



Solutions

TEST REPORT

Test Report No. : UL-RPT-RP-15968599-116

Applicant: PHILIPS CONSUMER LIFESTYLE B.V.

Model Number: BRC3XY

FCC ID: 2AICSIPL

Test Standard(s): Antenna Gain Measurement
(Derived from FCC Part 15.247(b)(3))

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2. The results in this report apply only to the sample tested.
3. Test Report Version 1.1

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Date: 30 September 2025

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Date: 30 September 2025



Deutsche
Akkreditierungsstelle
D-PL-19381-02-00

This laboratory is accredited by DAkkS.
The tests reported herein have been performed in
accordance with its' terms of accreditation.

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1. Customer Information

Company Name:	PHILIPS CONSUMER LIFESTYLE B.V.
Address:	TUSSENDIEPEN 4, 9206 AD DRACHTEN - THE NETHERLANDS

2. Summary of Testing

2.1. General Information

Applied Standards

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) – Sections 15.247

Location

Location of Testing:	UL International Germany GmbH Hedelfinger Str. 61 70327 Stuttgart Germany
Test Firm Registration:	399704

Date information

Order Date:	27 March 2025
EUT arrived:	30 June 2025
Test Dates:	27 August 2025
EUT returned:	-/-

2.2. Summary of Test Results

Clause	Measurement
Part 15.247(b)(3) / ANSI C63.10 Annex G	Antenna Gain Measurement

Results: BTLE 1 Mbps

Frequency (MHz)	Conducted Output Power (dBm)	Max. EIRP (dBm)	Antenna Gain (dBi)
2402	-0.64	0.63	1.27
2440	-1.08	0.63	1.71
2480	-1.45	-0.34	1.11

Notes:

1. Antenna Gain in dBi was calculated in accordance with ANSI C63.10 G.3:

$$\text{ERP/EIRP} = P_T + G_T - L_C$$

Rearranged:

$$G_T = \text{ERP/EIRP} - P_T + L_C$$

L_C is ignored since there is no cable connected between transmitter and antenna.

2. The calculated Antenna Gain is in dBi, since the correction factors used in the measurement of Radiated output power were also calculated by considering the Antenna dBi values.
3. Radiated measurement was only performed for 1 Mbps data rate as it was found out to be the worst-case in terms of output power.

2.3. Methods and Procedures

Reference:	ANSI C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 558074 D01 DTS Meas Guidance v05r02 April 2, 2019
Title:	Guidance for compliance measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under Section 15.247 of the FCC rules

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:	PHILIPS
Model Name or Number / PMN:	BRC3XY
Serial Number:	Not stated
Hardware Version:	N/A
Software Version:	N/A
Firmware Version:	V6.1.0
FCC ID:	2AICSIPL

3.2. Description of EUT

The Equipment is a Hand-held appliance with power supply for pulsed-light depilation, supporting Bluetooth Low Energy operations in 2400-2483.5MHz ISM band.

3.3. Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.4. Additional Information Related to Testing

Technology Tested:	Bluetooth Low Energy (Digital Transmission System)		
Type of Unit:	Transceiver		
Power Supply Requirement(s):	19.5V DC via AC/DC Adaptor		
Channel Spacing:	2 MHz		
Modulation:	GFSK		
Data Rate: LE	1 Mbps		
Maximum Conducted Output Power:	-0.64 dBm		
Transmit Frequency Range:	2402 MHz to 2480 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	37	2402
	Middle	17	2440
	Top	39	2480

Notes:

1. Measurements were only performed for 1 Mbps data rate as it was found out to be the worst-case in terms of output power.

3.5. Description of Available Antenna

The radio utilizes an Integrated, inverted F antenna with maximum measured gain stated below. The measured conducted peak output power was subtracted from the measured radiated peak EIRP to obtain the antenna gain in dBi.

