

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC149704

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FCC Radio Test Report FCC ID: 2AJSN-S1

Original Grant

Report No. TB-FCC149704

Applicant WellCare Today, LLC

Equipment Under Test (EUT)

Smart Watch **EUT Name**

S₁ Model No.

Series Model No. N/A

Brand Name N/A

Receipt Date 2016-09-01

Test Date 2016-09-02 to 2016-09-21

Issue Date 2016-09-22

Standards FCC Part 15: 2015, Subpart C(15.247)

Test Method ANSI C63.10: 2013

Conclusions PASS

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC requirements

Test/Witness Engineer

Approved& Authorized

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant : WellCare Today, LLC

Address : 75 Lane Road, Suite 404 Fairfield, NJ. 07004, United States

Manufacturer : Shenzhen NJY Science & Technology Co., Ltd

Address : No 5 Songpingshan Road, #202Jia Da R&D Bulding Lobby B,

ShenZhen, 518057 China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Smart Watch		
Models No.	1	S1		
Model Difference		N/A		
TOUR TOUR		Operation Frequency: Bluetooth3.0: 2402MHz~2480MHz GSM 850: 824.20MHz-848.80MHz see note(1) PCS1900: 1850.20MHz-1909.80MHz see note(1)		
Product		Number of Channel:	Bluetooth:79 Channels see Note 2	
Description		Max Peak Output Power:	Bluetooth: 1.820 dBm(GFSK)	
		Antenna Gain:	1.1 dBi Integral Antenna	
		Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)	
Power Supply	:	DC Voltage supplied from	` ' '	
WILLIAM TO		DC power by Li-ion Battery.		
Power Rating : Travel Charger: Input: AC 100~240V, 50/60Hz, 0.2A. Output: DC 5V, 1A. DC 3.7V by Li-ion Battery.			DHz, 0.2A.	
Connecting I/O Port(S)	:	Please refer to the User's I	Manual	

Note:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. The EUT has also been tested and complied the FCC 15.247 for FCC 2&22&24 for GSM function, and recorded in the separate test report.

(2) Channel List:

Bluetooth Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)



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00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454	1.33	E END
26	2428	53	2455		

(3) The Antenna information about the equipment is provided by the applicant.

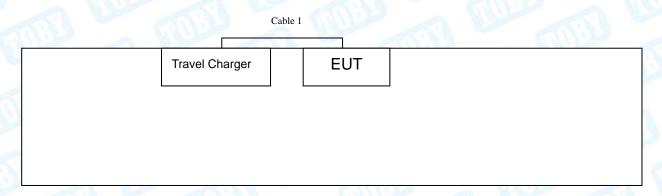
1.3 Block Diagram Showing the Configuration of System Tested

		EUT	ı	



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Charging with TX Mode



1.4 Description of Support Units

Equipment Information					
Name Model FCC ID/DOC Manufacturer Used "√"					
Travel Charger	N/A	N/A	N/A	Accessorise	
		Cable Information			
Number Shielded Type Ferrite Core Length Note					
Cable 1	NO	NO	1.5M	Accessorise	

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test				
Final Test Mode Description				
Mode 1 Charging with TX GFSK Mode				

	For Radiated Test				
Final Test Mode Description					
Mode 1	Charging with TX GFSK Mode				



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Mode 2	TX Mode(GFSK) Channel 00/39/78
Mode 3 TX Mode(π /4-DQPSK) Channel 00/39/	
Mode 4 TX Mode(8-DPSK) Channel 00/39/78	
Mode 5 Hopping Mode(GFSK)	
Mode 6	Hopping Mode(π /4-DQPSK)
Mode 7	Hopping Mode(8-DPSK)

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate. We have pretested all the test mode above.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

TX Mode: GFSK (1 Mbps)

TX Mode: # /4-DQPSK (2 Mbps)
TX Mode: 8-DPSK (3Mbps)

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane as the normal use. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

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

Test Software Version	Media Tek BT Tool		
Frequency	2402 MHz	2441MHz	2480 MHz
GFSK	DEF	DEF	DEF
π /4-DQPSK	DEF	DEF	DEF
8-DPSK	DEF	DEF	DEF



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1.7 Measurement Uncertainty

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

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
	Level Accuracy:	3
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Radiated Emission	9kHz to 30 MHz	±4.00 dB
Radiated Emission	Level Accuracy:	±4.40 dB
Radiated Effilssion	30MHz to 1000 MHz	±4.40 dB
Redicted Emission	Level Accuracy:	.4.20 dB
Radiated Emission	Above 1000MHz	±4.20 dB

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



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2. Test Summary

	F	CC Part 15 Subpart C(15.247)/ RSS	247 Issue 1	
Standard S	ection	T	1 1	D
FCC	IC	Test Item	Judgment	Remark
15.203	٠.	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.2	Conducted Emission	PASS	N/A
15.205	RSS-Gen 7.2.3	Restricted Bands	PASS	N/A
15.247(a)(1)	RSS 247 5.1 (2)	Hopping Channel Separation	PASS	N/A
15.247(a)(1)	RSS 247 5.1 (4)	Dwell Time	PASS	N/A
15.247(b)(1)	RSS 247 5.4 (2)	Peak Output Power	PASS	N/A
15.247(b)(1)	RSS 247 5.1 (4)	Number of Hopping Frequency	PASS	N/A
15.247(c)	RSS 247 5.5	Radiated Spurious Emission	PASS	N/A
15.247(a)	RSS 247 5.1 (1)	99% Occupied Bandwidth & 20dB Bandwidth	PASS	99%OBW GFSK:831.8194kHz π/4-DQPSK: 1070.40kHz 8-DPSK: 1103.70KHz

Note: N/A is an abbreviation for Not Applicable.



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3. Test Equipment

Conducted	d Emission Te	st			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 22, 2016	Jul. 21, 2017
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 22, 2016	Jul. 21, 2017
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 22, 2016	Jul. 21, 2017
LISN	Rohde & Schwarz	ENV216	101131	Jul. 22, 2016	Jul. 21, 2017
Radiation	Emission Tes	t			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 22, 2016	Jul. 21, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 20, 2016	Mar. 19, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar. 20, 2016	Mar. 19, 2017
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 19, 2016	Mar. 18, 2017
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar. 19, 2016	Mar. 18, 2017
Pre-amplifier	Sonoma	310N	185903	Mar. 20, 2016	Mar. 19, 2017
Pre-amplifier	HP	8447B	3008A00849	Mar. 26, 2016	Mar. 25, 2017
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 26, 2016	Mar. 25, 2017
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	onducted Em	ission			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Jul. 22, 2016	Jul. 21, 2017
Power Meter	Anritsu	ML2495A	25406005	Jul. 22, 2016	Jul. 21, 2017
Power Sensor	Anritsu	ML2411B	25406005	Jul. 22, 2016	Jul. 21, 2017



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

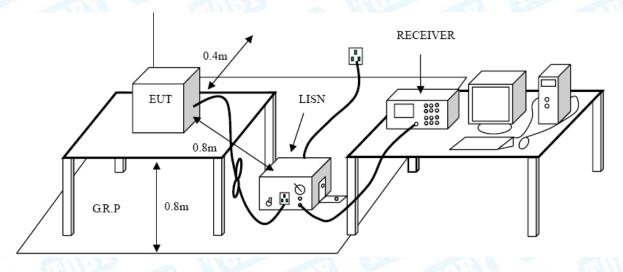
Conducted Emission Test Limit

Evaguanov	Maximum RF Line	e Voltage (dBμV)
Frequency	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



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I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Test data please refer the following pages.



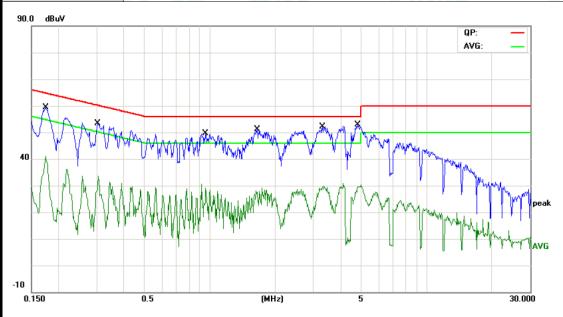
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UT:	Sma	art Watch	- BAT	Mod	el Name :	S1
emperatur	e: 25 °	C	33	Rela	tive Humidity:	55%
est Voltage	: AC	120V/60 Hz		10		
Terminal:	Line		WALL TO SERVICE		3 Killian	
Test Mode:	Cha	rging with T	X GFSK Mode	2402 MH	lz	Millian
Test Mode: Charging with TX GFSK Mode 2402 MHz Remark: Only worse case is reported 90.0 dBuV 10 10 10 10 10 10 10 10 10 10 10 10 10						
90.0 dBuV	·					
40						Many
	0.5		(MHz)	5		30.000
		Deading	Compet	Manarina		
		Reading		vieasure-		_
No. Mk.	Freq.	Level	Factor	ment	Limit Ove	er
No. Mk.	Freq.	Level dBuV	dB	ment dBuV	Limit Ove	Detector
No. Mk.						Detector
	MHz	dBu∨	dB	dBu∨	dBuV dB	Detector
1 *	MHz 0.1703	dBu∨ 47.24	dB 9.96	dBu∨ 57.20	dBuV dB	Detector QP 9 AVG
1 *	MHz 0.1703 0.1703	dBuV 47.24 28.99	dB 9.96 9.96	dBu√ 57.20 38.95	dBuV dB 64.94 -7.74 54.94 -15.99	Detector QP AVG QP
1 * 2 3	MHz 0.1703 0.1703 0.2644	dBuV 47.24 28.99 42.16	9.96 9.96 10.02	dBuV 57.20 38.95 52.18	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11	Detector QP QP QP QP AVG QP AVG
1 * 2 3 4	MHz 0.1703 0.1703 0.2644 0.2644	dBuV 47.24 28.99 42.16 25.81	9.96 9.96 10.02	dBuV 57.20 38.95 52.18 35.83	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46	Detector QP AVG QP AVG QP AVG QP QP QP
1 * 2 3 4 5	MHz 0.1703 0.1703 0.2644 0.2644 0.3899	dBuV 47.24 28.99 42.16 25.81 36.82	9.96 9.96 10.02 10.02	dBuV 57.20 38.95 52.18 35.83 46.84	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46 58.06 -11.22	Detector QP AVG QP AVG QP AVG AVG AVG AVG AVG
1 * 2 3 4 5 6	MHz 0.1703 0.1703 0.2644 0.2644 0.3899 0.3899	dBuV 47.24 28.99 42.16 25.81 36.82 21.81	9.96 9.96 10.02 10.02 10.02	dBuV 57.20 38.95 52.18 35.83 46.84 31.83	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46 58.06 -11.22 48.06 -16.23	Detector QP AVG QP AVG QP AVG AVG QP AVG QP AVG
1 * 2 3 4 5 6 7	MHz 0.1703 0.1703 0.2644 0.2644 0.3899 0.3899 1.7700	dBuV 47.24 28.99 42.16 25.81 36.82 21.81 35.19	9.96 9.96 10.02 10.02 10.02 10.02	dBuV 57.20 38.95 52.18 35.83 46.84 31.83 45.25	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46 58.06 -11.22 48.06 -16.23	Detector QP AVG QP AVG AVG AVG QP AVG AVG AVG AVG AVG AVG
1 * 2 3 4 5 6 7 8	MHz 0.1703 0.1703 0.2644 0.2644 0.3899 0.3899 1.7700 1.7700	dBuV 47.24 28.99 42.16 25.81 36.82 21.81 35.19 21.07	9.96 9.96 10.02 10.02 10.02 10.02 10.06	dBuV 57.20 38.95 52.18 35.83 46.84 31.83 45.25 31.13	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46 58.06 -11.22 48.06 -16.23 56.00 -10.79	Detector QP QP AVG
1 * 2 3 4 5 6 7 8	MHz 0.1703 0.1703 0.2644 0.2644 0.3899 0.3899 1.7700 1.7700 2.5178	dBuV 47.24 28.99 42.16 25.81 36.82 21.81 35.19 21.07 36.32	9.96 9.96 10.02 10.02 10.02 10.02 10.06 10.06	dBuV 57.20 38.95 52.18 35.83 46.84 31.83 45.25 31.13 46.36	dBuV dB 64.94 -7.74 54.94 -15.99 61.29 -9.11 51.29 -15.46 58.06 -11.22 48.06 -16.23 56.00 -10.79 46.00 -14.83	Detector QP AVG QP AVG QP AVG QP AVG QP AVG AVG AVG AVG AVG AVG AVG AV



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral		
Test Mode:	Charging with TX GFSK Mode 24	02 MHz	LINE OF THE PROPERTY OF
Remark:	Only worse case is reported		



Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBu∀	dB	dBuV	dBu∀	dB	Detector
	0.1737	44.21	9.97	54.18	64.78	-10.60	QP
	0.1737	31.11	9.97	41.08	54.78	-13.70	AVG
	0.3019	39.23	10.02	49.25	60.19	-10.94	QP
	0.3019	23.50	10.02	33.52	50.19	-16.67	AVG
	0.9538	34.23	10.07	44.30	56.00	-11.70	QP
	0.9538	19.11	10.07	29.18	46.00	-16.82	AVG
	1.6498	37.40	10.06	47.46	56.00	-8.54	QP
	1.6498	18.06	10.06	28.12	46.00	-17.88	AVG
*	3.3020	38.50	10.02	48.52	56.00	-7.48	QP
	3.3020	19.78	10.02	29.80	46.00	-16.20	AVG
	4.8178	38.26	9.97	48.23	56.00	-7.77	QP
	4.8178	20.28	9.97	30.25	46.00	-15.75	AVG
	Mk. *	0.1737 0.1737 0.3019 0.3019 0.9538 0.9538 1.6498 * 3.3020 3.3020 4.8178	Mk. Freq. Level MHz dBuV 0.1737 44.21 0.1737 31.11 0.3019 39.23 0.3019 23.50 0.9538 34.23 0.9538 19.11 1.6498 37.40 1.6498 18.06 * 3.3020 38.50 3.3020 19.78 4.8178 38.26	Mk. Freq. Level Factor MHz dBuV dB 0.1737 44.21 9.97 0.1737 31.11 9.97 0.3019 39.23 10.02 0.3019 23.50 10.02 0.9538 34.23 10.07 0.9538 19.11 10.07 1.6498 37.40 10.06 1.6498 18.06 10.06 * 3.3020 38.50 10.02 3.3020 19.78 10.02 4.8178 38.26 9.97	Mk. Freq. Level Factor ment MHz dBuV dB dBuV 0.1737 44.21 9.97 54.18 0.1737 31.11 9.97 41.08 0.3019 39.23 10.02 49.25 0.3019 23.50 10.02 33.52 0.9538 34.23 10.07 44.30 0.9538 19.11 10.07 29.18 1.6498 37.40 10.06 47.46 1.6498 18.06 10.06 28.12 * 3.3020 38.50 10.02 48.52 3.3020 19.78 10.02 29.80 4.8178 38.26 9.97 48.23	Mk. Freq. Level Factor ment Limit MHz dBuV dB dBuV dBuV 0.1737 44.21 9.97 54.18 64.78 0.1737 31.11 9.97 41.08 54.78 0.3019 39.23 10.02 49.25 60.19 0.3019 23.50 10.02 33.52 50.19 0.9538 34.23 10.07 44.30 56.00 0.9538 19.11 10.07 29.18 46.00 1.6498 37.40 10.06 47.46 56.00 * 3.3020 38.50 10.02 48.52 56.00 3.3020 19.78 10.02 29.80 46.00 4.8178 38.26 9.97 48.23 56.00	Mk. Freq. Level Factor ment Limit Over MHz dBuV dB dBuV dBuV dB 0.1737 44.21 9.97 54.18 64.78 -10.60 0.1737 31.11 9.97 41.08 54.78 -13.70 0.3019 39.23 10.02 49.25 60.19 -10.94 0.3019 23.50 10.02 33.52 50.19 -16.67 0.9538 34.23 10.07 44.30 56.00 -11.70 0.9538 19.11 10.07 29.18 46.00 -16.82 1.6498 37.40 10.06 47.46 56.00 -8.54 1.6498 18.06 10.06 28.12 46.00 -17.88 * 3.3020 38.50 10.02 48.52 56.00 -7.48 3.3020 19.78 10.02 29.80 46.00 -16.20 4.8178 38.26 9.97 48.23 56.

