

# RADIO TEST REPORT FCC ID: 055634521

Product: 6.3 inch 4G Smart Phone Trade Mark: LOGIC, iSWAG, UNONU Model No.: L63 Family Model: ACTIV, N63 Report No.: STR211125003001E Issue Date: Dec 20. 2021

# **Prepared for**

SWAGTEK

10205 NW 19th Street STE101 Miami, FL 33172

# Prepared by

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

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# **1 TEST RESULT CERTIFICATION**

Applicant's name:	SWAGTEK
Address:	10205 NW 19th Street STE101 Miami, FL 33172
Manufacturer's Name:	SWAGTEK
Address:	10205 NW 19th Street STE101 Miami, FL 33172
Product description	
Product name:	6.3 inch 4G Smart Phone
Model and/or type reference:	L63
Family Model:	ACTIV, N63

#### 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.

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

Date of Test	:	Nov 26 . 2021 ~ Dec 20. 2021
Testing Engineer	:	Allen Liu)
		(Allen Liu)
Authorized Signatory	:	Alex
		(Alex Li)



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	6.3 inch 4G Smart Phone		
Trade Mark	LOGIC, iSWAG, UNONU		
FCC ID	O55634521		
Model No.	L63		
Family Model	ACTIV, N63		
Model Difference	All models have same circuit, RF module, motherboard and antenna, only the appearance and battery cover logo brand and memory are different.		
Operating Frequency	2402MHz~2480MHz		
Modulation	GFSK, π/4-DQPSK, 8-DPSK		
Number of Channels	79 Channels		
Antenna Type	PIFA Antenna		
Antenna Gain	0.5 dBi		
Adapter	Model:HB001-B Input: AC 100-240V~50/60Hz 0.2A Output: DC 5V1.5A		
Battery	DC 3.8V, 3800mAh, 14.44Wh		
Power supply	DC 3.8V from battery or DC 5V from Adapter.		
HW Version	V1.1		
SW Version	LOGIC_L63A_GENERIC		

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.



Certificate #4298.01				
Report No.	Version	Description	Issued Date	
STR211125003001E	Rev.01	Initial issue of report	Dec 20, 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.

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  $\pi$ /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: AO a superline Operational Englishing on a testa di un degrada in superline superiore di superiore di			

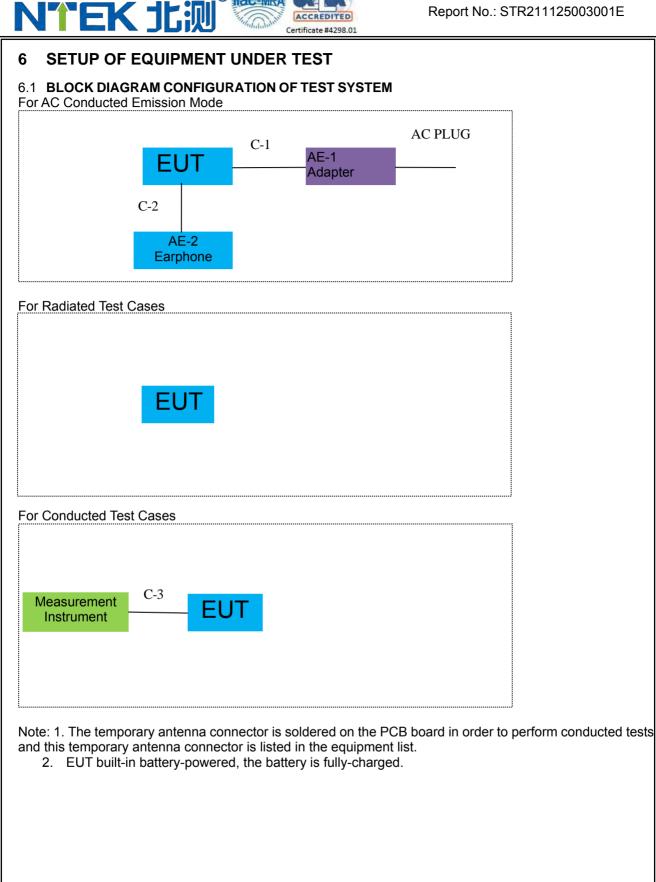
Note: AC power line Conducted Emission was tested under maximum output power.

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

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.





## 6.2 SUPPORT EQUIPMENT

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

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Adapter	HB001-B	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	1.5m
C-3	RF Cable	YES	NO	0.1m
				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".



## 6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

## Radiation& Conducted Test equipment

		estequipment					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2021.04.27	2022.04.26	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2021.07.01	2022.06.30	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2021.07.01	2022.06.30	1 year
4	Test Receiver	R&S	ESPI7	101318	2021.04.27	2022.04.26	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2021.03.29	2022.03.28	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	2021.03.29	2022.03.28	1 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2021.11.07	2022.11.06	1 year
9	Amplifier	EMC	EMC051835 SE	980246	2021.07.01	2022.06.30	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2021.11.07	2022.11.06	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2021.07.01	2022.06.30	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2019.08.06	2022.08.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2019.08.06	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	2019.08.06	2022.08.05	3 year
16	Filter	TRILTHIC	2400MHz	29	2021.07.01	2022.06.30	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	2021.04.27	2022.04.26	1 year
2	LISN	R&S	ENV216	101313	2021.04.27	2022.04.26	1 year
3	LISN	SCHWARZBE CK	NNLK 8129	8129245	2021.04.27	2022.04.26	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)

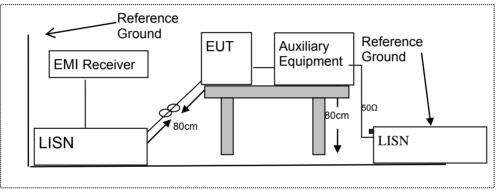
## 7.1.2 Conformance Limit

	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

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.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item -EUT Test Photos.

## 7.1.5 Test Results

Pass



## 7.1.6 Test Results

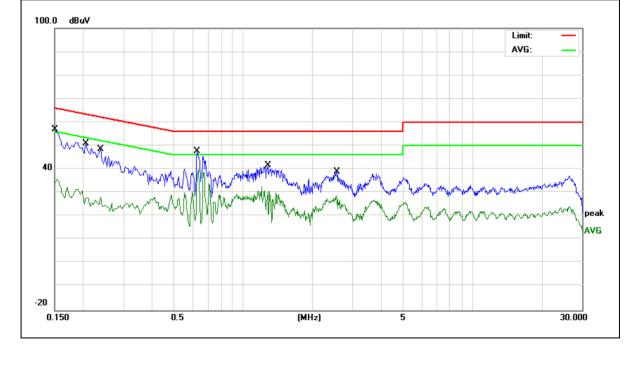
EUT:	6.3 inch 4G Smart Phone	Model Name :	L63
Temperature:	<b>22</b> ℃	Relative Humidity:	57%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domork
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1500	47.08	9.73	56.81	65.99	-9.18	QP
0.1500	26.25	9.73	35.98	55.99	-20.01	AVG
0.2060	41.27	9.63	50.90	63.36	-12.46	QP
0.2060	30.62	9.63	40.25	53.36	-13.11	AVG
0.2380	38.86	9.63	48.49	62.16	-13.67	QP
0.2380	29.02	9.63	38.65	52.16	-13.51	AVG
0.6300	37.81	9.70	47.51	56.00	-8.49	QP
0.6300	30.28	9.70	39.98	46.00	-6.02	AVG
1.2820	31.77	9.75	41.52	56.00	-14.48	QP
1.2820	22.50	9.75	32.25	46.00	-13.75	AVG
2.5540	29.10	9.73	38.83	56.00	-17.17	QP
2.5540	22.82	9.73	32.55	46.00	-13.45	AVG

Remark:

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

2. Factor = Insertion Loss + Cable Loss.





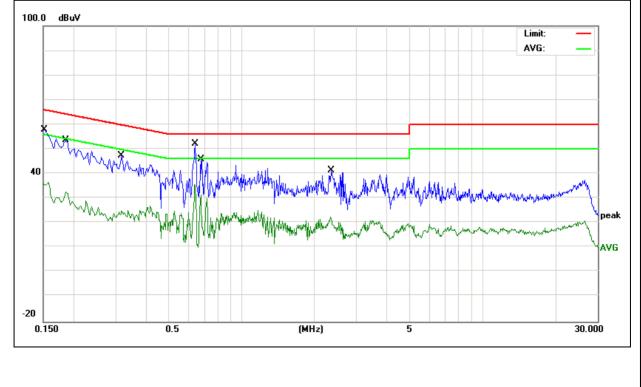
EUT:	6.3 inch 4G Smart Phone	Model Name :	L63
Temperature:	<b>25</b> ℃	Relative Humidity:	62%
Pressure:	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

	ſ	r	T			1
Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1539	47.52	9.63	57.15	65.78	-8.63	QP
0.1539	38.39	9.63	48.02	55.78	-7.76	AVG
0.1860	44.14	9.63	53.77	64.21	-10.44	QP
0.1860	33.73	9.63	43.36	54.21	-10.85	AVG
0.3180	37.74	9.67	47.41	59.76	-12.35	QP
0.3180	30.45	9.67	40.12	49.76	-9.64	AVG
0.6419	42.38	9.67	52.05	56.00	-3.95	QP
0.6419	25.97	9.67	35.64	46.00	-10.36	AVG
0.6780	36.26	9.65	45.91	56.00	-10.09	QP
0.6780	26.71	9.65	36.36	46.00	-9.64	AVG
2.3460	31.62	9.68	41.30	56.00	-14.70	QP
2.3460	12.89	9.68	22.57	46.00	-23.43	AVG

## Remark:

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

2. Factor = Insertion Loss + Cable Loss.





## 7.2 RADIATED SPURIOUS EMISSION

## 7.2.1 Applicable Standard

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

#### 7.2.2 Conformance Limit

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

According to 1 00 1 dit10.20	According to FOOT alt 15.200, Restricted bands							
MHz	MHz	MHz	GHz					
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15					
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46					
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75					
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5					
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2					
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5					
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7					
6.26775-6.26825	123-138	2200-2300	14.47-14.5					
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2					
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4					
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12					
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0					
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8					
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5					
12.57675-12.57725	322-335.4	3600-4400	(2)					
13.36-13.41								

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)					
	PEAK	AVERAGE				
Above 1000	74	54				

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

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



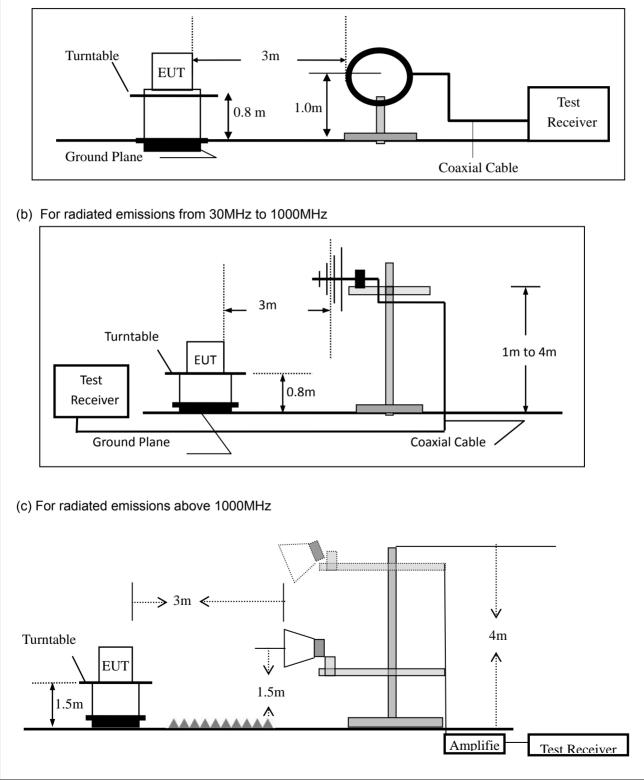
# 7.2.3 Measuring Instruments

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

ACCREDITED 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.

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

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

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

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- e. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- f. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.
  - Note:

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



During the radiated emission test, the Spectrum Analyzer was set with the following configurations:								
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth					
30 to 1000	QP	120 kHz	300 kHz					
Above 1000	Peak	1 MHz	1 MHz					
Above 1000	Average	1 MHz	1 MHz					

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

## 7.2.6 Test Results

EUT:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu

Freq.	Ant.Pol.	Emission Level(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.



