



EMI – TEST REPORT

- FCC Part 15.510, RSS-220 -

Type / Model Name : DePLife

Product Description : Through-wall imaging system

Applicant : MaXentric Technologies LLC

Address : 7590 Fay Ave #301

92037 SAN DIEGO, U.S.A.

Manufacturer : MaXentric Technologies LLC

Address : 7590 Fay Ave #301

92037 SAN DIEGO, U.S.A.

Test Result according to the standards
listed in clause 1 test standards:

POSITIVE

Test Report No. : 80219970-01 Rev_1

15. April 2025

Date of issue



Deutsche
Akkreditierungsstelle
D-PL-12030-01-00

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

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ATTACHMENT A as separate supplements

The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

1 TEST STANDARDS

The tests were performed according to following standards:

FCC Rules and Regulations Part 15, Subpart C - Intentional Radiators (September 2024)

Part 15, Subpart C, Section 15.203	Antenna requirement
Part 15, Subpart C, Section 15.204	External radio frequency power amplifiers and antenna modifications
Part 15, Subpart C, Section 15.207	Conducted limits
Part 15, Subpart C, Section 15.209	Radiated emission limits, general requirements

FCC Rules and Regulations Part 15, Subpart F – Ultra Wideband Operation (September 2024)

Part 15, Subpart F, Section 15.510	Technical requirements for hand held UWB systems
Part 15, Subpart F, Section 15.521	Technical requirements applicable to all UWB devices

Industry Canada – Radio equipment standards

RSS-Gen, Issue 5 + A1 + A2, March 2019	General Requirements for Compliance of Radio Apparatus
RSS-220, Issue 1 + A1, July 2018	Devices Using Ultra-Wideband (UWB) Technology

ANSI C63.10: 2013	Testing Unlicensed Wireless Devices
ETSI TR 100 028 V1.3.1: 2001-03	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Uncertainties in the Measurement of Mobile Radio Equipment Characteristics—Part 1 and Part 2
KDB 393764 D01 v02r01 (April 25, 2022)	Ultra-Wideband (UWB) Devices – Frequently Asked Questions

2 EQUIPMENT UNDER TEST

2.1 Information provided by the Client

Please note, we do not take any responsibility for information provided by the client or his representative which may have an influence on the validity of the test results.

2.2 Sampling

The customer is responsible for the choice of sample. Sample configuration, start-up and operation is carried out by the customer or according to his/her instructions.

2.3 Photo documentation of the EUT – Detailed photos see ATTACHMENT A

2.4 Equipment type

Through-wall imaging UWB system

2.5 Short description of the equipment under test (EUT)

The DePLife system is an ultra-wide band (UWB) radar for detecting the presence of life through walls made of modern building materials. The data is transmitted to a smart phone via Wi-fi for remote operation.

Number of tested samples: 2
Serial number: 054
LEW0624DHS0064
Firmware version: deplife_test_full_em_random_ch.s19

2.6 Variants of the EUT

There are no variants.

2.7 Operation frequency and channel plan

The operating frequency band is between 1990 MHz to 10600 MHz.
According to the applicant, there are no methods to adjust/select the frequencies nor power levels externally.

2.8 Transmit operating modes

Modulation: variable pulse position modulation (PPM) in combination with binary phase shift keying (BPSK).

2.9 Antenna

The following antennas shall be used with the EUT:

Number	Characteristic	Model number	Plug	f-range (GHz)	Gain (dBi)	Average Gain (dBi)
1	Omni	6-8.5GHz	None, PCB	6-8.5GHz	3-5	4dBi

2.10 Power supply system utilised

Power supply voltage, V_{nom} : 3.7 V DC

2.11 Peripheral devices and interface cables

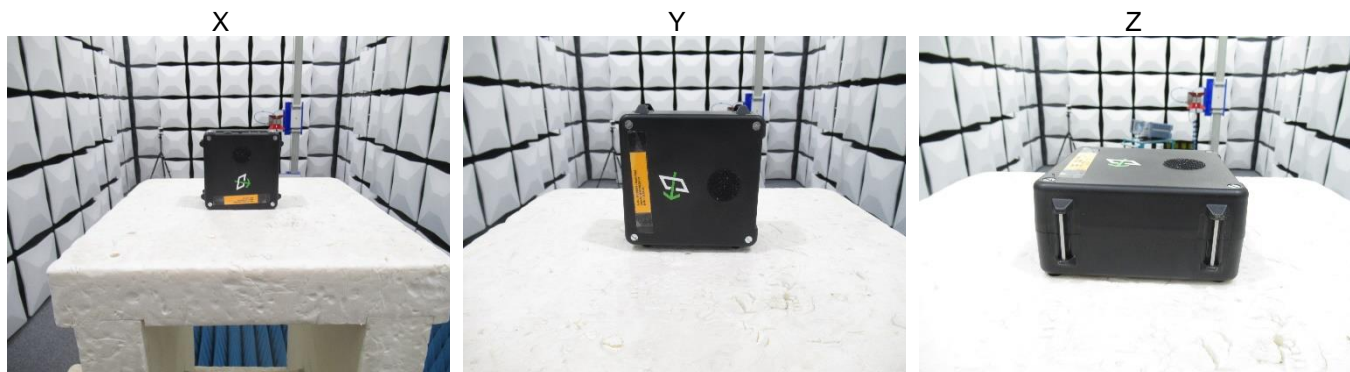
The following peripheral devices and interface cables are connected during the measurements:

- --- Model : ---

The USB-C port of the EUT can only be used for charging and does not work as data port.

2.12 Determination of worst case conditions for final measurement

Measurements are made in all three orthogonal axes with horizontal and vertical antenna positions to determine the worst case condition. For the further measurement the EUT is set in X position.



2.12.1 Test jig

No test jig is used.

2.12.2 Test software

Special Firmware provided by the applicant is used to set the EUT in a continuous Tx mode

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3 TEST RESULT SUMMARY

Through-wall imaging UWB device with operating frequency from 1990 MHz to 10600 MHz according to

- FCC § 15.510
- RSS-220 6.3

FCC Rule Part	RSS Rule Part	Description	Result
15.207(a) 15.521(j)	RSS-Gen, 8.8	AC power line conducted emissions	not applicable *1
15.510(a) 15.521(e)	RSS-220, 6.3.1(a)	UWB Bandwidth	passed
---	RSS-Gen, 6.6	99 % Bandwidth	passed
15.209(a) 15.510(d)(3) 15.521(c)(d)(h)	RSS-Gen, 8.9 RSS-220, 3.4, 6.3.1(c), 6.3.1(d)	Radiated Emissions 9 kHz to 40 GHz	passed
15.510(d)(4)	RSS-220, 6.3.1(e)	Radiated Emissions at 1164-1240 MHz and 1559-1610 MHz	passed
15.510(d)(5) 15.521(g)	RSS-220, 5.3.1(g)	Peak Power radiated	passed
15.203 15.521(b)	---	Antenna requirement	passed *2
15.204 15.521(b)	---	External radio frequency power amplifiers and antenna modifications	passed *2
15.521(a)(f)(i)	---	Technical requirements applicable to all UWB devices	passed *3

- *1 Not applicable, the EUT can not be connected to the public utility (AC) power line.
- *2 According to the applicant, the EUT has an internal PCB antenna. No other antennas can be connected to the EUT. Therefore, the requirements are regarded as fulfilled.
The EUT uses a unique coupling for its external antenna (reverse polarity xyz connector) and no standard aerial socket. Therefore, the requirements are regarded as fulfilled.
- *3 The imaging system is only employed for its specific purposes, the detection of tags or the transfer of data or voice information is not possible.
For details refer to the user manual.

3.1 Revision history of test report

Test report No	Rev.	Issue Date	Changes
80219970-01	0	22 January 2025	Initial test report
	1	15 April 2025	General: IC ID added in header Clause 2.7: typing error correction Clause 2.7: clarification statement for external frequency selection controls Clause 2.11: clarification statement for USB-C port (charging only) Clause 3: clarification of subclasses Clause 4.5.3.2.5: adding measurement method for RSS-220 Clause 5: RSS limit references added beneath FCC limit references Clause 5.1.5: Table unit correction Clause 5.2.5.3: typing error correction Clause 5.5: not necessary, section is deleted from document Clause 6: clarification of exact date of SER 2 measurement

The test report with the highest revision number replaces the previous test reports.

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3.2 Final assessment

The equipment under test fulfills the EMI requirements cited in clause 1 test standards.

Date of receipt of test sample : acc. to storage records

Testing commenced on : 29 October 2024

Testing concluded on : 21 January 2025

Checked by:

Tested by:

Klaus Gegenfurtner
Teamleader Radio

Franz-Xaver Schrettenbrunner
Radio Team

4 TEST ENVIRONMENT

4.1 Address of the test laboratory

**CSA Group Bayern GmbH
Straubinger Straße 100
94447 PLATTILING
GERMANY**

4.2 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature: 15 - 35 °C

Humidity: 30 - 60 %

Atmospheric pressure: 86 - 106 kPa

4.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. It is noted that the expanded measurement uncertainty corresponds to the measurement results from the standard measurement uncertainty multiplied by the coverage factor $k = 2$. The true value is located in the corresponding interval with a probability of 95 %. The measurement uncertainty was calculated for all measurements listed in this test report on basis of the ETSI Technical Report TR 100 028 Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1 and Part 2. The results are documented in the quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	$\pm 3.29 \text{ dB}$
20 dB Bandwidth	Center frequency of EUT	95%	$\pm 2.5 \times 10^{-7}$
99% Occupied Bandwidth	Center frequency of EUT	95%	$\pm 2.5 \times 10^{-7}$
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	$\pm 3.53 \text{ dB}$
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	$\pm 3.71 \text{ dB}$
Radiated Spurious Emissions	1000 MHz to 10000 MHz	95%	$\pm 2.34 \text{ dB}$
Peak conducted output power	902 MHz to 928 MHz	95%	$\pm 0.35 \text{ dB}$
Conducted Spurious Emissions	9 kHz to 10000 MHz	95%	$\pm 2.15 \text{ dB}$

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4.4 Conformity Decision Rule

The applied conformity decision rule is based on ILAC G8:09/2019 clause 4.2.1 Binary Statement for Simple Acceptance Rule ($w = 0$).

Details can be found in the procedure CSA_B_V50_29.

4.5 Measurement protocol for FCC and ISED

4.5.1 General information

CSA Group Bayern GmbH is recognized as wireless testing laboratory under the CAB identifier:

**FCC: DE 0011
ISED: DE0009**

4.5.2 General Standard information

The test methods used comply with ANSI C63.10 - "Testing Unlicensed Wireless Devices".

