

# FCC Test Report

Product Name	: Android Based UI
Trade Name	: PCI
Model No.	CSD-ELINK2
FCC ID.	: LY5-PCIABUI

Applicant: PCI Private LimitedAddress: 35 Pioneer Road North, Singapore 628475 Singapore

Date of Receipt	<i>:</i> Feb. 03, 2020
Issued Date	:Mar. 17, 2020
Report No.	: 2020009R-RFUSP01V01
Report Version	: V1.0



The test results relate only to the samples tested.

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## Test Report Certification

Issued Date : Mar. 17, 2020 Report No. : 2020009R-RFUSP01V01



Product Name		Android Based UI
		PCI Private Limited
Applicant		
Address	:	35 Pioneer Road North, Singapore 628475 Singapore
Manufacturer	:	PCI Private Limited
Address	:	35 Pioneer Road North, Singapore 628475 Singapore
Trade name		PCI
Model No.	:	CSD-ELINK2
FCC ID.	:	LY5-PCIABUI
EUT Voltage	:	DC 5V
Testing Voltage	:	DC 5V
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2018
		ANSI C63.10: 2013
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu
		County 310, Taiwan, R.O.C.
		TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied
		•
Documented By	:	Const 1.
		Voltor 132
		( Carol Tsai / Senior Engineering Adm. Specialist )
		Devices 1
Tested By	:	Ruellan. Lin
		( Rueyyan Lin / Senior Engineer )
		Λ
Approved By	:	Louis Hou
		20000371000
		(Louis Hsu / Deputy Manager)
	_	



## **Revision History**

Report No.	Version	Description	Issued Date
2020009R-RFUSP01V01	V1.0	Initial issue of report	Mar. 17, 2020



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### 1. General Information

## 1.1. EUT Description

Product Name	Android Based UI
Trade Name	PCI
Model No.	CSD-ELINK2
Frequency Range/Channel Number	2402~2480MHz / 79 Channels
Type of Modulation	GFSK, π/4-DQPSK, 8-DPSK

Antenna Information	
Antenna Type	Dipole PCB Antenna
Antenna Gain	3.59 dBi



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

- 1. This device is an Android Based UI including 2.4GHz b/g/n, 5GHz a/n/ac, BT2.0/BT 4.0 transmitting and receiving functions.
- 2. Regards to the frequency band operation; the lowest 
  imiddle and highest frequency of channel were selected to perform the test, and then shown on this report.
- 3. The EUT description is from the customer declaration.

#### 1.2. Test Mode

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

|--|

Test Items	Modulation	Channel	Result
Conducted Emission	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	N/A
Maximum peak conducted output power	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
Radiated Emission	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
RF antenna conducted test	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
Band Edge	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
Number of hopping Frequency	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
Carrier Frequency Separation	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
-20dB Bandwidth	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies
Dwell Time	GFSK/π/4-DQPSK/ 8-DPSK	00/39/78	Complies

Note: Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

#### 1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
N/A					

## 1.4. Configuration of tested System

EUT

#### 1.5. EUT Exercise Software

1	Set the EUT as shown in Section 1.4.
2	Execute the "Engineer Mode" on the Android system.
3	Configure test mode, test channel and data rate.
4	EUT start transmitting or receiving continuously.
5	Verify that the device is working properly.



## 1.6. Test Facility

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)		15 - 35	23	
Humidity (%RH)	FCC PART 15 C 15.207	25 - 75	50	
Barometric pressure (mbar)	Conducted Emission	860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	24	
Humidity (%RH)	Maximum peak conducted	25 - 75	45	3
Barometric pressure (mbar)	output power	860 - 1060	950-1000	
Temperature (°C)		15 - 35	25	
Humidity (%RH)	FCC PART 15 C 15.247 Radiated Emission	25 - 75	54	2
Barometric pressure (mbar)	Radiated Emission	860 - 1060	950-1000	
Temperature (°C)		15 - 35	24	
Humidity (%RH)	FCC PART 15 C 15.247 RF antenna conducted test	25 - 75	45	3
Barometric pressure (mbar)	RF antenna conducted test	860 - 1060	950-1000	
Temperature (°C)		15 - 35	25	
Humidity (%RH)	FCC PART 15 C 15.247 Band Edge	25 - 75	50	2
Barometric pressure (mbar)	Band Euge	860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	24	
Humidity (%RH)	Number of hopping Frequency	25 - 75	45	3
Barometric pressure (mbar)	Number of hopping Frequency	860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	24	
Humidity (%RH)	Carrier Frequency Separation	25 - 75	45	3
Barometric pressure (mbar)	Carrier Frequency Separation	860 - 1060	950-1000	
Temperature (°C)		15 - 35	24	
Humidity (%RH)	FCC PART 15 C 15.247 -20dB Bandwidth	25 - 75	45	3
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)		15 - 35	24	
Humidity (%RH)	FCC PART 15 C 15.247 Dwell Time	25 - 75	45	3
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test site information refers to Laboratory Information.

#### Laboratory Information

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <u>http://www.dekra.com.tw</u>

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.				
Address	1. No. 75-2, 3rd Lin, WangYe Keng, Yonghxing Tsuen, Qionglin				
	Shiang, Hsinchu County 307, Taiwan, R.O.C.				
	2. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu				
	County 31061, Taiwan, R.O.C.				
	3. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu				
	County 31061, Taiwan, R.O.C.				
Phone number	1. +886-3-592-8858				
	2. +886-3-582-8001				
	3. +886-3-582-8001				
Fax number	1. +886-3-592-8859				
	2. +886-3-582-8958				
	3. +886-3-582-8958				
Email address	info.tw@dekra.com				
Website	http://www.dekra.com.tw				

## 1.7. List of Test Equipment

Maximum peak conducted output power / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power	Anritsu	ML2496A	1602004	2019/12/02	2020/12/01
Meter Dual Input	Annisu	ML2490A	1002004	2019/12/02	2020/12/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	2019/12/02	2020/12/01
Pulse Power Sensor	Anritsu	MA2411B	1531044	2019/12/02	2020/12/01
Power Meter	Keysight	8990B	MY51000248	2019/05/21	2020/05/20
Power Sensor	Keysight	N1923A	MY57240005	2019/05/21	2020/05/20

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#### Radiated Emission / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2019/10/21	2020/10/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/02/21	2021/02/20
Bilog Antenna	Teseq	CBL6112D	23191	2019/06/17	2020/06/16
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2019/05/28	2020/05/27
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/12/27	2020/12/26
Pre-Amplifier	DEKRA	AP-025C	12183122	2019/09/24	2020/09/23
Pre-Amplifier	EMCI	EMC11830I	980366	2019/12/03	2020/12/02
Pre-Amplifier	DEKRA	AP-400C	201801231	2019/12/03	2020/12/02
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2019/10/25	2020/10/24
Band Reject Filter	Micro-Tronics	BRM50702	G192	2019/03/27	2020/03/26
Signal Analyzer	R&S	FSV40	101435	2019/07/08	2020/070/7
Coaxial Cable(16m)	Huber+Suhner	SF104	CB2-H	2019/07/25	2020/07/24
EMI system	DEKRA	Version 1.0	CB2-H	NA	NA



#### RF antenna conducted test / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2019/05/03	2020/05/02
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10

#### Band Edge / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2019/10/21	2020/10/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2019/03/15	2020/03/14
Bilog Antenna	Teseq	CBL6112D	23191	2019/06/17	2020/06/16
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2019/05/28	2020/05/27
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/12/27	2020/12/26
Pre-Amplifier	DEKRA	AP-025C	12183122	2019/09/24	2020/09/23
Pre-Amplifier	EMCI	EMC11830I	980366	2019/12/03	2020/12/02
Pre-Amplifier	DEKRA	AP-400C	201801231	2019/12/03	2020/12/02
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2019/10/25	2020/10/24
Band Reject Filter	Micro-Tronics	BRM50702	G192	2019/03/27	2020/03/26
Signal Analyzer	R&S	FSV40	101435	2019/07/08	2020/070/7
Coaxial Cable(16m)	Huber+Suhner	SF104	СВ2-Н	2019/07/25	2020/07/24
EMI system	DEKRA	Version 1.0	СВ2-Н	NA	NA

#### Number of hopping frequency / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2019/05/03	2020/05/02
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10

#### Carrier Frequency Separation / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2019/05/03	2020/05/02
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10



#### -20dB Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2019/05/03	2020/05/02
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10

Dwell Time / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2019/05/03	2020/05/02
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2019/09/11	2020/09/10

Note: All equipment upon which need to calibrated are with calibration period of 1 year.



## 1.8. Duty Cycle

Mode	On	On+Off	Duty	Duty Factor(dB)	Duty Factor(dB)	1/T Minimum
wode	Time(ms)	Time(ms)	Cycle(%)	linear voltage	Power	VBW (kHz)
DH5	2.880	3.751	76.78%	2.295092	1.15	0.347
2DH5	2.872	3.751	76.57%	2.319253	1.16	0.348
3DH5	2.870	3.751	76.51%	2.325303	1.16	0.348

#### <u>DH5</u>

Agilent Spe	etrun	n Analyz	er - S	wept SA													
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8						-							-				
10																	
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#### <u>2DH5</u>

<u>3DH5</u>

Agilent Spectrun								
X Center Fre	RF 50 Ω cq 2.40200	AC 0000 GHz	SENSE	Avg Type	ALIGNAUTO : Log-Pwr	TRAC	MFeb 05, 2020 E 1 2 3 4 5 6 E WWWWWWW	Frequency
	Ref 0.00 dE	PNO: Fast IFGain:Low 3m				™ Mkr1 6.	781 ms 84 dBm	Auto Tune
-10.0 -20.0		•1	24	<b>₩3</b> Δ1				Center Free 2.402000000 GH:
-40.0								Start Free 2.402000000 GH
-70.0 -80.0 -90.0								<b>Stop Fre</b> 2.402000000 GH
Center 2.40 Res BW 1.0			3W 1.0 MHz		weep 20	.00 ms (1	pan 0 Hz 0001 pts)	<b>CF Ste</b> 1.000000 M⊢ <u>Auto</u> Ma
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7 8 9 10 11 4								
MSG					STATUS	5		<u>L</u>



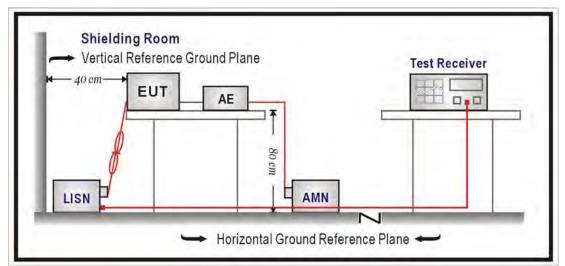
## 1.9. Uncertainty

Test item	Uncertainty					
Maximum peak conducted output power	± 1.27 dB					
Radiated Emission	$30$ MHz $\sim$ 1GHz as ±3.43dB					
	1GHz $\sim$ 26.5Ghz as ±3.65dB					
RF antenna conducted test	± 1.27dB					
Band Edge	±3.65dB					
Number of hopping frequency	± 1.27 dB					
Carrier Frequency Separation	± 50 Hz					
-20dB Bandwidth	± 50Hz					
Dwell Time	± 25 msec					



#### 2. Conducted Emission

#### 2.1. Test Setup



#### 2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)								
Frequency	QP	AV						
0.15 - 0.50	66 - 56	56 - 46						
0.50 - 5.0	56	46						
5.0 - 30	60	50						

Remarks: In the above table, the tighter limit applies at the band edges.

#### 2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

#### 2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2018

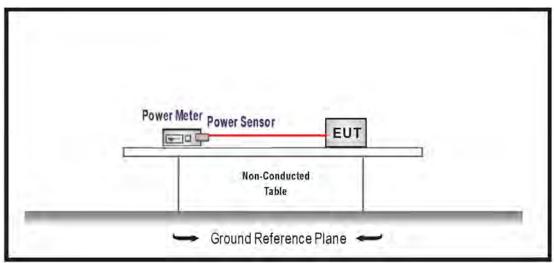
#### 2.5. Test Result

Owing to the DC operation of EUT, this test item is not performed.



#### 3. Maximum peak conducted output power

#### 3.1. Test Setup



#### 3.2. Test procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements

#### 3.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: 1 Watt for systems employing at least 50 hopping channels; and, 0.25 Watts for systems employing less than 50 hopping channels.

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

#### 3.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018.



### 3.5. Test Result

Product	Android Based UI	Android Based I II					
Test Item	Maximum peak conducte	Aaximum peak conducted output power					
Test Mode	Mode 1: Transmit Mode						
Date of Test	2020/02/27	2020/02/27 Test Site SR12-H					
Test Temperature	22.0°C	22.0°C Test Humidity 56.0%					

#### GFSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(dBm)	(dBm)
00	2402	7.820	≦30
39	2441	9.470	≦30
78	2480	8.550	≦30

#### π/4-DQPSK

Channel Ne	Frequency	Measure Level	Limit
Channel No.	(MHz)	(dBm)	(dBm)
00	2402	6.840	≦30
39	2441	8.590	≦30
78	2480	7.650	≦30

#### 8-DPSK

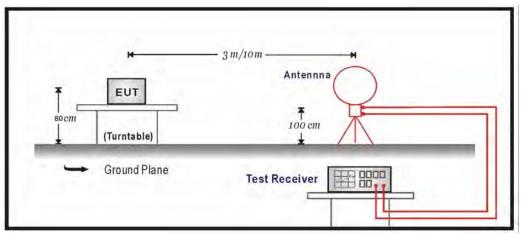
Channel Na	Frequency	Measure Level	Limit
Channel No.	(MHz)	(dBm)	(dBm)
00	2402	6.830	≦30
39	2441	8.570	≦30
78	2480	7.650	≦30



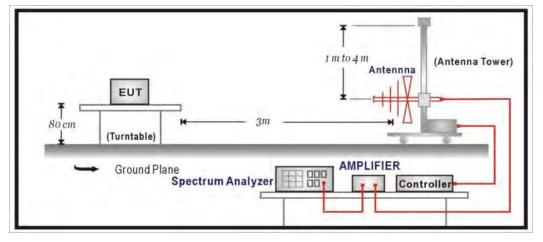
#### 4. Radiated Emission

#### 4.1. Test Setup

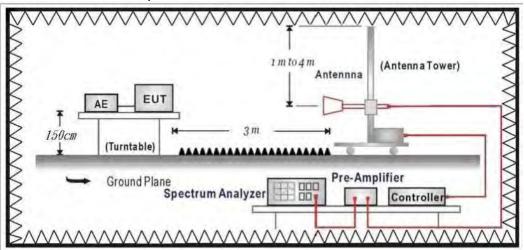
Under 30MHz Test Setup:



#### Under 1GHz Test Setup:



#### Above 1GHz Test Setup:



#### 4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits							
Frequency (MHz)	uV/m	dBuV/m					
30-88	100	40					
88-216	150	43.5					
216-960	200	46					
Above 960	500	54					

Remarks: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### 4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

On any frequency or frequencies form 9KHz(inculde The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

#### 4.4. Test Specification

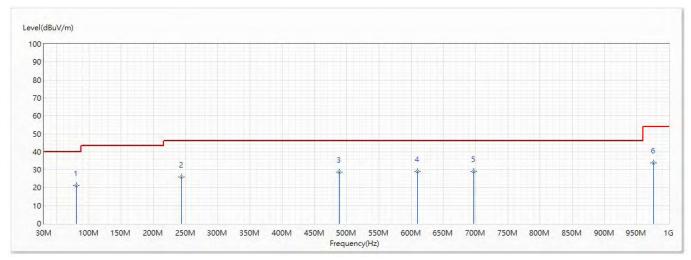
According to FCC Part 15 Subpart C Paragraph 15.247: 2018



#### 4.5. Test Result

#### 30MHz-1GHz Spurious

Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	80.44	21.11	40.00	-18.89	28.25	-7.14	QP
2	244.006	25.94	46.00	-20.06	27.62	-1.68	QP
3	488.083	28.57	46.00	-17.43	24.12	4.45	QP
* 4	609.939	29.09	46.00	-16.91	23.01	6.08	QP
5	697.36	28.99	46.00	-17.01	21.98	7.01	QP
6	976.114	33.85	54.00	-20.15	23.09	10.76	QP

Note:

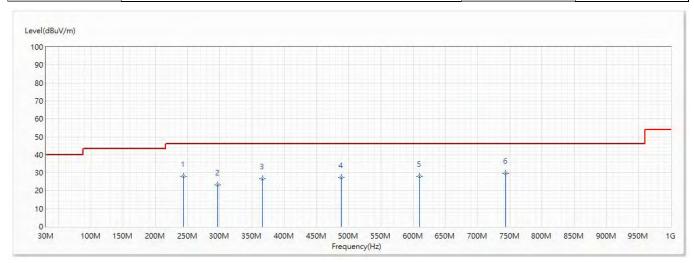
1. All reading levels is Quasi-Peak value.

2. " \* ", means this data is the worst value.

