

## RADIO TEST REPORT FCC ID: 2ARRB-HK125

Certificate #4298.01

Product:IN-EAR WIRELESS MONO<br/>HEADSETTrade Mark:MotorolaModel No.:HK125Family Model:N/AReport No.:S21090701701001<br/>Issue Date:Sep 16. 2021

## **Prepared for**

Meizhou Guo Wei Electronics Co., Ltd

AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.

## Prepared by

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



I

## TABLE OF CONTENTS

ACCREDITED Certificate #4298.01

1 7	TEST RESULT CERTIFICATION	3
2	SUMMARY OF TEST RESULTS	4
3	FACILITIES AND ACCREDITATIONS	5
3.1		5
3.2 3.3		
4 (	GENERAL DESCRIPTION OF EUT	6
5	DESCRIPTION OF TEST MODES	8
6	SETUP OF EQUIPMENT UNDER TEST	9
6.1		
6.2 6.3		
	TEST REQUIREMENTS	
	-	
7.1 7.2		
7.2		
7.4		
7.5		
7.6		
7.7	PEAK OUTPUT POWER	30
7.8		31
7.9		
7.1		
7.1	1 FREQUENCY HOPPING SYSTEM (FHSS) EQUIPMENT REQUIREMENTS	34
8	TEST RESULTS	35
8.1	Dwell Time	35
8.2		
8.3		
8.4		
8.5		
8.6		
8.7	CONDUCTED RF SPURIOUS EMISSION	74



## 1 TEST RESULT CERTIFICATION

Applicant's name:	Meizhou Guo Wei Electronics Co., Ltd
Address:	AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.
Manufacturer's Name	Meizhou Guo Wei Electronics Co., Ltd
Address:	AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.
Product description	
Product name:	IN-EAR WIRELESS MONO HEADSET
Model and/or type reference:	HK125
Family Model:	N/A

#### Measurement Procedure Used:

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

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

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

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

Date of Test

Testing Engineer

Authorized Signatory

(Alex Li)

Sep 07, 2021 ~ Sep 16, 2021

(Mukzi Lee)



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).
	: 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

## NTEK 北测<sup>®</sup>

## 4 GENERAL DESCRIPTION OF EUT

ilac-

Certificate #4298.01

Product Feature and Specification		
Equipment	IN-EAR WIRELESS MONO HEADSET	
Trade Mark	Motorola	
FCC ID	2ARRB-HK125	
Model No.	HK125	
Family Model	N/A	
Model Difference	N/A	
Operating Frequency	2402MHz~2480MHz	
Modulation	GFSK, π/4-DQPSK, 8-DPSK	
Number of Channels	79 Channels	
Antenna Type	Ceramic chip Antenna	
Antenna Gain	1.8 dBi	
Power supply	DC 3.7V from battery or DC 5V from Type-C port.	
Adapter	N/A	
Firmware Version	V01	
Software Version	V01	
Firmware version	V01	
Series Number	S02B0032137014321	

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

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



Revision History					
Report No.	Version	Description	Issued Date		
S21090701701001	Rev.01	Initial issue of report	Sep 16, 2021		

ACCREDITED Certificate #4298.01



## 5 DESCRIPTION OF TEST MODES

NTEK 北测

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: A O a survey line. O such stand Englishing was to stand and a survey instance structure survey.			

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 SETUP OF EQUIPME	ENT UNDER TEST	
6.1 BLOCK DIAGRAM CONF For AC Conducted Emission M	FIGURATION OF TEST SYSTEM	Μ
EUT	C-1	AC PLUG
For Radiated Test Cases		
For Conducted Test Cases		
Instrument		DCD board in order to perform conducted too
and this temporary antenna co	na connector is soldered on the P onnector is listed in the equipmer owered, the battery is fully-charge	PCB board in order to perform conducted tes ent list. ged.



## 6.2 SUPPORT EQUIPMENT

**NTEK** 北测

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	N/A	N/A	Peripherals

R

ilac-

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	Power Cable	NO	NO	1.0m
C-2	RF Cable	YES	NO	0.1m

#### Notes:

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



#### 6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

ilac-M

ACCREDITED Certificate #4298.01

#### Radiation& Conducted Test equipment

Radiationa Conducted I		estequipment					
Item	Kind of Equipment	Manufacturer	Туре 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	2021.04.27	2022.04.26	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2021.04.27	2022.04.26	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	2020.11.20	2021.11.19	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	2020.11.20	2021.11.19	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2020.11.20	2021.11.19	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	Filter	TRILTHIC	2400MHz	29	2020.11.20	2021.11.19	1 year
16	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

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



AC Co	AC Conduction Test equipment						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	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

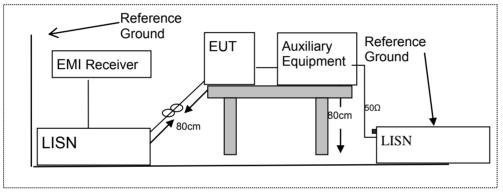
	Conducted Emission Limit		
Frequency(MHz)	Quasi-peak	Average	
0.15-0.5	66-56*	56-46*	
0.5-5.0	56	46	
5.0-30.0	60	50	

Certificate #4298.01

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

- 2. The lower limit shall apply at the transition frequencies
  - 3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

#### 7.1.3 Test Configuration



#### 7.1.4 Test Procedure

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

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable
  may be terminated, if required, using the correct terminating impedance. The overall length shall not
  exceed 1 m.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 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:	IN-EAR WIRELESS MONO HEADSET	Model Name :	HK125
Temperature:	<b>22</b> ℃	Relative Humidity:	57%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

ED

ACCRED

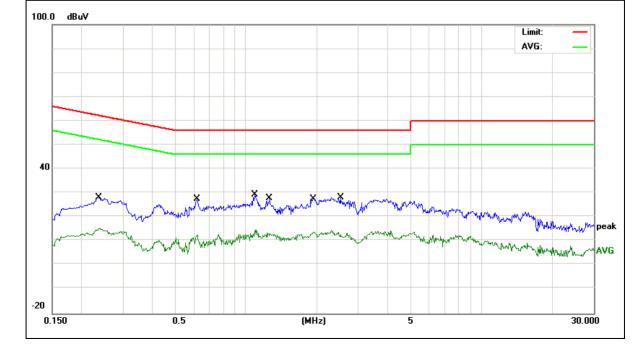
Certificate #4298.01

Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
18.47	9.63	28.10	62.22	-34.12	QP
5.70	9.63	15.33	52.22	-36.89	AVG
17.72	9.70	27.42	56.00	-28.58	QP
2.89	9.70	12.59	46.00	-33.41	AVG
19.64	9.75	29.39	56.00	-26.61	QP
4.86	9.75	14.61	46.00	-31.39	AVG
18.15	9.75	27.90	56.00	-28.10	QP
3.40	9.75	13.15	46.00	-32.85	AVG
17.83	9.76	27.59	56.00	-28.41	QP
4.11	9.76	13.87	46.00	-32.13	AVG
3.54	9.73	13.27	46.00	-32.73	QP
18.56	9.73	28.29	56.00	-27.71	AVG
	(dBµV) 18.47 5.70 17.72 2.89 19.64 4.86 18.15 3.40 17.83 4.11 3.54	(dBµV)       (dB)         18.47       9.63         5.70       9.63         17.72       9.70         2.89       9.70         19.64       9.75         4.86       9.75         18.15       9.75         3.40       9.75         17.83       9.76         4.11       9.76         3.54       9.73	(dBµV)(dB)(dBµV)18.479.6328.105.709.6315.3317.729.7027.422.899.7012.5919.649.7529.394.869.7514.6118.159.7527.903.409.7513.1517.839.7627.594.119.7613.873.549.7313.27	$(dB\mu V)$ $(dB)$ $(dB\mu V)$ $(dB\mu V)$ 18.479.6328.1062.225.709.6315.3352.2217.729.7027.4256.002.899.7012.5946.0019.649.7529.3956.004.869.7514.6146.0018.159.7527.9056.003.409.7513.1546.0017.839.7627.5956.004.119.7613.8746.003.549.7313.2746.00	(dBμV)(dB)(dBμV)(dBμV)(dB)18.479.6328.1062.22-34.125.709.6315.3352.22-36.8917.729.7027.4256.00-28.582.899.7012.5946.00-33.4119.649.7529.3956.00-26.614.869.7514.6146.00-31.3918.159.7527.9056.00-28.103.409.7513.1546.00-32.8517.839.7627.5956.00-28.414.119.7613.8746.00-32.133.549.7313.2746.00-32.73

#### Remark:

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

2. Factor = Insertion Loss + Cable Loss.







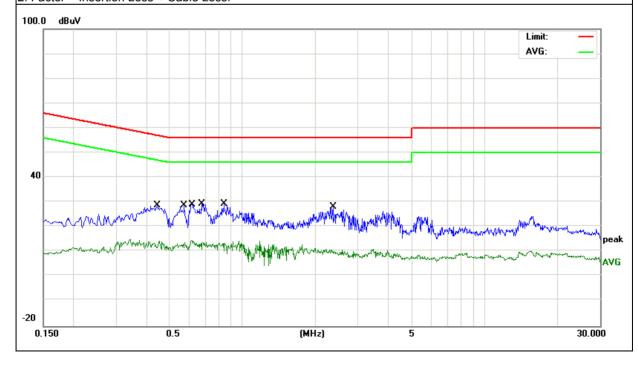
EUT: IN-EAR WIRELESS MONO HEADSET			Model Name :		HK125			
Temperature: 25°C					Relative Humidi	ity:	62%	
Pressure:		1010hPa			Phase :		N	
Test Voltage :		DC 5V fro	om Adapter AC	120V/60Hz	Test Mode:		Mode 1	
Frequency	Rea	ding Level	Correct Factor	Measure-ment	Limits	Ν	largin	Demori
(MHz)	(	(dBµV)	(dB)	(dBµV)	(dBµV)		(dB)	Remark
0.4460		19.09	9.72	28.81	56.95	-1	28.14	QP
0.4460		4.55	9.72	14.27	46.95	-)	32.68	AVG
0.5738		19.17	9.70	28.87	56.00	-	27.13	QP
0.5738		4.17	9.70	13.87	46.00	-	32.13	AVG
0.6139		5.04	9.68	14.72	46.00	-	31.28	QP
0.6139		19.40	9.68	29.08	56.00	-1	26.92	AVG
0.6780		19.61	9.65	29.26	56.00	-;	26.74	QP
0.6780		3.96	9.65	13.61	46.00	-	32.39	AVG
0.8378		19.51	9.69	29.20	56.00	-;	26.80	QP
0.8378		3.81	9.69	13.50	46.00	_;	32.50	AVG
2.3420		1.19	9.68	10.87	46.00	-	35.13	QP
2.3420		18.44	9.68	28.12	56.00	-1	27.88	AVG

ACCREE

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

Certificate #4298.01

According to FOC Fait 13.203, 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
Γ	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.



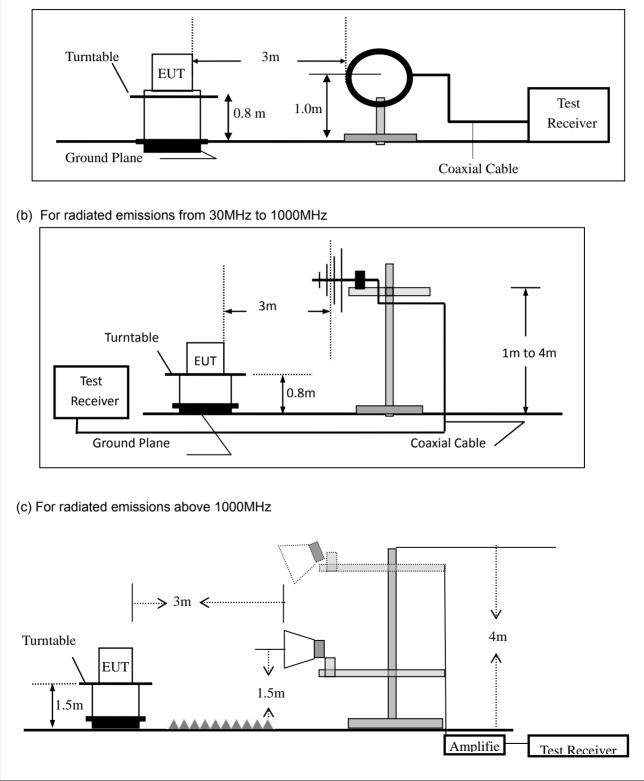
#### 7.2.3 Measuring Instruments

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

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.

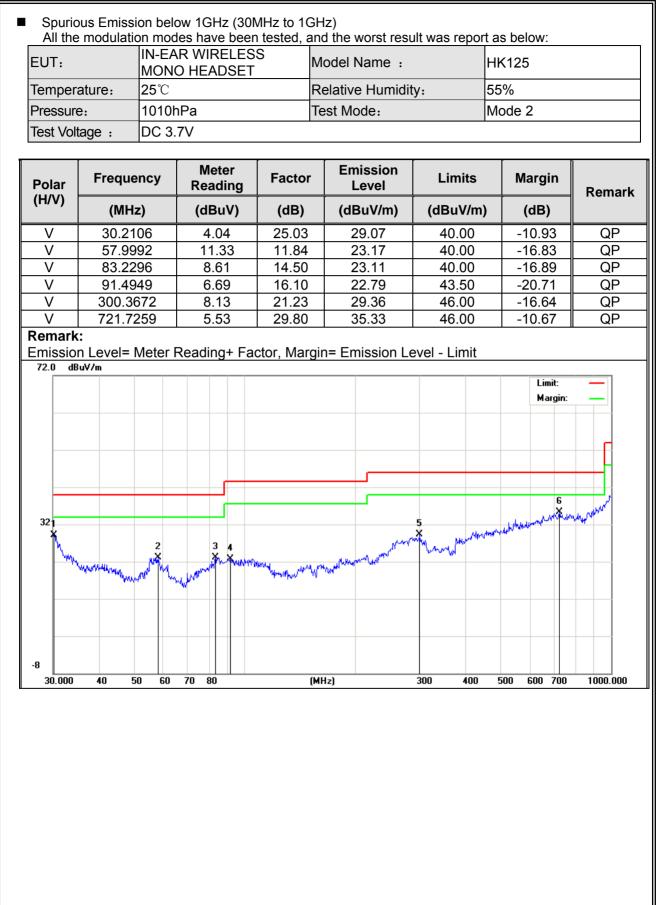
#### 7.2.6 Test Results

Spurious Emission below 30MHz (9KHz to 30MHz)							
EUT:	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125				
Temperature:	<b>20</b> ℃	Relative Humidity:	48%				
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mukzi Lee				

