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Date: 29 September 2025

I.T.L. Product Testing Ltd.

FCC Radio Test Report

for

Miltel Communications Ltd.

Equipment under test:

Telemetry Endpoint

Tested Model: C2-10-P-L1

(Product Family: C2-EP)

FCC ID: MLLC2-EP

Tested by: _____
L. Tenenbaum

Approved by: _____
M. Zohar

This report concerns: Original Grant
Equipment Class: Narrowband (Class A)
Limits used: 47CFR Parts 2; 90
Measurement procedure used: ANSI C63.26-2015.
Substitution Method used: ANSI TIA-603-E (2016)

Prepared by:	**Applicant:**
R. Ezrah I.T.L. Product Testing Ltd. 3 Ha'oreg Street, Modi'in 7177909, Israel Email: rame@itlglobal.org	Yarum Locker Miltel Communications Ltd. 7 Gush E'tzion Street, 4th Floor, Givat Shmuel 54030, Israel Email: yarum@miltelcom.com

Table of Contents

1 General Information

1.1 Administrative Information

Manufacturer:	Miltel Communications Ltd.
Equipment Under Test (E.U.T):	Telemetry Endpoint
Equipment Model No.:	C2-10-P-L1
Other Models[1]:	1. C2-10-E-L1 2. C2-10-E-L4 3. C2-10-P-L4 4. C2-5-P-L1
Equipment Serial No.:	N/A
Date of Receipt of E.U.T:	2 June 2024
Start of Test:	2 June 2024
End of Test:	16 July 2024
Test Laboratory Location:	I.T.L Product Testing Ltd. 3 HaOreg Street, Modi'in 7177909, Israel
Standard/s:	FCC 47 CFR Part 90, UHF 450-470 MHz

1.2 List of Accreditations

The EMC laboratory of I.T.L. is accredited by/registered with 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.), FCC Designation Number is IL1005.
3. Industry Canada (Canada), IC File No.: 46405-4025; Site No. IC 4025A-1, IC 4025A-2.

I.T.L. Product Testing Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this test report have been determined in accordance with I.T.L.'s terms of accreditation unless stated otherwise in the report.

1.3 Test Methodology

Radiated and conducted testing was performed according to the procedures in ANSI C63.26: 2015 and ANSI/TIA-603-E: 2016, Section 2.2.12.

[1] See a customer's declaration on page 7.

1.4 Product Description[2]

Description (short)		Telemetry Endpoint			
Description (full)		Meter and Sensors Telemetry device			
Brand name		Miltel Communications Ltd.			
Model number		C2-EP			
Serial number		-			
Type	☒	Stand Alone			
	☐	Combined/integrated			
	☐	Plug-in			
Category	☒	Fixed (distance from human ≥ 200 cm)			
	☐	Portable (distance from human ≤ 20 cm)			
	☐	Mobile (distance from human ≥ 20 cm)			
Assigned frequency band/s		450.0 – 462.5375 MHz 462.7375 – 467.5375 MHz 467.7375 – 470.0 MHz			
Operational frequencies		450.0 – 462.5375 MHz 462.7375 – 467.5375 MHz 467.7375 – 470.0 MHz			
Maximum rated output power		At transmitter's 50 Ω RF output connector (dBm)			
		E.I.R.P. (for EUT without RF connector)			27dBm
Antenna	☐ Unique Coupling		☐ Standard Connection		☒ Integral
	☐ Temporary RF connector		Gain (peak): -2dBi		
Operating channel bandwidth		12.5KHz			
Modulation type		4-FSK			
Bitrate		12 Kb/s			
Transmitter		Max. duty cycle:	0.05%		
		Power source	☐ AC	Nominal rated voltage	3.0/3.65V
			☐ DC		
			☒ Battery		
Receiver Class					
Extreme temperature conditions			-30°C to +60°C		

[2] The product description was provided by the customer. For full details, refer to the manufacturer's specifications or user guide. I.T.L Product Testing Ltd. is not responsible for the validity or the accuracy of any information provided by the customer

1.5 List of Accreditations

The EMC laboratory of I.T.L. is accredited by/registered with 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.), FCC Designation Number is IL1005.
3. Department of Innovation, Science and Economic Development (ISED) Canada, CAB identifier: IL1002

I.T.L. Product Testing Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this test report have been determined in accordance with I.T.L.'s terms of accreditation unless stated otherwise in the report.

Date: 18.9.2024

Model Difference Declaration

Dear Madam/Sir,

We, Miltel communications Ltd., 7 Gush-Etzion St. Givat Shmuel, 5403007, Israel.

Hereby declare that the EUT that was tested at the I.T.L. EMC laboratory on 09 June 2024 which is as follows:

EUT: Telemetry Endpoint

Model Name:C2-EP (C2-10-P-L1)

Serial No.: N/A

is identical to Models:

1. C2-10-E-L1
2. C2-10-E-L4
3. C2-10-P-L4
4. C2-5-P-L1

except for the following:

1. Meter Interface: Encoder or Pulse
2. Operating Voltage: 3V or 3.6V
3. Potting: Potted or not Potted

which does not affect EMC/Radio performance, as was measured and verified in ITL labs.

Sincerely,

Signature:

Printed Name: Yarum Locker

Title: CEO

Company Name: Miltel Communications Ltd.

2 System Test Configuration

2.1 Justification

1. The E.U.T is a transceiver that utilizes UHF frequencies in the range 450MHz to 470MHz.
2. Radiated emission evaluation was performed in a typical installation orientation as declared by the customer.
3. The device uses 12.5kHz channel BW/spacing. The transmission power is 27dBm, delivered to an integral printed antenna, operated by a non-rechargeable 3V or 3.6V battery.
4. Testing was performed with 12.5kHz bandwidth

2.2 EUT Exercise Software

N/A

2.3 Special Accessories

N/A

2.4 Equipment Modifications

N/A

2.5 Configuration of Tested System

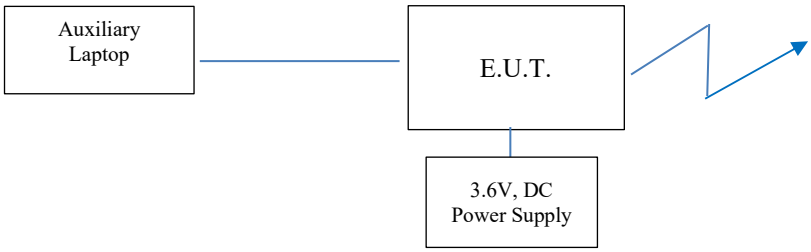

Figure 1. Radiated Test Setup

3 RF Power Output

3.1 Test Specification

FCC, Part 90, Section 205(h)

3.2 Test Procedure

Temperature (22°C)/ Humidity (52%RH))
Test method used: ANSI C63.26 (2015), Section 5.2.3.3
The E.U.T was placed on a non-metallic table, 0.8 meters above the ground, at a distance of 3 meters. The readings were maximized by adjusting the antenna height between 1-4 meters, the turntable azimuth between 0-360°, and the antenna polarization.

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:

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

E - Field Strength (V/m)
d – Distance from transmitter (m)
G – Antenna gain
P – Peak power (W)
ERP (dBm)= EIRP (dBm) - 2.15

3.3 Test Limit

Maximum ERP 2W (33dBm).

3.4 Test Results

Carrier Channel	Antenna Pol.	Maximum Peak Level	Effective Radiated Power Level	Antenna Gain	Calculated Power	Limit	Margin
(MHz)	(V/H)	(dBuV/m)	(dBm)	(dBi)	(dBm)	(dBm)	(dB)
450.0	V	116.2	22.5	-2dBi	24.5	33.0	-8.5
	H	106.4	12.7	-2dBi	14.7	33.0	-18.3
460.0	V	117.8	24.1	-2dBi	26.1	33.0	-6.9
	H	108.0	14.3	-2dBi	16.3	33.0	-16.7
470.0	V	118.6	24.9	-2dBi	26.9	33.0	-6.1
	H	108.9	15.1	-2dBi	17.1	33.0	-15.9

