



RADIO TEST REPORT FCC ID: 2BFTW-SPCF1

Product: TV-BOX
Trade Mark: STATIONPC

Model No.: Station F1 Family Model: N/A Report No.: S24052901205001 Issue Date: Jun 18, 2024

Prepared for

StationPC Technology Co., LTD Card 2102D, Block 1, Hongyu Building, 57 Zhongshan 4th Road, East District, Zhongshan City, China

Prepared by

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





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1 TEST RESULT CERTIFICATION

Applicant's name:	StationPC Technology Co., LTD
Address:	Card 2102D, Block 1, Hongyu Building, 57 Zhongshan 4th Road, East District, Zhongshan City, China
Manufacturer's Name:	StationPC Technology Co., LTD
Address:	Card 2102D, Block 1, Hongyu Building, 57 Zhongshan 4th Road, East District, Zhongshan City, China
Product description	
Product name:	TV-BOX
Trademark:	STATIONPC
Model and/or type reference:	Station F1
Family Model:	N/A
Test Sample Number	S240529012005
Date of tests:	May 30, 2024 ~ Jun 18, 2024

Measurement Procedure Used:

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

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

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

Prepared By: Joe. Yan Joe.Yan Approved : Alex Li By : Alex Li (Project Engineer) (Supervisor) (Manager)

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

ACCR Certificate #4298.01

Remark:

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





3 FACILITIES AND ACCREDITATIONS

3.1 FACILITIES

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

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

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

3.2 LABORATORY ACCREDITATIONS AND LISTINGS

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

3.3 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	Conducted Emission Test	±2.80dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(30MHz~1GHz)	±2.64dB
5	All emissions, radiated(1GHz~6GHz)	±2.40dB
6	All emissions, radiated(>6GHz)	±2.52dB
7	Temperature	±0.5°C
8	Humidity	±2%
9	All emissions, radiated(9KHz~30MHz)	±6dB
10	Occupied bandwidth	±3.7%





4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification		
Equipment	TV-BOX	
Trade Mark	STATIONPC	
FCC ID	2BFTW-SPCF1	
Model No.	Station F1	
Family Model	N/A	
Model Difference	This model contains 2 different combinations for DDR, which are 2GB+32GB, 4GB+32GB, and have the same running rate. We choose 4GB+32GB as the test sample.	
Operating Frequency	2402MHz~2480MHz	
Modulation	GFSK, π/4-DQPSK, 8-DPSK	
Number of Channels	79 Channels	
Antenna Type	PIFA Antenna	
Antenna Gain	3.23 dBi	
Adapter	MODEL:KYT050200BU INPUT:100-240V~50/60Hz 0.35A Max OUTPUT:5V2A	
Battery	N/A	
Rating	DC 5V From Adapter AC 120V/60Hz	
HW Version	V1.2	
SW Version	StationF1_StationOS_v1.5.10.11_eMMc_240425	

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.





Revision History				
Report No.	Version	Description	Issued Date	
S24052901205001	Rev.01	Initial issue of report	Jun 18, 2024	
		1	J1	



5 DESCRIPTION OF TEST MODES

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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 π /4-DQPSK modulation; 3Mbps for 8-DPSK modulation) were used for all test.

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

Carrier Frequency and Channel list:

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

Note: fc=2402MHz+k×1MHz k=0 to 78

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

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

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

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

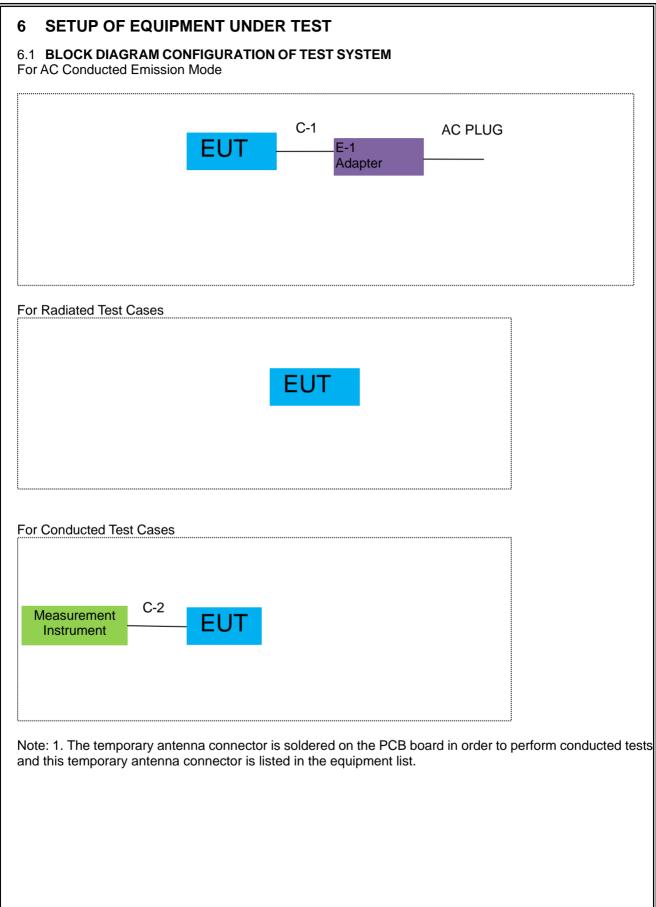
Note: For radiated test cases, the worst mode data rate 3Mbps was reported only, because this data rate has the highest RF output power at preliminary tests, and no other significantly frequencies found in conducted spurious emission.

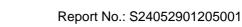
For Conducted Test Cases		
Final Test Mode	Description	
Mode 2	CH00(2402MHz)	
Mode 3	CH39(2441MHz)	
Mode 4	CH78(2480MHz)	
Mode 5	Hopping mode	

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









6.2 SUPPORT EQUIPMENT

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

Certificate #4298.01

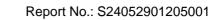
Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Adapter	N/A	N/A	Peripherals

lac.

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	Type-C 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-

ACCREDITED Certificate #4298.01

Radiation& Conducted Test equipment

Vaulatio		lest equipment					
	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4440A	MY41000130	2024.03.12	2025.03.11	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2024.04.26	2025.04.25	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2024.04.26	2025.04.25	1 year
4	Test Receiver	R&S	ESPI7	101318	2024.03.12	2025.03.11	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2024.03.11	2025.03.10	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2023.05.06	2026.05.05	3 year
7	Horn Antenna	SCHWARZBE CK	BBHA 9120 D	2816	2023.01.12	2026.01.11	3 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2022.11.07	2025.11.06	3 year
9	Amplifier	EMC	EMC051835 SE	980246	2024.01.23	2025.01.22	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2023.11.03	2026.11.02	3 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2024.04.25	2025.04.24	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2022.06.17	2025.06.16	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2022.06.17	2025.06.16	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2022.06.17	2025.06.16	3 year
15	Filter	TRILTHIC	2400MHz	29	2023.03.26	2026.03.25	3 year
16	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

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





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

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



7 TEST REQUIREMENTS

7.1 CONDUCTED EMISSIONS TEST

7.1.1 Applicable Standard

According to FCC Part 15.207(a)

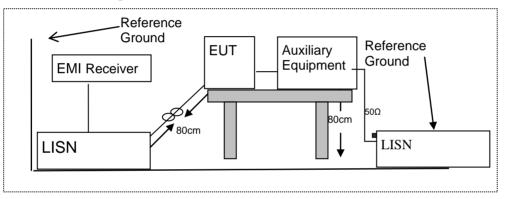
7.1.2 Conformance Limit

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

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

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

7.1.3 Test Configuration



7.1.4 Test Procedure

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

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable
 may be terminated, if required, using the correct terminating impedance. The overall length shall not
 exceed 1 m.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item –EUT Test Photos.

7.1.5 Test Results

Pass





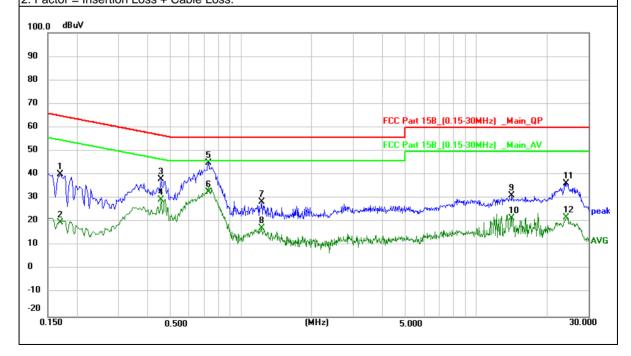
7.1.6 Test Results

EUT:	TV-BOX	Model Name :	Station F1
Temperature:	22 ℃	Relative Humidity:	57%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Demerly
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1700	32.20	9.97	42.17	64.96	-22.79	QP
0.1700	12.08	9.97	22.05	54.96	-32.91	AVG
0.4540	28.68	10.55	39.23	56.80	-17.57	QP
0.4540	19.97	10.55	30.52	46.80	-16.28	AVG
0.7260	33.41	11.11	44.52	56.00	-11.48	QP
0.7260	23.29	11.11	34.40	46.00	-11.60	AVG
1.2260	17.90	12.12	30.02	56.00	-25.98	QP
1.2260	7.61	12.12	19.73	46.00	-26.27	AVG
14.1540	22.75	9.70	32.45	60.00	-27.55	QP
14.1540	13.11	9.70	22.81	50.00	-27.19	AVG
24.1980	28.39	9.65	38.04	60.00	-21.96	QP
24.1980	12.98	9.65	22.63	50.00	-27.37	AVG

Remark:

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







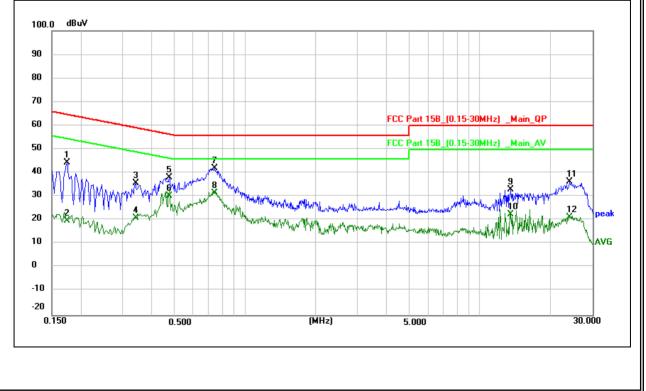
EUT:	TV-BOX	Model Name :	Station F1
Temperature:	25 ℃	Relative Humidity:	62%
Pressure:	1010hPa	Phase :	Ν
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1740	34.56	9.97	44.53	64.77	-20.24	QP
0.1740	9.96	9.97	19.93	54.77	-34.84	AVG
0.3420	25.39	10.32	35.71	59.15	-23.44	QP
0.3420	10.79	10.32	21.11	49.15	-28.04	AVG
0.4740	27.60	10.59	38.19	56.44	-18.25	QP
0.4740	19.92	10.59	30.51	46.44	-15.93	AVG
0.7420	30.98	11.13	42.11	56.00	-13.89	QP
0.7420	20.52	11.13	31.65	46.00	-14.35	AVG
13.4820	23.46	9.70	33.16	60.00	-26.84	QP
13.4820	12.90	9.70	22.60	50.00	-27.40	AVG
23.9940	26.69	9.65	36.34	60.00	-23.66	QP
23.9940	11.82	9.65	21.47	50.00	-28.53	AVG

Remark:

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

2. Factor = Insertion Loss + Cable Loss.





7.2 RADIATED SPURIOUS EMISSION

7.2.1 Applicable Standard

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

7.2.2 Conformance Limit

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

According to 1 00 1 art15.20	Recording to FOOT art 15.200, Restricted bands					
MHz	MHz	MHz	GHz			
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15			
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46			
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75			
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5			
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2			
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5			
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7			
6.26775-6.26825	123-138	2200-2300	14.47-14.5			
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2			
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4			
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12			
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0			
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8			
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5			
12.57675-12.57725	322-335.4	3600-4400	(2)			
13.36-13.41						

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

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

Limits of Radiated Emission Measurement(Above 1000MHz)

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

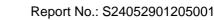
Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

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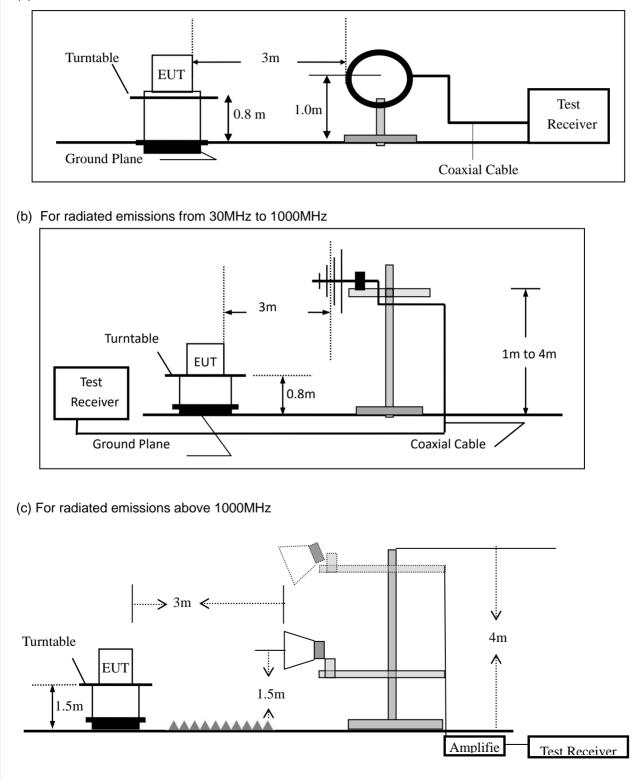
7.2.3 Measuring Instruments

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.

