



Issue Date: 6 May 2026

I.T.L. Product Testing Ltd.

FCC/ISED Radio Test Report

for

Itamar Medical Ltd.

Equipment under test:

Body Sensor

PolySense

FCC ID: 2APUBPOLYS

IC: 27705-POLYS

Tested by: 
L. Tenenbaum

Reviewed by: 
M. Zohar

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This report concerns: Original Grant

Equipment type: FCC: Digital Transmission System (DTS)
IC: Spread Spectrum Digital Device (2400-2483.5)

Limits used: 47CFR15 Section 15.247
RSS-247, Issue 4, July 2025, Section 5
RSS-Gen, Issue 5, April 2018, Amendment 2
(February 2021)

Measurement procedure used: KDB 558074 D01 v03r05, ANSI C63.10:2013 and
RSS-Gen, Issue 5, April 2018

Prepared by:	Applicant:
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1. General Information

1.1 Administrative Information

Manufacturer:	Itamar Medical Ltd.
Manufacturer's Address:	9 Halamish St., P.O.Box 3579, Caesarea 3088900 Israel Tel: +972.4.617.7000
Equipment Under Test (E.U.T):	Body Sensor
Equipment Model/PMN:	PolySense
Equipment Serial No.:	050000009
Equipment HVIN:	PolySense
Equipment FVIN:	1
Date of Receipt of E.U.T:	22 Oct. 2025
Start of Test:	22 Oct. 2025
End of Test:	30 Oct. 2025
Test Laboratory Location:	I.T.L Product Testing Ltd. 3 HaOreg Street, Modi'in 7177909, Israel
Test Specifications:	FCC Part 15, Subpart C RSS-247, Issue 4, July 2025, Section 5 RSS-Gen, Issue 5, April 2018, Amendment 2 (February 2021)

1.2 Lab Accreditations

The EMC laboratory of I.T.L. is accredited by the following bodies:

1. The American Association for Laboratory Accreditation (A2LA) (U.S.A.), Certificate No. 1152.01.
2. The Federal Communications Commission (FCC) (U.S.A.), Registration no. 332439, Designation no. IL1005.
3. Department of Innovation, Science and Economic Development (ISED) Canada, CAB identifier: IL1002

The results shown in this test report were determined in accordance with I.T.L.'s terms of accreditation, unless stated otherwise.

1.3 EUT Description¹

EUT		The EUT is a device attached to the forehead, the chest or the leg and is a WP400 accessory. It is battery-powered (1.5V, non-rechargeable) and measures several body parameters including EMG, ECG and EEG through electrodes. The measured data is recorded and transmitted to a smartphone application via a (non-approved) BLE 4.2 radio transceiver.			
Brand		Itamar Medical			
Test Model		PolySense			
Equipment Type		☒	Standalone		
		☐	Combined/integrated		
		☐	Plug-in		
Intended Use		☐	Fixed (min. distance of 200 cm from human body)		
		☐	Mobile (minimum distance of 200 cm from human body)		
		☒	Portable (max. distance of 20 cm from human body)		
Assigned frequency band/s		-			
Operational frequencies		-			
Maximum rated output power		At transmitter's 50 Ω RF output connector (dBm)			
		Effective radiated power (for equipment with no RF connector)			
Antenna	☐ Unique Coupling		☐ Standard Connection		☒ Integral
	☐ Temporary RF connector		Gain (peak): 2.52		
Operating channel bandwidth		2402MHz -2480MHz			
Modulation type		GFSK			
Bit rate		1 Mbps			
Transmitter		Max. duty cycle			
		Power source	☐ AC	Nominal rated voltage	
			☐ DC		
			☒ Battery		1.5V
Receiver Class		2			
Extreme temperature conditions (°C)		0-40			

1.4 Test Methodology

Both conducted and radiated testing was performed according to the procedures in KDB 558074 D01 v03r05, ANSI C63.10: 2020 and RSS-Gen, Issue 5, April 2018. Radiated testing was performed at an antenna to EUT distance of 3 meters.

¹ The data in this section was provided by the customer. I.T.L. Product Testing Ltd. is not responsible for the validity, nor the accuracy of any information provided by the customer, which can also affect the validity of results. Customer model names, addresses, trademarks etc. are not considered data. For full details, refer to the manufacturer's specifications or user guide.



1.5 Test Facility

Emissions tests were performed at I.T.L.'s testing facility in Modi'in, Israel.

1.6 Measurement Uncertainty

Conducted Emission

Conducted Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4)

0.15 – 30 MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 3.44 dB

Radiated Emission

Radiated Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4) for open site:

30-1000MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 4.96 dB

1 GHz to 6 GHz

Expanded Uncertainty (95% Confidence, K=2):

±5.19 dB

>6 GHz

Expanded Uncertainty (95% Confidence, K=2):

±5.51 dB

2. System Test Configuration

2.1 Justification

1. The E.U.T. was evaluated while transmitting at the low channel (2402MHz), the mid channel (2440MHz) and the high channel (2480MHz).
2. Final radiated emission tests were performed after exploratory emission testing that was performed in three orthogonal polarities to determine the “worst case” radiation.
3. The “worst case” for the low, high, and mid channels was the Y-axis.

Orientation	Frequency	Field Strength	2 rd Harmonic
	(MHz)	(dBuV/m)	(dBuV/m)
Y axis	2402.0	94.57	--

Figure 1. Screening Results

2.2 EUT Exercise Software

No special exercise software was used.

2.3 Special Accessories

No special accessory was used.

2.4 Equipment Modifications

No modifications were necessary in order to achieve compliance.

2.5 Configuration of Tested System

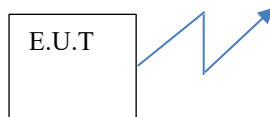


Figure 2. Configuration of Tested System



3. 6 dB Minimum Bandwidth

3.1 Test Specification

FCC Part 15, Subpart C, Section 247(a)(2)

RSS-247, Section 5.2(a)

3.2 Test Procedure

(Temperature (22°C)/ Humidity (61%RH))

The E.U.T operation mode and test set-up are as described in Section 2 of this report.

The E.U.T was tested in the chamber and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 1.5 meters above the ground. The emissions were measured at a distance of 3 meters.

The spectrum bandwidth of the E.U.T. at the point of 6 dB below maximum peak power was measured and recorded. The RBW was set to 100 kHz.

3.3 Test Limit

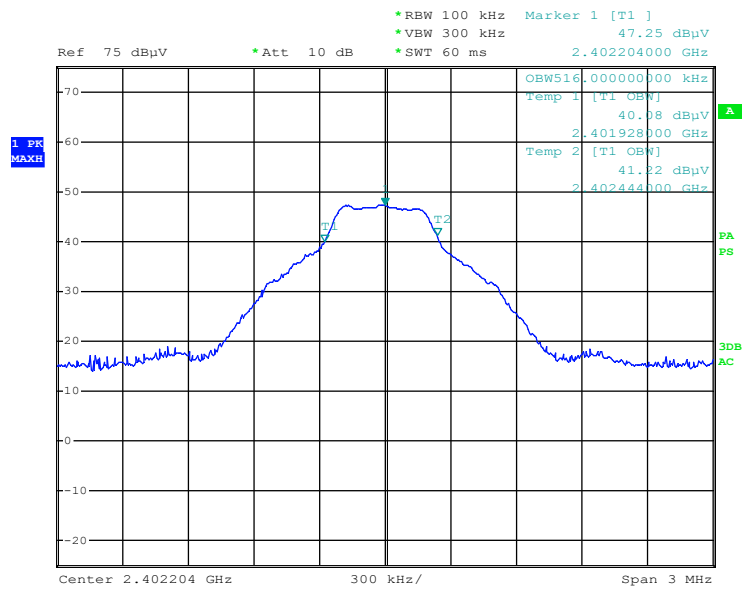
Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