Figure 2 RF Power Output

JUDGEMENT: Pass

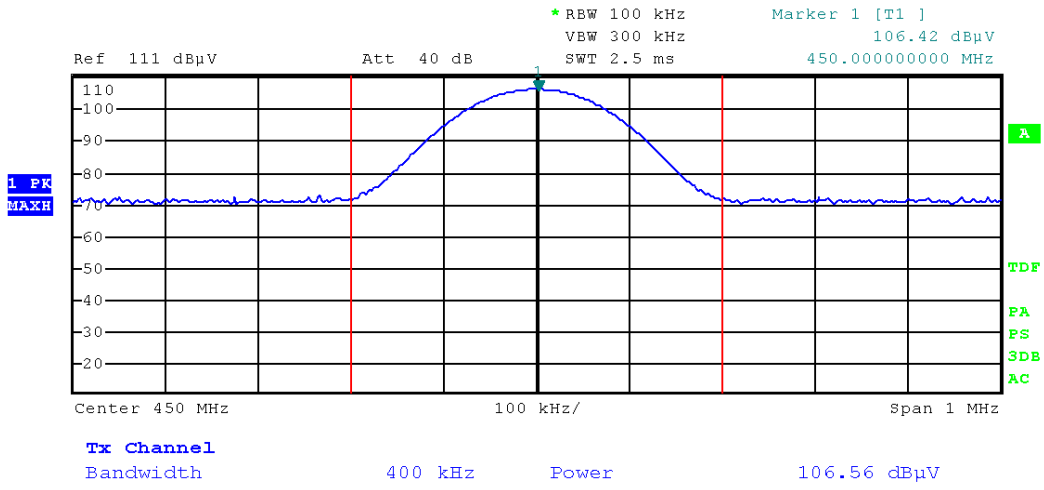

Figure 3. 450 MHz, C2-EP, Horizontal

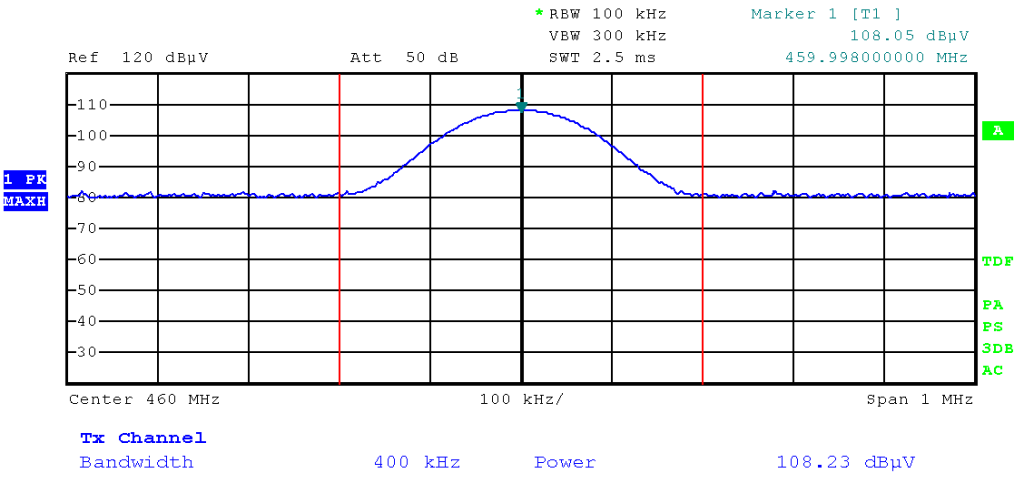

Figure 4. 460 MHz, C2-EP, Horizontal

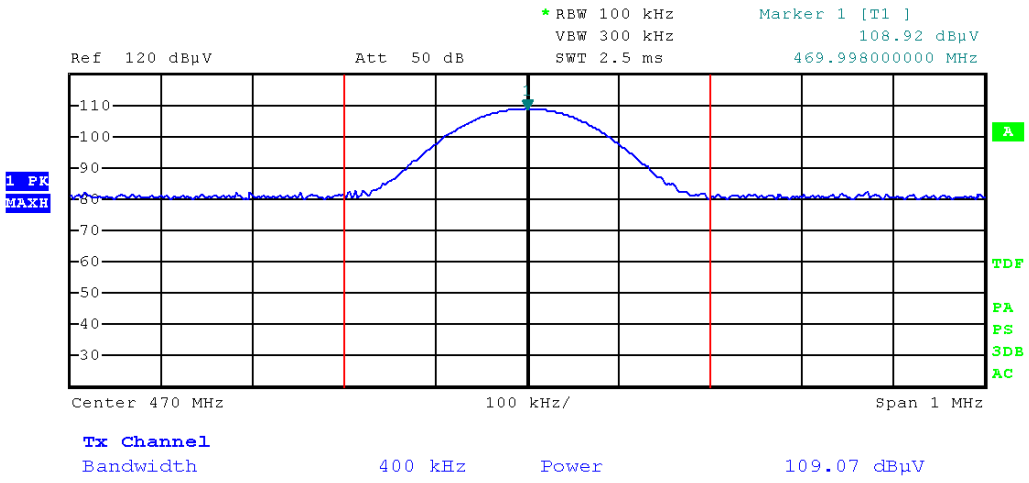

Figure 5. 470 MHz, C2-EP, Horizontal

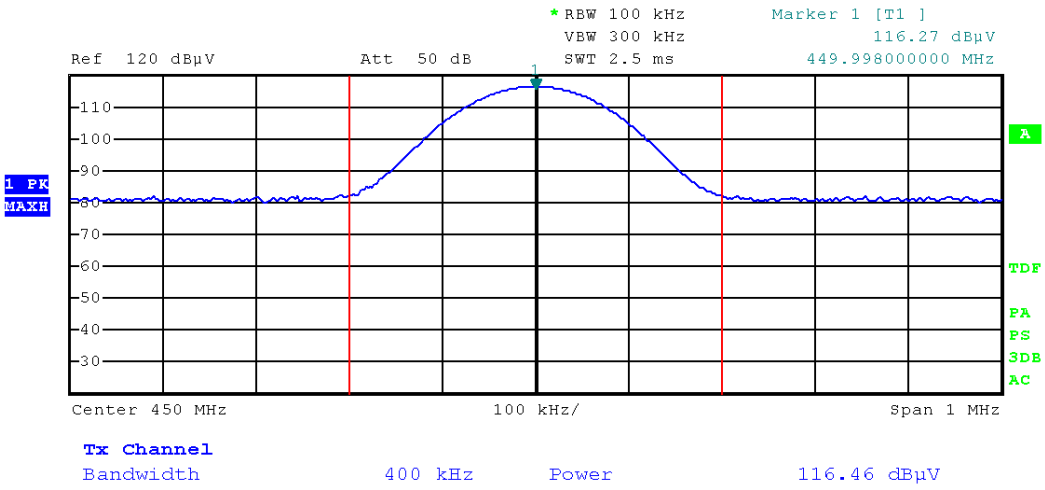

Figure 6. 450MHz, Vertical

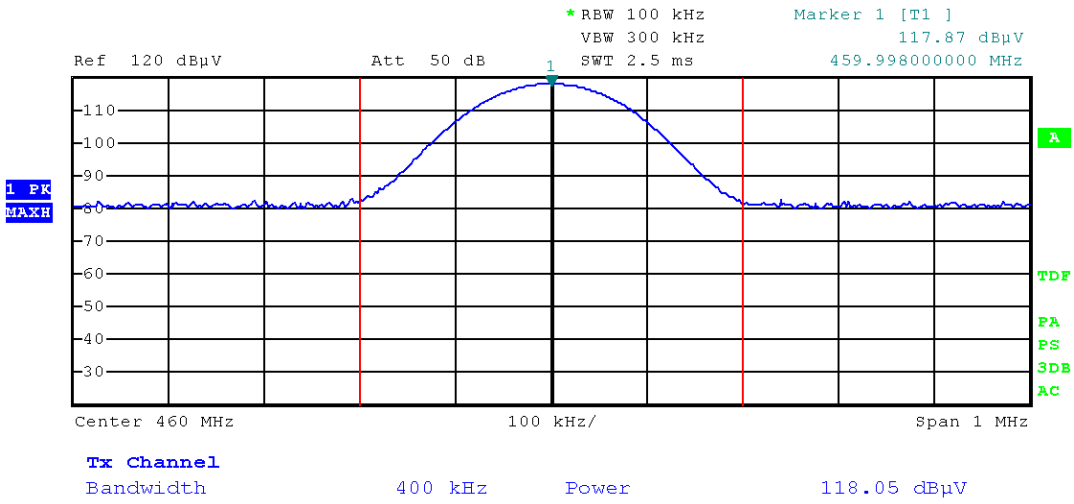

Figure 7. 460MHz, Vertical

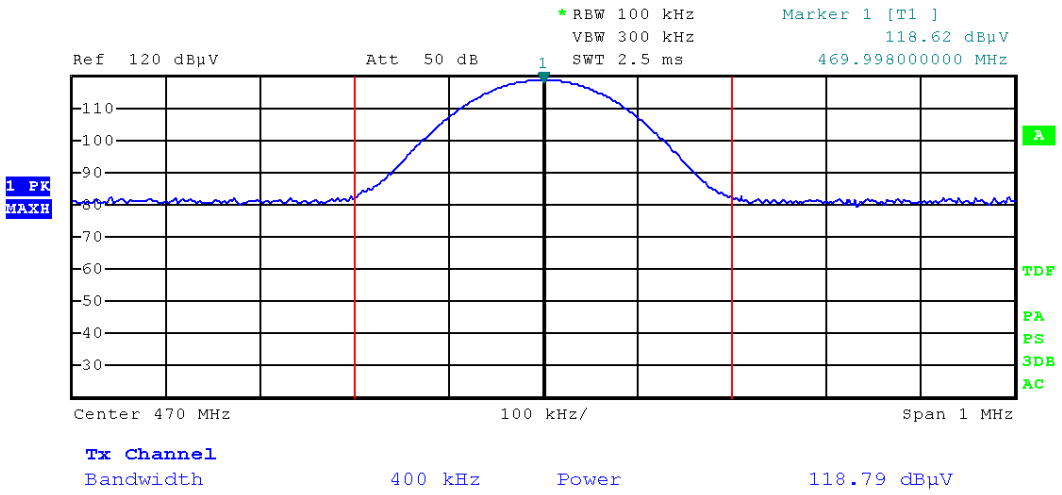

Figure 8. 470MHz, Vertical

3.5 Test Equipment Used; RF Power Output*

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1507	EMI Test Receiver	Rohde & Schwarz	ESCI7	100794	07-Oct-24	07-Oct-25
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	16 Oct 2023	16 Oct 2025

Figure 9 Test Equipment Used

4 Occupied Bandwidth

4.1 Test Specification

FCC, Part 90, Sub Part I, Section 209(b)(5)

4.2 Test Procedure

(Temperature (22°C)/ Humidity (62%RH))
Test method used: ANSI C63.26 (2015), Section 5.4.4

The E.U.T.'s antenna terminal was connected to the Spectrum Analyzer through an external attenuator and an appropriate coaxial cable. Special attention was taken to prevent Spectrum Analyzer RF input overload (total loss=10.5 dB).
RBW set to value between 1% to 5% from the OBW.

