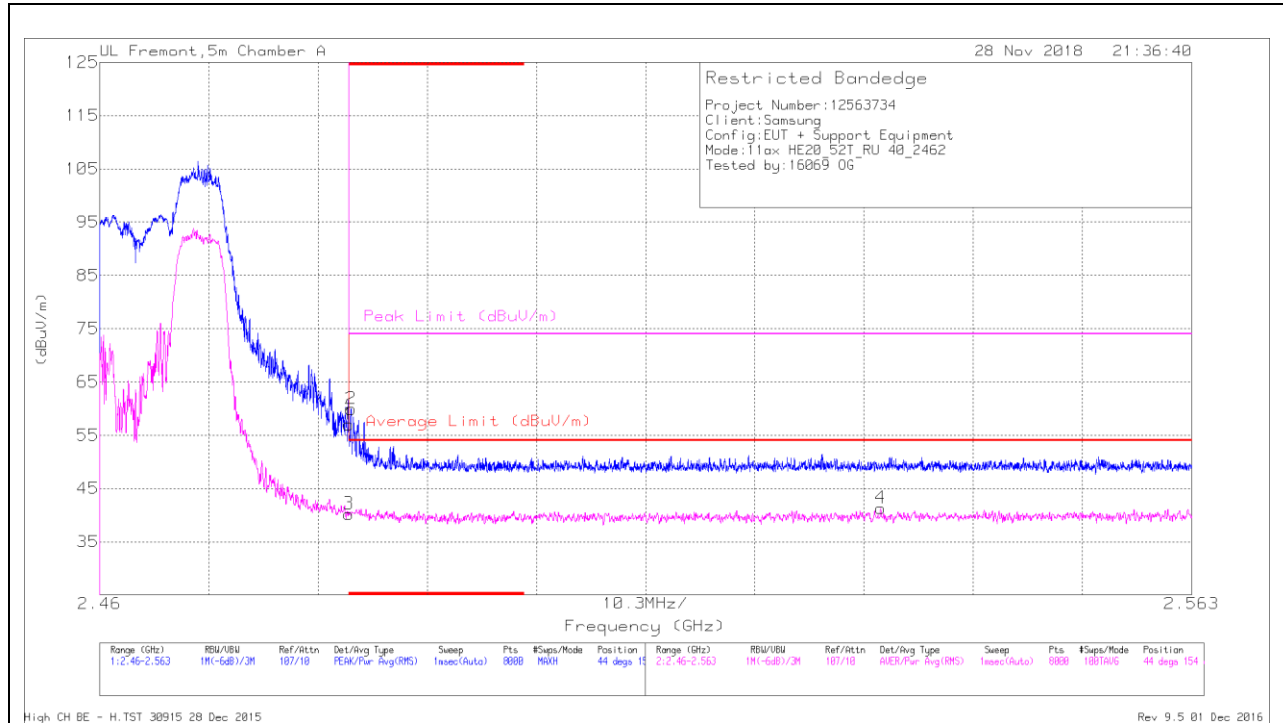


2TX Chain 0 + Chain 1 OFDMA MODE – 52-Tones, RU index 40

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



Trace Markers

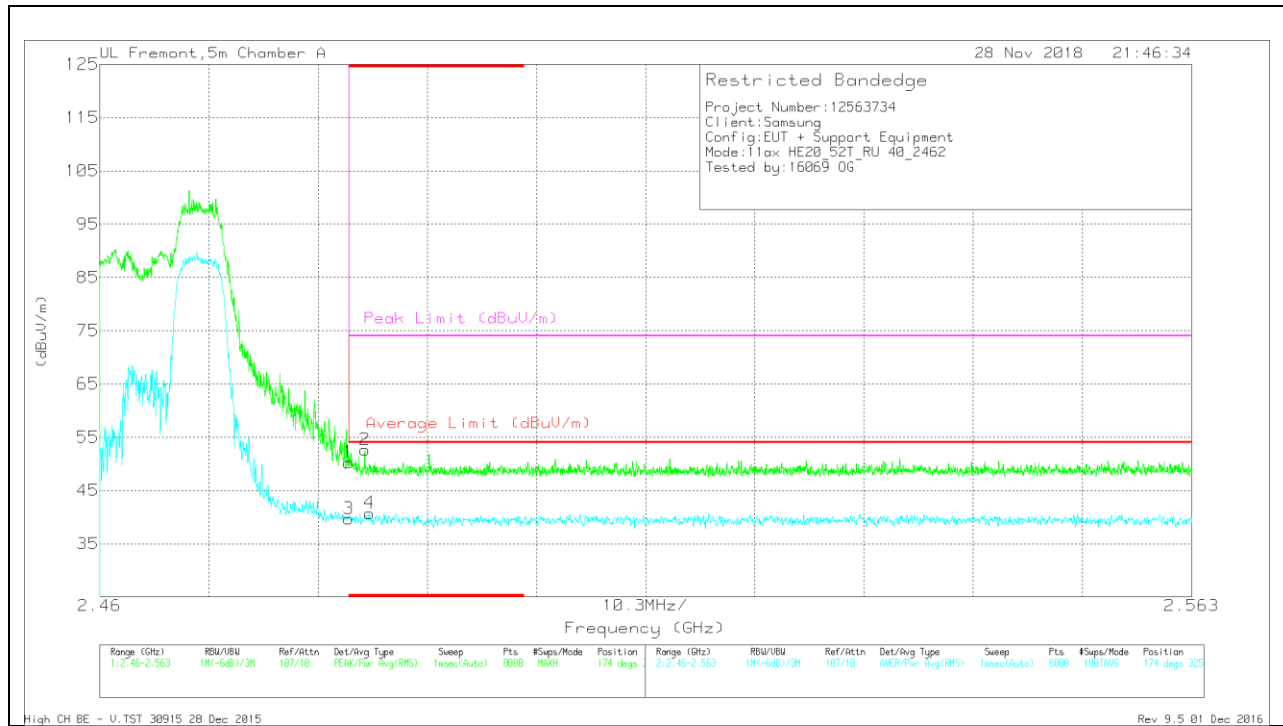
Marker	Frequenc y (GHz)	Meter Reading (dBUV)	Det	AF T862 (dBm)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.5	Pk	32.3	-21.8	0	57	-	-	74	-17	44	154	H
2	* 2.484	49.44	Pk	32.3	-21.8	0	59.94	-	-	74	-14.06	44	154	H
3	* 2.484	28.84	RMS	32.3	-21.8	0.17	39.51	54	-14.49	-	-	44	154	H
4	2.534	29.64	RMS	32.4	-21.6	0.17	40.61	54	-13.39	-	-	44	154	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Ampl/Cbl/Filt/Pad (dB)	DC Corr (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	39.76	Pk	32.3	-21.8	0	50.26	-	-	74	-23.74	174	325	V
3	* 2.484	28.72	RMS	32.3	-21.8	0.17	39.39	54	-14.61	-	-	174	325	V
2	* 2.485	42.12	Pk	32.3	-21.8	0	52.62	-	-	74	-21.38	174	325	V
4	* 2.485	29.74	RMS	32.3	-21.8	0.17	40.41	54	-13.59	-	-	174	325	V

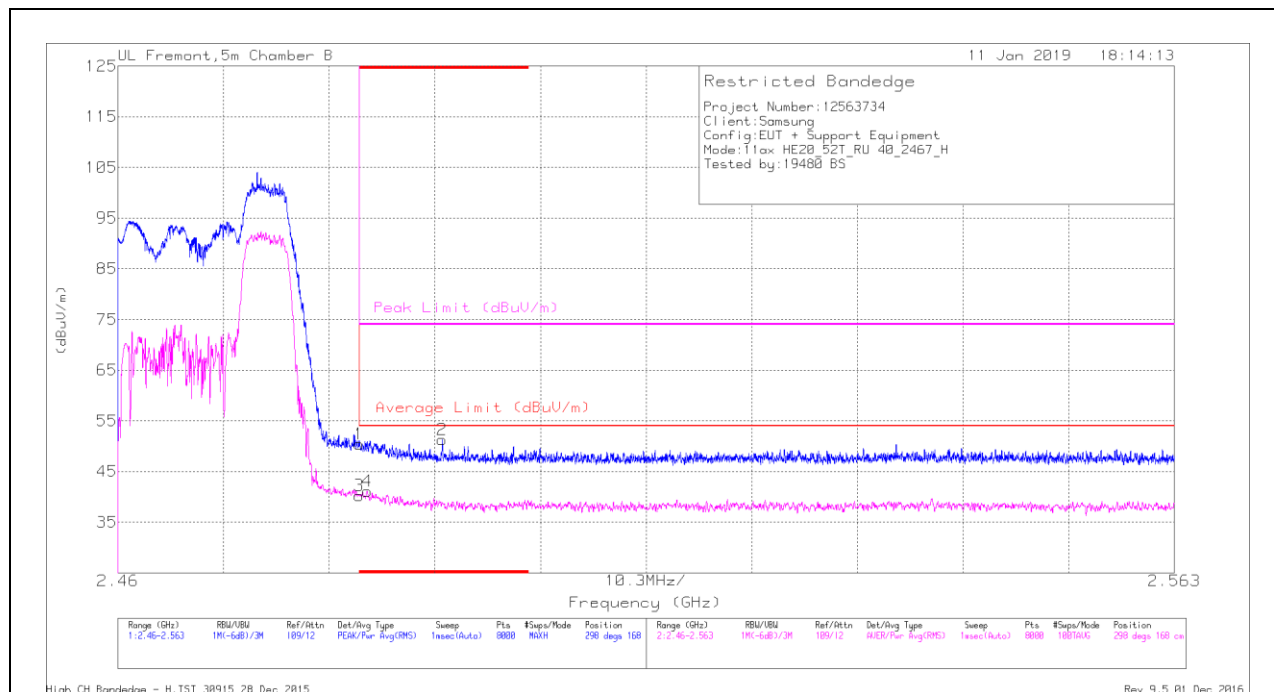
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



Trace Markers

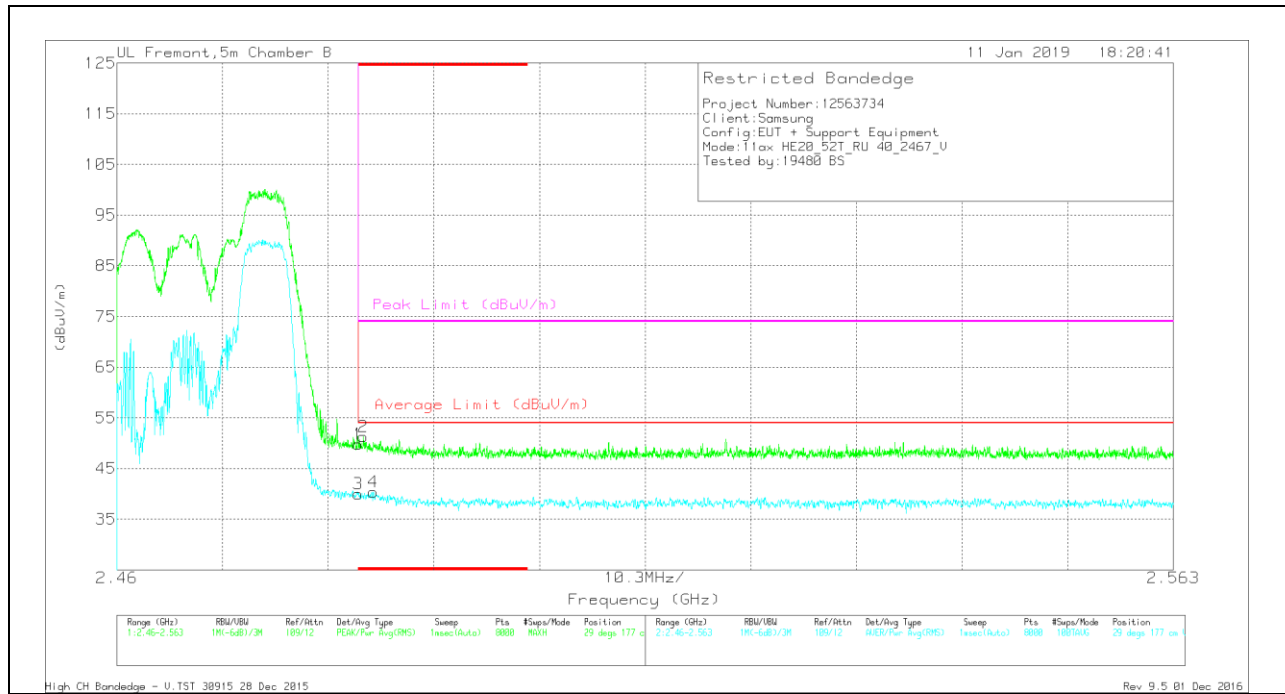
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T863 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.16	Pk	32.6	-20.3	0	50.46	-	-	74	-23.54	298	168	H
3	* 2.484	27.81	RMS	32.6	-20.3	.17	40.28	54	-13.72	-	-	298	168	H
4	* 2.484	28.79	RMS	32.6	-20.4	.17	41.16	54	-12.84	-	-	298	168	H
2	* 2.492	39.14	Pk	32.7	-20.6	0	51.24	-	-	74	-22.76	298	168	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF Y863 (dBm)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	37.51	Pk	32.6	-20.3	0	49.81	-	-	74	-24.19	29	177	V
2	* 2.484	39.08	Pk	32.6	-20.4	0	51.28	-	-	74	-22.72	29	177	V
3	* 2.484	27.46	RMS	32.6	-20.3	.17	39.93	54	-14.07	-	-	29	177	V
4	* 2.485	27.91	RMS	32.6	-20.3	.17	40.38	54	-13.62	-	-	29	177	V

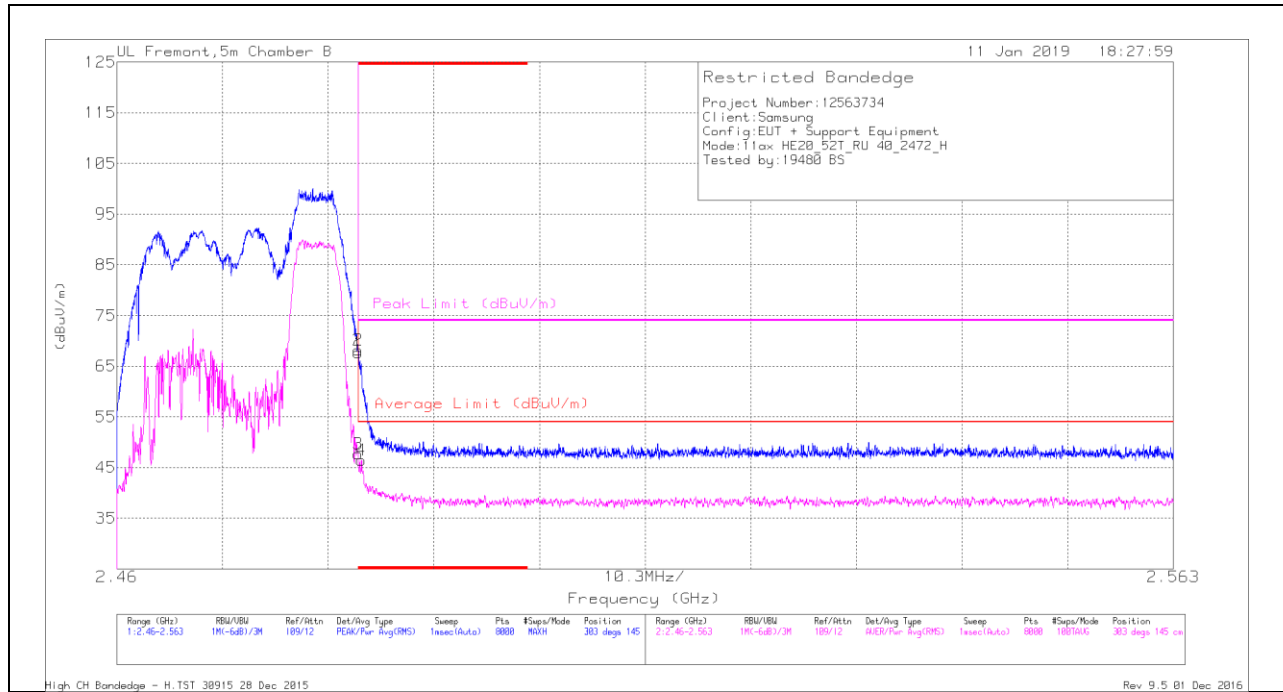
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



