

10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205, 15.209, 15.247 (d)

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

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

For peak measurements above 1 GHz, the resolution bandwidth is set to 1 MHz and the video bandwidth is set to 3 MHz. For average measurements above 1GHz, the resolution bandwidth and video bandwidth are set as described in ANSI C63.10:2013 for the applicable measurement. For this evaluation, RMS Power Averaging was used and the resolution/video bandwidth settings were 1MHz/3MHz.

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

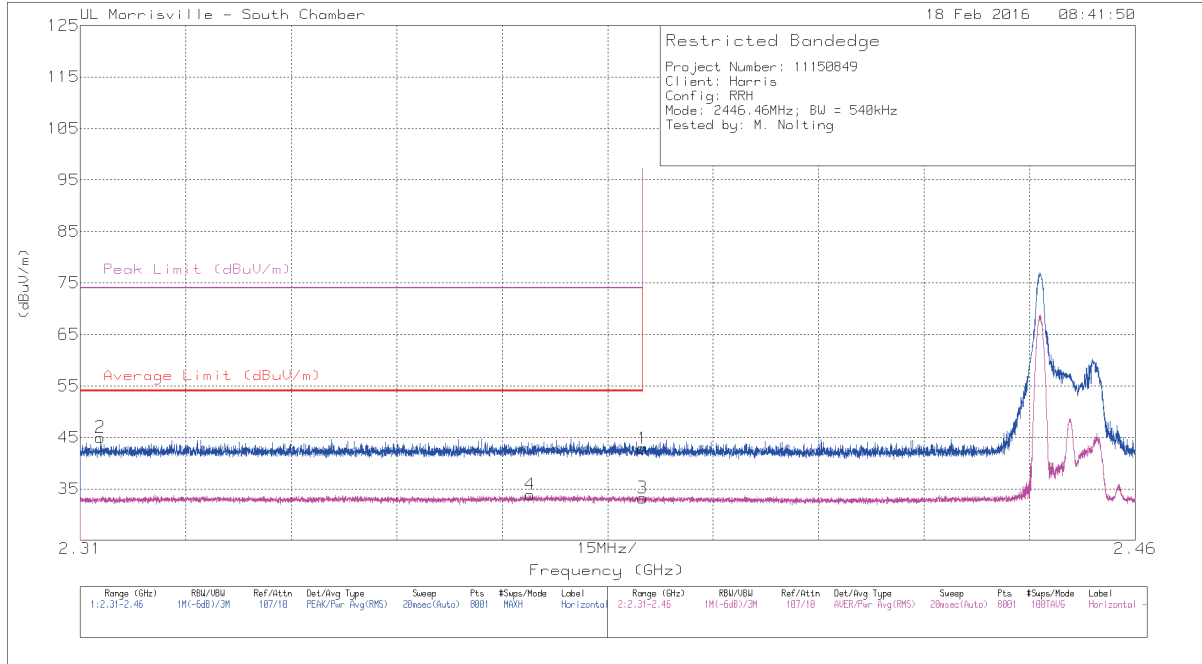
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

For this testing, all 8 antenna ports were terminated into 50Ω terminations.

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. TX ABOVE 1 GHz 540 kHz MODE IN THE 2.4 GHz BAND

ADJACENT RESTRICTED BAND LOW

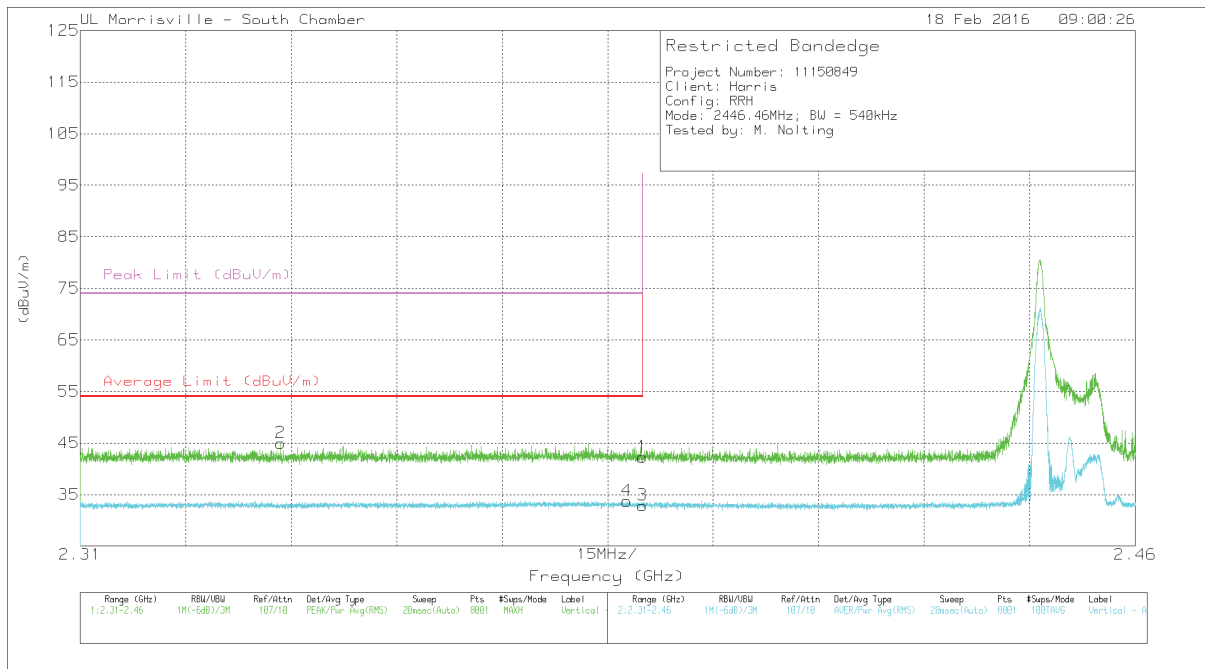


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	35.04	Pk	32	-24.2	0	42.84	-	-	74	-31.16	227	117	H
2	* 2.313	36.88	Pk	31.9	-23.8	0	44.98	-	-	74	-29.02	227	117	H
3	* 2.39	24.73	RMS	32	-24.2	.75	33.28	54	-20.72	-	-	227	117	H
4	* 2.374	25.38	RMS	31.9	-24.1	.75	33.93	54	-20.07	-	-	227	117	H

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

Pk - Peak detector

RMS - RMS detection



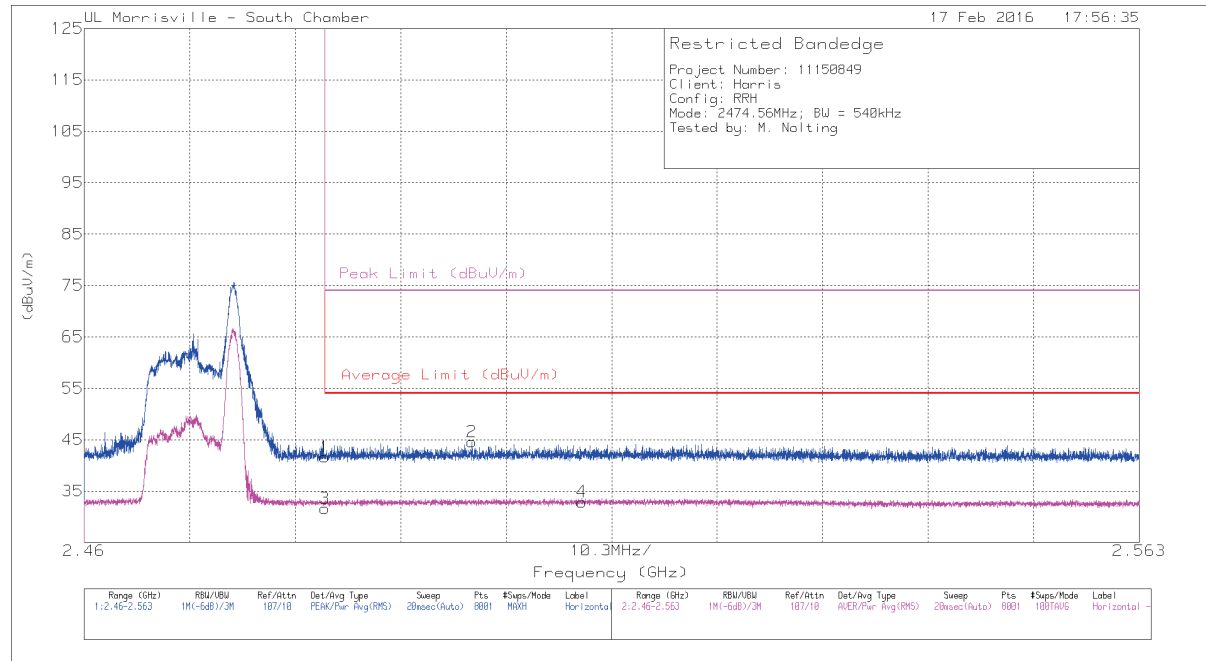
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	34.49	Pk	32	-24.2	0	42.29	-	-	74	-31.71	234	128	V
2	* 2.339	37.11	Pk	31.9	-24	0	45.01	-	-	74	-28.99	234	128	V
3	* 2.39	24.4	RMS	32	-24.2	.75	32.95	54	-21.05	-	-	234	128	V
4	* 2.388	25.17	RMS	32	-24.1	.75	33.82	54	-20.18	-	-	234	128	V

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

Pk - Peak detector

RMS - RMS detection

ADJACENT RESTRICTED BAND HIGH

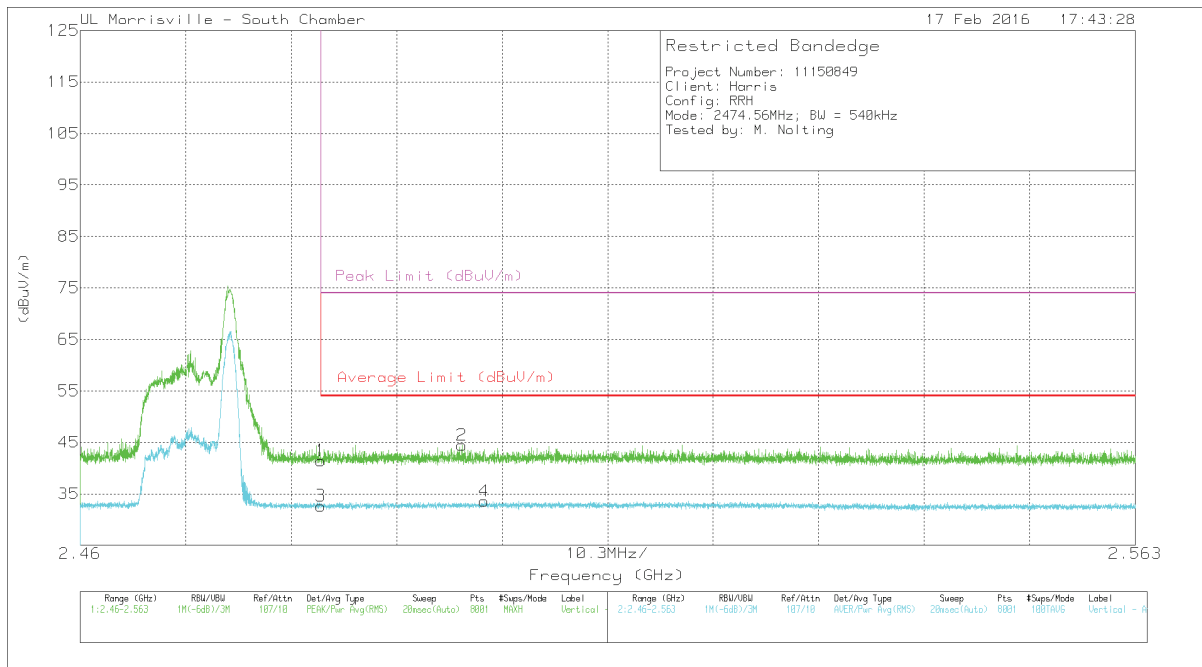


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	34.24	Pk	32.1	-24.7	0	41.64	-	-	74	-32.36	232	164	H
2	* 2.498	37.29	Pk	32.1	-24.8	0	44.59	-	-	74	-29.41	232	164	H
3	* 2.484	24.21	RMS	32.1	-24.7	0.75	32.36	54	-21.64	-	-	232	164	H
4	2.509	25.68	RMS	32.1	-24.9	0.75	33.63	54	-20.37	-	-	232	164	H

