

# FCC RF Test Report

APPLICANT	: Xiaomi Communications Co., Ltd.
EQUIPMENT	: Mobile Phone
BRAND NAME	: POCO
MODEL NAME	: 2412DPC0AG
FCC ID	: 2AFZZPC0AG
STANDARD	: FCC Part 15 Subpart C §15.247
CLASSIFICATION	: (DSS) Spread Spectrum Transmitter
TEST DATE(S)	: Oct. 12, 2024 ~ Oct. 25, 2024

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

JasonJia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen) 1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China



# TABLE OF CONTENTS

		N HISTORY	-
SUI	MMAR	Y OF TEST RESULT	.4
1	GENE	ERAL DESCRIPTION	.5
	1.1	Applicant	.5
	1.2	Manufacturer	.5
	1.3	Product Feature of Equipment Under Test	
	1.4	Product Specification of Equipment Under Test	.5
	1.5	Modification of EUT	.6
	1.6	Testing Location	.6
	1.7	Test Software	
	1.8	Applicable Standards	.7
2	TEST	CONFIGURATION OF EQUIPMENT UNDER TEST	
	2.1	Carrier Frequency Channel	.8
	2.2	Test Mode	-
	2.3	Connection Diagram of Test System	10
	2.4	Support Unit used in test configuration and system	11
	2.5	EUT Operation Test Setup	11
	2.6	Measurement Results Explanation Example	11
3	TEST	RESULT	12
	3.1	Number of Channel Measurement	12
	3.2	Hopping Channel Separation Measurement	13
	3.3	Dwell Time Measurement	14
	3.4	20dB and 99% Bandwidth Measurement	15
	3.5	Output Power Measurement	16
	3.6	Conducted Band Edges Measurement	18
	3.7	Conducted Spurious Emission Measurement	19
	3.8	Radiated Band Edges and Spurious Emission Measurement	20
	3.9	AC Conducted Emission Measurement	24
	3.10	Antenna Requirements	26
4	LIST	OF MEASURING EQUIPMENT	27
5	MEAS	SUREMENT UNCERTAINTY	28
AP	PENDI	X A. CONDUCTED TEST RESULTS	
AP	PENDI	X B. AC CONDUCTED EMISSION TEST RESULT	
AP	PENDI	X C. RADIATED SPURIOUS EMISSION	
AP	PENDI	X D. DUTY CYCLE PLOTS	
AP	PENDI	X E. SETUP PHOTOGRAPHS	



# **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR400803A	Rev. 01	Initial issue of report	Nov. 14, 2024



# SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(1)	Number of Channels	≥ 15Chs	Pass	-
3.2	15.247(a)(1)	Hopping Channel Separation	≥ 2/3 of 20dB BW	Pass	-
3.3	15.247(a)(1)	Dwell Time of Each Channel	≤ 0.4sec in 31.6sec period	Pass	-
3.4	15.247(a)(1)	20dB Bandwidth	-	Report only	-
3.4	-	99% Bandwidth	-	Report only	-
3.5	15.247(b)(1)	Peak Output Power	≤ 125 mW	Pass	-
3.6	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass	-
3.7	15.247(d)	Conducted Spurious Emission	≤ 20dBc	Pass	-
3.8	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 14.19 dB at 844.8 MHz
3.9	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.80 dB at 0.15 MHz
3.10	15.203 & 15.247(b)	Antenna Requirement	15.203 & 15.247(b)	Pass	-

#### Conformity Assessment Condition:

 The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

#### Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



# **1** General Description

### 1.1 Applicant

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

### 1.2 Manufacturer

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

### **1.3 Product Feature of Equipment Under Test**

Product Feature					
Equipment Mobile Phone					
Brand Name POCO					
Model Name	del Name 2412DPC0AG				
FCC ID	2AFZZPC0AG				
IMEI Code	Conducted: 862842070044344/862842070044351 Conduction: 862842070040482/862842070040490 Radiation: 862842070044229/862842070044237				
HW Version	135100O10				
SW Version	Xiaomi HyperOS 2.0				
EUT Stage	Identical Prototype				

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

# **1.4 Product Specification of Equipment Under Test**

Standard	Standards-related Product Specification			
Tx/Rx Frequency Range	2402 MHz ~ 2480 MHz			
Number of Channels	79			
Carrier Frequency of Each Channel	2402+n*1 MHz; n=0~78			
Maximum Output Power to Antenna	Bluetooth BR(1Mbps) : 15.82 dBm (0.0382 W) Bluetooth EDR (2Mbps) : 15.36 dBm (0.0344 W) Bluetooth EDR (3Mbps) : 15.61 dBm (0.0364 W)			
99% Occupied Bandwidth	Bluetooth BR(1Mbps) : 0.755MHz Bluetooth EDR (2Mbps) : 1.172MHz Bluetooth EDR (3Mbps) : 1.175MHz			
Antenna Type / Gain	IFA Antenna with gain -2.7 dBi			
Type of Modulation	Bluetooth BR (1Mbps) : GFSK Bluetooth EDR (2Mbps) :π/4-DQPSK Bluetooth EDR (3Mbps) : 8-DPSK			



### **1.5 Modification of EUT**

No modifications are made to the EUT during all test items.

### **1.6 Testing Location**

Sporton International Inc. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (Shenzhen)						
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595						
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.				
	TH01-SZ	CN1256	421272				
Test Firm	Sporton International Inc.	(Shenzhen)					
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985						
	Sporton Site No.	FCC Designation No.	FCC Test Firm				
Test Site No.		· · · · · · · · · · · · · · · · · · ·	Registration No.				
	CO02-SZ ; 03CH03-SZ	CN1256	421272				

### 1.7 Test Software

ſ	ltem	Site	Manufacturer	Name	Version
ſ	1.	03CH03-SZ	AUDIX	E3	6.2009-8-24
	2.	CO02-SZ	AUDIX	E3	6.120613b



### **1.8 Applicable Standards**

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart C §15.247
- FCC KDB 558074 D01 15.247 Meas Guidance v05r02
- ANSI C63.10-2013

#### Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



# 2 Test Configuration of Equipment Under Test

# 2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
	0	2402	27	2429	54	2456
	1	2403	28	2430	55	2457
	2	2404	29	2431	56	2458
	3	2405	30	2432	57	2459
	4	2406	31	2433	58	2460
	5	2407	32	2434	59	2461
	6	2408	33	2435	60	2462
	7	2409	34	2436	61	2463
	8	2410	35	2437	62	2464
	9	2411	36	2438	63	2465
	10	2412	37	2439	64	2466
	11	2413	38	2440	65	2467
	12	2414	39	2441	66	2468
2400-2483.5 MHz	13	2415	40	2442	67	2469
	14	2416	41	2443	68	2470
	15	2417	42	2444	69	2471
	16	2418	43	2445	70	2472
	17	2419	44	2446	71	2473
	18	2420	45	2447	72	2474
	19	2421	46	2448	73	2475
	20	2422	47	2449	74	2476
	21	2423	48	2450	75	2477
	22	2424	49	2451	76	2478
	23	2425	50	2452	77	2479
	24	2426	51	2453	78	2480
	25	2427	52	2454	-	-
	26	2428	53	2455	-	-



### 2.2 Test Mode

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report, and the worst mode of radiated spurious emissions is Bluetooth 1Mbps mode, and recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

Summary table of Test Cases							
	Data Rate / Modulation						
Test Item	Bluetooth BR 1Mbps	Bluetooth EDR 2Mbps	Bluetooth EDR 3Mbps				
	GFSK	π/4-DQPSK	8-DPSK				
Conducted	Mode 1: CH00_2402 MHz	Mode 4: CH00_2402 MHz	Mode 7: CH00_2402 MHz				
	Mode 2: CH39_2441 MHz	Mode 5: CH39_2441 MHz	Mode 8: CH39_2441 MHz				
Test Cases	Mode 3: CH78_2480 MHz	Mode 6: CH78_2480 MHz	Mode 9: CH78_2480 MHz				
		Bluetooth BR 1Mbps GFSK					
Radiated		Mode 1: CH00_2402 MHz					
Test Cases		Mode 2: CH39_2441 MHz					
		Mode 3: CH78_2480 MHz					
AC							
Conducted	Mode 1 : Bluetooth Link + A	daptor 1 + USB Cable1 + Batt	ery 1				
Emission							
Remark:							
1. For radiate	1. For radiated test cases, the worst mode data rate 1Mbps was reported only, because this data rate						
has the hig	hest RF output power at prelir	ninary tests, and no other sign	ificantly frequencies found in				
conducted	conducted spurious emission.						

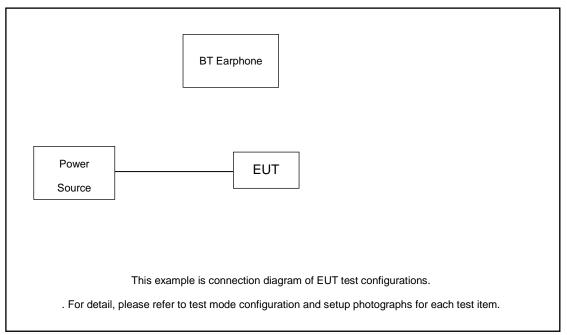
The following summary table is showing all test modes to demonstrate in compliance with the standard.

2. For Radiated Test Cases, The tests were performed with Adapter1 and USB Cable1 .

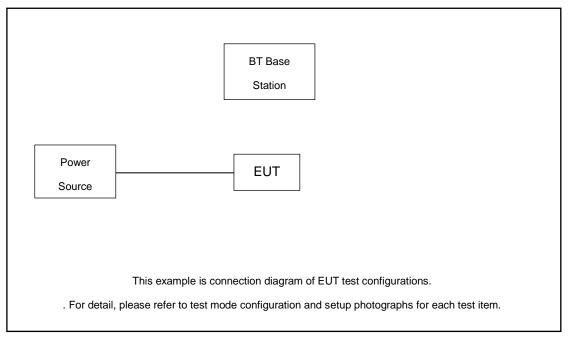


## 2.3 Connection Diagram of Test System

AC Conducted Emission:



Radiated Emission:



### 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	BT Base Station	R&S	СВТ	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A

# 2.5 EUT Operation Test Setup

For Bluetooth function, the engineering test program was provided and enabled to make EUT connect with Bluetooth base station to continuous transmit.

For AC power line conducted emissions, the EUT was set to connect with the BT earphone.

### 2.6 Measurement Results Explanation Example

#### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 2.20 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 2.20 + 10 = 12.20 (dB)



# 3 Test Result

### 3.1 Number of Channel Measurement

### 3.1.1 Limits of Number of Hopping Frequency

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

### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.1.3 Test Procedure

- 1. The testing follows ANSI C63.10-2013 clause 7.8.3.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Enable the EUT hopping function.
- Use the following spectrum analyzer settings: Span = the frequency band of operation;
   RBW = 300kHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold.
- 6. The number of hopping frequency used is defined as the number of total channel.
- 7. Record the measurement data derived from spectrum analyzer.

### 3.1.4 Test Setup



Spectrum Analyzer

### 3.1.5 Test Result of Number of Hopping Frequency



### 3.2 Hopping Channel Separation Measurement

### 3.2.1 Limit of Hopping Channel Separation

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.

### **3.2.2 Measuring Instruments**

The measuring equipment is listed in the section 4 of this test report.

#### 3.2.3 Test Procedures

- 1. The testing follows ANSI C63.10-2013 clause 7.8.2.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Enable the EUT hopping function.
- Use the following spectrum analyzer settings:
   Span = wide enough to capture the peaks of two adjacent channels;
   RBW = 300kHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold.
- 6. Measure and record the results in the test report.

### 3.2.4 Test Setup



Spectrum Analyzer

### 3.2.5 Test Result of Hopping Channel Separation



### 3.3 Dwell Time Measurement

#### 3.3.1 Limit of Dwell Time

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.

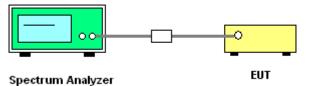
#### 3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

#### 3.3.3 Test Procedures

- 1. The testing follows ANSI C63.10-2013 clause 7.8.4.
- The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Enable the EUT hopping function.
- 5. Use the following spectrum analyzer settings: 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.
- 6. Measure and record the results in the test report.

