

# **FCC 47 CFR PART 15 SUBPART E**

Product Type : Play-Fi Module

Applicant : Phorus, Inc.

Address : 16255 Ventura Boulevard, Encino, California, 91436 United

States

Trade Name : DTS

Model Number : CAPRICA2L

Test Specification : FCC 47 CFR PART 15 SUBPART E

Taiwan Accreditation Foundation accreditation number: 1330

ANSI C63.10:2013

Receive Date : Apr. 15, 2016

Test Period : May 11 ~ May 12, 2016

Issue Date : Jun. 03, 2016

Issue by

A Test Lab Techno Corp.

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lac MRA



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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
00	May 24, 2016	Initial Issue	Snow Wang
01	Jun. 03, 2016	Revised report information.	Peggy Chang

# Verification of Compliance

Issued Date: Jun. 03, 2016

Product Type : Play-Fi Module

Applicant : Phorus, Inc.

Address 16255 Ventura Boulevard, Encino, California, 91436 United

States

Trade Name : DTS

Model Number : CAPRICA2L

FCC ID : 2AAWQ-CAPRICA2L

EUT Rated Voltage : DC 5V / DC 3.3V / DC 1.8V / DC 1.1V

Test Voltage : 120 Vac / 60 Hz

Applicable Standard : FCC 47 CFR PART 15 SUBPART E

ANSI C63.10:2013

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

No. 140-1, Changan Street, Bade Distriction (B.O.C)

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Taiwan Accreditation Foundation accreditation number: 1330

http://www.atl-lab.com.tw/e-index.htm

A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By

Reviewed By

(Manager) (Fly Lu) (Testing Engineer)

(Eric Ou Yang)



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## 1 General Information

## 1.1. Summary of Test Result

Standard FCC	Item	Result	Remark
15.407(b)(6) 15.207	AC Power Conducted Emission	N/A	
15.407(b) 15.205 / 15.209	Transmitter Radiated Emissions	PASS	
15.407(a)	Maximum Conducted Output Power	N/A	
15.407(a)	26dB RF Bandwidth	N/A	
15.407(a)	6dB RF Bandwidth	N/A	
15.407(a)	Peak Power Spectral Density	N/A	
15.407(g)	Frequency Stability	N/A	
15.407(a) 15.203	Antenna Requirement	PASS	

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

Note: The devise is module: CAPRICA2L adding new type antenna to do class  $\ \, \square \,$  permissive change report so it only test transmitter radiated emissions and band edge measurement.

## 1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	
Conducted Emission	9kHz ~ 150KHz	2.7 dB	
Conducted Emission	150kHz ~ 30MHz	2.8 dB	
	9kHz ~ 30MHz	1.457 dB	
	30MHz ~ 1000MHz	6.300 dB	
Radiated Emission	1000MHz ~ 18000MHz	5.474 dB	
	18000MHz ~ 26500MHz	5.630 dB	
	26500MHz ~ 40000MHz	5.054 dB	
Conducted Output Power		+0.27 dB / -0.28 dB	
RF Bandwidth		4.96%	
Power Spectral Density		+0.71 dB / -0.77 dB	
Frequency Stability		+ 2.212 x 10-7% / - 2.170 x 10-7	
Duty Cycle		1.06%	
Time Occupancy		1.40%	

