

TEST REPORT

Product : Nextiles Smart Module
Trade mark : NEXTILES
Model/Type reference : Gen2.5-A
Serial Model : /
Report Number : EED39O80793601
FCC ID : 2A8GBNX-SM-GEN2
Date of Issue : September 28, 2022

Test Standards	Result
☒ 47 CFR Part 15 Subpart C	PASS

Prepared for:
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Date: September 28, 2022

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Authorized Signatory



Scan to check the authenticity

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Modification Record

No.	Last Report No.	Modification Description
1	EED39O80793601	First report

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1. Test Summary

Test item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15Subpart C Section 15.203/15.247 (c)	ANSI C63.10-2020	PASS
AC Power Line Conducted Emission	47 CFR Part 15Subpart C Section 15.207	ANSI C63.10-2020	PASS
Maximum conducted output power	47 CFR Part 15Subpart C Section 15.247 (b)(3)	ANSI C63.10-2020	PASS
DTS Bandwidth	47 CFR Part 15Subpart C Section 15.247 (a)(2)	ANSI C63.10-2020	PASS
Maximum Power Spectral Density	47 CFR Part 15Subpart C Section 15.247 (e)	ANSI C63.10-2020	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15Subpart C Section 15.247(d)	ANSI C63.10-2020	PASS
RF Conducted Spurious Emissions	47 CFR Part 15Subpart C Section 15.247(d)	ANSI C63.10-2020	PASS
Radiated Spurious Emissions	47 CFR Part 15Subpart C Section 15.205/15.209	ANSI C63.10-2020	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15Subpart C Section 15.205/15.209	ANSI C63.10-2020	PASS

Remark:

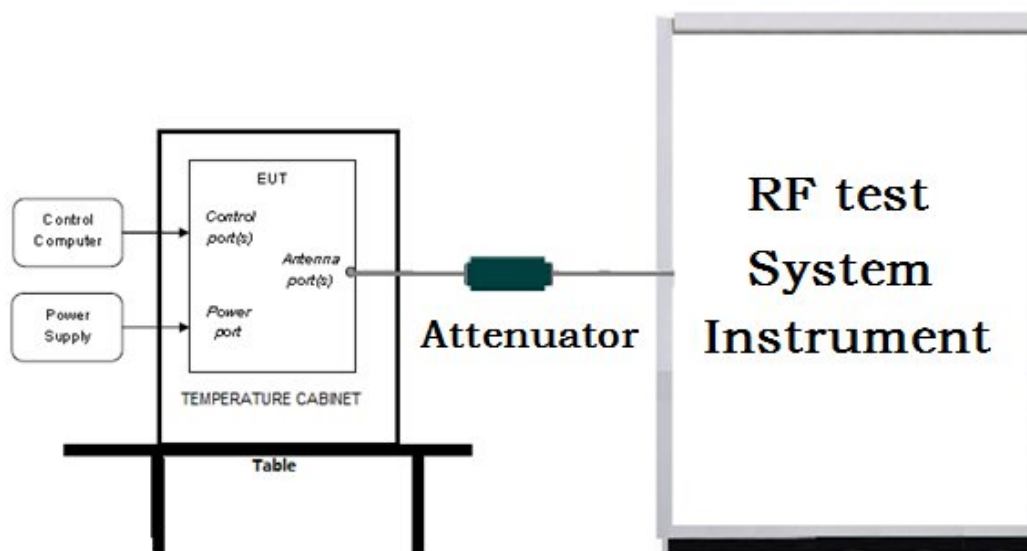
Test according to ANSI C63.4-2014 & ANSI C63.10-2020.

The tested samples and the sample information are provided by the client.

2. Test Requirement

2.1. Test Setup

For Conducted Test Setup



For Radiated Emissions Test Setup

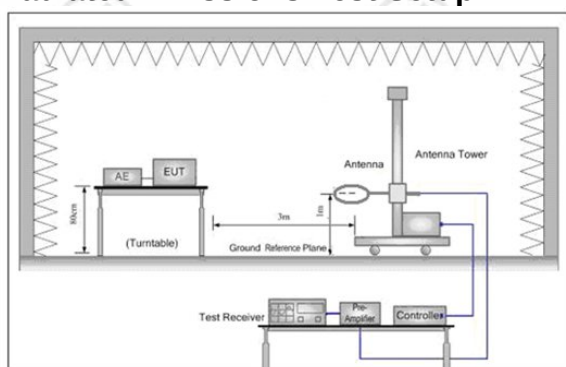


Figure 1. Below 30MHz

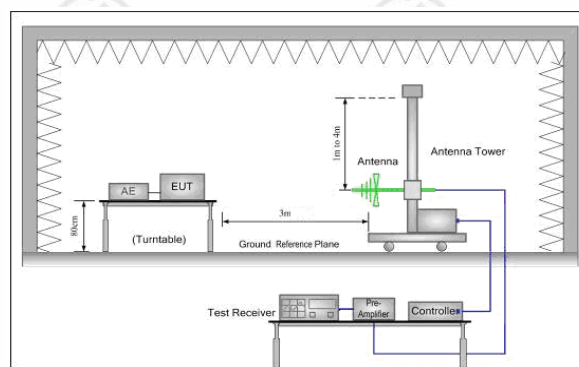


Figure 2. 30MHz to 1GHz

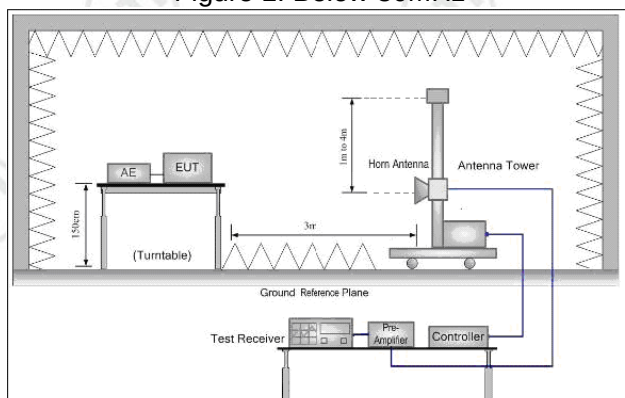
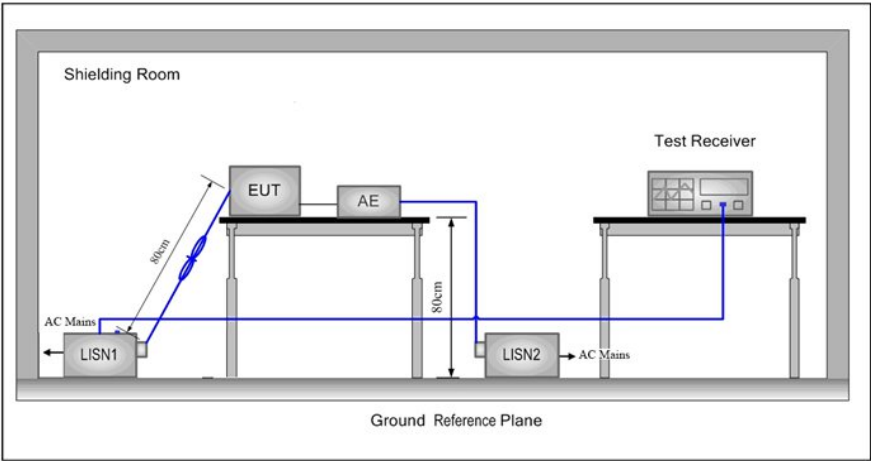


Figure 3. Above 1GHz

For Conducted Emissions Test Setup



2.2. Test Environment

Operating Environment:	
Temperature:	23.3 °C
Humidity:	53.2 % RH
Atmospheric Pressure:	1008mbar

2.3. Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
GFSK	2402MHz ~2480 MHz	Channel 1	Channel 20	Channel 40
		2402MHz	2440MHz	2480MHz
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.			

3. General Information

3.1. Client Information

Applicant:	Nextiles, Inc.
Address of Applicant:	19 Morris Ave. Bldg. 128 Brooklyn, NY11205
Manufacturer:	Ningbo High-tech Zone LADDER Science Co., Ltd
Address of Manufacturer:	3/F, Building #1, Zone B, No.428 Dongqing Road, High-tech Zone, Ningbo City, Zhejiang Province
Factory:	Ningbo High-tech Zone LADDER Science Co., Ltd
Address of Factory:	3/F, Building #1, Zone B, No.428 Dongqing Road, High-tech Zone, Ningbo City, Zhejiang Province

3.2. General Description of EUT

Product Name:	Nextiles Smart Module
Model No.(EUT):	Gen2.5-A
Trade Mark:	NEXTILES
EUT Supports Radios application:	Bluetooth V5.0 BLE
Power Supply:	DC 3.7V
Sample Received Date:	Jun 6, 2022
Sample tested Date:	Aug 3, 2022 to Aug 9, 2022

3.3. Product Specification subjective to this standard

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	Bluetooth LE5.0
Modulation Technique:	DSSS
Modulation Type:	GFSK
Number of Channel:	40
Sample Type:	portable device
Test Software of EUT:	putty TOOL (manufacturer declare)
Antenna Type:	FPC Antenna
Antenna Gain ^① :	0.34dBi
Test Voltage:	DC 3.7V

Note: 1 The antenna gain is provided by the client and we Centre Testing International (Suzhou) CO., LTD. test lab is not responsible for the accuracy of the antenna gain information.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz
3	2406MHz	13	2426MHz	23	2446MHz	33	2466MHz
4	2408MHz	14	2428MHz	24	2448MHz	34	2468MHz
5	2410MHz	15	2430MHz	25	2450MHz	35	2470MHz
6	2412MHz	16	2432MHz	26	2452MHz	36	2472MHz
7	2414MHz	17	2434MHz	27	2454MHz	37	2474MHz
8	2416MHz	18	2436MHz	28	2456MHz	38	2476MHz
9	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz

3.4. Description of Support Units

The EUT has been tested with associated equipment below.

1) support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
NB	ThinkPad	E490	FCC ID and DOC	CTI

3.5. Test Location

All test facilities used to collect the test data are located at Building 18, Zhihui New Town Ecological Industrial Park, No. 1206, Jinyang East Road, Lujia Town, Kunshan, Jiangsu, China.

3.6. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Cert. No. 5734.01

Centre Testing International (Suzhou) CO., LTD. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration. Laboratories and any additional program requirements in the identified field of testing.

FCC-Designation No.:CN1290

Centre Testing International Group Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The American association for Centre Testing International Group Co., Ltd. EMC laboratory accreditation Designation No.:CN1290

3.7. Deviation from Standards

None.

3.8. Abnormalities from Standard Conditions

None.

3.9. Other Information Requested by the Customer

None.

3.10. Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Occupied Bandwidth	0.56%
2	RF Power conducted	0.59 dB
3	Power Spectral Density, conducted	2.37 dB
4	Unwanted Emission, conducted	2.68 dB
5	All Emission, radiated	4.41 dB(30MHz-1GHz)
		4.99 dB(1GHz-18GHz)
		5.307 dB(18GHz-40GHz)
6	Temperature test	0.54°C
7	Humidity test	1.62%
8	DC and low frequency voltages test	1.14%

4. Equipment List

RF test system					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Signal Generator	R&S	SMB100A	182002	2021-10-24	2022-10-23
Spectrum Analyzer	R&S	FSV40	101588	2021-10-24	2022-10-23
Vector signal generator	R&S	SMBV100B	101985	2021-10-24	2022-10-23
Temperature/ Humidity Indicator	testo	608-H1	1945222628	2021-11-02	2022-11-01
Switch Automatic control	R&S	OSP-B157W8	101111	2021-10-23	2022-10-22
High-low temperature chamber	GIANT FORCE	GTH-800-40-CP	MAA1908-003	2021-12-04	2022-12-03
Automatic test software	Shenzhen JS TONSCEND	/	V2.6.77.0518	/	/

966 Semi-anechoic Chamber					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Receiver	R&S	ESU8	100537	2021-12-06	2022-12-05
Spectrum analyzer	R&S	FSV40	101185	2021-12-06	2022-12-05
Preamplifier (30MHz~1GHz)	R&S	SCU-08	100748	2022-05-24	2023-05-23
Preamplifier (1GHz~18GHz)	R&S	SCU-18D	1987397	2021-12-09	2022-12-08
Preamplifier (18GHz~40GHz)	/	MTLNA1804003 0235	12009007	2021-10-23	2022-10-22
Loop Antenna (9kHz~30MHz)	TESEQ	HLA6121	54575	2022-02-26	2023-02-25
Antenna (30MHz~1GHz)	SCHWARZBEC K	VULB9163	9163-965	2021-10-15	2022-10-14
Antenna (1GHz~18GHz)	R&S	HF907	102524	2021-12-14	2022-12-13
Antenna (18GHz~40GHz)	R&S	BBHA9170	1032	2021-10-23	2022-10-22
Band rejection filter	Xi'an xingbo	XBLBQ-DZA81	200827-1-02	/	/

5. Radio Technical Requirements Specification

5.1. Reference Documents for Testing

No.	Identity	Document Title
1	FCC Part15C	Subpart C-Intentional Radiators
2	ANSI C63.10-2020	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

5.2. Test Results List

Test requirement	Test method	Test item	Verdict	Note
Part15C Section 15.247 (a)(2)	ANSI C63.10 Section 11.8.1	DTS Bandwidth	PASS	Appendix A)
Part15C Section 15.247 (b)(3)	ANSI C63.10 Section 11.9.1	Maximum conducted output power	PASS	Appendix B)
Part15C Section 15.247 (e)	ANSI C63.10 Section 11.10.2	Maximum power spectral density	PASS	Appendix C)
Part15C Section 15.247(d)	ANSI C63.10 Section 11.13.3.2	Band-edge for RF Conducted Emissions	PASS	Appendix D)
Part15C Section 15.247(d)	ANSI C63.10 Section 11.11	Conducted Spurious Emissions	PASS	Appendix E)
Part15C Section 15.203/15.247 (c)	ANSI C63.10	Antenna Requirement	PASS	Appendix F)
Part15C Section 15.207	ANSI C63.10 Section 6.2	AC Power Line Conducted Emission	PASS	Appendix G)
Part15C Section 15.205/15.209	ANSI C63.10 Section 6.10.5	Restricted bands around fundamental frequency (Radiated Emission)	PASS	Appendix H)
Part15C Section 15.205/15.209	ANSI C63.10 Section 6.4,6.5,6.6	Radiated Spurious Emissions	PASS	Appendix I)

Appendix A): DTS Bandwidth

Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	0.68	2401.65	2402.33	0.5	PASS
		2440	0.72	2439.63	2440.35	0.5	PASS
		2480	0.65	2479.66	2480.32	0.5	PASS
BLE_1M	Ant1	2402	0.76	2401.61	2402.37	0.5	PASS
		2440	0.75	2439.61	2440.36	0.5	PASS
		2480	0.72	2479.63	2480.34	0.5	PASS
BLE_2M	Ant1	2402	1.24	2401.36	2402.61	0.5	PASS
		2440	1.25	2439.39	2440.64	0.5	PASS
		2480	1.22	2479.36	2480.58	0.5	PASS
BLE_500K	Ant1	2402	0.71	2401.64	2402.34	0.5	PASS
		2440	0.73	2439.62	2440.35	0.5	PASS
		2480	0.70	2479.64	2480.34	0.5	PASS

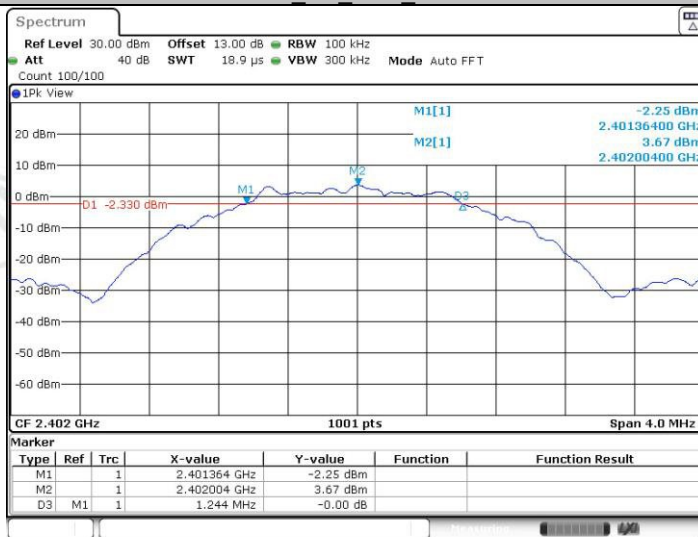
Test Graphs





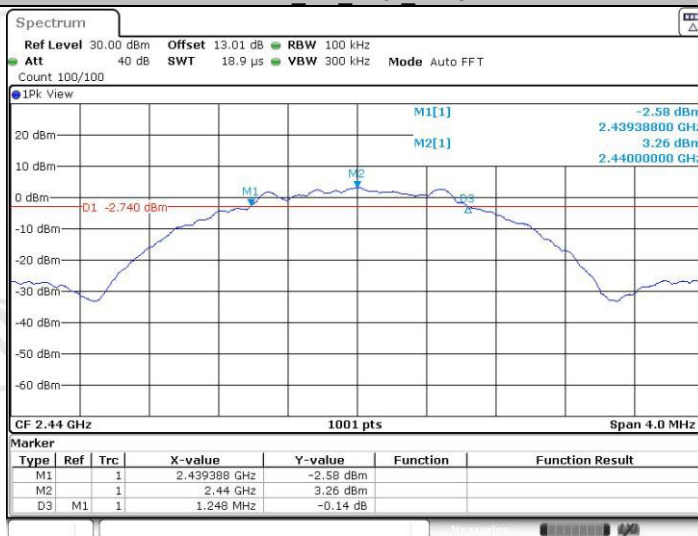


BLE 2M_Ant1_2402



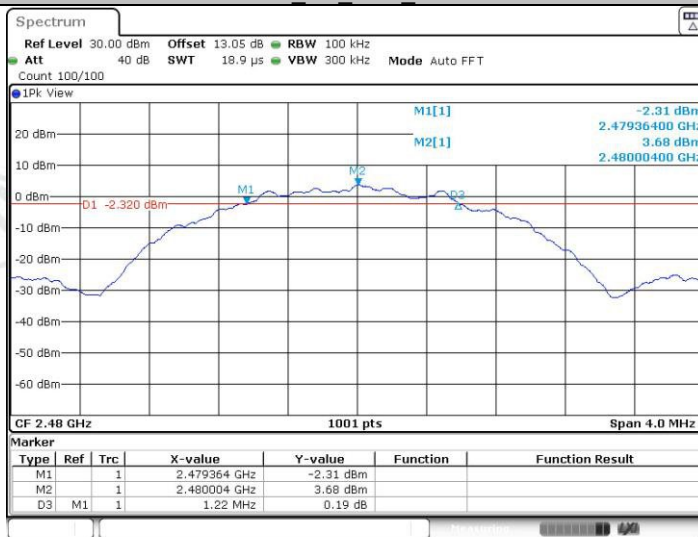
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BLE 2M_Ant1_2440



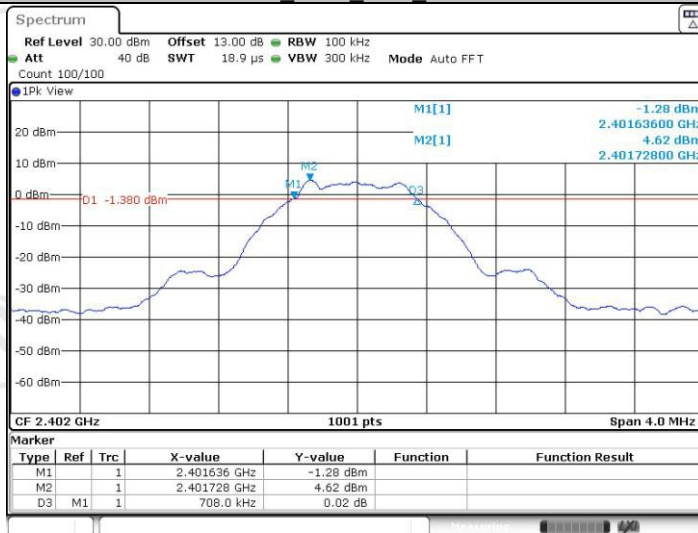
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BLE 2M Ant1 2480



Date: 3.AUG.2022 00:42:56

BLE 500K Ant1 2402



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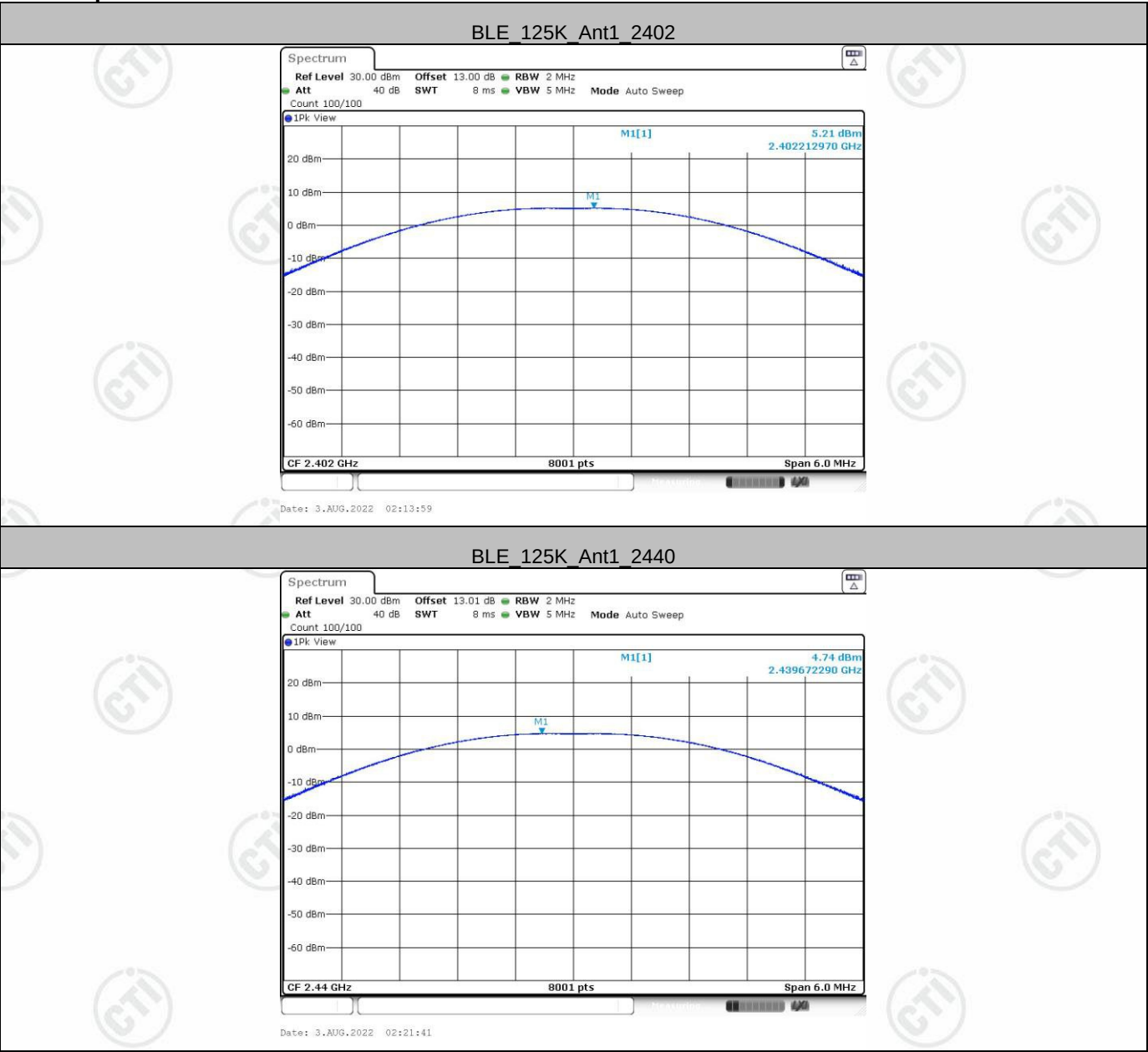