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

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





Certificate #4298.01



(H/V)         (MHz)         (dBuV)         (dB)         (dBuV/m)         (dBuV/m)         (dB)           H         30.2107         4.70         25.03         29.73         40.00         -10.27         QF           H         33.6802         3.19         22.24         25.43         40.00         -14.57         QF           H         57.9992         10.43         11.84         22.27         40.00         -17.73         QF           H         84.9993         9.14         14.79         23.93         40.00         -11.60         QF           H         136.9388         4.22         18.65         22.87         43.50         -20.63         QF           H         568.6127         7.23         27.61         34.84         46.00         -11.16         QF           Remark:           Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit         -20.63         QF         -46.00         -11.16         QF         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00         -46.00 </th <th>Polar</th> <th>Frequency</th> <th>Meter Reading</th> <th>Factor</th> <th>Emission Level</th> <th>Limits</th> <th>Margin</th> <th>Remark</th>	Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
H       33.6802       3.19       22.24       25.43       40.00       -14.57       QF         H       57.9992       10.43       11.84       22.27       40.00       -17.73       QF         H       84.9993       9.14       14.79       23.93       40.00       -16.07       QF         H       136.9388       4.22       18.65       22.87       43.50       -20.63       QF         H       568.6127       7.23       27.61       34.84       46.00       -11.16       QF         Remark:       Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit       72.0       dBuV/m	(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H       57.9992       10.43       11.84       22.27       40.00       -17.73       QF         H       84.9993       9.14       14.79       23.93       40.00       -16.07       QF         H       136.9388       4.22       18.65       22.87       43.50       -20.63       QF         H       568.6127       7.23       27.61       34.84       46.00       -11.16       QF         Remark:       Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit       72.0       dBuV/m       Margin:       Margin:         72.0       dBuV/m	Н	30.2107	4.70	25.03	29.73	40.00	-10.27	QP
H       84.9993       9.14       14.79       23.93       40.00       -16.07       QF         H       136.9388       4.22       18.65       22.87       43.50       -20.63       QF         H       568.6127       7.23       27.61       34.84       46.00       -11.16       QF         Remark:         Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit         72.0       dBuV/m       dBuV/m       Margin:       Mar	Н	33.6802	3.19	22.24	25.43	40.00	-14.57	QP
H       136.9388       4.22       18.65       22.87       43.50       -20.63       QF         H       568.6127       7.23       27.61       34.84       46.00       -11.16       QF         Remark:       Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit       72.0       dBuV/m       Imit: Margin: Imit: Margin: Imit: Margin: Imit: Margin: Imit: Margin: Imit: Margin: Imit: Imit: Margin: Imit: Imi	Н	57.9992	10.43	11.84	22.27	40.00	-17.73	QP
H     568.6127     7.23     27.61     34.84     46.00     -11.16     QF       Remark:       Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit       72.0       dBuV/m	Н	84.9993	9.14	14.79	23.93		-16.07	QP
Remark: Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit 72.0 dBuV/m		136.9388		18.65		43.50	-20.63	QP
Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit 72.0 dBuV/m	Н	568.6127	7.23	27.61	34.84	46.00	-11.16	QP
Margin:	Emissio	n Level= Meter F	Reading+ Fac	tor, Margin:	= Emission Lev	vel - Limit	Limit:	
8	221						6 ×	1 Martin Martin
	- V						With Martin Colomba Colomba	·•
		Hanny management		5 Munu (Manunu ya	nonennonennennen	woodly photon wear	a particular a second	¥
	-8	Harry monormy again the series	yem and a					1000.000





■ Spurious											
EUT:		I-EAR ONO HEA		ESS	Mode	l No.:		HK12	5		
Temperature	Cemperature: 20 ℃					ive Humidity	<i>r</i> :	48%			
Test Mode:	Μ	ode2/Mod	e3/Mode4		Test E	Зу:		Mukzi	Lee		
All the modula	ation mo	des have	been teste	d, ar	nd the	worst result	t was	report	as below	<b>'</b> :	
Frequency	Read Level	Cable loss	Antenna Factor		eamp actor	Emission Level	Li	mits	Margin	Remark	Comment
(MHz)	(dBµV)	(dB)	dB/m	(	(dB)	(dBµV/m)	(dB	μV/m)	(dB)		
			Low Char	nel	(2402	MHz)(GFSK)-	-Abo	ve 1G			
4804	68.32	5.21	35.59	4	4.30	64.82	7	4.00	-9.18	Pk	Vertical
4804	45.21	5.21	35.59	4	4.30	41.71	5	4.00	-12.29	AV	Vertical
7206	70.57	6.48	36.27	4	4.60	68.72	7	4.00	-5.28	Pk	Vertical
7206	48.74	6.48	36.27	4	4.60	46.89	5	4.00	-7.11	AV	Vertical
4804	70.66	5.21	35.55	4	4.30	67.12	7	4.00	-6.88	Pk	Horizontal
4804	49.04	5.21	35.55	4	4.30	45.50	5	4.00	-8.50	AV	Horizontal
7206	68.27	6.48	36.27	4	4.52	66.50	7	4.00	-7.50	Pk	Horizontal
7206	45.83	6.48	36.27	4	4.52	44.06	5	4.00	-9.94	AV	Horizontal
			Mid Chan	inel (	(2441 N	/Hz)(GFSK)-	-Abo	ve 1G			
4882	70.36	5.21	35.66	4	4.20	67.03	7	4.00	-6.97	Pk	Vertical
4882	45.69	5.21	35.66	4	4.20	42.36	5	4.00	-11.64	AV	Vertical
7323	70.64	7.10	36.50	4	4.43	69.81	7	4.00	-4.19	Pk	Vertical
7323	46.79	7.10	36.50	4	4.43	45.96	5	4.00	-8.04	AV	Vertical
4882	68.4	5.21	35.66	4	4.20	65.07	7	4.00	-8.93	Pk	Horizontal
4882	46.53	5.21	35.66	4	4.20	43.20	5	4.00	-10.80	AV	Horizontal
7323	68.43	7.10	36.50	_	4.43	67.60	7	4.00	-6.40	Pk	Horizontal
7323	46.47	7.10	36.50	4	4.43	45.64	5	4.00	-8.36	AV	Horizontal
			High Char	nel	(2480	MHz)(GFSK)-	- Abo	ove 1G			
4960	69.26	5.21	35.52	4	4.21	65.78	7	4.00	-8.22	Pk	Vertical
4960	49.62	5.21	35.52	4	4.21	46.14	5	4.00	-7.86	AV	Vertical
7440	68.39	7.10	36.53	4	4.60	67.42	7	4.00	-6.58	Pk	Vertical
7440	48.42	7.10	36.53	4	4.60	47.45	5	4.00	-6.55	AV	Vertical
4960	69.15	5.21	35.52	4	4.21	65.67	7	4.00	-8.33	Pk	Horizontal
4960	50.2	5.21	35.52	4	4.21	46.72	5	4.00	-7.28	AV	Horizontal
7440	69.15	7.10	36.53	4	4.60	68.18	7	4.00	-5.82	Pk	Horizontal
7440	50.41	7.10	36.53	4	4.60	49.44	5	4.00	-4.56	AV	Horizontal

ACCR

Certificate #4298.01

Note:

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



■ Spurious	Emission i	0-239	90MHz and	2483	.5-25	00MHz					
EUT:	IN-EAR WIRELESS MONO HEADSET					Model No.:			HK125		
Temperature	Temperature: 20 °C						ty:	48%			
Test Mode:	Mode2/ M	lode4			Test	By:		Muk	zi Lee		
All the modu	lation mod	es have	been test	ed, a	and th	ne worst res	ult wa	s rep	ort as be	low:	
Frequency	Meter Reading	Cable Loss	Antenna Factor		amp ctor	Emission Level	Lim	nits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(0	dΒ)	(dBµV/m)	(dBµ'	V/m)	(dB)	Туре	
		-	1	Mbp	s(GFS	SK)-Non-hop	ping				
2310.00	69.12	2.97	27.80	43	8.80	56.09	74	4	-17.91	Pk	Horizontal
2310.00	48.94	2.97	27.80	43	8.80	35.91	54	4	-18.09	AV	Horizontal
2310.00	70.27	2.97	27.80	43	8.80	57.24	74	4	-16.76	Pk	Vertical
2310.00	48.27	2.97	27.80	43	8.80	35.24	54	4	-18.76	AV	Vertical
2390.00	70.13	3.14	27.21	43	8.80	56.68	74	4	-17.32	Pk	Vertical
2390.00	48.03	3.14	27.21	43	8.80	34.58	54	4	-19.42	AV	Vertical
2390.00	70.5	3.14	27.21	43	8.80	57.05	74		-16.95	Pk	Horizontal
2390.00	45.45	3.14	27.21	43	8.80	32.00	54	4	-22.00	AV	Horizontal
2483.50	70.13	3.58	27.70	44	00.	57.41	74	4	-16.59	Pk	Vertical
2483.50	49.65	3.58	27.70	44	00.	36.93	5	4	-17.07	AV	Vertical
2483.50	68.99	3.58	27.70	44	00.	56.27	74	4	-17.73	Pk	Horizontal
2483.50	47.68	3.58	27.70	44	.00	34.96	5	4	-19.04	AV	Horizontal
				1M	bps(G	FSK)-hoppir	ig				
2310.00	69.73	2.97	27.80	43	8.80	56.70	74	4	-17.30	Pk	Vertical
2310.00	45.06	2.97	27.80	43	8.80	32.03	5	4	-21.97	AV	Vertical
2310.00	68.26	2.97	27.80	43	8.80	55.23	74	4	-18.77	Pk	Horizontal
2310.00	50.92	2.97	27.80	43	8.80	37.89	5	4	-16.11	AV	Horizontal
2390.00	70.23	3.14	27.21	43	8.80	56.78	74	4	-17.22	Pk	Vertical
2390.00	47.35	3.14	27.21	43	8.80	33.90	5	4	-20.10	AV	Vertical
2390.00	70.63	3.14	27.21	43	8.80	57.18	74	4	-16.82	Pk	Horizontal
2390.00	47.16	3.14	27.21	43	8.80	33.71	5	4	-20.29	AV	Horizontal
2483.50	69.41	3.58	27.70	44	l.00	56.69	74	4	-17.31	Pk	Vertical
2483.50	50.91	3.58	27.70	44	l.00	38.19	54	4	-15.81	AV	Vertical
2483.50	70.55	3.58	27.70	44	l.00	57.83	74	4	-16.17	Pk	Horizontal
2483.50	46.38	3.58	27.70	44	.00	33.66	54	4	-20.34	AV	Horizontal

ACCREDITED Certificate #4298.01

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





	•	IN-E		WIRFLF	326 SS	0MHz-18000MHz							
ΕL	EUT: MONO HEADSET						Model No.:			HK125			
Те	Temperature: 20 °C						ive Humidit	y:	48%				
Те	Test Mode: Mode2/ Mode4					Test I	By:		Mukz	i Lee			
A	II the modula	ation mod	es have	been teste	ed, a	and the	e worst res	ult wa	is repo	ort as be	ow:		
	Frequency	Reading Level	Cable Loss	Antenna Factor		eamp actor	Emission Level	Lin	nits	Margin	Detector	Comment	
	(MHz)	(dBµV)	(dB)	dB/m	(	dB)	(dBµV/m)	(dBµ	V/m)	(dB)	Туре		
	3260	68.7	4.04	29.57	44	4.70	57.61	7	4	-16.39	Pk	Vertical	
	3260	46.56	4.04	29.57	44	4.70	35.47	5	4	-18.53	AV	Vertical	
	3260	70.89	4.04	29.57	44	4.70	59.80	7	4	-14.20	Pk	Horizontal	
	3260	46.72	4.04	29.57	44	4.70	35.63	5	4	-18.37	AV	Horizontal	
	3332	70.83	4.26	29.87	44	4.40	60.56	7	4	-13.44	Pk	Vertical	
	3332	46.22	4.26	29.87	44	4.40	35.95	5	4	-18.05	AV	Vertical	
	3332	69.4	4.26	29.87	44	4.40	59.13	7	4	-14.87	Pk	Horizontal	
	3332	45.34	4.26	29.87	44	4.40	35.07	5	4	-18.93	AV	Horizontal	
	17797	51.78	10.99	43.95	43	3.50	63.22	7	4	-10.78	Pk	Vertical	
	17797	30.66	10.99	43.95	43	3.50	42.10	5	4	-11.90	AV	Vertical	
	17788	49.1	11.81	43.69	44	4.60	60.00	7	4	-14.00	Pk	Horizontal	
	17788	40.88	11.81	43.69	44	4.60	51.78	5	4	-2.22	AV	Horizontal	

ACCREDITED Certificate #4298.01

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.

Certificate #4298.01

#### 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

	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125 48% Mukzi Lee
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode 5(1Mbps)	Test By:	Mukzi Lee

# NTEK 北测<sup>®</sup>

#### 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

	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mukzi Lee



#### 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:	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mukzi Lee

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



#### 7.6 20DB BANDWIDTH TEST

#### 7.6.1 Applicable Standard

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

#### 7.6.2 Conformance Limit

No limit requirement.

#### 7.6.3 Measuring Instruments

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

#### 7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

#### 7.6.5 Test Procedure

The testing follows ANSI C63.10-2013 clause 6.9.2 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW  $\geq$  1% of the 20 dB bandwidth VBW  $\geq$  RBW Sweep = auto Detector function = peak Trace = max hold

#### 7.6.6 Test Results

EUT:	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mukzi Lee



#### 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

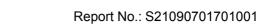
 $VBW \ge RBW$ 

Sweep = auto

Detector function = peak Trace = max hold

#### 7.7.6 Test Results

	IN-EAR WIRELESS MONO HEADSET	Model No.:	HK125
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mukzi Lee





#### 7.8 CONDUCTED BAND EDGE MEASUREMENT

#### 7.8.1 Applicable Standard

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

#### 7.8.2 Conformance Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.205(c)).

Certificate #4298.01

#### 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

	IN-EAR WIRELESS MONC HEADSET	Model No.:	HK125
Temperature:	<b>20</b> ℃	Relative Humidity:	
Test Mode:	Mode2 /Mode4/ Mode 5	Test By:	Mukzi Lee





### 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)).

Certificate #4298.01

#### 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.

Certificate #4298.01

#### 7.10.2 Result

The EUT antenna is permanent attached Ceramic chip antenna (Gain: 1.8dBi). 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 transmissions over the minimum number of hopping channels specified in this section. (h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Certificate #4298.01

#### 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.

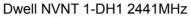
The system receiver have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

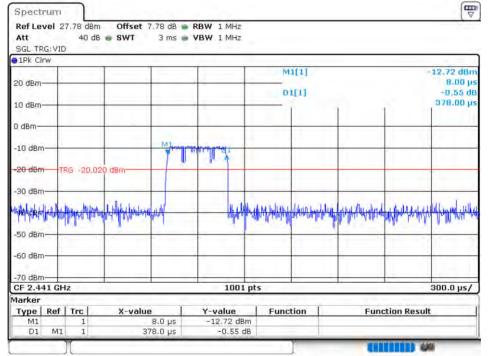


## 8 TEST RESULTS

#### 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	0.378	120.96	31600	400	Pass
NVNT	1-DH3	2441	1.63	260.8	31600	400	Pass
NVNT	1-DH5	2441	2.88	307.2	31600	400	Pass
NVNT	2-DH1	2441	0.375	120	31600	400	Pass
NVNT	2-DH3	2441	1.62	259.2	31600	400	Pass
NVNT	2-DH5	2441	2.872	306.347	31600	400	Pass
NVNT	3-DH1	2441	0.399	127.68	31600	400	Pass
NVNT	3-DH3	2441	1.62	259.2	31600	400	Pass
NVNT	3-DH5	2441	2.864	305.493	31600	400	Pass
NVNT NVNT NVNT NVNT	2-DH3 2-DH5 3-DH1 3-DH3	2441 2441 2441 2441 2441	1.62 2.872 0.399 1.62	259.2 306.347 127.68 259.2	31600 31600 31600 31600	400 400 400 400	Pa Pa Pa Pa







