

## 10. RADIATED TEST RESULTS

### 10.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

#### TEST PROCEDURE

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

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

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

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

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

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

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

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.

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

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

NOTE: The limits in FCC 47 CFR, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance of 377 Ohms. For example, the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to  $Y - 51.5 = Z$  dBuA/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

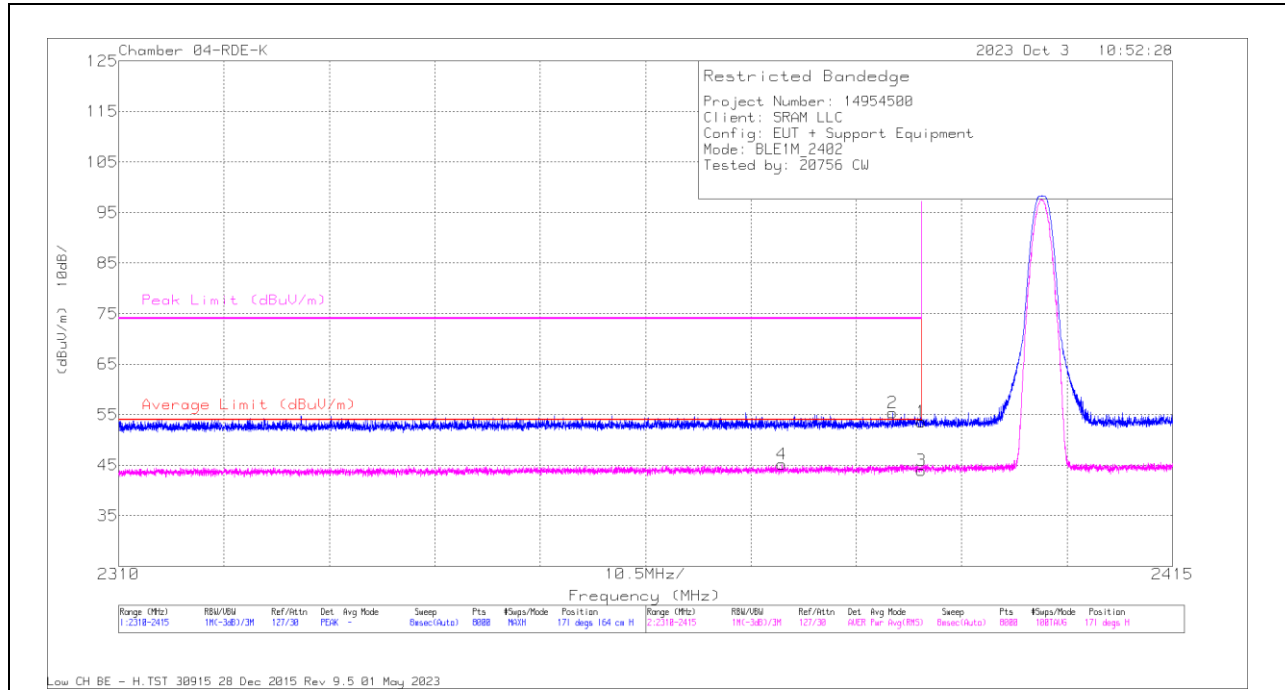
## 10.2. TRANSMITTER ABOVE 1 GHz

### 10.2.1. QUALCOMM RADIO

**BLE (1Mbps):**

**BANDEDGE (LOW CHANNEL)**

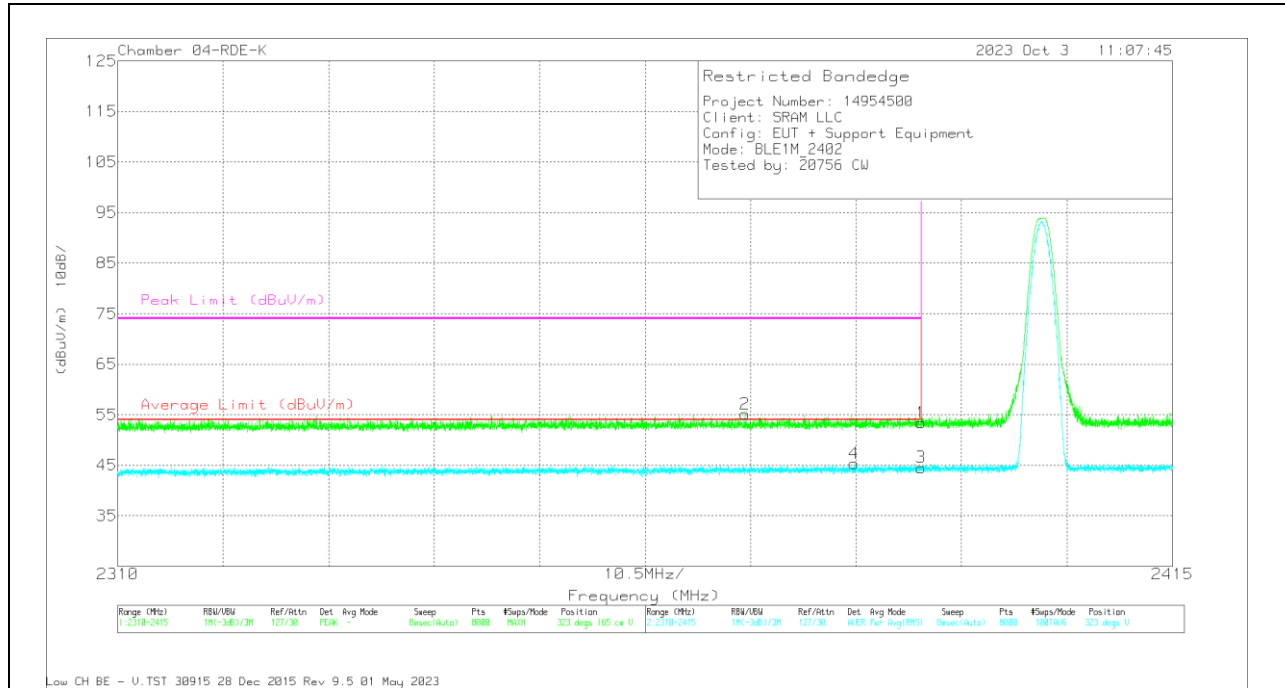
### HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.28	PK	31.8	-34.5	0	53.58	-	-	74	-20.42	171	164	H
2	* 2387.082	58.05	PK	31.8	-34.5	0	55.35	-	-	74	-18.65	171	164	H
3	* 2390	44.67	RMS	31.8	-34.5	2.06	44.03	54	-9.97	-	-	171	164	H
4	* 2376.094	46.06	RMS	31.7	-34.6	2.06	45.22	54	-8.78	-	-	171	164	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT

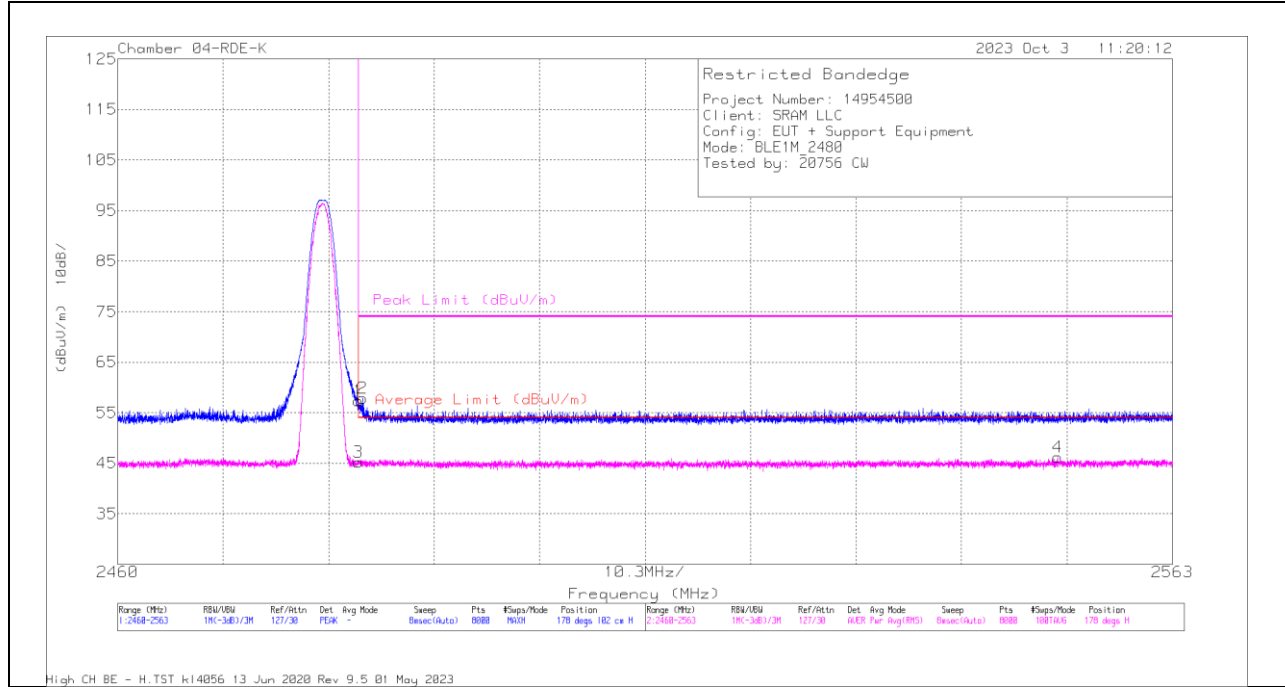


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cb/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.13	PK	31.8	-34.5	0	53.43	-	-	74	-20.57	323	165	V
2	* 2372.445	58.01	PK	31.7	-34.6	0	55.11	-	-	74	-18.89	323	165	V
3	* 2390	45.19	RMS	31.8	-34.5	2.06	44.55	54	-9.45	-	-	323	165	V
4	* 2383.327	45.99	RMS	31.8	-34.5	2.06	45.35	54	-8.65	-	-	323	165	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK - Peak detector  
 RMS - RMS detection

**BANDEDGE (HIGH CHANNEL)**

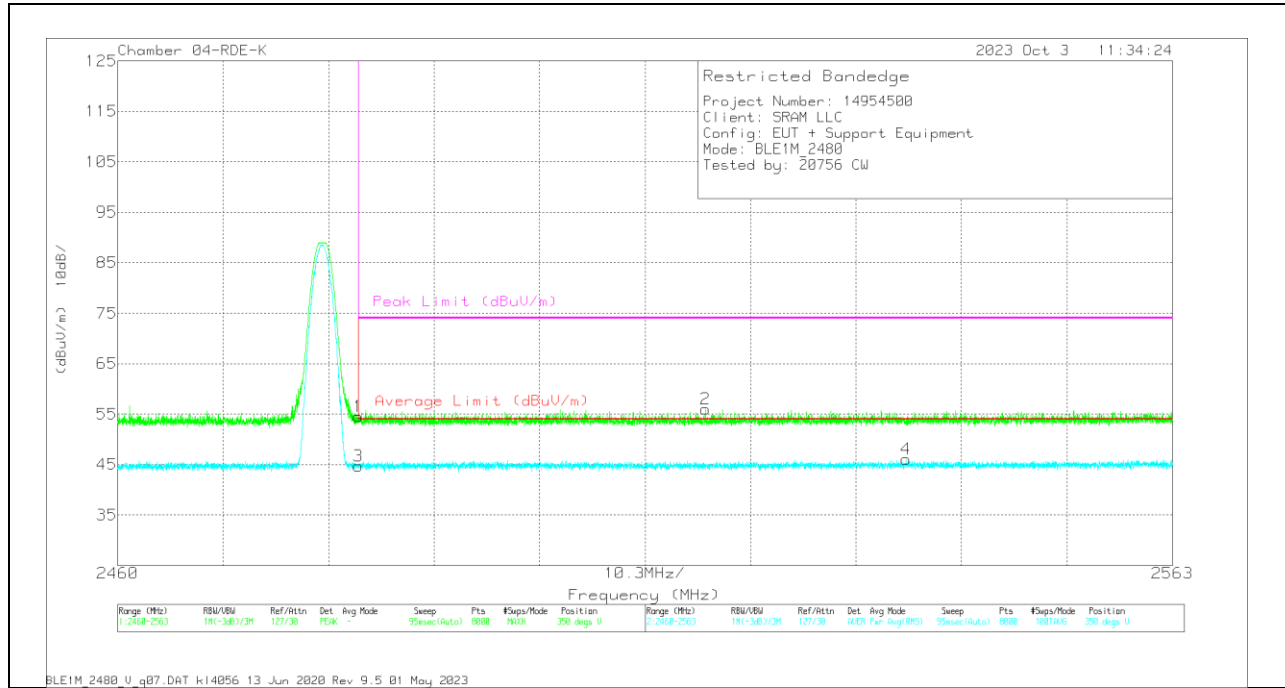
**HORIZONTAL RESULT**



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	59.32	Pk	32.2	-34.1	0	57.42	-	-	74	-16.58	178	102	H
2	* 2483.925	59.71	PK	32.2	-34.1	0	57.81	-	-	74	-16.19	178	102	H
3	* 2483.5	45.07	RMS	32.2	-34.1	2.06	45.23	54	-8.77	-	-	178	102	H
4	2551.774	45.83	RMS	32.2	-33.9	2.06	46.19	54	-7.81	-	-	178	102	H

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

### VERTICAL RESULT

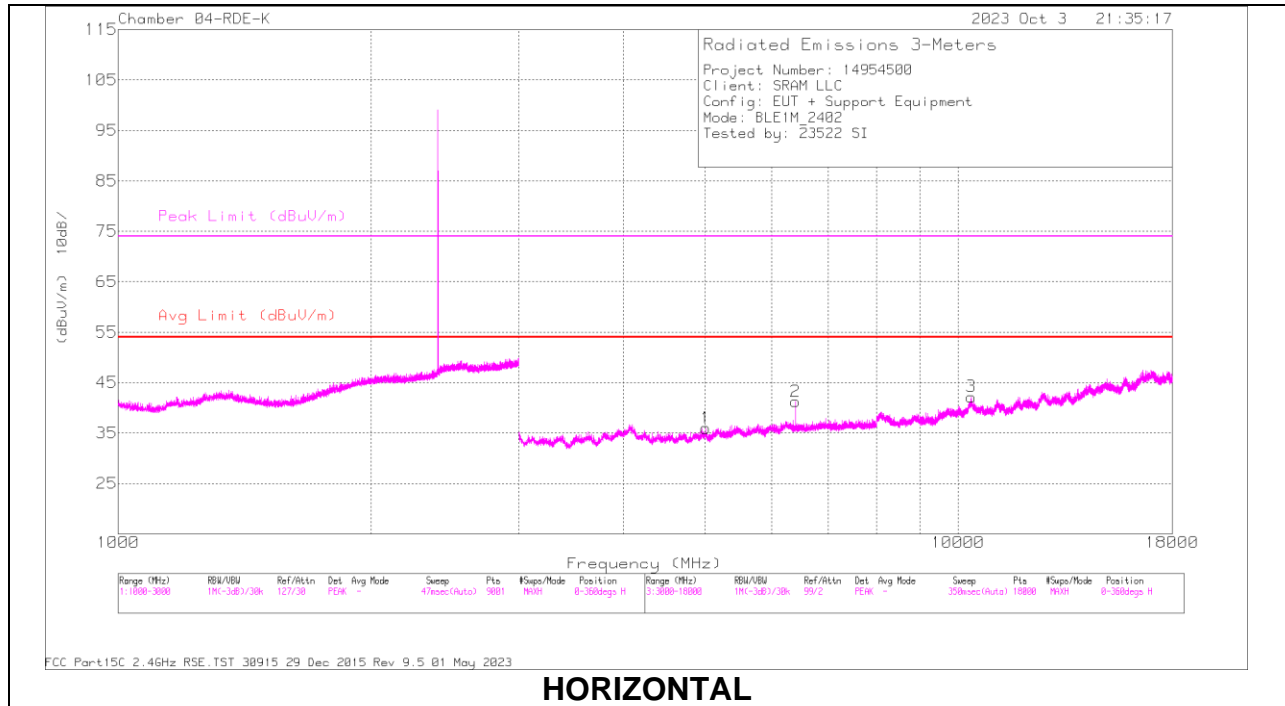


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	56.45	PK	32.2	-34.1	0	54.55	-	-	74	-19.45	350	169	V
2	2517.406	57.84	PK	32.2	-34	0	56.04	-	-	74	-17.96	350	169	V
3	* 2483.5	44.55	RMS	32.2	-34.1	2.06	44.71	54	-9.29	-	-	350	169	V
4	2537.004	45.69	RMS	32.2	-33.9	2.06	46.05	54	-7.95	-	-	350	169	V

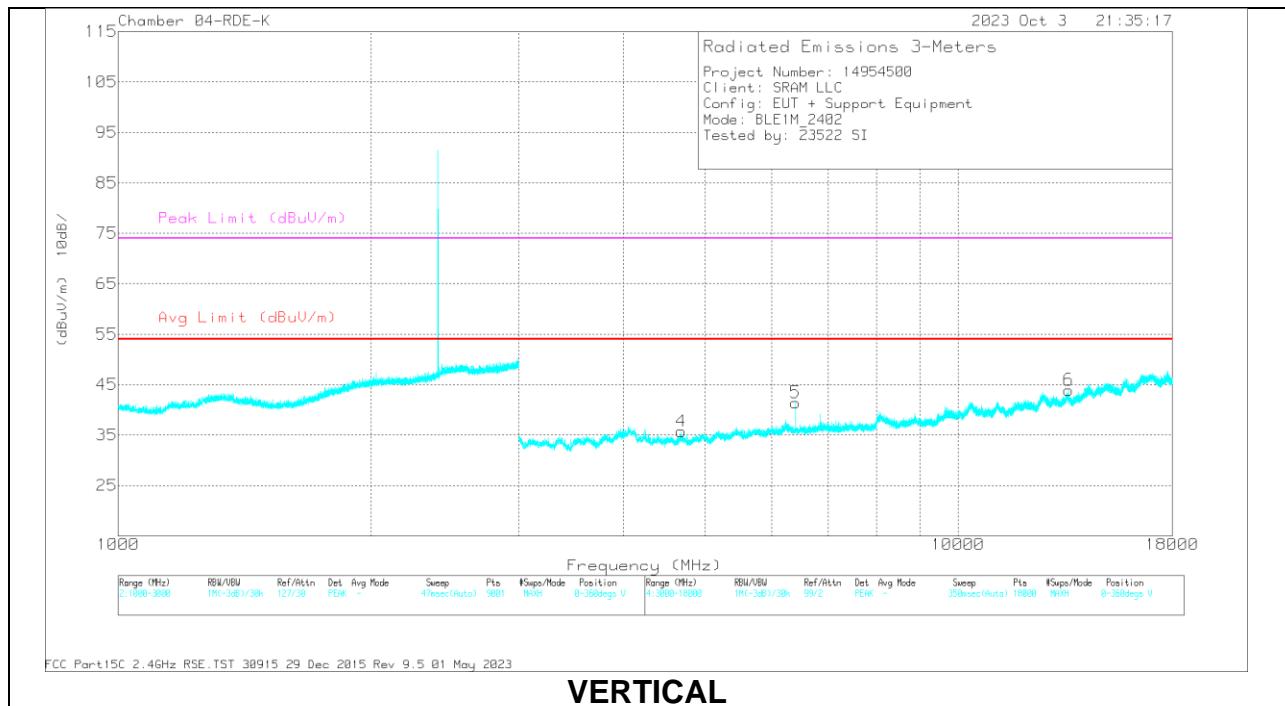
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

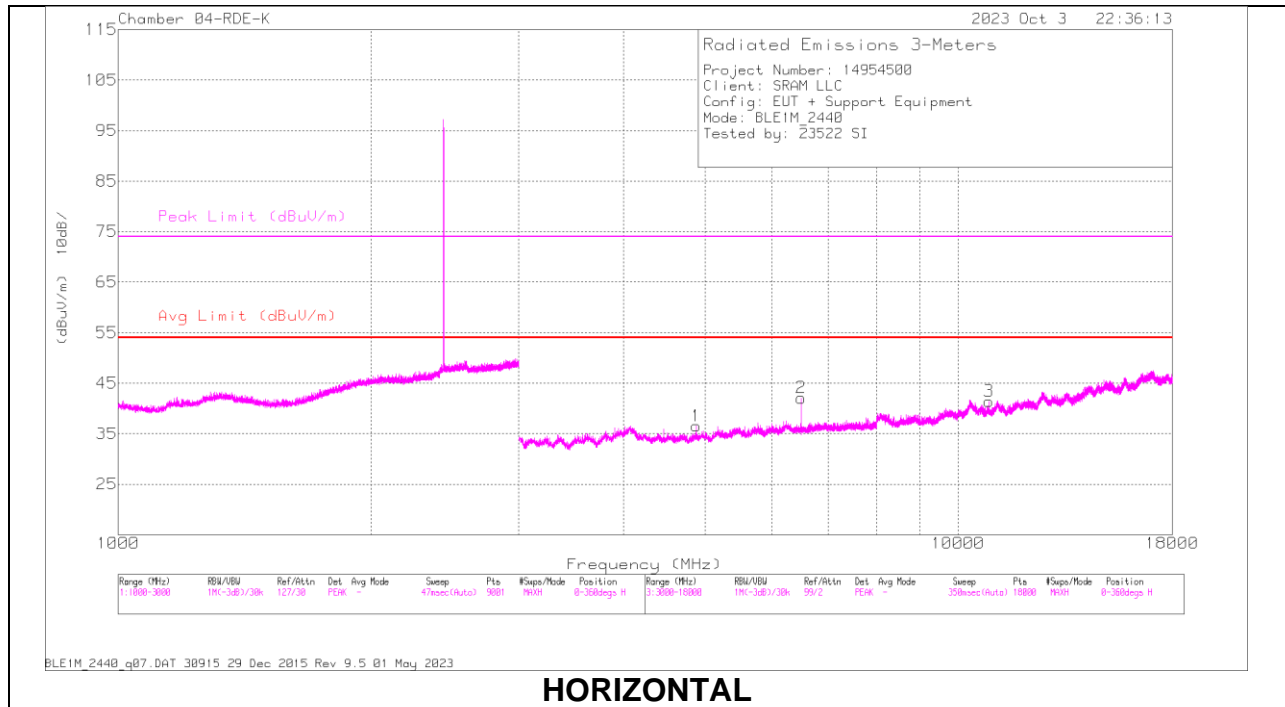
**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5005.394	51.47	PK2	33.8	-39.6	0	45.67	-	-	74	-28.33	80	193	H
	* 5005.754	39.58	MAv1	33.8	-39.6	2.06	35.84	54	-18.16	-	-	80	193	H
2	6405.266	51.79	PK2	35.4	-38.4	0	48.79	-	-	-	-	158	130	H
	6405.44	43.77	MAv1	35.4	-38.4	2.06	42.83	-	-	-	-	158	130	H
3	10372.671	49.96	PK2	37.7	-35.4	0	52.26	-	-	-	-	11	201	H
	10373.139	37.47	MAv1	37.7	-35.4	2.06	41.83	-	-	-	-	11	201	H
4	* 4680.466	52.4	PK2	33.8	-40.6	0	45.6	-	-	74	-28.4	177	282	V
	* 4679.657	40.54	MAv1	33.8	-40.6	2.06	35.8	54	-18.2	-	-	177	282	V
5	6405.288	52.37	PK2	35.4	-38.4	0	49.37	-	-	-	-	191	156	V
	6405.293	43.56	MAv1	35.4	-38.4	2.06	42.62	-	-	-	-	191	156	V
6	13544.343	46.97	PK2	38.9	-33.7	0	52.17	-	-	-	-	21	241	V
	13541.278	35.28	MAv1	38.9	-33.7	2.06	42.54	-	-	-	-	21	241	V

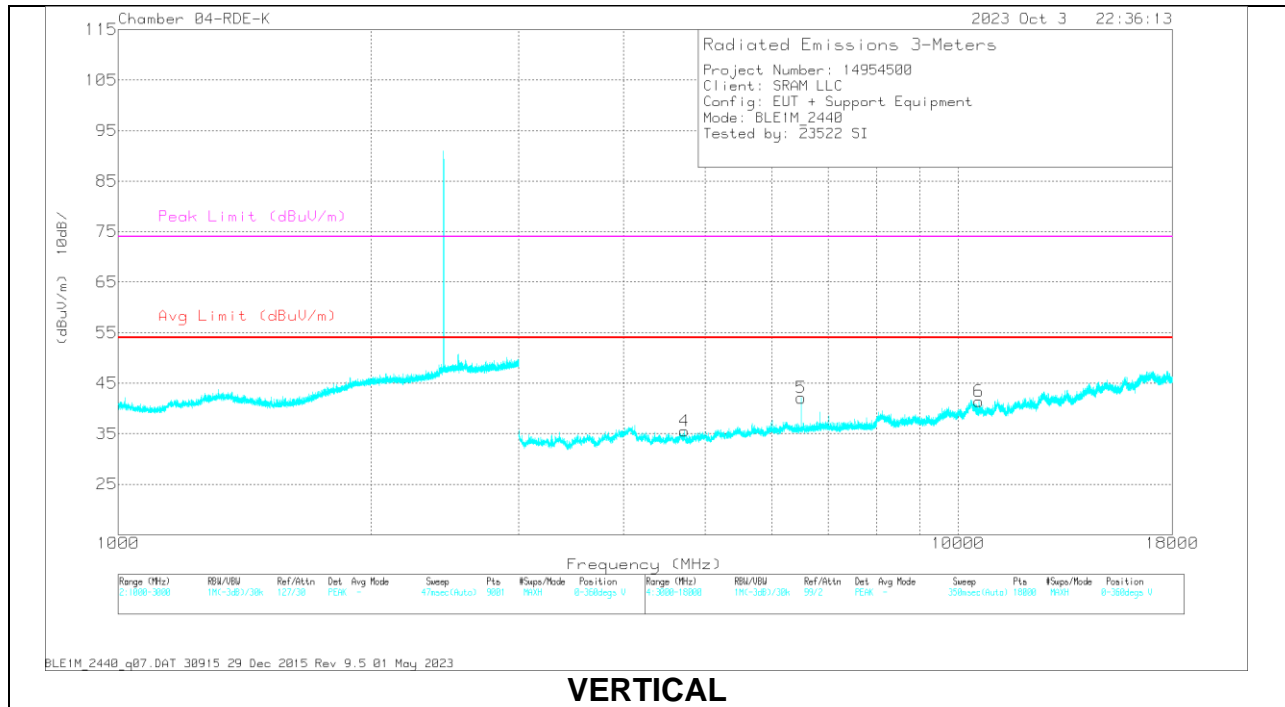
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average



