



RF TEST REPORT

Product Name: OBD2 Bluetooth Scanner UD-BS

Model Number: BS101, BS102, BS103, BS104, BS105

FCC ID: 2BW32-BS101

Issued For : Shenzhen Tongzhen Technology Co., LTD
Bldg 1, APT 402, No. 103 Qianjin 1st Road, Xinan Lake
Comm, Xinan Street, Baoan Dist, Shenzhen, Guangdong,
China

Issued By : Shenzhen LGT Test Service Co., Ltd.
Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street,
Pingshan District, Shenzhen, Guangdong, China

Report Number: LGT26G155RF04

Sample Received Date: Jul. 23, 2026

Date of Test: Jul. 23, 2026 ~ Aug. 10, 2026

Date of Issue: Aug. 10, 2026

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TEST REPORT CERTIFICATION

Applicant: Shenzhen Tongzhen Technology Co., LTD
Address: Bldg 1, APT 402, No. 103 Qianjin 1st Road, Xinan Lake Comm, Xinan Street, Baoan Dist, Shenzhen, Guangdong, China
Manufacturer: Shenzhen Tongzhen Technology Co., LTD
Address: Bldg 1, APT 402, No. 103 Qianjin 1st Road, Xinan Lake Comm, Xinan Street, Baoan Dist, Shenzhen, Guangdong, China
Product Name: OBD2 Bluetooth Scanner UD-BS
Trademark: UNIFYDIAG
Model Number: BS101, BS102, BS103, BS104, BS105
Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15.247, Subpart C ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024	PASS

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Revision History

Rev.	Issue Date	Revisions
00	Aug. 10, 2026	Initial Issue



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:
KDB 558074 D01 Part 15.247 Meas Guidance v05r02.

FCC Part 15.247, Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	N/A	--
15.247 (a)(2)	6dB Bandwidth	PASS	--
15.247 (b)(3)	Output Power	PASS	--
15.209	Radiated Spurious Emission	PASS	--
15.247 (d)	Conducted Spurious & Band Edge Emission	PASS	--
15.247 (e)	Power Spectral Density	PASS	--
15.205	Restricted Band Edge Emission	PASS	--
Part 15.247(d)/ Part 15.209(a)	Band Edge Emission	PASS	--
15.203	Antenna Requirement	PASS	--

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024.



1.1 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95** %.

No.	Item	Uncertainty
1	Occupied Channel Bandwidth	$\pm 0.46\%$
2	RF Output Power, Conducted	$\pm 0.71\text{dB}$
3	Power Spectral Density, Conducted	$\pm 1.57\text{dB}$
4	Unwanted Emission, Conducted	$\pm 0.63\text{dB}$
5	Conducted emission	$\pm 2.80\text{dB}$
6	All Emissions, Radiated (0.009-30MHz)	$\pm 2.16\text{dB}$
7	All Emissions, Radiated (30MHz-1GHz)	$\pm 4.61\text{dB}$
8	All Emissions, Radiated (1GHz-18GHz)	$\pm 5.49\text{dB}$
9	All Emissions, Radiated (18GHz-40GHz)	$\pm 4.31\text{dB}$
10	Temperature	$\pm 0.5^{\circ}\text{C}$
11	Humidity	$\pm 2\%$
12	Duty Cycle	$\pm 2.3\%$

Note: The measurement uncertainty is not included in the test result.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	OBD2 Bluetooth Scanner UD-BS	
Test Model Number:	BS101	
Series Number:	BS102, BS103, BS104, BS105	
Model Difference:	Only the model and color are different.	
Product Description:	Operation Frequency:	2402~2480 MHz
	Modulation Type:	GFSK
	Radio Technology:	BLE
	Bluetooth Configuration:	BLE (1M PHY, 2M PHY)
	Number Of Channel:	40
	Antenna Designation:	PCB Antenna
	Antenna Gain (dBi)	1.7
Channel List:	Please refer to the Note 3.	
Rating:	Input: DC 12V	
Hardware Version:	UD-BS BT v1.3	
Software Version:	V2.3.16	
Connecting I/O Port(s):	Please refer to the Note 1.	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refers to the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.
- 3.

Channel List							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480



2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions

Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Worst Mode	Description	Data/Modulation
Mode 1	TX CH00(2402MHz)	1 Mbps/GFSK
Mode 2	TX CH19(2440MHz)	1 Mbps/GFSK
Mode 3	TX CH39(2480MHz)	1 Mbps/GFSK
Mode 4	TX CH00(2402MHz)	2 Mbps/GFSK
Mode 5	TX CH19(2440MHz)	2 Mbps/GFSK
Mode 6	TX CH39(2480MHz)	2 Mbps/GFSK

Note:

(1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

(2) We have be tested for all avaiable U.S. voltage and frequency (For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/60Hz is shown in the report.

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

Test software Version	Test program: BLE	
bt_tool_v1.1.2	Mode Or Modulation type	Power setting
	1M	Default
	2M	Default



2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating

Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	Rongweixin	R241-1202000C	N/A	Input: 100-240V 50/60Hz 1.5A Output: 12V, 2A with ferrite core

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) “YES” means “with core”; “NO” means “without core”.



2.5 EQUIPMENTS LIST

Radiated Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2026-03-02	2027-03-01
Active loop Antenna	ETS	6502	00049544	2025-03-11	2028-03-10
Spectrum Analyzer	Keysight	N9010B	MY60242508	2026-03-03	2027-03-02
Trilog Broadband Antenna (30M-1G)	SCHWARZBECK	VULB 9168	2705	2024-05-17	2027-05-16
Horn Antenna(1-18G)	SCHWARZBECK	3115	10SL0060	2025-03-10	2028-03-09
Horn Antenna(18-40G)	SCHWARZBECK	BBHA 9170	685	2023-10-23	2026-10-22
Pre-amplifier(30M-1G)	EMtrace	RP01A	02019	2026-03-02	2027-03-01
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2026-03-02	2027-03-01
Pre-amplifier(18-40G)	SCHWARZBECK	BBV 9721	9721-019	2025-10-20	2026-10-19
Coaxial cables (9kHz-1GHz)	Juncoax	JMR600-NM NM-8M	N.A	2026-03-03	2027-03-02
Coaxial cables (1GHz-18GHz)	TaiHe	UCD460B-N MSM-1M9	N.A	2026-03-03	2027-03-02
Coaxial cables (18GHz-40GHz)	Junkosha Inc.	MWX241-05 000KMSKM S	N.A	2026-03-03	2027-03-02
Band 2.4G-2.5G Filter	SEKT	K6-2400-250 0-10S4550-00 1	N.A	2026-03-08	2027-03-07
Antenna Tower	SAEMC	BK-4AT-BS-D	SK20210930 08	N.A	N.A
Temperature & Humidity Testing Software	JINGCHUANG	BT-3	N.A	2026-03-05	2027-03-04
EMC-I_V1.5.0.16_SKET					

RF Conducted Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
Signal Analyzer	Keysight	N9010B	MY60242508	2026-03-03	2027-03-02
Signal Analyzer	Keysight	N9020A	MY50530994	2026-03-02	2027-03-01
Power Sensor	R&S	NRP8S	104963	2026-03-02	2027-03-01
RF Automatic Test system	MW	MW100-RFC B	MW220324L G-33	2026-03-03	2027-03-02
MXG Vector Signal Generator	Keysight	N5182B	MY59100717	2026-03-03	2027-03-02
Attenuator	eastsheep	90db	N.A	2026-03-02	2027-03-01
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2026-03-05	2027-03-04
Digital multimeter	FLUKE	F101	N.A	2026-03-03	2027-03-02
DC source	Keysight	E3634A	MY58036468	2026-03-05	2027-03-04
Testing Software	MTS8310_V2.0.0.0_MW				



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

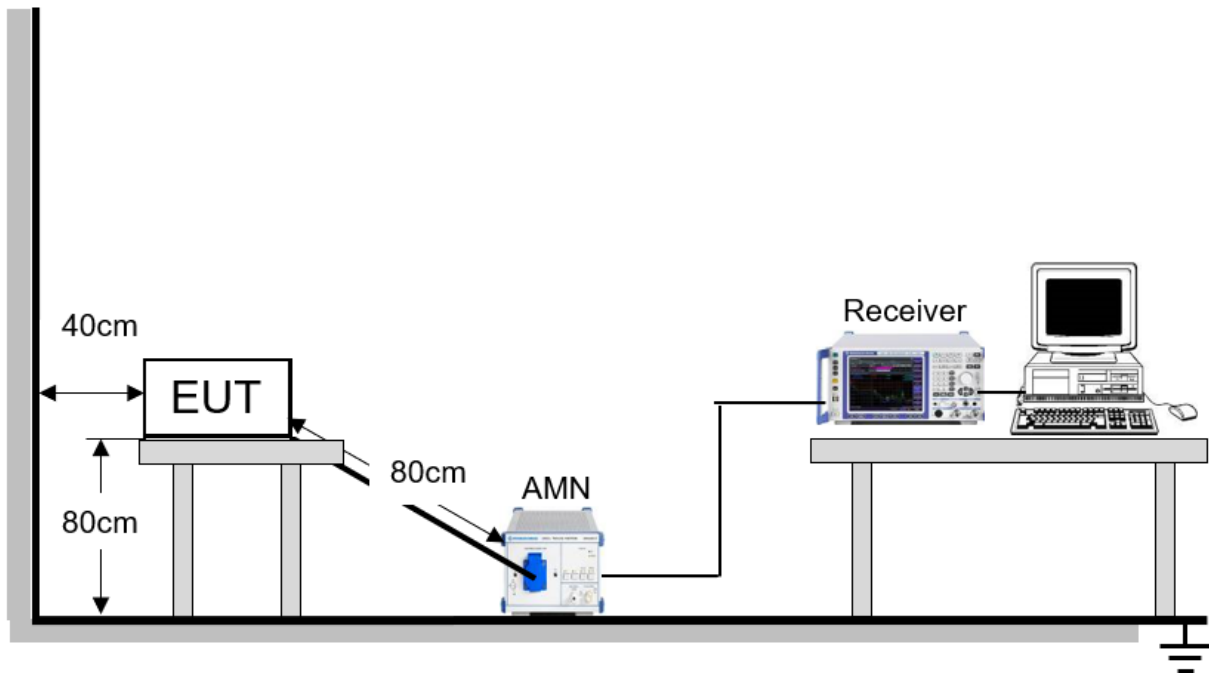
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.3 TEST SETUP



3.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.5 TEST RESULTS

N/A



4. RADIATED EMISSION MEASUREMENT

4.1 RADIATED EMISSION LIMITS

In case the emission fall within the Restricted band specified on Part15.205 (a)&209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (1GHz-25 GHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			



For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz (Peak/QP/AV)
Stop Frequency	150KHz/30MHz (Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz (Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz (Peak/AV)
Stop Frequency	10th carrier hamonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

For Restricted band

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2310 to 2410 MHz Upper Band Edge: 2475 to 2500 MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

Receiver Parameter	Setting
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.2 TEST PROCEDURE

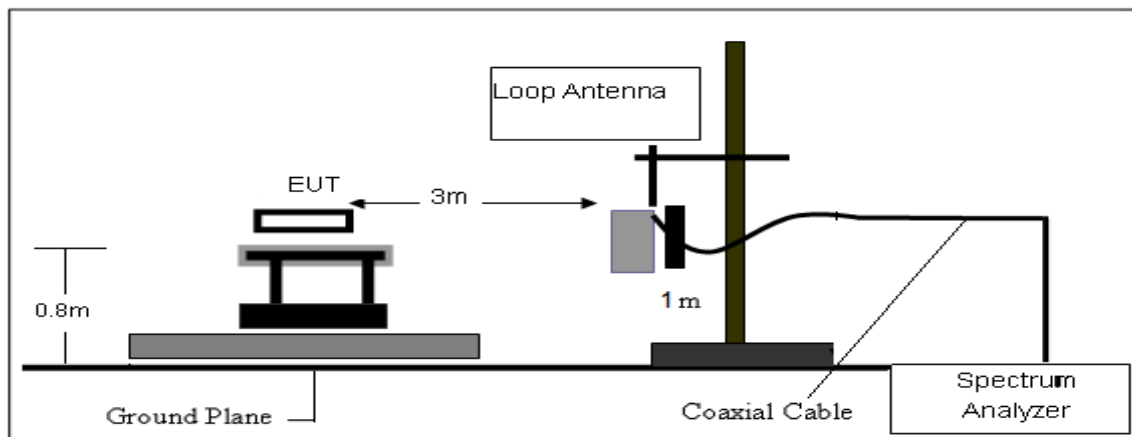
- The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

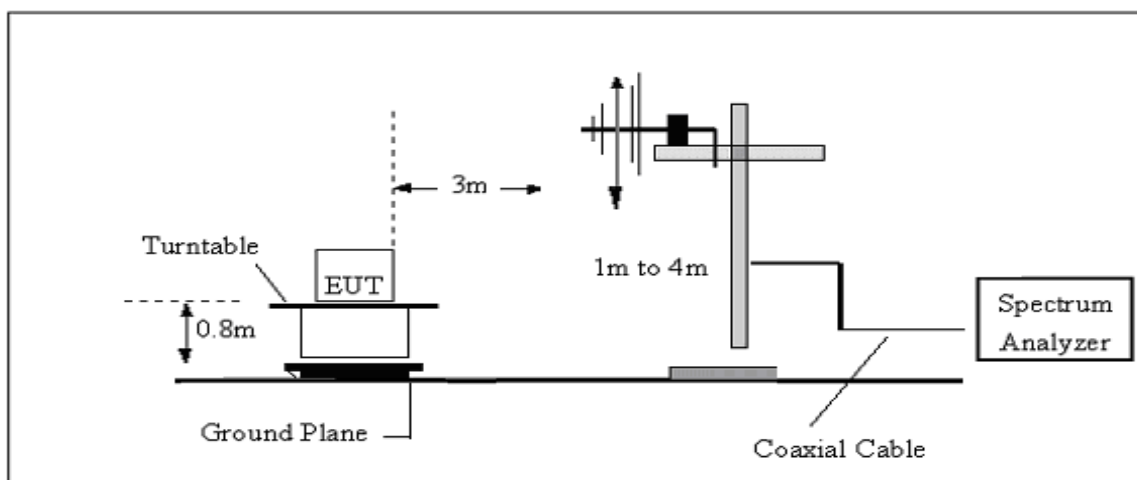
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

4.3 TEST SETUP

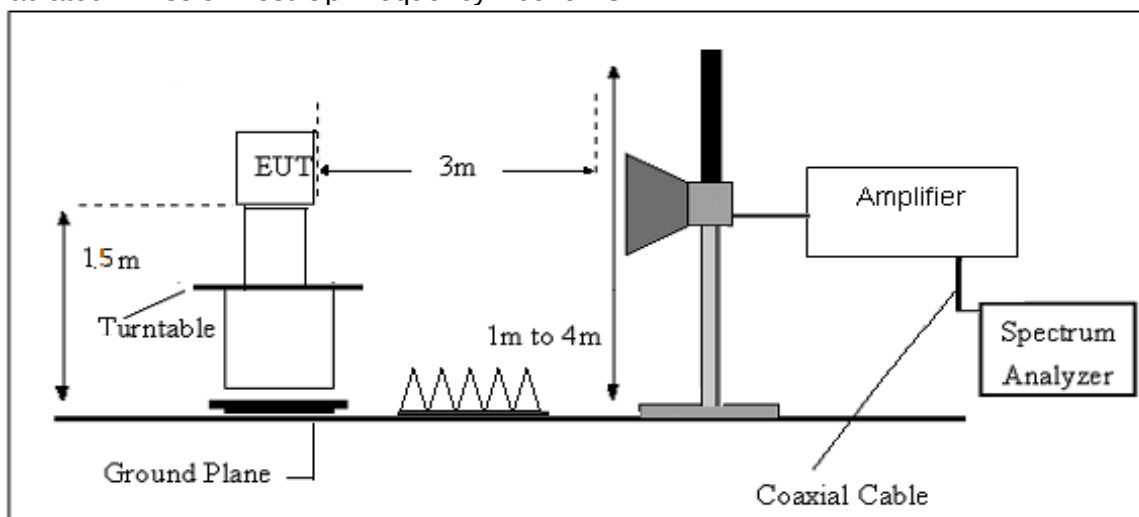
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



4.4 EUT OPERATING CONDITIONS

Please refer to section 3.4 of this report.