Spurious Emission below 1GHz (30MHz to 1GHz)

_										
	All the modulation modes have been tested, and the worst result was report as below:									
	EUT: 6.3 inch 4G Smart Phone Model Name : L63									
	Temperature:	<b>25</b> ℃	Relative Humidity:	55%						
	Pressure:	1010hPa	Test Mode:	Mode 1						

Test Voltage : DC 3.8V

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Limits Margin		
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Remark	
V	30.0000	10.21	25.06	35.27	40.00	-4.73	QP	
V	44.5868	13.05	16.54	29.59	40.00	-10.41	QP	
V	83.5222	11.44	14.42	25.86	40.00	-14.14	QP	
V	140.3421	18.46	18.94	37.40	43.50	-6.10	QP	
V	183.2005	17.38	16.15	33.53	43.50	-9.97	QP	
V	265.6757	9.72	20.47	30.19	46.00	-15.81	QP	

## Remark:

Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit





Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remarl
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Н	139.3613	10.10	18.90	29.00	43.50	-14.50	QP
Н	154.8204	14.13	17.95	32.08	43.50	-11.42	QP
Н	180.6488	14.25	16.30	30.55	43.50	-12.95	QP
Н	252.9482	13.20	19.91	33.11	46.00	-12.89	QP
Н	452.7197	6.15	25.18	31.33	46.00	-14.67	QP
Н	714.1734	7.58	29.66	37.24	46.00	-8.76	QP
						Margin:	
						6	
32	the and the south of the second second	which and the second second	ANN AND A		5		
-8	40 50 60	70 80	(M)	121	300 400 5	500 600 700	1000.000



<ul> <li>Spurious Emission Above 1GHz (1GHz to 25GHz)</li> <li>EUT: 6.3 inch 4G Smart Phone Model No.:</li> </ul>			L63							
Temperature: 20 °C Relative Humidity: 48%			/ 0							
Test Mode		Mode2/Mc	ode3/Mode		Test By:	,	Alle	n Liu		
					d the worst re	sult was			ow:	
				· · · ·					-	•
Frequency	Read Level	Cable loss	Antenna Factor	Pream Facto		Limi	ts	Margin	Remark	Comment
(MHz)	(dBµV)		dB/m	(dB)		(dBµV	//m)	(dB)	Remain	Common
(	(******	(		. ,	2 MHz)( 8-DPSł		-	. ,		
4804.214	63.26	5.21	35.59	44.30	,,	74.0		-14.24	Pk	Vertical
4804.214	40.82	5.21	35.59	44.30		54.0	00	-16.68	AV	Vertical
7206.265	60.13	6.48	36.27	44.60		74.0		-15.72	Pk	Vertical
7206.265	44.28	6.48	36.27	44.60	0 42.43	54.0	00	-11.57	AV	Vertical
4804.109	60.87	5.21	35.55	44.30	0 57.33	74.0	00	-16.67	Pk	Horizontal
4804.109	42.84	5.21	35.55	44.30	0 39.30	54.0	00	-14.70	AV	Horizontal
7206.224	63.32	6.48	36.27	44.52	2 61.55	74.0	00	-12.45	Pk	Horizontal
7206.224	48.18	6.48	36.27	44.52	2 46.41	54.0	)0	-7.59	AV	Horizontal
		- <b>-</b>	Mid Chann	iel (2441	1 MHz)( 8-DPSk	()Abov	e 1G	L	L	L
4882.396	63.53	5.21	35.66	44.20	0 60.20	74.0	00	-13.80	Pk	Vertical
4882.396	42.28	5.21	35.66	44.20	0 38.95	54.0	00	-15.05	AV	Vertical
7323.241	59.91	7.10	36.50	44.43	3 59.08	74.0	00	-14.92	Pk	Vertical
7323.241	47.55	7.10	36.50	44.43	3 46.72	54.0	00	-7.28	AV	Vertical
4882.108	61.59	5.21	35.66	44.20	0 58.26	74.0	00	-15.74	Pk	Horizontal
4882.108	48.84	5.21	35.66	44.20	0 45.51	54.0	00	-8.49	AV	Horizontal
7323.132	60.48	7.10	36.50	44.43	3 59.65	74.0	00	-14.35	Pk	Horizontal
7323.132	41.32	7.10	36.50	44.43	3 40.49	54.0	00	-13.51	AV	Horizontal
			High Chann	iel (2480	0 MHz)( 8-DPSI	<) Abov	ve 1G	6		
4960.397	67.14	5.21	35.52	44.2	1 63.66	74.0	00	-10.34	Pk	Vertical
4960.397	43.66	5.21	35.52	44.2	1 40.18	54.0	00	-13.82	AV	Vertical
7440.201	61.28	7.10	36.53	44.60	0 60.31	74.0	00	-13.69	Pk	Vertical
7440.201	45.45	7.10	36.53	44.60	0 44.48	54.0	00	-9.52	AV	Vertical
4960.225	67.52	5.21	35.52	44.2	1 64.04	74.0	00	-9.96	Pk	Horizontal
4960.225	47.47	5.21	35.52	44.2		54.0		-10.01	AV	Horizontal
7440.298	62.24	7.10	36.53	44.60	0 61.27	74.0	00	-12.73	Pk	Horizontal
7440.298	45.47	7.10	36.53	44.60	0 44.50	54.0	00	-9.50	AV	Horizontal

Note:

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



Spurious	Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz									
EUT:	6.3 inch 4	G Smar	t Phone	Mod	el No.:		L63			
Temperature:	Temperature: 20 °C				tive Humidi	ty:	48%			
Test Mode:	Mode2/ N	lode4		Test	By:		Aller	n Liu		
All the modul	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	Lim	its	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµ\	V/m)	(dB)	Туре	
	•		31	/bps(8-DF	SK)-Non-ho	oping				
2310.00	58.48	2.97	27.80	43.80	45.45	74	4	-28.55	Pk	Horizontal
2310.00	44.93	2.97	27.80	43.80	31.90	54	4	-22.10	AV	Horizontal
2310.00	59.22	2.97	27.80	43.80	46.19	74	4	-27.81	Pk	Vertical
2310.00	42.54	2.97	27.80	43.80	29.51	54	4	-24.49	AV	Vertical
2390.00	59.61	3.14	27.21	43.80	46.16	74	4	-27.84	Pk	Vertical
2390.00	43.15	3.14	27.21	43.80	29.70	54	4	-24.30	AV	Vertical
2390.00	56.30	3.14	27.21	43.80	42.85	74	4	-31.15	Pk	Horizontal
2390.00	42.17	3.14	27.21	43.80	28.72	54	4	-25.28	AV	Horizontal
2483.50	59.23	3.58	27.70	44.00	46.51	74	1	-27.49	Pk	Vertical
2483.50	42.86	3.58	27.70	44.00	30.14	54	4	-23.86	AV	Vertical
2483.50	59.92	3.58	27.70	44.00	47.20	74	1	-26.80	Pk	Horizontal
2483.50	43.08	3.58	27.70	44.00	30.36	54	4	-23.64	AV	Horizontal
				3Mbps(8-	DPSK)-hopp	ng				
2310.00	50.01	2.97	27.80	43.80	36.98	74.	00	-37.02	Pk	Vertical
2310.00	43.32	2.97	27.80	43.80	30.29	54.	00	-23.71	AV	Vertical
2310.00	54.26	2.97	27.80	43.80	41.23	74.	00	-32.77	Pk	Horizontal
2310.00	42.11	2.97	27.80	43.80	29.08	54.	00	-24.92	AV	Horizontal
2390.00	51.86	3.14	27.21	43.80	38.41	74.	00	-35.59	Pk	Vertical
2390.00	43.89	3.14	27.21	43.80	30.44	54.	00	-23.56	AV	Vertical
2390.00	51.76	3.14	27.21	43.80	38.31	74.	00	-35.69	Pk	Horizontal
2390.00	43.01	3.14	27.21	43.80	29.56	54.	00	-24.44	AV	Horizontal
2483.50	50.54	3.58	27.70	44.00	37.82	74.	00	-36.18	Pk	Vertical
2483.50	43.14	3.58	27.70	44.00	30.42	54.	00	-23.58	AV	Vertical
2483.50	52.62	3.58	27.70	44.00	39.90	74.	00	-34.10	Pk	Horizontal
2483.50	42.80	3.58	27.70	44.00	30.08	54.	00	-23.92	AV	Horizontal

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



EUT: 6.3 inch 4G Smart Phone				Model No.:		L63					
Temperature:   20 °C				Relative Humidity:			48%				
Test Mode: Mode2/ Mode4			Test I	est By: Allen Liu							
Al <u>I the modul</u>	lation mod	les have	been teste	ed, a	and the	e worst res	ult wa	is rep	ort as be	ow:	
Frequency Reading C		Cable Loss	Antenna Factor		eamp actor	Emission Level	Lir	nits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)		(dBµV/m)	(dBµ	ıV/m)	(dB)	Туре	
3260	60.76	4.04	29.57	44	4.70	49.67	7	'4	-24.33	Pk	Vertical
3260	57.69	4.04	29.57	44	4.70	46.60	5	54	-7.40	AV	Vertical
3260	61.14	4.04	29.57	44	4.70	50.05	7	'4	-23.95	Pk	Horizontal
3260	58.03	4.04	29.57	44	4.70	46.94	5	54	-7.06	AV	Horizontal
3332	65.69	4.26	29.87	44	4.40	55.42	7	'4	-18.58	Pk	Vertical
3332	53.64	4.26	29.87	44	4.40	43.37	5	54	-10.63	AV	Vertical
3332	62.49	4.26	29.87	44	4.40	52.22	7	'4	-21.78	Pk	Horizontal
3332	52.56	4.26	29.87	44	4.40	42.29	5	54	-11.71	AV	Horizontal
17797	43.07	10.99	43.95	43	3.50	54.51	7	'4	-19.49	Pk	Vertical
17797	33.75	10.99	43.95	43	3.50	45.19	5	54	-8.81	AV	Vertical
17788	45.21	11.81	43.69	44	4.60	56.11	7	'4	-17.89	Pk	Horizonta
17788	33.00	11.81	43.69	44	4.60	43.90	5	54	-10.10	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  $\geq$  RBW Sweep = auto Detector function = peak Trace = max hold

#### 7.3.6 Test Results

EUT:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	20 (	Relative Humidity:	48%
Test Mode:	Mode 5(1Mbps)	Test By:	Allen Liu



## 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.

#### 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 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.

VBW ≥ RBW Sweep = auto

Detector function = peak Trace = max hold

#### 7.4.6 Test Results

EUT:	6.3 inch 4G Smart Phone	Model No.:	L63 48% Allen Liu
Temperature:	<b>20</b> °C	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu



## 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.

## 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:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu

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 x 79) (s), Hops Over Occupancy Time comes to  $(1600 / 6 / 79) \times (0.4 \times 79) = 106.67$  hops.
- 2. 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  $(800 / 6 / 20) \times (0.4 \times 20) = 53.33$  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

#### 7.6.6 Test Results

EUT:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	<b>20</b> °C	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu



## 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

 $RBW \ge$  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:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu



## 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 §15.209(a) (see §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:	6.3 inch 4G Smart Phone	Model No.:	L63
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	Mode2 /Mode4/ Mode 5	Test By:	Allen Liu



## 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: 0.5dBi). It comply with the standard requirement.



#### 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 transmission sover 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.

