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# TEST REPORT

**Product** Rais2.1 Base Station

Trade mark N/A

Rais2.1 Model/Type reference

**Serial Number** N/A

EED32N80400101 **Report Number** 

**FCC ID** : 2AVOR-BASE

Date of Issue Jun. 24, 2021

**Test Standards** 47 CFR Part 15 Subpart C

Test result PASS

Prepared for:

Retail Aware, Inc 808 Conagra Dr; Ste 401; Omaha, Ne 68102

Prepared by:

Centre Testing International Group Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

> TEL: +86-755-3368 3668 FAX: +86-755-3368 3385



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Date:

Jun. 24, 2021

Check No.: 8807260521



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3 Version

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Version No.	Date	(6)	Description	9
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**4 Test Summary** 

Test Item	Test Requirement	Result	
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203/15.247 (c)	PASS	
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	PASS	
DTS Bandwidth	47 CFR Part 15 Subpart C Section 15.247 (a)(2)	PASS	
Maximum Conducted Output Power	47 CFR Part 15 Subpart C Section 15.247 (b)(3)	PASS	
Maximum Power Spectral Density	47 CFR Part 15 Subpart C Section 15.247 (e)	PASS	
Band Edge Measurements	47 CFR Part 15 Subpart C Section 15.247(d)	PASS	
Conducted Spurious Emissions	47 CFR Part 15 Subpart C Section 15.247(d)	PASS	
Radiated Spurious Emission & Restricted bands	47 CFR Part 15 Subpart C Section 15.205/15.209	PASS	
		1 4 4 1	

#### Remark:

Company Name and Address shown on Report, the sample(s) and sample Information were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.







## 5 General Information

## **5.1 Client Information**

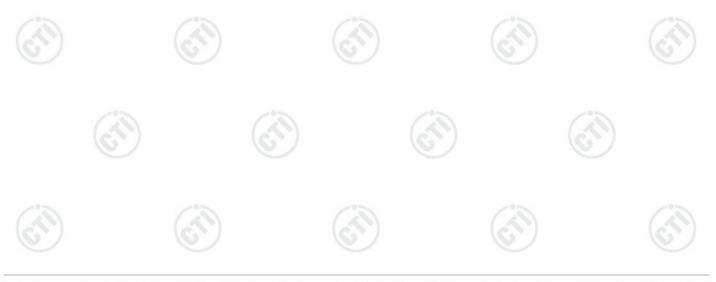
Applicant:	Retail Aware, Inc	
Address of Applicant:	808 Conagra Dr ; Ste 401 ; Omaha, Ne 68102	
Manufacturer:	Retail Aware, Inc	130
Address of Manufacturer:	808 Conagra Dr ; Ste 401 ; Omaha, Ne 68102	(0)
Factory:	Retail Aware, Inc	
Factory of Manufacturer:	808 Conagra Dr ; Ste 401 ; Omaha, Ne 68102	

# 5.2 General Description of EUT

Product Name:	Rais2.1 Base Station	
Mode No.(EUT):	Rais2.1	
Trade mark:	N/A	
Product Type:	☐ Mobile ☐ Portable ☒ Fix Location	20
Operation Frequency:	902 MHz~928MHz	
Device Type:	DTS	
Number of Channel:	1	
Antenna Type:	External antenna	
Antenna Gain:	5dBi	
Power Supply:	AC 100-240V~50/60Hz 0.25A	
Test Voltage:	120V/60Hz	
Sample Received Date:	Jun. 10, 2021	
Sample tested Date:	Jun. 10, 2021 to Jun. 18, 2021	11

Operation Frequency each of channel

Channel	Frequency
Only Channel	914.88 MHz





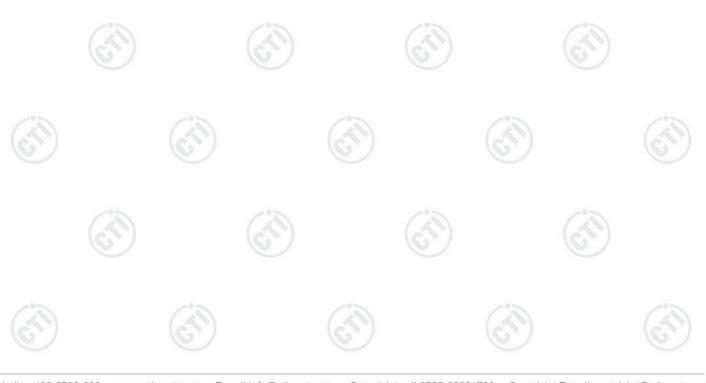
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# **5.3 Test Configuration**

<b>EUT Test Software Settings:</b>					
Software:	RF test				
EUT Power Grade:	Power level is built-in set parameters and cannot be changed and selected				
This EUT was set to transmit in a worse-case scenario with modulation on. For duty cycle, the highest					
possible duty cycle was used. F	or other transmitter testes, the transmitter was set to transmit continuously.				

