

RF Test Report

Report Number: 209642-1**Revision Level:** 3**Client:** Trackonomy Systems, Inc.

214 Devcon Dr., San Jose, CA 95112 USA

Manufacturer: Trackonomy Systems, Inc.**Equipment Under Test:** Multifunctional IoT Platform Sensor Device**Model:** FBO-2005 (C2PC)**FCC ID:** 2AXA8-FBO-2005**IC ID:** 27299-FBO2005**Applicable Standards:** FCC Part 15 Subpart C, § 15.247

RSS-247, Issue 4, July 2025

RSS-GEN, Issue 5, Amendment 2, February 2021

ANSI C63.10:2020 + ANSI C63.10/Cor1-2023 (Corrigendum 1) + ANSI
C63.10a:2024 (Amendment 1) + Errata to ANSI C63.10a:2024 (Amendment 1)**Report issued on:** 07/17/2025**Test Result:** Compliant

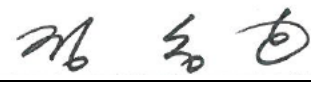
FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 1935.01

This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

Prepared by:


Richard Dollente, Wireless Engineer

Reviewed by:


Fred Jeong, Wireless Laboratory Manager

Remarks: This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. And for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/terms-e-document.aspx>.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful, and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for a maximum of 30 days only.

Table of Contents

1	SUMMARY OF TEST RESULTS	3
1.1	MODIFICATIONS REQUIRED FOR COMPLIANCE.....	3
2	GENERAL INFORMATION	4
2.1	CLIENT INFORMATION	4
2.2	TEST LABORATORY	4
2.3	GENERAL INFORMATION OF EUT	4
2.4	OPERATING MODES AND CONDITIONS	5
2.5	EUT CONNECTION BLOCK DIAGRAM – CONDUCTED MEASUREMENTS.....	5
2.6	EUT CONNECTION BLOCK DIAGRAM – RADIATED MEASUREMENTS.....	6
2.7	SYSTEM CONFIGURATIONS	6
2.8	WORST-CASE CONFIGURATION.....	7
3	RADIATED BAND EDGE AND RADIATED SPURIOUS EMISSIONS	8
3.1	TEST RESULT	15
3.2	TEST METHOD	15
3.3	TEST LIMIT	15
3.4	TEST DATE AND TEST ENGINEER(S)	15
3.5	TEST SITE	16
3.6	ADDITIONAL OBSERVATION	16
3.7	TEST EQUIPMENT	16
3.8	TEST DATA	19
4	MEASUREMENT UNCERTAINTY	31
5	REVISION HISTORY	32

1 Summary of Test Results

Test Description	Test Specification		Test Result
6dB Bandwidth and 99% Occupied Bandwidth	15.247(a)(2)	RSS-247 5.2(a) RSS-Gen 6.7	Note 1
Output Power	15.247(b)(3)	RSS-247 5.4(d)	Compliant
Power Spectral Density	15.247(e)	RSS-247 5.2(b)	Note 1
Conducted Band Edge and Conducted Spurious Emissions	15.247(d)	RSS-247 5.5	Note 1
Radiated Spurious Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 5.5 RSS-Gen 8.9, 8.10	Compliant
Radiated Band Edge Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 5.5 RSS-Gen 8.9, 8.10	Compliant
AC Powerline Conducted Emissions	15.207	RSS-Gen 8.8	Note 2

Note:

1. Refer to RF Module Report FCC 2AXA8-FBO-2005; RF Module Report IC ID: 27299-FBO2005; Trackonomy confirms no changes on the modulation, data rate and other characteristics of the fundamental emission outputted from the antenna port between original sample and C2PC sample. Only antenna was changed.
2. EUT is battery operated device. Test not applicable

1.1 Modifications Required for Compliance

None

2 General Information

2.1 Client Information

Company Name: Trackonomy Systems, Inc.
Address: 214 Devcon Dr.
City, State, Zip, Country: San Jose, CA 95112 USA

2.2 Test Laboratory

Name: SGS North America, Inc.
Address: 12310 World Trade Drive, Suite 106/107
City, State, Zip, Country: San Diego, CA 92128
Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 1935.01
Designation ID: US1346
CAB ID: US0236

2.3 General Information of EUT

Equipment Under Test: Multifunctional IoT Platform Sensor Device
Model: FBO-2005 (C2PC)
Hardware Version: V2
Firmware Version: V2
Serial Numbers: MAC ID: CC79C9D85436
FCC ID: 2AXA8-FBO-2005
IC: 27299-FBO2005
Frequency Range: 2402MHz – 2480MHz
Antenna Manufacturer: Linx Technologies
Data Modes: 2MBPS
Antenna Model: ANT-2.4-FPC-LH
Antenna Type: Flexible Embedded FPC Antenna
Antenna Gain*: 6.1dBi
Rated Voltage: 3.7V
Test Voltage: 3.7V
Sample Received Date: 07/01/2025
Dates of testing: 07/15/2025 – 07/24/2025

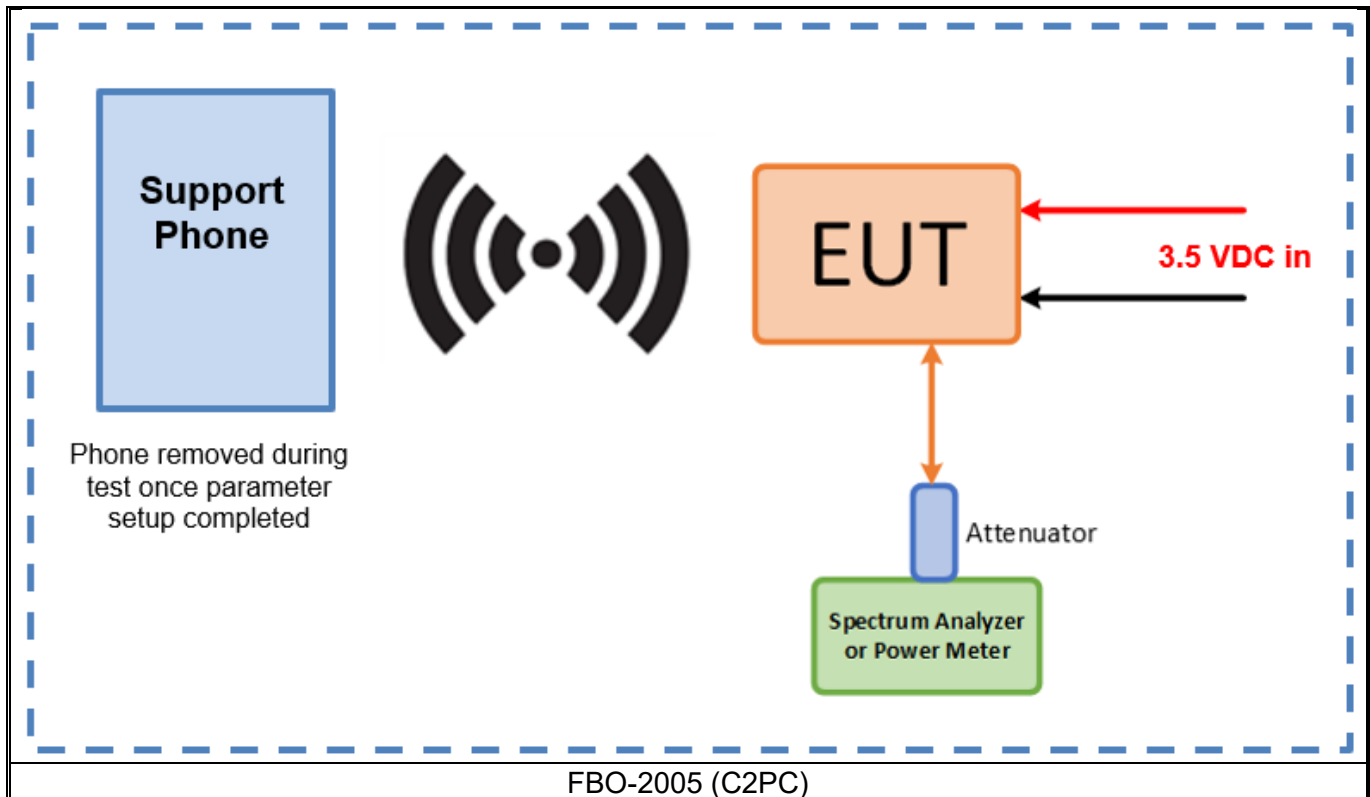
*Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous filing or other.