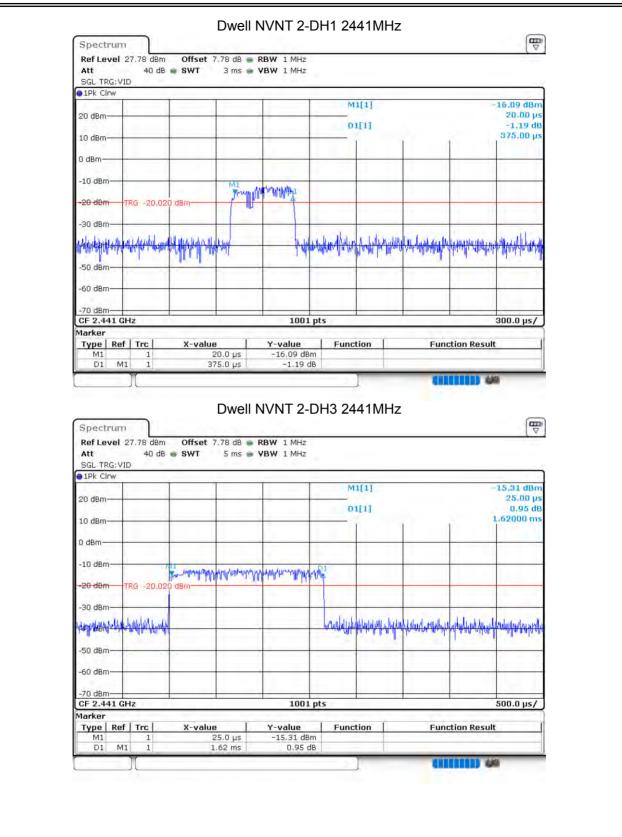
Spectrum					
Ref Level 27.78 dB					
Att 40 d SGL TRG:VID	lB 🖷 SWT 5 ms (	WBW 1 MHz			
1Pk Clrw					
			M1[1]		-12.77 dBm
20 dBm-			01[1]		15.00 µs 1.01 dB
10 dBm				1 1	1.63000 ms
D dBm					
			and a second		
-10 dBm	- Hallower and the second	anti Hillia Marianangan	4		
-20 dBm TRG -20,0	020 dBm			-	
-30 dBm					
and the second sec			the list i good when destru	ad all a la constitution to the day	And in the de Martin day
industration of the second of	(iii)		willing Walk High will	heijenthremterschlichen welss	Abi. Madalana ana alia
-50 dBm	-	-			
-60 dBm					
		1 1 1 4			1.1
-70 dBm- CF 2.441 GHz		1001 pt	s	1. 1.	500.0 µs/
Type     Ref     Trc       M1     1       D1     M1       Spectrum	1.0000		Function	Function R	
Type Ref Trc M1 1 D1 M1 1 Spectrum Ref Level 27.78 dB	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	)	auuu	
Type         Ref         Trc           M1         1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG:VID	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	H5 2441MH	auuu	
Type         Ref         Trc           M1         1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	)	auuu	
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw           20 dBm	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB
Type         Ref         Trc           M1         1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw           20 dBm	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1,01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm	15.0 µs 1.63 ms Dwel m Offset 7.78 dB	-12.77 dBm 1.01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Image: Comparison of the second secon	15.0 µs 1.63 ms Dwel	-12.77 dBm 1,01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB
M1         1           D1         M1         1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID         1Pk Clrw           20 dBm         20 dBm           10 dBm         M1           -10 dBm         M1           -20 dBm         TRG         -20,0	15.0 µs 1.63 ms Dwel	-12.77 dBm 1,01 dB	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	H5 2441MH	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID           1Pk Clrw           20 dBm           10 dBm           -10 dBm           -20 dBm           TRG	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	H5 2441MH	auuu	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	H5 2441MH	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID         PIPk Clrw           20 dBm         10 dBm           10 dBm         10 dBm           -20 dBm         TRG           -20 dBm         -20 dBm           -50 dBm         -50 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	H5 2441MH	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum           Ref Level         27.78 dB           Att         40 d           SGL TRG: VID           IPk Clrw           20 dBm           10 dBm           -10 dBm           -30 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	H5 2441MH	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID         PIPk Clrw           20 dBm         10 dBm           10 dBm         M1           -10 dBm         M1           -20 dBm         TRG           -20 dBm         -20, dBm           -30 dBm         -60 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1,01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz UI	M1[1] 01[1]	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1         1           D1         M1         1           D1         M1         1           Spectrum         Ref Level 27.78 dB           Att         40 d           SGL TRG: VID         1Pk Clrw           20 dBm         20 dBm           10 dBm         10 dBm           -0 dBm         TRG - 20,0           -30 dBm         -50 dBm           -60 dBm         -60 dBm           -70 dBm         -70 dBm	15.0 µs 1.63 ms Dwel	-12.77 dBm 1.01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz	M1[1] 01[1]	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms
Type         Ref         Trc           M1         1           D1         M1           D1         M1           Spectrum         Image: Comparison of the second secon	15.0 µs 1.63 ms Dwel	-12.77 dBm 1,01 dB I NVNT 1-D RBW 1 MHz VBW 1 MHz UI	M1[1] 01[1]	z	-7.30 dBm 16.00 µs 0.34 dB 2.88000 ms

ACC

ED



#### Report No.: S21090701701001





Ref Level 27.78 dBm Of Att 40 dB st	ffset 7.78 dB 📦 RBW 1 MH: WT 8 ms 📾 VBW 1 MH:				
SGL TRG: VID		2			
• 1Pk Clrw	1 1	M1[1]		-10.53 di	
20 dBm		MILI		-10.53 0	
10 10-		01[1]		-1.82	
10 dBm			1 1		
D dBm					-
-10 dBm	Unin permeter and the second of the second o	1			-
-20 dBm TRG -20,020 dBm			_		_
-30 dBm-					
1480 BEAKA ADAM		Almonto Margaria Anter the of the of the stand of the	h water to retailly	Linden and an Automatic day	dias
140 98W 94		united to be a find, to be the first first	Manha Paller als le	ente flar et selfan de ser an de like hat te	ALC: N
-50 dBm-					
-60 dBm			-		
-70 dBm					
CF 2.441 GHz	100	11 pts	1	800.0 µs	s/
Marker           Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1	Y-value         Y-value           32.0 µs         -10.53 c           2.872 ms         -1.82	1Bm	a	tion Result	
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         System	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3	<sup>IBM</sup> dB -DH1 2441MH2	a	منه (()))	
Type     Ref     Trc     X       M1     1       D1     M1     1       Spectrum       Ref Level     27.78 dBm     Of	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3	<sup>IBM</sup> dB -DH1 2441MH2	a	منه (()))	
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Construction of the second se	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3	<sup>IBM</sup> dB -DH1 2441MH2	a	-6.61 di	Bm
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Construction of the second se	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3	<sup>IBM</sup> dB -DH1 2441MHz z	a	-6.61 dl -0.61 dl 2.00 -1.51	Bm ) µs dB
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Construction of the second s	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	a	-6.61 dt	Bm ) µs dB
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Comparison of the system of t	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ● RBW 1 MH: WT 3 ms ● VBW 1 MH:	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	a	-6.61 dl -0.61 dl 2.00 -1.51	Bm ) µs dB
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Construction of the second s	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB RBW 1 MH2 WT 3 ms VBW 1 MH2	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	a	-6.61 dl -0.61 dl 2.00 -1.51	Bm ) µs dB
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           Spectrum         Image: Comparison of the system of t	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB RBW 1 MH2 WT 3 ms VBW 1 MH2	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	a	-6.61 dl -0.61 dl 2.00 -1.51	Bm ) µs dB
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm           10 dBm         70 dBm           -10 dBm         TRG	32.0 µs -10.53 c 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB RBW 1 MH2 WT 3 ms VBW 1 MH2	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	a	-6.61 dl -0.61 dl 2.00 -1.51	Bm ) µs dB
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm           10 dBm         70 dBm           -10 dBm         TRG           -20 dBm         -30 dBm	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ■ RBW 1 MH; WT 3 ms ■ VBW 1 MH; M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MH2 -DH1 2441MH2 	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs dB ) µs
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm           10 dBm         70 dBm           -10 dBm         TRG	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ■ RBW 1 MH; WT 3 ms ■ VBW 1 MH; M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	<sup>3BM</sup> dB -DH1 2441MH2 2 2 M1[1]	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs dB ) µs
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm           10 dBm         70 dBm           -10 dBm         TRG           -20 dBm         -30 dBm	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ■ RBW 1 MH; WT 3 ms ■ VBW 1 MH; M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MH2 -DH1 2441MH2 	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs dB ) µs
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw           20 dBm         10 dBm           10 dBm         70 dBm           -10 dBm         TRG           -30 dBm         -30 dBm	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ■ RBW 1 MH; WT 3 ms ■ VBW 1 MH; M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MH2 -DH1 2441MH2 	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs dB ) µs
Type         Ref         Trc         X.           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         91Pk Clrw           20 dBm         10 dBm           10 dBm         10 dBm           -30 dBm         -10,020 dBm           -30 dBm         -30 dBm           -60 dBm         -60 dBm	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB ■ RBW 1 MH; WT 3 ms ■ VBW 1 MH; M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MH2 -DH1 2441MH2 	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs dB ) µs
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw         20 dBm           10 dBm         0 dBm         10 dBm           -20 dBm         -30 dBm         -30 dBm           -50 dBm         -60 dBm         -60 dBm           -70 dBm         -70 dBm         -70 dBm	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB RBW 1 MH: WT 3 ms VBW 1 MH: M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MH2 -DH1 2441MH2 	Z	-6.61 dt 2.00 -1,51 399.00	Bm ) µs ) µs
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw         20 dBm           10 dBm         0 dBm         10 dBm           -20 dBm         -30 dBm         -30 dBm           -50 dBm         -50 dBm         -70 dBm           -70 dBm         CF 2.441 GHz         Marker	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 Frset 7.78 dB WT 3 ms VBW 1 MH; VBW 1 MH; VBW 1 MH; 100 100	BBM dB -DH1 2441MH2 2 2 M1[1] 01[1] 01[1] 01[1] 01[1] 01[1] 01[1]		-6.61 dl 2.00 -1.51 399.00	Bm ) µs ) µs
Type         Ref         Trc         X           M1         1         1         1           D1         M1         1         1           D1         M1         1         1           Spectrum         Ref Level 27.78 dBm         Of           Att         40 dB         SV           SGL TRG: VID         1Pk Clrw         20 dBm           10 dBm         0 dBm         10 dBm           -20 dBm         -30 dBm         -10.020 dBm           -50 dBm         -50 dBm         -70 dBm           -70 dBm         CF 2.441 GHz         Marker	32.0 µs 2.872 ms -1.82 Dwell NVNT 3 ffset 7.78 dB RBW 1 MH: WT 3 ms VBW 1 MH: M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	BBM dB -DH1 2441MHz z z M1[1] 01[1] 01[1] 01[1] 01[1] 1] 1] 1] 1] 1] 1] 1] 1] 1]		-6.61 di 2.00 -1.51 399.00	Bm ) µs ) µs

