

# **TEST REPORT**

Report No.:	BCTC2502766561E	
Applicant:	MOSWS INTERNATIONAL LIMITED	
Product Name:	5.1 Channel Home Theater System	
Test Model:	K38	CHENZH
Tested Date:	2025-03-03 to 2025-04-10	
Issued Date:	2025-04-10	
She	enzhen BCTC Testing Co., Ltd.	
No.: BCTC/RF-EMC-005	Page: 1 of 85	Edition: B,2



# FCC ID:2AZ43-K38

Product Name:	5.1 Channel Home Theater System
Trademark:	Bobtot
Model/Type Reference:	K38 K48, K59, K701D, K901S, H3831, H5880, H5955, H7926, H7922, H8901, H5958, H7912, KW58, W58, B48, H7901, H5808, H7920
Prepared For:	MOSWS INTERNATIONAL LIMITED
Address:	FLAT/RM 07 BLK B 5/F KING YIP FACTORY BUILDING 59 KING YIP STREET KWUN TONG HongKong,CHINA
Manufacturer:	SHENZHEN CITY ENKOR ELECTRONICS LTD.
Address:	The 101,201,301 of Building 1 ,building 3, Plant No.4,Tianyang Third Road, Dongfang Community,Songgang Street,Bao'an District,Shenzhen City
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China.
Sample Received Date:	2025-03-03
Sample Tested Date:	2025-03-03 to 2025-04-10
Issue Date:	2025-04-10
Report No.:	BCTC2502766561E
Test Standards:	FCC Part15.247 ANSI C63.10-2013
Test Results:	PASS
Remark:	This is Bluetooth Classic radio test report.

Tested by:

kelsey Ton

Kelsey Tan/ Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A Means Not Applicable)

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# 1. Version

Report No.	Issue Date	Description	Approved
BCTC2502766561E	2025-04-10	Original	Valid

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# 2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No	Results
1	Conducted emission AC power port	§15.207	PASS
2	Conducted peak output power for FHSS	§15.247(b)(1)	PASS
3	20dB Occupied bandwidth	§15.247(a)(1)	PASS
4	Hopping channel separation	§15.247(a)(1)	PASS
5	Number of hopping frequencies	§15.247(a)(1)(iii)	PASS
6	Dwell Time	§15.247(a)(1)(iii)	PASS
7	Spurious RF conducted emissions	§15.247(d)	PASS
8	Band edge	§15.247(d)	PASS
9	Spurious radiated emissions for transmitter	§15.247(d) & §15.209 & §15.205	PASS
10	Antenna Requirement	15.203	PASS

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# 3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3m chamber Radiated spurious emission(9KHz-30MHz)3m chamber Radiated spurious emission(30MHz-1GHz)3m chamber Radiated spurious emission(1GHz-18GHz)	U=3.7dB U=4.3dB U=4.5dB
emission(30MHz-1GHz) 3m chamber Radiated spurious emission(1GHz-18GHz)	
emission(1GHz-18GHz)	U=4.5dB
3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
Conducted Emission (150kHz-30MHz)	U=3.20dB
Conducted Adjacent channel power	U=1.38dB
Power Spectral Density	U=1.19dB
Conducted output power uncertainty Above 1G	U=1.576dB
Conducted output power uncertainty below 1G	U=1.28dB
Conducted spurious emissions	U=0.55dB
Occupied Bandwidth/Frequency Range	U=3.46%
humidity uncertainty	U=5.3%
Temperature uncertainty	U=0.59°C
Frequency Error	U=53.50Hz
Frequency Drift	U=0.64kHz
	Conducted Emission (150kHz-30MHz) Conducted Adjacent channel power Power Spectral Density Conducted output power uncertainty Above 1G Conducted output power uncertainty below 1G Conducted spurious emissions Occupied Bandwidth/Frequency Range humidity uncertainty Temperature uncertainty Frequency Error





# 4. Product Information And Test Setup

# 4.1 Product Information

Model/Type Reference:	K38 K48, K59, K701D, K901S, H3831, H5880, H5955, H7926, H7922, H8901, H5958, H7912, KW58, W58, B48, H7901, H5808, H7920
Model Differences:	All the model are the same circuit and RF module, except model names and appearance of the color.
Bluetooth Version:	5.3
Hardware Version:	N/A
Software Version:	N/A
Operation Frequency:	2402-2480MHz
Type of Modulation:	GFSK, π/ 4 DQPSK, 8DPSK
Number Of Channel:	79CH
Antenna installation:	Internal antenna
Antenna Gain:	<ul> <li>1.7 dBi</li> <li>Remark:</li> <li>The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information.</li> <li>The antenna gain of the product is provided by the customer, and the test data is affected by the customer, and the test data is affected by the customer information.</li> </ul>
Ratings:	AC120V/60Hz

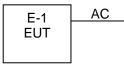
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# 4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Conducted Emission and Radiated Spurious Emission:



# 4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	5.1 Channel Theater System	Bobtot	K38 K48, K59, K701D, K901S, H3831, H5880, H5955, H7926, H7922, H8901, H5958, H7912, KW58, W58, B48, H7901, H5808, H7920		EUT

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Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

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#### 4.4 Channel List

СН	Frequency (MHz)	СН	Frequency (MHz)	СН	Frequency (MHz)	СН	Frequency (MHz)
0	2402	1	2403	2	2404	3	2405
4	2406	5	2407	6	2408	7	2409
8	2410	9	2411	10	2412	11	2413
12	2414	13	2415	14	2416	15	2417
16	2418	17	2419	18	2420	19	2421
20	2422	21	2423	22	2424	23	2425
24	2426	25	2427	26	2428	27	2429
28	2430	29	2431	30	2432	31	2433
32	2434	33	2435	34	2436	35	2437
36	2438	37	2439	38	2440	39	2441
40	2442	41	2443	42	2444	43	2445
44	2446	45	2447	46	2448	47	2449
48	2450	49	2451	50	2452	51	2453
52	2454	53	2455	54	2456	55	2457
56	2458	57	2459	58	2460	59	2461
60	2462	61	2463	62	2464	63	2465
64	2466	65	2467	66	2468	67	2469
68	2470	69	2471	70	2472	71	2473
72	2474	73	2475	74	2476	75	2477
76	2478	77	2479	78	2480	79	/

### 4.5 Test Mode

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.

Test Mode	Test mode	Low channel	Middle channel	High channel
1	Transmitting(GFSK)	2402MHz	2441MHz	2480MHz
2	Transmitting(π/ 4 DQPSK)	2402MHz	2441MHz	2480MHz
3	Transmitting(8DPSK)	2402MHz	2441MHz	2480MHz
4	Transmitting (Conduc			

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) Fully-charged battery is used during the test

### 4.6 Table Of Parameters Of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters

Test software Version	SecureCRT	
Frequency	2402 MHz 2441 MHz 2480 MHz	·
Parameters	DEF	۰. ا

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#### 5. **Test Facility And Test Instrument Used**

#### 5.1 **Test Facility**

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards. FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

## 5.2 Test Instrument Used

	Conducted Emissions Test						
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.		
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025		
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025		
Software	Frad	EZ-EMC	EMC-CON 3A1	١	/		
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	May 15, 2025		

	RF Conducted Test						
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.		
Power Metter	Keysight	E4419		May 16, 2024	May 15, 2025		
Power Sensor (AV)	Keysight	E9300A		May 16, 2024	May 15, 2025		
Signal Analyzer20kH z-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025		
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025		
Radio frequency control box	MAIWEI	MW100-RFC B		\ \			
Software	MAIWEI	MTS 8310					



Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 16, 2024	May 15, 2025
Horn Antenn(18GH z-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	$\Lambda_{j}$

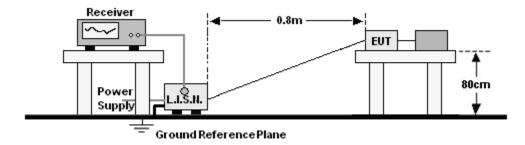
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# 6. Conducted Emissions

# 6.1 Block Diagram Of Test Setup



#### 6.2 Limit

	Limit (d	dBuV)
Frequency (MHz)	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:

1. \*Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

#### 6.3 Test procedure

Receiver Parameters		Setting	
Attenuation		10 dB	
Start Frequency		0.15 MHz	
Stop Frequency		30 MHz	
IF Bandwidth		9 kHz	

a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).

b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.

c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

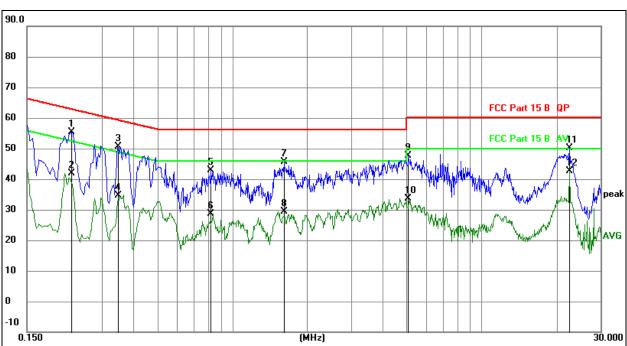
# 6.4 EUT operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



# 6.5 Test Result

Temperature:	<b>24.5</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	L



Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.
 Measurement = Reading Level + Correct Factor
 Over = Measurement - Limit

4. Ove	r = measi	urennenit - Li						
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1	*	0.2256	35.33	20.07	55.40	62.61	-7.21	QP
2		0.2256	21.81	20.07	41.88	52.61	-10.73	AVG
3		0.3465	30.59	20.07	50.66	59.05	-8.39	QP
4		0.3465	14.68	20.07	34.75	49.05	-14.30	AVG
5		0.8217	22.79	20.09	42.88	56.00	-13.12	QP
6		0.8217	8.44	20.09	28.53	46.00	-17.47	AVG
7		1.6105	25.41	20.10	45.51	56.00	-10.49	QP
8		1.6105	9.27	20.10	29.37	46.00	-16.63	AVG
9		5.0848	27.57	20.15	47.72	60.00	-12.28	QP
10		5.0848	13.42	20.15	33.57	50.00	-16.43	AVG
11		22.5353	29.79	20.31	50.10	60.00	-9.90	QP
12		22.5353	22.20	20.31	42.51	50.00	-7.49	AVG