^{*:}Maximum data x:Over limit !:over margin



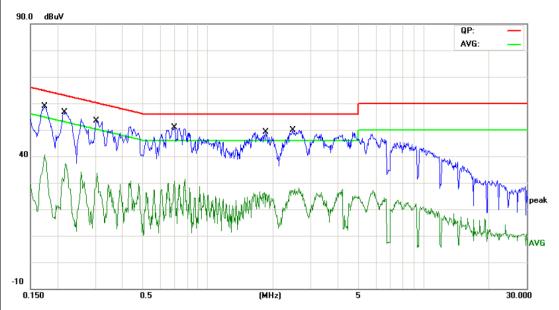
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UT:	Smart Watch	V BA	Mode	el Name	:	S1
emperature:	25 ℃	33	Relat	tive Hum	idity:	55%
est Voltage:	AC 240V/60 Hz		1		TING	
erminal:	Line	CHIT:		J 46		
Test Mode:	Charging with T	X GFSK Mod	le 2402 MH:	Z	- 0	Allin
Test Voltage: AC 240V/60 Terminal: Line Test Mode: Charging wind Part of the Property of the P	Only worse case	e is reported	A Property		8.0	
-10		(MHz)	5		QP: AVG:	30.000
		Correct Factor	Measure- ment	Limit	Over	
		dB	dBu∨	dBu∨	dB	Detector
	703 45.32	9.96	55.28	64.94	-9.66	QP
	703 27.99	9.96	37.95	54.94	-16.99	AVG
	2242 31.67	10.02	41.69		-20.97	QP
	2242 25.39	10.02	35.41		-17.25	AVG
	2644 40.40	10.02	50.42		-10.87	QP
	2644 24.31	10.02	34.33		-16.96	AVG
	339 37.33	10.02	47.35 32.29		-9.83	QP
	339 22.27	10.02			-14.89	AVG
	35.14	10.08	45.22		-10.78	QP
	21.31	10.08	31.39		-14.61	AVG
	7700 35.34	10.06	45.40		-10.60	QP
	7700 19.00 Over limit !:over margin Read Level+ Coi		29.06	- 0.00	-16.94	AVG



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EUT:	Smart Watch	Model Name :	S1
Temperature	e: 25 ℃	Relative Humidity:	55%
Test Voltage	: AC 240V/60 Hz		
Terminal:	Neutral		
Test Mode:	Charging with TX GFSK M	ode 2402 MHz	L. William
Remark:	Only worse case is reporte	ed	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBu∀	dB	Detector
1		0.1737	44.20	9.97	54.17	64.78	-10.61	QP
2		0.1737	30.61	9.97	40.58	54.78	-14.20	AVG
3	*	0.2149	42.44	10.02	52.46	63.01	-10.55	QP
4		0.2149	27.22	10.02	37.24	53.01	-15.77	AVG
5		0.3019	38.48	10.02	48.50	60.19	-11.69	QP
6		0.3019	23.50	10.02	33.52	50.19	-16.67	AVG
7		0.6976	35.04	10.12	45.16	56.00	-10.84	QP
8		0.6976	20.61	10.12	30.73	46.00	-15.27	AVG
9		1.8580	34.19	10.06	44.25	56.00	-11.75	QP
10		1.8580	16.26	10.06	26.32	46.00	-19.68	AVG
11		2.4700	34.59	10.04	44.63	56.00	-11.37	QP
12		2.4700	17.52	10.04	27.56	46.00	-18.44	AVG

^{*:}Maximum data x:Over limit !:over margin



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limit (9 kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

Frequency	Class B (dBuV/	m)(at 3m)
(MHz)	Peak	Average
Above 1000	74	54

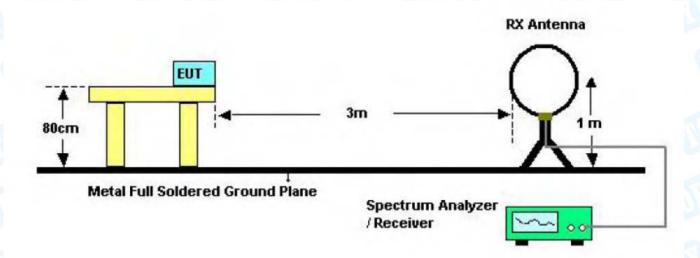
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m)

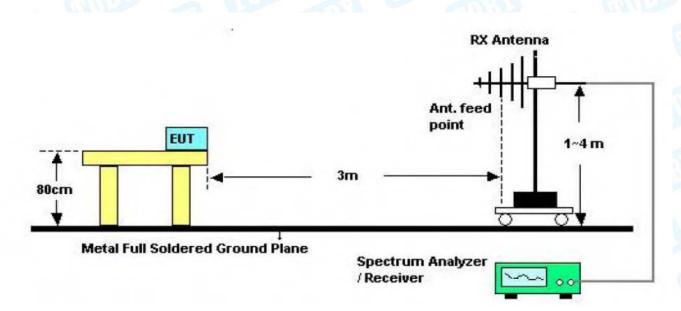


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5.2 Test Setup



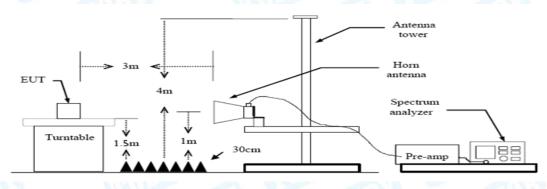
Bellow 30MHz Test Setup



Bellow 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power in TX mode.

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 kHz with Peak Detector for Average Values.

Test data please refer the following pages.



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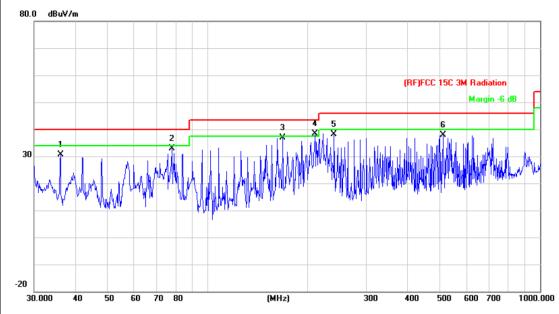
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est	Voltag	e:	D	C 3	.7V	B				W	U			1					
nt.	Pol.		Н	oriz	ont	al		. 1		S. S. S.		a		A)				61	
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N 1 2	lo. Mk	. F 78. 216	req. MHz 138	9	Re L	eac dBu 58.6	rel ı∨ 88 01	-23	rrect actor 3/m 3.40	m dE 3	asurent BuV/m 5.48	e-	Lin dB: 40	nit uV/m 0.00	-	dB 4.5	r 2 8	Dete pe	ector eak
1 2 3	* !	78. 216	Treq. MHz 138 .024	9 10 33	Re L	eac dBu 58.6	rel IV 88 01 20	-23 -19	3/m 3.40 9.29	3 4	asure nent BuV/m 5.48 0.72	9-	Lin dBr 40 46	nit uV/m 0.00 6.00	- -	dB 4.5 5.2	r 2 8	Dete pe pe	ecto eak eak
1 2 3 4	lo. Mk	78. 216 234 344	Treq. 0138 024 .168	9 10 33 54	Re L	eac _ev dBu 58.6 60.0	rel iV 88 01 20 83	-18	3.40 9.29 3.46	3 4 4	asurent BuV/m 5.48 0.72 0.74	9-	Lin 40 46 46 46	nit uv/m 0.00 6.00 6.00	-	dB 4.5 5.2 5.2	r 2 8 6	pe pe pe	ecto eak eak eak
1 2 3	* !	78. 216	138 .024 .168 .385	9 40 33 54	Re L	eac dBu 58.6	rel	-14 -11	3/m 3.40 9.29	3 4 4 4 3	asure nent BuV/m 5.48 0.72	9-	Lin 40 46 46 46	nit uV/m 0.00 6.00	-	dB 4.5 5.2	r 2 8 6 8	pee pee pee	ecto



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		9
Ant. Pol.	Vertical		
Test Mode:	TX GFSK Mode 2402MHz	10.33	CHIT:
Remark:	Only worse case is reported		

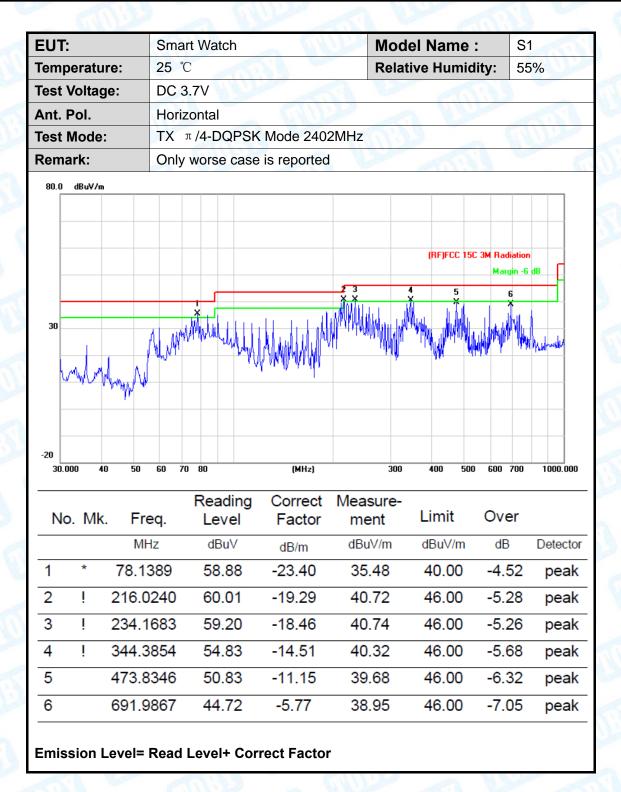


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		36.0007	48.44	-17.83	30.61	40.00	-9.39	peak
2		77.8653	56.20	-23.41	32.79	40.00	-7.21	peak
3		167.8242	57.55	-20.78	36.77	43.50	-6.73	peak
4	*	210.0482	58.02	-19.56	38.46	43.50	-5.04	peak
5		239.9874	56.30	-18.18	38.12	46.00	-7.88	peak
6		510.0436	48.37	-10.55	37.82	46.00	-8.18	peak

^{*:}Maximum data x:Over limit !:over margin



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EU'	T:				Silia	art '	vva	lCH			177		M	ode	l Na	ame) :		S	1	
em	pe	ratur	re:		25	$^{\circ}$ C		1					Re	elati	ve H	lum	idit	y:	55	5%	
es	t Vo	oltag	e:		DC	3.7	V					SVI)	V			A	N	M			
۱nt	. Po	ol.			Vert	tica	I			8		المؤر		4						A	Ñ
Гes	t M	ode:	1		TX	π/	4-C	QF	PSK	Mod	le 240	2MH	Z		3		à		111		
Ren	nar	k:			Onl	y w	ors	e c	ase	is re	porte	d	(D)								
80.	0 d	BuV/m																_			
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	0.000											Mo			40)O	500	600	700		1000
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31		40	0		60 eq.		Rea Le	adir evel	<u>ا</u>	Fa	rrect	n	asur nent	e-	Lin		(er		10000
31		40	0	Fre MH	60 eq.		Rea Le	vel	I	Fa dE	rrect	n dl	nent	e-	Lin dBu	nit	(Ove	er	D	eteo
N 1		40	10	Fre MH 7.88	60 eq. z		Rea Le	evel 3uV 4.39	9	6E -21	rrect actor 3/m 1.86	n dl	nent BuV/m 2.53	e-	Lin dBu	nit u∨/m	-	Ove	er 3	D	etec pea
1 2		40	10	Fre MH 7.88	eq. z 376 240		Rea Le dE 54	evel 3u∀ 4.39 3.05	9	-21	rrect actor B/m 1.86 0.78	n dl 3	nent BuV/m 2.53 5.27	e-	Lin dBu 43	nit uv/m .50	-	Ove dB -10.	er .97 23	D	etec pea
1 2 3		Mk.	10 16 22	Fre MH 7.88	eq. z 376 240		Sea Le dE 54 56	3uV 1.39 3.05) 5 6	-21 -20	rrect actor 3/m 1.86 0.78	3 3	nent 32.53 5.27 6.44	e-	Lin dBu 43 43	nit 50 50	-	Ove dB -10. -8.2	er .97 23	D	etec pea pea
1 2 3 4	lo.	Mk.	10 16 22 39	Fre MH 7.88 7.82 2.16 6.24	eq. z 376 240 698 412		Sea Le de 54 56 55 50	3uV 1.39 3.05 5.46	5	-21 -20 -19	rrect actor 3/m 1.86 0.78 9.02 2.58	3 3 3 3	nent 32.53 5.27 6.44 8.15	e-	Lim 43 43 46 46	nit .50 .50 .00	-	Ove dB -10. -8.2 -9.5	er .97 23 56	D	pea pea pea
1 2 3	lo.	Mk.	10° 16° 22° 39° 62°	Fre MH 7.88 7.82 2.16 6.24 5.07	eq. z 376 240		Rea Le 54 56 55 50	3uV 1.39 3.05	5 5 3 3	-21 -20 -19 -12	rrect actor 3/m 1.86 0.78	3 3 3 3 4	nent 32.53 5.27 6.44	e-	Lim 43 43 46 46	nit 50 50	-	Ove dB -10. -8.2	er .97 23 56 85	D	etec pea pea