3.4 Test Results

Operation Frequency	Reading	Specification
(MHz)	(kHz)	(kHz)
2402.0	516	≥ 500.0
2440.0	510	≥ 500.0
2480.0	504	≥ 500.0

Figure 3 6 dB Minimum Bandwidth

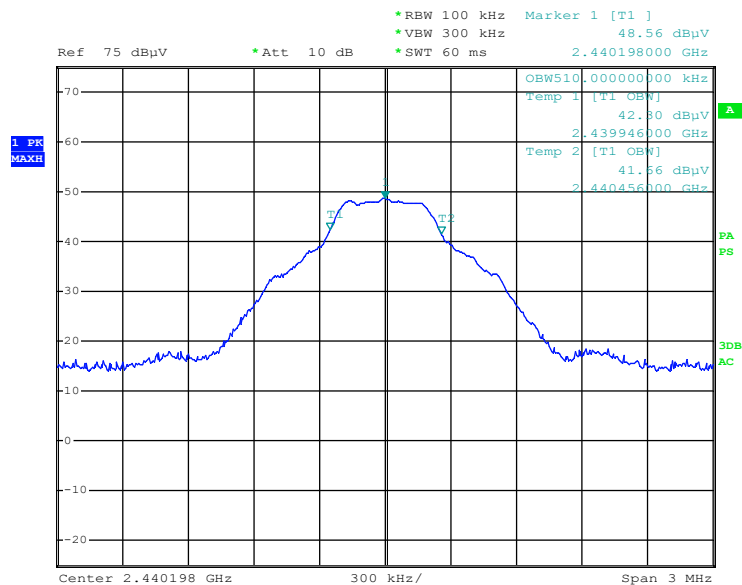
JUDGEMENT: PASS



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Date: 27.OCT.2025 14:26:46

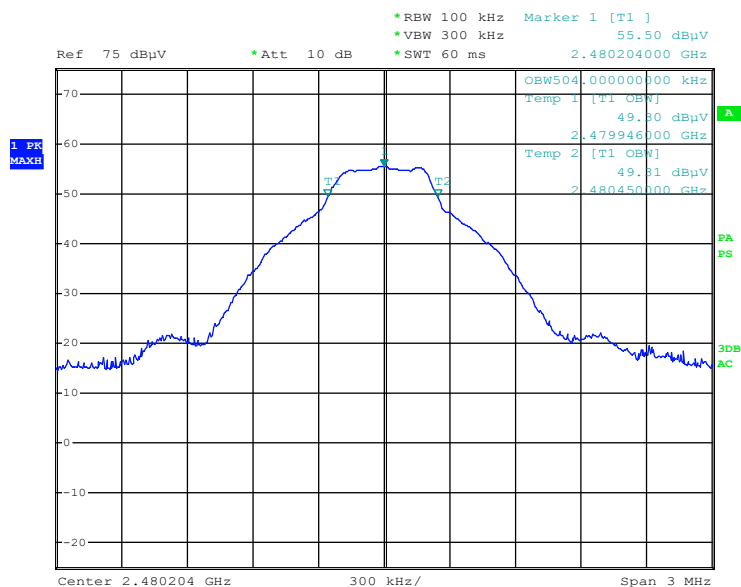
Figure 4. 2402.0 MHz



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Figure 5. 2440.0 MHz



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Figure 6. 2480.0 MHz

3.5 Test Equipment Used; 6dB Bandwidth

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028

Figure 7 Test Equipment Used

3.6 Testing Software

- TILE! 7, manufacturer: ETS-Lindgren, ver.: 7.6.2.3.
- Spectrum Analyzer: Keysight, ver. A25.05
- EMI Receiver: Rohde & Schwarz, Model: ESCI7, Firmware version: 4.42 SP1

4. Maximum Conducted Output Power

4.1 Test Specification

FCC, Part 15, Subpart C, Section 247(b)(3)

RSS-247, Section 5.4(d)

4.2 Test Procedure

(Temperature (22°C)/ Humidity (70%RH))

The E.U.T operation mode and test set-up are as described in Section 2 of this report.

The E.U.T was tested in the chamber, placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 1.5 meters above the ground. The readings were maximized by the turntable azimuth between 0-360°, and the antenna polarization.

The emissions were measured at a distance of 3 meters.

Radiated output power levels were measured at selected operation frequencies and the results were converted to power level according to the formula as shown below:

$$P = \frac{(E_{V/m} \times d)^2}{(30 \times G)} \text{ [W]}$$

where:

E - Field Strength (V/m)

d – Distance from the transmitter (m)

G – Antenna gain

P – Peak power (W)

4.3 Test Limit

The maximum peak Conducted output power of the intentional radiator for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

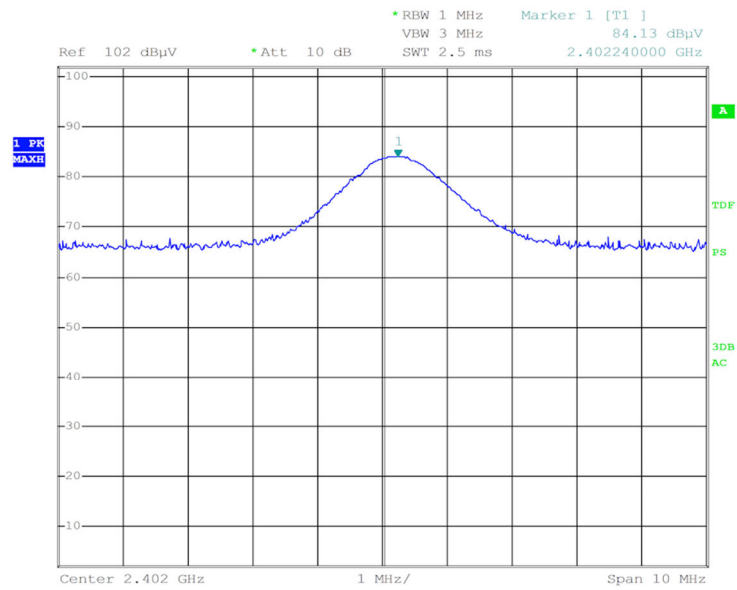
4.4 Test Results

Operation Frequency	Polarization	Field Strength	Antenna gain ²	Power	Power	Specification	Margin
(MHz)	(V/H)	(dBuV/m)	(dBi)	(dBm)	(mW)	(mW)	(mW)
2402.0	V	84.1	2.52	-12.28	0.06	1000.00	-999.94
	H	94.6	2.52	-1.78	0.66	1000.00	-999.34
2440.0	V	83.4	2.52	-12.98	0.05	1000.00	-999.95
	H	91.1	2.52	-5.28	0.29	1000.00	-999.71
2480.0	V	81.8	2.52	-14.58	0.03	1000.00	-999.97
	H	90.1	2.52	-6.28	0.23	1000.00	-999.77

Figure 8 Maximum Peak Power Output

JUDGEMENT: PASS

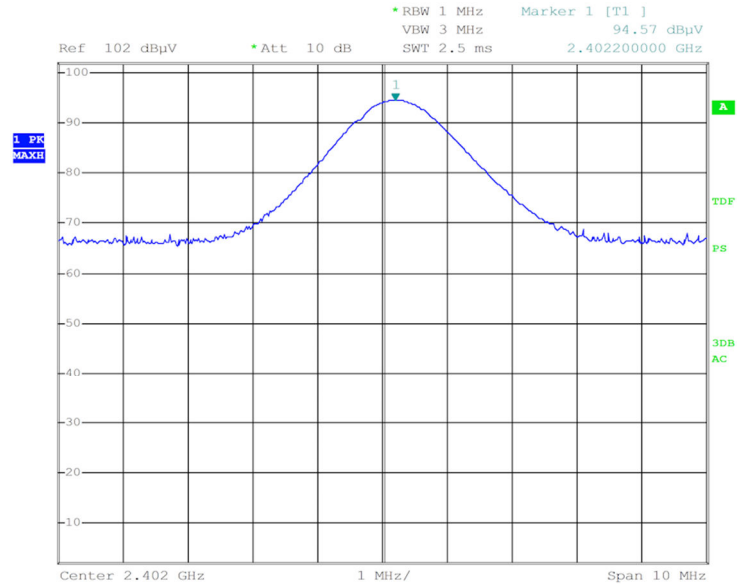
² The antenna gain was provided by the customer.