Certificate #4298.01

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

	-
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 t	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						
Ab aug 4000	Peak	1 MHz	1 MHz						
Above 1000	Average	1 MHz	1 MHz						

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

7.2.6 Test Results

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

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Joe.Yan

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

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





Spurious Emission below 1GHz (30MHz to 1GHz) All the modulation modes have been tested, and the worst result was report as below: EUT: TV-BOX Model Name : Station F1 Temperature: **25°**℃ 55% **Relative Humidity:** Test Mode: Mode 4 Pressure: 1010hPa DC 5V FROM ADAPTER AC 120V/60HZ Test Voltage : Meter Emission Frequency Factor Limits Margin Polar Reading Level Remark (H/V) (MHz) (dBuV) (dB) (dBuV/m) (dBuV/m) (dB) 17.98 V 32.2924 18.84 36.82 40.00 -3.18 QP V 106.7587 19.13 30.50 43.50 -13.00 QP 11.37 V 143.8292 14.84 QP 18.95 33.79 43.50 -9.71 V 157.5586 15.46 15.79 31.25 43.50 -12.25 QP QP V 374.6225 9.29 21.76 31.05 46.00 -14.95 V 576.6443 25.31 36.97 46.00 -9.03 QP 11.66 **Remark:** Emission Level= Meter Reading+ Factor, Margin= Emission Level - Limit dBu¥/m 80.0 70 60 FCC Part15 RE-Class B_30-1000MHz 50 Margin -6 dB 40 Å 3 2 **4** X 5 and where the strend of the st 30 A MAA 20 10 0.0 30.000 (MHz) 1000.000 60.00 300.00





Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Н	49.5328	7.36	20.49	27.85	40.00	-12.15	QP
Н	103.0800	8.83	19.08	27.91	43.50	-15.59	QP
Н	143.8293	14.38	14.84	29.22	43.50	-14.25	QP
Н	191.7450	14.73	17.96	32.69	43.50	-10.81	QP
Н	255.6230	14.60	19.45	34.05	46.00	-11.95	QP
Н	701.7610	8.62	27.11	35.73	46.00	-10.27	QP
80.0	dBuV/m						
70							
60					FCC Part15 RE-Class I	B 30-1000MHz	
50					Margin -6 dB		
40						6	
30	1		3	Martin Martin	man do ^{ang} alamonta	North more the man	ang the sector
20	honeronderblitten at forset Marshell about	WWW. Martinger and a factor of the	with the state of				
10							
0.0							
	100 000).00	1	MHz)	300.00		1000.000





■ Spurious	Emission	h Above 1	GHz (1GH	z to 25GF	z)					
EUT:		-BOX		Mode	,		Statior	ר F1		
Temperature	: 20	°C		Relat	ve Humidity	<i>/</i> :	48%			
Test Mode:			e3/Mode4	Test I			Joe.Ya	an		
						twas				
	All the modulation modes have been tested, and the worst result was report as below:									
Frequency	Read Level	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Li	mits	Margin	Remark	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dB	µV/m)	(dB)	Remark	Comment
	,		Low Chanr	nel (2402 M	IHz)(8-DPSK)Abo	ove 1G	. ,		
4804.214	64.54	5.21	35.59	44.30	61.04	74	4.00	-12.96	Pk	Vertical
4804.214	43.88	5.21	35.59	44.30	40.38	54	4.00	-13.62	AV	Vertical
7206.265	62.61	6.48	36.27	44.60	60.76	74	4.00	-13.24	Pk	Vertical
7206.265	41.59	6.48	36.27	44.60	39.74	54	4.00	-14.26	AV	Vertical
4804.109	63.21	5.21	35.55	44.30	59.67	74	4.00	-14.33	Pk	Horizontal
4804.109	41.71	5.21	35.55	44.30	38.17	54	4.00	-15.83	AV	Horizontal
7206.224	61.16	6.48	36.27	44.52	59.39	74	4.00	-14.61	Pk	Horizontal
7206.224	41.20	6.48	36.27	44.52	39.43	54	4.00	-14.57	AV	Horizontal
			Mid Chann	el (2441 M	Hz)(8-DPSK)Abo	ove 1G			
4882.396	65.28	5.21	35.66	44.20	61.95	74	4.00	-12.05	Pk	Vertical
4882.396	43.41	5.21	35.66	44.20	40.08	54	4.00	-13.92	AV	Vertical
7323.241	63.32	7.10	36.50	44.43	62.49	74	4.00	-11.51	Pk	Vertical
7323.241	43.42	7.10	36.50	44.43	42.59	54	4.00	-11.41	AV	Vertical
4882.108	62.20	5.21	35.66	44.20	58.87	74	4.00	-15.13	Pk	Horizontal
4882.108	42.71	5.21	35.66	44.20	39.38	54	4.00	-14.62	AV	Horizontal
7323.132	61.75	7.10	36.50	44.43	60.92	74	4.00	-13.08	Pk	Horizontal
7323.132	41.98	7.10	36.50	44.43	41.15		4.00	-12.85	AV	Horizontal
			High Chanr	nel (2480 M	Hz)(8-DPSK) Ab	ove 1G	i		
4960.397	65.15	5.21	35.52	44.21	61.67	74	4.00	-12.33	Pk	Vertical
4960.397	44.34	5.21	35.52	44.21	40.86	54	4.00	-13.14	AV	Vertical
7440.201	63.37	7.10	36.53	44.60	62.40	74	4.00	-11.60	Pk	Vertical
7440.201	42.38	7.10	36.53	44.60	41.41	54	4.00	-12.59	AV	Vertical
4960.225	62.53	5.21	35.52	44.21	59.05	74	4.00	-14.95	Pk	Horizontal
4960.225	41.84	5.21	35.52	44.21	38.36	54	4.00	-15.64	AV	Horizontal
7440.298	61.56	7.10	36.53	44.60	60.59	74	4.00	-13.41	Pk	Horizontal
7440.298	42.32	7.10	36.53	44.60	41.35	54	4.00	-12.65	AV	Horizontal

Note:

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

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

(3)Only the worst data is recorded in the report, the data rates (3Mbps for 8-DPSK modulation) test result is the worst.





Spurious	Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz									
EUT:	TV-BOX Model No.: S						Stati	on F1		
Temperature:	20 ℃			Rel	ative Humidi	ty:	48%			
Test Mode:	Mode2/ M	lode4		Tes	t By:		Joe.	Yan		
All the modul	ation mod	es have	been test	ed, and	the worst res	sult wa	as rep	ort as be	low:	
Frequency	Meter Reading	Cable Loss	Antenna Factor	Preamp Factor	Emission Level	Lim	nits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµ'	V/m)	(dB)	Туре	
			31	/lbps(8-D	PSK)-Non-ho	pping				
2310.00	59.01	2.97	27.80	43.80	45.98	74	4	-28.02	Pk	Horizontal
2310.00	45.39	2.97	27.80	43.80	32.36	54	4	-21.64	AV	Horizontal
2310.00	59.38	2.97	27.80	43.80	46.35	74	4	-27.65	Pk	Vertical
2310.00	42.71	2.97	27.80	43.80	29.68	54	4	-24.32	AV	Vertical
2390.00	58.78	3.14	27.21	43.80	45.33	74	4	-28.67	Pk	Vertical
2390.00	43.39	3.14	27.21	43.80	29.94	54	4	-24.06	AV	Vertical
2390.00	57.16	3.14	27.21	43.80	43.71	74	4	-30.29	Pk	Horizontal
2390.00	44.12	3.14	27.21	43.80	30.67	54	4	-23.33	AV	Horizontal
2483.50	59.90	3.58	27.70	44.00	47.18	74	4	-26.82	Pk	Vertical
2483.50	43.68	3.58	27.70	44.00	30.96	54	4	-23.04	AV	Vertical
2483.50	60.10	3.58	27.70	44.00	47.38	74	4	-26.62	Pk	Horizontal
2483.50	44.40	3.58	27.70	44.00	31.68	54	4	-22.32	AV	Horizontal
				3Mbps(8	-DPSK)-hopp	ing				
2310.00	51.90	2.97	27.80	43.80	38.87	74.	00	-35.13	Pk	Vertical
2310.00	42.07	2.97	27.80	43.80	29.04	54.	00	-24.96	AV	Vertical
2310.00	53.15	2.97	27.80	43.80	40.12	74.	00	-33.88	Pk	Horizontal
2310.00	45.06	2.97	27.80	43.80	32.03	54.	00	-21.97	AV	Horizontal
2390.00	54.31	3.14	27.21	43.80	40.86	74.	00	-33.14	Pk	Vertical
2390.00	42.67	3.14	27.21	43.80	29.22	54.	00	-24.78	AV	Vertical
2390.00	52.86	3.14	27.21	43.80	39.41	74.	00	-34.59	Pk	Horizontal
2390.00	41.63	3.14	27.21	43.80	28.18	54.	00	-25.82	AV	Horizontal
2483.50	54.97	3.58	27.70	44.00	42.25	74.	00	-31.75	Pk	Vertical
2483.50	44.04	3.58	27.70	44.00	31.32	54.	00	-22.68	AV	Vertical
2483.50	54.40	3.58	27.70	44.00	41.68	74.	00	-32.32	Pk	Horizontal
2483.50	44.83	3.58	27.70	44.00	32.11	54.	00	-21.89	AV	Horizontal

Note:

(1) All other emissions more than 20dB below the limit.(2)Only the worst data is recorded in the report, the data rates (3Mbps for 8-DPSK modulation) test result is the worst.





EUT:	ious Emission in Restricted Band 326 TV-BOX							Station F1			
Temperature:	20 °C				Relat	ive Humidit	y:	48%			
Test Mode:	Mode	e2/ Mode	94		Test I	By:	-	Joe.۱	/an		
All the modula	ation mode	es have	been teste	ed, a	and the	e worst res	ult wa	is rep	ort as be	low:	
Frequency	Reading Level	Cable Loss	Antenna Factor		eamp actor	Emission Level	Lin	nits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµ	ıV/m)	(dB)	Туре	
3260	60.65	4.04	29.57	44	4.70	49.56	49.56 74		-24.44	Pk	Vertical
3260	55.78	4.04	29.57	44	4.70	44.69 54		54	-9.31	AV	Vertical
3260	61.39	4.04	29.57	44	4.70	50.30 74		'4	-23.70	Pk	Horizontal
3260	57.36	4.04	29.57	44	4.70	46.27	5	64	-7.73	AV	Horizontal
3332	64.96	4.26	29.87	44	4.40	54.69	7	'4	-19.31	Pk	Vertical
3332	54.02	4.26	29.87	44	4.40	43.75	5	64	-10.25	AV	Vertical
3332	61.88	4.26	29.87	44	4.40	51.61	7	'4	-22.39	Pk	Horizontal
3332	53.77	4.26	29.87	44	4.40	43.50	5	54	-10.50	AV	Horizontal
17797	44.02	10.99	43.95	43	3.50	55.46	7	'4	-18.54	Pk	Vertical
17797	32.76	10.99	43.95	43	3.50	44.20	5	64	-9.80	AV	Vertical
17788	44.16	11.81	43.69	44	4.60	55.06	7	'4	-18.94	Pk	Horizontal
17788	31.40	11.81	43.69	44	4.60	42.30	5	4	-11.70	AV	Horizontal

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



7.3 NUMBER OF HOPPING CHANNEL

7.3.1 Applicable Standard

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

7.3.2 Conformance Limit

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

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

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode 5(1Mbps)	Test By:	Joe.Yan



7.4 HOPPING CHANNEL SEPARATION MEASUREMENT

7.4.1 Applicable Standard

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

7.4.2 Conformance Limit

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

7.4.3 Measuring Instruments

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

7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

7.4.5 Test Procedure

The testing follows ANSI C63.10-2013 clause 7.8.2

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

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

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

The EUT was operating in controlled its channel.