3. Emission Level = Reading Level + Correct Factor



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0

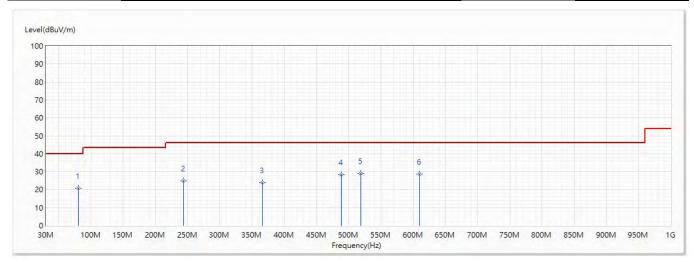


No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	244.006	28.13	46.00	-17.87	29.81	-1.68	QP
2	296.993	23.19	46.00	-22.81	23.67	-0.48	QP
3	365.984	26.72	46.00	-19.28	24.97	1.75	QP
4	488.083	27.39	46.00	-18.61	22.94	4.45	QP
5	610.06	27.87	46.00	-18.13	21.79	6.08	QP
* 6	744.041	29.76	46.00	-16.24	22.16	7.60	QP

- 1. All reading levels is Quasi-Peak value.
- 2. " \* ", means this data is the worst value.
- 3. Emission Level = Reading Level + Correct Factor



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0

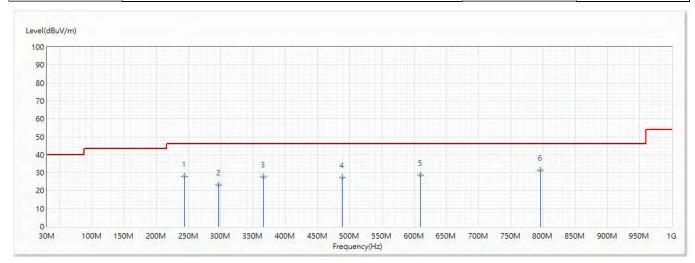


No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	80.44	20.73	40.00	-19.27	27.87	-7.14	QP
2	244.006	25.06	46.00	-20.94	26.74	-1.68	QP
3	365.984	23.94	46.00	-22.06	22.19	1.75	QP
4	488.083	28.45	46.00	-17.55	24.00	4.45	QP
* 5	518.516	28.91	46.00	-17.09	23.99	4.92	QP
6	610.06	28.68	46.00	-17.32	22.60	6.08	QP

- 1. All reading levels is Quasi-Peak value.
- 2. " \* ", means this data is the worst value.
- 3. Emission Level = Reading Level + Correct Factor



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0

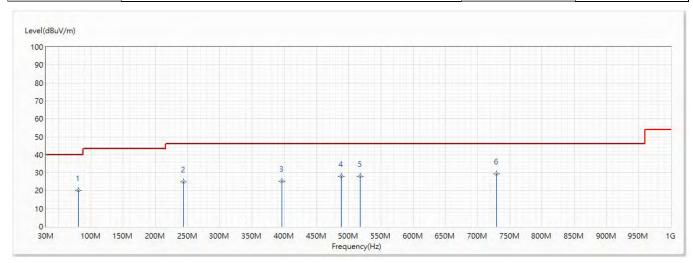


No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	244.006	27.98	46.00	-18.02	29.66	-1.68	QP
2	296.993	23.14	46.00	-22.86	23.62	-0.48	QP
3	365.984	27.54	46.00	-18.46	25.79	1.75	QP
4	487.961	27.17	46.00	-18.83	22.72	4.45	QP
5	609.939	28.51	46.00	-17.49	22.43	6.08	QP
* 6	795.815	31.55	46.00	-14.45	23.29	8.26	QP

- 1. All reading levels is Quasi-Peak value.
- 2. " \* ", means this data is the worst value.
- 3. Emission Level = Reading Level + Correct Factor



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0

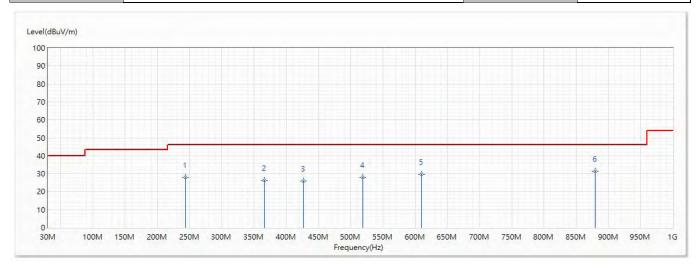


No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	80.561	20.27	40.00	-19.73	27.40	-7.13	QP
2	244.006	25.06	46.00	-20.94	26.74	-1.68	QP
3	396.539	25.34	46.00	-20.66	22.60	2.74	QP
4	487.961	27.84	46.00	-18.16	23.39	4.45	QP
5	518.274	27.92	46.00	-18.08	23.01	4.91	QP
* 6	729.249	29.29	46.00	-16.71	21.87	7.42	QP

- 1. All reading levels is Quasi-Peak value.
- 2. " \* ", means this data is the worst value.
- 3. Emission Level = Reading Level + Correct Factor



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/3/9
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0



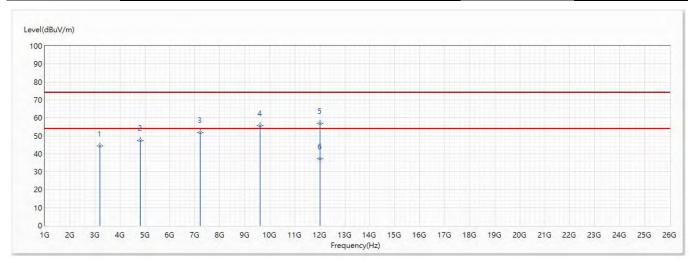
No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	244.006	28.03	46.00	-17.97	29.71	-1.68	QP
2	365.984	26.37	46.00	-19.63	24.62	1.75	QP
3	426.973	25.83	46.00	-20.17	22.47	3.36	QP
4	518.516	28.11	46.00	-17.89	23.19	4.92	QP
5	610.06	29.73	46.00	-16.27	23.65	6.08	QP
* 6	879.478	31.43	46.00	-14.57	22.13	9.30	QP

- 1. All reading levels is Quasi-Peak value.
- 2. " \* ", means this data is the worst value.
- 3. Emission Level = Reading Level + Correct Factor



#### Harmonic & Spurious:

Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1 DH5 2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.666	44.32	74.00	-29.68	58.69	-14.37	PK
2	4804	47.57	74.00	-26.43	56.04	-8.47	PK
3	7206	51.95	74.00	-22.05	51.76	0.19	PK
4	9608	55.60	74.00	-18.40	50.86	4.74	PK
* 5	12010	57.13	74.00	-16.87	48.00	9.13	PK
6	12010	37.13	54.00	-16.87	28.00	9.13	AV

Note:

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

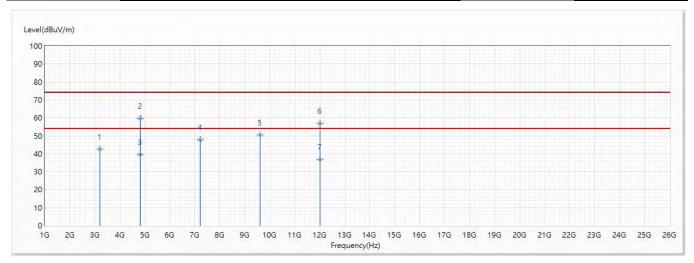
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 DH5 2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.66	42.66	74.00	-31.34	57.03	-14.37	PK
* 2	4804	59.56	74.00	-14.44	68.03	-8.47	PK
3	4804	39.56	54.00	-14.44	48.03	-8.47	AV
4	7206	47.90	74.00	-26.10	47.71	0.19	PK
5	9608	50.40	74.00	-23.60	45.66	4.74	PK
6	12010	57.02	74.00	-16.98	47.89	9.13	PK
7	12010	37.02	54.00	-16.98	27.89	9.13	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

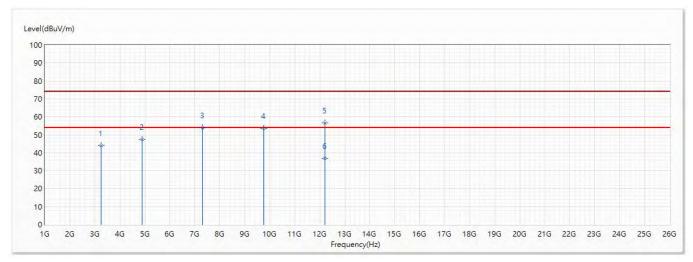
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1 DH5 2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	43.90	74.00	-30.10	58.16	-14.26	PK
2	4882	47.58	74.00	-26.42	55.81	-8.23	PK
3	7323	53.97	74.00	-20.03	53.54	0.43	PK
4	9764	53.52	74.00	-20.48	48.64	4.88	PK
* 5	12205	56.73	74.00	-17.27	48.15	8.58	PK
6	12205	36.73	54.00	-17.27	28.15	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

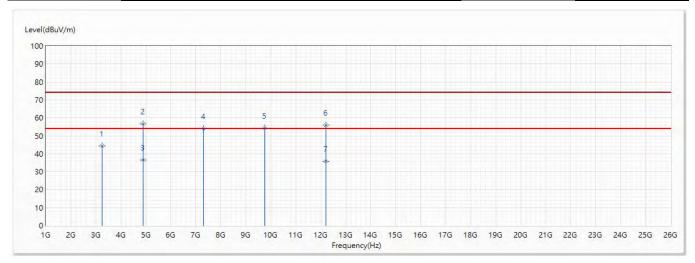
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 DH5 2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	44.42	74.00	-29.58	58.68	-14.26	PK
* 2	4882	56.52	74.00	-17.48	64.75	-8.23	PK
3	4882	36.52	54.00	-17.48	44.75	-8.23	AV
4	7323	53.81	74.00	-20.19	53.38	0.43	PK
5	9764	54.10	74.00	-19.90	49.22	4.88	PK
6	12205	55.97	74.00	-18.03	47.39	8.58	PK
7	12205	35.97	54.00	-18.03	27.39	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

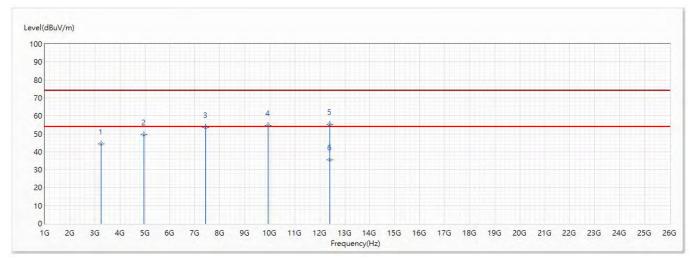
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1 DH5 2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	44.44	74.00	-29.56	58.70	-14.26	PK
2	4960	49.38	74.00	-24.62	57.34	-7.96	PK
3	7440	53.54	74.00	-20.46	52.87	0.67	PK
4	9920	54.48	74.00	-19.52	49.44	5.04	PK
* 5	12400	55.39	74.00	-18.61	47.36	8.03	PK
6	12400	35.39	54.00	-18.61	27.36	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

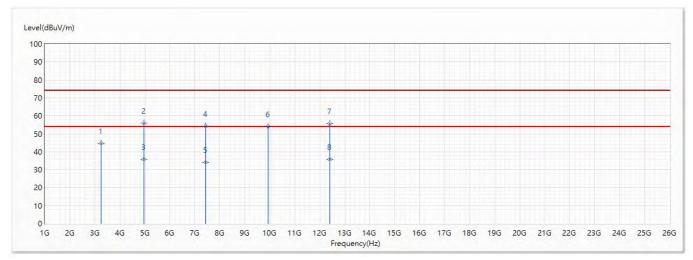
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	44.57	74.00	-29.43	58.83	-14.26	PK
* 2	4960	55.90	74.00	-18.10	63.86	-7.96	PK
3	4960	35.90	54.00	-18.10	43.86	-7.96	AV
4	7440	54.23	74.00	-19.77	53.56	0.67	PK
5	7440	34.23	54.00	-19.77	33.56	0.67	AV
6	9920	54.09	74.00	-19.91	49.05	5.04	PK
7	12400	55.72	74.00	-18.28	47.69	8.03	PK
8	12400	35.72	54.00	-18.28	27.69	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

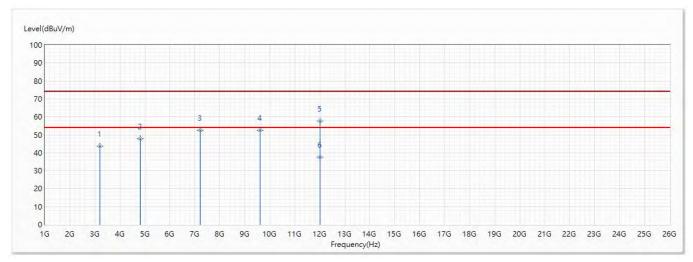
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	INK2 Site	
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.666	43.81	74.00	-30.19	58.18	-14.37	PK
2	4804	47.85	74.00	-26.15	56.32	-8.47	PK
3	7206	52.42	74.00	-21.58	52.23	0.19	PK
4	9608	52.42	74.00	-21.58	47.68	4.74	PK
* 5	12010	57.63	74.00	-16.37	48.50	9.13	PK
6	12010	37.63	54.00	-16.37	28.50	9.13	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

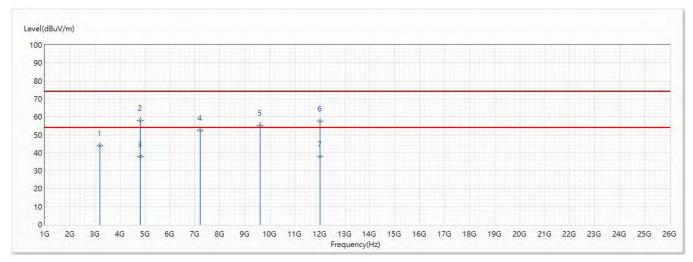
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 2DH5 2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.666	44.19	74.00	-29.81	58.56	-14.37	PK
* 2	4804	57.97	74.00	-16.03	66.44	-8.47	PK
3	4804	37.97	54.00	-16.03	46.44	-8.47	AV
4	7206	52.51	74.00	-21.49	52.32	0.19	PK
5	9608	55.38	74.00	-18.62	50.64	4.74	PK
6	12010	57.78	74.00	-16.22	48.65	9.13	PK
7	12010	37.78	54.00	-16.22	28.65	9.13	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

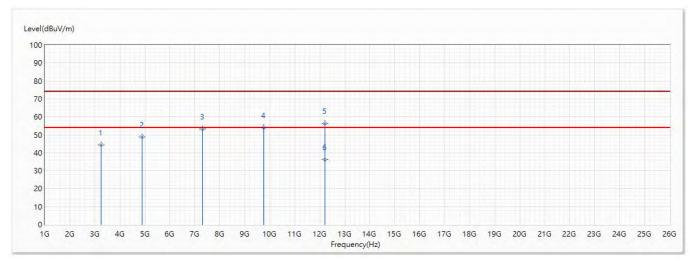
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	44.43	74.00	-29.57	58.69	-14.26	PK
2	4882	48.80	74.00	-25.20	57.03	-8.23	PK
3	7323	53.36	74.00	-20.64	52.93	0.43	PK
4	9764	53.98	74.00	-20.02	49.10	4.88	PK
* 5	12205	56.34	74.00	-17.66	47.76	8.58	PK
6	12205	36.34	54.00	-17.66	27.76	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

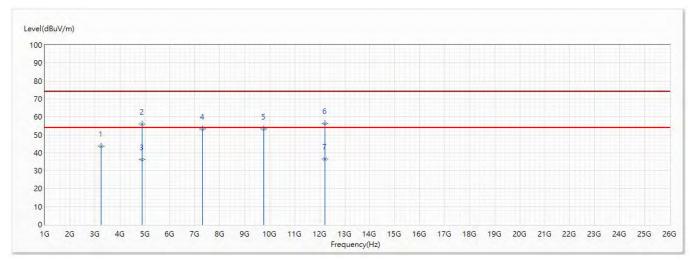
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 2DH5 2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	43.72	74.00	-30.28	57.98	-14.26	PK
2	4882	56.14	74.00	-17.86	64.37	-8.23	PK
3	4882	36.14	54.00	-17.86	44.37	-8.23	AV
4	7323	53.20	74.00	-20.80	52.77	0.43	PK
5	9764	53.10	74.00	-20.90	48.22	4.88	PK
* 6	12205	56.48	74.00	-17.52	47.90	8.58	PK
7	12205	36.48	54.00	-17.52	27.90	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

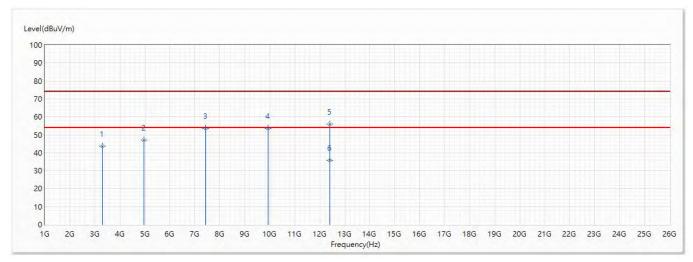
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3306.666	43.53	74.00	-30.47	57.67	-14.14	PK
2	4960	46.94	74.00	-27.06	54.90	-7.96	PK
3	7440	53.47	74.00	-20.53	52.80	0.67	PK
4	9920	53.75	74.00	-20.25	48.71	5.04	PK
* 5	12400	55.86	74.00	-18.14	47.83	8.03	PK
6	12400	35.86	54.00	-18.14	27.83	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

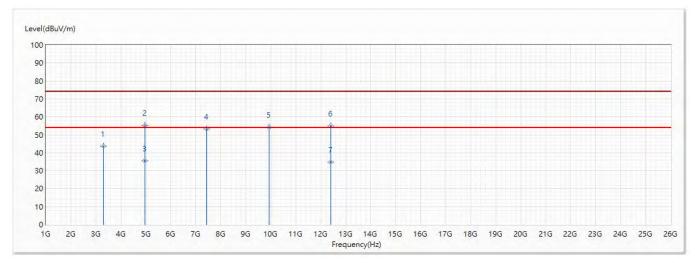
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3306.666	43.59	74.00	-30.41	57.73	-14.14	PK
* 2	4960	55.39	74.00	-18.61	63.35	-7.96	PK
3	4960	35.39	54.00	-18.61	43.35	-7.96	AV
4	7440	53.36	74.00	-20.64	52.69	0.67	PK
5	9920	54.20	74.00	-19.80	49.16	5.04	PK
6	12400	54.93	74.00	-19.07	46.90	8.03	PK
7	12400	34.93	54.00	-19.07	26.90	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

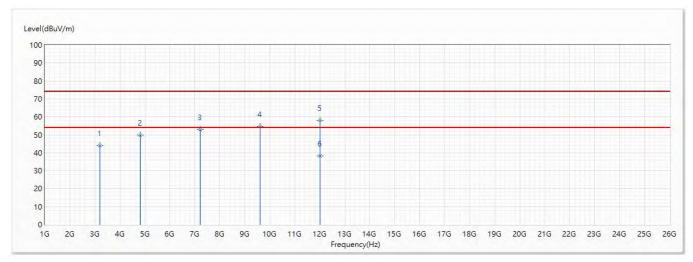
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.666	43.97	74.00	-30.03	58.34	-14.37	PK
2	4804	49.94	74.00	-24.06	58.41	-8.47	PK
3	7206	52.76	74.00	-21.24	52.57	0.19	PK
4	9608	54.63	74.00	-19.37	49.89	4.74	PK
* 5	12010	58.11	74.00	-15.89	48.98	9.13	PK
6	12010	38.11	54.00	-15.89	28.98	9.13	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

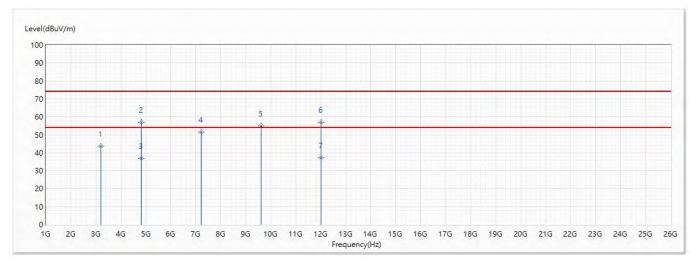
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3202.666	43.78	74.00	-30.22	58.15	-14.37	PK
2	4804	56.97	74.00	-17.03	65.44	-8.47	PK
3	4804	36.97	54.00	-17.03	45.44	-8.47	AV
4	7206	51.57	74.00	-22.43	51.38	0.19	PK
5	9608	54.92	74.00	-19.08	50.18	4.74	PK
* 6	12010	57.14	74.00	-16.86	48.01	9.13	PK
7	12010	37.14	54.00	-16.86	28.01	9.13	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

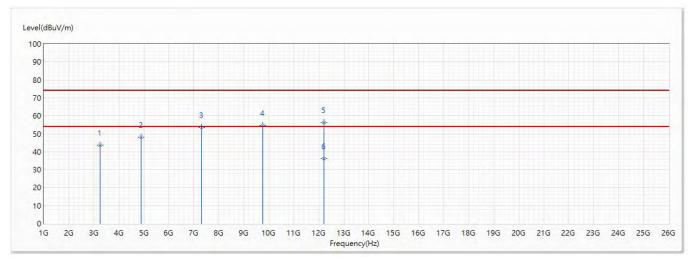
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1 3DH5 2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	43.79	74.00	-30.21	58.05	-14.26	PK
2	4882	48.11	74.00	-25.89	56.34	-8.23	PK
3	7323	53.63	74.00	-20.37	53.20	0.43	PK
4	9764	54.51	74.00	-19.49	49.63	4.88	PK
* 5	12205	56.28	74.00	-17.72	47.70	8.58	PK
6	12205	36.28	54.00	-17.72	27.70	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

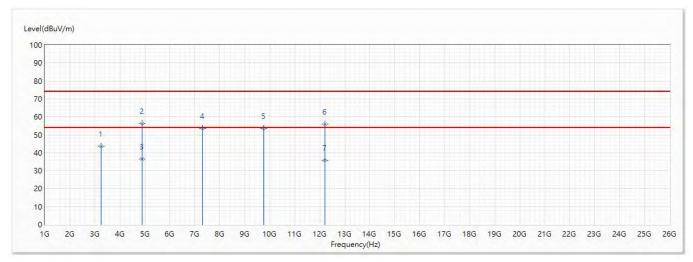
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 3DH5 2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3254.666	43.78	74.00	-30.22	58.04	-14.26	PK
* 2	4882	56.36	74.00	-17.64	64.59	-8.23	PK
3	4882	36.36	54.00	-17.64	44.59	-8.23	AV
4	7323	53.57	74.00	-20.43	53.14	0.43	PK
5	9764	53.74	74.00	-20.26	48.86	4.88	PK
6	12205	55.94	74.00	-18.06	47.36	8.58	PK
7	12205	35.94	54.00	-18.06	27.36	8.58	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

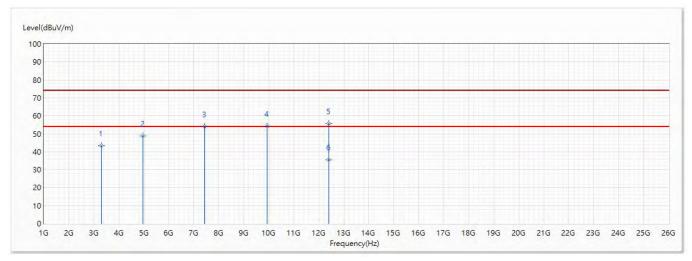
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3306.666	43.38	74.00	-30.62	57.52	-14.14	PK
2	4960	48.71	74.00	-25.29	56.67	-7.96	PK
3	7440	53.83	74.00	-20.17	53.16	0.67	PK
4	9920	54.20	74.00	-19.80	49.16	5.04	PK
* 5	12400	55.51	74.00	-18.49	47.48	8.03	PK
6	12400	35.51	54.00	-18.49	27.48	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

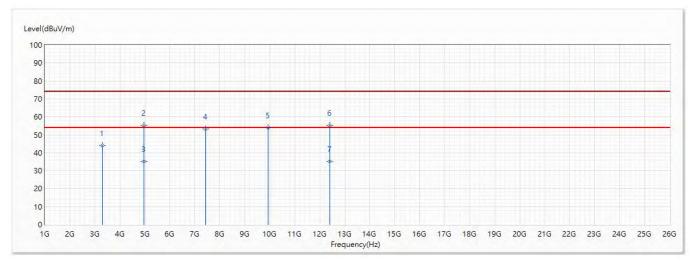
2. " \* ", means this data is the worst value.