Appendix B): Maximum conducted output power

Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_125K	Ant1	2402	5.21	≤30	PASS
		2440	4.74	≤30	PASS
		2480	5.05	≤30	PASS
BLE_1M	Ant1	2402	5.26	≤30	PASS
		2440	4.92	≤30	PASS
		2480	5.17	≤30	PASS
BLE_2M	Ant1	2402	5.28	≤30	PASS
		2440	4.96	≤30	PASS
		2480	5.19	≤30	PASS
BLE_500K	Ant1	2402	5.09	≤30	PASS
		2440	4.77	≤30	PASS
		2480	5.07	≤30	PASS

Test Graphs



BLE 125K Ant1 2480

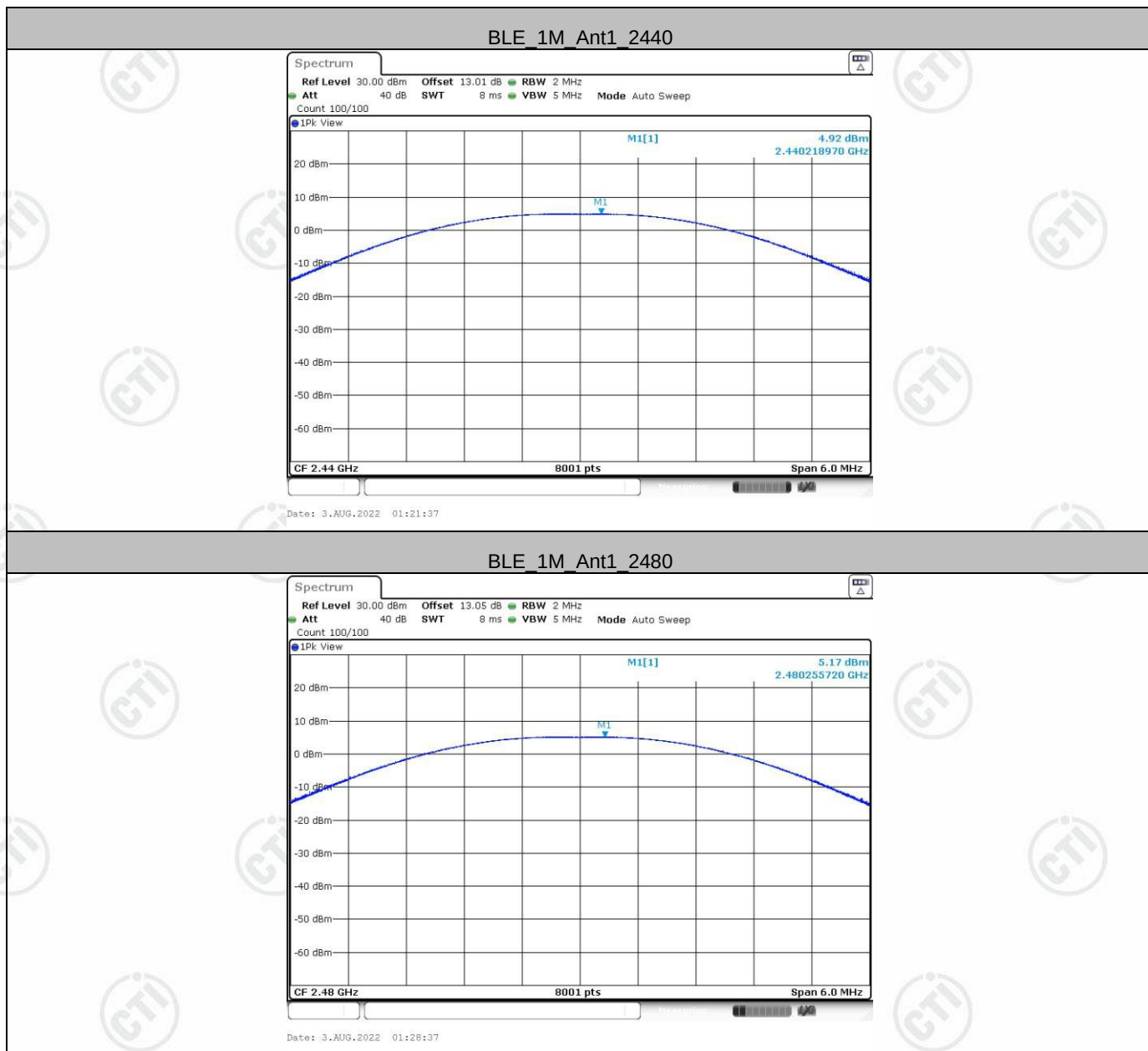


Date: 3.AUG.2022 02:26:25

BLE 1M Ant1 2402



Date: 3.AUG.2022 00:57:51



BLE 2M_Ant1_2402



Date: 3.AUG.2022 00:28:32

BLE 2M_Ant1_2440



Date: 3.AUG.2022 00:37:43

BLE 2M Ant1 2480

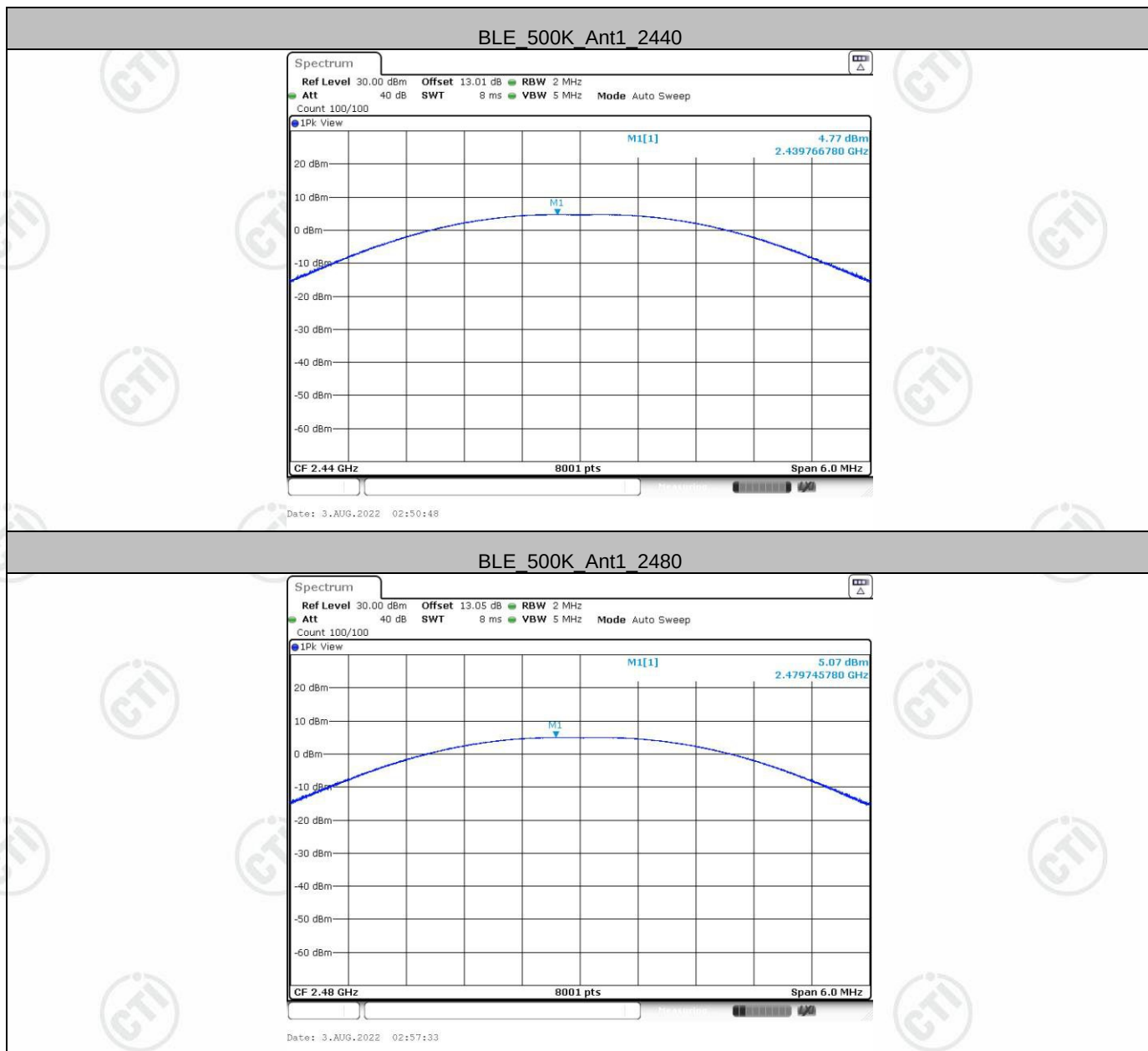


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BLE 500K Ant1 2402



Date: 3.AUG.2022 02:35:20



Appendix C): Maximum power spectral density

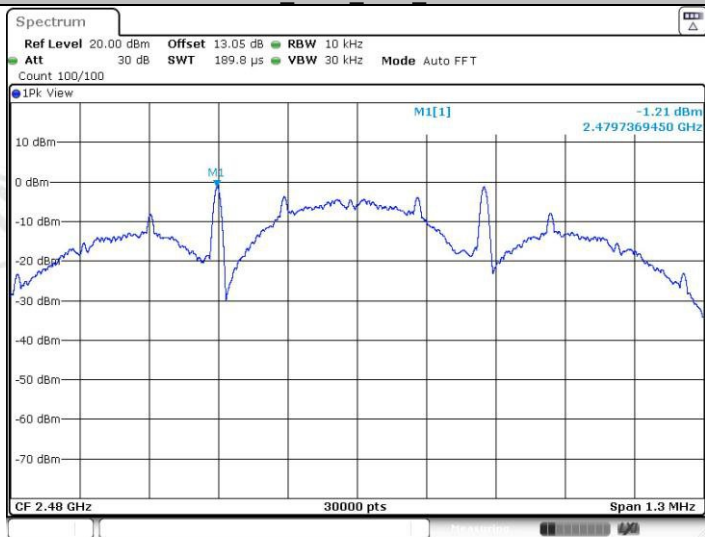
Test Result

Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_125K	Ant1	2402	-1.05	≤8.00	PASS
		2440	-1.45	≤8.00	PASS
		2480	-1.21	≤8.00	PASS
BLE_1M	Ant1	2402	-2.77	≤8.00	PASS
		2440	-2.52	≤8.00	PASS
		2480	-1.83	≤8.00	PASS
BLE_2M	Ant1	2402	-5.71	≤8.00	PASS
		2440	-5.63	≤8.00	PASS
		2480	-5.18	≤8.00	PASS
BLE_500K	Ant1	2402	-1.18	≤8.00	PASS
		2440	-1.48	≤8.00	PASS
		2480	-1.21	≤8.00	PASS

Test Graphs

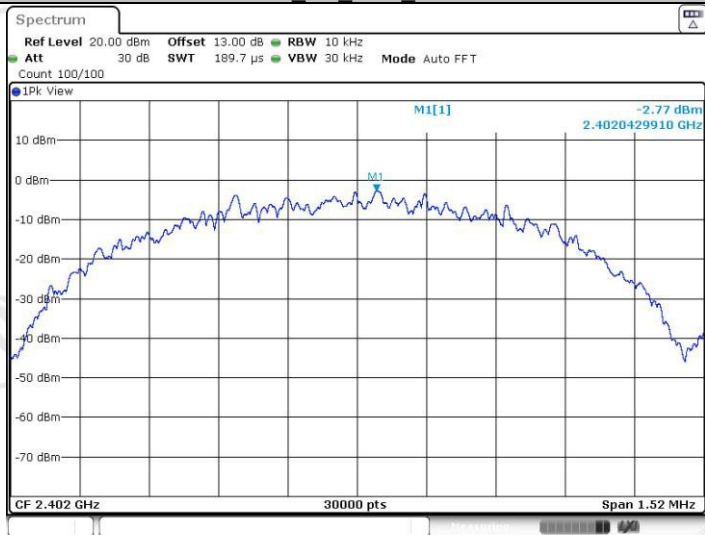


BLE 125K Ant1_2480



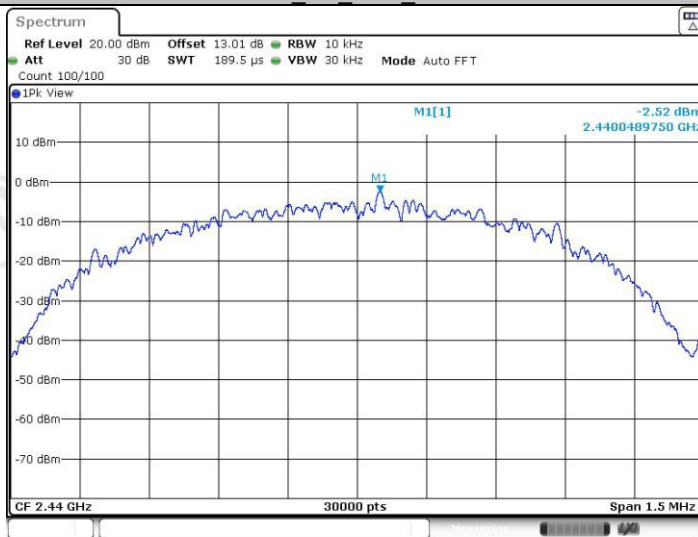
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BLE 1M_Ant1_2402



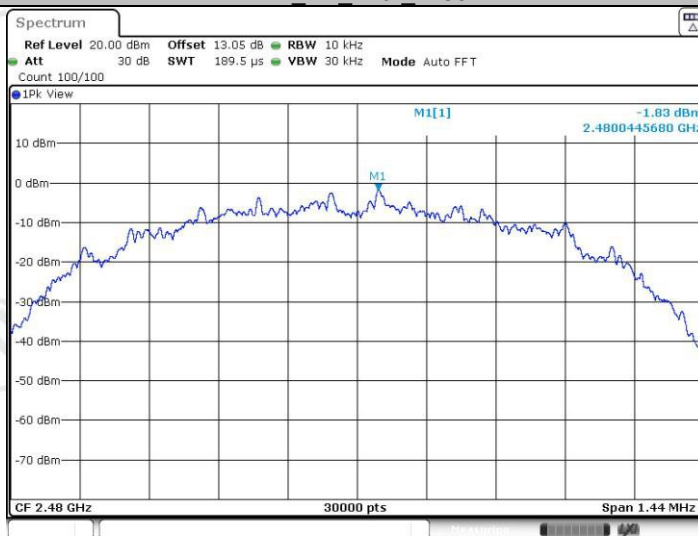
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BLE 1M_Ant1_2440



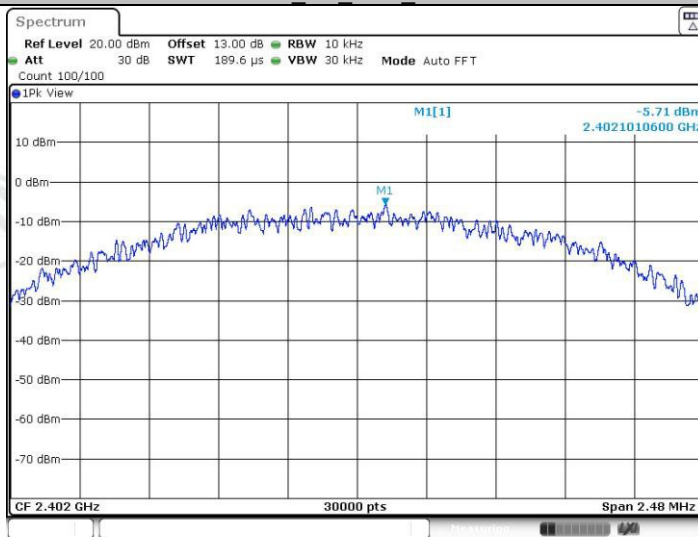
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BLE 1M_Ant1_2480

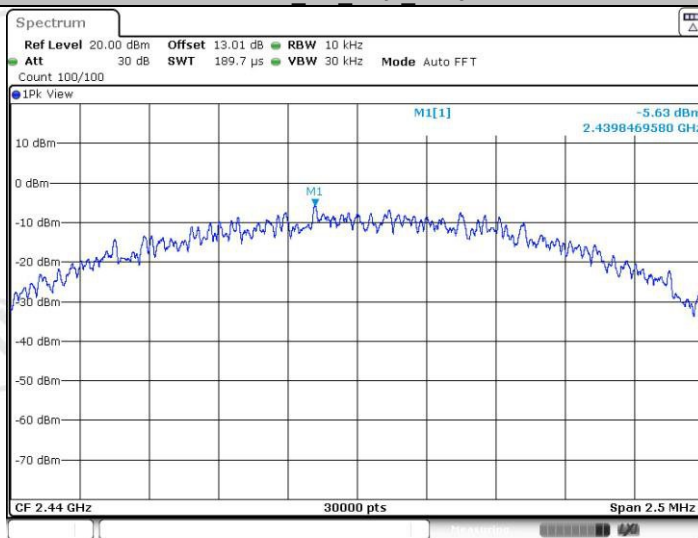


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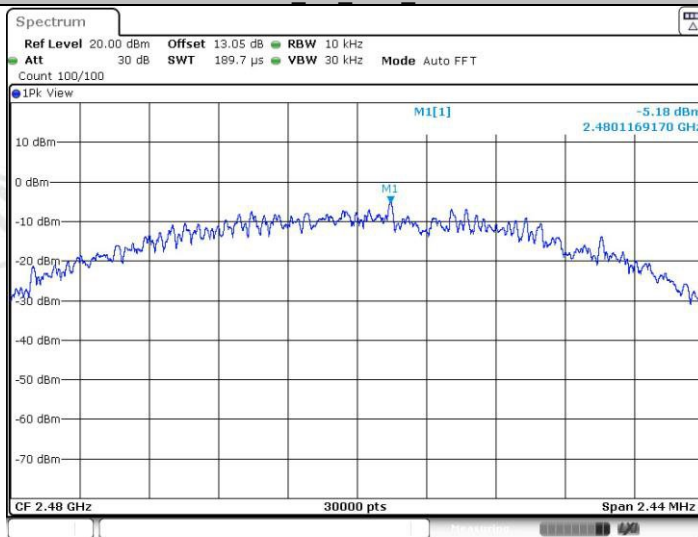
BLE 2M_Ant1_2402



BLE 2M_Ant1_2440

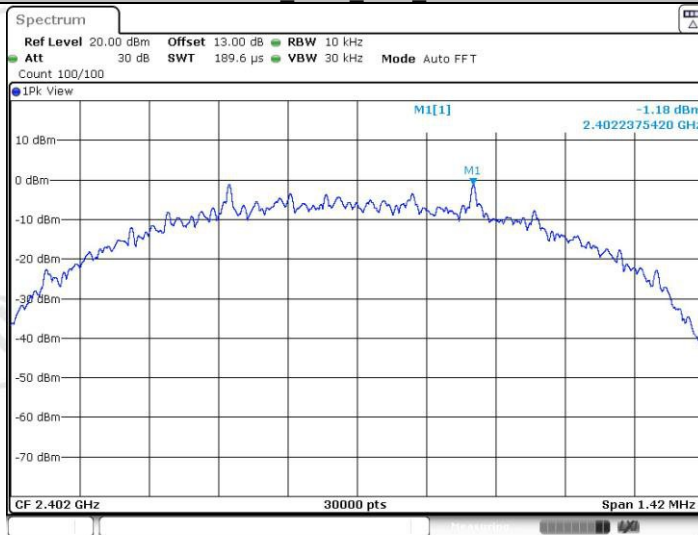


BLE_2M_Ant1_2480

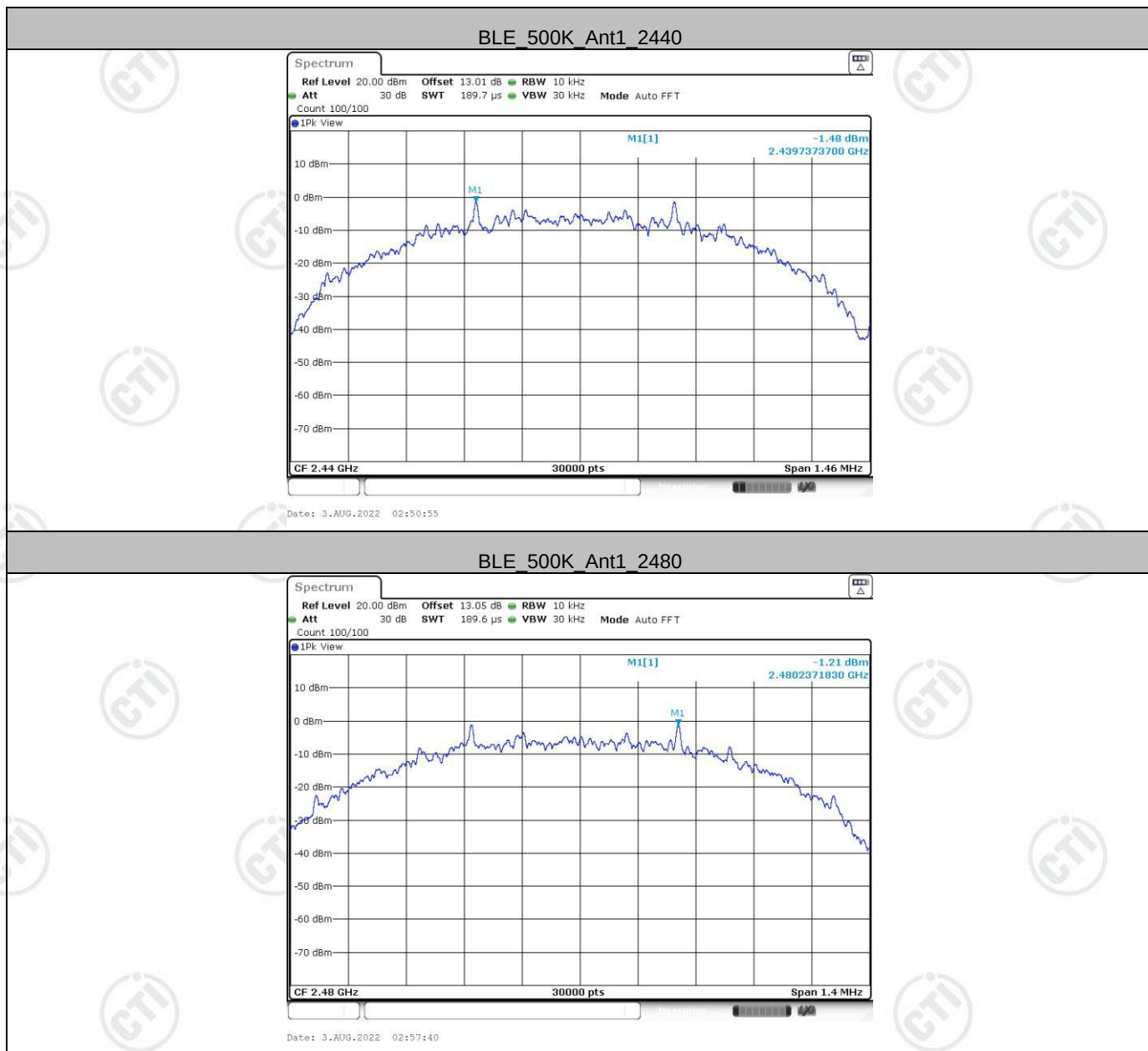


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BLE_500K_Ant1_2402



Date: 3.AUG.2022 02:35:27



Appendix D): Band-edge for RF Conducted Emissions

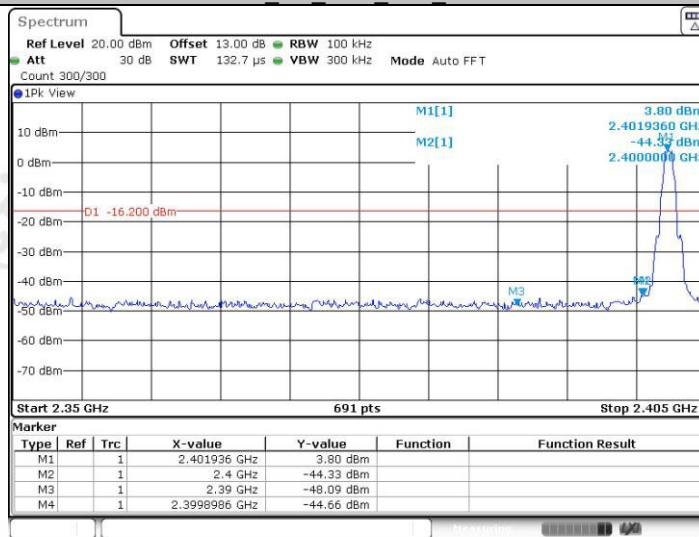
Test Result

Test Mode	Antenna	Ch Name	Channel	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_125K	Ant1	Low	2402	3.25	-44.97	≤-16.75	PASS
		High	2480	2.32	-44.34	≤-17.68	PASS
BLE_1M	Ant1	Low	2402	3.80	-44.66	≤-16.2	PASS
		High	2480	4.68	-40.68	≤-15.32	PASS
BLE_2M	Ant1	Low	2402	3.62	-28.39	≤-16.38	PASS
		High	2480	3.82	-43.68	≤-16.18	PASS
BLE_500K	Ant1	Low	2402	4.34	-45.15	≤-15.66	PASS
		High	2480	4.61	-43.27	≤-15.39	PASS