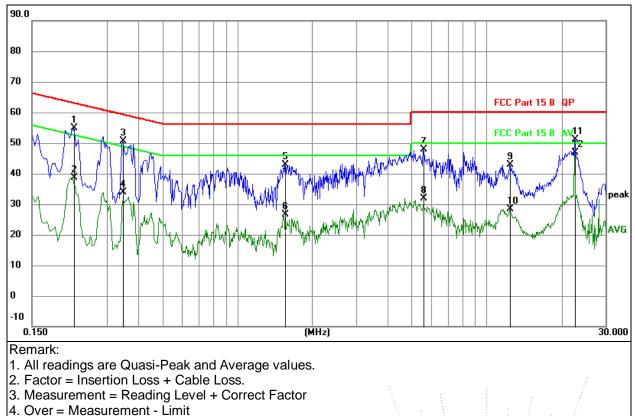
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Temperature:	<b>24.5</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Ν



4. Ove	r = measurements	irement - Li						
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.2220	34.86	20.07	54.93	62.74	-7.81	QP
2		0.2220	18.46	20.07	38.53	52.74	-14.21	AVG
3		0.3480	30.45	20.07	50.52	59. <b>01</b>	-8.49	QP
4		0.3480	13.89	20.07	33.96	49.01	-15.05	AVG
5		1.5540	22.81	20.10	42.91	56.00	-13.09	QP
6		1.5540	6.48	20.10	26.58	46.00	-19.42	AVG
7		5.5815	27.83	20.15	47.98	60.00	-12.02	QP
8		5.5815	11.73	20.15	31.88	50.00	-18.12	AVG
9		12.4080	22.64	20.24	42.88	60.00	-17.12	QP
10		12.4080	8.09	20.24	28.33	50.00	-21.67	AVG
11		22.5780	30.80	20.31	51.11	60.00	-8.89	QP
12	*	22.5780	26.46	20.31	46.77	50.00	-3.23	AVG

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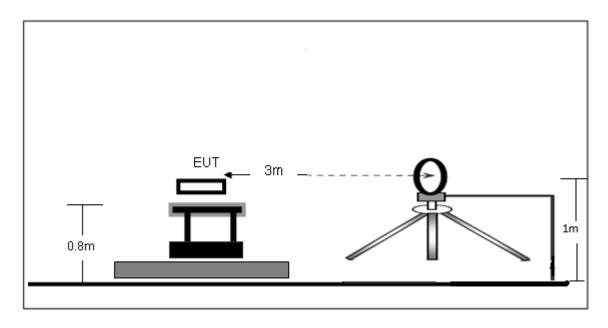
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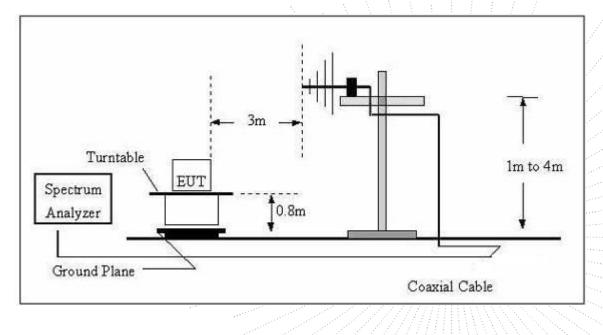
# 7. Radiated emissions

# 7.1 Block Diagram Of Test Setup

(A) Radiated Emission Test-Up Frequency Below 30MHz

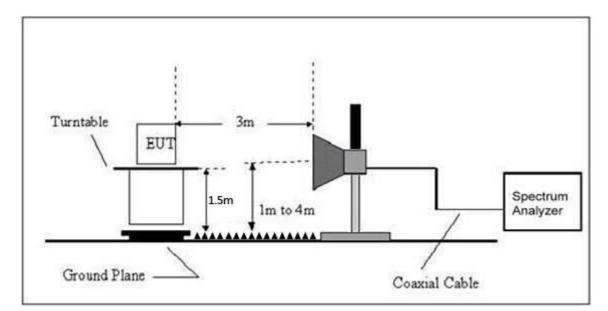








(C) Radiated Emission Test-Up Frequency Above 1GHz



# 7.2 Limit

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.

Field Strength	Distance	nce Field Strength Limit at 3m Distance		
uV/m	(m)	uV/m	dBuV/m	
2400/F(kHz)	300	10000 * 2400/F(kHz)	20log <sup>(2400/F(kHz))</sup> + 80	
24000/F(kHz)	30	100 * 24000/F(kHz)	20log <sup>(24000/F(kHz))</sup> + 40	
30	30	100 * 30	20log <sup>(30)</sup> + 40	
100	3	100	20log <sup>(100)</sup>	
150	3	150	20log <sup>(150)</sup>	
200	3	200	20log <sup>(200)</sup>	
500	3	500	20log <sup>(500)</sup>	
	2400/F(kHz) 24000/F(kHz) 30 100 150 200	2400/F(kHz)         300           24000/F(kHz)         30           30         30           100         3           150         3           200         3	2400/F(kHz)         300         10000 * 2400/F(kHz)           24000/F(kHz)         30         100 * 24000/F(kHz)           30         30         100 * 30           100         3         100           150         3         150           200         3         200	

Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m)	) (at 3M)
	Peak	Average
Above 1000		54

Notes:

(1)The limit for radiated test was performed according to FCC PART 15C.

(2)The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

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Frequency Range Of Radiated Measurement

(a) For an intentional radiator the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to at least the frequency shown in this paragraph:
(1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

(2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

(3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.

(4) If the intentional radiator operates at or above 95 GHz: To the third harmonic of the highest fundamental frequency or to 750 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.

(5) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a) (1)through (4) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this section, whichever is the higher frequency range of investigation.

# 7.3 Test procedure

Receiver Parameter	Setting
Attenuation	Auto
9kHz~150kHz	RBW 200Hz for QP
150kHz~30MHz	RBW 9kHz for QP
30MHz~1000MHz	RBW 120kHz for QP

Spectrum Parameter	Setting
1-25GHz	RBW 1 MHz /VBW 1 MHz for Peak, RBW 1 MHz / VBW 10Hz for Average

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.



Above 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d.For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

g. Test the EUT in the lowest channel, the middlest channel, the Highest channel. Note:

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

# 7.4 EUT operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

#### 7.5 Test Result

## Below 30MHz

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Test voltage.	

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				PASS
				PASS

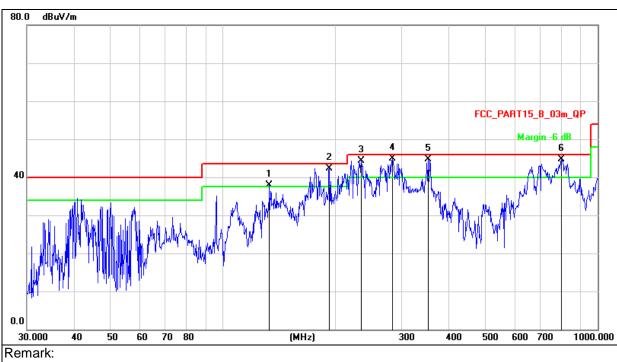
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor.



Between 30MHz – 1GHz						
Temperature:	<b>22.4</b> ℃	Relative Humidity:	54%RH			
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz			
Test Mode:	Mode 4	Polarization:	Horizontal			



Factor = Antenna Factor + Cable Loss – Pre-amplifier.
 Measurement = Reading Level + Correct Factor

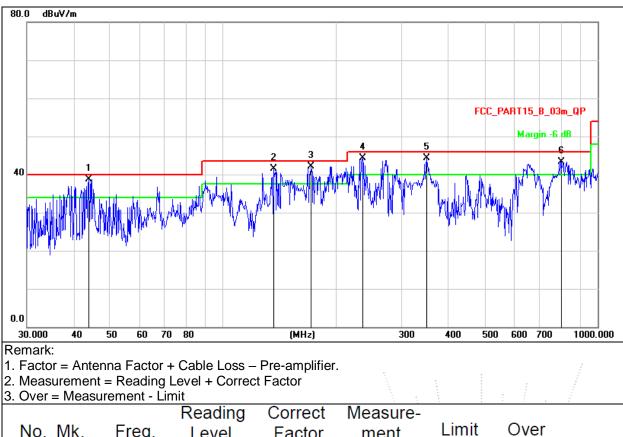
3.	Over = Measurement -	Limit

- 101							
ML	From	Reading	Correct	Measure-	Limit	Over	
IVIK			Factor				
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
İ	133.1511	56.06	-18.25	37.81	43.50	-5.69	QP
İ	192.4182	58.58	-16.28	42.30	43.50	-1.20	QP
İ	234.1682	59.14	-14.74	44.40	46.00	-1.60	QP
*	282.9852	58.53	-13.60	44.93	46.00	-1.07	QP
İ	352.9433	56.09	-11.44	44.65	46.00	-1.35	QP
İ	798.9796	49.09	-4.41	44.68	46.00	-1.32	QP
	Mk ! !	Mk. Freq. MHz ! 133.1511 ! 192.4182 ! 234.1682 * 282.9852 ! 352.9433	Mk.       Freq.       Level         MHz       dBuV         !       133.1511       56.06         !       192.4182       58.58         !       234.1682       59.14         *       282.9852       58.53         !       352.9433       56.09	Mk.       Freq.       Reading Level       Correct Factor         MHz       dBuV       dB         !       133.1511       56.06       -18.25         !       192.4182       58.58       -16.28         !       234.1682       59.14       -14.74         *       282.9852       58.53       -13.60         !       352.9433       56.09       -11.44	Mk.Freq.Reading LevelCorrect FactorMeasure- mentMHzdBuVdBdBuV/m!133.151156.06-18.2537.81!192.418258.58-16.2842.30!234.168259.14-14.7444.40*282.985258.53-13.6044.93!352.943356.09-11.4444.65	Mk.Freq.Reading LevelCorrect FactorMeasure- mentLimitMHzdBuVdBdBuV/mdB/m!133.151156.06-18.2537.8143.50!192.418258.58-16.2842.3043.50!234.168259.14-14.7444.4046.00*282.985258.53-13.6044.9346.00!352.943356.09-11.4444.6546.00	Mk.Freq.Reading LevelCorrect FactorMeasure- mentLimitOverMHzdBuVdBdBuV/mdB/mdB!133.151156.06-18.2537.8143.50-5.69!192.418258.58-16.2842.3043.50-1.20!234.168259.14-14.7444.4046.00-1.60*282.985258.53-13.6044.9346.00-1.07!352.943356.09-11.4444.6546.00-1.35