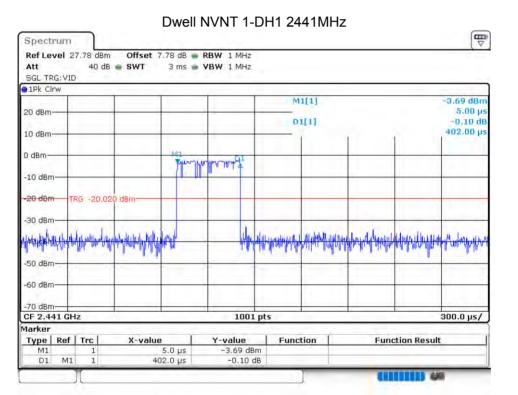


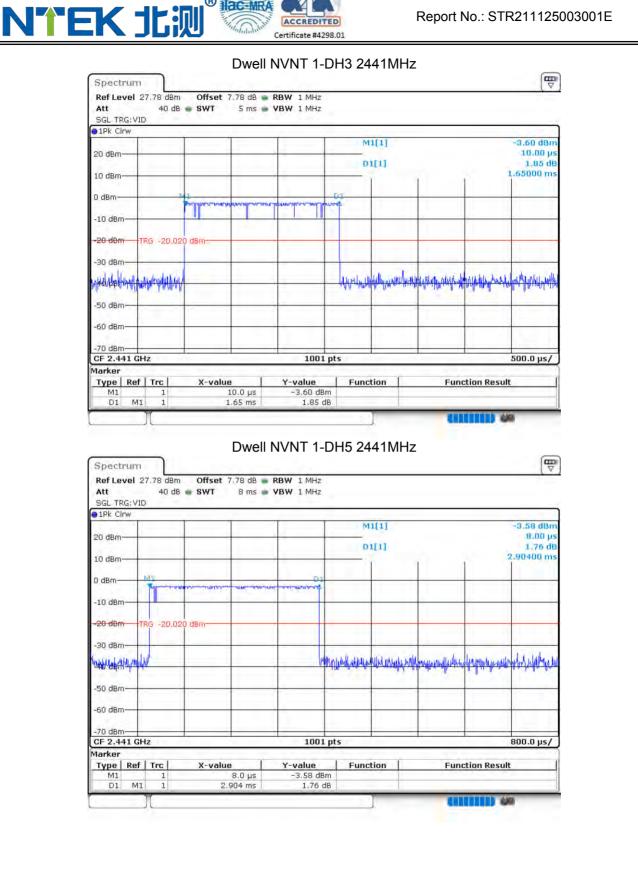


# 8 TEST RESULTS

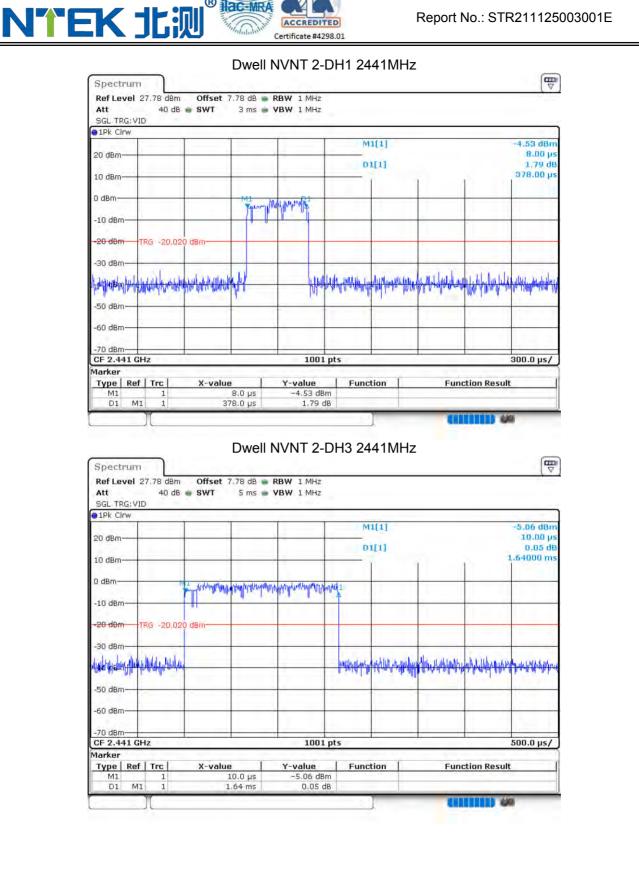
## 8.1 DWELL TIME

Condition	Mode	Frequency	Pulse	Total Dwell	Period	Limit	Verdict
Condition	Mode	(MHz)	Time (ms)	Time (ms)	Time (ms)	(ms)	veruici
NVNT	1-DH1	2441	0.402	128.64	31600	400	Pass
NVNT	1-DH3	2441	1.65	264	31600	400	Pass
NVNT	1-DH5	2441	2.904	309.76	31600	400	Pass
NVNT	2-DH1	2441	0.378	120.96	31600	400	Pass
NVNT	2-DH3	2441	1.64	262.4	31600	400	Pass
NVNT	2-DH5	2441	2.888	308.053	31600	400	Pass
NVNT	3-DH1	2441	0.375	120	31600	400	Pass
NVNT	3-DH3	2441	1.635	261.6	31600	400	Pass
NVNT	3-DH5	2441	2.888	308.053	31600	400	Pass



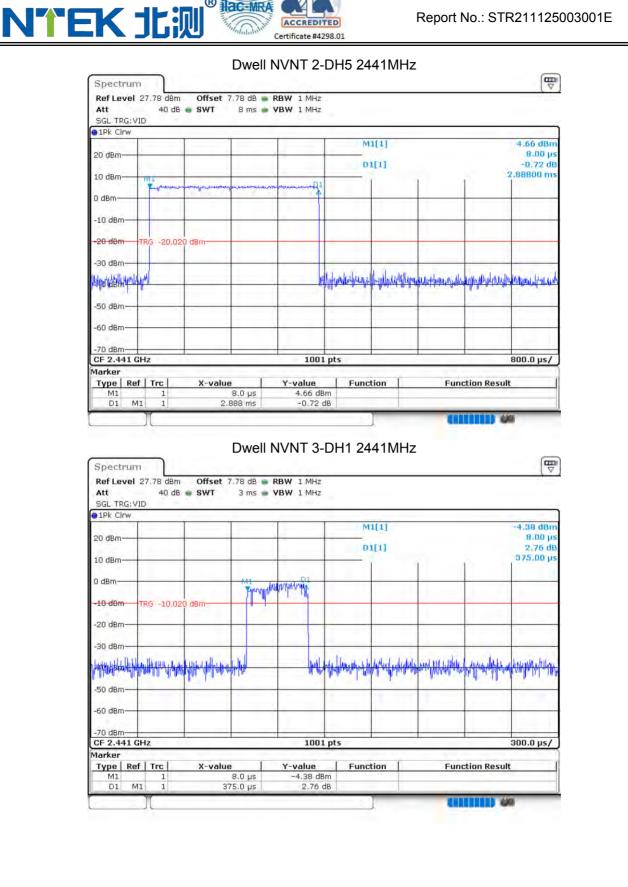


® Hac-MR



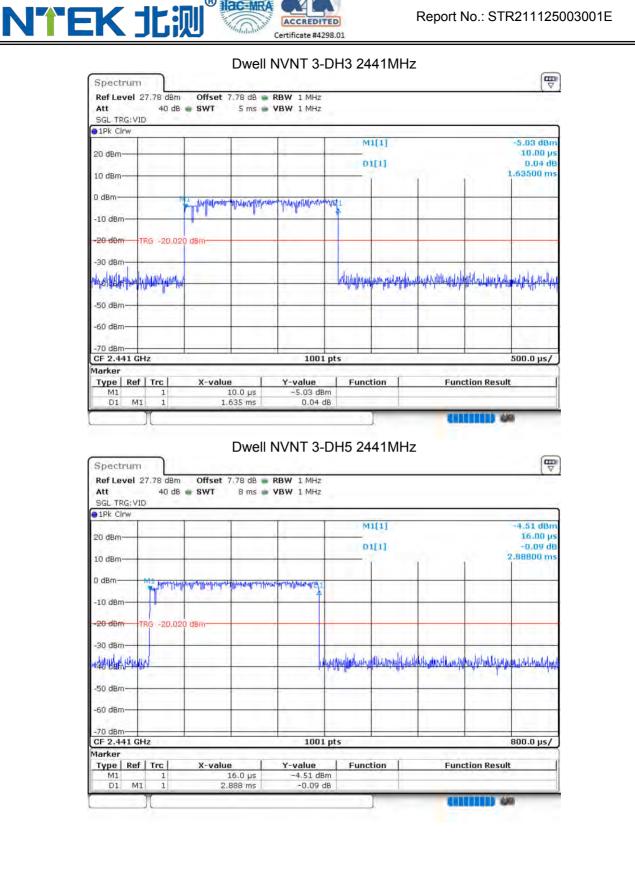
® Hac-MR





® lac-MB

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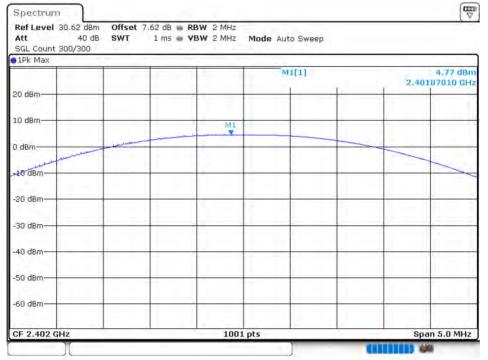
® lac-MR



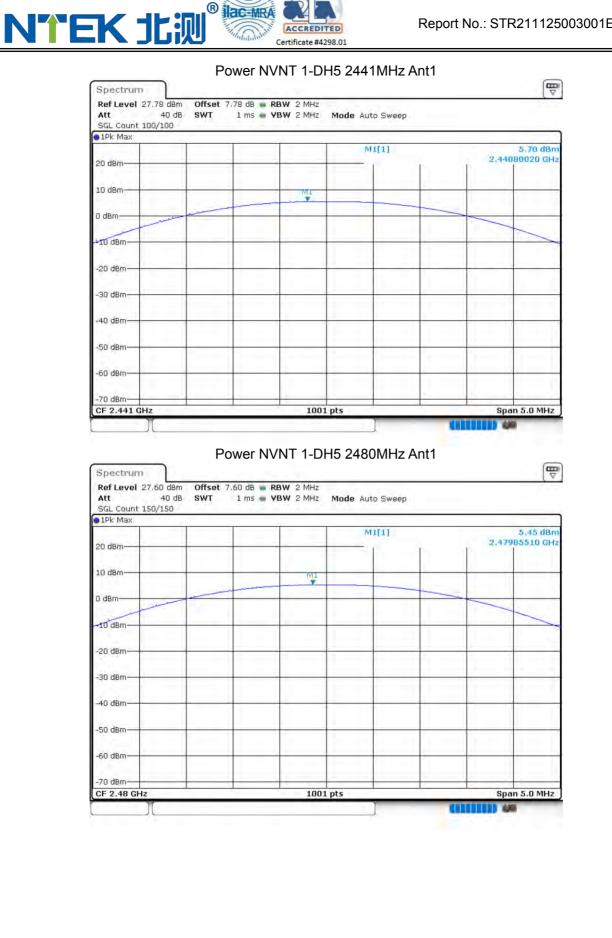
# 8.2 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant 1	4.766	30	Pass
NVNT	1-DH5	2441	Ant 1	5.703	30	Pass
NVNT	1-DH5	2480	Ant 1	5.453	30	Pass
NVNT	2-DH5	2402	Ant 1	5.975	21	Pass
NVNT	2-DH5	2441	Ant 1	6.48	21	Pass
NVNT	2-DH5	2480	Ant 1	6.433	21	Pass
NVNT	3-DH5	2402	Ant 1	6.428	21	Pass
NVNT	3-DH5	2441	Ant 1	6.807	21	Pass
NVNT	3-DH5	2480	Ant 1	6.565	21	Pass