Trace Markers

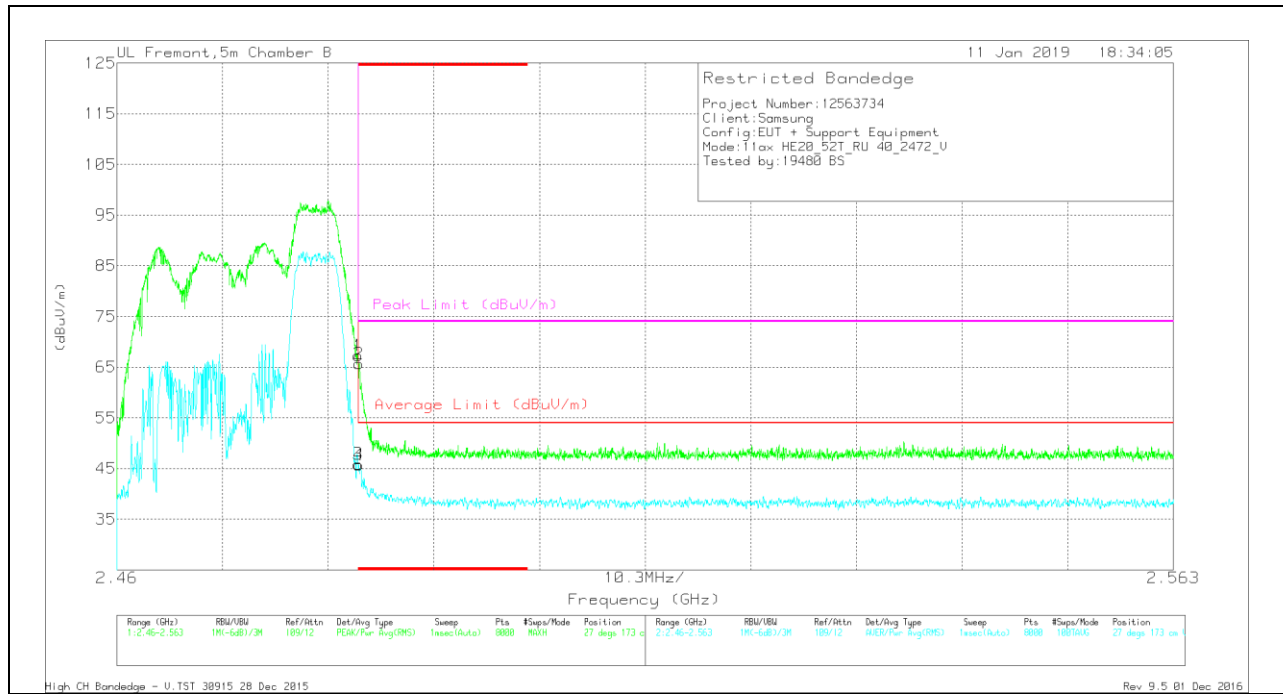
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dBm)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.38	Pk	32.6	-20.3	0	67.68	-	-	74	-6.32	303	145	H
2	* 2.484	55.82	Pk	32.6	-20.3	0	68.12	-	-	74	-5.88	303	145	H
3	* 2.484	35.21	RMS	32.6	-20.3	.17	47.68	54	-6.32	-	-	303	145	H
4	* 2.484	34.02	RMS	32.6	-20.4	.17	46.39	54	-7.61	-	-	303	145	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF Y863 (dBm)	Amp/Chl/Filt/Pad (dB)	DC Corr (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	55.02	Pk	32.6	-20.3	0	67.32	-	-	74	-6.68	27	173	V
2	* 2.484	53.42	Pk	32.6	-20.3	0	65.72	-	-	74	-8.28	27	173	V
3	* 2.484	33.41	RMS	32.6	-20.3	.17	45.88	54	-8.12	-	-	27	173	V
4	* 2.484	33.27	RMS	32.6	-20.3	.17	45.74	54	-8.26	-	-	27	173	V

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

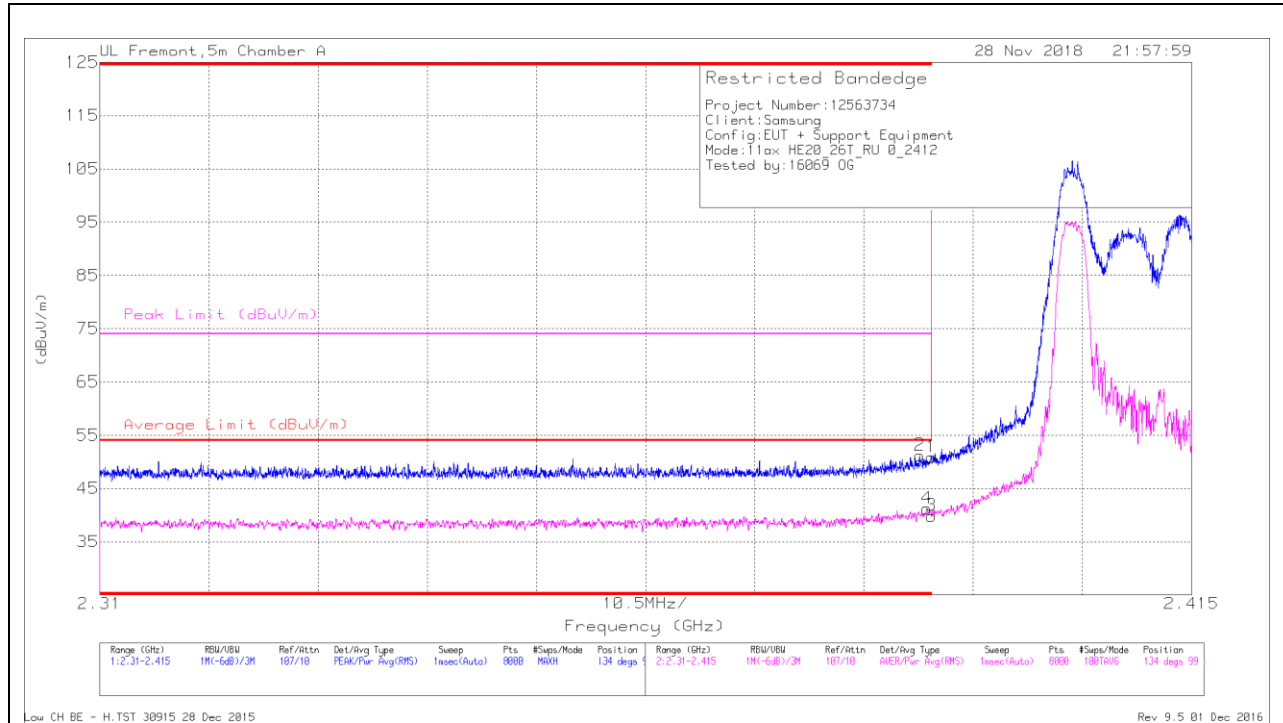
Pk - Peak detector

RMS - RMS detection

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU index 0

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



Trace Markers

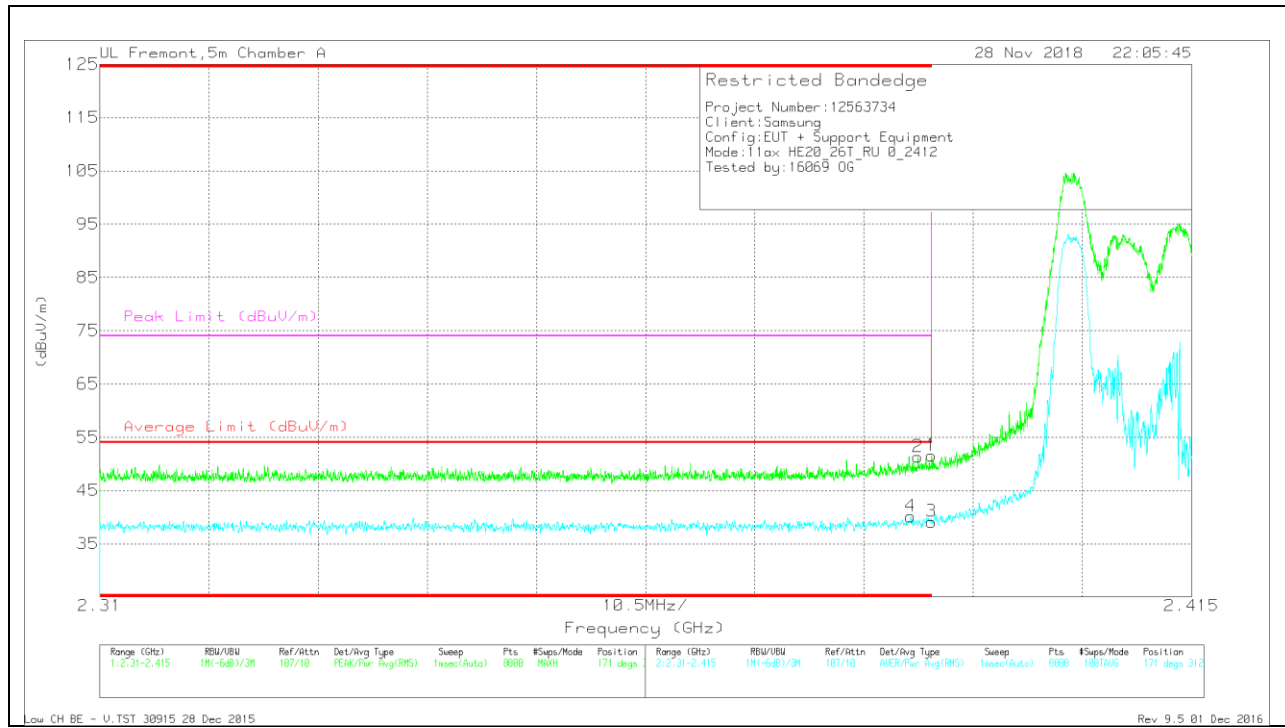
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBm)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	41.5	Pk	31.8	-22.1	0	51.2	-	-	74	-22.8	134	99	H
1	* 2.39	41.17	Pk	31.8	-22.1	0	50.87	-	-	74	-23.13	134	99	H
3	* 2.39	29.66	RMS	31.8	-22.1	0.09	39.45	54	-14.55	-	-	134	99	H
4	* 2.39	31.01	RMS	31.8	-22.1	0.09	40.8	54	-13.2	-	-	134	99	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (m)	Height (cm)	Polarity
4	* 2.388	29.94	RMS	31.8	-22.1	0.09	39.73	54	-14.27	-	-	171	312	V
2	* 2.389	41.63	Pk	31.8	-22.1	0	51.33	-	-	74	-22.67	171	312	V
1	* 2.39	41.88	Pk	31.8	-22.1	0	51.58	-	-	74	-22.42	171	312	V
3	* 2.39	28.95	RMS	31.8	-22.1	0.09	38.74	54	-15.26	-	-	171	312	V

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

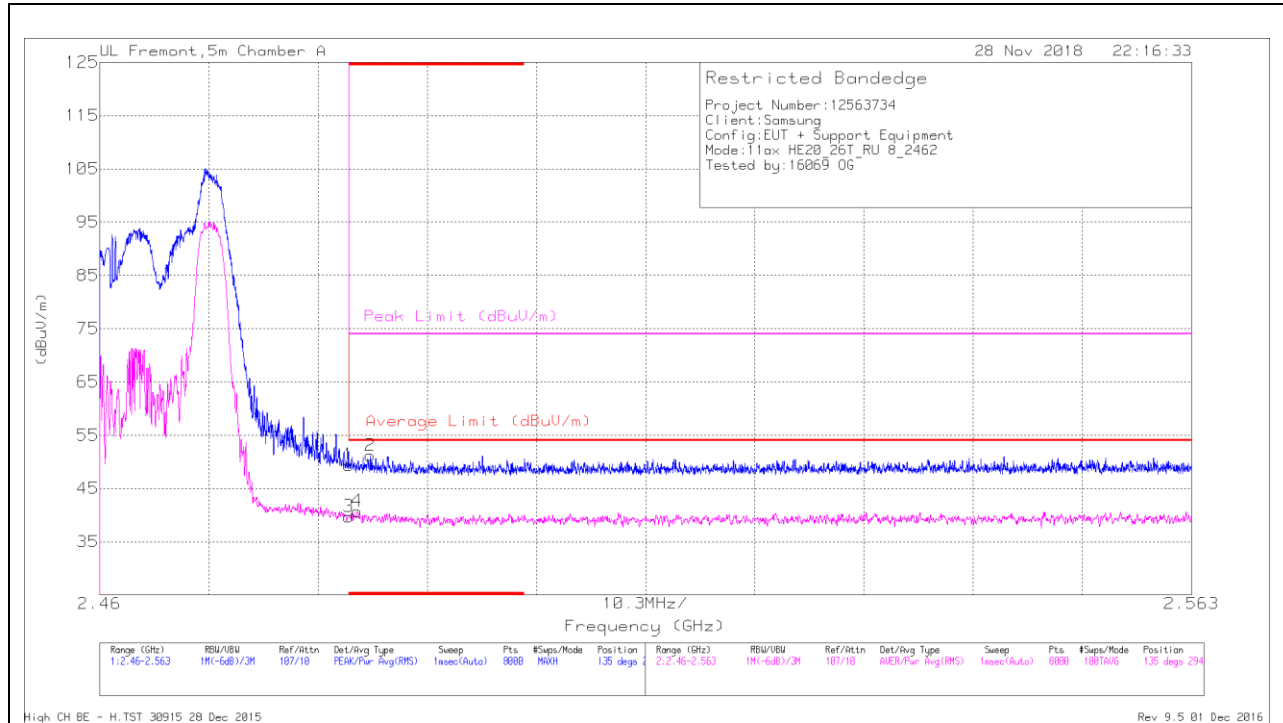
Pk - Peak detector

RMS - RMS detection

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU index 8

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



Trace Markers

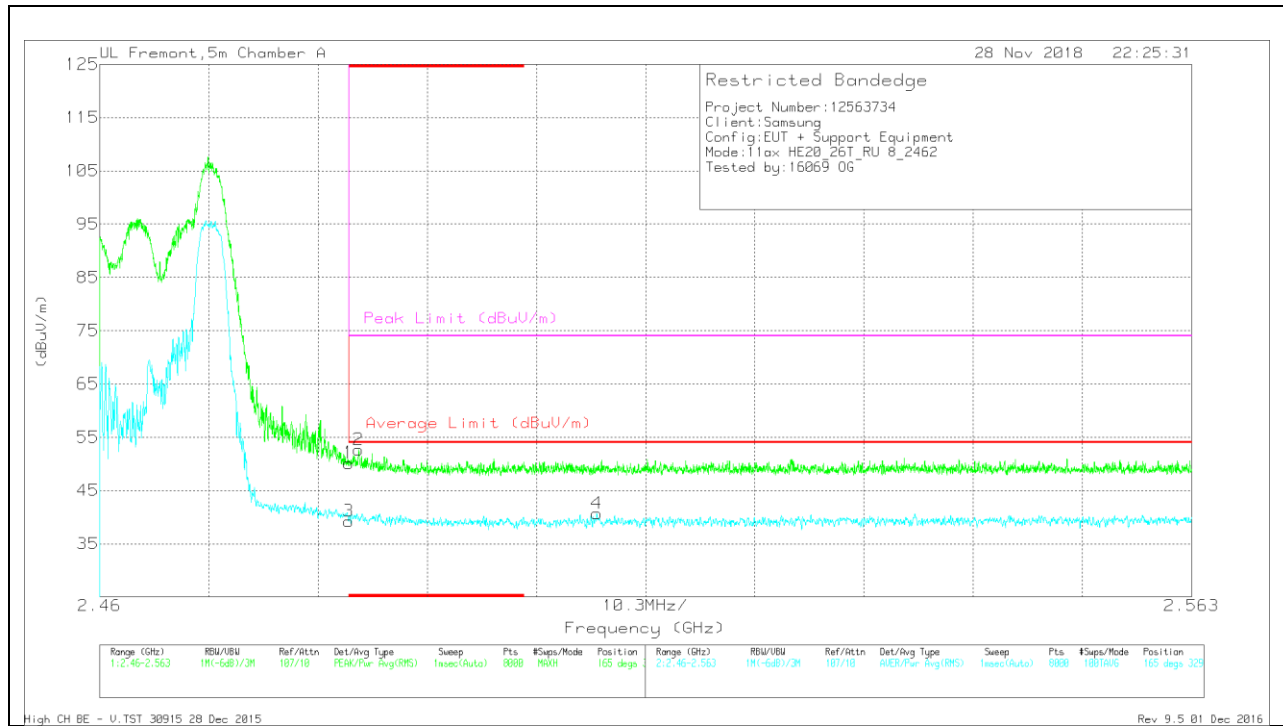
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T862 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.91	Pk	32.3	-21.8	0	49.41	-	-	74	-24.59	135	294	H
3	* 2.484	28.73	RMS	32.3	-21.8	0.09	39.32	54	-14.68	-	-	135	294	H
4	* 2.484	29.72	RMS	32.3	-21.8	0.09	40.31	54	-13.69	-	-	135	294	H
2	* 2.486	40.67	Pk	32.3	-21.8	0	51.17	-	-	74	-22.83	135	294	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Ampl/Cbl/Filtr/Pad (dB)	DC Corr (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	39.61	Pk	32.3	-21.8	0	50.11	-	-	74	-23.89	165	329	V
2	* 2.484	42.13	Pk	32.3	-21.8	0	52.63	-	-	74	-21.37	165	329	V
3	* 2.484	28.22	RMS	32.3	-21.8	0.09	38.81	54	-15.19	-	-	165	329	V
4	2.507	29.46	RMS	32.4	-21.7	0.09	40.25	54	-13.75	-	-	165	329	V