E



Temperature:	<b>22.4</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Vertical



No.	Mk	. Freq.	Level	Factor	ment	Limit	Over	ŕ
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	43.9658	53.16	-14.39	38.77	40.00	-1.23	QP
2	İ	136.9388	60.05	-18.52	41.53	43.50	-1.97	QP
3	İ	171.9944	59.89	-17.80	42.09	43.50	-1.41	QP
4	İ	235.8163	59.04	-14.70	44.34	46.00	-1.66	QP
5	İ	349.2500	55.85	-11.51	44.34	46.00	-1.66	QP
6	İ	798.9796	47.76	-4.41	43.35	46.00	-2.65	QP

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#### Between 1GHz – 25GHz

Polar	Frequency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	Туре
			GFSK Low ch	annel			
V	4804.00	72.52	-19.99	52.53	74.00	-21.47	PK
V	4804.00	63.93	-19.99	43.94	54.00	-10.06	AV
V	7206.00	65.08	-14.22	50.86	74.00	-23.14	PK
V	7206.00	54.18	-14.22	39.96	54.00	-14.04	AV
Н	4804.00	71.34	-19.99	51.35	74.00	-22.65	PK
Н	4804.00	61.48	-19.99	41.49	54.00	-12.51	AV
Н	7206.00	62.79	-14.22	48.57	74.00	-25.43	PK
Н	7206.00	53.88	-14.22	39.66	54.00	-14.34	AV
		G	FSK Middle o	hannel			
V	4882.00	72.52	-19.99	52.53	74.00	-21.47	PK
V	4882.00	63.93	-19.99	43.94	54.00	-10.06	AV
V	7323.00	65.08	-14.22	50.86	74.00	-23.14	PK
V	7323.00	54.18	-14.22	39.96	54.00	-14.04	AV
Н	4882.00	71.34	-19.99	51.35	74.00	-22.65	PK
Н	4882.00	61.48	-19.99	41.49	54.00	-12.51	AV
Н	7323.00	62.79	-14.22	48.57	74.00	-25.43	PK
Н	7323.00	53.88	-14.22	39.66	54.00	-14.34	AV
			GFSK High ch	nannel			
V	4960.00	72.52	-19.99	52.53	74.00	-21.47	PK
V	4960.00	63.93	-19.99	43.94	54.00	-10.06	AV
V	7440.00	65.08	-14.22	50.86	74.00	-23.14	PK
V	7440.00	54.18	-14.22	39.96	54.00	-14.04	AV
Н	4960.00	71.34	-19.99	51.35	74.00	-22.65	PK
Н	4960.00	61.48	-19.99	41.49	54.00	-12.51	AV
Н	7440.00	62.79	-14.22	48.57	74.00	-25.43	PK
Н	7440.00	53.88	-14.22	39.66	54.00	-14.34	AV

#### Remark:

1. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier. Over= Measurement - Limit

2.If peak below the average limit, the average emission was no test.

3. In restricted bands of operation, The spurious emissions below the permissible value more than 20dB4. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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Polar	Frequency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	Туре
		π/4	DQPSK Low	channel			
V	4804.00	71.23	-19.99	51.24	74.00	-22.76	PK
V	4804.00	61.10	-19.99	41.11	54.00	-12.89	AV
V	7206.00	62.84	-14.22	48.62	74.00	-25.38	PK
V	7206.00	53.69	-14.22	39.47	54.00	-14.53	AV
Н	4804.00	68.16	-19.99	48.17	74.00	-25.83	PK
Н	4804.00	58.51	-19.99	38.52	54.00	-15.48	AV
Н	7206.00	60.52	-14.22	46.30	74.00	-27.70	PK
Н	7206.00	51.65	-14.22	37.43	54.00	-16.57	AV
		π/4	DQPSK Midd	e channel			
V	4882.00	69.87	-19.84	50.03	74.00	-23.97	PK
V	4882.00	62.90	-19.84	43.06	54.00	-10.94	AV
V	7323.00	59.55	-13.90	45.65	74.00	-28.35	PK
V	7323.00	50.95	-13.90	37.05	54.00	-16.95	AV
Н	4882.00	66.56	-19.84	46.72	74.00	-27.28	PK
Н	4882.00	57.12	-19.84	37.28	54.00	-16.72	AV
Н	7323.00	57.34	-13.90	43.44	74.00	-30.56	PK
Н	7323.00	50.14	-13.90	36.24	54.00	-17.76	AV
			DQPSK High	channel			
V	4960.00	72.76	-19.68	53.08	74.00	-20.92	PK
V	4960.00	63.82	-19.68	44,14	54.00	-9.86	AV
V	7440.00	65.39	-13.57	51.82	74.00	-22.18	PK
V	7440.00	54.48	-13.57	40.91	54.00	-13.09	AV
Н	4960.00	70.21	-19.68	50.53	74.00	-23.47	PK
Н	4960.00	59.76	-19.68	40.08	54.00	-13.92	AV
Н	7440.00	62.88	-13.57	49.31	74.00	-24.69	PK
Н	7440.00	55.79	-13.57	42.22	54.00	-11.78	AV

#### Remark:

1. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier. Over= Measurement - Limit

2.If peak below the average limit, the average emission was no test.

In restricted bands of operation, The spurious emissions below the permissible value more than 20dB
 The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar	Frequency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	Туре
		8	DPSK Low cl	nannel			
V	4804.00	71.89	-19.99	51.90	74.00	-22.10	PK
V	4804.00	62.84	-19.99	42.85	54.00	-11.15	AV
V	7206.00	64.19	-14.22	49.97	74.00	-24.03	PK
V	7206.00	53.39	-14.22	39.17	54.00	-14.83	AV
Н	4804.00	68.01	-19.99	48.02	74.00	-25.98	PK
Н	4804.00	57.32	-19.99	37.33	54.00	-16.67	AV
Н	7206.00	61.48	-14.22	47.26	74.00	-26.74	PK
Н	7206.00	53.47	-14.22	39.25	54.00	-14.75	AV
		80	<b>OPSK Middle</b>	channel		•	•
V	4882.00	68.18	-19.84	48.34	74.00	-25.66	PK
V	4882.00	60.35	-19.84	40.51	54.00	-13.49	AV
V	7323.00	59.39	-13.90	45.49	74.00	-28.51	PK
V	7323.00	51.38	-13.90	37.48	54.00	-16.52	AV
Н	4882.00	64.54	-19.84	44.70	74.00	-29.30	PK
Н	4882.00	54.87	-19.84	35.03	54.00	-18.97	AV
Н	7323.00	56.78	-13.90	42.88	74.00	-31.12	PK
Н	7323.00	48.11	-13.90	34.21	54.00	-19.79	AV
		8	DPSK High c	hannel			
V	4960.00	71.09	-19.68	51.41	74.00	-22.59	PK
V	4960.00	60.69	-19.68	41.01	54.00	-12.99	AV
V	7440.00	64.08	-13.57	50.51	74.00	-23.49	PK
V	7440.00	53.30	-13.57	39.73	54.00	-14.27	AV
Н	4960.00	69.25	-19.68	49.57	74.00	-24.43	PK
Н	4960.00	59.16	-19.68	39.48	54.00	-14.52	AV
Н	7440.00	63.01	-13.57	49.44	74.00	-24.56	PK
Н	7440.00	54.89	-13.57	41.32	54.00	-12.68	AV

#### Remark:

1. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss -Pre-amplifier. Over= Measurement – Limit 2.If peak below the average limit, the average emission was no test.

3. In restricted bands of operation, The spurious emissions below the permissible value more than 20dB

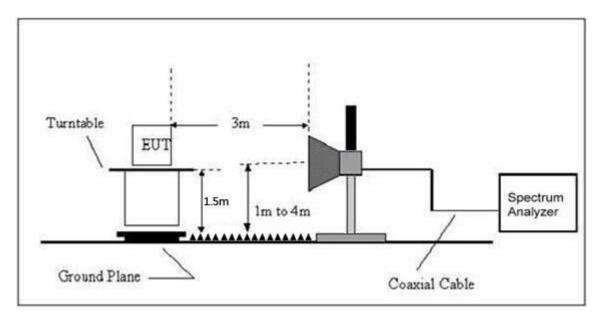
4. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



# 8. Radiated Band Emission Measurement And Restricted Bands Of Operation

# 8.1 Block Diagram Of Test Setup

Radiated Emission Test-Up Frequency Above 1GHz



### 8.2 Limit

FCC Part15 C Section 15.209 and 15.205

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 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	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	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			



Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)		
	Peak	Average	
Above 1000	74	54	

Notes:

(1)The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3)Emission level (dBuV/m)=20log Emission level (uV/m).