#### 3.3.4 Test Setup



### 3.3.5 Test Result of Dwell Time



### 3.4 20dB and 99% Bandwidth Measurement

### 3.4.1 Limit of 20dB and 99% Bandwidth

Reporting only

#### 3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

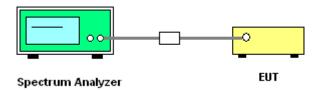
#### 3.4.3 Test Procedures

- 1. The testing follows ANSI C63.10-2013 clause 6.9.2 and 6.9.3.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- Use the following spectrum analyzer settings for 20dB Bandwidth measurement.
  Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hopping channel; The RBW is set to 1% to 5% of the 99% OBW, the VBW is set to 3 times the RBW;
  Sweep = auto; Detector function = peak; Trace = max hold.
- 5. Use the following spectrum analyzer settings for 99 % Bandwidth measurement.
  Span = approximately 1.5 to 5 times the 99% bandwidth, centered on a hopping channel; The RBW is set to 1% to 5% of the 99% OBW, the VBW is set to 3 times the RBW; Sweep = auto; Detector function = peak;

Trace = max hold.

6. Measure and record the results in the test report.

### 3.4.4 Test Setup



### 3.4.5 Test Result of 20dB and 99% Occupied Bandwidth



### 3.5 Output Power Measurement

### 3.5.1 Limit of Output Power

The maximum peak conducted output power of the intentional radiator shall not exceed the following: 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. The power limit for 1Mbps, 2Mbps, 3Mbps and AFH modes are 0.125 watts.

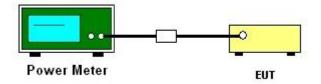
### 3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

#### 3.5.3 Test Procedures

- 1. The testing follows ANSI C63.10-2013 clause 7.8.5.
- 2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Measure the conducted output power with cable loss and record the results in the test report.
- 5. Measure and record the results in the test report.

### 3.5.4 Test Setup





### 3.5.5 Test Result of Peak Output Power

DH	CH.	NTX	Peak Power (dBm)	Power Level	Power Limit (dBm)	Test Result
	0	1	15.10	Defualt	20.97	Pass
DH5	39	1	15.82	Defualt	20.97	Pass
	78	1	15.41	Defualt	20.97	Pass
	0	1	14.58	Defualt	20.97	Pass
2DH5	39	1	15.36	Defualt	20.97	Pass
	78	1	14.87	Defualt	20.97	Pass
	0	1	14.84	Defualt	20.97	Pass
3DH5	39	1	15.61	Defualt	20.97	Pass
	78	1	15.12	Defualt	20.97	Pass

### 3.5.6 Test Result of Average Output Power (Reporting Only)

DH	DH CH.		Average Power	Duty Factor
			(dBm)	(dB)
	0	1	15.04	1.15
DH5	39	1	15.78	1.15
	78	1	15.38	1.15
	0	1	11.92	1.15
2DH5	39	1	12.91	1.15
	78	1	12.65	1.15
	0	1	11.97	1.14
3DH5	39	1	12.93	1.14
	78	1	12.68	1.14



### 3.6 Conducted Band Edges Measurement

### 3.6.1 Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

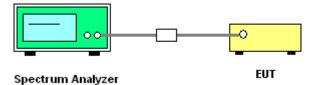
### 3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.6.3 Test Procedures

- 1. The testing follows ANSI C63.10-2013 clause 7.8.6.
- 2. Set to the maximum power setting and enable the EUT transmit continuously.
- 3. Set RBW = 100kHz, VBW = 300kHz. Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used.
- 4. Enable hopping function of the EUT and then repeat step 2. and 3.
- 5. Measure and record the results in the test report.

### 3.6.4 Test Setup



### 3.6.5 Test Result of Conducted Band Edges

Please refer to Appendix A.

### 3.6.6 Test Result of Conducted Hopping Mode Band Edges



### 3.7 Conducted Spurious Emission Measurement

### 3.7.1 Limit of Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

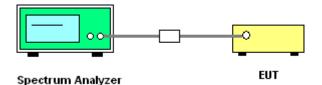
### 3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

#### 3.7.3 Test Procedure

- 1. The testing follows ANSI C63.10-2013 clause 7.8.8.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
- 5. Measure and record the results in the test report.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 3.7.4 Test Setup



### 3.7.5 Test Result of Conducted Spurious Emission



### 3.8 Radiated Band Edges and Spurious Emission Measurement

### 3.8.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

#### 3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.



#### 3.8.3 Test Procedures

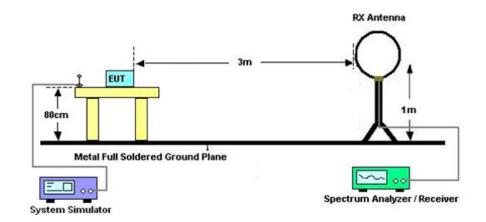
- 1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- 4. Set to the maximum power setting and enable the EUT transmit continuously.
- 5. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
  - (3) For average measurement: use duty cycle correction factor method per 15.35(c). Duty cycle = On time/100 milliseconds On time = N<sub>1</sub>\*L<sub>1</sub>+N<sub>2</sub>\*L<sub>2</sub>+...+N<sub>n-1</sub>\*LN<sub>n-1</sub>+N<sub>n</sub>\*L<sub>n</sub> Where N<sub>1</sub> is number of type 1 pulses, L<sub>1</sub> is length of type 1 pulses, etc. Average Emission Level = Peak Emission Level + 20\*log(Duty cycle)
- 6. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level
- 7. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
- 8. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Note: The average levels were calculated from the peak level corrected with duty cycle correction factor (-24.79dB) derived from 20log (dwell time/100ms). This correction is only for signals that hop with the fundamental signal, such as band-edge and harmonic. Other spurious signals that are independent of the hopping signal would not use this correction.

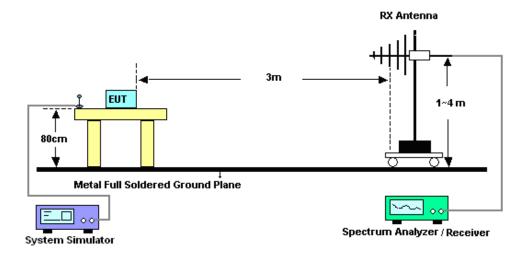


### 3.8.4 Test Setup

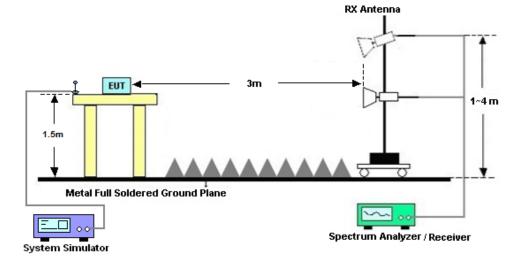
#### For radiated emissions below 30MHz



#### For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : 22 of 28 Report Issued Date : Nov. 14, 2024 Report Version : Rev. 01 Report Template No.: BU5-FR15CBT Version 2.0



### 3.8.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### 3.8.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.8.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C.

#### 3.8.8 Duty cycle correction factor for average measurement



### 3.9 AC Conducted Emission Measurement

### 3.9.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBµV)			
Frequency of emission (MHZ)	Quasi-peak	Average		
0.15-0.5	66 to 56*	56 to 46*		
0.5-5	56	46		
5-30	60	50		

\*Decreases with the logarithm of the frequency.

### 3.9.2 Measuring Instruments

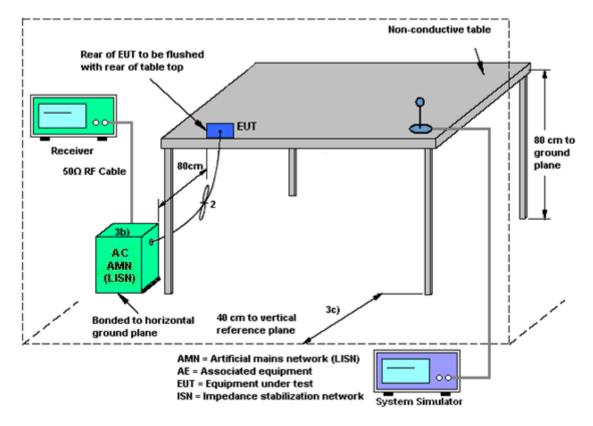
The measuring equipment is listed in the section 4 of this test report.

#### 3.9.3 Test Procedures

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.



### 3.9.4 Test Setup



### 3.9.5 Test Result of AC Conducted Emission



### 3.10 Antenna Requirements

### 3.10.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### 3.10.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

### 3.10.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



# 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY544500 83	20Hz~8.4GHz	Apr. 09, 2024	Oct. 18, 2024~ Oct. 19, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY551502 46	10Hz~44GHz;	Apr. 09, 2024	Oct. 18, 2024~ Oct. 19, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 29, 2023	Oct. 18, 2024~ Oct. 19, 2024	Dec. 28, 2024	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Aug. 20, 2023	Oct. 18, 2024~ Oct. 19, 2024	Aug. 19, 2025	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBE CK	BBHA9120D	9120D-135 5	1GHz~18GHz	Apr. 09, 2024	Oct. 18, 2024~ Oct. 19, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz	Jul. 03, 2024	Oct. 18, 2024~ Oct. 19, 2024	Jul.02, 2025	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Oct. 18, 2024~ Oct. 19, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2024	Oct. 18, 2024~ Oct. 19, 2024	Oct. 17, 2025	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P- R	1943528	1GHz~18GHz	Oct. 18, 2024	Oct. 18, 2024~ Oct. 19, 2024	Oct. 17, 2025	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY395013 02	500MHz~26.5G Hz	Dec. 27, 2023	Oct. 18, 2024~ Oct. 19, 2024	Dec. 26, 2024	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002 729	N/A	Oct. 18, 2024	Oct. 18, 2024~ Oct. 19, 2024	Oct. 17, 2025	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Oct. 18, 2024~ Oct. 19, 2024	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Oct. 18, 2024~ Oct. 19, 2024	NCR	Radiation (03CH03-SZ)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 03, 2024	Oct. 25, 2024	Jul. 02, 2025	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 03, 2024	Oct. 25, 2024	Jul. 02, 2025	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002 470	100Vac~250Vac	Dec.25, 2022	Oct. 25, 2024	Dec. 24, 2024	Conduction (CO02-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Oct. 12, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 29, 2023	Oct. 12, 2024	Dec. 28, 2024	Conducted (TH01-SZ)
Thermo meter	Anymetre	JR593	#7	- 10℃ ~ 50℃ 10%RH~99%R H	Apr. 09, 2024	Oct. 12, 2024	Apr. 08, 2025	Conducted (TH01-SZ)

NCR: No Calibration Required



### **5** Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

#### Uncertainty of Conducted Measurement

Test Item	Uncertainty		
Conducted Spurious Emission & Bandedge	±1.34 dB		
Occupied Channel Bandwidth	±0.012 MHz		
Conducted Power	±1.34 dB		
Conducted Power Spectral Density	±1.32 dB		
Frequency	±1.3 Hz		

#### Uncertainty of AC Conducted Emission Measurement (0.15 MHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence	2.5 dB
of 95% (U = 2Uc(y))	2.3 UB

#### Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence	5.0 dB
of 95% (U = 2Uc(y))	

#### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence	5.0 dB	
of 95% (U = 2Uc(y))	5.0 dB	

#### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9 dB
--	--------

#### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence	5.0 dB
of 95% (U = 2Uc(y))	5.0 dB

----- THE END ------



# **Appendix A. Conducted Test Results**



Ambient Condition: <u>24-26</u> ℃, <u>45-55</u> %RH

Test Date: 2024.10.12

Test Engineer: Chen ZhiQiang

# 20dB Emission Bandwidth

### **Test Result**

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]
		2402	0.86	2401.55	2402.41
DH5	Ant17	2441	0.86	2440.55	2441.41
		2480	0.86	2479.55	2480.41
	Ant17	2402	1.29	2401.36	2402.66
2DH5		2441	1.29	2440.36	2441.66
		2480	1.30	2479.36	2480.66
	Ant17	2402	1.30	2401.35	2402.65
3DH5		2441	1.30	2440.35	2441.65
		2480	1.30	2479.35	2480.65