4.3 Test Limit

Operations using equipment designed to operate with a 12.5 kHz channel bandwidth will be authorized at 11.25 kHz bandwidth.

4.4 Test Results

JUDGEMENT: Pass

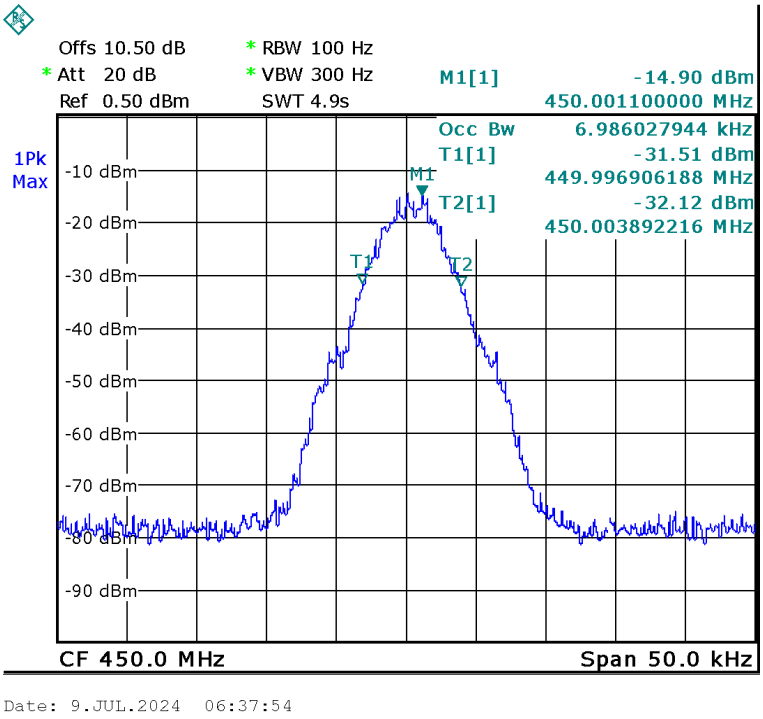

Figure 10. 450MHz

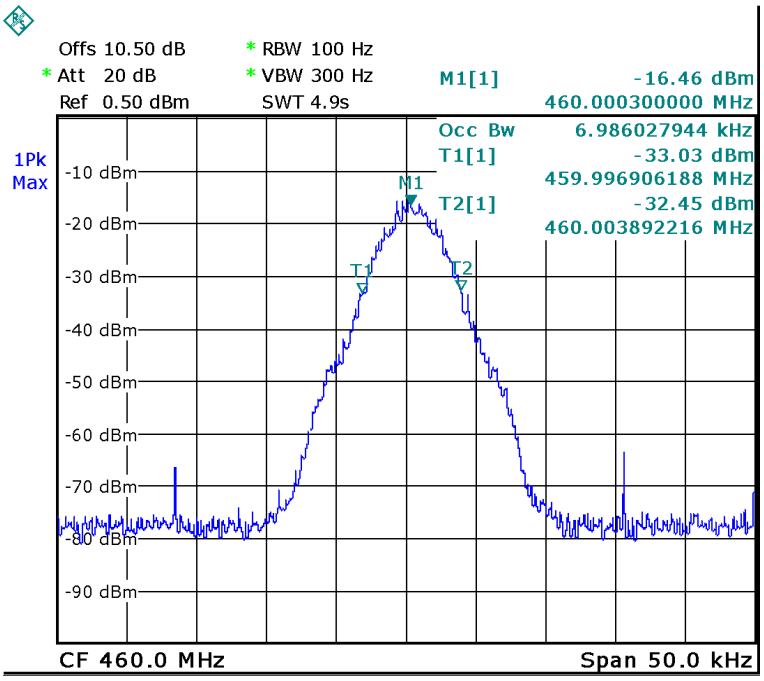

Figure 11. 460MHz

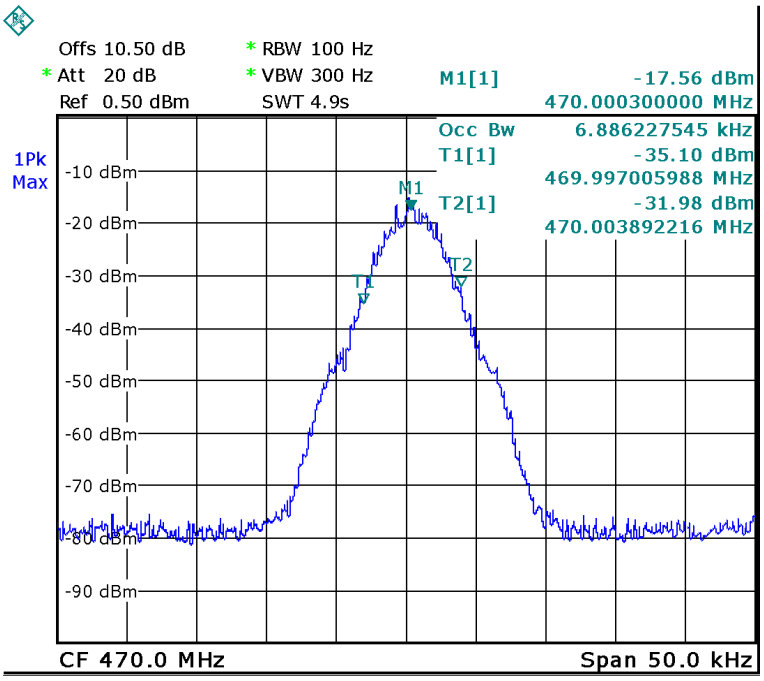

Figure 12. 470MHz

4.5 Test Equipment Used; Occupied Bandwidth

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1499	Spectrum Analyzer	Rohde & Schwarz	FSL6	100194	5 Feb 2024	5 Feb 2025
1799	RF Attenuator 10 dB 18GHZ NSA	Narda	779-10	4413	1 Oct 2023	1 Oct 2024
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	9 Aug 2023	9 Aug 2024

Figure 13 Test Equipment Used

5 Emission Mask

5.1 Test Specification

FCC, Part 90, Sub Part I, Section 210

5.2 Test Procedure

(Temperature (20°C)/ Humidity (62%RH))
Test method used: ANSI C63.26 (2015), Section 5.7
The E.U.T.'s