### 8.3 Test procedure

Receiver Parameter	Setting
Attenuation	Auto
Start Frequency	2300MHz
Stop Frequency	2520
RB / VB (Emission In Restricted Band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Above 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d.For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

g. Test the EUT in the lowest channel, the Highest channel.

Note:

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

# 8.4 EUT operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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## 8.5 Test Result

Test mode	Polar (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measure- ment (dBuV/m)		nits V/m)	Over	Result
			(ubuv/iii)	//m) (ab)	PK	PK	AV	PK	
		Low Channel 2402MHz							
	Н	2390.00	72.01	-25.43	46.58	74.00	54.00	-27.42	PASS
	Н	2400.00	74.05	-25.40	48.65	74.00	54.00	-25.35	PASS
	V	2390.00	71.59	-25.43	46.16	74.00	54.00	-27.84	PASS
GFSK	V	2400.00	71.72	-25.40	46.32	74.00	54.00	-27.68	PASS
GFSK		High Channel 2480MHz							
	Н	2483.50	72.21	-25.15	47.06	74.00	54.00	-26.94	PASS
	Н	2500.00	67.39	-25.10	42.29	74.00	54.00	-31.71	PASS
	V	2483.50	71.77	-25.15	46.62	74.00	54.00	-27.38	PASS
	V	2500.00	67.69	-25.10	42.59	74.00	54.00	-31.41	PASS
		Low Channel 2402MHz							
π/4DQPSK	Н	2390.00	72.20	-25.43	46.77	74.00	54.00	-27.23	PASS
	Н	2400.00	75.19	-25.40	49.79	74.00	54.00	-24.21	PASS
	V	2390.00	72.35	-25.43	46.92	74.00	54.00	-27.08	PASS
	V	2400.00	72.80	-25.40	47.40	74.00	54.00	-26.60	PASS
	High Channel 2480MHz								
	Н	2483.50	71.50	-25.15	46.35	74.00	54.00	-27.65	PASS
	Н	2500.00	67.56	-25.10	42.46	74.00	54.00	-31.54	PASS
	V	2483.50	72.70	-25.15	47.55	74.00	54.00	-26.45	PASS
	V	2500.00	69.29	-25.10	44.19	74.00	54.00	-29.81	PASS
				Low Chan	nel 2402MHz				
8DPSK	Н	2390.00	72.48	-25.43	47.05	74.00	54.00	-26.95	PASS
	Н	2400.00	74.53	-25.40	49.13	74.00	54.00	-24.87	PASS
	V	2390.00	72.29	-25.43	46.86	74.00	54.00	-27.14	PASS
	V	2400.00	73.57	-25.40	48.17	74.00	54.00	-25.83	PASS
		High Channel 2480MHz							
	Н	2483.50	72.73	-25.15	47.58	74.00	54.00	-26.42	PASS
	Н	2500.00	69.33	-25.10	44.23	74.00	54.00	-29.77	PASS
	V	2483.50	70.96	-25.15	45.81	74.00	54.00	-28.19	PASS
	V	2500.00	66.24	-25.10	41.14	74.00	54.00	-32.86	PASS

#### Remark:

1. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss - Pre-amplifier.

2. If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

3. In restricted bands of operation, The spurious emissions below the permissible value more than 20dB

4. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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# 9. Spurious RF Conducted Emissions

# 9.1 Block Diagram Of Test Setup



## 9.2 Limit

Regulation 15.247 (d),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))

### 9.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;

2. Set the spectrum analyzer:

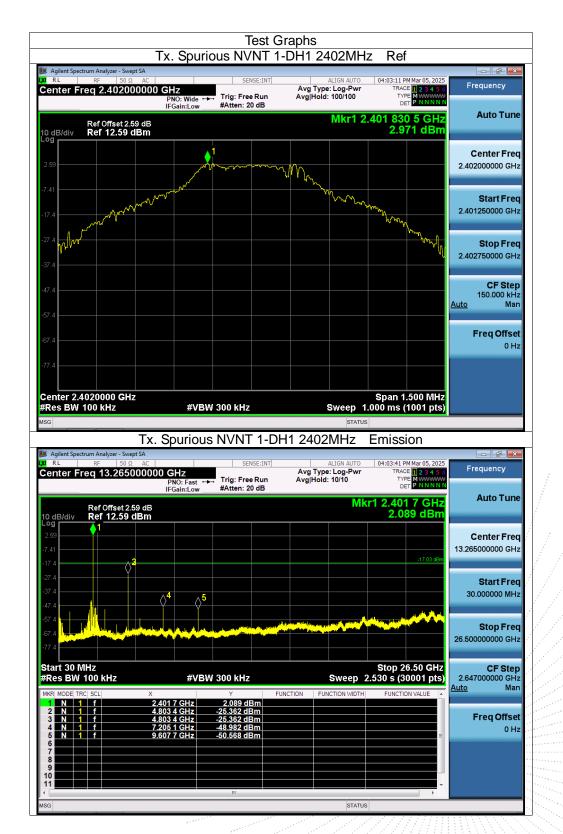
RBW = 100kHz, VBW = 300kHz, Sweep = auto

Detector function = peak, Trace = max hold

#### 9.4 Test Result

Temperature:	<b>26</b> ℃		Relative Humidity:	54%RH		
Pressure:	101KPa		Test Voltage :	AC 120V/60Hz		
	•••••					
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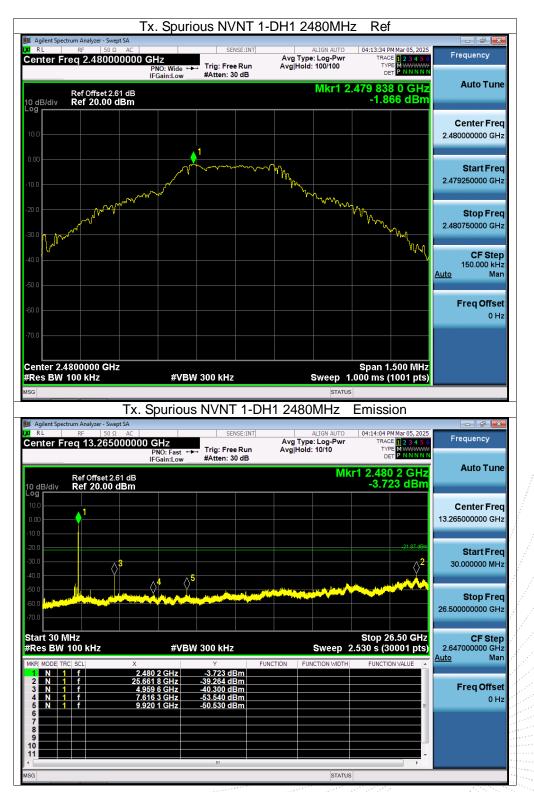
Edition: B.2

No.: BCTC/RF-EMC-005



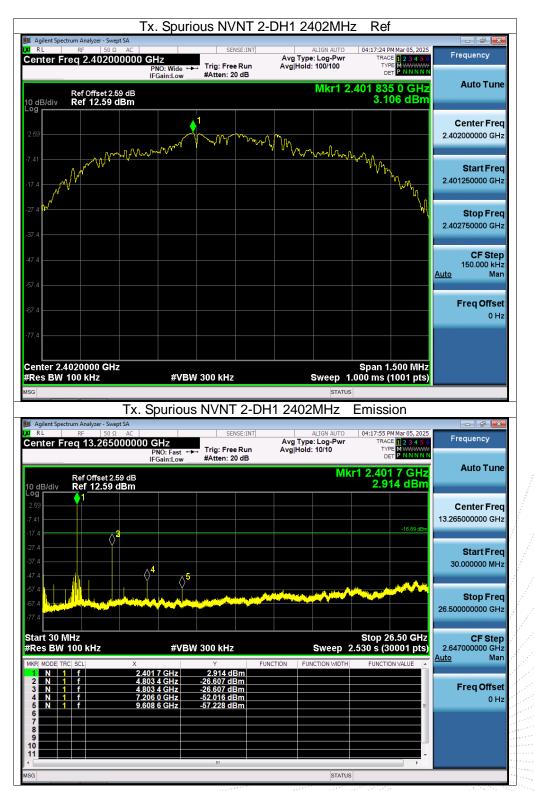






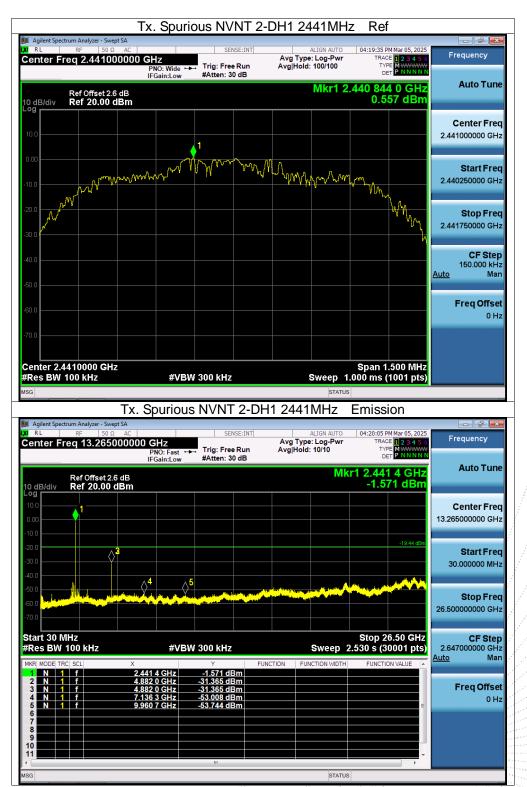






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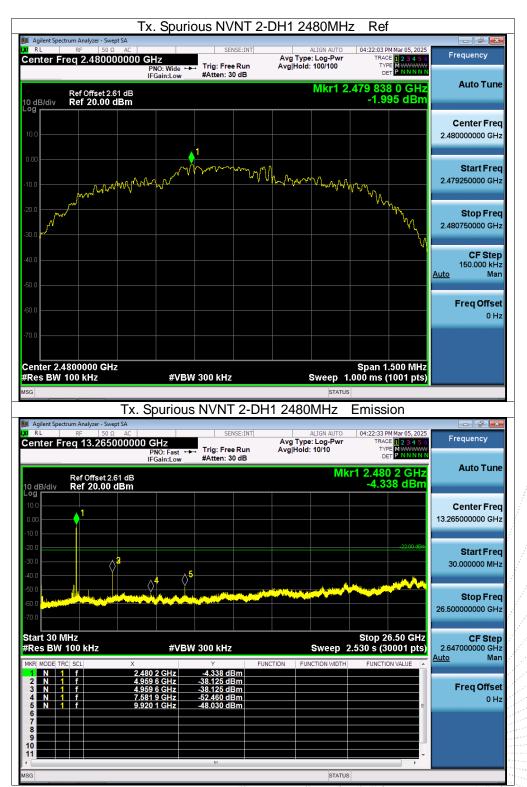