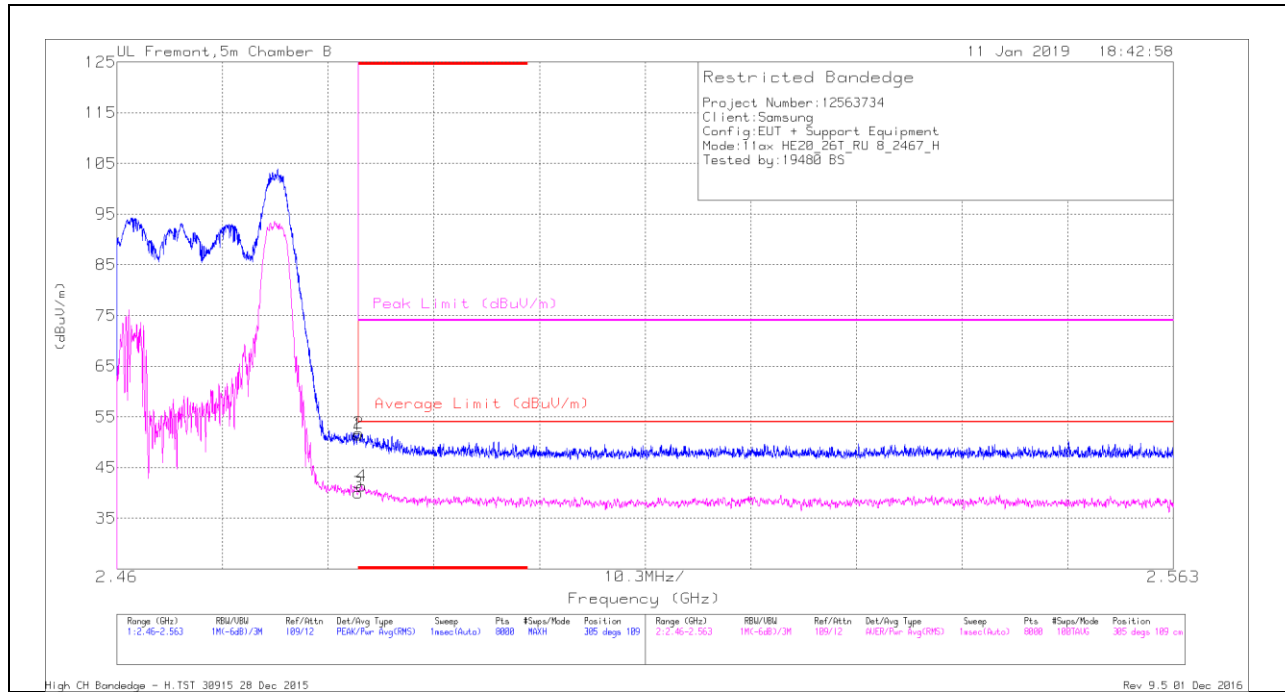
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



Trace Markers

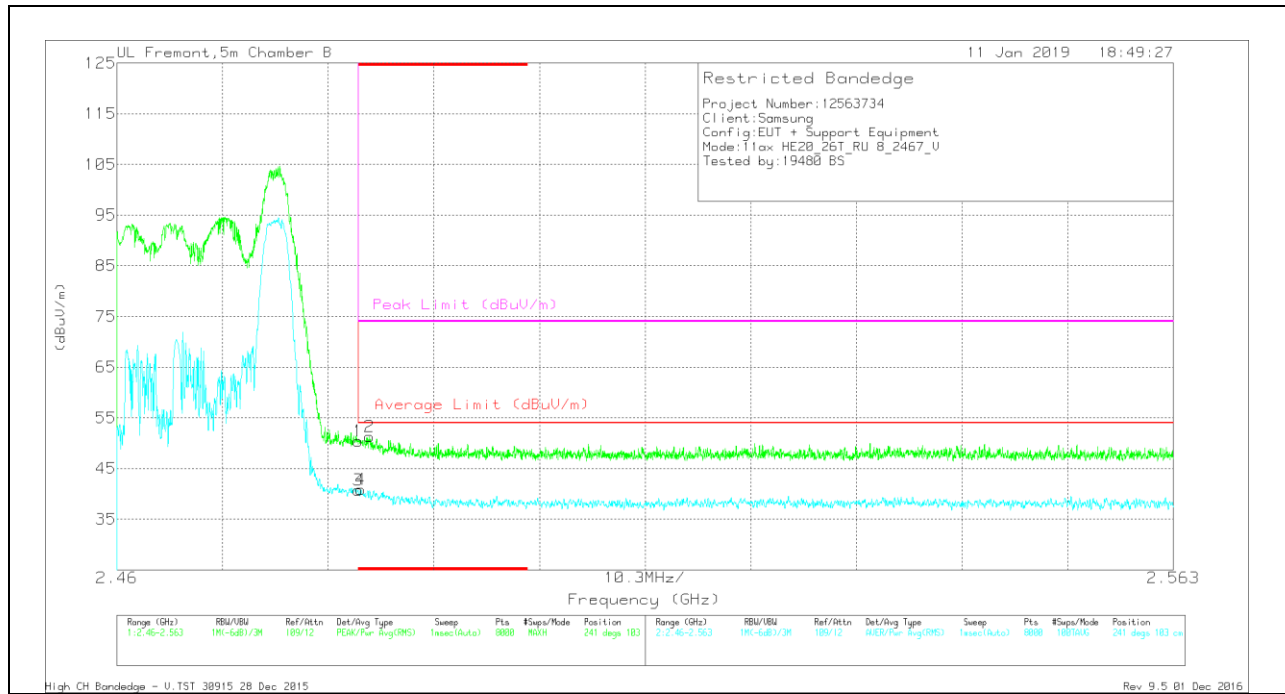
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T863 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.17	Pk	32.6	-20.3	0	51.47	-	-	74	-22.53	305	109	H
2	* 2.484	39.49	Pk	32.6	-20.3	0	51.79	-	-	74	-22.21	305	109	H
3	* 2.484	27.55	RMS	32.6	-20.3	.09	39.94	54	-14.06	-	-	305	109	H
4	* 2.484	29.03	RMS	32.6	-20.4	.09	41.32	54	-12.68	-	-	305	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF Y863 (dBm)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.06	Pk	32.6	-20.3	0	50.36	-	-	74	-23.64	241	103	V
3	* 2.484	28.29	RMS	32.6	-20.3	.09	40.68	54	-13.32	-	-	241	103	V
4	* 2.484	28.52	RMS	32.6	-20.4	.09	40.81	54	-13.19	-	-	241	103	V
2	* 2.485	39.04	Pk	32.6	-20.4	0	51.24	-	-	74	-22.76	241	103	V

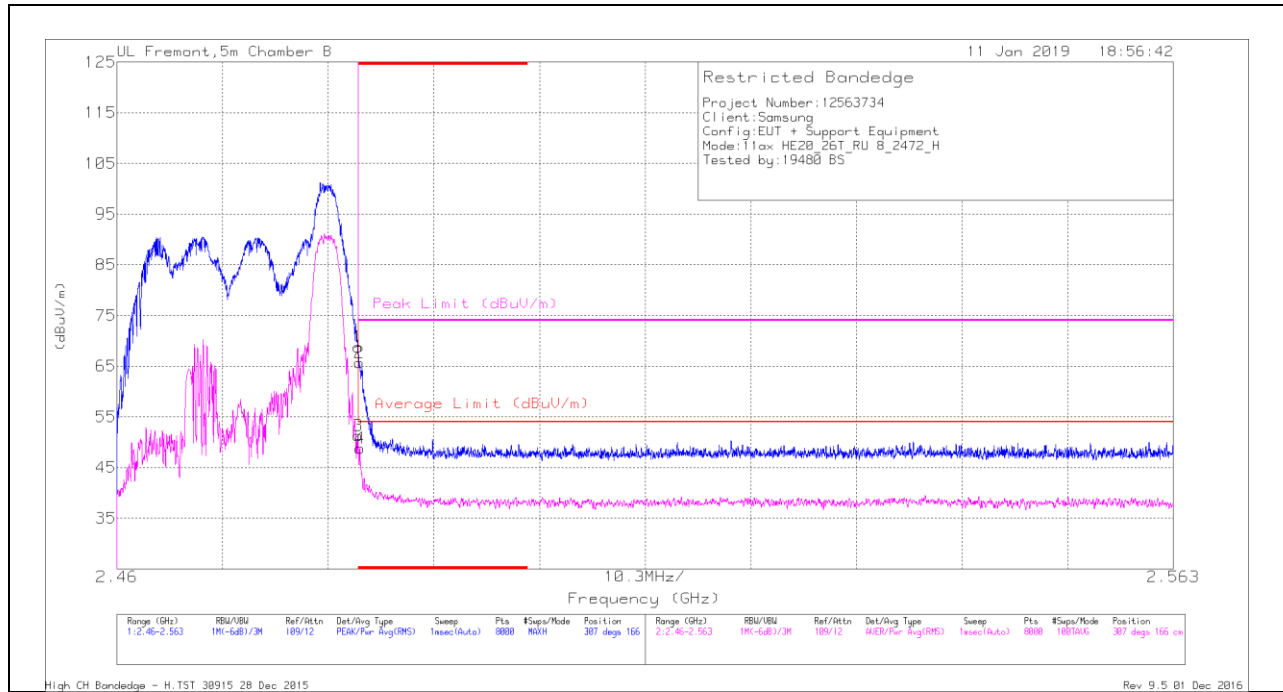
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



Trace Markers

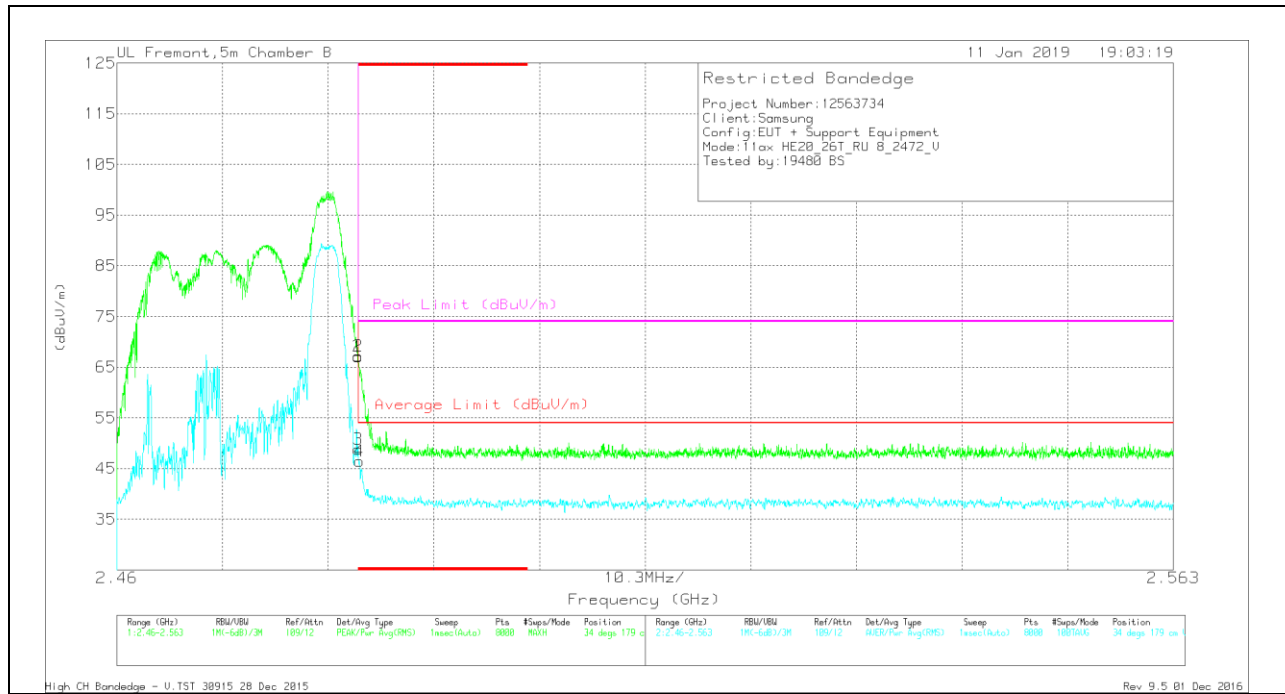
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T863 (dBm)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.53	Pk	32.6	-20.3	0	68.83	-	-	74	-5.17	307	166	H
2	* 2.484	53.4	Pk	32.6	-20.3	0	65.7	-	-	74	-8.3	307	166	H
3	* 2.484	38.92	RMS	32.6	-20.3	.09	51.31	54	-2.69	-	-	307	166	H
4	* 2.484	36.47	RMS	32.6	-20.4	.09	48.76	54	-5.24	-	-	307	166	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF Y863 (dBm)	Amp/Chl/Filt/Pad (dB)	DC Corr (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	54.71	Pk	32.6	-20.3	0	67.01	-	-	74	-6.99	34	179	V
2	* 2.484	54.91	Pk	32.6	-20.3	0	67.21	-	-	74	-6.79	34	179	V
3	* 2.484	36.44	RMS	32.6	-20.3	.09	48.83	54	-5.17	-	-	34	179	V
4	* 2.484	34	RMS	32.6	-20.3	.09	46.39	54	-7.61	-	-	34	179	V