Use the following spectrum analyzer settings:

Span = Measurement Bandwidth or Channel Separation

RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.

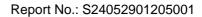
VBW ≥ RBW Sweep = auto

Detector function = peak Trace = max hold

7.4.6 Test Results

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Joe.Yan





7.5 AVERAGE TIME OF OCCUPANCY (DWELL TIME)

7.5.1 Applicable Standard

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

7.5.2 Conformance Limit

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

Certificate #4298.01

7.5.3 Measuring Instruments

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

7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

7.5.5 Test Procedure

The testing follows ANSI C63.10-2013 clause 7.8.4 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT must have its hopping function enabled. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel RBW \geq 1MHz VBW \geq RBW Sweep = as necessary to capture the entire dwell time per hopping channel Detector function = peak Trace = max hold Measure the maximum time duration of one single pulse. Set the EUT for DH5, DH3 and DH1 packet transmitting. Measure the maximum time duration of one single pulse.



7.5.6 **Test Results**

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 ℃	Relative Humidity:	Station F1 48% Joe.Yan
Test Mode:	Mode2/Mode3/Mode4	Test By:	Joe.Yan

Certificate #4298.01

Test data reference attachment.

Note:

A Period Time = (channel number)*0.4

DH1 Dwell time: Reading * (1600/2)*31.6/(channel number) DH3 Dwell time: Reading * (1600/4)*31.6/(channel number) DH5 Dwell time: Reading * (1600/6)*31.6/(channel number)

For Example:

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





7.6 20DB BANDWIDTH TEST

7.6.1 Applicable Standard

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

7.6.2 Conformance Limit

No limit requirement.

7.6.3 Measuring Instruments

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

7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

7.6.5 Test Procedure

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

Certificate #4298.01

7.6.6 Test Results

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Joe.Yan





7.7 PEAK OUTPUT POWER

7.7.1 Applicable Standard

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

7.7.2 Conformance Limit

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

7.7.3 Measuring Instruments

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

7.7.4 Test Setup

Please refer to Section 6.1 of this test report.

7.7.5 Test Procedure

The testing follows ANSI C63.10-2013 clause 7.8.5.

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

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

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

The EUT was operating in controlled its channel.

Use the following spectrum analyzer settings:

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

 $RBW \ge the 20 dB$ bandwidth of the emission being measured

 $VBW \ge RBW$

Sweep = auto

Detector function = peak Trace = max hold

7.7.6 Test Results

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Joe.Yan





7.8 CONDUCTED BAND EDGE MEASUREMENT

7.8.1 Applicable Standard

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

7.8.2 Conformance Limit

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

7.8.3 Measuring Instruments

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

7.8.4 Test Setup

Please refer to Section 6.1 of this test report.

7.8.5 Test Procedure

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

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

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

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

The EUT must have its hopping function enabled.

Use the following spectrum analyzer settings:

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

RBW = 100KHz

VBW = 300KHz

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

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

Repeat above procedures until all measured frequencies were complete.

7.8.6 Test Results

EUT:	TV-BOX	Model No.:	Station F1
Temperature:	20 °C	Relative Humidity:	
Test Mode:	Mode2 /Mode4/ Mode 5	Test By:	Joe.Yan





7.9 SPURIOUS RF CONDUCTED EMISSION

7.9.1 Applicable Standard

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

7.9.2 Conformance Limit

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

7.9.3 Measuring Instruments

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

7.9.4 Test Setup

Please refer to Section 6.1 of this test report.

7.9.5 Test Procedure

Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured.

- b) Set the RBW = 100 kHz.
- c) Set the VBW \geq [3 × RBW].
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level.

Then the limit shall be attenuated by at least 20 dB relative to the maximum amplitude level in 100 kHz.

7.9.6 Test Results

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





7.10 ANTENNA APPLICATION

7.10.1 Antenna Requirement

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

7.10.2 Result

The EUT antenna is PIFA Antenna (Gain: 3.23 dBi). It comply with the standard equirement.



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

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

7.11.2 Frequency Hopping System

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

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

7.11.3 EUT Pseudorandom Frequency Hopping Sequence

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

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





8 TEST RESULTS

8.1 DWELL TIME

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.399	79.401	199	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.655	187.015	113	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.912	276.64	95	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.39	81.9	210	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.64	221.4	135	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.888	254.144	88	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.387	85.527	221	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.64	214.84	131	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.896	286.704	99	31600	400	Pass

