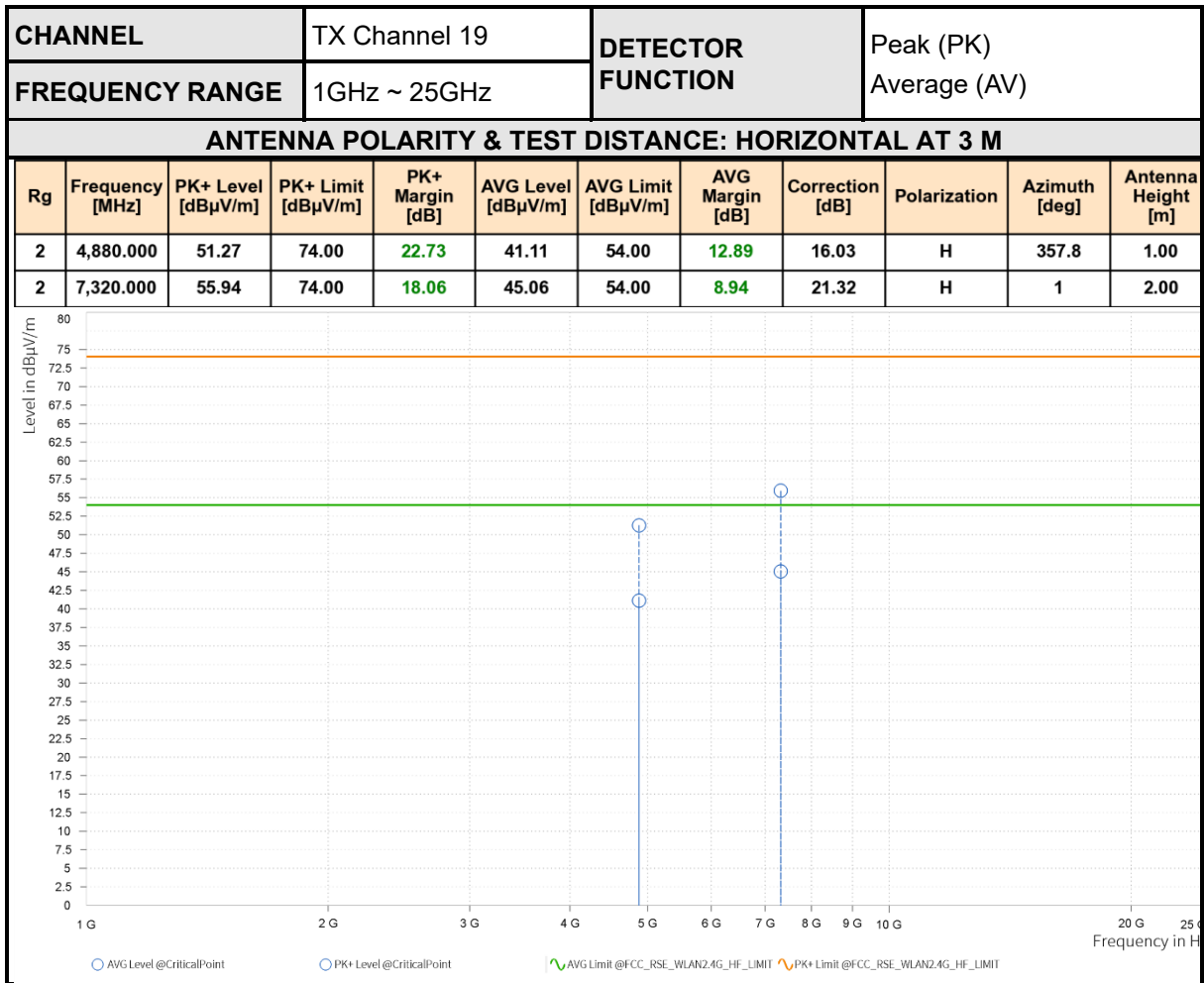
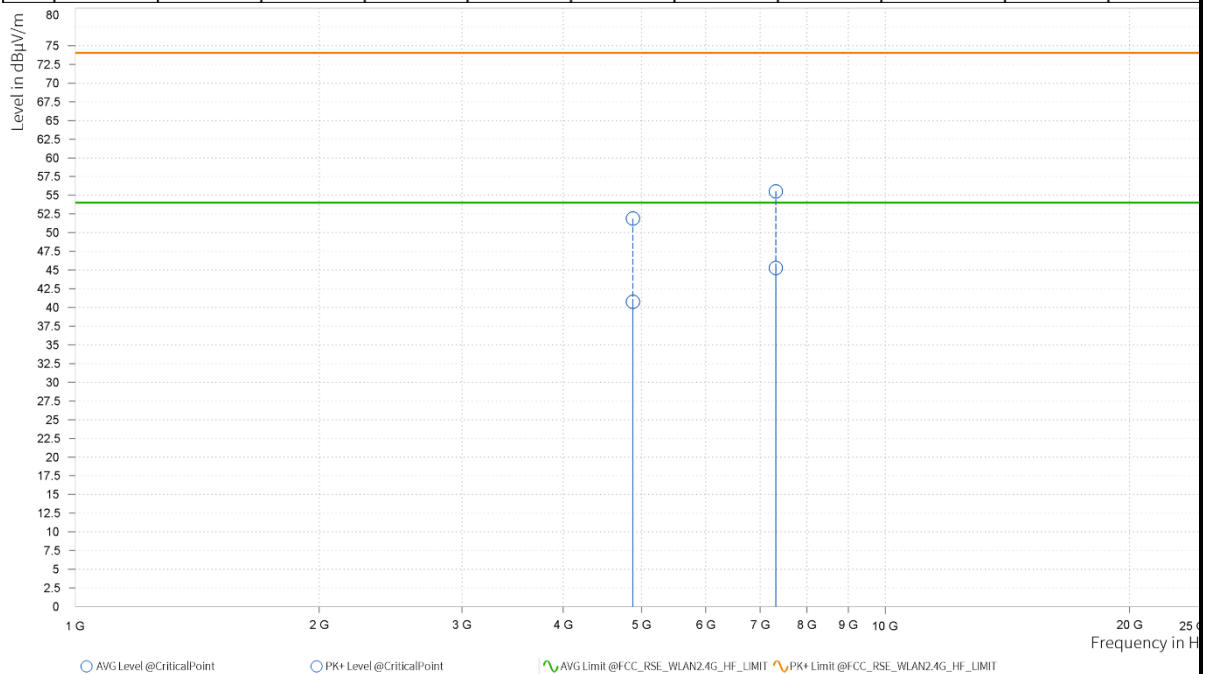






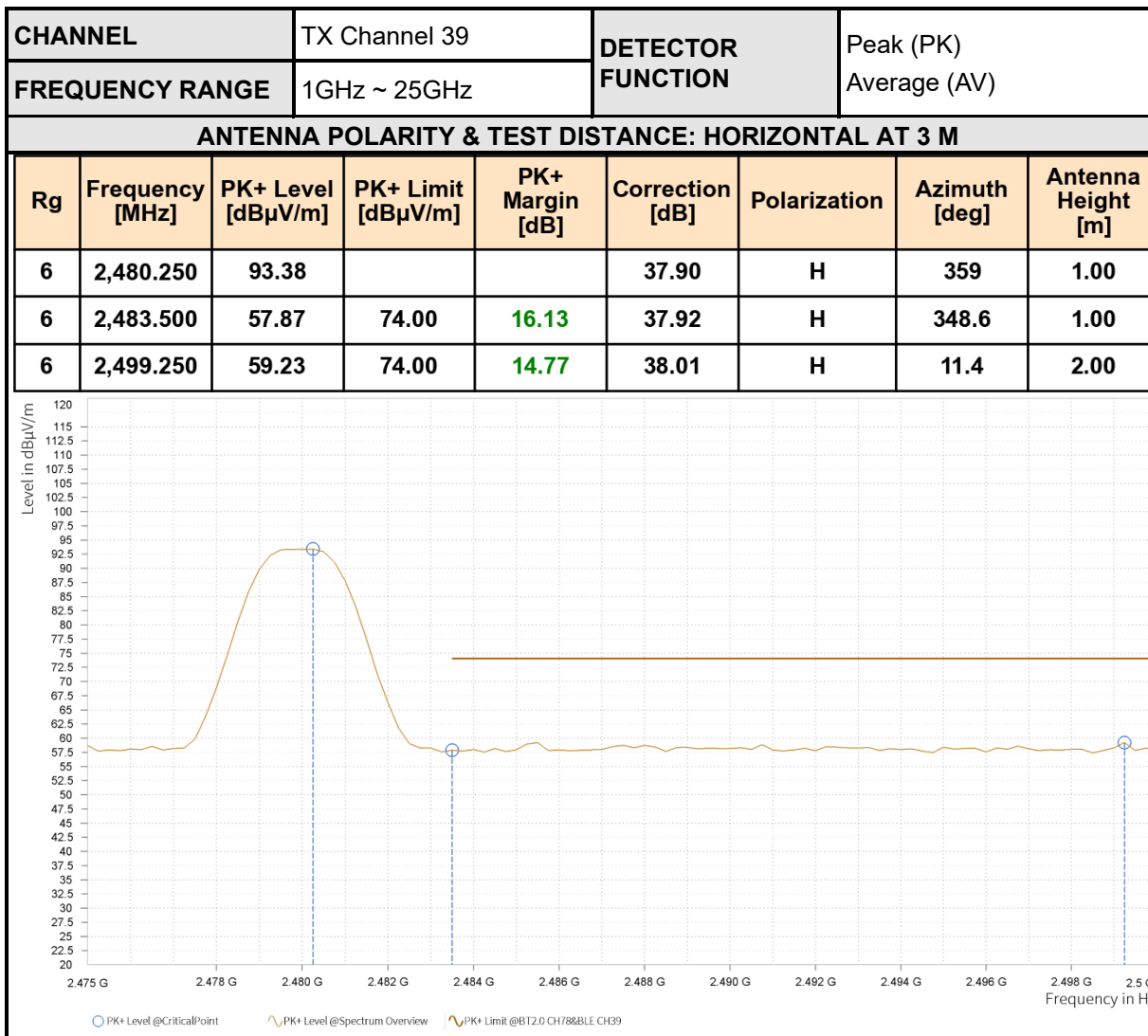
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	51.87	74.00	22.13	40.78	54.00	13.22	16.03	V	359	1.00
2	7,320.000	55.53	74.00	18.47	45.29	54.00	8.71	21.32	V	359	2.00



REMARKS:

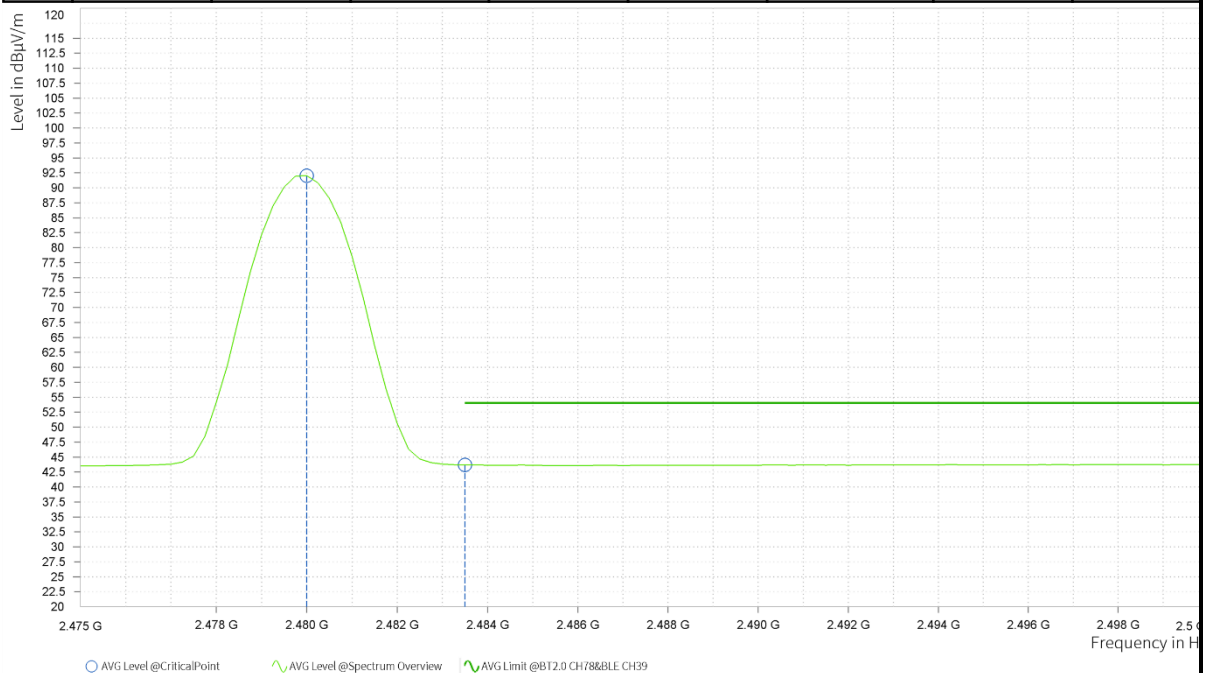
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2440MHz: Fundamental frequency.





ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

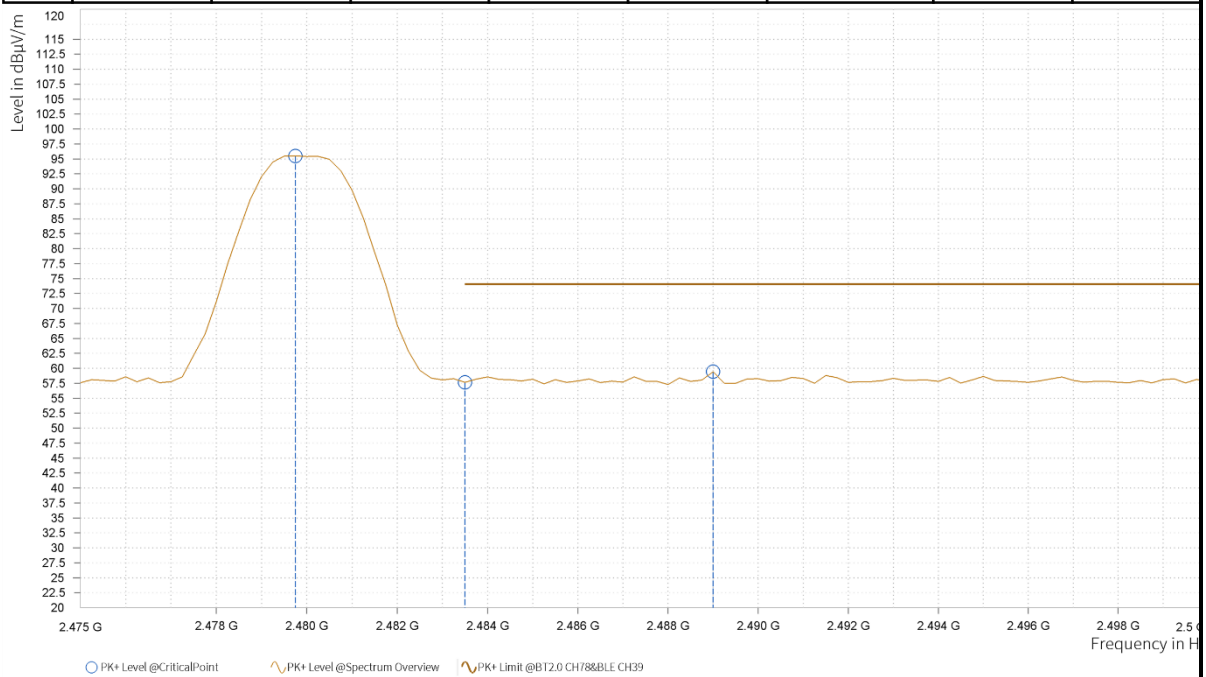
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	92.03			37.89	H	350.1	1.00
6	2,483.500	43.69	54.00	10.31	37.92	H	359	1.00
6	2,500.000	43.77	54.00	10.23	38.01	H	175.3	1.00

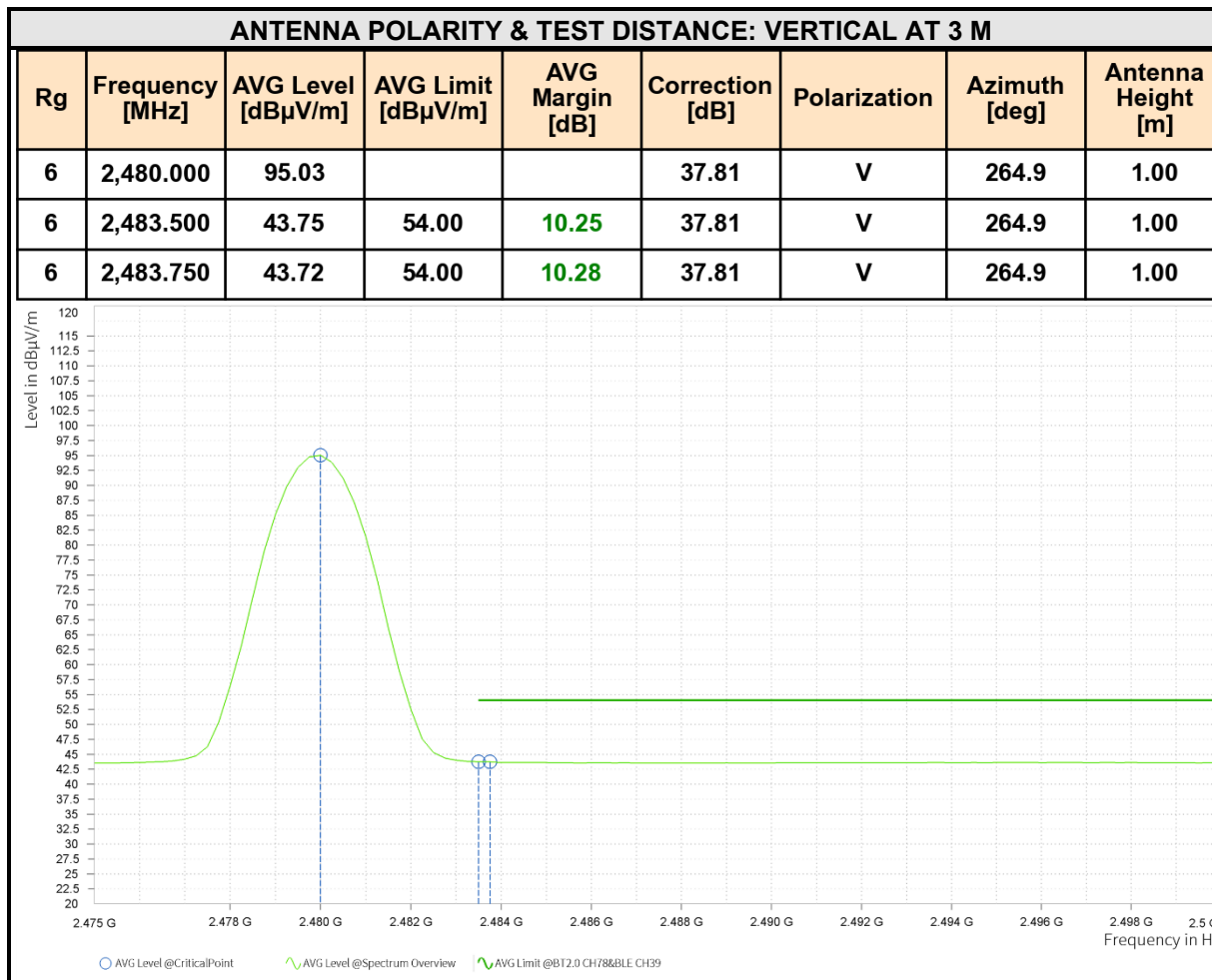




ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

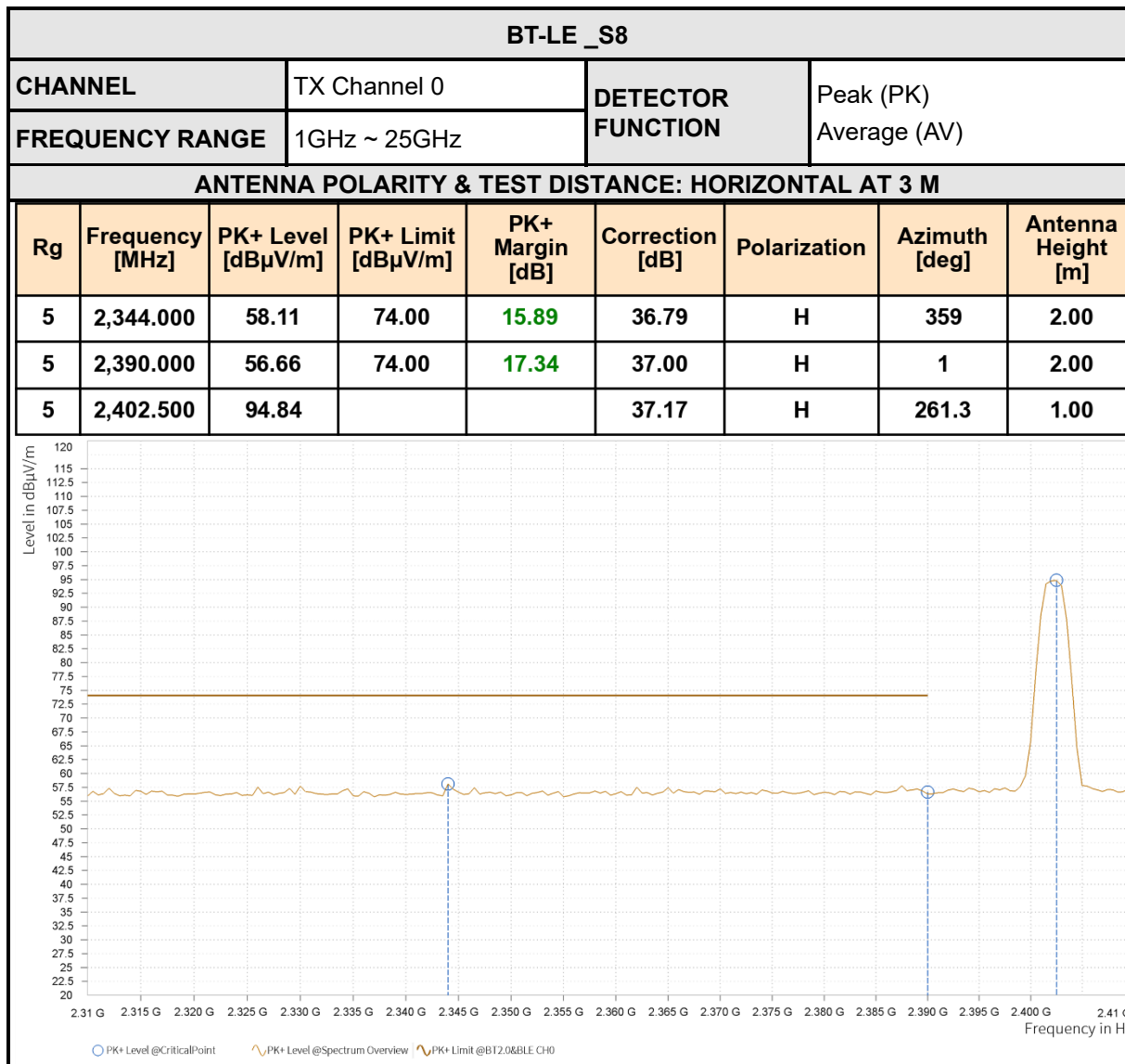
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	95.49			37.81	V	264.9	1.00
6	2,483.500	57.65	74.00	16.35	37.81	V	1	1.00
6	2,489.000	59.43	74.00	14.57	37.81	V	41.4	1.00





REMARKS:

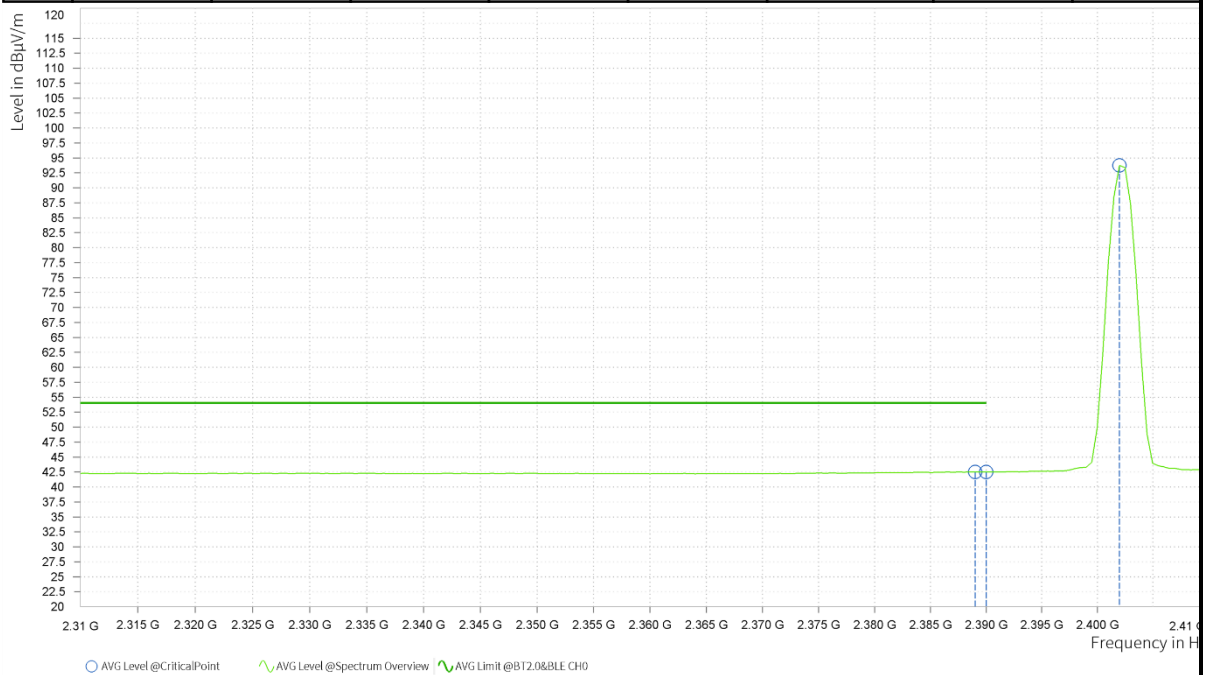
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2480MHz: Fundamental frequency.





ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

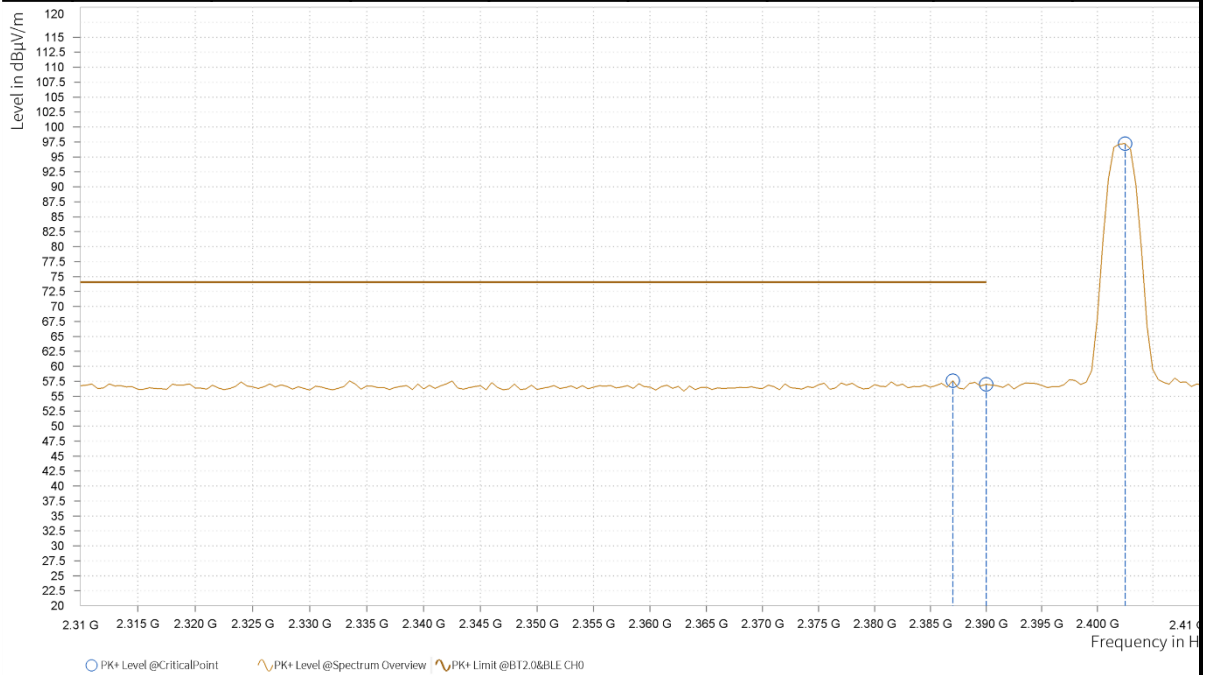
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,389.000	42.51	54.00	11.49	36.98	H	5	1.00
5	2,390.000	42.52	54.00	11.48	37.00	H	7.4	2.00
5	2,402.000	93.74			37.16	H	264.8	1.00