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

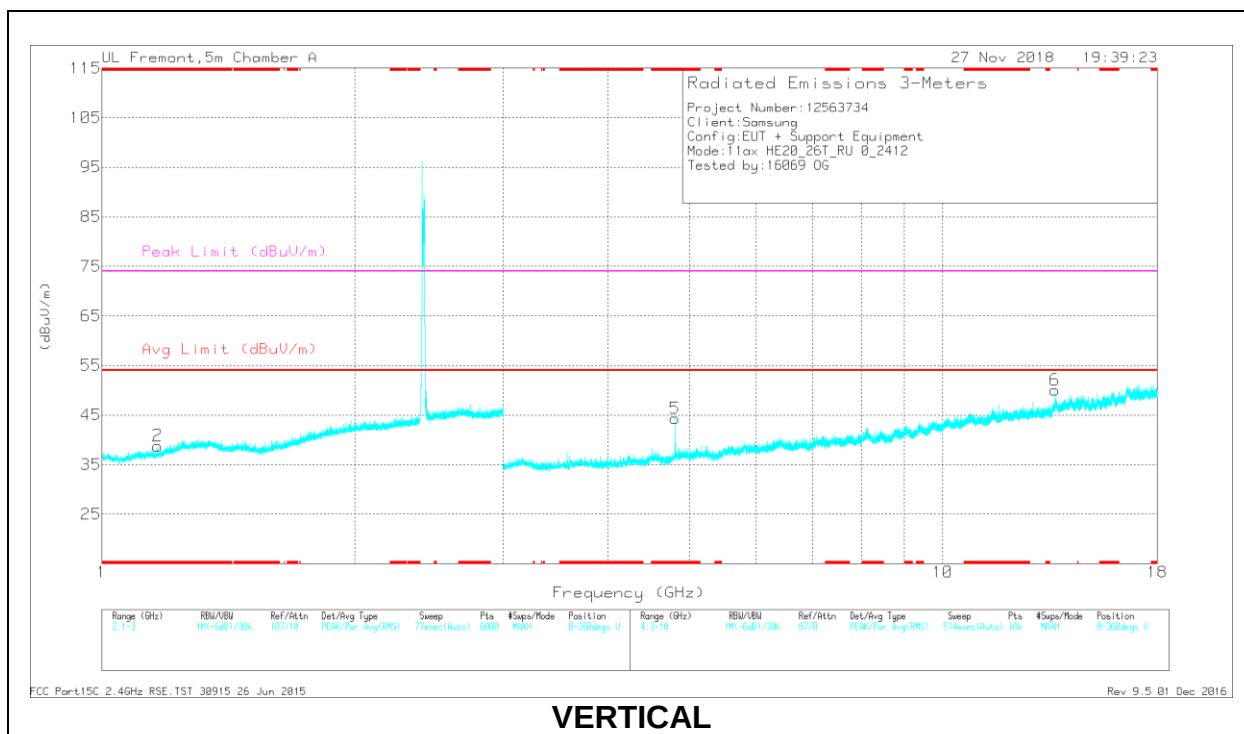
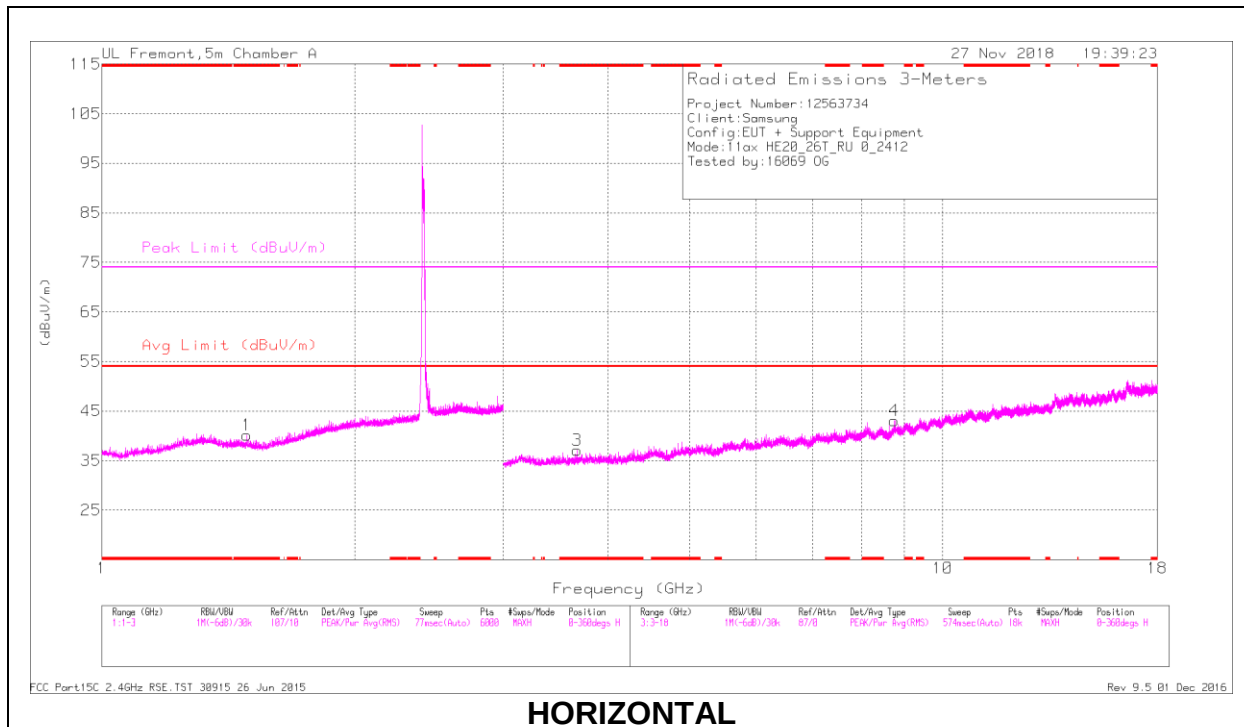
Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU index 0

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.485	40.79	PK2	28.5	-23.9	0	45.39	-	-	74	-28.61	245	170	H
	* 1.484	28.66	MAv1	28.5	-23.9	0.09	33.35	54	-20.65	-	-	245	170	H
2	* 1.164	40.81	PK2	27.8	-24.4	0	44.21	-	-	74	-29.79	22	311	V
	* 1.165	28.6	MAv1	27.8	-24.4	0.09	32.09	54	-21.91	-	-	22	311	V
3	* 3.672	37.11	PK2	33	-27.9	0	42.21	-	-	74	-31.79	6	123	H
	* 3.673	25.12	MAv1	33	-27.9	0.09	30.31	54	-23.69	-	-	6	123	H
5	* 4.805	35.79	PK2	34.2	-26.4	0	43.59	-	-	74	-30.41	121	252	V
	* 4.807	23.75	MAv1	34.2	-26.3	0.09	31.74	54	-22.26	-	-	121	252	V
4	8.76	33.05	PK2	36	-20.5	0	48.55	-	-	-	-	118	160	H
6	13.601	32.18	PK2	39.2	-17.1	0	54.28	-	-	-	-	249	191	V

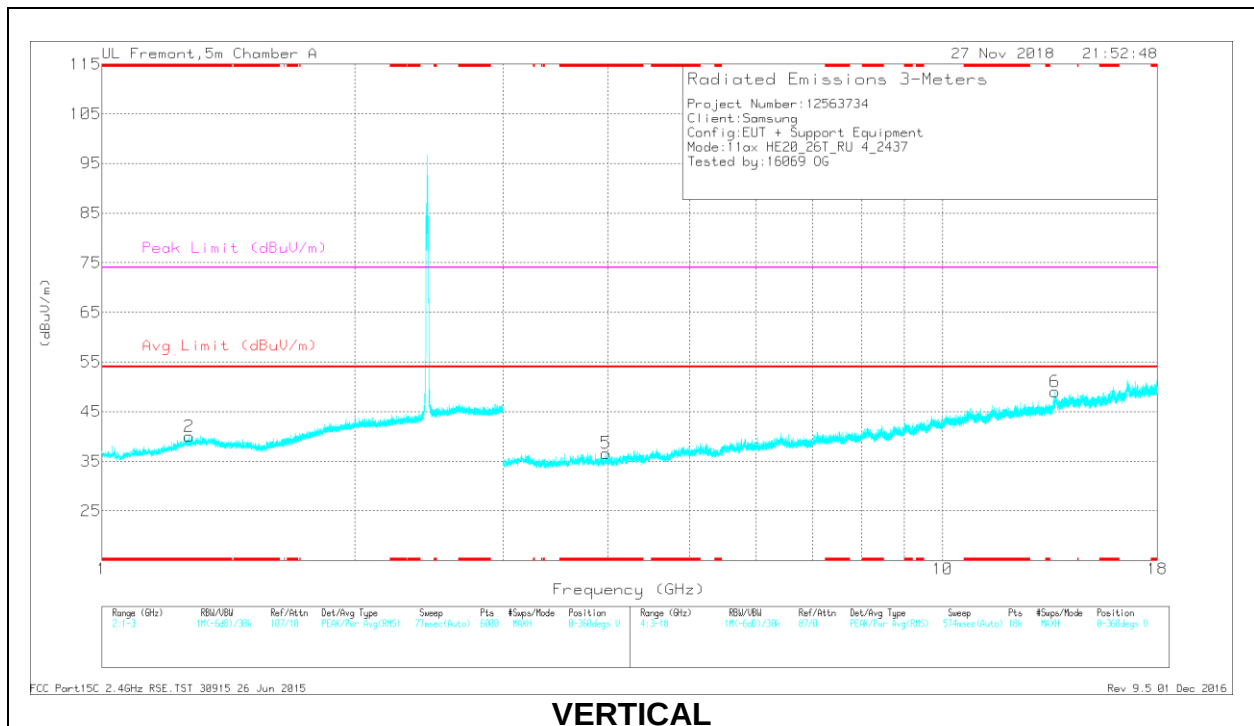
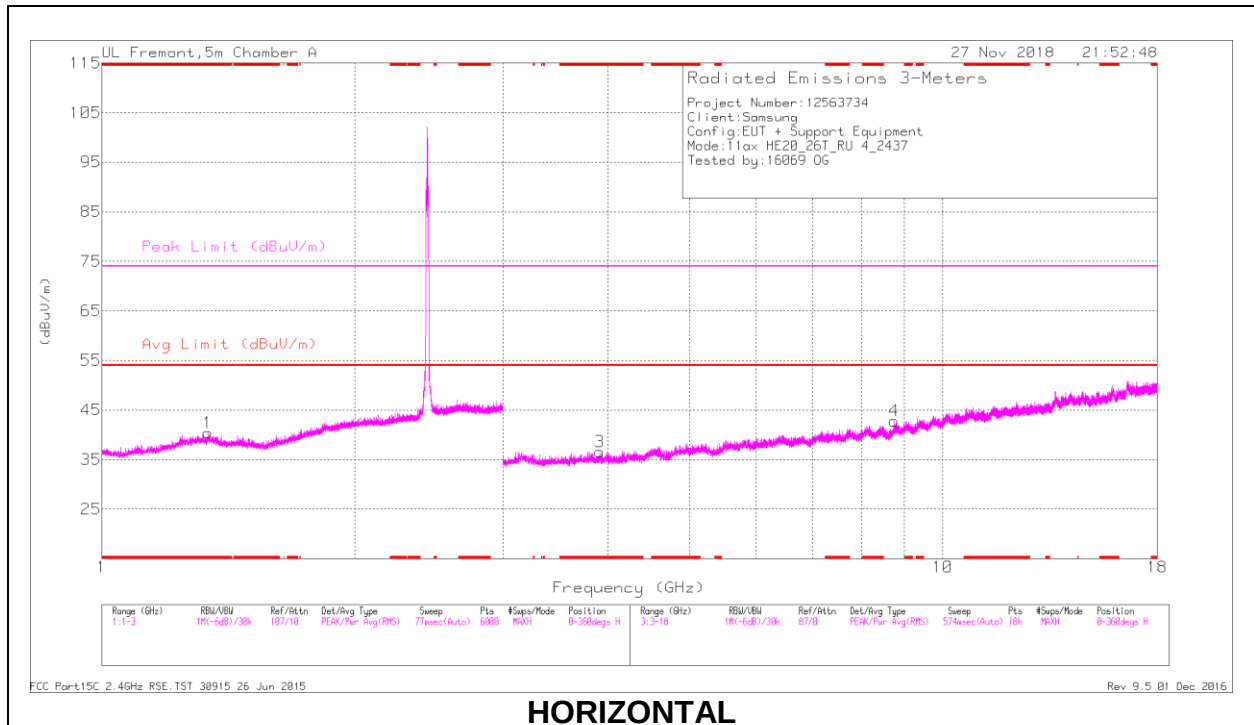
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU index 4

MID CHANNEL, CH 6 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.335	40.65	PK2	29.5	-24.3	0	45.85	-	-	74	-28.15	168	113	H
	* 1.337	28.86	MAv1	29.5	-24.3	0.09	34.15	54	-19.85	-	-	168	113	H
2	* 1.269	41.19	PK2	29.2	-24.3	0	46.09	-	-	74	-27.91	212	117	V
	* 1.269	28.73	MAv1	29.2	-24.3	0.09	33.72	54	-20.28	-	-	212	117	V
3	* 3.906	37.6	PK2	33.1	-28.1	0	42.6	-	-	74	-31.4	304	178	H
	* 3.907	25.19	MAv1	33.1	-28	0.09	30.38	54	-23.62	-	-	304	178	H
5	* 3.974	36.91	PK2	33.3	-27.8	0	42.41	-	-	74	-31.59	340	135	V
	* 3.976	25.22	MAv1	33.3	-27.9	0.09	30.71	54	-23.29	-	-	340	135	V
4	8.749	32.86	PK2	36	-20.7	0	48.16	-	-	-	-	56	126	H
6	13.606	33.02	PK2	39.2	-17.1	0	55.12	-	-	-	-	274	169	V

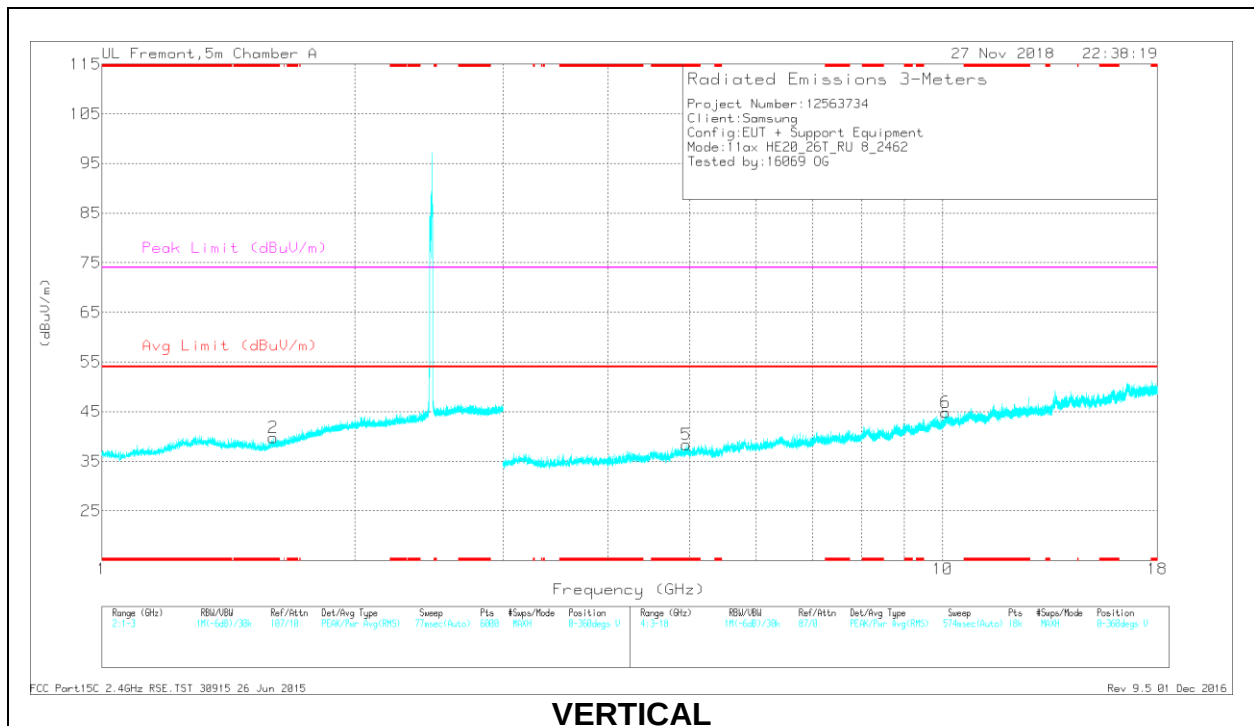
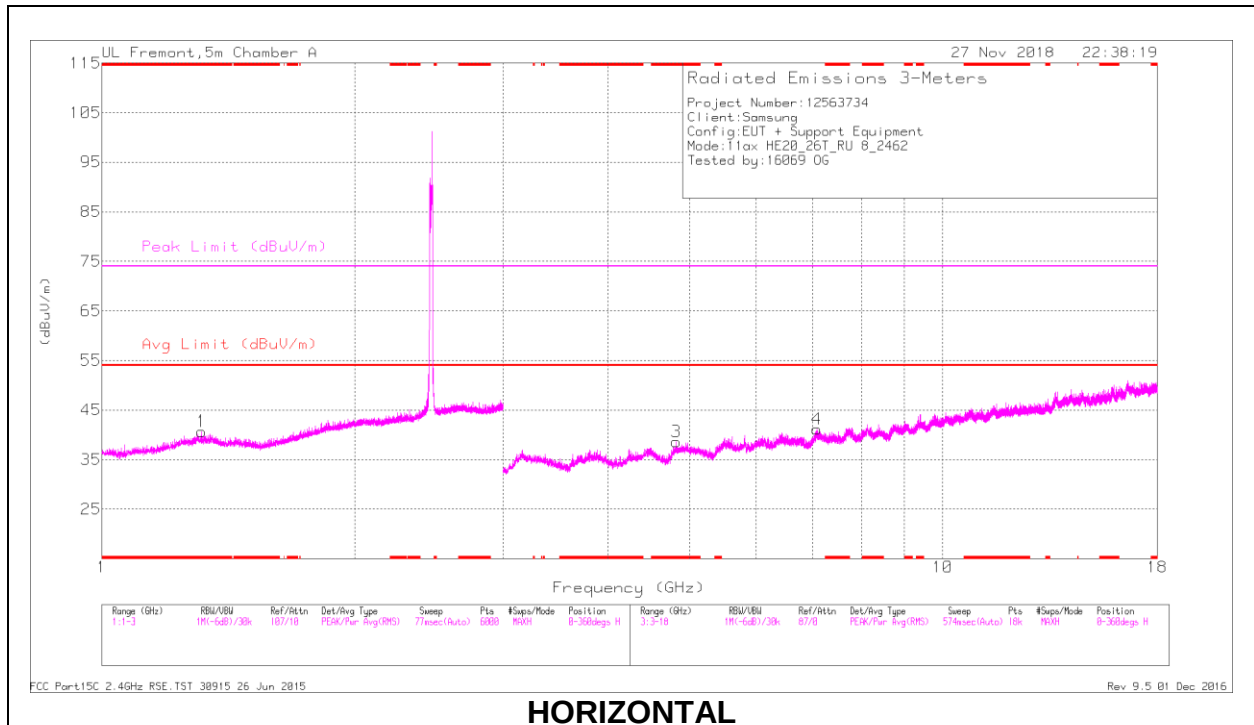
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU index 8

