

TEST REPORT

Report Number. : 14890696-E5V4

Applicant : BELKIN INTERNATIONAL, INC.
555 S. AVIATION BLVD., SUITE 180
EL SEGUNDO, CA 90245, USA

Model : MMA008

Brand : belkin

FCC ID : K7SMMA008

IC : 3623A-MMA008

EUT Description : Auto-Tracking Stand Pro with DockKit

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 3
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:

2024-02-09

Prepared by:

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2024-01-19	Initial Issue	--
V2	2024-02-05	Updated Section 1, 10.5 to address TCB's questions	Tina Chu
V3	2024-02-08	Updated Section 6.3 antenna gain	Tina Chu
V4	2024-02-09	Updated RSS-247 to Issue 3	F. de Anda

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BELKIN INTERNATIONAL, INC.
555 S. AVIATION BLVD., SUITE 180
EL SEGUNDO, CA 90245, USA

EUT DESCRIPTION: Auto Tracking Dock with Magsafe

MODEL: MMA008

BRAND: belkin

SERIAL NUMBER: Radiated: 57X10F68D00587, 57X10F68D00546,
57X10F68D00585, 57X10F68D00529,
57X10F68D00586, 57X10F68D00534, 57X10F68D00518
Conducted: 57XA10F68D00517

SAMPLE RECEIPT DATE: 2023-11-06

DATE TESTED: 2023-11-13 to 2023-12-27

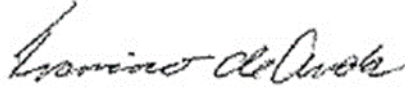
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
ISED RSS-247 Issue 3	Complies
ISED RSS-GEN Issue 5 + A1 + A2	Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.

Approved & Released For
UL Verification Services Inc. By:



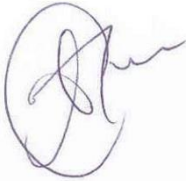
Francisco deAnda
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UL Verification Services Inc.

Prepared By:



David Collins
Senior Test Engineer
Consumer Technology Division
UL Verification Services Inc.

Reviewed By:



Tina Chu
Senior Project Engineer
Consumer Technology Division
UL Verification Services Inc.

2. TEST RESULTS SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

Below is a list of the data provided by the customer:

- 1) Antenna gain and type (see section 6.3)
- 2) Cable loss (see section 6.3)

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	ANSI C63.10 Section 11.6.
-	RSS-GEN 6.7	99% OBW	Reporting purposes only	ANSI C63.10 Section 6.9.3.
15.247 (a) (2)	RSS-247 5.2 (a)	6dB BW	Complies	None.
15.247 (b) (3)	RSS-247 5.4 (d)	Output Power	Complies	None.
See Comment		Average power	Reporting purposes only	Per ANSI C63.10, Section 11.9.2.3.2.
15.247 (e)	RSS-247 5.2 (b)	PSD	Complies	None.
15.247 (d)	RSS-247 5.5	Conducted Spurious Emissions	Complies	None.
15.209, 15.205	RSS-GEN 8.9, 8.10	Radiated Emissions	Complies	None.
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions	Complies	None.

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with;

FCC CFR 47 Part 2
FCC CFR 47 Part 15
ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance
KDB 414788 D01 Radiated Test Site
RSS-GEN Issue 5 + A1 + A2, and RSS-247 Issue 3

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, Certificate Number 0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input type="checkbox"/>	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
<input type="checkbox"/>	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA			

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
RF Power Measurement Direct Method Using Power Meter	1.3 dB (PK) / 0.45 dB (AV)
Unwanted Emissions, Conducted	1.94 dB
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable

Loss (dB) – Preamp Gain (dB)

$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) +

LISN Insertion Loss.

$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a 360-degree face, body & movement tracking wireless charger with MagSafe that can charge one client device at a time. The EUT is also motorized and supports a 90 degree auto tilt for automatic video angle adjusting. The EUT supports both BLE (1Mbps, 2Mbps), and NFC (passive). The EUT supports Wireless Power Transfer (WPT) only when directly connected to a USB-C AC/DC power supply.

When the EUT is disconnected from the power supply and is powered by the internal battery, the wireless charging coil will not transmit any power. The wireless charging coil can be used for charging either a MagSafe iPhone at 360kHz (15W Max), legacy iPhone at 127.7kHz (7.5W Max), or AirPods Pro case at 127.7kHz (1W Max).

The EUT is powered through a USB-C to USB-Cable that is connected to the bundled 30W USB Type-C PD Power Supply.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	BLE	0.53	1.13

6.3. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

The antenna gain(s), type and cable loss as provided by the manufacturer, are as follows:

The radio utilizes a PCB antenna with a maximum gain of 1.83 dBi. Cable loss: 0.3db.

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was v2.3.0

The test utility software used during testing was Direct Test Mode v2.1.0

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT is intended to be operating in a desktop orientation only where antenna location is at the base that is not moving, therefore all final radiated testing was performed with the EUT in desktop orientation

The worst-case data rate for each mode is determined to be as follows, based on input from the manufacturer of the radio:

BLE: 1 Mbps

BLE: 2 Mbps

7. MEASUREMENT METHOD

On Time and Duty Cycle: ANSI C63.10 Section 11.6.

6 dB BW: ANSI C63.10 Subclause -11.8.1 RBW \geq DTS BW

Occupied BW (99%): ANSI C63.10-2013 Section 6.9.3

Output Power: ANSI C63.10 Subclause -11.9.1.3 Method PKPM1 Peak-reading power meter

Output Power: ANSI C63.10 Subclause -11.9.2.3.2 Method AVGPM-G (Measurement using a gated RF average-reading power meter)

PSD: ANSI C63.10 Subclause -11.10.2 Method PKPSD (peak PSD)

Radiated emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11

Radiated emissions restricted frequency bands: ANSI C63.10 Subclause -11.12.1

Conducted emissions in restricted frequency bands: ANSI C63.10 Subclause -11.12.2

Band-edge: ANSI C63.10 Section 6.10

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

8. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB1	80293	2024-03-31	2023-03-13
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	170647	2024-04-30	2023-04-11
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222741	2024-08-31	2022-08-31
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	170015	2024-07-31	2022-07-28
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	170013	2024-07-31	2022-07-28
RF Filter Box, 1-18GHz, 8 Port	UL-FR1	SAC 8 port rf box 1	171875	2024-05-31	2023-05-30
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	230547	2024-02-29	2023-02-15
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	80404	2024-08-31	2022-08-08
RF Filter Box, 1-18GHz, 8 Port	UL-FR1	SAC 8 port rf box 1	197920	2024-05-31	2023-05-17
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	225688	2024-02-29	2023-02-14
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	206806	2024-10-31	2022-10-07
RF Filter Box, 1-18GHz	FREMONT	SAC-L1	171013	2024-05-31	2023-05-04
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	191429	2024-02-29	2023-02-15
Link File, RF Amplifier Assembly, 18-26.5GHz, 60dB Gain	AMPLICAL	AMP18G26.5-60	234683	2024-03-29	2023-03-18
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	199659	2023-12-31	2022-12-06
10dB Fixed Attenuator, up to 26GHz	Pasternack Enterprises	PE7087-10	236189	Verified/characterized before use	
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90731	2024-01-31	2023-01-24
Power Sensor, P-series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	81319	2024-01-25	2023-01-25
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	125178	2024-02-29	2023-02-06
AC MAINS LINE CONDUCTED EMISSIONS TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
LISN	Fischer Custom Communications, Inc	FCC-LISN-50/250-25-2-01-480V	175765	2024-01-31	2023-01-27
EMI TEST RECEIVER	Rohde & Schwarz	ESR	171646	2024-02-29	2023-02-20
Transient Limiter	TE	TBFL1	207996	2024-08-31	2023-08-10
UL TEST SOFTWARE LIST					
Radiated Software	UL	UL EMC	Ver 2023-05-01		
Antenna Port Software	UL	UL RF	Ver 2022-08-16		
AC Line Conducted Software	UL	UL EMC	Rev 9.5, 2023-03-03		

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

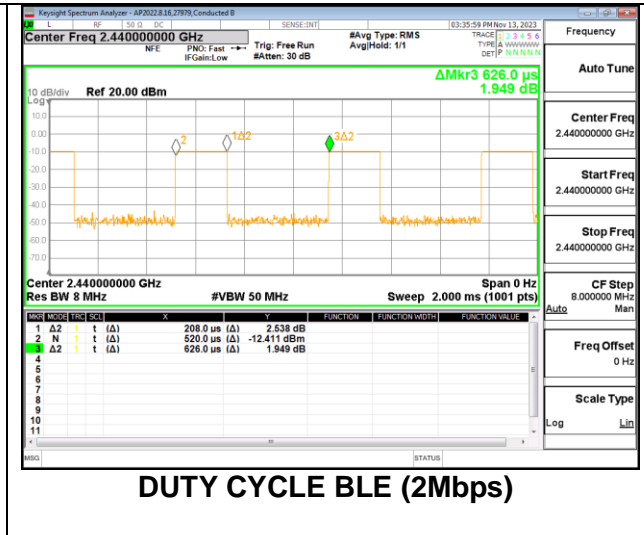
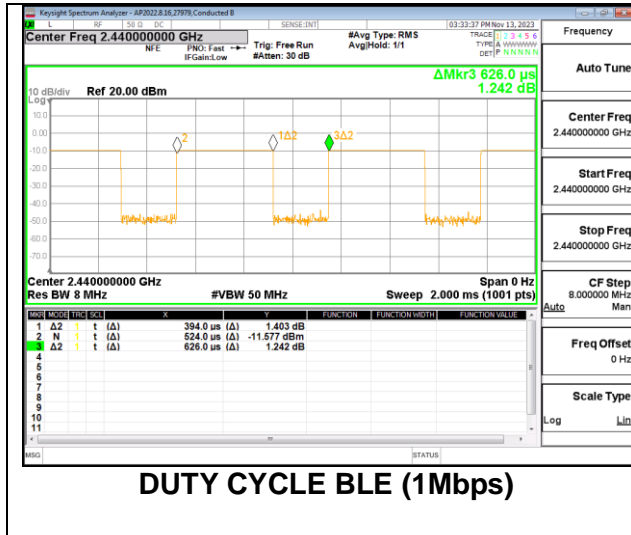
Conducted:

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
BLE (1Mbps)	0.394	0.626	0.629	62.94	2.01	2.538
BLE (2Mbps)	0.208	0.626	0.332	33.23	4.79	4.808

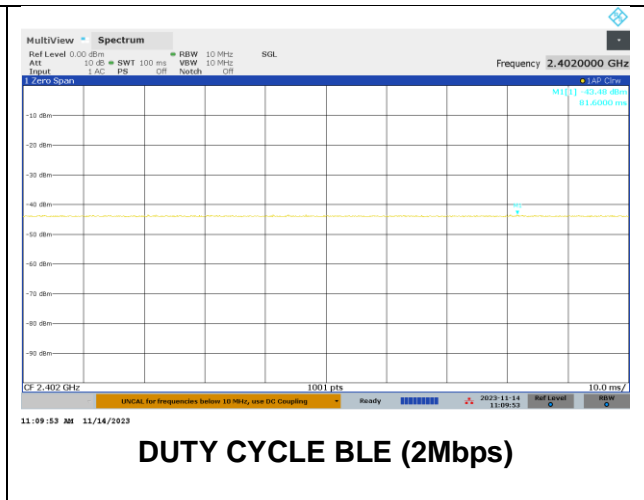
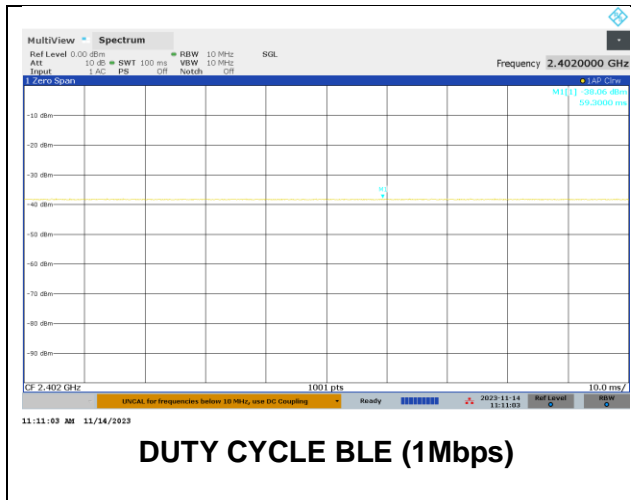
Radiated:

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
BLE (1Mbps)	1.000	1.000	1.000	100.00	0.00	0.010
BLE (2Mbps)	1.000	1.000	1.000	100.00	0.00	0.010

Conducted:



Radiated:



9.2. 99% BANDWIDTH

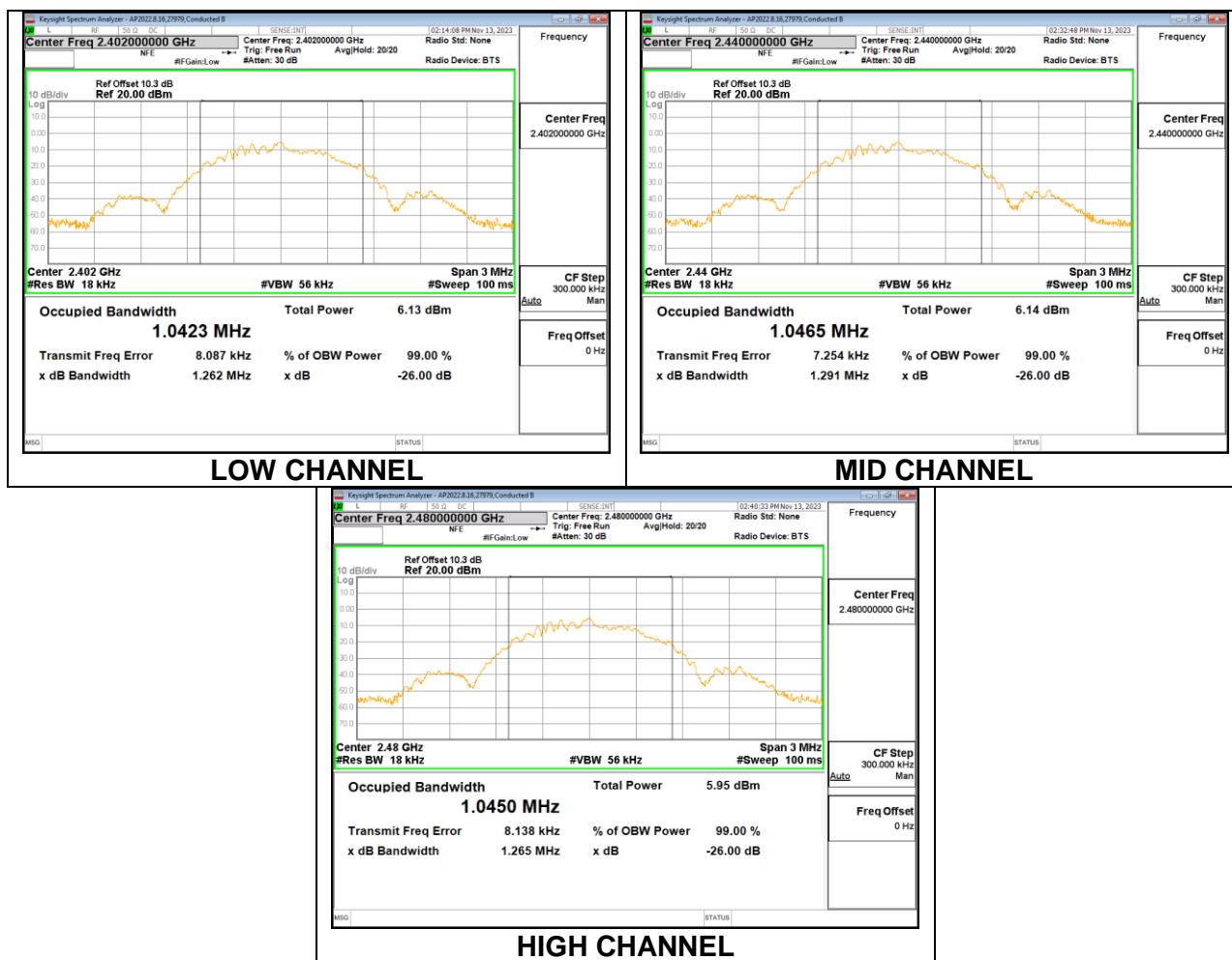
LIMITS

None; for reporting purposes only.

