



RADIO TEST REPORT FCC ID: ZSW-30-107

Product:Mobile PhoneTrade Mark:BmobileModel No.:BL61Family Model:N/AReport No.:S21020301005001Issue Date:27 Mar. 2021

Prepared for

b mobile HK Limited

Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung;New Territories; Hong Kong.

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 / 2320 0090 Website: http://www.ntek.org.cn





Report No.: S21020301005001

TABLE OF CONTENTS

1 TES	ST RESULT CERTIFICATION	3
	MMARY OF TEST RESULTS	
3 FA	CILITIES AND ACCREDITATIONS	5
3.1 3.2	FACILITIES LABORATORY ACCREDITATIONS AND LISTINGS	5
3.3	MEASUREMENT UNCERTAINTY	
4 GE	NERAL DESCRIPTION OF EUT	6
5 DE	SCRIPTION OF TEST MODES	8
6 SE	TUP OF EQUIPMENT UNDER TEST	9
6.1	BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM	9
6.2	SUPPORT EQUIPMENT	10
6.3	EQUIPMENTS LIST FOR ALL TEST ITEMS	
7 TES	ST REQUIREMENTS	13
7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9 7.10 7.11	CONDUCTED EMISSIONS TEST RADIATED SPURIOUS EMISSION NUMBER OF HOPPING CHANNEL HOPPING CHANNEL SEPARATION MEASUREMENT AVERAGE TIME OF OCCUPANCY (DWELL TIME) 20DB BANDWIDTH TEST PEAK OUTPUT POWER CONDUCTED BAND EDGE MEASUREMENT. SPURIOUS RF CONDUCTED EMISSION ANTENNA APPLICATION FREQUENCY HOPPING SYSTEM (FHSS) EQUIPMENT REQUIREMENTS	16 25 26 27 29 30 31 32 33
8 TES	ST RESULTS	35
8.1 8.2 8.3 8.4 8.5 8.6 8.7	DWELL TIME MAXIMUM CONDUCTED OUTPUT POWER OCCUPIED CHANNEL BANDWIDTH CARRIER FREQUENCIES SEPARATION NUMBER OF HOPPING CHANNEL BAND EDGE CONDUCTED RF SPURIOUS EMISSION	40 45 50 55 56





1 TEST RESULT CERTIFICATION

Applicant's name	b mobile HK Limited
Address	Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung;New Territories; Hong Kong.
Manufacturer's Name	b mobile HK Limited
Address	Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung;New Territories; Hong Kong.
Product description	
Product name	Mobile Phone
Model and/or type reference	BL61
Family Model	N/A

Certificate #4298.01

Measurement Procedure Used:

APPLICABLE STANDARDS		
STANDARD/ TEST PROCEDURE	TEST RESULT	
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart C ANSI C63.10-2013	Complied	

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.

Date of Test	:	03 Feb. 2021 ~ 27 Mar. 2021
Testing Engineer	:	(Mary Hu)
Technical Manager	:	Jasonchen
Authorized Signatory	:	(Jason Chen) Addus (Alex Li)

NTEK北测



SUMMARY OF TEST RESULTS					
	FCC Part15 (15.247), Subpart C				
Standard Section	Test Item	Verdict	Remark		
15.207	Conducted Emission	PASS			
15.209 (a) 15.205 (a)	Radiated Spurious Emission	PASS			
15.247(a)(1)	Hopping Channel Separation	PASS			
15.247(b)(1)	Peak Output Power	PASS			
15.247(a)(iii)	Number of Hopping Frequency	PASS			
15.247(a)(iii)	Dwell Time	PASS			
15.247(a)(1)	Bandwidth	PASS			
15.247 (d)	Band Edge Emission	PASS			
15.247 (d)	Spurious RF Conducted Emission	PASS			
15.203	Antenna Requirement	PASS			

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



4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification		
Equipment	Mobile Phone	
Trade Mark	Bmobile	
FCC ID	ZSW-30-107	
Model No.	BL61	
Family Model	N/A	
Model Difference	N/A	
Operating Frequency	2402MHz~2480MHz	
Modulation	GFSK, π/4-DQPSK, 8-DPSK	
Number of Channels	79 Channels	
Antenna Type	PIFA Antenna	
Antenna Gain	1.1 dBi	
Power supply	DC 3.8V/ 3000mAh from battery or DC 5V from Adapter.	
Adapter	Input: 100-240V~50-60Hz 0.2A Output: 5.0V1A	
HW Version	Bmobile_BL61_TEM_PE_V001	
SW Version	BL61_HW_V1.0	

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				
Report No.	Version	Description	Issued Date	
S21020301005001	Rev.01	Initial issue of report	27 Mar. 2021	



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.

Certificate #4298.01

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 for GFSK modulation; 2Mbps for π /4-DQPSK modulation; 3Mbps for 8-DPSK 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:

Channel	Frequency(MHz)
0	2402
1	2403
39	2441
40	2442
77	2479
78	2480

Note: fc=2402MHz+k×1MHz k=0 to 78

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

For AC Conducted Emission			
Final Test Mode	Description		
Mode 1	normal link mode		

Note: AC power line Conducted Emission was tested under maximum output power.

For Radiated Test Cases		
Final Test Mode	Description	
Mode 1	normal link mode	
Mode 2	CH00(2402MHz)	
Mode 3	CH39(2441MHz)	
Mode 4	CH78(2480MHz)	

Note: For radiated test cases, the worst mode data rate 3Mbps 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.

For Conducted Test Cases				
Final Test Mode Description				
Mode 2	CH00(2402MHz)			
Mode 3	CH39(2441MHz)			
Mode 4	CH78(2480MHz)			
Mode 5	Hopping mode			

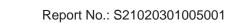
Note: The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.

NTEK北测



6 SETUP OF	EQUIPMENT	UNDER	TEST	
6.1 BLOCK DIAGI		RATION O	F TEST SYSTI	EM
C-2	EUT AE-2 Earphone	C-1	AE-1 Adapter	AC PLUG
For Radiated Test C	Cases			
	EUT			
For Conducted Test	t Cases			
Measurement Instrument	C-3	JT		

Note: 1. The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.2. EUT built-in battery-powered, the battery is fully-charged.



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.

Certificate #4298.01

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Adapter	N/A	N/A	Peripherals
AE-2	Earphone	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	USB Cable	NO	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".

NTEK北测



Report No.: S21020301005001

6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

adiatic		rest equipment					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2020.05.11	2021.05.10	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2020.07.13	2021.07.12	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2020.07.13	2021.07.12	1 year
4	Test Receiver	R&S	ESPI7	101318	2020.05.11	2021.05.10	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2020.04.11	2021.04.10	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
7	Horn Antenna	EM	EM-AH-1018 0	2011071402	2020.04.11	2021.04.10	1 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2020.12.10	2021.12.09	1 year
9	Amplifier	EMC	EMC051835 SE	980246	2020.07.13	2021.07.12	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2020.12.10	2021.12.09	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2020.07.13	2021.07.12	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2019.08.6	2022.08.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2019.08.6	2022.08.05	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2019.06.28	2022.06.27	3 year
15	High Test Cable(1G-40G Hz)	N/A	R-04	N/A	2020.04.11	2021.04.10	1 year
16	Filter	TRILTHIC	2400MHz	29	2020.07.13	2021.07.12	1 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

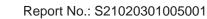
We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list





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	2020.05.11	2021.05.10	1 year		
2	LISN	R&S	ENV216	101313	2020.04.11	2021.04.10	1 year		
3	LISN	SCHWARZBE CK	NNLK 8129	8129245	2020.05.11	2021.05.10	1 year		
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2020.05.11	2023.05.10	3 year		
5	Test Cable (9KHz-30MH z)	N/A	C01	N/A	2020.05.11	2023.05.10	3 year		
6	Test Cable (9KHz-30MH z)	N/A	C02	N/A	2020.05.11	2023.05.10	3 year		
7	Test Cable (9KHz-30MH z)	N/A	C03	N/A	2020.05.11	2023.05.10	3 year		

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.



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(MHz)	Quasi-peak	Average		
0.15-0.5	66-56*	56-46*		
0.5-5.0	56	46		
5.0-30.0	60	50		

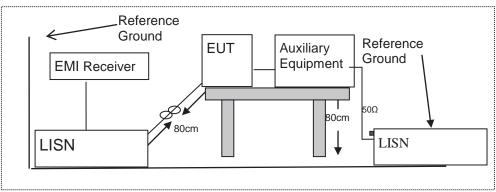
Certificate #4298.01

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 Test Configuration



7.1.4 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.
- 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.
- 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.
- 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.

7.1.5 Test Results

Pass





7.1.6 Test Results

EUT:	Mobile Phone	Model Name :	BL61
Temperature:	21.1 ℃	Relative Humidity:	53%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

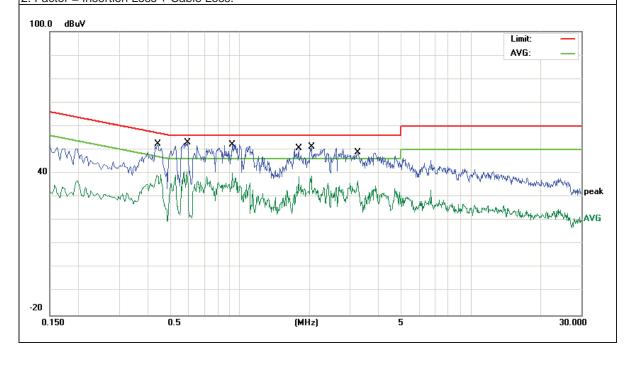
ACCRED

Certificate #4298.01

Reading Level					
Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
42.79	9.55	52.34	57.02	-4.68	QP
29.94	9.55	39.49	47.02	-7.53	AVG
43.61	9.55	53.16	56.00	-2.84	QP
31.08	9.55	40.63	46.00	-5.37	AVG
42.74	9.56	52.30	56.00	-3.70	QP
30.56	9.56	40.12	46.00	-5.88	AVG
41.12	9.58	50.70	56.00	-5.30	QP
28.97	9.58	38.55	46.00	-7.45	AVG
41.52	9.58	51.10	56.00	-4.90	QP
29.36	9.58	38.94	46.00	-7.06	AVG
39.40	9.60	49.00	56.00	-7.00	QP
27.25	9.60	36.85	46.00	-9.15	AVG
	42.79 29.94 43.61 31.08 42.74 30.56 41.12 28.97 41.52 29.36 39.40	42.79 9.55 29.94 9.55 43.61 9.55 31.08 9.55 42.74 9.56 30.56 9.56 41.12 9.58 28.97 9.58 41.52 9.58 39.40 9.60	42.79 9.55 52.34 29.94 9.55 39.49 43.61 9.55 53.16 31.08 9.55 40.63 42.74 9.56 52.30 30.56 9.56 40.12 41.12 9.58 50.70 28.97 9.58 51.10 29.36 9.58 38.94 39.40 9.60 49.00	42.799.5552.3457.0229.949.5539.4947.0243.619.5553.1656.0031.089.5540.6346.0042.749.5652.3056.0030.569.5640.1246.0041.129.5850.7056.0028.979.5838.5546.0041.529.5851.1056.0029.369.5838.9446.0039.409.6049.0056.00	42.799.5552.3457.02-4.6829.949.5539.4947.02-7.5343.619.5553.1656.00-2.8431.089.5540.6346.00-5.3742.749.5652.3056.00-3.7030.569.5640.1246.00-5.8841.129.5850.7056.00-5.3028.979.5838.5546.00-7.4541.529.5851.1056.00-4.9029.369.5838.9446.00-7.0639.409.6049.0056.00-7.00

Remark:

All readings are Quasi-Peak and Average values.
Factor = Insertion Loss + Cable Loss.



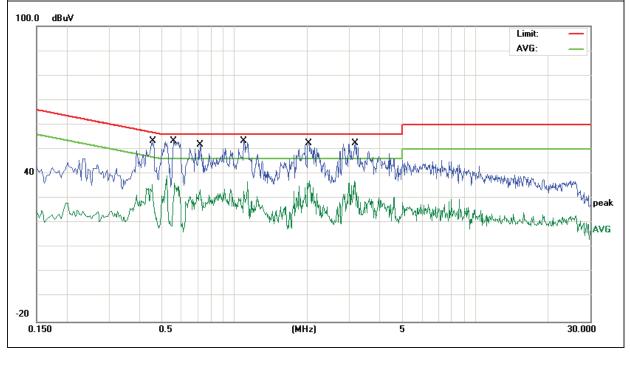




EUT:	Mobile Phone Model Name : BL61							
Temperature:	Temperature: 21.1 ℃				Relative Humid	lity:	53%	
Pressure:		1010hPa	i		Phase :		Ν	
Test Voltage :		DC 5V fro	om Adapter AC	120V/60Hz	Test Mode:		Mode [·]	1
Frequency	Read	ding Level	Correct Factor	Measure-ment	Limits	Ма	rgin	Remark
(MHz)	((dBµV)	(dB)	(dBµV)	(dBµV)	(d	IB)	Kelliark
0.4580		43.75	9.54	53.29	56.73	-3	.44	QP
0.4580	:	26.07	9.54	35.61	46.73	-11	.12	AVG
0.5580		43.79	9.54	53.33	56.00	-2	.67	QP
0.5580	:	29.70	9.54	39.24	46.00	-6	.76	AVG
0.7180		42.38	9.54	51.92	56.00	-4	.08	QP
0.7180		24.10	9.54	33.64	46.00	-12	2.36	AVG
1.0900		43.85	9.55	53.40	56.00	-2	.60	QP
1.0900	:	27.28	9.55	36.83	46.00	-9	.17	AVG
2.0300		42.93	9.57	52.50	56.00	-3	.50	QP
2.0300	:	27.63	9.57	37.20	46.00	-8	.80	AVG
3.1660		42.81	9.59	52.40	56.00	-3	.60	QP
3.1660	[:	27.49	9.59	37.08	46.00	-8	.92	AVG

Remark:

All readings are Quasi-Peak and Average values.
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

Certificate #4298.01

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)

Frequency(MHz)	Class B (dBuV/	/m) (at 3M)
Frequency(iviriz)	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.

NTEKJLW



7.2.3 Measuring Instruments

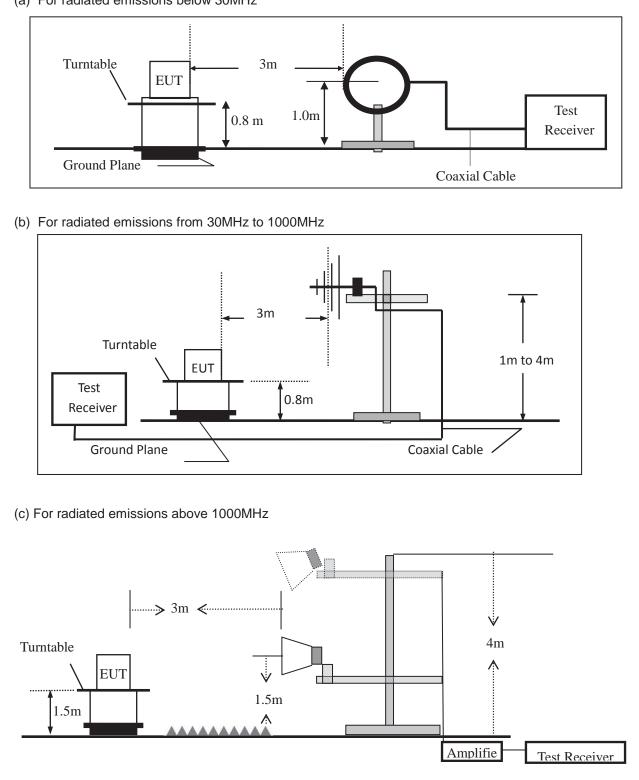
The Measuring equipment is listed in the section 6.3 of this test report.

ACC

Certificate #4298.01

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.