4.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = AF + CL - AG$$



4.6 TEST RESULTS

Results of Radiated Emissions (9 KHz~30MHz)

No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Remark
1*	-	-	-	-	-	-	-	See Note

Note:

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.



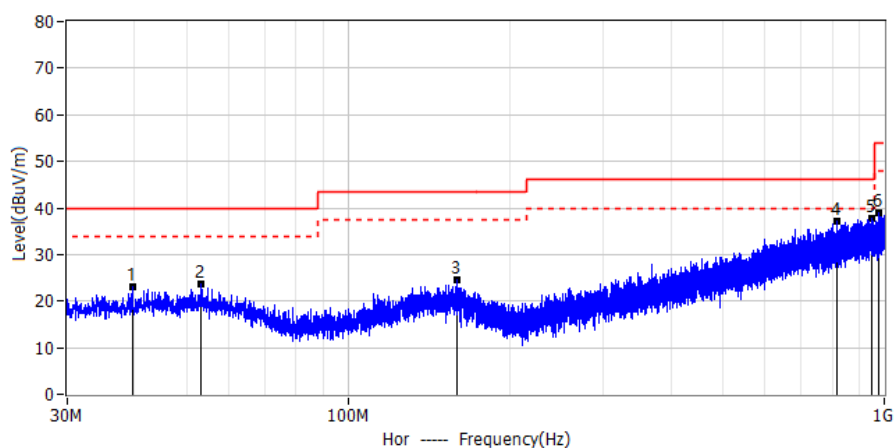
Results of Radiated Emissions (30MHz~1000MHz)

Note:1. All mode has been tested, only shown the worst case data.

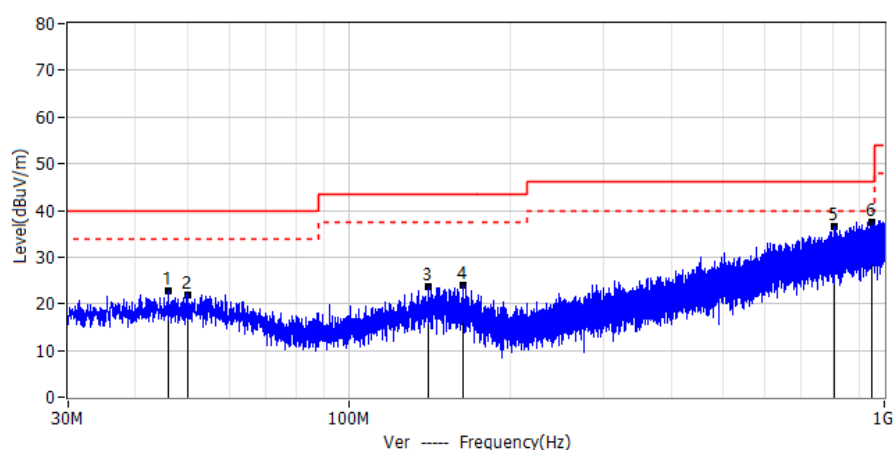
2. Note: Level = Reading + Factor

Margin = Level – Limit

Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Date: 2026-07-24
Test Mode: TX BLE 2M 2402	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	39.750	2.83	20.20	23.03	40.00	-16.97	QP	Hor
2*	53.379	2.89	20.84	23.73	40.00	-16.27	QP	Hor
3*	159.831	2.31	22.12	24.43	43.50	-19.07	QP	Hor
4*	815.551	4.01	33.28	37.29	46.00	-8.71	QP	Hor
5*	948.416	2.75	34.91	37.66	46.00	-8.34	QP	Hor
6*	975.825	4.09	35.00	39.09	54.00	-14.91	QP	Hor



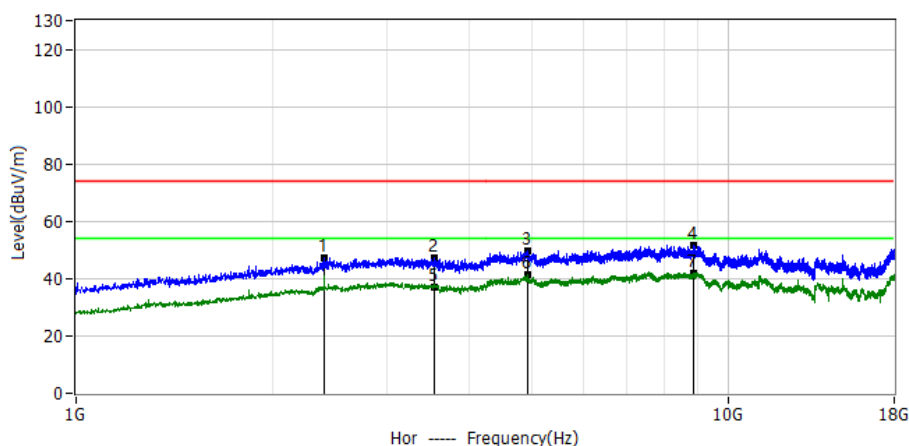
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	46.117	1.98	20.70	22.68	40.00	-17.32	QP	Ver
2*	50.246	1.14	20.73	21.87	40.00	-18.13	QP	Ver
3*	140.729	1.97	21.62	23.59	43.50	-19.91	QP	Ver
4*	164.059	2.31	21.62	23.93	43.50	-19.57	QP	Ver
5*	804.259	3.48	33.11	36.59	46.00	-9.41	QP	Ver
6*	945.779	2.48	34.90	37.38	46.00	-8.62	QP	Ver



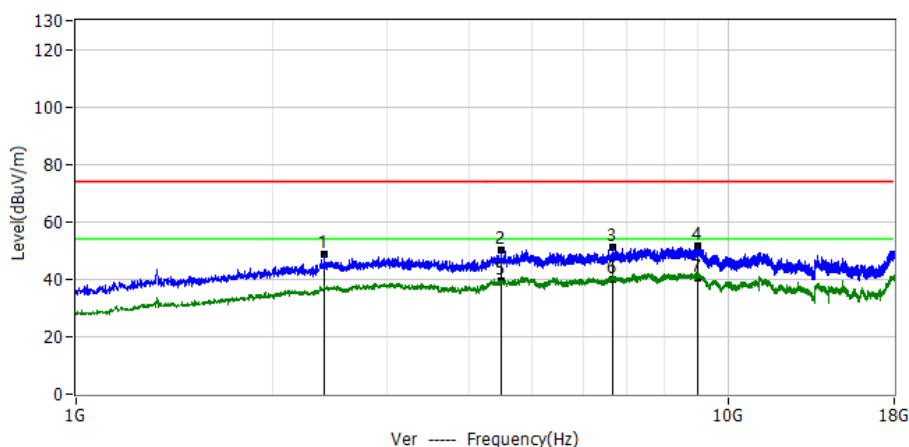
Results of Radiated Emissions (Above 1000MHz)

Note: While performing the testing, the filter is used for avoiding test instrument overload.

Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2402	
Note:	



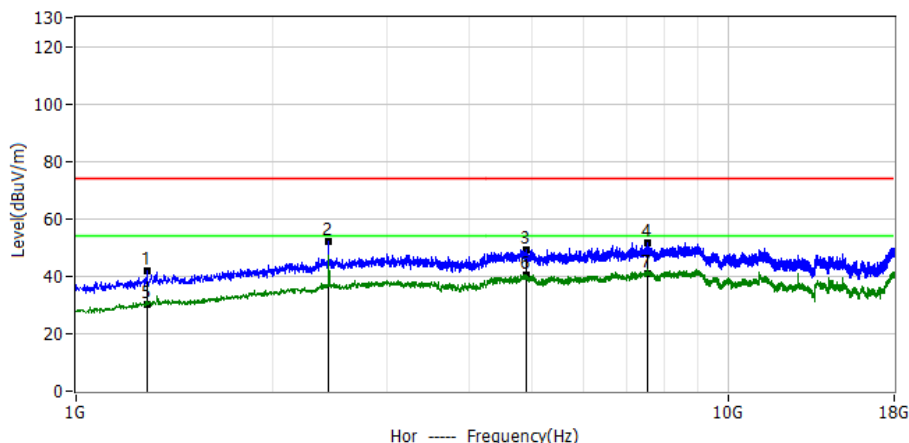
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4025GHz	58.09	-11.05	47.04	/	/	PK	Hor
2*	3.5394GHz	55.33	-8.26	47.07	74.00	-26.93	PK	Hor
3*	4.9185GHz	55.60	-5.94	49.66	74.00	-24.34	PK	Hor
4*	8.8561GHz	58.80	-7.14	51.66	74.00	-22.34	PK	Hor
5*	3.5394GHz	45.46	-8.26	37.20	54.00	-16.80	AV	Hor
6*	4.9185GHz	47.14	-5.94	41.20	54.00	-12.80	AV	Hor
7*	8.8561GHz	48.94	-7.14	41.80	54.00	-12.20	AV	Hor



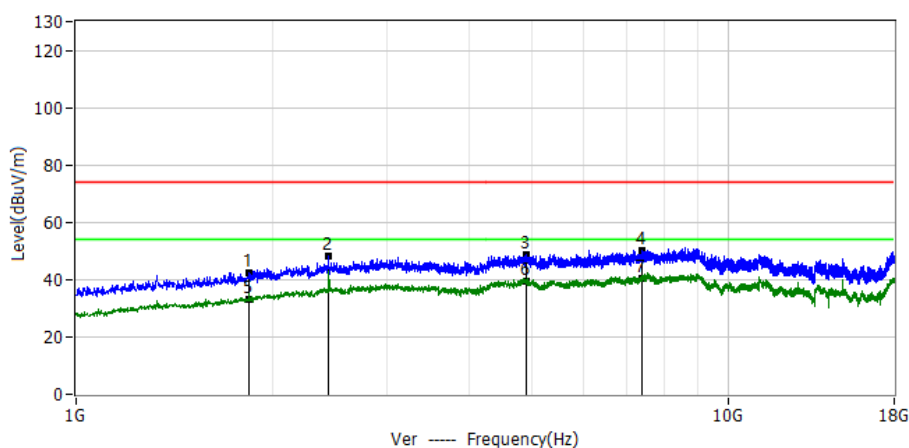
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4025GHz	59.96	-11.05	48.91	/	/	PK	Ver
2*	4.4829GHz	55.64	-5.67	49.97	74.00	-24.03	PK	Ver
3*	6.6546GHz	58.71	-7.37	51.34	74.00	-22.66	PK	Ver
4*	8.9900GHz	58.67	-7.01	51.66	74.00	-22.34	PK	Ver
5*	4.4829GHz	44.87	-5.67	39.20	54.00	-14.80	AV	Ver
6*	6.6546GHz	47.47	-7.37	40.10	54.00	-13.90	AV	Ver
7*	8.9900GHz	47.61	-7.01	40.60	54.00	-13.40	AV	Ver



Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2440	
Note:	



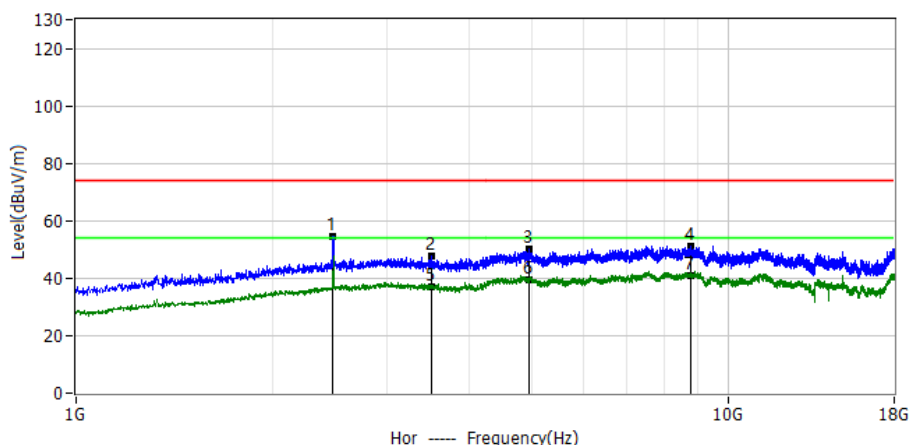
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.2826GHz	64.13	-22.32	41.81	74.00	-32.19	PK	Hor
2*	2.4407GHz	62.99	-10.69	52.30	/	/	PK	Hor
3*	4.9057GHz	55.23	-5.93	49.30	74.00	-24.70	PK	Hor
4*	7.5344GHz	58.80	-7.06	51.74	74.00	-22.26	PK	Hor
5*	1.2826GHz	52.52	-22.32	30.20	54.00	-23.80	AV	Hor
6*	4.9057GHz	46.33	-5.93	40.40	54.00	-13.60	AV	Hor
7*	7.5344GHz	48.06	-7.06	41.00	54.00	-13.00	AV	Hor



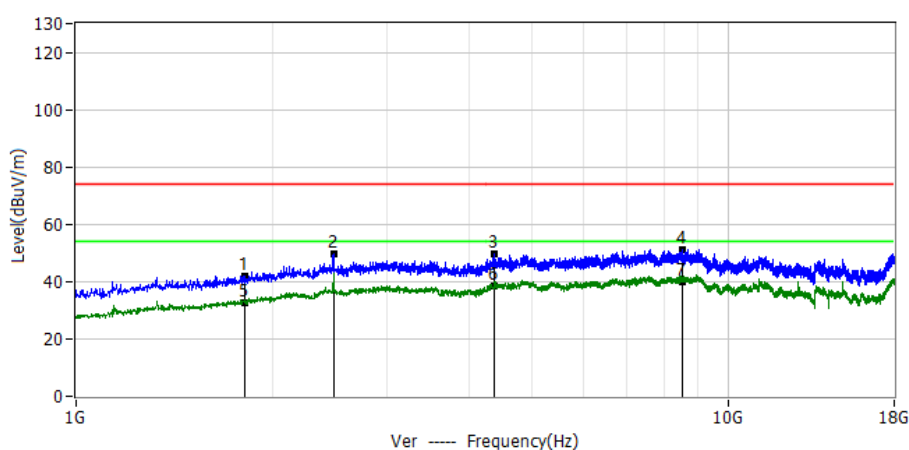
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.8394GHz	59.21	-16.72	42.49	74.00	-31.51	PK	Ver
2*	2.4407GHz	59.07	-10.69	48.38	/	/	PK	Ver
3*	4.8972GHz	54.60	-5.93	48.67	74.00	-25.33	PK	Ver
4*	7.4005GHz	57.26	-7.01	50.25	74.00	-23.75	PK	Ver
5*	1.8394GHz	49.82	-16.72	33.10	54.00	-20.90	AV	Ver
6*	4.8972GHz	45.43	-5.93	39.50	54.00	-14.50	AV	Ver
7*	7.4005GHz	47.31	-7.01	40.30	54.00	-13.70	AV	Ver



Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2480	
Note:	



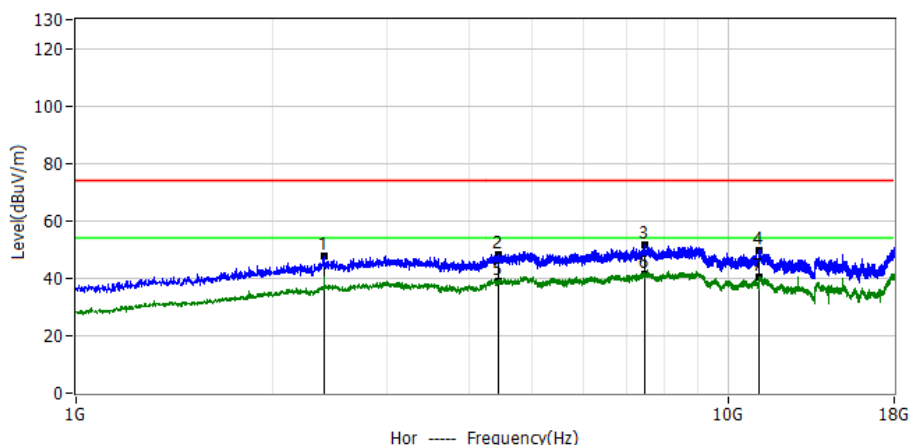
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4790GHz	65.07	-10.34	54.73	/	/	PK	Hor
2*	3.5032GHz	56.14	-8.30	47.84	74.00	-26.16	PK	Hor
3*	4.9652GHz	55.90	-5.98	49.92	74.00	-24.08	PK	Hor
4*	8.7796GHz	58.49	-7.22	51.27	74.00	-22.73	PK	Hor
5*	3.5032GHz	45.40	-8.30	37.10	54.00	-16.90	AV	Hor
6*	4.9652GHz	45.18	-5.98	39.20	54.00	-14.80	AV	Hor
7*	8.7796GHz	48.32	-7.22	41.10	54.00	-12.90	AV	Hor



