Prüfbericht-Nr.: *Test report No.:*	**60379462 001**	**Auftrags-Nr.:** *Order No.:*	168264037	Seite 1 von 20 *Page 1 of 20*
Kunden-Referenz-Nr.: *Client reference No.:*	N/A	**Auftragsdatum:** *Order date.:*	25.05.2020	
Auftraggeber: *Client:*	**Amazon.com Services LLC** 410 Terry Ave N, Seattle, Washington 98109, United States Of America			
Prüfgegenstand: *Test item:*	AMAZON LOCKER			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	ZL-ODIN-V1			
Auftrags-Inhalt: *Order content:*	FCC and IC approval			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 15: Subpart C Section 15.205 RSS-247 Issue 2 February 2017 RSS-Gen Issue 5 April 2018			

Wareneingangsdatum: *Date of receipt:*	25.05.2020	Please refer to photo documents
Prüfmuster-Nr.: *Test sample No.:*	A000798751-001/002	
Prüfzeitraum: *Testing period:*	25.05.2020 - 15.06.2020	
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result*:*	Pass	

geprüft von / *tested by:*			**kontrolliert von /** *reviewed by:*		
23.06.2020	Lin Lin / Project Manager		23.06.2020	Sam Lin / Technical Certifier	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

FCC ID: 2AWCC-5677

IC: 24273-5677 HVIN: ZL-ODIN-V1

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:* Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged:*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhalt
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 6DB BANDWIDTH
RESULT: Pass

5.1.5 99% BANDWIDTH
RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION
RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Bluetooth LE

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China

FCC Accreditation Designation No.: CN1260
ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

TÜV Rheinland (Shenzhen) Co., Ltd.

Radio Spectrum Testing				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
Signal Analyzer	R&S	FSV 40	101441	20.08.2020
OSP	R&S	OSP 150	101017	17.12.2020
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V10.50.10)	N/A	N/A
Power Meter	R&S	NRP2	107105	17.12.2020
Wideband Power Sensor	R&S	NRP-Z81	105350	17.12.2020
Shielding Room 8#	Albatross	SR8	APC17151-SR8	23.07.2020
Unwanted Emission Testing				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	R&S	ESR 7	102021	19.08.2020
Signal Analyzer	R&S	FSV 40	101439	21.08.2020
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	21.08.2020
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	20.08.2020
Amplifier	R&S	SCU-18F	180070	20.08.2020
Amplifier	R&S	SCU40A	100475	20.09.2020
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	02.09.2020
Double-Ridged	ETS-LINDGREN	3117	00218717	02.09.2020

Antenna (1 -18 GHz)				
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	02.09.2020
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	01.09.2020
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18313	02.09.2020
Test software	R&S	EMC32 (V10.50.40)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	06.07.2020

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for measurements as below table.

Parameter	Uncertainty
Radio Frequency	±1 x 10-7
RF Power (conducted)	±2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	±6 dB
Radiated Emission (3m SAC), 30MHz to 1000MHz	± 4.52 dB
Radiated Emission (3m SAC), above 1000MHz	± 4.37 dB
Temperature	±1 °C
Humidity	±5 %
Voltage (DC)	±1 %
Voltage (AC, <10kHz)	±2 %

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd.. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is an Amazon Locker which supports Bluetooth LE functions.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	AMAZON LOCKER
Type Designation	ZL-ODIN-V1
FCC ID	2AWCC-5677
IC	24273-5677
HVIN	ZL-ODIN-V1
Battery Specification	Model: 26S1024 Nominal Voltage: 6Vdc Typical Capacity: 40.8Ah
Testing Voltage	6Vdc
Work Temperature	-20°C ~ +55°C
Technical Specification of Bluetooth LE	
Bluetooth Version:	V5.0
Frequency Range:	2402-2480MHz
Type of Modulation:	GFSK
Data Rate:	1Mbps
Quantity of Channels	40
Channel Separation:	2MHz
Type of Antenna:	Integral Antenna
Antenna number:	1
Antenna Gain:	-4 dBi

Table 3: RF Channel and Frequency of Bluetooth LE

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402**	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472

06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	**19**	**2440**	29	2460	**39**	**2480**

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz for Bluetooth LE.

3.3 Independent Operation Modes

The basic operation modes are:

A. Bluetooth LE
   1. Low channel
   2. Middle channel
   3. High channel

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- FCC/IC Label and Location Info
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model ZL-ODIN-V1 in this report.

4.3 Special Accessories and Auxiliary Equipment

None.

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

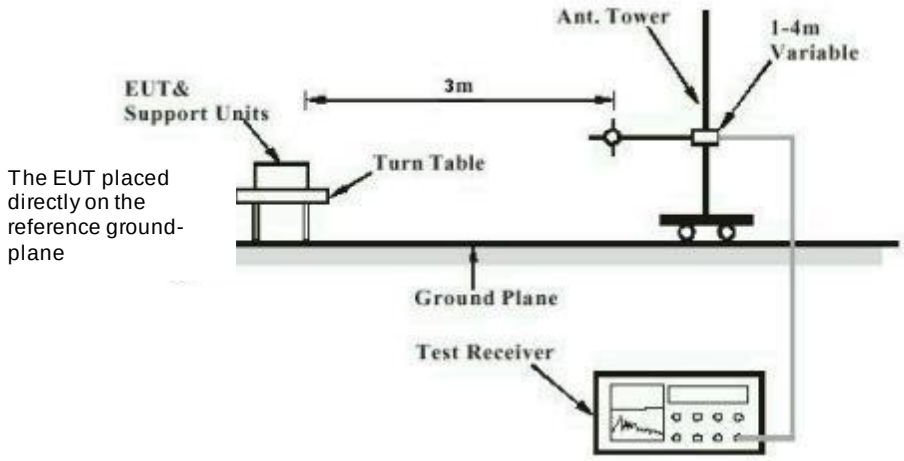


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

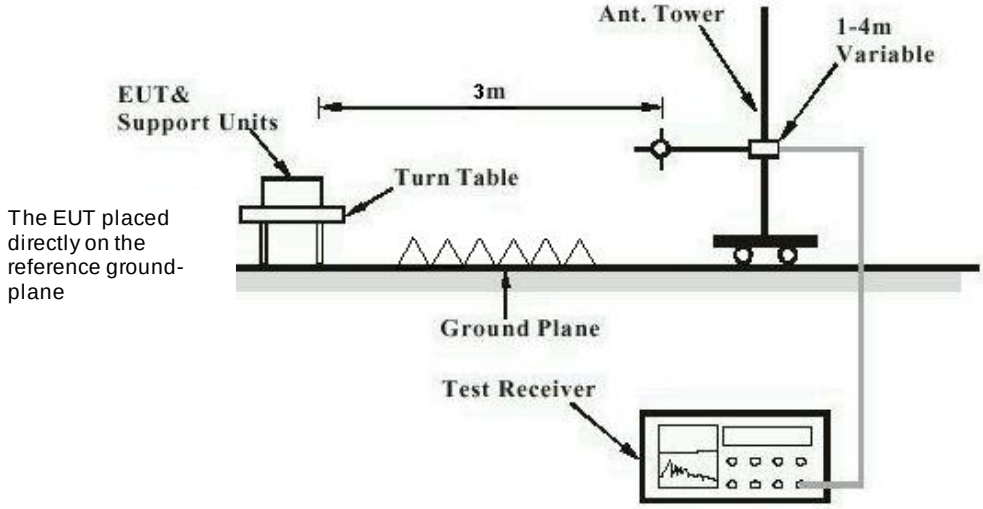
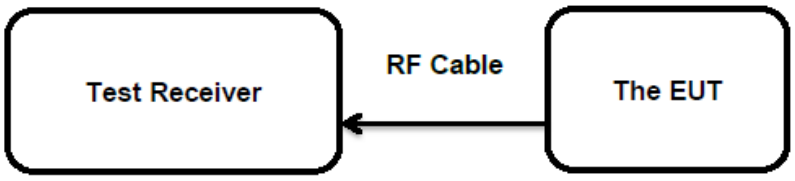


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has one internal antenna, the directional gain of antenna is -4 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(b)(3)
		RSS-247 Clause 5.4(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	DTS < 1.0 Watts
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	04.06.2020
Input voltage	:	6Vdc
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 4: Test Result of Maximum Peak Conducted Output Power, Bluetooth LE

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
Bluetooth LE	Low CH	7.87	0.0061	< 1
	Middle CH	7.92	0.0062	
	High CH	8.08	0.0064	
Maximum Measured Value		8.08	0.0064	

Note:
1) The cable loss is taken into account in results.
2) Antenna gain(G) of Bluetooth LE: -4 dBi,
e.i.r.p. = $P_{(Peak\ power)}$ + G, which is far below the 4 W

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(e)
		RSS-247 Clause 5.2(b)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 8 dBm / 3kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	04.06.2020
Input voltage	:	6Vdc
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 5: Test Result of Power Spectral Density, Bluetooth LE

Test Mode	Test Channel (MHz)	Measured Peak Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Bluetooth LE	2402	-10.34	8 dBm / 3kHz
	2440	-9.91	
	2480	-9.95	
Maximum Measured Value		-9.91	

Note: The cable loss is taken into account in results.

For the measurement records, refer to the appendix A.

5.1.4 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(2)
		RSS-247 Clause 5.2(a)
Basic standard	:	ANSI C63.10: 2013
Limits	:	> 500 KHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	04.06.2020
Input voltage	:	6Vdc
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 6: Test Result of 6dB Bandwidth, Bluetooth LE

Test Mode	Test Channel (MHz)	6dB Bandwidth (kHz)	Limit (kHz)
Bluetooth LE	2402	713	>500
	2440	713	
	2480	713	
Minimum Measured Value		713	

For the measurement records, refer to the appendix A.