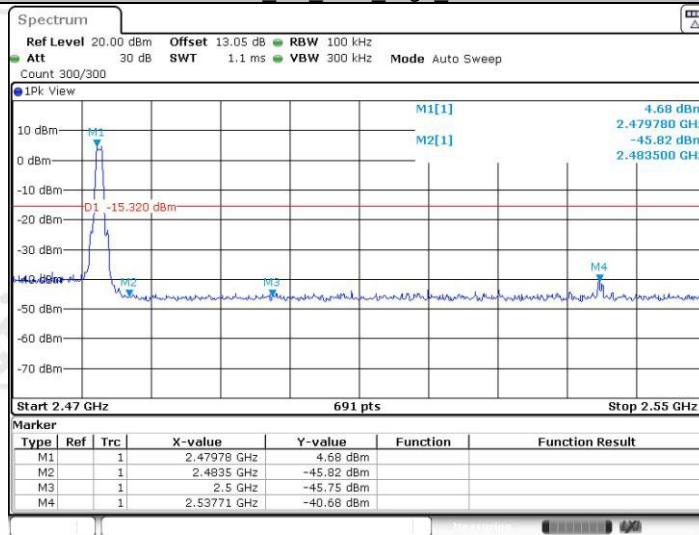
Test Graphs



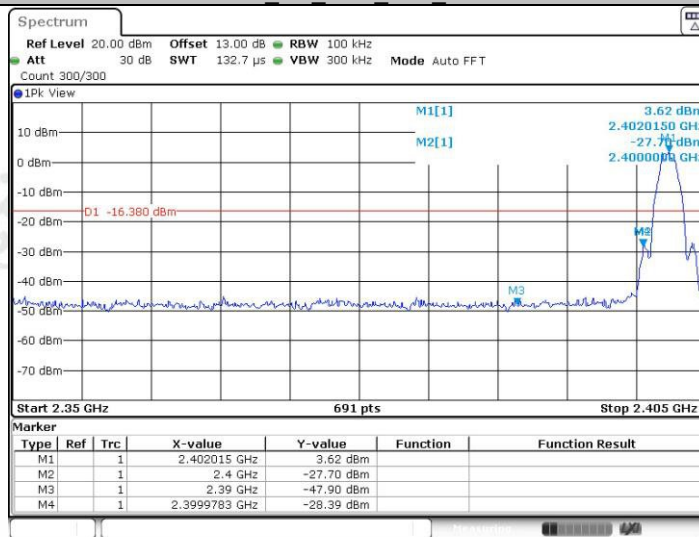
BLE 1M Ant1 Low 2402



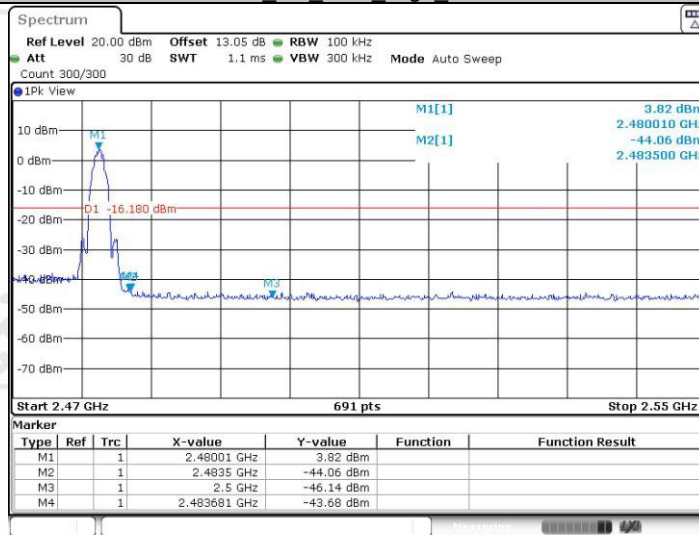
BLE 1M Ant1 High 2480



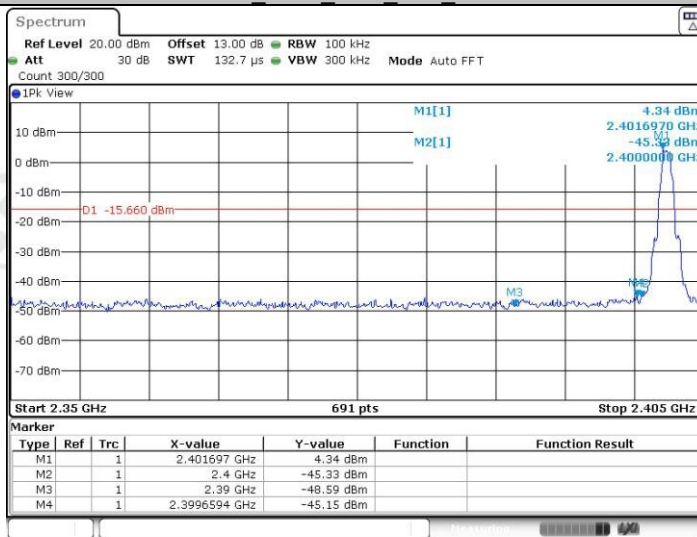
BLE 2M Ant1 Low 2402



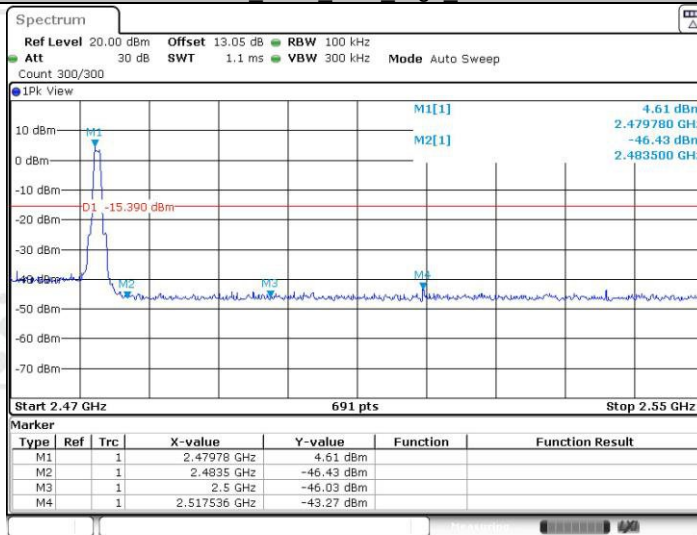
BLE 2M Ant1 High 2480



BLE_500K_Ant1_Low_2402



BLE_500K_Ant1_High_2480



Appendix E): Conducted Spurious Emissions

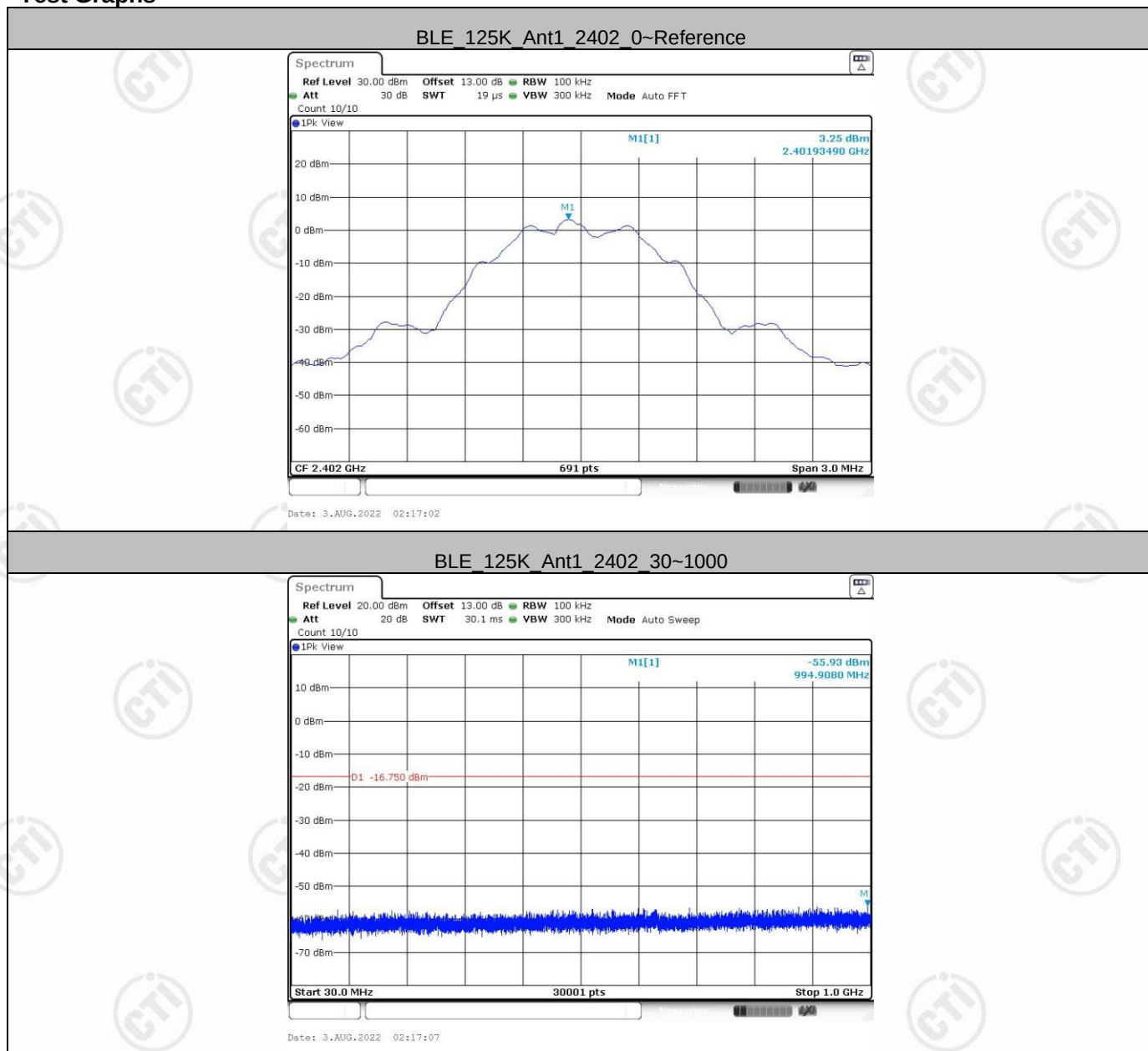
Test Result

Test Mode	Antenna	Channel	Freq Range [MHz]	Ref Level [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_125K	Ant1	2402	Reference	3.25	3.25	---	PASS
			30~1000	3.25	-55.93	≤-16.75	PASS
			1000~26500	3.25	-38.59	≤-16.75	PASS
		2440	Reference	1.76	1.76	---	PASS
			30~1000	1.76	-54.26	≤-18.24	PASS
			1000~26500	1.76	-39.15	≤-18.24	PASS
		2480	Reference	2.72	2.72	---	PASS
			30~1000	2.72	-55.13	≤-17.28	PASS
			1000~26500	2.72	-38.11	≤-17.28	PASS
BLE_1M	Ant1	2402	Reference	3.90	3.90	---	PASS
			30~1000	3.90	-56.19	≤-16.1	PASS
			1000~26500	3.90	-37.2	≤-16.1	PASS
		2440	Reference	4.04	4.04	---	PASS
			30~1000	4.04	-55.68	≤-15.96	PASS
			1000~26500	4.04	-35.39	≤-15.96	PASS
		2480	Reference	4.69	4.69	---	PASS
			30~1000	4.69	-55.66	≤-15.31	PASS
			1000~26500	4.69	-37.87	≤-15.31	PASS
BLE_2M	Ant1	2402	Reference	3.73	3.73	---	PASS
			30~1000	3.73	-55.31	≤-16.27	PASS
			1000~26500	3.73	-37.81	≤-16.27	PASS
		2440	Reference	3.21	3.21	---	PASS
			30~1000	3.21	-55.41	≤-16.79	PASS
			1000~26500	3.21	-37.39	≤-16.79	PASS
		2480	Reference	3.75	3.75	---	PASS
			30~1000	3.75	-55.64	≤-16.25	PASS
			1000~26500	3.75	-37.9	≤-16.25	PASS
BLE_500K	Ant1	2402	Reference	4.67	4.67	---	PASS
			30~1000	4.67	-55.62	≤-15.33	PASS
			1000~26500	4.67	-36.03	≤-15.33	PASS
		2440	Reference	3.89	3.89	---	PASS
			30~1000	3.89	-55.52	≤-16.11	PASS
			1000~26500	3.89	-37	≤-16.11	PASS