ED



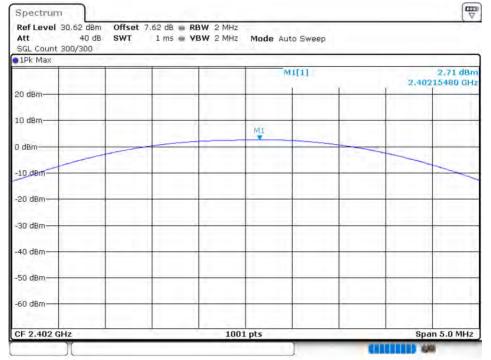
Att SGL TR				RBW 1 MHz VBW 1 MHz					
●1Pk Clr	W	1 1	_	1		F + 1			15 (5 40.
20 dBm-	_		_		MI	[1]			-15.47 dBn 20.00 ps
10 dBm-					01	[1]			0.83 dt 1.62000 ms
							1		
D dBm—									
-10 dBm		MI IL ADAM LLA	ax th A atomic	Harry In Comparis			-		-
-20 dBm	TRG -20.	020 dBm	alter the second and	ale ale and a second and a second	714	_			
-30 dBm				1					
					the second	dualid . his		all saturations	a daller a d
	Mar Caller	rul .			- the found that	Halloth Aralley	ANA MANAM	a follow and	. all an all and a second
-50 dBm			-	-			-	-	
-60 dBm	_	-							-
-70 dBm				1 1	4				1.1
CF 2.44				1001	pts		1	1	500.0 µs/
Marker	Pof Trol	X-value	. ii	V-ushia	Eunett	on 1	e	tion Decu	l <del>t</del>
Tunn	Rel ITC		0.0 μs	Y-value -15.47 dB	Functi	on	Fun	ction Resu	<b>0.</b>
Type M1	1								
	M1 1		.62 ms	0.83 d			-		Mr.
M1 D1	M1 1	1.	Dwell		(B)	41MHz	-	((())) 4	<b>₩</b> (¶
M1 D1 Spectr Ref Lev Att SGL TR/ @1Pk Cir	M1 1	1. m Offset 7	Dwell	0.83 d NVNT 3-1 RBW 1 MH2	(B)		2		-10.55 dBn
M1 D1 Spectr Ref Lev Att SGL TR	M1 1	1. m Offset 7	Dwell	0.83 d NVNT 3-1 RBW 1 MH2	DH5 244	[1]	2		
M1 D1 Spectr Ref Lev Att SGL TR 9 IPK Cir	M1 1	1. m Offset 7	Dwell	0.83 d NVNT 3-1 RBW 1 MH2	DH5 244	[1]	2		-10.55 dBn 32.00 ps
M1 D1 Spectr Ref Lex Att SGL TR • 1Pk Clr 20 dBm-	M1 1	1. m Offset 7	Dwell	0.83 d NVNT 3-1 RBW 1 MH2	DH5 244	[1]	2		-10.55 dBn 32.00 ps 0.33 dB
M1 D1 Spectr Ref Lev Att SGL TR 9 1Pk Clr 20 dBm- 10 dBm-	M1 1	1. im Offset 7 JB SWT	.62 ms	0.83 d NVNT 3- RBW 1 MHz VBW 1 MHz	DH5 244	[1]			-10.55 dBn 32.00 ps 0.33 dB
M1 D1 Spectrr Ref Lev Att SGL TR/ • 1Pk Clr 20 dBm- 10 dBm- -10 dBm	M1 1 vel 27.78 de 40 s S:VID W M1 M1 M1 M1	I. M Offset 7 dB SWT	Dwell	0.83 d NVNT 3- RBW 1 MHz VBW 1 MHz	DH5 244	[1]			-10.55 dBn 32.00 ps 0.33 dB
M1 D1 Spectr Ref Lev Att SGL TR SGL TR O dBm- D dBm-	M1 1 vel 27.78 de 40 - 5:VID w M1 m1 m1 m1 m1 m1 m1 m1 m1 m1 m	I. M Offset 7 dB SWT	.62 ms	0.83 d NVNT 3- RBW 1 MHz VBW 1 MHz	DH5 244	[1]			-10.55 dBn 32.00 ps 0.33 dB
M1 D1 Spectr Ref Lex Att SGL TR/ • 1Pk Clr 20 dBm- 10 dBm- -10 dBm	M1 1 vel 27.78 de 40 S: VID W M1 TRG -20,	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]			-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectr Ref Lev SGL TR 9 JPK Clr 20 dBm- 10 dBm- -10 dBm -20 dBm	M1 1 vel 27.78 de 40 d S:VID w M1 TRG -20,	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]			-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectr Ref Lev Att SGL TR O dBm- 10 dBm- 10 dBm- -10 dBm -30 dBm	M1 1 vel 27.78 de 40 d S:VID w M1 TRG -20, M1 M1	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]		hillitest and	-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectr Ref Lev Att SGL TR 9 1Pk Clr 20 dBm- 10 dBm- -10 dBm -20 dBm	M1 1 vel 27.78 de 40 d S:VID w M1 TRG -20, M1 M1	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]		u u u u u u u u u u u u u u u u u u u	-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectr Ref Lev Att SGL TR 9 1Pk Clr 20 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm	M1 1 vel 27.78 de 40 5: VID w M1 TRG -20, M1 M1	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]		and the second sec	-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectr Ref Lev Att SGL TR 9 IPk Clr 20 dBm- 10 dBm- -10 dBm- -10 dBm -30 dBm -30 dBm -50 dBm -50 dBm	M1 1 vel 27.78 de 40 d 5: VID w M1 TRG -20, M1/W	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]			-10.55 dBn 32.00 µ 0.33 dE 2.86400 ms
M1 D1 Spectr Ref Lev Att SGL TR • 1Pk Clr 20 dBm- 10 dBm- -10 dBm- -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm	M1 1 vel 27.78 de 40 d 5: VID w M1 TRG -20, M1/W	I. M Offset 7 dB SWT	.62 ms	0.83 d	DH5 244	[1]			-10.55 dBn 32.00 µ 0.33 dt 2.86400 ms
M1 D1 Spectrr Ref Lev Att SGL TR/ ● 1Pk Clr 20 dBm- 10 dBm- -10 dBm- -10 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm CF 2.44 Marker Type	M1 1 vel 27.78 de 40 - 5:VID w M1 F. Arg TRG - 20, M1 TRG - 20, M1 TR	1. m Offset 7 dB SWT 020 dBm 020 dBm	.62 ms	0.83 d	DH5 244	[1] [1]		tion Resu	-10.55 dBn 32.00 µ 0.33 dt 2.86400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m
M1 D1 Spectr Ref Lex Att SGL TR • 1Pk Clr • 1Pk Clr • 1Pk Clr • 10 dBm - 10 dBm - 10 dBm - 30 dBm - 30 dBm - 50 dBm - 60 dBm - 60 dBm - 70 dBm CF 2.44 Marker Type M1	M1 1 vel 27.78 de 40 d 5:VID w TRG -20, 1 GHz Ref Trc 1	1. m Offset 7 dB SWT 020 dBm 020 dBm X-value 3	.62 ms	0.83 d	DH5 244	[1] [1]			-10.55 dBn 32.00 µ 0.33 dt 2.86400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m
M1 D1 Spectrr Ref Lev Att SGL TR/ ● 1Pk Clr 20 dBm- 10 dBm- -10 dBm- -10 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm CF 2.44 Marker Type	M1 1 vel 27.78 de 40 - 5:VID w M1 F. Arg TRG - 20, M1 TRG - 20, M1 TR	1. m Offset 7 dB SWT 020 dBm 020 dBm X-value 3	.62 ms	0.83 d	DH5 244	[1] [1]			-10.55 dBn 32.00 µ 0.33 dt 2.86400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m 4.400 m



# 8.2 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant 1	2.706	30	Pass
NVNT	1-DH5	2441	Ant 1	2.571	30	Pass
NVNT	1-DH5	2480	Ant 1	3.976	30	Pass
NVNT	2-DH5	2402	Ant 1	0.262	21	Pass
NVNT	2-DH5	2441	Ant 1	-0.132	21	Pass
NVNT	2-DH5	2480	Ant 1	0.338	21	Pass
NVNT	3-DH5	2402	Ant 1	0.655	21	Pass
NVNT	3-DH5	2441	Ant 1	0.375	21	Pass
NVNT	3-DH5	2480	Ant 1	0.987	21	Pass

#### Power NVNT 1-DH5 2402MHz Ant1



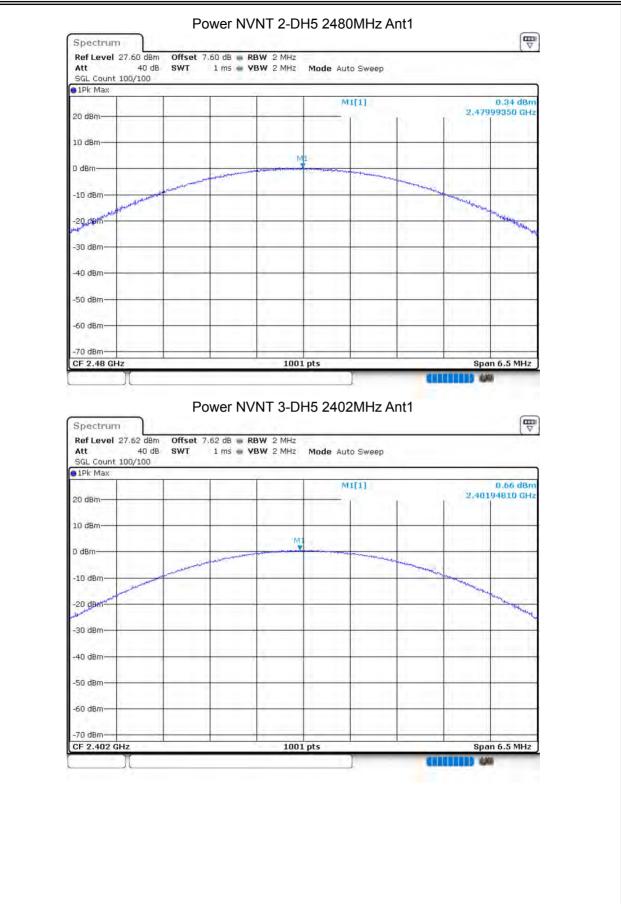


Ref Level         27.78 dBm           Att         40 dB           SGL Count         100/100	Offset 7.78 dB  RBW 2 M SWT 1 ms  VBW 2 M	Hz Hz <b>Mode</b> Auto Sweep		
1Pk Max		441541		
20 dBm-		M1[1]	2.4	2,57 dBm 4081520 GHz
10 dBm	M			
0 dBm				
10-10-				-
-10 dBm-				
-20 dBm				-
-30 dBm			-	
-40 dBm				
-50 dBm				
-60 dBm				
SP GUIT				
-70 dBm CF 2.441 GHz		.001 pts		oan 5.0 MHz
Y			CONTRACTOR 0	100
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150	Offset         7.60 dB         RBW         2 M           SWT         1 ms         VBW         2 M		Ant1	(The second seco
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150	Offset 7.60 dB . RBW 2 M	Hz		3,98 dBm
Att 40 dB SGL Count 150/150	Offset 7.60 dB . RBW 2 M	Hz Hz <b>Mode</b> Auto Sweep		
Ref Level 27.60 dBm Att 40 dB SGL Count 150/150 1Pk Max	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           IPk Max         20 dBm           10 dBm         10 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Hz <b>Mode</b> Auto Sweep		3,98 dBm
Ref Level         27.60         dBm           Att         40 dB         SGL Count 150/150           SGL Count         150/150           IPk Max         20 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60         dBm           Att         40 dB         SGL Count 150/150           OIPK Max         20         dBm           10 dBm         10         dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60         dBm           Att         40 dB         SGL Count 150/150         1Pk Max           • 1Pk Max         20         dBm         10         dBm         10	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           1Pk Max         20 dBm           10 dBm         0 dBm           -20 dBm         -20 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           1Pk Max         20 dBm           10 dBm         0 dBm           -20 dBm         -20 dBm           -30 dBm         -30 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           1Pk Max         20 dBm           10 dBm         0 dBm           10 dBm         -20 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           1Pk Max         20 dBm           10 dBm         10 dBm           0 dBm         -20 dBm           -20 dBm         -30 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           IPk Max         20 dBm           10 dBm         10 dBm           D dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           1Pk Max         20 dBm           20 dBm         10 dBm           10 dBm         -           20 dBm         -           20 dBm         -           30 dBm         -           -20 dBm         -           -40 dBm         -	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep		3,98 dBm
Ref Level         27,60         dBm           Att         40 dB         SGL Count         150/150           IPk Max         20         dBm         10           10 dBm         10         dBm         10           10 dBm         20         dBm         10           20 dBm         40         dBm         10           -20 dBm         -30         dBm         -30         dBm           -50 dBm         -60 dBm         -70 dBm         -70         -70	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Hz Mode Auto Sweep	2.4	3.98 dBm 7984520 GHz
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           IPk Max         20 dBm           20 dBm         10 dBm           10 dBm         -           20 dBm         -           -20 dBm         -           -20 dBm         -           -30 dBm         -           -50 dBm         -           -60 dBm         -	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Mode Auto Sweep	2.4	3,98 dBm 7984520 GHz
Ref Level         27,60         dBm           Att         40 dB         SGL Count         150/150           IPk Max         20         dBm         10           10 dBm         10         dBm         10           10 dBm         20         dBm         10           20 dBm         40         dBm         10           -20 dBm         -20         dBm         -20           -30 dBm         -30         dBm         -40           -70 dBm         -70         dBm         -70	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Hz Mode Auto Sweep	2.4	3,98 dBm 7984520 GHz
Ref Level         27.60 dBm           Att         40 dB           SGL Count         150/150           IPk Max         20 dBm           20 dBm         10 dBm           10 dBm	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Hz Mode Auto Sweep	2.4	3,98 dBm 7984520 GHz
Ref Level         27,60         dBm           Att         40 dB         SGL Count         150/150           IPk Max         20         dBm         10           10 dBm         10         dBm         10           10 dBm         20         dBm         10           20 dBm         40         dBm         10           -20 dBm         -30         dBm         -30         dBm           -50 dBm         -60 dBm         -70 dBm         -70         -70	Offset 7.60 dB = RBW 2 M SWT 1 ms = VBW 2 M	Hz Hz Mode Auto Sweep	2.4	3,98 dBm 7984520 GHz



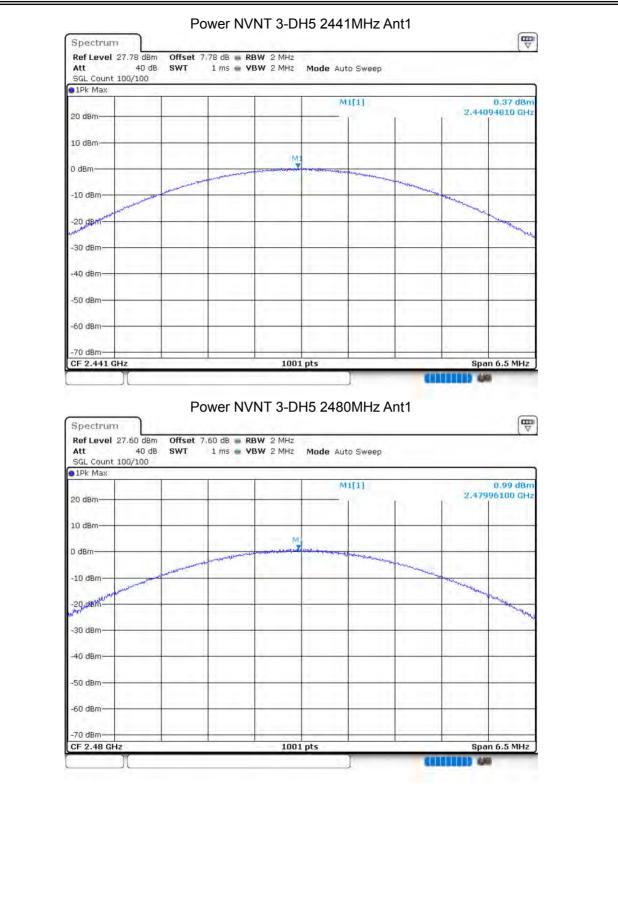








**NTEK** 北测





# NTEK 北测

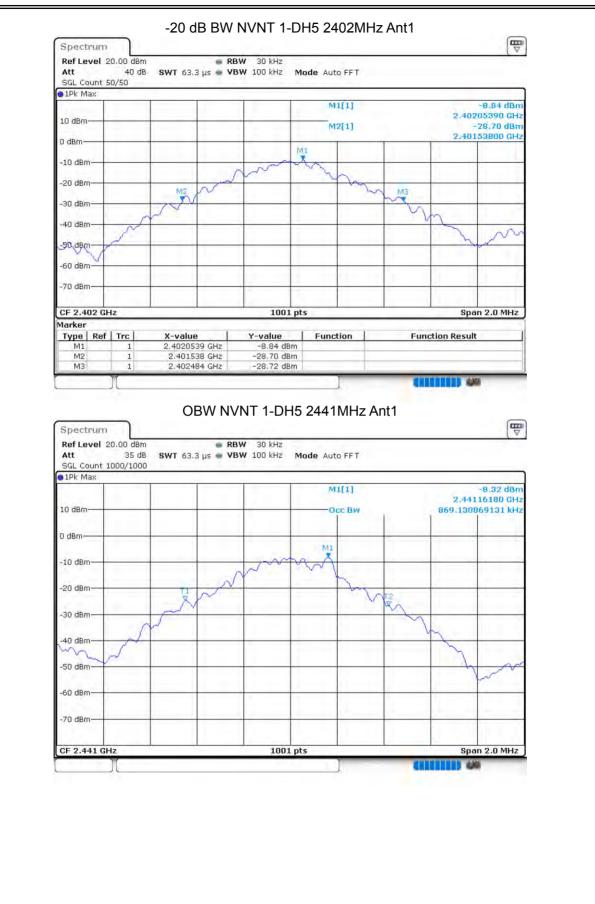
# 8.3 OCCUPIED CHANNEL BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant 1	0.9031	0.946	Pass
NVNT	1-DH5	2441	Ant 1	0.8691	0.944	Pass
NVNT	1-DH5	2480	Ant 1	0.8711	0.948	Pass
NVNT	2-DH5	2402	Ant 1	1.1728	1.266	Pass
NVNT	2-DH5	2441	Ant 1	1.1628	1.234	Pass
NVNT	2-DH5	2480	Ant 1	1.1848	1.264	Pass
NVNT	3-DH5	2402	Ant 1	1.1588	1.27	Pass
NVNT	3-DH5	2441	Ant 1	1.1608	1.246	Pass
NVNT	3-DH5	2480	Ant 1	1.1568	1.25	Pass