2.4 Operating Modes and Conditions

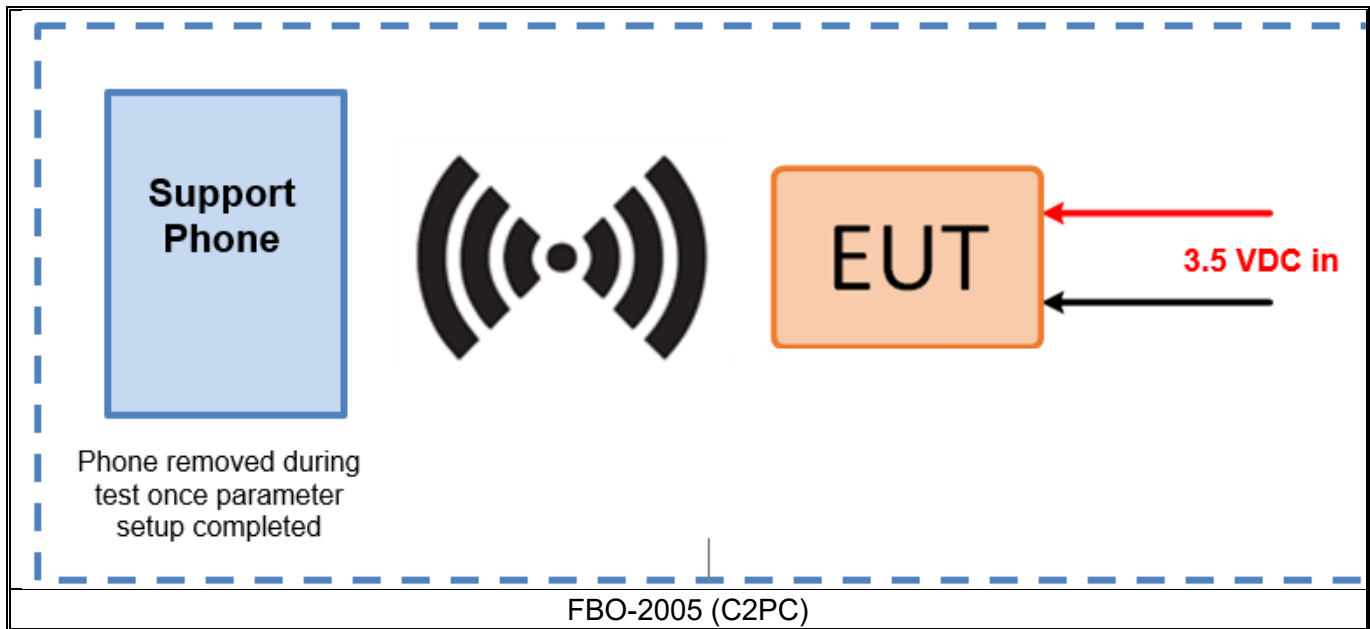
The EUT was running test mode via a support tablet which allowed the following:

- 1) Selecting low, middle and high BLE Channels.
- 2) Selecting the modulation scheme as used in normal operation, but with >98% duty cycle.
- 3) Setting the power level. Maximum Power Setting: 7

2.5 EUT Connection Block Diagram – Conducted Measurements



2.6 EUT Connection Block Diagram – Radiated Measurements

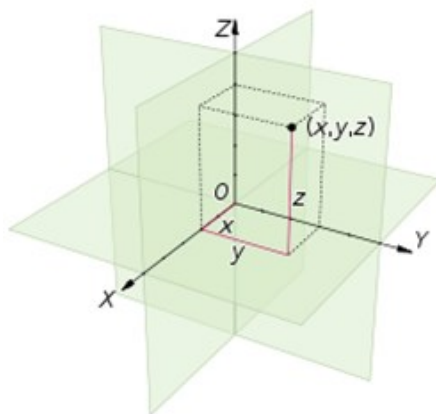


2.7 System Configurations

Manufacturer	Description	Model Number
Samsung	Support phone to set parameter on the EUT	SM-T387T

2.8 Worst-Case Configuration

Based on the physical of the EUT possible usage or installation, EUT was evaluated X, Y, and Z to determine the worst-case of EUT orientation. For radiated measurements verification performed using "X" configuration as worst-case.



3 Output Power

3.1 Test Result

Test Description	Test Specification		Test Result
Output Power	15.247(b)(3)	RSS-247 S5.4 (d)	Compliant

3.2 Test Method

Fundamental maximum peak conducted output power measurements were performed using the method described in ANSI C63.10:2020 clause 11.9.1.2 and 11.9.2.3. This procedure is referenced in KDB 558074 D01 15.247 Meas Guidance v05r02.

The BLE 2MBPS data mode was used for this test.

3.3 Test Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. For using antennas with greater than 6dBi of gain, the limit is reduced in dB by the amount the gain exceeds 6dBi (e.g. for a 7.4dBi antenna, the limit is reduced from 30dBm to 28.6dBm). Also, the EIRP shall not exceed 4 Watts (36 dBm) based on RSS-247 S5.4 (d).

3.4 Test Date and Test Engineer(s)

Test Date(s): 10/01/2025

Engineer: RD

3.5 Test Site

SGS EMC Laboratory, San Diego, CA

Environmental Conditions

Temperature: 17 °C

Relative Humidity: 64 %

Atmospheric Pressure: 101.7 kPa

3.6 Additional Observation

Per customer's declaration, the power level used on the original certification previously was 8. The report reflects a spotcheck on the output power when the power level is 7.

3.7 Test Equipment

Asset	Manufacturer	Equipment	Model	Serial No.	Cal Date	Cal Due Date
2003	Keysight	Signal Analyzer	N9030B	MY61330812	01/21/2025	01/21/2026
2013	Keysight	Single Channel Peak Power Meter	N1911A	MY62310007	01/21/2025	01/21/2026
2015	Keysight	Wideband Power Sensor	N1921A	MY62220017	01/21/2025	01/21/2026
-	ETS-Lindgren	RF cable	-	-	Verified	
-	Weinschel	20dB attenuator	3M-20	116459	Verified	
-	Keysight	DC Power Supply	E3632A	MY65176036	Verified	
-	Agilent	Test Software	Power Panel	3.5.0	N/A	

3.7.1 Test Setup

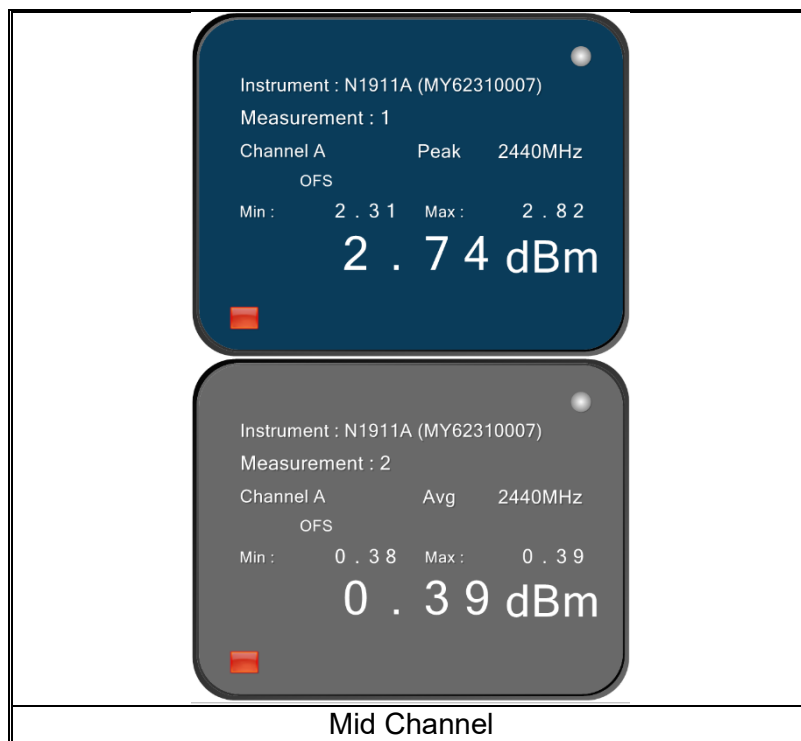
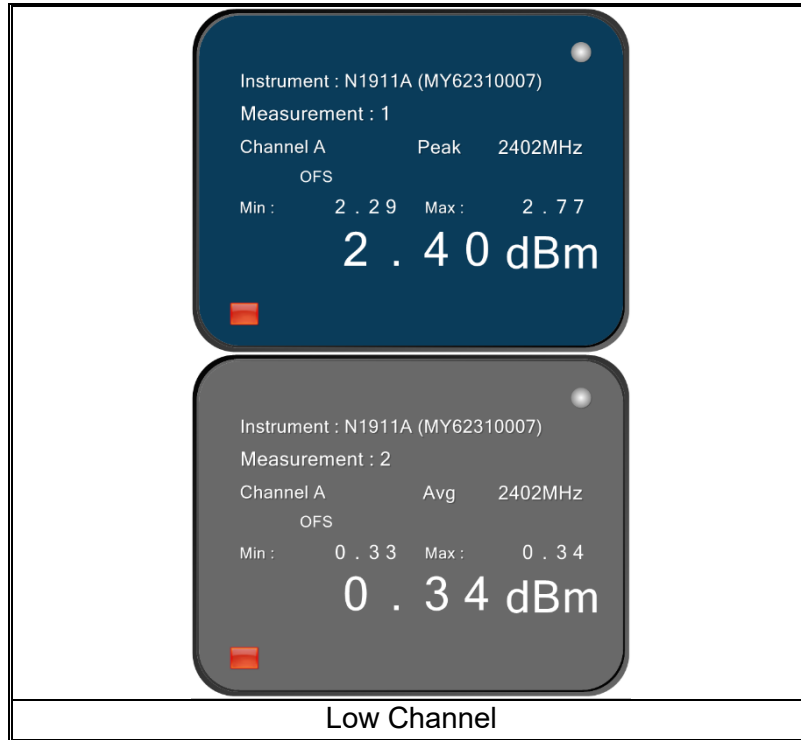
Refer to Section 2.5 in this test report

