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Report Template Version: V03 Report Template Revision Date: Mar.1st, 2017

# **Test Report**

Report No. :	CQASZ20210100152E -01			
Applicant:	Dongguan Liesheng Electronic Co., Ltd.			
Address of Applicant:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.			
Manufacturer:	Dongguan Liesheng Electronic Co., Ltd.			
Address of Manufacturer:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.			
Equipment Under Test (E	UT):			
Product:	Haylou Wireless Earbuds			
All Model No.:	Haylou GT6			
Test Model No.:	Haylou GT6			
Brand Name:	Haylou			
FCC ID:	2AMQ6-GT6			
Standards:	47 CFR Part 15, Subpart C			
Date of Test:	2021-02-22 to 2021-03-10			
Date of Issue:	2021-03-10			
Test Result :	PASS*			

Tiny You

Tested By:

Reviewed By:

Sheek, Luo (Sheek Luo)

( Jack Ai)

(Tiny You)

PPROVE

Approved By:

\* In the configuration tested, the EUT complied with the standards specified above.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.



# 1 Version

### **Revision History Of Report**

Report No.	Version	Description	Issue Date
CQASZ20210100152E -01	Rev.01	Initial report	2021-03-10



# 2 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	ANSI C63.10 (2013)	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 (2013)	N/A
Conducted Peak Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(1)	ANSI C63.10 (2013)	PASS
20dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	ANSI C63.10 (2013)	PASS
Carrier Frequencies Separation	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	ANSI C63.10 (2013)	PASS
Hopping Channel Number	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	ANSI C63.10 (2013)	PASS
Dwell Time	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	ANSI C63.10 (2013)	PASS
Pseudorandom Frequency Hopping Sequence	47 CFR Part 15, Subpart C Section 15.247(b)(4)&TCB Exclusion List (7 July 2002)	ANSI C63.10 (2013)	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 (2013)	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 (2013)	PASS
Radiated Spurious emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 (2013)	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 (2013)	PASS

N/A: Not Applicable

Note:1, When the EUT charging, BT will not work.

2, The circuitry in both ears of the headset was identical, and the test tested only the left ear.



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# 4 General Information

### **4.1** Client Information

Applicant:	Dongguan Liesheng Electronic Co., Ltd.
Address of Applicant:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.
Manufacturer:	Dongguan Liesheng Electronic Co., Ltd.
Address of Manufacturer:	Room 401-410, Building 1, No.86 Hongtu Road, Nancheng District, Dongguan City, Guangdong, China.

### 4.2 General Description of EUT

Product Name:	Haylou Wireless Earbuds	
All Model No.:	Haylou GT6	
Test Model No.:	Haylou GT6	
Trade Mark:	Haylou	
Hardware Version:	V1.0	
Software Version:	V1.0	
Operation Frequency:	2402MHz~2480MHz	
Bluetooth Version:	5.2	
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)	
Modulation Type:	GFSK, π/4DQPSK, 8DPSK	
Transfer Rate:	1Mbps/2Mbps/3Mbps	
Number of Channel:	79	
Hopping Channel Type:	Adaptive Frequency Hopping systems	
Product Type:	□ Mobile	
Test Software of EUT:	AWBTRDLAB 1.0.9.2 (manufacturer declare )	
Antenna Type:	Integral antenna	
Antenna Gain:	-4.51dBi	
Power Supply:	lithium battery:	
	DC3.7V, 310mAh, Charge by DC5.0V	

Note:

All test:

Only the left ear of the Haylou GT6 model was tested because the circuit design, layout, components used and internal wiring of both ears were the same.



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

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The Lowest channel	2402MHz
The Middle channel	2441MHz
The Highest channel	2480MHz



### 4.3 Additional Instructions

EUT Test Software Settings:				
Mode:	<ul> <li>Special software is used.</li> <li>Through engineering command into the engineering mode.</li> <li>engineering command: *#*#3646633#*#*</li> </ul>			
EUT Power level:	Class2 (Power level is built-in set parameters and cannot be changed and selected)			
Use test software to set the lo	owest frequency, the middle frequency and	I the highest frequency keep		
transmitting of the EUT.				
Mode	Channel Frequency(MHz)			
	СНО	2402		
DH1/DH3/DH5	СН39	2441		
	CH78	2480		
	СНО	2402		
2DH1/2DH3/2DH5	СН39	2441		
	CH78	2480		
	СНО	2402		
2DH1/2DH3/2DH5	СН39	2441		
	CH78	2480		

#### Run Software:

AWBTRDLAB 1.0.9.2	
DUT Download	
COM Port	Hode Boot->HCI      Connect Disconnec      To HCI mode IC:
НСІ	
BT Test Mode Load From DUT	
BT Test Mode Load From DUT	Device Name
HCI reset Save To DUT	_ BD ADDR::: write
10T 16267 2346 10 DOI	
BDR/EDR BLE Audio	
Start RF	-Parameters-
Stop RF	
Stop Ir	Channel 0 v Freq Offset 0x88 v v
	Payload FRESS BEDE Max FYR Level Dx00 V
	Packet Type DH1 v EDR Max PWR Level 0x00 v
	PKT count Unlimited v



### 4.4 Test Environment

Operating Environment:			
Temperature:	25.0 °C		
Humidity:	53 % RH		
Atmospheric Pressure:	995mbar		
Test Mode:	Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.		

### 4.5 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.	Remark	FCC certification
PC	Lenovo	ThinkPad E450c	FCC ID	CQA
Adapter	Samsung	EP-TA50CBC	FCC ID	CQA



### 4.6 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate.

The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities.

The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the **Shenzhen Huaxia Testing Technology Co., Ltd.** quality system acc. to DIN EN ISO/IEC 17025.

Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

No.	Item	Uncertainty	Notes
1	Radiated Emission (Below 1GHz)	±5.12dB	(1)
2	Radiated Emission (Above 1GHz)	±4.60dB	(1)
3	Conducted Disturbance (0.15~30MHz)	±3.34dB	(1)
4	Radio Frequency	3×10 <sup>-8</sup>	(1)
5	Duty cycle	0.6 %.	(1)
6	Occupied Bandwidth	1.1%	(1)
7	RF conducted power	0.86dB	(1)
8	RF power density	0.74	(1)
9	Conducted Spurious emissions	0.86dB	(1)
10	Temperature test	0.8°C	(1)
11	Humidity test	2.0%	(1)
12	Supply voltages	0.5 %.	(1)
13	time	0.6 %.	(1)
14	Frequency Error	5.5 Hz	(1)

Hereafter the best measurement capability for CQA laboratory is reported:

(1)This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.





### 4.7 Test Location

#### Shenzhen Huaxia Testing Technology Co., Ltd,

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

#### 4.8 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: **IC Registration No.: 22984-1** 

The 3m Semi-anechoic chamber of Shenzhen Huaxia Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

The test facility is recognized, certified, or accredited by the following organizations:

#### • CNAS (No. CNAS L5785)

CNAS has accredited Shenzhen Huaxia Testing Technology Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

#### • A2LA (Certificate No. 4742.01)

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

#### • FCC Registration No.: 522263

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.:522263

#### **4.9** Abnormalities from Standard Conditions

None.

#### **4.10**Other Information Requested by the Customer

None.



### 4.11 Equipment List

			Instrument	Calibration	Calibration
Test Equipment	Manufacturer	Model No.	No.	Date	Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2018/9/26	2019/9/25
Spectrum analyzer	R&S	FSU26	CQA-038	2018/10/28	2019/10/27
Preamplifier	MITEQ	AFS4-00010300-18-10P- 4	CQA-035	2018/9/26	2019/9/25
Preamplifier	MITEQ	AMF-6D-02001800-29- 20P	CQA-036	2018/11/2	2019/11/1
Loop antenna	Schwarzbeck	FMZB1516	CQA-087	2018/10/28	2020/10/27
Bilog Antenna	R&S	HL562	CQA-011	2018/9/26	2020/9/25
Horn Antenna	R&S	HF906	CQA-012	2018/9/26	2020/9/25
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2018/9/26	2020/9/25
Coaxial Cable (Above 1GHz)	CQA	N/A	C019	2018/9/26	2019/9/25
Coaxial Cable (Below 1GHz)	CQA	N/A	C020	2018/9/26	2019/9/25
Antenna Connector	CQA	RFC-01	CQA-080	2018/9/26	2019/9/25
RF cable(9KHz~40GHz)	CQA	RF-01	CQA-079	2018/9/26	2019/9/25
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2018/9/26	2019/9/25
EMI Test Receiver	R&S	ESPI3	CQA-013	2018/9/26	2019/9/25
LISN	R&S	ENV216	CQA-003	2018/11/5	2019/11/4
Coaxial cable	CQA	N/A	CQA-C009	2018/9/26	2019/9/25

Note:

The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.



# 5 Test results and Measurement Data

### 5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
-----------------------	--

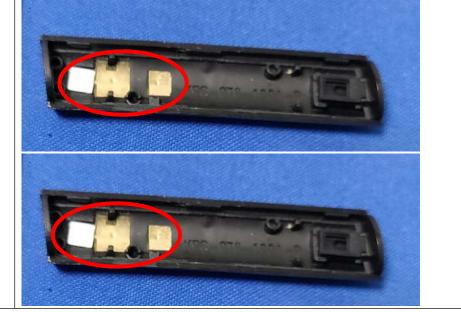
#### 15.203 requirement:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### EUT Antenna:



The antenna is integral antenna. The best case gain of the antenna is -4.51dBi.



# 5.2 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=Cable loss+ attenuation factor.
Limit:	21dBm
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi$ /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report.
Test Results:	Pass

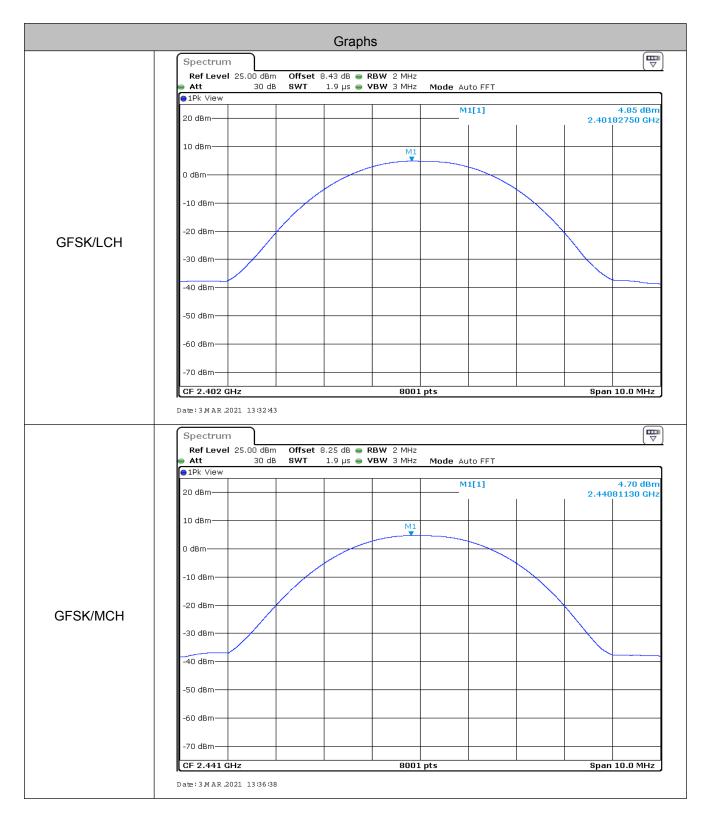


# Measurement Data

	GFSK mode	e	
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	4.850	21.00	Pass
Middle	4.700	21.00	Pass
Highest	5.260	21.00	Pass
	π/4DQPSK m	ode	
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	5.530	21.00	Pass
Middle	5.470	21.00	Pass
Highest	6.090	21.00	Pass
	8DPSK mod	e	
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	5.440	21.00	Pass
Middle	5.480	21.00	Pass
Highest	6.100	21.00	Pass



#### Test plot as follows:





	Spectrum
	Ref Level 25.00 dBm Offset 8.25 dB ● RBW 2 MHz ● Att 30 dB SWT 1.9 µs ● VBW 3 MHz Mode Auto FFT
	● 1Pk View M1[1] 5.26 dBn
	20 dBm 2.47980880 GH2
	10 dBm M1
	0 dBm
	-10 dBm
	-20 dBm
GFSK/HCH	-30 dBm
	-40 dBm
	-50 dBm
	-60 dBm
	-70 dBm
	Cr 2.46 Grz         Span 10.0 Mrz           Date: 3 MAR. 2021         13:39:49
	Spectrum       Image: Constraint of the sector
	● 1Pk View 20 dBm M1[1] 5.53 dBn 2.40174250 GH2
	10 dBm M1
	0 dBm
	-10 dBm
π/4DQPSK/LCH	-20 dBm
	-30 dBm
	-40 dBm
	-50 dBm
	-60 dBm
	-70 dBm
	Date: 3 M A R 2021 13:43:30

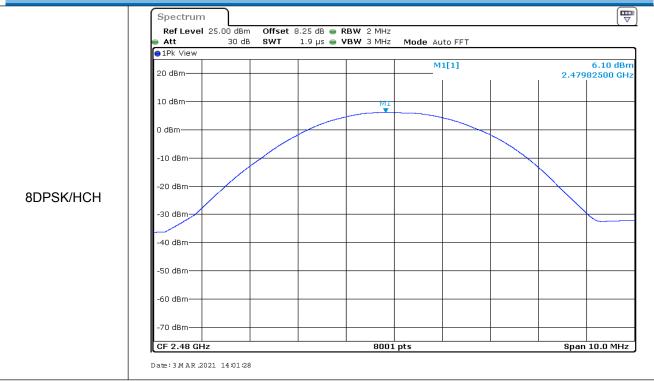


	Spectrum	
		(*)
	1Pk View     M1[1]	5.47 dBm
	20 dBm	2.44063380 GHz
	10 dBm M1	
	0 dBm	
	-10 dBm	
π/4DQPSK/MCH	-20 dBm	
	-30 dBm	
	-40 dBm	
	-+0 UDIN	
	-50 dBm-	
	-60 dBm	
	-70 dBm	
	CF 2.441 GHz 8001 pts	Span 10.0 MHz
	Date:3MAR.2021 13:47:20	
	Spectrum	
	RefLevel 25.00 dBm Offset 8.25 dB ● RBW 2 MHz ● Att 30 dB SWT 1.9 μs ● VBW 3 MHz Mode Auto FFT	
	●1Pk View M1[1]	6.09 dBm
	20 dBm	2.47967000 GHz
	10 dBm	
	0 dBm	
	-10 dBm	
π/4DQPSK/HCH	-20 dBm	
	-30 dBm	
	-40 dBm	
	-40 dBm	
	-50 dBm	
	-50 dBm	Span 10.0 MHz



	Spectrum					
		: 8.43 dB <b>e RBW</b> 2 MHz 1.9 μs <b>e VBW</b> 3 MHz	Mode Auto FFT			( 🗸 )
	1Pk View					
	20 dBm		M1[1]	1 1		5.44 dBm 3380 GHz
	10 dBm	M1				
	0 dBm					
	-10 dBm					
8DPSK/LCH	-20 dBm					
	-30 dBm					
	-40 dBm					
	-50 dBm					
	-60 dBm					
	-70 dBm					
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28	8001	pts		Span 1	0.0 MHz
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28 Spectrum Ref Level 25.00 dBm Offset	: 8.25 dB 👄 <b>RBW</b> 2 MHz			Span 1	0.0 MHz
	CF 2.402 GHz Date: 3MAR 2021 1354-28		Mode Auto FFT			
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT	: 8.25 dB 👄 <b>RBW</b> 2 MHz				
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm	: 8.25 dB ● <b>RBW</b> 2 MHz 1.9 µs ● <b>VBW</b> 3 MHz	Mode Auto FFT			₩ 5.48 dBm
	CF 2.402 GHz Date: 3 M AR .2021 13 54 28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm 10 dBm	: 8.25 dB 👄 <b>RBW</b> 2 MHz	Mode Auto FFT			₩ 5.48 dBm
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
	CF 2.402 GHz Date: 3 M AR .2021 13 54 28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm 10 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
	CF 2.402 GHz Date: 3 M AR .2021 13:54:28   Spectrum Ref Level 25:00 dBm Offset Att 30 dB SWT  1Pk View 20 dBm 10 dBm 0 dBm 0 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz Date: 3 M AR 2021 13 54 28  Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -10 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz Date: 3 M AR .2021 13 54 28  Spectrum Ref Level 25.00 dBm Offsel Att 30 dB SWT  1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz           Date: 3 M AR .2021 13 54 28           Spectrum           Ref Level 25.00 dBm         Offset           Att         30 dB         SWT           ● 1Pk View         20 dBm         0           10 dBm         0         0           -10 dBm         -20 dBm         -30 dBm           -40 dBm         -40 dBm         -40 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz Date: 3 M AR .2021 13 54 28  Spectrum Ref Level 25.00 dBm Offsel Att 30 dB SWT  1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz           Date: 3 M AR .2021 13 54 28           Spectrum           Ref Level 25.00 dBm         Offset           Att         30 dB         SWT           ● 1Pk View         20 dBm         0           10 dBm         0         0           -10 dBm         -20 dBm         -30 dBm           -40 dBm         -40 dBm         -40 dBm	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm
8DPSK/MCH	CF 2.402 GHz           Date: 3 M AR .2021 13 54:28           Spectrum           Ref Level 25.00 dBm         Offset           • Att         30 dB         SWT           • IPk View         20 dBm         -           10 dBm         -         -           -20 dBm         -         -           -30 dBm         -         -           -30 dBm         -         -           -50 dBm         -         -	: 8.25 dB • RBW 2 MHz 1.9 μs • VBW 3 MHz	Mode Auto FFT			₩ 5.48 dBm







### 5.3 20dB Occupy Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table
	Ground Reference Plane Remark: Offset=Cable loss+ attenuation factor.
Limit:	NA
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi$ /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report.
Test Results:	Pass

#### **Measurement Data**

Test channel	20	0dB Occupy Bandwidth (MH	z)
rest channer	GFSK	π/4DQPSK	8DPSK
Lowest	0.870	1.256	1.270
Middle	0.934	1.290	1.278
Highest	0.934	1.292	1.284



