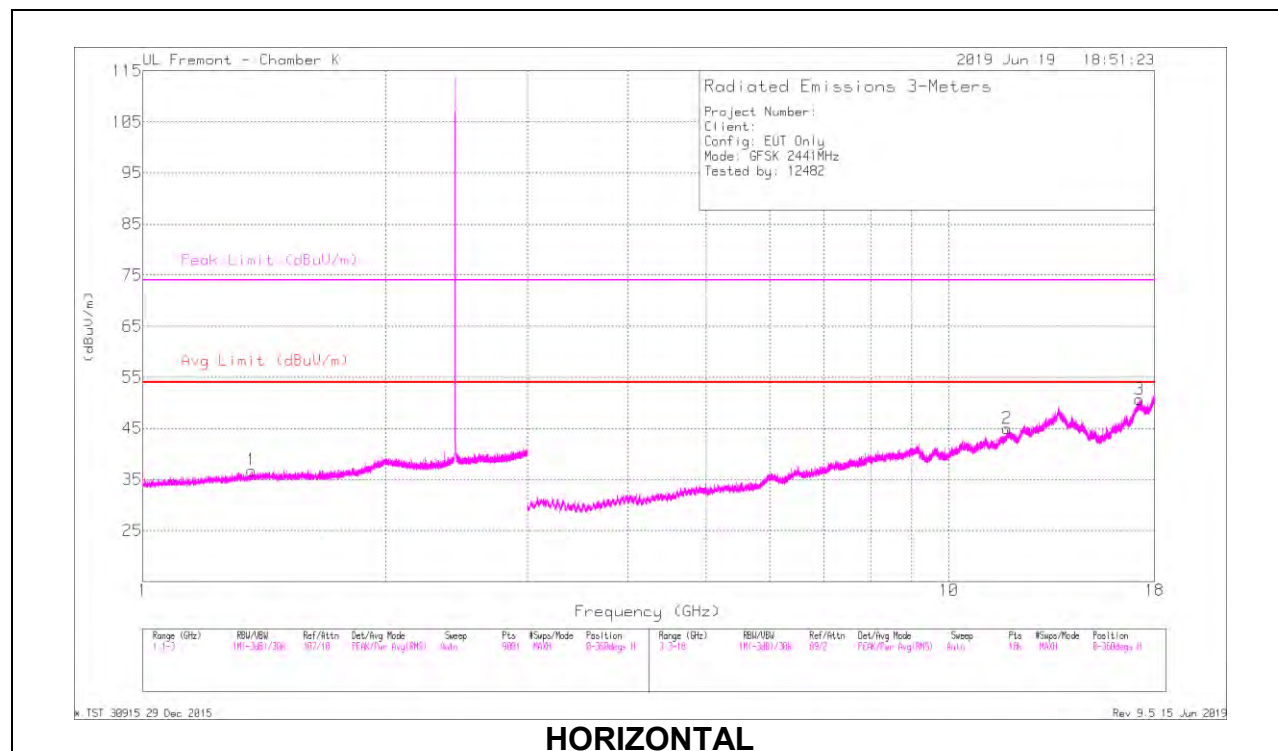
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.35866	43.4	PKFH	24.5	-23.9	44	-	-	74	-30	258	110	H
	* 1.36003	30.09	VA1T	24.5	-23.8	30.79	54	-23.21	-	-	258	110	H
4	* 1.34337	43.54	PKFH	24.5	-23.9	44.14	-	-	74	-29.86	332	185	V
	* 1.34643	30.16	VA1T	24.5	-23.9	30.76	54	-23.24	-	-	332	185	V
2	* 3.9793	40.18	PKFH	31.5	-31.6	40.08	-	-	74	-33.92	279	108	H
	* 3.97988	27.04	VA1T	31.5	-31.6	26.94	54	-27.06	-	-	279	108	H
3	13.70228	31.33	PKFH	43.1	-18.6	55.83	-	-	-	-	95	150	H
5	* 7.49305	35.69	PKFH	37.1	-25.8	46.99	-	-	74	-27.01	22	126	V
	* 7.493	22.15	VA1T	37.1	-25.8	33.45	54	-20.55	-	-	22	126	V
6	* 11.99583	32.13	PKFH	40.2	-20.3	52.03	-	-	74	-21.97	162	230	V
	* 11.99877	18.93	VA1T	40.2	-20.3	38.83	54	-15.17	-	-	162	230	V

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

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

MID CHANNEL RESULTS



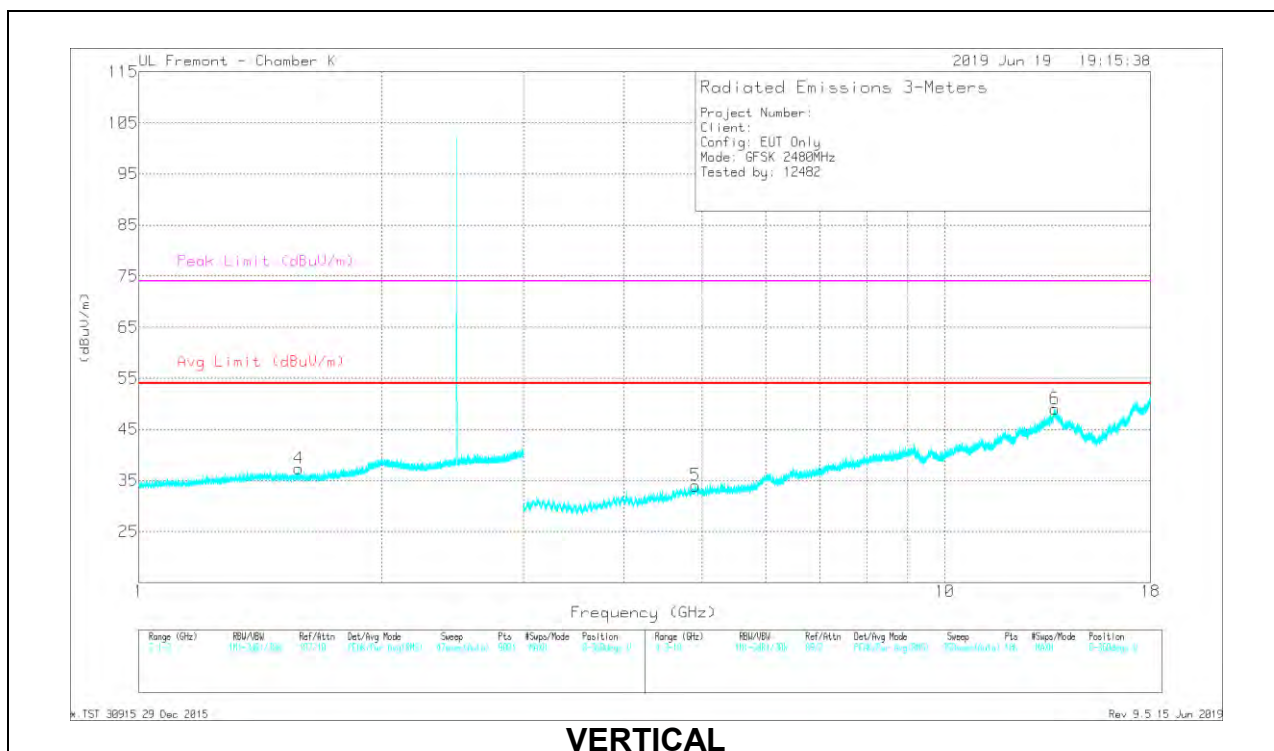
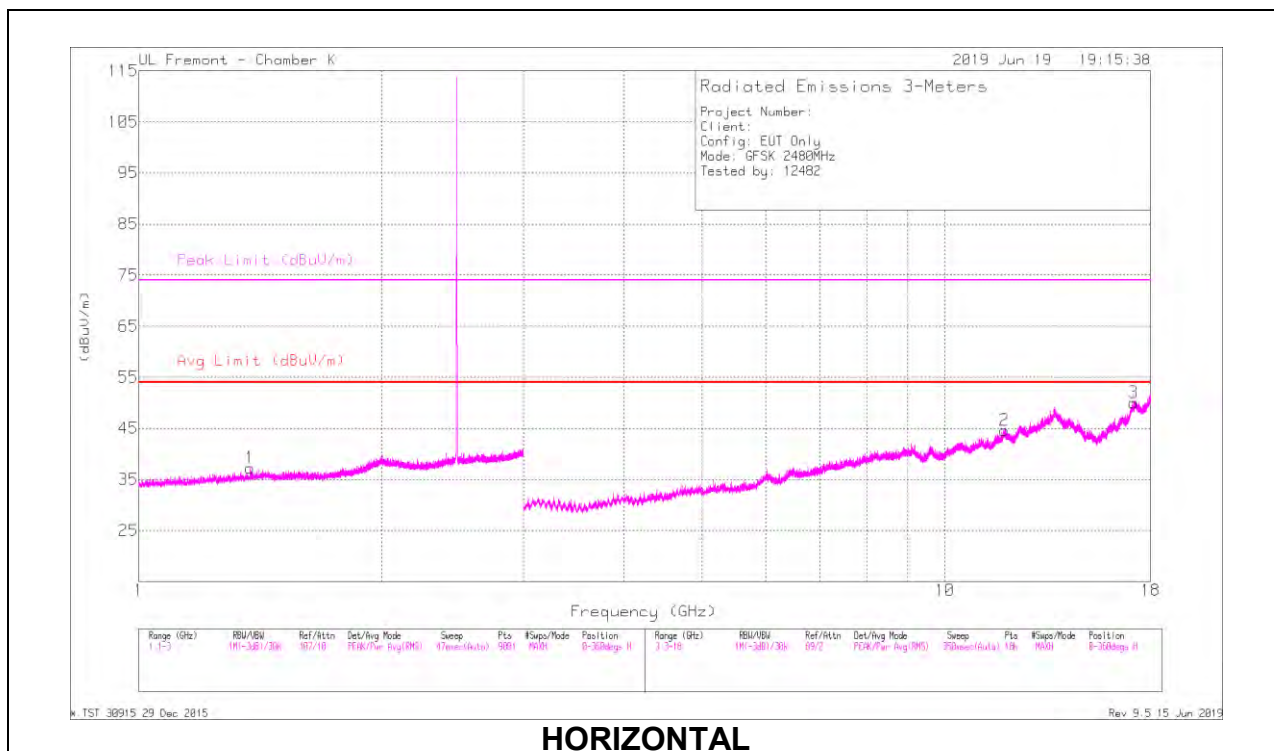
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36233	43.29	PKFH	24.6	-23.8	44.09	-	-	74	-29.91	28	204	H
	* 1.3647	30.11	VA1T	24.6	-23.8	30.91	54	-23.09	-	-	28	204	H
4	* 1.16688	43.81	PKFH	23.8	-23.9	43.71	-	-	74	-30.29	226	204	V
	* 1.16754	30.09	VA1T	23.8	-23.9	29.99	54	-24.01	-	-	226	204	V
2	* 11.82139	32.71	PKFH	39.9	-19.6	53.01	-	-	74	-20.99	285	300	H
	* 11.82298	18.8	VA1T	39.9	-19.6	39.1	54	-14.9	-	-	285	300	H
3	17.25379	31.96	PKFH	43.3	-16.5	58.76	-	-	-	-	334	117	H
	17.25329	18.12	VA1T	43.3	-16.5	44.92	-	-	-	-	334	117	H
5	* 4.08016	40.33	PKFH	31.3	-30.7	40.93	-	-	74	-33.07	354	175	V
	* 4.08081	26.28	VA1T	31.3	-30.7	26.88	54	-27.12	-	-	354	175	V
6	13.70082	31.05	PKFH	43.1	-18.6	55.55	-	-	-	-	139	269	V

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

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

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.37309	44.26	PKFH	24.6	-23.9	44.96	-	-	74	-29.04	212	233	H
	* 1.372	30.13	VA1T	24.6	-23.9	30.83	54	-23.17	-	-	212	233	H
4	* 1.57606	44.24	PKFH	24.8	-23.8	45.24	-	-	74	-28.76	300	185	V
	* 1.57812	30.22	VA1T	24.8	-23.8	31.22	54	-22.78	-	-	300	185	V
2	* 11.86639	32.35	PKFH	40	-19.8	52.55	-	-	74	-21.45	31	149	H
	* 11.86638	18.84	VA1T	40	-19.8	39.04	54	-14.96	-	-	31	149	H
3	17.15829	31.27	PKFH	43.3	-16.8	57.77	-	-	-	-	86	102	H
5	* 4.89997	39.12	PKFH	33.3	-30.5	41.92	-	-	74	-32.08	155	233	V
	* 4.90368	25.77	VA1T	33.3	-30.5	28.57	54	-25.43	-	-	155	233	V
6	13.70385	31.2	PKFH	43	-18.6	55.6	-	-	-	-	308	131	V

