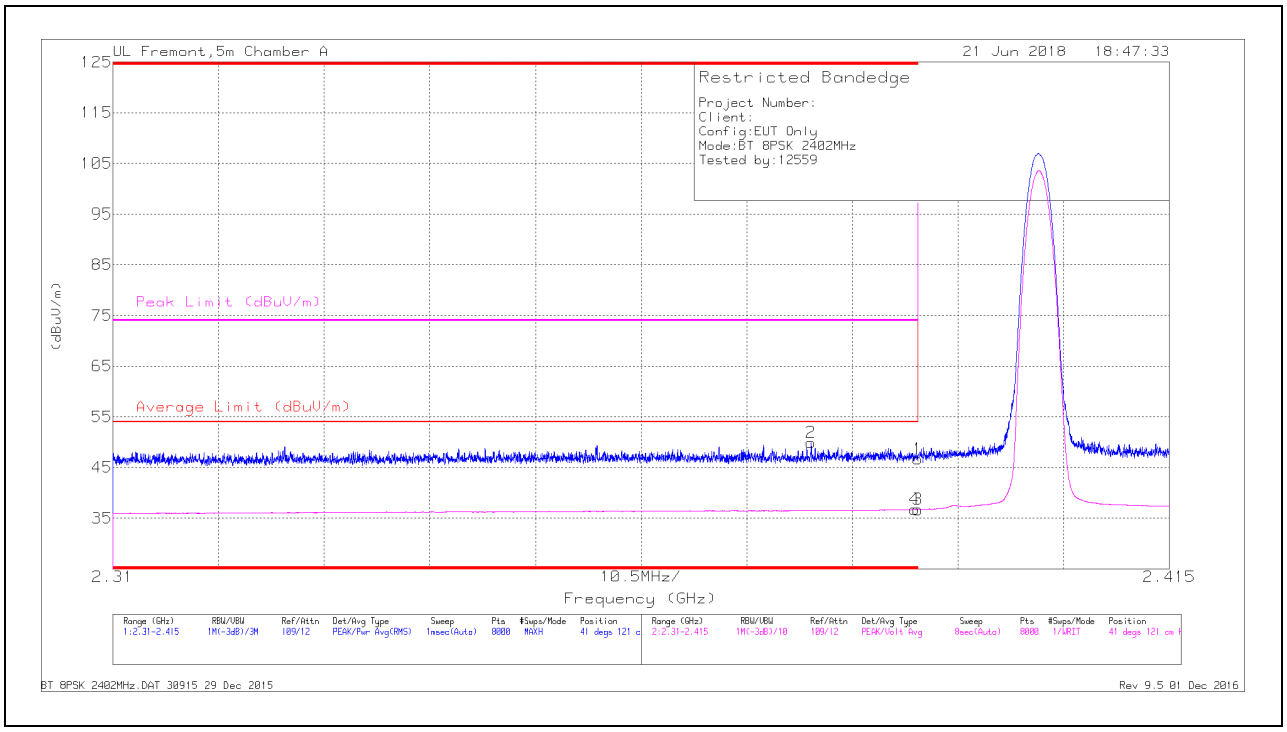
9.1.2. HIGH POWER ENCHANCED DATA RATE 8PSK MODULATION

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.379	41.17	Pk	31.7	-23	49.87	-	-	74	-24.13	41	121	H
1	* 2.39	37.91	Pk	31.8	-23	46.71	-	-	74	-27.29	41	121	H
3	* 2.39	27.9	VA1T	31.8	-23	36.7	54	-17.3	-	-	41	121	H
4	* 2.39	27.92	VA1T	31.8	-23	36.72	54	-17.28	-	-	41	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

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VERTICAL RESULT

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.375	40.29	Pk	31.7	-23	48.99	-	-	74	-25.01	71	270	V
1	* 2.39	38.06	Pk	31.8	-23	46.86	-	-	74	-27.14	71	270	V
3	* 2.39	27.77	VA1T	31.8	-23	36.57	54	-17.43	-	-	71	270	V
4	* 2.39	27.79	VA1T	31.8	-23	36.59	54	-17.41	-	-	71	270	V

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

Pk - Peak detector

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

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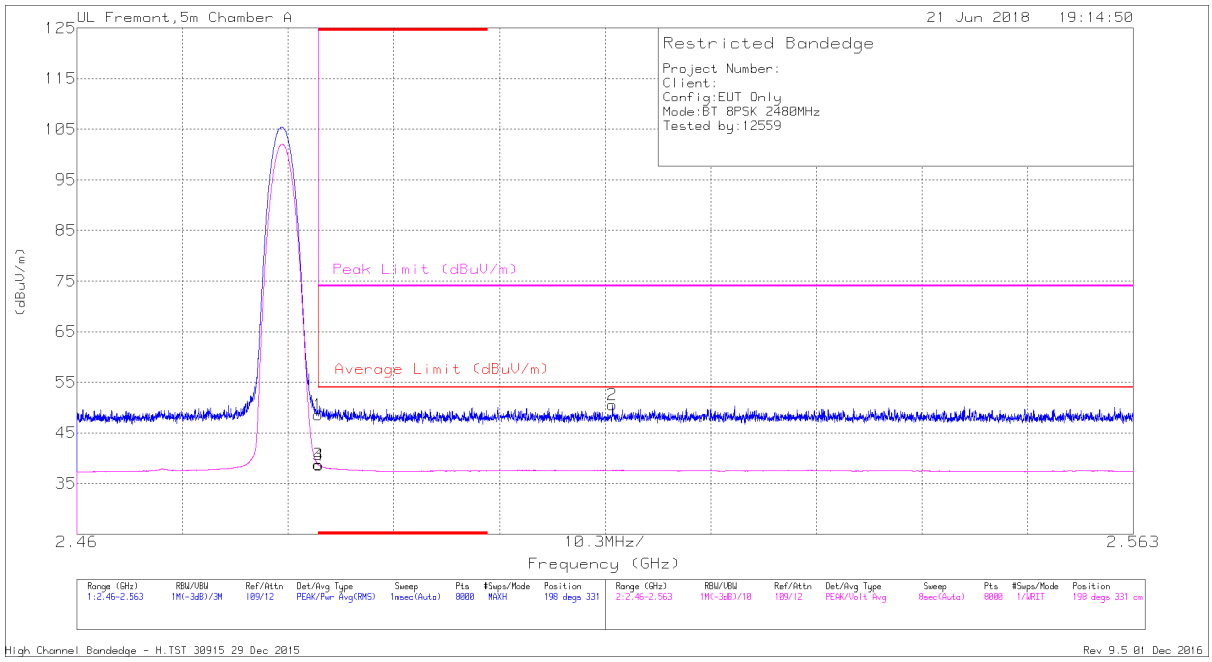
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.18	Pk	32.3	-22.9	48.58	-	-	74	-25.42	198	331	H
3	* 2.484	29.36	VA1T	32.3	-22.9	38.76	54	-15.24	-	-	198	331	H
4	* 2.484	29.19	VA1T	32.3	-22.9	38.59	54	-15.41	-	-	198	331	H
2	2.512	40.94	Pk	32.4	-22.8	50.54	-	-	74	-23.46	198	331	H

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

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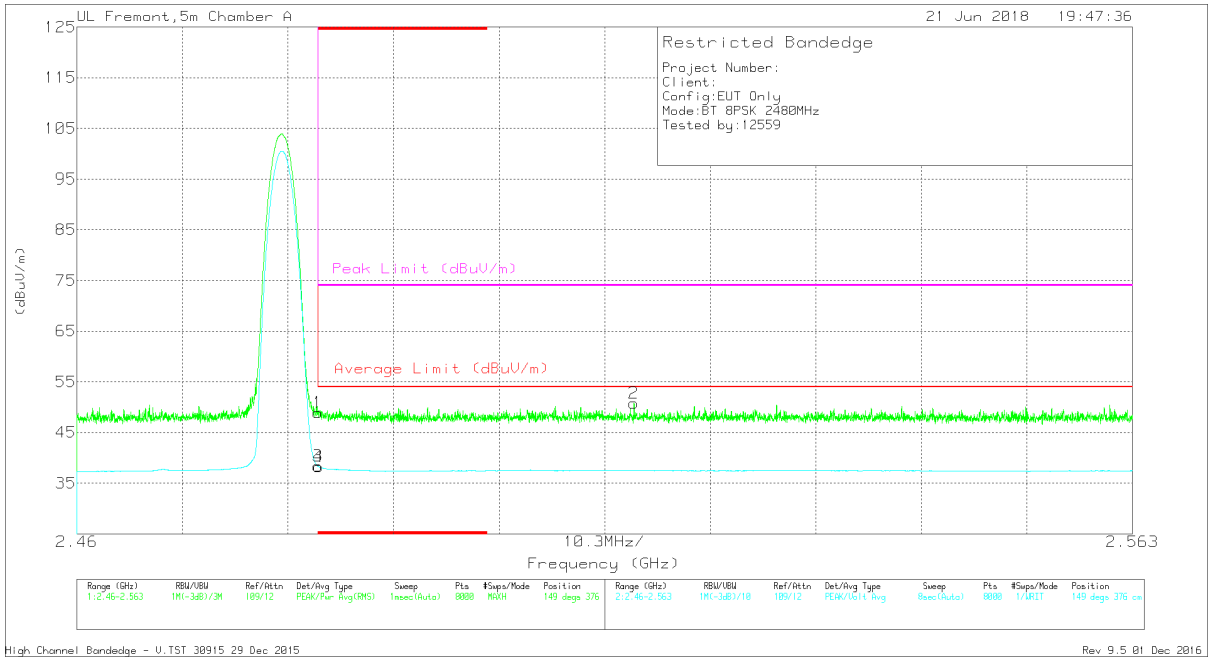
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.49	Pk	32.3	-22.9	48.89	-	-	74	-25.11	149	376	V
3	* 2.484	28.94	VA1T	32.3	-22.9	38.34	54	-15.66	74	-35.66	149	376	V
4	* 2.484	28.83	VA1T	32.3	-22.9	38.23	54	-15.77	74	-35.77	149	376	V
2	2.514	41.14	Pk	32.4	-22.8	50.74	-	-	74	-23.26	149	376	V

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

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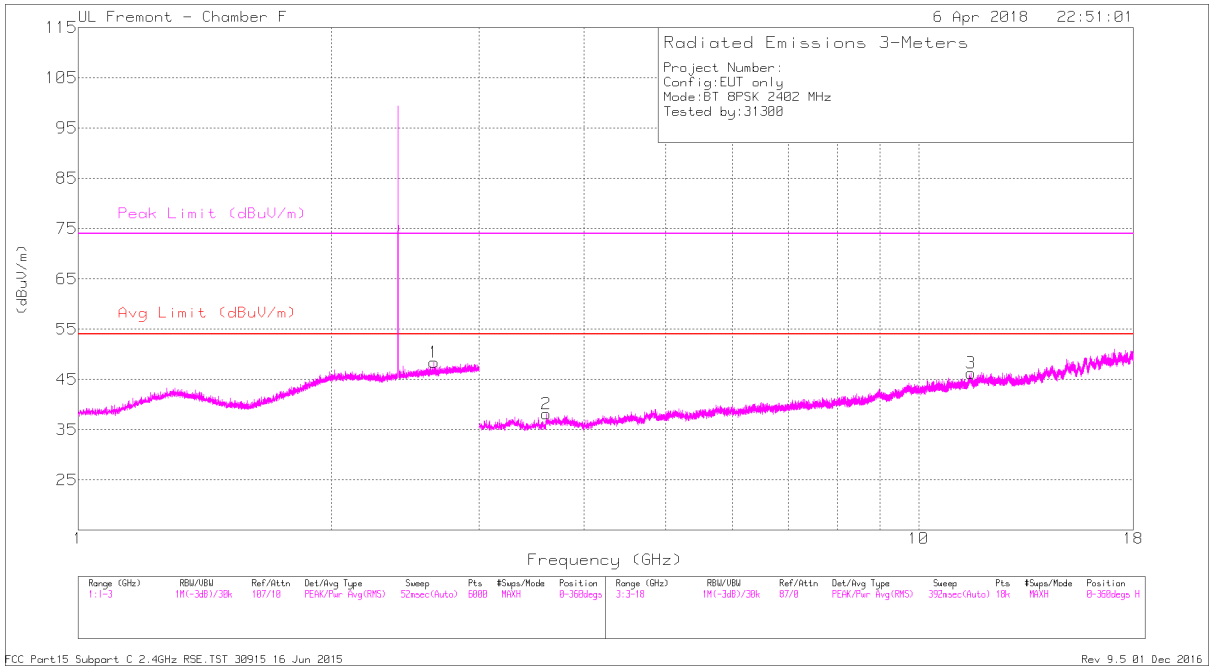
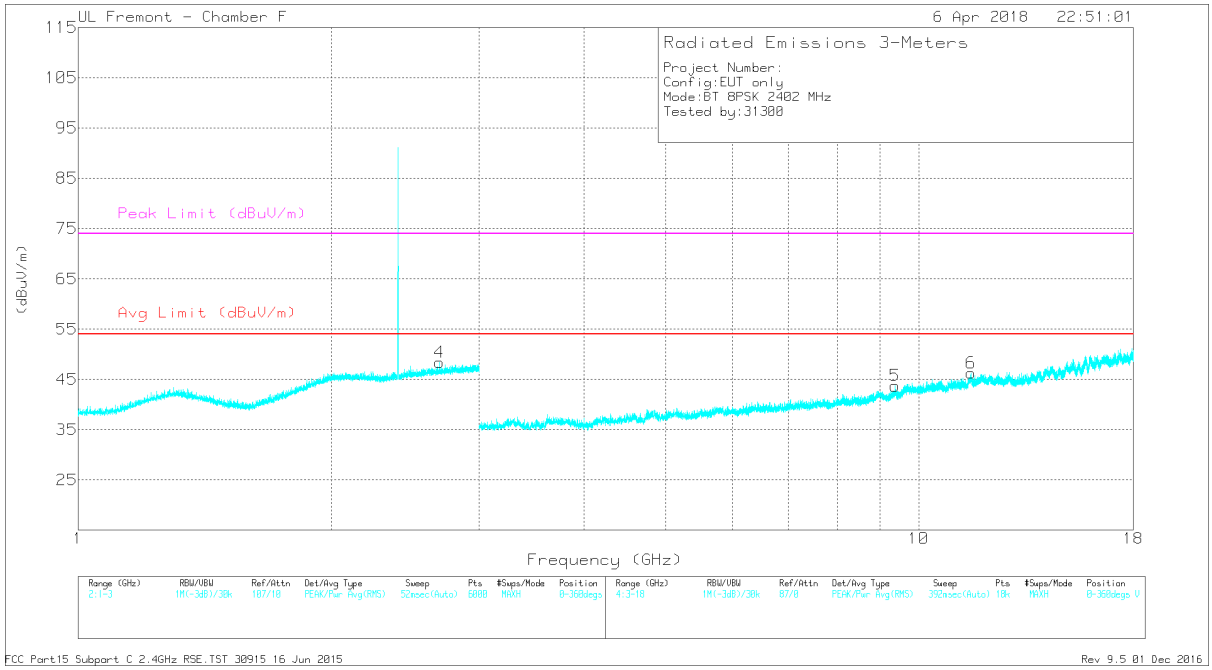
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.654	42.12	PKFH	32.4	-20.5	54.02	-	-	-	-	266	390	H
4	* 2.693	42.42	PKFH	32.5	-20.4	54.52	-	-	74	-19.48	260	137	V
	* 2.694	30.07	VA1T	32.5	-20.4	42.17	54	-11.83	-	-	260	137	V
2	* 3.608	39.22	PKFH	33.1	-28.8	43.52	-	-	74	-30.48	257	168	H
	* 3.609	27.44	VA1T	33.1	-28.8	31.74	54	-22.26	-	-	257	168	H
3	* 11.538	34.75	PKFH	38.5	-20.4	52.85	-	-	74	-21.15	10	261	H
	* 11.54	23.09	VA1T	38.5	-20.4	41.19	54	-12.81	-	-	10	261	H
5	* 9.37	34.59	PKFH	36.6	-21.5	49.69	-	-	74	-24.31	253	144	V
	* 9.366	23.06	VA1T	36.6	-21.6	38.06	54	-15.94	-	-	253	144	V
6	* 11.545	34.51	PKFH	38.5	-20.6	52.41	-	-	74	-21.59	201	212	V
	* 11.541	23.1	VA1T	38.5	-20.4	41.2	54	-12.8	-	-	201	212	V

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

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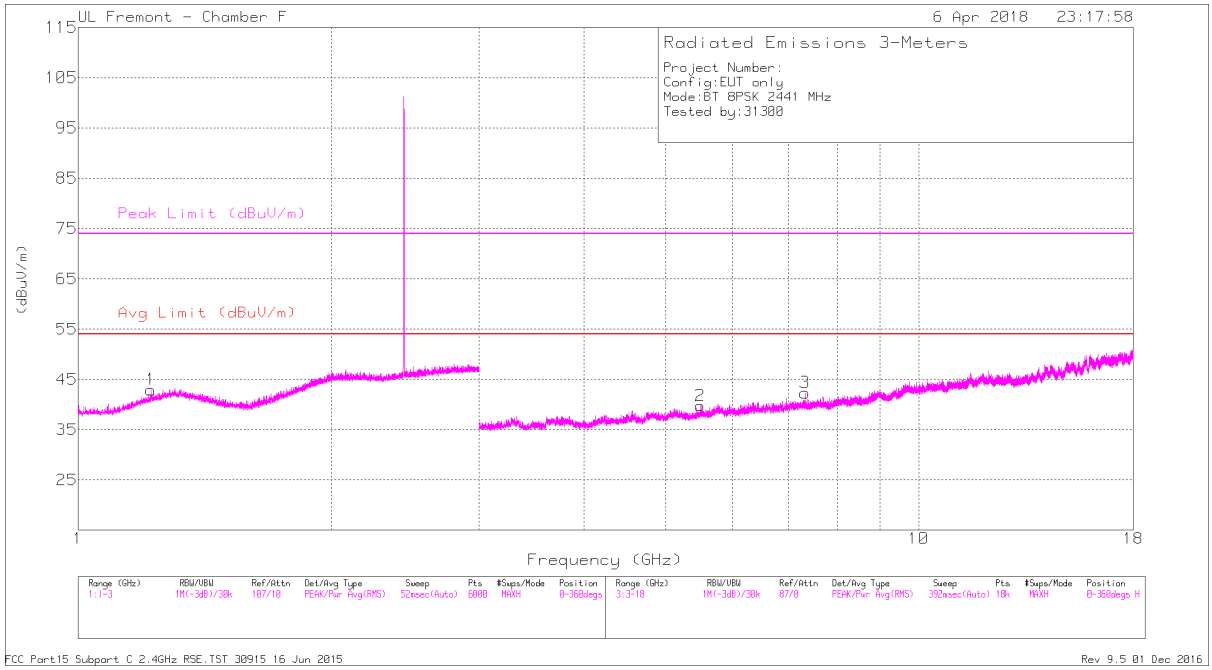
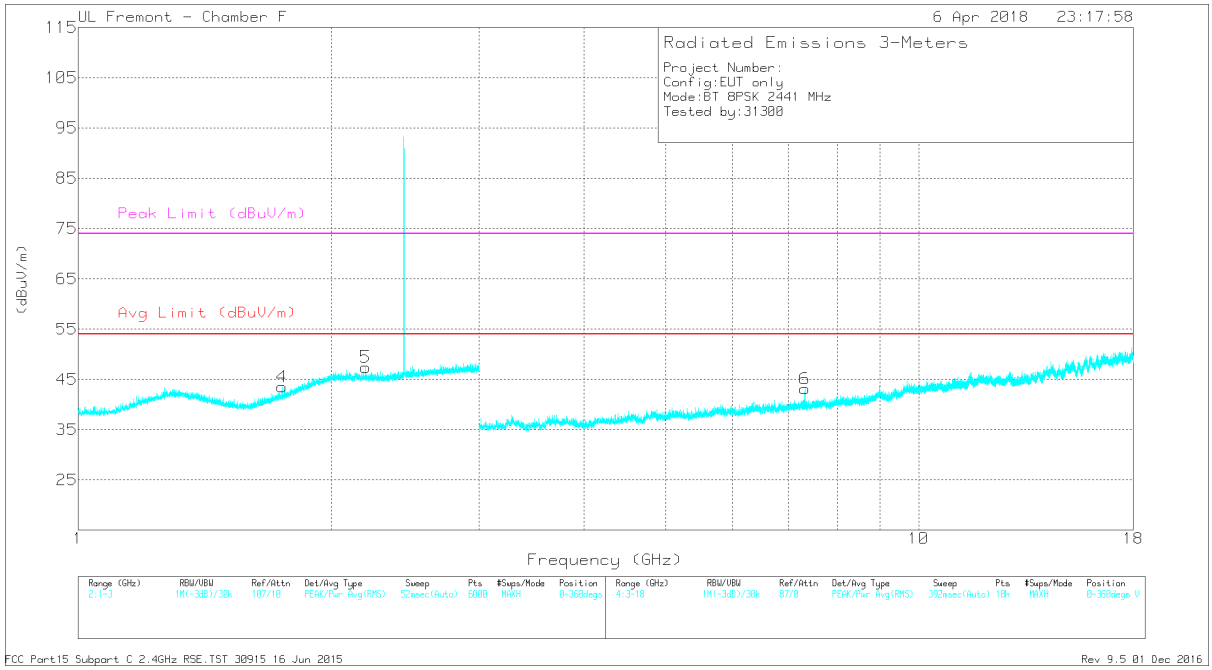
MID CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.221	42.11	PKFH	29.1	-22.2	49.01	-	-	74	-24.99	139	375	H
	* 1.219	30.12	VA1T	29.1	-22.2	37.02	54	-16.98	-		139	375	H
4	1.748	42.27	PKFH	29	-21.3	49.97	-	-	74	-24.03	286	180	V
5	2.2	42.91	PKFH	32	-20.7	54.21	-	-	74	-19.79	45	331	V
2	5.495	38.12	PKFH	34.8	-27.2	45.72	-	-	74	-28.28	88	323	H
3	* 7.323	38.45	PKFH	35.9	-25.9	48.45	-	-	74	-25.55	265	112	H
	* 7.323	27.82	VA1T	35.9	-25.9	37.82	54	-16.18	-	-	265	112	H
6	* 7.323	38.72	PKFH	35.9	-25.9	48.72	-	-	74	-25.28	347	101	V
	* 7.323	28.49	VA1T	35.9	-25.9	38.49	54	-15.51	-		347	101	V

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

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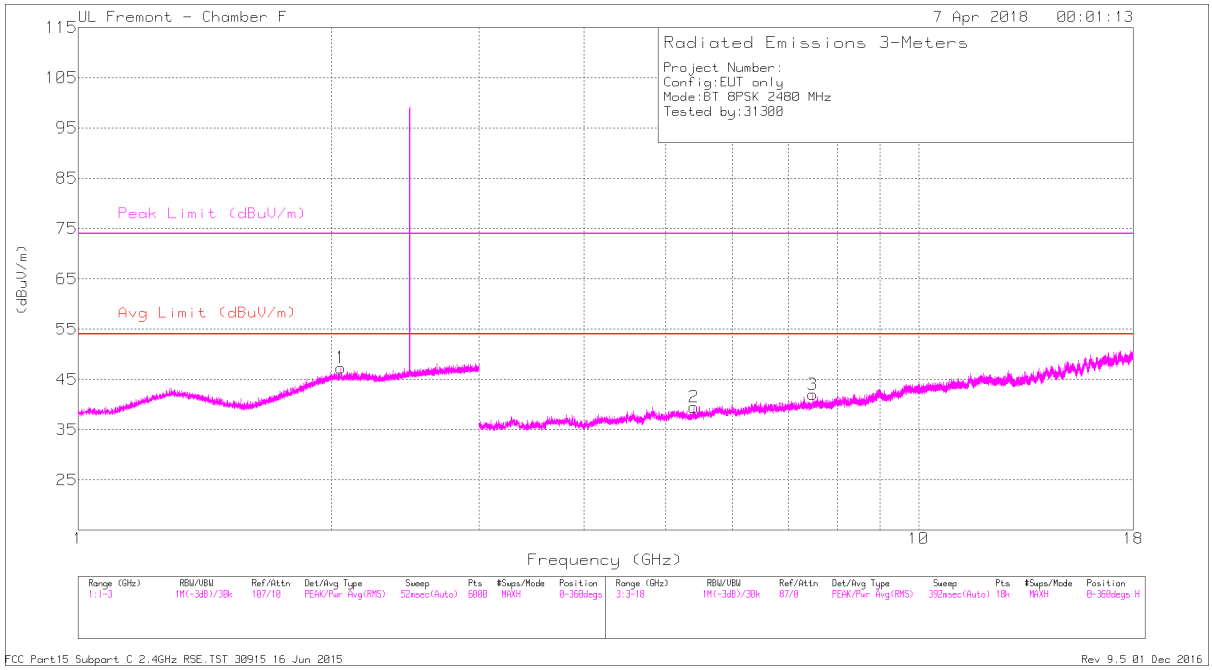
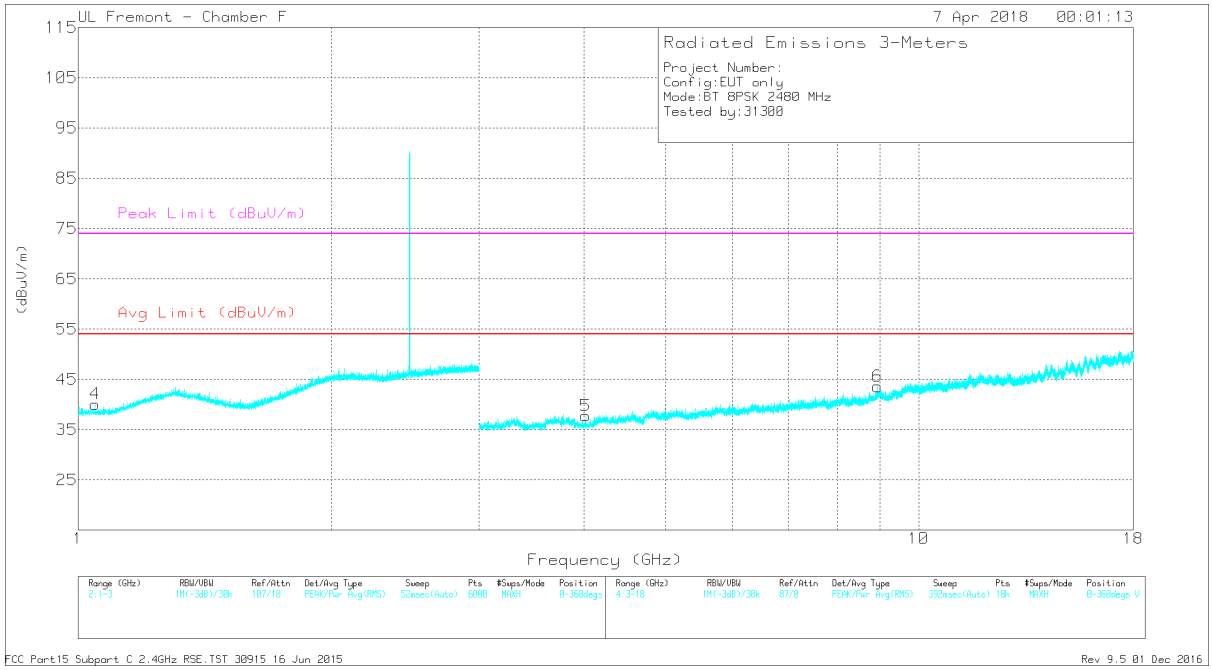
HIGH CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.054	42.03	PKFH	32.3	-21.1	53.23	-	-	74	-20.77	272	122	H
4	* 1.049	42.34	PKFH	26.8	-22.6	46.54	-	-	74	-27.46	137	296	V
	* 1.046	30.27	VA1T	26.7	-22.6	34.37	54	-19.63	-	-	137	296	V
2	* 5.4	38.14	PKFH	34.7	-27.2	45.64	-	-	74	-28.36	140	190	H
	* 5.4	26.27	VA1T	34.7	-27.2	33.77	54	-20.23	-	-	140	190	H
3	* 7.478	36.97	PKFH	36	-25	47.97	-	-	74	-26.03	146	121	H
	* 7.478	24.94	VA1T	36	-25	35.94	54	-18.06	-	-	146	121	H
5	* 4.015	39.06	PKFH	33.3	-28.5	43.86	-	-	74	-30.14	214	169	V
	* 4.015	27.26	VA1T	33.3	-28.5	32.06	54	-21.94	-	-	214	169	V
6	8.931	36.01	PKFH	36.6	-23	49.61	-	-	74	-24.39	319	202	V