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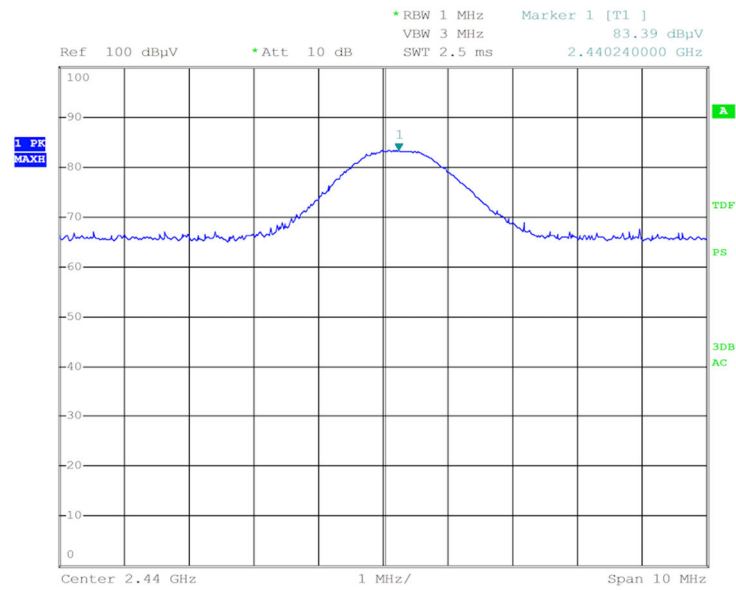
Figure 9 2402.0 MHz – Vertical



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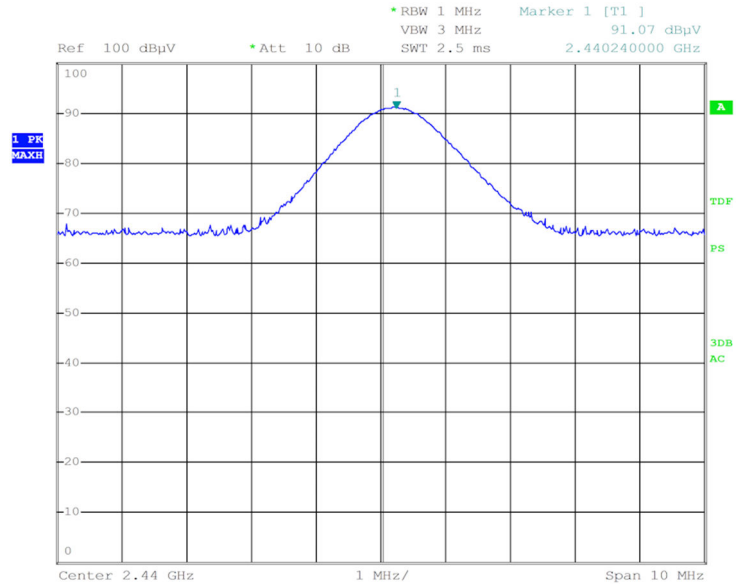
Figure 10 2402.0 MHz – Horizontal



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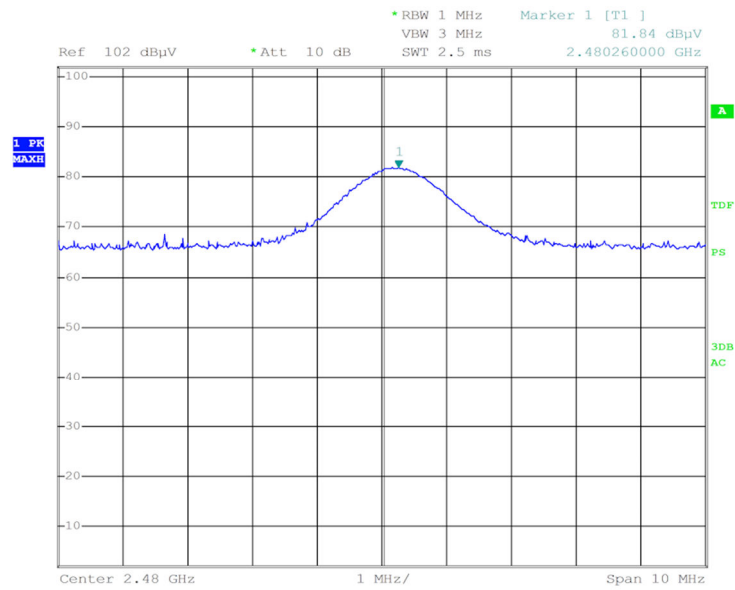
Figure 11 2440.0 MHz – Vertical



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Date: 27.OCT.2025 15:49:46

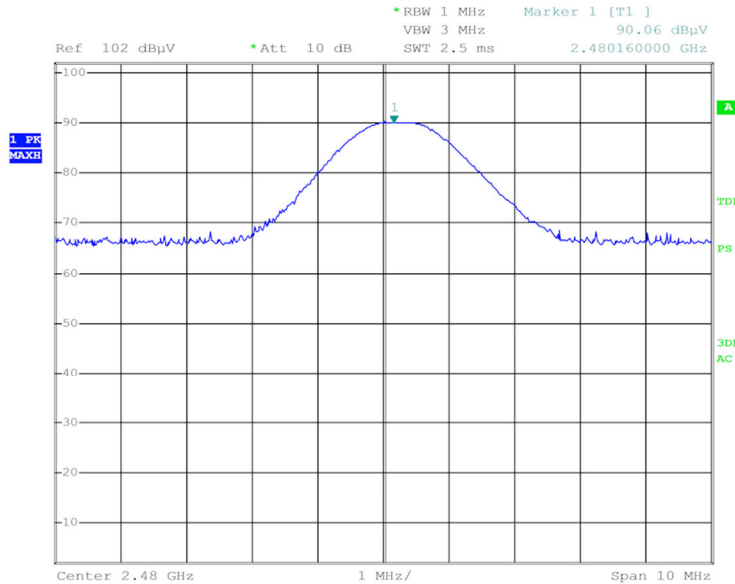
Figure 12 2440.0 MHz – Horizontal



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Figure 13 2480.0 MHz – Vertical



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Figure 14 2480.0 MHz – Horizontal



4.5 Test Equipment Used; Maximum Conducted Output Power

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028

Figure 15 Test Equipment Used



5. Band Edge Spectrum

5.1 Test Specification

FCC, Part 15, Subpart C, Section 247(d)

RSS-247, Section 5.5

5.2 Test Procedure

(Temperature (20°C)/ Humidity (59%RH))

The E.U.T operation mode and test set-up are as described in Section 2 of this report.

The E.U.T was tested in the chamber and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 1.5 meters above the ground. The readings were maximized by the turntable azimuth between 0-360°, and the antenna polarization. The emissions were measured at a distance of 3 meters.

The RBW was set to 100 kHz.

