

RADIO TEST REPORT FCC ID: 2AT9T-5009AF1

Certificate #4298 0

Product: Mobile Phone

Trade Mark: ulefone

Model No.: GQ5009

Note 18 Ultra, Note 18, Note 18 Pro, Note Family Model: 18E, Note 18S, Note 18 Lite, Note 18s, Note 18s Pro Report No.: S24032202401002 Issue Date: Apr 25, 2024

Prepared for

Shenzhen Ulefone Technology Co., Ltd.

7A01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd. 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen 518126 P.R. China Tel. 400-800-6106, 0755-2320 0050, 0755-2320 0090 Website: http://www.ntek.org.cn





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1 TEST RESULT CERTIFICATION

Applicant's name:	Shenzhen Ulefone Technology Co., Ltd.
Address:	7A01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China
Manufacturer's Name:	Shenzhen Gotron Electronic CO.,LTD.
Address 7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua D Shenzhen City, Guangdong Province China	
Product description	
Product name Mobile Phone	
Model and/or type reference:	GQ5009
Family Model:	Note 18 Ultra, Note 18, Note 18 Pro, Note 18E, Note 18S, Note 18 Lite, Note 18s, Note 18s Pro
Sample number	S240322024001
Date of Test	Mar 25, 2024 ~ Apr 25, 2024

Measurement Procedure Used:

APPLICABLE STANDARDS		
APPLICABLE STANDARD/ TEST PROCEDURE	TEST RESULT	
FCC 47 CFR Part 2, Subpart J		
FCC 47 CFR Part 15, Subpart C	Complied	
ANSI C63.10-2013	Complied	
KDB 558074 D01 15.247 Meas Guidance v05r02		

This device described above has been tested by Shenzhen NTEK Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of Shenzhen NTEK Testing Technology Co., Ltd., this document may be altered or revised by Shenzhen NTEK Testing Technology Co., Ltd., personnel only, and shall be noted in the revision of the document.

The test results of this report relate only to the tested sample identified in this report.

Prepared . //	Men liv Allen Liu ject Engineer)	Reviewed . By [·] –	Aaron Cheng (Supervisor)	Approved : By :(I	Alex Li Alex Li Manager)

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2 SUMMARY OF TEST RESULTS

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FCC Part15 (15.247), Subpart C					
Standard Section Test Item Verdict Remark					
15.207 Conducted Emission PASS					
15.247 (a)(2) 6dB Bandwidth PASS					
15.247 (b)	5.247 (b) Peak Output Power PASS				
15.209 (a) 15.205 (a)	Radiated Spurious Emission PASS				
15.247 (e)	Power Spectral Density	PASS			
15.247 (d) Band Edge Emission PASS					
15.247 (d) Spurious RF Conducted Emission PASS					
15.203 Antenna Requirement PASS					

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Remark:

 "N/A" denotes test is not applicable in this Test Report.
 All test items were verified and recorded according to the standards and without any deviation during the test.





3 FACILITIES AND ACCREDITATIONS

3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

3.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description	
CNAS-Lab. :	The Certificate Registration Number is L5516.
IC-Registration	The Certificate Registration Number is 9270A.
-	CAB identifier:CN0074
FCC- Accredited	Test Firm Registration Number: 463705.
	Designation Number: CN1184
A2LA-Lab.	The Certificate Registration Number is 4298.01
	This laboratory is accredited in accordance with the recognized
	International Standard ISO/IEC 17025:2005 General requirements for
	the competence of testing and calibration laboratories.
	This accreditation demonstrates technical competence for a defined
	scope and the operation of a laboratory quality management system
	(refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).
Name of Firm :	Shenzhen NTEK Testing Technology Co., Ltd.
Site Location :	1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang
	Street, Bao'an District, Shenzhen 518126 P.R. China.

3.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y\pm U$, where expended 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	Conducted Emission Test	±2.80dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(30MHz~1GHz)	±2.64dB
5	All emissions, radiated(1GHz~6GHz)	±2.40dB
6	All emissions, radiated(>6GHz)	±2.52dB
7	Temperature	±0.5°C
8	Humidity	±2%
9	All emissions, radiated(9KHz~30MHz) ±6dB	

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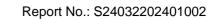
4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification			
Equipment	Mobile Phone		
Trade Mark ulefone			
FCC ID	2AT9T-5009AF1		
Model No.	GQ5009		
Family Model	Note 18 Ultra, Note 18, Note 18 Pro, Note 18E, Note 18S, Note 18 Lite, Note 18s, Note 18s Pro		
Model Difference	All models are the same circuit and RF module, except the Model Name.		
Operating Frequency	2402MHz~2480MHz		
Modulation	GFSK		
Number of Channels	40 Channels		
Antenna Type	PIFA Antenna		
Antenna Gain 0.64dBi			
Adapter	Model: HJ-FC038K7-US Input: 100-240V~50/60Hz 0.6A Output: 5.0V3.0A 15.0W OR 9.0V2.0A 18.0W OR 12.0V1.5A 18.0W		
Battery	DC 3.87V, 5450mAh / 21.09Wh		
Power supply	DC 3.87V from battery or DC 5V from adapter		
HW Version	N/A		
SW Version	N/A		
L			

Note 1: Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.

Note 2: The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.





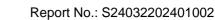
Revision History

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Revision history				
Report No.	Version	Description	Issued Date	
S24032202401002	Rev.01	Initial issue of report	Apr 25, 2024	





5 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

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The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (1Mbps&2Mbps for GFSK modulation) were used for all test.

The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement -X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

Carrier Frequency and Channel list:

Frequency(MHz)
2402
2404
2440
2442
2478
2480
-

Note: fc=2402MHz+k×2MHz k=0 to 39

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Test Cases		
Test Item	Data Rate/ Modulation	
AC Conducted Emission Mode 1: normal link mode		
	Mode 1: normal link mode	
Radiated Test	Mode 2: GFSK Tx Ch00_2402MHz_1Mbps&2Mbps	
Cases	Mode 3: GFSK Tx Ch19_2440MHz_1Mbps&2Mbps	
	Mode 4: GFSK Tx Ch39_2480MHz_1Mbps&2Mbps	
Conducted Test	Mode 2: GFSK Tx Ch00_2402MHz_1Mbps&2Mbps	
Conducted Test	Mode 3: GFSK Tx Ch19_2440MHz_1Mbps&2Mbps	
	Mode 4: GFSK Tx Ch39_2480MHz_1Mbps&2Mbps	

Note:

1. The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.

2. AC power line Conducted Emission was tested under maximum output power.

3. For radiated test cases, the worst mode data rate 1Mbps was reported only, because this data rate has the highest RF output power at preliminary tests, and no other significantly frequencies found in conducted spurious emission.

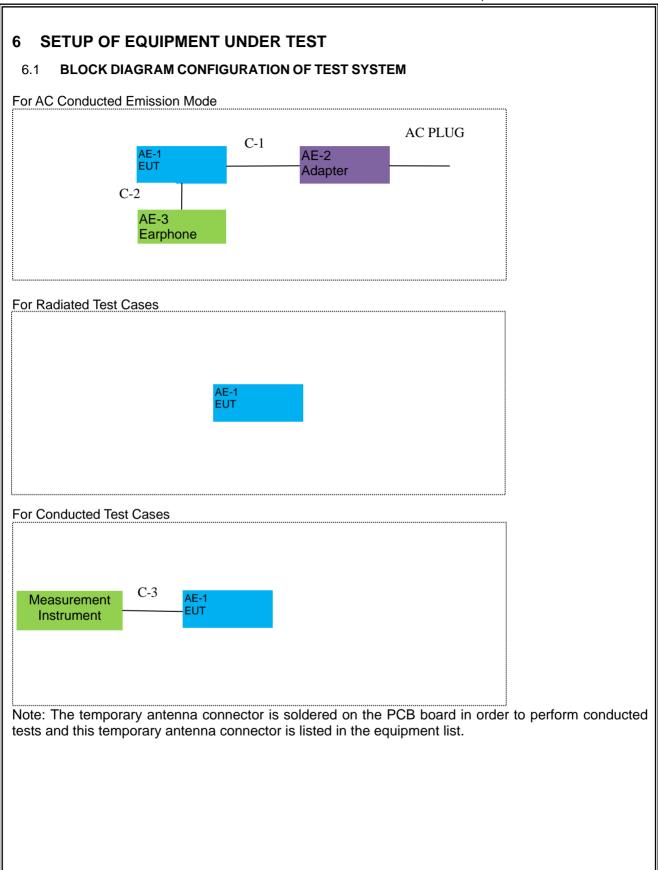
4. EUT built-in battery-powered, the battery is fully-charged.

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6.2 SUPPORT EQUIPMENT

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.

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Mobile Phone	GQ5009	N/A	EUT
AE-2	Adapter	HJ-FC038K7-US	N/A	Peripherals
AE-3	Earphone	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	USB Cable	YES	NO	1.0m
C-2	Earphone Cable	NO	NO	1.2m
C-3	RF Cable	YES	NO	0.1m

Notes:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in [Length] column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

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6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

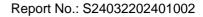
Radiation& Conducted Test equipment

	Und Conducted	loot oquipinont					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2024.03.12	2025.03.11	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2023.05.29	2024.05.28	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2024.03.12	2025.03.11	1 year
4	Test Receiver	R&S	ESPI7	101318	2024.03.12	2025.03.11	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2024.03.11	2025.03.10	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2023.05.06	2026.05.05	3 year
7	Horn Antenna	EM	EM-AH-1018 0	2011071402	2024.03.12	2025.03.11	1 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2023.05.29	2024.05.28	1 year
9	Amplifier	EMC	EMC051835 SE	980246	2023.05.29	2024.05.28	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2023.05.29	2024.05.28	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2023.05.29	2024.05.28	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2023.05.06	2026.05.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2023.05.06	2026.05.05	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2022.06.17	2025.06.16	3 year
15	Filter	TRILTHIC	2400MHz	29	2023.05.29	2024.05.28	1 year
16	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list





AC Co	AC Conduction Test equipment						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2024.03.12	2025.03.11	1 year
2	LISN	R&S	ENV216	101313	2024.03.12	2025.03.11	1 year
3	LISN	SCHWARZBE CK	NNLK 8129	8129245	2024.03.12	2025.03.11	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2023.05.06	2026.05.05	3 year
5	Test Cable (9KHz-30MH z)	N/A	C01	N/A	2023.05.06	2026.05.05	3 year
6	Test Cable (9KHz-30MH z)	N/A	C02	N/A	2023.05.06	2026.05.05	3 year
7	Test Cable (9KHz-30MH z)	N/A	C03	N/A	2023.05.06	2026.05.05	3 year

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Note: Each piece of equipment is scheduled for calibration once a year except the Aux Equipment & Test Cable which is scheduled for calibration every 2 or 3 years.

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7 TEST REQUIREMENTS

7.1 CONDUCTED EMISSIONS TEST

7.1.1 Applicable Standard

According to FCC Part 15.207(a)

7.1.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit		
Frequency(IVII IZ)	Quasi-peak	Average	
0.15-0.5	66-56*	56-46*	
0.5-5.0	56	46	
5.0-30.0	60	50	

Note: 1. *Decreases with the logarithm of the frequency

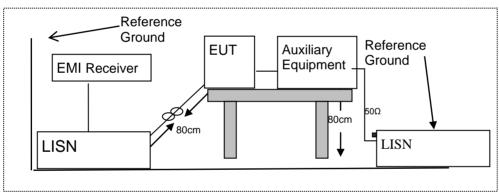
2. The lower limit shall apply at the transition frequencies

3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

7.1.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.1.4 Test Configuration



7.1.5 Test Procedure

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- 3. Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 4. 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 40cm long.
- 5. 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.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item -EUT Test Photos.