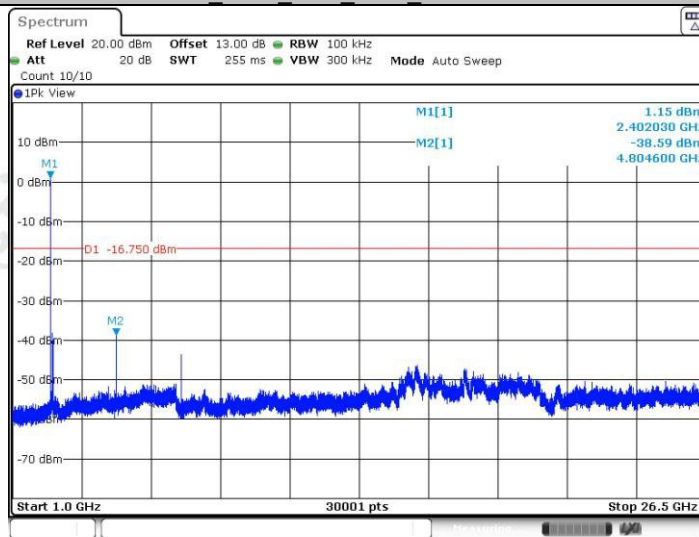
Report No. : EED39O80793601

		2480	Reference	4.63	4.63	---	PASS
			30~1000	4.63	-55.53	≤-15.37	PASS
			1000~26500	4.63	-36.39	≤-15.37	PASS

Test Graphs



BLE 125K Ant1 2402 1000~26500

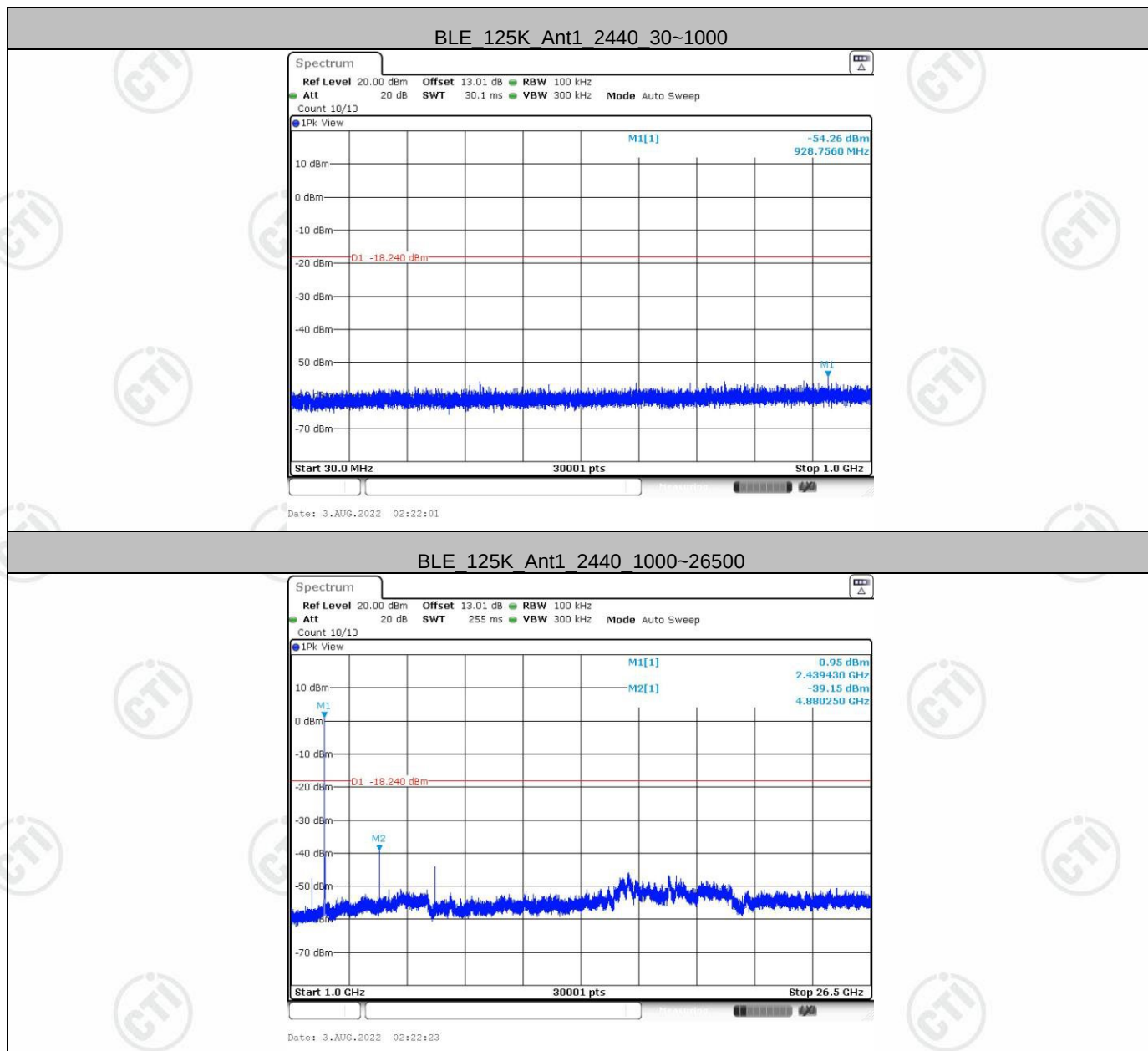


Date: 3.AUG.2022 02:17:29

BLE 125K Ant1 2440 0~Reference



Date: 3.AUG.2022 02:21:57

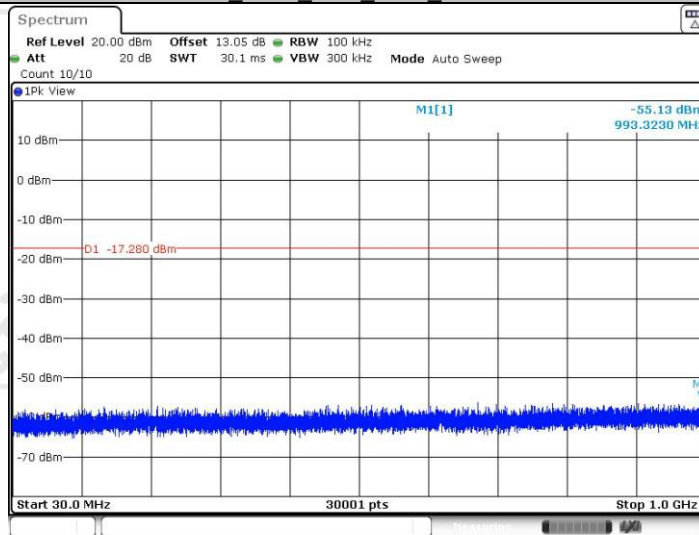


BLE 125K Ant1 2480 0~Reference

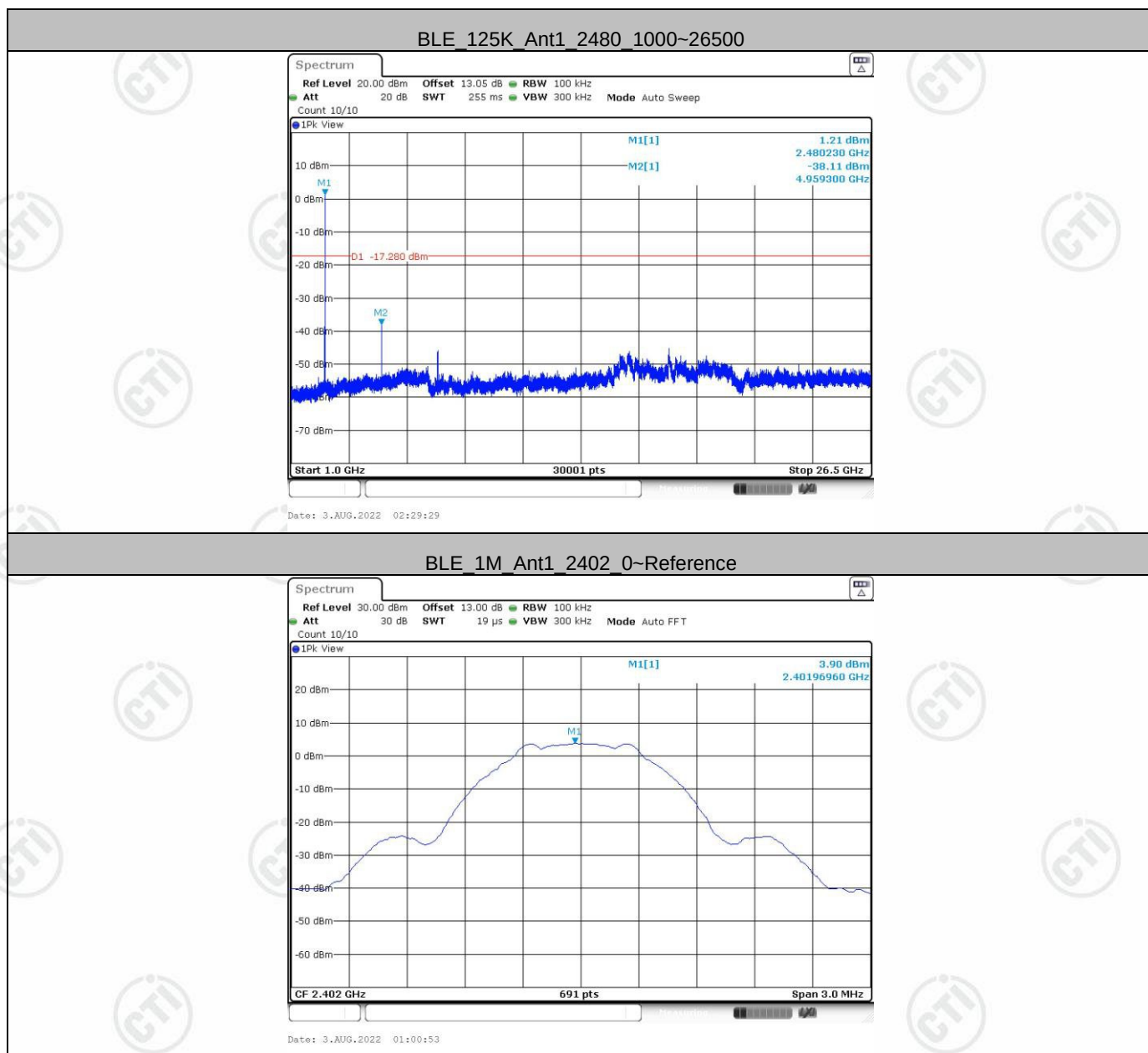


Date: 3.AUG.2022 02:29:02

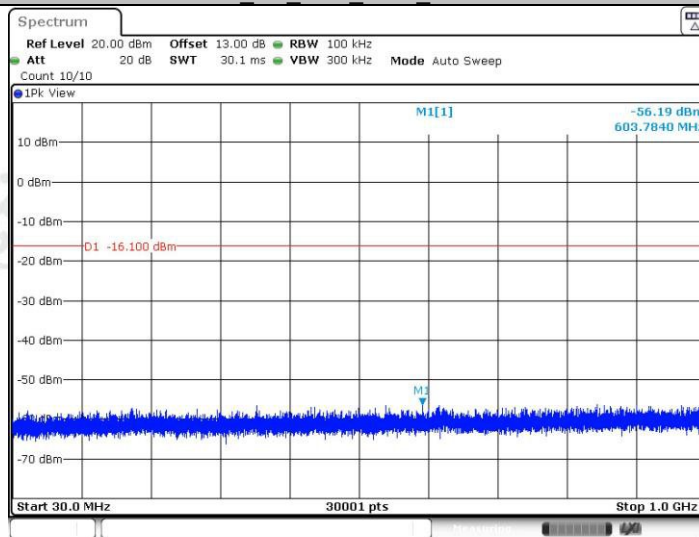
BLE 125K Ant1 2480 30~1000



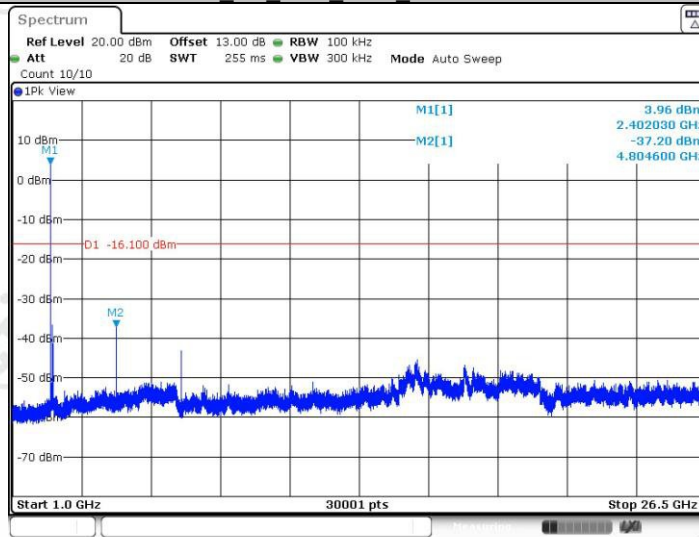
Date: 3.AUG.2022 02:29:07

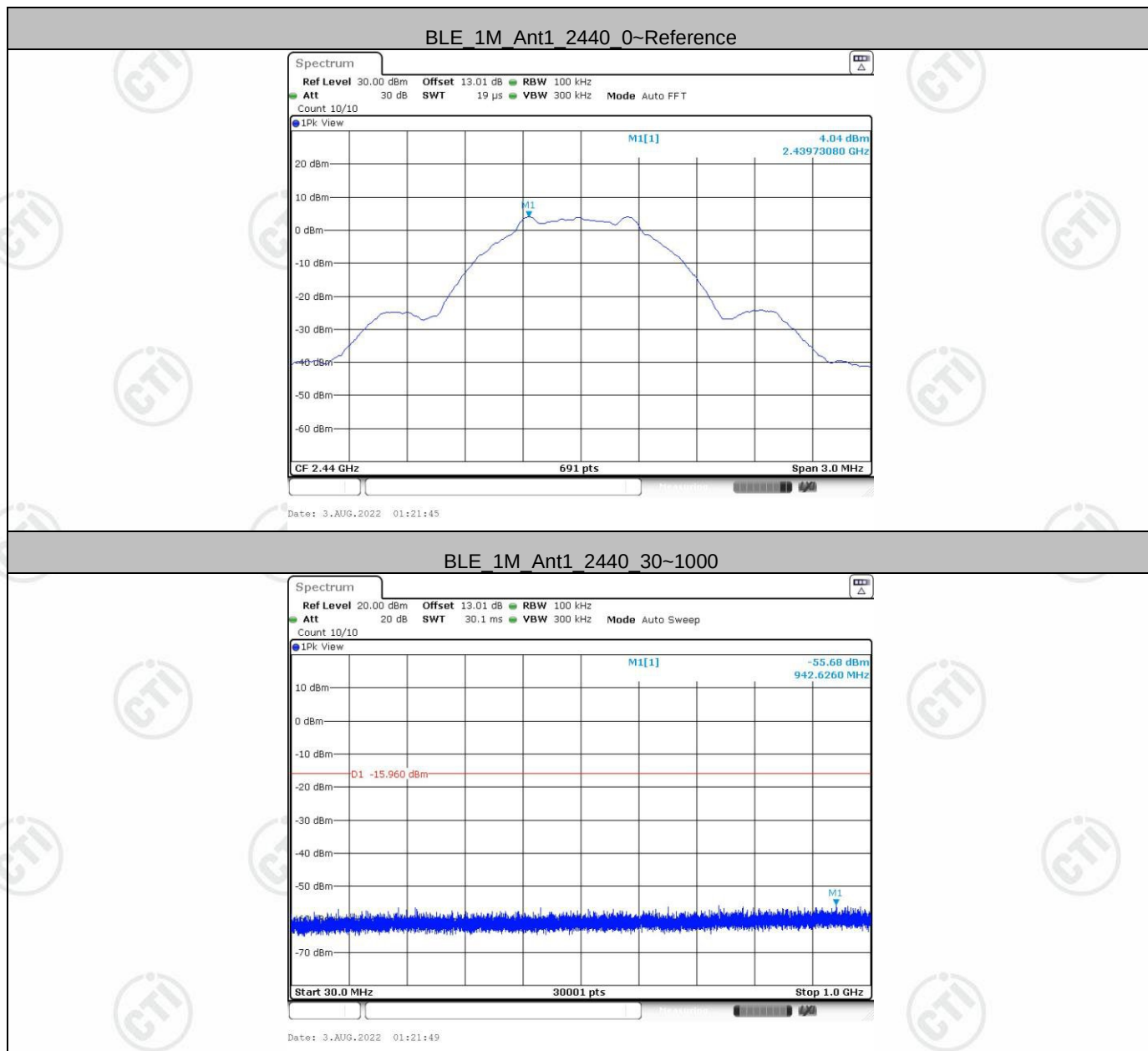


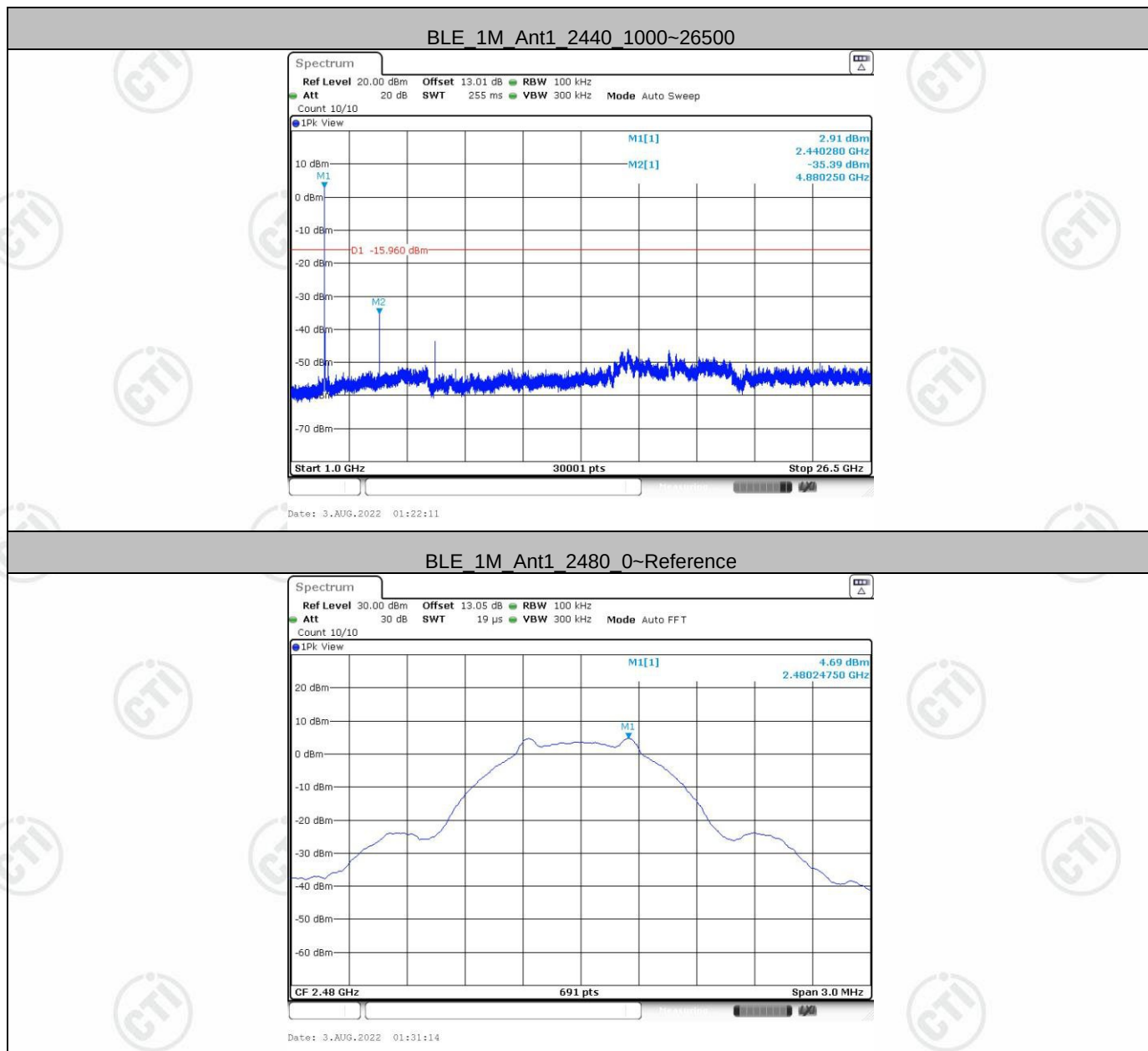
BLE 1M Ant1 2402 30~1000

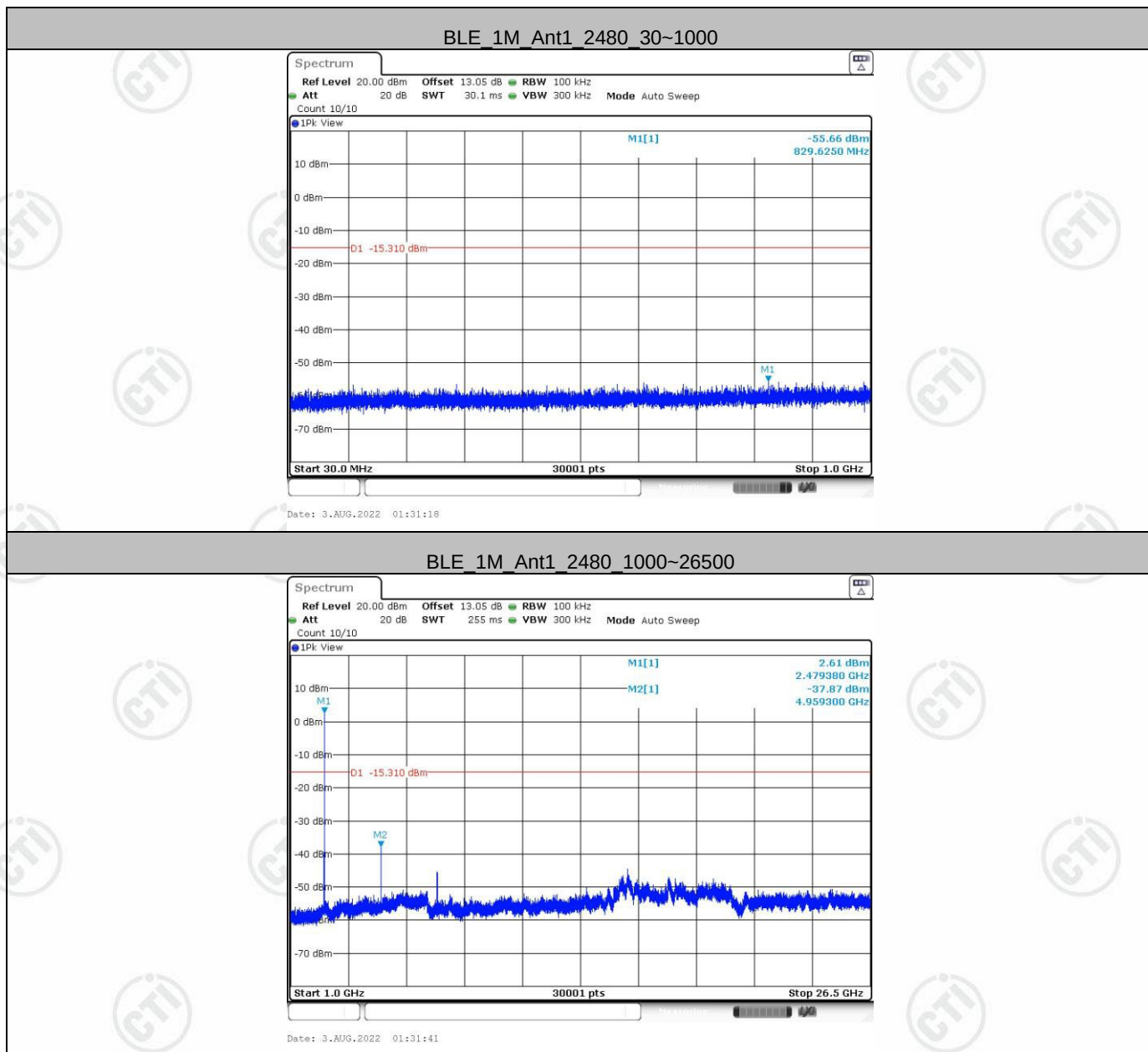


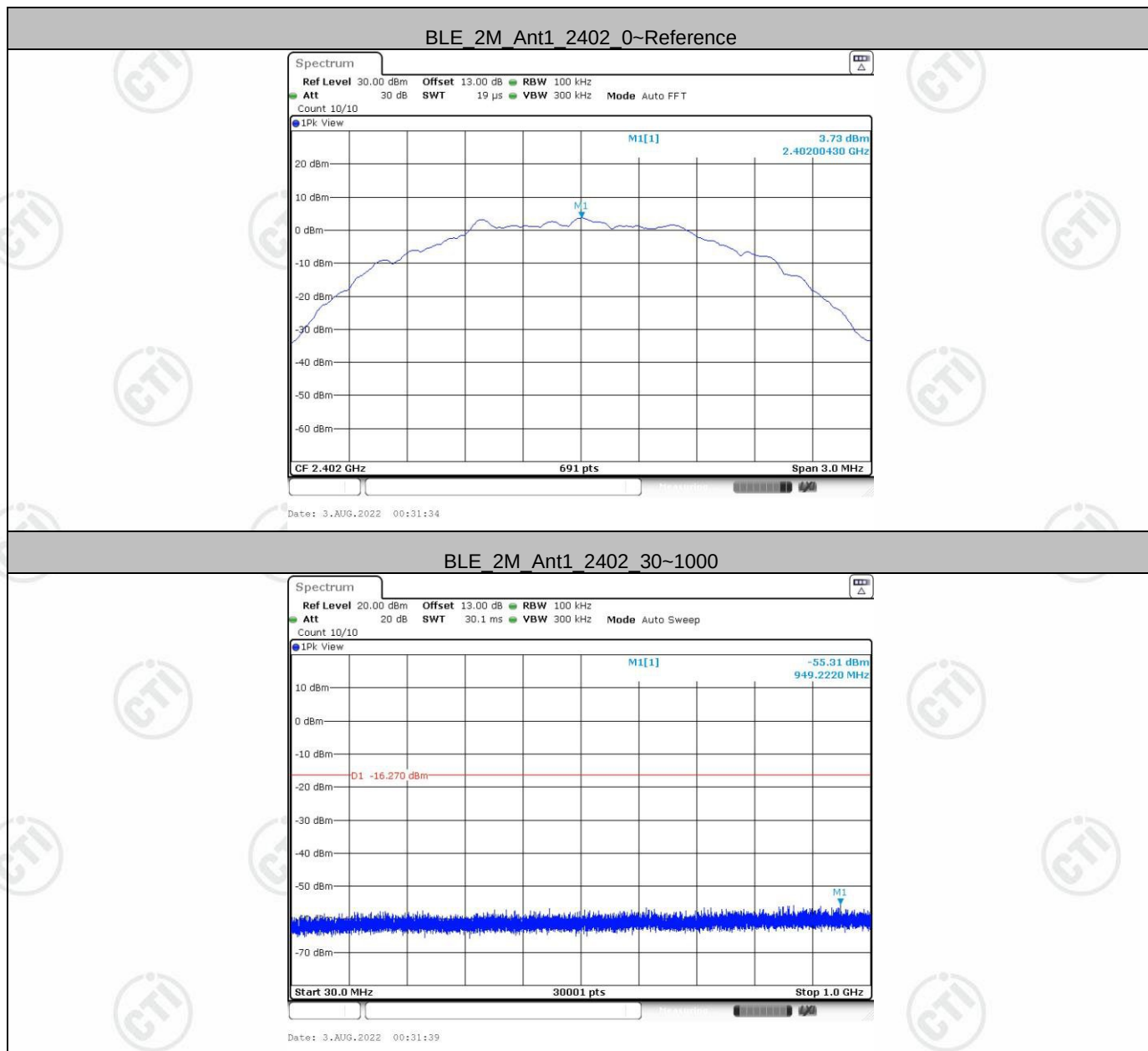
BLE 1M Ant1 2402 1000~26500

