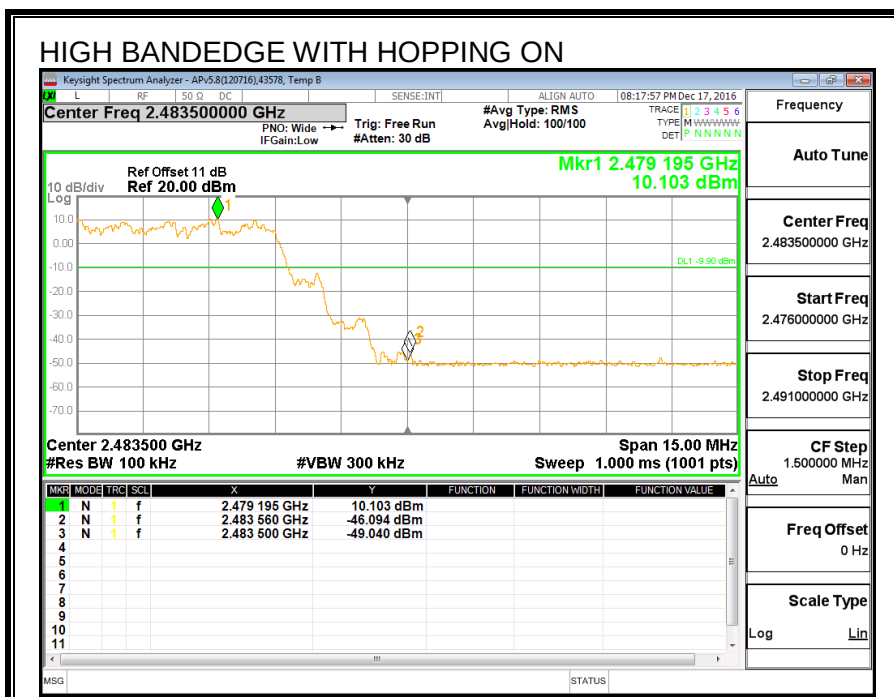
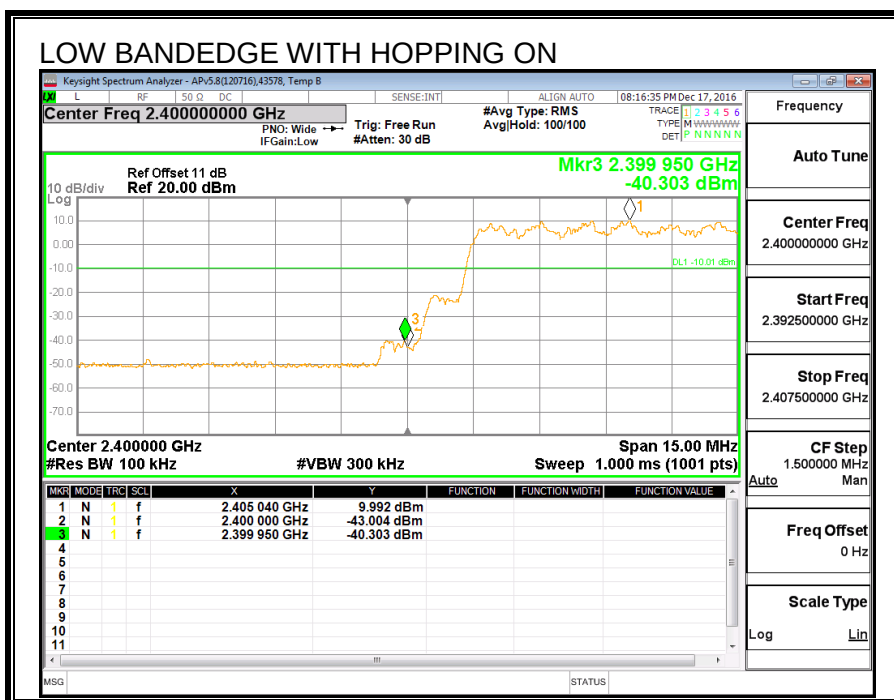




9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

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

TEST PROCEDURE

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

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

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

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

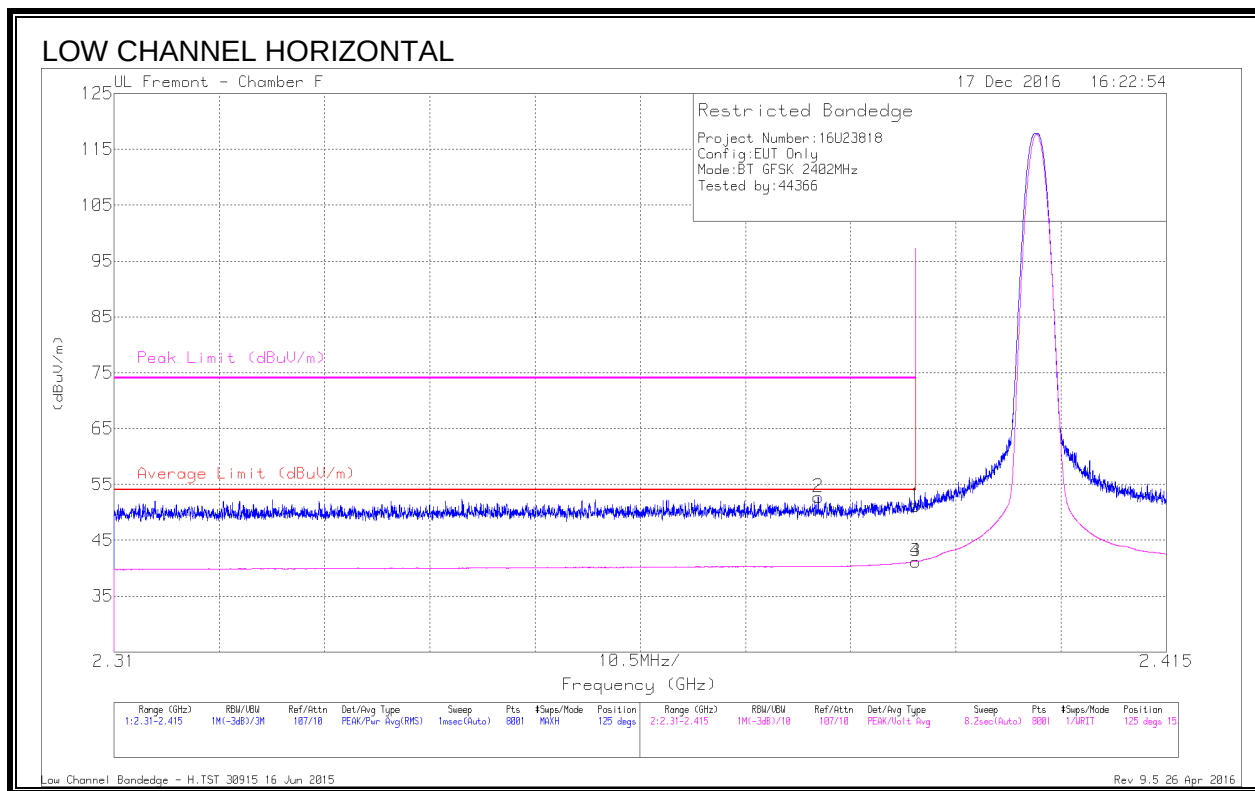
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak→ this is a note from Radiated automation software. When the frequency is below 1G, software is using RB=100kHz; when the frequency is above 1G, software is using RB=1MHz.

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

RESULTS

9.2. HIGH POWER BASIC DATA RATE GFSK MODULATION

9.2.1. RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.39	40.01	Pk	32.1	-20.9	51.21	-	-	74	-22.79	125	153	H
2	* 2.38	41.54	Pk	32.1	-20.9	52.74	-	-	74	-21.26	125	153	H
3	* 2.39	30	VA1T	32.1	-20.9	41.2	54	-12.8	-	-	125	153	H
4	* 2.39	30	VA1T	32.1	-20.9	41.2	54	-12.8	-	-	125	153	H

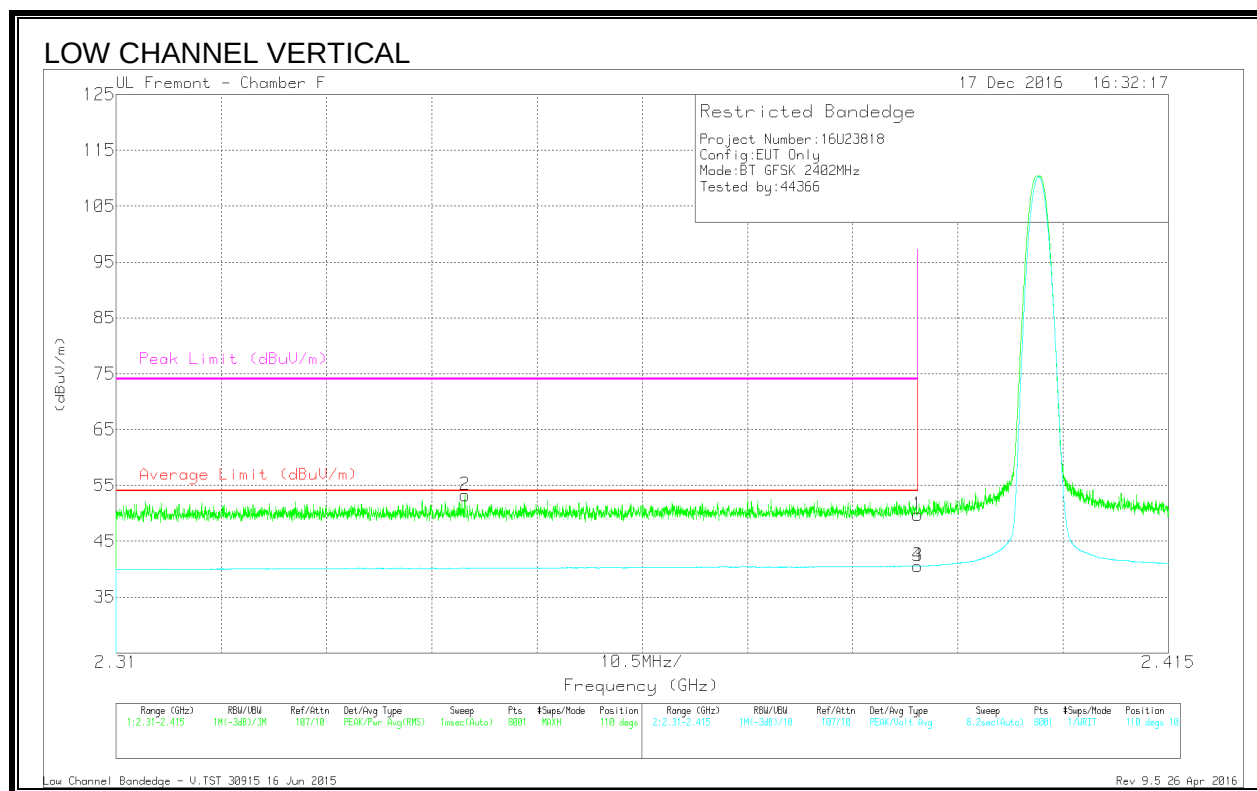
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

Low Channel Bandedge - H.TST 30915 16 Jun 2015

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	38.55	Pk	32.1	-20.9	49.75	-	-	74	-24.25	110	103	V
2	* 2.345	42.37	Pk	31.9	-21	53.27	-	-	74	-20.73	110	103	V
3	* 2.39	29.37	VA1T	32.1	-20.9	40.57	54	-13.43	-	-	110	103	V
4	* 2.39	29.38	VA1T	32.1	-20.9	40.58	54	-13.42	-	-	110	103	V

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

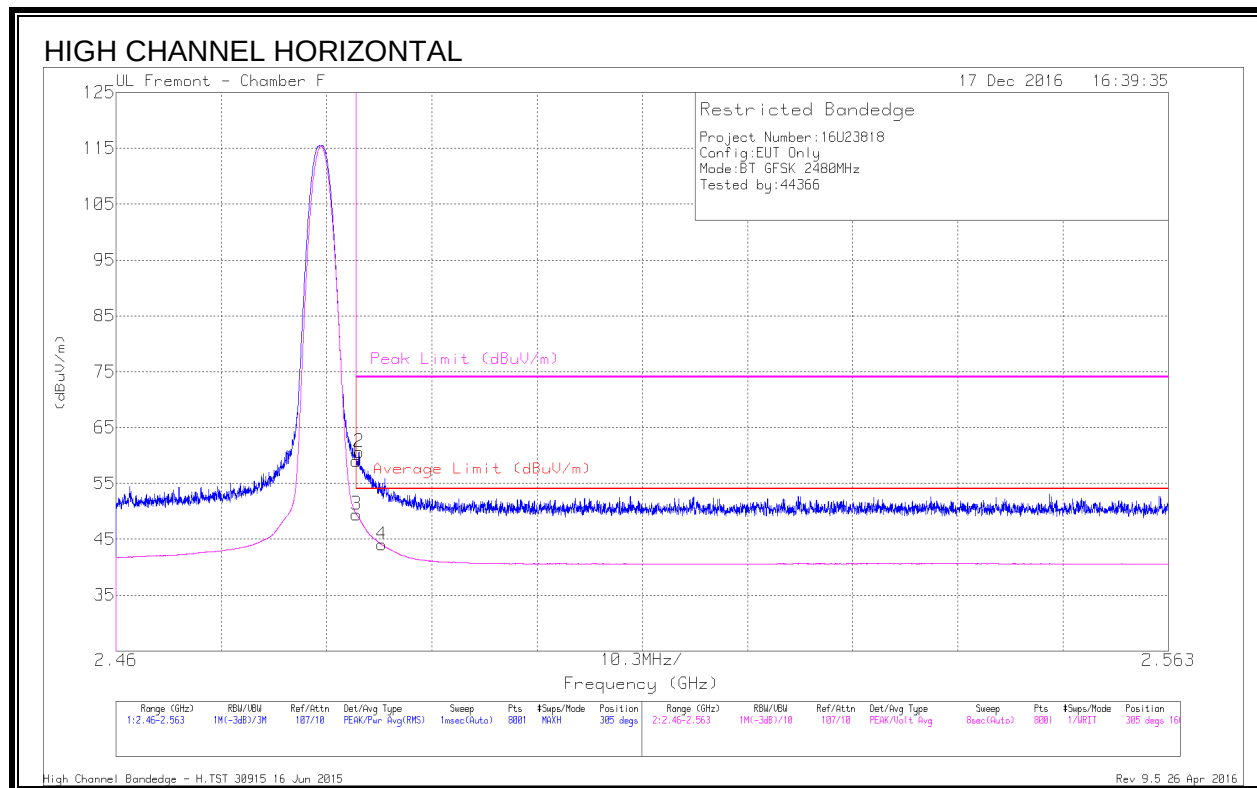
Pk - Peak detector

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

Low Channel Bandedge - V.TST 30915 16 Jun 2015

Rev 9.5 26 Apr 2016

9.2.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	47.71	Pk	32.3	-21	59.01	-	-	74	-14.99	305	166	H
2	* 2.484	49.32	Pk	32.3	-21	60.62	-	-	74	-13.38	305	166	H
3	* 2.484	38.14	VA1T	32.3	-21	49.44	54	-4.56	-	-	305	166	H
4	* 2.486	32.65	VA1T	32.3	-20.9	44.05	54	-9.95	-	-	305	166	H

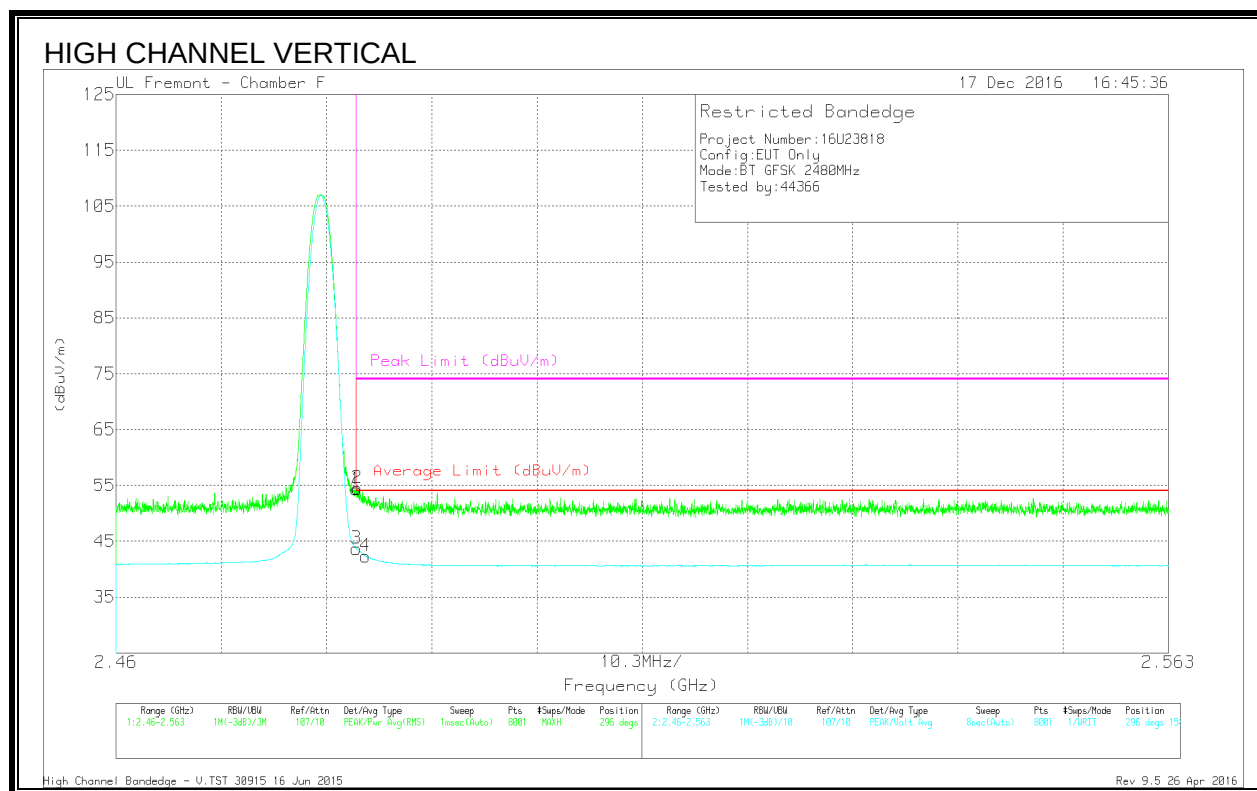
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

High Channel Bandedge - H.TST 30915 16 Jun 2015

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	42.97	Pk	32.3	-21	54.27	-	-	74	-19.73	296	158	V
2	* 2.484	43.19	Pk	32.3	-21	54.49	-	-	74	-19.51	296	158	V
3	* 2.484	32.37	VA1T	32.3	-21	43.67	54	-10.33	-	-	296	158	V
4	* 2.484	31.03	VA1T	32.3	-21	42.33	54	-11.67	-	-	296	158	V

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

Pk - Peak detector

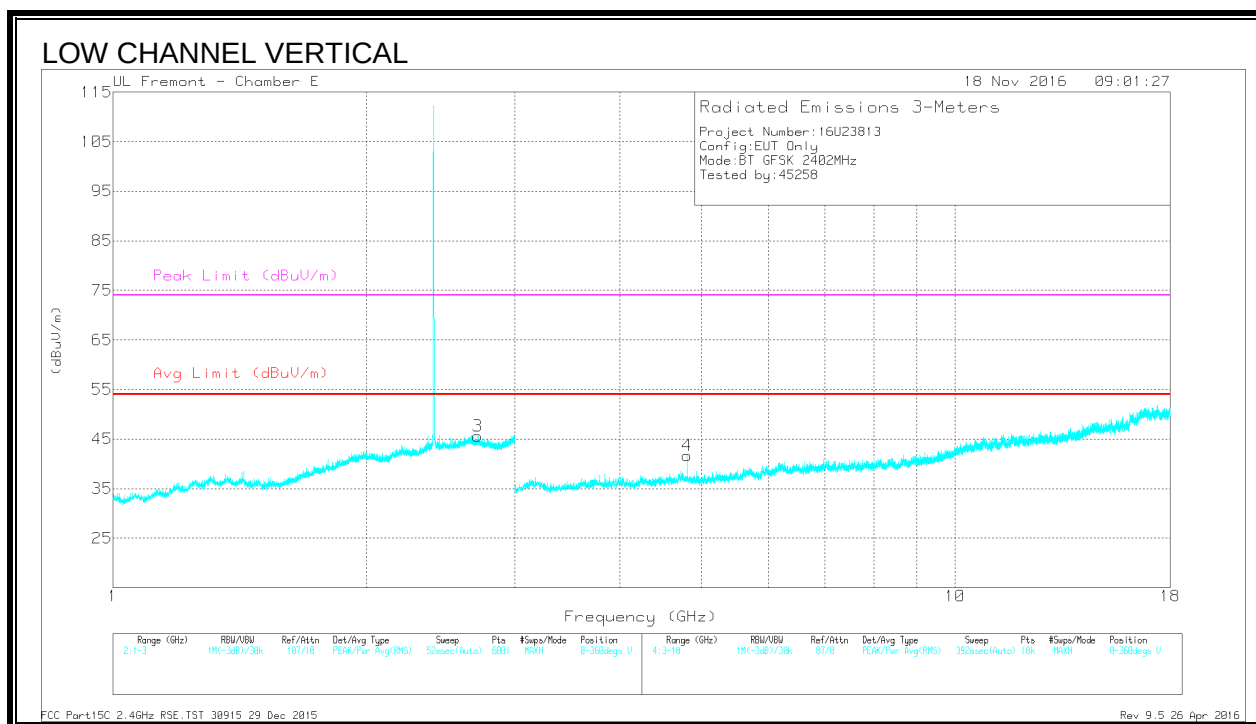
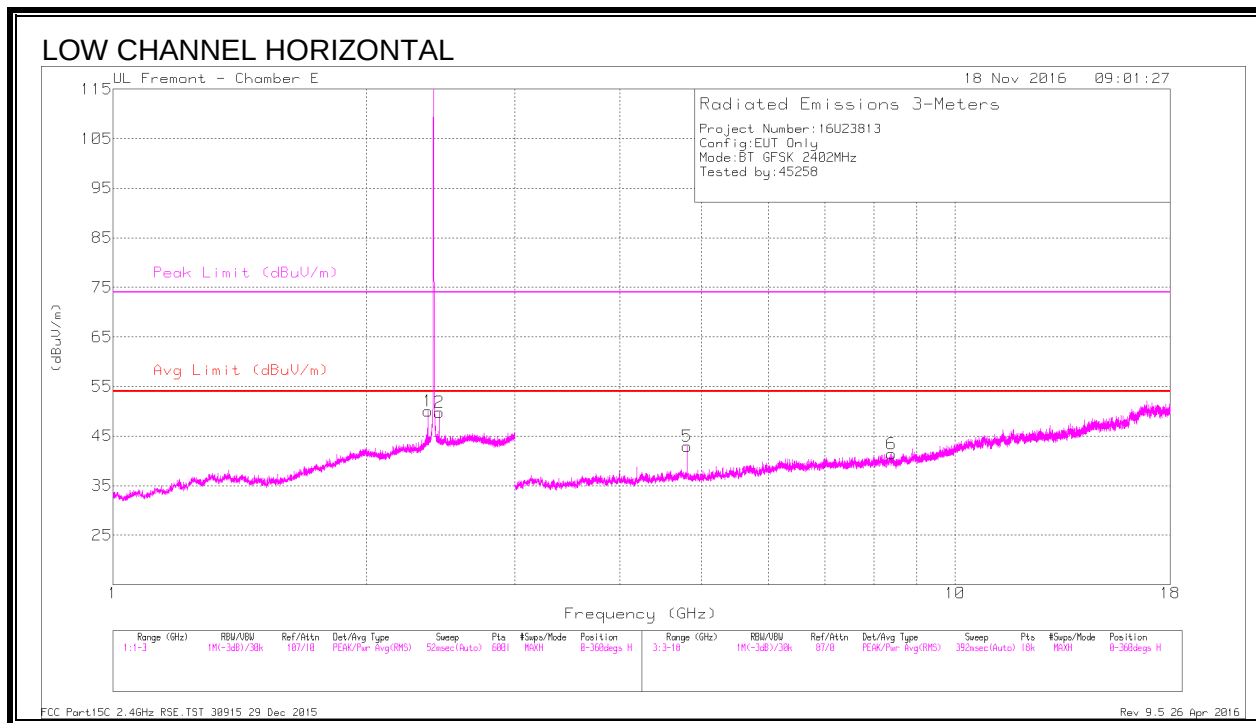
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

