

# **FCC** Radio Test Report

### FCC ID: S3Z-CIM35X2

Report No. Equipment Model Name Brand Name Applicant Address Manufacturer Address	CIMX CIMX CIMC CIMC 200 S CIMC	CCP-1-2002T042 1PRO V3 Module 1PRO V3 ON ON Lighting, Inc. rummit Drive, Suite 500, South Tower, Burlington, MA 01803 ON Lighting, Inc. rummit Drive, Suite 500, South Tower, Burlington, MA 01803
Radio Function	: ZigBe	e
FCC Rule Part(s) Measurement Procedure(s)		Part15, Subpart C (15.247) C63.10-2013
Date of Receipt Date of Test Issued Date	2020/ 2020/ 2020/	2/13 ~ 2020/7/14

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

her Prepared by Peter Chen, Engineer **ac-MRA** Testing Labor 0659 Approved by Scott Hsu , Manager BTL Inc. No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com





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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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#### **REPORT ISSUED HISTORY**

Report Version	Des	scription	Issued Date
R00	Original Issue.	· · · · · · · · · · · · · · · · · · ·	2020/7/23
Project No.: 2002T042	Page 5 c	f 65	Report Version: R00

#### SUMMARY OF TEST RESULTS 1

Test procedures according to the technical standards.

FCC Part 15, Subpart C (15.247)							
Standard(s) Section	Standard(s) Section Description Test Result						
15.207	AC Power Line Conducted Emissions		N/A	NOTE(3)			
15.205 15.209 15.247(d)	Radiated Emissions	APPENDIX A APPENDIX B	Pass				
15.247(a)(2)	Bandwidth	APPENDIX C	Pass				
15.247(b)(3)	Output Power	APPENDIX D	Pass				
15.247(e)	Power Spectral Density	APPENDIX E	Pass				
15.247(d)	Antenna conducted Spurious Emission	APPENDIX F	Pass				
15.203	Antenna Requirement		Pass				

NOTE:

"N/A" denotes test is not applicable in this Test Report.
 The report format version is TP.1.1.1.
 DC input device (Supplied by host).



#### 1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan The test sites and facilities are covered under FCC RN: 355421 and DN: TW1099.

□ CB16

SR06

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan The test sites and facilities are covered under FCC RN: 325517 and DN: TW1115.

□ C03 ⊠ CB18 □ CB19

#### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expanded uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k} = 2$ , providing a level of confidence of approximately **95**%. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U<sub>cispr</sub> requirement.

#### A. Radiated emissions test :

Test Site	Measurement Frequency Range	U,(dB)	
	0.03 GHz ~ 0.2 GHz	4.17	
	0.2 GHz ~ 1 GHz	4.72	
CB15	1 GHz ~ 6 GHz	5.21	
CB15	6 GHz ~ 18 GHz	5.51	
	18 GHz ~ 26 GHz	3.69	
	26 GHz ~ 40 GHz	4.23	
	0.03 GHz ~ 0.2 GHz	4.17	
	0.2 GHz ~ 1 GHz	4.72	
CB18	1 GHz ~ 6 GHz	5.21	
СВТо	6 GHz ~ 18 GHz	5.51	
	18 GHz ~ 26 GHz	3.69	
	26 GHz ~ 40 GHz	4.23	

#### B. Conducted test :

Test Item	U,(dB)
Bandwidth	1.13
Output power	1.06
Power Spectral Density	1.20
Conducted Spurious emissions	1.14
Conducted Band edges	1.13

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

#### 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Tested by
Radiated emissions below 1 GHz	22~23 °C, 65 %	John Chuang Hunter Chiang
Radiated emissions above 1 GHz	22~23 °C, 65 %	John Chuang Hunter Chiang
Bandwidth	23.8 °C, 53 %	Jay Kao
Output Power	23.8 °C, 53 %	Jay Kao
Power Spectral Density	23.8 °C, 53 %	Jay Kao
Antenna conducted Spurious Emission	23.8 °C, 53 %	Jay Kao

#### 1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

For Antenna Group I:

Test Software	Teraterm				
Modulation Mode	2405 MHz	2440 MHz	2470 MHz	2475 MHz	Data Rate
ZigBee	8	4	-3	-10	250 kbps

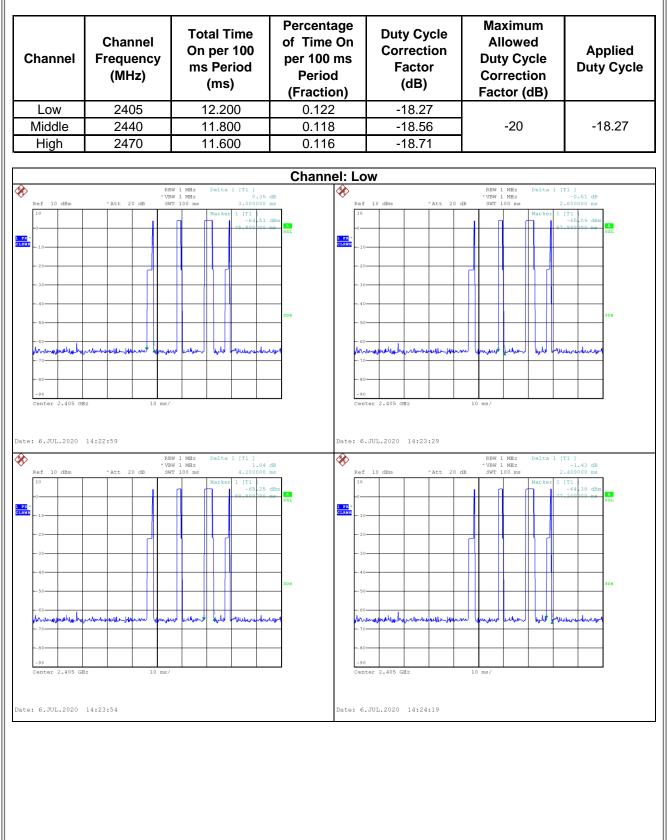
#### For Antenna Group II:

Test Software	Teraterm				
Modulation Mode	2405 MHz 2440 MHz 2470 MHz 2475 MHz Data Rate				
ZigBee	-4	8	-5	-10	250 kbps