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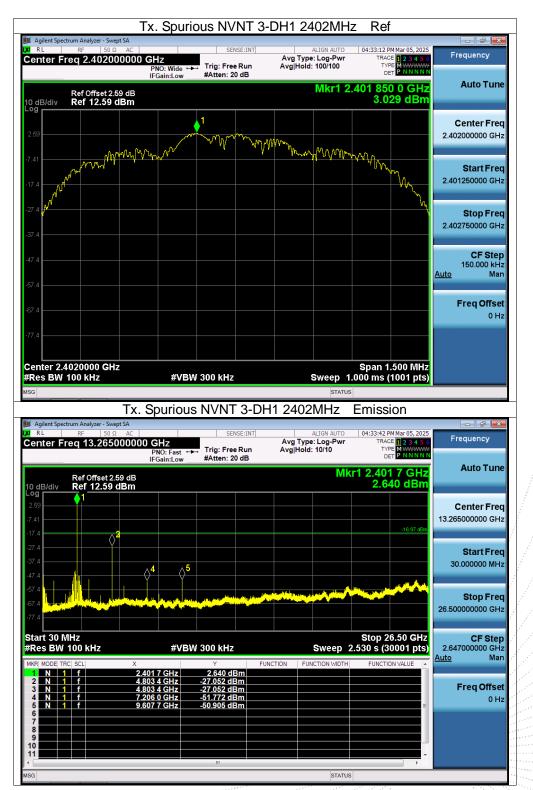
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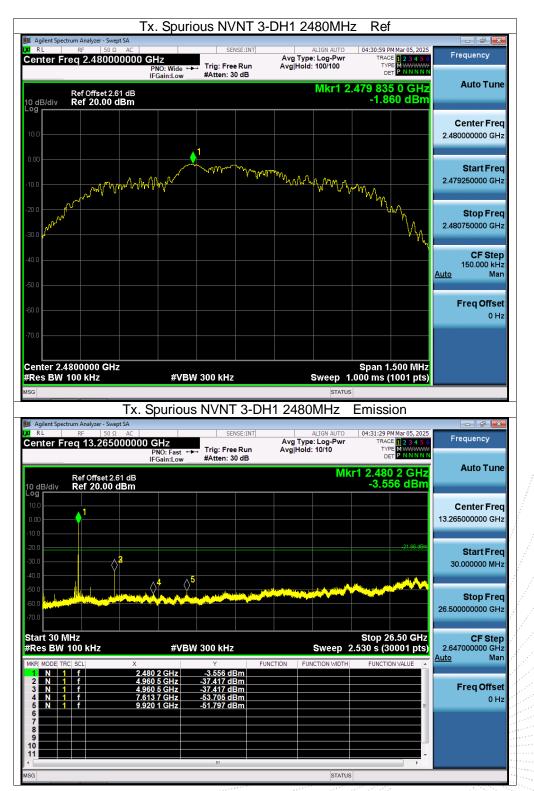