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

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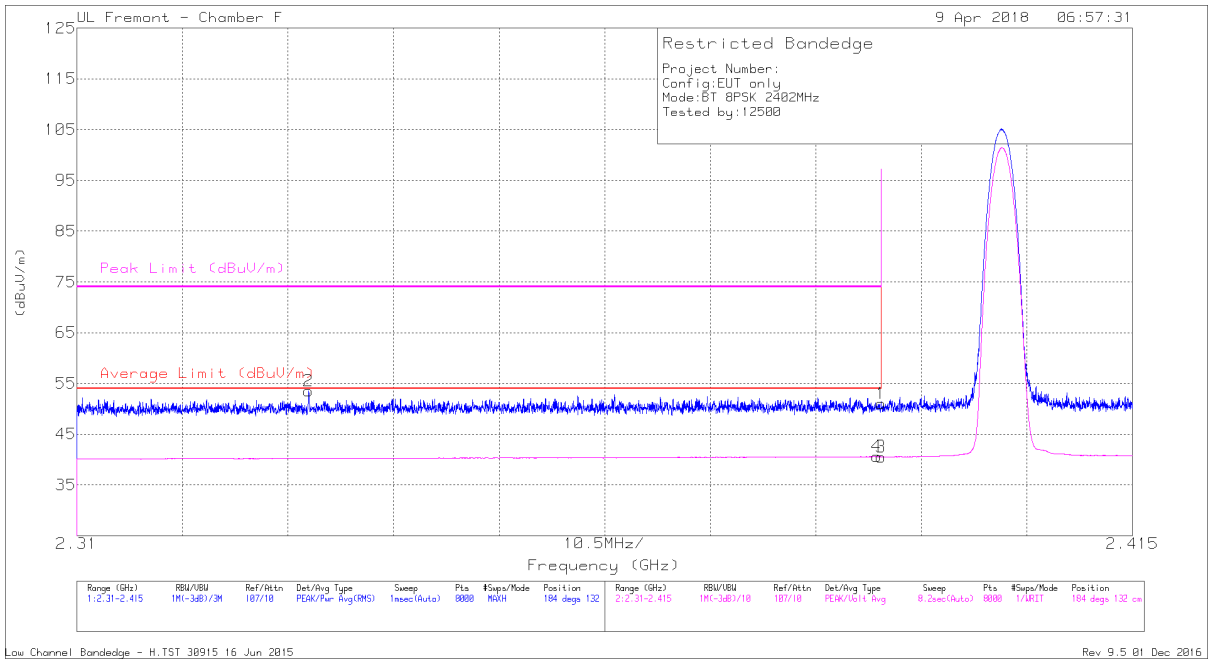
Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.71	Pk	31.9	-20.6	51.01	-	-	74	-22.99	184	132	H
2	* 2.333	42.48	Pk	31.7	-20.7	53.48	-	-	74	-20.52	184	132	H
3	* 2.39	29.24	VA1T	31.9	-20.6	40.54	54	-13.46	-	-	184	132	H
4	* 2.39	29.27	VA1T	31.9	-20.6	40.57	54	-13.43	-	-	184	132	H

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

Pk - Peak detector

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

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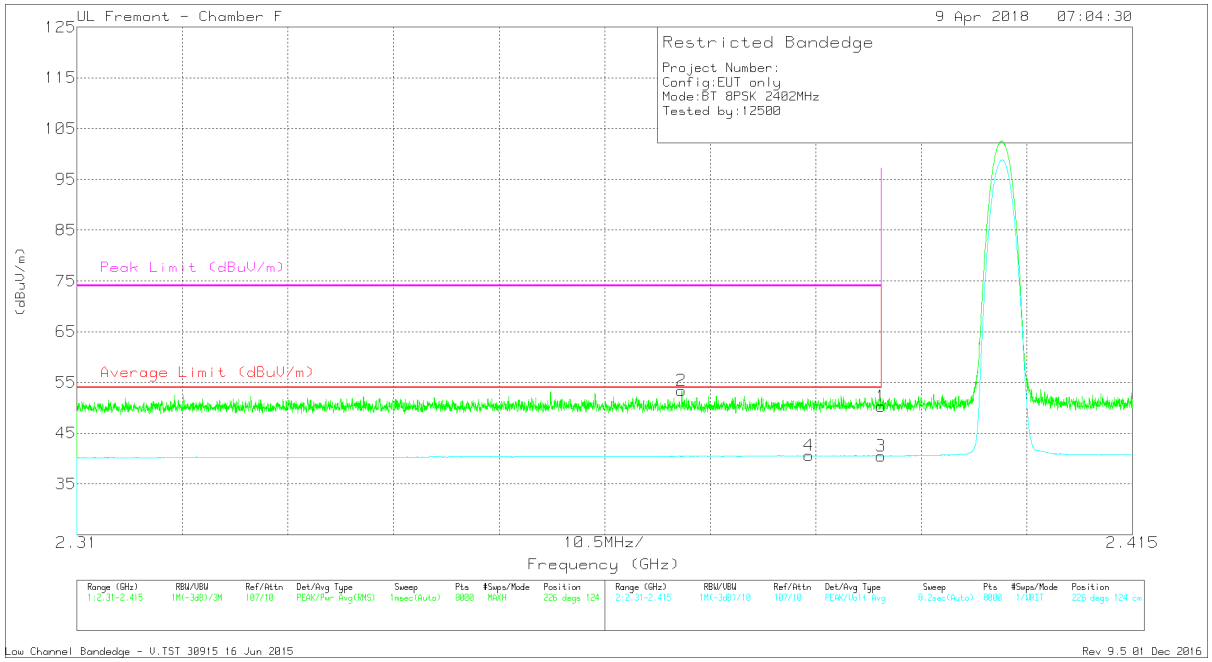
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.02	Pk	31.9	-20.6	50.32	-	-	74	-23.68	226	124	V
2	* 2.37	42.19	Pk	31.8	-20.6	53.39	-	-	74	-20.61	226	124	V
3	* 2.39	29.23	VA1T	31.9	-20.6	40.53	54	-13.47	-	-	226	124	V
4	* 2.383	29.38	VA1T	31.8	-20.6	40.58	54	-13.42	-	-	226	124	V

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

Pk - Peak detector

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

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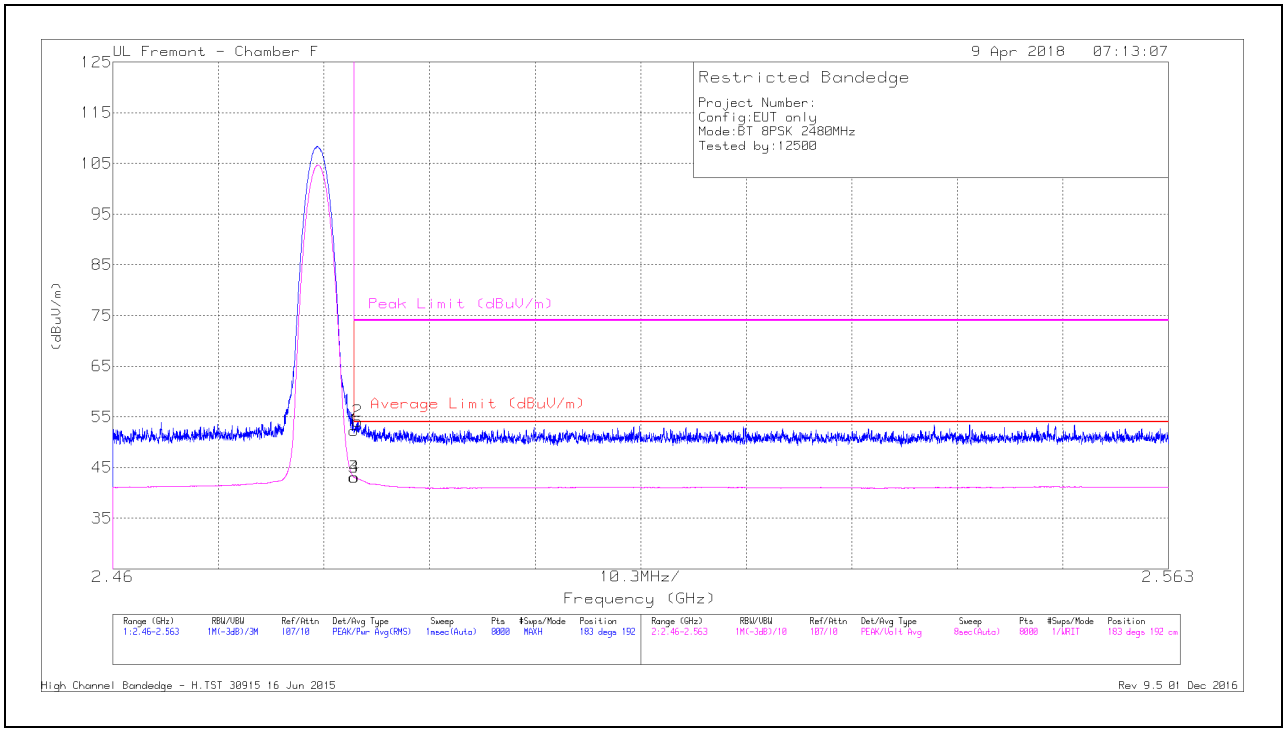
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.87	Pk	32.1	-20.7	52.27	-	-	74	-21.73	183	192	H
2	* 2.484	42.64	Pk	32.2	-20.7	54.14	-	-	74	-19.86	183	192	H
3	* 2.484	31.72	VA1T	32.1	-20.7	43.12	54	-10.88	-	-	183	192	H
4	* 2.484	31.64	VA1T	32.1	-20.7	43.04	54	-10.96	-	-	183	192	H

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

Pk - Peak detector

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

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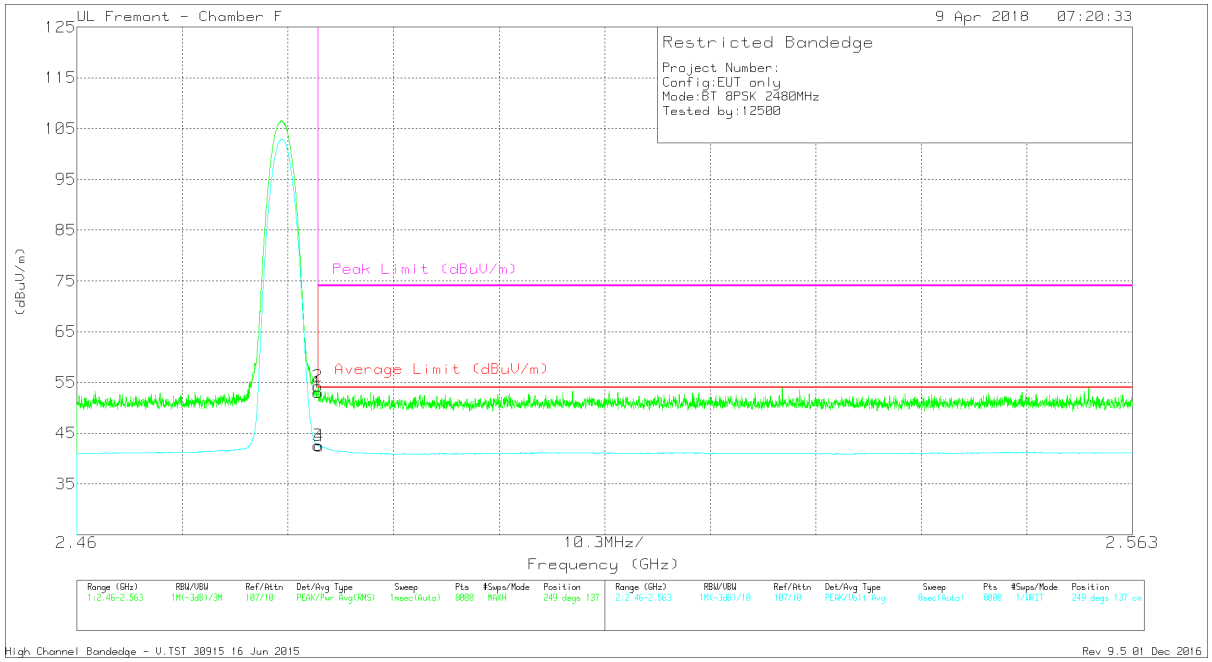
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.66	Pk	32.1	-20.7	53.06	-	-	74	-20.94	249	137	V
2	* 2.484	42.82	Pk	32.1	-20.7	54.22	-	-	74	-19.78	249	137	V
3	* 2.484	31.21	VA1T	32.1	-20.7	42.61	54	-11.39	-	-	249	137	V
4	* 2.484	31.07	VA1T	32.1	-20.7	42.47	54	-11.53	-	-	249	137	V

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

Pk - Peak detector

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

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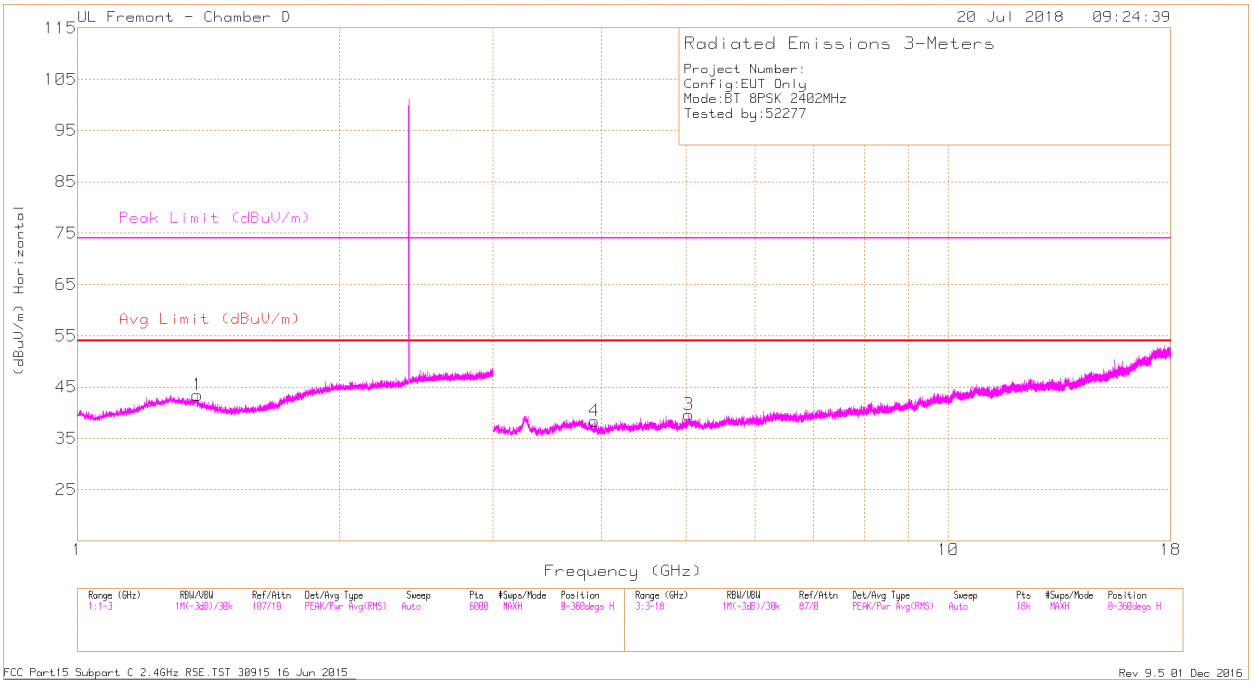
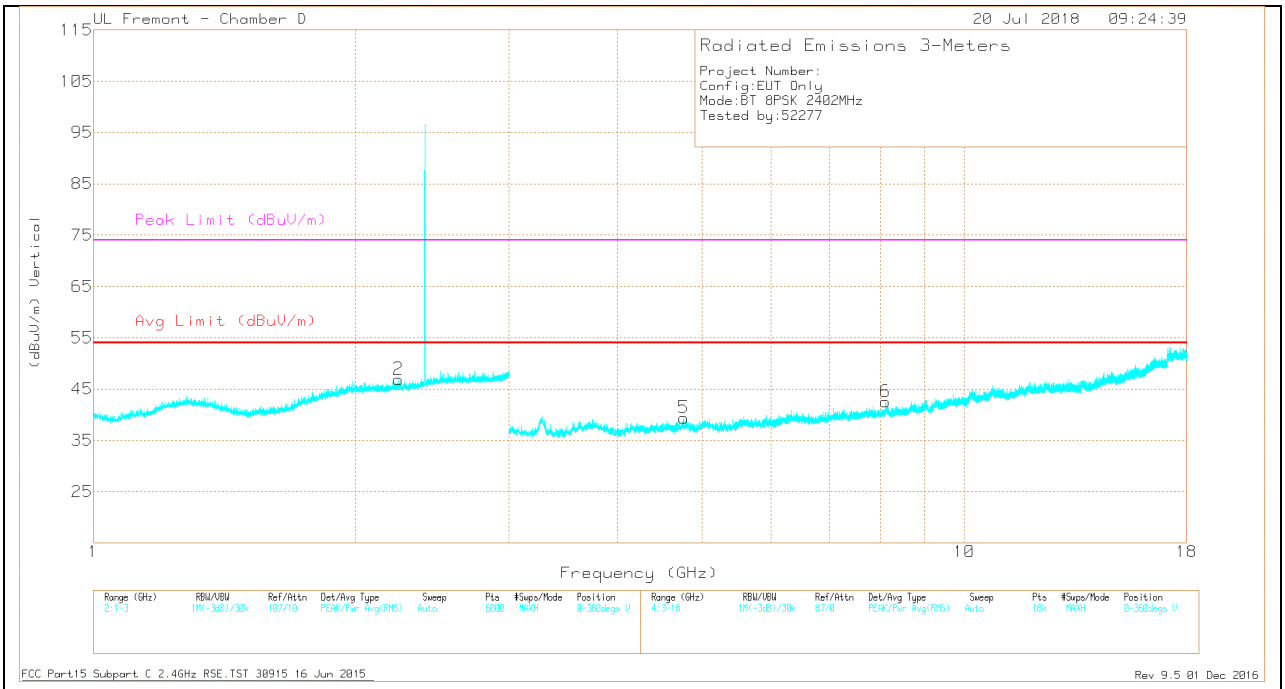
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.372	42.23	PKFH	29.5	-22	49.73	-		74	-24.27	143	171	H
	* 1.375	30.22	VA1T	29.4	-21.9	37.72	54	-16.28	-	-	143	171	H
2	* 2.241	42.91	PKFH	31.8	-20.7	54.01			74	-19.99	242	147	V
	* 2.24	30.1	VA1T	31.8	-20.7	41.2	54	-12.80	-	-	242	147	V
3	* 5.032	37.15	PKFH	34.3	-26.1	45.35			74	-28.65	152	317	H
	* 5.032	25.72	VA1T	34.2	-26.1	33.82	54	-20.18	-	-	152	317	H
4	* 3.923	38.29	PKFH	33.6	-27.8	44.09			74	-29.91	218	289	H
	* 3.926	26.67	VA1T	33.7	-27.8	32.57	54	-21.43	-	-	218	289	H
5	* 4.763	37.74	PKFH	34.3	-26.3	45.74			74	-28.26	192	244	V
	* 4.764	26.3	VA1T	34.3	-26.3	34.3	54	-19.7	-	-	192	244	V
6	* 8.12	34.93	PKFH	35.8	-22.5	48.23			74	-25.77	215	239	V
	* 8.122	23.42	VA1T	35.8	-22.5	36.72	54	-17.28	-	-	215	239	V

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

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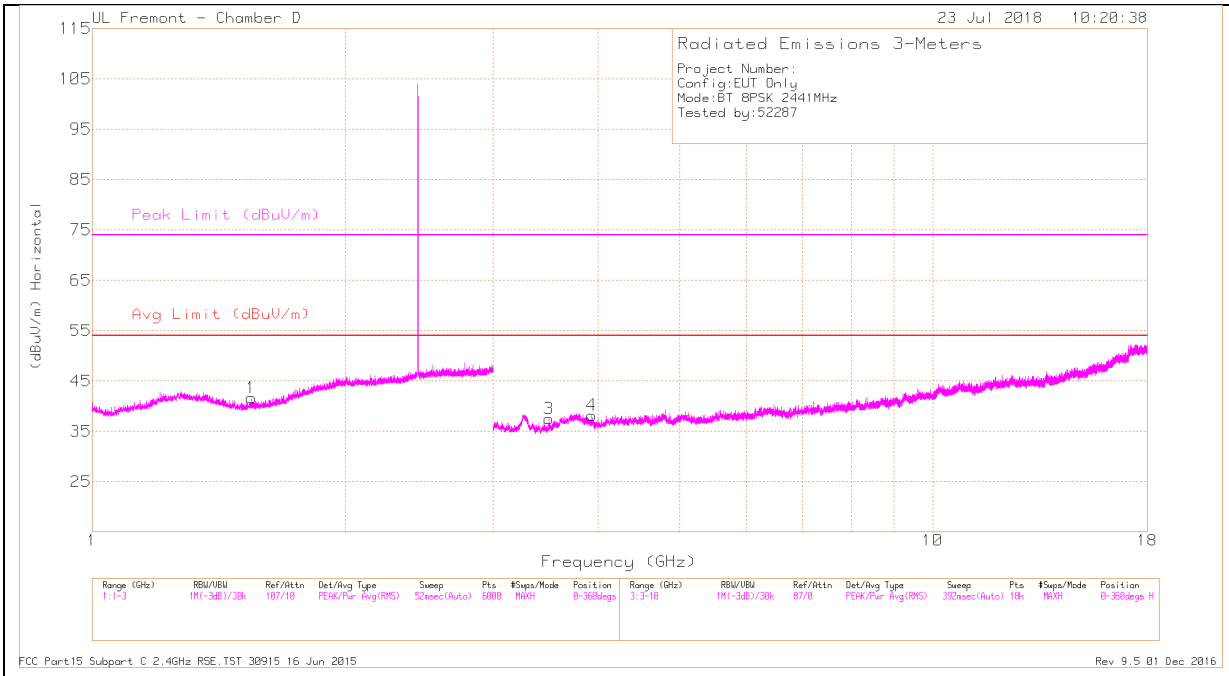
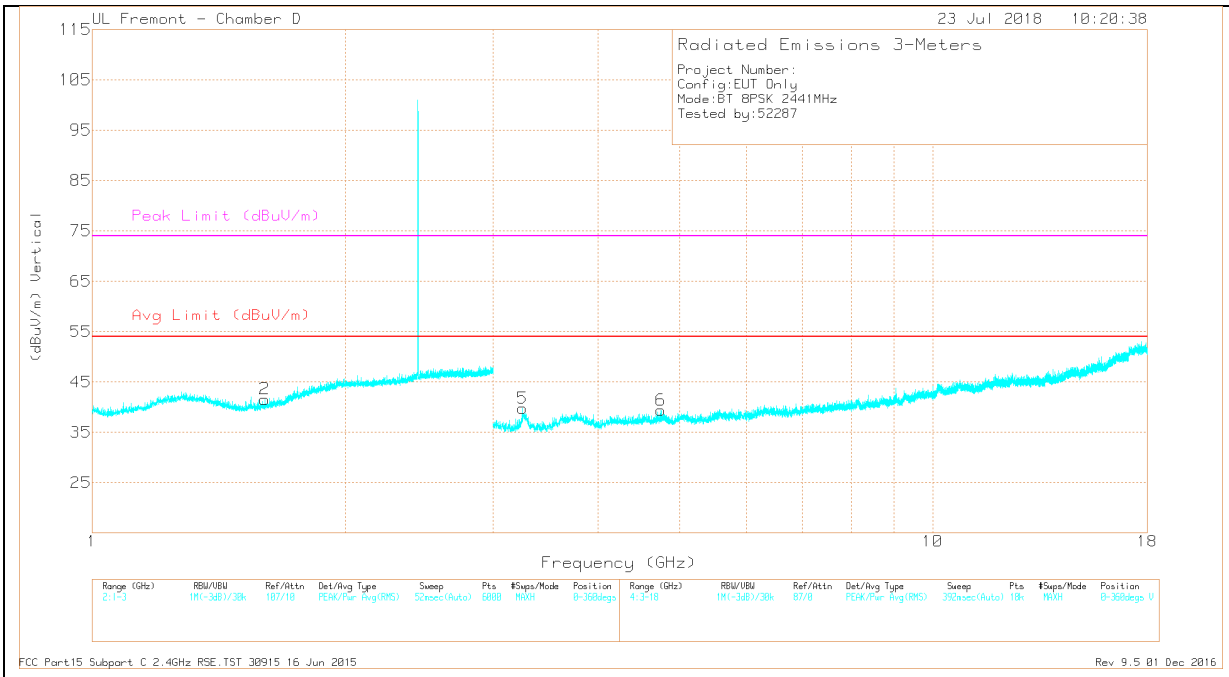
MID CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.549	40.36	PKFH	28.1	-21.6	46.86	-	-	74	-27.14	9	198	H
	* 1.549	28.54	VA1T	28.1	-21.6	35.04	54	-18.96	-	-	9	198	H
2	* 1.604	40.52	PKFH	28.1	-21.5	47.12	-	-	74	-26.88	207	354	V
	* 1.606	28.5	VA1T	28.1	-21.5	35.1	54	-18.9	-	-	207	354	V
3	* 3.933	36.54	PKFH	33.6	-27.8	42.34	-	-	74	-31.66	287	389	H
	* 3.931	24.95	VA1T	33.7	-27.8	30.85	54	-23.15	-	-	287	389	H
6	* 4.748	36.59	PKFH	34.2	-26.3	44.49	-	-	74	-29.51	164	218	V
	* 4.746	24.47	VA1T	34.2	-26.1	32.57	54	-21.43	-	-	164	218	V
5	3.251	37.64	PKFH	34.4	-28	44.04	-	-	74	-29.96	253	368	V
	3.252	26.03	VA1T	34.4	-28	32.43	54	-21.57	-		253	368	V
4	3.496	38.18	PKFH	33.2	-28	43.38	-		74	-30.62	220	105	H
	3.495	25.82	VA1T	33.2	-28	31.02	54	-22.98	-		220	105	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 Part15 Subpart C 2.4GHz RSE.TST 30915 16 Jun 2015
Rev 9.5 01 Dec 2016