3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/24
Test Mode	Mode 1: Transmit Mode	Engineer	Scott
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1 3DH5 2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	3306.666	44.08	74.00	-29.92	58.22	-14.14	PK
* 2	4960	55.21	74.00	-18.79	63.17	-7.96	PK
3	4960	35.21	54.00	-18.79	43.17	-7.96	AV
4	7440	53.26	74.00	-20.74	52.59	0.67	PK
5	9920	54.00	74.00	-20.00	48.96	5.04	PK
6	12400	55.12	74.00	-18.88	47.09	8.03	PK
7	12400	35.12	54.00	-18.88	27.09	8.03	AV

1.All reading above 1GHz is performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst value.

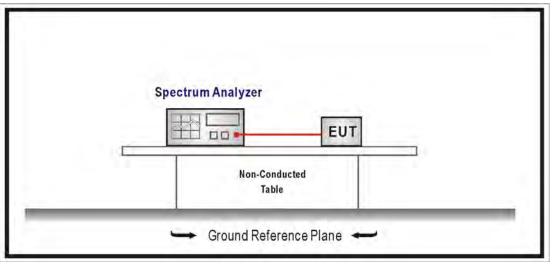
3.Emission Level = Reading Level + Correct Factor.

4. The average measurement was not performed when the peak measured data under the limit of average detection.

## 5. **RF** antenna conducted test

#### 5.1. Test Setup

RF Conducted Measurement:



## 5.2. Limits

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 an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

#### 5.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247

#### 5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018



# 5.5. Test Result

Product	Android Based UI				
Test Item	RF antenna conducted test	RF antenna conducted test			
Test Mode	Mode 1: Transmit Mode				
Date of Test	2020/02/27	Test Site	SR12-H		
Test Temperature	22.0℃	Test Humidity	56.0%		

# GFSK

Channal	Frequency	Measure Level	Limit
Channel	(MHz)	(dBc)	(dBc)
00	2402	53.838	≧20
39	2441	58.330	≧20
78	2480	58.574	≧20

		Channe			
Keysight Spectrum Analyzer - Sw					
RL RF 50 Ω		SENSE:INT	Avg Type: Log-Pwr	02:24:31 PM Feb 27, 2020 TRACE 1 2 3 4 5 6	Frequency
Center Freq 2.40000	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100 Ext Gain: -0.50 dB	TYPE MWWWW DET P NNNNN	
0 dB/div <b>Ref 20.00</b> (	dBm		Δ	Mkr3 2.17 MHz 58.586 dB	Auto Tun
.og		▲3∆2			Comton Eng
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0.0					Start Fre
20.0					2.350000000 GH
0.0					
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0.0					Auto Ma
enter 2.40000 GHz Res BW 100 kHz	#VBW :	▲ 300 kHz	Sweep 1.3	Span 100.0 MHz 33 ms (10001 pts)	FreqOffs
KR MODE TRC SCL	X	Y FUNC	TION FUNCTION WIDTH	FUNCTION VALUE	01
1 N 1 f 2 F 1 f (Δ)	2.402 16 GHz 2.399 99 GHz (Δ)	7.570 dBm 51.017 dBm		E	
3 Δ2 1 f (Δ)	2.355 35 GH2 (Δ) 2.17 MHz (Δ)	58.586 dB			Scale Typ
4 5 6					Log <u>L</u>
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	u: 54764		514100		

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🔤 Ke	ysight Spect	rum Analyzer - Sv	/ept SA									- 6 💌
₩ R Cen		RF 50 S	00000 GH		SEN	ISE:INT	Avg Type Avg Hold:	: Log-Pwr	TRAC	HFeb 27, 2020 E 1 2 3 4 5 6 E MWWWW	Fre	quency
			IF	NO:Fast 🕞 Gain:Low	#Atten: 30		Ext Gain:	-0.50 dB	•• kr5 -44.	88 MHz	ļ	Auto Tune
10 dl Log 10.0		Ref 20.00	dBm			5∆4			80	.279 dB		enter Freq 000000 GHz
-10.0 -20.0 -30.0												<b>Start Freq</b> 000000 GHz
-30.0 -40.0 -50.0												<b>Stop Freq</b> 000000 GHz
-60.0 -70.0		<u>2</u> 04 <b>4. 1940. 194</b> 0. 1940. 19	ad the state of the second	inistan ikata	and the second of the second o	Indonesia	(tetra and a start property)	********	ection and the second	manda a tata a sa	10.0 <u>Auto</u>	CF Step 000000 MHz Man
#Re		4100 GHz 00 kHz	×	#VBW	300 kHz	EUNO		weep 1.3	333 ms (1	00.0 MHz 0001 pts) N VALUE	F	req Offset 0 Hz
1 2 3 4 5	N         1           F         1           Δ2         1           F         1           Δ4         1	$\begin{array}{c c} f \\ f \\ (\Delta) \\ f \\ f \\ f \\ f \\ \end{array}$	2.441 1 2.396 6 44.5 2.486 0	2 GHz (Δ) 4 MHz (Δ)	8.976 dE -60.073 dE 69.048 ( -59.303 dE 68.279 (	3m 3m dB 3m				E	<b>S</b> Log	cale Type <u>Lin</u>
6 MSG (	Ĵ) File <f< td=""><td>I I PICTURE.PN</td><td>G&gt; saved</td><td>1</td><td>m</td><td></td><td> </td><td>STATUS</td><td></td><td></td><td></td><td></td></f<>	I I PICTURE.PN	G> saved	1	m			STATUS				

Channel 39

Channel 78

		n Analyzer - Swe										X
Cen		<sup>ε 50 Ω</sup>	0000 GH	Z NO: Fast 🔾	1	NSE:INT		e: Log-Pwr :>100/100	TRAC	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M WWWWW	Frequenc	У
				ain:Low	#Atten: 3		Ext Gain:	-0.50 dB	/kr3 -4.	09 MHz	Auto 1	Гune
10 dE Log i	3/div <b>R</b> e	ef 20.00 c	IBm						64	.464 dB		
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					I H							
-10.0 -20.0											Start 2.433500000	
-30.0												
-40.0											Stop	
-50.0											2.533500000	) GH
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-70.0											10.000000 <u>Auto</u>	Ma
Cent	ter 2.483	50 GHz							Span 1	00.0 MHz		
#Res	s BW 100	) kHz		#VBW	/ 300 kHz		s	weep 1.3	333 ms (1	0001 pts)	FreqO	οπse 0 H
	MODE TRC SC N 1 f		× 2.480 1	6 GHz	Y 7.642 di	FUNC	TION FUI	NCTION WIDTH	FUNCTION	DN VALUE	1	
2	F 1 f		2.484 2	5 GHz (Δ) 9 MHz (Δ)	-56.822 di 64.464	3m				E	Scale	Тур
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ise 🖂	Prile <pic< td=""><td>TURE.PNC</td><td>a&gt; saved</td><td></td><td></td><td></td><td></td><td>STATUS</td><td></td><td></td><td></td><td></td></pic<>	TURE.PNC	a> saved					STATUS				



Product	Android Based UI							
Test Item	RF antenna conducted test	₹F antenna conducted test						
Test Mode	Mode 1: Transmit Mode							
Date of Test	2020/02/27	Test Site	SR12-H					
Test Temperature	22.0°C	Test Humidity	56.0%					

## π/4-DQPSK

Channal	Frequency	Measure Level	Limit
Channel	(MHz)	(dBc)	(dBc)
00	2402	54.186	≧20
39	2441	57.274	≧20
78	2480	57.739	≧20

🔤 Keysight :	Spectrum Analyzer - Swe	ept SA							
KI RL Center	RF 50 Ω Freq 2.40000		SENSE		Avg Type Avg Hold:	: Log-Pwr	TRAC	M Feb 27, 2020 E 1 2 3 4 5 6 E M WWWW	Frequency
10 dB/div	, Ref 20.00 c	PNO: Fast IFGain:Low	#Atten: 30 d		Ext Gain:	-0.50 dB	DR Mkr3 2.	40 MHz .543 dB	Auto Tune
10.00				3∆2					Center Freq 2.40000000 GHz
-10.0									<b>Start Freq</b> 2.350000000 GHz
-30.0 -40.0 -50.0			×2	h					<b>Stop Freq</b> 2.450000000 GHz
-60.0 <b>kaatu</b>	www.com.com.com.com.com	<del>adan sa kanang na Kanan</del> kananan			mail the second factors		ndar på tillet og svil på den	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CF Step 10.000000 MHz <u>Auto</u> Man
#Res B∖	2.40000 GHz N 100 kHz		/ 300 kHz	FUNC		weep 1.3	133 ms (1	00.0 MHz 0001 pts) DN VALUE	Freq Offset 0 Hz
MKR MODE 1 Ν 2 F 3 Δ2 4 5	$\begin{array}{c c} 1 & f \\ \hline \end{array} $	× 2.402 16 GHz 2.399 76 GHz (Δ) 2.40 MHz (Δ)	6.625 dBm -49.917 dBm 56.543 dB	1		ICTION WIDTH	FUNCTION		Scale Type
6	e <picture.pnc< td=""><td>G&gt; saved</td><td>III</td><td>  </td><td></td><td>STATUS</td><td></td><td>•</td><td></td></picture.pnc<>	G> saved	III	 		STATUS		•	

	eysight Spe	ctrum A	nalyzer -	Swept SA											
Cei		<sub>R</sub> ⊧ eq 2		Ω DC			SE	NSE:			be: Log-Pwr d:>100/100	TRAC	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M WWWW	F	requency
10 (	B/div	Ref	20.0	) dBm	PNO: Fa IFGain:Lo		#Atten: 3				n: -0.50 dB	⊳ lkr5 -47.	70 MHz		Auto Tune
10.0			20.0					52	\4						<b>Center Freq</b> 41000000 GHz
-10.0 -20.0 -30.0														2.39	Start Freq 91000000 GHz
-30.0 -40.0 -50.0														2.49	<b>Stop Freq</b> 91000000 GHz
-60.( -70.(	1.00	* <u>0</u>	ika ja pi		******	478- <b>1</b> -1679-0.	كمفعف فالمتعاد والمستعان		deri di sata an	an an all heisi an air an	nist minner sit teatraliseren	atur dan ayan ayan ayan ayan ayan ayan ayan		1 <u>Auto</u>	<b>CF Step</b> 0.000000 MHz Man
#R(	nter 2.4 es BW	100		X	#	VBW	300 kHz	:	EUN		Sweep 1.3	333 ms (1	00.0 MHz 0001 pts)		Freq Offset 0 Hz
1 2 3 4 5 6	Ν 1 F 1 Δ2 1 F 1	f f f	(Δ) (Δ) (Δ)	2.44 2.39 2.48	10 84 GHz 07 47 GHz 13.37 MHz 18 54 GHz 17.70 MHz	z (Δ) z (Δ) z	8.170 d -59.598 d 67.768 -58.530 d 66.700	Bm dB Bm					E	Log	Scale Type Lin
	Ĵ)File <	PICT	URE.P	NG> save	d		ш			1	STATU	s	4		

Channel 39

🔤 Keysight Spectrum Analyzer - Sw	•		
KE RE 50 Ω Center Freq 2.48350	00000 GHz	02:11:34 PM Feb 27, 2020           Avg Type: Log-Pwr         TRACE           Avg Hold:>100/100         TYPE	Frequency
10 dB/div Ref 20.00	IFGain:Low #Atten: 30 dB	ΔMkr3 -9.33 MHz         63.189 dB	Auto Tune
10.0 0.00	3Δ2		Center Free 2.483500000 GH:
-10.0			Start Free 2.433500000 GH
-30.0 -40.0 -50.0			Stop Free 2.533500000 GH
-60.0	and the second s	r ei fræstikkeligt for er en	<b>CF Ste</b> 10.000000 MH <u>Auto</u> Ma
Center 2.48350 GHz #Res BW 100 kHz	#VBW 300 kHz	Span 100.0 MHz Sweep 1.333 ms (10001 pts)	Freq Offse 0 H
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.479 84 GHz 6.861 dBm 2.489 17 GHz (Δ) -56.328 dBm -9.33 MHz (Δ) 63.189 dB		Scale Typ
	G> saved	STATUS	



Product	Android Based UI							
Test Item	RF antenna conducted test	₹F antenna conducted test						
Test Mode	Mode 1: Transmit Mode							
Date of Test	2020/02/27	Test Site	SR12-H					
Test Temperature	22.0°C Test Humidity 56.0%							

# 8-DPSK

Channal	Frequency	Measure Level	Limit
Channel	(MHz)	(dBc)	(dBc)
00	2402	56.863	≧20
39	2441	55.342	≧20
78	2480	58.067	≧20

Keysight Spectrum Analyzer - Swe	pt SA				
RL         RF         50 Ω           Center Freg 2.40000	0000 GHz	SENSE:INT	Avg Type: Log-Pwr	02:04:25 PM Feb 27, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 🕞 IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold:>100/100 Ext Gain: -0.50 dB	TYPE MWWWW DET P NNNNN	Auto Tune
10 dB/div <b>Ref 20.00 d</b>	Bm		Δ	56.863 dB	
10.0		3∆2			Center Freq
0.00					2.400000000 GHz
-10.0					Start Freq
-20.0					2.350000000 GHz
-30.0		↓ ¥			Stop Freq
-50.0		×2 4			2.450000000 GHz
-60.0 <b></b>	rectantersonation and interrections	ا العدي	a the second second second second second		<b>CF Step</b> 10.000000 MHz
-70.0					Auto Man
Center 2.40000 GHz #Res BW 100 kHz	#VBW	300 kHz	Sweep 1.3	Span 100.0 MHz 333 ms (10001 pts)	Freq Offset 0 Hz
MKR MODE TRC SCL 1 N 1 f	× 2.402 16 GHz	6.736 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	
2 F 1 f (Δ) 3 $\Delta 2$ 1 f (Δ) 4	2.399 52 GHz (Δ) 2.64 MHz (Δ)	-50.127 dBm 56.863 dB			Scale Type
5 6				-	Log <u>Lin</u>
MSG			STATUS		

_			Analyzer - Sw									
KXIR Cer		RF eq 2		00000 GH		]	NSE:INT		e: Log-Pwr :>100/100	TRAC	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M WWWW	Frequency
					NO: Fast 🕞 Gain:Low	#Atten: 3		Ext Gain:	-0.50 dB	D		Auto Tune
	B/div	Rei	f 20.00	dBm					ΔΜ		25 MHz .881 dB	
Log							5∆4					Center Freq
10.0							Ă					2.441000000 GHz
-10.0												
-20.0		_										Start Freq 2.391000000 GHz
-30.0						/	Ч					Oton Ener
-40.0						U U	l l					Stop Freq 2.491000000 GHz
-60.0	a suisinasi.	( <b>1</b> 214)	والمرسور والمعاري		al friende Berning Ber	aliter and a second	. And all and a set of the set of	land a stand and the stand	ili jana fi partin gi jaran i	sannoinn an thai		CF Step 10.000000 MHz
-70.0												<u>Auto</u> Man
	ter 2.4 s BW				#VBW	/ 300 kHz		s	weep 1.3		00.0 MHz 0001 pts)	Freq Offset
MKR 1	MODE TRO	SCI f		× 2.441 1	6 GHz	Y 8.190 di		ICTION FUI	NCTION WIDTH	FUNCTI	ON VALUE	0 112
2	F 1 Δ2 1	f	(Δ) (Δ)	2.398 1 43.0	1 GHz (Δ) 5 MHz (Δ)	-59.849 dE 68.039	Bm dB					Scale Type
4 5 6	F 1 Δ4 1	f	<u>(Δ)</u>	2.486 4 -45.2	5 MHz (Δ)	<u>-58.691 di</u> 66.881						Log <u>Lin</u>
		· .				III				1		
MSG									STATUS			

Channel 39

	ectrum Analyzer - Sw	rept SA								×
Center F	RF   50 Ω req 2.48350	00000 GHz	Tria	SENSE:INT	Avg Type Avg Hold	e: Log-Pwr	TRAC	E 1 2 3 4 5 6	Frequency	/
10 dB/div	Ref 20.00	PNO: Fas IFGain:Lo dBm		n: 30 dB	Ext Gain:	-0.50 dB	₀ • • • • • • • • • • • • • • • • • • •		Auto T	une
10.0				3Δ2					<b>Center F</b> 2.483500000	
-10.0									Start F 2.433500000	
-30.0				¥					<b>Stop F</b> 2.533500000	
-60.0 <b>Ann ay dan</b> -70.0		<mark>gefanngi Yelen ak fantasak der</mark> Siegetoan bet			Hereita an	**************************************	477.1409.49864179.49	telanter and the state of the s	CF S 10.000000 <u>Auto</u>	
Center 2. #Res BW		#\ 	/BW 300 k			weep 1.3	133 ms (11	00.0 MHz 0001 pts)	Freq Of	ffse 0 H
1 Ν 2 F 3 Δ2 4 5	f f (Δ) f (Δ)	2.480 16 GHz 2.484 66 GHz -4.50 MHz	(Δ) -57.135	l dBm 5 dBm 49 dB				E	Scale T	Гур Li
6	<picture.pn< td=""><td>G&gt; saved</td><td>m</td><td></td><td></td><td>STATUS</td><td>•</td><td>•</td><td></td><td></td></picture.pn<>	G> saved	m			STATUS	•	•		



Product	Android Based UI								
Test Item	RF antenna conducted test	₹F antenna conducted test							
Test Mode	Mode 1: Transmit Mode								
Date of Test	2020/02/27	Test Site	SR12-H						
Test Temperature	22.0°C	Test Humidity	56.0%						