Certificate #4298.01

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:

eee ale lenething epeerann analyzer eetange	
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 / 1 MHz for Average
	0 ///

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:									
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth						
30 to 1000	QP	120 kHz	300 kHz						
Ah awa 4000	Peak		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

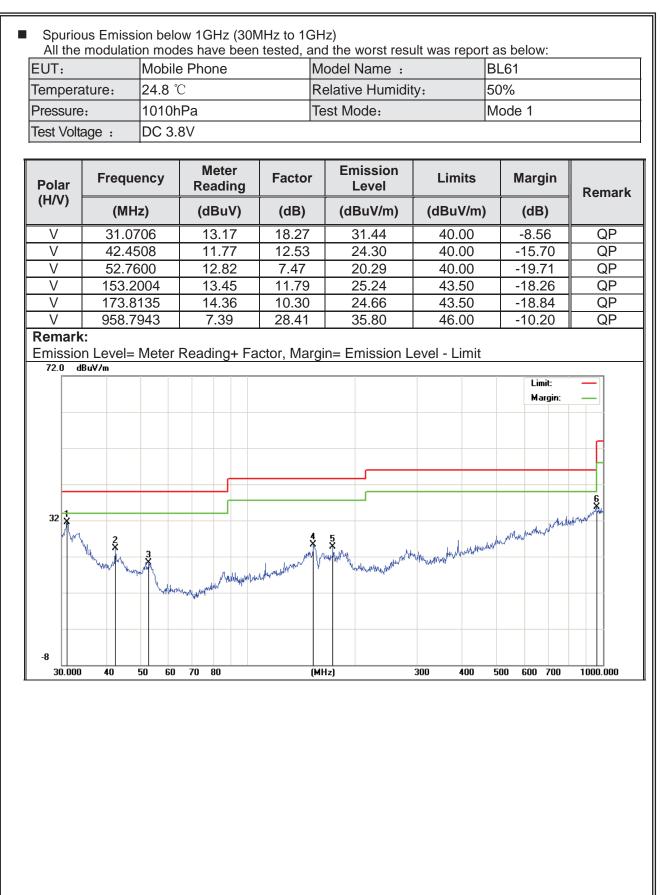
EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

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



Report No.: S21020301005001







Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remar
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Н	92.7871	9.09	10.26	19.35	43.50	-24.15	QP
Н	168.4138	10.85	10.76	21.61	43.50	-21.89	QP
Н	286.9823	9.22	14.32	23.54	46.00	-22.46	QP
Н	739.6604	7.40	25.11	32.51	46.00	-13.49	QP
Н	878.3214	8.34	25.63	33.97	46.00	-12.03	QP
Н	942.1304	6.27	28.07	34.34	46.00	-11.66	QP
						Limit: Margin:	
32	Maryman and a phone of		, where we have the second s	W W W W W W W	Marker Marker Marker	norm when when the second s	55.00
-8	40 50 60	70 80	(MH2		00 400 50	0 600 700	1000.000





Spurio EUT:	ous Emis	Mobile Ph	,		Model No.:		BL61		BL61			
Temperatu		20 ℃			Relative Hum	idity:	48%					
Test Mode		-	ode3/Mode		Test By:		Mary Hu					
All the modulation modes have been tested, and the worst result was report as below:												
An the mountation modes have been tested, and the worst result was report as below.												
Frequenc	Read	Cable	Antenna	Pream		Limit	s Margin					
У	Level	loss	Factor	Facto				Remark	Comment			
(MHz)	(dBµV)	(dB)	dB/m	(dB)	,	dBµV/	, , ,					
			1	r ì	02 MHz)(GFSI	1 ·		т				
4804.79	66.03	5.21	35.59	44.30		74.00		Pk	Vertical			
4804.79	43.49	5.21	35.59	44.30		54.00		AV	Vertical			
7206.51	63.60	6.48	36.27	44.60		74.00		Pk	Vertical			
7206.51	43.53	6.48	36.27	44.60	41.68	54.00	0 -12.32	AV	Vertical			
4804.57	62.12	5.21	35.55	44.30		74.00		Pk	Horizontal			
4804.57	43.16	5.21	35.55	44.30	39.62	54.00	0 -14.38	AV	Horizontal			
7206.80	59.55	6.48	36.27	44.52		74.00	0 -16.22	Pk	Horizontal			
7206.80	43.49	6.48	36.27	44.52		54.00		AV	Horizontal			
			Mid Char	nnel (24	41 MHz)(GFSł	<)Abov			1			
4882.73	65.93	5.21	35.66	44.20		74.00	0 -11.40	Pk	Vertical			
4882.73	43.04	5.21	35.66	44.20	39.71	54.00	0 -14.29	AV	Vertical			
7323.37	62.11	7.10	36.50	44.43	61.28	74.00	0 -12.72	Pk	Vertical			
7323.37	42.39	7.10	36.50	44.43	3 41.56	54.00	0 -12.44	AV	Vertical			
4882.50	62.37	5.21	35.66	44.20	59.04	74.00	0 -14.96	Pk	Horizontal			
4882.50	41.94	5.21	35.66	44.20	38.61	54.00	0 -15.39	AV	Horizontal			
7324.90	59.66	7.10	36.50	44.43	3 58.83	74.00	0 -15.17	Pk	Horizontal			
7324.90	41.53	7.10	36.50	44.43		54.00		AV	Horizontal			
	.		High Cha	nnel (24	80 MHz)(GFSI	K) Abov	/e 1G					
4959.32	67.60	5.21	35.52	44.21	l 64.12	74.00	0 -9.88	Pk	Vertical			
4959.32	43.20	5.21	35.52	44.21	I 39.72	54.00	0 -14.28	AV	Vertical			
7439.37	63.03	7.10	36.53	44.60	62.06	74.00	0 -11.94	Pk	Vertical			
7439.37	42.62	7.10	36.53	44.60	41.65	54.00	0 -12.35	AV	Vertical			
4960.51	62.74	5.21	35.52	44.21	I 59.26	74.00	0 -14.74	Pk	Horizontal			
4960.51	42.19	5.21	35.52	44.21	I 38.71	54.00	0 -15.29	AV	Horizontal			
7440.01	61.11	7.10	36.53	44.60	60.14	74.00	0 -13.86	Pk	Horizontal			
7440.01	40.35	7.10	36.53	44.60	39.38	54.00	0 -14.62	AV	Horizontal			

Note:

(1) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor (2)All other emissions more than 20dB below the limit.





Spurio									
EUT:	EUT: Mobile Phone Model No.:								
Temperatu	Temperature: 20 °C Relative Humidity:								
Test Mode	: Mode2	2/ Mode	4	Т	est By:		Mary Hu		
All the mo	All the modulation modes have been tested, and the worst result was report as below:								
Frequency	Meter Reading	Cable Loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/n	n) (dB)	Туре	
				1Mbps(G	FSK)-Non-hop	oping			
2310.00	52.24	2.97	27.80	43.80	39.21	74	-34.79	Pk	Horizontal
2310.00	44.64	2.97	27.80	43.80	31.61	54	-22.39	AV	Horizontal
2310.00	54.06	2.97	27.80	43.80	41.03	74	-32.97	Pk	Vertical
2310.00	44.81	2.97	27.80	43.80	31.78	54	-22.22	AV	Vertical
2390.00	52.88	3.14	27.21	43.80	39.43	74	-34.57	Pk	Vertical
2390.00	41.91	3.14	27.21	43.80	28.46	54	-25.54	AV	Vertical
2390.00	52.06	3.14	27.21	43.80	38.61	74	-35.39	Pk	Horizontal
2390.00	42.26	3.14	27.21	43.80	28.81	54	-25.19	AV	Horizontal
2483.50	54.03	3.58	27.70	44.00	41.31	74	-32.69	Pk	Vertical
2483.50	42.47	3.58	27.70	44.00	29.75	54	-24.25	AV	Vertical
2483.50	51.50	3.58	27.70	44.00	38.78	74	-35.22	Pk	Horizontal
2483.50	41.66	3.58	27.70	44.00	28.94	54	-25.06	AV	Horizontal
				1Mbps(GFSK)- hopp	ing			
2310.00	55.58	2.97	27.80	43.80	42.55	74	-31.45	Pk	Horizontal
2310.00	42.63	2.97	27.80	43.80	29.60	54	-24.40	AV	Horizontal
2310.00	52.35	2.97	27.80	43.80	39.32	74	-34.68	Pk	Vertical
2310.00	41.31	2.97	27.80	43.80	28.28	54	-25.72	AV	Vertical
2390.00	53.83	3.14	27.21	43.80	40.38	74	-33.62	Pk	Vertical
2390.00	42.94	3.14	27.21	43.80	29.49	54	-24.51	AV	Vertical
2390.00	51.94	3.14	27.21	43.80	38.49	74	-35.51	Pk	Horizontal
2390.00	44.83	3.14	27.21	43.80	31.38	54	-22.62	AV	Horizontal
2483.50	54.00	3.58	27.70	44.00	41.28	74	-32.72	Pk	Vertical
2483.50	40.38	3.58	27.70	44.00	27.66	54	-26.34	AV	Vertical
2483.50	51.35	3.58	27.70	44.00	38.63	74	-35.37	Pk	Horizontal
2483.50	40.28	3.58	27.70	44.00	27.56	54	-26.44	AV	Horizontal

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





EUT	Spurious Emission in Restricted Band 3260 UT: Mobile Phone						Model No.:		BL61			
Ten	nperature:	20 °C	1			Relati	ive Humidit	y:	48%			
Tes	t Mode:	Mode	e2/ Mode	94		Test I	By:	<u>,</u>	Mary	Hu		
All	the modula	ation mode	es have	been teste	ed, a	and the	e worst res	ult wa			ow:	
	Frequency	Reading Level	Cable Loss	Antenna Factor		eamp actor	Emission Level	Lin	nits	Margin	Detector	Comment
	(MHz)	(dBµV)	(dB)	dB/m	((dB)	(dBµV/m)	(dBµ	ıV/m)	(dB)	Туре	
	3260	61.50	4.04	29.57	44	4.70	50.41	7	'4	-23.59	Pk	Vertical
	3260	48.13	4.04	29.57	44	4.70	37.04	5	4	-16.96	AV	Vertical
	3260	56.75	4.04	29.57	44	4.70	45.66	7	'4	-28.34	Pk	Horizontal
	3260	45.17	4.04	29.57	44	4.70	34.08	5	4	-19.92	AV	Horizontal
	3332	60.08	4.26	29.87	44	4.40	49.81	7	'4	-24.19	Pk	Vertical
	3332	45.03	4.26	29.87	44	4.40	34.76	5	4	-19.24	AV	Vertical
	3332	64.93	4.26	29.87	44	4.40	54.66	7	'4	-19.34	Pk	Horizontal
	3332	45.68	4.26	29.87	44	4.40	35.41	5	4	-18.59	AV	Horizontal
	17797	50.63	10.99	43.95	43	3.50	62.07	7	'4	-11.93	Pk	Vertical
	17797	36.63	10.99	43.95	43	3.50	48.07	5	4	-5.93	AV	Vertical
	17788	54.68	11.81	43.69	44	4.60	65.58	7	'4	-8.42	Pk	Horizontal
Γ	17788	38.15	11.81	43.69	44	4.60	49.05	5	4	-4.95	AV	Horizontal

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



7.3 NUMBER OF HOPPING CHANNEL

7.3.1 Applicable Standard

According to FCC Part 15.247(a)(1) (iii)and ANSI C63.10-2013

7.3.2 Conformance Limit

Frequency hopping systems in the 2400-2483.5MHz band shall use at least 15 channels.

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 ANSI C63.10-2013 clause 7.8.3

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 must have its hopping function enabled.

Use the following spectrum analyzer settings:

Span = the frequency band of operation

RBW : To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.

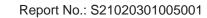
VBW ≥ RBW

Sweep = auto

Detector function = peak Trace = max hold

7.3.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode 5(1Mbps)	Test By:	Mary Hu





7.4 HOPPING CHANNEL SEPARATION MEASUREMENT

7.4.1 Applicable Standard

According to FCC Part 15.247(a)(1) and ANSI C63.10-2013

7.4.2 Conformance Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band shall have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

Certificate #4298.01

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 testing follows ANSI C63.10-2013 clause 7.8.2 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 = Measurement Bandwidth or Channel Separation RBW: Start with the RBW set to approximately 3% of the channel spacing; adjust as necessary to best identify the center of each individual channel. VBW \geq RBW Sweep = auto Detector function = peak Trace = max hold

7.4.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu



7.5 AVERAGE TIME OF OCCUPANCY (DWELL TIME)

7.5.1 Applicable Standard

According to FCC Part 15.247(a)(1)(iii) and ANSI C63.10-2013

7.5.2 Conformance Limit

The average time of occupancy on any channel shall not be greater than 0.4s within a period of 0.4s multiplied by the number of hopping channels employed.

Certificate #4298.01

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 ANSI C63.10-2013 clause 7.8.4 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 must have its hopping function enabled. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel RBW \geq 1MHz VBW \geq RBW Sweep = as necessary to capture the entire dwell time per hopping channel Detector function = peak Trace = max hold Measure the maximum time duration of one single pulse. Set the EUT for DH5, DH3 and DH1 packet transmitting. Measure the maximum time duration of one single pulse.



7.5.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

Certificate #4298.01

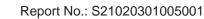
Test data reference attachment.

Note:

A Period Time = (channel number)*0.4 DH1 Dwell time: Reading * (1600/2)*31.6/(channel number) DH3 Dwell time: Reading * (1600/4)*31.6/(channel number) DH5 Dwell time: Reading * (1600/6)*31.6/(channel number)

For Example:

- 1. In normal mode, hopping rate is 1600 hops/s with 6 slots in 79 hopping channels. With channel hopping rate (1600 / 6 / 79) in Occupancy Time Limit (0.4×79) (s), Hops Over Occupancy Time comes to $(1600 / 6 / 79) \times (0.4 \times 79) = 106.67$ hops.
- In AFH mode, hopping rate is 800 hops/s with 6 slots in 20 hopping channels. With channel hopping rate (800 / 6 / 20) in Occupancy Time Limit (0.4 x 20) (s), Hops Over Occupancy Time comes to (800 / 6 / 20) x (0.4 x 20) = 53.33 hops.
- 3. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time



7.6 20DB BANDWIDTH TEST

7.6.1 Applicable Standard

According to FCC Part 15.247(a)(1) and ANSI C63.10-2013

7.6.2 Conformance Limit

No limit requirement.

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 ANSI C63.10-2013 clause 6.9.2 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 = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW \geq 1% of the 20 dB bandwidth VBW \geq RBW Sweep = auto Detector function = peak Trace = max hold

Certificate #4298.01

7.6.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

NTEK北测



7.7 PEAK OUTPUT POWER

7.7.1 Applicable Standard

According to FCC Part 15.247(b)(1) and ANSI C63.10-2013

7.7.2 Conformance Limit

The maximum peak conducted output power of the intentional radiator shall not exceed the following: (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band 0.125 watts.

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 ANSI C63.10-2013 clause 7.8.5.

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 = approximately 5 times the 20 dB bandwidth, centered on a hopping channel

RBW \geq the 20 dB bandwidth of the emission being measured

 $VBW \ge RBW$

Sweep = auto

Detector function = peak Trace = max hold

7.7.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

NTEK北测



Report No.: S21020301005001

7.8 CONDUCTED BAND EDGE MEASUREMENT

7.8.1 Applicable Standard

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

7.8.2 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. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.205(c)).

7.8.3 Measuring Instruments

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

7.8.4 Test Setup

Please refer to Section 6.1 of this test report.

7.8.5 Test Procedure

The testing follows ANSI C63.10-2013 clause 7.8.6.

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 must have its hopping function enabled.

Use the following spectrum analyzer settings:

Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel

RBW = 100KHz

VBW = 300KHz

Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used.

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.

7.8.6 Test Results

EUT:	Mobile Phone	Model No.:	BL61
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	Mode2 /Mode4/ Mode 5	Test By:	Mary Hu

NTEKJLW



Report No.: S21020301005001

7.9 SPURIOUS RF CONDUCTED EMISSION

7.9.1 Applicable Standard

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

7.9.2 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. Attenuation below the general limits specified in §15.209(a) is not required. In addition, 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)).