#### Test plot as follows:





			Ē
	Spectrum Ref Level 25.00 dBm Offset 8.25 dB  RBW	30 kHz	
	■ Att 30 dB SWT 63.3 μs ● VBW 1		
	● 1Pk View	M1[1]	15.00 dBm
	20 dBm	M1[1]	-15.20 dBm 2.47954400 GHz
	10 dBm	M2[1]	5.11 dBm 2.48000000 GHz
		$\sqrt{1}$	
	0 dBm		
	-10 dBm	m	
	-20 dBm		
GFSK/HCH	-30 dBm		
	-40 dBm		
	-50 dBm		
	-60 dBm		
	-70 dBm		
	2	1001 pts	Span 2.0 MHz
	Marker Type   Ref   Trc   X-value   Y-va	lue   Function	Function Result
		20 dBm	
	M2 1 2.48 GHz 5.	11 dBm D.27 dB	
	M2 1 2.48 GHz 5.		
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0		
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0	0.27 dB	
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR .2021         13:39:21         0         0         0           Spectrum           Ref Level .25.00 dBm Offset 8.43 dB • RBW         0	30 kHz	 ⊽
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0	30 kHz 30 kHz 00 kHz <b>Mode</b> Auto FFT	``````````````````````````````````````
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR .2021         13:39:21         Spectrum         Ref Level         25.00 dBm         Offset         8.43 dB         RBW         3           Att         30 dB         SWT         63.3 µs         VBW         10	30 kHz	-15.88 dBm
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR .2021         13:39:21         Spectrum         Ref Level         25.00 dBm         Offset         8.43 dB         • RBW         3           • Att         30 dB         SWT         63.3 µs         • VBW         10           • 1Pk View         20 dBm         Image: Control of the second secon	30 kHz 30 kHz 00 kHz <b>Mode</b> Auto FFT	-15.88 dBm 2.40137200 GHz 4.73 dBm
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR .2021         13:39:21         39         39         60 kHz         10           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         30 dB         SWT         63.3 µs         VBW         10           • Plk View         • VBW	0.27 dB	-15.88 dBm 2.40137200 GHz
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR .2021         13:39:21         Spectrum         Ref Level         25.00 dBm         Offset         8.43 dB         • RBW         3           • Att         30 dB         SWT         63.3 µs         • VBW         10           • 1Pk View         20 dBm         Image: Control of the second secon	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0           Ref Level         25.00 dBm         Offset         8.43 dB         • RBW         0           • Att         30 dB         SWT         63.3 μs         • VBW 10           • IPk View         20 dBm         0         0         0         0           10 dBm         0         0         0         0         0         0	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0           Ref Level         25.00 dBm         Offset         8.43 dB         ● RBW         0           ● Att         30 dB         SWT         63.3 µs         • VBW         10           ● IPk View         20 dBm         0         0         0         0         0         0           0 dBm         0         0         0         0         0         0         0         0         0	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         0           Att         30 dB         SWT         63.3 µs         VBW         10           10 dBm         0         0         0         0         0         0         0	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0         0         0           Ref Level         25.00 dBm         Offset         8.43 dB         ● RBW         0           ● Att         30 dB         SWT         63.3 µs         • VBW         10           ● IPk View         20 dBm         0         0         0         0         0         0           0 dBm         0         0         0         0         0         0         0         0         0	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         30 dB         Offset         8.43 dB         ● RBW         30 dB         ● Att         30 dB         SWT         63.3 µs         ● VBW         10           ● Att         30 dB         SWT         63.3 µs         ● VBW         10           ● IPk View         20 dBm         0         0 dBm         0         <	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0 <td>0.27 dB</td> <td>-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz</td>	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         30 dB         Offset         8.43 dB         RBW         30 dB         9 dB         10 dB         10 dB         10 dB         9 dB         9 dB         9 dB         9 dB         10 dB         9 dB         9 dB         10 dB         9 dB         9 dB         9 dB         9 dB         9 dB         10 dB         10 dB         10 dB         9 dB         9 dB         9 dB         10 dB	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         0 <td>0.27 dB</td> <td>-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz</td>	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021         13:39:21         30 dB         Offset         8.43 dB         RBW         30 dB         9 dB         10 dBm         10 dBm <t< td=""><td>0.27 dB</td><td>-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz</td></t<>	0.27 dB	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021 13:39:21           Spectrum           Ref Level 25.00 dBm Offset 8.43 dB • RBW 3           Att         30 dB         SWT         63.3 µs         • VBW 1           • 10 dBm         0         dBm         0         dBm         0           -10 dBm         01         -15.265 dBm         -20 dBm         -70 dBm	30 kHz 30 kHz Mode Auto FFT M1[1] M2[1]   _	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021 13:39:21           Spectrum           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         3           Att         30 dB         SWT         63.3 µs         VBW         10           10 dBm         0         dBm         0         dBm         0           20 dBm         01         -15.265 dBm         -20 dBm <td>30 kHz 30 kHz Mode Auto FFT M1[1] M2[1] M2 M2 M2 M2 M2 M2 M2 M2 M2 M2</td> <td>-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz</td>	30 kHz 30 kHz Mode Auto FFT M1[1] M2[1] M2 M2 M2 M2 M2 M2 M2 M2 M2 M2	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021 13:39:21           Spectrum           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         3           Att         30 dB         SWT         63.3 µs         VBW         10           10 dBm         01         -15.265 dBm         -20 dBm         -20 dBm         -30 dBm         -20	30 kHz 30 kHz Mode Auto FFT M1[1] M2[1] M2[1] M2 M2 M2 M2 M2 M2 M2 M2 M2 M2	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz
π/4DQPSK/LCH	M2         1         2.48 GHz         5.           D3         M1         1         934.0 kHz         0           Date: 3 M AR 2021 13:39:21           Spectrum           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         3           Att         30 dB         SWT         63.3 µs         VBW         10           10 dBm         01         -15.265 dBm         -0 <t< td=""><td>30 kHz 30 kHz Mode Auto FFT M1[1] M2[1] M2 M2 M2 M2 M2 M2 M2 M2 M2 M2</td><td>-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz</td></t<>	30 kHz 30 kHz Mode Auto FFT M1[1] M2[1] M2 M2 M2 M2 M2 M2 M2 M2 M2 M2	-15.88 dBm 2.40137200 GHz 4.73 dBm 2.40199800 GHz

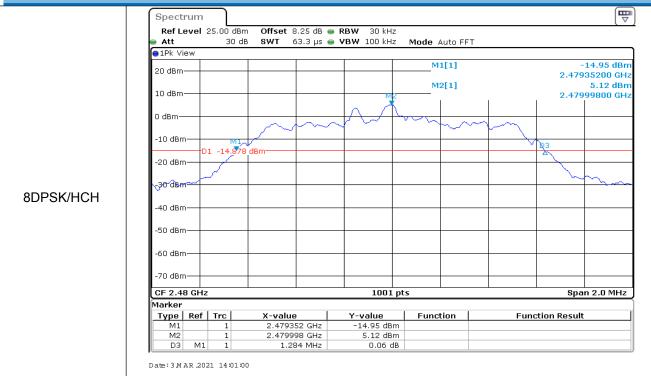


	Spectrum					
				Mode Auto FF	т	(*
	●1Pk View	· ·				15 50 40-
	20 dBm			M1[1]		-15.58 dBm 2.44034600 GHz
	10 dBm		M2	M2[1]		4.56 dBm 2.44100000 GHz
	0 dBm					
		$\sim$	$\gamma \sim 1^{\circ}$	a from	m.	
	-10 dBmM1 D1 _15.44	42 dBm				V-Q3
	-20 dBm					
	_30_dBm-					$+$ $\gamma$
π/4DQPSK/MCH	-40 dBm					
	-50 dBm					
	-60 dBm					
	-70 dBm					
	CF 2.441 GHz	4 1	1001 pt	5		Span 2.0 MHz
	Marker Type   Ref   Trc	X-value	Y-value	Function	Eun	ction Result
	M1 1	2.440346 GHz	-15.58 dBm	Tuncton		ction Result
	M2 1 D3 M1 1 Date: 3 M AR 2021 13:46		4.56 dBm 0.13 dB			
	M2 1 D3 M1 1 Date: 3 MAR .2021 13:46	1.29 MHz 52 3m <b>Offset</b> 8.25 dB •	0.13 dB	Mode Auto FF	т	
	M2 1 D3 M1 1 Date: 3 M AR .2021 13:46 Spectrum Ref Level 25.00 dE Att 30 d 1Pk View	1.29 MHz 52 3m <b>Offset</b> 8.25 dB •	0.13 dB		T	
	M2         1           D3         M1         1           Date: 3 M AR .2021         13:46           Spectrum         Ref Level         25.00 dB           Att         30	1.29 MHz 52 3m <b>Offset</b> 8.25 dB •	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz
	M2 1 D3 M1 1 Date: 3 M AR .2021 13:46 Spectrum Ref Level 25.00 dE Att 30 d 1Pk View	1.29 MHz 52 3m <b>Offset</b> 8.25 dB •	0.13 dB			-15.00 dBm
	M2       1         D3       M1       1         Date: 3 M AR .2021       13:46         Spectrum       Ref Level .25.00 dE         Att       30 d         ● 1Pk View       20 dBm	1.29 MHz 52 3m <b>Offset</b> 8.25 dB •	0.13 dB	M1[1]	т	-15.00 dBm 2.47934800 GHz 5.13 dBm
	M2         1           D3         M1         1           Date: 3 M AR .2021         13:46           Spectrum         Ref Level 25:00 dB           Att         30 dB           10 dBm         10 dBm           0 dBm         10 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.48000000 GHz
	M2       1         D3       M1       1         Date: 3 M AR .2021       13:46         Spectrum       Ref Level .25.00 dB         Att       30 dB         10 dBm       0         -10 dBm       D1         -14.87	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm
	M2         1           D3         M1         1           Date: 3 M AR .2021         13 46           Spectrum         Ref Level         25.00 dB           Att         30 dB           10 dBm         0 dBm           -10 dBm         D1           -20 dBm         -20 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
1/4DOPSK/HCH	M2       1         D3       M1       1         Date: 3 M AR .2021       13:46         Spectrum       Ref Level .25.00 dB         Att       30 dB         10 dBm       0         -10 dBm       D1         -14.87	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
τ/4DQPSK/HCH	M2         1           D3         M1         1           Date: 3 M AR .2021         13 46           Spectrum         Ref Level         25.00 dB           Att         30 dB           10 dBm         0 dBm           -10 dBm         D1           -20 dBm         -20 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
π/4DQPSK/HCH	M2       1         D3       M1       1         Date: 3 M AR .2021       13:46         Spectrum       Ref Level 25:00 dB         Att       30 d         IPk View       20 dBm         10 dBm       0         -20 dBm       D1 -14.87         -20 dBm       -30 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
π/4DQPSK/HCH	M2       1         D3       M1         Date: 3 M AR 2021       13:46         Spectrum       Ref Level 25:00 dB         Att       30 d         IPk View       20 dBm         10 dBm       0 dBm         -20 dBm       D1 -14.87         -20 dBm       -40 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
π/4DQPSK/HCH	M2       1         D3       M1         Date: 3 M AR .2021       13:46         Spectrum       Ref Level .25.00 dB         Att       30 dB         10 dBm       0         -20 dBm       0         -20 dBm       -20 dBm         -30 dBm       -50 dBm         -50 dBm       -60 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1]	T	-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
π/4DQPSK/HCH	M2       1         D3       M1       1         Date: 3 M AR 2021       13 46         Spectrum       Ref Level 25.00 dB         Att       30 0         ● 1Pk View       20 dBm         10 dBm       0 dBm         -10 dBm       D1 -14.87         -20 dBm       -30 dBm         -50 dBm       -50 dBm	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs	0.13 dB	M1[1] M2[1]		-15.00 dBm 2.47934800 GHz 5.13 dBm 2.4800000 GHz
π/4DQPSK/HCH	M2         1           D3         M1         1           Date: 3 MAR.2021         13:46           Spectrum         Ref Level         25.00 dB           Att         30 d           ● IPk View         20 dBm           10 dBm         0           -20 dBm         0           -30 dBm         0           -50 dBm         -50 dBm           -60 dBm         CF 2.48 GHz           Marker         Intervention	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs a 70 dBm	0.13 dB	M1[1] M2[1]		-15.00 dBm 2.47934800 GHz 5.13 dBm 2.48000000 GHz
π/4DQPSK/HCH	M2         1           D3         M1         1           Date: 3 M AR .2021         13 46           Ref Level         25.00 dB           Att         30 0           ● 1Pk View         20 dBm           20 dBm         10 dBm           0 dBm         0 dBm           -20 dBm         -11 dBm           -20 dBm         -20 dBm           -30 dBm         -30 dBm           -50 dBm         -50 dBm           -70 dBm         -70 dBm           Type         Ref         Trc           M1         1         1	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs e 0 dB SWT 63.3 μs e 0 dBm	0.13 dB	M1[1] M2[1]		-15.00 dBm 2.47934800 GHz 5.13 dBm 2.48000000 GHz
π/4DQPSK/HCH	M2       1         D3       M1         Date: 3 MAR 2021       13:46         Spectrum         Ref Level       25.00 dB         Att       30 d         IPk View       20 dBm         10 dBm       0         0 dBm       0         -20 dBm       -20 dBm         -30 dBm       -30 dBm         -50 dBm       -60 dBm         -70 dBm       CF 2.48 GHz         Marker       Type       Ref         Type       Ref       Trc	1.29 MHz 52 3m Offset 8.25 dB dB SWT 63.3 μs e 70 dBm	0.13 dB	M1[1] M2[1]		-15.00 dBm 2.47934800 GHz 5.13 dBm 2.48000000 GHz



	Spectrum						[₩
	Ref Level 25.00 dBm	Offset 8.43 dB		<b>M</b> - <b>d</b> -			( v
	● Att 30 dB ●1Pk View	SWT 63.3 µs 👄	<b>VBW</b> 100 kHz	Mode Auto FF	I		
	20 dBm			M1[1]			15.47 dBm 35800 GHz
	10 dBm		M2	M2[1]		2.402	4.70 dBm 00000 GHz
	0 dBm						
	-10 dBm M1	$\sim$			$\sim$		
	-10 dBm	dBm				A3 A3	
							~ .
8DPSK/LCH	~30'dBm=~						, • • • • • • • • • • • • • • • • • • •
	-40 dBm						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	CF 2.402 GHz Marker		1001 pts			Spa	n 2.0 MHz
	Type   Ref   Trc	X-value	Y-value	Function	Fu	nction Result	
	M1 1 M2 1	2.401358 GHz 2.402 GHz	-15.47 dBm 4.70 dBm				
	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01	2.402 GHz 1.27 MHz	4.70 dBm -0.19 dB				
	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01	2.402 GHz 1.27 MHz Offset 8.25 dB	4.70 dBm -0.19 dB RBW 30 kHz	Mode Auto FF	T		
	M1         1           M2         1           D3         M1         1           Date: 3 M AR .2021         13:54:01           Spectrum           Ref Level 25:00 dBm           Att         30 dB	2.402 GHz 1.27 MHz Offset 8.25 dB	4.70 dBm -0.19 dB RBW 30 kHz	Mode Auto FF M1[1]	T		15.72 dBrr
	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Spectrum           Ref Level         25.00 dBm           Att         30 dB           • 1Pk View	2.402 GHz 1.27 MHz Offset 8.25 dB	4.70 dBm -0.19 dB RBW 30 kHz		T	2.440	15.72 dBm 35400 GHz 4.57 dBm
	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Spectrum           Ref Level         25:00 dBm           Att         30 dB           1Pk View         20 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440	15.72 dBn 35400 GHz 4.57 dBn
	M1 1 M2 1 D3 M1 1 Date: 3 M AR 2021 13:54:01 Spectrum Ref Level 25.00 dBm Att 30 dB P1Pk View 20 dBm 10 dBm 0 dBm 10 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440	15.72 dBn 35400 GHz 4.57 dBn
	M1         1           M2         1           D3         M1           Date: 3 M AR 2021         13:54:01           Spectrum           Ref Level         25:00 dBm           Att         30 dB           IPk View         20 dBm           10 dBm         0 dBm           0 dBm         0 1-15_430	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440	15.72 dBn 35400 GHz 4.57 dBn
	M1         1           M2         1           D3         M1           Date: 3 M AR 2021         13:54:01           Ref Level 25:00 dBm           Att         30 dB           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         D1 -15:480           -20 dBm         -20 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	т	2.440 2.441	( ▼ 15.72 dBm 35400 GHz 4.57 dBm 00000 GHz
8DPSK/MCH	M1         1           M2         1           D3         M1           Date: 3 M AR 2021         13:54:01           Spectrum         Ref Level         25:00 dBm           Att         30 dB           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         01           -20 dBm         -30 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440 2.441	15.72 dBm 35400 GHz 4.57 dBm
8DPSK/MCH	M1         1           M2         1           D3         M1           Date: 3 M AR 2021 13:54:01           Spectrum           Ref Level 25:00 dBm           Att         30 dB           1Dk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440 2.441	15.72 dBm 35400 GHz 4.57 dBm
8DPSK/MCH	M1         1           M2         1           D3         M1           Date: 3 M AR 2021         13:54:01           Spectrum         Ref Level         25:00 dBm           Att         30 dB           ● 1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         D1           -20 dBm         -10 dBm           -20 dBm         -20 dBm           -20 dBm         -30 dBm           -50 dBm         -50 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440 2.441	15.72 dBm 35400 GHz 4.57 dBm
8DPSK/MCH	M1         1           M2         1           D3         M1           Date: 3 M AR 2021 13:54:01           Spectrum           Ref Level 25:00 dBm           Att         30 dB           1Dk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1]	T	2.440 2.441	15.72 dBm 35400 GHz 4.57 dBm
8DPSK/MCH	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Spectrum         Ref Level         25:00 dBm           Att         30 dB           ● 1Pk View         20 dBm           10 dBm         01           -10 dBm         01           -20 dBm         -20 dBm           -50 dBm         -50 dBm           -70 dBm         -70 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB	M1[1] M2[1]	T	2.440	15.72 dBm 35400 GHz 4.57 dBm 00000 GHz
8DPSK/MCH	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Spectrum           Ref Level         25:00 dBm           Att         30 dB           1Pk View         20 dBm           10 dBm         0           -10 dBm         01 -15,430           -20 dBm         -20 dBm           -40 dBm         -50 dBm           -60 dBm         -60 dBm	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs •	4.70 dBm -0.19 dB RBW 30 kHz	M1[1] M2[1]		2.440	15.72 dBm 35400 GHz 4.57 dBm
8DPSK/MCH	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Ref Level         25:00 dBm           Att         30 dB           1Pk View         20 dBm           20 dBm         10 dBm           0 dBm         01 -15,430           -20 dBm         -10 dBm           -30 dBm         -15,430           -20 dBm         -20 dBm           -70 dBm         -60 dBm           -70 dBm         -70 dBm           CF 2.441 GHz         Marker           Type         Ref         Trc	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs • dBm	4.70 dBm -0.19 dB	M1[1] M2[1]		2.440	15.72 dBm 35400 GHz 4.57 dBm 00000 GHz
8DPSK/MCH	M1         1           M2         1           D3         M1         1           Date: 3 M AR 2021         13:54:01           Spectrum           Ref Level         25:00 dBm           Att         30 dB           1Pk View         20 dBm           10 dBm         0           -10 dBm         01           -20 dBm         -15,430           -20 dBm         -20 dBm           -20 dBm         -60 dBm           -50 dBm         -60 dBm           -60 dBm         -70 dBm           CF 2.441 GHz         Marker	2.402 GHz 1.27 MHz Offset 8.25 dB • SWT 63.3 μs • dBm	4.70 dBm -0.19 dB	M1[1]		2.440 2.441	15.72 dBm 35400 GHz 4.57 dBm 00000 GHz







# 5.4 Carrier Frequencies Separation

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
	Remark: Offset=Cable loss+ attenuation factor.
Limit:	2/3 of the 20dB bandwidth
	Remark: the transmission power is less than 0.125W.
Exploratory Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi$ /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report.
Test Results:	Pass



#### **Measurement Data**

	GFSK mod	le	
Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result
Lowest	0.851	≥0.58	Pass
Middle	1.327	≥0.62	Pass
Highest	1.000	≥0.62	Pass
	π/4DQPSK m	node	
Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result
Lowest	0.865	≥0.84	Pass
Middle	1.000	≥0.86	Pass
Highest	1.000	≥0.86	Pass
	8DPSK mo	de	
Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result
Lowest	1.178	≥0.85	Pass
Middle	1.168	≥0.852	Pass
Highest	1.005	≥0.856	Pass

Mode	20dB bandwidth (MHz) (worse case)	Limit (MHz) (Carrier Frequencies Separation)
GFSK	0.934	0.62
π/4DQPSK	1.292	0.86
8DPSK	1.284	0.856



#### Test plot as follows:

		Gra	ipi io			
	Spectrum Ref Level 25.00 dB	m Offset 8.43 dB	👄 RBW 100 kHz			
	■ Att 30 c	dв <b>SWT</b> 18.9 µs	🔵 <b>VBW</b> 300 kHz	Mode Auto FFT		
	●1Pk View			M1[1]		4.23 dBm
	20 dBm					2.40199519 GHz
				D1[1]		-0.29 dB 850.96 kHz
	10 dBm	M1		D1		
	0 dBm		$\neg$	7		
	-10 dBm			~		
FSK/LCH	-20 dBm					
	-30 dBm					
	-40 dBm					
	-50 dBm					
	-60 dBm					
	-70 dBm					
				nts		Stop 2.404 GHz
	<b>Start 2.401 GHz</b>	:42	625			
	Date: 3 M AR .2021 14:06: Spectrum Ref Level 25.00 dB	m Offset 8.25 dB	<ul> <li>B25 (</li> <li></li></ul>			
	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB	m Offset 8.25 dB				
	Date: 3 M AR .2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View	m Offset 8.25 dB	RBW 100 kHz			4.54 dBm
	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB	m Offset 8.25 dB	RBW 100 kHz	Mode Auto FFT		4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR .2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT		4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR .2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View 20 dBm	m Offset 8.25 dB	RBW 100 kHz	Mode Auto FFT		4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR .2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View 20 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR 2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View 20 dBm 10 dBm 0 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d 1Pk View 20 dBm 10 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
	Date: 3 M AR 2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 1Pk View 20 dBm 10 dBm 0 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
-sk/mch	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
-SK/MCH	Date: 3 M AR 2021 14:06 Spectrum Ref Level 25.00 dB Att 30 d 10 dBm 10 dBm -10 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz
-SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
-SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
=SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	2.44084615 GHz -0.09 dB
-SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
=SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
=SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25:00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB
-SK/MCH	Date: 3 M AR 2021 14:06: Spectrum Ref Level 25.00 dB Att 30 d P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	om Offset 8.25 dB dB SWT 18.9 µs	RBW 100 kHz	Mode Auto FFT	D1	4.54 dBm 2.44084615 GHz -0.09 dB