5.1.5 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	RSS-Gen Clause 6.6
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	04.06.2020
Input voltage	:	6Vdc
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 7: Test Result of 99% Bandwidth, Bluetooth LE

Test Mode	Test Channel (MHz)	99% Bandwidth (MHz)
Bluetooth LE	Low CH	1.04
	Middle CH	1.04
	High CH	1.04
Maximum Measured Value		1.04

For the measurement records, refer to the appendix A.

5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	04.06.2020
Input voltage	:	6Vdc
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

5.1.7 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	FCC Part 15.209(a) RSS-Gen Table 4
Kind of test site	:	3m Semi-anechoic Chamber & 3m Full-anechoic Chamber

Test Setup

Date of testing	:	03.06.2020
Input voltage	:	6Vdc
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

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Appendix A: Test Results of Bluetooth LE

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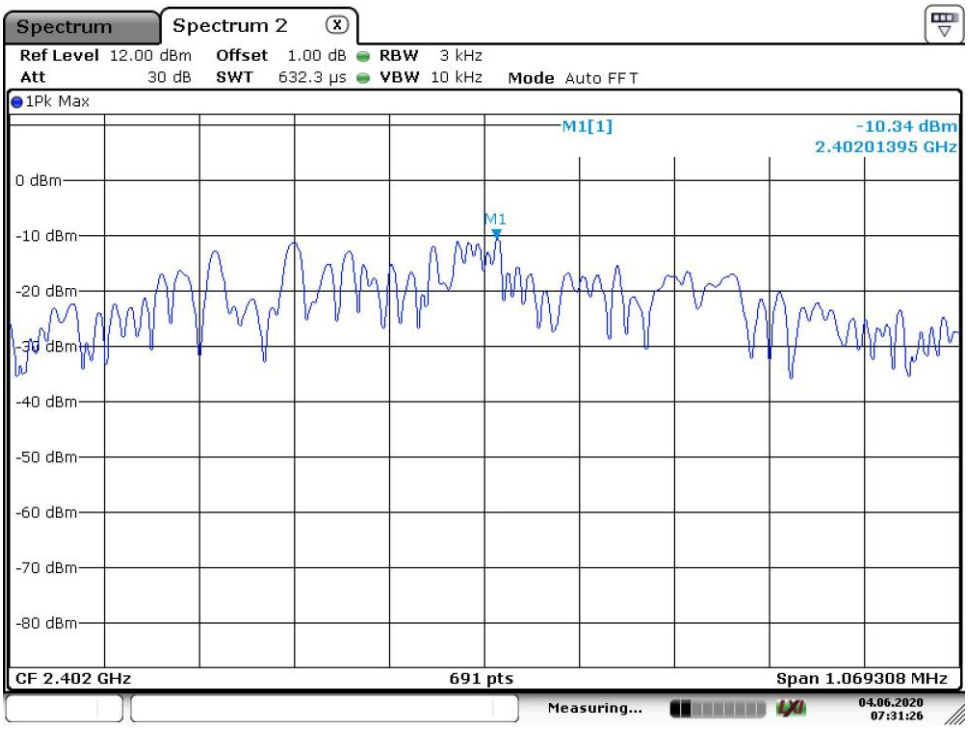
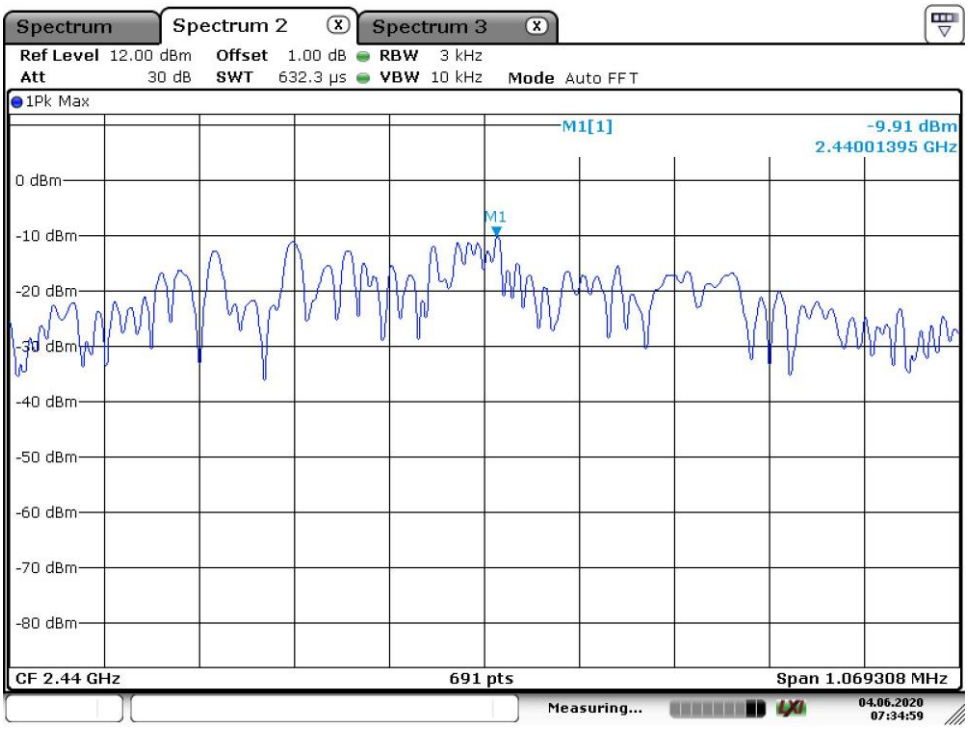
Appendix A.1: Test Results of Conducted Power Spectral Density