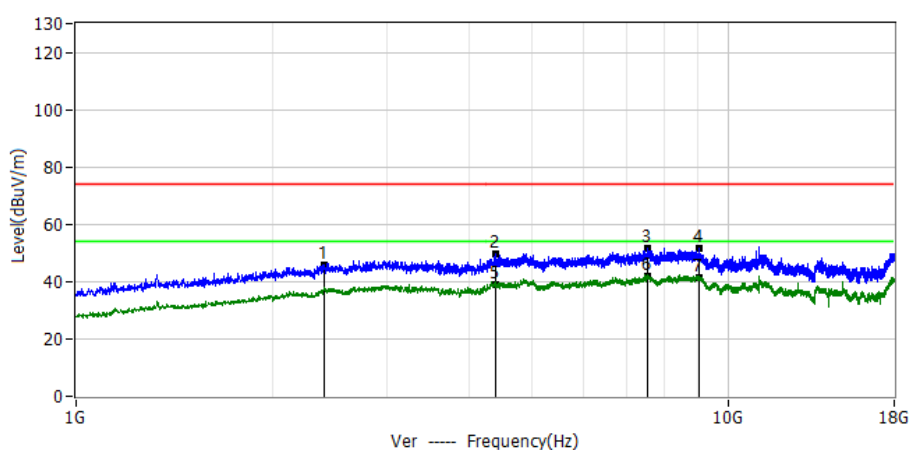
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.8117GHz	59.16	-17.06	42.10	74.00	-31.90	PK	Ver
2*	2.4811GHz	60.21	-10.32	49.89	/	/	PK	Ver
3*	4.3851GHz	55.60	-6.08	49.52	74.00	-24.48	PK	Ver
4*	8.5161GHz	58.54	-7.47	51.07	74.00	-22.93	PK	Ver
5*	1.8117GHz	49.86	-17.06	32.80	54.00	-21.20	AV	Ver
6*	4.3851GHz	44.68	-6.08	38.60	54.00	-15.40	AV	Ver
7*	8.5161GHz	47.47	-7.47	40.00	54.00	-14.00	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2402	
Note:	



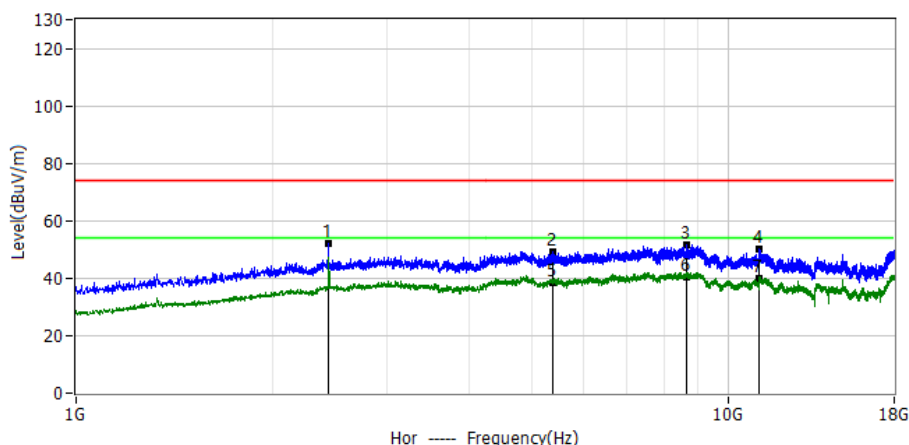
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4025GHz	58.75	-11.05	47.70	/	/	PK	Hor
2*	4.4510GHz	53.93	-5.80	48.13	74.00	-25.87	PK	Hor
3*	7.4642GHz	58.47	-7.00	51.47	74.00	-22.53	PK	Hor
4*	11.1532GHz	54.68	-5.07	49.61	74.00	-24.39	PK	Hor
5*	4.4510GHz	44.60	-5.80	38.80	54.00	-15.20	AV	Hor
6*	7.4642GHz	48.20	-7.00	41.20	54.00	-12.80	AV	Hor
7*	11.1532GHz	45.37	-5.07	40.30	54.00	-13.70	AV	Hor



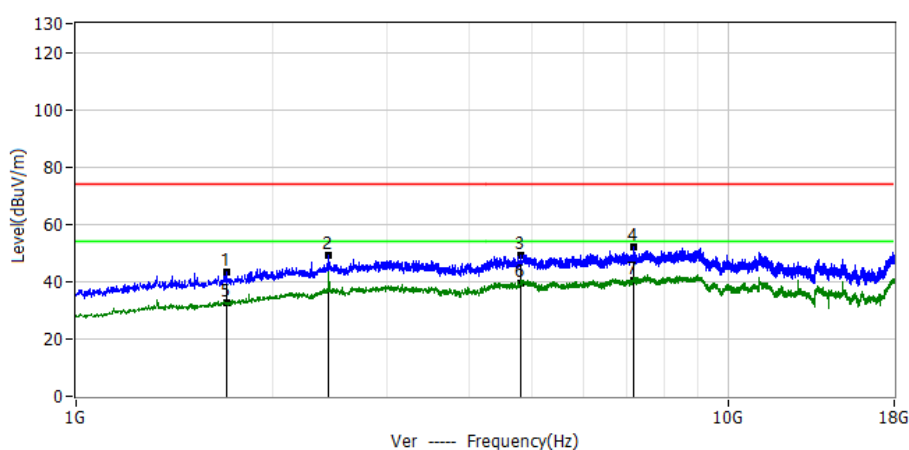
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4004GHz	56.81	-11.07	45.74	/	/	PK	Ver
2*	4.3957GHz	55.53	-6.04	49.49	74.00	-24.51	PK	Ver
3*	7.5174GHz	58.85	-7.02	51.83	74.00	-22.17	PK	Ver
4*	9.0389GHz	58.52	-7.01	51.51	74.00	-22.49	PK	Ver
5*	4.3957GHz	44.94	-6.04	38.90	54.00	-15.10	AV	Ver
6*	7.5174GHz	48.82	-7.02	41.80	54.00	-12.20	AV	Ver
7*	9.0389GHz	48.41	-7.01	41.40	54.00	-12.60	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2440	
Note:	



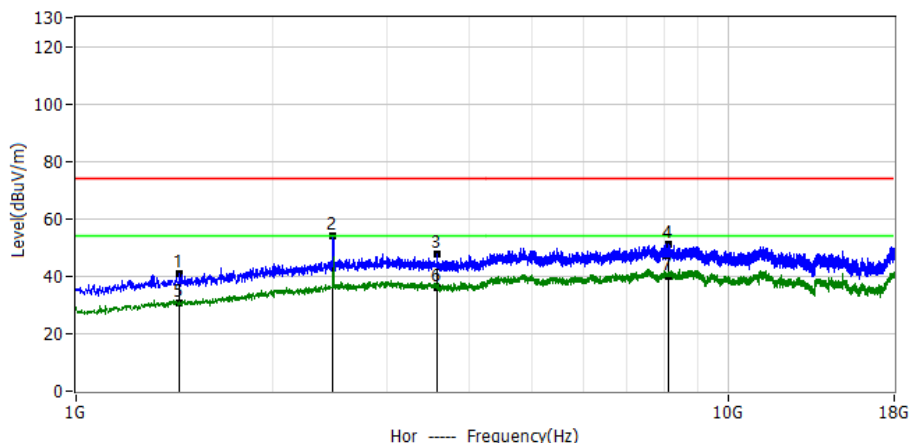
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4407GHz	62.97	-10.69	52.28	/	/	PK	Hor
2*	5.3754GHz	56.65	-7.43	49.22	74.00	-24.78	PK	Hor
3*	8.6606GHz	58.93	-7.33	51.60	74.00	-22.40	PK	Hor
4*	11.1490GHz	55.30	-5.07	50.23	74.00	-23.77	PK	Hor
5*	5.3754GHz	46.13	-7.43	38.70	54.00	-15.30	AV	Hor
6*	8.6606GHz	47.53	-7.33	40.20	54.00	-13.80	AV	Hor
7*	11.1490GHz	45.17	-5.07	40.10	54.00	-13.90	AV	Hor



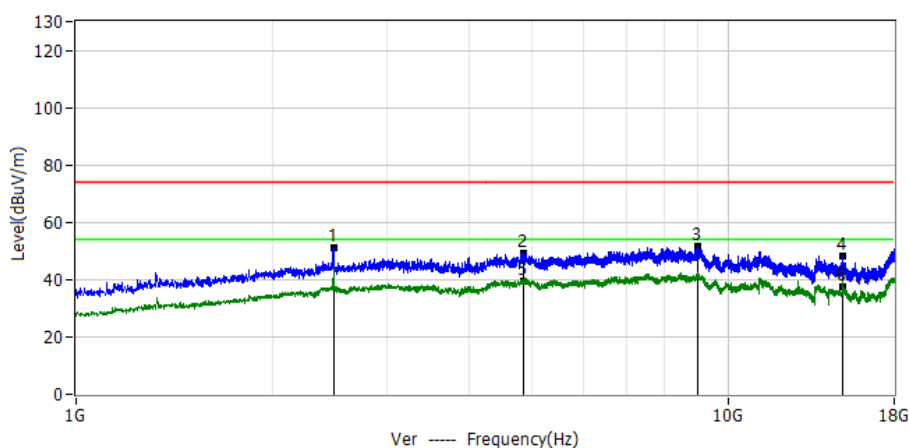
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.7034GHz	61.43	-18.33	43.10	74.00	-30.90	PK	Ver
2*	2.4407GHz	59.97	-10.69	49.28	/	/	PK	Ver
3*	4.8186GHz	55.16	-5.86	49.30	74.00	-24.70	PK	Ver
4*	7.1837GHz	58.94	-7.06	51.88	74.00	-22.12	PK	Ver
5*	1.7034GHz	51.03	-18.33	32.70	54.00	-21.30	AV	Ver
6*	4.8186GHz	45.26	-5.86	39.40	54.00	-14.60	AV	Ver
7*	7.1837GHz	47.46	-7.06	40.40	54.00	-13.60	AV	Ver



Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2480	
Note:	



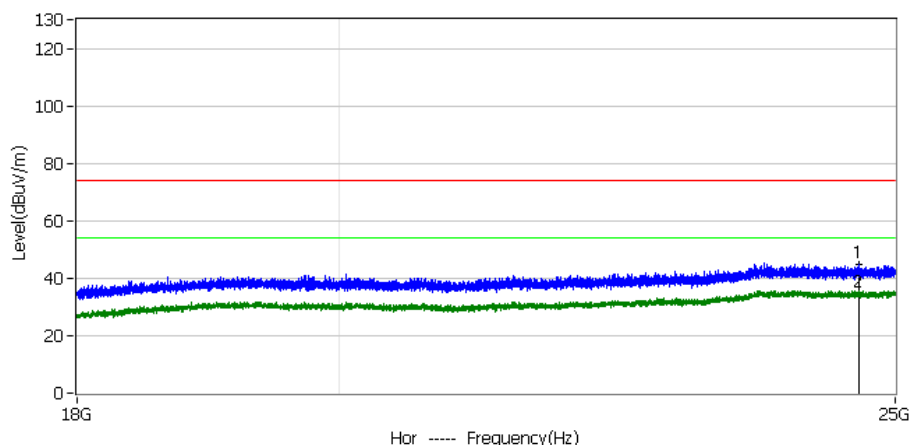
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.4399GHz	61.71	-20.85	40.86	74.00	-33.14	PK	Hor
2*	2.4790GHz	64.43	-10.34	54.09	/	/	PK	Hor
3*	3.5861GHz	56.01	-8.20	47.81	74.00	-26.19	PK	Hor
4*	8.0869GHz	59.02	-7.89	51.13	74.00	-22.87	PK	Hor
5*	1.4399GHz	51.65	-20.85	30.80	54.00	-23.20	AV	Hor
6*	3.5861GHz	44.40	-8.20	36.20	54.00	-17.80	AV	Hor
7*	8.0869GHz	47.89	-7.89	40.00	54.00	-14.00	AV	Hor



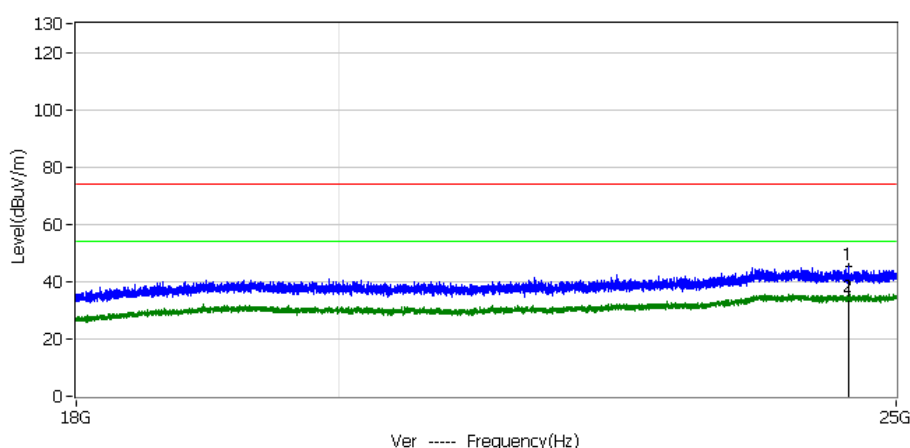
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2.4811GHz	61.55	-10.32	51.23	/	/	PK	Ver
2*	4.8569GHz	55.30	-5.89	49.41	74.00	-24.59	PK	Ver
3*	8.9900GHz	58.79	-7.01	51.78	74.00	-22.22	PK	Ver
4*	14.9825GHz	52.26	-3.88	48.38	74.00	-25.62	PK	Ver
5*	4.8569GHz	45.39	-5.89	39.50	54.00	-14.50	AV	Ver
6*	14.9825GHz	41.58	-3.88	37.70	54.00	-16.30	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2402	
Note:	



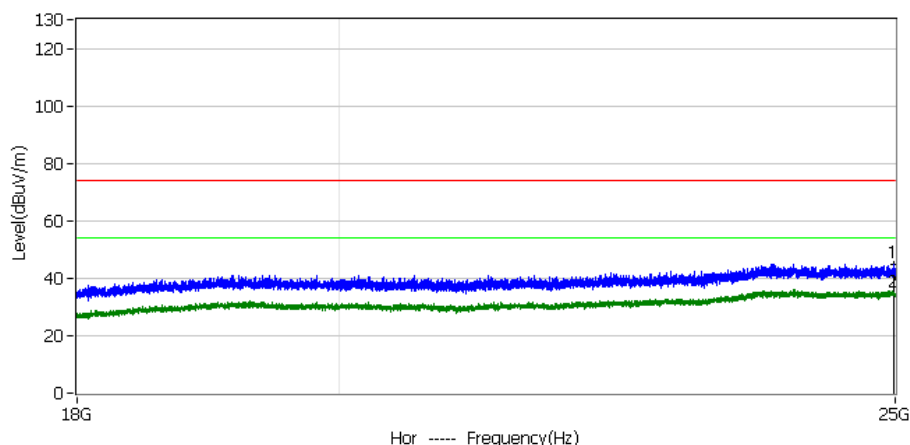
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.645GHz	33.06	11.68	44.74	74.00	-29.26	PK	Hor
2*	24.645GHz	22.82	11.68	34.50	54.00	-19.50	AV	Hor



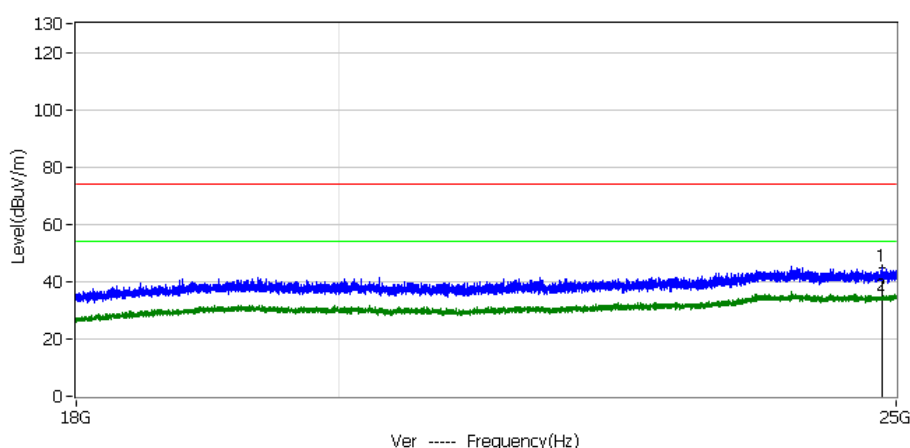
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.534GHz	33.61	11.59	45.20	74.00	-28.80	PK	Ver
2*	24.534GHz	22.51	11.59	34.10	54.00	-19.90	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2440	
Note:	