# **5.4 Test Environment**

	10.0	10.0		10.0		10.0				
	Operating Environment	t:								
	Radiated Spurious Emissions:									
	Temperature:	22~25.0 °C			-07					
	Humidity:	50~55 % RH								
	Atmospheric Pressure:	1010mbar	(0)		(0.)		6.			
	Conducted Emissions:									
	Temperature:	22~25.0 °C								
	Humidity:	50~55 % RH		Cin						
	Atmospheric Pressure:	1010mbar		(0,)		(0,)				
	RF Conducted:									
	Temperature:	22~25.0 °C								
	Humidity:	50~55 % RH	/°>		<b>(2)</b>		/°>			
(7)	Atmospheric Pressure:	1010mbar			(81)		(27)			
_	1907 /		7.70.7				1, 10, 10			





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## 5.5 Description of Support Units

The EUT has been tested with associated equipment below.

1	sociated ment name	Manufacturer	model	S/N serial number	Supplied by	Certification
AE	Adapter	W&T	W&T- AD1806B0 50100U	\	Client	FCC sdoc

#### 5.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted. FCC Designation No.: CN1164

## 5.7 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty		
1	Radio Frequency	7.9 x 10 <sup>-8</sup>		
	DE newer conducted	0.46dB (30MHz-1GHz)		
2	RF power, conducted	0.55dB (1GHz-18GHz)		
3 F		3.3dB (9kHz-30MHz)		
	Padiated Spurious emission test	4.3dB (30MHz-1GHz)		
	Radiated Spurious emission test	4.5dB (1GHz-18GHz)		
	(25)	3.4dB (18GHz-40GHz)		
4	Conduction emission	3.5dB (9kHz to 150kHz)		
4	Conduction emission	3.1dB (150kHz to 30MHz)		
5	Temperature test	0.64°C		
6	Humidity test	3.8%		
7	DC power voltages	0.026%		





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# 6 Equipment List

Conducted disturbance Test						
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)	
Receiver	R&S	ESCI	100435	04-15-2019	04-14-2022	
Temperature/ Humidity Indicator	Defu	TH128	/	(0)		
LISN	R&S	ENV216	100098	03-04-2021	03-03-2022	
Barometer	changchun	DYM3	1188			

	RF test system						
Equipment	Manufacturer	Mode No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)		
Spectrum Analyzer	Keysight	N9010A	MY54510339	12-28-2020	12-27-2021		
Signal Generator	Keysight	N5182B	MY53051549	12-28-2020	12-27-2021		
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	06-29-2020	06-28-2021		
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	(4)	- (	<u>:</u>		
High-pass filter	MICRO- TRONICS	SPA-F-63029-4	(6)		·		
DC Power	Keysight	E3642A	MY56376072	12-28-2020	12-27-2021		
PC-1	Lenovo	R4960d		_ · · ·			
Power unit	R&S	OSP120	101374	12-28-2020	12-27-2021		
RF control unit	JS Tonscend	JS0806-2	158060006	12-28-2020	12-27-2021		
BT&WI-FI Automatic test software	JS Tonscend	JS1120-3					

3M Semi/full-anechoic Chamber						
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)	
3M Chamber & Accessory Equipment	TDK	SAC-3		05-24-2019	05-23-2022	
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	05-16-2021	05-15-2022	
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04-15-2021	04-14-2024	
Receiver	R&S	ESCI7	100938-003	10-16-2020	10-15-2021	
Multi device Controller	maturo	NCD/070/10711 112		(	<u> </u>	
Temperature/ Humidity Indicator	Shanghai qixiang	HM10	1804298	06-29-2020	06-28-2021	
Cable line	Fulai(7M)	SF106	5219/6A			
Cable line	Fulai(6M)	SF106	5220/6A			
Cable line	Fulai(3M)	SF106	5216/6A	_°	- 705	
Cable line	Fulai(3M)	SF106	5217/6A	( X )-1	/ 🐼	

