TEST REPORT

REPORT NUMBER: 25B02W000005-008

ON

Type of Equipment:	Barcode Reader
Type of Designation:	DLMKWF
Brand Name:	DATALOGIC
Manufacturer:	Datalogic S.r.l.
FCC ID:	U4G-DLMKWF
IC	3862E-DLMKWF

ACCORDING TO

FCC Part 2, FCC Part 15C, RSS-Gen Issue 5, RSS-247 Issue 3,ANSI C63.10-2013

Chongqing Academy of Information and Communications Technology

Month date, year
Apr.18th, 2025
Signature

Zhou Jin
Director

Note:
The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.

Revision Version

Report Number	Revision	Date
25B02W000005-008	00	2025-04-18

CONTENTS

1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
Designation Number:	CN1239
IC Registration Number:	29397
Address:	No.19 EastRoad,Xiantao Big-data Valley,Yubei District,Chongqing,People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	30-75%

1.3. Project data

Testing Start Date:	2025-03-25
Testing End Date:	2025-04-14

1.4. Signature

李润豪	**2025-04-18**
Li Runhao **(Prepared this test report)**	**Date**
	2025-04-18
Wang Lili **(Reviewed this test report)**	**Date**
	2025-04-18
Zhou Jin **Director of the laboratory** **(Approved this test report)**	**Date**

2. Client Information

2.1. Applicant Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-ltaly
City:	Calderara di Reno
Country:	ltaly
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

2.2. Manufacturer Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-ltaly
City:	Calderara di Reno
Country:	ltaly
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	Barcode Reader
Model name	DLMKWF
Brand name	DATALOGIC
BLUETOOTH Frequency Band	2402MHz-2480MHz
Type of BLE modulation	GFSK
HVIN	DLMKWF
Extreme Temperature	-20/+50°C
Nominal Test Voltage	3.85V
Extreme Test High Voltage	4.4V
Extreme Test Low Voltage	3.6V

Note1: Photographs of EUT are shown in ANNEX A of this test report.
Note2: High and low voltage values in extreme condition test are given by manufacturer.
Note3: The Extreme Temperature is provided by the manufacturer and has not been verified by the laboratory.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
25B02W000005#S07	S25CC0873	V00	0.00.01.20250311	2025-03-20
25B02W000005#S16	867529060024650	V00	0.00.01.20250311	2025-03-27

*EUT ID: is used to identify the test sample in the lab internally.

No.	Item(s)	Data
1	Antenna gain of EUT	1.13 dBi
Note: The data of aantenna gain is provided by the Antenna specification may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.		

3.3. Outline of Equipment under Test

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)	Channel Separation
BLE	CH0-39	2402-2480		2MHz

Test frequency list:

BLE	Channel	0	19	39
	Freq. (MHz)	2402	2440	2480

Emissions Information:

TestMode	Frequency Min(MHz)	Frequency Max(MHz)	Max OutPut Power(dBm)	Max OutPut Power(W)	OBW (KHz)	Necessary Bandwidth & Emission Classification
BLE_1M	2402	2480	-2.57	0.0006	1096	1M10F1D
BLE_2M	2402	2480	-2.37	0.0006	2140	2M14F1D
BLE_125K	2402	2480	-2.52	0.0006	1200	1M20F1D
BLE_500K	2402	2480	-2.37	0.0006	1092	1M09F1D

Note: This report is for BLE only.

3.4. Internal Identification of AE used during the test

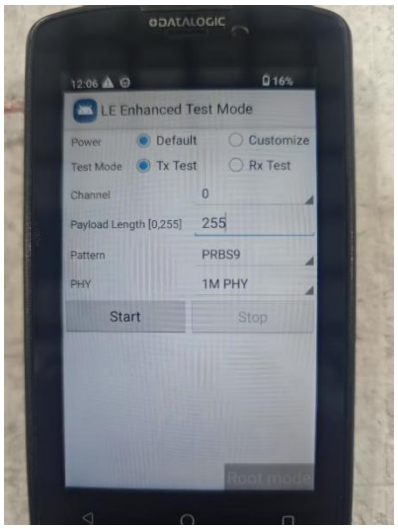
AE ID*	Description	Note
BA01	Battery	Model: MK2-BY-202 3.85V 4850mAh
AE1	RF cable	1.0dB

*AE ID: is used to identify the test sample in the lab internally.

dB*：is provided customer.

3.5. EUT Test RF Configuration

EUT uses engineering mode to control RF emissions, changing power levels, channels, rates, and HT.


DATALOGIC
12:06
16%
LE Enhanced Test Mode
Power
Default
Customize
Test Mode
Tx Test
Rx Test
Channel
0
Payload Length [0,255]
255
Pattern
PRBS9
PHY
1M PHY
Start
Stop

4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	--
FCC Part 15C	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz	--
RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2021
RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	2023
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for Performing Compliance Measurements on Frequency Hopping Spread Spectrum systems (DSS) Operating Under §15.247	--
Note: FCC Part 2 and KDB 558074 D01 15.247 Meas Guidance v05r02 is not A2LA certified.		

5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137	--	--	R&S	1 Year	2025-06-28
2	T-SWT01 RF switch unit	--	--	--	--	Beijing Zhiwang Xince Technology Co., Ltd	--	--

5.2. RSE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	1 Year	2025-06-28
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2 Years	2026-10-28
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2 Years	2026-11-08
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2 Years	2026-09-30
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2 Years	2026-09-30
6	Loop Antenna	6502	00213256	--	--	ETS	1 Year	2026-09-04
7	Amplifier1	SCU-08F1	8320027	--	--	R&S	--	--
8	Amplifier2	SCU-18F	180093	--	--	R&S	--	--
9	2-Line V-Network	ENV216	102368	--	--	R&S	1 Year	2025-05-16
10	Test Receiver	ESR 3	101382	03	3.48 SP2	R&S	1 Year	2025-06-28
11	Test Receiver	ESW 26	101382	00	1.50 SP1	R&S	1 Year	2025-06-28

5.3. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
--	--	--	--	--	--	--

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
1	Fully-Anechoic Chamber	FAC 5	--	TDK	3 Years	2027-11-04
2	Anechoic Chamber	SAC 10	--	TDK	3 Years	2027-11-05

5.5. Test software

No.	Name	version	SN	Manufacture
1	EMC32 (Transmitter Spurious Emission-Radiated Above 1GHz)	V9.26.01	--	R&S
2	EMC32 (Transmitter Spurious Emission-Radiated Below 1GHz)	V 10.20.01	--	R&S
3	EMC32 (AC Powerline Conducted Emission)	V 10.40.10	--	R&S
4	WIFI/BT CE/FCC/ICautomated testing software	V1.0.0.0	--	Beijing Zhiwang Xince Technology Co., Ltd

6. Test Results

6.1. Summary of Test Results

FCC Rules	IC Rules	Name of Test	Result
15.247(b)	RSS-247 5.4	Maximum Peak Output Power	Pass
15.247(e)	RSS-247 5.2	Peak Power Spectral Density	Pass
15.247(a)	RSS-247 5.2	6dB Occupied Bandwidth	Pass
2.1049	RSS-GEN 6.7	99% Occupied Bandwidth	N/A note3
15.247(d)	RSS-247 5.5	Band Edges Compliance	Pass
15.247(d)	RSS-247 5.5	Transmitter Spurious Emission-Conducted	Pass
15.247/15.205/15.209	RSS-GEN 8.9, 8.10	Transmitter Spurious Emission-Radiated	Pass
15.207	RSS-GEN 8.8	AC Powerline Conducted Emission	Pass
15.203/15.247(c)	RSS Gen 6.8, RSS-247 5.4	Antenna requirement	Pass Note 2
NOTE 1:The mobile computer, manufactured by Datalogic S.r.l. is a new product for testing. NOTE 2:Bluetooth used an Internal antenna with max Gain 1.13 dBi that complied with 15.203/15.247(c) Requirements. NOTE 3：Unrestricted requirements.			

6.2. Peak Output Power-Conducted

Specifications:	FCC 47 Part 15.247(b), RSS-247 5.4
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Conducted Limit(dBm)	EIRP Limit(dBm)
FCC 47 Part 15.247(b)(3)	<30	N/A
RSS-247 5.4(d)	<30	<36

Measurement Uncertainty:

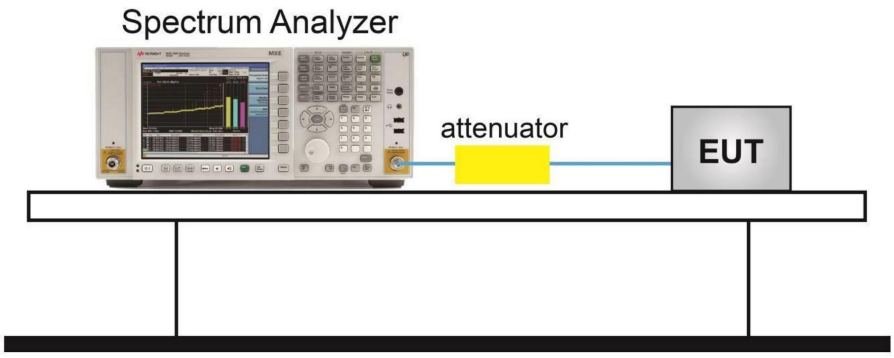
Measurement Uncertainty	0.36dB

Test Procedure:

The measurement is according to ANSI C63.10 clause 11.9.1,

1. Set the RBW ≥ DTS bandwidth.
2. Set VBW ≥ [3 × RBW].
3. Set span ≥ [3 × RBW].
4. Sweep time = auto couple.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.

Test setup:



Antenna gain of EUT:

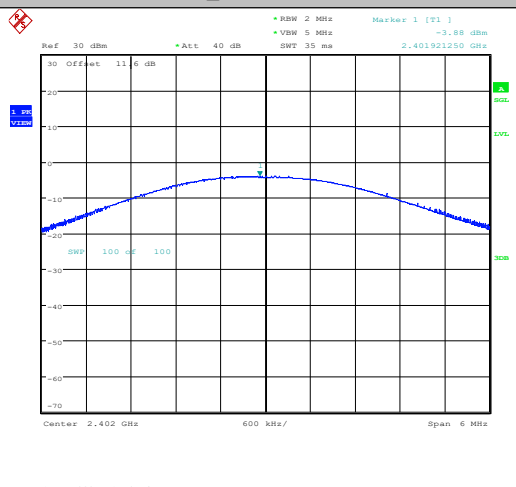
No.	Item(s)	Data
1	Antenna gain of EUT	1.13dBi
Note: The data is provided by the customer may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.		

Measurement Results:

TestMode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.88	≤30	-2.75	≤36	PASS
BLE_1M	Ant1	2440	-2.57	≤30	-1.44	≤36	PASS
BLE_1M	Ant1	2480	-4.29	≤30	-3.16	≤36	PASS
BLE_2M	Ant1	2402	-3.78	≤30	-2.65	≤36	PASS
BLE_2M	Ant1	2440	-2.37	≤30	-1.24	≤36	PASS
BLE_2M	Ant1	2480	-4.04	≤30	-2.91	≤36	PASS
BLE_125K	Ant1	2402	-3.84	≤30	-2.71	≤36	PASS
BLE_125K	Ant1	2440	-2.52	≤30	-1.39	≤36	PASS
BLE_125K	Ant1	2480	-4.15	≤30	-3.02	≤36	PASS
BLE_500K	Ant1	2402	-3.67	≤30	-2.54	≤36	PASS
BLE_500K	Ant1	2440	-2.37	≤30	-1.24	≤36	PASS
BLE_500K	Ant1	2480	-4.07	≤30	-2.94	≤36	PASS

Test graphs as below

BLE_1M-Ant1-2402-PASS



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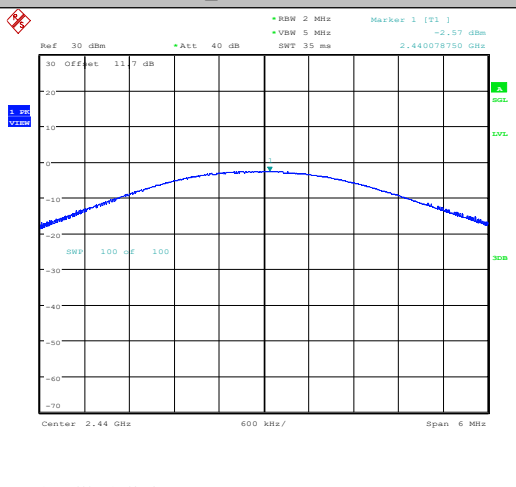

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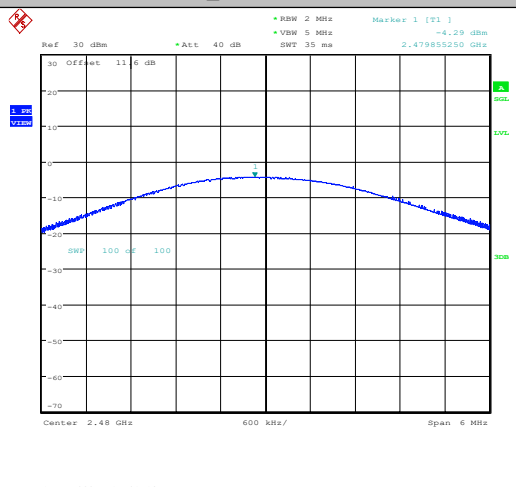

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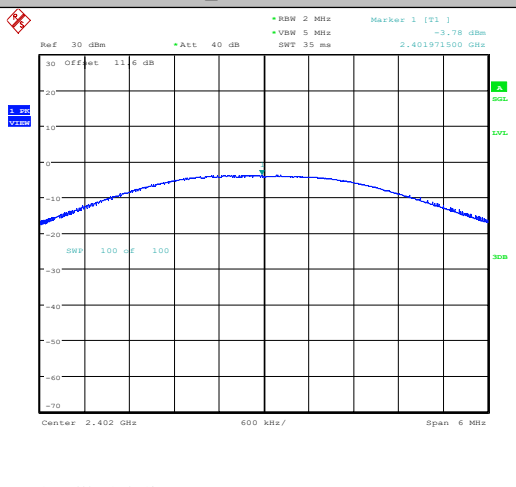

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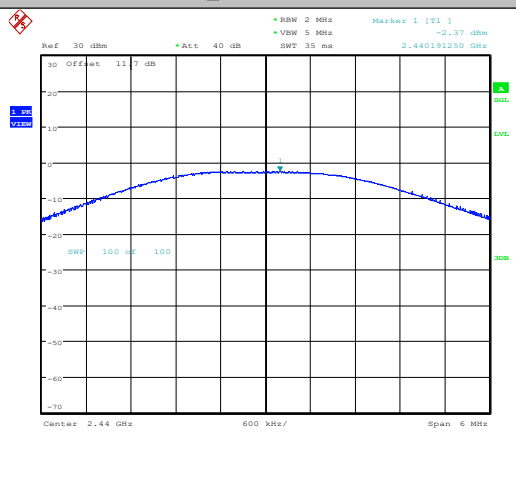
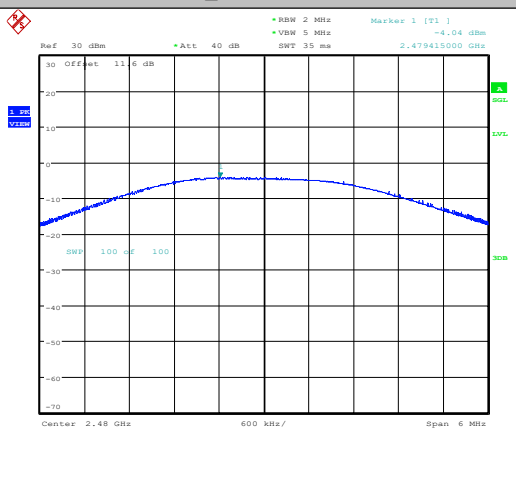
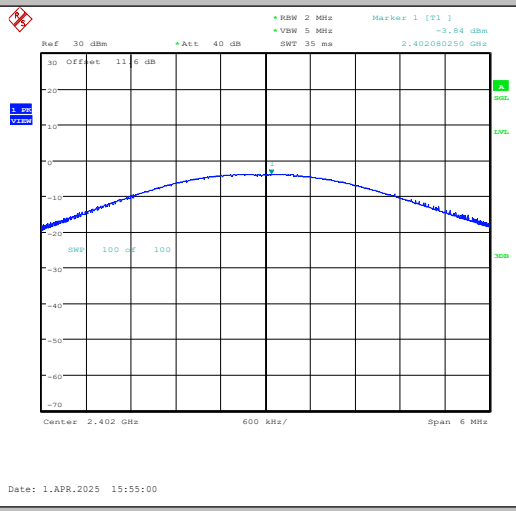
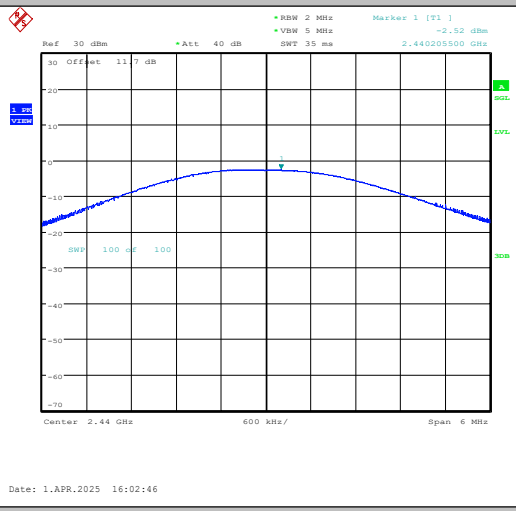


BLE_2M-Ant1-2480-PASS



BLE_125K-Ant1-2402-PASS	BLE_125K-Ant1-2440-PASS
	
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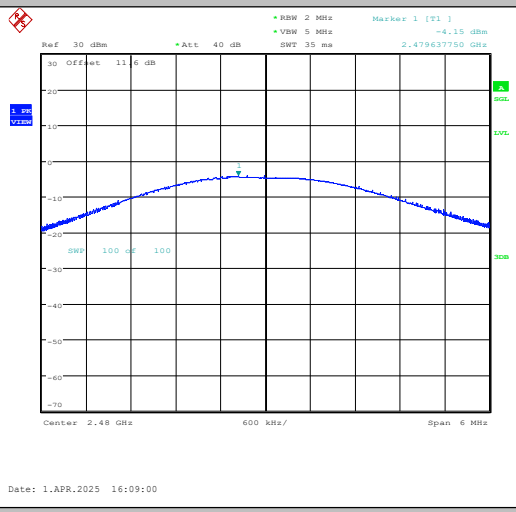
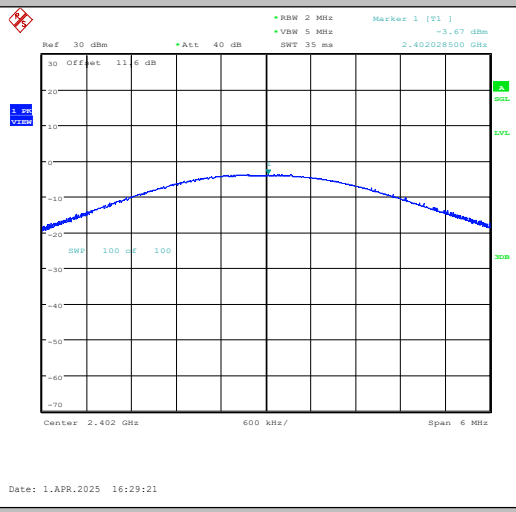
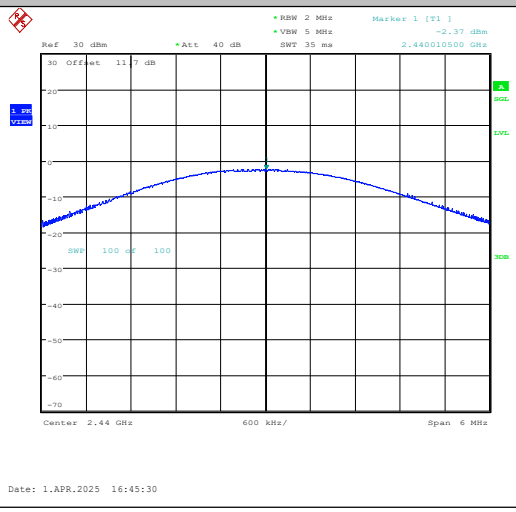
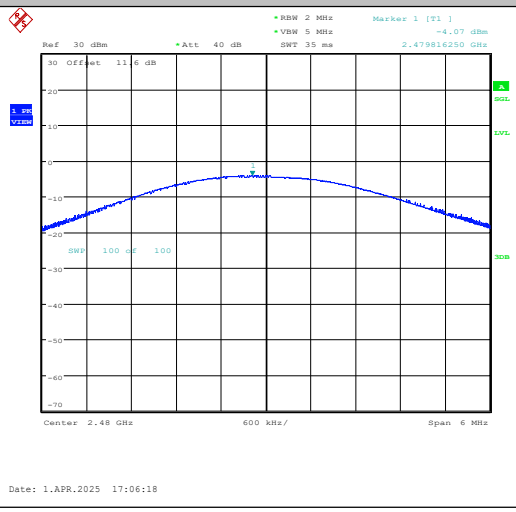
	