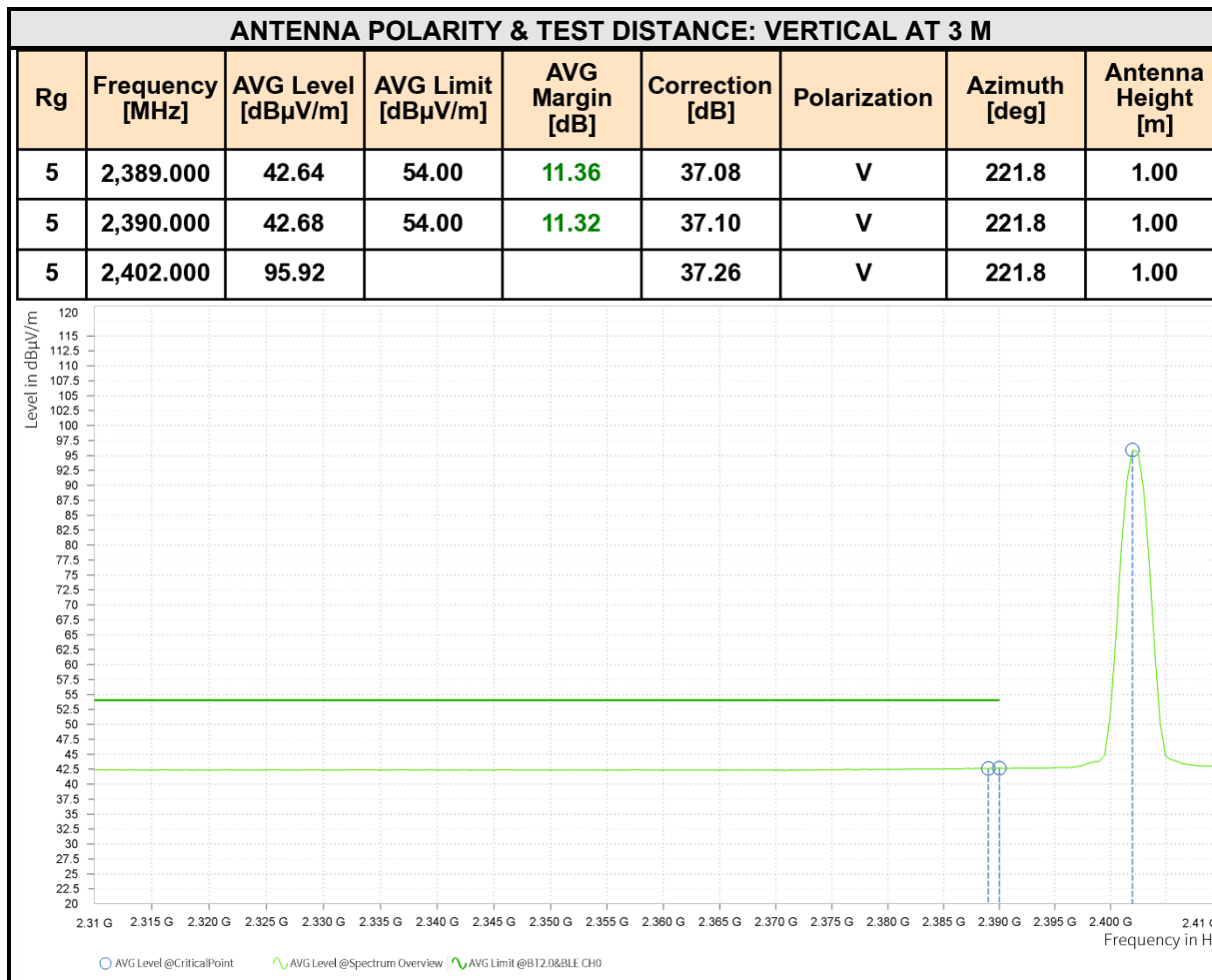




ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

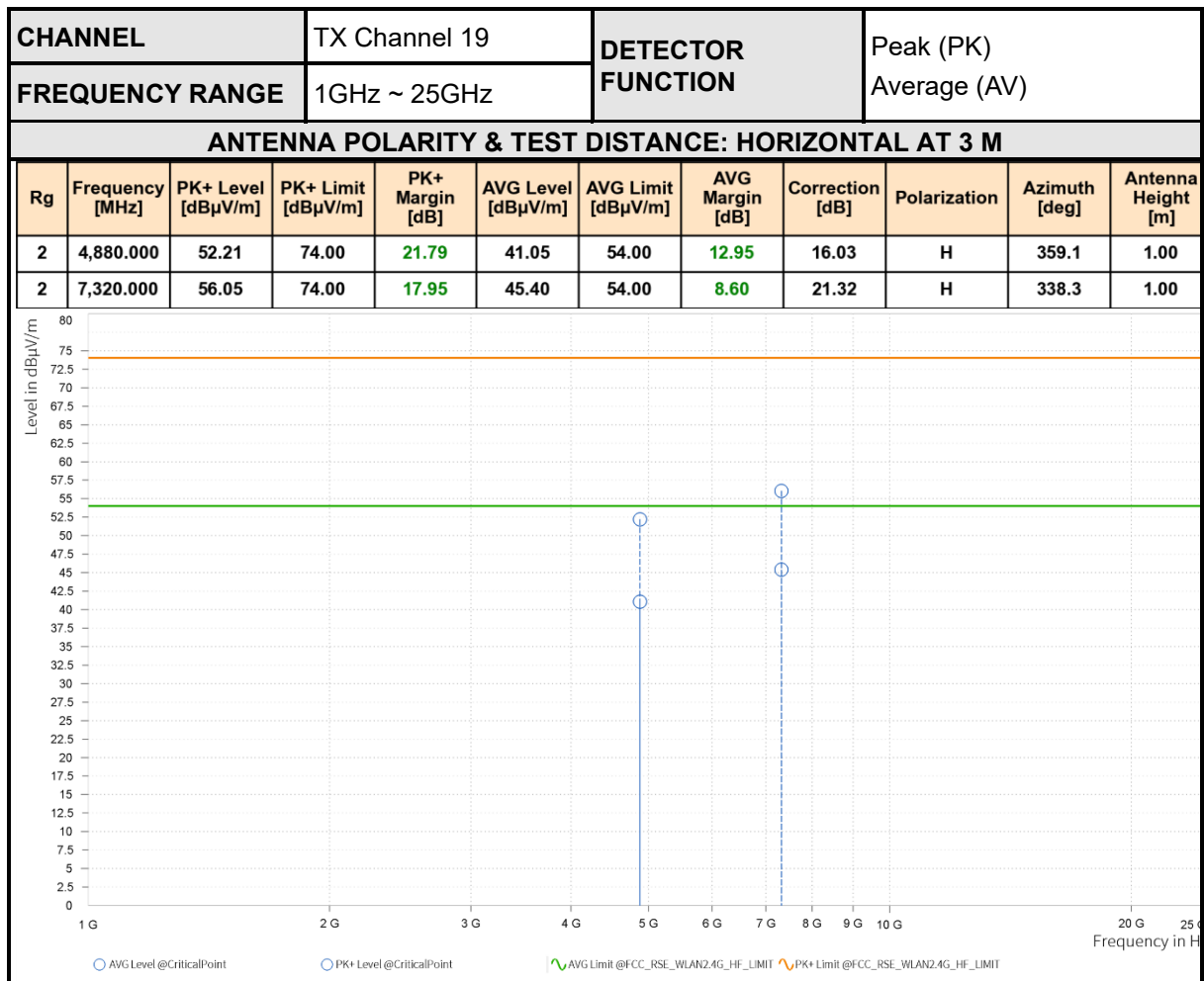
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,387.000	57.61	74.00	16.39	37.06	V	309.2	1.00
5	2,390.000	56.99	74.00	17.01	37.10	V	48.6	2.00
5	2,402.500	97.21			37.27	V	218.2	1.00





REMARKS:

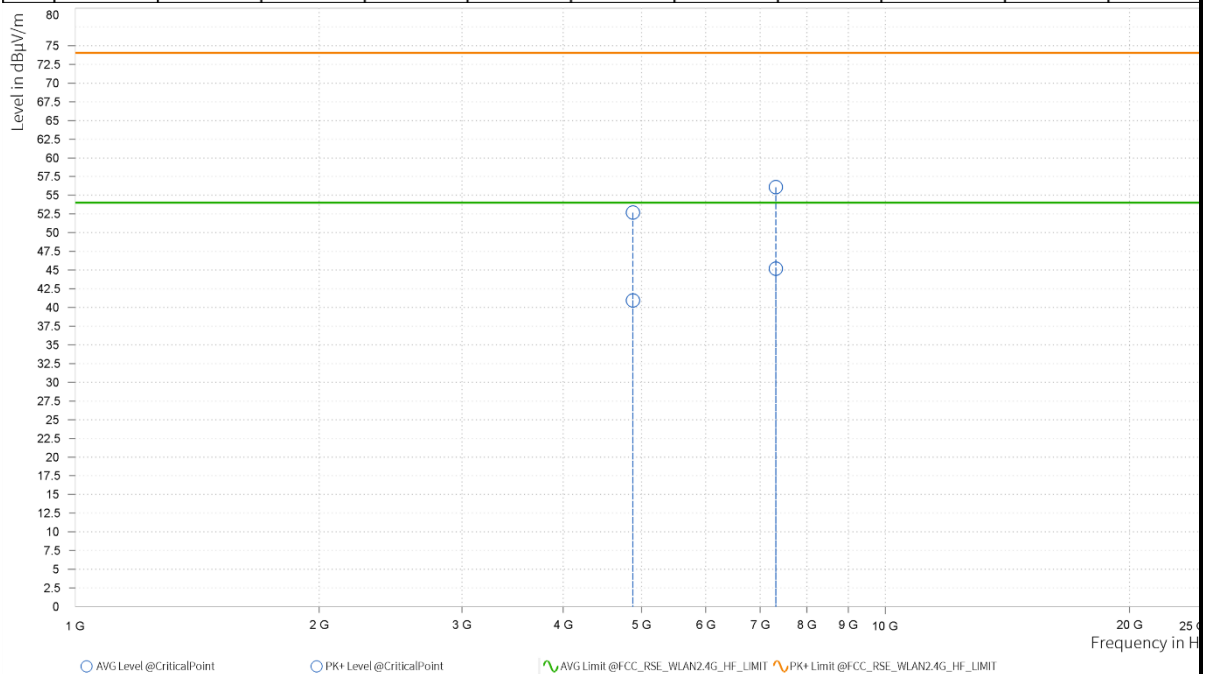
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor.
2. Margin value = Limit value–Emission level.
3. 2402MHz: Fundamental frequency.





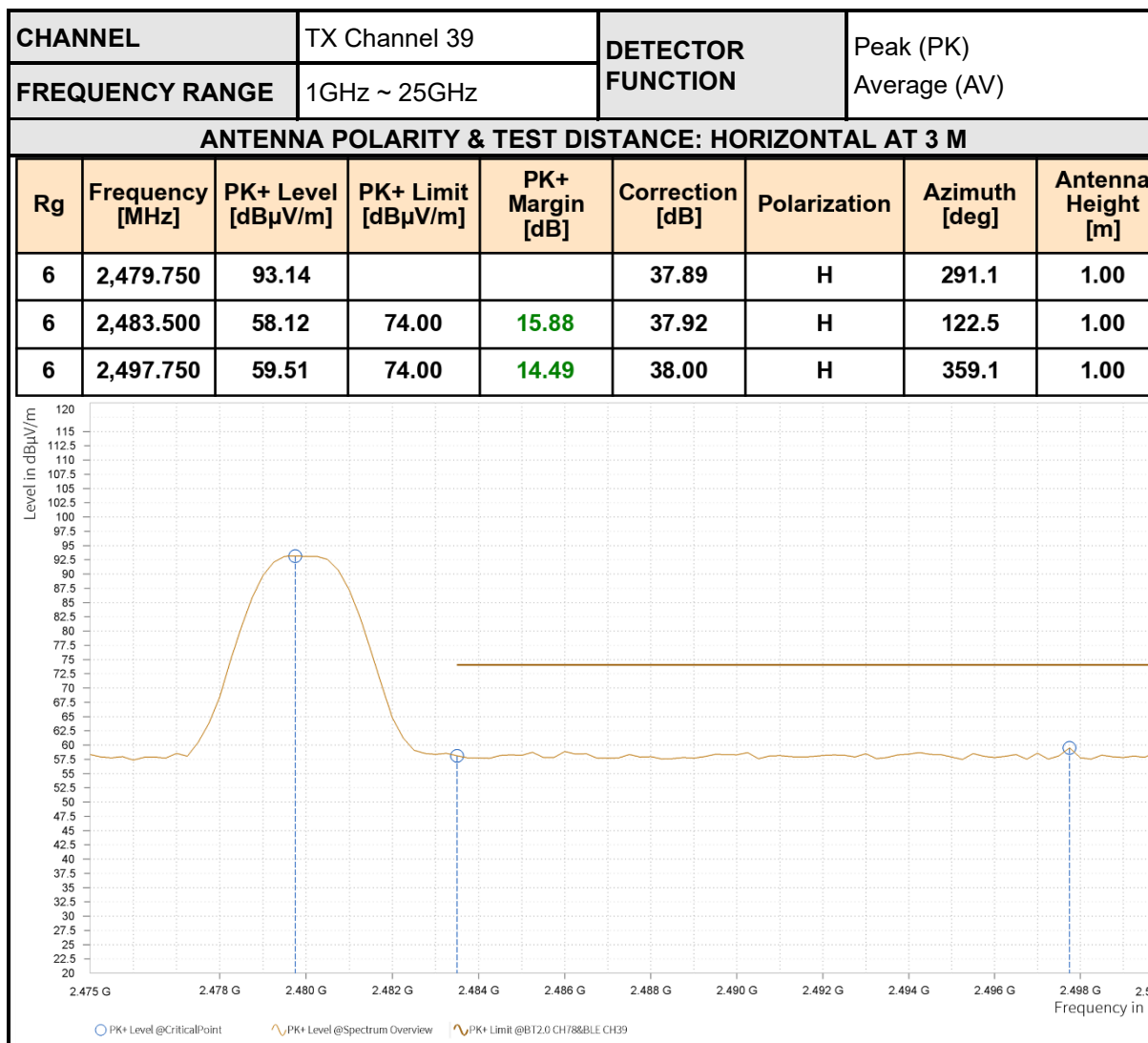
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	52.68	74.00	21.32	40.96	54.00	13.04	16.03	V	359	1.00
2	7,320.000	56.08	74.00	17.92	45.17	54.00	8.83	21.32	V	339.4	2.00