### MID CHANNEL RESULTS



**HORIZONTAL**



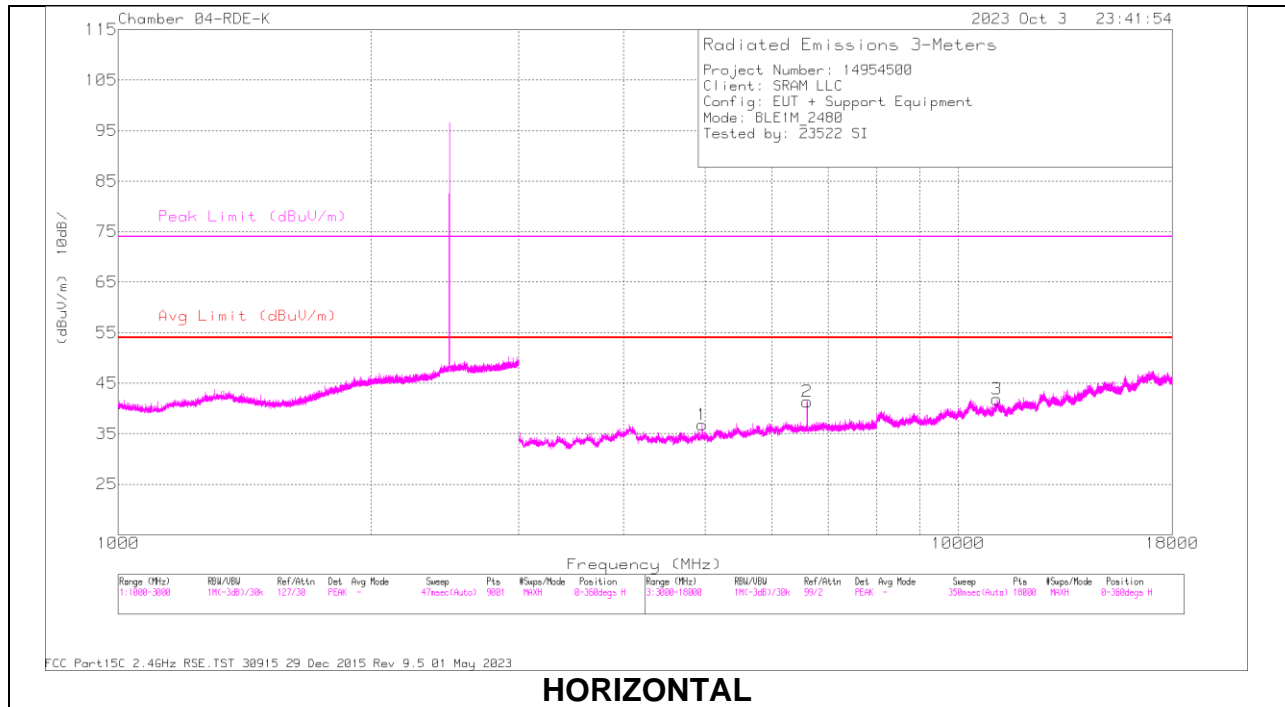
**VERTICAL**

**RADIATED EMISSIONS**

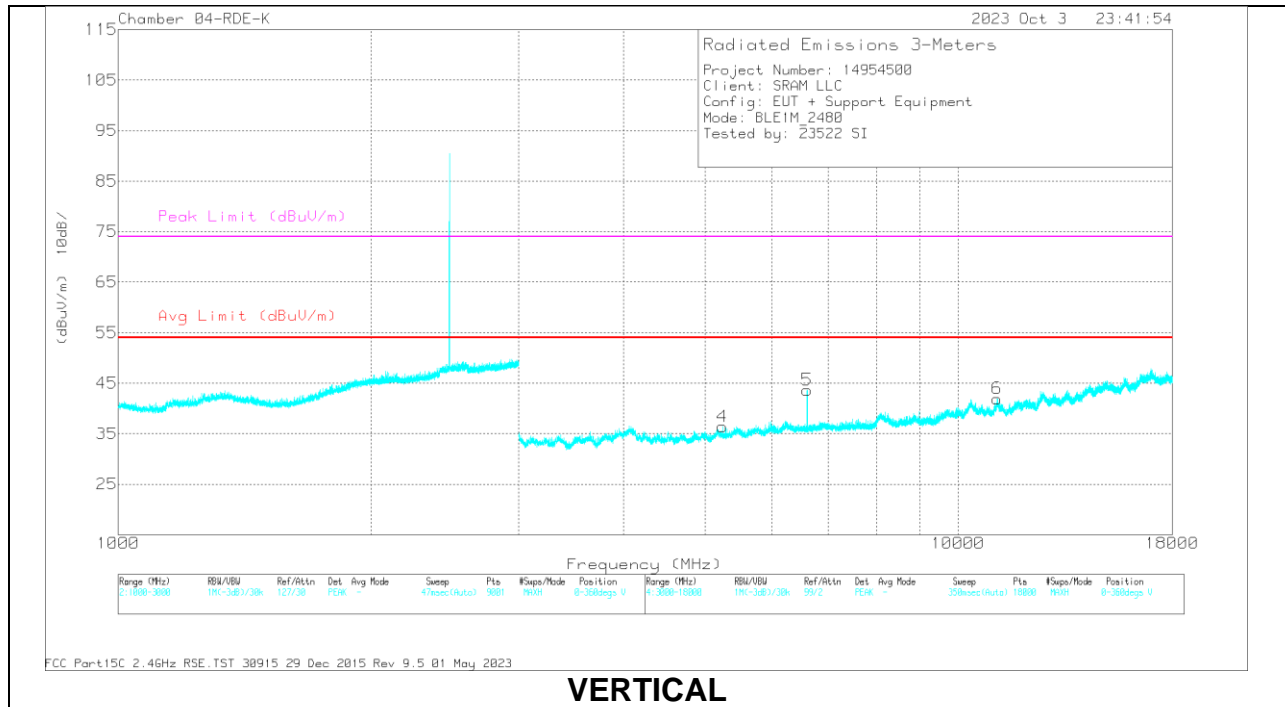
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4879.547	53.47	PK2	33.7	-39.9	0	47.27	-	-	74	-26.73	327	103	H
	* 4880.087	41.54	MAv1	33.7	-39.9	2.06	37.4	54	-16.6	-	-	327	103	H
2	6506.401	51.56	PK2	35.5	-38	0	49.06	-	-	-	-	161	104	H
	6506.551	43.31	MAv1	35.5	-38.1	2.06	42.74	-	-	-	-	161	104	H
3	* 10890.706	49.22	PK2	38	-35.8	0	51.42	-	-	74	-22.58	120	380	H
	* 10891.56	36.41	MAv1	38	-35.7	2.06	40.77	54	-13.23	-	-	120	380	H
4	* 4722.033	51.47	PK2	33.7	-40.5	0	44.67	-	-	74	-29.33	111	153	V
	* 4722.147	40.09	MAv1	33.7	-40.5	2.06	35.35	54	-18.65	-	-	111	153	V
5	6506.734	52.11	PK2	35.5	-38.1	0	49.51	-	-	-	-	6	135	V
	6506.671	43.74	MAv1	35.5	-38.1	2.06	43.20	-	-	-	-	6	135	V
6	10596.652	48.15	PK2	37.9	-36	0	50.05	-	-	-	-	145	123	V
	10595.959	36.73	MAv1	37.9	-36	2.06	40.69	-	-	-	-	145	123	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4959.227	53.39	PK2	33.7	-39.9	0	-47.19	-	-	74	-26.81	309	127	H
	* 4960.021	42.51	MAv1	33.7	-39.8	2.06	38.47	54	-15.53	-	-	309	127	H
2	6613.452	51.63	PK2	35.5	-38.2	0	48.93	-	-	-	-	163	103	H
	6613.379	42.78	MAv1	35.5	-38.2	2.06	42.14	-	-	-	-	163	103	H
3	* 11125.28	49.13	PK2	38	-35.4	0	51.73	-	-	74	-22.27	103	301	H
	* 11124.688	37.15	MAv1	38	-35.4	2.06	41.81	54	-12.19	-	-	103	301	H
4	5242.436	50.57	PK2	34.3	-39.5	0	45.37	-	-	-	-	341	306	V
	5244.477	39.17	MAv1	34.3	-39.5	2.06	36.03	-	-	-	-	341	306	V
5	6613.376	51.96	PK2	35.5	-38.2	0	49.26	-	-	-	-	8	124	V
	6613.233	44.02	MAv1	35.5	-38.2	2.06	43.38	-	-	-	-	8	124	V
6	* 11136.394	48.9	PK2	38	-35.2	0	51.7	-	-	74	-22.3	311	311	V
	* 11136.477	37.18	MAv1	38	-35.2	2.06	42.04	54	-11.96	-	-	311	311	V

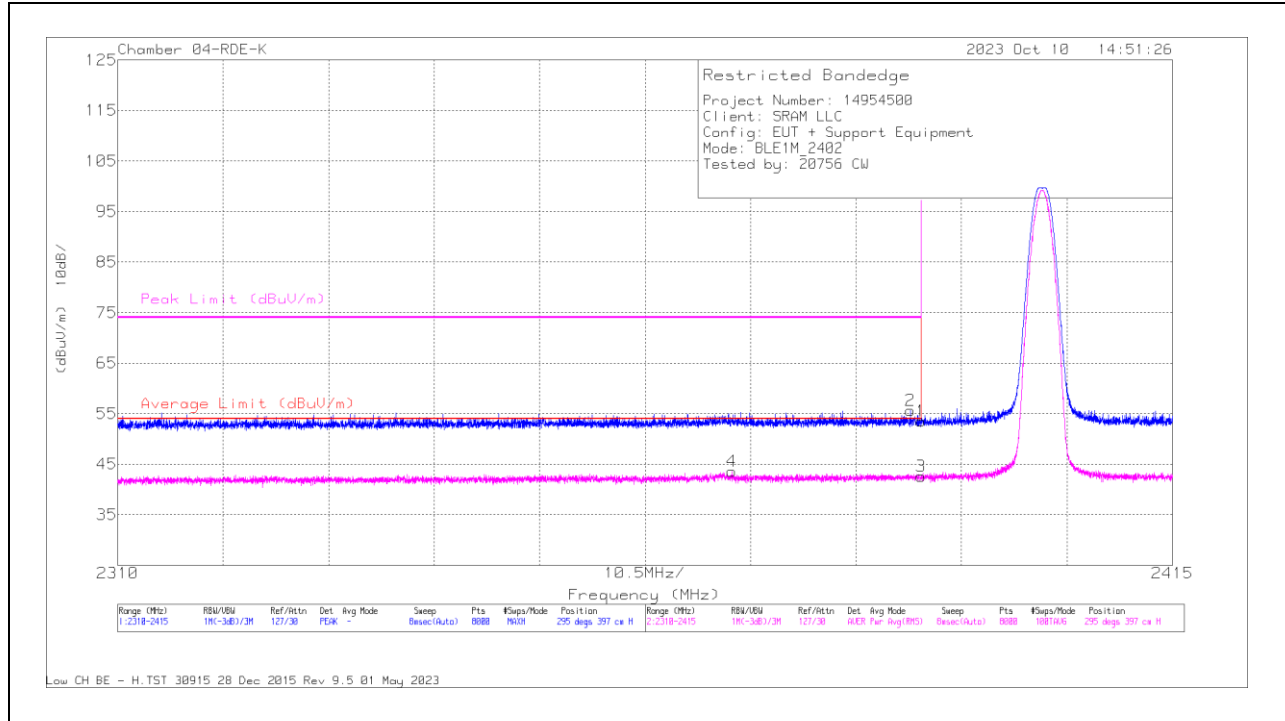
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

### 10.2.2. LEFT NORDIC RADIO:

#### BLE (1Mbps):

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



#### Trace Markers

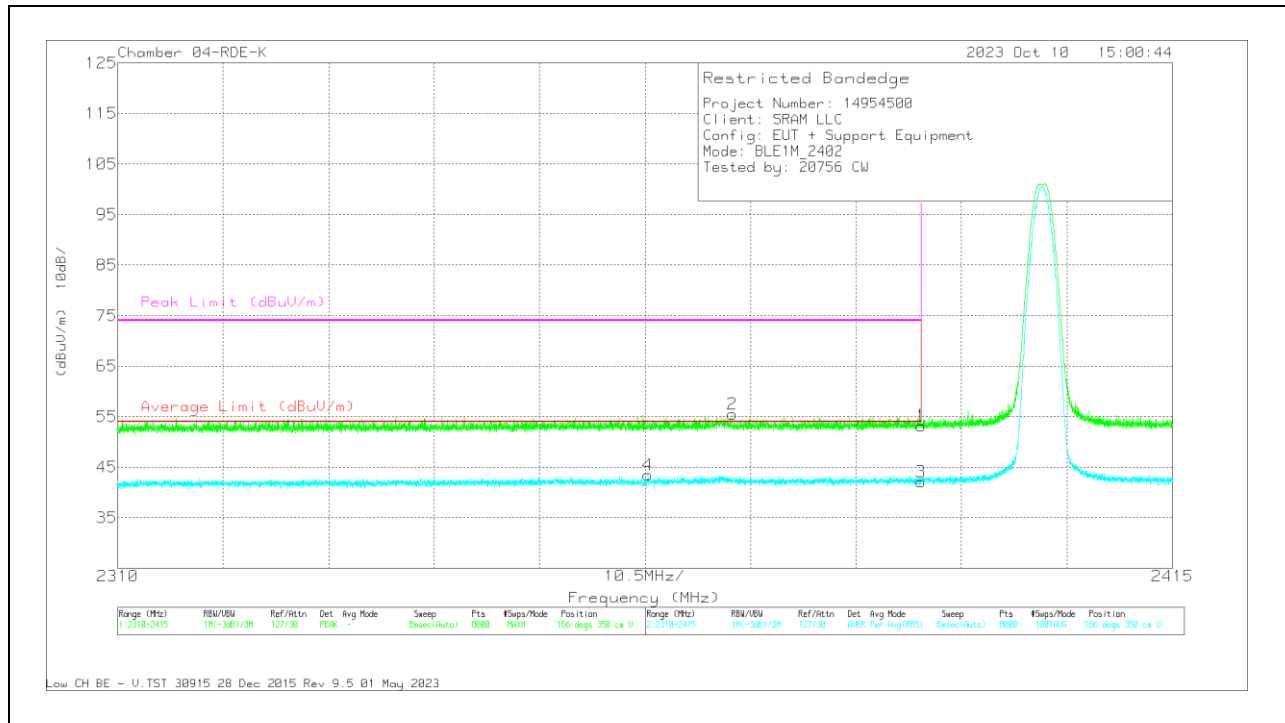
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.17	Pk	31.8	-34.5	53.47	-	-	74	-20.53	295	397	H
2	* 2388.92	58.28	Pk	31.8	-34.5	55.58	-	-	74	-18.42	295	397	H
3	* 2390	45.33	RMS	31.8	-34.5	42.63	54	-11.37	-	-	295	397	H
4	* 2371.119	46.48	RMS	31.7	-34.6	43.58	54	-10.42	-	-	295	397	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	55.9	Pk	31.8	-34.5	53.2	-	-	74	-20.8	166	350	V
2	* 2371.185	58.45	Pk	31.7	-34.6	55.55	-	-	74	-18.45	166	350	V
3	* 2390	44.78	RMS	31.8	-34.5	42.08	54	-11.92	-	-	166	350	V
4	* 2362.797	46.42	RMS	31.7	-34.7	43.42	54	-10.58	-	-	166	350	V

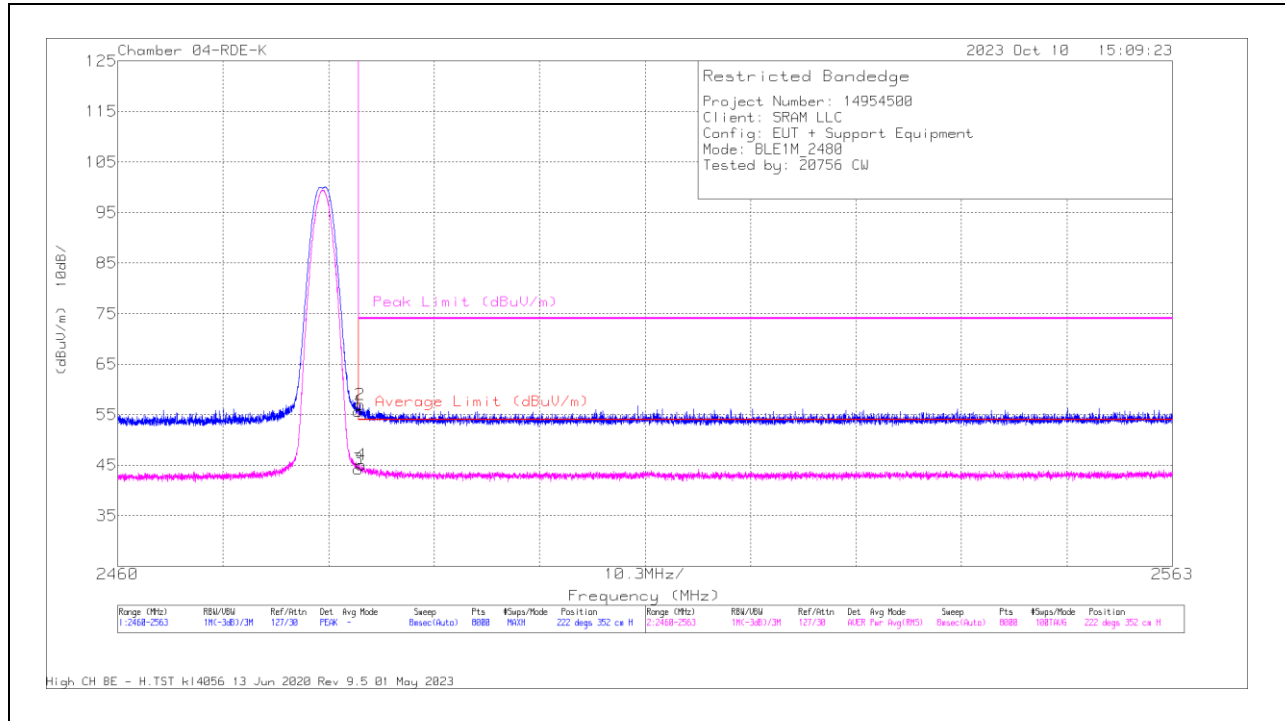
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**

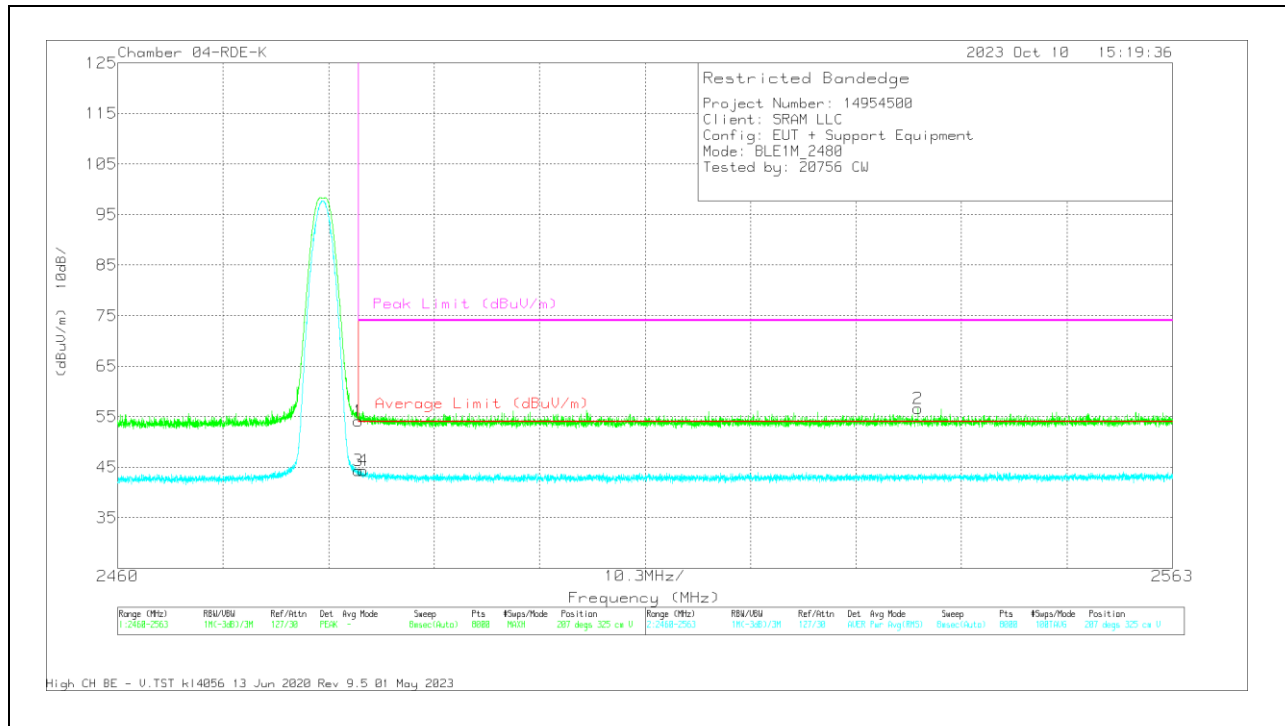


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	57.53	Pk	32.2	-34.1	55.63	-	-	74	-18.37	222	352	H
2	* 2483.681	58.93	Pk	32.2	-34.1	57.03	-	-	74	-16.97	222	352	H
3	* 2483.5	46.11	RMS	32.2	-34.1	44.21	54	-9.79	-	-	222	352	H
4	* 2483.81	46.95	RMS	32.2	-34.1	45.05	54	-8.95	-	-	222	352	H

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

### VERTICAL RESULT



### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	56.07	Pk	32.2	-34.1	54.17	-	-	74	-19.83	207	325	V
2	2538.151	58.29	Pk	32.2	-33.9	56.59	-	-	74	-17.41	207	325	V
3	* 2483.5	46.23	RMS	32.2	-34.1	44.33	54	-9.67	-	-	207	325	V
4	* 2483.99	46.28	RMS	32.2	-34.1	44.38	54	-9.62	-	-	207	325	V