5.3 Test Limit

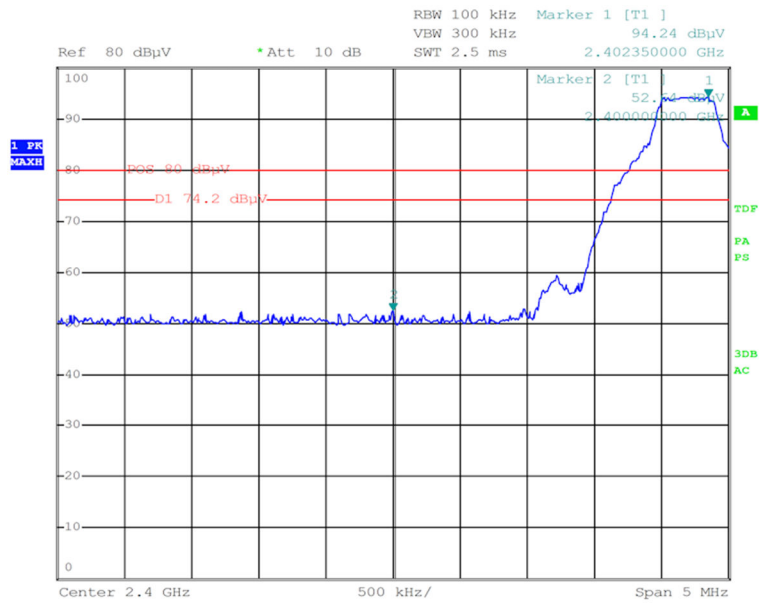
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

5.4 Test Results

Operation Frequency (MHz)	Band Edge Frequency (MHz)	Spectrum Level (dBuV/m)	Specification (dBuV/m)	Margin (dB)
Low	2400.0	52.5	74.2	-21.7
High	2483.5	50.5	70.5	-20.0

Figure 16 Band Edge Spectrum

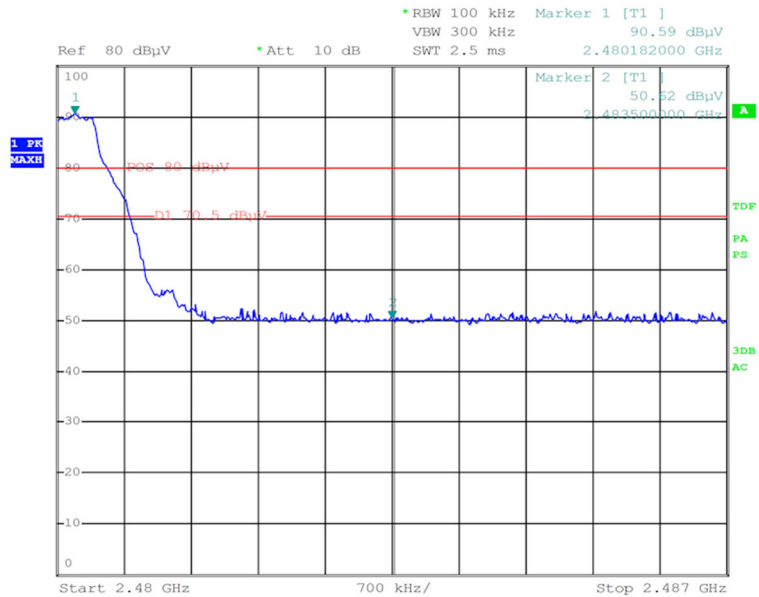
JUDGEMENT: PASS



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Date: 27.OCT.2025 19:03:19

Figure 17 Band Edge Low



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Date: 27.OCT.2025 19:16:53

Figure 18 Band Edge High



5.5 Test Equipment Used; Band Edge

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028

Figure 19 Test Equipment Used

6. Transmitted Power Density

6.1 Test Specification

FCC, Part 15, Subpart C, Section 247(e)

RSS-247, Section 5.2(b)

6.2 Test Procedure

(Temperature (22°C)/ Humidity (70%RH))

The E.U.T operation mode and test set-up are as described in Section 2 of this report.

The E.U.T was tested in the chamber and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 1.5 meters above the ground.

The readings were maximized by the turntable azimuth between 0-360°, and the antenna polarization. The emissions were measured at a distance of three meters.

The spectrum analyzer was set to 3 kHz RBW and VBW to 10 kHz.

Radiated output power levels were measured at selected operation frequencies and the results were converted to power level according to the formula as shown below:

$$P = \frac{(E_{V/m} \times d)^2}{(30 \times G)} \quad [W]$$

E - Field Strength (V/m)

d – Distance from transmitter (m)

G – Antenna gain

P – Peak power (W)

6.3 Test Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.4 Test Results

JUDGEMENT: PASS

Operation Frequency	Reading Spectrum Analyzer	Reading Spectrum Analyzer	Antenna Gain ³	Calculated Gain	Specification	Margin
(MHz)	(dBμV/m)	(dBm)	(dBi)	(dBm)	(dBm)	(dB)
2402.0	83.8	-11.4	2.52	-13.92	8.0	-21.92
2440.0	82.1	-13.1	2.52	-15.62	8.0	-23.62
2480.0	79.9	-15.3	2.52	-17.82	8.0	-25.82