REMARKS:

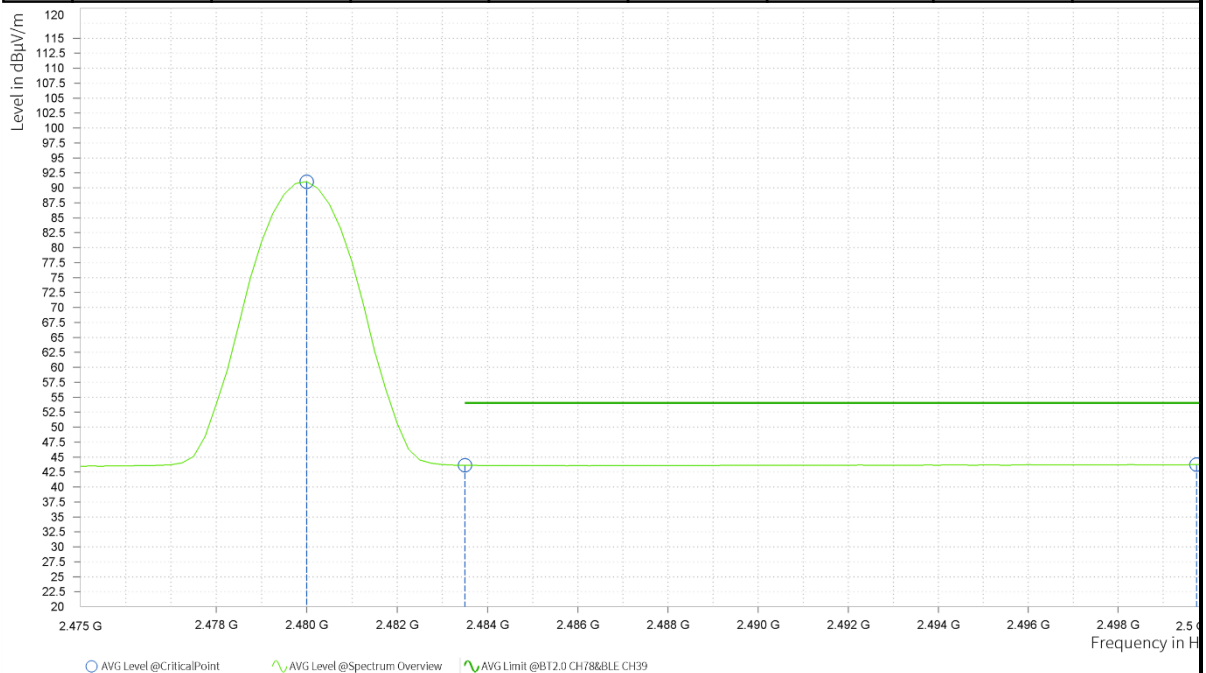
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2440MHz: Fundamental frequency.





ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

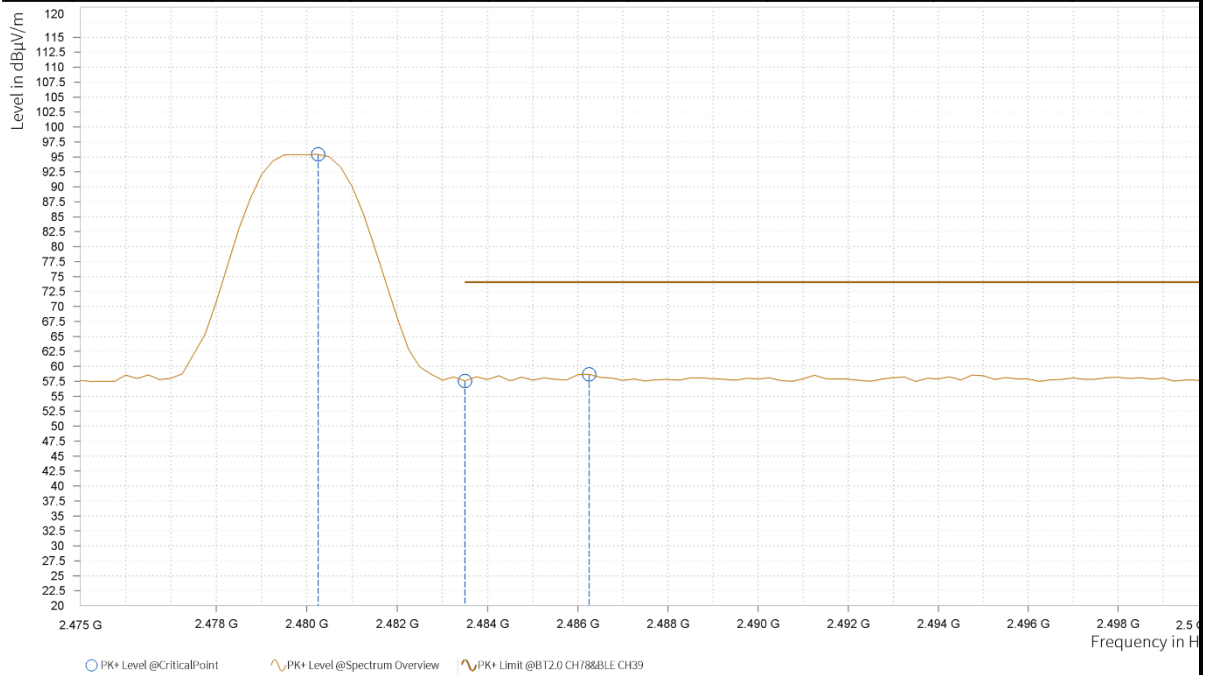
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	91.02			37.89	H	351.2	1.00
6	2,483.500	43.66	54.00	10.34	37.92	H	1	1.00
6	2,499.750	43.73	54.00	10.27	38.01	H	178.8	1.00

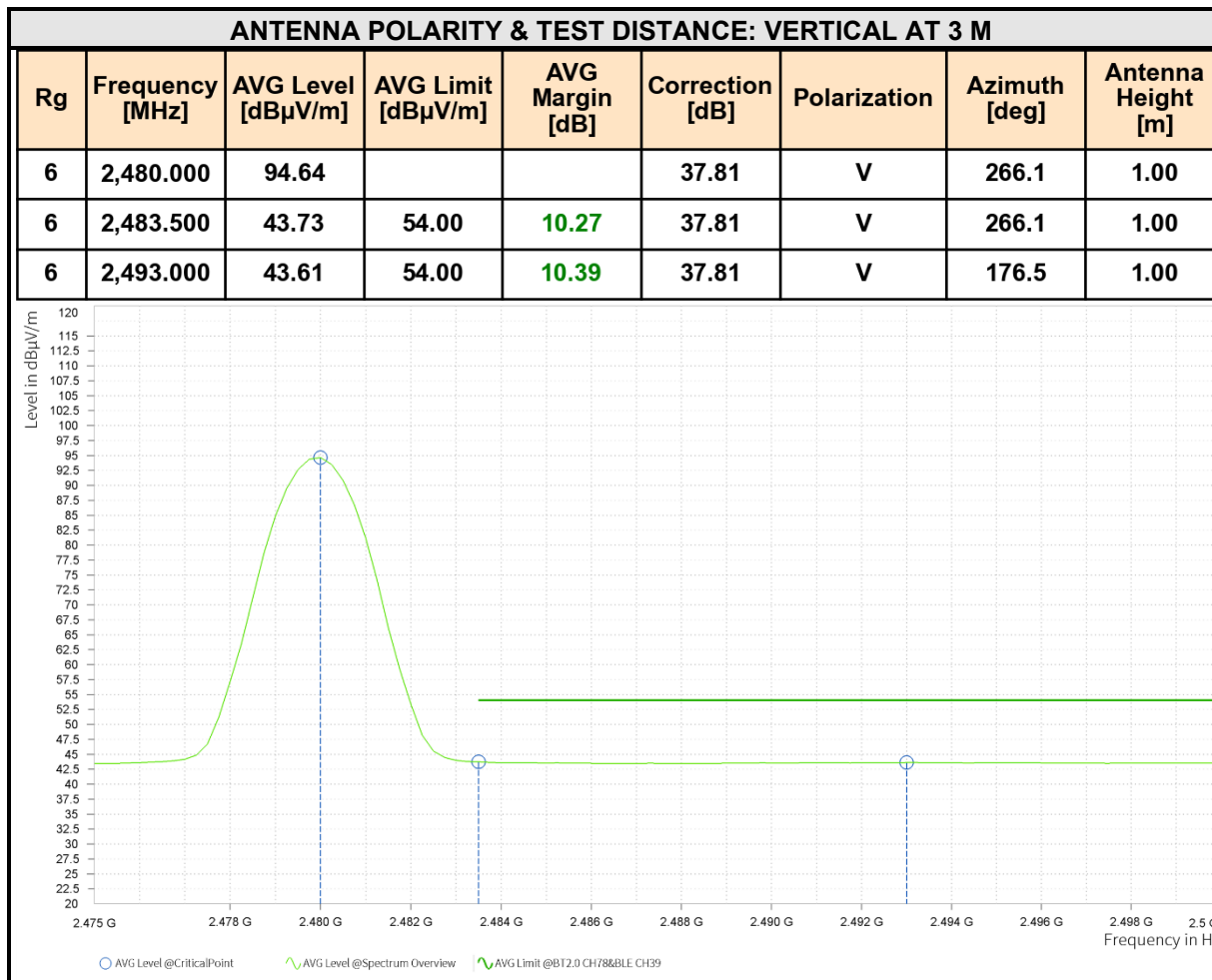




ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.250	95.41			37.81	V	268.4	1.00
6	2,483.500	57.57	74.00	16.43	37.81	V	5	1.00
6	2,486.250	58.66	74.00	15.34	37.81	V	177.6	1.00





REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2480MHz: Fundamental frequency.

**3.3 6 dB BANDWIDTH MEASUREMENT****3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT**

The minimum 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Mar.18,25	Mar.17,27
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

NOTE:

1. The calibration interval of the above test instruments is 12/ 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.



3.3.3 TEST PROCEDURE

In accordance with ANSI C63.10-2020 11.8.1 Option 1:

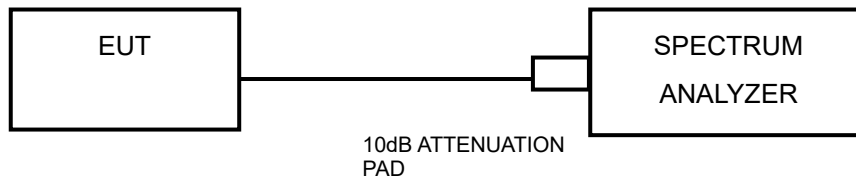
- a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100kHz.
- b) Set the VBW $\geq [3 \times \text{RBW}]$.
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB downamplitude” value, then it shall be as close as possible to this value.



3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.3.7 TEST RESULTS

Please Refer to Appendix Of this test report..

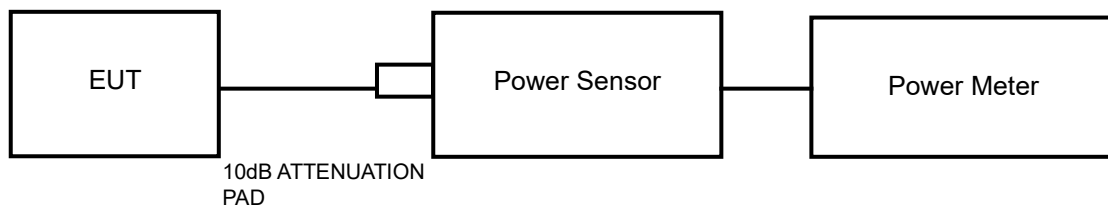


3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



3.4.7 TEST RESULTS

3.4.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix Of this test report..



Test Report No.: PSU-QBJ2511130112RF01

3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

Please Refer to Appendix Of this test report..

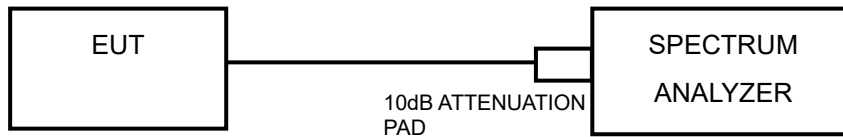


3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span > 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW $\geq 3 \times$ RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



Please Refer to Appendix Of this test report..

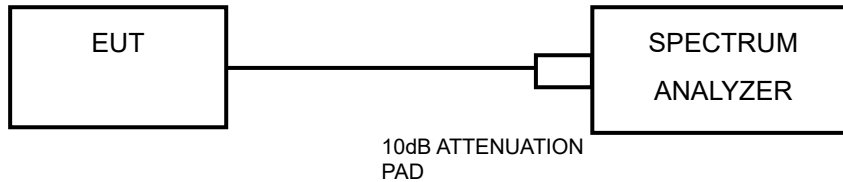


3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below -20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.



MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW $\geq$ 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix Of this test report..