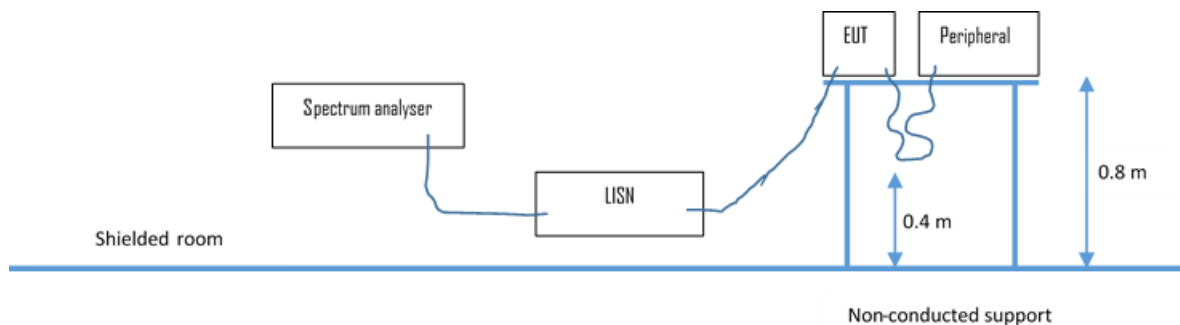
4.5.2.1 Justification

The equipment under test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions.

4.5.3 Details of test procedures

4.5.3.1 Conducted emission

Test setup according ANSI C63.10



The final level, expressed in $\text{dB}\mu\text{V}$, is arrived at by taking the reading directly from the Spectrum analyser. This level is compared to the limit.

To convert between $\text{dB}\mu\text{V}$ and μV , the following conversions apply:

$$\text{dB}\mu\text{V} = 20(\log \mu\text{V})$$

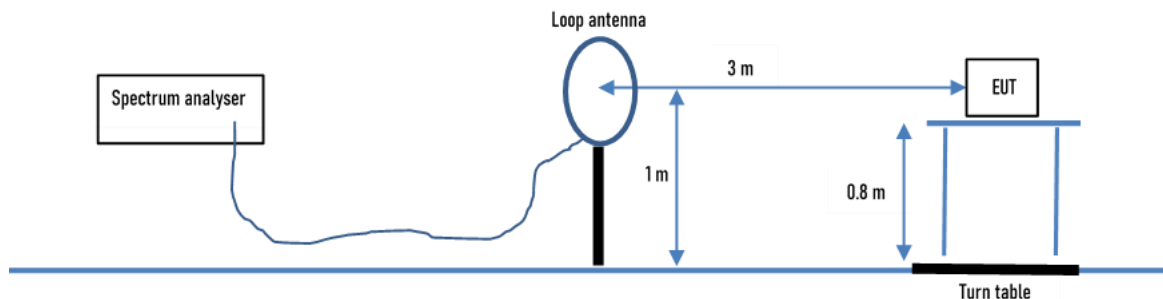
$$\mu\text{V} = \text{Inverse log}(\text{dB}\mu\text{V}/20)$$

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak detection and a Line Impedance Stabilization Network (LISN) with $50 \Omega / 50 \mu\text{H}$ (CISPR 16) characteristics. The receiver is protected by means of an impedance matched pulse limiter connected directly to the RF input. Table top equipment is placed on a non-conducting table 80 centimetres above the floor and is positioned 40 centimetres from the vertical ground plane (wall) of the screen room. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emission is re-measured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

4.5.3.2 Radiated emission

4.5.3.2.1 SAC test site (9 kHz - 30 MHz):

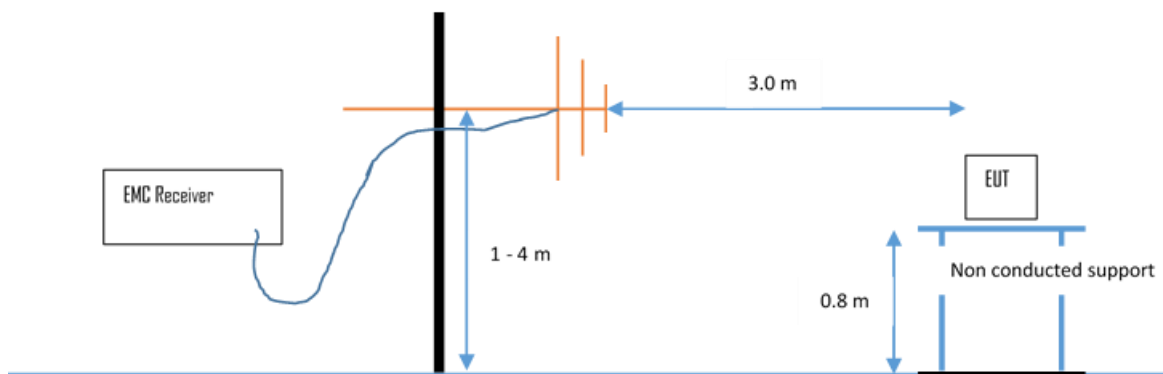
Test setup according ANSI C63.10



Emissions from the EUT are measured in the frequency range of 9 MHz to 30 MHz using a tuned receiver and a calibrated loop antenna. Table top equipment is placed on a 1.0 X 1.5 m non-conducting table 80 centimetres above the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screened room located outside the test area. The antenna is positioned 3, 10 or 30 metres horizontally from the EUT and is repeated vertically. To locate maximum emissions from the test sample the antenna is varied along the site axis and the EUT is rotated 360 degrees.

4.5.3.2.2 SAC test site (30 MHz - 1 GHz):

Test setup according ANSI C63.10.



Spurious emissions from the EUT are measured in the frequency range of 30 MHz to 1000 MHz using a tuned receiver and appropriate broadband linearly polarised antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasi-peak detection. Table top equipment is placed on a 1.0 X 1.5 m non-conducting table 80 centimetres above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screened room located outside the test area. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 metres and the EUT is rotated 360 degrees. The final level in dBµV/m is calculated by taking the reading from the EMI receiver (Level dBµV) and adding the correction factors and cable loss factor (dB). The FCC limit is subtracted from this result in order to provide the limit margin listed in the measurement protocol.

The resolution bandwidth setting:

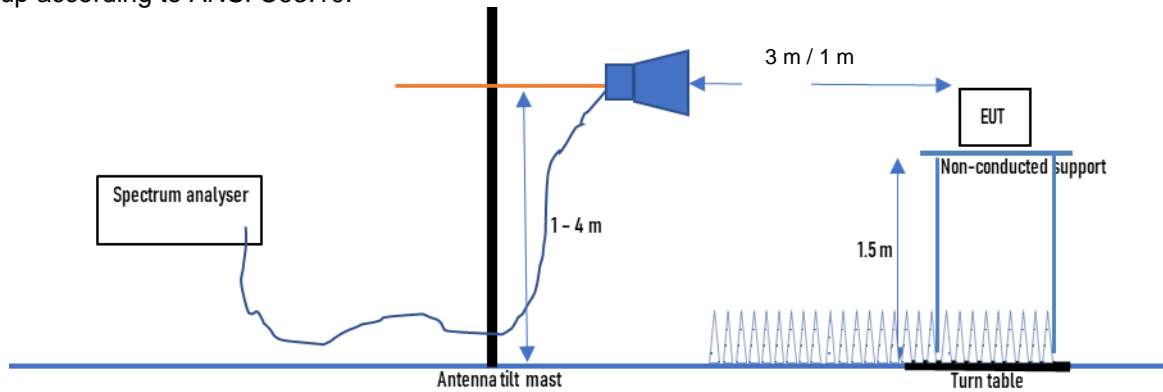
30 MHz – 1000 MHz: RBW: 120 kHz

Example:

Frequency (MHz)	Level (dBµV)	+	Factor (dB)	=	Level (dBµV/m)	-	Limit (dBµV/m)	=	Delta (dB)
719.0	75.0	+	32.6	=	107.6	-	110.0	=	-2.4

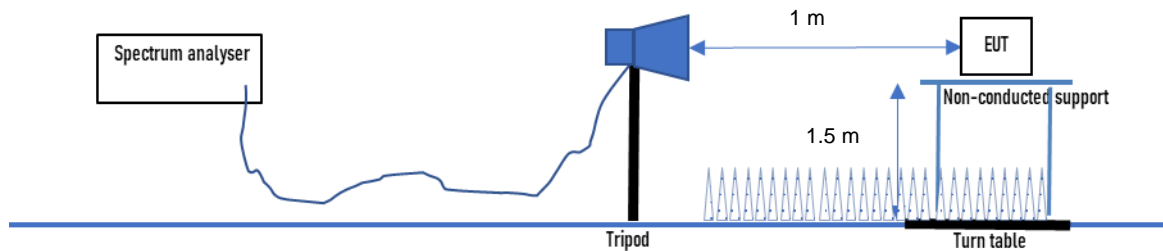
4.5.3.2.3 FAR test site (1000 MHz – 18000 MHz)

Test setup according to ANSI C63.10.



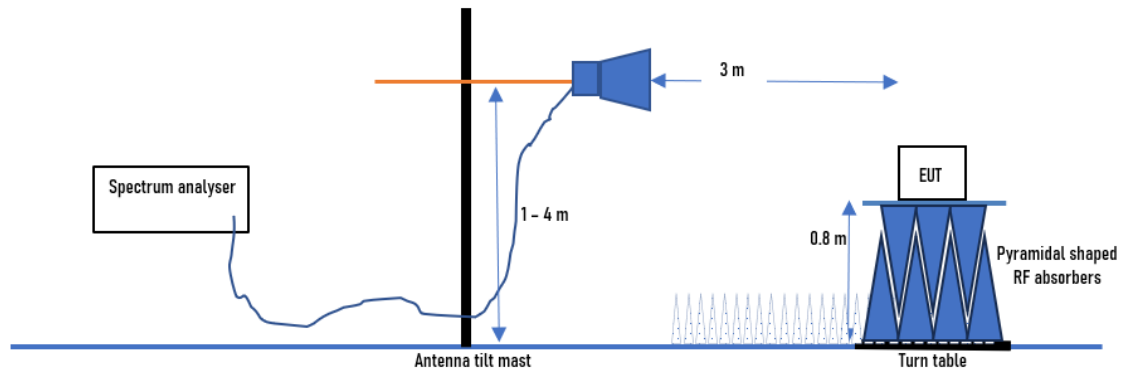
Radiated emissions from the EUT are measured in the frequency range 1 GHz up to 18 GHz as specified in 47 CFR Part 15, Subpart A, Section 15.33, using a spectrum analyser and appropriate linearly polarized antennas. Table top equipment is placed on a non-conducting table, 1.5 metre above the ground plane. The turntable is fully covered with the appropriate absorber (Type VHP-12). Any controlling device is positioned such that it does not significantly influence the measurement results. Interconnecting cables that hang closer than 40 cm to the ground plane are folded back and forth in the center, forming a bundle 30 cm to 40 cm long. Measurements are made in three orientations of the EUT and the horizontal and vertical polarization planes of measurement antenna in a fully anechoic room. The measurement antenna is adjusted and the EUT orientated to permit the measurement of the maximum emission from the EUT. The conditions determined as worst-case will then be used for the final measurements.