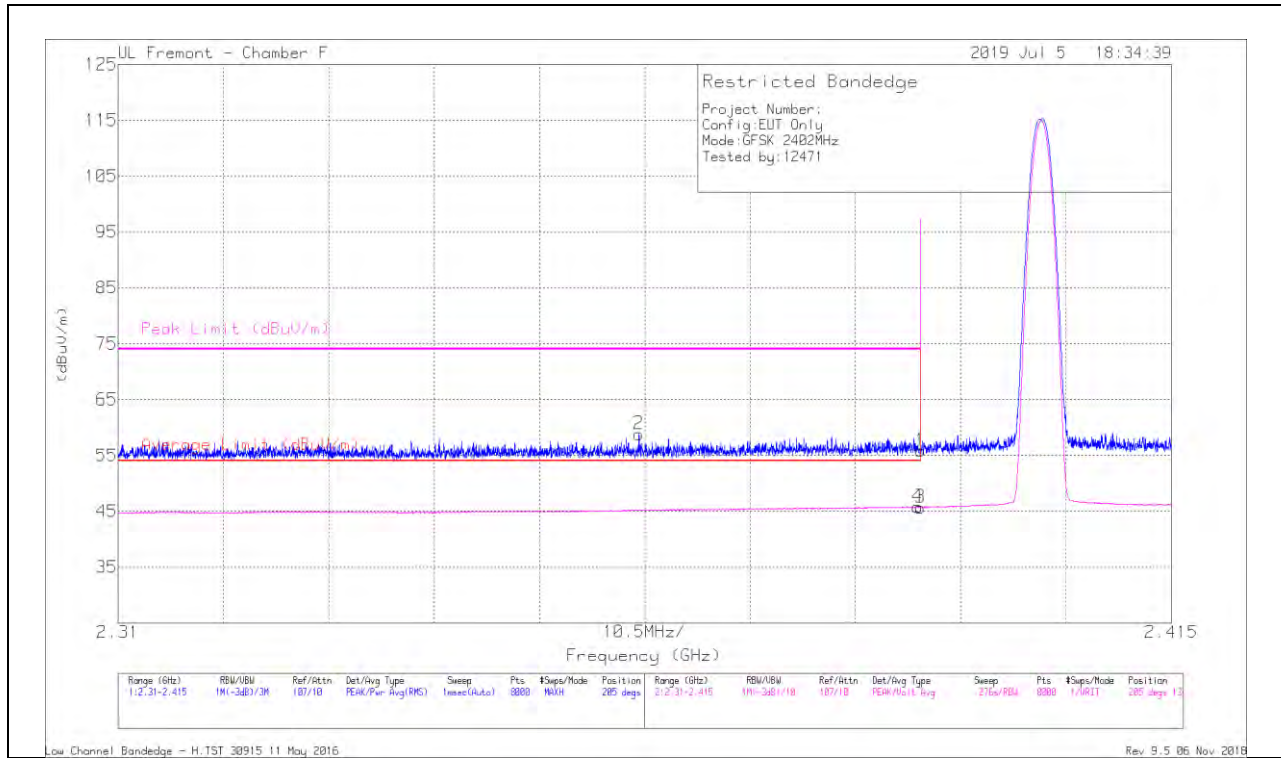
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

Antenna 4

BANEDGE (LOW CHANNEL)

HORIZONTAL RESULT



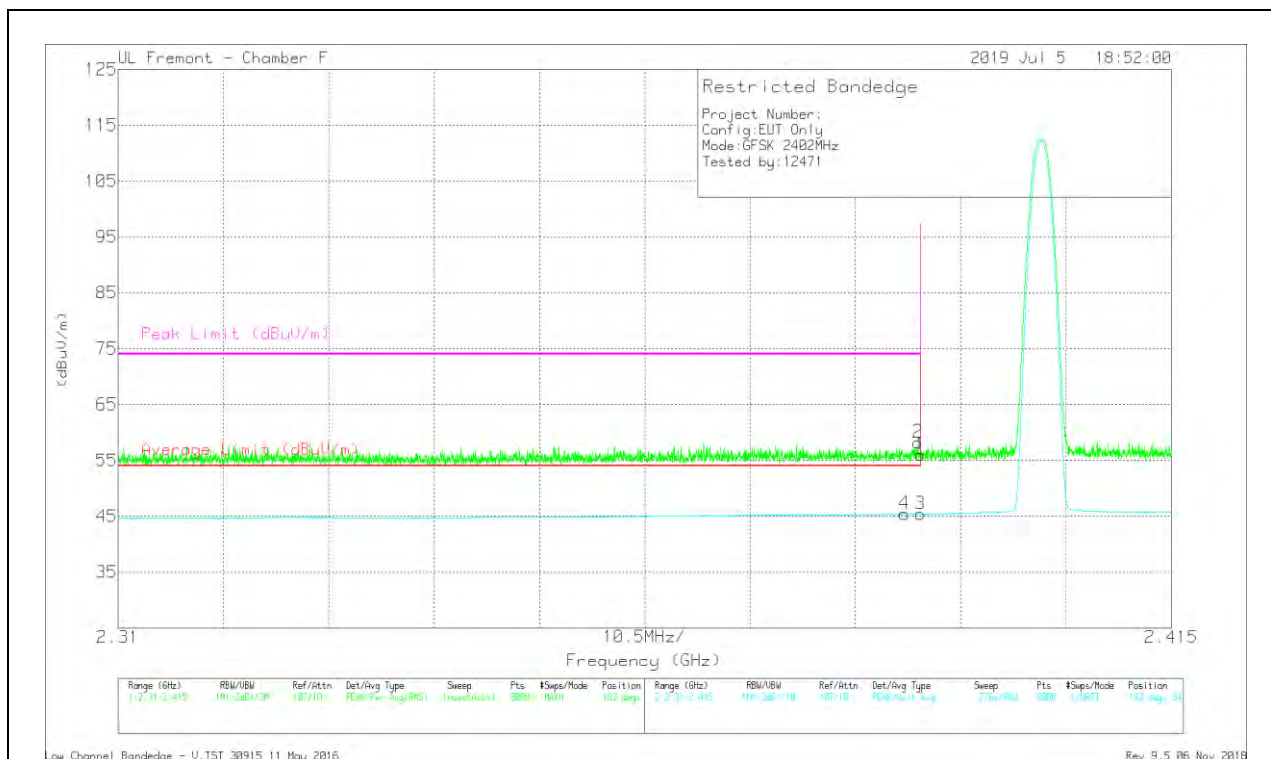
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.35	Pk	32	-14.5	55.85	-	-	74	-18.15	205	134	H
2	* 2.362	41.41	Pk	31.8	-14.4	58.81	-	-	74	-15.19	205	134	H
3	* 2.39	28.19	VA1T	32	-14.5	45.69	54	-8.31	-	-	205	134	H
4	* 2.39	28.26	VA1T	32	-14.5	45.76	54	-8.24	-	-	205	134	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.48	Pk	32	-14.5	55.98	-	-	74	-18.02	183	342	V
2	* 2.39	40.69	Pk	32	-14.5	58.19	-	-	74	-15.81	183	342	V
3	* 2.39	27.89	VA1T	32	-14.5	45.39	54	-8.61	-	-	183	342	V
4	* 2.388	27.93	VA1T	32	-14.5	45.43	54	-8.57	-	-	183	342	V

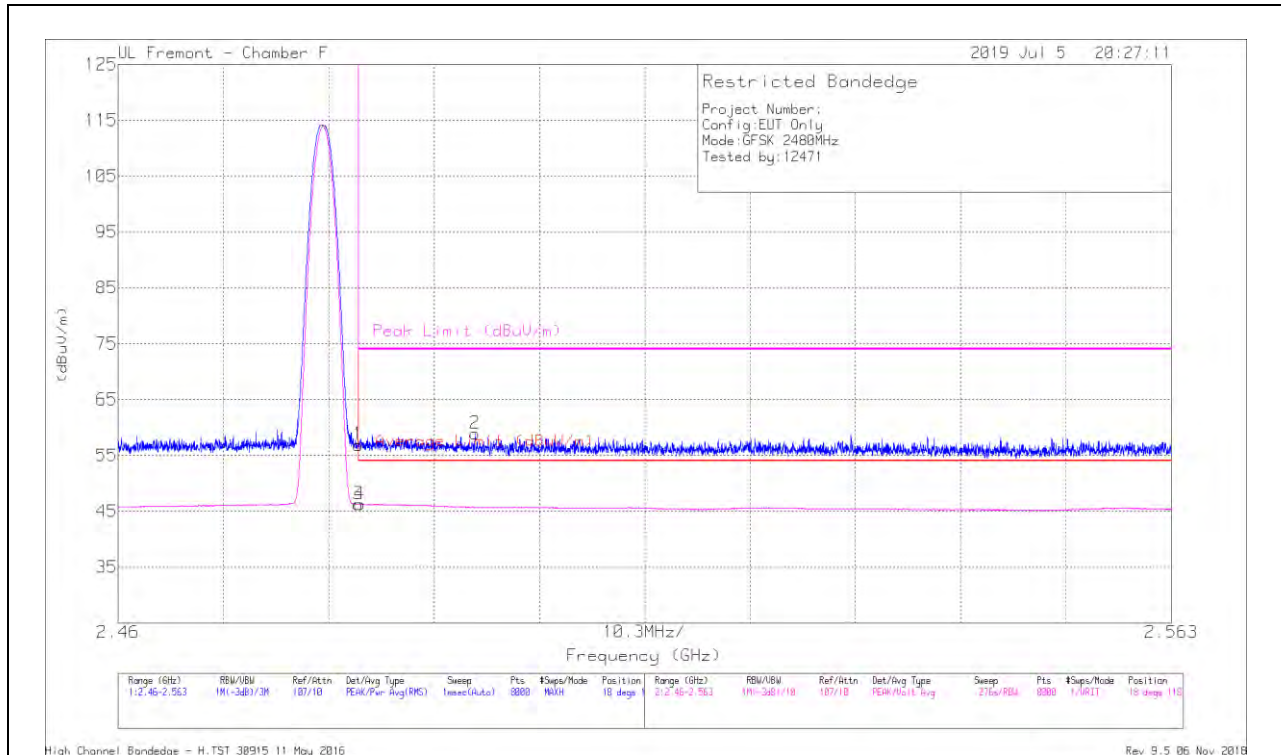
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

BANDEGE (HIGH CHANNEL)

HORIZONTAL RESULT



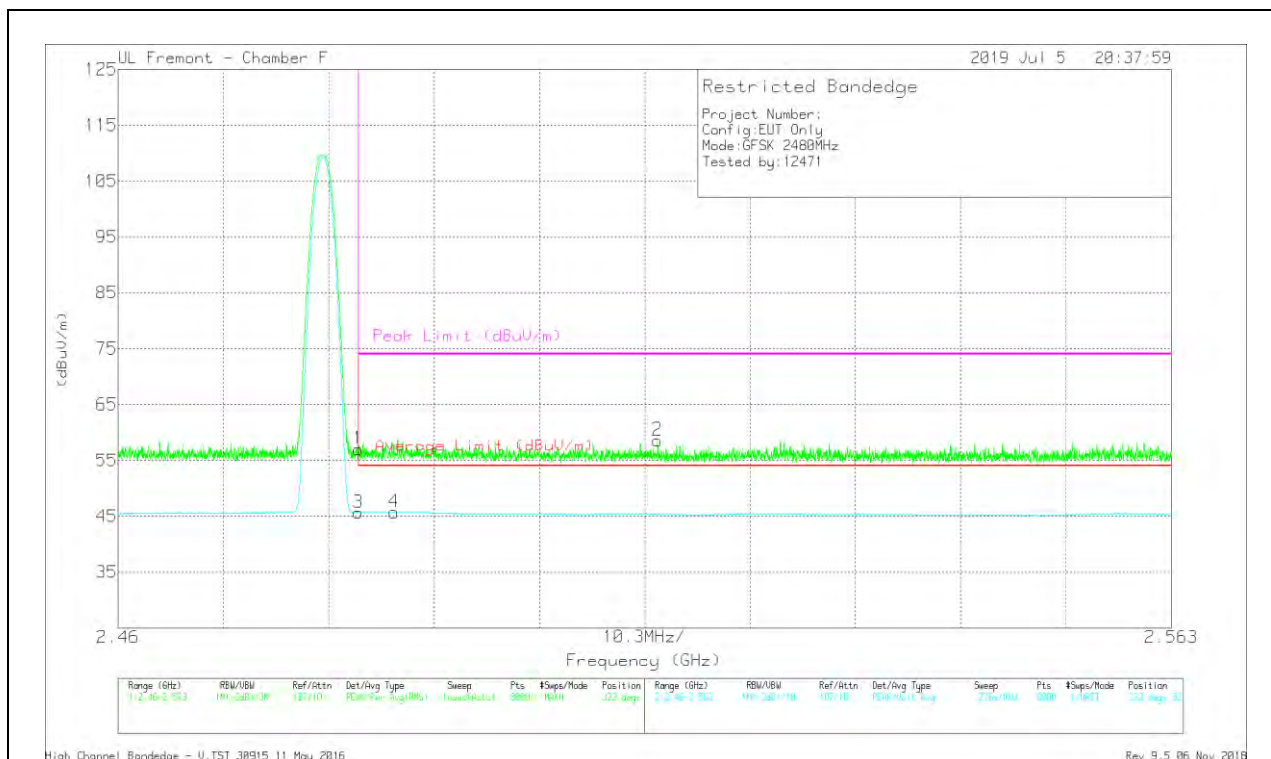
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.19	Pk	32.4	-14.7	56.89	-	-	74	-17.11	18	118	H
2	* 2.495	41.29	Pk	32.4	-14.8	58.89	-	-	74	-15.11	18	118	H
3	* 2.484	28.53	VA1T	32.4	-14.7	46.23	54	-7.77	-	-	18	118	H
4	* 2.484	28.54	VA1T	32.4	-14.7	46.24	54	-7.76	-	-	18	118	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbll/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degr)	Height (cm)	Polarity
1	* 2.484	39.33	Pk	32.4	-14.7	57.03	-	-	74	-16.97	323	323	V
2	2.513	40.87	Pk	32.4	-14.7	58.57	-	-	74	-15.43	323	323	V
3	* 2.484	27.93	VA1T	32.4	-14.7	45.63	54	-8.37	-	-	323	322	V
4	* 2.487	28.03	VA1T	32.3	-14.6	45.73	54	-8.27	-	-	323	322	V