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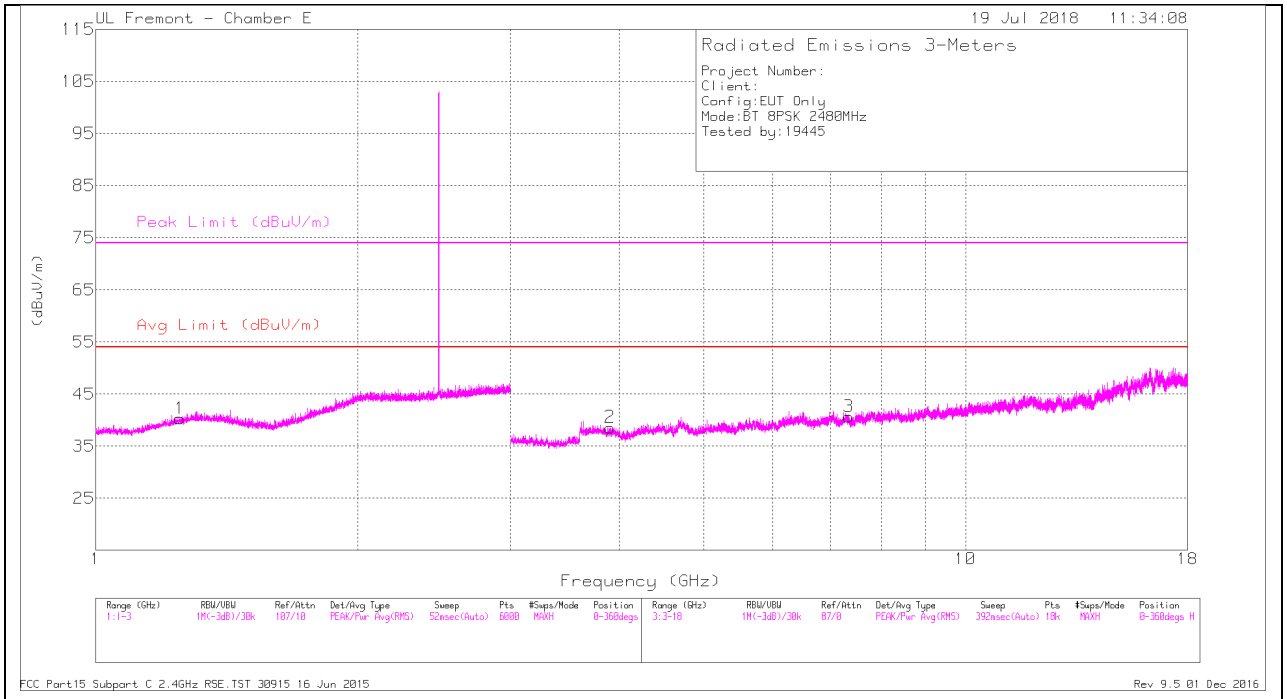
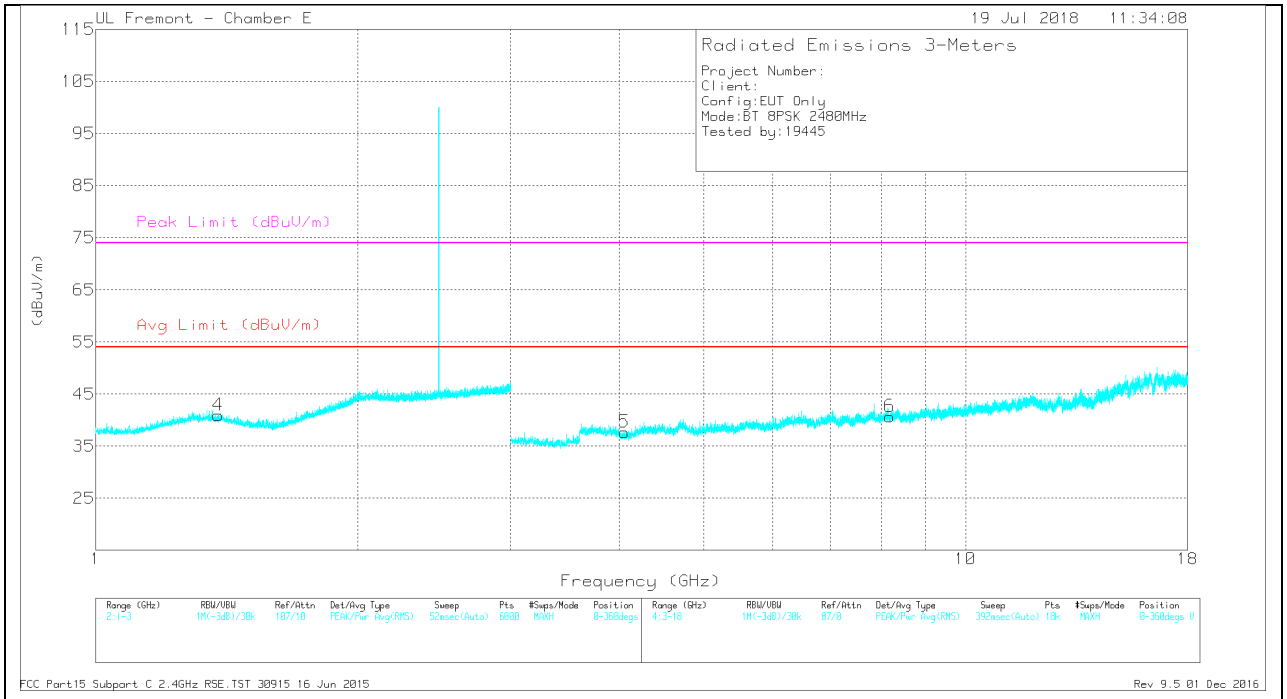
HIGH CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.65	PKFH	28.4	-25.4	46.65	-	-	74	-27.35	360	101	H
	* 1.252	31.33	VA1T	28.5	-25.4	34.43	54	-19.57	-	-	360	101	H
4	* 1.382	43.46	PKFH	28.8	-25.1	47.16	-	-	74	-26.84	360	101	V
	* 1.383	31.07	VA1T	28.8	-25.1	34.77	54	-19.23	-	-	360	101	V
2	* 3.902	40.66	PKFH	33.7	-29.4	44.96	-	-	74	-29.04	360	201	H
	* 3.901	28.17	VA1T	33.7	-29.4	32.47	54	-21.53	-	-	360	201	H
3	* 7.338	37.63	PKFH	36	-26.1	47.53	-	-	74	-26.47	360	100	H
	* 7.336	24.73	VA1T	36	-26.1	34.63	54	-19.37	-	-	360	100	H
5	* 4.057	40.07	PKFH	33.6	-30	43.67	-	-	74	-30.33	360	201	V
	* 4.056	27.84	VA1T	33.6	-30	31.44	54	-22.56	-	-	360	201	V
6	* 8.181	36.94	PKFH	36.5	-25.4	48.04	-	-	74	-25.96	360	201	V
	* 8.181	23.53	VA1T	36.5	-25.4	34.63	54	-19.37	-	-	360	201	V

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

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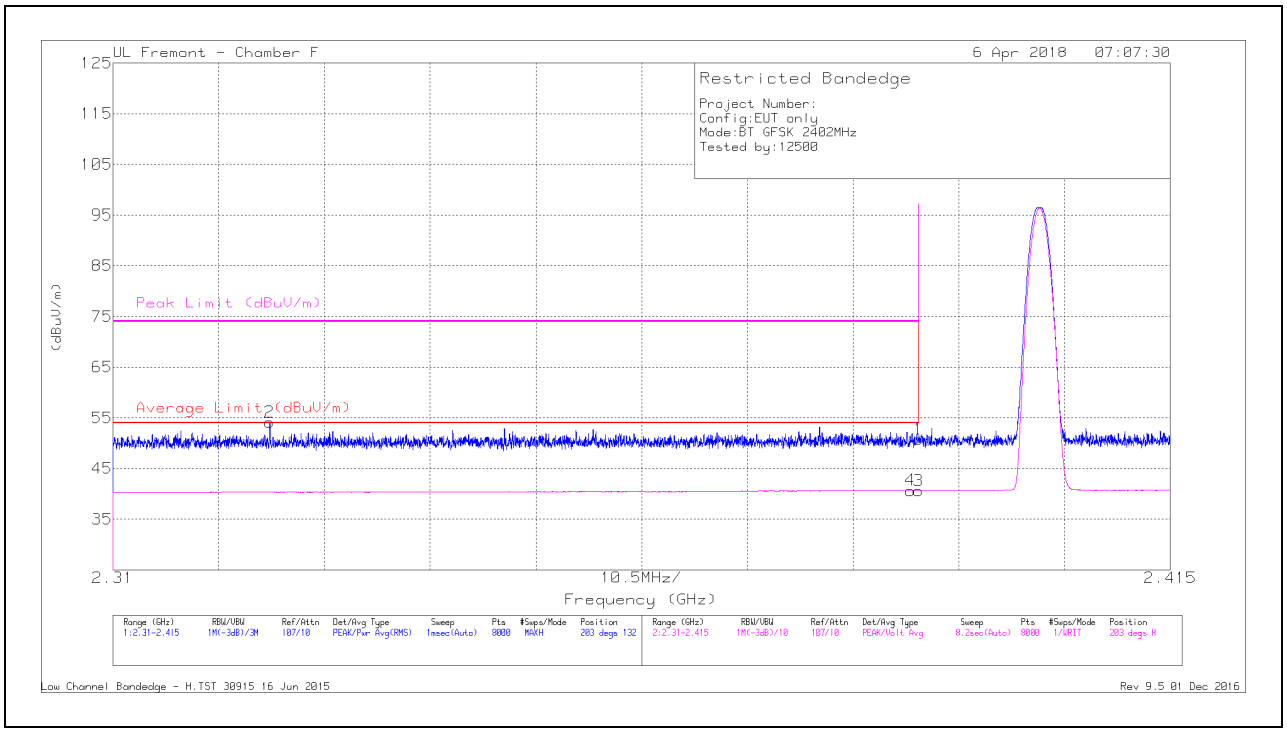
9.1.3. LOW POWER BASIC DATA RATE GFSK MODULATION

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.53	Pk	31.9	-20.6	50.83	-	-	74	-23.17	203	132	H
2	* 2.326	43.15	Pk	31.7	-20.7	54.15	-	-	74	-19.85	203	132	H
3	* 2.39	29.32	VA1T	31.9	-20.6	40.62	54	-13.38	-	-	203	132	H
4	* 2.389	29.37	VA1T	31.9	-20.6	40.67	54	-13.33	-	-	203	132	H

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

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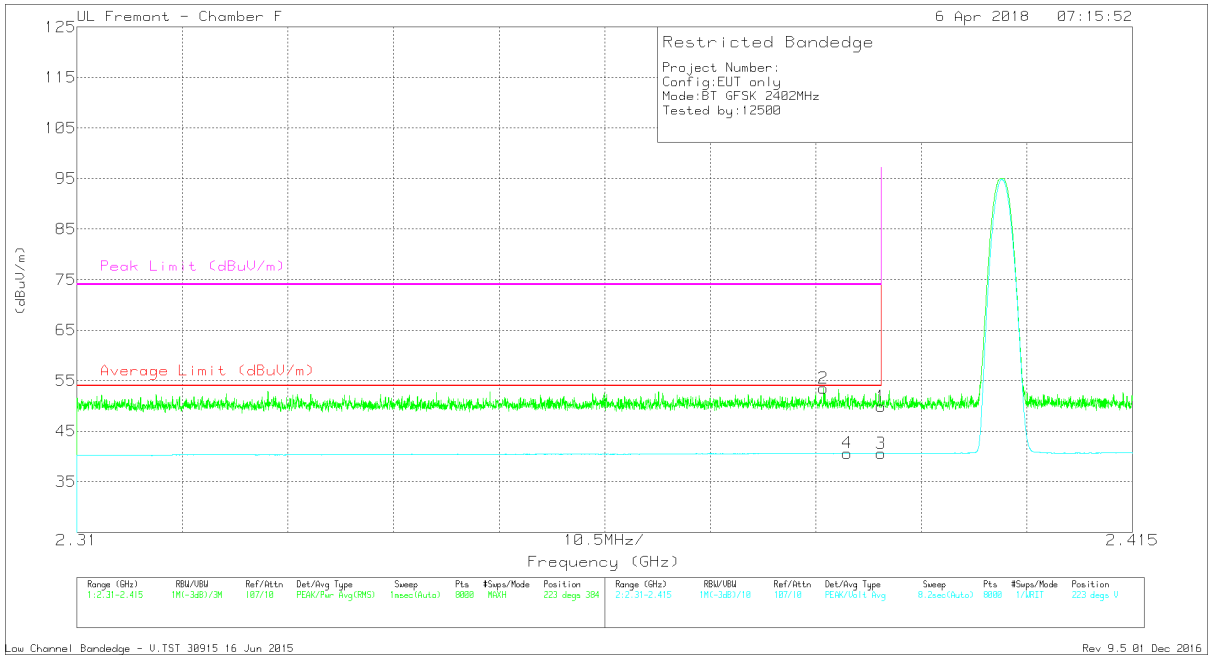
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.57	Pk	31.9	-20.6	49.87	-	-	74	-24.13	223	384	V
2	* 2.384	42.33	Pk	31.8	-20.6	53.53	-	-	74	-20.47	223	384	V
3	* 2.39	29.33	VA1T	31.9	-20.6	40.63	54	-13.37	-	-	223	384	V
4	* 2.387	29.37	VA1T	31.9	-20.6	40.67	54	-13.33	-	-	223	384	V

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

Pk - Peak detector

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

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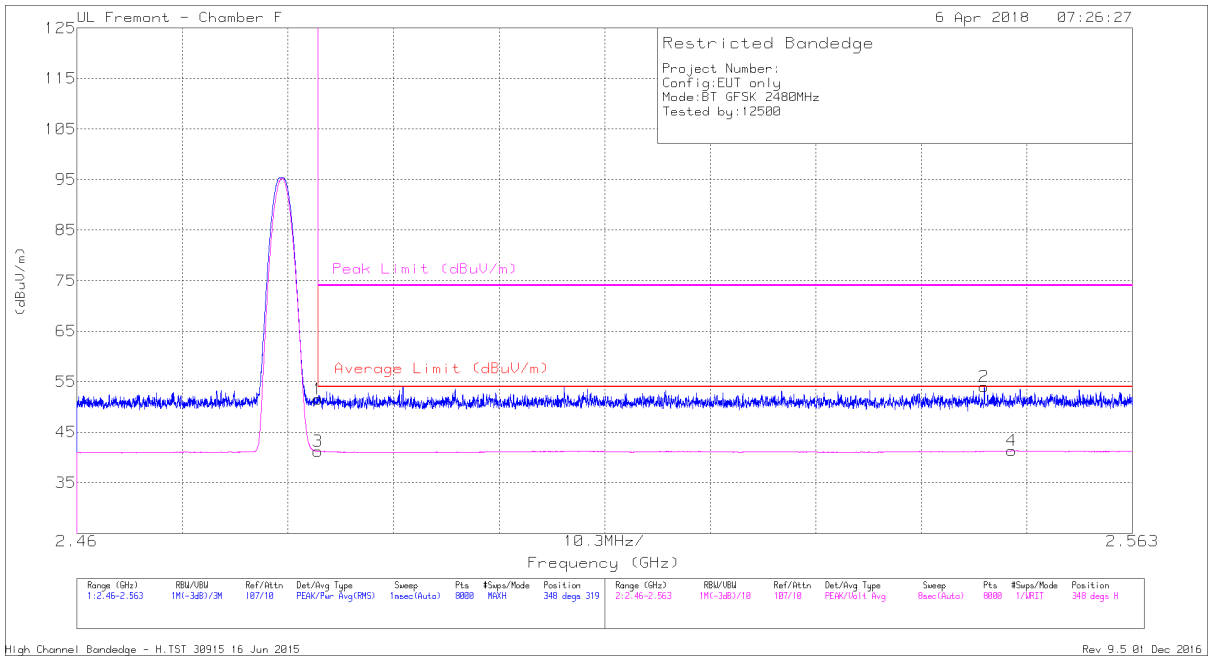
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.11	Pk	32.1	-20.7	51.51	-	-	74	-22.49	348	319	H
2	2.549	42.46	Pk	32.2	-20.6	54.06	-	-	74	-19.94	348	319	H
3	* 2.484	29.8	VA1T	32.1	-20.7	41.2	54	-12.8	-	-	348	319	H
4	2.551	29.62	VA1T	32.2	-20.5	41.32	54	-12.68	-	-	348	319	H

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

Pk - Peak detector

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

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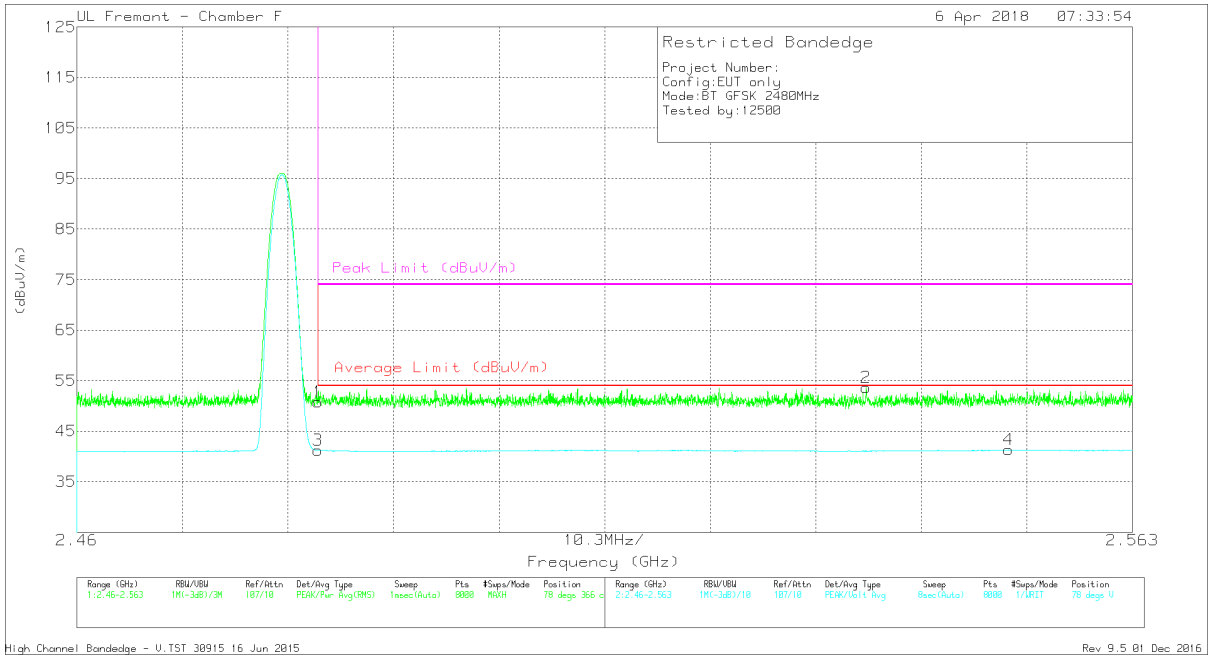
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.43	Pk	32.1	-20.7	50.83	-	-	74	-23.17	78	366	V
2	2.537	42.09	Pk	32.2	-20.7	53.59	-	-	74	-20.41	78	366	V
3	* 2.484	29.82	VA1T	32.1	-20.7	41.22	54	-12.78	-	-	78	366	V
4	2.551	29.6	VA1T	32.2	-20.5	41.3	54	-12.7	-	-	78	366	V

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

Pk - Peak detector

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

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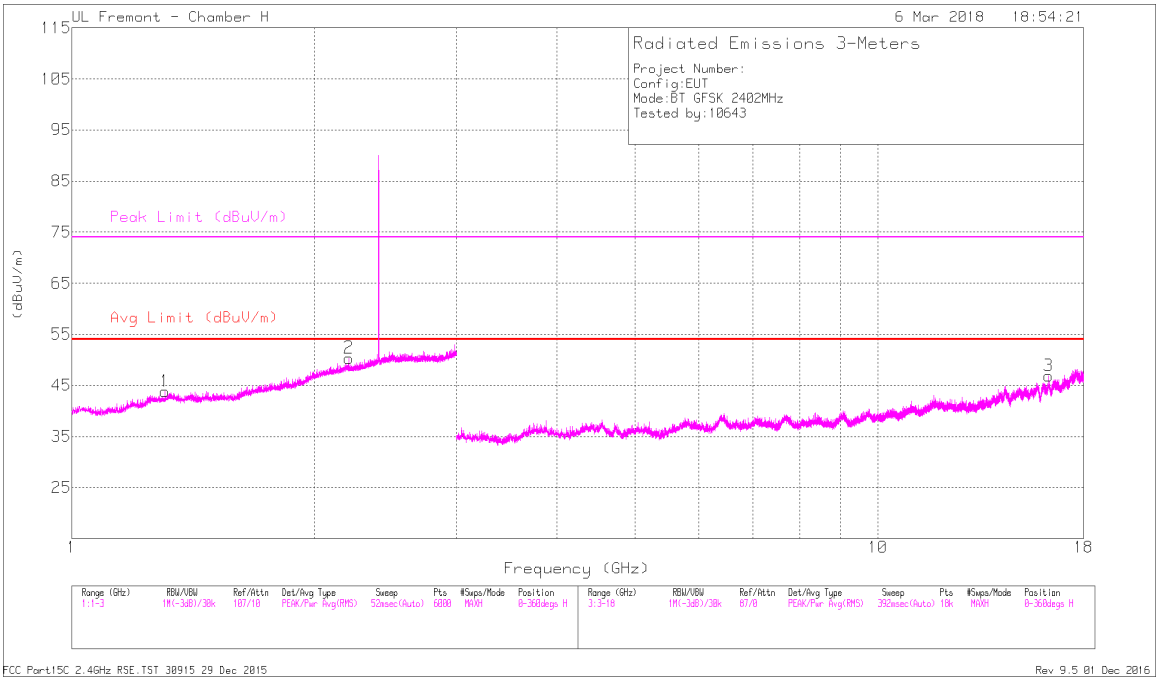
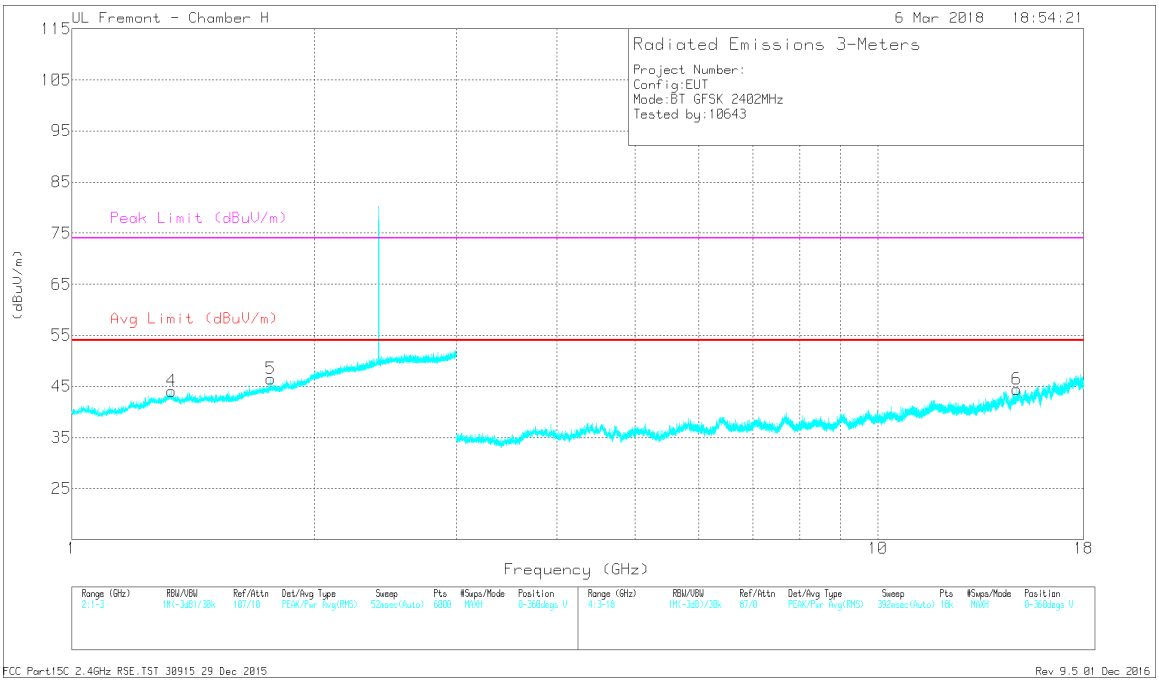
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.305	35.52	PKFH	29.2	-15.9	48.82	-	-	74	-25.18	245	146	H
	* 1.306	23.67	VA1T	29.2	-15.9	36.97	54	-17.03	-	-	245	146	H
2	* 2.205	37.01	PKFH	31.9	-14.3	54.61	-	-	74	-19.39	279	380	H
	* 2.204	24.51	VA1T	31.9	-14.3	42.11	54	-11.89	-	-	279	380	H
4	* 1.331	36.05	PKFH	29.1	-15.8	49.35	-	-	74	-24.65	189	140	V
	* 1.328	23.94	VA1T	29.1	-15.9	37.14	54	-16.86	-	-	189	140	V
5	1.764	36.14	PKFH	29.7	-14.9	50.94	-	-	74	-23.06	275	263	V
	1.768	24.08	VA1T	29.7	-14.9	38.88	54	-15.12			275	263	V
6	14.865	34.51	PKFH	40.2	-24.5	50.21	-		74	-23.79	294	397	V
	14.863	22.89	VA1T	40.2	-24.4	38.69	54	-15.31			294	397	V
3	16.302	34.01	PKFH	41.9	-23.3	52.61	-		74	-21.39	88	337	H
	16.304	22.28	VA1T	41.9	-23.2	40.98	54	-13.02			88	337	H