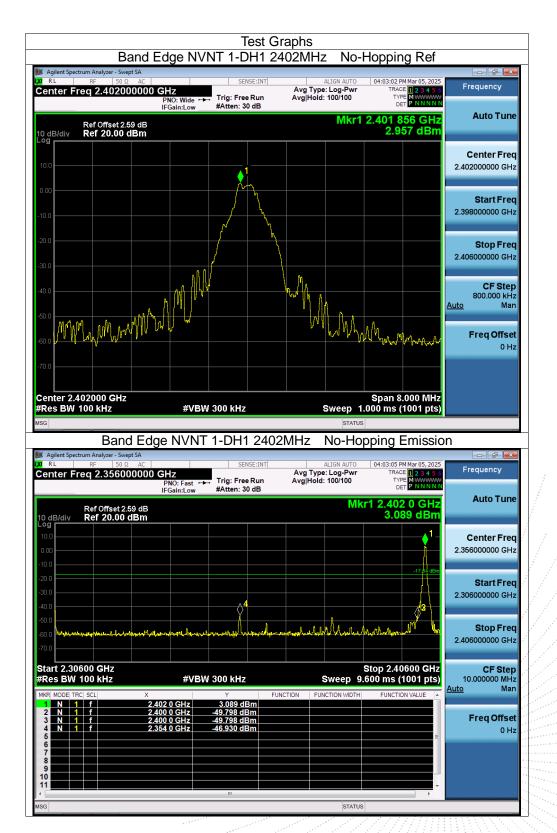




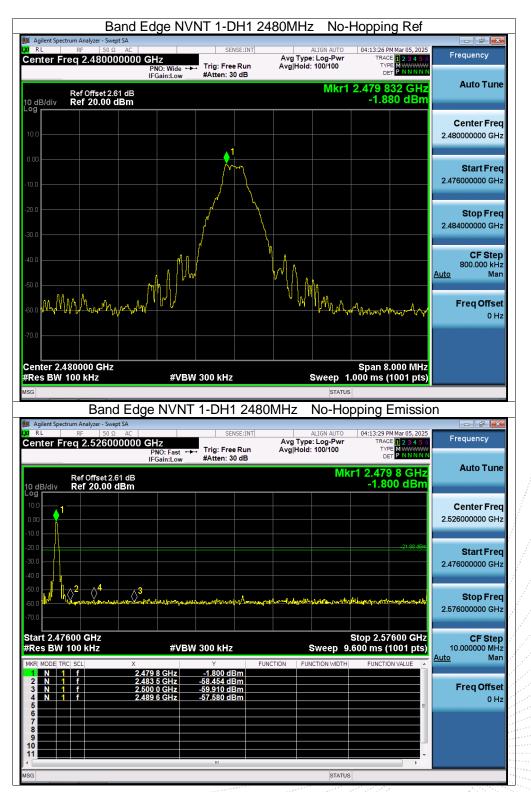








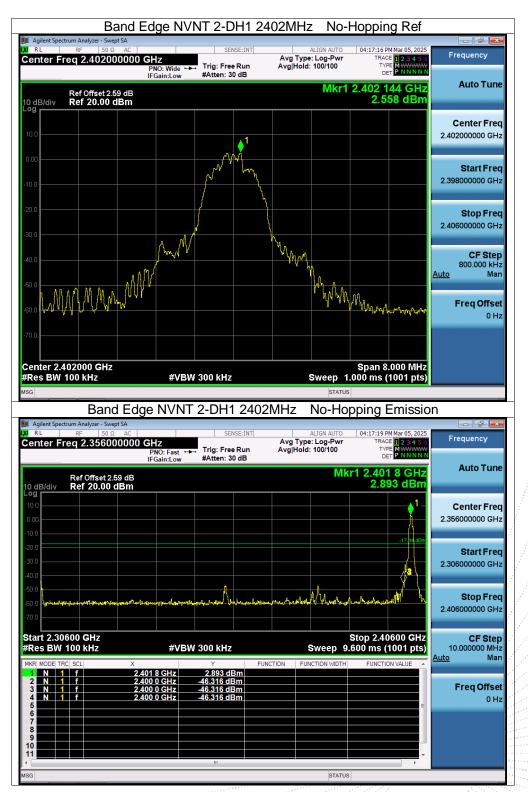




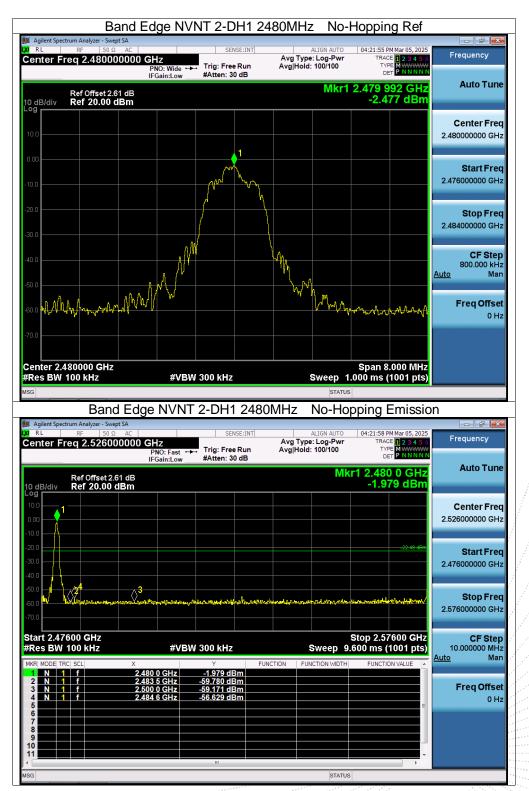
,TC 3C PPR



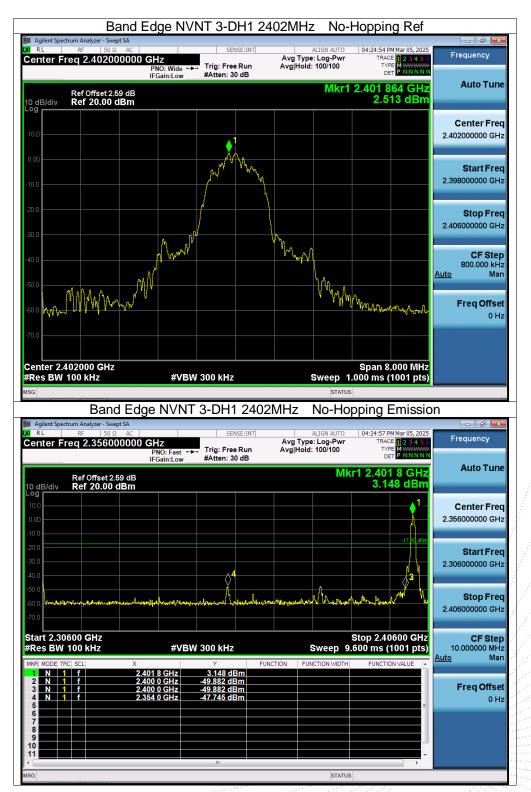




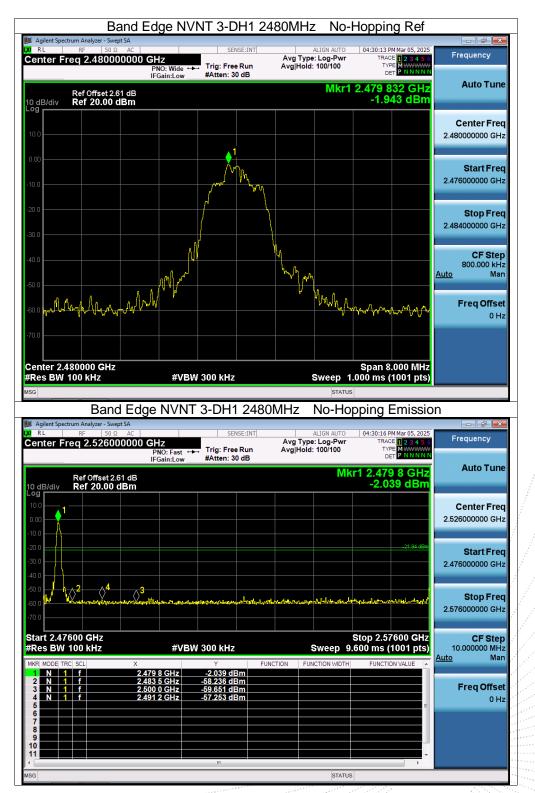


















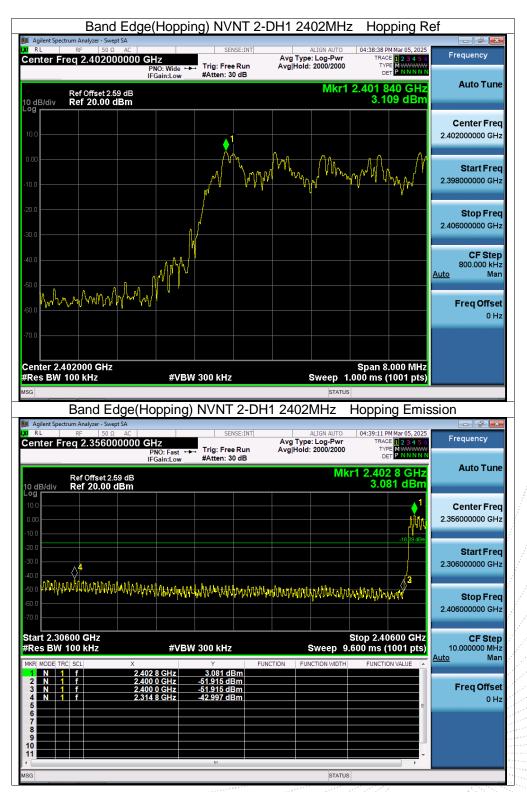




,TC 3C PPR

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Band Edg	e(Hoppin	g) NVNT 2	2-DH1 2480MHz	z Hopping R	ef
J Agilent Spectrum Analyzer - Swept SA		SENSE:INT	ALIGN AUTO	04:41:44 PM Mar 05, 2025	
Center Freq 2.480000000	GHz PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 1 2 3 4 5 6 TYPE M WWWW DET P N N N N N	Frequency
Ref Offset 2.61 dB 10 dB/div Ref 20.00 dBm			Mkr1	2.479 840 GHz -1.861 dBm	Auto Tune
10.0					Center Freq 2.480000000 GHz
0.00 m M a N 1					Start Freq
-10.0 WWW YWWW		Mary wh			2.476000000 GHz
-20.0					<b>Stop Freq</b> 2.484000000 GHz
-40.0					CF Step 800.000 kHz
-50.0			M. M. M.	Ungon Angon Comercia	<u>Auto</u> Man Freq Offset
-70.0				Blowedly, HELVULAT Connections	0 Hz
Center 2.480000 GHz				Span 8.000 MHz	
#Res BW 100 kHz	#VBW	300 kHz	Sweep 1	.000 ms (1001 pts)	
MSG			STATUS	<u>.</u> .	
Band Edge(I	Hopping)	NVNT 2-D		Hopping Emis	
	GHz PNO: Fast ↔	SENSE:INT		Hopping Emis	SSION Frequency
Band Edge(H Agilent Spectrum Analyzer - Swept SA K RL RF 500 AC C Center Freq 2.526000000 Ref Offset 2.61 dB 10 dB/div Ref 20.00 dBm	GHz	SENSE:INT	H1 2480MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	Hopping Emis 04:42:16 PM Mar 05, 2025 TRACE 12 3 4 5 6	
Band Edge( Section Analyzer - Swept SA RL RF 50 Q AC Center Freq 2.526000000 Ref Offset 2.61 dB	GHz PNO: Fast ↔	SENSE:INT	H1 2480MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	Hopping Emis	Frequency
Band Edge(f Band Edge(f Agilent Spectrum Analyzer - Swept SA Center Freq 2.526000000 Ref Offset 2.61 dB 10 dB/div Ref 20.00 dBm 10 dB/div 1	GHz PNO: Fast ↔	SENSE:INT	H1 2480MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	Hopping Emis	Frequency Auto Tune Center Freq
Band Edge(f	GHZ PRO: Fast IFGain:Low	SENSE:INT Trig: Free Run #Atten: 30 dB	H1 2480MHz	Hopping Emis 04:42:16 PM Mar 05, 2025 TRACE 12 23 45 G TYPE 10 20 45 C POP 10 10 10 10 10 10 10 10 10 10 10 10 10	Frequency Auto Tune Center Freq 2.52600000 GHz
Band Edge(f Bit Agilen Spectrum Analyzer - Swept SA (M) RL RF 500 AcC Center Freq 2.5260000000 Ref Offset 2.61 dB Ref 20.00 dBm 100 100 100 100 100 100 100 10	GHZ PRO: Fast IFGain:Low	SENSE:INT Trig: Free Run #Atten: 30 dB	H1 2480MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 2000/2000	Hopping Emis 04:42:16 PM Mar 05, 2025 TRACE 12 23 45 G TYPE 10 20 45 C POP 10 10 10 10 10 10 10 10 10 10 10 10 10	Frequency Auto Tune Center Freq 2.52600000 GHz Start Freq
Band Edge(f	GHz PPO: Fast →→ IFGain:Low	SENSE:INT Trig: Free Run #Atten: 30 dB	H1 2480MHz	Hopping Emis 04:42:16 PM Mar 05, 2025 TRACE 12 23 45 G TYPE 10 20 45 C POP 10 10 10 10 10 10 10 10 10 10 10 10 10	Frequency Auto Tune Center Freq 2.52600000 GHz Start Freq 2.47600000 GHz Stop Freq 2.57600000 GHz CF Step 10.00000 MHz
Band Edge(H	GHz PPO: Fast →→ IFGain:Low	SENSE:INT Trig: Free Run #Atten: 30 dB	H1 2480MHz	Hopping Emis 04:42:16 PM Mar 05, 2025 TRACE 12 24 5 6 TYPE 10 24 5 0 TYPE 10 24 5 0 TYPE 10 10 10 10 TYPE 10	Frequency Auto Tune Center Freq 2.52600000 GHz Start Freq 2.47600000 GHz Stop Freq 2.57600000 GHz
Band Edge(f           Agilent Spectrum Analyzer - Swept SA           Ref Offset 2.5260000000           Center Freq 2.5260000000           Ref Offset 2.61 dB           Control Bar           Ref Offset 2.61 dB           Control Bar           Control Bar           Start 2.47600 GHz           Res BW 100 kHz           MKR MODE TRC SCL         X           N         I         I         2.2           N         I         f         2.2           N         I         f         2.4	GHz PNO: Fast →→ IFGain:Low #VBW #VBW 176 8 GHz 183 6 GHz 183 6 GHz	SENSE:INT	H1 2480MHz	Hopping Emis	Frequency Auto Tune Center Freq 2.526000000 GHz Start Freq 2.476000000 GHz Stop Freq 2.576000000 GHz CF Step 10.000000 MHz
Band Edge(f           Band Edge(f           Mail Agilent Spectrum Analyzer - Swept SA (M) RL         Ref Offset 2.61 dB 0.0 dB/div           Ref Offset 2.61 dB 10 dB/div         Ref Offset 2.61 dB 0.0 dB/div           0 dB/div         Ref Offset 2.61 dB 0.0 dB/div           10 dB/div         Ref 20.00 dBm         Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Ref Offset 2.61 dB 0.0 dB/div           10 dB/div         Ref 20.00 dBm         Colspan="2">Colspan="2"           10 dB/div         Colspan="2">Colspan="2"           20 dB/div         2         2         3         3         4         4         4         2         2         3         4         4         2         2         2         4         1         1         2         2         4         1         1         2	GHz PNO: Fast →→ IFGain:Low #VBW #VBW 176 8 GHz 183 6 GHz 183 6 GHz	SENSE:INT Trig: Free Run #Atten: 30 dB 	H1 2480MHz	Hopping Emis	Frequency Auto Tune Center Freq 2.526000000 GHz Start Freq 2.476000000 GHz Stop Freq 2.576000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset
Band Edge(f           Agilent Spectrum Analyzer - Swept SA           V         R.L         RF         Soc AcC           Center Freq 2.526000000         Ref Offset 2.61 dB         Dog         Dog           10         B         Ref Offset 2.61 dB         Dog         Dog         Dog           10         1	GHz PNO: Fast →→ IFGain:Low #VBW #VBW 176 8 GHz 183 6 GHz 183 6 GHz	SENSE:INT Trig: Free Run #Atten: 30 dB 	H1 2480MHz	Hopping Emis	Frequency Auto Tune Center Freq 2.526000000 GHz Start Freq 2.476000000 GHz 2.576000000 GHz 0.00000 GHz Lo.000000 MHz Auto Man