	Spectrum						
	Ref Level 25.00 dB		<ul> <li>RBW 100 kHz</li> <li>VBW 300 kHz</li> </ul>	Mode Auto FFT			
	• 1Pk View 20 dBm			M1[1]		5.17 2.47884135 -0.0	
	10 dBm	M1		D1		1.00000	MHz
	0 dBm						
	-20 dBm						
GFSK/HCH	-30 dBm						
	-40 dBm						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	Start 2.478 GHz	•	625 pt	5		Stop 2.481 (	GHz
	Spectrum Ref Level 25.00 dB		<ul> <li>RBW 100 kHz</li> <li>VBW 300 kHz</li> </ul>	Mode Auto FFT			
	●1Pk View						
	20 dBm			M1[1]			GHz 4 dB
	10 dBm	M1		D1	$\square$	865.39	
	0 dBm						
	-10 dBm						
	-10 dBm						
π/4DQPSK/LCH							
π/4DQPSK/LCH	-20 dBm-						
π/4DQPSK/LCH	-20 dBm						
π/4DQPSK/LCH	-20 dBm -30 dBm -40 dBm						
π/4DQPSK/LCH	-20 dBm -30 dBm -40 dBm -50 dBm						



	Spectrum					
	Ref Level 25.00 d8 Att 30 1Pk View		<ul> <li>RBW 100 kHz</li> <li>VBW 300 kHz</li> </ul>	Mode Auto FFT		
	20 dBm			M1[1]		4.64 dBm 2.44085096 GHz
	10 dBm	M1		D1[1]		-0.06 dB 1.00000 MHz
	0 dBm		$\rightarrow$		$\sim$	
	-10 dBm					
	-20 dBm					
π/4DQPSK/MCH	-30 dBm					
	-40 dBm					
	-50 dBm					
	-60 dBm					
	-70 dBm					
	Start 2.44 GHz Date: 3 MAR .2021 14:20	:56	625 p	ts		Stop 2.443 GHz
	Date: 3 M A.R. 2021 14:20 Spectrum Ref Level 25.00 di Att 30	Bm Offset 8.25 dB	625 p			Stop 2.443 GHz
	Date: 3 M A.R. 2021 14:20 Spectrum Ref Level 25.00 df	Bm Offset 8.25 dB	<b>• RBW</b> 100 kHz	Mode Auto FFT		
	Date: 3 M A.R. 2021 14:20 Spectrum Ref Level 25.00 di Att 30	Bm Offset 8.25 dB	<b>• RBW</b> 100 kHz			5.28 dBm 2.47885096 GHz -0.03 dB
	Date: 3 MAR .2021 14:20 Spectrum Ref Level 25.00 di Att 30 PIPk View	Bm Offset 8.25 dB	<b>• RBW</b> 100 kHz	Mode Auto FFT		(₩ ▼ 5.28 dBm 2.47885096 GHz
	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 1Pk View 20 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 1 Pk View 20 dBm 10 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
т/4DQPSK/HCH	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 • 1Pk View 20 dBm 10 dBm 0 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
π/4DQPSK/HCH	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 1 Pk View 20 dBm 10 dBm -10 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
π/4DQPSK/HCH	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 10 dBm 10 dBm -10 dBm -20 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
π/4DQPSK/HCH	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
π/4DQPSK/HCH	Date: 3 MAR 2021 14:20 Spectrum Ref Level 25.00 di Att 30 10 Hk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB
π/4DQPSK/HCH	Date: 3 MAR 2021 14:20  Spectrum  Ref Level 25.00 di  Att 30  10 dBm  10 dBm  -10 dBm  -20 dBm  -30 dBm  -30 dBm  -50 dBm	Bm Offset 8.25 dB dB SWT 18.9 µs	<b>• RBW</b> 100 kHz	Mode Auto FFT M1[1] D1[1]		5.28 dBm 2.47885096 GHz -0.03 dB



	Spectrum							
	Ref Level 25.00 dBm Att 30 dB 1Pk View		<ul> <li>RBW 100 kH</li> <li>VBW 300 kH</li> </ul>		uto FFT			
	20 dBm				l[1]		2.401	4.39 dBm 99039 GHz
	10 dBm	M1			.[1]		1.	-0.44 dE 17789 MHz
	0 dBm	<sup>M1</sup>	<u> </u>					~~~
	-10 dBm							
8DPSK/LCH	-20 dBm							
ODFSK/LCH	-30 dBm							
	-40 dBm							
	-50 dBm							
	-60 dBm							
	-70 dBm							
							Ston	1 404 0115
	Spectrum	Ł	625	pts			3(0)	2.404 GHz
	Date: 3 M AR .2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB	Offset 8.25 dB		2	uto FFT.			
	Date: 3 M AR .2021 14:31:54 Spectrum Ref Level 25.00 dBm	Offset 8.25 dB	<b>RBW</b> 100 kH	z z <b>Mode</b> A				
	Date: 3 M AR .2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB	Offset 8.25 dB	<b>RBW</b> 100 kH	z z Mode A M:	.uto FFT [[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 9 1Pk View	Offset 8.25 dB	<b>RBW</b> 100 kH	z z Mode A M:	L[1]	D1	2.441	4.51 dBm 00481 GHz 0.01 dE
	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View 20 dBm 10 dBm 0 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
8DPSK/MCH	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
8DPSK/MCH	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
8DPSK/MCH	Date: 3 M AR 2021 14:31 54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
8DPSK/MCH	Date: 3 M AR 2021 14:31:54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dE
8DPSK/MCH	Date: 3 M AR 2021 14:31 54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z z Mode A M:	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dB
8DPSK/MCH	Date: 3 M AR 2021 14:31 54 Spectrum Ref Level 25.00 dBm Att 30 dB 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 dBm -60 dBm	Offset 8.25 dB ( SWT 18.9 μs (	<b>RBW</b> 100 kH	z Mode A	L[1]		2.441	4.51 dBm 00481 GHz 0.01 dB 16827 MHz





	Spectrum Ref Level 25.00 dB Att 30 d		
	1Pk View		
	20 dBm	M1[1]	5.19 dBn 2.47916827 GH -0.06 dl
	10 dBm		1.00481 MH
	~~ _		
	0 dBm		
	-10 dBm		
	-20 dBm		-
8DPSK/HCH	-30 dBm		
	-40 dBm		
	-50 dBm		
	-60 dBm		
	-70 dBm		
	Start 2.478 GHz	625 pts	Stop 2.481 GHz



# 5.5 Hopping Channel Number

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=Cable loss+ attenuation factor.
Limit:	At least 15 channels
Exploratory Test Mode:	hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi/4DQPSK$ modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report.
Test Results:	Pass

#### Measurement Data

Mode	Hopping channel numbers	Limit
GFSK	79	≥15
π/4DQPSK	79	≥15
8DPSK	79	≥15



### Test plot as follows:

	Graphs	
	Spectrum         []           Ref Level 25.00 dBm         Offset 8.25 dB • RBW 100 kHz	₩)
	■ Att 30 dB SWT 94.8 µs ● VBW 300 kHz Mode Auto FFT	_
	M1[1] 3.97 dt	
	20 dBm 2.401952 G D1[1] 1.16 77.924 M	dB
	10 dBm D1	
	₀₩₽₩₩₽₩₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	_
	- <u>1998</u> Thankaranaanaanaalaanaanaanaanaanaanaanaanaanaa	
GFSK/Hop	-20 dBm	
	-30 dBm	
	40 dBm	
		A
	J-50 dBm	•0
	-60 dBm	-
	-70 dBm	
	Start 2.4 GHz         600 pts         Stop 2.4835 GF	Ιz
		₩)
		<b>•</b> )
	Spectrum         [1]           Ref Level 25.00 dBm         Offset 8.25 dB ● RBW 100 kHz           ▲ Att         30 dB         SWT         94.8 µs         ♥ VBW 300 kHz         Mode Auto FFT	Bm
	Spectrum         Miliniary           Ref Level 25.00 dBm         Offset 8.25 dB • RBW 100 kHz           Att         30 dB           SWT         94.8 µs           Offset 8.25 dB         RBW 100 kHz           Mathematical Subscription         Mode Auto FFT           Offset 8.25 dB         Mathematical Subscription           Offset 8.25 dB         Offset 8.25 dB           Offset 8.25 dB         VBW 300 kHz           Mode Auto FFT         01[1]           0.74         01[1]           0.74         78.203 M	Bm Hz dB
	Spectrum         Image: Constraint of the sector of t	Bm iHz dB iHz
	Spectrum         Miliniary           Ref Level 25.00 dBm         Offset 8.25 dB • RBW 100 kHz           Att         30 dB           SWT         94.8 µs           Offset 8.25 dB         RBW 100 kHz           Mathematical Subscription         Mode Auto FFT           Offset 8.25 dB         Mathematical Subscription           Offset 8.25 dB         Offset 8.25 dB           Offset 8.25 dB         VBW 300 kHz           Mode Auto FFT         01[1]           0.74         01[1]           0.74         78.203 M	Bm iHz dB iHz
	Spectrum         Image: Constraint of the sector of t	Bm iHz dB iHz
	Spectrum         Image: Constraint of the second secon	Bm iHz dB iHz
π/4DQPSK/Hop	Spectrum         Image: Constraint of the second secon	Bm iHz dB iHz
π/4DQPSK/Hop	Spectrum         Image: Constraint of the second secon	Bm iHz dB IHz
π/4DQPSK/Hop	Spectrum         Image: Constraint of the second secon	Bm iHz dB IHz
π/4DQPSK/Hop	Spectrum         Militian         Mathematical Stress         Mathematical Stres         Mathematica	Bm iHz dB IHz
π/4DQPSK/Hop	Spectrum         Militian         Mathematical Stress         Mathematical Stres         Mathematica	Bm iHz dB IHz
π/4DQPSK/Hop	Spectrum         Image: Spectrum </td <td>Bm iHz dB IHz</td>	Bm iHz dB IHz
π/4DQPSK/Hop	Spectrum         (1)           Ref Level 25.00 dBm         Offset 8.25 dB • RBW 100 kHz         Mode Auto FFT           • Att         30 dB         SWT         94.8 µs         VBW 300 kHz         Mode Auto FFT           • IPk View	Bm iHz dB IHz





	Spectrum Ref Level 25.00 dBm Att 30 dB		<b>RBW</b> 100 kHz <b>/BW</b> 300 kHz	Mode Auto FFT	
8DPSK/Hop	1Pk View	uni shops 🧉		Mode Additit	
	20 dBm			M1[1]	3.63 dBn 2.401952 GH 1.44 dl
	10 dBm				78.342 MH
	0 ABARAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	warman	minn	MMMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	MUMMIN
	-10 dBm				
	-20 dBm				
	-30 dBm				
	1-40 dBm				
	-50 dBm				
	-60 dBm				
	-70 dBm				
	Start 2.4 GHz	II	600 pt	s	Stop 2.4835 GHz



### 5.6 Dwell Time

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)			
Test Method:	ANSI C63.10:2013			
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table			
	Ground Reference Plane			
	Remark: Offset=Cable loss+ attenuation factor.			
Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type.			
Limit:	0.4 Second			
Test Results:	Pass			



#### **Measurement Data**

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Dwell Time[s]	Limit (second)
GFSK	DH1	LCH	0.48	0.154	≤0.4
GFSK	DH1	МСН	0.48	0.154	≤0.4
GFSK	DH1	НСН	0.48	0.154	≤0.4
π/4DQPSK	2DH1	LCH	0.5	0.16	≤0.4
π/4DQPSK	2DH1	МСН	0.5	0.16	≤0.4
π/4DQPSK	2DH1	НСН	0.5	0.16	≤0.4
8DPSK	3DH1	LCH	0.5	0.16	≤0.4
8DPSK	3DH1	МСН	0.5	0.16	≤0.4
8DPSK	3DH1	НСН	0.5	0.16	≤0.4
GFSK	DH3	LCH	1.76	0.282	≤0.4
GFSK	DH3	МСН	1.75	0.28	≤0.4
GFSK	DH3	НСН	1.75	0.28	≤0.4
π/4DQPSK	2DH3	LCH	1.77	0.283	≤0.4
π/4DQPSK	2DH3	МСН	1.77	0.283	≤0.4
π/4DQPSK	2DH3	НСН	1.77	0.283	≤0.4
8DPSK	3DH3	LCH	1.77	0.283	≤0.4
8DPSK	3DH3	МСН	1.77	0.283	≤0.4
8DPSK	3DH3	НСН	1.77	0.283	≤0.4
GFSK	DH5	LCH	2.98	0.318	≤0.4
GFSK	DH5	МСН	2.98	0.318	≤0.4
GFSK	DH5	НСН	2.97	0.317	≤0.4
π/4DQPSK	2DH5	LCH	2.99	0.319	≤0.4
π/4DQPSK	2DH5	МСН	2.99	0.319	≤0.4
π/4DQPSK	2DH5	НСН	2.99	0.319	≤0.4
8DPSK	3DH5	LCH	2.99	0.319	≤0.4
8DPSK	3DH5	МСН	2.99	0.319	≤0.4
8DPSK	3DH5	НСН	2.99	0.319	≤0.4

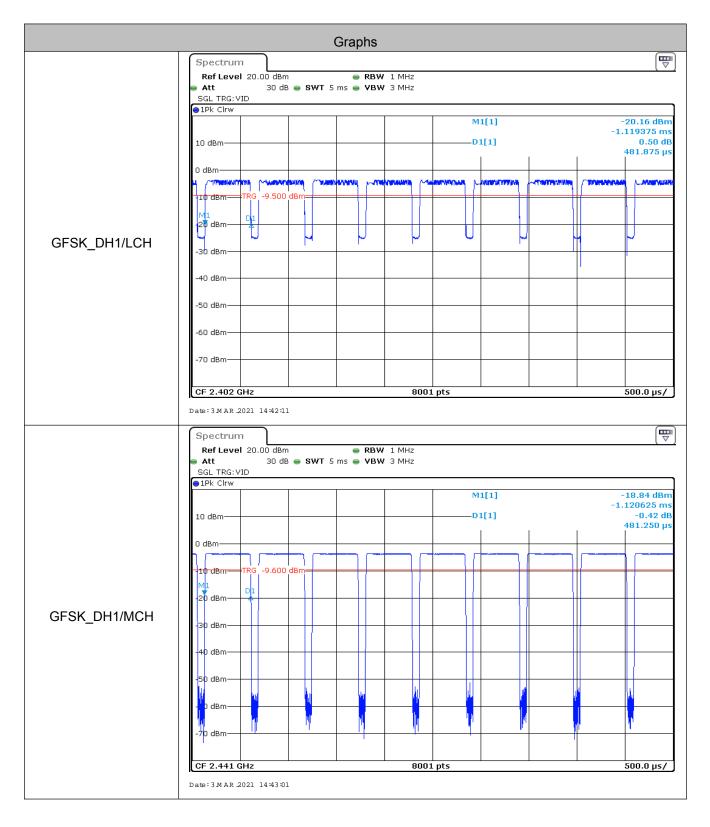
#### Remark:

The test period: T= 0.4 Second/Channel x 79 Channel = 31.6 s DH1/2DH1/3DH1 Dwell time = Burst Width(ms)\*(1600/ (2\*79))\*31.6 DH3/2DH3/3DH3 Dwell time = Burst Width (ms)\*(1600/ (4\*79))\*31.6 DH5/2DH5/3DH5 Dwell time = Burst Width (ms)\*(1600/ (6\*79))\*31.6



Report No.: CQASZ20210100152E -01

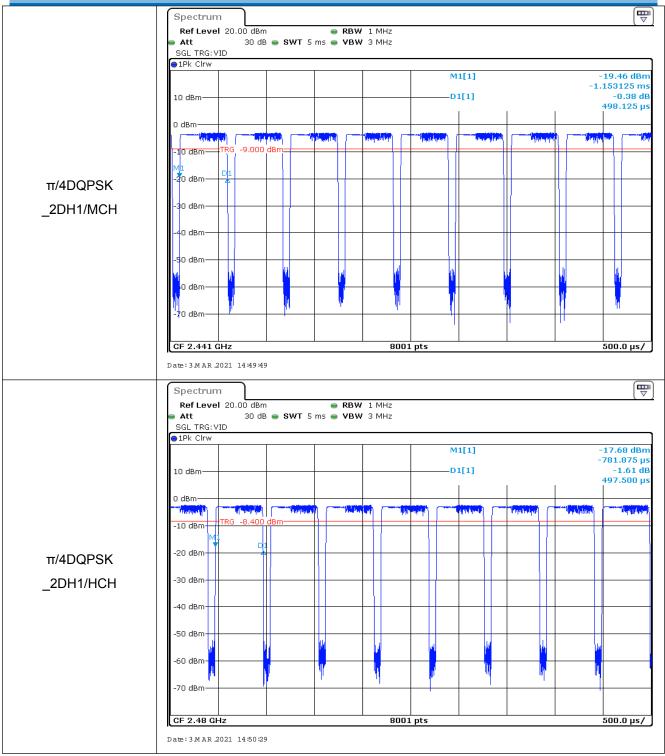
#### Test plot as follows:





	Spectrum							
	Ref Level         20.00 dBm              RBW 1 MHz            Att         30 dB         SWT 5 ms         VBW 3 MHz            SGL TRG: VID         VID         VID         VID							
	●1Pk Clrw	-18.24 dBm						
		.120625 ms -1.10 dB						
		481.250 µs						
	10 dBm TRG -9.000 dBm 10 m 10							
	-20 dBm							
GFSK_DH1/HCH	-30 dBm							
	140 dBm							
	-50 dBm							
	-70 dBm	1						
	CF 2.48 GHz 8001 pts	500.0 μs/						
	Spectrum							
	Spectrum         (▽)           Ref Level 20.00 dBm         ● RBW 1 MHz           ● Att         30 dB ● SWT 5 ms ● VBW 3 MHz							
	SGL TRG: VID IPk Clrw							
	-1	-20.95 dBm .156250 ms						
	10 dBm D1[1]	1.88 dB 500.625 μs						
	-10 0011 - 10 0000 - 10 0000							
π/4DQPSK								
_2DH1/LCH	-30 dBm							
	-40 dBm							
	-50 dBm-							
	-60 dBm							
	-70 dBm							
	CF 2.402 GHz 8001 pts	500.0 µs/						
1	Date: 3 M AR .2021 14:49:12							