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

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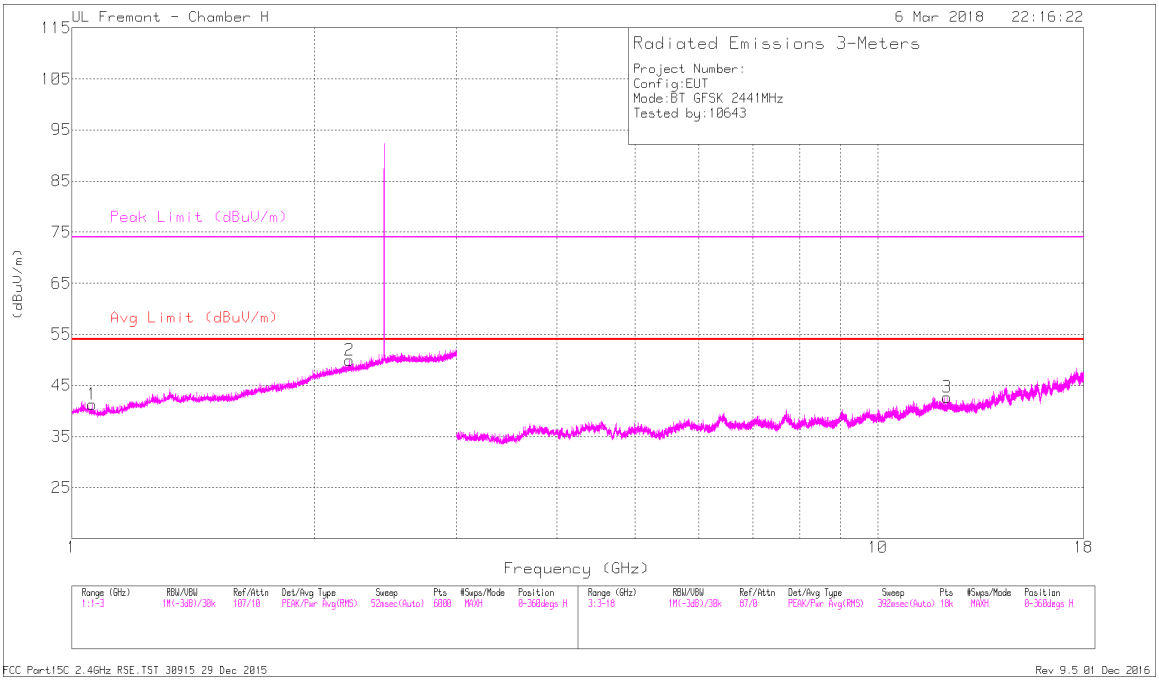
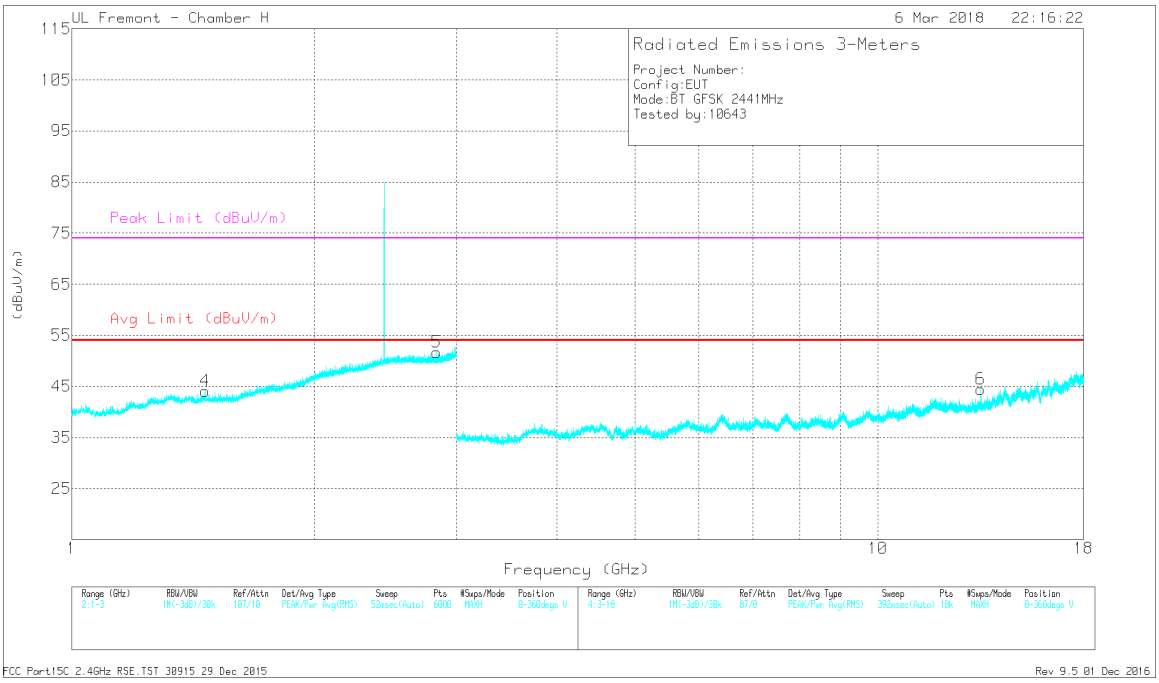
MID CHANNEL RESULTS



HORIZTONAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.061	35.39	PKFH	27.2	-16.1	46.49	-	-	74	-27.51	128	262	H
	* 1.058	23.57	VA1T	27.2	-16.1	34.67	54	-19.33	-	-	128	262	H
2	* 2.211	36.9	PKFH	31.9	-14.3	54.5	-	-	74	-19.5	33	131	H
	* 2.209	24.53	VA1T	31.9	-14.3	42.13	54	-11.87	-	-	33	131	H
4	* 1.464	35.67	PKFH	28.6	-15.5	48.77	-	-	74	-25.23	111	128	V
	* 1.463	23.92	VA1T	28.6	-15.5	37.02	54	-16.98	-	-	111	128	V
5	* 2.837	37.31	PKFH	32.5	-13.7	56.11	-	-	74	-17.89	271	153	V
	* 2.834	25.09	VA1T	32.5	-13.7	43.89	54	-10.11	-	-	271	153	V
3	* 12.195	35.85	PKFH	38.7	-26	48.55	-	-	74	-25.45	4	368	H
	* 12.191	23.07	VA1T	38.7	-26	35.77	54	-18.23	-	-	4	368	H
6	13.429	34.48	PKFH	39.5	-25.7	48.28	-	-	74	-25.72	283	374	V
	13.429	22.79	VA1T	39.5	-25.7	36.59	54	-17.41	-	-	283	374	V

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

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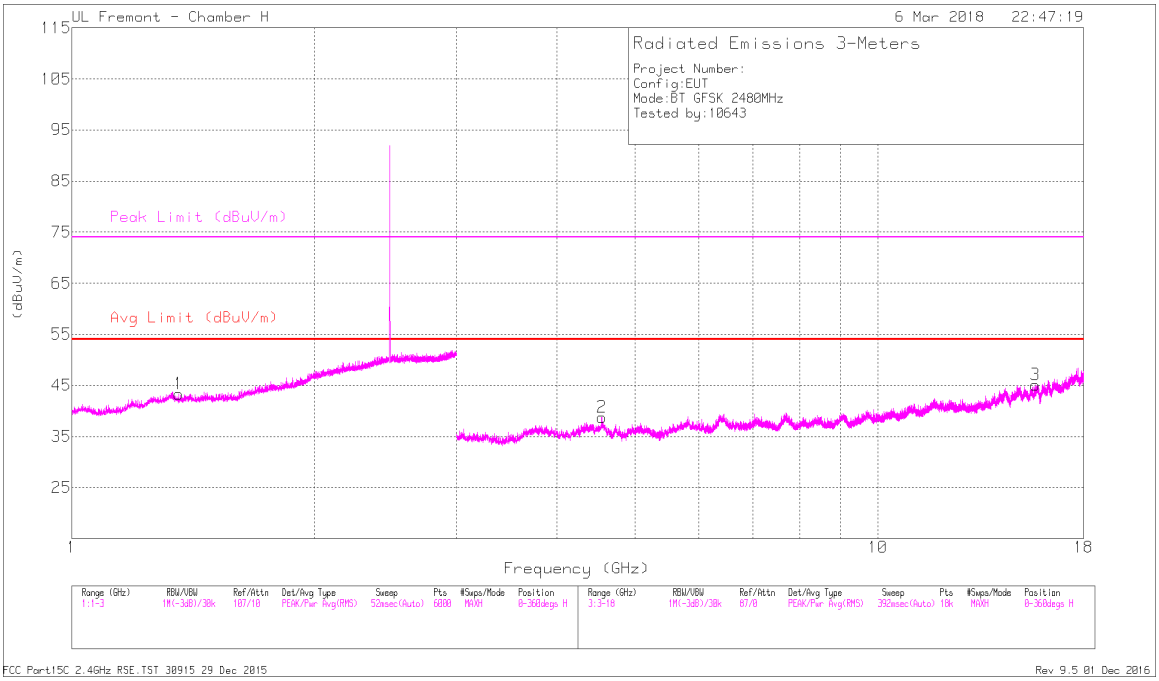
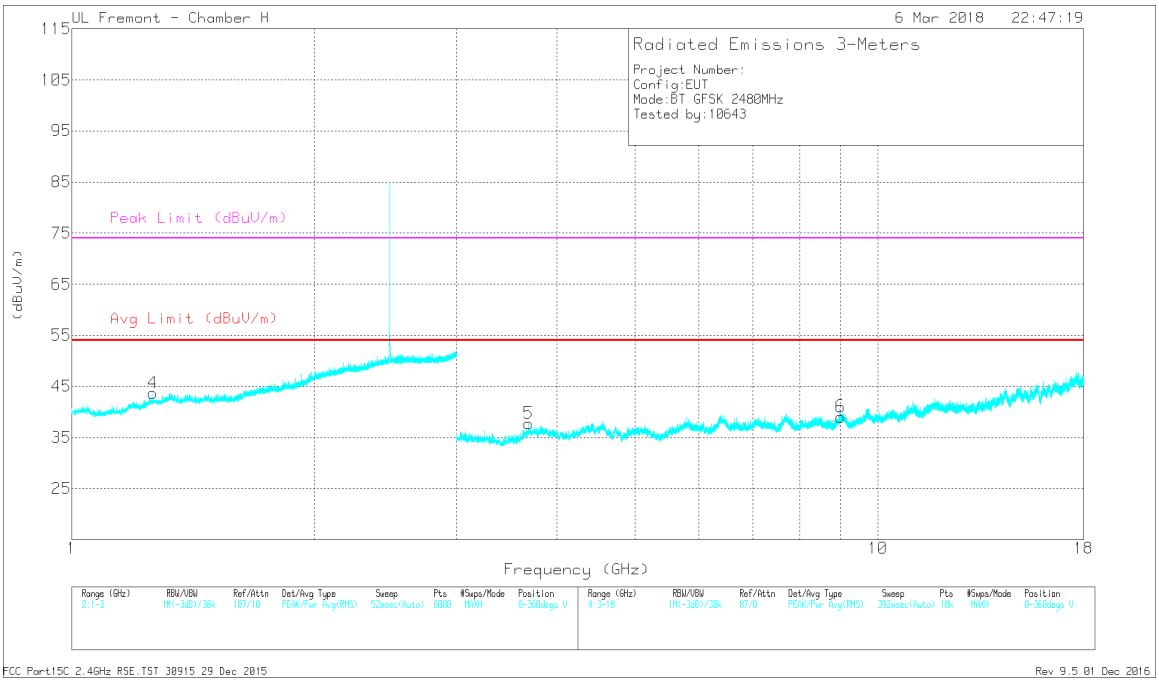
HIGH CHANNEL RESULTS



HORIZTONAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.356	35.24	PKFH	29	-15.8	48.44	-	-	74	-25.56	78	172	H
	* 1.359	23.4	VA1T	29	-15.8	36.6	54	-17.4	-	-	78	172	H
4	* 1.259	36.49	PKFH	28.7	-16	49.19	-	-	74	-24.81	187	364	V
	* 1.26	24.12	VA1T	28.7	-15.9	36.92	54	-17.08	-	-	187	364	V
2	* 4.551	43.39	PKFH	34.3	-34.7	42.99	-	-	74	-31.01	352	204	H
	* 4.55	32.08	VA1T	34.3	-34.7	31.68	54	-22.32	-	-	352	204	H
3	* 15.696	34.23	PKFH	40.7	-24	50.93	-	-	74	-23.07	244	211	H
	* 15.695	21.29	VA1T	40.7	-24	37.99	54	-16.01	-	-	244	211	H
5	* 3.69	44.04	PKFH	33	-35.5	41.54	-	-	74	-32.46	329	183	V
	* 3.686	33.07	VA1T	33	-35.5	30.57	54	-23.43	-	-	329	183	V
6	8.996	37.36	PKFH	36.5	-28.3	45.56	-	-	74	-28.44	299	217	V
	8.995	25.44	VA1T	36.5	-28.3	33.64	54	-20.36	-		299	217	V

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

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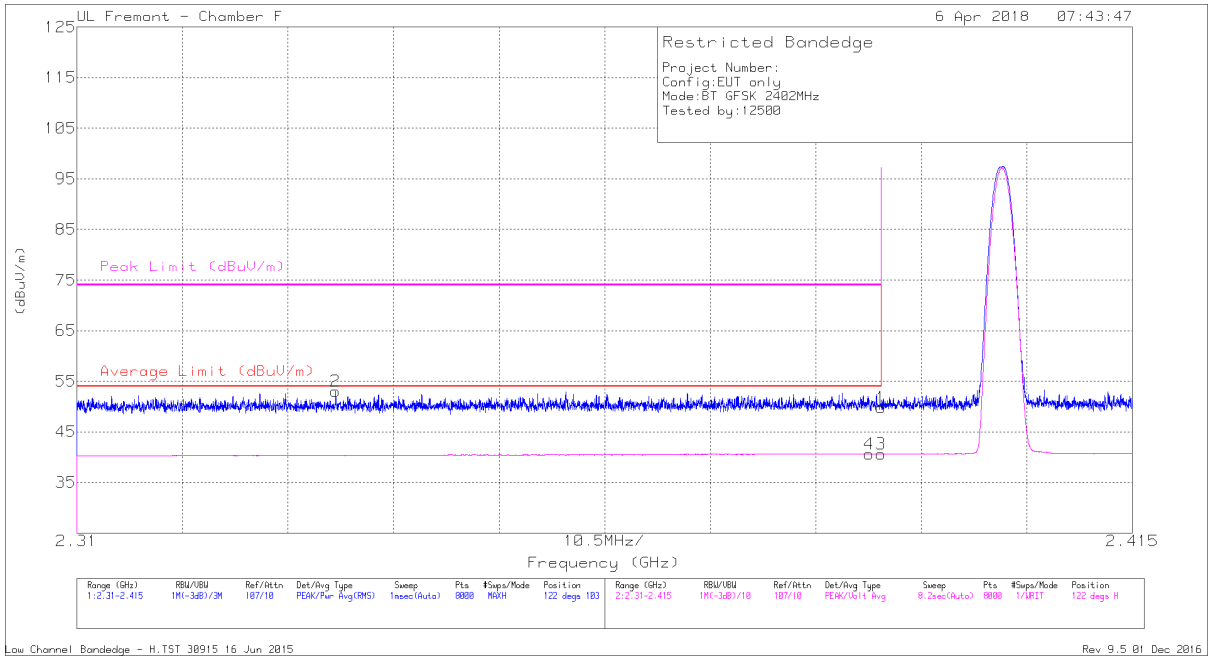
Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.46	Pk	31.9	-20.6	49.76	-	-	74	-24.24	122	103	H
2	* 2.336	42.06	Pk	31.7	-20.7	53.06	-	-	74	-20.94	122	103	H
3	* 2.39	29.3	VA1T	31.9	-20.6	40.6	54	-13.4	-	-	122	103	H
4	* 2.389	29.35	VA1T	31.9	-20.6	40.65	54	-13.35	-	-	122	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

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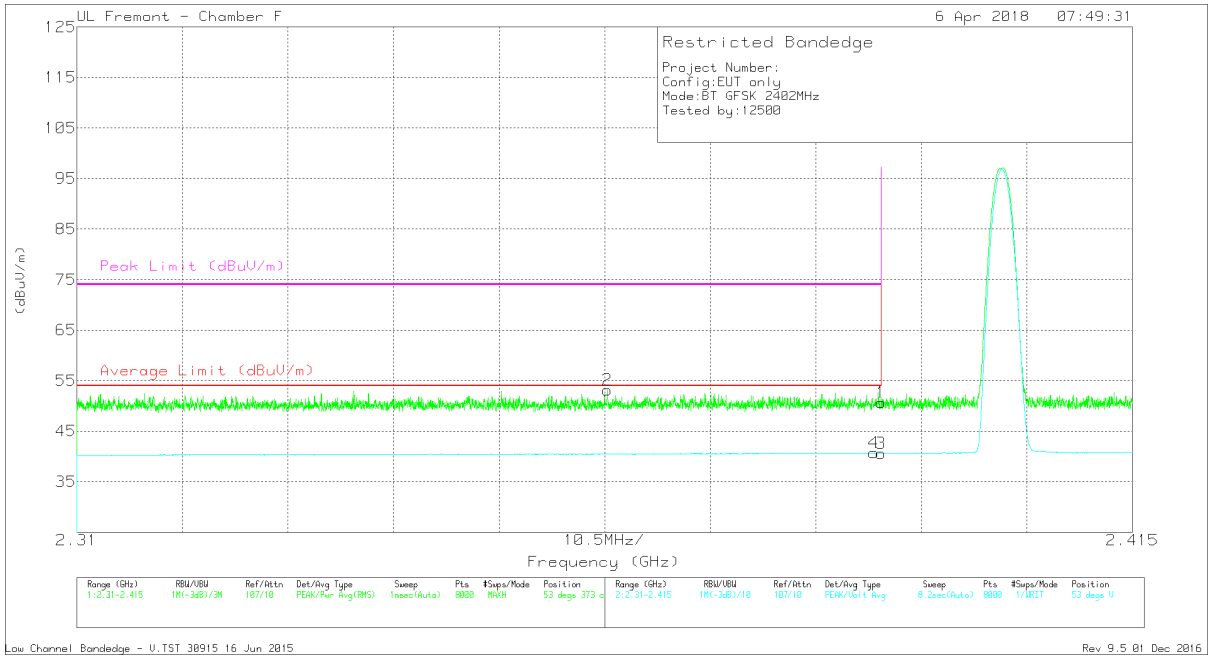
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.34	Pk	31.9	-20.6	50.64	-	-	74	-23.36	53	373	V
2	* 2.363	42.04	Pk	31.8	-20.7	53.14	-	-	74	-20.86	53	373	V
3	* 2.39	29.32	VA1T	31.9	-20.6	40.62	54	-13.38	-	-	53	373	V
4	* 2.389	29.38	VA1T	31.9	-20.6	40.68	54	-13.32	-	-	53	373	V

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

Pk - Peak detector

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

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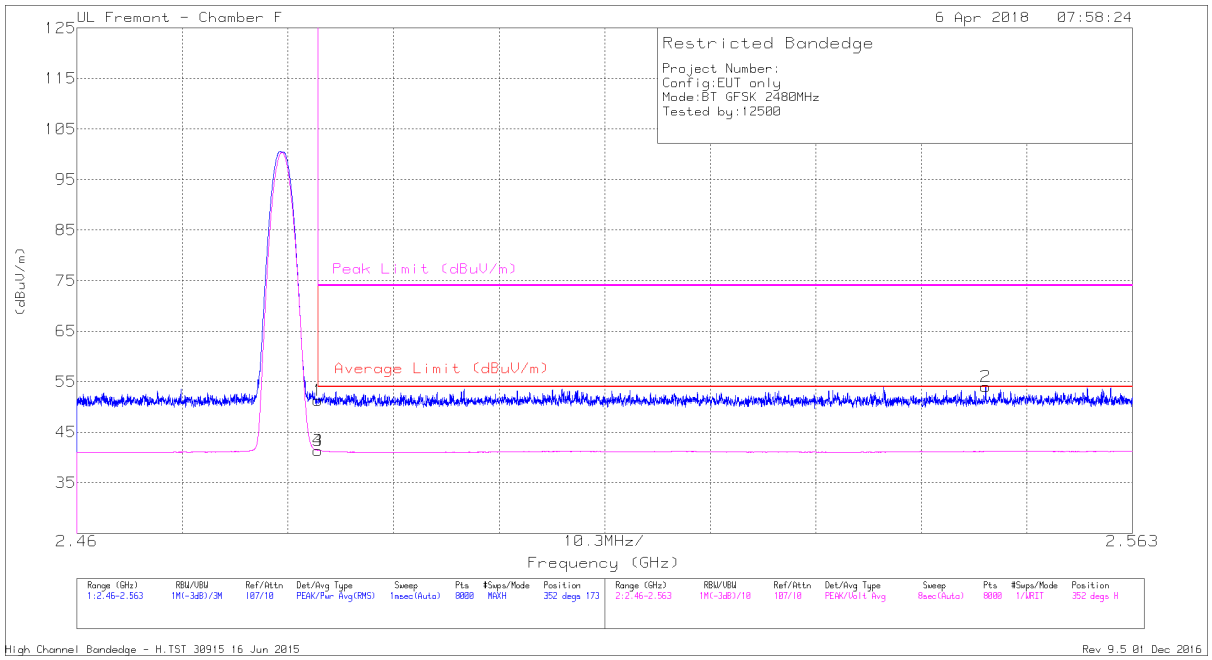
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.85	Pk	32.1	-20.7	51.25	-	-	74	-22.75	352	173	H
2	2.549	42.43	Pk	32.2	-20.6	54.03	-	-	74	-19.97	352	173	H
3	* 2.484	29.99	VA1T	32.1	-20.7	41.39	54	-12.61	-	-	352	173	H
4	* 2.484	29.98	VA1T	32.1	-20.7	41.38	54	-12.62	-	-	352	173	H

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

Pk - Peak detector

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

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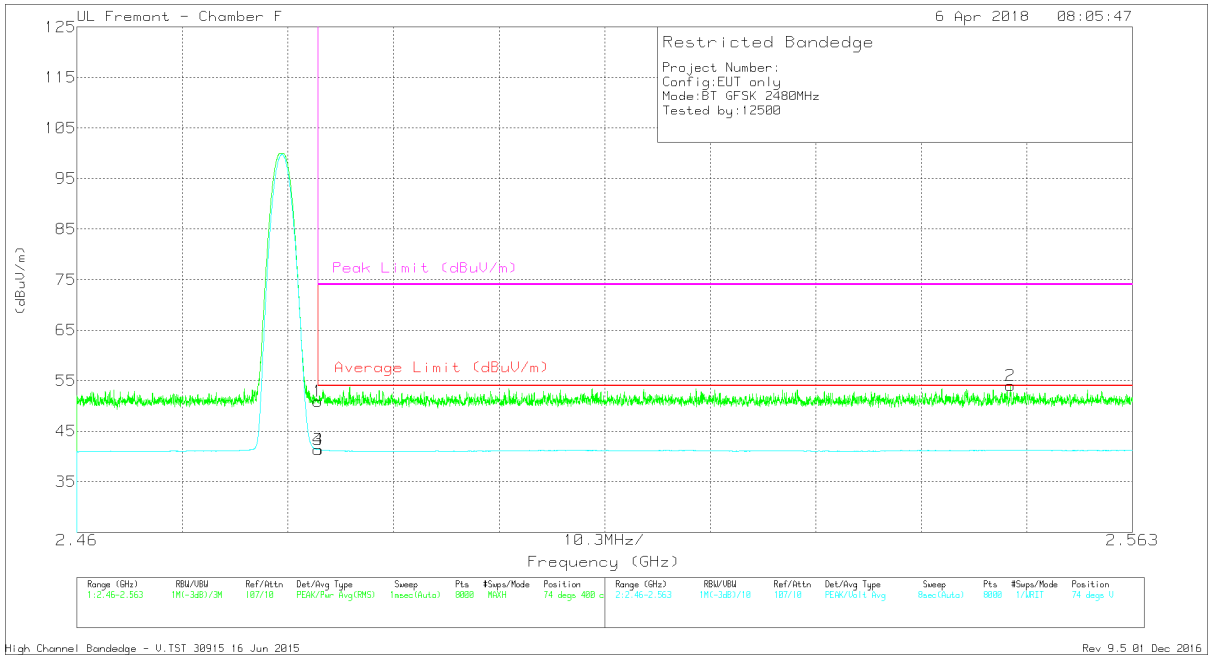
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.52	Pk	32.1	-20.7	50.92	-	-	74	-23.08	74	400	V
2	2.551	42.29	Pk	32.2	-20.5	53.99	-	-	74	-20.01	74	400	V
3	* 2.484	29.98	VA1T	32.1	-20.7	41.38	54	-12.62	-	-	74	400	V
4	* 2.484	29.95	VA1T	32.1	-20.7	41.35	54	-12.65	-	-	74	400	V