Antenna Details	Antenna Type	Frequency (MHz)	Antenna Gain (dBi)
Integral Antenna	PCB Antenna	2402	1.27
		2440	1.71
		2480	1.11

3.6. Support Equipment

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

Description:	Laptop
Brand Name:	LENOVO
Model Name or Number:	20NYS1GL1U
Serial Number:	PC1G3R7Y

Description:	AC/DC Adaptor
Brand Name:	Philips
Model Name or Number:	AD2069020020-2HF
Serial Number:	-/-

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 0 dBm power level in *Bluetooth* LE 1M mode with modulation, maximum possible data length available and Pseudorandom Bit Sequence 9.
- Transmitting with 0 dBm power level in *Bluetooth* LE 2M mode with modulation, maximum possible data length available and Pseudorandom Bit Sequence 9.
- Transmitting with 0 dBm power level in *Bluetooth* LE S2 500 kbps mode with modulation, maximum possible data length available and Pseudorandom Bit Sequence 9.
- Transmitting with 0 dBm power level in *Bluetooth* LE S8 125 kbps mode with modulation, maximum possible data length available and Pseudorandom Bit Sequence 9.

4.2. Configuration and Peripherals

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

- Controlled in test mode using a software application on the laptop PC. The application nRF Connect Desktop was used to enable a continuous transmission and to select the test channels as required. The laptop PC was connected to the EUT via a USB to serial adaptor.
- The EUT was powered via an AC/DC power supply.
- Transmitter radiated spurious emissions tests were performed with the EUT transmitting in LE1M mode as this was found to transmit the highest power.
- Transmitter radiated spurious emissions tests were performed with the AC/DC Adapter connected to the EUT.
- Before starting final radiated measurements “worst case verification” was performed by Lab for the three axis of EUT (x, y, z) The EUT in z-axis (Vertically Laying with laser pointing towards z axis) was found out to be the worst-case scenario.
- Conducted measurements were performed with the help of the FSV30 spectrum analyzer from Rohde & Schwarz, no other software or tool was used.
- Radiated measurements were performed with the help of the ESW44 EMI Receiver from Rohde & Schwarz, no other software or tool was used.

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 Uncertainty* for details.

In accordance with DAkkS 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 Maximum (Peak) Output Power

Test Summary:

Test Engineer:	Abbas Al-Hussainy	Test Date:	08 July 2025
Test Sample Serial Number:	Not stated		

FCC Reference:	Part 15.247(b)(3)
ISED Canada Reference:	RSS-Gen 6.12 / RSS-247 5.4(d)
Test Method Used:	FCC KDB 558074 Section 8.3.1.1 referencing ANSI C63.10 Section 11.9.1.1 and Notes below

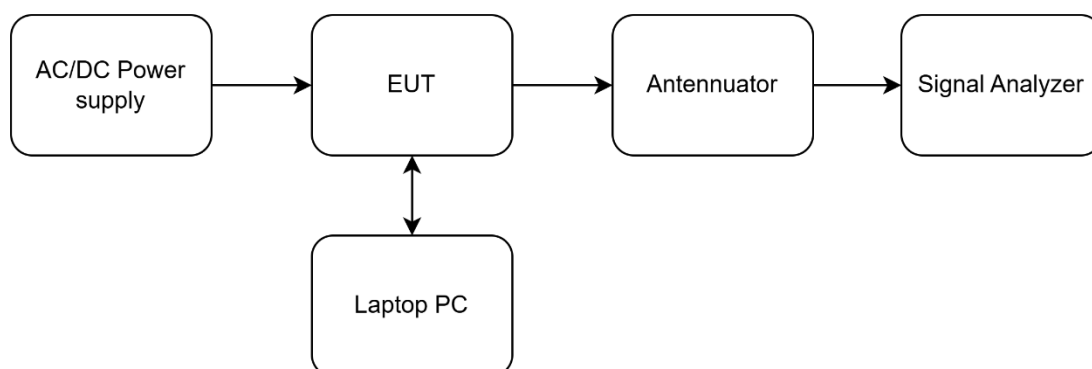
Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	30

Note(s):

1. Conducted power tests were performed using a signal analyser in accordance with ANSI C63.10 Section 11.9.1.1 with the RBW $\geq$ DTS bandwidth procedure.
2. The signal analyser resolution bandwidth was set to 3 MHz and video bandwidth of 10 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set $\geq 3 \times$ RBW. A marker was placed at the peak of the signal and the results recorded in the tables below.
3. The RF port on the EUT was connected to the spectrum analyser using a RF cable. The RF cable attenuation maximum 1.40 dB@2.4GHz was added as offset for the measurements.
4. The conducted power was added to the declared antenna gain to obtain the EIRP.