HIGH CHANNEL, CH 11 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Ampl/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.316	41.42	PK2	29.5	-24.3	0	46.62	-	-	74	-27.38	308	109	H
	* 1.313	28.77	MAv1	29.5	-24.3	0.09	34.06	54	-19.94	-	-	308	109	H
2	* 1.598	40.68	PK2	28.2	-23.5	0	45.38	-	-	74	-28.62	224	153	V
	* 1.598	28.59	MAv1	28.2	-23.5	0.09	33.38	54	-20.62	-	-	224	153	V
3	* 4.824	35.64	PK2	34.2	-25.9	0	43.94	-	-	74	-30.06	194	297	H
	* 4.823	24.06	MAv1	34.2	-25.9	0.09	32.45	54	-21.55	-	-	194	297	H
5	* 4.959	36.26	PK2	34.2	-26.7	0	43.76	-	-	74	-30.24	54	281	V
	* 4.958	24.81	MAv1	34.2	-26.7	0.09	32.4	54	-21.6	-	-	54	281	V
4	7.091	33.31	PK2	35.7	-22.7	0	46.31	-	-	-	-	128	169	H
6	10.087	31.86	PK2	37.4	-19.4	0	49.86	-	-	-	-	135	125	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2. SPURIOUS EMISSIONS FOR SIMULTANEOUS TRANSMISSION

SIMULTANEOUS TX CONDITIONS

Mode	# of TX	5GHz		2.4GHz	
		Ant1	Ant2	Ant1	Ant2
2.4GHz+5GHz RSDB Only	2	O	X	X	O
		X	O	O	X
		O	X	O	X
		X	O	X	O
2.4GHz+5GHz RSDB&MIMO	3	O	O	O	X
		O	O	X	O
		O	X	O	O
		X	O	O	O
	4	O	O	O	O

WORST TEST-CASE CONDITIONS

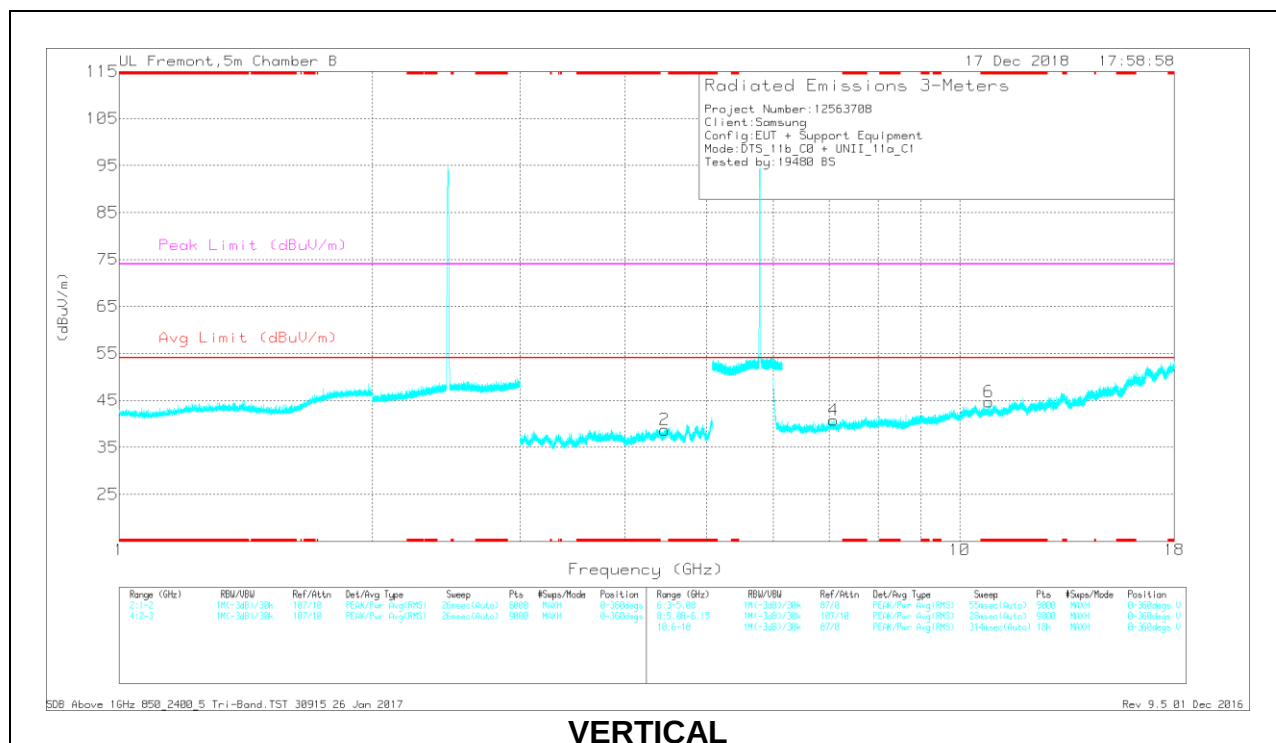
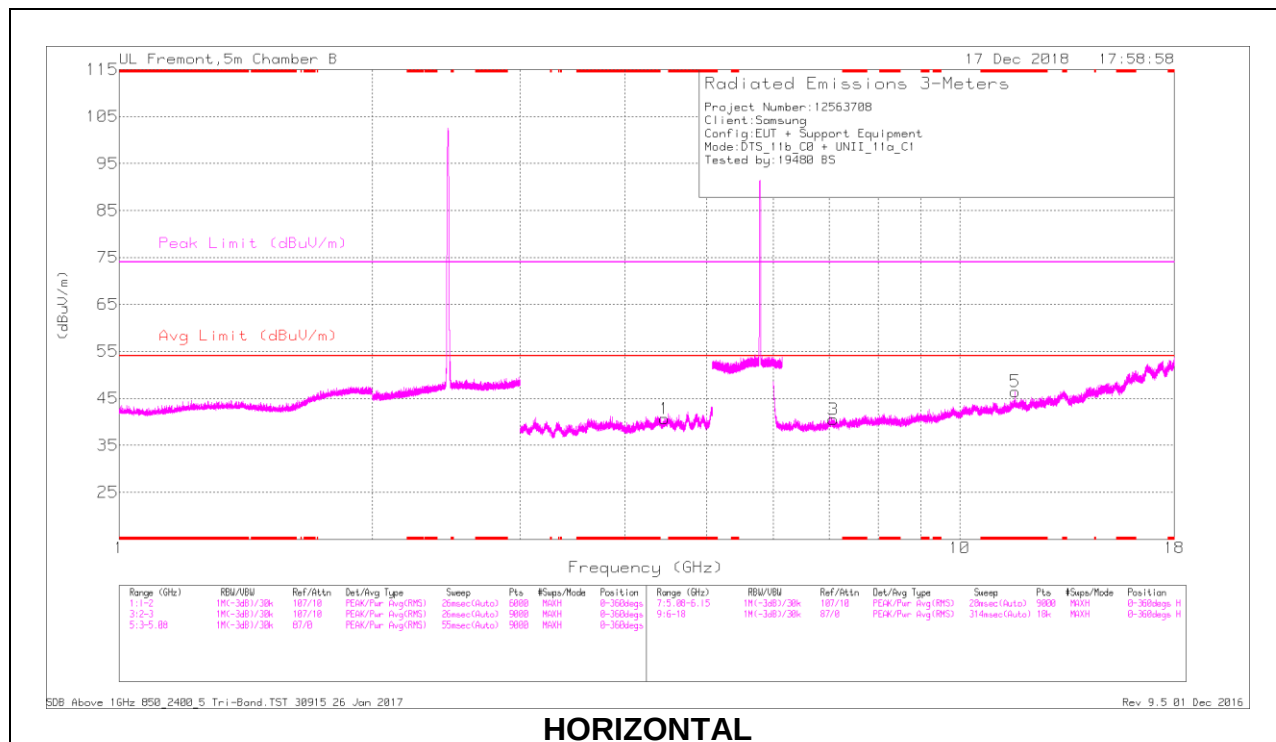
Target power of each UNII band (UNII-1, UNII-2A, UNII-2C, UNII-3) is different for maximum power mode (802.11a mode and 802.11n HT20 mode). So the highest target power (channel and mode) were selected for worst test case condition on each antenna. New emissions were not detected and harmonic's emission level was lower than stand-alone condition and all test data complied FCC technical limit.

Also 4 Tx condition can cover other RSDB and MIMO condition. So test lab conducted the test on the condition of 1 Tx for each antenna and 4Tx MIMO antenna condition like below.

Testcase #	Band (GHz)	Antenna	MODE	Channel	Frequency (MHz)
1	2.4	Chain 0	11b	11	2462
	5	Chain 1	11a	157	5785
2	5	Chain 0	11a	64	5320
	2.4	Chain 1	11b	6	2437
3	2.4	Chain 0	11ax_HE20_242T_RU61	6	2437
	5	Chain 1	11ax_HE80_242T_RU62	42	5210
4	5	Chain 0	11ax_HE20_242T_RU61	100	5500
	2.4	Chain 1	11ax_HE20_242T_RU61	6	2437
5	2.4	MIMO	11ax_HE20_242T_RU61	6	2437
	5	MIMO	11ax_HE80_242T_RU62	42	5210

9.2.1. TEST CASE 1

Chain 0 802.11b Channel 11 + Chain 1 802.11a Channel 157



RADIATED EMISSIONS

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.457	32.25	Pk	33.8	-28.4	3	40.65	-	-	-	-	0-360	103	H
2	4.457	32.33	Pk	33.8	-28.4	1	38.73	-	-	-	-	0-360	102	V

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

Pk - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 11.639	29.35	Pk	38.8	-21.7	46.45	-	-	74	-27.55	0-360	199	H
6	* 10.828	29.57	Pk	38	-22.9	44.67	-	-	74	-29.33	0-360	200	V
3	7.074	31.81	Pk	36	-27.3	40.51	-	-	-	-	0-360	199	H
4	7.077	32.07	Pk	36	-27.3	40.77	-	-	-	-	0-360	102	V

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

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.639	34.06	PK-U	38.8	-21.7	51.16	-	-	74	-22.84	295	140	H
* 11.637	22.64	ADR	38.8	-21.7	39.74	54	-14.26	-	-	295	140	H
* 10.826	35.66	PK-U	38	-22.9	50.76	-	-	74	-23.24	288	289	V
* 10.827	23.44	ADR	38	-22.9	38.54	54	-15.46	-	-	288	289	V

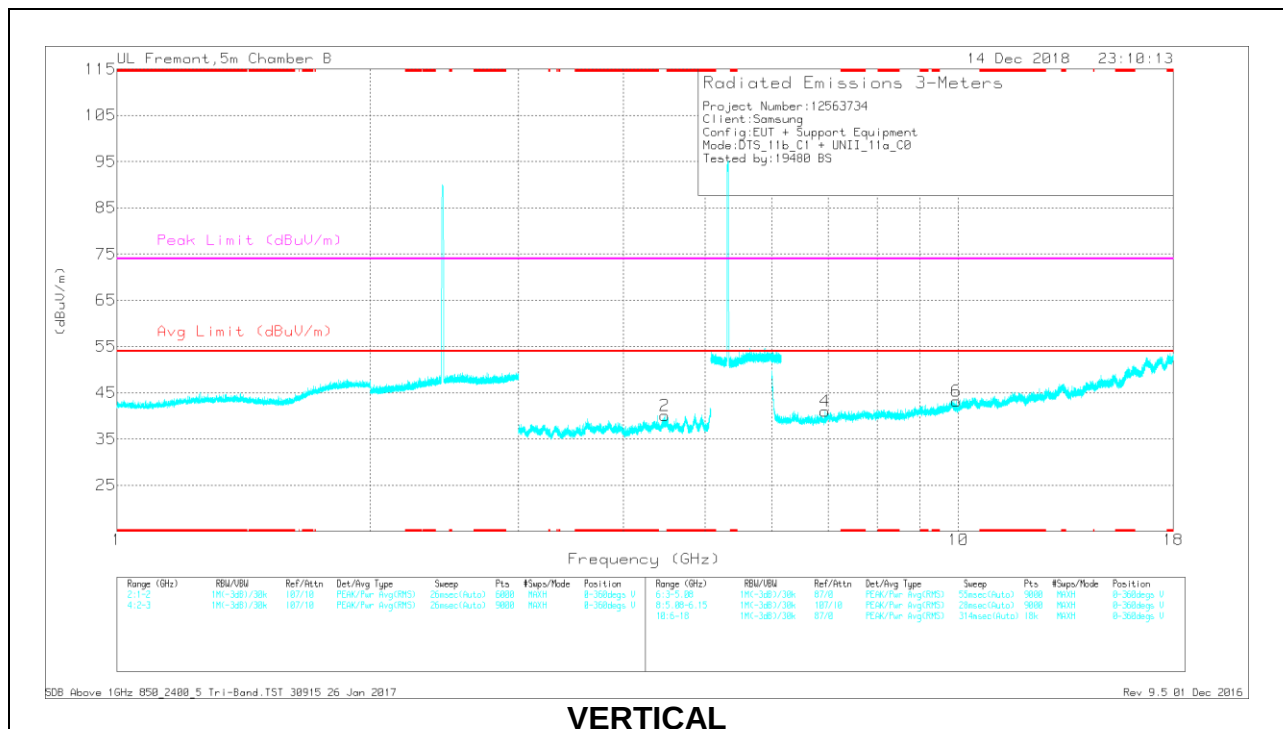
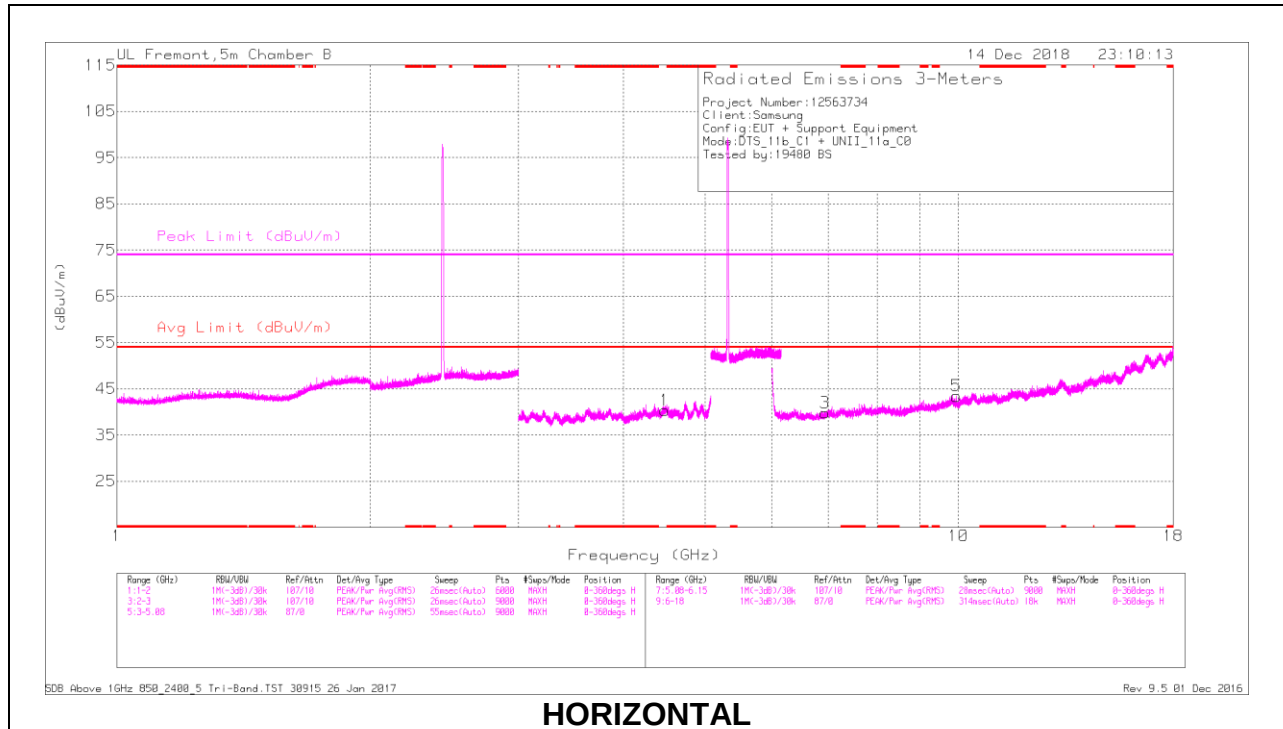
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.2.2. TEST CASE 2

