

RF Test Report

Project Number: 5315129**Offer No.:** SUW-202410007210**Report Number:** SUW5315129EMC04**Revision:** 2**Client:** Track Group, Inc.**Equipment Under Test:** Electronic Monitoring Ankle Bracelet**Product Name:** ReliAlert XC5**Model Number:** OTD 5.0**FCC ID:** TPO-OTD50**IC:** 6512A-OTD50**Applicable Standards:** FCC Part 15 Subpart C, § 15.247 (ANSI C63.10:2020)

RSS-247, Issue 4, July 2025

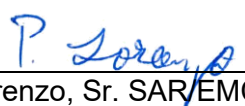
RSS-GEN, Issue 5, February 2021, Amendment 2

(ANSI C63.10.2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024)

Report issued on: 5 June 2026**Test Result:** Compliant

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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.

Tested by:
Paul Lorenzo, Sr. SAR/EMC Technician**Reviewed by:**
Martin Taylor, Sr. RF/EMC Project Engineer

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1 Summary of Test Results

Test Description	Test Specification		Test Result
Bandwidth	15.247(a)(2)	RSS-247 S5.2 (a) RSS-GEN S6.7	N/T ¹
Output Power	15.247(b)(3)	RSS-247 S5.4 (d)	N/T ¹
Power Spectral Density	15.247(e)	RSS-247 S5.2 (b)	N/T ¹
Conducted Spurious Emissions / Band Edge	15.247(d)	RSS-247 S5.5	N/T ¹
Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 S5.5 RSS-GEN S8.9, S8.10	Compliant
Band Edge Emissions in Restricted Frequency Bands	15.205, 15.209	RSS-GEN S8.9, S8.10	NT ¹
AC Powerline Conducted Emissions	15.207	RSS-GEN S8.8	N/T ²
Antenna Requirement	15.203	RSS-GEN S6.8	Compliant ³

(1) Not under the scope of this evaluation. Testing was limited to radiated spurious emissions to show continued compliance of a certified module when integrated into the host device per KDB 996369 D04 Module Integration v02.

(2) Device does not operate when connected to AC mains.

(3) The device uses a SMD ceramic antenna which cannot be replaced by the end user.

1.1 Modifications Required for Compliance

None.

2 General Information

2.1 Client Information

Name: Track Group, Inc.
Address: 200 East 5th Ave, Suite 100
City, State, Zip, Country: Naperville, Ill 60563, USA

2.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01
CAB ID: US0186

2.3 General Information of EUT

Equipment Under Test: Electronic Monitoring Ankle Bracelet
Product Name: ReliAlert XC5
Model: OTD 5.0
HW version: 5.0.0
SW version: 5.0.12.1
Serial Numbers: P5020013, Retest P5020020
FCC ID: TPO-OTD50
IC: 6512A-OTD50
Frequency Range: 2402 – 2480 MHz
Data Modes: Bluetooth Low Energy (BLE) – GFSK
Antenna/Gain*: Ceramic Chip. SZP-C-1W11 (2400-2500MHz = 0.8dBi gain)
Rated Voltage: 3.6Vdc (Internal rechargeable Li-ion battery)
Test Voltage: 3.6Vdc
Sample Received Date: 27 May 2025
Dates of testing: 3-4 June 2025; Retest May 27-29 & June 2 2026

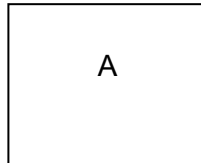
*Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous filing or other.

2.4 Operating Modes and Conditions

The EUT was programmed by client to following:

- 1) Highest power channel, modulation, data rate and RF power setting per the test report provided on the FCC site.

2.5 EUT Connection Block Diagram – Radiated Measurements



2.6 System Configurations

Device Reference	Manufacturer	Description	Model	Serial Number
A	Track Group Inc.	Electronic Monitoring Ankle Bracelet	OTD 5.0	P5020013 P5020020 (Retest)

3 Emissions in Restricted Frequency Bands

3.1 Test Result

Test Description	Test Specification		Test Result
Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 S5.5 RSS-GEN S8.9, S8.10	Compliant

3.2 Test Method

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

Lowest, middle and highest channels were investigated – the device was commanded to continuously transmit on channel 39.

EUT is designed to measure flowrate on a level flat tabletop. Only X-axis was tested.