Hotline:400-6788-333 www.cti-cert.com E-mail:info@cti-cert.com Complaint call:0755-33681700 Complaint E-mail:complaint@cti-cert.com



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		3M full-anecho	ic Chamber		
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy
RSE Automatic test software	JS Tonscend	JS36-RSE	10166		
Receiver	Keysight	N9038A	MY57290136	03-04-2021	03-03-2022
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-04-2021	03-03-2022
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-04-2021	03-03-2022
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS- LINDGREN	3117	00057407	07-10-2018	07-09-2021
Preamplifier	EMCI	EMC184055SE	980596	05-20-2021	05-19-2022
Preamplifier	EMCI	EMC001330	980563	04-15-2021	04-14-2022
Preamplifier	JS Tonscend	980380	EMC051845 SE	12-31-2020	12-30-2021
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-16-2021	04-15-2022
Fully Anechoic Chamber	TDK	FAC-3		01-09-2021	01-08-2024
Filter bank	JS Tonscend	JS0806-F	188060094	04-09-2021	04-08-2022
Cable line	Times	SFT205-NMSM- 2.50M	394812-0001	(	(S)
Cable line	Times	SFT205-NMSM- 2.50M	394812-0002		
Cable line	Times	SFT205-NMSM- 2.50M	394812-0003		
Cable line	Times	SFT205-NMSM- 2.50M	393495-0001		(2
Cable line	Times	EMC104-NMNM- 1000	SN160710	<u> </u>	@
Cable line	Times	SFT205-NMSM- 3.00M	394813-0001		
Cable line	Times	SFT205-NMNM- 1.50M	381964-0001	- /	<u>- 62</u>
Cable line	Times	SFT205-NMSM- 7.00M	394815-0001	(	<u>ال</u>
Cable line	Times	HF160-KMKM- 3.00M	393493-0001		















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### 7 Test results and Measurement Data

### 7.1 Antenna Requirement

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

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

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

**EUT Antenna:** Please see Internal photos

The antenna is External antenna. The best case gain of the antenna is 5dBi.





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# 7.2 Conducted Emissions

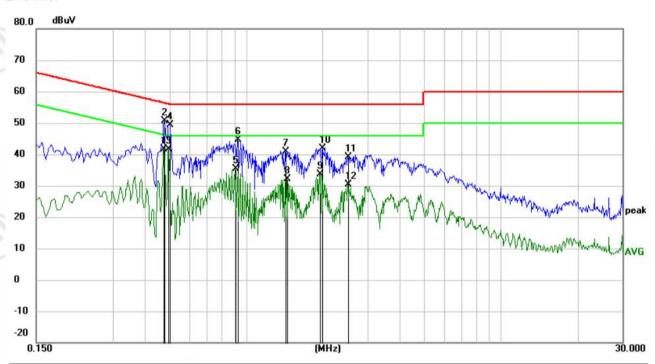
112 1313131313131		6.31	163			
Test Requirement:	47 CFR Part 15C Section 15.2	.07				
Test Method:	ANSI C63.10: 2013					
Test Frequency Range	e: 150kHz to 30MHz					
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sv	weep time=auto				
Limit:	Fraguency range (MUz)	Limit (d	BuV)	10		
	Frequency range (MHz)	Quasi-peak	Average	( . )		
	0.15-0.5	66 to 56*	56 to 46*			
	0.5-5	56	46	1		
	5-30	60	50	1		
	* Decreases with the logarithm	of the frequency.		_		
Test Setup:	Shielding Room  EUT  AC Mains  LISN1	AE  LISN2 AC Main  Ground Reference Plane	Test Receiver	9		
Test Procedure:	1) The mains terminal disturb	ance voltage test was	conducted in a shi	elded		
	Impedance Stabilization Not impedance. The power of connected to a second LIS plane in the same way a multiple socket outlet strip single LISN provided the rational strategy of the tabletop EUT was planground reference plane. As placed on the horizontal ground reference with the EUT shall be 0.4 m of the EUT shall be 0.5 m of the Lish unit under test and bond mounted on top of the ground the closest points of the Lish and associated equipment to find the maximum.	<ol> <li>The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linea impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.</li> <li>The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.</li> <li>The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.</li> <li>In order to find the maximum emission, the relative positions of equipmen and all of the interface cables must be changed according to</li> </ol>				
Test Mode:	Transmitting					
Test Results:	Pass					