# Channel 00 (30MHz-25GHz)-GFSK

🔤 Keysight Spectrum Analyzer - Swept SA 🚽				
ເx RL RF 50Ω DC Center Freq 12.51500000		Avg Type: Log-Pwr Avg Hold:>10/10	02:35:20 PM Feb 27, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWW	Frequency
	PNO: Fast Trig: Free Run IFGain:Low #Atten: 30 dB	Ext Gain: -0.50 dB	DET P NNNN	Auto Tune
10 dB/div Ref 20.00 dBm		ΔMkr	3 -2.402 1 GHz 53.838 dB	Autorune
				Center Freg
				12.515000000 GHz
-10.0				
-20.0				Start Freq 30.000000 MHz
-30.0				Stop Freq
-50.0 2			والم والمحافظة ومن المالية والمراجع المراجع المراجع المراجع المراجع المحافظة والمحافظة والمحافظة والمحافظة والم	25.000000000 GHz
-60.0				CF Step 2.497000000 GHz Auto Man
Start 30 MHz #Res BW 100 kHz	#VBW 300 kHz	Sweep 81.	Stop 25.00 GHz 33 ms (10001 pts)	Freq Offset
MKR MODE TRC SCL X	Ý	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	0 Hz
2 F 1 f (Δ) 4.	402 2 GHz 7.574 dBm 804 3 GHz (Δ) -46.264 dBm 402 1 GHz (Δ) 53.838 dB		E	Scale Type
4 5 6				Log <u>Lin</u>
MSG VFile <picture.png> save</picture.png>	m m	STATUS		

	Spectrum An		pt SA								E	
Center	Freq 1	50 Ω 2.5150	DC 00000 G		7	NSE:INT	Avg Type Avg Hold	e: Log-Pwr ·>10/10	TRAC	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M WWWWW	Free	quency
				NO: Fast 🖵 Gain:Low	#Atten: 3		Ext Gain:	-0.50 dB	D		ļ	Auto Tune
10 dB/div	v Ref	20.00 d	Bm					ΔΙΝΚΙ		9 6 GHz .330 dB		
Log 10.0	¢ <sup>3,</sup>	Δ2									Ce	enter Freq
0.00											12.5150	000000 GHz
-10.0				 	<u> </u>							Start Freq
-20.0			 									000000 MHz
-30.0												Stop Freq
-40.0			/			<u> </u>						000000 GHz
-60.0		m	.2 Adultaria			-		any distinguished and a second		وجهد الأقليز وادارية		CF Step
-70.0		" <b>*</b> *									2.4970 <u>Auto</u>	000000 GHz Man
									014 - 11 - 0	C 00 011-		
Start 30 #Res B		Hz		#VBW	/ 300 kHz		s	weep 81		5.00 GHz 0001 pts)	Fi	r <b>eq Offset</b> 0 Hz
MKR MODE	TRC SCL		× 2.442	1 GHz	Y 8.317 dE		CTION FUI	NCTION WIDTH	FUNCTION	DN VALUE		0112
2 F 3 Δ2 4		Δ) Δ)	4.881	7 GHz (Δ) 6 GHz (Δ)	-50.014 dE 58.330	Bm					s	cale Type
5											Log	Lin
					m				1			
мsg 횎 Fil	le <pictl< td=""><td>JRE.PNG</td><td>i&gt; saved</td><td></td><td></td><td></td><td></td><td>STATUS</td><td></td><td></td><td></td><td></td></pictl<>	JRE.PNG	i> saved					STATUS				

#### Channel 39 (30MHz-25GHz)-GFSK

# Channel 78 (30MHz-25GHz)-GFSK

Keysight Spectrum						
Center Freq	50 Ω DC 12.51500000	D GHz	SENSE:INT	Avg Type: Log-Pwr Avg Hold:>10/10	02:27:31 PM Feb 27, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWW	Frequency
			#Atten: 30 dB	Ext Gain: -0.50 dB	DET P NNNNN r3 -2.479 5 GHz	Auto Tune
10 dB/div Re	f 20.00 dBm				58.574 dB	
	3Δ2					Center Free
0.00						12.515000000 GH;
-10.0						Start Free
-20.0						30.000000 MH:
-30.0						
-40.0						Stop Free 25.00000000 GH
-50.0	2	المقالمة المرجوعة، وفي مقاطر موجوعة إلى رو	a and the state of	والماسلية والمناوية والمسلولة	وتراد المالارت المكرمة وتقريبه ومعادل الم	
-60.0 -70.0						CF Stej 2.497000000 GH
						<u>Auto</u> Mar
Start 30 MHz #Res BW 100	kHz	#VBW 3	00 kHz	Sweep 8	Stop 25.00 GHz 1.33 ms (10001 pts)	Freq Offse
MKR MODE TRC SCL		179 6 GHz	Y FUN 7.054 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	0 Н
2 F 1 f 3 Δ2 1 f	(Δ) 4.9		58.574 dB			Scale Typ
4 5 6						Log <u>Li</u> i
	' 'URE.PNG> save	d	m	STATU	s	

	Spectrum Ana		ot SA									
Center	<sub>R</sub> , Freq 12	50 Ω 2.5150	DC   00000 G		]	NSE:INT	Avg Typ Avg Hold	e: Log-Pwr ⊡>10/10	TRAC	M Feb 27, 2020 E 1 2 3 4 5 6 PE M WWWW	F	requency
10 dB/div	Ref 2	20.00 d	IFC	NO: Fast ⊂ Gain:Low	#Atten: 30		Ext Gain:	-0.50 dB	••••••••••••••••••••••••••••••••••••••	2 1 GHz .186 dB		Auto Tune
10.0	34											<b>Center Freq</b> 15000000 GHz
-10.0											3(	Start Freq 0.000000 MHz
-30.0 -40.0		X	2							kuran sahirika say	25.00	<b>Stop Freq</b> 00000000 GHz
-60.0 -70.0	-						al the state of th				2.49 <u>Auto</u>	<b>CF Step</b> 97000000 GHz Man
Start 30 #Res BV	V 100 ki	Hz	X	#VBW	/ 300 kHz			weep 81	.33 ms (1	5.00 GHz 0001 pts)		Freq Offset 0 Hz
1 Ν 2 F 3 Δ2 4	1 f	∆) ∆)	2.402 4.804	2 GHz 3 GHz (Δ) 1 GHz (Δ)	<u>5.068 dE</u> -49.118 dE 54.186 d	Bm Bm				E		Scale Type
5 6					ш					-	Log	Lin
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#### Channel 00 (30MHz-25GHz)-π/4-DQPSK

# Channel 39 (30MHz-25GHz)-π/4-DQPSK

	pectrum Anal								-			ð <b>-</b> X
XI RL Center F	<sub>R</sub> Freq 12	50 Ω .5150	DC 00000 G	i <b>Hz</b> NO:Fast ⊂	Trig: Free		Avg Hold		TRAC TYL	M Feb 27, 2020 E 1 2 3 4 5 6 E M WWWW	Frequer	ncy
10 dB/div	Ref 2	0.00 d		Gain:Low	#Atten: 30	dB	Ext Gain:		3 -2.43	9 6 GHz .274 dB	Auto	Tun
10.0 0.00	3∆	2									Cente 12.5150000	
10.0 20.0											Star 30.0000	
30.0 40.0 50.0			«"								Stoj 25.0000000	
50.0 70.0			nz hytylenistekte		*********	angladi <sup>kan ja</sup> ndag	a in più a finala giù i			*********	CI 2.4970000 <u>Auto</u>	= St 00 G M
	V 100 kH	lz		#VBW	/ 300 kHz	FUN		· ·	.33 ms (1	5.00 GHz 0001 pts)	Freq	Offs 0
1 Ν 2 F 3 Δ2 4	TRC SCL 1 f 1 f (Δ 1 f (Δ		4.881	1 GHz 7 GHz (Δ) 6 GHz (Δ)	7.600 dB -49.674 dB 57.274 d	m m	CTION FU	NCTION WIDTH	FUNCTI		Scale	еTy
6					Ш				1	•	Log	<u>L</u>
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Keysight Spectru	m Analyzer - Swe			- (			<u>) 11/4 C</u>			
Center Free	RF 50 Ω 12.5150	00000 GI		SEN	SE:INT	Avg Typ Avg Hold	e: Log-Pwr	TRAC	M Feb 27, 2020 E 1 2 3 4 5 6 E M WWWW	Frequency
10 dB/div F	tef 20.00 c	IFG	D:Fast 🖵 ain:Low	#Atten: 30		Ext Gain	: -0.50 dB	-21.25	2 0 GHz .739 dB	Auto Tune
10.0	3∆2									Center Free 12.515000000 GH:
-10.0										Start Free 30.000000 MH:
-30.0										Stop Free 25.000000000 GH
-60.0	-	in a second de la constante de	or and the second s	ماريانيا ويو <del>لوا يا ويو</del> ي	Name and Ashield					<b>CF Stej</b> 2.497000000 GH <u>Auto</u> Ma
Start 30 MH #Res BW 10	0 kHz	×	#VBW	300 kHz	ELIN		weep 81	.33 ms (1	5.00 GHz 0001 pts)	Freq Offse 0 H
1 N 1 2 F 1 3 Δ2 1 4	f f (Δ) f (Δ)	2.479 6	GHz (Δ)	6.446 dE -51.293 dB 57.739 d	lm m			Tonen		Scale Type
5 6				ш				1	•	Log <u>Lir</u>
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#### Channel 78 (30MHz-25GHz)-π/4-DQPSK

	ectrum Analyzer - :										
Center F	RF 50	5000000 C	SHZ NO: Fast	7	SE:INT	Avg Type Avg Hold	e: Log-Pwr ·>10/10	TRAC	M Feb 27, 2020 E 1 2 3 4 5 6 E M WWWW	Frequ	lency
			Gain:Low	#Atten: 30		Ext Gain:		Di	T P NNNNN		
10 dB/div	Ref 20.00	) dBm					ΔMkr		2 1 GHz .349 dB	AL	ito Tune
Log	_3∆2									Cer	nter Freg
0.00											0000 GHz
-10.0											
-20.0											t <b>art Freq</b> 0000 MHz
-30.0										s	top Freq
-40.0											0000 GHz
-60.0		///2	الاستحمادية	ببالم معاداتك		الايرىنىية المالية الم					CF Step
-70.0											0000 GHz Man
										Auto	man
Start 30 I #Res BW			#VBW	/ 300 kHz		s	weep 81		5.00 GHz 0001 pts)	Fre	e <b>q Offset</b> 0 Hz
MKR MODE T	RC SCL	X 2 402	2 GHz	Y 6.762 dB	FUNC	TION FUN	ICTION WIDTH	FUNCTION	DN VALUE		0 112
2 F 3 Δ2 4	f (Δ) f (Δ)	4.804	<u>3 GHz</u> (Δ) 1 GHz (Δ)	-50.587 dB 57.349 c	m				E	Sc	ale Type
4 5 6										Log	<u>Lin</u>
			1	Ш	1	1		1			
мsg 🍑 File	<picture.p< td=""><td>NG&gt; saved</td><td></td><td></td><td></td><td></td><td>STATUS</td><td></td><td></td><td></td><td></td></picture.p<>	NG> saved					STATUS				

#### Channel 00 (30MHz-25GHz)-8-DPSK

# Channel 39 (30MHz-25GHz)-8-DPSK

	ectrum Analyzer - Sv						•			
Center F	RF 50 g req 12.515	000000 G	i <b>Hz</b> NO:Fast ⊂	7	E:INT	Avg Type Avg Hold	e: Log-Pwr :>10/10	TRAI TY	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M WWWW	Frequency
10 dB/div	Ref 20.00	IF	Gain:Low	#Atten: 30	dB	Ext Gain:		3 -2.43	9 6 GHz .342 dB	Auto Tun
10.0 0.00	3∆2									Center Fre 12.515000000 GH
20.0										Start Fre 30.000000 Mi
-30.0 -40.0 -50.0		×								<b>Stop Fro</b> 25.000000000 GI
50.0 70.0			, in the second second			fedela gastrian da jut				CF Sto 2.497000000 G <u>Auto</u> M
tart 30 N Res BW	100 kHz	X	#VBW	V 300 kHz	FUNC		weep 81	.33 ms (1	25.00 GHz 0001 pts)	Freq Offs 0
1 N 1 2 F 1 3 Δ2 1 4	$\begin{array}{c c} f \\ f \\ f \\ f \\ (\Delta) \\ \end{array}$	<u>2.442</u> 4.881	1 GHz 7 GHz (Δ) 6 GHz (Δ)	5.975 dBi -49.367 dBi 55.342 d	n n			FUNCT		Scale Ty
6				m					•	Log <u>l</u>
sg 🔱 File ·	<picture.pn< td=""><td>IG&gt; saved</td><td></td><td></td><td></td><td></td><td>STATUS</td><td>5</td><td></td><td></td></picture.pn<>	IG> saved					STATUS	5		

🚾 Keysight Spe	ctrum Analyzer - Sw	ept SA					12)01			- 7	×
Center Fr	RF 50 Ω req 12.5150			1	SE:INT		e: Log-Pwr	TRA	M Feb 27, 2020 DE 1 2 3 4 5 6	Frequency	,
10 dB/div	Ref 20.00	IFG	O: Fast ⊂ ain:Low	Trig: Free #Atten: 30		Avg Hol Ext Gain	: -0.50 dB	□ -20.15	3 3 GHz .067 dB	Auto T	une
10.0	3∆2									Center F 12.515000000	
-10.0	_									Start F 30.000000 I	
-30.0									//	Stop F 25.000000000	
60.0								fablen, gelin jahi <sup>di</sup>		CF S 2.497000000 <u>Auto</u>	
Start 30 N #Res BW	100 kHz	×	#VBW	300 kHz	EUN		Sweep 81	.33 ms (1	5.00 GHz 0001 pts)	Freq Off	fse 0⊦
1 N 1 2 F 1 3 Δ2 1 4	f f (Δ) f (Δ)	2.479 6 22.632 8	GHz GHz (Δ) GHz (Δ)	6.183 dB -51.884 dB 58.067 d	m m				E	Scale T	
5 6				ш					•	Log	Li
ısg 🔱 File <	PICTURE.PN	G> saved					STATUS	3			

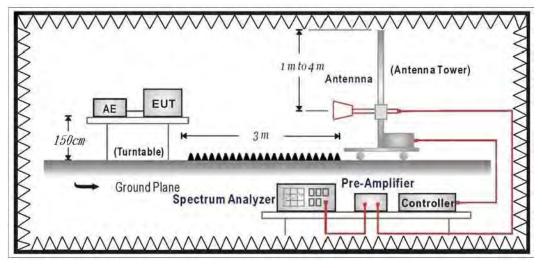
#### Channel 78 (30MHz-25GHz)-8-DPSK



## 6. Band Edge

## 6.1. Test Setup

RF Radiated Measurement:



## 6.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

#### 6.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

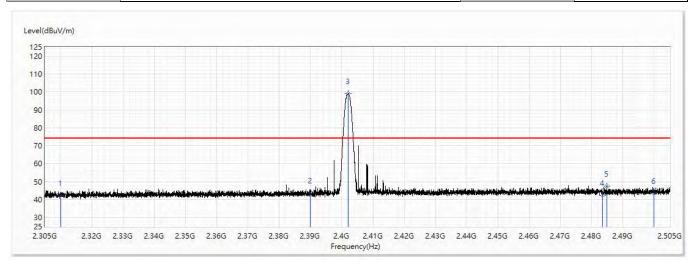
## 6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018



## 6.5. Test Result

Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	42.56	74.00	-31.44	26.99	15.57	PK
2	2390	43.83	74.00	-30.17	27.67	16.16	PK
! 3	2402.15	98.93	74.00	24.93	82.68	16.25	PK
4	2483.5	42.52	74.00	-31.48	25.66	16.86	PK
5	2484.825	47.36	74.00	-26.64	30.49	16.87	PK
6	2500	43.50	74.00	-30.50	26.52	16.98	PK

Note:

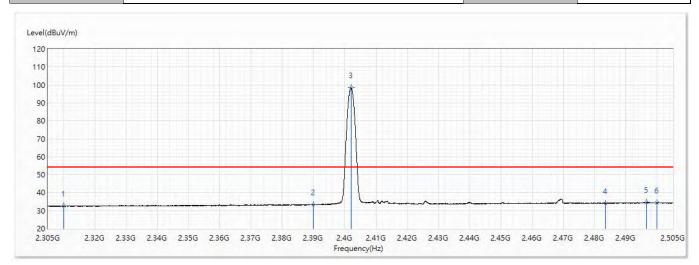
1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.53	54.00	-21.47	16.96	15.57	AV
2	2390	33.30	54.00	-20.70	17.14	16.16	AV
! 3	2402.025	98.46	54.00	44.46	82.21	16.25	AV
4	2483.5	34.08	54.00	-19.92	17.22	16.86	AV
5	2496.675	34.62	54.00	-19.38	17.67	16.95	AV
6	2500	34.40	54.00	-19.60	17.42	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

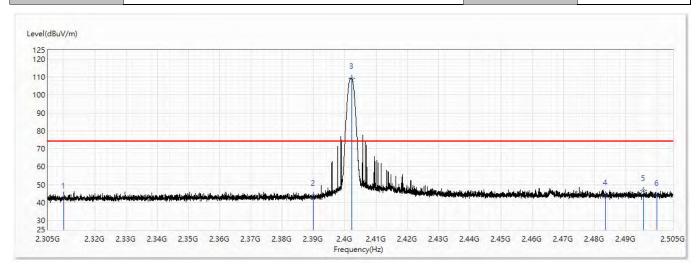
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	42.85	74.00	-31.15	27.28	15.57	PK
2	2390	44.00	74.00	-30.00	27.84	16.16	PK
! 3	2402.175	109.37	74.00	35.37	93.12	16.25	PK
4	2483.5	44.57	74.00	-29.43	27.71	16.86	PK
5	2495.675	46.81	74.00	-27.19	29.87	16.94	PK
6	2500	44.02	74.00	-29.98	27.04	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

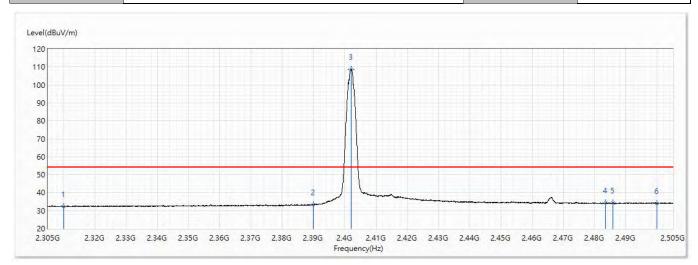
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.32	54.00	-21.68	16.75	15.57	AV
2	2390	33.31	54.00	-20.69	17.15	16.16	AV
! 3	2402.05	108.84	54.00	54.84	92.59	16.25	AV
4	2483.5	34.20	54.00	-19.80	17.34	16.86	AV
5	2485.85	34.35	54.00	-19.65	17.48	16.87	AV
6	2500	34.00	54.00	-20.00	17.02	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

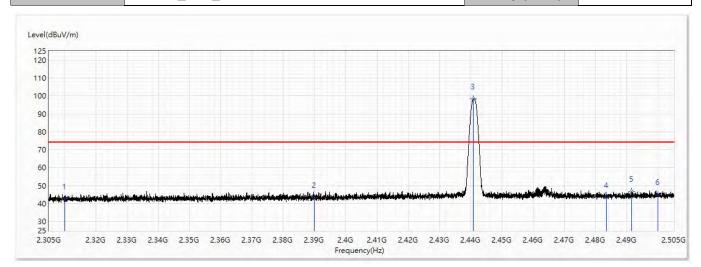
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	42.78	74.00	-31.22	27.21	15.57	PK
2	2390	43.38	74.00	-30.62	27.22	16.16	PK
! 3	2440.85	98.47	74.00	24.47	81.93	16.54	PK
4	2483.5	43.38	74.00	-30.62	26.52	16.86	PK
5	2491.425	46.93	74.00	-27.07	30.02	16.91	PK
6	2500	44.98	74.00	-29.02	28.00	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