Chain 0 802.11a Channel 64 + Chain 1 802.11b Channel 6



RADIATED EMISSIONS

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.474	32.52	Pk	33.8	-29	3	40.32	-	-	-	-	0-360	199	H
2	4.474	34.21	Pk	33.8	-29	1	40.01	-	-	-	-	0-360	102	V

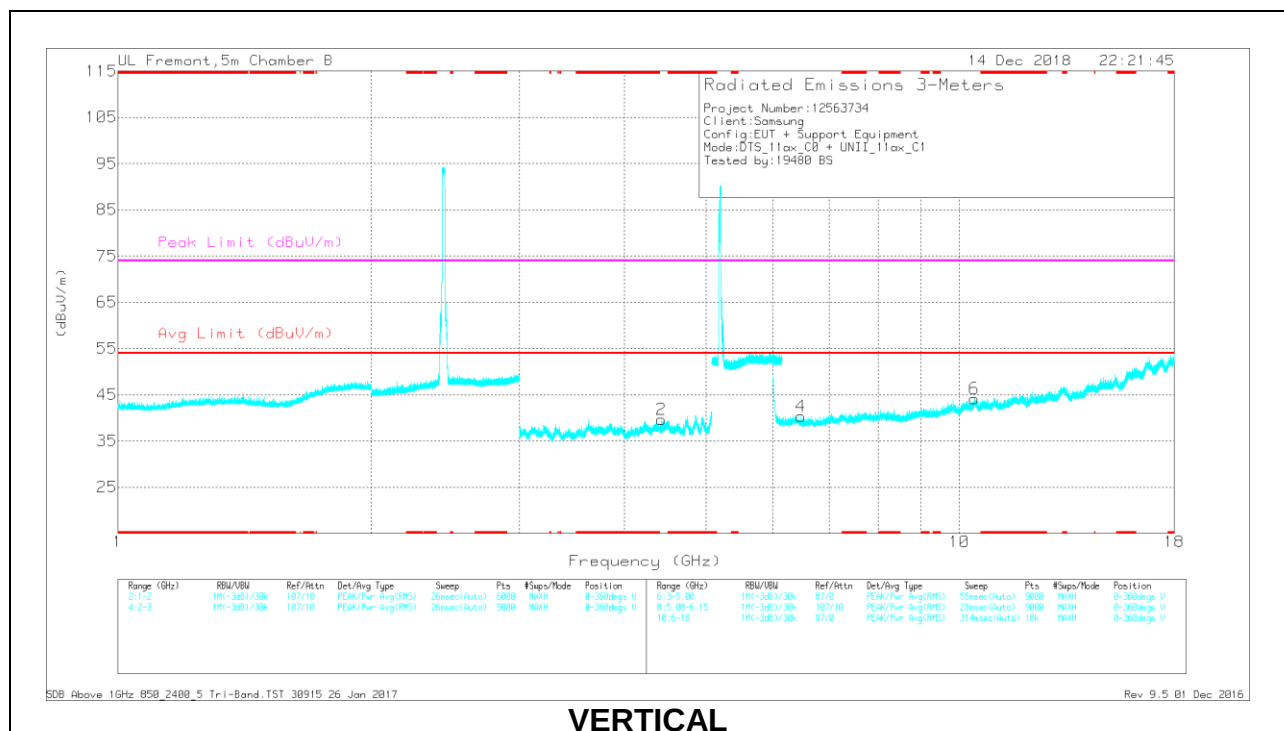
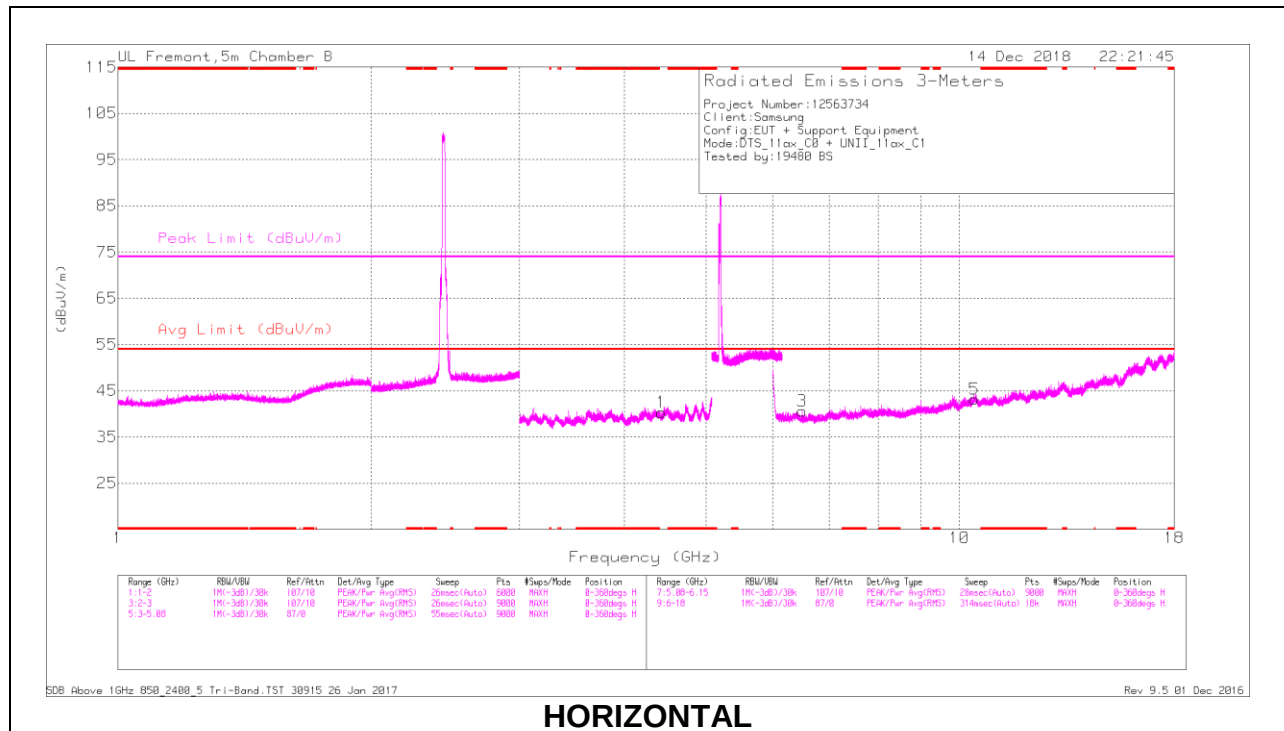
Pk - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	6.936	32.86	Pk	35.8	-27.7	40.96	-	-	-	-	0-360	102	V
3	6.937	31.66	Pk	35.8	-27.7	39.76	-	-	-	-	0-360	199	H
5	9.942	29.7	Pk	37.4	-23.7	43.4	-	-	-	-	0-360	103	H
6	9.949	29.58	Pk	37.4	-23.8	43.18	-	-	-	-	0-360	200	V

Pk - Peak detector

9.2.3. TEST CASE 3

Chain 0 802.11ax HE20 242T – RU61 Channel 6 + Chain 1 802.11ax HE80 242T – RU62 Channel 42



RADIATED EMISSIONS

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fltr/Pad (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	4.421	33.75	Pk	33.8	-28.9	1	39.65	-	-	-	-	0-360	200	V
1	4.424	32.47	Pk	33.8	-28.9	3	40.37	-	-	-	-	0-360	199	H

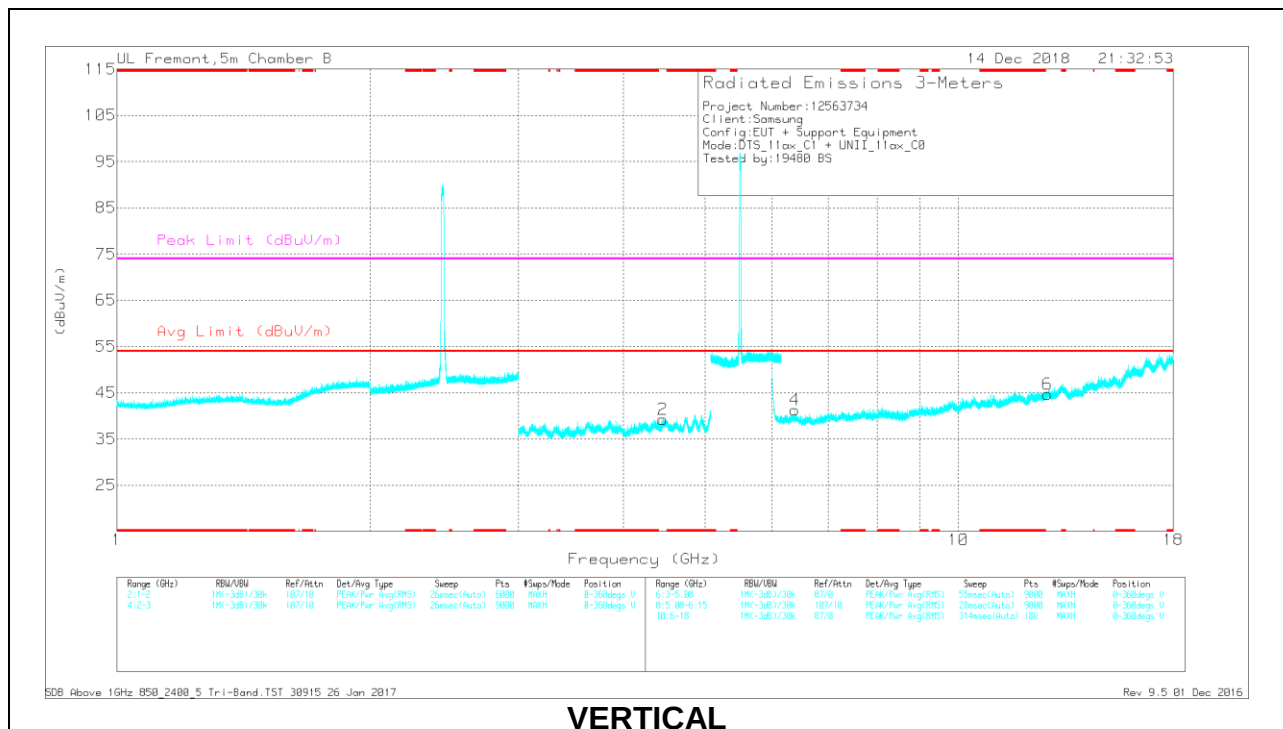
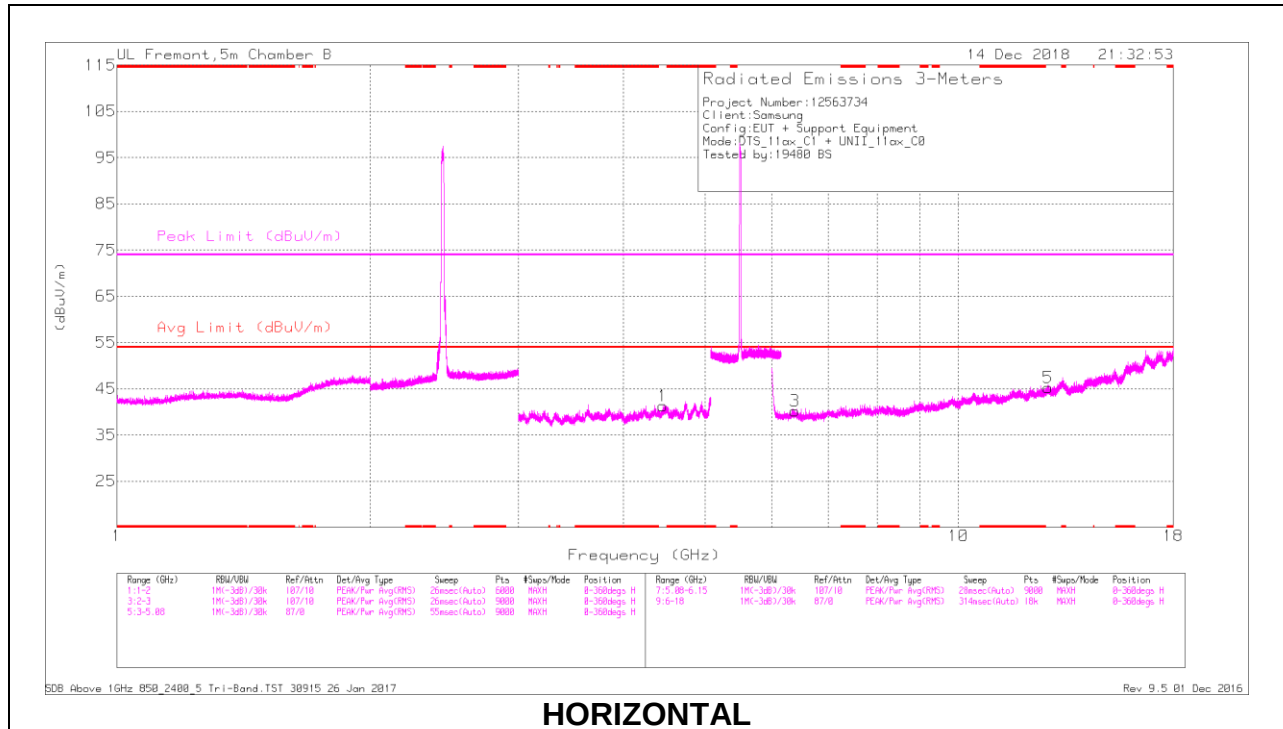
Pk - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/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
4	6.483	33.07	Pk	35.7	-28.4	40.37	-	-	-	-	0-360	102	V
3	6.501	33.45	Pk	35.6	-28.5	40.55	-	-	-	-	0-360	102	H
6	10.42	28.06	Pk	37.9	-21.8	44.16	-	-	-	-	0-360	199	V
5	10.422	27.24	Pk	37.9	-21.9	43.24	-	-	-	-	0-360	102	H

Pk - Peak detector

9.2.4. TEST CASE 4

Chain 0 802.11ax HE20 242T – RU61 Channel 100 + Chain 1 802.11ax HE20 242T – RU61 Channel 6



RADIATED EMISSIONS

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	4.456	32.83	Pk	33.8	-28.4	1	39.23	-	-	-	-	0-360	102	V
1	4.458	32.91	Pk	33.8	-28.4	3	41.31	-	-	-	-	0-360	199	H