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Page:

		Office	ii v v c	atch			1	Mod	el Nam	e :		S1	
emperatu	ıre:	25 °	С					Relat	ive Hun	nidit	y:	55%	%
est Voltaç	ge:	DC 3	3.7V	A.B.			10	6		W	Ny		
nt. Pol.		Horiz	zonta	al		UIII	Sec. Sec.		1 K			4	a
est Mode	:	TX 8	B-DPS	SK Mo	ode 2	2402MH	z 🦱	Mill.	3		· V		الفارا
emark:		Only	wors	se ca	se is	reported	t		-				
80.0 dBuV/m			1		2 X			likhar, ud		C 15C 3	3M Radi Marg 6	iation in -6	dB
30.000 40	0 50	60 70				(MHz)	Marthur	300	400	500	600 7	700	1000.
		60 70	0 80 Re	eadinq	_	(MHz) Correct Factor	Mea	sure-	400 Limit		600 i		1000
30.000 40		60 70 eq.	Re Le		_	Correct	me	sure-				r	1000
30.000 40	c. Fre	60 70 eq.	Re Le	evel		Correct Factor	m € dBu	sure- ent	Limit	n	Ove	r	
30.000 40 No. Mk	c. Fre	eq.	Re Le	evel BuV	-	Correct Factor	dBu 31	sure- ent	Limit dBuV/r	n O	Ove dB	r 2	Detec
No. Mk	K. Fro MH 78.1	eq. display a seq	Re Le 5-	evel dBuV 4.88	-	Correct Factor dB/m 23.40	31 30	sure- ent IV/m	Limit dBuV/r	m)	Over	r 2 55	Detec pea
No. Mk	78.13	eq. 1z 389 2204 682	Re Le 5-	evel dBuV 4.88 2.97	- -	Correct Factor dB/m 23.40 22.02	31 30 35	sure- ent IV/m .48	Limit dBuV/r 40.00 43.50	m)) -	OverdB -8.5	r 2 55 76	Detection pea
No. Mk	78.13 732.2 234.1	eq	Re Le 5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-	evel dBuV 4.88 2.97 3.70	- - -	Correct Factor dB/m 23.40 22.02	31 30 35 36	sure- ent .v/m .48 .95	Limit dBuV/r 40.00 43.50 46.00	m O -	Ove dB -8.5 -12.5	2 55 76	Detection pea



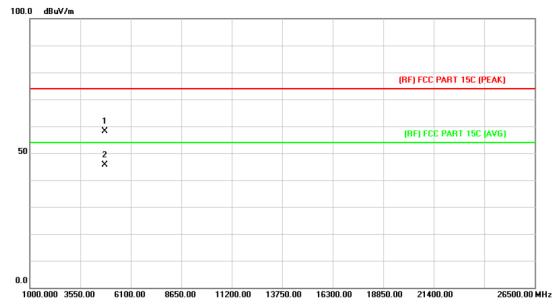
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Temperature: Test Voltage:				Model	ivaille.	S1
	25 ℃			Relative	Humidity:	55%
	DC 3.7V	MAN		F.	and a	
Ant. Pol.	Vertical				Marie	
Test Mode:	TX 8-DPS	SK Mode 24	102MHz	MIN.		Ullin
Remark:	Only wors	se case is r	eported			
30 dBuV/m	Alay Market			3 *	(RF)FCC 15C 3M R	adiation largin -6 dB
-20 30.000 40 50	60 70 80		(MHz)	300	400 500 600	0 700 1000.00
	Re	_	orrect Me	asure-		0 700 1000.00 /er
30.000 40 50 No. Mk. Fr	Re req. L	evel F	orrect Me Factor n	asure- nent l	Limit Ov	
No. Mk. Fr	Reg. L	evel F	orrect Me Factor n	asure- nent l	Limit Ov dBuV/m d	/er
No. Mk. Fr	Req. L	evel F dBuV 3.54 -2	orrect Me Factor n	asure- nent I BuV/m	Limit Ov dBuV/m d 43.50 -11	ver IB Detecto
No. Mk. Fr	Req. L Hz 0 0014 5 0482 5	evel F dBuV 3.54 -2 6.52 -1	orrect Me Factor n dB/m dl 21.85 3	asure- nent I BuV/m s1.69 s6.96	Limit Ov dBuV/m d 43.50 -11 43.50 -6	ver IB Detecto 1.81 peak
No. Mk. Fr 1 102.0 2 210.0 3 300.3	Req. L Hz 0 0014 5 0482 5 3672 5	evel F dBuV 3.54 -2 6.52 -4 1.30 -4	orrect Me Factor n dB/m dl 21.85 3 19.56 3	asure- nent I BuV/m 61.69 66.96	Limit Ov dBuV/m d 43.50 -1 ² 43.50 -6 46.00 -1 ²	ver IB Detecto 1.81 peak
No. Mk. Fr M 1 102.0 2 210.0 3 300.3	Req. L Hz 0 0014 5 0482 5 3672 5 2412 5	evel F dBuV 3.54 -2 6.52 -2 1.30 -2 0.23 -2	orrect Me Factor n dB/m dl 21.85 3 19.56 3 16.64 3 12.58 3	asure- nent I BuV/m 61.69 66.96 64.66	Limit Ov dBuV/m d 43.50 -1 43.50 -6 46.00 -1 46.00 -8	ver IB Detector 1.81 peak 5.54 peak 1.34 peak



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.7V	MA	
Ant. Pol.	Horizontal	The state of the s	
Test Mode:	TX GFSK Mode 2402MHz	M:N	THURSDAY
Remark:	No report for the emission which no prescribed limit.	nore than 10 dB below	the

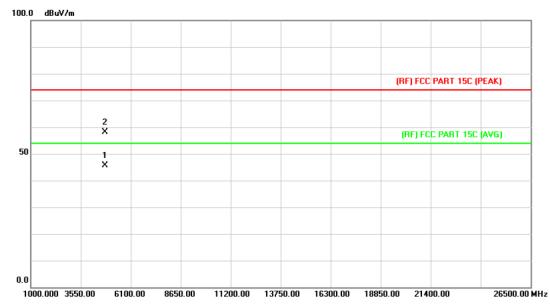


No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4804.054	44.71	13.44	58.15	74.00	-15.85	peak
2	*	4804.254	32.24	13.44	45.68	54.00	-8.32	AVG



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX GFSK Mode 2402MHz	10:30	MILLER
Remark:	No report for the emission which no prescribed limit.	nore than 10 dB below	the

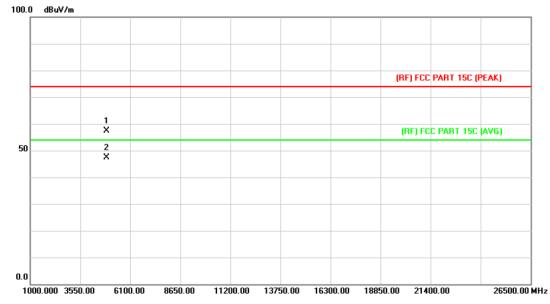


No	o. Mk	c. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.654	32.24	13.44	45.68	54.00	-8.32	AVG
2		4803.987	44.71	13.44	58.15	74.00	-15.85	peak



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX GFSK Mode 2441MHz		Millian
Remark:	No report for the emission which r	nore than 10 dB below t	he
	prescribed limit.	A KILL	THE RESERVE

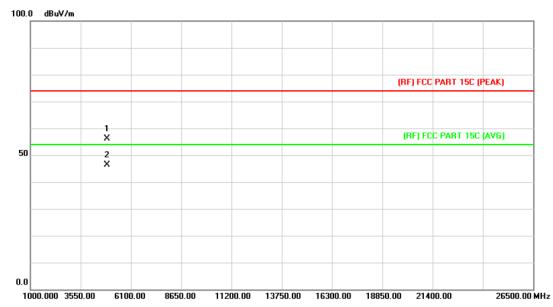


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.250	43.38	13.90	57.28	74.00	-16.72	peak
2	*	4881.559	33.45	13.90	47.35	54.00	-6.65	AVG



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX GFSK Mode 2441MHz	W:10	MILL
Remark:	No report for the emission which no prescribed limit.	nore than 10 dB below	the

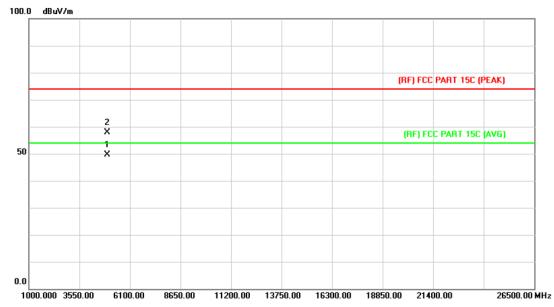


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4882.074	42.14	13.90	56.04	74.00	-17.96	peak
2	*	4882.457	32.45	13.90	46.35	54.00	-7.65	AVG



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Smart Watch	Model Name :	S1				
mperature: 25 °C Relative Humidity		55%				
DC 3.7V	The same					
Horizontal	The state of the s					
TX GFSK Mode 2480MHz	W:17	Milliam				
Remark: No report for the emission which more than 10 dB below the prescribed limit.						
	25 °C DC 3.7V Horizontal TX GFSK Mode 2480MHz No report for the emission which n	25 °C Relative Humidity: DC 3.7V Horizontal TX GFSK Mode 2480MHz No report for the emission which more than 10 dB below				

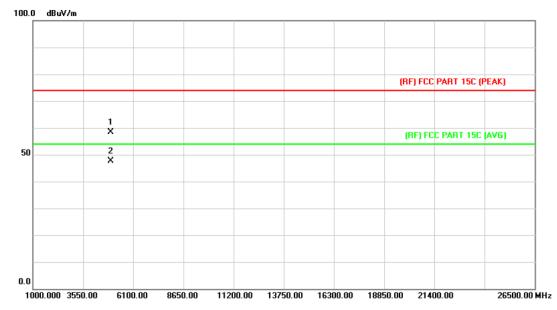


1	Vo.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4960.158	35.32	14.36	49.68	54.00	-4.32	AVG
2			4960.908	43.47	14.36	57.83	74.00	-16.17	peak



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EUT:	Smart Watch	Model Name :	S1					
Temperature:	re: 25 °C Relative Humidity:							
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Vertical							
Test Mode:	TX GFSK Mode 2480MHz		Millian					
Remark: No report for the emission which more than 10 dB below the prescribed limit.								

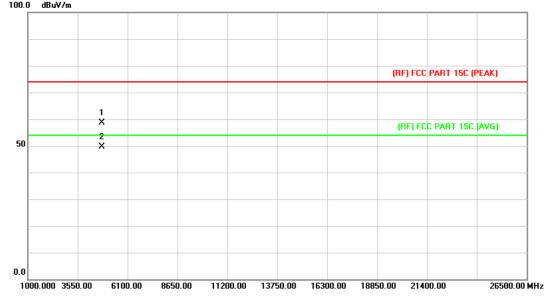


No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4959.348	44.04	14.36	58.40	74.00	-15.60	peak
2	*	4959.687	33.32	14.36	47.68	54.00	-6.32	AVG



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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 8-DPSK Mode 2402MHz	11111111	Milliam
Remark:	No report for the emission which r prescribed limit.	nore than 10 dB below	the
100.0 dBuV/m			

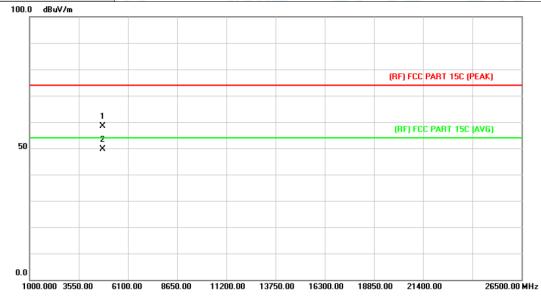


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4804.056	45.21	13.44	58.65	74.00	-15.35	peak
2	*	4804.368	36.24	13.44	49.68	54.00	-4.32	AVG



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EUT:	Smart Watch	Model Name :	S1					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Vertical							
Test Mode:	TX 8-DPSK Mode 2402MHz	111:32	MULL					
Remark: No report for the emission which more than 10 dB below the prescribed limit.								
100.0 dBuV/m								

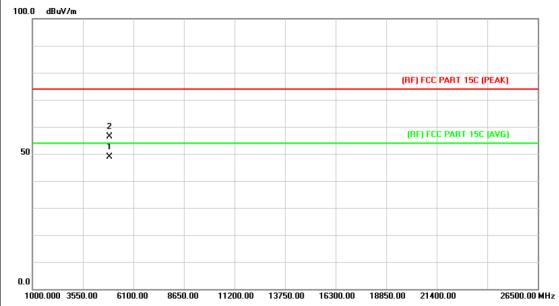


No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.984	44.87	13.44	58.31	74.00	-15.69	peak
2	*	4804.012	36.14	13.44	49.58	54.00	-4.42	AVG



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EUT:	Smart Watch	Model Name :	S1			
Temperature: 25 °C		Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2441MHz	11:30	William			
Remark: No report for the emission which more than 10 dB below the prescribed limit.						