Mask D

5.3 Test Results

JUDGEMENT: Passed

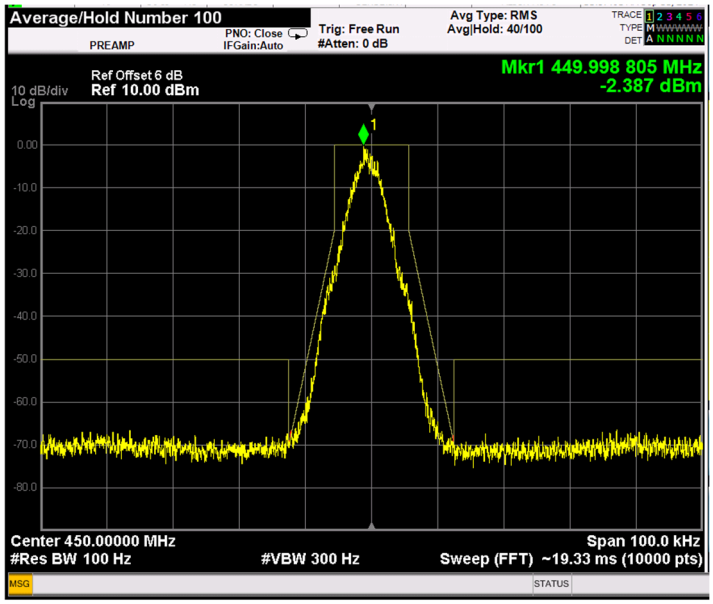

Figure 14. 450MHz

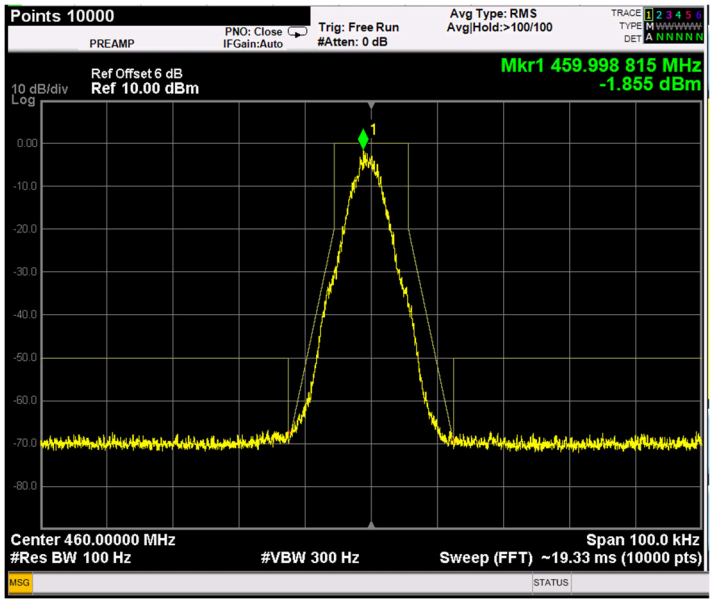

Figure 15. 460MHz

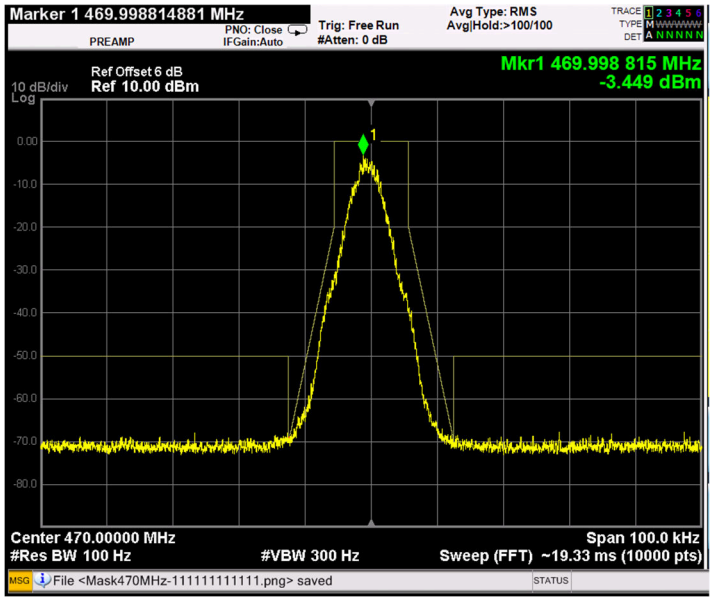

Figure 16. 470MHz

5.4 Test Equipment Used; Emission Mask

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	9 Aug 2023	9 Aug 2024
1856	Horn Antenna	EMCO	3115	-	25 May 2021	25 May 2024
2163	Signal Analyzer	Keysight	WO-0040 02 56-23	MY54430 182	25 Feb 2023	25 Feb 2025
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	16 Oct 2023	16 Oct 2025

Figure 17 Test Equipment Used

6 Spurious Radiated Emission

6.1 Test Specification

FCC, Part 90, Sub Part I, Section 210

6.2 Test Procedure

(Temperature (28°C)/ Humidity (50%RH))
Test method used: ANSI C63.26 (2015), Section 5.5.3

The E.U.T was tested inside the shielded room, placed on a non-metallic table, 0.8 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 frequency range 0.009MHz -5.0GHz was scanned.
The E.U.T. was replaced by a substitution antenna driven by a signal generator. The height was readjusted for maximum reading. The signal generator level was adjusted to obtain the same reading on the EMI receiver
The signals observed were converted to radiated power using:

P_d(dBm) = P_g(dBm) – Cable Loss (dB) + Substitution Antenna Gain (dBd)

P_d = Dipole equivalent power (result).
P_g = Signal generator output level.
A Peak detector was using for this test.

The table below describe only results with the highest radiation.

6.3 Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 50 + 10*log (P) dB, yielding –20dBm.

6.4 Test Results

Carrier Channel	Freq.	Antenna Pol.	Maximum Peak Level	Cable Loss	Antenna Gain	Signal Generator RF Output	Limit	Margin
(MHz)	(MHz)	(V/H)	(dBµV/m)	(dB)	(dBi)	(dBm)	(dBm)	(dB)
450	900	V	45.0	0.5	-2.0	-48.2	-20.0	-28.2
	900	H	47.7	0.5	-2.0	-45.5	-20.0	-25.5
	1350	V	61.3	0.5	-2.0	-31.9	-20.0	-11.9
	1350	H	57.9	0.5	-2.0	-35.3	-20.0	-15.3
460	920	V	46.2	0.5	-2.0	-47.0	-20.0	-27.0
	920	H	47.3	0.5	-2.0	-45.9	-20.0	-25.9
	1380	V	59.8	0.5	-2.0	-33.4	-20.0	-13.4
	1380	H	54.5	0.5	-2.0	-38.7	-20.0	-18.7

Carrier Channel	Freq.	Antenna Pol.	Maximum Peak Level	Cable Loss	Antenna Gain	Signal Generator RF Output	Limit	Margin
(MHz)	(MHz)	(V/H)	(dBµV/m)	(dB)	(dBi)	(dBm)	(dBm)	(dB)
470	940	V	46.1	0.5	-2.0	-47.1	-20.0	-27.1
	940	H	46.7	0.5	-2.0	-46.5	-20.0	-26.5
	1410	V	63.4	0.5	-2.0	-29.8	-20.0	-9.8
	1410	H	57.2	0.5	-2.0	-36.0	-20.0	-16.0