ALL       M	Band Edge(Hopp	ing) NVNT 3-	DH1 2402MHz	Hopping R	ef	
Pred Pred 2-402000000       Pred Ref 07642289 dB       Mkr1 2-404 000 GHz         Pred Offset 289 dB       Mkr1 2-404 000 GHz       Center Freq 2.400000 GHz         Pred Offset 289 dB       Mkr1 2-404 000 GHz       Start Freq 2.400000 GHz         Pred Offset 289 dB       Mkr1 2-404 000 GHz       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.400000 GHz         Pred Offset 289 dB       Pred Offset 289 dB       Start Freq 2.4000000 GHz         Pred Offset 289 dB       Start Freq 2.4000000 GHz       Start Freq 2.4000000 GHz         Ref Offset 289 dB       Start Freq 2.4000000 GHz       Pred Offset 289 dB         Pred Offset 289 dB       Start Freq 2.4000000 GHz       Pred Offset 289 dB         Pred Offset 289 dB       Start Freq 2.4000000 GHz       Pred Offset 289 dB         Pred Offset 289 dB       Start Freq 2.4000000 GHz       Pred Offset 289 dB         Pred Offset 289 dB       Start Freq 2.400000 GHz       Pred Offset 289 dB <t< td=""><td></td><td>SENSE:INT</td><td></td><td>04:44:07 PM Mar 05, 2025</td><td></td></t<>		SENSE:INT		04:44:07 PM Mar 05, 2025		
Production         Mikri 0.200         Mikri 2.404 000 GHz 2.458 dBm         Auto Tunc 2.458 dBm           0000000 GHz 0000000 GHz         0 <t< td=""><td>PNO: Wide •</td><td></td><td></td><td>TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N</td><td>Frequency</td></t<>	PNO: Wide •			TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency	
30       All of a construction       Center Freq       2.40200000 GHz         30       00	Ref Offset 2.59 dB	#Atten: 30 dB	Mkr1 2	.404 000 GHz	Auto Tune	
2.40200000 GHz 2.40200000 GHz 2.40200000 GHz 2.40200000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.4020000 GHz 2.4020000 GHz 2.4020000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.40200 GHz 2.40200 GHz 2.40200 GHz 2.40200 GHz 2.402000 GHz 2.402000 GHz 2.402000 GHz 2.40200 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz 3.002 GHz	10 dB/div Ref 20.00 dBm			2.400 UDIII		
Start Freq 2.39800000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 0.06 00 00 00 00 00 00 00 00 00 00 00 00 0	10.0				Center Freq 2.402000000 GHz	
Start Freq 2.39800000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 2.0500000 GHz Stop Freq 0.06 00 00 00 00 00 00 00 00 00 00 00 00 0				<u>Λ</u> Λ Λ		
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Auto Auto	-10.0			ro v yyey	2.398000000 GHz	
000000000000000000000000000000000000	-20.0				Stop Freq	
Band Edge (Hopping) NVNT 3-DH1 2402MHz Sweep 1.000 ms (1001 pts) Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Frequency PROFERSE Ref Offset 259 dB Center Freq 2.356000000 GHz Ref 20.00 dBm Center Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Center Freq 2.35600000 GHz Center Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.356000000 GHz Center Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop F	-30.0	<mark>/</mark>			2.406000000 GHz	
Band Edge (Hopping) NVNT 3-DH1 2402MHz Sweep 1.000 ms (1001 pts) Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Band Edge (Hopping) NVNT 3-DH1 2402MHz Hopping Emission Frequency PROFERSE Ref Offset 259 dB Center Freq 2.356000000 GHz Ref 20.00 dBm Center Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Center Freq 2.35600000 GHz Center Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.356000000 GHz Center Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Center Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.356000000 GHz Stop Freq 2.35600000 GHz Stop Freq 2.356000000 GHz Stop F	M.M	ฟา			CF Step	
C00       Model Free Quite State       Free Quite State       Free Quite State         C00       Model Free Quite State       Span 8.000 MHz       Span 8.000 MHz         Construction       Span 8.000 MHz       Span 8.000 MHz       Span 8.000 MHz         Construction       Span 8.000 MHz       Span 8.000 MHz       Span 8.000 MHz         Construction       Status       Status       Status       Status         Construction       Status       Mater: 30 db       Augent Status       Freq Offset         Construction       Status       Mkr1 2.402 8 GHz       Status       Freq Offset         Construction       Ref Offset 2.89 dB       Mkr1 2.402 8 GHz       Status       Center Freq         Construction       Ref Offset 2.89 dB       Status       Status       Center Freq         Construction       Ref Offset 2.89 dB       Status       Center Freq       2.356000000 GHz         Construction       Ref Offset 2.89 dB       Status       Center Freq       2.366000000 GHz         Construction       Ref Offset 2.89 dB       Status       Center Freq       2.366000000 GHz         Construction       Ref Offset 2.89 dB       Status       Status       Status       Status         Constat       X       YW 300 kHz	-40.0				800.000 kHz	
00       00 <td< td=""><td>-50.0</td><td></td><td></td><td></td><td></td></td<>	-50.0					
0.0	-60.0				Freq Offset	
enter 2.402000 GHz Res BW 100 kHz  #VEW 300 kHz Band Edge(Hopping) NVNT 3-DH1 2402MHz Hopping Emission Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Swept 3 Aglent Spectrum Analyzer Stop 2.40600 GHz Res BW 100 kHz #VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X VEW 300 kHz BY MORE TREE SCL X 402 8 GHz X 43.455 GHz Freq Offset C Hz K A 1 1 2.313 8 GHz 43.455 GHz	-70.0				0112	
Res BW 100 kHz       Sweep 1.000 ms (1001 pts)         Istatus         Istatus         Band Edge(Hopping) NVNT 3-DH1 2402MHz       Hopping Emission         Istatus       Istatus         Istatus <th c<="" td=""><td></td><td></td><td></td><td></td><td></td></th>	<td></td> <td></td> <td></td> <td></td> <td></td>					
Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Intrus         Aug Type: Log-Pwr AvgHold: 2000/2000         The Ref Offset 2.59 dB         Mikr1 2.402 8 GHz         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.59 dB         Stop 2.40600 CHz         Ref Offset 2.50 dB         Stop 2.40600 CHz         Stop 2.4060	Center 2.402000 GHz					
Aglent Spectrum Analyzer - Swept SA       RL       RF       S0 G       AC       SENSE:INT       ALIGN AUTO       04:44:39 PM Mar 05,2025       Frequency         PRO: Fast       PNO: Fast       Trig: Free Run #Atten: 30 dB       Avg Type: Log-Pwr Avg Hold: 2000/2000       TRACE       PS       Frequency         Od B/div       Ref Offset 2.59 dB       Mkr1 2.402 8 GHz 3.028 dBm       3.028 dBm       Auto Tune         000       0	#Res BW 100 KHZ #VB	W 300 KHZ		00 ms (1001 pts)		
RL     RF     S0.0     AC     SENSE:NT     ALIGN AUTO     04144:39 MMar 05,2025       enter Freq 2.356000000 GHz (FGainLow)     Trig: Free Run Haten: 30 dB     Arg Type: Log-Pwr Avg Hoid: 2000/2000     Trace IP 2.3445     Frequency       Ref Offset: 259 dB     Mkr1 2.402 8 GHz 3.028 dBm     Mkr1 2.402 8 GHz 3.028 dBm     Auto Tune       0 dB/div     Ref 20.00 dBm     3.028 dBm     Center Freq 2.356000000 GHz     Center Freq 2.35600000 GHz       0 dD 00     4     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       0 dD 00     4     4     4     4       1 M 1     1     2.402 8 GHz     3.028 dBm     1       1 M 1     1     2.402 8 GHz     3.028 dBm     1     1       2 N 1     1     1     2.402 8 GHz     3.028 dBm     1       3 N 1     1     1     2.402 8 GHz     3.028 dBm	Band Edge(Hopping	) NVNT 3-DH	1 2402MHz H	lopping Emis	ssion	
Phile         Phile         Fast         Phile	Agilent Spectrum Analyzer - Swept SA					
Ref Offset2.59 dB       Mkr1 2.402 8 GHz 3.028 dBm       Auto Tune         0 dB/div       Ref 20.00 dBm       3.028 dBm       Center Freq 2.35600000 GHz         000       4       4       4       4       4       4       4       4       4       4       4       4       4       5       6       5       5       5       5       5       6 <td></td> <td>SENSE:INT</td> <td></td> <td>04:44:39 PM Mar 05, 2025</td> <td></td>		SENSE:INT		04:44:39 PM Mar 05, 2025		
0 dB/div       Ref 20.00 dBm       3.028 dBm         0 dB/div       Ref 20.00 dBm       Center Freq         0 dB/div       Ref 20.00 dBm       Center Freq         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Ref 20.00 dBm         0 dB/div       Ref 20.00 dBm       Stop 2.40600 dBm         1 n 1 f       2.402 8 dHz       3.028 dBm         1 n 1 f       2.402 8 dHz       3.028 dBm         1 n 1 f       2.400 0 dHz       51.895 dBm         1 n 1 f       2.400 0 dHz       4.43.455 dBm         1 n 1 f       2.400 0 dHz       4.43.455 dBm         0 Hz       Ref 20.00 dHz       Ref 20.00 dHz         1 n 1 f       2.400 dHz       A.43.455 dBm         1 n 1 f       2.400 dHz	Center Freq 2.356000000 GHz PNO: Fast •	Trig: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6		
2.356000000 GHz tart 2.30600 GHz tart 2.400 GHz tart 4.40 GHZ tart 4	Center Freq 2.356000000 GHz PNO: Fast IFGain:Low	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNNN	Frequency	
000       172       117       1	Center Freq 2.356000000 GHz PNO: Fast IFGain:Low Ref Offset 2.59 dB	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNNN	Frequency	
000       0	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB Ref 20.00 dBm 10.0	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNNN	Frequency Auto Tune Center Freq	
000       44 <t< td=""><td>Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 20 dB/div Ref 20.00 dBm</td><td>Trig: Free Run</td><td>Avg Type: Log-Pwr Avg Hold: 2000/2000</td><td>TRACE 123456 TYPE MUNIFUN DET PNNNNN 12.4028 GHz 3.028 dBm</td><td>Frequency Auto Tune Center Freq</td></t<>	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 20 dB/div Ref 20.00 dBm	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 123456 TYPE MUNIFUN DET PNNNNN 12.4028 GHz 3.028 dBm	Frequency Auto Tune Center Freq	
000       0	Center Freq 2.356000000 GHz           PN0: Fast -           IFGain:Low           Ref Offset 2.59 dB           Ref 20.00 dBm           Og           10 dB/div         Ref 20.00 dBm           00         000         000           -100	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 123456 TYPE MUNIFUN DET PNNNNN 12.4028 GHz 3.028 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq	
000       0	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 10 dB/div Ref 20.00 dBm 0 00 -00 -00 -00 -00 -00 -00 -0	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 2000/2000	TRACE 123456 TYPE MUNIFUN DET PNNNNN 12.4028 GHz 3.028 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq	
tart 2.30600 GHz       Stop 2.40600 GHz       CF Step 10.000000 MHz         Res BW 100 kHz       #VBW 300 kHz       Sweep 9.600 ms (1001 pts)         Auto       Man         IN       1       1       2.402 8 GHz       3.028 dBm       Function width       Function value	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 10 dB/div Ref 20.00 dBm 	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 MKr*	TRACE 123456 TYPE NYNWY DET P NNNNN 12.4028 GHz 3.028 dBm 1. .17 4 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq 2.306000000 GHz	
Res     BW     100 kHz     #VBW     300 kHz     Sweep     9.600 ms (1001 pts)       IN     1     f     2.402.8 GHz     3.028 dBm     10.00000 MHz       2     N     1     f     2.402.8 GHz     3.028 dBm       3     N     1     f     2.400.0 GHz     -51.895 dBm       3     N     1     f     2.313.8 GHz     -43.455 dBm       6     7     7     7     7     7       8     8     8     8     10.00000 MHz       9     9     9     9     10.00000 GHz	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 10 dB/div Ref 20.00 dBm 	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 MKr*	TRACE 123456 TYPE NYNWY DET P NNNNN 12.4028 GHz 3.028 dBm 1. .17 4 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq 2.306000000 GHz	
NR     1     f     2.402.8 GHz     3.028 dBm       1     N     1     f     2.402.8 GHz     3.028 dBm       2     N     1     f     2.400.0 GHz     -51.895 dBm       3     N     1     f     2.400.0 GHz     -51.895 dBm       3     N     1     f     2.400.0 GHz     -51.895 dBm       6     6     6     6     6       7     6     6     6     6       9     6     6     6     6       1     1     1     1     1	Center Freq 2.356000000 GHz PN0: Fast - IFGain:Low Ref Offset 2.59 dB 10 dB/div Ref 20.00 dBm - 00 - - - - - - - - - - - - -	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr*	1760E 123456 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Frequency Auto Tune Center Freq 2.356000000 GHz 2.306000000 GHz Stop Freq 2.406000000 GHz	
3       N       1       f       2.400 0 GHz       -51.895 dBm       Freq Offset         4       N       1       f       2.313 8 GHz       -43.455 dBm       0 Hz         6       -       -       -       -       -       0 Hz         7       -       -       -       -       -       0 Hz         9       -       -       -       -       -       -       0 Hz         1       - <td>Center Freq 2.356000000 GHz PNC: Fast PNC: /td> <td>Trig: Free Run #Atten: 30 dB</td> <td>Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6</td> <td>12.402 8 GHz 3.028 dBm -11 -17 4 dBm</td> <td>Frequency           Auto Tune           Center Freq           2.356000000 GHz           Start Freq           2.306000000 GHz           Stop Freq           2.40600000 GHz           CF Step           10.00000 MHz</td>	Center Freq 2.356000000 GHz PNC: Fast PNC:	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency           Auto Tune           Center Freq           2.356000000 GHz           Start Freq           2.306000000 GHz           Stop Freq           2.40600000 GHz           CF Step           10.00000 MHz	
	Center Freq 2.356000000 GHz           PN0: Fast IFGain:Low           Ref Offset 2.59 dB           10 dB/div         Ref 20.00 dBm           00	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency           Auto Tune           Center Freq           2.356000000 GHz           Start Freq           2.306000000 GHz           Stop Freq           2.406000000 GHz           CF Step           10.000000 MHz	
	Center Freq 2.356000000 GHz           PN0: Fast - IFGain:Low           Ref Offset 2.59 dB           10 dB/div         Ref 20.00 dBm           00         -     <	→ Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq 2.306000000 GHz Stop Freq 2.406000000 GHz CF Step 10.000000 MHz Auto Man	
	Center Freq 2.356000000 GHz           PN0: Fast           IFGain:Low           Ref Offset 2.59 dB           10 dB/div         Ref 20.00 dBm           00	→ Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq 2.306000000 GHz Stop Freq 2.406000000 GHz CF Step 10.000000 MHz Auto Man	
	Center Freq 2.356000000 GHz         PN0: Fast           PN0: Fast         IFGain:Low           In dB/div         Ref Offset 2.59 dB           10 dB/div         Ref 20.00 dBm           20 db         4           40 db         4           40 db         4           40 db         4           40 db         4           40 db         4           40 db         4           40 db         4           40 db         4           5         1           70 db         1           70 db         1           70 db         1           7         1           7         1           7         1           7         1           7         1           7	→ Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency           Auto Tune           Center Freq           2.356000000 GHz           Start Freq           2.306000000 GHz           Stop Freq           2.406000000 GHz           CF Step           10.000000 MHz	
IG	Center Freq 2.356000000 GHz PNC: Fast IFGain:Low Ref Offset 2.59 dB 10 dB/div Ref 20.00 dBm 00 00 00 00 00 00 00 00 00 0	→ Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 2000/2000 Mkr MyWydywyadywywy Ssweep 9.6	12.402 8 GHz 3.028 dBm -11 -17 4 dBm	Frequency Auto Tune Center Freq 2.356000000 GHz Start Freq 2.306000000 GHz Stop Freq 2.406000000 GHz CF Step 10.000000 MHz Auto Man	