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

Pk - Peak detector

RMS - RMS detection



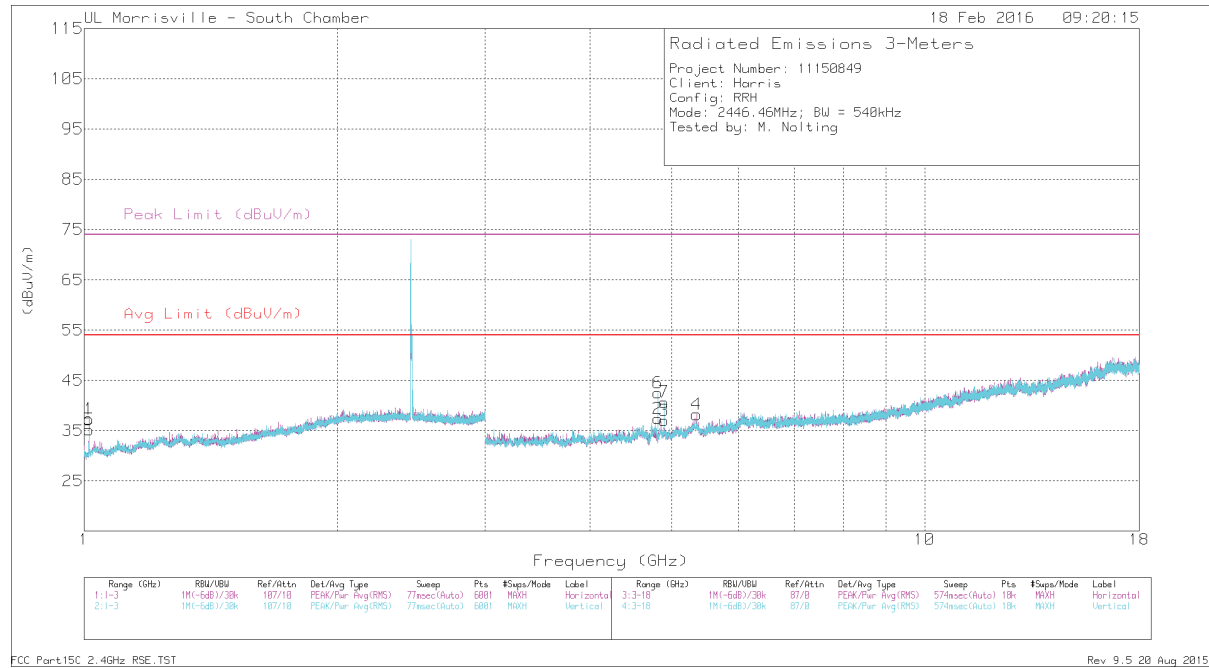
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF AT0069 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	34.06	Pk	32.1	-24.7	0	41.46	-	-	74	-32.54	248	149	V
2	* 2.497	37.14	Pk	32.1	-24.8	0	44.44	-	-	74	-29.56	248	149	V
3	* 2.484	24.54	RMS	32.1	-24.7	0.75	32.69	54	-21.31	-	-	248	149	V
4	* 2.499	25.59	RMS	32.1	-24.8	0.75	33.64	54	-20.36	-	-	248	149	V

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

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL, 1-18 MHz



Marker	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fltr/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	* 1.014	39.43	PK2	27.8	-25	0	42.23	-	-	74	-31.77	254	189	H
	* 1.014	33.12	MAv1	27.8	-25	0.75	36.67	54	-17.33	-	-	254	189	H
5	* 1.014	38.34	PK2	27.8	-25	0	41.14	-	-	74	-32.86	6	118	V
	* 1.014	31.28	MAv1	27.8	-25	0.75	34.83	54	-19.17	-	-	6	118	V
2	* 4.816	41.32	PK2	34	-31.5	0	43.82	-	-	74	-30.18	90	102	H
	* 4.816	33.66	MAv1	34	-31.5	0.75	36.91	54	-17.09	-	-	90	102	H
3	* 4.902	41.88	PK2	33.9	-31.4	0	44.38	-	-	74	-29.62	92	133	H
	* 4.901	33.42	MAv1	33.9	-31.4	0.75	36.67	54	-17.33	-	-	92	133	H
4	* 5.355	38.22	PK2	34.4	-30	0	42.62	-	-	74	-31.38	279	226	H
	* 5.354	26.97	MAv1	34.4	-30	0.75	32.12	54	-21.88	-	-	279	226	H
6	* 4.816	43.81	PK2	34	-31.5	0	46.31	-	-	74	-27.69	215	101	V
	* 4.816	38.67	MAv1	34	-31.5	0.75	41.92	54	-12.08	-	-	215	101	V
7	* 4.901	43.77	PK2	33.9	-31.4	0	46.27	-	-	74	-27.73	260	102	V
	* 4.901	37.57	MAv1	33.9	-31.4	0.75	40.82	54	-13.18	-	-	260	102	V

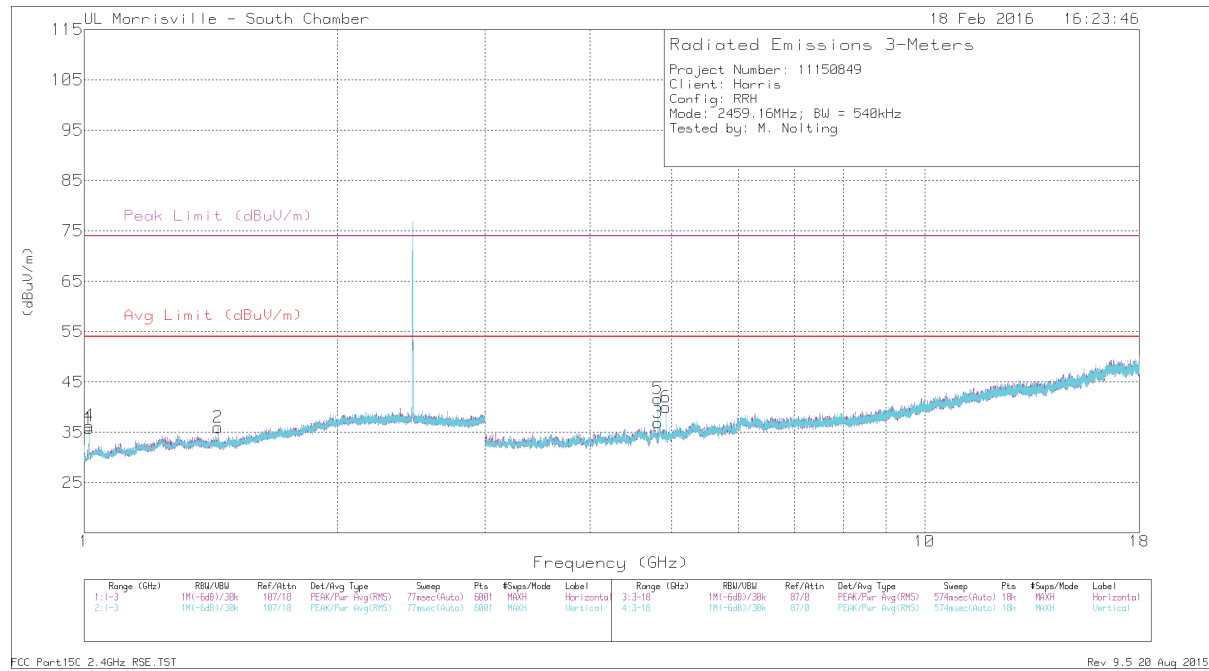
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Ftr/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	* 1.014	39.01	PK2	27.8	-25	0	41.81	-	-	74	-32.19	249	193	H
	* 1.014	32.18	MAv1	27.8	-25	0.75	35.73	54	-18.27	-	-	249	193	H
2	* 1.444	36.91	PK2	28	-22.8	0	42.11	-	-	74	-31.89	252	111	H
	* 1.444	27.57	MAv1	28	-22.8	0.75	33.52	54	-20.48	-	-	252	111	H
4	* 1.014	38.29	PK2	27.8	-25	0	41.09	-	-	74	-32.91	3	190	V
	* 1.014	30.73	MAv1	27.8	-25	0.75	34.28	54	-19.72	-	-	3	190	V
3	* 4.816	41.85	PK2	34	-31.5	0	44.35	-	-	74	-29.65	91	101	H
	* 4.816	33.7	MAv1	34	-31.5	0.75	36.95	54	-17.05	-	-	91	101	H
5	* 4.816	43.91	PK2	34	-31.5	0	46.41	-	-	74	-27.59	216	102	V
	* 4.816	38.26	MAv1	34	-31.5	0.75	41.51	54	-12.49	-	-	216	102	V
6	* 4.922	43.22	PK2	33.9	-31.6	0	45.52	-	-	74	-28.48	229	105	V
	* 4.921	37.12	MAv1	33.9	-31.6	0.75	40.17	54	-13.83	-	-	229	105	V