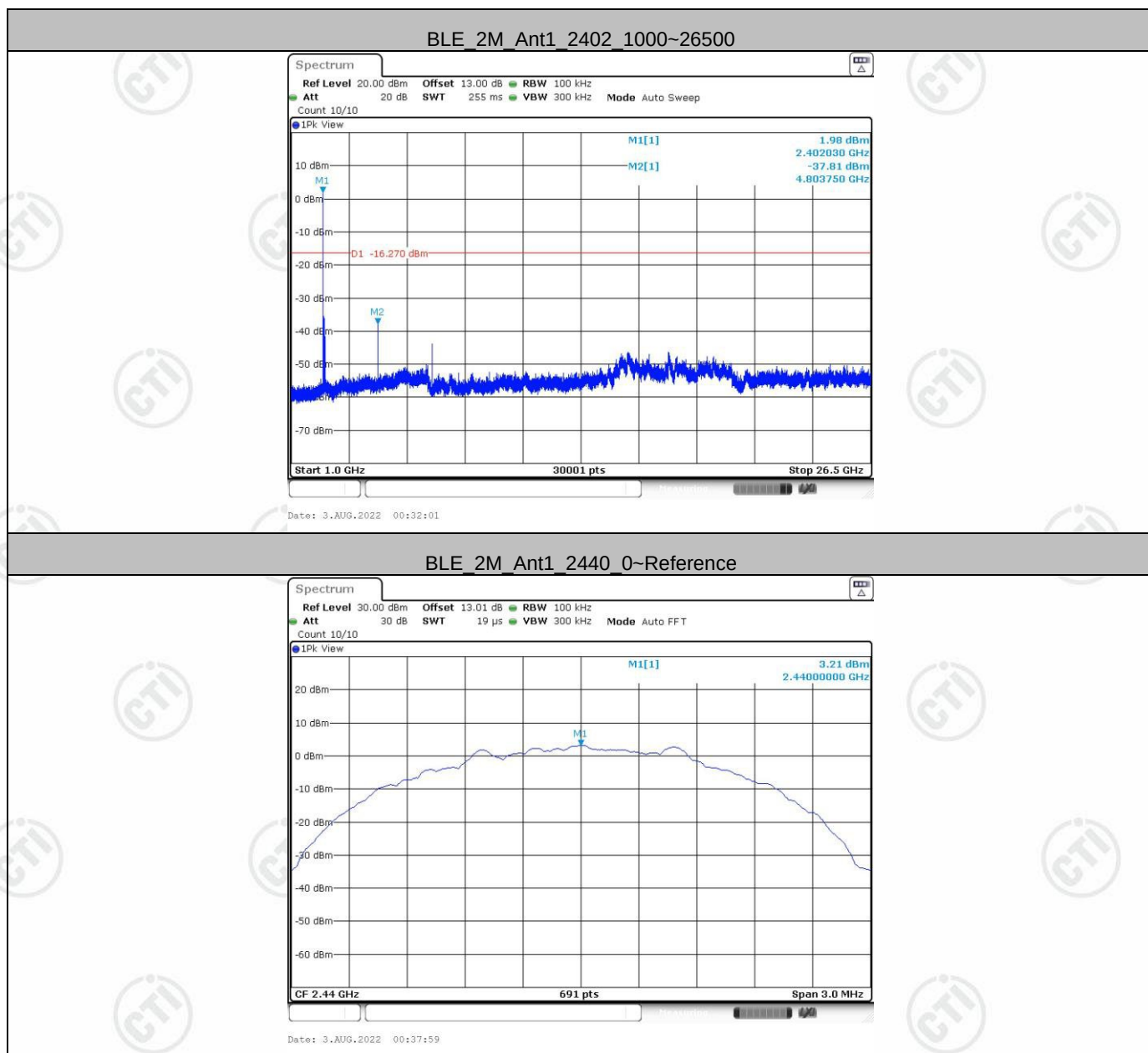




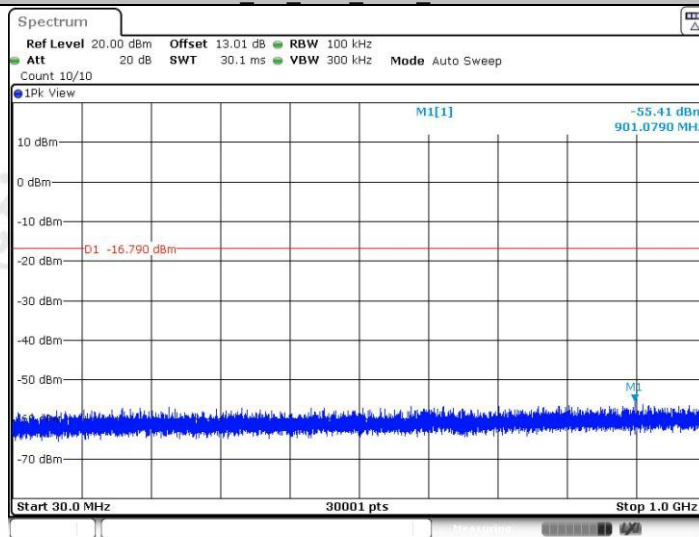




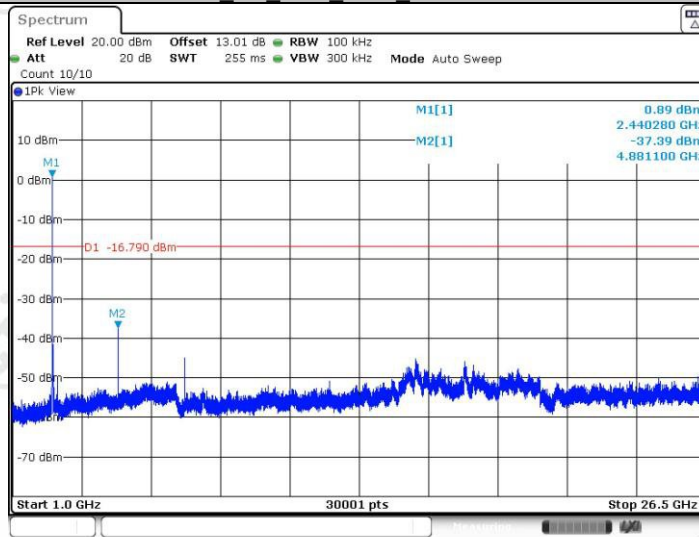


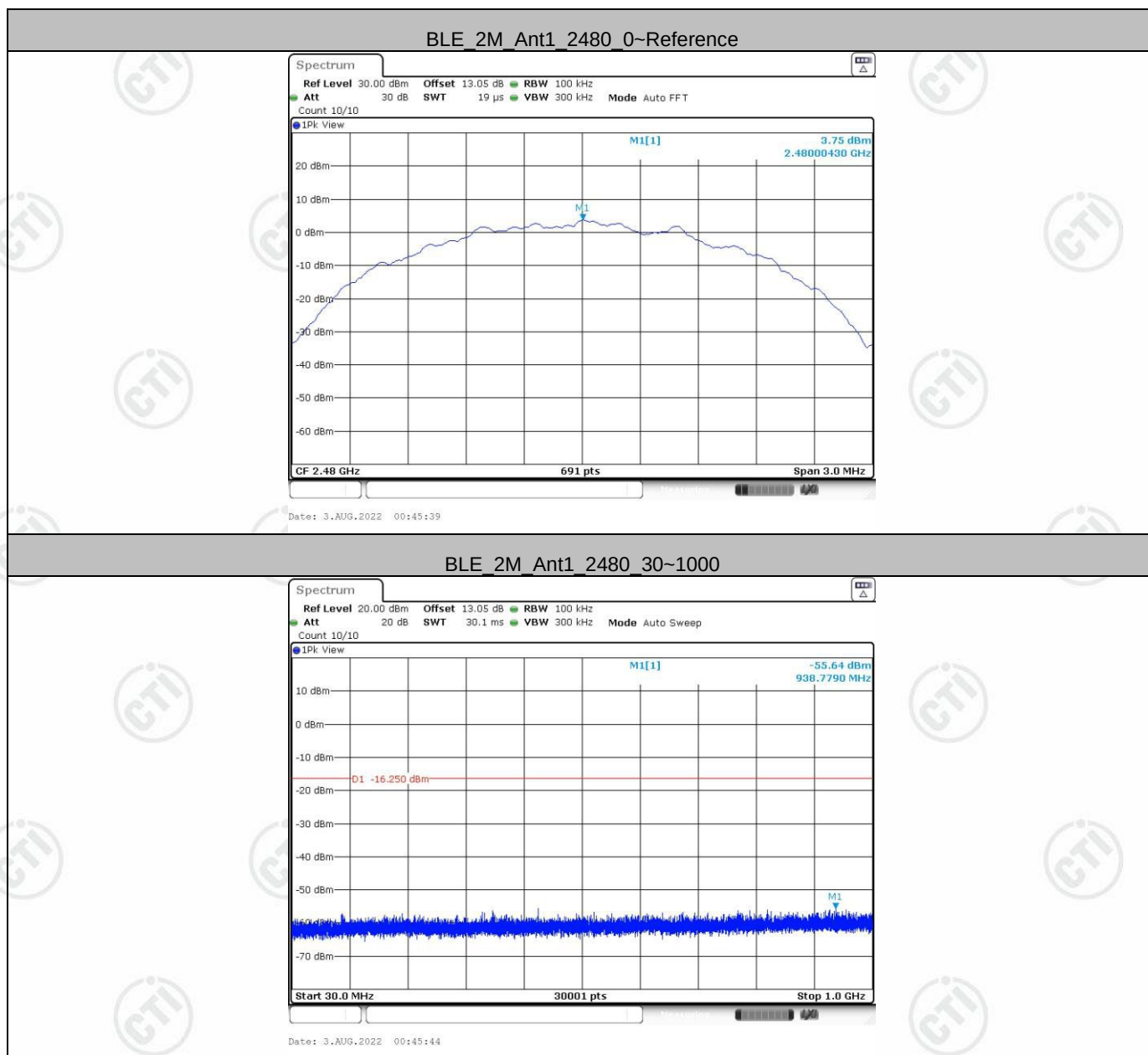


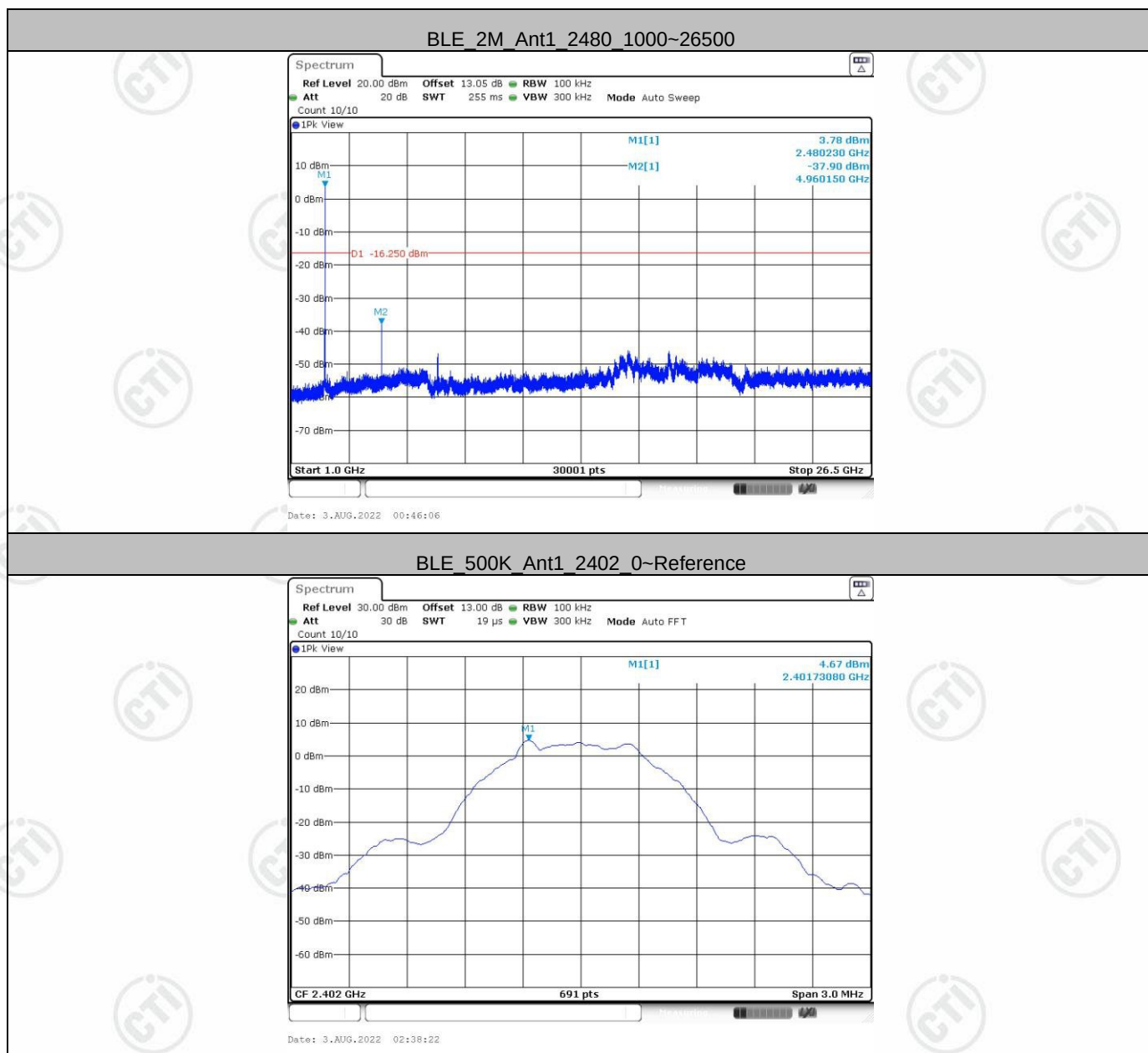
BLE 2M Ant1 2440 30~1000

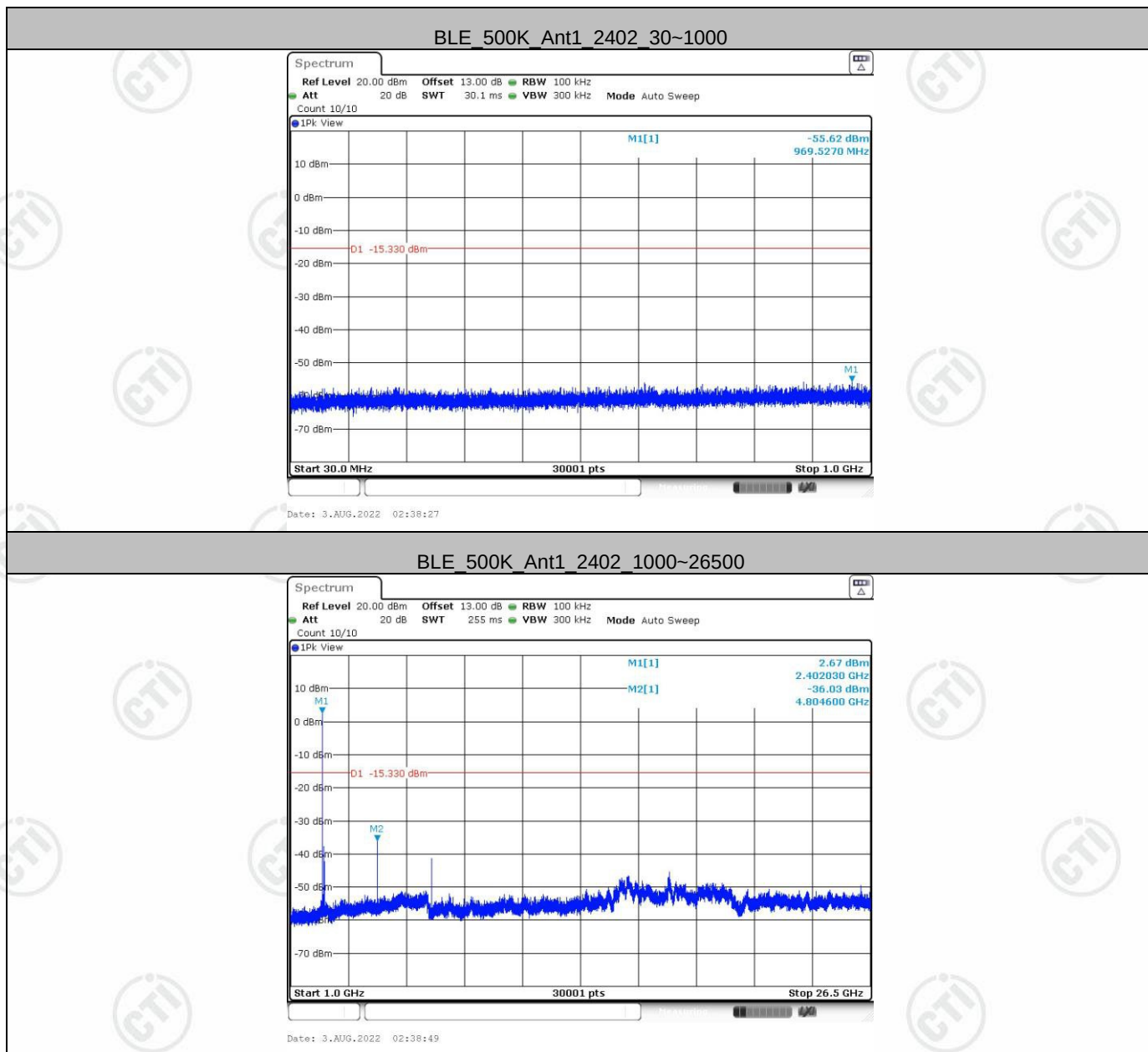


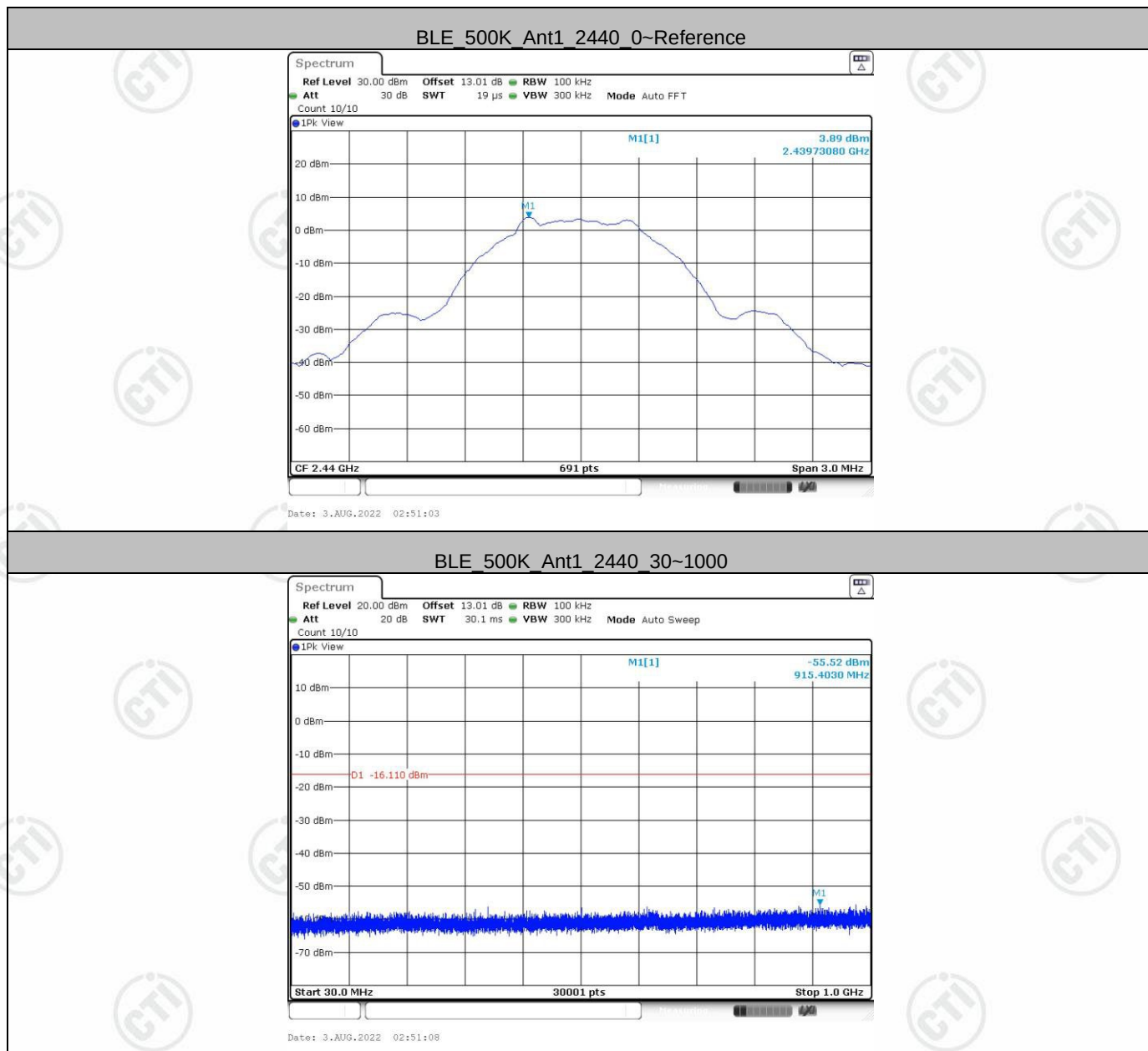
BLE 2M Ant1 2440 1000~26500



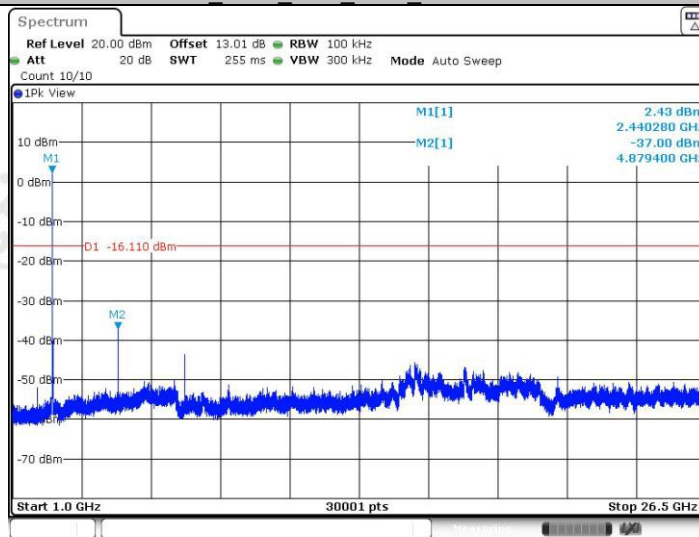








BLE_500K_Ant1_2440_1000~26500



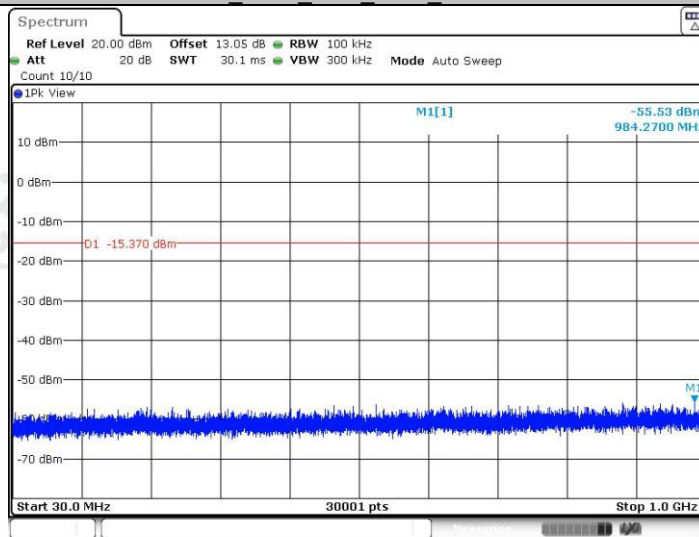
Date: 3.AUG.2022 02:51:30

BLE_500K_Ant1_2480_0~Reference



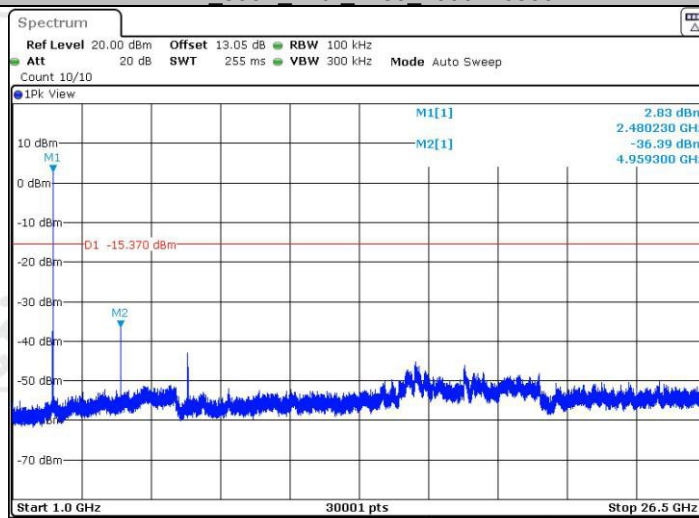
Date: 3.AUG.2022 03:00:10

BLE_500K_Ant1_2480_30~1000



Date: 3.AUG.2022 03:00:15

BLE_500K_Ant1_2480_1000~26500



Date: 3.AUG.2022 03:00:37

Appendix F): Antenna Requirement

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:



The antenna is integrated on the main PCB and no consideration of replacement.