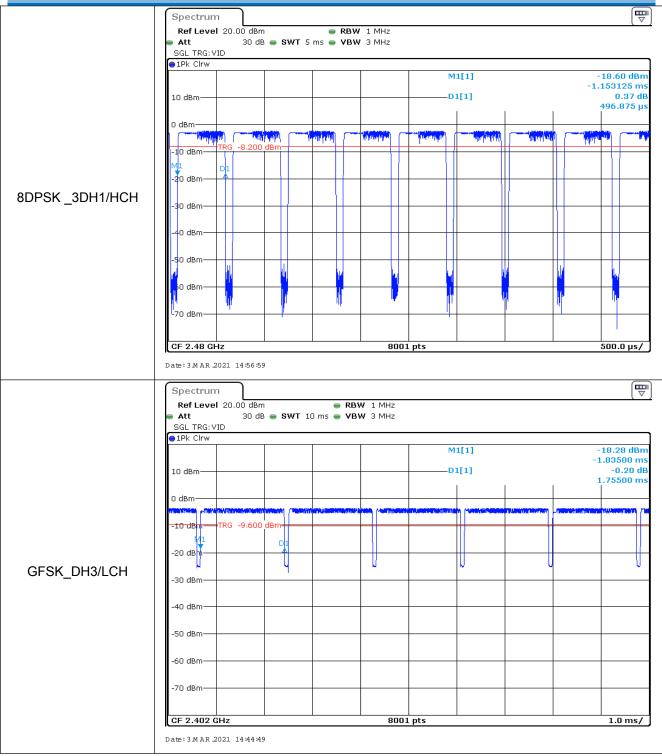






	Spectrum     Image: Constraint of the sector o						
	● Att 30 dB ● SWT 5 ms ● VBW 3 MHz SGL TRG: VID ● 1Pk Clrw						
	M1[1] -21.06 dBm -877.500 μs						
	10 dBmD1[1] 1.83 dB 498.750 μs						
8DPSK_3DH1/LCH							
_	-30 dBm						
	-40 dBm						
	-50 dBm						
	-60 dBm-						
	-70 dBm-						
	CF 2.402 GHz         8001 pts         500.0 μs/           Date: 3 M AR.2021 14:55:39         3						
	Spectrum 🕎						
	Ref Level 20.00 dBm         RBW 1 MHz           Att         30 dB         SWT 5 ms         VBW 3 MHz           SGL TRG:VID         SGL TRG:VID         SGL TRG:VID         SGL TRG:VID						
	●1Pk Cirw M1[1] -19.03 dBm						
	-1.153125 ms 10 dBmD1[1] 0.95 dB 496.875 μs						
	-10 dBm TRG -8.800 dBm						
	M1 D1 -20 dBm						
8DPSK_3DH1/MCH	-30 dBm						
	-40 dBm						
	-50 dBm						
	-70 dBm						
	CF 2.441 GHz         8001 pts         500.0 μs/						
	Date: 3 M AR.2021 14:56:17						







	Spectrum								
	Ref Level         20.00 dBm         Image: 1           Image: Att         30 dB         SWT         10 ms         Image: 1	RBW 1 MHz VBW 3 MHz	· · · ·						
	SGL TRG;VID P1Pk Clrw								
		M1[1]	-14.99 dBm						
	10 dBm	D1[1]	-1.83375 ms -0.29 dB						
			1.75125 ms						
	-10 dBm								
	-20 dBm								
GFSK_DH3/MCH	20 00 1								
	-30 dBm								
	-40 dB m								
	-50 dBm								
	-60 dBin								
	-70 dBm								
	CF 2.441 GHz	8001 pts	1.0 ms/						
	Date: 3 M AR .2021 14:45:30								
	Spectrum								
	Ref Level         20.00 dBm         RBW         1 MHz           Att         30 dB         SWT         10 ms         VBW         3 MHz								
	_SGL TRG: VID								
	1Pk Clrw	M1[1]	-14.48 dBm						
	10 dBm	D1[1]	-1.83375 ms -0.87 dB						
			1.75125 ms						
	0 dBm								
	-10 dBm TRG -9.000 dBm								
	-20 dBm								
GFSK_DH3/HCH	-30 dBm								
	-40 dBm								
	-50 dBm								
	-60 dBm								
		"   "   "							
	-70 dBm								
	CF 2.48 GHz	8001 pts	1.0 ms/						
	Date: 3 M AR .2021 14:46:07								

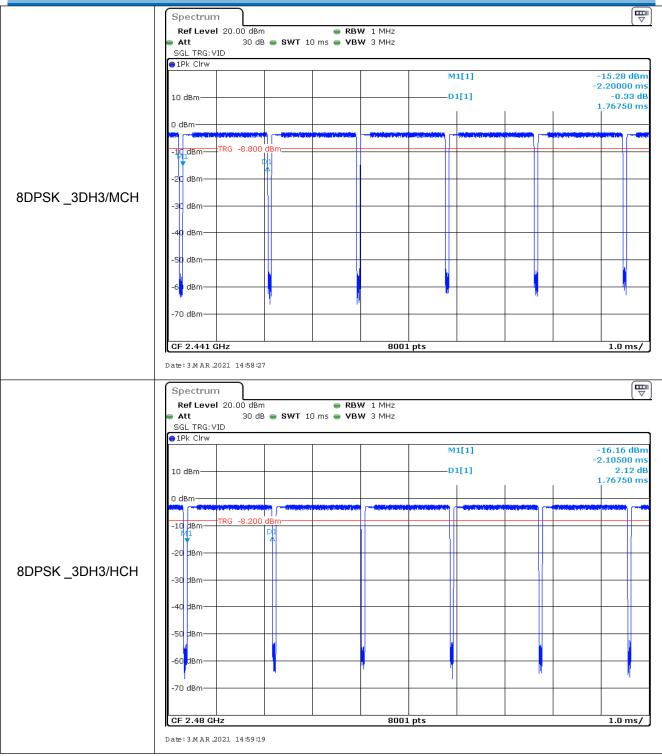


	Spectrum							
	RefLevel 20.00 dBm	<u>( , )</u>						
	SGL TRG: VID							
	1Pk Clrw     M1[1]	-18.97 dBm						
	10 dBm D1[1]	-1.24875 ms -2.10 dB						
		1.77375 ms						
	-10 dBm TRG -9.100 dBm							
π/4DQPSK	-20 dBm							
_2DH3/LCH	-30 dBm							
	-40 dBm							
	-50 dBm							
	-60 dBm							
	-70 dBm							
	CF 2.402 GHz 8001 pts	1.0 ms/						
	Date: 3 MAR 2021 14:51:10							
	Spectrum							
	Ref Level 20.00 dBm							
	● Att 30 dB ● SWT 10 ms ● VBW 3 MHz SGL TRG:VID ● 1Pk Clrw							
	M1[1]	-14.34 dBm						
	10 dBmD1[1]	-2.25750 ms -1.30 dB						
	0 dBm	1.76750 ms						
	al L-meneral companyation (meneral l-meneral l-meneral l-meneral l-meneral l-meneral l-meneral l-meneral l-me							
	TRG -9,000 dBm							
π/4DOPSK	-2p dBm							
	-3D dBm							
_2003/10100								
	-+D dBm							
	-\$D dBm							
	-qD dBm							
	-70 ubiii							
	CF 2.441 GHz         8001 pts	1.0 ms/						
	Date: 3 M AR .2021 14:52:17							
π/4DQPSK _2DH3/MCH	3D dBm D dBm D dBm 5D dBm 5D dBm 0D dBm 70 dBm	1.0 ms/						

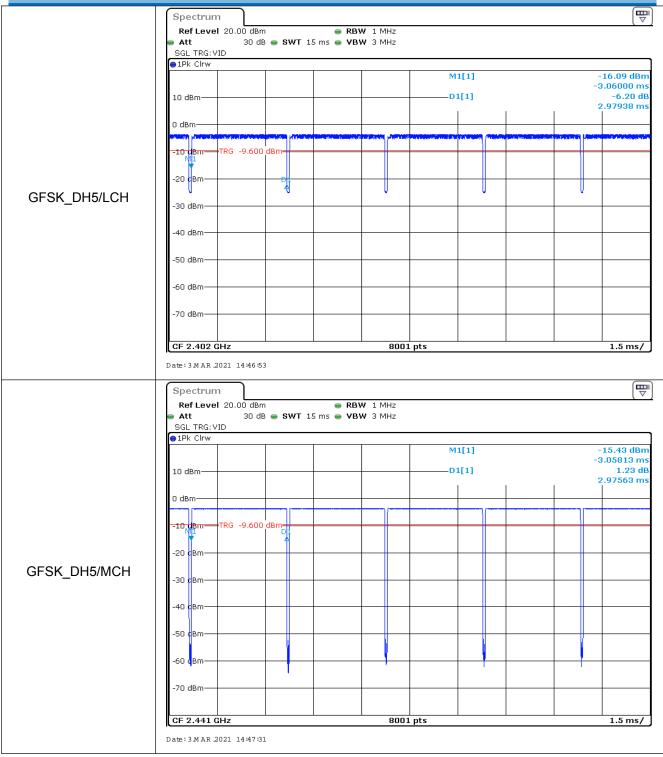


	Spectrum						
	Ref Level         20.00 dBm						
	SGL TRG: VID						
				M1[1]	-14.36 dBm -1.49250 ms		
	10 dBm			D1[1]	-0.49 dB 1.76750 ms		
	0 dBm						
	TRC 0	400 dBm					
	-10 dBm						
π/4DQPSK	-20 dBm						
_2DH3/HCH	-30 dBm						
	-40 dBm						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	CF 2.48 GHz		8001 pts		1.0 ms/		
	Date: 3 M AR .2021 14:5	52:50					
	Spectrum						
	Ref Level         20.00 dBm         RBW         1 MHz           Att         30 dB         SWT         10 ms         VBW         3 MHz						
	SGL TRG: VID						
				M1[1]	-17.88 dBm -1.85250 ms		
	10 dBm			D1[1]	0.58 dB 1.77000 ms		
	0 dBm						
	-10 dBm TRG -8.						
	M1	D1					
	-20 dBm						
8DPSK_3DH3/LCH	-30 dBm		~				
	-40 dBm						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	CF 2.402 GHz		8001 pts		1.0 ms/		
	Date: 3 M AR .2021 14:	57:45					
	1						











	Spectrum							
	Ref Level 20.00 dBm	<u>(``)</u>						
	SGL TRG: VID							
	M1[1]	-12.67 dBm						
	10 dBmD1[1]	-3.05625 ms 0.88 dB						
	0 dBm	2.97375 ms						
	-10'dőm							
	-20 dBm							
GFSK_DH5/HCH	-30 cBm							
	-40 cBm							
	-50 dBm-							
	-60 dBm							
	-70 dBm							
	CF 2.48 GHz 8001 pts	1.5 ms/						
	Date: 3 MAR 2021 14:48:09							
	Spectrum (							
	Ref Level         20.00 dBm         RBW         1 MHz           Att         30 dB         SWT         15 ms         VBW         3 MHz           SGL TRG: VID         SGL TRG: VID							
	● 1Pk Clrw	-12.67 dBm						
	10 dBm D1[1]	-12.67 dBm -1.68938 ms 2.91 dB						
		2.91 db 2.98875 ms						
	-10 dBm TR® 19.100 dBm 2							
	-20 dBm							
π/4DQPSK	-30 dBm	U						
_2DH5/LCH								
	-40 dBm-							
	-50 dBm-							
	-60 dBm							
	-70 dBm							
	CF 2.402 GHz 8001 pts	1.5 ms/						
	Date: 3 M AR 2021 14:53:29							

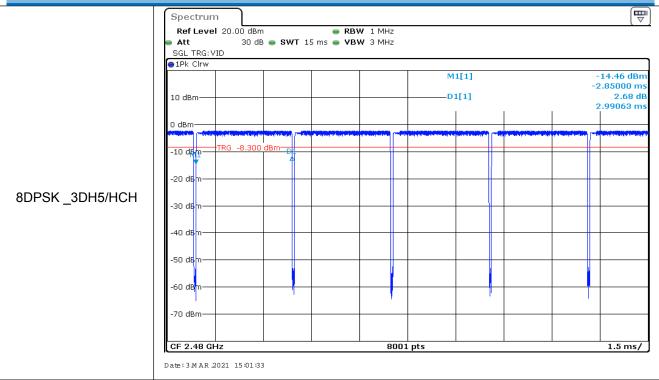


	Spectrum						
	Ref Level         20.00         dBm         ● RBW         1 MHz           ● Att         30 dB         ● SWT         15 ms         ● VBW         3 MHz						
	SGL TRG: VID				]		
				M1[1]	-12.29 dBm		
	10 dBm			D1[1]	-3.41812 ms -1.54 dB 2.99063 ms		
	0 dBm				2.99003 ms		
	-10 dBm	000 dBm					
π/4DQPSK	-20 dBm						
_2DH5/MCH	-30 dBm						
_20113/10/01							
	-40 dBm						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	-70 0011						
	CF 2.441 GHz		8001 pt	s	1.5 ms/		
	Date: 3 M AR .2021 14:5	54:26					
	Spectrum						
	Ref Level 20.00	dBm DdB 👄 <b>SWT</b> 15 ms 🖷	RBW 1 MHz VBW 3 MHz				
	SGL TRG: VID 9 1Pk Clrw						
				-10.98 dBm -2.65500 ms			
	10 dBm			D1[1]	-3.82 dB 2.99063 ms		
	0 dBm						
	-10 dBntz TRG -8.	400 dBm		a sea de la companya	······································		
π/4DQPSK	-20 dBm						
_2DH5/HCH	-30 dBm						
	-40 dBm						
	50 de -						
	-50 dBm						
	-60 dBm						
	-70 dBm						
	CF 2.48 GHz	54-59	8001 pt	S	1.5 ms/		
	Date: 5 PIAR 2021 14.5						



	Spectrum								
	Ref Level         20.00 dBm         ■ RBW         1 MHz           ● Att         30 dB         SWT         15 ms         ♥ VBW         3 MHz								
	_SGL TRG: VID								
	●1Pk Clrw M1[1] -8.49 dBm								
	-1.58813 ms 10 dBm D1[1] -4.34 dB								
	2.98875 ms								
	-10 dBm TRG -8.900 dBm U								
	-20 dBm								
8DPSK_3DH5/LCH									
ODI OIX_ODI IO/ECIT	-30 dBm								
	-40 dBm								
	-50 dBm								
	-60 dBm								
	-70 dBm								
	CF 2.402 GHz 8001 pts 1.5 ms/								
	Date: 3 MAR 2021 15:00:09								
	Spectrum 🕎								
	Ref Level 20.00 dBm         RBW 1 MHz           Att         30 dB         SWT 15 ms         VBW 3 MHz								
	SGL TRG: VID								
	M1[1] -14.35 dBm -1.81875 ms								
	10 dBmD1[1] 1.86 dB 2.99063 ms								
	0 dBm								
	-10 dBm TRG -8.800 dBm 01								
	-20 dBm								
8DPSK_3DH5/MCH	-30 dBm								
	-30 ubii								
	-40 dBm								
	-50 dBm								
	-60 dBm								
	-70 dBm								
	CF 2.441 GHz         8001 pts         1.5 ms/           Date: 3 MAR. 2021         15:00:47								







#### 5.7 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013				
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
	Remark: Offset=cable loss+ attenuation factor.				
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.				
Exploratory Test Mode:	Hopping and Non-hopping transmitting with all kind of modulation and all kind of data type				
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi/4DQPSK$ modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report.				
Test Results:	Pass				



Mode	Test Channel	Frequency [MHz]	Frequency Hopping	Emission Level [dBm]	Limit [dBm]	Result
0501/		0.400	Off	-45.960	-15.19	PASS
GFSK	LCH	2400	On	-47.680	-15.24	PASS
			Off	-53.880	-14.79	PASS
GFSK	HCH	2483.5	On	-51.620	-14.69	PASS
			Off	-42.530	-15.19	PASS
π/4DQPSK	LCH	2400	On	-43.650	-15.08	PASS
			Off	-49.770	-14.79	PASS
π/4DQPSK	HCH	2483.5	On	-48.730	-14.74	PASS
			Off	-41.850	-15.19	PASS
8DPSK	LCH	2400	On	-41.100	-15.24	PASS
			Off	-50.890	-14.78	PASS
8DPSK	HCH	2483.5	On	-49.500	-14.74	PASS



Report No.: CQASZ20210100152E -01

#### Test plot as follows:

		Grap	hs			
	Spectrum					
	Ref Level 25.00		RBW 100 kHz			
	e Att 3	D dB <b>SWT</b> 151.7 μs	🔵 VBW 300 kHz	Mode Auto F	FT	)
	20 dBm			M1[1]		4.81 dBm
				M2[1]		2.4019910 GHz -45.96 dBm
	10 dBm				M1	2.4000000 GHz
	0 dBm					
	-10 dBm					
	-20 dBm	190 dBm				
	-30 dBm					
	-40 dBm					
GFSK/LCH/No Hop				мз		
	4-50 dBm	and fronte lay the same white a wand	with descent of the state	الجاعد سأبجرا بالإدراب ومعاملين	بليبيد والبالي الباكي	persisting the second second second second
	-60 dBm		·			-
	-70 dBm					
	Start 2.31 GHz			ts		Stop 2.441 GHz
	Marker			1		
	Type Ref Trc M1 1	2.401991 GHz	Y-value 4.81 dBm	Function	Fur	nction Result
	M2 1 M3 1	2.4 GHz 2.39 GHz	-45.96 dBm -50.85 dBm			
	M4 1	2.31 GHz	-51.81 dBm			
	M5 1	2.3996695 GHz	-45.35 dBm			
	Date: 3 M AR .2021 13:	33:12				
	Spectrum Ref Level 25.00	dBm Offset 8.43 dB	🔵 RBW 100 kHz			[ ▽ ]
	e Att 3		🔵 <b>VBW</b> 300 kHz	Mode Auto P	FT	
	●1Pk View			M1[1]		4.76 dBm
	20 dBm					2.429760 GHz -47.68 dBm
	10 dBm			M2[1]		2.400000 GHz
	0 dBm				<u>hahanaana</u>	IN ALARAMAN AND TRACE AND A
	-10 dBm				<u> </u>	A ARADAA ARAD
	D1 -15	240 dBm				
	-20 dBm					
	-30 dBm					
GFSK/LCH/Hop	-40 dBm				мя	ļ
		lessu.		M3	142	
	4-50.dBm	man and a second	and the second s	en marty m	~	
	-60 dBm					
	-70 dBm					
	Start 2.31 GHz		600 pt	s		Stop 2.441 GHz
	Marker Type Ref Trc	X-value	Y-value	Function	Eur	nction Result
	M1 1	2.42976 GHz	4.76 dBm	- anotion		
	M2 1 M3 1	2.4 GHz 2.39 GHz	-47.68 dBm -50.91 dBm			
	M4 1 M5 1	2.31 GHz 2.399666 GHz	-51.56 dBm -45.76 dBm			
				1	1	
	Date: 3 MAR.2021 14:		10110 0.011	1		



	Spectrum									
	Ref Level 25	.00 dBm	Offset 8.25	dB 👄 R	<b>3W</b> 100 kHz	:				( \Box
	🗕 Att	30 dB			<b>BW</b> 300 kHz		Auto FF1	-		
	●1Pk View					N	1[1]			5.21 dBm
	20 dBm									84800 GHz
	10 dBm				M1	N	2[1]			53.88 dBm 50000 GHz
	0 dBm				Ň					
	o dom									
	-10 dBm	-14.790	dBm							
	-20 dBm	-14.790								
	-30 dBm									
	-50 0511				M h l					
GFSK/HCH/No Hop	-40 dBm					14				
	-50,dBm	a a ta bata a bakat	لمنعمهم بالمرد والمعاود والمعادم	non hard	V Vla	Anna		M3	and the same site and	والمعالية والمعالية
	n a sta toban al Antaria. An	and the second	and a second state of the second	and the second		n making the second	and usation in the		ur, alitreraji, ki alashiri)	a na sa
	-60 dBm									
	-70 dBm									
	CF 2.4835 GH	z			8001	pts			Span	60.0 MHz
	Marker   Type   Ref   <sup>-</sup>	Frc	X-value	1	Y-value	Fund	tion	Fund	tion Result	
	M1 M2	1	2.479848 (		5.21 dBr -53.88 dBr	n				
	M3	1	2.4835 (	GHz	-53.25 dBr	n				
	M4	1	2.484295 (	Hz	-45.91 dBr	n				
	Date: 3 M AR .2021	13:40:18	3							
	Spectrum									
	Ref Level 25	.00 dBm	Offset 8.25	dB 👄 R	<b>3W</b> 100 kHz					(⊽)
	Att	30 dB			<b>BW</b> 300 kHz		Auto FFT	-		
	●1Pk View					N	1[1]			5.31 dBm
	20 dBm									71500 GHz
	10 dBm					N	2[1]			51.62 dBm 35000 GHz
	88820404	0000	<u>ANAAAN</u> AA	ллал	ם ממ					
		ЛШИ		INN						
	-Koldert-V-V	14 600		0 1 1 0 4						
	-20 dBm	-14.690	UBIII							
	20 db									
0501/11/01/11	-30 dBm				h					
GFSK/HCH/Hop	-40 dBm					14				
	-50 dBm				\			M3	as tours define	han ann i de humd
					~	,		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
	-60 dBm									
	-70 dBm									
	CF 2.4835 GH	z	ı I		600	ots		1	Span	60.0 MHz
	Marker   Type   Ref   <sup>-</sup>	Tre	X-value	1	Y-value	Euro	tion	Euro	tion Result	
	M1	1	2.47715 (		5.31 dBr	n		Fund	aon kesult	
	M2 M3	1	2.4835 (		-51.62 dBr -51.83 dBr					
	M4	1	2.484251 (		-47.88 dBr					
	Date: 3 MAR .2021	14:15:27	7							