High Channel Bandedge - V.TST 30915 16 Jun 2015

Rev 9.5 26 Apr 2016

9.2.3. HARMONICS AND SPURIOUS EMISSIONS

LOW HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.364	42.71	PKFH	31.9	-19.7	54.91	-	-	74	-19.09	97	180	H
	* 2.365	34.11	VA1T	31.9	-19.7	46.31	54	-7.69	-	-	97	180	H
3	* 2.712	37.02	PKFH	32.6	-19.3	50.32	-	-	74	-23.68	218	127	V
	* 2.713	25.31	VA1T	32.6	-19.3	38.61	54	-15.39	-	-	218	127	V
5	* 4.804	43.6	PKFH	34	-29.6	48	-	-	74	-26	82	110	H
	* 4.804	36.84	VA1T	34	-29.6	41.24	54	-12.76	-	-	82	110	H
6	* 8.408	36.5	PKFH	35.7	-25.2	47	-	-	74	-27	268	376	H
	* 8.409	24.97	VA1T	35.7	-25.3	35.37	54	-18.63	-	-	268	376	H
4	* 4.804	42.28	PKFH	34	-29.6	46.68	-	-	74	-27.32	152	101	V
	* 4.804	35.35	VA1T	34	-29.6	39.75	54	-14.25	-	-	152	101	V
2	2.439	41.66	PKFH	32.2	-19.8	54.06	-	-	-	-	92	179	H
	2.439	33.83	VA1T	32.2	-19.8	46.23	-	-	-	-	92	179	H

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

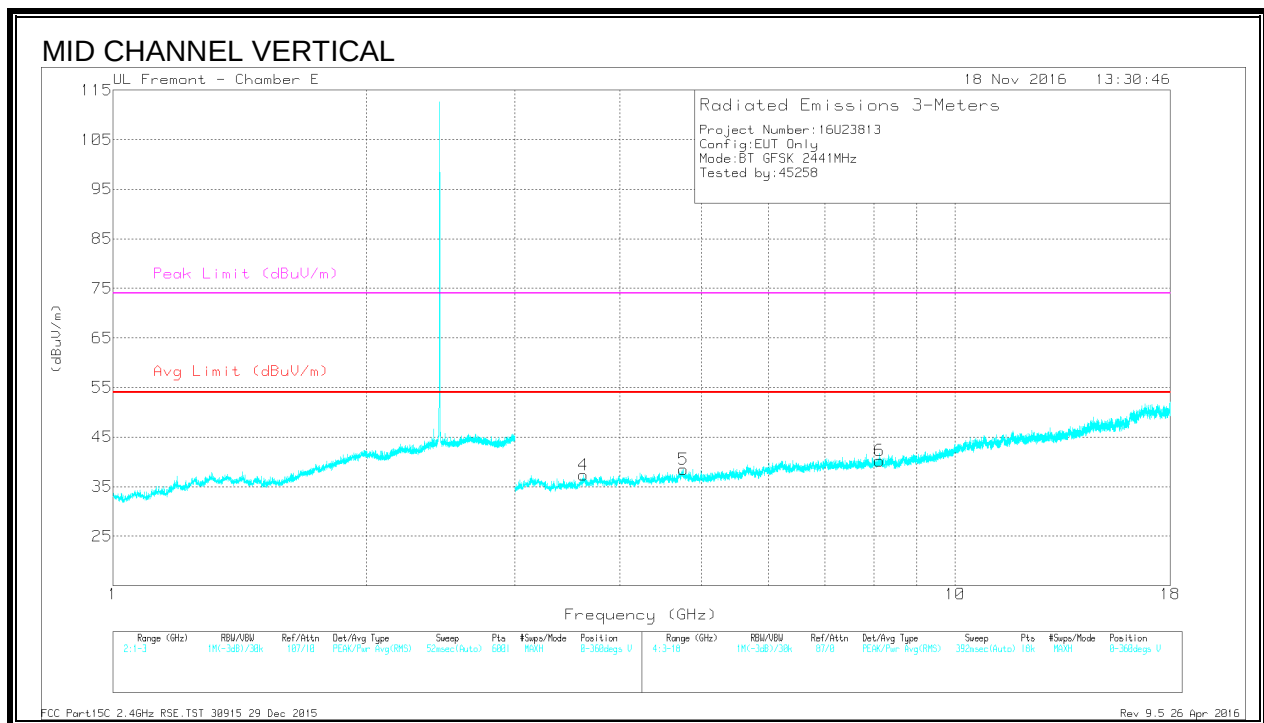
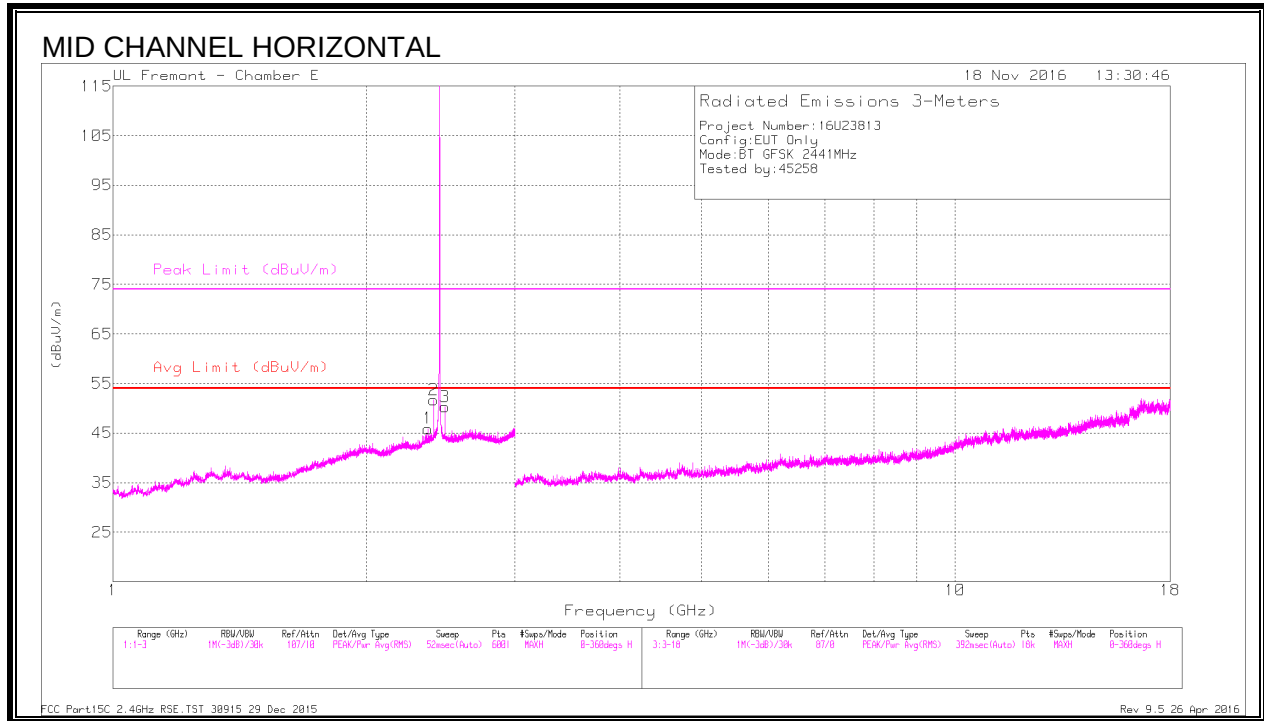
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

MID HORIZONTAL



Data

Margin	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.367	38.99	PKFH	31.9	-19.8	51.09	-	-	74	-22.91	278	188	H
	* 2.366	29.27	VA1T	31.9	-19.8	41.37	54	-12.63	-	-	278	188	H
4	* 3.617	39.52	PKFH	33	-30.5	42.02	-	-	74	-31.98	341	174	V
	* 3.617	28.44	VA1T	33	-30.5	30.94	54	-23.06	-	-	341	174	V
5	* 4.751	38.89	PKFH	34	-28.9	43.99	-	-	74	-30.01	116	199	V
	* 4.75	27.59	VA1T	34	-28.9	32.69	54	-21.31	-	-	116	199	V
6	* 8.131	36.9	PKFH	35.7	-25.8	46.8	-	-	74	-27.2	51	153	V
	* 8.13	25.06	VA1T	35.7	-25.8	34.96	54	-19.04	-	-	51	153	V
2	2.403	42.61	PKFH	32.2	-19.7	55.11	-	-	-	-	270	198	H
	2.404	34.34	VA1T	32.2	-19.7	46.84	-	-	-	-	270	198	H
3	2.478	42.99	PKFH	32.3	-19.7	55.59	-	-	-	-	273	142	H
	2.478	33.25	VA1T	32.3	-19.7	45.85	-	-	-	-	273	142	H

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

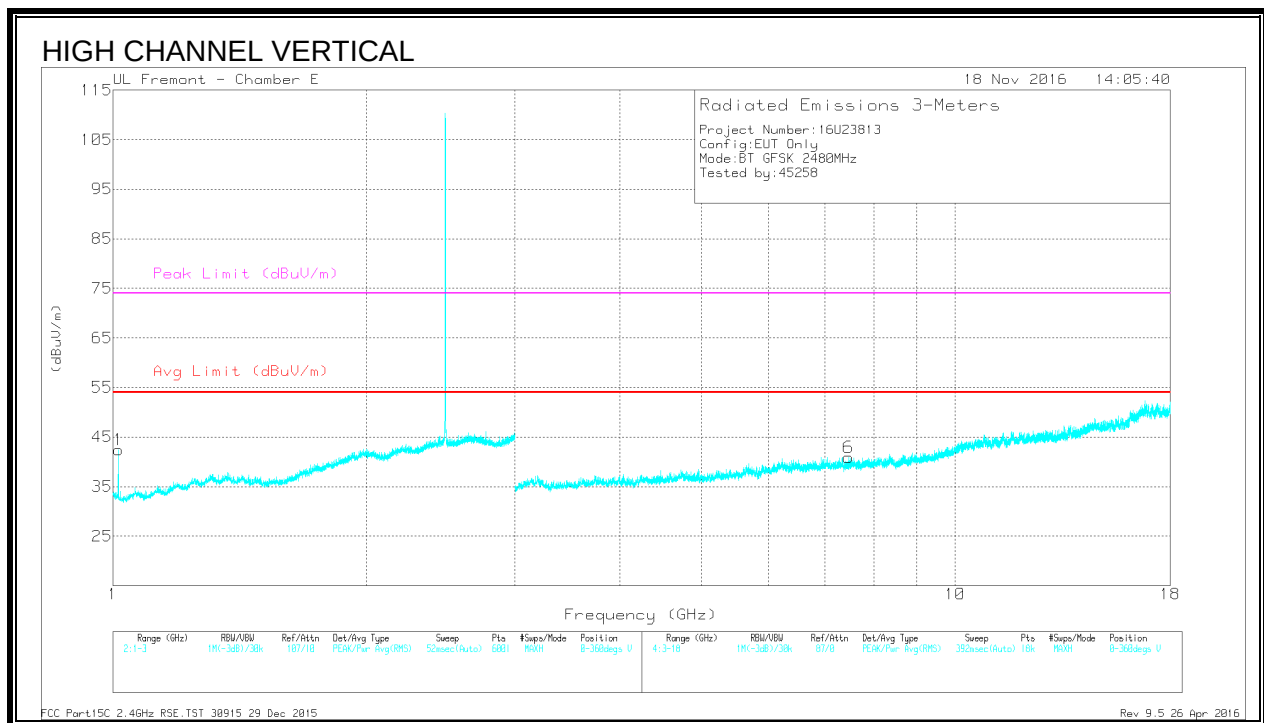
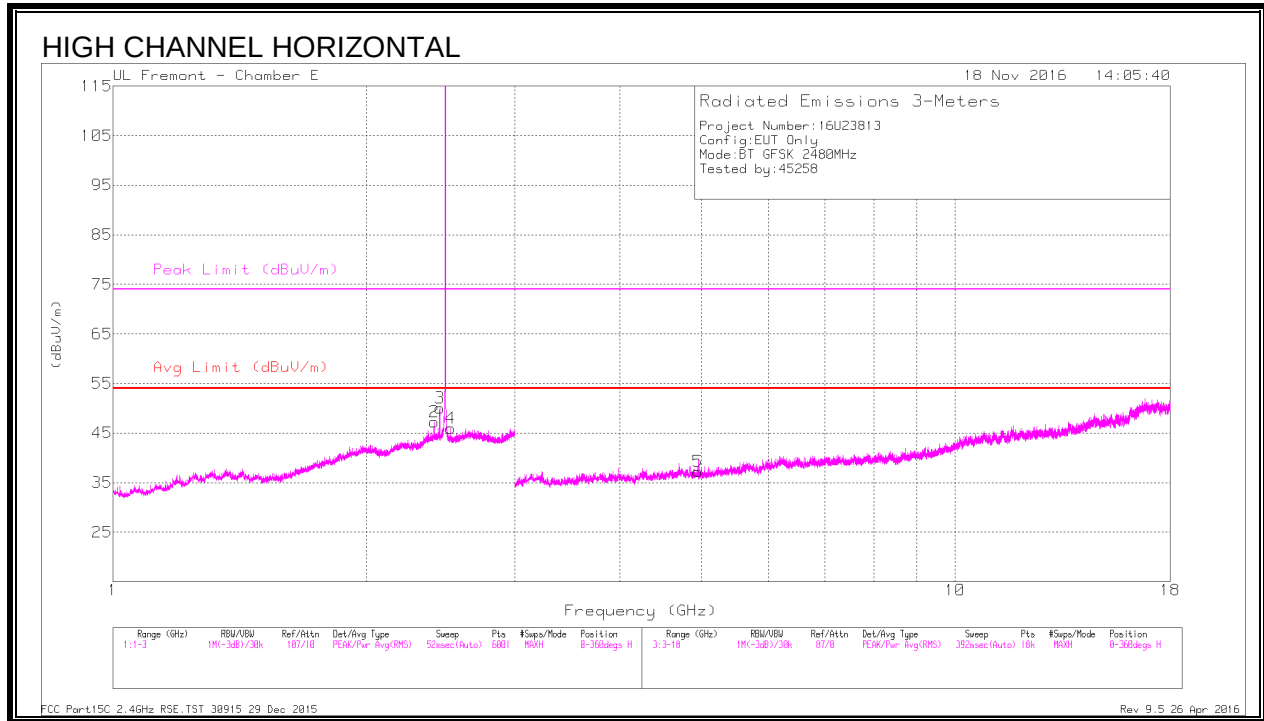
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

HIGH HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb I/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.013	36.13	PKFH	27.5	-23.4	40.23	-	-	74	-33.77	236	232	V
	* 1.013	24.1	VA1T	27.5	-23.4	28.2	54	-25.8	-	-	236	232	V
5	* 4.946	39.9	PKFH	34	-30.3	43.6	-	-	74	-30.4	166	239	H
	* 4.945	28.47	VA1T	34	-30.4	32.07	54	-21.93	-	-	166	239	H
6	* 7.469	38.2	PKFH	35.5	-27.3	46.4	-	-	74	-27.6	249	184	V
	* 7.47	26.01	VA1T	35.5	-27.2	34.31	54	-19.69	-	-	249	184	V
2	2.405	39.85	PKFH	32.2	-19.7	52.35	-	-	-	-	87	189	H
	2.405	29.3	VA1T	32.2	-19.7	41.8	-	-	-	-	87	189	H
3	2.442	42.38	PKFH	32.2	-19.6	54.98	-	-	-	-	93	199	H
	2.443	32.94	VA1T	32.2	-19.6	45.54	-	-	-	-	93	199	H
4	2.517	38.61	PKFH	32.3	-19.7	51.21	-	-	-	-	96	202	H
	2.517	28.95	VA1T	32.3	-19.7	41.55	-	-	-	-	96	202	H

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

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

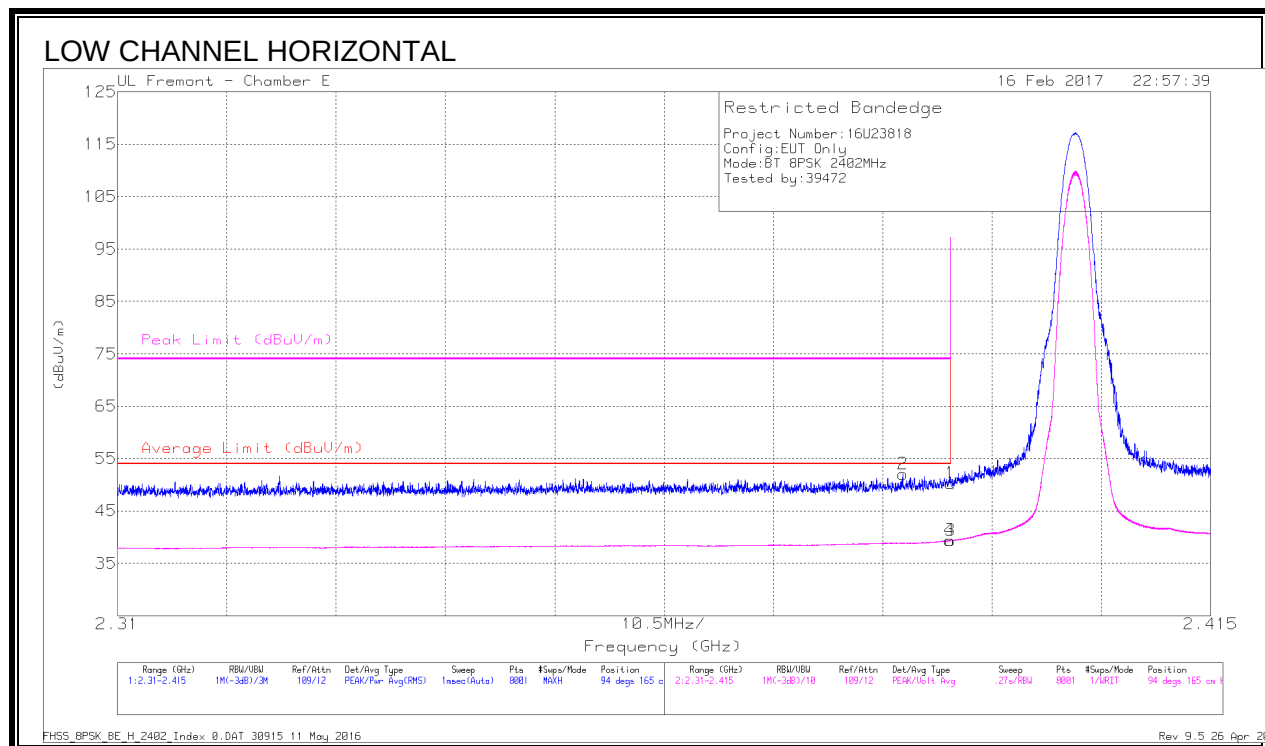
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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Rev 9.5 26 Apr 2016

9.3. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

9.3.1. RESTRICTED BANDEDGE (LOW CHANNEL)

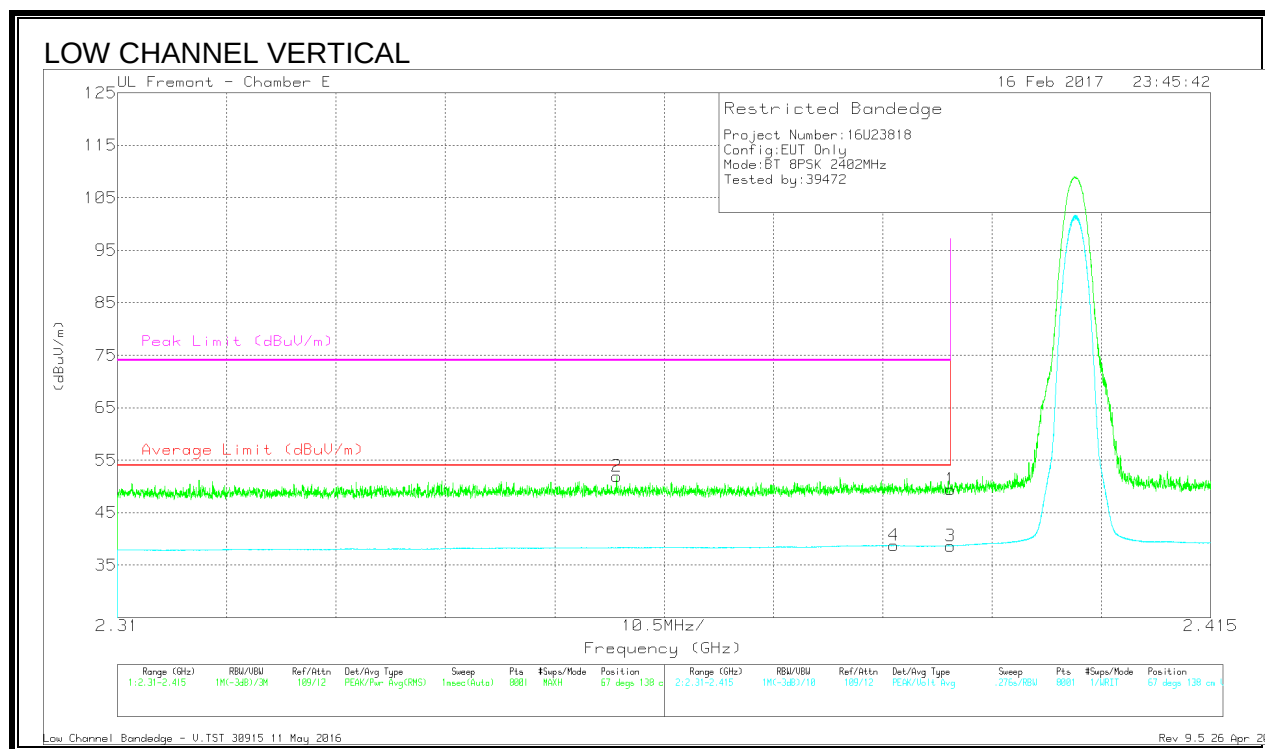


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	37.96	Pk	32	-19.7	50.26	-	-	74	-23.74	94	165	H
2	* 2.385	39.66	Pk	32	-19.6	52.06	-	-	74	-21.94	94	165	H
3	* 2.39	27.06	VA1T	32	-19.7	39.36	54	-14.64	-	-	94	165	H
4	* 2.39	27.05	VA1T	32	-19.7	39.35	54	-14.65	-	-	94	165	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