4.5.3.2.4 Anechoic chamber 1 (18 GHz – 40 GHz)



Emissions from the EUT are measured in the frequency range 18 GHz up to 40 GHz as specified in 47 CFR Part 15, Subpart A, Section 15.33, using a spectrum analyser and appropriate linearly polarized antennas. Table top equipment is placed on a non-conducting table, 1.5 metre above the ground plane. The turntable is fully covered with the appropriate absorber (Type VHP-12). Any controlling device is positioned such that it does not significantly influence the measurement results. Interconnecting cables that hang closer than 40 cm to the ground plane are folded back and forth in the center, forming a bundle 30 cm to 40 cm long. Measurements are made in three orientations of the EUT and the horizontal and vertical polarization planes of measurement antenna in a fully anechoic room. The measurement antenna is adjusted and the EUT orientated to permit the measurement of the maximum emission from the EUT. The conditions determined as worst-case will then be used for the final measurements. Where appropriate, the test distance may be reduced in order to detect emissions under better uncertainty. The limit are adopted.

4.5.3.2.5 Measurement variations for GPR and wall imaging radar devices (RSS-220 annex 5)



An alternative method for testing GPR devices is to place the DUT at a height of 80 cm on a non-conducting support with the emitter directed downwards. If the DUT emissions are expected to have components below 500 MHz, a layer of ferrite tile should be placed directly on the floor below the DUT. Pyramidal or wedge-shaped RF absorbers not less than 60 cm in height should be placed directly below the DUT. Some sections of absorber may be inverted and placed over other absorbers to form a solid block. Care shall be taken not to place any RF absorber between the device and the search antenna, as this would prevent energy not directed downwards from reflecting from the ground screen. The placement of the absorber shall not be disturbed when the device is rotated. This arrangement prevents energy directed downwards from consideration in the measurement. A search in azimuth and elevation for indirect emissions may now be performed.

The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

5 TEST CONDITIONS AND RESULTS

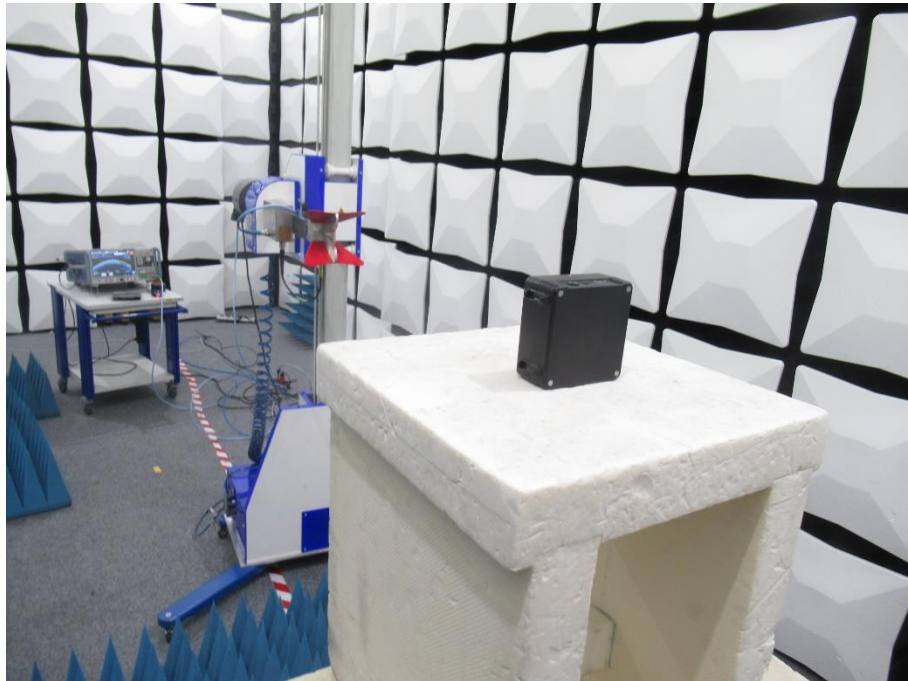
5.1 UWB Bandwidth

For test instruments and accessories used see section 6 Part **CPR 3**.

5.1.1 Description of the test location

Test location: Fully Anechoic Room FAR1

5.1.2 Photo documentation of the test set-up



5.1.3 Applicable standard

According to FCC Part 15, Section 15.510(a):

The UWB bandwidth of an imaging system operating under the provisions of this section must be below 960 MHz or the center frequency, f_c , and the frequency at which the highest radiated emission occurs, f_m , must be contained between 1990 MHz and 10600 MHz.

According to FCC Part 15, Section 15.503(d):

Ultra-wideband (UWB) transmitter. An intentional radiator that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

5.1.4 Description of Measurement

The bandwidth is measured following the procedure set out in ANSI C63-10, Item 10.1. The measurement was performed radiated at a distance of 1 m. The bandwidth was measured at an amplitude level reduced from the reference level of a modulated channel by a ratio of -10 dB. The EUT is set in TX continuous mode while measuring.

Spectrum analyser settings:

RBW: 1 MHz, VBW: 3 MHz, Detector: Peak

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5.1.5 Test result

lowest frequency f_L (MHz)	highest frequency f_H (MHz)	permitted frequency range (GHz)	UWB bandwidth (MHz)	required UWB bandwidth (MHz)	result
6613.6	7912.3	1.99 - 10.6	1298.7	> 500	passed

Limit according to FCC §15.510(a) and §15.503(d):

Minimum bandwidth	500 MHz or fractional BW ≥ 0.2
Permitted frequency range	1.99 - 10.6

Limit according to RSS-220 6.3.1(a) and 2:

Minimum bandwidth	500 MHz or fractional BW ≥ 0.2
Permitted frequency range	1.99 - 10.6

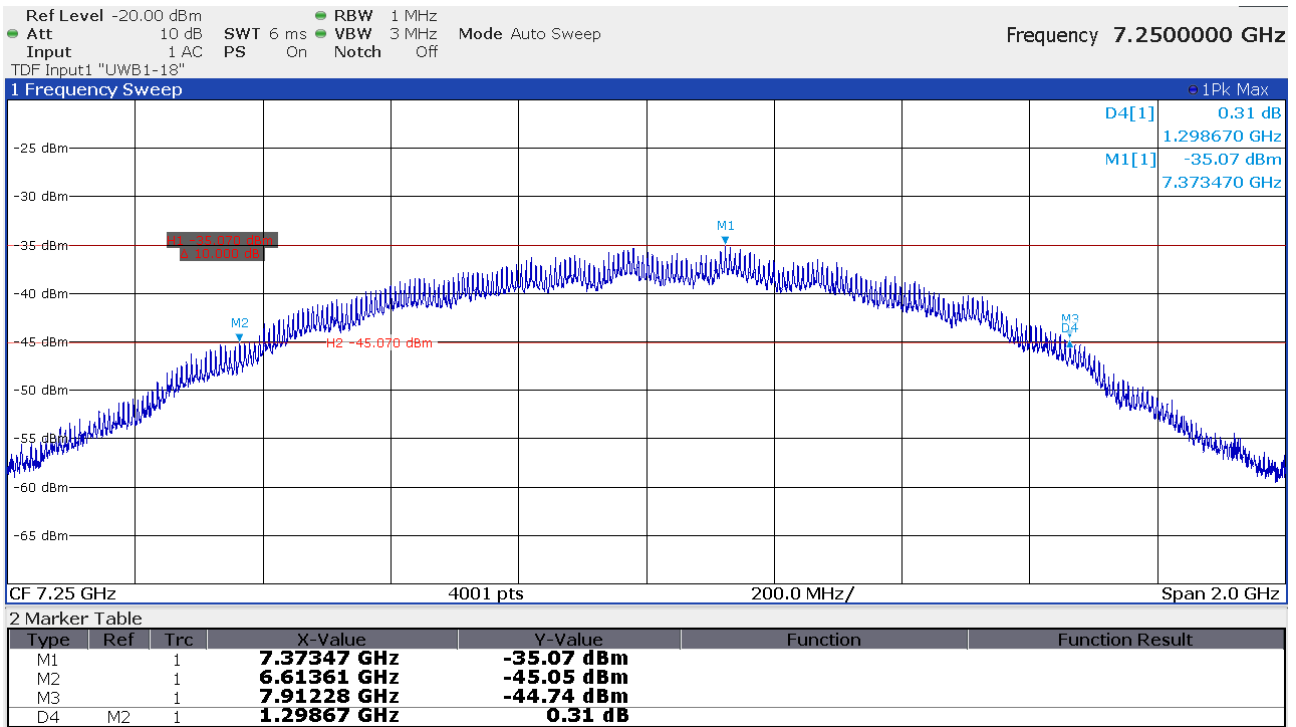
The requirements are **FULFILLED**.

Remarks: For detailed test results please refer to following test protocols.
The test is performed with sample LEW0624DHS0064.

The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

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5.1.6 Test protocols EBW



5.1.7 Test protocols OBW



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5.2 Radiated Emissions 9 kHz to 40 GHz

For test instruments and accessories used see section 6 Part **SER 1**, **SER 2** and **SER 3**.