	Spectrun	n									
	Ref Leve	l 25.00 dBm			<b>RBW</b> 100 k⊢						( ~
	Att 1Pk View	30 dE	SWT 1	.51.7 μs 🥃	<b>VBW</b> 300 kH	Iz Mode	Auto F	FT			
	20 dBm-					M	1[1]			0.40	4.81 dBm
	10 dBm					M	2[1]			-	120080 GHz -42.53 dBm
							1		11	2.40	100000 GHz
	0 dBm										
	-10 dBm	D1 -15.190	dBm								
	-20 dBm—	D1 -13,190									
	-30 dBm								1		
π/4DQPSK/LCH/No	-40 dBm							Mā			
Нор							43	1	1		
	450 dBm	and Marinetherides	and the state of the state of the	A MARINA WALLAND	understand and the second second	الد موجد فالموجو الماد	the state of the s	N	We with the second	atteria desta de partes	d monthing trains designed
	-60 dBm										
	-70 dBm—										
	Start 2.31	GHz			8001	pts				Stop 2	2.441 GHz
	Marker Type Re	f   Trc	X-value	. 1	Y-value	Fund	tion	1	Fund	tion Result	: 1
	M1	1	2.4020	08 GHz	4.81 dBr	n					
	M2 M3	1		.4 GHz 39 GHz	-42.53 dBr -52.79 dBr						
	M4 M5	1		31 GHz	-53.77 dBr -41.96 dBr						
	1115		2.3990		-41.90 UBI						
	Spectrun Ref Leve Att IPk View	n I 25.00 dBm 30 dE			<b>RBW</b> 100 k⊢ <b>VBW</b> 300 k⊢		Auto F	FT			♥
	20 dBm					M	1[1]			2.4	4.92 dBm 36960 GHz
	10 dBm					N	2[1]			-	43.65 dBm
	0 dBm								WATAR MALLA	2.4 MAMAAAA	HODOOOMAHZ
									0.0000 00000		
	-10 dBm—	D1 -15.080	dBm								
	-20 dBm—										
	-30 dBm							-			
					1 1					1	
π/4DQPSK/LCH/Hop	-40 dBm							Mp			
π/4DQPSK/LCH/Hop			and a second	the out of the second		S	МЗ	ME			
π/4DQPSK/LCH/Hop	250.dBm	ay munde	www.	<del>unsaper</del> v		Langer-May	МЗ 1				
π/4DQPSK/LCH/Hop	<mark>ይ 5 ይ d ይ መ</mark> -60 d B m		www.	the and the work		-unun-mb)	M3 Nation				
π/4DQPSK/LCH/Hop	たりの dBのーー -60 dBm -70 dBm		www.	the second s		hanne and the	M3 1000-рос				
π/4DQPSK/LCH/Hop	50 dBm -60 dBm -70 dBm Start 2.31		a that have	the set of	600	nangaran dagi Dits	M3 the second			Stop :	2.441 GHz
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						(m)
	Spectrum Ref Level 25.00 d	Bm Offset 8.25 dB 🖷				
	Att 30		<b>VBW</b> 300 kHz	Mode Auto FFT		
	●1Pk View			M1[1]		5.21 dBm
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	10 dBm		M1			2.48350000 GHz
	0 dBm		$+ \wedge +$			
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Нор	-40 dBm					
	- TO CAR	the second and a second second	w ym	and the second of the second o	M3	when any mark when the law
	-60 dBm					
	-70 dBm					
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	Marker					
	Type         Ref         Trc           M1         1	X-value 2.479848 GHz	Y-value 5.21 dBm	Function	Functio	n Result
	M2 1 M3 1	2.4835 GHz 2.5 GHz	-49.77 dBm -52.81 dBm			
	M4 1	2.4844 GHz	-45.43 dBm			
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	Spectrum					
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	Att 30     IPk View	dB <b>SWT</b> 75.8 µs 🖷	<b>VBW</b> 300 kHz	Mode Auto FFT		
	20 dBm			M1[1]		5.26 dBm
				M2[1]		2.4781500 GHz -48.73 dBm
	10 dBm	MANANAN			1	2.4835000 GHz
	ABB ARALANA	Annakaa				
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п/4DQPSK/HCH/Hop						
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8DPSK/LCH/No Hop								1	1.		
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	-60 dBm	•					<b>`</b>				
	-70 dBm—										
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	M2 M3	1		.4 GHz	-41.85 dBr -53.02 dBr						
		1	2.3	39 GHz							
		1	2.3	31 GHz	-53.21 dBr						
	M4 M5	1	2.3 2.399653	31 GHz 31 GHz	-53.21 dBr -41.16 dBr						
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	M4	1	2.399653								
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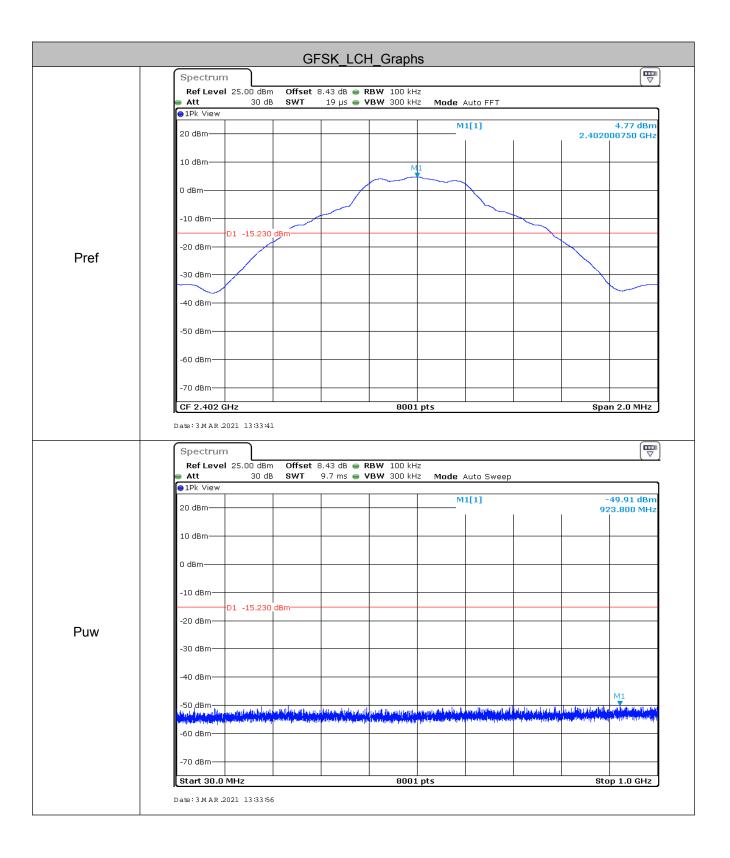
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		evel 2	25.00 dBn		8.25 dB 😑									
	Att 1Pk Vie		30 dE	SWT	75.8 µs 👄	VBW	300 k	Hz	Mode /	Auto FFT	-			
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	20 dBm-							+						84800 GHz
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	- <b>5</b> 0, dBm	_				w	)	M4	and the second second	1		мз	L. L. K.	
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	M1 M2		1	2.4798	48 GHz 35 GHz	-5	5.22 d 0.89 d							
	M3		1	2	.5 GHz	- 5	2.31 d	lBm						
	M4		1	2.484	37 GHz	-4	-5.94 d	lBm						
	Date: 3.M /	AR .202	1 14:01:5	7										
	Spectr													
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	●1Pk Vie	эw								aco i i i				
	20 dBm-								M	1[1]				5.26 dBm
									м	2[1]				61500 GHz 49.50 dBm
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	M2		1	2.48	35 GHz		9.50 d	lBm						
	M3 M4		1		51 GHz		0.43 d 5.90 d							
	Date: 3 M A	AR .202	14:41:1	У										



# 5.8 Spurious RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
	Remark: Offset=cable loss+ attenuation factor.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi$ /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type.
Test Results:	Pass







Report No.: CQASZ20210100152E -01

20 dBm	●1Pk View					M	11[1]			3.89 di
10 dBm       M1	20 dBm									
M1         M1<						14	12[1]			
-10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -40 dBm -50 dBm -50 dBm -40 dBm -60 dBm -10	10 dBm	M1								
-10 dBm       01 -15.230 dBm       -10 dBm       -10 dBm       -10 dBm         -30 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm         -20 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm         -10 dBm       -10 dBm       -11 133409       -11 130 ms       VBW 300 kHz       Mode Auto Sweep         -10 dBm       -11 130 ms       VBW 300 kHz       Mode Auto Sweep       -10 dBm       -10 dBm         -10 dBm       -11 130 ms       -10 dBm	0 dBm									
O1         15.230 dBm         M2           -30 dBm         -40 dBm         -40 dBm         -40 dBm           -40 dBm         -40 dBm         -40 dBm         -40 dBm           -50 dBm         -40 dBm         -40 dBm         -40 dBm           -50 dBm         -40 dBm         -40 dBm         -40 dBm           -70 dBm         -40 dBm         -41 dBm         -45.96 c           0 dBm         -45.96 c         -45.96 c         -45.96 c           0 dBm         -41 dBm         -45.96 c         -45.96 c           0 dBm         -45.96 c         -45.96 c         -45.96 c           0 dBm         -45.96 c         -45.96 c         -45.96 c           -10 dBm         -45.96 c         -45.96 c         -45.96 c           -20 dBm         -45.96 c         -45.96 c         -45.96 c           -20 dBm         -45.96 c         -45.96 c         -45.96 c           -10 dBm										
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-40 dBm       M2         -50 dBm       M2         -60 dBm       M2         -70 dBm       M2         -80 dBm       M2         -70 dBm       M2         -80 dBm       M2         -70 dBm       M2         -70 dBm       M2         -80 dBm       M2         -70 dBm       M2         -80 dBm       M2         -70 dBm       M2         -70 dBm       M2         -80 dBm       M2         -70 dBm       M1[1]         -70 dBm       M1[1] <td< td=""><td>-20 dBm—</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	-20 dBm—									
-40 dBm       M2         -50 dBm       M2         -60 dBm       M2         -77 dBm       M2         -70 dBm       M11										
-50 dBm	-30 dBm—									
-50 dBm										
-50 dBm	-40 dBm—									
-50 dBm					Like Course of the					
-60 dBm       -60 dBm       -60 dBm       -60 dBm       -60 dBm       -70 dBm	-50 dBm	a mandan latte		alisia		desired of the party	a contrativity of a		where the set	al tike i sou
-70 dBm         Image: start 1.0 GHz         B001 pts         Stop 12.0 G           Date: 3 MAR 2021 13:34:09         Spectrum         Stop 12.0 G         Stop 12.0 G           Ref Level 25.00 dBm         Offset 8.43 dB         RBW 100 kHz         Mode Auto Sweep           • 1Pk View         • 10 dBm         • 11         -45.96 c           • 0 dBm         • 11         • 19.92010         • 19.92010           • 0 dBm         • 10 dBm         • 10 dBm         • 10 dBm           -20 dBm         • 10 dBm         • 10 dBm         • 10 dBm           -30 dBm         • 10 dBm         • 10 dBm         • 10 dBm           -70 dBm         • 10 dBm         • 10 dBm         • 10 dBm           -70 dBm         • 10 dBm         • 10 dBm         • 10 dBm           -70 dBm         • 10 dBm         • 10 dBm         • 10 dBm	and the second state of the second	debictle en astedebi		Total and the second		http://	a dhagana an	hay politicate de la constante	and the second secon	and the second
Start 1.0 GHz         8001 pts         Stop 12.0 G           Date: 3 MAR. 2021 13:34:09         Spectrum         Ref Level 25.00 dBm         Offset 8.43 dB         RBW 100 kHz         Mode Auto Sweep         Att         30 dB         SWT 130 ms         YBW 300 kHz         Mode Auto Sweep         19.92010           I PR View	-60 dBm									
Start 1.0 GHz         B001 pts         Stop 12.0 G           Date: 3MAR 2021 1334:09         Spectrum         Ref Level 25.00 dBm         Offset 8.43 dB • RBW 100 kHz         Mode Auto Sweep         • 10 dBm         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 19.92010         • 10.0 Bm         • 19.92010         • 10.0 Bm         • 19.92010         • 10.0 Bm	70 40									
Date: 3 M AR. 2021 13:34:09           Spectrum           Ref Level 25:00 dBm         Offset 8:43 dB (a) RBW 100 kHz           Att         30 dB (b) WT 130 ms (a) VBW 300 kHz           Mode Auto Sweep         M1[1]         -45.96 c           Ipk View         M1[1]         -45.96 c           20 dBm         M1[1]         -45.96 c           10 dBm         M1[1]         -45.96 c           -10 dBm         D1 -15.230 dBm         D1           -20 dBm         D1 -15.230 dBm         D1         D1 -15.230 dBm           -30 dBm         D1         M1[1]         -41.97 dBm           -70 dBm         D1         M1[1]         -41.97 dBm           -70 dBm         D1         M1[1]         -41.97 dBm         D1	-70 ubiii—									
Spectrum           Ref Level         25.00 dBm         Offset         8.43 dB         RBW         100 kHz           Math         30 dB         SWT         130 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View									Stor	12.0.01
10 dBm	Date: 3 M AR . Spectrur Ref Leve	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz	Auto Sweep	1	3.04	(
0 dBm       Image: state of the state of th	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode		,		(
0 dBm       Image: state s	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-10 dBm	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode		, 		45.96 d
-10 dBm	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
D1         -15.230         dBm	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
D1         -15.230         dBm         Image: Constraint of the second	Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-30 dBm	Date: 3 M AR . Spectrur Ref Leve • Att • 1Pk View 20 dBm	2021 13:34:09	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-40 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 dl
-40 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d
-60 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d
-60 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm -20 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-50 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d
-60 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	Offset		<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-70 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -40 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				45.96 d
-70 dBm	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -40 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				45.96 d
	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				45.96 d
	Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d
Start 12.0 GHz 8001 pts Stop 25.0 G	Date: 3 M AR . Spectrur Ref Leve Att PIPk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -40 dBm -40 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d
	Date: 3 M AR . Spectrur Ref Leve Att PIPk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -60 dBm	2021 13:34:09 n el 25.00 dBm 30 dE	dBm	130 ms • 1	<b>RBW</b> 100 kH	łz łz Mode				( 45.96 d

GFSK\_MCH\_Graphs



	Spectru									
		el 25.00 dB	m Offset		<b>RBW</b> 100 kH					( * ,
	e Att 1Pk View	30 c	IB SWT	19 µs 😑 🕻	<b>VBW</b> 300 kH	iz Mode /	Auto FFT			
		,				м	1[1]			4.62 dBm
	20 dBm—						I	1	2.440	851270 GHz
	10 dBm—									
					M1					
	0 dBm				1					
	-10 dBm—									
	-20 dBm—	D1 -15.38								
Pref										
	-30 dBm—									
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	-40 dBm—									
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	-60 dBm—									
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					800:	Inte			Sni	an 2.0 MHz
	CE 2 441	CH <sub>2</sub>							op	JII 2.0 MILIZ
	CF 2.441		07							
		GHz .2021 13:37:	07			•				
	Date: 3 M AR	2021 13:37: m								
	Date: 3 M AR Spectru Ref Lev	. 2021 13:37: m el 25.00 dB	m Offset		<b>RBW</b> 100 kH	łz	Auto Sweep			
	Date: 3 M AR	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				
	Date: 3 M AR Spectru Ref Lev Att	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i	Auto Sweep 1[1]			-48.83 dBm 47.550 MHz
	Date: 3 M AR Spectru Ref Lev Att 1Pk View 20 dBm—	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
	Date:3MAR Spectru Ref Lev ● Att ● 1Pk View	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
	Date: 3 M AR Spectru Ref Lev Att 1Pk View 20 dBm—	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm-	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm-	. 2021 13:37: m el 25.00 dB 30 d	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm-	. 2021 13:37: m el 25.00 dB 30 d	m Offset B SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm-	2021 13:37: m el 25.00 dB /	m Offset B SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm-	2021 13:37: m el 25.00 dB /	m Offset B SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	2021 13:37: m el 25.00 dB /	m Offset B SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:37: m el 25.00 dB /	m Offset B SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:37: m el 25.00 dB / D1 -15.38	m Offset B SWT	9.7 ms	<b>RBW</b> 100 kH	iz iz Mode / Mode /	1[1]		8	-48.83 dBm 47.550 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:37: m el 25.00 dB / D1 -15.38	m Offset B SWT	9.7 ms	<b>RBW</b> 100 kH	iz iz Mode / Mode /	1[1]		8	-48.83 dBm 47.550 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:37: m el 25.00 dB / D1 -15.38	m Offset B SWT	9.7 ms	<b>RBW</b> 100 kH	iz iz Mode / Mode /	1[1]		8	-48.83 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -30 dBm- -40 dBm- -50 dBm- -50 dBm-	2021 13:37: m el 25.00 dB / D1 -15.38	m Offset B SWT	9.7 ms	<b>RBW</b> 100 kH	iz iz Mode / Mode /	1[1]		8	-48.83 dBm 47.550 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	2021 13:37: m el 25.00 dB 30 c / D1 -15.38	m Offset B SWT	9.7 ms	RBW 100 kH	iz iz Mode / Mode /	1[1]			-48.83 dBm 47.550 MHz



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Att 1Pk View	30 d	B SWT	110 ms 😑 🕻	/ <b>BW</b> 300 k⊢	z Mode	Auto Sweep			
20 dBm					м	1[1]			4.41 dB 44150 GI
20 0011					м	2[1]		-	46.44 dB
10 dBm	M1					1	1	6.	.49863 GI
	Ť								
0 dBm									
10 40									
-10 dBm—	D1 -15.380								
-20 dBm	DI -13.380								
-30 dBm			-						
-40 dBm				M	2				
-50 dBm					Lull III				
مستبطها وتراجع	And Constants		In the second second	and the second			n den leinen der sonnen	in and starting of the light of t	
STATE DEPARTMENT	a di karana	1				1	1 <u>.</u>	p p r	
-60 dBm									
-60 dBm—									
-60 dBm									
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun	<b>GHZ</b> 2021 13:37:3	m Offset	8.25 dB • F 130 ms • V		z z <b>Mode</b>				[
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset		<b>RBW</b> 100 kH	z z <b>Mode</b>	Auto Sweep			46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att IPk View	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 df
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att IPk View	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att PIPk View 20 dBm 10 dBm	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att PIPk View 20 dBm	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 df
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-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att PIPk View 20 dBm 10 dBm	SHZ 2021 13:37:3 1 1 25.00 dBr	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 df
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 10 dBm 0 dBm -10 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 df
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT	130 ms	<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT	130 ms	<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT	130 ms	<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -60 dBm	SHZ 2021 13:37:3 1 25.00 dBr 30 d	m Offset B SWT	130 ms	<b>RBW</b> 100 kH	z z <b>Mode</b>				46.03 dE 75010 G
-70 dBm Start 1.0 C Date: 3 M AR 2 Spectrun Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	-D1 -15.380	m Offset B SWT	130 ms	<b>RBW</b> 100 kH	Z Mode .				46.03 dE

