TEST REPORT

Test Report No. : UL-RPT-RP14002621-316A

Manufacturer	:	Cambium Networks Ltd
Model No.	:	60 GHz cnWave V3000
FCC ID	:	QWP-60V3000
Test Standard(s)	:	FCC Parts 15.209, 15.215 & 15.255

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2. The results in this report apply only to the sample(s) tested.
3. The sample tested is in compliance with the above standard(s).
4. The test results in this report are traceable to the national or international standards.
5. Version 2.0 supersedes all previous versions.

Date of Issue: 11 August 2022

Checked by:

Sarah Williams
RF Operations Leader, Radio Laboratory

Company Signatory:

Ben Mercer
Lead Project Engineer, Radio Laboratory

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1. Customer Information

Company Name:	Cambium Networks Ltd
Address:	Unit B2 Linhay Business Park Eastern Road Ashburton Devon TQ13 7UP United Kingdom

2. Summary of Testing

2.1. General Information

Specification Reference:	47CFR15.255
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Radio Frequency Devices) – Section 15.255
Specification Reference:	47CFR15.209 and 47CFR15.215
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Sections 15.209 & 15.215
Site Registration:	685609
Lab. Designation No.:	UK2011
Location of Testing:	Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	18 March 2022 to 17 June 2022

2.2. Summary of Test Results

FCC Reference (47CFR)	Measurement	Result
Part 15.255(c)(1)(ii)	Transmitter EIRP	✓
Part 15.255(e)	Transmitter Peak Output Power	✓
Part 15.255(e)(1)	Transmitter 6 dB Bandwidth	✓
Part 15.215(c)	Transmitter 20 dB Bandwidth	✓
Part 15.255(d) / 15.209	Transmitter Spurious Emissions	✓

Key to Results

✓ = Complied ✗ = Did not comply

2.3. Methods and Procedures

Reference:	ANSI C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

2.4. Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

3. Equipment Under Test (EUT)

3.1. Identification of Equipment Under Test (EUT)

Brand Name:	Cambium Networks
Model Name or Number:	60 GHz cnWave V3000
Test Sample Serial Number:	V5XF026Q7XSF
Hardware Version:	P9
Software Version:	Image: 1.2.1 B25, DM Tools: 3.9.0.3
Firmware Version:	10.11.0.89
FCC ID:	QWP-60V3000

3.2. Description of EUT

The equipment under test was a point-to-point / point-to-multipoint high gain client node operating in the 57-71 GHz band.

3.3. Modifications Incorporated in the EUT

The EUT was returned to the customer on 26/05/22 due to fluctuating emission levels. This was traced to the baseband RF cable which was replaced and the EUT returned to UL on 15/06/22. No other modifications were applied to the EUT during testing.

3.4. Additional Information Related to Testing

Category of Equipment:	Transceiver		
Channel Spacing:	4.32 GHz		
Modulation Type:	BPSK, QPSK & 16QAM		
Antenna Type:	Integrated Patch & Parabolic Reflector		
Antenna Gain:	22.5 dBi (patch) 22.0 dB (reflector) Combined: 44.5 dBi		
Transmit Frequency Range:	57 GHz to 66 GHz		
Transmit Channels Tested:	**Channel ID**	**Channel No.**	**Channel Frequency (GHz)**
	Bottom	9	59.400
	Middle	10	61.560
	Top	11	63.720
Power Supply Requirement:	Nominal	56 VDC via 120 VAC PoE	

3.5 EUT Settings

Channel	Sector	TPC	Notch
9	32	4	-
10	32	4	-
11	32	4	-

3.6. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	PoE
Brand Name:	Cambium Networks
Model Name or Number:	N000900L017A
Serial Number:	1745005333

Description:	Test Laptop
Brand Name:	HP EliteBook
Model Name or Number:	NH121UC#ABU
Serial Number:	2CE00223BK

Description:	Ethernet Cables. Quantity 3. Length 1 m / 3 m / 10 m
Brand Name:	RS Pro
Model Name or Number:	Not marked or stated
Serial Number:	Not marked or stated

4. Operation and Monitoring of the EUT during Testing

4.1. Operating Modes

The EUT was tested in the following operating mode(s):

- Transmitting with BPSK MCS5 modulation, which was found to be the worst-case mode after preliminary investigation.
- Operating on bottom, middle and top channels with a 4.32 GHz channel bandwidth.
- Transmitting at maximum output power with beamforming locked to sector 32 (straight ahead), which was found to be the direction of highest EIRP during preliminary investigation.

4.2. Configuration and Peripherals

The EUT was tested in the following configuration(s):

- A laptop PC with Qualcomm DMTools and QRCT software was used to configure the EUT during the testing. Telnet commands were used to set the channel and modulation. The laptop was connected to the EUT via Ethernet.
- The EUT was powered by a PoE supply connected to 120 VAC mains.
- Due to the large dimensions of the 22 dB reflector, the far field measurement distance is in excess of 100 m. For in-band tests, the reflector was removed to expose the smaller 22.5 dBi patch, allowing measurements to be made in the far field at 3 m. The 22 dB reflector gain was added to the measured results. An enquiry was made to the FCC OET and this method was deemed acceptable.
- Transmitter radiated spurious emissions tests were performed with the 22 dB reflector fitted. All measurements were performed in the far field of the measurement antenna.

5. Measurements, Examinations and Derived Results

5.1. General Comments

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to *Section 6: Measurement Uncertainties* for details.

