# FCC RADIO TEST REPORT

## FCC ID: 2BAWSRDG-XX

Sample : Dride4K

Trade Name : N/A

Main Model : DR4K1-RDG-XX

Additional Model : N/A

Report No.: 23032009ER-64

## **Prepared for**

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## **TEST RESULT CERTIFICATION**

Applicant	Dride Technology LTD
Address	Eliyahu Eitan 1, Rishon Letzion, Israel
Manufacturer	Dride Technology LTD
Address	Eliyahu Eitan 1, Rishon Letzion, Israel
Product description	
Product	Dride4K
Trade Name:	N/A
Model Name:	DR4K1-RDG-XX
Test Methods	FCC Rules and Regulations Part 15 Subpart C Section 15.249, ANSI C63.10: 2013

This device described above has been tested by Shenzhen Accurate Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test	
Date (s) of performance of tests:	Mar. 20, 2023 ~ May. 12, 2023
Date of Issue:	Jul. 13, 2023
Test Result:	Pass

Prepared By:

Jamillu

Date:

2023-7-13

Project Engineer

Check By:

Date:

2023-7-13

Reviewer

Table of Contents	Page
1 TEST SUMMARY	Δ
1 1 TEST PROCEDURES AND RESULTS	4
1.2 TEST FACILITY	4
1.3 MEASUREMENT UNCERTAINTY	5
2 GENERAL INFORMATION	6
2.1 GENERAL DESCRIPTION OF EUT	6
2.2 CARRIER FREQUENCY OF CHANNELS	7
2.3 TEST MODE	7
2.4 TEST SETUP	7
2.5 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL	7
2.6 MEASUREMENT INSTRUMENTS LIST	8
3 CONDUCTED EMISSION	10
3.1 TEST LIMIT	10
3.2 TEST SETUP	10
3.3 TEST PROCEDURE	11
3.4 TEST RESULT	11
4 RADIATED EMISSION	12
4.1 TEST LIMIT	12
4.2 TEST SETUP	13
4.3 TEST PROCEDURE	14
4.4 TEST RESULT	15
5 BAND EDGE	18
5.1 TEST LIMIT	18
5.2 TEST SETUP	18
5.3 TEST PROCEDURE	18
5.4 TEST RESULT	18
6 99%OCCUPIED BANDWIDTH&20dB BANDWIDTH	21
6.1 TEST SETUP	21
6.2 TEST PROCEDURE	21
6.4 TEST RESULT	21
7 ANTENNA REQUIREMENT	22
8 PHOTO OF TEST	23

## **1TEST SUMMARY**

## 1.1 TEST PROCEDURES AND RESULTS

ITEM	STANGARD	RESULT
CONDUCTED EMISSION	FCC Part 15.207	Not Applicable
RADIATED EMISSION	FCC Part 15.209/15.249	COMPLIANT
BAND EDGE	FCC Part 15.249/15.205	COMPLIANT
20dB BANDWIDTH	FCC Part 15.215	COMPLIANT
ANTENNA REQUIREMENT	FCC Part 15.203	COMPLIANT

## 1.2 TEST FACILITY

Test Firm :	Shenzhen Accurate Technology Co., Ltd.	
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Address : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19. The testing quality system of our laboratory meets with ISO/IEC-17025 requirements. This approval result is accepted by MRA of APLAC.

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

Designation Number: CN1189

The EMC Laboratory has been accredited by A2LA, and in compliance with ISO/IEC 17025:2017 General Requirements for testing Laboratories.

FCC Registration Number: 708358

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission.

IC Registration Number: 5077A

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada.