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

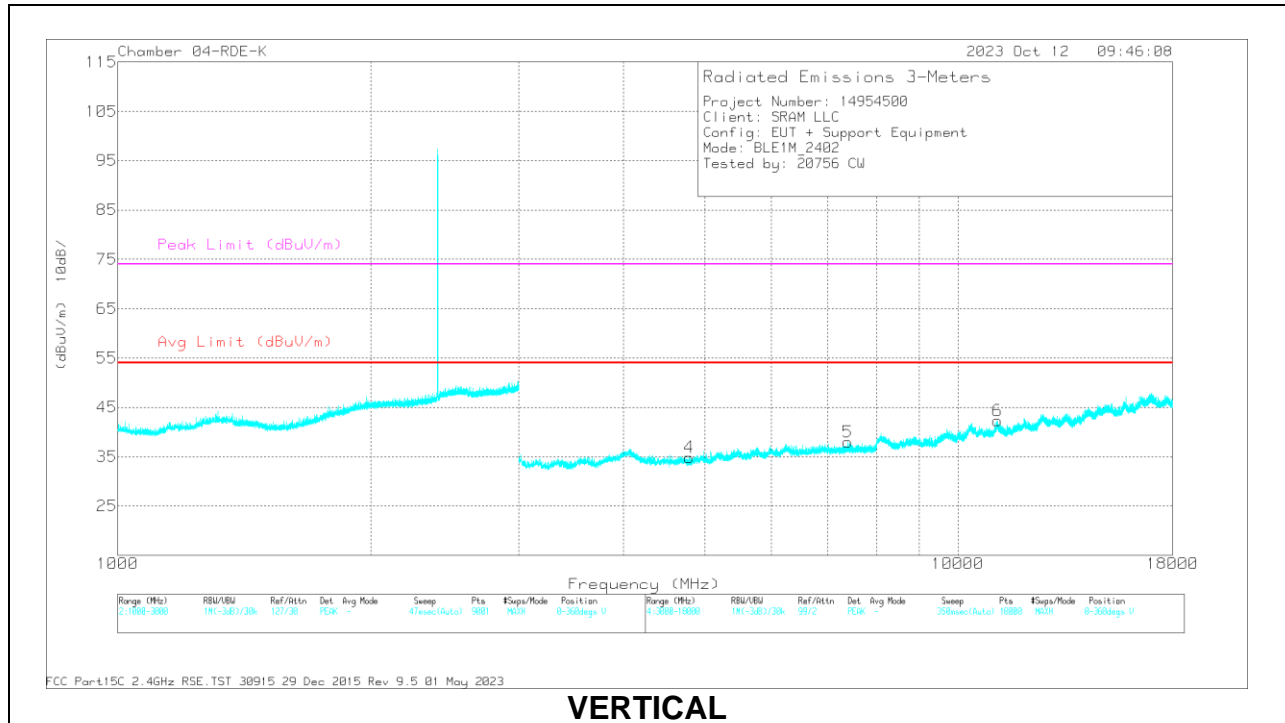
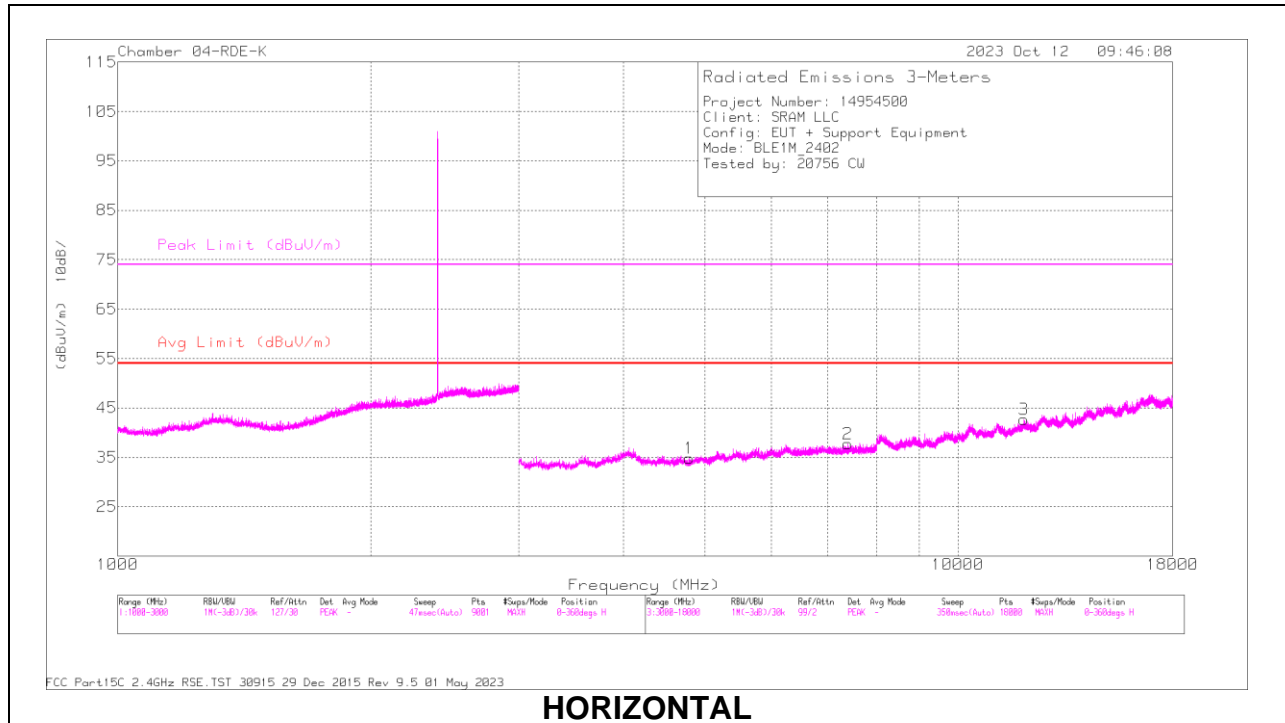
Pk - Peak detector

RMS - RMS detection



# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**RADIATED EMISSIONS**

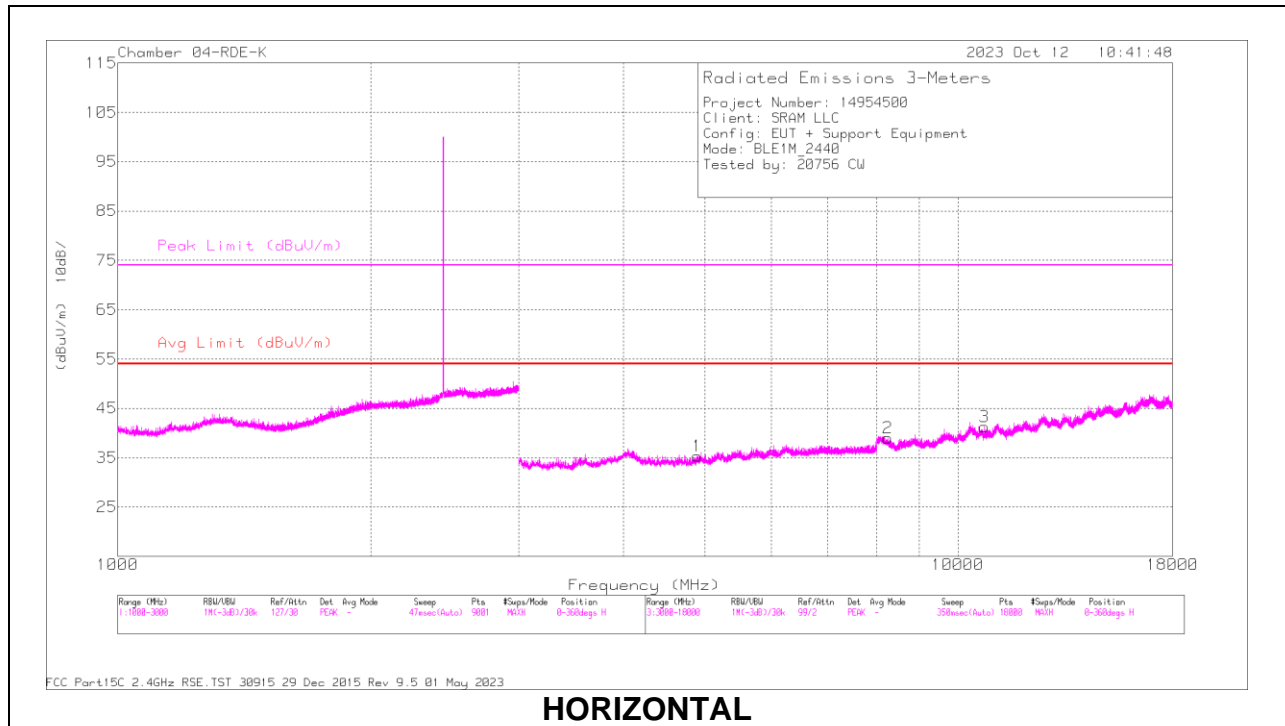
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4788.045	50.9	PK2	33.7	-40	44.6	-	-	74	-29.4	38	105	H
	* 4789.194	39.47	MAv1	33.7	-40	33.17	54	-20.83	-	-	38	105	H
2	* 7400.833	48.84	PK2	35.7	-37.2	47.34	-	-	74	-26.66	350	101	H
	* 7400.429	37.11	MAv1	35.7	-37.2	35.61	54	-18.39	-	-	350	101	H
3	* 11985.713	47.58	PK2	38.6	-34	52.18	-	-	74	-21.82	3	261	H
	* 11987.801	35.52	MAv1	38.6	-33.9	40.22	54	-13.78	-	-	3	261	H
4	* 4782.894	51.18	PK2	33.7	-40.1	44.78	-	-	74	-29.22	268	108	V
	* 4784.019	39.27	MAv1	33.7	-40.2	32.77	54	-21.23	-	-	268	108	V
5	* 7401.053	48.92	PK2	35.7	-37.2	47.42	-	-	74	-26.58	15	178	V
	* 7400.454	37.06	MAv1	35.7	-37.2	35.56	54	-18.44	-	-	15	178	V
6	* 11140.457	49.45	PK2	38	-35.2	52.25	-	-	74	-21.75	42	126	V
	* 11142.232	37.13	MAv1	38	-35.1	40.03	54	-13.97	-	-	42	126	V

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

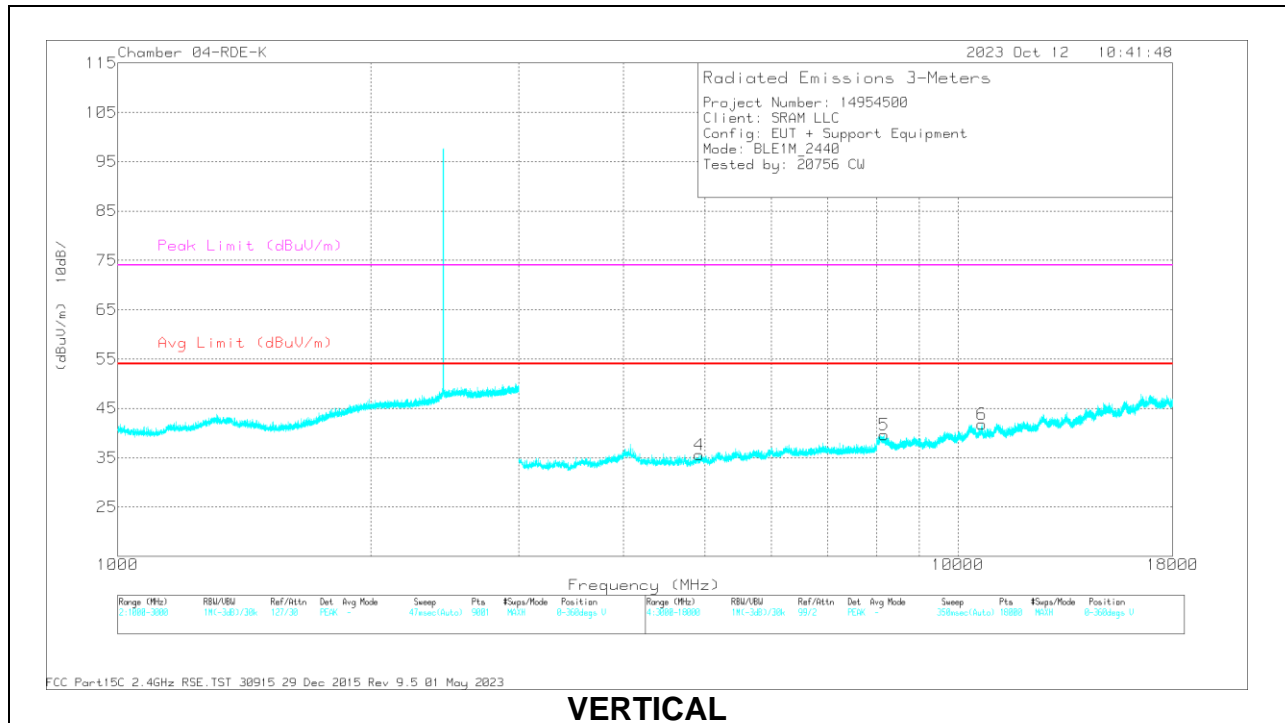
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### MID CHANNEL RESULTS



**HORIZONTAL**



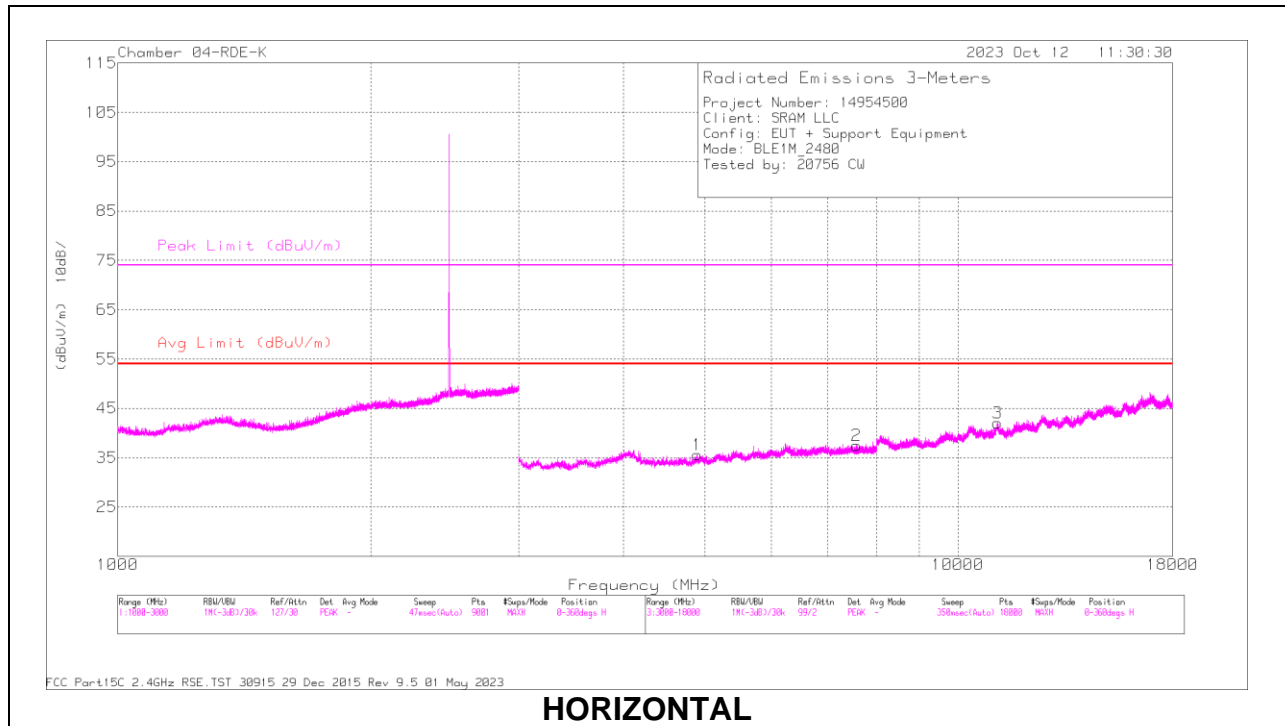
**VERTICAL**

**RADIATED EMISSIONS**

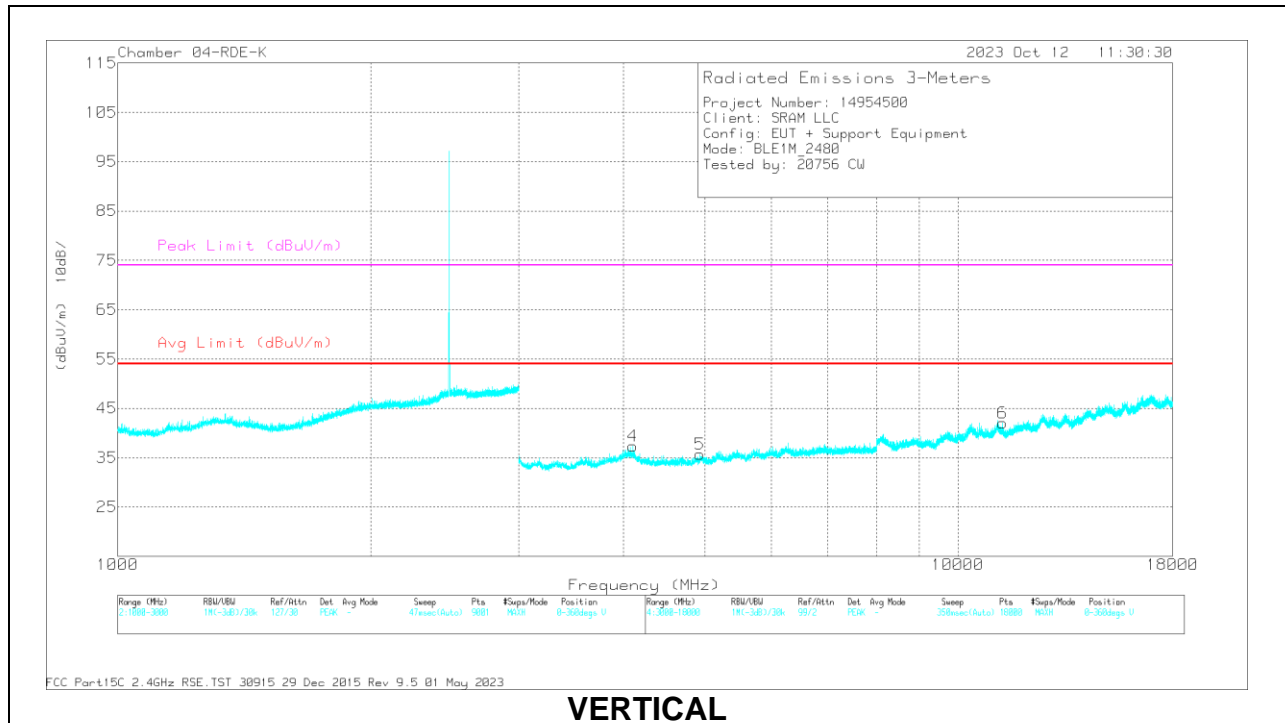
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4896.33	51.89	PK2	33.7	-40	45.59	-	-	74	-28.41	354	385	H
	* 4896.846	40.11	MAv1	33.7	-40	33.81	54	-20.19	-	-	354	385	H
2	* 8259.247	48.97	PK2	35.9	-36.8	48.07	-	-	74	-25.93	43	123	H
	* 8258.543	37.52	MAv1	35.9	-36.8	36.62	54	-17.38	-	-	43	123	H
3	* 10756.964	48.21	PK2	37.9	-35.8	50.31	-	-	74	-23.69	143	225	H
	* 10756.375	36.46	MAv1	37.9	-35.8	38.56	54	-15.44	-	-	143	225	H
4	* 4924.017	51.74	PK2	33.7	-40	45.44	-	-	74	-28.56	283	279	V
	* 4920.343	39.89	MAv1	33.7	-39.9	33.69	54	-20.31	-	-	283	279	V
5	* 8166.263	49.97	PK2	35.9	-36.9	48.97	-	-	74	-25.03	20	353	V
	* 8167.978	38.28	MAv1	35.9	-36.9	37.28	54	-16.72	-	-	20	353	V
6	* 10676.876	48.04	PK2	37.9	-35.4	50.54	-	-	74	-23.46	10	119	V
	* 10678.559	36.45	MAv1	37.9	-35.4	38.95	54	-15.05	-	-	10	119	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4892.569	51.74	PK2	33.7	-40	45.44	-	-	74	-28.56	152	396	H
	* 4892.887	40.23	MAv1	33.7	-40	33.93	54	-20.07	-	-	152	396	H
2	* 7568.479	49.17	PK2	35.7	-37.2	47.67	-	-	74	-26.33	183	193	H
	* 7565.44	37.06	MAv1	35.7	-37.2	35.56	54	-18.44	-	-	183	193	H
3	* 11152.881	49.11	PK2	38	-35.2	51.91	-	-	74	-22.09	175	259	H
	* 11150.69	37.52	MAv1	38	-35.2	40.32	54	-13.68	-	-	175	259	H
4	* 4101.267	52.48	PK2	35	-41.2	46.28	-	-	74	-27.72	343	203	V
	* 4102.658	40.78	MAv1	35	-41.1	34.68	54	-19.32	-	-	343	203	V
5	* 4929.028	51.21	PK2	33.7	-39.9	45.01	-	-	74	-28.99	327	260	V
	* 4927.321	39.87	MAv1	33.7	-40	33.57	54	-20.43	-	-	327	260	V
6	* 11310.224	48.69	PK2	37.8	-35.3	51.19	-	-	74	-22.81	339	391	V
	* 11311.598	37.14	MAv1	37.8	-35.5	39.44	54	-14.56	-	-	339	391	V

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

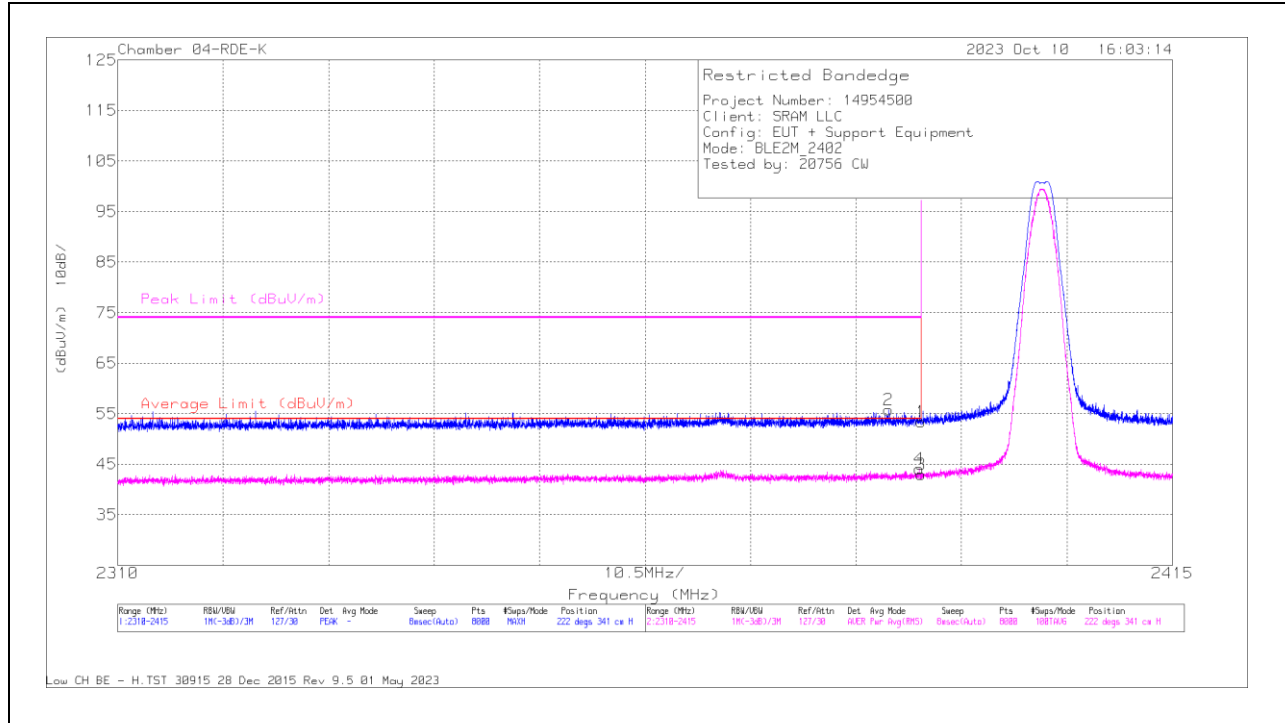
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

**BLE (2Mbps):**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



**Trace Markers**

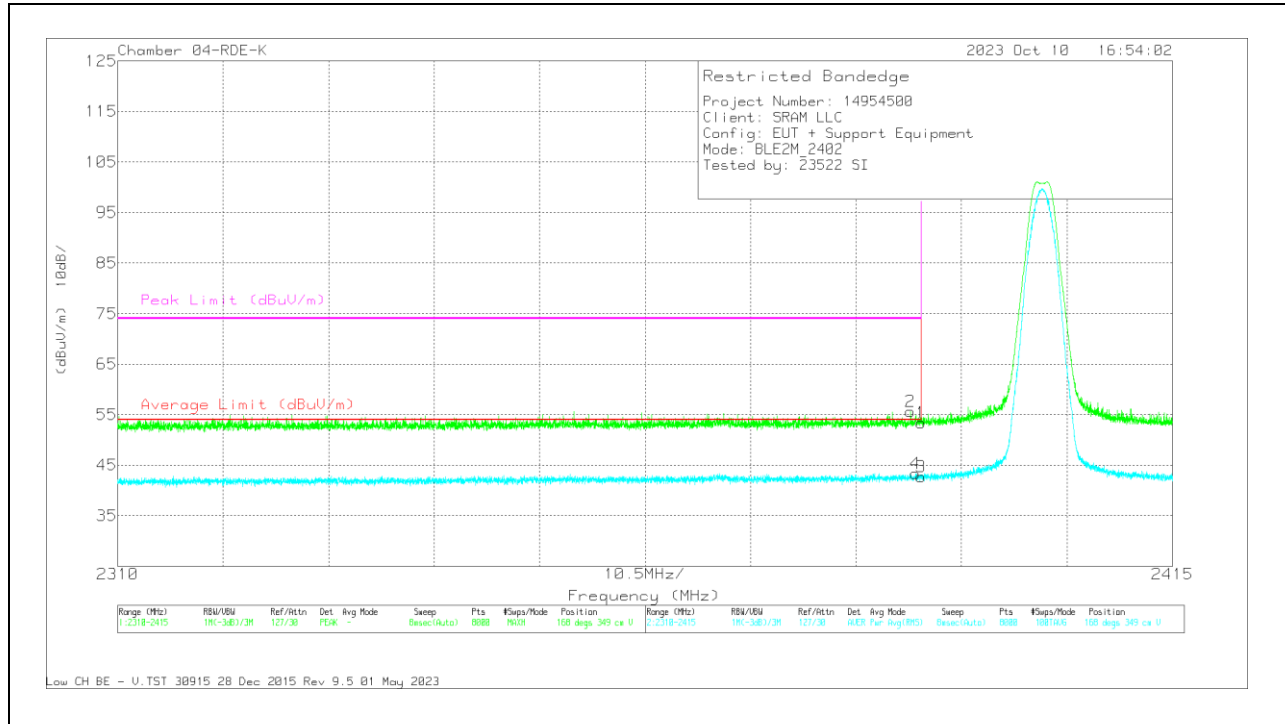
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.15	Pk	31.8	-34.5	53.45	-	-	74	-20.55	222	341	H
2	* 2386.714	58.45	PK	31.8	-34.5	55.75	-	-	74	-18.25	222	341	H
3	* 2390	45.72	RMS	31.8	-34.5	43.02	54	-10.98	-	-	222	341	H
4	* 2389.799	46.78	RMS	31.8	-34.5	44.08	54	-9.92	-	-	222	341	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.12	Pk	31.8	-34.5	53.42	-	-	74	-20.58	168	349	V
2	* 2388.946	58.36	Pk	31.8	-34.5	55.66	-	-	74	-18.34	168	349	V
3	* 2390	45.43	RMS	31.8	-34.5	42.73	54	-11.27	-	-	168	349	V
4	* 2389.431	46.09	RMS	31.8	-34.5	43.39	54	-10.61	-	-	168	349	V