RESULTS

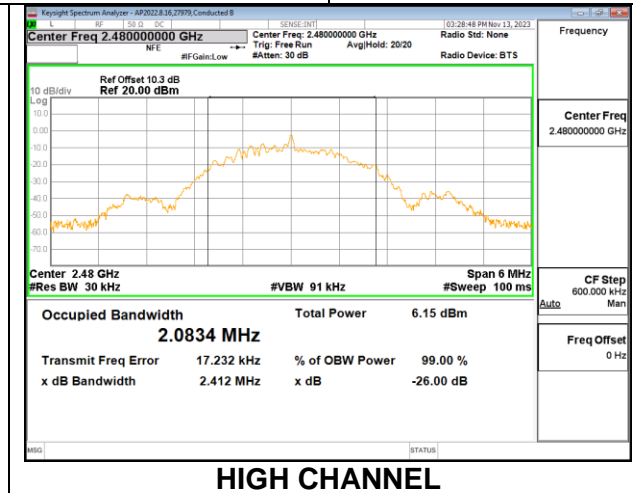
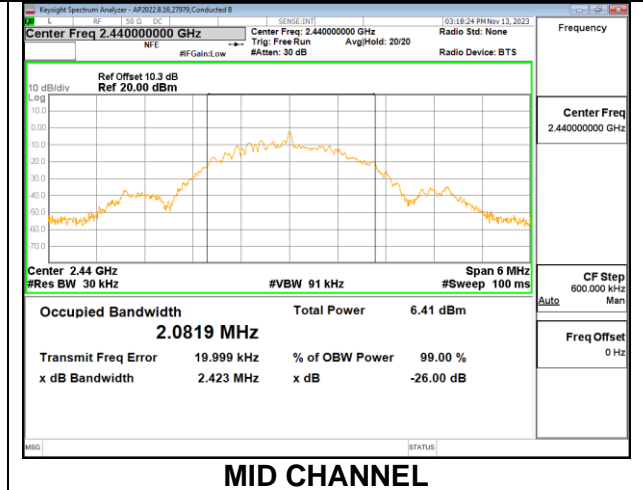
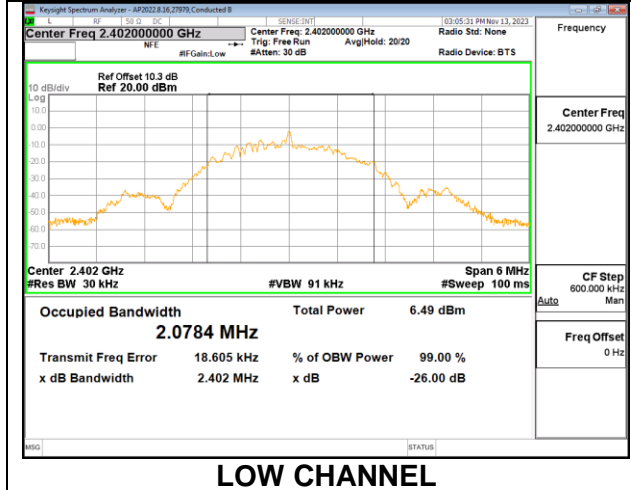
9.2.1. BLE (1Mbps)

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.0423
Middle	2440	1.0465
High	2480	1.0450



9.2.2. BLE (2Mbps)

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	2.0784
Middle	2440	2.0819
High	2480	2.0834



9.3. 6 dB BANDWIDTH

LIMITS

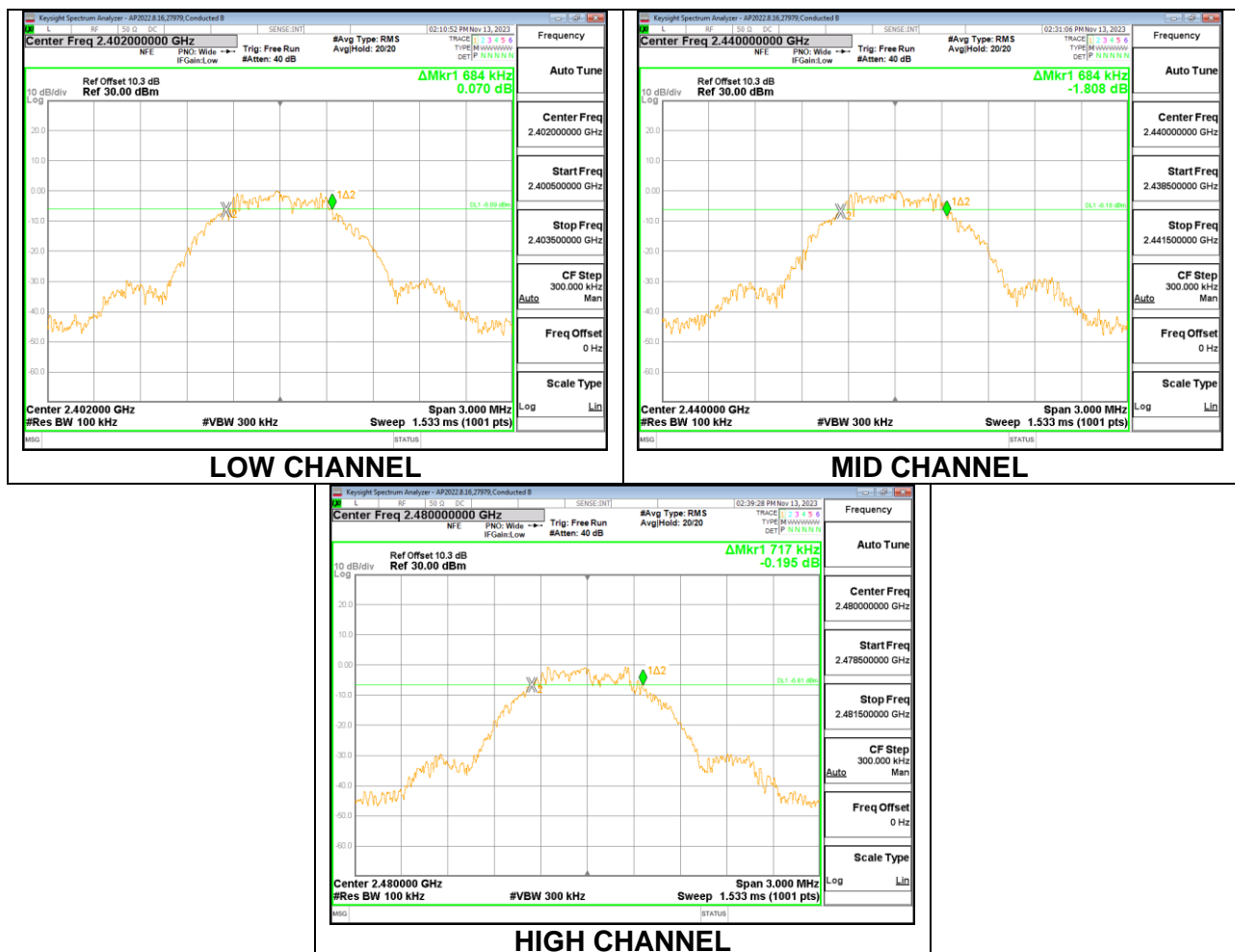
FCC §15.247 (a) (2)
 RSS-247 5.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

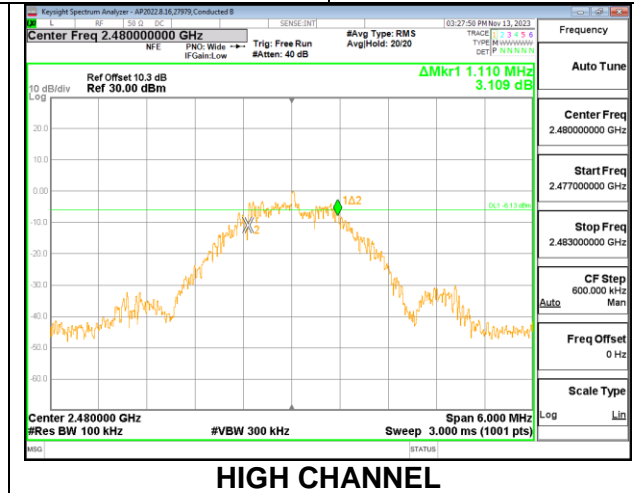
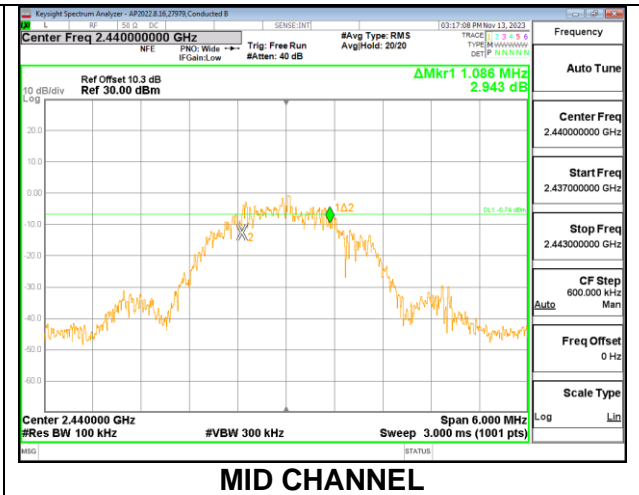
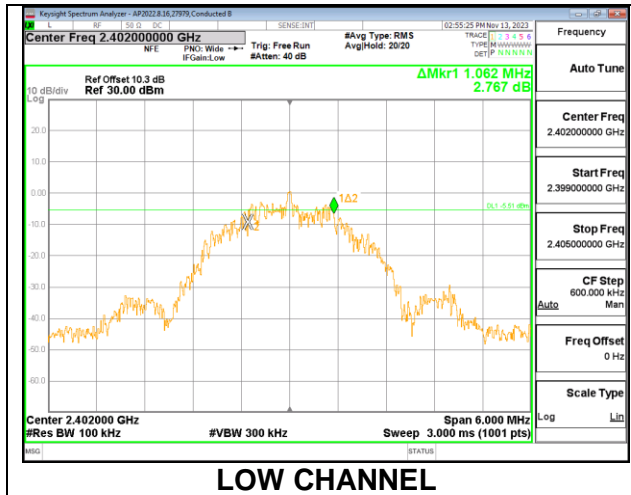
9.3.1. BLE (1Mbps)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.6840	0.5
Middle	2440	0.6840	0.5
High	2480	0.7170	0.5



9.3.2. BLE (2Mbps)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	1.0620	0.5
Middle	2440	1.0860	0.5
High	2480	1.1100	0.5



9.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

RSS-247 5.4 (d)

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with 0.3dB loss connected to a power meter via wideband power sensor. Peak output power was read directly from power meter.

RESULTS

9.4.1. BLE (1Mbps)

Tested By:	27979 HN
Date:	2023-11-13

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	0.52	30	-29.480
Middle	2440	0.38	30	-29.620
High	2480	0.18	30	-29.820

9.4.2. BLE (2Mbps)

Tested By:	27979 HN
Date:	2023-11-13

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	0.53	30	-29.470
Middle	2440	0.35	30	-29.650
High	2480	0.11	30	-29.890

9.5. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with 0.3dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

9.5.1. BLE (1Mbps)

Tested By:	27979 HN
Date:	2023-11-13

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	0.23
Middle	2440	0.08
High	2480	-0.12

9.5.2. BLE (2Mbps)

Tested By:	27979 HN
Date:	2023-11-13

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	0.19
Middle	2440	-0.02
High	2480	-0.15

9.6. POWER SPECTRAL DENSITY

LIMITS

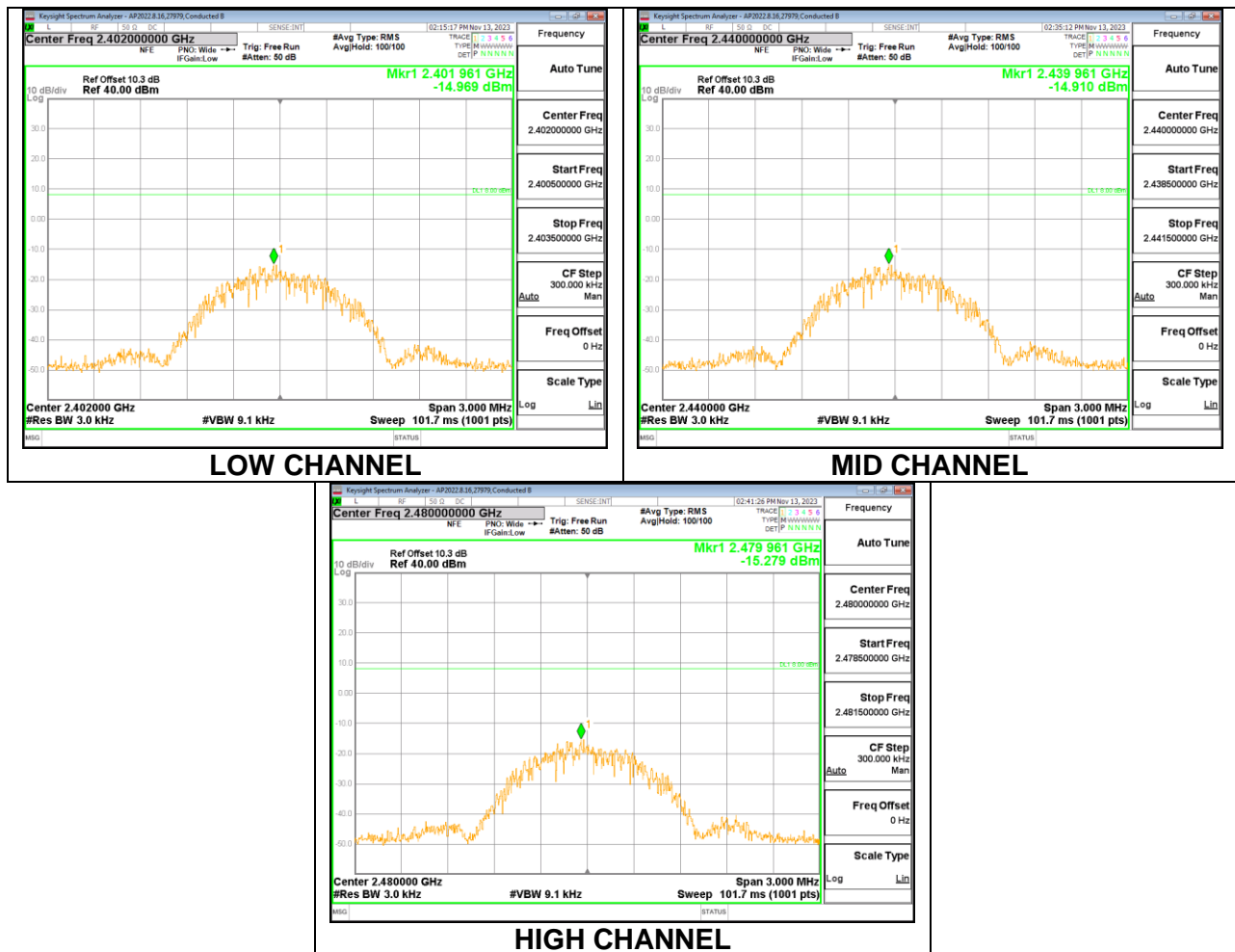
FCC §15.247 (e)
 RSS-247 (5.2) (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

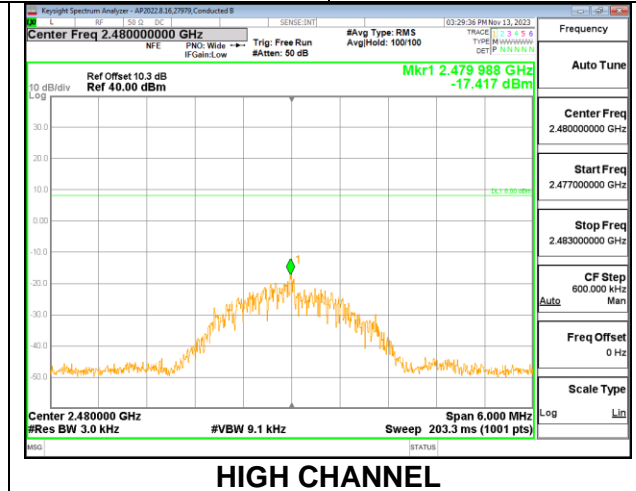
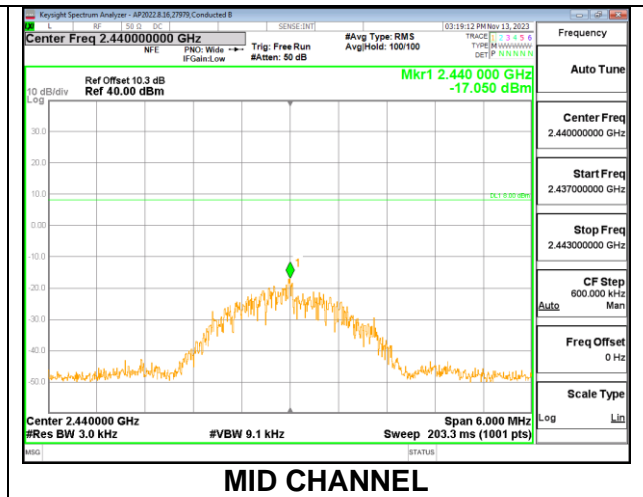
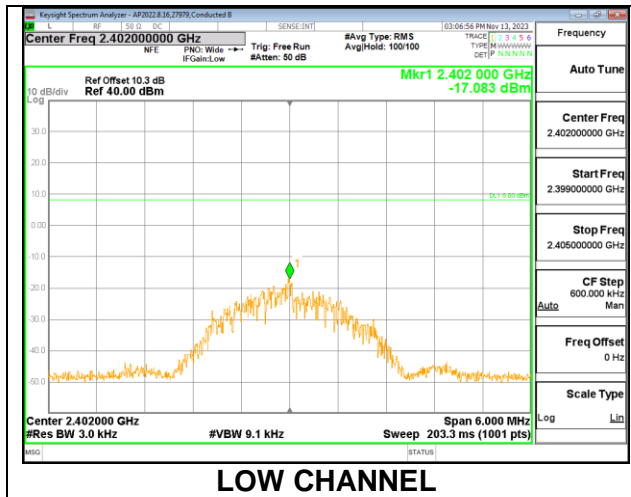
9.6.1. BLE (1Mbps)

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2402	-14.97	8	-22.97
Middle	2440	-14.91	8	-22.91
High	2480	-15.28	8	-23.28



9.6.2. BLE (2Mbps)

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2402	-17.08	8	-25.08
Middle	2440	-17.05	8	-25.05
High	2480	-17.42	8	-25.42