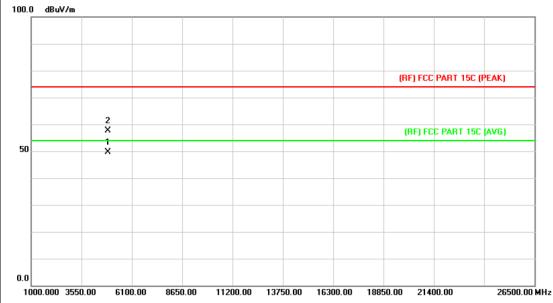


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4882.654	35.09	13.90	48.99	54.00	-5.01	AVG
2		4882.716	42.54	13.90	56.44	74.00	-17.56	peak



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EUT:	Smart Watch	Model Name :	S1				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.7V						
Ant. Pol.	Vertical						
Test Mode:	TX 8-DPSK Mode 2441MHz	1.33	Millian				
Remark:	No report for the emission which mo prescribed limit.	ore than 10 dB below th	ne				

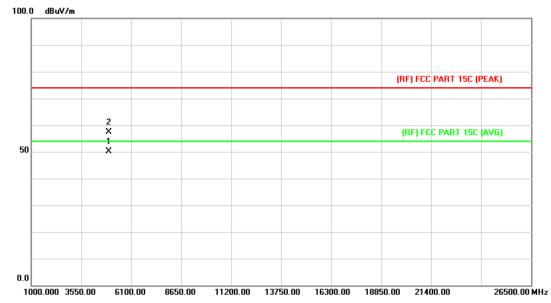


N	lo.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4881.987	35.75	13.90	49.65	54.00	-4.35	AVG
2			4882.584	43.64	13.90	57.54	74.00	-16.46	peak



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EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2480MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

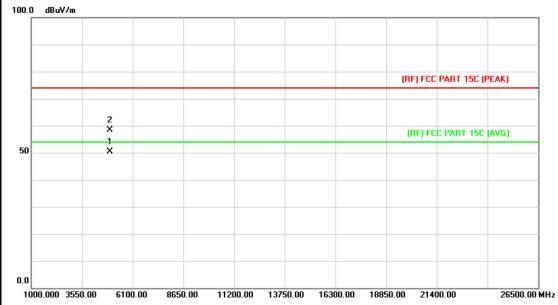


N	lo.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4959.002	35.76	14.36	50.12	54.00	-3.88	AVG
2			4959.418	43.06	14.36	57.42	74.00	-16.58	peak



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EUT:	Smart Watch	Model Name :	S1				
Temperature:	25 °C Relative Humidity: 55%						
Test Voltage:	DC 3.7V						
Ant. Pol.	Vertical						
Test Mode:	TX 8-DPSK Mode 2480MHz	11:30 T	Millian				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						



No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.652	35.96	14.36	50.32	54.00	-3.68	AVG
2		4959.730	43.91	14.36	58.27	74.00	-15.73	peak



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6. Restricted Bands Requirement

6.1 Test Standard and Limit

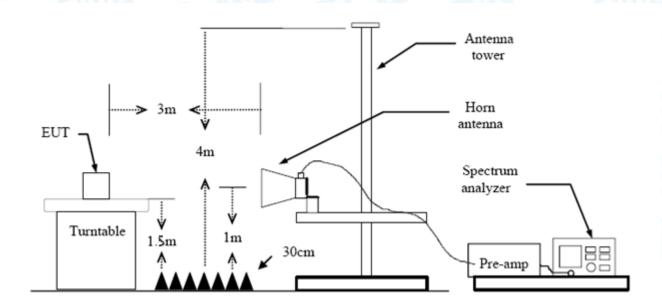
6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dE	BuV/m)(at 3m)
Band (MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

Note: All restriction bands have been tested, only the worst case is reported.

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.



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(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.4 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 KHz with Peak Detector for Average Values.

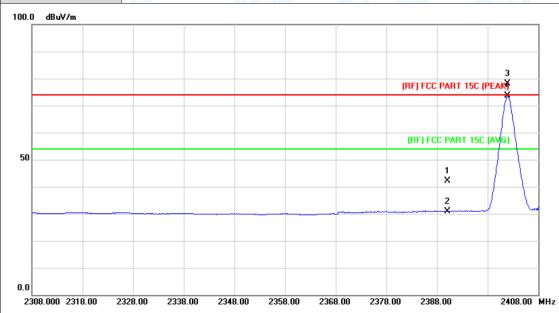
All restriction bands have been tested, only the worst case is reported.



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(1) Radiation Test

EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		III.
Test Mode:	TX GFSK Mode 2402MHz		
Remark:	N/A		1

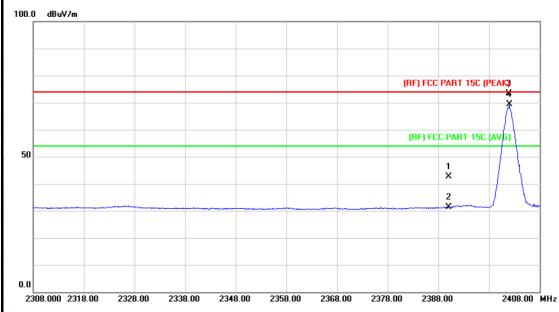


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.35	0.77	42.12	74.00	-31.88	peak
2		2390.000	30.16	0.77	30.93	54.00	-23.07	AVG
3	Χ	2401.900	77.27	0.82	78.09	Fundamental Frequency		peak
4	*	2401.900	72.92	0.82	73.74	Fundamenta	l Frequency	AVG



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EUT:	Smart Watch	Model Name :	S1					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Vertical	W CO						
Test Mode:	TX GFSK Mode 2402MHz	TX GFSK Mode 2402MHz						
Remark:	N/A							

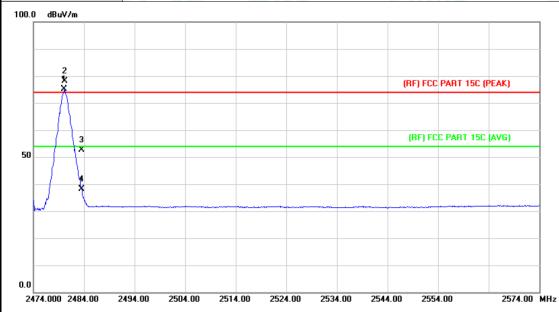


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.92	0.77	42.69	74.00	-31.31	peak
2		2390.000	30.51	0.77	31.28	54.00	-22.72	AVG
3		2401.900	72.58	0.82	73.40	Fundamenta	I Frequency	peak
4	*	2402.000	68.52	0.82	69.34	Fundamenta	I Frequency	AVG



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EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX GFSK Mode 2480 MHz					
Remark:	N/A					

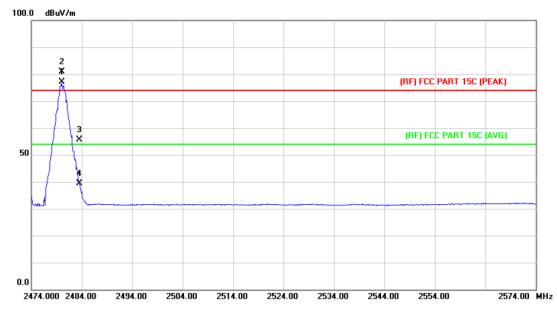


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2480.100	74.02	1.15	75.17	Fundamental F	requency	AVG
2	X	2480.200	77.08	1.15	78.23	Fundamental F	requency	peak
3		2483.500	51.52	1.17	52.69	74.00	-21.31	peak
4		2483.500	37.03	1.17	38.20	54.00	-15.80	AVG



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EUT:	Smart Watch	Model Name :	S1				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.7V	DC 3.7V					
Ant. Pol.	Vertical						
Test Mode:	TX GFSK Mode 2480 MHz						
Remark:	N/A						

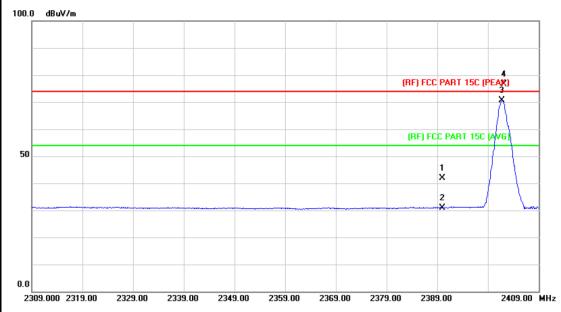


No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2480.000	75.89	1.15	77.04	Fundamental	Frequency	AVG
2	X	2480.100	79.77	1.15	80.92	Fundamental	Frequency	peak
3		2483.500	54.40	1.17	55.57	74.00	-18.43	peak
4		2483.500	38.20	1.17	39.37	54.00	-14.63	AVG



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EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 °C Relative Humidity: 55%					
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2402MHz					
Remark:	N/A					



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.15	0.77	41.92	74.00	-32.08	peak
2		2390.000	30.13	0.77	30.90	54.00	-23.10	AVG
3	*	2401.700	69.77	0.82	70.59	Fundamenta	al Frequency	AVG
4	Χ	2402.200	75.81	0.82	76.63	Fundamenta	al Frequency	peak



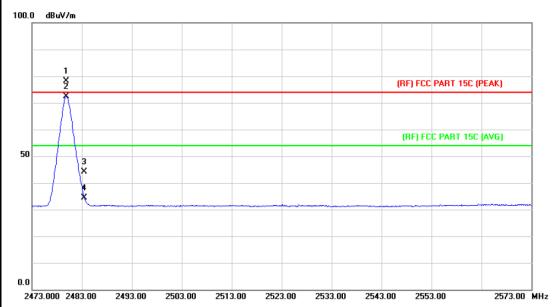
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EUT:		Sm	nart Wat	ch		Model	Nam	e:	S1		1
Гетре	rature	: 25	$^{\circ}$ C			Relativ	e Hun	nidity:	559	%	1817
Test Vo	oltage:	DC	3.7V	MA		10	189		10	19.0	
Ant. Po	ol.	Ve	rtical		11/11	المتقلق		2 1			(11)
Test M	ode:	TX	8-DPSI	K Mode	2402MH	z	M'			EN.	11
Remar	k:	N/A	4	Marie Contract		N			M	10	
100.0	dBuV/m										
								(RF)	CC PAR	RT 15C (PEAK)	
										¥ ×	
								(DE	ECC DA	RT 15C (AVG)	
50								(nr	FLL FA	in i isc javaj	
									1 X		\
									2		
-									×		PORTAL PROPERTY.
0.0											
2309	.000 2319.	00 2329.0	0 2339.0	0 2349	.00 2359.0	0 2369	9.00 2	379.00	2389.00	24	09.00 MH:
NI-	NAI.			ding	Correct		asure-	Lim	i+	Over	
NO.	Mk.	Freq.		vel	Factor		ent				
		MHz	dB	uV	dB/m	dB	BuV/m	dBu\	√/m	dB	Detect
	2	390.000	42	.36	0.77	43	3.13	74.	00	-30.87	pea
1					0.77	3	1.21	54.	00	-22.79	AVC
2	2	390.000	30	.44	0.77	5	1.21				
		390.000 401.600		.44	0.77		5.95	Fundam	ental F	requency	AVC



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EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2480MF	TX 8-DPSK Mode 2480MHz				
Remark:	N/A	1				

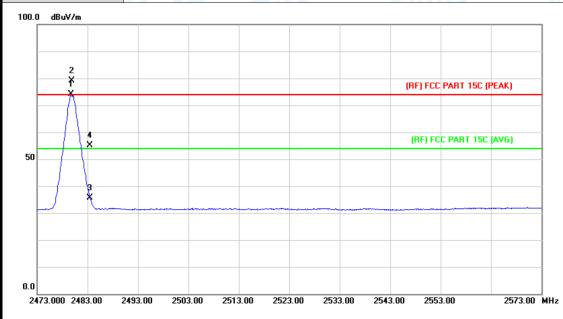


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2479.900	77.06	1.15	78.21	Fundamenta	l Frequency	peak
2	*	2479.900	71.25	1.15	72.40	Fundamenta	I Frequency	AVG
3		2483.500	43.07	1.17	44.24	74.00	-29.76	peak
4		2483.500	33.29	1.17	34.46	54.00	-19.54	AVG



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EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Vertical					
Test Mode:	TX 8-DPSK Mode 2480MI	TX 8-DPSK Mode 2480MHz				
Remark:	N/A					

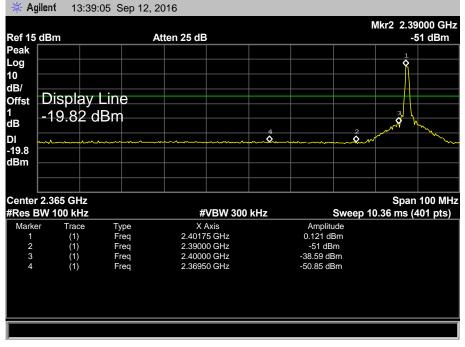


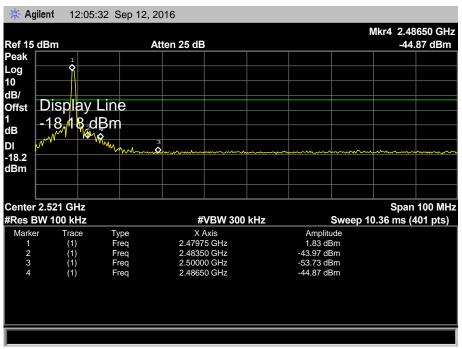
N	lo.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		X	2479.700	72.86	1.15	74.01	Fundamental	Frequency	peak
2	,	*	2479.900	78.03	1.15	79.18	Fundamental	Frequency	peak
3			2483.500	34.50	1.17	35.67	74.00	-38.33	peak
4			2483.500	53.98	1.17	55.15	74.00	-18.85	peak



(2) Conducted Test

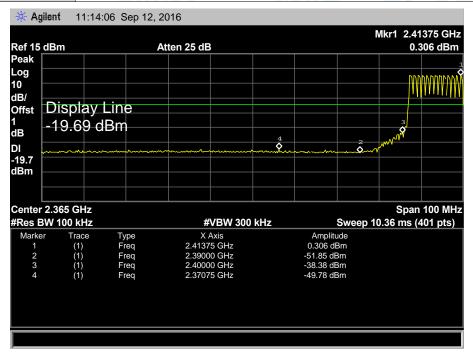
EUT:	Smart Watch	Model Name :	S1		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.7V				
Test Mode:	TX GFSK Mode 2402MHz / 2480 M	1Hz	Illin		
Remark:	N/A		67		

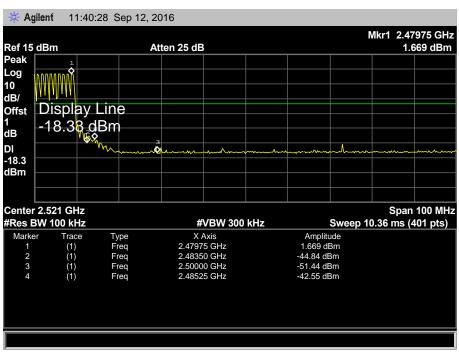






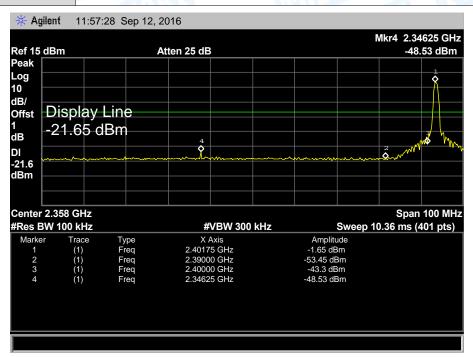
EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	The same	
Test Mode:	GFSK Hopping Mode		
Remark:	N/A		Millian







EUT:	Smart Watch	Model Name :	S1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Test Mode:	TX 8-DPSK Mode 2402MHz / 248	TX 8-DPSK Mode 2402MHz / 2480 MHz				
Remark:	N/A		THURSDAY			



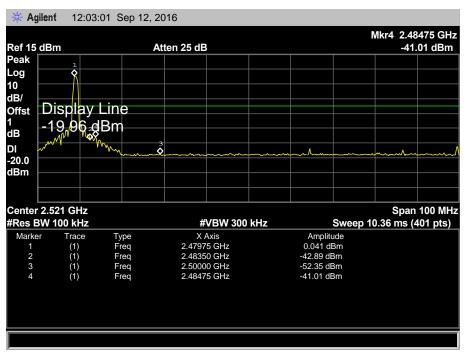
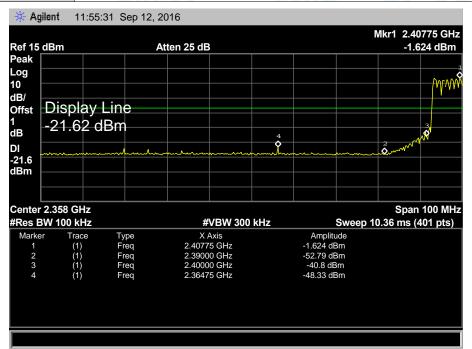
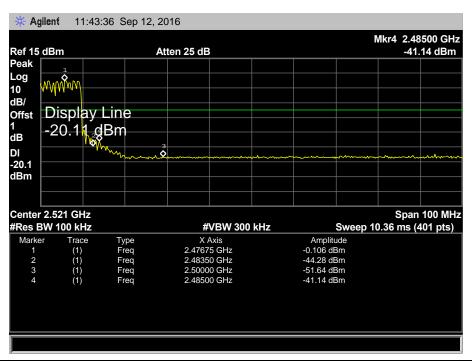




		Table 10 Control of the Control of t	
EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	8-DPSK Hopping Mode		
Remark:	N/A		UMILLE







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7. Number of Hopping Channel

7.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.247 (a)(1)

6.1.2 Test Limit

Section	Test Item	Limit
15.247	Number of Hopping Channel	>15

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=100 KHz, VBW=100 KHz, Sweep time= Auto.