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

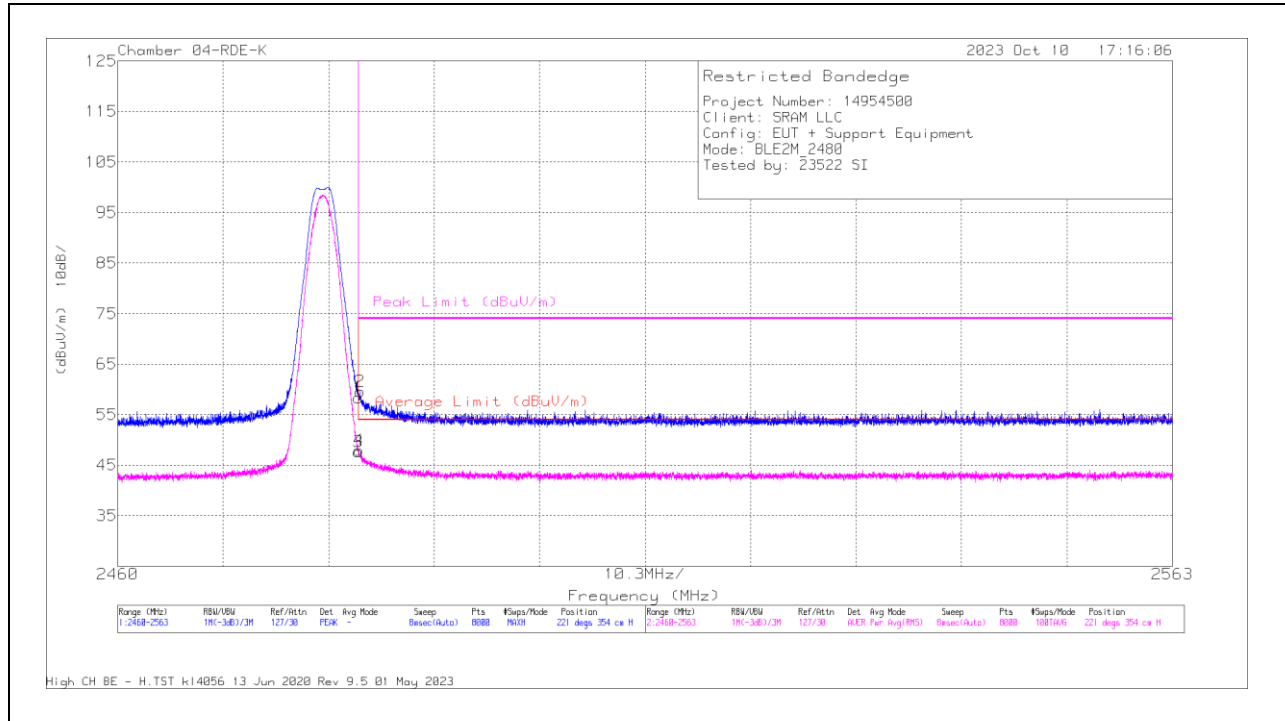
Pk - Peak detector

RMS - RMS detection



**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



**Trace Markers**

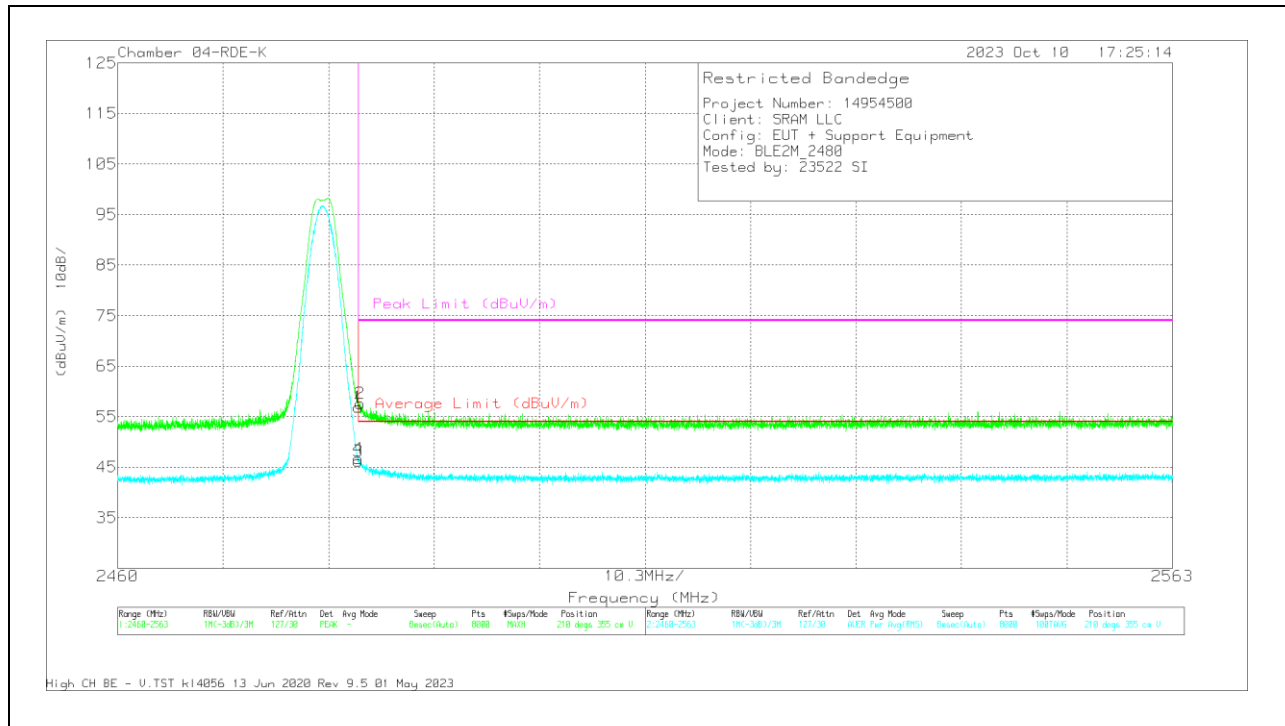
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	60.24	Pk	32.2	-34.1	58.34	-	-	74	-15.66	221	354	H
2	* 2483.707	61.5	Pk	32.2	-34.1	59.6	-	-	74	-14.4	221	354	H
3	* 2483.5	49.6	RMS	32.2	-34.1	47.7	54	-6.3	-	-	221	354	H
4	* 2483.565	49.82	RMS	32.2	-34.1	47.92	54	-6.08	-	-	221	354	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	58.75	Pk	32.2	-34.1	56.85	-	-	74	-17.15	210	355	V
2	* 2483.668	59.48	Pk	32.2	-34.1	57.58	-	-	74	-16.42	210	355	V
3	* 2483.5	48.11	RMS	32.2	-34.1	46.21	54	-7.79	-	-	210	355	V
4	* 2483.513	48.59	RMS	32.2	-34.1	46.69	54	-7.31	-	-	210	355	V

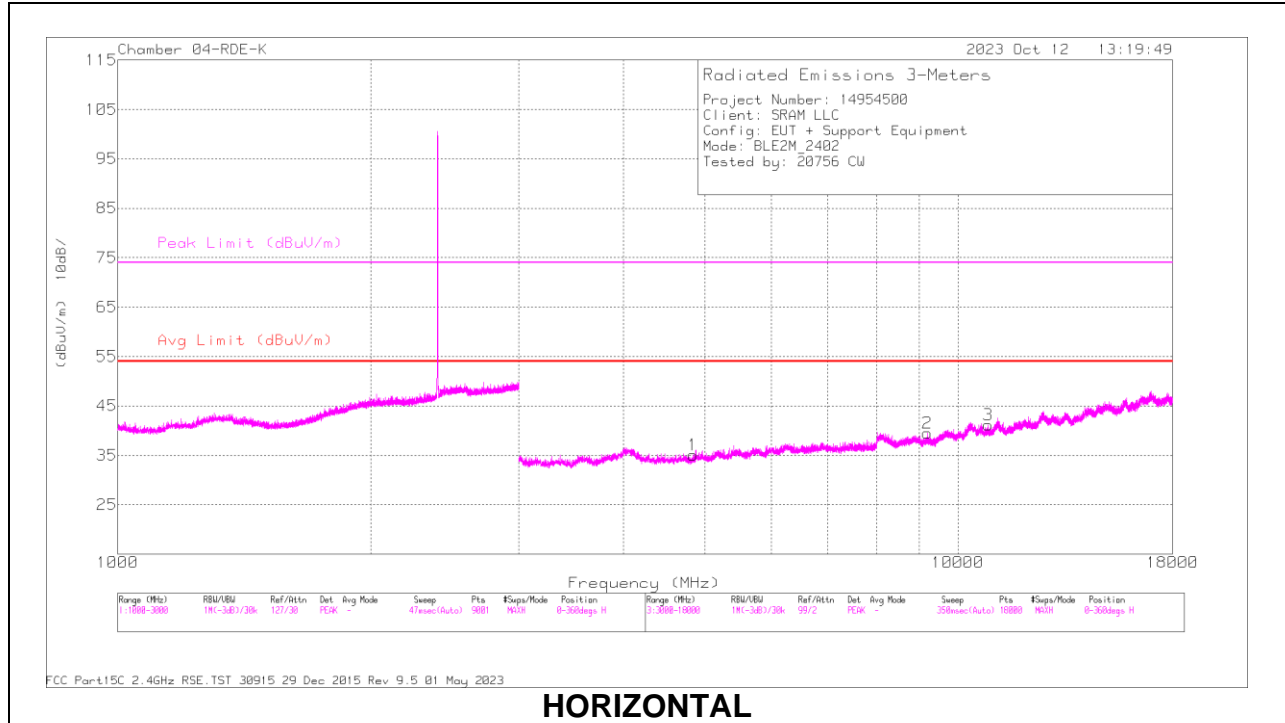
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

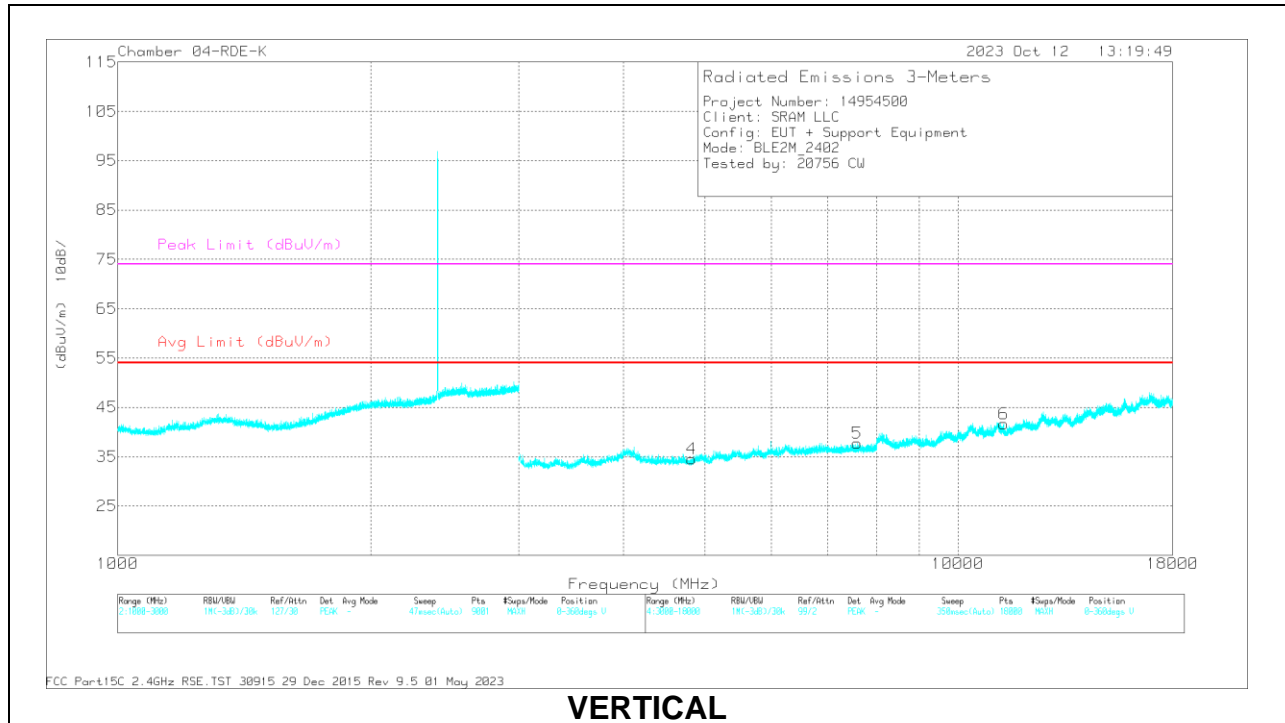
RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

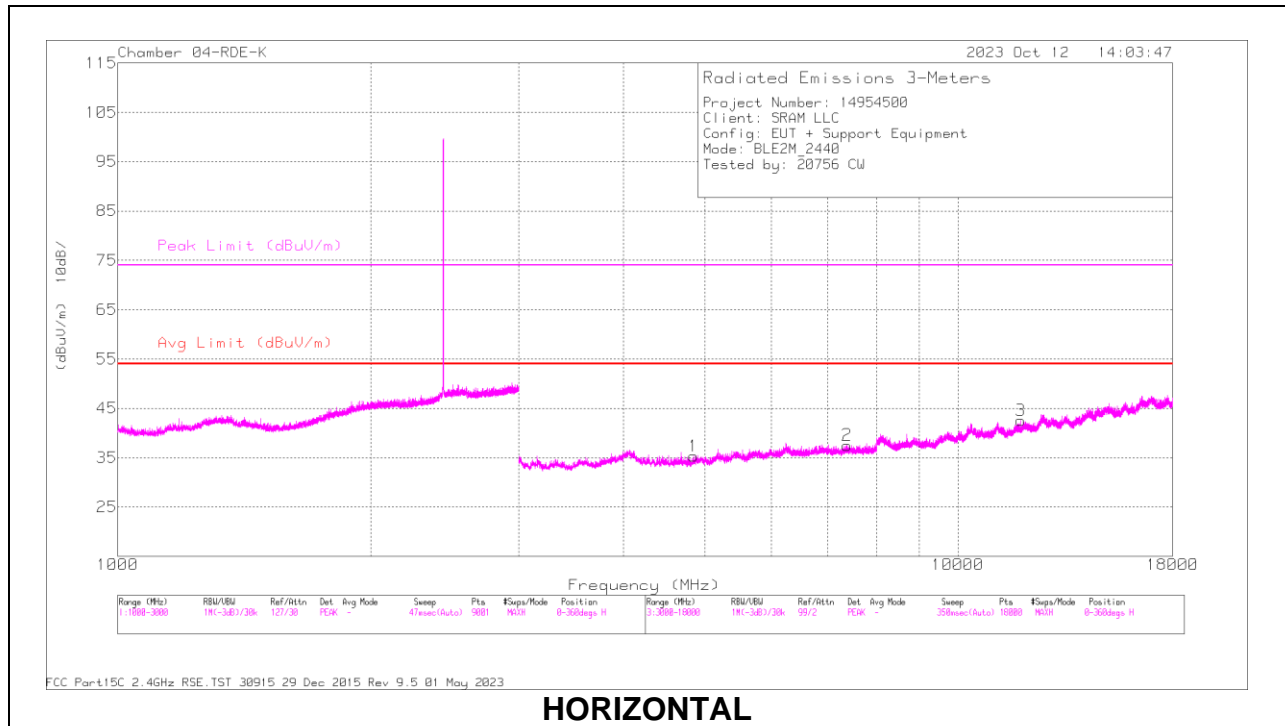
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4833.882	51.51	PK2	33.7	-39.9	45.31	-	-	74	-28.69	7	320	H
	* 4837.808	39.65	MAv1	33.7	-40.1	33.25	54	-20.75	-	-	7	320	H
2	* 9191.098	48.46	PK2	36.2	-36	48.66	-	-	74	-25.34	71	321	H
	* 9190.39	36.47	MAv1	36.2	-36	36.67	54	-17.33	-	-	71	321	H
3	* 10858.429	48.19	PK2	38	-35.9	50.29	-	-	74	-23.71	216	318	H
	* 10855.934	36.63	MAv1	38	-35.8	38.83	54	-15.17	-	-	216	318	H
4	* 4824.346	50.76	PK2	33.7	-40	44.46	-	-	74	-29.54	191	366	V
	* 4821.597	39.53	MAv1	33.7	-39.9	33.33	54	-20.67	-	-	191	366	V
5	* 7590.216	48.77	PK2	35.8	-37.2	47.37	-	-	74	-26.63	354	313	V
	* 7589.292	37.18	MAv1	35.8	-37.3	35.68	54	-18.32	-	-	354	313	V
6	* 11346.397	48.5	PK2	37.8	-35.5	50.8	-	-	74	-23.2	166	150	V
	* 11347.913	36.33	MAv1	37.8	-35.4	38.73	54	-15.27	-	-	166	150	V

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

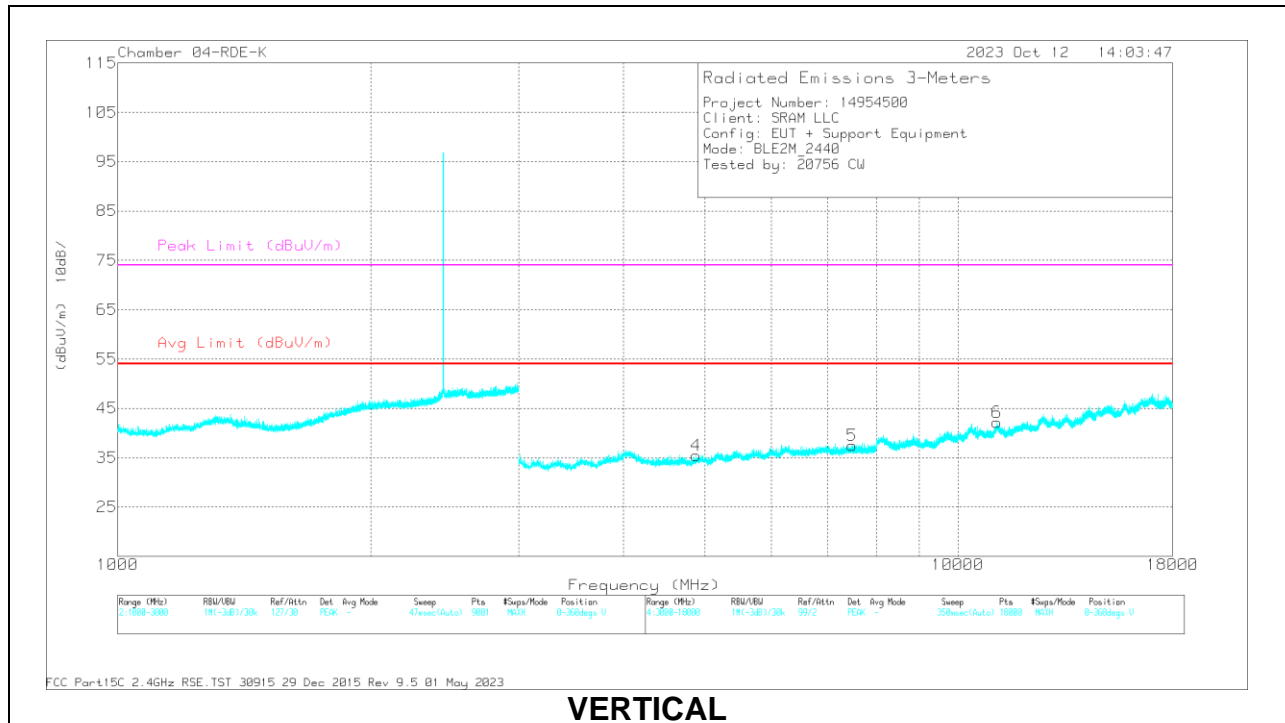
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

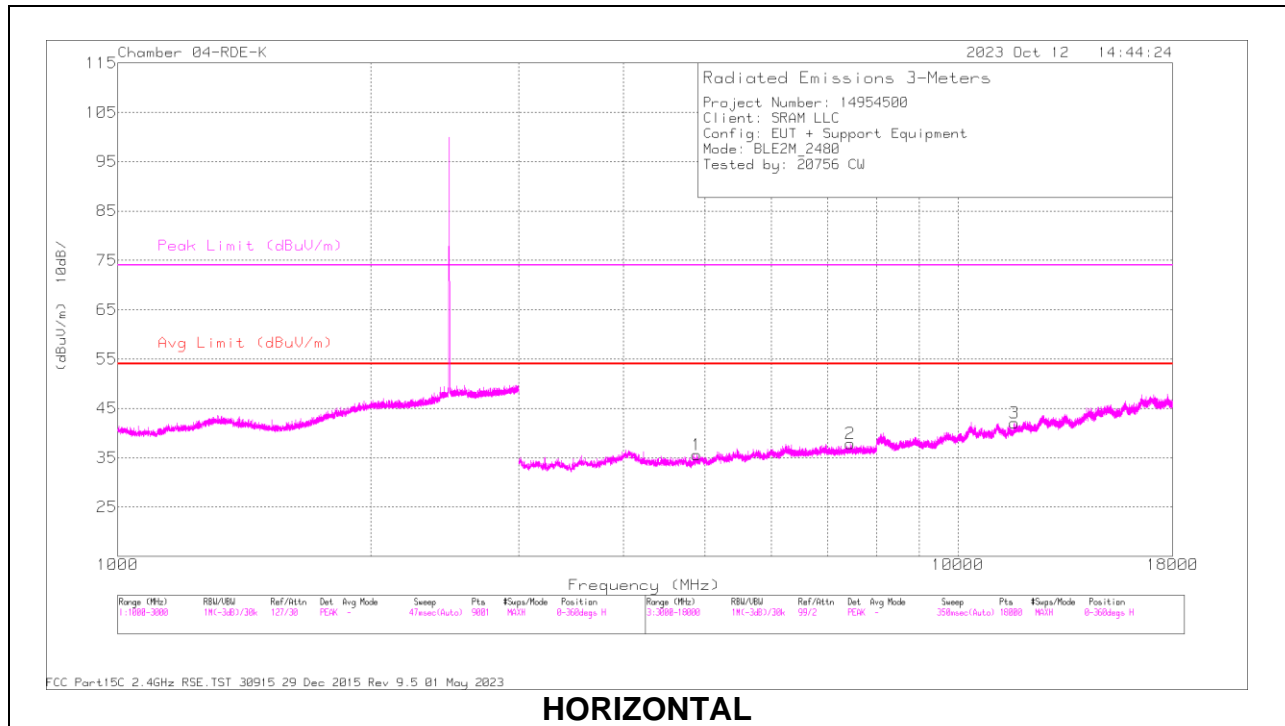
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4845.841	51.17	PK2	33.7	-40	44.87	-	-	74	-29.13	169	148	H
	* 4845.628	39.41	MAv1	33.7	-40	33.11	54	-20.89	-	-	169	148	H
2	* 7377.868	48.84	PK2	35.7	-37.2	47.34	-	-	74	-26.66	160	339	H
	* 7374.822	37.03	MAv1	35.7	-37.1	35.63	54	-18.37	-	-	160	339	H
3	* 11876.237	47.22	PK2	38.4	-34	51.62	-	-	74	-22.38	23	387	H
	* 11875.451	35.72	MAv1	38.4	-34	40.12	54	-13.88	-	-	23	387	H
4	* 4880.474	51.22	PK2	33.7	-39.9	45.02	-	-	74	-28.98	94	229	V
	* 4879.876	39.93	MAv1	33.7	-39.9	33.73	54	-20.27	-	-	94	229	V
5	* 7484.34	49.16	PK2	35.7	-37.2	47.66	-	-	74	-26.34	293	389	V
	* 7486.283	37.3	MAv1	35.7	-37.3	35.7	54	-18.3	-	-	293	389	V
6	* 11121.166	48.89	PK2	38	-35.4	51.49	-	-	74	-22.51	13	350	V
	* 11118.928	37.65	MAv1	38	-35.5	40.15	54	-13.85	-	-	13	350	V