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#### **Measurement Data**

#### Live line:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4740	31.69	9.96	41.65	46.44	-4.79	AVG	
2		0.4785	40.58	9.95	50.53	56.37	-5.84	peak	
3	*	0.4965	31.56	9.95	41.51	46.06	-4.55	AVG	
4		0.5010	39.51	9.95	49.46	56.00	-6.54	peak	
5		0.9060	25.41	9.85	35.26	46.00	-10.74	AVG	
6		0.9240	34.72	9.85	44.57	56.00	-11.43	peak	
7		1.4280	31.06	9.81	40.87	56.00	-15.13	peak	
8		1.4460	22.42	9.81	32.23	46.00	-13.77	AVG	
9		1.9410	23.83	9.79	33.62	46.00	-12.38	AVG	
10		1.9995	32.16	9.79	41.95	56.00	-14.05	peak	
11		2.5035	29.26	9.79	39.05	56.00	-16.95	peak	
12		2.5035	20.48	9.79	30.27	46.00	-15.73	AVG	

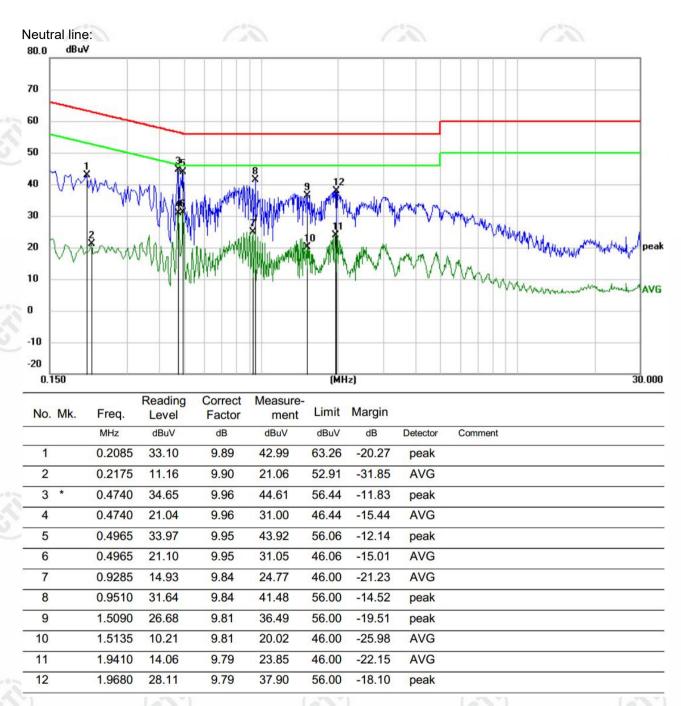
#### Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.









#### Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.









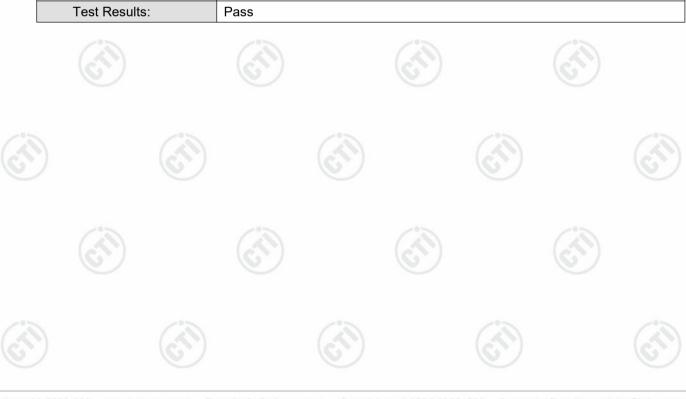






# 7.3 Maximum Conducted Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)	
Test Method:	ANSI C63.10 2013	-6-
Test Setup:		(21)
	Control Control Control Power Supply  Power Supply  Table  RF test System System Instrument	
	Remark: Offset=Cable loss+ attenuation factor.	
Test Procedure:	<ul> <li>a) Set the RBW ≥ DTS bandwidth.</li> <li>b) Set VBW ≥ 3 × RBW.</li> <li>c) Set span ≥ 3 x RBW</li> <li>d) Sweep time = auto couple.</li> <li>e) Detector = peak.</li> <li>f) Trace mode = max hold.</li> <li>g) Allow trace to fully stabilize.</li> <li>h) Use peak marker function to determine the peak amplitude</li> </ul>	level.
Limit:	30dBm	(23)
Test Mode:	Transmitting	
Test Results:	Pass	