BLE_500K-Ant1-2440-PASS	BLE_500K-Ant1-2480-PASS
	

6.3. Peak Power Spectral Density

Specifications:	FCC 47 Part 15.247(e), RSS-247 5.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247(e)	≤ 8dBm/3 kHz
RSS-247 5.2(b)	≤ 8dBm/3 kHz

Measurement Uncertainty:

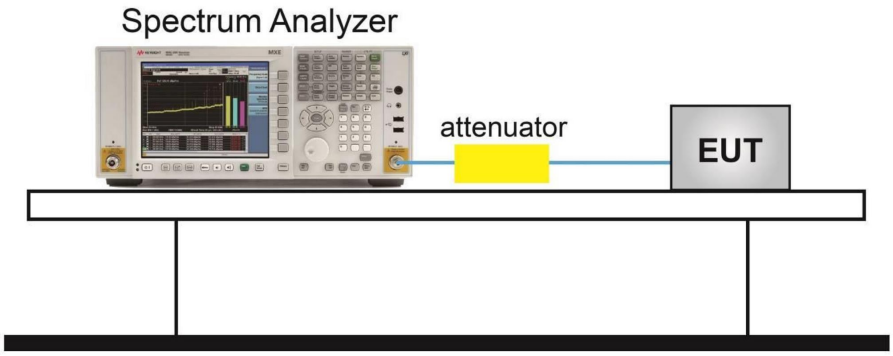
Measurement Uncertainty	0.36dB

Test procedures:

The measurement is according to ANSI C63.10 clause 11.10.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to 3 kHz ≤ RBW ≤ 100 kHz.
6. Set the VBW ≥ [3 × RBW].
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

Test Setup

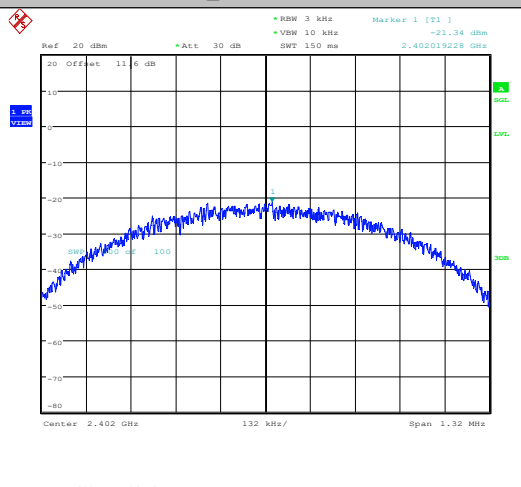


Measurement Results:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-21.34	≤8.00	PASS
BLE_1M	Ant1	2440	-19.96	≤8.00	PASS
BLE_1M	Ant1	2480	-21.70	≤8.00	PASS
BLE_2M	Ant1	2402	-23.47	≤8.00	PASS
BLE_2M	Ant1	2440	-22.14	≤8.00	PASS
BLE_2M	Ant1	2480	-24.05	≤8.00	PASS
BLE_125K	Ant1	2402	-10.86	≤8.00	PASS
BLE_125K	Ant1	2440	-9.52	≤8.00	PASS
BLE_125K	Ant1	2480	-11.30	≤8.00	PASS
BLE_500K	Ant1	2402	-11.04	≤8.00	PASS
BLE_500K	Ant1	2440	-9.53	≤8.00	PASS
BLE_500K	Ant1	2480	-11.44	≤8.00	PASS

Test graphs as below

BLE_1M-Ant1-2402-PASS



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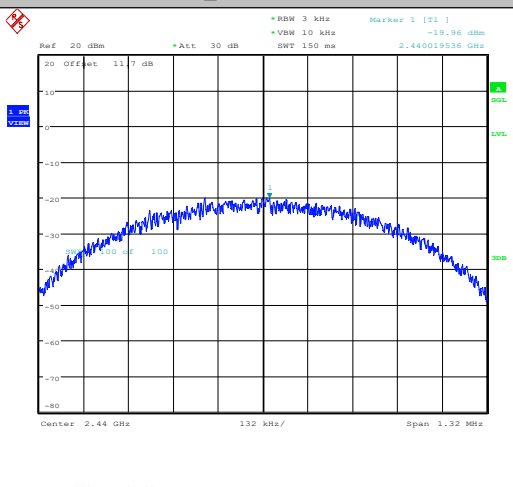

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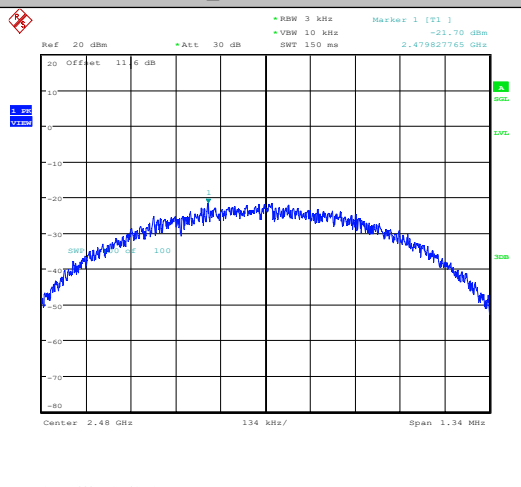

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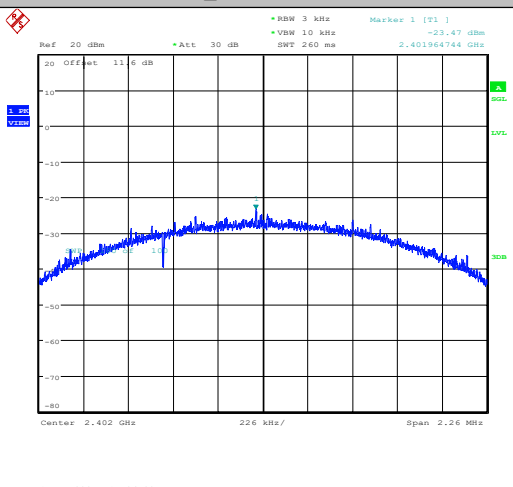

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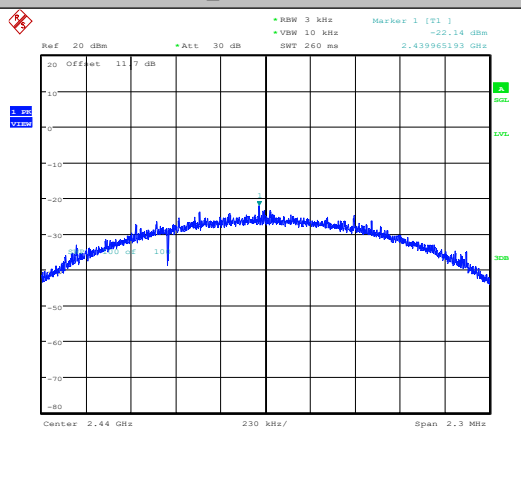

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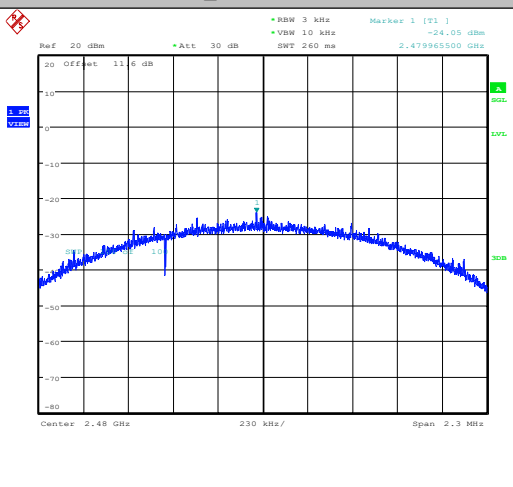

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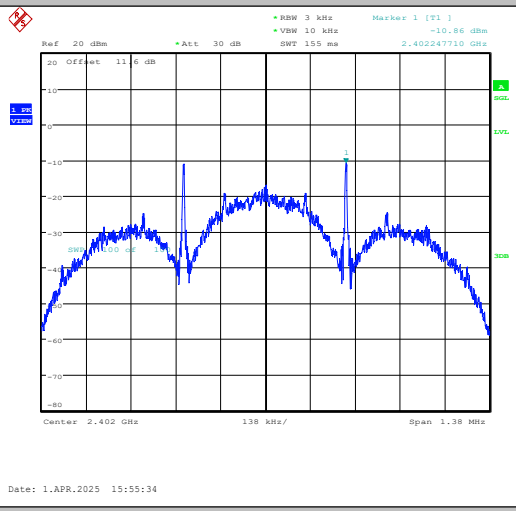
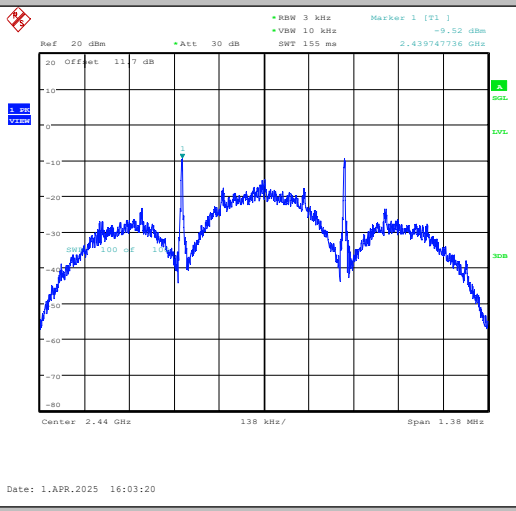
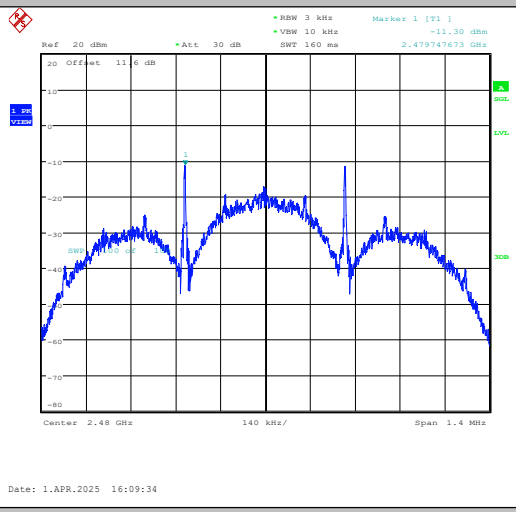
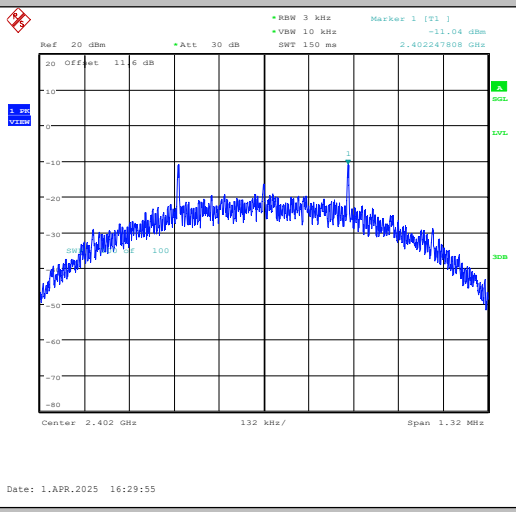
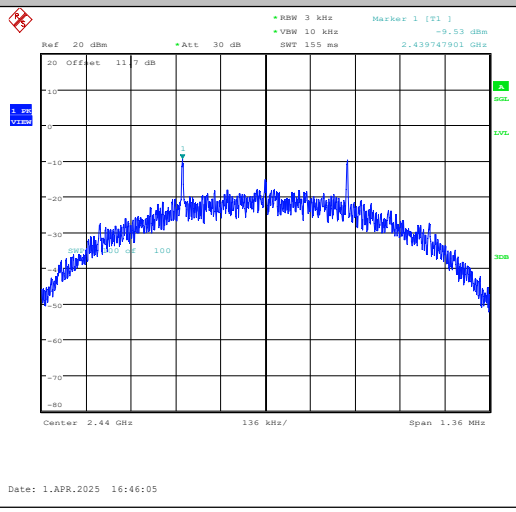
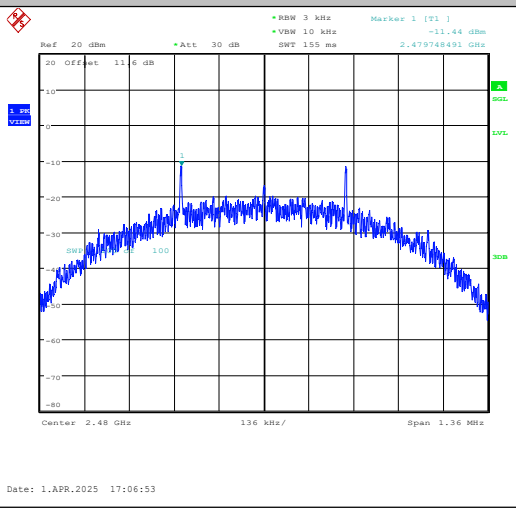
	
BLE_125K-Ant1-2480-PASS	BLE_500K-Ant1-2402-PASS
	
BLE_500K-Ant1-2440-PASS	BLE_500K-Ant1-2480-PASS
	

6.4. 6dB Bandwidth

Specifications:	FCC 47 Part 15.247 (a) (2), RSS-247 5.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247 (a) (2)	≥500kHz
RSS-247 5.2(a)	≥500kHz

Measurement Uncertainty:

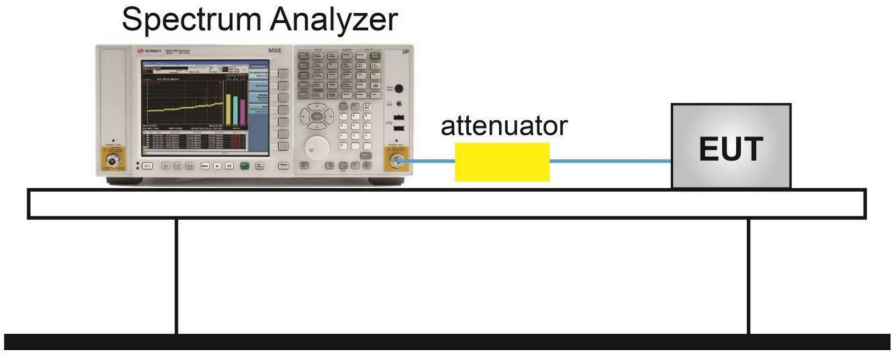
Measurement Uncertainty	3kHz

Test procedures:

The measurement is according to ANSI C63.10 clause 11.8.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW = 100 kHz.
4. Set the VBW ≥ [3 × RBW].
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Test Setup:

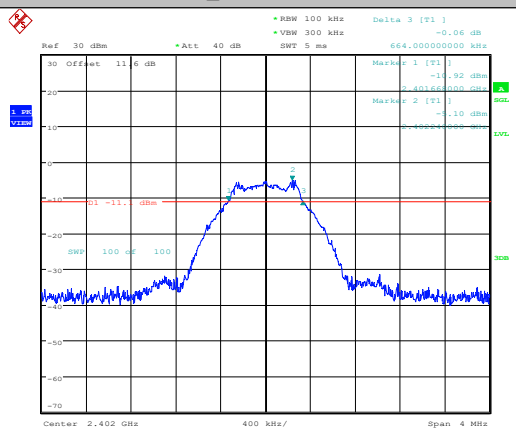


Measurement Results:

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.66	2401.67	2402.33	0.5	PASS
BLE_1M	Ant1	2440	0.66	2439.67	2440.33	0.5	PASS
BLE_1M	Ant1	2480	0.67	2479.66	2480.33	0.5	PASS
BLE_2M	Ant1	2402	1.13	2401.44	2402.57	0.5	PASS
BLE_2M	Ant1	2440	1.15	2439.42	2440.58	0.5	PASS
BLE_2M	Ant1	2480	1.15	2479.43	2480.58	0.5	PASS
BLE_125K	Ant1	2402	0.69	2401.66	2402.34	0.5	PASS
BLE_125K	Ant1	2440	0.69	2439.66	2440.34	0.5	PASS
BLE_125K	Ant1	2480	0.70	2479.65	2480.34	0.5	PASS
BLE_500K	Ant1	2402	0.66	2401.67	2402.34	0.5	PASS
BLE_500K	Ant1	2440	0.68	2439.66	2440.34	0.5	PASS
BLE_500K	Ant1	2480	0.68	2479.66	2480.34	0.5	PASS