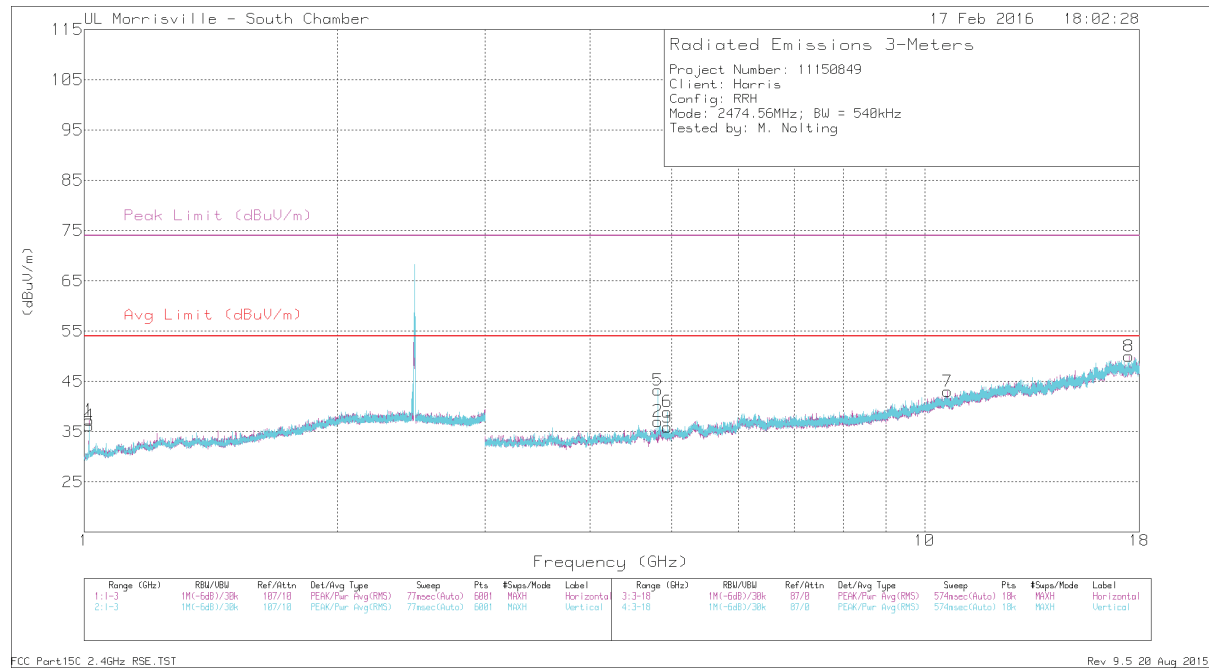
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/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	* 1.014	39.63	PK2	27.8	-25	0	42.43	-	-	74	-31.57	242	267	H
	* 1.014	33.94	MAv1	27.8	-25	0.75	37.49	54	-16.51	-	-	242	267	H
4	* 1.014	38.43	PK2	27.8	-25	0	41.23	-	-	74	-32.77	74	103	V
	* 1.014	31.5	MAv1	27.8	-25	0.75	35.05	54	-18.95	-	-	74	103	V
2	* 4.815	41.56	PK2	34	-31.5	0	44.06	-	-	74	-29.94	91	101	H
	* 4.816	33.52	MAv1	34	-31.5	0.75	36.77	54	-17.23	-	-	91	101	H
3	* 4.941	41.13	PK2	33.9	-31.7	0	43.33	-	-	74	-30.67	241	103	H
	* 4.941	31.87	MAv1	33.9	-31.7	0.75	34.82	54	-19.18	-	-	241	103	H
7	* 10.648	35.65	PK2	37.7	-25.4	0	47.95	-	-	74	-26.05	71	119	H
	* 10.647	24.18	MAv1	37.7	-25.4	0.75	37.23	54	-16.77	-	-	71	119	H
5	* 4.816	44.37	PK2	34	-31.5	0	46.87	-	-	74	-27.13	216	101	V
	* 4.816	39.09	MAv1	34	-31.5	0.75	42.34	54	-11.66	-	-	216	101	V
6	* 4.941	42.46	PK2	33.9	-31.7	0	44.66	-	-	74	-29.34	92	103	V
	* 4.941	35.53	MAv1	33.9	-31.7	0.75	38.48	54	-15.52	-	-	92	103	V
8	17.495	32.4	Pk	41.5	-23.9	0	50	-	-	-	-	0-360	199	H

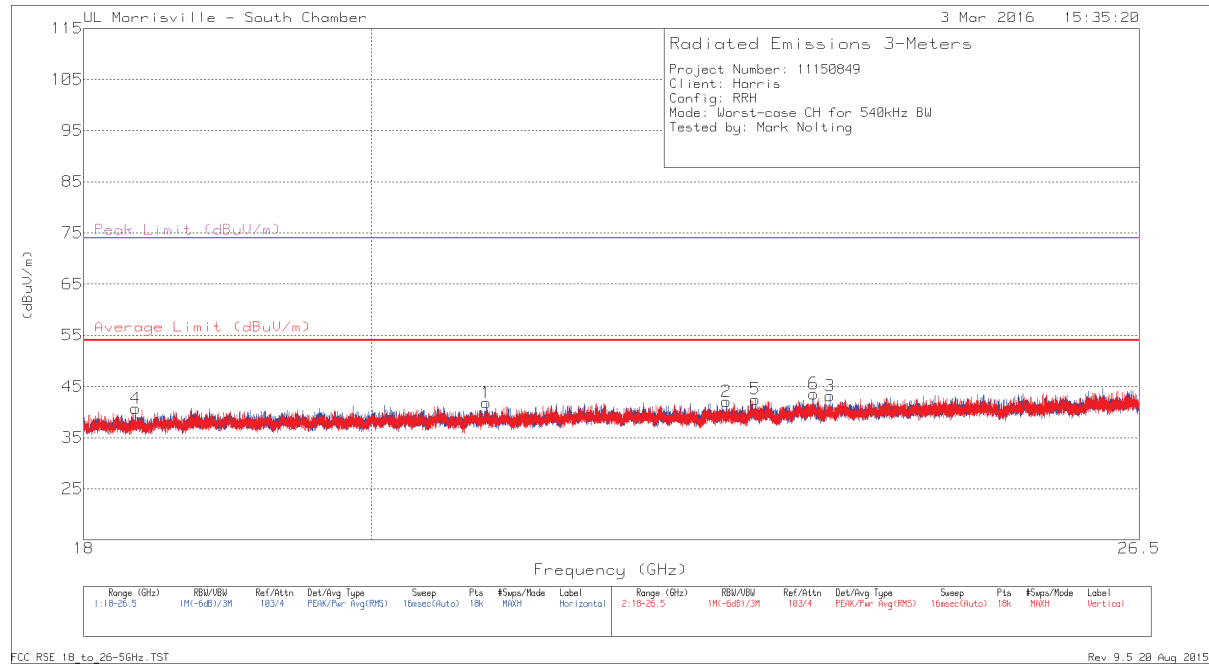
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Aver

WORST CASE HARMONICS AND SPURIOUS EMISSIONS 18-26 MHz



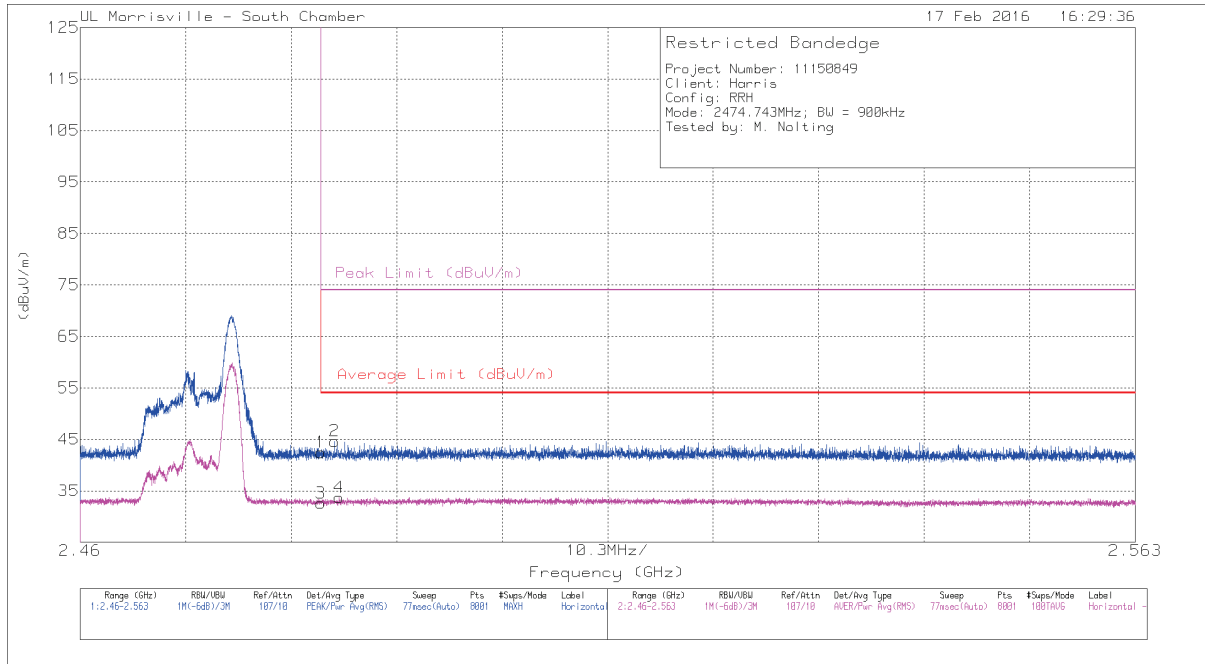
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0076 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 18.346	48.89	Pk	32.5	-40.7	40.69	54	-13.31	74	-33.31	0-360	252	V
1	* 20.86	48.5	Pk	33.4	-40.1	41.8	54	-12.2	74	-32.2	0-360	299	H
2	* 22.779	47.67	Pk	34.1	-39.7	42.07	54	-11.93	74	-31.93	0-360	149	H
5	* 23.02	47.69	Pk	34.2	-39.4	42.49	54	-11.51	74	-31.51	0-360	101	V
3	* 23.662	48.09	Pk	34.2	-39.1	43.19	54	-10.81	74	-30.81	0-360	299	H
6	23.519	48.17	Pk	34.4	-39	43.57	54	-10.43	74	-30.43	0-360	299	V