7.1.6 Test Results

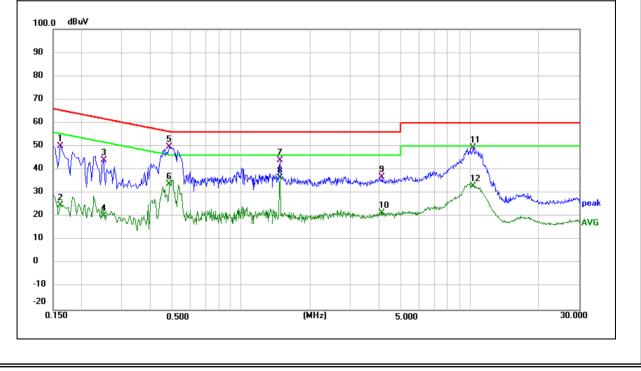
EUT:	Mobile Phone	Model Name :	GQ5009
Temperature:	22 ℃	Relative Humidity:	57%
Pressure:	1010hPa	Phase :	L
Lest Voltage .	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domork
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1620	40.18	9.95	50.13	65.36	-15.23	QP
0.1620	14.88	9.95	24.83	55.36	-30.53	AVG
0.2500	33.92	10.14	44.06	61.76	-17.70	QP
0.2500	10.34	10.14	20.48	51.76	-31.28	AVG
0.4860	39.14	10.63	49.77	56.24	-6.47	QP
0.4860	23.37	10.63	34.00	46.24	-12.24	AVG
1.4740	31.49	12.60	44.09	56.00	-11.91	QP
1.4740	23.95	12.60	36.55	46.00	-9.45	AVG
4.1180	27.23	9.67	36.90	56.00	-19.10	QP
4.1180	11.87	9.67	21.54	46.00	-24.46	AVG
10.3220	39.72	9.69	49.41	60.00	-10.59	QP
10.3220	23.33	9.69	33.02	50.00	-16.98	AVG

Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.







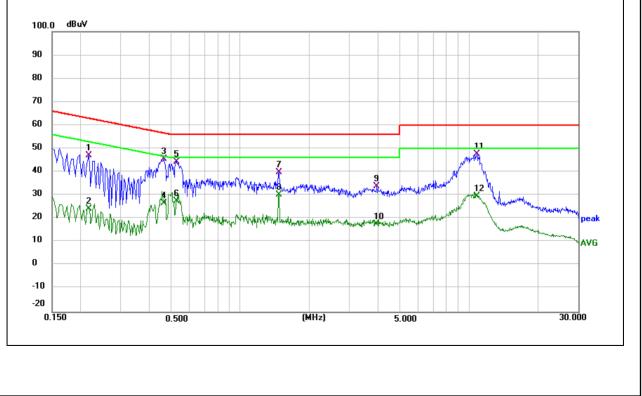
EUT:	Mobile Phone	Model Name :	GQ5009
Temperature:	22 ℃	Relative Humidity:	57%
Pressure:	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domorik
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.2180	36.91	10.08	46.99	62.89	-15.90	QP
0.2180	14.09	10.08	24.17	52.89	-28.72	AVG
0.4620	34.88	10.57	45.45	56.66	-11.21	QP
0.4620	16.21	10.57	26.78	46.66	-19.88	AVG
0.5265	33.51	10.71	44.22	56.00	-11.78	QP
0.5265	16.84	10.71	27.55	46.00	-18.45	AVG
1.4740	27.36	12.60	39.96	56.00	-16.04	QP
1.4740	17.61	12.60	30.21	46.00	-15.79	AVG
3.9540	24.27	9.67	33.94	56.00	-22.06	QP
3.9540	8.08	9.67	17.75	46.00	-28.25	AVG
10.8260	38.01	9.69	47.70	60.00	-12.30	QP
10.8260	20.11	9.69	29.80	50.00	-20.20	AVG

Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.







7.2 RADIATED SPURIOUS EMISSION

7.2.1 Applicable Standard

According to FCC Part 15.247(d) and 15.209 and ANSI C63.10-2013

7.2.2 Conformance Limit

According to FCC Part 15.247(d): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)). According to FCC Part15.205, Restricted bands

According to 1 00 1 art 10.200; Accord bands				
MHz	MHz	GHz		
16.42-16.423	399.9-410	4.5-5.15		
16.69475-16.69525	608-614	5.35-5.46		
16.80425-16.80475	960-1240	7.25-7.75		
25.5-25.67	1300-1427	8.025-8.5		
37.5-38.25	1435-1626.5	9.0-9.2		
73-74.6	1645.5-1646.5	9.3-9.5		
74.8-75.2	1660-1710	10.6-12.7		
123-138	2200-2300	14.47-14.5		
149.9-150.05	2310-2390	15.35-16.2		
156.52475-156.52525	2483.5-2500	17.7-21.4		
156.7-156.9	2690-2900	22.01-23.12		
162.0125-167.17	3260-3267	23.6-24.0		
167.72-173.2	3332-3339	31.2-31.8		
240-285	3345.8-3358	36.43-36.5		
322-335.4	3600-4400	(2)		
	MHz 16.42-16.423 16.69475-16.69525 16.80425-16.80475 25.5-25.67 37.5-38.25 73-74.6 74.8-75.2 123-138 149.9-150.05 156.52475-156.52525 156.7-156.9 162.0125-167.17 167.72-173.2 240-285	MHzMHz16.42-16.423399.9-41016.69475-16.69525608-61416.80425-16.80475960-124025.5-25.671300-142737.5-38.251435-1626.573-74.61645.5-1646.574.8-75.21660-1710123-1382200-2300149.9-150.052310-2390156.52475-156.525252483.5-2500156.7-156.92690-2900162.0125-167.173260-3267167.72-173.23332-3339240-2853345.8-3358		

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	24000/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Eroguopov(MHz)	Class B (dBuV/m) (at 3M)		
Frequency(MHz)	PEAK	AVERAGE	
Above 1000	74	54	

Remark :1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz: Distance extrapolation factor =40log(Specific distance/ test distance)(dB); Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz: Distance extrapolation factor =20log(Specific distance/ test distance)(dB); Limit line=Specific limits(dBuV) + distance extrapolation factor.

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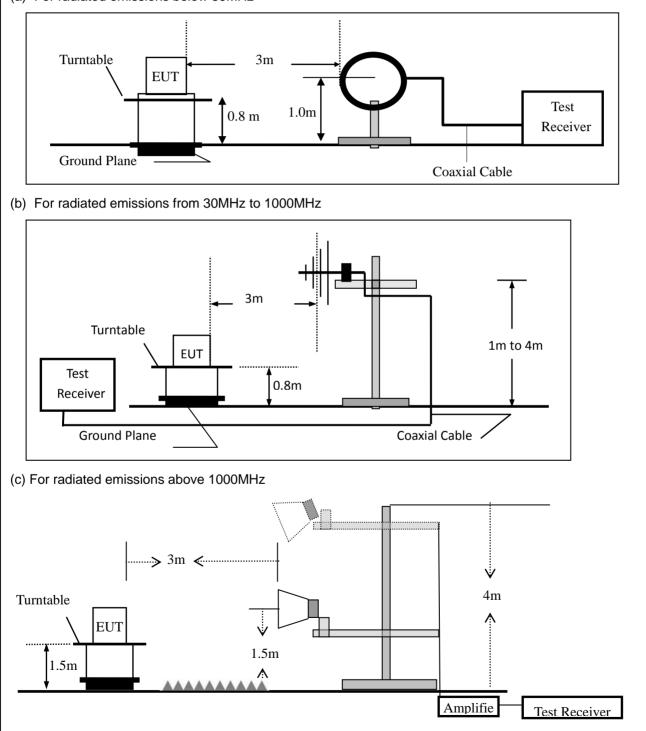


7.2.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.2.4 Test Configuration

(a) For radiated emissions below 30MHz







7.2.5 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 1MHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the radiated emission test above 1GHz:

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

- e. 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 then Quasi Peak detector mode re-measured.
- f. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- g. 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



During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

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Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 4000	Peak	1 MHz	1 MHz
Above 1000	Average	1 MHz	1 MHz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*lg(100 [kHz]/narrower RBW [kHz]). , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.2.6 Test Results

	Spurious	Emission	below	30MHz	(9KHz to 30MHz)
--	----------	----------	-------	-------	-----------------

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Lest Mode:	Mode1/Mode2/Mode3/ Mode4	Test By:	Allen Liu

Freq.	Ant.Pol.	Emission L	.evel(dBuV/m)	Limit 3	m(dBuV/m)	Over(dB)		
(MHz)	H/V	PK	AV	PK	AV	PK	AV	

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.



Spurious Emission below 1GHz (30MHz to 1GHz) All the modulation modes have been tested, and the worst result was report as below:

EUT:	Mobile Phone	Model Name :	GQ5009
Temperature:	25 ℃	Relative Humidity:	55%
Pressure:	1010hPa	Test Mode:	Mode 4
Test Voltage :	DC 3.87V		

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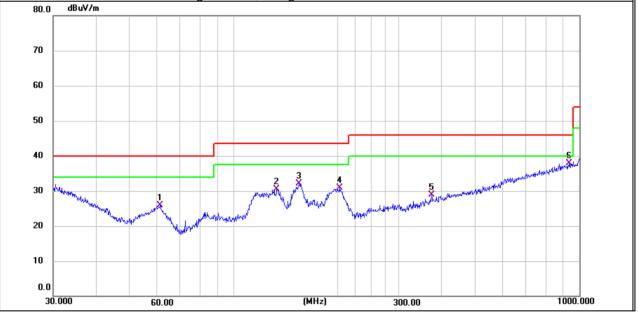
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Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark	
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)		
V	61.1316	13.81	12.07	25.88	40.00	-14.12	QP	
V	133.1511	11.78	18.68	30.46	43.50	-13.04	QP	
V	154.2786	13.83	18.21	32.04	43.50	-11.46	QP	
V	202.1005	14.58	16.25	30.83	43.50	-12.67	QP	
V	373.3112	6.26	22.63	28.89	46.00	-17.11	QP	
V	935.5463	6.75	31.13	37.88	46.00	-8.12	QP	

Remark:









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Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark	
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	rtomant	
Н	31.8427	5.10	25.32	30.42	40.00	-9.58	QP	
Н	49.0145	4.73	15.70	20.43	40.00	-19.57	QP	
Н	103.4421	6.41	17.85	24.26	43.50	-19.24	QP	
Н	205.6751	13.51	16.33	29.84	43.50	-13.66	QP	
Н	357.9287	5.85	22.06	27.91	46.00	-18.09	QP	
Н	699.3046	6.83	27.94	34.77	46.00	-11.23	QP	
Remark Emission 80.0	: n Level= Meter F dBuV/m	Reading+ Fac	tor, Margin	= Emission Le	vel - Limit			
70 - 60 - 50 - 40 - 30 & 20 - 10 -		mentang and a start of the star	a an an and the second		5 Auguring and Alexand			
0.0	000 6	D.00	n	MHz)	300.00		1000.000	