Test distances for radiated tests:

- 9k to 30 MHz – Near field prescan to determine if there were any emissions
- 30 to 1000 MHz - The EUT to measurement antenna distance was 3 meters
- 1 to 18 GHz - The EUT to measurement antenna distance was 3 meters
- 18 to 26 GHz - The EUT to measurement antenna distance was 1 meter

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

3.3 Test Site

3m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions	27-May-2026	29-May-2026	2-Jun-2026
Temperature:	23.1°C	22.17 °C	22.04°C
Relative Humidity:	63.2%	59.9%	61.3%
Atmospheric Pressure:	98.3kPa	98.1kPa	98.7kPa

3.4 Test Equipment

30-1000 MHz

Test End Date: 2-Jun-2026

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, BILOG	JB6	SUNOL	B079689	18-Apr-2024	18-Apr-2026
ROTARY NM TO NF CONNECTOR	18-2120-0	DIAMOND ANTENNA AND MICROWAVE CORP	22008	23-Mar-2026	22-Mar-2027
RF CABLE NM TO NM, 0.01-18GHz	EM-B810NM-354	Echelon	26004	7-Apr-2026	6-Apr-2027
Nfemale to Nmale RF Cable	EM-B810NMNF-118	Echelon	23010	7-Apr-2026	6-Apr-2027
RF CABLE RIGHT ANGLE NM TO NM, 0.01-18GHz	90-076-020	TELEDYNE STORM MICROWAVE	22037	19-Dec-2025	18-Dec-2026
RF CABLE, NM TO NM.	90-195-157	TELEDYNE STORM MICROWAVE	21019	22-Mar-2026	21-Mar-2027
LOW NOISE AMPLIFIER	ZKL-2+	MINI-CIRCUITS	B079800	26-Sep-2025	25-Sep-2026
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027

1-18GHz

Test End Date: 29-May-2026

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079691	2-Aug-2024	1-Aug-2026
RF CABLE NM TO NM, 0.01-18GHz	EM-B810NM-354	Echelon	26004	7-Apr-2026	6-Apr-2027
RF CABLE RIGHT ANGLE NM TO NM, 0.01-18GHz	90-076-020	TELEDYNE STORM MICROWAVE	22037	19-Dec-2025	18-Dec-2026
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	15003	2-Jun-2025	2-Jun-2026
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027
FILTER, HIGH PASS, >2800MHZ	HPM50111	MICRO-TRONICS	22017	2-Jun-2025	2-Jun-2026

18-26GHz

Test End Date: 27-May-2026

Tester: PL

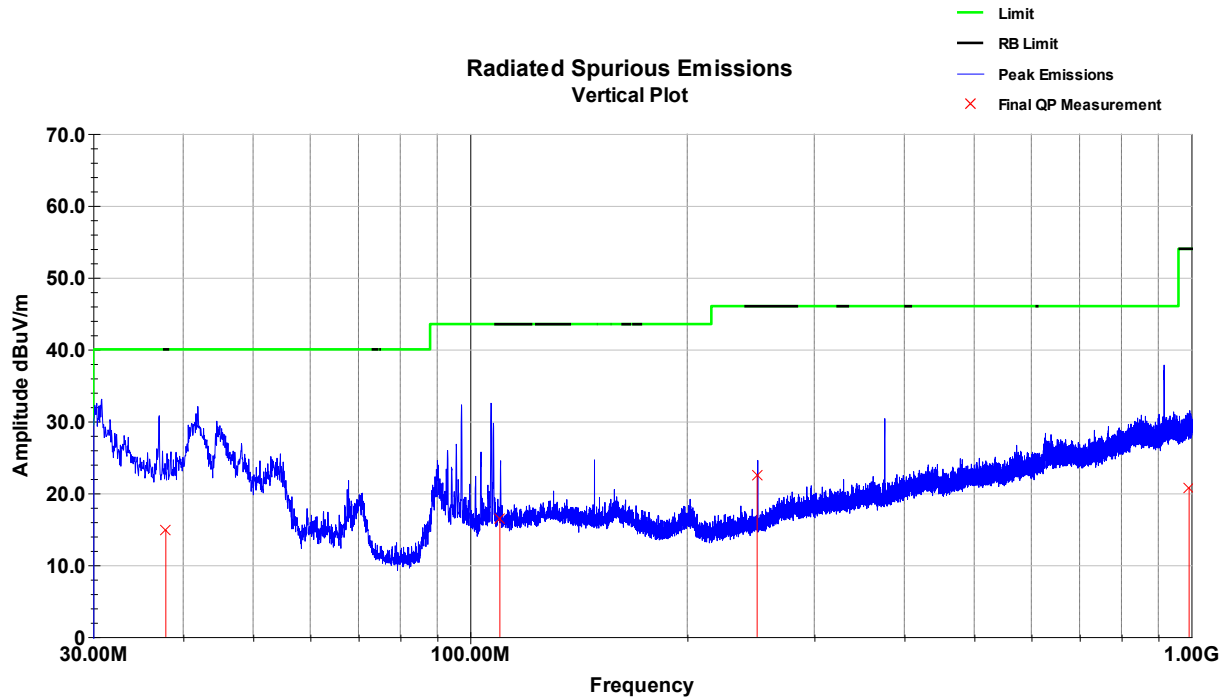
Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (SMALL)	3116B	ETS LINDGREN	B079695	2-Aug-2024	1-Aug-2026
RF CABLE SMA, 0.01-40GHZ	HULL150A-29P-29P-36	HASCO COMPONENTS	19101	20-Apr-2026	19-Apr-2027
SMA to SMA RF Cable	NC12-K1K1-138	MEGAPHASE	22002	20-Apr-2026	19-Apr-2027
ANTENNA, LOOP, ACTIVE	6502	ETS LINDGREN	B085752	30-Mar-2026	29-Mar-2028
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027
LOW NOISE AMPLIFIER	NSP1840-HG	MITEQ	B087572	10-Oct-2025	9-Oct-2026