#### **1.3 MEASUREMENT UNCERTAINTY**

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

#### A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
UNI	ANSI	9kHz ~ 150kHz	2.96	
		150kHz ~ 30MHz	2.44	

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
UNI	ANSI	9kHz ~ 30MHz	2.50	
		30MHz ~ 1000MHz	4.80	
		Above 1000MHz	4.13	

## **2 GENERAL INFORMATION**

## 2.1 GENERAL DESCRIPTION OF EUT

Product:	Dride4K
Trade Name:	N/A
Main Model:	DR4K1-RDG-XX
Additional Model:	N/A
Model Difference:	N/A
Frequency Range:	24.05GHz~ 24.25GHz(Radar)
Number of Channels:	1CH
Modulation Type:	FMCW(Radar)
Field Strength of Fundamental:	108.92dBuV/m(Peak)@3m
Antenna Type:	PCB Array antenna
Antenna Gain:	3.0dBi
Battery:	N/A
Adapter:	N/A
Power Source:	DC 12-24V from car charger

#### 2.2 CARRIER FREQUENCY OF CHANNELS

	Channel List
Channel	Frequency(GHz)
01	24.09

#### 2.3 TEST MODE

The EUT was programmed to be in continuously transmitting mode.

Channel List			
Test Channel	Test Frequency (GHz)		
CH01	24.09		

#### 2.4 TEST SETUP

Operation of EUT during Radiation testing:

DC Power EUT	DC Power		EUT
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Operation of EUT during RF Conducted testing:



#### 2.5 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ltem	Equipment	Model No.	Cable Length(cm)	Remark
1	Dride4K	DR4K1-RDG-XX	3m	EUT
2	DC power supply			AE

Note:

- 1. The support equipment was authorized by Declaration of Confirmation.
- 2. All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

#### 2.6 MEASUREMENT INSTRUMENTS LIST

ltem	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
	· · ·	Conduction Emi	ssions Measurem	ient	·
1	Conducted Emission Test Software	EZ-EMC	Ver.CCS-3A1-C E	N/A	N/A
2	AMN	Schwarzbeck	NNLK8121	8121370	2023.09.22
3	AAN	TESEQ	T8-Cat6	38888	2023.09.22
4	Pulse Limiter	CYBRTEK	EM5010	E115010056	2023.05.17
5	EMI Test Receiver	Rohde&Schwarz	ESCI	101210	2023.09.22
		Radiated Emis	sions Measureme	ent	
1	Radiated Emission Test Software	EZ-EMC	Ver.CCS-03A1	N/A	N/A
2	Horn Antenna	Sunol	DRH-118	A101415	2023.09.27
3	Broadband Hybrid Antenna	Sunol	JB1	A090215	2024.02.26
4	PREAMP	HP	8449B	3008A00160	2023.09.22
5	PREAMP	HP	8447D	2944A07999	2023.05.17
6	EMI TEST RECEIVER	Rohde&Schwarz	ESR3	101891	2023.09.22
7	VECTOR Signal Generator	Rohde&Schwarz	SMU200A	101521	2023.09.22
8	Signal Generator	Agilent	E4421B	MY4335105	2023.09.22
9	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2023.09.22
10	MXA Signal Analyzer	Keysight	N9020A	MY51110104	2023.09.22
11	RF Power sensor	DARE	RPR3006W	15100041SNO88	2023.05.17
12	RF Power sensor	DARE	RPR3006W	15100041SNO89	2023.05.17
13	RF power divider	Anritsu	K241B	992289	2023.09.22
14	Wideband radio communication tester	Rohde&Schwarz	CMW500	154987	2023.09.22
15	Active Loop Antenna	Com-Power	AL-130R	10160009	2023.07.25
16	Broadband Hybrid Antennas	Schwarzbeck	VULB9163	VULB9163#958	2023.09.22
17	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1680	2023.05.23
18	Horn Antenna	A-INFOMW	LB-180400-KF	J211060660	2023.09.27
19	Microwave Broadband Preamplifier	Schwarzbeck	BBV 9721	100472	2023.09.22
20	Signal Generator	Agilent	N5183A	MY47420153	2023.09.22
21	Spectrum Analyzer	Rohde&Schwarz	FSP 40	100501	2023.09.22
22	Power Meter	KEYSIGHT	N1911A	MY50520168	2023.09.22
23	Frequency Meter	VICTOR	VC2000	997406086	2023.09.22
24	DC Power Source	HYELEC	HY5020E	055161818	2023.09.22
25	Analyzer, Spectrum	Agilent	E4446A	US44300386	2023.09.22
26	System Controller	Sunol Sciences	SC99V	011003-1	N/A
27	Antenna, Horn	EMCO	3115	9511-4627	2023.09.22