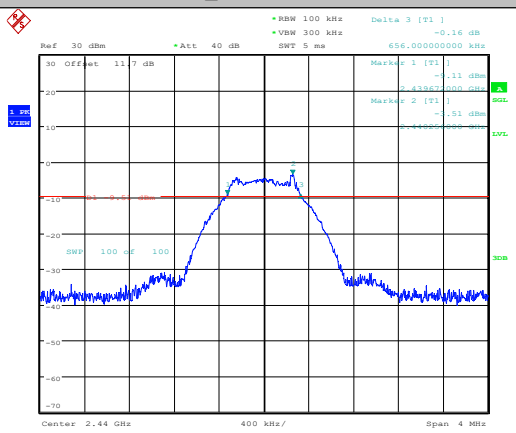
Test graphs as below

BLE_1M-Ant1-2402-PASS



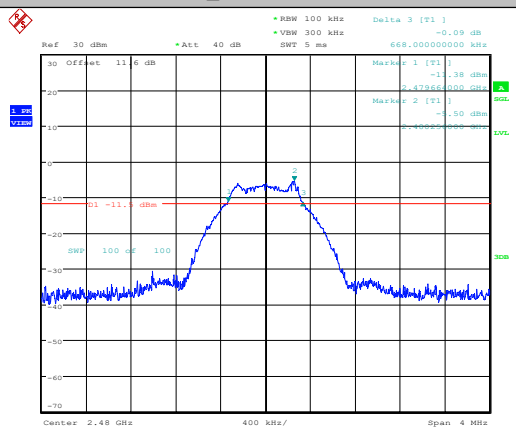
Date: 1.APR.2025 14:25:09

BLE_1M-Ant1-2440-PASS



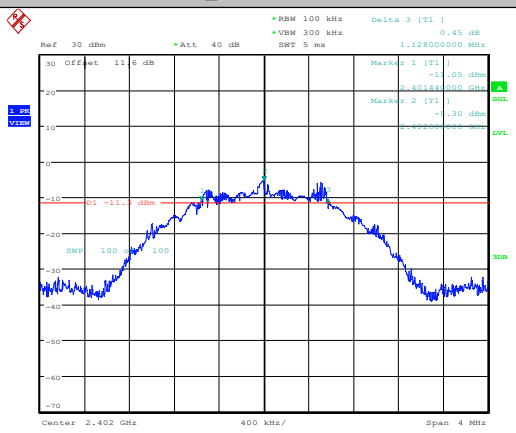
Date: 1.APR.2025 14:29:29

BLE_1M-Ant1-2480-PASS



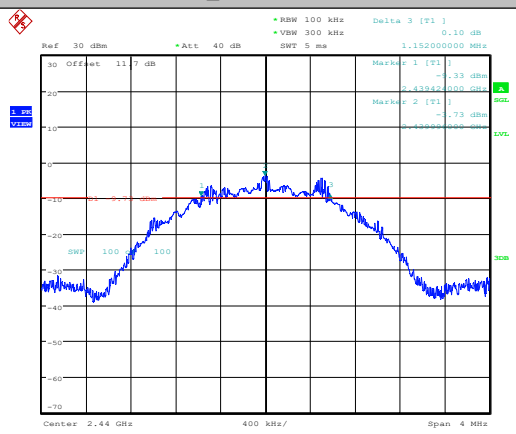
Date: 1.APR.2025 15:20:47

BLE_2M-Ant1-2402-PASS



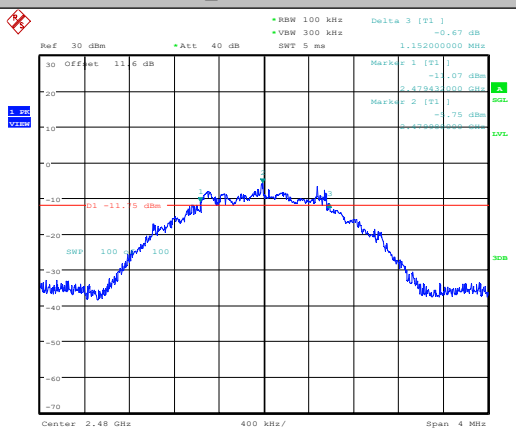
Date: 1.APR.2025 15:24:45

BLE_2M-Ant1-2440-PASS

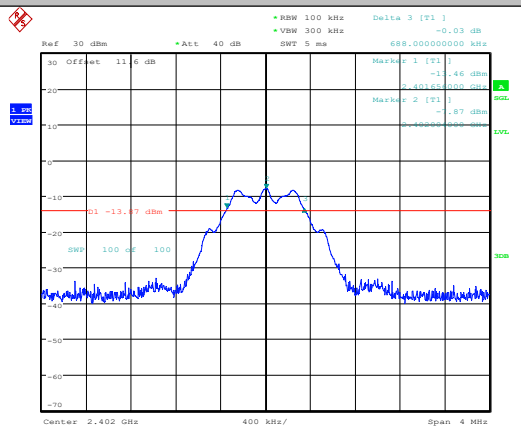
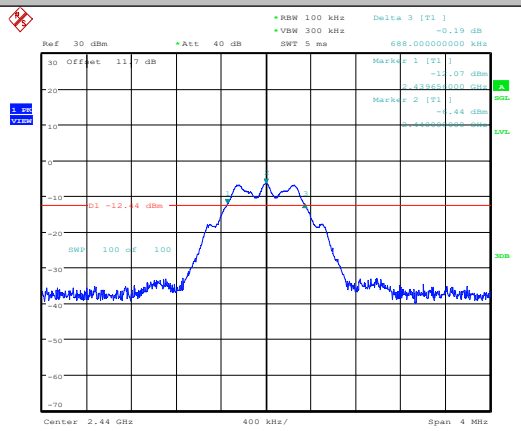
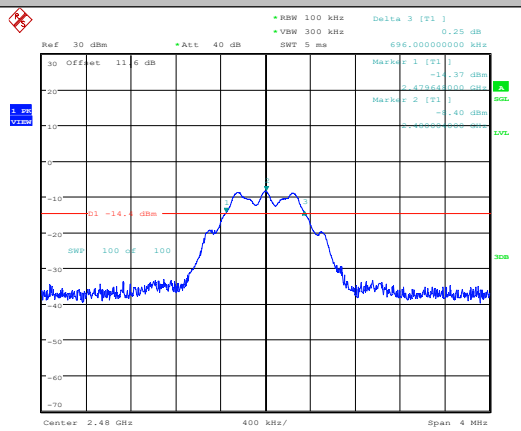
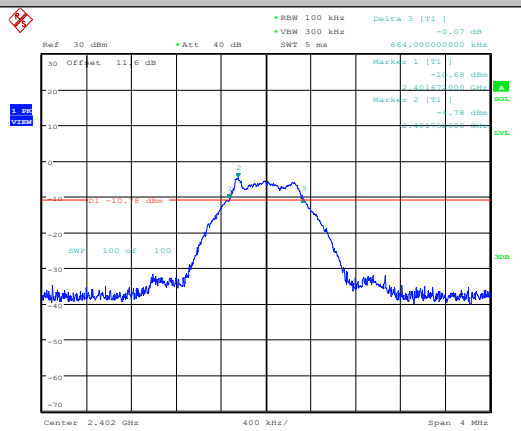
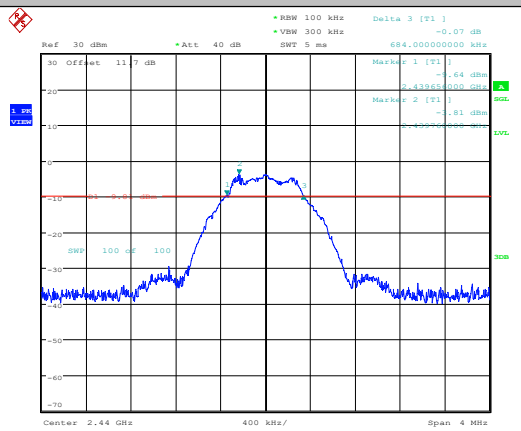
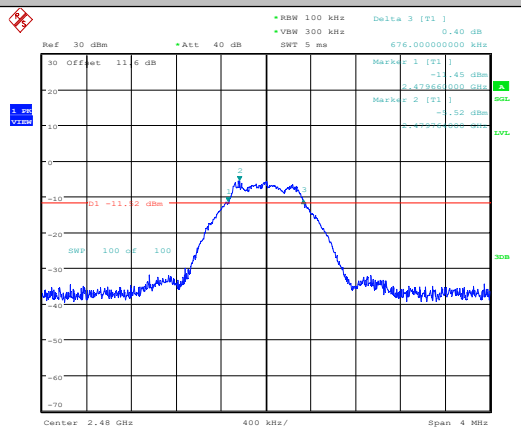


Date: 1.APR.2025 15:34:21

BLE_2M-Ant1-2480-PASS



Date: 1.APR.2025 15:49:10

BLE_125K-Ant1-2402-PASS	BLE_125K-Ant1-2440-PASS
	
Date: 1.APR.2025 15:54:32	Date: 1.APR.2025 16:02:18
BLE_125K-Ant1-2480-PASS	**BLE_500K-Ant1-2402-PASS**
	
Date: 1.APR.2025 16:08:29	Date: 1.APR.2025 16:28:53
BLE_500K-Ant1-2440-PASS	**BLE_500K-Ant1-2480-PASS**
	
Date: 1.APR.2025 16:45:02	Date: 1.APR.2025 17:05:46

6.5. 99% Occupied Bandwidth

Specifications:	FCC 47 Part 2.1049, RSS-GEN 6.7
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limit
2.1049	N/A
RSS-Gen 6.7	N/A

Measurement Uncertainty:

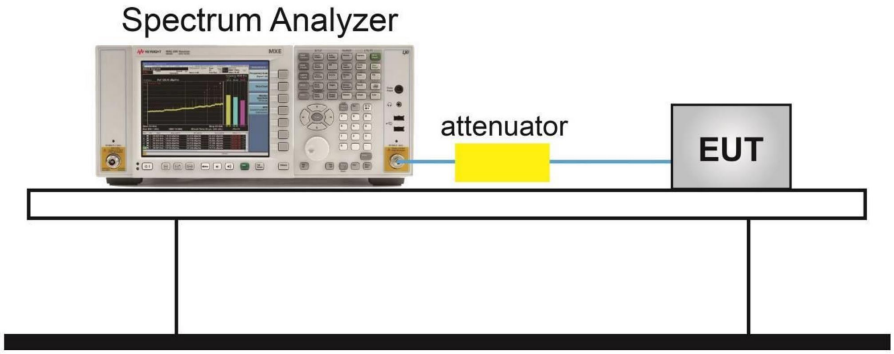
Measurement Uncertainty	3kHz

Test procedures:

The measurement is according to ANSI C63.10 clause 6.9.3.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW shall be in the range of 1% to 5% of the OBW.
4. Set the VBW ≥ [3 × RBW].
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

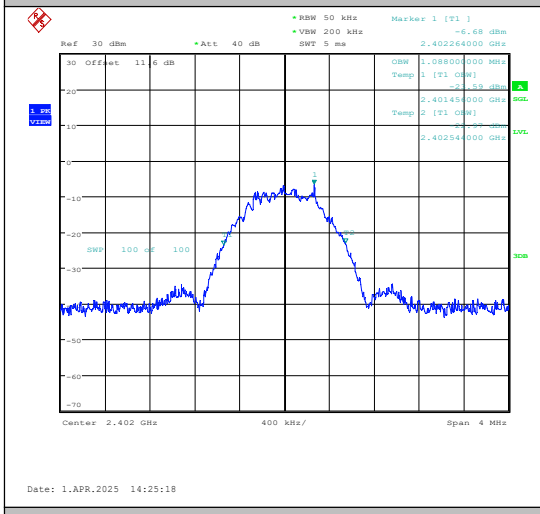
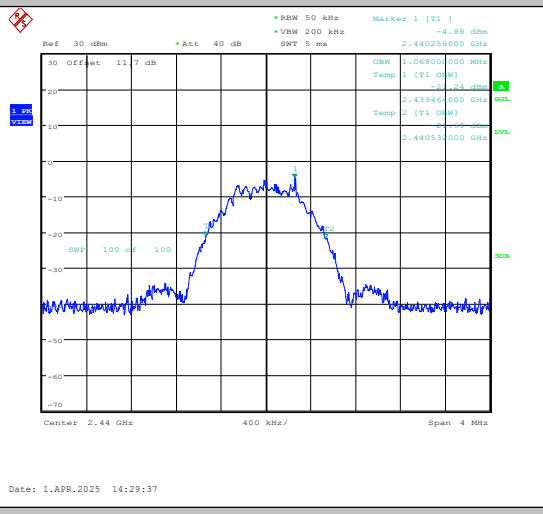
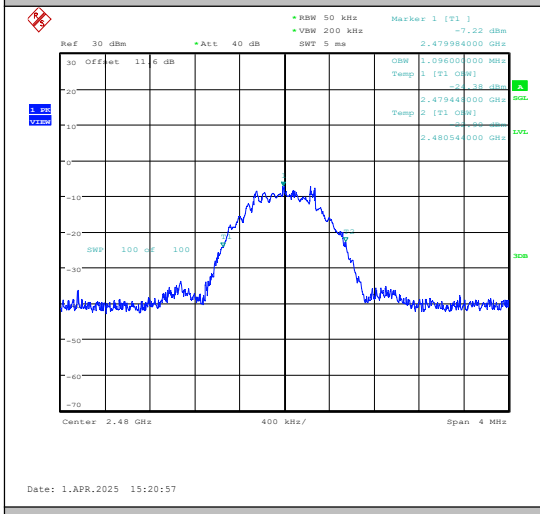
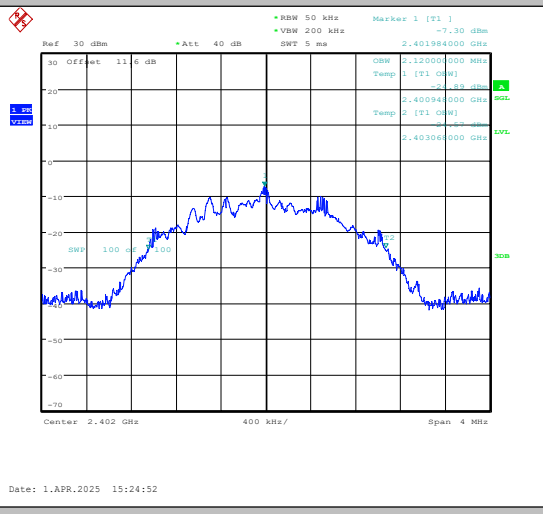
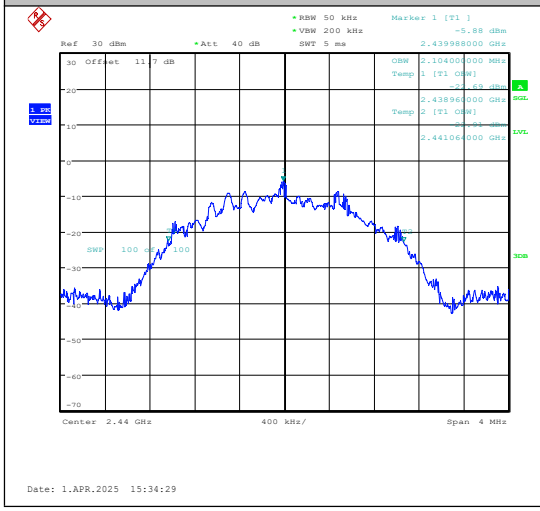
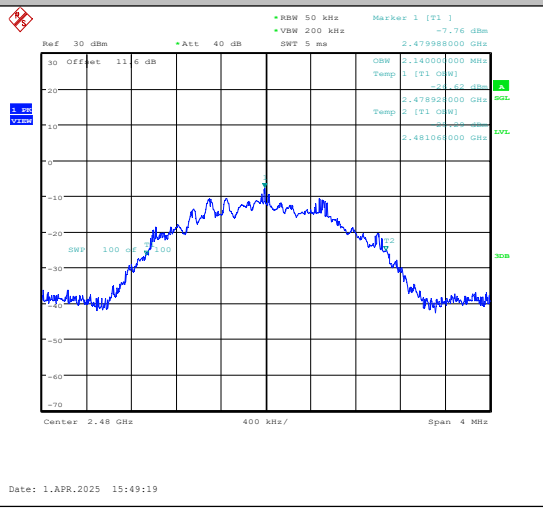
Test setup:

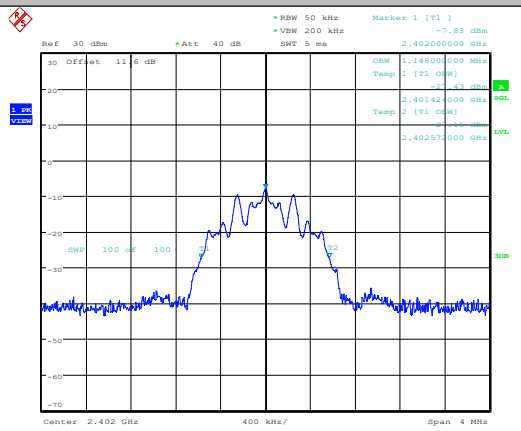
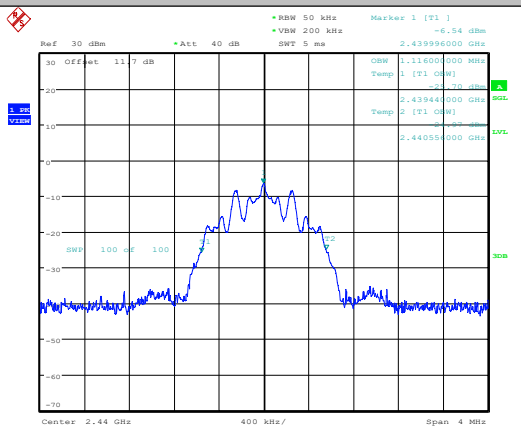
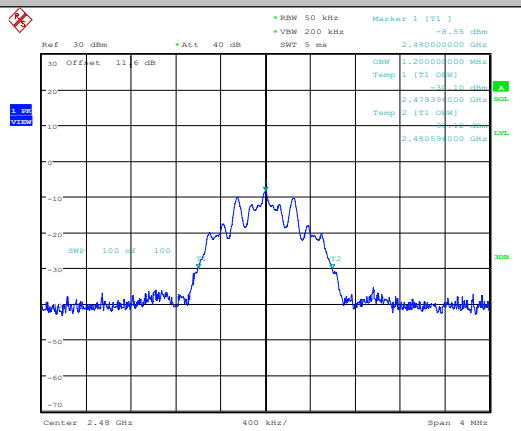
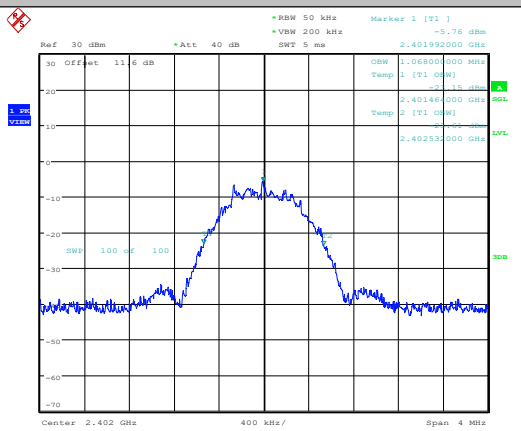
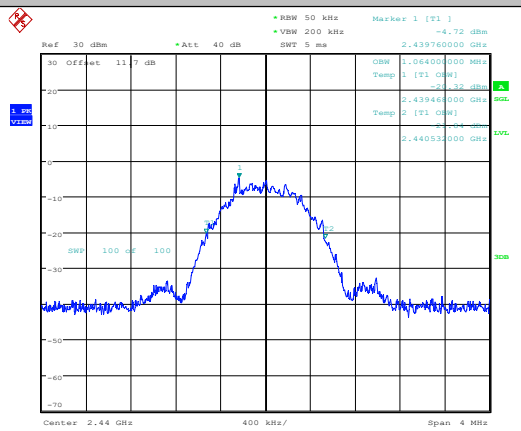
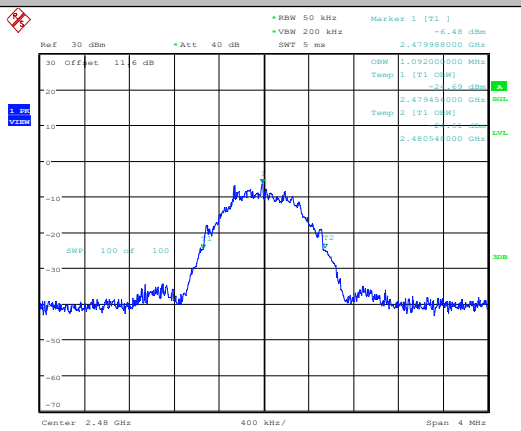


Measurement Results:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.088	2401.4560	2402.5440	---	---
BLE_1M	Ant1	2440	1.068	2439.4640	2440.5320	---	---
BLE_1M	Ant1	2480	1.096	2479.4480	2480.5440	---	---
BLE_2M	Ant1	2402	2.120	2400.9480	2403.0680	---	---
BLE_2M	Ant1	2440	2.104	2438.9600	2441.0640	---	---
BLE_2M	Ant1	2480	2.140	2478.9280	2481.0680	---	---
BLE_125K	Ant1	2402	1.148	2401.4240	2402.5720	---	---
BLE_125K	Ant1	2440	1.116	2439.4400	2440.5560	---	---
BLE_125K	Ant1	2480	1.200	2479.3960	2480.5960	---	---
BLE_500K	Ant1	2402	1.068	2401.4640	2402.5320	---	---
BLE_500K	Ant1	2440	1.064	2439.4680	2440.5320	---	---
BLE_500K	Ant1	2480	1.092	2479.4560	2480.5480	---	---

Test graphs as below

BLE_1M-Ant1-2402	BLE_1M-Ant1-2440
	
BLE_1M-Ant1-2480	BLE_2M-Ant1-2402
	
BLE_2M-Ant1-2440	BLE_2M-Ant1-2480
	

BLE_125K-Ant1-2402	BLE_125K-Ant1-2440
	
BLE_125K-Ant1-2480	BLE_500K-Ant1-2402
	
BLE_500K-Ant1-2440	BLE_500K-Ant1-2480
	

6.6. Frequency Band Edges-Conducted

Specifications:	FCC 47 Part 15.247(d), RSS-247 5.5
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit(dBc)
FCC 47 Part 15.247(d)	>20
RSS-247 5.5	>20

Measurement Uncertainty:

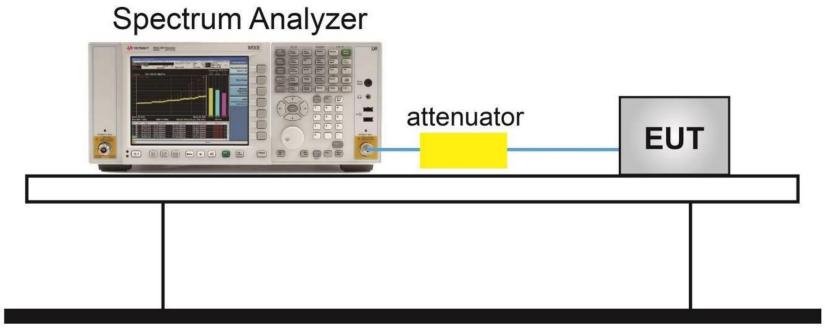
Measurement Uncertainty	0.56dB

Test procedures:

The measurement is according to ANSI C63.10 clause 11.13.2

1. Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.
2. Reference level: As required to keep the signal from exceeding the maximum instrument input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
3. Attenuation: Auto (at least 10 dB preferred).
4. Sweep time: Coupled.
5. Resolution bandwidth: 100 kHz.6) Video bandwidth: 300 kHz.7) Detector: Peak.8) Trace: Max hold.