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

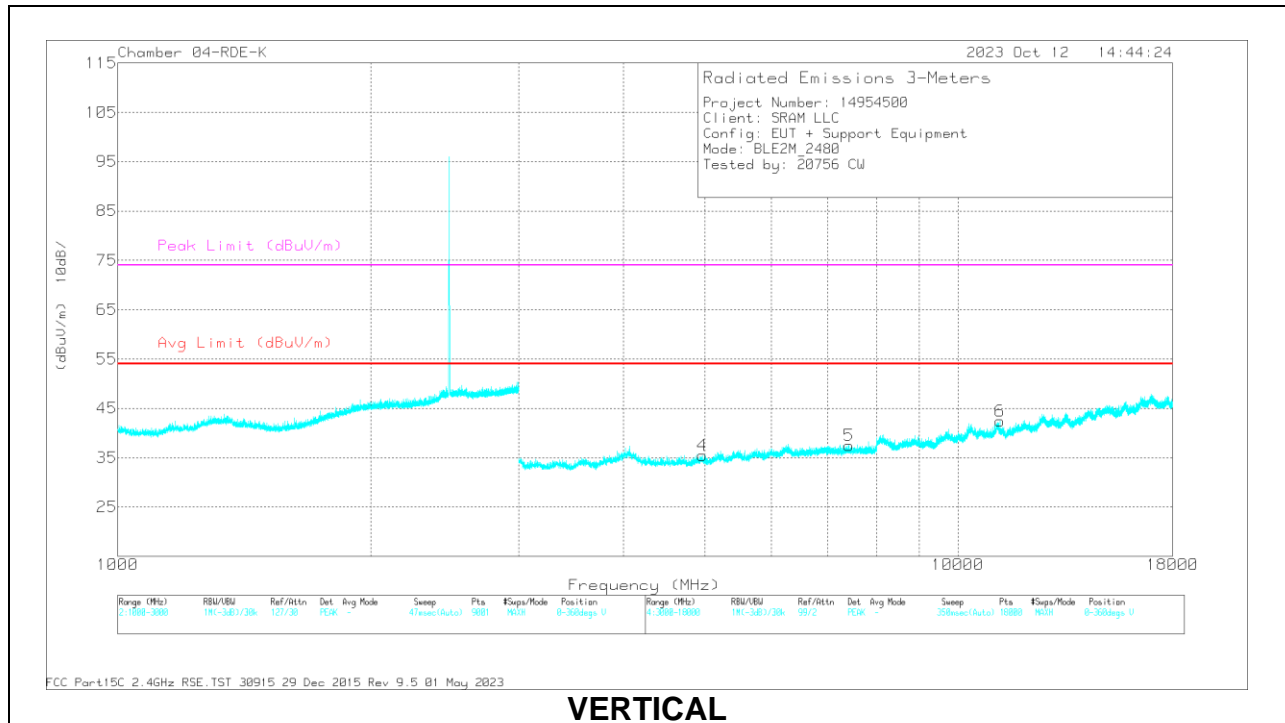
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4887.923	51.35	PK2	33.7	-39.8	45.25	-	-	74	-28.75	312	190	H
	* 4888.871	39.81	MAv1	33.7	-39.8	33.71	54	-20.29	-	-	312	190	H
2	* 7442.591	48.72	PK2	35.7	-37.1	47.32	-	-	74	-26.68	221	354	H
	* 7441.679	37.26	MAv1	35.7	-37.1	35.86	54	-18.14	-	-	221	354	H
3	* 11683.197	47.56	PK2	38.2	-34.5	51.26	-	-	74	-22.74	20	104	H
	* 11680.863	35.85	MAv1	38.2	-34.5	39.55	54	-14.45	-	-	20	104	H
4	* 4961.489	51.69	PK2	33.7	-39.8	45.59	-	-	74	-28.41	90	234	V
	* 4960.026	39.9	MAv1	33.7	-39.8	33.8	54	-20.2	-	-	90	234	V
5	* 7413.187	48.54	PK2	35.7	-37.3	46.94	-	-	74	-27.06	69	335	V
	* 7416.019	37.05	MAv1	35.7	-37.2	35.55	54	-18.45	-	-	69	335	V
6	* 11225.297	48.09	PK2	37.9	-35	50.99	-	-	74	-23.01	270	357	V
	* 11223.555	36.63	MAv1	37.9	-35	39.53	54	-14.47	-	-	270	357	V

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

PK2 - KDB558074 Method: Maximum Peak

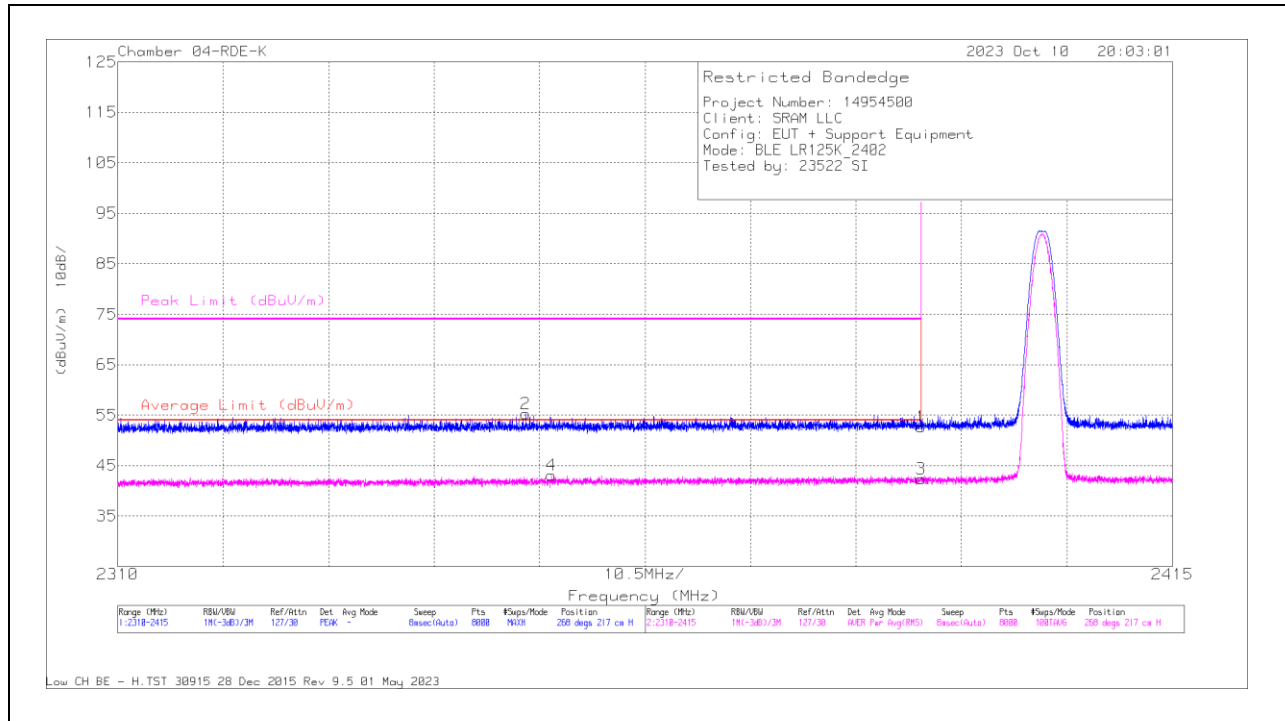
MAv1 - KDB558074 Option 1 Maximum RMS Average



**BLE (125kpbs):**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**

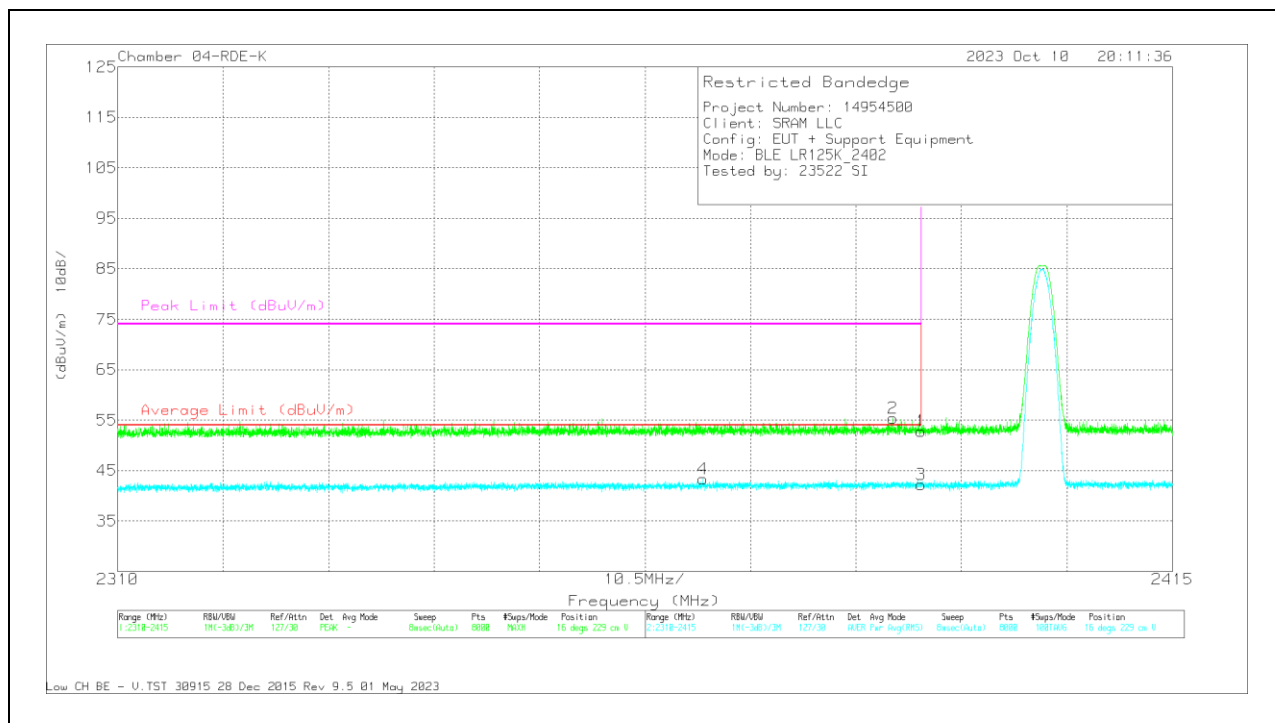


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	55.34	Pk	31.8	-34.5	52.64	-	-	74	-21.36	268	217	H
2	* 2350.602	58.22	Pk	31.6	-34.6	55.22	-	-	74	-18.78	268	217	H
3	* 2390	45.08	RMS	31.8	-34.5	42.38	54	-11.62	-	-	268	217	H
4	* 2353.188	46.05	RMS	31.6	-34.6	43.05	54	-10.95	-	-	268	217	H

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

### VERTICAL RESULT



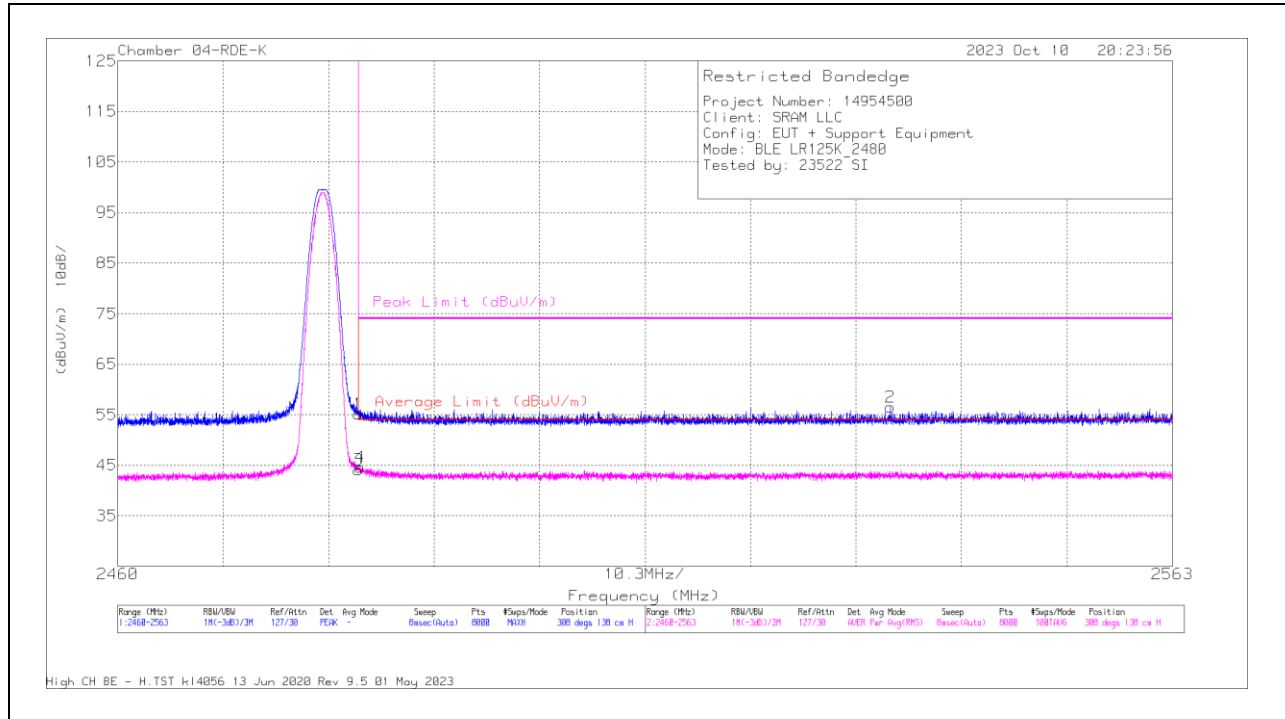
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	55.53	Pk	31.8	-34.5	52.83	-	-	74	-21.17	16	229	V
2	* 2387.161	58.03	Pk	31.8	-34.5	55.33	-	-	74	-18.67	16	229	V
3	* 2390	44.9	RMS	31.8	-34.5	42.2	54	-11.8	-	-	16	229	V
4	* 2368.284	46.28	RMS	31.7	-34.6	43.38	54	-10.62	-	-	16	229	V

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

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**

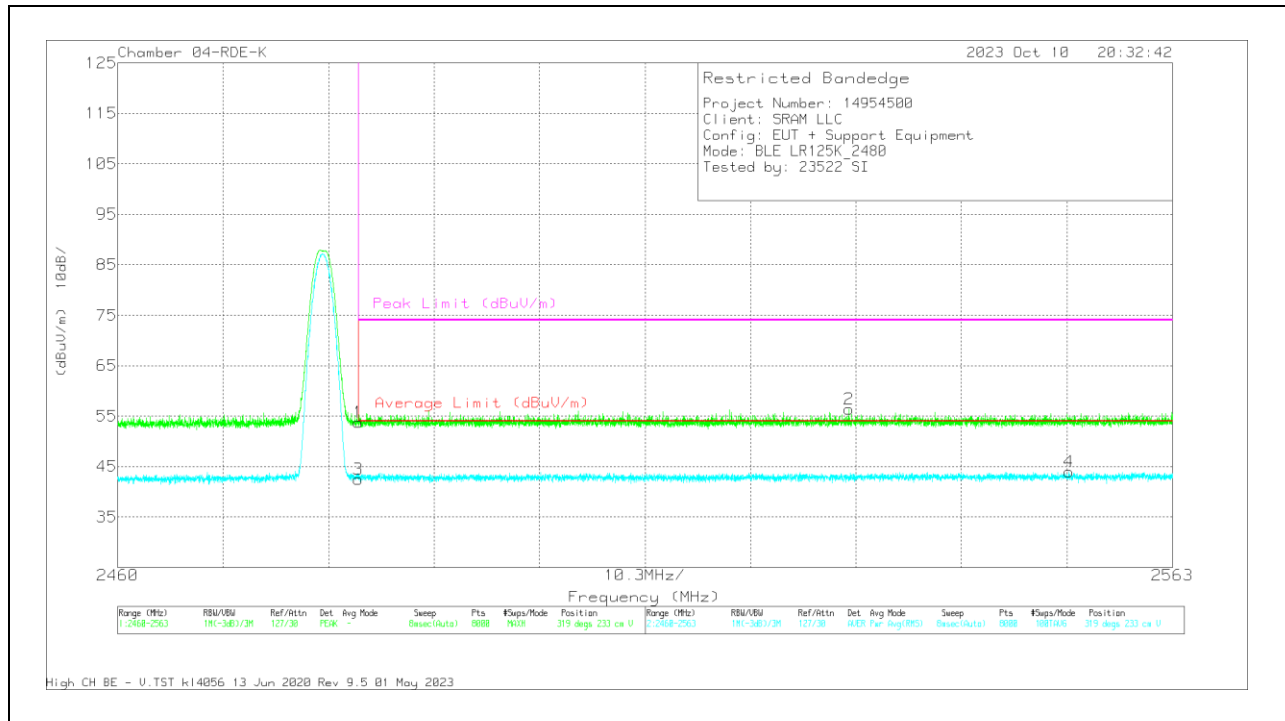


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	57.03	Pk	32.2	-34.1	55.13	-	-	74	-18.87	308	138	H
2	2535.472	58.23	Pk	32.2	-33.9	56.53	-	-	74	-17.47	308	138	H
3	* 2483.5	46	RMS	32.2	-34.1	44.1	54	-9.9	-	-	308	138	H
4	* 2483.655	46.48	RMS	32.2	-34.1	44.58	54	-9.42	-	-	308	138	H

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

### VERTICAL RESULT



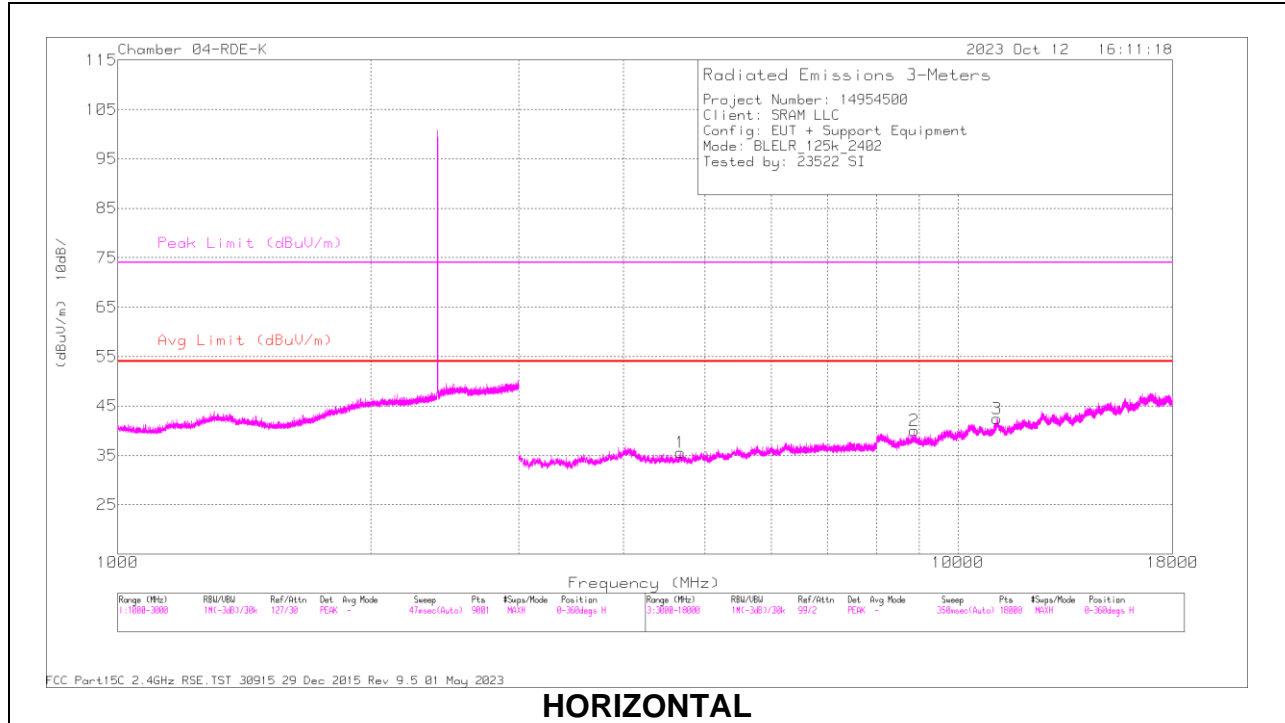
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	55.67	Pk	32.2	-34.1	53.77	-	-	74	-20.23	319	233	V
2	2531.39	58.15	Pk	32.2	-34	56.35	-	-	74	-17.65	319	233	V
3	* 2483.5	44.37	RMS	32.2	-34.1	42.47	54	-11.53	-	-	319	233	V
4	2552.92	45.52	RMS	32.2	-33.8	43.92	54	-10.08	-	-	319	233	V

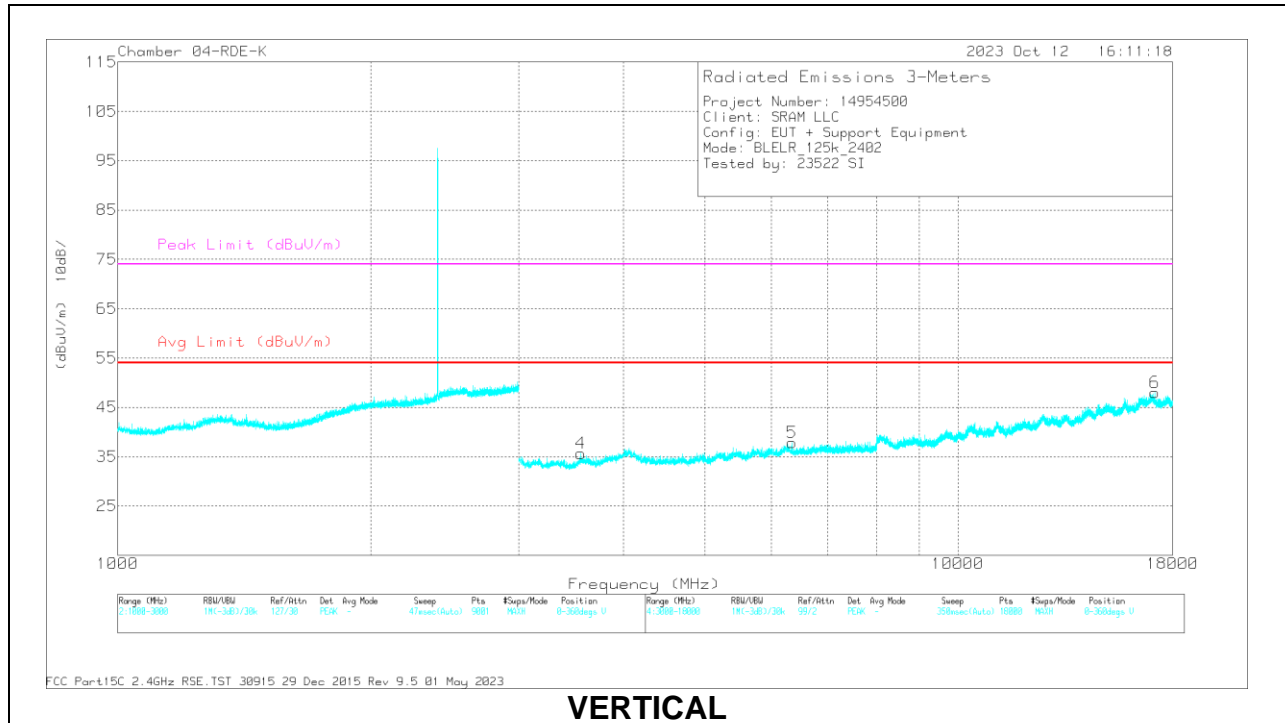
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