3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit. （单天线用）



4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



Test Report No.: PSU-QBJ2511130112RF01

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

6 APPENDIX :BLE

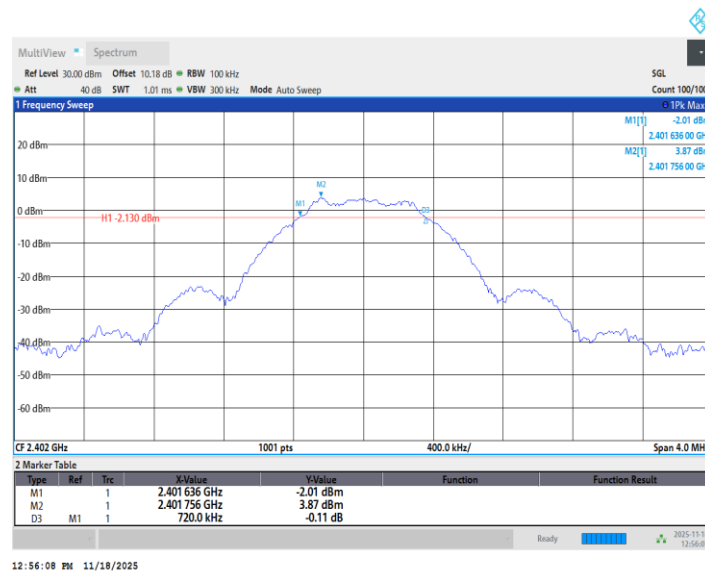
DTS BANDWIDTH

TEST RESULT

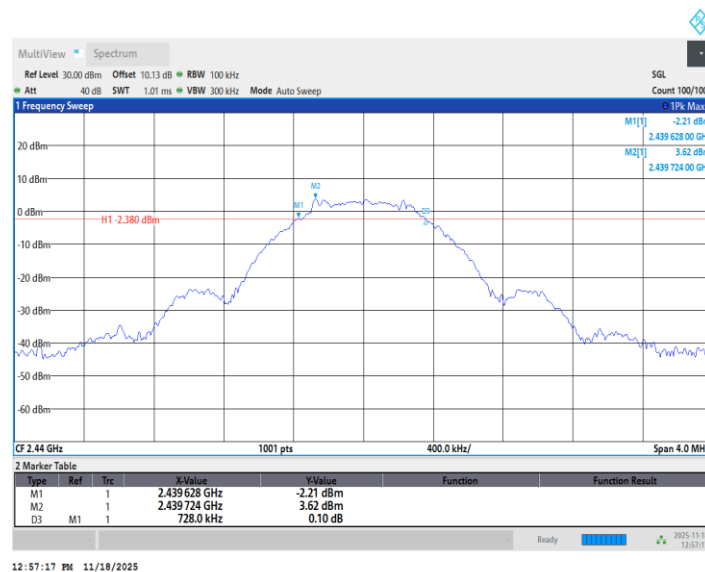
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.72	2401.64	2402.36	0.5	PASS
		2440	0.73	2439.63	2440.36	0.5	PASS
		2480	0.71	2479.64	2480.35	0.5	PASS
BLE_2M	Ant1	2404	1.32	2403.31	2404.63	0.5	PASS
		2440	1.37	2439.34	2440.70	0.5	PASS
		2478	1.29	2477.36	2478.65	0.5	PASS
BLE_125K	Ant1	2402	0.70	2401.64	2402.34	0.5	PASS
		2440	0.72	2439.63	2440.36	0.5	PASS
		2480	0.73	2479.63	2480.36	0.5	PASS
BLE_500K	Ant1	2402	0.71	2401.64	2402.35	0.5	PASS
		2440	0.70	2439.65	2440.34	0.5	PASS
		2480	0.72	2479.64	2480.36	0.5	PASS