Test Setup:

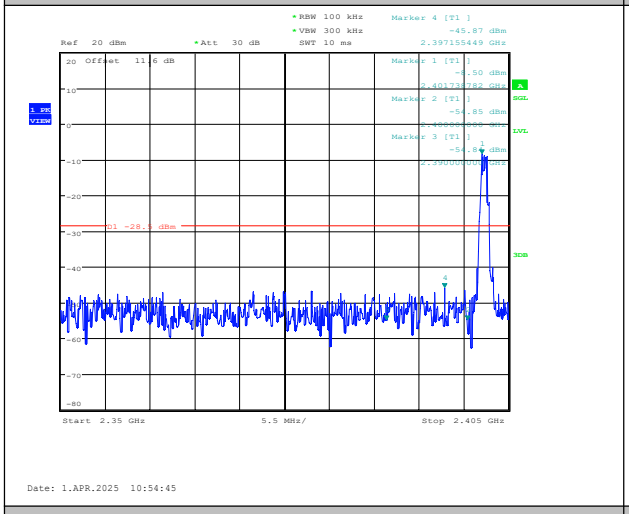


Measurement Results:

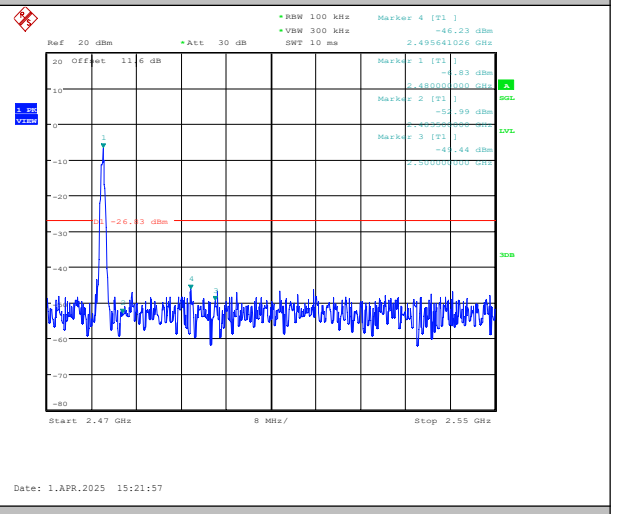
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-8.50	-45.87	≤-28.5	PASS
BLE_1M	Ant1	High	2480	-6.83	-46.23	≤-26.83	PASS
BLE_2M	Ant1	Low	2402	-9.23	-43.30	≤-29.23	PASS
BLE_2M	Ant1	High	2480	-9.94	-46.59	≤-29.94	PASS
BLE_125K	Ant1	Low	2402	-8.27	-46.72	≤-28.27	PASS
BLE_125K	Ant1	High	2480	-10.65	-46.41	≤-30.65	PASS
BLE_500K	Ant1	Low	2402	-8.24	-46.28	≤-28.24	PASS
BLE_500K	Ant1	High	2480	-9.16	-45.26	≤-29.16	PASS

Test graphs as below

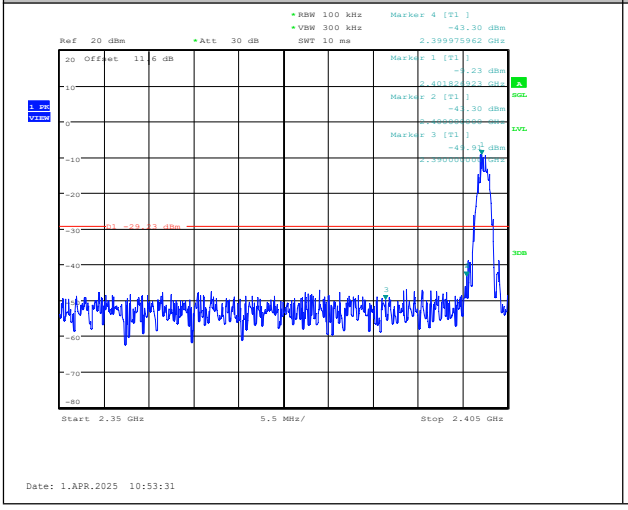
BLE_1M-Ant1-2402-PASS



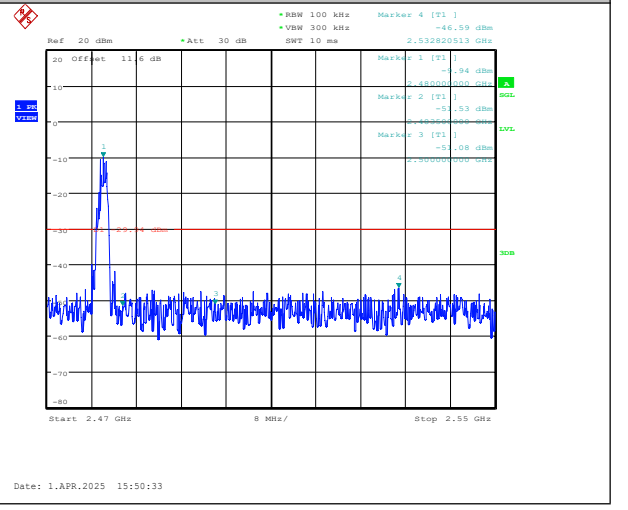
BLE_1M-Ant1-2480-PASS

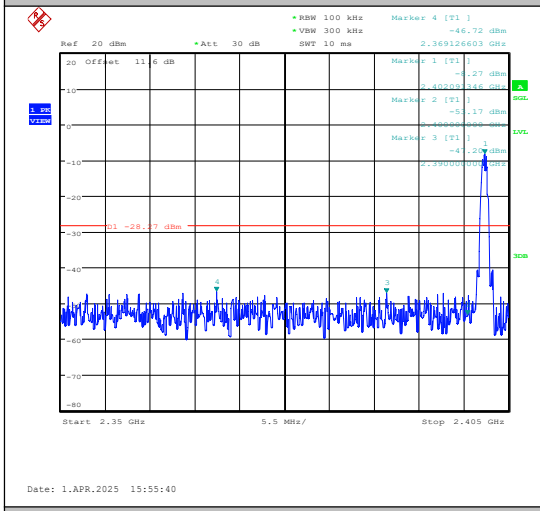
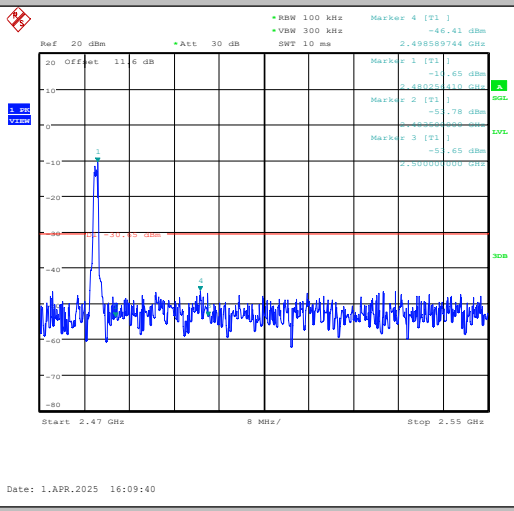
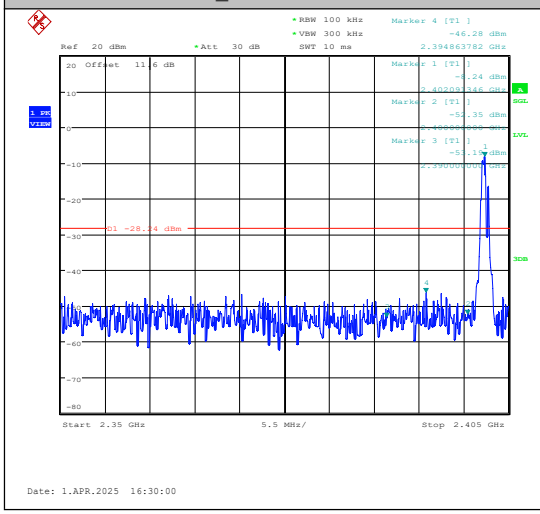
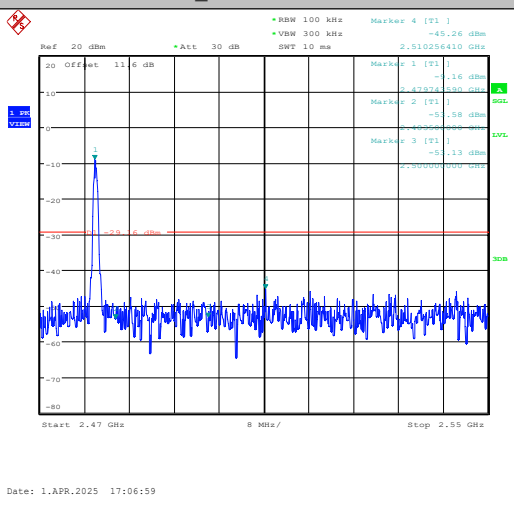


BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS



BLE_125K-Ant1-2402-PASS	BLE_125K-Ant1-2480-PASS
	
BLE_500K-Ant1-2402-PASS	BLE_500K-Ant1-2480-PASS
	

6.7. Conducted Emission

Specifications:	FCC 47 Part 15.247(d), RSS-247 5.5
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247(d)	20dB below peak output power in 100KHz bandwidth
RSS-247 5.5	20dB below peak output power in 100KHz bandwidth

Measurement Uncertainty:

Measurement Uncertainty	0.56dB

Test procedures:

This measurement is according to ANSI C63.10 clause 11.11.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.

Reference level measurement

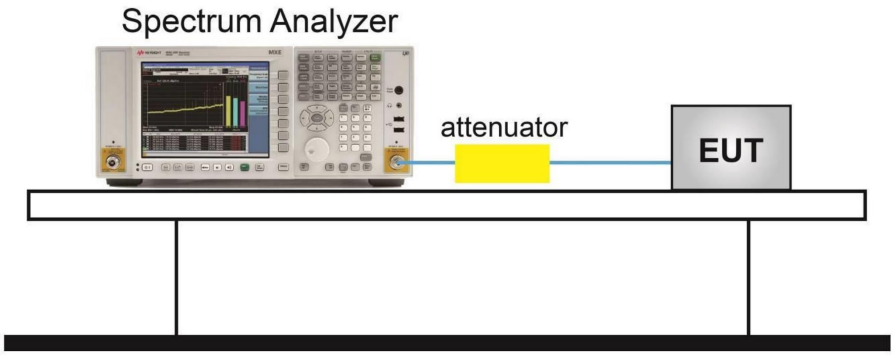
3. Set instrument center frequency to DTS channel center frequency.
4. Set the span to ≥ 1.5 times the DTS bandwidth.
5. Set the RBW = 100 kHz.
6. Set the VBW ≥ [3 × RBW].
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum PSD level.

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 100 kHz.
3. Set the VBW ≥ [3 × RBW].
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.

8. Use the peak marker function to determine the maximum amplitude level

Test Setup:

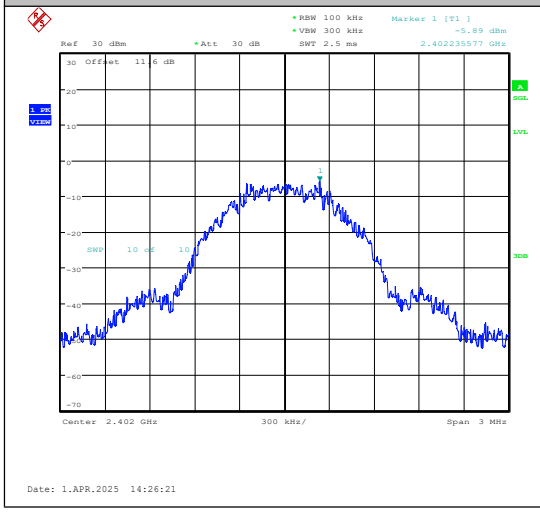
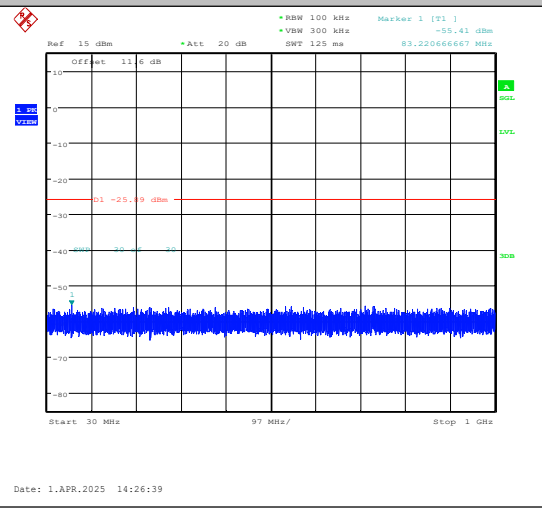


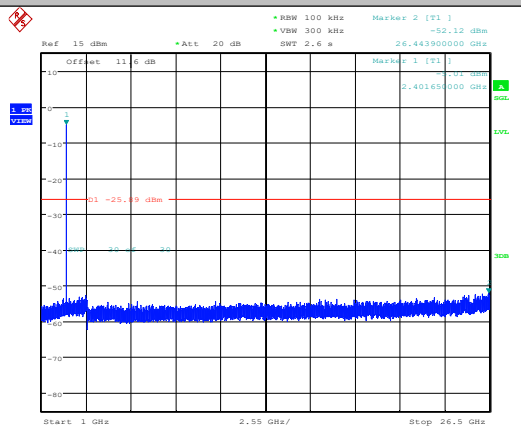
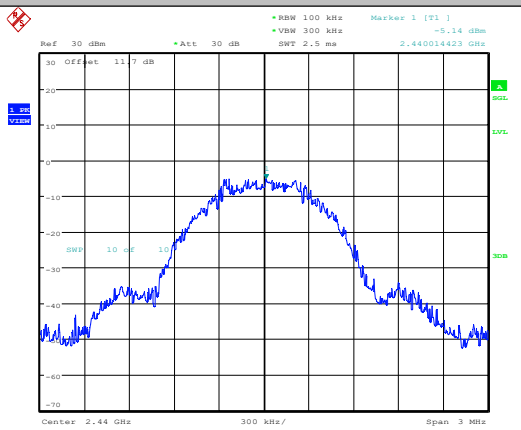
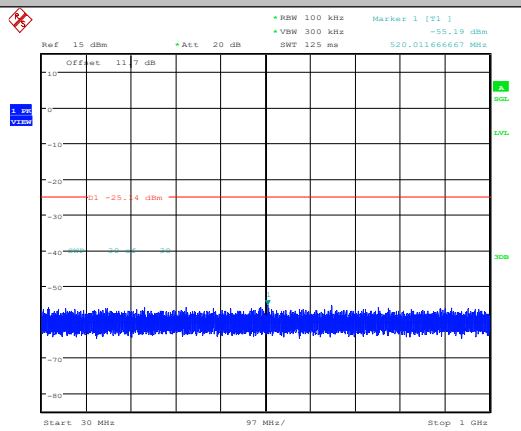
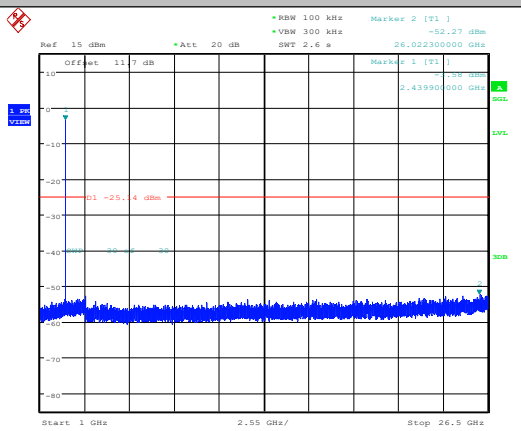
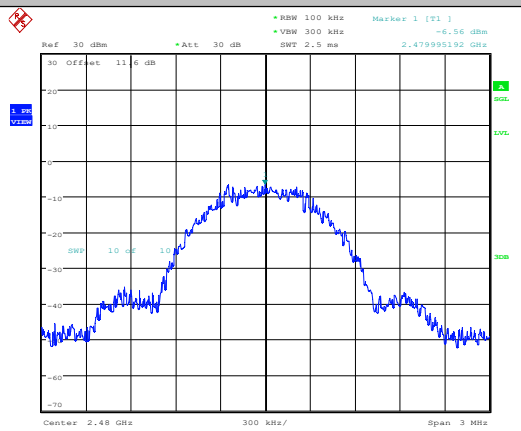
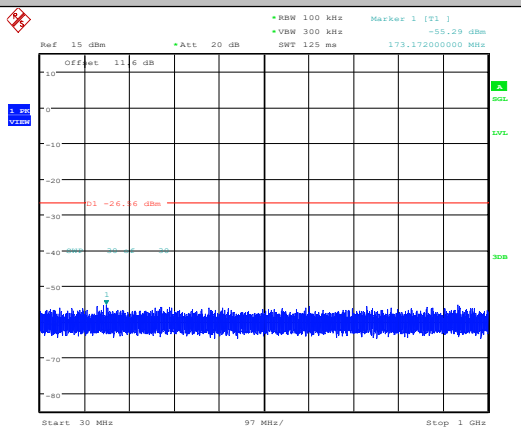
Measurement Results:

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-5.89	-5.89	---	PASS
BLE_1M	Ant1	2402	30~1000	-5.89	-55.41	≤-25.89	PASS
BLE_1M	Ant1	2402	1000~26500	-5.89	-52.12	≤-25.89	PASS
BLE_1M	Ant1	2440	0~Reference	-5.14	-5.14	---	PASS
BLE_1M	Ant1	2440	30~1000	-5.14	-55.19	≤-25.14	PASS
BLE_1M	Ant1	2440	1000~26500	-5.14	-52.27	≤-25.14	PASS
BLE_1M	Ant1	2480	0~Reference	-6.56	-6.56	---	PASS
BLE_1M	Ant1	2480	30~1000	-6.56	-55.29	≤-26.56	PASS
BLE_1M	Ant1	2480	1000~26500	-6.56	-52.08	≤-26.56	PASS
BLE_2M	Ant1	2402	0~Reference	-7.19	-7.19	---	PASS
BLE_2M	Ant1	2402	30~1000	-7.19	-54.52	≤-27.19	PASS
BLE_2M	Ant1	2402	1000~26500	-7.19	-52.21	≤-27.19	PASS
BLE_2M	Ant1	2440	0~Reference	-6.62	-6.62	---	PASS
BLE_2M	Ant1	2440	30~1000	-6.62	-55.44	≤-26.62	PASS
BLE_2M	Ant1	2440	1000~26500	-6.62	-52.30	≤-26.62	PASS
BLE_2M	Ant1	2480	0~Reference	-5.78	-5.78	---	PASS
BLE_2M	Ant1	2480	30~1000	-5.78	-55.38	≤-25.78	PASS
BLE_2M	Ant1	2480	1000~26500	-5.78	-51.91	≤-25.78	PASS
BLE_125K	Ant1	2402	0~Reference	-8.06	-8.06	---	PASS
BLE_125K	Ant1	2402	30~1000	-8.06	-54.97	≤-28.06	PASS
BLE_125K	Ant1	2402	1000~26500	-8.06	-52.60	≤-28.06	PASS
BLE_125K	Ant1	2440	0~Reference	-6.66	-6.66	---	PASS
BLE_125K	Ant1	2440	30~1000	-6.66	-55.76	≤-26.66	PASS

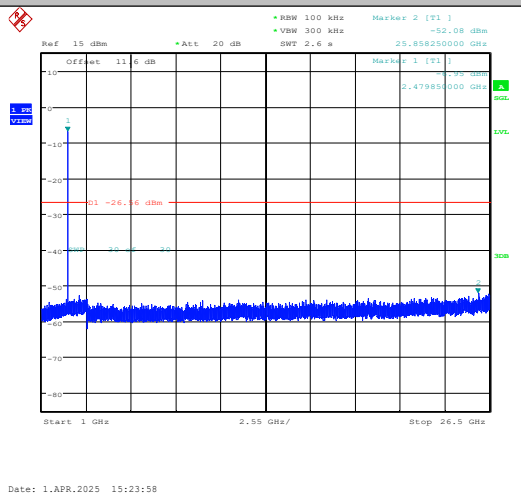
BLE_125K	Ant1	2440	1000~26500	-6.66	-50.74	≤-26.66	PASS
BLE_125K	Ant1	2480	0~Reference	-8.54	-8.54	---	PASS
BLE_125K	Ant1	2480	30~1000	-8.54	-54.97	≤-28.54	PASS
BLE_125K	Ant1	2480	1000~26500	-8.54	-52.33	≤-28.54	PASS
BLE_500K	Ant1	2402	0~Reference	-5.30	-5.30	---	PASS
BLE_500K	Ant1	2402	30~1000	-5.30	-55.37	≤-25.30	PASS
BLE_500K	Ant1	2402	1000~26500	-5.30	-51.77	≤-25.30	PASS
BLE_500K	Ant1	2440	0~Reference	-4.40	-4.40	---	PASS
BLE_500K	Ant1	2440	30~1000	-4.40	-55.38	≤-24.40	PASS
BLE_500K	Ant1	2440	1000~26500	-4.40	-52.52	≤-24.40	PASS
BLE_500K	Ant1	2480	0~Reference	-5.74	-5.74	---	PASS
BLE_500K	Ant1	2480	30~1000	-5.74	-54.77	≤-25.74	PASS
BLE_500K	Ant1	2480	1000~26500	-5.74	-52.56	≤-25.74	PASS