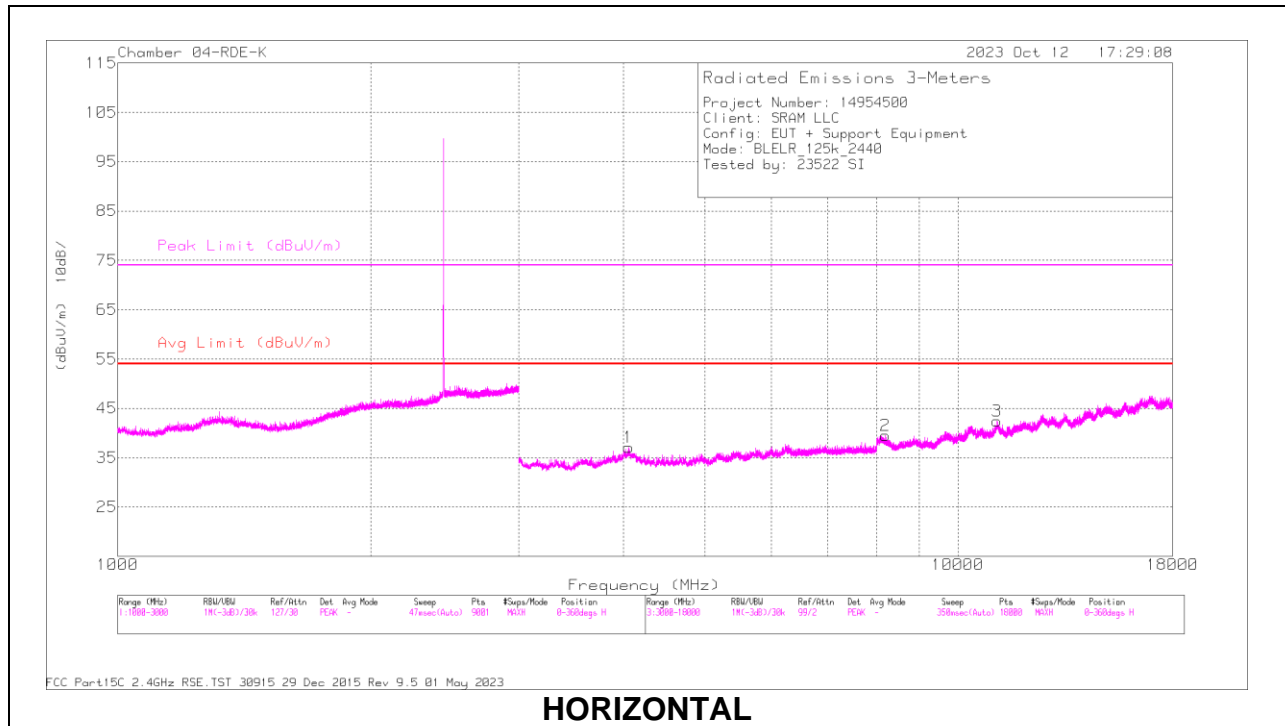
**VERTICAL**

**RADIATED EMISSIONS**

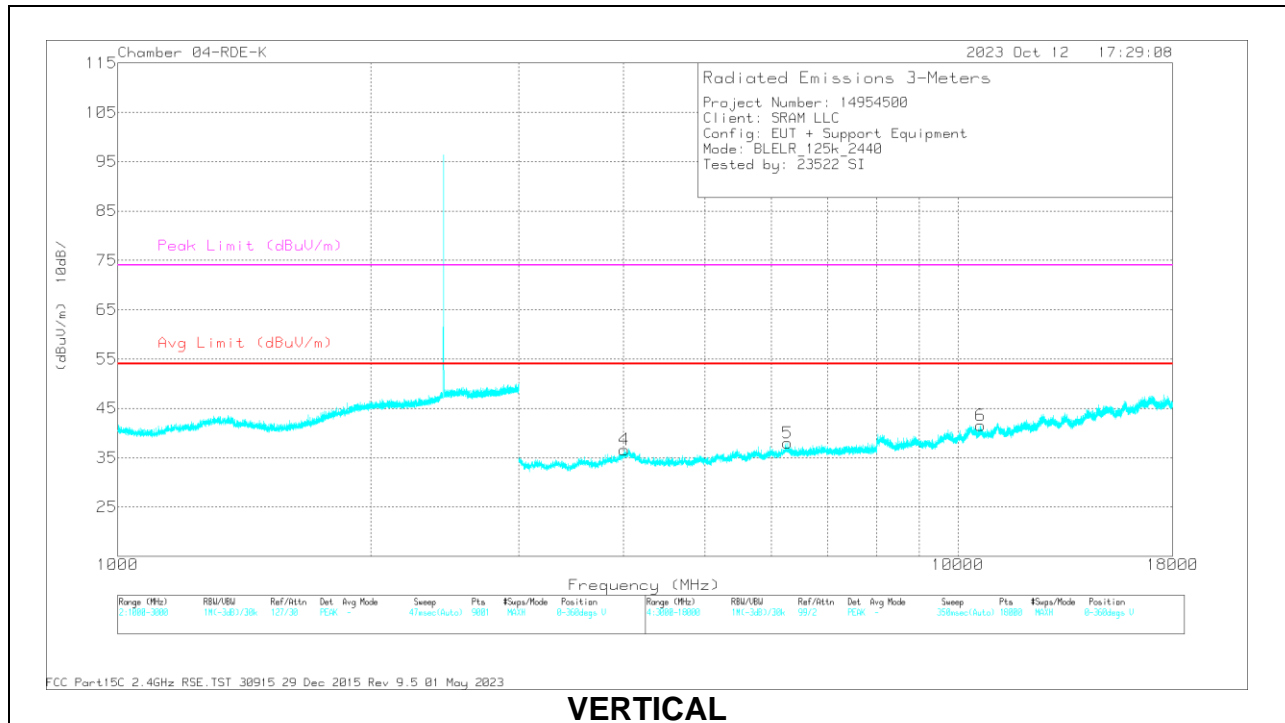
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4680.138	52.28	PK2	33.8	-40.6	45.48	-	-	74	-28.52	241	391	H
	* 4679.206	40.62	MAv1	33.8	-40.6	33.82	54	-20.18	-	-	241	391	H
2	8864.743	49.43	PK2	36	-36.3	49.13	-	-	-	-	90	318	H
3	* 11132.69	49.44	PK2	38	-35.3	52.14	-	-	74	-21.86	111	382	H
	* 11130.248	37.81	MAv1	38	-35.2	40.61	54	-13.39	-	-	111	382	H
4	* 3558.387	53.63	PK2	33	-41.6	45.03	-	-	74	-28.97	256	240	V
	* 3560.237	41.72	MAv1	33	-41.6	33.12	54	-20.88	-	-	256	240	V
5	6342.075	49.83	PK2	35.4	-38.3	46.93	-	-	-	-	340	335	V
6	17154.754	45.61	PK2	41.3	-31	55.91	-	-	-	-	309	348	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4054.795	53.54	PK2	35.2	-41.4	47.34	-	-	74	-26.66	275	391	H
	* 4055.007	41.2	MAv1	35.2	-41.4	35	54	-19	-	-	275	391	H
2	* 8198.766	50.46	PK2	35.9	-37	49.36	-	-	74	-24.64	280	370	H
	* 8197.287	38.54	MAv1	35.9	-37	37.44	54	-16.56	-	-	280	370	H
3	* 11131.548	49.3	PK2	38	-35.3	52	-	-	74	-22	282	306	H
	* 11134.427	37.68	MAv1	38	-35.2	40.48	54	-13.52	-	-	282	306	H
4	* 4008.695	52.21	PK2	35.1	-41.3	46.01	-	-	74	-27.99	17	163	V
	* 4008.438	40.76	MAv1	35.1	-41.2	34.66	54	-19.34	-	-	17	163	V
5	6272.18	49.76	PK2	35.3	-37.8	47.26	-	-	-	-	85	364	V
6	* 10635.209	49.05	PK2	37.9	-35.9	51.05	-	-	74	-22.95	61	284	V
	* 10634.608	37.3	MAv1	37.9	-35.9	39.3	54	-14.7	-	-	61	284	V

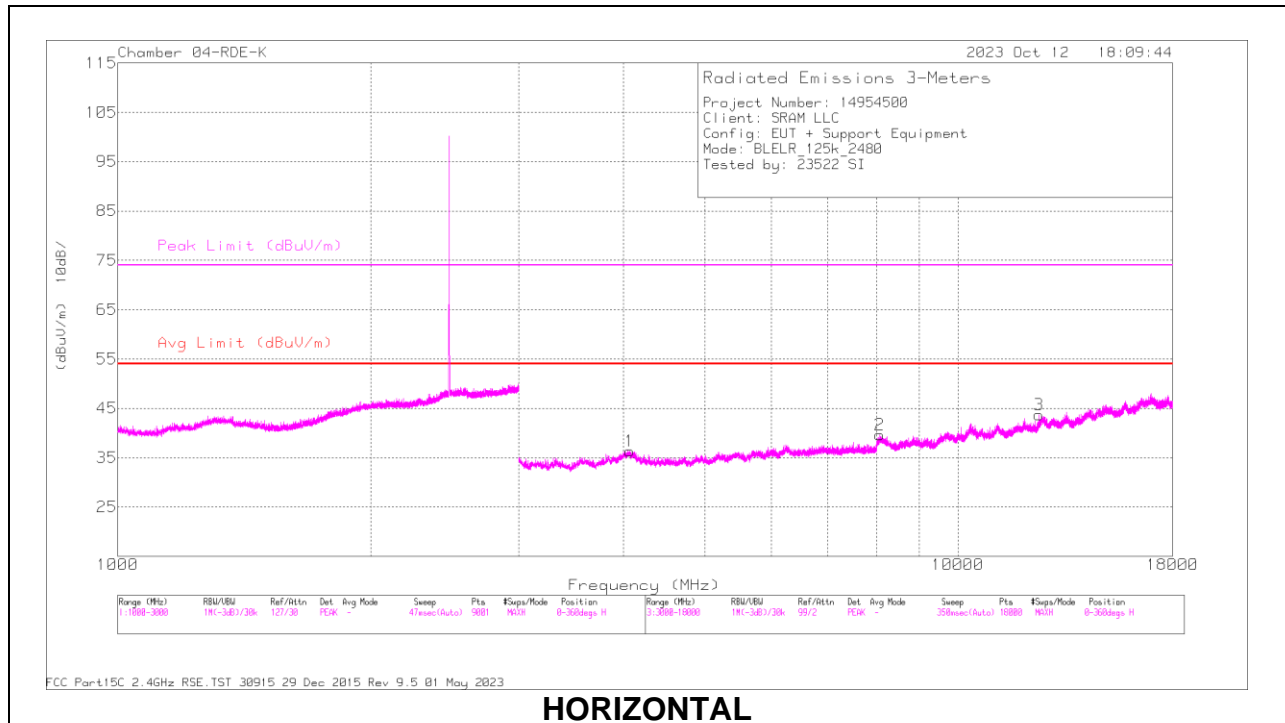
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

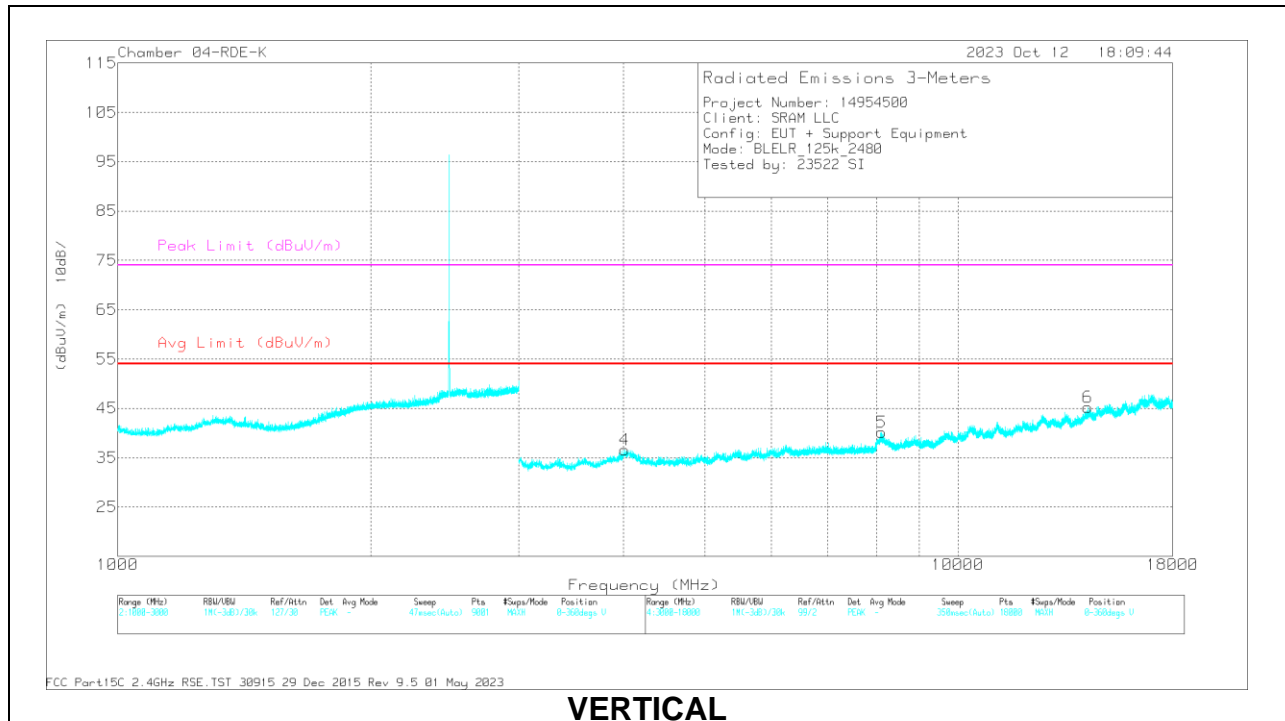
MAv1 - KDB558074 Option 1 Maximum RMS Average



### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4067.61	52.63	PK2	35.2	-41.4	46.43	-	-	74	-27.57	95	290	H
	* 4068.597	41.01	MAv1	35.2	-41.3	34.91	54	-19.09	-	-	95	290	H
2	* 8069.706	49.64	PK2	35.9	-36.5	49.04	-	-	74	-24.96	264	383	H
	* 8071.6	37.98	MAv1	35.9	-36.4	37.48	54	-16.52	-	-	264	383	H
3	* 12492.962	46.3	PK2	39.2	-33.7	51.8	-	-	74	-22.2	243	260	H
	* 12493.064	34.82	MAv1	39.2	-33.7	40.32	54	-13.68	-	-	243	260	H
4	* 4013.425	52.35	PK2	35.2	-41.3	46.25	-	-	74	-27.75	239	353	V
	* 4010.792	40.75	MAv1	35.2	-41.2	34.75	54	-19.25	-	-	239	353	V
5	* 8110.774	49.95	PK2	35.9	-36.8	49.05	-	-	74	-24.95	252	154	V
	* 8113.583	38.05	MAv1	35.9	-36.9	37.05	54	-16.95	-	-	252	154	V
6	14278.284	48.13	PK2	39.3	-34.2	53.23	-	-	-	-	113	311	V

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

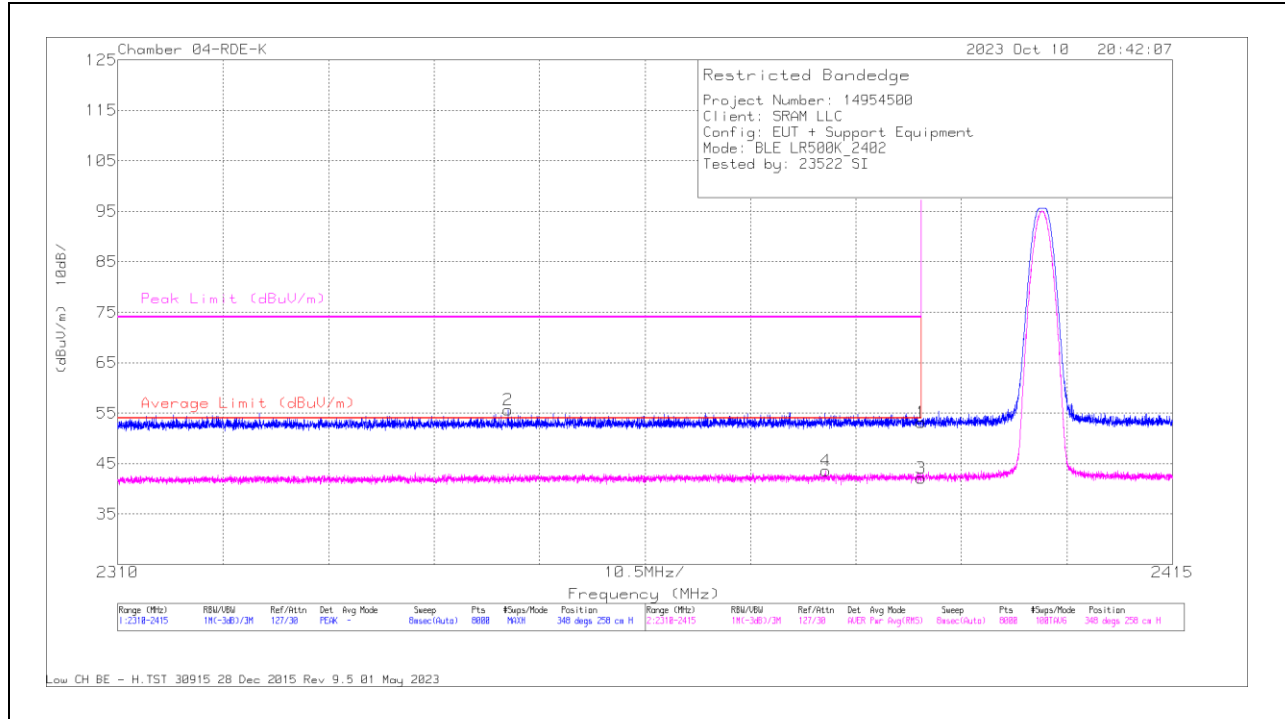
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

**BLE (500kpbs):**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**

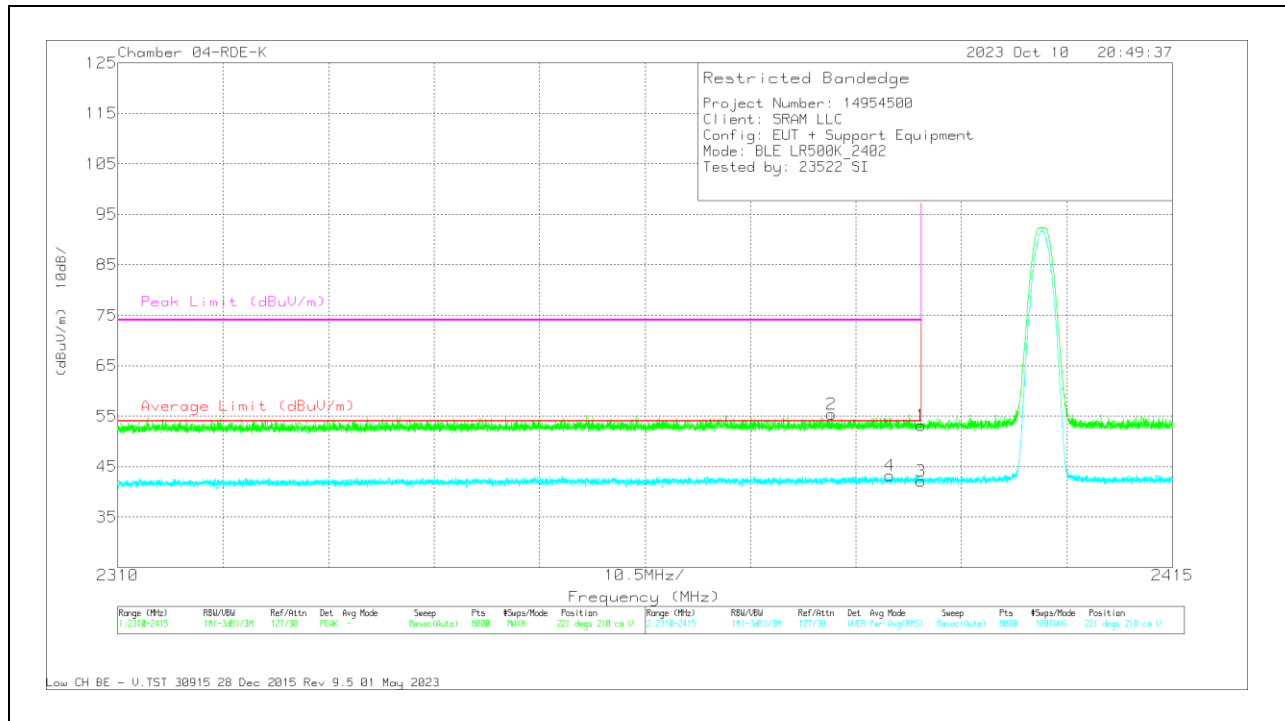


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	55.9	Pk	31.8	-34.5	53.2	-	-	74	-20.8	348	258	H
2	* 2348.882	58.76	Pk	31.6	-34.7	55.66	-	-	74	-18.34	348	258	H
3	* 2390	44.8	RMS	31.8	-34.5	42.1	54	-11.9	-	-	348	258	H
4	* 2380.479	46.24	RMS	31.8	-34.5	43.54	54	-10.46	-	-	348	258	H

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

### VERTICAL RESULT



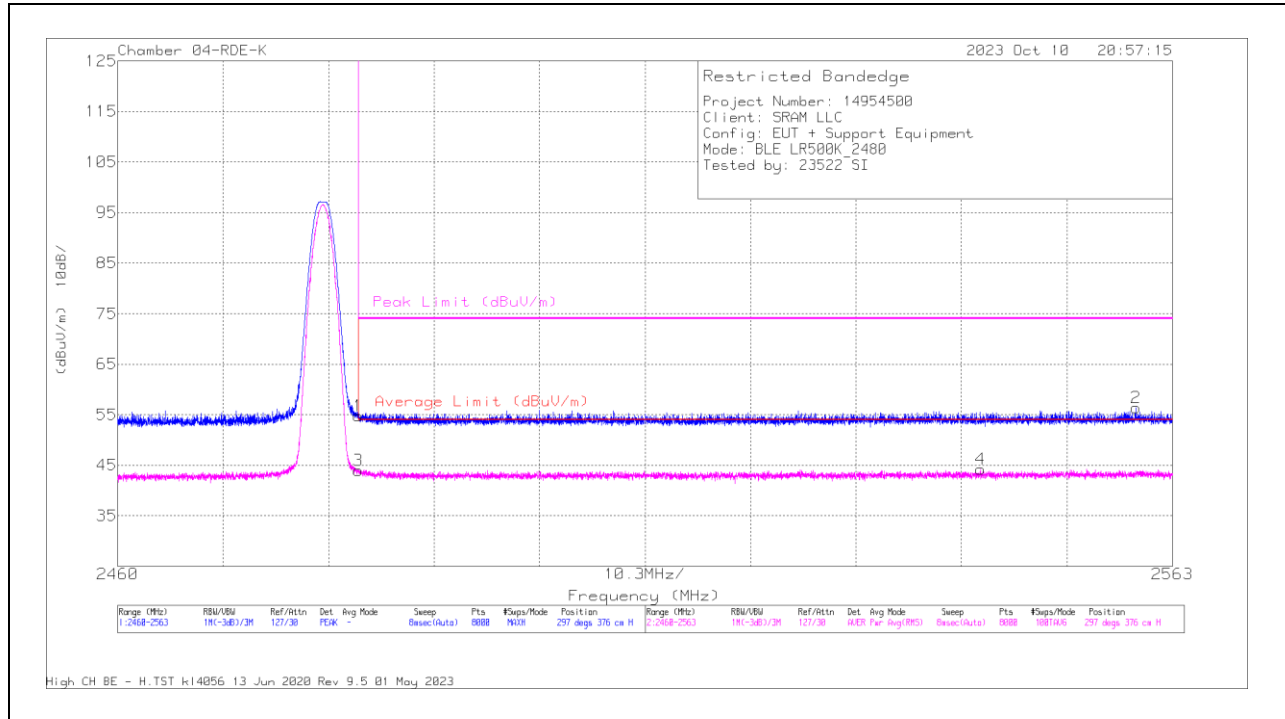
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	55.79	Pk	31.8	-34.5	53.09	-	-	74	-20.91	221	210	V
2	* 2381.056	58.06	Pk	31.8	-34.5	55.36	-	-	74	-18.64	221	210	V
3	* 2390	44.83	RMS	31.8	-34.5	42.13	54	-11.87	-	-	221	210	V
4	* 2386.872	45.91	RMS	31.8	-34.5	43.21	54	-10.79	-	-	221	210	V

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

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**

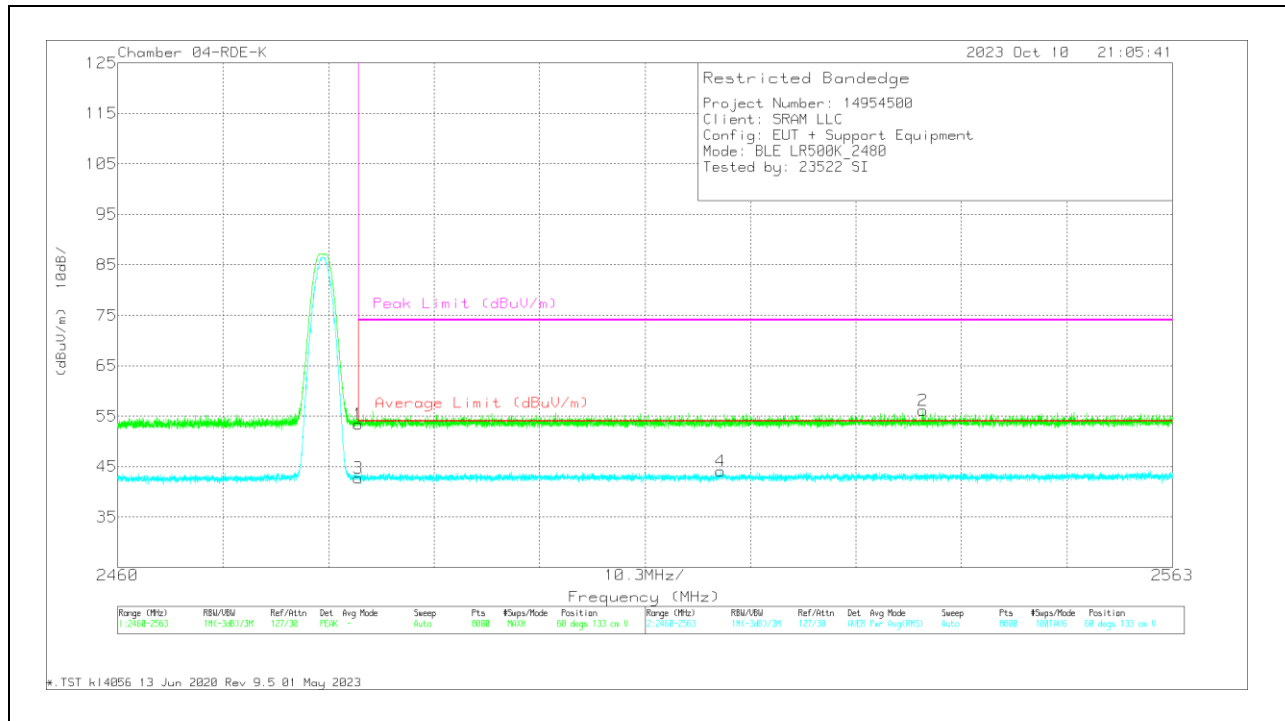


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	56.63	Pk	32.2	-34.1	54.73	-	-	74	-19.27	297	376	H
2	2559.462	57.96	Pk	32.2	-33.8	56.36	-	-	74	-17.64	297	376	H
3	* 2483.5	45.81	RMS	32.2	-34.1	43.91	54	-10.09	-	-	297	376	H
4	2544.28	45.99	RMS	32.2	-34	44.19	54	-9.81	-	-	297	376	H