UT:	Μ	lobile Pho	ne	r	Model No.:		GQ5009		
emperature	e: 20	ິຕ		ŀ	Relative Hum	nidity:	48%		
est Mode:	M	ode2/Mo	de3/Mode	4	Test By: Allen Liu				
Frequency	Read Level	Cable loss	Antenna Factor	Pream Factor		Limits	Margin	Remark	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/m)	(dB)		
			Low (Channel ((2402 MHz)(GF	SK)Above	1G		
4804.338	61.60	5.21	35.59	44.30	58.10	74.00	-15.90	Pk	Vertical
4804.338	42.03	5.21	35.59	44.30	38.53	54.00	-15.47	AV	Vertical
7206.107	61.57	6.48	36.27	44.60	59.72	74.00	-14.28	Pk	Vertical
7206.107	41.02	6.48	36.27	44.60	39.17	54.00	-14.83	AV	Vertical
4804.169	62.83	5.21	35.55	44.30	59.29	74.00	-14.71	Pk	Horizontal
4804.169	41.89	5.21	35.55	44.30	38.35	54.00	-15.65	AV	Horizontal
7206.214	62.66	6.48	36.27	44.52	60.89	74.00	-13.11	Pk	Horizontal
7206.214	41.11	6.48	36.27	44.52	39.34	54.00	-14.66	AV	Horizontal
		- .	Mid C	Channel (2440 MHz)(GF	SK)Above	1G		
4880.473	62.67	5.21	35.66	44.20	59.34	74.00	-14.66	Pk	Vertical
4880.473	42.85	5.21	35.66	44.20	39.52	54.00	-14.48	AV	Vertical
7320.265	66.24	7.10	36.50	44.43	65.41	74.00	-8.59	Pk	Vertical
7320.265	42.23	7.10	36.50	44.43	41.40	54.00	-12.60	AV	Vertical
4880.366	63.04	5.21	35.66	44.20	59.71	74.00	-14.29	Pk	Horizontal
4880.366	41.92	5.21	35.66	44.20	38.59	54.00	-15.41	AV	Horizontal
7320.234	60.78	7.10	36.50	44.43	59.95	74.00	-14.05	Pk	Horizontal
7320.234	43.72	7.10	36.50	44.43	42.89	54.00	-11.11	AV	Horizontal
		•	High (Channel ((2480 MHz)(GF	SK) Above	e 1G		
4960.482	63.70	5.21	35.52	44.21	60.22	74.00	-13.78	Pk	Vertical
4960.482	42.82	5.21	35.52	44.21	39.34	54.00	-14.66	AV	Vertical
7440.131	64.79	7.10	36.53	44.60	63.82	74.00	-10.18	Pk	Vertical
7440.131	49.77	7.10	36.53	44.60	48.80	54.00	-5.20	AV	Vertical
4960.326	64.52	5.21	35.52	44.21	61.04	74.00	-12.96	Pk	Horizontal
4960.326	45.11	5.21	35.52	44.21	41.63	54.00	-12.37	AV	Horizontal
7440.199	64.57	7.10	36.53	44.60	63.60	74.00	-10.40	Pk	Horizontal
7440.199	44.44	7.10	36.53	44.60	43.47	54.00	-10.53	AV	Horizontal

Note:

(1) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor

(2)All other emissions more than 20dB below the limit.

(3)Only the worst data is recorded in the report, the data rates (1Mbps for GFSK modulation) test result is the worst

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Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz EUT: Mobile Phone Model No.: GQ5009 Temperature: 20 °C Relative Humidity: 48% Test Mode: Mode2/ Mode4 Test By: Allen Liu

Frequency	Meter Reading	Cable Loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector	Comment	
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре		
1Mbps(GFSK)										
2310.00	64.17	2.97	27.80	43.80	51.14	74	-22.86	Pk	Horizontal	
2310.00	43.63	2.97	27.80	43.80	30.60	54	-23.40	AV	Horizontal	
2310.00	61.04	2.97	27.80	43.80	48.01	74	-25.99	Pk	Vertical	
2310.00	41.68	2.97	27.80	43.80	28.65	54	-25.35	AV	Vertical	
2390.00	63.09	3.14	27.21	43.80	49.64	74	-24.36	Pk	Vertical	
2390.00	43.44	3.14	27.21	43.80	29.99	54	-24.01	AV	Vertical	
2390.00	64.81	3.14	27.21	43.80	51.36	74	-22.64	Pk	Horizontal	
2390.00	41.64	3.14	27.21	43.80	28.19	54	-25.81	AV	Horizontal	
2483.50	62.59	3.58	27.70	44.00	49.87	74	-24.13	Pk	Vertical	
2483.50	43.89	3.58	27.70	44.00	31.17	54	-22.83	AV	Vertical	
2483.50	64.64	3.58	27.70	44.00	51.92	74	-22.08	Pk	Horizontal	
2483.50	43.29	3.58	27.70	44.00	30.57	54	-23.43	AV	Horizontal	

Note: (1) All other emissions more than 20dB below the limit.

(2)Only the worst data is recorded in the report, the data rates (1Mbps for GFSK modulation) test result is the worst

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EUT:	Μ	lobile	Phone		Model N	Model No.:			GQ5009			
Temperature	Temperature: 20 ℃				Relative	Relative Humidity:			48%			
Test Mode:	М	lode2	/ Mode4		Test By		All	Allen Liu				
Frequency	Readi Leve	0	Cable Loss	Antenna Factor	Preamp Factor	Emission Level	Limit	ts	Margin	Detector	Comment	
(MHz)	(dBµ\	V)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV	//m)	(dB)	Туре		
3260	64.1	1	4.04	29.57	44.70	53.02	74		-20.98	Pk	Vertical	
3260	57.1	8	4.04	29.57	44.70	46.09	54		-7.91	AV	Vertical	
3260	65.6	3	4.04	29.57	44.70	54.54	74		-19.46	Pk	Horizontal	
3260	59.4	5	4.04	29.57	44.70	48.36	54		-5.64	AV	Horizontal	
3332	65.1	3	4.26	29.87	44.40	54.86	74		-19.14	Pk	Vertical	
3332	56.4	5	4.26	29.87	44.40	46.18	54		-7.82	AV	Vertical	
3332	66.1	4	4.26	29.87	44.40	55.87	74		-18.13	Pk	Horizontal	
3332	53.4	4	4.26	29.87	44.40	43.17	54		-10.83	AV	Horizontal	
17797	46.4	5	10.99	43.95	43.50	57.89	74		-16.11	Pk	Vertical	
17797	35.9	1	10.99	43.95	43.50	47.35	54		-6.65	AV	Vertical	
17788	44.2	0	11.81	43.69	44.60	55.10	74		-18.90	Pk	Horizontal	
17788	36.1	2	11.81	43.69	44.60	47.02	54		-6.98	AV	Horizontal	

Note: (1) All other emissions more than 20dB below the limit.

(2)Only the worst data is recorded in the report, the data rates (1Mbps for GFSK modulation) test result is the worst



7.3 6DB BANDWIDTH

7.3.1 Applicable Standard

According to FCC Part 15.247(a)(2) and KDB 558074 D01 15.247 Meas Guidance v05r02 Section 8.2.

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7.3.2 Conformance Limit

The minimum permissible 6dB bandwidth is 500 kHz.

7.3.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.3.4 Test Setup

Please refer to Section 6.1 of this test report.

7.3.5 Test Procedure

The testing follows Subclause 11.8 of ANSI C63.10

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Use the following spectrum analyzer settings:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) \geq 3*RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.6 Test Results

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu





7.4 DUTY CYCLE

7.4.1 Applicable Standard

According to KDB 558074 D01 15.247 Meas Guidance v05r02s Section 6.

7.4.2 Conformance Limit

No limit requirement.

7.4.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

7.4.5 Test Procedure

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW \geq OBW if possible; otherwise, set RBW to the largest available value. Set VBW \geq RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T \leq 16.7 microseconds.)

The transmitter output is connected to the Spectrum Analyzer. We tested accroding to the zero-span measurement method, 6.0)b) in KDB 558074

The largest available value of RBW is 8 MHz and VBW is 50 MHz. The zero-span method of measuring duty cycle shall not be used if $T \le 6.25$ microseconds. (50/6.25 = 8)

The zero-span method was used because all measured T data are > 6.25 microseconds and both RBW and VBW are > 50/T.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Span = Zero Span RBW = 8MHz(the largest available value) VBW = 8MHz (\geq RBW) Number of points in Sweep >100 Detector function = peak Trace = Clear write Measure T_{total} and T_{on} Calculate Duty Cycle = T_{on} / T_{total}





7.4.6 Test Results

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	N/A	Test By:	N/A

Note: Not Applicable





7.5 **PEAK OUTPUT POWER**

7.5.1 Applicable Standard

According to FCC Part 15.247(b)(3) and KDB 558074 D01 15.247 Meas Guidance v05r02 Section 8.3.1.

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7.5.2 Conformance Limit

The maximum peak conducted output power of the intentional radiator for systems using digital modulation in the 2400 - 2483.5 MHz bands shall not exceed: 1 Watt (30dBm). If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

7.5.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

7.5.5 Test Procedure

The testing follows Subclause 11.9.1.1 of ANSI C63.10 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Set the RBW \geq DTS bandwidth. Set VBW =3*RBW. Set the span \geq 3*RBW Set Sweep time = auto couple. Set Detector = peak. Set Trace mode = max hold. Allow trace to fully stabilize. Use peak marker function to determine the peak amplitude level.

7.5.6 Test Results

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu



7.6 POWER SPECTRAL DENSITY

7.6.1 Applicable Standard

According to FCC Part 15.247(e) and KDB 558074 D01 15.247 Meas Guidance v05r02 Section 8.4.

7.6.2 Conformance Limit

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.6.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

7.6.5 Test Procedure

The testing follows Measurement Procedure Subclause 11.10.2 of ANSI C63.10 This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance, and is optional if the maximum conducted (average) output power was used to demonstrate compliance.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5*DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW \geq 3 RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.





7.6.6 Test Results

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu



7.7 CONDUCTED BAND EDGE MEASUREMENT

7.7.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05r02 Section 8.7.

7.7.2 Conformance Limit

In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

7.7.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.7.4 Test Setup

Please refer to Section 6.1 of this test report.

7.7.5 Test Procedure

The testing follows FCC KDB 558074 D01 15.247 Meas Guidance v05r02 Section 8.7.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.

Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.

Repeat above procedures until all measured frequencies were complete.

7.7.6 Test Results

EUT:	Mobile Phone	Model No.:	GQ5009
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode4	Test By:	Allen Liu





7.8 SPURIOUS RF CONDUCTED EMISSIONS

7.8.1 Conformance Limit

1. Below -20dB of the highest emission level in operating band.

2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

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7.8.2 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.8.3 Test Setup

Please refer to Section 6.1 of this test report.

7.8.4 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and measure frequency range from 30MHz to 26.5GHz.

7.8.5 Test Results

Remark: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.





7.9 ANTENNA APPLICATION

7.9.1 Antenna 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.

7.9.2 Result

The EUT antenna is permanent attached PIFA antenna (Gain:0.64 dBi). It comply with the standard requirement.