28	Harmonic Mixer and Horn Antenna Set	OML	M03HWA; M05HWA; M08HWA; M12HWA; M19HWA	170615-1	2023.09.22
29	AOBOR Hi frequency Co AX Cable	IW	IW KPS- 1501A3960KPS		2023.09.22
30	10 dB Attenuator	Pasternack	PE7087-10	1837	N/A
31	Antenna, Horn	Wisewave	ARH-2823-02	10555-02	2023.09.22
32	Antenna, Horn	Wisewave	ARH-4223-02	10555-02	2023.09.22
33	18-40GHz Pre- Amplifier	AH Systems	PAM-1840VH	170	2023.09.22
34	Antenna, Horn	Sunol Sciences	DRH-118	A052704	2023.09.22
35	Standard Horn Antenna	Custom Microwave	M19RH	U91113-A	N/A
36	Standard Horn Antenna	Custom Microwave	M12RH	E91113-A	N/A
37	Standard Horn Antenna	Custom Microwave	M08RH	F91113-A	N/A
38	Solid State amplifier	Quinstar	QLW-50754530- I2	953600006	2023.09.22
39	Solid State amplifier	Quinstar	QLW-40605030- 00	953500005	2023.09.22
40	Solid State amplifier	Quinstar	QLW-70905030- I2	953700007	2023.09.22

## **3 CONDUCTED EMISSION**

#### 3.1 TEST LIMIT

For unintentional device, according to § 15.207(a) Line Conducted Emission Limits is as following

Frequency (MHz)	Maximum RF Line Voltage (dB V)				
	CLASS A		CLASS B		
(	Q.P.	Ave.	Q.P.	Ave.	
0.15~0.50	79	66	66~56*	56~46*	
0.50~5.00	73	60	56	46	
5.00~30.0	73	60	60	50	

\* Decreasing linearly with the logarithm of the frequency.

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

### 3.2 TEST SETUP



#### 3.3 TEST PROCEDURE

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is placed on a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63. 10.
- 4. If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5. All support equipments received AC power from a second LISN, if any.
- 6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

#### 3.4 TEST RESULT

N/A

Remark: The EUT is powered by DC power.

## **4 RADIATED EMISSION**

#### 4.1 TEST LIMIT

For unintentional device, according to § 15.209(a), except for Class B digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency	Field strength (microvolt/meter)	Limit (dBuV/m )	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F (kHz)	- Quasi-peak		300
0.490MHz-1.705MHz	24000/F (kHz)	-	Quasi-peak	30
1.705MHz-30MHz	30	-	Quasi-peak	30
30MHz-88MHz 100		40.0	Quasi-peak	3
88MHz-216MHz 150		43.5	Quasi-peak	3
216MHz-960MHz	216MHz-960MHz 200		Quasi-peak	3
960MHz-1GHz 500		54.0	Quasi-peak	3
Above 10Hz	500	54.0	Average	3
Above IGHZ	500	74.0	Peak	3

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

Limit: (Field strength of the fundamental signal)

Limit(dBuV/m @3m)	Remark
107.96	Average Value
127.96	Peak Value

According to section 15.249(a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (Mz)	Field strength of fundamental (mV/m)	Field strength of fundamental $(\mu V/m)$
902 – 928	50	500
2400 – 2483.5	50	500
5725 – 5875	50	500
24000 – 24250	250	2500

(b) Fixed, point-to-point operation as referred to in this paragraph shall be limited to systems employing a fixed transmitter transmitting to a fixed remote location. Point-to-multipoint systems, omnidirectional applications, and multiple co-located intentional radiators transmitting the same information are not allowed. Fixed, point-to-point operation is permitted in the 24.05- 24.25 GHz band subject to the following conditions:

(1) The field strength of emissions in this band shall not exceed 2500 millivolts/meter.