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

Pk - Peak detector

10.2.2. TX ABOVE 1 GHz 900 kHz MODE IN THE 2.4 GHz BAND

ADJACENT RESTRICTED BAND HIGH

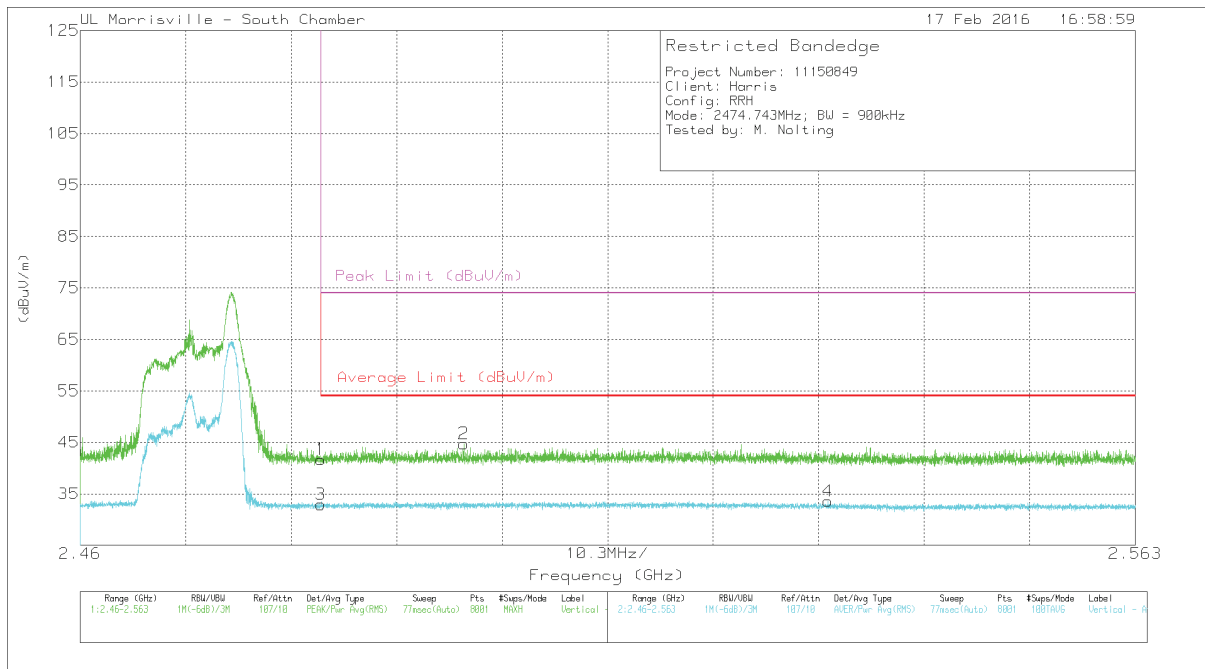


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	35.07	Pk	32.1	-24.7	0	42.47	-	-	74	-31.53	12	127	H
2	* 2.485	37.25	Pk	32.1	-24.7	0	44.65	-	-	74	-29.35	12	127	H
3	* 2.484	24.51	RMS	32.1	-24.7	.75	32.66	54	-21.34	-	-	12	127	H
4	* 2.485	25.61	RMS	32.1	-24.7	.75	33.76	54	-20.24	-	-	12	127	H

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

Pk - Peak detector

RMS - RMS detection



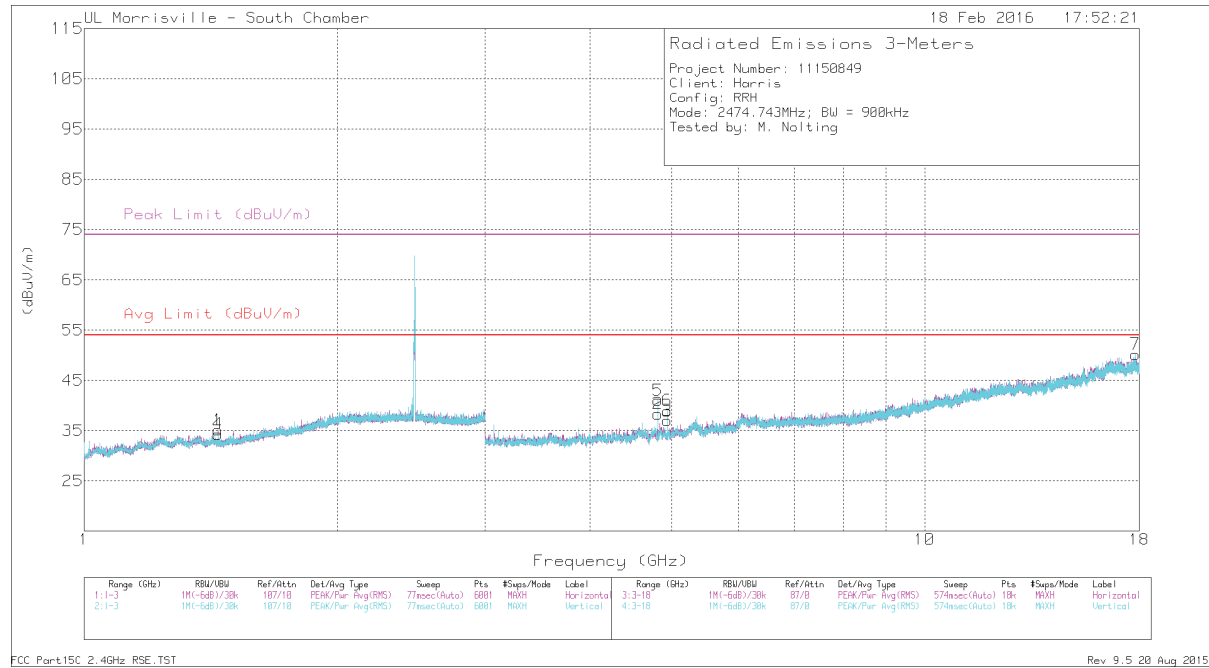
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	34.3	Pk	32.1	-24.7	0	41.7	-	-	74	-32.3	231	101	V
2	* 2.497	37.43	Pk	32.1	-24.8	0	44.73	-	-	74	-29.27	231	101	V
3	* 2.484	24.83	RMS	32.1	-24.7	.75	32.98	54	-21.02	-	-	231	101	V
4	2.533	25.77	RMS	32.1	-25	.75	33.62	54	-20.38	-	-	231	101	V

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

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Ftr/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	* 1.444	37.25	PK2	28	-22.8	0	42.45	-	-	74	-31.55	250	111	H
	* 1.444	28.54	MAv1	28	-22.8	0.75	34.49	54	-19.51	-	-	250	111	H
4	* 1.444	36.01	PK2	28	-22.8	0	41.21	-	-	74	-32.79	198	141	V
	* 1.444	26.16	MAv1	28	-22.8	0.75	32.11	54	-21.89	-	-	198	141	V
2	* 4.816	41.32	PK2	34	-31.5	0	43.82	-	-	74	-30.18	91	101	H
	* 4.816	33.4	MAv1	34	-31.5	0.75	36.65	54	-17.35	-	-	91	101	H
3	* 4.941	42.21	PK2	33.9	-31.7	0	44.41	-	-	74	-29.59	253	133	H
	* 4.941	33.92	MAv1	33.9	-31.7	0.75	36.87	54	-17.13	-	-	253	133	H
5	* 4.816	44.13	PK2	34	-31.5	0	46.63	-	-	74	-27.37	214	101	V
	* 4.816	38.42	MAv1	34	-31.5	0.75	41.67	54	-12.33	-	-	214	101	V
6	* 4.941	43.5	PK2	33.9	-31.7	0	45.7	-	-	74	-28.3	21	123	V
	* 4.941	36.68	MAv1	33.9	-31.7	0.75	39.63	54	-14.37	-	-	21	123	V
7	* 17.807	36.48	PK2	41.6	-22.4	0	55.68	-	-	74	-18.32	38	166	V
	* 17.805	24.62	MAv1	41.6	-22.4	0.75	44.57	54	-9.43	-	-	38	166	V

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

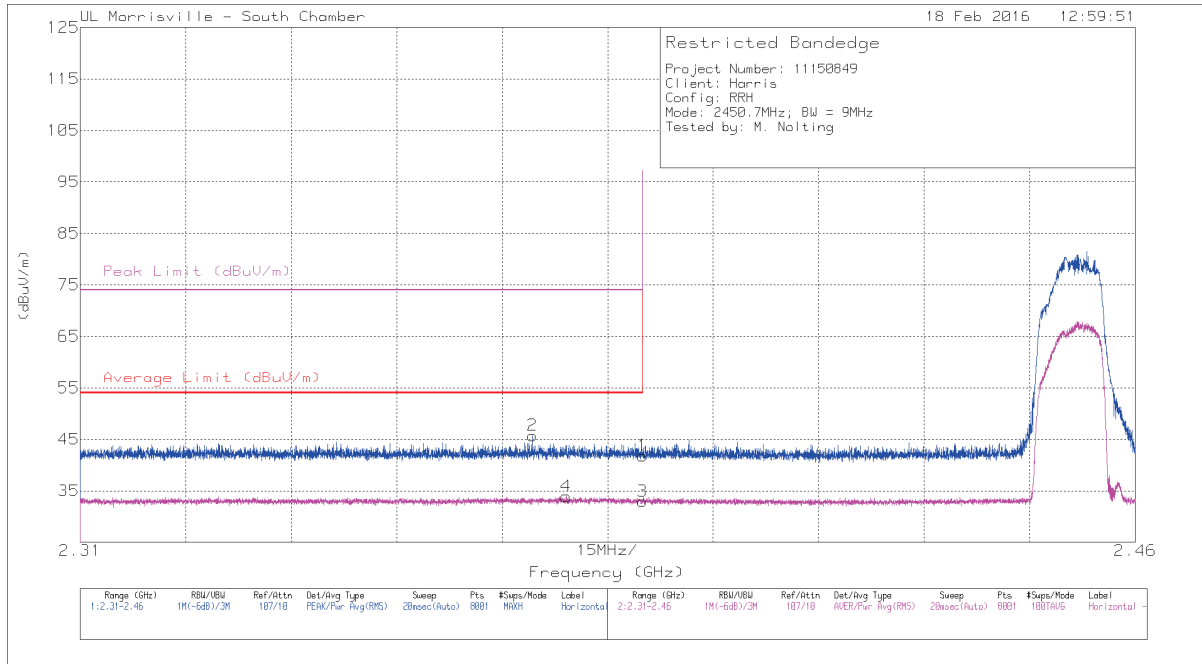
Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2.3. TX ABOVE 1 GHz 9 MHz MODE IN THE 2.4 GHz BAND