8 TEST RESULTS

1M:

8.1.1 **Duty Cycle**

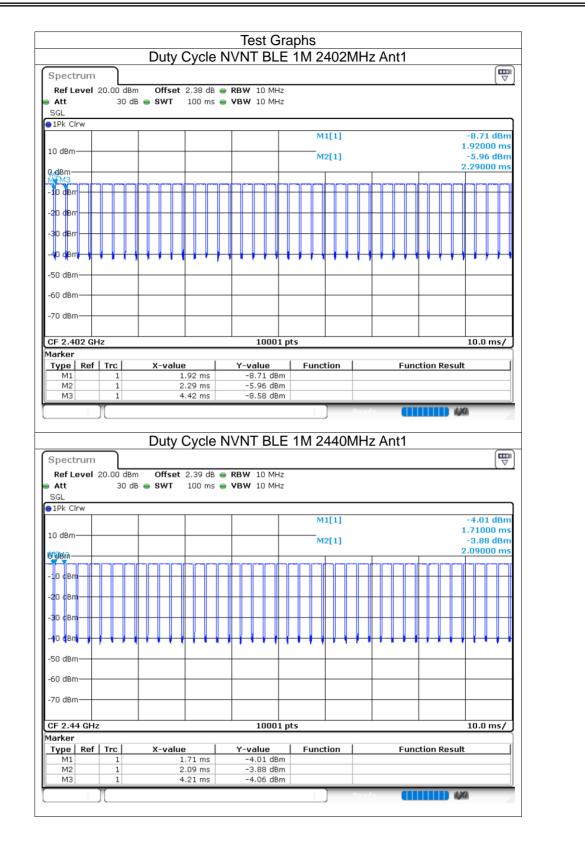
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	85.6	0.68	0.47
NVNT	BLE 1M	2440	Ant1	85.2	0.7	0.47
NVNT	BLE 1M	2480	Ant1	85.6	0.68	0.47

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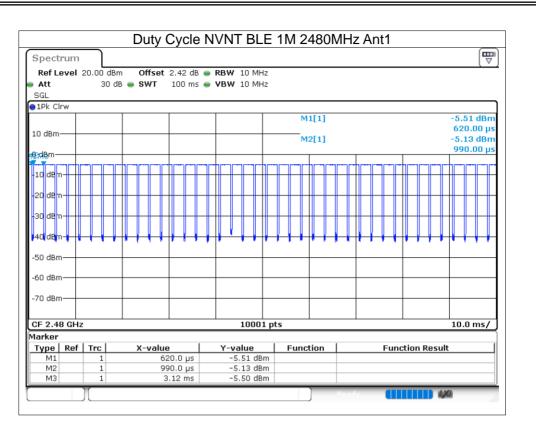


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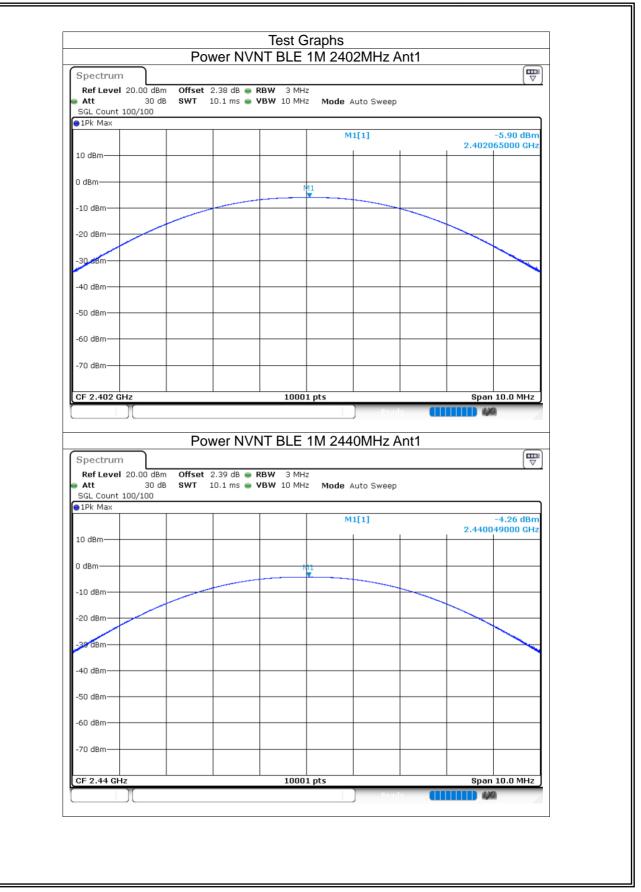


8.1.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-5.9	30	Pass
NVNT	BLE 1M	2440	Ant1	-4.26	30	Pass
NVNT	BLE 1M	2480	Ant1	-5.06	30	Pass

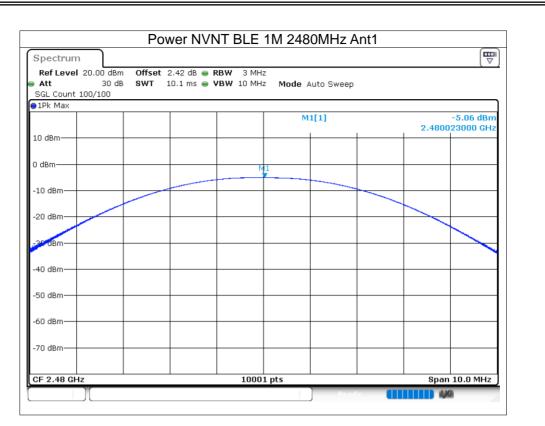
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8.1.3 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.702	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.659	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.685	0.5	Pass





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pectrum								
Ref Level	 20.00 d	Bm Offset 2.4	2 dB 😑 R	BW 100 kHz				(v
Att			_		Mode Auto FFT			
GL Count 3	00/300							
1Pk Max								
					M1[1]			-5.91 dBm
							2.4802	42180 GHz
JUBIII					M2[1]			11.91 dBm
dBm							2.4796	46000 GHz
					M1			
LO dBm			12		M3	3		
20 dBm —								
30 dBm —								
+0 dBm								
o ubiii								
50 dBm								
'0 dBm								
F 2.48 GHz	2			10001 pt	s		Spar	n 2.0 MHz
arker								
ype Ref	Trc	X-value	1	Y-value	Function	Fun	ction Result	
M1	1	2.48024218	GHz	-5.91 dBm				
M2	1	2.479646		-11.91 dBm				
M3	1	2.480331	GHz	-11.91 dBm				

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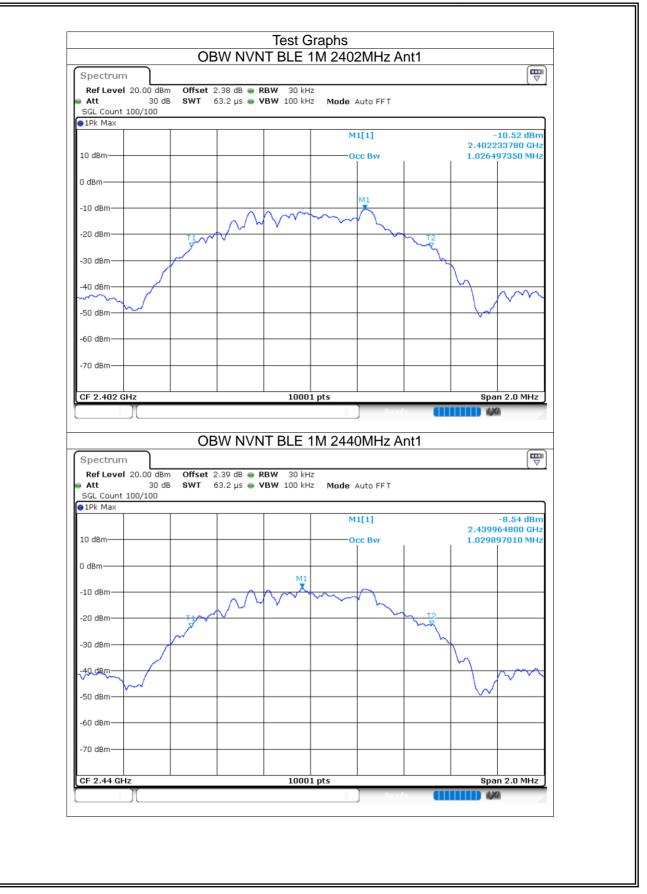


8.1.4 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.026
NVNT	BLE 1M	2440	Ant1	1.03
NVNT	BLE 1M	2480	Ant1	1.04

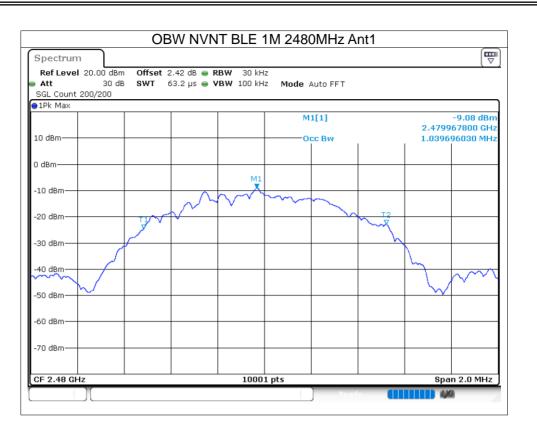
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8.1.5 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-23.15	8	Pass
NVNT	BLE 1M	2440	Ant1	-21.02	8	Pass
NVNT	BLE 1M	2480	Ant1	-22.23	8	Pass



Spectrum	ſ							
Ref Level 20.		2.38 dB 👄						(*)
Att SGL Count 100/		632.2 µs 😑	VBW 10 kH	Z Mode	Auto FFT			
●1Pk Max					1[1]			-23.15 dBm
10 d0m				, m		1		201680 GHz
10 dBm								
0 dBm								
-10 dBm								
-20 dBm	warden anala	and as cont	no a concentrative	Mary M. O.A.				Murran
-30 dBm	warder any m	A Val many day	. Oppolit . Marance.	a an illerand o	ኯግሞራምንምትንጭ	Howkhan	WAW MILANA	
manna								www.
-40 dBm								
-50 dBm								
-60 dBm								
-70 dBm								
CF 2.402 GHz			1001				0	1.053 MHz
							opun	1.000 Miliz J
Spectrum	F	'SD NVN)	nt1) W	
Spectrum Ref Level 20.	00 dBm Offset	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(nt1		
Ref Level 20. Att SGL Count 200,	00 dBm Offset 30 dB SWT		TBLE 1 RBW 3 kH	IM 244(nt1		
Ref Level 20. Att SGL Count 200,	00 dBm Offset 30 dB SWT	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(¹² Mode /		∾ 11		(₩) -21.02 dBm
Ref Level 20. Att SGL Count 200, 1Pk Max	00 dBm Offset 30 dB SWT	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(¹² Mode /	Auto FFT	nt1		
Ref Level 20. Att SGL Count 200, 1Pk Max	00 dBm Offset 30 dB SWT	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(¹² Mode /	Auto FFT	nt1		-21.02 dBm
Ref Level 20. Att SGL Count 200/ 1Pk Max 10 dBm	00 dBm Offset 30 dB SWT	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(¹² Mode /	Auto FFT	nt1		-21.02 dBm
-	00 dBm Offset 30 dB SWT	t 2.39 dB 👄	TBLE 1 RBW 3 kH	IM 244(¹² Mode /	Auto FFT	nt1		-21.02 dBm
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm	00 dBm Offset 30 dB SWT	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm/ -40 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm/ -40 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm/ -40 dBm -50 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	IM 244(Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ IPk Max 10 dBm -10 dBm -20 dBm -30 dBm/ -40 dBm -50 dBm -60 dBm -70 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	T BLE 1 RBW 3 kH VBW 10 kH	M1	Auto FFT		2.4400	-21.02 dBm 117780 GHz
Ref Level 20. Att SGL Count 200/ ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm	00 dBm Offset 30 dB SWT /200	t 2.39 dB 631.9 μs	TBLE 1	M1	Auto FFT		2.4400	21.02 dBm 117780 GHz

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Spectrum		
Ref Level 20.00 dBm Offset 2.42 dB Ref	BW 3 kHz	(•
Att 30 dB SWT 632.2 µs • V		
SGL Count 300/300		
) 1Pk Max		
	M1[1]	-22.23 dBm 2.48001745 GHz
10 dBm		
D dBm		
-10 dBm		
-20 dBm	M1	
	and the set a manage of the Month have a straight when	Unough
-20 dBm -30 dBm what was a way when the second seco		WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
-40 dBm		100 70
-40 dBm		
-50 dBm		
-60 dBm		
-70 dBm		
CF 2.48 GHz	1001 pts	Span 1.0275 MHz

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8.1.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-43.97	-20	Pass
NVNT	BLE 1M	2480	Ant1	-35.28	-20	Pass