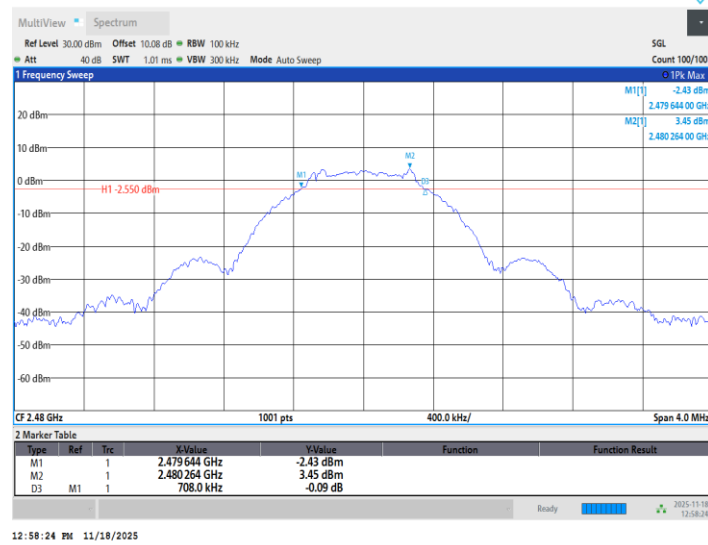
BLE_1M_Ant1_2402



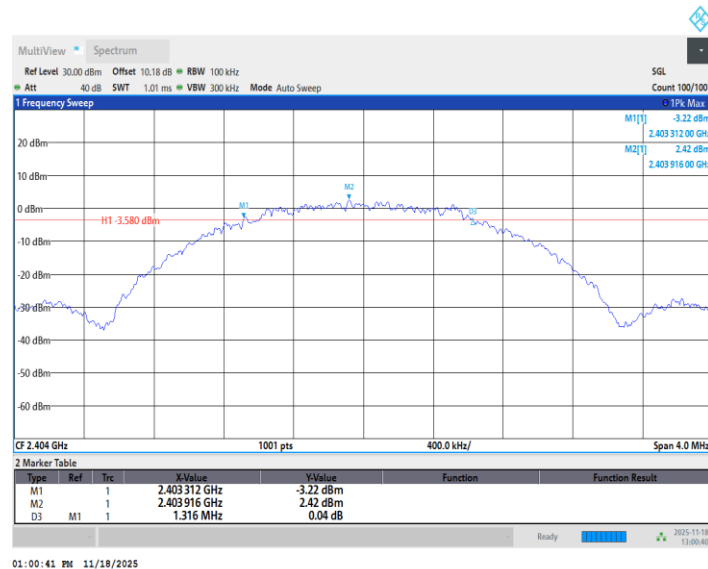
BLE_1M_Ant1_2440



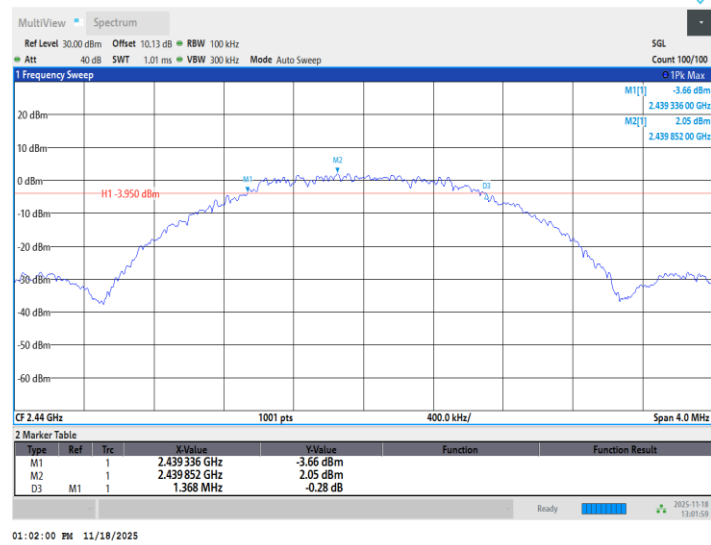
BLE_1M_Ant1_2480



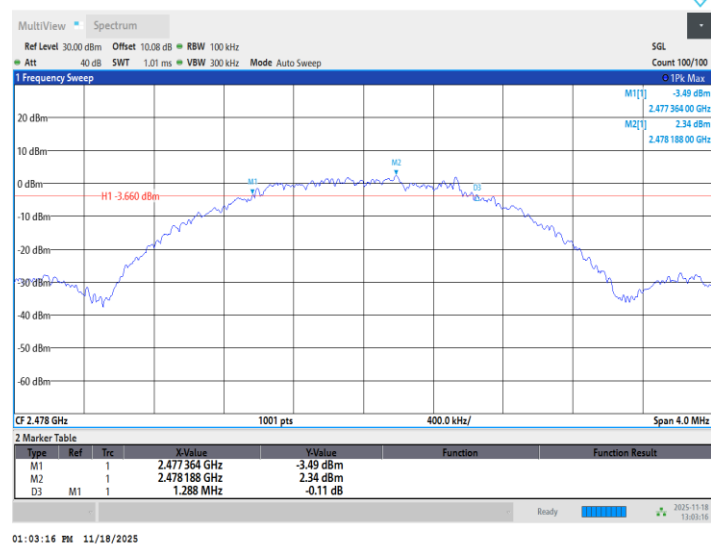
BLE_2M_Ant1_2404



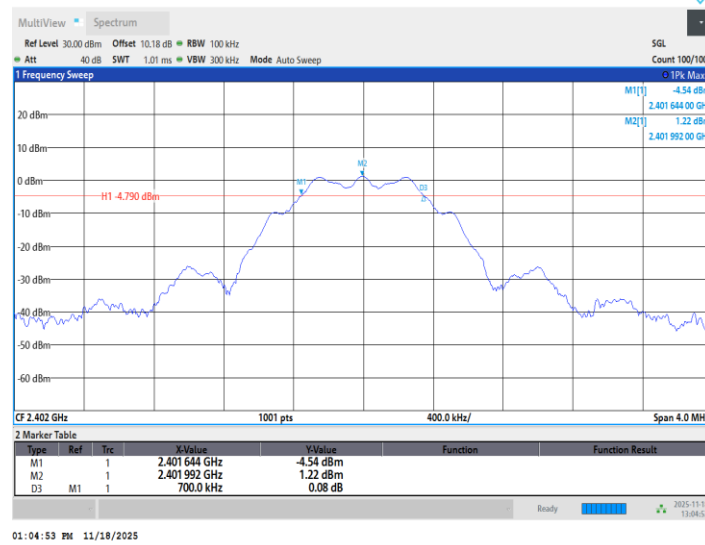
BLE_2M_Ant1_2440



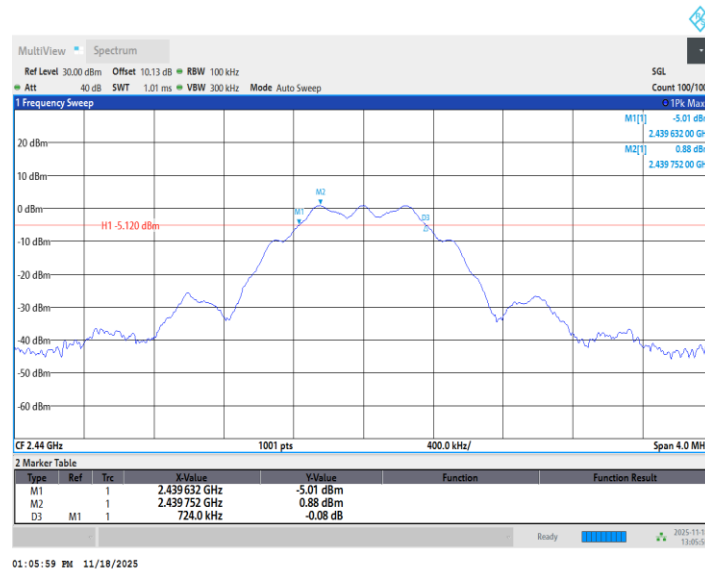
BLE_2M_Ant1_2478



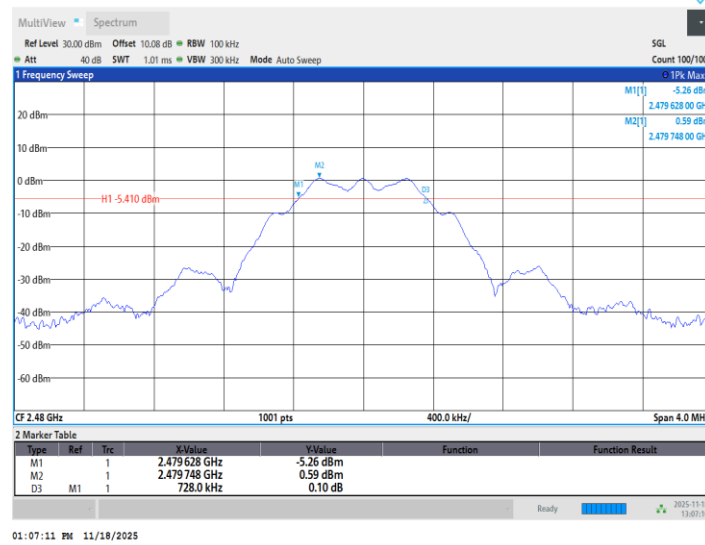
BLE_125K_Ant1_2402



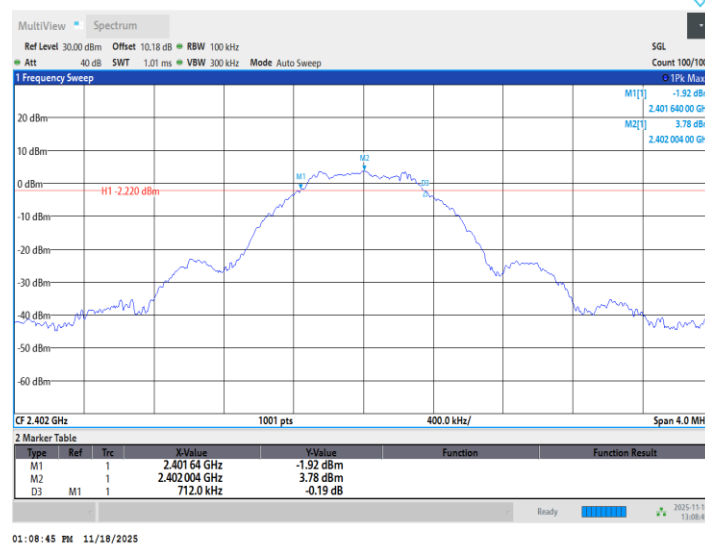
BLE_125K_Ant1_2440



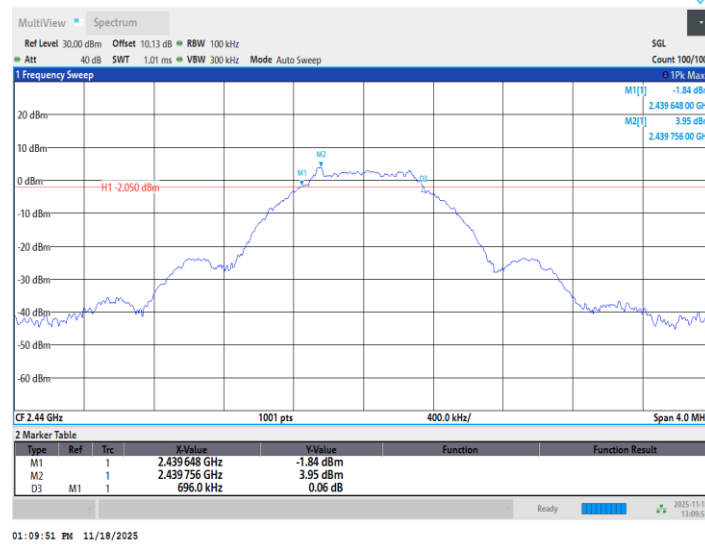
BLE_125K_Ant1_2480



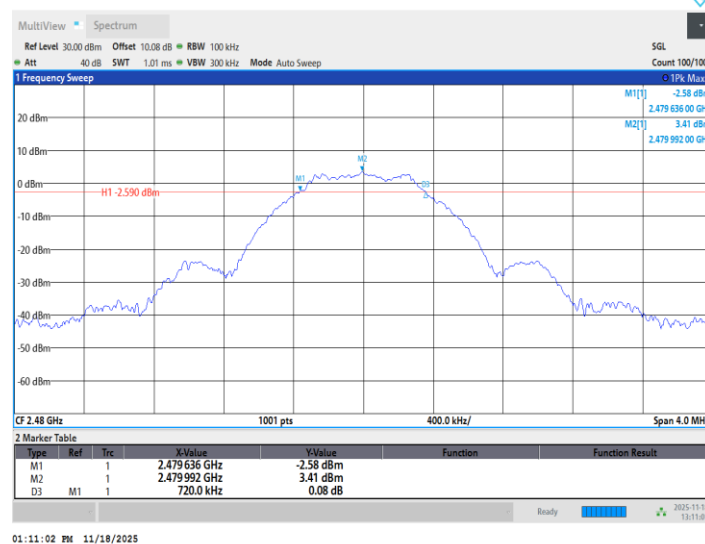
BLE_500K_Ant1_2402



BLE_500K_Ant1_2440



BLE_500K_Ant1_2480

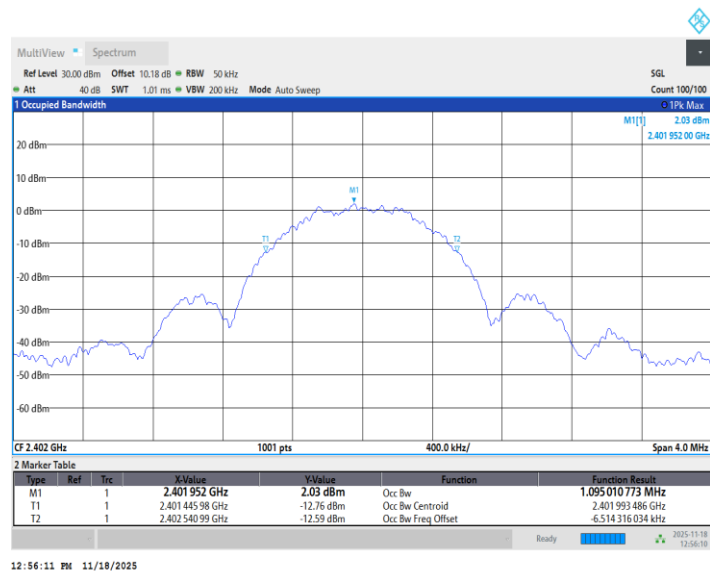


**OCCUPIED CHANNEL BANDWIDTH****TEST RESULT**

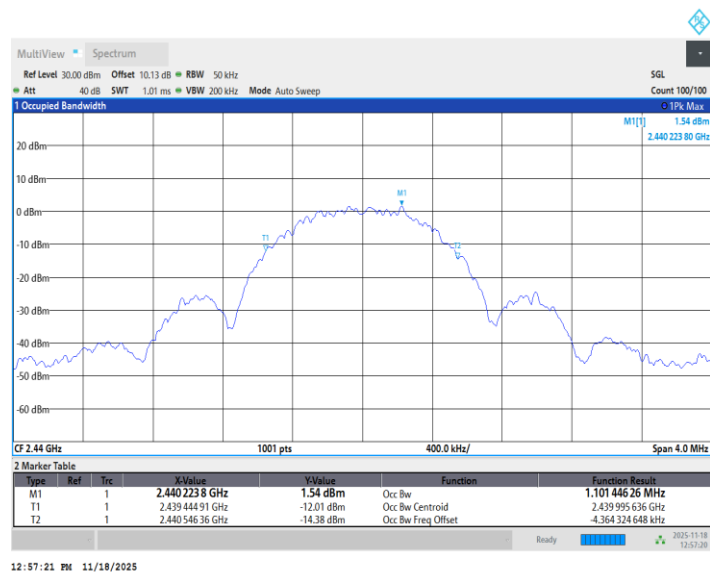
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0950	2401.4460	2402.5410	---	---
		2440	1.1014	2439.4449	2440.5464	---	---
		2480	1.0976	2479.4502	2480.5478	---	---
BLE_2M	Ant1	2404	2.0682	2402.9518	2405.0200	---	---
		2440	2.0790	2438.9527	2441.0318	---	---
		2478	2.0589	2476.9536	2479.0125	---	---
BLE_125K	Ant1	2402	1.0861	2401.4514	2402.5374	---	---
		2440	1.0911	2439.4489	2440.5399	---	---
		2480	1.0931	2479.4481	2480.5412	---	---
BLE_500K	Ant1	2402	1.0851	2401.4536	2402.5387	---	---
		2440	1.1112	2439.4409	2440.5521	---	---
		2480	1.0971	2479.4468	2480.5439	---	---



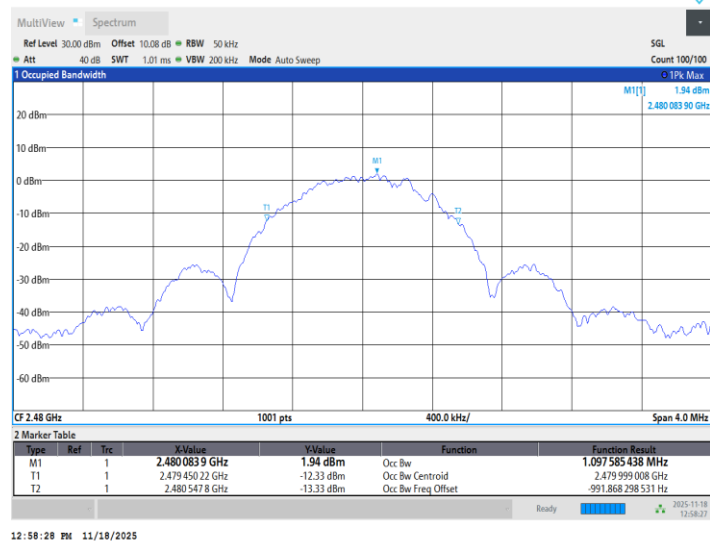
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