9.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

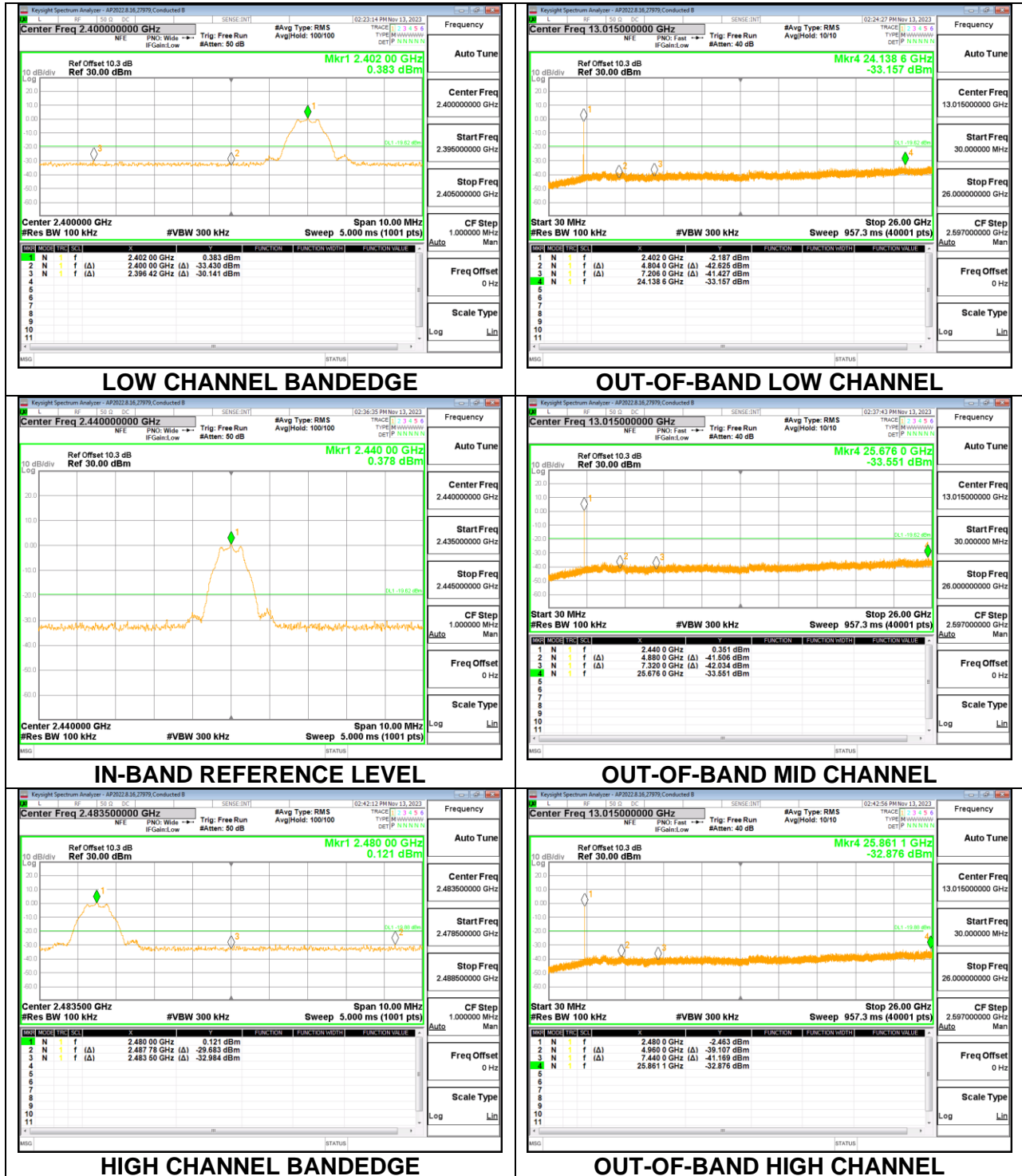
FCC §15.247 (d)

RSS-247 5.5

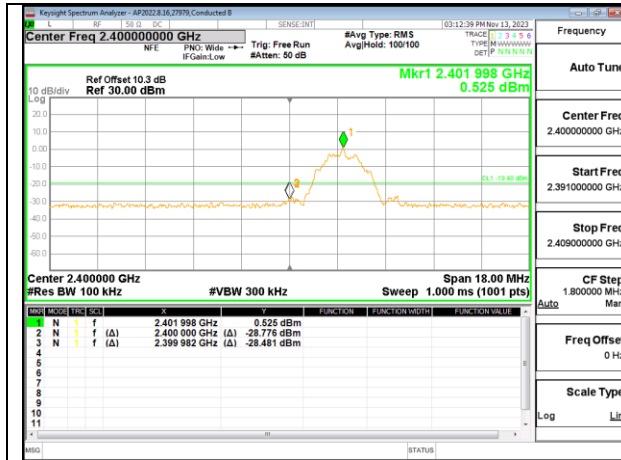
Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dBc.

RESULTS

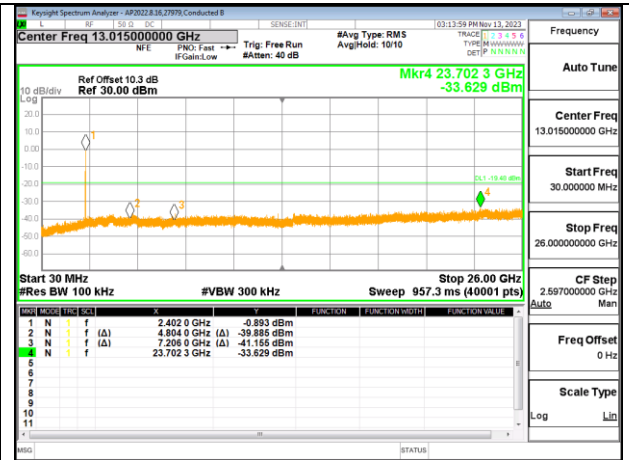
9.7.1. BLE (1Mbps)



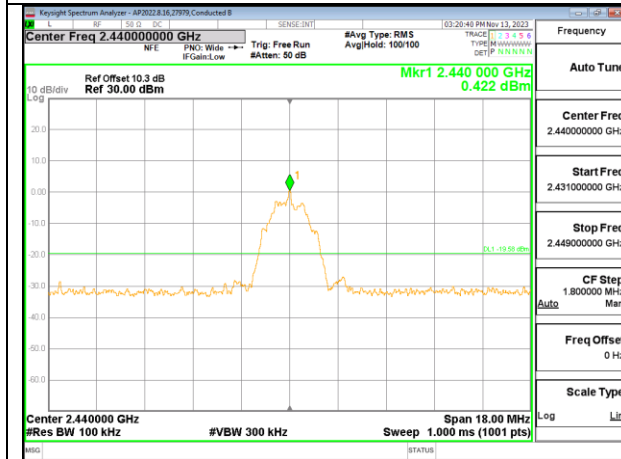
9.7.2. BLE (2Mbps)



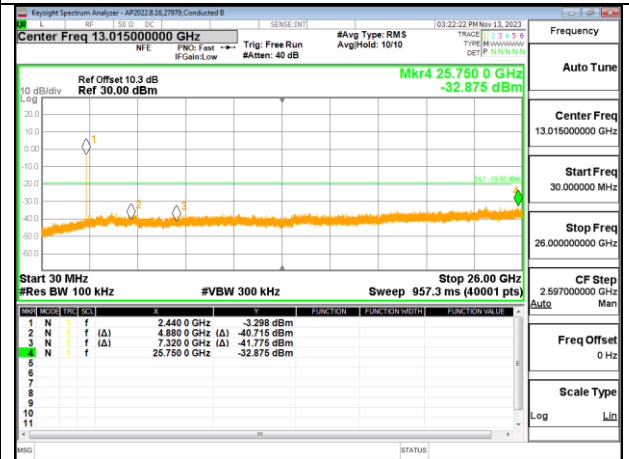
LOW CHANNEL BANDEDGE



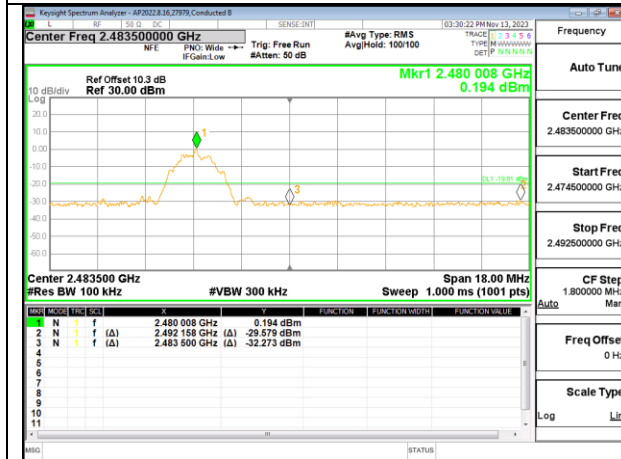
OUT-OF-BAND LOW CHANNEL



IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

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. Blue color trace on plots: Parallel orientation. Green color trace on plots: Perpendicular orientation.

Base 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.

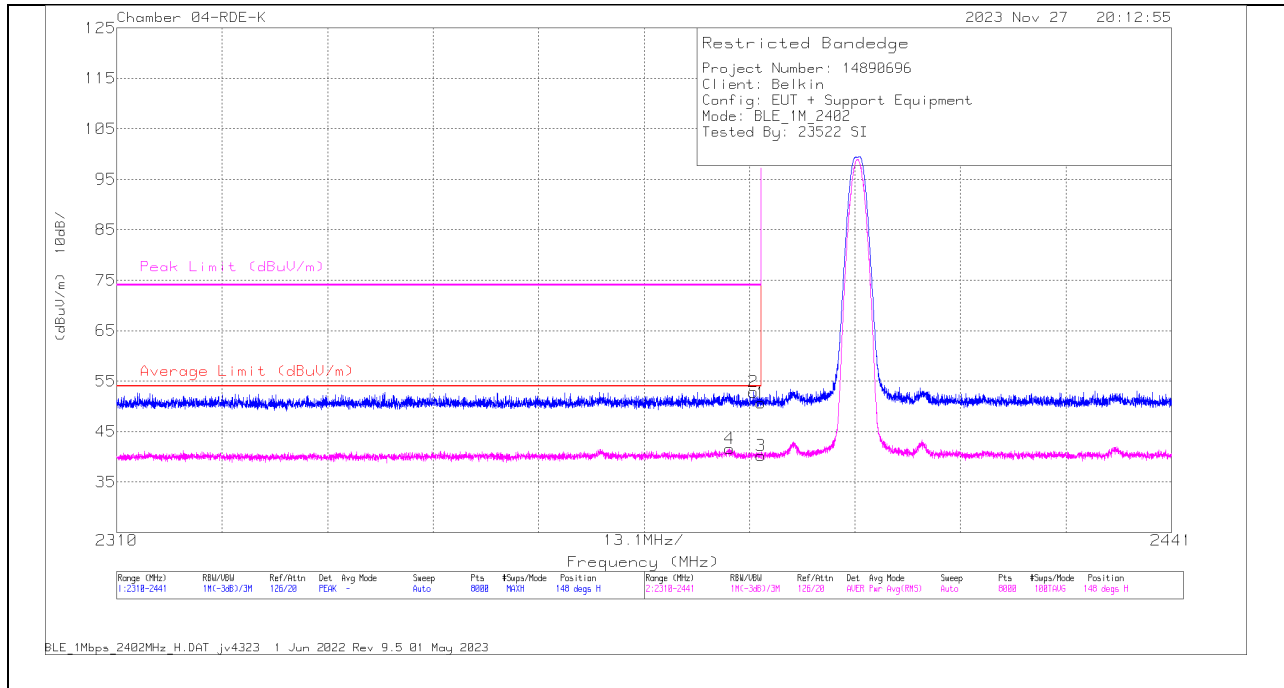
NOTE: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance 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. BLE (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

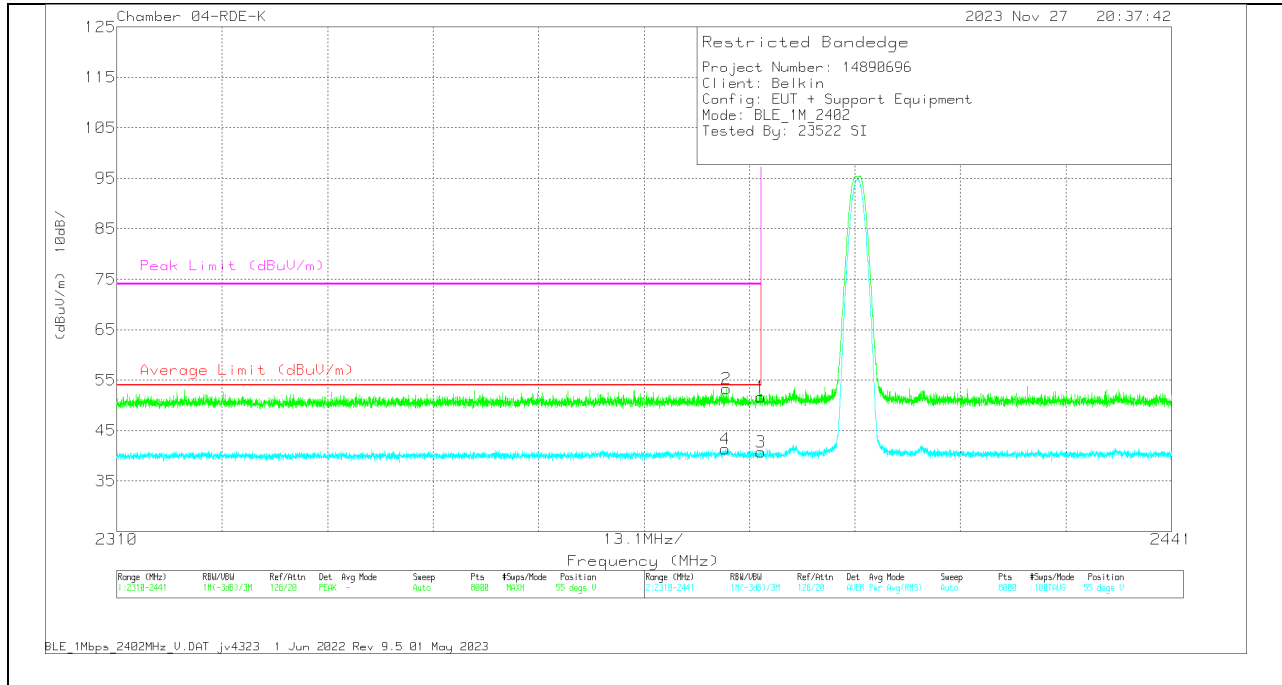


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (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	* 2.39	55.8	Pk	32	-37.1	50.7	-	-	74	-23.3	148	108	H
2	* 2.389085	57.94	Pk	32	-37.1	52.84	-	-	74	-21.16	148	108	H
3	* 2.39	45.39	RMS	32	-37.1	40.29	54	-13.71	-	-	148	108	H
4	* 2.386088	46.75	RMS	32	-37.1	41.65	54	-12.35	-	-	148	108	H

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

VERTICAL RESULT



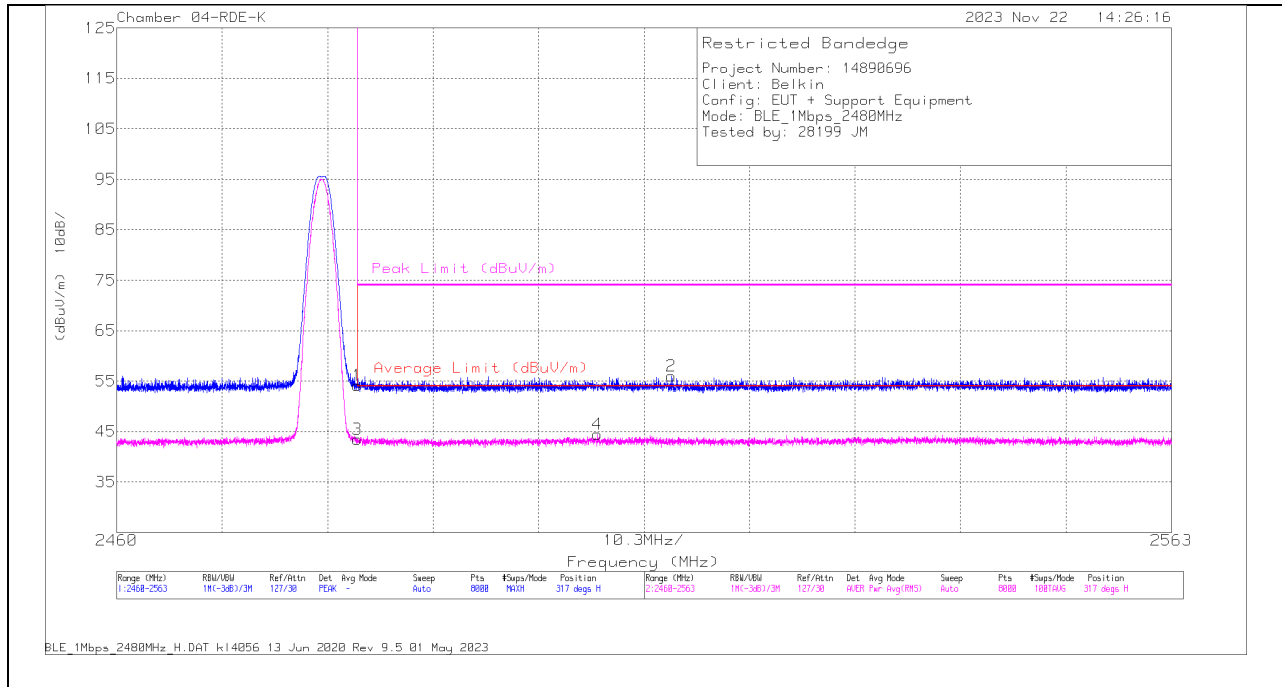
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (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	* 2.39	56.76	PK	32	-37.1	51.66	-	-	74	-22.34	55	112	V
2	* 2.385711	58.35	PK	32	-37.1	53.25	-	-	74	-20.75	55	112	V
3	* 2.39	45.87	RMS	32	-37.1	40.77	54	-13.23	-	-	55	112	V
4	* 2.38558	46.5	RMS	32	-37.1	41.4	54	-12.6	-	-	55	112	V