Software: TILE! Profile: RSE 30-1000 MHz 260302
TILE! Profile: RSE 1-40GHz 260302

3.5 Test Data

3.5.1 30-1000MHz (Channel 39)

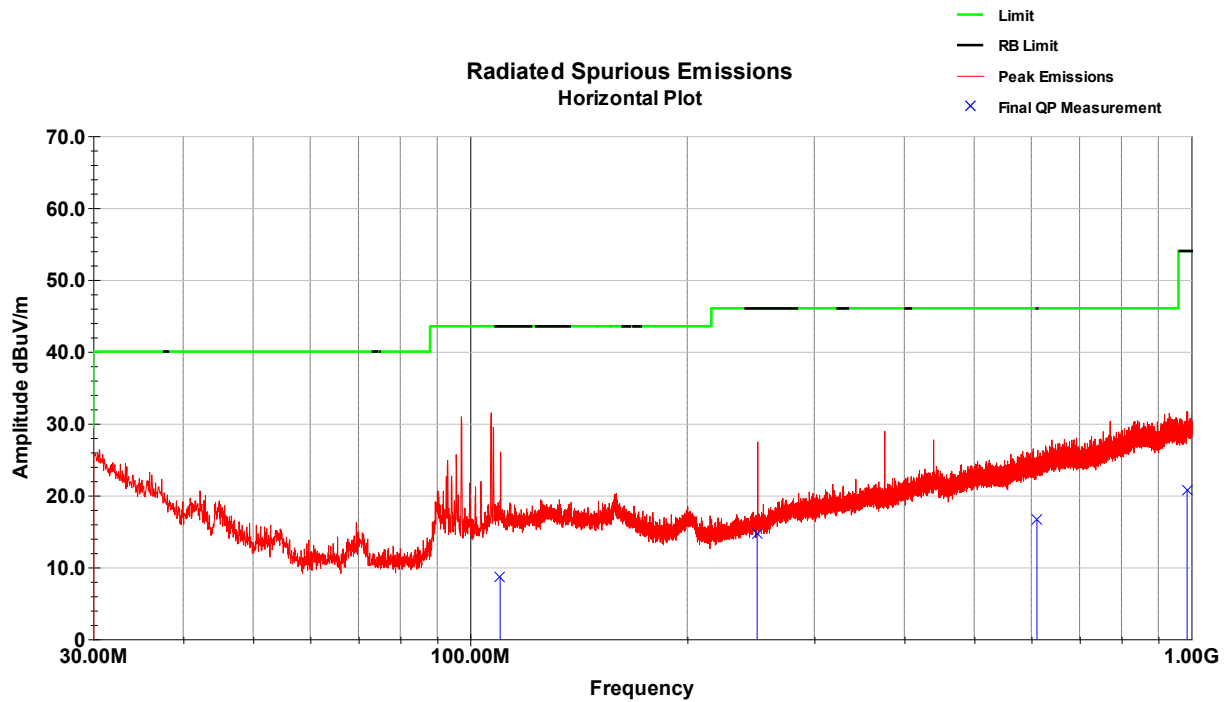
Vertical Radiated Spurious Emissions 30-1000MHz Plot



Vertical Radiated Spurious Emissions 30-1000MHz Data

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
37.84	V	33.0	303.0	26.6	20.1	0.4	0.0	32.2	14.9	40.0	-25.1
109.96	V	149.0	220.0	30.9	16.8	0.9	0.0	32.1	16.5	43.5	-27.0
250.03	V	187.0	163.0	36.8	16.3	1.4	0.0	32.0	22.6	46.0	-23.4
993.23	V	254.0	100.0	21.6	27.9	2.6	0.0	31.3	20.8	54.0	-33.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Radiated Spurious Emissions 30-1000MHz Plot