3.8 Test Data

3.8.1 FCC Limits

Test Mode	Frequency (MHz)	Measured PK Output Power (dBm)	Limits (dBm)	Antenna Gain	EIRP (dBm)	EIRP Limit (dBm)	Verdict
2M	2402	2.77	29.9	6.1	8.87	36.02	PASS
	2440	2.82	29.9	6.1	8.92	36.02	PASS
	2480	3.03	29.9	6.1	9.13	36.02	PASS

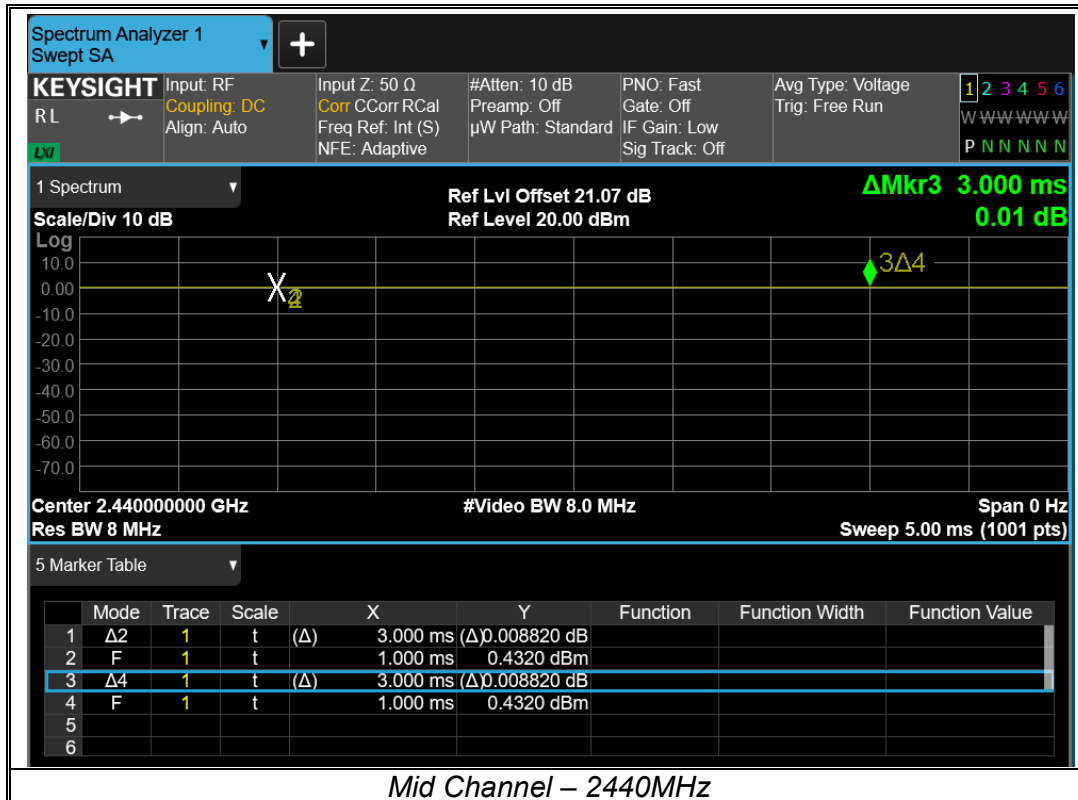
Test Mode	Frequency (MHz)	Measured AVG Output Power (dBm)	Limits (dBm)
2M	2402	0.34	29.9
	2440	0.39	29.9
	2480	0.44	29.9





Duty Cycle

Test Mode	Frequency (MHz)	T _{on} (ms)	T _{on} +T _{off} (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
2M	2440	3	3	100	0.0



Mid Channel – 2440MHz

3.8.2 ISED Limits

Test Mode	Frequency (MHz)	Measured PK Output Power (dBm)	Limits (dBm)	Antenna Gain	EIRP (dBm)	EIRP Limit (dBm)	Verdict
2M	2402	2.77	30.0	6.1	8.87	36.0	PASS
	2440	2.82	30.0	6.1	8.92	36.0	PASS
	2480	3.03	30.0	6.1	9.13	36.0	PASS

Test Mode	Frequency (MHz)	Measured AVG Output Power (dBm)	Limits (dBm)
2M	2402	0.34	30.0
	2440	0.39	30.0
	2480	0.44	30.0

Refer to the Test Plot provided in 3.8.1

4 Radiated Band Edge and Radiated Spurious Emissions

4.1 Test Result

Test Description	Test Specification		Test Result
Radiated Spurious Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 5.5 RSS-Gen 8.9, 8.10	Compliant
Radiated Band Edge Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 5.5 RSS-Gen 8.9, 8.10	Compliant

4.2 Test Method

Radiated emissions in restricted frequency bands were measured using methods defined in ANSI C63.10:2020 clause 11.11 and 11.12. These procedures are referenced in KDB 558074 D01 15.247 Meas Guidance v05r02.

The BLE 2MBPS data mode was used for this test.

4.3 Test Limit

Limits within restricted bands of operation:

Frequency	Limits ⁽¹⁾		Peak Limits dBuV/m
	Microvolts/m	dBuV/m	
30 - 88 MHz	100	40 ⁽²⁾	--
88 - 216 MHz	150	43.5 ⁽²⁾	--
216 - 960 MHz	200	46 ⁽²⁾	--
960 - 1000 MHz	500	54 ⁽²⁾	--
1 - 40 GHz	500	54 ⁽³⁾	74

(1) These limits are applicable to emissions outside of the intentional transmit frequency band.

(2) Quasi-peak limit

(3) Average limit

4.4 Test Date and Test Engineer(s)

Test Date(s): 07/11/2025 – 07/12/2025

Engineer: AM

4.5 Test Site

SGS EMC Laboratory, San Diego, CA

Environmental Conditions

Temperature: 17 °C

Relative Humidity: 64 %

Atmospheric Pressure: 101.7 kPa

4.6 Additional Observation

None

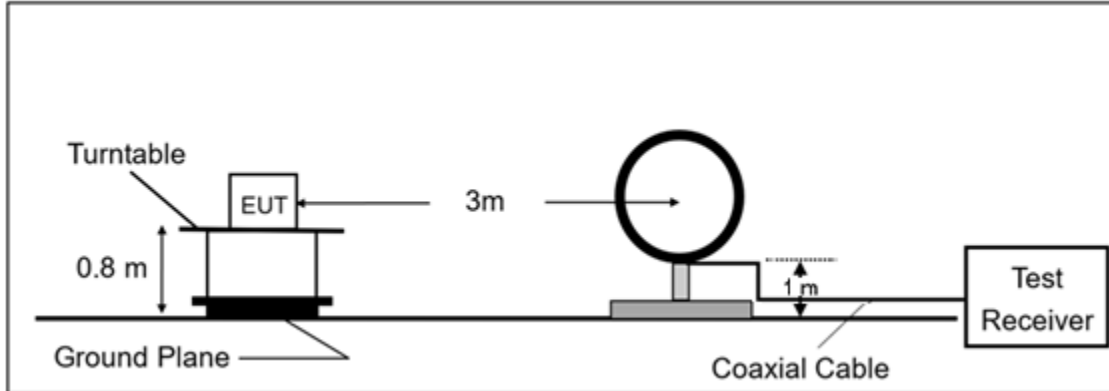
4.7 Test Equipment

Asset	Manufacturer	Equipment	Model	Serial No.	Cal Date	Cal Due Date
2034	ETS Lindgren	Biconilog Antenna	3142E	00243882	06/29/2023	09/24/2025
2033	ETS Lindgren	Horn Antenna	3117	00251986	09/27/2024	09/27/2026
-	-	RF cable	-	-	Verified	
-	Micro-Tronics	2.97GHz Highpass Filter	HPM16182	G015	Verified	
2026	RF-Lambda	RF Microwave Systems Amplifier	RAMP00M45GA	00089204010	02/13/2025	02/13/2026
2017	Keysight	EMI Receiver	N9038B	MY5050132	03/24/2025	03/24/2026
-	ETS Lindgren	Test Software	TILE!	7.9.3.7	N/A	
-	BK Precision	DC Power Supply	1621A	D18501857	Verified	

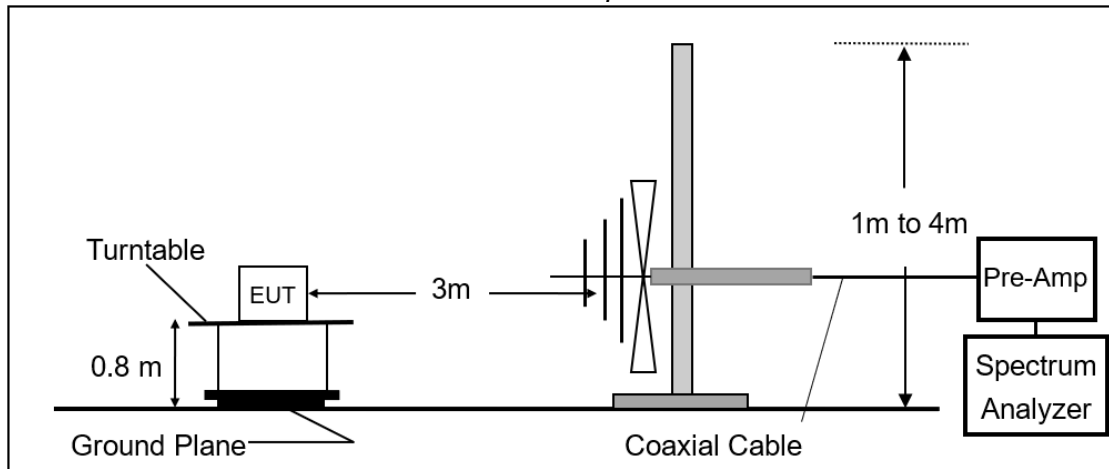
4.7.1 Test Setup

Refer to Section 2.6 in this test report of EUT setup.