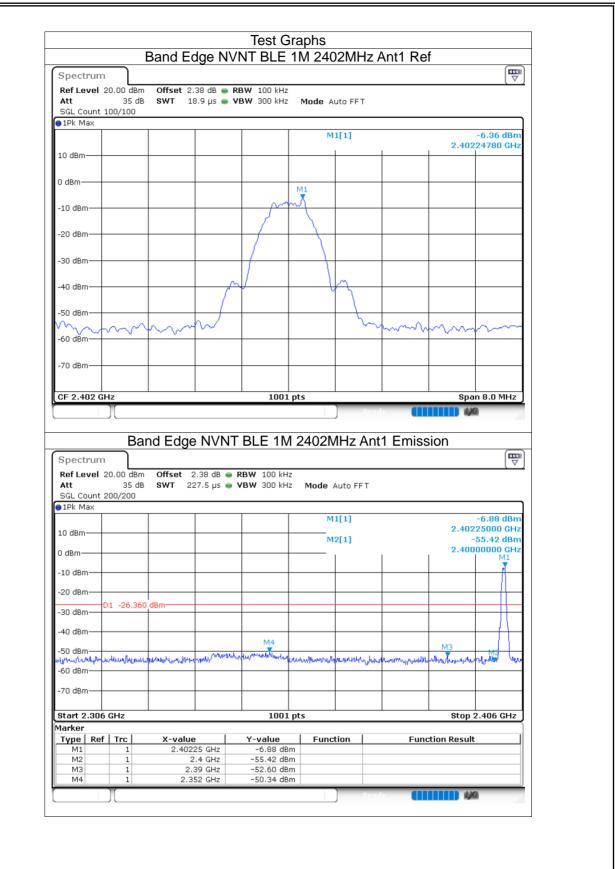


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Speci	rum			-	/NT BLE [·]					E.	_
-		10.00 dB	n Offset 2	42 dB 👄	RBW 100 kHz					()	
Att		45 d			VBW 300 kHz	Mode Au	ito FFT				
		.00/100									۔
∋1Pk M	ax				1	M1	[1]			-7.20 dBi	20
									2.48	007990 GH	
20 dBm			-							-	-11
10 dBm											1
0 dBm-											
o abiii					M	1					
-10 dBr	n					C L					
						\rightarrow					
-20 dBr	n-+-				+ / +						
						$\langle \rangle$					1
-30 dBr											1
-40 dBr	n_				γ						
A.,	~h	in	Inn	mor			<u> </u>	mm	mm	Im	
-50 dBr	n	v ^v	· · · · · · ·	-	+ +		۷ ۴		F	~	-
-60 dBr	n										-1
CF 2.4	8 GHz	2	•		1001	ots		•	Sp	an 8.0 MHz	
		J Ba	and Edge	e NVN	Г BLE 1M	2480M	IHz Ant	1 Emise	sion		
		10.00 dB	n Offset (2.42 dB 🔵	RBW 100 kHz			1 Emiss	sion		
Ref Le Att	vel 3	10.00 dB 45 d	n Offset (2.42 dB 🔵				1 Emiss	sion		
Ref Le Att	vel 3 ount 1	10.00 dB	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A	uto FFT	1 Emiss	sion		
Ref Le Att SGL Co 1Pk M	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A		1 Emiss		-6.56 dBi	<u></u>
Ref Le Att SGL Co	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Co 1Pk M	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH	
Ref Le Att SGL Co 1Pk M 20 dBm 10 dBm	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Co 1Pk M 20 dBm 10 dBm	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Co 1Pk M 20 dBm 10 dBm	ount 1	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Co 1Pk M 20 dBm 10 dBm	n	10.00 dB 45 d	n Offset (2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Co 1Pk M 20 dBm 10 dBm 0 dBm- -10 dBr	n	10.00 dB 45 d	m Offset (B SWT 2)	2.42 dB 🔵	RBW 100 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi	
Ref Le Att SGL Cr 1Pk M 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	n	0.00 dB 45 d .00/100	m Offset (B SWT 2)	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A M1	uto FFT	1 Emiss	2.47	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL CC 1Pk M 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm	n	10.00 dB 45 d 00/100	m Offset (B SWT 2)	2.42 dB 🔵	RBW 100 kHz VBW 300 kHz	Mode A	uto FF T		2.47	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL C(1Pk M 20 dBm 10 dBm -10 dBm -20 dBm -30 dBr -30 dBr -40 dBr	n	10.00 dB 45 d 00/100	m Offset 3 B SWT 27	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A	uto FF T		2.47	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL CC 1Pk M 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm	n D	10.00 dB 45 d 00/100	m Offset 3 B SWT 27	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A	uto FF T		2.47	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL Cr 20 dBm 20 dBm 10 dBm -10 dBm -20 dBr -20 dBr -30 dBr -30 dBr -40 dBr -50 dBr	well 3 bunt 1 lax n n n n n n n n	1 -27.1	m Offset 3 B SWT 27	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A M1 M2	uto FF T		2.47 2.46	-6.56 dB 975000 GH -43.35 dB 1350000 GH	
Ref Le Att SGL C: SGL C: IPk M 20 dBm 10 dBm -10 dBm -20 dBr -30 dBr -40 dBr -50 dBr -60 dBr Start 2	well 3 bunt 1 lax n	1 -27.1	m Offset 3 B SWT 27	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A M1 M2	uto FF T		2.47 2.46	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL Cr 20 dBm 20 dBm 10 dBm -10 dBm -20 dBr -20 dBr -30 dBr -30 dBr -40 dBr -50 dBr	vel 3 ount 1 ax n <td< td=""><td>0.00 dB 45 d .00/100 1 -27.1 4 GHz</td><td>m Offset 3 B SWT 27</td><td>2.42 dB ● 27.5 µs ●</td><td>RBW 100 kHz VBW 300 kHz</td><td>Mode A M1 M2</td><td>uto FF T [1] ?[1] ก</td><td></td><td>2.47 2.46</td><td>-6.56 dBi 975000 GH -43.35 dBi 350000 GH</td><td></td></td<>	0.00 dB 45 d .00/100 1 -27.1 4 GHz	m Offset 3 B SWT 27	2.42 dB ● 27.5 µs ●	RBW 100 kHz VBW 300 kHz	Mode A M1 M2	uto FF T [1] ?[1] ก		2.47 2.46	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL CC SGL CC IPk M 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -60 dBm Start 2 Marker	vel 3 ount 1 ax n <td< td=""><td>0.00 dB 45 d 00/100 1 -27.10 14 GHz I Trc 1</td><td>m Offset 3 B SWT 23</td><td>2.42 dB • 27.5 µs •</td><td>RBW 100 kHz VBW 300 kHz</td><td>Mode A M1 M2</td><td>uto FF T [1] ?[1] ก</td><td></td><td>2.47 2.46</td><td>-6.56 dBi 975000 GH -43.35 dBi 350000 GH</td><td></td></td<>	0.00 dB 45 d 00/100 1 -27.10 14 GHz I Trc 1	m Offset 3 B SWT 23	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A M1 M2	uto FF T [1] ?[1] ก		2.47 2.46	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL Cd SGL Cd IPk M 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	vel 3 ount 1 ax n <td< td=""><td>11 -27.14 GHz</td><td>m Offset : B SWT 2: </td><td>2.42 dB • 27.5 µs •</td><td>RBW 100 kHz VBW 300 kHz</td><td>Mode A M1 M2 </td><td>uto FF T [1] ?[1] ก</td><td></td><td>2.47 2.46</td><td>-6.56 dBi 975000 GH -43.35 dBi 350000 GH</td><td></td></td<>	11 -27.14 GHz	m Offset : B SWT 2: 	2.42 dB • 27.5 µs •	RBW 100 kHz VBW 300 kHz	Mode A M1 M2 	uto FF T [1] ?[1] ก		2.47 2.46	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	
Ref Le Att SGL C: SGL C: IPk M 20 dBm 10 dBm -10 dBm -20 dBr -30 dBr -40 dBr -50 dBr -60 dBr Start 2 Marker Type M1	vel 3 ount 1 ax n <td< td=""><td>0.00 dB 45 d 00/100 1 -27.1 4 GHz Trc 1 1 1</td><td>m Offset : B SWT 2: </td><td>2.42 dB ● 27.5 µs ●</td><td>RBW 100 kHz VBW 300 kHz</td><td>Mode A M1 M2 M2 M2 M3 M2 M3 M2 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3</td><td>uto FF T [1] ?[1] ก</td><td></td><td>2.47 2.46</td><td>-6.56 dBi 975000 GH -43.35 dBi 350000 GH</td><td></td></td<>	0.00 dB 45 d 00/100 1 -27.1 4 GHz Trc 1 1 1	m Offset : B SWT 2: 	2.42 dB ● 27.5 µs ●	RBW 100 kHz VBW 300 kHz	Mode A M1 M2 M2 M2 M3 M2 M3 M2 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3	uto FF T [1] ?[1] ก		2.47 2.46	-6.56 dBi 975000 GH -43.35 dBi 350000 GH	

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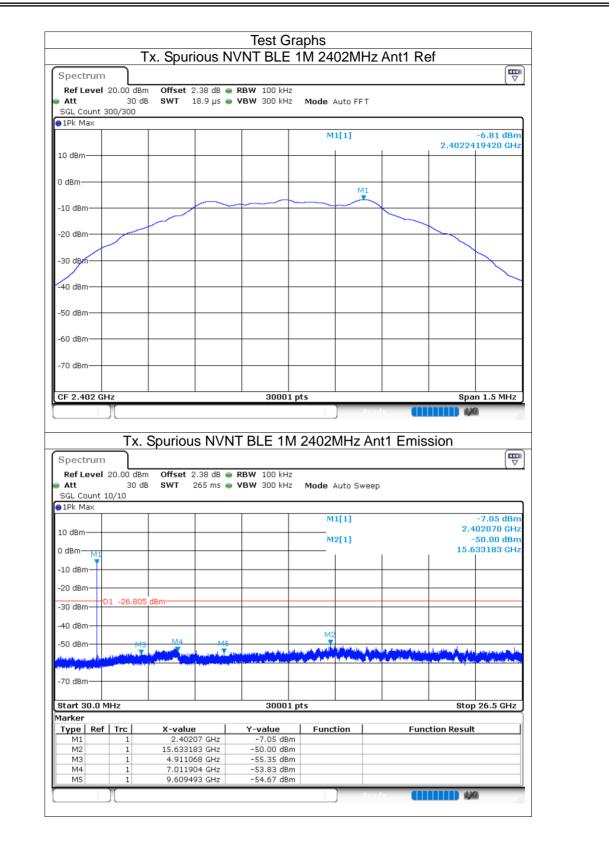




8.1.7 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-43.18	-20	Pass
NVNT	BLE 1M	2440	Ant1	-45.62	-20	Pass
NVNT	BLE 1M	2480	Ant1	-44.97	-20	Pass