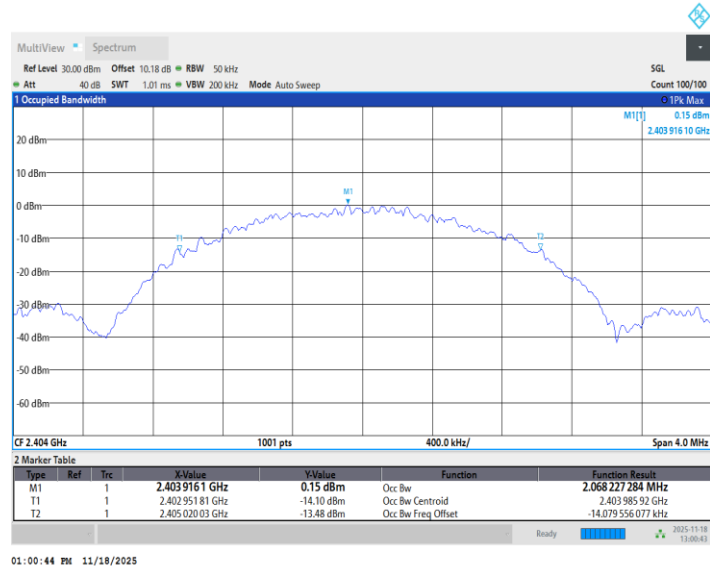


BLE_1M_Ant1_2480



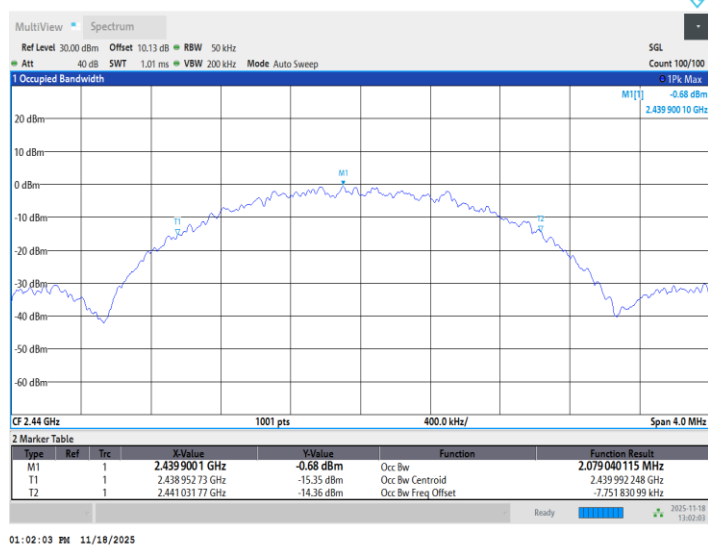
12:58:28 PM 11/18/2025

BLE_2M_Ant1_2404

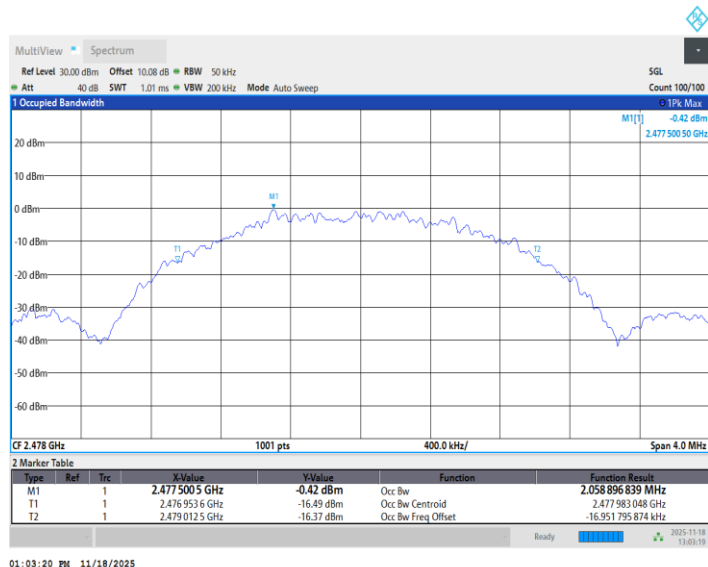


01:00:44 PM 11/18/2025

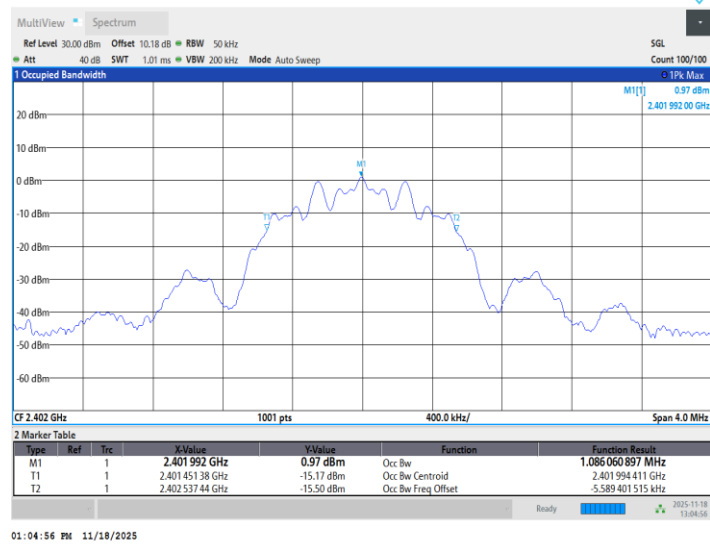
BLE_2M_Ant1_2440



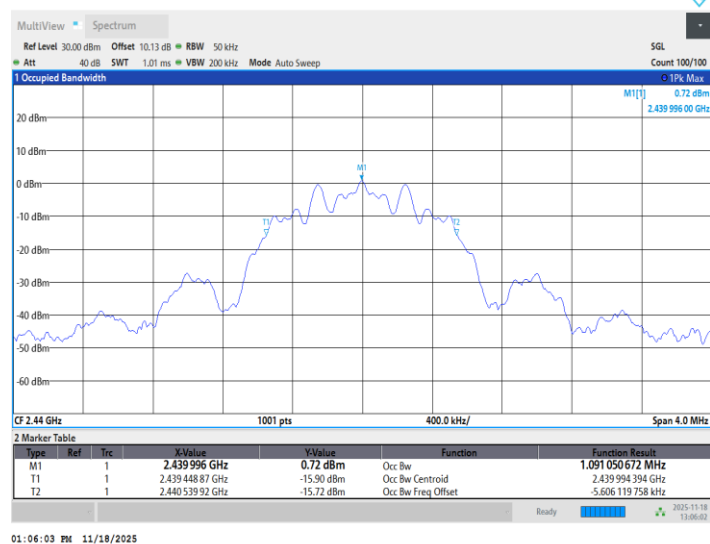
BLE_2M_Ant1_2478



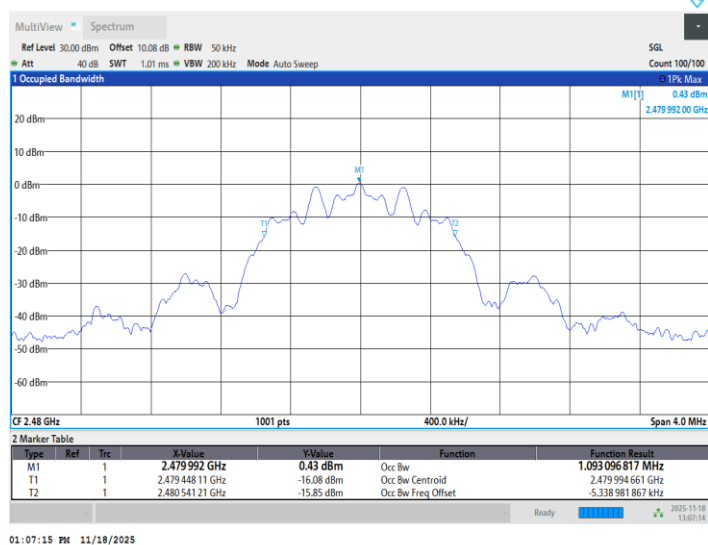
BLE_125K_Ant1_2402



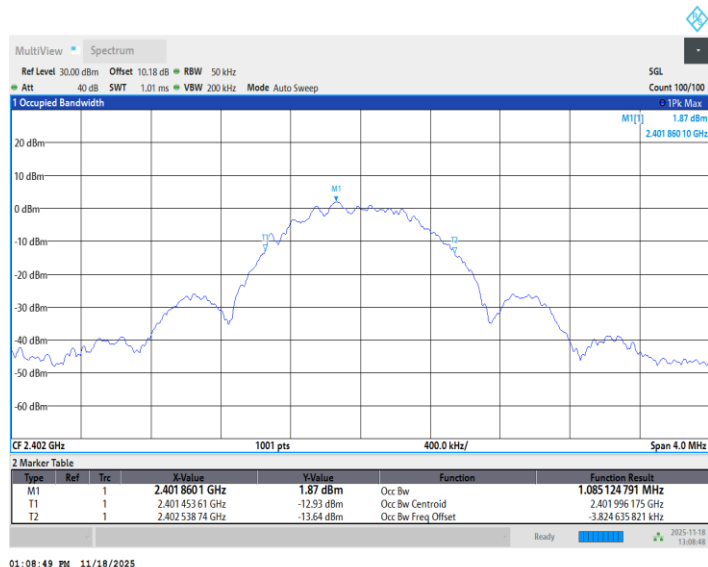
BLE_125K_Ant1_2440



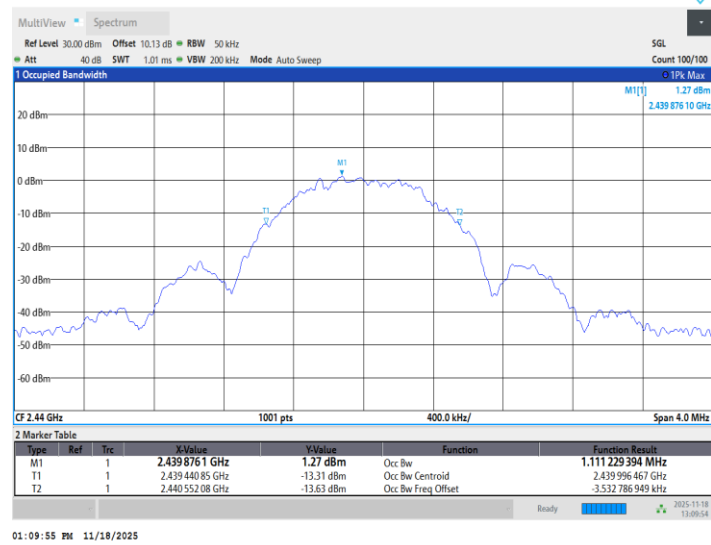
BLE_125K_Ant1_2480



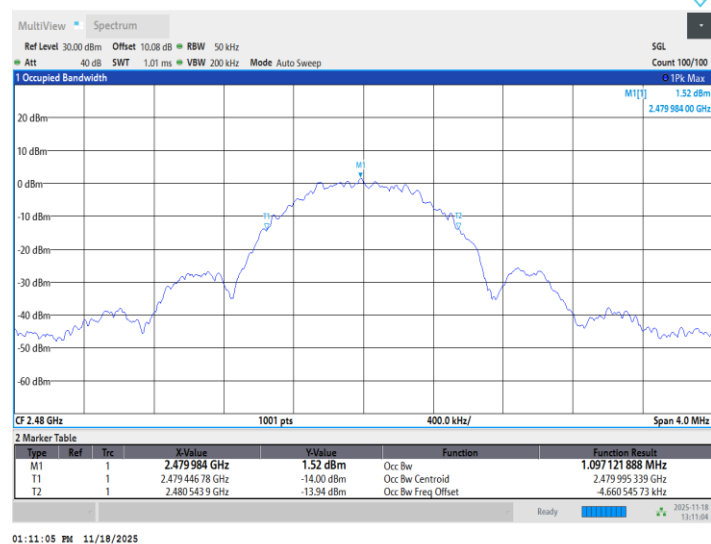
BLE_500K_Ant1_2402



BLE_500K_Ant1_2440



BLE_500K_Ant1_2480





MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT

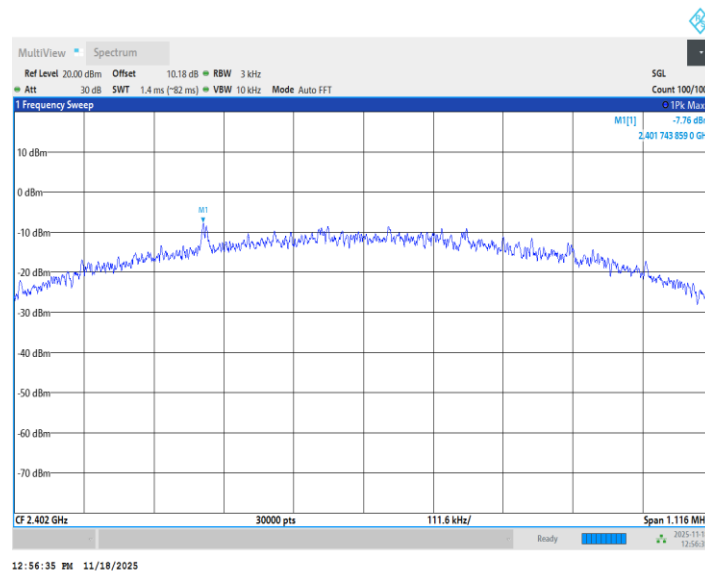
TestMode	Antenna	Channel	Average power [dBm]	Peak power [dBm]	Peak power [mw]	Conducted Limit [dBm]	EIRP [dBm]	EIRP [mw]	EIRP Limit [dBm]	Verdict	Power Setting
BLE_1M	Ant1	2402	5.13	6.07	4.0458	≤30	7.77	5.9841	≤36	PASS	14
		2440	5.21	6.13	4.1020	≤30	7.83	6.0674	≤36	PASS	14
		2480	5.16	5.68	3.6983	≤30	7.38	5.4702	≤36	PASS	14
BLE_2M	Ant1	2404	5.15	6.85	4.8417	≤30	8.55	7.1614	≤36	PASS	14
		2440	5.2	6.71	4.6881	≤30	8.41	6.9343	≤36	PASS	14
		2478	5.17	6.4	4.3652	≤30	8.10	6.4565	≤36	PASS	14
BLE_125k	Ant1	2402	5.13	6.11	4.0832	≤30	7.81	6.0395	≤36	PASS	14
		2440	5.2	5.98	3.9628	≤30	7.68	5.8614	≤36	PASS	14
		2480	5.15	5.67	3.6898	≤30	7.37	5.4576	≤36	PASS	14
BLE_500K	Ant1	2402	5.13	6.11	4.0832	≤30	7.81	6.0395	≤36	PASS	14
		2440	5.19	5.99	3.9719	≤30	7.69	5.8749	≤36	PASS	14
		2480	5.16	5.68	3.6983	≤30	7.38	5.4702	≤36	PASS	14
Note:EIRP=Peak Power+Gain											

**MAXIMUM POWER SPECTRAL DENSITY****TEST RESULT**

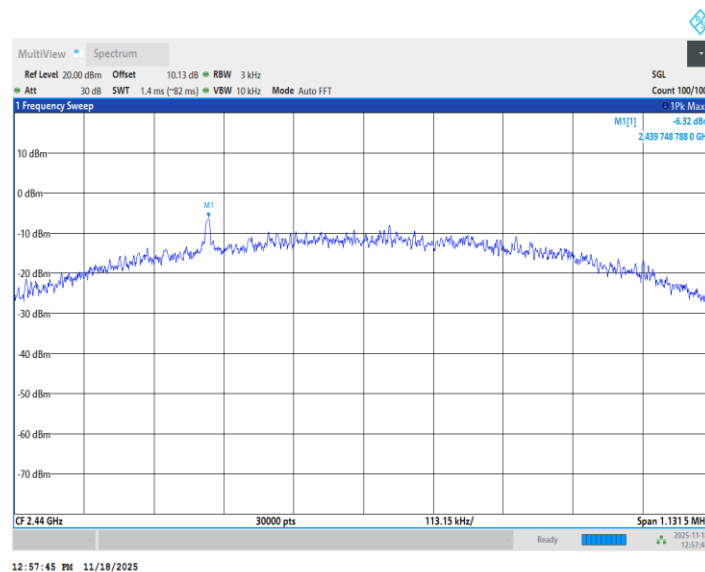
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.76	≤8.00	PASS
		2440	-6.32	≤8.00	PASS
		2480	-7.31	≤8.00	PASS
BLE_2M	Ant1	2404	-8.94	≤8.00	PASS
		2440	-9.89	≤8.00	PASS
		2478	-11.04	≤8.00	PASS
BLE_125K	Ant1	2402	-1.57	≤8.00	PASS
		2440	-1.69	≤8.00	PASS
		2480	-1.94	≤8.00	PASS
BLE_500K	Ant1	2402	-8.05	≤8.00	PASS
		2440	-9.37	≤8.00	PASS
		2480	-9.43	≤8.00	PASS