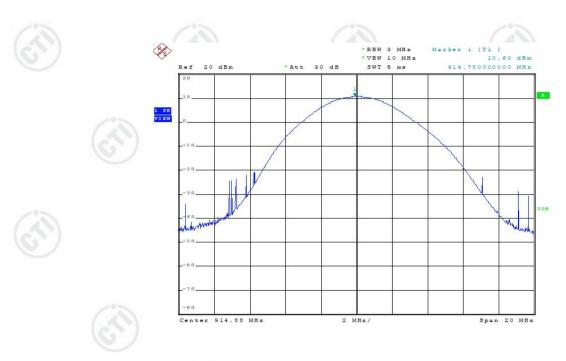




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Test Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)	Result
914.88	10.6	30.00	Pass



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# 7.4 DTS Bandwidth

10.4	164 / 164 /
Test Requirement:	47 CFR Part 15C Section 15.247 (a)(2)
Test Method:	ANSI C63.10 2013
Test Setup:	(ci)
	Control Computer Power port Attenuator Table  EUT RF test System System Instrument
	Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	a) Set RBW = 100 kHz. b) Set the VBW ≥[3 × RBW]. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
Limit:	≥ 500 kHz
Test Mode:	Transmitting
Test Results:	Pass
Limit: Test Mode:	a) Set RBW = 100 kHz. b) Set the VBW ≥[3 × RBW]. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) Measure the maximum width of the emission that is constrained frequencies associated with the two outermost amplitude points (upp lower frequencies) that are attenuated by 6 dB relative to the maximum measured in the fundamental emission. ≥ 500 kHz Transmitting

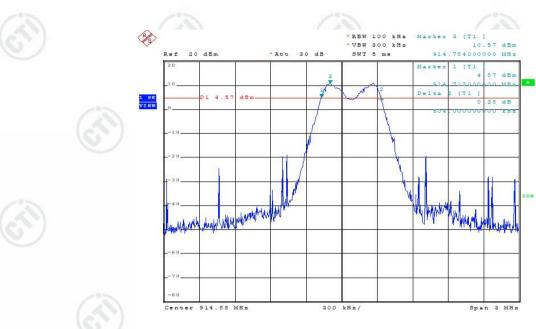


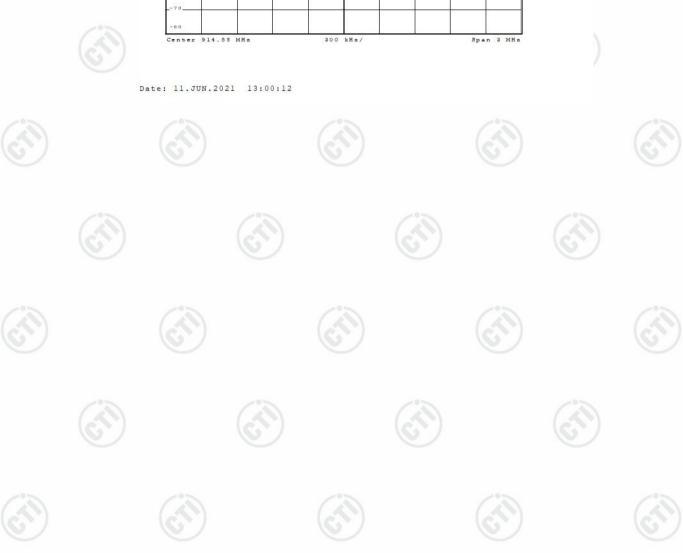


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Test Frequency (MHz)	6dB Occupy Bandwidth (kHz)	Limit (kHz)	Result
914.88	504	≥500	Pass