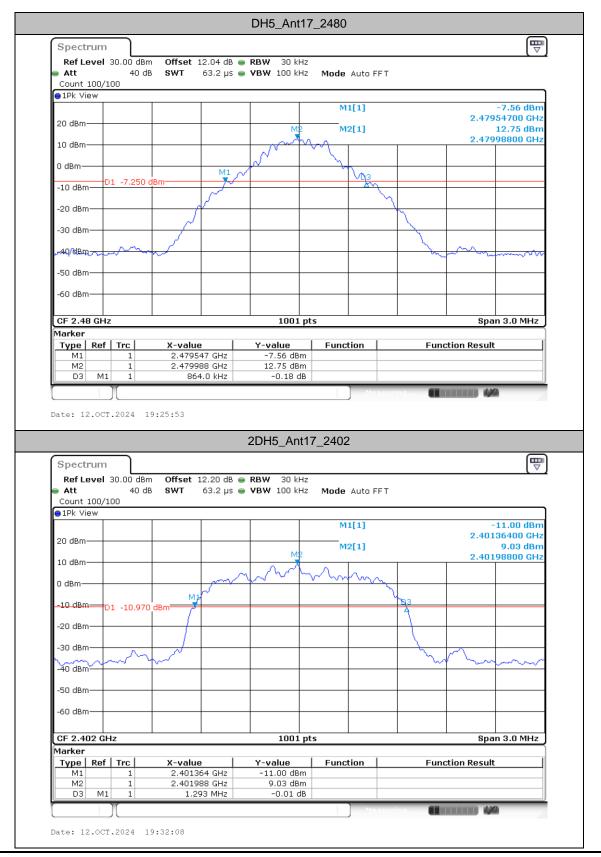


#### **Test Graphs**



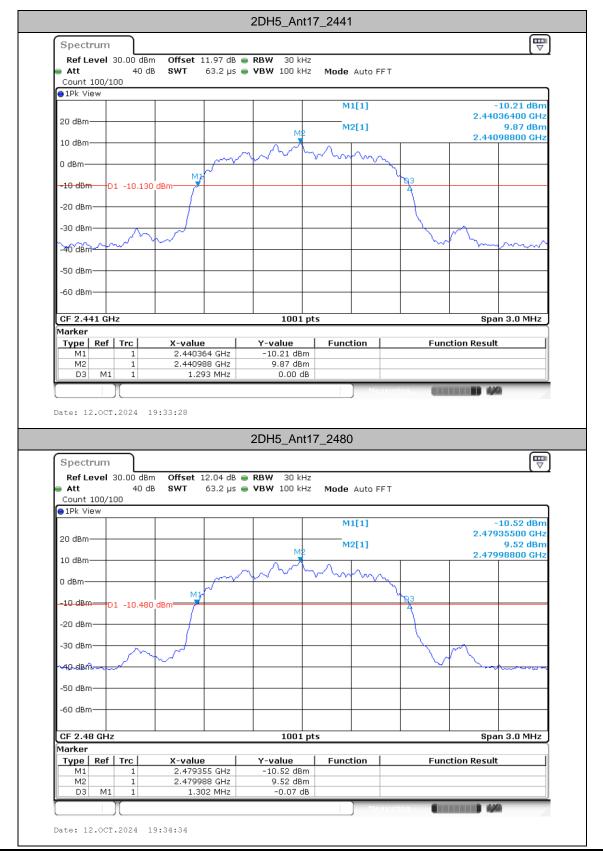
**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A2 of A45





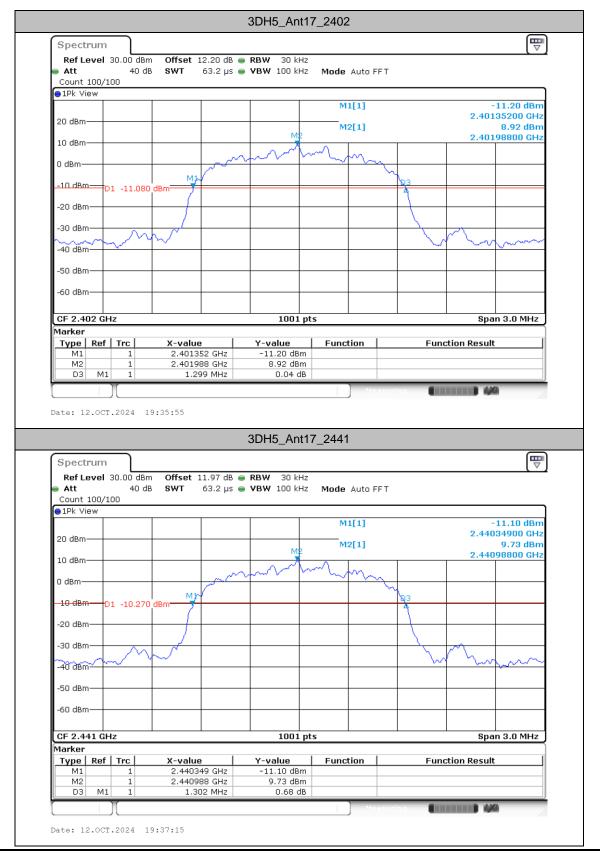
**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A3 of A45





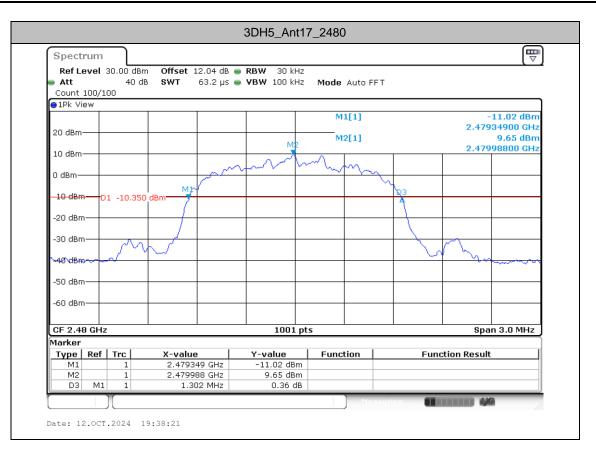
**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A4 of A45





**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A5 of A45





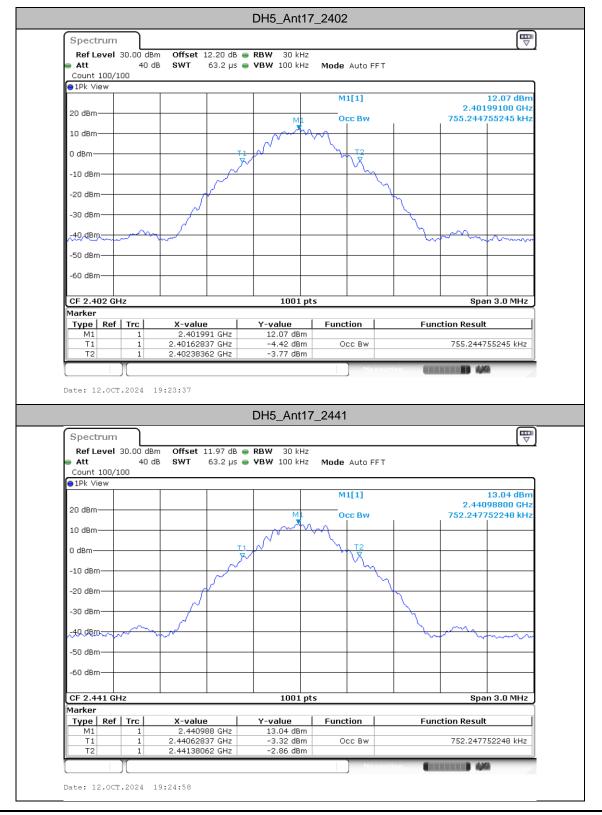


# **Occupied Channel Bandwidth**

### **Test Result**

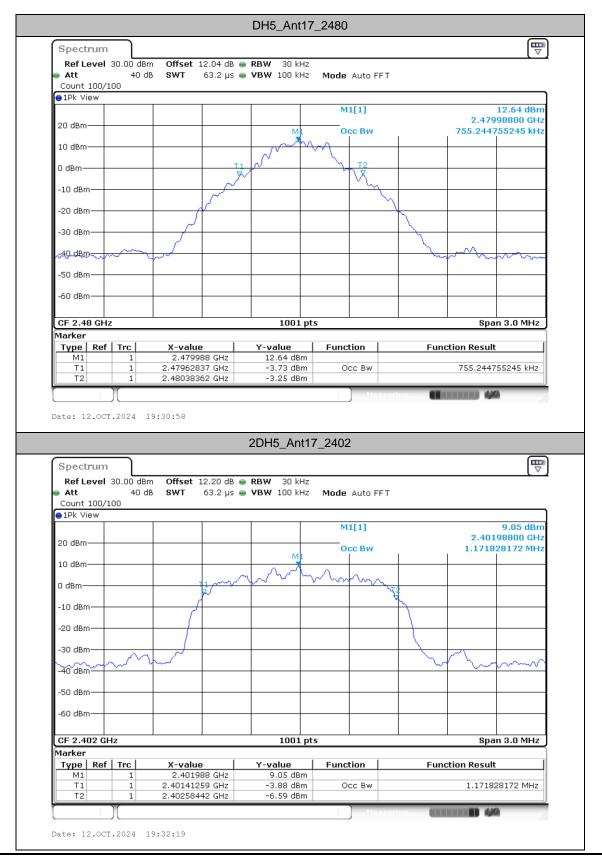
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
		2402	0.755	2401.6284	2402.3836
DH5	Ant17	2441	0.752	2440.6284	2441.3806
		2480	0.755	2479.6284	2480.3836
	Ant17	2402	1.172	2401.4126	2402.5844
2DH5		2441	1.172	2440.4126	2441.5844
		2480	1.169	2479.4126	2480.5814
3DH5	Ant17	2402	1.172	2401.4156	2402.5874
		2441	1.175	2440.4156	2441.5904
		2480	1.172	2479.4156	2480.5874





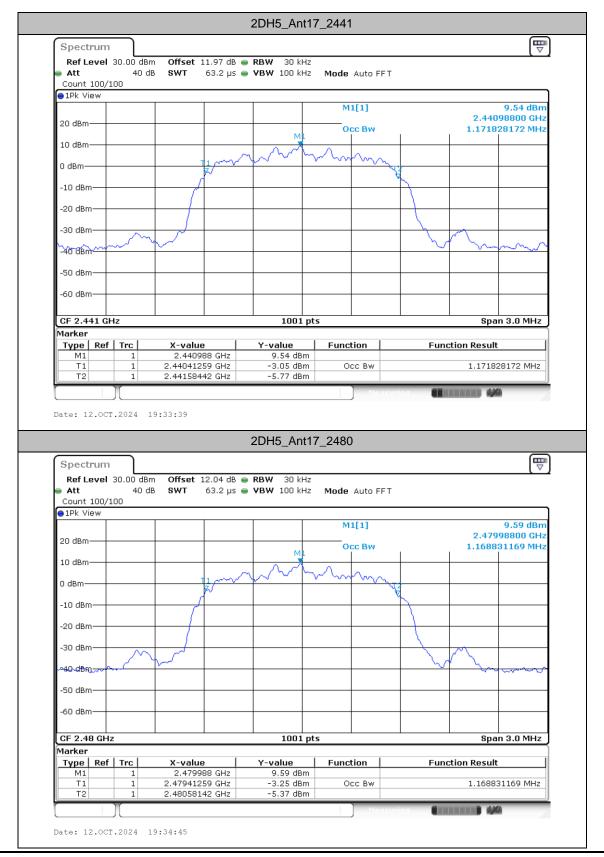
**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A8 of A45