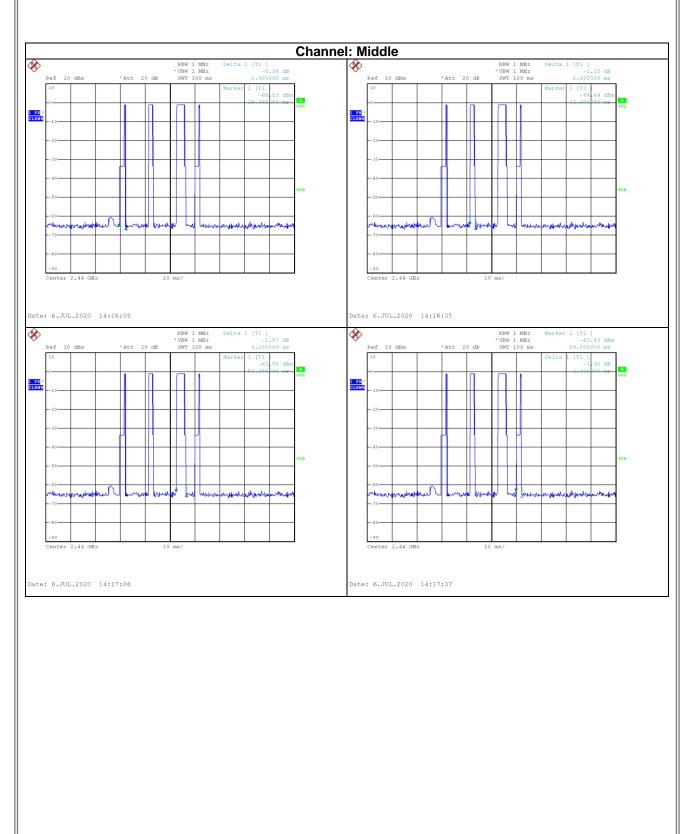


#### 1.5 DUTY CYCLE

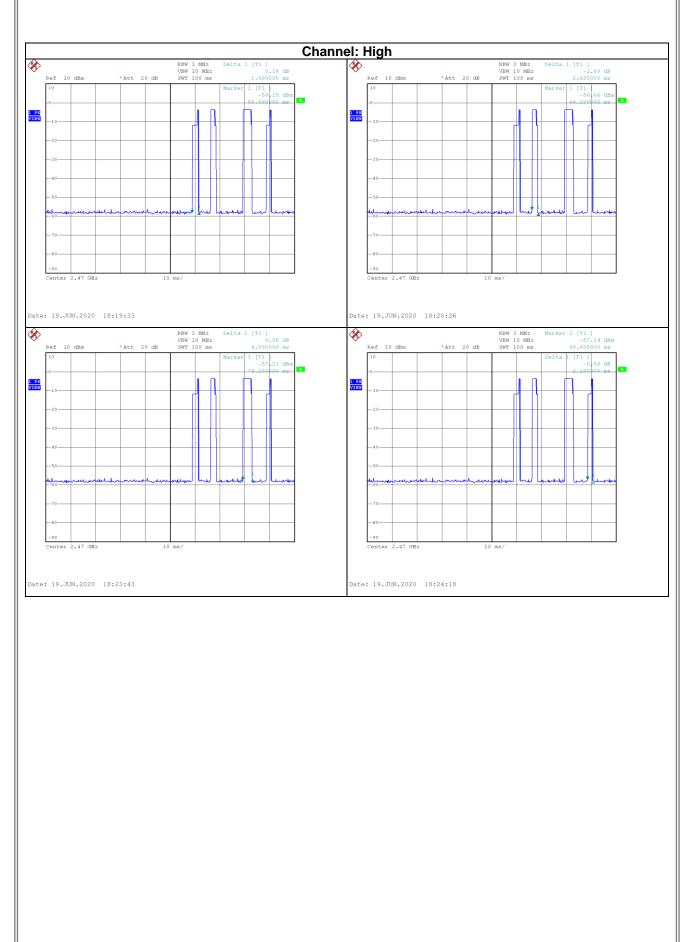
If duty cycle is  $\geq$  98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered.











#### 2 GENERAL INFORMATION

#### 2.1 DESCRIPTION OF EUT

Equipment	CIMX1PRO V3 Module
Model Name	CIMX1PRO V3
Brand Name	CIMCON
Model Difference	N/A
Power Source	Supplied by host
Power Rating	I/P: DC 2.1-3.6V
Products Covered	2 * Antenna
Frequency Range	2400 MHz ~ 2483.5 MHz
Operation Frequency	2405 MHz~ 2470 MHz and 2475 MHz
Modulation Technology	O-QPSK
Transfer Rate	250 kbit/s
Output Power Max.	Antenna Group I: 23.49 dBm (0.2234 W)
Output Fower Max.	Antenna Group II: 23.31 dBm (0.2143 W)
Test Model CIMX1PRO V3	
Sample Status	Engineering Sample
EUT Modification(s)	N/A

#### NOTE:

- (1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- (2) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
11	2405	19	2445
12	2410	20	2450
13	2415	21	2455
14	2420	22	2460
15	2425	23	2465
16	2430	24	2470
17	2435	25	2475
18	2440		

#### (3) Table for Filed Antenna:

Group I:

Ant.	Brand	Model No.	Antenna Type	Connector	Gain (dBi)
1	N/A	iSLC3100-7P	Monopole	N/A	1.5
Group II					
Ant.	Brand	Model No.	Antenna Type	Connector	Gain (dBi)
1	N/A	A24-HASM-450	Dipole	SMA	2.14



#### 2.2 TEST MODES

Test Items	Test mode	Channel	Note
Transmitter Radiated Emissions (below 1GHz)	ZigBee	11/25	-
Transmitter Radiated Emissions (above 1GHz)	ZigBee	11/24/25	Bandedge
	ZigBee	11/18/24/25	Harmonic
Bandwidth	ZigBee	11/18/24/25	-
Output Power	ZigBee	11/18/24/25	-
Power Spectral Density	ZigBee	11/18/24/25	-
Antenna conducted Spurious Emission	ZigBee	11/18/24/25	-

NOTE:

(1) The EUT includes two groups of antenna assemblies, all are evaluated. For Transmitter Radiated Emissions, only the worst cases are recorded.

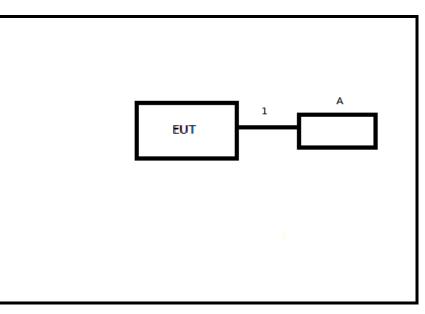
(2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical (Antenna Group I), Horizontal (Antenna Group II)) is recorded.
(3) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.

(4) There were no emissions found below 30 MHz within 20 dB of the limit.