Figure 18 Spurious Radiated Emission

JUDGEMENT: Pass

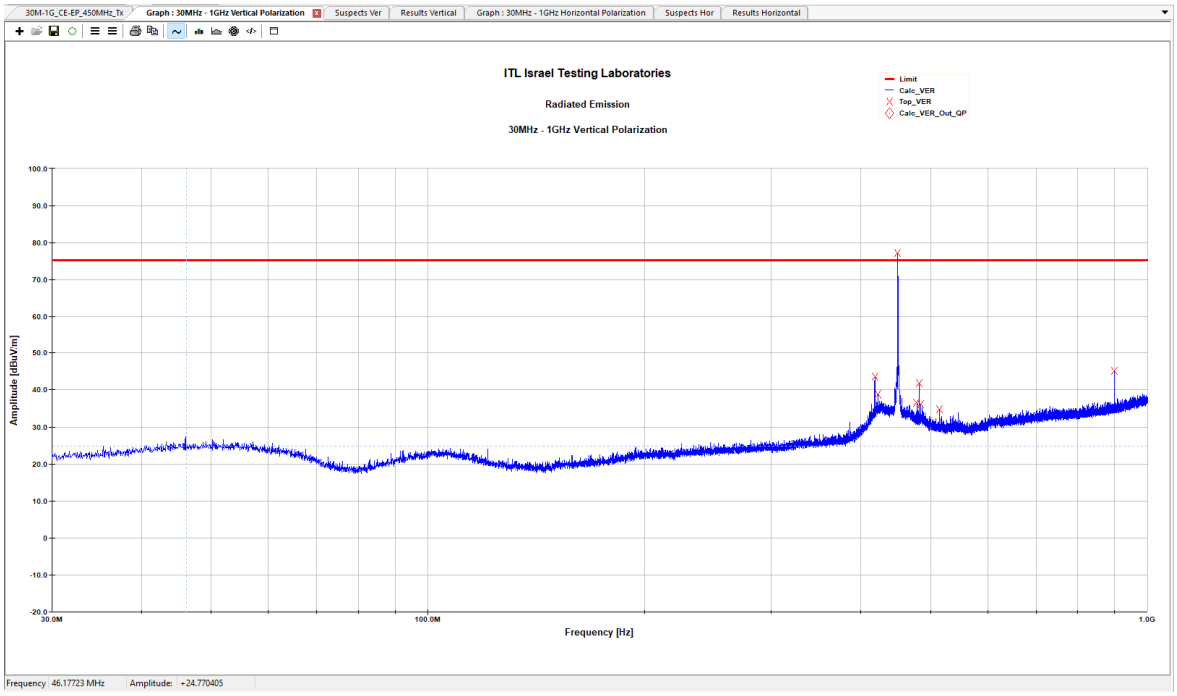

Figure 19 450 V, 30M-1GHz

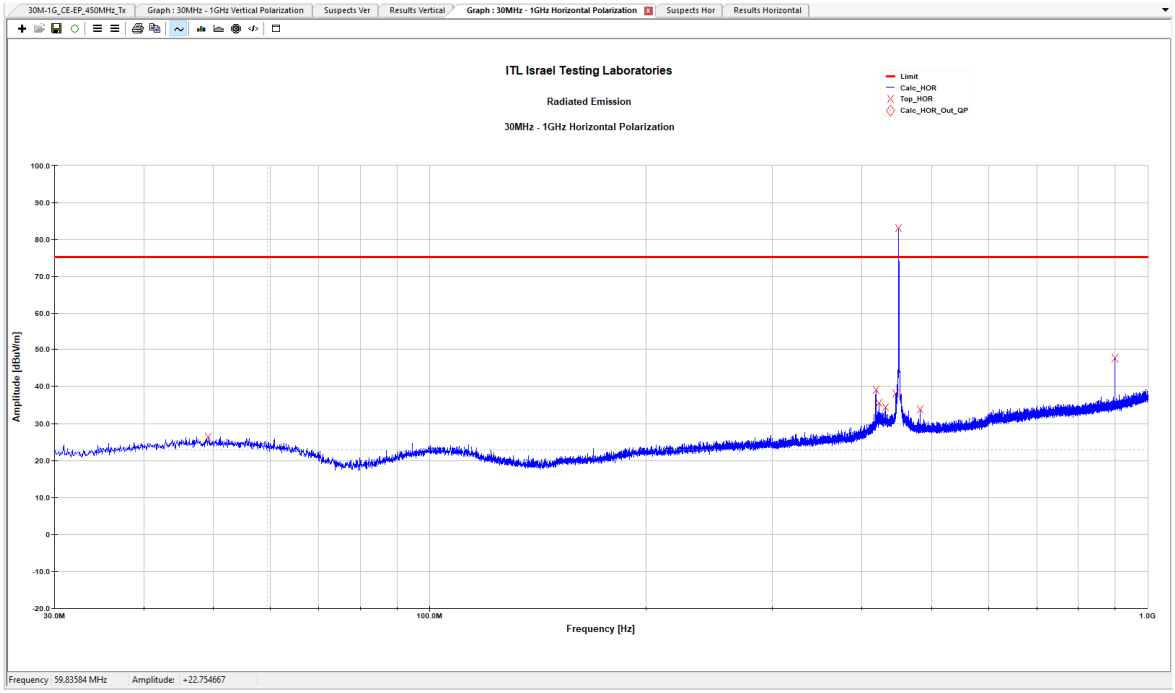

Figure 20 450 H, 30M-1GHz

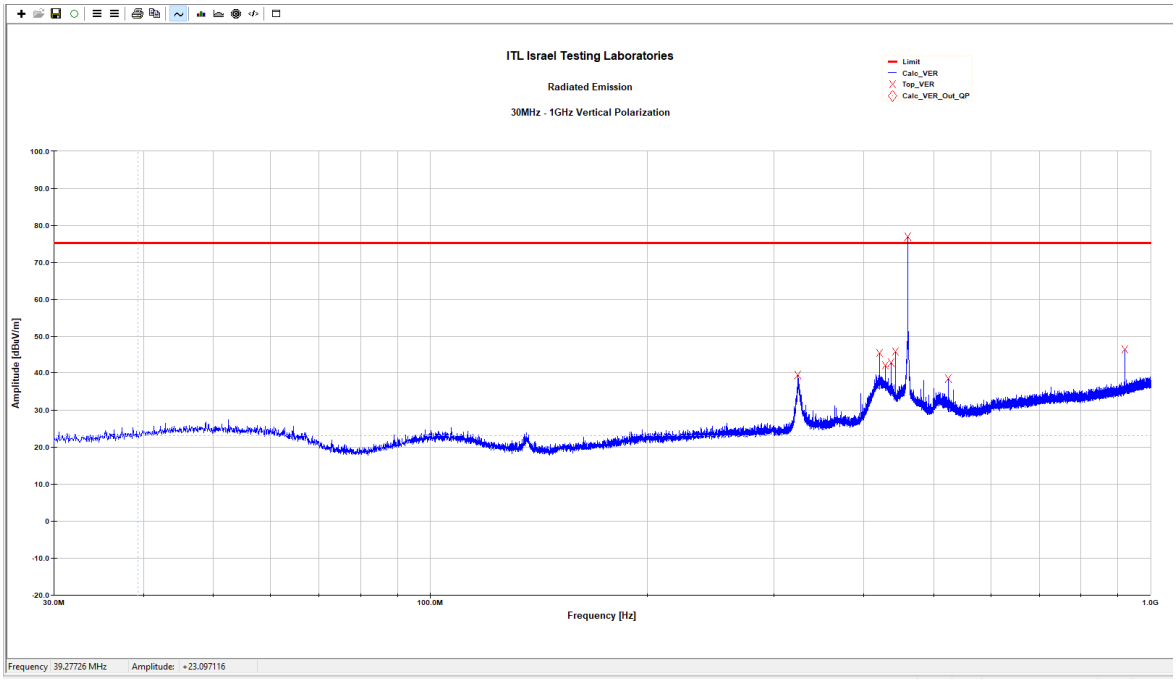

Figure 21 460 V, 30M-1GHz

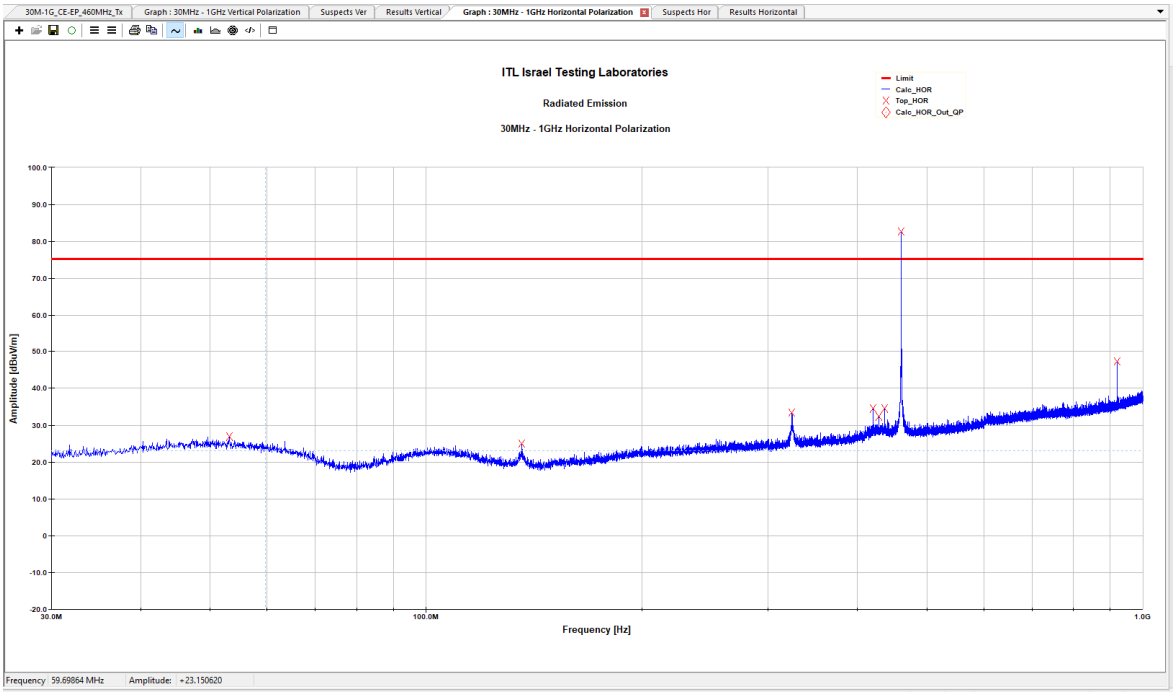

Figure 22 460 H ,30M-1GHz

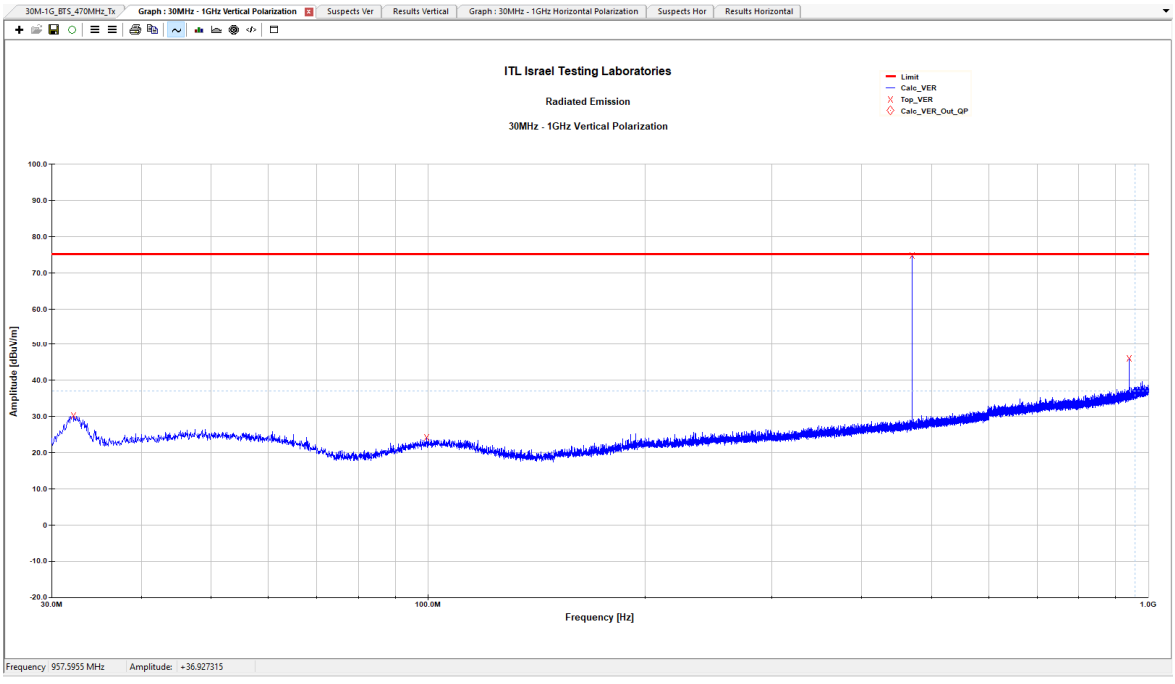

Figure 23 470 H, 30M-1GHz

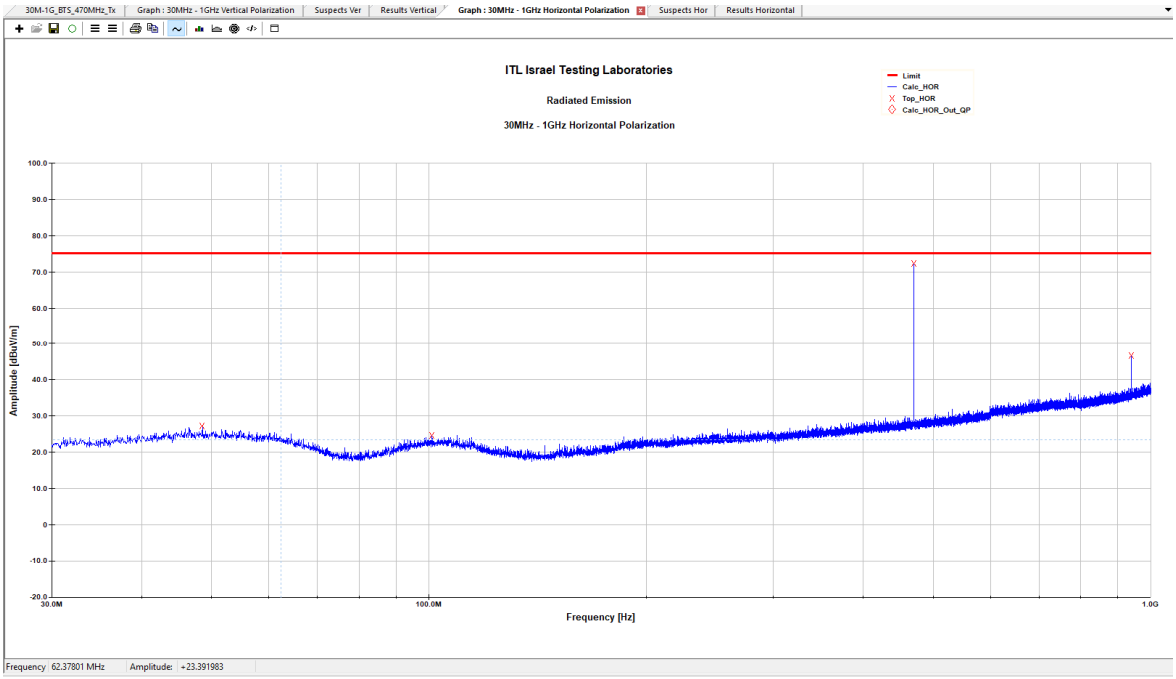

Figure 24 470 V, 30 MHz-1 GHz

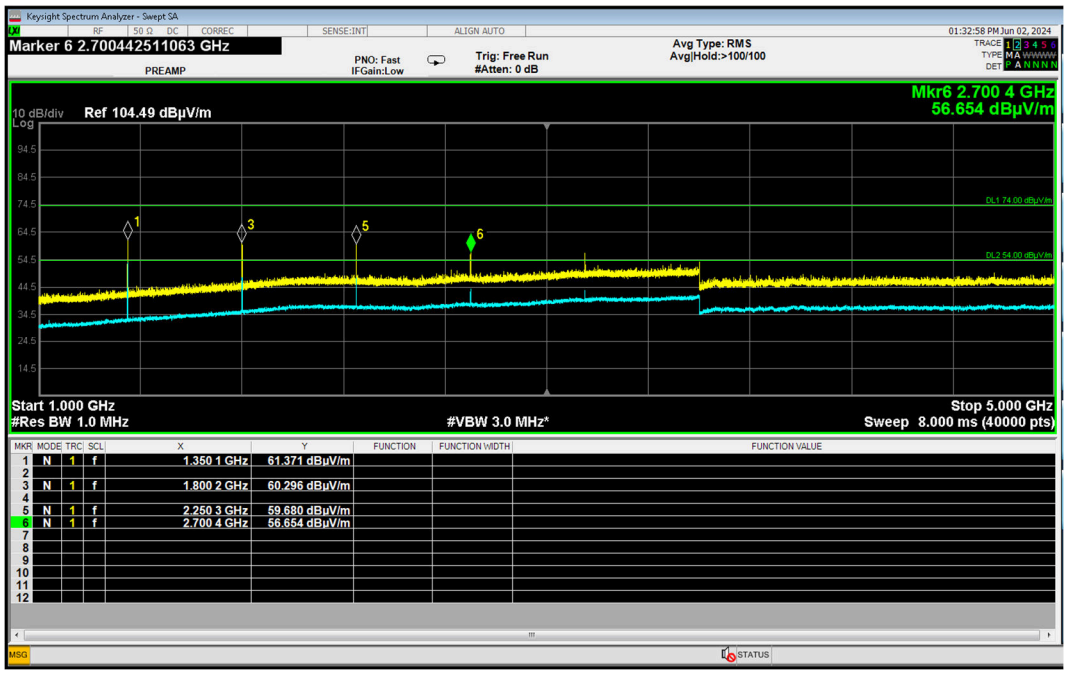

Figure 25 Spurious Emissions 1-5 GHz, 450 MHz

Figure 26 Spurious Emissions 1-5 GHz, 460 MHz

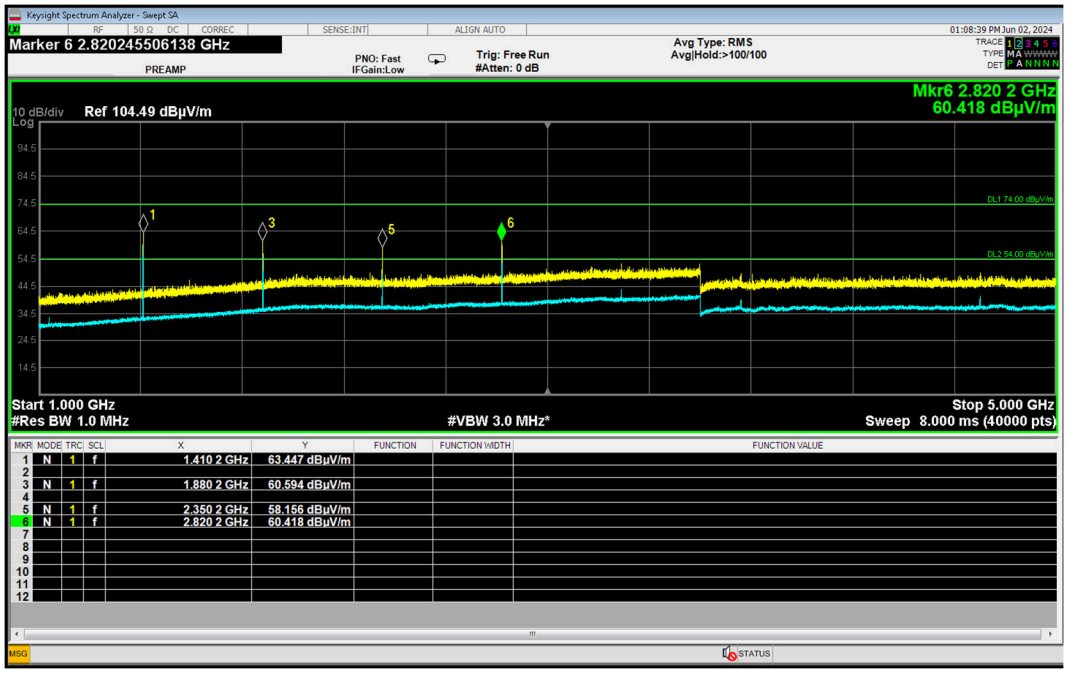

Figure 27 Spurious Emissions 1-5 GHz 470 MHz

6.5 Test Instrumentation Used; Radiated Measurements

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1075	Active Loop Antenna	EMCO	6502	2950	May. 23, 2024	May. 23, 2025
1366	Horn Antenna	EMCO	3115	9702-511	Oct. 18, 2023	Oct. 18, 2025

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1499	Spectrum Analyzer	Rohde & Schwarz	FSL6	100194	Feb. 5, 2024	Feb. 5, 2025
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	Aug. 9, 2023	Aug. 9, 2024
2163	Signal Analyzer	Keysight	WO-00400 256-23	MY54430182	Feb. 25, 2023	Feb. 25, 2025
2199	Trilog Broadband Antenna 30 MHz-7 GHz	Schwarzbeck	VULB 9162	585	Oct. 16, 2023	Oct. 16, 2025

Figure 28 Test Equipment Used

7 Transmitter Frequency Stability

7.1 Test Specification

FCC, Part 90, Sub Part I, Section 213; Part 2, Section 1055

7.2 Test Procedure

(Temperature (22°C)/ Humidity (45%RH))
Test method used: ANSI C63.26 (2015), Section 5.2.6

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

The E.U.T. was operated with a CW signal at 450,460,470MHz.