ADJACENT RESTRICTED BAND LOW

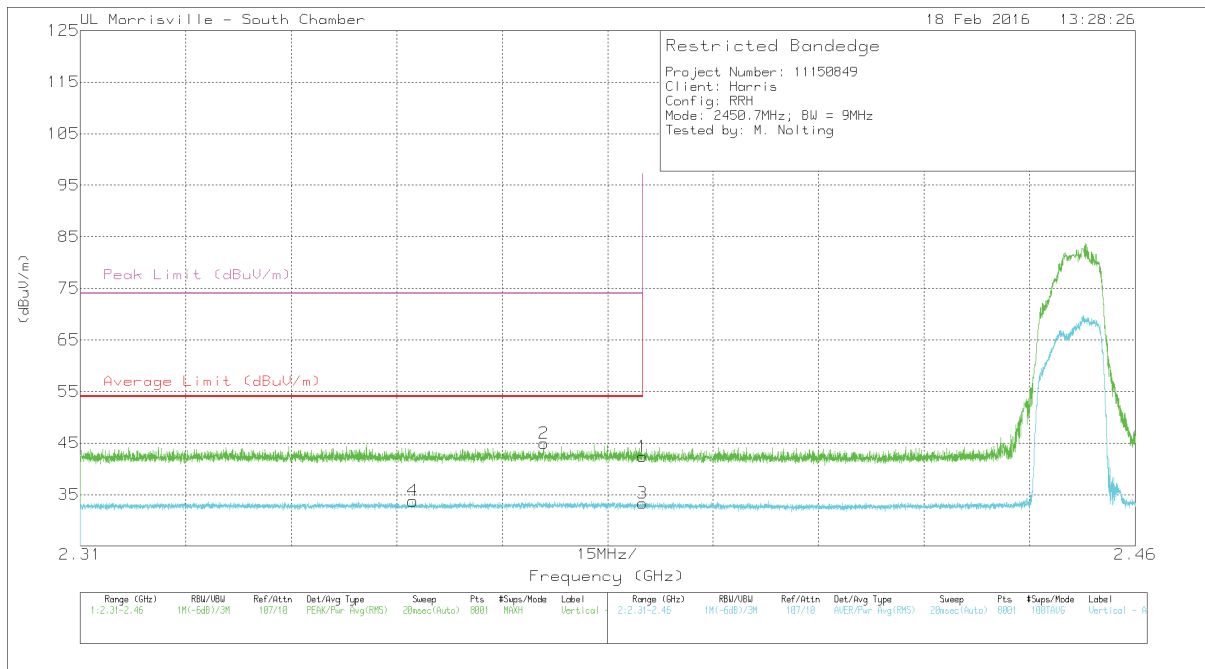


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	34	Pk	32	-24.2	0	41.8	-	-	74	-32.2	235	197	H
2	* 2.374	37.94	Pk	31.9	-24.1	0	45.74	-	-	74	-28.26	235	197	H
3	* 2.39	24.46	RMS	32	-24.2	0.68	32.94	54	-21.06	-	-	235	197	H
4	* 2.379	25.2	RMS	32	-24	0.68	33.88	54	-20.12	-	-	235	197	H

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

Pk - Peak detector

RMS - RMS detection



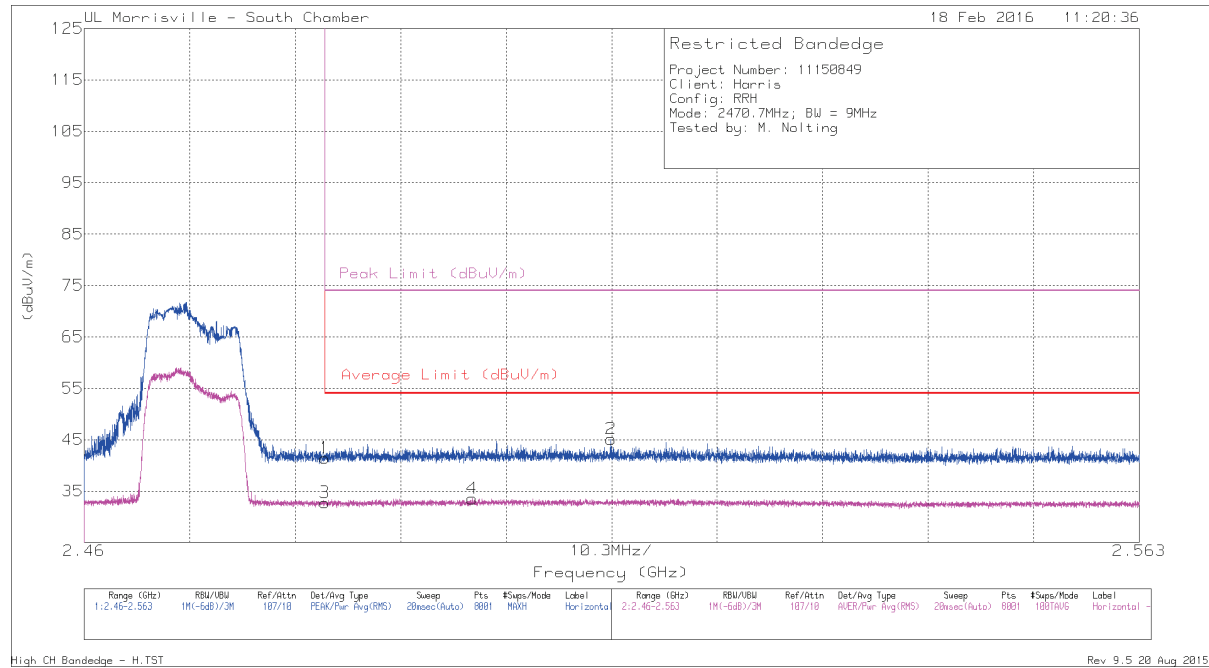
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	34.57	Pk	32	-24.2	0	42.37	-	-	74	-31.63	239	110	V
2	* 2.376	37.04	Pk	32	-24.1	0	44.94	-	-	74	-29.06	239	110	V
3	* 2.39	24.82	RMS	32	-24.2	0.68	33.3	54	-20.7	-	-	239	110	V
4	* 2.357	25.27	RMS	31.9	-24.1	0.68	33.75	54	-20.25	-	-	239	110	V

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

Pk - Peak detector

RMS - RMS detection

ADJACENT RESTRICTED BAND HIGH



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fltr/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	34.04	Pk	32.1	-24.7	0	41.44	-	-	74	-32.56	229	166	H
2	2.511	37.94	Pk	32.1	-24.9	0	45.14	-	-	74	-28.86	229	166	H
3	* 2.484	24.65	RMS	32.1	-24.7	.68	32.73	54	-21.27	-	-	229	166	H
4	* 2.498	25.53	RMS	32.1	-24.8	.68	33.51	54	-20.49	-	-	229	166	H

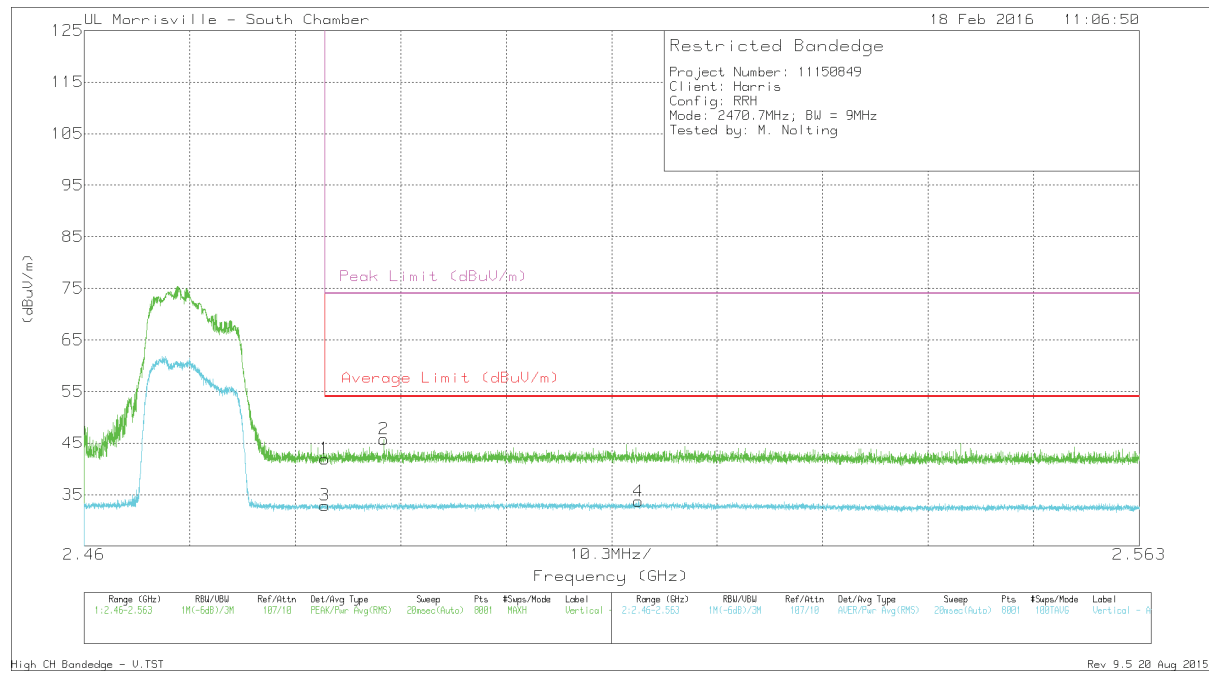
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST

Rev 9.5 20 Aug 2015



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	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	34.54	Pk	32.1	-24.7	0	41.94	-	-	74	-32.06	240	102	V
2	* 2.489	38.45	Pk	32.1	-24.8	0	45.75	-	-	74	-28.25	240	102	V
3	* 2.484	24.81	RMS	32.1	-24.7	.68	32.89	54	-21.11	-	-	240	102	V
4	2.514	25.81	RMS	32.1	-24.9	.68	33.69	54	-20.31	-	-	240	102	V