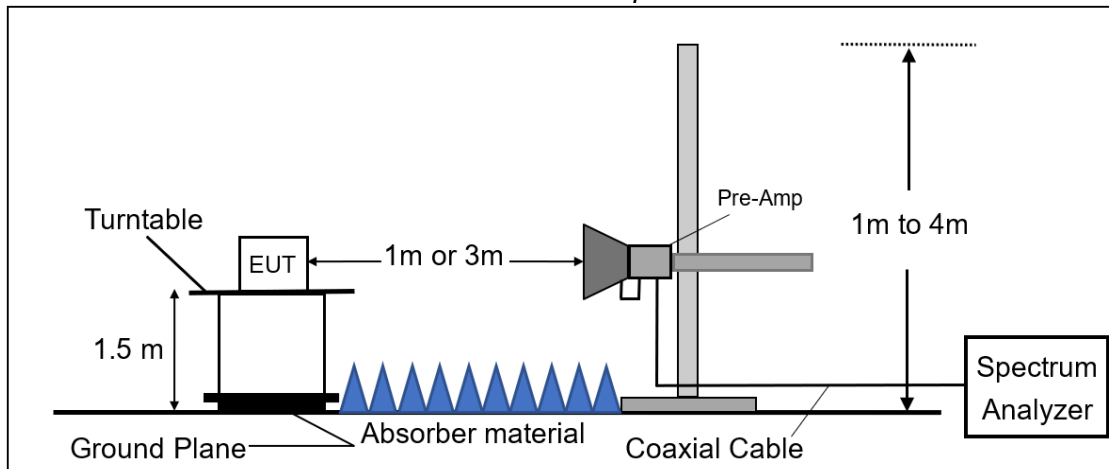
Radiated emission test setup for 9kHz to 30MHz



Radiated emission test setup for 30MHz to 1GHz



Radiated emission test setup for above 1GHz



4.7.2 Field Strength Calculation

The total correction factor is calculated by adding the Antenna Factor, Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any).

The basic equation with a sample calculation as follows:

$$TC = AF + CL - AG$$

Where TC = Total Correction CL = Cable Loss
 AG = Amplifier Gain
 AF = Antenna Factor

The Final reading had been calculated internally by the test software by adding the Measurement Reading from the receiver and Total Correction factor.

The basic equation with a sample calculation as follows:

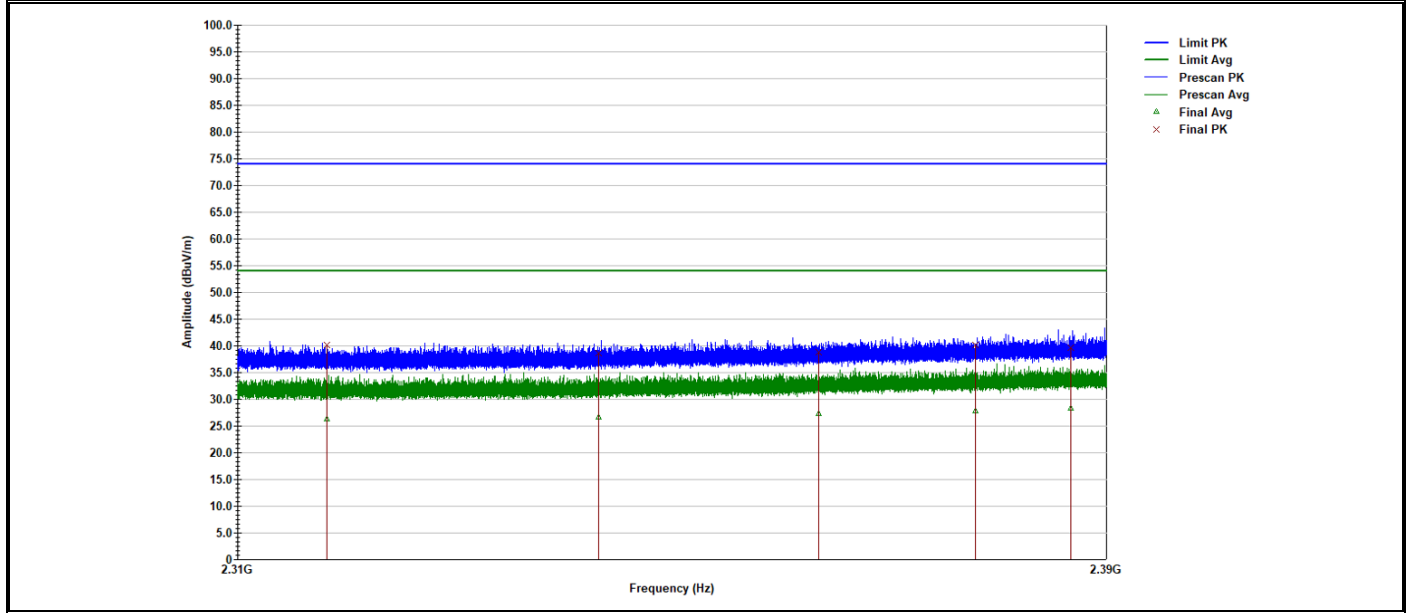
$$Final = MR + TC$$

Where TC = Total Correction MR = Measurement Reading

4.8 Test Data

4.8.1 Radiated Band Edge

BLE Low Channel – Restricted Band Edge 2310MHz-2390MHz – Vertical Polarity



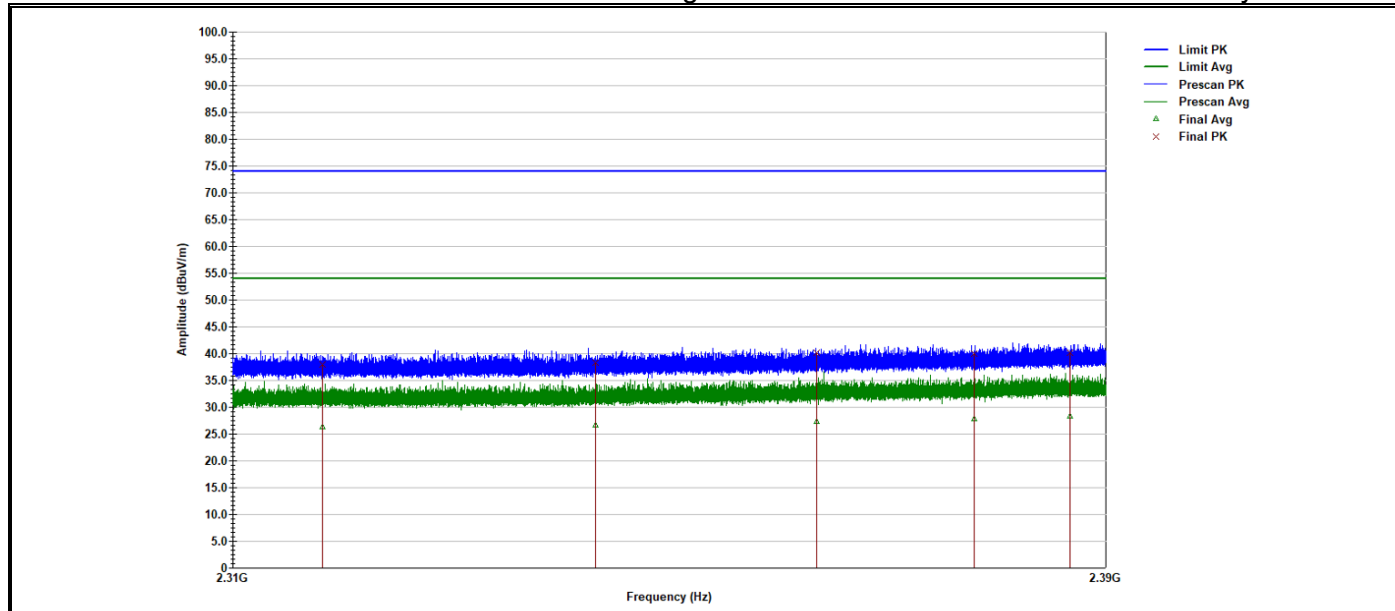
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.10	26.32	-0.92	-27.68	54	245	181
2342.92	26.65	-0.82	-27.35	54	150	322
2363.23	27.3	-0.68	-26.7	54	359	-20
2377.74	27.84	-0.66	-26.16	54	172	120
2386.67	28.31	-0.61	-25.69	54	294	113

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.10	40.24	-0.92	-33.76	74	245	181
2342.92	38.68	-0.82	-35.32	74	150	322
2363.23	38.81	-0.68	-35.19	74	359	-20
2377.74	40.17	-0.66	-33.83	74	172	120
2386.67	39.65	-0.61	-34.35	74	294	113