# 2 **EUT Description**

Applicant	Phorus, Inc. 16255 Ventura Boulevard, Encino, California, 91436 United States					
Manufacturer	LITE-ON Technology (Changzhou) Co., Ltd A9 Building, No. 88, Yanghu Road, Wujin Hi-Tech Industrial Development Zone, Changzhou City, Jiangsu Province, P.R. China					
Product Type	Play-Fi Module					
Trade Name	DTS					
Model No.	CAPRICA2L					
FCC ID	2AAWQ-CAPRIC	A2L				
Class II Permissive Change	Adding new type	antenna	<b>1</b> .	_		
Frequency Range	Band		Mode	Frequency Ra (MHz)	nge	Number of Channels
		IEEE 8	02.11a	5180 – 5240	0	4 Channels
	U-NII Band I	IEEE 8	02.11n 20 MHz	5180 - 5240		4 Channels
		IEEE 8	02.11n 40 MHz	5190 – 5230		2 Channels
		IEEE 802.11a		5260 – 5320		4 Channels
	U-NII Band II-A	IEEE 802.11n 20 MHz		5260 - 5320		4 Channels
		IEEE 802.11n 40 MHz		5270 – 5310		2 Channels
		IEEE 802.11a		5500 – 5700		11 Channels
	U-NII Band II-C	IEEE 8	02.11n 20 MHz	5500 – 5700 5510 – 5670		11 Channels
		IEEE 8	02.11n 40 MHz			5 Channels
		IEEE 8	02.11a	5745 – 582	5	5 Channels
	U-NII Band III	IEEE 8	02.11n 20 MHz	5745 – 582	5	5 Channels
		IEEE 8	02.11n 40 MHz	5755 – 5795		2 Channels
Modulation Type	OFDM					
Equipment Type	Client (without radar detection function)					
Antenna Used	Manufactur	LECOM CSA3A0227		Type		Max. Gain
	HWA SUNG ELI CO., LTD.			PIFA Antenna	U-N	III Band I: 3.40 dBi III Band II-A: 3.40 dBi III Band II-C: 1.36 dBi III Band III: 2.62 dBi
Antenna Delivery	1TX + 1RX					

RF Output Power	IEEE 802.11a U-NII Band I : 0.017 W / 12.43 dBm
	IEEE 802.11a U-NII Band II-A : 0.019 W / 12.85 dBm
	IEEE 802.11a U-NII Band II-C : 0.024 W / 13.75 dBm
	IEEE 802.11a U-NII Band III : 0.024 W / 13.87 dBm
	IEEE 802.11n 20MHz U-NII Band I: 0.012 W / 10.68 dBm
	IEEE 802.11n 20MHz U-NII Band II-A: 0.012 W / 10.79 dBm
	IEEE 802.11n 20MHz U-NII Band II-C: 0.016 W / 12.00 dBm
	IEEE 802.11n 20MHz U-NII Band III: 0.014 W / 11.40 dBm
	IEEE 802.11n 40MHz U-NII Band I: 0.011 W / 10.47 dBm
	IEEE 802.11n 40MHz U-NII Band II-A: 0.011W / 10.52 dBm
	IEEE 802.11n 40MHz U-NII Band II-C: 0.016 W / 12.00 dBm
	IEEE 802.11n 40MHz U-NII Band III: 0.014 W / 11.45 dBm

# 3 Test Methodology

## 3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Report Number: 1605FR18-01

Test Mode
Mode 1: Normal Operation Mode
Mode 2: IEEE 802.11a Link Mode
Mode 3: IEEE 802.11n 20MHz Link Mode
Mode 4: IEEE 802.11n 40MHz Link Mode

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

Test Mode	ANT-0	ANT-1	ANT-0+1
Mode 2: IEEE 802.11a Link Mode	V	V	
Mode 3: IEEE 802.11n 20MHz Link Mode	V	V	
Mode 4: IEEE 802.11n 40MHz Link Mode	V	V	

Test Mode	Band	Data Rate	Test Channel
	U-NII Band I	6M	36, 44, 48
   IEEE 802.11a Link Mode	U-NII Band II-A		52, 56, 64
ILLE 602.11a LITIK Mode	U-NII Band II-C	Olvi	100, 116, 140
	U-NII Band III		149, 157, 165
	U-NII Band I	6.5M	36, 44, 48
   IEEE 802.11n 20MHz Link Mode	U-NII Band II-A		52, 56, 64
leee 802.1111 20MHz Lilik Mode	U-NII Band II-C		100, 116, 140
	U-NII Band III		149, 157, 165
	U-NII Band I	- 13.5M	38, 46
   IEEE 802.11n 40MHz Link Mode	U-NII Band II-A		54, 62
TEEE 002.1111 40MHZ LIIK Mode	U-NII Band II-C		102, 110, 134
	U-NII Band III		151, 159