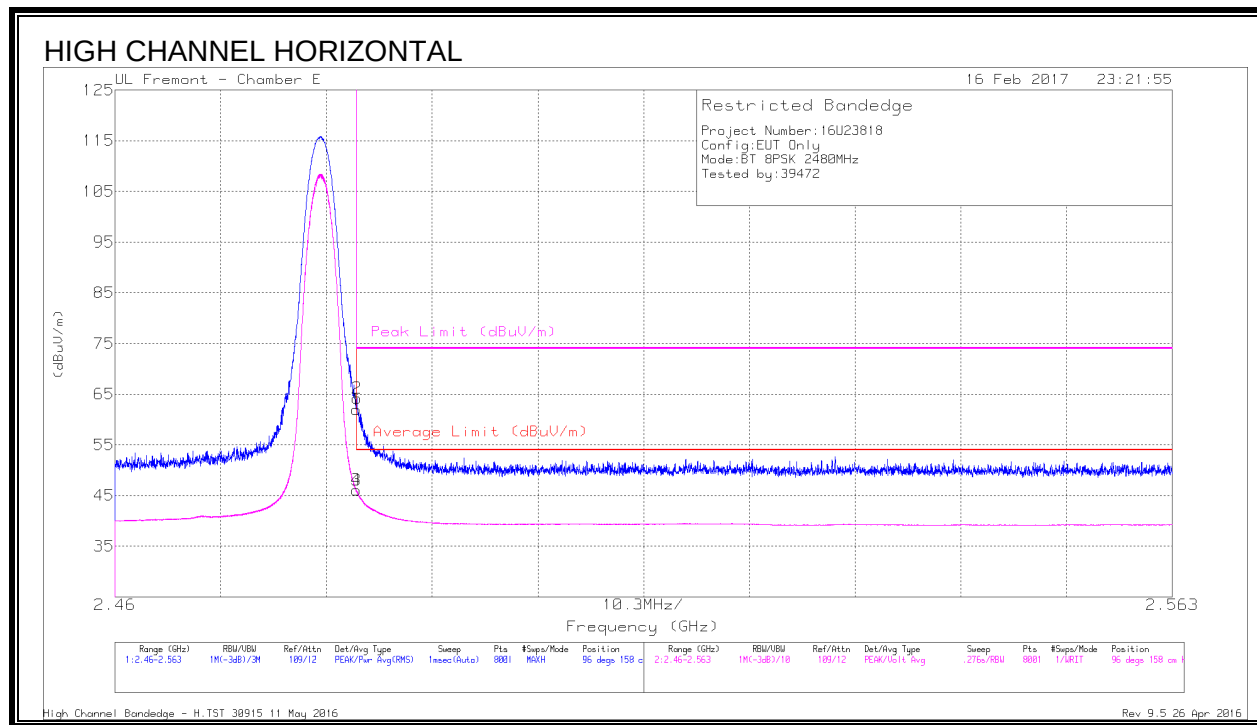
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	37.09	Pk	32	-19.7	49.39	-	-	74	-24.61	67	138	V
2	* 2.358	39.7	Pk	31.9	-19.7	51.9	-	-	74	-22.1	67	138	V
3	* 2.39	26.35	VA1T	32	-19.7	38.65	54	-15.35	-	-	67	138	V
4	* 2.385	26.26	VA1T	32	-19.5	38.76	54	-15.24	-	-	67	138	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

9.3.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)

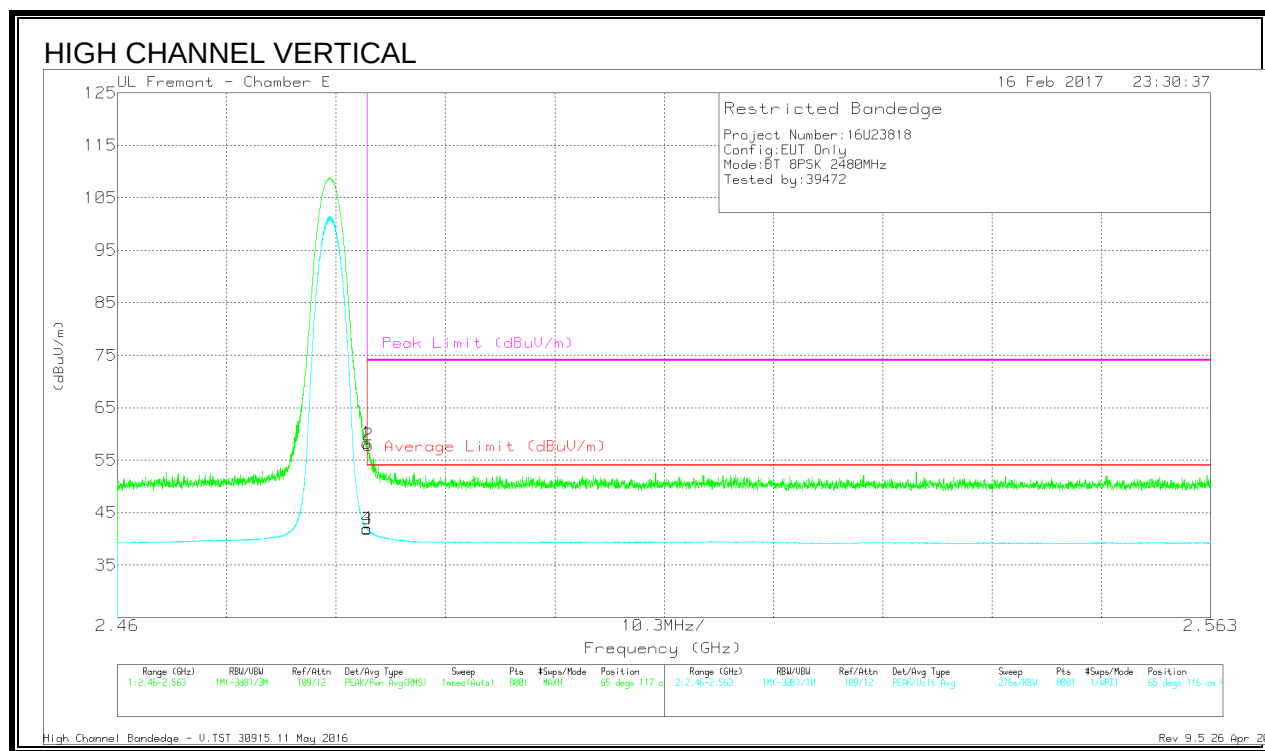


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filr/ Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.14	Pk	32.5	-19.7	61.94	-	-	74	-12.06	96	158	H
2	* 2.484	51.39	Pk	32.5	-19.7	64.19	-	-	74	-9.81	96	158	H
3	* 2.484	33.26	VA1T	32.5	-19.7	46.06	54	-7.94	-	-	96	158	H
4	* 2.484	33.31	VA1T	32.5	-19.7	46.11	54	-7.89	-	-	96	158	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



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/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	45.46	Pk	32.5	-19.7	58.26	-	-	74	-15.74	65	117	V
2	* 2.484	45.12	Pk	32.5	-19.7	57.92	-	-	74	-16.08	65	117	V
3	* 2.484	29.03	VA1T	32.5	-19.7	41.83	54	-12.17	-	-	65	116	V
4	* 2.484	29.19	VA1T	32.5	-19.7	41.99	54	-12.01	-	-	65	116	V

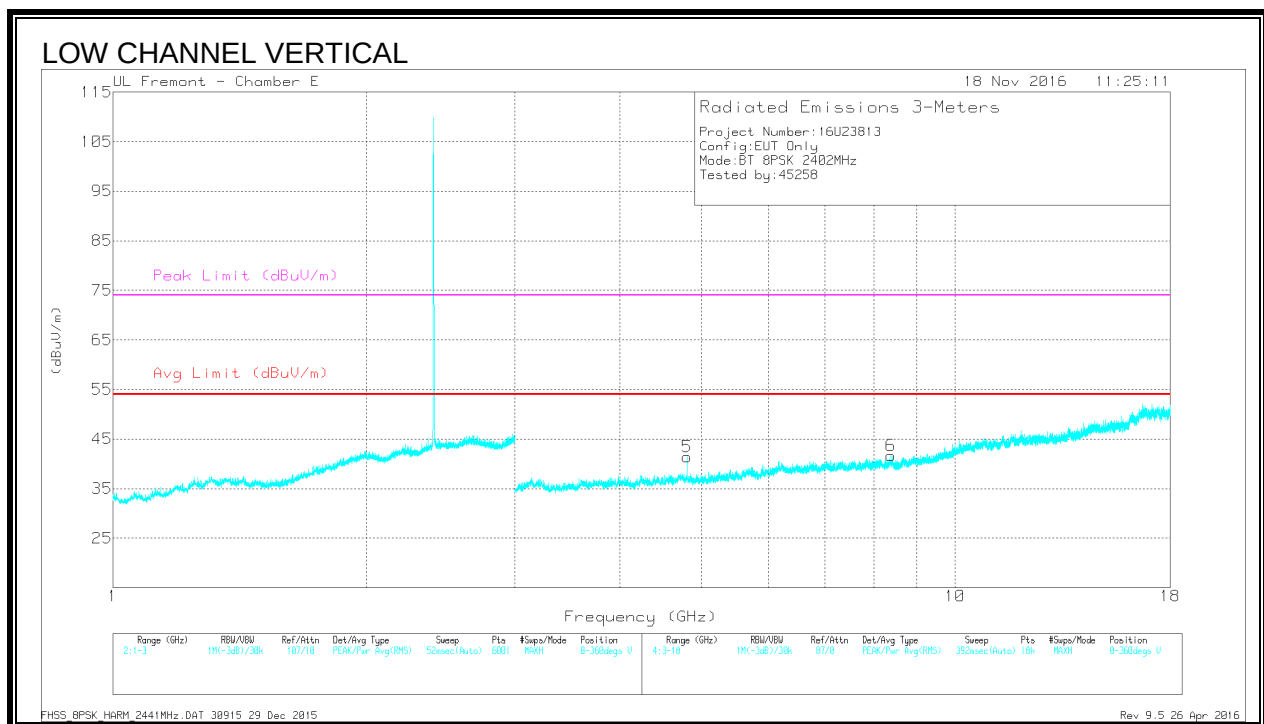
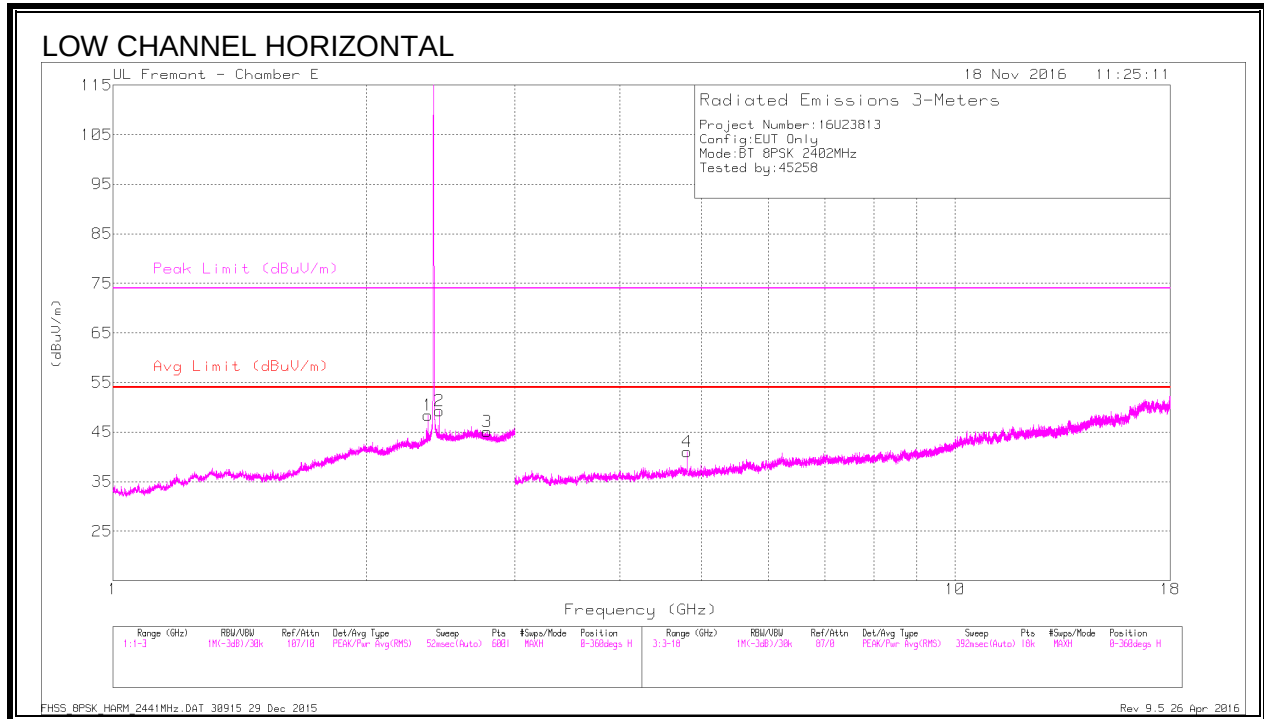
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

9.3.3. HARMONICS AND SPURIOUS EMISSIONS

LOW HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb l/Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.365	41.14	PKFH	31.9	-19.8	53.24	-	-	74	-20.76	99	203	H
	* 2.365	32.1	VA1T	31.9	-19.7	44.3	54	-9.7	-	-	99	203	H
3	* 2.78	36.28	PKFH	32.5	-19.6	49.18	-	-	74	-24.82	234	190	H
	* 2.777	25.23	VA1T	32.5	-19.6	38.13	54	-15.87	-	-	234	190	H
4	* 4.803	42.08	PKFH	34	-29.6	46.48	-	-	74	-27.52	129	105	H
	* 4.804	33.85	VA1T	34	-29.6	38.25	54	-15.75	-	-	129	105	H
5	* 4.804	42.48	PKFH	34	-29.6	46.88	-	-	74	-27.12	145	219	V
	* 4.804	33	VA1T	34	-29.6	37.4	54	-16.6	-	-	145	219	V
6	* 8.391	37.41	PKFH	35.7	-25.5	47.61	-	-	74	-26.39	330	146	V
	* 8.391	25.05	VA1T	35.7	-25.5	35.25	54	-18.75	-	-	330	146	V
2	2.439	40.85	PKFH	32.2	-19.7	53.35	-	-	-	-	97	244	H
	2.439	31.54	VA1T	32.2	-19.8	43.94	-	-	-	-	97	244	H

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

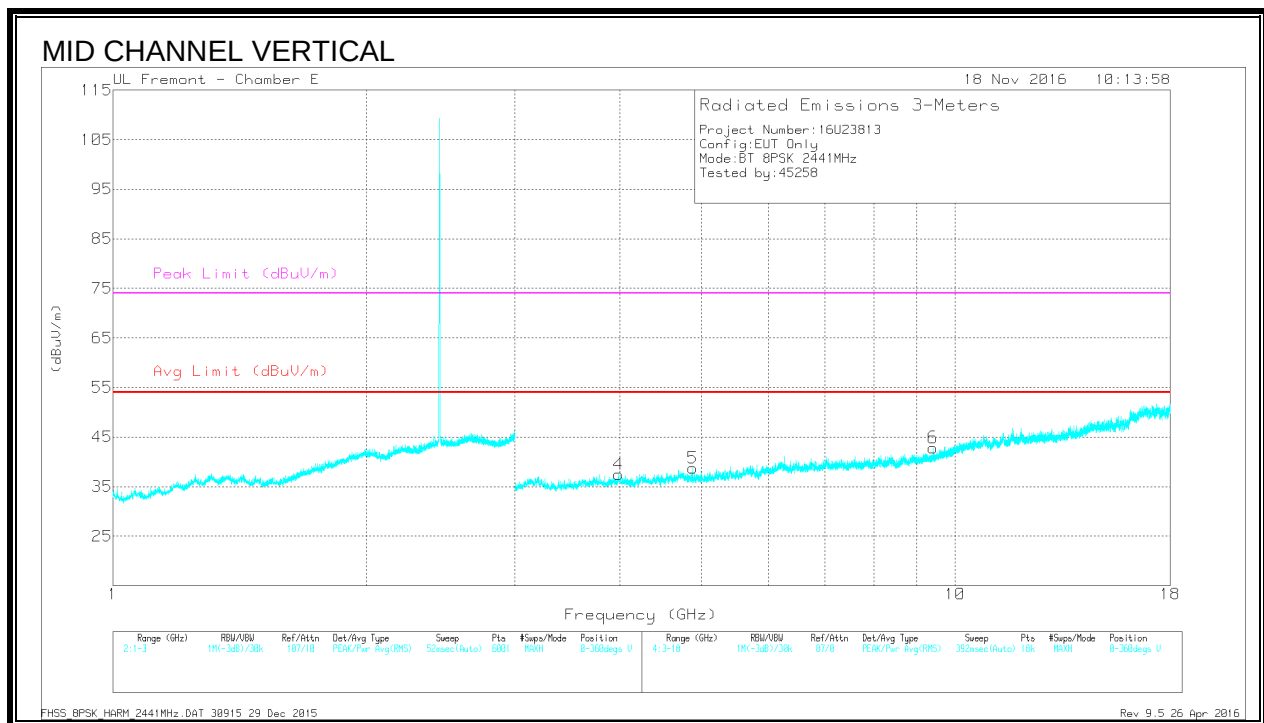
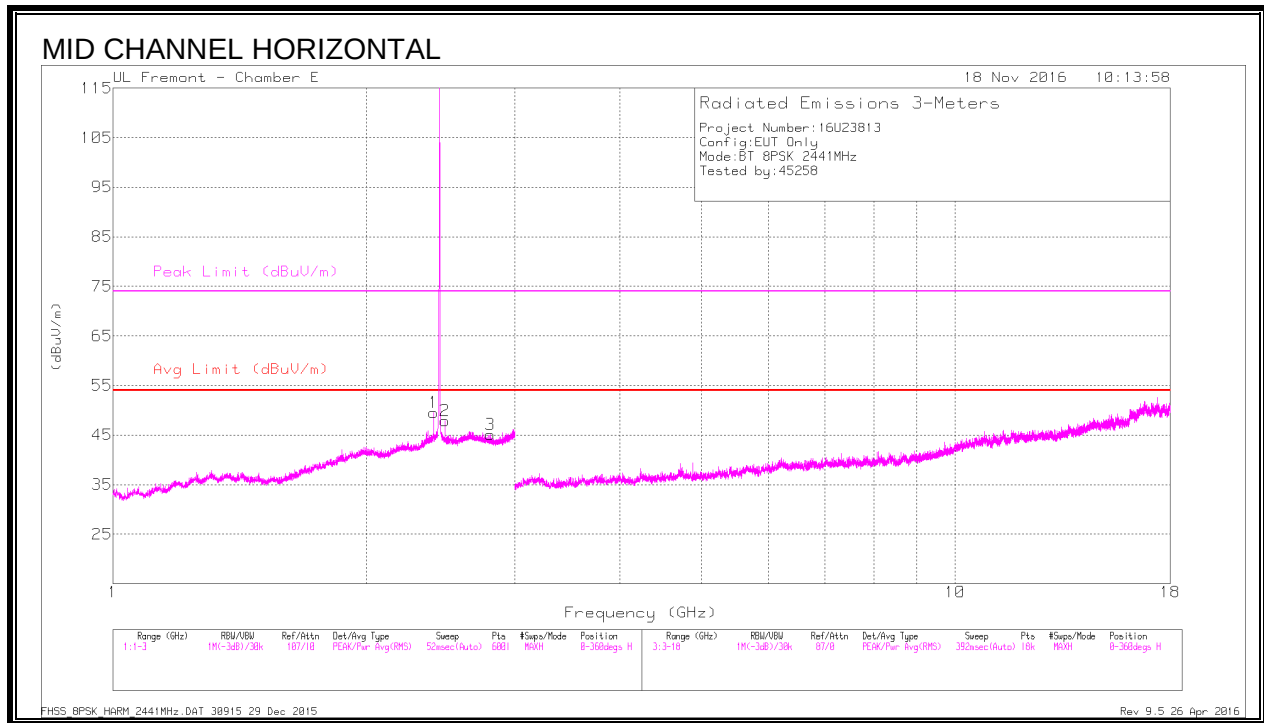
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FHSS_8PSK_HARM_2441MHz.DAT 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

MID HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb I/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 2.807	37.22	PKFH	32.4	-19.7	49.92	-	-	74	-24.08	163	165	H
	* 2.806	25.15	VA1T	32.4	-19.7	37.85	54	-16.15	-	-	163	165	H
4	* 3.984	38.84	PKFH	33.2	-29.4	42.64	-	-	74	-31.36	265	140	V
	* 3.984	27.92	VA1T	33.2	-29.4	31.72	54	-22.28	-	-	265	140	V
5	* 4.881	39.28	PKFH	34	-30.4	42.88	-	-	74	-31.12	329	198	V
	* 4.882	28.32	VA1T	34	-30.4	31.92	54	-22.08	-	-	329	198	V
6	* 9.416	36.71	PKFH	36.3	-25.4	47.61	-	-	74	-26.39	223	159	V
	* 9.414	25.31	VA1T	36.3	-25.4	36.21	54	-17.79	-	-	223	159	V
1	2.403	41.07	PKFH	32.2	-19.7	53.57	-	-	-	-	84	109	H
	2.404	31.81	VA1T	32.2	-19.7	44.31	-	-	-	-	84	109	H
2	2.478	31.14	VA1T	32.3	-19.7	43.74	-	-	-	-	92	128	H
	2.479	40.67	PKFH	32.3	-19.7	53.27	-	-	-	-	92	128	H