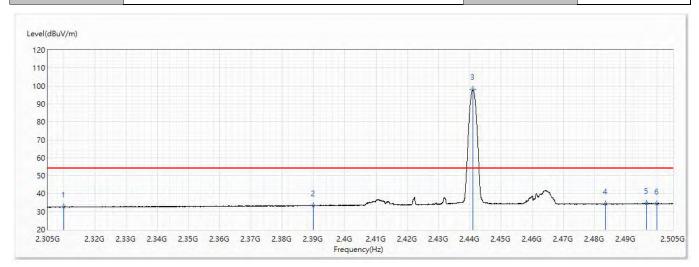
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.48	54.00	-21.52	16.91	15.57	AV
2	2390	33.18	54.00	-20.82	17.02	16.16	AV
! 3	2441.025	98.03	54.00	44.03	81.49	16.54	AV
4	2483.5	34.27	54.00	-19.73	17.41	16.86	AV
5	2496.525	34.71	54.00	-19.29	17.76	16.95	AV
6	2500	34.37	54.00	-19.63	17.39	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

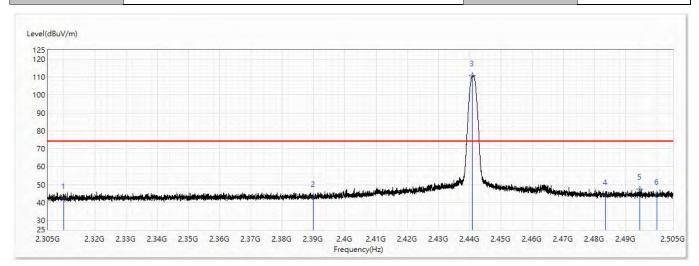
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	42.34	74.00	-31.66	26.77	15.57	PK
2	2390	43.35	74.00	-30.65	27.19	16.16	PK
! 3	2440.9	110.70	74.00	36.70	94.16	16.54	PK
4	2483.5	44.51	74.00	-29.49	27.65	16.86	PK
5	2494.525	47.41	74.00	-26.59	30.47	16.94	PK
6	2500	44.73	74.00	-29.27	27.75	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

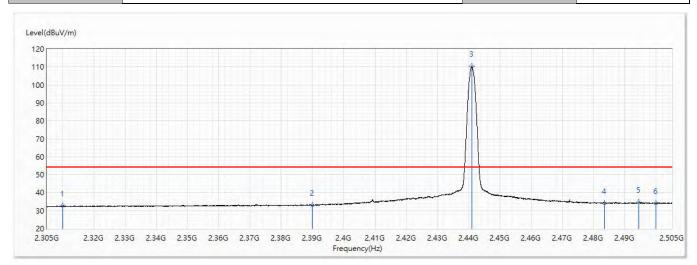
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.61	54.00	-21.39	17.04	15.57	AV
2	2390	33.12	54.00	-20.88	16.96	16.16	AV
! 3	2441	110.30	54.00	56.30	93.76	16.54	AV
4	2483.5	34.11	54.00	-19.89	17.25	16.86	AV
5	2494.45	34.66	54.00	-19.34	17.72	16.94	AV
6	2500	34.12	54.00	-19.88	17.14	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

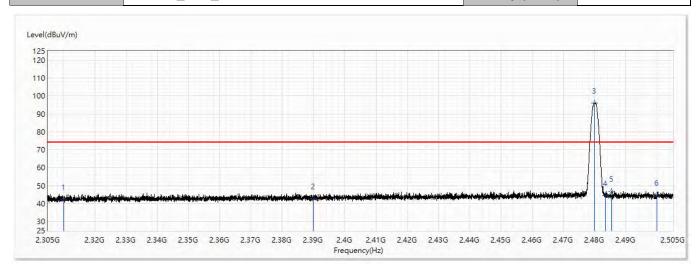
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	42.34	74.00	-31.66	26.77	15.57	PK
2	2390	42.65	74.00	-31.35	26.49	16.16	PK
! 3	2479.875	96.14	74.00	22.14	79.31	16.83	PK
4	2483.5	44.53	74.00	-29.47	27.67	16.86	PK
5	2485.525	46.75	74.00	-27.25	29.88	16.87	PK
6	2500	44.67	74.00	-29.33	27.69	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

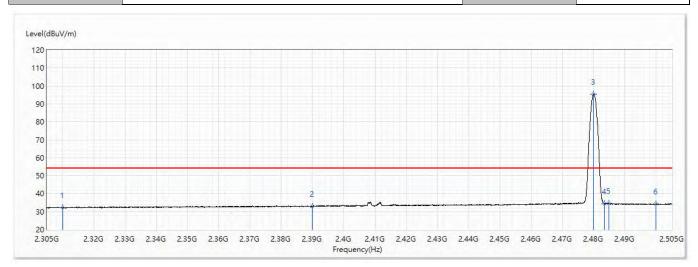
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.31	54.00	-21.69	16.74	15.57	AV
2	2390	33.07	54.00	-20.93	16.91	16.16	AV
! 3	2480.025	95.53	54.00	41.53	78.70	16.83	AV
4	2483.5	34.43	54.00	-19.57	17.57	16.86	AV
5	2484.75	34.56	54.00	-19.44	17.69	16.87	AV
6	2500	34.27	54.00	-19.73	17.29	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

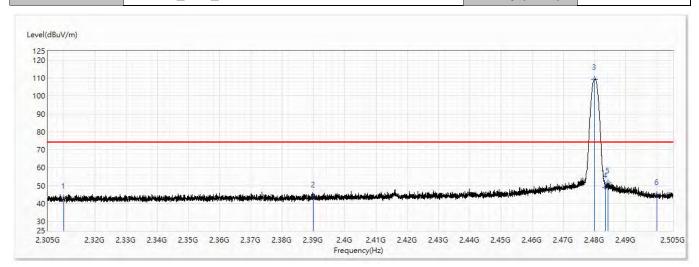
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.21	74.00	-30.79	27.64	15.57	PK
2	2390	43.65	74.00	-30.35	27.49	16.16	PK
! 3	2479.9	109.29	74.00	35.29	92.46	16.83	PK
4	2483.5	49.01	74.00	-24.99	32.15	16.86	PK
5	2484.225	51.57	74.00	-22.43	34.71	16.86	PK
6	2500	45.13	74.00	-28.87	28.15	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

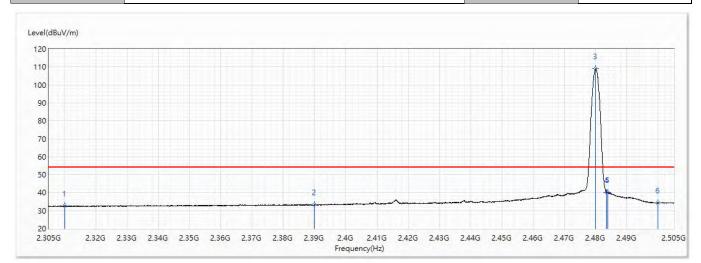
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/19
Test Mode	Mode 1: Transmit Mode	Engineer	Max
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.67	54.00	-21.33	17.10	15.57	AV
2	2390	33.15	54.00	-20.85	16.99	16.16	AV
! 3	2480	108.94	54.00	54.94	92.11	16.83	AV
4	2483.5	40.16	54.00	-13.84	23.30	16.86	AV
5	2483.85	40.06	54.00	-13.94	23.20	16.86	AV
6	2500	34.37	54.00	-19.63	17.39	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

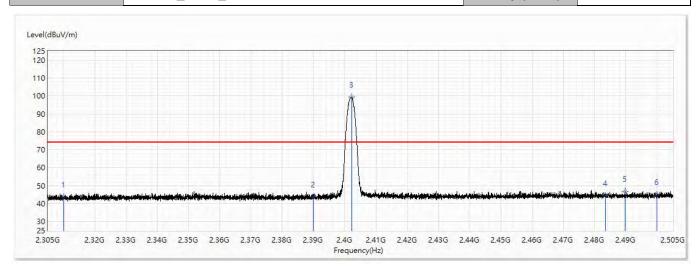
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.74	74.00	-30.26	28.17	15.57	PK
2	2390	43.88	74.00	-30.12	27.72	16.16	PK
! 3	2402.225	99.24	74.00	25.24	82.99	16.25	PK
4	2483.5	44.57	74.00	-29.43	27.71	16.86	PK
5	2489.675	46.91	74.00	-27.09	30.01	16.90	PK
6	2500	45.20	74.00	-28.80	28.22	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

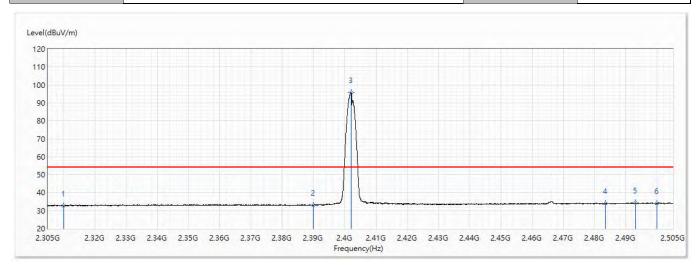
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.68	54.00	-21.32	17.11	15.57	AV
2	2390	33.11	54.00	-20.89	16.95	16.16	AV
! 3	2401.975	95.76	54.00	41.76	79.51	16.25	AV
4	2483.5	33.87	54.00	-20.13	17.01	16.86	AV
5	2493.05	34.32	54.00	-19.68	17.39	16.93	AV
6	2500	34.04	54.00	-19.96	17.06	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

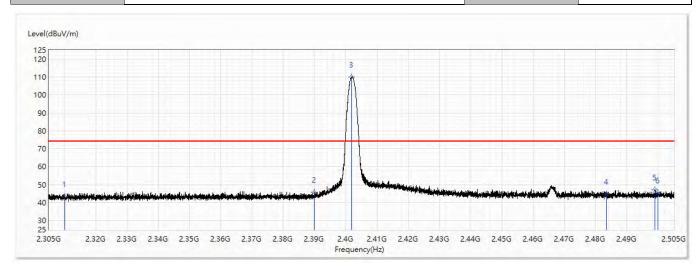
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.45	74.00	-30.55	27.88	15.57	PK
2	2390	45.76	74.00	-28.24	29.60	16.16	PK
! 3	2401.925	110.02	74.00	36.02	93.77	16.25	PK
4	2483.5	44.85	74.00	-29.15	27.99	16.86	PK
5	2498.9	47.32	74.00	-26.68	30.34	16.98	PK
6	2500	45.35	74.00	-28.65	28.37	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

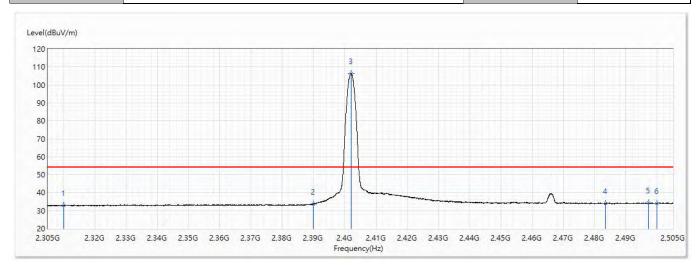
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.98	54.00	-21.02	17.41	15.57	AV
2	2390	33.68	54.00	-20.32	17.52	16.16	AV
! 3	2402	106.51	54.00	52.51	90.26	16.25	AV
4	2483.5	33.90	54.00	-20.10	17.04	16.86	AV
5	2497.125	34.29	54.00	-19.71	17.34	16.95	AV
6	2500	34.03	54.00	-19.97	17.05	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

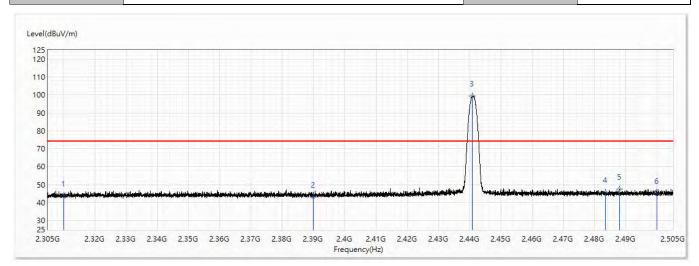
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.84	74.00	-30.16	28.27	15.57	PK
2	2390	43.10	74.00	-30.90	26.94	16.16	PK
! 3	2440.9	99.57	74.00	25.57	83.03	16.54	PK
4	2483.5	45.73	74.00	-28.27	28.87	16.86	PK
5	2487.975	47.41	74.00	-26.59	30.51	16.90	PK
6	2500	45.23	74.00	-28.77	28.25	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

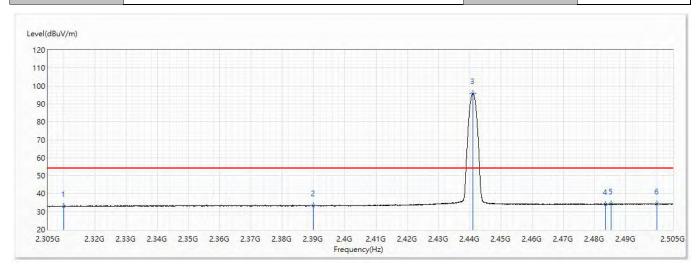
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.95	54.00	-21.05	17.38	15.57	AV
2	2390	33.32	54.00	-20.68	17.16	16.16	AV
! 3	2440.975	95.87	54.00	41.87	79.33	16.54	AV
4	2483.5	34.07	54.00	-19.93	17.21	16.86	AV
5	2485.15	34.44	54.00	-19.56	17.57	16.87	AV
6	2500	34.28	54.00	-19.72	17.30	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

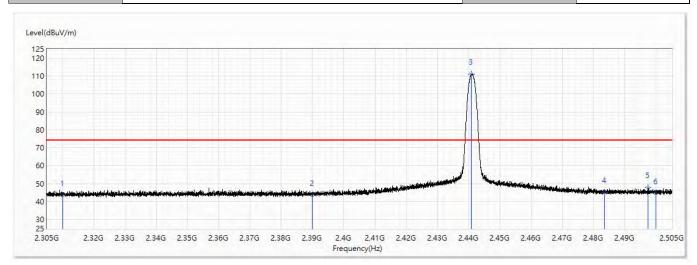
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.32	74.00	-30.68	27.75	15.57	PK
2	2390	43.43	74.00	-30.57	27.27	16.16	PK
! 3	2440.9	110.98	74.00	36.98	94.44	16.54	PK
4	2483.5	45.17	74.00	-28.83	28.31	16.86	PK
5	2497.45	47.75	74.00	-26.25	30.79	16.96	PK
6	2500	44.56	74.00	-29.44	27.58	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

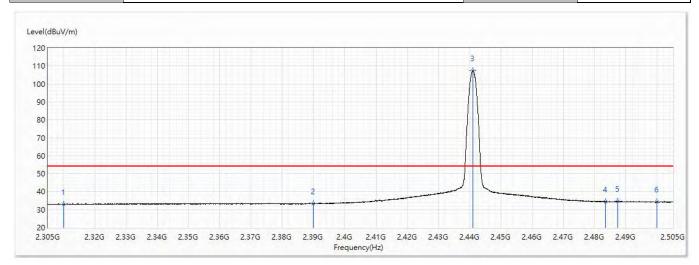
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date 2	
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.04	54.00	-20.96	17.47	15.57	AV
2	2390	33.23	54.00	-20.77	17.07	16.16	AV
! 3	2440.975	107.38	54.00	53.38	90.84	16.54	AV
4	2483.5	34.35	54.00	-19.65	17.49	16.86	AV
5	2487.425	34.65	54.00	-19.35	17.77	16.88	AV
6	2500	34.39	54.00	-19.61	17.41	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

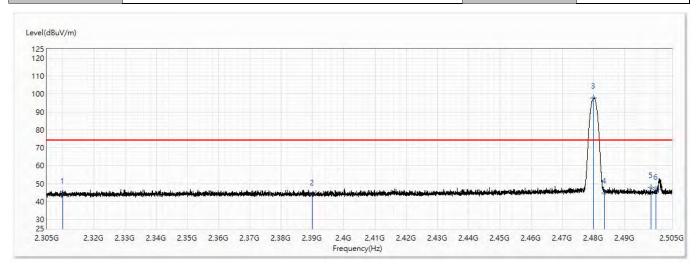
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	44.68	74.00	-29.32	29.11	15.57	PK
2	2390	43.66	74.00	-30.34	27.50	16.16	PK
! 3	2480	97.69	74.00	23.69	80.86	16.83	PK
4	2483.5	44.68	74.00	-29.32	27.82	16.86	PK
5	2498.4	47.90	74.00	-26.10	30.93	16.97	PK
6	2500	46.71	74.00	-27.29	29.73	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

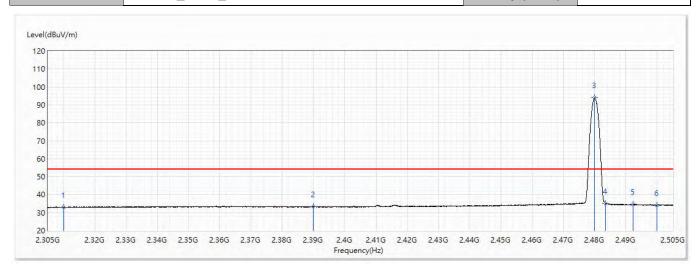
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.04	54.00	-20.96	17.47	15.57	AV
2	2390	33.40	54.00	-20.60	17.24	16.16	AV
! 3	2480	94.08	54.00	40.08	77.25	16.83	AV
4	2483.5	35.06	54.00	-18.94	18.20	16.86	AV
5	2492.25	34.56	54.00	-19.44	17.64	16.92	AV
6	2500	34.15	54.00	-19.85	17.17	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

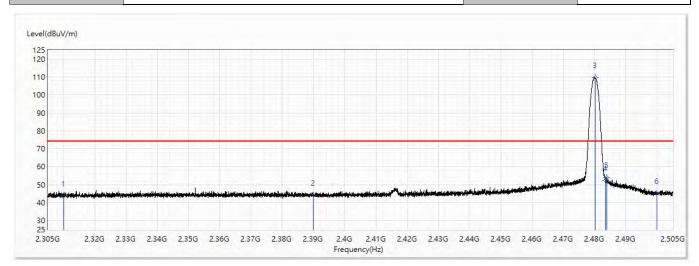
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.83	74.00	-30.17	28.26	15.57	PK
2	2390	44.22	74.00	-29.78	28.06	16.16	PK
! 3	2480.125	109.68	74.00	35.68	92.85	16.83	PK
4	2483.5	52.14	74.00	-21.86	35.28	16.86	PK
5	2483.775	54.18	74.00	-19.82	37.32	16.86	PK
6	2500	45.19	74.00	-28.81	28.21	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

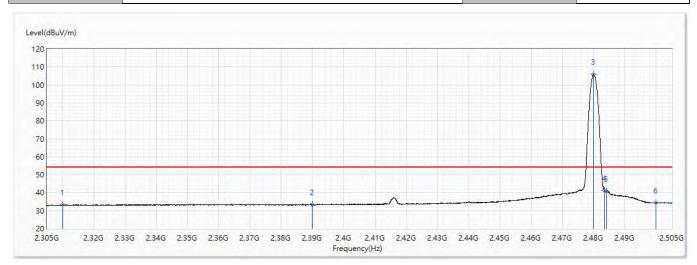
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/20
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_2DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.20	54.00	-20.80	17.63	15.57	AV
2	2390	33.16	54.00	-20.84	17.00	16.16	AV
! 3	2480.025	106.08	54.00	52.08	89.25	16.83	AV
4	2483.5	41.21	54.00	-12.79	24.35	16.86	AV
5	2484.075	40.75	54.00	-13.25	23.89	16.86	AV
6	2500	34.40	54.00	-19.60	17.42	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