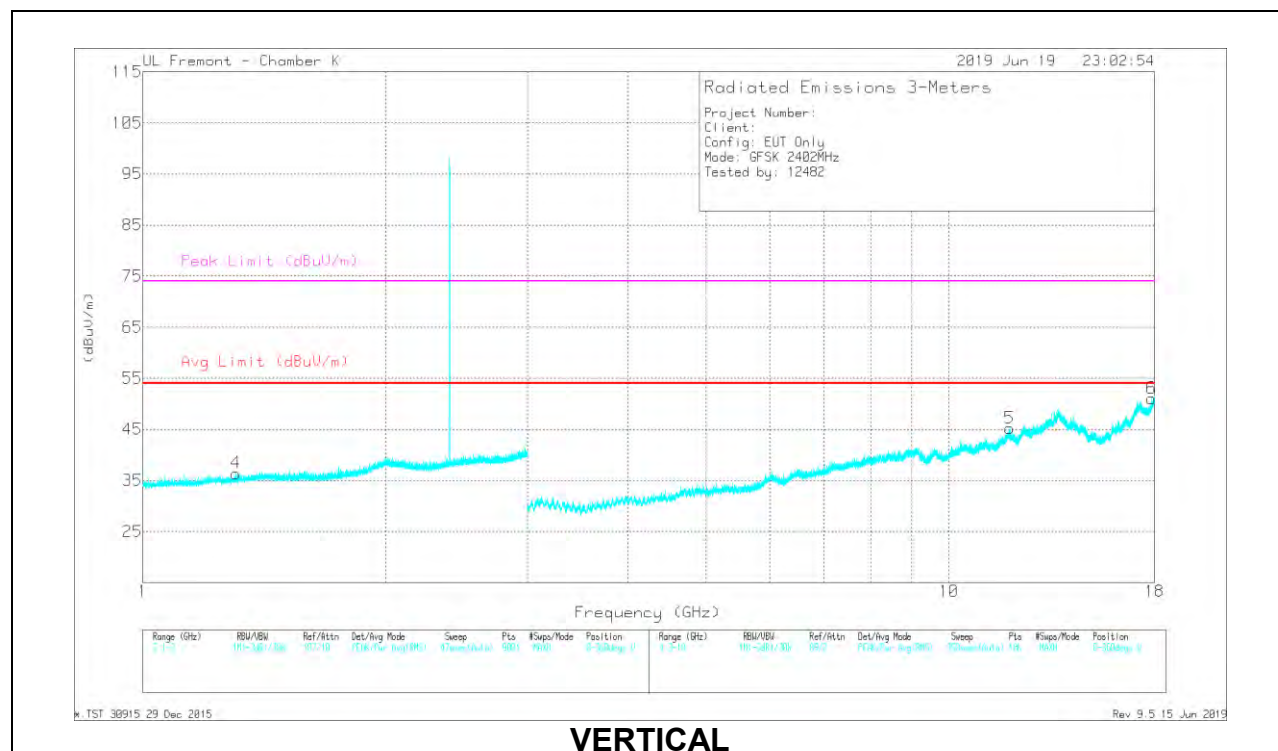
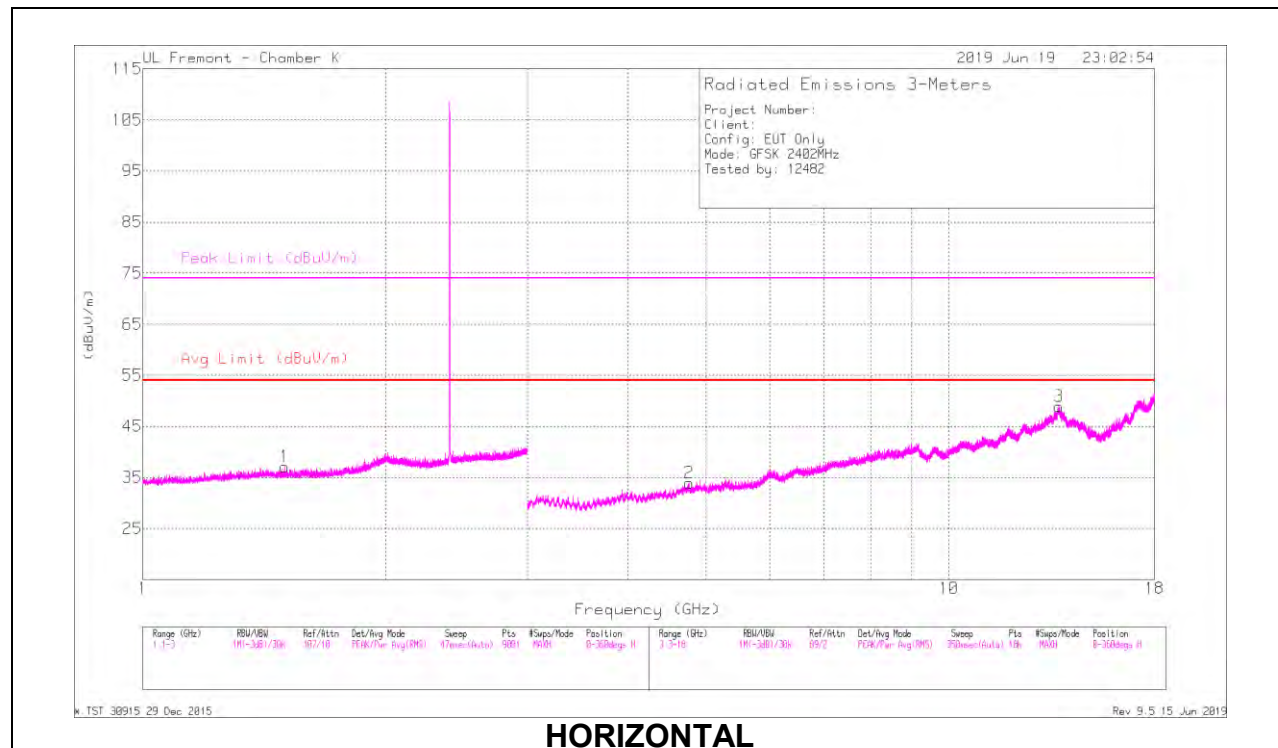
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.49965	43.91	PKFH	24.5	-23.7	44.71	-	-	74	-29.29	223	186	H
	* 1.50181	30.27	VA1T	24.5	-23.8	30.97	54	-23.03	-	-	223	186	H
4	* 1.30476	43.52	PKFH	24.5	-23.9	44.12	-	-	74	-29.88	347	302	V
	* 1.30751	30.13	VA1T	24.5	-23.9	30.73	54	-23.27	-	-	347	302	V
2	* 4.76187	39.27	PKFH	32.9	-30.2	41.97	-	-	74	-32.03	159	147	H
	* 4.76217	25.55	VA1T	32.9	-30.2	28.25	54	-25.75	-	-	159	147	H
3	13.69252	32.18	PKFH	43.1	-18.7	56.58	-	-	-	-	334	220	H
5	* 11.90261	32.64	PKFH	40	-20.2	52.44	-	-	74	-21.56	88	106	V
	* 11.90437	19.18	VA1T	40	-20.2	38.98	54	-15.02	-	-	88	106	V
6	* 17.84445	30.35	PKFH	43.5	-15.7	58.15	-	-	74	-15.85	111	127	V
	* 17.84337	17.04	VA1T	43.5	-15.7	44.84	54	-9.16	-	-	111	127	V

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

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

UL Fremont - Chamber K

2019 Jun 19 23:31:18

Radiated Emissions 3-Meters

Project Number:
Client:
Config: EUT Only
Mode: GFSK 2441MHz
Tested by: 12482

Peak Limit (dBuV/m)

Avg Limit (dBuV/m)

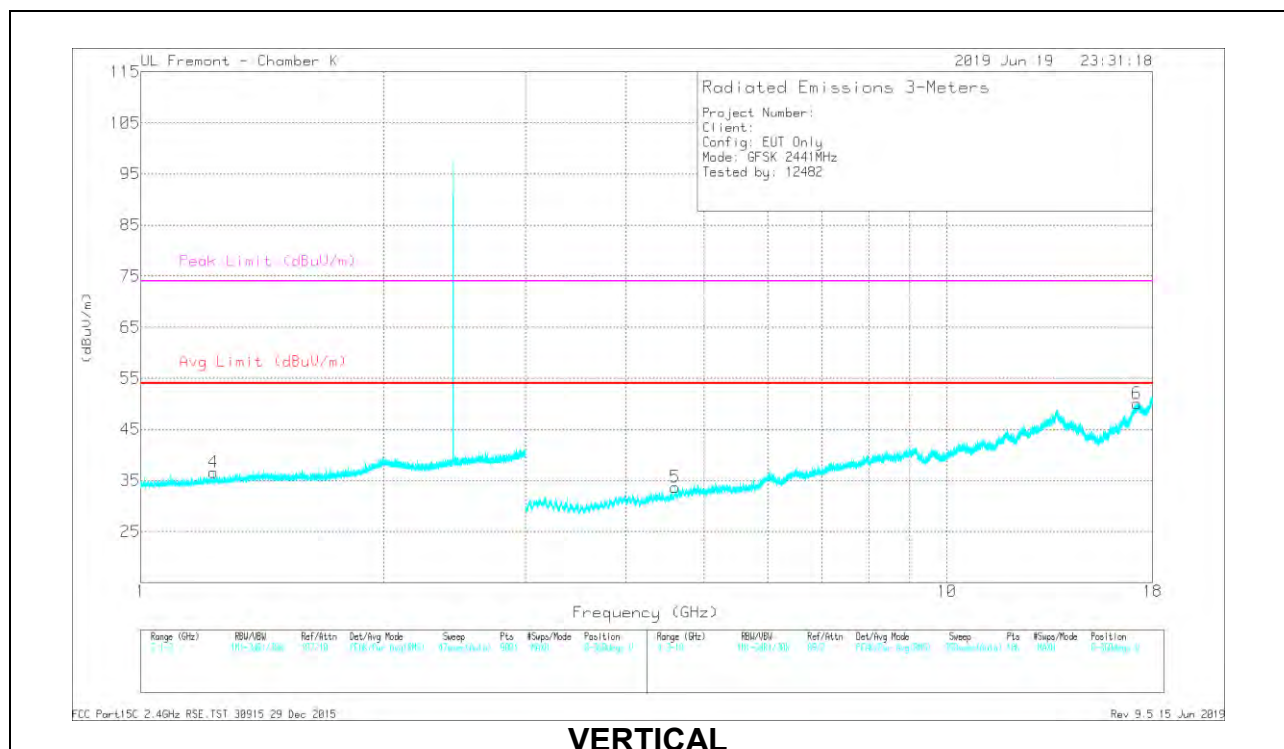
Frequency (GHz)

Range (GHz)	RBW/ABW	Ref/Antn	Det/Avg Mode	Sweep	Pts	#Swept/Mode	Position	Range (GHz)	RBW/ABW	Ref/Antn	Det/Avg Mode	Sweep	Pts	#Swept/Mode	Position
1-3	100-300/300	30/10	PKR/Per Avg (PK)	1/1000000	5001	10001	0-300kHz II	1-3	100-300/300	30/2	PKR/Per Avg (PK)	1/1000000	5001	10001	0-300kHz II