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

5.2. Test Results

5.2.1. Transmitter EIRP

Test Summary:

Test Engineer:	Ben Mercer	**Test Date:**	29 April 2022
Test Sample Serial Number:	V5XF026Q7XSF		

FCC Reference:	Part 15.255(c)(1)(ii)
Test Method Used:	ANSI C63.10 Section 9.11

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	43

Note(s):

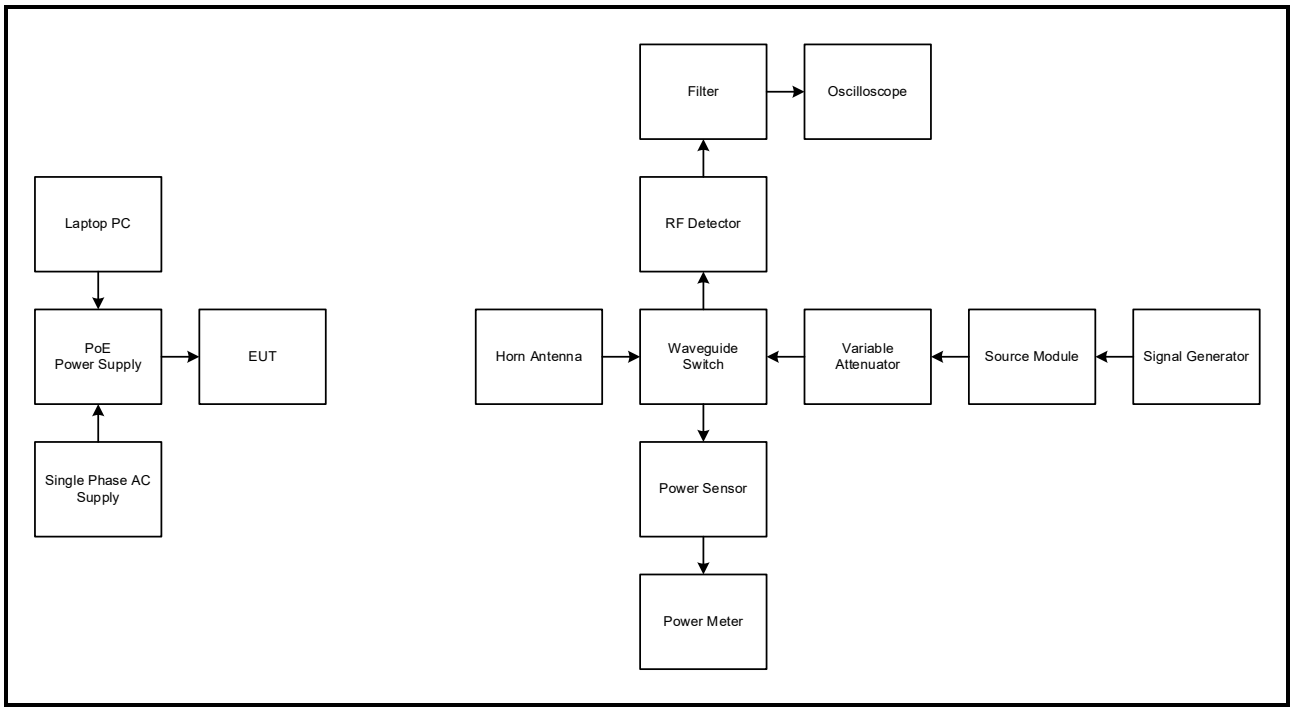
1. The measurement antenna was connected to an RF detector via a 4-way waveguide switch. A CW signal generator and wideband thermocouple power sensor were connected to the remaining two ports.
2. The RF detector was connected to the 50 Ω input of a digital storage oscilloscope via a 10 MHz low pass filter.
3. The EUT peak and average voltages were measured on the oscilloscope. The waveguide switch was then rotated to connect the signal generator to the RF detector, and the signal generator output was adjusted to match the previously measured voltages. The waveguide switch was then rotated to connect the signal generator output to the thermocouple power sensor, and the signal generator output power was measured.
4. The substituted levels recorded below include the calibrated path loss of the waveguide switch.
5. In accordance with Part 15.255(c)(1)(ii), the peak and average EIRP limits shall be reduced by 2 dB for every dB that the antenna gain is less than 51 dBi. The combined gain of the patch antenna and reflector is 44.5 dBi. The limit reduction was calculated as follows:

$$2 \times (51\ \text{dBi} - 44.5\ \text{dBi}) = 13\ \text{dB}$$

Peak EIRP Limit: 85 dBm – 13 dB = 72 dBm
Average EIRP Limit: 82 dBm – 13 dB = 69 dBm

Transmitter EIRP (continued)

Test setup:



Transmitter EIRP (continued)

Results: Bottom Channel / Peak

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
59.400	3.5	35.0	22.0	57.0	72.0	15.0	Complied

Results: Bottom Channel / Average

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
59.400	2.3	33.9	22.0	55.9	69.0	13.1	Complied

Results: Middle Channel / Peak

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
61.560	4.6	36.2	22.0	58.2	72.0	13.8	Complied

Results: Middle Channel / Average

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
61.560	3.8	35.8	22.0	57.8	69.0	11.2	Complied

Results: Top Channel / Peak

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
63.720	3.4	35.4	22.0	57.4	72.0	14.6	Complied

Results: Top Channel / Average

Frequency (GHz)	Level (V)	Substituted EIRP Level (dBm)	Reflector Gain (dB)	Corrected EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Result
63.720	2.7	34.8	22.0	56.8	69.0	12.2	Complied

Transmitter EIRP (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2041	Thermohygrometer	Testo	608-H1	45119912	09 Dec 2022	12
M2070	Oscilloscope	Keysight	DSOX2024A	MY59125508	22 Feb 2024	24
A3233	Waveguide RF Detector	Sage Millimeter	SFD-503753-15SF-P1	18199-01	Calibrated before use	-
A3235	Waveguide Switch	Flann	25333-2	215753	Calibrated before use	-
M281	Power Meter	Hewlett Packard	E4418A	GB37170210-01	19 May 2022	12
M291	Waveguide Power Sensor	Hewlett Packard	V8486A	US39010039	30 Nov 2022	24
M1252	Signal Generator	Hewlett Packard	83640A	3119A00489	04 Feb 2024	24
G094	Source Module	Hewlett Packard	83557A	2948A00475	Calibrated before use	-
A2964	Horn Antenna	Link Microtek	AM15HA-ULV1	14930	04 Feb 2023	12
A3251	Video Amplifier	Femto	HVA-200M-40B	05-01-354	Calibrated before use	-
A3252	Low Pass Filter	Mini-Circuits	BLP-10.7+	YUU54901833	Calibrated before use	-

5.2.2. Transmitter Peak Conducted Output Power

Test Summary:

Test Engineer:	Ben Mercer	**Test Date:**	29 April 2022
Test Sample Serial Number:	V5XF026Q7XSF		

FCC Reference:	Part 15.255(e)
Test Method Used:	ANSI C63.10 Section 9.11

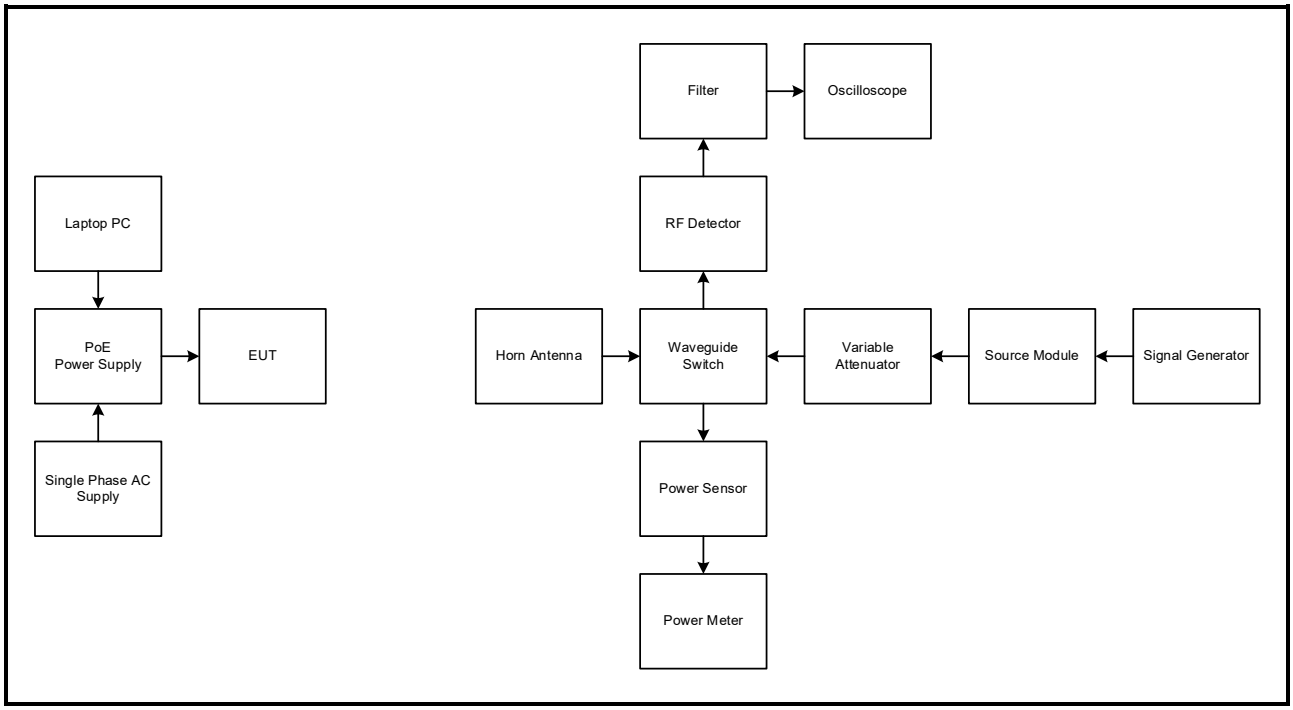
Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	43

Note(s):

1. The measurement antenna was connected to an RF detector via a 4-way waveguide switch. A CW signal generator and wideband thermocouple power sensor were connected to the remaining two ports.
2. The RF detector was connected to the 50 Ω input of a digital storage oscilloscope via a 10 MHz low pass filter.
3. The EUT peak and average voltages were measured on the oscilloscope. The waveguide switch was then rotated to connect the signal generator to the RF detector, and the signal generator output was adjusted to match the previously measured voltages. The waveguide switch was then rotated to connect the signal generator output to the thermocouple power sensor, and the signal generator output power was measured.
4. The stated antenna gain was subtracted from the measured EIRP to obtain the conducted power.
5. The substituted levels recorded below include the calibrated path loss of the waveguide switch.

Test setup:



Transmitter Peak Conducted Output Power (continued)

Results: Bottom Channel

EIRP Level (dBm)	Antenna Gain (dBi)	Conducted Level (dBm)	Conducted Level (mW)	Limit (mW)	Margin (mW)	Result
57.0	44.5	12.5	17.8	500	482.2	Complied

Results: Middle Channel

EIRP Level (dBm)	Antenna Gain (dBi)	Conducted Level (dBm)	Conducted Level (mW)	Limit (mW)	Margin (mW)	Result
58.2	44.5	13.7	23.4	500	476.6	Complied

Results: Top Channel

EIRP Level (dBm)	Antenna Gain (dBi)	Conducted Level (dBm)	Conducted Level (mW)	Limit (mW)	Margin (mW)	Result
57.4	44.5	12.9	19.5	500	480.5	Complied

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2041	Thermohygrometer	Testo	608-H1	45119912	09 Dec 2022	12
M2070	Oscilloscope	Keysight	DSOX2024A	MY59125508	22 Feb 2024	24
A3233	Waveguide RF Detector	Sage Millimeter	SFD-503753-15SF-P1	18199-01	Calibrated before use	-
A3235	Waveguide Switch	Flann	25333-2	215753	Calibrated before use	-
M281	Power Meter	Hewlett Packard	E4418A	GB37170210-01	19 May 2022	12
M291	Waveguide Power Sensor	Hewlett Packard	V8486A	US39010039	30 Nov 2022	24
M1252	Signal Generator	Hewlett Packard	83640A	3119A00489	04 Feb 2024	24
G094	Source Module	Hewlett Packard	83557A	2948A00475	Calibrated before use	-
A2964	Horn Antenna	Link Microtek	AM15HA-ULV1	14930	04 Feb 2023	12
A3251	Video Amplifier	Femto	HVA-200M-40B	05-01-354	Calibrated before use	-
A3252	Low Pass Filter	Mini-Circuits	BLP-10.7+	YUU54901833	Calibrated before use	-

5.2.3. Transmitter 6 dB Bandwidth

Test Summary:

Test Engineer:	Nick Raptopoulos	**Test Date:**	18 May 2022
Test Sample Serial Number:	V5XF026Q7XSF		

FCC Reference:	Part 15.255(e)(1)
Test Method Used:	ANSI C63.10 Section 9.3

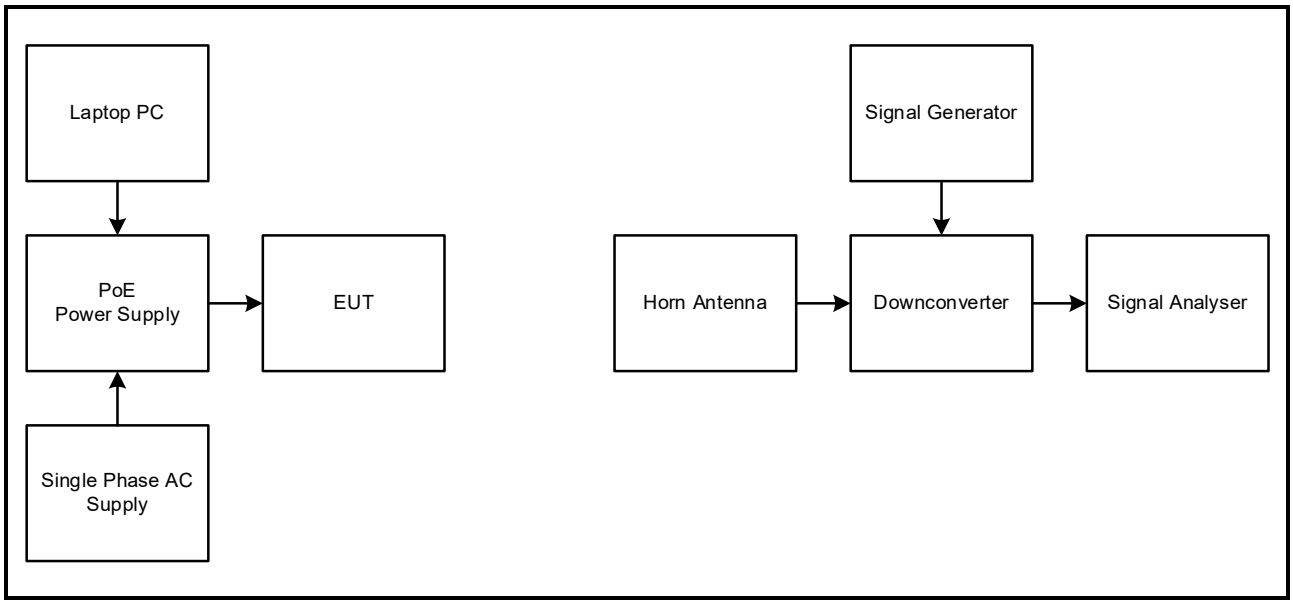
Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	45

Note(s):

1. The analyser span was set to between two and three times the emission bandwidth. The RBW was set to 100 kHz, and the VBW was set to three times the RBW. The marker delta function was used to measure 6 dB down from the peak on both sides of the emission. The resulting frequency delta between the two markers was recorded as the emission bandwidth.

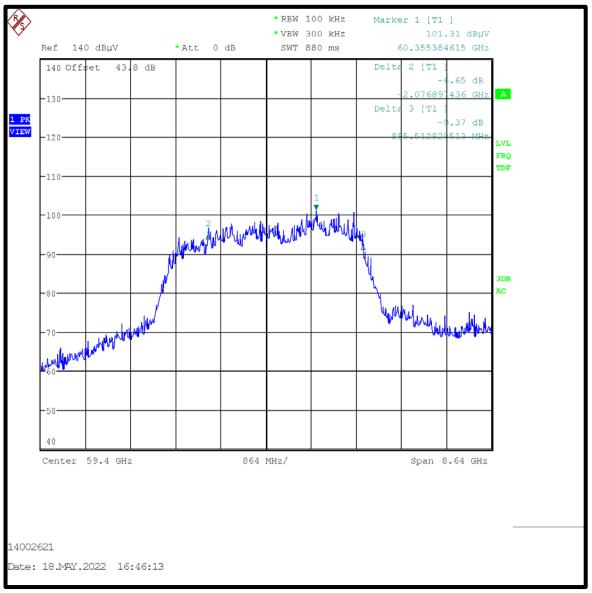
Test setup:



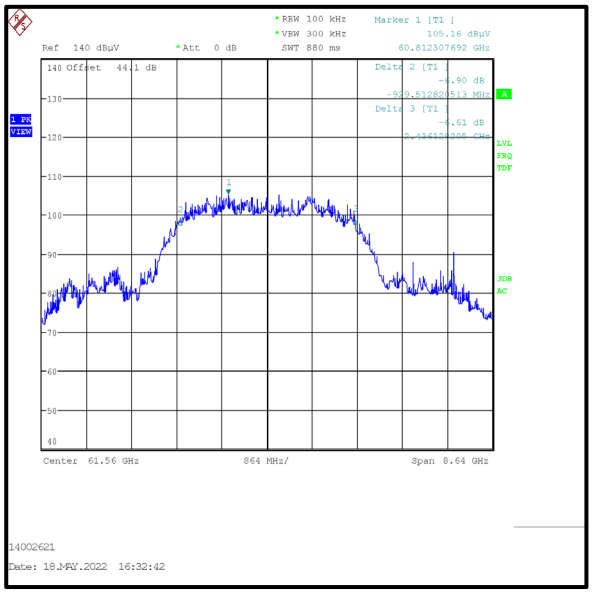
Transmitter 6 dB Bandwidth (continued)

Results:

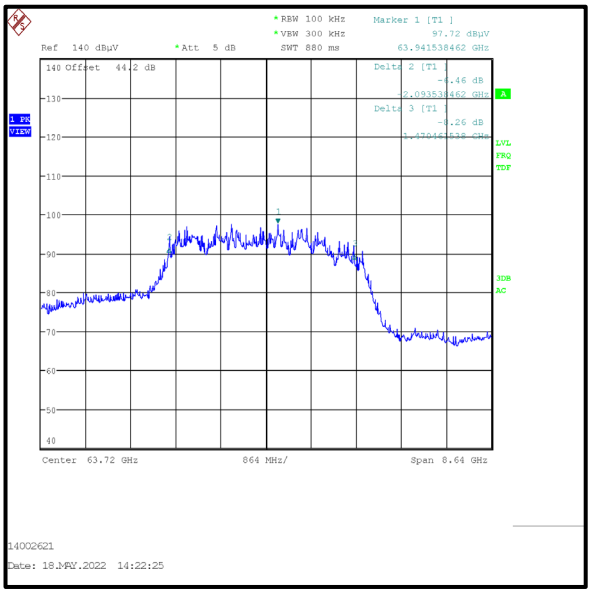
Channel	RBW (kHz)	VBW (kHz)	Emission Bandwidth (MHz)
Bottom	100	300	2972.410
Middle	100	300	3365.641
Top	100	300	3564.000



Bottom Channel



Middle Channel



Top Channel

Transmitter 6 dB Bandwidth (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
M2069	Downconverter	Virginia Diodes	WR15SAX	SAX 394	09 Jul 2023	24
M1252	Signal Generator	Hewlett Packard	83640A	3119A00489	04 Feb 2024	24
A2964	Horn Antenna	Link Microtek	AM15HA-ULV1	14930	04 Feb 2023	12

5.2.4. Transmitter 20 dB Bandwidth

Test Summary:

Test Engineer:	Nick Raptopoulos	**Test Date:**	18 May 2022
Test Sample Serial Number:	V5XF026Q7XSF		

FCC Reference:	Part 15.215(c)
Test Method Used:	ANSI C63.10 Section 6.9.2

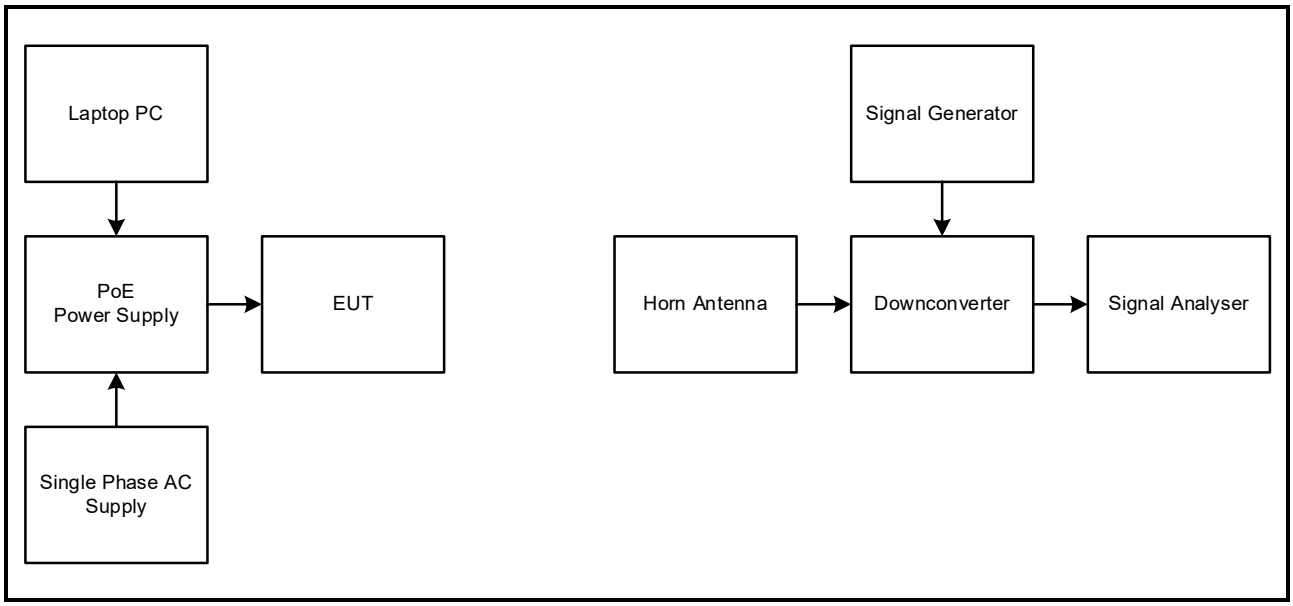
Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	45

Note(s):

1. The signal analyser resolution bandwidth was set to 1 MHz and the video bandwidth to 3 MHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The span was set to 5 GHz. The marker delta function was used to measure 20 dB down from the peak on both sides of the emission. The resulting frequency delta between the two markers was recorded as the 20 dB bandwidth.
2. The emission identified by marker 4 on the channel 11 plot is breakthrough from the external LO used to drive downconverter and has been excluded when calculating the 20 dB bandwidth.

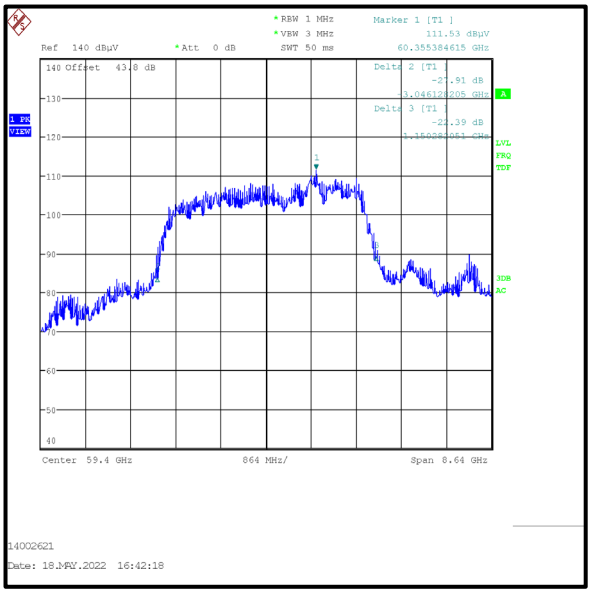
Test setup:



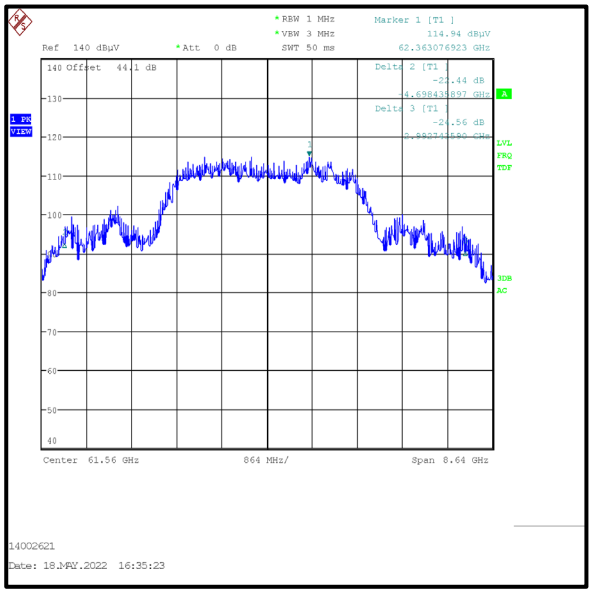
Transmitter 20 dB Bandwidth (continued)

Results:

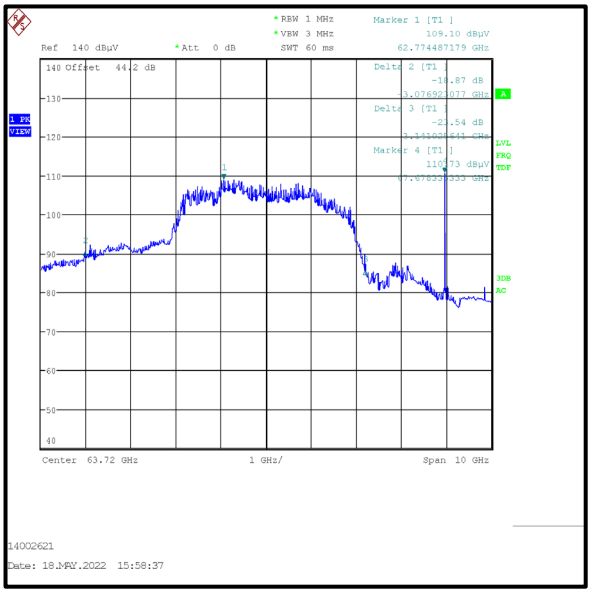
Channel	20 dB Bandwidth (MHz)
Bottom	4196.410
Middle	7691.180
Top	6217.949



Bottom Channel



Middle Channel



Top Channel

Transmitter 20 dB Bandwidth (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
M2069	Downconverter	Virginia Diodes	WR15SAX	SAX 394	09 Jul 2023	24
M1252	Signal Generator	Hewlett Packard	83640A	3119A00489	04 Feb 2024	24
A2964	Horn Antenna	Link Microtek	AM15HA-ULV1	14930	04 Feb 2023	12

5.2.5. Transmitter Radiated Spurious Emissions

Test Summary:

Test Engineers:	Patrick Jones & Nick Raptopoulos	**Test Dates:**	18 March 2022 & 17 June 2022
Test Sample Serial Numbers:	V5XF026Q7XSF		

FCC Reference:	Part 15.255(d) / 15.209
Test Method Used:	ANSI C63.10 Sections 6.3, 6.6, 9.8, 9.9, 9.12 & 9.13
Frequency Range:	1 to 8 GHz, 110 to 140 GHz

Environmental Conditions:

Temperature (°C):	24 to 25
Relative Humidity (%):	35 to 44

Note(s):

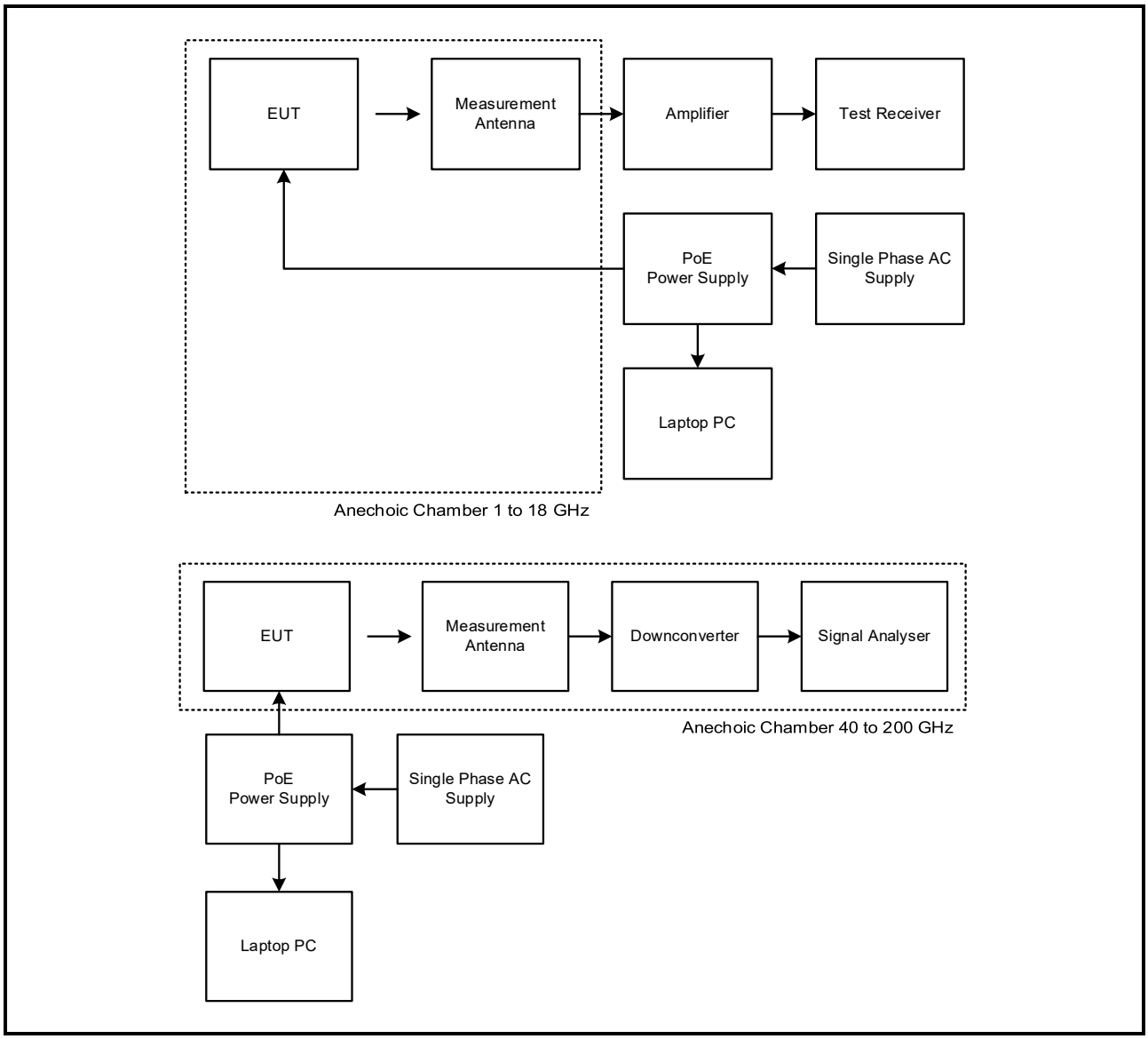
1. Full range spurious emissions testing was performed using a 2.16 GHz channel bandwidth under test report UL-RPT-RP13194254-1916A V2.0. Testing in this report has been reduced to known emission frequencies from the 2.16 GHz testing. The emission previously seen at approximately 15 GHz was not present.
2. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
3. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
4. Part 15.255(d)(3) defines a power density limit of 90 pW/cm^2 at 3 metres for spurious emissions between 40 GHz and 200 GHz. This was converted to a field strength limit of 85.31 dBuV/m using the equations provided in section 9.6 of ANSI C63.10.
5. Measurements distances above 40 GHz were determined using the procedure defined in section 9.8 of ANSI C63.10. Measurements were made at the following distances:

   110 GHz to 170 GHz – 1 metre

6. Where measurements were performed at a distance other than that specified by the limit, a correction factor was calculated using the equation provided in section 9.4 of ANSI C63.10. This correction factor was included in the transducer factor entered on the signal analyser.

Transmitter Radiated Spurious Emissions (continued)

Test setup:



Transmitter Radiated Spurious Emissions (continued)

Results: Bottom Channel / Peak

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
7425.048	Horizontal	53.9	74.0	20.1	Complied

Results: Bottom Channel / Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
7424.872	Horizontal	46.9	54.0	7.1	Complied
117039.240	Horizontal	68.4	85.3	16.9	Complied
120559.120	Horizontal	73.0	85.3	12.3	Complied

Results: Middle Channel / Peak

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
7694.872	Horizontal	54.8	74.0	19.2	Complied

Results: Middle Channel / Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
7694.904	Horizontal	48.8	54.0	5.2	Complied
121359.110	Horizontal	74.3	85.3	11.0	Complied
124879.130	Horizontal	70.6	85.3	14.7	Complied

Results: Top Channel / Peak

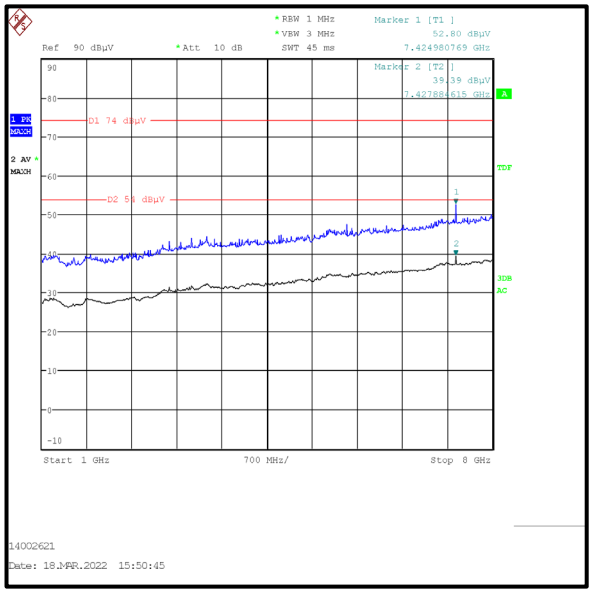
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
7964.856	Horizontal	58.3	74.0	15.7	Complied

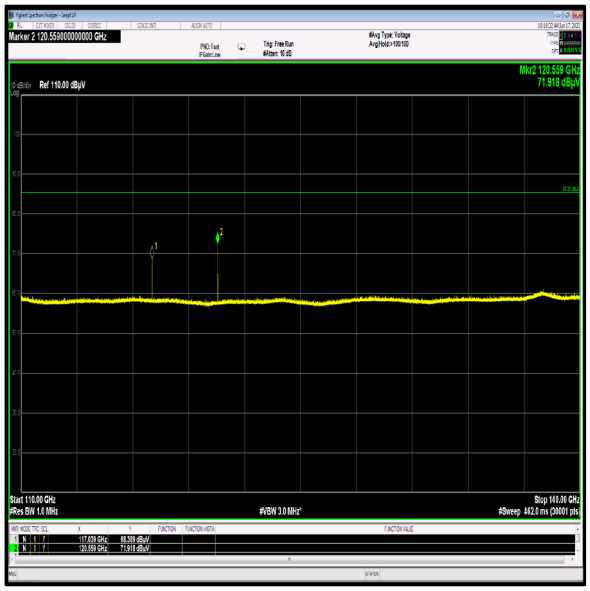
Results: Top Channel / Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
7964.936	Horizontal	53.9	54.0	0.1	Complied
125679.150	Horizontal	66.2	85.3	19.1	Complied
129199.040	Horizontal	65.8	85.3	19.5	Complied