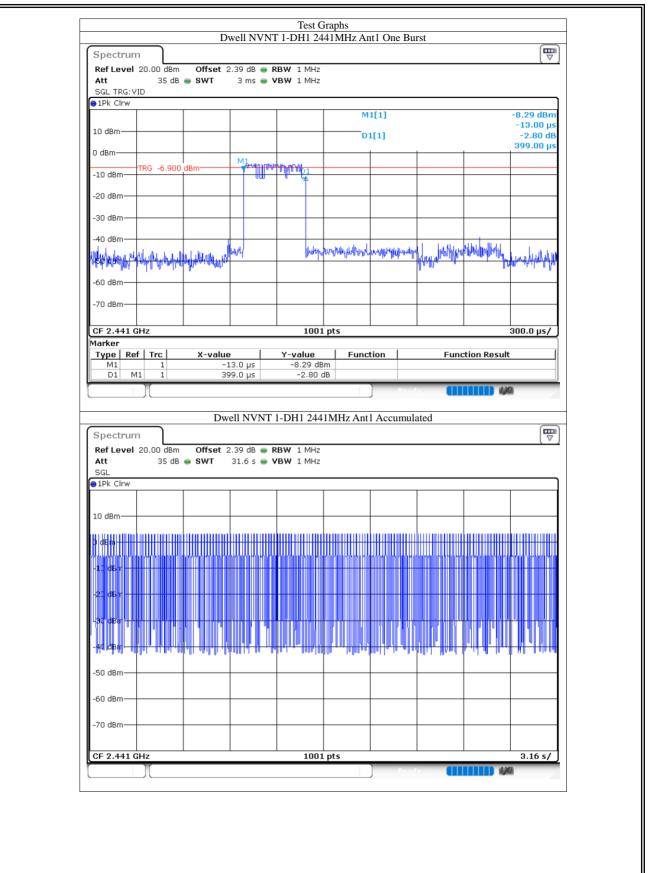


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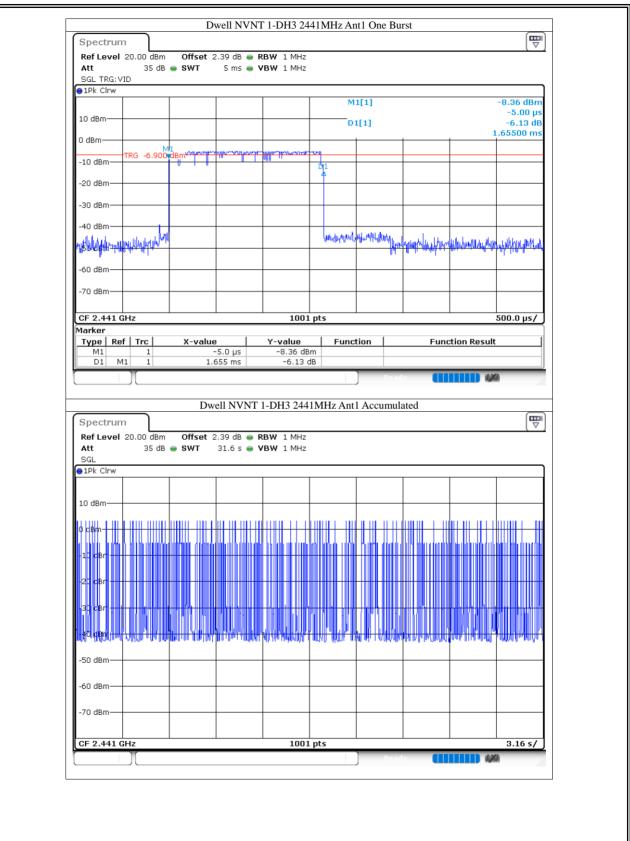
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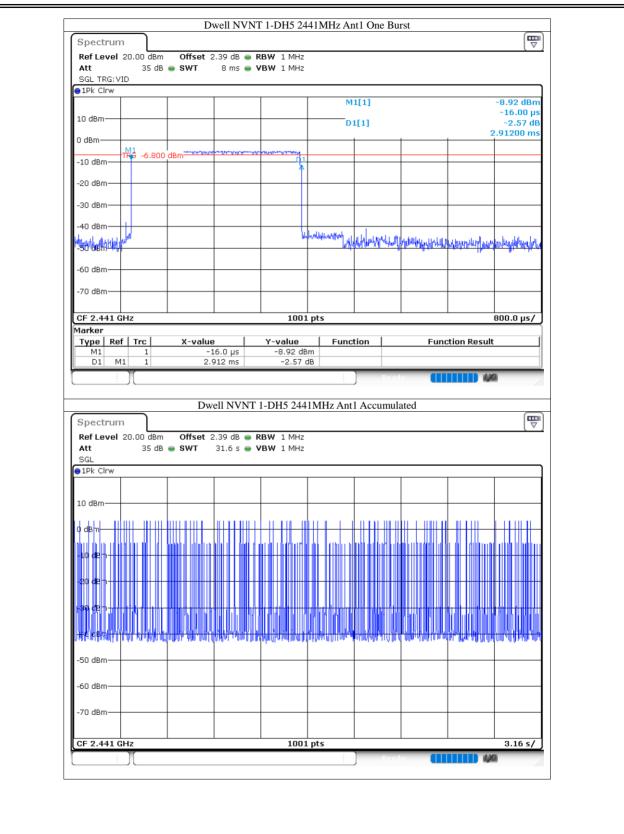
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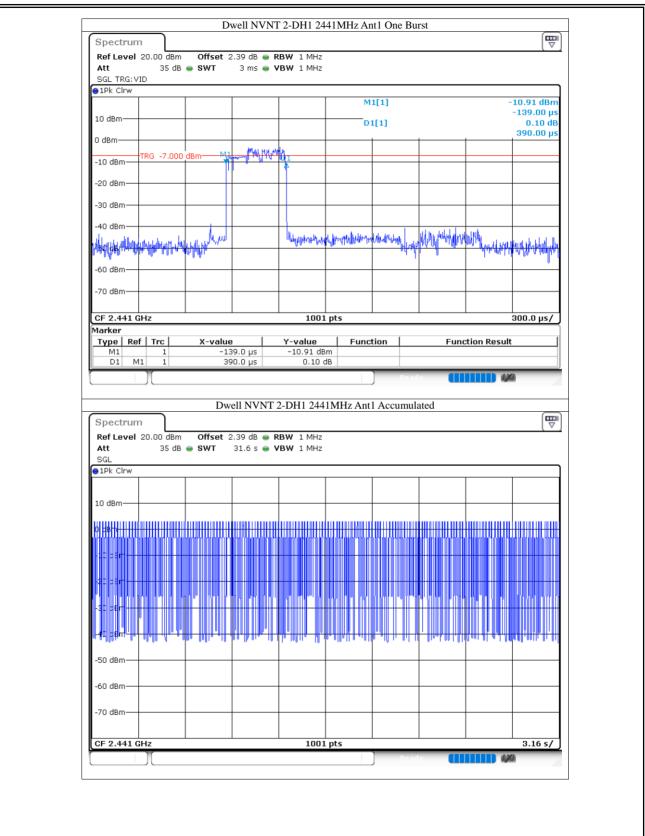
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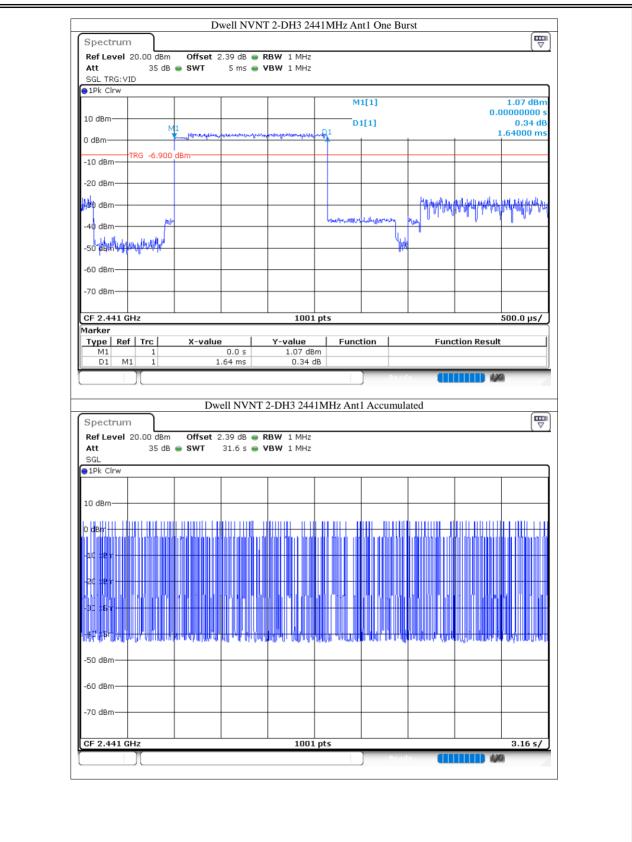
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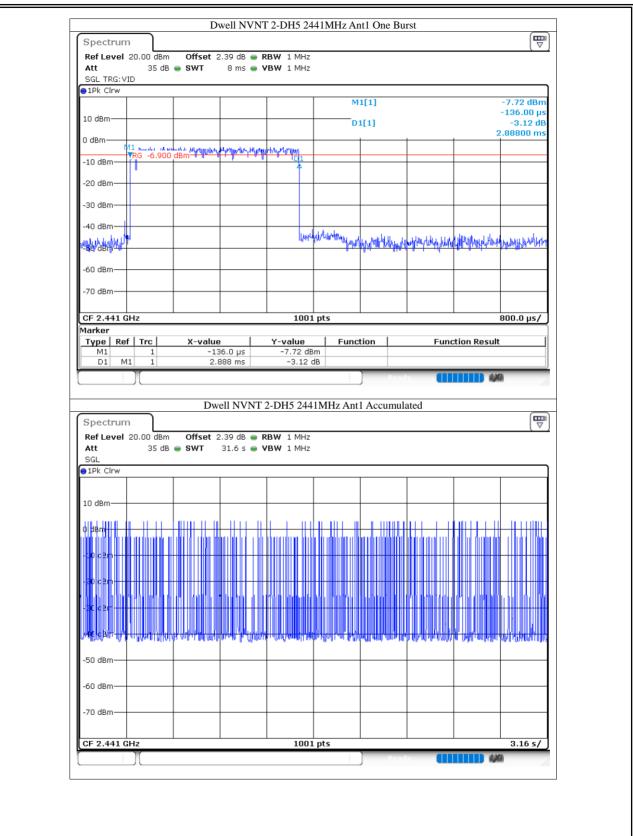
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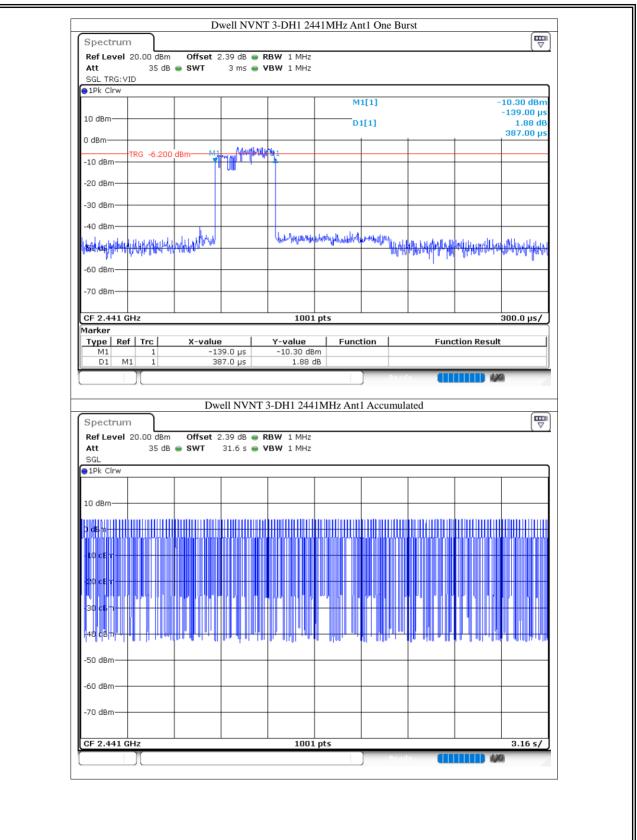
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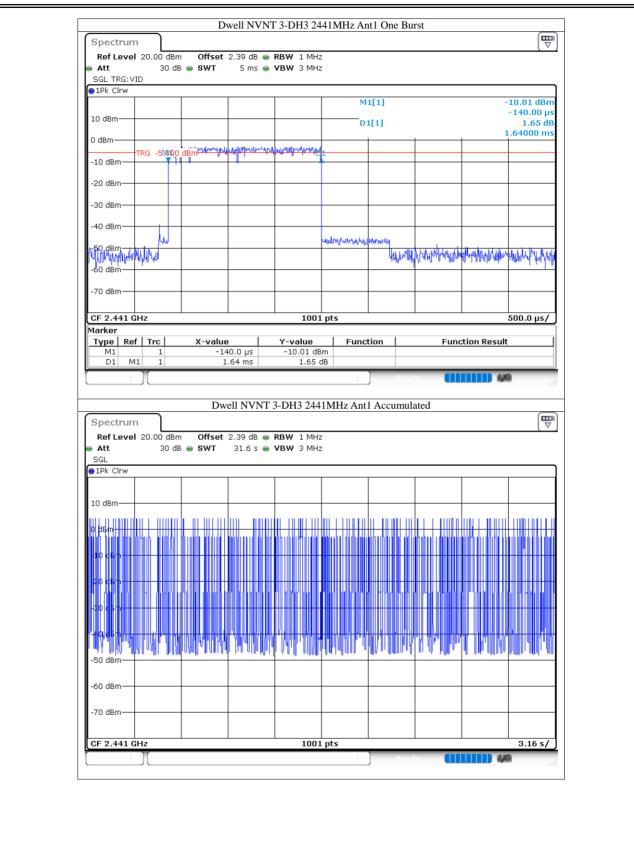
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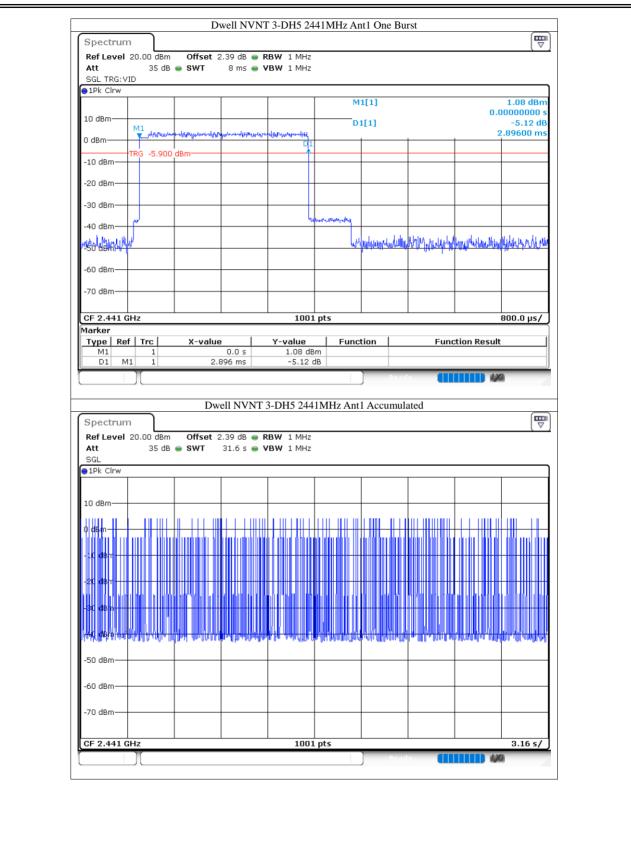
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8.2 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	3.31	21	Pass
NVNT	1-DH5	2441	Ant1	3.34	21	Pass
NVNT	1-DH5	2480	Ant1	2.73	21	Pass
NVNT	2-DH5	2402	Ant1	3.94	21	Pass
NVNT	2-DH5	2441	Ant1	3.98	21	Pass
NVNT	2-DH5	2480	Ant1	3.33	21	Pass
NVNT	3-DH5	2402	Ant1	4.9	21	Pass
NVNT	3-DH5	2441	Ant1	4.91	21	Pass
NVNT	3-DH5	2480	Ant1	4.32	21	Pass





Spectrum								
SGL Count 100/10	dB SWT	2.38 dB 👄 RB 1 ms 👄 VB		Mode Aut	o Sweep			
●1Pk Max				M	1[1]			3.31 dBm
10 dBm							2.402	213990 GHz
0 dBm	_			M1				
-10 dBm								
-20 dBm								
-30 dBm								
-40 dBm								
-50 dBm								
-60 dBm								
-70 dBm								
			100					in 5.0 MHz
CF 2.402 GHz Spectrum Ref Level 20.00 d Att 35		2.39 dB 👄 RB1	W 2 MHz	H5 2441M		× (1)	•••••	-
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100	dB SWT		VNT 1-D W 2 MHz	H5 2441M		× ()		
Spectrum Ref Level 20.00 d Att 35	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz	H5 2441M Mode Aut		· •		0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep	· •		¶
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 •1Pk Max	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 • 1Pk Max 10 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			0 (Ⅲ ▽ 3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 IPk Max IO dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 • 1Pk Max 10 dBm - 10 dBm - 20 dBm - 20 dBm - 40 dBm - 50 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep			3.34 dBm
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -50 dBm -60 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D w 2 MHz w 2 MHz	H5 2441M Mode Aut	to Sweep		2.441	3.34 dBm 00500 GHz
Spectrum Ref Level 20.00 d Att 35 SGL Count 100/100 • 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	dB SWT	2.39 dB 👄 RB1	VNT 1-D W 2 MHz W 2 MHz	H5 2441M Mode Aut	to Sweep		2.441	3.34 dBm 00500 GHz





SGL Count 100/100	42 dB 😑 RE 1 ms 😑 VE		Mode Auto	Sweep		
●1Pk Max			M1[1]	2.479	2.73 dBm 90010 GHz
10 dBm		M1			2.475	50010 0112
0 dBm	 				 	
-10 dBm						
-20 dBm						
-30 dBm						
-40 dBm						
-50 dBm						
-60 dBm						
-70 dBm						
CF 2.48 GHz		1001	pts	_		n 5.0 MHz
Ref Level 20.00 dBm Att 35 dB	38 dB 👄 RE	3W 2 MHz	H5 2402MH2 Mode Auto			
Att 35 dB SGL Count 100/100	38 dB 👄 RE	3W 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 IPk Max IPk Max IPk Max	38 dB 👄 RE	3W 2 MHz		Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 1Pk Max 10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 1Pk Max 10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 1Pk Max 10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 I Pk Max 10 dBm 0 dBm -0 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 IPk Max 10 dBm 0 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 1Pk Max 10 dBm 0 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 • IPk Max -0 dBm 10 dBm -0 dBm -10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 I Pk Max 10 dBm 10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 1Pk Max 100 dBm 10 dBm 0 dBm -10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 IPk Max 10 dBm 0 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep		
Ref Level 20.00 dBm Att 35 dB SGL Count 100/100 IPk Max 10 dBm 0 dBm -0 dBm -10 dBm	38 dB 👄 RE	BW 2 MHz BW 2 MHz	Mode Auto	Sweep	2.402	3.94 dBm 05840 GHz





Ref Level 20.0 Att SGL Count 100	35 dB SW 1		 RBW 2 MHz VBW 2 MHz 	Mode Aut	to Sweep			
●1Pk Max		1						0.00.10
				M	1[1]		2.44	3.98 dBm L09090 GHz
10 dBm				M1				
0 dBm						anne		
10 40	All all and a free and and					and the second	and an and a second second	
-10 dBm							- Maria	March and and and and and
720'dBm								Contractor and the second seco
-30 dBm								
-40 dBm								
-50 dBm								
-60 dBm								
-70 dBm								
CF 2.441 GHz			100	1 pts			Spa	in 6.5 MHz
Spectrum	٦	Pov	ver NVNT 2-D) Read			
	35 dB SW 1	et 2.42 dB (0H5 2480M		ly an		
Spectrum Ref Level 20.0 Att SGL Count 100	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D	DH5 2480M Mode Aut		Iv III		
Spectrum Ref Level 20.0 Att SGL Count 100	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	DH5 2480M Mode Aut	to Sweep			 3.33 dBm
Spectrum Ref Level 20.0 Att SGL Count 100 1Pk Max	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			 3.33 dBm
Spectrum Ref Level 20.0 Att SGL Count 100 @1Pk Max 10 dBm 0 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			 3.33 dBm
Spectrum Ref Level 20.1 Att SGL Count 100 1Pk Max 10 dBm 0 dBm -10 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.0 Att SGL Count 100 @1Pk Max 10 dBm 0 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			 3.33 dBm
Spectrum Ref Level 20.0 Att SGL Count 100 ● 1Pk Max 10 dBm 0 dBm -10 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.4 Att SGL Count 100 ● 1Pk Max 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.4 Att SGL Count 100 ● 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.4 Att SGL Count 100 ● 1Pk Max 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.4 Att SGL Count 100 ● 1Pk Max 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -40 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.1 Att SGL Count 100 1Pk Max 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -30 dBm -50 dBm -60 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.0 Att SGL Count 100 10 dBm 0 dBm -10 dBm -10 dBm -30 dBm -30 dBm -30 dBm -50 dBm	35 dB SW 1	et 2.42 dB (Ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep			3.33 dBm 01950 GHz
Spectrum Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dBm -10 dBm -10 dBm -30 dBm -30 dBm -50 dBm -60 dBm	35 dB SW 1	et 2.42 dB (ver NVNT 2-D RBW 2 MHz VBW 2 MHz	Mode Aut	to Sweep		2.480	3.33 dBm 01950 GHz