### Power NVNT 1-DH5 2402MHz Ant1







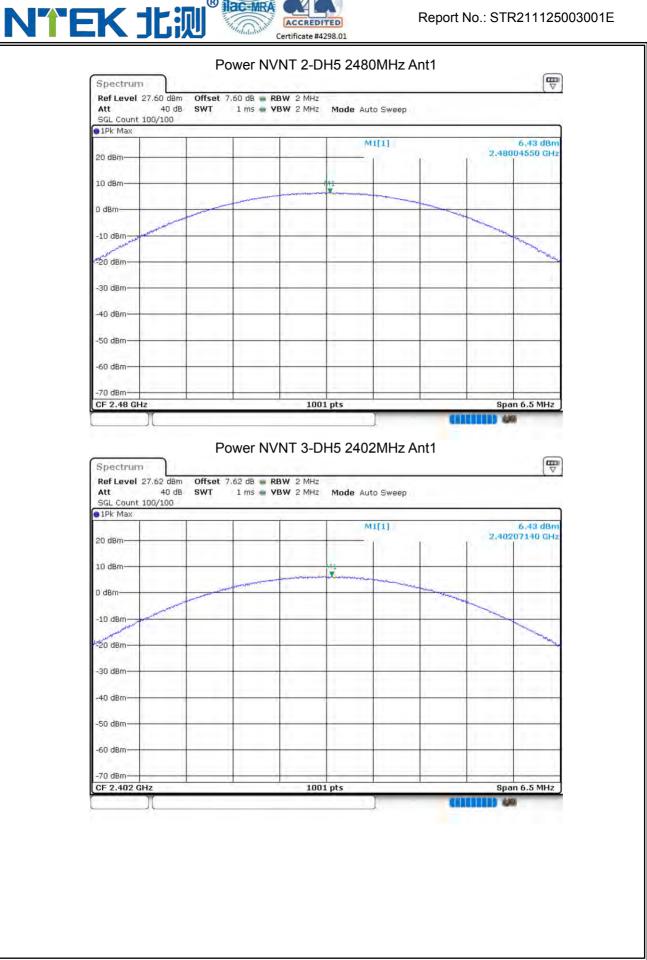




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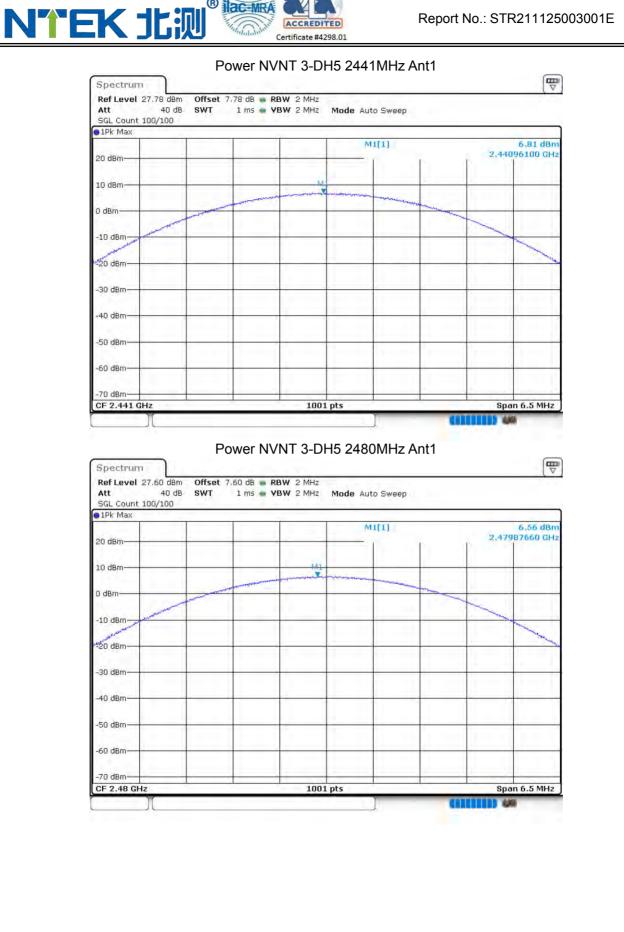
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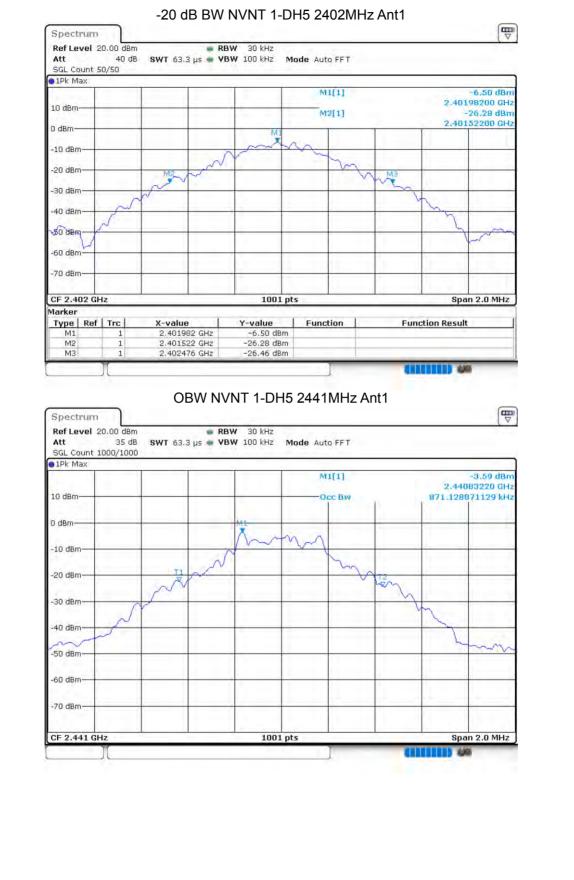
# 8.3 OCCUPIED CHANNEL BANDWIDTH

	••••••••					
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant 1	0.8731	0.954	Pass
NVNT	1-DH5	2441	Ant 1	0.8711	0.96	Pass
NVNT	1-DH5	2480	Ant 1	0.8452	0.938	Pass
NVNT	2-DH5	2402	Ant 1	1.1808	1.282	Pass
NVNT	2-DH5	2441	Ant 1	1.1808	1.284	Pass
NVNT	2-DH5	2480	Ant 1	1.1768	1.282	Pass
NVNT	3-DH5	2402	Ant 1	1.1788	1.292	Pass
NVNT	3-DH5	2441	Ant 1	1.1748	1.29	Pass
NVNT	3-DH5	2480	Ant 1	1.1768	1.29	Pass

## OBW NVNT 1-DH5 2402MHz Ant1



























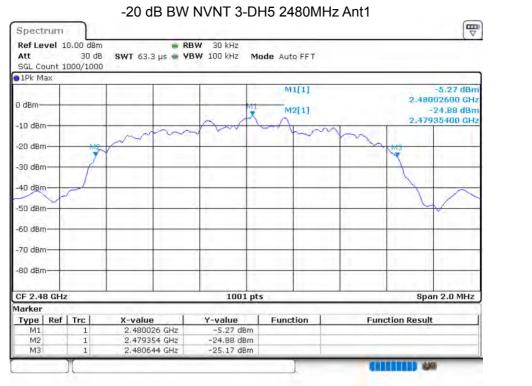










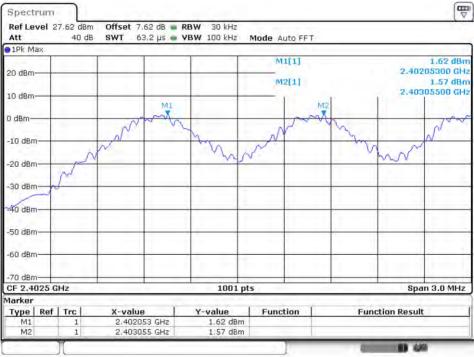




## 8.4 CARRIER FREQUENCIES SEPARATION

	INCOLN					
Condition	Mode	Hopping Freq1	Hopping Freq2	HFS	Limit	Verdict
Condition	Wiede	(MHz)	(MHz)	(MHz)	(MHz)	veraiet
NVNT	1-DH5	2402.053	2403.055	1.002	0.954	Pass
NVNT	1-DH5	2440.831	2441.833	1.002	0.96	Pass
NVNT	1-DH5	2478.831	2479.833	1.002	0.938	Pass
NVNT	2-DH5	2402.023	2403.025	1.002	0.855	Pass
NVNT	2-DH5	2441.026	2442.028	1.002	0.856	Pass
NVNT	2-DH5	2479.026	2480.028	1.002	0.855	Pass
NVNT	3-DH5	2402.026	2403.025	0.999	0.861	Pass
NVNT	3-DH5	2441.026	2442.028	1.002	0.86	Pass
NVNT	3-DH5	2479.026	2480.028	1.002	0.86	Pass

## CFS NVNT 1-DH5 2402MHz





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® Hac-MR



# Report No.: STR211125003001E

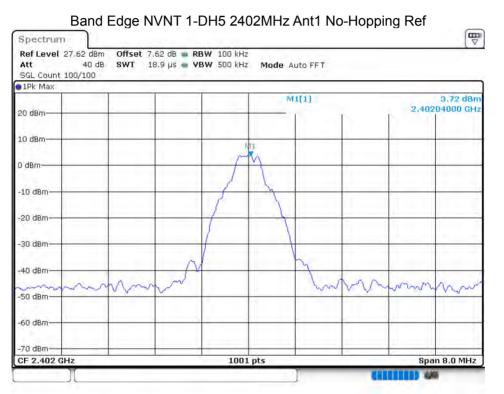


ndition	Mode	Hopping Number	Limit	Verdict				
NVNT	1-DH5	79	15	Pass				
			ng No.	NVNT 1-I	JH5 2402	MHZ		
	Spectr	the first state of the second state of the sec		100.10-				
	Att			300 kHz Mo	de Auto Sweej	0		
	SGL Cou 1Pk Ma:	nt 7000/7000			-			
			1		M1[1]			4.29 dBm
	20 dBm-				M2[1]			18370 GHz 4.30 dBm
	101dBm-	Same Inca			n n n h	1		02435 GHz
	o dam	ARAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	<u>thaannaa</u>		<u>ANNI DIARA</u>	HAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAA	
	-10 86-	<u>a a ra fa a a a a a a a a a a a a a a a </u>	YWWYYW	<u>I DA BANADANA</u>	<u>n a n an a</u>	YNYVYNY	₩₩₩₩₩₩₩	VYIYI) -
	-20 dBm-					Instantin.	I I A I A I A	
					11.1		ji il	
	-80 dBm-							
	-40 dBm-		-				1	luines
	-50 dBm-				-	-		
	-60 dBm-			_		-	-	
	-70 dBm-						1.1.1	
	Start 2.4			1001 pts			Stop 2	.4835 GHz
	Marker Type	Ref   Trc   X-value	I Y	value	Function	Fund	tion Result	. 1
	M1 M2	1 2.401837 G 1 2.4802435 G		4.29 dBm 4.30 dBm			na ni sana	
	-	T.			1	00		9



## 8.6 BAND EDGE

GE						
Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	Ant 1	No-Hopping	-44.73	-20	Pass
1-DH5	2402	Ant 1	Hopping	-44.43	-20	Pass
1-DH5	2480	Ant 1	No-Hopping	-47.4	-20	Pass
1-DH5	2480	Ant 1	Hopping	-47.33	-20	Pass
2-DH5	2402	Ant 1	No-Hopping	-44.46	-20	Pass
2-DH5	2402	Ant 1	Hopping	-43.37	-20	Pass
2-DH5	2480	Ant 1	No-Hopping	-46.25	-20	Pass
2-DH5	2480	Ant 1	Hopping	-46.64	-20	Pass
3-DH5	2402	Ant 1	No-Hopping	-45.68	-20	Pass
3-DH5	2402	Ant 1	Hopping	-43.9	-20	Pass
3-DH5	2480	Ant 1	No-Hopping	-46.13	-20	Pass
3-DH5	2480	Ant 1	Hopping	-46.49	-20	Pass
	Mode 1-DH5 1-DH5 1-DH5 2-DH5 2-DH5 2-DH5 2-DH5 3-DH5 3-DH5 3-DH5	Mode         Frequency (MHz)           1-DH5         2402           1-DH5         2402           1-DH5         2480           1-DH5         2480           2-DH5         2402           2-DH5         2402           2-DH5         2402           2-DH5         2402           2-DH5         2480           2-DH5         2480           3-DH5         2402           3-DH5         2402           3-DH5         2480	Mode         Frequency (MHz)         Antenna           1-DH5         2402         Ant 1           1-DH5         2402         Ant 1           1-DH5         2402         Ant 1           1-DH5         2480         Ant 1           1-DH5         2480         Ant 1           2-DH5         2402         Ant 1           2-DH5         2402         Ant 1           2-DH5         2402         Ant 1           2-DH5         2480         Ant 1           2-DH5         2480         Ant 1           3-DH5         2402         Ant 1           3-DH5         2402         Ant 1           3-DH5         2402         Ant 1           3-DH5         2402         Ant 1	ModeFrequency (MHz)AntennaHopping Mode1-DH52402Ant 1No-Hopping1-DH52402Ant 1Hopping1-DH52402Ant 1Hopping1-DH52480Ant 1No-Hopping1-DH52480Ant 1Hopping2-DH52402Ant 1Hopping2-DH52402Ant 1Hopping2-DH52402Ant 1Hopping2-DH52480Ant 1Hopping2-DH52480Ant 1Hopping3-DH52402Ant 1Hopping3-DH52402Ant 1Hopping3-DH52480Ant 1Hopping3-DH52480Ant 1Hopping3-DH52480Ant 1Hopping	Mode         Frequency (MHz)         Antenna         Hopping Mode         Max Value (dBc)           1-DH5         2402         Ant 1         No-Hopping         -44.73           1-DH5         2402         Ant 1         Hopping         -44.73           1-DH5         2402         Ant 1         Hopping         -44.43           1-DH5         2480         Ant 1         No-Hopping         -47.4           1-DH5         2480         Ant 1         Hopping         -47.4           1-DH5         2480         Ant 1         Hopping         -47.33           2-DH5         2402         Ant 1         Hopping         -44.46           2-DH5         2402         Ant 1         Hopping         -47.33           2-DH5         2402         Ant 1         No-Hopping         -46.25           2-DH5         2480         Ant 1         No-Hopping         -46.25           2-DH5         2480         Ant 1         Hopping         -45.68           3-DH5         2402         Ant 1         Hopping         -43.9           3-DH5         2480         Ant 1         Hopping         -43.9           3-DH5         2480         Ant 1         No-Hopping	Mode         Frequency (MHz)         Antenna         Hopping Mode         Max Value (dBc)         Limit (dBc)           1-DH5         2402         Ant 1         No-Hopping         -44.73         -20           1-DH5         2402         Ant 1         Hopping         -44.73         -20           1-DH5         2402         Ant 1         Hopping         -44.43         -20           1-DH5         2480         Ant 1         No-Hopping         -47.4         -20           1-DH5         2480         Ant 1         Hopping         -47.33         -20           1-DH5         2480         Ant 1         Hopping         -47.4         -20           1-DH5         2480         Ant 1         Hopping         -47.33         -20           2-DH5         2402         Ant 1         No-Hopping         -44.46         -20           2-DH5         2402         Ant 1         Hopping         -46.25         -20           2-DH5         2480         Ant 1         No-Hopping         -46.64         -20           2-DH5         2480         Ant 1         Hopping         -45.68         -20           3-DH5         2402         Ant 1         Hopping         -4