Appendix G): AC Power Line Conducted Emission

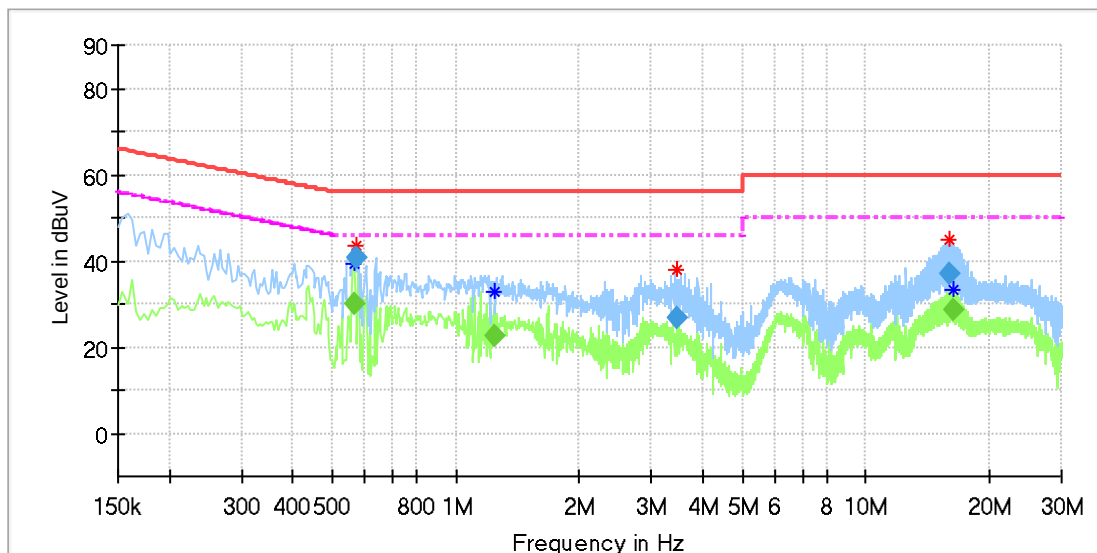
Test Procedure:	Test frequency range :150KHz-30MHz 1)The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.														
Limit:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table> * The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. NOTE: The lower limit is applicable at the transition frequency	Frequency range (MHz)	Limit (dBμV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBμV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

L1 line:



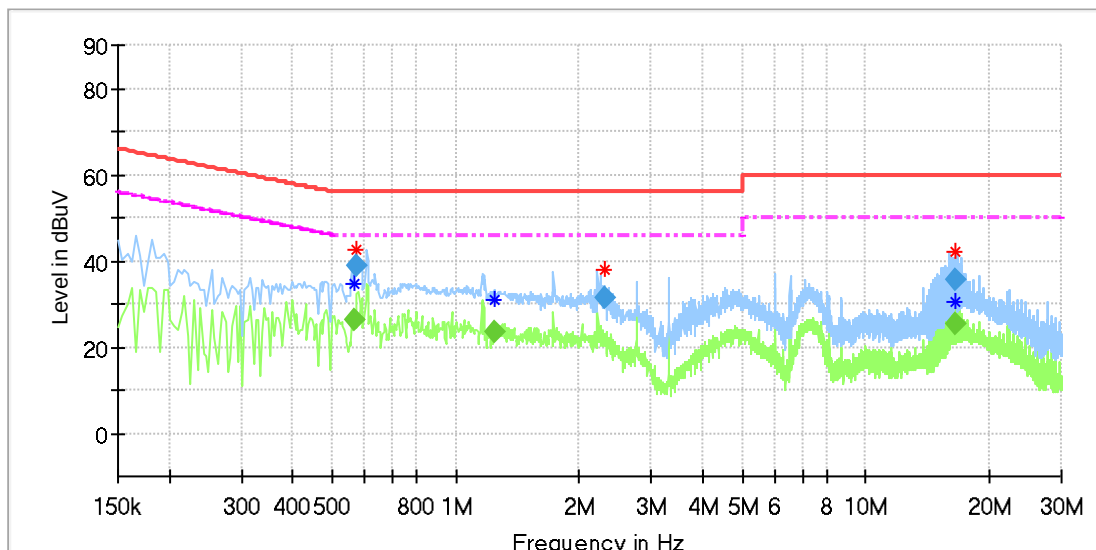
Final Result

Frequency (MHz)	QuasiPeak (dbuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.564364	---	29.95	46.00	16.05	1000.0	9.000	L1	20.1
0.573702	40.78	---	56.00	15.22	1000.0	9.000	L1	20.1
1.236892	---	22.59	46.00	23.41	1000.0	9.000	L1	20.1
3.453164	26.70	---	56.00	29.30	1000.0	9.000	L1	20.2
16.005756	37.03	---	60.00	22.97	1000.0	9.000	L1	20.1
16.404246	---	28.48	50.00	21.52	1000.0	9.000	L1	20.1

Notes:1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

Neutral line:



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.563502	---	26.24	46.00	19.76	1000.0	9.000	N	19.9
0.572724	38.72	---	56.00	17.28	1000.0	9.000	N	19.9
1.240686	---	23.46	46.00	22.54	1000.0	9.000	N	19.8
2.297448	31.36	---	56.00	24.64	1000.0	9.000	N	19.9
16.438216	---	25.50	50.00	24.50	1000.0	9.000	N	19.9
16.572432	35.45	---	60.00	24.55	1000.0	9.000	N	19.9

Notes:1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

Appendix H): Restricted bands around fundamental frequency (Radiated)

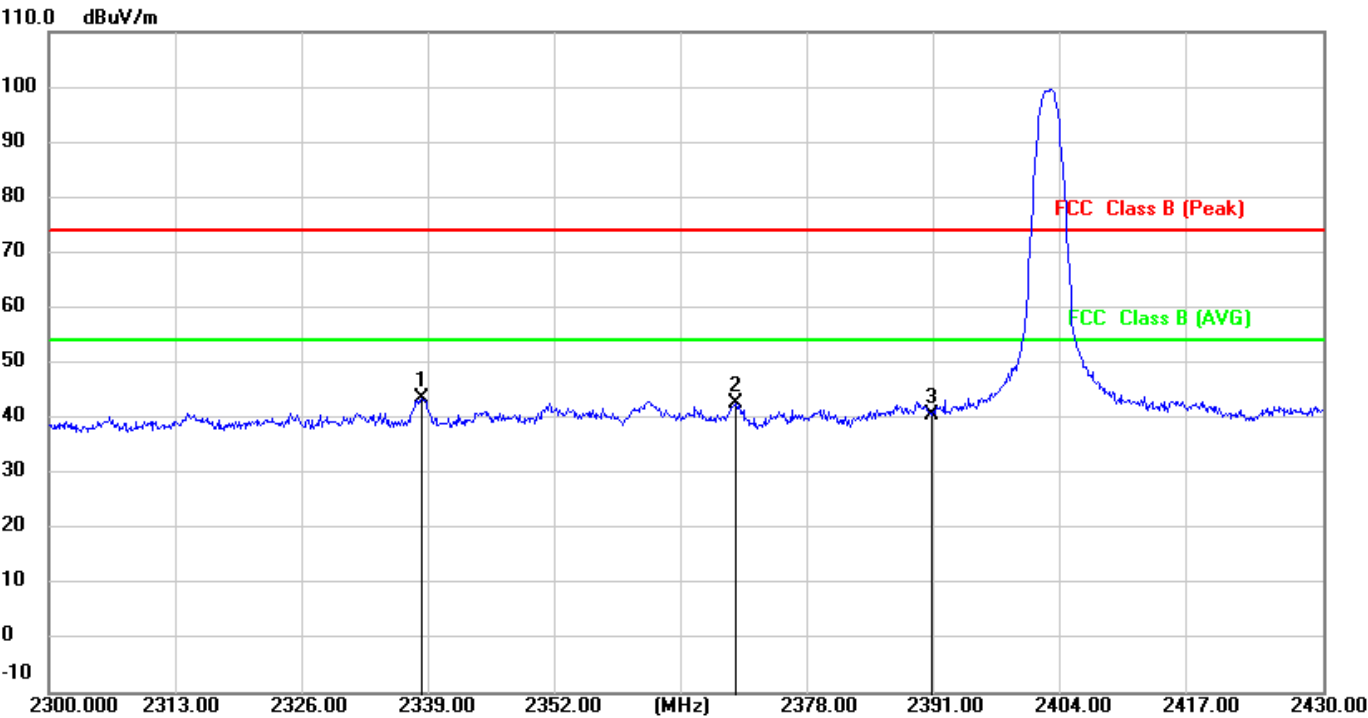
Receiver Setup:	<table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120kHz</td><td>300kHz</td><td>Quasi-peak</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr><tr><td>Peak</td><td>1MHz</td><td>1/T</td><td>Average</td></tr></table>	Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	Above 1GHz	Peak	1MHz	3MHz	Peak	Peak	1MHz	1/T	Average	
Frequency	Detector	RBW	VBW	Remark																	
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak																	
Above 1GHz	Peak	1MHz	3MHz	Peak																	
	Peak	1MHz	1/T	Average																	
Test Procedure:	Below 1GHz test procedure as below: a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel Above 1GHz test procedure as below: a. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter). b. Test the EUT in the lowest channel , the Highest channel c. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. d. Repeat above procedures until all frequencies measured was complete.																				
Limit:	<table><tr><td>Frequency</td><td>Limit (dBμV/m @3m)</td><td>Remark</td></tr><tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr><tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr><tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr><tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr><tr><td>74.0</td><td>Peak Value</td></tr></table>	Frequency	Limit (dBμV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	74.0	Peak Value
Frequency	Limit (dBμV/m @3m)	Remark																			
30MHz-88MHz	40.0	Quasi-peak Value																			
88MHz-216MHz	43.5	Quasi-peak Value																			
216MHz-960MHz	46.0	Quasi-peak Value																			
960MHz-1GHz	54.0	Quasi-peak Value																			
Above 1GHz	54.0	Average Value																			
	74.0	Peak Value																			

Report No. : EED39O80793601

Test plot as follows:

Mode:	BLE_1M	Channel:	2402
Remark:	Horizontal		

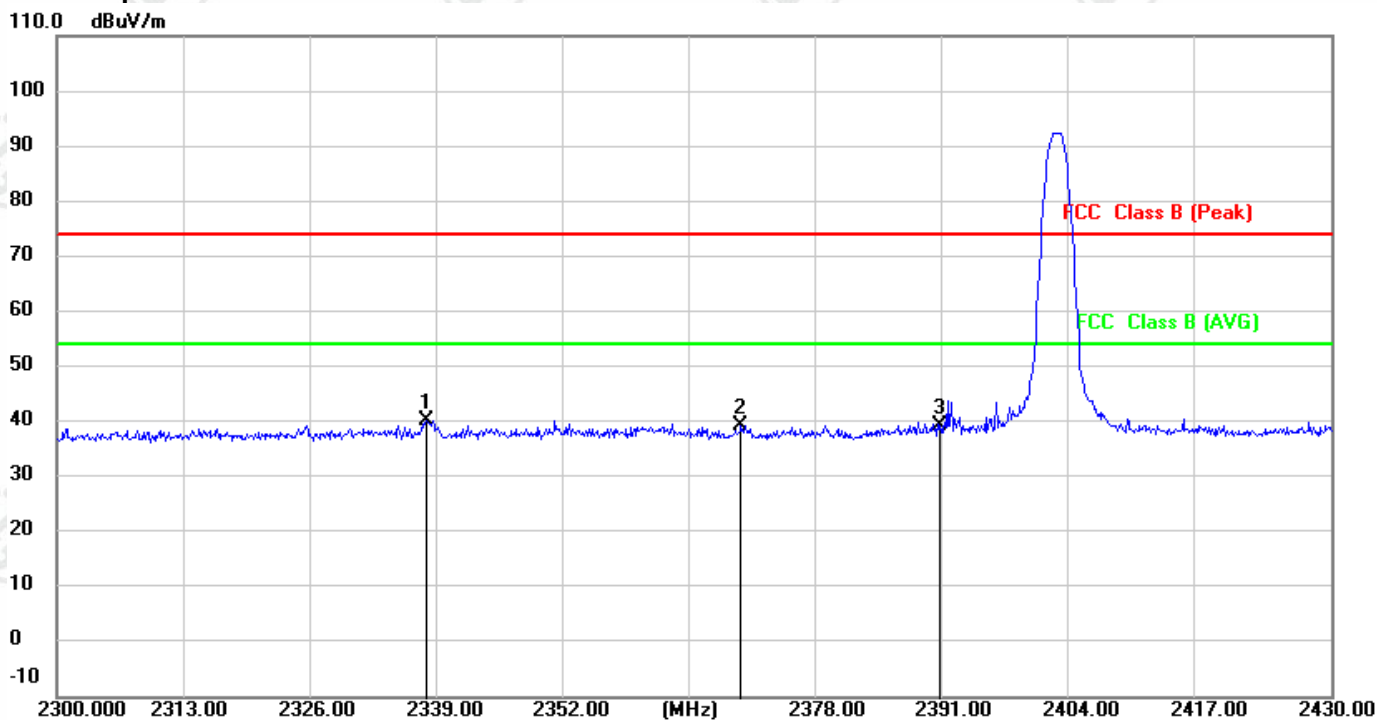
Test Graph



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2338.090	40.92	2.57	43.49	74.00	-30.51	200	7	peak
2	2370.070	39.85	2.66	42.51	74.00	-31.49	100	0	peak
3	2390.000	37.81	2.71	40.52	74.00	-33.48	139	360	peak

Mode:	BLE_1M	Channel:	2402
Remark:	Vertical		

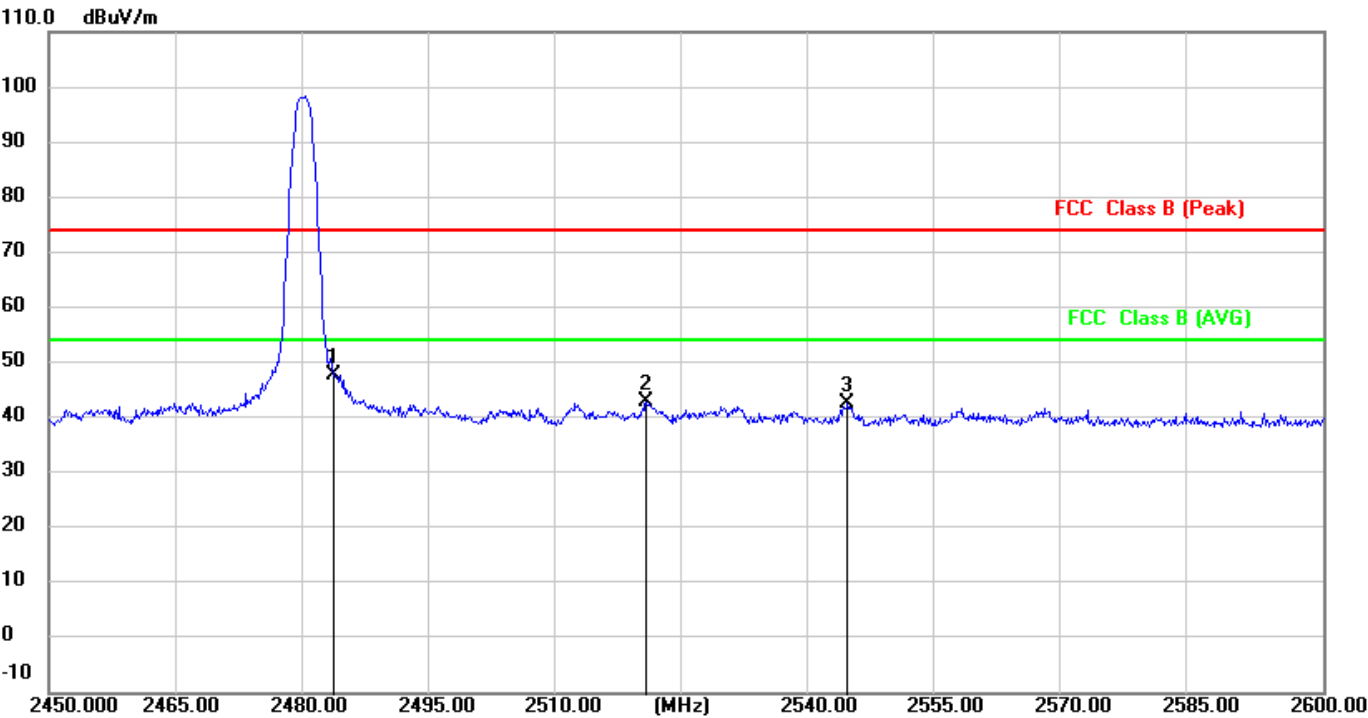
Test Graph



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2337.700	37.78	2.57	40.35	74.00	-33.65	200	317	peak
2	2369.810	36.75	2.66	39.41	74.00	-34.59	199	360	peak
3	2390.000	36.68	2.71	39.39	74.00	-34.61	100	309	peak

Mode:	BLE_1M	Channel:	2480
Remark:	Horizontal		

Test Graph

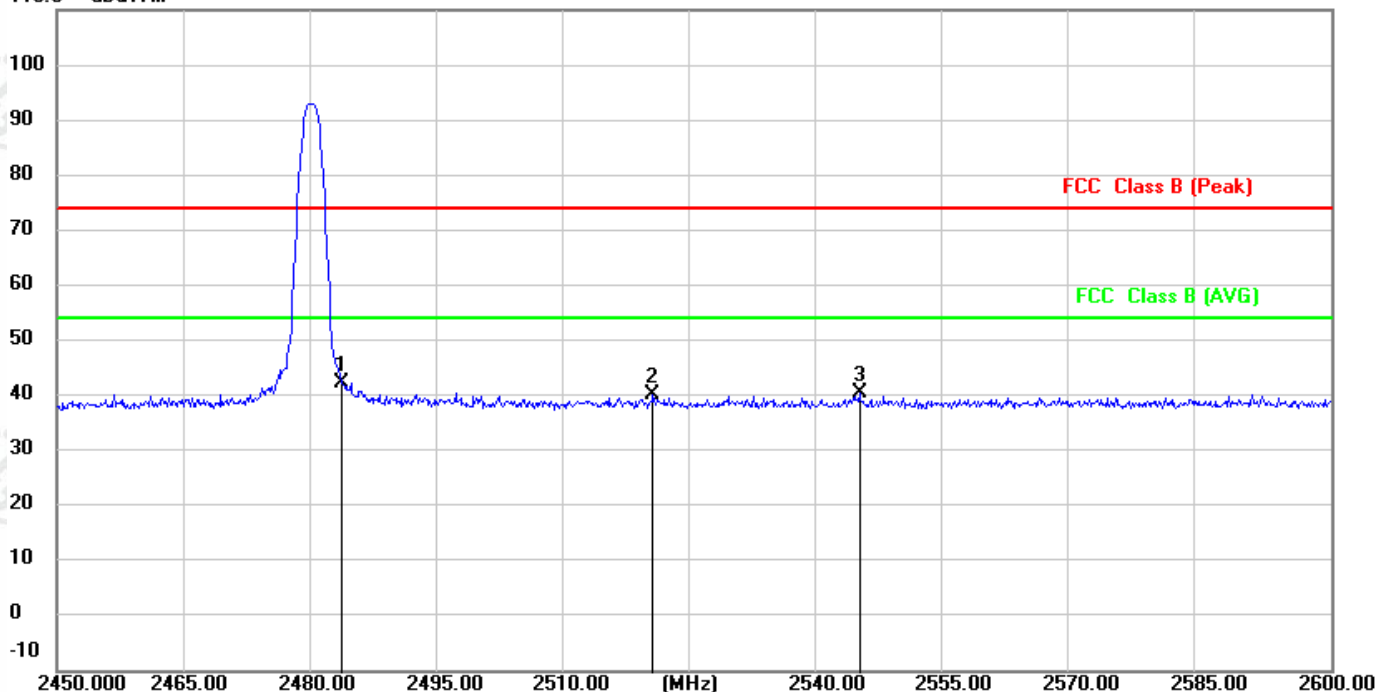


No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2483.500	44.77	2.92	47.69	74.00	-26.31	200	11	peak
2	2520.350	39.80	2.99	42.79	74.00	-31.21	135	360	peak
3	2544.050	39.63	3.04	42.67	74.00	-31.33	200	360	peak

Mode:	BLE_1M	Channel:	2480
Remark:	Vertical		

Test Graph

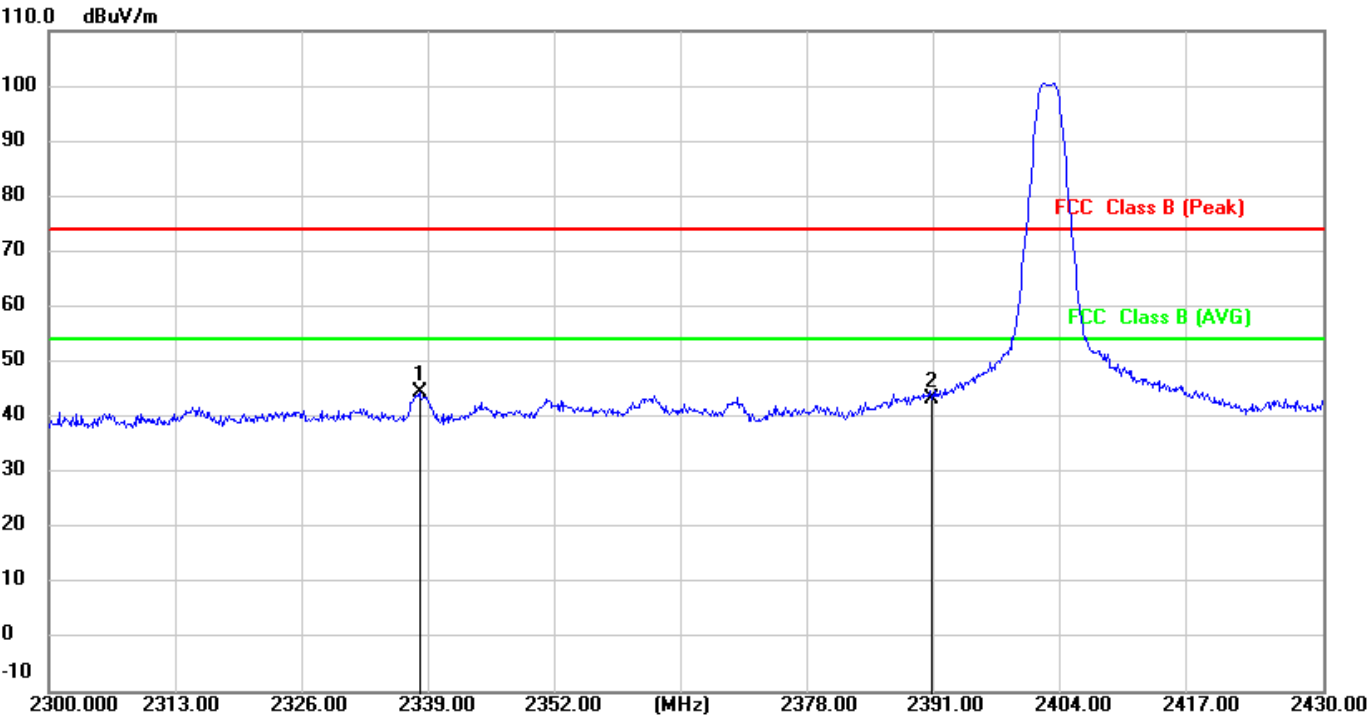
110.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2483.500	39.41	2.92	42.33	74.00	-31.67	100	253	peak
2	2520.200	37.10	2.99	40.09	74.00	-33.91	129	360	peak
3	2544.500	37.45	3.04	40.49	74.00	-33.51	120	360	peak

Mode:	BLE_2M	Channel:	2402
Remark:	Horizontal		

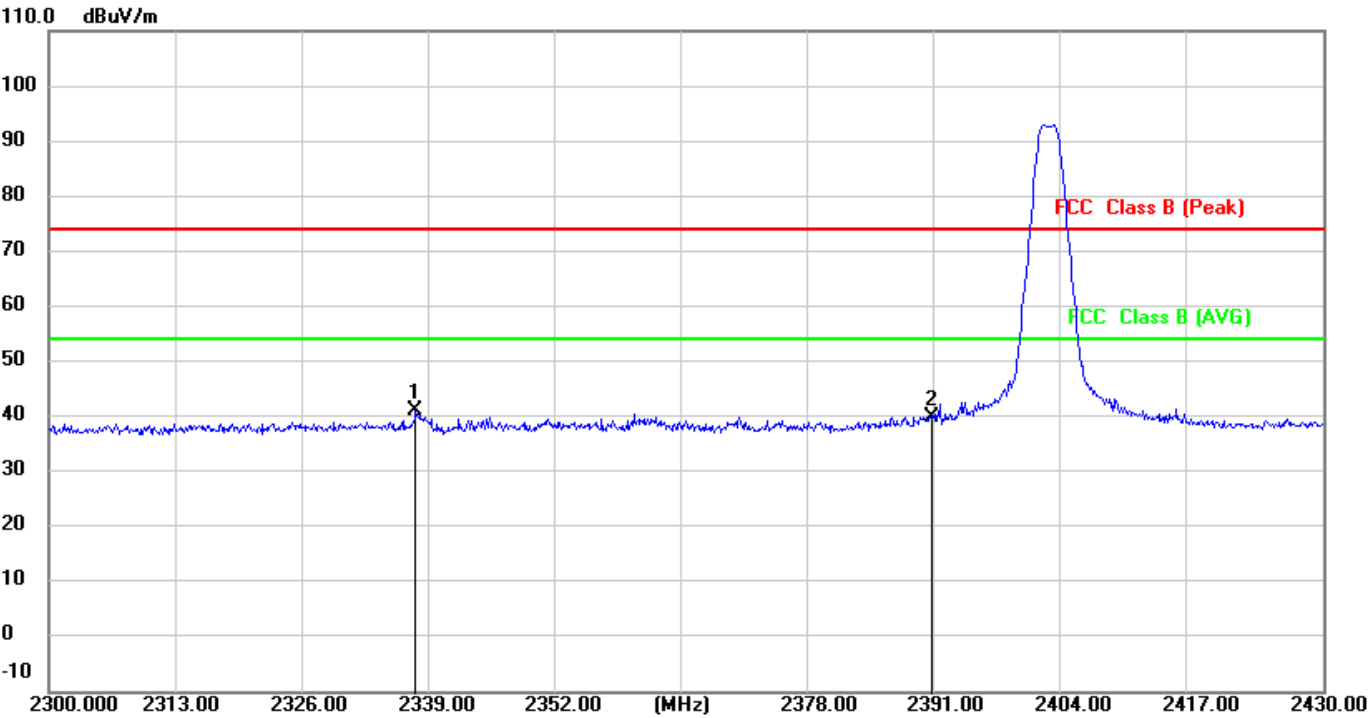
Test Graph



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2337.830	41.97	2.57	44.54	74.00	-29.46	187	360	peak
2	2390.000	40.65	2.71	43.36	74.00	-30.64	176	360	peak