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

### VERTICAL RESULT



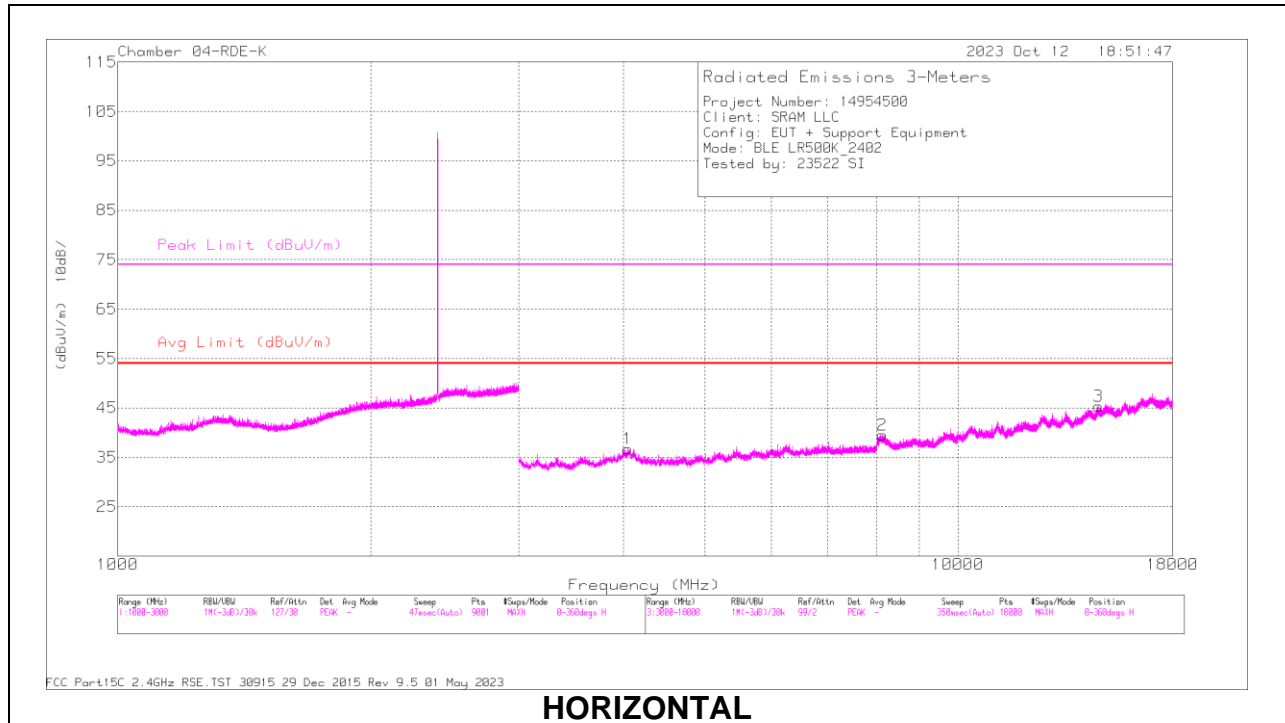
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	55.34	Pk	32.2	-34.1	53.44	-	-	74	-20.56	60	133	V
2	2538.666	57.84	Pk	32.2	-33.9	56.14	-	-	74	-17.86	60	133	V
3	* 2483.5	44.63	RMS	32.2	-34.1	42.73	54	-11.27	-	-	60	133	V
4	2518.899	45.76	RMS	32.2	-33.9	44.06	54	-9.94	-	-	60	133	V

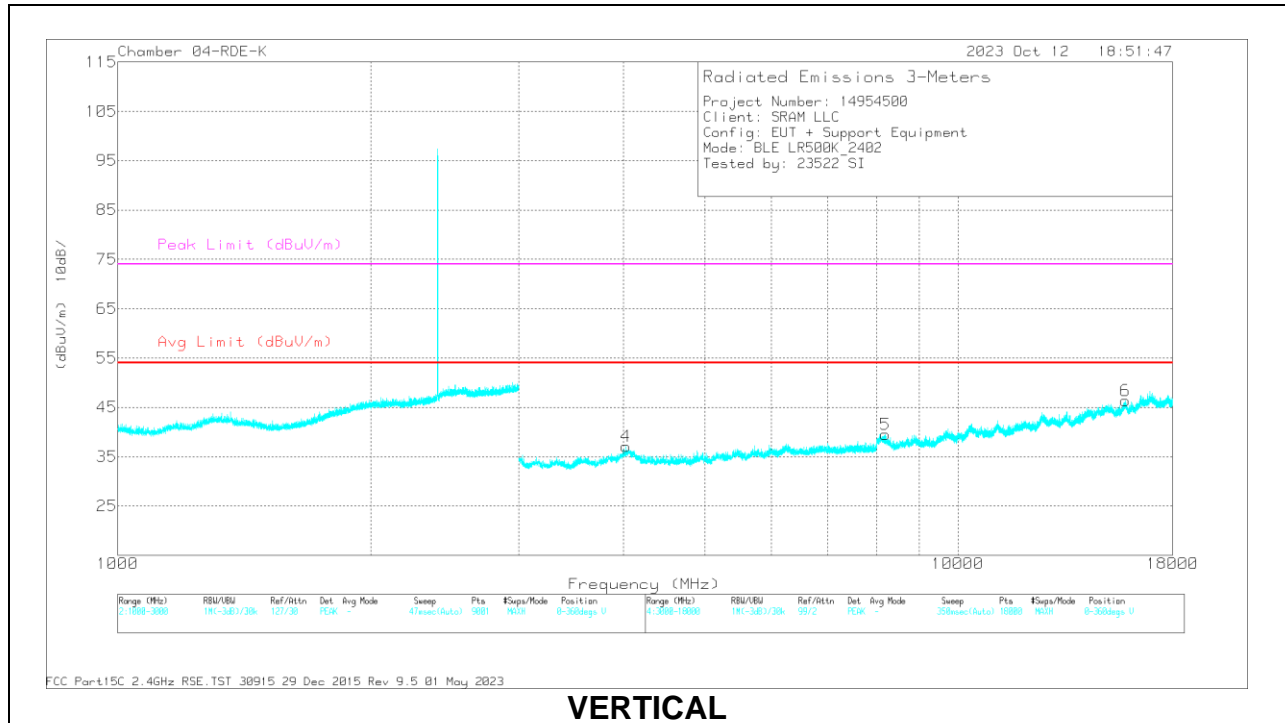
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4048.168	52.64	PK2	35.2	-41.4	46.44	-	-	74	-27.56	242	101	H
	* 4049.535	40.83	MAv1	35.2	-41.3	34.73	54	-19.27	-	-	242	101	H
2	* 8131.678	50.1	PK2	35.9	-36.9	49.1	-	-	74	-24.9	247	239	H
	* 8128.8	38.22	MAv1	35.9	-36.8	37.32	54	-16.68	-	-	247	239	H
3	14692.598	46.4	PK2	39.8	-32.2	54	-	-	-	-	204	210	H
4	* 4024.811	52.29	PK2	35.2	-41.3	46.19	-	-	74	-27.81	144	135	V
	* 4024.236	40.82	MAv1	35.2	-41.3	34.72	54	-19.28	-	-	144	135	V
5	* 8203.431	49.74	PK2	35.9	-37	48.64	-	-	74	-25.36	1	296	V
	* 8202.16	38.16	MAv1	35.9	-37	37.06	54	-16.94	-	-	1	296	V
6	* 15832.564	47.54	PK2	40.2	-31.6	56.14	-	-	74	-17.86	332	202	V
	* 15829.611	35.06	MAv1	40.2	-31.6	43.66	54	-10.34	-	-	332	202	V

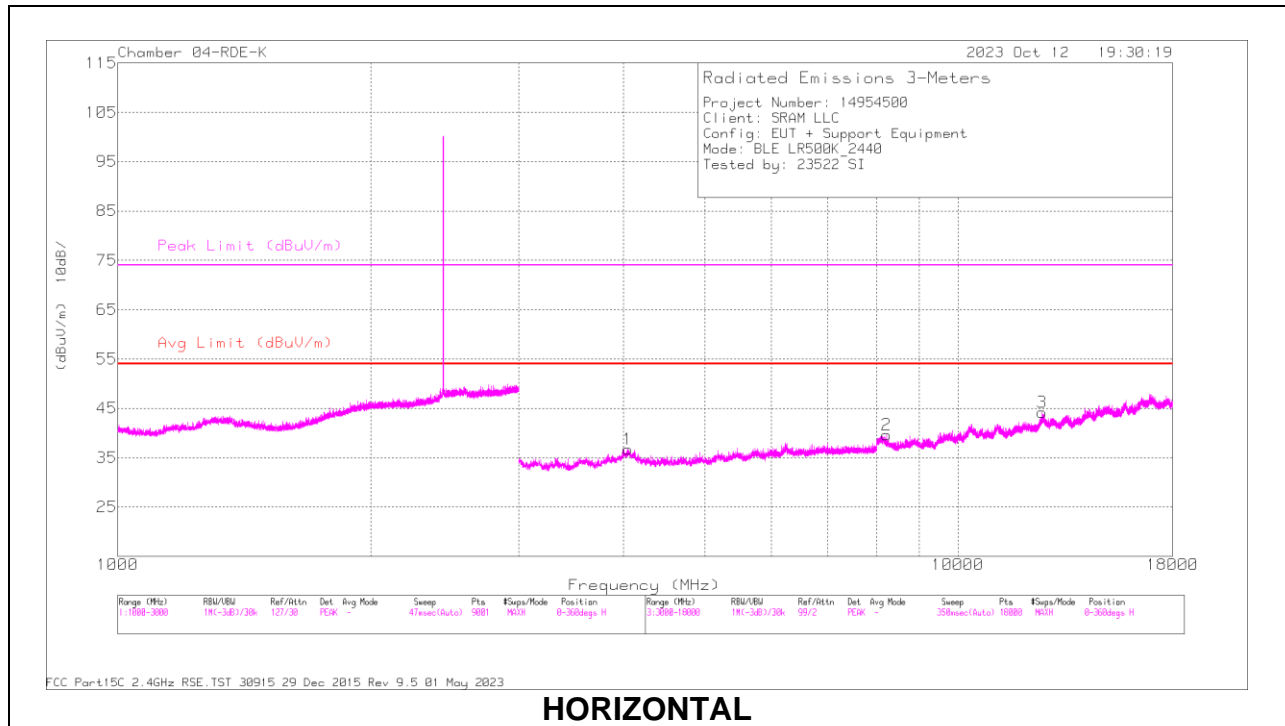
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

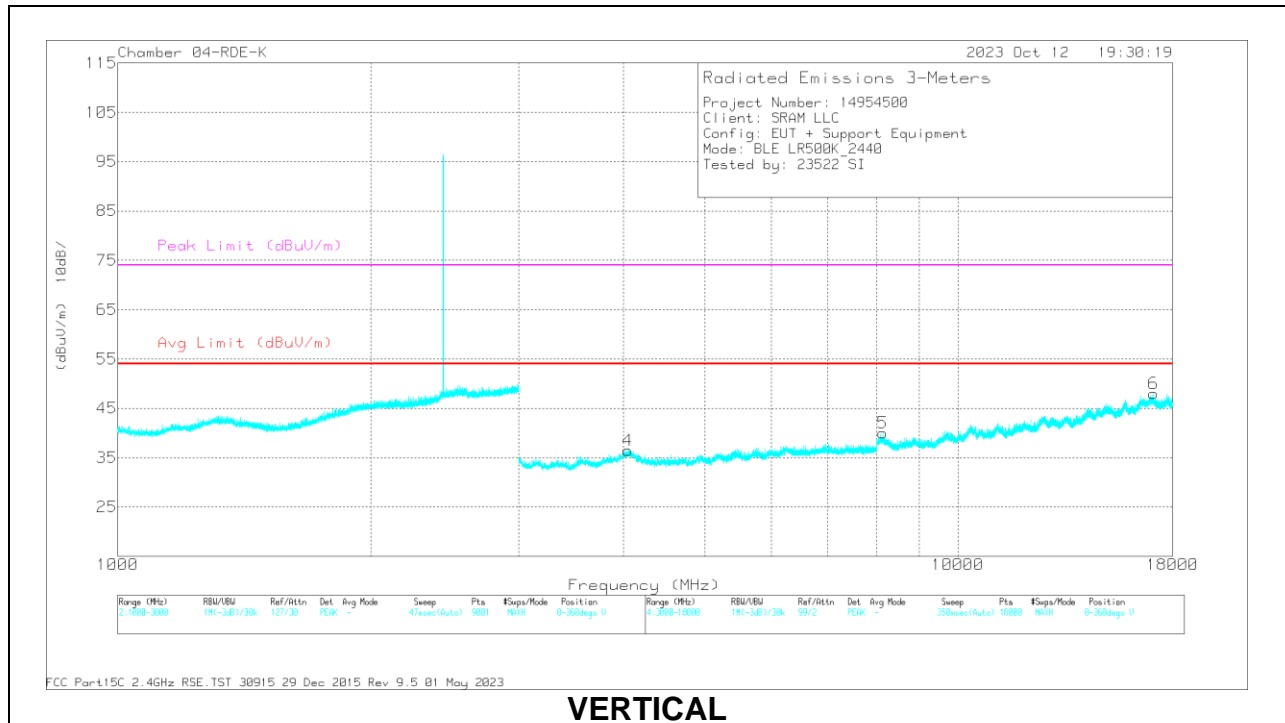
MAv1 - KDB558074 Option 1 Maximum RMS Average



### MID CHANNEL RESULTS



**HORIZONTAL**



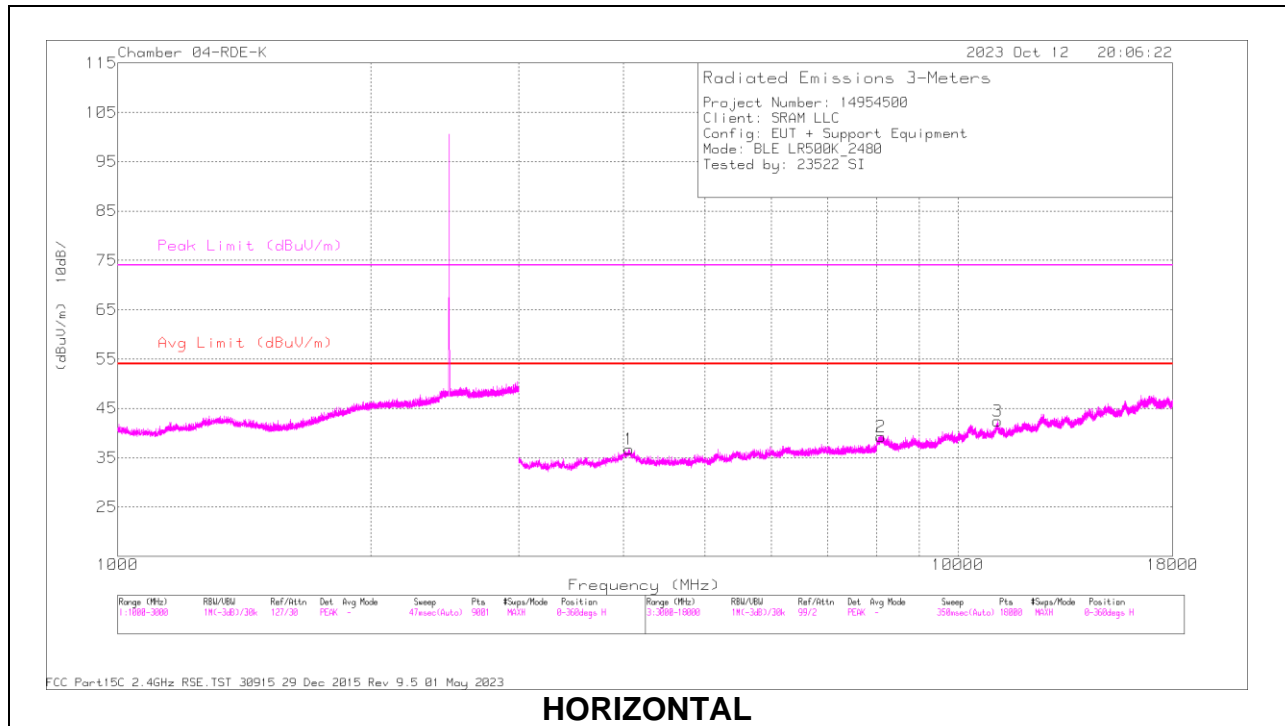
**VERTICAL**

**RADIATED EMISSIONS**

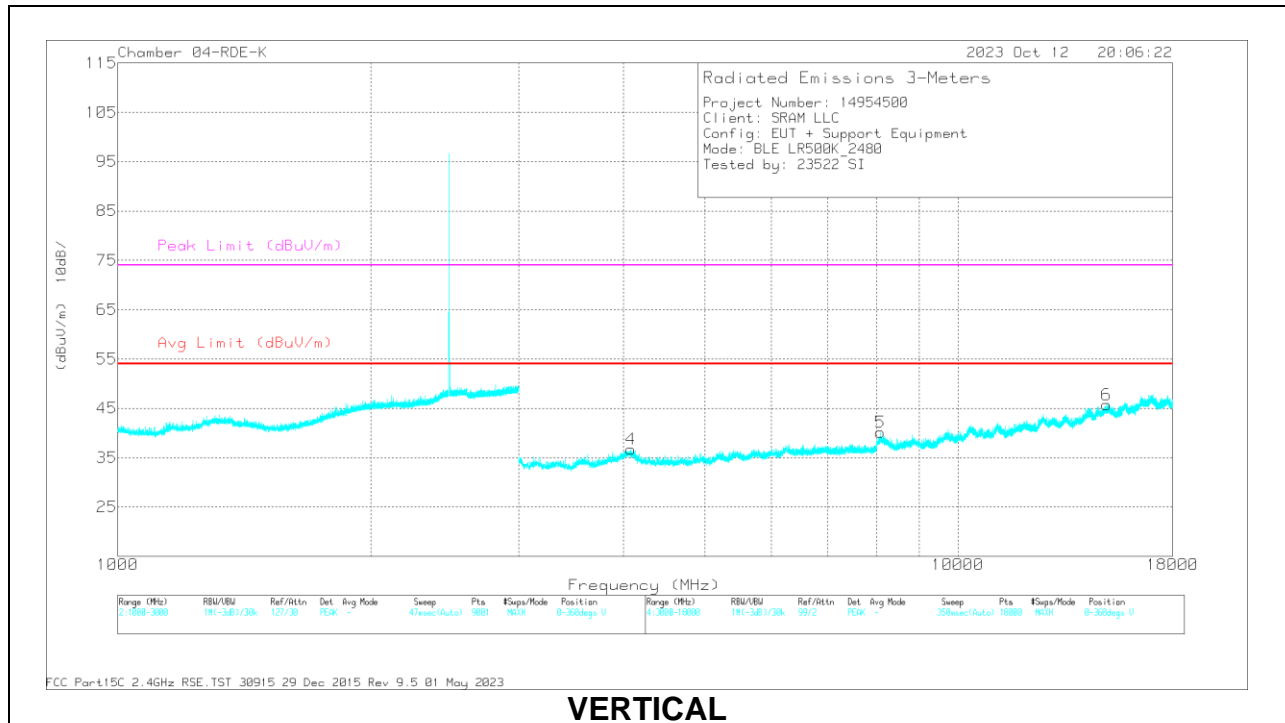
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4041.809	52.92	PK2	35.2	-41.4	46.72	-	-	74	-27.28	357	180	H
	* 4042.03	40.81	MAv1	35.2	-41.4	34.61	54	-19.39	-	-	357	180	H
2	* 8222.113	49.62	PK2	35.9	-36.9	48.62	-	-	74	-25.38	2	307	H
	* 8219.293	37.89	MAv1	35.9	-36.9	36.89	54	-17.11	-	-	2	307	H
3	* 12602.52	46.49	PK2	39.4	-33.3	52.59	-	-	74	-21.41	76	219	H
	* 12603.616	35.19	MAv1	39.4	-33.3	41.29	54	-12.71	-	-	76	219	H
4	* 4049.618	52.51	PK2	35.2	-41.3	46.41	-	-	74	-27.59	14	374	V
	* 4047.978	41.05	MAv1	35.2	-41.4	34.85	54	-19.15	-	-	14	374	V
5	* 8138.47	50.34	PK2	35.9	-36.9	49.34	-	-	74	-24.66	281	397	V
	* 8136.171	38.39	MAv1	35.9	-36.8	37.49	54	-16.51	-	-	281	397	V
6	17090.157	45.9	PK2	41.5	-31.1	56.3	-	-	-	-	113	385	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4059.368	52.7	PK2	35.2	-41.3	46.6	-	-	74	-27.4	291	238	H
	* 4059.3	41.16	MAv1	35.2	-41.3	35.06	54	-18.94	-	-	291	238	H
2	* 8096.245	49.75	PK2	35.9	-36.5	49.15	-	-	74	-24.85	20	366	H
	* 8098.822	38.44	MAv1	35.9	-36.6	37.74	54	-16.26	-	-	20	366	H
3	* 11146.321	48.63	PK2	38	-35.1	51.53	-	-	74	-22.47	76	286	H
	* 11147.772	37.29	MAv1	38	-35.2	40.09	54	-13.91	-	-	76	286	H
4	* 4084.253	52.65	PK2	35.1	-41.2	46.55	-	-	74	-27.45	149	315	V
	* 4083.256	40.64	MAv1	35.1	-41.3	34.44	54	-19.56	-	-	149	315	V
5	* 8083.152	49.38	PK2	35.9	-36.5	48.78	-	-	74	-25.22	35	132	V
	* 8084.889	37.9	MAv1	35.9	-36.5	37.3	54	-16.7	-	-	35	132	V
6	15026.23	47.3	PK2	40.1	-32.8	54.6	-	-	-	-	269	379	V

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

PK2 - KDB558074 Method: Maximum Peak

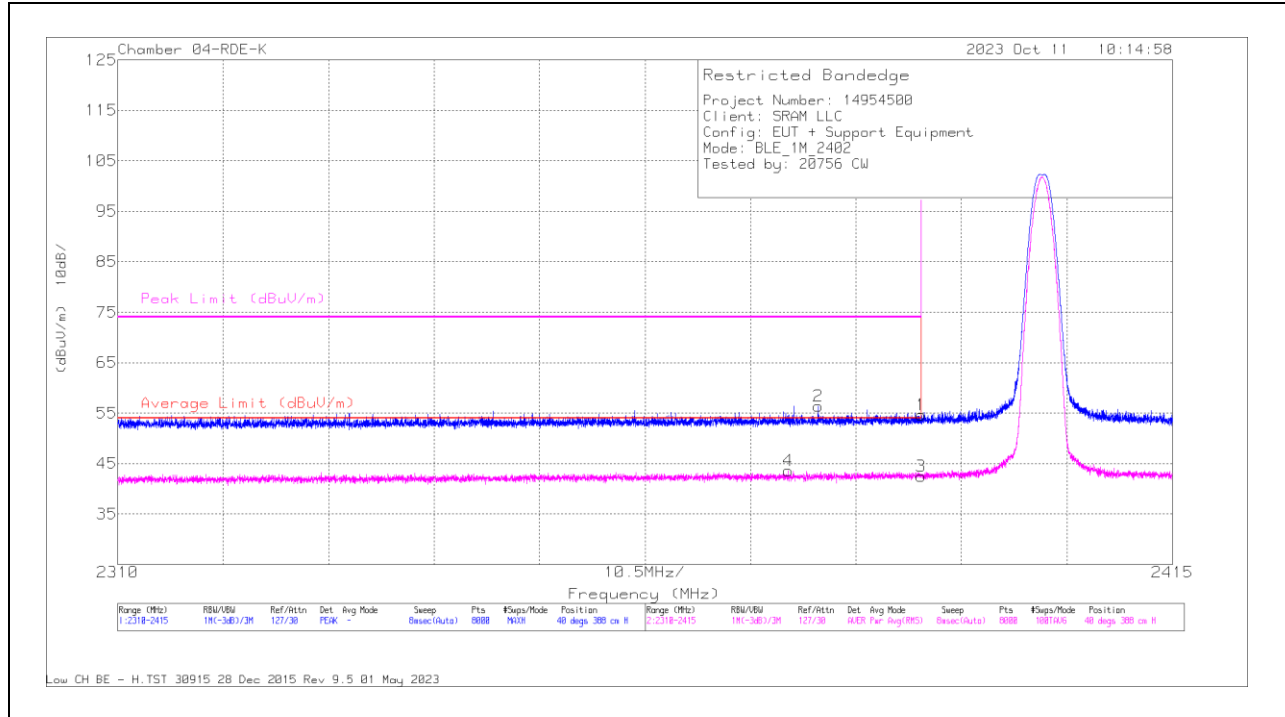
MAv1 - KDB558074 Option 1 Maximum RMS Average