### 3.2. EUT Exercise Software

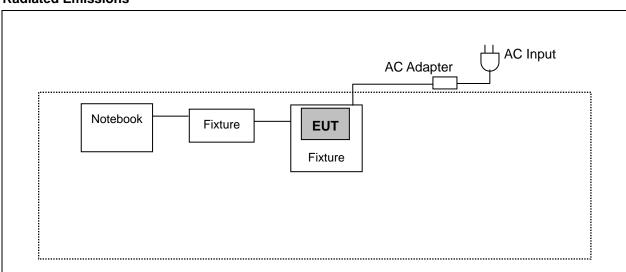
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

1.	Setup the EUT shown on 3.3.
2.	Turn on the power of all equipment.
3.	Turn on Wi-Fi function link to Notebook.
4.	EUT run test program.

Ν	easurement Software	
1	EZ-EMC Ver ATL-ITC-3A1-1	

## 3.3. Configuration of Test System Details

#### **Radiated Emissions**



#### 3.4. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

### 4 Radiated Emission Measurement

#### 4.1. Limit

- (a) Undesirable emission limits. Except as shown in paragraph (b) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
  - (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
  - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
  - (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
  - (4) For transmitters operating in the 5.725-5.85 GHz band:
    - (i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (b) Limits of Radiated Emission Measurement

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequency Range (MHz)	Field Strength (microvolts/meter)	Measurement Distance (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	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note: 1. The lower limit shall apply at the transition frequencies.

- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

## 4.2. Test Instruments

	3 Meter Chamber									
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period					
RF Pre-selector	Agilent	N9039A	MY46520256	01/08/2016	(1)					
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/08/2016	(1)					
Pre Amplifier	Agilent	8449B	3008A02237	10/07/2015	(1)					
Pre Amplifier	Agilent	8447D	2944A11119	01/11/2016	(1)					
Broadband Antenna	Schwarzbeck	VULB9168	416	09/25/2015	(1)					
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/12/2015	(1)					
Horn Antenna	ETS	3116	86467	09/01/2015	(1)					
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	02/01/2016	(1)					
Microwave Cable	EMCI	EMC102-KM-KM-14000	151001	10/15/2015	(1)					
Microwave Cable	EMCI	EMC-104-SM-SM-14000	140202	10/15/2015	(1)					
Microwave Cable	EMCI	EMC104-SM-SM-600	140301	10/15/2015	(1)					
Test Site	ATL	TE01	888001	08/27/2015	(1)					

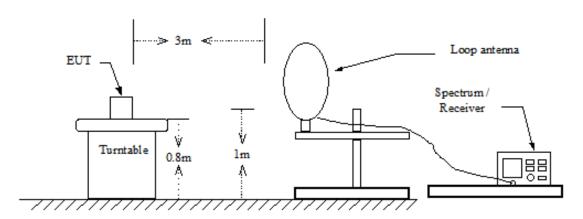
Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

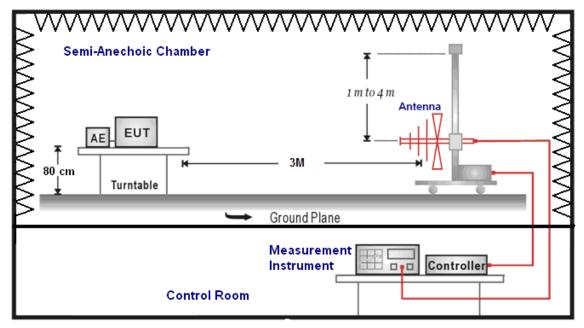


## 4.3. Setup

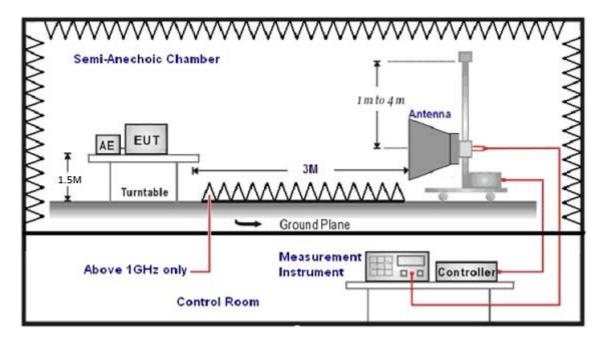
9kHz ~ 30MHz



30MHz ~ 1GHz



#### Above 1GHz



#### 4.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height(below 1GHz use 0.8m turntable / above 1GHz use 1.5m turntable), top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 40 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For restricted measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle > 0.98 / 1/T for average measurements when Duty cycle < 0.98.