³ The antenna gain was provided by the customer

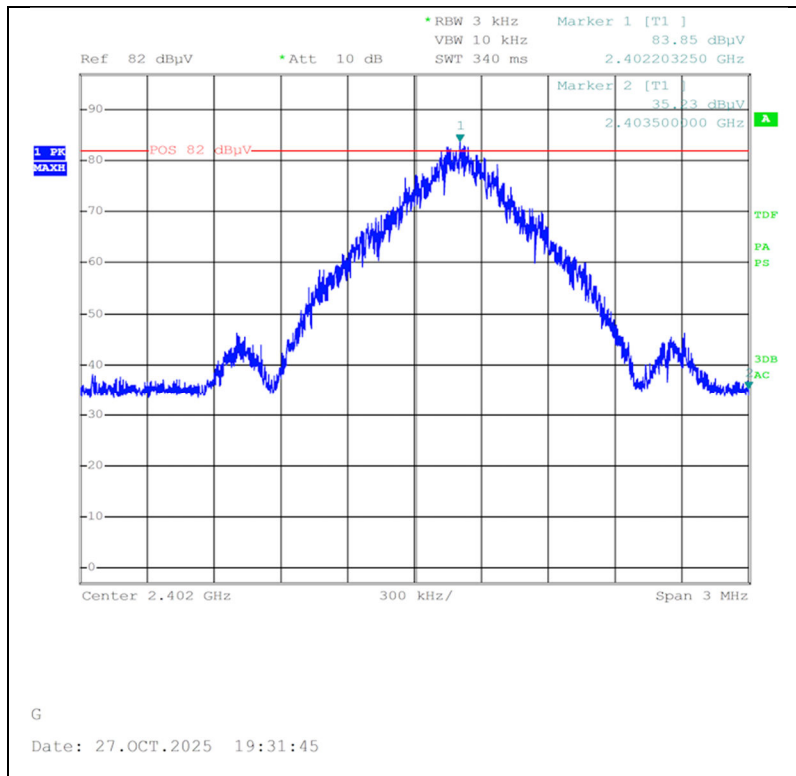


Figure 20 2402.0 MHz

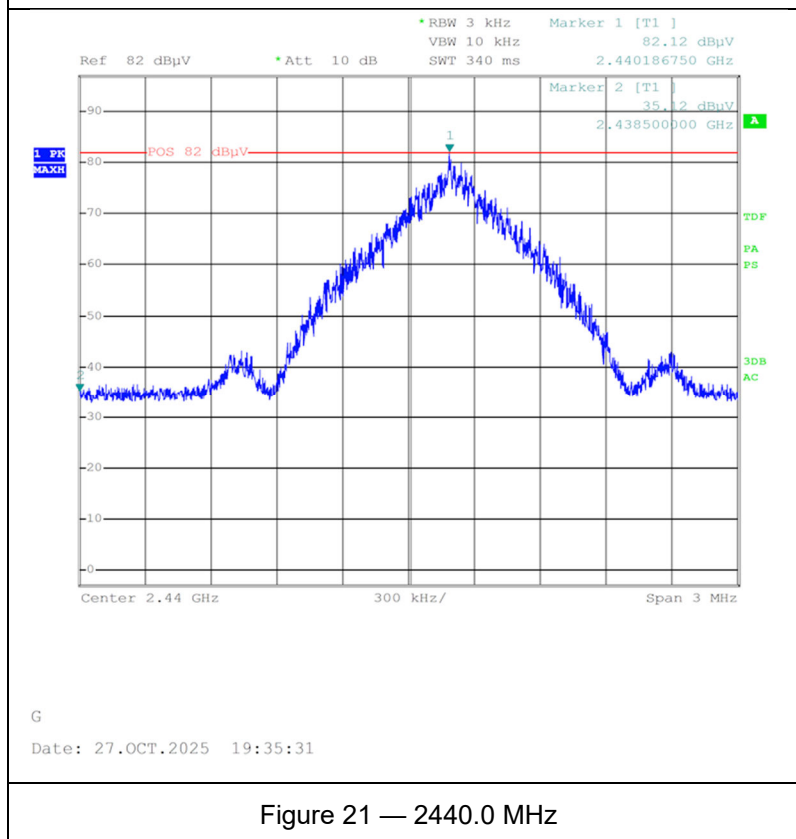
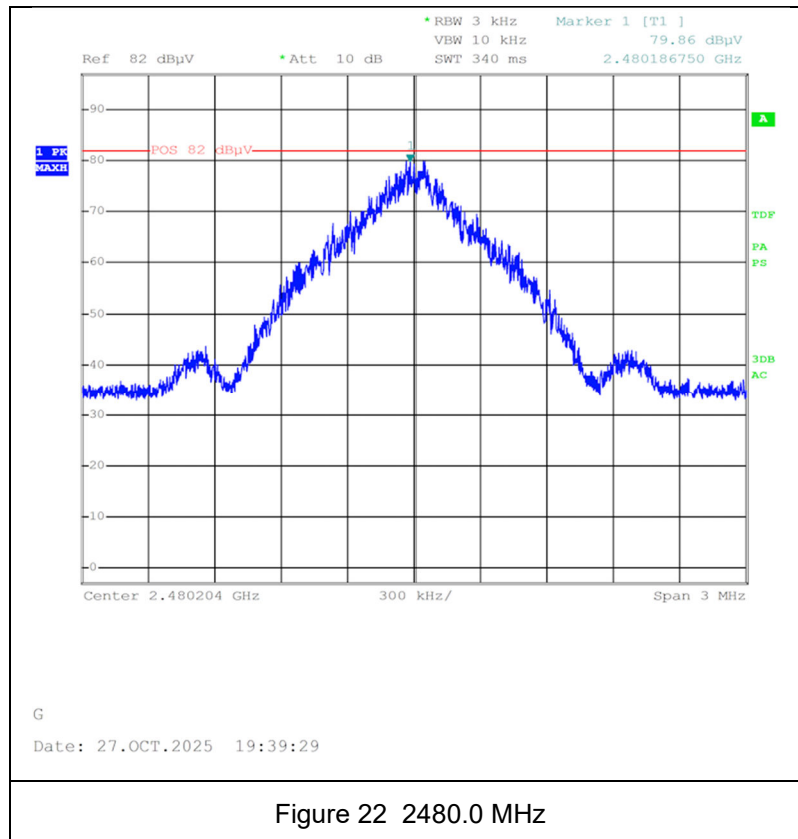


Figure 21 — 2440.0 MHz



6.5 Test Equipment Used; Transmitted Power Density

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028

Figure 23 Test Equipment Used



7. Occupied Bandwidth

7.1 Test Specification

FCC, Part 2, Sub part J, Section 2.1049

RSS-Gen, Issue 4: 2014, Section 6.6

7.2 Test Procedure

(Temperature (22°C)/ Humidity (56%RH))

The E.U.T. operation mode and test set-up are as described in Section 2 of this report.

The E.U.T. was placed in the chamber on a non-conductive table, 0.8 meters above the ground.

The distance between the E.U.T. and test antenna was 3 meters.

The transmitter unit was operated with normal modulation. The RBW set to the range of 1% to 5% of the OBW.

The span was set between 1.5 to 5 times of the OBW.

99% occupied bandwidth function was set on.

7.3 Test Limit

N/A

7.4 Test Results

Protocol Type	Operation Frequency	Reading
	(MHz)	(kHz)
BLE	2402.0	1386
	2440.0	1368
	2480.0	1308

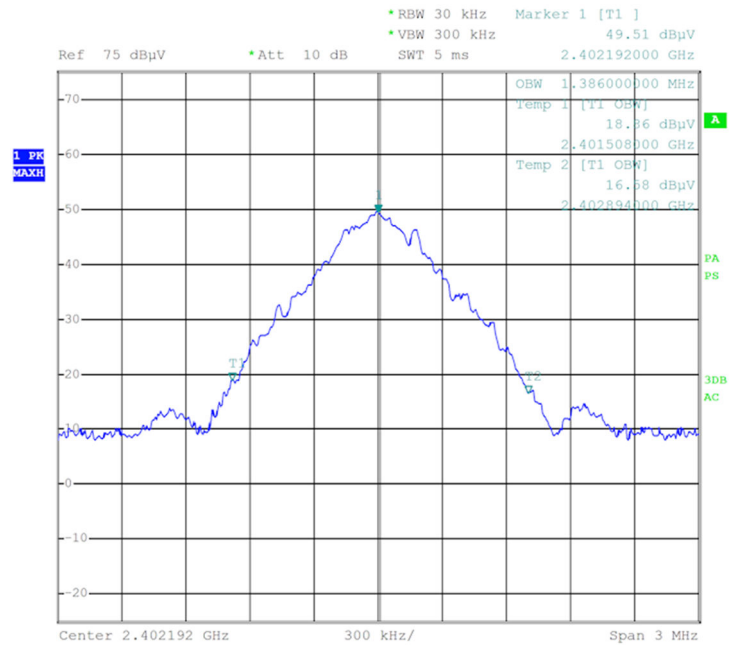
Figure 24. Bandwidth Test Results

JUDGEMENT: N/A



Occupied Bandwidth

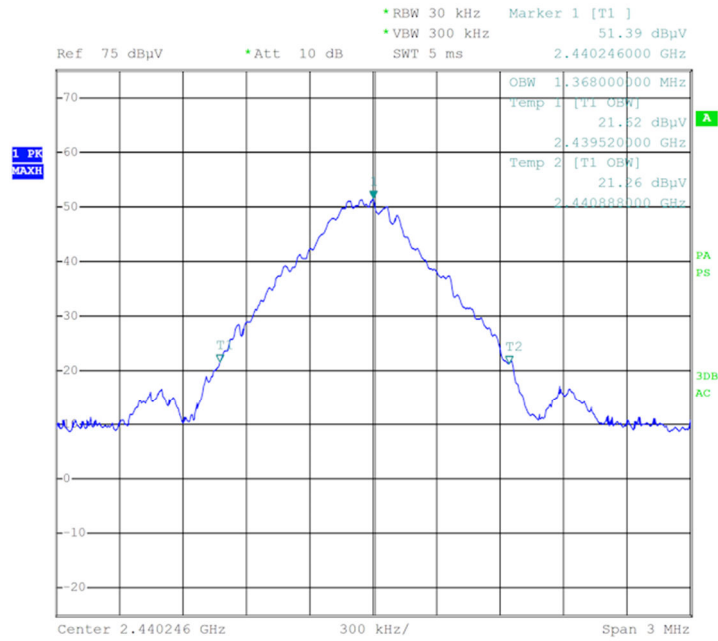
E.U.T Description Body Sensor
Model Number PolySense
Part Number: 050000009