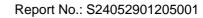
Att SGL Count 10	35 dB : 0/100	SWT	1 ms 🖷 V	BW 2 MHz	Mode Aut	o Sweep			
●1Pk Max					M	1[1]			4.90 dBm
10 dBm								2.40	196750 GHz
			and the second s	M	- www.www.uwy	warmen			
0 dBm		and the second second	- enter					<u></u>	
-10 dBm								and the second	*
-20 dBm									- marker
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
-50 0011									
-70 dBm									
25 0 100 011				1001	ntc			Spa	an 6.5 MHz
CF 2.402 GHz			Power 1	1001 NVNT 3-D) Read Hz Ant1	ly (11	4	
Spectrum Ref Level 20 Att SGL Count 10	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-DI	H5 2441MI		· •		
Spectrum Ref Level 20 Att	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-DI BW 2 MHz	H5 2441MI Mode Aut		•		4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			
Spectrum Ref Level 20 Att SGL Count 10 1Pk Max 10 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 1Pk Max 10 dBm 0 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 1Pk Max 10 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 1Pk Max 10 dBm 0 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 1Pk Max 10 dBm -10 dBm -10 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 IPk Max 10 dBm 0 dBm -10 dBm -28° dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 IPk Max 10 dBm -10 dBm -10 dBm -30 dBm -40 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 IPk Max 10 dBm 0 dBm -10 dBm -10 dBm -30 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 IPk Max 10 dBm -10 dBm -10 dBm -30 dBm -40 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	1.00 dBm 35 dB		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep			4.91 dBm
Spectrum Ref Level 20 Att SGL Count 10 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	0/100		39 dB 👄 RI	NVNT 3-D BW 2 MHz BW 2 MHz	H5 2441MI Mode Aut	o Sweep		2.44	4.91 dBm



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Ref Level 20.00		2.42 dB 👄 RBW 2 MHz			\	-
SGL Count 100/1	35 dB SWT 100	1 ms 🖷 VBW 2 MHz	Mode Auto Sweep			_
1Pk Max			M1[1]		4.32 dBm	
			mili		2.47994810 GHz	
LO dBm		M				1
) dBm		and and a second and	have the property and the second second			1
	al and a second			and the second s		
10 dBm				~	Non and the second seco	4
20 dBm					The second second	
2 de la Bill					~~~~	1
30 dBm						4
40 dBm						1
50 dBm						
60 dBm						1
70 dBm						
CF 2.48 GHz		100	1 pts		Span 6.5 MHz	41





8.3 -20DB BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.956	Pass
NVNT	1-DH5	2441	Ant1	0.948	Pass
NVNT	1-DH5	2480	Ant1	0.996	Pass
NVNT	2-DH5	2402	Ant1	1.348	Pass
NVNT	2-DH5	2441	Ant1	1.344	Pass
NVNT	2-DH5	2480	Ant1	1.358	Pass
NVNT	3-DH5	2402	Ant1	1.336	Pass
NVNT	3-DH5	2441	Ant1	1.298	Pass
NVNT	3-DH5	2480	Ant1	1.286	Pass

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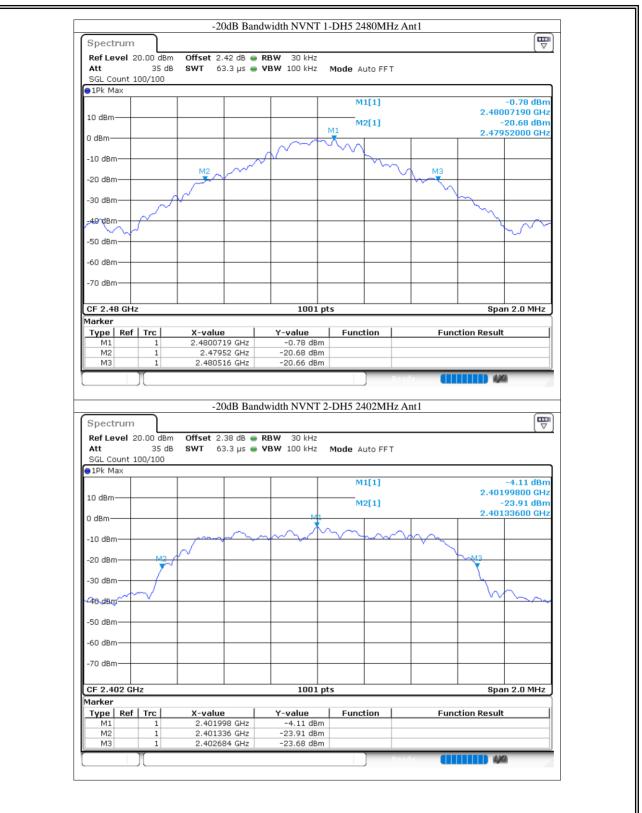




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Spectrum						₩)
Ref Level 2	0.00 dBr	n Offset 2.42 dB 🥃	RBW 30 kHz			
Att	35 di	В SWT 63.3 µs 🖷	VBW 100 kHz r	Node Auto FFT		
SGL Count 1	00/100					_
1Pk Max						
				M1[1]	-3.03 d	
10 dBm					2.48002000	
				M2[1]	-23.01 d	
) dBm			<u></u> <u>M1</u>		2.47936400	GHZ
10 dBm —		-			Yron I	_
	м					
20 dBm —	M					
30 dBm						
40-d8m	\sim					~
					· · · · · · · · · · · · · · · · · · ·	
50 dBm						
60 dBm —						_
70 dBm						_
F 2.48 GHz	:		1001 pts	5	Span 2.0 M	Hz
larker						
Type Ref	Trc	X-value	Y-value	Function	Function Result	1
M1	1	2.48002 GHz	-3.03 dBm			
M2	1	2.479364 GHz	-23.01 dBm			
M3	1	2.48065 GHz	-22.91 dBm			





8.4 OCCUPIED CHANNEL BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.851
NVNT	1-DH5	2441	Ant1	0.845
NVNT	1-DH5	2480	Ant1	0.869
NVNT	2-DH5	2402	Ant1	1.185
NVNT	2-DH5	2441	Ant1	1.197
NVNT	2-DH5	2480	Ant1	1.189
NVNT	3-DH5	2402	Ant1	1.195
NVNT	3-DH5	2441	Ant1	1.187
NVNT	3-DH5	2480	Ant1	1.187



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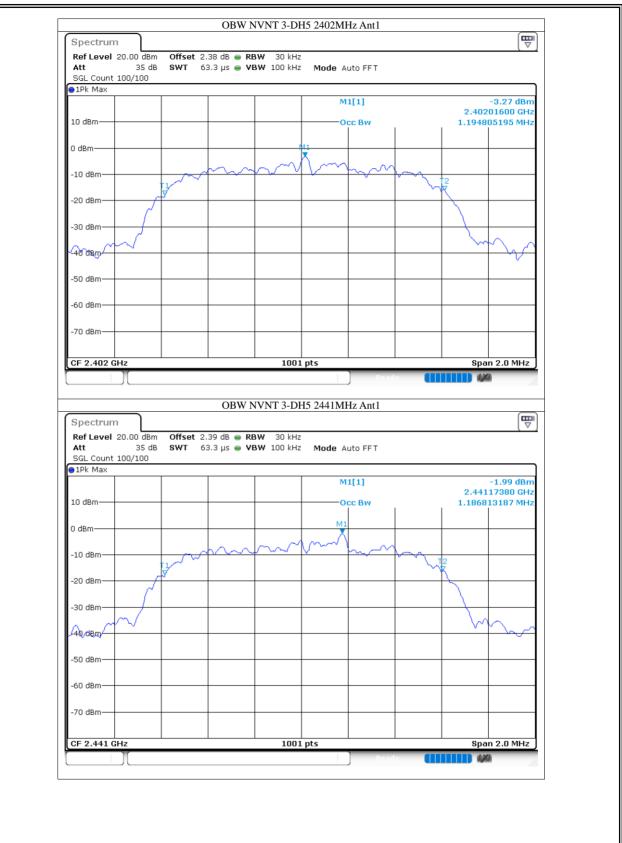
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8.5 CARRIER FREQUENCIES SEPARATION

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.026	2403.07	1.044	0.637	Pass
NVNT	1-DH5	Ant1	2441.174	2442.174	1	0.632	Pass
NVNT	1-DH5	Ant1	2479.02	2479.996	0.976	0.664	Pass
NVNT	2-DH5	Ant1	2402.174	2403.176	1.002	0.899	Pass
NVNT	2-DH5	Ant1	2441.174	2442.174	1	0.896	Pass
NVNT	2-DH5	Ant1	2479.174	2480.176	1.002	0.905	Pass
NVNT	3-DH5	Ant1	2402.018	2403.006	0.988	0.891	Pass
NVNT	3-DH5	Ant1	2441.018	2442.006	0.988	0.865	Pass
NVNT	3-DH5	Ant1	2479.018	2480.022	1.004	0.857	Pass



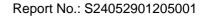


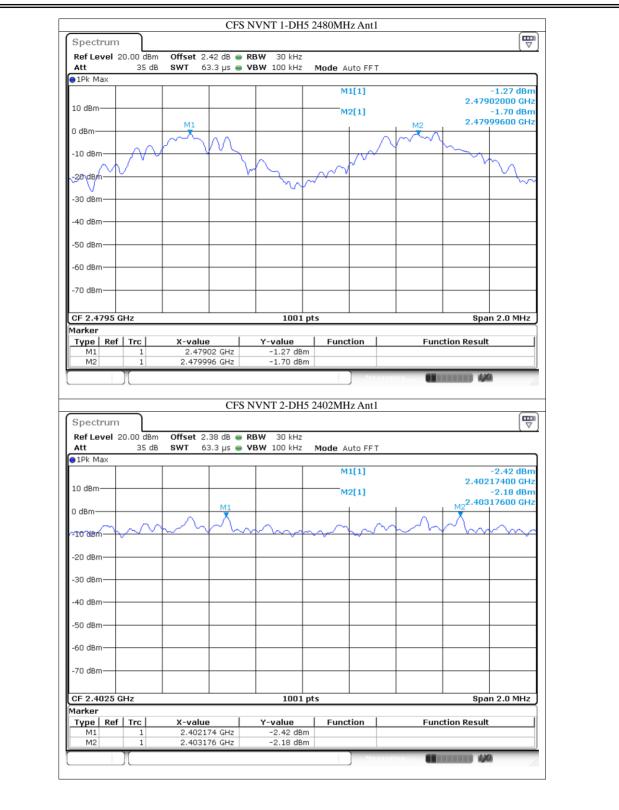




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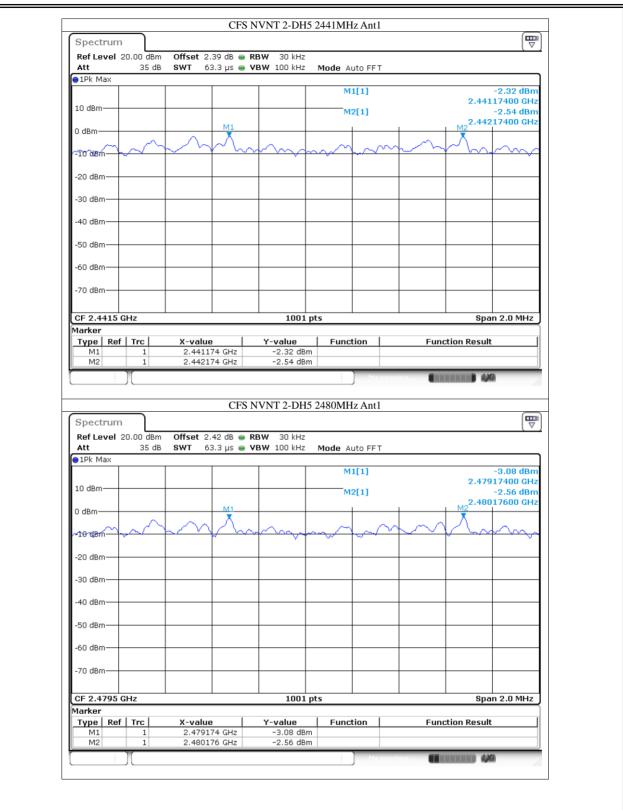
Certificate #4298.01