7.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

7.5 Test Data

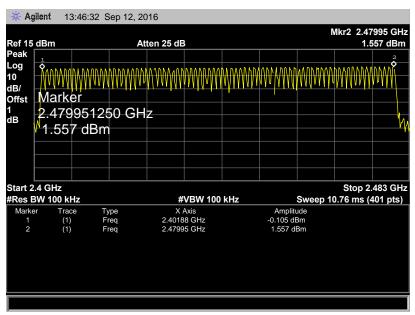


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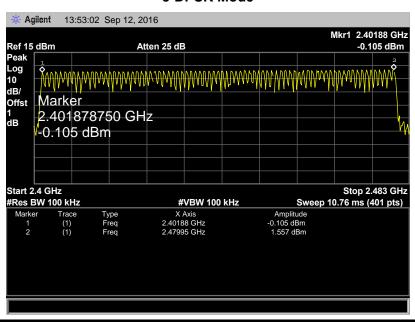
EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (GFSK/8-DPSK)	A VIII	

Frequency Range	Quantity of Hopping Channel	Limit
2402041- 2400041-	79	-45
2402MHz~2480MHz	79	>15

GFSK Mode



8-DPSK Mode





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8. Average Time of Occupancy

8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (a)(1)

8.1.2 Test Limit

Section	Test Item	Limit
15.247(a)(1)/ RSS-210	Average Time of	0.4 sec
Annex 8(A8.1d)	Occupancy	0.4 sec

8.2 Test Setup



8.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=1MHz, VBW=1MHz.
- (3) Use video trigger with the trigger level set to enable triggering only on full pulses.
- (4) Sweep Time is more than once pulse time.
- (5) Set the center frequency on any frequency would be measure and set the frequency span to zero.
- (6) Measure the maximum time duration of one single pulse.
- (7) Set the EUT for packet transmitting.
- (8) Measure the maximum time duration of one single pulse.

8.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

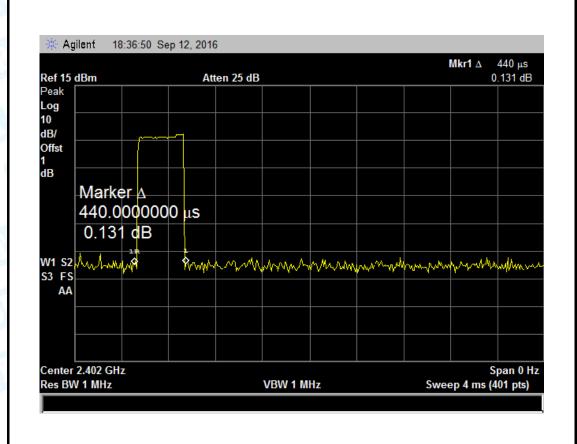


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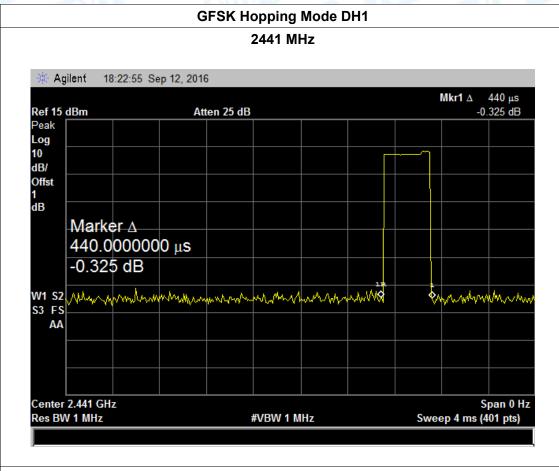
8.5 Test Data

EUT:	Smart Watch		Model Name :		S1	
Temperature:	25 ℃	25 ℃		dity:	55%	
Test Voltage:	DC 3.7V	NIO.				
Test Mode:	Hopping Mod	de (GFSK DH1)	WILLIAM STATE		Millian	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Result	
2402	0.440	140.80				
2441	0.440	140.80	31.60	400	PASS	
2480	0.440	140.80				
OFOK Hamping Made DH4						

GFSK Hopping Mode DH1







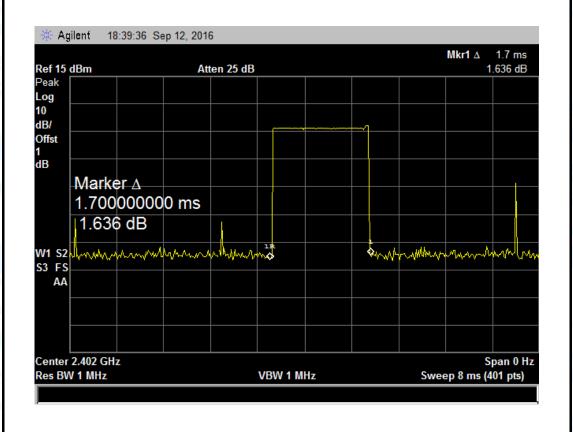
GFSK Hopping Mode DH1 2480 MHz 18:37:45 Sep 12, 2016 Agilent Mkr1 ∆ 440 µs -0.24 dB Ref 15 dBm Atten 25 dB Peak Log 10 dB/ Offst ďΒ Marker ∆ 440.0000000 μs -0.24 dB W1 S2 ♥ S3 FS Endage franches and have a franches and fran AA Center 2.48 GHz Res BW 1 MHz VBW 1 MHz Sweep 4 ms (401 pts)



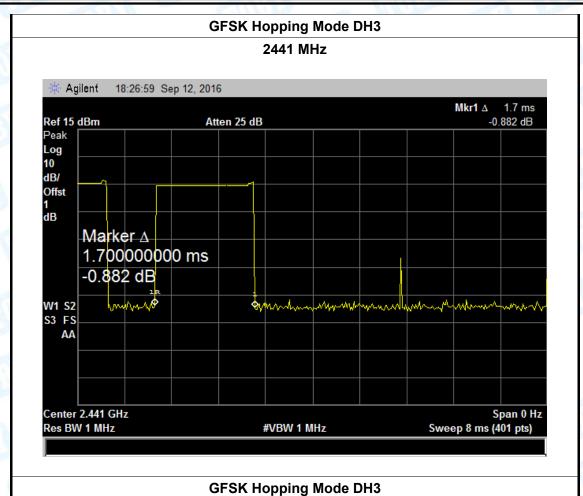
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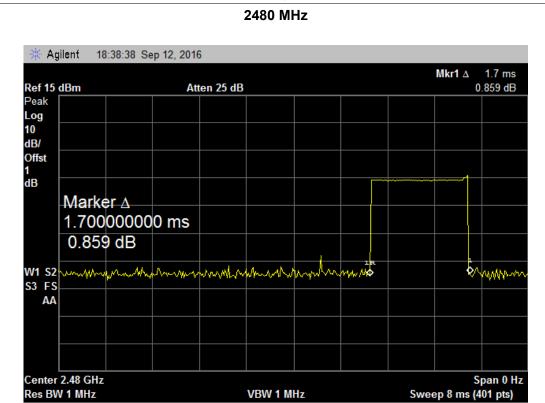
Smart Water	Smart Watch		:	S1
25 ℃	25 ℃		dity:	55%
DC 3.7V			CONTRACTOR OF THE PARTY OF THE	
Hopping Me	ode (GFSK DH3)			
Pulse Time	Total of Dwell	Period Time	Limit	Result
(ms)	(ms)	(s)	(ms)	Result
1.700	272.00			
1.700	272.00	31.60	400	PASS
1.700	272.00			
	25 °C DC 3.7V Hopping M Pulse Time (ms) 1.700 1.700	25 °C DC 3.7V Hopping Mode (GFSK DH3) Pulse Time (ms) (ms) 1.700 272.00 1.700 272.00	25 °C Relative Humin DC 3.7V Hopping Mode (GFSK DH3) Pulse Time (ms) (ms) (ms) (s) 1.700 272.00 31.60	25 °C Relative Humidity: DC 3.7V Hopping Mode (GFSK DH3) Pulse Time (ms) (ms) (ms) (ms) (s) (ms) 1.700 272.00 1.700 272.00 31.60 400

GFSK Hopping Mode DH3







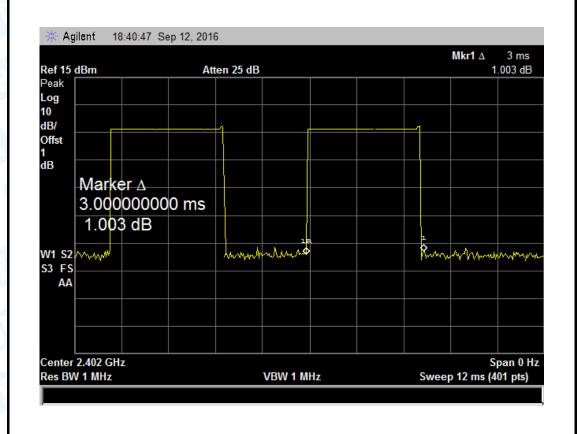




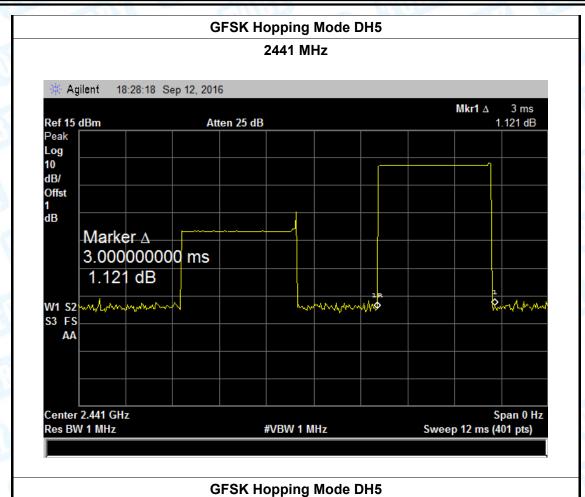
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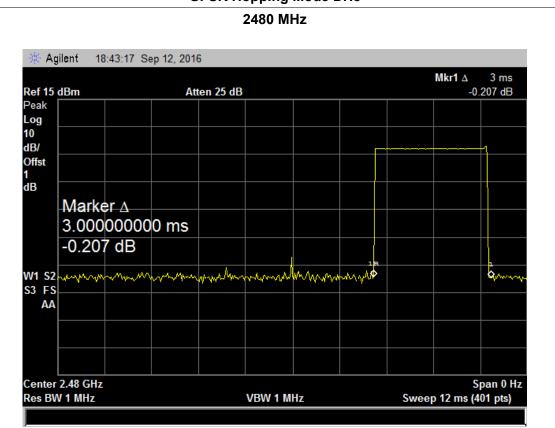
EUT:	Smart Wate	Smart Watch		:	S1	
Temperature	: 25 °C	25 ℃		idity:	55%	
Test Voltage:	DC 3.7V	DC 3.7V				
Test Mode:	Hopping M	ode (GFSK DH5)				
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Resuit	
2402	3.000	320.00				
2441	3.000	320.00	31.60	400	PASS	
2480	3.000	320.00				
050//11 1 14 1 5115						

GFSK Hopping Mode DH5







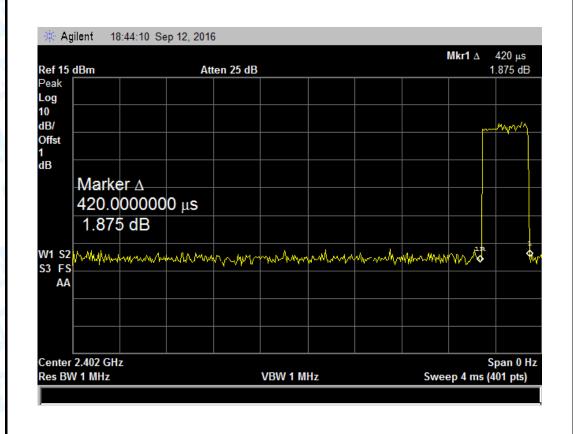




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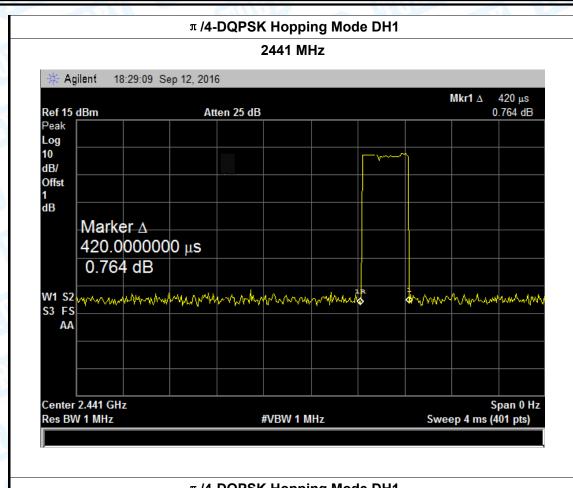
EUT:	Smart Wate	Smart Watch		me :	S1	
Temperature	: 25 °C		Relative H	umidity:	55%	
Test Voltage:	DC 3.7V	The state of the s	1			
Test Mode:	Hopping M	ode (π /4-DQPSK DH	1)	Aller		
Channel	Pulse Time	Total of Dwell	Period Time Limit		Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Result	
2402	0.420	134.40				
2441	0.420	134.40	31.60	400	PASS	
2480	0.420	134.40				
π /4-DQPSK Hopping Mode DH1						

...