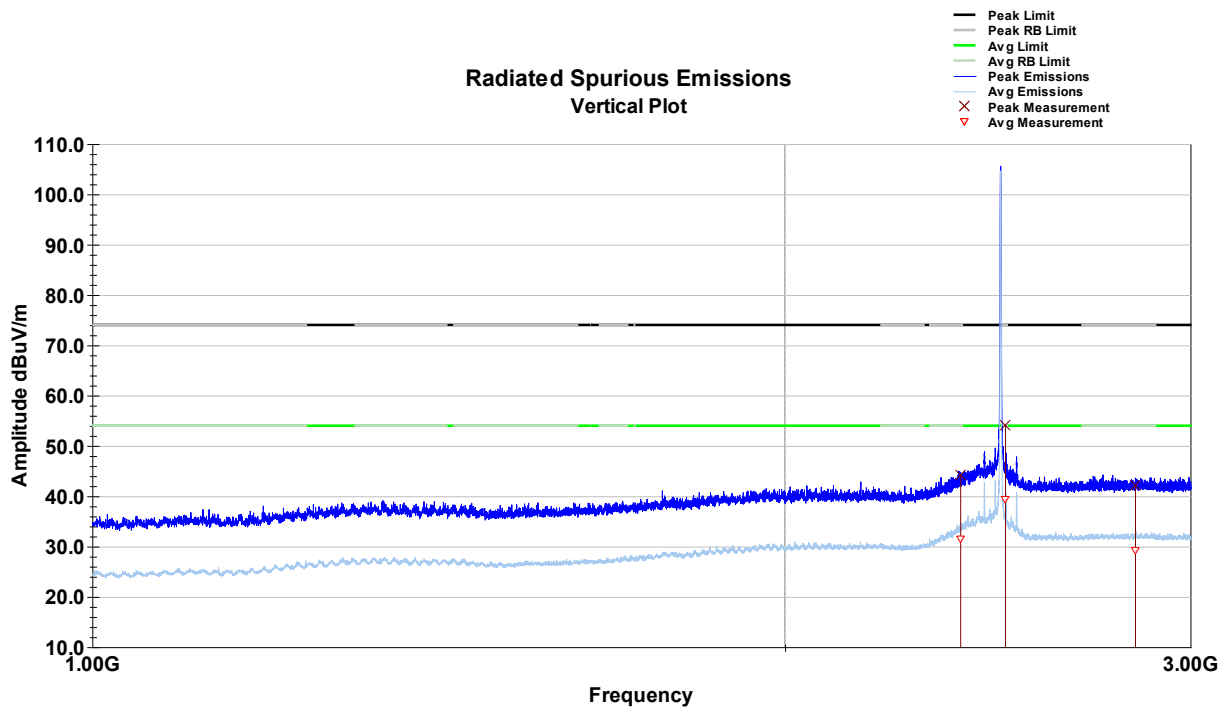


Horizontal Radiated Spurious Emissions 30-1000MHz Data

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
110.04	H	359.0	163.0	23.0	16.8	0.9	0.0	32.1	8.6	43.5	-34.9
250.03	H	359.0	132.0	29.0	16.3	1.4	0.0	32.0	14.7	46.0	-31.3
611.03	H	359.0	131.0	22.0	23.9	2.4	0.0	31.8	16.6	46.0	-29.4
986.81	H	359.0	116.0	21.7	27.9	2.6	0.0	31.3	20.8	54.0	-33.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

3.5.2 1-3GHz (Channel 39)