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

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

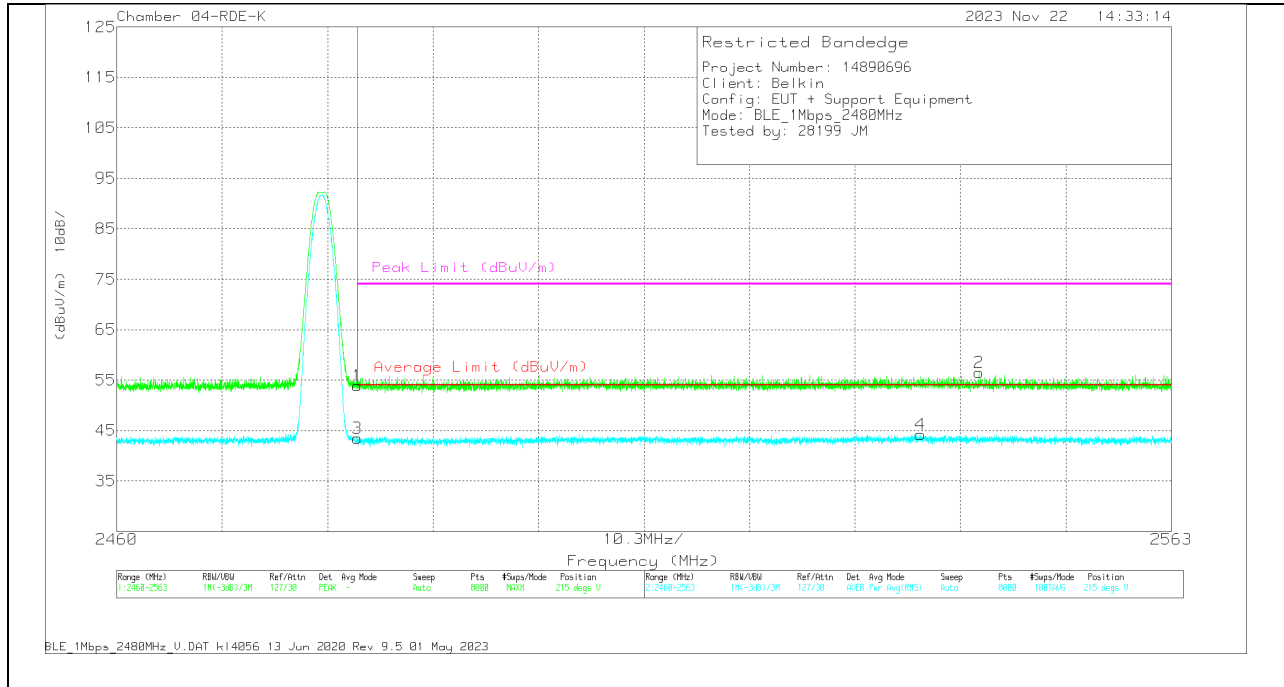


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF (dB/m)	Cb/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	56.04	Pk	32.2	-34.1	54.14	-	-	74	-19.86	317	131	H
3	* 2483.5	45.38	RMS	32.2	-34.1	43.48	54	-10.52	-	-	317	131	H
4	2506.962	46.07	RMS	32.3	-33.9	44.47	54	-9.53	-	-	317	131	H
2	2514.174	57.66	Pk	32.3	-34	55.96	-	-	74	-18.04	317	131	H

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

VERTICAL RESULT



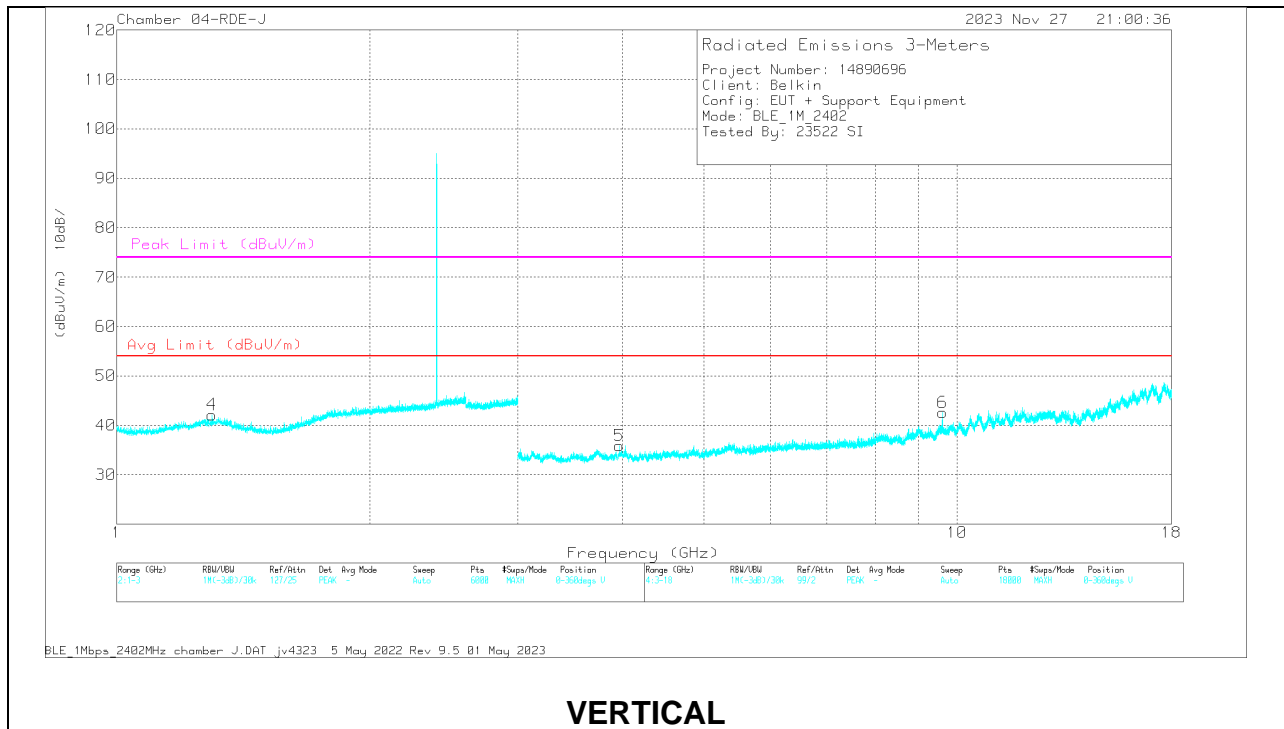
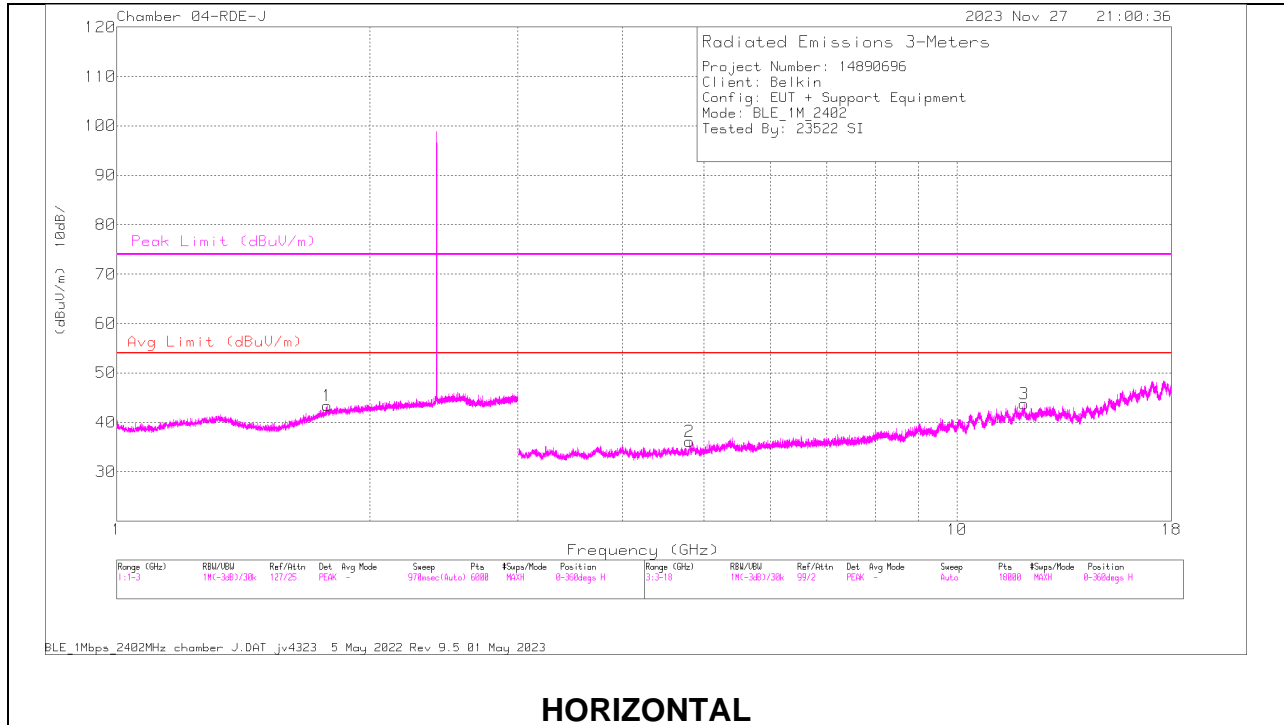
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF (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	55.74	Pk	32.2	-34.1	53.84	-	-	74	-20.16	215	363	V
3	* 2483.5	45.33	RMS	32.2	-34.1	43.43	54	-10.57	-	-	215	363	V
4	2538.485	45.73	RMS	32.4	-33.9	44.23	54	-9.77	-	-	215	363	V
2	2544.216	58.23	Pk	32.3	-34	56.53	-	-	74	-17.47	215	363	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

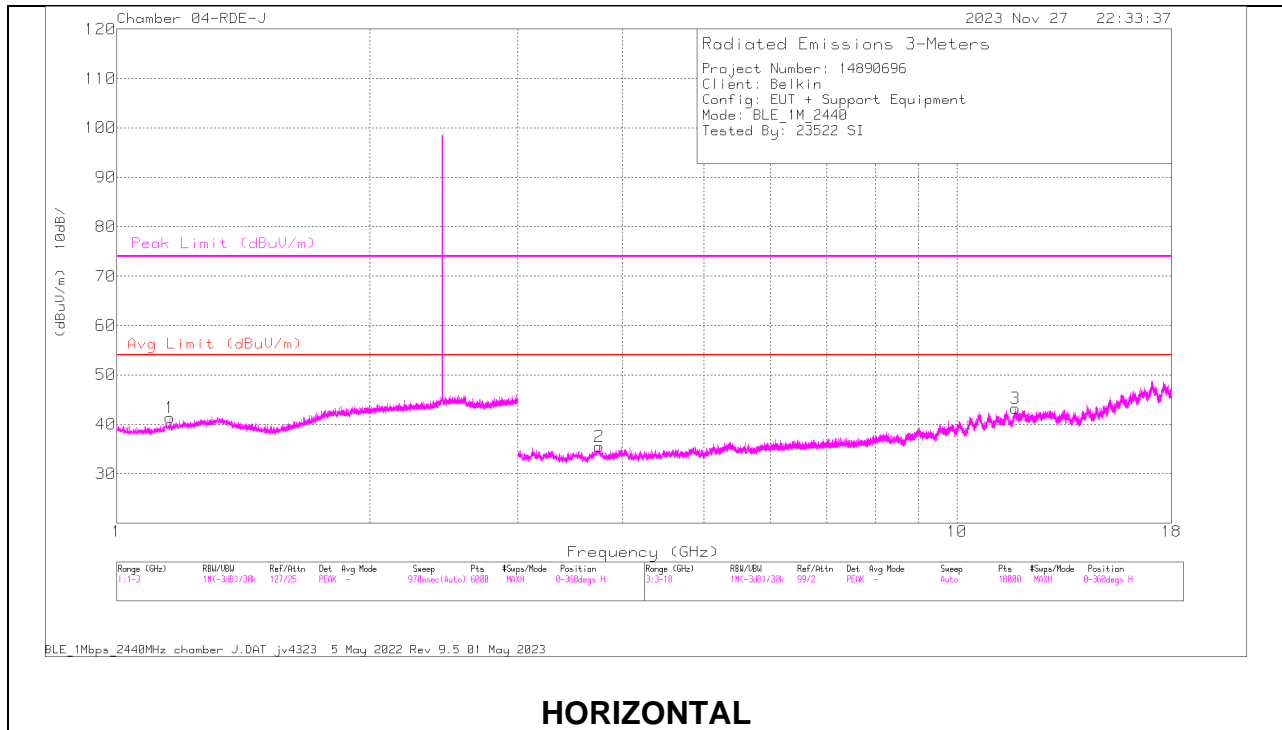
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.778858	47.59	MAv1	30.4	-37.3	40.69	-	-	-	-	177	326	H
	1.780048	59.62	PK2	30.4	-37.3	52.72	-	-	-	-	177	326	H
2	* 4.803972	57.1	PK2	34	-45	46.1	-	-	74	-27.9	157	136	H
	* 4.80419	46.47	MAv1	34	-45	35.47	54	-18.53	-	-	157	136	H
3	* 12.017841	53.22	PK2	38.7	-38.8	53.12	-	-	74	-20.88	125	221	H
	* 12.017831	41.44	MAv1	38.7	-38.8	41.34	54	-12.66	-	-	125	221	H
4	* 1.2983	59.24	PK2	28.7	-37.3	50.64	-	-	74	-23.36	51	169	V
	* 1.296096	47.47	MAv1	28.7	-37.5	38.67	54	-15.33	-	-	51	169	V
5	* 3.962452	55.19	PK2	33.4	-44.4	44.19	-	-	74	-29.81	342	298	V
	* 3.96064	43.92	MAv1	33.4	-44.4	32.92	54	-21.08	-	-	342	298	V
6	9.607142	55.9	PK2	36.7	-40.4	52.2	-	-	-	-	281	118	V
	9.607167	44.86	MAv1	36.7	-40.4	41.16	-	-	-	-	281	118	V

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

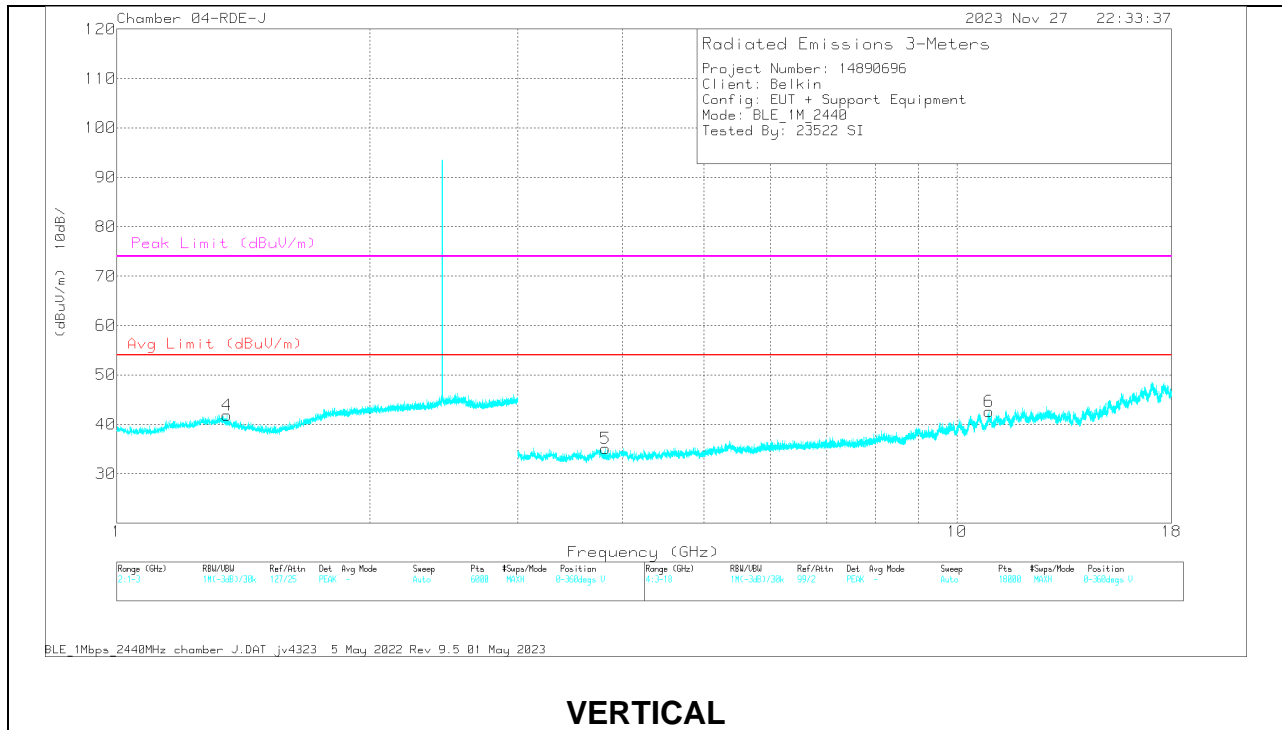
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