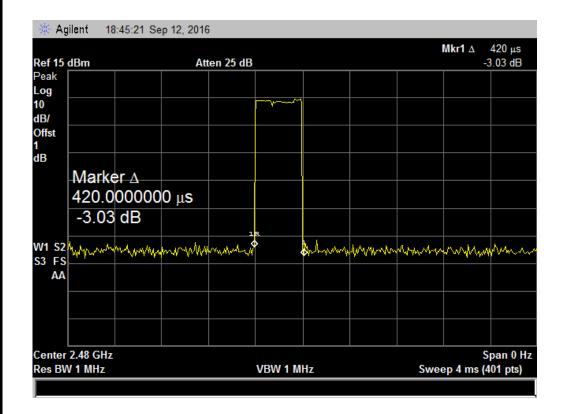




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π /4-DQPSK Hopping Mode DH1 2480 MHz

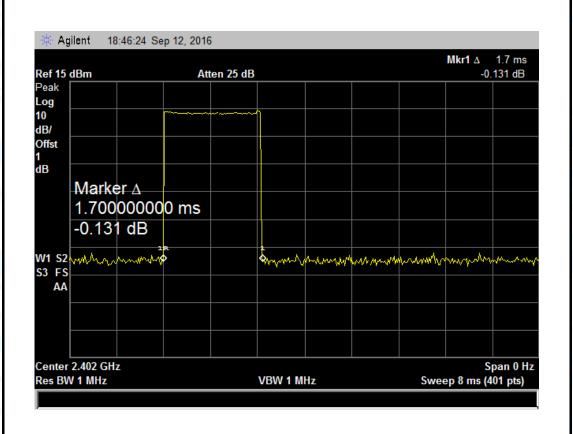




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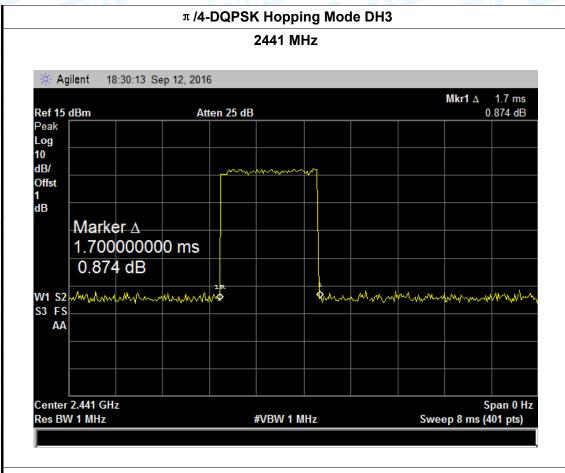
EUT:		Smart Wa	Smart Watch		e :	S1
Temperature:		25 ℃		Relative Humidity:		55%
Test Voltage:	st Voltage: DC 3.7V				11.11	
Test Mode:		Hopping N	Mode (π/4-DQPSK DH3	3)		
Channel	Pu	Ise Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		1.700	272.00			
2441		1.700	272.00	31.60	400	PASS
2480		1.700	272.00			

π /4-DQPSK Hopping Mode DH3

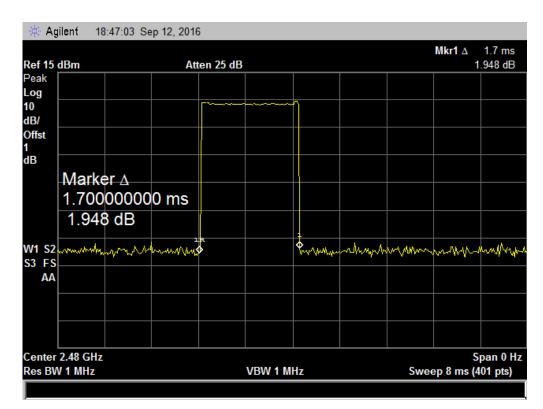




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 π /4-DQPSK Hopping Mode DH3

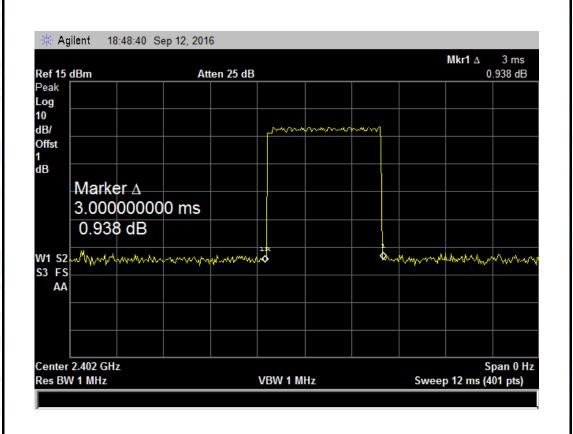




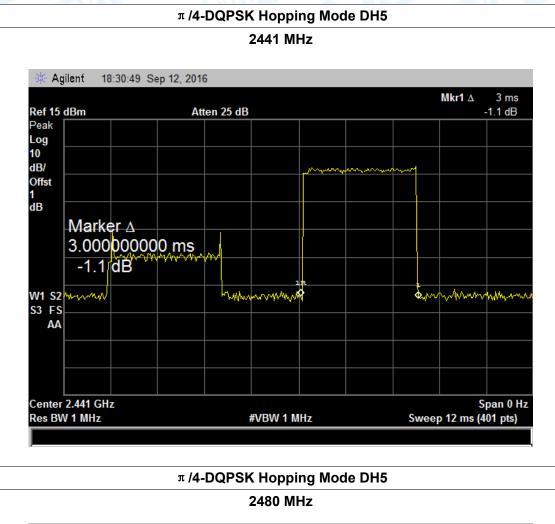
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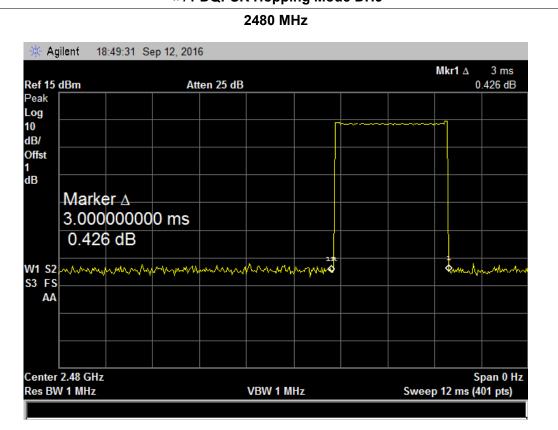
EUT:	Smart Wate	Smart Watch		e :	S1
Temperature:	: 25 ℃	25 ℃		idity:	55%
Test Voltage:	DC 3.7V		1		
Test Mode:	Hopping M	ode (π/4-DQPSK DH	15)	1	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	3.000	320.00			
2441	3.000	320.00	31.60	400	PASS
2480	3.000	320.00			

π /4-DQPSK Hopping Mode DH5







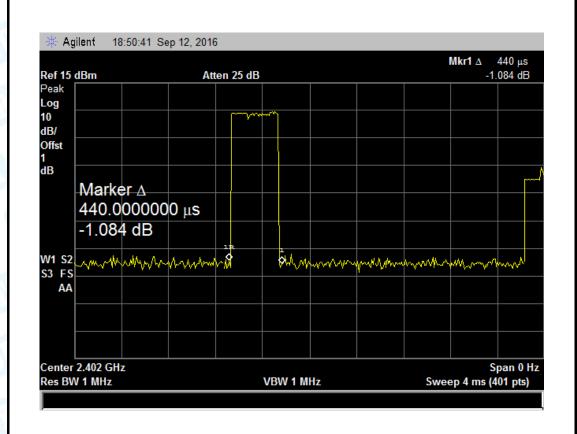




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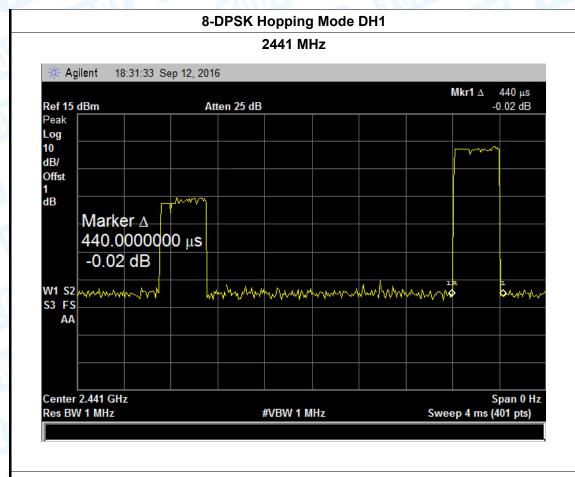
EUT:	Smart Water	Smart Watch		e:	S1	
Temperature:	: 25 ℃	25 ℃		idity:	55%	
Test Voltage:	DC 3.7V		CHILL		MAIL	
Test Mode:	Hopping M	ode (8-DPSK DH1)		MIN.		
Channel (MHz)	Pulse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result	
2402	0.440	140.80				
2441	0.440	140.80	31.60	400	PASS	
2480	0.440	140.80				

8-DPSK Hopping Mode DH1

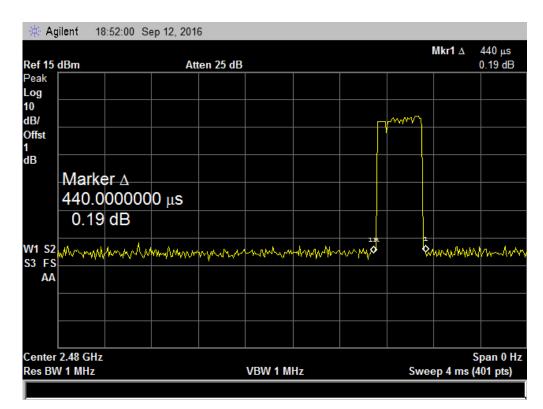




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8-DPSK Hopping Mode DH1

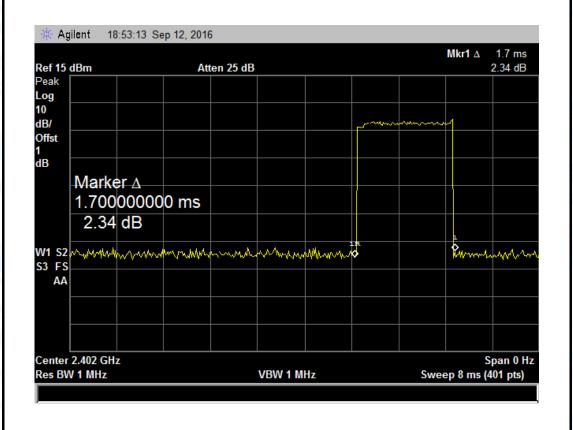




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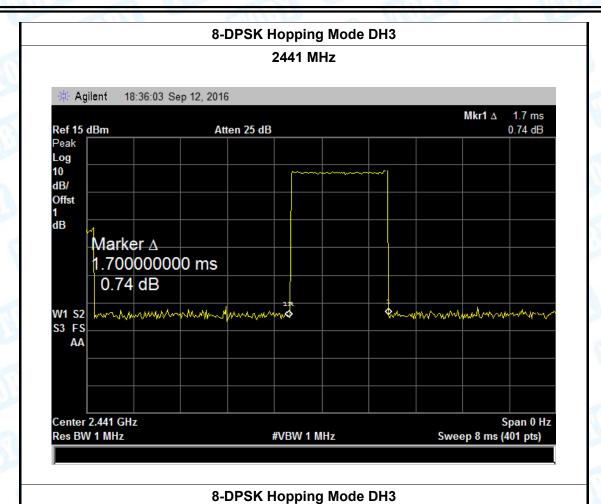
EUT:	Smart Wate	Smart Watch		e :	S1	
Temperature	: 25 °C	25 ℃		idity:	55%	
Test Voltage:	DC 3.7V		0	CAST		
Test Mode:	Hopping M	ode (8-DPSK DH3)				
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Result	
2402	1.700	272.00				
2441	1.700	272.00	31.60	400	PASS	
2480	1.700	272.00				
C DDOK Hamaian Mada DHO						

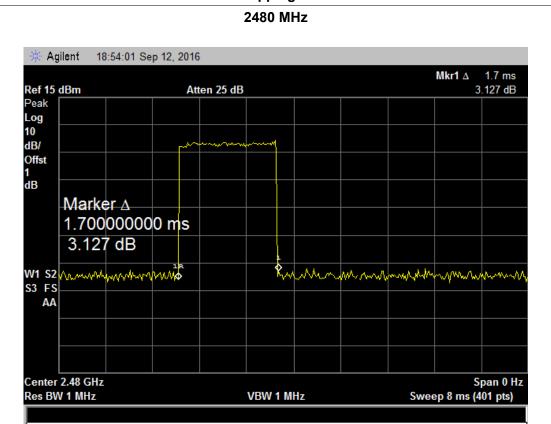
8-DPSK Hopping Mode DH3





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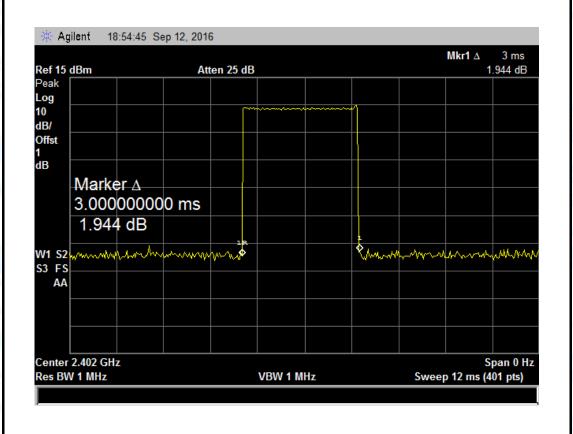




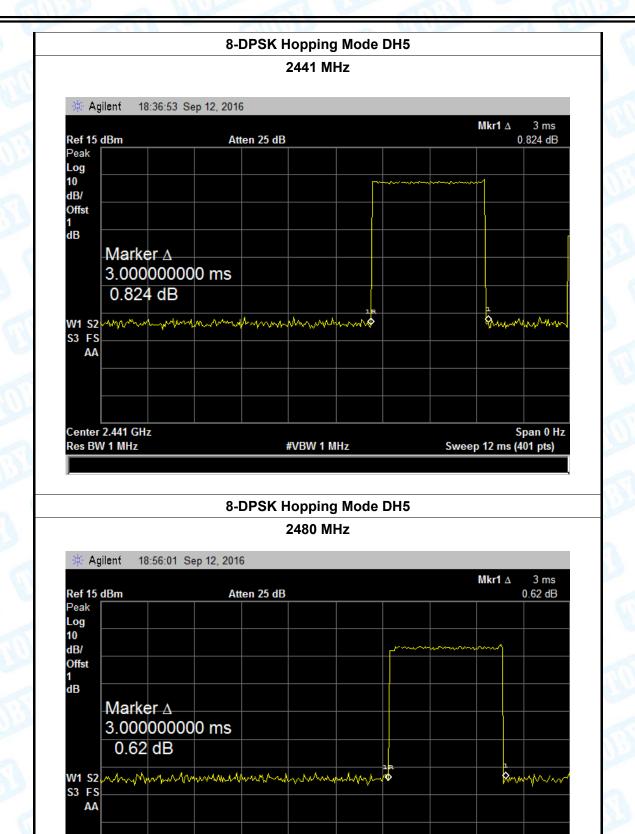
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EUT:	Smart Wate	Smart Watch		e :	S1
Temperature:	: 25 °C	25 ℃		idity:	55%
Test Voltage:	DC 3.7V			TO DE	
Test Mode:	Hopping M	ode (8-DPSK DH5)			
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Resuit
2402	3.000	320.00			
2441	3.000	320.00	31.60	400	PASS
2480	3.000	320.00			

8-DPSK Hopping Mode DH5







VBW 1 MHz

Center 2.48 GHz

Res BW 1 MHz

Span 0 Hz

Sweep 12 ms (401 pts)



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9. Channel Separation and Bandwidth Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Bandwidth	<=1 MHz (20dB bandwidth)	2400~2483.5
Channel Separation	>25KHz or >two-thirds of the 20 dB bandwidth Which is greater	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Channel Separation: RBW=30 kHz, VBW=100 kHz.