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

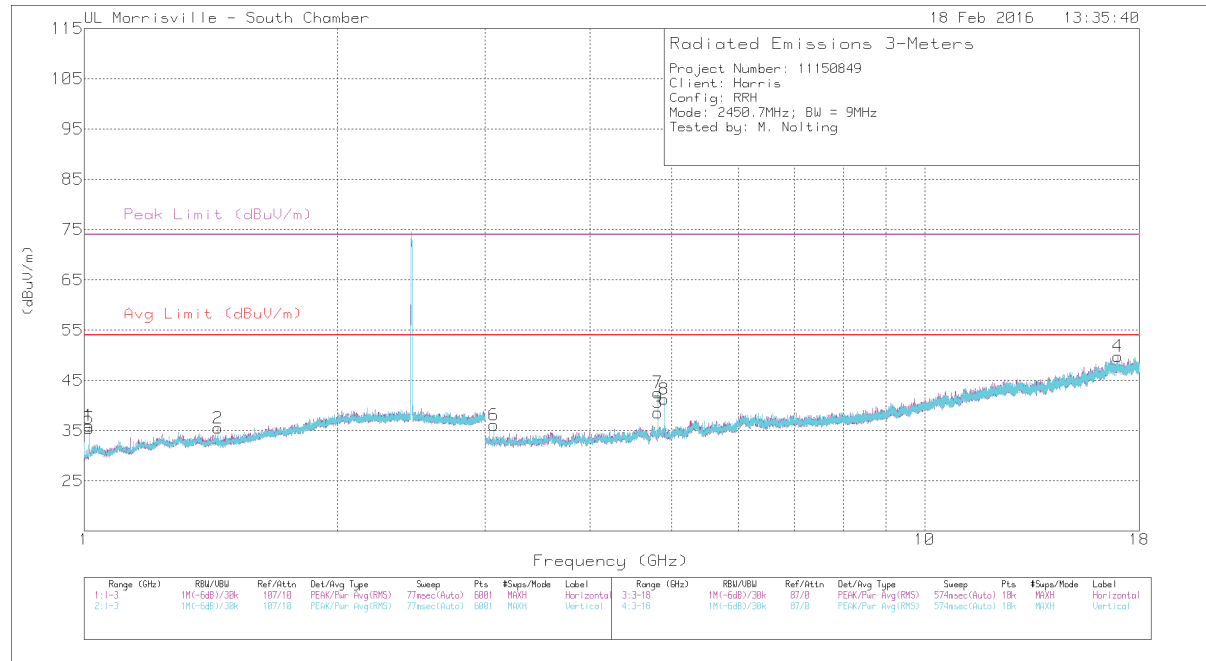
Pk - Peak detector

RMS - RMS detection

High CH Bandedge - V.TST

Rev 9.5 20 Aug 2015

HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/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	* 1.014	39.38	PK2	27.8	-25	0	42.18	-	-	74	-31.82	254	192	H
	* 1.014	32.16	MAv1	27.8	-25	0.68	35.64	54	-18.36	-	-	254	192	H
2	* 1.444	37.2	PK2	28	-22.8	0	42.4	-	-	74	-31.6	249	194	H
	* 1.444	28.65	MAv1	28	-22.8	0.68	34.53	54	-19.47	-	-	249	194	H
5	* 1.014	37.97	PK2	27.8	-25	0	40.77	-	-	74	-33.23	5	189	V
	* 1.014	31	MAv1	27.8	-25	0.68	34.48	54	-19.52	-	-	5	189	V
3	* 4.816	41.37	PK2	34	-31.5	0	43.87	-	-	74	-30.13	92	101	H
	* 4.816	33.41	MAv1	34	-31.5	0.68	36.59	54	-17.41	-	-	92	101	H
7	* 4.816	44.84	PK2	34	-31.5	0	47.34	-	-	74	-26.66	214	102	V
	* 4.816	39.42	MAv1	34	-31.5	0.68	42.6	54	-11.4	-	-	214	102	V
8	* 4.901	45.38	PK2	33.9	-31.4	0	47.88	-	-	74	-26.12	261	101	V
	* 4.901	38.03	MAv1	33.9	-31.4	0.68	41.21	54	-12.79	-	-	261	101	V
6	3.072	37.22	Pk	32.7	-33.8	0	36.12	-	-	-	-	0-360	101	V
4	16.973	32.51	Pk	42	-24.7	0	49.81	-	-	-	-	0-360	102	H

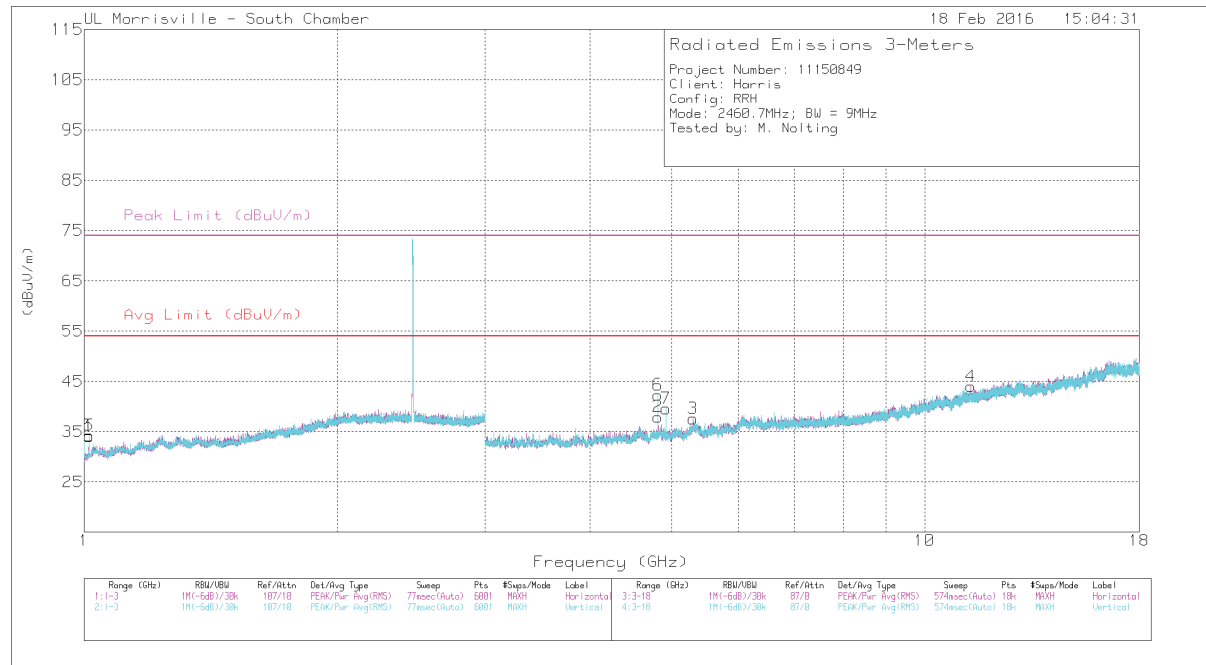
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/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	* 1.014	38.13	PK2	27.8	-25	0	40.93	-	-	74	-33.07	257	358	H
	* 1.014	30.32	MAv1	27.8	-25	0.68	33.8	54	-20.2	-	-	257	358	H
5	* 1.014	38.37	PK2	27.8	-25	0	41.17	-	-	74	-32.83	29	162	V
	* 1.014	30.5	MAv1	27.8	-25	0.68	33.98	54	-20.02	-	-	29	162	V
2	* 4.816	41.44	PK2	34	-31.5	0	43.94	-	-	74	-30.06	92	101	H
	* 4.816	33.46	MAv1	34	-31.5	0.68	36.64	54	-17.36	-	-	92	101	H
4	* 11.346	34.82	PK2	38.2	-24.2	0	48.82	-	-	74	-25.18	257	222	H
	* 11.347	23.67	MAv1	38.2	-24.2	0.68	38.35	54	-15.65	-	-	257	222	H
6	* 4.816	44.42	PK2	34	-31.5	0	46.92	-	-	74	-27.08	214	101	V
	* 4.816	39.09	MAv1	34	-31.5	0.68	42.27	54	-11.73	-	-	214	101	V
7	* 4.921	43.39	PK2	33.9	-31.6	0	45.69	-	-	74	-28.31	230	103	V
	* 4.921	36.97	MAv1	33.9	-31.6	0.68	39.95	54	-14.05	-	-	230	103	V
3	5.3	33.3	Pk	34.4	-30.1	0	37.6	-	-	-	-	0-360	199	H

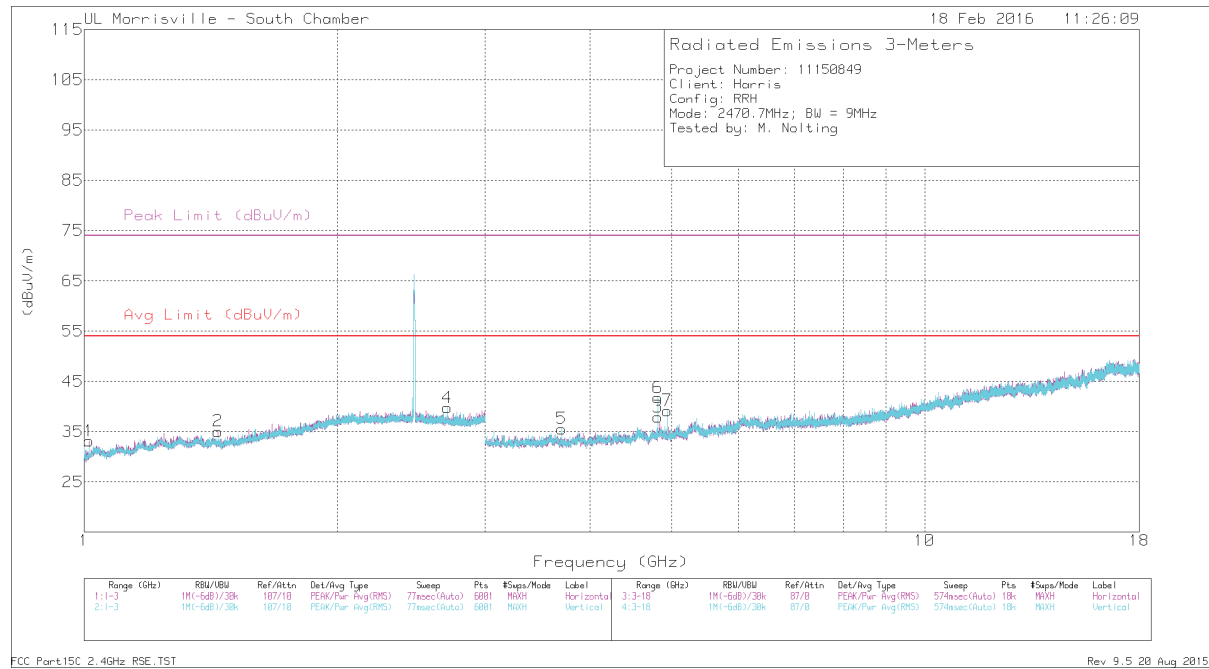
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL, 1-18 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/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	* 1.014	37.44	PK2	27.8	-25	0	40.24	-	-	74	-33.76	245	189	H
	* 1.014	27.41	MAv1	27.8	-25	0.68	30.89	54	-23.11	-	-	245	189	H
2	* 1.444	37.67	PK2	28	-22.8	0	42.87	-	-	74	-31.13	253	153	H
	* 1.444	27.97	MAv1	28	-22.8	0.68	33.85	54	-20.15	-	-	253	153	H
4	* 2.703	38.71	PK2	32.3	-25.9	0	45.11	-	-	74	-28.89	19	110	V
	* 2.703	28.68	MAv1	32.3	-25.9	0.68	35.76	54	-18.24	-	-	19	110	V
3	* 4.815	40.88	PK2	34	-31.5	0	43.38	-	-	74	-30.62	90	101	H
	* 4.816	33.04	MAv1	34	-31.5	0.68	36.22	54	-17.78	-	-	90	101	H
5	* 3.701	40.18	PK2	33.1	-33.3	0	39.98	-	-	74	-34.02	339	127	V
	* 3.705	28.6	MAv1	33.1	-33.3	0.68	29.08	54	-24.92	-	-	339	127	V
6	* 4.816	43.73	PK2	34	-31.5	0	46.23	-	-	74	-27.77	215	101	V
	* 4.816	38.55	MAv1	34	-31.5	0.68	41.73	54	-12.27	-	-	215	101	V
7	* 4.941	43.14	PK2	33.9	-31.7	0	45.34	-	-	74	-28.66	20	122	V
	* 4.941	36.83	MAv1	33.9	-31.7	0.68	39.71	54	-14.29	-	-	20	122	V