### 10.2.3. RIGHT NORDIC RADIO:

#### BLE (1Mbps):

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



#### Trace Markers

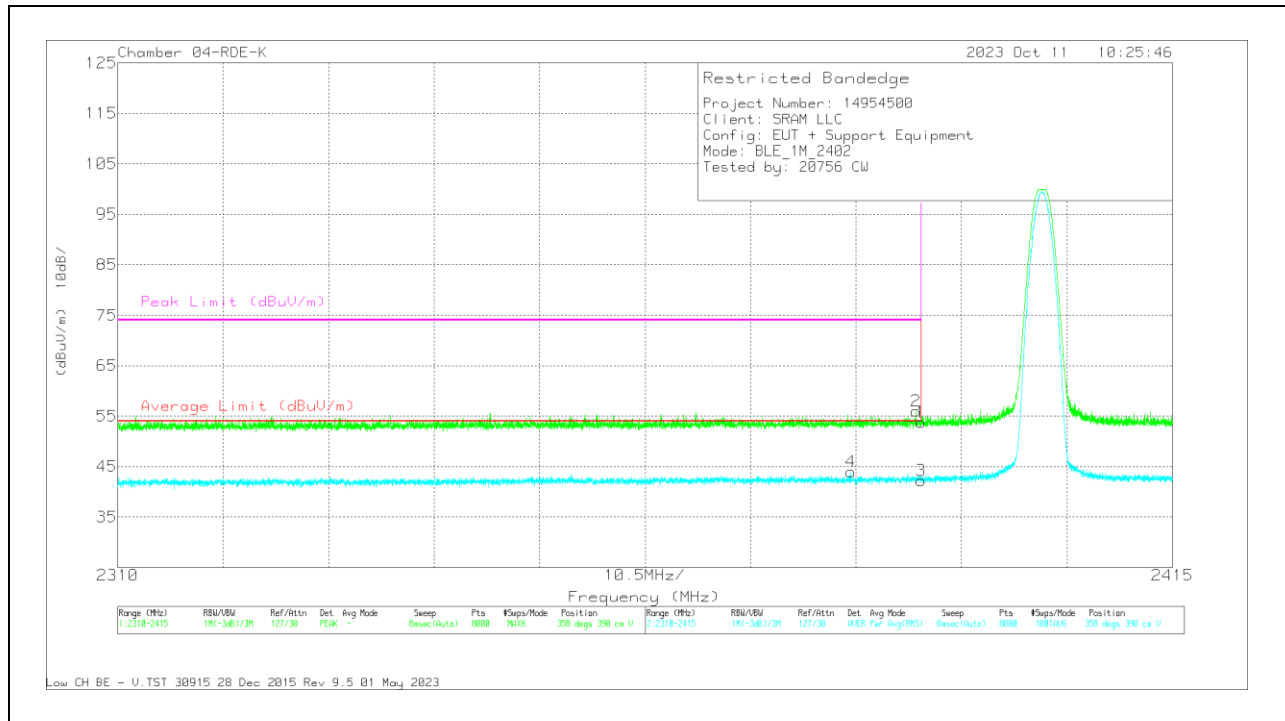
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	57.36	Pk	31.8	-34.5	54.66	-	-	74	-19.34	40	388	H
2	* 2379.731	59.13	Pk	31.8	-34.5	56.43	-	-	74	-17.57	40	388	H
3	* 2390	45.17	RMS	31.8	-34.5	42.47	54	-11.53	-	-	40	388	H
4	* 2376.751	46.5	RMS	31.7	-34.6	43.6	54	-10.4	-	-	40	388	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



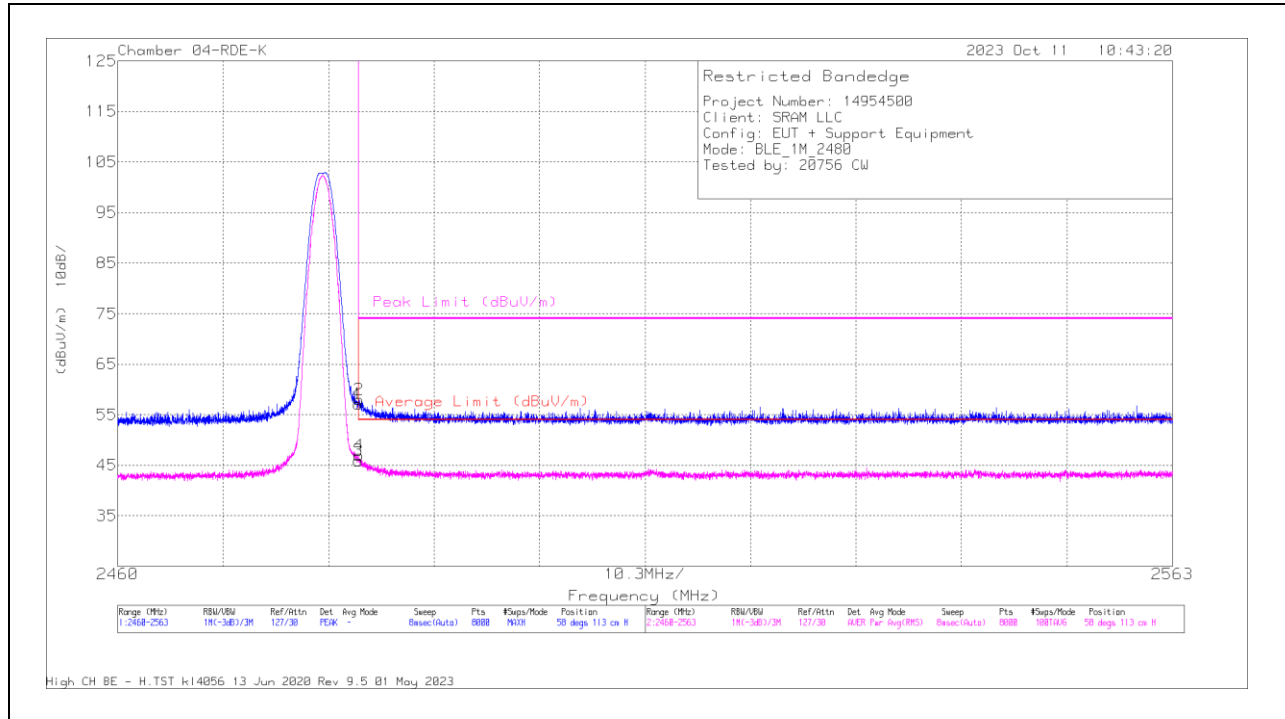
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	56.47	Pk	31.8	-34.5	53.77	-	-	74	-20.23	358	390	V
2	* 2389.471	58.68	Pk	31.8	-34.5	55.98	-	-	74	-18.02	358	390	V
3	* 2390	44.94	RMS	31.8	-34.5	42.24	54	-11.76	-	-	358	390	V
4	* 2382.999	46.62	RMS	31.8	-34.5	43.92	54	-10.08	-	-	358	390	V

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

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**

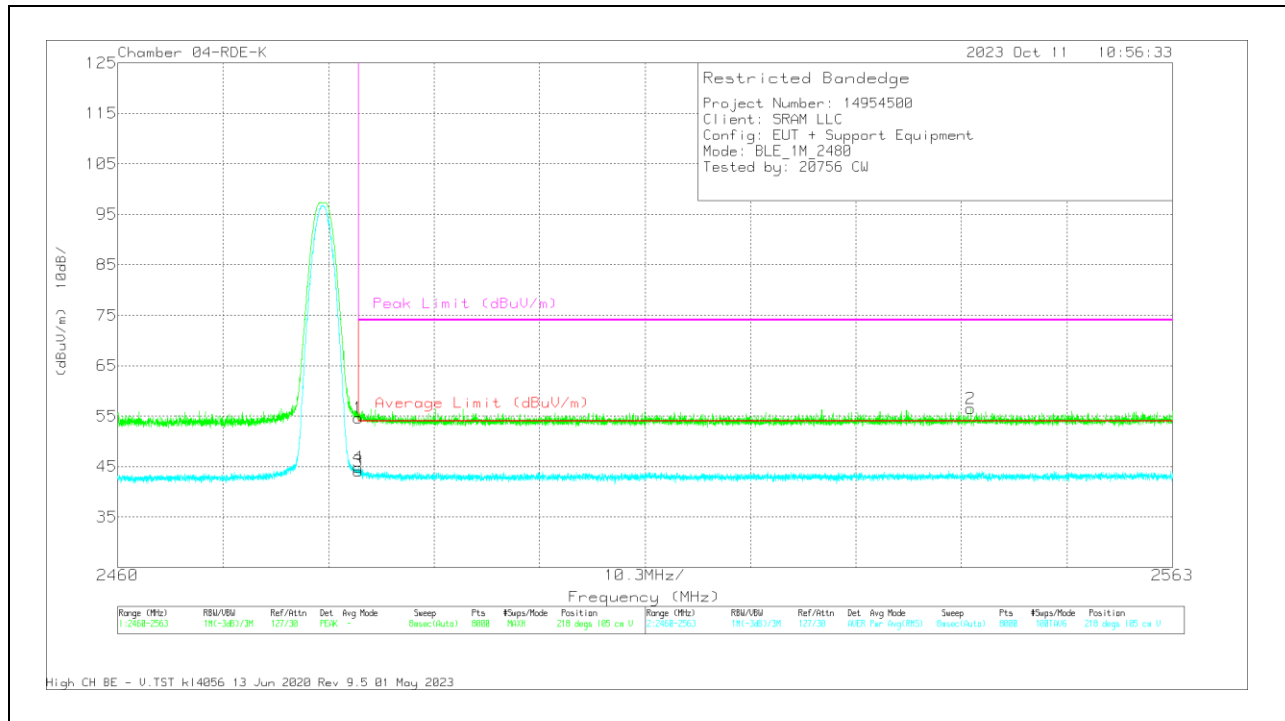


**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	58.97	Pk	32.2	-34.1	57.07	-	-	74	-16.93	58	113	H
2	* 2483.565	59.88	Pk	32.2	-34.1	57.98	-	-	74	-16.02	58	113	H
3	* 2483.5	47.79	RMS	32.2	-34.1	45.89	54	-8.11	-	-	58	113	H
4	* 2483.552	48.87	RMS	32.2	-34.1	46.97	54	-7.03	-	-	58	113	H

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

### VERTICAL RESULT



### Trace Markers

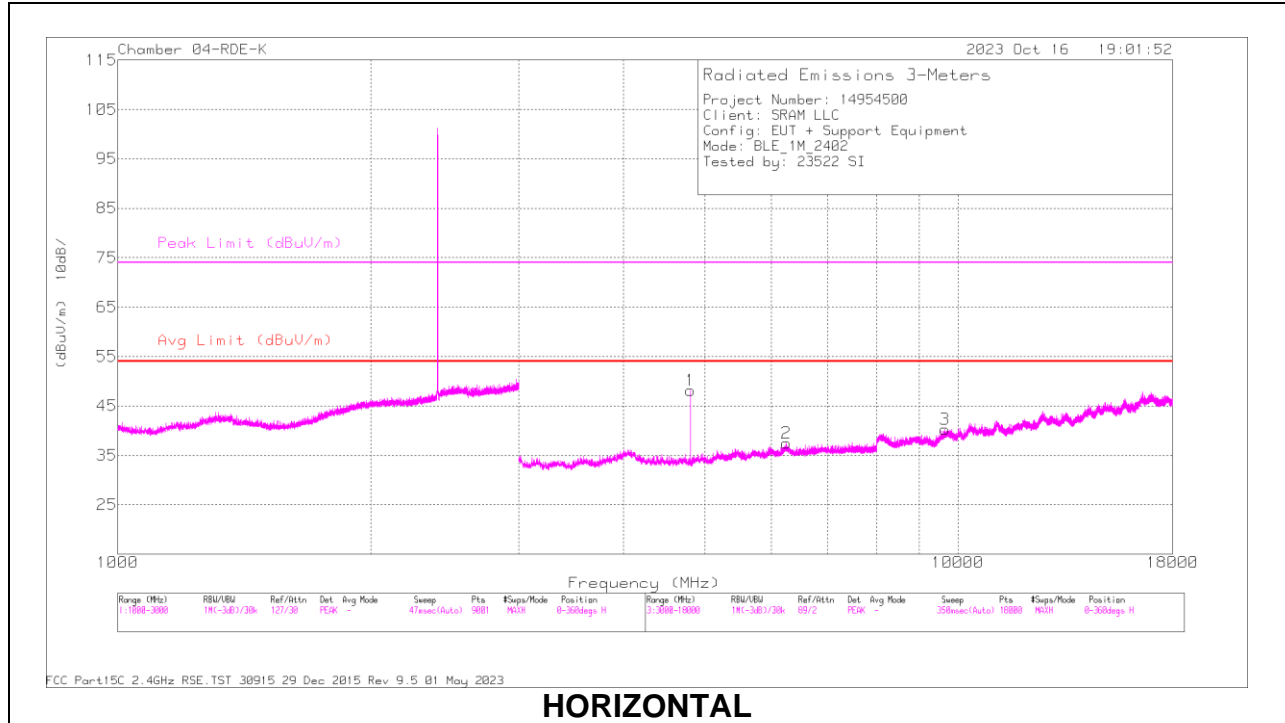
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	56.52	Pk	32.2	-34.1	54.62	-	-	74	-19.38	218	105	V
2	2543.301	58.15	Pk	32.2	-33.9	56.45	-	-	74	-17.55	218	105	V
3	* 2483.5	46.04	RMS	32.2	-34.1	44.14	54	-9.86	-	-	218	105	V
4	* 2483.513	46.7	RMS	32.2	-34.1	44.8	54	-9.2	-	-	218	105	V

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

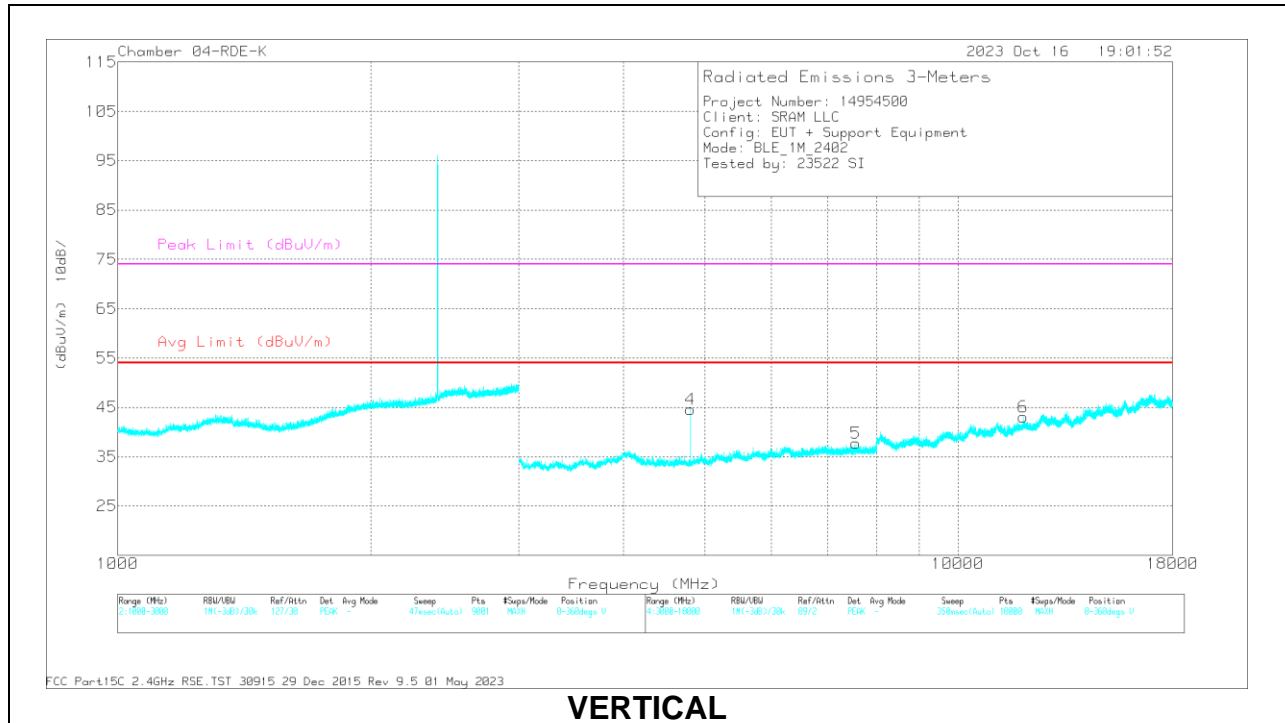


# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

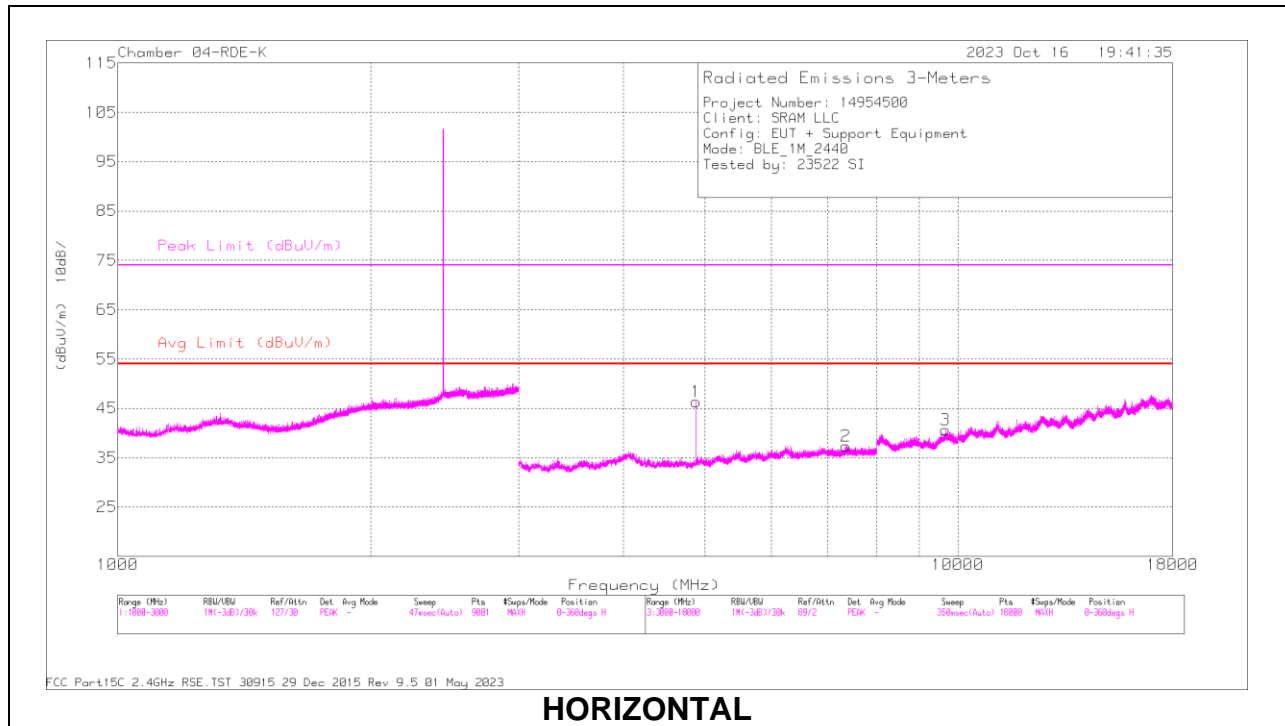
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4803.463	58.72	PK2	33.7	-39.9	52.52	-	-	74	-21.48	156	327	H
	* 4803.7	54.03	MAv1	33.7	-40	47.73	54	-6.27	-	-	156	327	H
2	6250.675	49.4	PK2	35.3	-37.7	47	-	-	-	-	190	255	H
3	9644.659	48.51	PK2	36.8	-35.8	49.51	-	-	-	-	129	197	H
4	* 4804.555	55.69	PK2	33.7	-40	49.39	-	-	74	-24.61	219	134	V
	* 4804.352	49.17	MAv1	33.7	-40	42.87	54	-11.13	-	-	219	134	V
5	* 7558.815	48.35	PK2	35.7	-37.2	46.85	-	-	74	-27.15	230	369	V
	* 7555.068	36.96	MAv1	35.7	-37.2	35.46	54	-18.54	-	-	230	369	V
6	* 11957.369	47.35	PK2	38.6	-34.2	51.75	-	-	74	-22.25	261	268	V
	* 11956.498	35.69	MAv1	38.6	-34.2	40.09	54	-13.91	-	-	261	268	V

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

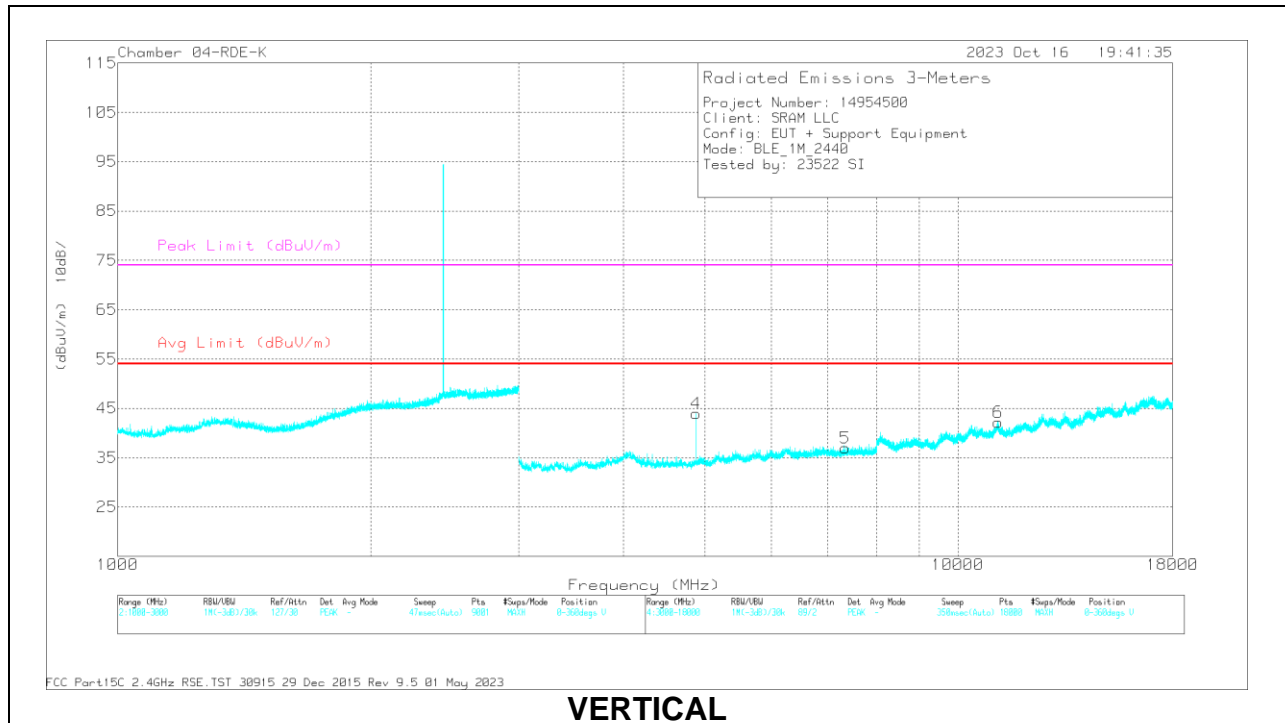
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4879.5	57.82	PK2	33.7	-39.9	51.62	-	-	74	-22.38	158	359	H
	* 4880.296	52.07	MAv1	33.7	-39.9	45.87	54	-8.13	-	-	158	359	H
2	* 7352.423	48.81	PK2	35.7	-37.3	47.21	-	-	74	-26.79	64	370	H
	* 7350.355	37.01	MAv1	35.7	-37.3	35.41	54	-18.59	-	-	64	370	H
3	9667.725	48.77	PK2	36.8	-35.8	49.77	-	-	-	-	101	348	H
4	* 4879.524	56.48	PK2	33.7	-39.9	50.28	-	-	74	-23.72	20	231	V
	* 4879.878	49.66	MAv1	33.7	-39.9	43.46	54	-10.54	-	-	20	231	V
5	* 7348.769	49.09	PK2	35.7	-37.2	47.59	-	-	74	-26.41	51	314	V
	* 7346.918	36.8	MAv1	35.7	-37.3	35.2	54	-18.8	-	-	51	314	V
6	* 11157.276	48.91	PK2	38	-35.1	51.81	-	-	74	-22.19	218	243	V
	* 11158.162	37.34	MAv1	38	-35.1	40.24	54	-13.76	-	-	218	243	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average