Bandwidth: RBW=30 kHz, VBW=100 kHz.

- (3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
 - (4) Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:30 kHz, and Video Bandwidth:100 kHz. Sweep Time set auto.

9.4 EUT Operating Condition

The EUT was set to the Hopping Mode for Channel Separation Test and continuously transmitting for the Bandwidth Test.

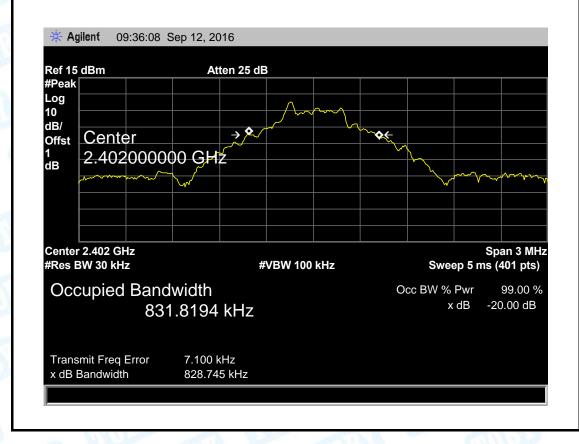


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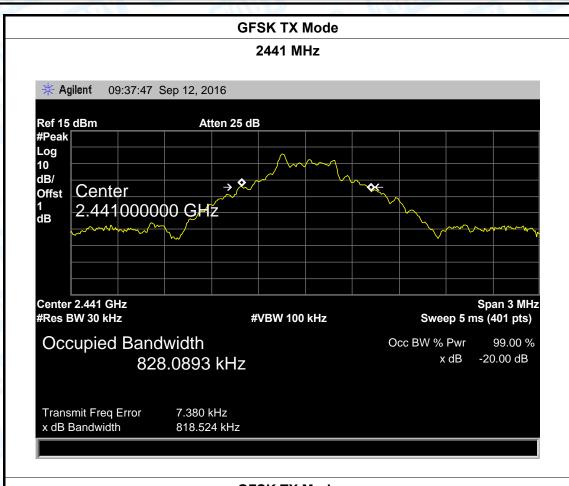
9.5 Test Data

EUT:	Sm	art Watch	Model Name :	S1
Temperature:	25	$^{\circ}$ C	Relative Humidity:	55%
Test Voltage:	DC	3.7V		
Test Mode:	TX	Mode (GFSK)	CHILLES .	A HILL
Channel freque (MHz)	ncy	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)
2402		831.8194	828.745	
		1		
2441		828.0893	818.524	

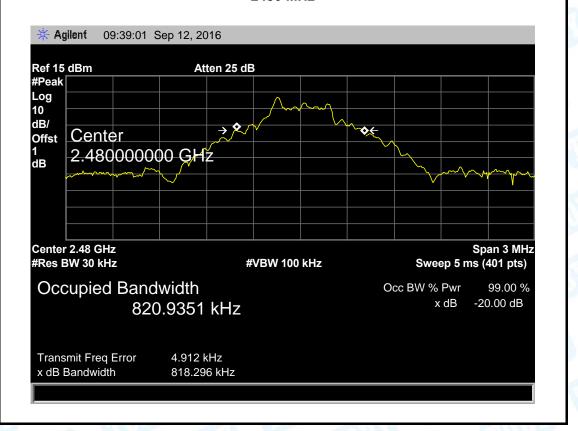
GFSK TX Mode











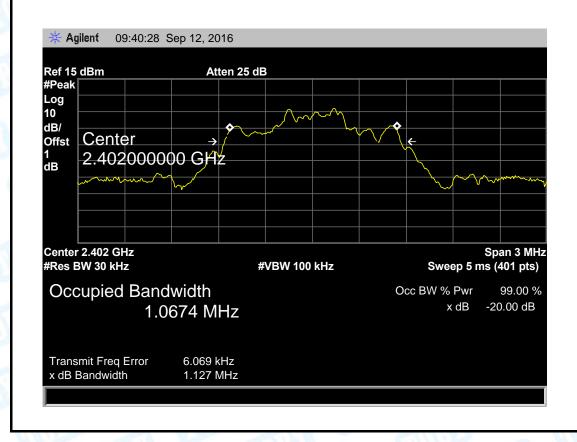


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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	ST CO	(3)
Test Mode:	TX Mode (π /4-DQPSK)		
			20dB

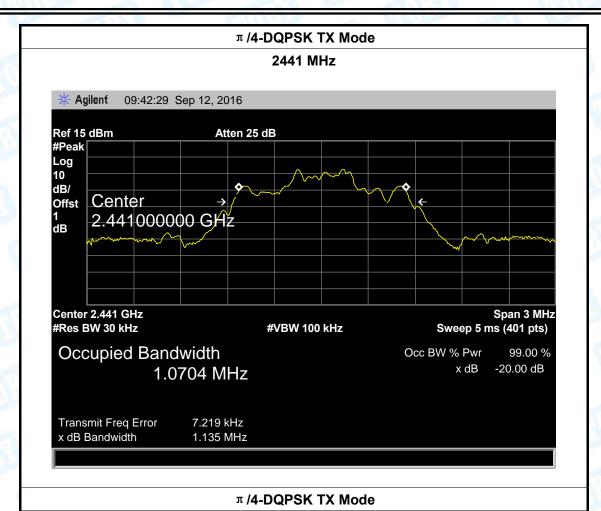
Channel frequency (MHz)	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)
2402	1067.40	1127.00	751.33
2441	1070.40	1135.00	756.67
2480	1068.90	1125.00	750.00

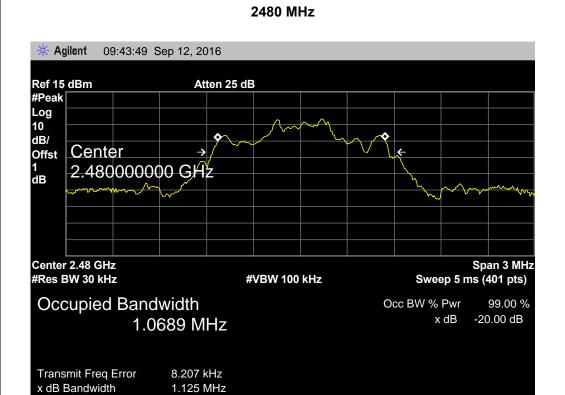
π/4-DQPSK TX Mode





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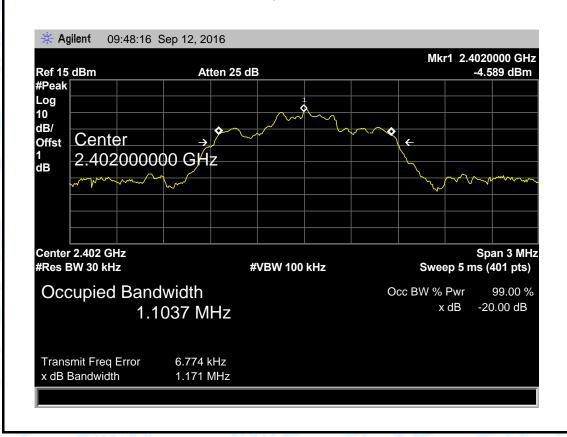


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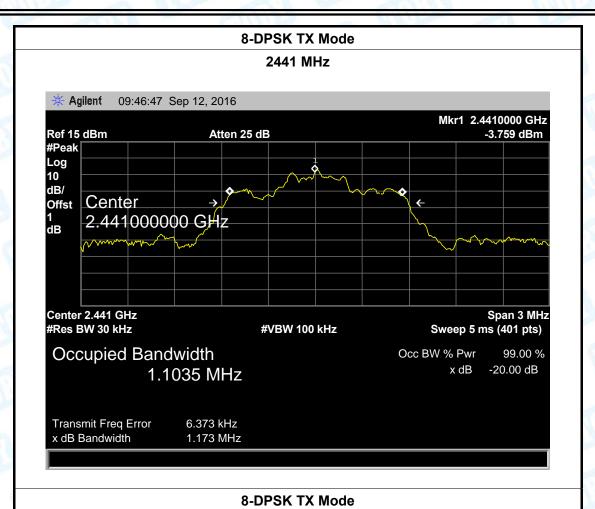
EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	TX Mode (8-DPSK)		

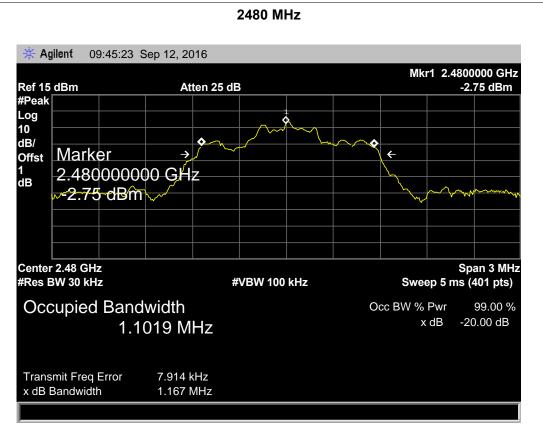
Channel frequency (MHz)	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)
2402	1103.70	1171.00	780.67
2441	1103.50	1173.00	778.00
2480	1101.90	1167.00	782.00

8-DPSK TX Mode









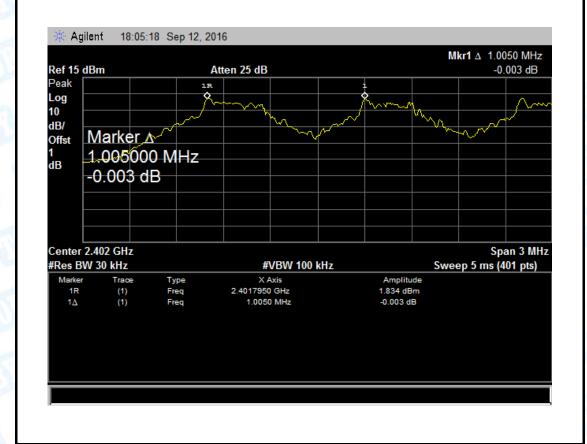


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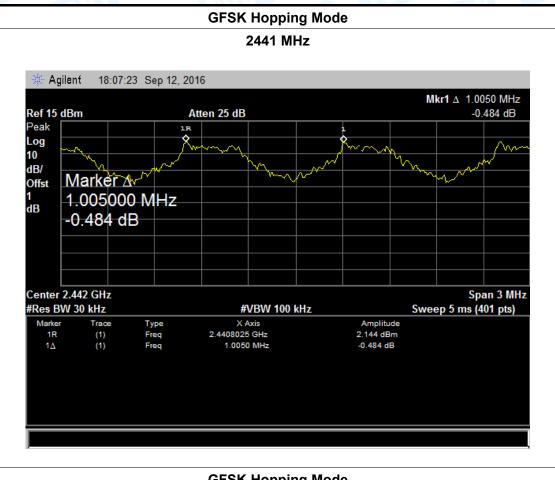
EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (GFSK)		

Channel frequency	Separation Read Value	Separation Limit		
(MHz)	(kHz)	(kHz)		
2402	1005.00	828.745		
2441	1005.00	818.524		
2480	1005.00	818.296		

GFSK Hopping Mode







GFSK Hopping Mode





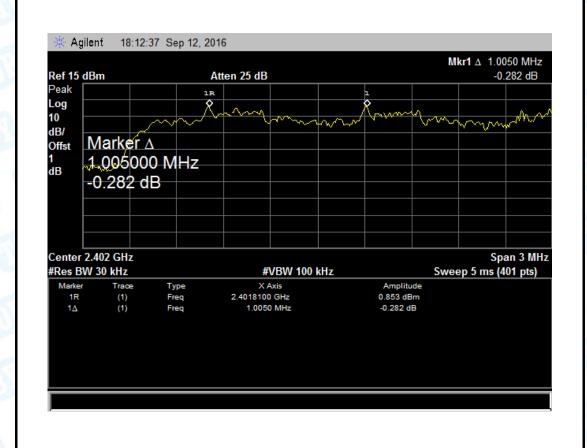
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EUT:	Smart Watch	Model Name :	S1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		

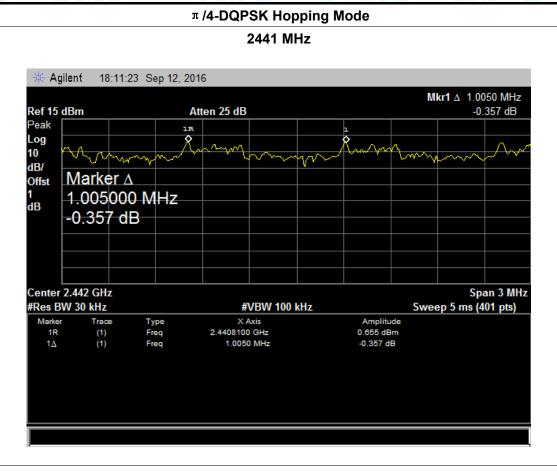
Test Mode: Hopping Mode (π /4-DQPSK)