Vertical Radiated Spurious Emissions 1-3GHz Plot



Vertical Radiated Spurious Emissions 1-3GHz Data

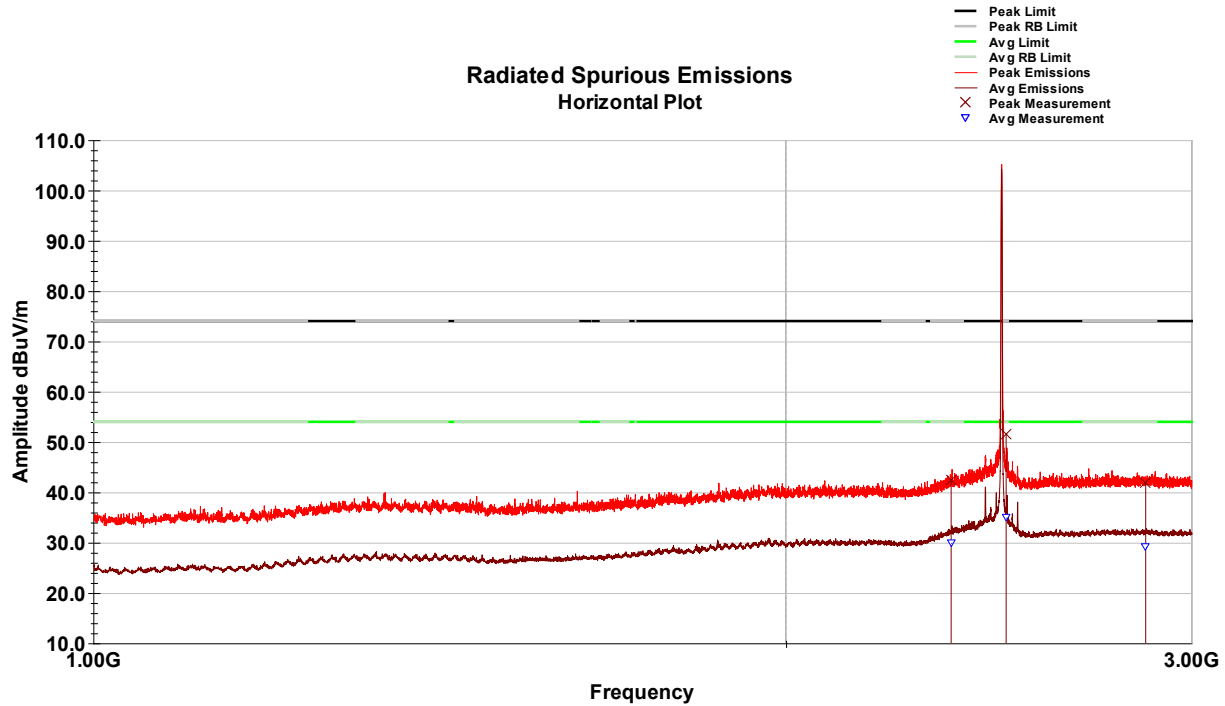
Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
2384.29	V	32.0	118.0	52.4	31.8	2.5	0.0	42.4	44.3	74.0	-29.7
2493.75	V	158.0	112.0	61.9	31.9	2.6	0.0	42.4	54.1	74.0	-19.9
2840.17	V	235.0	203.0	48.9	32.5	2.8	0.0	42.1	42.0	74.0	-32.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
2384.29	V	32.0	118.0	39.5	31.8	2.5	0.0	42.4	31.4	54.0	-22.6
2493.75	V	158.0	112.0	47.2	31.9	2.6	0.0	42.4	39.3	54.0	-14.6
2840.17	V	235.0	203.0	36.1	32.5	2.8	0.0	42.1	29.2	54.0	-24.8
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Horizontal Radiated Spurious Emissions 1-3GHz Plot



Horizontal Radiated Spurious Emissions 1-3GHz Data

Peak

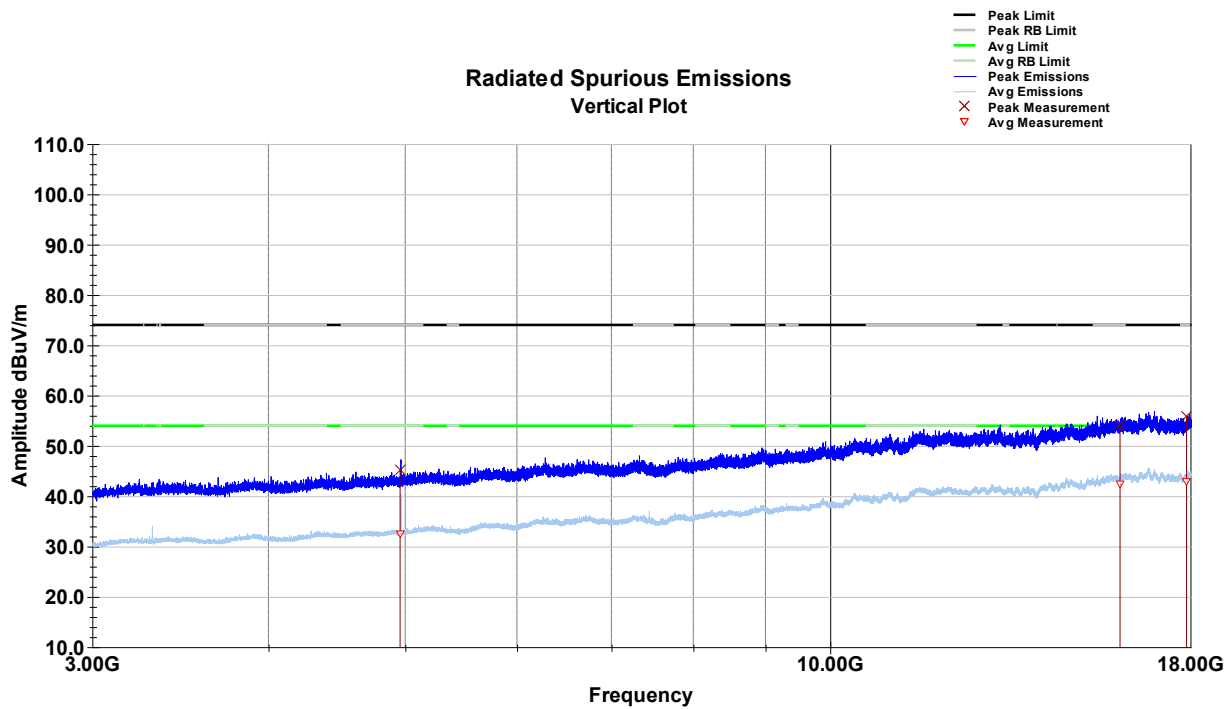
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
2359.36	H	296.0	100.0	50.8	31.5	2.5	0.0	42.4	42.4	74.0	-31.6
2492.82	H	115.0	146.0	59.5	31.9	2.6	0.0	42.4	51.7	74.0	-22.3
2866.46	H	49.0	112.0	48.8	32.4	2.8	0.0	42.1	42.0	74.0	-32.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
2359.36	H	296.0	100.0	38.3	31.5	2.5	0.0	42.4	29.9	54.0	-24.0
2492.82	H	115.0	146.0	42.8	31.9	2.6	0.0	42.4	34.9	54.0	-19.0
2866.46	H	49.0	112.0	36.0	32.4	2.8	0.0	42.1	29.1	54.0	-24.9
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.3 3-18GHz (Channel 39)