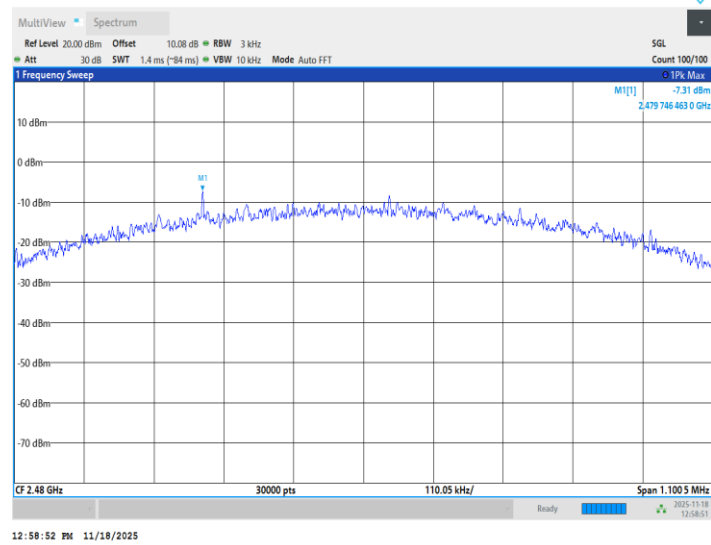
BLE_1M_Ant1_2402



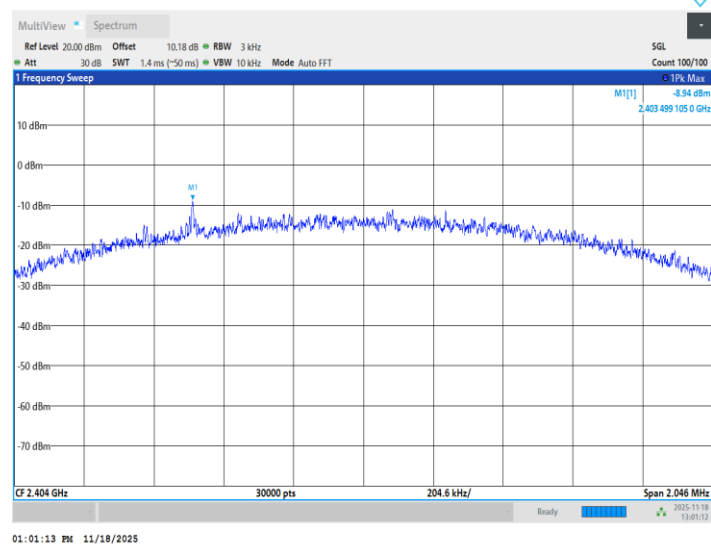
BLE_1M_Ant1_2440



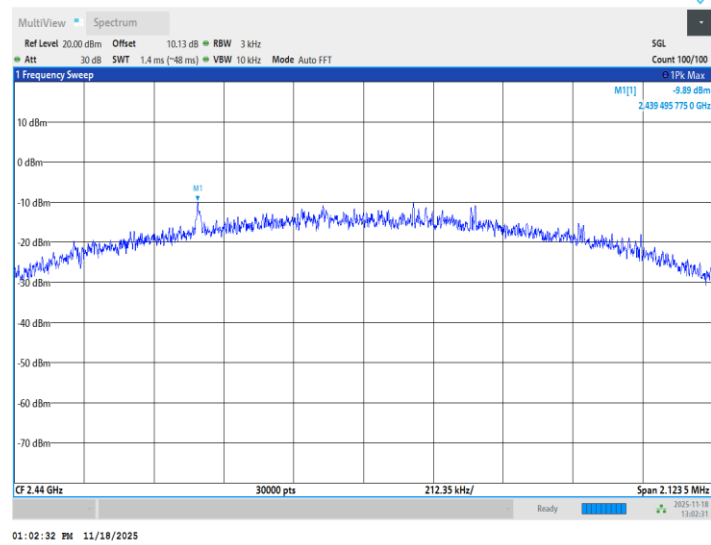
BLE_1M_Ant1_2480



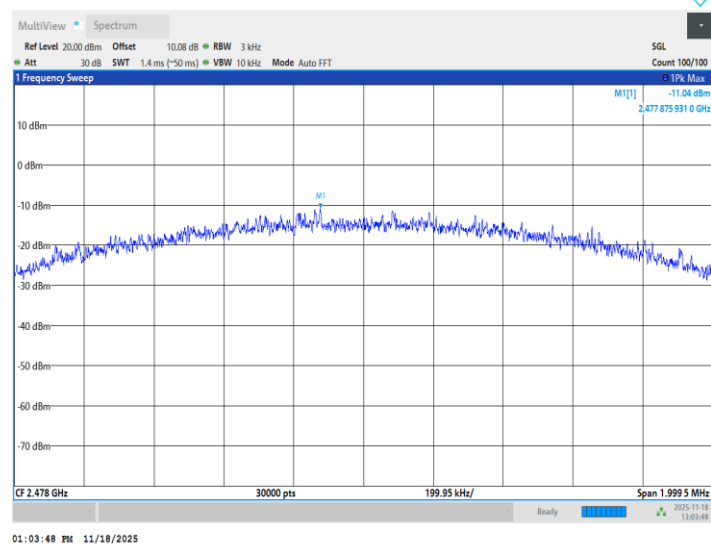
BLE_2M_Ant1_2404



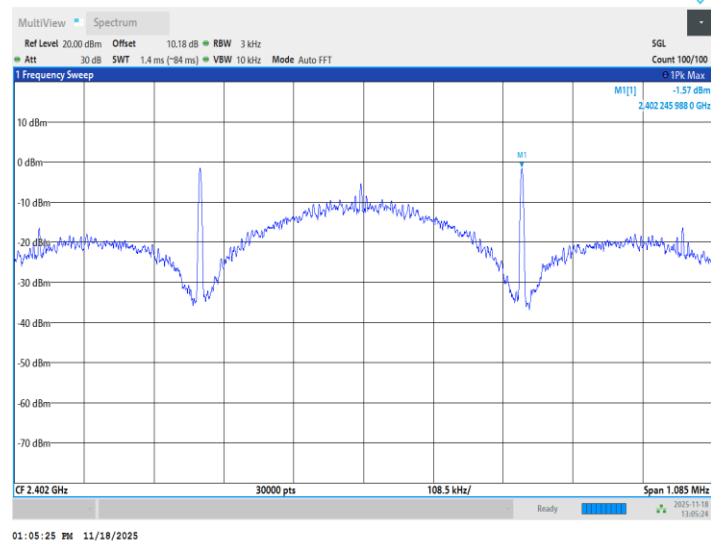
BLE_2M_Ant1_2440



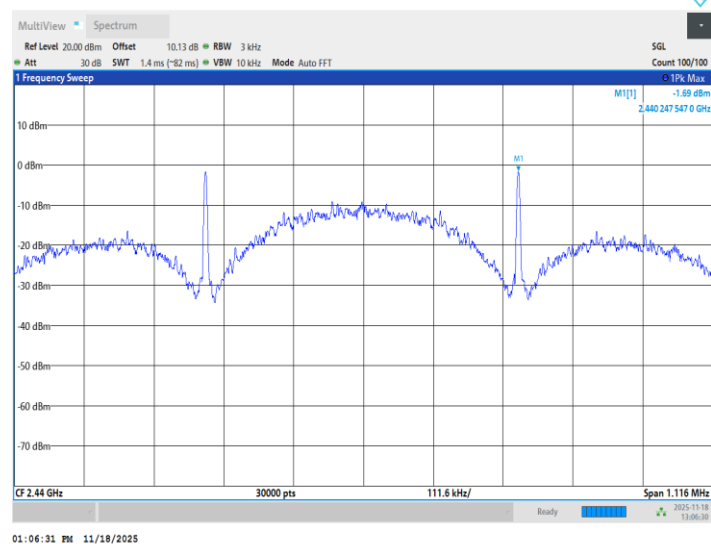
BLE_2M_Ant1_2478



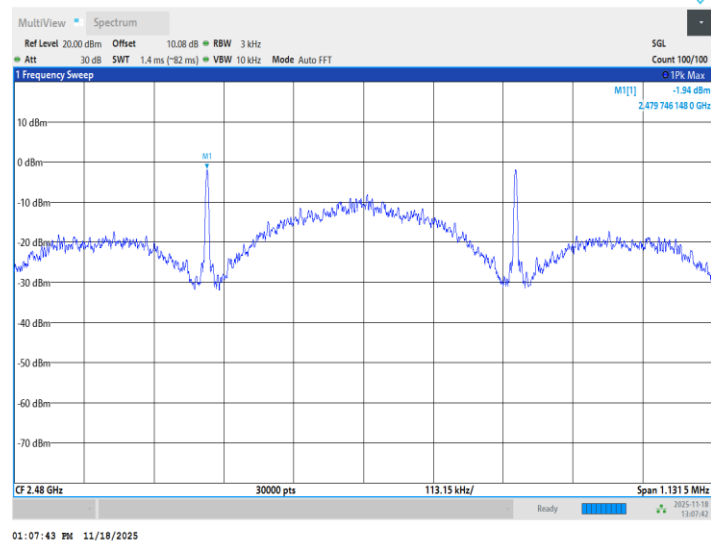
BLE_125K_Ant1_2402



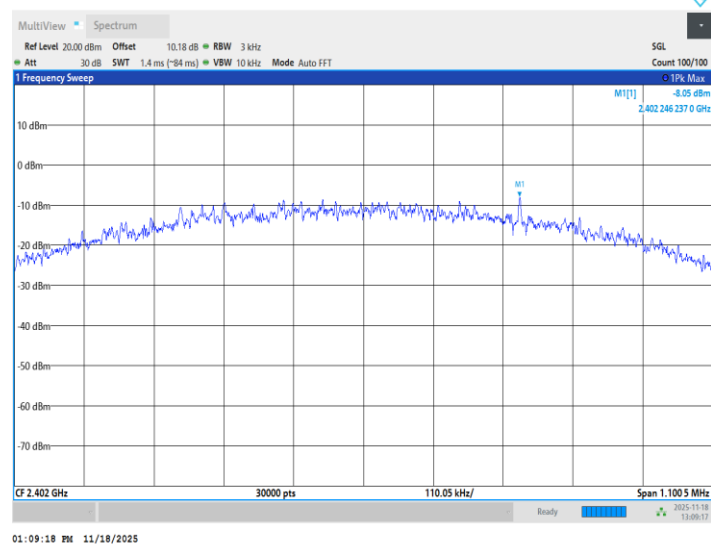
BLE_125K_Ant1_2440



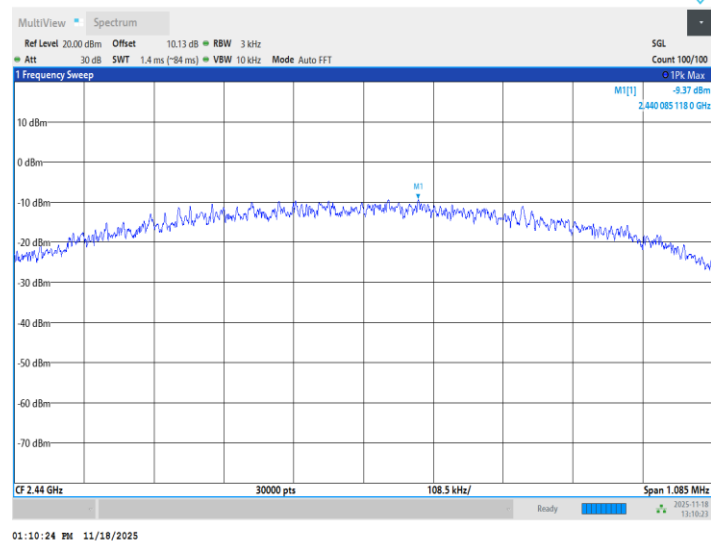
BLE_125K_Ant1_2480



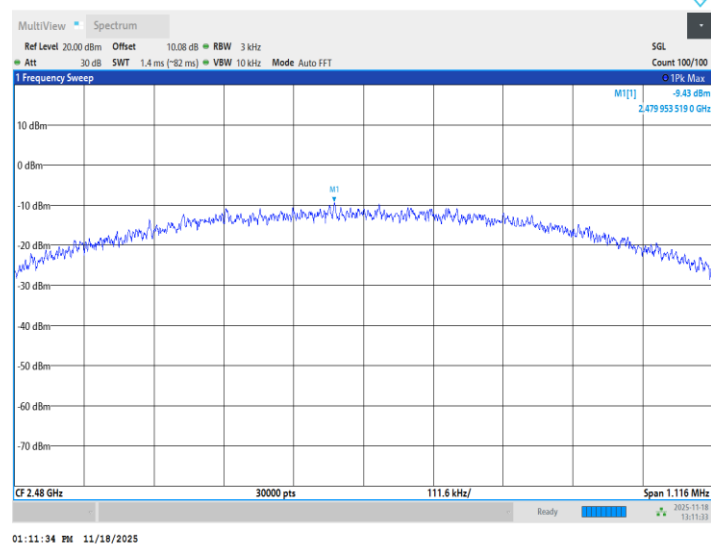
BLE_500K_Ant1_2402



BLE_500K_Ant1_2440



BLE_500K_Ant1_2480



BAND EDGE MEASUREMENTS

TEST RESULT

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.02	-43.92	≤-16.98	PASS
		High	2480	3.49	-50.83	≤-16.51	PASS
BLE_2M	Ant1	Low	2404	2.86	-51.31	≤-17.14	PASS

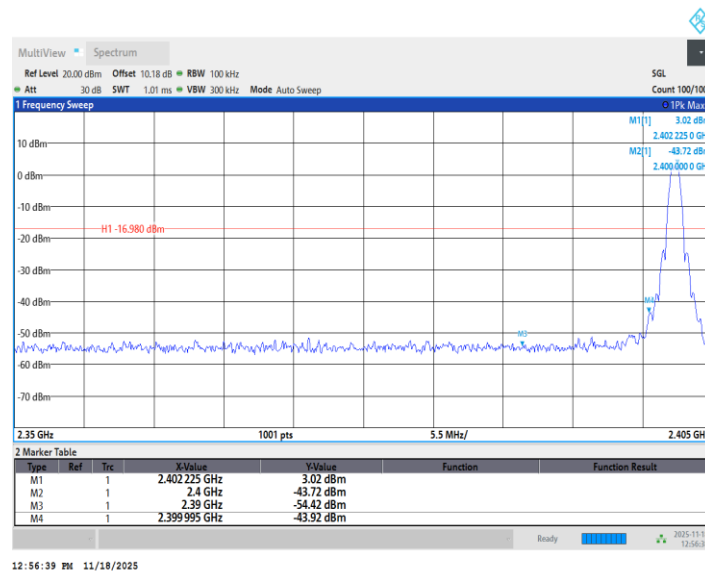


		High	2478	1.10	-50.83	≤ -18.9	PASS
BLE_125K	Ant1	Low	2402	1.04	-44.88	≤ -18.96	PASS
		High	2480	0.52	-51.37	≤ -19.48	PASS
BLE_500K	Ant1	Low	2402	4.04	-44.11	≤ -15.96	PASS
		High	2480	3.26	-51	≤ -16.74	PASS

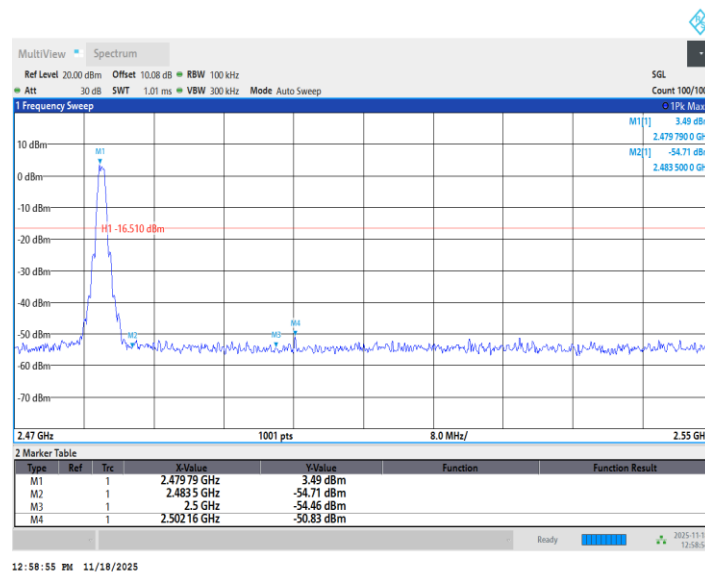


BUREAU VERITAS Test Report No.: PSU-QBJ2511130112RF01
TEST GRAPHS

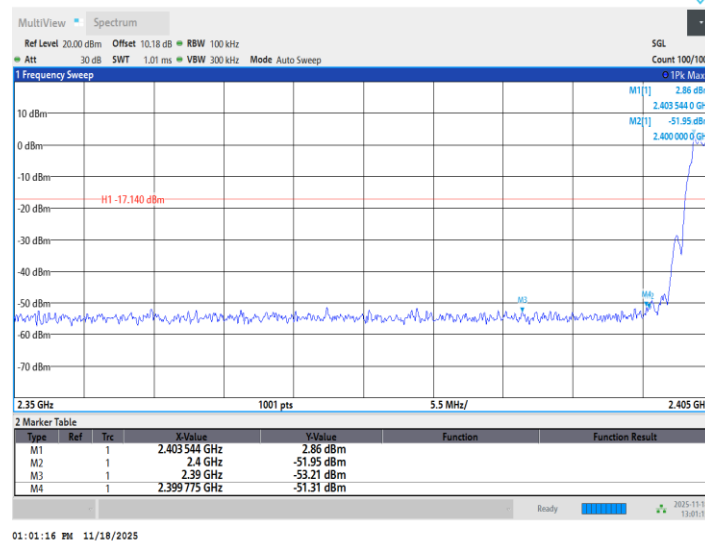
BLE_1M_Ant1_Low_2402



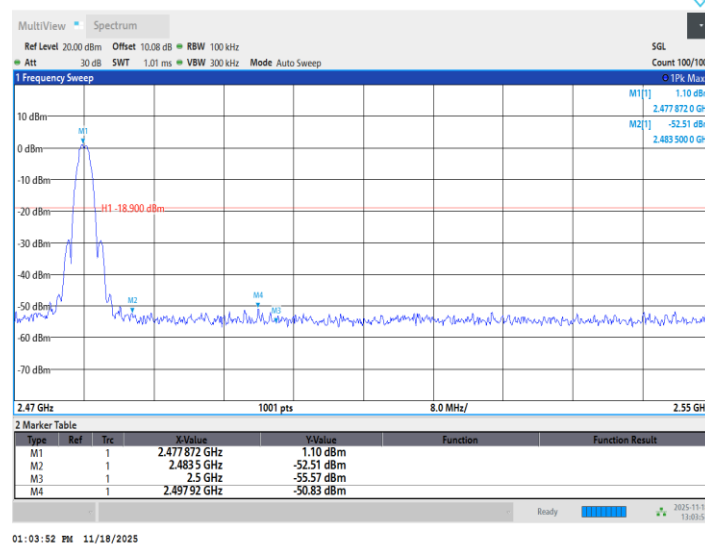
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2404



BLE_2M_Ant1_High_2478



BLE_125K_Ant1_Low_2402