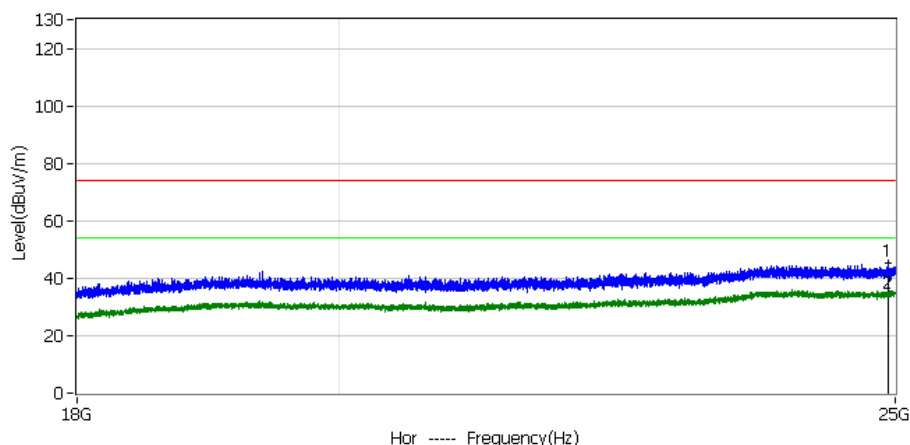
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.990GHz	33.04	11.88	44.92	74.00	-29.08	PK	Hor
2*	24.990GHz	22.62	11.88	34.50	54.00	-19.50	AV	Hor



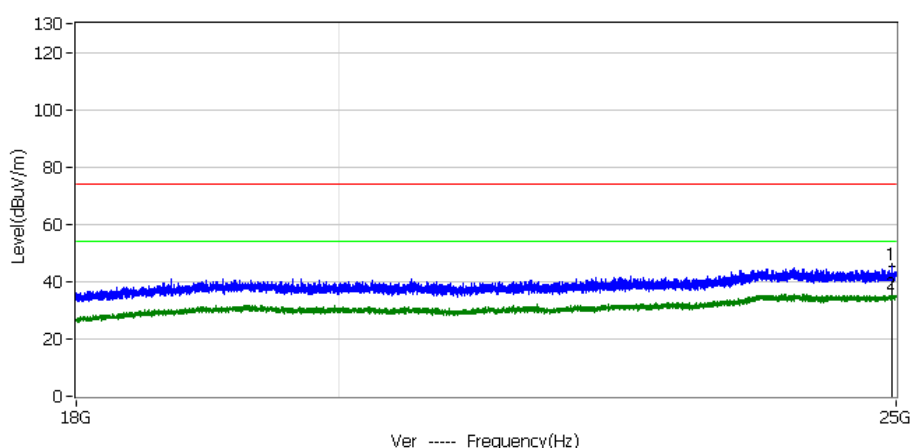
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.855GHz	33.12	11.82	44.94	74.00	-29.06	PK	Ver
2*	24.855GHz	22.68	11.82	34.50	54.00	-19.50	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 1M 2480	
Note:	



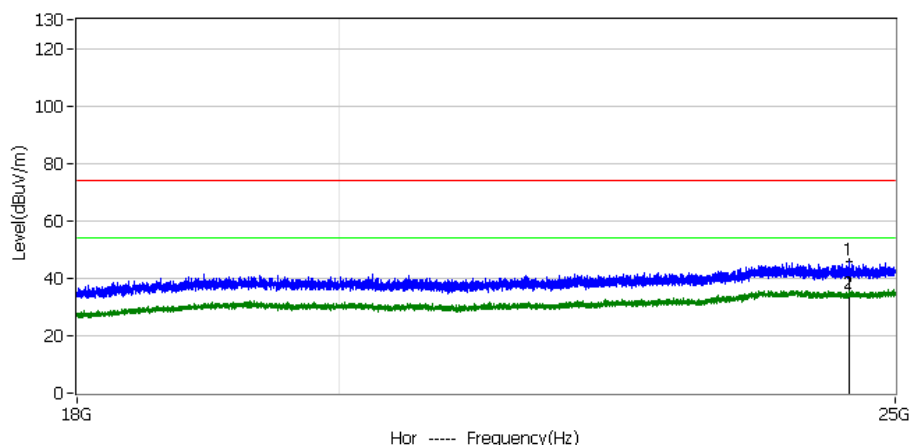
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.928GHz	33.35	11.85	45.20	74.00	-28.80	PK	Hor
2*	24.928GHz	22.45	11.85	34.30	54.00	-19.70	AV	Hor



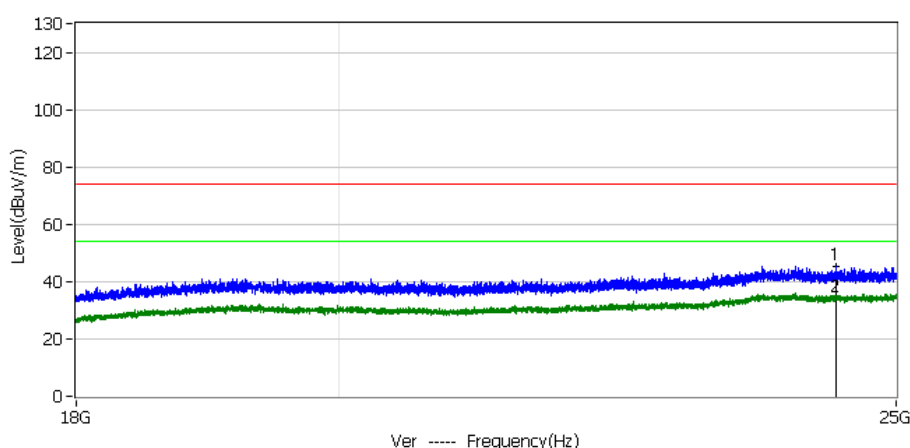
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.956GHz	33.33	11.87	45.20	74.00	-28.80	PK	Ver
2*	24.956GHz	23.03	11.87	34.90	54.00	-19.10	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2402	
Note:	



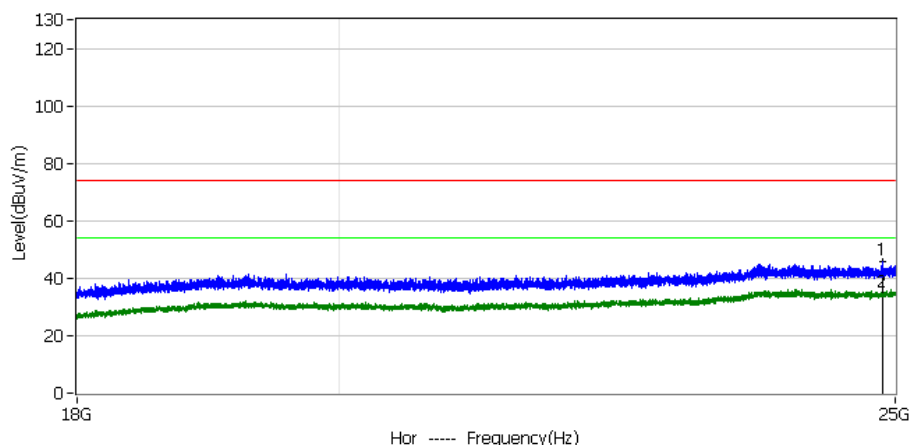
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.547GHz	34.08	11.60	45.68	74.00	-28.32	PK	Hor
2*	24.547GHz	22.70	11.60	34.30	54.00	-19.70	AV	Hor



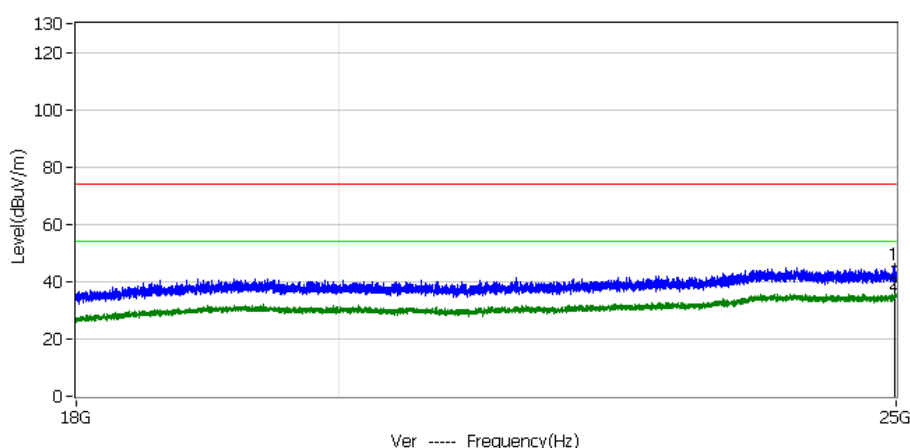
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.408GHz	33.66	11.48	45.14	74.00	-28.86	PK	Ver
2*	24.408GHz	22.72	11.48	34.20	54.00	-19.80	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2440	
Note:	



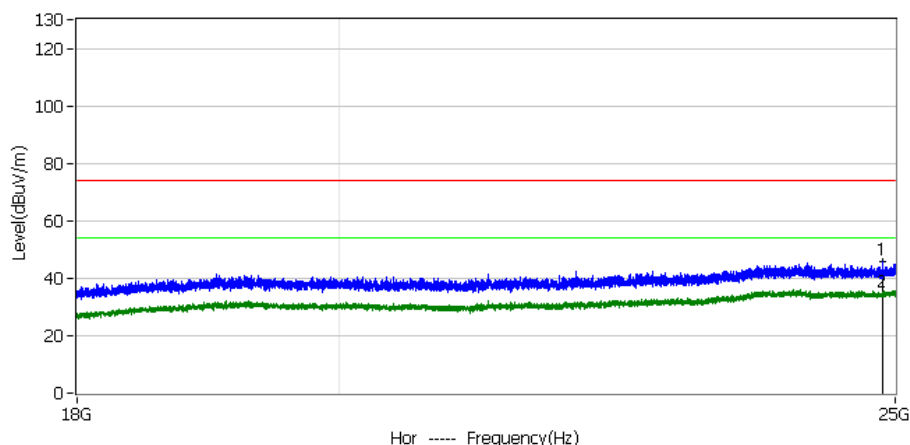
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.873GHz	33.76	11.83	45.59	74.00	-28.41	PK	Hor
2*	24.873GHz	22.67	11.83	34.50	54.00	-19.50	AV	Hor



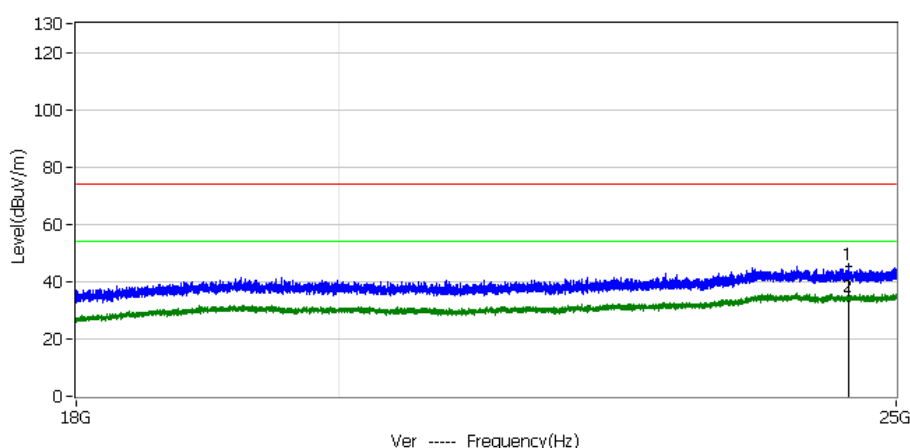
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.983GHz	33.33	11.88	45.21	74.00	-28.79	PK	Ver
2*	24.983GHz	23.12	11.88	35.00	54.00	-19.00	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2480	
Note:	



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.872GHz	34.15	11.83	45.98	74.00	-28.02	PK	Hor
2*	24.872GHz	22.67	11.83	34.50	54.00	-19.50	AV	Hor

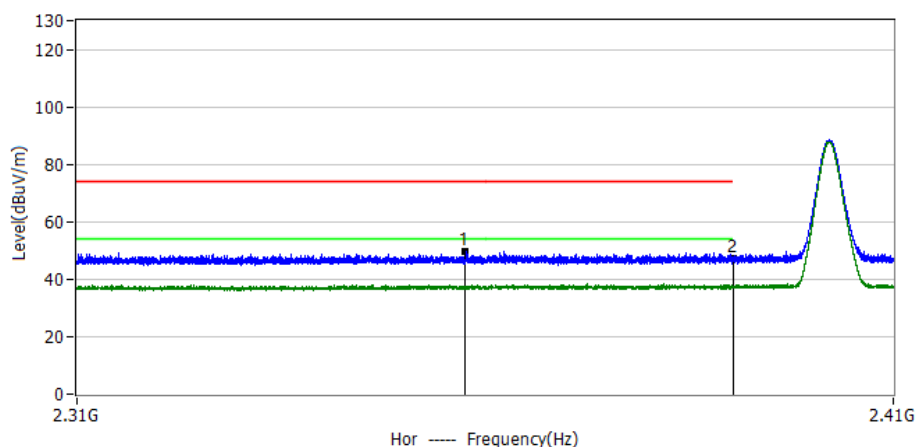


No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	24.525GHz	33.55	11.58	45.13	74.00	-28.87	PK	Ver
2*	24.525GHz	22.32	11.58	33.90	54.00	-20.10	AV	Ver

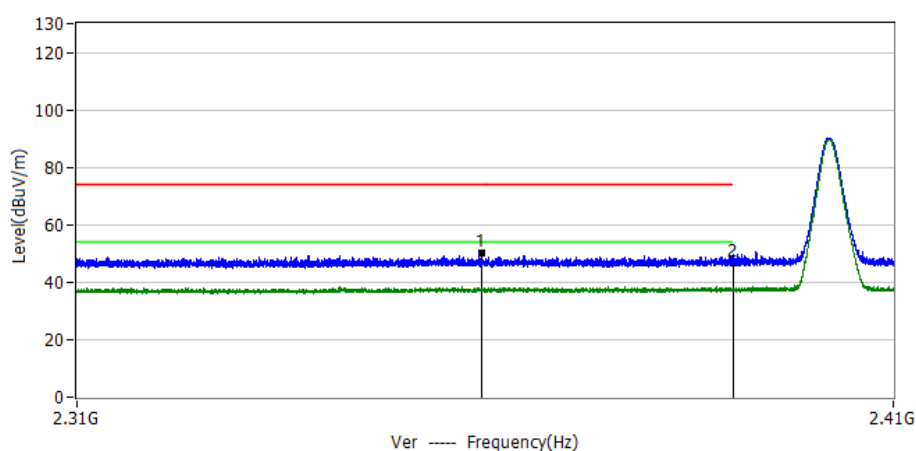


4.6 TEST RESULTS (BAND EDGE REQUIREMENTS)

Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Date: 2026-08-06
Test Mode: BLE 1M 2402M	
Note:	