5.2.1 Description of the test location

Test location: Semi Anechoic Chamber SAC2
 Test location: Fully Anechoic Room FAR1

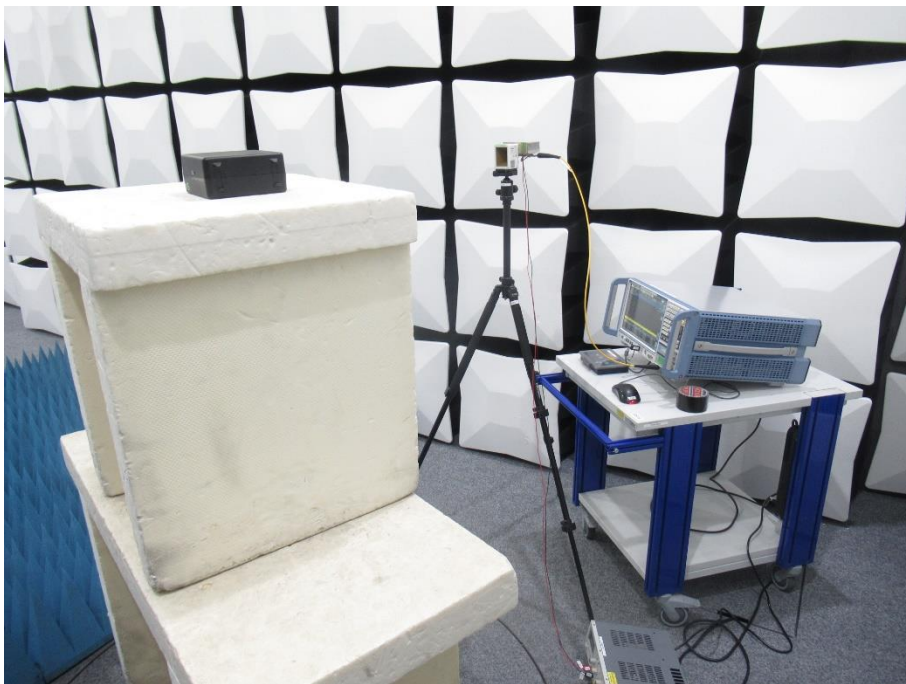
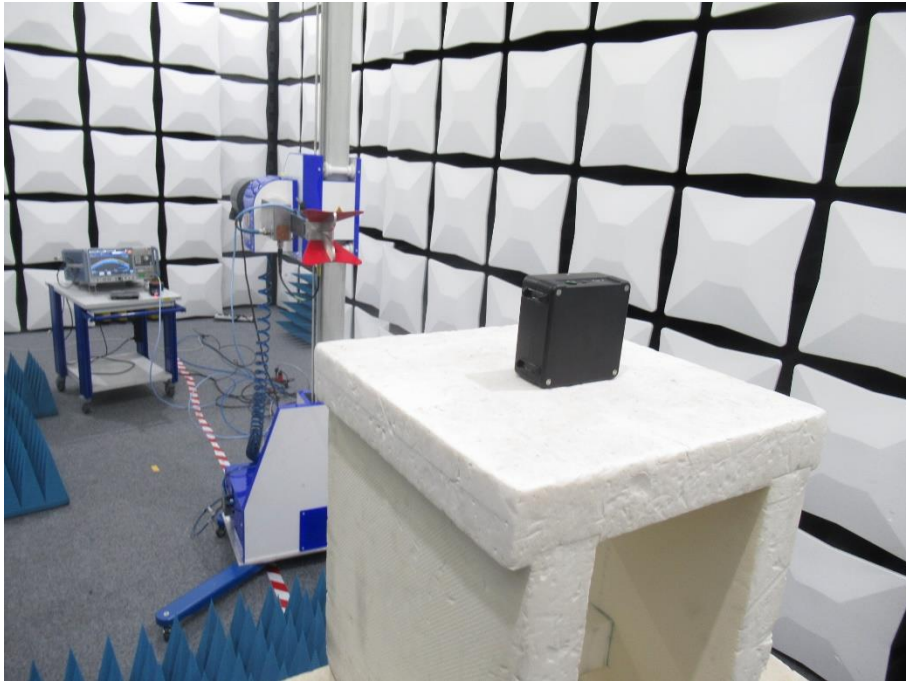
5.2.2 Photo documentation of the test set-up

SAC2



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FAR1



The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

5.2.3 Applicable standard

According to FCC Part 15, Section 15.510(d)(3):

The radiated emissions at or below 960 MHz shall not exceed the emission levels in § 15.209 of this chapter. The radiated emissions above 960 MHz shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz.

According to FCC Part 15, Section 15.521(c):

Emissions from digital circuitry used to enable the operation of the UWB transmitter shall comply with the limits in § 15.209, rather than the limits specified in this subpart, provided it can be clearly demonstrated that those emissions from the UWB device are due solely to emissions from digital circuitry contained within the transmitter and that the emissions are not intended to be radiated from the transmitter's antenna. Emissions from associated digital devices, as defined in § 15.3(k), e.g., emissions from digital circuitry used to control additional functions or capabilities other than the UWB transmission, are subject to the limits contained in Subpart B of this part.

5.2.4 Description of Measurement

The maximum emission is measured following the procedure set out in ANSI C63-10, item 10.2. The EUT is set in TX continuous mode while measuring.

Analyser settings:

9 kHz – 150 kHz	RBW: 200 Hz				
150 kHz - 30 MHz	RBW: 9 kHz				
30 MHz – 960 MHz	RBW: 120 kHz	Detector: QP			
960 MHz – 40 GHz	RBW: 1 MHz	VBW: 3 MHz	Detector: RMS	Sweptime: 1ms per MHz	

for § 15.521(c) additionally:

960 MHz – 40 GHz	RBW: 1 MHz	VBW3: MHz	Detector: Peak/Av	Sweptime: 100 ms
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5.2.5 Test result

5.2.5.1 Measurement 9 kHz to 30 MHz

f (MHz)	Level AV@3m (dBµV)	Ant. factor (dB/m)	Field strength AV@3m dB(µV/m)	Distance corr. 3m to 30m (dB)	Corrected level AV@30m dB(µV/m)	Limit AV@30m dB(µV/m)	Delta (dB)
0.851	-8.9	20.0	11.1	-40.0	-28.9	29.0	-57.9
1.419	-7.2	20.0	12.8	-40.0	-27.2	24.6	-51.8
1.926	-0.3	20.0	19.7	-40.0	-20.3	29.5	-49.8
2.314	-2.0	20.0	18.0	-40.0	-22.0	29.5	-51.5
7.568	-2.0	20.0	18.0	-40.0	-22.0	29.5	-51.5
28.761	-16.0	20.0	4.0	-40.0	-36.0	29.5	-65.5

f (MHz)	Level AV@3m (dBµV)	Ant. factor (dB/m)	Field strength AV@3m dB(µA/m)	Distance corr. 3m to 30m (dB)	Corrected level AV@30m dB(µA/m)	Limit AV@30m dB(µA/m)	Delta (dB)
0.851	-8.9	20.0	-40.4	-40.0	-80.4	-22.5	-57.9
1.419	-7.2	20.0	-38.7	-40.0	-78.7	-27.0	-51.7
1.926	-0.3	20.0	-31.8	-40.0	-71.8	-21.9	-49.9
2.314	-2.0	20.0	-33.5	-40.0	-73.5	-21.9	-51.6
7.568	-2.0	20.0	-33.5	-40.0	-73.5	-21.9	-51.6
28.761	-16.0	20.0	-47.5	-40.0	-87.5	-21.9	-65.6

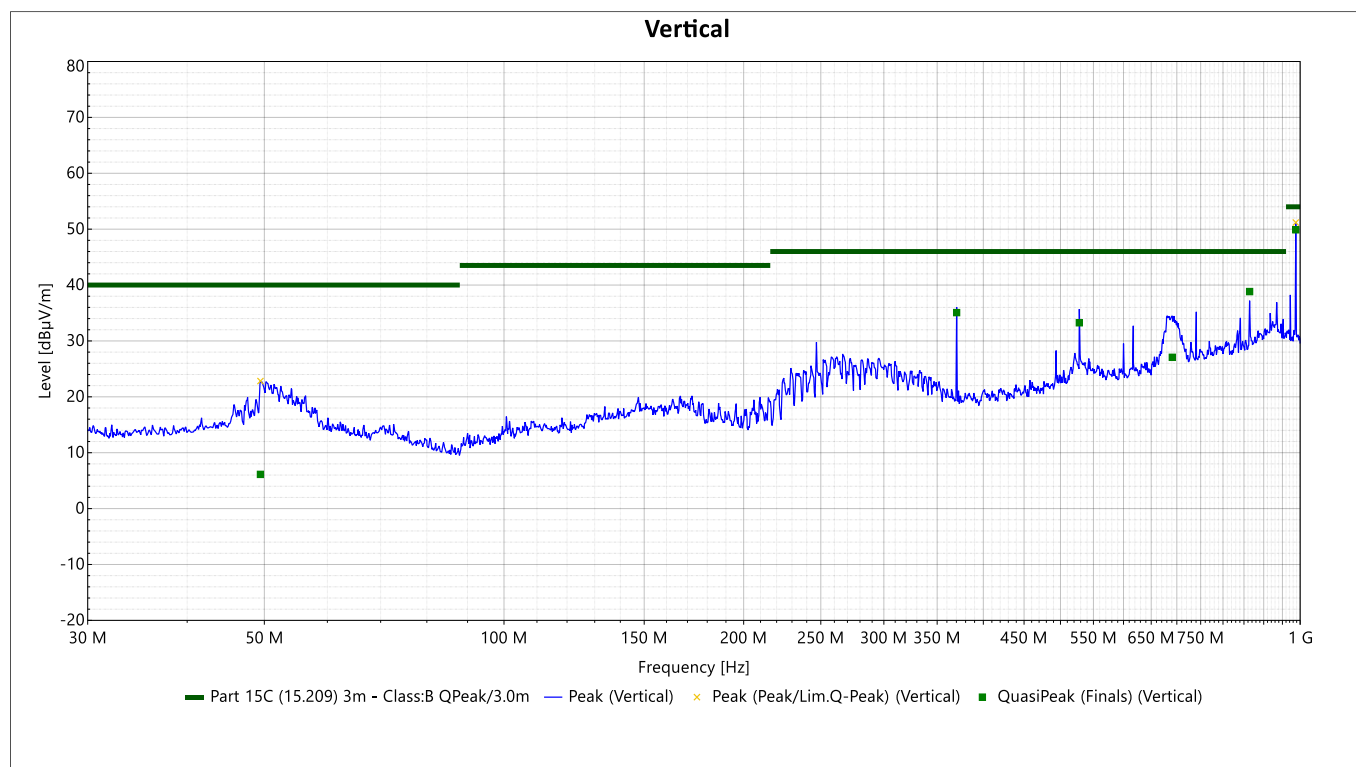
Note: Both UWB and WiFi are active.