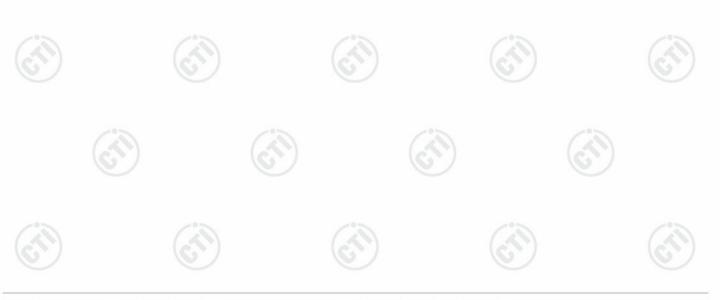






# 7.5 Maximum Power Spectral Density

103					
Test Requirement:	47 CFR Part 15C Section 15.247 (e	e)			
Test Method:	ANSI C63.10 2013				
Test Setup:					
	Control Computer Power Supply Table  EUT Control Power Power Supply Table	RF test System Instrument			
	Remark: Offset=Cable loss+ attenu	uation factor.			
Test Procedure:	within the RBW.	S bandwidth.			
Limit:	≤8.00dBm/3kHz				
Test Mode:	Transmitting				
Test Results:	Pass				

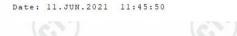




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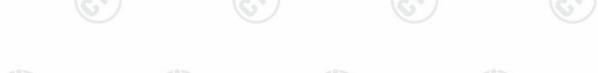
Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
914.88	4.29	≤8.00	Pass















# 7.6 Band Edge measurements and Conducted Spurious Emission

10.0	
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10 2013
Test Setup:	RF test System Instrument  Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	a) Set RBW =100KHz. b) Set VBW = 300KHz. c) Sweep time = auto couple. d) Detector = peak. e) Trace mode = max hold. f) Allow trace to fully stabilize. g) Use peak marker function to determine the peak amplitude level.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test Mode:	Transmitting
Test Results:	Pass

Test Frequency(MHz)	Emission Level(dBm)	Limit(dBm)	Result
614	-51.26	-8.89	Pass
960	-51.57	-8.89	Pass





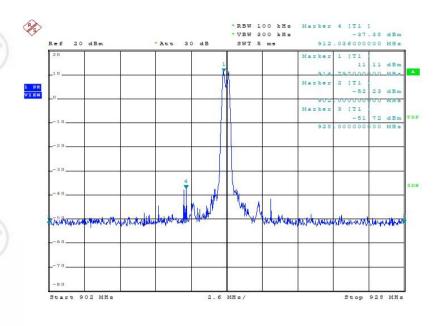






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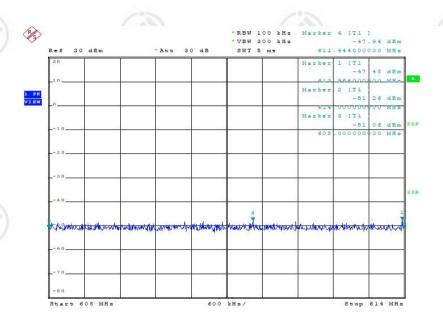






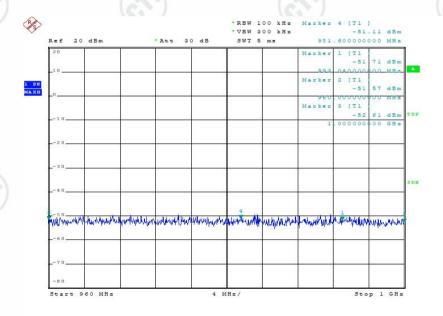






Date: 18.JUN.2021 22:38:38

#### Band-edge Measurement, Low Channel, Restricted Frequency



Date: 18.JUN.2021 22:40:25

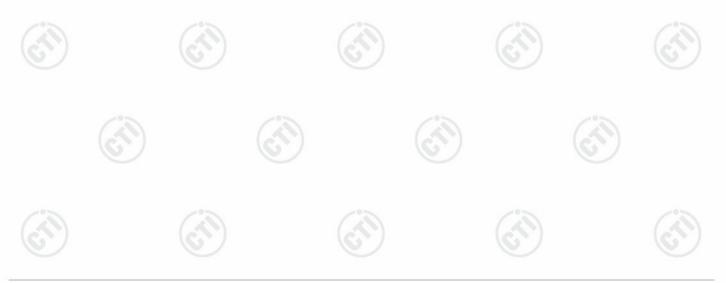
Band-edge Measurement, High Channel, Restricted Frequency