BLE Low Channel – Restricted Band Edge 2310MHz-2390MHz – Horizontal Polarity



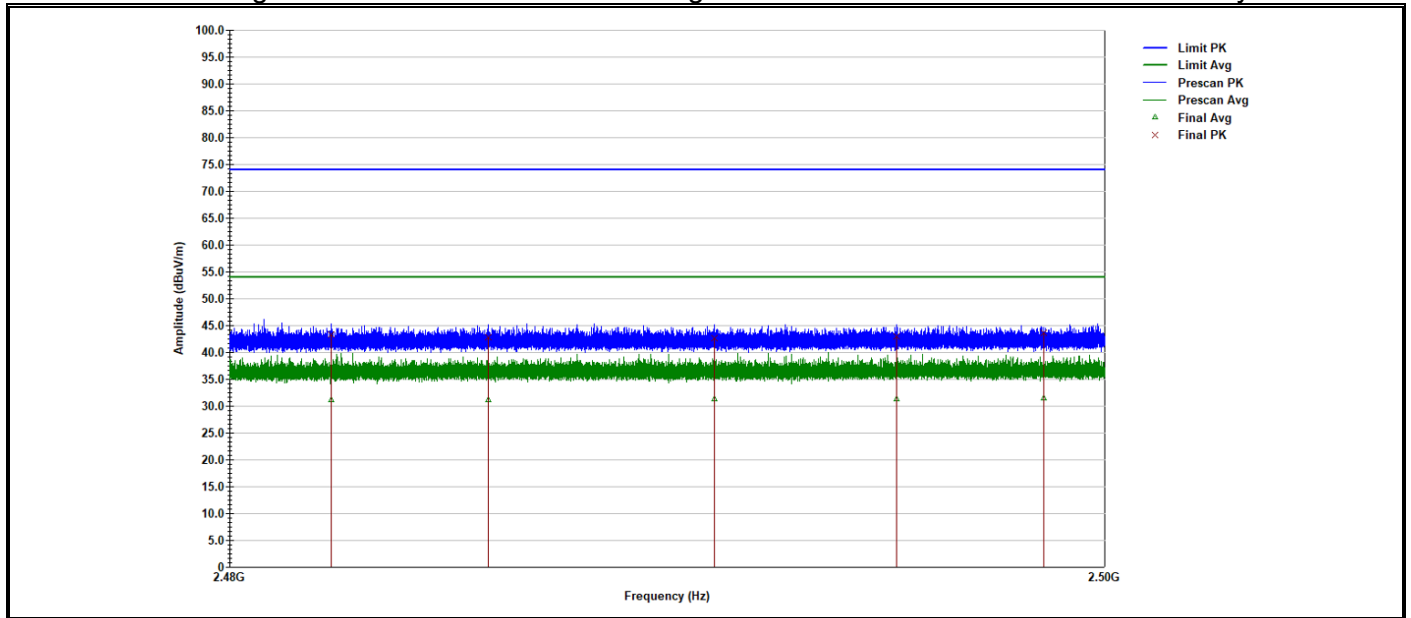
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.10	26.32	-0.92	-27.68	54	390	105
2342.92	26.64	-0.82	-27.36	54	309	105
2363.23	27.3	-0.68	-26.7	54	150	-20
2377.74	27.84	-0.66	-26.16	54	196	99
2386.67	28.31	-0.61	-25.69	54	150	295

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.10	37.98	-0.92	-36.02	74	390	105
2342.92	38.28	-0.82	-35.72	74	309	105
2363.23	40.16	-0.68	-33.84	74	150	-20
2377.74	39.93	-0.66	-34.07	74	196	99
2386.67	40.19	-0.61	-33.81	74	150	295

BLE High Channel – Restricted Band Edge 2483.5MHz-2500MHz – Vertical Polarity



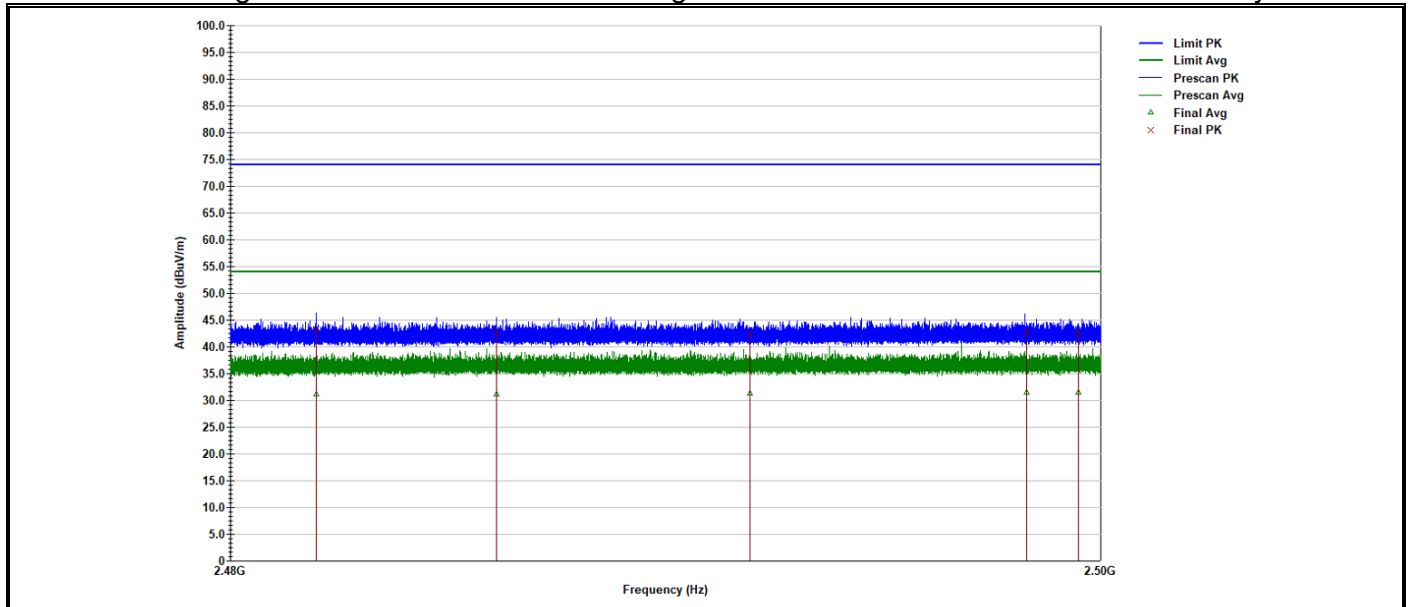
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2485.41	31.12	-0.1	-22.88	54	245	316
2488.36	31.19	-0.09	-22.81	54	180	365
2492.63	31.3	-0.08	-22.7	54	164	81
2496.07	31.39	-0.07	-22.61	54	188	263
2498.85	31.44	-0.06	-22.56	54	309	377

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2485.41	43.36	-0.1	-30.64	74	245	316
2488.36	42.76	-0.09	-31.24	74	180	365
2492.63	42.69	-0.08	-31.31	74	164	81
2496.07	42.97	-0.07	-31.03	74	188	263
2498.85	43.66	-0.06	-30.34	74	309	377

BLE High Channel – Restricted Band Edge 2483.5MHz-2500MHz – Horizontal Polarity



Average Data

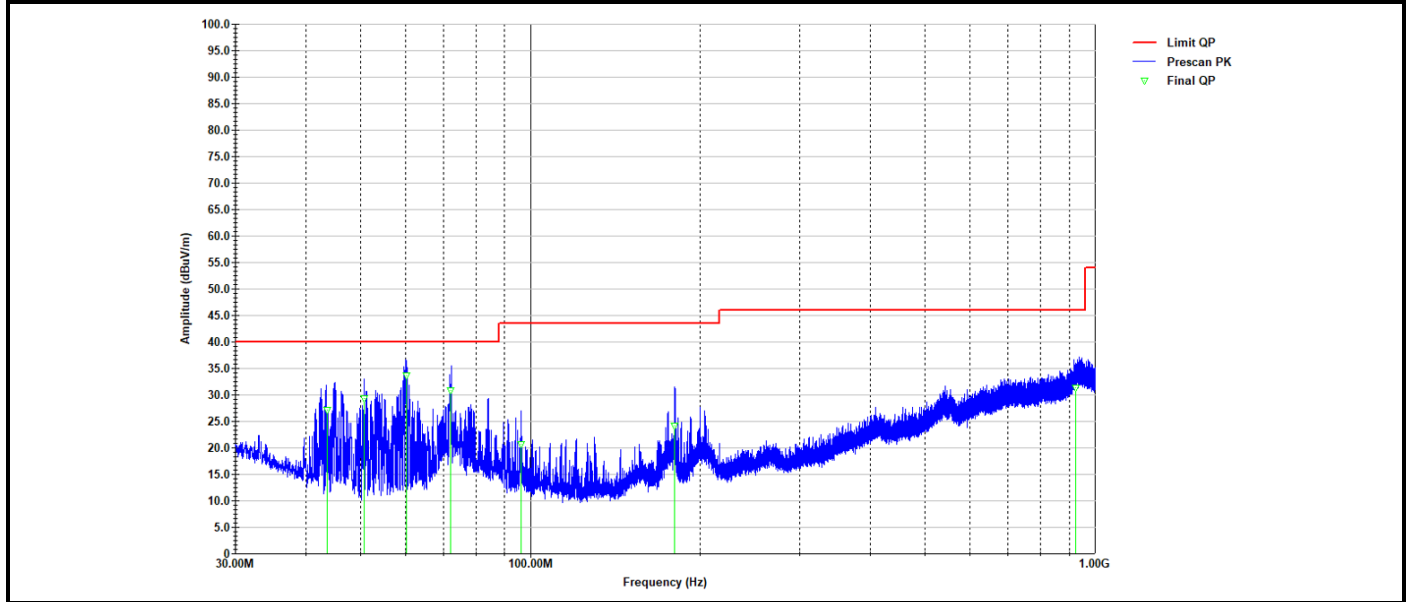
Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2485.12	31.12	-0.1	-22.88	54	156	336
2488.53	31.19	-0.09	-22.81	54	172	219
2493.34	31.34	-0.08	-22.66	54	315	287
2498.59	31.41	-0.06	-22.59	54	204	79
2499.58	31.42	-0.06	-22.58	54	400	250