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20 d9m									
20 dBm-				M	[1]		2.4	4.58 di 0185000 G	
10 dBm		1		Ma	[1]			-46.85 di	Bm
0 dBm			_		-	-			
-10 dBm			_			-		- 1	-
-20 dBm-D1 -16,28	34 dBm				-		-		
-30 dBm	-							-	-
-40 dBm			M4				M3	Ma	-
-50 dBm	and and a second s	when any and have	how many the	are for the second	for Allangter	mp. Ashin a juned	milanter modelle	~umd/ung/	Mord
-60 dBm			-	_	-	-			-
-70 dBm-			1001				01	- 0.405.01	10
Start 2.306 GHz Marker			1001		3 - 2			p 2.406 GH	12
Type         Ref         Trc           M1         1	X-value 2.40185		Y-value 4.58 dBn		ion	Fu	nction Resu	ult	-
M2 1 M3 1	2.39	4 GHz 9 GHz	-46.85 dBn -46.71 dBn	n					-
		D CH2	-41.02 dBn	1					
M4         1           Band Ec           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm	B SWT 18.	ing) NV 2 db 👞 Rb	NT 1-DI	H5 240: Mode Au		Ant1 Ho			
Band Ec Spectrum Ref Level 27.62 dBr Att 40 d SGL Count 8000/800 1Pk Max	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT	Ant1 Ho		4,60 di	Bm
Band Ed Spectrum Ref Level 27.62 dBr Att 40 d SGL Count 8000/800 1Pk Max 20 dBm 10 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT		2,44	4,60 di	Bm
Band Ed           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           0 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT	Ant1 Ho	2,44	4,60 di	Bm
Band Ed           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT	Ant1 Ho	2,44	4,60 di	Bm
Band Ed           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           0 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT	Ant1 Ho	2,44	4,60 di	Bm
Band Ed           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT		2,44	4,60 di	Bm
Band Ec           Spectrum           Ref Level 27.62 dBr           Att         40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT	Ant1 Ho	2,44	4,60 di	Bm
Band Ec           Spectrum           Ref Level 27.62 dBr           Att 40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT		2,44	4,60 di	Bm
Band Ec           Spectrum           Ref Level 27.62 dBr           Att 40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -60 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 240: Mode Au	ito FFT		2,44	4,60 di	Bm
Band Ec           Spectrum           Ref Level 27.62 dBr           Att 40 d           SGL Count 8000/800           1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dge(Hoppi m Offset 7.6, B swr 18.	ing) NV 2 db 👞 Rb	NT 1-DI W 100 kHz	H5 2403	ito FFT	Ant1 Ho	2.44	4,60 di	Bm SHz



NTEK :	

10 dBm     M2[1]     3       0 dBm     01 -15,396 dBm     0     0       -10 dBm     01 -15,396 dBm     0     0       -20 dBm     01 -15,396 dBm     0     0       -30 dBm     0     0     0       -40 dBm     0     0     0       -40 dBm     0     0     0       -50 dBm     0     0     0       -50 dBm     0     0     0       -60 dBm     0     0     0       -70 dBm     0     0     0       M2[1]     2.40595 GHz     4.29 dBm       M2[1]     2.40595 GHz     -39.83 dBm       M3     1     2.3476 GHz       M4     1     2.3486 GHz <td< th=""><th>2.405950 -43. 2.400000</th><th>29 dBm</th></td<>	2.405950 -43. 2.400000	29 dBm
10 dBm       0 dBm <t< th=""><th>2,40000</th><th></th></t<>	2,40000	
-10 dBm -20 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm -50 dBm -60 dBm -70	3 why the man state of the stat	Ma
20 dBm         115,396 dBm         M4           -30 dBm         -40 dBm         -41 data         -41 data           -40 dBm         -40 dBm         -41 data         -41 data         -41 data           -50 dBm         -60 dBm         -60 dBm         -60 dBm         -60 dBm         -60 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           Marker         Trc         X-value         Y-value         Function         Function R           M1         1         2.40595 GHz         4.329 dBm         -70 dBm         -70 dBm           M3         1         2.387 GHz         -43.95 dBm         -70 dBm         -70 dBm           M4         1         2.3486 GHz         -39.83 dBm         -70 dBm         -70 dBm           Spectrum         Ref Level         27.60 dBm         Offset         7.60 dB         RBW </td <td><u>ار</u> سارید مریک موانع اور</td> <td>M5</td>	<u>ار</u> سارید مریک موانع اور	M5
20 dBm         115,396 dBm         M4           -30 dBm         -40 dBm         -41 data         -41 data           -40 dBm         -40 dBm         -41 data         -41 data         -41 data           -50 dBm         -60 dBm         -60 dBm         -60 dBm         -60 dBm         -60 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm         -70 dBm           Marker         Trc         X-value         Y-value         Function         Function R           M1         1         2.40595 GHz         4.329 dBm         -70 dBm         -70 dBm           M3         1         2.387 GHz         -43.95 dBm         -70 dBm         -70 dBm           M4         1         2.3486 GHz         -39.83 dBm         -70 dBm         -70 dBm           Spectrum         Ref Level         27.60 dBm         Offset         7.60 dB         RBW </td <td>3 why on a start market</td> <td></td>	3 why on a start market	
-30 dBm -40 dBm -40 dBm -50 dBm -50 dBm -60 dBm -70	3 whore where the	
40 dBm       M4       12         -50 dBm       -50 dBm       -60 dBm         -60 dBm       -60 dBm       -60 dBm         -70 dBm       -70 dBm       -70 dBm         Start 2.306 GHz       1001 pts       50 dBm         Marker       -70 dBm       -70 dBm         M3 1       2.387 GHz       -43.95 dBm         M4       1       2.3486 GHz       -39.83 dBm         M4       1       2.3486 GHz       -39.83 dBm         Spectrum       -760 dBm       Offset 7.60 dB       RBW 100 kHz         Sol Count 100/100       -760 dBm       Marker       -72	3 whore where the	
-50 dBm -60 dBm -70	all man and set of	J.
-60 dBm -70 dBm Start 2.306 GHz Type Ref Trc X-value Y-value Function Function R M1 1 2.40595 GHz 4.29 dBm M2 1 2.4 GHz -43.29 dBm M3 1 2.387 GHz -43.95 dBm M4 1 2.3486 GHz -39.83 dBm M4 1 2.3486 GHz -39.83 dBm Ref Level 27.60 dBm Ref Level 27.60 dBm Ref Level 27.60 dBm Offset 7.60 dB RBW 100 kHz Spectrum Ref Level 27.60 dBm Offset 7.60 dB RBW 100 kHz M1 10 dBm OdBm M1 10 dBm M1 10 dBm		
-70 dBm         1001 pts         5           Start 2.306 GHz         1001 pts         5           Marker         Trc         X-value         Y-value         Function         Function R           M1         1         2.40595 GHz         4.29 dBm         6         6         7         6         7         6         7         6         7         6         7 <t< td=""><td></td><td></td></t<>		
Start 2.306 GHz         1001 pts         S           Marker         Type         Ref         Trc         X-value         Y-value         Function         Function R           M1         1         2.40595 GHz         4.29 dBm         1001 pts         5           M2         1         2.40595 GHz         4.29 dBm         1001 pts         1001 pt		
Marker         Type         Ref         Trc         X-value         Y-value         Function         Function R           M1         1         2.40595 GHz         4.29 dBm         1         1.240595 GHz         -43.29 dBm         1         1.240595 GHz         -43.29 dBm         1         1.2387 GHz         -43.95 dBm         1	Stop 2.40	06 GHz
M1       1       2.40595 GHz       4.29 dBm         M2       1       2.46 GZ       -43.29 dBm         M3       1       2.387 GHz       -43.95 dBm         M4       1       2.3486 GHz       -39.83 dBm         M4       1       2.3486 GHz       -39.83 dBm         Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping R         Spectrum         Ref Level 27.60 dBm       Offset 7.60 dB       RBW 100 kHz         Att       40 dB       SWT 18.9 µs       VBW 300 kHz         Mode Auto FFT         SGL Count 100/100         IPk Max         20 dBm       M11         0 dBm         M11         0 dBm	on De sult	
M3         1         2.387 GHz         -43,95 dBm           M4         1         2.3486 GHz         -39,83 dBm           Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping R           Spectrum           Ref Level 27.60 dBm         Offset 7.60 dB         RBW 100 kHz           Att         40 dB         SWT         18.9 µS         YBW 300 kHz         Mode Auto FFT           SGL Count 100/100         10 dBm         0 dBm         M1[1]         3	on Result	
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping R Spectrum Ref Level 27.60 dB Offset 7.60 dB RBW 100 kHz Att 40 dB SWT 18.9 µs VBW 300 kHz Mode Auto FFT SGL Count 100/100 IPk Max 20 dBm 0 d		
Spectrum           Ref Level 27.60 dBm         Offset 7.60 dB         RBW 100 kHz           Att         40 dB         SWT         18.9 µs         VBW 300 kHz         Mode Auto FFT           SGL Count 100/100         0 lPk Max         0 dBm         <		
10 dBm		46 dBm
0 dBm	2,480040	000 GHz
D dBm		_
-10 dBm-		1.1
-20 dBm		
		- 1
-30 dBm-		
-40 dBm-		
-50 dBm		
-60 dBm-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~
-70 dBm	~~~~~	~~
-70 dBm CF 2.48 GHz 1001 pts	~~~~	~~
		.0 MHz
	Span 8	.0 MHz



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0 1Pk Max 20 dBm				M1[1] M2[1]		4.23 2.48005000 -46.47	dBm
10 dBm					- (	2.48350000	GHZ
0 d8m	-				-		
-10 dBm					-		-
-20 cBm-01	-15,542 dBi	n		_	-		14
-30 d8m	-						
-40 dBm	N	43					
-50 dBm	anyummin	Monoundation	man provident and a second and a second	handed and a stand and a st	your Anathing products	and match an and all known	rellacionse
-60 dBm					- 1		
-70 dBm						· · · · · ·	-
Start 2.476 GH	lz	1	1001	pts		Stop 2.576	GHz
Marker Type   Ref   1	fre l	X-value	Y-value	Function	Fun	ction Result	1
M1	1	2.48005 GH	z 4.23 dBn	n	, an	cron Result	
M2 M3	1	2.4835 GH: 2.5 GH:	z -45.24 dBn	n			
M4	1	2.4989 GH:	z -42.95 dBn	n		NAMES OF ADDRESS OF AD	
Spectrum Ref Level 27.0 Att SGL Count 800	60 dBm C 40 dB S	offset 7.60 dB	) NVNT 1-DI	10.2.2.2.2.2		pping Ref	
Spectrum Ref Level 27.0 Att	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	10.2.2.2.2.2		5.07 2.48015980	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm-	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm 0 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum Ref Level 27.1 Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum           Ref Level 27.1           Att           SGL Count 800           • IPk Max           20 dBm           10 dBm           • 0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum           Ref Level 27.1           Att           SGL Count 800           • 1Pk Max           20 dBm           10 dBm           -0 dBm           -20 dBm           -20 dBm           -30 dBm           -50 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm
Spectrum           Ref Level 27.1           Att           SGL Count 800           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	60 dBm C 40 dB S	offset 7.60 dB	• RBW 100 kHz	Mode Auto FF1		5,07	dBm GHz



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Att SGL Count	40 dB 1200/1200	SWT 2	27,5 µs 🌰	<b>VBW</b> 300 kH	z Mode /	Auto FFT			
1Pk Max		<u> </u>		r	M	1[1]			4.88 dBm
20 dBm		-		-	_				85000 GHz
10 dBm-					M	2[1]			43.29 dBm 50000 GHz
bldem-							1		
				1			1		1 12 A 1
410 dBm	D1 -14.931	dBm							
-20 cBm							-	-	
-30 a8m		_		-					
-40 dBm2	M4	Ma			-				
-50 dBm	noneurorth parties	rime the work	plang to be de	non provision processed	particular demonstration of the	annormation	shuthwayoutun	un nu mushing a	and have a provident set
-60 dBm				1			· · · · · ·		
-70 dBm-	CUIT			1001	nte	-	-	Ptop	2 575 0112
Start 2.470 Marker	GEZ			1001	prs	1		stop	2.576 GHz
Type   Ret		X-valu		Y-value	Func	tion	Fund	tion Result	
M1 M2	1		I85 GHz I35 GHz	4.88 dB -43.29 dB					
M3 M4	1		2.5 GHz 15 GHz	-44.03 dB -42.27 dB					
- mer	1	6. T.	LD GITE	12.21 00		r			1
Spectrum Ref Level Att SGL Count 1Pk Max	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	DH5 24(	Mode A		o-Hoppir	ng Ref	
Ref Level Att SGL Count	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	o-Hoppir		
Ref Level Att SGL Count 1Pk Max	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	o-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- 0 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att           SGL Count           9 IPk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FFT	p-Hoppir		3.25 dBm
Ref Level Att SGL Count I Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm-	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FF T	p-Hoppir		3.25 dBm
Ref Level Att           SGL Count           9 IPk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FF T	p-Hoppir		3.25 dBm
Ref Level Att           SGL Count           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FF T	p-Hoppir	2.402	3.25 dBm
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm	1 27.62 dBm 40 dB	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz	Mode A	uto FF T	p-Hoppir	2.402	3.25 dBm
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -60 dBm	27.62 dBm 40 dB 100/100	Offset 7	.62 dB 🐞 R	<b>BW</b> 100 kHz		uto FF T	p-Hoppir	2,402	3.25 dBm 04000 GHz
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	27.62 dBm 40 dB 100/100	Offset 7	.62 dB 🐞 R			uto FF T	p-Hoppir	2.402	3.25 dBm 04000 GHz
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -30 dBm           -50 dBm           -60 dBm	27.62 dBm 40 dB 100/100	Offset 7	.62 dB 🐞 R			uto FF T	p-Hoppir	2,402	3.25 dBm 04000 GHz
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -30 dBm           -50 dBm           -60 dBm	27.62 dBm 40 dB 100/100	Offset 7	.62 dB 🐞 R			uto FF T	p-Hoppir	2,402	3.25 dBm 04000 GHz
Ref Level Att           SGL Count           SGL Count           10 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -30 dBm           -50 dBm           -60 dBm	27.62 dBm 40 dB 100/100	Offset 7	.62 dB 🐞 R			uto FF T	p-Hoppir	2,402	3.25 dBm 04000 GHz