Test graphs as below

BLE_1M-Ant1-2402-0~Reference-PASS	BLE_1M-Ant1-2402-30~1000-PASS
	

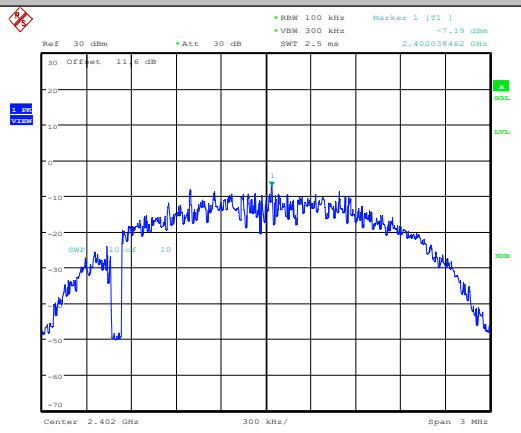
BLE_1M-Ant1-2402-1000~26500-PASS	BLE_1M-Ant1-2440-0~Reference-PASS
	
Date: 1.APR.2025 14:28:15	Date: 1.APR.2025 14:30:34
BLE_1M-Ant1-2440-30~1000-PASS	**BLE_1M-Ant1-2440-1000~26500-PASS**
	
Date: 1.APR.2025 14:30:51	Date: 1.APR.2025 14:32:28
BLE_1M-Ant1-2480-0~Reference-PASS	**BLE_1M-Ant1-2480-30~1000-PASS**
	
Date: 1.APR.2025 15:22:02	Date: 1.APR.2025 15:22:20

BLE_1M-Ant1-2480-1000~26500-PASS



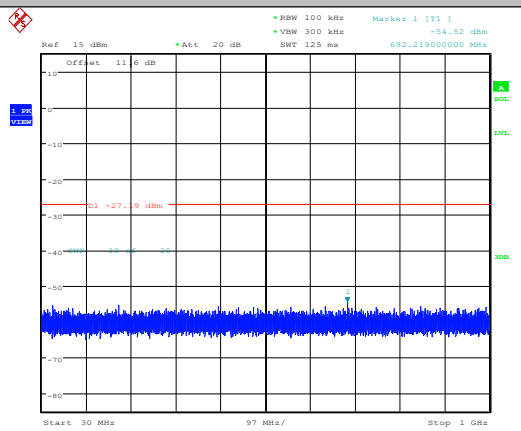
Date: 1.APR.2025 15:23:58

BLE_2M-Ant1-2402-0~Reference-PASS



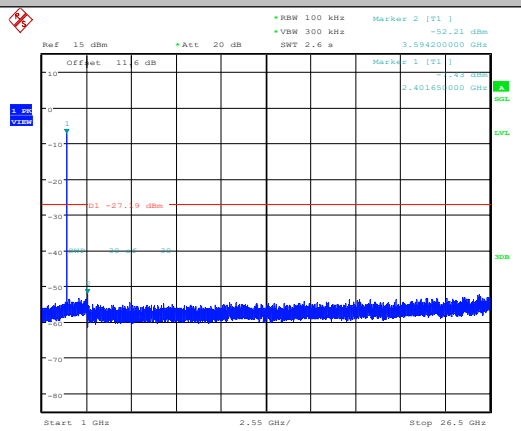
Date: 1.APR.2025 15:26:11

BLE_2M-Ant1-2402-30~1000-PASS



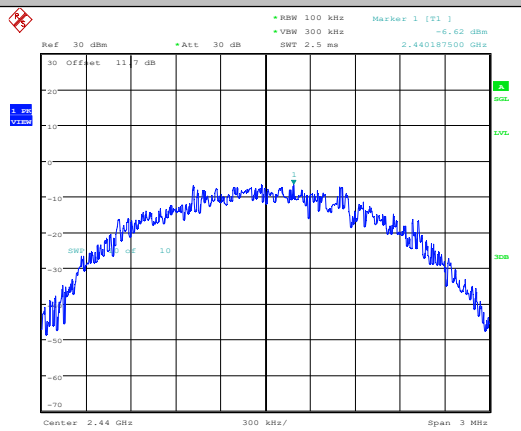
Date: 1.APR.2025 15:26:28

BLE_2M-Ant1-2402-1000~26500-PASS



Date: 1.APR.2025 15:28:07

BLE_2M-Ant1-2440-0~Reference-PASS



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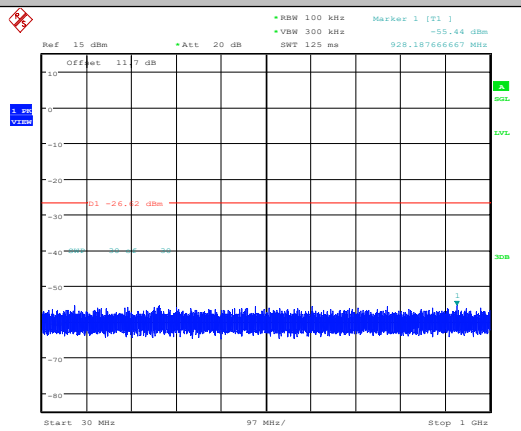
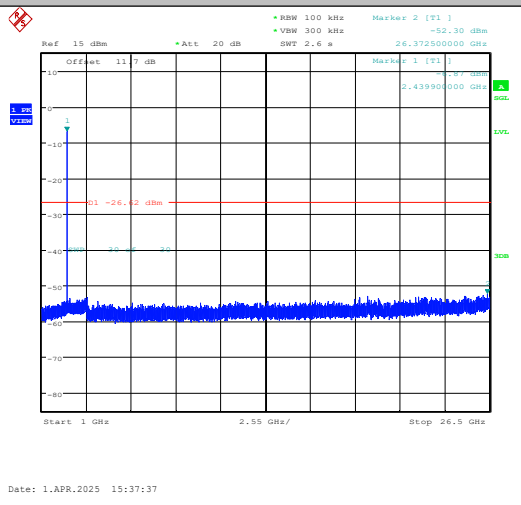
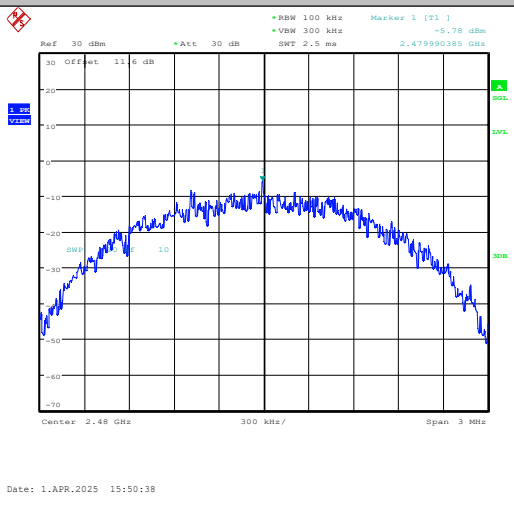
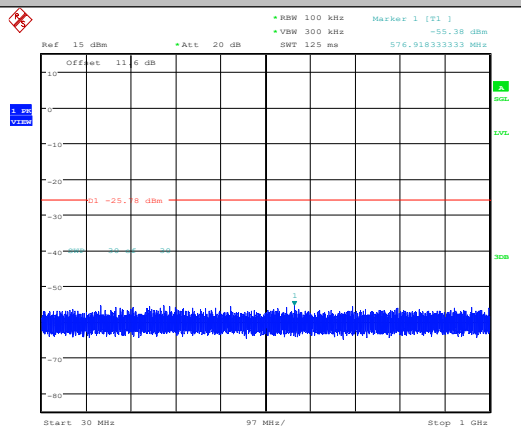
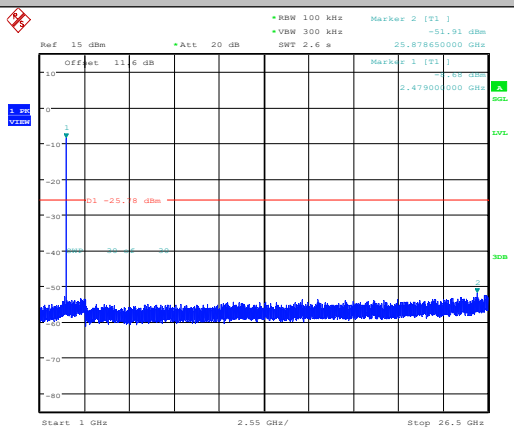
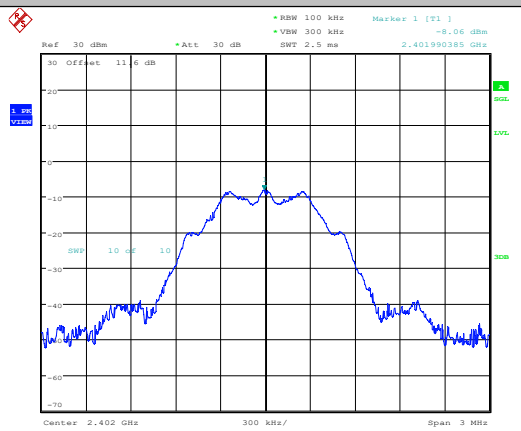
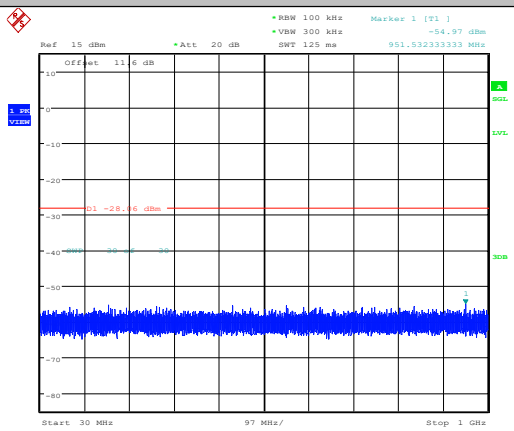
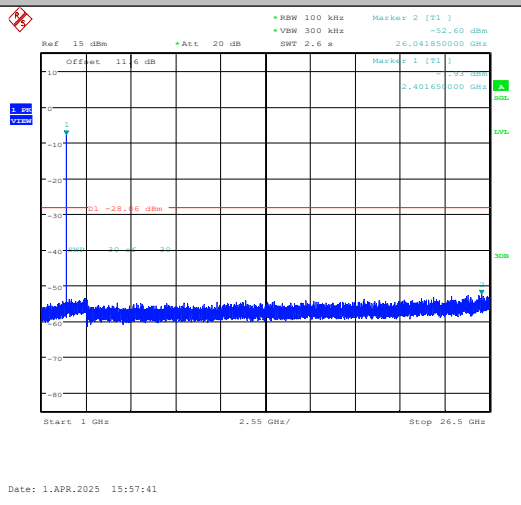
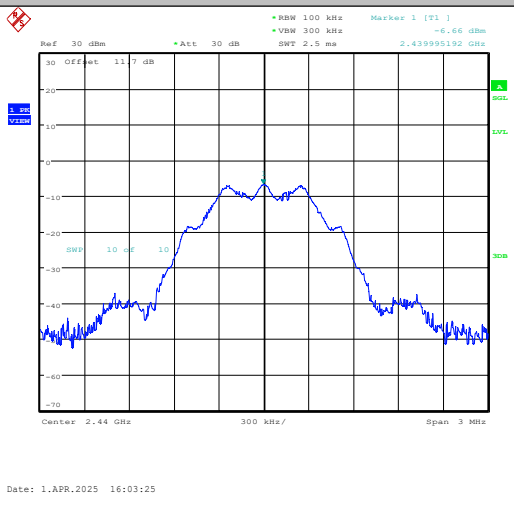
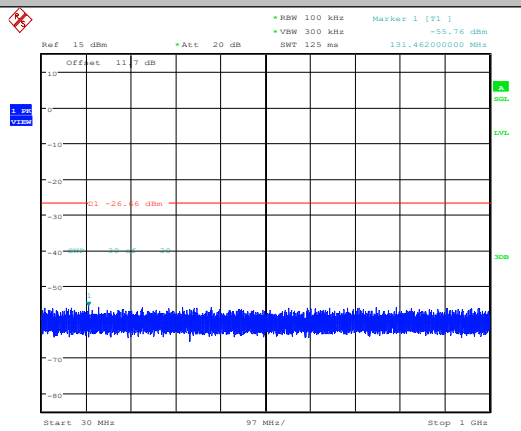
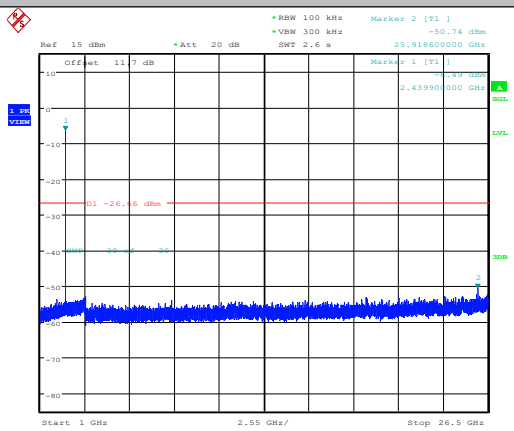
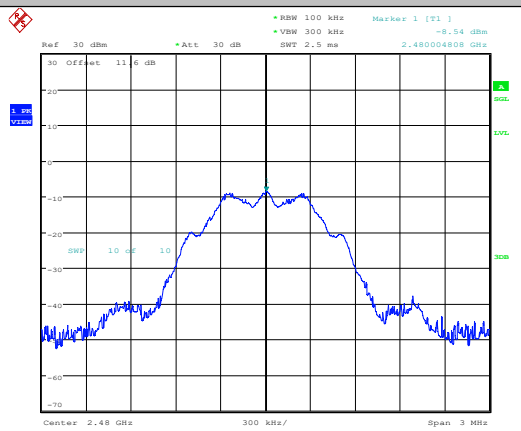
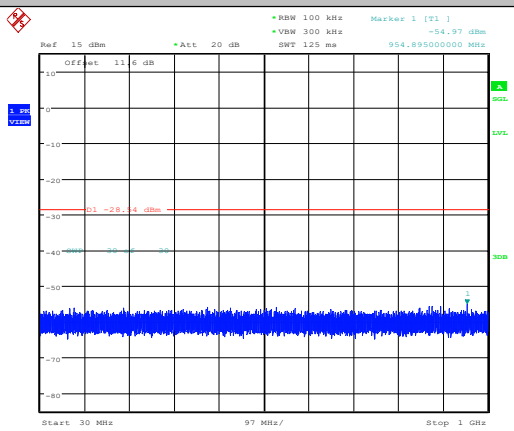
BLE_2M-Ant1-2440-30~1000-PASS



Date: 1.APR.2025 15:35:59

BLE_2M-Ant1-2440-1000~26500-PASS	BLE_2M-Ant1-2480-0~Reference-PASS
	
Date: 1.APR.2025 15:37:37	Date: 1.APR.2025 15:50:38
BLE_2M-Ant1-2480-30~1000-PASS	**BLE_2M-Ant1-2480-1000~26500-PASS**
	
Date: 1.APR.2025 15:50:56	Date: 1.APR.2025 15:52:35
BLE_125K-Ant1-2402-0~Reference-PASS	**BLE_125K-Ant1-2402-30~1000-PASS**
	
Date: 1.APR.2025 15:55:45	Date: 1.APR.2025 15:56:03

BLE_125K-Ant1-2402-1000~26500-PASS	BLE_125K-Ant1-2440-0~Reference-PASS
	
Date: 1.APR.2025 15:57:41	Date: 1.APR.2025 16:03:25
BLE_125K-Ant1-2440-30~1000-PASS	**BLE_125K-Ant1-2440-1000~26500-PASS**
	
Date: 1.APR.2025 16:03:43	Date: 1.APR.2025 16:05:21
BLE_125K-Ant1-2480-0~Reference-PASS	**BLE_125K-Ant1-2480-30~1000-PASS**
	
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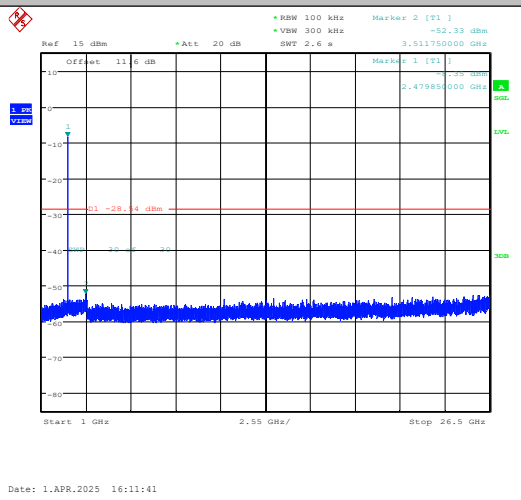
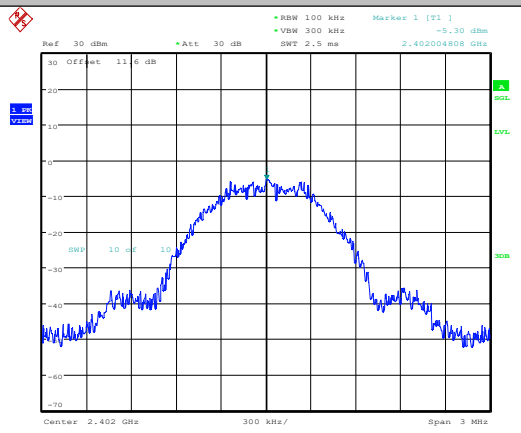
BLE_125K-Ant1-2480-1000~26500-PASS



Date: 1.APR.2025 16:11:41

BLE_500K-Ant1-2402-0~Reference-PASS



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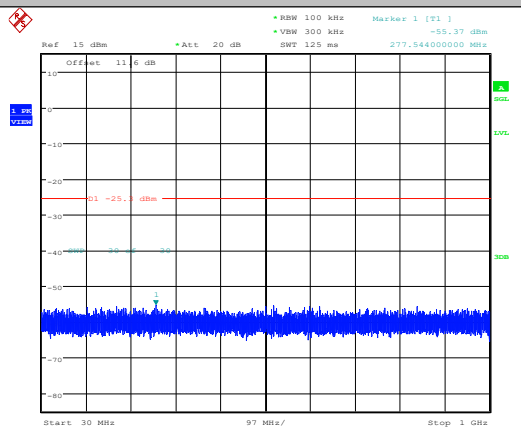
BLE_500K-Ant1-2402-30~1000-PASS



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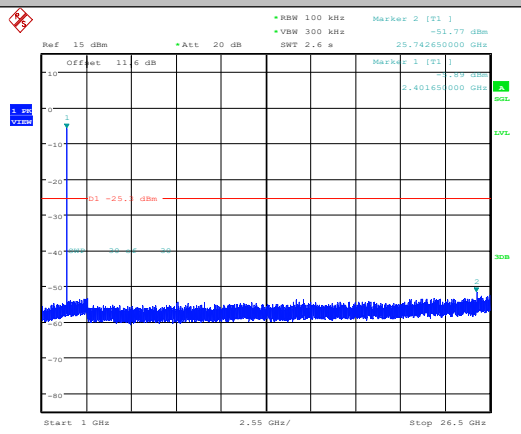
BLE_500K-Ant1-2402-1000~26500-PASS



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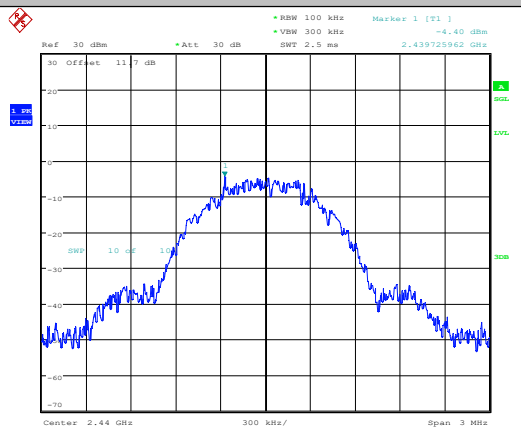
BLE_500K-Ant1-2440-0~Reference-PASS