FCC Part15C 2.4GHz RSE.TST 38915 29 Dec 2015

Rev 9.5.15 Jun 2019

HORIZONTAL



VERTICAL

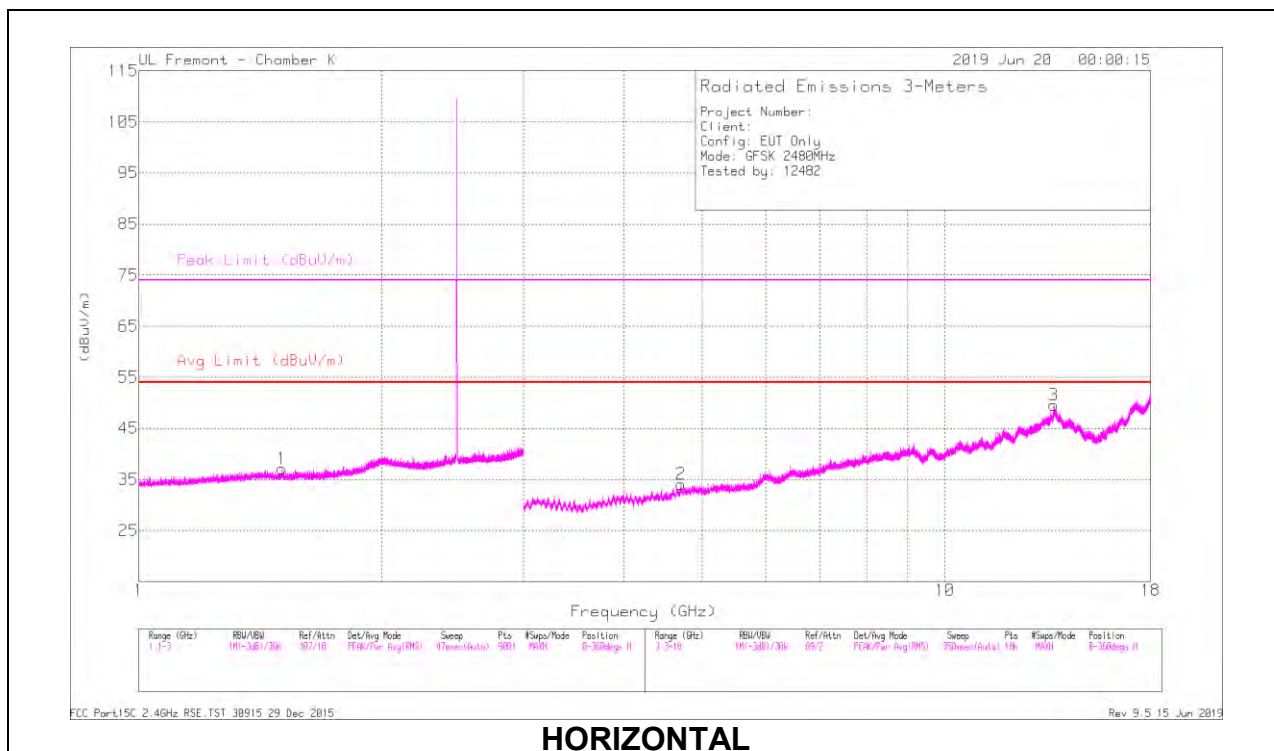
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.9449	44.59	PKFH	27.2	-24.1	47.69	-	-	-	-	150	302	H
4	* 1.23105	43.56	PKFH	24.3	-23.9	43.96	-	-	74	-30.04	161	232	V
	* 1.23263	30.06	VA1T	24.3	-23.9	30.46	54	-23.54	-	-	161	232	V
2	* 11.86451	32.75	PKFH	40	-19.8	52.95	-	-	74	-21.05	262	148	H
	* 11.86466	18.88	VA1T	40	-19.8	39.08	54	-14.92	-	-	262	148	H
3	13.65874	32.02	PKFH	43.1	-18.6	56.52	-	-	-	-	188	114	H
5	* 4.60144	39.58	PKFH	32.4	-31	40.98	-	-	74	-33.02	31	104	V
	* 4.60151	26.52	VA1T	32.4	-31	27.92	54	-26.08	-	-	31	104	V
6	17.20256	32.22	PKFH	43.5	-16.7	59.02	-	-	-	-	314	202	V

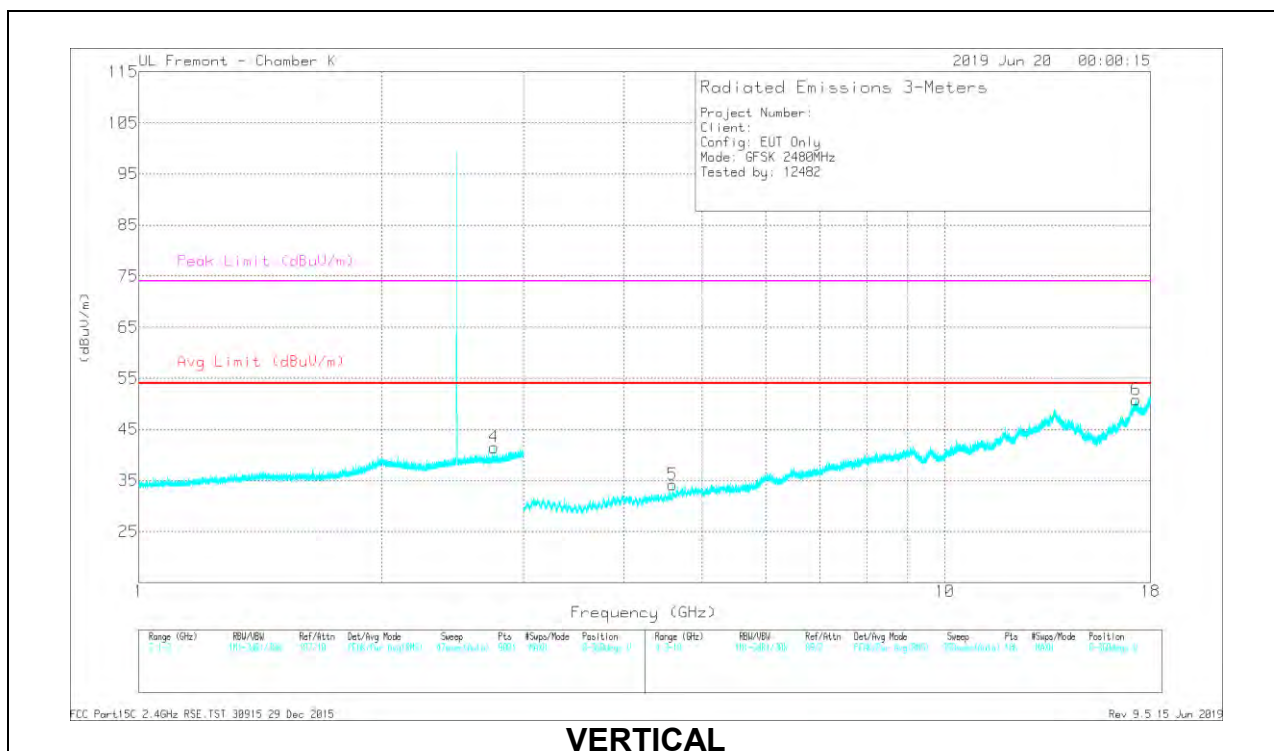
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.50641	43.81	PKFH	24.5	-23.7	44.61	-	-	74	-29.39	34	271	H
	* 1.50552	30.27	VA1T	24.5	-23.8	30.97	54	-23.03	-	-	34	271	H
4	* 2.75649	43.4	PKFH	28.9	-24.5	47.8	-	-	74	-26.2	144	203	V
	* 2.75781	30	VA1T	28.9	-24.5	34.4	54	-19.6	-	-	144	203	V
2	* 4.70934	39.05	PKFH	32.7	-30.5	41.25	-	-	74	-32.75	68	113	H
	* 4.70749	25.97	VA1T	32.7	-30.5	28.17	54	-25.83	-	-	68	113	H
3	13.65998	31.59	PKFH	43.1	-18.6	56.09	-	-	-	-	100	322	H
5	* 4.59233	39.64	PKFH	32.3	-31	40.94	-	-	74	-33.06	273	168	V
	* 4.59554	26.37	VA1T	32.3	-31	27.67	54	-26.33	-	-	273	168	V
6	17.27125	31.19	PKFH	43.3	-16.2	58.29	-	-	-	-	109	255	V

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

VA1T - FHSS: Linear Voltage Average $VB=1/T_{on}$ where: T_{on} is transmit duration

9.1.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



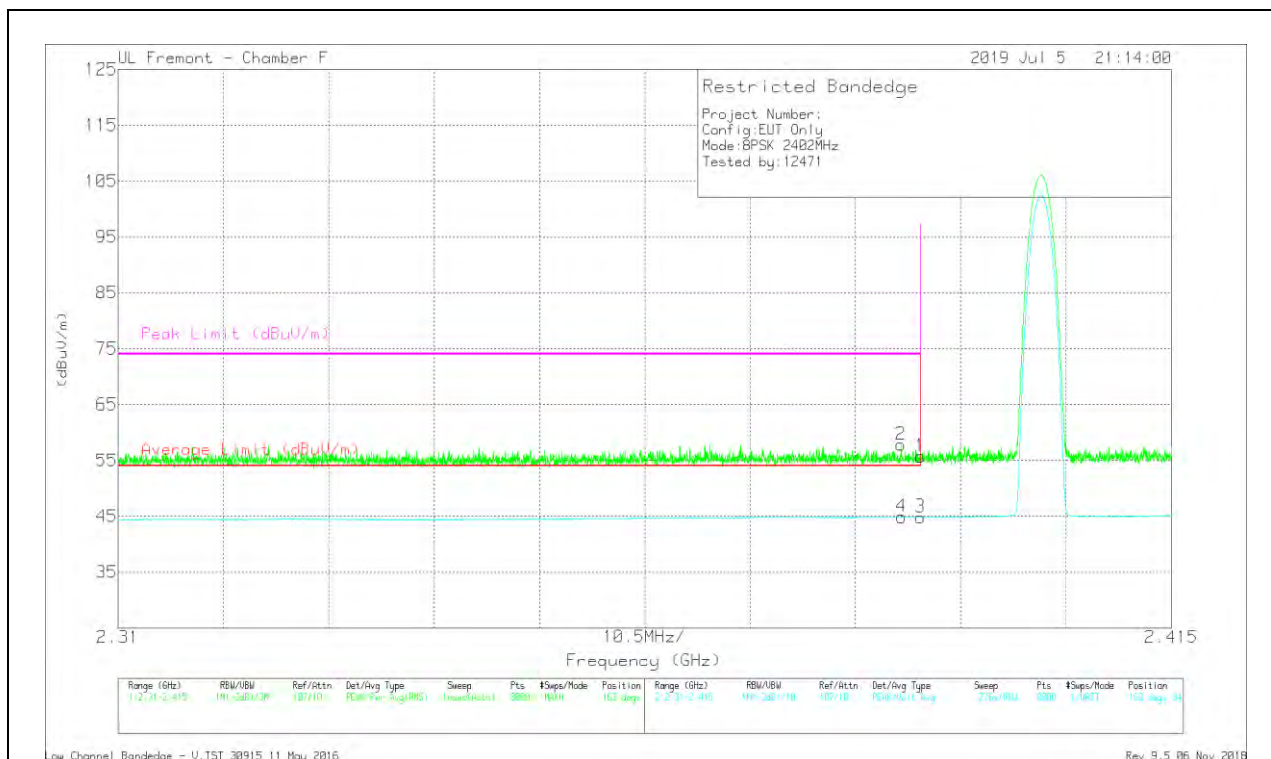
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	37.26	Pk	32	-14.5	54.76	-	-	74	-19.24	193	133	H
2	* 2.357	40.86	Pk	31.8	-14.6	58.06	-	-	74	-15.94	193	133	H
3	* 2.39	27.3	VA1T	32	-14.5	44.8	54	-9.2	-	-	193	133	H
4	* 2.377	27.44	VA1T	31.9	-14.4	44.94	54	-9.06	-	-	193	133	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.22	Pk	32	-14.5	55.72	-	-	74	-18.28	163	341	V
2	* 2.388	40.32	Pk	32	-14.5	57.82	-	-	74	-16.18	163	341	V
3	* 2.39	27.32	VA1T	32	-14.5	44.82	54	-9.18	-	-	163	341	V
4	* 2.388	27.39	VA1T	32	-14.5	44.89	54	-9.11	-	-	163	341	V

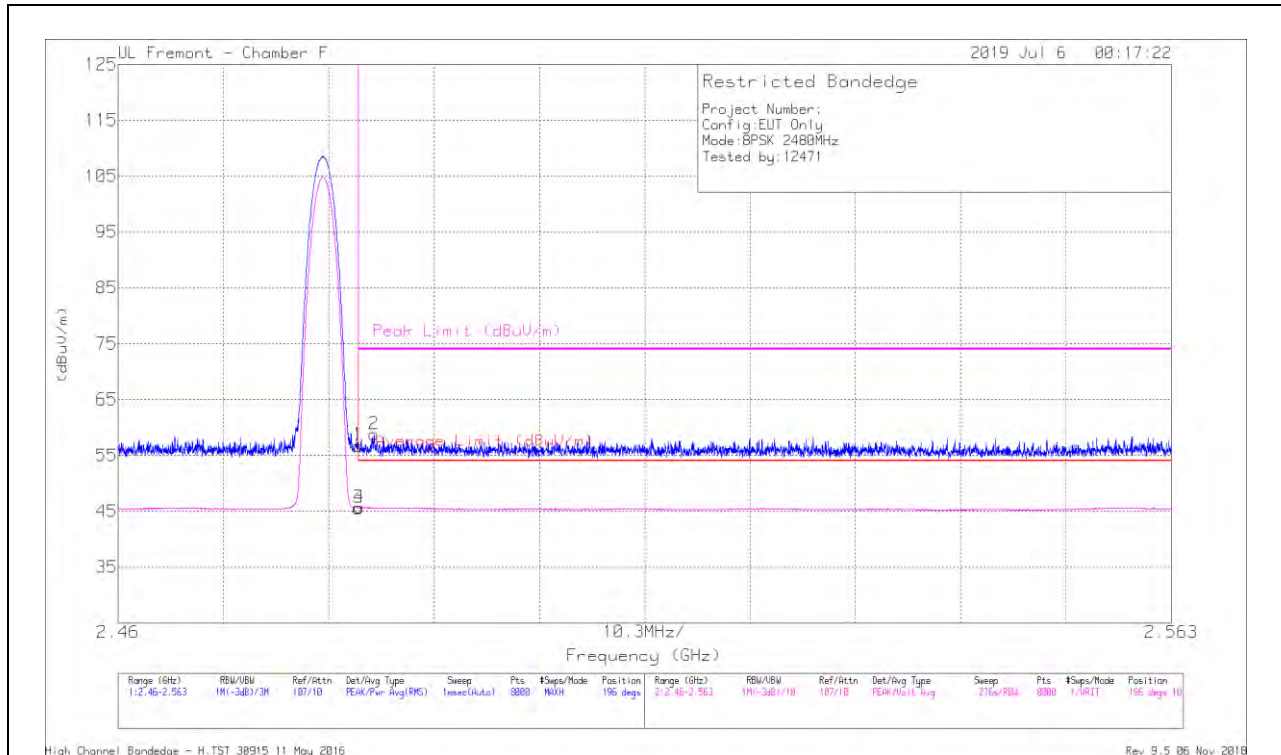
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