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5.2.5.2 Measurement 30 MHz to 960 MHz

vertical

Frequency (Hz)	QuasiPeak (dBµV/m)	QP Margin	QP Limit (dBµV/m)	angle	height	polarization	RBW (Hz)	Correction (dB)
49.438 M	6.12	-33.88	40	237	2.82	Vertical	120000	-10.9
370.296 M	35.07	-10.93	46	24	1.53	Vertical	120000	-7.29
528.01 M	33.25	-12.75	46	6	1	Vertical	120000	-4.1
690.865 M	27.07	-18.93	46	13	1.6	Vertical	120000	-1.06
864.017 M	38.83	-7.17	46	342	1.17	Vertical	120000	1.58
987.447 M	49.89	-4.11	54	191	1	Vertical	120000	3.41

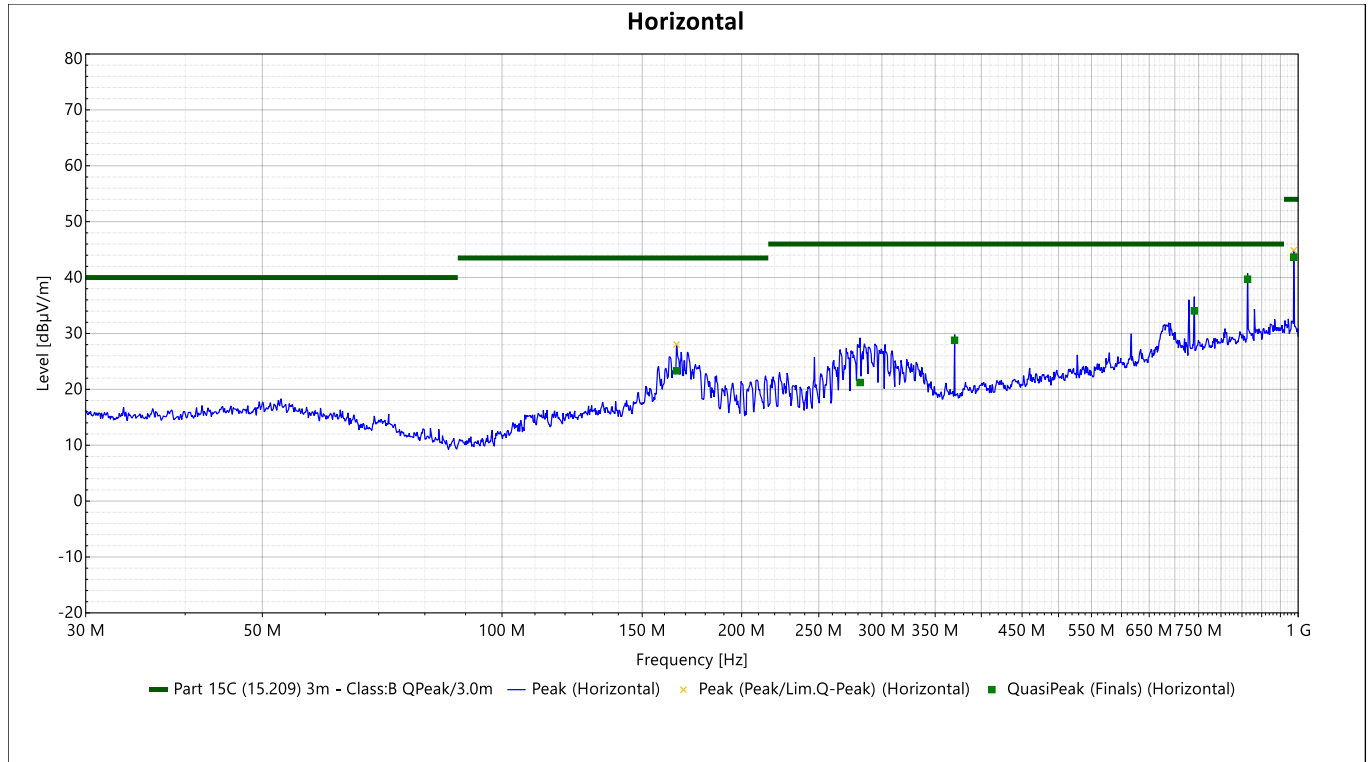


The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

horizontal

Frequency (Hz)	QuasiPeak (dBµV/m)	QP Margin	QP Limit (dBµV/m)	angle	height	polarization	RBW (Hz)	Correction (dB)
165.669 M	23.32	-20.18	43.5	89	1.5	Horizontal	120000	-9.78
281.63 M	21.22	-24.78	46	82	1.07	Horizontal	120000	-9.73
370.289 M	28.79	-17.21	46	89	1	Horizontal	120000	-7.28
740.596 M	34.02	-11.98	46	172	1	Horizontal	120000	0.58
864.023 M	39.71	-6.29	46	179	1	Horizontal	120000	2.04
987.447 M	43.67	-10.33	54	208	2.52	Horizontal	120000	4.14



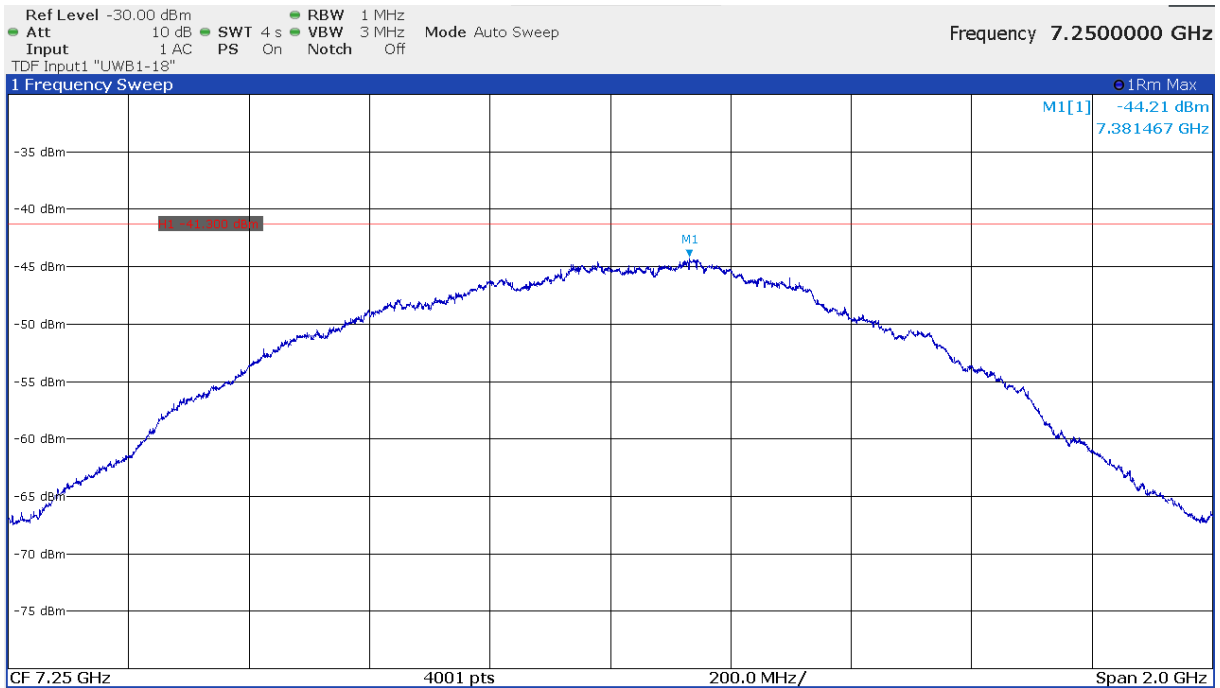
FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

5.2.5.3 Measurement 960 MHz to 40 GHz

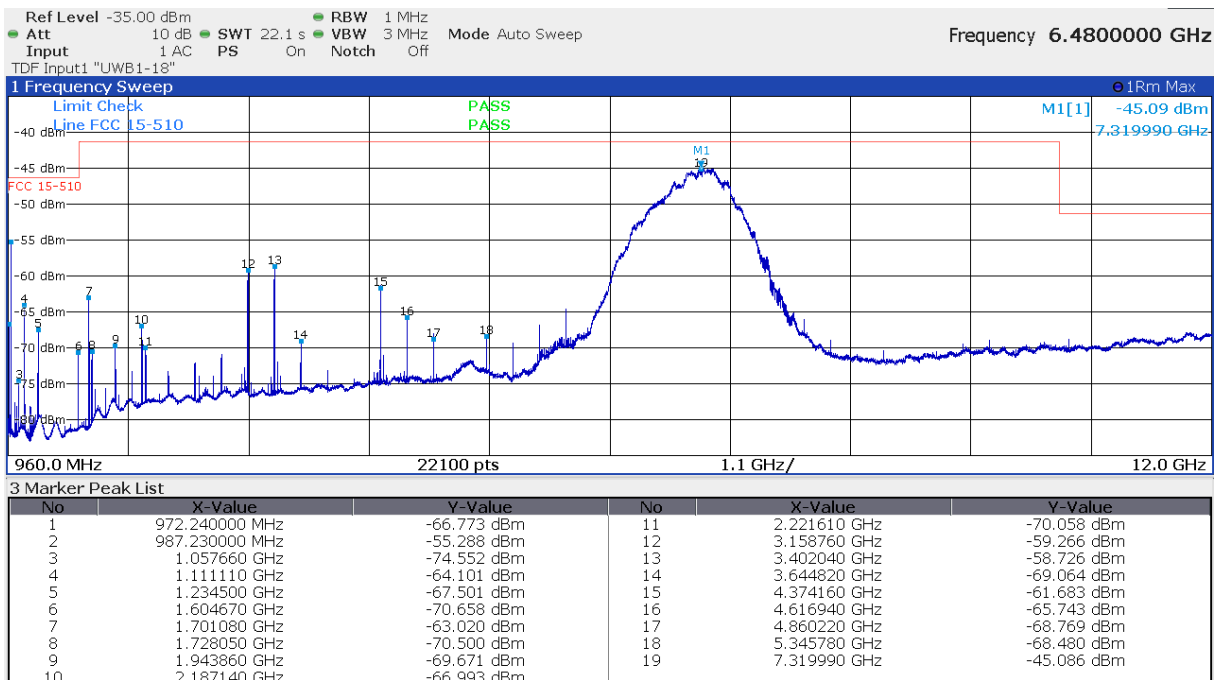
According to § 15.521(c), emissions from digital circuitry used to enable the operation of the UWB transmitter shall comply with the limits in § 15.209. The average limit is given by 54 dBμV/m at 3 meter distance, which corresponds to an EIRP of -41.3 dBm according to ANSI C63.10 2013 clause 10.3.9.