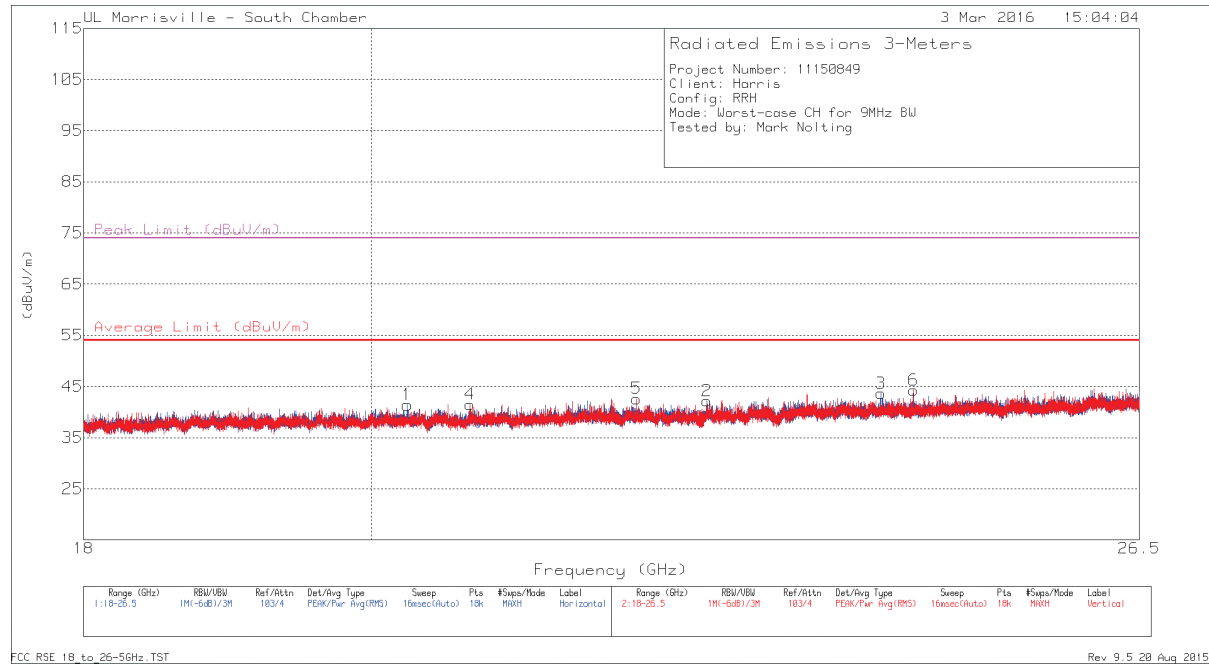
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

WORST CASE HARMONICS AND SPURIOUS EMISSIONS 18-26 MHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0076 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 20.267	48.5	Pk	33.1	-40.2	41.4	54	-12.6	74	-32.6	0-360	249	H
4	* 20.738	48.21	Pk	33.4	-40.1	41.51	54	-12.49	74	-32.49	0-360	152	V
5	* 22.04	48.72	Pk	33.9	-40	42.62	54	-11.38	74	-31.38	0-360	299	V
2	* 22.618	48.11	Pk	33.6	-39.5	42.21	54	-11.79	74	-31.79	0-360	102	H
3	24.105	48.05	Pk	34.4	-38.8	43.65	54	-10.35	74	-30.35	0-360	249	H
6	24.397	48.6	Pk	34.4	-38.7	44.3	54	-9.7	74	-29.7	0-360	152	V

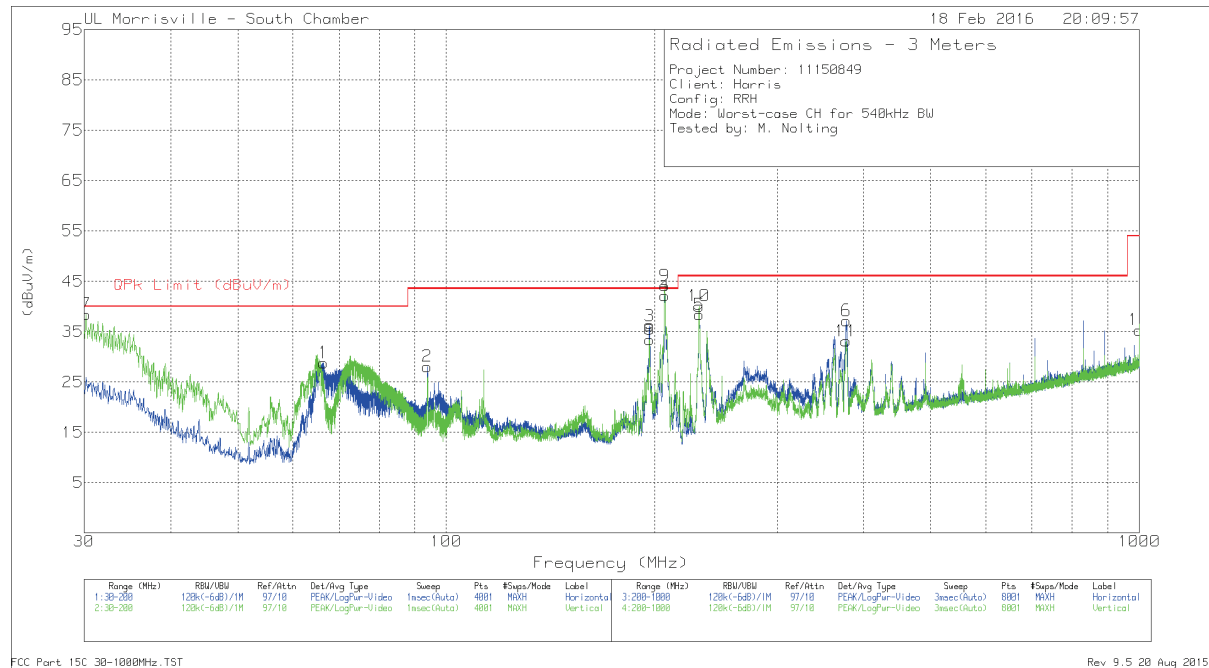
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

10.3. WORST-CASE BELOW 1 GHz

10.3.1. WORST-CASE BELOW 1 GHz, 540 kHz MODE

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



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF AT0074 (dB/m)	Port 0 Factors	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
12	* 999.9895	34.48	Qp	27.8	-25.7	36.58	53.97	-17.39	330	104	V
7	30.1926	43.6	Qp	26	-31.8	37.8	40	-2.2	309	105	V
1	66.5075	47.72	Pk	12.3	-31.2	28.82	40	-11.18	0-360	299	H
2	93.835	46.48	Pk	12.6	-31	28.08	43.52	-15.44	0-360	299	H
3	196.3875	49.31	Pk	17.1	-30.3	36.11	43.52	-7.41	0-360	199	H
8	196.3875	46.6	Pk	17.1	-30.3	33.4	43.52	-10.12	0-360	102	V
4	206.559	53.3	Qp	15.5	-30.2	38.6	43.52	-4.92	280	111	H
9	206.499	56.31	Qp	15.5	-30.2	41.61	43.52	-1.91	144	177	V
10	231.6	54.27	Pk	15.9	-30.1	40.07	46.02	-5.95	0-360	199	V
5	231.8	52.57	Pk	15.9	-30.1	38.37	46.02	-7.65	0-360	102	H
11	377.5	42.72	Pk	19.7	-29.3	33.12	46.02	-12.9	0-360	299	V
6	377.9	46.76	Pk	19.7	-29.3	37.16	46.02	-8.86	0-360	102	H

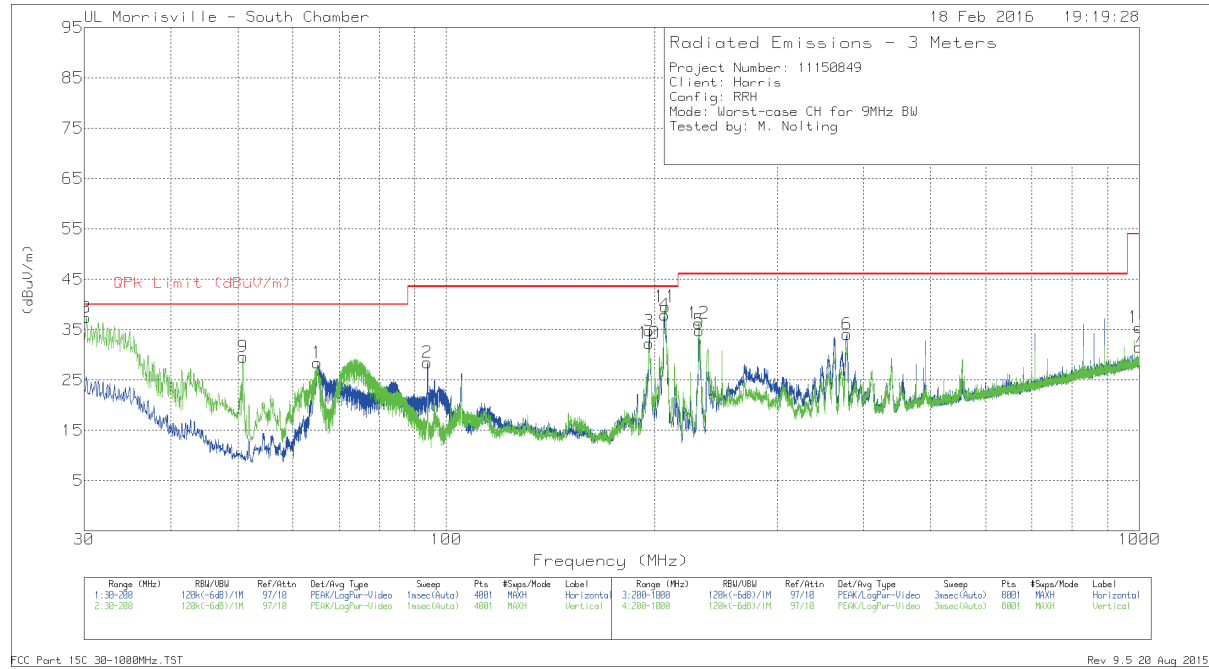
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

10.3.2. WORST-CASE BELOW 1 GHz, 9 MHz MODE

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



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF AT0074 (dB/m)	Port 0 Factors	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7	* 999.9923	30.66	Qp	27.8	-25.7	32.76	53.97	-21.21	116	150	H
13	* 999.9894	34.57	Qp	27.8	-25.7	36.67	53.97	-17.3	328	104	V
8	30.1962	42.65	Qp	26	-31.8	36.85	40	-3.15	306	102	V
9	50.8675	48.8	Pk	12.4	-31.6	29.6	40	-10.4	0-360	102	V
1	65.105	47.54	Pk	12.2	-31.3	28.44	40	-11.56	0-360	399	H
2	93.8988	46.87	Pk	12.6	-31	28.47	43.52	-15.05	0-360	199	H
3	196.0263	48.04	Pk	17	-30.3	34.74	43.52	-8.78	0-360	100	H
10	196.175	45.61	Pk	17	-30.3	32.31	43.52	-11.21	0-360	102	V
4	206.5	52.64	Pk	15.5	-30.2	37.94	43.52	-5.58	0-360	102	H
11	207.2	54.36	Pk	15.4	-30.2	39.56	43.52	-3.96	0-360	199	V
12	231.4	50.39	Pk	15.9	-30	36.29	46.02	-9.73	0-360	199	V
5	231.7	49.03	Pk	15.9	-30.1	34.83	46.02	-11.19	0-360	102	H
6	378.7	43.7	Pk	19.7	-29.3	34.1	46.02	-11.92	0-360	102	H

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

Pk - Peak detector

Qp - Quasi-Peak detector

11. 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 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