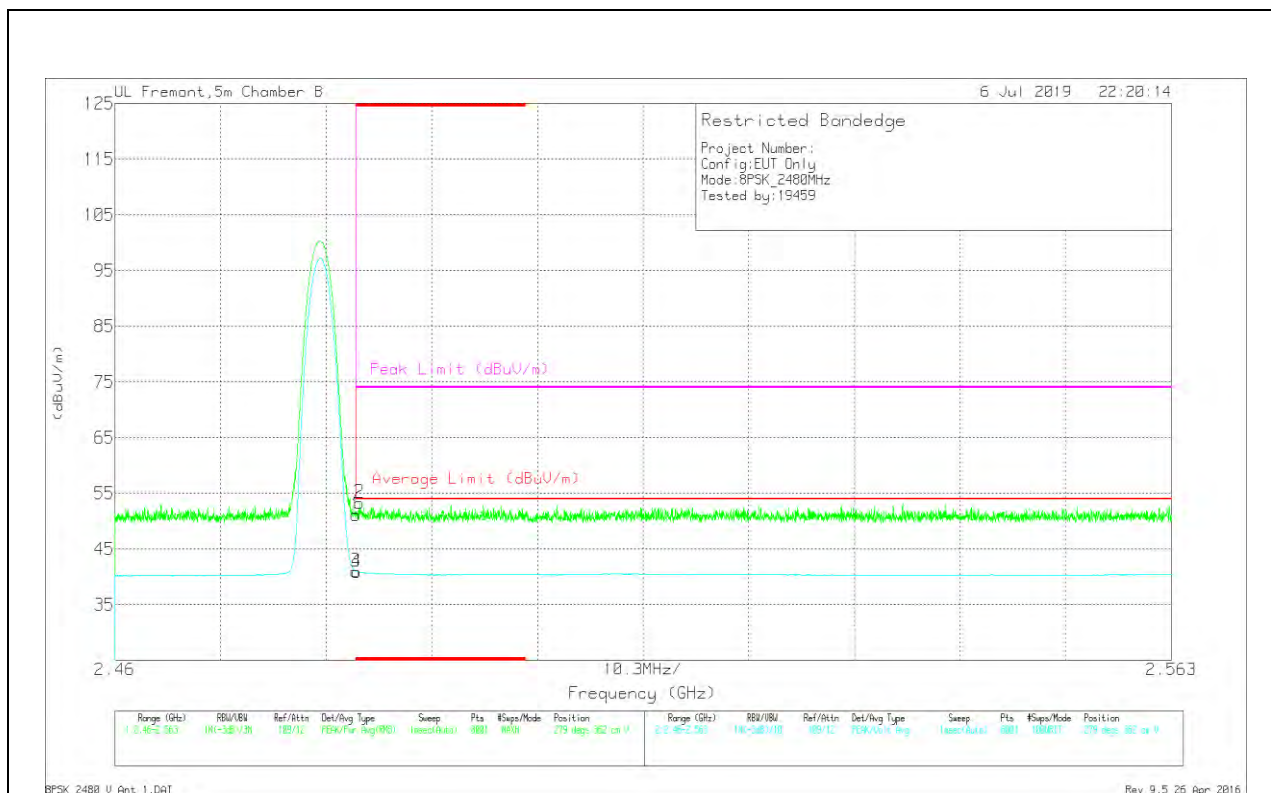
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degr)	Height (cm)	Polarity
1	* 2.484	39.06	Pk	32.4	-14.7	56.76	-	-	74	-17.24	196	103	H
2	* 2.485	40.97	Pk	32.4	-14.6	58.77	-	-	74	-15.23	196	103	H
3	* 2.484	27.91	VA1T	32.4	-14.7	45.61	54	-8.39	-	-	196	103	H
4	* 2.484	27.93	VA1T	32.4	-14.7	45.63	54	-8.37	-	-	196	103	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/P ad (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	37.76	Pk	32.3	-18.9	51.16	-	-	74	-22.84	279	362	V
2	* 2.484	39.89	Pk	32.3	-18.9	53.29	-	-	74	-20.71	279	362	V
3	* 2.484	27.6	PKFH	32.3	-18.9	41	-	-	74	-33	279	362	V
4	* 2.484	27.51	PKFH	32.3	-18.9	40.91	-	-	74	-33.09	279	362	V

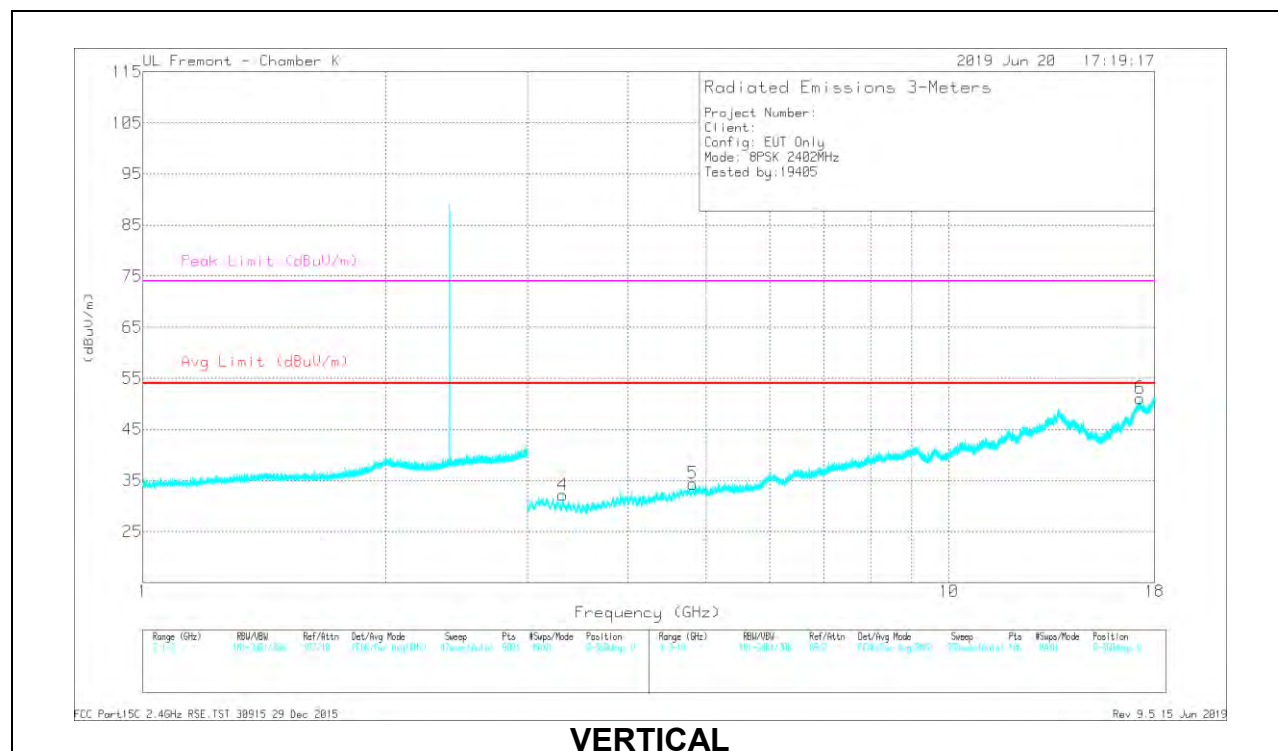
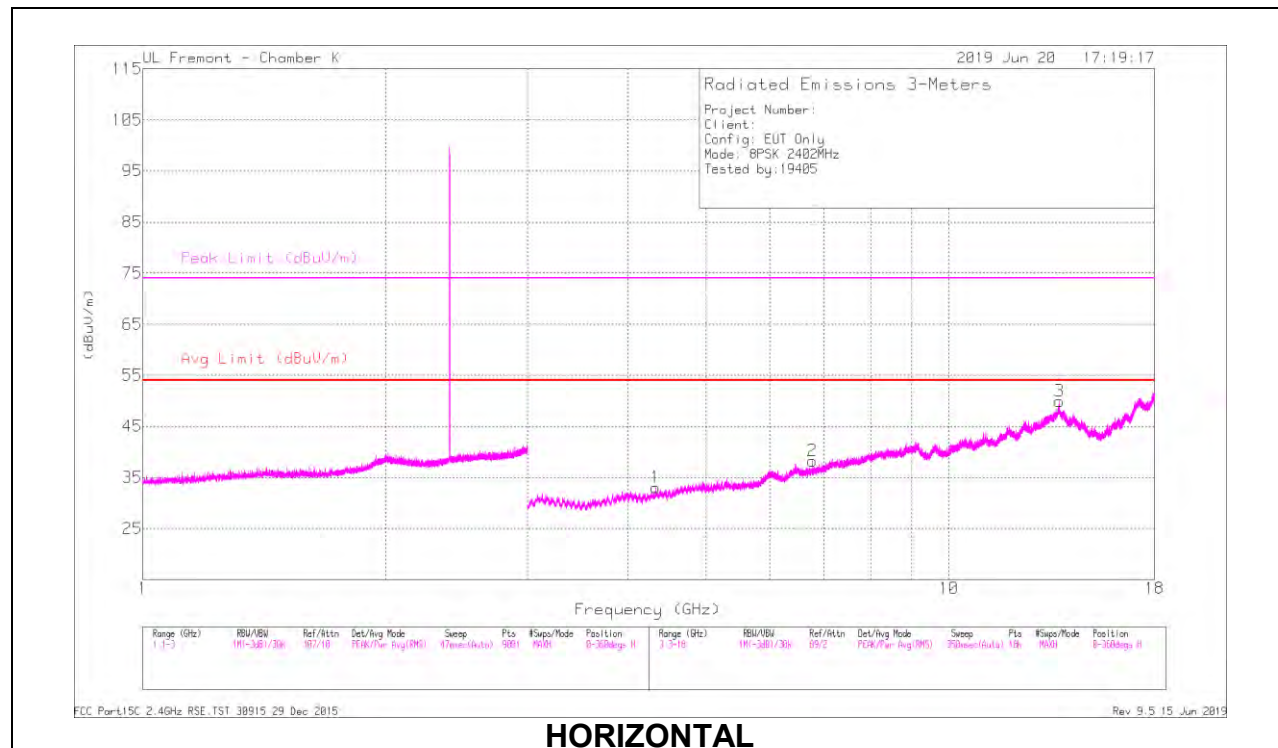
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



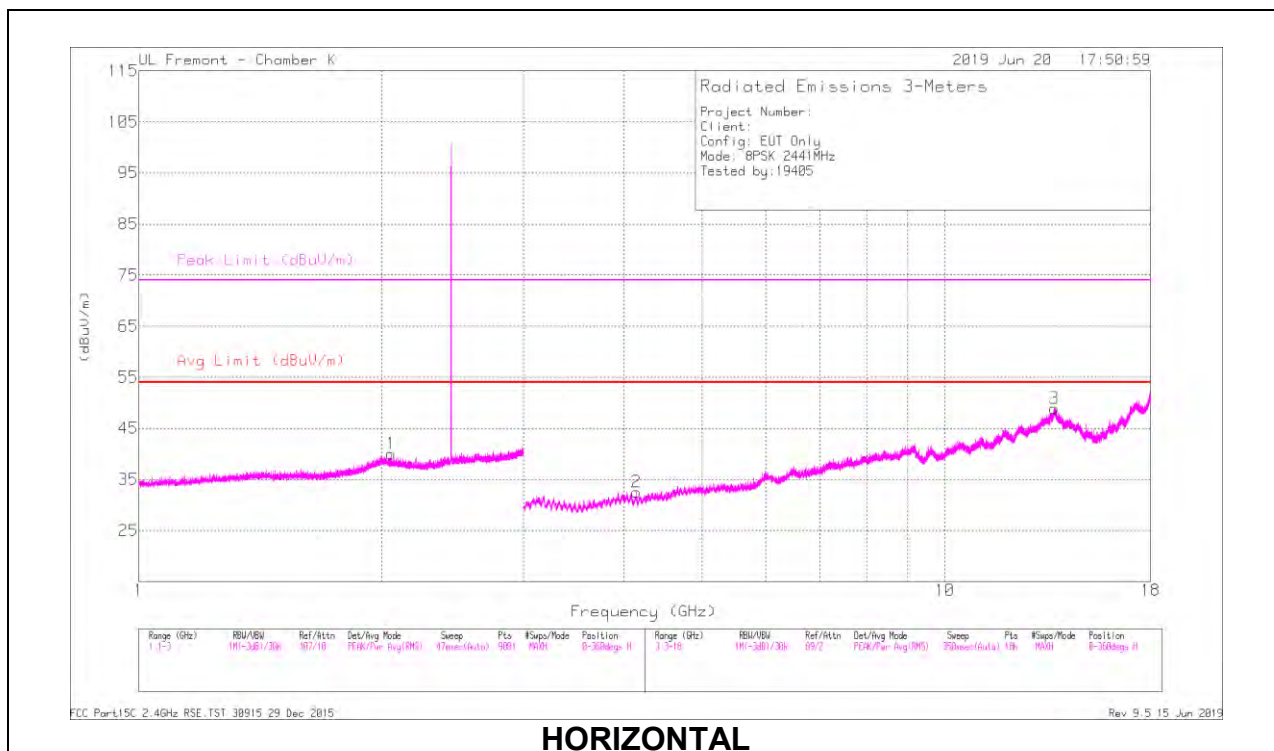
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.32178	40.22	PKFH	31.5	-31.2	40.52	-	-	74	-33.48	360	200	H
	* 4.32428	26.77	VA1T	31.5	-31.2	27.07	54	-26.93	-	-	360	200	H
2	6.77689	36.13	PKFH	35.8	-26.7	45.23	-	-	-	-	360	200	H
	6.77775	22.7	VA1T	35.8	-26.7	31.8	-	-	-	-	360	200	H
3	13.71089	31.81	PKFH	43	-18.6	56.21	-	-	-	-	360	200	H
	13.71009	18.36	VA1T	43	-18.6	42.76	-	-	-	-	360	200	H
4	3.31828	41.7	PKFH	30.4	-32.7	39.4	-	-	-	-	360	200	V
	3.32021	28.12	VA1T	30.4	-32.7	25.82	-	-	-	-	360	200	V
5	* 4.81411	38.72	PKFH	33	-30.4	41.32	-	-	74	-32.68	360	102	V
	* 4.81342	25.59	VA1T	33	-30.4	28.19	54	-25.81	-	-	360	102	V
6	17.2606	31.99	PKFH	43.3	-16.4	58.89	-	-	-	-	360	200	V