GFSK\_HCH\_Graphs



		pectrun									
		Ref Leve	l 25.00 dBr	n Offset	8.25 dB 👄 F	RBW 100 kH	z				
	•	Att	30 d				z Mode /	Auto FFT			
	•	1Pk View	1	1	1	1	1				
	20	) dBm—					M	1[1]		2 470	5.19 dBm 347020 GHz
	10	) dBm—									
						M1					
	o	dBm				1		<u> </u>			
	-1	.0 dBm			<b>—</b>						
			D1 -14.810	dBm							
	-2	20 dBm									
Pref											
	-3	0 dBm—									
		$\sim$									$\checkmark$
	-4	O dBm—									
	-5	i0 dBm									
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	-/	'0 dBm—									
							Inte			Sna	n 2.0 MHz
	С	F 2.48 GI	Hz			8001	r prs			эрс	
	Dat		2021 13:40:4				·				
	Dat	pectrun Ref Leve Att	2021 13:40:4	n Offset	8.25 dB ● F 9.7 ms ● V	<b>RBW</b> 100 kH	·	Auto Sweep			
	Dat	e: 3 M AR 2 pectrun Ref Leve Att 1Pk View	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a	Auto Sweep			
	Dat	pectrun Ref Leve Att	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a		1		
	Dat	re: 3 M AR 2 pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	e: 3 M AR 2 pectrun Ref Leve Att 1Pk View	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	pectrum Ref Leve Att 1Pk View 0 dBm	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	re: 3 M AR 2 pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4	n Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	pectrum Ref Leve Att 1Pk View 0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
	Dat	pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
Puw	Dat	E: 3 M AR .: pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
Puw	Dat	E: 3 M AR .: pectrun Ref Leve Att 1Pk View 0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
Puw	Dat	e: 3 M AR .: pectrun Ref Leve Att 1Pk View 0 dBm 0 dBm 0 dBm .0 dBm .0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
Puw	Dat S 20 10 -1 -2 -3	e: 3 M AR .: pectrun Ref Leve Att 1Pk View 0 dBm 0 dBm 0 dBm .0 dBm .0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm
Puw	Dat S 20 10 -1 -2 -3 -4	E: 3 M AR .: pectrun Ref Leve Att 1Pk View 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> a				-49.13 dBm 83.450 MHz
Puw	Dat S 20 10 -1 -2 -3 -4	E: 3 M AR           pectrum           Ref Leve           Att           IPk View           D dBm           D dBm           0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT	9.7 ms • V	<b>2BW</b> 100 kH 2BW 300 kH	IZ IZ Mode A	1[1]		9	-49.13 dBm B3.450 MHz
Puw	Dat S 20 10 -1 -2 -3 -4 -5	E: 3 M AR           pectrun           Ref Leve           Att           1Pk View           D dBm           0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT		<b>2BW</b> 100 kH 2BW 300 kH	IZ IZ Mode A	1[1]		9	-49.13 dBm B3.450 MHz
Puw	Dat S 20 10 -1 -2 -3 -4 -5	E: 3 M AR           Impectrum           Ref Leve           Att           IPk View           D dBm           D dBm           0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT	9.7 ms • V	<b>2BW</b> 100 kH 2BW 300 kH	IZ IZ Mode A	1[1]		9	-49.13 dBm B3.450 MHz
Puw	Dat S 20 10 -1 -2 -3 -4 -5 -6	E: 3 M AR           pectrun           Ref Leve           Att           1Pk View           D dBm           0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT	9.7 ms • V	<b>2BW</b> 100 kH 2BW 300 kH	IZ IZ Mode A	1[1]		9	-49.13 dBm B3.450 MHz
Puw	Dat S 20 10 -1 -2 -3 -4 -5 -6	E: 3 M AR           pectrun           Ref Leve           Att           1Pk View           D dBm           0 dBm	2021 13:40:4 n l 25.00 dBr 30 d	n Offset 3 SWT	9.7 ms • V	<b>2BW</b> 100 kH 2BW 300 kH	IZ IZ Mode A	1[1]		9	-49.13 dBm B3.450 MHz



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● 1Pk View 20 dBm					M	1[1]		2	4.02 dB 48000 G
					м	2[1]		-	45.70 dB
10 dBm	M1							6.	90563 G
	T								
0 dBm									
10 40									
-10 dBm—	D1 -14.810	dBm							
-20 dBm—									
-30 dBm									
-40 dBm—					M2				
-5 <mark>0 dBm</mark>		1.1		سروار أووالي	anal				
1.1. addition	المعطولة المعادية	ing the second second law		<ul> <li>A sublic constant</li> </ul>	and the state of the		a la participa de la factoria de la composicione de la composicione de la composicione de la composicione de la Composicione de la composicione de l		
-60 dBm	a parta kanang ha				n ndr		de la companya de la companya	and the second s	
-70 dBm—									
-70 dBm Start 1.0 ( Date: 3 M AR : Spectrum	2021 13:41:1	n Offset 8	3.25 dB 🖷 R 130 ms 🖷 V		z z Mode	Auto Sweep			(
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att IPk View	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode	Auto Sweep			12.0 GF
-70 dBm Start 1.0 d Date: 3 M AR : Spectrum Ref Leve Att	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att IPk View	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att P1Pk View 20 dBm	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att P1Pk View 20 dBm	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm	2021 13:41:11 n	n Offset 8		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR 2 Spectrum Ref Leve Att 10 dBm 10 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				(1
-70 dBm- Start 1.0 ( Date: 3.MAR. Spectrum Ref Leve Att P1Pk View 20 dBm- 10 dBm- -10 dBm-	2021 13:41:11 n	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 di
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm- Start 1.0 ( Date: 3.MAR. Spectrum Ref Leve Att 10 dBm- 10 dBm- -10 dBm-	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 di
-70 dBm- Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att PIPk View 20 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm- Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att PIPk View 20 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att IPK View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm (50 dBm) -40 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 0 Date: 3 M AR . Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:41:11 n I 25.00 dBm 30 dE	Offset 8 SWT		<b>:BW</b> 100 k⊢	z z Mode				46.77 dl
-70 dBm Start 1.0 ( Date: 3 M AR . Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -60 dBm	2021 13:41:1: n 1 25.00 dBm 30 dE 	Offset 8 SWT		<b>:BW</b> 100 k⊢	Z Mode				( 46.77 d

π/4DQPSK\_LCH\_Graphs



	Spectrum Ref Level 25.00		3.43 dB 👄 RBW 10				
	e Att 3	80 dB SWT	19 µs 👄 VBW 30	0 kHz Mode A	uto FFT		
				M	[1]		4.79 dBm
	20 dBm				I	2.4020	002000 GHz
	10 dBm						
	10 0.011			M1			
	0 dBm						
	-10 dBm	$\wedge$					
		.210 dBm					
Pref	-20 dBm						
	-30 dBm						
	-40 dBm						
	-50 dBm						
	-60 dBm						
	00 4011						
	-70 dBm						
	CF 2.402 GHz			 8001 pts		Spa	n 2.0 MHz
	Date: 3 MAR .2021 13	44.29					
	Spectrum Ref Level 25.00		3.43 dB 👄 RBW 10	00 kHz			
	Ref Level 25.00		3.43 dB 👄 <b>RBW</b> 10 9.7 ms 👄 <b>VBW</b> 30		uto Sweep		
	Att 3	dBm Offset		00 kHz Mode A	uto Sweep		-48.67 dBm
	Ref Level 25.00 Att 3	dBm Offset		00 kHz Mode A			-48.67 dBm
	Att 3	dBm Offset		00 kHz Mode A			-48.67 dBm
	Ref Level 25.00 Att 3 10 dBm 10 dBm	dBm Offset		00 kHz Mode A			-48.67 dBm
	Ref Level 25.00 Att 3 1Pk View 20 dBm	dBm Offset		00 kHz Mode A			-48.67 dBm
	Ref Level 25.00 Att 3 10 dBm 10 dBm	dBm Offset		00 kHz Mode A			-48.67 dBm
	Ref Level         25.00           Att         3           1Pk View         20 dBm           10 dBm         -           0 dBm         -	dBm Offset		00 kHz Mode A			-48.67 dBm
Duru	Ref Level         25.00           Att         3           1Pk View         20 dBm           10 dBm         -           0 dBm         -	dBm Offset 1		00 kHz Mode A			-48.67 dBm
Puw	Ref Level 25.00           Att         3           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         0 -11 -15	dBm Offset 1		00 kHz Mode A			-48.67 dBm
Puw	Ref Level         25.00           Att         3           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         0 -11 -15	dBm Offset 1		00 kHz Mode A			-48.67 dBm
Puw	Ref Level 25.00           Att         3           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         0 -11 -15	dBm Offset 1		00 kHz Mode A			-48.67 dBm
Puw	Ref Level 25.00           Att         3           1Pk View         20 dBm           10 dBm         0 dBm           -10 dBm         0 dBm           -30 dBm         -30 dBm	dBm Offset 1		00 kHz Mode A			-48.67 dBm
Puw	Ref Level 25.00           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dBm Offset 1	9.7 ms  VBW 30	00 KHZ Mode A		9	-48.67 dBm 49.020 MHz
Puw	Ref Level 25.00           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dBm Offset 1		00 KHZ Mode A		9	-48.67 dBm 49.020 MHz
Puw	Ref Level 25.00           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dBm Offset 1	9.7 ms  VBW 30	00 KHZ Mode A		9	-48.67 dBm 49.020 MHz
Puw	Ref Level 25.00           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -60 dBm	dBm Offset 1	9.7 ms  VBW 30	00 KHZ Mode A		9	-48.67 dBm 49.020 MHz
Puw	Ref Level 25.00           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	dBm Offset 1	9.7 ms • VBW 30	00 KHZ Mode A			<b>T</b>



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20 dBm						1[1]		-	2.09 di
10 dBm					м	2[1]			40160 C 46.04 d
						1	1	6.	87675 (
	M1								
0 dBm									
-10 dBm									
-10 0.0111	D1 -15.210	   dBm							
-20 dBm—									
-30 dBm—									
-40 dBm—									
					M2				
-50 dBm-	أفلوا والوالة فارعه ورواره				na kalender Neuropeinen <mark>ing kullura</mark>	وروا والأروانية والكرور			re Aller I.
a strategy and the second	and damage	and the state of the	Loosenheiter ont		a starting	a alla the engine	and the second s	hippolitical film	and a state of the
-60 dBm—									
-70 dBm									
Start 1.0				8001	l nts			Stor	12.0 G
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View	2021 13:44:5	n Offset i	8.43 dB 👄 F 130 ms 👄 V			Auto Sweep			
Spectrur Ref Leve Att 1Pk View	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode	Auto Sweep			46.13 d
Spectrur Ref Leve Att	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode				
Spectrur Ref Leve Att 9 1Pk View	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm-	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode				
Spectrum Ref Leve Att 1Pk View 20 dBm-	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm- 0 dBm-	2021 13:44:50 n 1 25.00 dBm	n Offset i			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm-	2021 13:44:50 n 1 25.00 dBm	o Offset a			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm- 0 dBm-	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			z Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				46.13 d
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				46.13 d
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				
Spectrur Ref Leve • Att • 1Pk View 20 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				
Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:44:50 n 1 25.00 dBm 30 dE	o Offset a			IZ Mode				

π/4DQPSK\_MCH\_Graphs



	Spectrum Ref Level				RBW 100 kH					
	Att	30 dB	SWT	19 µs 😑 🕻	<b>/BW</b> 300 kH	z Mode /	Auto FFT			
	●1Pk View					M	1[1]			4.63 dBm
	20 dBm								2.4408	346770 GHz
	10 dBm				M1					
					×	$\sim$				
	0 dBm		$\sim$		1 -					
	-10 dBm									
	D	1 -15.370	dBm							
Dref	-20 dBm	<i>(</i>								
Pref										
	-30 dBm									
	-40 dBm									
	-50 dBm									
	-60 dBm									
	-70 dBm									
	CF 2.441 GF	łz			8001	pts			Spa	n 2.0 MHz
	Date: 3 M AR .20			3.25 dB 🖷 F	<b>RBW</b> 100 kH	7				
	Spectrum Ref Level Att		Offset		RBW 100 kH 7BW 300 kH		Auto Sweep			V
	Spectrum Ref Level Att 1Pk View	25.00 dBm	Offset			z Mode /	Auto Sweep			-49.57 dBm
	Spectrum Ref Level Att	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm	25.00 dBm	Offset			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm
	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	25.00 dBm	Offset s			z Mode /				-49.57 dBm
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	25.00 dBm 30 dB	Offset s			z Mode /				-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att IPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	z Mode /			9	-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att IPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	z Mode /			9	-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	z Mode /			9	-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	z Mode /			9	-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	z Mode /			9	-49.57 dBm 77.150 MHz
Puw	Spectrum Ref Level Att IPk View 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm	25.00 dBm 30 dB	Offset s SWT	9.7 ms	/BW 300 kH	Z Mode /				-49.57 dBm 77.150 MHz



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●1Pk View		1							
					М	1[1]			0.64 dB
20 dBm						0[1]			44010 GI 45.50 dB
					in i	2[1]			78738 GI
10 dBm									
	M1								
0 dBm									
-10 dBm—									
	D1 -15.370	) dBm							
-20 dBm—									
-30 dBm—									
-40 dBm—					M2				
				المحاد ويتقالبواني	and the				
-50 dBm	والمتعادين والمتعاد والمتعاد والمتعاد					بالأرباد فالألفرية	فحال عن الله الارالية. إذا و	and de state beel a <sup>the</sup> a se	
albaithe babalaiste	Media Ameridades	and a special design			ling along	Augustal Standington Science	and the state of the second	State Balling of Philips	philosophilites.org
-60 dBm		1							
-70 dBm—									
				1 1					
🗕 Att	2021 13:48:1	n Offset		8001 RBW 100 kH: VBW 300 kH:	z	Auto Sweep		Stor	
Date: 3 M AR . Spectrur Ref Leve	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /		1		[1
Date: 3 MAR. Spectrur Ref Leve Att	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /	Auto Sweep			46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dB
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dB
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm-	2021 13:48:1 n 1 25.00 dBr	n Offset		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm-	2021 13:48:1 n 1 25.00 dBr	n Offset B SWT		<b>RBW</b> 100 kH	z z Mode /				46.10 dB
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT		<b>RBW</b> 100 kH	z z Mode /				46.10 dB
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 0 dBm -10 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att PIPk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT		<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT	130 ms • •	<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset SWT	130 ms • 1	<b>RBW</b> 100 kH	z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset B SWT	130 ms • 1	<b>RBW</b> 100 kH	z z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset SWT	130 ms • •	<b>RBW</b> 100 kH	z Mode /				46.10 dE 85650 G
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset SWT	130 ms	<b>RBW</b> 100 kH	z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset SWT	130 ms	<b>RBW</b> 100 kH	z Mode /				46.10 dB
Date: 3 M AR . Spectrur Ref Leve Att PIPk View 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm	2021 13:48:1 n 1 25.00 dBr 30 dl	n Offset SWT	130 ms	<b>RBW</b> 100 kH	z Mode /				46.10 dE
Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm -40 dBm	2021 13:48:1 n 30 di - D1 -15.370	n Offset SWT	130 ms	<b>RBW</b> 100 kH	z Mode /				46.10 dB

 $\pi$ /4DQPSK\_HCH\_Graphs



	Spectru									
		el 25.00 dB	m Offset	8.25 dB 👄 F	<b>RBW</b> 100 kH	łz				
	🖷 Att	30 0				iz Mode /	Auto FFT			
	●1Pk Viev	/			1		1711			5.19 dBm
	20 dBm—					IVI	1[1]		2.479	345770 GHz
	10 dBm—				M1					
				-		$\sim$				
	0 dBm			$\sim$						
	10.15									
	-10 dBm-	D1 -14.81	0 dBm							
	-20 dBm-	01 -14.01	.o ubin							
Pref	20 dbm									$\sim$
	-30 dBm-									
	-40 dBm—									
	-50 dBm-			1	1					
	-60 dBm-									
	-60 uBiii-									
	-70 dBm-									
						Inte				an 2.0 MHz
	CE 9.40	20.								
	CF 2.48				800:	r prs				
	· · · · · ·	GHz .2021 13:51:	39		800:	r prs				
	Date: 3 M AF	.2021 13:51:	39		800:	r prs				
	Date: 3 M AF	.2021 13:51:		8.25 dB 👄 F						
	Date: 3 M AF	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH		Auto Sweep			
	Date: 3 M AF Spectru Ref Lev Att 1 Pk Viev	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				
	Date: 3 M AF	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i	Auto Sweep	1		-49.54 dBm
	Date: 3 M AF Spectru Ref Lev Att 1Pk Viev 20 dBm-	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-49.54 dBm
	Date: 3 M AF Spectru Ref Lev Att 1 Pk Viev	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				
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	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm-	. 2021 13:51: m el 25.00 dB 30 (	m Offset		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-49.54 dBm
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Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:51: m el 25.00 dB 30 (	m Offset dB SWT		<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-49.54 dBm
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Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:51: m el 25.00 dB 30 (	m Offset dB SWT	9.7 ms • N	<b>RBW</b> 100 kH	iz iz <b>Mode</b> i				-49.54 dBm
Puw	Date: 3 M AF Spectru Ref Lev Att 1PR Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	D1 -14.81	m Offset dB SWT	9.7 ms • N	RBW 100 kH yBW 300 kH	iz Mode /	1[1]		3	-49.54 dBm 48.180 MHz
Puw	Date: 3 M AF Spectru Ref Lev Att 1PR Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	D1 -14.81	m Offset dB SWT	9.7 ms • N	RBW 100 kH yBW 300 kH	iz Mode /	1[1]		3	-49.54 dBm 48.180 MHz
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Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	D1 -14.81	m Offset dB SWT	9.7 ms • N	RBW 100 kH yBW 300 kH	iz Mode /	1[1]		3	-49.54 dBm 48.180 MHz
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	D1 -14.81	m Offset dB SWT	9.7 ms • N	RBW 100 kH yBW 300 kH	iz Mode /	1[1]		3	-49.54 dBm 48.180 MHz



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●1Pk View					M	1[1]			1.97 d
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					M	2[1]			-46.15 d .95375 (
10 dBm	M1								
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-10 dBm—									
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-70 dBm—									
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Start 1.0 Date: 3 M AR Spectrur Ref Leve	2021 13:52: n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊢	iz iz Mode	Auto Sweep	) 		-44.75 d
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8DPSK\_LCH\_Graphs



	Spectru	m								
	Ref Lev e Att	el 25.00 dBr 30 d			RB₩ 100 kH VB₩ 300 kH		Auto FFT			
	●1Pk View			1	1					
	20 dBm—					M	1[1]	I	2.4020	4.77 dBm 100500 GHz
	10 dBm				N	1				
	0 dBm									
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<b>D</b> (	-20 dBm—	D1 -15.230	) dBm							
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	I II	 CU3	1	1	800	l Lpts	I	I	Spa	n 2.0 MHz
	CF 2.402	GHZ								
		.2021 13:55:2	6							
	Date: 3 M AR	.2021 13:55:2 m								
	Date: 3 M AR Spectru Ref Lev Att	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset		RBW 100 kH VBW 300 kH	Iz	Auto Sweep			
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	Date: 3 M AR Spectru Ref Lev Att	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i	Auto Sweep 1[1]			49.60 dBm 29.130 MHz
	Date:3MAR Spectru RefLev ● Att ● 1Pk View	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
	Date: 3 M AR Spectru Ref Lev Att 1Pk View 20 dBm-	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
	Date: 3 M AR Spectru Ref Lev Att 20 dBm- 10 dBm-	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm-	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm	.2021 13:55:2 m el 25.00 dBr 30 d	m Offset B SWT		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2021 13:55:2 m el 25.00 dBr 30 d , D1 -15.230	m Offset B SWT		<b>RBW</b> 100 k⊦	lz Iz <b>Mode</b> i				-49.60 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:55:2 m el 25.00 dBr 30 d - D1 -15.230	m Offset B SWT	9.7 ms	RBW 100 kH	IZ IZ Mode M				49.60 dBm 29.130 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:55:2 m el 25.00 dBr 30 d - D1 -15.230	m Offset B SWT	9.7 ms	RBW 100 kH	IZ IZ Mode M				49.60 dBm 29.130 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:55:2 m el 25.00 dBr 30 d - D1 -15.230	m Offset B SWT	9.7 ms	<b>RBW</b> 100 k⊦	IZ IZ Mode M				49.60 dBm 29.130 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2021 13:55:2 el 25.00 dBr 30 d - D1 -15.230	m Offset B SWT	9.7 ms	RBW 100 kH	iz z Mode /				49.60 dBm 29.130 MHz