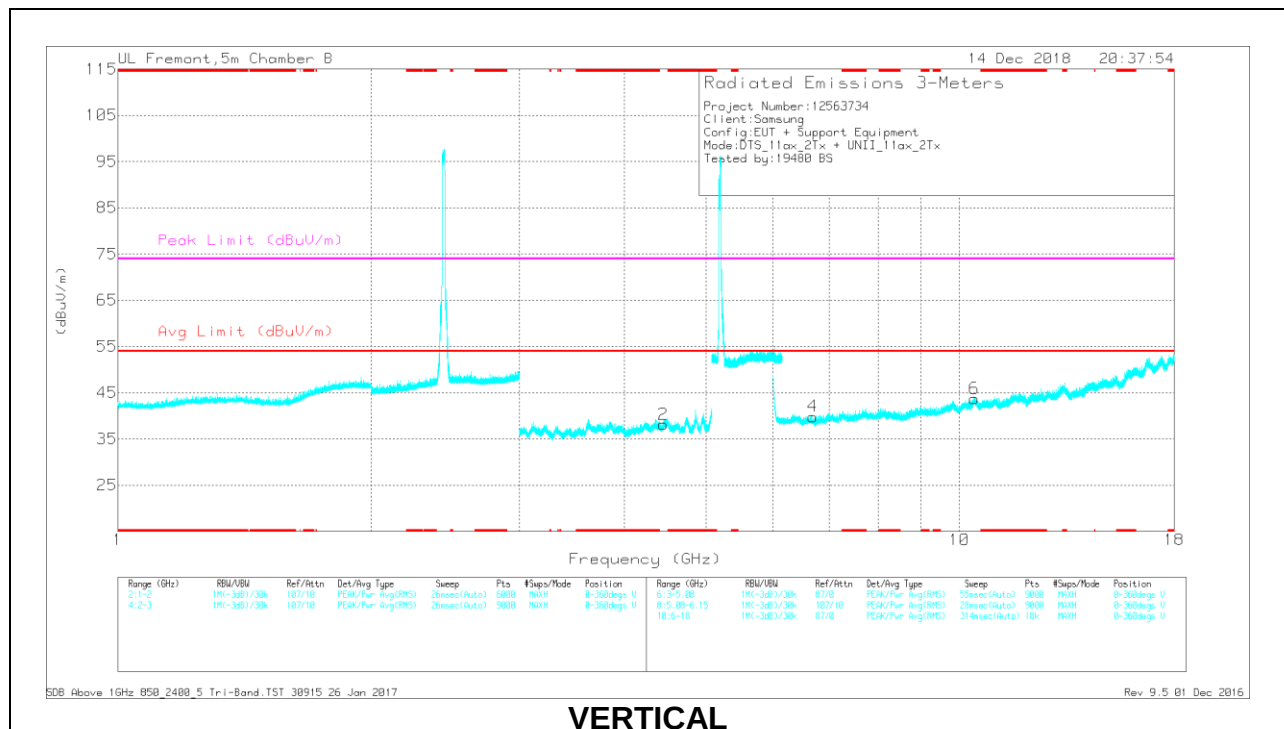
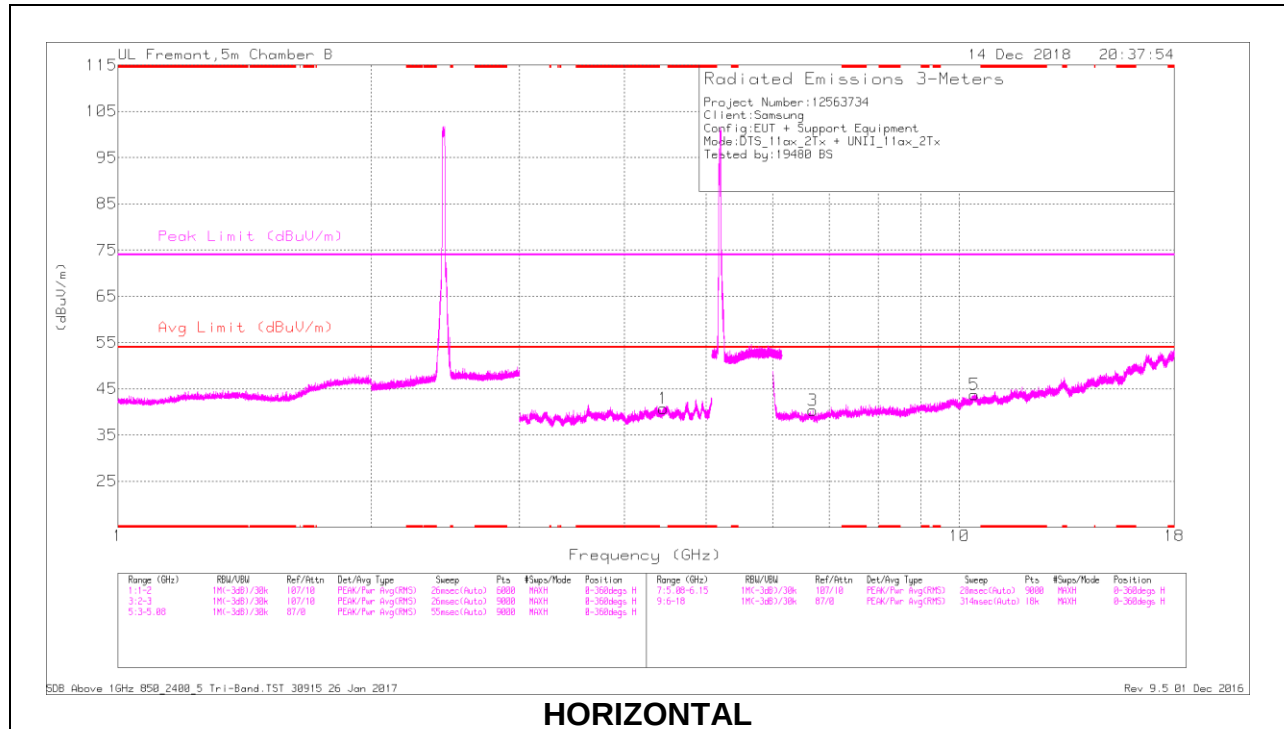
Pk - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	6.39	31.74	Pk	35.8	-27.3	40.24	-	-	-	-	0-360	199	H
4	6.39	32.79	Pk	35.8	-27.3	41.29	-	-	-	-	0-360	102	V
6	12.768	26.54	Pk	39.3	-21.2	44.64	-	-	-	-	0-360	199	V
5	12.778	27.06	Pk	39.3	-21.1	45.26	-	-	-	-	0-360	103	H

Pk - Peak detector

9.2.5. TEST CASE 5

2TX 802.11ax HE20 242T – RU61 Channel 6 + 2TX 802.11ax HE80 242T – RU62 Channel 42



RADIATED EMISSIONS

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	4.446	32.12	Pk	33.8	-28.8	1	38.12	-	-	-	-	0-360	199	V
1	4.447	32.76	Pk	33.8	-28.8	3	40.76	-	-	-	-	0-360	102	H

Pk - Peak detector

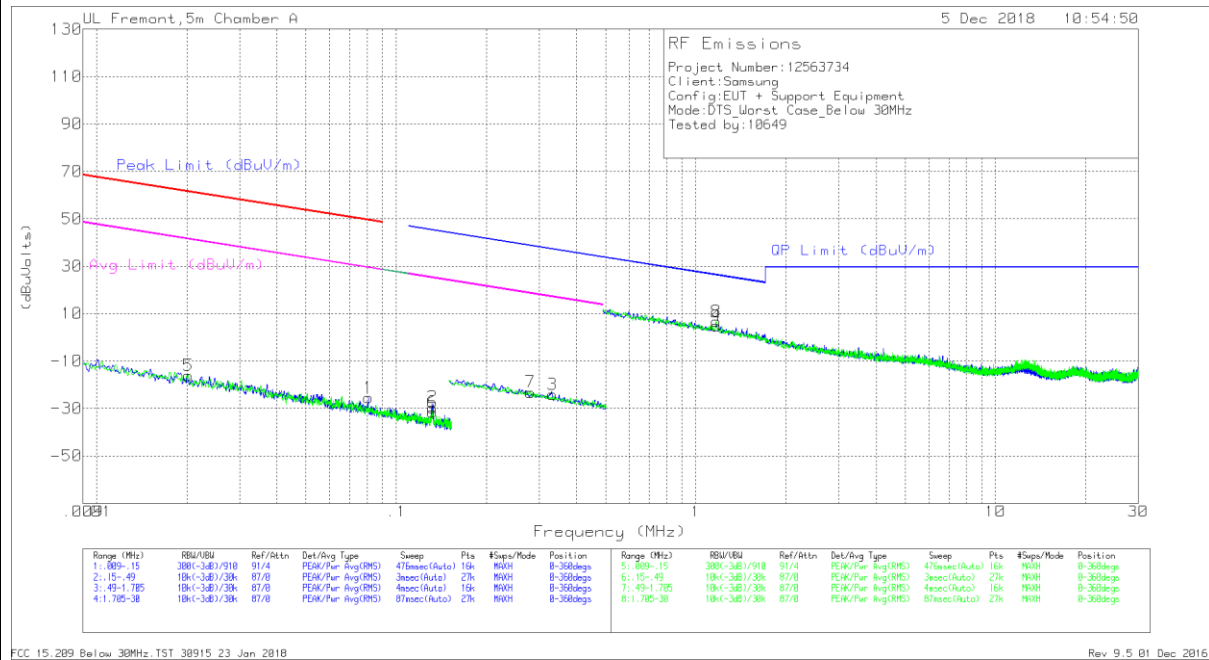
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	6.692	31.86	Pk	35.8	-27.8	39.86	-	-	-	-	0-360	102	V
3	6.697	32.39	Pk	35.8	-27.9	40.29	-	-	-	-	0-360	199	H
5	10.414	27.8	Pk	37.9	-22	43.7	-	-	-	-	0-360	102	H
6	10.419	27.76	Pk	37.9	-21.9	43.76	-	-	-	-	0-360	102	V

Pk - Peak detector

9.3. WORST-CASE BELOW 30 MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

FACE ON AND FACE OFF PLOTS



NOTE: KDB 414788 OATS and Chamber Correlation Justification

- Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
- OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

Trace Markers

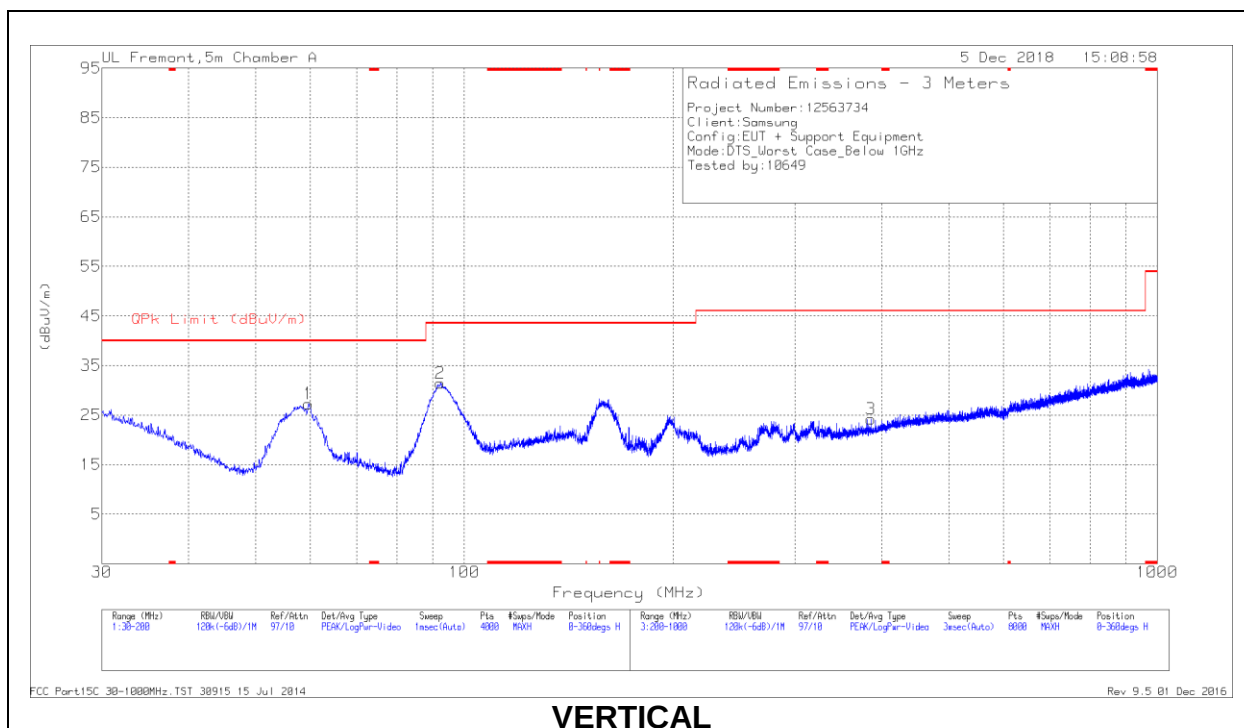
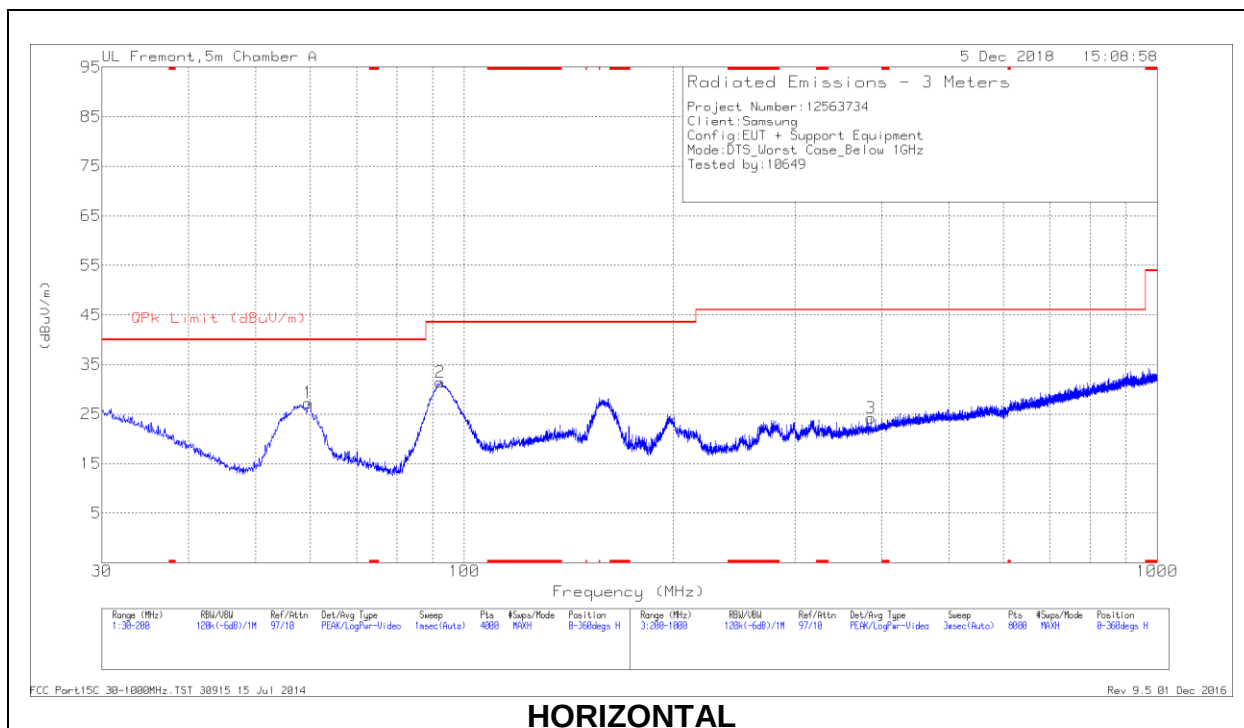
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
5	.02024	49.37	Pk	14.5	0	-80	-16.13	61.46	-77.59	41.46	-57.59	-	-	-	-	0-360
1	.08091	40.39	Pk	14.1	0	-80	-25.51	49.42	-74.93	29.42	-54.93	-	-	-	-	0-360
2	.13196	36.58	Pk	13.8	.1	-80	-29.52	-	-	-	-	45.22	-74.74	25.22	-54.74	0-360
6	.132	34.67	Pk	13.8	.1	-80	-31.43	-	-	-	-	45.21	-76.64	25.21	-56.64	0-360
7	.28019	43.06	Pk	13.7	.1	-80	-23.14	-	-	-	-	38.66	-61.8	18.66	-41.8	0-360
3	.33156	42.19	Pk	13.7	.1	-80	-24.01	-	-	-	-	37.2	-61.21	17.2	-41.21	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
8	1.17085	32.33	Pk	14.2	.2	-40	6.73	26.26	-19.53	0-360
4	1.17142	30.57	Pk	14.2	.2	-40	4.97	26.25	-21.28	0-360