The E.U.T. was placed inside a temperature chamber.

The spectrum analyzer was set to 20.0 kHz span and 1.0 kHz RBW, 3.0 kHz VBW.

Counter function was set for this evaluation.

The E.U.T. was operated from external 3.6VDC at nominal temperature (+25.0°C).

The carrier frequency was measured and recorded (reference frequency reading).

The carrier frequency was measured and recorded after at least 20 minutes of exposing the E.U.T. to the temperature.

7.3 Test Limit

In the 421-512 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of ± 1.5 ppm (675Hz@450M, 690Hz@460M, 705Hz@470M).

7.4 Test Results

JUDGEMENT: Passed

Temperature	Voltage [DC]	Frequency	Drift	Limit (1.5 PPM)
[°C]	[V]	[MHz]	[Hz]	[Hz]
-30.0	3.2	449.9998563	-143.7	675.0
-30.0	3.6	449.9999441	-55.9	675.0
-30.0	3.2	459.9997445	-255.5	690.0
-30.0	3.6	459.9997804	-219.6	690.0
-30.0	3.2	469.9997206	-279.4	705.0
-30.0	3.6	469.9998352	-164.8	705.0
-20.0	3.2	449999796.4	-203.6	675.0
-20.0	3.6	449999912.2	-87.8	675.0
-20.0	3.2	459999828.3	-171.7	690.0
-20.0	3.6	459999812.4	-187.6	690.0
-20.0	3.2	469999744.5	-255.5	705.0
-20.0	3.6	469999792.4	-207.6	705.0
-10.0	3.2	449999964.1	-35.9	675.0
-10.0	3.6	449999964.1	-35.9	675.0
-10.0	3.2	459999824.4	-175.6	690.0

Temperature	Voltage [DC]	Frequency	Drift	Limit (1.5 PPM)
[°C]	[V]	[MHz]	[Hz]	[Hz]
-10.0	3.6	459999904.2	-95.8	690.0
-10.0	3.2	469999744.5	-255.5	705.0
-10.0	3.6	469999752.5	-247.5	705.0
0.0	3.2	450000016.2	16.2	675.0
0.0	3.6	450000024.1	24.1	675.0
0.0	3.2	459999960.1	-39.9	690.0
0.0	3.6	459999948.1	-51.9	690.0
0.0	3.2	469999809.5	-190.5	705.0
0.0	3.6	469999888.3	-111.7	705.0
10.0	3.2	450000039.9	39.9	675.0
10.0	3.6	450000036.9	36.9	675.0
10.0	3.2	460000045.1	45.1	690.0
10.0	3.6	460000031.9	31.9	690.0
10.0	3.2	470000008.3	8.3	705.0
10.0	3.6	469999984.1	-15.9	705.0
20.0	3.2	449999756.4	-243.6	675.0
20.0	3.6	449999756.2	-243.8	675.0
20.0	3.2	459999676.7	-323.3	690.0
20.0	3.6	459999792.5	-207.5	690.0
20.0	3.2	469999760.5	-239.5	705.0
20.0	3.6	469999820.4	-179.6	705.0
30.0	3.2	449999808.4	-191.6	675.0
30.0	3.6	449999816.4	-183.6	675.0
30.0	3.2	459999836.5	-163.5	690.0
30.0	3.6	459999784.4	-215.6	690.0
30.0	3.2	469999728.5	-271.5	705.0
30.0	3.6	469999740.5	-259.5	705.0
40.0	3.2	449999803.4	-196.6	675.0
40.0	3.6	449999816.2	-183.8	675.0
40.0	3.2	459999788.2	-211.8	690.0
40.0	3.6	459999796.4	-203.6	690.0
40.0	3.2	469999724.6	-275.4	705.0
40.0	3.6	469999808.6	-191.4	705.0
50.0	3.2	449999816.4	-183.6	675.0
50.0	3.6	449999804.4	-195.6	675.0
50.0	3.2	459999740.3	-259.7	690.0
50.0	3.6	459999776.4	-223.6	690.0
50.0	3.2	469999739.5	-260.5	705.0
50.0	3.6	469999756.5	-243.5	705.0

Figure 29. Frequency Stability Test Results

7.5 Test Equipment Used; Transmitter Frequency Stability

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1022	Climatic Chamber	Russells	RBB-2-03-03	9921222	NCR	NCR
1499	Spectrum Analyzer	Rohde & Schwarz	FSL6	100194	Feb. 5, 2024	Feb. 5, 2025
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	Aug. 9, 2023	Aug. 9, 2024

Figure 30 Test Equipment Used

8 Transient Frequency Behavior

8.1 Test specification

FCC, Part 90, Section 214

8.2 Test Procedure

(Temperature (22°C)/ Humidity (45%RH))
Test method used: ANSI TIA 603 -E, Section 2.2.19

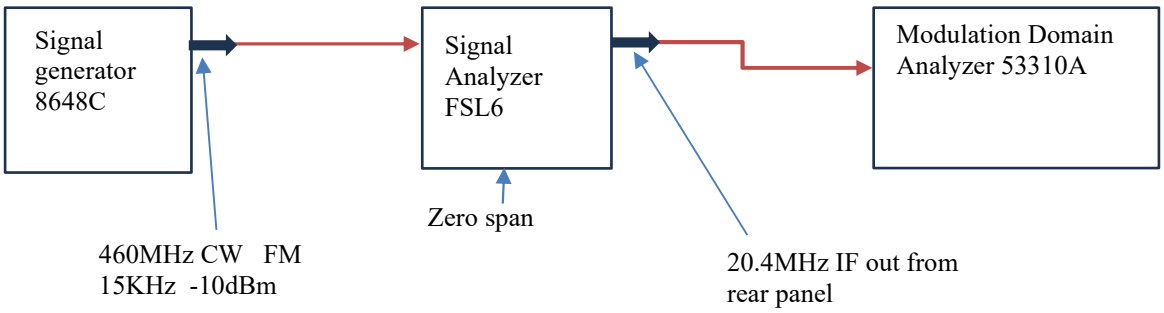

Figure 31 Set up ±12.5KHz Borders (F1&F2) calibration

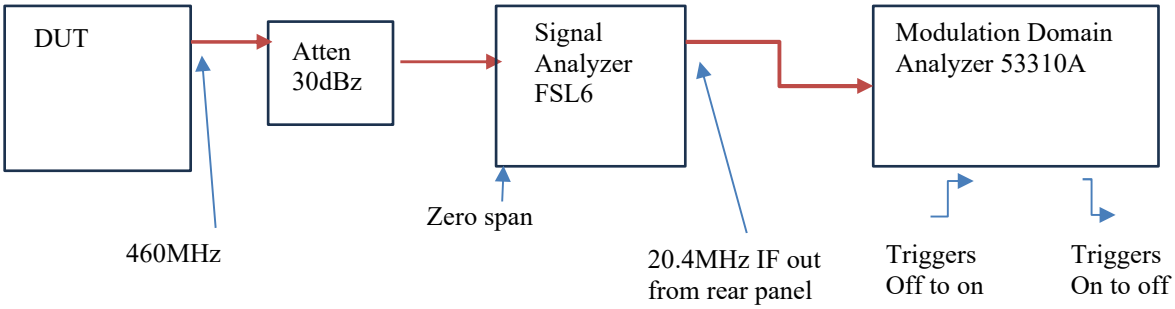

Figure 32 Testing Set up

8.3 Test Limit

Transmitters designed to operate in the 150-174 MHz and 421-512 MHz frequency bands must maintain transient frequencies within the maximum frequency difference limits during the time intervals indicated:

Time Intervals	Maximum Frequency Difference (kHz)	421 to 512 MHz (msec)
T1*	±12.5	10
T2	±6.25	25
T3*	±12.5k	10

*Note: if the transmitter carrier output power rating is 6 watts or less, the frequency difference during this time period may exceed the maximum frequency difference for this time period