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## 10. 20 dB Bandwidth

### 10.1 Block Diagram Of Test Setup



#### 10.2 Limit

N/A

### 10.3 Test procedure

1. Set RBW = 30kHz.

2. Set the video bandwidth (VBW)  $\ge$  3 x RBW.

3. Detector = Peak.

4. Trace mode = max hold.

5. Sweep = auto couple.

6. Allow the trace to stabilize.

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

#### 10.4 Test Result

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage :	AC 120V/60Hz

Condition	Mode	Frequency (MHz)	-20dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	0.915	Pass
NVNT	1-DH1	2441	0.918	Pass
NVNT	1-DH1	2480	1.030	Pass
NVNT	2-DH1	2402	1.263	Pass
NVNT	2-DH1	2441	1.208	Pass
NVNT	2-DH1	2480	1.297	Pass
NVNT	3-DH1	2402	1.285	Pass
NVNT	3-DH1	2441	1.241	Pass
NVNT	3-DH1	2480	1.277	Pass

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APPR

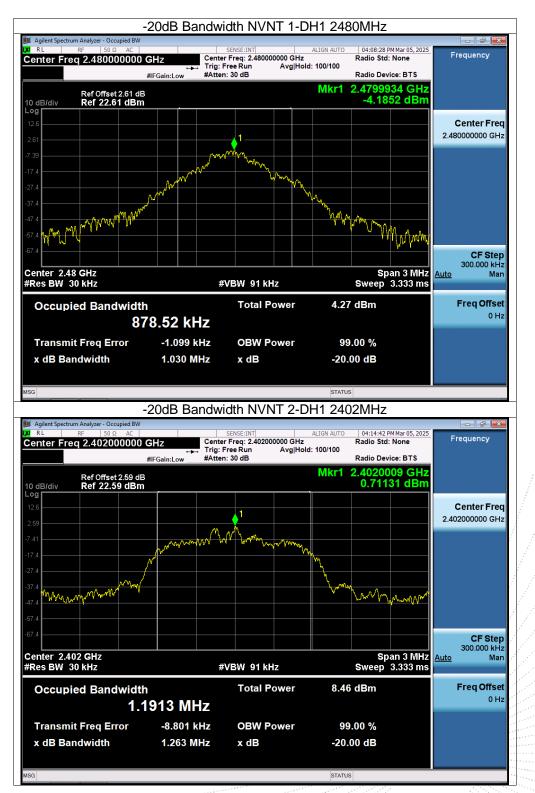
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