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

Pk - Peak detector

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

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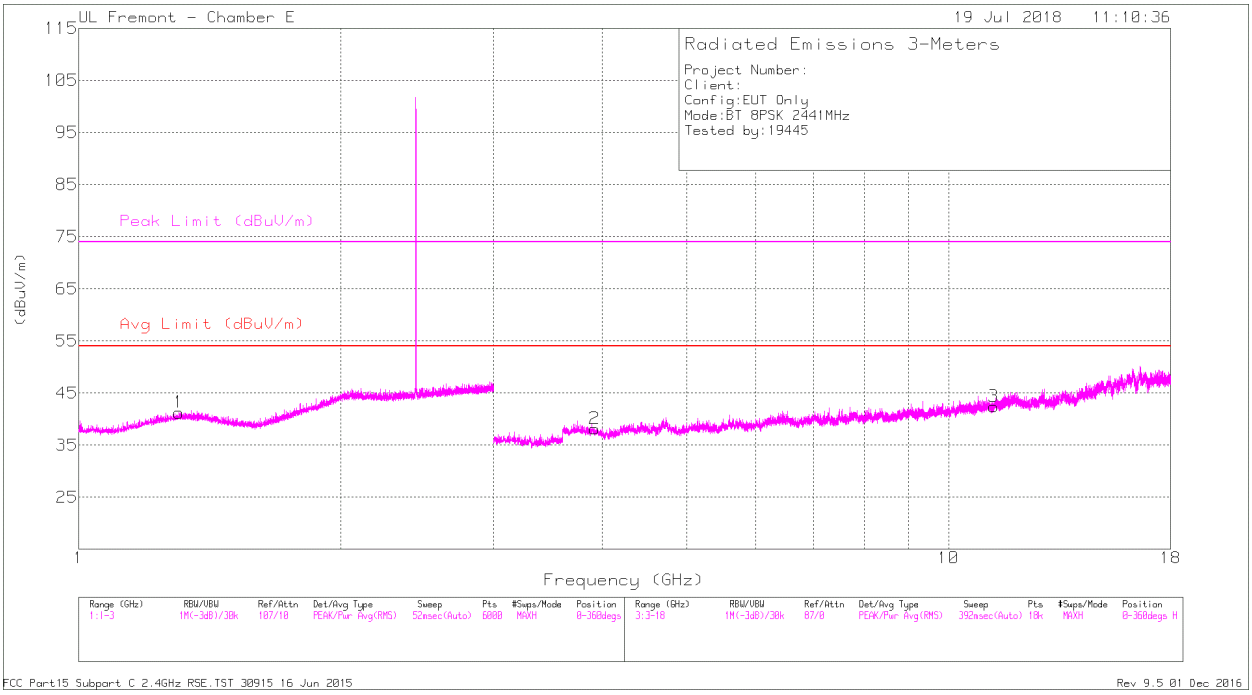
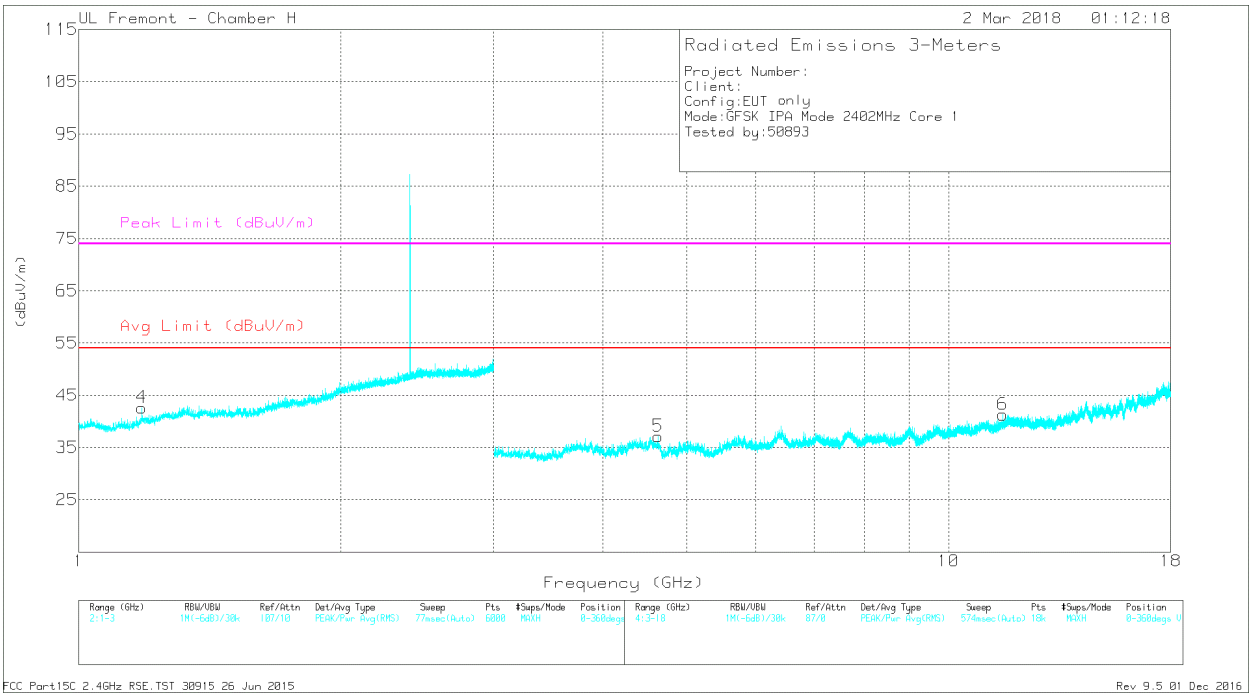
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.267	34.43	PKFH	28.8	-15.9	47.33	-	-	74	-26.67	219	285	H
	* 1.264	22.38	VA1T	28.7	-15.9	35.18	54	-18.82	-	-	219	285	H
4	* 1.18	34.29	PKFH	27.7	-15.9	46.09	-	-	74	-27.91	98	196	V
	* 1.183	22.38	VA1T	27.7	-15.9	34.18	54	-19.82	-	-	98	196	V
2	* 3.837	42.85	PKFH	33.3	-34.8	41.35	-	-	74	-32.65	330	253	H
	* 3.836	30.66	VA1T	33.3	-34.8	29.16	54	-24.84	-	-	330	253	H
3	* 10.819	35.09	PKFH	37.6	-27.3	45.39	-	-	74	-28.61	285	302	H
	* 10.819	22.93	VA1T	37.6	-27.3	33.23	54	-20.77	-	-	285	302	H
5	* 4.634	41.73	PKFH	34.2	-34.1	41.83	-	-	74	-32.17	194	289	V
	* 4.634	30.1	VA1T	34.2	-34.1	30.2	54	-23.8	-	-	194	289	V
6	* 11.538	32.93	PKFH	38.4	-26.2	45.13	-	-	74	-28.87	119	117	V
	* 11.535	21.74	VA1T	38.4	-26.2	33.94	54	-20.06	-	-	119	117	V

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

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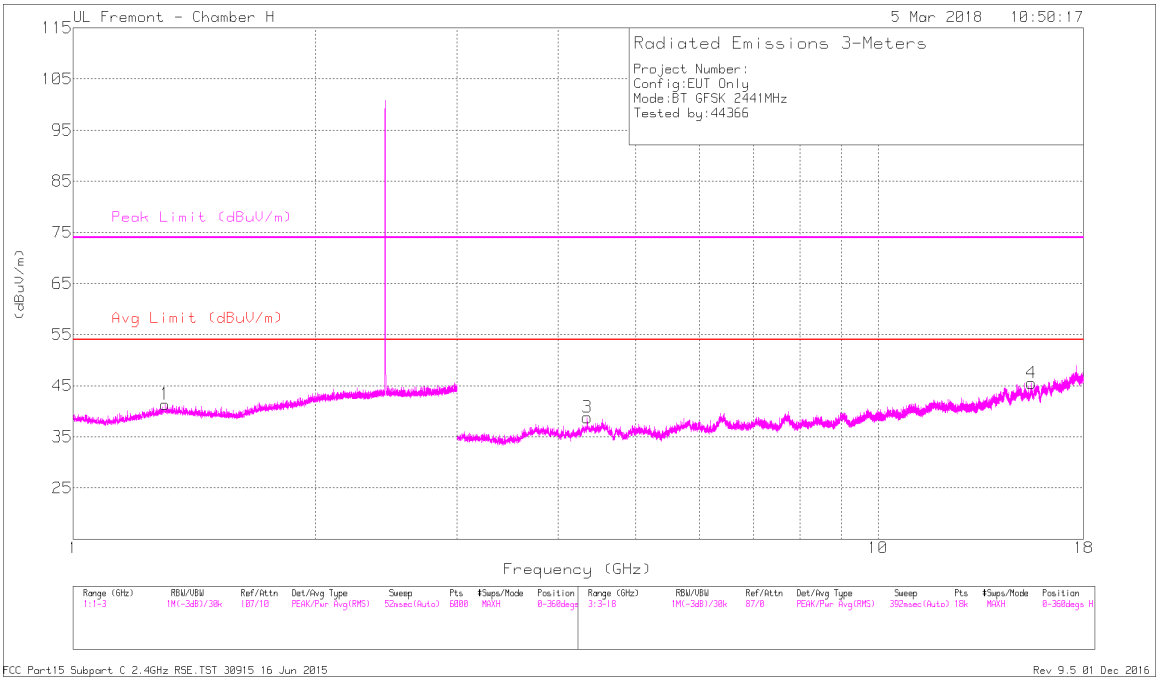
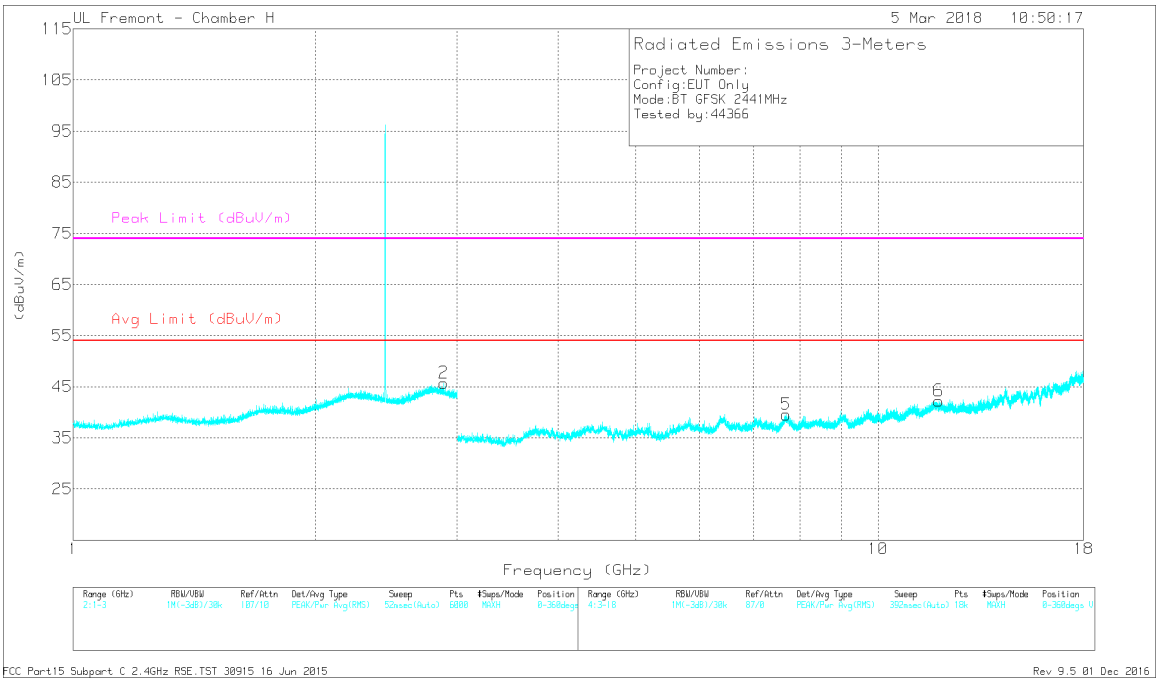
MID CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.3	44.68	PKFH	29.2	-27.5	46.38	-	-	74	-27.62	289	147	H
	* 1.3	33.29	VA1T	29.2	-27.5	34.99	54	-19.01	-	-	289	147	H
2	* 2.888	45.63	PKFH	32.6	-27.7	50.53	-	-	74	-23.47	245	124	V
	* 2.885	33.63	VA1T	32.6	-27.7	38.53	54	-15.47	-	-	245	124	V
3	* 4.352	43.71	PKFH	33.9	-34.2	43.41	-	-	74	-30.59	233	177	H
	* 4.352	31.68	VA1T	33.9	-34.2	31.38	54	-22.62	-	-	233	177	H
4	* 15.505	34.36	PKFH	41.4	-24.4	51.36	-	-	74	-22.64	359	388	H
	* 15.507	22.36	VA1T	41.4	-24.4	39.36	54	-14.64	-	-	359	388	H
5	* 7.685	38.84	PKFH	36.2	-29.6	45.44	-	-	74	-28.56	38	357	V
	* 7.686	26.99	VA1T	36.2	-29.7	33.49	54	-20.51	-	-	38	357	V
5	* 11.893	35.03	PKFH	39	-26	48.03	-	-	74	-25.97	23	378	V
	* 11.893	22.89	VA1T	39	-26	35.89	54	-18.11	-	-	23	378	V

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

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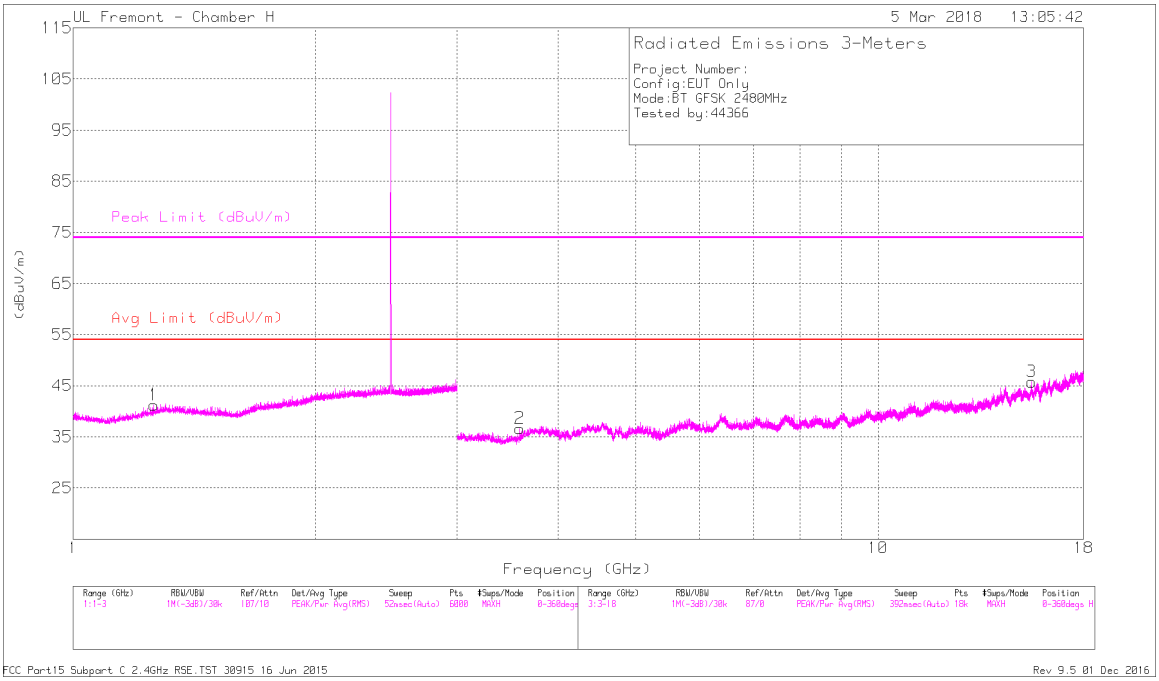
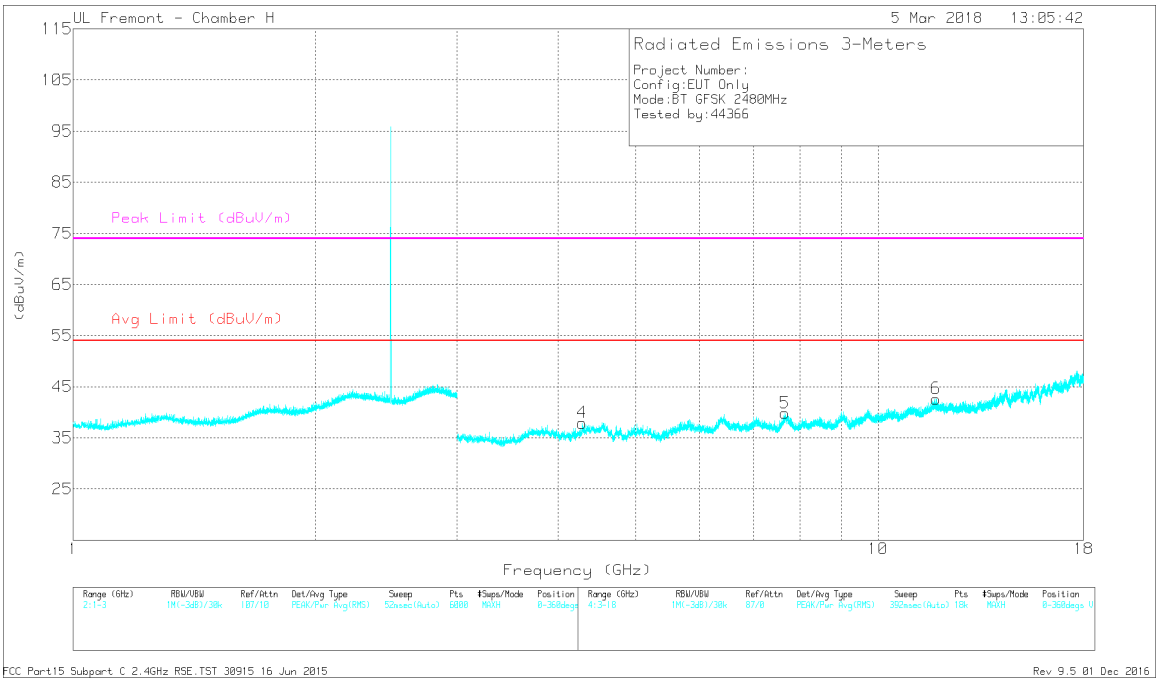
HIGH CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.258	44.83	PKFH	28.7	-27.5	46.03	-	-	74	-27.97	271	126	H
	* 1.258	33.24	VA1T	28.7	-27.5	34.44	54	-19.56	-	-	271	126	H
2	* 3.586	43.27	PKFH	33.2	-35	41.47	-	-	74	-32.53	8	340	H
	* 3.587	31.57	VA1T	33.2	-35	29.77	54	-24.23	-	-	8	340	H
3	* 15.521	34.35	PKFH	41.2	-24.3	51.25	-	-	74	-22.75	8	317	H
	* 15.52	22.84	VA1T	41.2	-24.3	39.74	54	-14.26	-	-	8	317	H
4	* 4.289	43.85	PKFH	33.7	-34.8	42.75	-	-	74	-31.25	305	400	V
	* 4.29	32.29	VA1T	33.7	-34.8	31.19	54	-22.81	-	-	305	400	V
5	* 7.665	38.68	PKFH	36.2	-29.6	45.28	-	-	74	-28.72	162	345	V
	* 7.664	27.03	VA1T	36.2	-29.6	33.63	54	-20.37	-	-	162	345	V
6	* 11.81	35.37	PKFH	38.9	-25.9	48.37	-	-	74	-25.63	251	124	V
	* 11.809	23.04	VA1T	38.9	-26	35.94	54	-18.06	-	-	251	124	V

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

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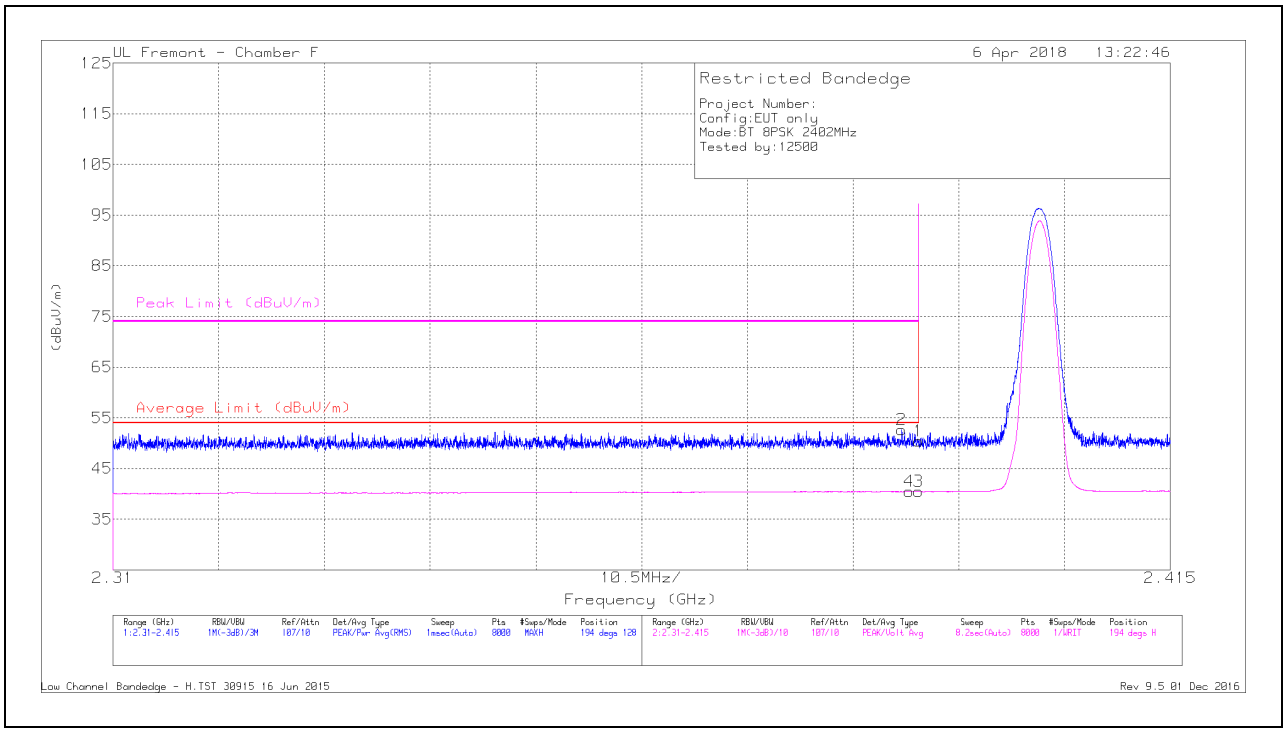
9.1.4. LOW POWER ENCHANCED DATA RATE 8PSK MODULATION

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.07	Pk	31.9	-20.6	50.37	-	-	74	-23.63	194	128	H
2	* 2.388	41.31	Pk	31.9	-20.6	52.61	-	-	74	-21.39	194	128	H
3	* 2.39	29.18	VA1T	31.9	-20.6	40.48	54	-13.52	-	-	194	128	H
4	* 2.389	29.21	VA1T	31.9	-20.6	40.51	54	-13.49	-	-	194	128	H

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

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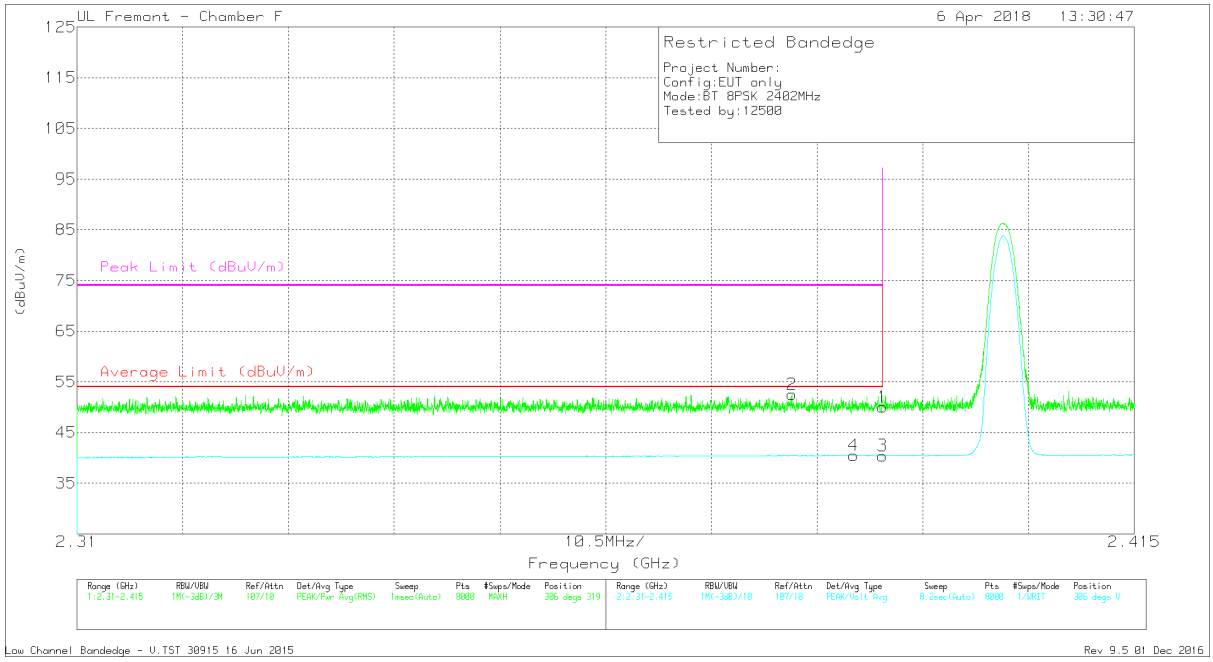
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.79	Pk	31.9	-20.6	50.09	-	-	74	-23.91	306	319	V
2	* 2.381	41.27	Pk	31.8	-20.6	52.47	-	-	74	-21.53	306	319	V
3	* 2.39	29.12	VA1T	31.9	-20.6	40.42	54	-13.58	-	-	306	319	V
4	* 2.387	29.19	VA1T	31.9	-20.6	40.49	54	-13.51	-	-	306	319	V

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

Pk - Peak detector

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

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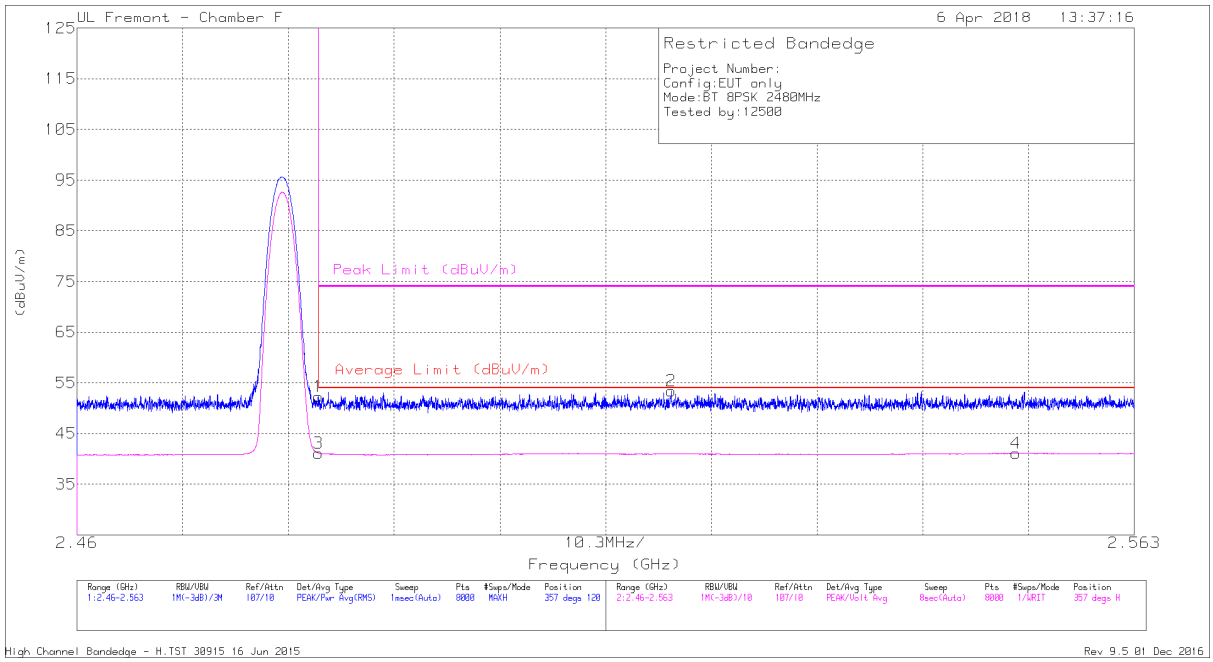
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.85	Pk	32.1	-20.7	52.25	-	-	74	-21.75	357	120	H
2	2.518	41.82	Pk	32.2	-20.6	53.42	-	-	74	-20.58	357	120	H
3	* 2.484	29.74	VA1T	32.1	-20.7	41.14	54	-12.86	-	-	357	120	H
4	2.551	29.43	VA1T	32.2	-20.5	41.13	54	-12.87	-	-	357	120	H