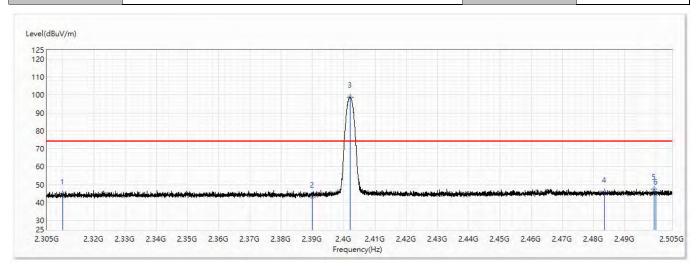
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	44.87	74.00	-29.13	29.30	15.57	PK
2	2390	43.17	74.00	-30.83	27.01	16.16	PK
! 3	2402.025	98.79	74.00	24.79	82.54	16.25	PK
4	2483.5	45.78	74.00	-28.22	28.92	16.86	PK
5	2499.3	47.64	74.00	-26.36	30.66	16.98	PK
6	2500	44.87	74.00	-29.13	27.89	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

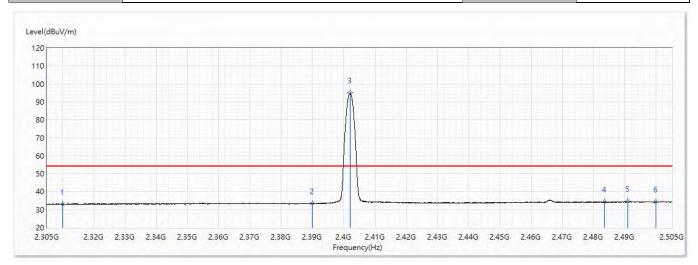
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.04	54.00	-20.96	17.47	15.57	AV
2	2390	33.33	54.00	-20.67	17.17	16.16	AV
! 3	2402.025	94.95	54.00	40.95	78.70	16.25	AV
4	2483.5	34.18	54.00	-19.82	17.32	16.86	AV
5	2490.925	34.56	54.00	-19.44	17.65	16.91	AV
6	2500	34.26	54.00	-19.74	17.28	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

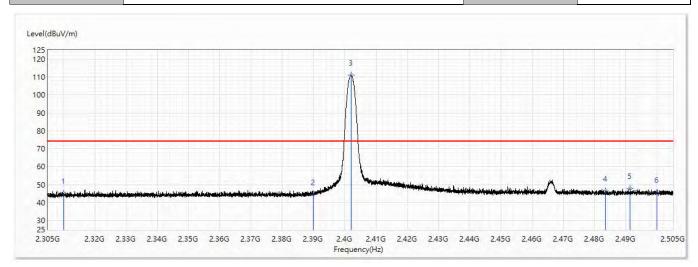
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	45.08	74.00	-28.92	29.51	15.57	PK
2	2390	44.56	74.00	-29.44	28.40	16.16	PK
! 3	2402	110.94	74.00	36.94	94.69	16.25	PK
4	2483.5	46.67	74.00	-27.33	29.81	16.86	PK
5	2491.375	47.78	74.00	-26.22	30.87	16.91	PK
6	2500	45.94	74.00	-28.06	28.96	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

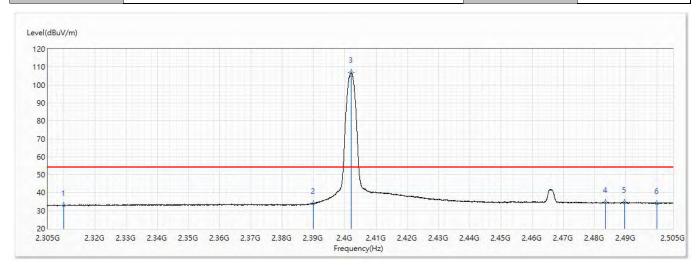
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2402MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.93	54.00	-21.07	17.36	15.57	AV
2	2390	34.08	54.00	-19.92	17.92	16.16	AV
! 3	2402.075	107.01	54.00	53.01	90.76	16.25	AV
4	2483.5	34.56	54.00	-19.44	17.70	16.86	AV
5	2489.45	34.62	54.00	-19.38	17.72	16.90	AV
6	2500	34.11	54.00	-19.89	17.13	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

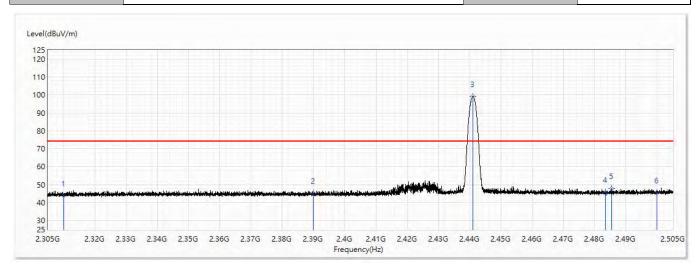
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	43.69	74.00	-30.31	28.12	15.57	PK
2	2390	45.19	74.00	-28.81	29.03	16.16	PK
! 3	2440.95	99.08	74.00	25.08	82.54	16.54	PK
4	2483.5	45.72	74.00	-28.28	28.86	16.86	PK
5	2485.35	47.79	74.00	-26.21	30.92	16.87	PK
6	2500	45.31	74.00	-28.69	28.33	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

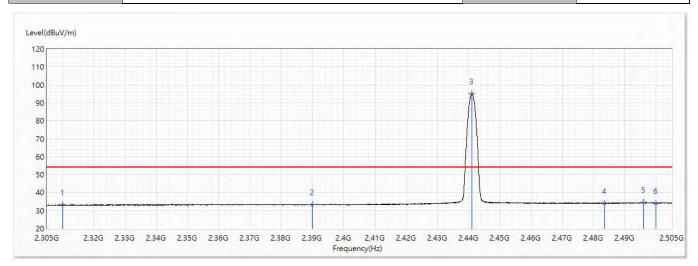
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.24	54.00	-20.76	17.67	15.57	AV
2	2390	33.23	54.00	-20.77	17.07	16.16	AV
! 3	2441.025	95.03	54.00	41.03	78.49	16.54	AV
4	2483.5	34.02	54.00	-19.98	17.16	16.86	AV
5	2495.925	34.58	54.00	-19.42	17.63	16.95	AV
6	2500	34.16	54.00	-19.84	17.18	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

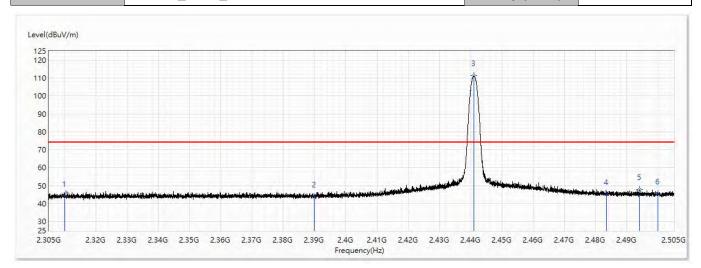
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	44.26	74.00	-29.74	28.69	15.57	PK
2	2390	43.66	74.00	-30.34	27.50	16.16	PK
! 3	2440.975	111.19	74.00	37.19	94.65	16.54	PK
4	2483.5	45.19	74.00	-28.81	28.33	16.86	PK
5	2494.05	47.75	74.00	-26.25	30.81	16.94	PK
6	2500	45.59	74.00	-28.41	28.61	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

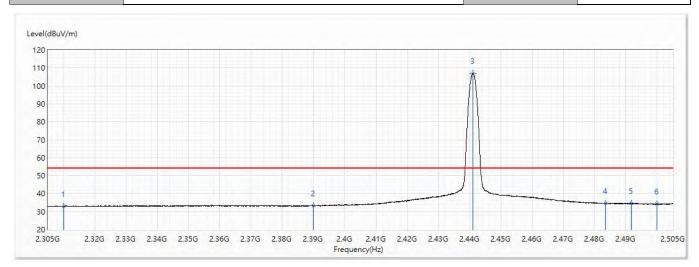
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2441MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	32.92	54.00	-21.08	17.35	15.57	AV
2	2390	33.24	54.00	-20.76	17.08	16.16	AV
! 3	2441.025	107.10	54.00	53.10	90.56	16.54	AV
4	2483.5	34.57	54.00	-19.43	17.71	16.86	AV
5	2491.65	34.76	54.00	-19.24	17.85	16.91	AV
6	2500	34.26	54.00	-19.74	17.28	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

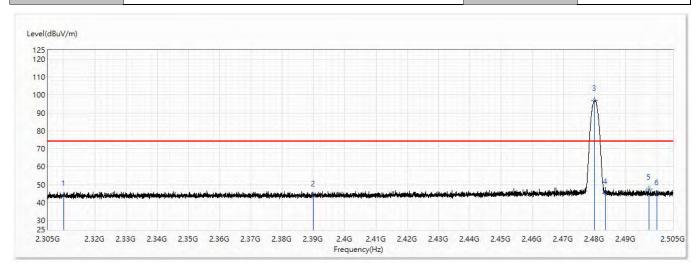
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	44.16	74.00	-29.84	28.59	15.57	PK
2	2390	43.92	74.00	-30.08	27.76	16.16	PK
! 3	2480.025	96.96	74.00	22.96	80.13	16.83	PK
4	2483.5	45.14	74.00	-28.86	28.28	16.86	PK
5	2497.35	47.38	74.00	-26.62	30.42	16.96	PK
6	2500	44.35	74.00	-29.65	27.37	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

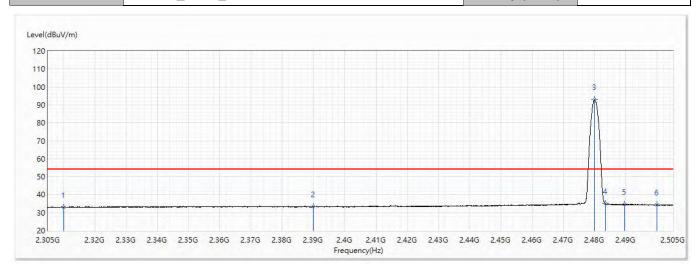
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Horizontal	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.09	54.00	-20.91	17.52	15.57	AV
2	2390	33.24	54.00	-20.76	17.08	16.16	AV
! 3	2480.025	92.93	54.00	38.93	76.10	16.83	AV
4	2483.5	34.91	54.00	-19.09	18.05	16.86	AV
5	2489.475	34.64	54.00	-19.36	17.74	16.90	AV
6	2500	34.30	54.00	-19.70	17.32	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

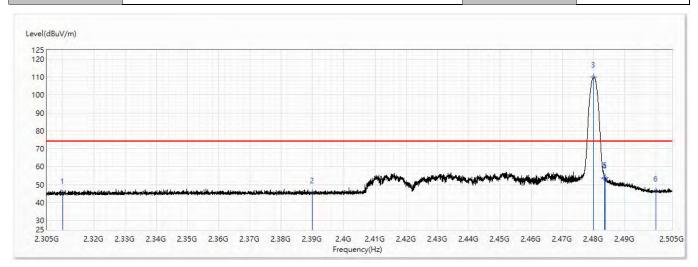
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	СВ2-Н
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	45.23	74.00	-28.77	29.66	15.57	PK
2	2390	45.48	74.00	-28.52	29.32	16.16	PK
! 3	2480	110.00	74.00	36.00	93.17	16.83	PK
4	2483.5	53.37	74.00	-20.63	36.51	16.86	PK
5	2483.75	54.07	74.00	-19.93	37.21	16.86	PK
6	2500	46.49	74.00	-27.51	29.51	16.98	PK

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

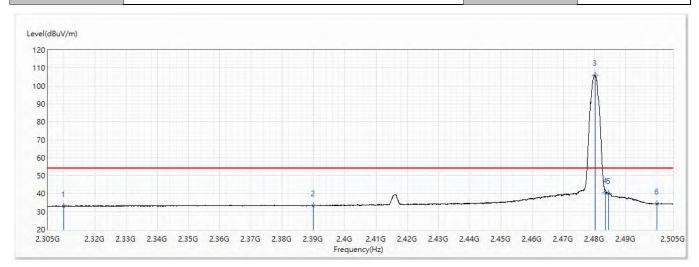
2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



Model No	CSD-ELINK2	Site	CB2-H
Test Voltage	DC 5V	Test Date	2020/2/21
Test Mode	Mode 1: Transmit Mode	Engineer	Elwin
Polarity	Vertical	Temperature (°C)	18.5
Test Condition	802.15.1_3DH5_2480MHz	Humidity (%RH)	51.0



No	Frequency	Emission Level	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
1	2310	33.06	54.00	-20.94	17.49	15.57	AV
2	2390	33.24	54.00	-20.76	17.08	16.16	AV
! 3	2480.05	105.96	54.00	51.96	89.13	16.83	AV
4	2483.5	40.62	54.00	-13.38	23.76	16.86	AV
5	2484.45	40.17	54.00	-13.83	23.31	16.86	AV
6	2500	34.30	54.00	-19.70	17.32	16.98	AV

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.

2. Emission Level = Reading Level + Correct Factor.

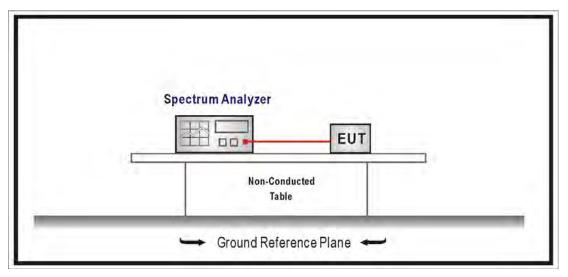
3. The average measurement was not performed when the peak measured data under the limit of average

detection. If the readings given are average, peak measurement should also be supplied.



## 7. Number of hopping frequency

## 7.1. Test Setup



## 7.2. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

# 7.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

# 7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018



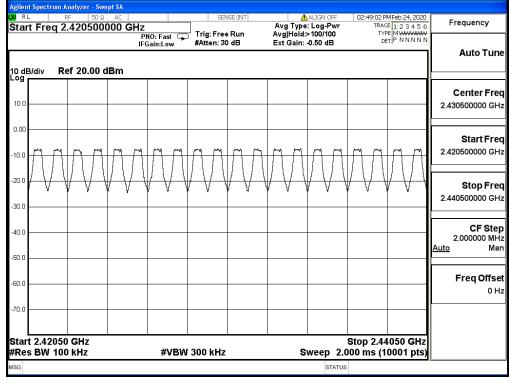
# 7.5. Test Result

Product	Android Based UI					
Test Item	Number of hopping frequency					
Test Mode	Mode 1: Transmit Mode					
Date of Test	2020/02/24 Test Site SR12-H					
Test Temperature	22.0°C Test Humidity 56.0%					

Frequency Range	requency Range Measure Level			
(MHz)	(Channels)	(Channels)		
2402 - 2480	79	≧ 75		

Agilent Spectrum Analyzer - Swept SA					<b>-</b>
🗶 RL   RF   50 Ω AC   Start Freq 2.401500000 C		Avg Typ	ALIGN OFF e: Log-Pwr :>100/100	02:41:15 PM Feb 24, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWWW	
10 dB/div Ref 20.00 dBm	IFGain:Low #Atten: 3			DET PNNNN	Auto Tune
10.0					Center Freq 2.411000000 GHz
	AAAAA	h M M M		MAAA	<b>Start Freq</b> 2.401500000 GHz
-20.0		$\forall \forall \forall \forall$		$\vee$	<b>Stop Freq</b> 2.420500000 GHz
-40.0					CF Step 1.900000 MHz <u>Auto</u> Mar
-60.0					Freq Offset 0 Hz
-70.0			St	op 2.420500 GHz	
#Res BW 100 kHz	#VBW 300 kHz	5	Sweep 2.0	00 ms (10001 pts)	

## 2401.5-2420.5MHz



#### 2420.5-2440.5MHz

#### 2440.5-2460.5MHz

Image: RL       RF       S0.2       AC       SENSE:INT       ALLION OFF       02:57:10 MFeb 24, 2020       Frequency         Start Freq 2.440500000 GHz       Trig: Free Run       Avg Type: Log-Pwr       TRACE [12:3:4:56       Frequency         0 dB/div       Ref 20.00 dBm       Trig: Free Run       Avg Type: Log-Pwr       Trig: Free Run       Auto Tune         0 dB/div       Ref 20.00 dBm       Galin: Jow       Frequency       Auto Tune         0 dB/div       Ref 20.00 dBm       Galin: Jow       Galin: Jow       Galin: Jow       Galin: Jow       Galin: Jow       Auto Tune         0 dB/div       Ref 20.00 dBm       Galin: Jow       Galin: Jow
Outritude         Outritude         Outritude         Auto Tune           0 dB/div         Ref 20.00 dBm         Center Free         2.450500000 GH;           0.00         Image: Center Free         2.450500000 GH;         Start Free           0.00         Image: Center Free         2.440500000 GH;         Start Free           0.00         Image: Center Free         2.44050000 GH;         Start Free           0.00         Image: Center Free         2.44050000 GH;         Start Free           0.00         Image: Center Free         2.440500000 GH;         Start Free           0.00         Image: Center Free         2.460500000 GH;         Start Free
10.0         Center Free           0.00
Start Free           10.0
V         V
2.000000 MH: Auto Mar
60.0 Freq Offset 0 Hz
70.0 70.
Res BW 100 kHz         #VBW 300 kHz         Sweep 2.000 ms (10001 pts)           sc         srarus

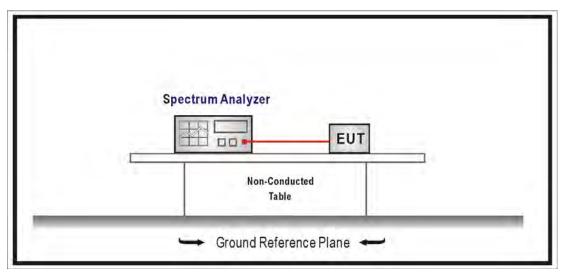
ø ⊪∟ Start Freq 2	RF 50 Ω			Trig: Free			ALIGN OFF	TRAC	MFeb 24, 2020	Frequency
10 dB/div <b>F</b>	Ref 20.00 c	IFG	NO: Fast 🖵 Gain:Low	#Atten: 30		Ext Gain:		DE	E MWWWW T P N N N N N	Auto Tur
										<b>Center Fre</b> 2.470500000 Gi
		nΜ	r r	ΠM	n n	n m	mη	m m	$\square$	<b>Start Fr</b> 2.460500000 G
20.0	$\mathbb{V} \mathbb{V}$		$\mathbb{Z}$	/ \/ \	$/ \vee \langle$				/ \/ \	<b>Stop Fr</b> 2.480500000 G
40.0										<b>CF St</b> ( 2.000000 M <u>Auto</u> M
60.0										Freq Offs 0
70.0										
Start 2.4605 #Res BW 10			#VBW	300 kHz		s		Stop 2.48 000 ms (1	8050 GHz 0001 pts)	

#### 2460.5-2480.5MHz



## 8. Carrier Frequency Separation

## 8.1. Test Setup



## 8.2. Limits

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an Maximum peak conducted output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