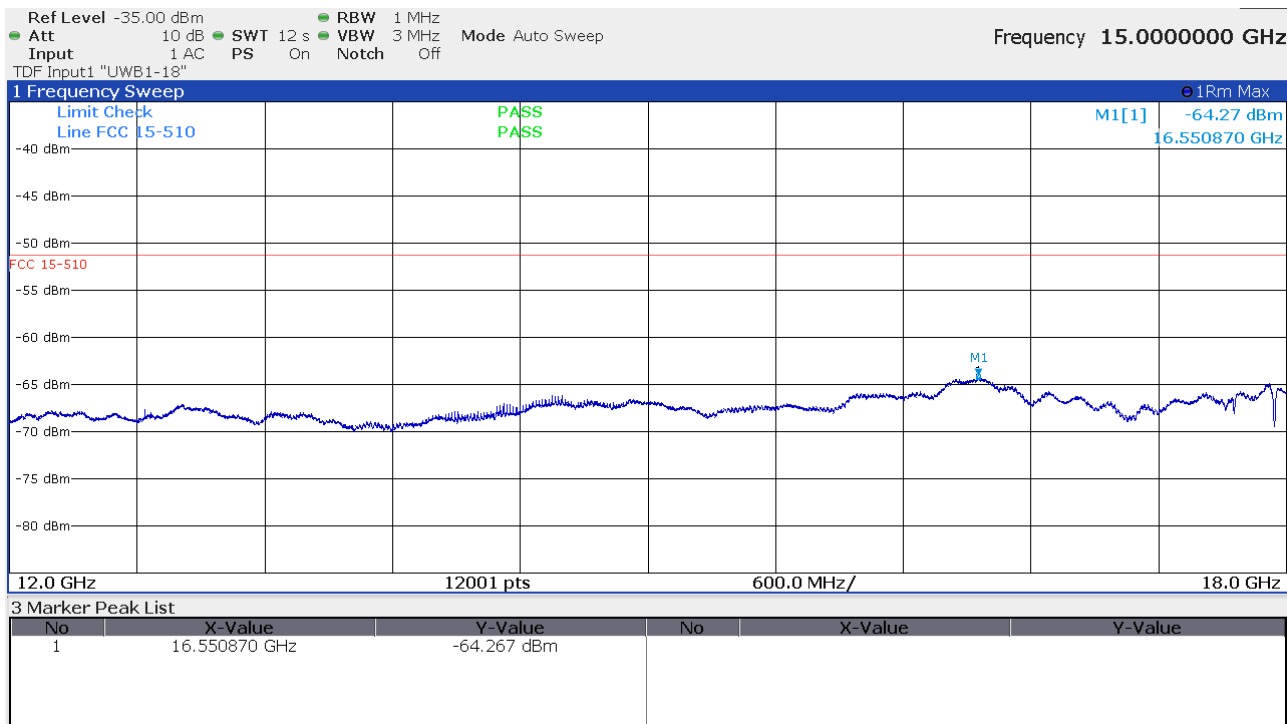
As proven in the following measurements, no emissions outside the UWB transmission can be detected in the frequency range 960 MHz and 40 GHz and the highest emissions occurs by the UWB emission itself. Therefore, the requirements according to § 15.209 can be regarded as fulfilled.

Mean Power

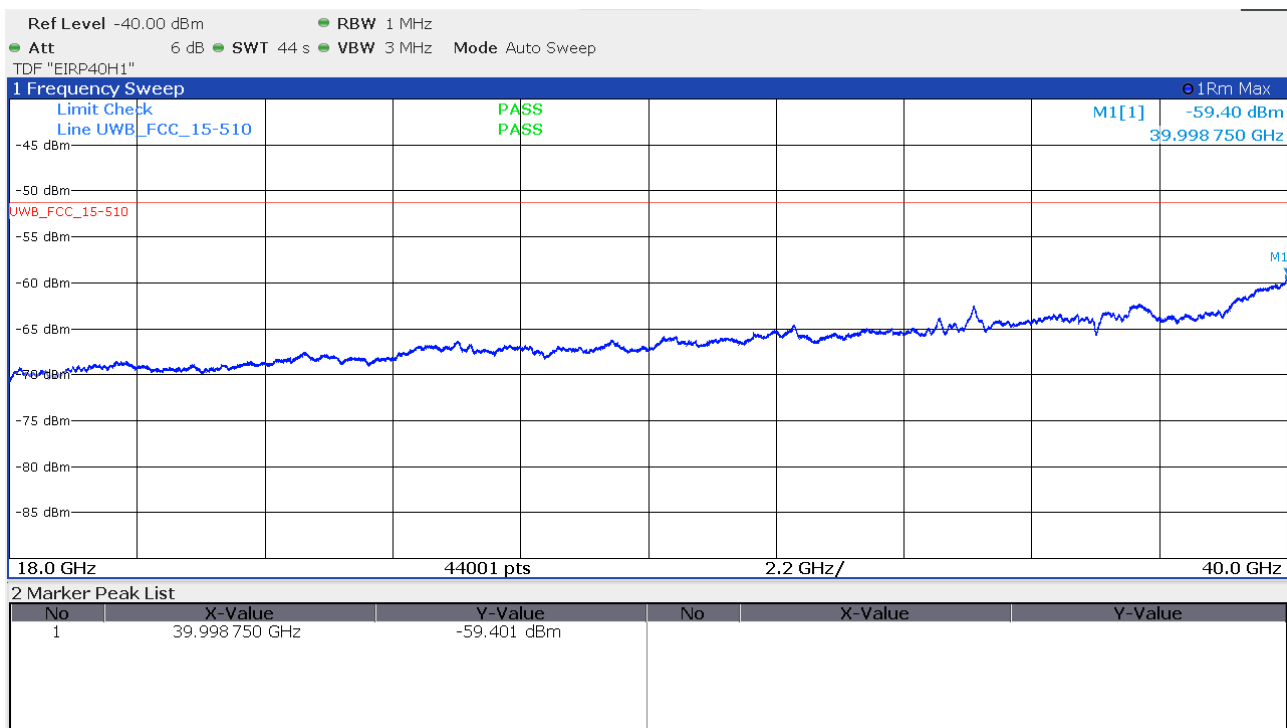


960 MHz to 18 GHz



FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1


18 GHz to 40 GHz



The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1
Limits:

Limit according §15.209(a) in the frequency range 9 kHz 960 MHz:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Limit according §15.510(d)(3) in the frequency range 960 MHz to 40 GHz:

Frequency in MHz	EIRP in dBm
960-1610	-46.3
1610-10600	-41.3
Above 10600	-51.3

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FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

Limit according to RSS-GEN, 6.6 in the frequency range 9 kHz 960 MHz:

Frequency (MHz)	Field Strength (Microvolts/m)	Measurement Distance (Metres)	E.i.r.p. (dBmW)
0.009-0.490	2,400/F (F in kHz)	300	$10 \log (17.28 / F^2)$ (F in kHz)
0.490-1.705	24,000/F (F in kHz)	30	$10 \log (17.28 / F^2)$ (F in kHz)
1.705-30	30	30	-45.7
30-88	100	3	-55.2
88-216	150	3	-51.7
216-960	200	3	-49.2

Limit according to RSS-220, 3.4, 6.3.1(c), 6.3.1(d) in the frequency range 960 MHz to 40 GHz:

Frequency in MHz	EIRP in dBm
960-1610	-46.3
1610-10600	-41.3
Above 10600	-51.3

The requirements are **FULFILLED**.

Remarks: The test is performed with sample LEW0624DHS0064 for emission 30 MHz – 18000 MHz and sample 054 for the other frequency ranges.

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

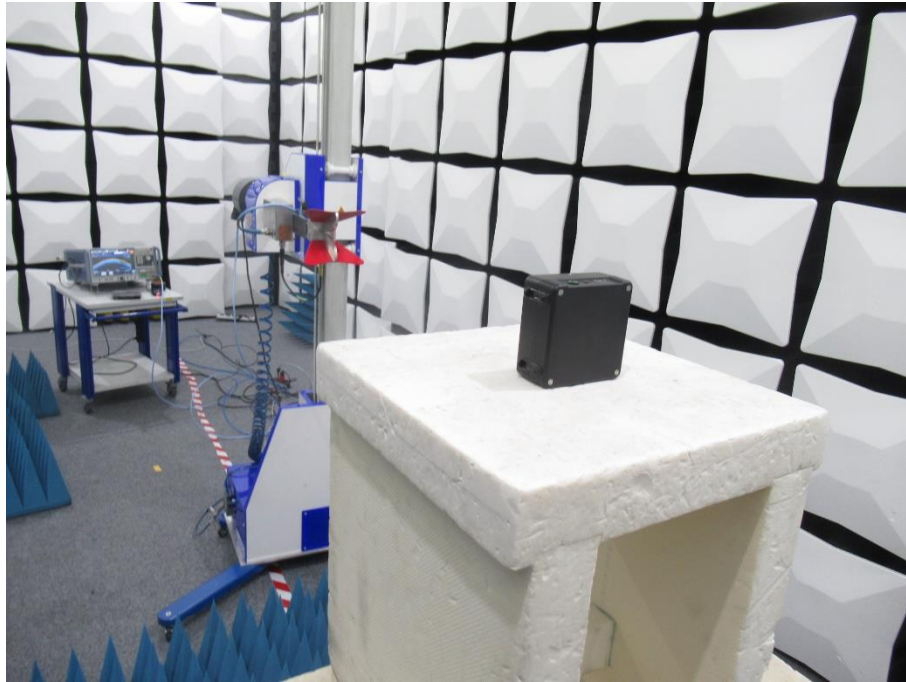
5.3 Radiated Emissions at 1164-1240 MHz and 1559-1610 MHz

For test instruments and accessories used see section 6 Part **SER 3**.

5.3.1 Description of the test location

Test location: Fully Anechoic Room FAR1

5.3.2 Photo documentation of the test set-up



5.3.3 Applicable standard

According to FCC Part 15, Section 15.510(d)(4):

In addition to the radiated emission limits specified in the paragraph (d)(3) of this section, emissions from these imaging systems shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz.

5.3.4 Description of Measurement

The spectral line is measured following the procedure set out in ANSI C63-10, item 10.3.10. The EUT is set in TX continuous mode while measuring.