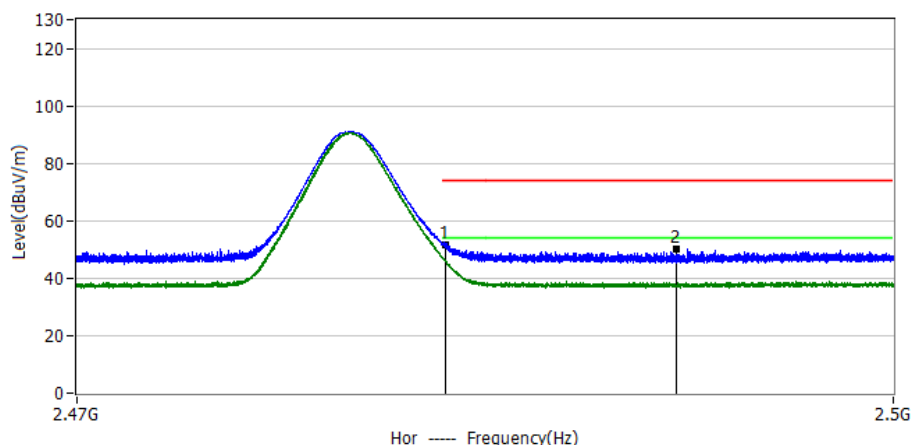
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2357.000	59.98	-10.29	49.69	74.00	-24.31	PK	Hor
2*	2390.000	57.22	-9.92	47.30	74.00	-26.70	PK	Hor



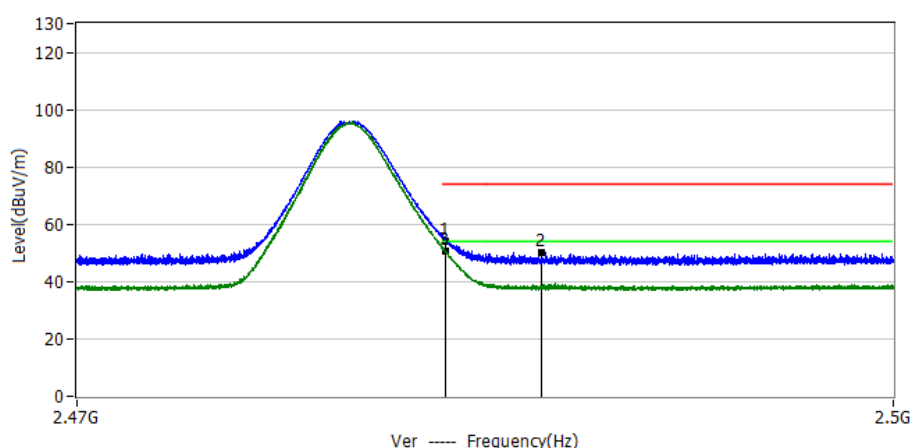
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2359.000	60.49	-10.27	50.22	74.00	-23.78	PK	Ver
2*	2390.000	56.42	-9.92	46.50	74.00	-27.50	PK	Ver



Project: LGT26G155	Test Engineer: zhangchengxiang
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Date: 2026-08-06
Test Mode: BLE 1M 2480M	
Note:	



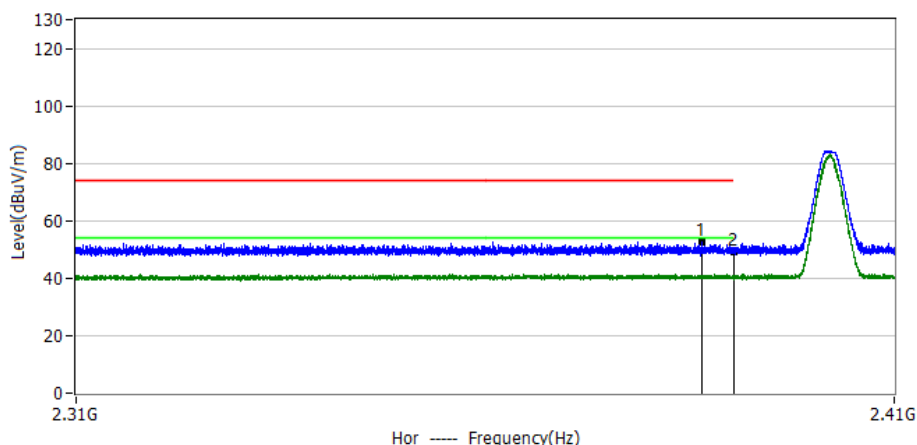
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2483.500	60.08	-8.68	51.40	74.00	-22.60	PK	Hor
2*	2492.000	58.53	-8.52	50.01	74.00	-23.99	PK	Hor



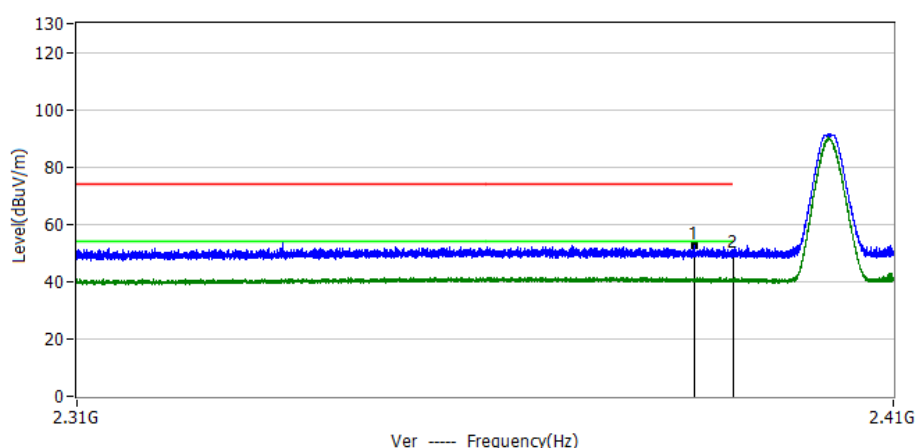
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2483.500	62.88	-8.68	54.20	74.00	-19.80	PK	Ver
2*	2487.000	58.65	-8.62	50.03	74.00	-23.97	PK	Ver
3*	2483.500	59.18	-8.68	50.50	54.00	-3.50	AV	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2402	
Note:	



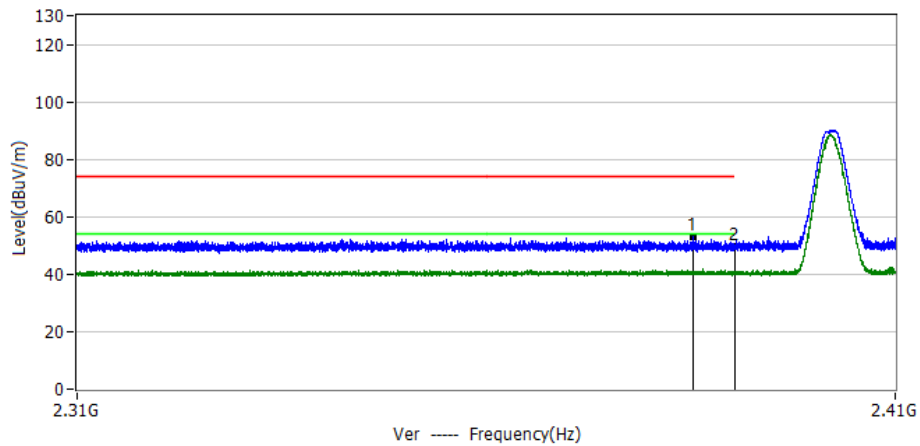
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2386.1000	17.02	35.57	52.59	74.00	-21.41	PK	Hor
2*	2390.0000	13.71	35.59	49.30	74.00	-24.70	PK	Hor



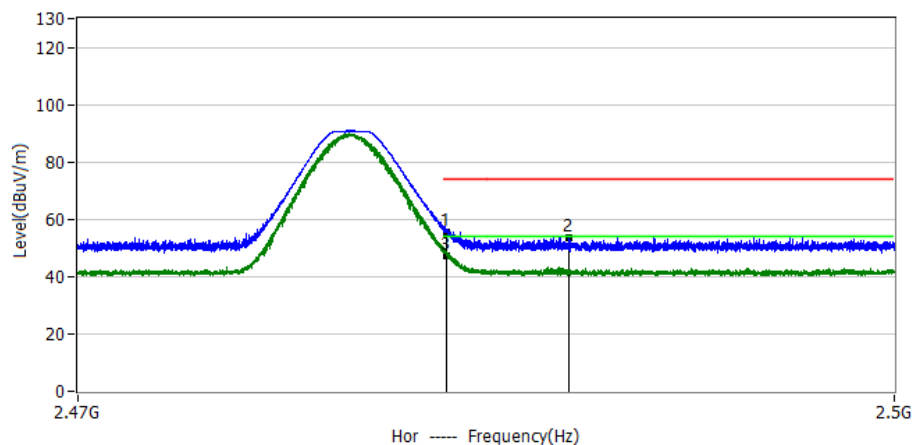
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2385.3000	17.25	35.57	52.82	74.00	-21.18	PK	Ver
2*	2390.0000	13.91	35.59	49.50	74.00	-24.50	PK	Ver



Project: LGT26G155	Test Engineer: zhangyangda
EUT: OBD2 Bluetooth Scanner UD-BS	Temperature: 25.8°C
M/N: BS101	Humidity: 54%RH
Test Voltage: DC 12V	Test Data: 2026-08-06
Test Mode: BLE 2M 2402	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2384.9000	17.27	35.57	52.84	74.00	-21.16	PK	Ver
2*	2390.0000	14.31	35.59	49.90	74.00	-24.10	PK	Ver



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	2483.5000	19.52	35.98	55.50	74.00	-18.50	PK	Hor
2*	2488.0000	17.72	36.00	53.72	74.00	-20.28	PK	Hor
3*	2483.5000	11.12	35.98	47.10	54.00	-6.90	AV	Hor



5. CONDUCTED SPURIOUS & BAND EDGE EMISSION

5.1 LIMIT

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

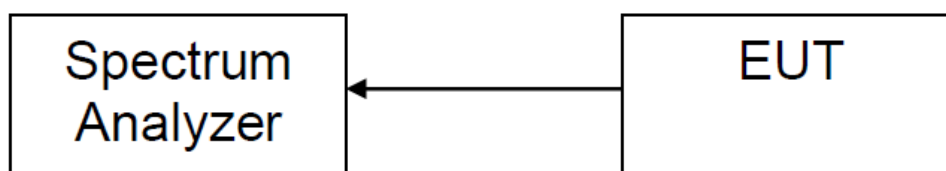
5.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2300 – 2407 MHz Upper Band Edge: 2475 – 2500 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

5.3 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth(RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

5.4 EUT OPERATION CONDITIONS

Please refer to section 3.4 of this report.

5.5 TEST RESULTS

For the measurement records, refer to the appendix I.

Note: Not recorded emission from 9 KHz to 30 MHz as emission level at least 20dBc lower than emission limit.



6. POWER SPECTRAL DENSITY TEST

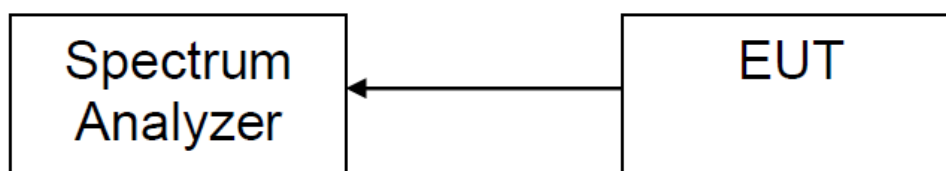
6.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	≤ 8 dBm (RBW ≥ 3 KHz)	2400-2483.5	PASS

6.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW to: $100 \text{ kHz} \geq \text{RBW} \geq 3 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3 TEST SETUP



6.4 EUT OPERATION CONDITIONS

Please refer to section 3.4 of this report.

6.5 TEST RESULTS

For the measurement records, refer to the appendix I.



7. BANDWIDTH TEST

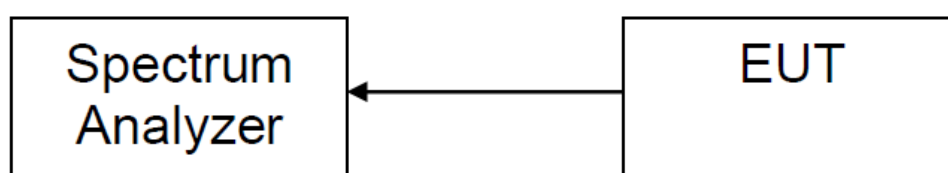
7.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

7.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW $\geq$ 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS

Please refer to section 3.4 of this report.

7.5 TEST RESULTS

For the measurement records, refer to the appendix I.



8. PEAK OUTPUT POWER TEST

8.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

8.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

RBW $\geq$ DTS bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

- Set the RBW $\geq$ DTS bandwidth.
- Set VBW $\geq [3 \times \text{RBW}]$.
- Set span $\geq [3 \times \text{RBW}]$.
- Sweep time = auto couple.
- Detector = peak.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

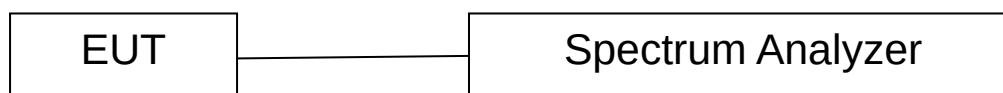
DTS bandwidth:

- Set the RBW = 1 MHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Set the span $\geq [1.5 \times \text{DTS bandwidth}]$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

PKPM1 Peak power sensor method:

The maximum peak conducted output power may be measured using a broadband peak RF power sensor. The power sensor shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

8.3 TEST SETUP



8.4 EUT OPERATION CONDITIONS

Please refer to section 3.4 of this report.

8.5 TEST RESULTS

For the measurement records, refer to the appendix I.



9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

9.2 EUT ANTENNA

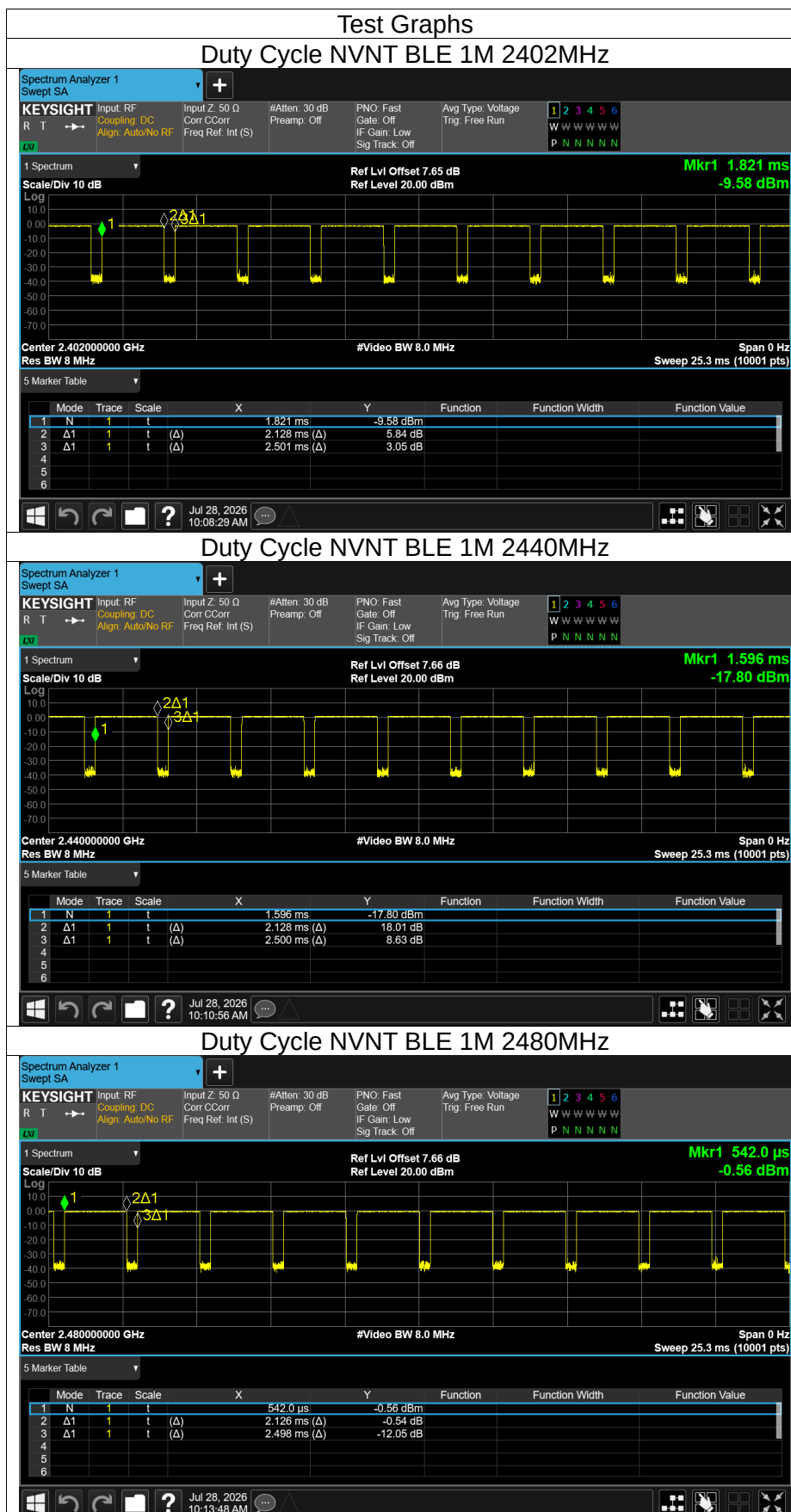
The EUT antenna is PCB Antenna. It comply with the standard requirement.