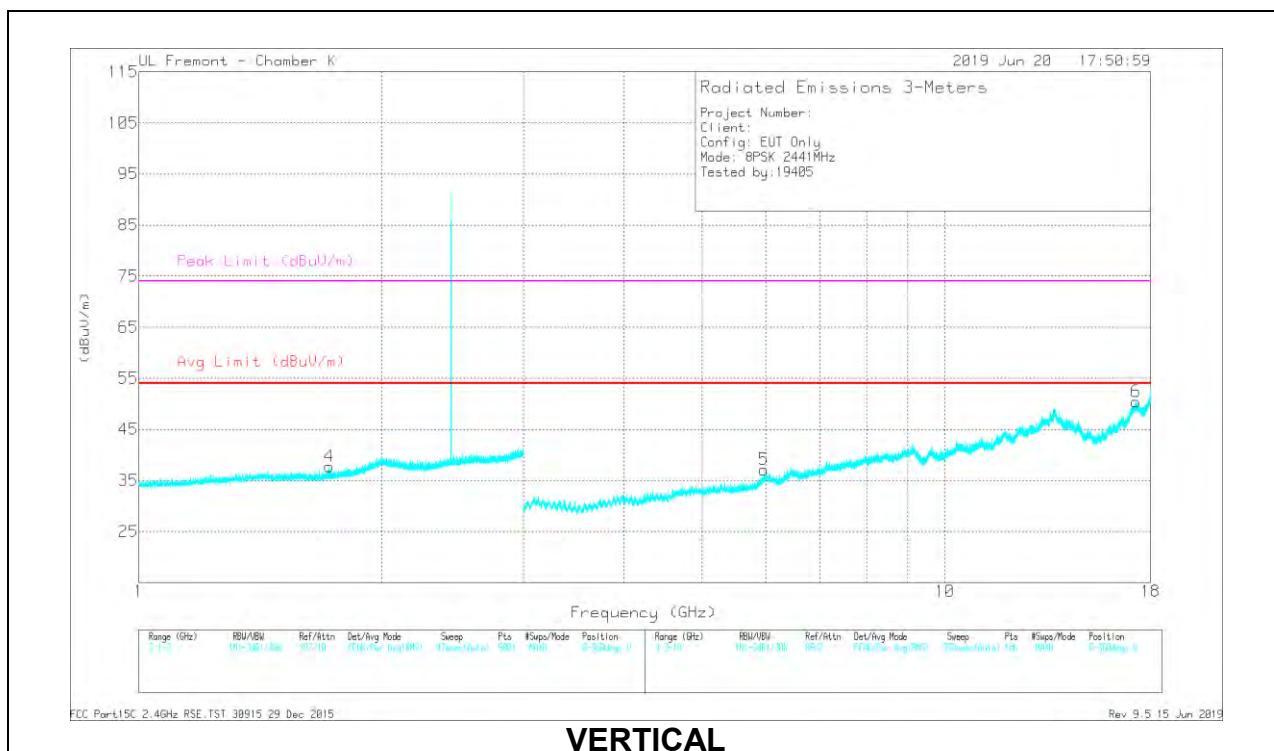
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

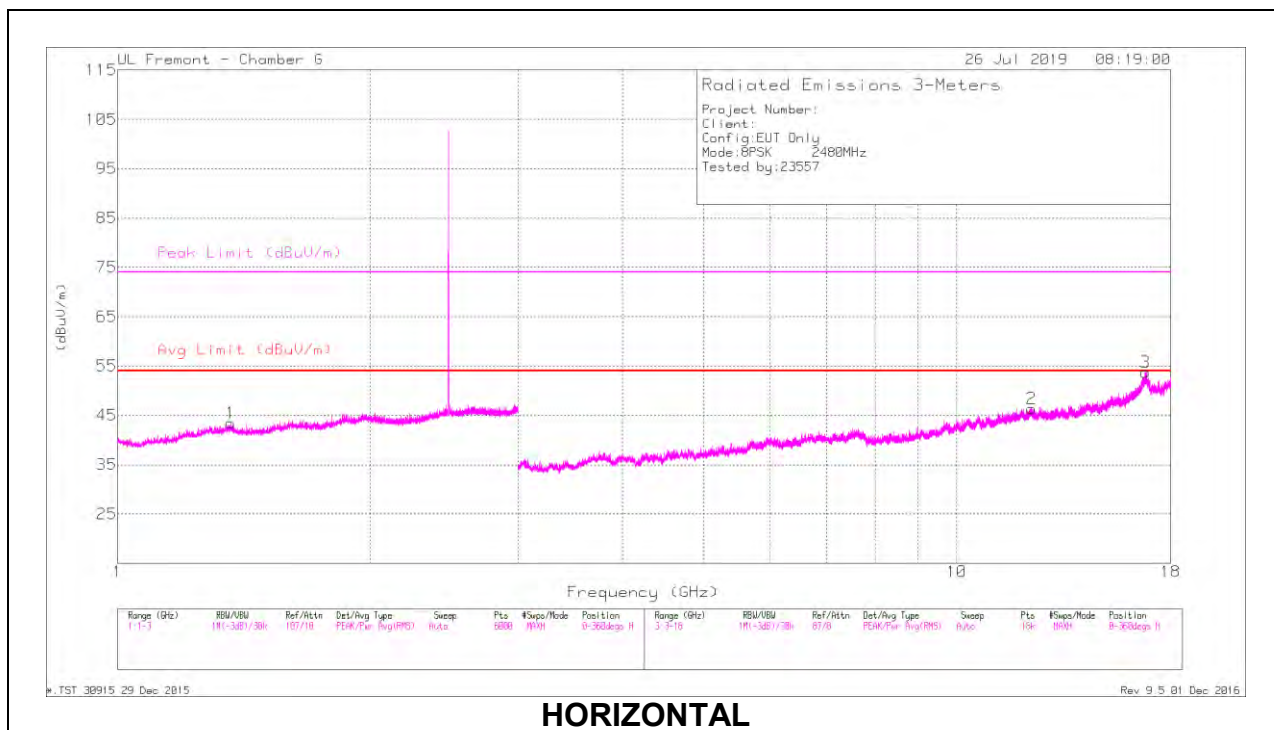
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.05647	43.63	PKFH	27.9	-24.5	47.03	-	-	-	-	360	200	H
	2.05537	30.29	VA1T	27.9	-24.5	33.69	-	-	-	-	360	200	H
4	1.72354	43.89	PKFH	25.2	-24.1	44.99	-	-	-	-	360	102	V
	1.72458	30.28	VA1T	25.2	-24.1	31.38	-	-	-	-	360	102	V
2	* 4.14517	39.09	PKFH	31.2	-30.7	39.59	-	-	74	-34.41	360	200	H
	* 4.14466	25.99	VA1T	31.2	-30.8	26.39	54	-27.61	-	-	360	200	H
3	13.67048	31.18	PKFH	43.1	-18.7	55.58	-	-	-	-	360	200	H
5	5.96614	37.59	PKFH	34.9	-28	44.49	-	-	-	-	360	200	V
6	17.26691	32.01	PKFH	43.3	-16.3	59.01	-	-	-	-	360	200	V

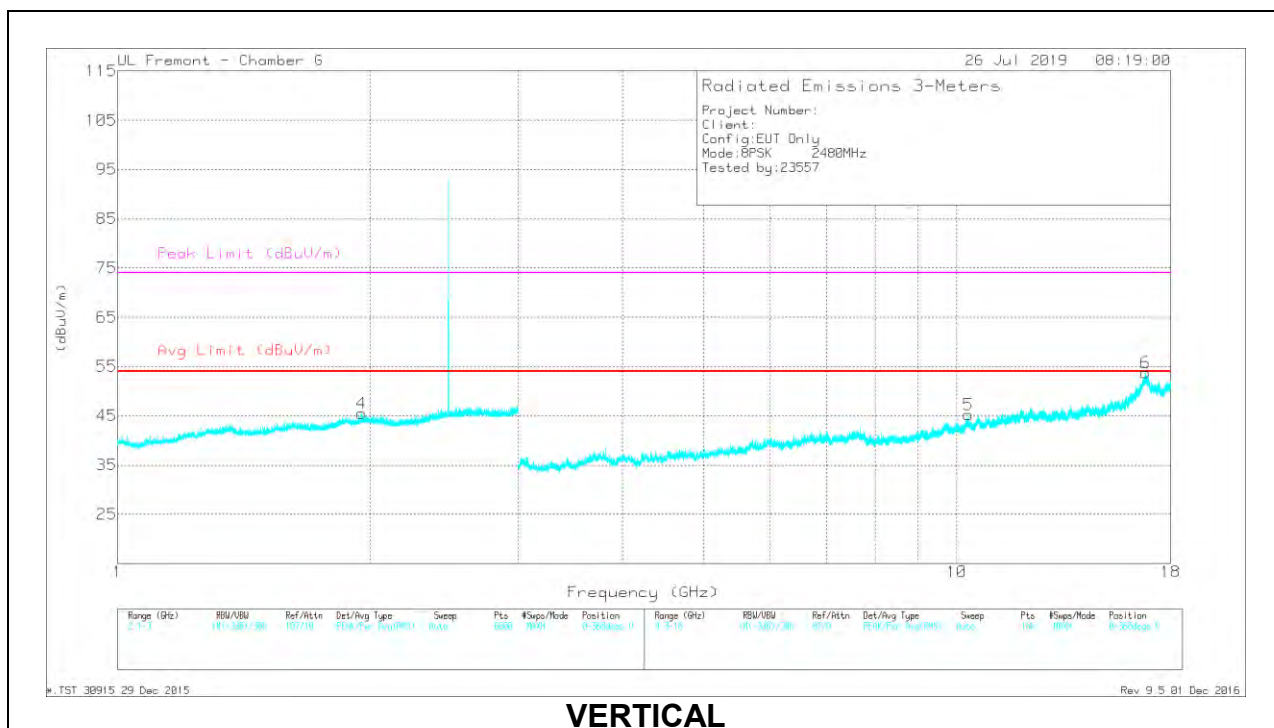
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr/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	* 1.364	42.34	PKFH	29.8	-23.2	48.94	-	-	74	-25.06	47	334	H
	* 1.366	31	VA1T	29.8	-23.2	37.6	54	-16.4	-	-	47	334	H
2	* 12.294	35.86	PKFH	39	-22.4	52.46	-	-	74	-21.54	263	264	H
	* 12.296	23.59	VA1T	39	-22.5	40.09	54	-13.91	-	-	263	264	H
4	1.951	42.23	PKFH	31.9	-22.6	51.53	-	-	-	-	210	103	V
5	10.335	36.57	PKFH	37.5	-23.6	50.47	-	-	-	-	60	295	V
3	16.791	35.15	PKFH	41.8	-17.4	59.55	-	-	-	-	123	138	H
6	16.795	35.19	PKFH	41.8	-17.4	59.59	-	-	-	-	41	202	V

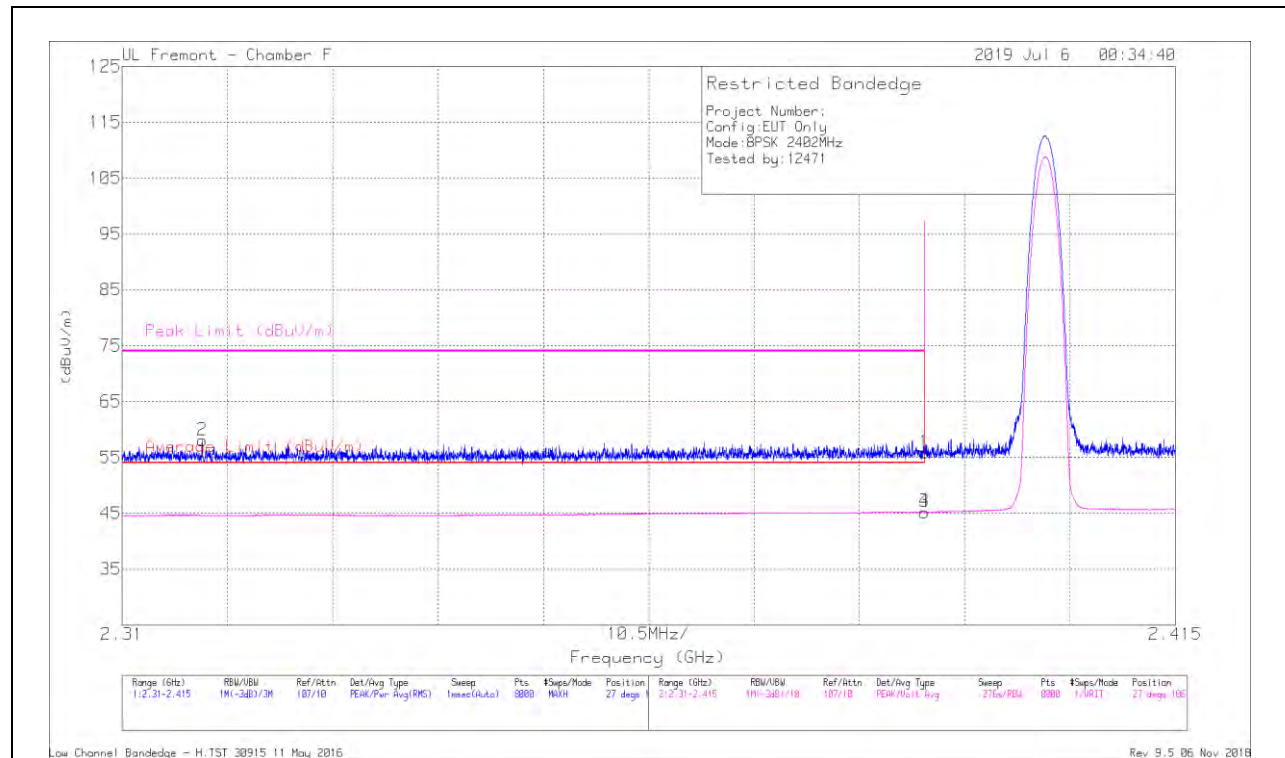
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