Low Channel



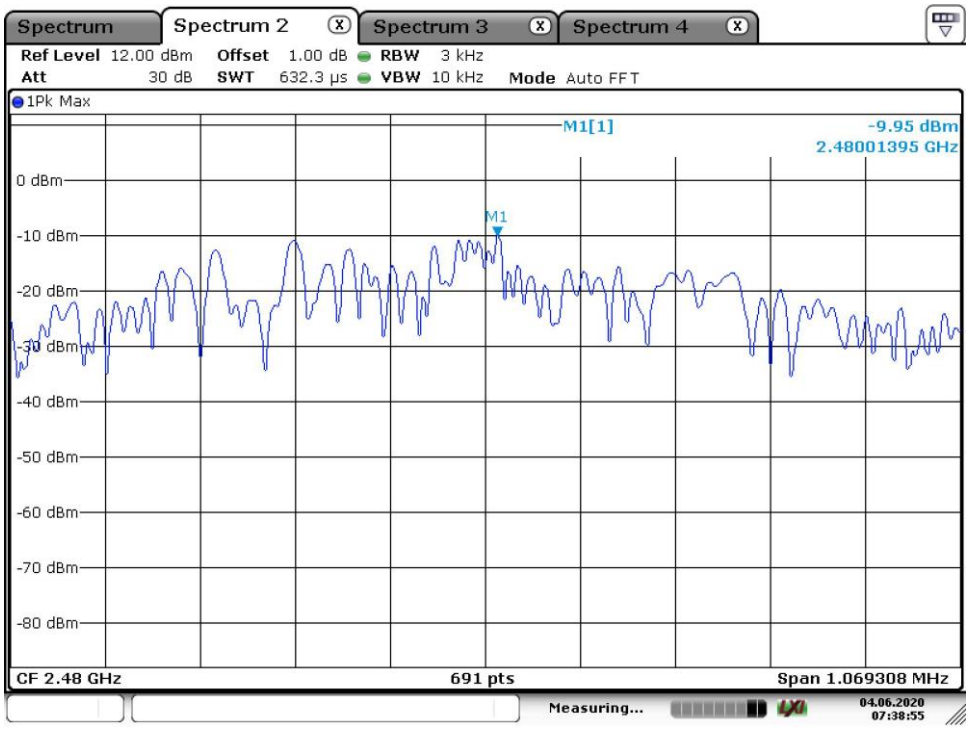
Date: 4.JUN.2020 07:31:25

Middle Channel



Date: 4.JUN.2020 07:34:59

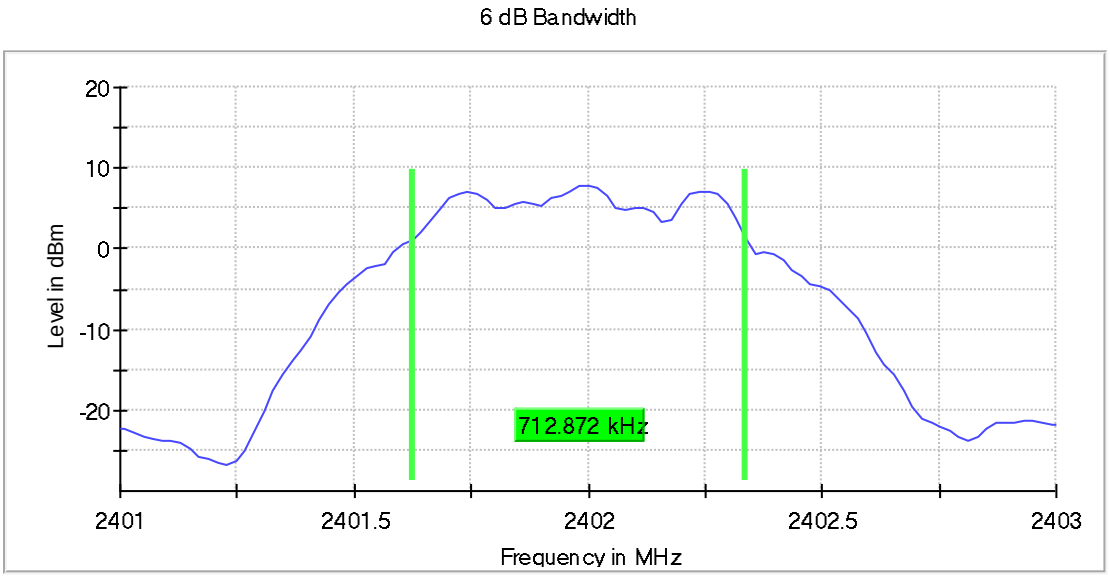
High Channel



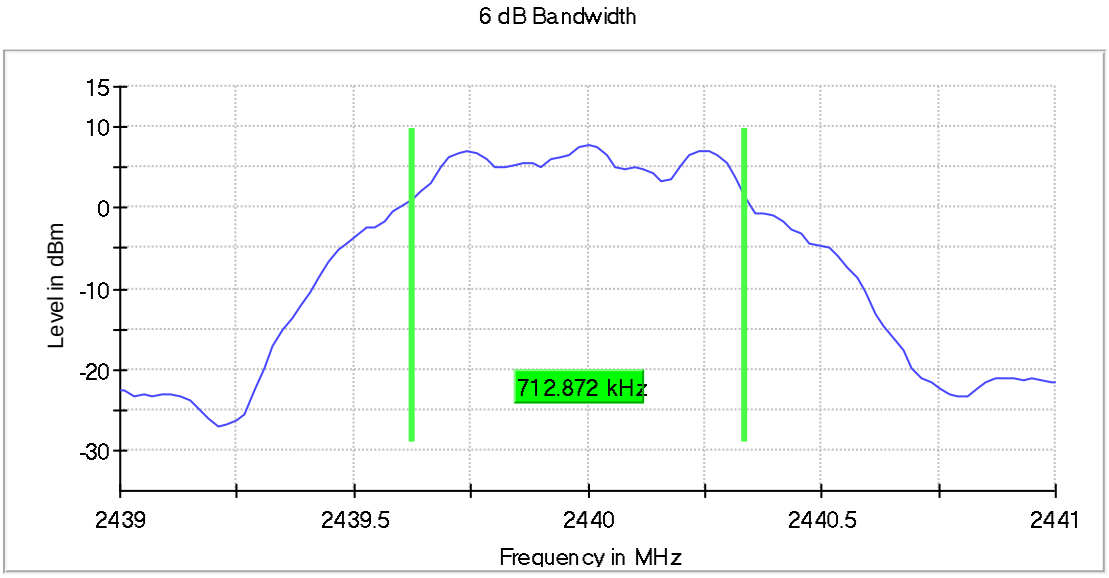
Date: 4.JUN.2020 07:38:55

Appendix A.2: Test Results of 6dB Bandwidth

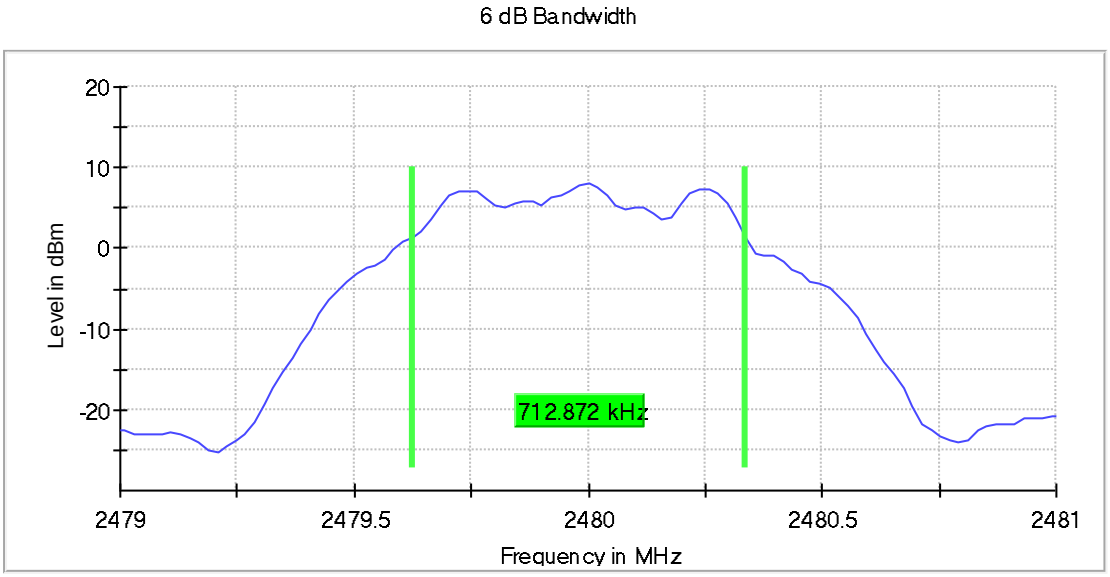
Low Channel
(RBW=100KHz, VBW=300KHz, 6dB Bandwidth: 713KHz)



Middle Channel
(RBW=100KHz, VBW=300KHz, 6dB Bandwidth: 713KHz)

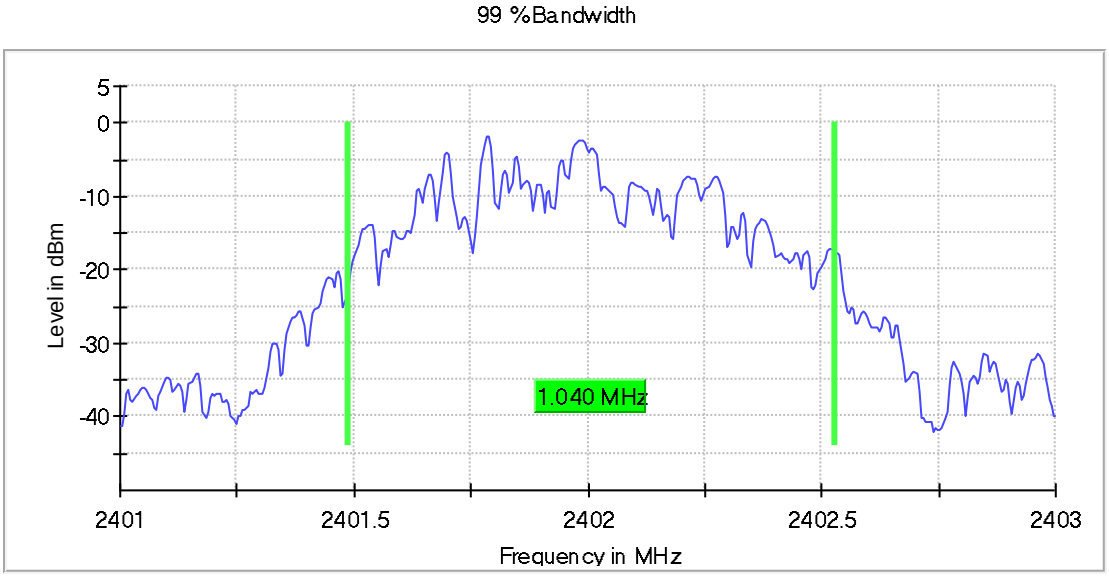


High Channel
(RBW=100KHz, VBW=300KHz, 6dB Bandwidth: 713KHz)

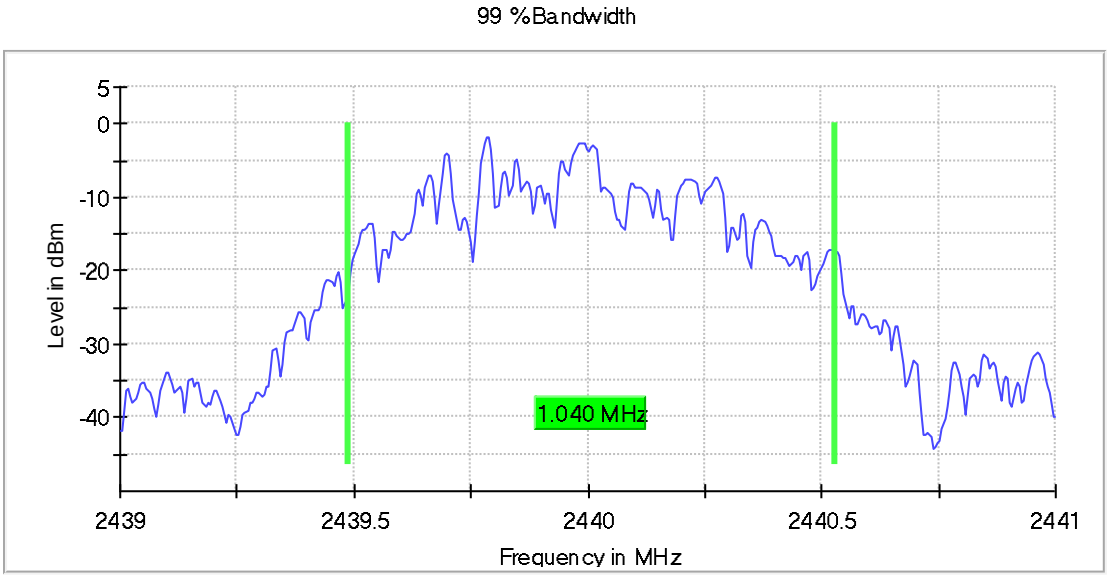


Appendix A.3: Test Results of 99% Bandwidth

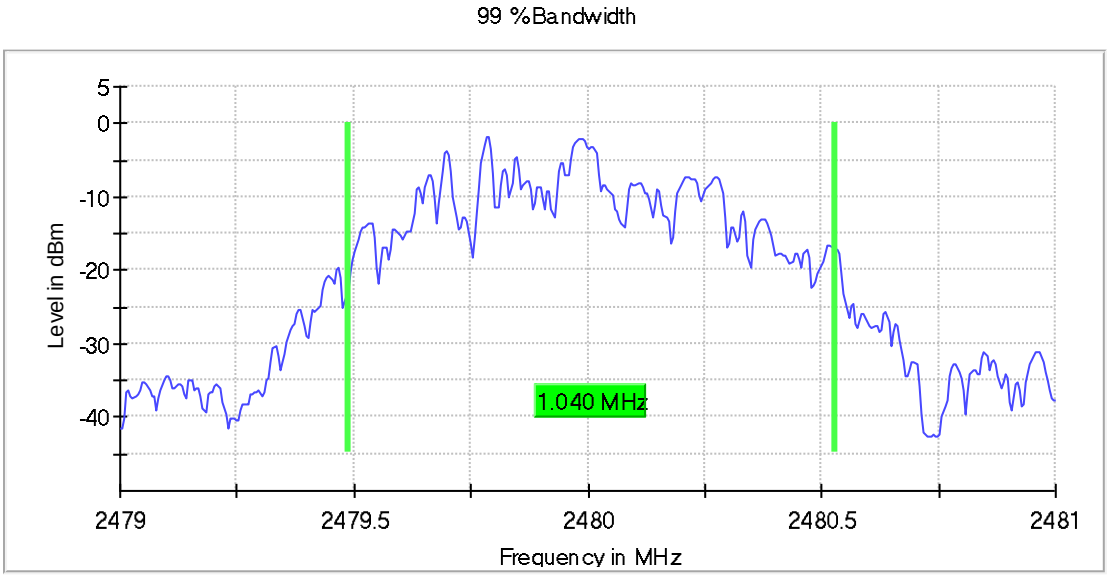
Low Channel
(RBW=10KHz, VBW=30KHz, 99% Bandwidth: 1.04MHz)