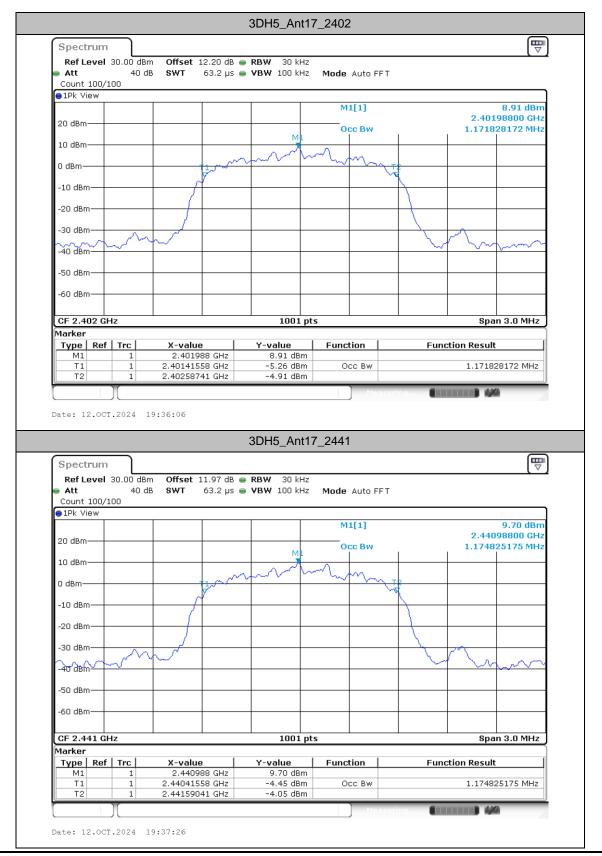
Page Number : A9 of A45





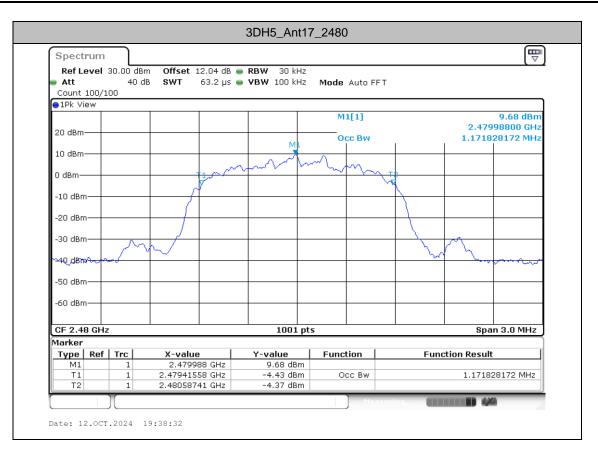
Page Number : A10 of A45

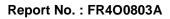




Page Number : A11 of A45









# **Carrier frequency separation**

### **Test Result**

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant17	Нор	1	≥0.573	PASS
2DH5	Ant17	Нор	1	≥0.867	PASS
3DH5	Ant17	Нор	1.055	≥0.867	PASS



	_			DH5_Ant	П7_Нор				G
Spectrum									
🗕 Att	30.00 dBm 40 dB			RBW 300 kH VBW 300 kH		Auto FFT			
Count 100/ 1Pk View	100								
					M1	[1]		2 4	15.75 dBm 4100145 GHz
20 dBm		MI			D2	[1]	D2	2	-0.18 dB
			+		1			1	1.00000 MHz
10 dBm									
0 dBm									
10.10-									
-10 dBm									
-20 dBm									
-30 dBm									
-40 dBm								1	
-50 dBm									
								1	
-60 dBm									
Start 2.440	15 GHz			691	nts			Stor	2.4425 GHz
	Υ					Measur	ing		
Date: 12.00	T.2024 19	:40:22							
Date: 12.00	T.2024 19	:40:22		2DH5_Ar	t17_Hop				
Spectrum	ı								<b>⊞</b> ⊽
Spectrum	_		11.97 dB 🕳	<b>RBW</b> 300 kH	łz	Auto FFT			<b>⊡</b> ⊽
Spectrum Ref Level Att Count 100/	30.00 dBm 40 dB	Offset	11.97 dB 🕳		łz	Auto FFT			( <del>Ш</del>
Spectrum Ref Level Att	30.00 dBm 40 dB	Offset	11.97 dB 🕳	<b>RBW</b> 300 kH	Hz Hz Mode	Auto FFT			(₩ ▼ 12.99 dBm
Spectrum Ref Level • Att Count 100/ • 1Pk View	30.00 dBm 40 dB	Offset	11.97 dB 🕳	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		2.4	12.99 dBm H4112319 GHz
Spectrum Ref Level Att Count 100/	30.00 dBm 40 dB	Offset	11.97 dB 🕳	<b>RBW</b> 300 kH	Hz Hz Mode	[1]		,D2	12.99 dBm
Spectrum Ref Level Att Count 100/ 1Pk View	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]			12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ IPk View 20 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ IPk View 20 dBm 10 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ PIPk View 20 dBm 10 dBm 0 dBm -10 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	30.00 dBm 40 dB	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz Mode M M1	[1]		,D2	12.99 dBm H4112319 GHz -0.24 dB
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm	30.00 dBm 40 dB /100	Offset	11.97 dB 6.2 μs M1	RBW 300 kH	Hz Hz M1 D2	[1]		D2 2	12.99 dBm H4112319 GHz -0.24 dB 1.00000 MHz
Spectrum Ref Level Att Count 100/ 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm	30.00 dBm 40 dB /100	Offset	11.97 dB 6.2 μs M1	<b>RBW</b> 300 kH	Hz Hz M1 D2	[1]		D2 2	12.99 dBm H4112319 GHz -0.24 dB 1.00000 MHz

Page Number : A14 of A45



Spectrum				
Ref Level 30.00 dBm Att 40 dB Count 100/100	Offset 11.97 dB ● R SWT 6.2 µs ● V		10de Auto FFT	
●1Pk View				
20 dBm	M1		M1[1] —D2[1]	12.90 dB 2.44113188 Gl -0.26 d -0.26 d
10 dBm				D2 1.05007 Mi
0 dBm				
-10 dBm				
-20 dBm				
-30 dBm				
-40 dBm				
-50 dBm				
-60 dBm				
Start 2.4405 GHz		691 pts		Stop 2.4425 GH
			Measuring	444

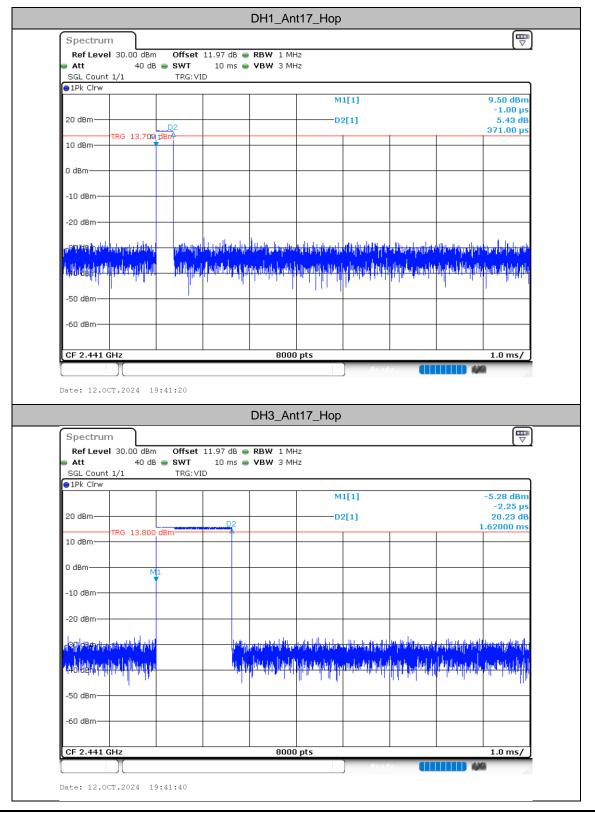


# Time of occupancy

### **Test Result**

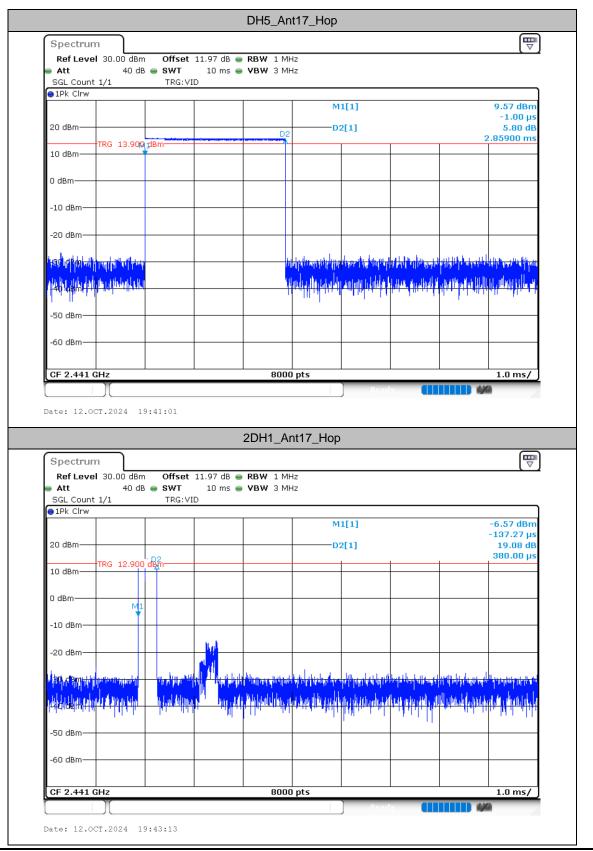
TestMode	Antenna	Freq(MHz)	BurstWidth	TotalHops	Result[s]	Limit[s]	Verdict
			[ms]	[Num]			
DH1	Ant17	Нор	0.371	320	0.119	≤0.4	PASS
DH3	Ant17	Нор	1.620	160	0.259	≤0.4	PASS
DH5	Ant17	Нор	2.859	106.67	0.305	≤0.4	PASS
2DH1	Ant17	Нор	0.380	320	0.122	≤0.4	PASS
2DH3	Ant17	Нор	1.624	160	0.26	≤0.4	PASS
2DH5	Ant17	Нор	2.864	106.67	0.306	≤0.4	PASS
3DH1	Ant17	Нор	0.379	320	0.121	≤0.4	PASS
3DH3	Ant17	Нор	1.623	160	0.26	≤0.4	PASS
3DH5	Ant17	Нор	2.867	106.67	0.306	≤0.4	PASS





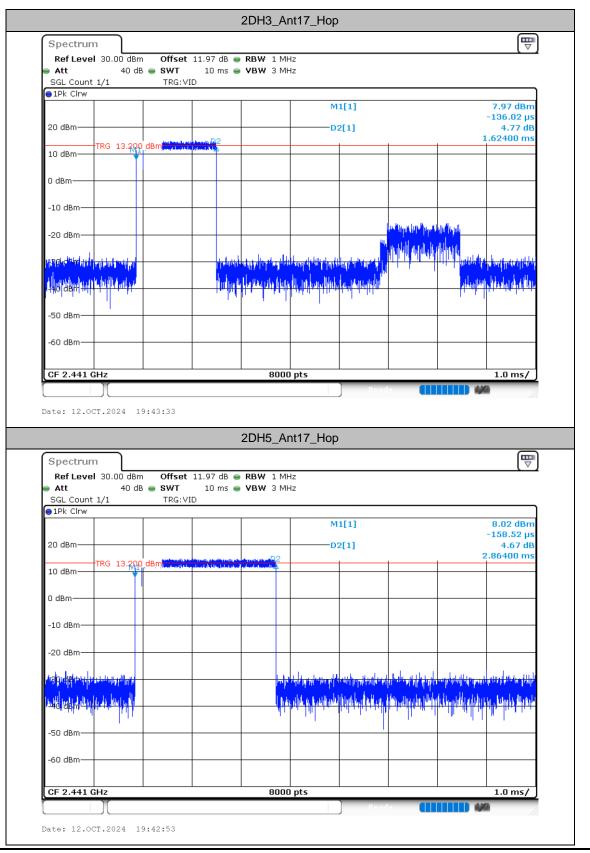
**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A17 of A45