For out of band measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna (mode SB AC VULB) at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antnna (model 3117) Schwarzbeck Mess-Elektronik Broadband Horn Antenna (BBHA 9170) was used in frequencies 1 – 40 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade). For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

- (1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)
  - FI= Reading of the field intensity.
  - AF= Antenna factor.
  - CL= Cable loss.
  - P.S Amplitude is auto calculate in spectrum analyzer.
- (2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)
  - The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:
  - (a) For fundamental frequency: Transmitter Output < +30dBm
  - (b) For spurious frequency: Spurious emission limits = fundamental emission limit /10

#### Measuring Instruments and setting

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting		
Attenuation	Auto		
Start Frequency	1000MHz		
Stop Frequency	40GHz		
DDW/\/DW//Emission in restricted band)	1MHz / 3MHz for Peak		
RBW/VBW(Emission in restricted band)	1MHz / (1/T) for Average		
RBW/VBW(Emission in non-restricted band)	1MHz / 3MHz for Peak		

## 4.5. Test Result

Below 1GHz

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

Model Number: CAPRICA2L Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ RH): 26( $^{\circ}$ C)/60%RH

Test Mode: Mode 1 Date: 05/11/2016

Test By: Eric Ou Yang

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
239.5000	38.31	-5.94	32.37	46.00	-13.63	QP	Н
316.0000	29.75	-3.15	26.60	46.00	-19.40	QP	Н
395.0000	36.38	-1.80	34.58	46.00	-11.42	QP	Н
533.0000	26.44	1.22	27.66	46.00	-18.34	QP	Н
650.0000	27.03	3.90	30.93	46.00	-15.07	QP	Н
797.5000	30.57	6.65	37.22	46.00	-8.78	QP	Н
199.5000	31.82	-7.80	24.02	43.50	-19.48	QP	V
399.0000	41.07	-1.72	39.35	46.00	-6.65	QP	V
530.0000	34.24	1.18	35.42	46.00	-10.58	QP	V
598.5000	32.00	2.88	34.88	46.00	-11.12	QP	V
643.5000	32.69	3.77	36.46	46.00	-9.54	QP	V
797.0000	28.12	6.64	34.76	46.00	-11.24	QP	V

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

### Above 1GHz

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz	
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	): 26(°ℂ)/60%RH		
Test Mode:	Mode	2	Date:			05/12/201	05/12/2016	
Frequency:	5180	MHz	Test By:		Eric Ou Ya	Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
10360.000	42.15	5.21	47.36	68.20	-20.84	peak	Н	
10360.000	41.72	5.21	46.93	68.20	-21.27	peak	V	

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz	
Model Number	r: CAPF	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	26(°C)/60°	%RH	
Test Mode:	Mode	2	Date:		05/12/201	6		
Frequency:	5200	MHz	Test By:		Eric Ou Ya	Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
10400.000	42.78	5.33	48.11	68.20	-20.09	peak	Н	
10400.000	42.69	5.33	48.02	68.20	-20.18	peak	V	

Standard:	FCC	FCC Part 15E			Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz	
Model Number	r: CAPI	RICA2L	Temp.(°C)/Hum.(%RH):		26(°C)/60°	%RH		
Test Mode:	Mode	2	Date:			05/12/201	6	
Frequency:	5240	MHz	Test By:		Eric Ou Ya	Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
10480.000	43.77	5.55	49.32	68.20	-18.88	peak	Н	
10480.000	43.20	5.55	48.75	68.20	-19.45	peak	V	

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz	
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH	
Test Mode:	Mode	2		Date:		05/12/201	6	
Frequency:	5260	MHz		Test By:		Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
10520.000	44.05	5.64	49.69	68.20	-18.51	peak	Н	
10520.000	43.73	5.64	49.37	68.20	-18.83	peak	V	