Middle Channel
(RBW=10KHz, VBW=30KHz, 99% Bandwidth: 1.04MHz)

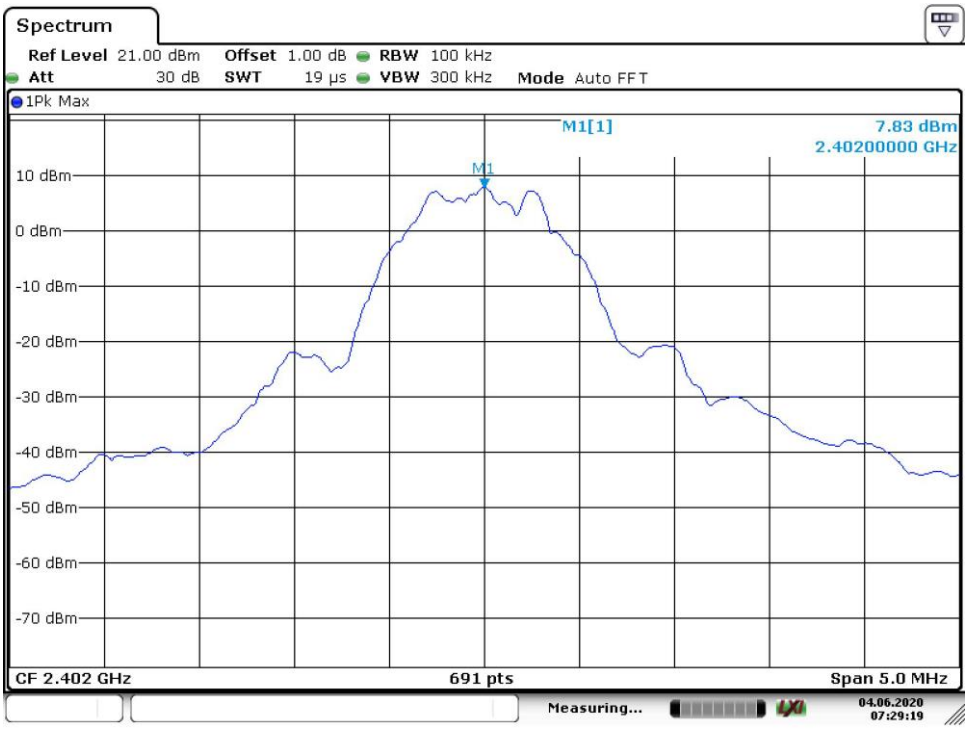


High Channel
(RBW=10KHz, VBW=30KHz, 99% Bandwidth: 1.04MHz)