Vertical Radiated Spurious Emissions 3-18GHz Plot



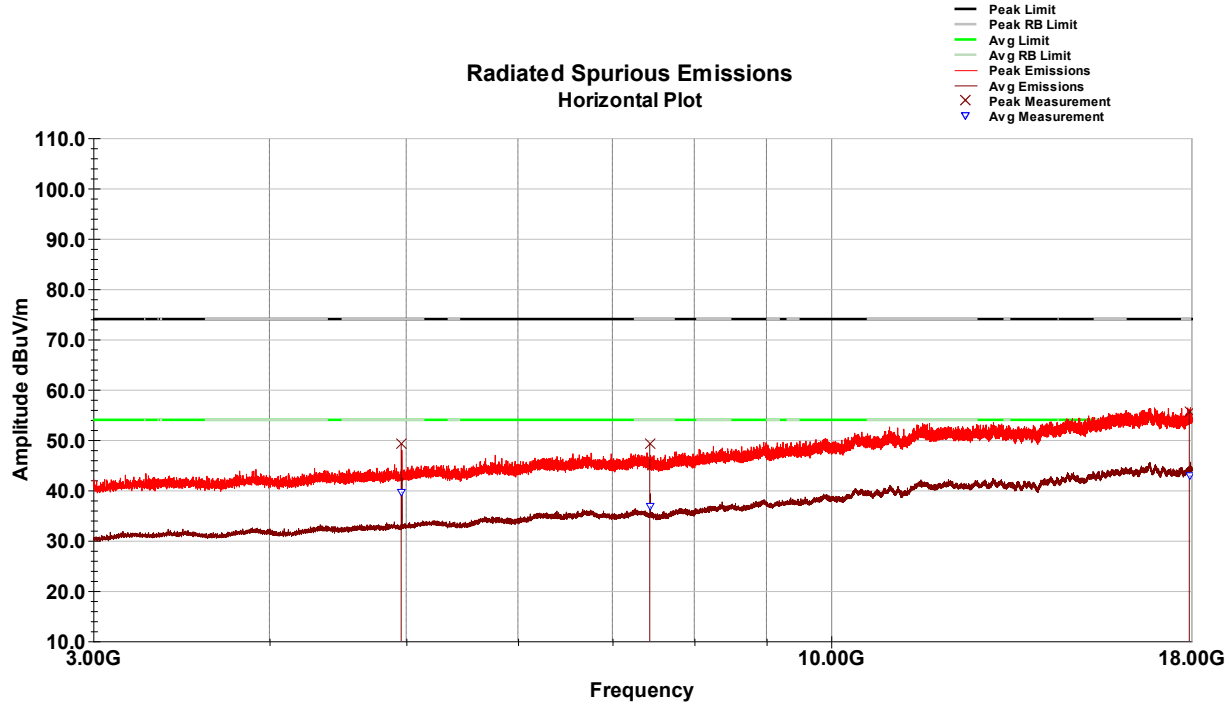
Vertical Radiated Spurious Emissions 3-18GHz Data Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4958.69	V	85.0	103.0	49.7	34.1	3.8	0.0	42.3	45.2	74.0	-28.8
16052.60	V	109.0	227.0	47.4	40.9	6.2	0.0	40.4	54.2	74.0	-19.8
17891.35	V	102.0	133.0	48.9	41.0	6.7	0.0	40.8	55.8	74.0	-18.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4958.69	V	85.0	103.0	37.1	34.1	3.8	0.0	42.3	32.6	54.0	-21.4
16052.60	V	109.0	227.0	35.6	40.9	6.2	0.0	40.4	42.4	54.0	-11.6
17891.35	V	102.0	133.0	36.0	41.0	6.7	0.0	40.8	42.9	54.0	-11.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Horizontal Radiated Spurious Emissions 3-18GHz Plot