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Spectrum									
Ref Level Att	20.00 dBn 30 dB			RBW 100 kHz					
SGL Count		, awi 1	כן ביס 🖷	VBW 300 kHz	- mode /	AULU FF I			
1Pk Max									
					M	1[1]			-5.12 dBm
10 dBm								2.43999	41000 GHz
10 0000									
0 dBm									
				M					
-10 dBm-									
-20 dBm				+ +					
-30 dBm									
-40 dBm									
-50 dBm									
-50 ubiii									
-60 dBm									
-70 dBm									
CF 2.44 GH	7								n 1.5 MHz
				30001	l pts			эра	11 1.3 MILLZ
Spectrum	Tx.	Spurious	s NVN⁻	30001 T BLE 1N) – Toor MHz An	t1 Emis		
Ref Level Att	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I		/1 2440M				
Ref Level Att SGL Count	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/1 2440M				
Ref Level Att	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/ 2440 2 2 Mode /				
Ref Level Att SGL Count	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 440010 GHz
Ref Level Att SGL Count 1Pk Max	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 440010 GHz
Ref Level Att SGL Count 1Pk Max	Tx. 20.00 dBn 30 dE	n Offset 2.	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm	Tx. 20.00 dBn 30 dE	SWT 2	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB ● 1 65 ms ● 1	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		2.4 22.7	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB 👄 I	TBLE 1N	/ 2440 2 Mode / M	Auto Sweep 1[1]		sion 2.4	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB ● 1 65 ms ● 1		/ 2440N 2 Mode / M	Auto Sweep 1[1]		2.4 22.7	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB ● 1 65 ms ● 1		/ 2440N 2 Mode / M	Auto Sweep 1[1] 2[1]		2.4 22.7	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Tx. 20.00 dBn 30 dE 10/10	SWT 2	.39 dB ● 1 65 ms ● 1		/ 2440N 2 Mode / M	Auto Sweep 1[1] 2[1]		2.4 22.7	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	Tx. 1 20.00 dBm 30 dE 10/10 D1 -25.120	SWT 2	.39 dB ● 1 65 ms ● 1		/ 2440N	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7	-6.82 dBm 40010 GHz 50.74 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -70 dBm Start 30.0	Tx. 1 20.00 dBn 30 dE 10/10 D1 -25.120 M3 MHz	SWT 2	.39 dB ● 1 65 ms ● 1	T BLE 1N	/ 2440N	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7 	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz
Ref Level Att SGL Count IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm Start 30.0 Marker Type	Tx. 20.00 dBn 30 dE 10/10 D1 -25.120 M3 MHz f Trc	dBm	.39 dB	T BLE 1N	/ 2440 2 Mode / M: 	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -70 dBm Start 30.0	Tx. 1 20.00 dBn 30 dE 10/10 D1 -25.120 M3 MHz	dBm	.39 dB ● 1 65 ms ● 1 	T BLE 1N	/ 2440 2 Mode / 	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7 	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -70 dBm Start 30.0 Marker Type M1 M2 M3	Tx. 1 20.00 dBn 30 dE 10/10 D1 -25.120 MHz MHz f Trc 1 1 1 1	B Offset 2. SWT 2 WT 2 dBm dBm dBm 2.4400 22.72537 4.92783	.39 dB ● 1 65 ms ● 1 	T BLE 1N	/ 2440 2 Mode / M: M: _	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7 	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz
Set Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm Marker Type M1 M2 M3 M4	Tx. 20.00 dBn 30 dE 10/10 D1 -25.120 M2 MHz f Trc 1 1 1 1	Offset 2. SWT 2 B dBm dBm dBm d2.22 d2.22	.39 dB .65 ms	T BLE 1N RBW 100 kHz yBW 300 kHz	/ 2440 2 Mode / M: M: M: M: M: M: M: M: M: M:	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7 	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -70 dBm Start 30.0 Marker Type M1 M2 M3	Tx. 1 20.00 dBn 30 dE 10/10 D1 -25.120 MHz MHz f Trc 1 1 1 1	B Offset 2. SWT 2 WT 2 dBm dBm dBm 2.4400 22.72537 4.92783	.39 dB .65 ms	T BLE 1N	/ 2440 2 Mode / M: M: M: M: M: M: M: M: M: M:	Auto Sweep 1[1] 2[1]		2.4 22.7 22.7 	-6.82 dBm 40010 GHz 50.74 dBm 25378 GHz

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Spectrur									
Ref Leve Att	el 20.00 dB 30 d			RBW 100 kHz VBW 300 kHz		to FFT			
SGL Count									
∋1Pk Max	1								
					M1[:	1]		2 4700	-6.21 dBm 352500 GHz
10 dBm		+						2.47950	
0 dBm		+ +		M1					
						~			
-10 dBm—									
-20 dBm—		T							
/									
-30 dBm—									
-40 dBm—									
-50 dBm									
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-60 dBm—		+ +							──┨│
-70 dBm—									
CF 2.48 G	Hz			30001	nts			Spa	an 1.5 MHz
][Read	· (1)		0
	_)[Spurious	NVN			Read Hz An	t1 Emis		a
C		Spurious	NVN			tood Hz An	t1 Emis		
Spectrur	_)(•		T BLE 1N	/ 2480M	Read Hz An	t1 Emis		
-		m Offset 2.4	12 dB 😑		1 2480M		t1 Emis		
Ref Leve Att SGL Count	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	/ 2480M		t1 Emis		
Ref Leve Att	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	A 2480M	to Sweep	t1 Emis		
Ref Leve Att SGL Count	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion	-6.42 dBm ‡79720 GHz
Ref Leve Att SGL Count 1Pk Max	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	A 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Leve Att SGL Count 1Pk Max 10 dBm	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm ‡79720 GHz
Ref Leve Att SGL Count 1Pk Max	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Leve Att SGL Count 1Pk Max 10 dBm	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Leve Att SGL Count 1Pk Max 10 dBm- 0 dBm- -10 dBm-	Tx. Tx. 1 20.00 dB 30 d	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Leve Att SGL Count 1Pk Max 10 dBm- 0 dBm- -10 dBm- -20 dBm-	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	1 2480M	to Sweep 1]	t1 Emis	sion 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	Mode Aut Mode Aut M1[: 	to Sweep	l	2 22	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	Mode Aut Mode Aut M1[: 	to Sweep 1]	l	2 22	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm	Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	Mode Aut Mode Aut M1[: 	to Sweep	l	2 22	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm	Tx. Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	T BLE 1N	Mode Aut Mode Aut M1[M2[M2[M2[M2[M2[M2[M2[M2	to Sweep	l	2:- 22:- 	-6.42 dBm +79720 GHz -51.19 dBm 788024 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -50 dBm	Tx. Tx. 1 20.00 dB 30 d 5/5	m Offset 2.4	12 dB 😑	TBLE 1N	Mode Aut Mode Aut M1[M2[M2[M2[M2[M2[M2[M2[M2	to Sweep	l	2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm
Ref Level Att SGL Count SGL Count IPk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm -50 dBm -50 dBm -70 dBm	Tx. Tx. 30 ct 5/5 1 20.00 dB 30 ct 1 5/5 1 20.00 dB 1 20.00 dB	m Offset 2.4 B SWT 26 2 dBm 2 dBm 3 m 4 m 5 m 5 m 5 m 6 m 6 m 6 m 6 m 7 m 8 m 10	+2 dB ● -5 ms ● 	T BLE 1N	M 2480M	to Sweep 1] 1] introduct for the second s	here a first to from the first to the first	2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm 788024 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -50 dBm -50 dBm -70 dBm M1	Tx. Tx. 30 de 5/5 -D1 -26.21	m Offset 2.4 B SWT 26 2 dBm 2 dBm	+2 dB ● 5 ms ●	T BLE 1N	Mode Aut Mode Aut M1[: M2[: M2[: 	to Sweep 1] 1] introduct for the second s	here a first to from the first to the first	2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm 788024 GHz
Ref Level Att SGL Count SGL Count IPk Max 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm Start 30.0 Marker Type M1 M2 M3	Tx. Tx. 30 d 5/5 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 11 -26.21 1	m Offset 2.4 B SWT 26 2 dBm 2 dBm 2 dBm 2 dBm 4 2 dBm 5 5 5 5 5 5 5 5 5 5 5 5 5	+2 dB ● -5 ms ● 	T BLE 1N	Mode Aut Mode Aut M1[: M2]: M2[:	to Sweep 1] 1] introduct for the second s		2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm 788024 GHz
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm Start 30.0 Marker Type Re M1 M2 M3	Tx. Tx. 30 d 5/5 D1 -26.21 0 0 0 0 0 0 0 0 0 0 0 0 0	m Offset 2.4 B SWT 26 2 dBm 2 dBm 2 dBm 2 dBm 2 dBm 2 dBm 2 dBm 4 dBm 4 dBm 5 dBm 5 dBm 6 dBm 6 dBm 7 dBm	+2 dB ● -5 ms ● 	T BLE 1N	M 2480M	to Sweep 1] 1] introduct for the second s		2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm 788024 GHz
Ref Level Att SGL Count SGL Count IPk Max 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm Start 30.0 Marker Type M1 M2 M3	Tx. Tx. 30 d 5/5 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 10 -26.21 11 -26.21 1	m Offset 2.4 B SWT 26 2 dBm 2 dBm 2 dBm 2 dBm 4 2 dBm 5 5 5 5 5 5 5 5 5 5 5 5 5	+2 dB ● -5 ms ● 	T BLE 1N	M 2480M	to Sweep 1] 1] introduct for the second s		2:- 22:- 	-6.42 dBm 479720 GHz -51.19 dBm 788024 GHz

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8.1.8 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 2M	2404	Ant1	57.86	2.38	0.93
NVNT	BLE 2M	2440	Ant1	57.34	2.42	0.93
NVNT	BLE 2M	2478	Ant1	57.87	2.38	0.93

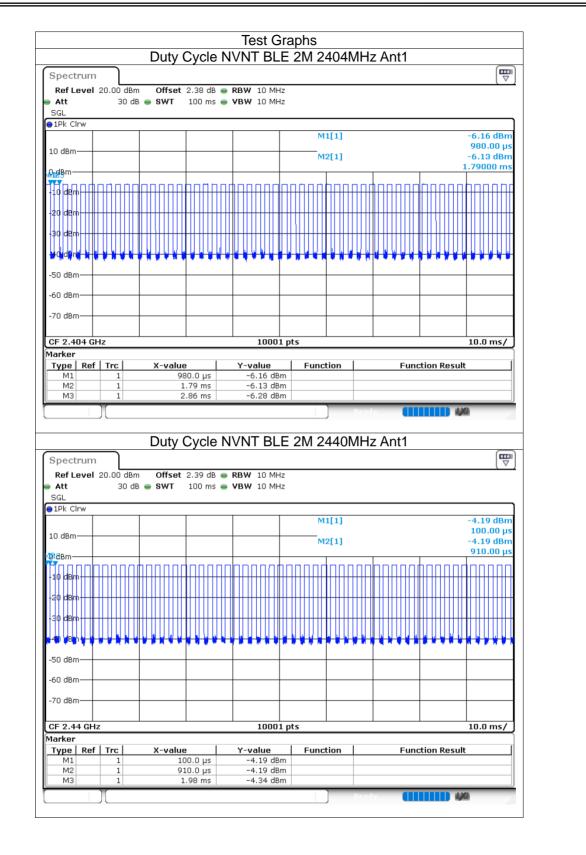


ILAC-MR

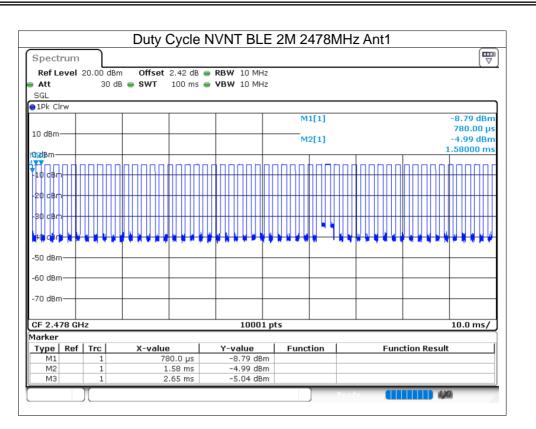
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Certificate #4298.01