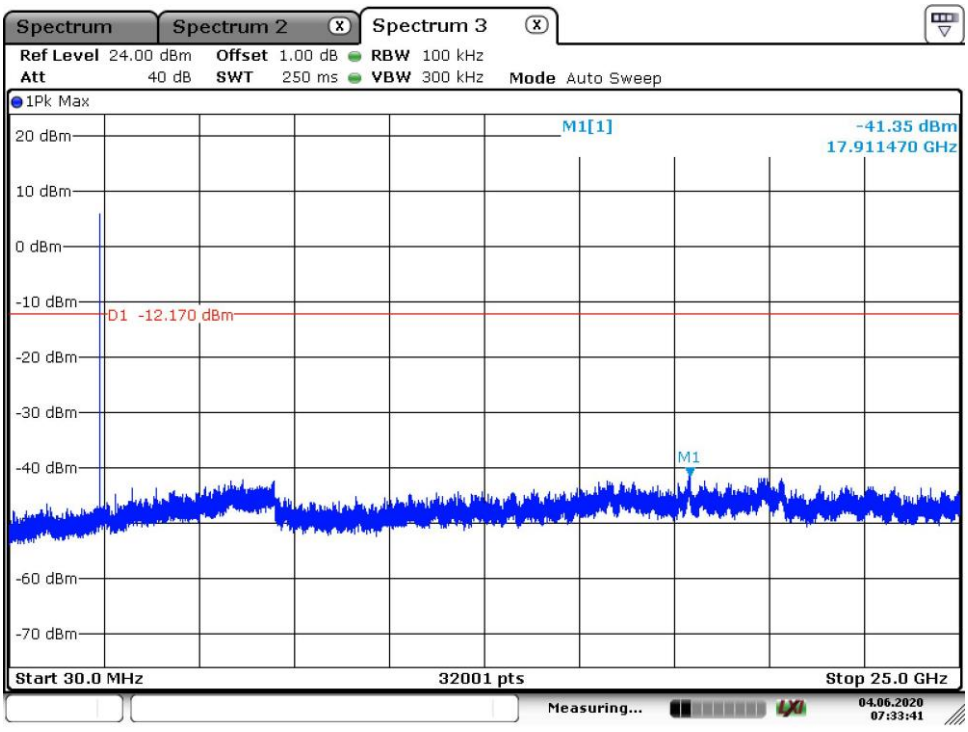


Appendix A.4: Test Results of Conducted Spurious Emissions

Low Channel

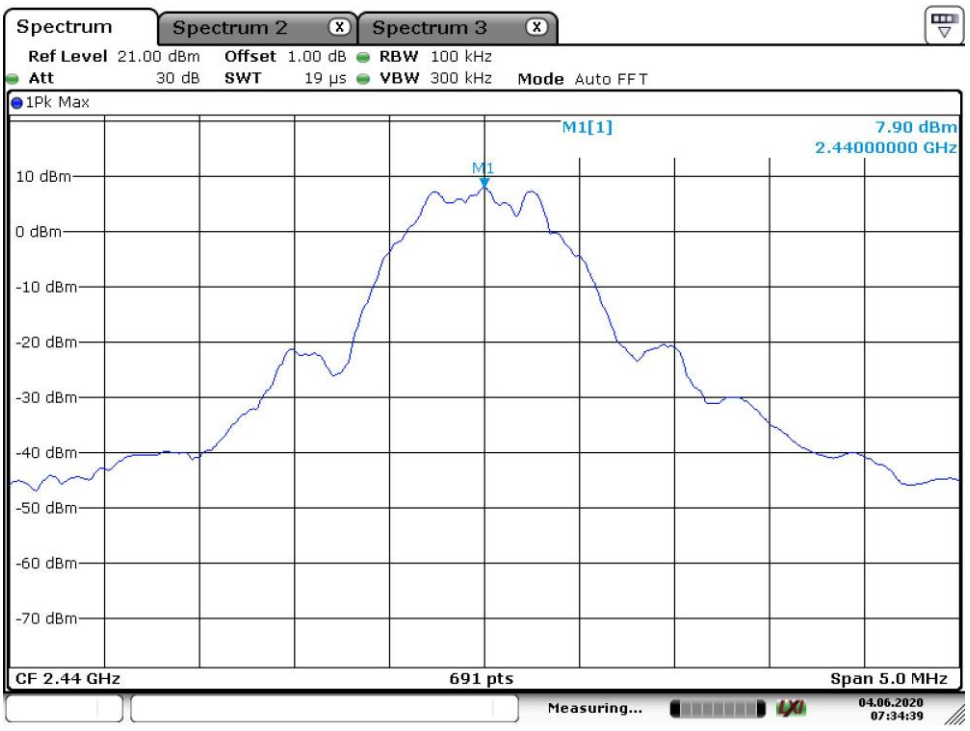


Date: 4.JUN.2020 07:29:19

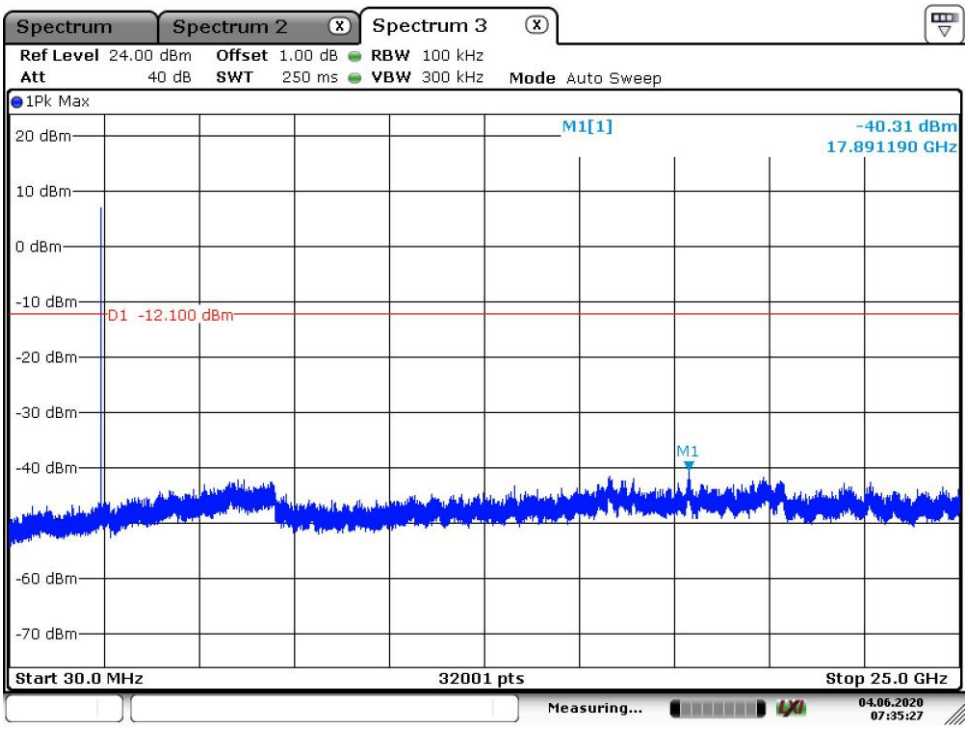


Date: 4.JUN.2020 07:33:41

Middle Channel

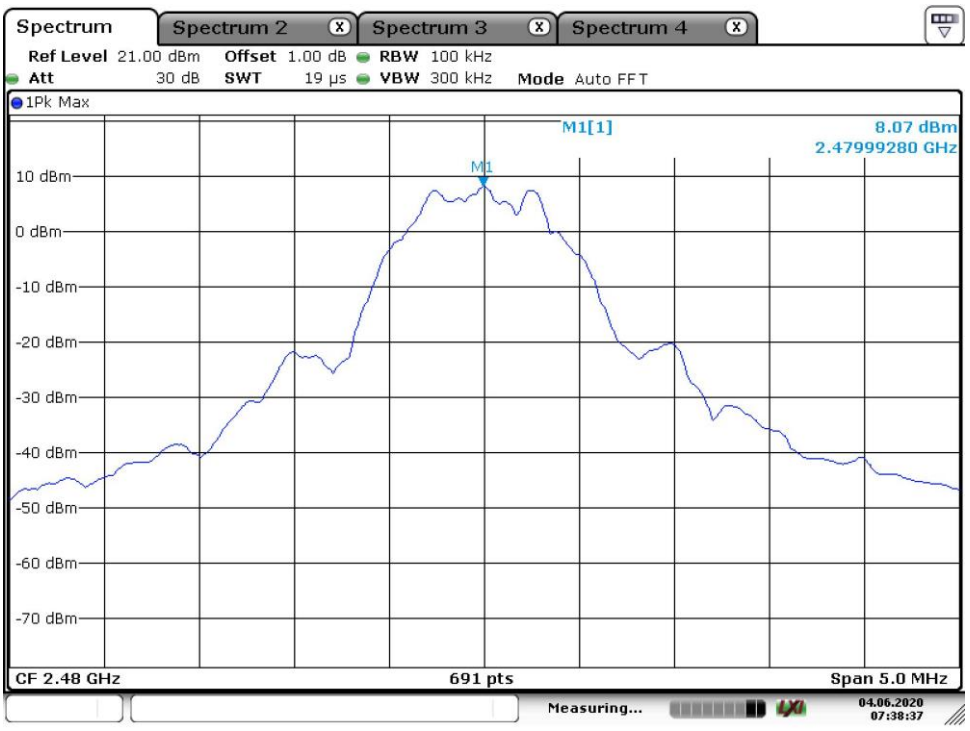


Date: 4.JUN.2020 07:34:39



Date: 4.JUN.2020 07:35:27

High Channel



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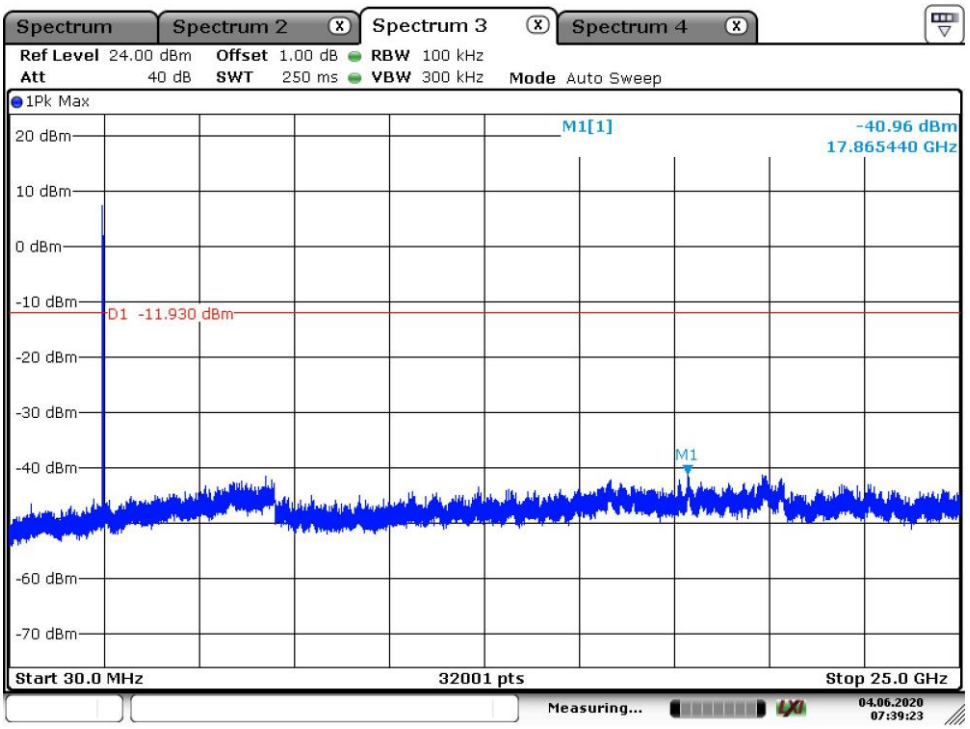
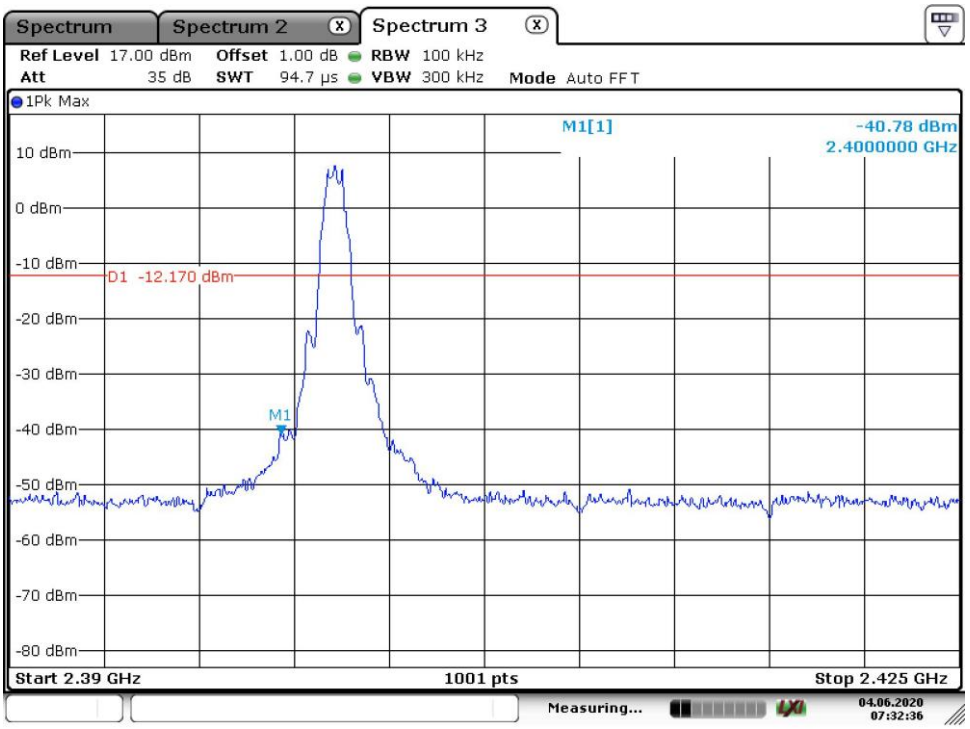