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

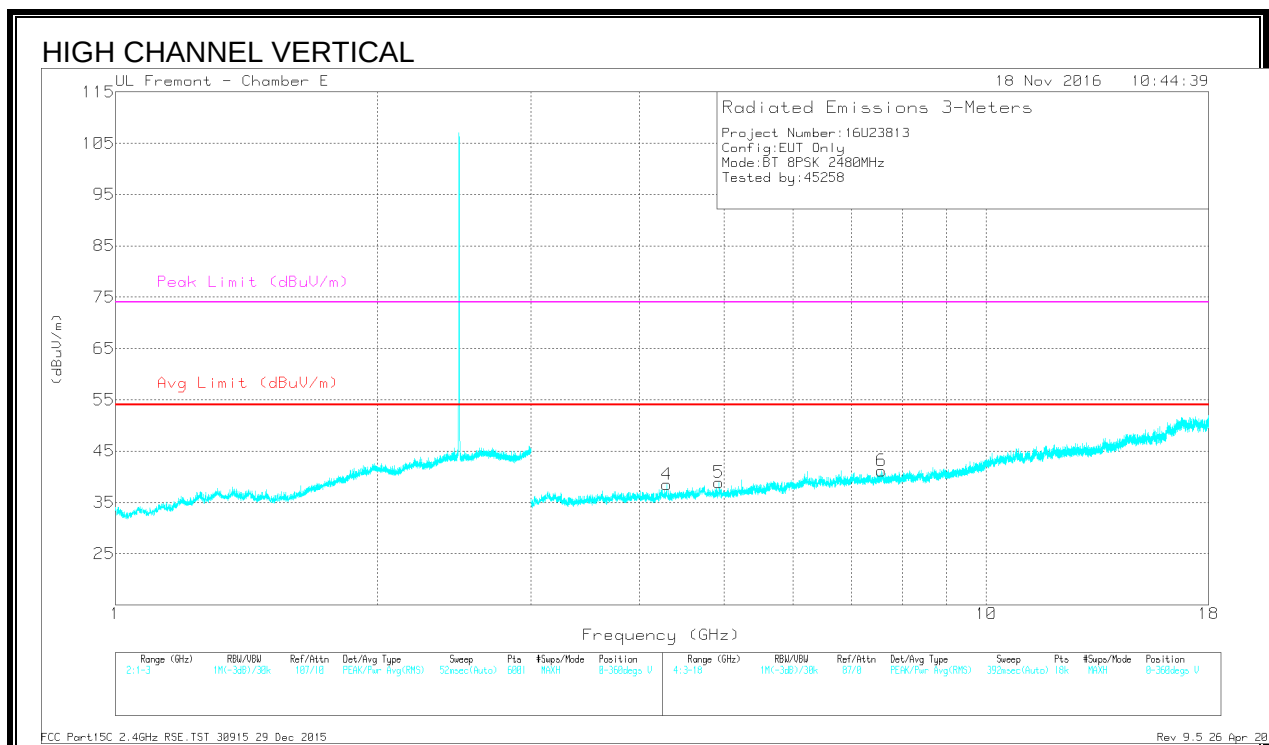
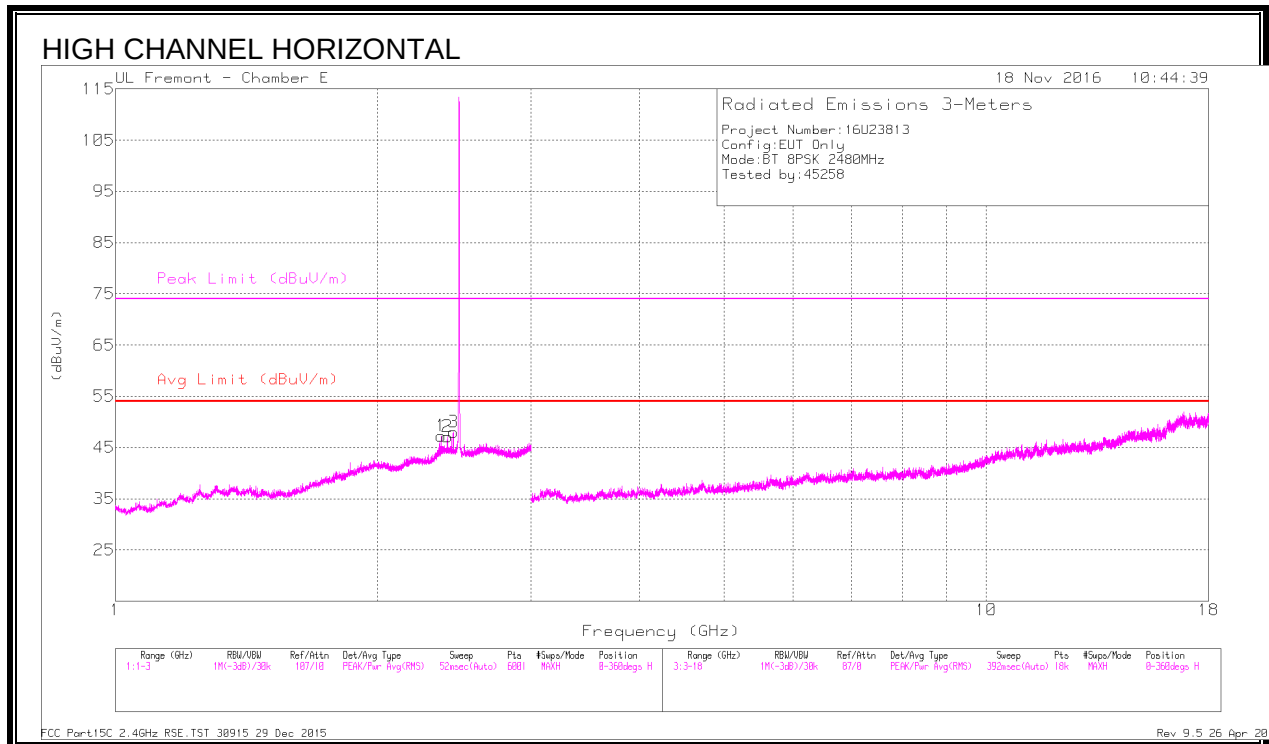
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FHSS_8PSK_HARM_2441MHz.DAT 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

HIGH HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl /Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.368	40.32	PKFH	31.9	-19.8	52.42	-	-	74	-21.58	277	185	H
	* 2.368	29.5	VA1T	31.9	-19.8	41.6	54	-12.4	-	-	277	185	H
4	* 4.297	39.12	PKFH	33.3	-29.6	42.82	-	-	74	-31.18	328	169	V
	* 4.3	27.96	VA1T	33.3	-29.7	31.56	54	-22.44	-	-	328	169	V
5	* 4.933	40.88	PKFH	34	-30.5	44.38	-	-	74	-29.62	226	197	V
	* 4.933	28.52	VA1T	34	-30.5	32.02	54	-21.98	-	-	226	197	V
6	* 7.578	36.19	PKFH	35.6	-25.7	46.09	-	-	74	-27.91	120	152	V
	* 7.577	24.93	VA1T	35.6	-25.7	34.83	54	-19.17	-	-	120	152	V
2	2.405	40.71	PKFH	32.2	-19.7	53.21	-	-	-	-	276	175	H
	2.405	30.9	VA1T	32.2	-19.7	43.4	-	-	-	-	276	175	H
3	2.442	40.15	PKFH	32.2	-19.6	52.75	-	-	-	-	281	151	H
	2.443	31.22	VA1T	32.2	-19.6	43.82	-	-	-	-	281	151	H

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

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

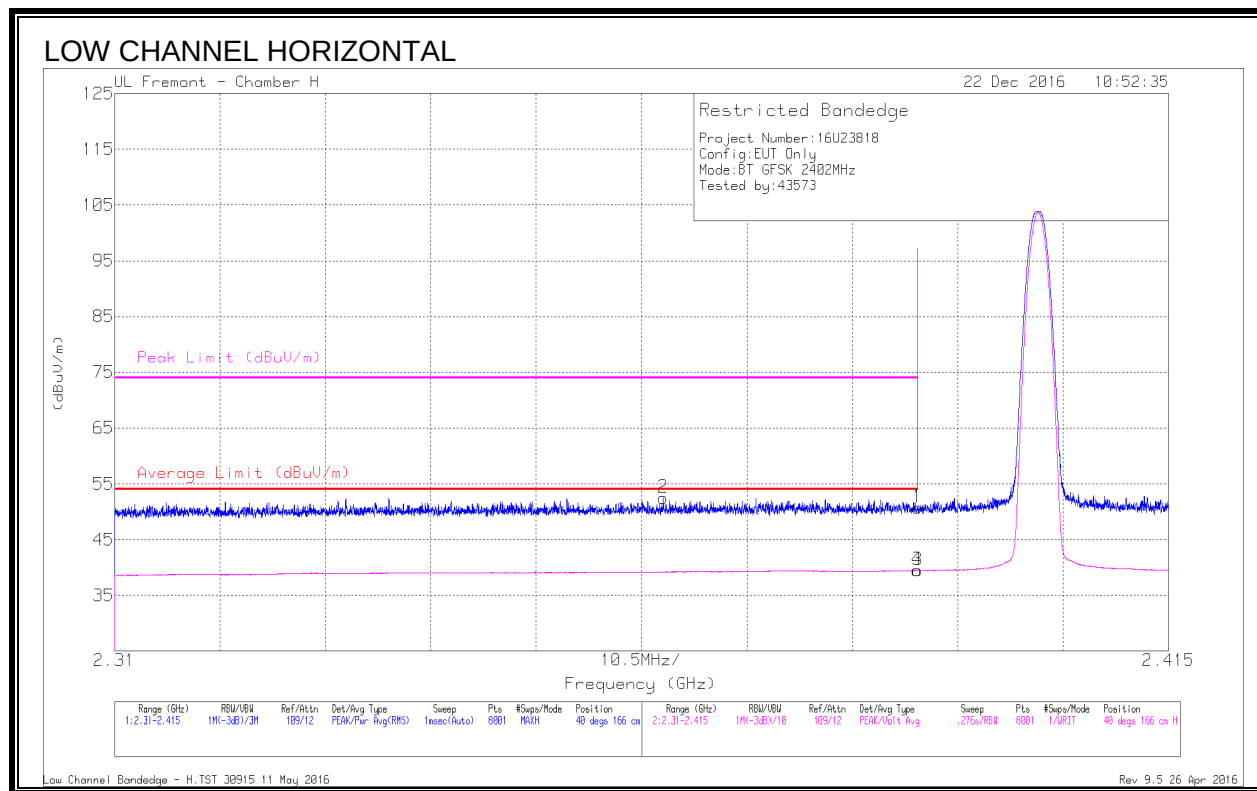
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

9.4. LOW POWER BASIC DATA RATE GFSK MODULATION

9.4.1. RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
2	* 2.365	40.42	Pk	31.8	-19.7	52.52	-	-	74	-21.48	40	166	H
1	* 2.39	38.5	Pk	31.9	-19.6	50.8	-	-	74	-23.2	40	166	H
3	* 2.39	27.18	VA1T	31.9	-19.6	39.48	54	-14.52	-	-	40	166	H
4	* 2.39	27.2	VA1T	31.9	-19.6	39.5	54	-14.5	-	-	40	166	H

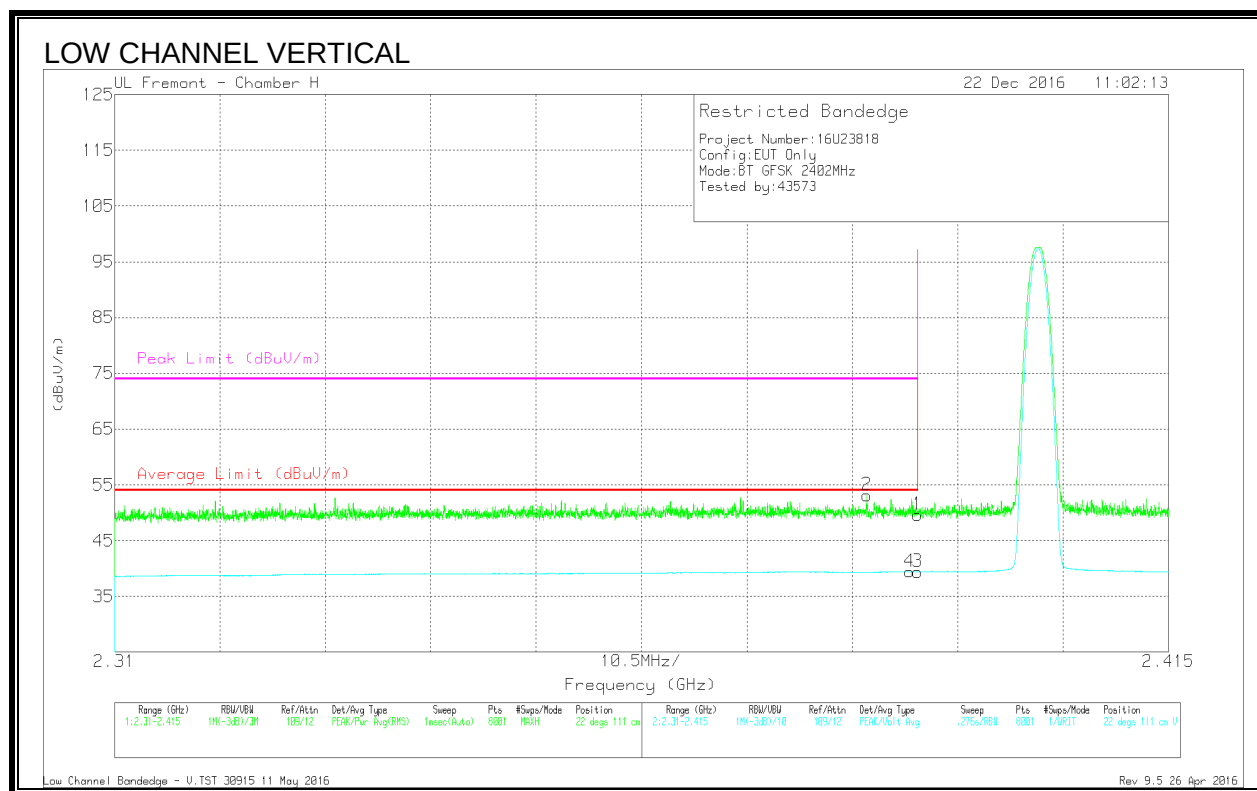
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

Low Channel Bandedge - H.TST 30915 11 May 2016

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
2	* 2.385	40.93	Pk	31.9	-19.7	53.13	-	-	74	-20.87	22	111	V
4	* 2.389	27.17	VA1T	31.9	-19.6	39.47	54	-14.53	-	-	22	111	V
1	* 2.39	37.39	Pk	31.9	-19.6	49.69	-	-	74	-24.31	22	111	V
3	* 2.39	27.15	VA1T	31.9	-19.6	39.45	54	-14.55	-	-	22	111	V

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

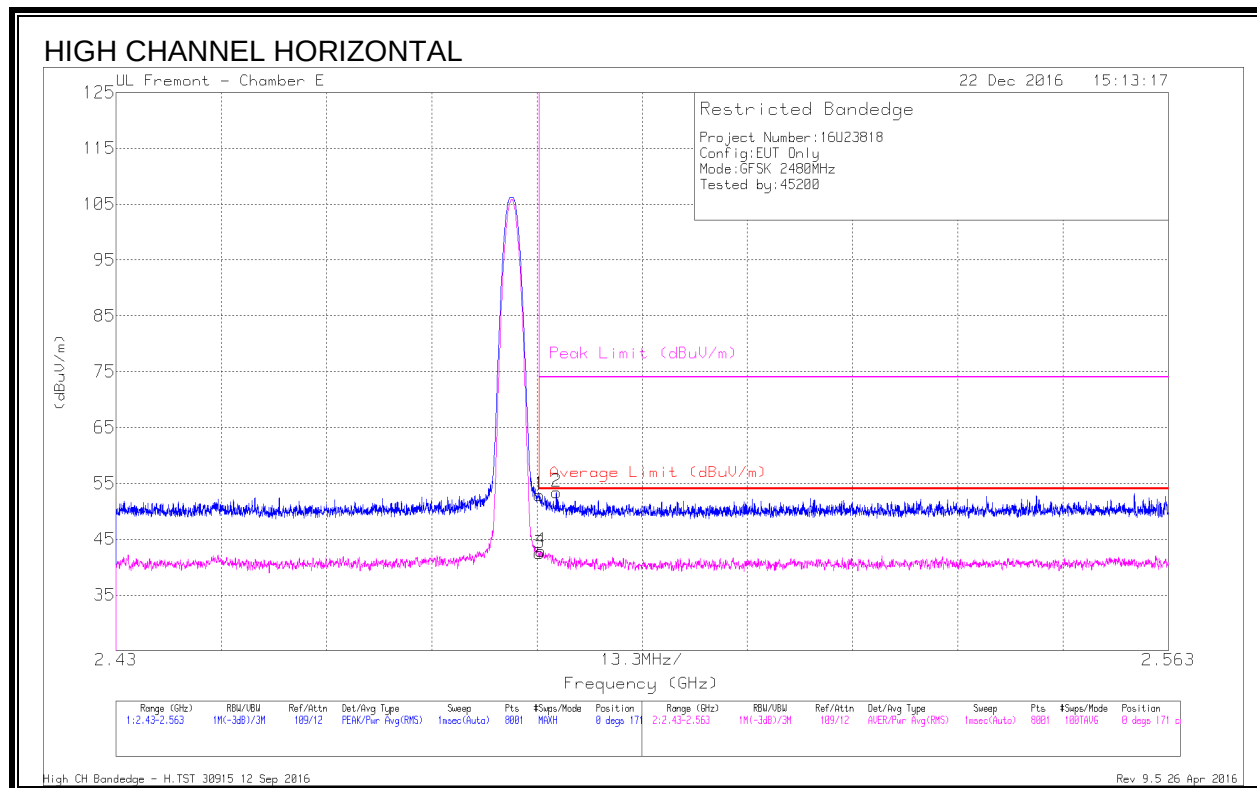
Pk - Peak detector

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

Low Channel Bandedge - V.TST 30915 11 May 2016

Rev 9.5 26 Apr 2016

9.4.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (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	40.33	Pk	32.3	-19.7	52.93	-	-	74	-21.07	0	171	H
3	* 2.484	29.89	RMS	32.3	-19.7	42.49	54	-11.51	-	-	0	171	H
4	* 2.484	30.32	RMS	32.3	-19.7	42.92	54	-11.08	-	-	0	171	H
2	* 2.486	40.94	Pk	32.3	-19.8	53.44	-	-	74	-20.56	0	171	H

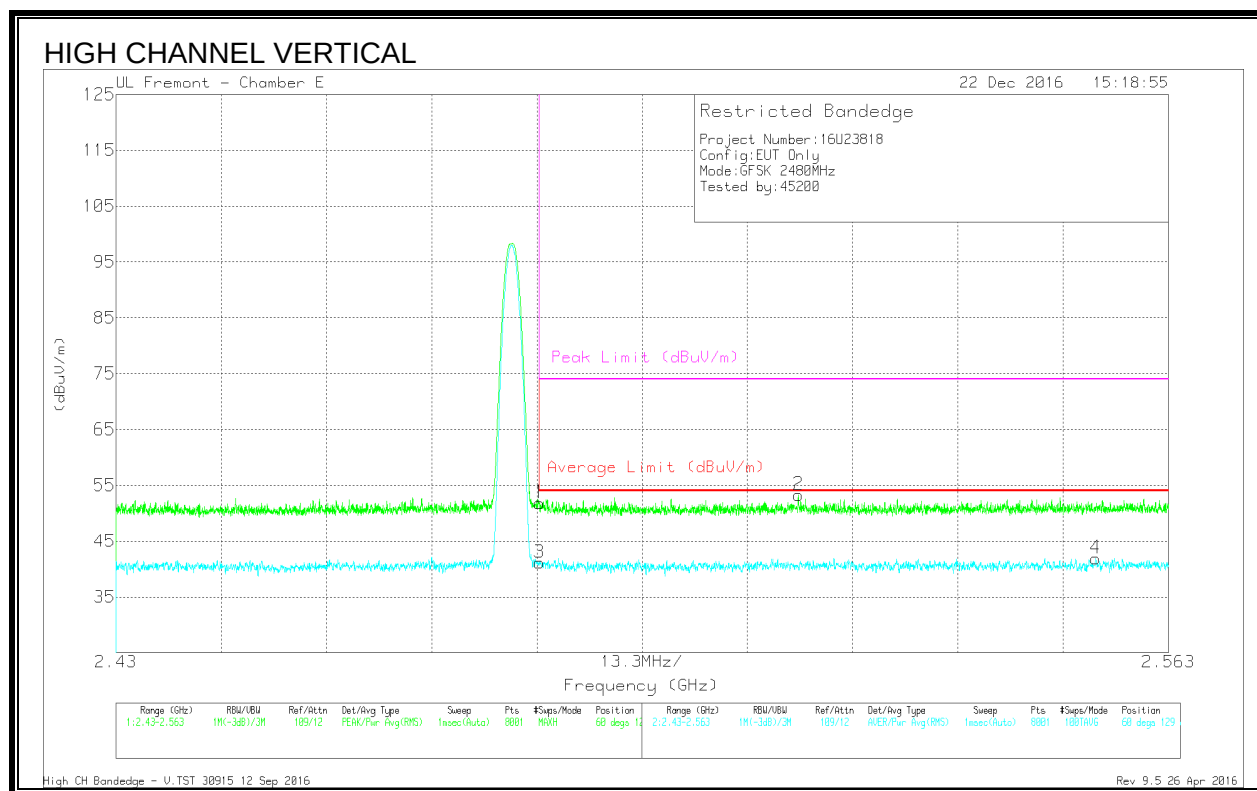
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (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	39.24	Pk	32.3	-19.7	51.84	-	-	74	-22.16	60	129	V
3	* 2.484	28.53	RMS	32.3	-19.7	41.13	54	-12.87	-	-	60	129	V
2	2.516	40.71	Pk	32.3	-19.7	53.31	-	-	74	-20.69	60	129	V
4	2.554	29.33	RMS	32.4	-19.8	41.93	54	-12.07	-	-	60	129	V

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

Pk - Peak detector

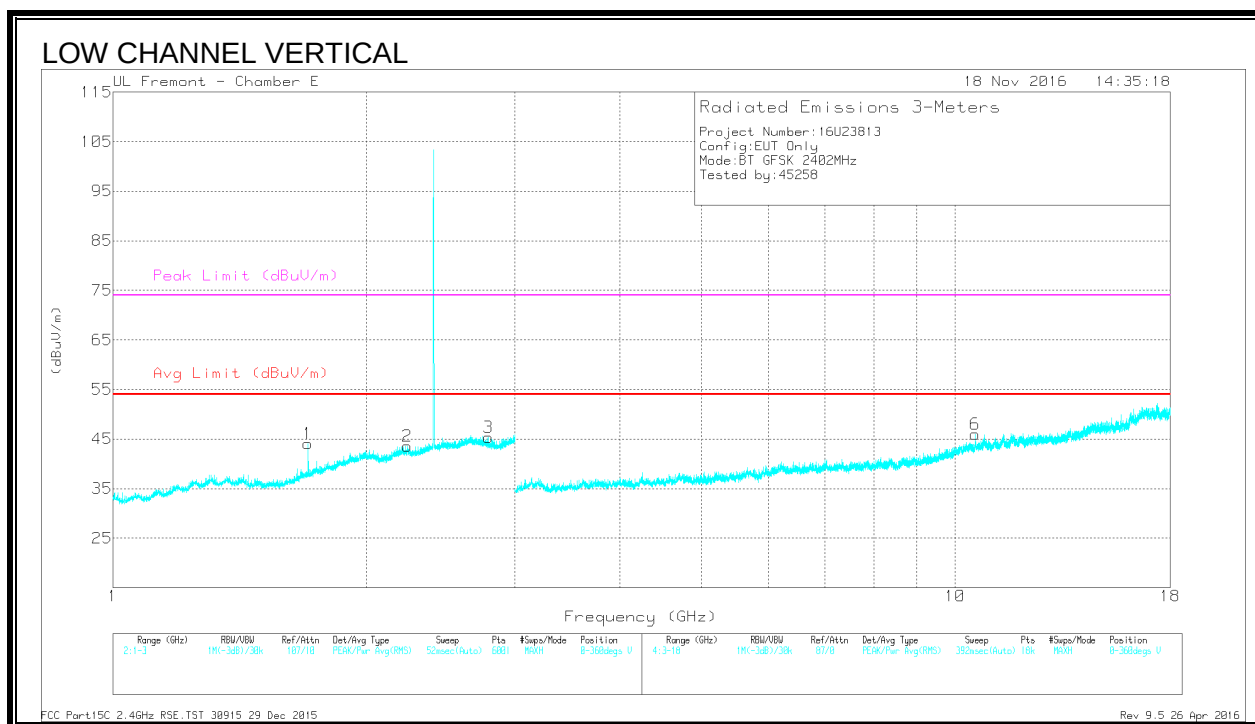
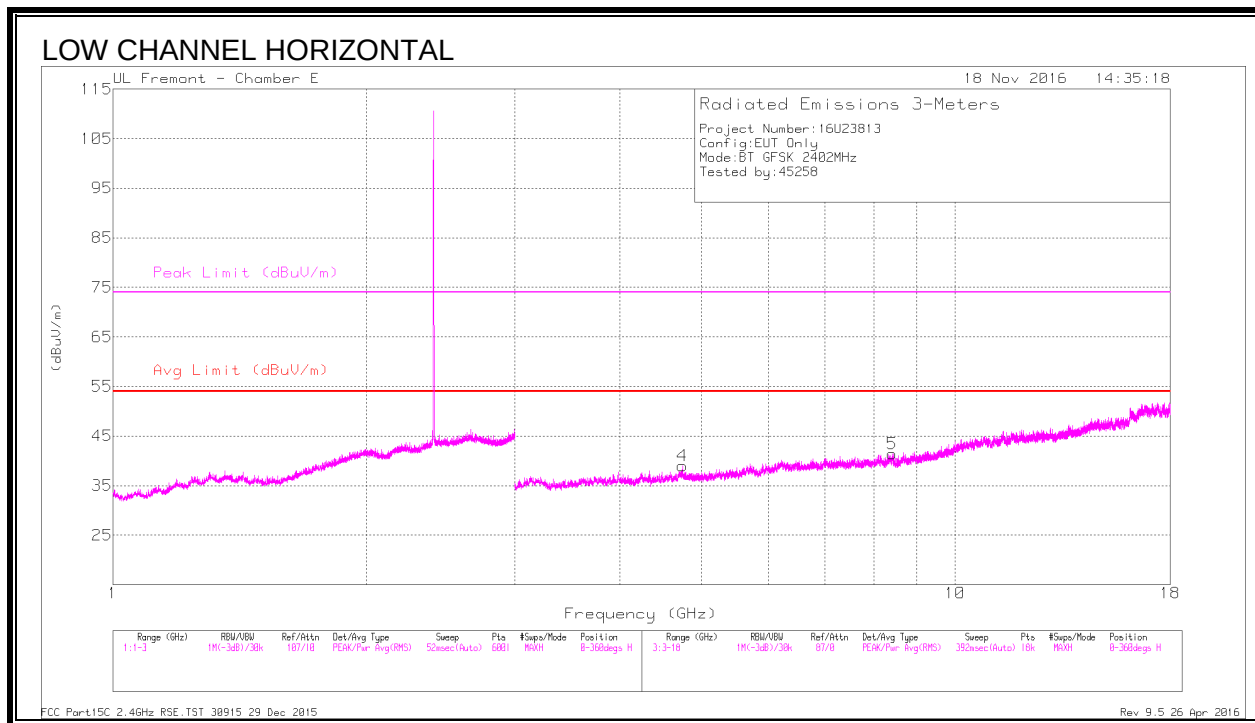
RMS - RMS detection

High CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 26 Apr 2016

9.4.3. HARMONICS AND SPURIOUS EMISSIONS

LOW HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.707	36.55	PKFH	29.2	-20.5	45.25	-	-	74	-28.75	154	326	V
	* 1.703	23.76	VA1T	29.2	-20.5	32.46	54	-21.54	-	-	154	326	V
2	* 2.236	36.03	PKFH	31.7	-19.4	48.33	-	-	74	-25.67	115	296	V
	* 2.237	24.63	VA1T	31.7	-19.4	36.93	54	-17.07	-	-	115	296	V
3	* 2.79	36.34	PKFH	32.4	-19.7	49.04	-	-	74	-24.96	185	318	V
	* 2.79	25.25	VA1T	32.4	-19.7	37.95	54	-16.05	-	-	185	318	V
4	* 4.742	39.94	PKFH	34	-29	44.94	-	-	74	-29.06	111	187	H
	* 4.741	27.86	VA1T	34	-28.9	32.96	54	-21.04	-	-	111	187	H
5	* 8.424	36.03	PKFH	35.7	-25.4	46.33	-	-	74	-27.67	50	142	H
	* 8.424	25.01	VA1T	35.7	-25.4	35.31	54	-18.69	-	-	50	142	H
6	10.561	24.06	VA1T	37.9	-22.8	39.16	-	-	-	-	196	347	V
	10.563	35.83	PKFH	37.9	-22.8	50.93	-	-	-	-	196	347	V

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

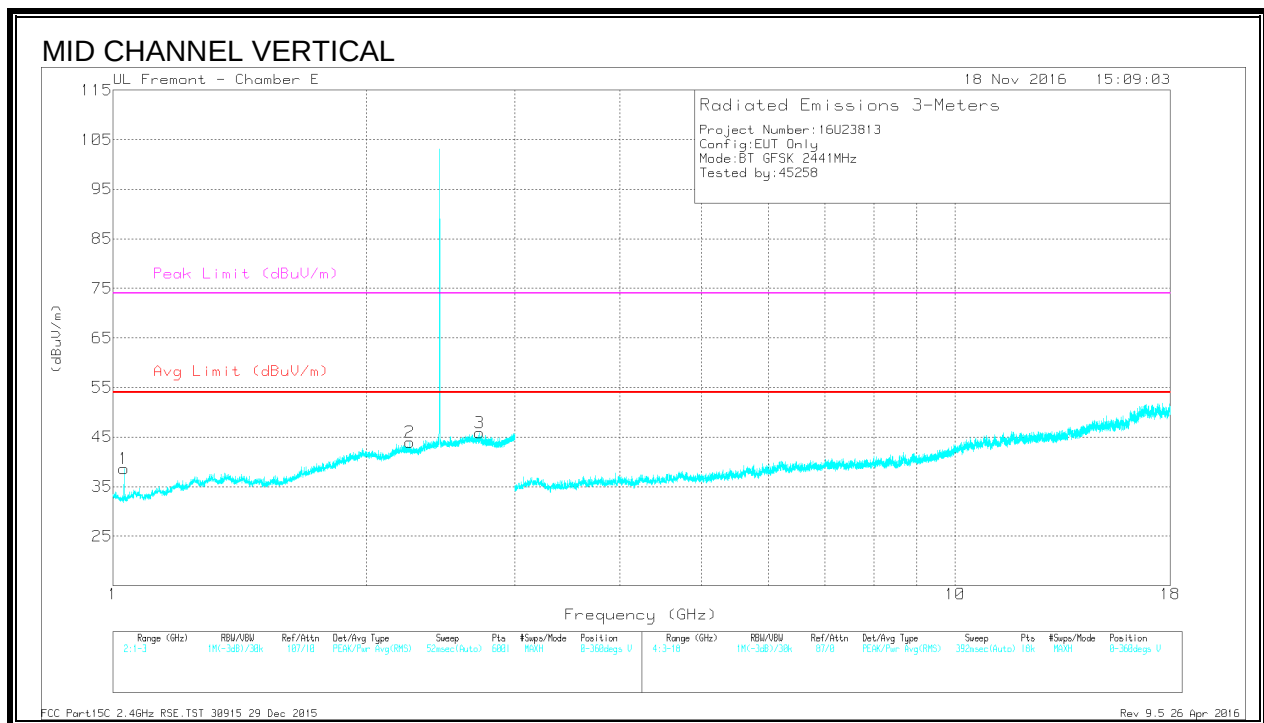
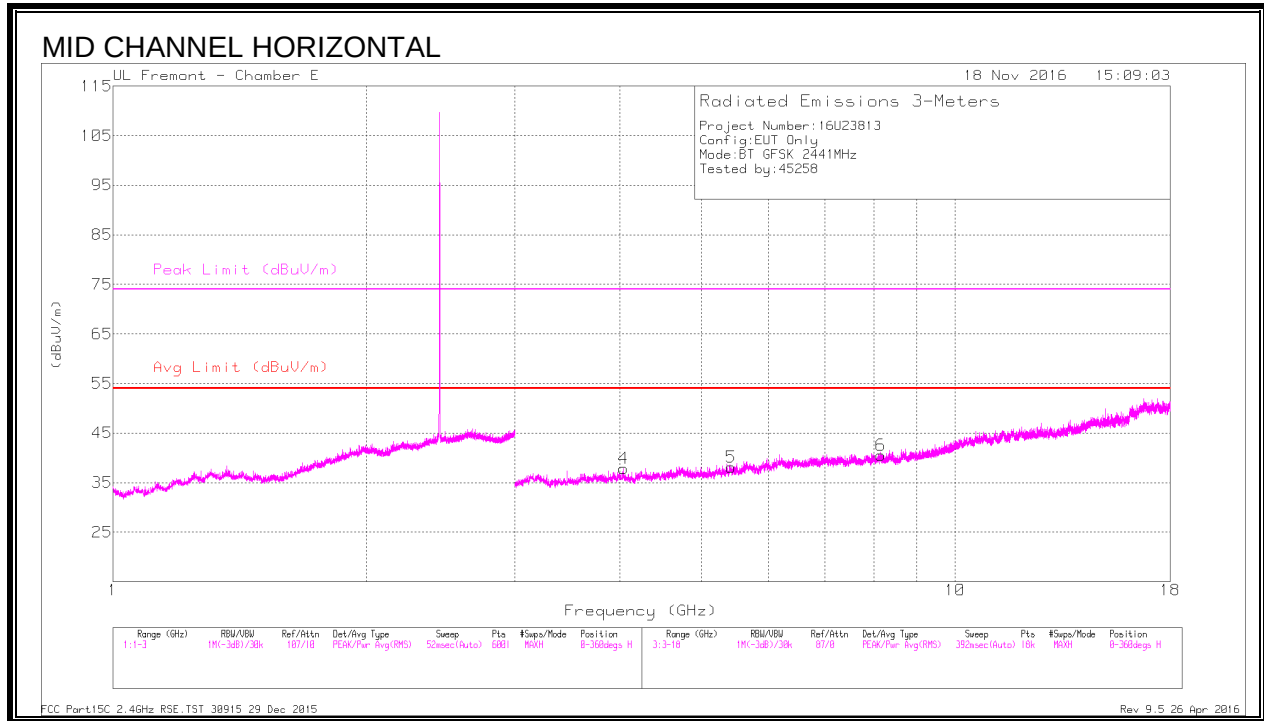
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

MID HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.031	35.27	PKFH	27.5	-23.5	39.27	-	-	74	-34.73	224	390	V
	* 1.028	23.52	VA1T	27.5	-23.7	27.32	54	-26.68	-	-	224	390	V
3	* 2.723	36.55	PKFH	32.5	-19.3	49.75	-	-	74	-24.25	352	371	V
	* 2.723	25.27	VA1T	32.5	-19.3	38.47	54	-15.53	-	-	352	371	V
2	* 2.252	35.44	PKFH	31.6	-19.8	47.24	-	-	74	-26.76	334	355	V
	* 2.25	24.59	VA1T	31.6	-19.7	36.49	54	-17.51	-	-	334	355	V
4	* 4.038	40.2	PKFH	33.2	-30.3	43.1	-	-	74	-30.9	254	308	H
	* 4.036	28.61	VA1T	33.2	-30.4	31.41	54	-22.59	-	-	254	308	H
5	* 5.422	39.22	PKFH	34.4	-29.7	43.92	-	-	74	-30.08	69	253	H
	* 5.422	27.9	VA1T	34.4	-29.6	32.7	54	-21.3	-	-	69	253	H
6	* 8.165	37.12	PKFH	35.7	-25.7	47.12	-	-	74	-26.88	156	212	H
	* 8.166	25.22	VA1T	35.7	-25.7	35.22	54	-18.78	-	-	156	212	H

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

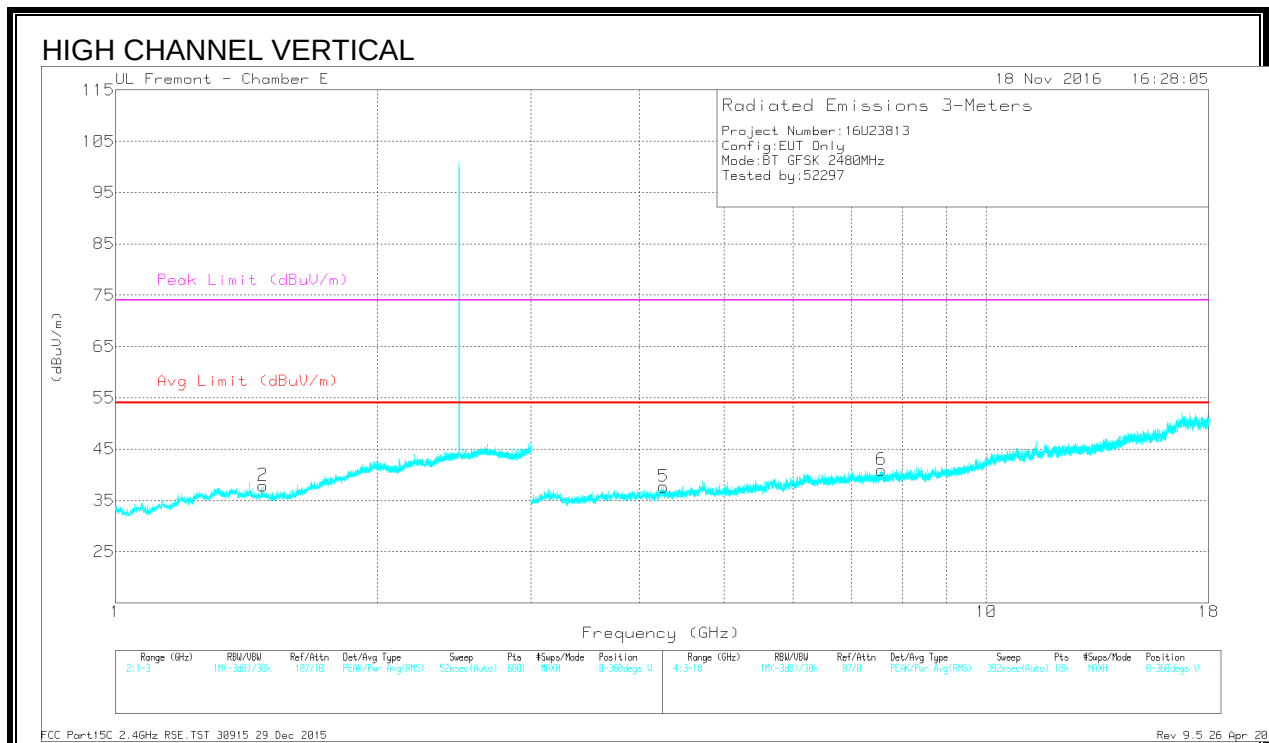
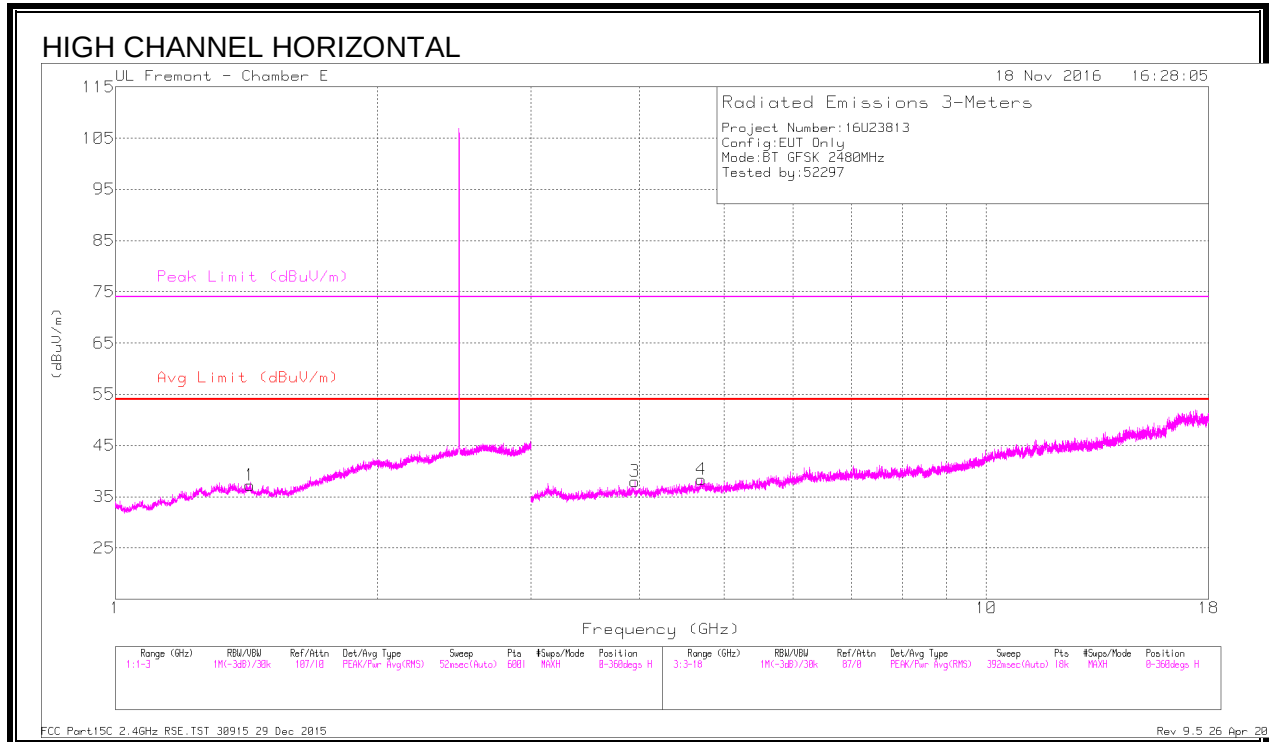
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

HIGH HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl /Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.426	34.62	PKFH	28.7	-21	42.32	-	-	74	-31.68	0	158	H
	* 1.427	23.9	VA1T	28.7	-21	31.6	54	-22.4	-	-	0	158	H
2	* 1.478	35.03	PKFH	28	-20.9	42.13	-	-	74	-31.87	244	167	V
	* 1.479	23.95	VA1T	28	-21	30.95	54	-23.05	-	-	244	167	V
3	* 3.948	39.52	PKFH	33.2	-29.4	43.32	-	-	74	-30.68	310	147	H
	* 3.949	27.35	VA1T	33.2	-29.4	31.15	54	-22.85	-	-	310	147	H
4	* 4.706	39.51	PKFH	34	-29.3	44.21	-	-	74	-29.79	139	307	H
	* 4.707	28.19	VA1T	34	-29.3	32.89	54	-21.11	-	-	139	307	H
5	* 4.262	39.23	PKFH	33.3	-29.1	43.43	-	-	74	-30.57	200	228	V
	* 4.26	27.3	VA1T	33.3	-29	31.6	54	-22.4	-	-	200	228	V
6	* 7.582	36.18	PKFH	35.6	-25.7	46.08	-	-	74	-27.92	327	375	V
	* 7.582	24.97	VA1T	35.6	-25.7	34.87	54	-19.13	-	-	327	375	V

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

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

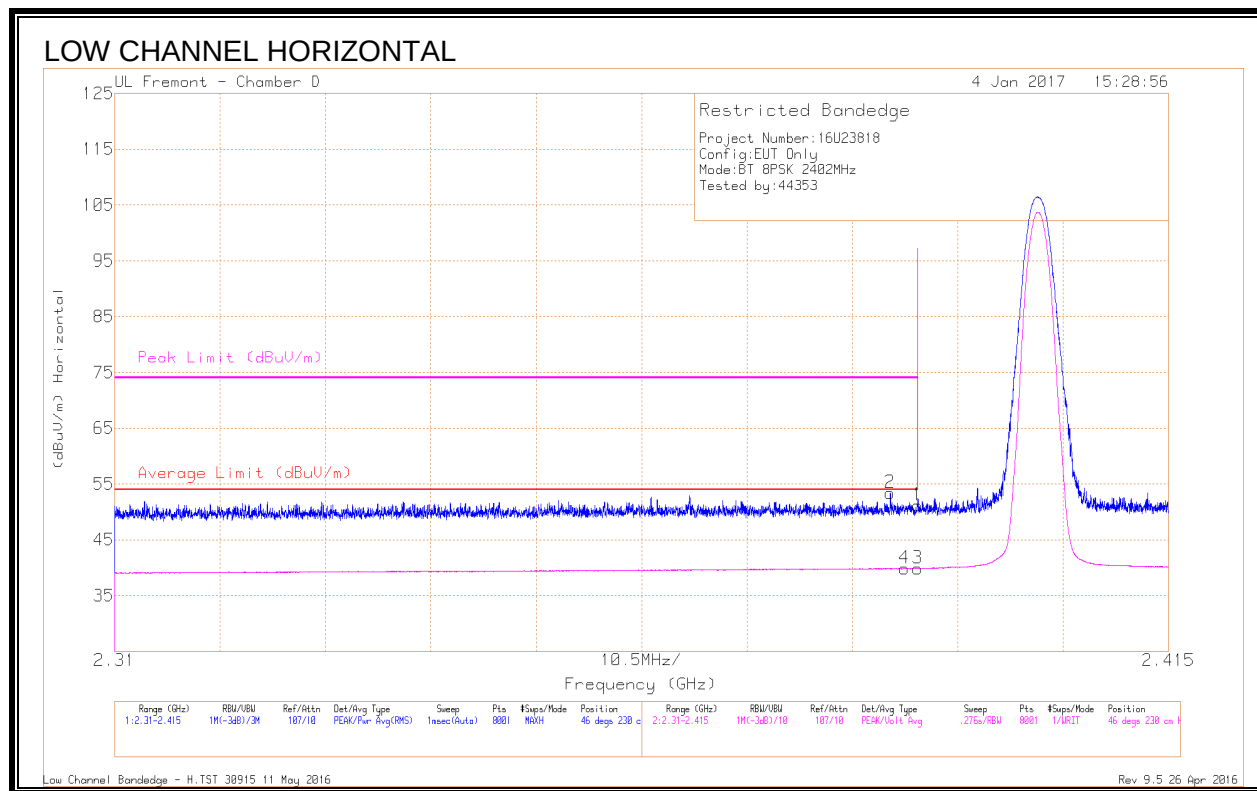
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

9.5. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

9.5.1. RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	39.73	Pk	32.1	-20.7	51.13	-	-	74	-22.87	46	230	H
2	* 2.387	42.13	Pk	32.1	-20.8	53.43	-	-	74	-20.57	46	230	H
3	* 2.39	28.44	VA1T	32.1	-20.7	39.84	54	-14.16	-	-	46	230	H
4	* 2.389	28.61	VA1T	32.1	-20.8	39.91	54	-14.09	-	-	46	230	H