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

Pk - Peak detector

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

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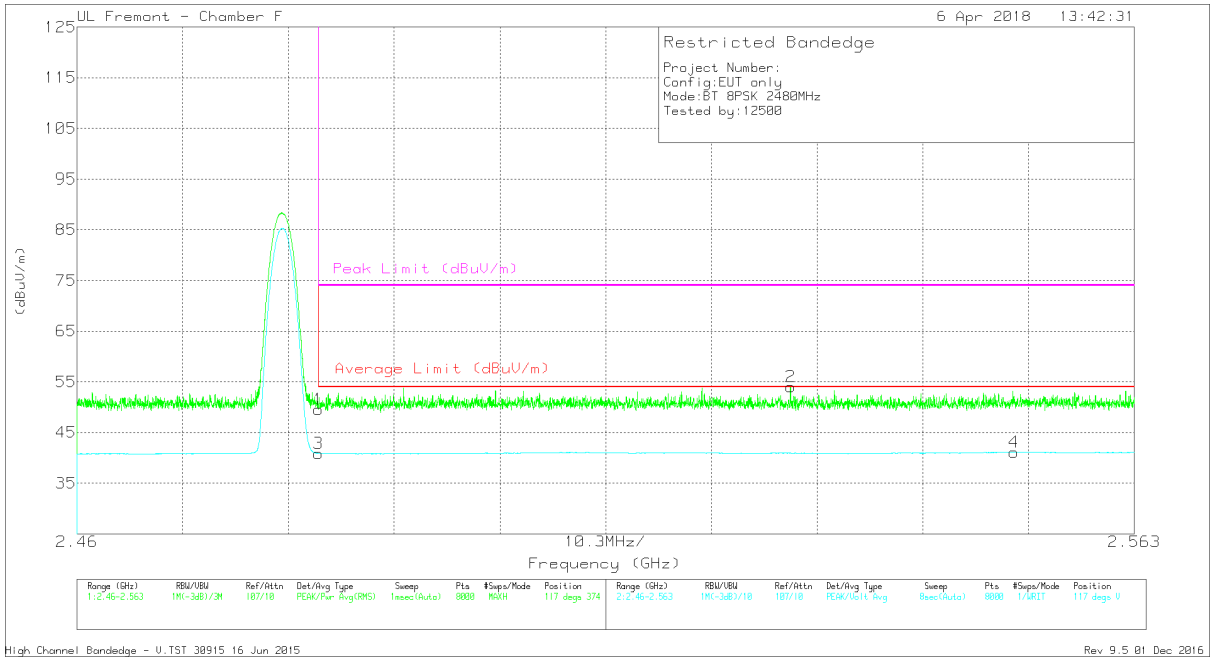
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.18	Pk	32.1	-20.7	49.58	-	-	74	-24.42	117	374	V
2	2.53	42.48	Pk	32.2	-20.7	53.98	-	-	74	-20.02	117	374	V
3	* 2.484	29.51	VA1T	32.1	-20.7	40.91	54	-13.09	-	-	117	374	V
4	2.551	29.43	VA1T	32.2	-20.5	41.13	54	-12.87	-	-	117	374	V

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

Pk - Peak detector

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

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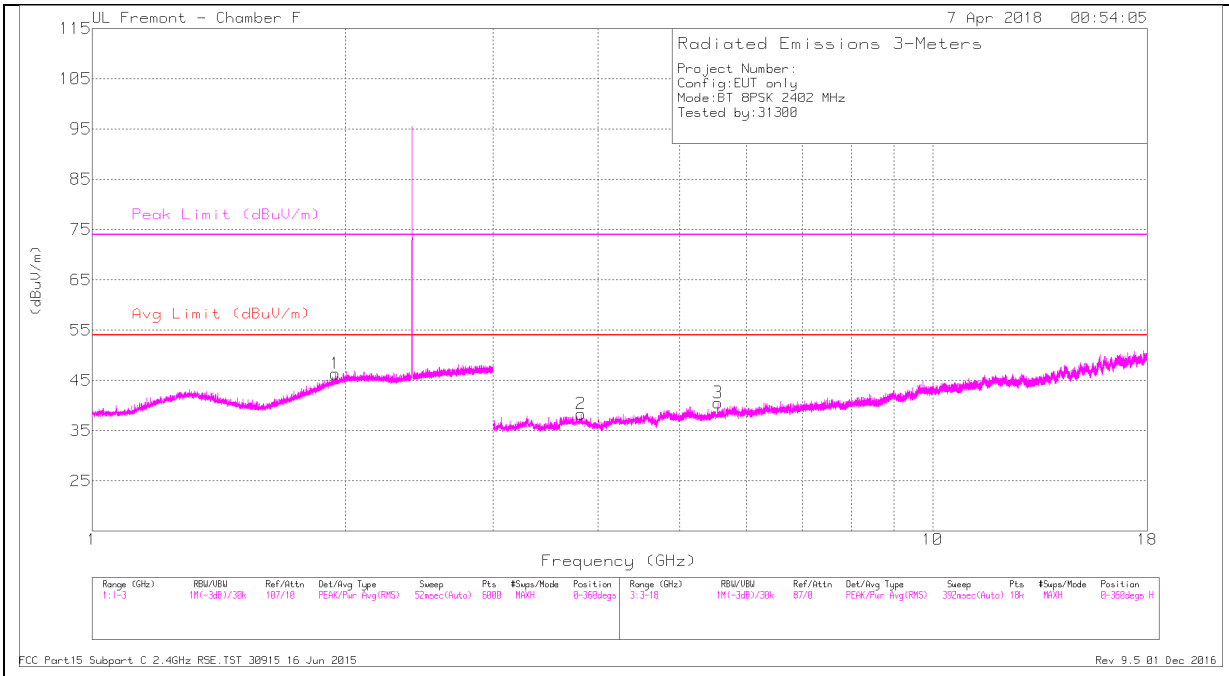
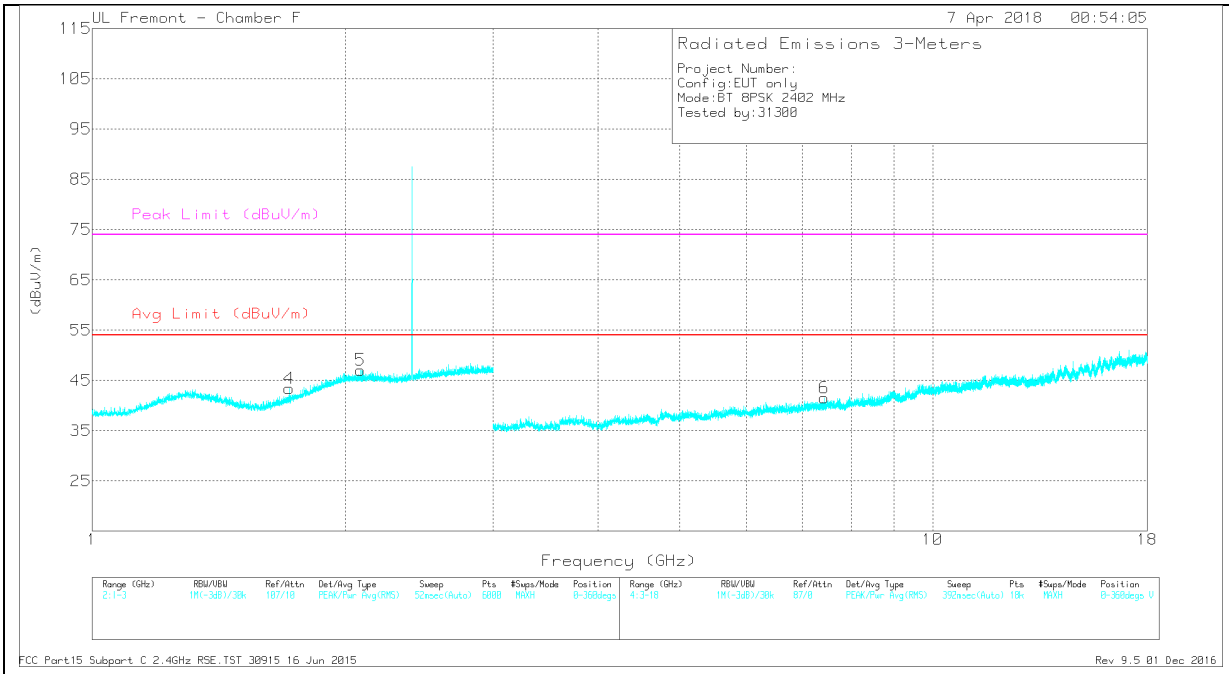
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.949	41.8	PKFH	31.8	-21.1	52.5	-	-	74	-21.5	128	116	H
4	1.716	42.45	PKFH	28.6	-21.4	49.65	-	-	74	-24.35	191	231	V
5	2.087	41.86	PKFH	32.3	-21	53.16	-	-	74	-20.84	100	292	V
3	5.552	38.26	PKFH	34.8	-27.6	45.46	-	-	74	-28.54	164	161	H
2	* 3.82	39.44	PKFH	33.3	-27.9	44.84	-	-	74	-29.16	146	123	H
	* 3.818	27.71	VA1T	33.3	-27.9	33.11	54	-20.89	-	-	146	123	H
6	* 7.432	37.28	PKFH	36	-25.2	48.08	-	-	74	-25.92	334	141	V
	* 7.432	25.09	VA1T	36	-25.2	35.89	54	-18.11	-	-	334	141	V

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

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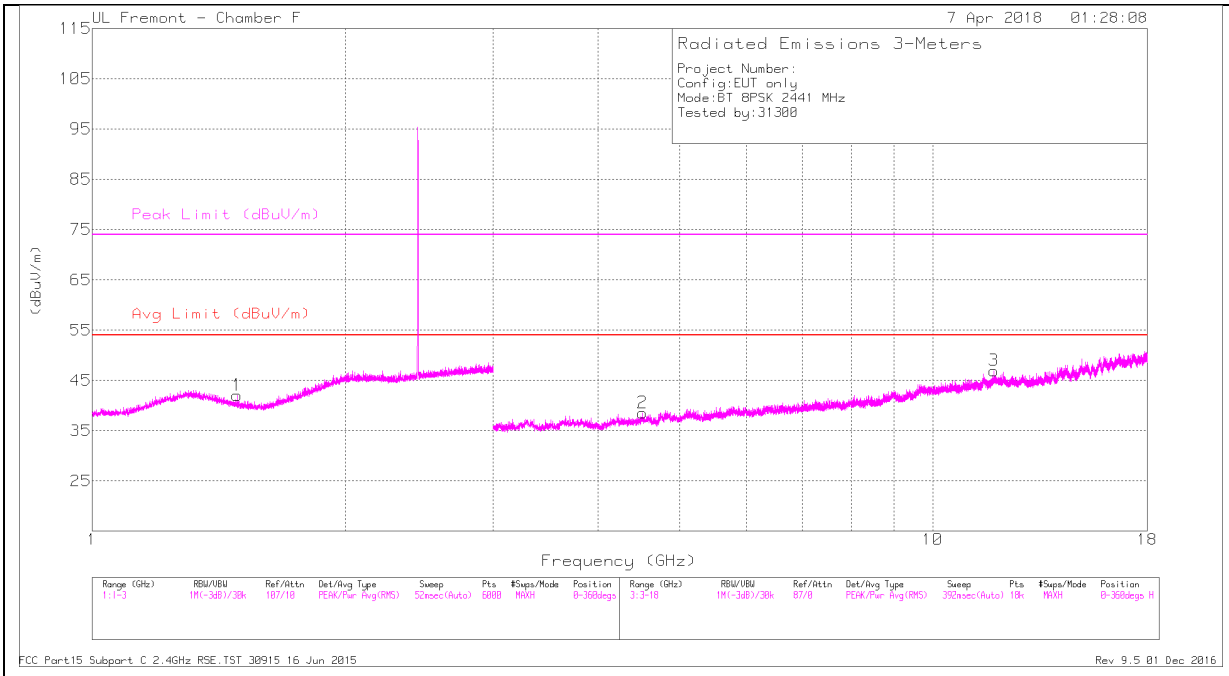
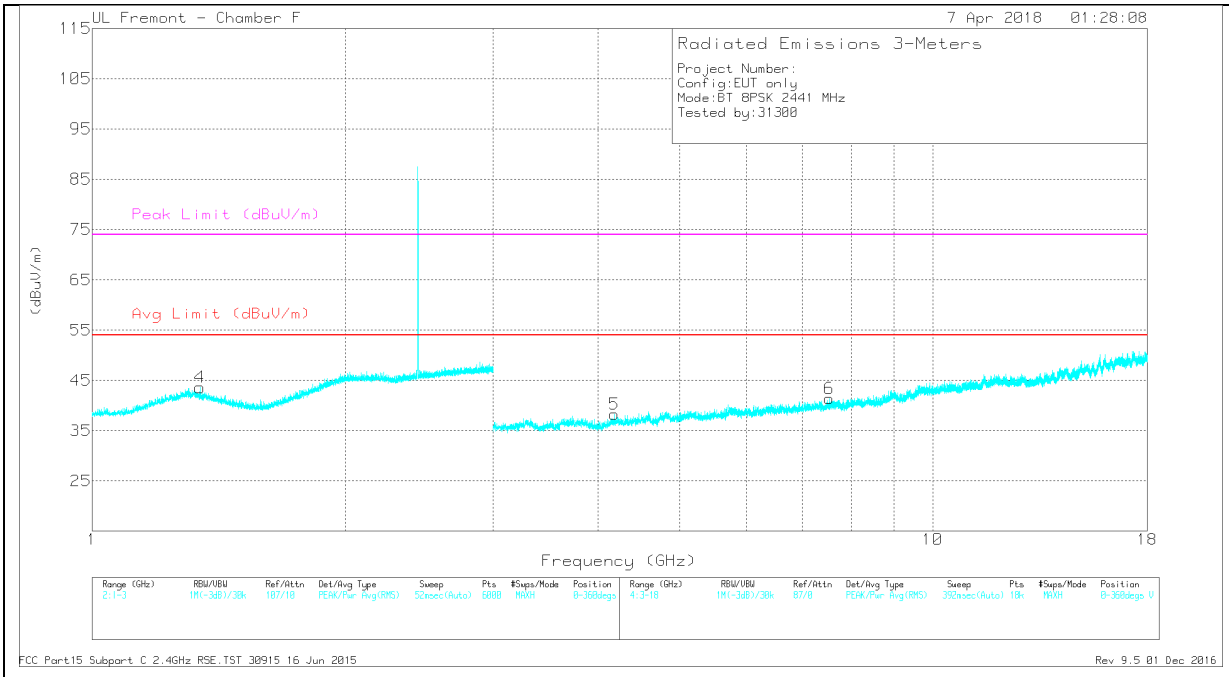
MID CHANNEL RESULTS



HORIZTONAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.489	41.89	PKFH	27.9	-21.7	48.09	-	-	74	-25.91	335	171	H
	* 1.486	29.94	VA1T	27.9	-21.7	36.14	54	-17.86	-	-	335	171	H
4	* 1.344	42.19	PKFH	29.7	-21.9	49.99	-	-	74	-24.01	151	112	V
	* 1.342	30.01	VA1T	29.7	-21.9	37.81	54	-16.19	-	-	151	112	V
2	* 4.52	38.57	PKFH	34.1	-27.6	45.07	-	-	74	-28.93	43	181	H
	* 4.52	26.78	VA1T	34.1	-27.6	33.28	54	-20.72	-	-	43	181	H
3	* 11.819	35.32	PKFH	39	-21.7	52.62	-	-	74	-21.38	295	236	H
	* 11.822	23.61	VA1T	39	-21.6	41.01	54	-12.99	-	-	295	236	H
5	* 4.18	38.87	PKFH	33.5	-27.8	44.57	-	-	74	-29.43	356	100	V
	* 4.18	26.87	VA1T	33.5	-27.8	32.57	54	-21.43	-	-	356	100	V
6	* 7.531	37.21	PKFH	36.1	-25.1	48.21	-	-	74	-25.79	220	291	V
	* 7.531	25.03	VA1T	36.1	-25.1	36.03	54	-17.97	-	-	220	291	V

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

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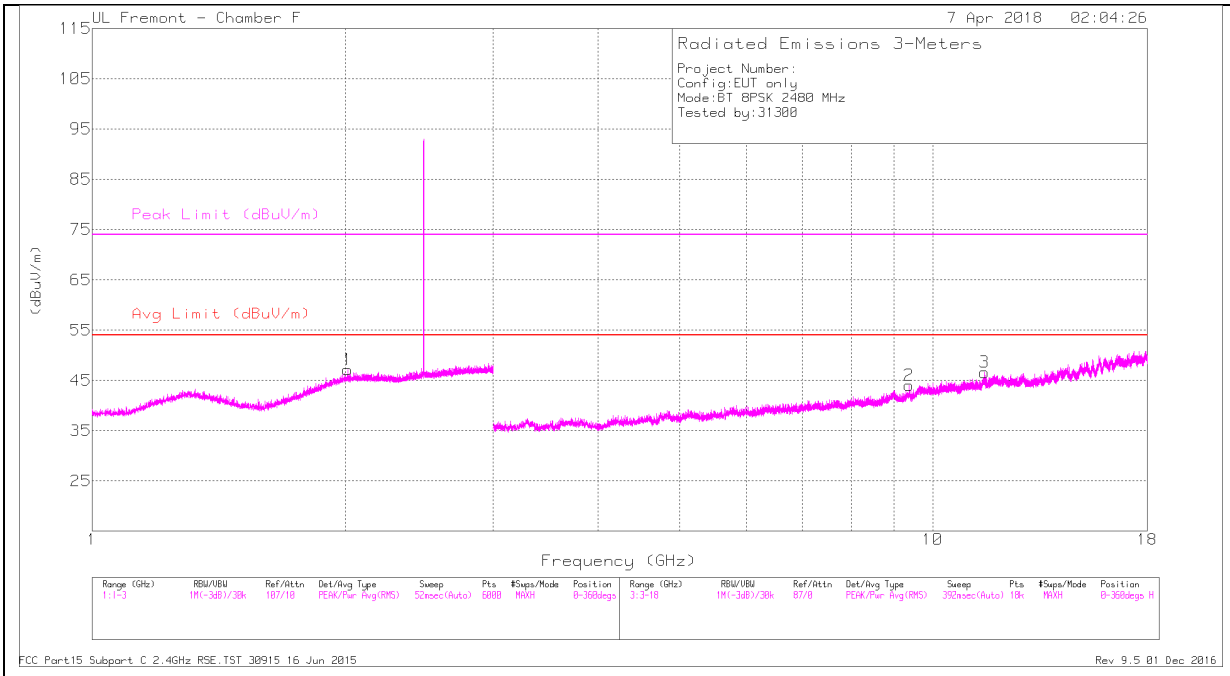
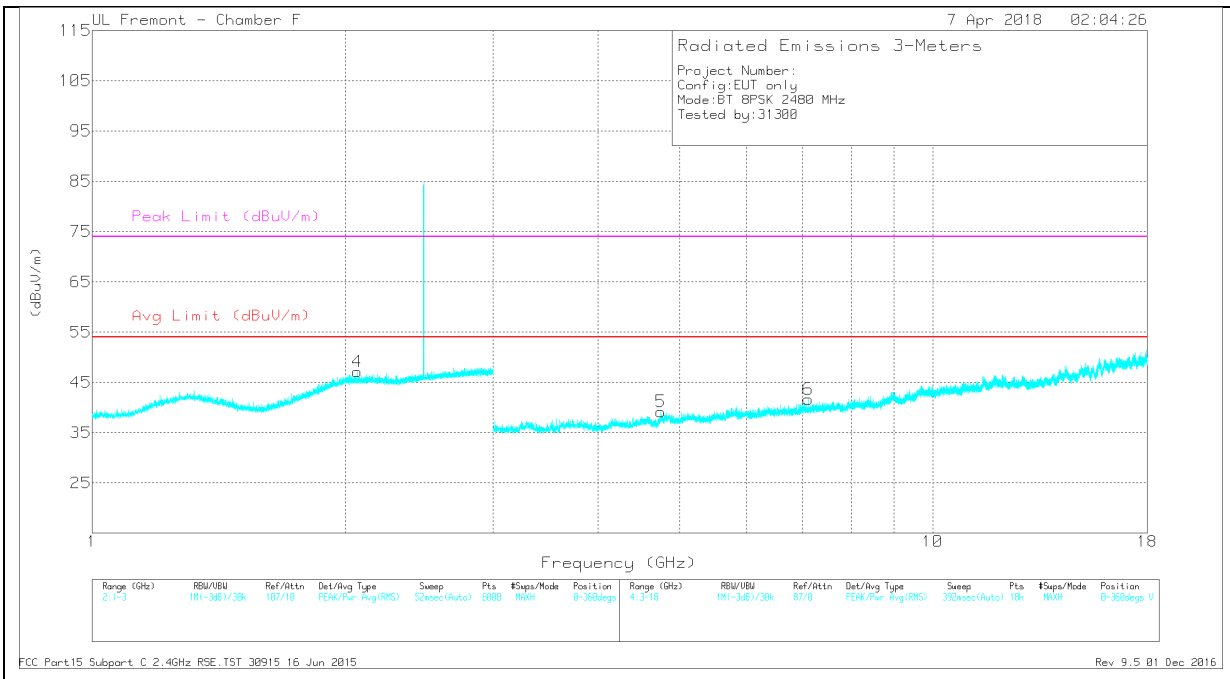
HIGH CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.015	41.95	PKFH	32.3	-21	53.25	-	-	74	-20.75	175	222	H
4	2.065	42.03	PKFH	32.3	-21.1	53.23	-	-	74	-20.77	292	339	V
2	* 9.374	34.52	PKFH	36.6	-21.5	49.62		-	74	-24.38	42	100	H
	* 9.37	23.07	VA1T	36.6	-21.5	38.17	54	-15.83	-	-	42	100	H
3	* 11.519	35.17	PKFH	38.5	-20.6	53.07	-	-	74	-20.93	67	322	H
	* 11.518	23.15	VA1T	38.5	-20.6	41.05	54	-12.95	-	-	67	322	H
5	* 4.75	39.59	PKFH	34.1	-27.6	46.09	-	-	74	-27.91	141	226	V
	* 4.749	27.78	VA1T	34.1	-27.6	34.28	54	-19.72	-	-	141	226	V
6	7.113	36.84	PKFH	35.8	-25.6	47.04	-	-	74	-26.96	197	179	V

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

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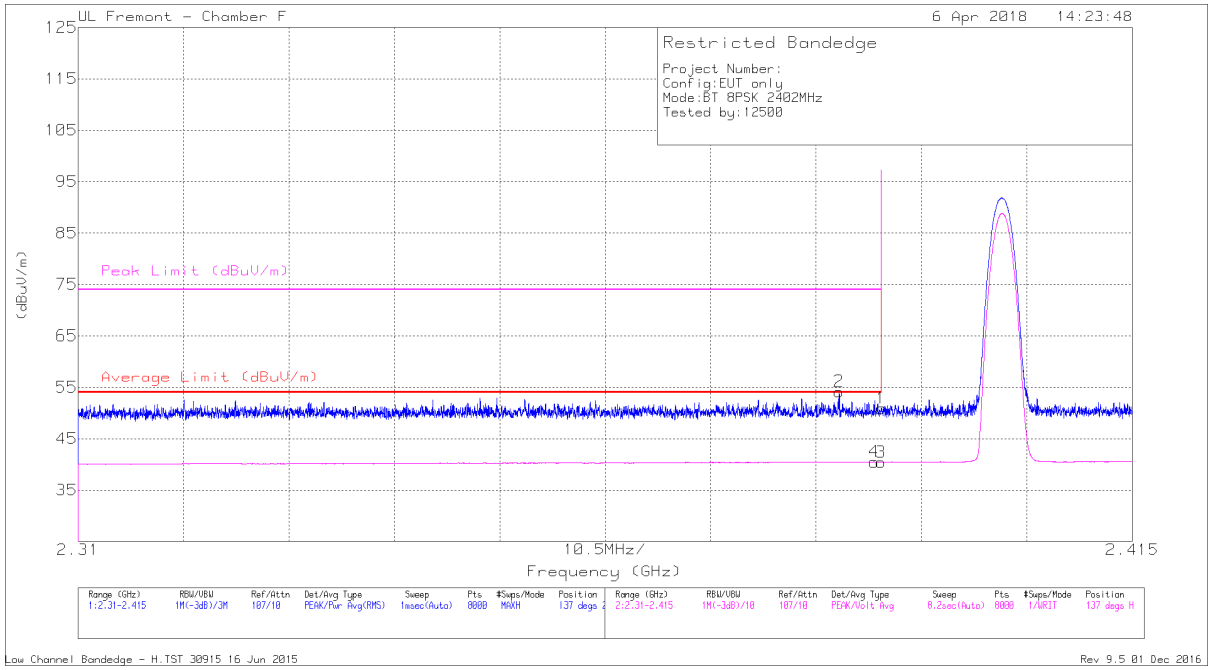
Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.6	Pk	31.9	-20.6	50.9	-	-	74	-23.1	137	207	H
2	* 2.386	42.95	Pk	31.8	-20.6	54.15	-	-	74	-19.85	137	207	H
3	* 2.39	29.14	VA1T	31.9	-20.6	40.44	54	-13.56	-	-	137	207	H
4	* 2.389	29.21	VA1T	31.9	-20.6	40.51	54	-13.49	-	-	137	207	H

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

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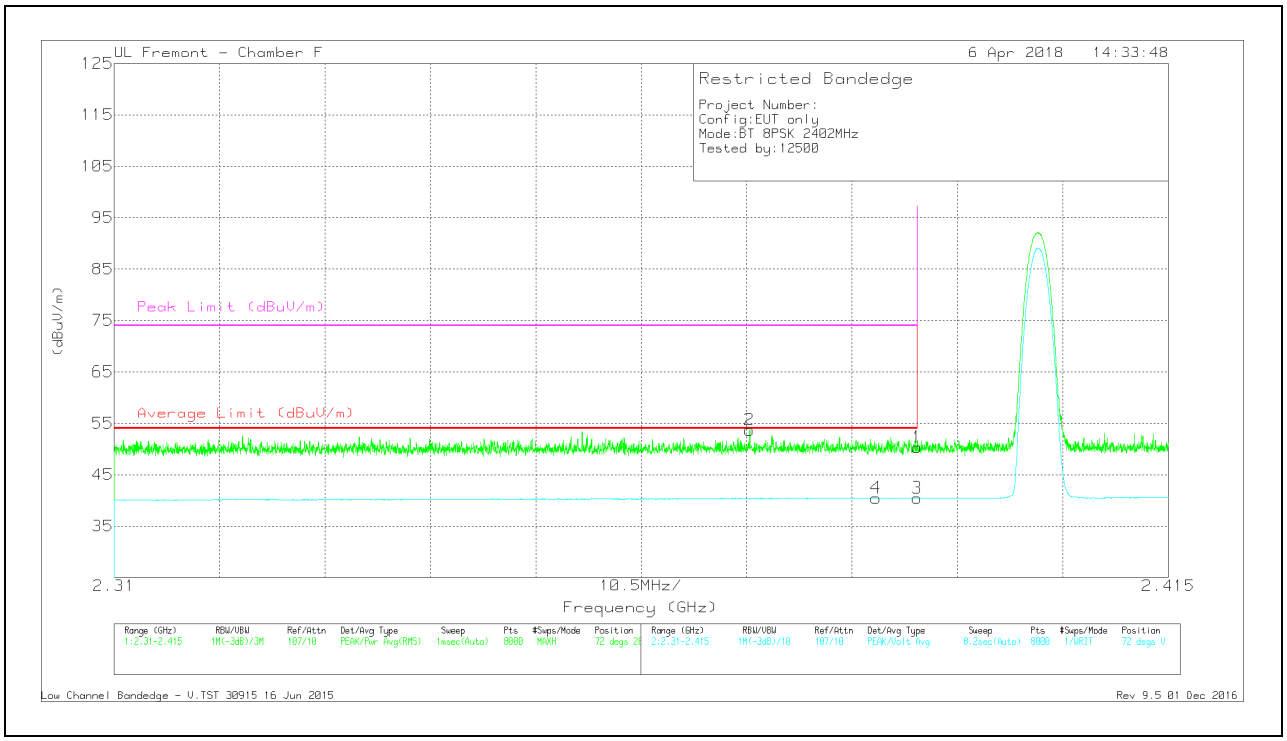
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.04	Pk	31.9	-20.6	50.34	-	-	74	-23.66	72	266	V
2	* 2.373	42.5	Pk	31.8	-20.6	53.7	-	-	74	-20.3	72	266	V
3	* 2.39	29.15	VA1T	31.9	-20.6	40.45	54	-13.55	-	-	72	266	V
4	* 2.386	29.28	VA1T	31.8	-20.6	40.48	54	-13.52	-	-	72	266	V