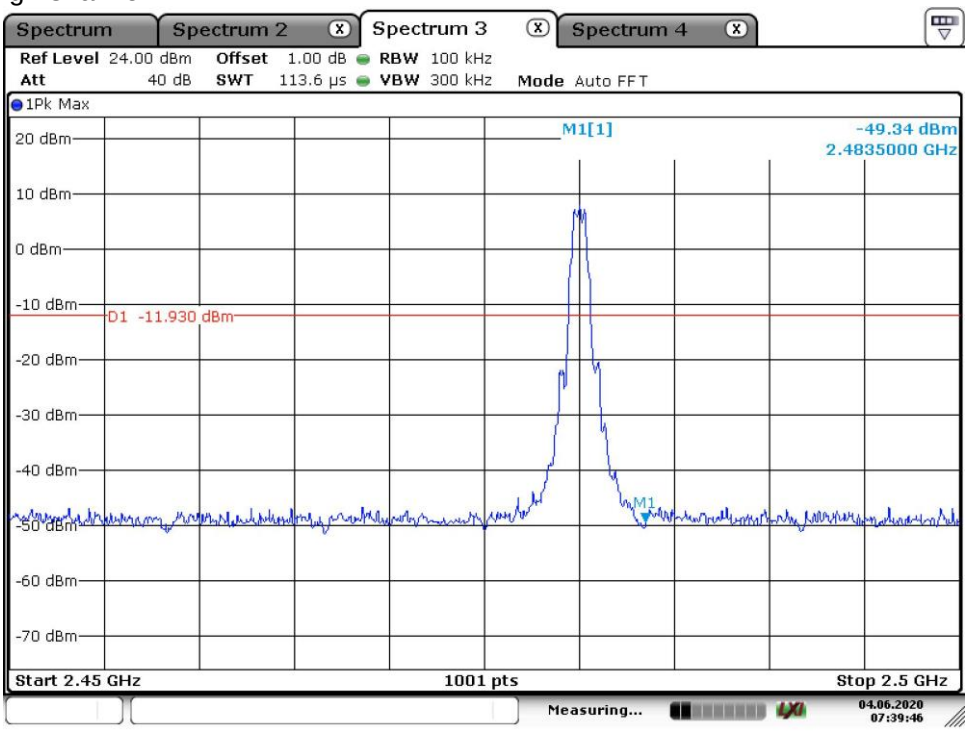
Date: 4.JUN.2020 07:39:23

Band Edge, Low Channel



Date: 4.JUN.2020 07:32:36

Band Edge, High Channel

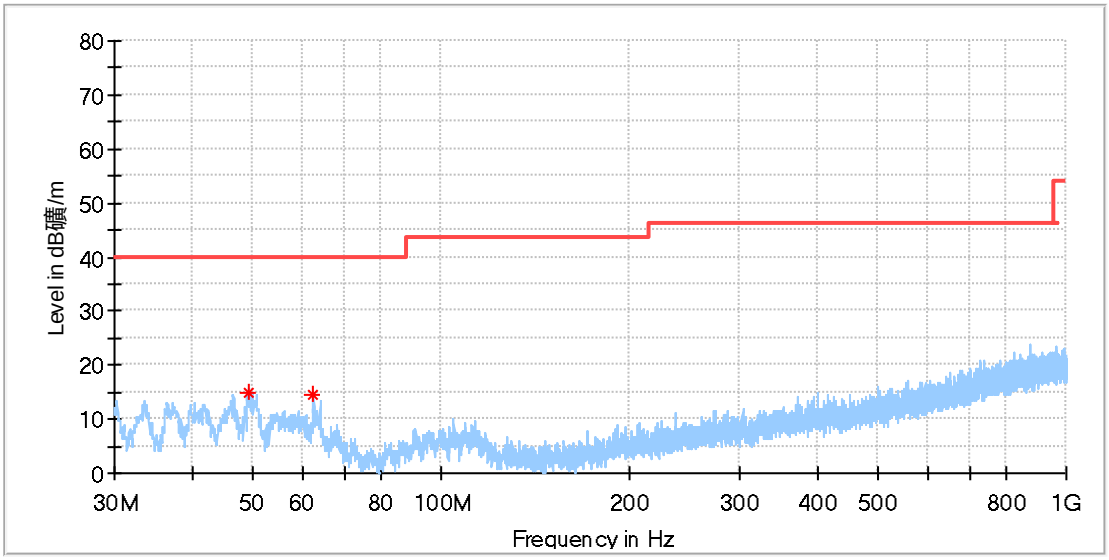


Date: 4.JUN.2020 07:39:46

Appendix A.5: Test Results of Radiated Spurious Emissions

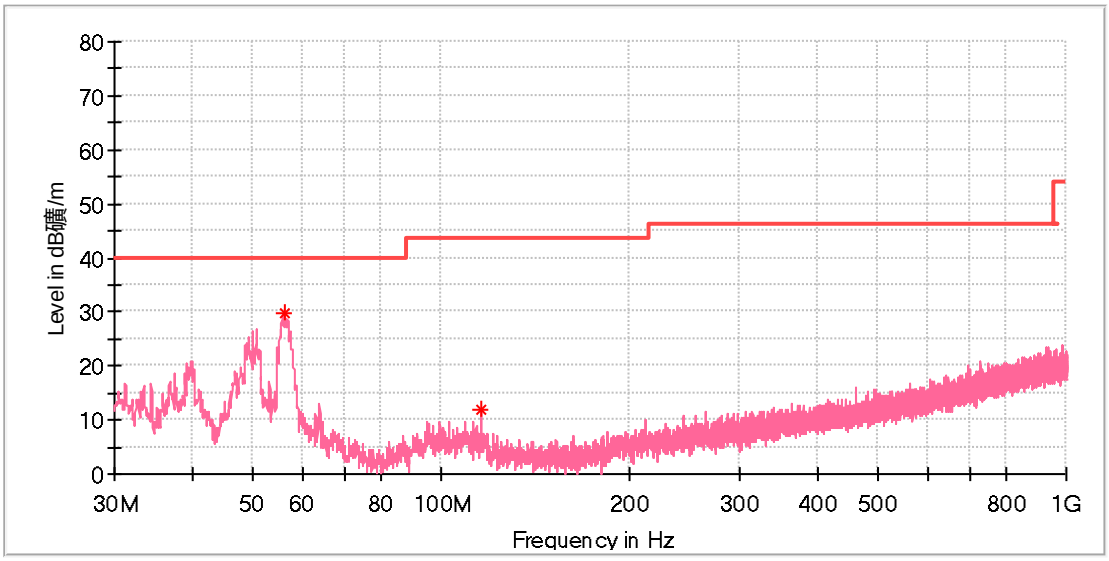
30 MHz to 1GHz

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.109000	14.84	---	40.00	25.16	100.0	H	175.0	-18.6
62.446500	14.57	---	40.00	25.43	100.0	H	29.0	-19.8

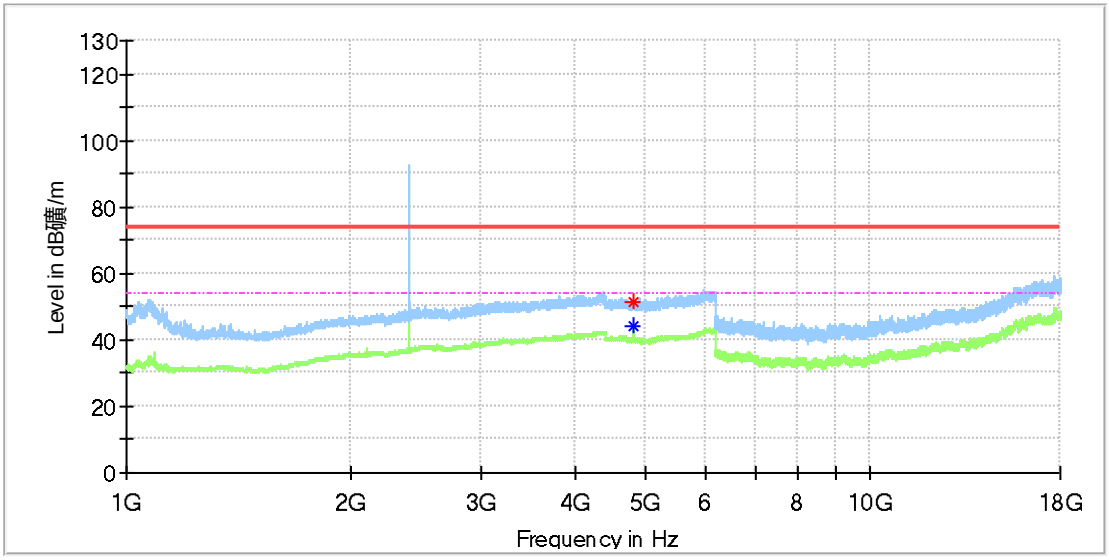
EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
56.190000	29.84	---	40.00	10.16	100.0	V	223.0	-18.9
115.602500	11.90	---	43.50	31.60	100.0	V	190.0	-20.2

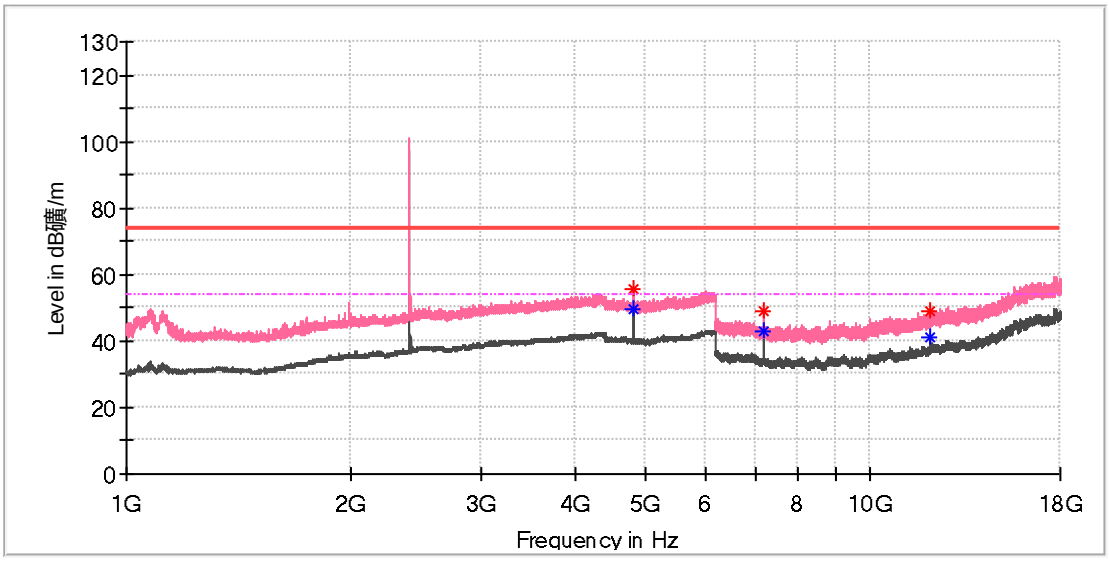
Above 1GHz

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch0
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