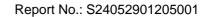


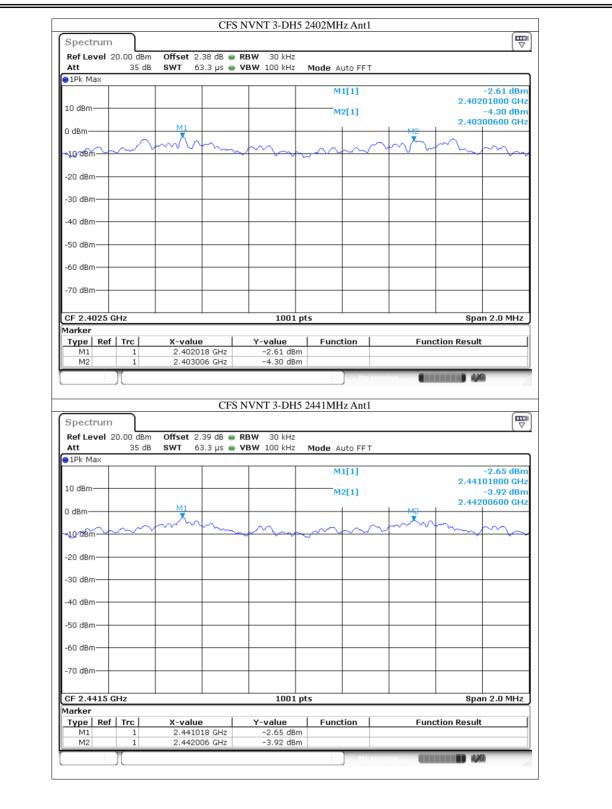




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Spectrum Ref Level :		Offset 2.42 di	3 👄 RBW 30 kHz					
Att	35 dB		5 🖶 VBW 100 kHz		ito FFT			
1Pk Max			_					
				M1	[1]			-3.04 dBm
10 40							2.479	901800 GHz
10 dBm				M2	2[1]			-3.34 dBm
0 dBm		M1				M2	2.480	002200 GHz
						X	~	
10 d8m	\sim		hom.		\sim	$\sim \sim$		m
29 abin				\sim				
-20 dBm								
-30 dBm								
-40 dBm								
-50 dBm								
-60 dBm								
-70 dBm								
CF 2.4795	GHz		1001	pts			Spa	an 2.0 MHz
1arker								
Type Ref	Trc	X-value	Y-value	Funct	ion	Fund	tion Resul	t l
M1	1	2.479018 GH	Iz -3.04 dB	m				





8.6 NUMBER OF HOPPING CHANNEL

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass





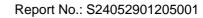
			Hopping	Test C No. NVNT 1		2MHz Ant	1		_
Spectrum									
Ref Level 2 Att	0.00 dBm 35 dB	Offset 2 SWT		RBW 100 kHz VBW 300 kHz		uto Sweep			
●1Pk Max	00 00				Houe A				
					м	1[1]		2.4	2.12 dBm 020040 GHz
10 dBm					M	2[1]			1.59 dBm 800765 GHz
o <mark>a</mark> km <u>h (h h h h</u>	la da da da	AUVUUU	1 00000	AUPULATE AND A MARKED A	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	IN A A A A A A A A A A A A A A A A A A A	INALANDIA (huvur	
-10 deriver	UWNN	NANAA	MANAY	navana	<u>uuuuuu</u>	UNANA	64694604	<u>unviu</u>	ULANU -
1	4818484	lkohlkol	00000104	Abailidhand	NANAANA	A A B K A A A A A A	Indeellaar	lagalaa	MANANA
-20 dBm									
-80 dBm									+
-40 dBm									+ +
50 dBm									
									1 14
-60 dBm									
-70 dBm									
Ptart 0.4 CU	_			1001	ntc			Dtar f	1499E OU-
Start 2.4 GH Marker	۷			1001	prs			stop 2	2.4835 GHz
Type Ref M1	Trc 1	X-value 2 4020	e	Y-value 2.12 dB	Funct	tion	Fund	tion Resu	lt
M2	1	2.48007		1.59 dB					
					1			1000 B	MA
	~					Measur			
	~		Hopping	No NVNT 2	-DH5 2402	MHz Anti	_		
Spectrum			Hopping 1	No. NVNT 2	-DH5 2402	2MHz Ant1	_		
Spectrum Ref Level 20		Offset 2	.38 dB 😑 I	RBW 100 kHz		2MHz Ant 1	_		
Ref Level 2 Att	D.00 dBm 35 dB		.38 dB 😑 I			2MHz Ant 1	_		
Ref Level 2		Offset 2	.38 dB 😑 I	RBW 100 kHz	Mode A		_		-3.13 dBm
Ref Level 2 Att		Offset 2	.38 dB 😑 I	RBW 100 kHz	Mode A	uto Sweep	_	2.4	-3.13 dBm 015865 GHz 0.14 dBm
Ref Level 20 Att P1Pk Max	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 24 Att PIPK Max 10 dBm 0 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att PIPk Max 10 dBm -10 dBm -10 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 24 Att PIPK Max 10 dBm 0 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att PIPk Max 10 dBm -10 dBm -10 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att PIPK Max 10 dBm -10 dBm -20 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att 1Pk Max 10 dBm 10 dBm 20 dBm -20 dBm -30 dBm -40 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att 10 dBm 10 dBm 10 dBm 20 dBm -20 dBm -80 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att PIPk Max 10 dBm 10 dBm -10 dBm -20 dBm -80 dBm -40 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att IPk Max 10 dBm 10 dBm 20 dBm 20 dBm 40 dBm 40 dBm 40 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att IPk Max 10 dBm OdBm -10 dBm -20 dBm -80 dBm -40 dBm -50 dBm -60 dBm -70 dBm	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4 2.4 WWWW	-3.13 dBm 015865 GH2 0.14 dBm 802435/GH2
Ref Level 2/ Att 1Pk Max 10 dBm 10 dBm -10 dBm -20 dBm -80 dBm -50 dBm -60 dBm -70 dBm Start 2.4 GH	35 dB	Offset 2 SWT	.38 dB 👄 🛙 1 ms 👄 V	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep 1[1] 2[1]		2.4 2.4 WWWW	-3.13 dBr ⊽ 015865 GHz 0.14 dBr 8024334GHz
Ref Level 20 Att 1Pk Max 10 dBm 10 dBm -10 dBm -20 dBm -80 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2.4 GH Marker Type Ref	35 dB	Offset 2 SWT	.38 dB • 1 1 ms • 1 	RBW 100 kHz VBW 300 kHz	Mode A	uto Sweep [[1] 2[1] v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/		2.4 2.4 WWWW	-3.13 dBm 015865 GHz 0.14 dBm 802433/GHz
Ref Level 20 Att 1Pk Max 10 dBm 10 dBm 10 dBm 20 dBm -20 dBm -80 dBm -60 dBm -70 dBm Start 2.4 GH Marker	35 dB	Offset 2 SWT	.38 dB • 1 1 ms • 1 	RBW 100 kHz	Mode A	uto Sweep [[1] 2[1] v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/v/		2.4 2.4 WWWW	-3.13 dBm 015865 GHz 0.14 dBm 802433/GHz





Spectrum									(₹)
Ref Level 2			_	3W 100 kHz						
Att	35 dB	SWT	1 ms 😑 VI	BW 300 kHz	Mode A	uto Sweep				_
1Pk Max										
					M	1[1]			-1.99 dE	
.0 dBm						111			15865 G	
					IML	2[1]			-2.32 ue 04940 <u>G</u>	
AR RAYLAND		1.1.1.1.1.1	ush w	di cobbe d		All all A		1	I M2	12
property and	When mental	envioentrustation	annonanan	Arriver	wy wy www wo w	ռառուհարկ	Angerrage	MAN WAY	why	
10 dBm										
20 dBm —										
80 dBm										
									1	
40 dBm										
										L.
50 dBm										MP ¹
50 dBm										
JU UBIII										
70 dBm										
, o ubiii										
start 2.4 GF	IZ			1001	pts			Stop 2.	.4835 GH	z
arker										_
Type Ref M1	Trc 1	2.401586	E CUIR	<u>Y-value</u> -1.99 dB	Funct	ion	Fund	ction Result		
M1 M2	1	2.401586		-1.99 dB -2.52 dB						_





8.7 BAND EDGE

		-					
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-53.13	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-52.93	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-48.7	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-50.12	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-50.36	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-47.16	-20	Pass

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Spectrum			<u> </u>	1-DH5 240		·F1			
Ref Level		Offset 2.	38 dB 👄 RI	BW 100 kHz					(>
Att				BW 300 kHz		uto FFT			
SGL Count	100/100								
					м	1[1]			2.24 dBm
10 dBm						I	I	2.401	.98400 GHz
TO UBIII				M	1				
0 dBm					-				
-10 dBm									
					5				
-20 dBm									
-30 dBm				1					
SU UBIII			\sim	$\langle \neg \rangle$					
-40 dBm			<u>⊢ / °</u>			\sim \			
-50 dBm	\sim		\sim			~~~~	\sim	how	m ~
-60 dBm									~~
-70 dBm									
CF 2.402 G	Hz			1001	pts		·	Spa	n 8.0 MHz
Spectrum	·			DH5 2402M		J	g Emission		
Ref Level Att	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	DH5 2402M RBW 100 kHz /BW 300 kHz	z		g Emission		
Ref Level	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	RBW 100 kHz	z		g Emission		
Ref Level Att SGL Count	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	RBW 100 kHz	z z Mode /		g Emission		2.56 dBm
Ref Level Att SGL Count	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz
Ref Level Att SGL Count 9 1Pk Max	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm 0 dBm	20.00 dBm 35 dB	Offset 2	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz 51.29∕₫Bm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -10 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz 51.29∕₫Bm
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB	Offset 2 SWT 22	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz 51.29∕₫Bm
Ref Level Att SGL Count 1Pk Max 10 dBm -10 dBm -10 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB 👄 F	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz 51.29∕₫Bm
Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	RBW 100 kHz	z Mode /	Auto FFT	g Emission	2.401	2.56 dBm 85000 GHz 51.29∕₫Bm
Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	RBW 100 kHz /BW 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]		2.401	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	RBW 100 kHz /BW 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]		2.401	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -60 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	RBW 100 kHz /BW 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]		2.401	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	RBW 100 kHz /BW 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]		2.401	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N	28W 100 kHz 78W 300 kHz	Z Mode /	Auto FFT 1[1] 2[1]		2.401 - 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.3000 Marker	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22	2.38 dB ● F 7.5 μs ● N M4	28W 100 kHz 78W 300 kHz	z Mode / M M M	Auto FFT 1[1] 2[1] ԿՄԱՍԻՆԱԱՆԴՆ		2.401 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -70 dBm -70 dBm Start 2.306 Marker Type Ref	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22 dBm	2.38 dB ● F 7.5 μs ● N Μ4 √₩/μ ^{/*} /₩/π/μ	28w 100 kHz /Bw 300 kHz /Bw 300 kHz ////////////////////////////////////	2 Mode / ۲۰۰۰ M	Auto FFT 1[1] 2[1] ԿՄԱՍԻՆԱԱՆԴՆ		2.401 - 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.306 Marker Type M1	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22 dBm ///////////////////////////////	 M4 M4 M4 M4 M4 M4 M4 	2BW 100 kHz /BW 300 kHz /BW 300 kHz //BW	z Mode / M M س pts	Auto FFT 1[1] 2[1] ԿՄԱՍԻՆԱԱՆԴՆ		2.401 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.3000 Marker Type M1 M2 M3	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22 dBm ///////////////////////////////	 .38 dB 7.5 μs Ν M4 Μ4 Μ4 Μ4 Μ4 Μ4 Μ4 Μ4 Μ4 M4 M4 M4 M4 M4 M4 M4 	100 kHz //www.ybw 300 kHz //www.ybw 300 kHz //www.ybw 300 kHz //www.ybw 300 kHz //wwwwybw 300 kHz //wwwybw 300 kHz //wwww 300 kHz //www 300 kHz //wwybw 300 k	z Mode / M M M M M M M M Funci m m m	Auto FFT 1[1] 2[1] ԿՄԱՍԻՆԱԱՆԴՆ		2.401 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.306 Marker Type M1	20.00 dBm 35 dB 100/100 D1 -17.761	Offset 2 SWT 22 dBm ///////////////////////////////	 M4 M4 M4 M4 M4 M4 M4 	2BW 100 kHz /BW 300 kHz /BW 300 kHz //BW	z Mode / M M M M M M M M Funci m m m	Auto FFT 1[1] 2[1] ԿՄԱՍԻՆԱԱՆԴՆ		2.401 2.400	2.56 dBm 85000 GHz 51.29 dBm 00000 GHz