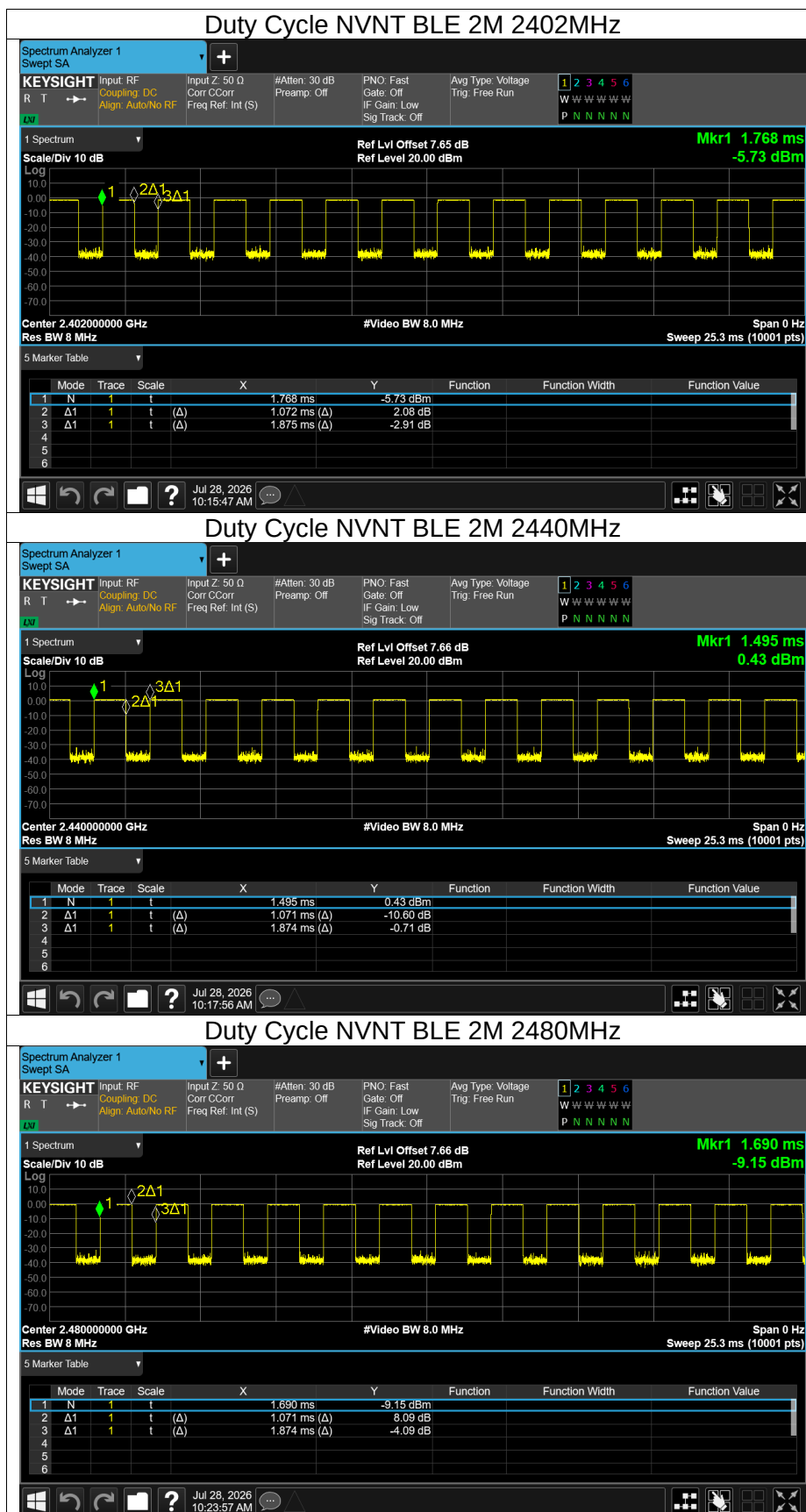


APPENDIX I - TEST RESULTS

Duty Cycle

Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	2.128	2.501	85.09	0.7	0.47
NVNT	BLE 1M	2440	2.128	2.5	85.12	0.7	0.47
NVNT	BLE 1M	2480	2.126	2.498	85.11	0.7	0.47
NVNT	BLE 2M	2402	1.072	1.875	57.17	2.43	0.93
NVNT	BLE 2M	2440	1.071	1.874	57.15	2.43	0.93
NVNT	BLE 2M	2480	1.071	1.874	57.15	2.43	0.93

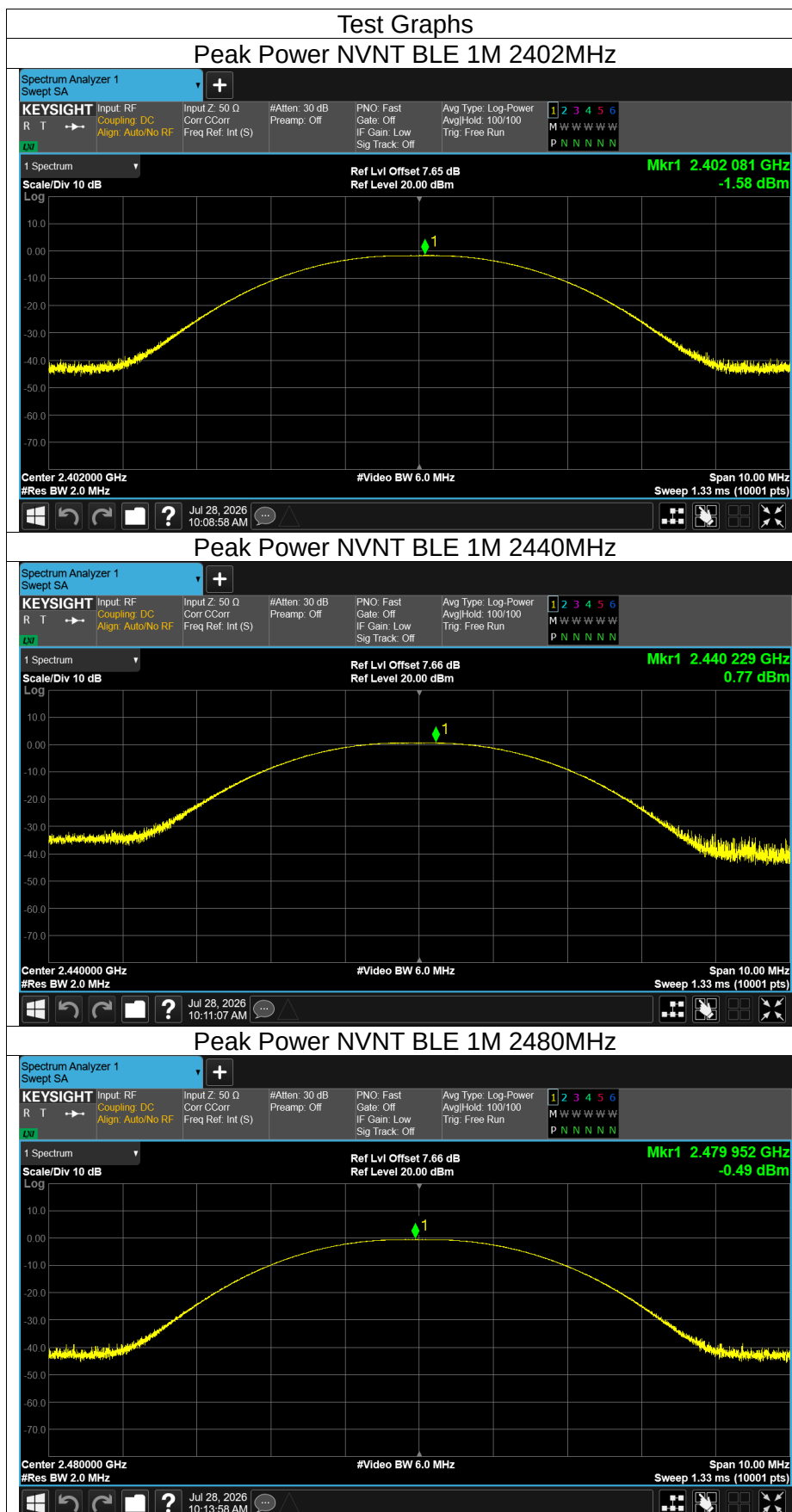


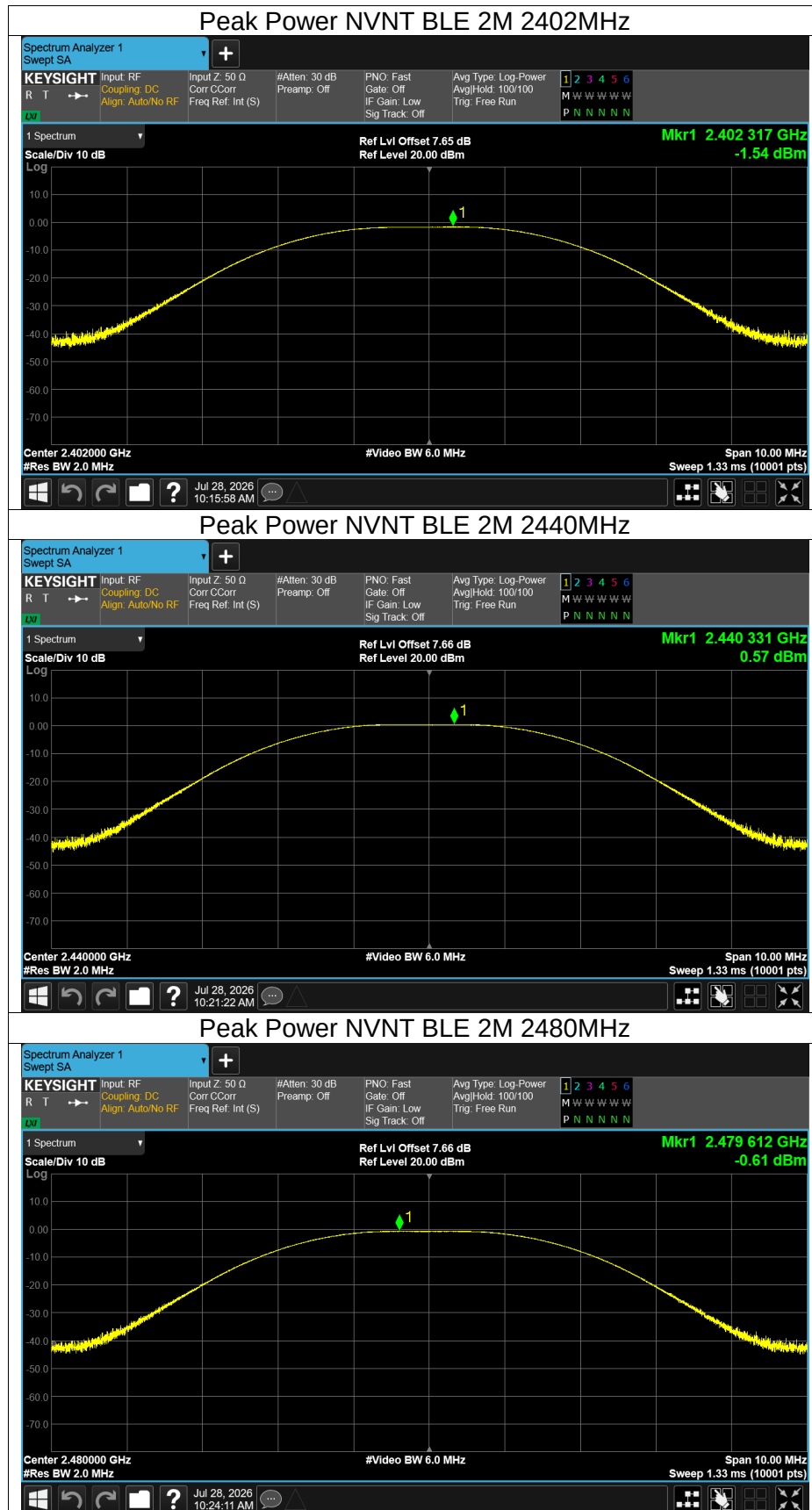




Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	-1.58	30	Pass
NVNT	BLE 1M	2440	0.77	30	Pass
NVNT	BLE 1M	2480	-0.49	30	Pass
NVNT	BLE 2M	2402	-1.54	30	Pass
NVNT	BLE 2M	2440	0.57	30	Pass
NVNT	BLE 2M	2480	-0.61	30	Pass



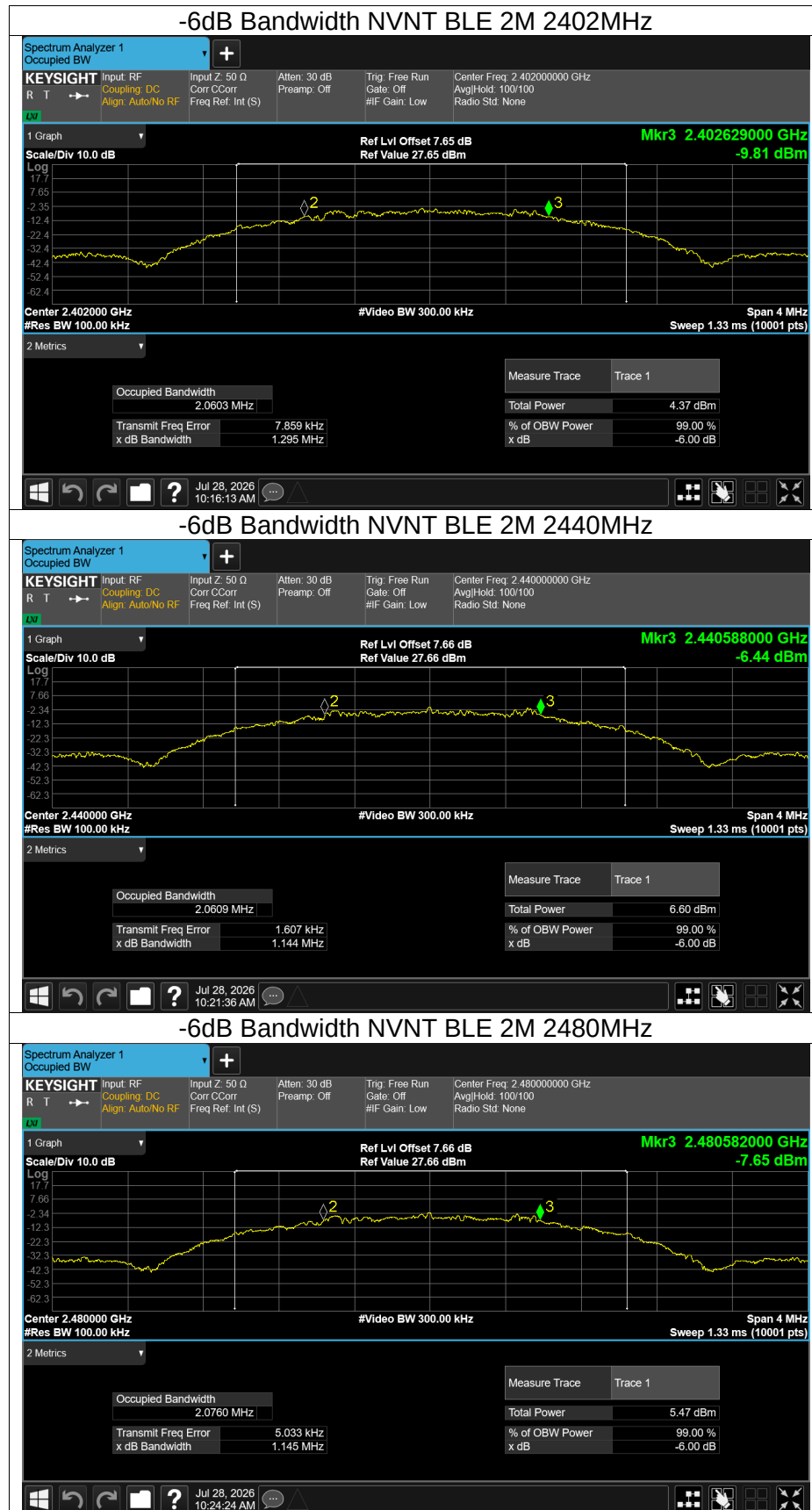




-6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	0.6509	0.5	Pass
NVNT	BLE 1M	2440	0.6635	0.5	Pass
NVNT	BLE 1M	2480	0.6577	0.5	Pass
NVNT	BLE 2M	2402	1.295	0.5	Pass
NVNT	BLE 2M	2440	1.144	0.5	Pass
NVNT	BLE 2M	2480	1.145	0.5	Pass