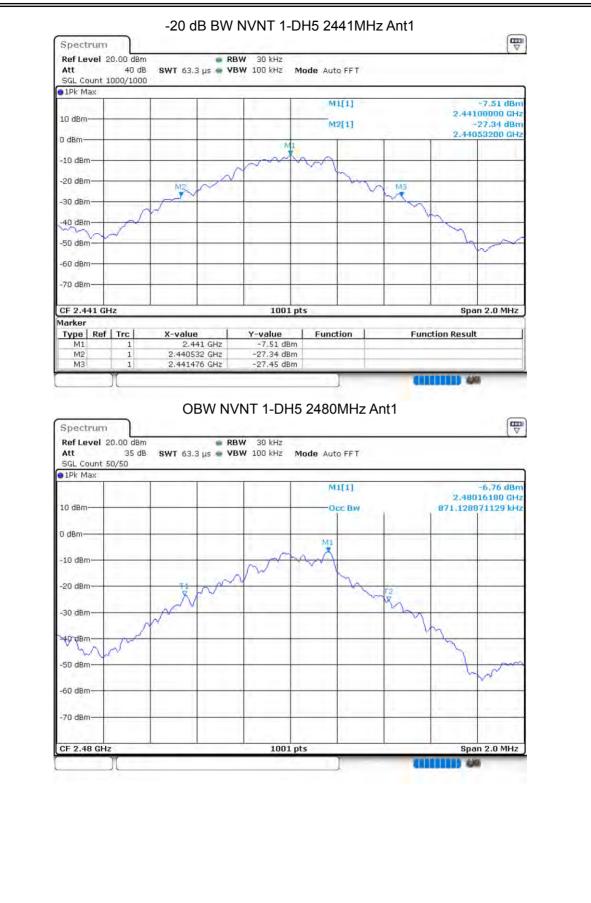
### OBW NVNT 1-DH5 2402MHz Ant1







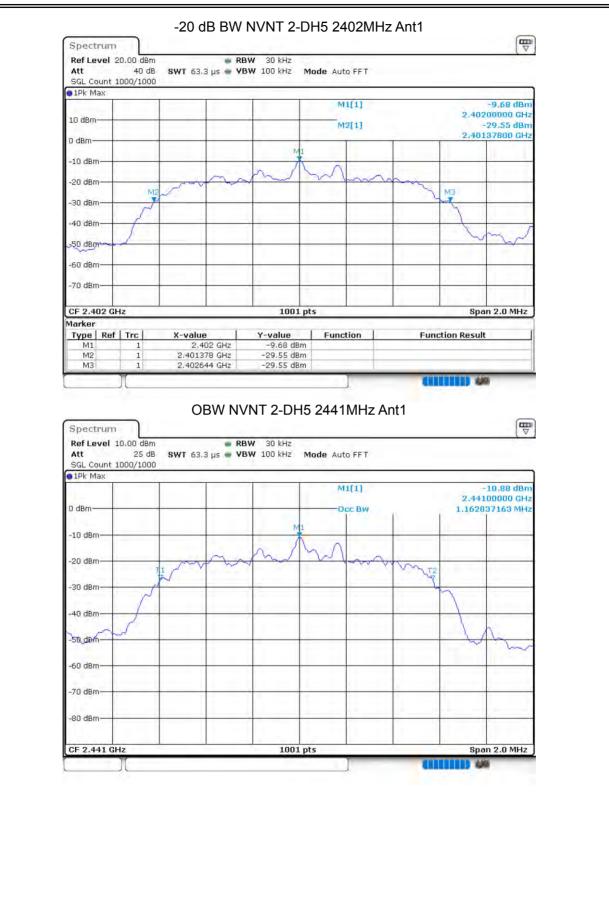




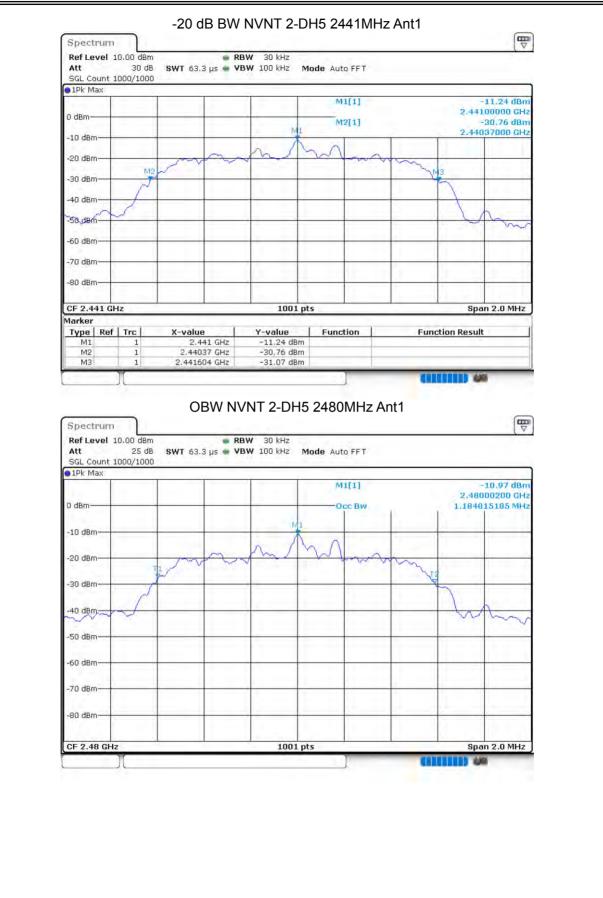
















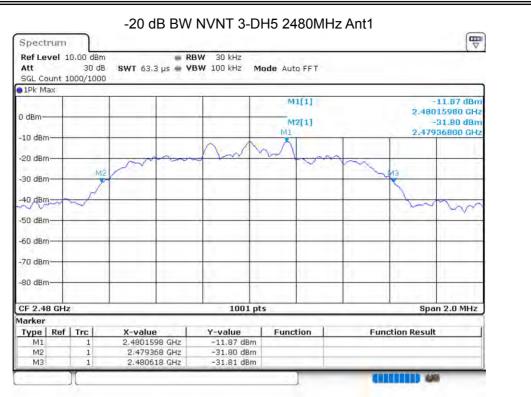












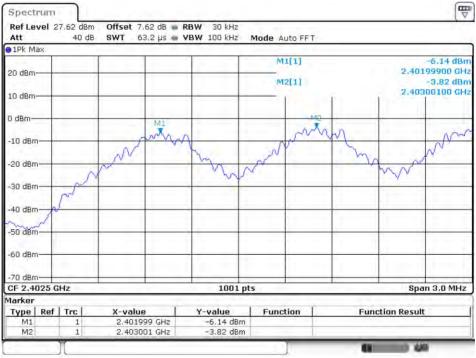


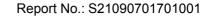
# NTEK 北测

# 8.4 CARRIER FREQUENCIES SEPARATION

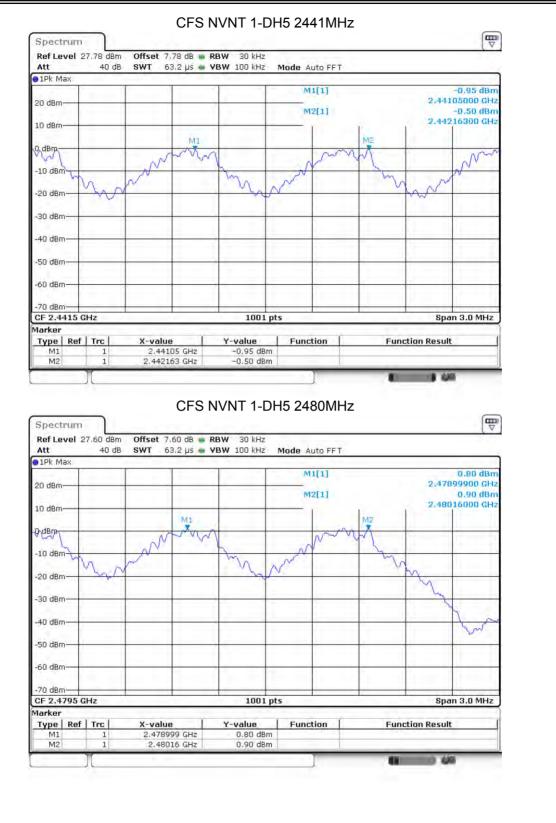
0.4 CARRIER	IKEQUEN	CIES SEFARATION				
Condition	Mode	Hopping Freq1	Hopping Freq2	HFS	Limit	Verdict
Contaition	mode	(MHz)	(MHz)	(MHz)	(MHz)	Voraiot
NVNT	1-DH5	2401.999	2403.001	1.002	0.946	Pass
NVNT	1-DH5	2441.05	2442.163	1.113	0.944	Pass
NVNT	1-DH5	2478.999	2480.16	1.161	0.948	Pass
NVNT	2-DH5	2401.999	2403.007	1.008	0.844	Pass
NVNT	2-DH5	2440.999	2442.001	1.002	0.823	Pass
NVNT	2-DH5	2479.002	2480.004	1.002	0.843	Pass
NVNT	3-DH5	2401.999	2403.169	1.17	0.847	Pass
NVNT	3-DH5	2440.831	2442.001	1.17	0.831	Pass
NVNT	3-DH5	2479.002	2480.001	0.999	0.833	Pass

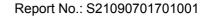
### CFS NVNT 1-DH5 2402MHz



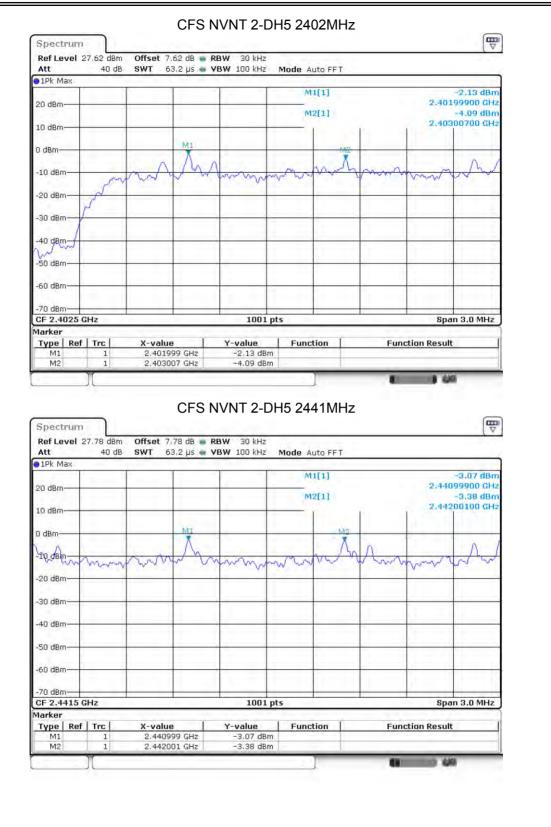


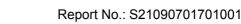




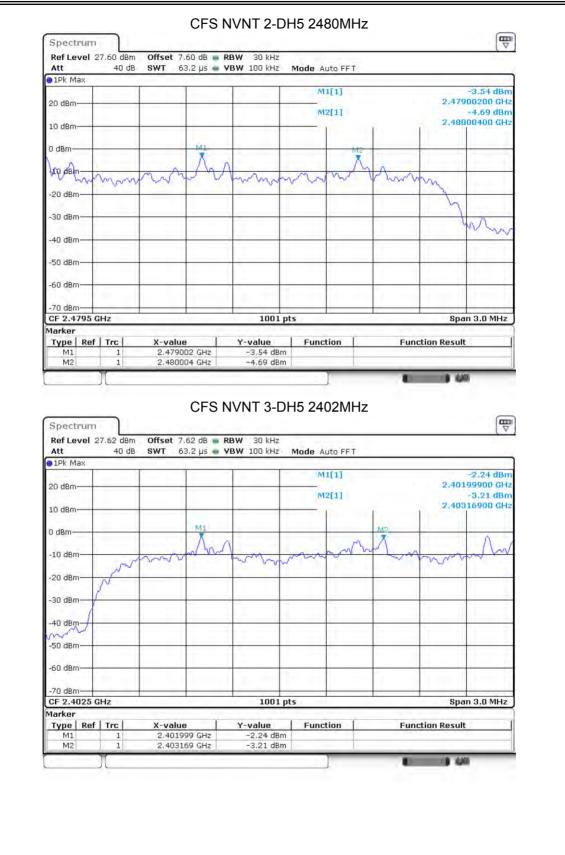


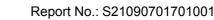




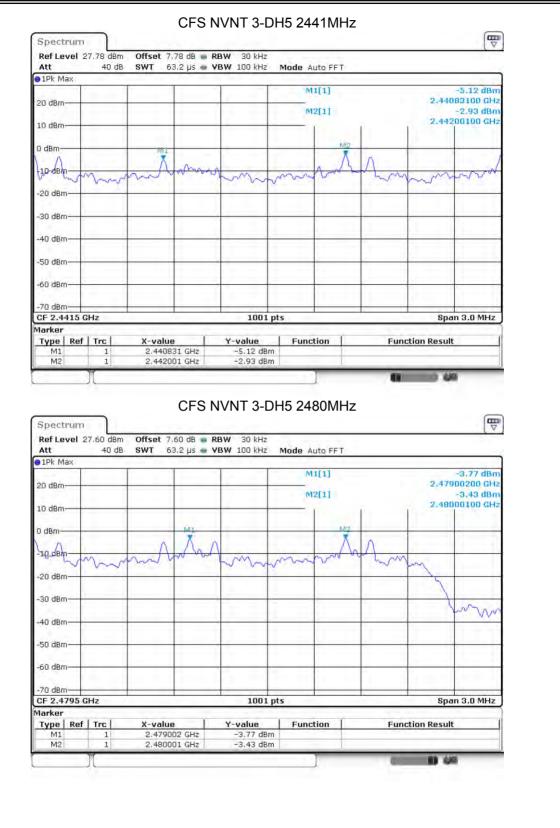














	Condition	Mode	Hopping Numb	er Limit	Verdict	
	NVNT	1-DH5	79	15	Pass	
	L					
	Н	lopping N	o. NVNT 1-DH5	2402MHz		
Spectrum						E
Ref Level 23	7.62 dBm Offset	7.62 dB 🖷 R	BW 100 kHz			[*
Att	40 dB SWT		BW 300 kHz Mode Au	to Sweep		
SGL Count 70 9 1Pk Max	000/7000					
THE MIGS			MI	[1]		-4,48 dBr
20 dBm		-			2,40	20040 GH
10 dBm			M2	[1]	2.47	2.93 dBn 99930 GH
TO OPIN				1		M2
	A D D D D D D D D D D D D D D D D D D D	N TA A A A A A A A A	AUGUNALANA ANA ANA ANA ANA ANA ANA ANA ANA A	NANANANA (AABI	างกลงคุณแต่มีปี	ABBAAR
-10 58m	IMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ALRAALA HARRAARK	IMBARI (UU		
TYTYTYTY	AAAAAAAAAAAA	AMAAAAAAA	AAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA	ABABABAA DAAS	110.1
-20 dBm						
-30 dBm						
-40 dBm						N.
-50 dBm					0	
-60 dBm						
-70 dBm						
Start 2.4 GH	z		1001 pts		Stop 2	.4835 GHz
Marker	Teol Vus	luo I	V-ualuo   Eunoti	on 1	Eunction Decul	
		lue 2004 GHz	Y-value Functi -4.48 dBm	on	Function Result	