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Att SGL Count	20.00 dBm 35 dB			BW 100 kHz BW 300 kHz	Mode Au	uto FFT			
IPk Max	100/100								
					M	1[1]		2.470	2.25 dBm 985610 GHz
10 dBm								2.479	85610 GHZ
				M1					
0 dBm					7				
-10 dBm					4				
					\sim				
-20 dBm—					\rightarrow				
-30 dBm)				
50 abiii					1	6			
-40 dBm—			<u>├</u> ~			ř \			
-50 dem-						har			
-50 d8m	www	~~~~					- An and	m	m
-60 dBm									
70.45									
-70 dBm									
CF 2.48 G	 			1001	ntc				in 8.0 MHz
						Read	ly 🚺		0
Spectrun Ref Level	n			DH5 2480M		No-Hoppin	g Emission	L	
Ref Level Att SGL Count	n 20.00 dBm 35 dB	Offset 2	2.42 dB 👄 R				g Emission	1	
Ref Level Att SGL Count	n 20.00 dBm 35 dB	Offset 2	2.42 dB 👄 R	RBW 100 kHz	Mode 4	Auto FFT	g Emission		
Ref Level Att SGL Count 1Pk Max	n 20.00 dBm 35 dB	Offset 2	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz
Ref Level Att SGL Count 1Pk Max	n 20.00 dBm 35 dB	Offset 2	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT	g Emission	2.480	1.64 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	n 20.00 dBm 35 dB	Offset 2	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count PIPk Max 10 dBm	n 20.00 dBm 35 dB	Offset 2 SWT 22	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count IPk Max 10 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -10 dBm -20 cBm -30 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB 👄 R	RBW 100 kHz	Mode A	Auto FFT 1[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB	XBW 100 kHz /BW 300 kHz	Mode 4	Auto FFT 1[1] 2[1]		2.480	1.64 dBm 005000 GHz -51.26 dBm 150000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB 👄 R	XBW 100 kHz /BW 300 kHz	Mode 4	Auto FFT 1[1] 2[1]	g Emission	2.480	1.64 dBm 005000 GHz -51.26 dBm
Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB	XBW 100 kHz /BW 300 kHz	Mode 4	Auto FFT 1[1] 2[1]		2.480	1.64 dBm 005000 GHz -51.26 dBm 150000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -20 cBm -30 dBm -40 dBm -40 dBm	n 20.00 dBm 35 dB 100/100	Offset 2 SWT 22	2.42 dB	XBW 100 kHz /BW 300 kHz	Mode 4	Auto FFT 1[1] 2[1]		2.480	1.64 dBm 005000 GHz -51.26 dBm 150000 GHz
Ref Level Att SGL Count • 1Pk Max • 1Pk Max • 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm -70 dBm -70 dBm	n 20.00 dBm 35 dB 100/100 201 -17.749	Offset 2 SWT 22	2.42 dB	XBW 100 kHz /BW 300 kHz	Mode 4	Auto FFT 1[1] 2[1]		2.480 2.483	1.64 dBm 005000 GHz -51.26 dBm 150000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 cBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2.47 Marker	n 20.00 dBm 35 dB 100/100 100/100	Offset 2 SWT 22	2.42 dB	RBW 100 kHz /BW 300 kHz	Mode A	Auto FF T 1[1] 2[1]		2.480 2.483	1.64 dBm 005000 GHz 51.26 dBm 50000 GHz
Ref Level Att SGL Count 10 dBm M1 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.47 Marker Type Re M1	n 20.00 dBm 35 dB 100/100 201 -17.749 4	Offset 2 SWT 22 dBm M3 M3 M3 M4 UMWM UMWM UMWM Z.4800	2.42 dB	RBW 100 kHz // BW 300 kHz	Mode A	Auto FF T 1[1] 2[1]		2.480 2.483	1.64 dBm 005000 GHz 51.26 dBm 50000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -10 dBm -20 cBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.47 Marker Type Re	n 20.00 dBm 35 dB 100/100 100/100 101 -17.749 4	Offset 2 SWT 22 dBm M3 	2.42 dB	RBW 100 kHz /// WW 300 kHz	Mode 4	Auto FF T 1[1] 2[1]		2.480 2.483	1.64 dBm 005000 GHz 51.26 dBm 50000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -50 dBm -50 dBm -50 dBm -70 dBm Start 2.47 Marker Type M1 M2	n 20.00 dBm 35 dB 100/100 201 -17.749 0 -17.749 6 GHz 6 GHz 1 1	Offset 2 SWT 22 dBm	2.42 dB	KBW 100 kHz /// WW 300 kHz	Mode 4	Auto FF T 1[1] 2[1]		2.480 2.483	1.64 dBm 005000 GHz 51.26 dBm 50000 GHz



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	20.00 dBm			W 100 kHz					
Att SGL Count	35 dB 100/100	SWT 18.	a ha 😑 AB	3W 300 kHz	Mode A	uto FFT			
⊖1Pk Max									1.00 -0
					M	1[1]		2.402	-1.02 dBm 204800 GHz
10 dBm									
0 dBm				M	1				
0 0.0.11				m	m,				
-10 dBm—					\rightarrow				
-20 dBm									
-20 0011									
-30 dBm									
40 dBm			$\sim\sim\sim$			m			
-40 dBm							Ν		
-50 dBm		$\sim \sim $					\rightarrow	www	
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-60 dBm									
-70 dBm									
CF 2.402 C	GHz			1001	pts			Spa	in 8.0 MHz
Spectrun	n	Band Edge I) No-Hoppir	ng Emission		
Ref Level Att	n 20.00 dBm 35 dB		38 dB 👄 R	BW 100 kHz	2				
Ref Level	n 20.00 dBm 35 dB	Offset 2.3	38 dB 👄 R	BW 100 kHz	: Mode /	Auto FFT			
Ref Level Att SGL Count 9 1Pk Max	n 20.00 dBm 35 dB	Offset 2.3	38 dB 👄 R	BW 100 kHz	: Mode /				-1.35 dBm .85000 GHz
Ref Level Att SGL Count 1Pk Max	n 20.00 dBm 35 dB	Offset 2.3	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 185000 GHz -49.40 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	n 20.00 dBm 35 dB	Offset 2.3	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 185000 GHz
Ref Level Att SGL Count 1Pk Max	n 20.00 dBm 35 dB	Offset 2.3	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 185000 GHz -49.40 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	n 20.00 dBm 35 dB	Offset 2.3 SWT 227	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 185000 GHz -49.40 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 185000 GHz -49.40 dBm
Ref Level Att SGL Count • 1Pk Max 10 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB 👄 R	BW 100 kHz	: Mode / M	Auto FFT		2.401	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm • 10 dBm • 10 dBm • 10 dBm • 20 dBm • 30 dBm • 40 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz	: Mode / M	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz Hz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz	: Mode / M	Auto FFT 1[1] 2[1]		2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz	: Mode / M	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz Hz
Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm	n 20.00 dBm 35 dB 100/100	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz	: Mode / M	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz Hz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	n 20.00 dBm 35 dB 100/100 201 -21.018	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz		Auto FFT 1[1] 2[1]	ng Emission	2.400 2.400	-1.35 dBm 85000 GHz -49.40 dBm 00000 GHz Hz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Marker	n 20.00 dBm 35 dB 100/100 01 -21.018 Մ ^ո ւչլուդիչութի 6 GHz	Offset 2.3 SWT 227	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz	: Mode / 	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 000000 GHz
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm Start 2.300 Marker Type Re	n 20.00 dBm 35 dB 100/100 D1 -21.018 թույն -21.018 6 GHz f Trc	Offset 2.3 SwT 227 dBm dBm	38 dB ● R .5 µs ● V	BW 100 kHz BW 300 kHz עריישער אין אין ערישער אין 1001 Y-value	: Mode / M س ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲	Auto FFT 1[1] 2[1]	ng Emission	2.400 2.400	-1.35 dBm 85000 GHz -49.40 dBm 000000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.300 Marker Type M1 M2	100/100 35 dB 100/100 01 -21.018 0	Offset 2.3 SWT 227	38 dB • R .5 µs • V	BW 100 kHz BW 300 kHz עישאיקאיקאיק עישאיקאיקאיק עישאיקאיקאיקאיק 1001 Y-value -1.35 dBr -49.40 dBr	: Mode / 	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 000000 GHz
Ref Level Att SGL Count 9 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.300 Marker Type Re M1	n 20.00 dBm 35 dB 100/100 	Offset 2.3 SWT 227	38 dB .5 µs V V V V V V V V V V V V V	BW 100 kHz BW 300 kHz	: Mode / 	Auto FFT 1[1] 2[1]	ng Emission	2.401 2.400	-1.35 dBm 85000 GHz -49.40 dBm 000000 GHz



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Att	20.00 dBm 35 dB			3W 100 kHz 3W 300 kHz		uto FFT			
SGL Count 1Pk Max	100/100								
					м	1[1]		2.479	-0.50 dBm 986410 GHz
10 dBm									
0 dBm				M1					
0 dbiii				m	\sim				
-10 dBm—									
-20 dBm									
-20 000				/	1				
-30 dBm						h			
-40 dBm			\sim			m			
TO UDIII		T					\		
-50 dBm	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					10-v	m	
-60 dBm	~ ~0 •	Č.							r www
-00 0811									
-70 dBm—									
CF 2.48 GF	Iz			1001	pts	<u> </u>		Spa	n 8.0 MHz
Spectrum		Band Edge		DH5 2480M		J Read	g Emission		
Spectrum	ו 20.00 dBm 35 dB		42 dB 😑 🛚	BW 100 kHz	Z				
Spectrum Ref Level Att	ו 20.00 dBm 35 dB	Offset 2.	42 dB 😑 🛚	BW 100 kHz	z z Mode /	Auto FFT			
Spectrum Ref Level Att SGL Count	ו 20.00 dBm 35 dB	Offset 2.	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 985000 GHz
Spectrum Ref Level Att SGL Count @ 1Pk Max 10 dBm M1	ו 20.00 dBm 35 dB	Offset 2.	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm
Spectrum Ref Level Att SGL Count IPk Max 10 dBm- M1 0 dBm-	ו 20.00 dBm 35 dB	Offset 2.	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 85000 GHz 51.40 dBm
Spectrum Ref Level Att SGL Count PIPk Max 10 dBm -10 dBm -10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 22	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 85000 GHz 51.40 dBm
Spectrum Ref Level Att SGL Count IPk Max 10 dBm- M1 0 dBm-	20.00 dBm 35 dB 100/100	Offset 2. SWT 22	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 85000 GHz 51.40 dBm
Spectrum Ref Level Att SGL Count PIPk Max 10 dBm -10 dBm -10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 22	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 85000 GHz 51.40 dBm
Spectrum Ref Level Att SGL Count ID dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -30 dBm- -40 dBm-	D1 -20.497	Offset 2. SWT 22	42 dB 😑 🛚	BW 100 kHz	z Mode /	Auto FFT		2.479	-0.87 dBm 85000 GHz 51.40 dBm
Spectrum Ref Level Att SGL Count ● 1Pk Max 10 dBm -10 dBm -20 cBm -30 dBm	20.00 dBm 35 dB 100/100 D1 -20.497	Offset 2. SwT 227	42 dB ● R 7.5 μs ● V	28W 100 kHz 78W 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]	g Emission	2.479	-0.87 dBm 85000 GHz -51.40 dBm 50000 GHz
Spectrum Ref Level Att SGL Count PIPk Max 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	20.00 dBm 35 dB 100/100 D1 -20.497	Offset 2. SWT 22	42 dB ● R 7.5 μs ● V	28W 100 kHz 78W 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]	g Emission	2.479	-0.87 dBm 85000 GHz -51.40 dBm 50000 GHz
Spectrum Ref Level Att SGL Count ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm	20.00 dBm 35 dB 100/100 D1 -20.497	Offset 2. SwT 227	42 dB ● R 7.5 μs ● V	28W 100 kHz 78W 300 kHz	z Mode / M M	Auto FFT 1[1] 2[1]	g Emission	2.479	-0.87 dBm 85000 GHz -51.40 dBm 50000 GHz
Spectrum Ref Level Att SGL Count 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm	D1 -20.497	Offset 2. SwT 227	42 dB ● R 7.5 μs ● V	100 kH2 BW 300 kH2	2 Mode / M M M	Auto FFT 1[1] 2[1]	g Emission	2.479 2.483	-0.87 dBm 985000 GHz 51.40 dBm 950000 GHz
Spectrum Ref Level Att SGL Count •1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm -70 dBm	D1 -20.497	Offset 2. SwT 227	42 dB ● R 7.5 μs ● V	28W 100 kHz 78W 300 kHz	2 Mode / M M M	Auto FFT 1[1] 2[1]	g Emission	2.479 2.483	-0.87 dBm 85000 GHz -51.40 dBm 50000 GHz
Spectrum Ref Level Att SGL Count ID dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -70 dBm -70 dBm Start 2.476 Marker Type Ref	20.00 dBm 35 dB 100/100 D1 -20.497 14 Microsoft 5 GHz f Trc	Offset 2. SwT 227	42 dB	28W 100 kHz 78W 300 kHz 70ulloukinini 1001 Y-value	z Mode / M M M m m m m m m m m m m m m m m	Auto FFT 1[1] 2[1]	g Emission	2.479 2.483	-0.87 dBm 85000 GHz 51.40 dBm 50000 GHz .52576 GHz
Spectrum Ref Level Att SGL Count ID dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -70 dBm -70 dBm -70 dBm -70 dBm	20.00 dBm 35 dB 100/100 D1 -20.497	Offset 2. SWT 22	42 dB • R 7.5 μs • V	BW 100 kHz BW 300 kHz	2 2 Mode / M 	Auto FFT 1[1] 2[1]	g Emission	2.479 2.483	-0.87 dBm 85000 GHz 51.40 dBm 50000 GHz .52576 GHz
Spectrum Ref Level Att SGL Count • 1Pk Max 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -70 dBm -70 dBm Start 2.476 Marker Type Ref M1	20.00 dBm 35 dB 100/100 D1 -20.497	Offset 2. SWT 221	42 dB	BW 100 kHz BW 300 kHz 90 kHz 90 kHz 90 kHz 100	z Mode / M M M M M M M M M M M M M M M M	Auto FFT 1[1] 2[1]	g Emission	2.479 2.483	-0.87 dBm 85000 GHz 51.40 dBm 50000 GHz .52576 GHz