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz	
Model Number	r: CAPF	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode	2	Date:		05/12/201	6		
Frequency:	5280	MHz	Test By:		Eric Ou Yang			
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
10560.000	45.18	5.68	50.86	68.20	-17.34	peak	Н	
10560.000	45.11	5.68	50.79	68.20	-17.41	peak	V	

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	26(℃)/609	%RH
Test Mode:	Mode	2	Date:		05/12/2016		
Frequency:	5320	MHz	Test By:		Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10640.000	45.33	5.78	51.11	74.00	-22.89	peak	Н
10640.000	45.01	5.78	50.79	74.00	-23.21	peak	V

Standard:	FCC Part 15E			Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz	
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	26(°C)/60°	%RH	
Test Mode:	Mode	2		Date:		05/12/201	05/12/2016	
Frequency:	5500	MHz		Test By:		Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
11000.000	44.49	6.18	50.67	74.00	-23.33	peak	Н	
11000.000	44.26	6.18	50.44	74.00	-23.56	peak	V	

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz	
Model Number	r: CAPI	RICA2L	Temp.(°ℂ)/Hum.(%RH):		Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode	2	Date:		05/12/201	6		
Frequency:	5560	MHz	Test By:		Eric Ou Yang			
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V	
11120.000	45.14	6.24	51.38	74.00	-22.62	peak	Н	
11120.000	44.90	6.24	51.14	74.00	-22.86	peak	V	

Standard:	FCC	FCC Part 15E		Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	Mode 2		Date:	Date:		6
Frequency:	5700	00MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11400.000	44.77	6.39	51.16	74.00	-22.84	peak	Н
11 100 000	45.04	6.30	E4 60	74.00	22.40	noole	\/
11400.000	45.21	6.39	51.60	74.00	-22.40	peak	V

Standard:	FCC	Part 15E		Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Numbe	odel Number: CAPRICA2L			Temp.(°C)/Hum.(%RH):			%RH
Test Mode:	Mode	2		Date:		05/12/2016	
Frequency:	5745	MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11490.000	45.22	6.44	51.66	74.00	-22.34	peak	Н
11490.000	44.46	6.44	50.90	74.00	-23.10	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	ated Emission		Power:		AC 120V/	60Hz
Model Number	nber: CAPRICA2L		Temp.(°C)/Hum.(%RH):		26(°C)/60°	%RH	
Test Mode:	Mode	2	Date:			05/12/201	6
Frequency:	5785	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11570.000	44.83	6.63	51.46	74.00	-22.54	peak	Н
11570.000	45.04	6.63	51.67	74.00	-22.33	peak	V

Standard:	FCC	FCC Part 15E			nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPF	RICA2L		Temp.(°C)/Hum.(%RH):		26(°C)/60°	%RH
Test Mode:	Mode	2		Date:		05/12/2016	
Frequency:	5825	25MHz		Test By:	Test By:		ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11650.000	44.45	6.85	51.30	74.00	-22.70	peak	Н
11650.000	44.77	6.85	51.62	74.00	-22.38	peak	V

Standard:	FCC	Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz
Model Number	r: CAPF	CAPRICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	Mode 3		Date:		05/12/201	6
Frequency:	5180	5180MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10360.000	43.41	5.21	48.62	68.20	-19.58	peak	Н
10360.000	43.50	5.21	48.71	68.20	-19.49	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	ated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	3		Date:		05/12/201	6
Frequency:	5200	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10400.000	44.59	5.33	49.92	68.20	-18.28	peak	Н
10400.000	43.69	5.33	49.02	68.20	-19.18	peak	V

Standard:	FCC	FCC Part 15E		Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	odel Number: CAPRICA2L		Temp.(°C)/Hum.(%RH):			26(°ℂ)/60%RH	
Test Mode:	Mode	Mode 3		Date:		05/12/2016	
Frequency:	5240	MHz	ИНz			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10480.000	44.27	5.55	49.82	68.20	-18.38	peak	Н
10480.000	44.21	5.55	49.76	68.20	-18.44	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	el Number: CAPRICA2L			Temp.(°ℂ)/	Hum.(%RH):	26(°ℂ)/60%RH	
Test Mode:	Mode	3		Date:		05/12/2016	
Frequency:	5260	5260MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10520.000	44.64	5.64	50.28	68.20	-17.92	peak	Н
10520.000	44.57	5.64	50.21	68.20	-17.99	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	ated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPF	CAPRICA2L		Temp.(°C)/Hum.(%RH):		26(°C)/60°	%RH
Test Mode:	Mode	3	Date:			05/12/201	6
Frequency:	5280	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10560.000	44.42	5.68	50.10	68.20	-18.10	peak	Н
10560.000	45.41	5.68	51.09	68.20	-17.11	peak	V