8.4 Test Results

JUDGEMENT: Passed

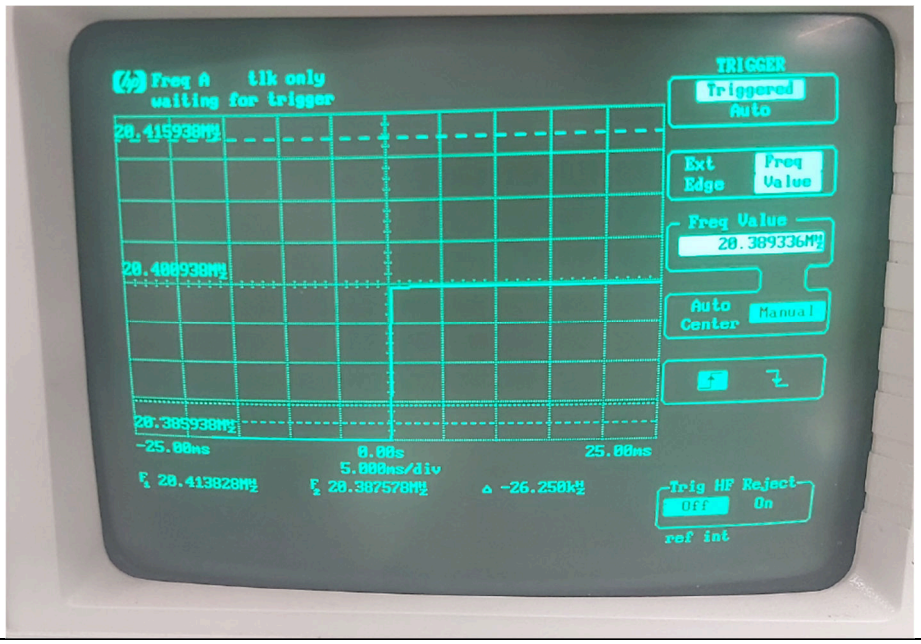

Figure 33. Transient Frequency Behavior “off to ON” Test Results

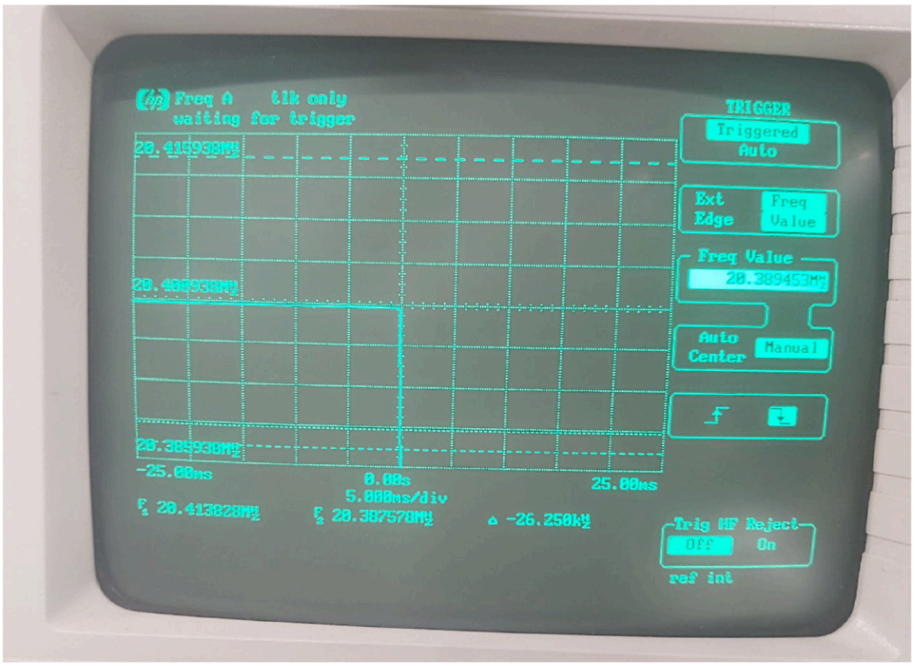

Figure 34. Transient Frequency Behavior “on to OFF” Test Results

8.5 Test Equipment Used; Transient Frequency Behavior*

ITL #	Instrument	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
1117	Signal Generator	Agilent/ Keysight	8648C	3623A04126	6 Feb 2024	6 Feb 2025
1454	Power Splitter # 1	Mini-Circuit	ZFSC-2-2+	-	1 Oct 2023	1 Oct 2025
1499	Spectrum Analyzer	Rohde & Schwarz	FSL6	100194	5 Feb 2024	5 Feb 2025
1699	Low Loss cable	Huber Suhner	Sucoflex	27502/4PEA	7 Jun 2023	7 Aug 2024
1778	Antenna Cable for KA Band	OSR Electronics	37297C KPS	1503-590 (05032006)	9 Aug 2023	9 Aug 2024
1783	20 cm Cable for KA Band Antenna	Rhophase Microwave	01536 263440 (A1673)	A1673	7 Jun 2023	7 Aug 2024
1832	20 dB Attenuator	MCL	VAT-20W2+	848	9 Aug 2023	9 Aug 2024
1964	Modulation Domain Analyzer	HP	53310A	N/A	19 Aug 2024	19 Aug 2026

Figure 35 Test Equipment Used

9 RF Exposure/Safety

See a separate report.

10 Setup Photos

See a separate file.

11 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	-40.0	11.5
0.02	-37.2	14.3	3	-40.0	11.5
0.03	-38.2	13.3	4	-40.1	11.4
0.05	-39.8	11.7	5	-40.2	11.3
0.1	-40.1	11.4	6	-40.4	11.1
0.2	-40.3	11.2	7	-40.4	11.1
0.3	-40.3	11.2	8	-40.4	11.1
0.5	-40.3	11.2	9	-40.5	11.0
0.7	-40.3	11.2	10	-40.5	11.0
1	-40.1	11.4	20	-41.5	10.0

ITL # 1353: Horn Antenna (@ 3m distance)[3]			
Frequency (MHz)	**Measured antenna factor (dB/m)**	**Frequency (MHz)**	**Measured antenna factor (dB/m)**
18000	32.4	22500	33.0
18500	32.0	23000	33.1
19000	32.3	23500	33.8
19500	32.4	24000	33.5
20000	32.3	24500	33.5
20500	32.8	25000	33.8
21000	32.8	25500	33.9
21500	32.7	26000	34.2
22000	33.1	26500	34.7

ITL #1356: Biconical Antenna			
Frequency (MHz)	**AF (dB/m)**	**Frequency (MHz)**	**AF (dB/m)**
30	13.00	90	8.23
35	10.89	100	11.12
40	10.59	120	13.16
45	10.63	140	13.07
50	10.12	160	14.80
60	9.26	180	16.95
70	7.74	200	17.17
80	6.63		

[3] The antenna factor shall be added to the receiver reading in dBµV to obtain field strength in dBµ V/m

ITL # 1366: Horn Antenna	
Frequency (MHz)	**AF (dB/m)**
750	25
1000	23.5
1500	26.0
2000	29.0
2500	27.5
3000	30.0
3500	31.5
4000	32.5
4500	32.5
5000	33.0
5500	35.0
6000	36.5
6500	36.5
7000	37.5
7500	37.5
8000	37.5
8500	38.0
9000	37.5
9500	38
10000	38.5
10500	38.5
11000	38.5
11500	38.5
12000	38.0
12500	38.5
13000	40.0
13500	41.0
14000	40.0
14500	39.0
15000	38.0
15500	37.5
16000	37.5
16500	39.0
17000	40.0
17500	42.0
18000	42.5

ITL # 1778: low loss RF cable	
Frequency (GHz)	**Loss (dB)**
10.0	-2.3
20.0	-3.5
30.0	-4.5
40.0	-6.0

ITL #2199 Trilog Broadband Antenna + ITL #1911 RF cable	
Frequency (MHz)	**AF (dB/m)**
30.00	14.30
40.00	16.20
50.00	17.40
60.00	16.30
70.00	13.00
80.00	11.10
90.00	13.40
100.00	15.20
150.00	11.40
30.00	14.30
40.00	16.20
50.00	17.40
60.00	16.30
70.00	13.00
80.00	11.10
90.00	13.40
100.00	15.20
150.00	11.40
200.00	14.10
300.00	16.10
400.00	18.10
500.00	19.50
600.00	21.10
700.00	22.50
800.00	23.50
900.00	24.70
1000.00	25.50

ITL # 2215 BBHA 9120 L - Double Ridged Broadband Horn Antenna	
Frequency (MHz)	**AF (dB/m)**
2500	38.30
3000	37.90
3500	35.50

ITL # 2215 BBHA 9120 L - Double Ridged Broadband Horn Antenna	
Frequency (MHz)	**AF (dB/m)**
4000	37.70
4500	36.50
5000	37.40
5500	37.30
6000	36.50
6500	37.10
7000	37.20
7500	37.40
8000	37.20
8500	38.30
9000	37.90
9500	38.70
10000	39.10
10500	38.60
11000	38.90
11500	39.30
12000	39.10
12500	39.20
13000	39.80
13500	39.90
14000	40.70
14500	40.30
15000	40.70
15500	41.10
16000	41.00
16500	41.80
17000	41.50
17500	42.10
18000	42.50
18500	42.20
19000	42.30
19500	42.40
20000	42.70
20500	42.90
21000	43.20
21500	43.60
22000	43.80
22500	43.80
23000	44.20
23500	44.40
24000	45.20

ITL # 2215 BBHA 9120 L - Double Ridged Broadband Horn Antenna	
Frequency (MHz)	**AF (dB/m)**
24500	46.30
25000	47.40
25500	47.80
26000	46.70
26500	45.90
27000	45.70
27500	45.40
28000	45.10
28500	45.10
29000	45.00
29500	45.30
30000	45.20
30500	45.20
31000	45.00
31500	45.00
32000	45.00
32500	44.90
33000	45.20
33500	45.10
34000	44.90
34500	44.60
35000	44.60
35500	44.60
36000	44.60
36500	45.00
37000	45.20
37500	45.00
38000	44.80
38500	45.30
39000	45.30
39500	45.70
40000	45.90

End of Report