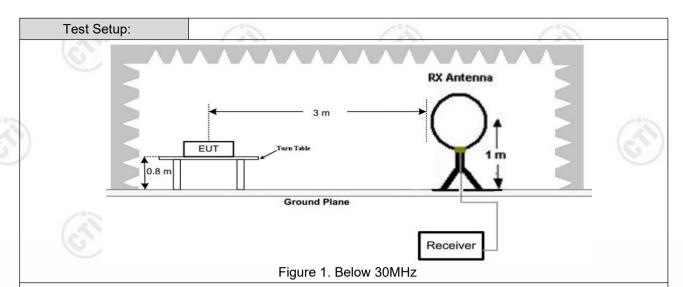
# 7.7 Radiated Spurious Emission & Restricted bands

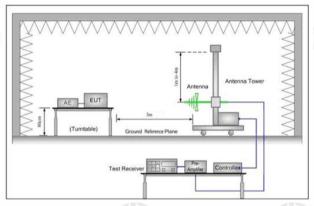
A VEST STATE OF THE STATE OF TH	1657		16.5		16.7	1		
Test Requirement:	47 CFR Part 15C Secti	on 1	5.209 and 15	.205				
Test Method:	ANSI C63.10 2013							
Test Site:	Measurement Distance	: 3m	n (Semi-Anech	noic Cham	ber)	-0.00		
Receiver Setup:	Frequency	10	Detector	RBW	VBW	Remark		
	0.009MHz-0.090MH	Peak	10kHz	30kHz	Peak			
	0.009MHz-0.090MH	z	Average	10kHz	30kHz	Average		
	0.090MHz-0.110MH	lz	Quasi-peak	10kHz	30kHz	Quasi-peak		
	0.110MHz-0.490MH	lz	Peak	10kHz	30kHz	Peak		
	0.110MHz-0.490MH	z	Average	10kHz	30kHz	Average		
	0.490MHz -30MHz		Quasi-peak	10kHz	30kHz	Quasi-peak		
	30MHz-1GHz		Quasi-peak	100 kH	z 300kHz	Quasi-peak		
	Above 1GHz		Peak	1MHz	3MHz	Peak		
			Peak	1MHz	10kHz	Average		
Limit:	Frequency	Frequency (mic		Limit (dBuV/m)	Remark	Measuremen distance (m)		
	0.009MHz-0.490MHz	2400/F(kHz)		-	-/0>	300		
	0.490MHz-1.705MHz	24	1000/F(kHz)	-	(c)	30		
	1.705MHz-30MHz		30	-	-	30		
	30MHz-88MHz		100	40.0	Quasi-peak	3		
	88MHz-216MHz		150	43.5	Quasi-peak	3		
	216MHz-960MHz	6	200	46.0	Quasi-peak	3		
	960MHz-1GHz		500	54.0	Quasi-peak	3		
	Above 1GHz 500		500	54.0	Average	3		
	Note: 15.35(b), frequency emissions is limit applicable to the epeak emission level rad	20c equip	dB above the oment under t	maximum est. This p	permitted ave	erage emission		





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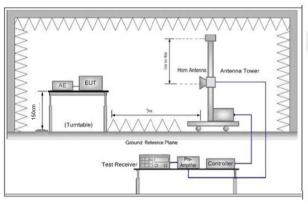


Figure 2. 30MHz to 1GHz

Figure 3. Above 1 GHz

#### Test Procedure:

- a. 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
  - 2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation

Note: For the radiated emission test above 1GHz:

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the



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	measurement.
	d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
	g. Test the EUT in the lowest channel (2402MHz),the middle channel (2440MHz),the Highest channel (2480MHz)
	h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
	i. Repeat above procedures until all frequencies measured was complete.
Test Mode:	Transmitting
Test Results:	Pass