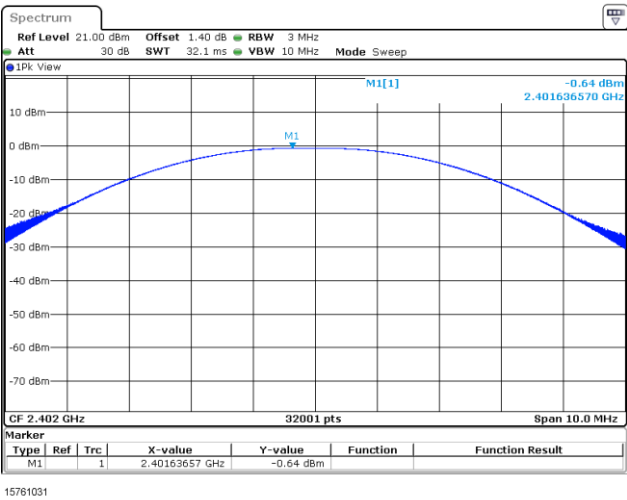
Test Setup:



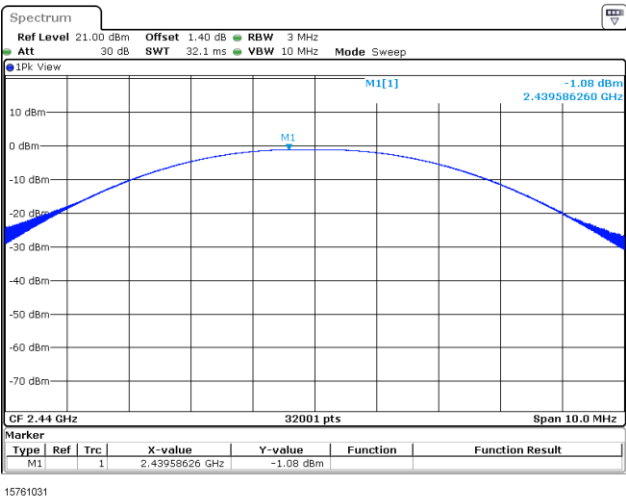
Transmitter Maximum Peak Output Power (continued)

Results: LE1M

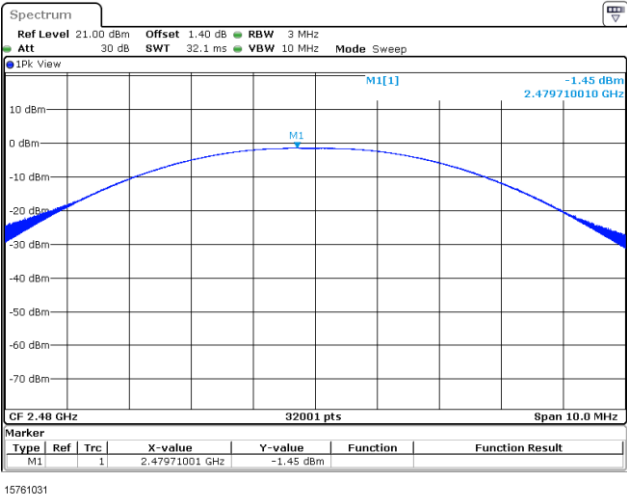
Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	-0.64	30.0	30.64	Complied
Middle	-1.08	30.0	31.08	Complied
Top	-1.45	30.0	31.45	Complied