Horizontal Radiated Spurious Emissions 3-18GHz Data Peak

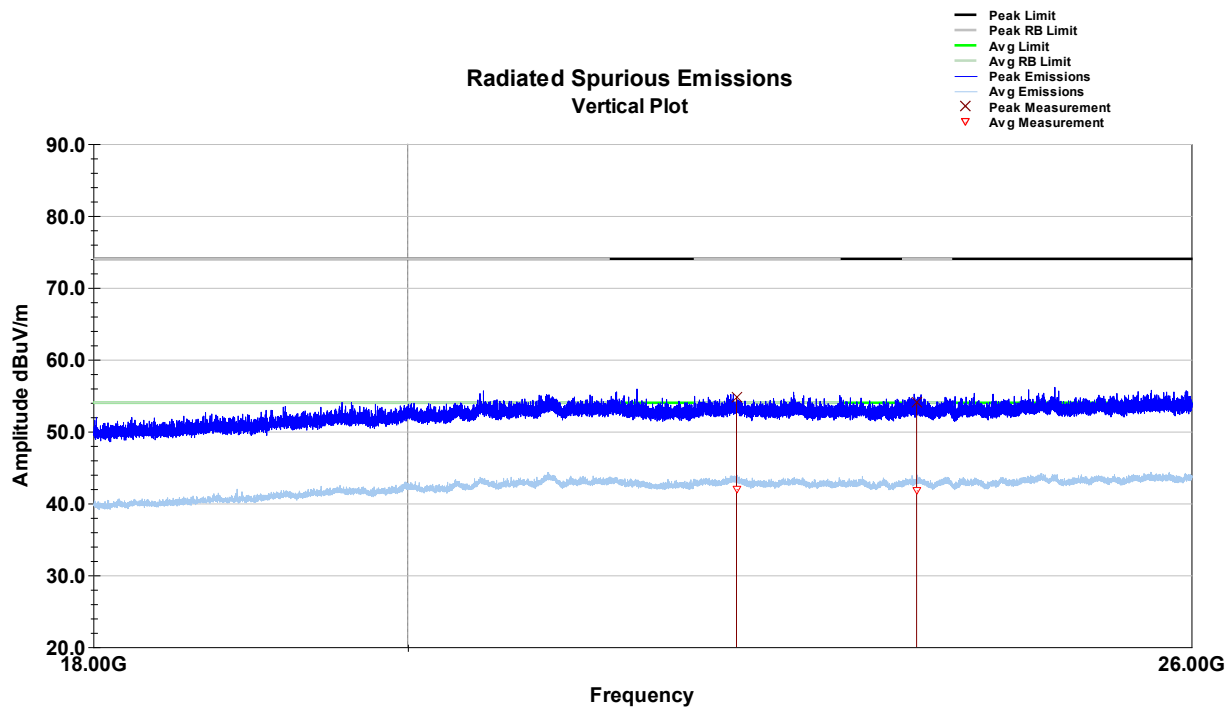
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4959.38	H	221.0	148.0	53.7	34.1	3.8	0.0	42.3	49.3	74.0	-24.7
7438.97	H	-1.0	131.0	50.9	35.7	4.7	0.0	42.0	49.3	74.0	-24.7
17943.09	H	76.0	108.0	48.6	41.0	6.7	0.0	40.7	55.7	74.0	-18.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4959.38	H	221.0	148.0	44.2	34.1	3.8	0.0	42.3	39.7	54.0	-14.3
7438.97	H	-1.0	131.0	38.4	35.7	4.7	0.0	42.0	36.8	54.0	-17.2
17943.09	H	76.0	108.0	35.9	41.0	6.7	0.0	40.7	42.9	54.0	-11.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.4 18-26GHz (Channel 39)