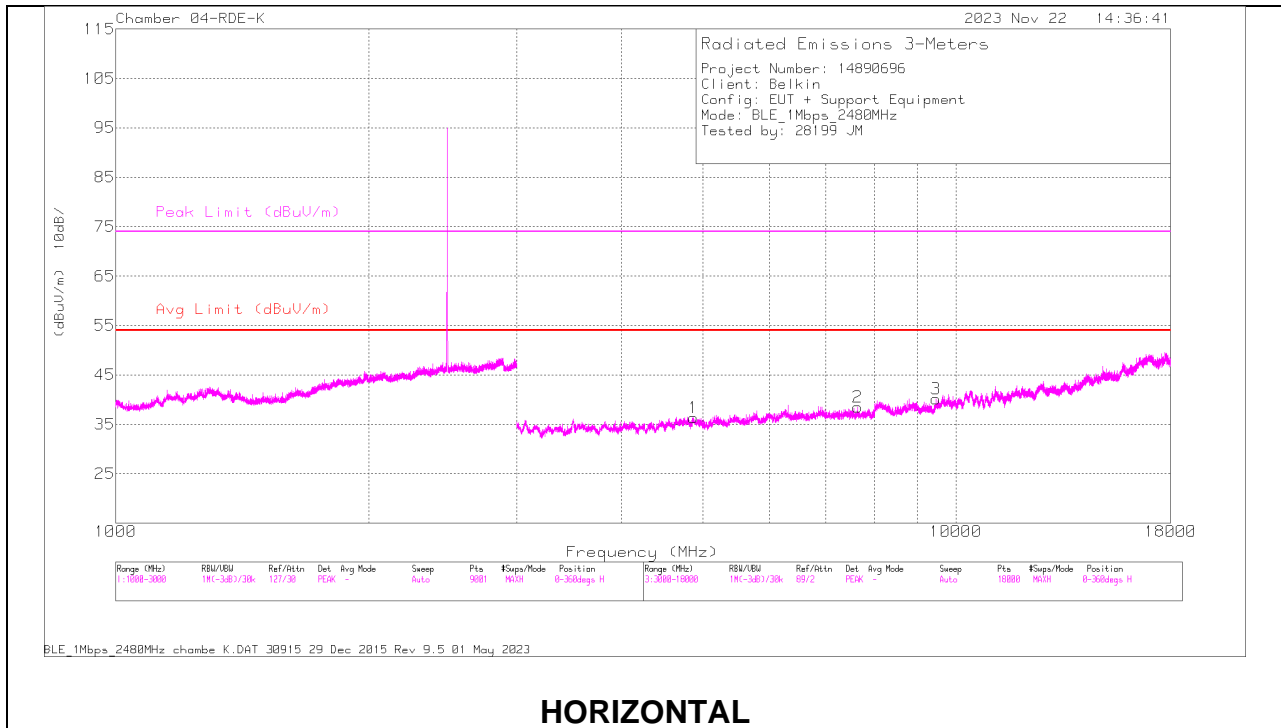
VERTICAL

RADIATED EMISSIONS

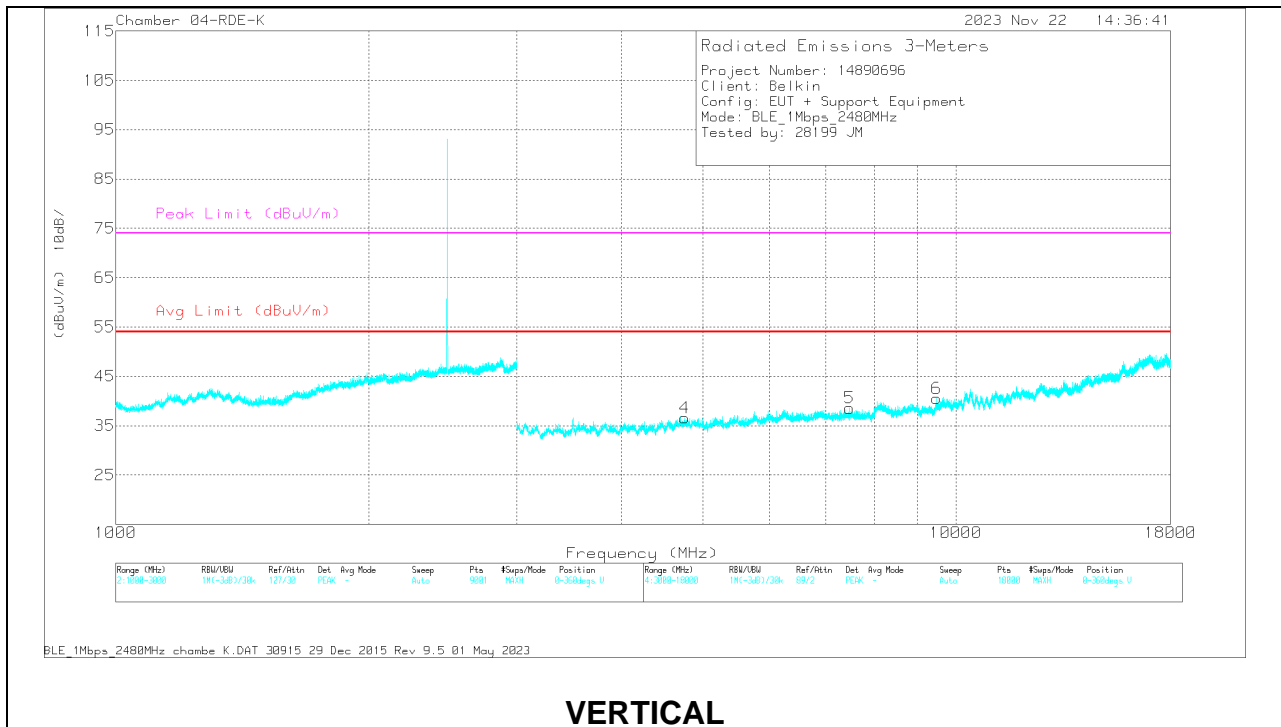
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.154176	59.55	PK2	27.8	-37.5	49.85	-	-	74	-24.15	0	249	H
	* 1.155223	47.76	MAv1	27.8	-37.5	38.06	54	-15.94	-	-	0	249	H
2	* 3.750487	55.76	PK2	33.2	-43.9	45.06	-	-	74	-28.94	289	154	H
	* 3.750071	43.77	MAv1	33.2	-43.9	33.07	54	-20.93	-	-	289	154	H
3	* 11.739395	52.92	PK2	38.5	-38.5	52.92	-	-	74	-21.08	110	215	H
	* 11.740352	41.1	MAv1	38.5	-38.6	41	54	-13	-	-	110	215	H
4	* 1.352485	59.27	PK2	28.6	-37.2	50.67	-	-	74	-23.33	287	329	V
	* 1.349696	47.84	MAv1	28.6	-37.2	39.24	54	-14.76	-	-	287	329	V
5	* 3.814753	54.63	PK2	33.4	-43.9	44.13	-	-	74	-29.87	315	295	V
	* 3.815516	42.96	MAv1	33.4	-43.9	32.46	54	-21.54	-	-	315	295	V
6	* 10.914732	52.62	PK2	37.8	-38.3	52.12	-	-	74	-21.88	351	127	V
	* 10.916278	41.02	MAv1	37.8	-38.3	40.52	54	-13.48	-	-	351	127	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	80404_ACF (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	* 4867.364	51.81	PK2	34.5	-39.7	46.61	-	-	74	-27.39	41	148	H
	* 4866.646	40.01	MAv1	34.5	-39.8	34.71	54	-19.29	-	-	41	148	H
2	* 7633.785	49.18	PK2	35.9	-37.3	47.78	-	-	74	-26.22	89	341	H
	* 7634.106	37.74	MAv1	35.9	-37.3	36.34	54	-17.66	-	-	89	341	H
3	* 9470.73	49.35	PK2	36.6	-36.1	49.85	-	-	74	-24.15	63	387	H
	* 9466.729	37.57	MAv1	36.6	-36	38.17	54	-15.83	-	-	63	387	H
4	* 4751.858	52.23	PK2	34.8	-40.3	46.73	-	-	74	-27.27	341	231	V
	* 4752.238	40.39	MAv1	34.8	-40.3	34.89	54	-19.11	-	-	341	231	V
5	* 7464.754	48.79	PK2	36.2	-37.3	47.69	-	-	74	-26.31	20	239	V
	* 7463.812	37.32	MAv1	36.2	-37.2	36.32	54	-17.68	-	-	20	239	V
6	* 9477.926	48.74	PK2	36.6	-36.1	49.24	-	-	74	-24.76	138	311	V
	* 9480.518	37.35	MAv1	36.6	-36	37.95	54	-16.05	-	-	138	311	V

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

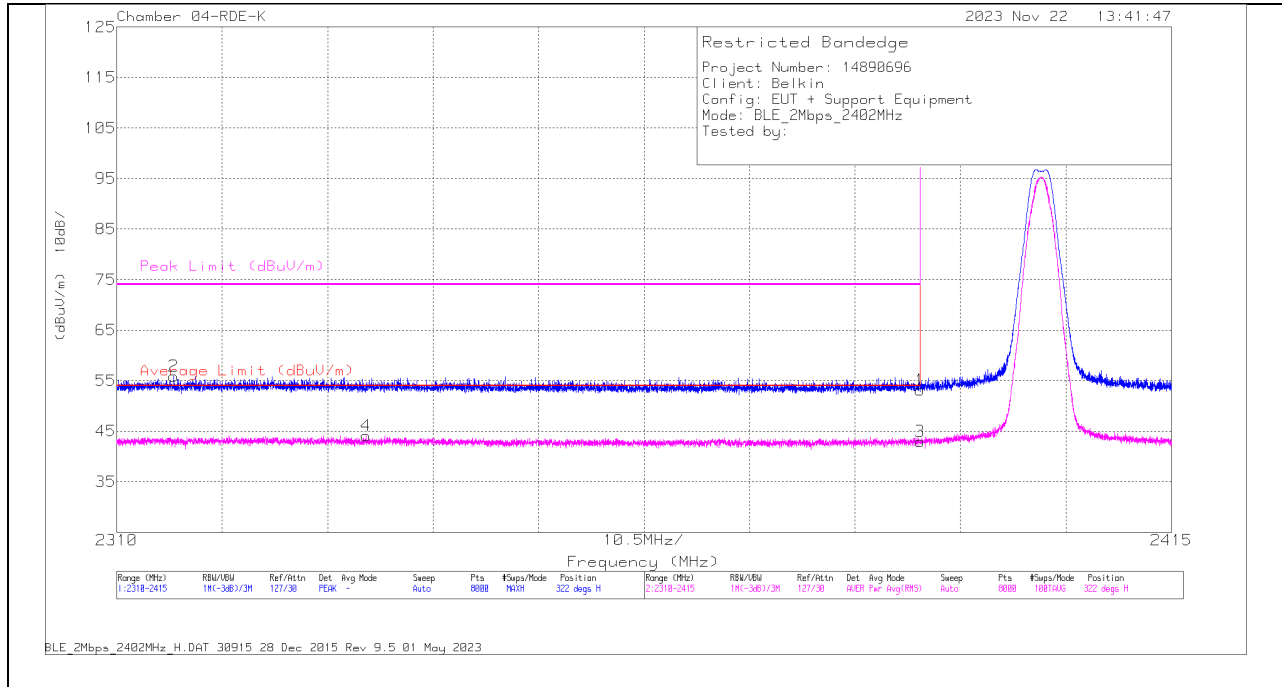
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2.2. BLE (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

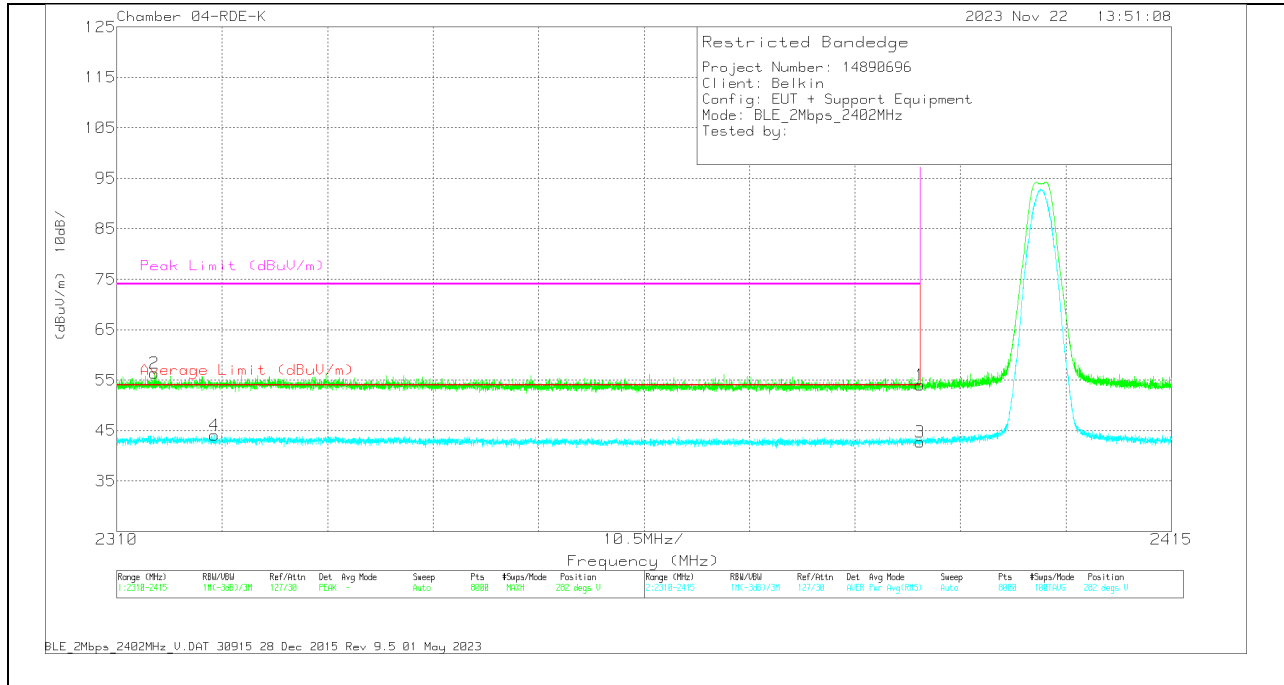


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404 ACF (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	55.48	Pk	32.2	-34.5	53.18	-	-	74	-20.82	322	189	H
2	* 2315.697	58.12	Pk	32.6	-34.8	55.92	-	-	74	-18.08	322	189	H
3	* 2390	45.23	RMS	32.2	-34.5	42.93	54	-11.07	-	-	322	189	H
4	* 2334.797	46.31	RMS	32.6	-34.8	44.11	54	-9.89	-	-	322	189	H

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

VERTICAL RESULT



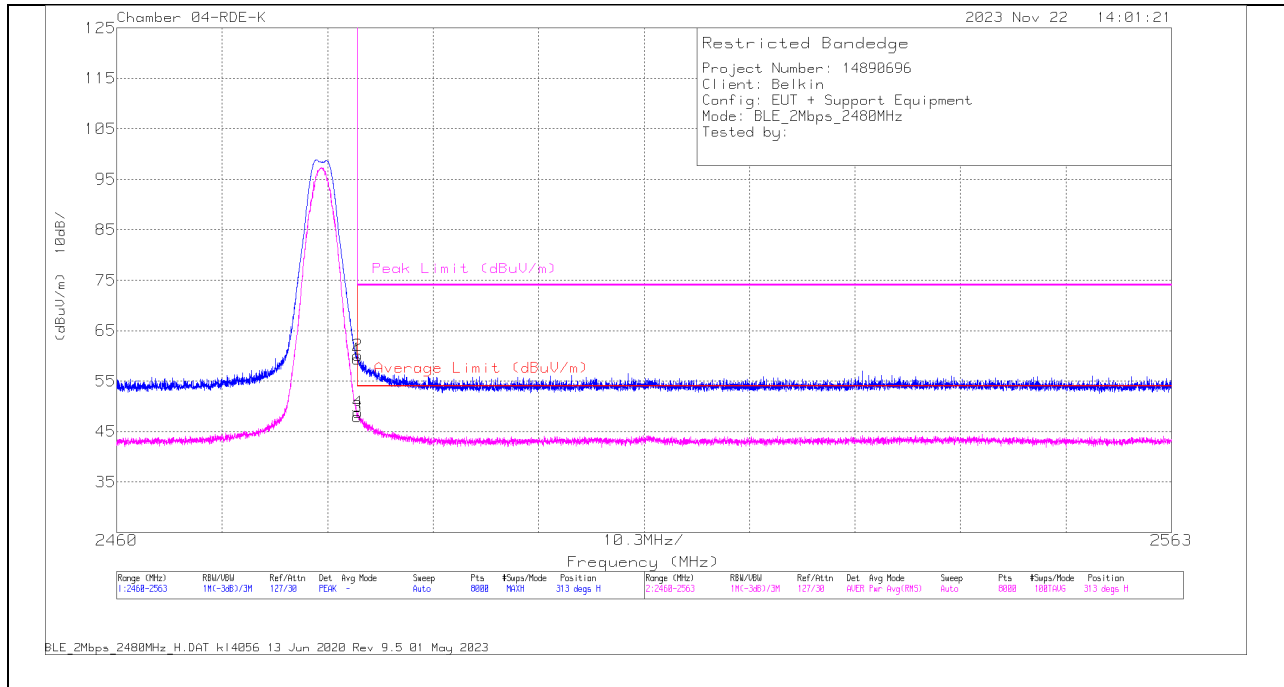
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404 ACF (dB/m)	Cb/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	56.32	Pk	32.2	-34.5	54.02	-	-	74	-19.98	282	209	V
2	* 2313.754	58.36	Pk	32.7	-34.7	56.36	-	-	74	-17.64	282	209	V
3	* 2390	45.07	RMS	32.2	-34.5	42.77	54	-11.23	-	-	282	209	V
4	* 2319.74	46.24	RMS	32.6	-34.8	44.04	54	-9.96	-	-	282	209	V