Bottom Channel



Middle Channel



Top Channel

5.2.2. Transmitter Radiated Output Power**Test Summary:**

Test Engineer:	Omar EL Mohgrabi	Test Date:	27 August 2025
Test Sample Serial Number:	Not stated		
Test Site Identification	SR 1/2		

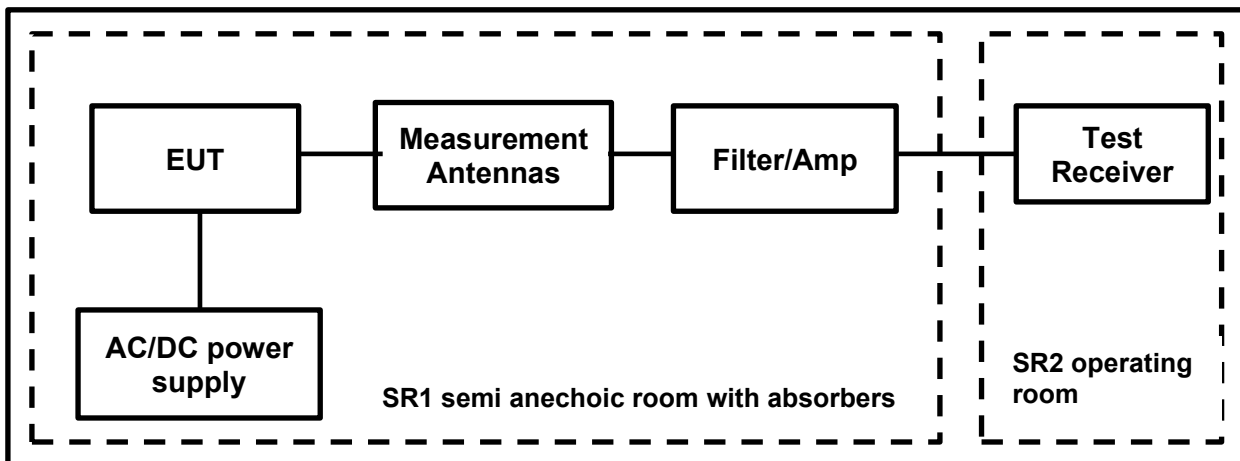
FCC Reference:	Part 15.247(b)(3)
Test Method Used:	ANSI C63.10 Annex G

Environmental Conditions:

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

Notes:

1. The spectrum analyser resolution bandwidth was set to 1 MHz and video bandwidth of 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 10 MHz. A marker was placed at the peak of the signal and the results recorded in the table below.
2. The correction factors (offset) used in the measurement of Radiated output power were calculated by considering the Antenna dBi values.
3. Radiated measurement was only performed for 1 Mbps data rate as it was found out to be the worst-case in terms of output power.

Test Setup:

Transmitter Radiated Output Power (continued)**Results:**

Frequency (MHz)	Conducted Output Power (dBm)	Max. EIRP (dBm)	Antenna Polarisation	Calculated Gain (dBi)
Bottom	-0.64	0.63	Vertical	1.27
Middle	-1.08	0.63	Vertical	1.71
Top	-1.45	-0.34	Vertical	1.11

Notes:

1. Antenna Gain in dBi was calculated in accordance with ANSI C63.10 G.3:

$$ERP/EIRP = P_T + G_T - L_c$$

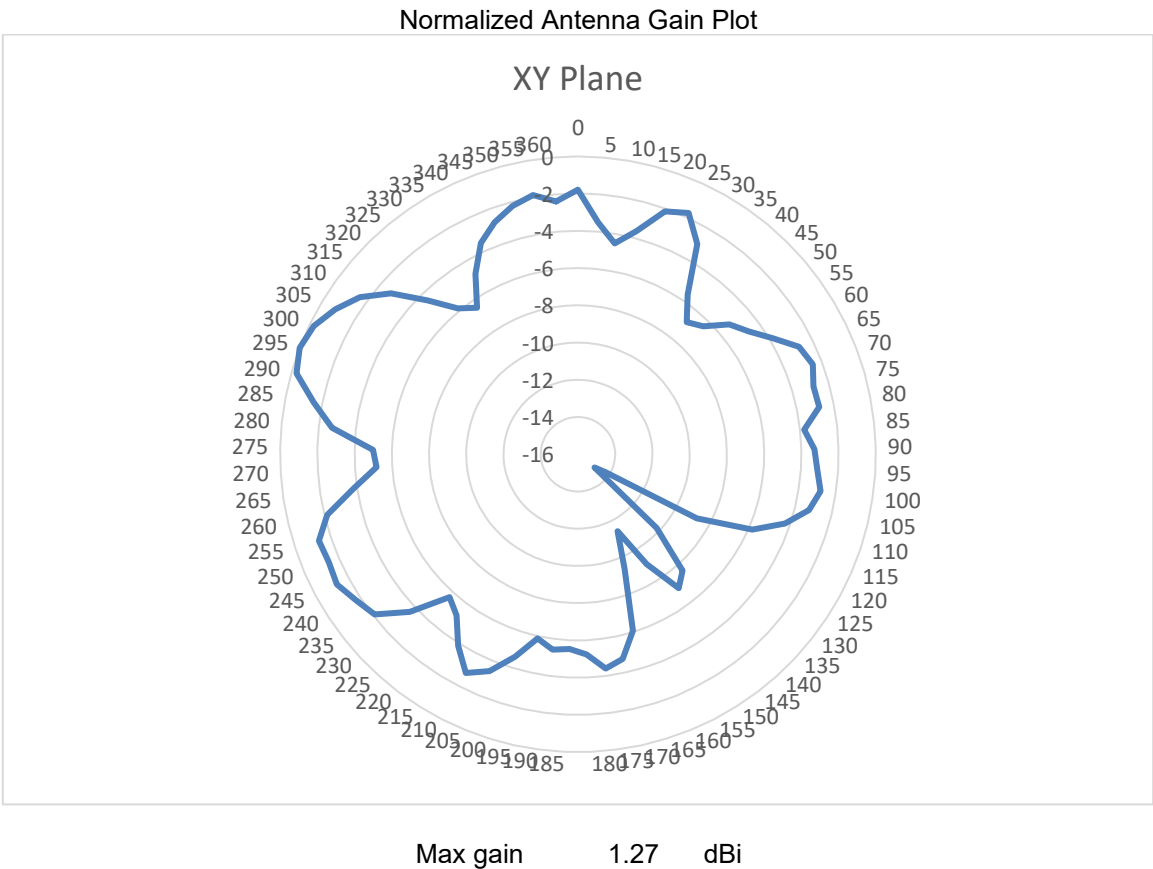
Rearranged:

$$G_T = ERP/EIRP - P_T + L_c$$

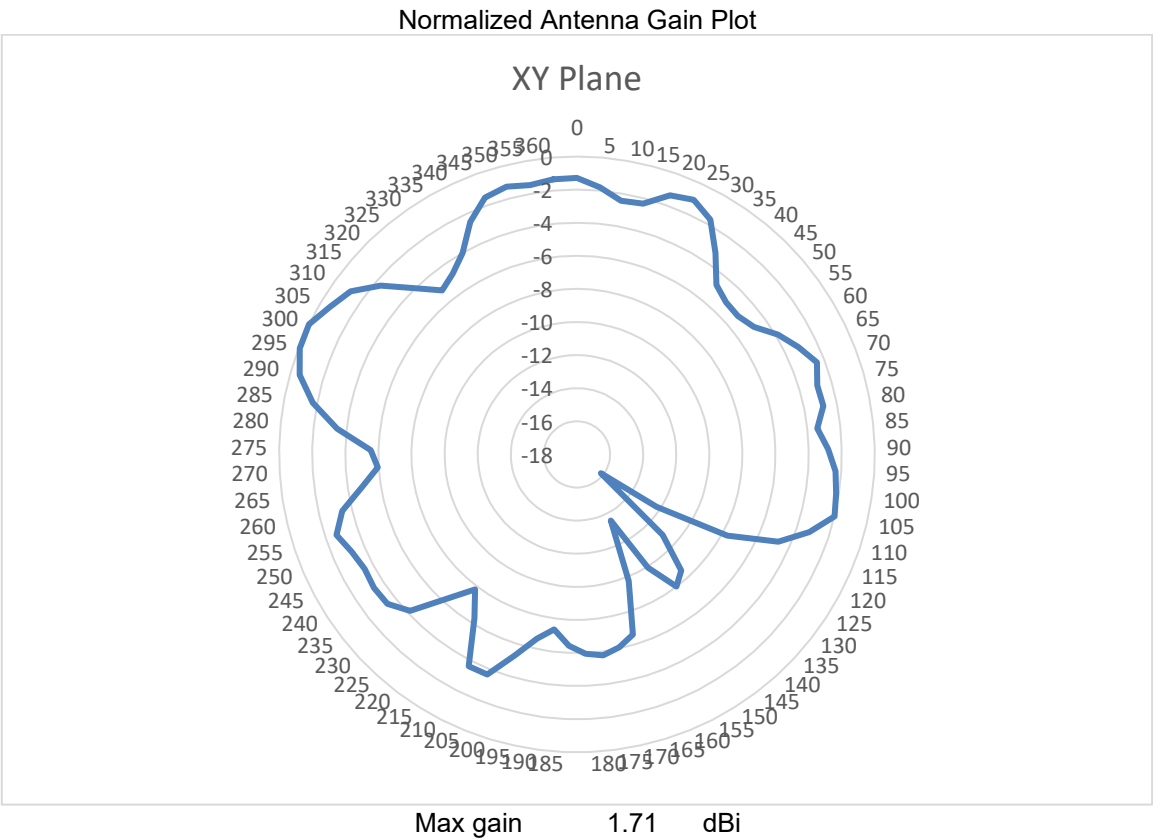
L_c is ignored since there is no cable connected between transmitter and antenna.

Plots :