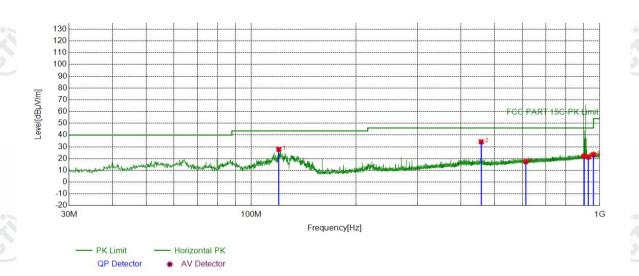




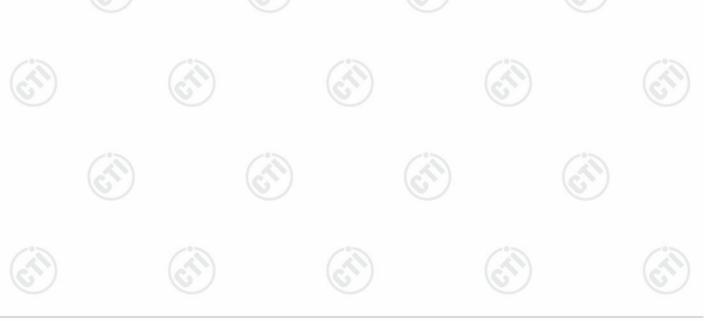


### Radiated Spurious Emission below 1GHz:

### **Test Graph**



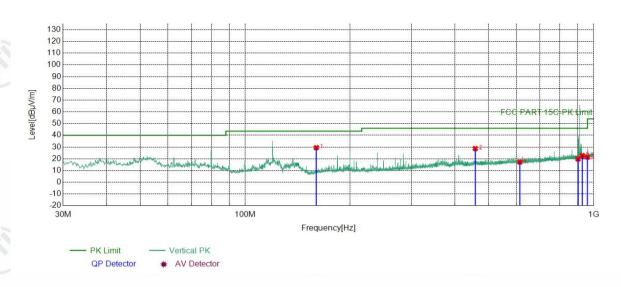
Suspected List											
NO	Freq.	Factor	Reading	Level	Limit	Margin		Polarity	Remark		
	[MHz]	[dB]	[dBµV]	[dBµV/m]	[dBµV/m]	[dB]	Result				
1	120.025	-20.08	48.01	27.93	43.50	15.57	PASS	Horizontal	PK		
2	457.424	-11.59	45.84	34.25	46.00	11.75	PASS	Horizontal	PK		
3	614.000	-8.48	25.96	17.48	46.00	28.52	PASS	Horizontal	PK		
4	902.000	-4.96	26.98	22.02	46.00	23.98	PASS	Horizontal	PK		
5	928.000	-4.70	26.02	21.32	46.00	24.68	PASS	Horizontal	PK		
6	960.000	-4.37	27.76	23.39	54.00	30.61	PASS	Horizontal	PK		







### **Test Graph**



Suspected List											
N/O	Freq.	Factor	Reading	Level	Limit	Margin	D 14	Polarity	Remark		
NO	[MHz]	[dB]	[dBµV]	[dBµV/m]	[dBµV/m]	[dB]	Result				
1	159.993	-21.15	50.62	29.47	43.50	14.03	PASS	Vertical	PK		
2	457.424	-11.59	40.31	28.72	46.00	17.28	PASS	Vertical	PK		
3	614.000	-8.48	25.72	17.24	46.00	28.76	PASS	Vertical	PK		
4	902.000	-4.96	24.82	19.86	46.00	26.14	PASS	Vertical	PK		
5	928.000	-4.70	27.50	22.80	46.00	23.20	PASS	Vertical	PK		
6	960.000	-4.37	25.76	21.39	54.00	32.61	PASS	Vertical	PK		





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### Radiated Spurious Emission above 1GHz:

Mode	<b>9</b> :	Transm	Transmitting					914.88 N	lHz
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1011.0011	-25.39	62.75	37.36	74.00	36.64	PASS	Horizontal	PK
2	1829.6830	-24.54	61.51	36.97	74.00	37.03	PASS	Horizontal	PK
3	2744.3744	-22.09	70.66	48.57	74.00	25.43	PASS	Horizontal	PK
4	4574.1049	-16.76	61.17	44.41	74.00	29.59	PASS	Horizontal	PK
5	6404.2269	-12.85	59.63	46.78	74.00	27.22	PASS	Horizontal	PK
6	10773.5182	-6.29	52.88	46.59	74.00	27.41	PASS	Horizontal	PK
7	1011.0011	-25.39	65.82	40.43	74.00	33.57	PASS	Vertical	PK
8	1372.2372	-26.77	68.06	41.29	74.00	32.71	PASS	Vertical	PK
9	3065.0043	-20.60	61.61	41.01	74.00	32.99	PASS	Vertical	PK
10	4574.1049	-16.76	63.15	46.39	74.00	27.61	PASS	Vertical	PK
11	8233.3489	-10.97	57.17	46.20	74.00	27.80	PASS	Vertical	AV
12	12566.6378	-4.35	52.40	48.05	74.00	25.95	PASS	Vertical	PK

#### Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
  - Final Test Level =Receiver Reading + Antenna Factor + Cable Factor Preamplifier Factor
- 2) Scan from 9kHz to 18GHz, the disturbance above 13GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