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

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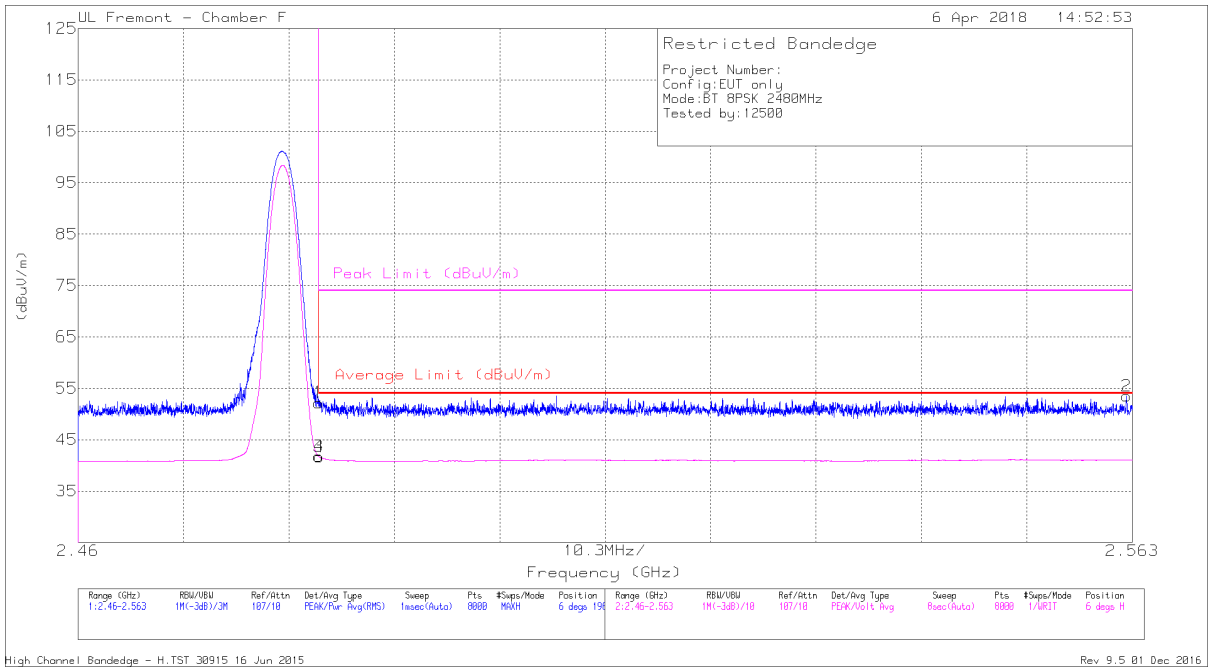
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.81	Pk	32.1	-20.7	52.21	-	-	74	-21.79	6	196	H
2	2.562	41.87	Pk	32.2	-20.6	53.47	-	-	74	-20.53	6	196	H
3	* 2.484	30.37	VA1T	32.1	-20.7	41.77	54	-12.23	-	-	6	196	H
4	* 2.484	30.3	VA1T	32.1	-20.7	41.7	54	-12.3	-	-	6	196	H

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

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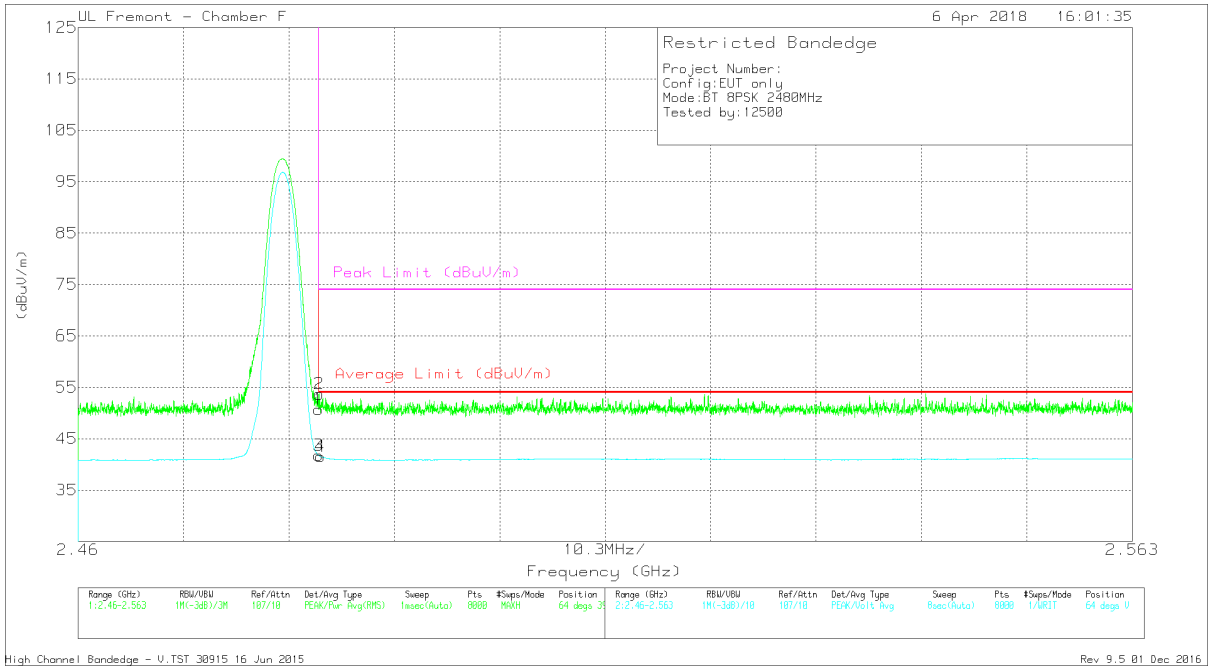
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.33	Pk	32.1	-20.7	50.73	-	-	74	-23.27	64	395	V
2	* 2.484	42.31	Pk	32.1	-20.7	53.71	-	-	74	-20.29	64	395	V
3	* 2.484	30.37	VA1T	32.1	-20.7	41.77	54	-12.23	-	-	64	395	V
4	* 2.484	30.16	VA1T	32.1	-20.7	41.56	54	-12.44	-	-	64	395	V

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

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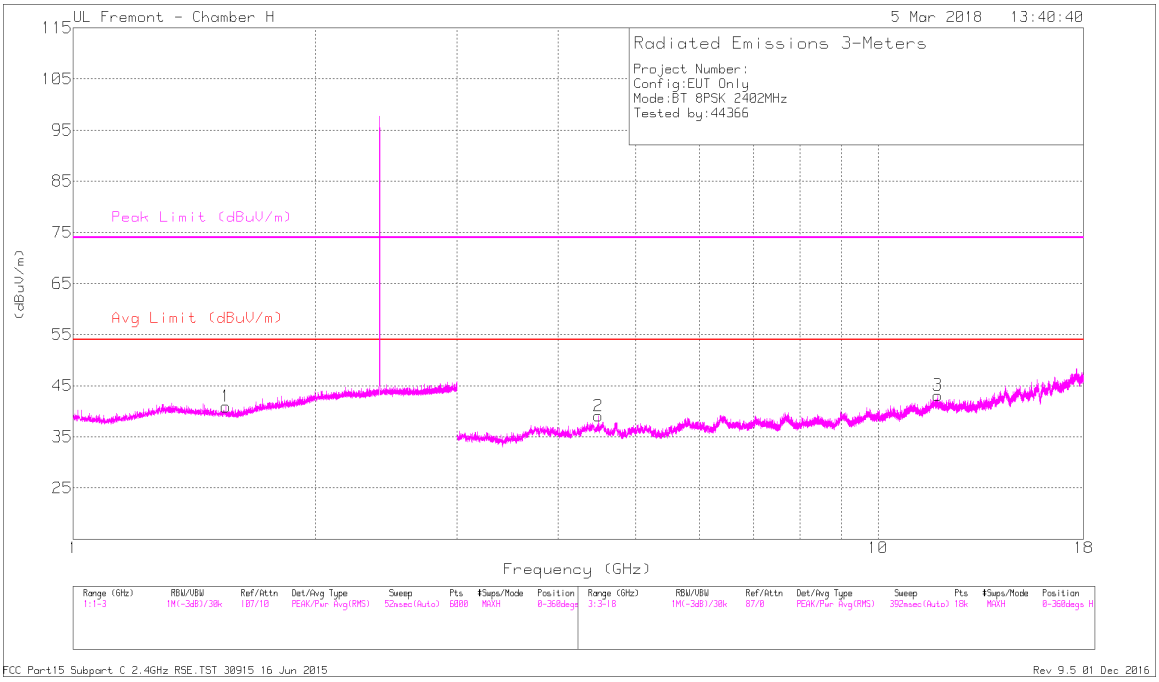
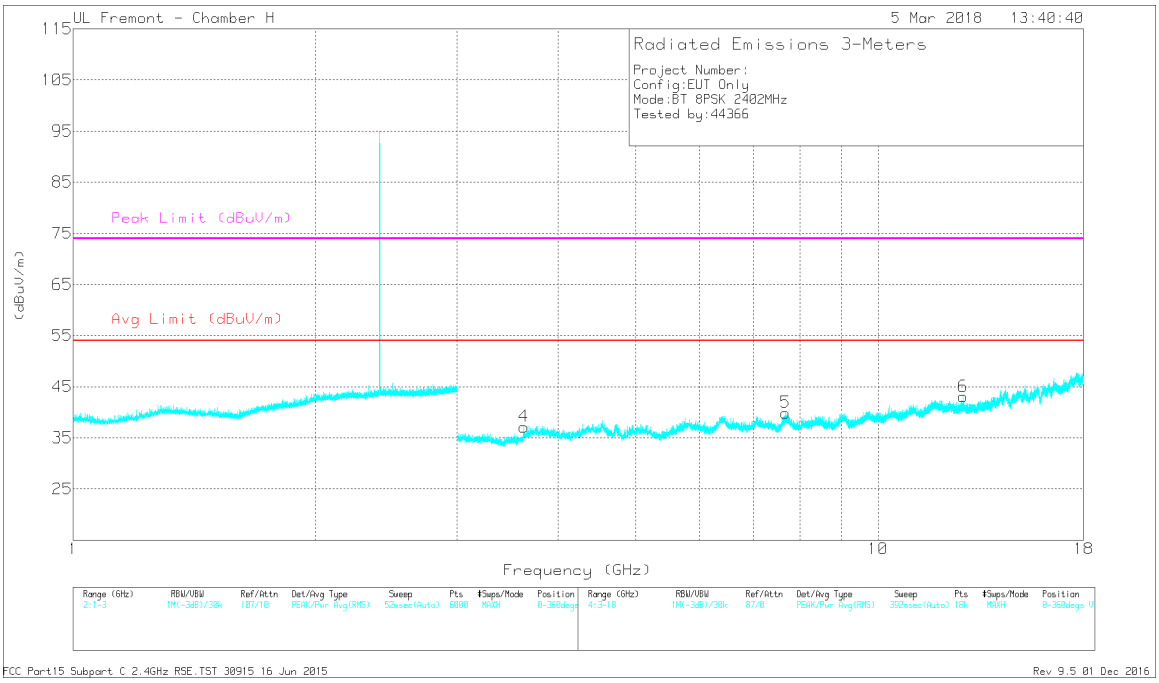
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.548	44.88	PKFH	28.3	-27.7	45.48	-	-	74	-28.52	212	139	H
	* 1.55	33.58	VA1T	28.3	-27.7	34.18	54	-19.82	-	-	212	139	H
3	* 11.864	35.64	PKFH	39	-25.8	48.84	-	-	74	-25.16	206	400	H
	* 11.865	23.03	VA1T	39	-25.9	36.13	54	-17.87	-	-	206	400	H
4	* 3.633	44.5	PKFH	33.1	-35.3	42.3	-	-	74	-31.7	103	102	V
	* 3.632	32.7	VA1T	33.1	-35.3	30.5	54	-23.5	-	-	103	102	V
5	* 7.67	38.92	PKFH	36.2	-29.5	45.62	-	-	74	-28.38	338	330	V
	* 7.671	26.89	VA1T	36.2	-29.5	33.59	54	-20.41	-	-	338	330	V
2	4.495	42.81	PKFH	34.2	-34.5	42.51	-	-	74	-31.49	79	385	H
6	12.76	34.38	PKFH	39.3	-25.9	47.78	-	-	74	-26.22	92	317	V

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

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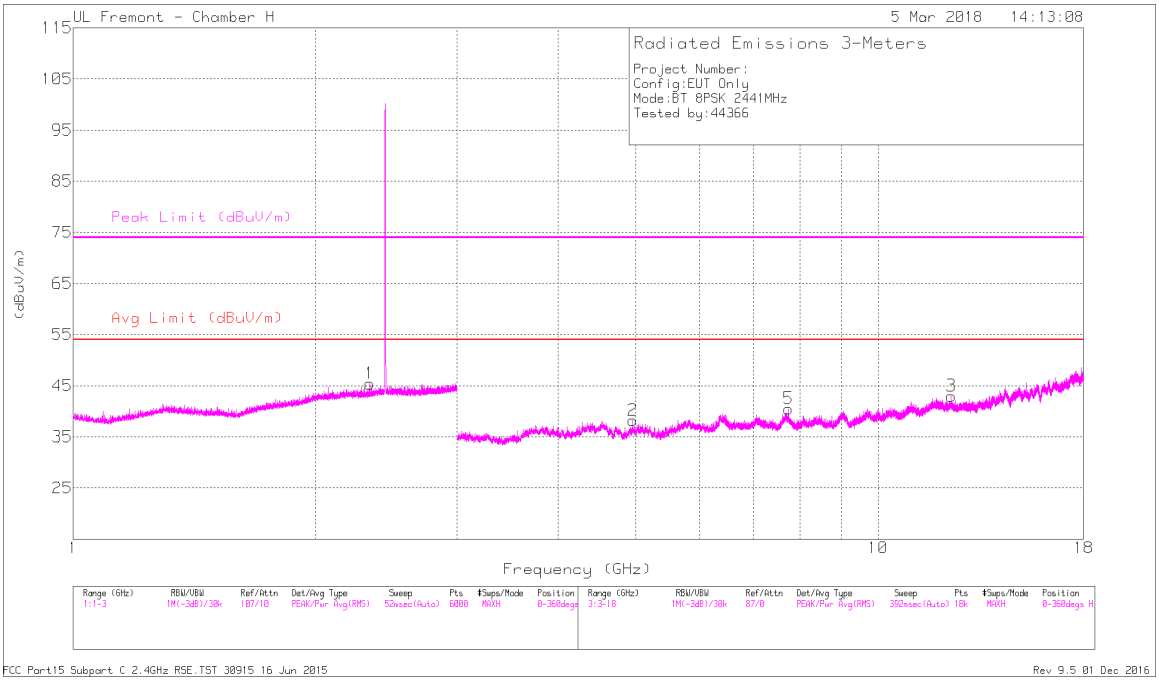
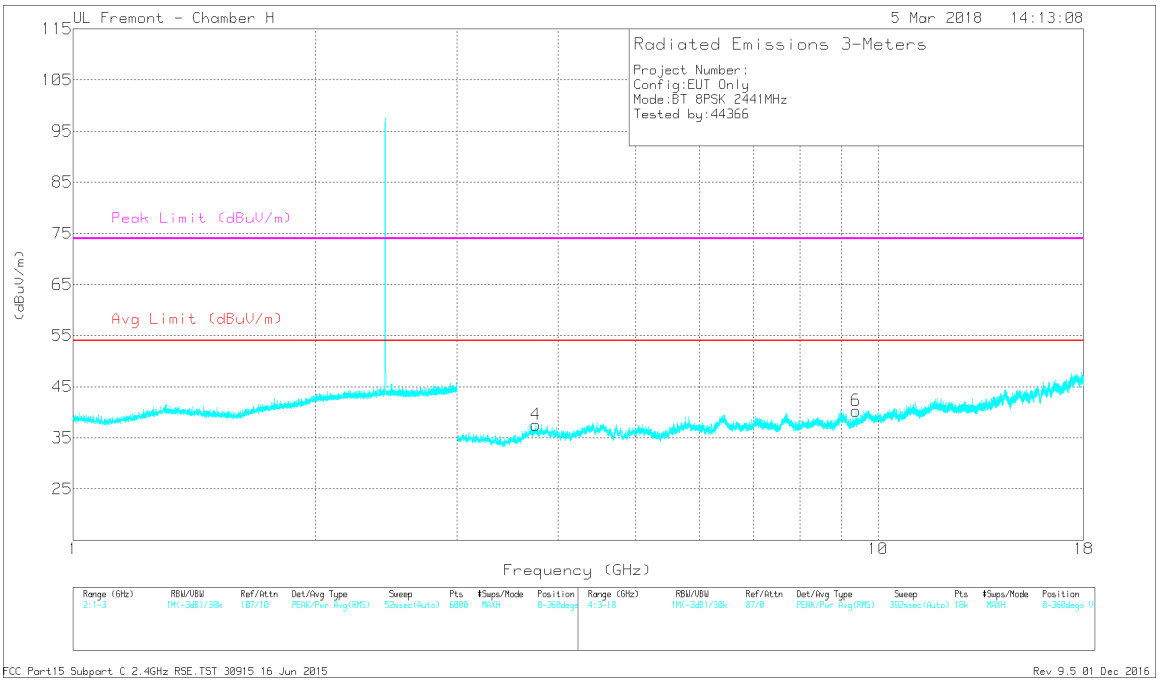
MID CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.336	45.81	PKFH	32	-28.1	49.71	-	-	74	-24.29	237	250	H
	* 2.339	34.1	VA1T	32	-28.1	38	54	-16	-	-	237	250	H
2	* 4.959	42.11	PKFH	34.2	-33.7	42.61	-	-	74	-31.39	276	224	H
	* 4.959	30.5	VA1T	34.2	-33.7	31	54	-23	-	-	276	224	H
3	* 12.332	34.89	PKFH	38.7	-25.8	47.79	-	-	74	-26.21	7	351	H
	* 12.331	23.3	VA1T	38.7	-25.8	36.2	54	-17.8	-	-	7	351	H
5	* 7.739	38.67	PKFH	36.2	-30.1	44.77	-	-	74	-29.23	143	398	H
	* 7.739	27.04	VA1T	36.2	-30.1	33.14	54	-20.86	-	-	143	398	H
4	* 3.758	44.76	PKFH	33.1	-35	42.86	-	-	74	-31.14	356	216	V
	* 3.756	33.03	VA1T	33.1	-35	31.13	54	-22.87	-	-	356	216	V
6	* 9.39	36.25	PKFH	36.8	-28.4	44.65	-	-	74	-29.35	186	340	V
	* 9.388	24.59	VA1T	36.8	-28.4	32.99	54	-21.01	-	-	186	340	V

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

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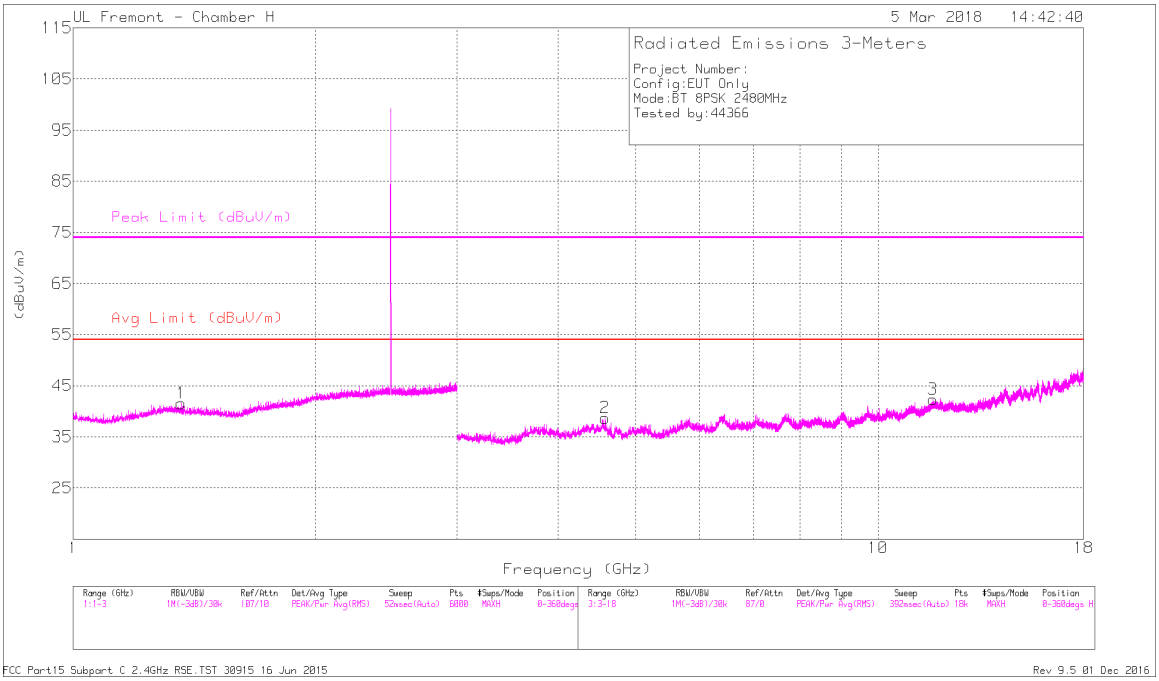
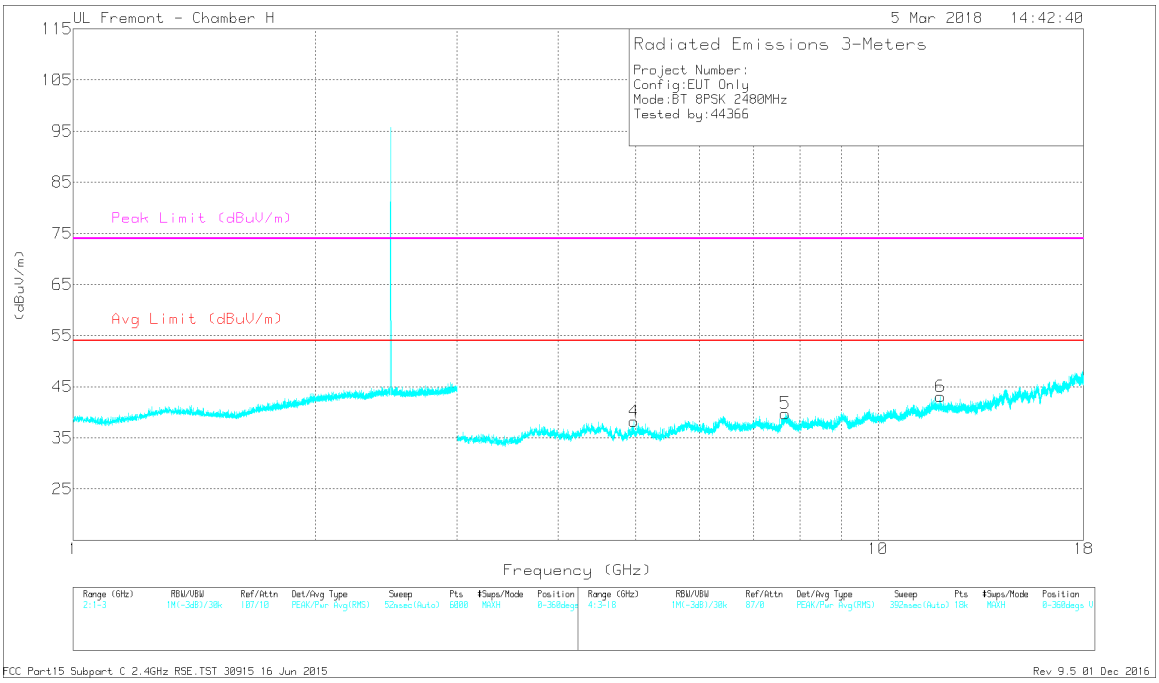
HIGH CHANNEL RESULTS



HORIZTONAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36	43.51	PKFH	29	-27.5	45.01	-	-	74	-28.99	326	254	H
	* 1.363	31.6	VA1T	28.9	-27.5	33	54	-21	-	-	326	254	H
2	* 4.578	43.53	PKFH	34.3	-34.5	43.33	-	-	74	-30.67	108	259	H
	* 4.577	31.52	VA1T	34.3	-34.5	31.32	54	-22.68	-	-	108	259	H
3	* 11.707	36.33	PKFH	38.8	-25.9	49.23	-	-	74	-24.77	360	290	H
	* 11.707	23.32	VA1T	38.8	-25.9	36.22	54	-17.78	-	-	360	290	H
4	* 4.974	42.08	PKFH	34.1	-33.6	42.58	-	-	74	-31.42	171	131	V
	* 4.972	30.19	VA1T	34.1	-33.7	30.59	54	-23.41	-	-	171	131	V
5	* 7.669	38.59	PKFH	36.2	-29.5	45.29	-	-	74	-28.71	169	366	V
	* 7.667	26.96	VA1T	36.2	-29.6	33.56	54	-20.44	-	-	169	366	V
6	* 11.956	36.43	PKFH	39.3	-26	49.73	-	-	74	-24.27	334	368	V
	* 11.955	22.89	VA1T	39.3	-26	36.19	54	-17.81	-	-	334	368	V