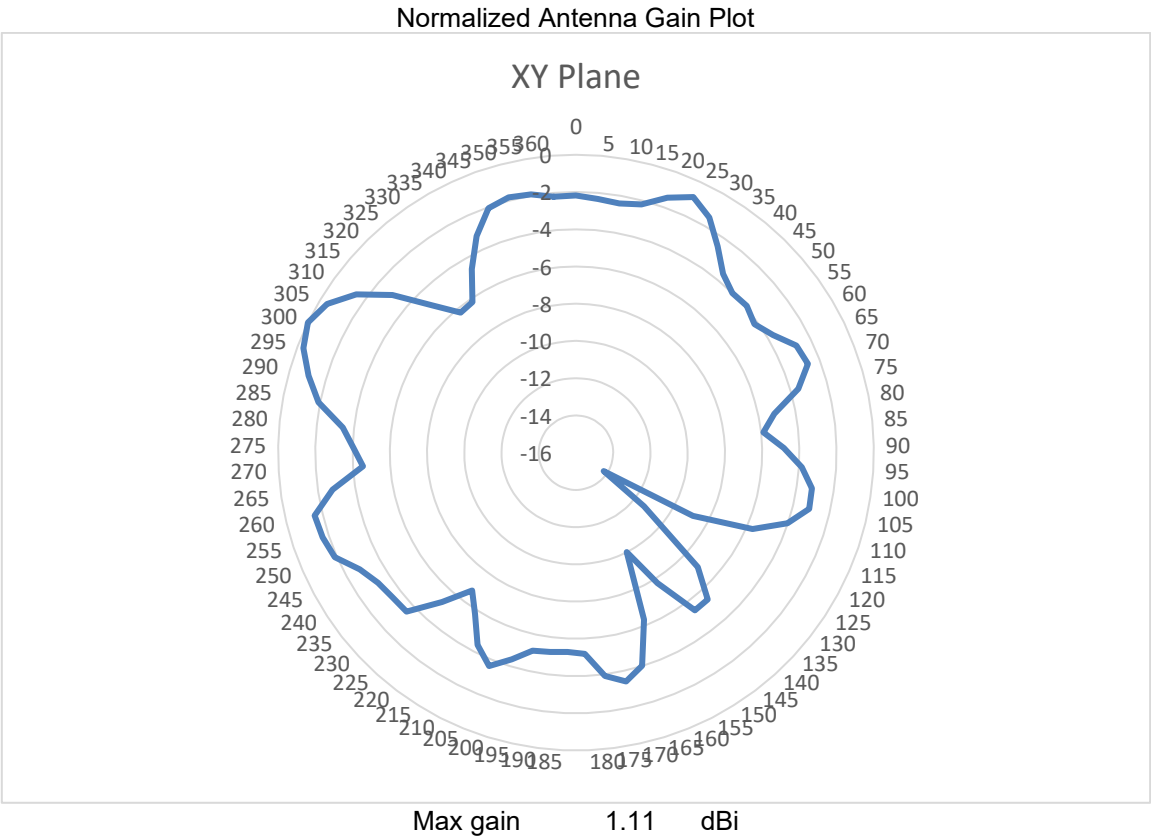
Bottom Channel



Middle Channel



Top Channel



6. Measurement Uncertainty

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

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

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	Confidence Level (%)	Calculated Uncertainty
Conducted Maximum Peak Output Power	95%	±0.59 dB
Radiated Spurious Emissions	95%	±3.10 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. Used equipment

Test site: SR 1/2

ID	Manufacturer	Type	Model	Serial	Calibration Date	Cal. Cycle (months)
1	Rohde & Schwarz	Antenna, Loop	HFH2-Z2	831247/012	18/07/2023	36
460	Deisel	Turntable	DT 4250 S	n/a	n/a	n/a
495	Schwarzbeck	Antenna, Trilog Broadband	VULB 9163	01691	30/11/2023	36
496	Rohde & Schwarz	Antenna, log. - periodical	HL050	100297	22/08/2022	42
588	Maturo	Controller	NCD	029/7180311	n/a	n/a
669	Rohde & Schwarz	EMI Test Receiver	ESW 44	103087	13/07/2023	36
607	Schwarzbeck	Antenna broadband horn antenna	BBHA 9170	9170-561	12/01/2024	36
608	Rohde & Schwarz	Switch Matrix	OSP 120	101227	lab verification	n/a
628	Maturo	Antenna mast	CAM 4.0-P	224/19590716	n/a	n/a
629	Maturo	Kippeinrichtung	KE 2.5-R-M	MAT002	n/a	n/a
-/-	Testo	Thermo-Hygrometer	608-H1	01	lab verification	n/a
328	SPS	AC/DC power distribution system	PAS 5000	A2464 00/2 0200	lab verification	n/a
1603665	Siemens Matsushita Components	semi-anechoic chamber SR1/ 2	-/-	B83117-A1421-T161	n/a	n/a
681	Maturo	Antenna mast, tilting	BAM4.5-P	402/0718.1	n/a	n/a

Test site: SR 9

ID	Manufacturer	Type	Model	Serial	Calibration Date	Cal. Cycle (months)
445	Huber & Suhner	RF Attenuator (10 dB)	6810.17.AC	--	lab verification	12
637	Rohde & Schwarz	Spectrum Analyzer	FSV40	101587	14/07/2023	39
-/-	Huber+Suhner	RF Cable -OSP120-DUT1	ST18/SMAM/S MAM/72	605505	lab verification	n/a
-/-	Testo	Thermo-Hygrometer	608-H1	07	lab verification	n/a
1603668	Siemens Matsushita Components	shielded room	--	B83117-B1422-T161	n/a	n/a

Test Measurement Software/Firmware Used:

no software or tool was used.

8. Report Revision History

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version
1.1	1	-	Typo in standards updated

--- END OF REPORT ---