Mode:	BLE_2M	Channel:	2402
Remark:	Vertical		

Test Graph

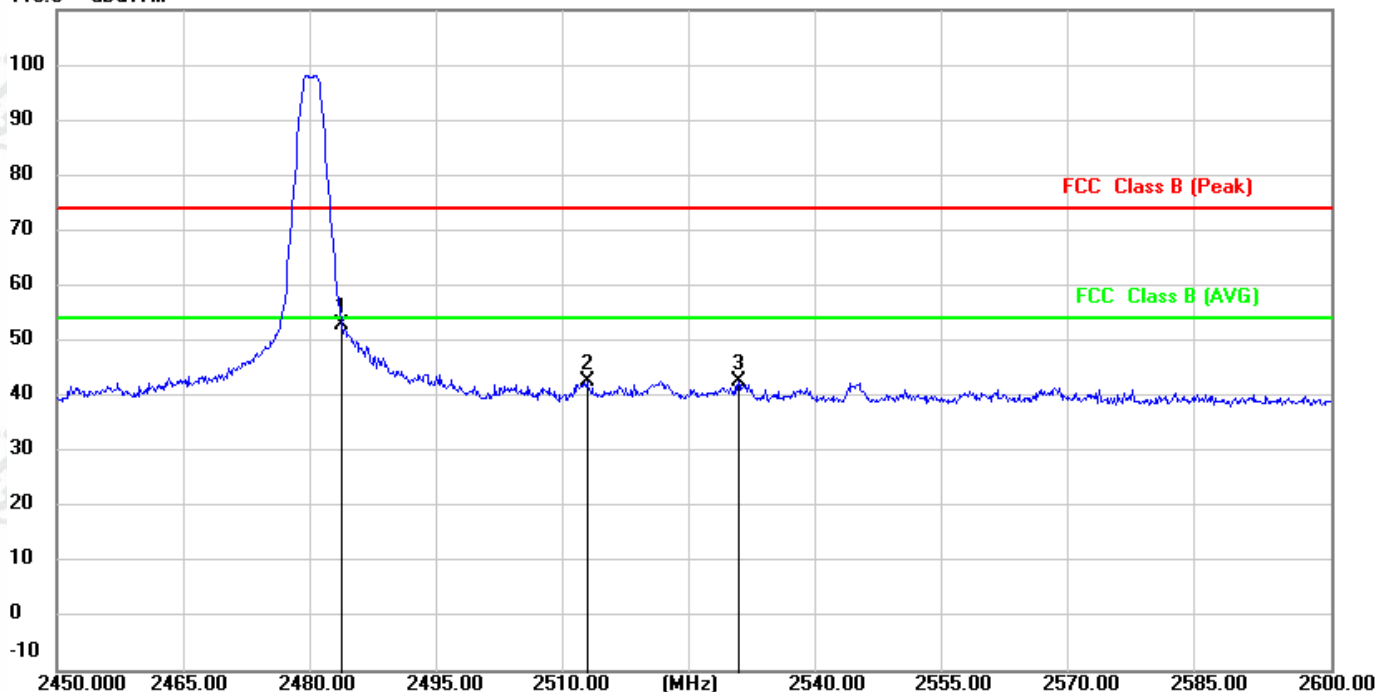


No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2337.440	38.44	2.57	41.01	74.00	-32.99	183	360	peak
2	2390.000	37.25	2.71	39.96	74.00	-34.04	100	309	peak

Mode:	BLE_2M	Channel:	2480
Remark:	Horizontal		

Test Graph

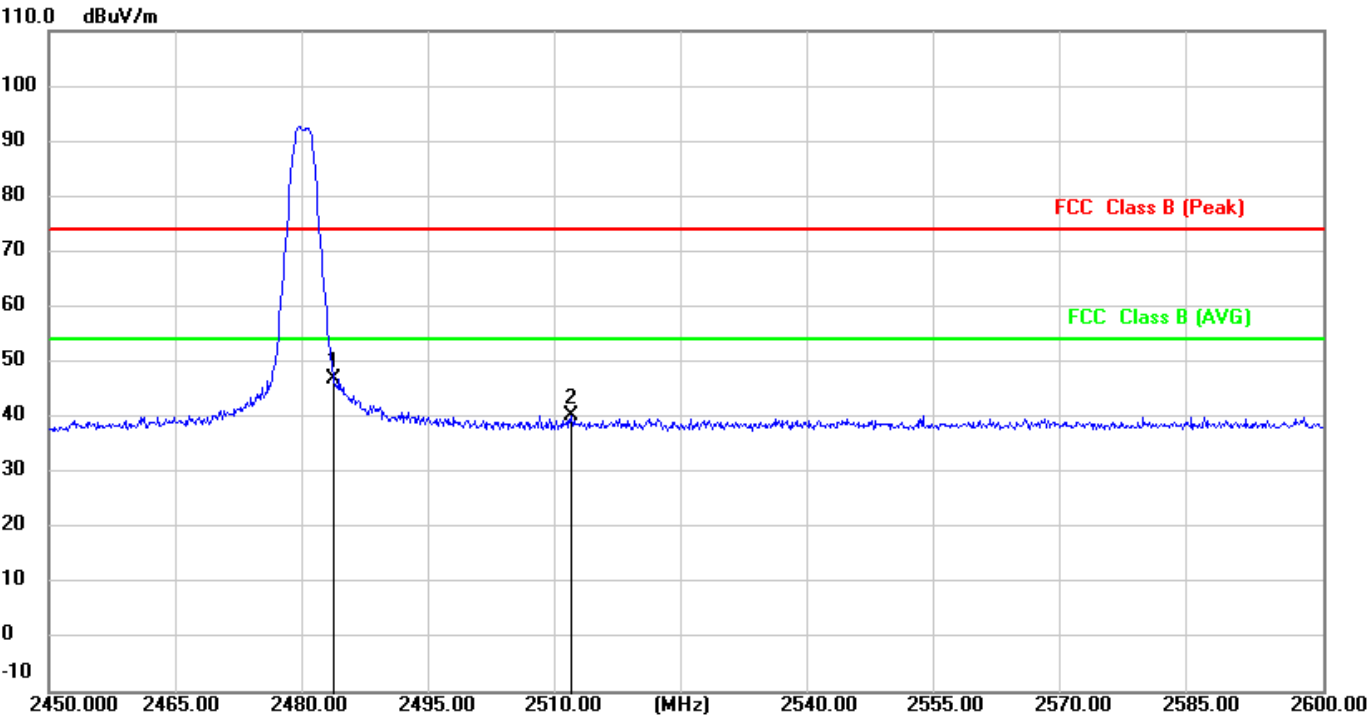
110.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2483.500	49.86	2.92	52.78	74.00	-21.22	153	360	peak
2	2512.400	39.64	2.98	42.62	74.00	-31.38	200	359	peak
3	2530.250	39.60	3.01	42.61	74.00	-31.39	200	7	peak

Mode:	BLE_2M	Channel:	2480
Remark:	Vertical		

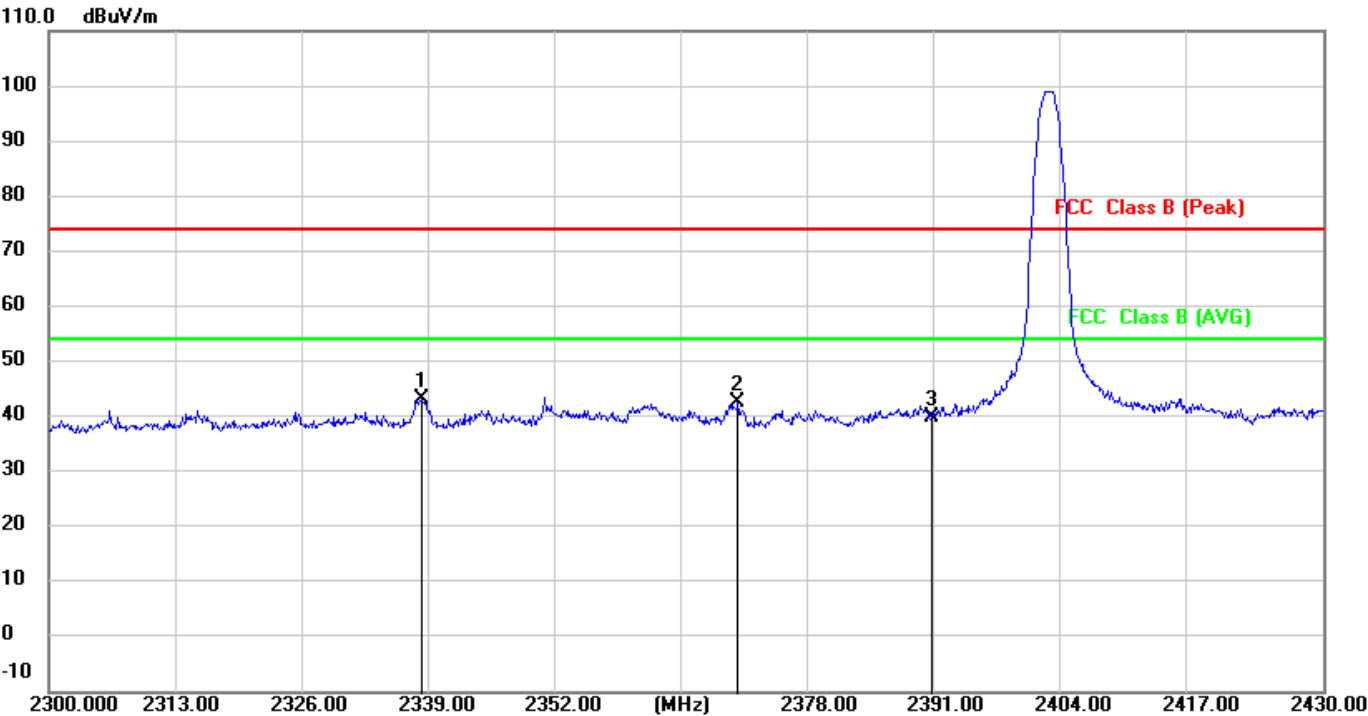
Test Graph



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2483.500	43.97	2.92	46.89	74.00	-27.11	200	320	peak
2	2511.500	37.17	2.97	40.14	74.00	-33.86	100	253	peak

Mode:	BLE_125kbps	Channel:	2402
Remark:	Horizontal		

Test Graph

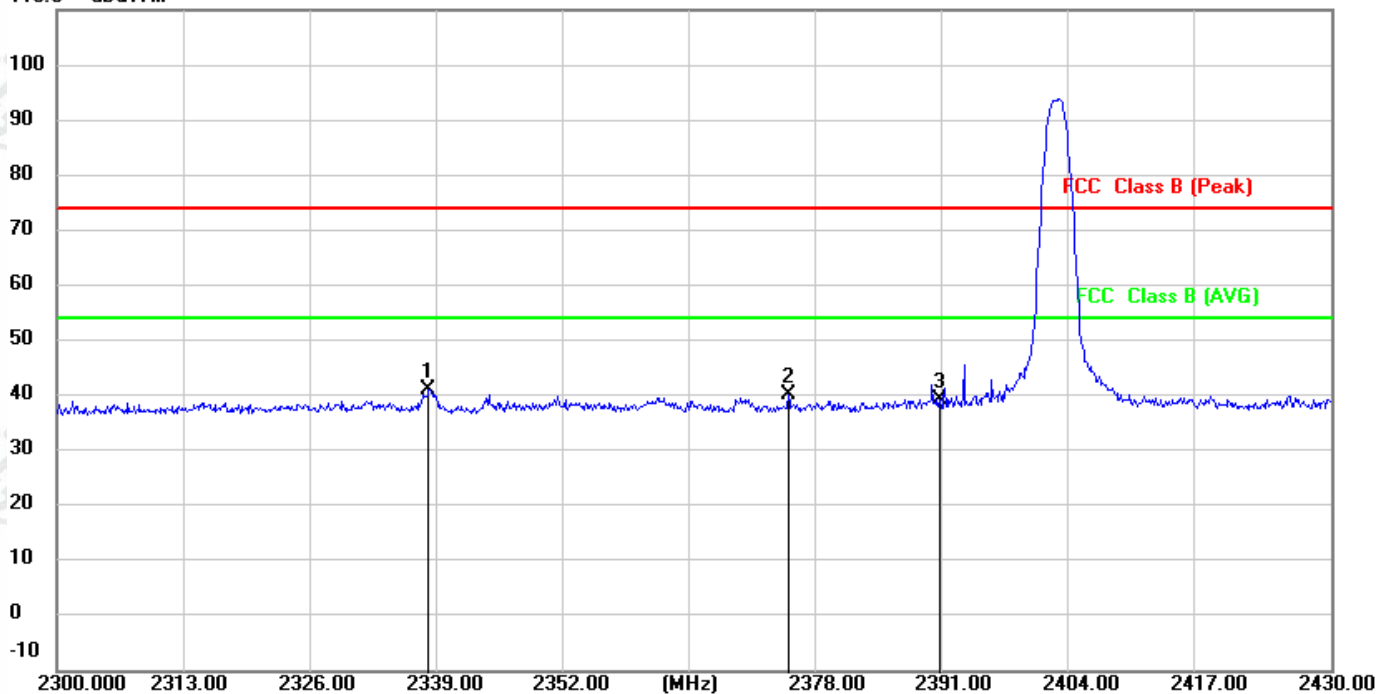


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2338.090	40.78	2.57	43.35	74.00	-30.65	100	5	peak
2	2370.330	39.89	2.66	42.55	74.00	-31.45	100	5	peak
3	2390.000	37.28	2.71	39.99	74.00	-34.01	200	3	peak

Mode:	BLE_125kbps	Channel:	2402
Remark:	Vertical		

Test Graph

110.0 dBuV/m

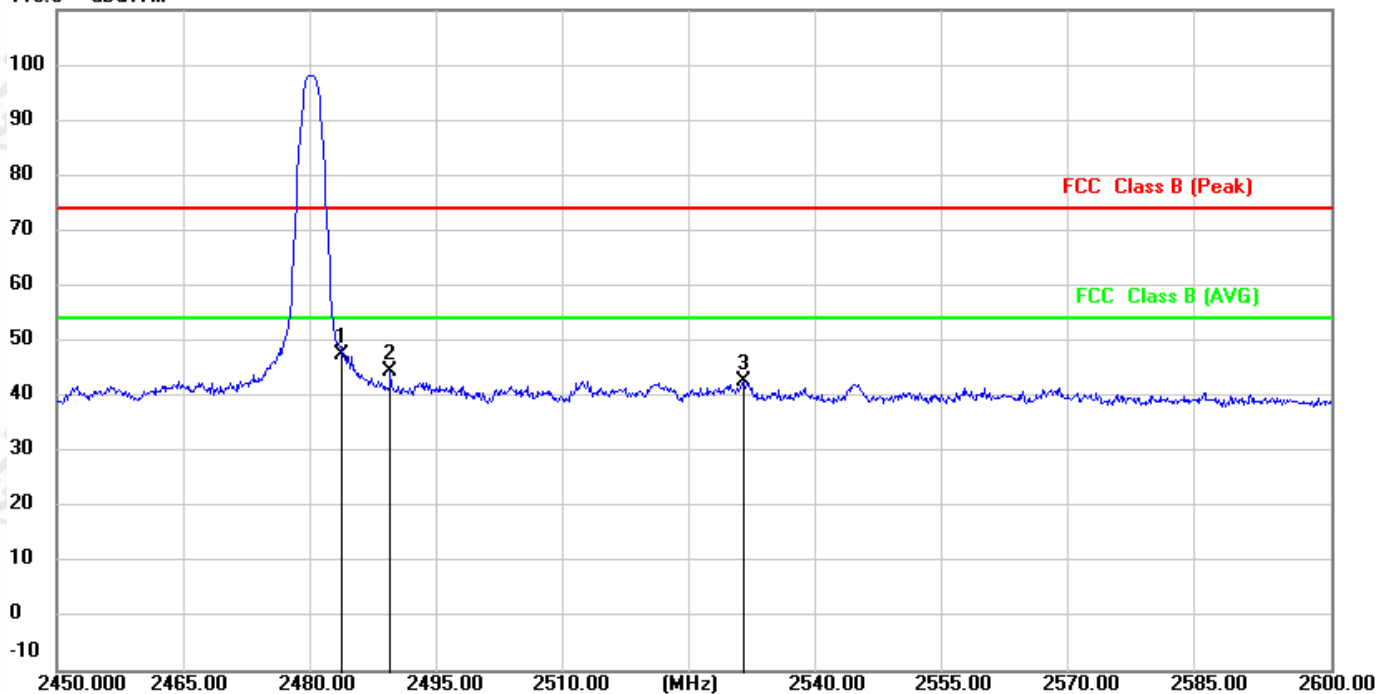


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2337.960	38.49	2.57	41.06	74.00	-32.94	151	360	peak
2	2374.620	37.59	2.67	40.26	74.00	-33.74	144	360	peak
3	2390.000	36.69	2.71	39.40	74.00	-34.60	199	360	peak

Mode:	BLE_125kbps	Channel:	2480
Remark:	Horizontal		

Test Graph

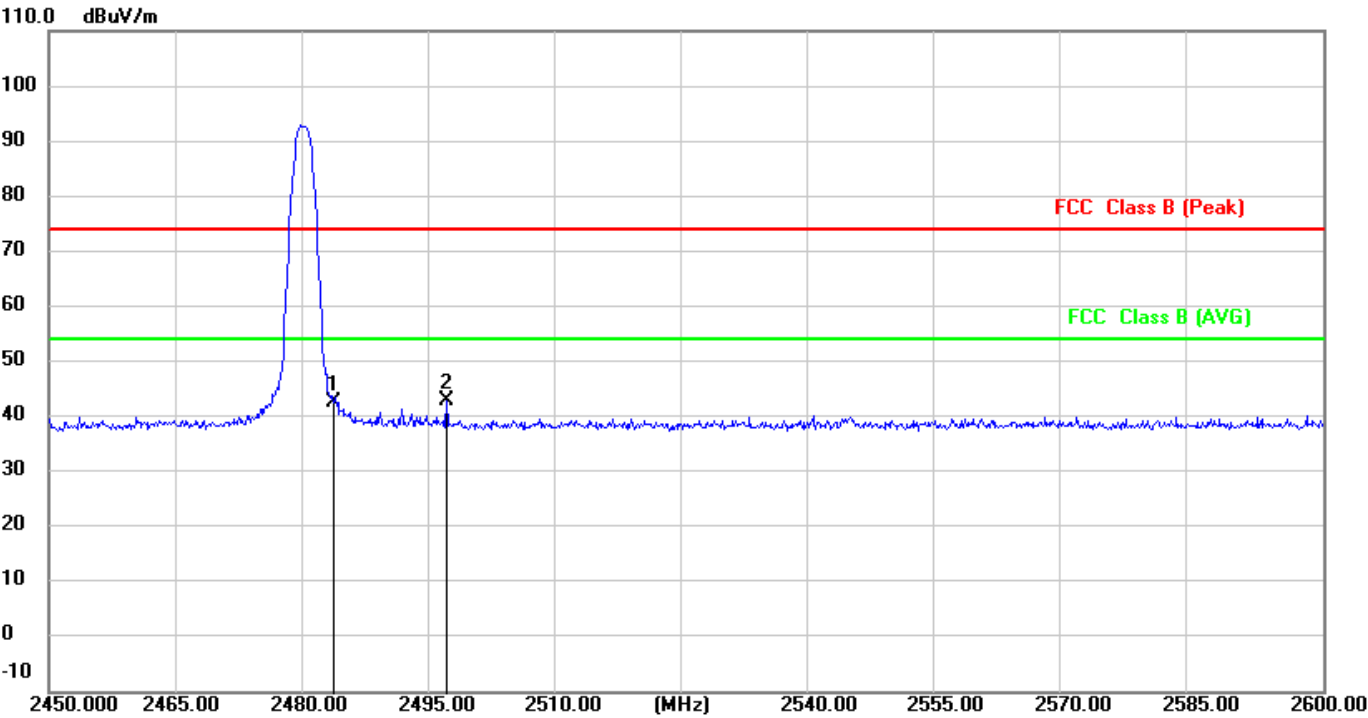
110.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.46	2.92	47.38	74.00	-26.62	161	360	peak
2	2489.300	41.39	2.93	44.32	74.00	-29.68	152	360	peak
3	2530.850	39.50	3.01	42.51	74.00	-31.49	200	360	peak

Mode:	BLE_125kbps	Channel:	2480
Remark:	Vertical		

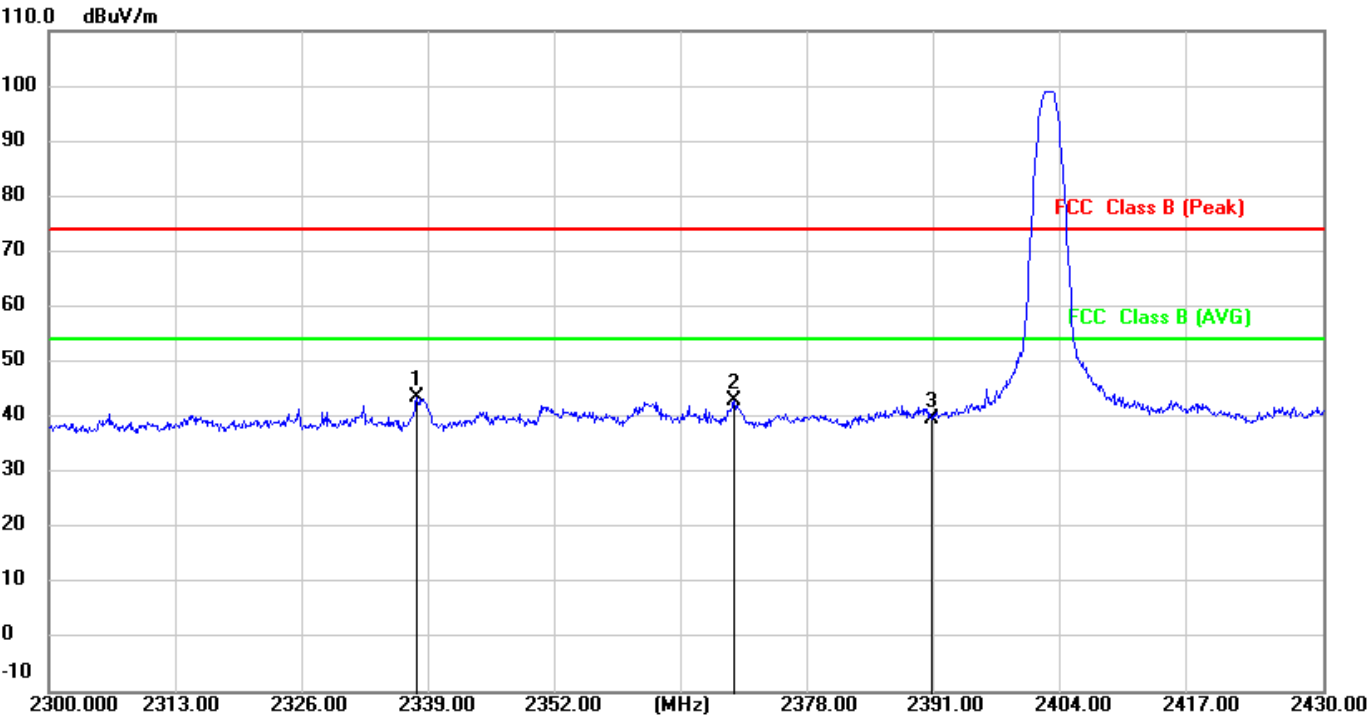
Test Graph



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2483.500	39.66	2.92	42.58	74.00	-31.42	100	253	peak
2	2496.800	40.08	2.94	43.02	74.00	-30.98	200	111	peak