#### 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



#### 2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
Α	Fixture board	NA	NA	NA	-
Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	NA	NA	1.5M	Power Cable	-



#### 3 RADIATED EMISSIONS TEST

#### 3.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

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
960~1000	500	3

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Radiated ( (dBu	Measurement Distance (meters)	
(1011 12)	Peak	Average	(IIIeters)
Above 1000	74	54	3

#### NOTE:

- (1) The limit for radiated test was performed according to FCC Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:
  - Measurement Value = Reading Level + Correct Factor
  - Correct Factor = Antenna Factor + Cable Loss Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
41.91	+	-8.36	=	33.55

Measurement Value		Limit Value		Margin Level
33.55	-	43.50	Ш	-9.95

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1MHz / 3MHz for Peak,
(Emission in restricted band)	1MHz / 1/T for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector





#### 3.2 TEST PROCEDURE

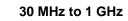
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

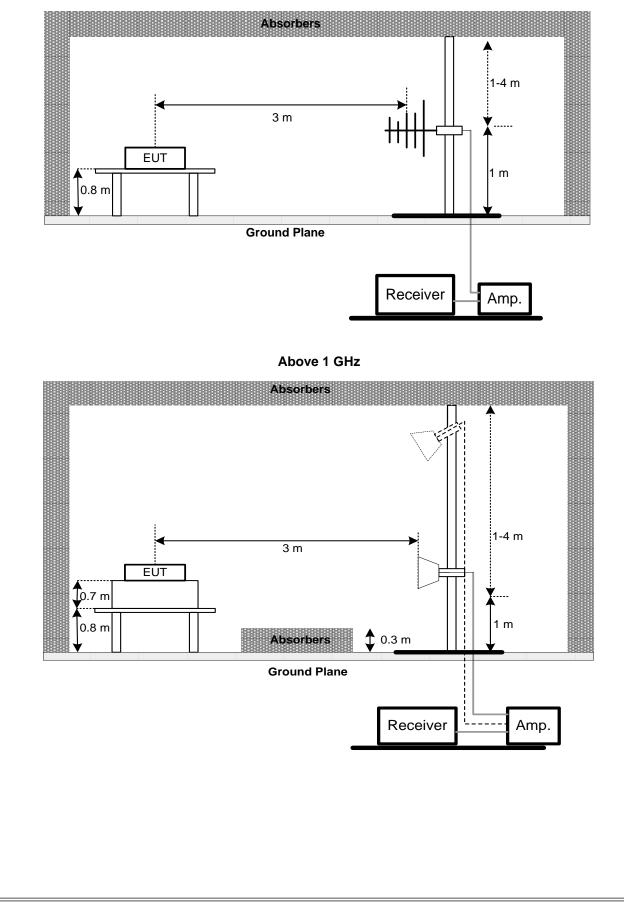
#### 3.3 DEVIATION FROM TEST STANDARD

No deviation.



#### 3.4 TEST SETUP







#### 3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 3.6 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX A.

#### 3.7 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX B.

#### NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



#### 4 BANDWIDTH TEST

#### 4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C								
Section	Test Item	Limit	Frequency Range (MHz)	Result				
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS				

#### 4.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

#### 4.3 DEVIATION FROM STANDARD

No deviation.

#### 4.4 TEST SETUP



#### 4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 4.6 TEST RESULTS

Please refer to the APPENDIX C.



#### 5 OUTPUT POWER TEST

#### 5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C							
Section	Test Item	Limit	Frequency Range (MHz)	Result			
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS			

#### 5.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance.

#### 5.3 DEVIATION FROM STANDARD

No deviation.

#### 5.4 TEST SETUP

EUT	Power Meter

#### 5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 5.6 TEST RESULTS

Please refer to the APPENDIX D.

#### 6 POWER SPECTRAL DENSITY TEST

#### 6.1 APPLIED PROCEDURES / LIMIT

	FCC Part15 (15.247), Subpart C											
Section	Test Item	Limit	Frequency Range (MHz)	Result								
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS								

#### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10 KHz, Sweep time = auto.

#### 6.3 DEVIATION FROM STANDARD

No deviation.

#### 6.4 TEST SETUP



#### 6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 6.6 TEST RESULTS

Please refer to the APPENDIX E.



#### 7 ANTENNA CONDUCTED SPURIOUS EMISSION

#### 7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits.

#### 7.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 10 ms.

#### 7.3 DEVIATION FROM STANDARD

No deviation.

#### 7.4 TEST SETUP



#### 7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 7.6 TEST RESULTS

Please refer to the APPENDIX F.



#### 8 LIST OF MEASURING EQUIPMENTS

			Radiated Emission	ons						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until				
1	Preamplifier	EMCI	EMC001340	980555	2020/4/11	2021/4/10				
2	Preamplifier	EMCI	EMC02325B	980217	2020/4/11	2021/4/10				
3	Preamplifier	EMCI	EMC012645B	980267	2020/4/11	2021/4/10				
4	Test Cable	EMCI	EMC104-SM-SM- 800	150207	2020/4/11	2021/4/10				
5	Test Cable	EMCI	EMC104-SM-SM- 3000	151205	2020/4/11	2021/4/10				
6	Test Cable	EMCI	EMC-SM-SM-700 0	180408	2020/4/11	2021/4/10				
7	MXE EMI Receiver	Agilent	N9038A	MY55420127	2020/3/25	2021/3/24				
8	Signal Analyzer	Agilent	N9010A	MY56480554	2019/6/6	2020/6/5				
9	Loop Ant	EMCO	EMCI-LPA600	274	2019/5/31	2020/5/30				
10	Horm Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2019/6/10	2020/6/9				
11	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	000992	2019/5/29	2020/5/28				
12	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0508	2019/5/29	2020/5/28				

	Bandwidth											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22						

	Output Power												
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until							
1	Power Meter	Anritsu	ML2487A	6K00004714	2019/6/20	2020/6/19							
2	Power Sensor	Anritsu	MA2491A	1725282	2019/6/20	2020/6/19							

	Power Spectral Density												
ltem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until							
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22							

	Antenna conducted Spurious Emission											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22						

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.



#### 9 EUT TEST PHOTO

Please refer to document Appendix No.: TP-2002T042-FCCP-1 (APPENDIX-TEST PHOTOS).

#### 10 EUT PHOTOS

Please refer to document Appendix No.: EP-2002T042-1 (APPENDIX-EUT PHOTOS).