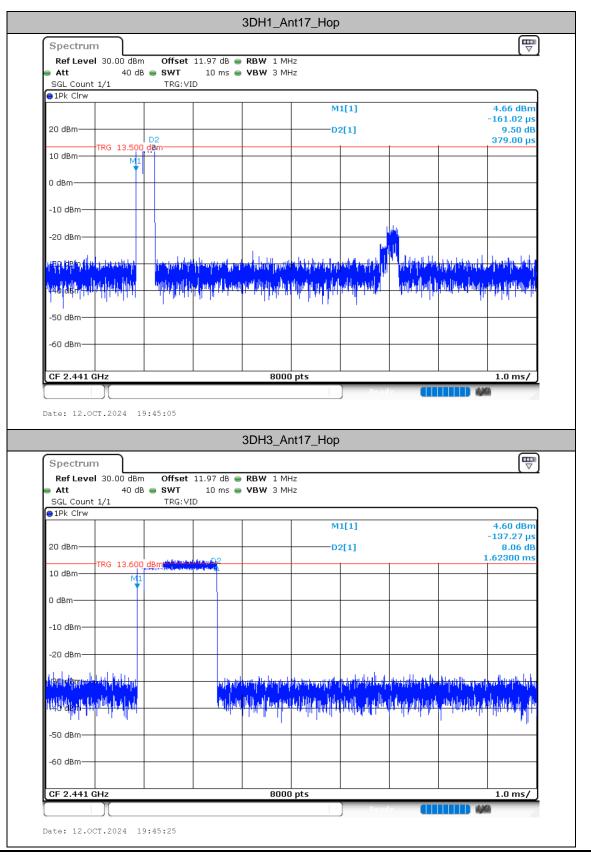
Page Number : A18 of A45





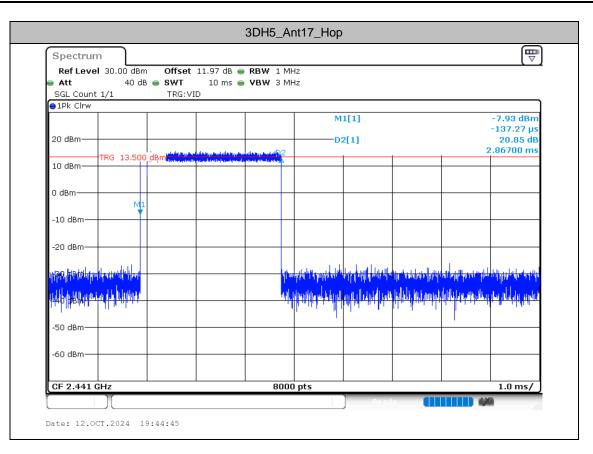
Page Number : A19 of A45





Page Number : A20 of A45





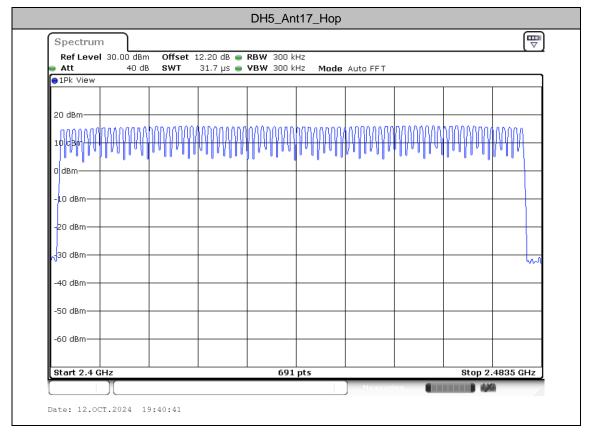


# Number of hopping channels

#### **Test Result**

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant17	Нор	79	≥15	PASS







## Band edge measurements

### Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
		Low	2402	14.40	-43.13	≤-5.6	PASS
DUE	A == 147	High	2480	15.05	-44.07	≤-4.95	PASS
DH5	Ant17	Low	Hop_2402	14.14	-44.71	≤-5.86	PASS
		High	Hop_2480	15.23	-43.38	≤-4.77	PASS
		Low	2402	11.52	-43.77	≤-8.48	PASS
2DH5	Ant17	High	2480	12.14	-44.17	≤-7.86	PASS
2005	Antr	Low	Hop_2402	10.13	-44.38	≤-9.87	PASS
		High	Hop_2480	12.35	-43.43	≤-7.65	PASS
		Low	2402	11.59	-44.19	≤-8.41	PASS
3DH5	1 nt 17	High	2480	12.46	-43.48	≤-7.54	PASS
3003	Ant17	Low	Hop_2402	9.99	-44.37	≤-10.01	PASS
		High	Hop_2480	11.93	-44.11	≤-8.07	PASS



							10_/ ultr/		ow_24	-02			
Spect	rum												
Ref L	evel	20.00					RBW 100 k						
Att 1Pk Vi	ew	31	) dB	SWT	75.8	ha 🕋	<b>VBW</b> 300 k	HZ	Mode	Auto FFT			
									м	1[1]			14.40 dBm
10 dBm	-				+				M	2[1]			021740 dHz -47.08 dBm
0 dBm-	_				_							2.4	000000 GHz
-10 dBn		01 -5.60	00 dBm										
-20 dBn	רי				1								
-30 dBn	י												
-40 dBn	n_										M4		
-50 dBn	m	um	rune	mm	mour	un	amanaha	m	www	www.	M3	mahumun	M2 The
-60 dBn	-ר												
-70 dBn	י		_								+		
Start 2		211-2					601	nt-				01	2.405.011=
Start 2 Marker		3112					691	pts				stop	2.405 GHz
Туре	Ref			X-valu			Y-value		Func	tion	Fur	iction Resul	t
M1 M2		1		2.402	2.4 GH		14.40 di -47.08 di						
M3 M4		1			2.39 GH: 261 GH:		-47.64 di -43.13 di						
1014				2.3923	201 GH.	2	-43.13 ut			Manau			20.
										)	-		
Jace. 1.		1.2024	19:2	3:52		DH	15_Ant17	_Hi	gh_24	180			
Spect		_	19:2	3:52		DH	I5_Ant17	_Hi	gh_24	180			T
Spect Ref L	rum	20.00	звт	Offset		dB 👄	<b>RBW</b> 100 k	Hz					
Spect Ref L	rum evel	20.00	звт			dB 👄		Hz		180 Auto FFT			<b>⊞</b> ⊽
Spect Ref L	rum evel	20.00 (	звт	Offset		dB 👄	<b>RBW</b> 100 k	Hz	Mode				15.05 dBm
Spect Ref L	rum evel	20.00	звт	Offset		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz
Spect Ref L Att 1Pk Vi	rum evel	20.00 ( 30	звт	Offset		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm
Spect Ref L Att 1Pk Vi 10 dBm 0 dBm-	ew	20.00 (	dBm ) dB	Offset SWT		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz -46.49 dBm
Spect Ref Li • Att • 1Pk Vi 10 dBm • 0 dBm- -10 dBm	ew	20.00 ( 30	dBm ) dB	Offset SWT		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz -46.49 dBm
Spect Ref L Att 1Pk Vi 10 dBm 0 dBm-	ew	20.00 ( 30	dBm ) dB	Offset SWT		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz -46.49 dBm
Spect Ref Li • Att • 1Pk Vi 10 dBm • 0 dBm- -10 dBm	rum evel ew	20.00 ( 30	dBm ) dB	Offset SWT		dB 👄	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz -46.49 dBm
Spect Ref Li Att 1Pk Vi 10 dBm 0 dBm- -10 dBm	ew	20.00 ( 30	dBm ) dB 50 dBm	Offset SWT		dB ● µs ●	<b>RBW</b> 100 k	Hz	Mode	Auto FFT			15.05 dBm 480130 GHz -46.49 dBm
Spect Ref L Att 1Pk Vi 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm		20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB 👄	RBW 100 k VBW 300 k	Hz	Mode	Auto FFT		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 1Pk Vi 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm		20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ●	RBW 100 k VBW 300 k	Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 1Pk Vi 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm		20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ●	RBW 100 k VBW 300 k	Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 1Pk Vi 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm	rum evel 	20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ●	RBW 100 k VBW 300 k	Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L • 1Pk Vi 10 dBm - 10 dBm - 20 dBm - 20 dBm - 30 dBm - 40 dBm - 60 dBm - 70 dBm		20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ●	RBW 100 k VBW 300 k	Hz Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm		20.00 ( 30	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ●	RBW 100 k VBW 300 k	Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -70 dBm -70 dBm <b>Start 2</b> Marker Type	rum evel ew 1 1 1 1 1 1 2 .47 (	20.00 ( 30 )1 -4.95 )1 -4.95 )1 -4.95 )1 -4.95 )1 -4.95 )1 -3 )1 -3 (-3 )1 -3 )1 -3 (-3 )1 -3 (-	dBm ) dB 50 dBm	Offset SWT	94.8	dB ● µs ● M3	RBW 100 k VBW 300 k	Hz Hz	Mode	Auto FFT 1[1] 2[1]		2.	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -50 dBm -70 dBm -70 dBm -70 dBm	rum evel ew 1 1 1 1 1 1 2 .47 (	20.00 ( 30 ) M1 ) -4.99 ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	dBm ) dB 50 dBm	Offset SWT	94.8	M3	RBW 100 k VBW 300 k	Hz Hz pts	Mode	Auto FFT 1[1] 2[1]		2	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 10 dBm 0 dBm- -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm <b>Start 2</b> Marker Type M1 M2 M3	rum evel ew 1 1 1 1 1 1 2 .47 (	20.00 ( 30 ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	dBm ) dB 50 dBm	Offset SWT مالیولی X-vali	94.8	M3 M3 M3 M3 M2 Z Z Z	RBW 100 k VBW 300 k 300	Hz Hz b b b b b b b b b b b b b b b b b	Mode	Auto FFT 1[1] 2[1]		2	15.05 dBm 480130 GHz -46.49 dBm 483500 GHz
Spect Ref L Att 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -60 dBm -50 dBm -70 dBm <b>Start 2</b> Marker Type M1 M2	rum evel ew 1 1 1 1 1 1 2 .47 (	20.00 ( 30 ) M1 ) -4.93 ) M1 ) M1 ) M1 ) M1 ) M1 ) M1 ) M1 ) M1	dBm ) dB 50 dBm	Offset SWT مالیولی X-vali	94.8	M3 M3 M3 M3 M2 Z Z Z	RBW 100 k VBW 300 k 100 k 1	Hz Hz b b b b b b b b b b b b b b b b b	Mode	Auto FFT 1[1] 2[1]	Fur	2	15.05 dBm +80130 GHz -46.49 dBm +83500 GHz 

**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A25 of A45



Spectrum									
Ref Level		m Offset 1	L2.20 dB	🔵 RBW 100 k	Hz				(*.
Att	30 0	IB SWT	75.8 µs	😑 <b>VBW</b> 300 k	Hz Mode	Auto FFT			
●1Pk View					M	1[1]			14.1 <u>4</u> dBm
10 dBm						.[1]		2.40	20150 段與z
TO GBW					M	2[1]			46.35 dBm
0 dBm								2.40	0000010142
-10 dBm	01 -5.860	dBm							
-10 080									
-20 dBm									
-30 dBm									
00 00									
-40 dBm		M4					MB		M2   ▼J
-50 dBm	mary	howard	many	mannoul	mun	Rod mon long	M3	molecourse	<b>J</b>
-60 dBm									
-70 dBm									
Start 2.35 (	GHz	·		691	pts		·	Stop :	2.405 GHz
Marker	1 - 1				1 -		_		
Type Ref	1 Trc	2.4020		<u>Y-value</u> 14.14 dB	Funct	tion	Fund	tion Result	
M2	1	2	.4 GHz	-46.35 dB	m				
M3 M4	1	2.36578	39 GHz	-48.50 dB -44.71 dB					
	-	2100010							
Date: 12.00	)[ r.2024	19:39:43	DH	5_Ant17_H	igh_Hop_	2480	ing		•
Date: 12.00 Spectrum	_	19:39:43	DH	5_Ant17_H	igh_Hop_	_2480	ing		
				5_Ant17_H		_2480			
Spectrum Ref Level Att		m Offset 1	L1.99 dB		Hz	2480			
Spectrum Ref Level	20.00 dB	m Offset 1	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz <b>Mode</b>	Auto FFT			
Spectrum Ref Level Att 1Pk View	20.00 dB 30 d	m Offset 1	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz <b>Mode</b>				15.23 dBm
Spectrum Ref Level Att	20.00 dB 30 d	m Offset 1	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 1Pk View	20.00 dB 30 c	m Offset 1 iB SWT	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz
Spectrum Ref Level Att 1Pk View	20.00 dB 30 d	m Offset 1 iB SWT	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 1Pk View	20.00 dB 30 c	m Offset 1 iB SWT	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 1Pk View	20.00 dB 30 c	m Offset 1 iB SWT	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 1Pk View Deem -10 dBm	20.00 dB 30 c	m Offset 1 iB SWT	L1.99 dB	<b>e RBW</b> 100 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 1Pk View Deem -10 dBm -20 dBm -30 dBm	20.00 dB 30 c	m Offset 1 iB SWT	L1.99 dB	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm
Spectrum Ref Level Att 10 EBm 10 EBm 10 EBm 10 Bm -10 dBm -20 dBm	20.00 dB 30 d	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T 1[1] 2[1]		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View Deem -10 dBm -20 dBm -30 dBm	20.00 dB 30 c	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FFT		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 dem -10 dBm -20 dBm -40 dBm -50 dBm	20.00 dB 30 d	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T 1[1] 2[1]		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att 10 Edm 10 Edm	20.00 dB 30 d	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T 1[1] 2[1]		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 ABm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dB 30 d	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T 1[1] 2[1]		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att Prk View 10 BBm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm	20.00 dB 30 d	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T 1[1] 2[1]		2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 Bm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2.47	20.00 dB 30 c	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Mode	Auto FF T 1[1] 2[1]		2.4 - 2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz
Spectrum Ref Level Att IPR View Id adm Id add Id addd Id add Id addd Id add Id add Id add Id addd Id addd Id add Id addd Id adddd Id addd Id ad	20.00 dB 30 d	m Offset 1 B SWT  CBm CBm CBm CBm CBm CBm CBm CBm CBm CB	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Mode	Auto FF T		2.4 	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz ւ
Spectrum Ref Level Att IPR View Id adm Id add Id addd Id add Id addd Id add Id add Id add Id addd Id addd Id add Id addd Id adddd Id addd Id ad	20.00 dB 30 c	m Offset 1 IB SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k	Hz Hz Mode	Auto FF T		2.4 - 2.4	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz ւ
Spectrum Ref Level Att 1Pk View 10 eBm 10 eBm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm -60 dBm -70 dBm -70 dBm -70 dBm -70 dBm -80 dBm -80 dBm -80 dBm -90 dBm -10 d	20.00 dB 30 d 30 d 30 d 31 -4.770 3Hz 3Hz	m Offset 1 B SWT	11.99 dB 94.8 µs 	RBW 100 k     VBW 300 k     VBW 300 k     M4	Hz Hz Mode M: M: M: M: M: M: M: M: M: M: M: M: M:	Auto FF T		2.4 	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz ւ
Spectrum Ref Level Att 1Pk View 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -70 dBm -70 dBm Type Ref M1	20.00 dB 30 c	m Offset 1 B SWT	11.99 dB 94.8 µs	RBW 100 k     VBW 300 k     VBW 300 k	Hz Hz Mode M: M: M: M: M: M: M: M: M: M: M: M: M:	Auto FF T		2.4 	15.23 dBm 72030 GHz 47.25 dBm 83500 GHz ւ