7.9.3 Measuring Instruments

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

7.9.4 Test Setup

Please refer to Section 6.1 of this test report.

7.9.5 Test Procedure

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW \geq [3 × RBW].
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level. Then the limit shall be attenuated by at least 20 dB relative to the maximum amplitude level in 100 kHz.

7.9.6 Test Results

Remark: The measurement frequency range is from 30MHzHz 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.



7.10 ANTENNA APPLICATION

7.10.1 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.

7.10.2 Result

The EUT antenna is permanent attached PIFA antenna (Gain: 1.1dBi). It comply with the standard requirement.

NTEK北测



7.11 FREQUENCY HOPPING SYSTEM (FHSS) EQUIPMENT REQUIREMENTS 7.11.1 Standard Applicable

According to FCC Part 15.247(a)(1), The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals. (g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section. (h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

7.11.2 Frequency Hopping System

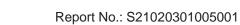
This transmitter device is frequency hopping device, and complies with FCC part 15.247 rule. This device uses Bluetooth radio which operates in 2400-2483.5 MHz band. Bluetooth uses a radio technology called frequency-hopping spread spectrum, which chops up the data being sent and transmits chunks of it on up to 79 bands (1 MHz each; centred from 2402 to 2480 MHz) in the range 2,400-2,483.5 MHz. The transmitter switches hop frequencies 1,600 times per second to assure a high degree of data security. All Bluetooth devices participating in a given piconet are synchronized to the frequency-hopping channel for the piconet. The frequency hopping sequence is determined by the master's device address and the phase of the hopping sequence (the frequency to hop at a specific time) is determined by the master's internal clock. Therefore, all slaves in a piconet must know the master's device address and must synchronize their clocks with the master's clock. Adaptive Frequency Hopping (AFH) was introduced in the Bluetooth specification to provide an effective way for a Bluetooth radio to counteract normal interference. AFH identifies "bad" channels, where either other wireless devices are interfering with the Bluetooth signal or the Bluetooth signal is interfering with another device. The AFH-enabled Bluetooth device will then communicate with other devices within its piconet to share details of any identified bad channels. The devices will then switch to alternative available "good" channels, away from the areas of interference, thus having no impact on the bandwidth used.

This device was tested with an bluetooth system receiver to check that the device maintained hopping synchronization, and the device complied with these requirements for FCC Part 15.247 rule.

7.11.3 EUT Pseudorandom Frequency Hopping Sequence

Pseudorandom Frequency Hopping Sequence Table as below: Channel: 08, 24, 40, 56, 40, 56, 72, 09, 01, 09, 33, 41, 33, 41, 65, 73, 53, 69, 06, 22, 04, 20, 36, 52, 38, 46, 70, 78, 68, 76, 21, 29, 10, 26, 42, 58, 44, 60, 76, 13, 03, 11, 35, 43, 37, 45, 69, 77, 55, 71, 08, 24, 08, 24, 40, 56, 40, 48, 72, 01, 72, 01, 25, 33, 12, 28, 44, 60, 42, 58, 74, 11, 05, 13, 37, 45 etc.

The system receiver have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.



8 TEST RESULTS

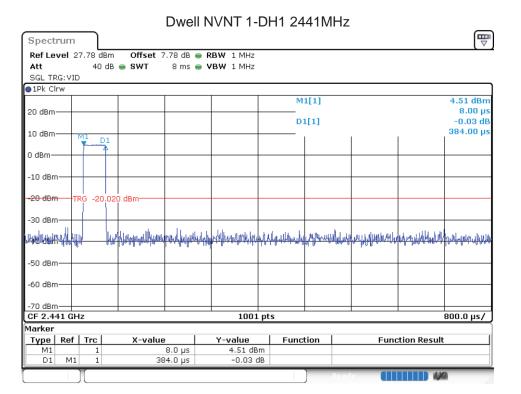
8.1 **DWELL TIME**

Condition	Mode	Frequency	Pulse	Total Dwell	Period	Limit	Verdict
		(MHz)	Time (ms)	Time (ms)	Time (ms)	(ms)	
NVNT	1-DH1	2441	0.384	122.88	31600	400	Pass
NVNT	1-DH3	2441	1.645	263.2	31600	400	Pass
NVNT	1-DH5	2441	2.896	308.907	31600	400	Pass
NVNT	2-DH1	2441	0.381	121.92	31600	400	Pass
NVNT	2-DH3	2441	1.63	260.8	31600	400	Pass
NVNT	2-DH5	2441	2.88	307.2	31600	400	Pass
NVNT	3-DH1	2441	0.381	121.92	31600	400	Pass
NVNT	3-DH3	2441	1.62	259.2	31600	400	Pass
NVNT	3-DH5	2441	2.872	306.347	31600	400	Pass
	NVNT NVNT NVNT NVNT NVNT NVNT NVNT NVNT	NVNT 1-DH1 NVNT 1-DH3 NVNT 1-DH5 NVNT 2-DH1 NVNT 2-DH3 NVNT 2-DH5 NVNT 3-DH1 NVNT 3-DH3	(MHz) NVNT 1-DH1 2441 NVNT 1-DH3 2441 NVNT 1-DH5 2441 NVNT 2-DH1 2441 NVNT 2-DH3 2441 NVNT 2-DH3 2441 NVNT 2-DH3 2441 NVNT 3-DH5 2441 NVNT 3-DH1 2441 NVNT 3-DH3 2441	NVNT1-DH124410.384NVNT1-DH324411.645NVNT1-DH524412.896NVNT2-DH124410.381NVNT2-DH324411.63NVNT2-DH524412.88NVNT3-DH124410.381NVNT3-DH324411.62	MHzTime (ms)Time (ms)NVNT1-DH124410.384122.88NVNT1-DH324411.645263.2NVNT1-DH524412.896308.907NVNT2-DH124410.381121.92NVNT2-DH324411.63260.8NVNT2-DH524412.88307.2NVNT3-DH124410.381121.92NVNT3-DH324411.62259.2	MHz)Time (ms)Time (ms)Time (ms)NVNT1-DH124410.384122.8831600NVNT1-DH324411.645263.231600NVNT1-DH524412.896308.90731600NVNT2-DH124410.381121.9231600NVNT2-DH324411.63260.831600NVNT2-DH524412.88307.231600NVNT3-DH124410.381121.9231600NVNT3-DH324411.62259.231600	MHzTime (ms)Time (ms)Time (ms)(ms)NVNT1-DH124410.384122.8831600400NVNT1-DH324411.645263.231600400NVNT1-DH524412.896308.90731600400NVNT2-DH124410.381121.9231600400NVNT2-DH324411.63260.831600400NVNT2-DH524412.88307.231600400NVNT3-DH124410.381121.9231600400NVNT3-DH324411.62259.231600400

ACCREDITED

Certificate #4298.01

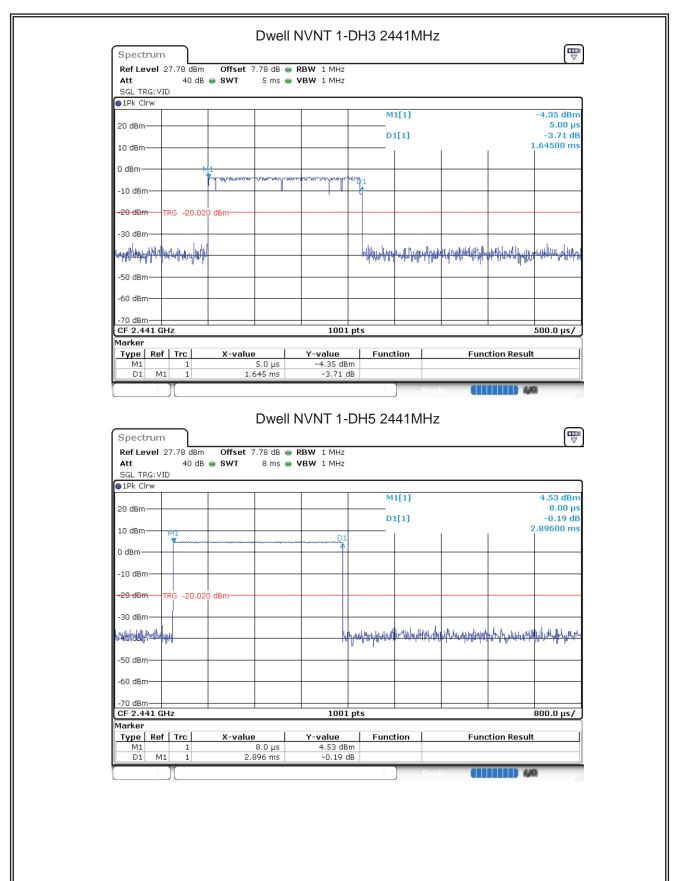
ilac-N







Report No.: S21020301005001







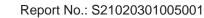
Ref Level 27.70 Att SGL TRG:VID	8 dBm O 40 dB 🕳 S	Offset 7.78 SWT 3		BW 1 MHz BW 1 MHz					
●1Pk Clrw									
20 dBm					M	1[1]			4.25 dBm 5.00 μs
20 0011					D	1[1]			-3.03 dB
10 dBm		M	11	obi Muta a		I			381.00 µs
0 dBm				MUMW01					
-10 dBm									
-20 dBm TRG	-20.020 dBn	n							
-30 dBm	<u> </u>								
When the physical and t	aradhall and	huyyahuyaha			handhalmann	^{hollin} ta, lagrad	that where the second	han man an a	had the subscription
-50 dBm									
-60 dBm									
-70 dBm									
CF 2.441 GHz				1001	l pts				300.0 µs/
Marker Type Ref Tr	rc I X	X-value		Y-value	Func	tion	Euno	tion Result	
M1	1	5.0	μs	4.25 dB	Sm				
D1 M1	1	381.0		-3.03 c	ав				
Spectrum Ref Level 27.74 Att	8 dBm 0 40 dB S	Dv Dffset 7.78	Well N	BW 1 MHz	DH3 24) Read	× (11		
Ref Level 27.7		Dv Dffset 7.78	Well N		DH3 24) 41MHz	* (11		(T T
Ref Level 27.79 Att SGL TRG: VID 1Pk Clrw		Dv Dffset 7.78	Well N	BW 1 MHz) Food 41MHz 1[1]	× (11		-4.17 dBm
Ref Level 27.70 Att SGL TRG: VID		Dv Dffset 7.78	Well N	BW 1 MHz	M		× (11		-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.79 Att SGL TRG: VID 1Pk Clrw		Dv Dffset 7.78	Well N	BW 1 MHz	M	1[1]	× (11)		-4.17 dBm 5.00 μs
Ref Level 27.74 Att SGL TRG:VID 1Pk Clrw 20 dBm	40 dB • S	Dv Dffset 7.78 SWT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz	M	1[1]	× ••••		-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 Att SGL TRG: VID 1Pk Clrw 20 dBm 10 dBm 10 dBm	40 dB • S	Dv Dffset 7.78	dB • RE ms • VI	BW 1 MHz BW 1 MHz	M	1[1]	× ••••		-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 Att SGL TRG: VID ● 1Pk Clrw 20 dBm 10 dBm	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz	M	1[1]	× ••••		-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID 10 1Pk Clrw 20 20 dBm 10 10 dBm 0 -10 dBm 710 -20 dBm TRG	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz	M	1[1]		, , , , ,	-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID 112 112 112 10 0 10 0 10 0 10 0 20 0 10 0 10 0 20 0 30 0 -30 0	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]			-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID 10 1Pk Clrw 20 20 dBm 10 10 dBm 0 -10 dBm 710 -20 dBm TRG	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]	- Carl		-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID 112 112 112 10 0 10 0 10 0 10 0 20 0 10 0 10 0 20 0 30 0 -30 0	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]			-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID IPR CIrw 20 dBm 20 dBm 10 dBm 10 dBm - -10 dBm - -20 dBm TRG -30 dBm - -50 dBm -	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]			-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID 1Pk Cirw 1Pk Cirw 20 dBm 10 dBm 0 -10 dBm - -20 dBm TRG -30 dBm -	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]			-4.17 dBm 5.00 µs -0.36 dB
Ref Level 27.74 SGL TRG: VID • 1Pk Clrw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm	40 dB • S	Dv Dffset 7.78 SwT 5	dB • RE ms • VI	BW 1 MHz BW 1 MHz		1[1]		p ^a nduster og støfter og som og s	-4.17 dBm 5.00 µs -0.36 dB 1.63000 ms
Ref Level 27.74 SGL TRG: VID 10 1Pk Clrw 20 20 dBm 10 10 dBm 10 -10 dBm 10 -20 dBm TRG -30 dBm - -50 dBm - -60 dBm - -70 dBm - CF 2.441 GHz Marker	40 dB • S	Dv Dffset 7.78 swr 5	well N	BW 1 MHz BW 1 MHz יייייייייייייייייייייייייייייייייייי	 D 	1[1] 1[1]	da Ulanda lago g	ganapati sata di sata d Sata di sata di	-4.17 dBm 5.00 μs -0.36 dB 1.63000 ms
Ref Level 27.74 SGL TRG: VID 10 1Pk Clrw 20 20 dBm 20 10 dBm 20 -10 dBm 20 -30 dBm 70 -50 dBm 70 -60 dBm 70 -70 dBm 70 <td>40 dB S</td> <td>Dv 5 3wT 5 </td> <td>dB ● RE ms ● VE</td> <td>BW 1 MHz BW 1 MHz</td> <td>Min D</td> <td>1[1] 1[1]</td> <td>da Ulanda lago g</td> <td>p^anduster og støfter og som og s</td> <td>-4.17 dBm 5.00 μs -0.36 dB 1.63000 ms</td>	40 dB S	Dv 5 3wT 5 	dB ● RE ms ● VE	BW 1 MHz BW 1 MHz	Min D	1[1] 1[1]	da Ulanda lago g	p ^a nduster og støfter og som og s	-4.17 dBm 5.00 μs -0.36 dB 1.63000 ms
Ref Level 27.74 SGL TRG: VID 10 1Pk Clrw 20 20 dBm 10 10 dBm 10 -10 dBm 10 -20 dBm TRG -30 dBm - -50 dBm - -60 dBm - -70 dBm - CF 2.441 GHz Marker	40 dB • S	Dv Dffset 7.78 swr 5	well N dB ● Re ms ● VI	BW 1 MHz BW 1 MHz יייייייייייייייייייייייייייייייייייי	MM1 D MM1 L L pts Func	1[1] 1[1]	da Ulanda laiper	ganapati sata di sata d Sata di sata di	-4.17 dBm 5.00 μs -0.36 dB 1.63000 ms