## APPENDIX A RADIATED EMISSIONS - 30 MHZ TO 1 GHZ



est Mo	de	ТХ	( Mode	A_A	ntenna	a Grou	p I_24	405MH	z_CH11		Те	sted Da	ate	2020/2	2/24
est Vol	ltage	DC	C 3.6V						Polarization					Vertica	al
80.0	dBuV/m														_
70															
60															_
50															
40															
30	1 X	2 X		зX		<b>4</b> ×			5 X		6 X				
20				×											
10															_
0.0 3	0.000 12	7.00	224.	00	321.0	0 4	18.00	515.0	0 612	00	709.00	806	00	1000.0	0 MHz
No. M			Readin Level	ng	Corree Facto	ct Me	asure nent								
	MHz		dBuV		dB		uV/m	dBuV/r			Detector	Comme	ent		
1	36.790		34.25		-9.09		5.16	40.00			peak				
2	128.940		36.76		-10.3		6.43	43.50			peak				
3	239.520		31.75		-9.06		2.69	46.00			peak				
4	351.070		31.60		-6.01		5.59	46.00			peak				
5	560.590		29.80		-1.00		3.80	46.00			peak				
6 *	712.880	0	29.80	)	1.87	31	1.67	46.00	) -14.3	3	peak				

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



est Mo	de	TX Mode	Antenna	Group I_2	405MHz_	CH11	Те	sted Date	2020/2/24
est Vol	tage	DC 3.6V					Pc	larization	Horizontal
80.0	dBu∀/m								
70									
60									
50									
40								5	6 X
30		l X	2 X		3 X	4 X		5 X	×
20			×						
10									
0.0	000 107	00 224.0	0 001 00		E15.00	010.00	700.00	000.00	1000.00.1411
31	).000 127.				515.00	612.00	709.00	806.00	1000.00 MHz
No. M	k. Freq	Reading Level	g Correct Factor		e- Limit	Over			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	128.9400	35.73	-10.33	25.40	43.50	-18.10	peak		
2	286.0800	30.36	-7.53	22.83	46.00	-23.17	peak		
3	482.9900	) 30.44	-2.92	27.52	46.00	-18.48	peak		
4	607.1500	) 30.43	0.18	30.61	46.00	-15.39	peak		
5	757.5000	29.58	2.64	32.22	46.00	-13.78	peak		
6 *	883.6000	29.07	4.21	33.28	46.00	-12.72	peak		

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

# **BIL**

				•					I		0.000/0/0
est l			TX Mode_	Antenn	a Group I	I_2475N	IHZ_(	CH25		ested Date	2020/3/2
est \	/olt	age	DC 3.6V						Ρ	olarization	Vertical
8	:0.0	dBuV/m									
7	'n										
6	:0										
5	io										
4	0										
3	:0	1 2 X X			-	4 ×		5 X		6 X	
2	20	1 2 X X			3 X						
1	0										
0	.0										
	30	.000 127.			.00 418.	.00 51	5.00	612.00	709.0	0 806.00	1000.00 MHz
No.	Mk	. Freq.	Reading Level	g Corre Fact			nit	Margin			
		MHz	dBuV	dB	dBuV	/m dBu		dB	Detector	Comment	
1	*	70.7400		-14.0				-17.20	peak		
2		120.2100		-13.5			50	-20.92	peak		
3		339.4300		-9.8				-24.49	peak		
4		475.2300		-6.2	4 24.3	35 46.	00	-21.65	peak		
5		605.2100		-3.8				-19.26	peak		
6		753.6200	30.26	-1.6	4 28.6	62 46.	00	-17.38	peak		

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

# **BIL**

est N	//oc	le	ΤХ	Mode	Antenn	a Group	II 24	75MHz	CH25	Т	ested Da	ite	2020/3/2	2
est V	/olt	age	-	3.6V					_	F	Polarization		Horizont	
80	D. O	dBu∀/m												1
70	ו													
60	ו													
50	ו													
40														
30	)					3 X		4 ×		5 X		6 X		
20		X		2 X		×								
10	ו													
0.	L	.000 127	00	224.00	0 321	.00 418	00	515.00	612.0	0 709.0	0 806.	00	1000.00	MH7
No.			F	Reading		ect Meas	sure-	Limit	Margir				1000.00	
		MHz		dBu∨	dB	dBu\		dBuV/m	dB	Detector	Commen	t		
1		47.4600		31.42	-11.4			40.00	-20.05	peak				
2		174.5300		32.45	-12.1			43.50	-23.20	peak				
3		374.3500		31.48	-8.7			46.00	-23.23	peak				
4		512.0900		30.97	-5.4			46.00	-20.43	peak				
5	*	703.1800		30.10	-2.3			46.00	-18.25	peak				
6	*	840.9200	J	30.71	-0.6	7 30.	J4	46.00	-15.96	peak				

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



### APPENDIX B RADIATED EMISSIONS - ABOVE 1 GHZ



t Mode	TX Mode	Antenna	Group I_	2405MHz	2_CH11	Test	ed Date	2020/2/2	4
t Voltage	DC 3.6V			Pola	arization	Horizontal			
130.0 dBu\	//m								_
120									
110									
100				2					
90									
80									
70				and the second					
60 	and the second second second	well water of the second	Welder a rode man	,uX''	Lawren .	Man Romannon	madanaharaharaharaharaharaharaharaharaharah	www.www.www.www.www.www.www.www.www.ww	,
00				2 X				6	1
40								×	
30 20									
10.0									
2305.000	2325.00 234	15.00 236	5.00 238	5.00 240	5.00 2425.0	0 2445.00	2465.00	2505.00	MHz

No.	Mk	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.400	30.62	31.38	62.00	74.00	-12.00	peak	
2		2389.400	62.00	-18.27	43.73	54.00	-10.82	AVG	
3	Х	2405.000	88.33	31.44	119.77	74.00	45.77	peak	No Limit
4	*	2405.000	119.77	-18.27	101.50	54.00	46.95	AVG	No Limit
5		2503.600	25.91	31.83	57.74	74.00	-16.26	peak	
6		2503.600	57.74	-18.27	39.47	54.00	-15.08	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



st Mode	TX Mode_	Antenna (	Group I_	2470MHz	_CH24		Tested [	Date	2020/3/2	20
st Voltage	DC 3.6V						Polariza	tion	Horizont	al
130.0 dBu\	//m									_
120				З						
110				(`						
100				4 ×						
90										
80					$\left\{ - \right\}$					
70				and a second	5					
	1 handlingthe month was	nummer	unuunuuu	American .	- W.W.	the manufacture	Norman	matument	are the floor of the sector	
50	2				6 ×					1
40	x									1
30 20										1
10.0										
2370.000	2390.00 241	).00 2430	.00 2450	0.00 2470	00 2490	.00 25	510.00 2	530.00	2570.00	MHz