Pk - Peak detector

9.4. Worst Case Below 1 GHz



Below 1GHz DATA

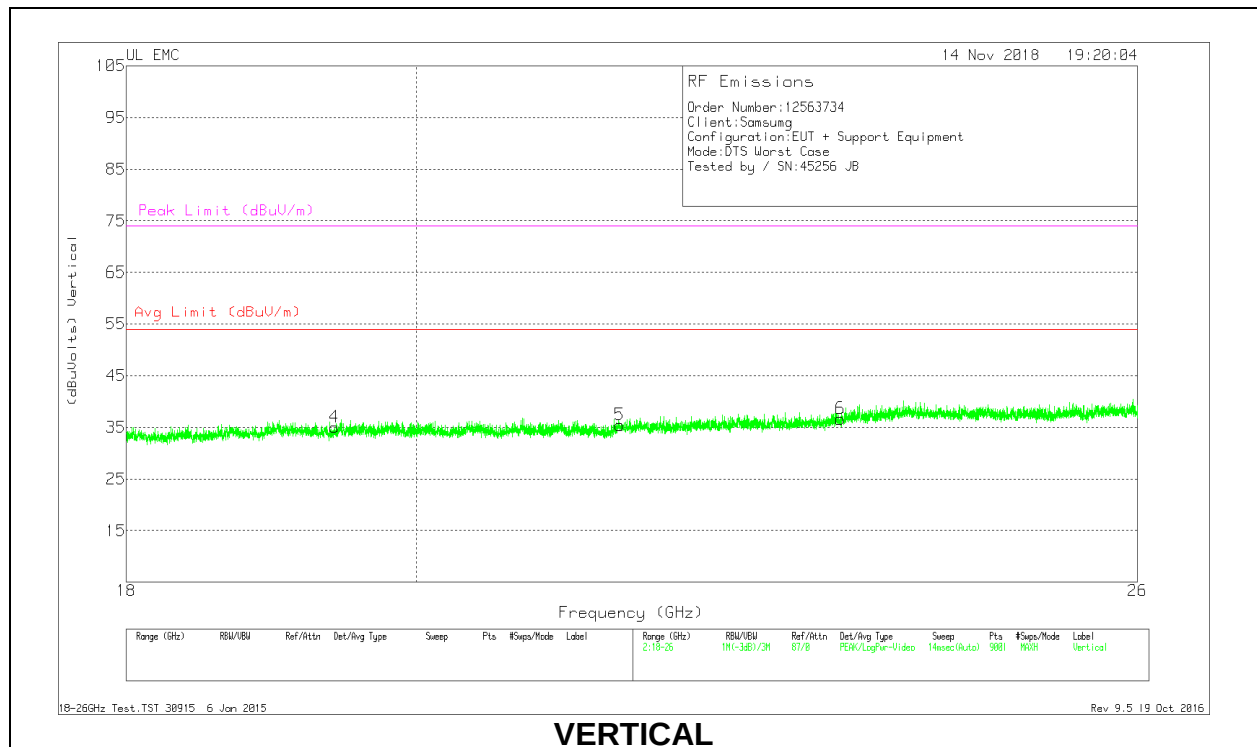
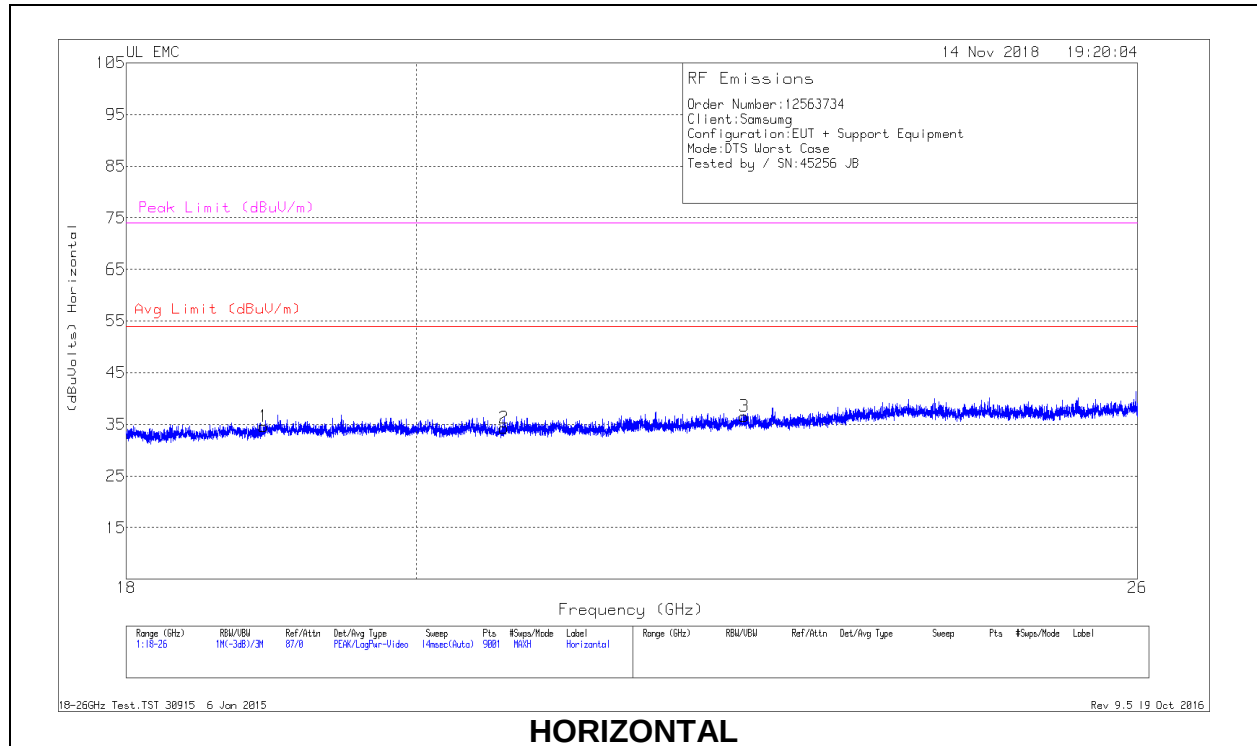
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	58.8225	49.03	Pk	11.5	-26.8	33.73	40	-6.27	0-360	100	V
	58.8902	40.31	Qp	11.5	-26.8	25.01	40	-14.99	16	106	V
1	59.6302	42.51	Pk	11.6	-26.8	27.31	40	-12.69	0-360	400	H
5	91.6835	50.13	Pk	12	-26.4	35.73	43.52	-7.79	0-360	100	V
2	92.4061	45.65	Pk	12.2	-26.4	31.45	43.52	-12.07	0-360	200	H
3	386.1242	29.79	Pk	19.1	-24.7	24.19	46.02	-21.83	0-360	101	H
6	571.8483	29.7	Pk	22.7	-24.8	27.6	46.02	-18.42	0-360	300	V

Pk - Peak detector

Qp - Quasi-Peak detector

9.5. Worst Case 18-26 GHz



18 – 26GHz DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	T447 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	18.92	36.96	Pk	32.5	-25.4	-9.5	34.56	54	-19.44	74	-39.44
2	20.648	36.19	Pk	33	-25.4	-9.5	34.29	54	-19.71	74	-39.71
3	22.535	37.73	Pk	33.5	-25.2	-9.5	36.53	54	-17.47	74	-37.47
4	19.416	36.72	Pk	32.8	-25	-9.5	35.02	54	-18.98	74	-38.98
5	21.538	37.01	Pk	33.1	-25.2	-9.5	35.41	54	-18.59	74	-38.59
6	23.335	37.15	Pk	33.8	-24.8	-9.5	36.65	54	-17.35	74	-37.35

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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.

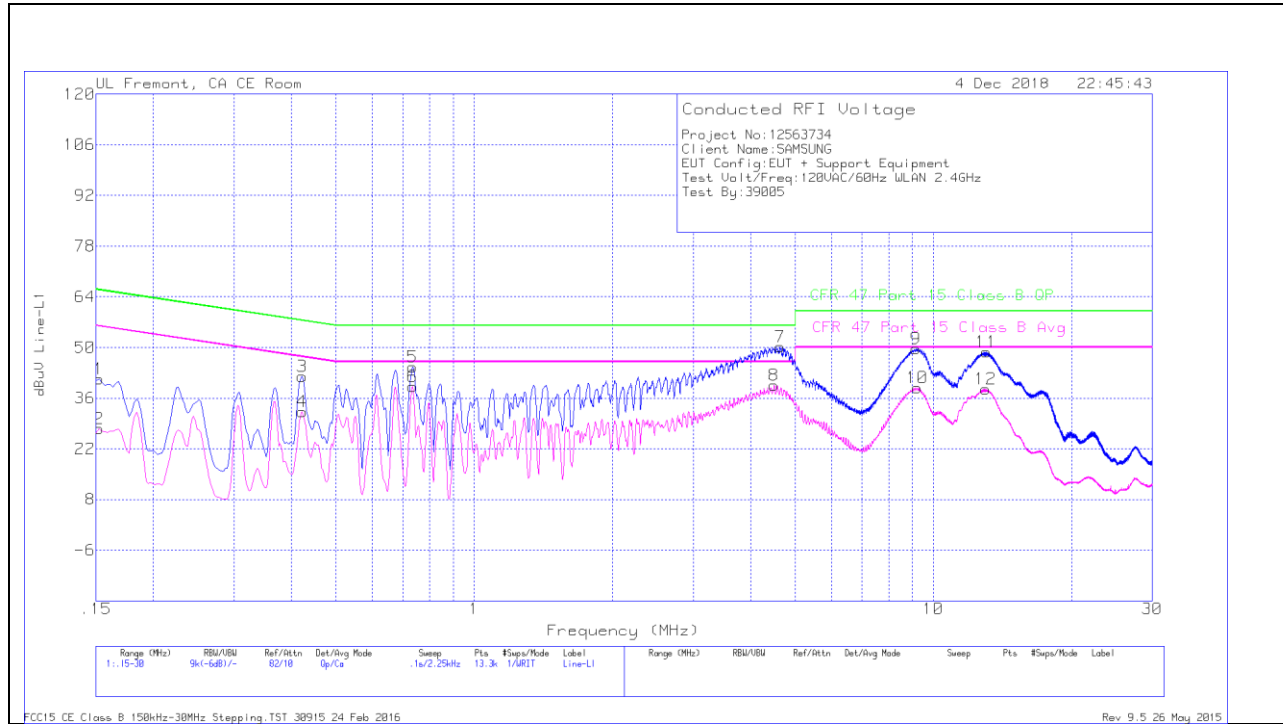
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

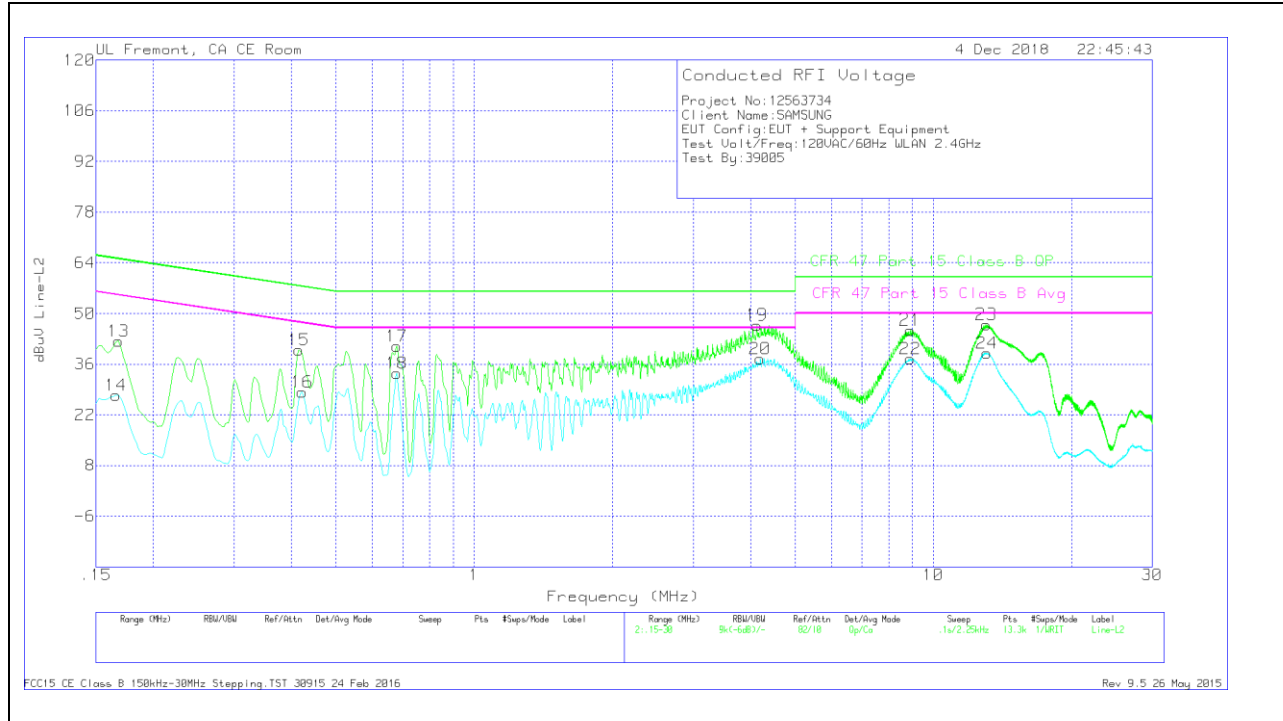
10.1. AC Power Line Norm

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Margin (dB)
1	.15225	31.08	Qp	.1	0	10.1	41.28	65.88	-24.6	-	-
2	.15225	17.32	Ca	.1	0	10.1	27.52	-	-	55.88	-28.36
3	.42225	31.88	Qp	0	0	10.1	41.98	57.4	-15.42	-	-
4	.42225	22.13	Ca	0	0	10.1	32.23	-	-	47.4	-15.17
5	.735	34.5	Qp	0	0	10.1	44.6	56	-11.4	-	-
6	.735	29.07	Ca	0	0	10.1	39.17	-	-	46	-6.83
7	4.63425	39.99	Qp	0	.1	10.1	50.19	56	-5.81	-	-
8	4.49925	29.43	Ca	0	.1	10.1	39.63	-	-	46	-6.37
9	9.177	39.22	Qp	0	.2	10.2	49.62	60	-10.38	-	-
10	9.21975	28.5	Ca	0	.2	10.2	38.9	-	-	50	-11.1
11	13.06163	38.24	Qp	.1	.2	10.2	48.74	60	-11.26	-	-
12	12.98738	27.95	Ca	.1	.2	10.2	38.45	-	-	50	-11.55

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	Margin (dB)
13	.168	32.09	Qp	.1	0	10.1	42.29	65.06	-22.77	-	-
14	.16575	17.25	Ca	.1	0	10.1	27.45	-	-	55.17	-27.72
15	.4155	29.78	Qp	0	0	10.1	39.88	57.54	-17.66	-	-
16	.42225	18.21	Ca	0	0	10.1	28.31	-	-	47.4	-19.09
17	.67875	30.83	Qp	0	0	10.1	40.93	56	-15.07	-	-
18	.67875	23.35	Ca	0	0	10.1	33.45	-	-	46	-12.55
19	4.128	36.58	Qp	0	.1	10.1	46.78	56	-9.22	-	-
20	4.2	27.24	Ca	0	.1	10.1	37.44	-	-	46	-8.56
21	8.92275	34.99	Qp	0	.2	10.2	45.39	60	-14.61	-	-
22	8.92163	27.06	Ca	0	.2	10.2	37.46	-	-	50	-12.54
23	13.05375	36.45	Qp	.1	.2	10.2	46.95	60	-13.05	-	-
24	13.101	28.62	Ca	.1	.2	10.2	39.12	-	-	50	-10.88