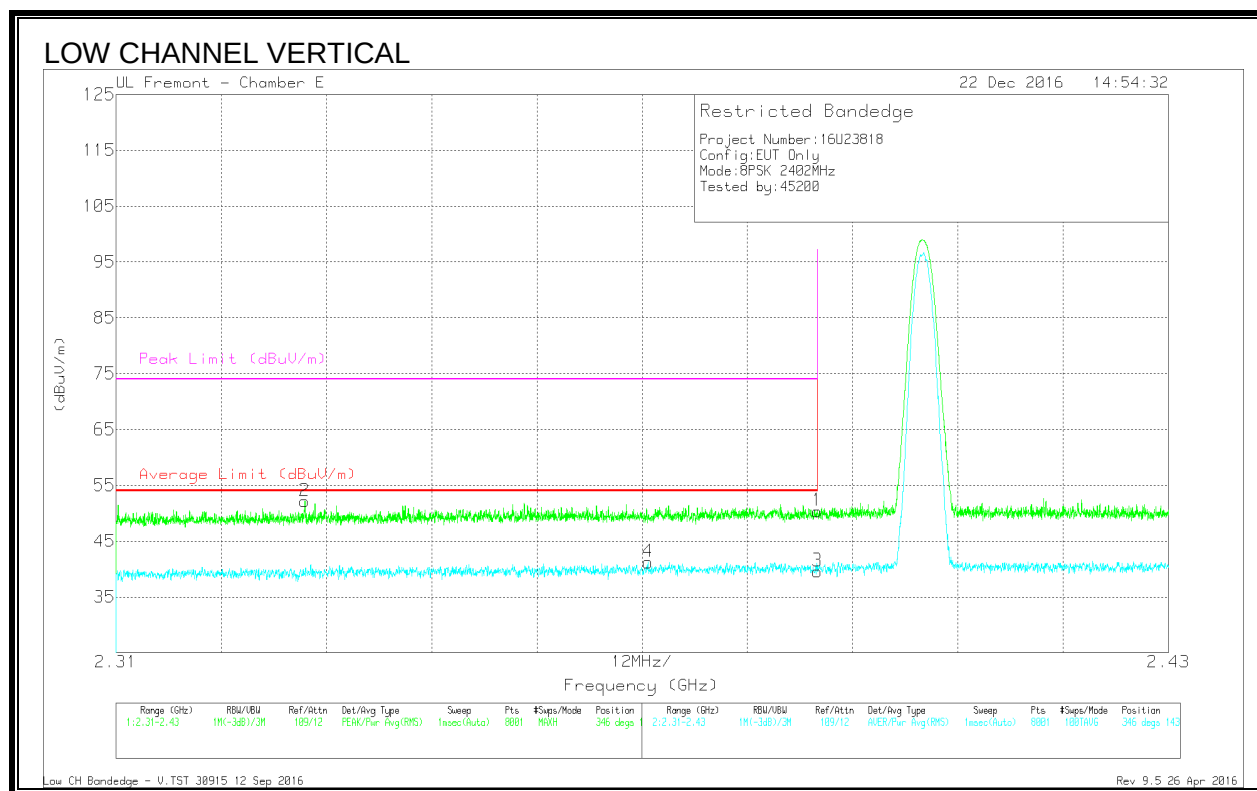
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

Low Channel Bandedge - H.TST 30915 11 May 2016

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (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
2	* 2.332	40.26	Pk	31.7	-19.8	52.16	-	-	74	-21.84	346	143	V
4	* 2.371	29.04	RMS	32	-19.8	41.24	54	-12.76	-	-	346	143	V
1	* 2.39	37.99	Pk	32.1	-19.7	50.39	-	-	74	-23.61	346	143	V
3	* 2.39	27.19	RMS	32.1	-19.7	39.59	54	-14.41	-	-	346	143	V

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

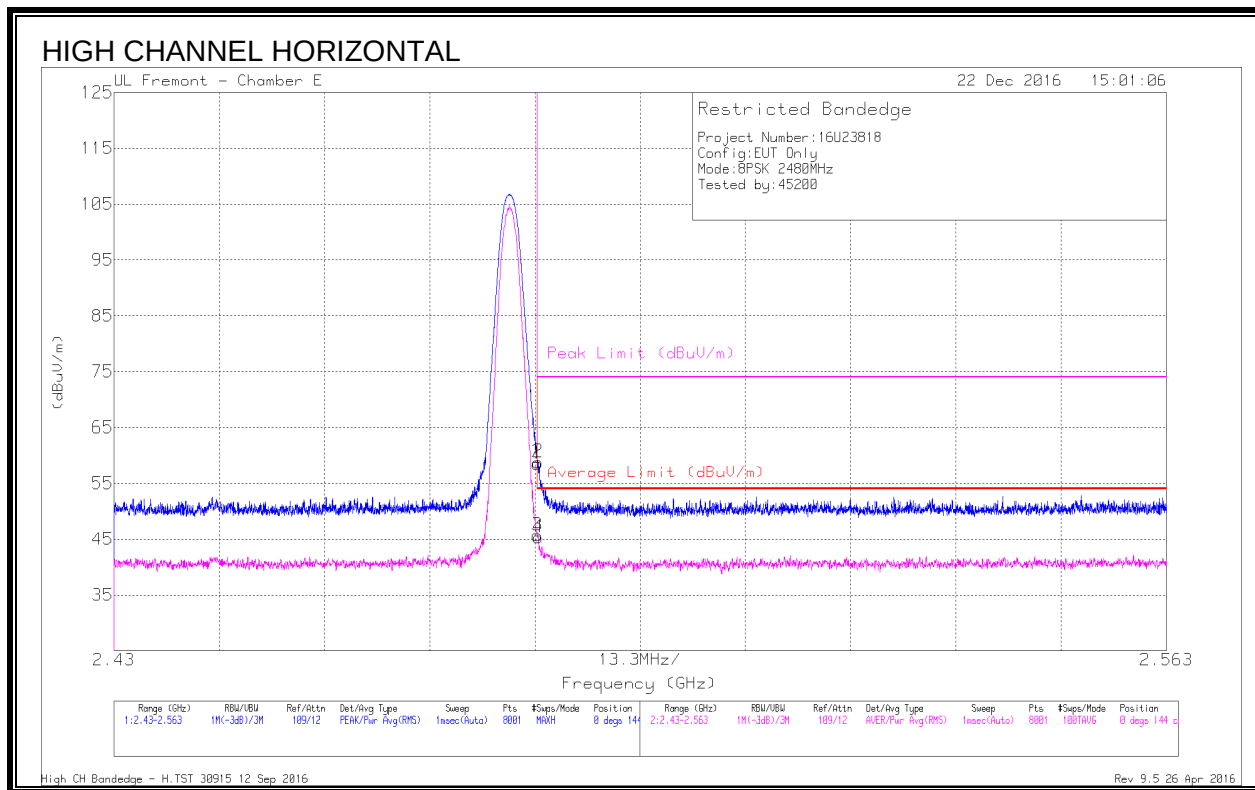
Pk - Peak detector

RMS - RMS detection

Low CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 26 Apr 2016

9.5.2. AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (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	45.9	Pk	32.3	-19.7	58.5	-	-	74	-15.5	0	144	H
2	* 2.484	46.2	Pk	32.3	-19.7	58.8	-	-	74	-15.2	0	144	H
3	* 2.484	33.06	RMS	32.3	-19.7	45.66	54	-8.34	-	-	0	144	H
4	* 2.484	32.72	RMS	32.3	-19.7	45.32	54	-8.68	-	-	0	144	H

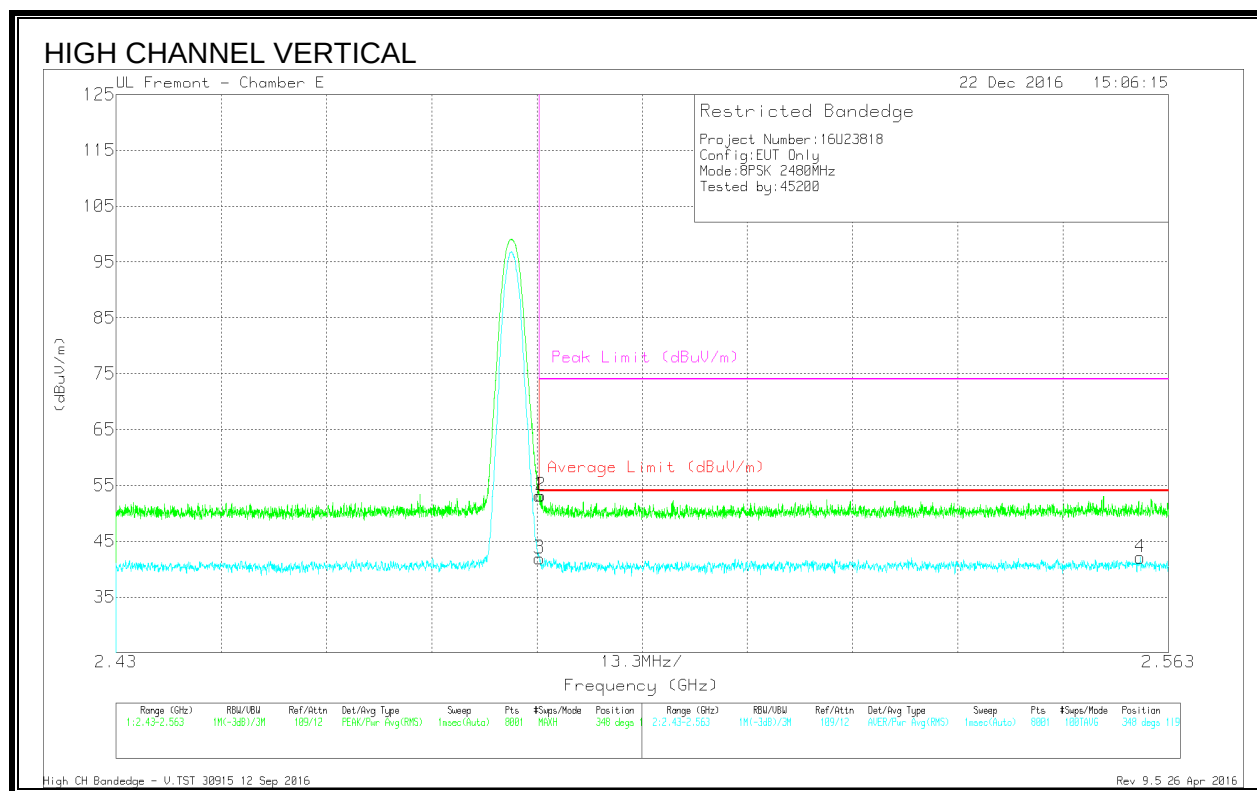
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 26 Apr 2016



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (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	40.59	Pk	32.3	-19.7	53.19	-	-	74	-20.81	348	119	V
2	* 2.484	40.6	Pk	32.3	-19.7	53.2	-	-	74	-20.8	348	119	V
3	* 2.484	29.34	RMS	32.3	-19.7	41.94	54	-12.06	-	-	348	119	V
4	2.559	29.39	RMS	32.5	-19.8	42.09	54	-11.91	-	-	348	119	V

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

Pk - Peak detector

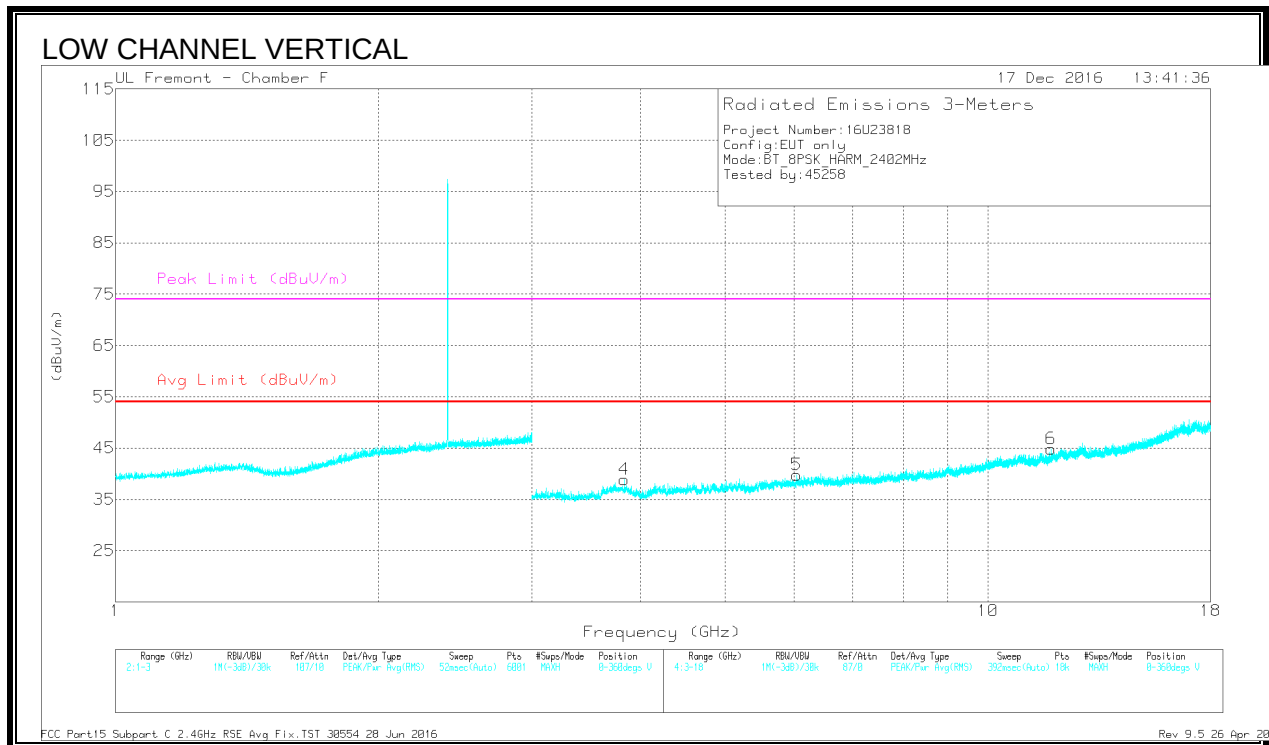
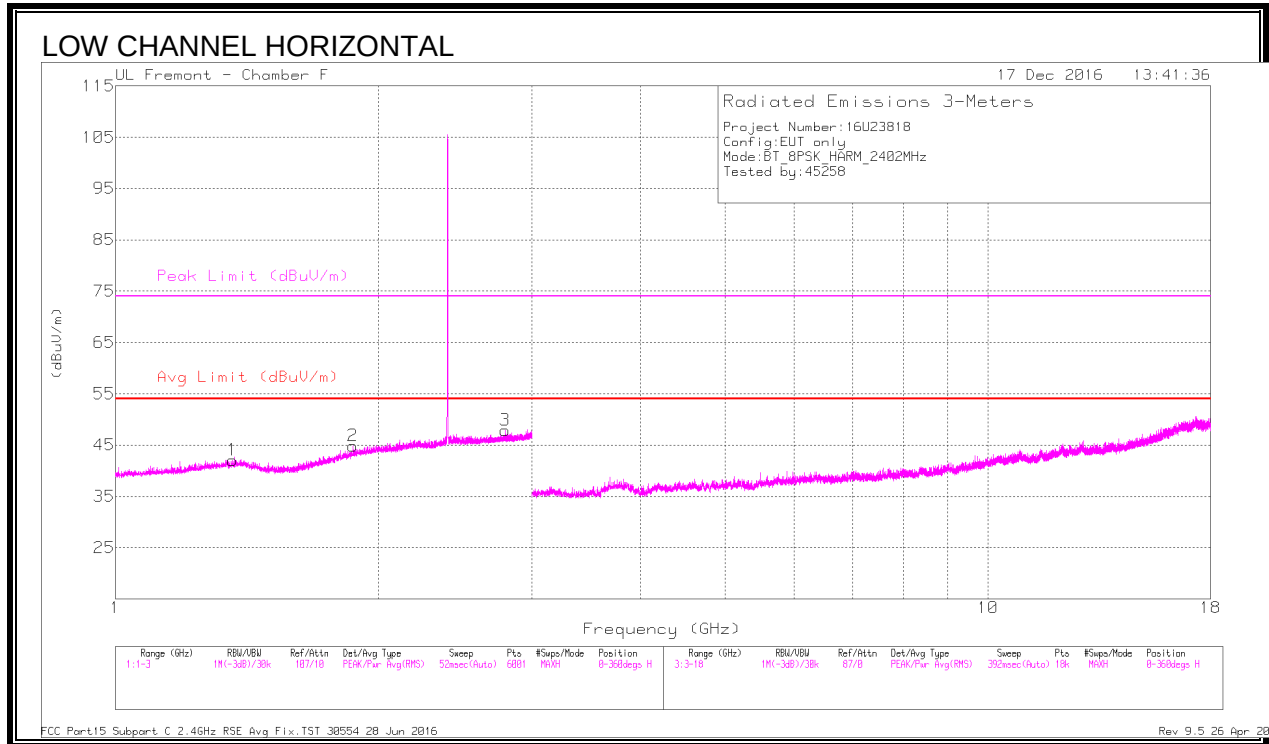
RMS - RMS detection

High CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 26 Apr 2016

9.5.3. HARMONICS AND SPURIOUS EMISSIONS

LOW HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl /Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.363	40.35	PKFH	29.2	-22.1	47.45	-	-	74	-26.55	54	146	H
	* 1.361	29.21	VA1T	29.2	-22.1	36.31	54	-17.69	-	-	54	146	H
2	1.872	40.2	PKFH	30.7	-21.4	49.5	-	-	-	-	125	170	H
	1.87	29.16	VA1T	30.7	-21.5	38.36	-	-	-	-	125	170	H
3	* 2.8	39.66	PKFH	32.5	-20.4	51.76	-	-	74	-22.24	210	154	H
	* 2.798	29.01	VA1T	32.5	-20.4	41.11	54	-12.89	-	-	210	154	H
4	* 3.83	38.02	PKFH	33.4	-28.4	43.02	-	-	74	-30.98	163	212	V
	* 3.826	26.2	VA1T	33.4	-28.4	31.2	54	-22.8	-	-	163	212	V
5	6.041	37.2	PKFH	35.5	-27.3	45.4	-	-	-	-	330	193	V
	6.041	25.4	VA1T	35.5	-27.3	33.6	-	-	-	-	330	193	V
6	* 11.81	33.78	PKFH	38.4	-22	50.18	-	-	74	-23.82	270	211	V
	* 11.808	22.16	VA1T	38.4	-22	38.56	54	-15.44	-	-	270	211	V

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

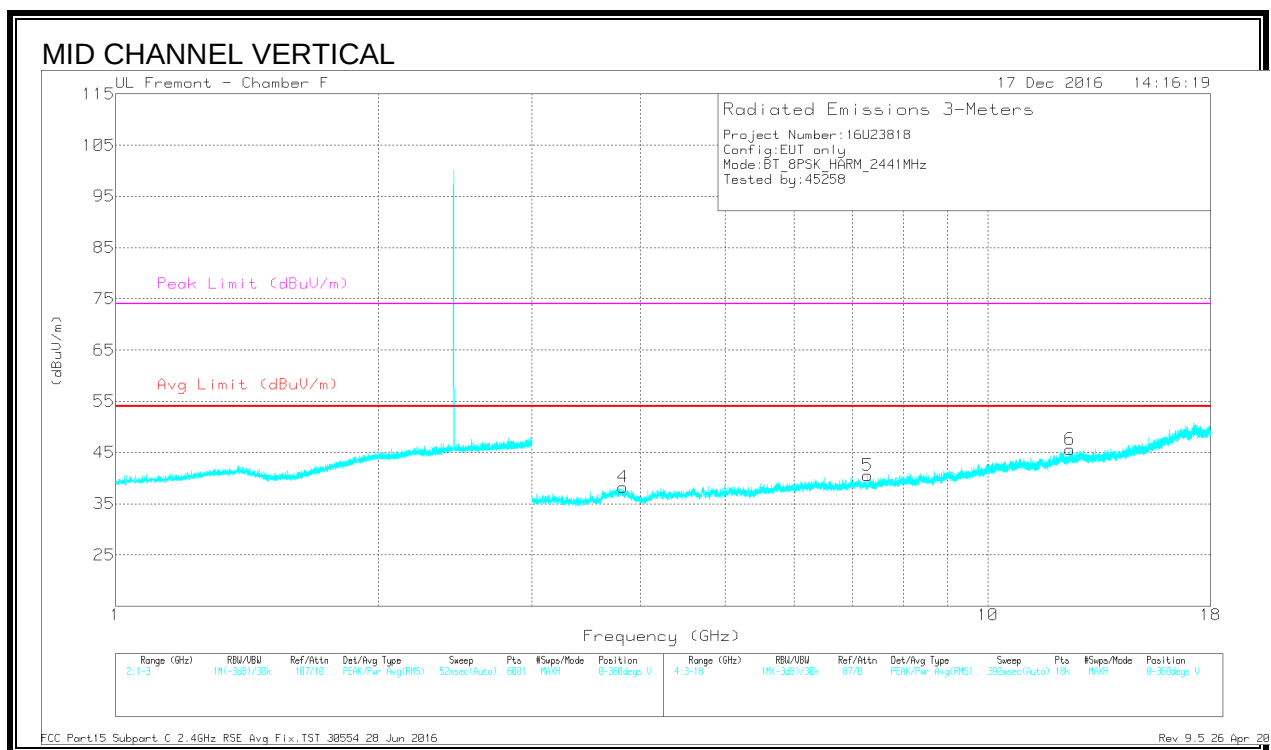
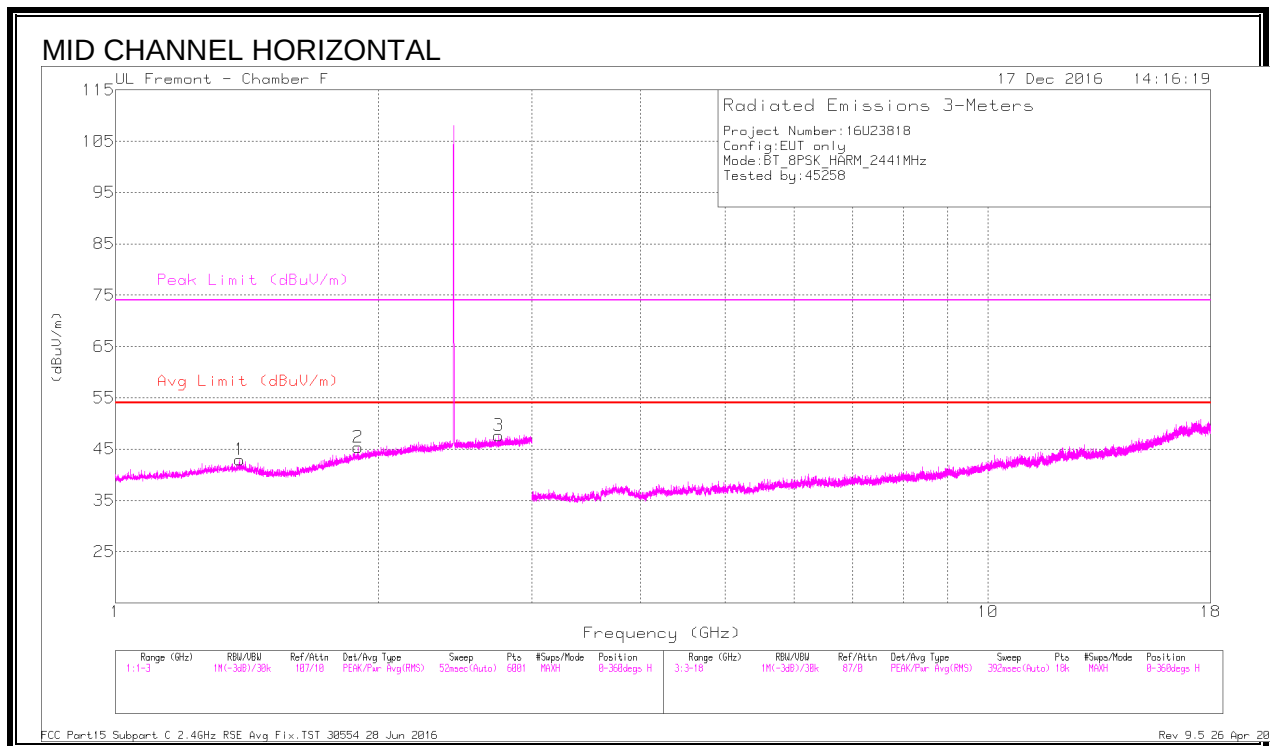
PK2 - KDB558074 Method: Maximum Peak