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2485.12	43.32	-0.1	-30.68	74	156	336
2488.53	42.8	-0.09	-31.2	74	172	219
2493.34	42.47	-0.08	-31.53	74	315	287
2498.59	43.06	-0.06	-30.94	74	204	79
2499.58	42.76	-0.06	-31.24	74	400	250

4.8.2 Radiated Spurious Emission

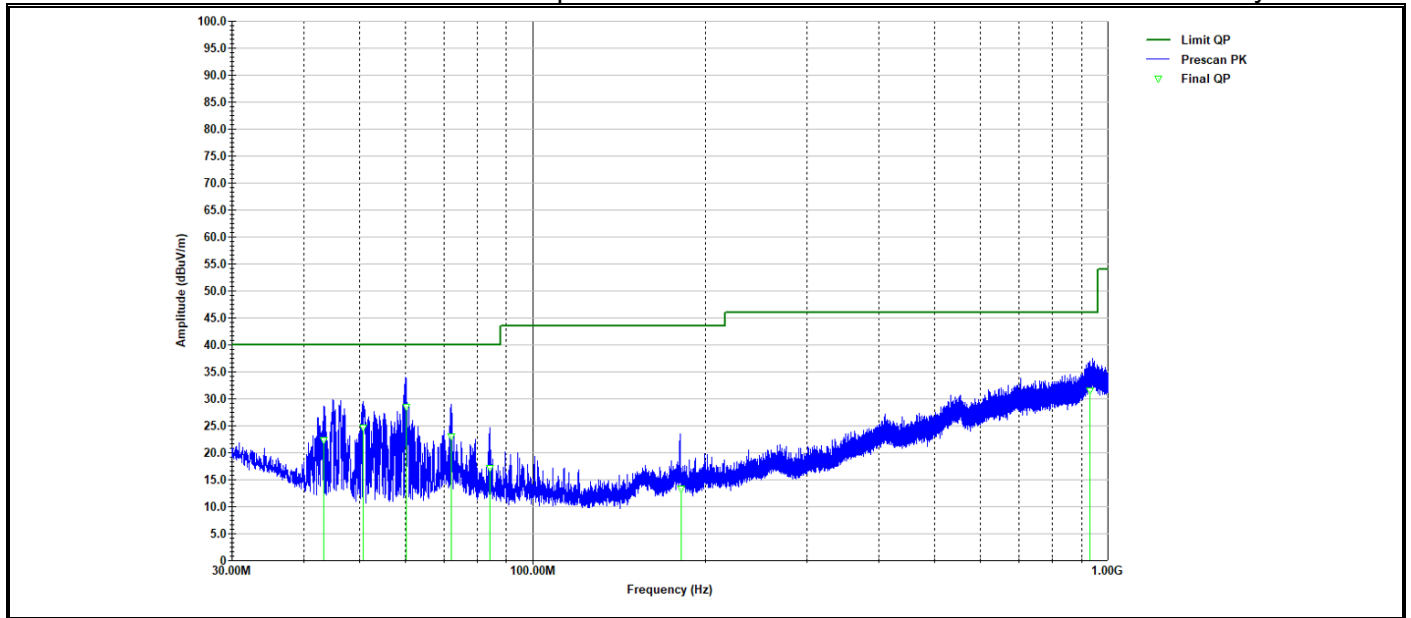
BLE Low Channel – Radiated Spurious Emission 30MHz to 1GHz – Vertical Polarity



Quasi-peak Data

Freq. (MHz)	Final QP (dBuV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Ant. Height (cm)	Azimuth (deg.)
43.61	27.08	14.27	-12.92	40	100.3	0.6
50.79	29.25	12.5	-10.75	40	100.3	283.5
60.28	33.62	12.6	-6.38	40	100.7	169.6
72.24	30.89	12.84	-9.11	40	100.7	221.1
96.05	20.65	13.25	-22.85	43.54	106.4	46.2
180.08	24.15	15.73	-19.39	43.54	105.7	220.8
924.97	31.27	33.8	-14.73	46	225.8	242.7

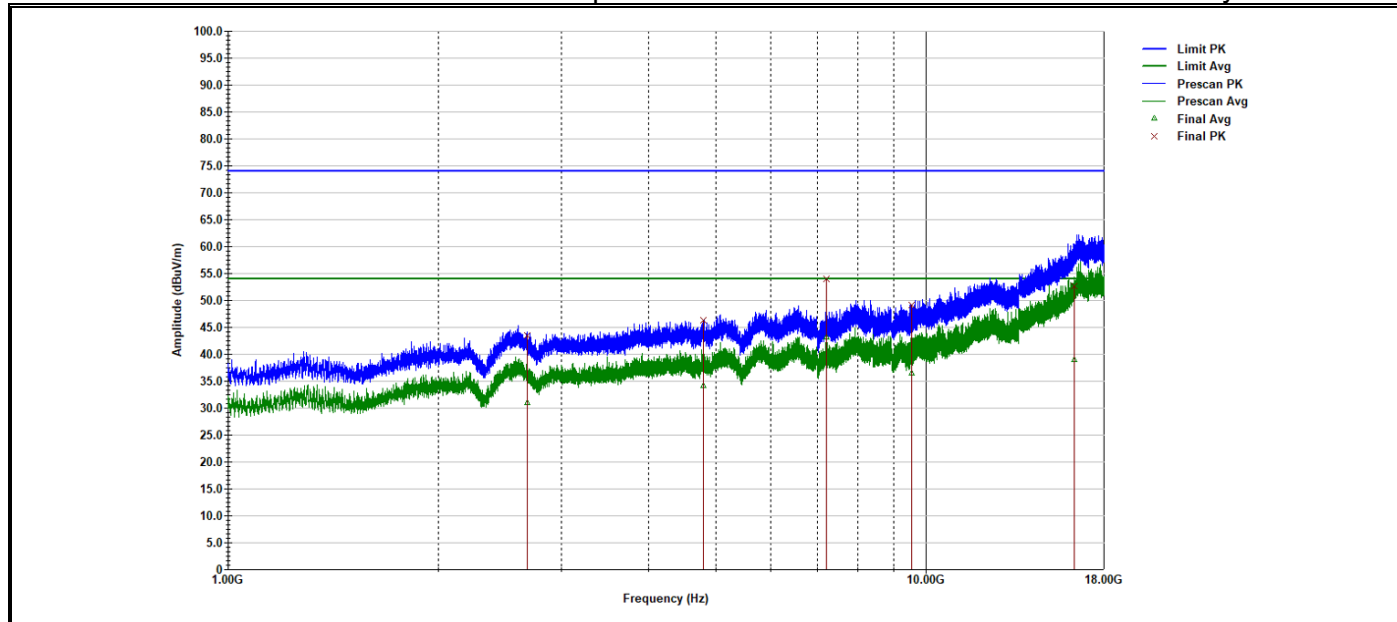
BLE Low Channel – Radiated Spurious Emission 30MHz to 1GHz – Horizontal Polarity



Quasi-peak Data

Freq. (MHz)	Final QP (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
43.37	22.28	14.37	-17.72	40	311	239
50.77	24.71	12.5	-15.29	40	400	117
60.24	28.49	12.6	-11.51	40	153	334
72.27	23.06	12.84	-16.94	40	272	51
84.17	17.23	12.25	-22.77	40	312	312
180.97	13.34	15.69	-30.2	43.54	106	-10
929.65	31.41	34.02	-14.59	46	367	176