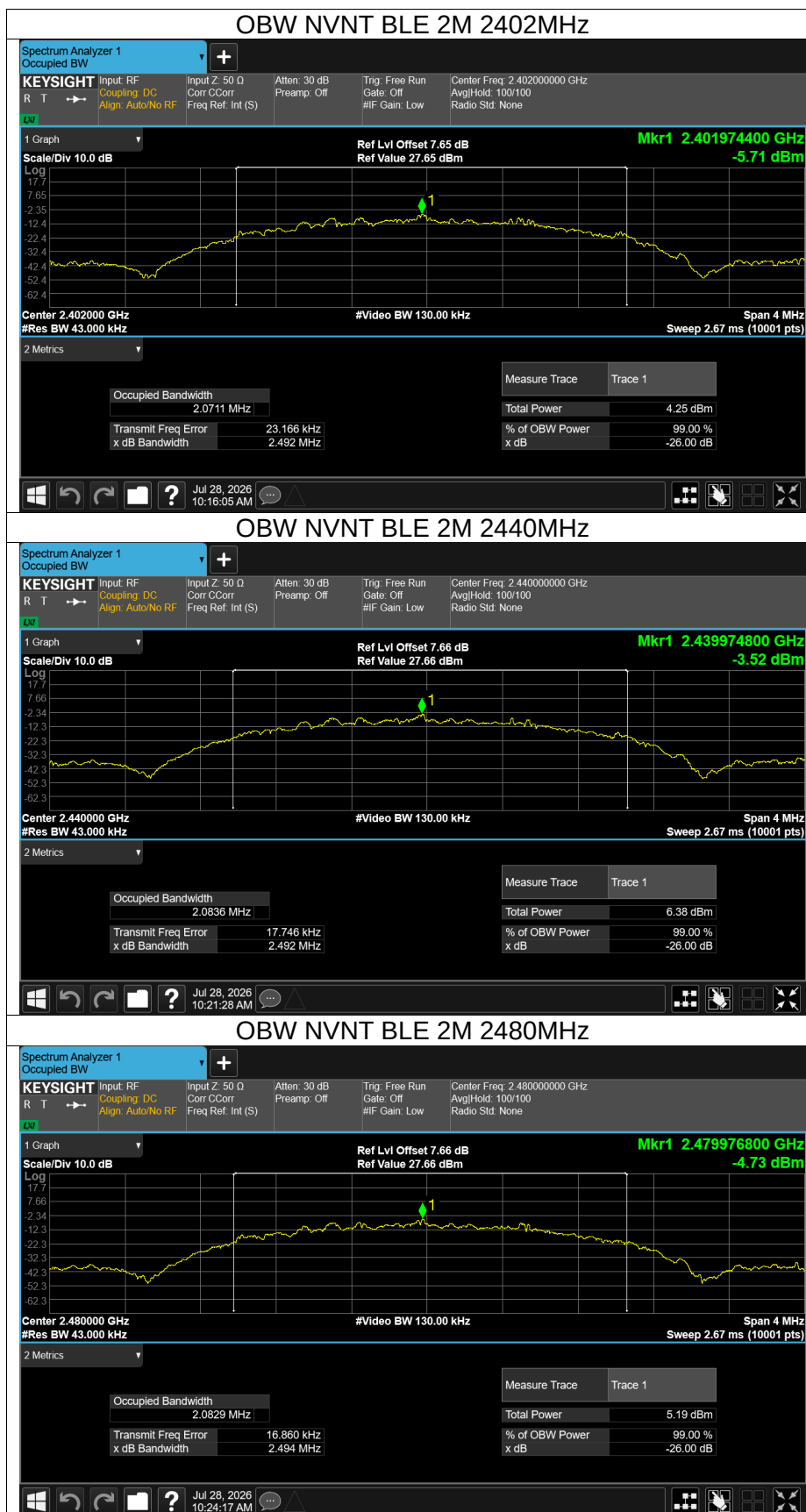




Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	BLE 1M	2402	1.048
NVNT	BLE 1M	2440	1.042
NVNT	BLE 1M	2480	1.04
NVNT	BLE 2M	2402	2.071
NVNT	BLE 2M	2440	2.084
NVNT	BLE 2M	2480	2.083

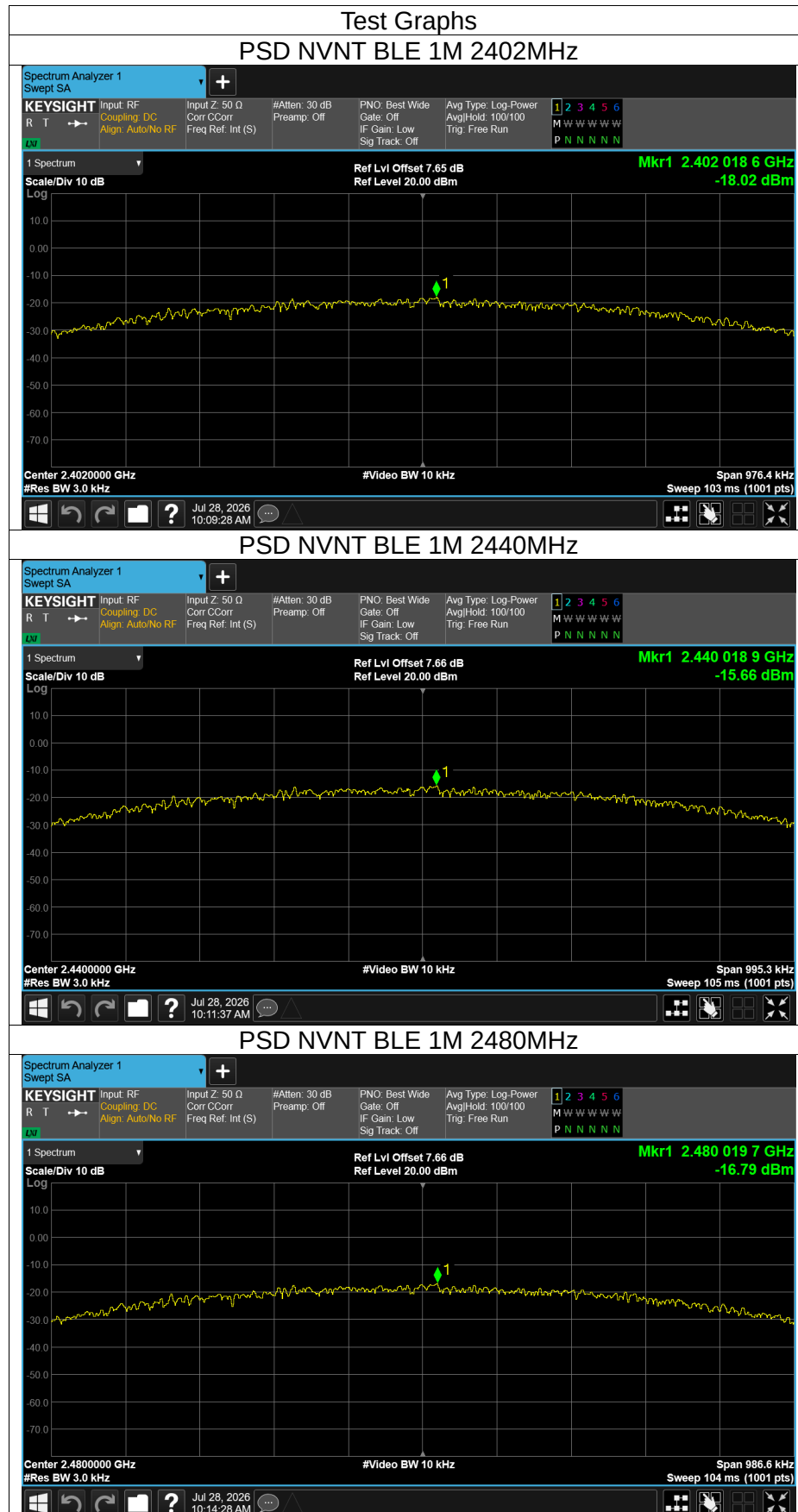


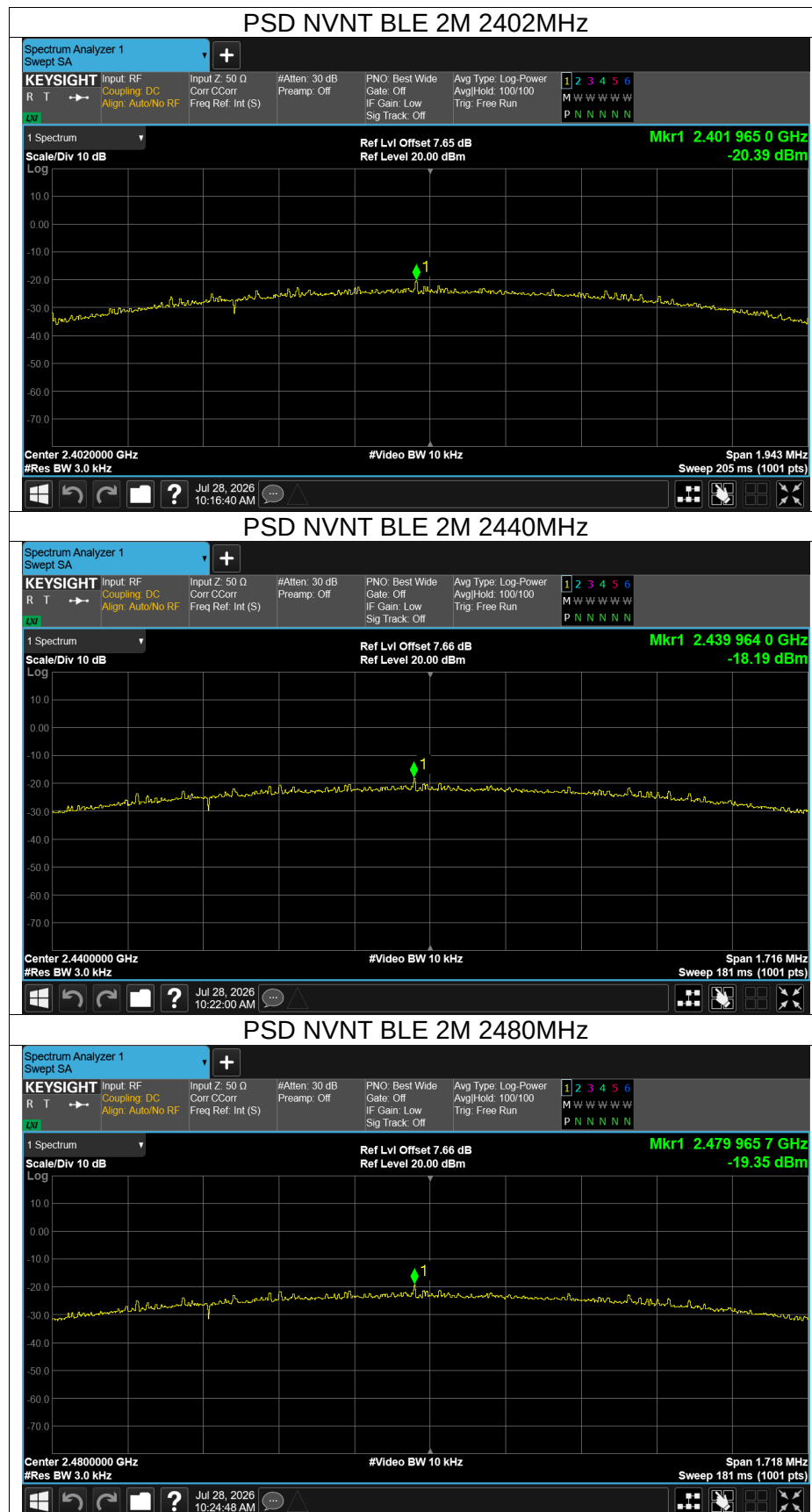




Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	-18.02	8	Pass
NVNT	BLE 1M	2440	-15.66	8	Pass
NVNT	BLE 1M	2480	-16.79	8	Pass
NVNT	BLE 2M	2402	-20.39	8	Pass
NVNT	BLE 2M	2440	-18.19	8	Pass
NVNT	BLE 2M	2480	-19.35	8	Pass

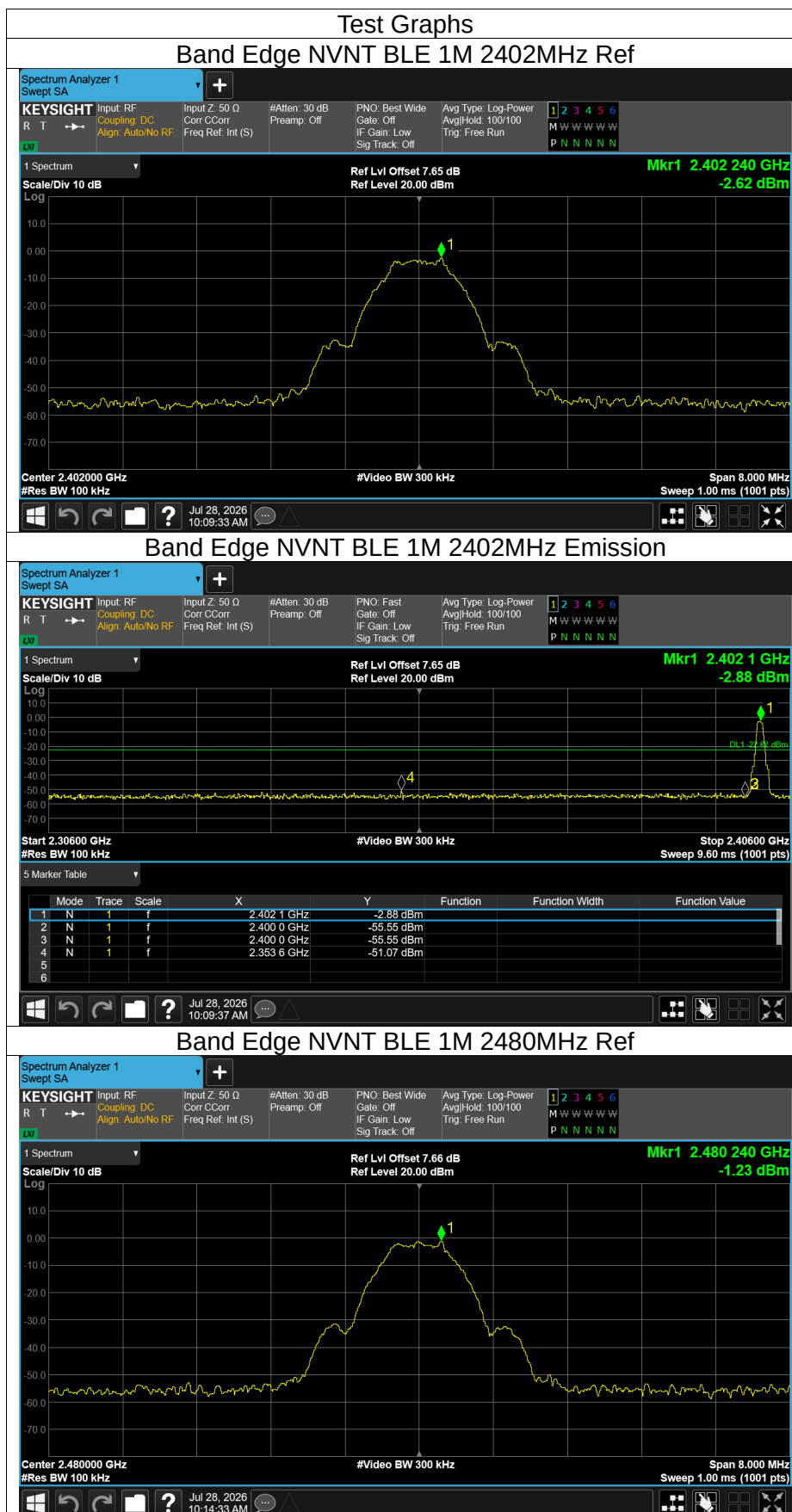






Band Edge

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-48.45	-20	Pass
NVNT	BLE 1M	2480	-50.59	-20	Pass
NVNT	BLE 2M	2402	-33.4	-20	Pass
NVNT	BLE 2M	2480	-49.5	-20	Pass