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

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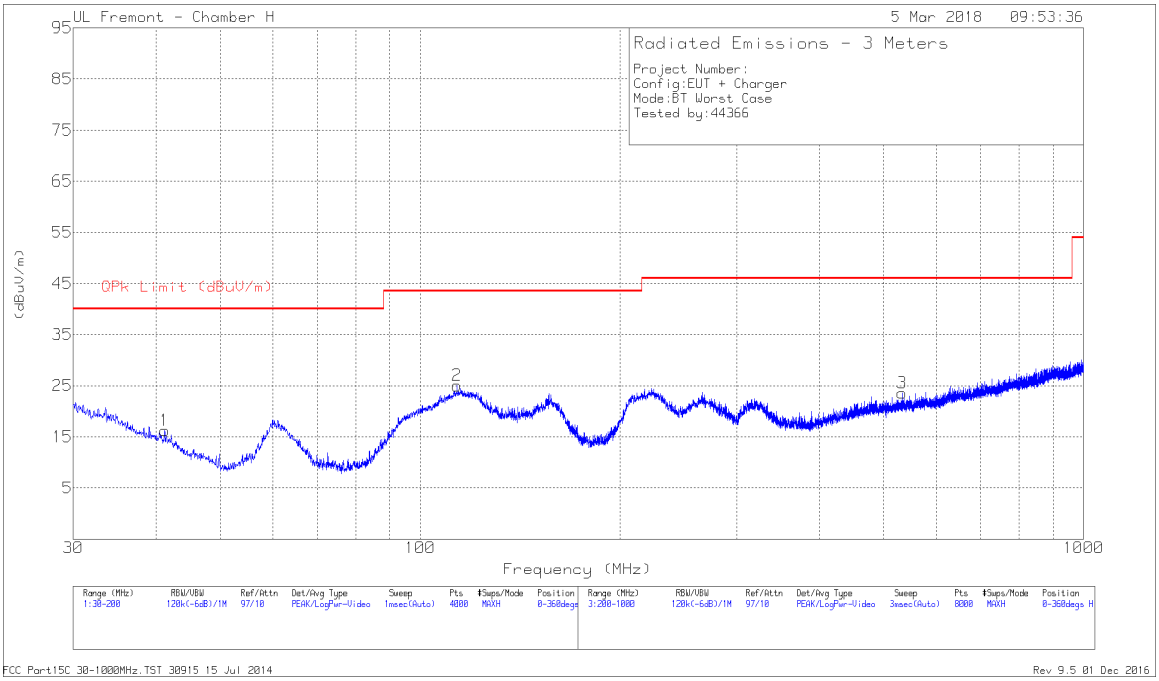
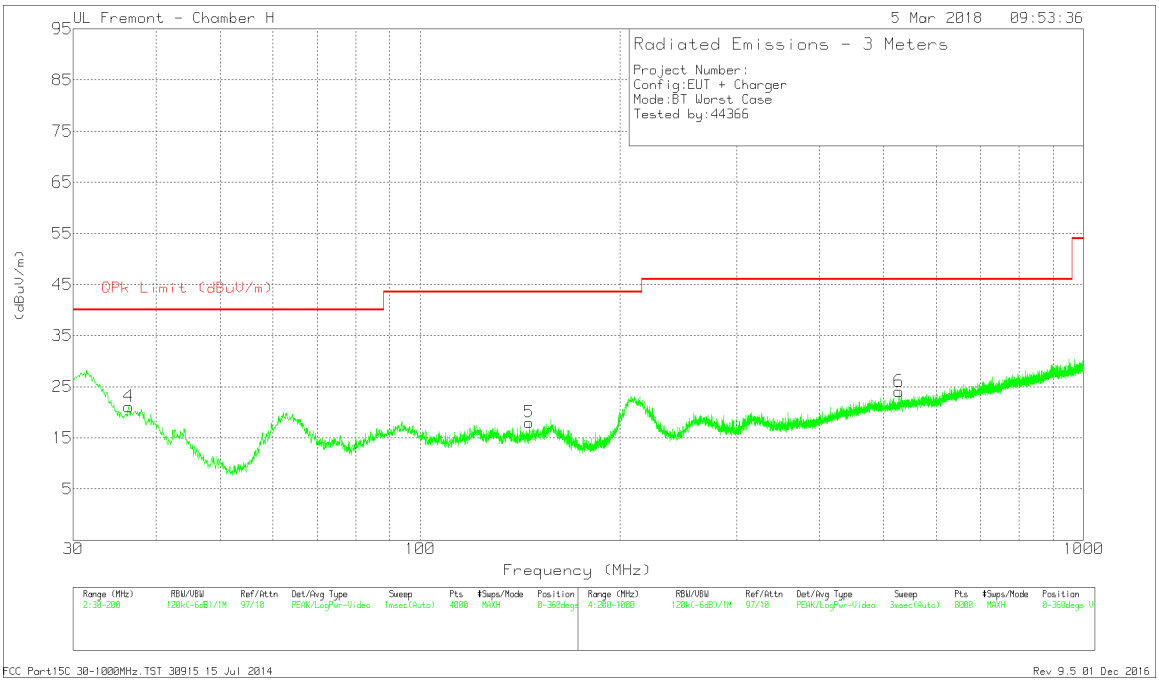
9.2. Worst Case Below 1 GHz

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



HORIZTONAL



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Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 113.6191	38.34	Pk	17.1	-30.4	25.04	43.52	-18.48	0-360	299	H
4	36.3767	32.24	Pk	20.1	-31.2	21.14	40	-18.86	0-360	100	V
1	41.2229	30.13	Pk	17.3	-31.2	16.23	40	-23.77	0-360	399	H
5	146.0975	31.54	Pk	16.6	-30.1	18.04	43.52	-25.48	0-360	100	V
6	527.1425	30.29	Pk	21.9	-28.1	24.09	46.02	-21.93	0-360	299	V
3	532.7433	29.77	Pk	22	-28.2	23.57	46.02	-22.45	0-360	101	H

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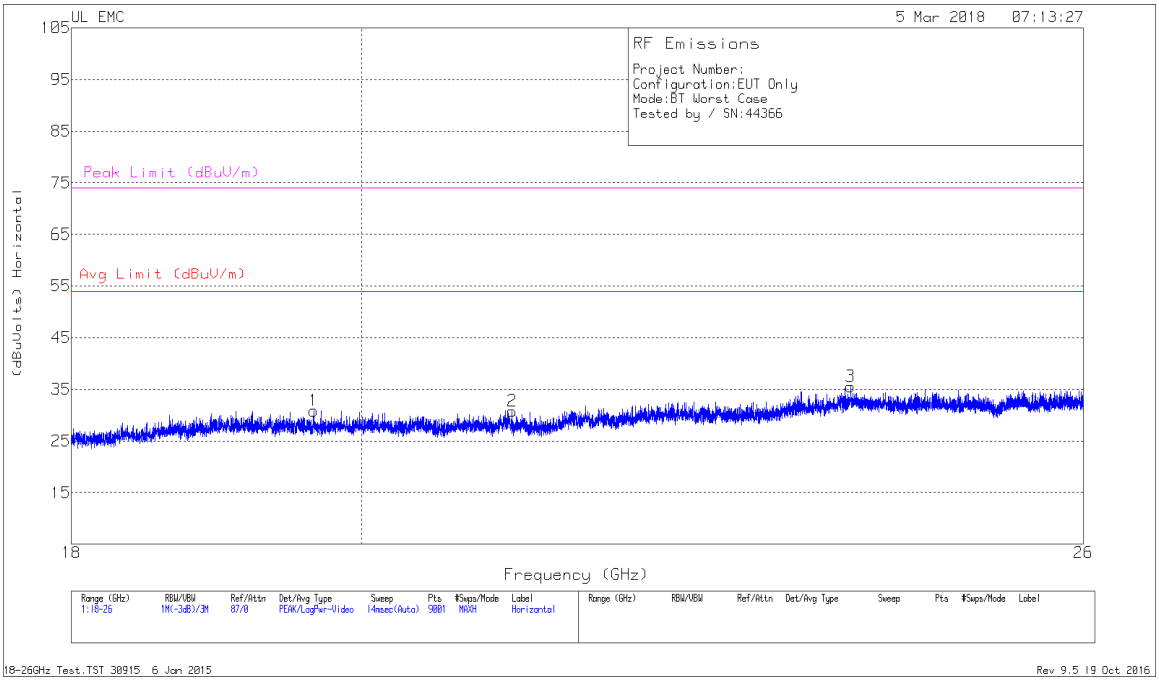
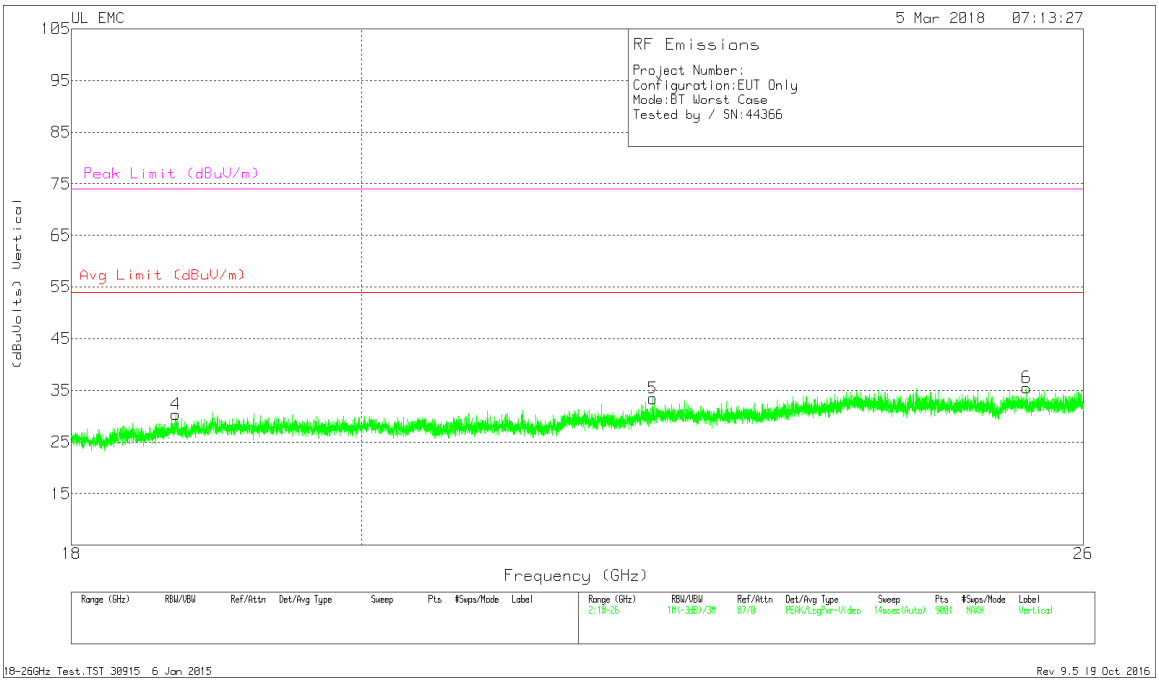
9.3. Worst Case 18-26 GHz

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



HORIZTONAL



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18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T449 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.656	32.65	Pk	32.7	-25	-9.5	30.85	54	-23.15	74	-43.15
2	21.126	32.67	Pk	33.1	-25.5	-9.5	30.77	54	-23.23	74	-43.23
3	23.889	35.11	Pk	33.9	-24	-9.5	35.51	54	-18.49	74	-38.49
4	18.696	31.76	Pk	32.3	-24.2	-9.5	30.36	54	-23.64	74	-43.64
5	22.234	34.03	Pk	33.5	-24.6	-9.5	33.43	54	-20.57	74	-40.57
6	25.467	35.16	Pk	34.4	-24.6	-9.5	35.46	54	-18.54	74	-38.54

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

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

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

RESULTS

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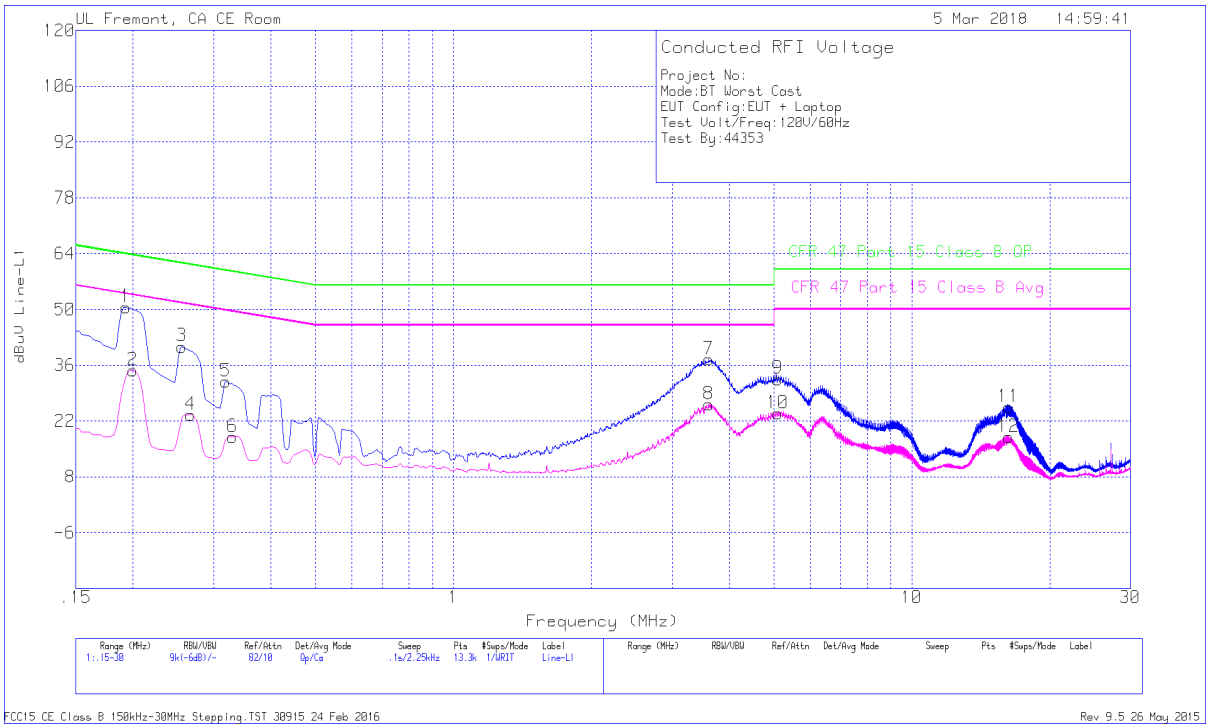
10.1.1. AC Power Line Host

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.19275	40.5	Qp	0	0	10.1	50.6	63.92	-13.32	-	-
2	.1995	24.58	Ca	0	0	10.1	34.68	-	-	53.63	-18.95
3	.25575	30.6	Qp	0	0	10.1	40.7	61.57	-20.87	-	-
4	.267	13.45	Ca	0	0	10.1	23.55	-	-	51.21	-27.66
5	.31875	21.81	Qp	0	0	10.1	31.91	59.74	-27.83	-	-
6	.33	7.96	Ca	0	0	10.1	18.06	-	-	49.45	-31.39
7	3.60488	27.28	Qp	0	.1	10.1	37.48	56	-18.52	-	-
8	3.6015	15.96	Ca	0	.1	10.1	26.16	-	-	46	-19.84
9	5.0955	22.33	Qp	0	.1	10.1	32.53	60	-27.47	-	-
10	5.0955	13.67	Ca	0	.1	10.1	23.87	-	-	50	-26.13
11	16.2578	14.88	Qp	0	.3	10.3	25.48	60	-34.52	-	-
12	16.2578	7.44	Ca	0	.3	10.3	18.04	-	-	50	-31.96

Qp - Quasi-Peak detector
Ca - CISPR average detection

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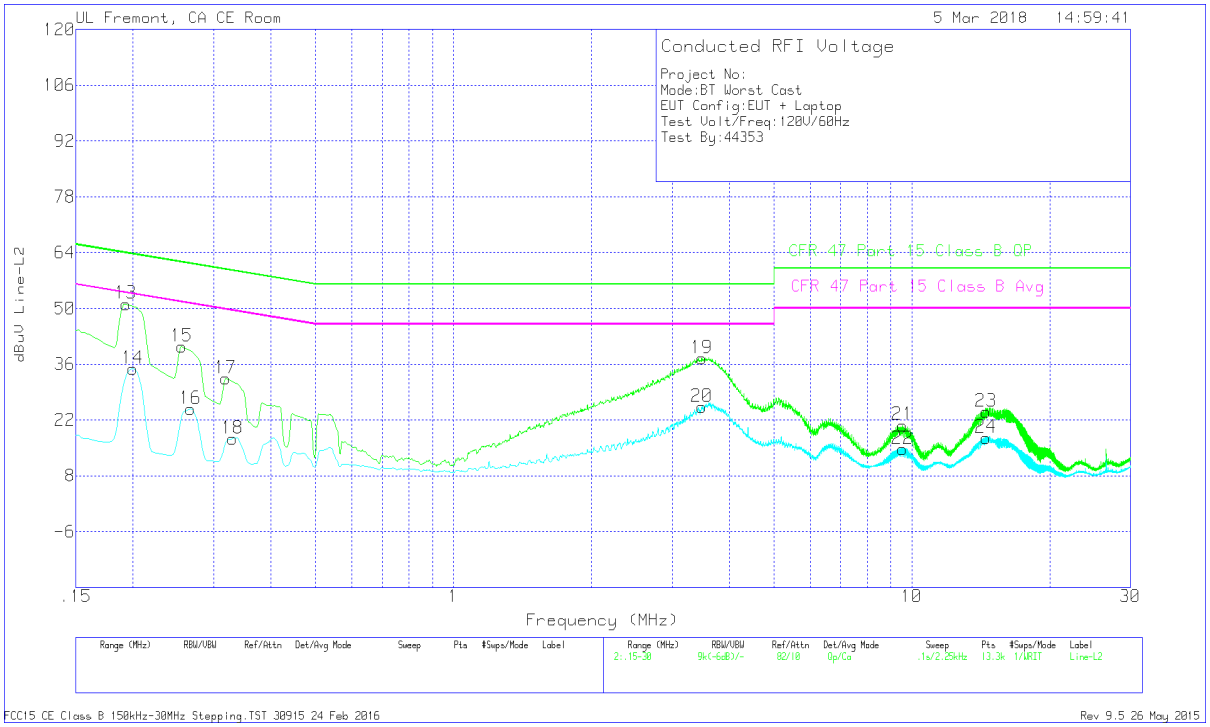
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.19275	41.03	Qp	0	0	10.1	51.13	63.92	-12.79	-	-
14	.1995	24.76	Ca	0	0	10.1	34.86	-	-	53.63	-18.77
15	.25575	30.4	Qp	0	0	10.1	40.5	61.57	-21.07	-	-
16	.267	14.7	Ca	0	0	10.1	24.8	-	-	51.21	-26.41
17	.31875	22.33	Qp	0	0	10.1	32.43	59.74	-27.31	-	-
18	.33	7.2	Ca	0	0	10.1	17.3	-	-	49.45	-32.15
19	3.48	27.26	Qp	0	.1	10.1	37.46	56	-18.54	-	-
20	3.48	15.06	Ca	0	.1	10.1	25.26	-	-	46	-20.74
21	9.5505	10.31	Qp	0	.2	10.2	20.71	60	-39.29	-	-
22	9.56175	4.39	Ca	0	.2	10.2	14.79	-	-	50	-35.21
23	14.5298	13.49	Qp	.1	.3	10.2	24.09	60	-35.91	-	-
24	14.5343	6.98	Ca	.1	.3	10.2	17.58	-	-	50	-32.42

Qp - Quasi-Peak detector
Ca - CISPR average detection

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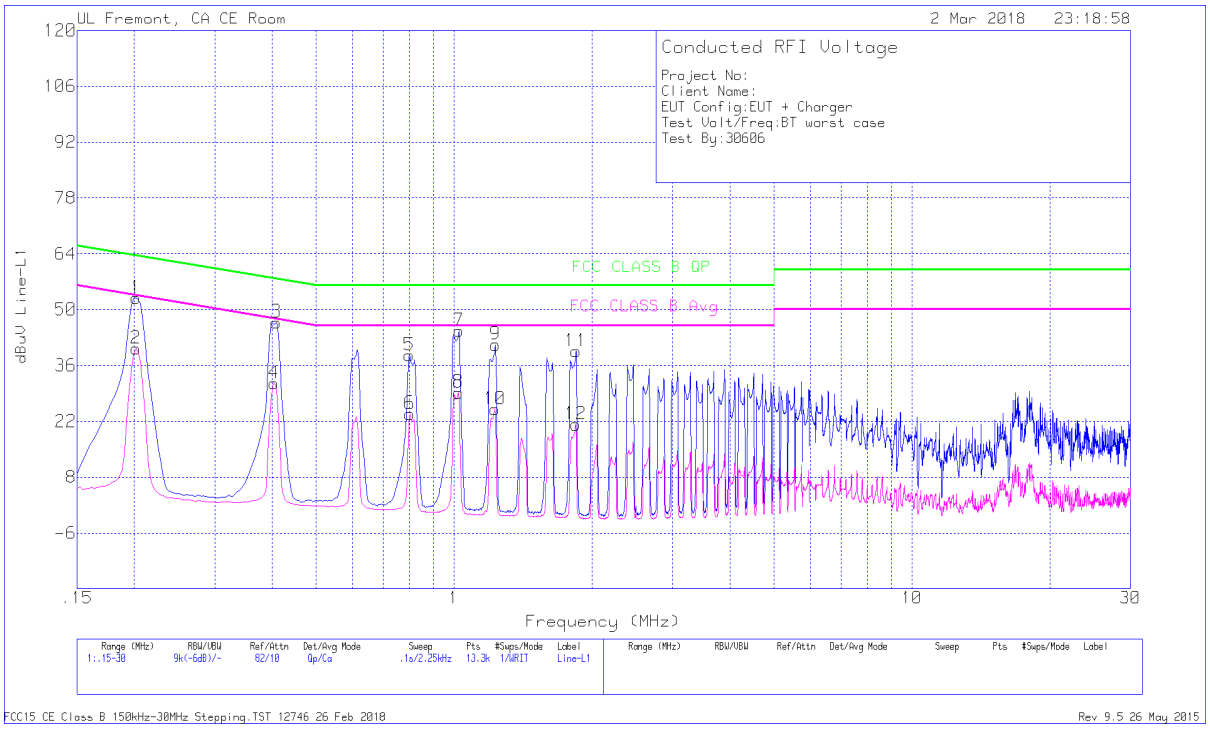
10.1.2. AC Power Line Norm

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Corrected Reading dBuV	FCC CLASS B QP	Margin (dB)	FCC CLASS B Avg	Margin (dB)
1	.20175	52.93	Qp	0	0	52.93	63.54	-10.61	-	-
2	.20175	40.26	Ca	0	0	40.26	-	-	53.54	-13.28
3	.40875	46.82	Qp	0	0	46.82	57.67	-10.85	-	-
4	.40425	31.51	Ca	0	0	31.51	-	-	47.77	-16.26
5	.798	38.53	Qp	0	0	38.53	56	-17.47	-	-
6	.80025	23.87	Ca	0	0	23.87	-	-	46	-22.13
7	1.02525	44.57	Qp	0	.1	44.67	56	-11.33	-	-
8	1.02075	29.09	Ca	0	.1	29.19	-	-	46	-16.81
9	1.23	41.11	Qp	0	.1	41.21	56	-14.79	-	-
10	1.22775	24.91	Ca	0	.1	25.01	-	-	46	-20.99
11	1.8465	39.48	Qp	0	.1	39.58	56	-16.42	-	-
12	1.842	21.12	Ca	0	.1	21.22	-	-	46	-24.78

Qp - Quasi-Peak detector
Ca - CISPR average detection

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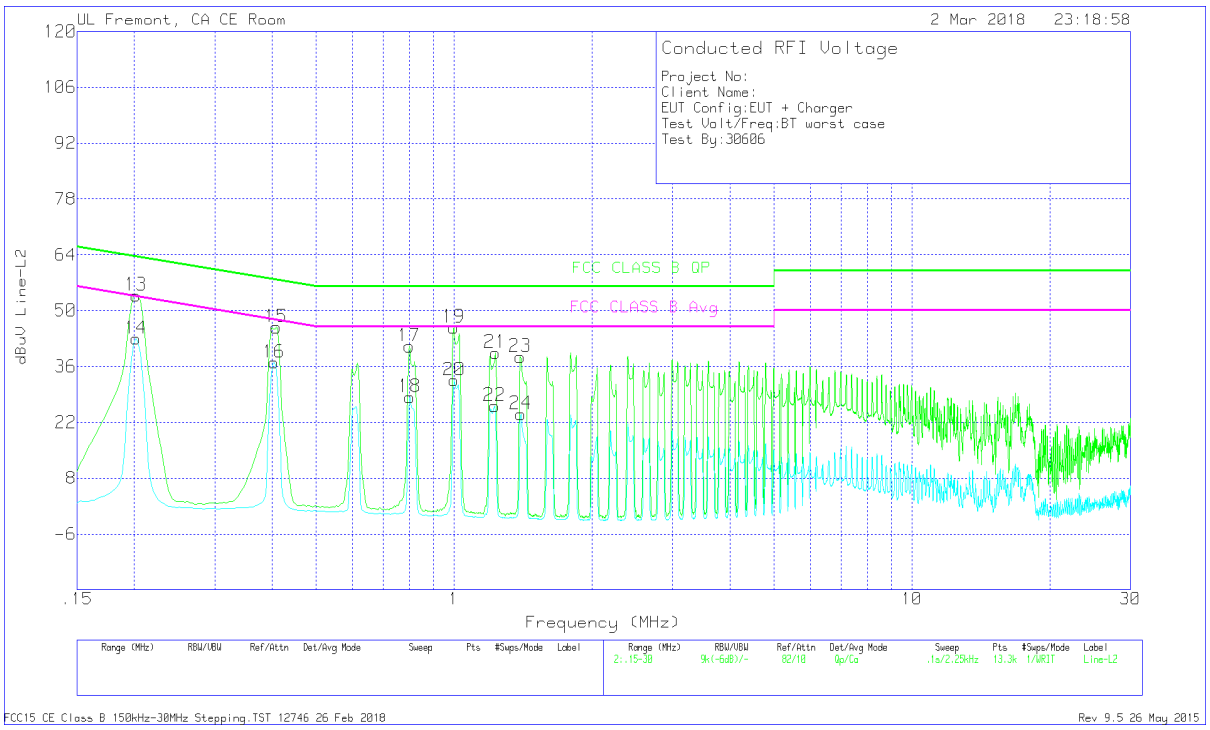
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Corrected Reading dBuV	FCC CLASS B QP	Margin (dB)	FCC CLASS B Avg	Margin (dB)
13	.20175	53.82	Qp	0	0	53.82	63.54	-9.72	-	-
14	.20175	42.96	Ca	0	0	42.96	-	-	53.54	-10.58
15	.40875	45.85	Qp	0	0	45.85	57.67	-11.82	-	-
16	.40425	36.96	Ca	0	0	36.96	-	-	47.77	-10.81
17	.798	41.06	Qp	0	0	41.06	56	-14.94	-	-
18	.80025	28.33	Ca	0	0	28.33	-	-	46	-17.67
19	.99825	45.7	Qp	0	.1	45.8	56	-10.2	-	-
20	1.0005	32.43	Ca	0	.1	32.53	-	-	46	-13.47
21	1.23	39.37	Qp	0	.1	39.47	56	-16.53	-	-
22	1.2255	25.99	Ca	0	.1	26.09	-	-	46	-19.91
23	1.39425	38.33	Qp	0	.1	38.43	56	-17.57	-	-
24	1.39875	23.98	Ca	0	.1	24.08	-	-	46	-21.92

Qp - Quasi-Peak detector
Ca - CISPR average detection

END OF REPORT

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11. SETUP PHOTOS

Please refer to 12204475-EP1V1 for setup photos

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