ACCREE

Certificate #4298.01

ED

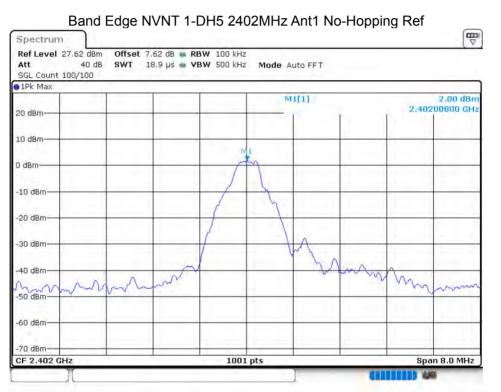


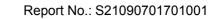
### 8.6 BAND EDGE

	<b>7</b>						
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant 1	No-Hopping	-42.65	-20	Pass
NVNT	1-DH5	2402	Ant 1	Hopping	-36.88	-20	Pass
NVNT	1-DH5	2480	Ant 1	No-Hopping	-47.08	-20	Pass
NVNT	1-DH5	2480	Ant 1	Hopping	-45.3	-20	Pass
NVNT	2-DH5	2402	Ant 1	No-Hopping	-39.64	-20	Pass
NVNT	2-DH5	2402	Ant 1	Hopping	-39.79	-20	Pass
NVNT	2-DH5	2480	Ant 1	No-Hopping	-40.11	-20	Pass
NVNT	2-DH5	2480	Ant 1	Hopping	-39.47	-20	Pass
NVNT	3-DH5	2402	Ant 1	No-Hopping	-40.45	-20	Pass
NVNT	3-DH5	2402	Ant 1	Hopping	-40.36	-20	Pass
NVNT	3-DH5	2480	Ant 1	No-Hopping	-40.97	-20	Pass
NVNT	3-DH5	2480	Ant 1	Hopping	-39.9	-20	Pass

ACCREDITED

Certificate #4298.01



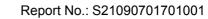




Att SGL Count	40 dB 100/100	SWT 23	erre He	an a		AULU PP 1			
●1Pk Max		-		1	M	1[1]			1.69 dB
20 dBm					M	2[1]			215000 GH -46.04 dB
10 dBm				-		1	()		000000 GI
0 dBm			-		-				
-10 dBm		10-0							
-20 UB/II	D1 -18.005	abm:						· · · · ·	
-30 dBm	-			M4		11		1	
-40 dBm	monolation	- and the approved to	when showing	Mound	Muniperior	and presentioners	-	Wind Manuel	normalist
-50 dBm				· · · ·	1				11
-60 dBm				1		·	· · · · · · · · · · · · · · · · · · ·	1	1.00
-70 dBm Start 2.306	GHz	l		1001	pts			Stop	2.406 GH
Marker Type Ref	Trc	X-value	. [	Y-value	Func	tion	Fund	tion Resul	t
M1 M2	1		15 GHz 2.4 GHz	1.69 dB -46.04 dB					
M3 M4	1		39 GHz 18 GHz	-46.92 dB -40.66 dB					
1 DATE		2,35	10.0115						
	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT	Ant1 Ho	pping R	[0
Ba Spectrum Ref Level : Att SGL Count :	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A		Ant1 Ho	- 1.	
Ba Spectrum Ref Level 3 Att SGL Count 1 1Pk Max 20 dBm-	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT	Ant1 Ho	- 1.	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 • 1Pk Max	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		- 1.	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 1Pk Max 20 dBm-	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		- 1.	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 SGL Count 1 PIPk Max 20 dBm- 10 dBm-	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		- 1.	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm -10 dBm	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		- 1.	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 © 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm -10 dBm	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	and Edg	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 I D dBm 10 dBm -10 dBm -20 dBm -30 dBm	27.62 dBm 40 dB	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 I D dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm	27.62 dBm 40 dB	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 I Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	27.62 dBm 40 dB	ge(Hopp offset 7	Ding) N'	VNT 1-D	0H5 240 Mode A	uto FFT		2,40:	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hopp offset 7	Ding) N'		PH5 240	uto FFT		2.40	-1.61 dB 315880 G
Ba Spectrum Ref Level : Att SGL Count : I D dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hopp offset 7	Ding) N'	VNT 1-D	PH5 240	uto FFT		2.40	-1,61 dB
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hopp offset 7	Ding) N'		PH5 240	uto FFT		2.40	-1.61 dB 315880 G
Ba Spectrum Ref Level 3 Att SGL Count 1 PIPK Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	and Edg 27.62 dBm 40 dB 8000/8000	ge(Hopp offset 7	Ding) N'		PH5 240	uto FFT		2.40	-1.61 dB 315880 G



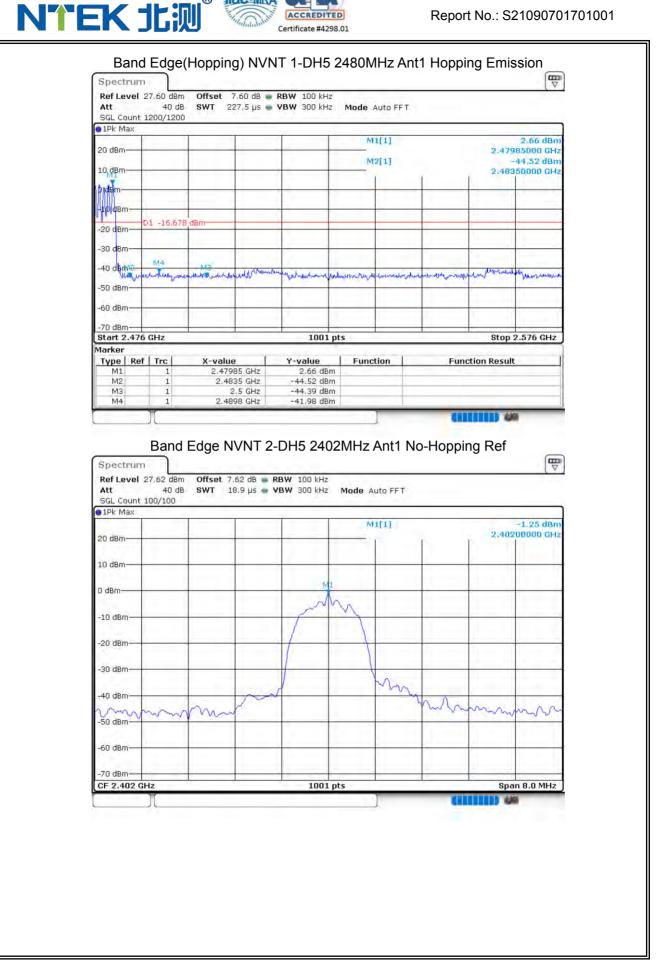
Att 40 dl	SWT 227		<b>BW</b> 100 kH <b>BW</b> 300 kH		Auto FFT.			
SGL Count 1200/120 9 1Pk Max			(					
20 dBm			-		1[1] 2[1]			-1.73 dBr 315000 GH -44.47 dBr
10 dBm			-		e(+)	(		000000 GH M1
0 dBm			-		1		1	1
-10 dBm							· · · · ·	1 ///
-20 dBm 01 -21.60	5 dBm						· · · · · ·	
-40 dBm			M4				43	MO
-50 dBm	ilser with growthe district	andmakton	nerdenhaven	wareneward	hundershifty contract	nahurthymligen	Windle Joine with the	nonintel
-60 dBm							1	
-70 dBm								
Start 2.306 GHz Marker	-		1001	pts	1		Stop	2.406 GHz
Type Ref Trc M1 1	X-value 2.40315		Y-value -1.73 dB		tion	Fun	tion Result	t
M2 1 M3 1	2.4 2.387	f GHz 7 GHz	-44.47 dB -43.91 dB					
M4 1								
Spectrum Ref Level 27.60 dBn Att 40 dt SGL Count 100/100		'NT 1-[ 0 db 🖕 Re	<b>3W</b> 100 kHz	30MHz /		-Hoppin	ng Ref	
Spectrum Ref Level 27.60 dBn Att 40 dt	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 248	30MHz / Mode A	uto FFT	-Hoppin	ng Ref	
Spectrum Ref Level 27.60 dBn Att 40 dt SGL Count 100/100	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 248	30MHz / Mode A		-Hoppin		3,30 dBr 300800 GH
Spectrum Ref Level 27.60 dBn Att 40 dl SGL Count 100/100 1Pk Max	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	30MHz / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum Ref Level 27.60 dBn Att 40 di SGL Count 100/100  1Pk Max 20 dBm 10 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 248	30MHz / Mode A	uto FFT	-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att 40 di           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum Ref Level 27.60 dBn Att 40 di SGL Count 100/100 1Pk Max 20 dBm- 10 dBm-	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att 40 di           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att 40 di           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           -10 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att 40 di           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBr           Att         40 dl           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att         40 dl           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT			3,30 dBr
Spectrum           Ref Level 27.60 dBr           Att         40 dl           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ / Mode A	uto FFT	p-Hoppin		3,30 dBr
Spectrum           Ref Level 27.60 dBn           Att         40 dl           SGL Count 100/100           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm	Edge NV	'NT 1-[ 0 db 🖕 Re	DH5 24	BOMHZ /	uto FFT		2,480	3,30 dBr





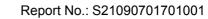
SGL Count 100/ 1Pk Max	100		-						
20 dBm-		- 1			M	1[1]		2.47	2.71 dBm 985000 GHz
				1.00	M	2[1]			-45.59 dBm
						1		2.46	350000 GHz
		-	-					1.11	1.1.1.1.2
-10 dBm	16.699 dBm-								
-20 cBm				-					11-13
-30 dBm						11		1	
Warment	non laulandy m	hoursel	Murhard	in government	muchur which they and	handthappyne	manialycown	chinger through the	Although white
-50 dBm	-			-				1	
-60 dBm				1	L			1	1
-70 dBm Start 2.476 GH:	2			1001	pts			Stop	2.576 GHz
Marker Type   Ref   Tr		-value		Y-value	Func	tion	Fim	ction Resu	
M1	1	2.47985		2.71 dB	m	cion	run	CION RESU	
M2 M3	1	2.4835	GHz	-45.59 dB -46.51 dB	m				
M4	1	2.4897	GHZ	-43.78 dB	m				
Spectrum Ref Level 27.6	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	VNT 1-D BW 100 kHz BW 300 kHz	- 		Ant1 Ho	pping F	Ref
Spectrum Ref Level 27.6 Att SGL Count 8009	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A		Ant1 Ho		
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm-	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm 1000000 GHz
Spectrum           Ref Level 27.6:           Att           SGL Count 8009           1PK Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm
Spectrum           Ref Level 27.6i           Att           SGL Count 8009           • 1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm 1000000 GHz
Spectrum           Ref Level 27.6:           Att           SGL Count 8009           • 1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz	Mode A	uto FFT	Ant1 Ho		3.32 dBm 1000000 GHz
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	BW 100 KHz BW 300 KHz		uto FFT	Ant1 Ho	2.48	3.32 dBm 1000000 GHz
Spectrum           Ref Level 27.6i           Att           SGL Count 8009           • 1Pk Max           20 dBm           10 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	<b>BW</b> 100 kHz		uto FFT	Ant1 Ho	2.48	3.32 dBm 1000000 GHz
Spectrum Ref Level 27.6 Att SGL Count 8009 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	BW 100 KHz BW 300 KHz		uto FFT	Ant1 Ho	2.48	3.32 dBm 1000000 GHz
Spectrum           Ref Level 27.6;           Att           SGL Count 8009           • 1Pk Max           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -50 dBm           -60 dBm	D dBm Off 40 dB SW	fset 7.60	dB 👞 RI	BW 100 KHz BW 300 KHz		uto FFT	Ant1 Ho	2.48	3.32 dBm 1000000 GHz





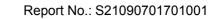
ilac-MR/

R



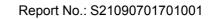


Att SGL Count	40 dB 100/100	SWT 22	7.5 µs 🖷	VBW 300 kHz	Mode Auto	FFT.			
1Pk Max	(	1			M1[1]			0.00	-1.46 dBm
20 dBm					M2[1]				215000 GHz -45.67 dBm
10 dBm						1		2,400	M1
0 dBm									<u> </u>
-10 dBm									
The second second	D1 -21.253	dBm							
-30 dBm			M4					1.000	
-40 dBm-	hubbershines	abarangestaware	which have been a start of the	wanter freedom to the state of	whether whether	manul	manuf	Mal Manufactor	types h
-50 dBm									
-60 dBm		·						1.000	
-70 dBm	6 GHz			1001 p	ts	1	-	Stop	2.406 GHz
Marker Type   Re	f   Trc	X-value	1	Y-value	Function	í.	Func	tion Result	
M1 M2	1 1	2.4021		-1.46 dBm -45.67 dBm		_	, une	cion nosa.	-
M3 M4	1	2.3	9 GHz 5 GHz	-46.53 dBm -40.89 dBm					
MIH	1 AL	2,040	5 GH2	-40,69 UBIII	1	-			8
Spectrun Ref Level Att		Offset 7.6	52 dB 🐞 F	VNT 2-DH	Mode Auto F	FT	ıt1 Hop	oping R	V
Spectrun Ref Level Att SGL Count	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz	A.2.11	FT	it1 Hop		
Spectrun Ref Level Att SGL Count 1Pk Max	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz	Mode Auto F	FT	ıt1 Hop		0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz	Mode Auto F	FT	it1 Hop		0.04 dBm
Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2,404	0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	it1 Hop	2,404	0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- 0 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2,404	0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2,404	0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT		2,404	0.04 dBm
Spectrun Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2,404	0.04 dBm
Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2,404	0.04 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm	n 27.62 dBm 40 dB	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT		2,404	0.04 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm - 10 dBm - 10 dBm - 20 dBm - 30 dBm - 30 dBm - 50 dBm - 60 dBm	n 27.62 dBm 40 dB 8000/8000	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT	t1 Hop	2.40- M1	0.04 dBm 199700 GHz
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm	n 27.62 dBm 40 dB 8000/8000	Offset 7.6	52 dB 🐞 F	RBW 100 kHz VBW 300 kHz	Mode Auto F	FT		2.40- M1	0.04 dBm