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.680	25.99	31.38	57.37	74.00	-16.63	peak	
2		2389.680	57.37	-18.27	39.10	54.00	-15.45	AVG	
3	Х	2470.000	86.80	31.70	118.50	74.00	44.50	peak	No Limit
4	*	2470.000	118.50	-18.27	100.23	54.00	45.68	AVG	No Limit
5		2483.600	32.20	31.76	63.96	74.00	-10.04	peak	
6		2483.600	63.96	-18.27	45.69	54.00	-8.86	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



t Mode	TX Mode	_Antenna (	Group I_2	2475MHz	_CH25	Т	ested Date	2020/2/2	24
t Voltage	DC 3.6V					F	Polarization	Horizont	al
130.0 dBu\	//m								_
120									
110				3					-
100									-
90				4 X					
80									
70		_			5				1
60 1 X 50	addresserver	Maharrahantadi	underhalister	and when and	No. your balls at	to professional and	arran an a	water water and	~
40 2					6 X				
30									
20									
10.0 2375.000	2395.00 24	15.00 2435	.00 2455	5.00 2475	.00 2495.	00 251	5.00 2535.00	2575.00	 MHz
	Read								

No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	1	2376.200	26.78	31.32	58.10	74.00	-15.90	peak	
2	1	2376.200	58.10	-18.27	39.83	54.00	-14.72	AVG	
3	X	2475.000	75.28	31.72	107.00	74.00	33.00	peak	No Limit
4	* 4	2475.000	107.00	-18.27	88.73	54.00	34.18	AVG	No Limit
5		2483.500	30.00	31.76	61.76	74.00	-12.24	peak	
6	2	2483.500	61.76	-18.27	43.49	54.00	-11.06	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



est Mode			Antenna G	iroup I_240	5MHz_C	CH11		ested Date	2020/2/24
st Volta	ge [	DC 3.6V					F	Polarization	Vertical
120.0	dBuV/m								
120.0	abatrin								
110									
100									
90 -									
80									
70									
60		1 X							
50									
40		2 X							
30									
20									
10 0.0									
	0.000 359	50.00 6100	).00 8650.0	0 11200.00	13750.0	0 16300	.00 188	50.00 21400.00	26500.00 MHz
	_	Readir			1.1.1.11	0			
No. Mk.					Limit	Over	D. ( )		
4 4	MHz 4810.00			dBuV/m	dBuV/m 74.00	dB -14.40	Detector	Comment	
	4810.00			59.60 41.33	54.00	-14.40	-		
	uremer			evel + Corr ue - Limit ∖		or.			



st Voltag		Mode_Ar	itenna (	Froup I_2	2405N	IHz_C	H11		ested D		2020/2/24
	ge DC	3.6V						F	Polarizat	ion	Horizontal
120.0	dBu¥/m										
Γ											
110											
100										_	
90 -											
80											
70											
60 —		X									
50											
40		2 X									
30 -											
20											
10											
0.0											
1000	0.000 3550.00	D 6100.00	) 8650.	00 1120	)0.00 ·	13750.00	16300	.00 188	50.00 21	400.00	26500.00 M
No. Mk.	Freq.	Reading	Correc			∟imit	Over				
NU. IVIK.	MHz	Level dBuV	Facto dB	r mer dBuV/		BuV/m	dB	Detector	Comm	ent	
1 4	4810.000	70.91	-9.82			4.00	-12.91	peak			
	4810.000	61.09	-18.2			4.00	-11.73				
l) Measu	urement V						Dr.				
							or.				



st Volta			Anten	na Gr	oup I_244	OMHz_C	CH18		ested D		2020/2/2	24
	age D	OC 3.6V						F	Polarizat	ion	Vertical	
120.0	dBuV/m											
Γ												]
110												1
100												1
90 -												1
80												
70 -		1										
60		1 X										
50		2 X										1
40		X										
30												1
20												{
10												{
0.0	0.000 3550	0.00 610	0.00	8650.00	11200.00	) 13750.0	0 16300	.00 188	50.00 21	400.00	26500.00	   MHz
		Readii		orrect	Measure	-						
lo. Mk	-	- Leve	F	actor	ment	Limit	Over					
4	MHz	dBuV		dB	dBuV/m 60.12	dBuV/m 74.00	dB -13.88	Detector peak	Comn	nent		
	4880.000		9 -	9.67	60.12	74.00		neak				
2 *	4880.000	0 60.12	2 -'	18.27	41.85	54.00	-12.70	-				
2 *	4880.000	0 60.12	2 -'					-				
2 *	4880.000	0 60.12	2 -'					-				
2 *	4880.000	0 60.12	2 -'					-				
2 *	4880.000	0 60.12	2 -'					-				
2 *	4880.000	0 60.12	2					-				
2 *	4880.000	0 60.12	2					-				
2 *	4880.000	0 60.12	2					-				
2 *	4880.000	0 60.12	2					-				
2 *	4880.000	0 60.12	2					-				
EMARI	< <u>S:</u>			18.27	41.85	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readi	18.27 ng Le		54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readi	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readi	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readii	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readii	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readii	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				
EMARI ) Meas	≺S: surement	t Value =	Readii	18.27 ng Le	41.85 vel + Corr	54.00	-12.70	-				



t Mode	TX Mode_	Antenna (	Group I	_2440	MHz_CF	118	Tested	Date	2020/2/24
t Voltage	DC 3.6V						Polariz	ation	Horizontal
120.0 dBuV	11m								
120.0 0004	· · ···								
110									
100									
90									
80									
70									
60	1 X								
50									
40	2 X								
30									
20									
10									
0.0									
1000.000	3550.00 6100	).00 8650	.00 11	200.00	13750.00	16300.00	18850.00	21400.00	26500.00 MHz

No.	Mk.	Freq.	Level			Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	48	380.000	70.06	-9.67	60.39	74.00	-13.61	peak	
2	* 48	380.000	60.39	-18.27	42.12	54.00	-12.43	AVG	

(1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value - Limit Value.

st Volta			enna Gro	oup I_2470	MHz_C	-124		ested Date	2020/3/23
	ge DC	3.6V					Ρ	olarization	Vertical
120.0	dBu∀/m								
Г									
110									
100									
90 -									
80									
70			1 X						
60 -			×						
50			2 X						
40			X						
30									
20									
10									
0.0	000 2550 0	C100.00	8650.00	11200.00	10750.00	10000	00 100	0.00 01400 0	20500.00 Mill
TUU	0.000 3550.00	Reading	Correct	11200.00 Measure-	13750.00	16300.0	00 1885	i0.00 21400.0	00 26500.00 MH
No. Mk.	Freq.	Level	Factor	ment	Limit	Over			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
	7410.000	66.10	-3.28	62.82	74.00	-11.18	peak		
2 * 7	7410.000	62.82	-18.27	44.55	54.00	-10.00	AVG		
	urement V			vel + Corre e - Limit Va		r.			