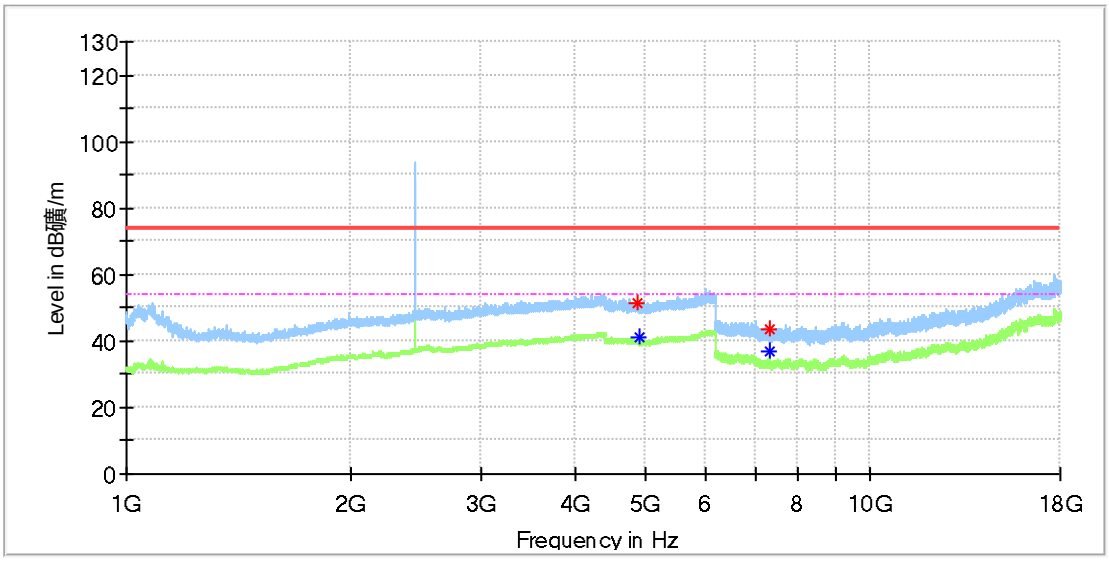
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	51.49	---	74.00	22.51	100.0	H	0.0	13.6
4803.500000	---	44.37	54.00	9.63	100.0	H	0.0	13.6

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch0
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



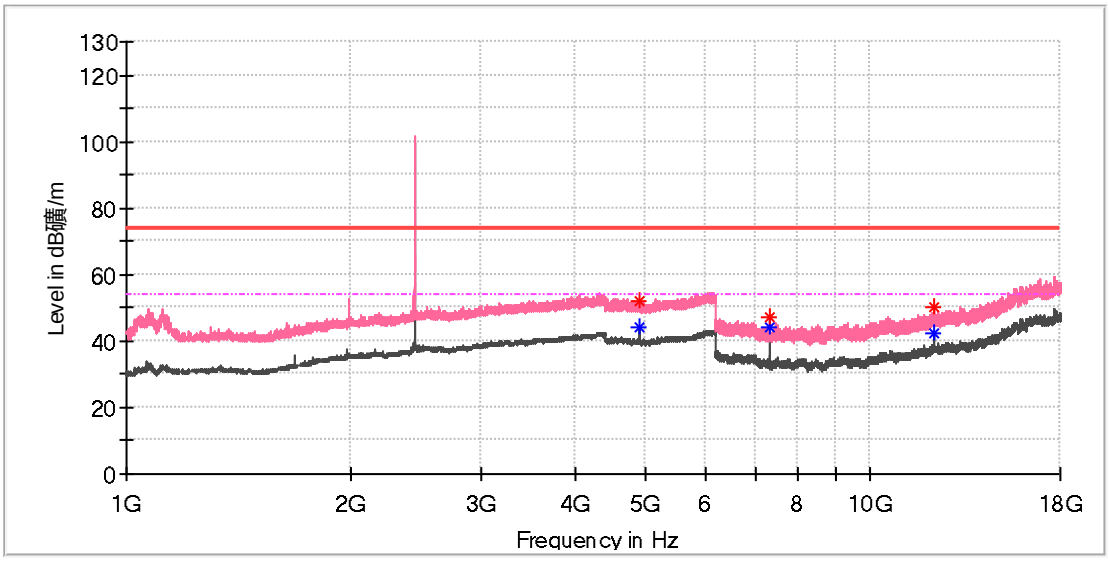
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.000000	55.74	---	74.00	18.26	100.0	V	56.0	13.6
4804.000000	---	49.31	54.00	4.69	100.0	V	66.0	13.6
7205.950000	48.81	---	74.00	25.19	100.0	V	121.0	8.8
7205.950000	---	43.10	54.00	10.90	100.0	V	121.0	8.8
12011.500000	---	41.19	54.00	12.81	100.0	V	0.0	14.0
12011.500000	48.69	---	74.00	25.31	100.0	V	0.0	14.0

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch19
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



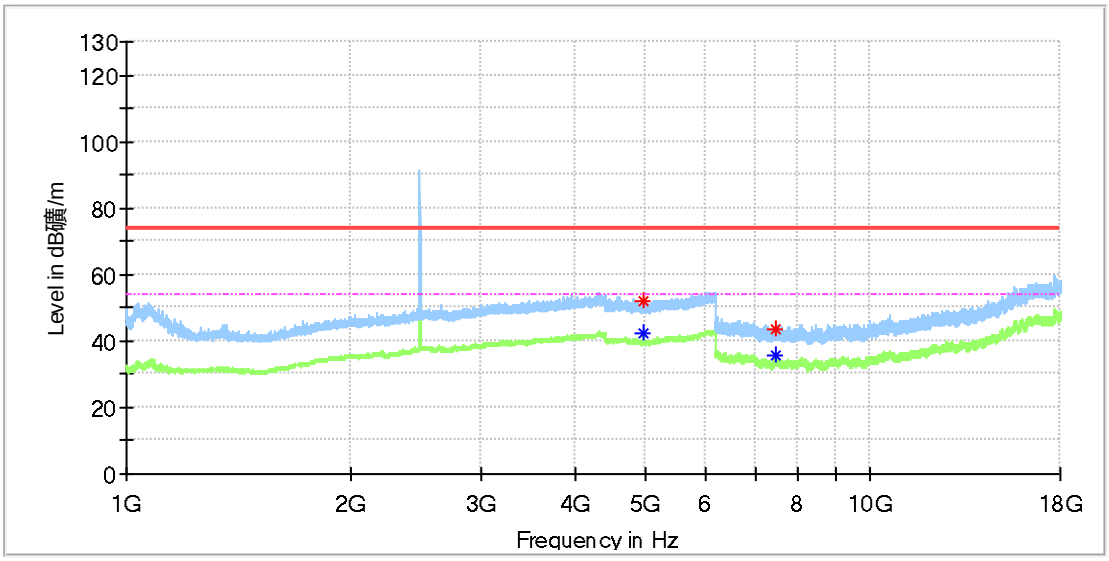
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4877.500000	51.56	---	74.00	22.44	100.0	H	148.0	13.4
4879.500000	---	41.37	54.00	12.63	100.0	H	32.0	13.4
7319.033333	43.58	---	74.00	30.42	100.0	H	174.0	8.2
7319.033333	---	36.74	54.00	17.26	100.0	H	174.0	8.2

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch19
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



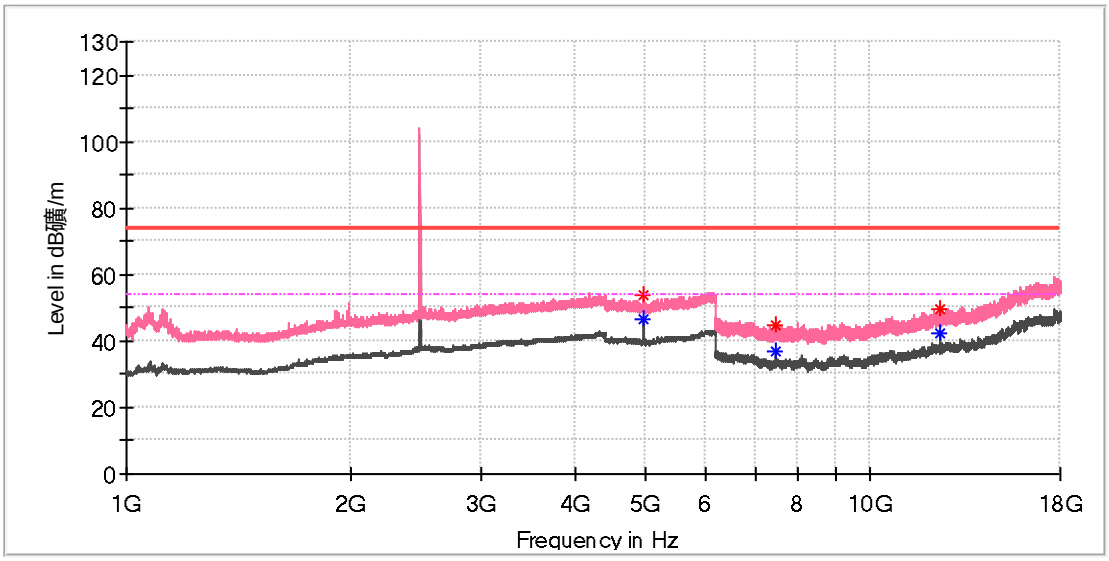
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4880.000000	52.15	---	74.00	21.85	100.0	V	247.0	13.4
4880.000000	---	44.30	54.00	9.70	100.0	V	247.0	13.4
7320.016667	46.94	---	74.00	27.06	100.0	V	356.0	8.2
7320.016667	---	43.95	54.00	10.05	100.0	V	356.0	8.2
12198.333333	---	42.40	54.00	11.60	100.0	V	0.0	14.7
12199.316667	49.92	---	74.00	24.08	100.0	V	356.0	14.7