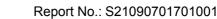


Att SGL Count 12 1Pk Max	40 dB 200/1200	1.351.9		VBW 300 kHz					
20 dBm					M	1[1]		2.4	-1.02 dBn
					M	2[1]			0415000 GH: -44.83 dBn
10 dBm		2					1	2.4	0000000 GH: M1
-10 dBm				1.					privile
							, i	(, I	
-20 dBm-D.	19.962	ubin-							
-40 dBm	-		1	M4	-			MB	nea -
-50 dBm	whenton	nnembers	d service of the loss	unhay another the	whitehistophy	transformation derived a	erround rabbe	transferration	Mary prost
-60 dBm				·					
-70 dBm						1	1		
Start 2.306 ( Marker	GHz		1	1001	pts			Sto	p 2.406 GHz
Type   Ref		X-valu		Y-value	Func	tion	Fu	nction Resi	alt
M1 M2	1		415 GHz 2.4 GHz	-1.02 dBr -44.83 dBr	n				
M3 M4	1		.39 GHz 511 GHz	-43.89 dBr -39.75 dBr					
[ m+	7					2			10.2
	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	-DH5 248 RBW 100 kHz YBW 300 kHz	Mode A	uto FFT	o-Hopp	ing Ref	V
Spectrum Ref Level 27 Att SGL Count 10	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A		o-Hopp		
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 • 1Pk Max	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm 10 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 2: Att SGL Count 10 1Pk Max 20 dBm 10 dBm 0 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB 🔳	RBW 100 kHz	Mode A	uto FFT	o-Hopp		-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT	o-Hopp	2,4	-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2,4	-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 1Pk Max 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2,4	-3,33 dBn
Spectrum Ref Level 23 Att SGL Count 10 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2,4	-3,33 dBn
Spectrum Ref Level 27 Att SGL Count 10 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2.4	-3,33 dBn
Spectrum Ref Level 2: Att SGL Count 10 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2.4 	-3,33 dBn 7998400 GH:
Spectrum Ref Level 2: Att SGL Count 10 9 IPk Max 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2.4 	-3,33 dBn 7998400 GH:
Spectrum Ref Level 2: Att SGL Count 10 9 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm	7.60 dBm 40 dB	Offset 7	7.60 dB	RBW 100 kHz	Mode A	uto FFT		2.4 	-3,33 dBn 7998400 GH:



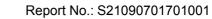


Att SGL Count	40 dB 100/100	SWT 22	7.5 µs 🖷	VBW 300 kHz	Mode Auto F	FT.		
• 1Pk Max				T T	M1[1]		- 19.0	-2.32 dBm
20 dBm			-		M2[1]			7995000 GHz -45.68 dBm
							2.4	8350000 GHz
-10 dBm	10.00							
-20 dBm-	-							
-30 d8m-	D1 -23,329	dBm	-					
-40 d8m/2	Ma	MB	da				1.1	
-50 dBm	warmanderial	ingertilized when	the for the section	Mary margare	rthumphuluy(primumlar)	un Honoralised.	mennerflatheren	and the second
-60 dBm		_					-	
-70 dBm-	011-			1001				0.535.0112
Start 2.476 Marker				1001 p	1	6	1	p 2.576 GHz
Type Ref M1	1		95 GHz	Y-value -2.32 dBm			Function Res	ult
M2 M3	1	2	35 GHz .5 GHz	-45.68 dBm -45.89 dBm				
M4	1	2,491	L6 GHz	-43.45 dBm	<u></u>			100
Ba Spectrum Ref Level Att SGL Count 1Pk Max	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	H5 2480MH Mode Auto FF		Hopping	( <b>m</b> ⊽
Spectrum Ref Level Att SGL Count	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	10.2011		Hopping	
Spectrum Ref Level Att SGL Count	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			( <b>m</b> ⊽
Spectrum Ref Level Att SGL Count 1Pk Max	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			-3,09 dBm
Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm-	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			-3,09 dBm
Spectrum Ref Level Att SGL Count 1Pk Max 20 dBm- 10 dBm-	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			-3,09 dBm
Spectrum Ref Level Att SGL Count IPk Max 20 dBm 10 dBm 0 dBm -10 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			-3,09 dBm
Spectrum Ref Level Att SGL Count IPK Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF			-3,09 dBm
Spectrum Ref Level Att SGL Count IPk Max 20 dBm 10 dBm 0 dBm -10 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T		-3,09 dBm
Spectrum Ref Level Att SGL Count IPk Max 20 dBm 0 dBm 0 dBm -10 dBm -20 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T		-3,09 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T		-3,09 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T		-3,09 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm - 10 dBm - 20 dBm - 20 dBm - 30 dBm - 40 dBm - 50 dBm - 60 dBm	27.60 dBm 40 dB	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T		-3,09 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 🐞 I	RBW 100 kHz	Mode Auto FF	T	2,4	-3,09 dBm
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 🐞 I	RBW 100 kHz VBW 300 kHz	Mode Auto FF	T	2,4	-3.09 dBm -815380 GHz
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 🐞 I	RBW 100 kHz VBW 300 kHz	Mode Auto FF	T	2,4	-3.09 dBm -815380 GHz
Spectrum Ref Level Att SGL Count • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm	27.60 dBm 40 dB 8000/8000	Offset 7.	60 dB 🐞 I	RBW 100 kHz VBW 300 kHz	Mode Auto FF	T	2,4	-3.09 dBm -815380 GHz



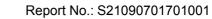






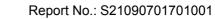


1Pk Max	.00/100	2	_						
20 dBm					M1[	1]	-	2.40	-1.27 dBm 195000 GHz
10 dBm			-		M2[	1]			-46.17 dBm 000000 GHz
0 dBm									M1
-10 dBm						1			A
-20 dBm-0	1 -21.096	dBm	_	1			<u>;</u>	r — 1	1.1
-30 dBm									
-40 dBm			dest.	M4				. M3	MZ
-50 dBm	apploanthemill	folsour publications and a second s	Anathies more wat	laderater have a post	consubminuter	the subsequences	Northagenthe	went with an	multiple the
-60 dBm	_		-						
-70 dBm									
Start 2.306 Marker	GHz	-		1001 p	s		_	Stop	2.406 GHz
Type Ref	Trc 1	X-value	95 GHz	Y-value -1.27 dBm	Functio	on	Fun	ction Resu	lt
M2	1	2	.4 GHz	-46.17 dBm					
M3 M4	1		39 GHz 11 GHz	-46.20 dBm -41.55 dBm					
	N						0		16 A
Att SGL Count 8 1Pk Max	40 dB 2000/8000	SWT 1	8.9 µs 🖷	RBW 100 kHz VBW 300 kHz					0.19 dBm
SGL Count 8		SWT 1	8.9 µs 🕳		Mode Aut				0.19 dBm
SGL Count 8		SWT 1	8,9 µś 🖷					2.40	0,19 dBm 416580 GHz
SGL Count 8 9 1Pk Max		SWT 1	8.9 µs 🖷					2.40	
SGL Count 8 9 1Pk Max 20 dBm-		SWT 1	8.9 µs 🖷				MI	2.40	
SGL Count 8 PIPk Max 20 dBm 10 dBm D dBm		SWT 1	8.9 µš 🖷				~~/	2.40	
SGL Count 8 1Pk Max 20 dBm- 10 dBm-		SWT 1	8.9 µs 🗰				~~/	2.40	
SGL Count 8 PIPk Max 20 dBm 10 dBm D dBm		SWT 14	8.9 µs 🗰				~/Å	2.40	
SGL Count B 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm		SWT 1:	8,9 µs •				~~/\.	2.40	
SGL Count B PIPk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm		SWT 1					~/Å	2.40	
SGL Count B PIPk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm		SWT 1:	8,9 µs •				~_/\\	2.40	
SGL Count B PIPk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm		SWT 14					~/Å	2.40	
SGL Count B PIPk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm		SWT 1:					~~/\L	2.40	
SGL Count 8		SWT 14		VBW 300 kHz	MI		~/Å	2.40	
SGL Count 8	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	SWT 11			MI		~~/V		
SGL Count 8	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	SWT 1		VBW 300 kHz	MI				416580 GH2
SGL Count 8	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	SWT 14		VBW 300 kHz	MI				416580 GH2





SGL Count 100	0/1000							-
20 dBm				M	1[1]		2.40	0.22 dBm 415000 GHz
10 dBm				M	2[1]			-43.78 dBm
0 dBm							2.400	000000 GHz
		1			1	( )		million
-10 dBm						) — — I		
	-19,811 dBm					1		
-30 dBm			M4		1		1	1.00
-40 dBm	routernation	welling when whether the	amen Asuradialous	manutination	and have been	willing war	Monum	hall wood
-50 dBm							1	
-60 dBm			1			-	1	
-70 dBm	17		1001	nts			Stop	2.406 GHz
Marker							1	
Type Ref 1 M1		40415 GHz	Y-value 0.22 dBr	Func m	tion	Fund	tion Resul	t
M2 M3	1	2.4 GHz 2.39 GHz	-43.78 dBr -44.75 dBr	n				
M4		.3484 GHz	-40.17 dBr					
	40 dB SWT	: 7.60 dB 🐞 F	-DH5 248	Mode A	uto FFT	D-Hoppin	ng Ref	( T
E Spectrum Ref Level 27.4 Att SGL Count 100 PPk Max	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A		p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.4 Att SGL Count 100 1Pk Max 20 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.4 Att SGL Count 100 PPk Max	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.4 Att SGL Count 100 1Pk Max 20 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 • 1Pk Max 20 dBm- 10 dBm- 0 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm- 10 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 • 1Pk Max 20 dBm- 10 dBm- 0 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm- 10 dBm- 0 dBm- -10 dBm-	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	uto FFT	p-Hoppin		-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2,480	-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2,480	-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2,480	-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2,480	-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2,480	-2,37 dBm
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2.480	-2,37 dBn
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2.480	-2.37 dBn 00000 GH:
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2.480	-2.37 dBn 00000 GH:
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2.480	-2.37 dBn 00000 GH:
E Spectrum Ref Level 27.1 Att SGL Count 100 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	60 dBm Offset 40 dB SWT	: 7.60 dB 🐞 F	RBW 100 kHz	Mode A	1[1]		2.480	-2.37 dBn 00000 GH:





SGL Count 10	101 100		ane po	VBW 300 kHz	Mode /	Auto FFT			
●1Pk Max	1				M	1[1]			-2.54 dBm
20 dBm					M	2[1]			15000 GHz 45.02 dBm
10 dBm							<u> </u>	2.483	50000 GHz
			1			1		1	1 2
-10 dBm		_					1	1	
	L -22,374 d	lBm							
-30 d8m	M4					1 21		1 2 1	
-40 demiz	anation for the la	M9 Hauman	undered the march for	nthe automation	- help-linear	-	monthymania	Huntmann	medeneses
-50 dBm		_	-			1	1		
-60 dBm				1			J.,	1	
-70 dBm Start 2.476 (	GHz			1001 p	ots			Stop :	2.576 GHz
Marker Type   Ref	Tre	X-value	1	Y-value	Func	tion	Fue	ction Result	
M1	1	2.4801	15 GHz	-2.54 dBm -45.02 dBm		lion	, un	ction Result	
M2 M3	1	2	35 GHz .5 GHz	-46.44 dBm	5				
M2 M3 M4	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R		15 248		Ant1 Ho	pping R	ef (₩
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A		Ant1 Ho		
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 O dBm 10 dBm 10 dBm -10 dBm -20 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm 0 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 Bar Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 M4 Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 M4 Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2         M3           M3         M4           Bar         Spectrum           Ref Level 27         Att           SGL Count 80         10           10 dBm         10           10 dBm         10           -10 dBm         -20           -30 dBm         -30 dBm           -50 dBm         -60 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	15 248 Mode A	uto FFT	Ant1 Ho		-2,46 dBm
M2 M3 M4 M4 Spectrum Ref Level 27 Att SGL Count 80 • 1Pk Max 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	1 1 nd Edg 7.60 dBm 40 dB	2 2.490 e(Hopp Offset 7,/	.5 GHz D2 GHz Ding) N <sup>1</sup> 60 dB <b></b> R	-46.44 dBm -43.34 dBm VNT 3-DF BW 100 kHz	H5 248	uto FFT	Ant1 Ho	2,480	-2,46 dBm



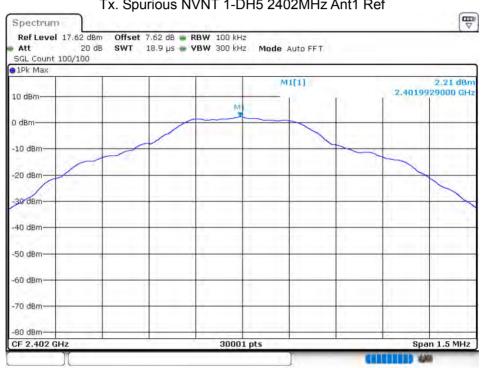
	F 1 1.1				
Ref Level 2	7.60 dBm	Offset 7.60 dB	🖷 RBW 100 kHz	V	X
Att	40 dB	SWT 227.5 µs	🖝 VBW 300 kHz	Mode Auto FFT	
SGL Count 1	.000/1000	)	1 2 4 1 2 4 1		
1Pk Max			1 1		
				M1[1]	-2.68 dBn
20 dBm				LACE 1	2.48015000 GH
10 dBm				M2[1]	-43.70 dBm 2.48350000 GH
					2.40030000 011
10 Bm-					
-Taild Ru					
-20 cBm-	_				
	1 -22,46	3 dBm			
-30 dBm					
CMA IN AND	1/14	MO			
-40 dBm	which has show	Anderetty manaderation me	many manual market	annal manuanter	or and an and a second and as second and a
-50 dBm					
					· · · · · · · · · · · · · · · · · · ·
-60 dBm					
-70 dBm	CH3	1	1001 pt	1	Stop 2.576 GHz
Marker	ditz		1001 pt	,	500p 2.070 GHz
Type   Ref	Tre	X-value	Y-value	Function	Function Result
	1	2.48015 GHz	-2.68 dBm	ranction	7 difectori Result
M1	1	2.4835 GHz	-43.70 dBm		
M1 M2	1				
	1	2.5 GHz	-43.82 dBm		