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Ref Level Att SGL Count	20.00 dBm 35 dB 100/100			W 100 kHz W 300 kHz	Mode Au	to FFT			
⊖1Pk Max	1	, ,							
					M1	[1]		2.401	-0.33 dBm 187210 GHz
10 dBm								2.10.	07210 012
				M1					
0 dBm				~~~~	<u>No</u>				
-10 dBm					m				
-10 ubiii—									
-20 dBm—				/					
					1				
-30 dBm—			~ ~			<u>h n n</u>			
-40 dBm			ww			·~~\			
TO GOIL									
-50 dBm	0000	h					han	$\sim \sim \sim$	100
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-60 dBm—									
70 45									
-70 dBm									
CF 2.402 (GHZ			1001	pts	_		Spa	in 8.0 MHz
Spectrur Ref Level		Band Edge 1				o-Hoppin	g Emission		
Ref Level Att	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	DH5 2402M BW 100 kHz BW 300 kHz	:		g Emission		
Ref Level Att SGL Count	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	BW 100 kHz	Mode A	uto FFT	g Emission		
Ref Level Att SGL Count 1Pk Max	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	BW 100 kHz	Mode A		g Emission	2.40	-0.35 dBm
Ref Level Att SGL Count	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz -48.06 dBm
Ref Level Att SGL Count 1Pk Max	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz
Ref Level Att SGL Count 1Pk Max	20.00 dBm 35 dB	Offset 2.2	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz -48.06 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz -48.06 dBm
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB	Offset 2. SWT 227	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz -48.06 dBm
Ref Level Att SGL Count 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 195000 GHz -48.06 dBm
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB 👄 RI	BW 100 kHz	Mode A 	uto FFT	g Emission		-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A M1 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz M2
Ref Level Att SGL Count ● 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A M1 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz M2
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A M1 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz M2
Ref Level Att SGL Count ● 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A M1 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz M2
Ref Level Att SGL Count • 1Pk Max 10 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz -48.06 dBm 000000 GHz -48.06 dBm 000000 GHz
Ref Level Att SGL Count O dBm 0 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● R 7.5 µs ● V	BW 100 kHz BW 300 kHz	Mode A 	uto FFT [1] 2[1]		2.400	-0.35 dBm 95000 GHz 48.06 dBm 000000 GHz M2
Ref Level Att SGL Count ● 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.30 Marker Type Re	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● Ri .5 µs ● Vi	BW 100 kHz BW 300 kHz	Mode A M1 M2	uto FFT [1] [1] [1]	hast-Mayron show	2.400	-0.35 dBm 95000 GHz -48.06 dBm 000000 GHz
Ref Level Att SGL Count 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm -70 dBm Start 2.30 Marker Type Re M1	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB • R 7.5 μs • V	BW 100 kHz BW 300 kHz M4 M4 1001 Y-value -0.35 dBn	Mode A M1 M2 M2 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3 M3	uto FFT [1] [1] [1]	hast-Mayron show	2.400 	-0.35 dBm 95000 GHz -48.06 dBm 000000 GHz
Ref Level Att SGL Count ○IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.30 Marker Type Re	20.00 dBm 35 dB 100/100	Offset 2. SWT 227	38 dB ● Ri .5 µs ● Vi	BW 100 kHz BW 300 kHz M4 M4 M4 M4 M6 M6 M6 M6 M6 M6 M6 M6 M6 M6 M6 M6 M6	Mode A M1 M2 M2 m2 m2 m2 m2 m2 m2 m2 m2 m3 m2 m3 m2 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3	uto FFT [1] [1] [1]	hast-Mayron show	2.400 	-0.35 dBm 95000 GHz -48.06 dBm 000000 GHz
Ref Level Att SGL Count SGL Count 10 dBm 0 dBm -10 dBm -10 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm Start 2.30 Marker Type M1 M2	20.00 dBm 35 dB 100/100 	Offset 2. SWT 227	38 dB	BW 100 kHz BW 300 kHz M4 M4 M4 1001 Y-value -0.35 dBn -48.06 dBn	Mode A M1 M2 M2 m2 m2 m2 m2 m2 m2 m2 m2 m3 m2 m3 m2 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3 m3	uto FFT [1] [1] [1]	hast-Mayron show	2.400 	-0.35 dBm 95000 GHz -48.06 dBm 000000 GHz



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Ref Level 20.0 Att SGL Count 100	35 dB SW 1	Г 18.9 µs 👄 🕻	RBW 100 kHz /BW 300 kHz	Mode A	uto FFT			
●1Pk Max								
				M	1[1]		0.400	-1.44 dBm 11190 GHz
10 dBm							2.480	11130 GHS
0 dBm			0.0000	M1 X.				
				m I				
-10 dBm								
-20 dBm								
-20 0811								
-30 dBm								
		m	1		m			
-40 dBm			+					
		1						
-50 dBm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~					m	m
-60 dBm								~m
-00 ubiii								
-70 dBm								
CF 2.48 GHz			1001	nts				n 8.0 MHz
) (34		Dore			<u> </u>
Spectrum		Edge NVNT 3			No-Hoppin	g Emission		
Ref Level 20.0 Att	D0 dBm Offs 35 dB SW1	Edge NVNT 3 set 2.42 dB Г 227.5 µs ●	RBW 100 kHz	2		g Emission		
Ref Level 20.0 Att SGL Count 100	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2		g Emission		
Ref Level 20.0 Att SGL Count 100	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode /		g Emission		(∇) -1.92 dBm
Ref Level 20.0 Att SGL Count 100	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz
Ref Level 20.0 Att SGL Count 100 1Pk Max	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT	g Emission	2.479	(∇) -1.92 dBm
Ref Level 20.0 Att SGL Count 100 • 1Pk Max 10 dBm 0 dBm • 0 dBm 0 dBm 0 dBm	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 1Pk Max	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dmm -10 dBm	D0 dBm Offs 35 dB SW1	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dBm -10 dBm -20 cBm D1	00 dBm Offs 35 dB SW1 /100	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm	00 dBm Offs 35 dB SW1 /100	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 > 1Pk Max 10 dBm 0 dBm - -10 dBm 0 -20 dBm 01 -30 dBm -40 dBm	00 dBm Offs 35 dB SW1 /100	et 2.42 dB 👄	RBW 100 kHz	2 2 Mode / M	Auto FFT 1[1]	g Emission	2.479	(∇) -1.92 dBm 985000 GHz -52.40 dBm
Ref Level 20.0 Att SGL Count 100 • 1Pk Max • 10 dBm • • 0 dBm • • 0 dBm • • -10 dBm • • -20 dBm • • -30 dBm • • -40 dBm •	-21.440 dBm	set 2.42 dB Γ 227.5 μs Γ	RBW 100 kHz VBW 300 kHz	2 Mode / M	Auto FFT 1[1] 2[1]		2.479 - 2.483	-1.92 dBm 085000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm -10 dBm -10 cBm -20 cBm -20 cBm -30 dBm -40 dBm M4 -50 dBM2	-21.440 dBm	et 2.42 dB 👄	RBW 100 kHz VBW 300 kHz	2 Mode / M	Auto FFT 1[1] 2[1]		2.479 - 2.483	-1.92 dBm 085000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -40 dBm -40 dBm -60 dBm	-21.440 dBm	set 2.42 dB Γ 227.5 μs Γ	RBW 100 kHz VBW 300 kHz	2 Mode / M	Auto FFT 1[1] 2[1]		2.479 - 2.483	-1.92 dBm 085000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 SGL Count 100 IPk Max 10 0 dBm 0 -10 cBm 0 -20 cBm 01 -30 dBm 01 -40 dBm 14 -50 dBm 14	-21.440 dBm	set 2.42 dB Γ 227.5 μs Γ	RBW 100 kHz VBW 300 kHz	2 Mode / M	Auto FFT 1[1] 2[1]		2.479 - 2.483	-1.92 dBm 085000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 9 IPk Max 10 dBm 10 dBm 0 -10 dBm 0 -20 dBm 01 -30 dBm 01 -40 dBm 14 -60 dBm -70 dBm	-21.440 dBm	set 2.42 dB Γ 227.5 μs Γ	RBW 100 kHz VBW 300 kHz	2 Mode / 	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 85000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 IPk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm -70 dBm -70 dBm	-21.440 dBm	set 2.42 dB Γ 227.5 μs Γ	RBW 100 kHz VBW 300 kHz	2 Mode / 	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 085000 GHz 52.40 dBm 50000 GHz
Ref Level 20.0 Att SGL Count 100 9 1Pk Max 10 10 dBm 10 -10 cBm 10 -20 cBm 01 -30 dBm 01 -40 dBm 11 -60 dBm 14 -70 dBm 15 -70 dBm 14 -70 dBm 14	-21.440 dBm	et 2.42 dB • Γ 227.5 μs •	RBW 100 kHz	2 Mode / M M M	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 985000 GHz 52.40 dBm 950000 GHz
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dm -10 dBm -20 dBm -40 dBm -40 dBm -60 dBm -70 dBm -70 dBm -70 dBm -70 dBm -70 dBm Type Ref M1	-21.440 dBm -21.440 dBm -21.440 dBm	set 2.42 dB Γ 227.5 μs	RBW 100 kHz VBW 300 kHz	2 2 Mode / M M M M M M M M M M M M M M M M M M M	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 985000 GHz 52.40 dBm 950000 GHz
Ref Level 20.0 Att SGL Count 100 9 IPk Max 10 dBm 10 dBm 0 -10 dBm 0 -20 dBm 01 -30 dBm 01 -40 dBm 01 -70 dBm	-21.440 dBm -21.440 dBm -21.440 dBm	et 2.42 dB ● Γ 227.5 μs ●	RBW 100 kHz VBW 300 kHz	2 Mode / M M M M M M	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 985000 GHz 52.40 dBm 950000 GHz
Ref Level 20.0 Att SGL Count 100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -40 dBm -60 dBm -70 dBm Start 2.476 GH Marker	-21.440 dBm -21.440 dBm -21.440 dBm	set 2.42 dB Γ 227.5 μs	RBW 100 kHz VBW 300 kHz	2 2 Mode / M M M M 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Auto FFT 1[1] 2[1]		2.479 - 2.483 	-1.92 dBm 985000 GHz 52.40 dBm 950000 GHz





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8.8 BAND EDGE(HOPPING)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-51.71	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-48.68	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-47.67	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-47.94	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-50.25	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-46.06	-20	Pass



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