Report No.: S24032202401002







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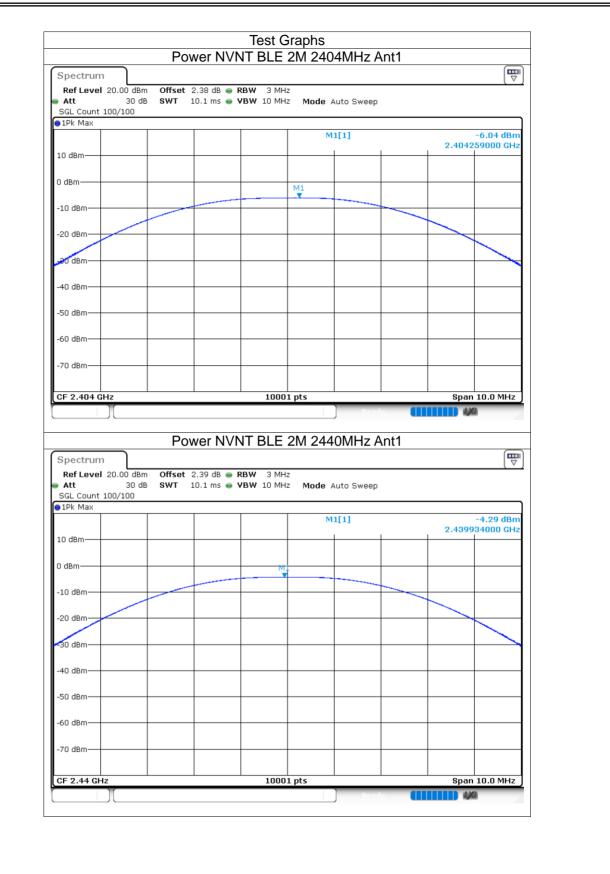




8.1.9 Maximum Conducted Output Power

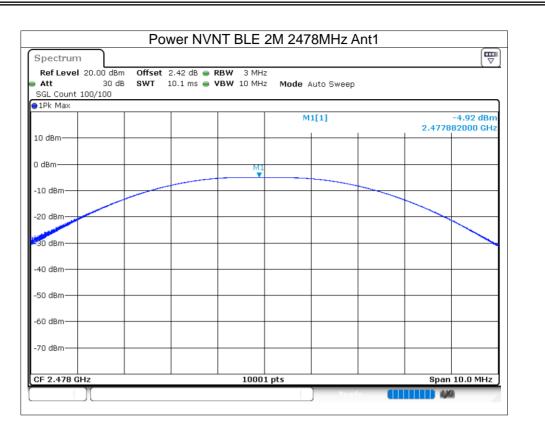
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 2M	2404	Ant1	-6.04	30	Pass
NVNT	BLE 2M	2440	Ant1	-4.29	30	Pass
NVNT	BLE 2M	2478	Ant1	-4.92	30	Pass





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8.1.10 -6dB Bandwidth

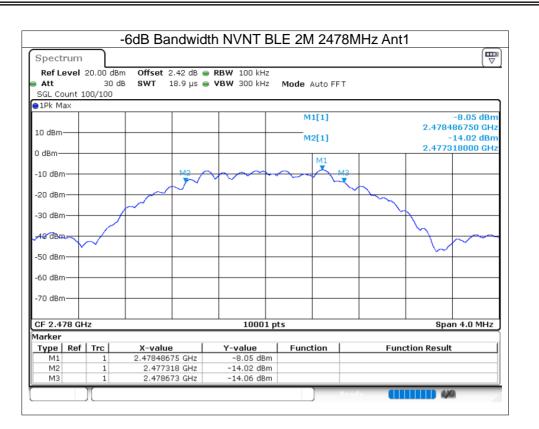
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 2M	2404	Ant1	1.164	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.198	0.5	Pass
NVNT	BLE 2M	2478	Ant1	1.356	0.5	Pass





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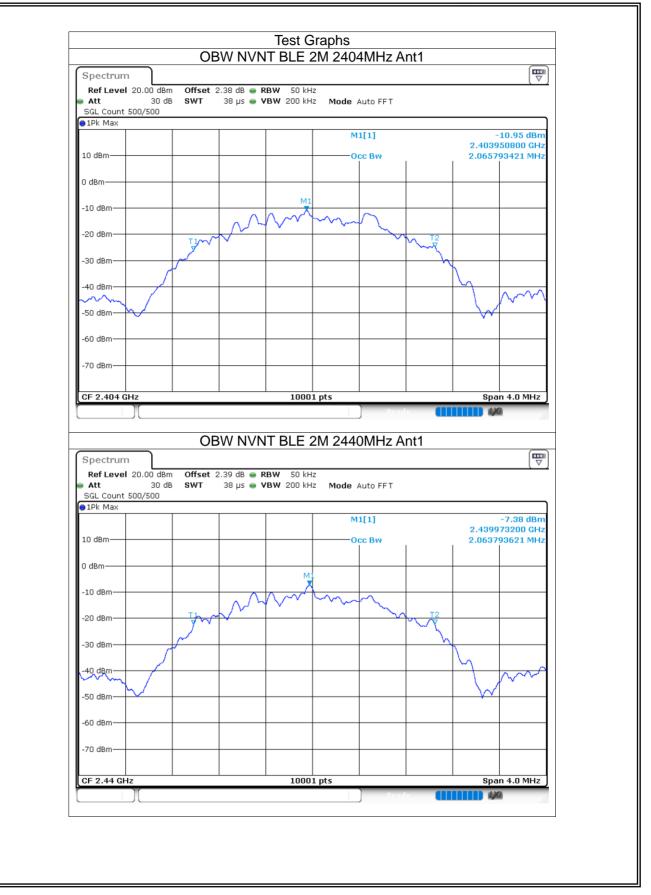


8.1.11 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 2M	2404	Ant1	2.066
NVNT	BLE 2M	2440	Ant1	2.064
NVNT	BLE 2M	2478	Ant1	2.056

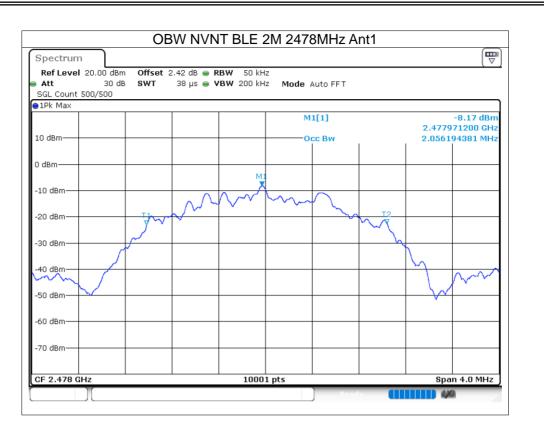
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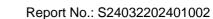
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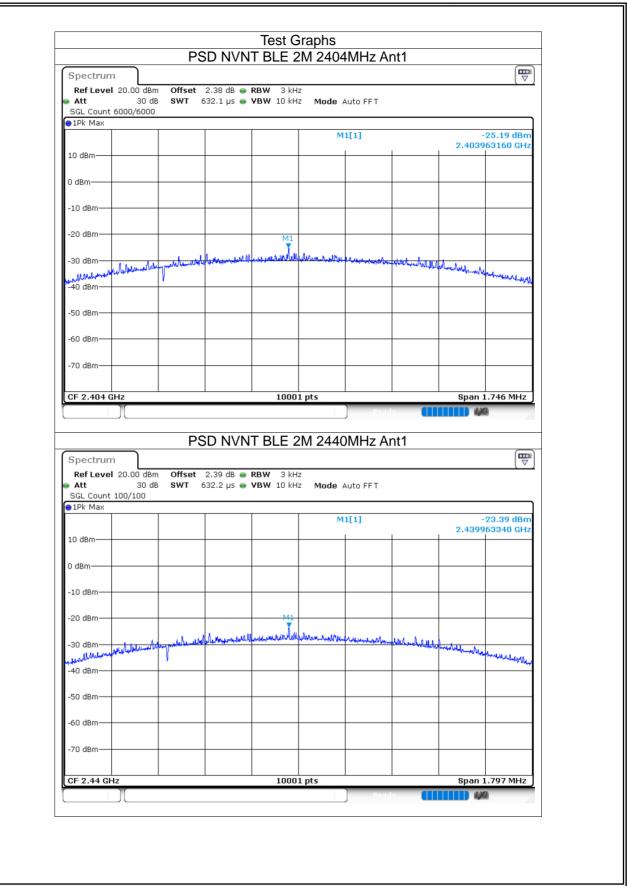


8.1.12 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 2M	2404	Ant1	-25.19	8	Pass
NVNT	BLE 2M	2440	Ant1	-23.39	8	Pass
NVNT	BLE 2M	2478	Ant1	-24.09	8	Pass

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Spectrum	ר								
Ref Level 20.	00 dBm	Offset 2	42 dB 👄 R	BW 3 kHz					(*
Att			_	BW 10 kHz	Mode Au	uto FFT			
SGL Count 100/	/100								
1Pk Max									
					M	1[1]		-	24.09 dBm
								2.4779	63190 GHz
LO dBm									
D dBm									
-10 dBm									
-20 dBm				M1					
				T					
-30 dBm			Heletrand	Une warden hall	Hermonyligher	Hernarder alle	Acars		
-30 UBIII	المستعاد العالمة العالم	Nor have a					and a start and a second second	drughter .	
when have been h								- HARRING AND A	- Whinhaused .
40 dBm									- AND AND
-50 dBm									
-60 dBm									
70 dBm									
CF 2.478 GHz				1000:	1 pts			Span 2	.034 MHz

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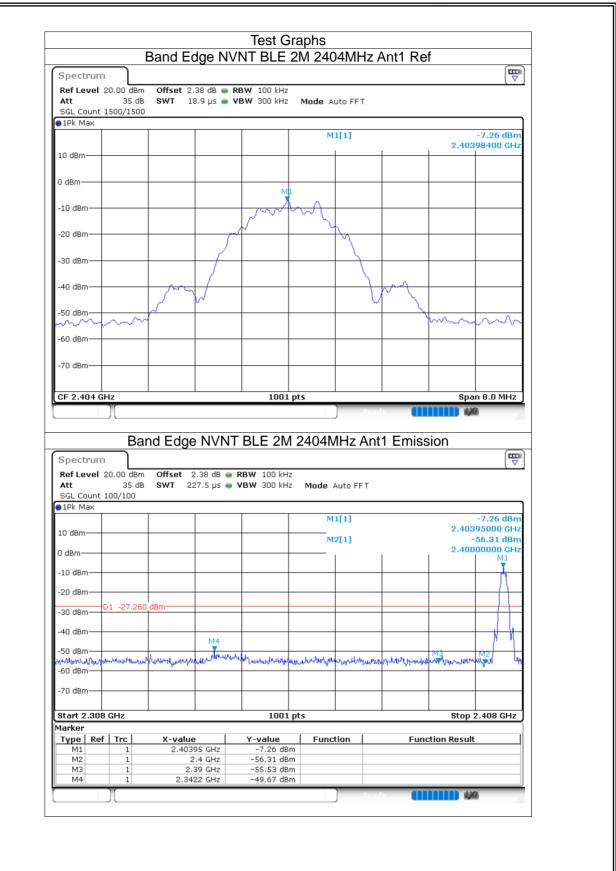




8.1.13 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 2M	2404	Ant1	-42.41	-20	Pass
NVNT	BLE 2M	2478	Ant1	-46.09	-20	Pass