Page Number : A26 of A45



Spectr	um									
Ref Le		1.00 dB	m Offset 1	2.20 dB (	<b>RBW</b> 100 kH	łz				L.
Att		30 d			<b>VBW</b> 300 kH		Auto FFT			
⊖1Pk Vie	W									
						M	1[1]		0.40	11.521dBm
10 dBm-						M	2[1]			21740 GHz
0 40							-[-]			00000 GHz
0 dBm—										
-10 dBm·	D1	-8,480	dBm							
-20 dBm·										
-30 dBm·										<u> </u>
-40 dBm·						<u>14</u>		M3		M2
-50 dBm	when	whend	mount	Mundr	mannon	mmul	human	morena	mounder	🔻 'w
00 0.0										
-60 dBm·										
-70 dBm·										
-70 ubilli										
Start 2.	25 CH	7			691	nte			Ston	2.405 GHz
Marker	55 GH	-			091				otop .	L. 100 GHZ
Type	Ref   '	Trc	X-value	1	Y-value	Func	tion	Fund	tion Result	.
M1		1	2.40217	4 GHz	11.52 dBr	m				
M2 M3		1		4 GHz 9 GHz	-46.93 dBi -47.89 dBi					
M4		1	2.378297		-43.77 dBi					
		·								
)ate: 12	.OCT.2	2024	19:32:33	2	DH5_Ant17	_High_24	J Measur 480	ing		
Date: 12		2024	19:32:33	2	DH5_Ant17	_High_24	480	ing		
Spectr Ref Le	um	).00 dB	m Offset 1:	2.04 dB (	<b>RBW</b> 100 kH	- Iz				
Spectr Ref Le Att	um vel 20		m Offset 1:	2.04 dB (		- Iz	480 Auto FFT			
Spectr Ref Le	um vel 20	).00 dB 30 d	m Offset 1:	2.04 dB (	<b>RBW</b> 100 kH	- Iz Iz Mode	Auto FFT			
Spectr Ref Le Att 1Pk Vie	um vel 20	).00 dB 30 d	m Offset 1:	2.04 dB (	<b>RBW</b> 100 kH	- Iz Iz Mode				12.14 dBm
Spectr Ref Le Att	um vel 20	).00 dB 30 d	m Offset 1:	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	
Spectr Ref Le Att 1Pk Vie	um vel 20	).00 dB 30 d	m Offset 1:	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz
Spectr Ref Le Att 1Pk Vie 10 dBm- 0 dBm-	um vel 20 w	).00 dB 30 c	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 1Pk Vie 10 dBm- 0 dBm-	um vel 20 w	).00 dB 30 d	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm-	um vel 20 w	).00 dB 30 c	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 1Pk Vie 10 dBm- 0 dBm-	um vel 20 w	).00 dB 30 c	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm-	um vel 20	).00 dB 30 c	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm-	um vel 20	-7.860	m Offset 1: B SWT	2.04 dB (	<b>RBW</b> 100 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	um vel 20	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode M M	Auto FF T		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm-	um vel 20	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode	Auto FFT		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	um vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode M M	Auto FF T		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	um vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode M M	Auto FF T		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm-	UM Vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode M M	Auto FF T		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -60 dBm-	UM Vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Hz Hz Mode M M	Auto FF T		2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -60 dBm-	UM Vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH     VBW 300 kH	Iz Mode M M	Auto FF T		2.4 - 2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -50 dBm- -70 dBm-	UM Vel 20 W D1	-7.860	m Offset 1: B SWT	2.04 dB ( 94.8 μs (	RBW 100 kH	Iz Mode M M	Auto FF T		2.4 - 2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le ▶ Att ■ 1Pk Vie ■ 10 dBm- − 10 dBm- − 20 dBm- − 20 dBm- − 30 dBm- − 50 dBm- − 50 dBm- − 70 dBm- − 70 dBm- − 70 dBm- − 70 dBm- − 70 dBm- − 70 dBm-	UM Vel 20 W D1	-7.860	m Offset 1: B SWT dBm dBm	2.04 dB ( 94.8 μs ( 	RBW 100 kH         VBW 300 kH	اع Mode M M س M	Auto FFT 1[1] 2[1]		2.4 - 2.4	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 1Pk Vie 10 dBm- 0 dBm- -20 dBm- -20 dBm- -30 dBm- -50 dBm- -50 dBm- -70 dBm- Type Marker Marker	um vel 20 W D1 D1	-7.860	m Offset 1: B SWT dBm dBm with with with with with with with with	2.04 dB ( 94.8 μs ( 	RBW 100 kł         VBW 300 kł         300 kł <t< td=""><td>12 12 Mode M M M</td><td>Auto FFT 1[1] 2[1]</td><td></td><td>2.4 </td><td>12.14 dBm 79780 GHz 46.30 dBm 83500 GHz</td></t<>	12 12 Mode M M M	Auto FFT 1[1] 2[1]		2.4 	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm- -20 dBm- -20 dBm- -30 dBm- -50 dBm- -60 dBm- -70 dBm- <b>Start 2.</b> Marker Type M11 M2	um vel 20 W D1 D1	-7.860	m Offset 1: B SWT dBm dBm dBm c c c c c c c c c c c c c c c c c c c	2.04 dB ( 94.8 µs ( % % % % % % % % % % % % % % % % % % %	BBW 100 kH VBW 300 kH 300 kH 3	12 12 Mode M M M Pts Func m m	Auto FFT 1[1] 2[1]		2.4 	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz
Spectr Ref Le Att 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -50 dBm- -70 dBm- -70 dBm- Type Marker	um vel 20 W D1 D1	-7.860	m Offset 1: B SWT dBm dBm dBm c c c c c c c c c c c c c c c c c c c	2.04 dB ( 94.8 µs ( 94.8 µ	RBW 100 kł         VBW 300 kł         300 kł <t< td=""><td>الت المحمد المحمد والمحمد المحمد المحمد المحمد المحمد المح المحمد المحمد ال</td><td>Auto FFT 1[1] 2[1]</td><td></td><td>2.4 </td><td>12.14 dBm 79780 GHz 46.30 dBm 83500 GHz</td></t<>	الت المحمد المحمد والمحمد المحمد المحمد المحمد المحمد المح المحمد المحمد ال	Auto FFT 1[1] 2[1]		2.4 	12.14 dBm 79780 GHz 46.30 dBm 83500 GHz

Page Number : A27 of A45



Spectrum	<u> </u>								
	20.00 dBn	Offset 1	12.20 dB 👄	<b>RBW</b> 100 kH	łz				(*
Att 🗧	30 de	SWT	75.8 µs 👄	<b>VBW</b> 300 kH	lz Mode	Auto FFT			
⊖1Pk View									
					м	1[1]		0.40	10.13 dBm
10 dBm				+ +	M	2[1]			28910 GHz 47.94 ABM
						2[1]			00000 GHz
0 dBm									
-10 dBm	D1 -9.870(	Bm							
-20 dBm									
-30 dBm									
-30 UBIII									M
-40 dBm				+ +					
munderen	Mandredlan	man men	manhameter	mound	runte	manually	M3	munum	M2 -
-50 dBm									-
-60 dBm									
oo abiii									
-70 dBm				-					
Start 2.35	GHz		·	691	ots			Stop :	2.405 GHz
Marker									
Type Ref		X-value		Y-value	Func	tion	Func	tion Result	
M1	1	2.40289		10.13 dBr					
M2 M3	1		.4 GHz 39 GHz	-47.91 dBr -48.06 dBr					
M4	1	2.381963		-44.38 dBr					
Date: 12.00	)[ T.2024 1	9:41:55	2DH5	5_Ant17_H	igh_Hop	) Measur _2480	in g		
	_	9:41:55	2DH5	5_Ant17_H	igh_Hop	_2480			
Spectrum	·					_2480			
Spectrum	_	n Offset 1	1.99 dB 👄	5_Ant17_H RBW 100 kH VBW 300 kH	łz	_2480			
Spectrum Ref Level	20.00 dBn	n Offset 1	1.99 dB 👄	<b>RBW</b> 100 kH	łz				IIII T
Spectrum Ref Level	20.00 dBn	n Offset 1	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz <b>Mode</b>				(₩ 12.35 dBm
Spectrum Ref Level Att 1Pk View	20.00 dBn	n Offset 1	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz
Spectrum Ref Level Att 1Pk View M1	20.00 dBn	n Offset 1	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View	20.00 dBn	n Offset 1	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm 0 dBm	20.00 dBn	n Offset 1 3 SWT	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View M1	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 19k View M1 10 dBm 0 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 👄	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	1.99 dB ● 94.8 µs ●	<b>RBW</b> 100 kH	łz łz Mode M	Auto FFT		2.4	12.35 dBm 74800 GHz 46.62 dBm
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	<b>RBW</b> 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm	20.00 dBn 30 dE	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	iz Mode M	Auto FF T 1[1] 2[1]		2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm	20.00 dBm 30 df	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH	IZ IZ Mode M M	Auto FF T 1[1] 2[1]		2.4 - 2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm Start 2.47	20.00 dBm 30 df	B Offset 1 3 SWT	11.99 dB 94.8 μs 94.8 μs	RBW 100 kH           VBW 300 kH	IZ IZ Mode M M	Auto FF T 1[1] 2[1]		2.4 - 2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm Start 2.47 Marker	20.00 dBm 30 df	B Offset 1 3 SWT	1.99 dB 94.8 µs 94.8 µs 94	RBW       100 kH         VBW       300 kH         Image: State of the sta	الا الا الا الا الا الا الا الا الا الا	Auto FFT 1[1] 2[1]	Advantual	2.4 - 2.4	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm -70 dBm Type Ref M1	20.00 dBm 30 dE 01 -7.650 ( 01	M4 M4 M4 X-value 2.474	11.99 dB 94.8 µs 94.8 µs 94.8 µs 94.8 µs 94.8 циз 100 100 100 100 100 100 100 10	RBW 100 kF VBW 300 kF 	iz iz Mode M M M S S S S S S S S S S S S S S S S	Auto FFT 1[1] 2[1]	Advantual	2.4 	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum           Ref Level           Att           1Pk View           M1           0 dBm           -10 dBm           -20 dBm           -30 dBm           -60 dBm           -70 dBm           Start 2.47           Marker           Type         Ref           M1           M2	20.00 dBn 30 df 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M4 M4 M4 M4 M4 M4 M4 M4 M4 M4	1.99 dB ● 94.8 µs ● 	RBW 100 kH VBW 300 kH	الا الا الا الا الا الا الا الا الا الا	Auto FFT 1[1] 2[1]	Advantual	2.4 	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm -70 dBm Type Ref M1	20.00 dBm 30 dE 01 -7.650 ( 01	M4 M4 M4 M4 M4 M4 M4 M4 M4 M4	1.99 dB ● 94.8 µs ●	RBW 100 kF VBW 300 kF 	2 12 12 M M M M M M M M M M M M M	Auto FFT 1[1] 2[1]	Advantual	2.4 	12.35 dBm 74800 GHz 46.62 dBm 83500 GHz