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●1Pk View		<b>el</b> 25				RBW 100 kH					
20 dBm         M1[1]         2.20 dd           10 dBm         M2[1]         -45.13 dd           0 dBm         M2[1]         -45.13 dd           0 dBm         M1         G.91390 Cd           0 dBm         M2[1]         -45.13 dd           -10 dBm         M2         G.91390 Cd           -20 dBm         G.91390 Cd         G.91390 Cd           -20 dBm         G.91390 Cd         G.91390 Cd           -20 dBm         G.91390 Cd         G.91390 Cd           -30 dBm         G.91390 Cd         G.91390 Cd           -40 dBm         G.91390 Cd         G.91390 Cd           -30 dBm         G.91390 Cd         G.91390 Cd           -40 dBm         G.91390 Cd         G.91390 Cd           -50 dBm         G.91390 Cd         G.91390 Cd           -70 dBm         G.91390 Cd         G.91390 Cd           -70 dBm         G.91390 Cd         G.91390 Cd           Stort 1.0 CHz         B001 pts         Stop 12.0 CH           Stort 1.0 CHz         Stop 12.0 CH         G.91390 Cd           0 dBm         G.91390 Cd         G.91390 Cd           10 dBm         G.91390 Cd         G.91390 Cd           -20 dBm         G.91390 Cd         G.93590 C	Att 1Pk View		30 de	SWT	110 ms 👄	<b>VBW</b> 300 KH	z Mode	Auto Sweep			
10 dBm     M1     6.91980 C       0 dBm     10 dBm     10 dBm       -10 dBm     10 dBm     10 dBm       -20 dBm     10 dBm     10 dBm       -30 dBm     10 dBm     10 dBm       -40 dBm     10 dBm     10 dBm       -30 dBm     10 dBm     10 dBm </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>М</td> <td>1[1]</td> <td></td> <td></td> <td>2.30 dB</td>	-						М	1[1]			2.30 dB
10 dBm       M1       6.91989 cd         0 dBm       10 dBm       10 dBm         -10 dBm       01 -15.230 dBm       10 dBm         -20 dBm       10 dBm       10 dBm         -30 dBm       10 dBm       10 dBm         -30 dBm       10 dBm       10 dBm         -40 dBm       10 dBm       10 dBm         -50 dBm       10 dBm       10 dBm         -60 dBm       10 dBm       10 dBm         -70 dBm       10 dBm       10 dBm         -70 dBm       11 dBm       10 dBm         -70 dBm       11 dBm       10 dBm         -70 dBm       10 dBm       10 dBm         -70 dBm       10 dBm       10 dBm         -70 dBm       10 dBm       10 dBm         -10 dBm       10 dBm       10 dBm         -10 dBm       10 dBm       10 dBm         -10 dBm       10 dBm       10 dBm         -20 dBm       11 dBm       10 dBm         -20 dBm       10 dBm       10 dBm         -10 dBm       10 dBm       10 dBm         -20 dBm       10 dBm       10 dBm         -20 dBm       10 dBm       10 dBm         -20 dBm       10 dBm <td>20 dBm</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>м</td> <td>2[1]</td> <td></td> <td></td> <td></td>	20 dBm						м	2[1]			
M1         M1         M1         M1           10 dBm         01         15.230 dBm         01         15.230 dBm         01           -30 dBm         -10         -10         -10         -10         -10         -10           -40 dBm         -10         -10         -10         -10         -10         -10         -10           -30 dBm         -10	10 d0m							2[1]			
0 dBm       -10 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -20 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -30 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -30 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -40 dBm       -12 - 15 - 230 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -70 dBm       -10 - 15 - 230 dBm       -11 - 15 - 230 dBm       -11 - 15 - 230 dBm         -70 dBm       -13 - 15 - 230 dBm       -13 - 15 - 230 dBm       -13 - 15 - 230 dBm         -10 dBm       -13 - 15 - 230 dBm       -13 - 15 - 230 dBm       -13 - 15 - 230 dBm         -10 dBm       -13 - 15 - 230 dBm       -13 - 15 - 230 dBm       -14 - 14 - 14 - 14 - 14 - 14 - 14 - 14	TO UBIII	M	L								
-10 dBm       01       -15.230 dBm       0       0       0       0         -20 dBm       -10 dBm       0       0       0       0       0       0         -30 dBm       -10 dBm       0 <t< td=""><td>0 dBm</td><td>Ţ</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	0 dBm	Ţ									
-20 dBm         -20 dBm <t< td=""><td>o abiii</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	o abiii										
-20 dBm         -20 dBm <t< td=""><td>-10 dBm—</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	-10 dBm—										
-20 dBm		D1	-15.230	dBm							
-40 dBm       M2         -50 dBm       M2         -60 dBm       M2         -77 dBm       M1         Start 1.0 GHz       8001 pts         Start 1.0 GHz       8.43 dB         Bold pts       100 dBm         10 dBm       10.33580 G         10 dBm       10.33580 G         10 dBm       10.33580 G         -10 dBm       10.33580 G         -20 dBm       10.30580 G         -30 d	-20 dBm—					_					
40 dBm       M2         50 dBm       M2         -0 dBm       M2         -10 dBm       Offset 8.43 dB       RBW 100 kHz         Att       30 dB       SWT         10 dBm       M1[1]       -45.63 dI         -10 dBm       M1[1]       -45.63 dI         -20 dBm       M1       M1         -30 dBm       M1       M1         -40 dBm       M1       M2         -20 dBm       M1       M1         -30 dBm       M1       M1         -30 dBm       M1       M1         -40 dBm       M1       M1         -70 dBm       M1       M1 </td <td></td>											
-50 dBm       -10 dBm	-30 dBm—	+			+	+					
-50 dBm       -60 dBm											
-50 BBm       -50 BBm       -10 BBm	-40 dBm—						M2				
-50 BBB						الالبابر البريبان	ALVIN .				
-60 dBm         -70 dBm <t< td=""><td>-50 dBm</td><td></td><td>Ver. Ultobe</td><td></td><td>allan og pillinger af so Miller som som som bodder</td><td></td><td>Manan Padamb</td><td>In the state</td><td>Approximation of the</td><td>headedtard</td><td>Inter Contract</td></t<>	-50 dBm		Ver. Ultobe		allan og pillinger af so Miller som som som bodder		Manan Padamb	In the state	Approximation of the	headedtard	Inter Contract
-00 dBm       -70 dBm       -8001 pts       Stop 12.0 GF         Start 1.0 GHz       8001 pts       Stop 12.0 GF         Date: 3 MAR 2021 1365:55       (1)         Spectrum       (1)         Ref Level 25.00 dBm       Offset 8.43 dB       RBW 100 kHz         Att       30 dB       SWT       130 ms       YBW 300 kHz         Mode Auto Sweep       -10 dBm       -16.33580 G       -16.33580 G         10 dBm       -10 dBm       -10 dBm       -10 dBm       -10 dBm         -20 dBm       -11.5:230 dBm       -10 dBm       -10 dBm       -10 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm       -11.5:230 dBm         -20 dBm       -11.5:230 dBm	the Charles Countries of	d pool to b	h han been	a second second second	The second second		" <mark>Sta</mark> ndert	then, be particulated upon		applements or	renormal inferio
Start 1.0 GHz         8001 pts         Stop 12.0 GF           Date: 3 M AR 2021 13:55:55         Spectrum         (1)           Ref Level 25:00 dBm         Offset 8.43 dB • RBW 100 kHz         Mode Auto Sweep           • Itk View         0         BWT 130 ms • VBW 300 kHz         Mode Auto Sweep           • Itk View         0         M1[1]         -45.63 dI           10 dBm         0         0         0           -10 dBm         0         0         0           -20 dBm         0         0         0           -30 dB         M1         0         0           -70 dBm         0         M1         0           -70 dBm         0         0         0         0           -70 dBm         0         0         0         0           -70 dBm         0         0         0         0	-60 dBm—										
Start 1.0 GHz         8001 pts         Stop 12.0 GF           Date: 3 M AR 2021 13:55:55         Spectrum         (1)           Ref Level 25:00 dBm         Offset 8.43 dB • RBW 100 kHz         Mode Auto Sweep           • Itk View         0         BWT 130 ms • VBW 300 kHz         Mode Auto Sweep           • Itk View         0         M1[1]         -45.63 dI           10 dBm         0         0         0           -10 dBm         0         0         0           -20 dBm         0         0         0           -30 dB         M1         0         0           -70 dBm         0         M1         0           -70 dBm         0         0         0         0           -70 dBm         0         0         0         0           -70 dBm         0         0         0         0	70 40										
Date: 3 MAR. 2021         13 55 55           Spectrum         Image: Construction of the state	-70 übili—										
Spectrum         Image: Constraint of the second secon	Start 1.0	GHz				8001	l pts			Stop	12.0 GH
10 dBm       Image: start 12.0 GHz	Ref Leve Att							Auto Sweep			
0 dBm	Ref Leve Att						z Mode				(
0 dBm -10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm -40 dBm -70 d	Ref Leve Att						z Mode		1		45.63 dB
-10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40	Ref Leve Att 1Pk View 20 dBm-						z Mode				45.63 dB
-10 dBm	Ref Leve Att 1Pk View 20 dBm-						z Mode				45.63 dB
D1     -15.230 dBm     Image: Constraint of the second of the sec	Ref Leve Att PPK View 20 dBm- 10 dBm-						z Mode				45.63 dB
D1       -15.230 dBm       Image: Constraint of the second	Ref Leve Att PPK View 20 dBm- 10 dBm-						z Mode				45.63 dB
-20 dBm -30 dBm -40 dBm -40 dBm -70	Ref Leve Att 1Pk View 20 dBm- 10 dBm- 0 dBm-						z Mode				45.63 dB
-40 dBm     M1	Ref Leve Att 1Pk View 20 dBm- 10 dBm- 0 dBm-	25	30 dP	SWT			z Mode				45.63 dB
-40 dBm     M1	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm	25	30 dP	SWT			z Mode				45.63 dB
-60 dBm -70 dBm Start 12.0 GHz 8001 pts Stop 25.0 GH	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm	25	30 dP	SWT			z Mode				45.63 dE
-60 dBm -70 dBm Start 12.0 GHz 8001 pts Stop 25.0 GH	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm	25	30 dP	SWT			z Mode				45.63 dB
-50 dBm	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm	25	30 dP	SWT			z Mode				45.63 dB
-60 dBm	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
-70 dBm / / / / / / / / / / / / / / /	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
-70 dBm / / / / / / / / / / / / / / / /	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
Start 12.0 GHz         8001 pts         Stop 25.0 GH	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
Start 12.0 GHz         8001 pts         Stop 25.0 GH	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -60 dBm	25	30 dP	SWT	130 ms		z Mode				45.63 dB
Date: 3 M AR 2021 13:56:10	Ref Leve           Att           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -30 dBm           -40 dBm           -50 dBm           -70 dBm		-15.230	SWT	130 ms	VBW         300 kH           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	Z Mode .			16.	45.63 dP 33580 G 33580 G
	Ref Leve           Att           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -30 dBm           -40 dBm           -50 dBm           -70 dBm		-15.230	SWT	130 ms	VBW         300 kH           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	Z Mode .			16.	45.63 dE 33580 G
	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -50 dBm           -70 dBm           -70 dBm           Start 12.0	D1	30 dP	dBm	130 ms	VBW         300 kH	Z Mode			16.	45.63 dP 33580 G 33580 G
#imgtx3dh51lchnnpuw4	Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -50 dBm           -70 dBm           -70 dBm           Start 12.0	D1	30 dP	dBm	130 ms	VBW         300 kH	Z Mode			16.	45.63 dP 33580 G 33580 G

8DPSK\_MCH\_Graphs



	Spectrum	
	Ref Level 25.00 dBm Offset 8.25 dB  RBW 100 kHz	(*)
	● Att 30 dB SWT 19 µs ● VBW 300 kHz Mode Auto FFT ● 1Pk View	
	M1[1]	4.62 dBm
	20 dBm 2.4408	47270 GHz
	10 dBm	
	0 dBm	
	-10 dBm- D1 -15.380 dBm-	
	-20 dBm	
Pref		$\sim$
	-30 dBm	
	-40 dBm	
	-50 dBm	
	-60 dBm	
	-70 dBm	
		n 2.0 MHz
	R	1 2.0 MHZ
	Date: 3 M AR 2021 13:58:46	
	Spectrum	
	Ref Level 25.00 dBm Offset 8.25 dB  RBW 100 kHz	
	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View	49.52 dBm
	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View	
	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View	49.52 dBm
	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           In Pk View         M1[1]         97 <td>49.52 dBm</td>	49.52 dBm
	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View	49.52 dBm
	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           Image: training	49.52 dBm
	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           In Pk View         M1[1]         97 <td>49.52 dBm</td>	49.52 dBm
_	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           1Pk View	49.52 dBm
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm 1.090 MHz
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm 1.090 MHz
Puw	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz         Mode Auto Sweep           • Att         30 dB         SWT         9.7 ms         • VBW 300 kHz         Mode Auto Sweep           • 1Pk View	49.52 dBm 1.090 MHz
Puw	Ref Level         25.00         dBm         Offset         8.25         dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           • 1Pk View	49.52 dBm 1.090 MHz
Puw	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           IPk View         20 dBm         9.7 ms         VBW         300 kHz         Mode         Auto Sweep           10 dBm         97         97         97         97         97         97           20 dBm         97         97         97         97         97         97           10 dBm         97         97         97         97         97         97           -10 dBm         97         97         97         97         97         97           -20 dBm         91         -15.380 dBm         97         97         97         97           -30 dBm         97         97         97         97         97         97         97	49.52 dBm 1.090 MHz
Puw	Ref Level         25.00 dBm         Offset         8.25 dB         RBW         100 kHz           Att         30 dB         SWT         9.7 ms         VBW         300 kHz         Mode Auto Sweep           IPk View         20 dBm         M1[1]         97           10 dBm         97         97         97         97           20 dBm         91         15.380 dBm         97         97           -20 dBm         91         15.380 dBm         97         97           -30 dBm         97         97         97         97         97           -30 dBm         97         97         97         97         97         97           -	49.52 dBm 1.090 MHz



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●1Pk View					N	11[1]		4.00 di
20 dBm								.44150 0
10 dBm						12[1]		-45.66 dl .96338 d
10 0011	M1							
0 dBm		_						
-10 dBm—								
-10 0011	D1 -15.38	0 dBm						
-20 dBm—								
-30 dBm—								
-40 dBm—					M2			
-50 dBm			dente and the second second	بالالالبيا بالغطل ويتاب				
	المرابع ويوالي ويواليون المرابع ويواليون الروايي		the state of the s	had a state of the		a a a a a a a a a a a a a a a a a a a		
-60 dBm—								
-70 dBm—								
								p 12.0 Gł
Spectrur	.2021 13:59 m		8.25 dB 👄 F		L pts			
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att	.2021 13:59 m	m Offset	8.25 dB ● F 130 ms ● V	<b>RBW</b> 100 k⊦	łz	Auto Sweep	)	
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att 1Pk View	.2021 13:59 n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊦	iz iz Mode	Auto Sweep	)	 -46.43 dl
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att	.2021 13:59 n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊦	iz iz Mode		)	 -46.43 d
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att 1Pk View	.2021 13:59 n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊦	iz iz Mode		, 	 -46.43 d
Start 1.0 0 Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm-	.2021 13:59 n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 d
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att 1Pk View 20 dBm	.2021 13:59 n al 25.00 dB	m Offset		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 d
Start 1.0 0 Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm- 10 dBm-	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 d
Start 1.0 Date: 3 M AR Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm	.2021 13:59 n al 25.00 dB	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 d
Start 1.0 Date: 3 M AR . Spectrur Ref Leve Att IPk View 20 dBm 10 dBm 0 dBm -10 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 d
Start 1.0 Date: 3 M AR . Spectrur Ref Leve Att IPk View 20 dBm 10 dBm 0 dBm -10 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 dl
Start 1.0 Date: 3 M AR . Spectrur Ref Leve Att 1Pk View 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 dl
Start 1.0 0 Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode	M1[1]		 -46.43 di .97210 G
Start 1.0 Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode			 -46.43 dl
Start 1.0 0 Date: 3 M AR . Spectrur Ref Leve Att 10 dBm 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode	M1[1]		 -46.43 d
Start 1.0           Date : 3 M AR           Spectrur           Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -60 dBm	2021 13:59 11 25.00 de 30 de	m Offset IB SWT		<b>RBW</b> 100 k⊦	iz iz Mode	M1[1]		 -46.43 d
Start 1.0           Date : 3 M AR           Spectrur           Ref Leve           Att           1Pk View           20 dBm           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm	2021 13:59 n 30 ( 30 ( 30)	m Offset IB SWT		<b>RBW</b> 100 k⊦		M1[1]		-46.43 d

8DPSK\_HCH\_Graphs



	Spectru Ref Lev	el 25.00 di	Bm Offset	8.25 dB 👄 F	<b>RBW</b> 100 kH	łz				
	e Att	30	dB SWT	19 µs 😑 🕻	<b>∕BW</b> 300 kH	iz Mode /	Auto FFT			
	●1Pk Viev	v				м	1[1]			5.20 dBm
	20 dBm—		_						2.4798	346770 GHz
	10 dBm—				M1					
	0 dBm				$\sim$			-		
	-10 dBm—								$\searrow$	
		D1 -14.80	00 dBm							
<b>D</b> (	-20 dBm-		_							
Pref										
	-30 dBm—									
	-40 dBm—									
	-50 dBm—									
	-60 dBm—									
	-70 dBm—									
	-70 ubiii									
	CF 2.48	GHz		1	8001	L pts			Spa	in 2.0 MHz
	· · · · · ·	GHz 2.2021 14:02	:25	1	8001	l pts			Spa	IN 2.0 MH2
	Date: 3 M AF	2.2021 14:02	:25		8001	L pts			Spa	
	Date: 3 M AF	2.2021 14:02		8.25 dB 🕳 I		·			Spa	
	Date: 3 M AR Spectru Ref Lev Att	2.2021 14:02	Bm Offset			łz	Auto Sweep		Spa	
	Date: 3 MAR Spectru Ref Lev Att 1Pk Viev	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /	Auto Sweep			-49.76 dBm
	Date: 3 M AR Spectru Ref Lev Att	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /				
	Date: 3 M AF Spectru Ref Lev Att 1Pk Viev 20 dBm-	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
	Date: 3 MAR Spectru Ref Lev Att 1Pk Viev	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
	Date: 3 M AF Spectru Ref Lev Att 1Pk Viev 20 dBm-	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /				₩ ▼ -49.76 dBm
	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm-	2.2021 14:02	Bm Offset		<b>RBW</b> 100 k⊦	lz Iz Mode /				₩ ▼ -49.76 dBm
	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				₩ ▼ -49.76 dBm
	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				₩ ▼ -49.76 dBm
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm-	2.2021 14:02	Am Offset dB SWT		<b>RBW</b> 100 k⊦	lz Iz Mode /				-49.76 dBm
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2.2021 14:02	3m Offset dB SWT	9.7 ms • •	RBW 100 kH	iz iz Mode / M	1[1]		9	49.76 dBm 54.420 MHz
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2.2021 14:02	3m Offset dB SWT	9.7 ms			1[1]		91	49.76 dBm 54.420 MHz
Puw	Date: 3 M AR Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	2.2021 14:02	3m Offset dB SWT	9.7 ms			1[1]		91	49.76 dBm 54.420 MHz
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	2.2021 14:02	3m Offset dB SWT	9.7 ms			1[1]		91	49.76 dBm 54.420 MHz
Puw	Date: 3 M AF Spectru Ref Lev Att 10 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	2.2021 14:02	3m Offset dB SWT	9.7 ms			1[1]		91	49.76 dBm 54.420 MHz



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●1Pk View	30 di	3 SWT	110 ms 🖷 🕻	<b>юw</b> 300 kH	2 Mode	Auto Sweep			
					M	1[1]			1.68 dB
20 dBm—									.48000 Gł
					M	2[1]			46.01 dB 61825 GI
10 dBm—						1	1		01023 G
	M1								
0 dBm									
-10 dBm—									
	D1 -14.800	dBm							
-20 dBm—									
-30 dBm—									
-40 dBm—									
					M2				
-50 dBm			he	and the stratest	(LIVI)				
all and a second	t julija je sta na sublikan na konstruktiva	the second second second second	in the state of the second	(head)		ին մի դեկերել։	and all the state of the state		in prinse in fellent meteoretike
-60 dBm—	. , بايناء فيغايل المسابل الما				100	فيربلان الارزياف	a she was a second a second		1.
-00 ubiii-									
70 -0									
-70 dBm—									
Start 1.0	GHz		•	8001	pts			Stop	12.0 GH
00 40					M	1[1]			
20 dBm—					M	1[1]			
					M	1[1]			
20 dBm					M	1[1]			
10 dBm—					M	11[1]			
					M				
10 dBm					M	1[1]			
10 dBm—					M	1[1]			
10 dBm	D1 -14.800	dBm			M				
10 dBm	-D1 -14.800	dBm			M				
10 dBm 0 dBm -10 dBm -20 dBm	-D1 -14.800	dBm			M				
10 dBm	-D1 -14.800	dBm			M				
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	-D1 -14.800	dBm			M				
10 dBm		dBm							
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	D1 -14.800	dBm				M1			46.62 dB 93630 G
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	D1 -14.800	dBm							
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	D1 -14.800	dBm							
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	D1 -14.800	dBm							
10 dBm	D1 -14.800	dBm							
10 dBm	D1 -14.800	dBm							
10 dBm		dBm							93630 G
10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm		dBm		8001					
10 dBm									
10 dBm	And the second s								

Remark:

Pre test 9kHz to 25GHz, find the highest point when testing, so only the worst data were shown in the test report. Per FCC Part 15.33 (a) and 15.31 (o) ,The amplitude of spurious emissions from intentional radiators



which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.