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Date: 27.OCT.2025 15:12:42

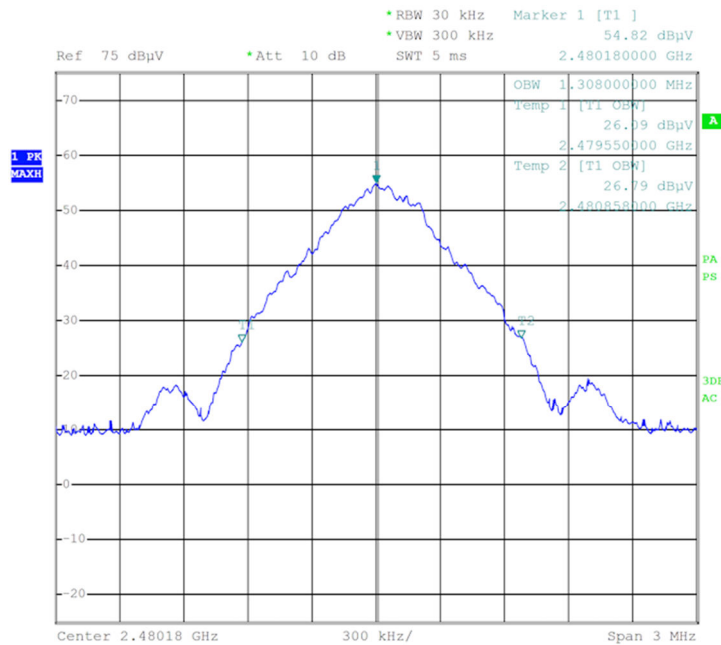
Figure 25. 2402.0 MHz, BLE



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Figure 26. 2440.0 MHz, BLE



G

Date: 27.OCT.2025 15:11:24

Figure 27. 2480.0 MHz, BLE



7.5 Test Equipment Used; Occupied Bandwidth

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028

Figure 28 Test Equipment Used



8. Emissions in non-Restricted Frequency Bands

8.1 Test Specification

FCC, Part 15, Subpart C, Section 247(d)

RSS-247, Section 5.5

8.2 Test Procedure

(Temperature (°C)/ Humidity (%RH))

The E.U.T. operation mode and test setup are described in Section 2 of this report.

The E.U.T was tested inside the shielded room and placed on a non-metallic table, 0.8/1.5 meters above the ground. The emissions were measured at a distance of three meters. The readings were maximized by the turntable azimuth between 0-360°, and the antenna polarization.

The frequency range 0.009MHz -25.0GHz was scanned.

RBW was set to 100 kHz, the detector set to max peak and the trace to “max hold”.

8.3 Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

8.4 Test Results

JUDGEMENT: PASS

No emissions were detected within 20 dBc of the limit.

The EUT met the requirements of the F.C.C. Part 15, Subpart C, Section 247(d) specification.

8.5 Test Instrumentation Used, Emission in non-Restricted Frequency Bands

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1075	Active Loop Antenna	EMCO	6502	2950	23 May 2025	23 May 2026
1366	Horn Antenna	EMCO	3115	9702-511	18 Oct 2023	31 Oct 2025
1777	LNA Horn Antenna Amplifier Ka band	OSR Electronics	PE9850R-20	J202021732	22 Sept 2022	31 Oct 2025
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2163	Signal Analyzer	Keysight	N9010A	MY54430182	18 Feb 2025	18 Feb 2027



ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028
2215	Horn Antenna, 3Ghz-40GHz	Schwarzbeck	BBHA 9120 L	12	11 Oct 2023	31 Oct 2025
2227	Broadband LNA 10MHz-50GHz 44Db	AEROFLEX	35822-000-30001-08	014	1 Nov 2024	1 Nov 2025
2228	RF Cable up to 40Ghz 6M	Huber Suhner	-	-	22 Sept 2024	31 Oct 2025
2229	Low Loss 2.92mm Cable up to 40GHz	MICRO-COAX	UFX40-Z-03620-210200	322365-001	22 Sept 2024	31 Oct 2025

Figure 29 Test Equipment Used

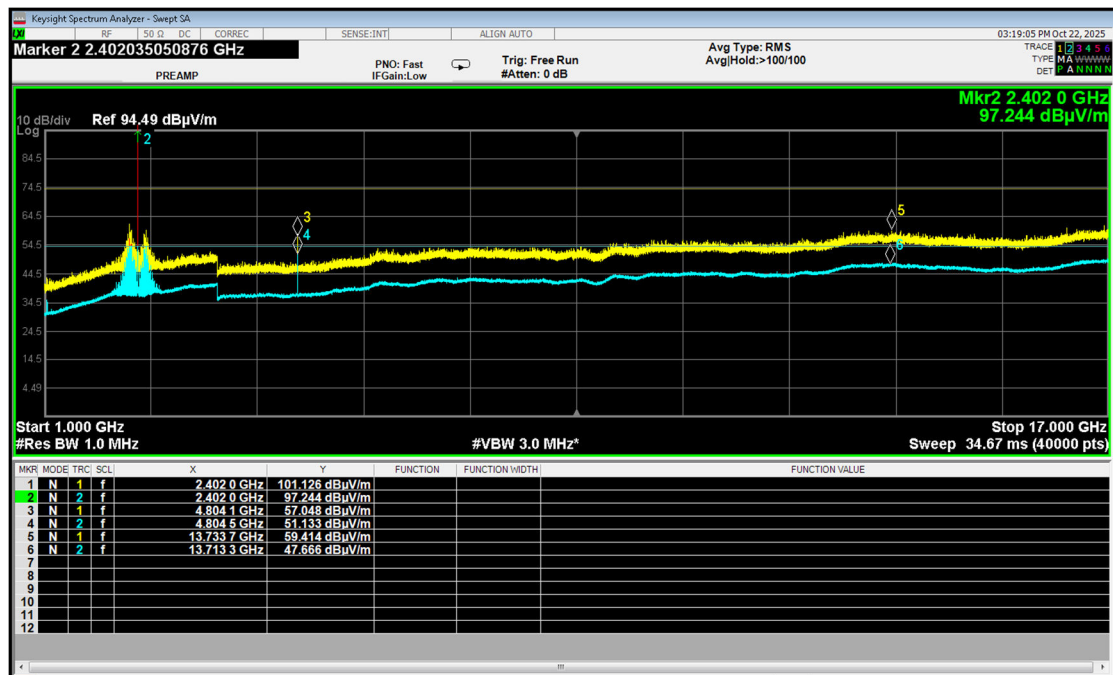


Figure 30 Spurious 1GHz-17GHz, TX 2402MHz Horizontal (worst case)

Note: no emissions detected between 9 kHz and 1 GHz, and between 17 GHz and 26.5 GHz.