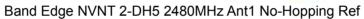
NTEK J	CETTICAL CAREAL

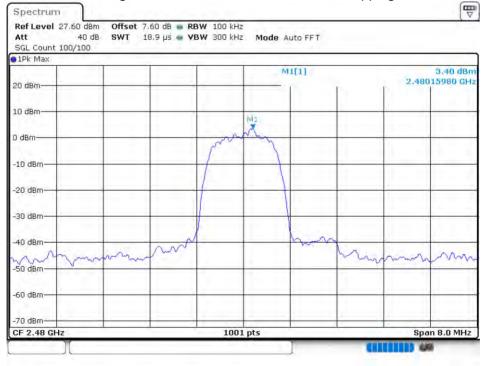
1Pk Max	-	í –	1	1	M	[1]			3.71 dBm
20 dBm				-					195000 GHz
10 dBm				1	INE	[1]	2		-43.07 dBm 100000/GHz
0 dBm			-			-		-	
-10 dBm	-		-	-		-	-		
-20 dBm—	D1 -16.746	dBm				-	-		
-30 dBm									
-40 dBm				M4				MR	MEY
-50 dBm	hinter transmission	alknownard	hy which the man	mphilippinetheringen	multiplitum	during the	door when why the	martine starmart	and and the
-60 dBm									
-70 dBm						1	1		
Start 2.30	6 GHz	1	4	1001	pts		2	Stop	2.406 GHz
Marker Type Re	f   Trc	X-valu	e	Y-value	Funct	ion	Fun	ction Result	t[
M1 M2	1		195 GHz 2.4 GHz	3.71 dB -43.07 dB					
M3	1	2	.39 GHz	-46.91 dB	m				
64.4				-41.22 dB	(f)				
Spectrur Ref Level Att	and Ed	ge(Hop offset 7 swr 1	ping) N	IVNT 2-D RBW 100 kHz VBW 300 kHz	- 		Ant1 Hc	opping R	ef
B Spectrur Ref Level Att	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au		Ant1 Hc		
B Spectrur Ref Level Att SGL Count PIPk Max	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	(1)	Ant1 Hc		.72 dBm
B Spectrur Ref Level Att SGL Count SGL Count 1Pk Max 20 dBm- 10 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count 9 1Pk Max 20 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	(1)			.72 dBm
B Spectrur Ref Level Att SGL Count SGL Count 1Pk Max 20 dBm- 10 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count SGL Count 1Pk Max 20 dBm- 10 dBm- 0 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count • 1Pk Max 20 dBm	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Cound 1Pk Max 20 dBm- 10 dBm- 0 dBm- -10 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count 1 SGL Count 1 Pk Max 20 dBm- 10 dBm- -10 dBm- -10 dBm- -20 dBm-	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Cound • 1Pk Max 20 dBm	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count • 1Pk Max 20 dBm	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count • 1Pk Max 20 dBm	and Ed	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT			.72 dBm
B Spectrur Ref Level Att SGL Count 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm	and Ed 1 27.62 dBm 40 dB 1 8000/8000	ge(Hop offset 7 swr 1	ping) N		Mode Au	Ito FFT		2.402	3.72 dBm 299900 GHz
B Spectrur Ref Level Att SGL Count SGL Count 10 dBm 10 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	and Ed 1 27.62 dBm 40 dB 1 8000/8000	ge(Hop offset 7 swr 1	ping) N	RBW 100 kHz	Mode Au	Ito FFT		2.402	3.72 dBm 299900 GHz
B Spectrur Ref Level Att SGL Count SGL Count 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm	and Ed 1 27.62 dBm 40 dB 1 8000/8000	ge(Hop offset 7 swr 1	ping) N		Mode Au	Ito FFT		2.402	3.72 dBm 299900 GHz

#### Report No.: STR211125003001E

NTEK 北测	ACCREDITED Certificate #4298.01
Band Edge(Hop	ping) NVNT 2-DH5 2402N

Spectrum Ref Level 2 Att	40 d	B <b>SWT</b> 23		RBW 100 kHz VBW 300 kHz	Mode Auto Ff	τ.		▼
SGL Count 1	200/120	0						
1Pk Max	_	10		1 1			_	8 45 dB
20 dBm					M1[1]		2 40	3.46 dBm 585000 GHz
				1	M2[1]			~44.05 dBm
10 dBm		-		-				000000 GHa
								1
0 dBm		-		1				JAMA.
-10 dBm			-					
and a start of the start of the	1 -16.28	12 dbm						
-20 dBm	1 -10,86	a upm						
-30 dBm	-							
-40 dBm			M4	Same a			MB	na D
upman hay show	appendition	manufacture imparit	approxist and and and	which more milling place	when my my alanty	A ray in white may it	which amore	anow
-50 dBm	2.2.2				2	A	1 10 202	
-60 dBm		-					-	1
-70 dBm							1	
Start 2.306	GHz	-T		1001 pts		1	Ston	2.406 GHz
larker	di le			1001 pt			orop	21100 dile
Type   Ref	Trc	X-value	1	Y-value	Function	l Fun	ction Resu	lt l
M1	1		85 GHz	3.46 dBm			anan tirea	
M2	1	2	.4 GHz	-44.05 dBm				
MЗ	1		39 GHz	-43.99 dBm		1		
M4	1	2.34	02 GHz	-39.65 dBm				







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SGL Count 100 1Pk Max	/100			7					
20 dBm				1	M	1[1]	-	2.48	3.23 dBm 005000 GHz
10,d8m				1.1.1.1.1.1	M	2[1]			-44.69 dBm 350000 GHz
0 d8m							1		
-10 cBm					1	1.1			
and the second second second	16.602	dBm							
-30 dBm							<u></u>		
-40 dBm2		Maa			1	1.1	1	1	
	in an probably	understand	modulu futury	bedicipyotemer	entertainteration	neurouthlybra	alumantum	and water and a support	n-Headsprages Minhold
-60 dBm								1	
-70 dBm						1	1		·
Start 2.476 GH Marker	z			1001	pts			Stop	2.576 GHz
Type   Ref   T		X-value		Y-value	Func	tion	Fund	tion Resu	lt
		2.480		3.23 dB					
M1 M2	1	2.48	IO5 GHz I35 GHz	-44.69 dB					
M1		2.48			m				
M1 M2 M3 M4	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB	m M5 248		Ant1 Hop	oping F	Ref
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 • 1Pk Max	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB	m m 0H5 248 Mode A		Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.t Att SGL Count 800	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB	m m 0H5 248 Mode A	uto FFT	Ant1 Hop		
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 • 1Pk Max	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 • 1Pk Max 20 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 M4 M4 M4 M4 M4 M4 M3 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.t Att SGL Count 800 • 1Pk Max 20 dBm 10 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 M4 M4 M4 M4 M4 M4 M3 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4 M4	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Band Spectrum Ref Level 27.6 Att SGL Count 800 • 1Pk Max 20 dBm • 10 dBm • 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop		₩ 4,28 dBm
M1 M2 M3 M4 Banc Spectrum Ref Level 27.6 Att SGL Count 800 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz yBW 300 kHz	Mode A	uto FFT	Ant1 Hop	2.47	4.28 dBm 999200 GHz
M1 M2 M3 M4 M3 M4 M3 M4 M3 M4 M3 M4 M5 M5 M5 M5 M5 M5 M5 M5 M5 M5	1 1 1 d Edg	2.48 2.4 e(Hop) Offset 7	25 GHz 2.5 GHz 99 GHz ping) N	-44.69 dB -44.48 dB -42.86 dB JVNT 2-D RBW 100 kHz YBW 300 kHz	Mode A	uto FFT	Ant1 Hop	2.47	4.28 dBm 999200 GHz



NTEK J	

9 1Pk Max	t 1000/1000								
20 dBm					M1	1[1]		2.480	3.74 dBm 005000 GHz
10 d8m				1	M2	2[1]			-43,97 dBm 350000 GHz
								2.400	
And m						1 1000	1		
-10 cBm-	D1 -15,724	dBm	1				· . · · · · · · · · · · · · · · · · · ·		
-20 dBm—				1. Contraction (1997)					1
-30 dBm	M4			-	1	1.000			
-40 d8m2	melliner	war they armal	former that have	muleverner	hourseman	henry	mannapanada	contract from a source of the	the your equilation of
-50 dBm					1	1	1	-	
-60 dBm				1			l		
-70 dBm- Start 2.47	76 GHz		1	1001	pts	-	-	Stop	2.576 GHz
Marker	1000		-					10.0	
Type R M1	1		05 GHz	Y-value 3.74 dB		ion	Fund	tion Result	t -
M2 M3	1		335 GHz 2.5 GHz	-43.97 dB -44.30 dB	and the second sec				
M4	1	2.48	83 GHz	-42.36 dB	3m		_		
Spectrui Ref Leve Att SGL Coun	m I 27.62 dBm 40 dB	Offset 7	IVNT 3-I .62 dB • RF 8.9 µs • VI	<b>BW</b> 100 kHz	=		-Hoppir		
Ref Leve Att SGL Coun	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	: Mode Au				3,98 dBm 216780 GHz
Ref Leve Att SGL Coun 1Pk Max	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT	-Hoppir		3,98 dBm
Ref Leve Att SGL Coun 1Pk Max 20 dBm- 10 dBm-	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	: Mode Au	uto FFT	-Hoppir		3,98 dBm
Ref Leve Att SGL Coun 1Pk Max 20 dBm- 10 dBm- 0 dBm-	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT	-Hoppir		3,98 dBm
Ref Leve Att SGL Coun 1Pk Max 20 dBm- 10 dBm-	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve Att SGL Coun 1Pk Max 20 dBm- 10 dBm- 0 dBm-	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve Att SGL Coun 1Pk Max 20 dBm- 10 dBm- -10 dBm-	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           0 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm	m I 27.62 dBm 40 dB	Offset 7	.62 dB 🖷 RI	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           0 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm	m I 27.62 dBm 40 dB	Offset 7	.62 dB RE	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -20 dBm	m I 27.62 dBm 40 dB	Offset 7	.62 dB RE	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           0 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	m I 27.62 dBm 40 dB	Offset 7	.62 dB RE	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           0 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm	m I 27.62 dBm 40 dB	Offset 7	.62 dB RE	<b>BW</b> 100 kHz	Mode Au	uto FFT			3,98 dBm
Ref Leve           Att           SGL Coun           SGL Coun           10 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	m	Offset 7	.62 dB RE	<b>BW</b> 100 kHz	Mode Au	uto FFT		2.402	3,98 dBm 216780 GHz

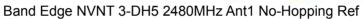
NTEK 北测	Reconception     Certificate #4298.01