BLE Low Channel – Radiated Spurious Emission 1GHz-18GHz – Vertical Polarity



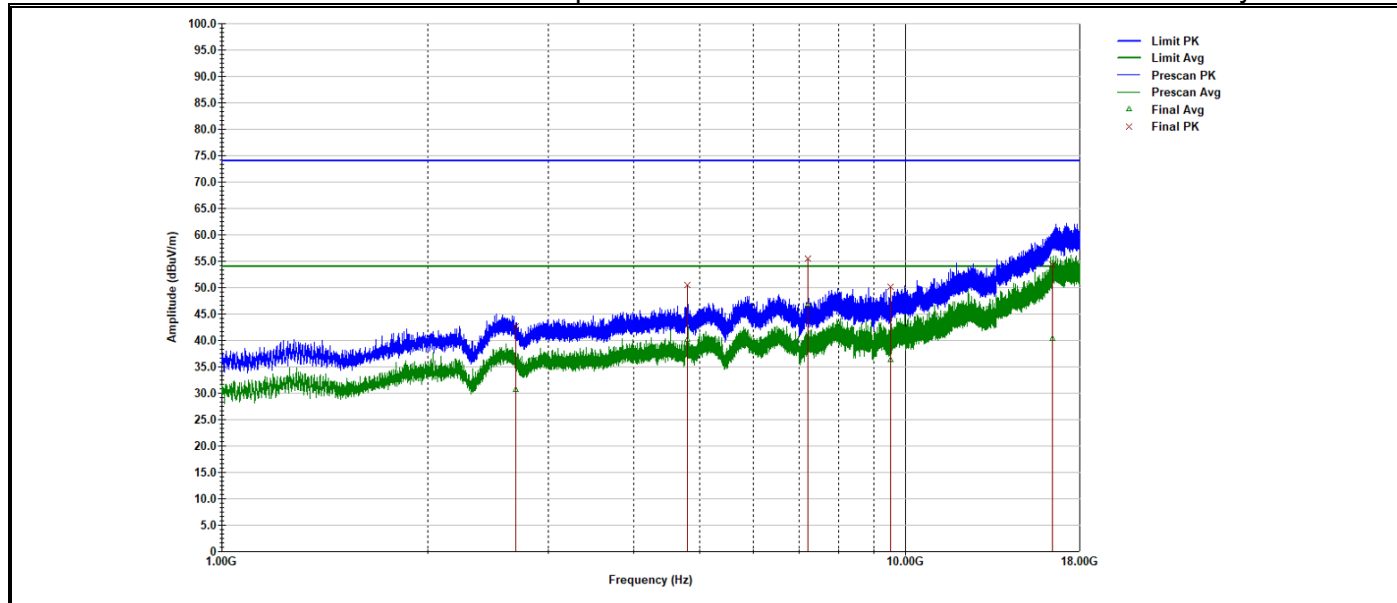
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2687	30.92	1.07	-23.08	54	284	20
4802	34.19	6.61	-19.81	54	318	230
7204	43.2	12.43	-10.8	54	302	4
9535	36.46	18.59	-17.54	54	156	325
16323	39.03	32.3	-14.97	54	248	380

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2687	43.53	1.07	-30.47	74	284	20
4802	46.35	6.61	-27.65	74	318	230
7204	53.97	12.43	-20.03	74	302	4
9535	49.11	18.59	-24.89	74	156	325
16323	52.61	32.3	-21.39	74	248	380

BLE Low Channel – Radiated Spurious Emission 1GHz-18GHz – Horizontal Polarity



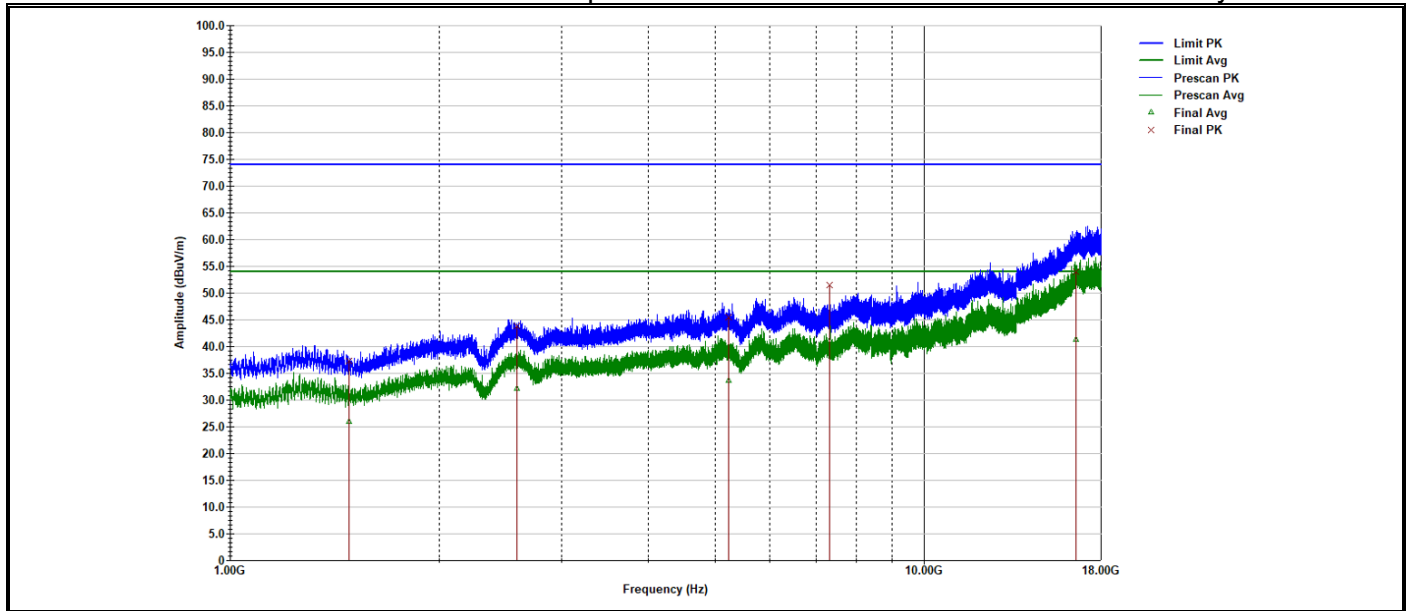
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2693	30.74	1.09	-23.26	54	309	366
4805	40.17	6.65	-13.83	54	224	167
7205	46.85	12.43	-7.15	54	194	117
9523	36.34	18.57	-17.66	54	186	358
16424	40.27	32.76	-13.73	54	393	301

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2693	42.72	1.09	-31.28	74	309	366
4805	50.43	6.65	-23.57	74	224	167
7205	55.42	12.43	-18.58	74	194	117
9523	50.21	18.57	-23.79	74	186	358
16424	54.25	32.76	-19.75	74	393	301

BLE Mid Channel – Radiated Spurious Emission 1GHz-18GHz – Vertical Polarity



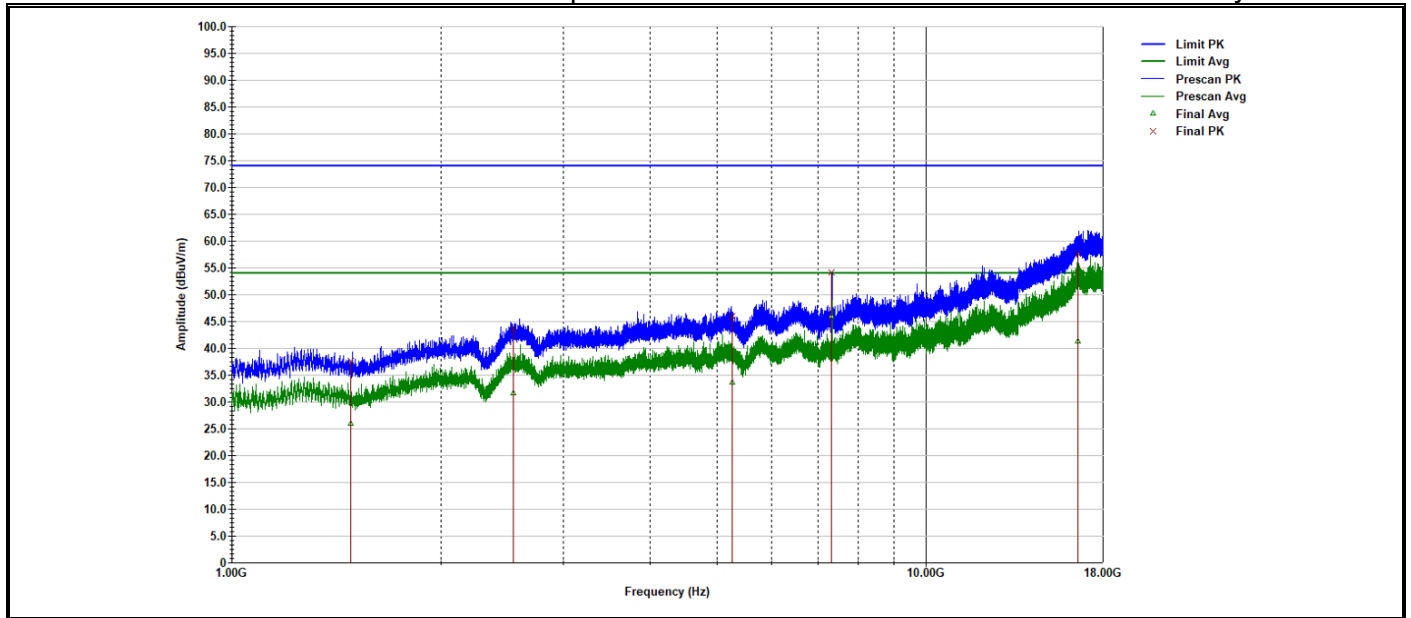
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1485	25.96	-6.43	-28.04	54	244	380
2590	32.19	0.5	-21.81	54	383	267
5228	33.75	7.4	-20.25	54	150	366
7319	41.22	12.73	-12.78	54	150	380
16549	41.33	33.31	-12.67	54	187	33