Antenna 4

BANEDGE (LOW CHANNEL)

HORIZONTAL RESULT



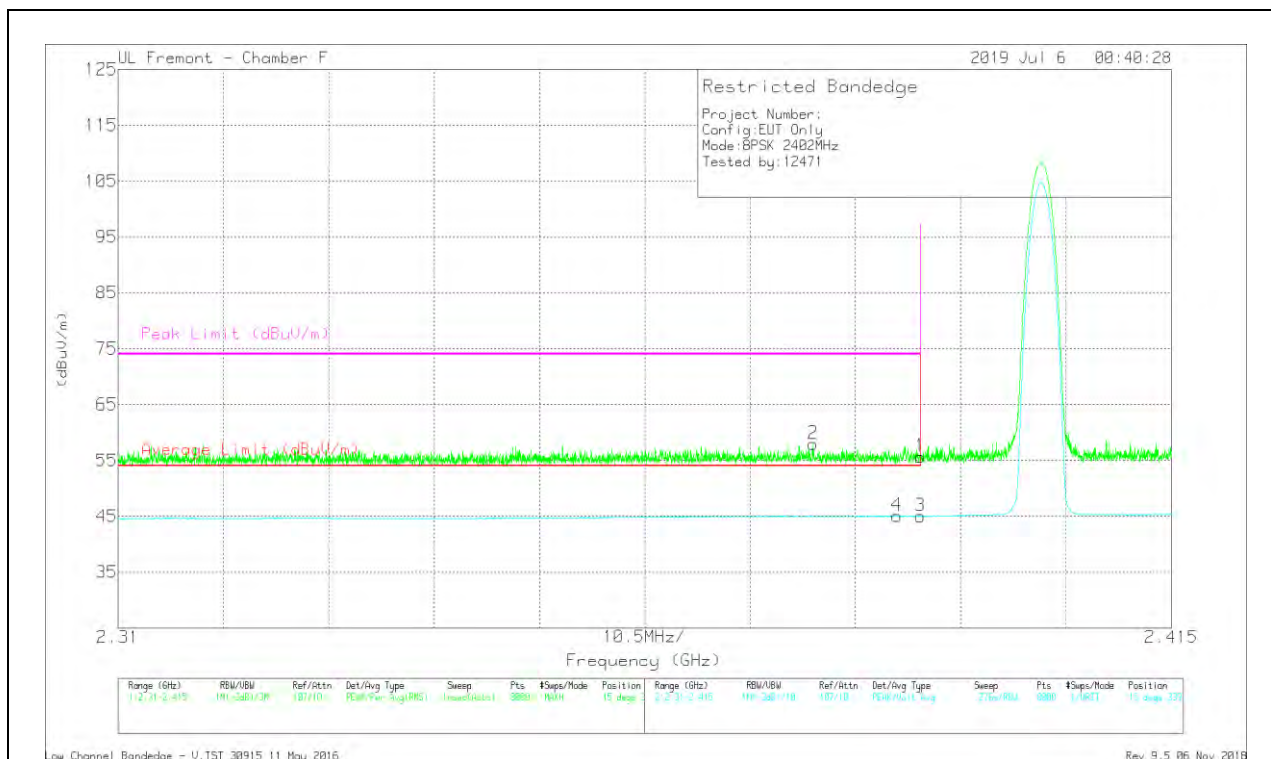
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.37	Pk	32	-14.5	55.87	-	-	74	-18.13	27	106	H
2	* 2.318	40.94	PK	31.7	-14.6	58.04	-	-	74	-15.96	27	106	H
3	* 2.39	27.72	VA1T	32	-14.5	45.22	54	-8.78	-	-	27	106	H
4	* 2.39	27.71	VA1T	32	-14.5	45.21	54	-8.79	-	-	27	106	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.17	Pk	32	-14.5	55.67	-	-	74	-18.33	15	339	V
2	* 2.379	40.46	Pk	31.9	-14.4	57.96	-	-	74	-16.04	15	339	V
3	* 2.39	27.51	VA1T	32	-14.5	45.01	54	-8.99	-	-	15	339	V
4	* 2.388	27.68	VA1T	31.9	-14.5	45.08	54	-8.92	-	-	15	339	V

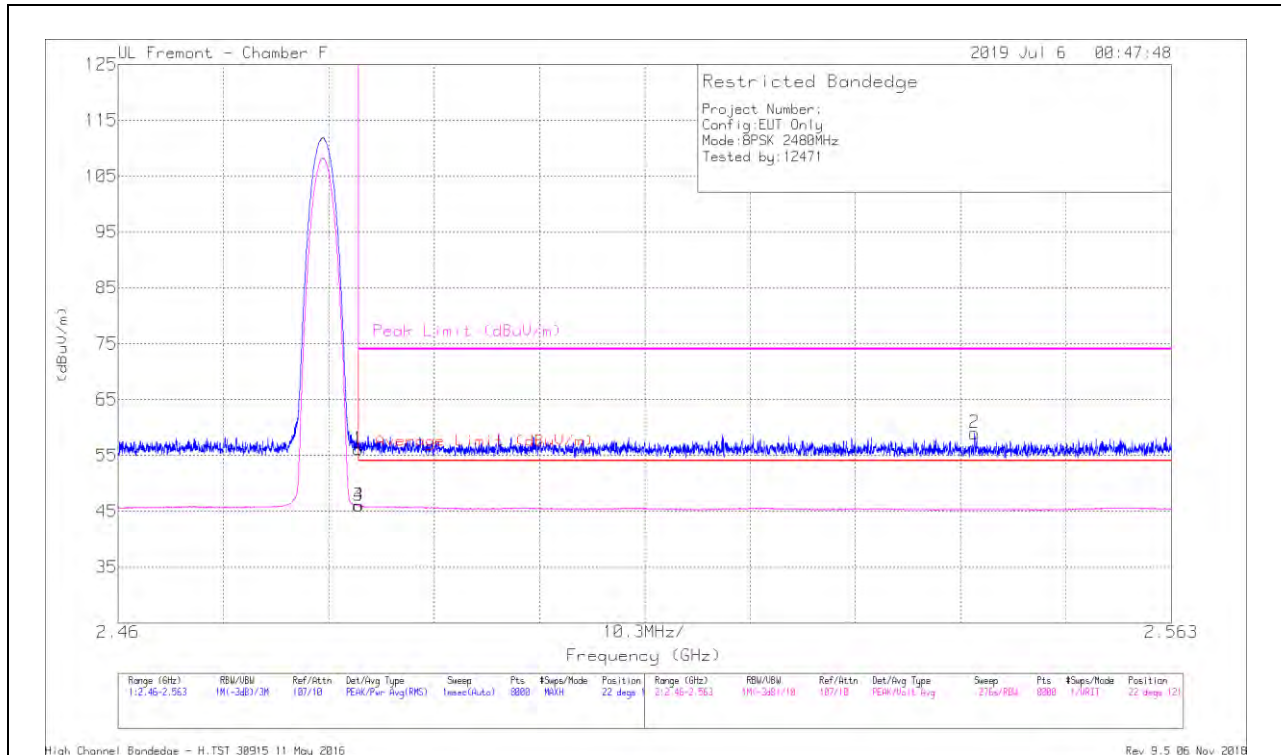
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



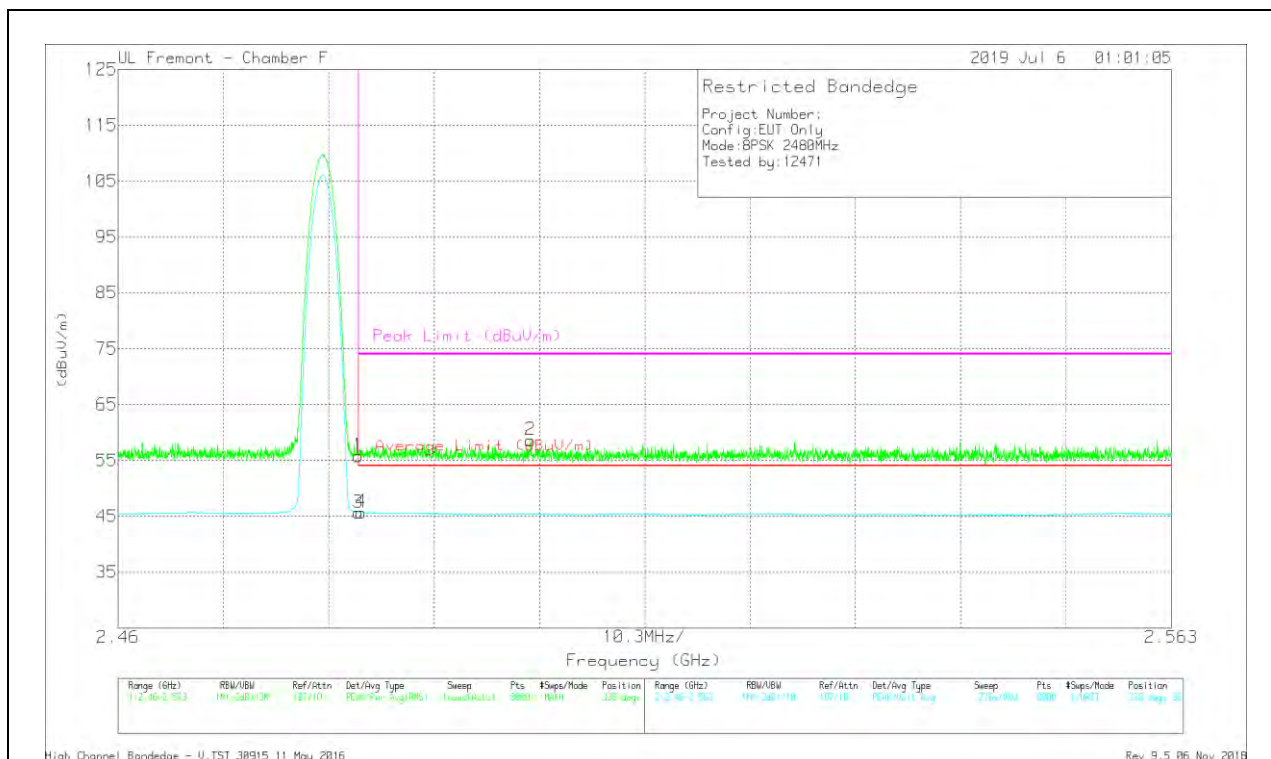
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.4	Pk	32.4	-14.7	56.1	-	-	74	-17.9	22	121	H
2	2.544	41.4	Pk	32.3	-14.7	59	-	-	74	-15	22	121	H
3	* 2.484	28.29	VA1T	32.4	-14.7	45.99	54	-8.01	-	-	22	121	H
4	* 2.484	28.29	VA1T	32.4	-14.7	45.99	54	-8.01	-	-	22	121	H

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

Pk - Peak detector

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbll/Fitr /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	38.09	Pk	32.4	-14.7	55.79	-	-	74	-18.21	338	368	V
2	2.5	40.9	Pk	32.4	-14.7	58.6	-	-	74	-15.4	338	368	V
3	* 2.484	27.95	VA1T	32.4	-14.7	45.65	54	-8.35	-	-	338	368	V
4	* 2.484	28	VA1T	32.4	-14.7	45.7	54	-8.3	-	-	338	368	V