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

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

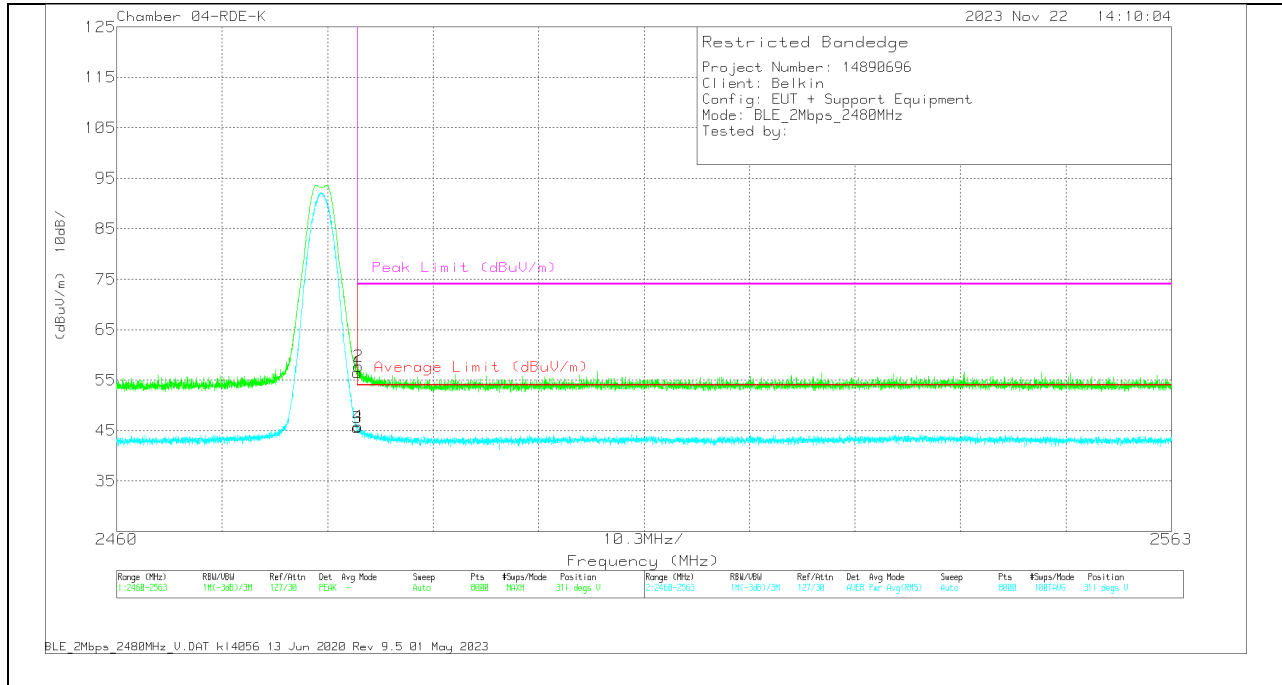


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF (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	61.26	Pk	32.2	-34.1	59.36	-	-	74	-14.64	313	110	H
2	* 2483.526	61.97	Pk	32.2	-34.1	60.07	-	-	74	-13.93	313	110	H
3	* 2483.5	49.87	RMS	32.2	-34.1	47.97	54	-6.03	-	-	313	110	H
4	* 2483.565	50.75	RMS	32.2	-34.1	48.85	54	-5.15	-	-	313	110	H

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

VERTICAL RESULT



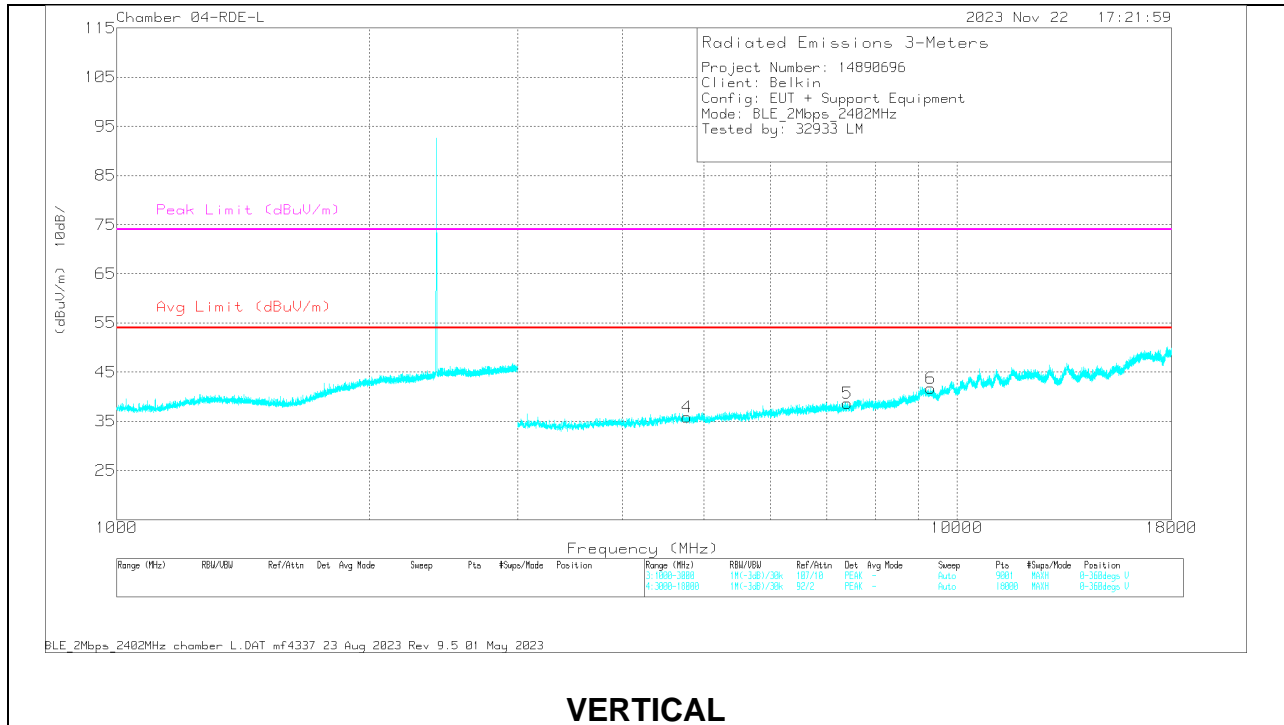
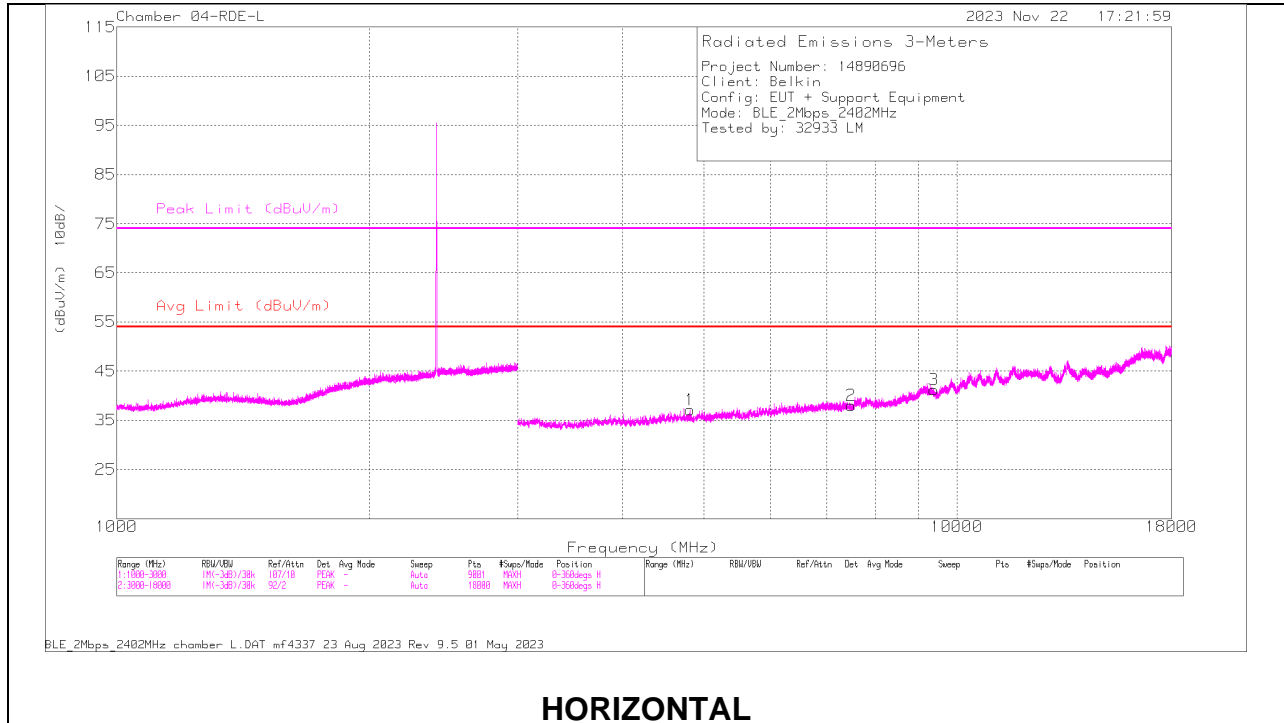
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF (dB/m)	Cb/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	58.39	PK	32.2	-34.1	56.49	-	-	74	-17.51	311	126	V
2	* 2483.642	59.68	PK	32.2	-34.1	57.78	-	-	74	-16.22	311	126	V
3	* 2483.5	47.49	RMS	32.2	-34.1	45.59	54	-8.41	-	-	311	126	V
4	* 2483.552	47.76	RMS	32.2	-34.1	45.86	54	-8.14	-	-	311	126	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	206806 ACF (dB/m)	AMP/CBL (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4818.291	38.12	PK2	33.9	-25.2	46.82	-	-	74	-27.18	172	168	H
	* 4819.388	26.1	MAv1	33.9	-25.2	34.8	54	-19.2	-	-	172	168	H
2	* 7489.297	34.09	PK2	35.6	-21.4	48.29	-	-	74	-25.71	95	201	H
	* 7488.853	21.95	MAv1	35.6	-21.4	36.15	54	-17.85	-	-	95	201	H
3	* 9396.021	33.12	PK2	36.3	-17.8	51.62	-	-	74	-22.38	107	349	H
	* 9395.39	21.5	MAv1	36.3	-17.7	40.1	54	-13.9	-	-	107	349	H
4	* 4778.841	37.62	PK2	33.9	-25.1	46.42	-	-	74	-27.58	355	172	V
	* 4778.8	25.95	MAv1	33.9	-25.1	34.75	54	-19.25	-	-	355	172	V
5	* 7402.255	34.2	PK2	35.6	-20.8	49	-	-	74	-25	49	388	V
	* 7402.579	22.6	MAv1	35.6	-20.8	37.4	54	-16.6	-	-	49	388	V
6	* 9318.473	21.93	MAv1	36.2	-17.8	40.33	54	-13.67	-	-	125	381	V
	* 9317.655	33.85	PK2	36.2	-17.8	52.25	-	-	74	-21.75	125	381	V

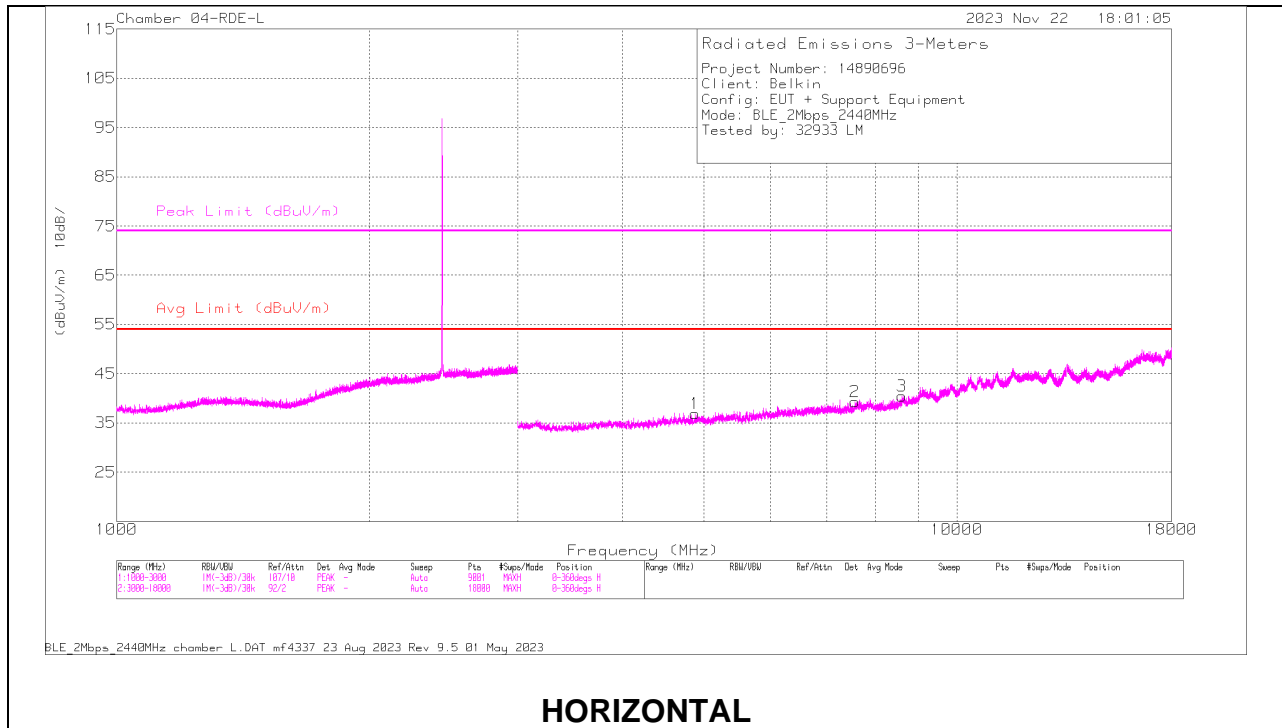
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

RMS - RMS detection

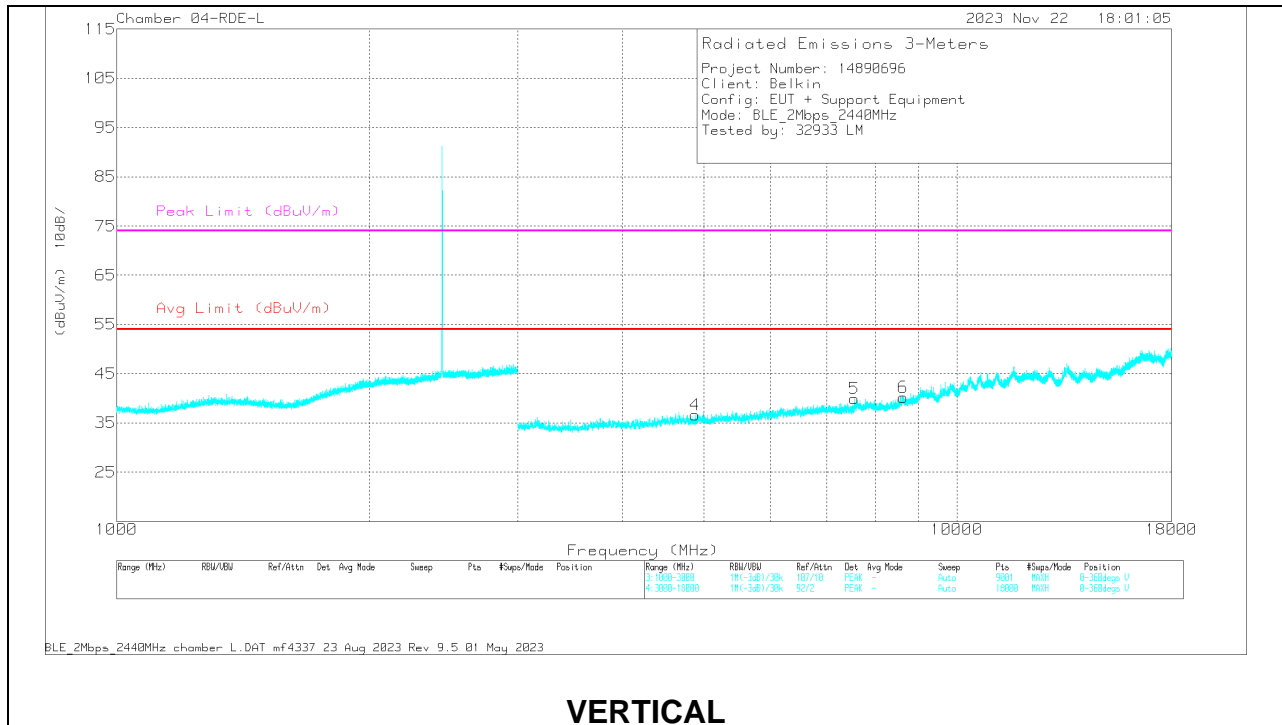
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