## **B**L

			Antenna	Group I_24	70MHz_C	H24		ested Da		2020/3/23
st Voltag	je DO	C 3.6V					F	Polarizati	on	Horizontal
120.0	dBu¥/m									
110										
100										
90										
80			1							
70			×							
60 —			2							
50			x							
40										
30										
20										
10										
0.0										
1000.	.000 3550.1					16300	0.00 188	50.00 214	00.00	26500.00 MH:
No. Mk.	Freq.	Readir Level			e- Limit	Over				
	MHz	dBuV		dBuV/m	dBuV/m	dB	Detector	Comme	ent	
1 74	410.000	74.10	-3.28	3 70.82	74.00	-3.18	peak			
2 * 74	410.000	70.82	-18.2	27 52.55	E4.00					
			. 10.	21 32.33	54.00	-2.00	AVG			
	rement	Value =	Reading	Level + Cor alue - Limit	rrect Facto		AVG			
) Measu	rement	Value =	Reading	Level + Cor	rrect Facto		AVG			



			Antenna	Group I_2	475MHz_	CH25		ested Dat		2020/2/24	
st Voltage	e DC	3.6V					F	Polarizatio	n	Vertical	
120.0 d	lBuV/m										
110											
100											
90											
80											
70											
60											
50		1 X									
40											
30		2 X									
		- 0									
20											
10											
0.0 1000.0	)00 3550.0	0 6100	).00 8650	0.00 11200	.00 13750	.00 16300	).00 188	50.00 21400	0.00	26500.00 M	Hz
		Readin			re-						
No. Mk.	Freq.	Level	Facto	or ment	t Limit						
	MHz	dBuV		dBuV/m			Detector	Commen	nt		
	50.000	59.81									
2 * 49	50.000	50.30	-18.2	27 32.03	54.00	-22.52	AVG				
	ement \			Level + Co alue - Limit		etor.					
) Measur	ement \					:tor.					



est Volt	de	TX Moc	le_Ar	itenna (	Group I_	2475	5MHz_C	H25		Τe	ested [	Date	20	20/2/24	1
	age	DC 3.6	/							Po	olariza	tion	Ho	orizonta	l
100															
120.0	) dBuV/m														
110															
100															
90															
80															
70															
60															
50		×													
40		2													
30		×													
20															
10															
0.0															
10	100.000 35		6100.00			00.00	13750.0	0 1630	10.00	18850	J.UU 2	1400.00		26500.00 N	4Hz
No. Mł	k. Fre		ading evel	Correc Facto			Limit	Over							
	MHz	z di	BuV	dB	dBuV	/m	dBuV/m	dB	Dete	ector	Com	ment			
1	4950.00	0 59	9.10	-9.51	49.5	9	74.00	-24.41	1 pe	ak					
2 *	4950.00	0 49	9.59	-18.2	7 31.3	2	54.00	-23.23	3 AV	/G					
	suremei				Level + ( alue - Lin			Dr.							



t Mode	TX Mod	e_Ante	enna G	roup II_	2405MH	lz_CH11		Teste	d Date	2020/3/2	2
t Voltage	DC 3.6V	,						Polar	ization	Horizon	tal
130.0 dBuV	//m										
120						3					
110						4					-
100						×					
90						$\left\{ - \right\}$					
80											
70					1	- Anna and A	M. M.				]
60	montalistic	mannak	usminhus	Madana			m Muguer	when when the second	harmonanthan	Martin Martin	-
40					2 X					6	1
30										×	
20											
10.0											
2305.000		345.00	2365.0			5.00 24	25.00	2445.00	2465.00	2505.00	MHz
o. Mk. F	Rea req. Le		Correct Factor			nit Ov					

No.	Mk	. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.400	32.40	31.25	63.65	74.00	-10.35	peak	
2		2389.400	63.65	-18.27	4538	54.00	-9.17	AVG	
3	Х	2405.000	89.12	31.32	120.44	74.00	46.44	peak	No Limit
4	*	2405.000	120.44	-18.27	102.17	54.00	47.62	AVG	No Limit
5		2485.400	26.77	31.66	58.43	74.00	-15.57	peak	
6		2485.400	58.43	-18.27	40.16	54.00	-14.39	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



st Mode	TX Mode_A	ntenna C	Group II_	_2470MH	z_CH24		Tested Da	ate	2020/4/1	6
st Voltage	DC 3.6V						Polarizati	on	Horizonta	al
130.0 dBu\	//m									
120				ŝ						
110										
100				>	<					
90					$\left\{ \right.$					
80					<u> </u>					
70				www.www.	5					
	www.www.www.www.	whether the states	and a second and a second	n <sup>e</sup>	5	mohermore		manutive	hudelmathenicardenale	
50 40 2					×					
40 X 30										
20										
10.0	2200.00 2410	00 2420	00 245	2 00 2476	00 240	0.00 25	10.00 25	0.00	2570.00	
2370.000	2390.00 2410. Reading				).00 2490	U.UU 25	10.00 253	30.00	2570.00	MH2

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2374.800	26.68	31.32	58.00	74.00	-16.00	peak	
2		2374.800	58.00	-18.27	39.73	54.00	-14.82	AVG	
3	Х	2470.000	89.64	31.70	121.34	74.00	47.34	peak	No Limit
4	*	2470.000	121.34	-18.27	103.07	54.00	48.52	AVG	No Limit
5		2483.500	35.08	31.76	66.84	74.00	-7.16	peak	
6		2483.500	66.84	-18.27	48.57	54.00	-5.98	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



t Mode	TX Mo	ode_Ant	enna Gro	oup II_	_2475MF	Hz_CH2	5	Teste	d Date	2020/3/2	2
t Voltage	DC 3.	6V						Polari	zation	Horizont	al
130.0 dBu	V/m										_
120											
110						3					
100						4					
90						×					
80											
70						5					
60 1 	-Amarika har alar	despression and the	w	harmer and the	Wand		nhomenon	www.hanawa	erson and a strand and a strand	muluntrightende	
40 2 X						6 X					
30											
20											
10.0 2375.000	2395.00	2415.00	2435.00	2455	5.00 247	75.00 2	495.00	2515.00	2535.00	2575.00	 MHz

No.	Mk.	Freq.	Reading Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2383.400	26.65	31.22	57.87	74.00	-16.13	peak	
2		2383.400	57.87	-18.27	39.60	54.00	-14.95	AVG	
3	X	2475.000	78.42	31.62	110.04	74.00	36.04	peak	No Limit
4	*	2475.000	110.04	-18.27	91.77	54.00	37.22	AVG	No Limit
5		2483.500	32.68	31.66	64.34	74.00	-9.66	peak	
6	:	2483.500	64.34	-18.27	46.07	54.00	-8.48	AVG	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



est Volt 120.0 110 100 90 80 70 60 50 40 30 20 10 0.0 10	-	DC 3.6V					F	Polarizati	on	Vertical	
110 90 80 70 60 50 40 30 20 10	0 dBuV/m										
110 90 80 70 60 50 40 30 20 10											
100 90 80 70 60 50 40 30 20 10											
90 80 70 60 50 40 30 20 10											
80 70 60 50 40 30 20 10											
70 60 50 40 30 20 10											
60 50 40 30 20 10											
50 40 30 20 10 0.0											
40 30 20 10 0.0											
30 20 10 0.0		2 X									
20 10 0.0											
10 0.0											
0.0											
10	00.000 35	50.00 6100	).00 8650.0	0 11200.0	0 13750.0	00 16300	<u>100 100</u>	50.00 214	100.00	26500.00	 
		Readir					0.00 108	JU.UU 214		20300.00	.anz
No. Mł	k. Fre				Limit	Over					
	MH			dBuV/m	dBuV/m		Detector	Comm	ent		
1	4810.00				74.00	-19.22	-				
2 *	4810.00	0 54.78	-18.27	36.51	54.00	-18.04	AVG				
	suremei		Reading L rement Va			tor.					