### 5.9 Other requirements Frequency Hopping Spread Spectrum System

Test Requirement:       147 CFR Part 15C Section 15.247 (a)(1), (b) requirement:         The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom 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 transmitter signals.         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 compy with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system and must distribute its transmission sover the minimum number of hopping channels specified in this section.         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 adapt its hopsets to avoid hopping on cocupied channels is permitted.         Compliance for section 15.247(a)(1)         According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a ninestage shift register stages: 9         . Longest sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with in one.         . Number of shift register stages: 9         . Longest sequence of zeros: 8 (non-inverted signal)         Linear Feedback Shift Register for Generation of the PRBS	 	
rate from a Pseudorandom 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. 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 transmitter be presented with a continuous data (or information) stream. In addition, a system and must distribute its transmissions over the minimum number of hopping channels specified in this section. The incorporation of intelligence within a frequency hopping system that 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. <b>Compliance for section 15.247(a)(1)</b> According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a nine- stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones. <b>Descent</b> for secutor Sitt Register for Generation of the PRBS sequence An example of Pseudorandom sequency Hopping Sequence as follow: <b>20 42 47 7 4 8 73 16 75 1</b> Each frequency used equally on the average by each transmitter. <b>According to Bluetooth Core Specification, Bluetooth reserviers are designed to have input and IF</b> bardwidths that match the hopping, channel bardwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals. <b>Comp</b>	Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1), (h) requirement:
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 transmitter be presented with a continuous data (or information) stream. In addition, a system employing short 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. 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.  Compliance for section 15.247(a)(1) According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a nine-stage shift register whose 6th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones.  • Number of shift register stages: 9 • Length of pseudo-random sequence: 2 <sup>o</sup> - 1 = 511 bits • Longest sequence of zeros: 8 (non-inverted signal)  Linear Feedback Shift Register for Generation of the PRBS sequence An example of Pseudorandom Frequency Hopping Sequence as follow: 20 62 46 77 7 64 8 73 16 75 1 Compliance for section 15.247(g) According to Bluetooth Core Specification, Bluetooth receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any Bluetooth transmitter and shift frequencies in synchronization with the transmitter signals. Compliance for section 15.247(g) According to Bluetooth Core Speci	rate from a Pseudorandom of on the average by each trans hopping channel bandwidths	ordered list of hopping frequencies. Each frequency must be used equally smitter. The system receivers shall have input bandwidths that match the of their corresponding transmitters and shall shift frequencies in
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According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a nine- stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones. • Number of shift register stages: 9 • Length of pseudo-random sequence: 2 <sup>9</sup> -1 = 511 bits • Longest sequence of zeros: 8 (non-inverted signal) <i>Linear Feedback Shift Register for Generation of the PRBS sequence</i> An example of Pseudorandom Frequency Hopping Sequence as follow: 20 62 46 77 7 64 8 73 16 75 1 Each frequency used equally on the average by each transmitter. According to Bluetooth Core Specification, Bluetooth receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals. <b>Compliance for section 15.247(g)</b> According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	the system to recognize other independently chooses and The coordination of frequence avoiding the simultaneous of	er users within the spectrum band so that it individually and adapts its hopsets to avoid hopping on occupied channels is permitted. cy hopping systems in any other manner for the express purpose of
According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a nine- stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones. • Number of shift register stages: 9 • Length of pseudo-random sequence: 2 <sup>9</sup> -1 = 511 bits • Longest sequence of zeros: 8 (non-inverted signal) <i>Linear Feedback Shift Register for Generation of the PRBS sequence</i> An example of Pseudorandom Frequency Hopping Sequence as follow: 20 62 46 77 7 64 8 73 16 75 1 Each frequency used equally on the average by each transmitter. According to Bluetooth Core Specification, Bluetooth receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals. <b>Compliance for section 15.247(g)</b> According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	Compliance for section 15.	.247(a)(1)
Linear Feedback Shift Register for Generation of the PRBS sequence         An example of Pseudorandom Frequency Hopping Sequence as follow:         20 62 46 77       7 64       8 73       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Frequency Hopping Sequence as follow:       16 75 1         Image: Sequence of Pseudorandom Hopping Channel Sequence of Pseudorandom Hopping Channel Bandwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals.         Compliance for section 15.247(g)         According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	<ul> <li>stage shift register whose 5th outputs are added in a modul stage. The sequence begins with nine ones.</li> <li>Number of shift register stationary of the sequence station of the sequence s</li></ul>	h and 9th stage lo-two addition stage. And the result is fed back to the input of the first with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized ges: 9 sequence: 2 <sup>9</sup> -1 = 511 bits
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Each frequency used equally on the average by each transmitter. According to Bluetooth Core Specification, Bluetooth receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals. <b>Compliance for section 15.247(g)</b> According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom		
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According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	According to Bluetooth Cord bandwidths that match the	e Specification, Bluetooth receivers are designed to have input and IF hopping channel bandwidths of any Bluetooth transmitters and shift
pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	Compliance for section 15.	.247(g)
	pseudorandom hopping freq Bluetooth system is also tra	uency with a continuous data and the short burst transmission from the



#### Compliance for section 15.247(h)

According to Bluetooth Core specification, the Bluetooth system incorporates with an adaptive system to detect other user within the spectrum band so that it individually and independently to avoid hopping on the occupied channels.

According to the Bluetooth Core specification, the Bluetooth system is designed not have the ability to coordinated with other FHSS System in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitter.

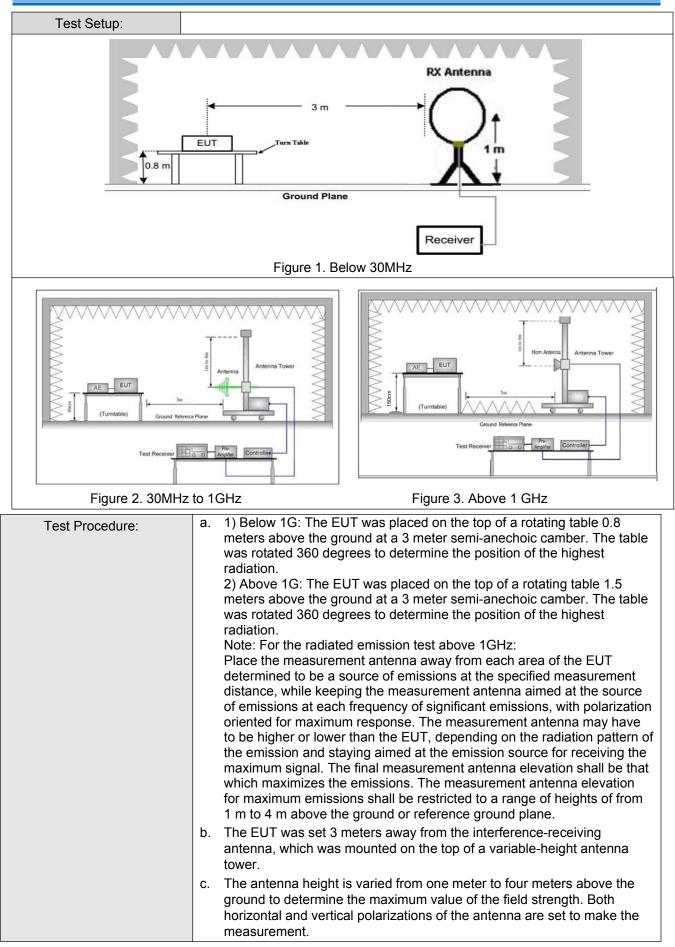


## 5.10 Radiated Spurious Emission & Restricted bands

Trat D 1 1	47.0ED D. 1450.0		5 000 L 4 5	005						
Test Requirement:		17 CFR Part 15C Section 15.209 and 15.205 ANSI C63.10: 2013								
Test Method:	ANSI C63.10: 2013									
Test Site:	Measurement Distance	easurement Distance: 3m (Semi-Anechoic Chamber)								
Receiver Setup:	Frequency	Frequency Detector RBW VBW Remark								
	0.009MHz-0.090MH	z	Peak	10kHz	z 30kHz	Peak				
	0.009MHz-0.090MH	z	Average	10kHz	z 30kHz	Average				
	0.090MHz-0.110MH	z	Quasi-peak	10kHz	z 30kHz	Quasi-peak				
	0.110MHz-0.490MH	z	Peak	10kHz	z 30kHz	Peak				
	0.110MHz-0.490MH	z	Average	10kHz	z 30kHz	Average				
	0.490MHz -30MHz		Quasi-peak	10kHz	z 30kHz	Quasi-peak				
	30MHz-1GHz		Peak	100 kH	Iz 300kHz	Peak				
			Peak	1MHz	z 3MHz	Peak				
	Above 1GHz		Peak	1MHz	z 10Hz	Average				
Limit:	Frequency	Field strength (microvolt/meter)		Limit (dBuV/m)	Remark	Measureme distance (m				
	0.009MHz-0.490MHz	2400/F(kHz)		-	-	300				
	0.490MHz-1.705MHz	24000/F(kHz)		-	-	30				
	1.705MHz-30MHz		30	-	-	30				
	30MHz-88MHz		100	40.0	Quasi-peak	3				
	88MHz-216MHz		150	43.5	Quasi-peak	3				
	216MHz-960MHz		200	46.0	Quasi-peak	3				
	960MHz-1GHz		500	54.0	Quasi-peak	3				
	Above 1GHz		500	54.0	Average	3				
	Note: 15.35(b), Unless emissions is 20dE applicable to the peak emission lev	3 ab equi	ove the maxin pment under t	num perm est. This p	itted average	emission limit				





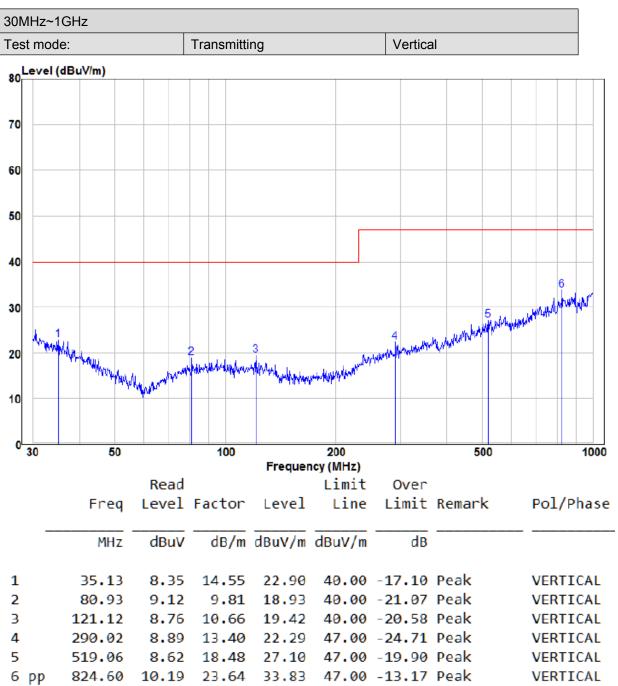




	<ul> <li>d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>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.</li> <li>g. Test the EUT in the lowest channel (2402MHz), the middle channel (2441MHz), the Highest channel (2480MHz)</li> <li>h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.</li> <li>i. Repeat above procedures until all frequencies measured was complete.</li> </ul>
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type Transmitting mode, Charge + Transmitting mode.
Final Test Mode:	Through Pre-scan, find the DH5 of data type and GFSK modulation is the worst case. Pretest the EUT at Transmitting mode and Charge + Transmitting mode, found the Charge + Transmitting mode which it is worse case For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Results:	Pass



#### 5.10.1 Radiated Emission below 1GHz



#### Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

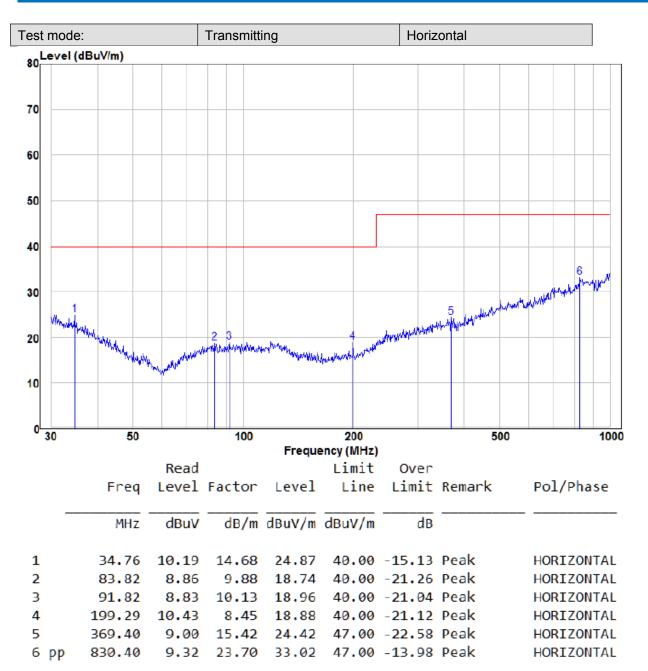
Factor= Antenna Factor + Cable Factor – Preamplifier Factor,

Level = Read Level + Factor,

Over Limit=Level-Limit Line.







Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Factor= Antenna Factor + Cable Factor - Preamplifier Factor,

Level = Read Level + Factor,

Over Limit=Level-Limit Line.



#### 5.10.2 Transmitter Emission above 1GHz

Worse case	mode:	GFSK(DH5)		Test chann	el:	Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		H/V
2390	53.26	-9.2	44.06	74	-29.94	Peak	Н
2400	56.60	-9.39	47.21	74	-26.79	Peak	Н
4804	51.34	-4.33	47.01	74	-26.99	Peak	Н
7206	48.41	1.01	49.42	74	-24.58	Peak	Н
2390	55.57	-9.2	46.37	74	-27.63	Peak	V
2400	57.06	-9.39	47.67	74	-26.33	Peak	V
4804	54.66	-4.33	50.33	74	-23.67	Peak	V
7206	50.80	1.01	51.81	74	-22.19	Peak	V

Worse case	mode:	GFSK(DH	5)	Test chann	el:	Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		H/V
4882	51.68	-4.11	47.57	74	-26.43	peak	н
7323	50.31	1.51	51.82	74	-22.18	peak	н
4882	52.90	-4.11	48.79	74	-25.21	peak	V
7323	49.02	1.51	50.53	74	-23.47	peak	V

Worse case	mode:	GFSK(DH	5)	Test chann	el:	Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		H/V
2483.5	56.21	-9.29	46.92	74	-27.08	Peak	н
4960	51.68	-4.04	47.64	74	-26.36	Peak	н
7440	50.18	1.57	51.75	74	-22.25	Peak	н
2483.5	53.88	-9.29	44.59	74	-29.41	Peak	v
4960	51.04	-4.04	47.00	74	-27.00	Peak	V
7440	48.35	1.57	49.92	74	-24.08	Peak	V

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

2) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.



# 6 Photographs - EUT Test Setup

## 6.1 Radiated Emission











# 7 Photographs - EUT Constructional Details

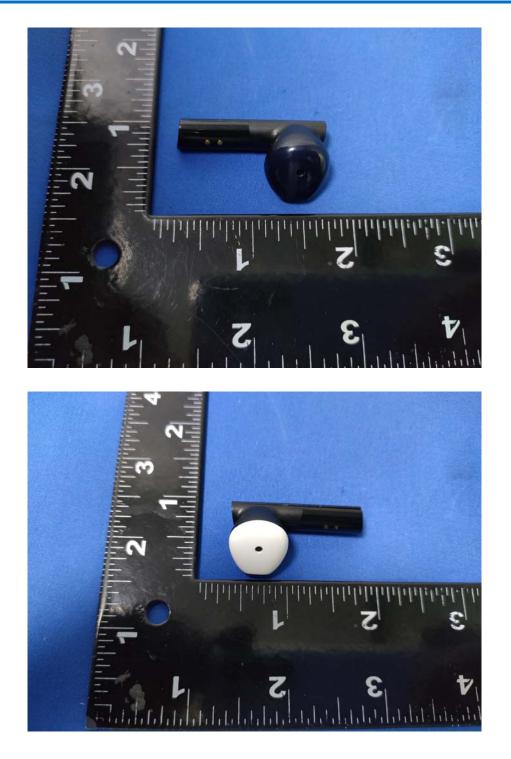




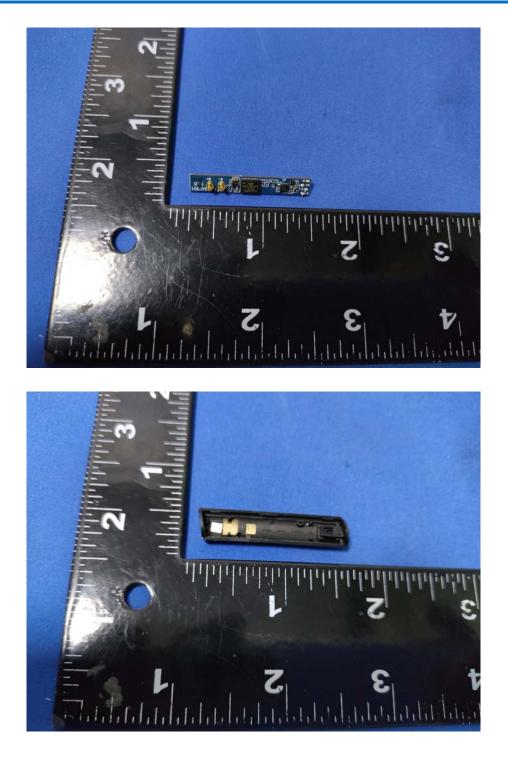








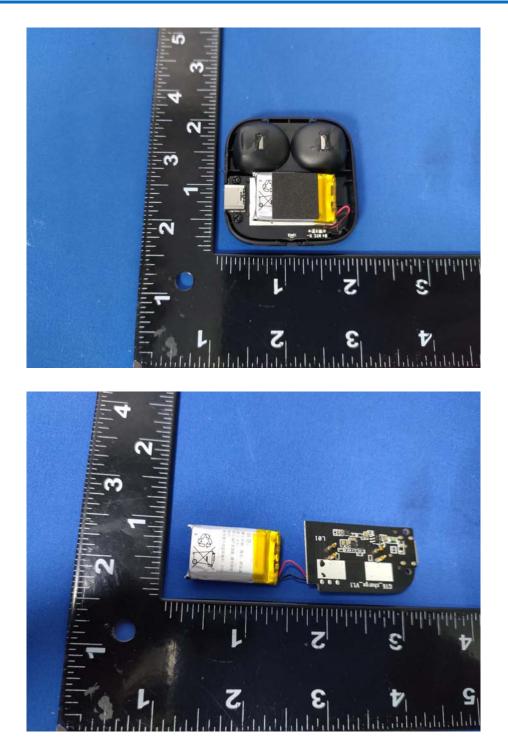




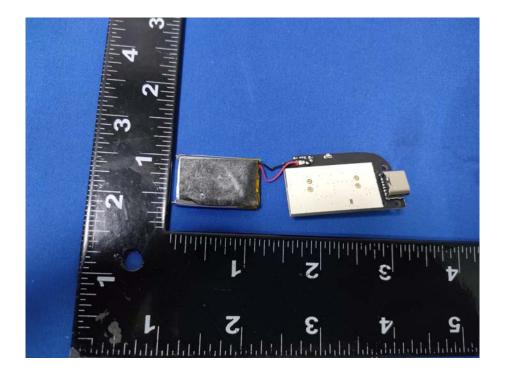












. The End