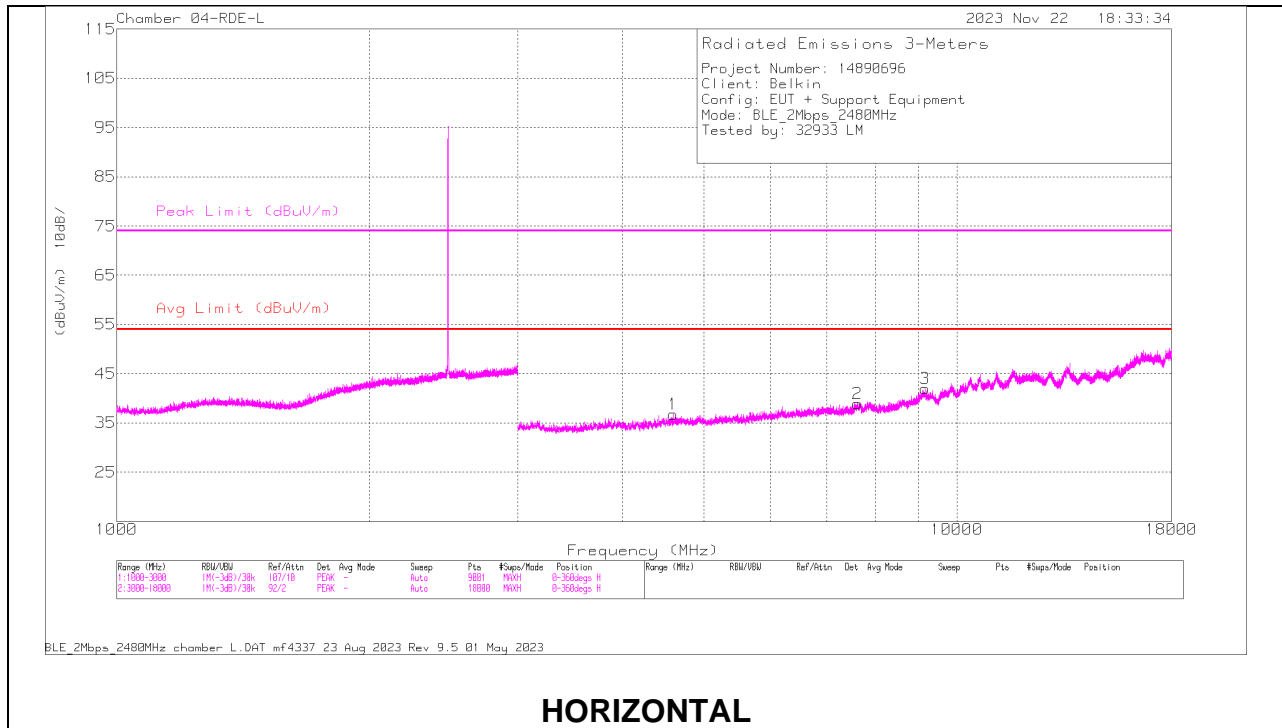
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	206806 ACF (dB/m)	AMP/CBL (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4879.244	38.47	PK2	33.9	-25	47.37	-	-	74	-26.63	76	128	H
	* 4880.93	27.51	MAv1	33.9	-25	36.41	54	-17.59	-	-	76	128	H
2	* 7561.399	34.41	PK2	35.6	-20.6	49.41	-	-	74	-24.59	148	363	H
	* 7560.905	22.65	MAv1	35.6	-20.6	37.65	54	-16.35	-	-	148	363	H
3	8599.801	32.81	PK2	35.7	-18.8	49.71	-	-	-	-	341	180	H
4	* 4878.811	38.19	PK2	33.9	-25	47.09	-	-	74	-26.91	125	362	V
	* 4879.082	26.38	MAv1	33.9	-25	35.28	54	-18.72	-	-	125	362	V
5	* 7556.635	22.71	MAv1	35.6	-20.6	37.71	54	-16.29	-	-	198	375	V
	* 7557.486	34.23	PK2	35.6	-20.6	49.23	-	-	74	-24.77	198	375	V
6	8639.353	33.28	PK2	35.7	-18.7	50.28	-	-	-	-	358	153	V

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

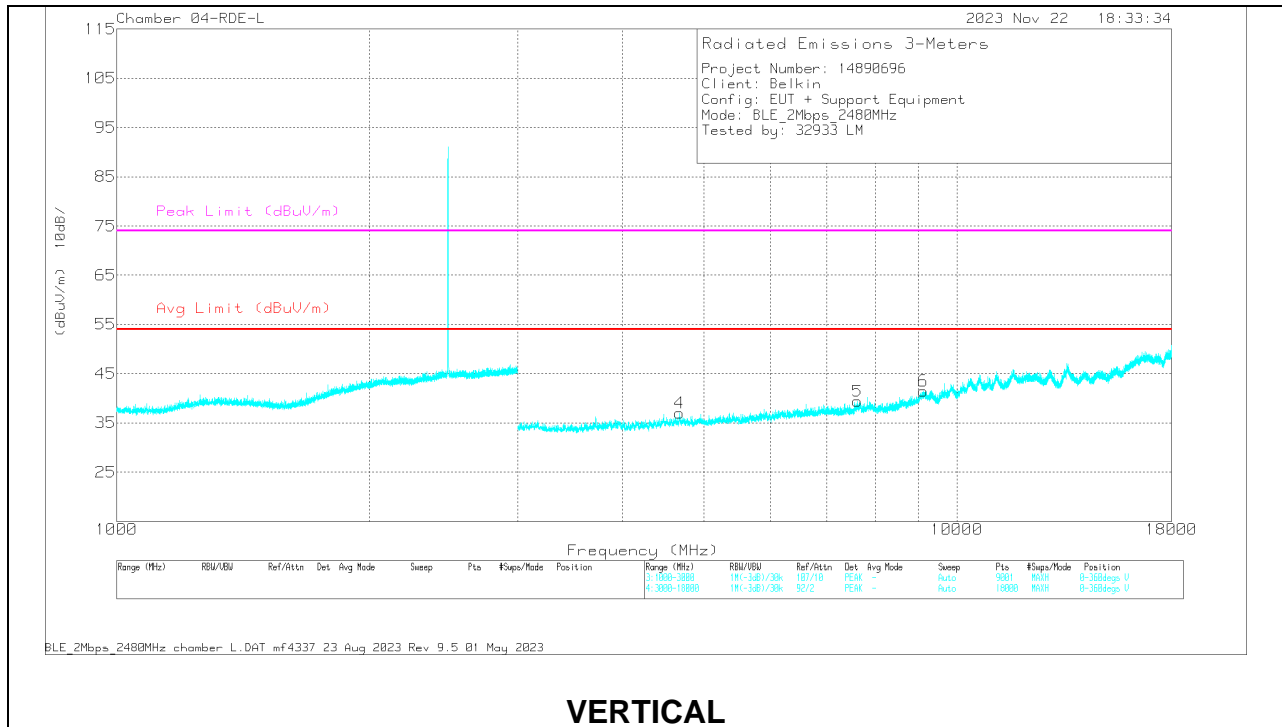
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

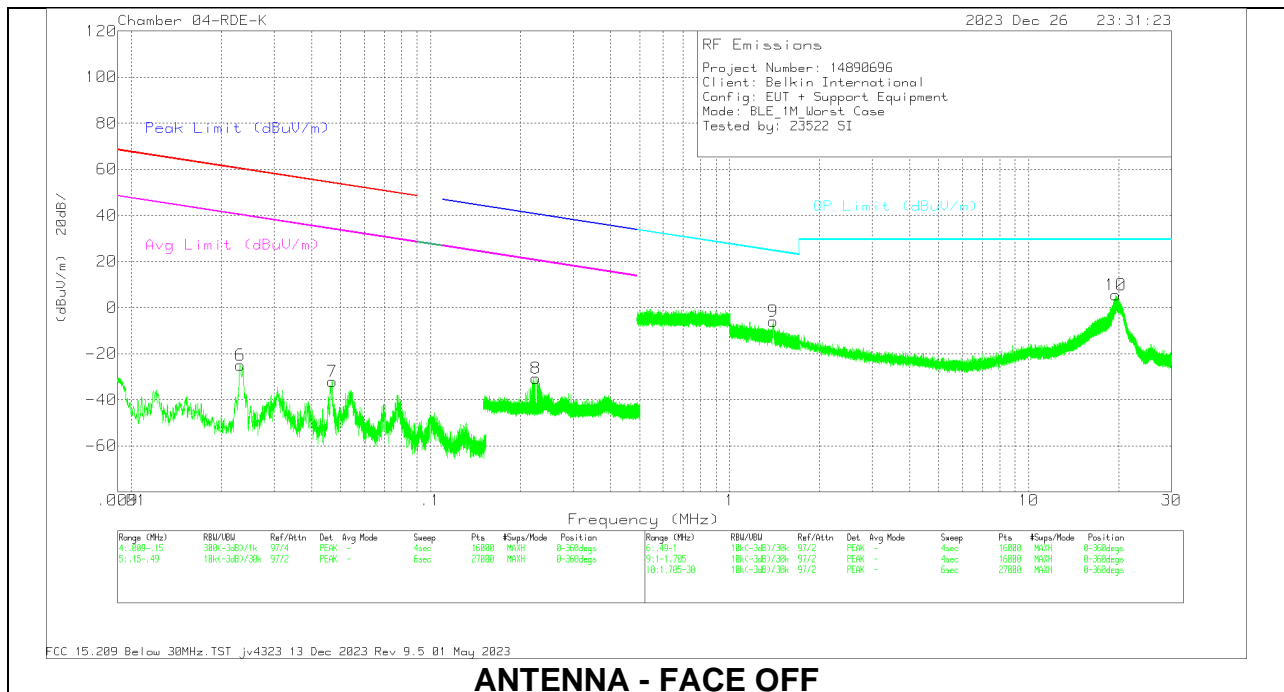
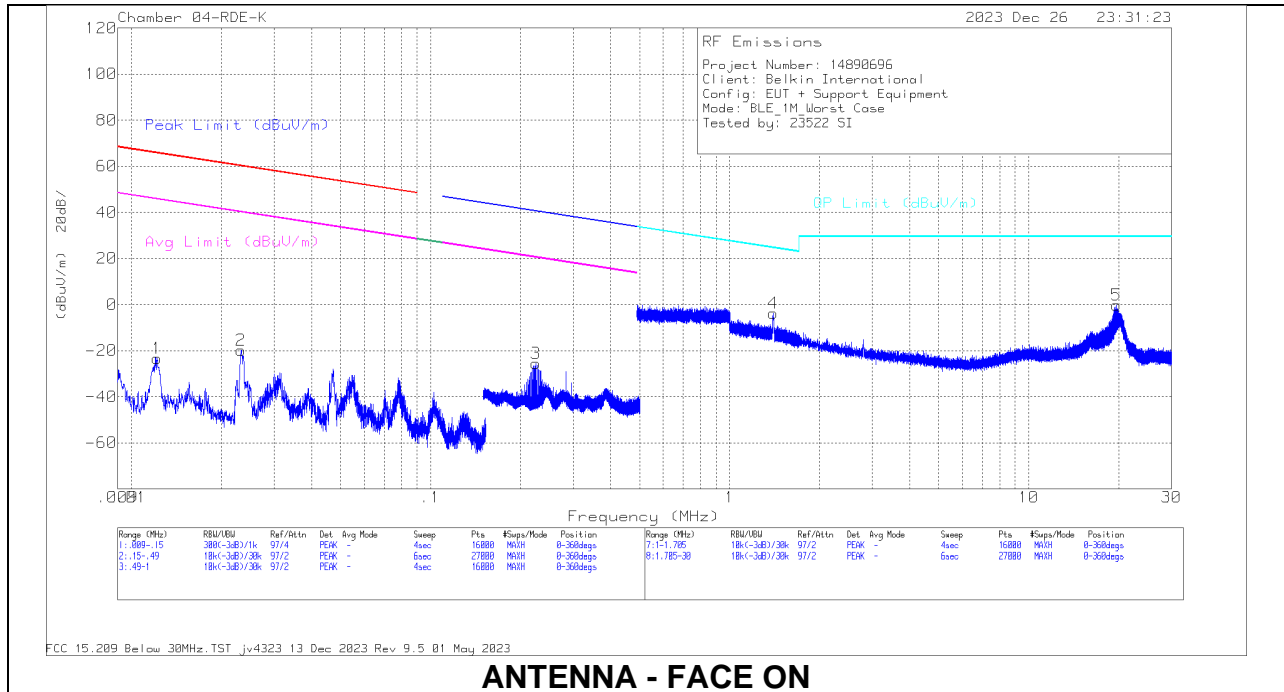
RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	206806 ACF (dB/m)	AMP/CBL (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4594.2	37.55	PK2	34.1	-25.7	45.95	-	-	74	-28.05	226	148	H
	* 4594.732	26.05	MAv1	34.1	-25.7	34.45	54	-19.55	-	-	226	148	H
2	* 7619.122	33.69	PK2	35.7	-20	49.39	-	-	74	-24.61	9	386	H
	* 7618.659	22.33	MAv1	35.7	-20	38.03	54	-15.97	-	-	9	386	H
3	* 9165.65	33.76	PK2	36.1	-18.1	51.76	-	-	74	-22.24	258	169	H
	* 9166.166	22.11	MAv1	36.1	-18.1	40.11	54	-13.89	-	-	258	169	H
4	* 4679.445	37.45	PK2	34	-24.8	46.65	-	-	74	-27.35	24	385	V
	* 4679.977	25.93	MAv1	34	-24.8	35.13	54	-18.87	-	-	24	385	V
5	* 7611.943	33.91	PK2	35.7	-20	49.61	-	-	74	-24.39	57	370	V
	* 7613.093	22.16	MAv1	35.7	-20	37.86	54	-16.14	-	-	57	370	V
6	* 9118.588	34.1	PK2	36.1	-18.1	52.1	-	-	74	-21.9	242	339	V
	* 9119.558	22.41	MAv1	36.1	-18.1	40.41	54	-13.59	-	-	242	339	V

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

10.3. WORST CASE BELOW 30MHZ

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (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)
1	.0122	27.73	Pk	60.1	-31.1	-80	-23.27	65.86	-89.13	45.86	-69.13	-	-	-	-	0-360
6	.0231	28.06	Pk	58.8	-31.8	-80	-24.94	60.3	-85.24	40.3	-65.24	-	-	-	-	0-360
2	.0233	33.3	Pk	58.8	-31.8	-80	-19.7	60.24	-79.94	40.24	-59.94	-	-	-	-	0-360
7	.0469	22.94	Pk	57.2	-32.2	-80	-32.06	54.16	-86.22	34.16	-66.22	-	-	-	-	0-360
3	.2248	30.16	Pk	56.4	-32.1	-80	-25.54	-	-	-	-	40.58	-66.12	20.58	-46.12	0-360
8	.225	24.92	Pk	56.4	-32.1	-80	-30.78	-	-	-	-	40.57	-71.35	20.57	-51.35	0-360

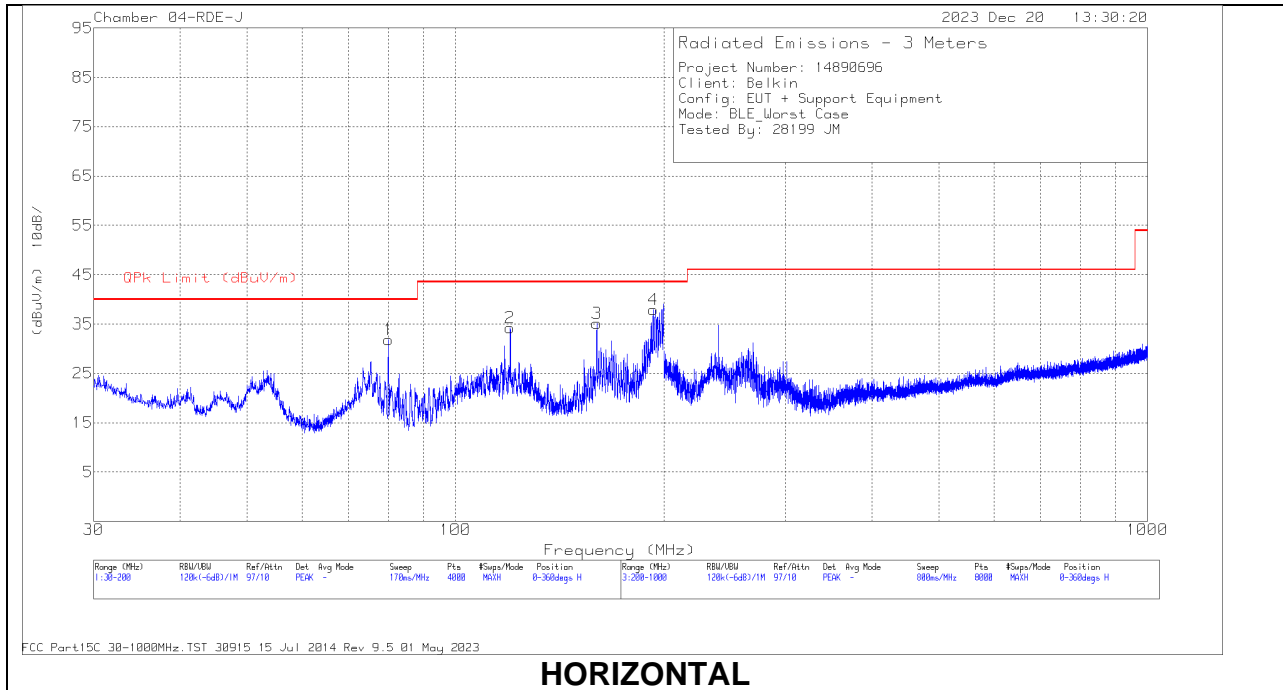
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	1.3977	23.65	Pk	44.7	-32.1	-40	-3.75	24.72	-28.47	0-360
9	1.4	21.35	Pk	44.7	-32.1	-40	-6.05	24.71	-30.76	0-360
10	19.5619	42.38	Pk	34.4	-31.4	-40	5.38	29.5	-24.12	0-360
5	19.6625	36.82	Pk	34.4	-31.4	-40	-1.18	29.5	-29.68	0-360