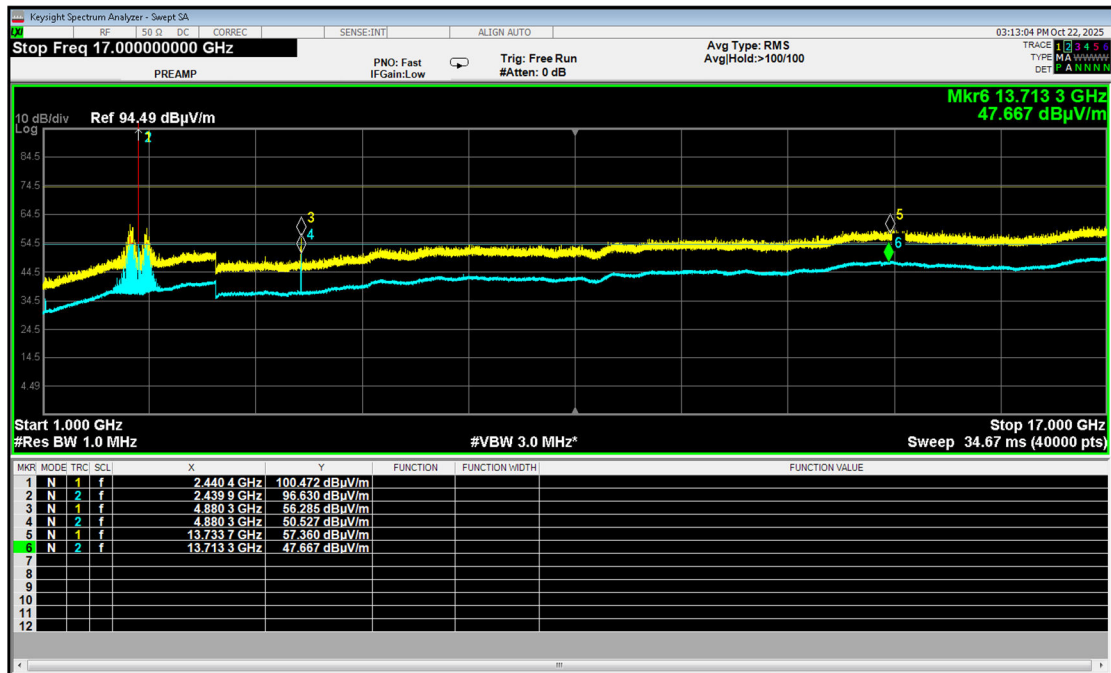


Figure 31 Spurious 1GHz-17GHz, TX 2440MHz Horizontal (worst case)

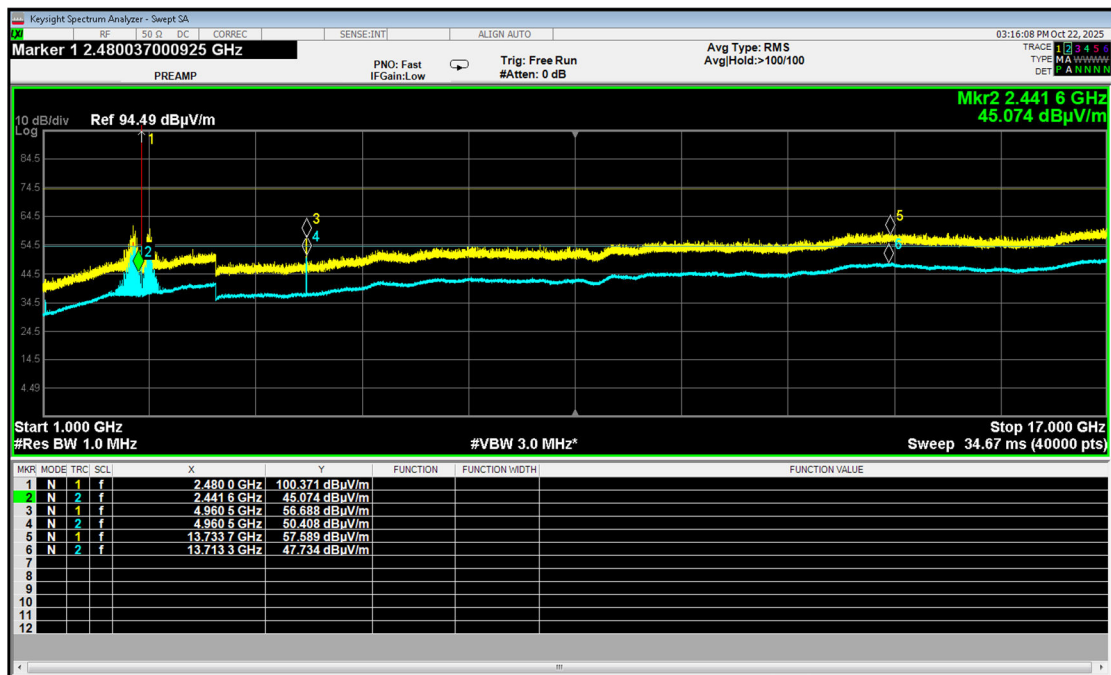


Figure 32 Spurious 1GHz-17GHz, TX 2480MHz Horizontal (worst case)



8.6 Field Strength Calculation

The field strength is calculated by the EMI Receiver software, including a Correction Factor, using the following equation:

$$FS = RA + AF + CF$$

where:

FS: Field Strength [dB μ V/m]

RA: Receiver Amplitude [dB μ V]

AF: Receiving Antenna Correction Factor [dB/m]

CF: Cable Attenuation Factor [dB]

No external pre-amplifiers were used.

9. Emissions in Restricted Frequency Bands

9.1 Test Specification

FCC Part 15, Subpart C, Sections 15.209, 15.205, 15.247(d)

RSS-247, Section 3.3

RSS-Gen, Section 8.10

9.2 Test Procedure

(Temperature (23°C)/ Humidity (65%RH))

The E.U.T. operation mode and test setup are described in Section 2 of this report.

The E.U.T was tested inside the shielded room and placed on a non-metallic table, 0.8/1.5 meters above the ground. The emissions were measured at a distance of three meters. The readings were maximized by the turntable azimuth between 0-360°, and the antenna polarization.

The frequency range 0.009MHz -25.0GHz was scanned.

RBW was set to 100 kHz, the detector set to max peak and the trace to “max hold”.

The tests were done for all “worst cases” for each protocol type. The highest radiations are described in the tables below.

The levels of the emissions within the frequency ranges of the restricted bands (Section 15.205 of FCC Part 15) were compared to the limits of the table in Section 15.209 (a), General Requirements.

9.3 Test Limit

FCC:

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	Field strength* (dBμV/m)	Field strength* (dBμV/m)@3m
0.009-0.490	2400/F(kHz)	300	48.5-13.8	128.5-73.8
0.490-1.705	24000/F(kHz)	30	33.8-23.0	73.8-63.0
1.705-30.0	30	30	29.5	69.5
30-88	100	3	40.0	40.0
88-216	150	3	43.5	43.5
216-960	200	3	46.0	46.0
Above 960	500	3	54.0	54.0

*The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

ISED:

Table 5 – General field strength limits at frequencies above 30 MHz	
Frequency (MHz)	Field strength (µV/m at 3 m)
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	Magnetic field strength (H-Field) (µA/m)	Measurement distance (m)
9 - 490 kHz ^{Note 1}	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

9.4 Test Results

JUDGEMENT: PASS

The EUT met the requirements of the F.C.C. Part 15, Subpart C Sections 15.209, 15.205, 15.247(d), and RSS-Gen, Section 8.10 specifications.