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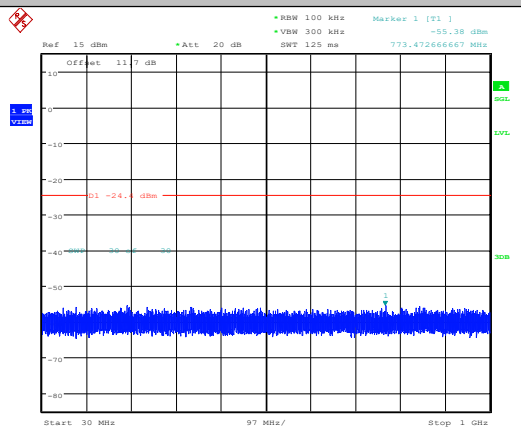
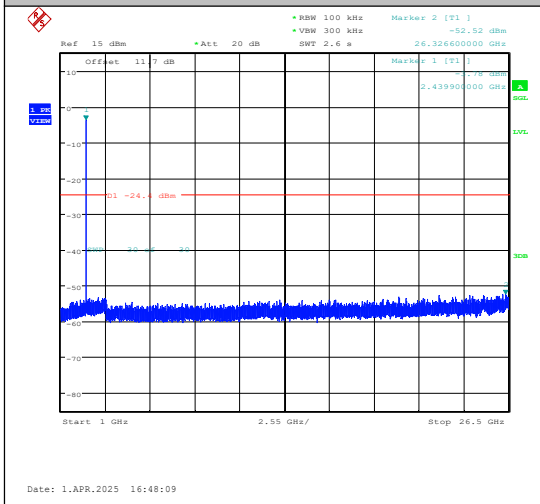
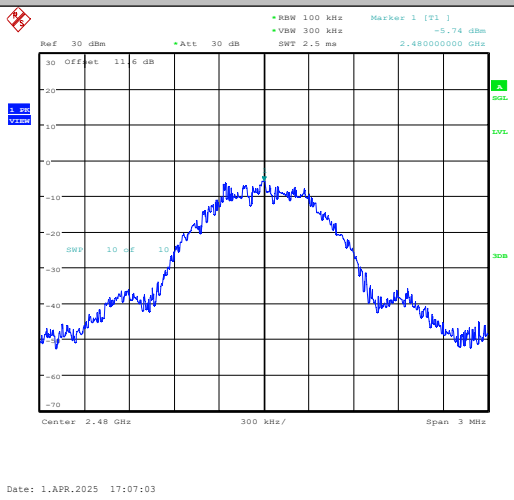
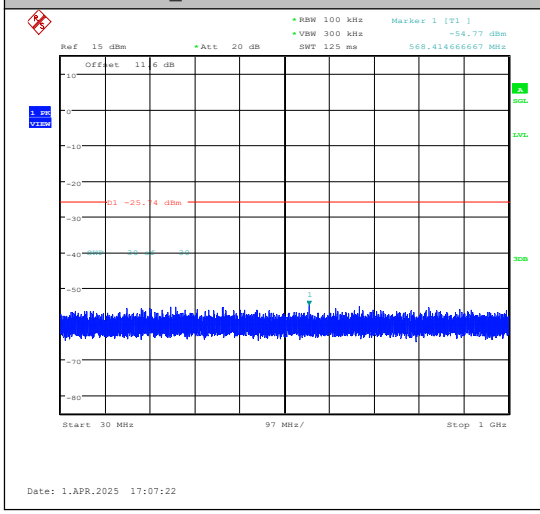
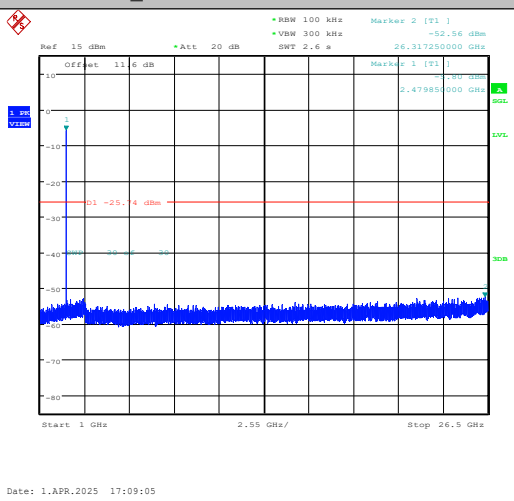
BLE_500K-Ant1-2440-30~1000-PASS



Date: 1.APR.2025 16:46:28

BLE_500K-Ant1-2440-1000~26500-PASS	BLE_500K-Ant1-2480-0~Reference-PASS
	
BLE_500K-Ant1-2480-30~1000-PASS	BLE_500K-Ant1-2480-1000~26500-PASS
	

6.8. Radiated Emission

Specifications:	FCC 47 Part 15.247(d),15.205(a),15.209(a), RSS-GEN 8.9, 8.10
DUT Serial Number:	25B02W000005#S07
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Limit in restricted band

Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBuV/m)
0.009~0.49	2400/F (kHz)	129-94
0.49~1.705	24000/F (kHz)	74-63
1.705~30	30	70
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

Measurement Uncertainty:

Measurement Uncertainty	30MHz-150MHz 3.38 dB (k=2) 150MHz-1000MHz 4.09dB (k=2) 1000MHz-6000MHz 4.84 dB (k=2) 6000MHz-18000MHz 4.52 dB (k=2) 18000MHz-26500MHz 6.19 dB (k=2) 26500MHz-40000MHz 6.03 dB (k=2)

Test procedures:

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the

measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height varied from 1m to 4m and the EUT azimuth were varied from 0° to 360° in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Test Settings – Below 1GHz (Quasi-Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 100 kHz.
3. Set the VBW = 300 kHz.
4. Detector = quasi-peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Trace was allowed to stabilize.

Test Settings – Above 1GHz (Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = peak
5. Trace mode = max hold
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

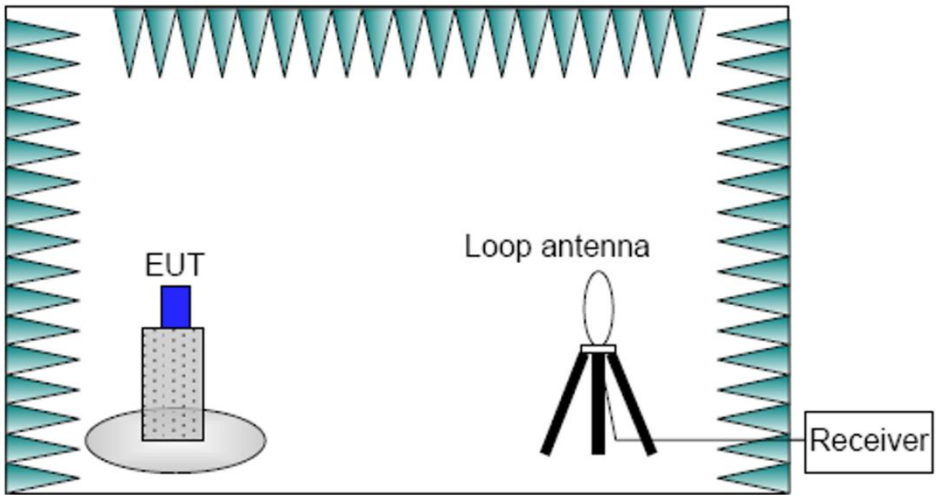
Test Settings – Above 1GHz (Average Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = power average (RMS).
5. Number of measurement points = 1001 (Number of points must be ≥ 2 × span\\RBW)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

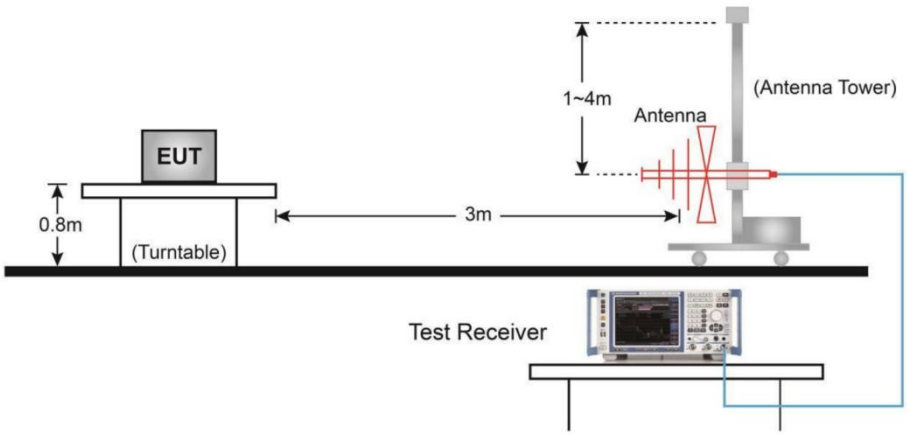
Frequency of emission (MHz)	RBW/VBW	Sweep Time (s)
0.009~30	9KHz/30KHz	Auto
30~1000	100KHz/300KHz	5
1000~4000	1MHz/3MHz	15
4000~18000	1MHz/3MHz	40
18000~26500	1MHz/3MHz	20

Test Setup:

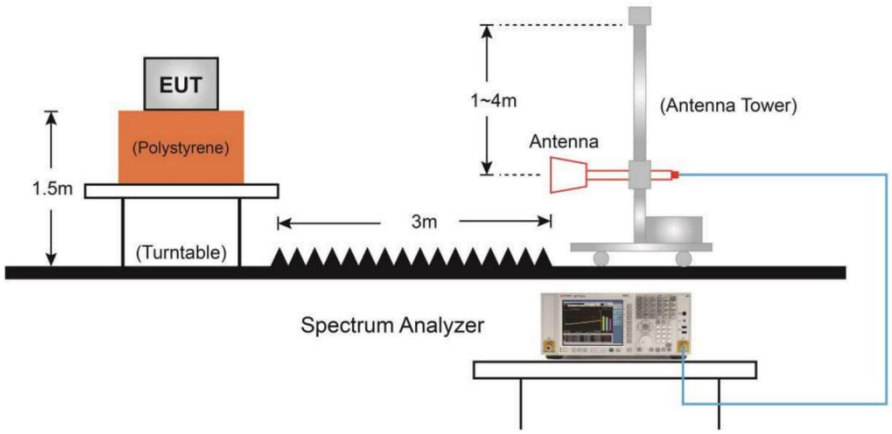
Below 30MHz Test Setup



Below 1GHz Test Setup



Above 1GHz Test Setup



Measurement Results:

A “reference path loss” is established and ARpi is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

A_{Rpi} = Cable loss + Antenna Factor-Preamplifier gain

Result=P_{Mea} + A_{Rpi}

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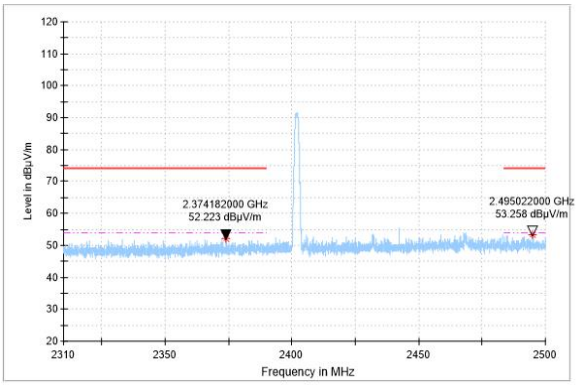	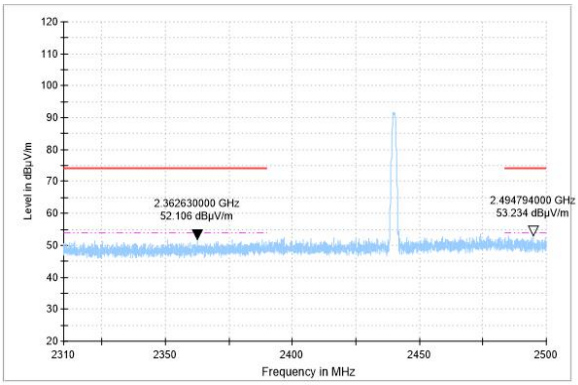
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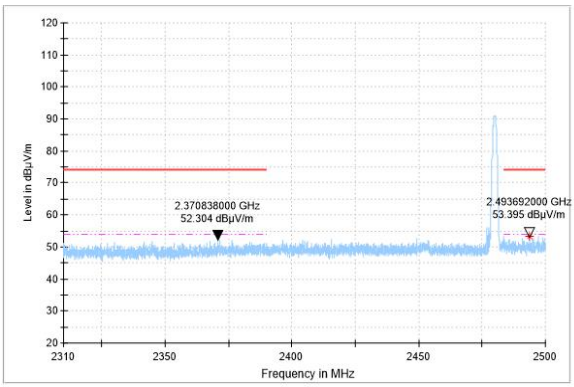	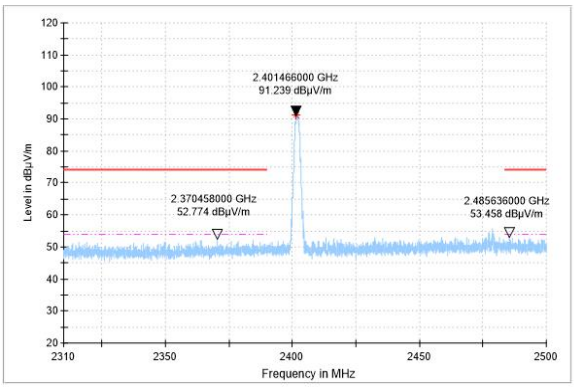
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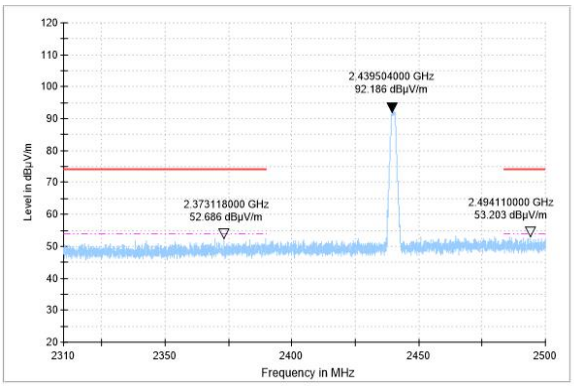	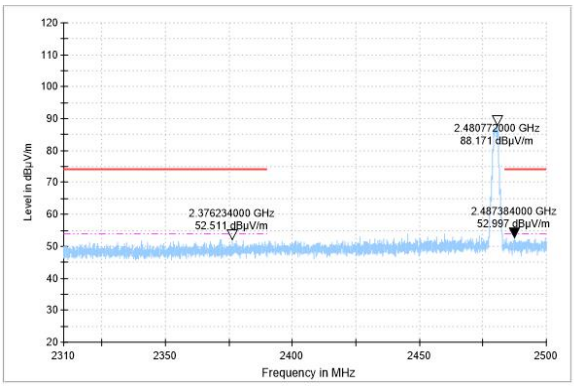

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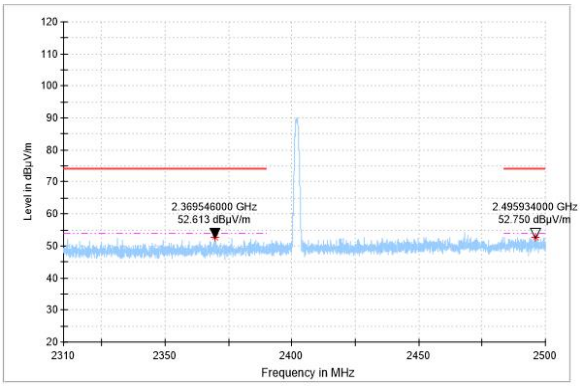	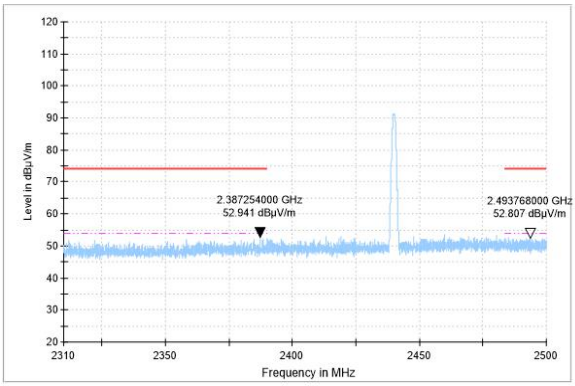
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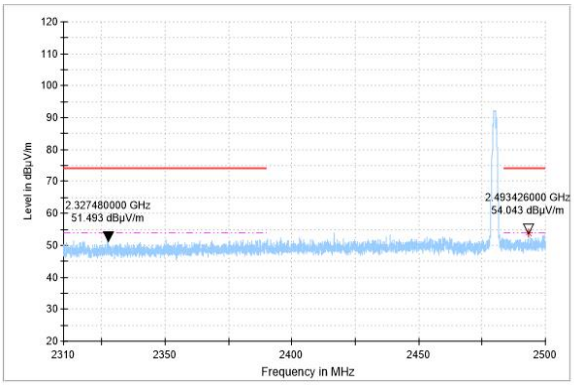	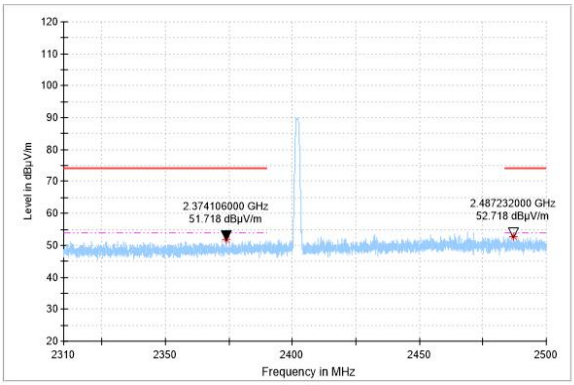
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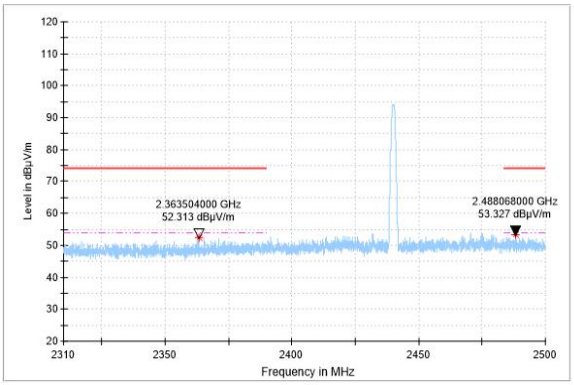	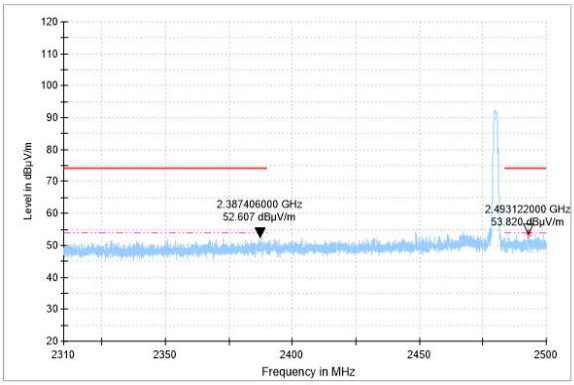