Vertical Radiated Spurious Emissions 18-26GHz Plot



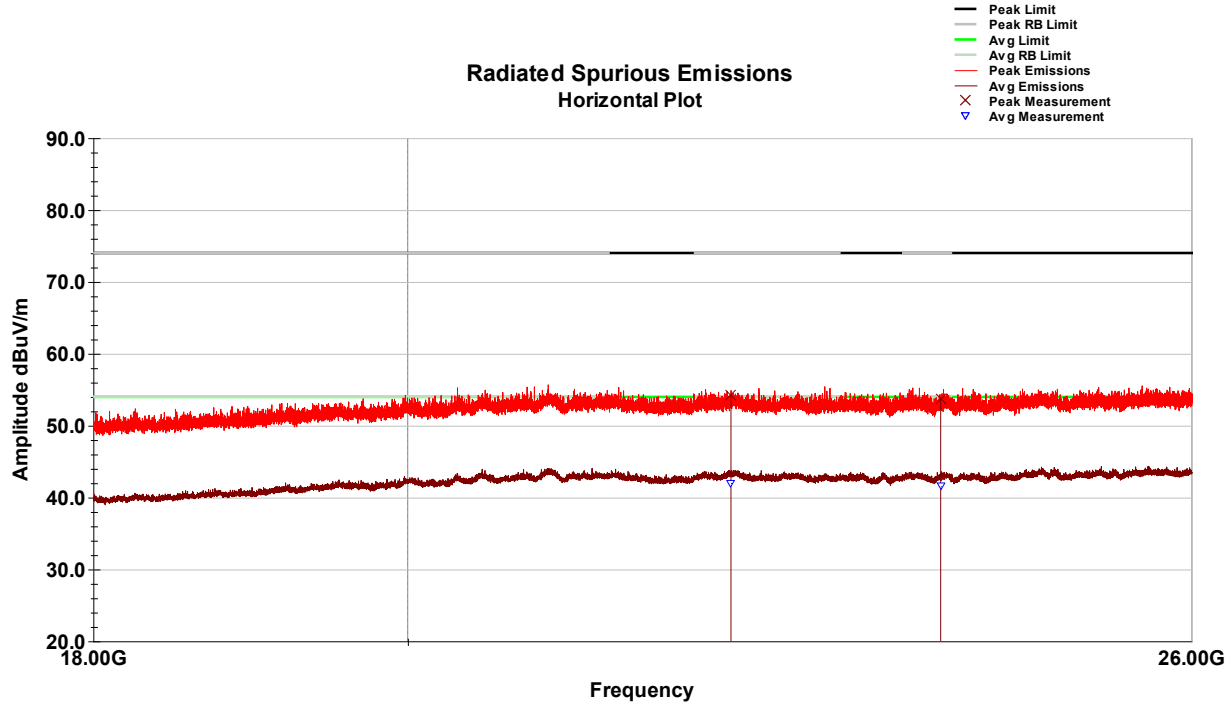
Vertical Radiated Spurious Emissions 18-26GHz Data Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
22327.40	V	128.0	204.0	57.1	46.4	10.2	-9.5	49.3	54.8	74.0	-19.2
23715.57	V	308.0	147.0	56.2	46.0	10.7	-9.5	49.3	54.0	74.0	-20.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Average

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
22327.40	V	128.0	204.0	44.2	46.4	10.2	-9.5	49.3	42.0	54.0	-12.0
23715.57	V	308.0	147.0	44.0	46.0	10.7	-9.5	49.3	41.8	54.0	-12.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Horizontal Radiated Spurious Emissions 18-26GHz Plot



Horizontal Radiated Spurious Emissions 18-26GHz Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
22286.10	H	135.0	100.0	56.4	46.4	10.2	-9.5	49.2	54.2	74.0	-19.8
23907.25	H	180.0	129.0	55.6	46.0	10.7	-9.5	49.0	53.8	74.0	-20.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Average

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
22286.10	H	135.0	100.0	44.2	46.4	10.2	-9.5	49.2	42.0	54.0	-12.0
23907.25	H	180.0	129.0	43.4	46.0	10.7	-9.5	49.0	41.6	54.0	-12.4
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

4 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	$\pm 1 \times 10^{-5}$	$\pm 9.8 \times 10^{-8}$
all emissions, radiated	± 6 dB	± 4.8 dB
temperature	$\pm 1^{\circ}\text{C}$	$\pm 0.5^{\circ}\text{C}$
humidity	± 5 %	$\pm 3.5\%$

5 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	24 June 2025
1	Updated antenna info and peak gain in section 2.3. Updated EUT sample name.	19 August 2025
2	Recheck msmts and tested above 18GHz per TCB	05 June 2026