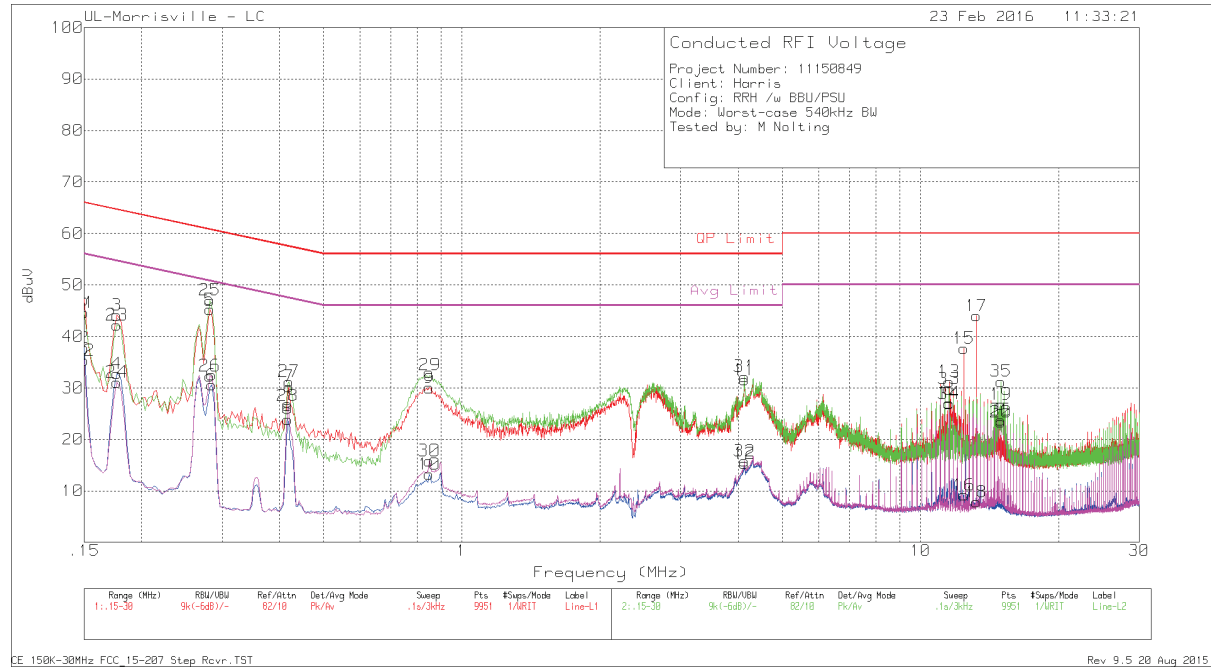
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST-CASE 540 kHz BW

PLOT



TABULAR RESULTS

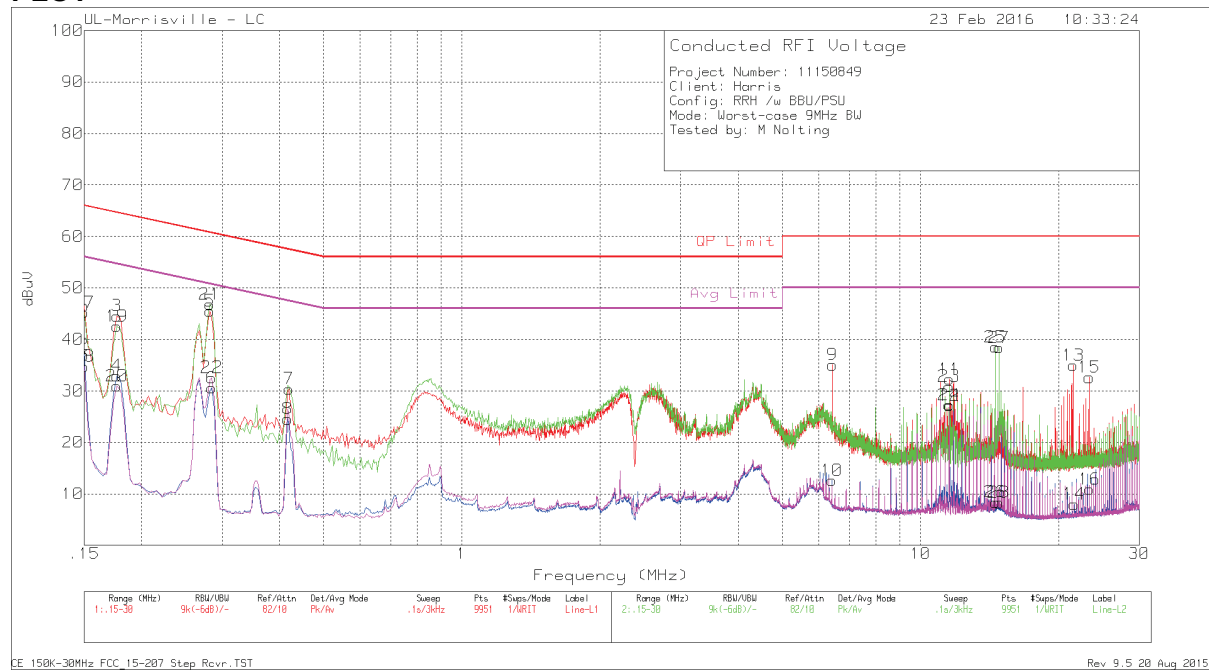
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit	Margin (dB)	Avg Limit	Margin (dB)
1	.15	36.95	Pk	.2	10	47.15	66	-18.85	-	-
2	.15	27.54	Av	.2	10	37.74	-	-	56	-18.26
3	.177	33.89	Pk	.2	10	44.09	64.63	-20.54	-	-
4	.177	22.58	Av	.2	10	32.78	-	-	54.63	-21.85
5	.282	35.15	Pk	.1	10	45.25	60.76	-15.51	-	-
6	.285	20.45	Av	.1	10	30.55	-	-	50.67	-20.12
7	.42	20.26	Pk	0	10	30.26	57.45	-27.19	-	-
8	.417	13.92	Av	0	10	23.92	-	-	47.51	-23.59
9	.849	20.04	Pk	0	10	30.04	56	-25.96	-	-
10	.849	3.2	Av	0	10	13.2	-	-	46	-32.8
11	4.137	21.44	Pk	0	10.1	31.54	56	-24.46	-	-
12	4.134	5.19	Av	0	10.1	15.29	-	-	46	-30.71
13	11.55	20.82	Pk	.1	10.3	31.22	60	-28.78	-	-
14	11.547	16.66	Av	.1	10.3	27.06	-	-	50	-22.94
15	12.432	27.28	Pk	.1	10.3	37.68	60	-22.32	-	-
16	12.453	-1.33	Av	.1	10.4	9.17	-	-	50	-40.83
17	13.236	33.53	Pk	.1	10.4	44.03	60	-15.97	-	-
18	13.236	-2.64	Av	.1	10.4	7.86	-	-	50	-42.14
19	14.985	16.31	Pk	.1	10.4	26.81	60	-33.19	-	-
20	14.985	12.88	Av	.1	10.4	23.38	-	-	50	-26.62
21	.15	34.23	Pk	.4	10	44.63	66	-21.37	-	-
22	.15	24.93	Av	.4	10	35.33	-	-	56	-20.67
23	.177	31.9	Pk	.3	10	42.2	64.63	-22.43	-	-
24	.177	20.79	Av	.3	10	31.09	-	-	54.63	-23.54
25	.282	36.91	Pk	.1	10	47.01	60.76	-13.75	-	-
26	.282	22.23	Av	.1	10	32.33	-	-	50.76	-18.43
27	.42	21.14	Pk	.1	10	31.24	57.45	-26.21	-	-
28	.417	16.42	Av	.1	10	26.52	-	-	47.51	-20.99
29	.852	22.48	Pk	0	10	32.48	56	-23.52	-	-
30	.849	5.84	Av	0	10	15.84	-	-	46	-30.16
31	4.137	22.01	Pk	.1	10.1	32.21	56	-23.79	-	-
32	4.134	5.6	Av	.1	10.1	15.8	-	-	46	-30.2
33	11.544	19.4	Pk	.1	10.3	29.8	60	-30.2	-	-
34	11.544	16.51	Av	.1	10.3	26.91	-	-	50	-23.09
35	14.982	20.75	Pk	.1	10.4	31.25	60	-28.75	-	-
36	14.982	13.26	Av	.1	10.4	23.76	-	-	50	-26.24

Pk - Peak detector

Av - Average detection

WORST-CASE 9 MHz BW

PLOT



TABULAR RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit	Margin (dB)	Avg Limit	Margin (dB)
1	.15	36.33	Pk	.2	10	46.53	66	-19.47	-	-
2	.15	26.81	Av	.2	10	37.01	-	-	56	-18.99
3	.177	34.37	Pk	.2	10	44.57	64.63	-20.06	-	-
4	.177	22.72	Av	.2	10	32.92	-	-	54.63	-21.71
5	.282	35.43	Pk	.1	10	45.53	60.76	-15.23	-	-
6	.285	20.48	Av	.1	10	30.58	-	-	50.67	-20.09
7	.42	20.4	Pk	0	10	30.4	57.45	-27.05	-	-
8	.417	14.55	Av	0	10	24.55	-	-	47.51	-22.96
9	6.435	24.76	Pk	.1	10.2	35.06	60	-24.94	-	-
10	6.408	2.31	Av	.1	10.2	12.61	-	-	50	-37.39
11	11.559	21.87	Pk	.1	10.3	32.27	60	-27.73	-	-
12	11.559	16.74	Av	.1	10.3	27.14	-	-	50	-22.86
13	21.549	24.15	Pk	.2	10.6	34.95	60	-25.05	-	-
14	21.633	-2.79	Av	.2	10.6	8.01	-	-	50	-41.99
15	23.34	21.81	Pk	.2	10.6	32.61	60	-27.39	-	-
16	23.352	.12	Av	.2	10.6	10.92	-	-	50	-39.08
17	.15	34.84	Pk	.4	10	45.24	66	-20.76	-	-
18	.15	24.35	Av	.4	10	34.75	-	-	56	-21.25
19	.177	32.25	Pk	.3	10	42.55	64.63	-22.08	-	-
20	.177	20.65	Av	.3	10	30.95	-	-	54.63	-23.68
21	.282	36.72	Pk	.1	10	46.82	60.76	-13.94	-	-
22	.285	22.47	Av	.1	10	32.57	-	-	50.67	-18.1
23	11.55	20.47	Pk	.1	10.3	30.87	60	-29.13	-	-
24	11.55	16.86	Av	.1	10.3	27.26	-	-	50	-22.74
25	14.565	27.99	Pk	.1	10.4	38.49	60	-21.51	-	-
26	14.565	-2.09	Av	.1	10.4	8.41	-	-	50	-41.59
27	14.829	27.89	Pk	.1	10.4	38.39	60	-21.61	-	-
28	14.826	-2.2	Av	.1	10.4	8.3	-	-	50	-41.7

Pk - Peak detector

Av - Average detection