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Ref Le Att		20.00 dBm 35 dB			RBW 100 kHz VBW 300 kHz	Mode Auto	FFT			
SGL C		200/200								
THK N	I X EI					M1[1	1			-6.06 dBm
						MILI	a -		2.47	-6.06 dBm 798400 GHz
10 dBm	ı—∔									
0 dBm-										
					Mp					
-10 dBr	n-+					m				
						~				
-20 dBr	n-+		+	<u> </u>	~	₽√				
							\sum			
-30 dBr	n-+				-		\rightarrow			
				1			5			
-40 dBr	n+		$+ \wedge \neg$	t /	+ +		\rightarrow	~~~{		
				W				۲.		
-50 dBr	n				+ +				m	
7 ° V	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\sim \sim \sim$	1						$\sim \sim \sim$	m
-60 dBr	n- -									
-70 dBr	n- -									
CF 2.4	78 GI	Hz			1001 pt	ts			Spa	n 8.0 MHz
										0
		Ba	nd Edae	NVN	T BLE 2M 2	2478MH	lz Ant [,]	1 Emiss	sion	1111
Ref Le Att	evel 2	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz VBW 300 kHz			1 Emiss	sion	
Att SGL C	e vel 2 ount 1	20.00 dBm	n Offset 2	2.42 dB 👄	RBW 100 kHz			1 Emiss	sion	
Ref Le Att	e vel 2 ount 1	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	sion	
Ref Le Att SGL C	ount 1 lax	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz		o FFT	1 Emiss		-7.36 dBm 795000 GHz
Ref Le Att SGL C	ount 1 lax	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C	ount 1 lax	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz
Ref Le Att SGL C 1Pk M	ount 1 lax	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm 0 dBm-	ount 1 lax	20.00 dBm 35 dE	n Offset 2	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm	n n n n n n n n n n n n n n n n n n n	20.00 dBm 35 dE 100/100	Offset 2 3 SWT 22	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm 0 dBm-	n	20.00 dBm 35 dE	Offset 2 3 SWT 22	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm -10 dBm -20 dBm -20 dBm	n	20.00 dBm 35 dE 100/100	Offset 2 3 SWT 22	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm -10 dBm -20 dBm	n	20.00 dBm 35 dE 100/100	Offset 2 3 SWT 22	2.42 dB 👄	RBW 100 kHz	Mode Aut	o FFT	1 Emiss	2.47	-7.36 dBm 795000 GHz -54.01 dBm
Ref Le Att SGL C 1Pk M 10 dBm -10 dBm -20 dBm -20 dBm	n	20.00 dBm 35 dE 100/100 D1 -26.06	4 dBm	2.42 dB 	RBW 100 kHz YBW 300 kHz	Mode Aut M1[1 M2[1	o FFT .] .]		2.47	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 1Pk M 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	2 vel 2 2 ount 1 1 ax n n n n n n n n n n n n n	20.00 dBm 35 dE 100/100	4 dBm	2.42 dB 	RBW 100 kHz	Mode Aut M1[1 M2[1	o FFT .] .]		2.47	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 1Pk M 10 dBm 0 dBm- -10 dBm -20 dBm -30 dBm	2 vel 2 2 ount 1 1 ax n n n n n n n n n n n n n	20.00 dBm 35 dE 100/100 D1 -26.06	4 dBm	2.42 dB 	RBW 100 kHz YBW 300 kHz	Mode Aut M1[1 M2[1	o FFT .] .]		2.47	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 1Pk M 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	n n n n n	20.00 dBm 35 dE 100/100 D1 -26.06	4 dBm	2.42 dB 	RBW 100 kHz YBW 300 kHz	Mode Aut M1[1 M2[1	o FFT .] .]		2.47	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 1Pk M 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm	n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1 n 1	20.00 dBm 35 dE 100/100 01 -26.06 M4	4 dBm	2.42 dB 	RBW 100 kHz VBW 300 kHz	Mode Aut	o FFT .] .]		2.47 2.48	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 1Pk M 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm -70 dBm -70 dBm -70 dBm -70 dBm	n 1 n 1	20.00 dBm 35 dE 100/100 01 -26.06 M4	4 dBm	2.42 dB 	RBW 100 kHz YBW 300 kHz	Mode Aut	o FFT .] .]		2.47 2.48	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C SGL C IPK M 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 dBm -70 dBm -70 dBm -70 dBm -70 dBm	evel 2 ount 1 lax n <	20.00 dBm 35 dE 100/100 D1 -26.06 M4 GHz	4 dBm	2.42 dB 2.42 dB 2.42 dB 4.42 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.42 dB 4.44	RBW 100 kHz VBW 300 kHz	Mode Aut M1[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2] M2[1 M2] M2] M2[1 M2] M2] M2] M2] M2] M2] M2] M2]	o FFT .] .]	Joseph W. Joseph and State of the	2.47 2.48 	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C SGL C 1Pk M 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm -60 dBm -70 dBm Start 1 Aarker	evel 2 ount 1 lax n <	20.00 dBm 35 dE 100/100 D1 -26.06 M4 K/k/k/k/k/k/k/k/k/k/k/k/k/k/k/k/k/k/k/k	4 dBm	2.42 dB 2.42 dB 2.42 dB 4. (μαλλαβιηματία)	RBW 100 kHz VBW 300 kHz	Mode Aut	o FFT .] .]	Joseph W. Joseph and State of the	2.47 2.48	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C SGL C IPK M 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 dBm -70 dBm -70 dBm -70 dBm -70 dBm	evel 2 ount 1 lax n n n n n 2.474 	20.00 dBm 35 dE 100/100 D1 -26.06 M4 GHz	Offset 2 SWT 22	2.42 dB 2.42 dB 2.42 dB 4.42 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.44 dB 4.42 dB 4.44	RBW 100 kHz VBW 300 kHz	Mode Aut M1[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2] M2[1 M2] M2] M2[1 M2] M2] M2] M2] M2] M2] M2] M2]	o FFT .] .]	Joseph W. Joseph and State of the	2.47 2.48 	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm	evel 2 ount 3 n n n n n n 22.474	20.00 dBm 35 dE 100/100 01 -26.06 M4 GHz GHz I Trc 1 1 1 1	A Offset 2 SWT 22 SWT 22 A dBm 4	2.42 dB • 	RBW 100 kHz VBW 300 kHz 	Mode Aut M1[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2] M2[1 M2] M2] M2[1 M2] M2] M2] M2] M2] M2] M2] M2]	o FFT .] .]	Joseph W. Joseph and State of the	2.47 2.48 	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz
Ref Le Att SGL C IPk M 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -60 dBm -70 dBm 50 dBm -70 dBm -70 dBm M1 M2	evel 2 ount 3 n n n n n n 22.474	20.00 dBm 35 dE 100/100 01 -26.06 M4 GHz GHz 1 1	A Offset 2 SWT 22 SWT 22 A dBm 4	2.42 dB • -7.5 µs • 	RBW 100 kHz VBW 300 kHz	Mode Aut M1[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2[1 M2] M2] M2[1 M2] M2] M2[1 M2] M2] M2] M2] M2] M2] M2] M2]	o FFT .] .]	Joseph W. Joseph and State of the	2.47 2.48 	-7.36 dBm 795000 GHz -54.01 dBm 350000 GHz

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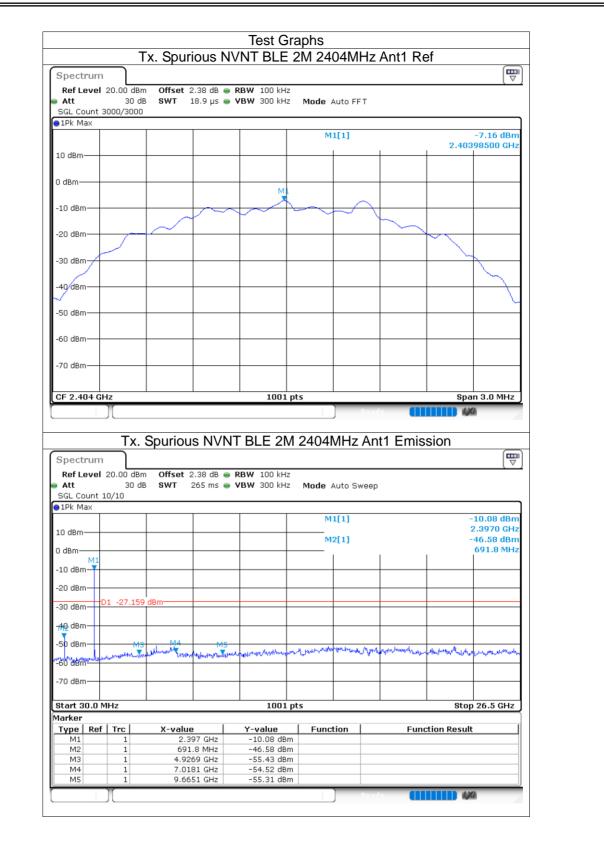


8.1.14 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 2M	2404	Ant1	-39.41	-20	Pass
NVNT	BLE 2M	2440	Ant1	-45.28	-20	Pass
NVNT	BLE 2M	2478	Ant1	-42.37	-20	Pass

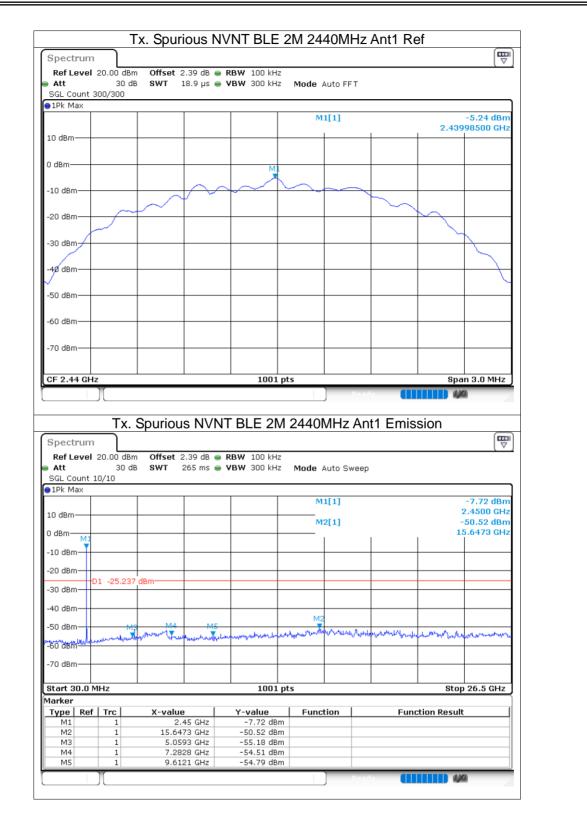
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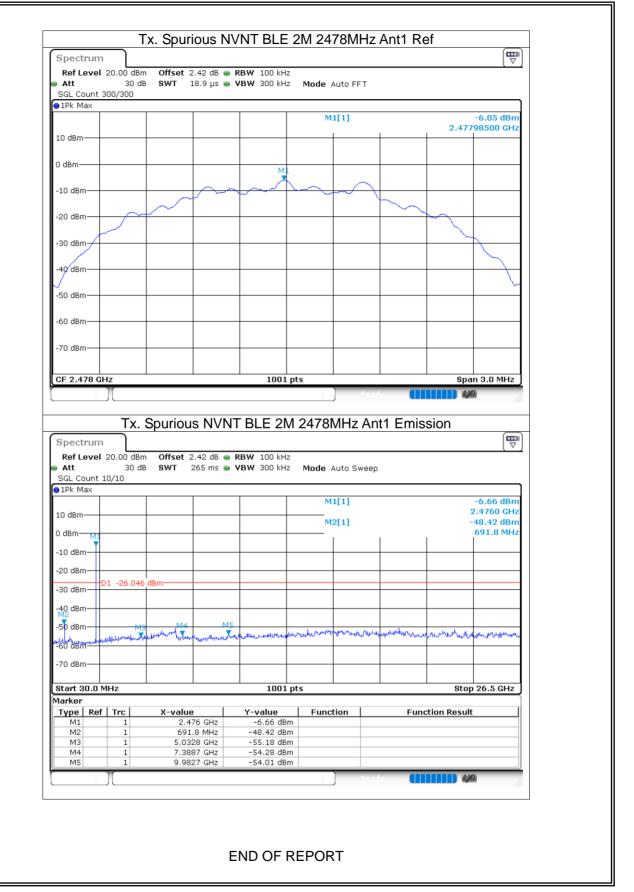
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