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1485	37.36	-6.43	-36.64	74	244	380
2590	43.85	0.5	-30.15	74	383	267
5228	45.49	7.4	-28.51	74	150	366
7319	51.49	12.73	-22.51	74	150	380
16549	53.94	33.31	-20.06	74	187	33

BLE Mid Channel – Radiated Spurious Emission 1GHz-18GHz – Horizontal Polarity



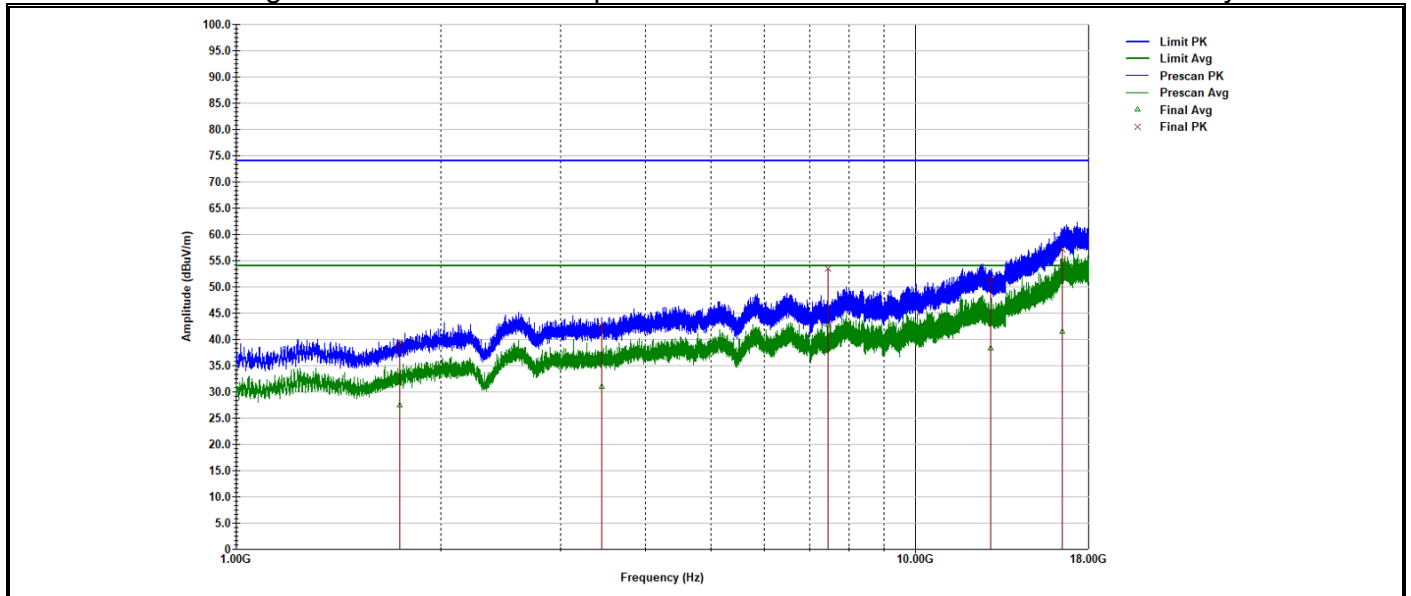
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1484	25.92	-6.44	-28.08	54	309	131
2546	31.75	0.33	-22.25	54	325	334
5253	33.74	7.41	-20.26	54	263	355
7321	46.04	12.73	-7.96	54	163	202
16548	41.26	33.31	-12.74	54	340	126

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1484	37.7	-6.44	-36.3	74	309	131
2546	43.68	0.33	-30.32	74	325	334
5253	46.07	7.41	-27.93	74	263	355
7321	54.1	12.73	-19.9	74	163	202
16548	57.63	33.31	-16.37	74	340	126

BLE High Channel – Radiated Spurious Emission 1GHz-18GHz – Vertical Polarity



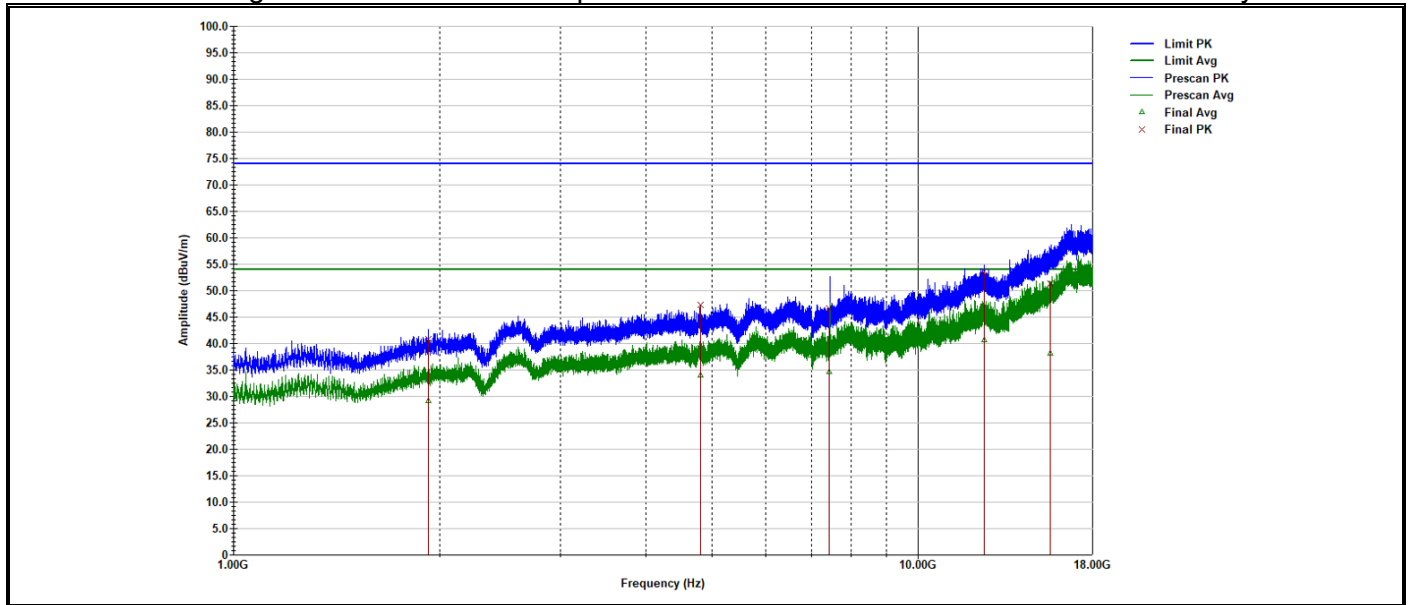
Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1740	27.47	-4.12	-26.53	54	188	380
3448	30.93	2.73	-23.07	54	297	50
7442	42.8	13.17	-11.2	54	179	12
12898	38.25	26.05	-15.75	54	388	17
16462	41.44	32.93	-12.56	54	379	-6

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1740	39.28	-4.12	-34.72	74	188	380
3448	42.5	2.73	-31.5	74	297	50
7442	53.52	13.17	-20.48	74	179	12
12898	51.64	26.05	-22.36	74	388	17
16462	57.08	32.93	-16.92	74	379	-6

BLE High Channel – Radiated Spurious Emission 1GHz-18GHz – Horizontal Polarity



Average Data

Freq. (MHz)	Final AVG (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1928	29.09	-2.29	-24.91	54	364	68
4806	34.05	6.66	-19.95	54	332	380
7428	34.72	13.12	-19.28	54	385	132
12520	40.61	26.03	-13.39	54	163	193
15610	38.22	29.92	-15.78	54	362	97

Peak Data

Freq. (MHz)	Final PK (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
1928	40.9	-2.29	-33.1	74	364	68
4806	47.32	6.66	-26.68	74	332	380
7428	46.67	13.12	-27.33	74	385	132
12520	53.72	26.03	-20.28	74	163	193
15610	51.29	29.92	-22.71	74	362	97

5 Measurement Uncertainty

The measurement uncertainty figures are calculated in accordance with TR 100 028-1 [2] and correspond to an expansion factor (coverage factor) $k = 2$ (which provides confidence levels of 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).

Measurement uncertainty is not used to adjust the measurements to determine compliance.

Parameter	Expanded Uncertainty for Normal k factor equal to 2	
	Required	Laboratory Actual
Radio Frequency	$\pm 1 \times 10^{-5}$	$\pm 9.8 \times 10^{-8}$
Total RF Power, Conducted	± 1.5 dB	± 1.2 dB
RF Power Density, Conducted	± 3 dB	± 0.7 dB
Spurious Emissions, Conducted	± 3 dB	± 2.1 dB
All Emissions, Radiated	± 6 dB	± 4.8 dB
Temperature	$\pm 1^{\circ}\text{C}$	$\pm 0.5^{\circ}\text{C}$
Humidity	± 5 %	$\pm 3.5\%$

6 Revision History

Revision Level	Description of changes	Page Affected	Revision Date
1	Initial release	None	07/17/2025
2	Updated Device Information	3	11/04/2025
3	Added Output Power Section	All	11/04/2025
3	Updated Applicable Standards	1	11/04/2025