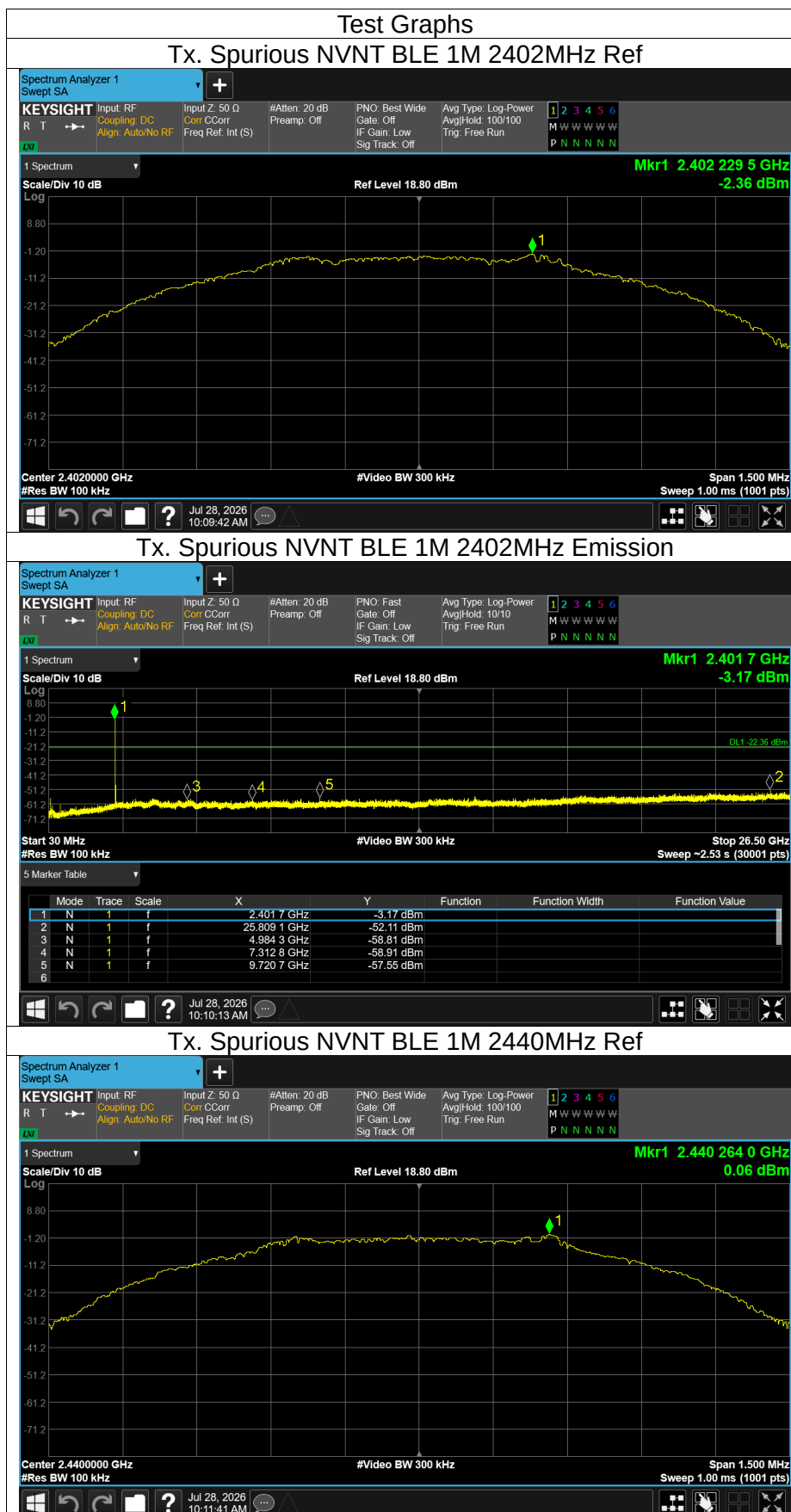


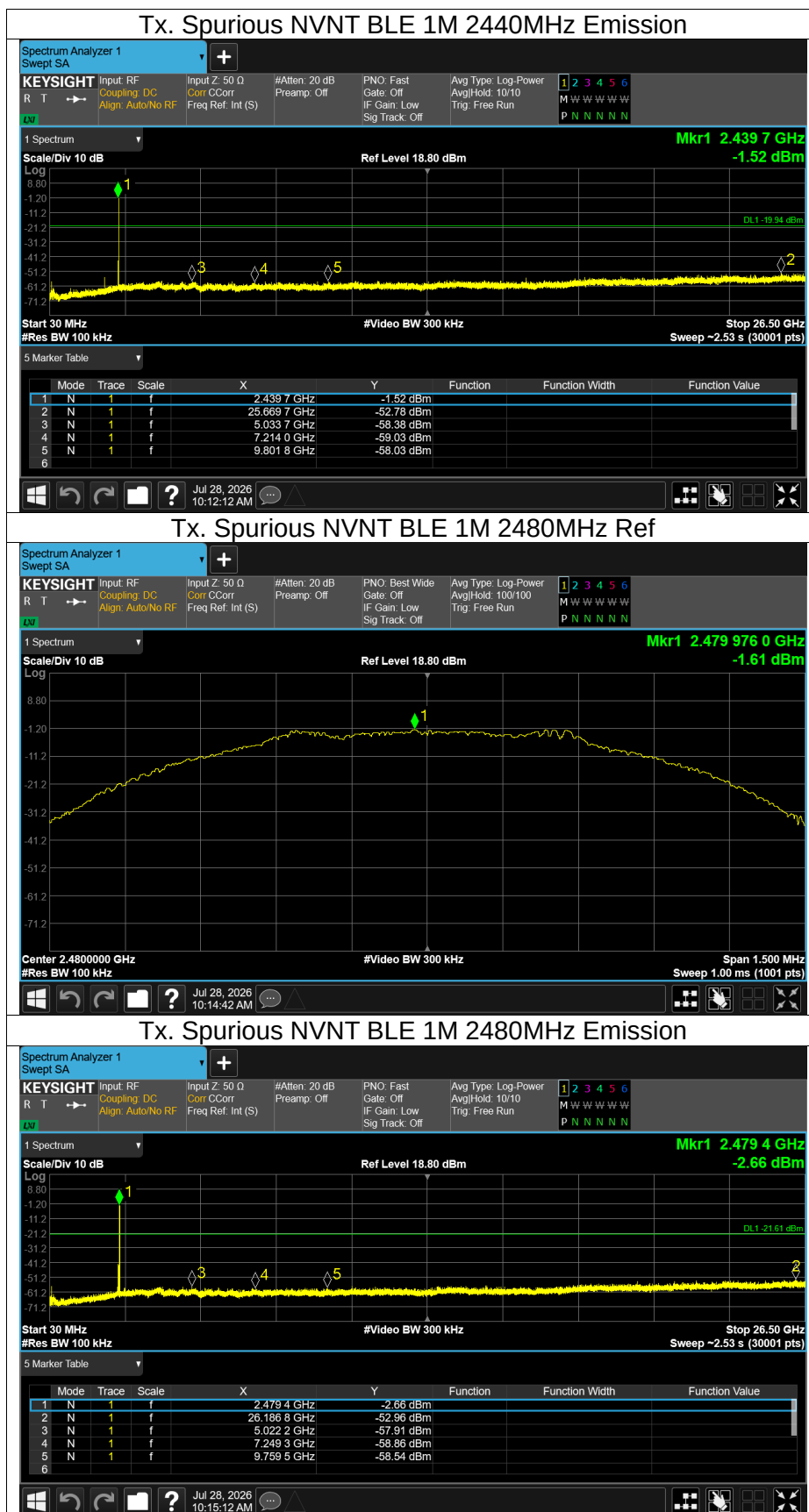


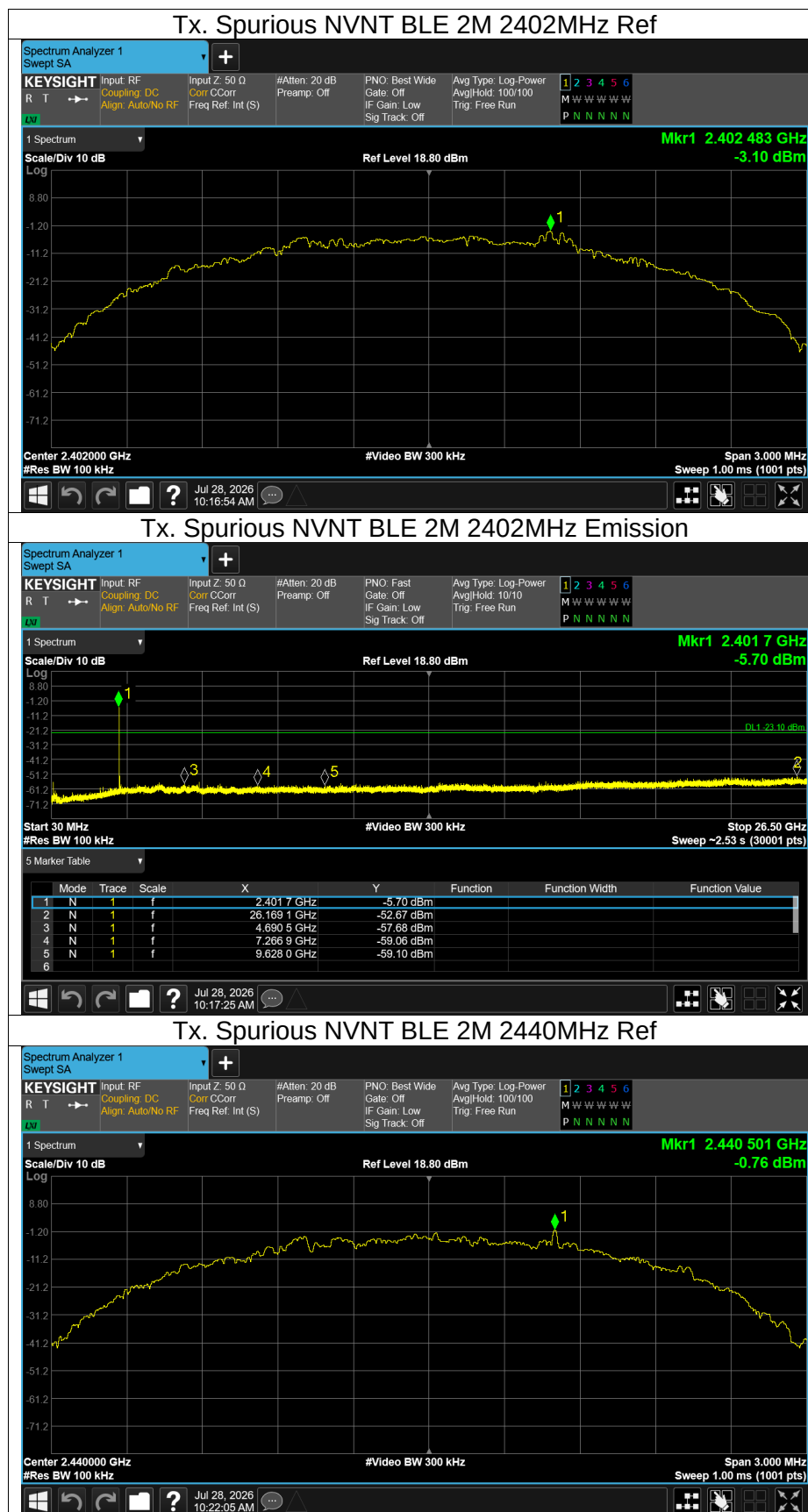


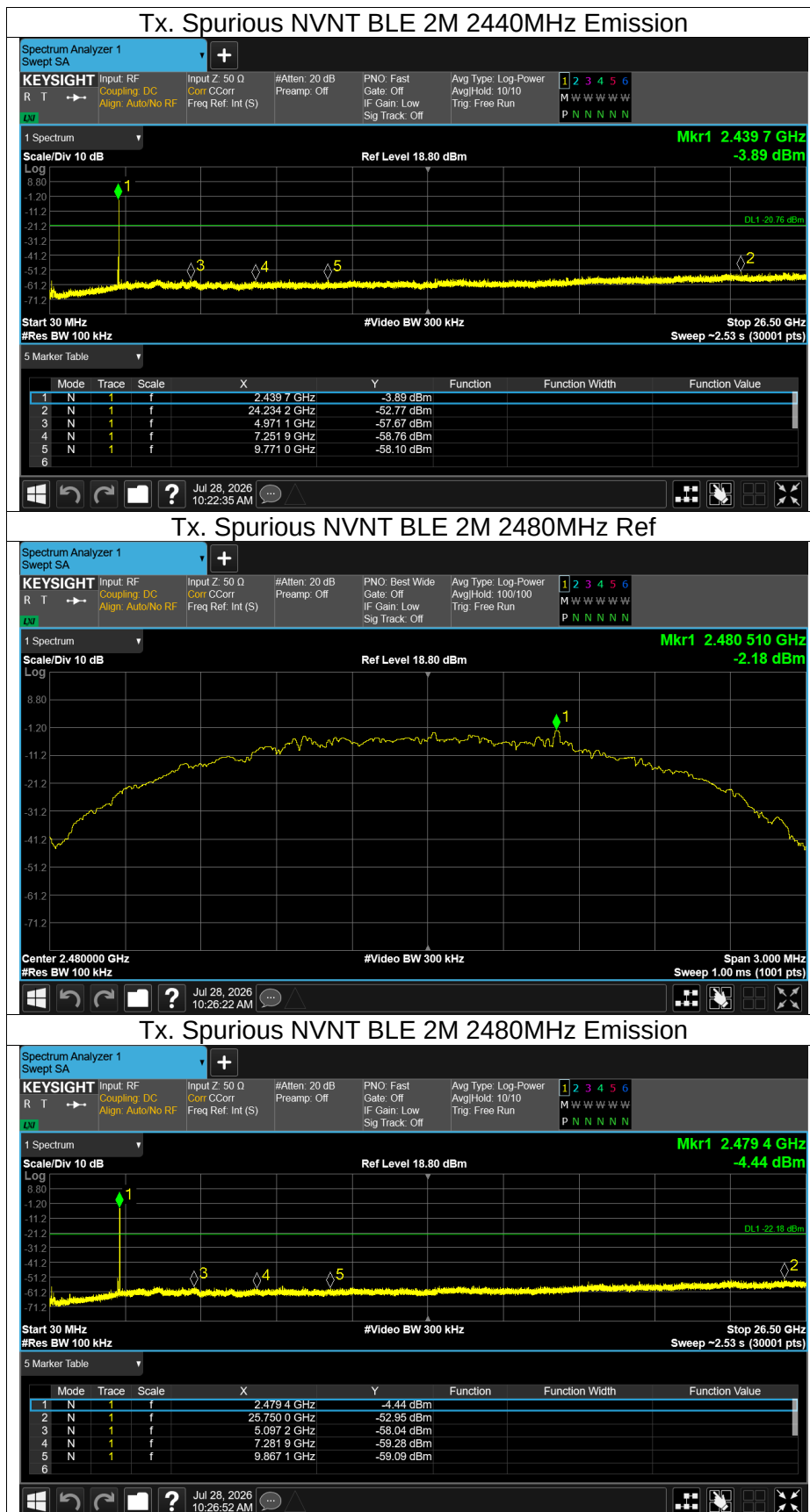
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-49.74	-20	Pass
NVNT	BLE 1M	2440	-52.83	-20	Pass
NVNT	BLE 1M	2480	-51.35	-20	Pass
NVNT	BLE 2M	2402	-49.57	-20	Pass
NVNT	BLE 2M	2440	-52.02	-20	Pass
NVNT	BLE 2M	2480	-50.77	-20	Pass











APPENDIX II - MEASUREMENT PHOTOS

Note: Please see the attached RF_Test Setup photos for FCC ID.

※※※※※END OF THE REPORT※※※※※