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 26 Apr 2016

MID HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl /Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.387	40.32	PKFH	29.3	-22.1	47.52	-	-	74	-26.48	329	142	H
	* 1.389	29.26	VA1T	29.3	-22.1	36.46	54	-17.54	-	-	329	142	H
2	1.897	40.44	PKFH	30.9	-21.4	49.94	-	-	-	-	189	195	H
	1.899	29.08	VA1T	30.9	-21.4	38.58	-	-	-	-	189	195	H
3	* 2.748	41.37	PKFH	32.4	-20.6	53.17	-	-	74	-20.83	128	181	H
	* 2.75	28.99	VA1T	32.5	-20.5	40.99	54	-13.01	-	-	128	181	H
4	* 3.816	37.67	PKFH	33.4	-28.5	42.57	-	-	74	-31.43	293	211	V
	* 3.817	26.32	VA1T	33.4	-28.5	31.22	54	-22.78	-	-	293	211	V
5	* 7.278	36.05	PKFH	35.5	-26.5	45.05	-	-	74	-28.95	213	236	V
	* 7.279	25.01	VA1T	35.5	-26.5	34.01	54	-19.99	-	-	213	236	V
6	* 12.427	33.69	PKFH	39	-22.2	50.49	-	-	74	-23.51	162	200	V
	* 12.425	22.55	VA1T	39	-22.1	39.45	54	-14.55	-	-	162	200	V

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

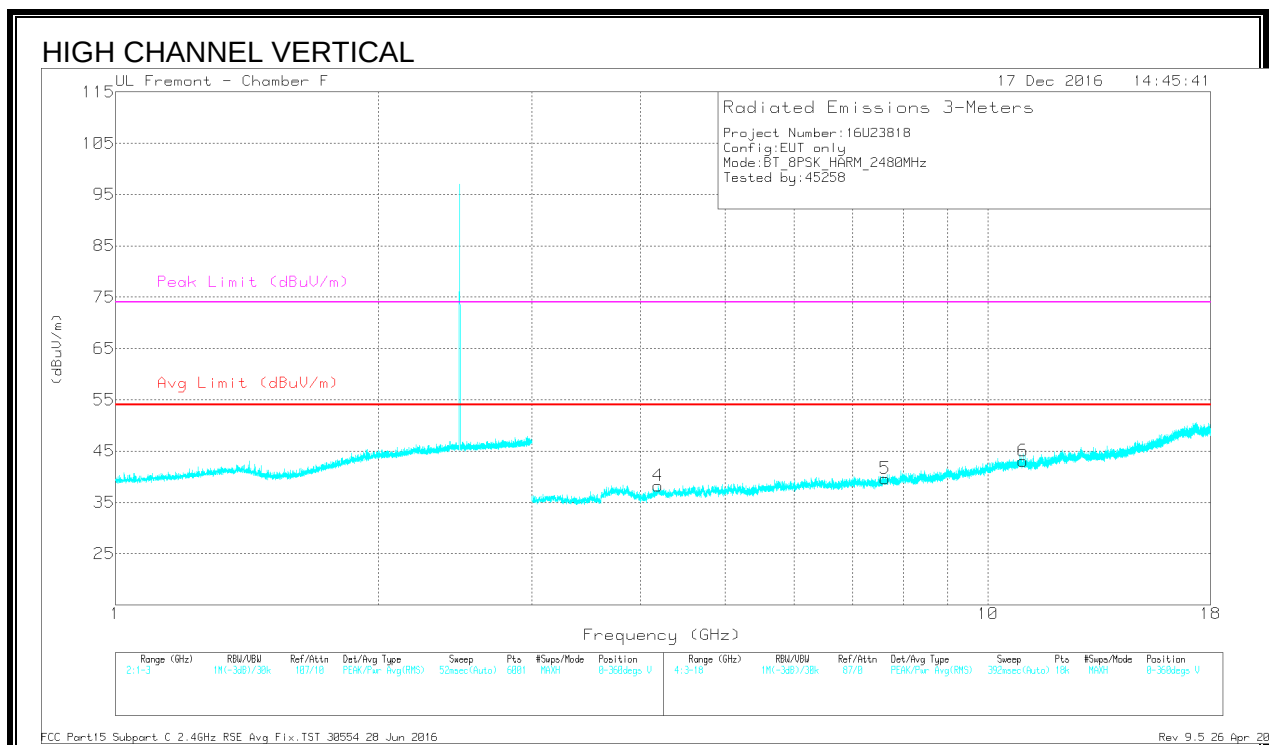
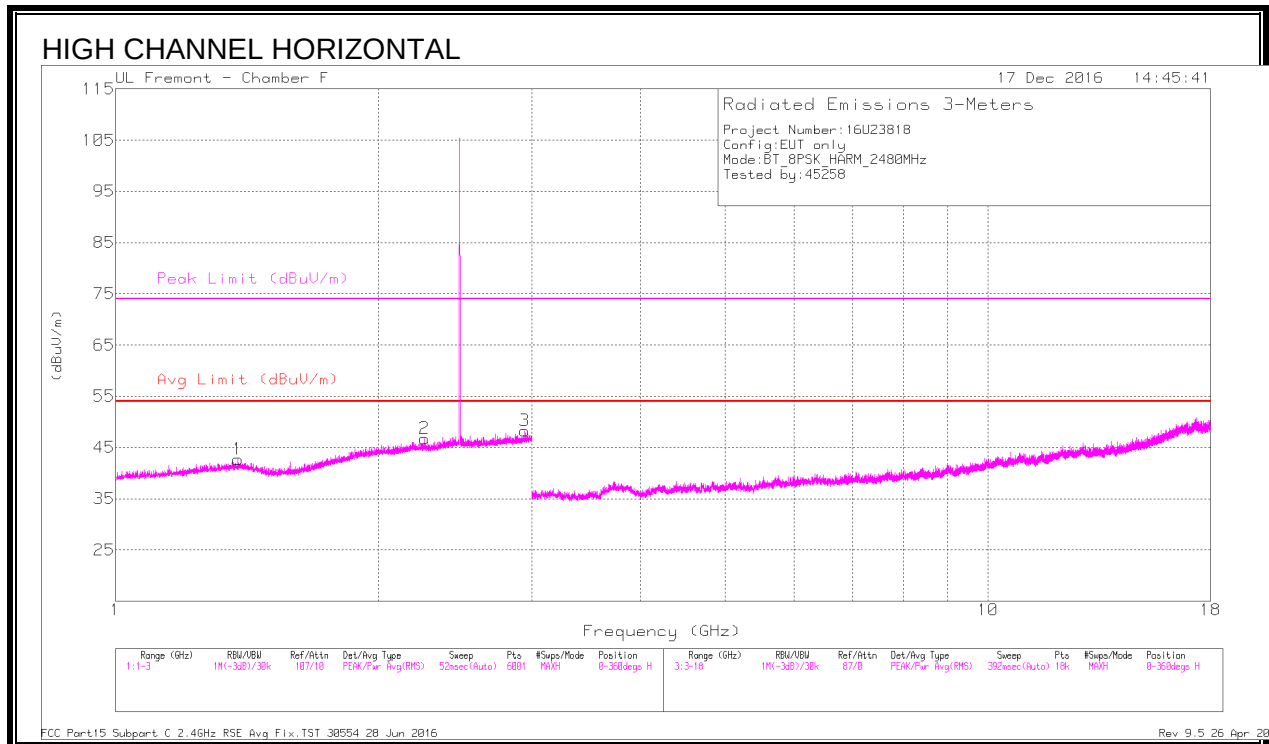
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

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

FCC Part15 Subpart C 2.4GHz RSE Avg Fix.TST 30554 28 Jun 2016

Rev 9.5 26 Apr 2016

HIGH HORIZONTAL



Data

Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl /Filtr/Pa d (dB)	Correcte d Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.383	40.31	PKFH	29.2	-22.1	47.41	-	-	74	-26.59	138	156	H
	* 1.381	29.27	VA1T	29.2	-22.1	36.37	54	-17.63	-	-	138	156	H
2	* 2.258	40.52	PKFH	31.8	-21	51.32	-	-	74	-22.68	162	181	H
	* 2.258	29.12	VA1T	31.8	-21	39.92	54	-14.08	-	-	162	181	H
3	2.947	40.26	PKFH	32.7	-20.4	52.56	-	-	-	-	210	167	H
	2.946	29.11	VA1T	32.7	-20.4	41.41	-	-	-	-	210	167	H
4	* 4.19	37.69	PKFH	33.7	-28.2	43.19	-	-	74	-30.81	319	149	V
	* 4.186	26.33	VA1T	33.7	-28.2	31.83	54	-22.17	-	-	319	149	V
5	* 7.623	35.34	PKFH	35.7	-25.4	45.64	-	-	74	-28.36	267	224	V
	* 7.624	24.25	VA1T	35.7	-25.4	34.55	54	-19.45	-	-	267	224	V
6	* 10.97	32.6	PKFH	37.9	-21.5	49	-	-	74	-25	198	245	V
	* 10.968	21.66	VA1T	37.9	-21.5	38.06	54	-15.94	-	-	198	245	V

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

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

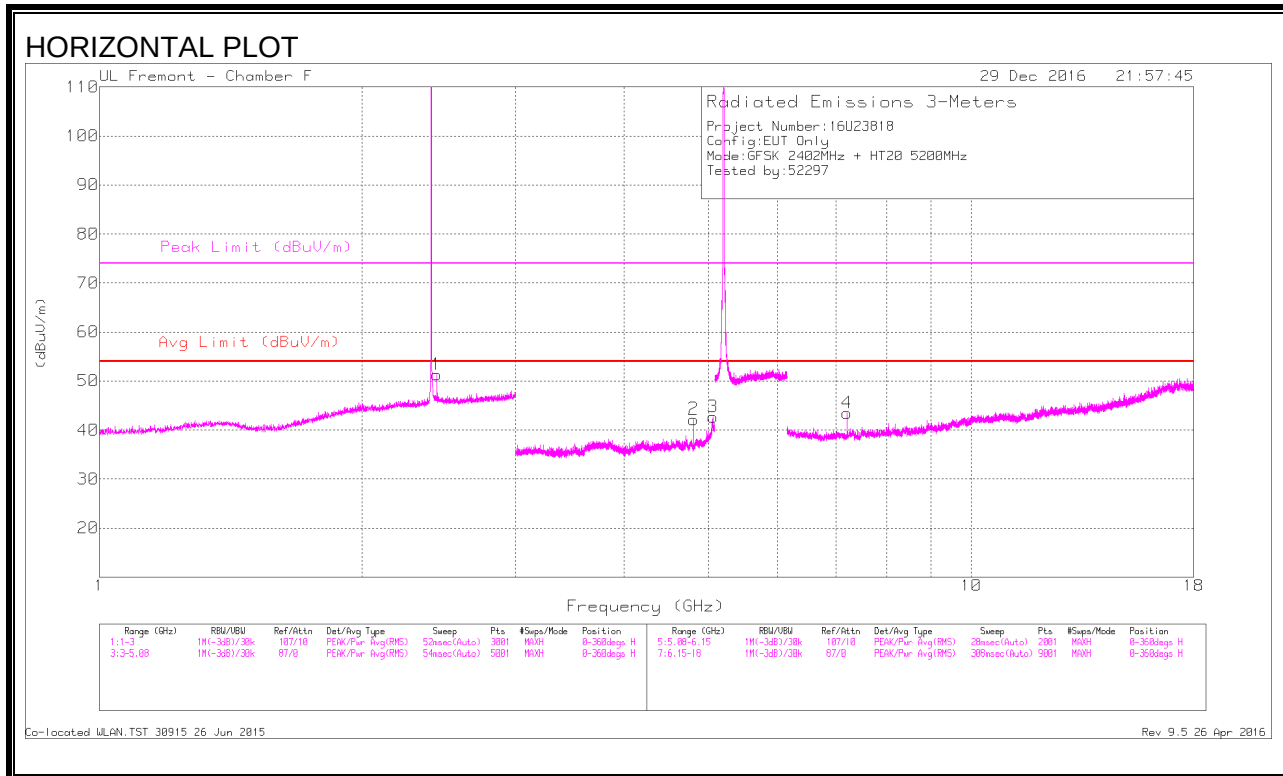
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

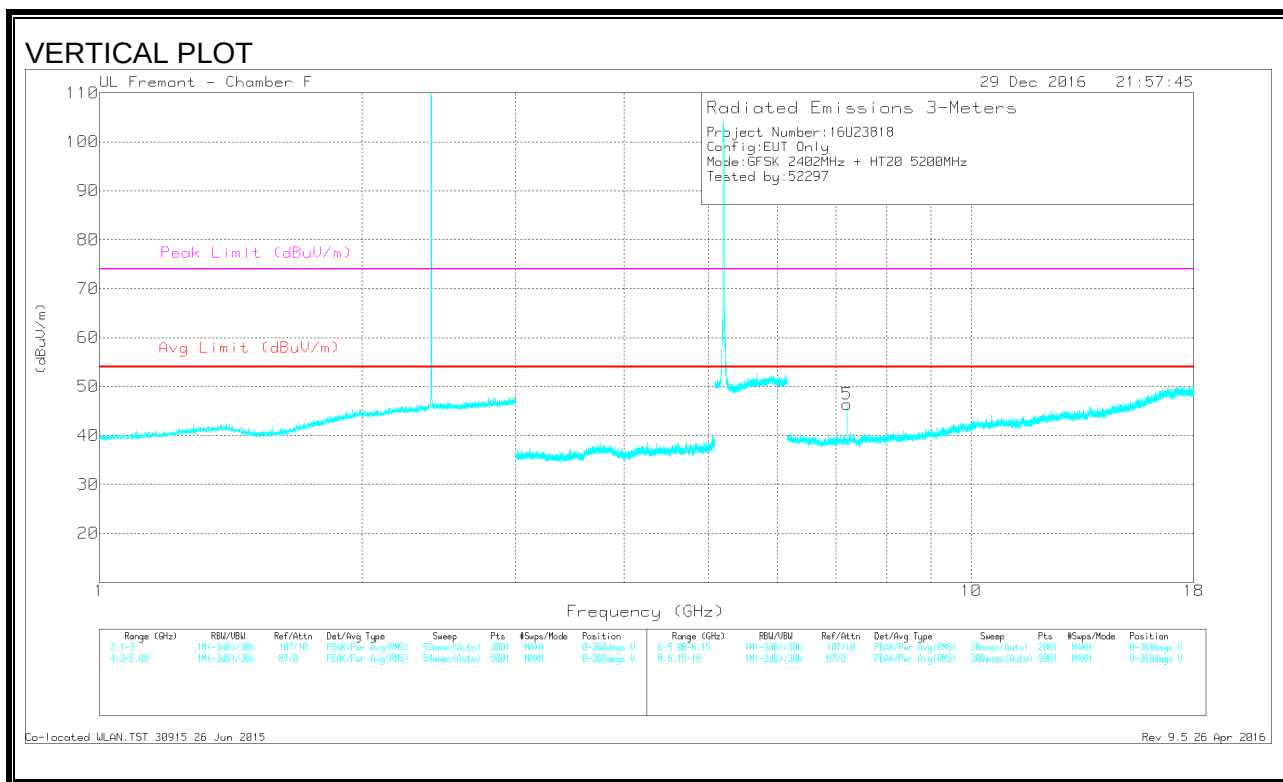
FCC Part15 Subpart C 2.4GHz RSE Avg Fix.TST 30554 28 Jun 2016

Rev 9.5 26 Apr 2016

9.6. WORST-CASE CO-LOCATION

BLUETOOTH AND 802.11 HT20 2Tx CDD MODE IN THE 5.2GHz BAND





DATA

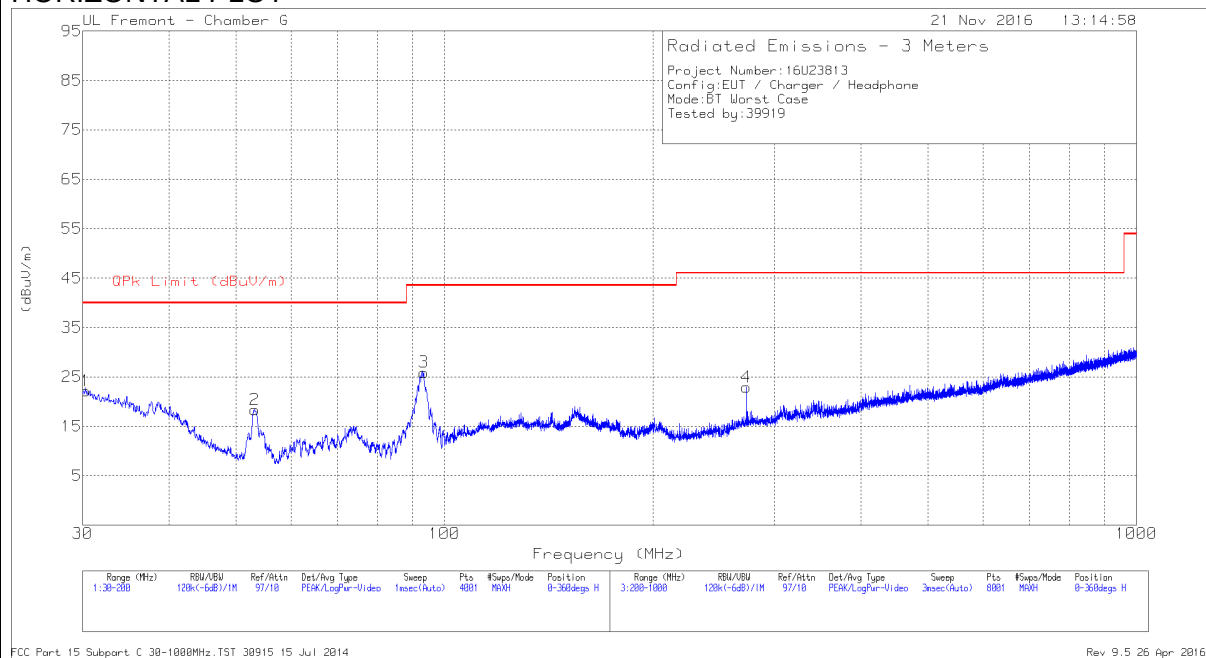
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.439	40.01	Pk	32.2	-20.9	51.31	53.97	-2.66	74	-22.69	0-360	201	H
2	* 4.804	35.8	Pk	34	-27.6	42.2	53.97	-11.77	74	-31.8	0-360	201	H
3	* 5.058	36.31	Pk	34.2	-27.9	42.61	53.97	-11.36	74	-31.39	0-360	148	H
4	7.206	34.13	Pk	35.6	-26.3	43.43	53.97	-10.54	74	-30.57	0-360	201	H
5	7.206	37.09	Pk	35.6	-26.3	46.39	53.97	-7.58	74	-27.61	0-360	201	V

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

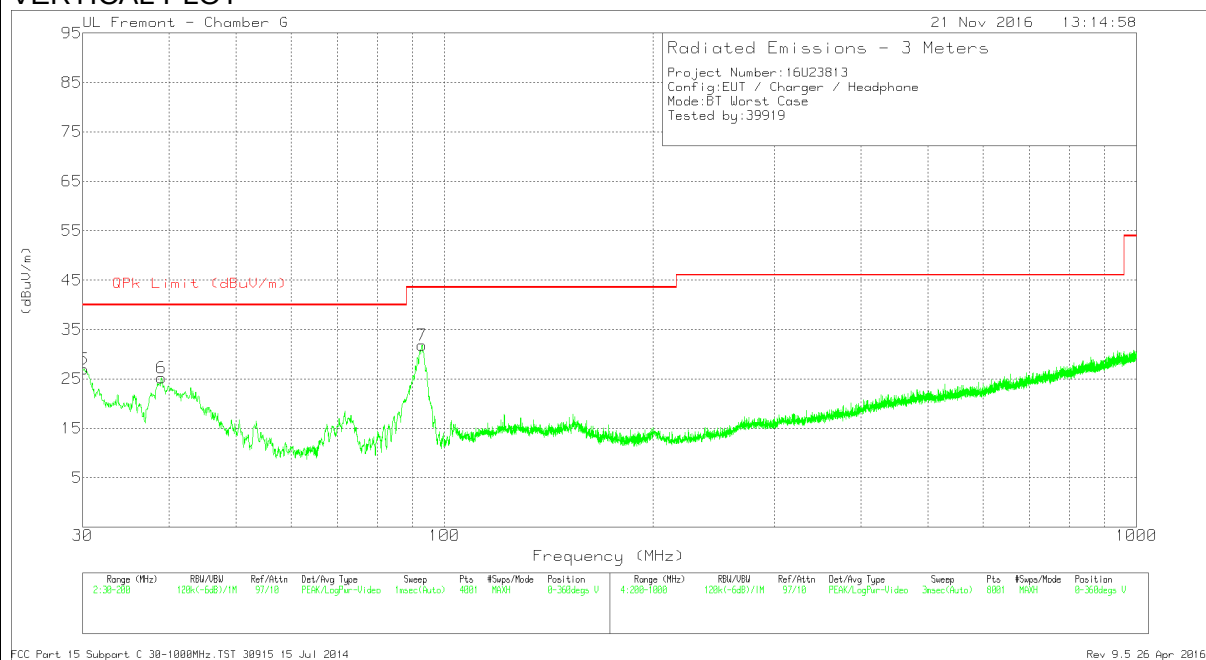
9.7. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequen cy (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp Cbl (dB)	Correcte d Reading (dBuV/ m)	QPk Limit (dBuV/ m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 273.2	34.83	Pk	17.2	-29.1	22.93	46.02	-23.09	0-360	100	H
5	30.1275	32.82	Pk	25.5	-31.3	27.02	40	-12.98	0-360	100	V
1	30.2975	28.12	Pk	25.4	-31.3	22.22	40	-17.78	0-360	200	H
6	38.9675	37.27	Pk	19.1	-31.2	25.17	40	-14.83	0-360	100	V
2	53.1413	38.44	Pk	10.9	-31	18.34	40	-21.66	0-360	399	H
7	92.73	50.16	Pk	12.2	-30.5	31.86	43.52	-11.66	0-360	100	V
3	93.2825	44.02	Pk	12.4	-30.5	25.92	43.52	-17.6	0-360	200	H