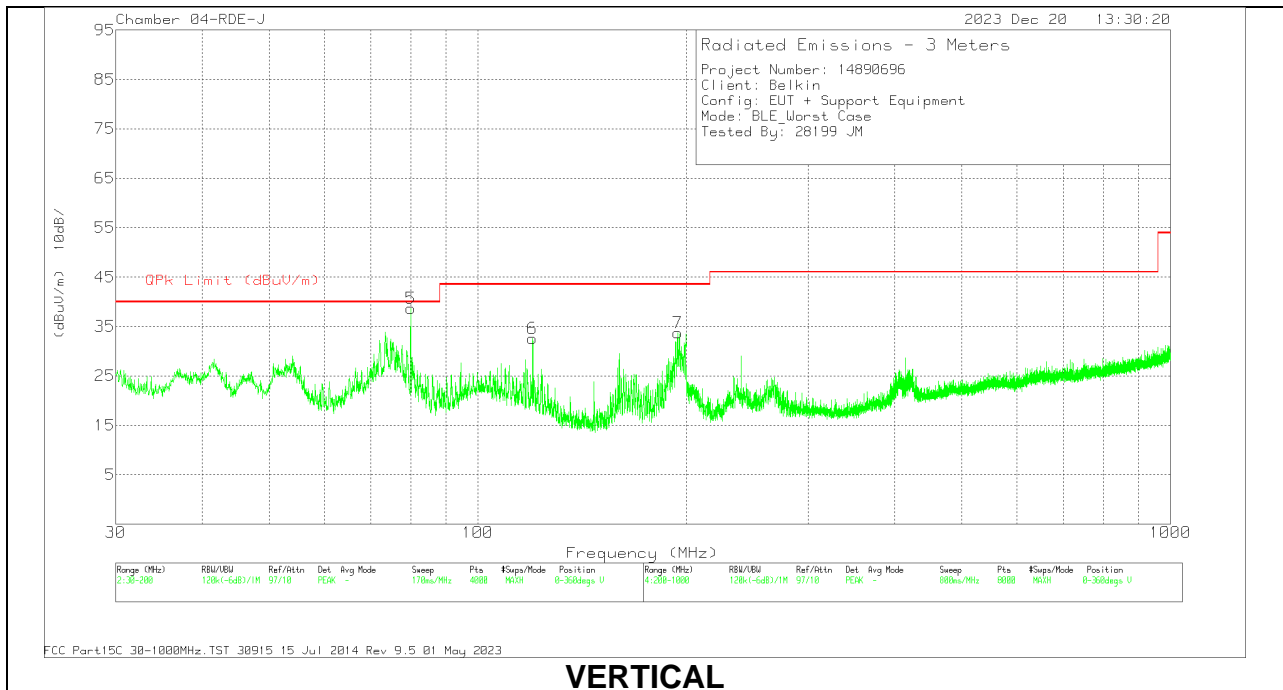
Pk - Peak detector

10.4. WORST CASE BELOW 1 GHZ

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



HORIZONTAL



VERTICAL

Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80293 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	119.996	45.58	Pk	19.8	-31.1	34.28	43.52	-9.24	0-360	199	H
6	119.996	43.93	Pk	19.8	-31.1	32.63	43.52	-10.89	0-360	100	V
1	79.9929	49.58	Pk	13.6	-31.3	31.88	40	-8.12	0-360	199	H
5	192.369	37.36	Qp	17.4	-30.8	23.96	43.52	-19.56	149	136	V
3	159.999	47.94	Pk	18.1	-30.9	35.14	43.52	-8.38	0-360	199	H
4	79.9985	56.28	Qp	13.6	-31.3	38.58	40	-1.42	102	108	H
7	194.305	46.93	Pk	17.6	-30.8	33.73	43.52	-9.79	0-360	100	V

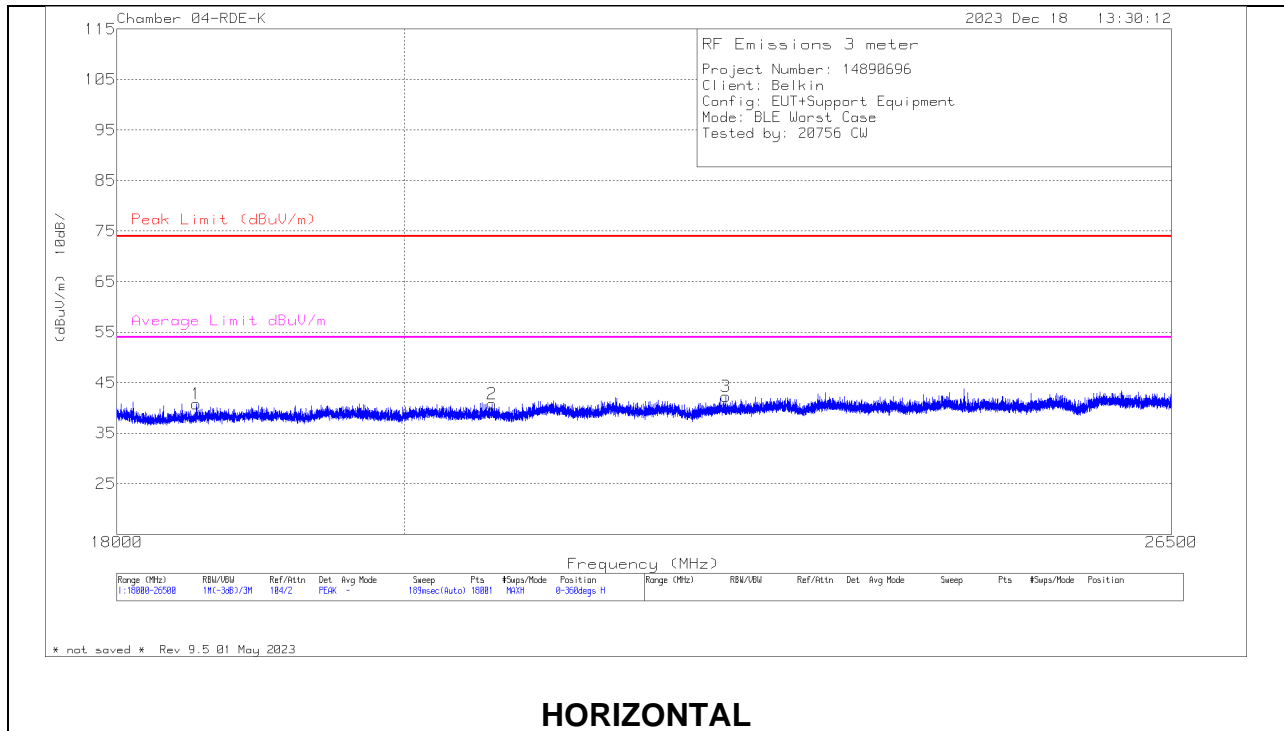
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

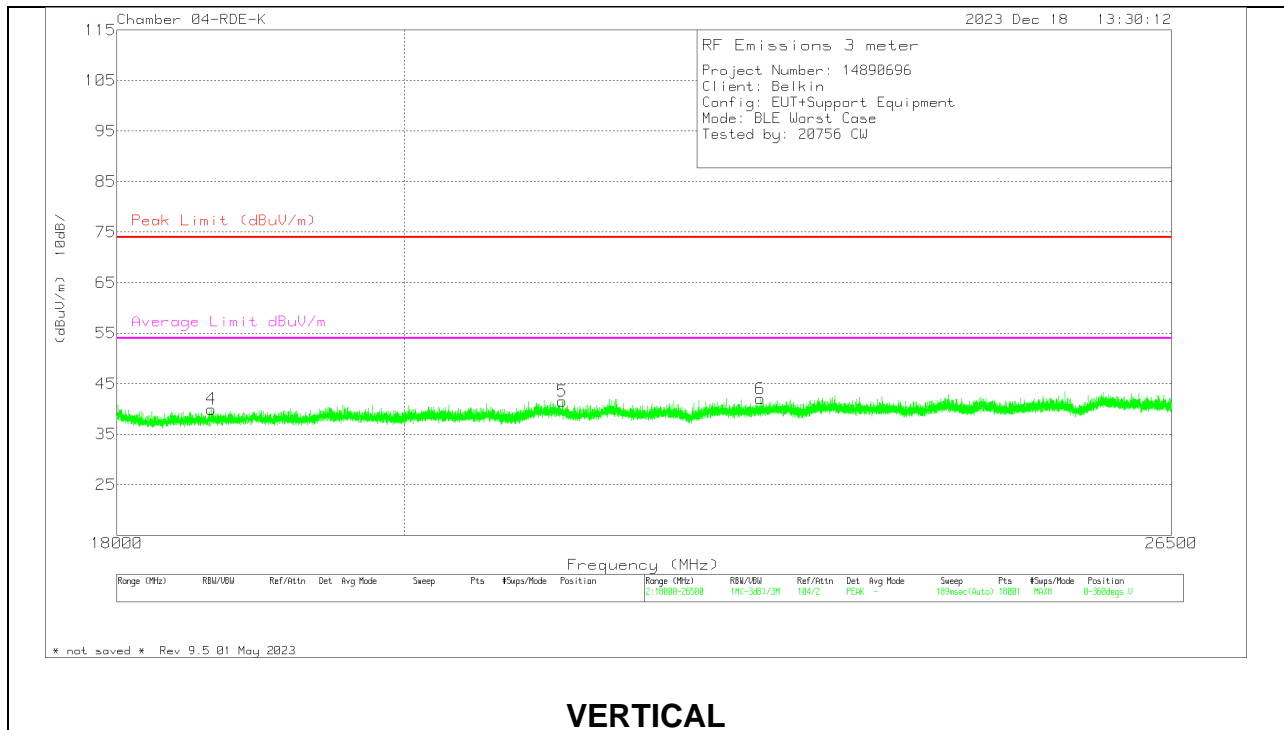
Qp - Quasi-Peak detector

10.5. WORST CASE 18-26 GHz

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



HORIZONTAL



VERTICAL

18 – 26GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Horn ACF (dB/m)	234683 Amp/Cbl (dB)	Cables (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 18531.722	53.18	Pk	32.4	-62.9	18.1	40.78	74	-33.22	-	-	0-360	200	H
2	* 20655.777	50.28	Pk	32.8	-61.3	19	40.78	74	-33.22	-	-	0-360	101	H
3	* 22505.47	51.76	Pk	33.3	-62.6	19.8	42.26	74	-31.74	-	-	0-360	101	H
4	* 18633.722	52.28	Pk	32.4	-62.9	18.2	39.98	74	-34.02	-	-	0-360	199	V
5	* 21196.943	50.92	Pk	33	-61.6	19.2	41.52	74	-32.48	-	-	0-360	101	V
6	* 22791.164	51.18	Pk	33.3	-62.4	20	42.08	74	-31.92	-	-	0-360	101	V

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

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

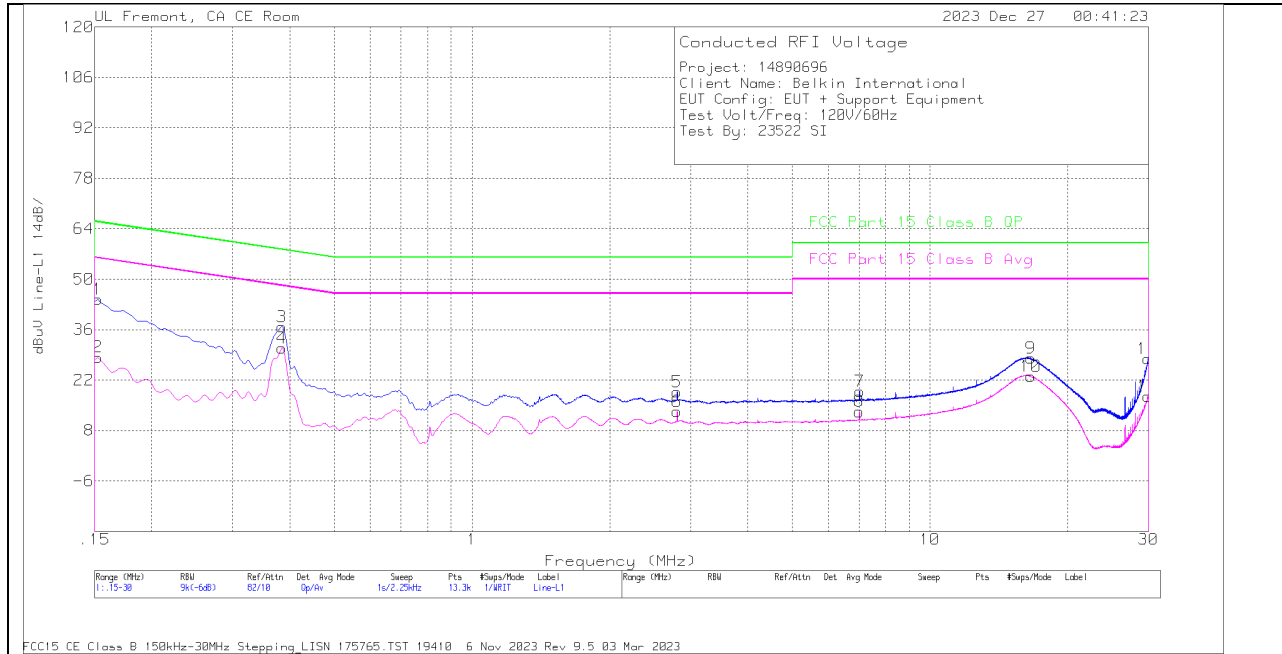
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

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

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

RESULTS

LINE 1 RESULTS

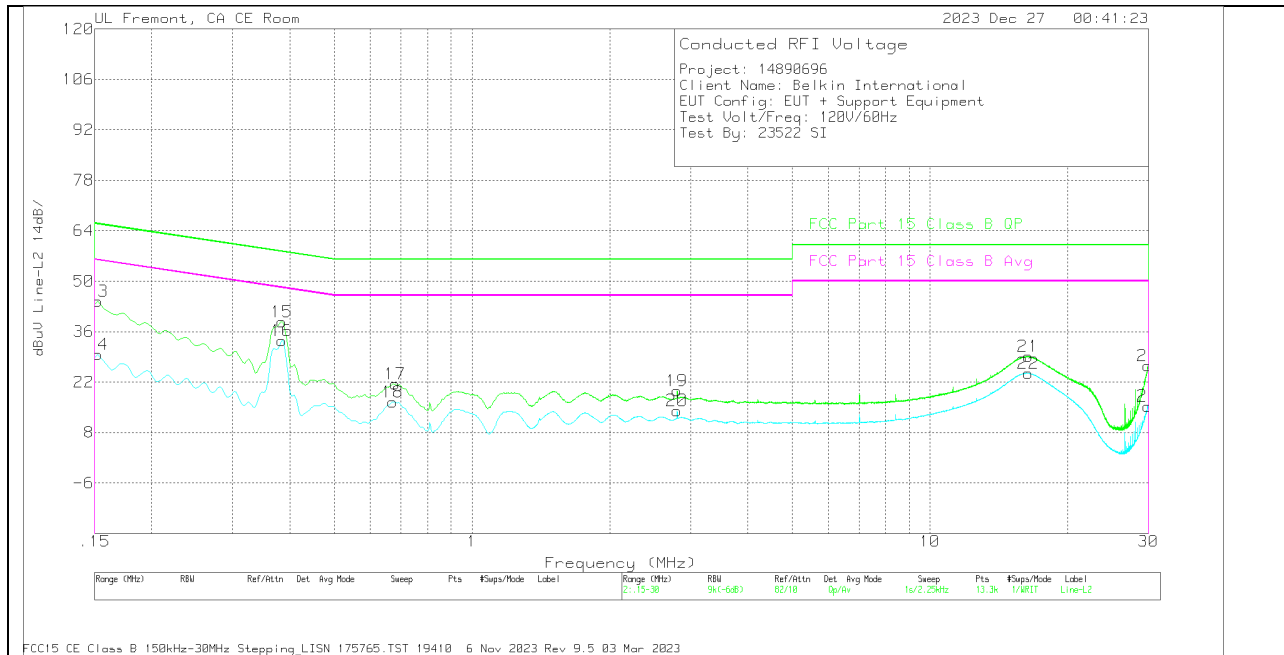


Trace Markers

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	Corrected Reading (dBuV)	FCC Part 15C QP	QP Margin (dB)	FCC Part 15C Avg	Av Margin (dB)
2	.1523	18.86	Av	0	0	9.5	28.36	-	-	55.88	-27.52
4	.384	21.47	Av	0	0	9.4	30.87	-	-	48.19	-17.32
6	2.805	3.79	Av	0	.1	9.4	13.29	-	-	46	-32.71
8	7.0148	3.64	Av	0	.2	9.4	13.24	-	-	50	-36.76
10	16.6043	13.27	Av	.1	.3	9.4	23.07	-	-	50	-26.93
12	29.9445	7.31	Av	.3	.4	9.5	17.51	-	-	50	-32.49
1	.1523	34.97	Qp	0	0	9.5	44.47	65.88	-21.41	-	-
3	.384	27.37	Qp	0	0	9.4	36.77	58.19	-21.42	-	-
5	2.805	9.27	Qp	0	.1	9.4	18.77	56	-37.23	-	-
7	7.017	9.34	Qp	0	.2	9.4	18.94	60	-41.06	-	-
9	16.6133	18.26	Qp	.1	.3	9.4	28.06	60	-31.94	-	-
11	29.9445	17.65	Qp	.3	.4	9.5	27.85	60	-32.15	-	-

Qp - Quasi-Peak detector
 Av - Average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	Corrected Reading (dBuV)	FCC Part 15C QP	QP Margin (dB)	FCC Part 15C Avg	Av Margin (dB)
14	.1523	20.14	Av	0	0	9.5	29.64	-	-	55.88	-26.24
16	.384	23.92	Av	0	.1	9.4	33.42	-	-	48.19	-14.77
18	.672	6.98	Av	0	.1	9.4	16.48	-	-	46	-29.52
20	2.805	4.6	Av	0	.1	9.4	14.1	-	-	46	-31.9
22	16.4051	14.69	Av	.1	.2	9.5	24.49	-	-	50	-25.51
24	29.9456	5.22	Av	.3	.3	9.5	15.32	-	-	50	-34.68
13	.1523	34.92	Qp	0	0	9.5	44.42	65.88	-21.46	-	-
15	.384	29.25	Qp	0	.1	9.4	38.75	58.19	-19.44	-	-
17	.6788	12.17	Qp	0	0	9.3	21.47	56	-34.53	-	-
19	2.805	10.05	Qp	0	.1	9.4	19.55	56	-36.45	-	-
21	16.4108	19.35	Qp	.1	.2	9.5	29.15	60	-30.85	-	-
23	29.94	16.42	Qp	.3	.3	9.5	26.52	60	-33.48	-	-

Qp - Quasi-Peak detector
 Av - Average detection

12. SETUP PHOTOS

Please refer to 14890696-EP1V1 for setup photos

END OF TEST REPORT