(2) The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.001\%$  of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

(3) Antenna gain must be at least 33 dBi. Alternatively, the main lobe beamwidth must not exceed 3.5 degrees. The beamwidth limit shall apply to both the azimuth and elevation planes. At antenna gains over 33 dBi or beamwidths narrower than 3.5 degrees, power must be reduced to ensure that the field strength does not exceed 2500 millivolts/meter.

(c) Field strength limits are specified at a distance of 3 meters.

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

#### **4.2 TEST SETUP**



1. Radiated Emission Test-Up Frequency Below 30MHz

- 2. Radiated Emission Test-Up Frequency 30MHz~1GHz

3. Radiated Emission Test-Up Frequency Above 1GHz



#### **4.3 TEST PROCEDURE**

- 1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7. The test frequency range from 9kHz to Above 40GHz.
- Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

#### 4.4 TEST RESULT

#### PASS

Remark:

- 1. By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, and test data recorded in this report.
- 2. Radiated emission test from 9kHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9kHz to 30MHz and not recorded in this report.

Below 1GHz Test Results:

Temperature:	<b>24</b> ℃	Relative Humidity:	48%
Test Date:	Mar. 28, 2022	Pressure:	1010hPa
Test Voltage:	DC 24V	Phase:	Horizontal
Test Mode:	Transmitting mode of 24.09GHz		





Temperature:	<b>24</b> ℃	Relative Humidity:	48%	
Test Date:	Mar. 28, 2022	Pressure:	1010hPa	
Test Voltage:	DC 24V	Phase:	Vertical	
Test Mode:	Transmitting mode of 24.09GHz			



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level - Limit Factor = Ant. Factor + Cable Loss - Pre-amplifier

Remark:

1. Measuring frequencies from 9 kHz to the 1 GHz, Radiated emission test from 9kHz to 30MHzwas verified, and no any emission was found except system noise floor.

2. \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

3. The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120kHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10kHz.

11201ital.						
Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector
(GHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
24.09	102.29	6.63	108.92	127.96	-19.04	PK
24.09	88.24	6.63	94.87	107.96	-13.09	AV
48.18	59.71	7.26	66.97	88	-21.03	PK
48.18	49.91	7.26	57.17	68	-10.83	AV
72.27	56.63	8.58	65.21	88	-22.79	PK
72.27	46.8	8.58	55.38	68	-12.62	AV
	_					

### Above 1 GHz Test Results: CH01 (24.09GHz)

Horizontal:

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier. Margin = Absolute Level - Limit

Vertical:

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector
(GHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
24.09	102.25	6.63	108.88	127.96	-19.08	PK
24.09	88.09	6.63	94.72	107.96	-13.24	AV
48.18	59.83	7.26	67.09	88	-20.91	PK
48.18	49.94	7.26	57.2	68	-10.8	AV
72.27	56.68	8.58	65.26	88	-22.74	PK
72.27	46.89	8.58	55.47	68	-12.53	AV
Remark: Fac	tor = Antenna	Factor + Cab	le Loss – Pre-amp	lifier. Margin :	= Absolute L	evel – Limit

Remark:

1. Measuring frequencies from 1 GHz to the 40 GHz and Above 40GHz.

- "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
  \* denotes emission frequency which appearing within the Restricted Bands specified in provision of
- 15.205, then the general radiated emission limits in 15.209 apply.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120kHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10kHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 6. When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.</p>
- 7. For fundamental frequency, RBW >20dB BW, VBW>=3XRBW, PK detector for PK value, AV detector for AV value.

#### **5 BAND EDGE**

#### 5.1 TEST LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. 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).

#### 5.2 TEST SETUP



#### **5.3 TEST PROCEDURE**

- The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode. The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc.
- Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=1MHz, VBW=3MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz ; VBW=3MHz / Sweep=AUTO

#### **5.4 TEST RESULT**

#### Note:

- 1. Factor=Antenna Factor + Cable loss Amplifier gain. Field Strength=Factor + Reading level
- 2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB( $\mu$ V) to represent the Amplitude. Use the F dB( $\mu$ V/m) to represent the Field Strength. So A=F.