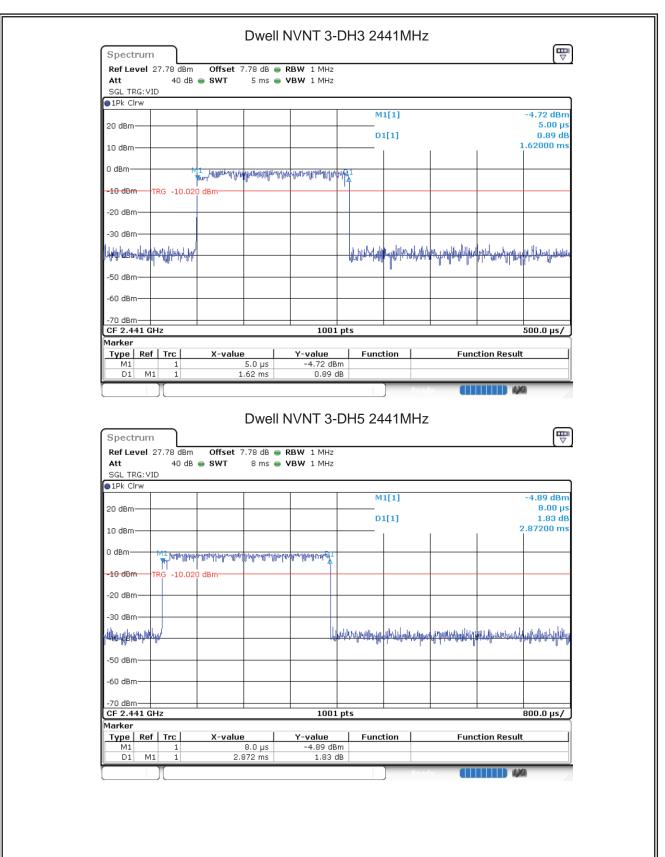




SGL TRG: V	ID								
-					м	1[1]			-3.91 dBn
20 dBm					D	1[1]			بل 00.8 dl 06.0-
10 dBm						1	1	: :	2.88000 m
0 dBm	M1								
	- Jollion Work	de-theol Wyleden 1	nysheren jyyw	**************************************					
-10 dBm									
-20 dBm	TRG -20.02	0 dBm							
-30 dBm							_		
HARDIERENAN	had)				โนเพอร์ปและค	i kuitud Jahra	ade Marger forth Autoral	hombrodulation	halistiana
Alaw Maraumanan	14-3			ľ	<u>101000 - 0008.001</u>	իկստի, սովիր թ.	- and a set of the	hall all models.	A LOWAGOND -
-50 dBm									
-60 dBm							_		
70 db									
-70 dBm CF 2.441 0	Hz	I		100:	L pts				800.0 µs/
Marker			1		1 -		_		-
Type Re M1	f Trc 1	X-value	9.0 µs	<u>Y-value</u> -3.91 di	Funct	tion	Fun	ction Result	t
			.88 ms	-0.60					
D1 M Spectrun Ref Level	27.78 dBm	Offset 7	7.78 dB 👄 F	BW 1 MHz	DH1 24	.41MH	ady	•••••	
Spectrum Ref Level Att SGL TRG:V	27.78 dBm 40 dB		7.78 dB 👄 F		DH1 24] Re 41MH	Z		¶ Ţ
D1 M Spectrun Ref Level Att SGL TRG:V • 1Pk Clrw	27.78 dBm 40 dB	Offset 7	7.78 dB 👄 F	BW 1 MHz] Re 41MH	Z		4.28 dBn
Spectrum Ref Level Att SGL TRG:V	27.78 dBm 40 dB	Offset 7	7.78 dB 👄 F	BW 1 MHz	M		Z		4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrun Ref Level Att SGL TRG:V • 1Pk Clrw	27.78 dBm 40 dB	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]	Z		4.28 dBn 2.00 μ
D1 M Spectrum Ref Level Att SGL TRG:V • 1Pk Clrw 20 dBm-	27.78 dBm 40 dB	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]	Z		4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrun Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm- 0 dBm-	27.78 dBm 40 dB ID	Offset 7 SWT	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm 10 dBm 0 dBm -10 dBm	27.78 dBm 40 dB	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrun Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm- 0 dBm-	27.78 dBm 40 dB ID	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm 10 dBm 0 dBm -10 dBm	27.78 dBm 40 dB ID	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]	Z		4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrun Ref Level Att SGL TRG:V O dBm 10 dBm 0 dBm -10 dBm -20 dBm	27.78 dBm 40 dB ID	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm 10 dBm -10 dBm -30 dBm -30 dBm	27.78 dBm 40 dB ID	Offset 7	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]		4444444	4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	27.78 dBm 40 dB ID	Offset 7 SWT	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm 10 dBm -10 dBm -30 dBm -30 dBm	27.78 dBm 40 dB ID	Offset 7 SWT	2.78 dB ● F 3 ms ● V	BW 1 MHz	M	1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrum Ref Level Att SGL TRG:V 0 1Pk Clrw 20 dBm 10 dBm -20 dBm -20 dBm -30 dBm -50 dBm	27.78 dBm 40 dB ID	Offset 7 SWT	2.78 dB ● F 3 ms ● V	BW 1 MHz BW 1 MHz		1[1]		4444444	4.28 dBn 2.00 μ -0.45 dI
D1 M Spectrum Ref Level Att SGL TRG:V 9 1Pk Clrw 20 dBm 10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.441 C	27.78 dBm 40 dB ID TRG -10.02	Offset 7 SWT	2.78 dB ● F 3 ms ● V	BW 1 MHz		1[1]			4.28 dBn 2.00 μ -0.45 dI
D1 M Ref Level Att SGL TRG:V 1Pk Clrw 20 dBm 10 dBm 0 dBm -0 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -60 dBm -70 dBm -70 dBm GF 2.441 C Marker	27.78 dBm 40 dB ID TRG -10.02	Offset 7 SWT	7.78 dB F F 3 ms V	BW 1 MHz BW 1 MHz				tion Result	4.28 dBn 2.00 μ -0.45 dI 381.00 μ
D1 M Ref Level Att SGL TRG:V ID O dBm ID 10 dBm 0 0 dBm - -10 dBm - -20 dBm - -30 dBm - -50 dBm - -60 dBm - -70 dBm </td <td>27.78 dBm 40 dB ID TRG -10.02</td> <td>Offset 7</td> <td>7.78 dB • F 3 ms • V</td> <td>BW 1 MHz /BW 1 MHz //BW 1 MHz ////////////////////////////////////</td> <td>D:</td> <td></td> <td></td> <td></td> <td>4.28 dBn 2.00 μ -0.45 dI 381.00 μ</td>	27.78 dBm 40 dB ID TRG -10.02	Offset 7	7.78 dB • F 3 ms • V	BW 1 MHz /BW 1 MHz //BW 1 MHz ////////////////////////////////////	D:				4.28 dBn 2.00 μ -0.45 dI 381.00 μ
D1 M Ref Level Att SGL TRG: V 1Pk Clrw 20 dBm 10 dBm 10 dBm 0 dBm -20 dBm -30 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.441 C Marker Type	27.78 dBm 40 dB ID TRG -10.02	Offset 7	7.78 dB F F 3 ms V	BW 1 MHz /BW 1 MHz	D:				4.28 dBn 2.00 μ -0.45 dI 381.00 μ







NTEK北测

Report No.: S21020301005001



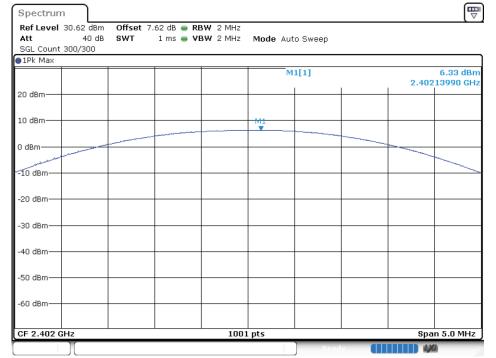
ilac-

_							
	Condition	Mode	Frequency (MHz)	Antenna	Power (dBm)	Limit (dBm)	Verdict
	NVNT	1-DH5	2402	Ant 1	6.331	30	Pass
	NVNT	1-DH5	2441	Ant 1	4.876	30	Pass
	NVNT	1-DH5	2480	Ant 1	6.618	30	Pass
	NVNT	2-DH5	2402	Ant 1	5.825	20.97	Pass
	NVNT	2-DH5	2441	Ant 1	6.686	20.97	Pass
	NVNT	2-DH5	2480	Ant 1	6.486	20.97	Pass
	NVNT	3-DH5	2402	Ant 1	6.008	20.97	Pass
	NVNT	3-DH5	2441	Ant 1	7.095	20.97	Pass
	NVNT	3-DH5	2480	Ant 1	6.924	20.97	Pass

ACCREDITED

Certificate #4298.01

Power NVNT 1-DH5 2402MHz Ant1



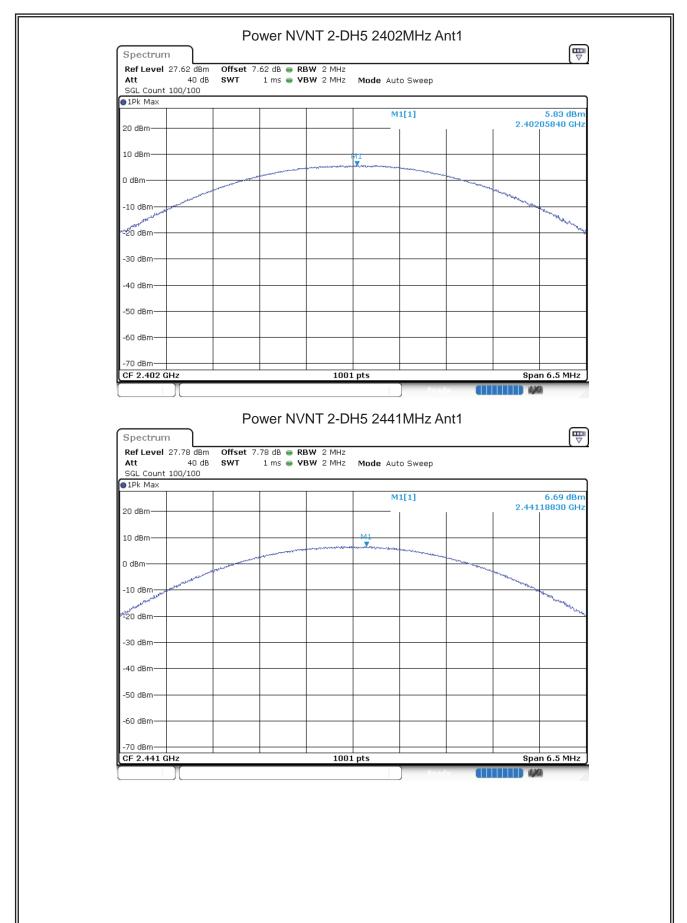




Att SGL Count 9 1Pk Max 20 dBm 10 dBm 0 dBm 10 dBm		SWT	7.78 dB • F 1 ms • V	RBW 2 MHZ YBW 2 MHZ M		Sweep			4.88 dBm
1Pk Max 20 dBm 10 dBm 0 dBm 10 dBm					M1	[1]			4.88 dBm
10 dBm					M1	[1]			4.88 dBm
10 dBm								2.440	89010 GHz
0 dBm									
≈10 dBm			1	M1					
≈10 dBm									
00 JD									
-20 dBm									
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm				+					
-70 dBm									
CF 2.441 G									1
	n	Offset 7	7.60 dB 👄 🖡		5 2480		t 1	Spa	0
	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡	/NT 1-DH5	5 2480		(111		m 5.0 MHz
Ref Level Att SGL Count	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡	/NT 1-DH5	5 2480		t1		0
Ref Level Att SGL Count 1Pk Max	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBm
Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡	/NT 1-DH5	5 2480) Sweep	t1		6.62 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm 10 dBm 0 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count 1Pk Max 20 dBm 10 dBm 0 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count IPk Max 20 dBm 10 dBm -10 dBm -20 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count I Plk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count • IPk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count I Plk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	n 27.60 dBm 40 dB	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1		€.62 dBn
Ref Level Att SGL Count • IPk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	27.60 dBm 40 dB 100/100	Offset 7	7.60 dB 👄 🖡		5 2480) Sweep	t1	2.475	€.62 dBn