Page Number : A28 of A45



Spectrum									E
Ref Level		m Offset 1	2.20 dB 🧉	<b>RBW</b> 100 kH	17				( v .
Att	30 d			<b>VBW</b> 300 kH		Auto FFT			
⊖1Pk View									
					M	1[1]			11.59 <sub>1</sub> dBm
10 dBm				_				2.40	21740 GHz
					M:	2[1]			46.391dBm
0 dBm							1	2.40	00000 GHz
	01 -8.410	dBm							
-10 dBm	0.110								
-20 dBm									
-30 dBm									1 1
1440 dBm							МЗ		M≇
-50 dBm	wwwwwww	mann	when	maronon	www.www.www	Monurul	www.	manul	v
-60 dBm									
-70 dBm									
Start 2.35 (	GHz			691	pts			Stop	2.405 GHz
Marker	1 - 1				1 -		-		
Type Ref	1 Trc	2.40217		<u>Y-value</u> 11.59 dBr	Funct	tion	Fund	tion Result	
M2	1		4 GHz	-46.39 dBr					
M3	1	2.3	39 GHz	-48.15 dBr					
M4	1	2.350398	36 GHz	-44.19 dBr	n				
	_	19:36:20	31	DH5_Ant17	_High_24	480			
Spectrum						480			
		m Offset 1	2.04 dB (	<b>RBW</b> 100 kH	- Iz				
Spectrum Ref Level	20.00 dB	m Offset 1	2.04 dB (		- Iz	480 Auto FFT			
Spectrum Ref Level Att	20.00 dB	m Offset 1	2.04 dB (	<b>RBW</b> 100 kH	lz lz <b>Mode</b>				12.46 dBm
Spectrum Ref Level Att 1Pk View	20.00 dB 30 d	m Offset 1	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz
Spectrum Ref Level Att	20.00 dB 30 d	m Offset 1	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View	20.00 dB 30 d	m Offset 1	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT	•	2.4	12.46 dBm 80130 GHz
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB (	<b>RBW</b> 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dB 30 d	m Offset 1 B SWT	2.04 dB 94.8 μs	RBW 100 kH     VBW 300 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm
Spectrum Ref Level Att 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	1z 1z Mode M: M:	Auto FF T		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB 94.8 μs	RBW 100 kH	lz lz Mode M	Auto FFT		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -40 dBm -40 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	1z 1z Mode M: M:	Auto FF T		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	1z 1z Mode M: M:	Auto FF T		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -60 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	1z 1z Mode M: M:	Auto FF T		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -40 dBm -40 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	1z 1z Mode M: M:	Auto FF T		2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW         100 kH           VBW         300 kH	Iz Mode	Auto FF T		2.4 - 2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2.47	20.00 dBi 30 d	m Offset 1 B SWT	2.04 dB ( 94.8 µs (	RBW 100 kH     VBW 300 kH	Iz Mode	Auto FF T		2.4 - 2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz
Spectrum Ref Level Att 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -70 dBm -70 dBm	20.00 dBi 30 d M1 D1 -7.540	m Offset 1 B SWT cBm	2.04 dB ( 94.8 µs (	RBW 100 kH VBW 300 kH	اع Mode M: M: مالیالیدیدریار pts	Auto FF T  [[1]  [[1]  [		2.4 	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz առեւրունա
Spectrum Ref Level Att 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	20.00 dBi 30 d M1 -7.540 M2 M2 3Hz	m Offset 1 B SWT  dBm  dBm  x-value	2.04 dB 94.8 μs 94.8 μs	RBW 100 kH VBW 300 kH	12 12 M M M M	Auto FF T  [[1]  [[1]  [		2.4 - 2.4	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz առեւրունա
Spectrum Ref Level Att 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -70 dBm -70 dBm	20.00 dBi 30 d M1 D1 -7.540	m Offset 1 B SWT  dBm  dBm  x-value 2,4801	2.04 dB 94.8 μs 94.8 μs	RBW 100 kH VBW 300 kH	12 12 M M M M	Auto FF T  [[1]  [[1]  [		2.4 	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz առեւրունա
Spectrum           Ref Level           Att           1Pk View           10 dBm           0 dBm           -10 dBm           -20 dBm           -20 dBm           -30 dBm           -60 dBm           -70 dBm           Start 2.47 C           Marker           Type           Ref           M1           M2	20.00 dBi 30 d M1 -7.540 	m Offset 1 B SWT dBm dBm dBm dBm dBm dBm dBm dBm dBm dBm	2.04 dB 94.8 µs 94.8 µ	RBW 100 kH VBW 300 kH M4 M4 M4 691 2.46 dBr 12.46 dBr -47.13 dBr -45.01 dBr	الا کے الحکام الحکا حکام الحکام الحک حکام الحکام	Auto FF T  [[1]  [[1]  [		2.4 	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz առեւրունա
Spectrum           Ref Level           Att           1Pk View           10 dBm           0 dBm           -10 dBm           -20 dBm           -30 dBm           -40 dBm           -50 dBm           -60 dBm           -70 dBm           Start 2.47 C           Marker           Type           Ref           M1           M2	20.00 dBi 30 d M1 01 -7.540 M2 M2 3Hz 3Hz	m Offset 1 B SWT dBm dBm dBm x-value z.4801 2.4801	2.04 dB 94.8 µs 94.8 µ	RBW 100 kH VBW 300 kH M4 M4 691 Y-value 12.46 dBr -47.13 dBr	الا کے الحکام الحکا حکام الحکام الحک حکام الحکام	Auto FF T  [[1]  [[1]  [		2.4 	12.46 dBm 80130 GHz 47.13 dBm 83500 GHz առեւրունա

Page Number : A29 of A45



Spectrum	<u> </u>								
Ref Level	20.00 dBn	n Offset 1	2.20 dB 🧉	• RBW 100 kH	z				
Att	30 de	B SWT	75.8 µs 🧉	• <b>VBW</b> 300 kH	z Mode	Auto FFT			
●1Pk View									0.00 10
					IVI	1[1]		2.40	9.99 dBm 2095 GHz
10 dBm					M	2[1]			47.20 (B)
0 dBm								2.40	iooobo GHz
-10 dBm	D1 -10.010	) dBm							
-20 dBm									
-20 00111									
-30 dBm				-					
-40 dBm							N		N
-40 ubiii			mourin		www.www	line bu	M3		M2
-50 dBm	whenhow	mound	- marina	mountant		Munhan	mo wat	mannen	
60 ID									
-60 dBm									
-70 dBm									
Start 2.35	GHz	11		691 p	ots			Stop	2.405 GHz
Marker								· · ·	
Type Ref		X-value		Y-value	Func	tion	Fund	ction Result	:
M1 M2	1	2.40209	5 GHz 4 GHz	9.99 dBn -47.21 dBn					
M2 M3	1		9 GHz	-47.21 uBr -47.90 dBr					
M4	1		4 GHz	-44.37 dBm					
Date: 12.00	)[ T.2024 1	9:43:47	3DH	5_Ant17_Hi	igh_Hop	) Meanin _2480	ing		
Date: 12.00	_	9:43:47	3DH	5_Ant17_Hi	igh_Hop	_2480			
Spectrum	_			5_Ant17_Hi RBW 100 kH		_2480	D Groc		
Spectrum Ref Level Att	·	n Offset 1	1.99 dB 🧉		z	_2480 Auto FF T			
Spectrum Ref Level Att 1Pk View	20.00 dBn	n Offset 1	1.99 dB 🧉	• RBW 100 kH	z z Mode	Auto FFT			
Spectrum Ref Level Att 1Pk View	20.00 dBn	n Offset 1	1.99 dB 🧉	• RBW 100 kH	z z Mode				11.93 dBm
Spectrum Ref Level Att 1Pk View	20.00 dBn	n Offset 1	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	
Spectrum Ref Level Att 1Pk View M1 Ro HBm Tron	20.00 dBn	n Offset 1	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz
Spectrum Ref Level Att PIPk View M1 RBM7100 0 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View M1 0 dBm	20.00 dBn	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att PIPk View M1 RBM7100 0 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dBn 30 db	n Offset 1 3 SWT	1.99 dB 🧉	• RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm -20 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -30 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 µs	RBW 100 kH	z Z Mode	Auto FFT		2.4	11.93 dBm 71220 GHz 46.84 dBm
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -60 dBm	20.00 dBn 30 dE	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1 0 dBm -10 dBm -20 dBm -20 dBm -40 dBm -50 dBm -60 dBm -70 dBm	20.00 dBm 30 df D1 -8.070 d	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH     VBW 300 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4 - 2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm Start 2.47	20.00 dBm 30 df D1 -8.070 d	n Offset 1 3 SWT	1.99 dB 94.8 μs 94.8 μs	RBW 100 kH	z Mode M M	Auto FF T 1[1] 2[1]		2.4 - 2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz
Spectrum Ref Level Att 1Pk View 1Pk View 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70	20.00 dBn 30 dE 20.00 dBn 30 dB	n Offset 1 3 SWT	1.99 dB 94.8 µs МЗ	RBW 100 kH           VBW 300 kH	Z Mode M M	Auto FF T  1[1]  2[1]		2.4 - 2.4	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz ກ <sup>4</sup> ພ <sub>ິ</sub> ການ, ເພດແບ 2.55 GHz
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm -70 dBm Type Ref M1	20.00 dBm 30 dE 20.00 dBm 30 dBm	n Offset 1 3 SWT	1.99 dB 94.8 μs	RBW 100 kH         VBW 300 kH         Image: state stat	2 2 Mode M M M ots Func n	Auto FF T  1[1]  2[1]		2.4 	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz ກ <sup>4</sup> ພ <sub>ິ</sub> ການ, ເພດແບ 2.55 GHz
Spectrum           Ref Level           Att           1Pk View           M1           0 dBm           -10 dBm           -20 dBm           -30 dBm           -60 dBm           -70 dBm           Start 2.47           Marker           Type         Ref           M1           M2	20.00 dBn 30 df D1 -8.070 d M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2	A Offset 1 3 SWT CBm CBm CBm CBm CBm CBm CBm CBm	1.99 dB 94.8 µs	RBW 100 kH VBW 300 kH	2 Mode M M M M M M M M M M M M M	Auto FF T  1[1]  2[1]		2.4 	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz ກ <sup>4</sup> ພ <sub>ິ</sub> ການ, ເພດແບ 2.55 GHz
Spectrum Ref Level Att 1Pk View M1 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm -70 dBm Type Ref M1	20.00 dBm 30 dE 20.00 dBm 30 dBm	A Offset 1 3 SWT CBm CBm CBm CBm CBm CBm CBm CBm	1.99 dB 94.8 µs	RBW 100 kH         VBW 300 kH         Image: state stat	ت ت M M M M M M M M M M M M M	Auto FF T  1[1]  2[1]		2.4 	11.93 dBm 71220 GHz 46.84 dBm 83500 GHz ກ <sup>4</sup> ພ <sub>ິ</sub> ການ, ເພດແບ 2.55 GHz