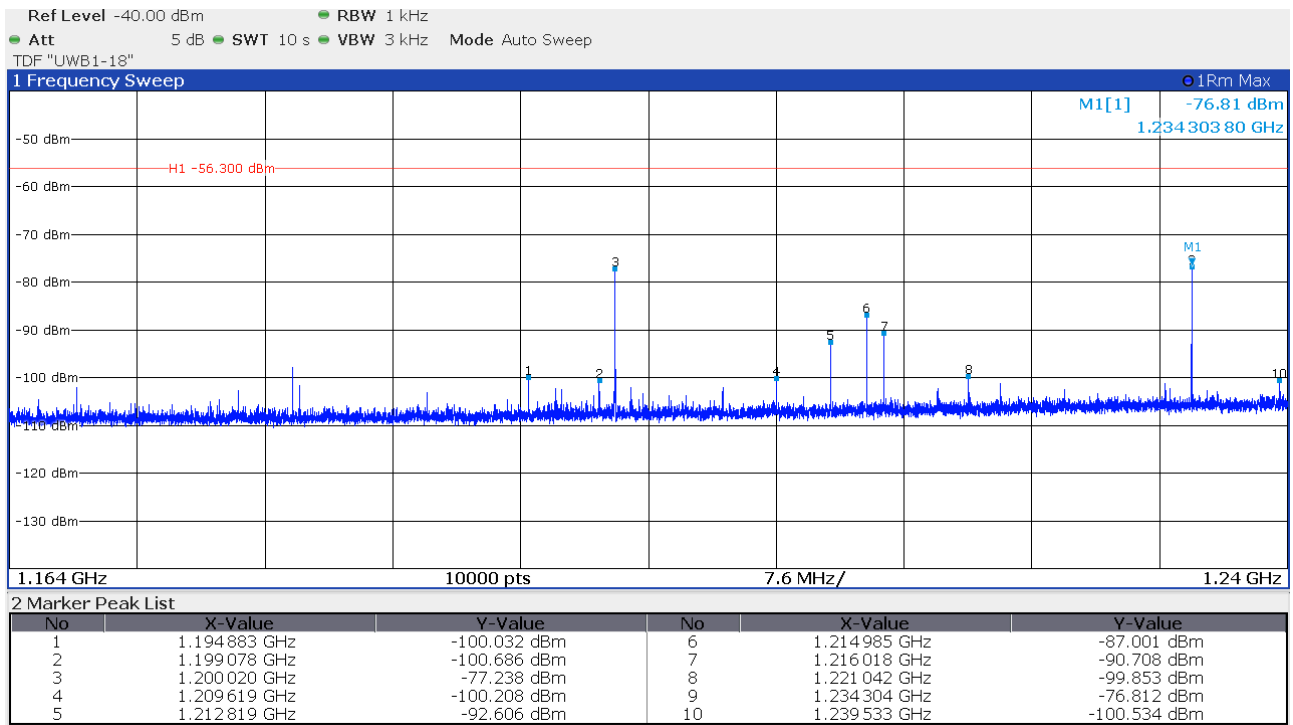
Analyser settings:

RBW: 1 kHz, VBW: 3 kHz, Detector: RMS, Sweep time: 1 ms/1kHz,

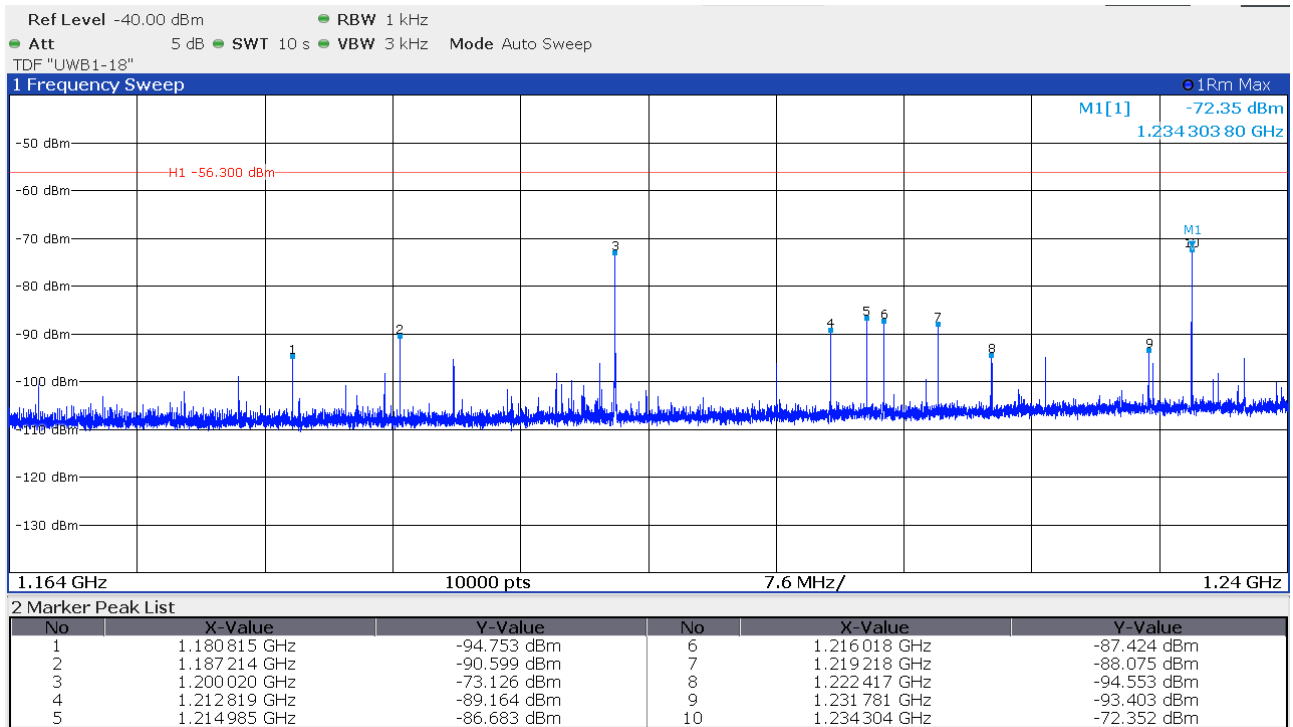
FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

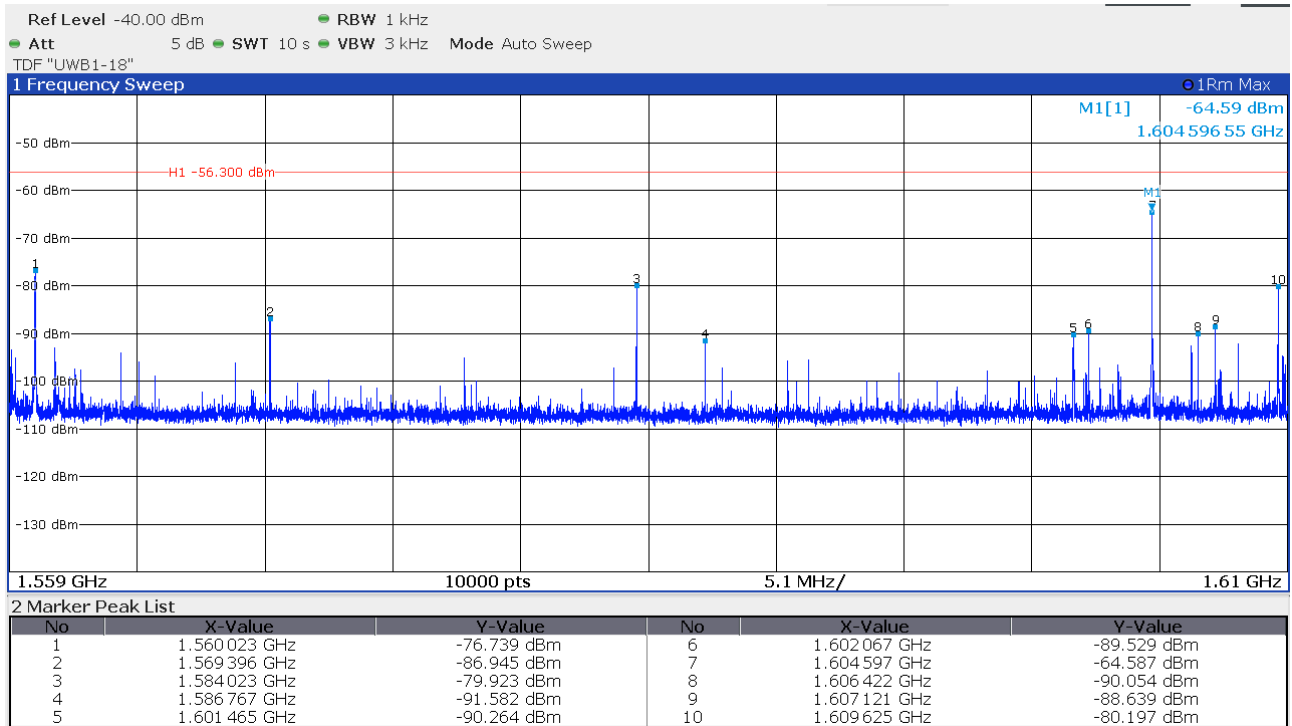
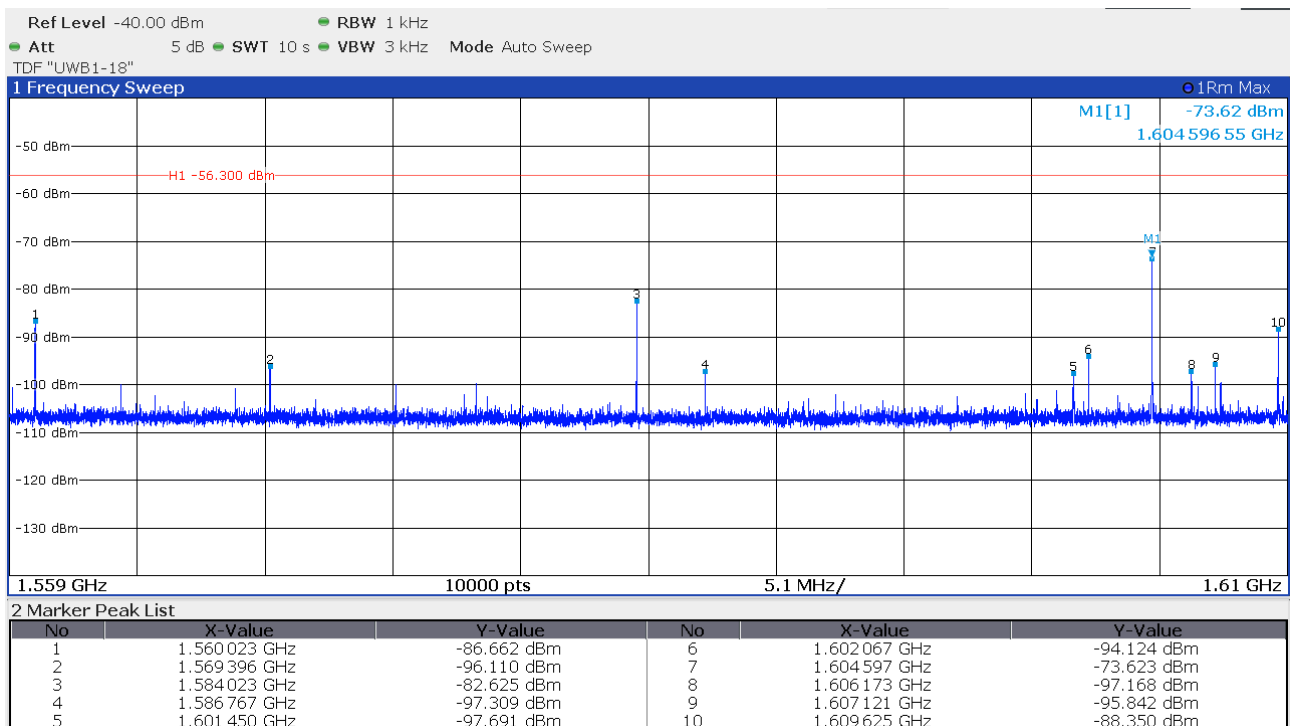
5.3.5 Test result

1164 MHz to 1240 MHz horizontal



1164 MHz to 1240 MHz vertical



FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1
1559 MHz to 1610 MHz horizontal

1559 MHz to 1610 MHz vertical


FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

Limit according to FCC §15.510(d)(4):

Frequency in MHz	EIRP in dBm
1164-1240	-56.3
1559-1610	-56.3

Limit according to RSS-220 6.3.1(e):

Frequency in MHz	EIRP in dBm
1164-1240	-56.3
1559-1610	-56.3

The requirements are **FULFILLED**.