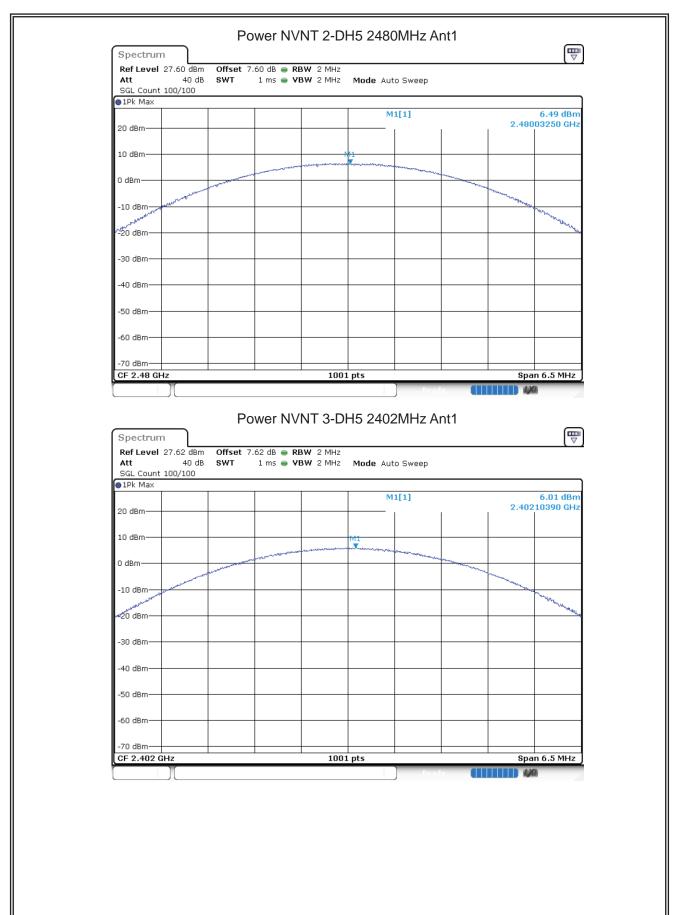






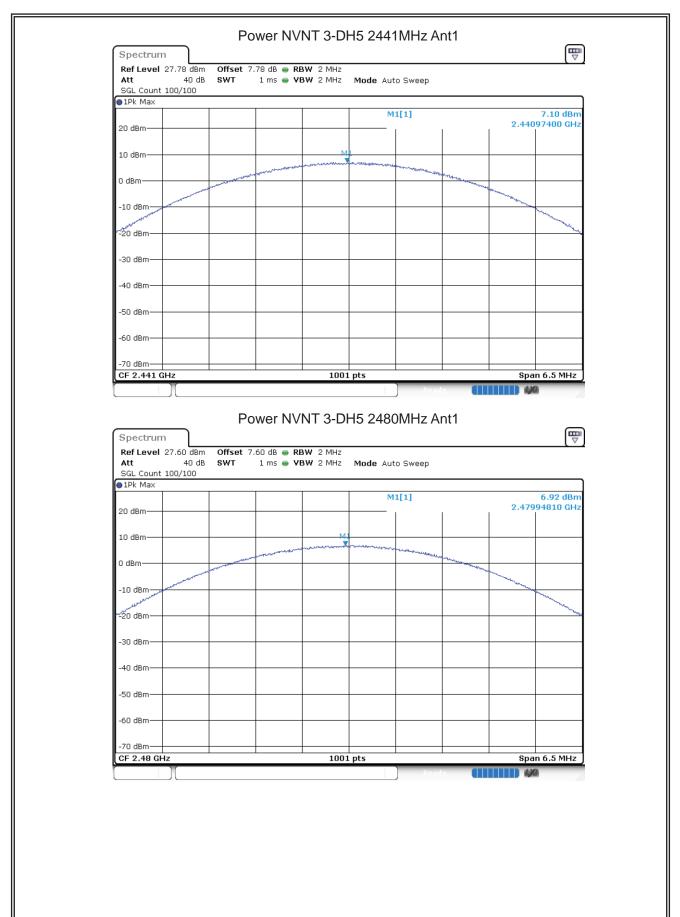












NTEK北测



8.3 OCCUPIED CHANNEL BANDWIDTH

ilac-

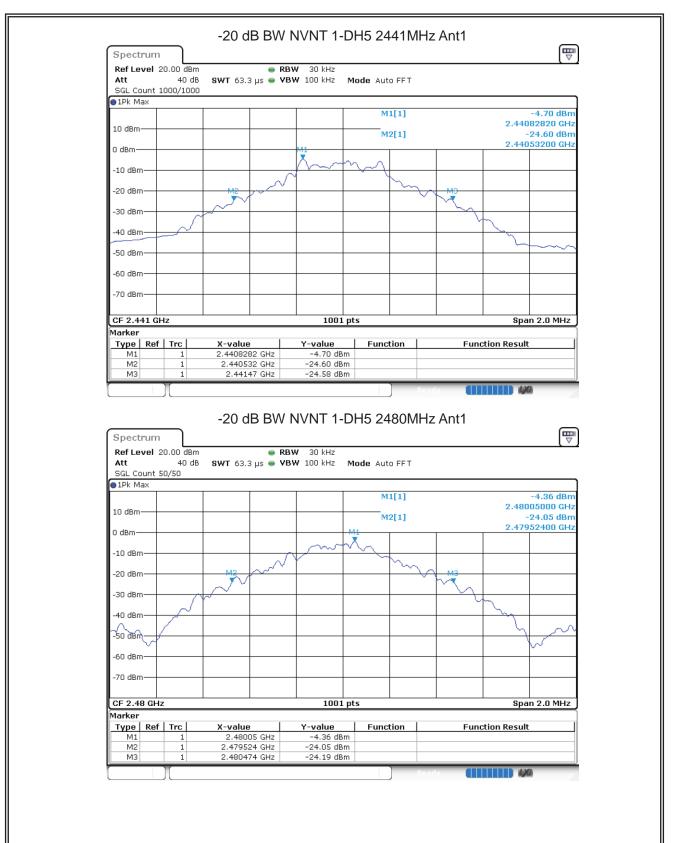
••••••					
Condition	Mode	Frequency	Antenna	-20 dB	Verdict
		(MHz)		Bandwidth	
				(MHz)	
NVNT	1-DH5	2402	Ant 1	0.95	Pass
NVNT	1-DH5	2441	Ant 1	0.938	Pass
NVNT	1-DH5	2480	Ant 1	0.95	Pass
NVNT	2-DH5	2402	Ant 1	1.284	Pass
NVNT	2-DH5	2441	Ant 1	1.284	Pass
NVNT	2-DH5	2480	Ant 1	1.284	Pass
NVNT	3-DH5	2402	Ant 1	1.292	Pass
NVNT	3-DH5	2441	Ant 1	1.288	Pass
NVNT	3-DH5	2480	Ant 1	1.288	Pass
	NVNT NVNT NVNT NVNT NVNT NVNT NVNT	NVNT1-DH5NVNT1-DH5NVNT1-DH5NVNT2-DH5NVNT2-DH5NVNT2-DH5NVNT3-DH5NVNT3-DH5	NVNT 1-DH5 2402 NVNT 1-DH5 2441 NVNT 1-DH5 2480 NVNT 2-DH5 2402 NVNT 2-DH5 2402 NVNT 2-DH5 2441 NVNT 2-DH5 2442 NVNT 2-DH5 2442 NVNT 2-DH5 2442 NVNT 3-DH5 2402 NVNT 3-DH5 2441	NVNT 1-DH5 2402 Ant 1 NVNT 1-DH5 2441 Ant 1 NVNT 1-DH5 2480 Ant 1 NVNT 1-DH5 2480 Ant 1 NVNT 2-DH5 2402 Ant 1 NVNT 2-DH5 2441 Ant 1 NVNT 2-DH5 2442 Ant 1 NVNT 2-DH5 2480 Ant 1 NVNT 3-DH5 2402 Ant 1 NVNT 3-DH5 2441 Ant 1	(MHz) Bandwidth (MHz) NVNT 1-DH5 2402 Ant 1 0.95 NVNT 1-DH5 2441 Ant 1 0.938 NVNT 1-DH5 2480 Ant 1 0.938 NVNT 1-DH5 2480 Ant 1 0.95 NVNT 2-DH5 2402 Ant 1 1.284 NVNT 2-DH5 2480 Ant 1 1.284 NVNT 2-DH5 2402 Ant 1 1.284 NVNT 2-DH5 2402 Ant 1 1.284 NVNT 3-DH5 2402 Ant 1 1.284 NVNT 3-DH5 2402 Ant 1 1.284

-20 dB BW NVNT 1-DH5 2402MHz Ant1



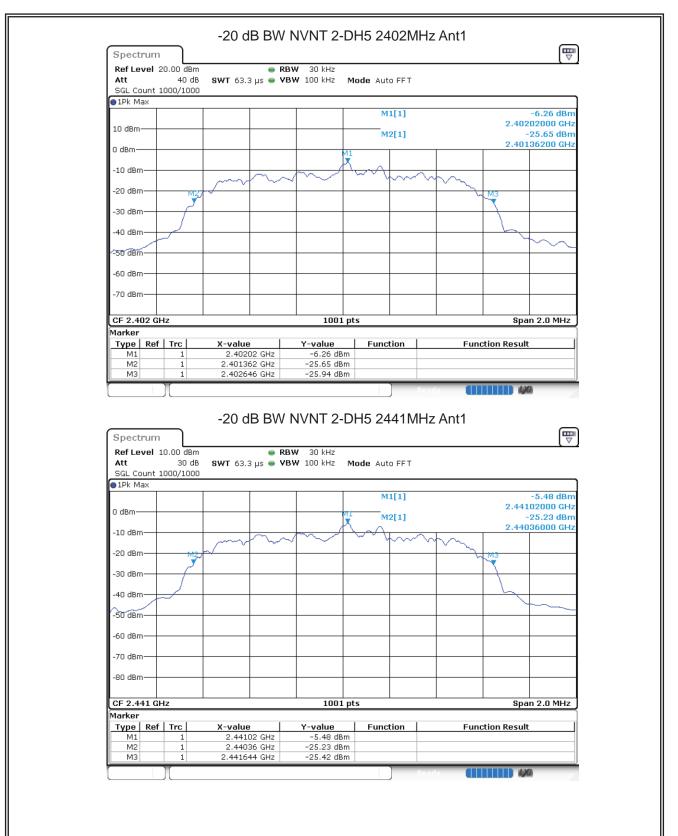






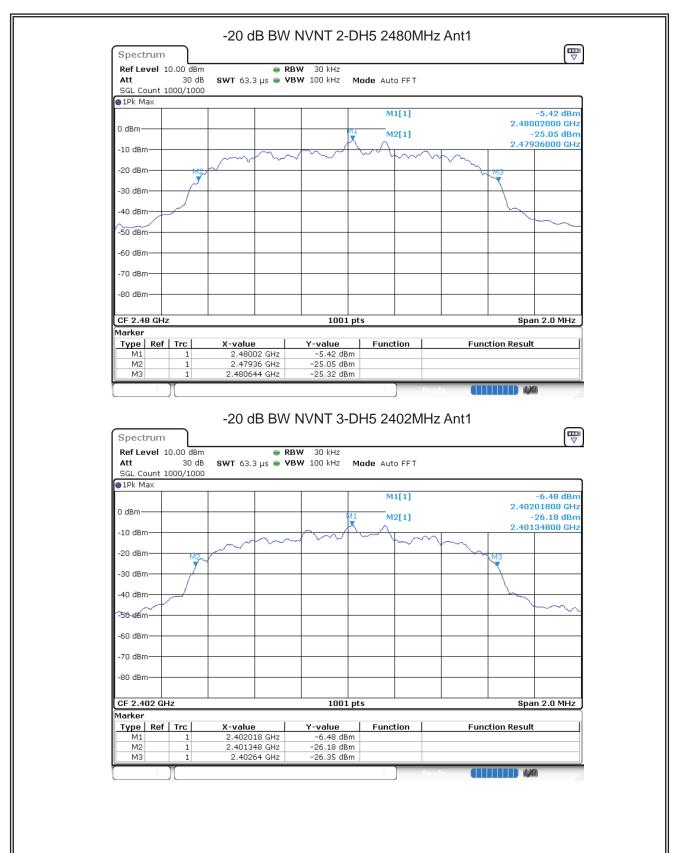




















8.4 CARRIER FREQUENCIES SEPARATION

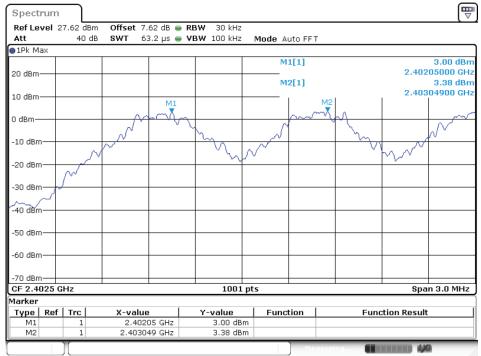
ilac-

O.I. O/IIIIEI	(I I C C C		•			
Condition	Mode	Hopping Freq1	Hopping Freq2	HFS	Limit	Verdict
		(MHz)	(MHz)	(MHz)	(MHz)	
NVNT	1-DH5	2402.05	2403.049	0.999	0.95	Pass
NVNT	1-DH5	2441.05	2442.052	1.002	0.938	Pass
NVNT	1-DH5	2478.828	2479.83	1.002	0.95	Pass
NVNT	2-DH5	2402.02	2403.01	0.99	0.856	Pass
NVNT	2-DH5	2441.02	2442.16	1.14	0.856	Pass
NVNT	2-DH5	2479.02	2480.022	1.002	0.856	Pass
NVNT	3-DH5	2402.02	2403.16	1.14	0.861	Pass
NVNT	3-DH5	2441.02	2442.16	1.14	0.859	Pass
NVNT	3-DH5	2479.02	2480.022	1.002	0.859	Pass

ACCREDITED

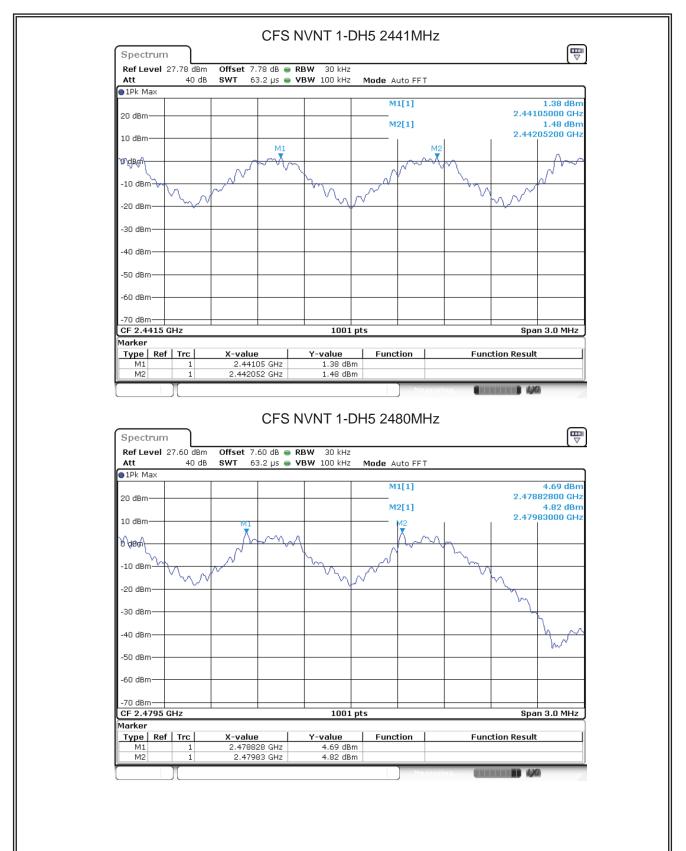
Certificate #4298.01

CFS NVNT 1-DH5 2402MHz



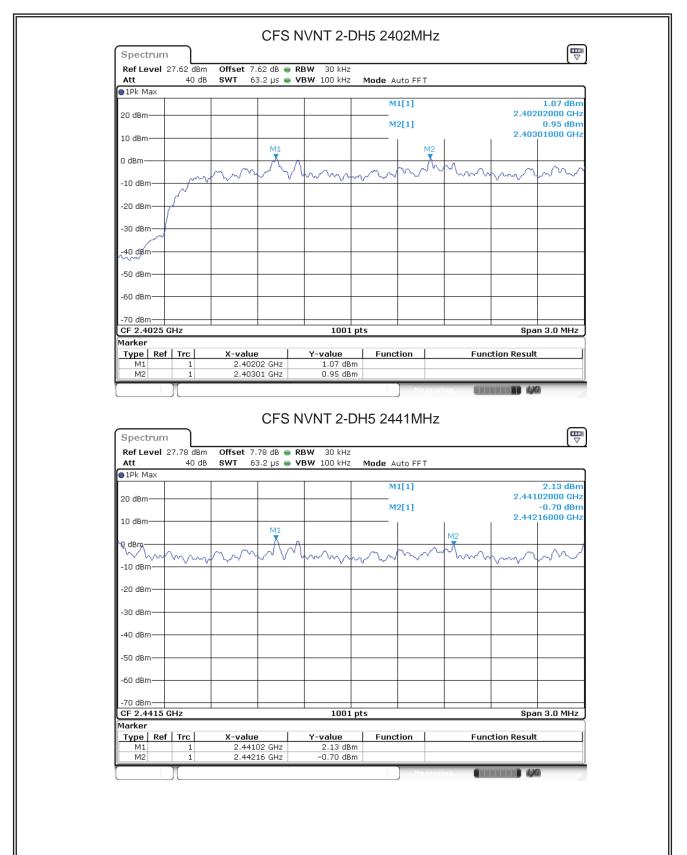






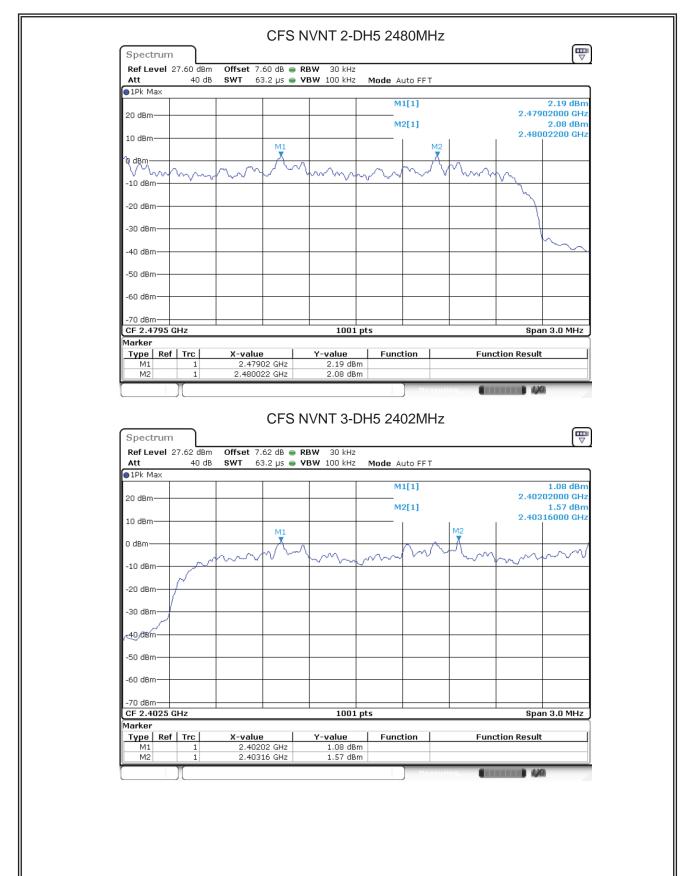






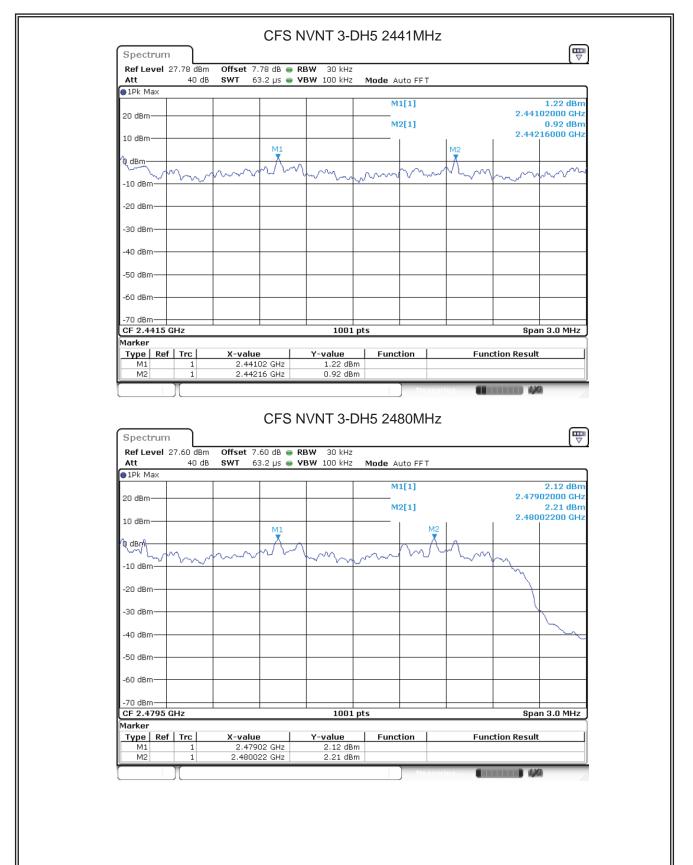










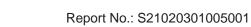






ER OF HOP	PING CHAN						7
	Condition	Mode	Hoppin	ig Numbe			_
	NVNT	1-DH5		79	15	Pass	
Spectrum	Ho	opping N	o. NVNT	⁻ 1-DH5 24	402MHz	2	E
Ref Level 2		7.62 dB 🔵 RI					
Att SGL Count 5	40 dB SWT	1 ms 🛑 🗸	BW 300 kHz	Mode Auto 9	Sweep		
1Pk Max	000/5000						
				M1[1]			5.32 dBm
20 dBm				M2[1]		2	4018370 GHz. 5.53 dBm
101dBm-							2.48007651gHz
	<u>hannaan boodaa</u>	11111111111		<u>AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA</u>	WANNIANA	DADADYAHAAA	<u>Aniahan</u> a (
-10 dBm	IA IYA KA KA MAAAAAAA	MARAAAAA	Looboolli	<u>AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA</u>	<u>YNYNYN UYI</u>	<u>I A D A D A D A D A D A D A D A D A D A </u>	<u>ANAAAAA</u>
-20 dBm							
-30 dBm							И
-40 dBm							ha
-50 dBm							
-60 dBm							
-70 dBm Start 2.4 GH	2		1001	nte		Sto.	p 2.4835 GHz
Marker	2		1001	pro		300	p 2.4000 dri2
	Trc X-valu 1 2.401	1e 837 GHz	Y-value 5.32 dBr	Function		Function Re	sult
M2	1 2.4800	765 GHz	5.53 dBr	n			
	Л				Ready		4,44