est Mode			Antenna	Group II_2	405MHz_	CH11		ested Date	2020/3/2
est Voltag	je D	C 3.6V					F	olarization	Horizontal
120.0	dBuV∕m								
120.0									
110									
100									
90									
80									
70									
60		1							
50		1							
40		2							
30		2 X							
20									
10									
0.0									
1000.	.000 3550	).00 6100	).00 8650	.00 11200	.00 13750.0	0 16300	).00 188	50.00 21400.00	26500.00 MHz
No. Mk.	Free	Readir				Over			
NU. IVIK.	Freq. MHz	Level		or ment dBuV/n		dB	Detector	Comment	
1 4	810.000					-19.76		Common	
	810.000					-18.58	-		
	rement			Level + Co		or.			
:) Margin	Level	= Measui	rement Va	alue - Limi	i vaiue.				



st Vol			_Anten	na Gro	oup II_2	2440MF	Iz_CH	18		ested		2020/3/2	
	tage [	DC 3.6V							F	Polariz	ation	Vertical	
120.	0 dBuV/m												
110													
100													
90													
90 80													
70													
60		1 X											
50		0											
40		2 X											
30													
20													
10													
0.0													
1	000.000 355			8650.00			750.00	16300	D.00 188	50.00	21400.00	26500.001	MHz
No. M	k. Fred	Readi I. Leve		orrect actor	Measu ment		nit C	Over					
	MHz			dB	dBuV/m			dB	Detector	Cor	mment		
1	4880.00			0.39	60.18			13.82	-				
2 *	4880.00	0 60.1	ŏ -1	8.27	41.91	54.0	JU -1	12.64	AVG				
								2.01					
EMAR ) Mea ) Mar	suremen	it Value = = Measu	Readi	ng Lev t Valu	vel + Co e - Limi	orrect F it Value	actor.						



t Mode	TX Mode_	Antenna	Group	II_244	0MHz_C	H18	Testec	Date	2020/3/2
t Voltage	DC 3.6V						Polariz	zation	Horizontal
120.0 dBu\	//m								
110									
100									
90									
80									
70	1								
60 50	^								
40	2 X								
30									
20									
10									
0.0	3550.00 610	D.00 865	0.00 1	1200.00	13750.00	16300.00	18850.00	21400.00	26500.00 MHz

	No. I	Mk.	Freq.	Level	Factor		Limit	Over		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	48	880.000	71.86	-10.39	61.47	74.00	-12.53	peak	
-	2	* 4	880.000	61.47	-18.27	43.20	54.00	-11.35	AVG	

(1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value - Limit Value.

			Antenna	Group II_24	70MHz_C	H24		ested		2020/4/16
st Voltage	DC 3	3.6V					F	Polariza	ation	Vertical
120.0 dB	uV/m									
110										
100										
90										
80			_							
70			×							
60			2							
50			2 X							
40										
30										
20										
10										
0.0										
1000.00	0 3550.00	6100.	00 8650	.00 11200.00	D 13750.00	16300	0.00 188	50.00 2	21400.00	26500.00 MHz
lo. Mk.	Freq.	Reading			- Limit	Over				
IU. IVIK.	MHz	Level dBuV	Facto dB	or ment dBuV/m	dBuV/m	dB	Detector	Com	iment	
1 741	0.000	73.29	-2.68		74.00	-3.39	peak	2011		
	0.000	70.61	-18.2		54.00	-2.21	AVG			
		alue = F	Reading	Level + Cori	rect Facto	r				
i Marcini i	evel = M			alue - Limit V						
) Margin L	evel = N			alue - Limit V						

### <u>3ĩL</u>

st \/ol+	le	TX Mode	Antenna	Group II	_247	0MHz_C	H24	ŀ	Tested	Date	2020/4/16	5
	age	DC 3.6V							Polariz	ation	Horizonta	l
100.0												
120.0	dBuV/m	·										
110												
100												
90												
80												
70			X									
60			~									
50			2 X									
40												
30												
20												
10												
0.0												
10	00.000 35	50.00 61	00.00 86	50.00 112	200.00	13750.00	16300	).00 188	850.00	21400.00	26500.00 N	Hz
No. Mk	. Fre	Read q. Leve			sure- ent	Limit	Over					
	MH					dBuV/m	dB	Detecto		mment		
1	7410.00					74.00	-3.54	peak				
2 *	7410.00	00 70.4	6 -18	.27 52.	19	54.00	-2.36	AVG				
EMAR ) Meas ) Marg	suremei	nt Value = I = Measi	- Reading urement \	ı Level + /alue - Liı	Corre mit Va	ect Facto alue.	r.					



	de	TX Mo	ode_A	ntenna	Group II_	_247	5MHz_0	CH25		Teste	d Date		202	0/3/2
st Volt	age	DC 3.	6V						F	Polari	zation		Ver	tical
120.0	) dBuV/m													
120.0														
110														
100														
90														
80														
70														
60														
50			i k											
40														
30			2 X											
20														
10 0.0														
	) 00.000 35	50.00	6100.0	)0 8650	).00 1120	)0.00	13750.00	) 16300	).00 188	50.00	21400.0	00	26	500.00 MH
			eading											
No. MI			_evel	Fact			Limit	Over						
4	MH		dBuV	dB	dBuV	/m	dBuV/m	dB	Detecto		omment			
1	4950.00	UU (			2 50.0	4	74.00	22.00	m n n l i					
2 *	4950.00		60.26 50.04	-10.2 -18.2			74.00 54.00	-23.96 -22.78	-					
EMAR ) Mea	KS: sureme	nt Valu	50.04	-18.2	7 31.7 Level + C	7 Corre	54.00 ct Facto	-22.78	-					
EMAR ) Mea	KS: sureme	nt Valu	50.04	-18.2	7 31.7	7 Corre	54.00 ct Facto	-22.78	-					