Page Number : A30 of A45

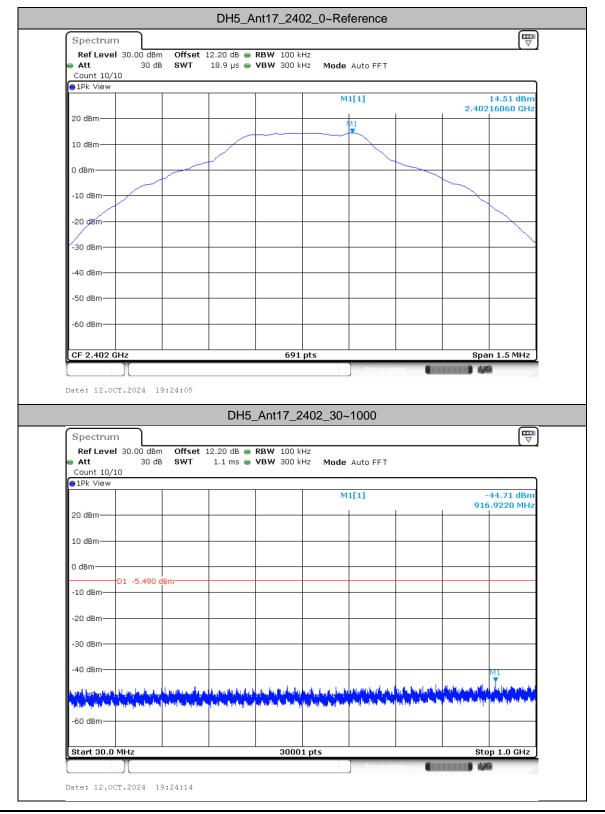


# **Conducted Spurious Emission**

#### **Test Result**

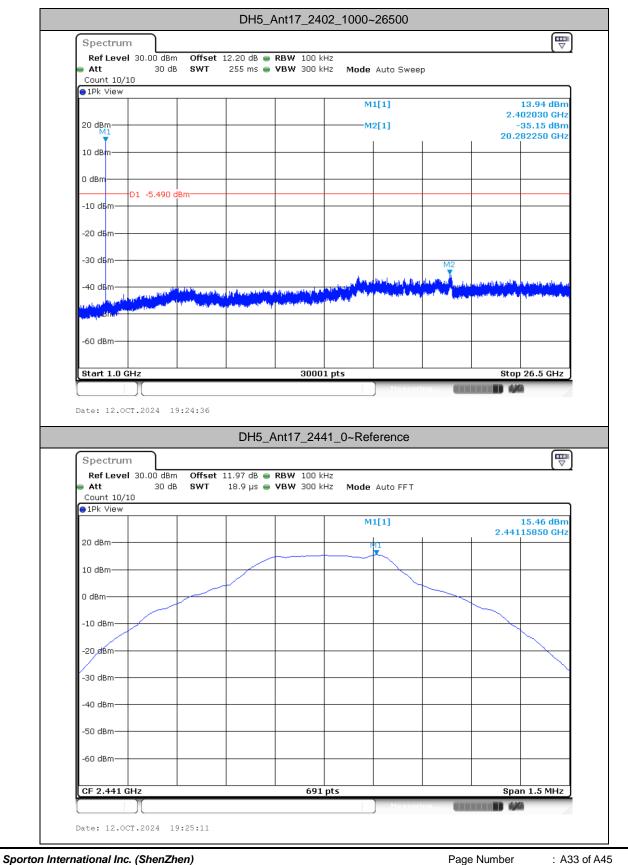
TestMode	Antenna	Freq(MHz)	FreqRange	RefLevel	Result	Limit	Verdict
			[MHz]	[dBm]	[dBm]	[dBm]	
DH5	Ant17	2402	Reference	14.51	14.51		PASS
			30~1000	14.51	-44.71	≤-5.49	PASS
			1000~26500	14.51	-35.15	≤-5.49	PASS
		2441	Reference	15.46	15.46		PASS
			30~1000	15.46	-45.43	≤-4.54	PASS
			1000~26500	15.46	-36.29	≤-4.54	PASS
		2480	Reference	15.18	15.18		PASS
			30~1000	15.18	-44.52	≤-4.82	PASS
			1000~26500	15.18	-35.2	≤-4.82	PASS
2DH5	Ant17	2402	Reference	11.76	11.76		PASS
			30~1000	11.76	-44.94	≤-8.24	PASS
			1000~26500	11.76	-35.77	≤-8.24	PASS
		2441	Reference	12.48	12.48		PASS
			30~1000	12.48	-45.01	≤-7.52	PASS
			1000~26500	12.48	-36.02	≤-7.52	PASS
		2480	Reference	12.20	12.20		PASS
			30~1000	12.20	-45.42	≤-7.8	PASS
			1000~26500	12.20	-35.06	≤-7.8	PASS
3DH5	Ant17	2402	Reference	11.68	11.68		PASS
			30~1000	11.68	-45.53	≤-8.32	PASS
			1000~26500	11.68	-35.67	≤-8.32	PASS
		2441	Reference	12.62	12.62		PASS
			30~1000	12.62	-46.01	≤-7.38	PASS
			1000~26500	12.62	-36.28	≤-7.38	PASS
		2480	Reference	12.41	12.41		PASS
			30~1000	12.41	-45.33	≤-7.59	PASS
			1000~26500	12.41	-35.67	≤-7.59	PASS



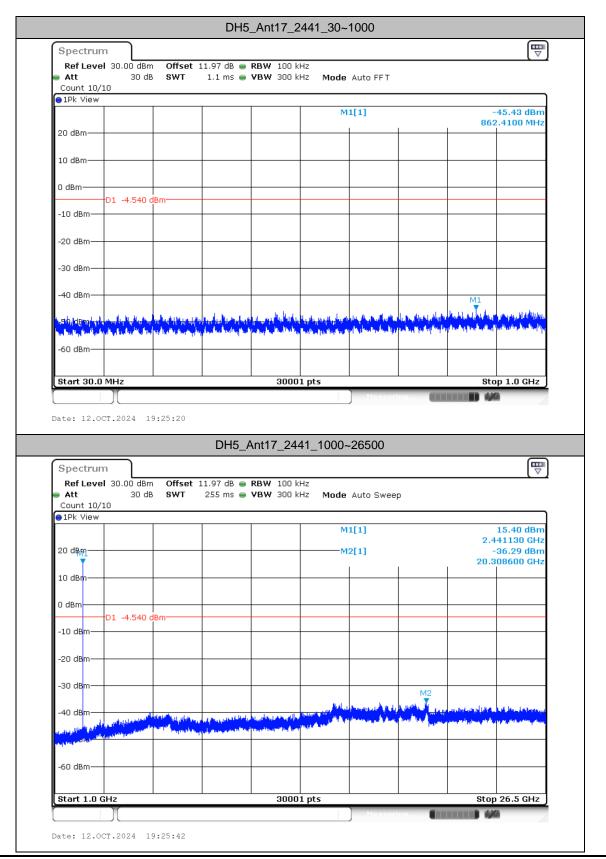


**Sporton International Inc. (ShenZhen)** TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG Page Number : A32 of A45









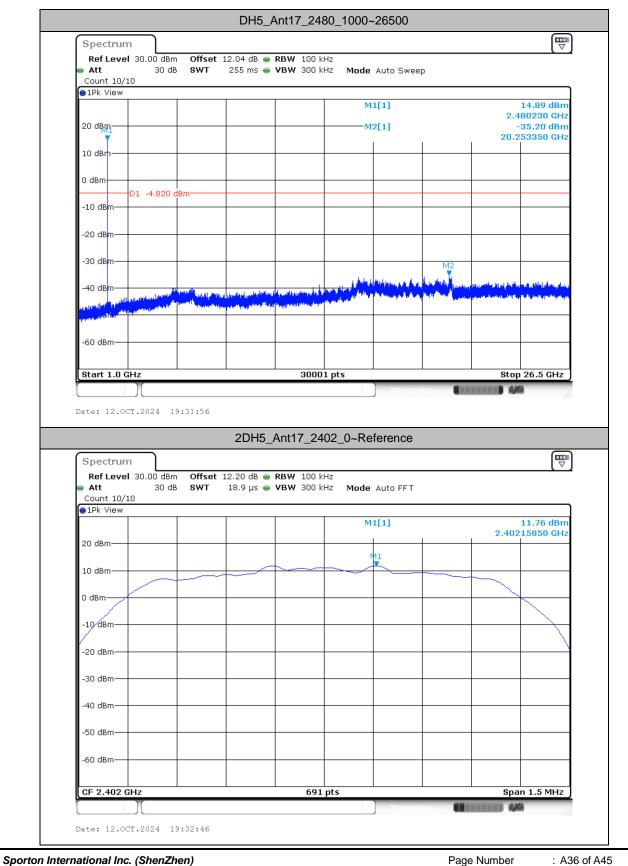
Page Number : A34 of A45





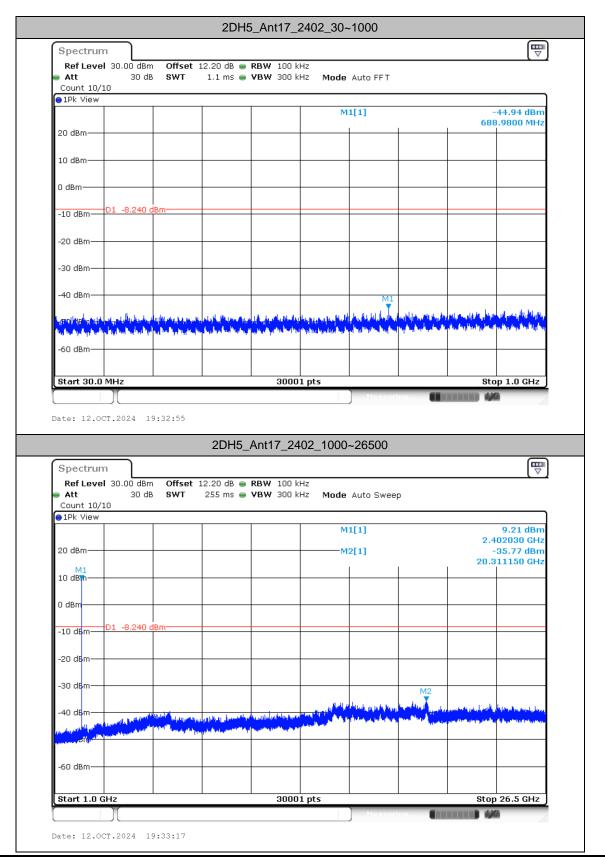
Page Number : A35 of A45





TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: 2AFZZPC0AG





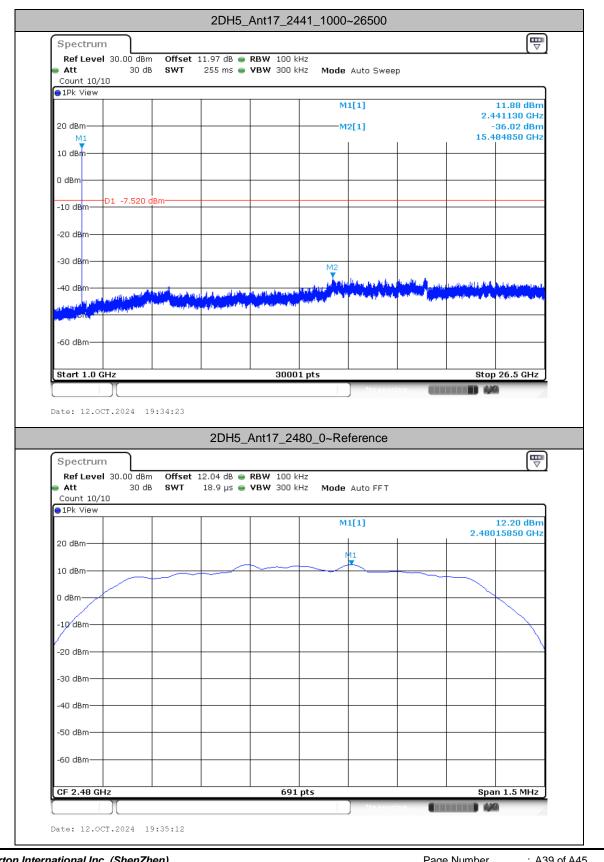
Page Number : A37 of A45





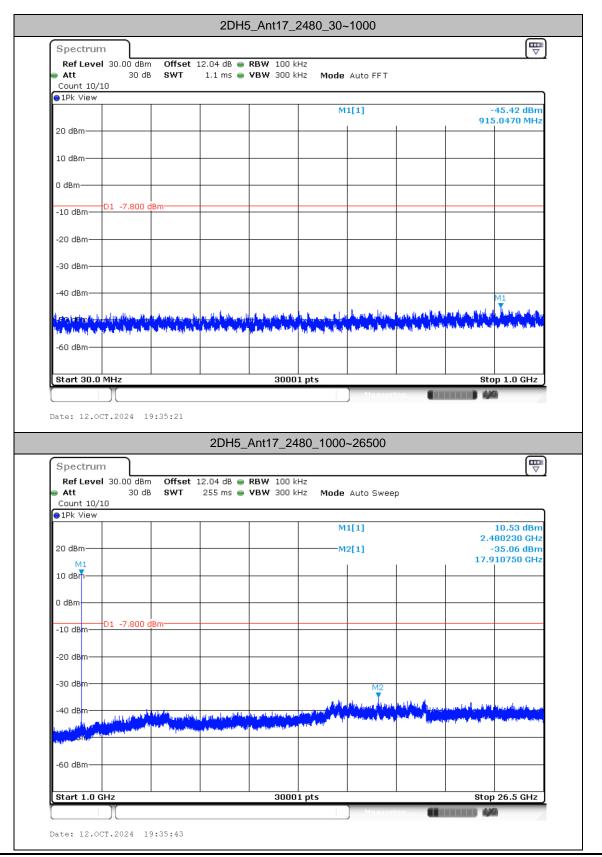
Page Number : A38 of A45





Page Number : A39 of A45





Page Number : A40 of A45