NTEK北测



8.6 BAND EDGE

.0	DAND EDG							
	Condition	Mode	Frequency	Antenna	Hopping	Max Value	Limit	Verdict
			(MHz)		Mode	(dBc)	(dBc)	
	NVNT	1-DH5	2402	Ant 1	No-Hopping	-47.85	-20	Pass
	NVNT	1-DH5	2402	Ant 1	Hopping	-46.95	-20	Pass
	NVNT	1-DH5	2480	Ant 1	No-Hopping	-49.79	-20	Pass
	NVNT	1-DH5	2480	Ant 1	Hopping	-48.5	-20	Pass
	NVNT	2-DH5	2402	Ant 1	No-Hopping	-44.79	-20	Pass
	NVNT	2-DH5	2402	Ant 1	Hopping	-44.23	-20	Pass
	NVNT	2-DH5	2480	Ant 1	No-Hopping	-46.38	-20	Pass
	NVNT	2-DH5	2480	Ant 1	Hopping	-46.41	-20	Pass
	NVNT	3-DH5	2402	Ant 1	No-Hopping	-44.47	-20	Pass
	NVNT	3-DH5	2402	Ant 1	Hopping	-43.37	-20	Pass
	NVNT	3-DH5	2480	Ant 1	No-Hopping	-46.92	-20	Pass
	NVNT	3-DH5	2480	Ant 1	Hopping	-47.03	-20	Pass

ACCREDI

Certificate #4298.01

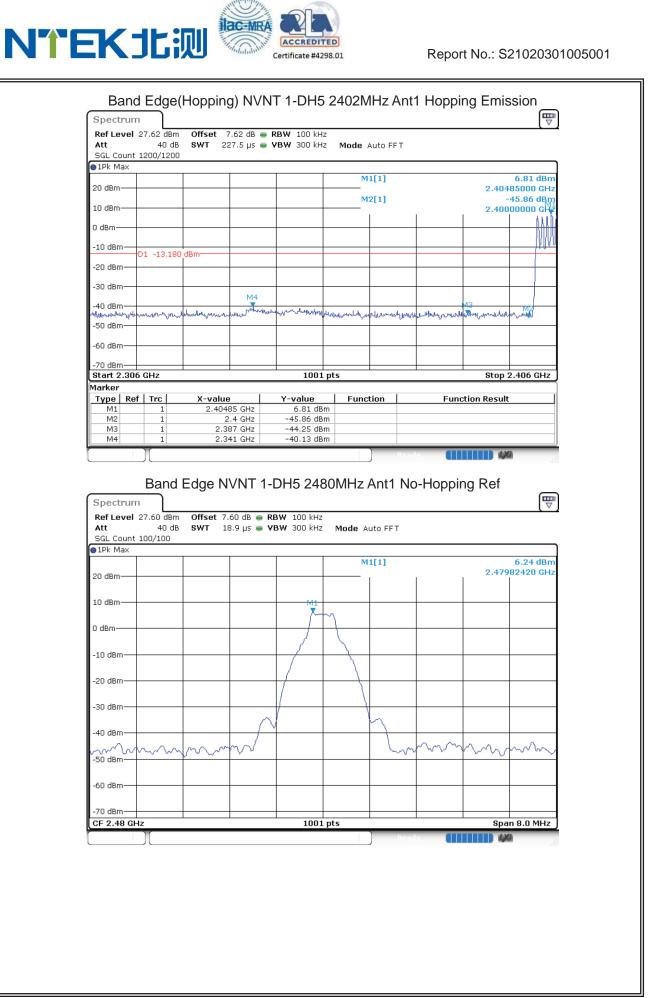
TED

ilac-

Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref Spectrum Ref Level 27.62 dBm Offset 7.62 dB 🖷 RBW 100 kHz Mode Auto FFT ●1Pk Max 5.82 dBm 2.40182420 GHz M1[1] 20 dBm-10 dBm-Χ. 0 dBm--10 dBm -20 dBm--30 dBm -40 dBm -50 dBm--60 dBm -70 dBm-1001 pts Span 8.0 MHz CF 2.402 GHz



Att SGL Count 1Pk Max	40 dB 100/100	SWT 22	27.5 µs 👄 🕻	VBW 500 kH		Auto FFT			5 05 dBm
20 dBm						1[1]			5.85 dBm 185000 GHz
10 dBm					M	2[1]			-46.45 dBm 000000 sHz
0 dBm									
-10 dBm	D1 -14.180	dD-r							
-20 dBm	DI -14.180	uBm							
-30 dBm									
-40 dBm			M4	May Manuna			1	мз	Ma
-50 dBm	mound	v-Nolwayali-angerto	down and and	manimum	pidy malline Mallion	harrowtheres	and some of the	and supporter	Nephinsk Whe
-60 dBm									
-70 dBm									
Start 2.30 Marker	6 GHz			1001	l pts			Stop	2.406 GHz
Type Re M1	f Trc	X-value 2.4018	B5 GHz	Y-value 5.85 dB	Func	tion	Fund	ction Resul	t
	1	0	.4 GHz	-46.45 dB	3m				
M2 M3					3m				
M3 M4 Spectrun Ref Level Att SGL Count	and Edg	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz BW 300 kHz	0H5 240		Ant1 Ho	pping R	ef
M3 M4 Spectrun Ref Level Att	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT	Ant1 Ho	pping R	
M3 M4 Spectrum Ref Level Att SGL Count	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A		Ant1 Ho		
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm-	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT	Ant1 Ho		6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count ● 1Pk Max	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT	Ant1 Ho		6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm-	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- 0 dBm- -10 dBm-	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count ● 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 and Edg n 27.62 dBm 40 dB	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	0H5 240 : Mode A	uto FFT			6.82 dBm
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm • 10 dBm • 10 dBm • -10 dBm • -20 dBm • -30 dBm • -30 dBm • -50 dBm • -50 dBm	and Edg 27.62 dBm 40 dB 8000/8000	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB /NT 1-D BW 100 kHz BW 300 kHz	DH5 240	uto FFT		2.40	6.82 dBm 582820 GHz
M3 M4 Spectrun Ref Level Att SGL Count ● 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -50 dBm -60 dBm	and Edg 27.62 dBm 40 dB 8000/8000	2.344 2.344 ge(Hopp Offset 7.	99 GHz 44 GHz Ding) N 62 dB • R	-46.36 dB -42.04 dB VNT 1-D BW 100 kHz	DH5 240	uto FFT		2.40	6.82 dBm 582820 GHz

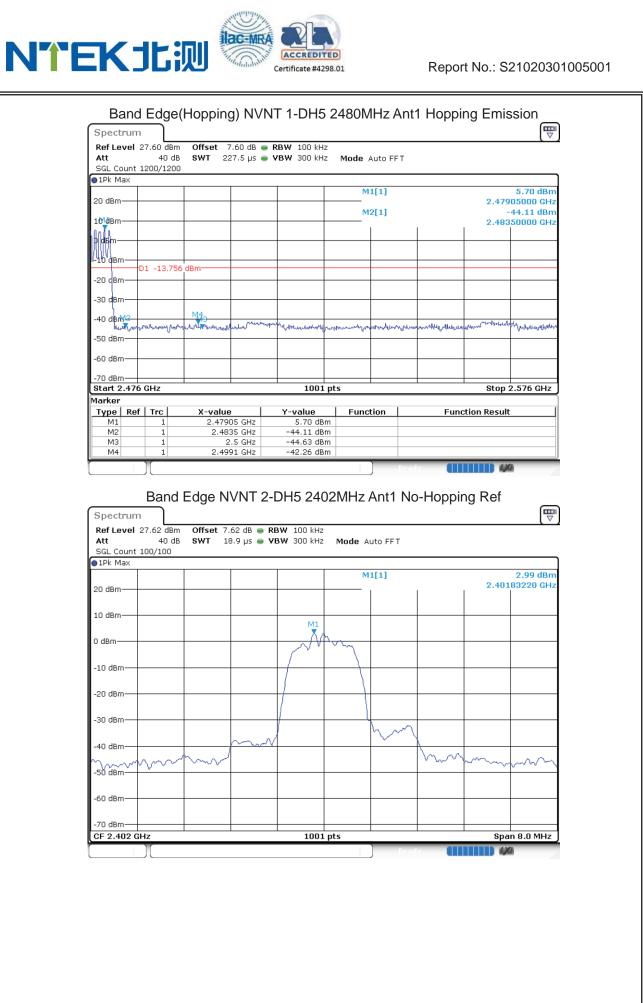






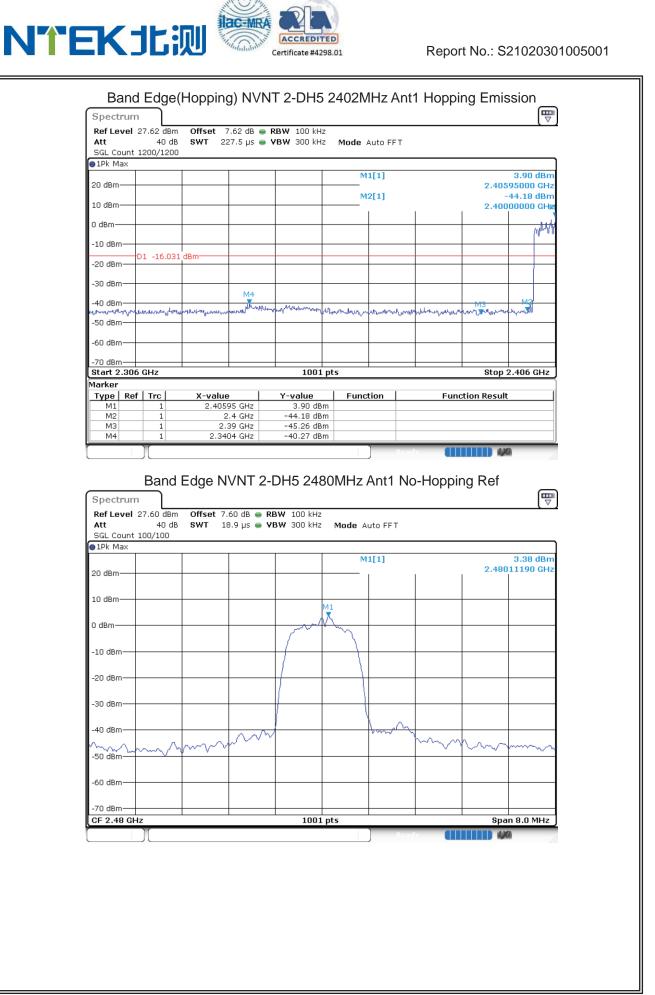
●1Pk Max					M	1[1]			5.77 dBm	
20 dBm					M	2[1]			95000 GHz 46.79 dBm	
101dBm						-[-]	I		50000 GHz	
0 dBm										
-10 dBm	1 -13.763	dBm								
-20 dBm										
-30 dBm										
-40 dBm	M4	M3	muruna	and a far a	Robertoman	Kallensonhauble	withheliter	nontrationale	Muneraturolondo	
-50 dBm	····				,			-		
-60 dBm										
-70 dBm Start 2.476	GHz			1001	pts			Stop	2.576 GHz	
Marker Type Ref	Trc	X-value	. 1	Y-value	Fund	tion	Fund	tion Result		
M1	1	2.4799	95 GHz 35 GHz	5.77 dBi -46.79 dBi	m					
	1									
M2 M3	1 1 1	2	.5 GHz	-43.86 dBi -43.56 dBi						
M2 M3 M4	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.86 dBi -43.56 dBi VNT 1-D BW 100 kHz BW 300 kHz	m H5 248		unt1 Hop	oping R	ef	
M2 M3 M4 Ba Spectrum Ref Level 2 Att	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At		ant1 Hop	oping R		
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	ant1 Hop			
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 @1Pk Max	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 9 IPk Max 20 dBm 10 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 9 IPk Max 20 dBm 10 dBm 0 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 9 IPk Max 20 dBm 10 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 9 IPk Max 20 dBm 10 dBm 0 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	Ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 9 1Pk Max 20 dBm 10 dBm 0 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	xnt1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 O 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	Ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT	Ant1 Hop		€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT			€.24 dBm	
M2 M3 M4 Spectrum Ref Level 2 Att SGL Count 8 P1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT			€.24 dBm	
M2 M3 M4 Ba Spectrum Ref Level 2 Att SGL Count 8 PIPk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm	1 1 7.60 dBm 40 dB 000/8000	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	m H5 248 Mode At	uto FFT			€.24 dBm	
M2 M3 M4 Ba Spectrum Ref Level 2 Att SGL Count 8 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm	1 1 7.60 dBm 40 dB 000/8000	2 2.492 ge(Hopp Offset 7.4	.5 GHz 21 GHz Ding) N' 60 dB • R	-43.56 dB	Mode A	uto FFT	Ant1 Hop	2.475	6.24 dBm 82420 GHz	

ACCRED





●1Pk Max	100/100				M1[1]				2.46 dBm
20 dBm									215000 GHz
10 dBm					M2[1]				-43.45 dBm)000000 GHz
0 dBm									- X
-10 dBm—									
-20 dBm	D1 -17.006	dBm							
-30 dBm									
-40 dBm			M4	white produces and the second	munnumpente			M3	Ma
-50 dBm-	www.www.www	hourth-wite-ophytic	when the sec		LAYUUUMPUUUMPUUUU	mh. Translanda	งเขาจะหม่างเหตุ	n parta and the	Malin .
-60 dBm									
-70 dBm	6 0 4 2			1001	ntc			Stop	2.406 GHz
Marker									
Type Re M1	f Trc 1	X-value 2.402	15 GHz	Y-value 2.46 dBr	Function		Func	tion Result	t
	1		.4 GHz	-43.45 dBr	n				
M2									
M3 M4 Spectrur Ref Level Att	and Edo	2.34 2.34 ge(Hopp Offset 7.	62 dB 🖷 🖪	BW 100 kHz			t1 Hop	oping R	ef
M3 M4 Spectrur Ref Level Att	and Edg	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr VNT 2-D	m H5 2402M Mode Auto F	FT	t1 Hop	oping R	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr VNT 2-D	n H5 2402M	FT	t1 Hop		
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr VNT 2-D	m H5 2402M Mode Auto F	FT	t1 Hop		
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr VNT 2-D	m H5 2402M Mode Auto F	FT	t1 Hop		
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr VNT 2-D	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm-	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	t1 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	41 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	€1 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	41 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm - 10 dBm - 10 dBm - 20 dBm - 30 dBm - 30 dBm - 50 dBm - 60 dBm	1 1 27.62 dBm 40 dB 8000/8000	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	Mode Auto F	FT	t1 Hop	2.405	3.97 dBm 502900 GHz
M3 M4 Spectrun Ref Level Att SGL Count O dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	and Edo	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	m H5 2402M Mode Auto F	FT	41 Hop	2.405	
M3 M4 Spectrun Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	1 1 27.62 dBm 40 dB 8000/8000	2.34 2.34 ge(Hopp Offset 7.	12 GHz Ding) N 62 dB • F	-41.81 dBr	Mode Auto F	FT	t1 Hop	2.405	3.97 dBm 502900 GHz