## 8.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements

## 8.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018

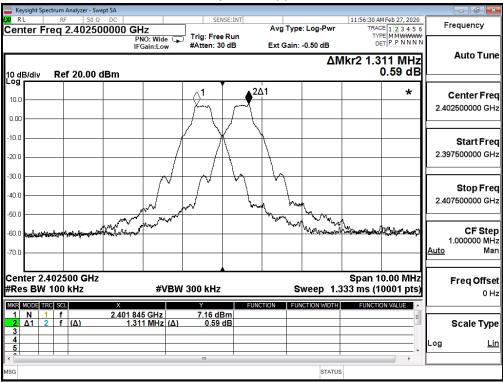


## 8.5. Test Result

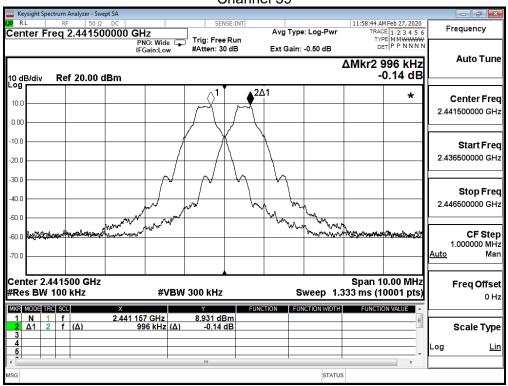
Product	Android Based UI					
Test Item	Carrier Frequency Separation					
Test Mode	Mode 1: Transmit Mode					
Date of Test	2020/02/27	SR12-H				
Test Temperature	22.0°C	Test Humidity	56.0%			

#### GFSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.311	≧0.750
39	2441	0.996	≧0.750
78	2480	1.001	≧0.753







Channel 39

Channel 78

				-		-					
										sight Spectrum	
Frequency	1 PM Feb 27, 2020 RACE 1 2 3 4 5 6 TYPE MMWWWW	TRAC	: Log-Pwr	Avg Typ	Run	]	lz NO:Wide ⊂			ter Freq	en
Auto Tui	DET P P N N N N	Di	-0.50 dB	Ext Gain	0 dB	#Atten: 3	Gain:Low				
Auto Tu	001 MHz. 0.01 dB		ΔN					IBm	ef 20.00 c	3/div Re	
Center Fr	*			<u>ع</u> لم		1`					og
2.479500000 G					M	M					10.0 ).00
					/	$\square$					0.0
Start Fr					l						0.0
2.474500000 G					$\setminus$		- /				0.0
Stop Fr				+M	M	$\wedge$	$\sim$				0.0
2.484500000 G			١	w. h		J.	hand				0.0
CF St	instantinet	all All and a start of the	Munnham Alur	Winn			and the second	and a support	a a secon a mas	(Neticianitanitan	0.0
1.000000 M	men damat ya Chid	- OF INCOME						- Internet and the second s	And a free to	Crista (mith stipuling	0.0
<u>Auto</u> N											0.0
Freq Offs 0	10.00 MHz (10001 pts)		weep 1.3			/ 300 kHz	#VBV			ter 2.479 s BW 100	
	CTION VALUE	FUNCTI	CTION WIDTH	NCTION FL		Y 7.39 dE		× 2.479 15		MODE TRC SC	KR I 1
Scale Ty	=					0.01	1 MHz (Δ)		(Δ)		2 3
Log											4 5
	F	1		1		III			1		Ĉ
		6	STATUS								G



Product	Android Based UI					
Test Item	Carrier Frequency Separation					
Test Mode	Mode 1: Transmit Mode					
Date of Test	2020/02/27 Test Site		SR12-H			
Test Temperature	22.0°C	Test Humidity	56.0%			

#### π/4-DQPSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.000	≧0.901
39	2441	1.003	≧0.899
78	2480	0.997	≧0.899

					nanne	C					
									Analyzer - Swe		
Frequency	7 PM Feb 27, 2020 RACE 1 2 3 4 5 6 TYPE MMWWWW DET P P N N N N	TRAC	: Log-Pwr			SEN Trig: Free #Atten: 3	IZ IO: Wide 😱		50 Ω 2.40250	er Freq	Cent
Auto Tune	.000 MHz 0.37 dB	lkr2 1.0	-0.50 dΒ ΔΝ	Bm	f 20.00 d	idiy Re	10 dB				
<b>Center Fre</b> 2.402500000 GH	*			4	<u>2∆1</u>	1 Juny					-og 10.0 -
Start Fre 2.397500000 GH											-10.0 - -20.0 -
<b>Stop Fre</b> 2.407500000 G⊦			have	han	hur	m	m				-30.0 + -40.0 + -50.0 +
CF Ste 1.000000 MH Auto Ma		Dames							in an	natura da na na serie	60.0 70.0
Freq Offs 0 H	10.00 MHz (10001 pts)		weep 1.3	s	<u> </u>	300 kHz	#VBW			er 2.4025 BW 100	
Scale Typ		FUNCTI	CTION WIDTH	TION FU		6.47 dE 0.37	1 GHz 0 MHz (Δ)	× 2.401 84 1.00	(Δ)	DDE TRC SCI N 1 f N 2 f	1
Log <u>Li</u>						III					4 5
			STATUS								ISG

			n Analyzer - Sv										×
Cen			<sup>₽</sup> 50 Ω	00000 GI	łz		NSE:INT	Avg Type	e: Log-Pwr	TRAC	M Feb 27, 2020 E 1 2 3 4 5 6 E M M WWWW	Frequency	
					NO: Wide( Gain:Low	→ Thg: Fre #Atten: 3		Ext Gain:	-0.50 dB	D		Auto Tu	
10 di	3/div	R	ef 20.00	dBm					ΔΝ		03 MHz 0.10 dB		ine
Log 10.0							_2∆1				*	Center Fr	req
0.00						m	Im					2.441500000 G	;Hz
-10.0						/ /	$\cap$	$\mathbb{N}$					_
-20.0												Start Fr 2.436500000 G	11
-30.0													
-30.0					m	m	M	1 where	Ì			Stop Fr	req
					لىرى .	1		han	how			2.446500000 G	εHz
-50.0	d.m.	M.D.A.NO.	marametrich	mman	A TON AND				13		a dama a shikarar	CF St	en
	v pyper	oofin over	and a second									1.000000 N	
-70.0												<u>Auto</u> N	lan
			500 GHz ) kHz		#VB	W 300 kHz		s	weep 1.3		0.00 MHz 0001 pts)	Freq Off	
MKR		TRC SC		×		Y	FUNC		NCTION WIDTH		DN VALUE	0	Hz
	Ν Δ1	1 f 2 f	(Δ)	<u>2.440 83</u> 1.00	6 GHz 3 MHz (2	7.93 d () 0.10					Е	Scale Ty	pe
3												-	Lin
5		-	-			m							
MSG									STATUS	5		<u> </u>	

Channel 39

	sight Spectrum											
Cent			DC   00000 GH	Iz			Avg Typ	e: Log-Pwr	TRA	M Feb 27, 2020 CE 1 2 3 4 5 6 PE M M WWW	F	requency
_				NO:Wide ⊂ Gain:Low	#Atten: 3		Ext Gain:		D	ET P P N N N N		Auto Tune
10 dE	3/div Re	ef 20.00 c	lBm							997 kHz 0.05 dB		
Log 10.0						_2∆1				*		Center Free
0.00					m	m					2.4	79500000 GH
-10.0							$\backslash$					
-20.0						$\left  \right\rangle$					2.4	Start Fre 74500000 GH
-30.0			/	-	front	h	him	$\overline{\lambda}$				Stop Fre
-40.0				~			howward	1 min a			2.4	84500000 GH
	udates (1949a)	notion of lease and	1				- WW.		- Marine Corrora	a ana ana ana ana ana ana ana ana ana a		CF Ste 1.000000 MH
-70.0											<u>Auto</u>	Ma
	ter 2.479 s BW 100			#VBV	V 300 kHz	•	s	weep 1.3		0.00 MHz 0001 pts)		Freq Offse 0 H
1	N 1 f		× 2.478 84		Y 6.49 dl		TION FU	NCTION WIDTH	FUNCTI	ON VALUE		
3	Δ1 2 f	(Δ)	99	97 kHz (Δ)	0.05	dB						Scale Typ
4											Log	Li
∢ MSG					III			STATUS	;	•		

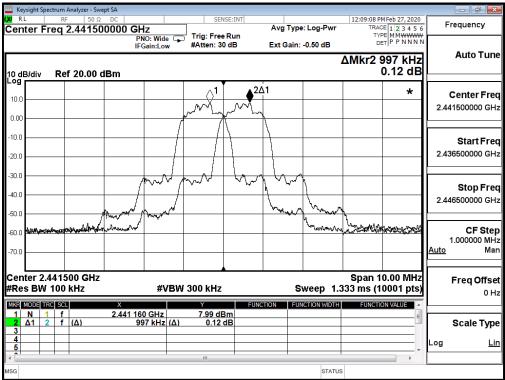


Product	Android Based UI		
Test Item	Carrier Frequency Separation	on	
Test Mode	Mode 1: Transmit Mode		
Date of Test	2020/02/27	Test Site	SR12-H
Test Temperature	22.0°C	Test Humidity	56.0%

#### 8-DPSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.000	≧0.909
39	2441	0.997	≧0.911
78	2480	0.999	≧0.912

- 6 -							Analyzer - Swe		
Frequency	12:07:25 PM Feb 27, 2020 TRACE 1 2 3 4 5 6 TYPE MMWWWW		Avg Type	SENSE:IN	Z IO: Wide 🕠		F 50 Ω 2.40250	er Freq	a <sub>RL</sub> Cent
<b>.</b>	DET P P N N N N	-0.50 dB	Ext Gain:	#Atten: 30 dB	Sain:Low				
Auto Tun	r2 1.000 MHz 0.37 dB	ΔMkr2 <sup>·</sup>				Bm	ef 20.00 d	/div Re	10 dB
Center Fre	*		▲2∆1	1					<sup>-og</sup>
2.402500000 GH			n_	My					10.0
Start Fre					/				10.0
2.397500000 GH									20.0
Stop Fre			$\sim$	m h	m	(			30.0
2.407500000 GH		han	hand						40.0 50.0
CF Ste	an the matter and the second second	March March March	4 · 44		hand	Margara .	s-atomics Color	gen galage and	
1.000000 Mi <u>Auto</u> Ma									70.0
Freq Offs	Span 10.00 MHz ms (10001 pts)		Si	300 kHz	#VBW			er 2.4025 BW 100	
	FUNCTION VALUE	CTION WIDTH FUI	FUNCTION FUN	Y 6.62 dBm		× 2.402 15		ode TRC SCI N 1 f	
Scale Typ	E			0.37 dB	0 MHz (Δ)		(Δ)		2 / 3
Log <u>L</u>									4
	•	STATUS		III					



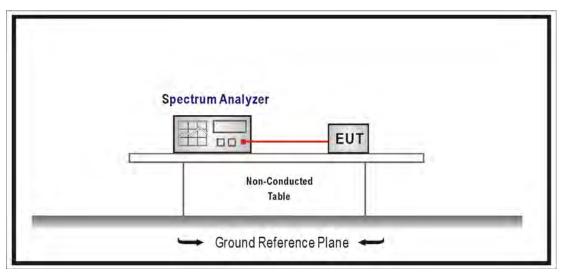
#### Channel 39

Keysight Spectrum Analyzer - Swept SA				
X RL RF 50 Ω DC Center Freq 2.47950000	0 GHz	Avg Type: Log-		Frequency
	PNO: Wide Trig: Free F IFGain:Low #Atten: 30		dB	
10 dB/div Ref 20.00 dBm			ΔMkr2 999 kHz 0.01 dB	Auto Tune
10.0		▲2∆1	*	Center Free
0.00	m	M		2.479500000 GH
-10.0				
-20.0				Start Fre 2.474500000 GH
-30.0				
-40.0	man			<b>Stop Fre</b> 2.484500000 GH
-50.0	and frances	- horang has	$\sim$	2.484500000 GF
-60.0 Mar	, i i i i i i i i i i i i i i i i i i i		annon and a second second	CF Ste 1.000000 M⊦
-70.0				<u>Auto</u> Ma
Center 2.479500 GHz #Res BW 100 kHz	#VBW 300 kHz	Sweep	Span 10.00 MHz p   1.333 ms (10001 pts)	Freq Offse 0 H
MKR MODE TRC SCL X	79 159 GHz 6.67 dBr	FUNCTION FUNCTION	WIDTH FUNCTION VALUE	
<b>2</b> Δ1 2 f (Δ) 3	999 kHz (Δ) 0.01 dl			Scale Typ
4 5				Log <u>Li</u>
4 MSG	III		STATUS	



# 9. -20dB Bandwidth

### 9.1. Test Setup



### 9.2. Limits

N/A

# 9.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW  $\geq$  1% of the 20 dB bandwidth, VBW  $\geq$  RBW, Sweep = auto, Detector function = peak, Trace = max hold, The EUT should be transmitting at its maximum data rate.

### 9.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018.



# 9.5. Test Result

Product	Android Based UI						
Test Item	-20dB Bandwidth						
Test Mode	Mode 1: Transmit Mode						
Date of Test	2020/02/27	Test Site	SR12-H				
Test Temperature	22.0℃	Test Humidity	56.0%				

# GFSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.125	
39	2441	1.125	
78	2480	1.129	

				-				
🔤 Keysight Spec	ctrum Analyzer - Occupied B	N						- <i>•</i> <del>•</del>
KI RL	RF 50 Ω DC			NSE:INT			16 AM Feb 27, 2020	Frequency
Center Fr	eq 2.401993600	) GHz	Center F	req: 2.40199	3600 GHz Avg Hold:>1		Std: None	requeries
		#IFGain:Low	#Atten: 3		Ext Gain: -0.		Device: BTS	
		an Gameon						
10 dB/div	Ref 30.00 dBr	<u>n</u>						
20.0								
								Center Fre
10.0			~~					2.401993600 GH
0.00				$\vdash$				
-10.0								
-20.0								
-30.0		$\sim$				~		
-40.0							~	
-50.0	where and the same state of the same						* marene are	
-60.0								
Center 2.4	402 GHz					;	Span 4 MHz	CF Ste
#Res BW	100 kHz		#VE	3W 300 k	Hz	Swee	p 1.333 ms	400.000 kH
								<u>Auto</u> Ma
Occup	oied Bandwid	th		Total P	ower	12.9 dBm		
	q	84.01 k	Hz					
	Ŭ	04.01 K	112					Freq Offse
Transm	nit Freg Error	8.572	kHz	% of OE	<b>3W Power</b>	99.00 %		0 H
	andwidth	1.125	MI I	x dB		-20.00 dB		
хавы	andwidth	1.125	VIHZ	хав		-20.00 aB		
180						STATUS		L
ISG						514105		



Channel 39

	um Analyzer - Occupied BV	V				-		
Center Fre	RF 50 Ω DC q 2.441000000	GHz	SENSE:IN Center Freq: 2.	441000000 GHz		11:38:26 A Radio Std	M Feb 27, 2020 : None	Frequency
	9 2.44 1000000		Trig: Free Run #Atten: 30 dB	Avg Hold Ext Gain:		Radio Dev	ice: BTS	
		#IFGaIn:Low	#Atten: 50 ub	Ext Gain.	-0.00 00	Radio Dev	ICE. DT3	
10 dB/div	Ref 30.00 dBn	n						
Log		· · · · · · · · · · · · · · · · · · ·						
								Center Freq
0.00			/~~~~					2.441000000 GHz
-10.0			1					
-20.0								
-30.0		$\downarrow$			~			
-40.0								
-50.0	a and a second and a second as					an and	mon	
-60.0								
Center 2.44	11 GHz					Sn	an 4 MHz	
#Res BW 1			#VBW 3	300 kHz			1.333 ms	CF Step 400.000 kHz
Occupi	ed Bandwidt	h	Tot	al Power	14.3	dBm		<u>Auto</u> Man
		 87.71 kH:	7					<b>F O</b> ff
<b>_</b> .	-		_					Freq Offset 0 Hz
	t Freq Error	-931 H		of OBW Powe		.00 %		
x dB Bar	ndwidth	1.125 MH	z xd	В	-20.	00 dB		
MSG					STATUS			
Mod					STATUS	·		

Channel 78

	🔤 Keysight Spectrum Analyzer - Occupied BW										
KL RL Center F	RF 50 Ω req 2.48000		lz	Center Fi	NSE:INT req: 2.48000			11:39:10 A Radio Std	M Feb 27, 2020 : None	F	requency
			Gain:Low #Atten: 30 dB Ext Gain: -0.50 dB Radio Device: BTS						rice: BTS		
			Guilleon						1		
10 dB/div											
Log 20.0											Contor From
10.0											Center Freq 0000000 GHz
0.00										2.40	0000000 GH2
-10.0											
-20.0											
-30.0							_~				
-40.0		/									
-50.0 mprenom	and the second s	/					٩	anone with	merror		
-60.0	-										
	40.011-							0			
Center 2 #Res BW				#VE	300 k	Hz			an 4 MHz 1.333 ms		CF Step 400.000 kHz
								•		Auto	400.000 KHZ Man
Occu	pied Band	width			Total P	ower	13.0	dBm			
		990	.43 k	Hz							Freq Offset
Transr	nit Freg Err	or	-1.035	kHz	% of OE	3W Powe	er 99	.00 %			0 Hz
x dB B	Bandwidth		1.129	MHz	x dB		-20	00 dB			
	unumuun		1.1201		X UD		-20.	00 00			
MSG							STATUS	5		<u> </u>	



Product	Android Based UI							
Test Item	-20dB Bandwidth							
Test Mode	Mode 1: Transmit Mode	Mode 1: Transmit Mode						
Date of Test	2020/02/27	Test Site	SR12-H					
Test Temperature	22.0°C	Test Humidity	56.0%					

### π/4-DQPSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.351	
39	2441	1.349	
78	2480	1.348	

						-					
	ectrum Analyzer - Occupi										
IXI RL	RF 50 Ω C			SENSE:INT	00000 0				M Feb 27, 2020	Frequ	encv
Center Fi	req 2.402000	JOU GHZ	GHz Center Freq: 2.402000000 GHz Trig: Free Run Avg Hold:>			100/100	Radio Std: None			,	
		#IFGain:Low	#Atten:				0.50 dB	Radio Dev	ice: BTS		
	B-6 00 00 -	-									
10 dB/div Log	Ref 30.00 c	IBM .		-							
20.0										Cen	ter Freq
10.0										2.402000	
				+-						2.402000	000 662
0.00			~~~~		$\square$						
-10.0					+ +	$\mathbf{X}^{\dagger}$					
-20.0						$\rightarrow$					
-30.0											
-40.0							V- \~				
-50.0	And and a second se								mme		
-60.0											
Center 2.	.402 GHz							Sp	an 4 MHz		
#Res BW			#V	/BW 300	kHz				1.333 ms		CF Step
										Auto	Mar
Occu	pied Bandw	idth		Total I	Power	ſ	13.0	dBm			
		1.1930 N	IH7							_	
		1.1000 1	11 12							Fre	q Offset
Transr	mit Freq Error	-3.332	2 kHz	% of O	BW P	owe	r 99	.00 %			0 Hz
v dB B	andwidth	1.351	MHz	x dB			-20	00 dB			
	anawian	1.551	WINZ	хub			-20.				
MSG							STATUS	5			



Channel 39

Keysight Spectrum Analyzer - Occi					- d <b>-</b>
RL RF 50 Ω     Center Freq 2.44100		SENSE:INT		11:40:24 AM Feb 27, Radio Std: None	Frequency
	#IFGain:Low	∫ Trig: Free Run #Atten: 30 dB	Avg Hold:>100/1 Ext Gain: -0.50 c		s
10 dB/div Ref 30.00	) dBm				
20.0					Center Fred
10.0					2.441000000 GHz
0.00					
-10.0	-		$+$ $\wedge$ $+$		
-20.0					
-30.0			- A word		
-50.0				- North Contraction of the Contr	·····
-60.0					
Center 2.441 GHz				Span 4 M	
#Res BW 100 kHz		#VBW 300	kHz	Sweep 1.333	
Occupied Band	width	Total	Power	14.4 dBm	Auto Mar
eccupied Balla	1.1948 MI	47			
					Freq Offset
Transmit Freq Erro			BW Power	99.00 %	0112
x dB Bandwidth	1.349 N	lHz xdB		-20.00 dB	
MSG			e	STATUS	