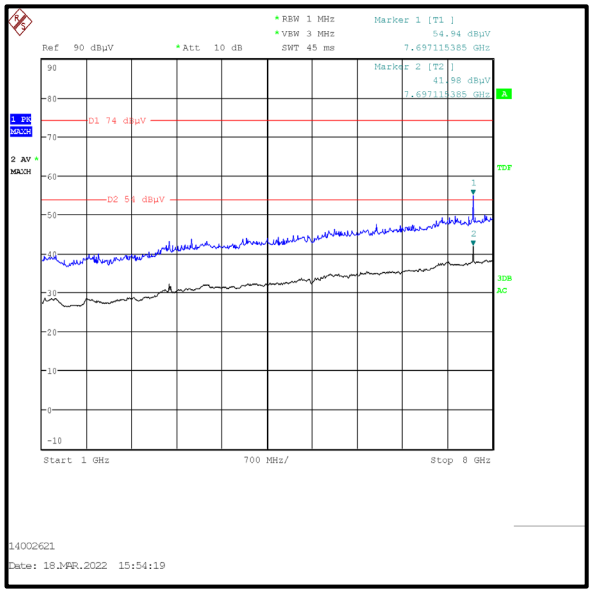
Transmitter Radiated Spurious Emissions (continued)

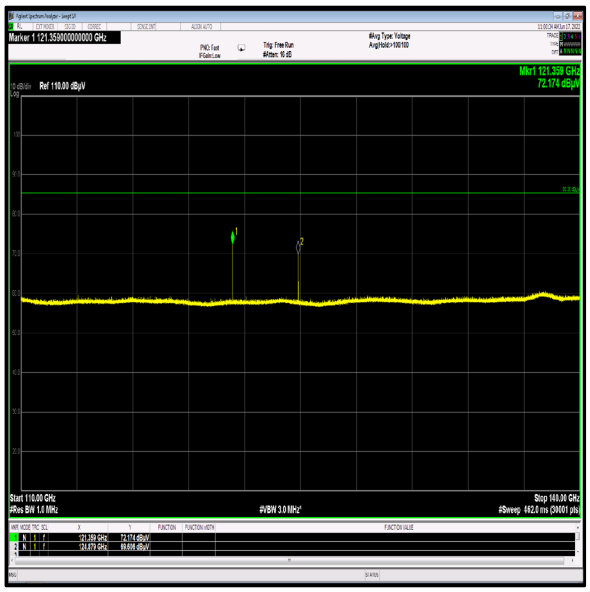
Bottom Channel





Middle Channel

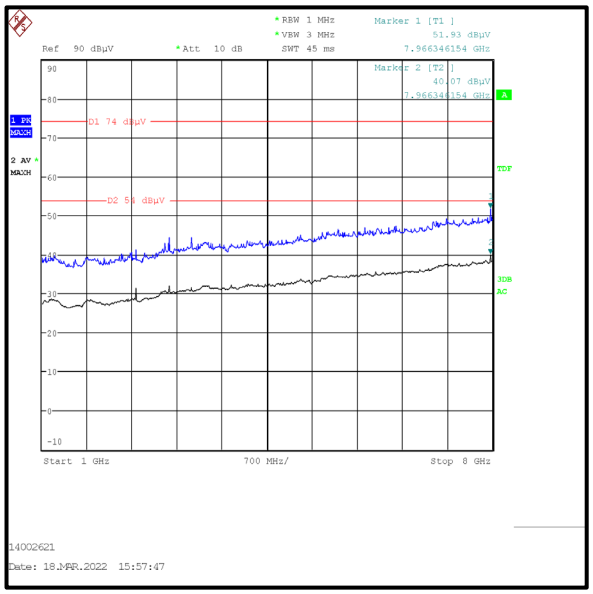


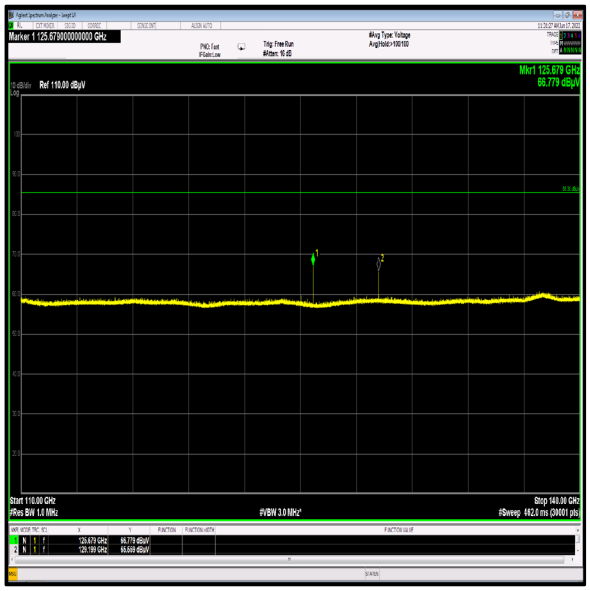


Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Spurious Emissions (continued)

Top Channel





Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Spurious Emissions (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2022	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	26 Oct 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
A2863	Pre-Amplifier	Keysight	8449B	3008A02100	21 Oct 2022	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	00653	26 Oct 2022	12
M1832	Signal Analyser	Keysight	N9010A	MY53470303	18 May 2024	24
M2066	Downconverter	Virginia Diodes	WR6.5SAX	SAX 392	31 May 2024	24
A2968	Horn Antenna	Link Microtek	AM7HA-ULV1	14934	04 Feb 2023	12

6 Measurement Uncertainty & Decision Rule

Overview

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

Decision Rule

The decision rule applied is based upon the accuracy method criteria. The measurement uncertainty is met and the result is considered in conformance with the requirement criteria if the observed value is within the prescribed limit.

Measurement Uncertainty

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Transmitter EIRP	57 to 71 GHz	95%	±2.70 dB
Transmitter Peak Output Power	57 to 71 GHz	95%	±2.70 dB
Transmitter 6 dB Bandwidth	57 to 71 GHz	95%	±4.59 %
Transmitter 20 dB Bandwidth	57 to 71 GHz	95%	±4.59 %
Transmitter Radiated Emissions	1 GHz to 40 GHz	95%	±3.16 dB
Transmitter Radiated Emissions	40 GHz to 200 GHz	95%	±5.12 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

7. Report Revision History

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version
2.0	6	3.1	Firmware version corrected

--- END OF REPORT ---