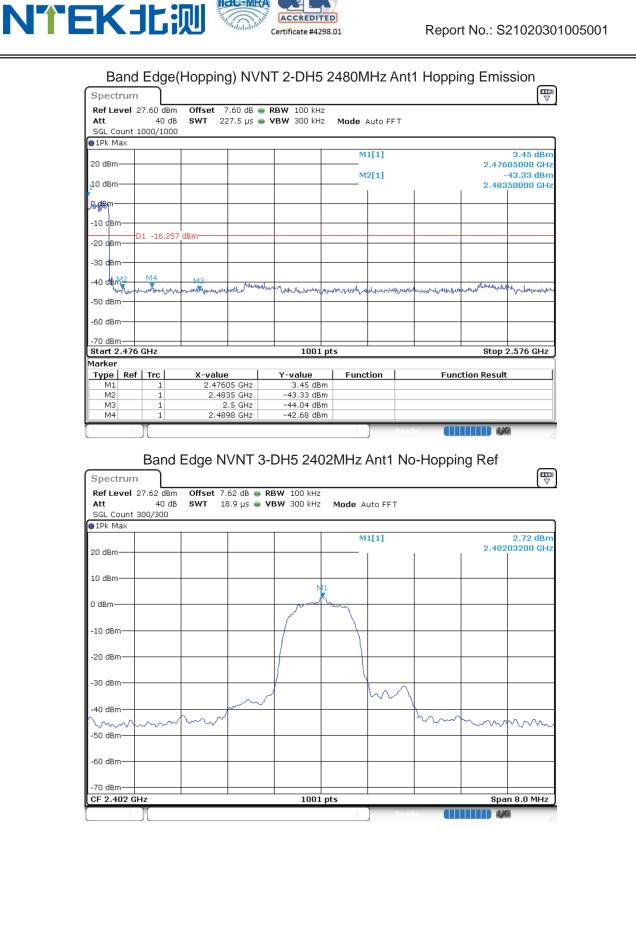


NTEK北测



Ref Level : Att SGL Count	40 dB			XBW 100 kHz /BW 300 kHz		Auto FFT			
●1Pk Max					м	1[1]			2.55 dBm
20 dBm					M	2[1]			05000 GHz 45.63 dBm
10 dBm						l		2.483	50000 GHz
0 dBm									
-10 dBm	D1 -16.620	dBm							
-20 dBm	01 -10.020	dom							
-30 dBm									
-40 dBm12	M4	M3	Montering	www.www	www.	Walter Marthal	humana	Ulymanulit	wywww. Maryon
-50 dBm									
-60 dBm									
-70 dBm Start 2.476	GHz			1001	pts		<u> </u>	Stop	2.576 GHz
Marker Type Ref		X-value	1	Y-value	Func	tion	Fuer	tion Result	
M1 M2	1	2.4800	05 GHz 35 GHz	2.55 dBn -45.63 dBn	n		, and	Alon Neguli	·
M3 M4	1	2	.5 GHz 47 GHz	-43.64 dBn -43.01 dBn	n				
						Read			54
	27.60 dBm 40 dB	Offset 7.	60 dB 🔵 RE	/NT 2-DI 3w 100 kHz 8w 300 kHz			Ant1 Hop	oping R	ef
Ba Spectrum Ref Level Att SGL Count ● 1Pk Max	27.60 dBm 40 dB	Offset 7.	60 dB 🔵 RE	3W 100 kHz	Mode A		Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		
Ba Spectrum Ref Level Att SGL Count ● 1Pk Max	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count ● 1Pk Max 20 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm 10 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm 10 dBm 10 dBm 0 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count 1 Pk Max 20 dBm 10 dBm -10 dBm -10 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count I SGL Count I SGL Count I D dBm I O dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count SGL Count 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop		₩ 3.74 dBm
Ba Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 👄 RE	3W 100 kHz BW 300 kHz	Mode A	uto FFT	Ant1 Hop	2.476	3.74 dBm 05190 GHz
Ba Spectrum Ref Level Att SGL Count I D dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 👄 RE	3W 100 kHz	Mode A	uto FFT	Ant1 Hop	2.476	3.74 dBm 05190 GHz

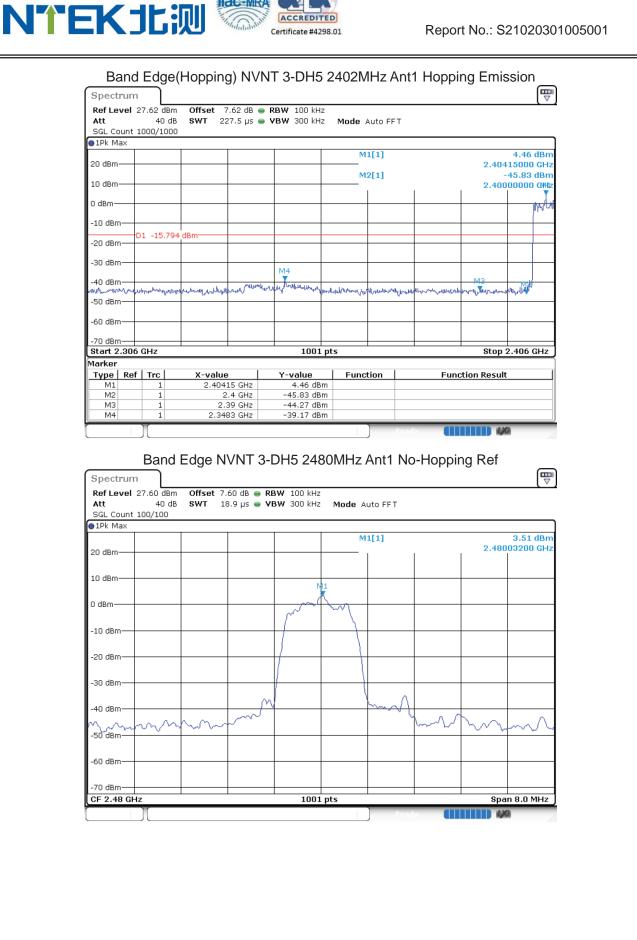
ACCRED



ACCREDITED

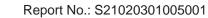


Att SGL Count	40 d 100/100	B SWT 22	27.5 µs 👄	VBW 300 kH	z Mode A	uto FFT			
20 dBm					Mi	[1]		0.40	2.90 dBm
					M2	2[1]			195000 GHz -44.96 dBm
10 dBm								2.40	000000,16Hz
-10 dBm-									
	01 -17.28	0_dBm							
-30 dBm									
-40 dBm				M4					
-40 abin mrtuillimhri -50 dBm	whenthe	wyntryntern	What the Myron w	www. Mullerd Walker	Humany	bulledyper	al all many show	W3 WWWWW	www.
-60 dBm									
-70 dBm									
Start 2.306 Marker	GHz			1001	pts			Stop	2.406 GHz
Type Ref		X-value		Y-value	Funct	ion	Fund	tion Resul	t
M1 M2	1		95 GHz 2.4 GHz	2.90 dB -44.96 dB					
Spectrum Ref Level	and Ec	2. 2.34 dge(Hopp n Offset 7.	39 GHZ 83 GHZ Ding) N	-46.01 dB -41.75 dB	m H5 2402		Ant1 Ho	oping R	a Ref (♥)
M4 Ba Spectrum	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 db	m H5 2402 Mode Au	ito FFT	adv 🚺 Ant1 Hoj	oping R	
M4 Spectrum Ref Level 3 Att SGL Count 1	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au		Ant1 Hop		
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 1Pk Max	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop		₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count 1 SGL Count 1 1Pk Max 20 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : 1Pk Max 20 dBm 10 dBm 0 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 20 dBm 10 dBm 0 dBm -10 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : 1Pk Max 20 dBm 10 dBm 0 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 20 dBm 10 dBm 0 dBm -10 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHZ 83 GHZ Ding) N	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 20 dBm 10 dBm -10 dBm -20 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : Att SGL Count : SGL Count : 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm	1 1 27.62 dBi 40 d	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •	-41.75 dB	m H5 2402 Mode Au	ito FFT	Ant1 Hop	2.40	₩ ▼ 4.21 dBm
M4 Ba Spectrum Ref Level : SGL Count 1 SGL Count 1 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm	1 1 27.62 dBi 40 d 8000/800	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •		Mode Au	ito FFT	Ant1 Hop	2.40	4.21 dBm 482920 GHz
M4 Back Spectrum Ref Level : SGL Count : SGL Count : ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -50 dBm -60 dBm	1 1 27.62 dBi 40 d 8000/800	2. 2.34 dge(Hopp n offset 7. 8 swr 1:	39 GHz 83 GHz Ding) Ν 62 dB • 8.9 μs •	-41.75 dB	Mode Au	ito FFT		2.40	4.21 dBm 482920 GHz



ACCREDITED

NTEK北测



●1Pk Max	100/100								0.10.40	
20 dBm		<u> </u>	<u> </u>		M	1[1]		2.480	2.12 dBm 15000 GHz	
10 dBm		ļ			M	2[1]			45.66 dBm 50000 GHz	
0 dBm										
-10 dBm-										
	D1 -16.490	dBm								
-20' dBm										
-30 dBm										
-40 dbmr2-	M4	M3	and Markeller	toursursursup	nHallwarder	unter market and	and and along the	und monthly	my why mobile	
-50 dBm		4					0 0 Q		14° 040 0	
-60 dBm										
-70 dBm-	5 00-	<u> </u>	<u> </u>	1001	ntc			0+	2 576 011-	
Start 2.470 Marker	JGHZ			1001	μις			stop	2.576 GHz	
Type Ret	f Trc	X-value 2,480	e 15 GHz	Y-value 2.12 dBr	Func m	tion	Fund	tion Result	:]	
	1		35 GHz	-45.66 dBr	m					
M2				-46 CC dbr						
M3 M4 Spectrum Ref Level Att SGL Count	1 1 27.60 dBm 40 dB	2.49 2.49 ge(Hopp offset 7.	.60 dB 👄 R	-46.33 dBr -43.41 dBr VNT 3-D BW 100 kHz BW 100 kHz	m		Ant1 Hop	oping R	ef	
M3 M4 Spectrum Ref Level Att	1 1 27.60 dBm 40 dB	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz	m H5 248 Mode A		Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count	1 1 27.60 dBm 40 dB	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop			
M3 M4 Spectrum Ref Level Att SGL Count ● 1Pk Max	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count 9 1Pk Max 20 dBm- 10 dBm-	1 1 27.60 dBm 40 dB	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm-	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count 9 1Pk Max 20 dBm- 10 dBm-	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count O dBm 10 dBm -10 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count 10 dBm -10 dBm -20 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count O dBm 10 dBm -10 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count 10 dBm -10 dBm -20 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	uto FFT	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Bi Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	1[1]	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	1[1]	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Bi Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	1[1]	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 Bi Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	m H5 248 Mode A	1[1]	Ant1 Hop		₩ ▼ 4.50 dBm	
M3 M4 M4 Spectrum Ref Level Att SGL Count ● 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	1 1 27.60 dBm 40 dB 8000/8000	2.49 2.49 ge(Hopp offset 7.	31 GHz Ding) N .60 dB • R	-43.41 dBr VNT 3-D BW 100 kHz BW 300 kHz	Mode A	1[1]	Ant1 Hop	2.477	4.50 dBm 15480 GHz	

ACCRED



NTEK北测	ACCREDITED Certificate #4298.01
	Certificate #4250.01

Spectrum		(II 0/					t1 Hoppi	5	
Ref Level 🖇			_	RBW 100 kH;					
Att SGL Count :	40 dB		5 µs 😑	VBW 300 kH;	Mode /	Auto FFT			
1Pk Max	1000/1000	,							
					м	1[1]			1.85 dBm
20 dBm —								2.478	805000 GHz
10 40					M	2[1]			-44.86 dBm
10 dBm						I	I	2.48	350000 GHz
Rigem-		+							
10,00									
-10 dBm	01 -15.500								
-20 cBm)1 -13.300	5 ubin							
-30 dBm									
40 dBm <u>12</u>		M443	. would	100				minute	the second second
-50 dBm	J. Marken Mr.	- The Barth Andrew	w)	and the second	mr. Mulanthanpa	and a contraction of the	metre Mystriten	e-fred - v.	" John Lunder Land
-JU UBIII									
-60 dBm		+							
-70 dBm									
Start 2.476	GHz			1001	pts			Stop	2.576 GHz
1arker								F	
Type Ref	Trc	X-value		Y-value	Func	tion	Func	tion Resul	t
M1	1	2.47805		1.85 dB					
M2 M3	1	2.4835	GHz GHz	-44.86 dBi -44.07 dBi					
M3 M4	1	2.5		-44.07 dBi					

NTEK北测

Report No.: S21020301005001

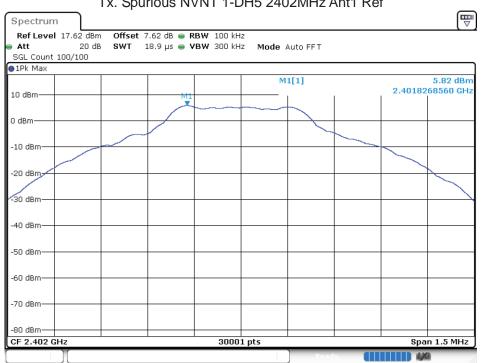
8.7 CONDUCTED RF SPURIOUS EMISSION

ilac-

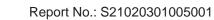
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant 1	-59.67	-20	Pass
NVNT	1-DH5	2441	Ant 1	-58.96	-20	Pass
NVNT	1-DH5	2480	Ant 1	-61.89	-20	Pass
NVNT	2-DH5	2402	Ant 1	-57.75	-20	Pass
NVNT	2-DH5	2441	Ant 1	-59.71	-20	Pass
NVNT	2-DH5	2480	Ant 1	-41.04	-20	Pass
NVNT	3-DH5	2402	Ant 1	-57.32	-20	Pass
NVNT	3-DH5	2441	Ant 1	-58.25	-20	Pass
NVNT	3-DH5	2480	Ant 1	-58.02	-20	Pass

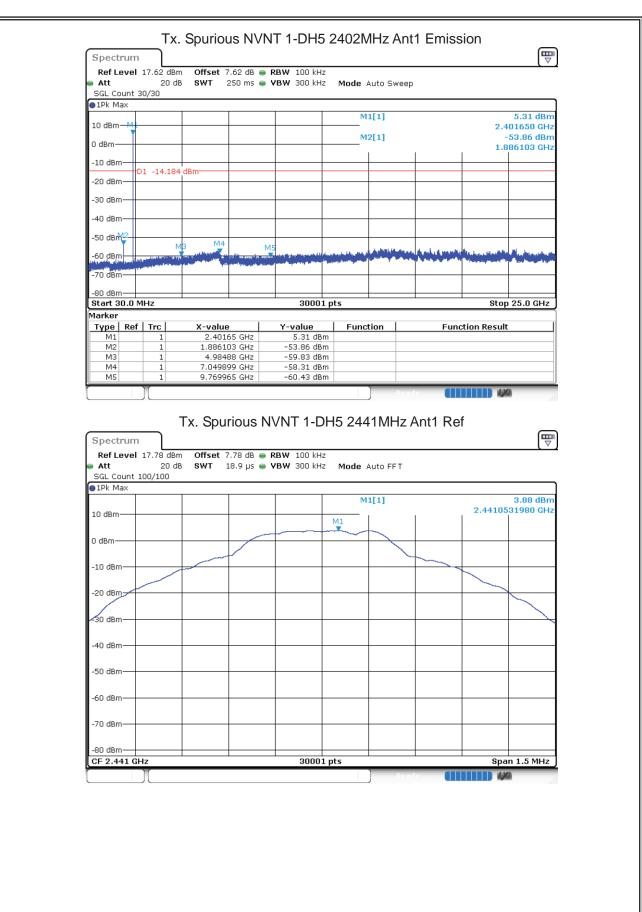
ACCREDITED

Certificate #4298.01



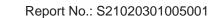
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