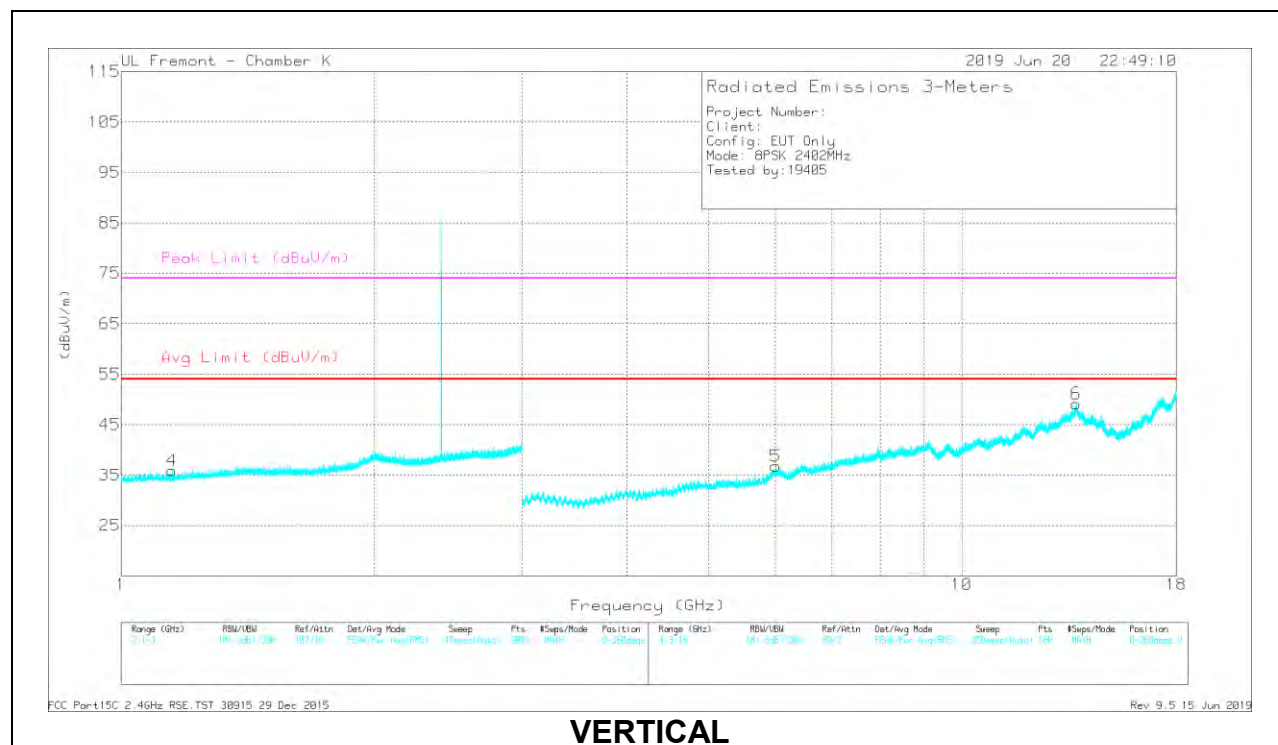
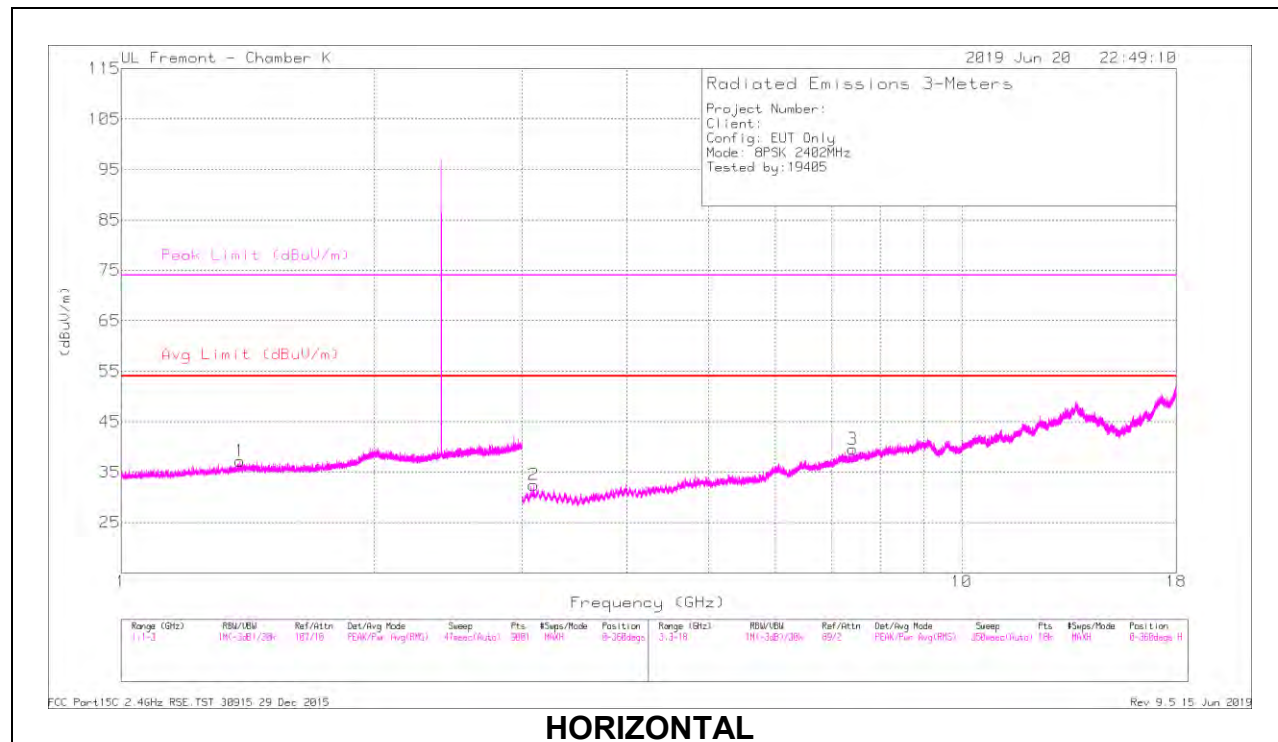
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

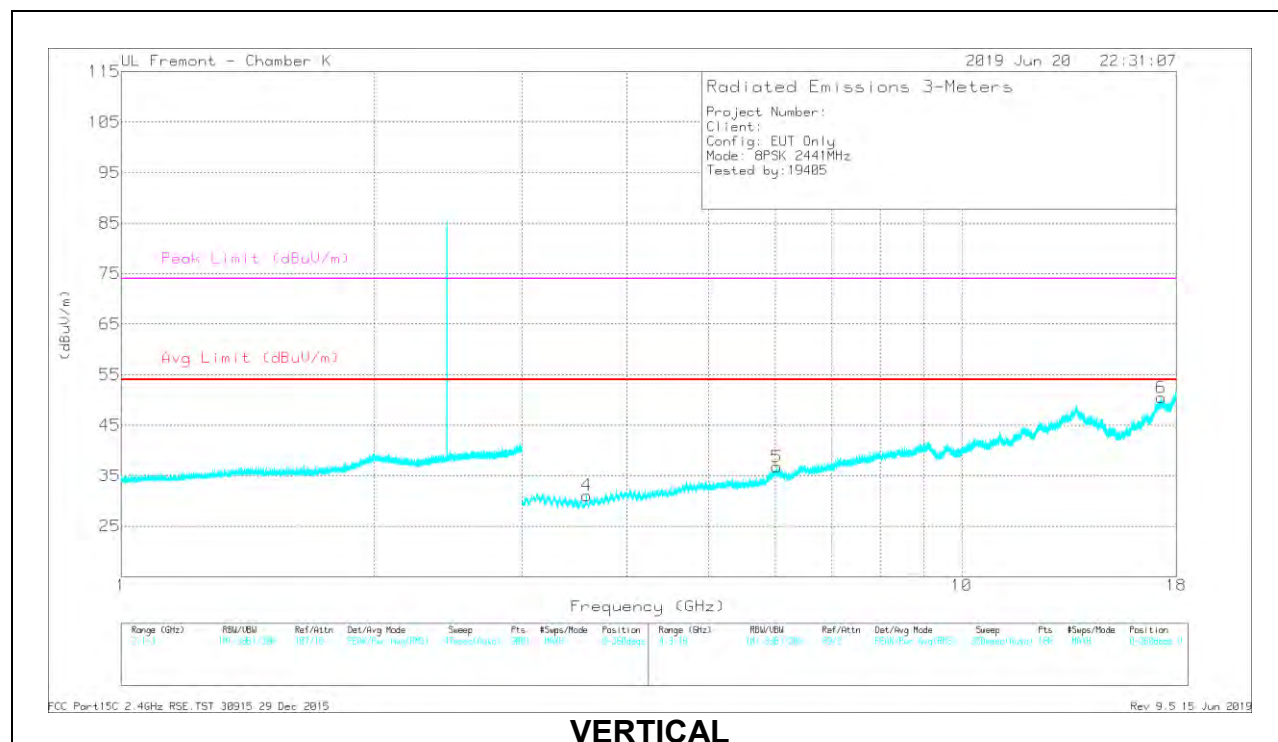
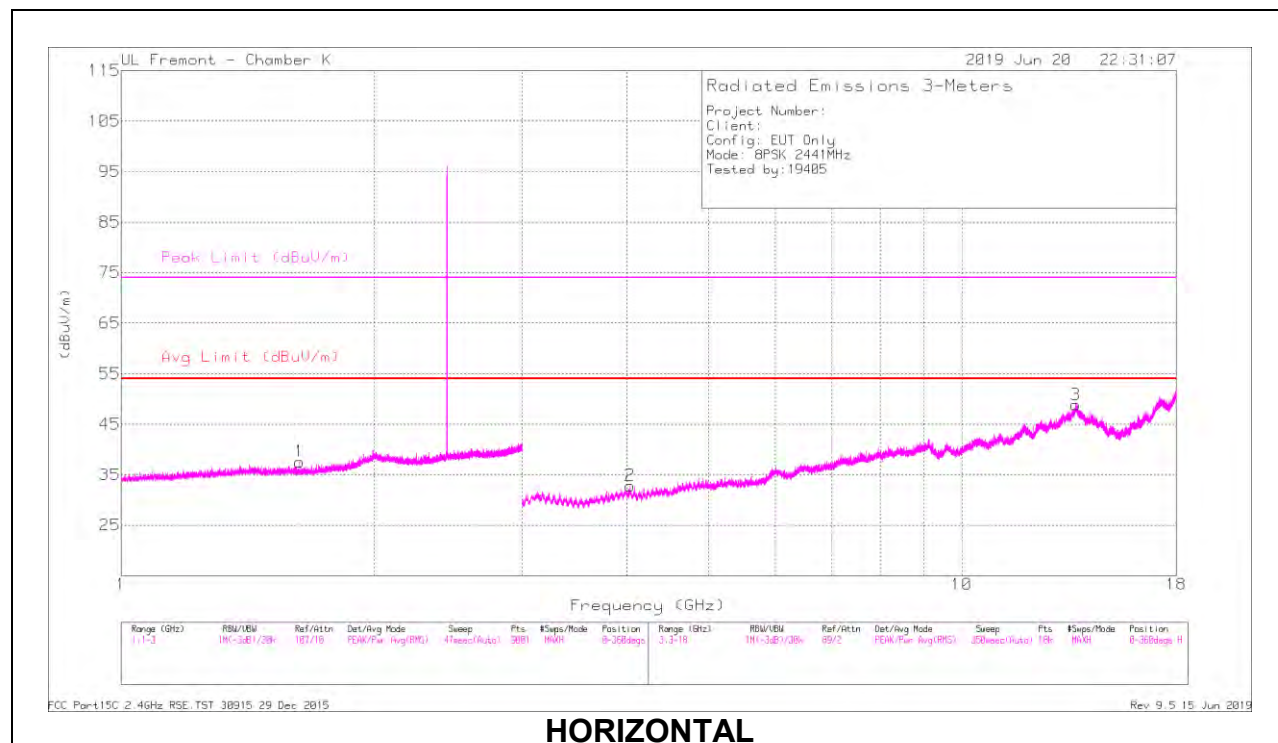
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.38278	43.93	PKFH	24.7	-23.9	44.73	-	-	74	-29.27	360	100	H
	* 1.38568	30.19	VA1T	24.7	-23.9	30.99	54	-23.01	-	-	360	100	H
4	* 1.14786	43.6	PKFH	23.7	-23.9	43.4	-	-	74	-30.6	360	100	V
	* 1.14891	30.07	VA1T	23.7	-23.8	29.97	54	-24.03	-	-	360	100	V
2	3.09784	42.64	PKFH	30.4	-33.3	39.74	-	-	-	-	360	200	H
	3.09406	28.9	VA1T	30.4	-33.4	25.9	-	-	-	-	360	200	H
3	* 7.41185	35.74	PKFH	37.1	-26.4	46.44	-	-	74	-27.56	360	200	H
	* 7.41446	22.45	VA1T	37.1	-26.4	33.15	54	-20.85	-	-	360	200	H
5	6.00695	36.63	PKFH	35	-27.5	44.13	-	-	-	-	360	200	V
6	13.69204	18.17	VA1T	43.1	-18.7	42.57	-	-	-	-	360	200	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

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

MID CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.63128	43.76	PKFH	24.9	-24	44.66	-	-	-	-	360	200	H
	1.63099	30.28	VA1T	24.9	-24	31.18	-	-	-	-	360	200	H
2	* 4.02725	40.81	PKFH	31.4	-31.3	40.91	-	-	74	-33.09	360	200	H
	* 4.03116	26.96	VA1T	31.4	-31.3	27.06	54	-26.94	-	-	360	200	H
3	13.66095	32.45	PKFH	43.1	-18.6	56.95	-	-	-	-	360	102	H
	13.65794	17.95	VA1T	43.1	-18.6	42.45	-	-	-	-	360	102	H
4	* 3.57913	40.42	PKFH	29.9	-32.2	38.12	-	-	74	-35.88	360	102	V
	* 3.58088	27.56	VA1T	29.8	-32.3	25.06	54	-28.94	-	-	360	102	V
5	6.02856	36.67	PKFH	35	-27.3	44.37	-	-	-	-	360	200	V
6	17.26998	32.19	PKFH	43.3	-16.2	59.29	-	-	-	-	360	102	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

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