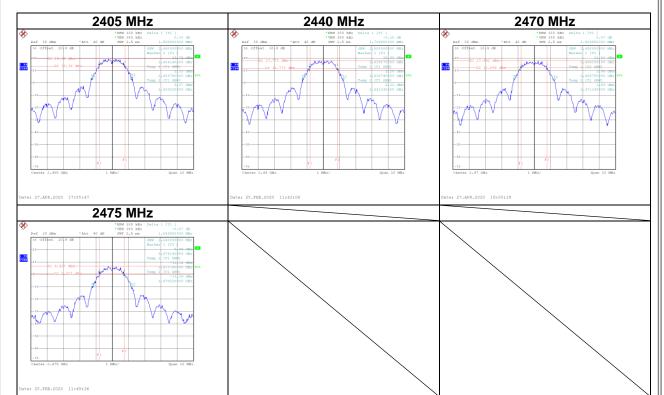


st Mode	e T	X Mode	_Ante	enna G	Group II_2	247	5MHz_	CH25		Tes	ted Da	ate	202	20/3/2
st Volta	ige D	OC 3.6V								Pola	arizatio	on	Ho	rizontal
120.0	dBuV/m													
T20.0	abatriii													
110										-				
100 -										_				
90 -										_				
80 -										_				
70														
60 -														
50		, ×												
40														
30		2 X												
20														
10 0.0														
	0.000 355	0.00 61	00.00	8650.	00 11200	0.00	13750.0	0 16300	0.00 18	850.0	0 214	00.00	2	6500.00 M
		Read		Correc				~						
No. Mk.	-			Facto			Limit	Over						
4	MHz	dBu'		dB	dBuV/r		dBuV/m 74.00	dB -23.56	Detecto		Comme	ent		
	4950.000 4950.000			-10.22	50.44	ŧ	74.00		peak	C				
			14	-18.27	32.17	7	54.00	-22.38	-					
	uremen	t Value =	= Rea	ading L	.evel + C	orre	54.00	-22.38	-					
I) Measu	uremen	t Value =	= Rea	ading L		orre	54.00	-22.38	-					



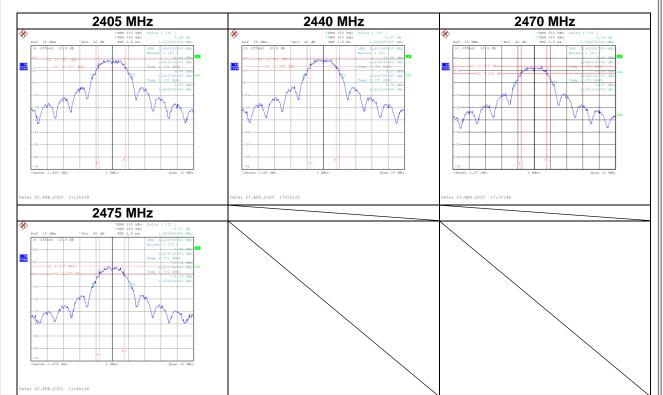


Test Mode:	TX Mode_Antenna Gr	oup I		
Test Voltage	DC 3.6V			
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2405	1.59	2.46	500	Pass
2440	1.71	2.50	500	Pass
2470	1.61	2.48	500	Pass
2475	1.55	2.44	500	Pass





Test Mode:	TX Mode_Antenna Gr	oup II		
Test Voltage	DC 3.6V			
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2405	1.67	2.48	500	Pass
2440	1.59	2.42	500	Pass
2470	1.60	2.48	500	Pass
2475	1.55	2.44	500	Pass





#### APPENDIX D OUTPUT POWER



Test Mode :	TX Mode_Ant	enna Group I		Tested Date	2020/4/27
Test Voltage	DC 3.6V				
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2405	23.49	0.2234	30.00	1.0000	Pass
2440	23.02	0.2004	30.00	1.0000	Pass
2470	21.59	0.1442	30.00	1.0000	Pass
2475	10.86	0.0122	30.00	1.0000	Pass
Test Mode :	TX Mode_Ant	enna Group II		Tested Date	2020/4/27

Test Voltage DC 3.6V

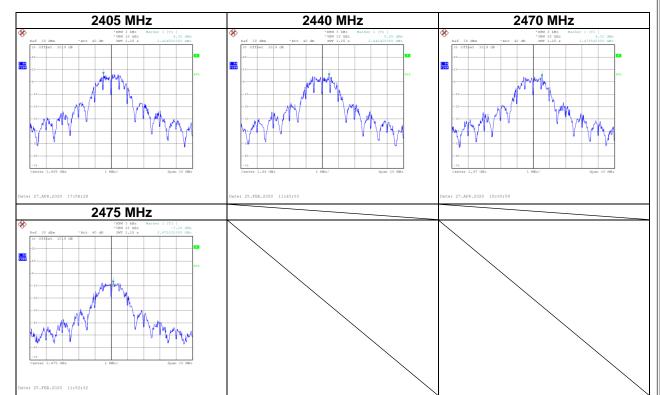
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2405	21.79	0.1510	30.00	1.0000	Pass
2440	23.31	0.2143	30.00	1.0000	Pass
2470	20.46	0.1112	30.00	1.0000	Pass
2475	10.86	0.0122	30.00	1.0000	Pass



### APPENDIX E POWER SPECTRAL DENSITY TEST

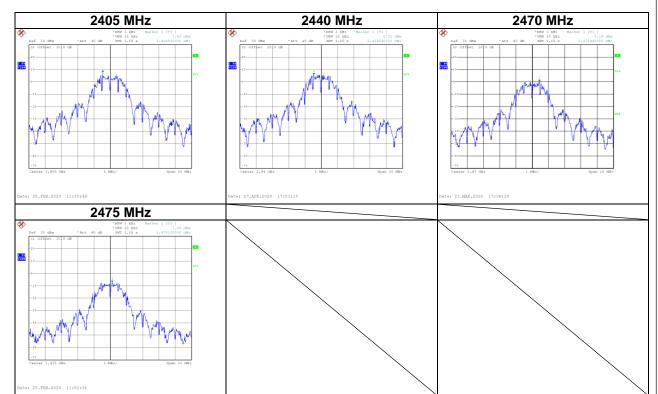


Test Mode:     TX Mode_Antenna Group I       Test Voltage     DC 3.6V						
Frequency (MHz)		Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Test Result		
2405		6.32	8	Pass		
2440		5.25	8	Pass		
2470		4.32	8	Pass		
2475		-7.28	8	Pass		





Test Mode:       TX Mode_Antenna Group II         Test Voltage       DC 3.6V						
Frequency (MHz)	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Test Result			
2405	7.50	8	Pass			
2440	5.72	8	Pass			
2470	0.19	8	Pass			
2475	-7.28	8	Pass			





#### APPENDIX F ANTENNA CONDUCTED SPURIOUS EMISSION