Channel frequency	Separation Read Value	Separation Limit		
(MHz)	(kHz)	(kHz)		
2402	1005.00	751.33		
2441	1005.00	756.67		
2480	1005.00	750.00		

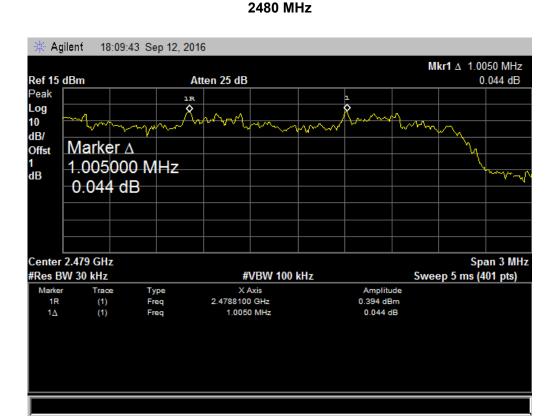
π/4-DQPSK Hopping Mode







π /4-DQPSK Hopping Mode





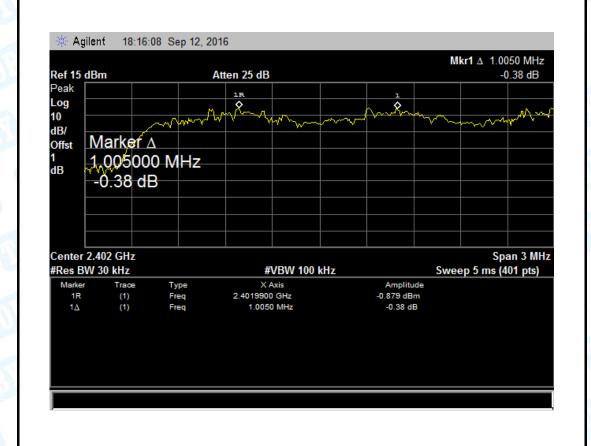
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EUT:	Smart Watch	Model Name:	S1
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Toot Model	Happing Made (9 DDSK)	AND THE RESERVE OF THE PERSON	Control of the last

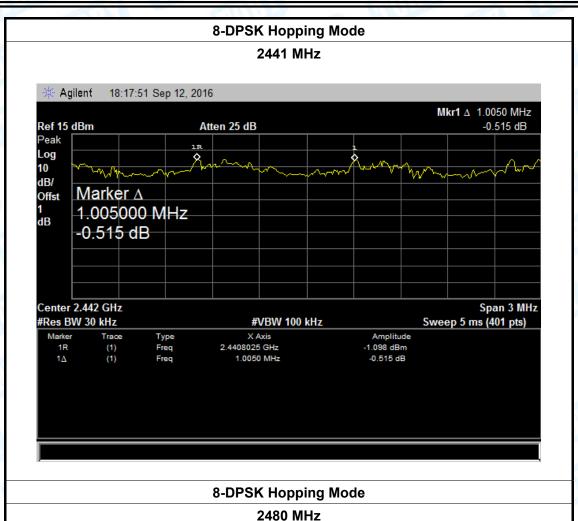
Test Mode: Hopping Mode (8-DPSK)

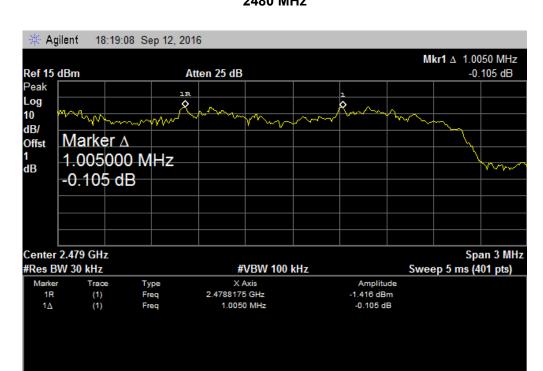
Channel frequency	Separation Read Value	Separation Limit	
(MHz)	(kHz)	(kHz)	
2402	1005.00	780.67	
2441	1005.00	778.00	
2480	1005.00	782.00	

8-DPSK Hopping Mode











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10. Peak Output Power Test

10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.247 (b) (1)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	Hopping Channels>75 Power<1W(30dBm) Other <125 mW(21dBm)	2400~2483.5

10.2 Test Setup



10.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Peak Detector: RBW=1 MHz, VBW=3 MHz for bandwidth less than 1MHz. RBW=3 MHz, VBW=3 MHz for bandwidth more than 1MHz.

10.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.



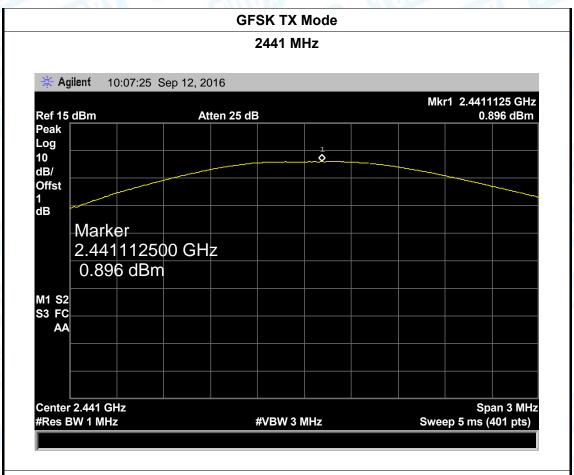
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10.5 Test Data

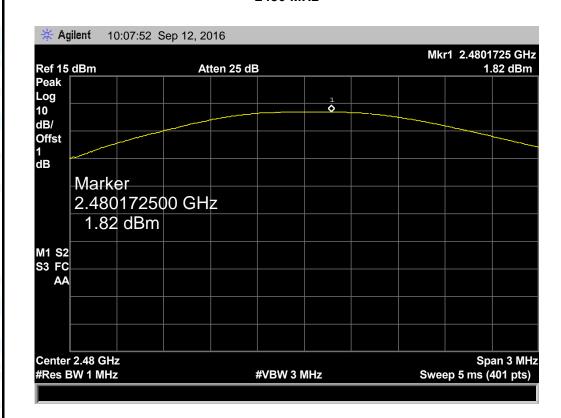
JT:		Smart Watch Model Name : 25 ℃ Relative Humidity:			Model Name :		S1
mperat	ure:			tive Humidity:	55%		
st Volta	age:	DC 3.7V		6	(All)		MARIN
st Mod	e:	TX Mode	(GFSK)	CO A			
nannel	frequen	ncy (MHz)	Test Res	ult (dBm)	Limit (d	dBm)
	2402		-1.	493			
2441		0.896			30		
2480		1.8	820				
			GFSK 1	TX Mode	'		
			2402	2 MHz			
	dBm		Atten 25 dB			-1	.493 dBm
∦ Ag	ilent 09:	:49:33 Sep 1	2, 2016			Mkr1 2.402	01275 GHz
	abiii		Atter 20 ab			-1	.493 dBm
Peak	ub.iii		Atten 20 dB			-1	.493 dBm
Peak Log 10			Atten 20 dB	1 ♦		-1	.493 dBm
Peak Log			ARCHIZOGE	1 ◊		-1	.493 dBm
Peak Log 10 dB/		,	ARCHIZOGE	1 ◊		-1	.493 dBm
Peak Log 10 dB/ Offst 1	Marke	PF	Attenzo	1 •		-1	.493 dBm
Peak Log 10 dB/ Offst 1	Marke 2.402	1275 0 0 (1 •		-1	.493 dBM
Peak Log 10 dB/ Offst 1	Marke	1275 0 0 (1 •		-1	.493 dBm
Peak Log 10 dB/ Offst 1 dB	Marke 2.402	1275 0 0 (1 •		-1	.493 dBM
Peak Log 10 dB/ Offst 1 dB	Marke 2.402	1275 0 0 (•		-1	.493 dBm
Peak Log 10 dB/ Offst 1 dB	Marke 2.402	1275 0 0 (•		-1	.493 dBM
Peak Log 10 dB/ Offst 1 dB	Marke 2.402	1275 0 0 (1		-1	.493 dBM
Peak Log 10 dB/ Offst 1 dB M1 S2 S3 FC AA	Marke 2.402	127500 (3 dBm		1			pan 3 MHz



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GFSK TX Mode

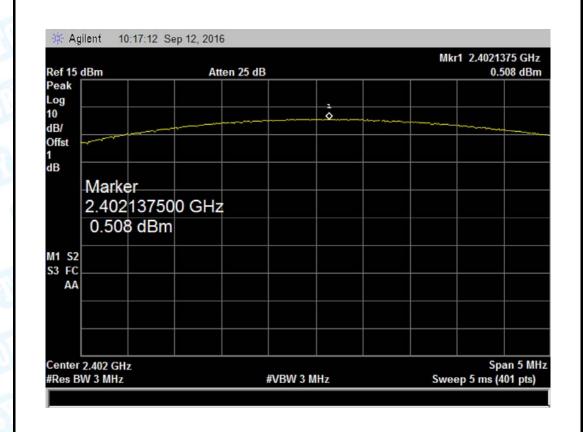




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EUT:	Smart Watch		Model Name :		S1
Temperature:	25 ℃		Rel	ative Humidity:	55%
Test Voltage:	DC 3.7V				
Test Mode:	TX Mode	(π /4-DQPSK)		J. Killian	
Channel frequen	cy (MHz)	Test Result (dBm)		Limit (dl	Bm)
2402		0.508			
2441		-0.317		21	
2480		0.129			
		- /4 DODGK TV Mad			

π /4-DQPSK TX Mode



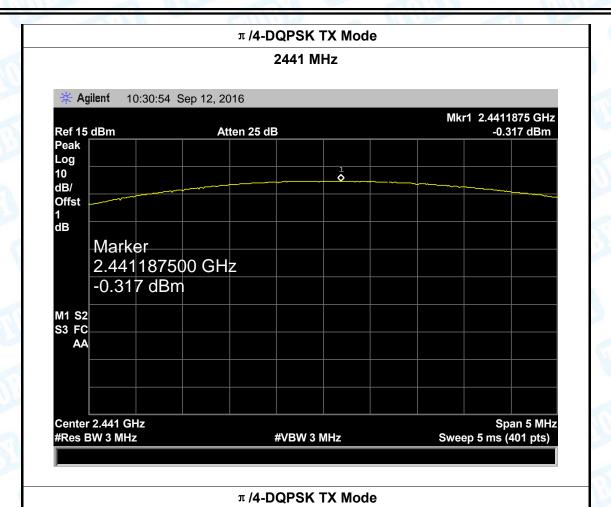


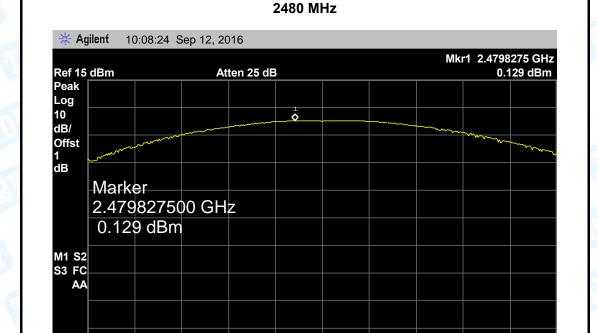
Center 2.48 GHz

#Res BW 1 MHz

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#VBW 3 MHz

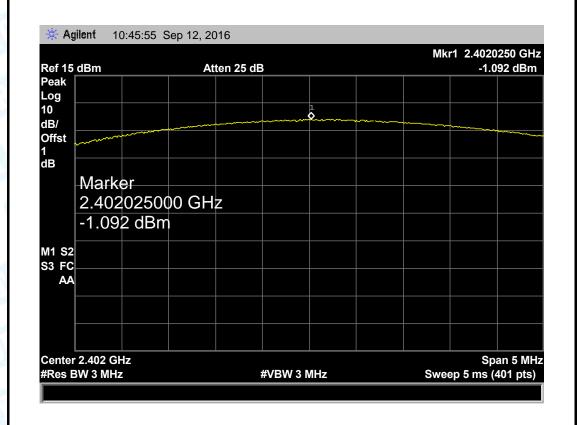
Span 3 MHz

Sweep 5 ms (401 pts)



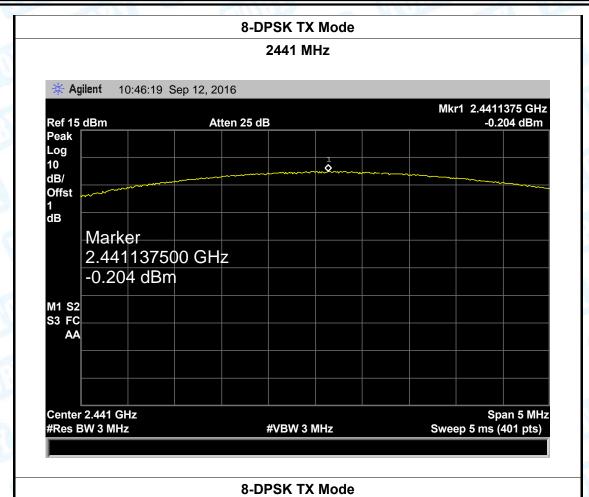
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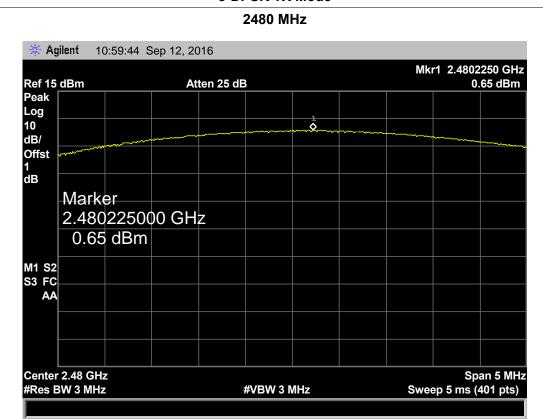
EUT:	Smart Watch		Model Name :		S1
Temperature:	25 ℃		Relative Hu	midity:	55%
Test Voltage:	DC 3.7V			TO BE	
Test Mode:	TX Mode	(8-DPSK)			
Channel frequen	cy (MHz)	Test Result (dBm)	L	₋imit (dl	Bm)
2402		-1.092			
2441		-0.204		21	
2480		0.650			
		8-DPSK TX Mode			





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11. Antenna Requirement

11.1 Standard Requirement

11.1.1 Standard FCC Part 15.203

11.1.2 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 shall be considered sufficient to comply with the provisions of this Section. 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.

11.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 1.1 dBi, and the antenna connector is de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

The EUT antenna is a Integral antenna. It complies with the standard requirement.

	Antenna Type
a Gu	▼ Permanent attached antenna
	□ Unique connector antenna
A.S.	□ Professional installation antenna