Keysight Species	🔤 Keysight Spectrum Analyzer - Occupied BW											
Center Fr	RF 50 Ω req 2.480000	000 GHz				Avg	Hold:	>100/100 -0.50 dB	11:40:50 Radio Sto Radio De		F	requency
10 dB/div	Ref 30.00	III Gamilon										
20.0												Center Freq
10.0			+		~~_						2.48	0000000 GHz
-10.0												
-20.0							$\rightarrow$					
-30.0		m						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
-50.0 -50.0										Marine Marine		
-60.0						-						
Center 2. #Res BW				#VE	SW 300	kHz				oan 4 MHz 1.333 ms		CF Step 400.000 kHz
Occup	oied Bandw	/idth			Total F	owe	r	13.	1 dBm		<u>Auto</u>	Man
		1.193	9 MH	z								Freq Offset
Transn	nit Freq Erro	r -∢	5.915 k	Hz	% of O	BW F	owe	er 99	9.00 %			0 Hz
x dB B	andwidth	1	.348 MI	Hz	x dB			-20	.00 dB			
MSG								STATU	s			



Product	Android Based UI							
Test Item	-20dB Bandwidth							
Test Mode	Mode 1: Transmit Mode	Mode 1: Transmit Mode						
Date of Test	2020/02/27	Test Site	SR12-H					
Test Temperature	22.0°C	Test Humidity	56.0%					

### 8-DPSK

Channel No.	Frequency	Measure Level	Limit
Channel No.	(MHz)	(MHz)	(MHz)
00	2402	1.363	
39	2441	1.366	
78	2480	1.368	

	trum Analyzer - Occupied B	N									d X
N RL	RF 50 Ω DC			ENSE:INT	00000 C1	-			M Feb 27, 2020	Freque	ncv
Senter Fre	eq 2.40200000	J GHZ	Trig: Fre	req: 2.4020 e Run			100/100	Radio Std	None		,
		#IFGain:Low	#Atten:			ain: -0		Radio Dev	ice: BTS		
10 dB/div	Ref 30.00 dBr	n									
		<u> </u>									
20.0										Cente	er Fre
10.0				-	+ +					2.4020000	00 G⊦
0.00				<u> </u>							
10.0					$\perp$	$ \perp$					
20.0						$\setminus$					
						$\langle  $					
30.0	m	$\sim$				- Y-	~~~~	$\sim \sim$			
40.0	Λ										
50.0 www.web					+ +						
60.0					+ +						
Center 2.4								0	an 4 MHz		
Res BW			#V	BW 300	kH7				1.333 ms		F Ste
								encop	neee me	400.0 Auto	000 kH Ma
Occup	ied Bandwid	th		Total F	Power		13.1	dBm		/1010	
	1	2055 N	147							_	
		2033 1	11 12							Freq	
Transm	it Freq Error	1.144	kHz	% of O	BW Po	ower	99	.00 %			0 F
v dB Ba	ndwidth	1.363	MHz	x dB			-20 (	00 dB			
	indwidth	1.505	11112	x ub			-20.0				
SG							STATUS				



Channel 39

Keysight Spectrum Analyzer - Occupied	BW				_	- 7 💌
Image: RL         RF         50 Ω         DC           Center Freq 2.44100000		SENSE:INT enter Freq: 2.44100 rig: Free Run	00000 GHz Avg Hold:>100/	Radio Std:	1Feb 27, 2020 None	Frequency
		Atten: 30 dB	Ext Gain: -0.50		ce: BTS	
10 dB/div <b>Ref 30.00 dB</b> Log	sm		<del>, , , , , , , , , , , , , , , , , , , </del>			
20.0						Center Freq
0.00		~~~_				2.441000000 GHz
-10.0			$  \rangle  $			
-20.0	$\sim$			~ ~~~		
-40.0						
-50.0					Arthon Andrew	
Center 2.441 GHz				Spa	an 4 MHz	
#Res BW 100 kHz		#VBW 300 k	(Hz		1.333 ms	CF Step 400.000 kHz
Occupied Bandwid		Total P	ower	14.6 dBm		<u>Auto</u> Man
1	.2048 MHz					Freq Offset
Transmit Freq Error	-556 Hz		BW Power	99.00 %		0 Hz
x dB Bandwidth	1.366 MHz	x dB		-20.00 dB		
MSG				STATUS		

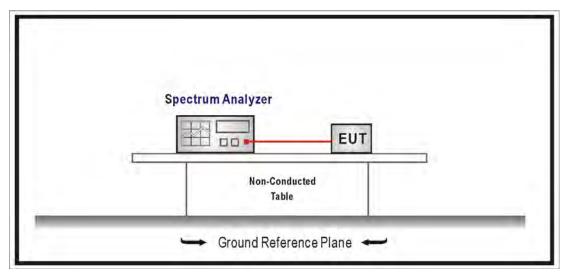
Channel 78

🔤 Keysight S	pectrum Analyzer - Occi	upied BW										
Center F	RF 50 Ω Freq 2.48000			SENSI enter Fred rig: Free F	q: 2.480000			100/100	11:44:34 A Radio Std	M Feb 27, 2020 None	F	requency
		#IFGair		Atten: 30 o				0.50 dB	Radio Dev	ice: BTS		
10 dB/div Log	Ref 30.00	dBm										
20.0					~~~							<b>Center Freq</b> 80000000 GHz
-10.0					· \	~						
-20.0		$\sim$					X	$\sim$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
-40.0 -50.0										-		
	2.48 GHz									an 4 MHz		CF Step
	100 kHz	ورز واغام			V 300 ki			13.2	Sweep	1.333 ms	<u>Auto</u>	400.000 kHz Man
0000	ipied Band	1.205	2 MHz			54651		13.2	ubiii			Freq Offset
Trans	mit Freq Erre	or	-999 Hz	<u> </u>	% of OB	SW P	owei	r <b>99</b>	.00 %			0 Hz
x dB I	Bandwidth	1.	.368 MHz	: )	dB			-20.0	00 dB			
									1			
MSG								STATUS				



### 10. Dwell Time

### 10.1. Test Setup



### 10.2. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 5725-5850 MHz bands. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

# 10.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements

Span = zero span, centered on a hopping channel, RBW = 1 MHz, VBW ≥ RBW, Sweep = as necessary to capture the entire dwell time per hopping channel, Detector function = peak, Trace = max hold.

# 10.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018



### 10.5. Test Result

Product	Android Based UI		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2020/02/27	Test Site	SR12-H
Test Temperature	22.0°C	Test Humidity	56.0%

GFSK

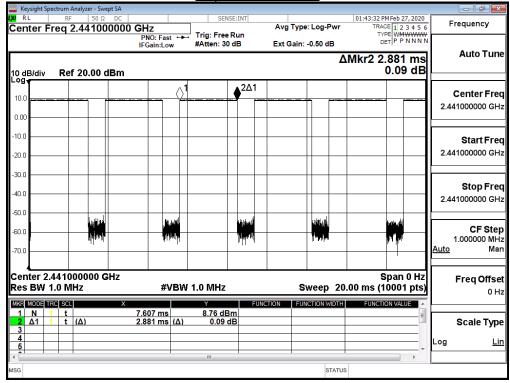
Occupancy Time of Frequency Hopping System

- A) 2402MHz Test Time Period: 0.4\*79=31.60sec → Time slot length : 2.879 ms = <u>0.002879</u> sec Dwell Time : <u>0.002879</u> \*(266.67/79)\* 31.60= <u>0.3071</u> sec ∘
- B) 2441MHz Test Time Period: 0.4\*79=31.60sec <sup>→</sup> Time slot length : 2.881 ms = <u>0.002881</u> sec Dwell Time : <u>0.002881</u> \*(266.67/79)\* 31.60= <u>0.3073</u> sec <sup>→</sup>
- C) 2480MHz Test Time Period: 0.4\*79=31.60sec , Time slot length : 2.879 ms = <u>0.002879</u> sec Dwell Time : <u>0.002879</u> \*(266.67/79)\* 31.60= <u>0.3071</u> sec 。

Test Result: The Average Occupancy Time of Each Highest  $\,^{,}$  Middle and Lowest Channel Is Less Than 0.4sec  $\,^{,}$  And Corresponds to The Standard  $\,^{,}$ 

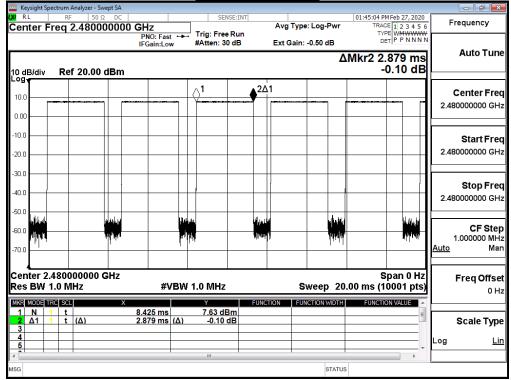
			nep rate 2			
	trum Analyzer - Swept SA					
XI RL	RF 50 Ω DC		SENSE:INT		01:42:19 PM Feb 27, 2020	Frequency
Center Fre	eq 2.402000000		Trig: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE WMWWWW	ricquericy
		PNO: Fast +++	#Atten: 30 dB	Ext Gain: -0.50 dB	DET P P N N N N	
		IF Gall.LOW	#/ titeli. oo ub			Auto Tur
				Δ	Mkr2 2.879 ms	Autoru
10 dB/div	Ref 20.00 dBm				0.16 dB	
Log						
10.0			2∆1		*	Center Fre
10.0	┉┿╌┉┑╶┍┿┉╍┉╼	——————————————————————————————————————		┝┉╼┉╾┉┥╴┍┉═┙		2.40200000 G
0.00						2.4020000000
0.00						
10.0						04
						Start Fr
20.0						2.402000000 G
30.0						
						Stop Fr
40.0						2.402000000 G
						2.402000000 G
50.0		L	1115			
50.0	ik dia ta	a de la constante de	i betrag	No. M	10.00	CF St
50.0	THE THE	- Trans	70 <sup>4</sup> 00	1.4/hr	Aut 1	1.000000 M
0.0		11 P				Auto N
0.0						
4						
	02000000 GHz				Span 0 Hz	Freq Offs
es BW 1.0	0 MHz	#VBW	1.0 MHz	Sweep 20	.00 ms (10001 pts)	0
					FUNCTION VALUE	0
IKR MODE TRC	SCL X	7.563 ms	7.04 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	
$2 \Delta 1 1$	t (Δ)	2.879 ms (Δ)	0.16 dB		E	Scale Ty
3						Courtery
4						Log
5						'
			m		•	
G				STATUS	5	
1					1	

#### Hop rate-2402MHz



#### Hop rate-2441MHz

### Hop rate-2480MHz



Note: Dwell time = time slot length \* hop rate / number of hopping channels \* period



Product	Android Based UI								
Test Item	Dwell Time	well Time							
Test Mode	Mode 1: Transmit Mode								
Date of Test	2020/02/27	Test Site	SR12-H						
Test Temperature	22.0°C	Test Humidity	56.0%						

π/4-DQPSK

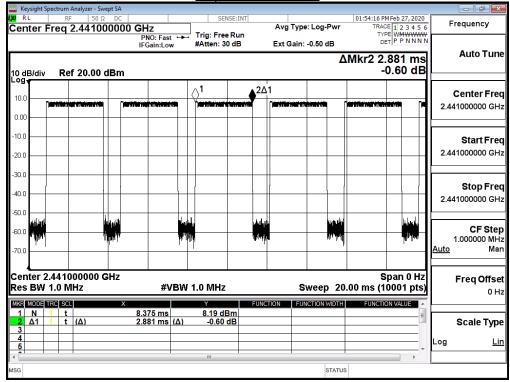
Occupancy Time of Frequency Hopping System

- A) 2402MHz Test Time Period: 0.4\*79=31.60sec → Time slot length : 2.877 ms = <u>0.002877</u> sec Dwell Time : <u>0.002877</u> \*(266.67/79)\* 31.60= <u>0.3069</u> sec ∘
- B) 2441MHz Test Time Period: 0.4\*79=31.60sec <sup>→</sup> Time slot length : 2.881 ms = <u>0.002881</u> sec Dwell Time : <u>0.002881</u> \*(266.67/79)\* 31.60= <u>0.3073</u> sec <sup>→</sup>
- C) 2480MHz Test Time Period: 0.4\*79=31.60sec , Time slot length : 2.873 ms = <u>0.002873</u> sec Dwell Time : <u>0.002873</u> \*(266.67/79)\* 31.60= <u>0.3065</u> sec 。

Test Result: The Average Occupancy Time of Each Highest  $\,^{,}$  Middle and Lowest Channel Is Less Than 0.4sec  $\,^{,}$  And Corresponds to The Standard  $\,^{,}$ 

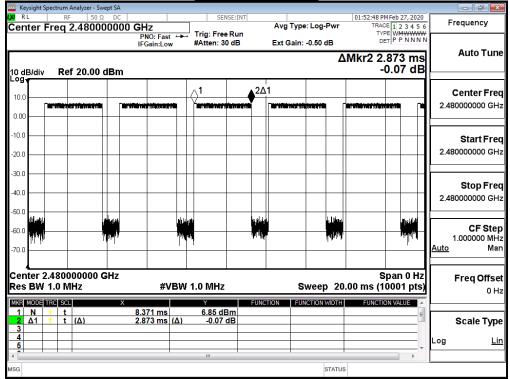
					_					_	_							
- F															Analyzer - Swe			
Frequency		1 Feb 27, E 1 2 3	01:55:39 PM	Dure		vg Type		SE:INT	SEN	_						R	_	R
	www	EWMW	TYP	- wi	. Log-	vgiype		Run	Trig: Free		et inte	IZ NO: Fasi		00	2.40200	-req	ter	en
	NNN	TPPN	DE	B	-0.50 c	t Gain:		)dB	#Atten: 3		ow	Gain:Lo	IFG					
Auto Tu	me	877	Mkr2 2.	^						_								
		D.18		-									_					
	<u> </u>									_			1		ef 20.00 d	Re	3/div	ba ba
Center F							2∆ <sup>′</sup> 1		1									
2.402000000 0	~	-								₩								0.0
2.402000000								TATI A DATA DATA DA										.00
							ŢĮ											00
Start F										$\perp$								).0
2.402000000 0																		
2.402000000		_					-++			+								).0
																		1.0
Oton E																		
Stop F										$\downarrow$								).0
2.402000000 0																		
										+								).0
CF S	ditte.	e de		10,00			in the			u.				للازن			l History	).0
1.000000 N	a P	η		गन्त										d de la			4100	
uto										⊥				111			a. 11	).0
		pan 0								_					000000 G	4020	tor 2	an
Freq Off			.00 ms (1	20	weer	s			.0 MHz	ส 1	VBIA	<b>#</b> \		112		1.0 N		
C					<u> </u>					_								_
		)n value	FUNCTIO	WIDTH	ICTION 1	FUI	UNCTI		¥ 6.59 dE			97 ms	X			TRC SC		
Scale Ty	=								-0.18			<u>97 ms</u> 77 ms				1 t 1 t	<u>Ν</u> Δ1	1
ecule 1									5.10	_			2.0			· ·		3
og	— Lo					_										_		4
						-				_	+						-	5
											_							-
				STATUS	1													3

Hop rate-2402MHz



Hop rate-2441MHz

#### Hop rate-2480MHz



Note: Dwell time = time slot length \* hop rate / number of hopping channels \* period



Product	Android Based UI								
Test Item	Dwell Time	well Time							
Test Mode	Mode 1: Transmit Mode								
Date of Test	2020/02/27	Test Site	SR12-H						
Test Temperature	22.0°C	Test Humidity	56.0%						

8-DPSK

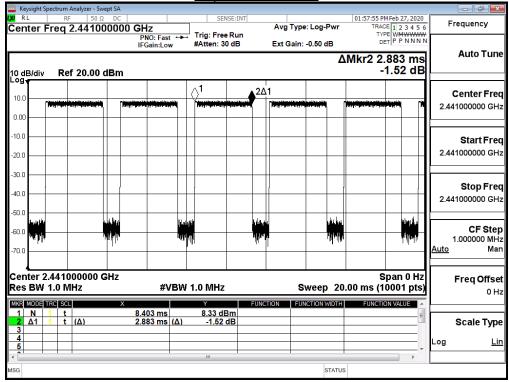
Occupancy Time of Frequency Hopping System

- A) 2402MHz Test Time Period: 0.4\*79=31.60sec <sup>,</sup> Time slot length : 2.885 ms = <u>0.002885</u> sec Dwell Time : <u>0.002885</u> \*(266.67/79)\* 31.60= <u>0.3077</u> sec <sup>,</sup>
- B) 2441MHz Test Time Period: 0.4\*79=31.60sec <sup>→</sup> Time slot length : 2.883 ms = <u>0.002883</u> sec Dwell Time : <u>0.002883</u> \*(266.67/79)\* 31.60= <u>0.3075</u> sec <sup>→</sup>
- C) 2480MHz Test Time Period: 0.4\*79=31.60sec <sup>,</sup> Time slot length : 2.885 ms = <u>0.002885</u> sec Dwell Time : <u>0.002885</u> \*(266.67/79)\* 31.60= <u>0.3077</u> sec <sup>,</sup>

Test Result: The Average Occupancy Time of Each Highest  $\,^{,}$  Middle and Lowest Channel Is Less Than 0.4sec  $\,^{,}$  And Corresponds to The Standard  $\,^{,}$ 

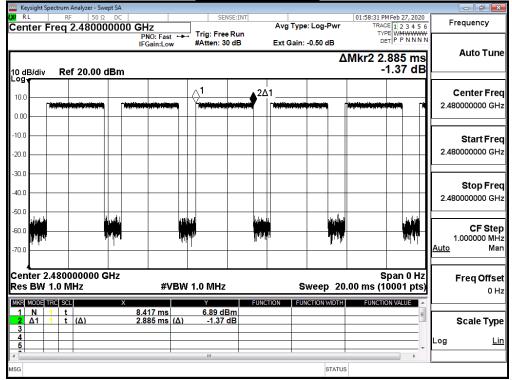
enter Freq 2.402000000 GHz PN0: Fast ↔ Trig: Free Run	
Center Freq 2.402000000 GHz PNO: Fast ++ Trig: Free Run	
PNO: Fast Trig: Free Run	Frequency
PNU: Fast	riequency
IFGain:Low #Atten: 30 dB Ext Gain: -0.50 dB DETIPPNNNN	
il danizon	Auto Tu
ΔMkr2 2.885 ms	Autoru
) dB/div Ref 20.00 dBm -1.07 dB	
	Center Fr
Encode for any former former for the second former former for the second former f	.402000000 G
	Start Fi
.0 2	.402000000
	Stop Fi
	.402000000 0
التفريعية التلقيقاتية المتفعم وباسريف التلتمان وتقسعه	
	CF St
<sup>20</sup> գա <del>րի լիսո, ուլու գորի գորի, հերգ</del> լ	1.000000 N
	<u>o</u> N
enter 2.402000000 GHz Span 0 Hz	Freq Off
es BW 1.0 MHz #VBW 1.0 MHz Sweep 20.00 ms (10001 pts)	0
R MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE	_
1 N 1 1 1 9 240 ma 6 42 dBm	
2 Δ1 1 t (Δ) 2.885 ms (Δ) -1.07 dB	Scale Ty
3	
4 Log	1
STATUS	

Hop rate-2402MHz



#### Hop rate-2441MHz

#### Hop rate-2480MHz



Note: Dwell time = time slot length \* hop rate / number of hopping channels \* period