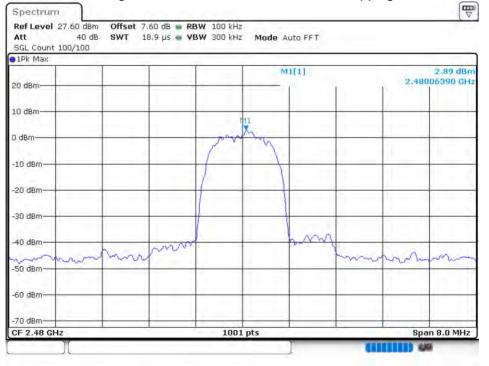
●1Pk Max	11 I			1 1	M1[:	1]			3.13 dBm
20 dBm		-			M2[:				215000 GHz ~44.40 dBm
10 dBm	-								0000000 GHz
0 dBm			-					-	A
-10 dBm			-	-	-		-		
-20 dBm	D1 -16.019	dBm-							
-30 dBm							_	-	
-40 dBm			M4			_		M3	ME
-50 dBm	ment Mbell party	erabulation and	-physics -	reproduced	ichorator and plands	abrahalmas	malling	manufarman	petarmal wh
-60 dBm				· · · · · · · · · · · · · · · · · · ·					
-70 dBm							1		1
Start 2.30	6 GHz		1	1001	ots			Stop	2.406 GHz
Marker Type   Re	flTrol	X-valu	a 1	Y-value	Functio	n	Euro	ction Resul	+
M1	1	2.402	215 GHz	3.13 dBn	r		Full	ston kesu	
M2 M3	1	2	2.4 GHz .39 GHz	-44.40 dBn -46.51 dBn	1 I				
			13 GHz	-41.70 dBn	r i				
M4 Spectrum Ref Level Att SGL Count		ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz VBW 300 kHz	15 2402		nt1 Ho	pping R	Ref
M4 Spectrur Ref Level Att SGL Count • 1Pk Max	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI	15 2402	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI	H5 2402	FFT	.nt1 Ho		
M4 Spectrur Ref Level Att SGL Count • 1Pk Max	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 2402	FFT	.nt1 Ho		4,04 dBm
M4 Spectrur Ref Level Att SGL Count IPk Max 20 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- 0 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- -10 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- 0 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- -10 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count SGL Count 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count SGL Count 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count IPk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm	and Edg n 27.62 dBm 40 dB	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 24021	FFT	.nt1 Ho		4,04 dBm
M4 Spectrum Ref Level Att SGL Count ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hop offset 7	ping) N		H5 2402	FFT	.nt1 Ho	2.40	4,04 dBm 215980 GHz
M4 Spectrum Ref Level Att SGL Count SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hop offset 7	ping) N	VNT 3-DI RBW 100 kHz YBW 300 kHz	H5 2402	FFT	nt1 Ho	2.40	4,04 dBm

#### Report No.: STR211125003001E

NTEK 北测	ACCREDITED Certificate #4298.01
Band Edge(Hopr	oina) NVNT 3-DH5 2402N

Att		.62 dBm 40 dB 100/1000		a second second	RBW 100 kHz VBW 300 kHz	Mode Auto	FFT.			Ţ.
1Pk M	ах		<u>.</u>							
20 dBm 10 dBm						M1[1] M2[1]			-	0.68 dBm 95000 GHz 44.68 dBm 100000 GHz
0 dBm-										M
-10 dBn	1									partit
-20 dBn		-15,957	dBm							
-30 dBn	n			M4					-	
	the second	unter finite	abelburgareenad	-	non white man	anner y Martin	while warmen	reality willing the	M3 wm. Malinend	infilia
-50 dBn	J									
-60 dBn -70 dBn										
		Hz	1		1001 pts	5	1		Stop	2.406 GHz
Start 2										
4 1 1 1 1 1	D-CI	Trc	X-value	-	Y-value	Function		Funct	ion Result	
1 1 1 1 1 1	Ref	1	2.4059		0.68 dBm					
Marker Type M1	Ref									
	Ret	1		4 GHz 9 GHz	-44.68 dBm -44.58 dBm		_			







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• 1Pk Max				1	M	1[1]		10.00	3.01 dBm
20 dBm			1		M	2[1]			95000 GHz 45.64 dBm
10,dBm						1	1		50000 GHz
0 d8m	-			-				1	1
-10 cBm		Ja-					1		
-20 dBm—	DI -17,111	dBm-		1			_		
-30 dBm									
-40 dBm	M4	where the here where	the multiple	angende warmen	nthe new Million	1 lought why say	nurhunterhander	nurshight harrier	an manthematic
-50 dBm-								-	
-60 dBm				1				1	
-70 dBm	6 GHz		_	1001	pts		-	Stop	2.576 GHz
Marker		No. of Street, or Stre	T			tan I	(FLA)	1	
	f Trc	X-value 2,4799	5 GHz	Y-value 3.01 dBn		tion	Func	tion Result	-
M1					n				
M1 M2 M3	1	2.483 2.	5 GHz 5 GHz	-45.64 dBn -45.54 dBn	n				
M1 M2 M3 M4 B Spectrur Ref Level Att SGL Count	and Edg	2,483 2,489 ge(Hopp offset 7.6	5 GHZ 5 GHZ 8 GHZ 98 GHZ 99 GHZ 99 GHZ 99 GHZ 90 GH		h H5 248	1.5.52	nt1 Hop	oping R	ef
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	5 GHZ 5 GHZ 8 GHZ 98 GHZ 99 GHZ 99 GHZ 99 GHZ 90 GH	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	1.5.52	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	5 GHZ 5 GHZ 8 GHZ 98 GHZ 99 GHZ 99 GHZ 99 GHZ 90 GH	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count IPk Max 20 dBm	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	5 GHZ 5 GHZ 8 GHZ 98 GHZ 99 GHZ 99 GHZ 99 GHZ 90 GH	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm-	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count IPk Max 20 dBm	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm-	1 1 1 27.60 dBm 40 dB	2,483 2,489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count SGL Count 10 dBm 10 dBm -10 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count SGL Count 10 dBm 10 dBm -10 dBm -20 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm	1 1 1 27.60 dBm 40 dB	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	1 2 3	
M1 M2 M3 M4 Spectrur Ref Level Att SGL Count 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm	1 1 1 27.60 dBm 40 dB 8000/8000	2.483 2.489 ge(Hopp offset 7.6	15 GHz 5 GHz 18 GHz 98 GHz 98 GHz 9 N 9 N 50 dB 9 μs 9 μs 9 γs	-45.54 dBn -43.24 dBn /NT 3-DI BW 100 kHz	Mode Ar	uto FF T	nt1 Hop	2,479	



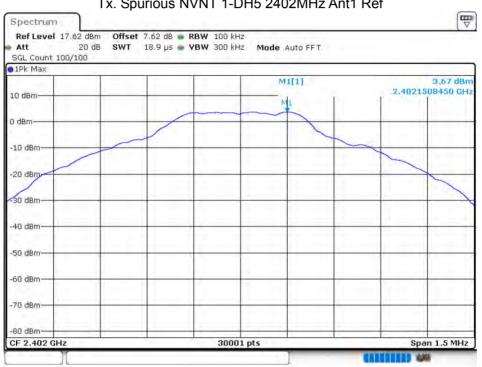


Ref Level : Att SGL Count	27.60 dBm 40 dB 1000/1000			Mode Auto FFT	
1Pk Max		6	20		
				M1[1]	1.01 dBm
20 dBm				M2[1]	2.47885000 GHz ~44.59 dBm
10 dBm			-	m#[#]	2.48350000 GHz
MI					
RIAR			1		
-10 cBm					
	01 -16.014	dBm			
-20 cBm-	2.05.0155		-		
-30 dBm					
-30 060					
-40 dBm	M4	M3 Ahren		12 mil 12 mil 10 mil	whine potran with a reduced when a water
"Antarton	and and a second second	and the month of the man	and an	and algorization and reported	antipolyable and the second and the second and the
-50 dBm					
-60 dBm					
			· · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
-70 dBm			+ +		
	GHZ		1001 pt	5	Stop 2.576 GHz
Start 2.476	· · ·	X-value	Y-value	Function	Function Result
1arker			1.01 dBm	Function	Function Result
1arker Type   Ref		2.47885 GHz			
1arker	1 1	2.47885 GHz 2.4835 GHz	-44.59 dBm		
Marker Type Ref M1	1				



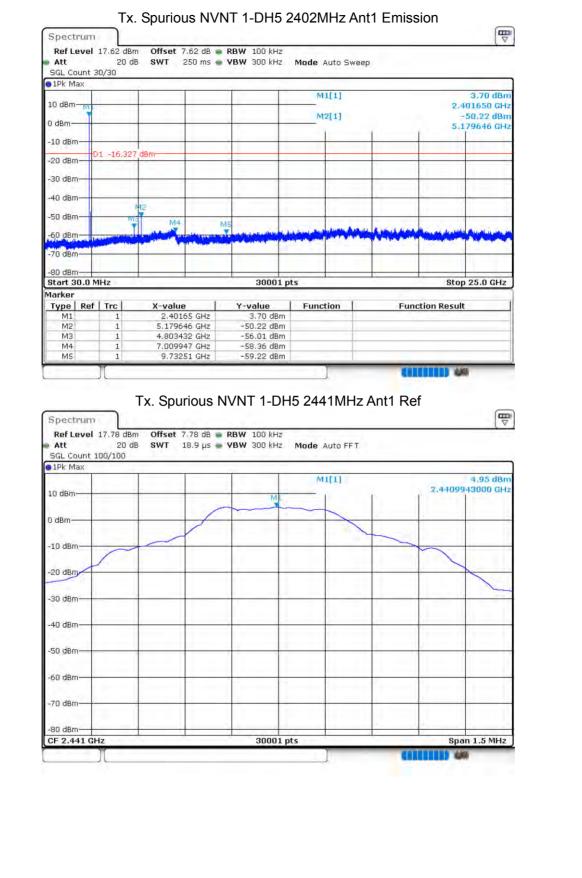
# 8.7 CONDUCTED RF SPURIOUS EMISSION

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant 1	-53.88	-20	Pass
NVNT	1-DH5	2441	Ant 1	-59.87	-20	Pass
NVNT	1-DH5	2480	Ant 1	-42.23	-20	Pass
NVNT	2-DH5	2402	Ant 1	-54.45	-20	Pass
NVNT	2-DH5	2441	Ant 1	-52.83	-20	Pass
NVNT	2-DH5	2480	Ant 1	-51.41	-20	Pass
NVNT	3-DH5	2402	Ant 1	-57.6	-20	Pass
NVNT	3-DH5	2441	Ant 1	-51.58	-20	Pass
NVNT	3-DH5	2480	Ant 1	-49	-20	Pass