E.U.T Description Body Sensor
Type PolySense
Serial Number: 050000009

Specifications: FCC, Part 15, Subpart C, Sections 15.209, 15.205, 15.247(d)
RSS-247, Section 3.3; RSS-Gen, Issue 5, Section 8.10

Antenna Polarization: Horizontal/Vertical Frequency Range: 9kHz to 25.0 GHz
Protocol Type: BLE Detector: Peak, Average

Operation Frequency	Freq.	Pol	Peak Reading	Peak Limit	Peak Margin	Average Reading	Average Limit	Average Margin
(MHz)	(MHz)	(H/V)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
2402.0	2390.0	V	51.5	74.0	-22.5	49.4	54.0	-4.6
	2390.0	H	52.6	74.0	-21.4	49.3	54.0	-4.7
	4804.0	V	47.1	74.0	-26.9	40.1	54.0	-13.9
	4804.0	H	57.1	74.0	-16.9	51.0	54.0	-3.0
2440.0	4880.0	V	48.9	74.0	-25.1	37.6	54.0	-16.4
	4880.0	H	56.3	74.0	-17.7	50.5	54.0	-3.5

Operation Frequency	Freq.	Pol	Peak Reading	Peak Limit	Peak Margin	Average Reading	Average Limit	Average Margin
(MHz)	(MHz)	(H/V)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
2480.0	7320.0	V	53.5	74.0	-20.5	44.5	54.0	-9.5
	7320.0	H	53.5	74.0	-20.5	44.5	54.0	-9.5
	4960.0	V	50.9	74.0	-23.1	42.6	54.0	-11.4
	4960.0	H	56.7	74.0	-17.3	50.4	54.0	-3.6
	2483.5	V	50.1	74.0	-23.9	42.5	54.0	-11.5
	2483.5	H	50.6	74.0	-23.4	43.5	54.0	-10.5

Figure 33. Radiated Emission Results

* "Correction Factor" = Antenna Factor + Cable Loss- Low Noise Amplifier Gain

9.5 Test Instrumentation Used; Emissions in Restricted Frequency Bands

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Receiver	Rohde & Schwarz	ESCI7	100794	11 Feb 2025	11 Feb 2026
1075	Active Loop Antenna	EMCO	6502	2950	23 May 2025	23 May 2026
1366	Horn Antenna	EMCO	3115	9702-511	18 Oct 2023	31 Oct 2025
1777	LNA Horn Antenna Amplifier Ka band	OSR Electronics	PE9850R-20	J202021732	31 Oct 2022	31 Oct 2025
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	20 Apr 2025	20 Apr 2026
2163	Signal Analyzer	Keysight	N9010A	MY54430182	18 Feb 2025	18 Feb 2027
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	22 Jul 2025	22 Jul 2028
2215	Horn Antenna, 3Ghz-40GHz	Schwarzbeck	BBHA 9120 L	12	11 Oct 2023	31 Oct 2025
2227	Broadband LNA 10MHz-50GHz 44Db	AEROFLEX	35822-000-30001-08	014	1 Nov 2024	1 Nov 2025
2228	RF Cable up to 40Ghz 6M	Huber Suhner	-	-	22 Sept 2025	22 Sept 2026
2229	Low Loss 2.92mm Cable up to 40GHz	MICRO-COAX	UFX40-Z-03620-210200	322365-001	22 Sept 2025	22 Sept 2026

Figure 34 Test Equipment Used



10. Test Photos

See a separate document.

11. RF Exposure

See a separate document.

12. Appendix A - Correction Factors

ITL # 1075: Active Loop Antenna						
Frequency (MHz)	MAF (dBs/m)	AF (dB/m)		Frequency (MHz)	MAF (dBs/m)	AF (dB/m)
0.01	-33.1	18.4		2.0	-40.0	11.5
0.02	-37.2	14.3		3.0	-40.0	11.5
0.03	-38.2	13.3		4.0	-40.1	11.4
0.05	-39.8	11.7		5.0	-40.2	11.3
0.1	-40.1	11.4		6.0	-40.4	11.1
0.2	-40.3	11.2		7.0	-40.4	11.1
0.3	-40.3	11.2		8.0	-40.4	11.1
0.5	-40.3	11.2		9.0	-40.5	11.0
0.7	-40.3	11.2		10.0	-40.5	11.0
1.0	-40.1	11.4		20.0	-41.5	10.0

ITL # 1352: Horn Antenna			
Frequency (MHz)	AF (dB/m)	Frequency (MHz)	AF (dB/m)
0.75	25	9.5	38
1.0	23.5	10.0	38.5
1.5	26.0	10.5	38.5
2.0	29.0	11.0	38.5
2.5	27.5	11.5	38.5
3.0	30.0	12.0	38.0
3.5	31.5	12.5	38.5
4.0	32.5	13.0	40.0
4.5	32.5	13.5	41.0
5.0	33.0	14.0	40.0
5.5	35.0	14.5	39.0
6.0	36.5	15.0	38.0
6.5	36.5	15.5	37.5
7.0	37.5	16.0	37.5
7.5	37.5	16.5	39.0
8.0	37.5	17.0	40.0
8.5	38.0	17.5	42.0
9.0	37.5	18.0	42.5



ITL # 1353: Horn Antenna (@ 3m distance)⁴

Frequency (MHz)	Measured antenna factor (dB/m)	Frequency (MHz)	Measured antenna factor (dB/m)
18000.0	32.4	22500.0	33.0
18500.0	32.0	23000.0	33.1
19000.0	32.3	23500.0	33.8
19500.0	32.4	24000.0	33.5
20000.0	32.3	24500.0	33.5
20500.0	32.8	25000.0	33.8
21000.0	32.8	25500.0	33.9
21500.0	32.7	26000.0	34.2
22000.0	33.1	26500.0	34.7

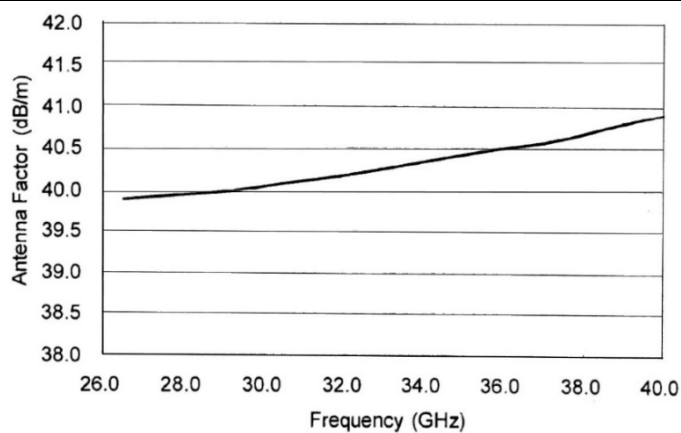
ITL #1840: Anechoic Chamber RF Cable

Frequency (MHz)	Cable Loss (dB)	Frequency (MHz)	Cable Loss (dB)
1000.0	-1.4	10000.0	-6.0
1500.0	-1.7	10500.0	-6.2
2000.0	-2.0	11000.0	-6.2
2500.0	-2.3	11500.0	-6.0
3000.0	-2.6	12000.0	-6.0
3500.0	-2.8	12500.0	-6.1
4000.0	-3.1	13000.0	-6.3
4500.0	-3.3	13500.0	-6.5
5000.0	-3.6	14000.0	-6.7
5500.0	-3.7	14500.0	-7.0
6000.0	-4.0	15000.0	-7.3
6500.0	-4.4	15500.0	-7.5
7000.0	-4.7	16000.0	-7.6
7500.0	-4.8	16500.0	-8.0
8000.0	-5.0	17000.0	-8.0
8500.0	-5.1	17500.0	-8.1
9000.0	-5.6	18000.0	-8.2
9500.0	-5.8		

⁴ The antenna factor shall be added to the receiver reading in dBμV to obtain field strength in dBμV/m



ITL # 1777: 26.5-40 GHz Horn Antenna



**ITL # 2199 Trilog Broadband Antenna30 MHz - 1 GHz +
RF cables**

Frequency (MHz)	Measured antenna factor (dB/m)	Frequency (MHz)	Measured antenna factor (dB/m)
30.00	14.30	80.00	11.10
40.00	16.20	90.00	13.40
50.00	17.40	100.00	15.20
60.00	16.30	150.00	11.40
70.00	13.00	200.00	14.10
80.00	11.10	300.00	16.10
90.00	13.40	400.00	18.10
100.00	15.20	500.00	19.50
150.00	11.40	600.00	21.10
30.00	14.30	700.00	22.50
40.00	16.20	800.00	23.50
50.00	17.40	900.00	24.70
60.00	16.30	1000.00	25.50
70.00	13.00		

End of Report