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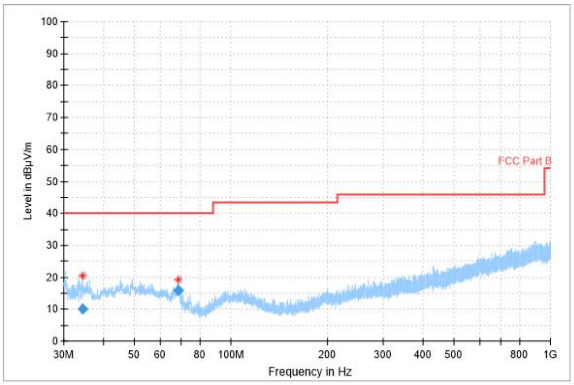	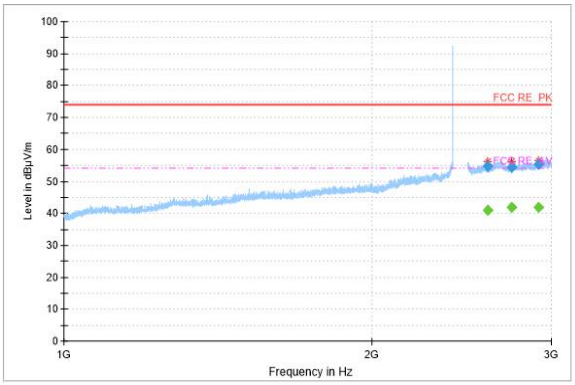
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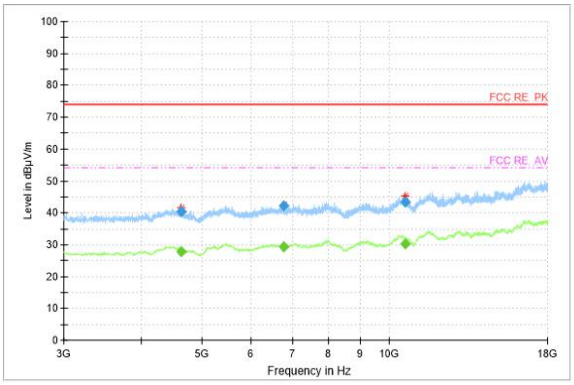	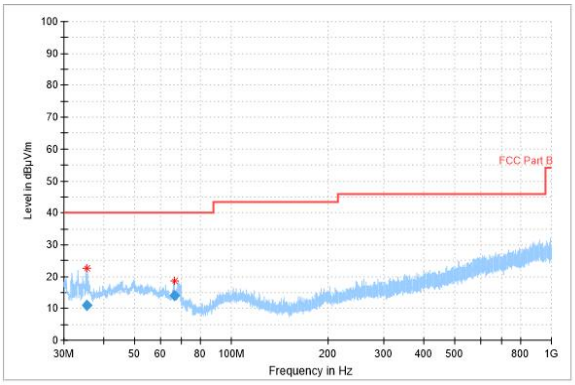
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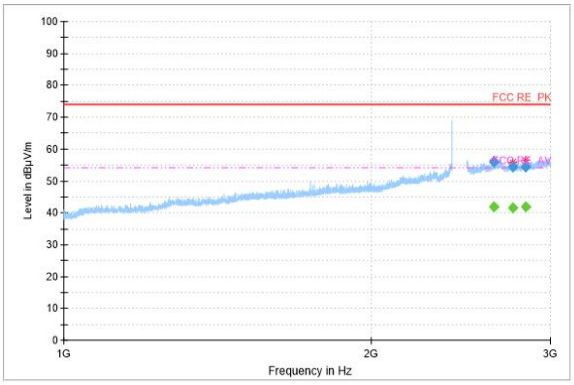	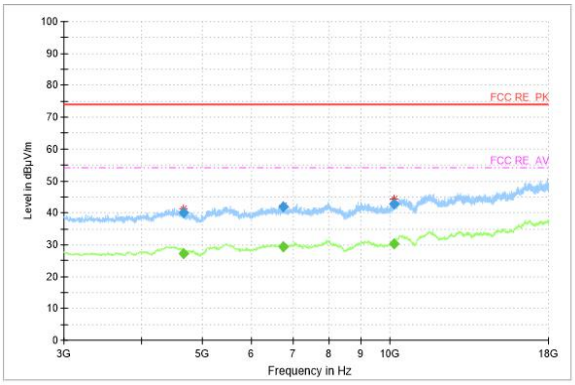

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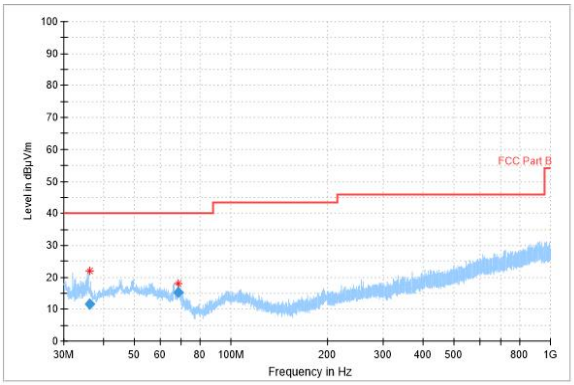	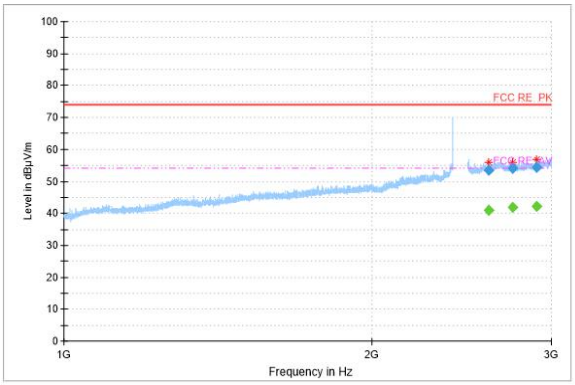
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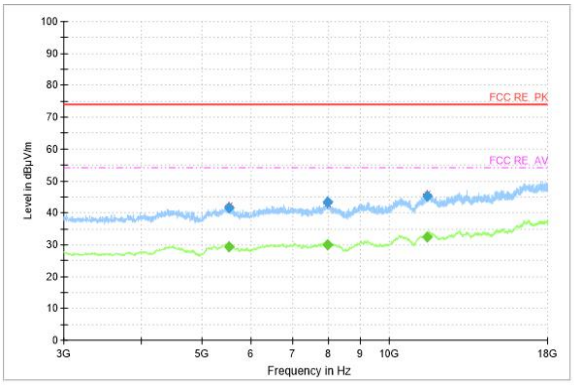	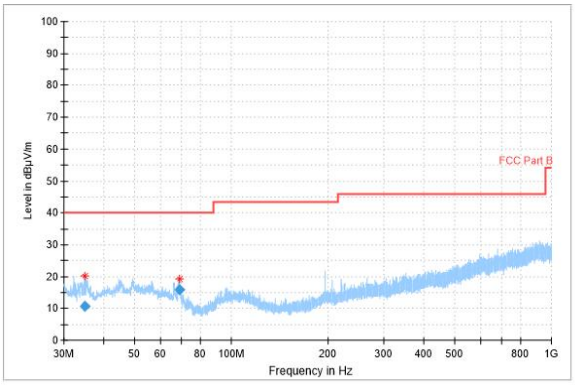
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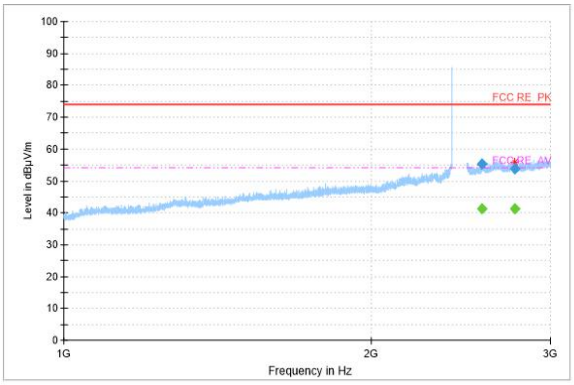	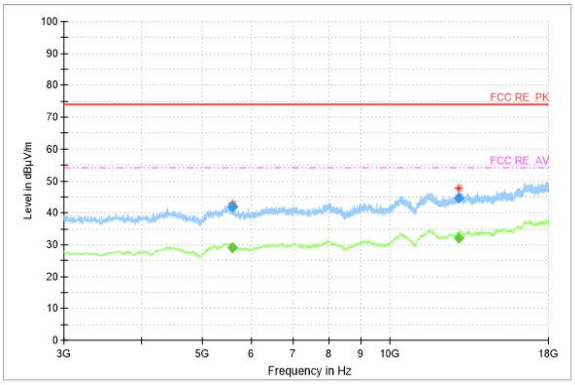

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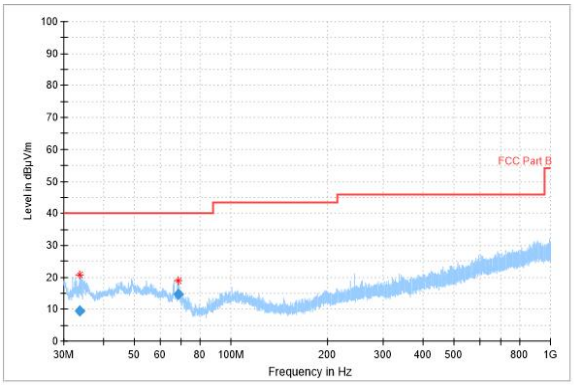	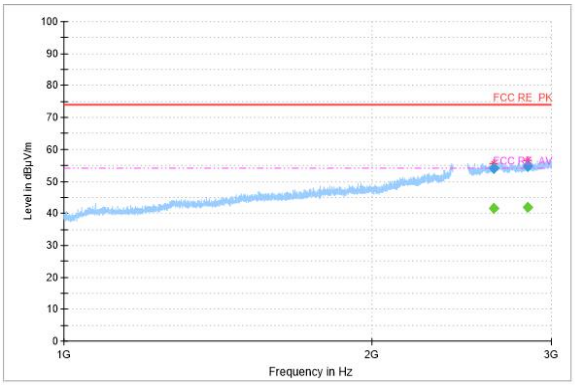
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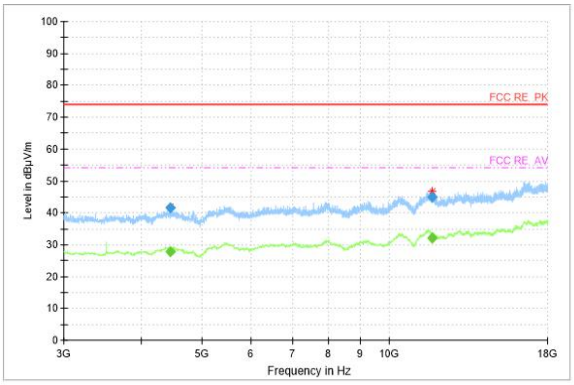	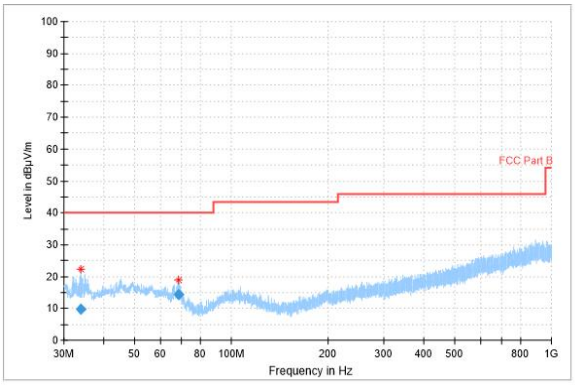
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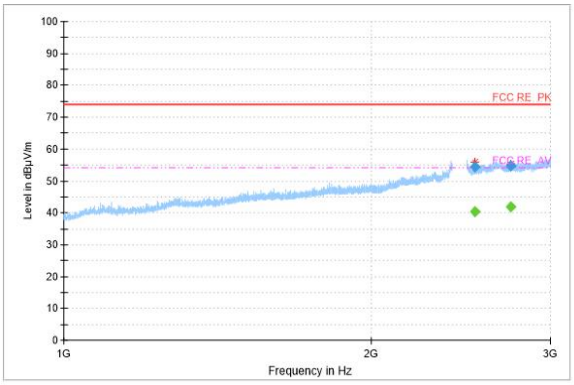	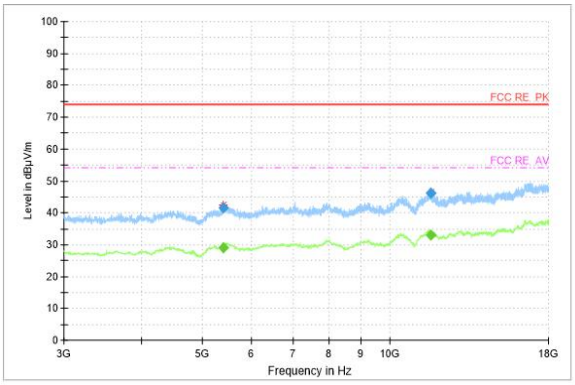

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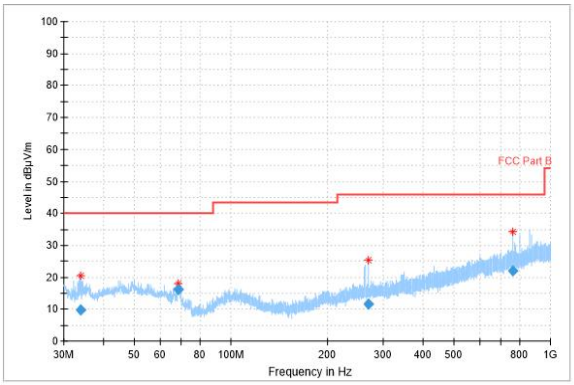	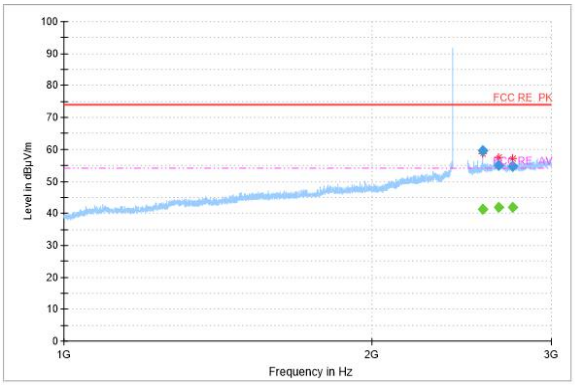
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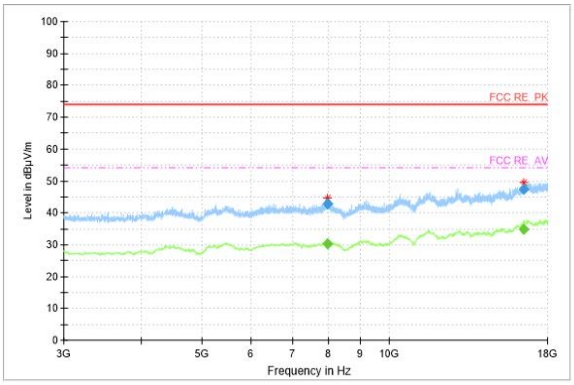	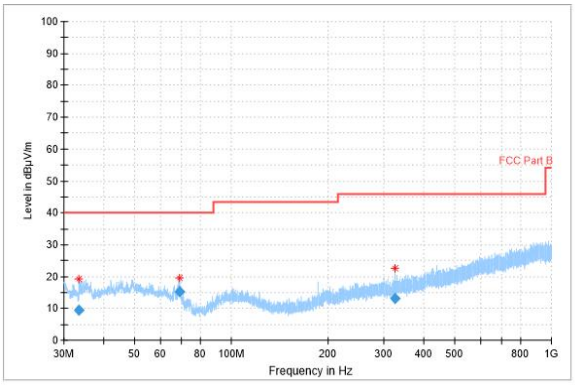
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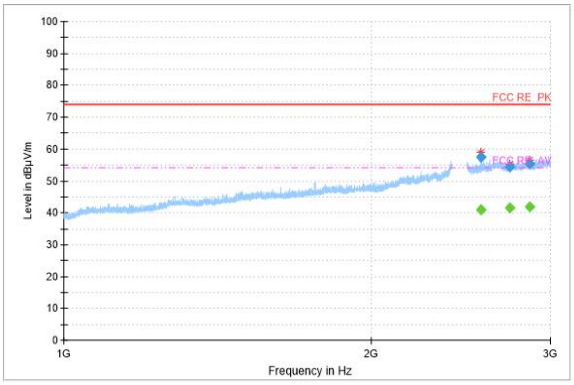	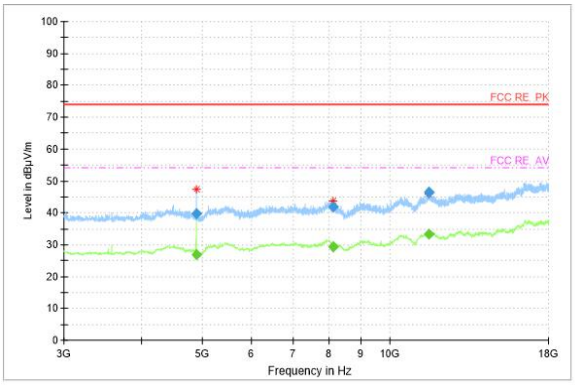

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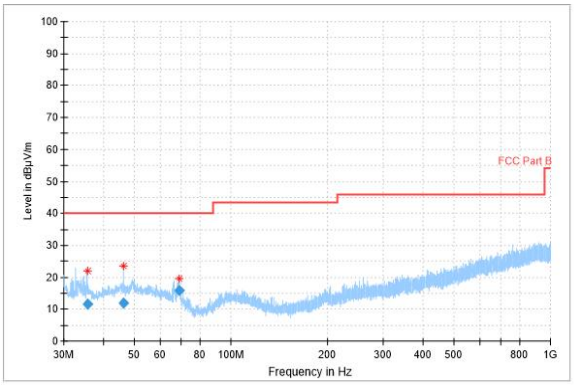
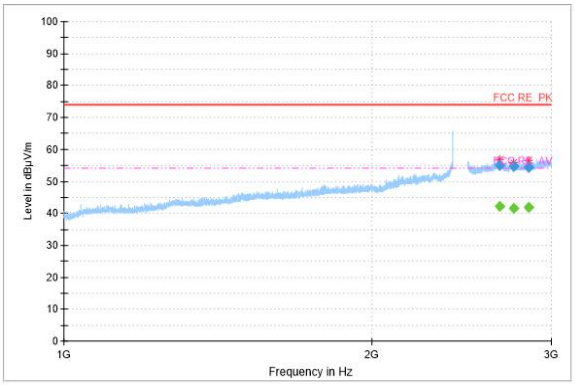
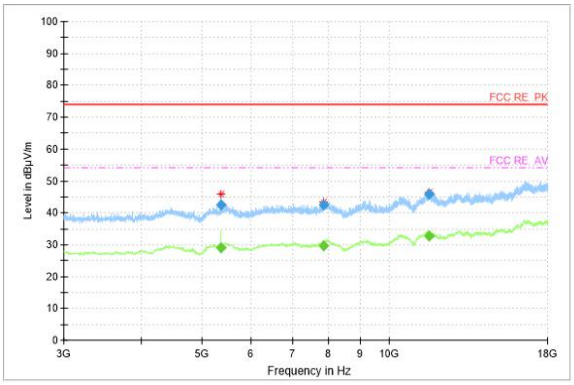
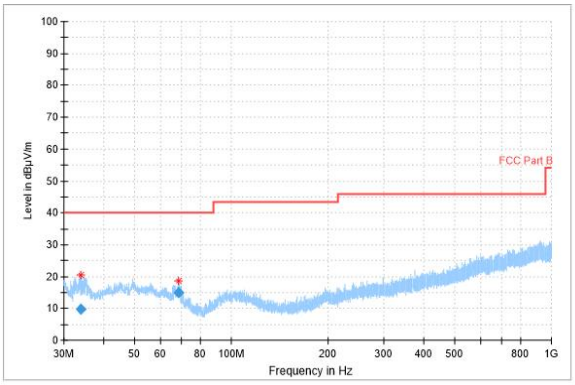
	
RSE-S2-CH39-3GHz-18GHz	RSE-S8-CH0-30MHz-1GHz
	
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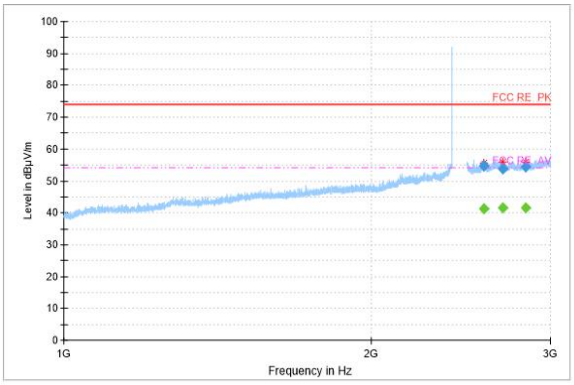	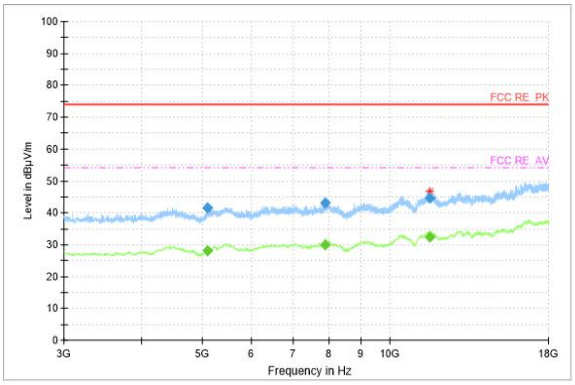