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	---	42.46	54.00	11.54	100.0	H	188.0	13.2
4960.500000	51.86	---	74.00	22.14	100.0	H	40.0	13.2
7439.000000	43.39	---	74.00	30.61	100.0	H	110.0	8.4
7439.000000	---	35.70	54.00	18.30	100.0	H	110.0	8.4

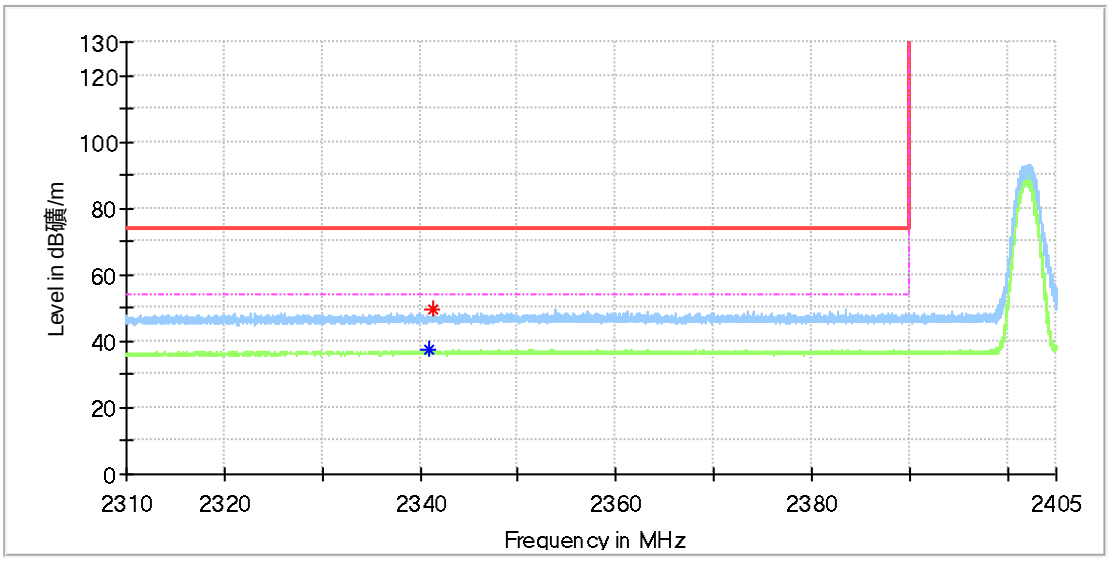
EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	53.69	---	74.00	20.31	100.0	V	52.0	13.2
4960.000000	---	46.33	54.00	7.67	100.0	V	52.0	13.2
7439.000000	44.67	---	74.00	29.33	100.0	V	193.0	8.4
7439.491667	---	36.99	54.00	17.01	100.0	V	193.0	8.4
12399.425000	---	42.37	54.00	11.63	100.0	V	141.0	14.7
12400.900000	49.30	---	74.00	24.70	100.0	V	141.0	14.7

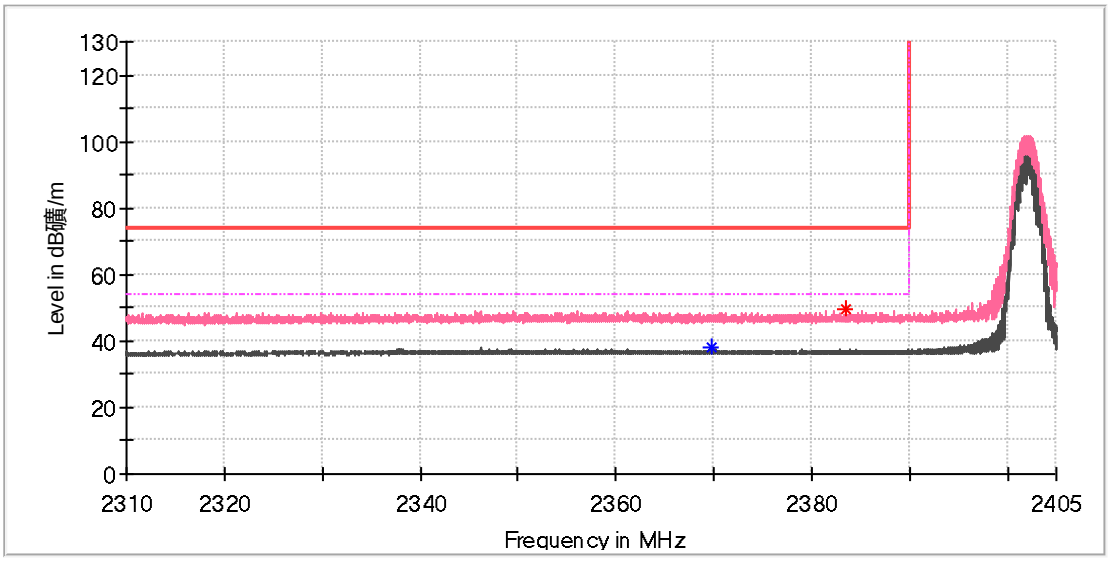
Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch0
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



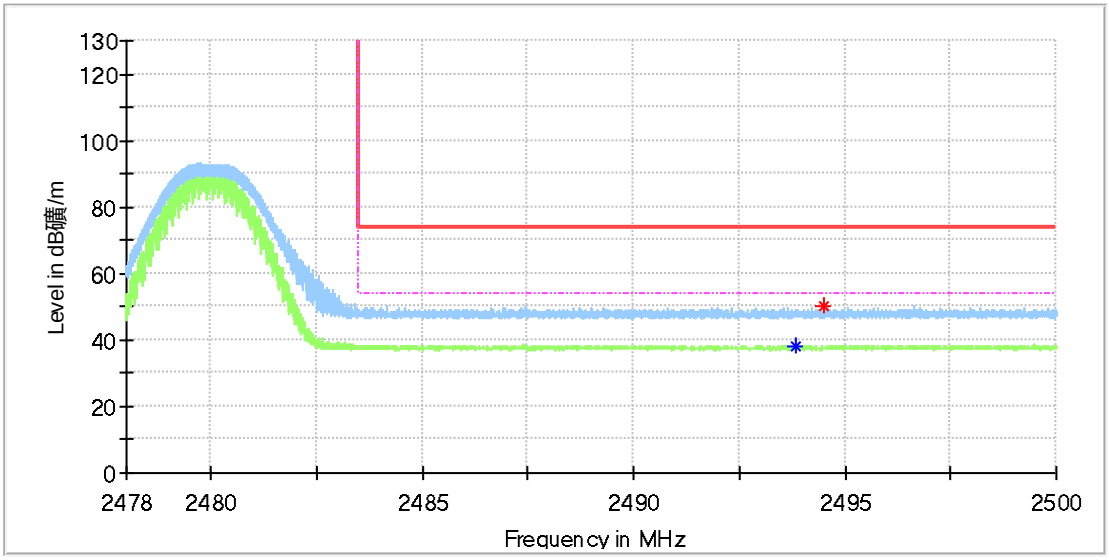
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2340.847059	---	37.55	54.00	16.45	100.0	H	164.0	6.8
2341.294118	49.58	---	74.00	24.42	100.0	H	131.0	6.8

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch0
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



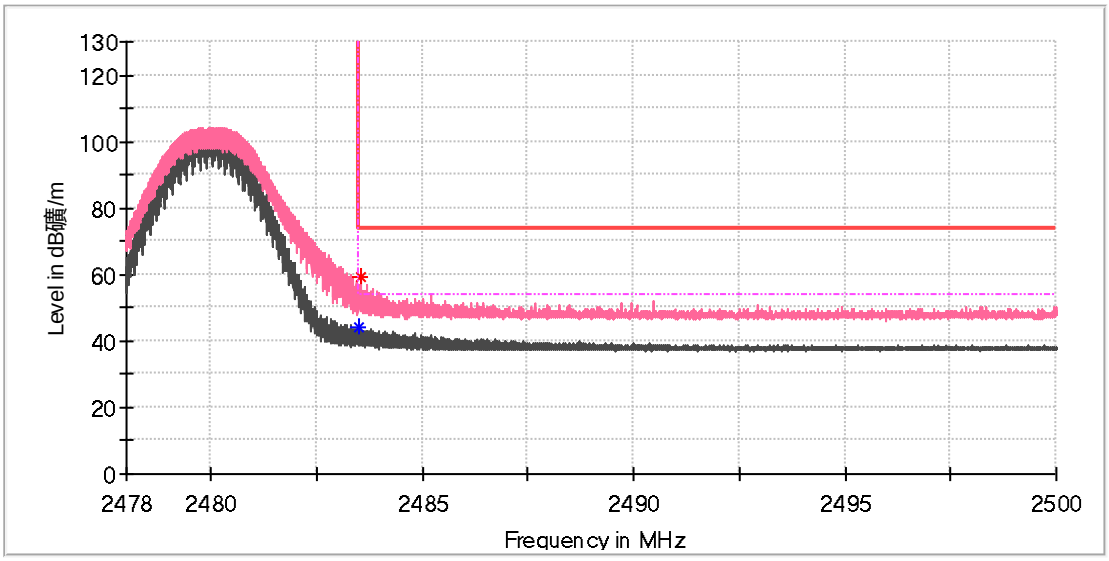
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2369.780147	---	37.95	54.00	16.05	100.0	V	116.0	6.9
2383.457353	49.81	---	74.00	24.19	100.0	V	105.0	7.0

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2493.843235	---	38.23	54.00	15.77	100.0	H	42.0	7.4
2494.490294	50.43	---	74.00	23.57	100.0	H	295.0	7.4

EUT Name:	AMAZON LOCKER
Model:	ZL-ODIN-V1
Test Mode:	BLE_1M_Ch39
Test Voltage::	Battery
Remark:	Temp 24 Humi:45%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.509706	---	43.97	54.00	10.03	100.0	V	87.0	7.4
2483.538824	59.10	---	74.00	14.90	100.0	V	74.0	7.4