Temperature	<b>21.8</b> ℃	Relative Humidity	58%
Pressure	101kPa	Test Voltage	DC 24V
Test Mode	Transmitting mode of 24.09GHz	Polarization	Horizontal

Peak Value						
Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
23 999.77	58.09	6.68	64.77	77.96	-13.19	PK
24 250.20 67.85 6.99 74.84 77.96 -3.12 PK						PK
Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier. Margin = Absolute Level - Limit						

## Average Value

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
23 999.77	43.89	6.68	50.57	57.96	-7.39	AV
24 250.20	45.85	6.99	52.84	57.96	-5.12	AV
Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier. Margin = Absolute Level - Limit						

Temperature	<b>21.8</b> ℃	<b>21.8</b> ℃		Relative Humidity		58%		
Pressure	101kPa	101kPa			Test Voltage		DC 24V	
Test Mode	Transmitting m	Transmitting mode of 24.09GHz		Polarization V		Vert	/ertical	
Peak Value								
Frequency	Reading Result	Factor	Emi	ission Level	Limits		Margin	Detector
(MHz)	(dBµV)	(dB)	(	(dBµV/m)	(dBµV/n	n)	(dB)	Туре
23 999.77	55.96	6.68		62.64	77.96		-15.32	PK
24 250.20	65.72	6.99		72.71	77.96		-5.25	PK
Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier. Margin = Absolute Level - Limit								

## Average Value

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
23 999.77	41.76	6.68	48.44	57.96	-9.52	AV
24 250.20	43.72	6.99	50.71	57.96	-7.25	AV
Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier. Margin = Absolute Level - Limit						

## 6 99% OCCUPIED BANDWIDTH& 20dB BANDWIDTH

#### 6.1 TEST SETUP

Same as Radiated Emission Measurement.

#### **6.2 TEST PROCEDURE**

- 1. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 2. Set SPA Centre Frequency = Operation Frequency, RBW= 51kHz, VBW=160kHz, SPAN=8MHz.
- 3. Set SPA Trace 1 Max hold, then View.

## 6.4 TEST RESULT

#### PASS

Channel	Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Result
CH01	24090	2.899	2.569	PASS

Agilent Spectrum Analyzer - Occupied B	W			
		SENSE:INT Center Fred: 24 09000	ALIGNAUTO	03:53:25 PM May 10, 2023 Radio Std: None
Center Fred 24.0900000		Trig: Free Run	Avg Hold>10/10	Radio Sta. Hone
	#IFGain:Low	#Atten: 10 dB		Radio Device: BTS
10 dB/div Ref -20.00 dBr	n			
L0g				
40.0		mannen		
50.0	a reversion of the second	they are should be M	∧ <b>,</b>	
50.0	JA MA		Madan	
Number of the second se	ANT A		14 Martin Marine	when the day a second
-80.0				
-90.0				
-100				
-110				
Center 24.09 GHz				Span 8 MHz
#Res BW 51 kHz		#VBW 160 k	Hz	Sweep 3.8 ms
Occupied Rendwidt	h	Total Power	-23 7 dBm	
Occupied Bandwidt		Total Towor	-20.17 GBIII	
2.5	5688 MHz			
Transmit Freg Error	-360.36 kHz	OBW Power	99.00 %	
y dB Bondwidth	2 200 MU-	v dB	20.00 48	
	2.099 101-12	хав	-20.00 aB	
MSG			STATUS	

## 7 ANTENNA REQUIREMENT

#### Standard Applicable:

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Antenna Connected Construction

The antenna used in this product is a PCB Array Antenna, The directional gains of antenna used for transmitting is 3dBi.

#### ANTENNA:



## **8 PHOTO OF TEST**

## RADIATED EMISSION



30MHz-1000MHz



1-18GHz



18-40GHz



40-100GHz

## **RF Conducted**



\*\*\*End of Report\*\*\*