# R **NTEK**北测

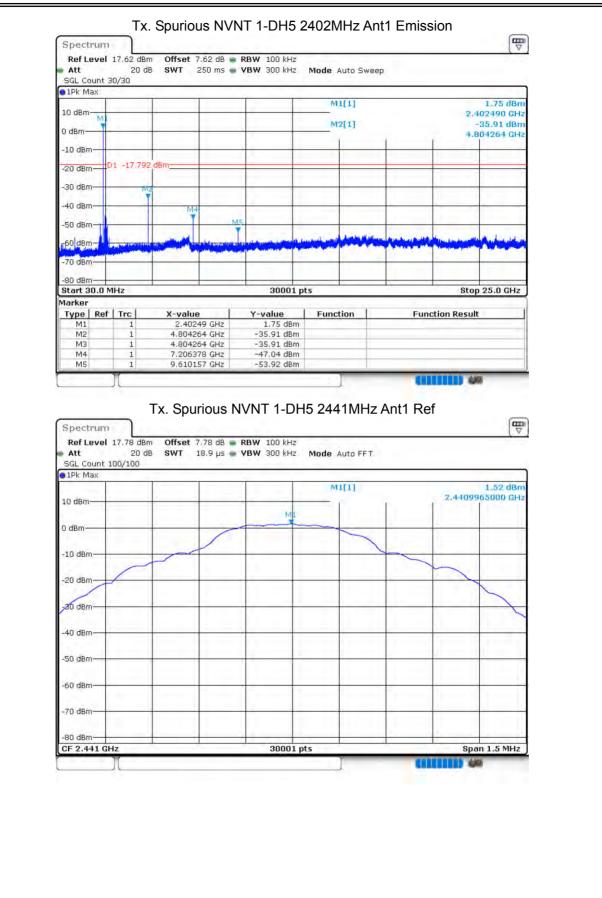
# 8.7 CONDUCTED RF SPURIOUS EMISSION

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant 1	-38.11	-20	Pass
NVNT	1-DH5	2441	Ant 1	-36.37	-20	Pass
NVNT	1-DH5	2480	Ant 1	-39.85	-20	Pass
NVNT	2-DH5	2402	Ant 1	-41.89	-20	Pass
NVNT	2-DH5	2441	Ant 1	-43.32	-20	Pass
NVNT	2-DH5	2480	Ant 1	-43.54	-20	Pass
NVNT	3-DH5	2402	Ant 1	-44.09	-20	Pass
NVNT	3-DH5	2441	Ant 1	-42.02	-20	Pass
NVNT	3-DH5	2480	Ant 1	-43.78	-20	Pass

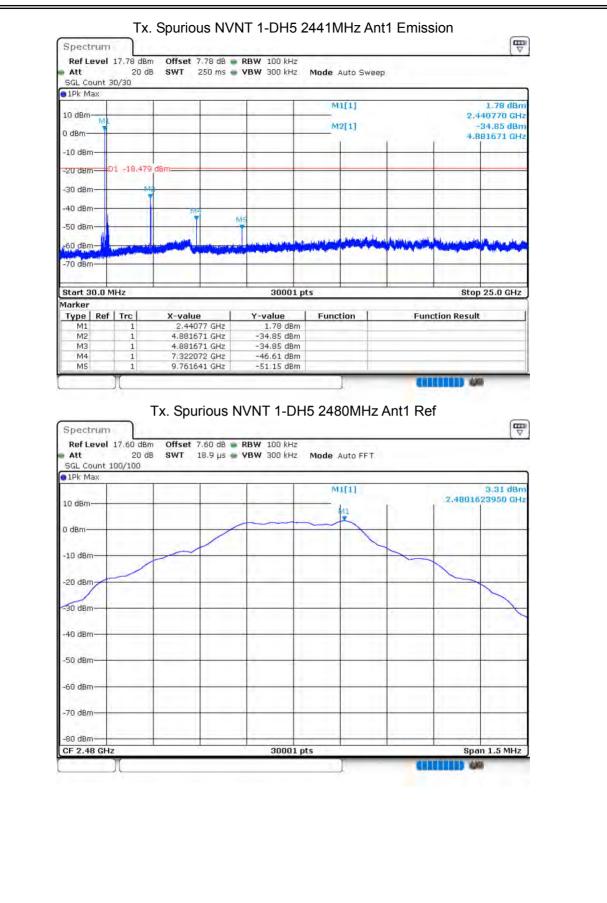


#### Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

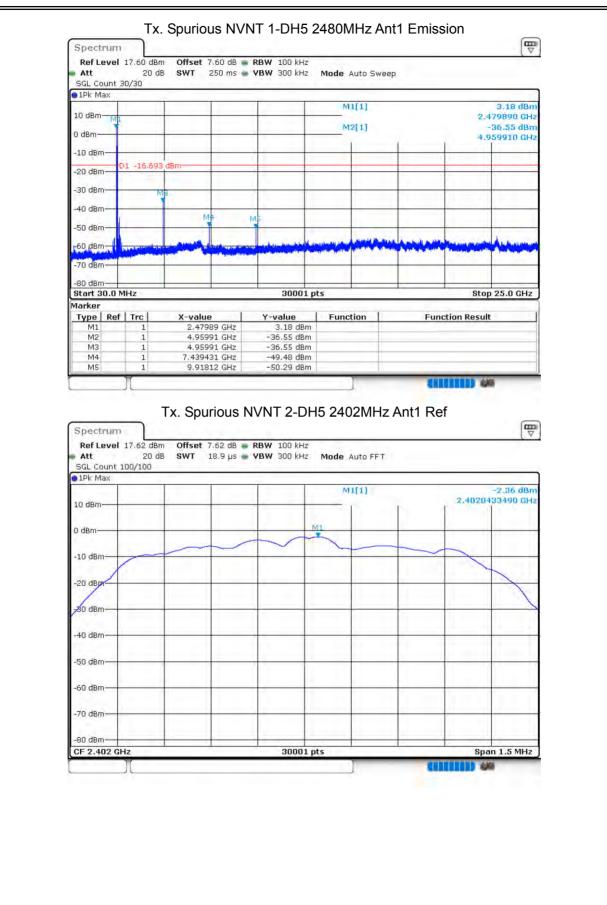




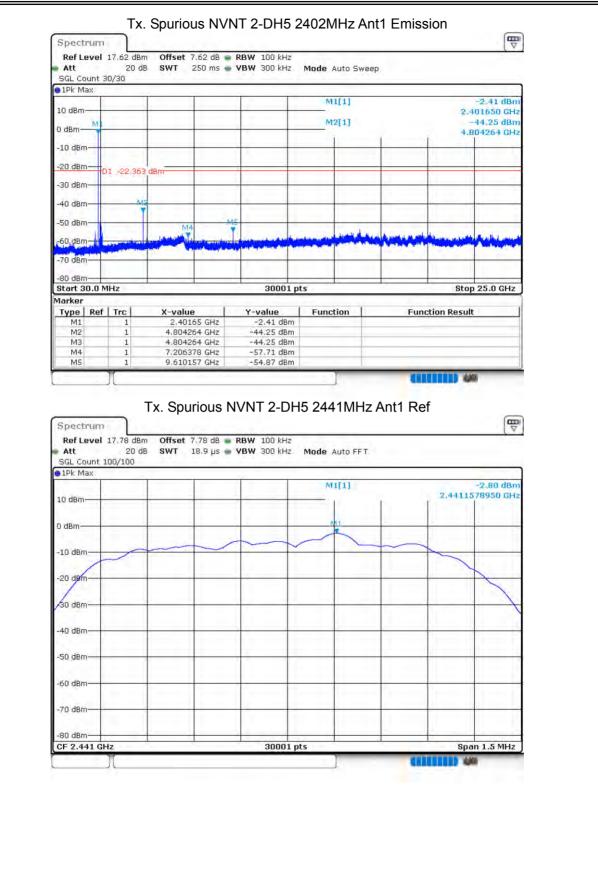




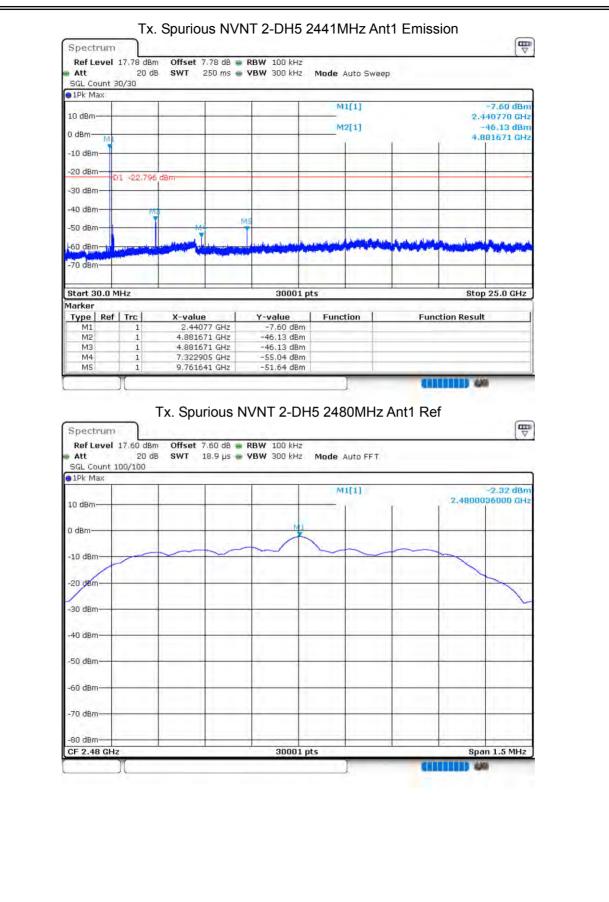




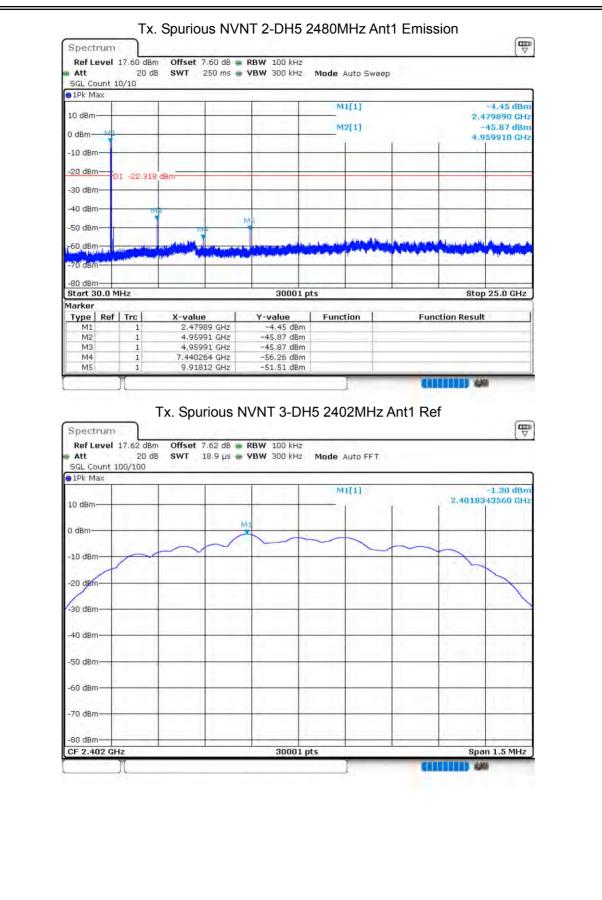




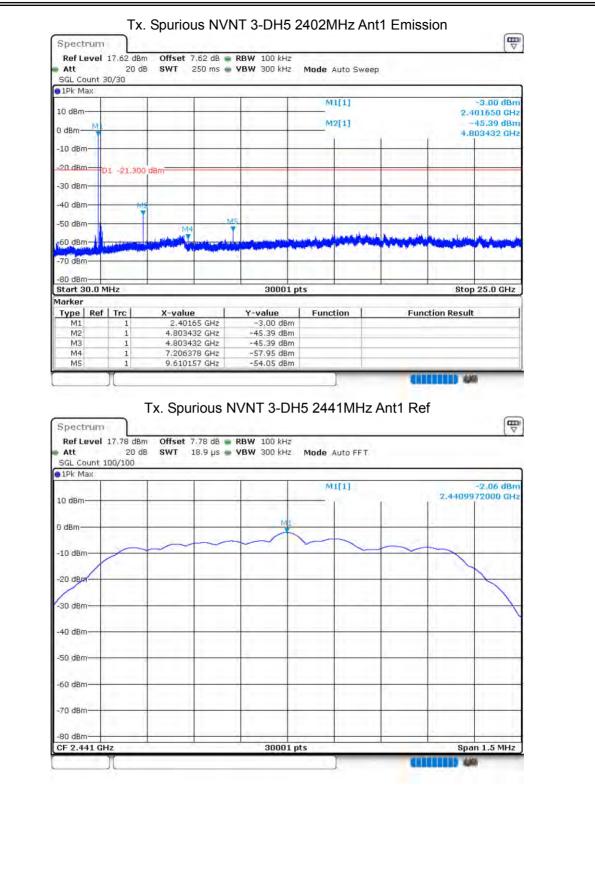




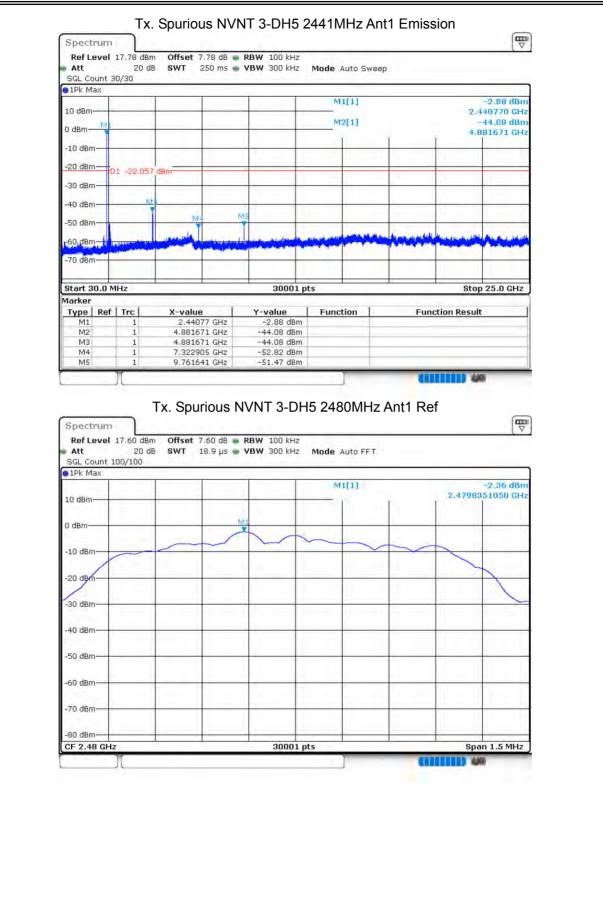














Att SGL Count	l 17.60 dB 20 c 30/30		3 <b>• RBW</b> 100 kł s <b>• VBW</b> 300 kł		: Auto Swe	ер		
1Pk Max								
10 dBm					M1[1]			-6.18 dBm
10 000					M2[1]			79890 GHz 46.15 dBm
0 dBm	1							59910 GHz
-10 dBm-								1 COLORED I
as dom								
-20 dBm	D1 -22.35	7 dBm		-	-	-		
30 dBm	14 (FR/24							
JU UDIN								11
-40 dBm	-	NB		+		-		
-50 dBm		MA	Ma					·
-50 UBIII-				1 2 2 2 4			1074	
60 dBm —	Total and the second second	and the second second	relationst the stand in Louis	Strachtelle Brain			And an addition of the	Anthroph
70 dBm				1220			Law and	1.2.2.2.
-70 060			- 1 A					1.000
-80 dBm					-			
Start 30.0	MHz		3000	01 pts			Stop	25.0 GHz
Marker		1011112	1-				Carl Contractor	
	f Trc	X-value	Y-value		nction	Func	tion Result	
M1 M2	1	2.47989 GH 4.95991 GH						
1716	1	4.95991 GH						
M3								
M3 M4	1	7.439431 GH	z -54.67 d	Bm	1			

END OF REPORT