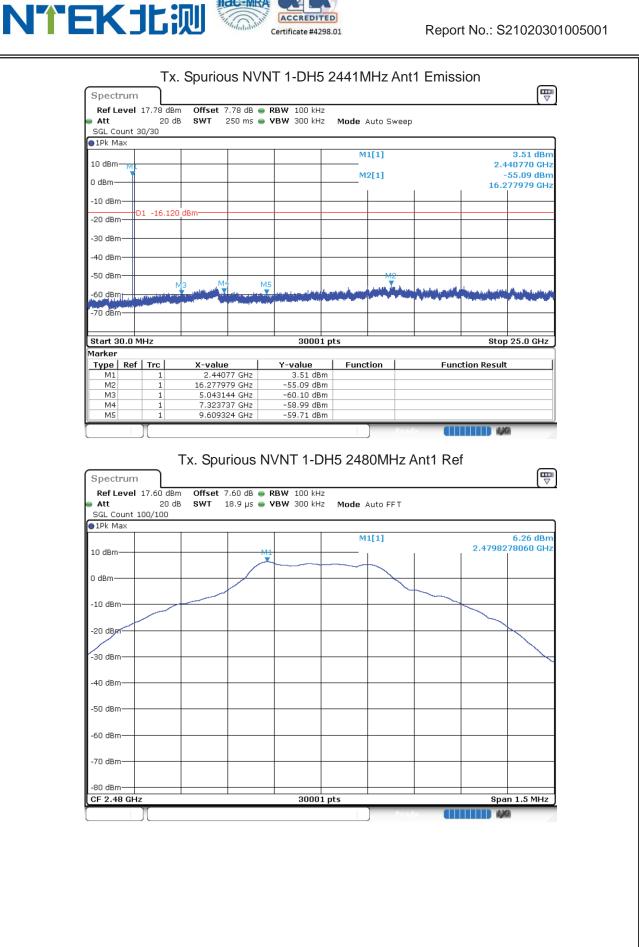


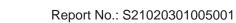


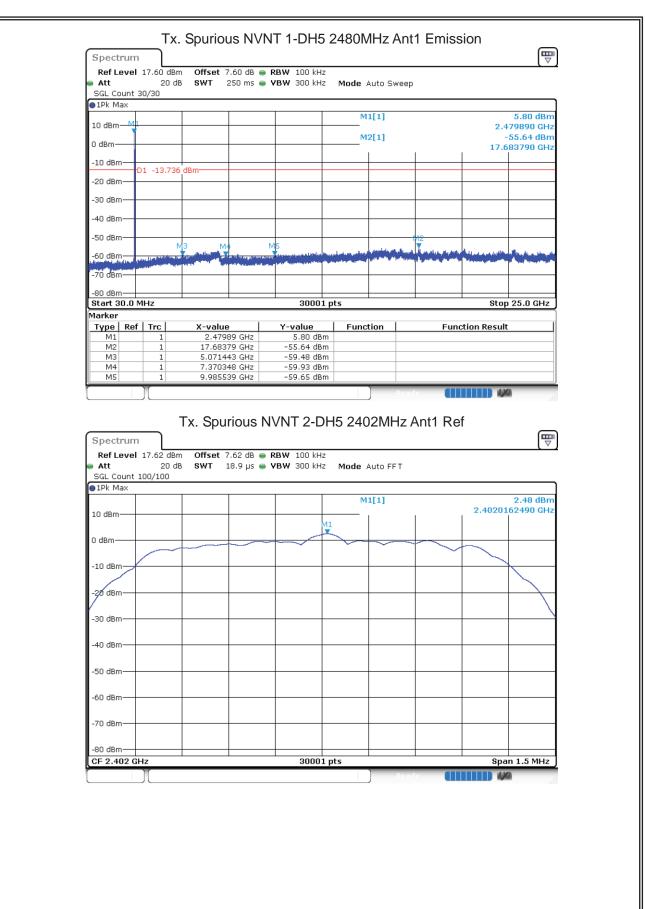
Certificate #4298.01

NTEK北测



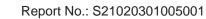


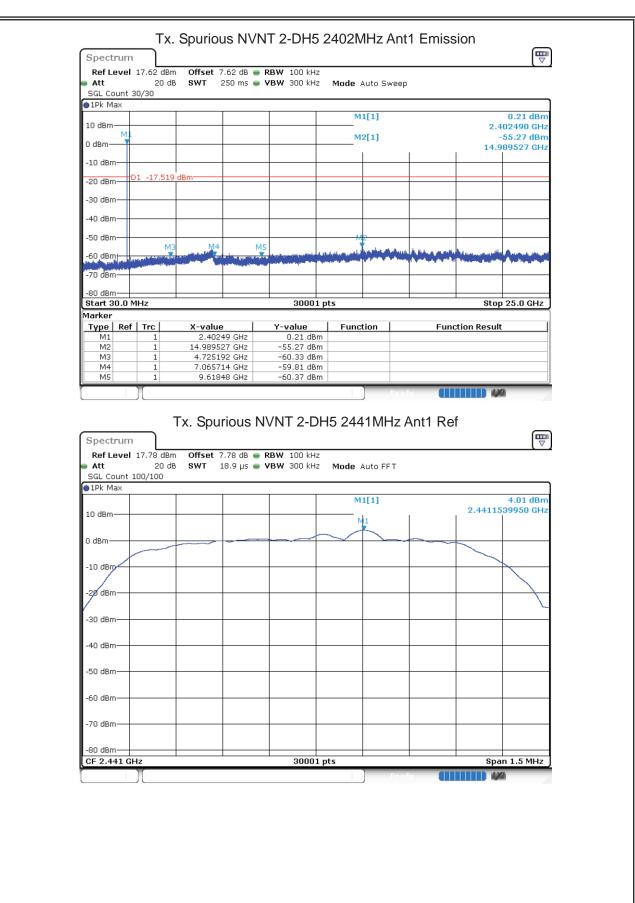




Certificate #4298.01

NTEK北测





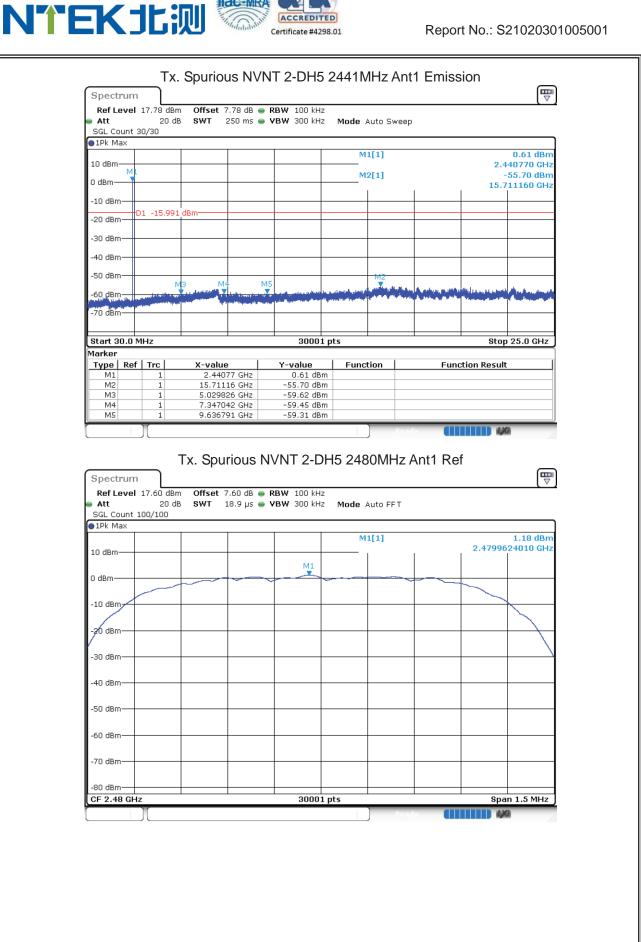
ilac-M

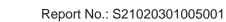
ACCREDITED

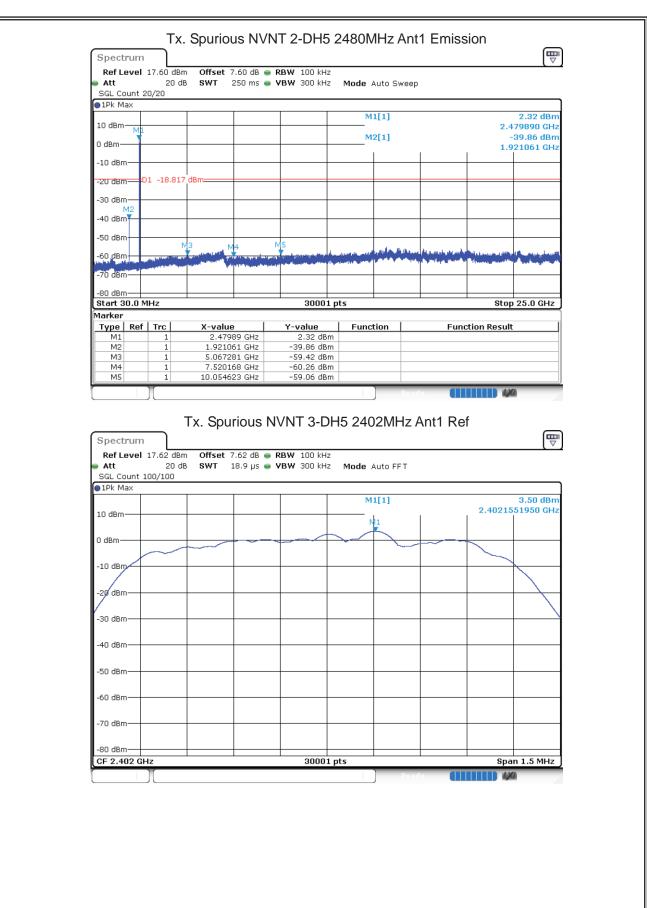
Certificate #4298.01

NTEK北测







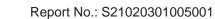


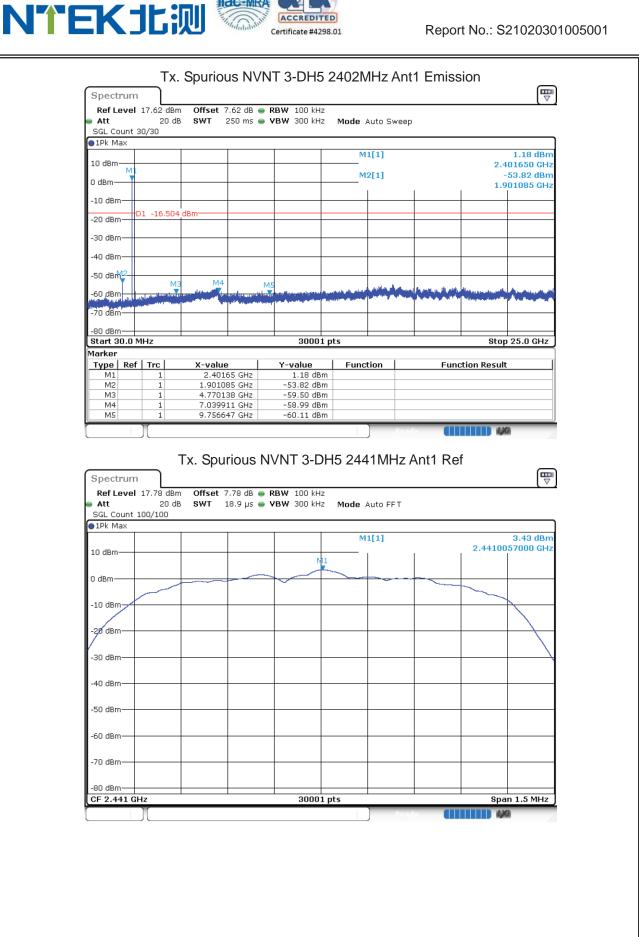
lac-N

ACCREDITED

Certificate #4298.01

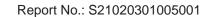
NTEK北测

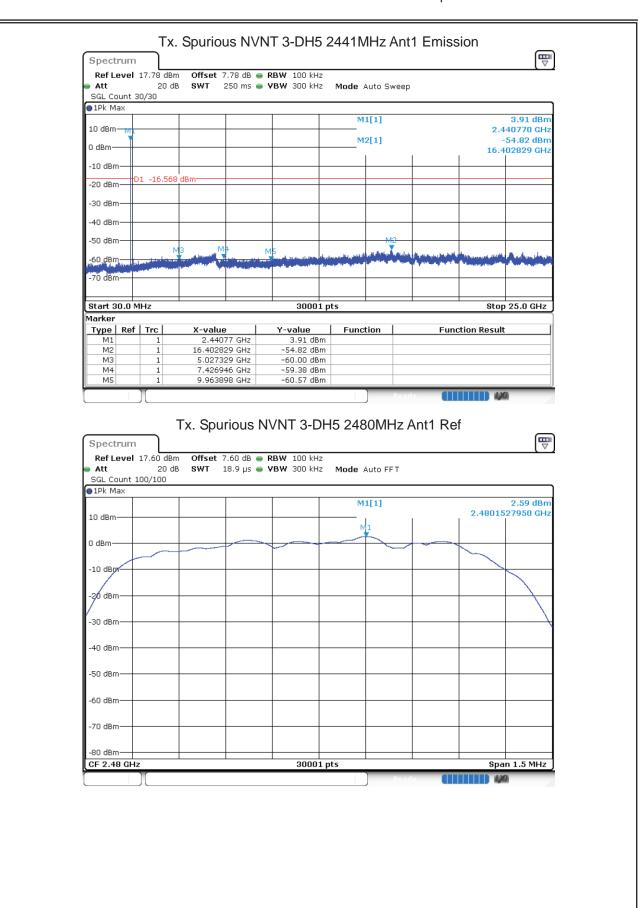




lac-

ACCREDITED





Certificate #4298.01

NTEK北测





Att										[₩
_	evel	17.60 0		_	RBW 100 kHz					
			dB SWT 250	ms 😑 '	VBW 300 kHz	Mode A	uto Swee	р		
SGL Co		0/30								
						M1	[1]			1.95 dBm
10 dBm	MI								2.4	79890 GHz
0 dDm	T					M2	[1]			55.43 dBm
0 dBm–									15.7	16154 GHz
-10 dBn	א-ר									
-20 dBn	D	1 -17.4	14 dBm							
-20 ubii										
-30 dBn	א-ר				+					
-40 dBn										
-40 080	' T									
-50 dBn	י		МЗ ми		MS		M2			
-60 dBn			M3 M4		The second second	and the address	a faile and a	والقرام ما المرجع ال	and the second s	
				يە مەلەرلەر روپ		water and the second			Mariana and Maria	
-70 dBn					+ + +			-		
-80 dBn	<u>ו</u> _ר									
Start 3		IHz	I		30001	ots			Stop	25.0 GHz
Marker										
Туре	Ref		X-value		Y-value	Funct	ion	Fund	tion Result	
M1 M2		1	2.47989 G 15.716154 G		1.95 dBm -55.43 dBm					
M3		1	5.092251 G		-58.72 dBm					
M4		1	7.488539 G		-59.52 dBm					
M5		1	10.082922 G	Hz	-59.17 dBm					

END OF REPORT

Version.1.3