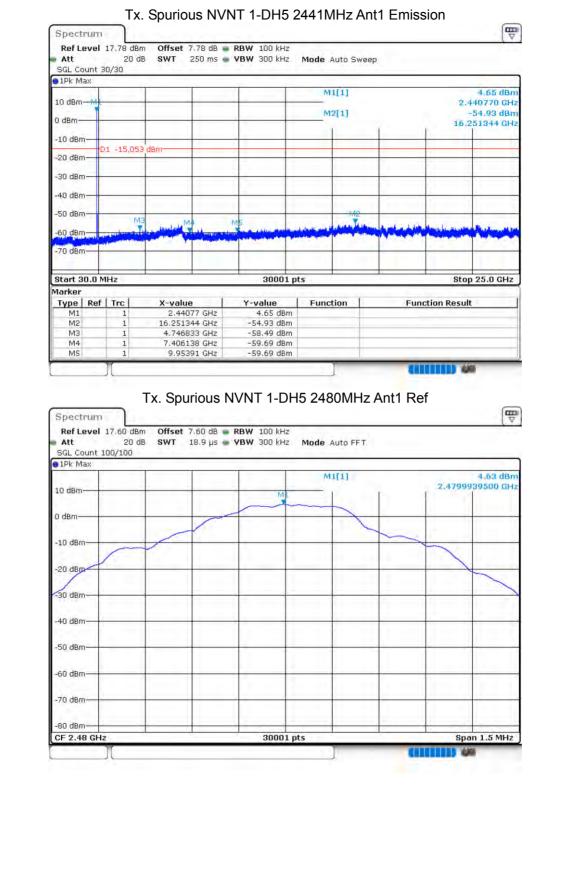


### Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref





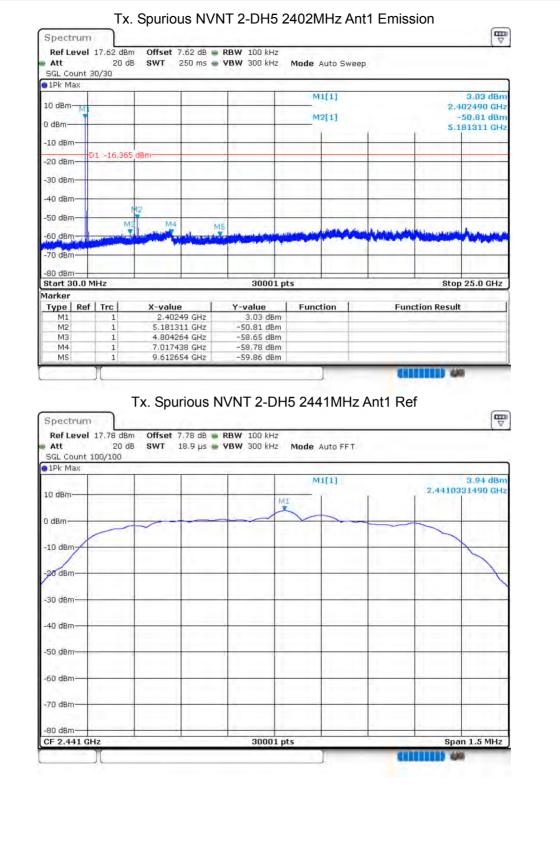




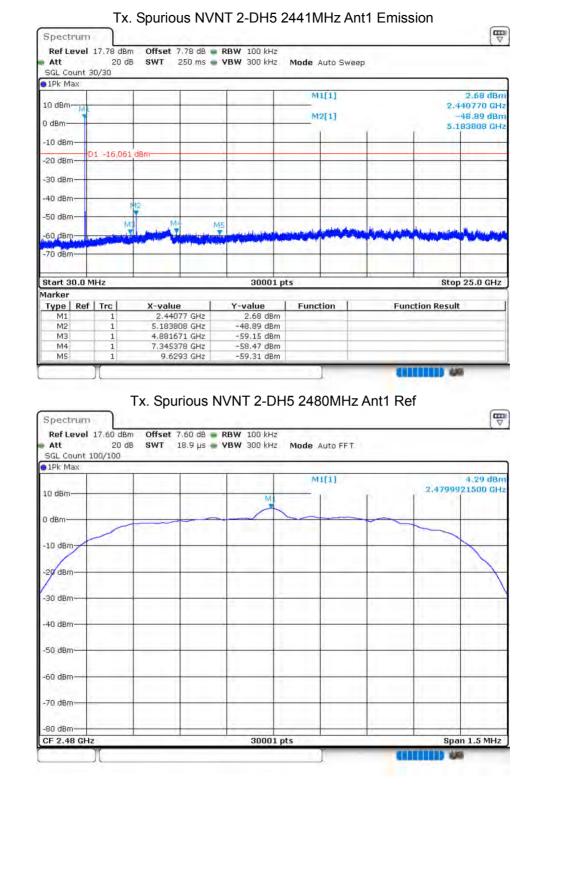


• 1Pk Max 10 dBm				M1[1] M2[1]		4.86 dl 2.479890 G -37.60 dl	Hz
0 dBm			1		1 - 1	2.516180 G	
-10 dBm-01	-15.368 dBm						
-20 dBm			1				
-30 dBm - M2							
-40 dBm							-
-50 dBm	Ma		MS	1 1 1			-
-60 dBm-			The second second	and the second states of the second		the state of the s	¥
-70 dBm-		9					
-80 dBm							
Start 30.0 MHz Marker			30001	pts		Stop 25.0 GF	IZ
Type   Ref   T			Y-value	Function	Fund	ion Result	_1
M1 M2	1 2.51	989 GHz 618 GHz	4.86 dBn -37.60 dBn	1			-
M3 M4		491 GHz	-60.06 dBn -60.13 dBn				
M5		227 GHz	~58,58 dBn				
Spectrum Ref Level 17 Att	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz	H5 2402MHz Mode Auto FFT			
Ref Level 17 Att SGL Count 100 1Pk Max	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz			3,64 di	3m
Ref Level 17 Att SGL Count 100,	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz	Mode Auto FFT		(	3m
Ref Level 17 Att SGL Count 100 1Pk Max	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100,           •1Pk Max         •10 dBm-           •0 dBm-         •10 dBm-	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level 17 Att SGL Count 100 1Pk Max 10 dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100,           •1Pk Max         •10 dBm-           •0 dBm-         •10 dBm-	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level 17           Att           SGL Count 100,           1Pk Max           10 dBm           0 dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           1Pk Max         10           0 dBm         0           -10 dBm         -28 dBm           -28 dBm         -30 dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count         100           O dBm         0         dBm           -10 dBm         -28 dBm         -28 dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           1Pk Max         10           0 dBm         0           -10 dBm         -28 dBm           -28 dBm         -30 dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           • IPk Max         •           • 0 dBm         •	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           Older         100           Older         100           Older         100           Older         100           Older         100           Older         100           SGL Count 100         100           Older         100           Older         100           SGL Count 100         100           Band         100           SGL Count 100         100           Band         100         100           State         100         100         100           State         100         100         100         100           State         100         100         100         100         100           State         100         100         100         100         100         100           State         100         100         100         100         100         100     <	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           • IPk Max         •           • 0 dBm         •	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           SGL Count 100         100 dBm           10 dBm         0           0 dBm         -           -10 dBm         -           -28 dBm         -           -30 dBm         -           -50 dBm         -           -60 dBm         -           -70 dBm         -	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m
Ref Level         17           Att         SGL Count 100           • IPk Max         •           • 0 dBm         •           • 0 dBm         •           • 10 dBm         •           • 28 dBm         •           • 30 dBm         •           • 40 dBm         •           • 50 dBm         •	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m HHz
Ref Level         17           Att         SGL Count         100           1Pk Max         10         dBm           10         dBm	.62 dBm Offset 20 dB SWT	7.62 dB 🖷	RBW 100 kHz YBW 300 kHz	Mode Auto FFT		3,64 di	3m

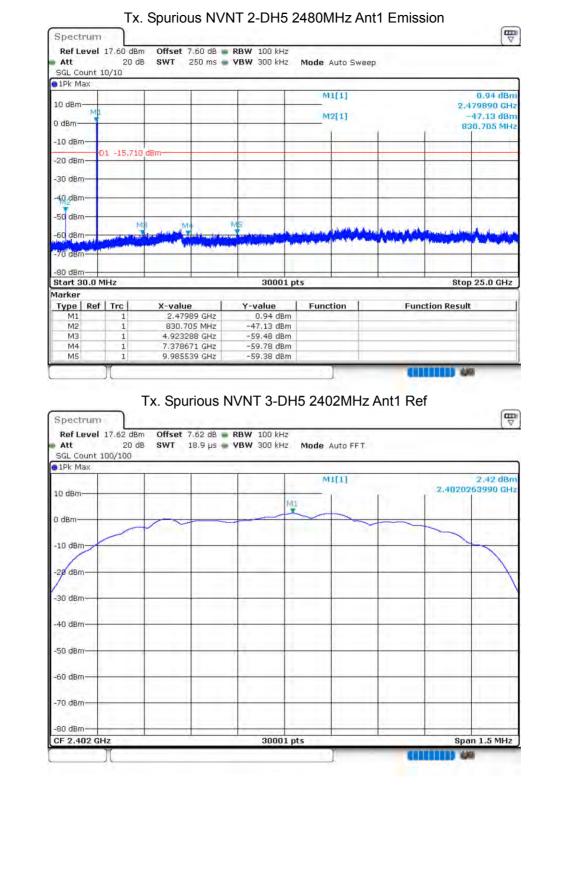








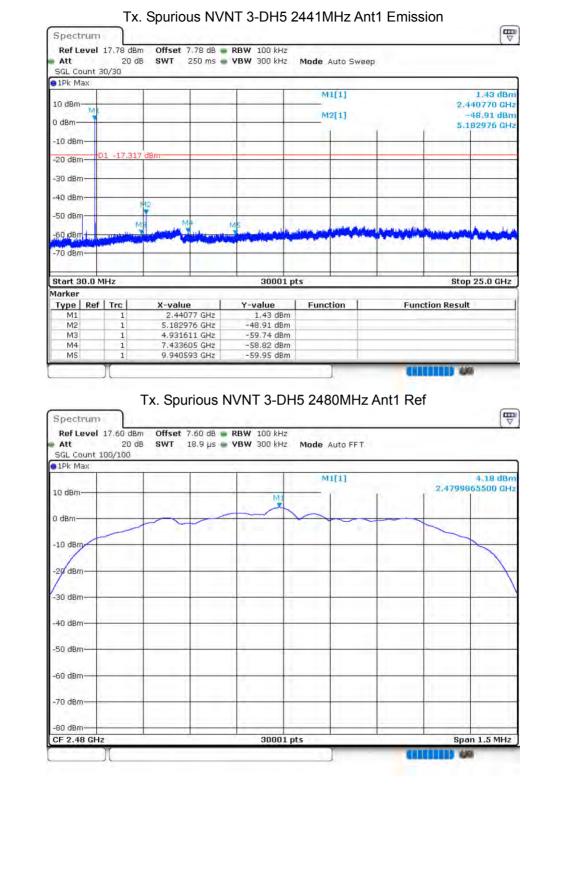






1Pk Max     10 dBm			M1[1]	1	2	3.26 dBm 401650 GHz
0 dBm			M2[1	1		-55.18 dBm
			1	1	15.	964189 GHz
-10 dBm-	579 dBm					
-20 dBm-						
-30 dBm-		- 12				11
-40 dBm						11
-50 dBm	M3 M4	MS		42	1	
-60 dBm		T and have defended	-	different states	About the Particular Descent	with the second
-70 dBm						
-80 dBm						
Start 30.0 MHz	3 C	30001	pts		Sto	p 25.0 GHz
Marker Type   Ref   Trc	X-value	Y-value	Function		Function Resul	t1
M1 1 M2 1	2.40165 GH 15.964189 GH					-
M3 1	5.002359 GH	z -59.34 dBm	<u> </u>			
M4 1 M5 1	7.044073 GH 9.442025 GH					
						10
Spectrum Ref Level 17,78 Att 21 SGL Count 100/100	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	S NVNT 3-DI			Ref	( <b>W</b>
Ref Level 17.78 Att 20 SGL Count 100/100 1Pk Max	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	18 🖷 RBW 100 kHz		) FFT		2.68 dBm
Ref Level 17,78 Att 20 SGL Count 100/100	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	18 🖷 RBW 100 kHz	Mode Auto	) FFT		
Ref Level 17.78 Att 20 SGL Count 100/100 1Pk Max	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17.78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level         17.78           Att         20           SGL Count         100/100           1Pk Max         10           10 dBm         10	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17.78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17,78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm           -10 dBm           -20 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17.78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17.78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm           -10 dBm           -20 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level         17,78           Att         20           SGL         Count         100/100           1Pk         Max         10           0 dBm         0         dBm           -10 dBm         -28 dBm         -30 dBm           -40 dBm         -40 dBm         -40 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17,78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level         17,78           Att         20           SGL         Count         100/100           1Pk         Max         10           0 dBm         0         dBm           -10 dBm         -28 dBm         -30 dBm           -40 dBm         -40 dBm         -40 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level         17,78           Att         20           SGL         Count         100/100           1D dBm         0         0           10 dBm         -         0           -10 dBm         -         0           -20 dBm         -         -           -30 dBm         -         -           -50 dBm         -         -           -60 dBm         -         -	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level         17,78           Att         20           SGL         Count         100/100           1Pk         Max         10           10 dBm         0         dBm           -10 dBm         -         -           -2g         dBm         -           -30 dBm         -         -           -40 dBm         -         -	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT		2.68 dBm
Ref Level 17,78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm           -10 dBm           -26 dBm           -30 dBm           -50 dBm           -60 dBm           -70 dBm           -80 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B RBW 100 kHz	Mode Auto	) FFT	2,4408	2.68 dBm 436050 GHz
Ref Level 17,78           Att         20           SGL Count 100/100           1Pk Max           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	dBm <b>Offset</b> 7.78 d 0 dB <b>SWT</b> 18.9 μ	B <b>RBW</b> 100 kHz Is <b>VBW</b> 300 kHz	Mode Auto	) FFT	2,4408	2.68 dBm 436050 GHz







Att		17.60 dB 20 d			RBW 100 kH: VBW 300 kH:		Mode .	Auto Swi	вер	Ť		Ţ.		
SGL Co		0/30			_	-	-							
			1				M	1[1]			1.06 dB			
10 dBm	MT	_	-			-						479890 GHz		
0 dBm-		_				_	M	2[1]				-44.83 dBm		
o abin								ī	1		i 5.	187137 GHz		
-10 dBr	n i	-	-	-	1	-			-					
-20 dBr	D	1 -15.81	5 dBm		-	-				-				
-20 aBr	1													
-30 dBr	n			-	-	_		-	-	-				
			1.1											
-40 dBr	n		112		7	-		-			1.1			
-50 dBr			·								1.000			
00 000			Ma M	4	M5		1.1.1.1	1 and 1		Lucia	1	4		
-60 dBr	2	la a fair a f		development of the	and the second second second	Cold.		-			A second second	where the second		
-70 dBr											1	1000		
-70 061	H										1			
-80 dBr	n	_				-				_				
Start 3	80.0 M	Hz	540		30001	L pt	5	c		C	Sto	p 25.0 GHz		
Marker								· · · · · ·						
Туре	Ref		X-valu		Y-value		Func	tion	-	Fun	ction Resu	t		
M1	-	1		89 GHz	1.06 dB					_				
M2	_	1		37 GHz	-44.83 dBi	11. A.								
M3 M4		1		.92 GHz	-59.32 dB									
M5	-	1	10.0379		-59.62 dB									

END OF REPORT