Remarks: The test is performed with sample 054.

The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

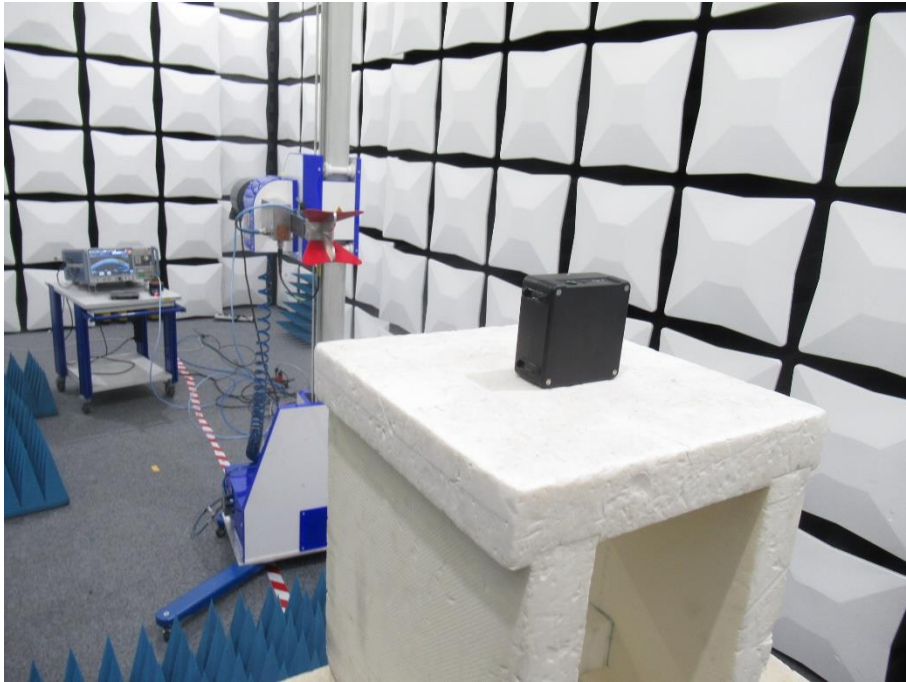
5.4 Peak Power radiated

For test instruments and accessories used see section 6 Part **CPR 3**.

5.4.1 Description of the test location

Test location: Fully Anechoic Room FAR1

5.4.2 Photo documentation of the test set-up



5.4.3 Applicable standard

According to FCC Part 15, Section 15.510(d)(5):

There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_m . That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a correspondingly different peak emission limit, following the procedures described in § 15.521.

5.4.4 Description of Measurement

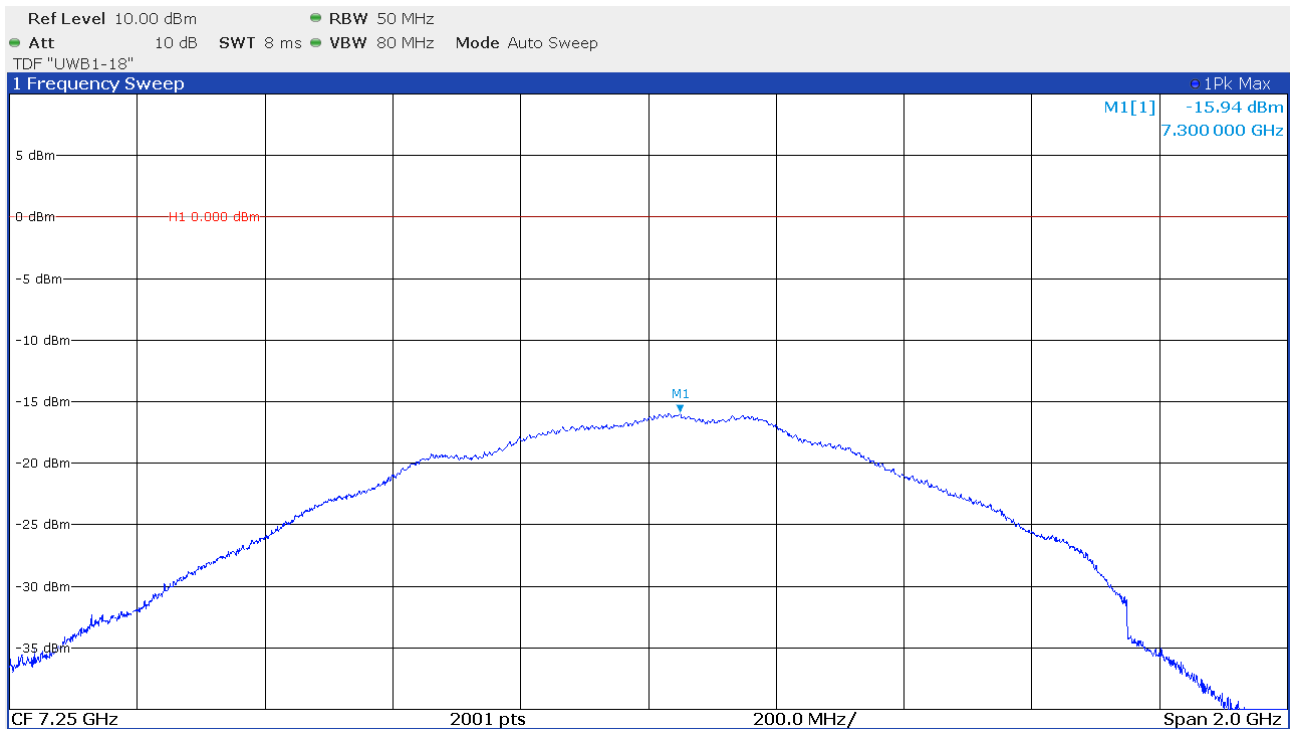
The peak power is measured following the procedure set out in ANSI C63-10, item 10.3.5. The EUT is set in TX continuous mode while measuring.

Analyser settings:

RBW: 50 MHz, VBW: 80 MHz, Detector: Peak, Trace Mode: Max hold

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

5.4.5 Test result



Limit according to FCC §15.510(d)(5):

BW of emissions contained in	EIRP
50 MHz	0 dBm

Limit according to RSS-220 6.3.1(g):

BW of emissions contained in	EIRP
50 MHz	0 dBm

The requirements are **FULFILLED**.

Remarks: The test is performed with sample LEW0624DHS0064.

FCC ID: 2BKU8DEPLIFE-1 IC: 33302-DEPLIFE1

6 USED TEST EQUIPMENT AND ACCESSORIES

All test instruments used are calibrated and verified regularly. The calibration history is available on request.

Test ID	Model Type	Equipment No.	Next Calib.	Last Calib.	Next Verif.	Last Verif.
CPR 3	FSW43	02-02/11-15-001	19/08/2025	19/08/2024		
	AMF-6D-01002000-22-10P	02-02/17-15-004				
	3117	02-02/24-05-009	23/07/2025	23/07/2024		
	BAM 4.5-P	02-02/50-17-024				
	NCD	02-02/50-17-025				
	KK-SF106-2X11N-6,5M	02-02/50-18-016				
	BAT-EMC 2023.0.8.0	02-02/68-13-001				
SER 1	ESR7	09-02/03-21-004	05/08/2025	05/08/2024		
	HFH2-Z2E	09-02/24-21-001	05/08/2025	05/08/2024		
	KK-7.8F-2XNM_4.0M	09-02/50-21-018				
	KK-7.8F-2XNM-10.0M	09-02/50-21-019				
	KK-7.8F-2XNM_4.5M	09-02/50-21-023				
	KK-7.8F-2XNM_9.5M	09-02/50-21-025				
SER 2	ESR7	09-02/03-21-004	05/08/2025	05/08/2024		
	BBV 9743 B	09-02/17-21-002	19/12/2024	19/12/2023		
	VULB9168	09-02/24-22-003	06/08/2025	06/08/2024	12/08/2025	12/08/2024
	KK-7.8F-2XNM_4.0M	09-02/50-21-018				
	KK-7.8F-2XNM-10.0M	09-02/50-21-019				
	KK-7.8F-2XNM_4.5M	09-02/50-21-023				
	KK-7.8F-2XNM_9.5M	09-02/50-21-025				
	50F-003 N 3dB	09-02/50-22-002				
	CDB-10K-18-50V-NMF-I	09-02/50-22-031	17/07/2025	17/07/2024		
	BAT-EMC 2023.0.8.0	09-02/68-21-002				
SER 3	FSW43	02-02/11-15-001	19/08/2025	19/08/2024		
	AMF-6D-01002000-22-10P	02-02/17-15-004				
	LNA-40-18004000-33-5P	02-02/17-20-002				
	3117	02-02/24-05-009	23/07/2025	23/07/2024		
	BBHA 9170	02-02/24-05-013	21/03/2026	21/03/2023		
	BAM 4.5-P	02-02/50-17-024				
	NCD	02-02/50-17-025				
	KK-SF106-2X11N-6,5M	02-02/50-18-016				
	KMS116-GL140SE-KMS116-	02-02/50-20-026				
	BAT-EMC 2023.0.8.0	02-02/68-13-001				

SER 2 measurments were performed on 5th November 2024.

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