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

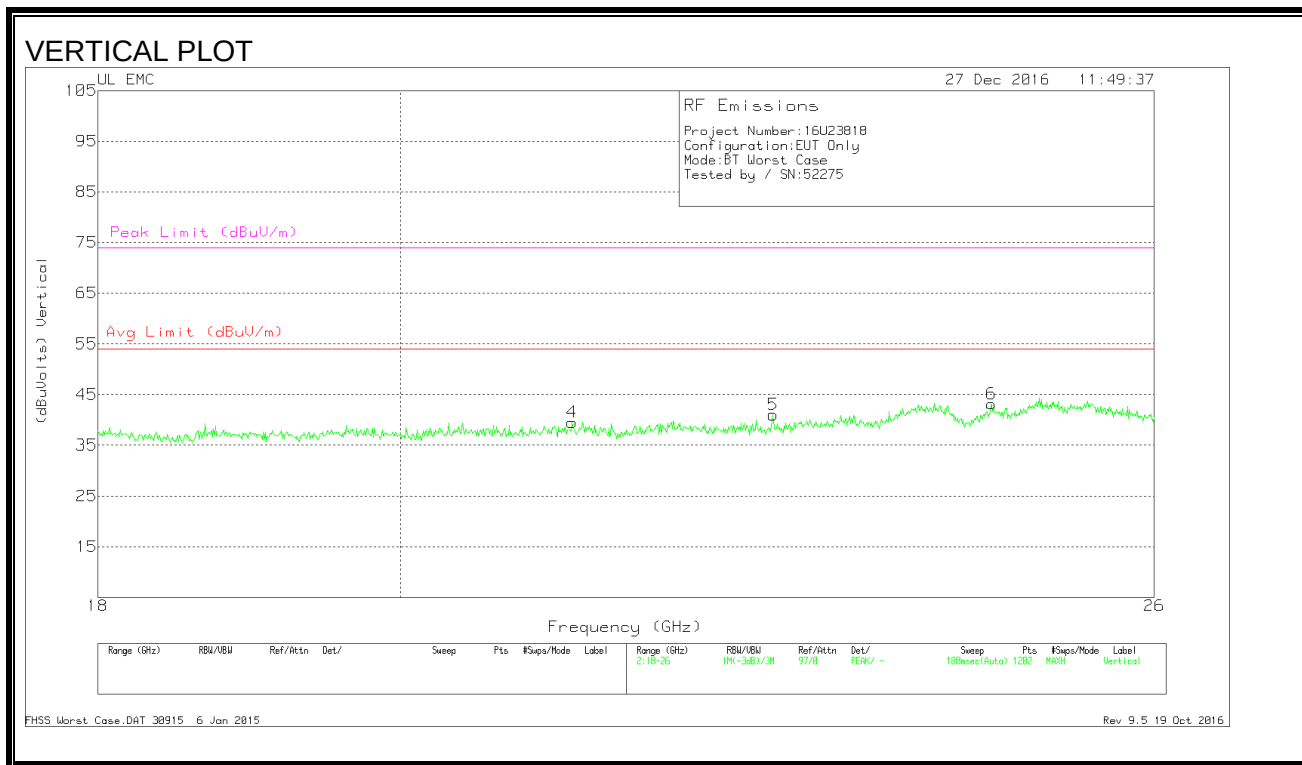
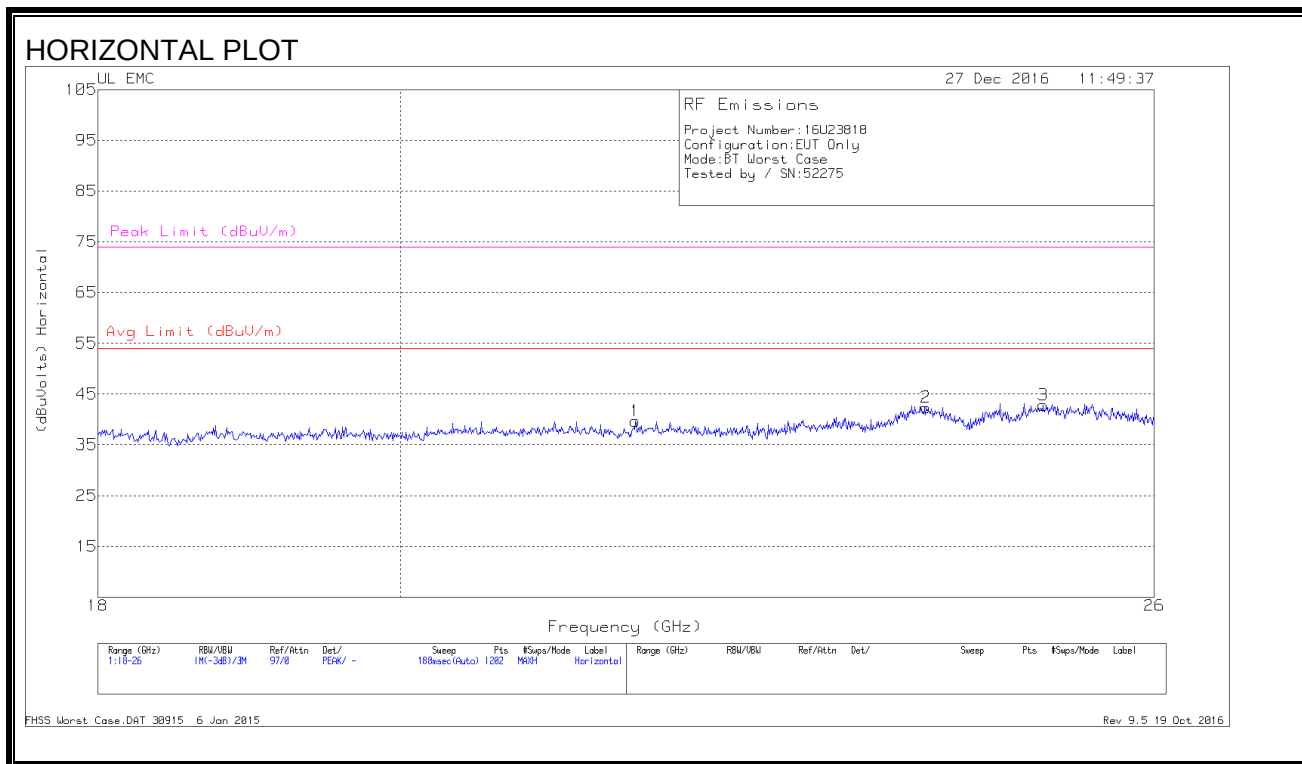
Pk - Peak detector

FCC Part 15 Subpart C 30-1000MHz.TST 30915 15 Jul 2014

Rev 9.5 26 Apr 2016

9.8. WORST-CASE ABOVE 18 GHz

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



Data

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	21.704	40.57	Pk	33.2	-24.6	-9.5	39.67	54	-14.33	74	-34.33
2	24.015	42.13	Pk	34	-24.3	-9.5	42.333	54	-11.67	74	-31.67
3	25.014	42.63	Pk	34.2	-24.5	-9.5	42.83	54	-11.17	74	-31.17
4	21.231	41	Pk	33.1	-25.1	-9.5	39.5	54	-14.5	74	-34.5
5	22.769	41.7	Pk	33.4	-24.6	-9.5	41	54	-13	74	-33
6	24.568	42.47	Pk	34.1	-23.9	-9.5	43.17	54	-10.833	74	-30.83

Pk - Peak detector

FHSS Worst Case.DAT 30915 6 Jan 2015
Rev 9.5 19 Oct 2016

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	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.

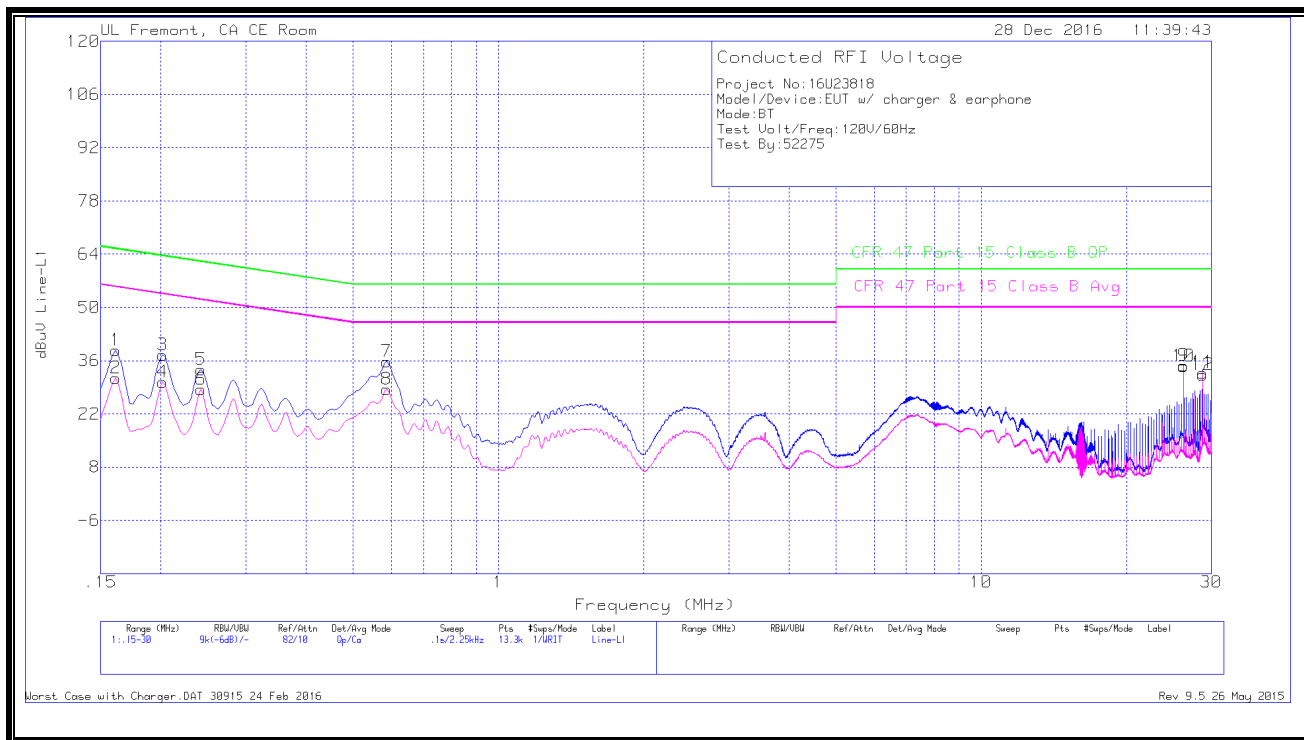
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

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

LINE 1 RESULTS

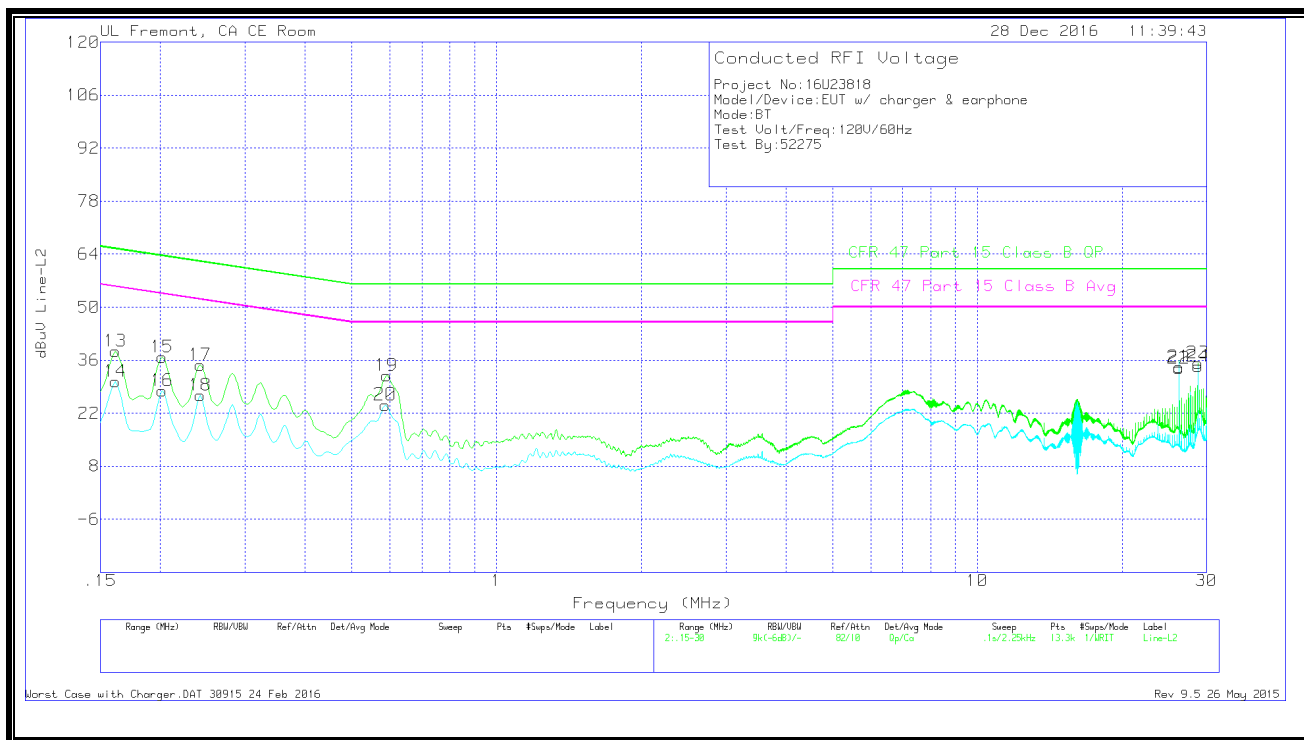


WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.16125	28.53	Qp	0	0	10.1	38.63	65.4	-26.77	-	-
2	.16125	21.22	Ca	0	0	10.1	31.32	-	-	55.4	-24.08
3	.20175	27.46	Qp	0	0	10.1	37.56	63.54	-25.98	-	-
4	.20175	20.26	Ca	0	0	10.1	30.36	-	-	53.54	-23.18
5	.24225	23.56	Qp	0	0	10.1	33.66	62.02	-28.36	-	-
6	.24225	18.35	Ca	0	0	10.1	28.45	-	-	52.02	-23.57
7	.5865	25.65	Qp	0	0	10.1	35.75	56	-20.25	-	-
8	.5865	18.32	Ca	0	0	10.1	28.42	-	-	46	-17.58
9	26.25	23.78	Qp	.1	.3	10.5	34.68	60	-25.32	-	-
10	26.25	23.59	Ca	.1	.3	10.5	34.49	-	-	50	-15.51
11	28.752	22.07	Qp	.1	.3	10.4	32.87	60	-27.13	-	-
12	28.752	21.5	Ca	.1	.3	10.4	32.3	-	-	50	-17.7

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



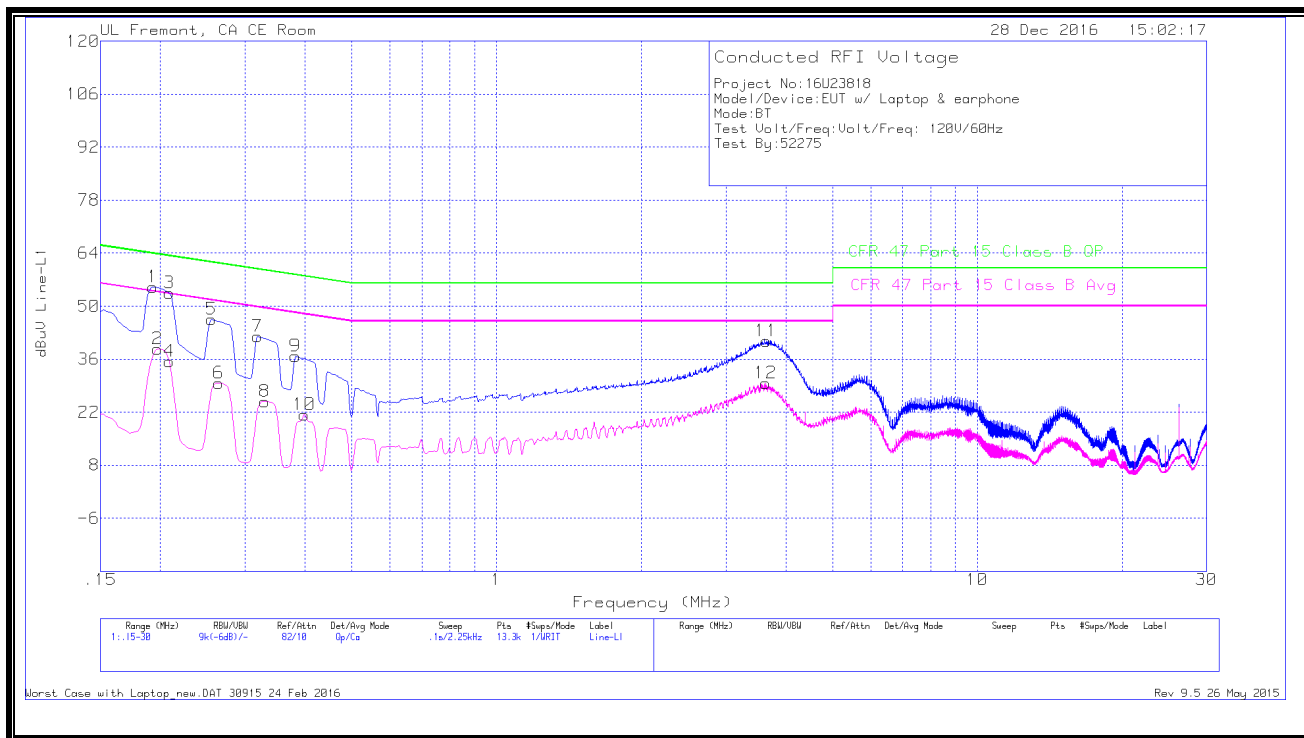
WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.16125	28.22	Qp	0	0	10.1	38.32	65.4	-27.08	-	-
14	.16125	20.21	Ca	0	0	10.1	30.31	-	-	55.4	-25.09
15	.20175	26.7	Qp	0	0	10.1	36.8	63.54	-26.74	-	-
16	.20175	17.79	Ca	0	0	10.1	27.89	-	-	53.54	-25.65
17	.24225	24.68	Qp	0	0	10.1	34.78	62.02	-27.24	-	-
18	.24225	16.65	Ca	0	0	10.1	26.75	-	-	52.02	-25.27
19	.591	21.79	Qp	0	0	10.1	31.89	56	-24.11	-	-
20	.5865	14.08	Ca	0	0	10.1	24.18	-	-	46	-21.82
21	26.24775	23.32	Qp	.1	.3	10.5	34.22	60	-25.78	-	-
22	26.24775	22.92	Ca	.1	.3	10.5	33.82	-	-	50	-16.18
23	28.74975	24.49	Qp	.1	.3	10.4	35.29	60	-24.71	-	-
24	28.74975	23.57	Ca	.1	.3	10.4	34.37	-	-	50	-15.63

Qp - Quasi-Peak detector
Ca - CISPR average detection
FCC15 CE Class B 150kHz-30MHz Stepping.TST
Rev 9.5 07 Dec 2016

10.2. EUT POWERED BY HOST PC VIA USB CABLE

LINE 1 RESULTS

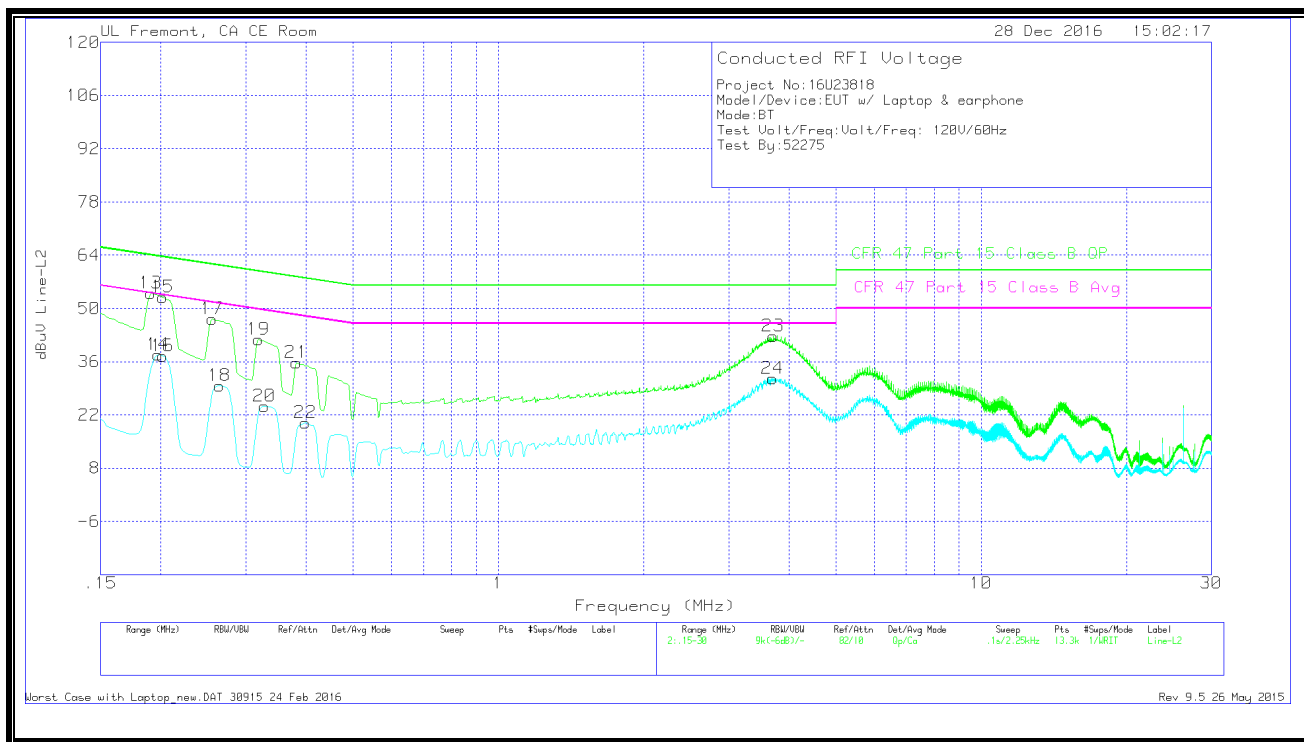


WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.19275	44.9	Qp	0	0	10.1	55	63.92	-8.92	-	-
2	.19725	28.65	Ca	0	0	10.1	38.75	-	-	53.73	-14.98
3	.2085	43.39	Qp	0	0	10.1	53.49	63.26	-9.77	-	-
4	.2085	25.26	Ca	0	0	10.1	35.36	-	-	53.26	-17.9
5	.25575	36.42	Qp	0	0	10.1	46.52	61.57	-15.05	-	-
6	.26475	19.57	Ca	0	0	10.1	29.67	-	-	51.28	-21.61
7	.31875	31.84	Qp	0	0	10.1	41.94	59.74	-17.8	-	-
8	.33	14.74	Ca	0	0	10.1	24.84	-	-	49.45	-24.61
9	.38175	26.62	Qp	0	0	10.1	36.72	58.24	-21.52	-	-
10	.39862	11.24	Ca	0	0	10.1	21.34	-	-	47.88	-26.54
11	3.64425	30.63	Qp	0	.1	10.1	40.83	56	-15.17	-	-
12	3.6285	19.4	Ca	0	.1	10.1	29.6	-	-	46	-16.4

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.1905	43.82	Qp	0	0	10.1	53.92	64.01	-10.09	-	-
14	.19725	27.67	Ca	0	0	10.1	37.77	-	-	53.73	-15.96
15	.20175	42.83	Qp	0	0	10.1	52.93	63.54	-10.61	-	-
16	.20175	27.46	Ca	0	0	10.1	37.56	-	-	53.54	-15.98
17	.25575	37.08	Qp	0	0	10.1	47.18	61.57	-14.39	-	-
18	.26475	19.61	Ca	0	0	10.1	29.71	-	-	51.28	-21.57
19	.31875	31.76	Qp	0	0	10.1	41.86	59.74	-17.88	-	-
20	.32775	14.19	Ca	0	0	10.1	24.29	-	-	49.51	-25.22
21	.38175	25.6	Qp	0	0	10.1	35.7	58.24	-22.54	-	-
22	.39862	9.9	Ca	0	0	10.1	20	-	-	47.88	-27.88
23	3.71175	32.53	Qp	0	.1	10.1	42.73	56	-13.27	-	-
24	3.69375	21.44	Ca	0	.1	10.1	31.64	-	-	46	-14.36

Qp - Quasi-Peak detector
Ca - CISPR average detection
Worst Case with Laptop.DAT
Rev 9.5 07 Dec 2016