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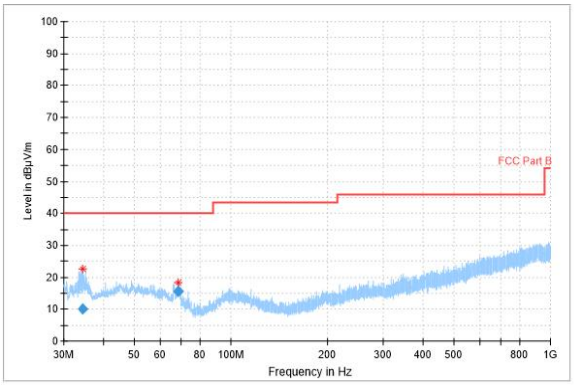	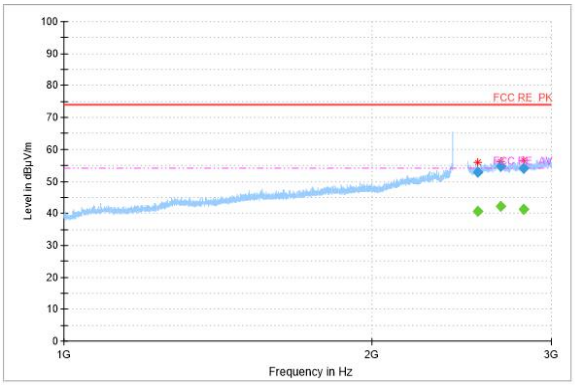
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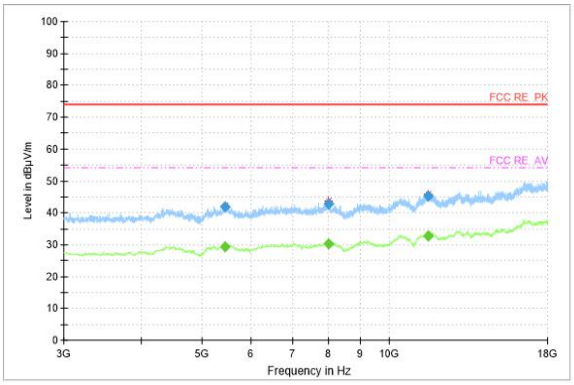	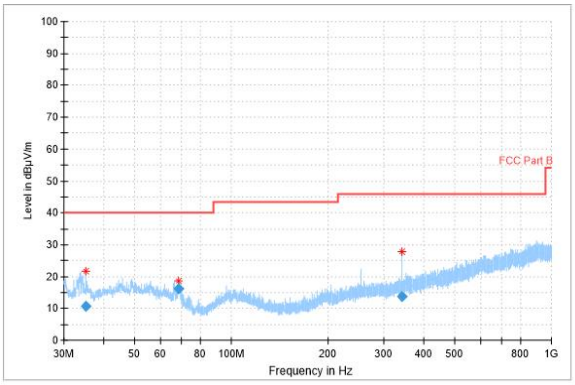
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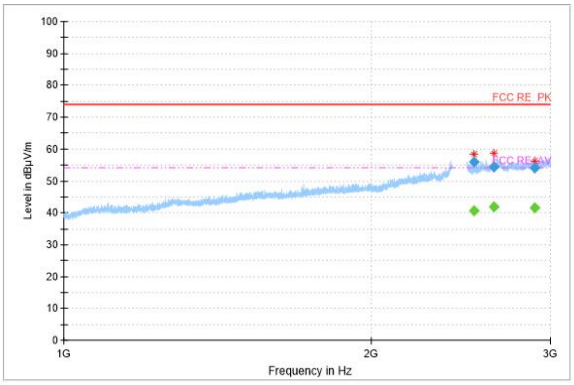
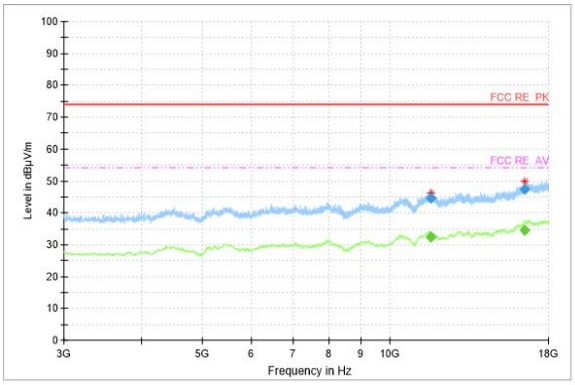
	

Note：

1. The out-of- limit signal in the picture is the main frequency signal.
2. Only data in worst mode is provided.
3. Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the Emissions in the frequency band 18GHz-26.5GHz is more than 20dB below the limit are not report.
4. The test data below 30MHz is more than 20dB lower than the limit value, so it is not provided in the report.
5. Horizontal and vertical polarity is all have been tested, the result of them is synthesized in the above data

diagram.

RSE-1M-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.3	10.2	-15	25.2	29.80	40.00	H
68.2	15.99	-15	30.99	24.01	40.00	H

RSE-1M-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2599.0	54.73	17	37.73	19.27	74.00	H
2743.7	54.43	17	37.43	19.57	74.00	V
2912.7	55.32	18	37.32	18.68	74.00	V

RSE-1M-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2599.0	40.85	17	23.85	13.15	54.00	H
2743.7	41.83	17	24.83	12.17	54.00	V
2912.7	42.02	18	24.02	11.98	54.00	V

RSE-1M-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4632.2	40.31	-4	44.31	33.69	74.00	V
6773.5	42.15	-2	44.15	31.85	74.00	H
10610.1	43.44	1	42.44	30.56	74.00	V

RSE-1M-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4632.2	27.74	-4	31.74	26.26	54.00	V
6773.5	29.42	-2	31.42	24.58	54.00	H

10610.1	30.21	1	29.21	23.79	54.00	V

RSE-1M-CH19-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
35.3	11.08	-15	26.08	28.92	40.00	H
66.3	14.19	-14	28.19	25.81	40.00	H

RSE-1M-CH19-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2640.5	56.1	17	39.1	17.90	74.00	H
2755.1	54.55	17	37.55	19.45	74.00	V
2837.9	54.46	17	37.46	19.54	74.00	V

RSE-1M-CH19-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2640.5	41.75	17	24.75	12.25	54.00	H
2755.1	41.63	17	24.63	12.37	54.00	V
2837.9	41.8	17	24.8	12.20	54.00	V

RSE-1M-CH19-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4668.2	39.92	-4	43.92	34.08	74.00	V
6749.0	41.96	-2	43.96	32.04	74.00	H
10180.2	42.72	1	41.72	31.28	74.00	H

RSE-1M-CH19-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4668.2	27.23	-4	31.23	26.77	54.00	V
6749.0	29.43	-2	31.43	24.57	54.00	H

10180.2	30.26	1	29.26	23.74	54.00	H

RSE-1M-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
36.1	11.55	-14	25.55	28.45	40.00	H
68.2	15.32	-15	30.32	24.68	40.00	H

RSE-1M-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2602.6	53.54	17	36.54	20.46	74.00	V
2745.8	54.06	17	37.06	19.94	74.00	V
2902.5	54.38	17	37.38	19.62	74.00	V

RSE-1M-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2602.6	40.83	17	23.83	13.17	54.00	V
2745.8	41.79	17	24.79	12.21	54.00	V
2902.5	42.05	17	25.05	11.95	54.00	V

RSE-1M-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5534.0	41.73	-3	44.73	32.27	74.00	V
7967.4	43.4	-1	44.4	30.60	74.00	H
11502.6	45.21	3	42.21	28.79	74.00	V

RSE-1M-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5534.0	29.28	-3	32.28	24.72	54.00	V
7967.4	29.97	-1	30.97	24.03	54.00	H

11502.6	32.44	3	29.44	21.56	54.00	V

RSE-2M-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.9	10.64	-15	25.64	29.36	40.00	H
69.0	15.77	-15	30.77	24.23	40.00	H

RSE-2M-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2570.0	55.34	17	38.34	18.66	74.00	V
2766.0	53.72	17	36.72	20.28	74.00	V

RSE-2M-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2570.0	41.22	17	24.22	12.78	54.00	V
2766.0	41.24	17	24.24	12.76	54.00	V

RSE-2M-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5595.5	41.84	-3	44.84	32.16	74.00	H
12924.9	44.68	4	40.68	29.32	74.00	V

RSE-2M-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5595.5	29.13	-3	32.13	24.87	54.00	H
12924.9	32.1	4	28.1	21.90	54.00	V

RSE-2M-CH19-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.7	9.62	-15	24.62	30.38	40.00	H
68.4	14.62	-15	29.62	25.38	40.00	H

RSE-2M-CH19-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2631.1	53.99	17	36.99	20.01	74.00	V
2844.9	54.68	18	36.68	19.32	74.00	V

RSE-2M-CH19-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2631.1	41.51	17	24.51	12.49	54.00	V
2844.9	41.95	18	23.95	12.05	54.00	V

RSE-2M-CH19-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4448.5	41.64	-4	45.64	32.36	74.00	H
11751.5	44.92	3	41.92	29.08	74.00	V

RSE-2M-CH19-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4448.5	27.77	-4	31.77	26.23	54.00	H
11751.5	32.04	3	29.04	21.96	54.00	V

RSE-2M-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.8	9.71	-15	24.71	30.29	40.00	H
68.5	14.44	-15	29.44	25.56	40.00	H

RSE-2M-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2530.3	54.33	16	38.33	19.67	74.00	V
2742.8	54.62	17	37.62	19.38	74.00	H

RSE-2M-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2530.3	40.51	16	24.51	13.49	54.00	V
2742.8	41.87	17	24.87	12.13	54.00	H

RSE-2M-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5412.6	41.56	-3	44.56	32.44	74.00	H
11631.5	46.12	3	43.12	27.88	74.00	V

RSE-2M-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5412.6	29.12	-3	32.12	24.88	54.00	H
11631.5	33.09	3	30.09	20.91	54.00	V

RSE-S2-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.8	9.91	-15	24.91	30.09	40.00	H
68.2	16.16	-15	31.16	23.84	40.00	H
269.8	11.57	-11	22.57	34.43	46.00	H
760.0	22.12	0	22.12	23.88	46.00	H

RSE-S2-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2568.7	59.52	17	42.52	14.48	74.00	H
2661.5	54.93	18	36.93	19.07	74.00	V
2750.5	54.73	17	37.73	19.27	74.00	V

RSE-S2-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2568.7	41.22	17	24.22	12.78	54.00	H
2661.5	41.98	18	23.98	12.02	54.00	V
2750.5	41.86	17	24.86	12.14	54.00	V

RSE-S2-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
7981.9	42.79	-1	43.79	31.21	74.00	V
16501.4	47.31	10	37.31	26.69	74.00	H

RSE-S2-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
7981.9	30.19	-1	31.19	23.81	54.00	V
16501.4	34.77	10	24.77	19.23	54.00	H

RSE-S2-CH19-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.4	9.43	-15	24.43	30.57	40.00	H
69.0	15.42	-15	30.42	24.58	40.00	H
325.1	13.19	-9	22.19	32.81	46.00	H

RSE-S2-CH19-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2565.1	57.5	17	40.5	16.50	74.00	H
2733.3	54.31	17	37.31	19.69	74.00	V
2862.5	55.27	18	37.27	18.73	74.00	V

RSE-S2-CH19-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2565.1	40.95	17	23.95	13.05	54.00	H
2733.3	41.48	17	24.48	12.52	54.00	V
2862.5	41.79	18	23.79	12.21	54.00	V

RSE-S2-CH19-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4893.8	39.87	-3	42.87	34.13	74.00	H
8122.5	41.98	-1	42.98	32.02	74.00	V
11565.0	46.59	4	42.59	27.41	74.00	V

RSE-S2-CH19-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4893.8	27.05	-3	30.05	26.95	54.00	H
8122.5	29.4	-1	30.4	24.60	54.00	V
11565.0	33.28	4	29.28	20.72	54.00	V

RSE-S2-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
35.5	11.63	-14	25.63	28.37	40.00	H
46.2	12.01	-12	24.01	27.99	40.00	H
69.0	15.98	-15	30.98	24.02	40.00	H

RSE-S2-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2668.0	55.18	18	37.18	18.82	74.00	V
2754.9	54.65	17	37.65	19.35	74.00	V
2850.0	54.55	18	36.55	19.45	74.00	V

RSE-S2-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2668.0	42.1	18	24.1	11.90	54.00	V
2754.9	41.74	17	24.74	12.26	54.00	V
2850.0	42	18	24	12.00	54.00	V

RSE-S2-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5364.9	42.39	-3	45.39	31.61	74.00	V
7862.9	42.42	-2	44.42	31.58	74.00	H
11616.5	45.75	4	41.75	28.25	74.00	H

RSE-S2-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5364.9	28.97	-3	31.97	25.03	54.00	V
7862.9	29.81	-2	31.81	24.19	54.00	H
11616.5	32.67	4	28.67	21.33	54.00	H

RSE-S8-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.9	9.92	-15	24.92	30.08	40.00	H
68.5	14.9	-15	29.9	25.10	40.00	H

RSE-S8-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2578.9	54.66	17	37.66	19.34	74.00	V
2695.0	53.84	17	36.84	20.16	74.00	V
2835.9	54.48	17	37.48	19.52	74.00	H

RSE-S8-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2578.9	41.39	17	24.39	12.61	54.00	V
2695.0	41.44	17	24.44	12.56	54.00	V
2835.9	41.74	17	24.74	12.26	54.00	H

RSE-S8-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5098.6	41.44	-1	42.44	32.56	74.00	V
7883.4	43.06	-2	45.06	30.94	74.00	V
11620.4	44.55	4	40.55	29.45	74.00	V

RSE-S8-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5098.6	28.27	-1	29.27	25.73	54.00	V
7883.4	30.09	-2	32.09	23.91	54.00	V
11620.4	32.36	4	28.36	21.64	54.00	V

RSE-S8-CH19-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.4	10.2	-15	25.2	29.80	40.00	H
68.2	15.69	-15	30.69	24.31	40.00	H

RSE-S8-CH19-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2542.9	52.99	16	36.99	21.01	74.00	H
2675.2	54.76	18	36.76	19.24	74.00	H
2819.6	54	17	37	20.00	74.00	V

RSE-S8-CH19-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2542.9	40.55	16	24.55	13.45	54.00	H
2675.2	42.12	18	24.12	11.88	54.00	H
2819.6	41.43	17	24.43	12.57	54.00	V

RSE-S8-CH19-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5453.9	41.95	-3	44.95	32.05	74.00	H
8005.4	42.82	-1	43.82	31.18	74.00	H
11582.8	45.15	4	41.15	28.85	74.00	H

RSE-S8-CH19-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
5453.9	29.46	-3	32.46	24.54	54.00	H
8005.4	30.2	-1	31.2	23.80	54.00	H
11582.8	32.76	4	28.76	21.24	54.00	H

RSE-S8-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
35.1	10.55	-15	25.55	29.45	40.00	H
68.2	16.25	-15	31.25	23.75	40.00	H

341.1	13.88	-8	21.88	32.12	46.00	H

RSE-S8-CH39-1GHz-8GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2525.8	55.84	16	39.84	18.16	74.00	V
2641.5	54.33	17	37.33	19.67	74.00	V
2892.2	54.27	17	37.27	19.73	74.00	H

RSE-S8-CH39-1GHz-8GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2525.8	40.53	16	24.53	13.47	54.00	V
2641.5	41.75	17	24.75	12.25	54.00	V
2892.2	41.56	17	24.56	12.44	54.00	H

RSE-S8-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
11640.9	44.76	3	41.76	29.24	74.00	H
16493.9	47.26	10	37.26	26.74	74.00	V

RSE-S8-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
11640.9	32.37	3	29.37	21.63	54.00	H
16493.9	34.68	10	24.68	19.32	54.00	V

6.9. AC Powerline Conducted Emission

Specifications:	FCC 47 Part 15.207, RSS-GEN 8.8
DUT Serial Number:	25B02W000005#S07
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Method of Measurement: ANSI C63.10-2013-clause 6.2

1.The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2.If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3.The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

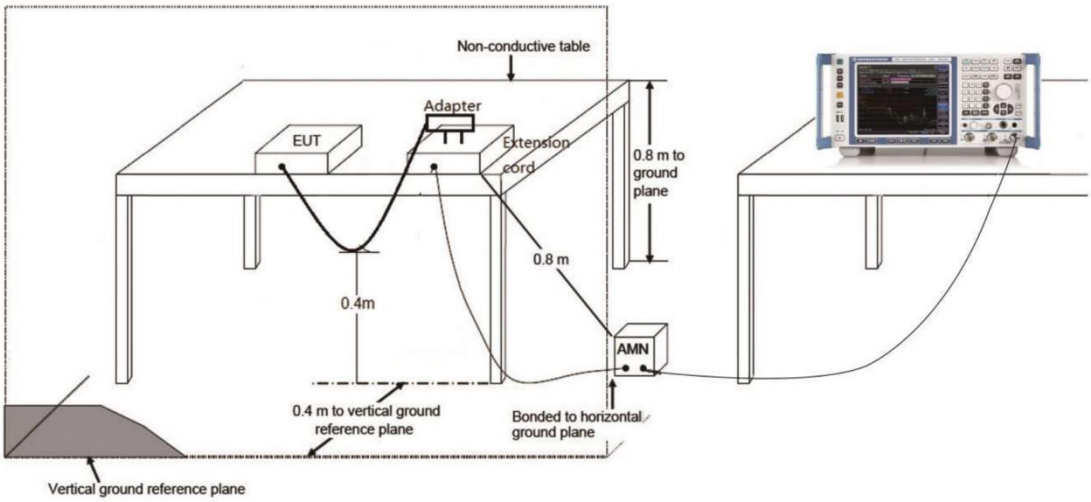
4.If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Measurement Uncertainty:

Measurement Uncertainty	1.97dB（k=2）

Test Setup



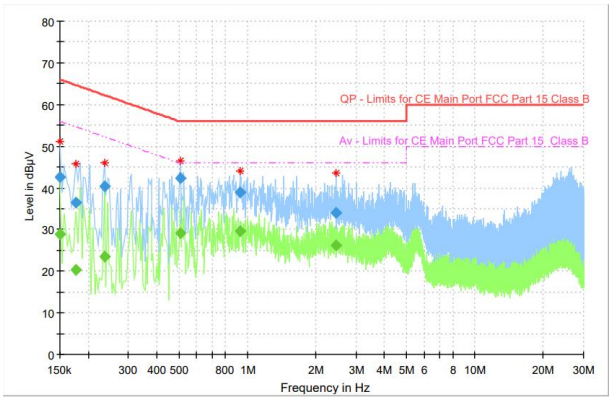
Test Condition

Voltage（V）	Frequency（Hz）
120	60

Measurement Results and limit:

(Quasi-peak-average Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	56 to 46	P
0.5 to 5	56	46	
5 to 30	60	50	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

BLE 2M CH2440	/
	/

Frequency (MHz)	QuasiPeak (dBµV)	Average (dµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.228356	34.41	---	63.76	29.35	15000.0	9.000	N	ON	10.2
0.228356	---	22.02	53.76	31.75	15000.0	9.000	N	ON	10.2
0.627600	---	25.44	46.00	20.56	15000.0	9.000	N	ON	10.0
0.627600	34.03	---	56.00	21.97	15000.0	9.000	N	ON	10.0
1.153706	26.39	---	56.00	29.61	15000.0	9.000	N	ON	10.0
1.153706	---	19.86	46.00	26.14	15000.0	9.000	N	ON	10.0
2.015625	---	17.38	46.00	28.62	15000.0	9.000	L1	ON	9.9
2.015625	25.78	---	56.00	30.22	15000.0	9.000	L1	ON	9.9
3.131269	---	15.18	46.00	30.82	15000.0	9.000	N	ON	9.8
3.131269	22.97	---	56.00	33.03	15000.0	9.000	N	ON	9.8
10.022888	---	13.19	50.00	36.81	15000.0	9.000	N	ON	9.9
10.022888	19.11	---	60.00	40.89	15000.0	9.000	N	ON	9.9

Note:

1. All modes have been tested and only the worst mode is recorded in the report.
2. L1 and N is all have been tested, the result of them is synthesized in the above data diagram.

ANNEX A EUT Photos

See the document ”25B02W000005-External Photos”.
See the document ”25B02W000005-Internal Photos”.

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

*****END OF REPORT*****