Mode:	BLE_500kbps	Channel:	2402
Remark:	Horizontal		

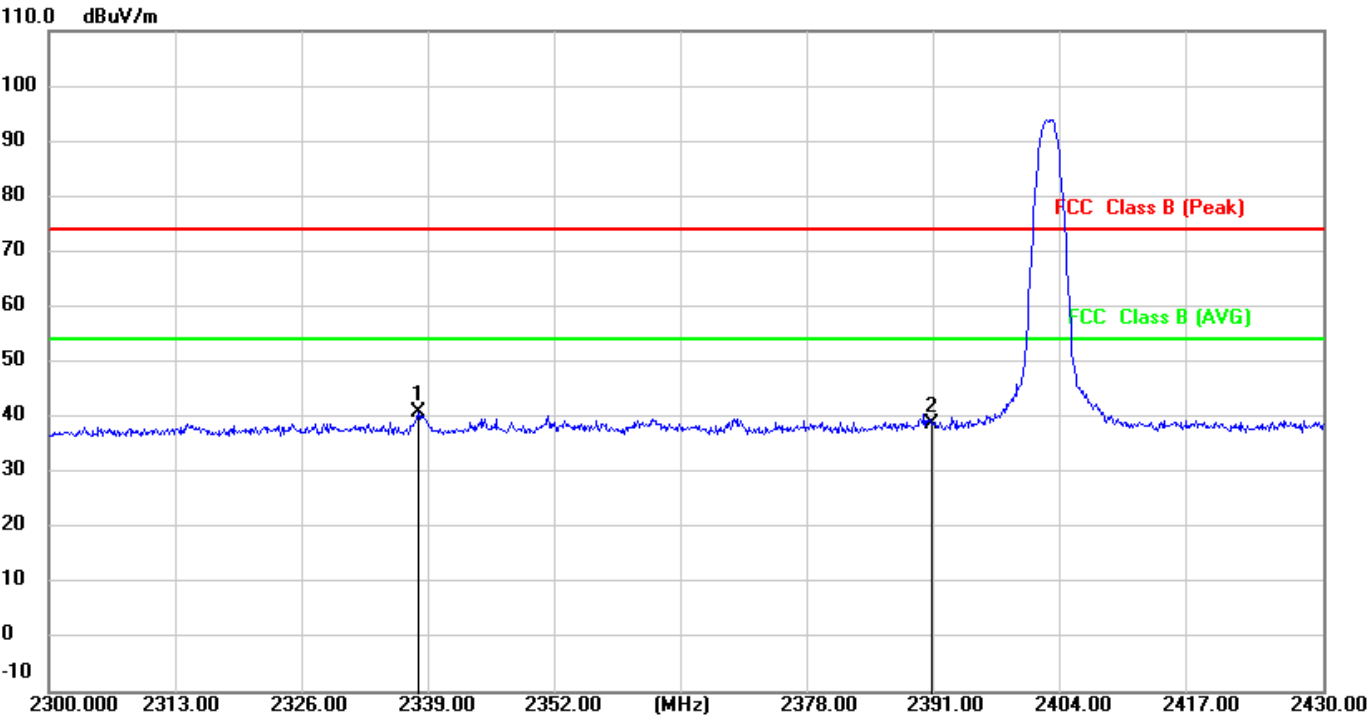
Test Graph



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2337.570	40.86	2.57	43.43	74.00	-30.57	200	11	peak
2	2369.940	40.14	2.66	42.80	74.00	-31.20	100	8	peak
3	2390.000	37.00	2.71	39.71	74.00	-34.29	165	360	peak

Mode:	BLE_500kbps	Channel:	2402
Remark:	Vertical		

Test Graph

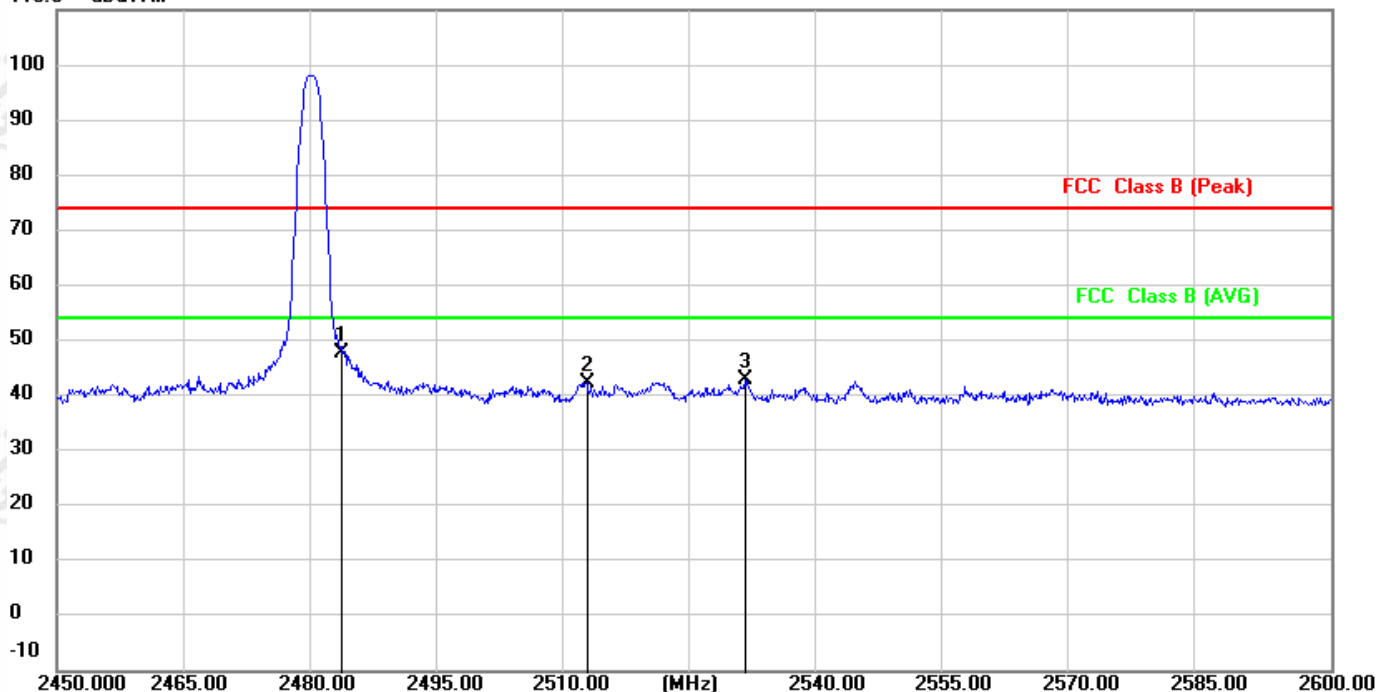


No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2337.700	38.27	2.57	40.84	74.00	-33.16	179	360	peak
2	2390.000	36.12	2.71	38.83	74.00	-35.17	200	353	peak

Mode:	BLE_500kbps	Channel:	2480
Remark:	Horizontal		

Test Graph

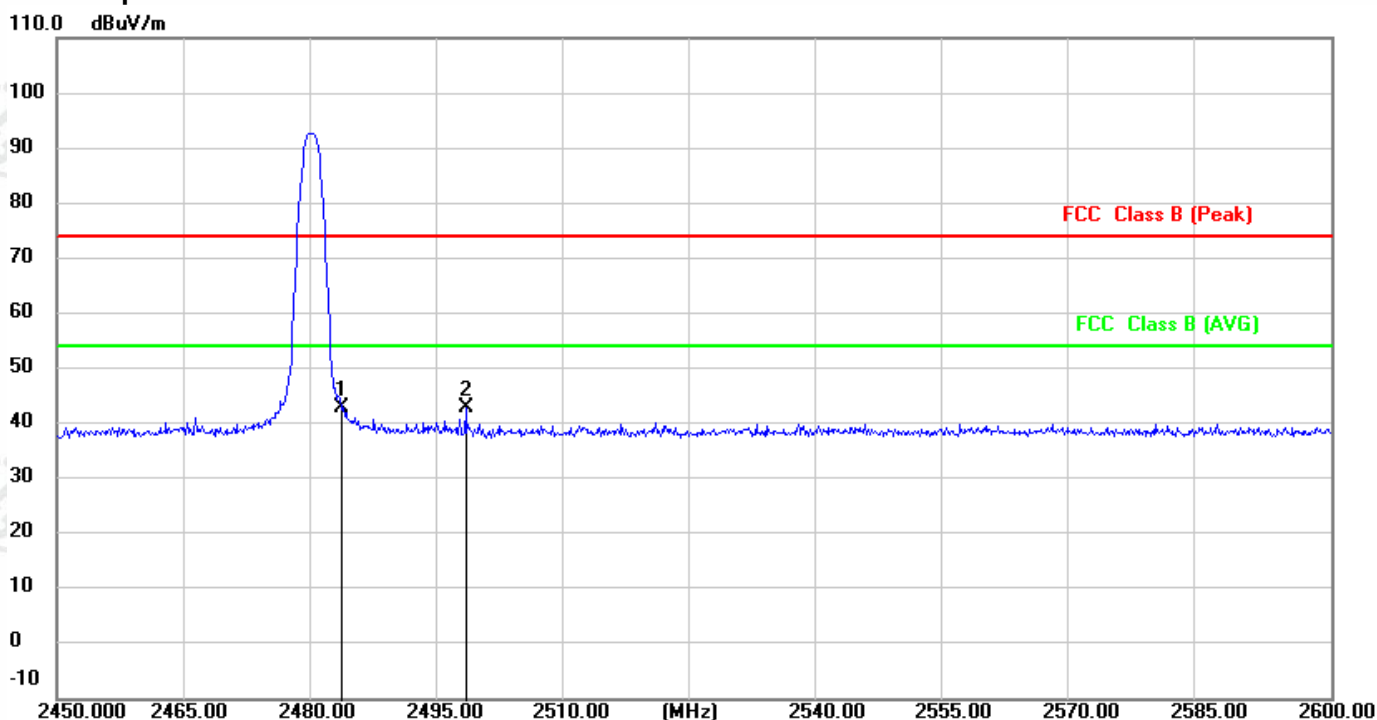
110.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.88	2.92	47.80	74.00	-26.20	200	7	peak
2	2512.400	39.44	2.98	42.42	74.00	-31.58	150	360	peak
3	2531.000	39.90	3.02	42.92	74.00	-31.08	200	7	peak

Mode:	BLE_500kbps	Channel:	2480
Remark:	Vertical		

Test Graph



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	2483.500	40.11	2.92	43.03	74.00	-30.97	100	253	peak
2	2498.150	40.00	2.95	42.95	74.00	-31.05	200	110	peak

Note:

1)As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20dB under any condition of modulation. So, only the peak values are measured:

2) The field strength is calculated by adding the correct Factor. The basic equation with a sample calculation is as follows:

Final Test Level = Reading +Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Appendix I): Radiated Spurious Emissions

Receiver Setup:	<table><tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr><tr><td>0.009MHz-0.090MHz</td><td>Peak</td><td>10kHz</td><td>30kHz</td><td>Peak</td></tr><tr><td>0.009MHz-0.090MHz</td><td>Average</td><td>10kHz</td><td>30kHz</td><td>Average</td></tr><tr><td>0.090MHz-0.110MHz</td><td>Quasi-peak</td><td>10kHz</td><td>30kHz</td><td>Quasi-peak</td></tr><tr><td>0.110MHz-0.490MHz</td><td>Peak</td><td>10kHz</td><td>30kHz</td><td>Peak</td></tr><tr><td>0.110MHz-0.490MHz</td><td>Average</td><td>10kHz</td><td>30kHz</td><td>Average</td></tr><tr><td>0.490MHz -30MHz</td><td>Quasi-peak</td><td>10kHz</td><td>30kHz</td><td>Quasi-peak</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120kHz</td><td>300kHz</td><td>Quasi-peak</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr><tr><td>Peak</td><td>1MHz</td><td>1/T</td><td>Average</td></tr></table>	Frequency	Detector	RBW	VBW	Remark	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	Above 1GHz	Peak	1MHz	3MHz	Peak	Peak	1MHz	1/T	Average
Frequency	Detector	RBW	VBW	Remark																																														
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak																																														
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average																																														
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak																																														
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak																																														
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average																																														
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak																																														
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak																																														
Above 1GHz	Peak	1MHz	3MHz	Peak																																														
	Peak	1MHz	1/T	Average																																														
Test Procedure:	Below 1GHz test procedure as below: a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, whichwas mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Above 1GHz test procedure as below: a. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter (Above 18GHz the distance is 1 meter and table is 1.5 meter). b. Test the EUT in the lowest channel, the middle channel, the Highest channel c. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. d. Repeat above procedures until all frequencies measured was complete.																																																	
Limit:	<table><tr><th>Frequency</th><th>Field strength microvolt/meter)</th><th>Limit (dBµV/m)</th><th>Remark</th><th>Measurement distance (m)</th></tr><tr><td>0.009MHz-0.490MHz</td><td>2400/F(kHz)</td><td>-</td><td>-</td><td>300</td></tr><tr><td>0.490MHz-1.705MHz</td><td>24000/F(kHz)</td><td>-</td><td>-</td><td>30</td></tr><tr><td>1.705MHz-30MHz</td><td>30</td><td>-</td><td>-</td><td>30</td></tr><tr><td>30MHz-88MHz</td><td>100</td><td>40.0</td><td>Quasi-peak</td><td>3</td></tr><tr><td>88MHz-216MHz</td><td>150</td><td>43.5</td><td>Quasi-peak</td><td>3</td></tr><tr><td>216MHz-960MHz</td><td>200</td><td>46.0</td><td>Quasi-peak</td><td>3</td></tr><tr><td>960MHz-1GHz</td><td>500</td><td>54.0</td><td>Quasi-peak</td><td>3</td></tr><tr><td>Above 1GHz</td><td>500</td><td>54.0</td><td>Average</td><td>3</td></tr></table> Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.	Frequency	Field strength microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30	1.705MHz-30MHz	30	-	-	30	30MHz-88MHz	100	40.0	Quasi-peak	3	88MHz-216MHz	150	43.5	Quasi-peak	3	216MHz-960MHz	200	46.0	Quasi-peak	3	960MHz-1GHz	500	54.0	Quasi-peak	3	Above 1GHz	500	54.0	Average	3				
Frequency	Field strength microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)																																														
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300																																														
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30																																														
1.705MHz-30MHz	30	-	-	30																																														
30MHz-88MHz	100	40.0	Quasi-peak	3																																														
88MHz-216MHz	150	43.5	Quasi-peak	3																																														
216MHz-960MHz	200	46.0	Quasi-peak	3																																														
960MHz-1GHz	500	54.0	Quasi-peak	3																																														
Above 1GHz	500	54.0	Average	3																																														

Radiated Spurious Emissions test Data:

Radiated Emission below 1GHz:

Mode:	GFSK Transmitting	Channel:	2480
Remark:			

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
40.6700	V	38.14	-18.02	20.12	40.00	-19.88	QP
64.9200	V	50.04	-20.07	29.97	40.00	-10.03	QP
98.8700	V	36.47	-19.11	17.36	43.50	-26.14	QP
143.4900	V	42.25	-22.71	19.54	43.50	-23.96	QP
165.8000	V	44.51	-22.47	22.04	43.50	-21.46	QP
332.6400	V	41.32	-16.59	24.73	46.00	-21.27	QP
40.6700	H	36.96	-18.02	18.94	40.00	-21.06	QP
65.8900	H	46.80	-20.36	26.44	40.00	-13.56	QP
113.4200	H	35.63	-19.79	15.84	43.50	-27.66	QP
165.8000	H	41.56	-22.47	19.09	43.50	-24.41	QP
291.9000	H	39.66	-17.71	21.95	46.00	-24.05	QP
332.6400	H	40.73	-16.59	24.14	46.00	-21.86	QP

Notes:

- 1) Through Pre-scan then find the GFSK-CH39 is the worst case mode and only the worst data was recorded.

Report No. : EED39080793601

Transmitter Emission above 1GHz:

Mode:	BLE_1M	Channel:	2402
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	34.42	7.83	42.25	74.00	-31.75	100	227	peak
2	8055.000	31.05	13.03	44.08	74.00	-29.92	100	227	peak
3	13903.000	29.79	21.34	51.13	74.00	-22.87	100	30	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	1986.000	39.94	0.96	40.90	74.00	-33.10	100	209	peak
2	7409.000	32.59	12.33	44.92	74.00	-29.08	100	209	peak
3	15535.000	29.36	22.75	52.11	74.00	-21.89	100	252	peak

Mode:	BLE_1M	Channel:	2440
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4876.000	42.34	9.31	51.65	74.00	-22.35	100	92	peak
2	6712.000	32.38	11.44	43.82	74.00	-30.18	100	250	peak
3	15212.000	29.67	23.01	52.68	74.00	-21.32	100	13	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	39.73	7.83	47.56	74.00	-26.44	200	88	peak
2	7409.000	32.59	12.33	44.92	74.00	-29.08	200	339	peak
3	14906.000	30.11	22.97	53.08	74.00	-20.92	170	360	peak

Mode:	BLE_1M	Channel:	2480
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2802.000	49.47	4.29	53.76	74.00	-20.24	100	208	peak
2	4961.000	43.69	9.51	53.20	74.00	-20.80	100	97	peak
3	11081.000	30.51	16.65	47.16	74.00	-26.84	200	286	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2751.000	51.53	4.01	55.54	74.00	-18.46	200	106	peak
2	2751.703	33.91	4.01	37.92	54.00	-16.08	200	106	AVG
3	3992.000	43.40	7.83	51.23	74.00	-22.77	200	194	peak
4	14821.000	30.66	22.87	53.53	74.00	-20.47	137	360	peak

Mode:	BLE_2M	Channel:	2402
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	34.42	7.83	42.25	74.00	-31.75	100	279	peak
2	6916.000	32.55	11.61	44.16	74.00	-29.84	100	279	peak
3	12254.000	29.48	17.75	47.23	74.00	-26.77	100	318	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	39.73	7.83	47.56	74.00	-26.44	100	53	peak
2	4995.000	34.67	9.59	44.26	74.00	-29.74	100	53	peak
3	11183.000	29.69	16.82	46.51	74.00	-27.49	200	31	peak

Mode:	BLE_2M	Channel:	2440
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4876.000	42.50	9.31	51.81	74.00	-22.19	100	96	peak
2	8531.000	30.84	13.70	44.54	74.00	-29.46	100	222	peak
3	14821.000	29.57	22.87	52.44	74.00	-21.56	100	344	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	42.56	7.83	50.39	74.00	-23.61	200	194	peak
2	4876.000	36.32	9.31	45.63	74.00	-28.37	200	213	peak
3	15212.000	30.24	23.01	53.25	74.00	-20.75	100	295	peak

Report No. : EED39O80793601

Mode:	BLE_2M	Channel:	2480
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2751.000	49.40	4.01	53.41	74.00	-20.59	100	213	peak
2	4961.000	43.64	9.51	53.15	74.00	-20.85	100	101	peak
3	14821.000	30.35	22.87	53.22	74.00	-20.78	146	360	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	1884.000	47.81	0.63	48.44	74.00	-25.56	166	360	peak
2	3975.000	41.59	7.75	49.34	74.00	-24.66	200	210	peak
3	4961.000	36.22	9.51	45.73	74.00	-28.27	100	184	peak
4	14906.000	29.94	22.97	52.91	74.00	-21.09	100	358	peak

Mode:	BLE_125kbps	Channel:	2402
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3142.000	35.36	5.12	40.48	74.00	-33.52	100	233	peak
2	8735.000	30.62	13.85	44.47	74.00	-29.53	100	233	peak
3	14158.000	30.01	21.72	51.73	74.00	-22.27	184	360	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4995.000	34.67	9.59	44.26	74.00	-29.74	200	333	peak
2	11625.000	29.63	17.25	46.88	74.00	-27.12	200	333	peak
3	16215.000	28.84	23.72	52.56	74.00	-21.44	100	176	peak

Mode:	BLE_125kbps	Channel:	2440
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4876.000	42.42	9.31	51.73	74.00	-22.27	100	88	peak
2	10571.000	31.31	15.91	47.22	74.00	-26.78	124	360	AVG
3	14838.000	29.73	22.89	52.62	74.00	-21.38	111	360	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	1901.000	49.69	0.69	50.38	74.00	-23.62	200	13	peak
2	3992.000	39.35	7.83	47.18	74.00	-26.82	200	83	peak
3	4876.000	34.96	9.31	44.27	74.00	-29.73	100	328	peak
4	14889.000	29.42	22.95	52.37	74.00	-21.63	200	50	peak

Mode:	BLE_125kbps	Channel:	2480
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	2479.000	41.24	2.91	44.15	74.00	-29.85	163	360	peak
2	4961.000	43.34	9.51	52.85	74.00	-21.15	100	103	peak
3	14175.000	31.09	21.75	52.84	74.00	-21.16	200	102	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	38.89	7.83	46.72	74.00	-27.28	200	154	peak
2	4774.000	36.03	9.07	45.10	74.00	-28.90	200	113	peak
3	15926.000	29.40	23.46	52.86	74.00	-21.14	128	360	peak

Mode:	BLE_500kbps	Channel:	2402
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4876.000	42.34	9.31	51.65	74.00	-22.35	100	203	peak
2	11812.000	30.42	17.00	47.42	74.00	-26.58	100	203	peak
3	17048.000	26.86	25.64	52.50	74.00	-21.50	169	360	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3142.000	35.36	5.12	40.48	74.00	-33.52	100	53	peak
2	8735.000	30.62	13.85	44.47	74.00	-29.53	100	53	peak
3	14158.000	30.01	21.72	51.73	74.00	-22.27	100	251	peak

Mode:	BLE_500kbps	Channel:	2440
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	4876.000	42.78	9.31	52.09	74.00	-21.91	100	92	peak
2	11081.000	30.63	16.65	47.28	74.00	-26.72	100	222	peak
3	14906.000	30.08	22.97	53.05	74.00	-20.95	100	353	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	1901.000	46.41	0.69	47.10	74.00	-26.90	183	360	peak
2	3992.000	39.94	7.83	47.77	74.00	-26.23	200	143	peak
3	4876.000	35.02	9.31	44.33	74.00	-29.67	200	210	peak
4	15212.000	29.91	23.01	52.92	74.00	-21.08	200	267	peak

Mode:	BLE_500kbps	Channel:	2480
Remark:			

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	1884.000	47.00	0.63	47.63	74.00	-26.37	100	360	peak
2	4961.000	43.25	9.51	52.76	74.00	-21.24	100	96	peak
3	14821.000	30.14	22.87	53.01	74.00	-20.99	200	114	peak

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	3992.000	39.48	7.83	47.31	74.00	-26.69	200	22	peak
2	4961.000	36.81	9.51	46.32	74.00	-27.68	100	119	peak
3	14821.000	30.37	22.87	53.24	74.00	-20.76	200	209	peak

Note:

1) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak values are measured:

2) The field strength is calculated by adding the correct Factor. The basic equation with a sample calculation is as follows:

Final Test Level = Reading +Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

3) Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

*** End of Report ***

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