Standard:	FCC	FCC Part 15E		Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz
Model Number	del Number: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:	Mode	3	Date:		Date:		6
Frequency:	5320	MHz		Test By:	Test By:		ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10640.000	45.58	5.78	51.36 74.00		-22.64	peak	Н
10640.000	45.38	5.78	51.16	74.00	-22.84	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	Number: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):			%RH
Test Mode:	Mode	3		Date:		05/12/2016	
Frequency:	5500	5500MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11000.000	45.11	6.18	51.29	74.00	-22.71	peak	Н
11000.000	45.25	6.18	51.43	74.00	-22.57	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	ated Emission		Power:	Power:		60Hz
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	3	Date:			05/12/201	6
Frequency:	5560	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11120.000	45.01	6.24	51.25	74.00	-22.75	peak	Н
11120.000	45.40	6.24	51.64	74.00	-22.36	peak	V

Standard:	FCC	FCC Part 15E		Test Distance:		3m	
Test item:	Radia	Radiated Emission		Power:			60Hz
Model Number	el Number: CAPRICA2L		Temp.(°C)/Hum.(%RH):			26(°C)/60°	%RH
Test Mode:	Mode	3	Date:			05/12/2016	
Frequency:	5700	5700MHz		Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11400.000	44.83	6.39	51.22	74.00	-22.78	peak	Н
11400.000	45.05	6.39	51.44	74.00	-22.56	peak	V

Standard:	FCC	Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	ımber: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):			%RH
Test Mode:	Mode	3		Date:		05/12/2016	
Frequency:	5745	5745MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11490.000	45.05	6.44	51.49	74.00	-22.51	peak	Н
11490.000	44.83	6.44	51.27	74.00	-22.73	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPI	CAPRICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	3		Date:	Date:		6
Frequency:	5785	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11570.000	44.17	6.63	50.80	74.00	-23.20	peak	Н
11570.000	44.95	6.63	51.58	74.00	-22.42	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPRICA2L			Temp.(°C)/Hum.(%RH):		26(°C)/60°	%RH
Test Mode:	Mode	3		Date:	Date:		6
Frequency:	5825	MHz	lHz		Test By:		ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11650.000	43.62	6.85	50.47	74.00	-23.53	peak	Н
11650,000	11 10	6 95	E4 22	74.00	22.67	nook	W
11650.000	44.48	6.85	51.33	74.00	-22.67	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz
Model Number	: CAPF	CAPRICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	<del>.</del> 4		Date:		05/12/201	6
Frequency:	5190	5190MHz		Test By:	Test By:		ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10380.000	43.89	5.27 49.16		68.20	-19.04	peak	Н
10380.000	43.97	5.27	49.24	68.20	-18.96	peak	V

Standard:	FCC	Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:			60Hz
Model Numbe	r: CAPI	RICA2L		Temp.(°ℂ)/	Temp.(°C)/Hum.(%RH):		%RH
Test Mode:	Mode	<b>4</b>	Date:		05/12/2016		
Frequency:	5230	MHz	Test By:		Eric Ou Yang		
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10460.000	43.68	5.50	49.18	68.20	-19.02	peak	Н
10460.000	44.27	5.50	49.77	68.20	-18.43	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	Test Distance:		
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz
Model Number	: CAPI	RICA2L		Temp.(°C)/Hum.(%RH):		26(°ℂ)/60%RH	
Test Mode:	Mode	<del>.</del> 4		Date:	Date:		6
Frequency:	5270	MHz			Test By:		ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10540.000	44.86	5.66	50.52	68.20	-17.68	peak	Н
10540.000	44.58	5.66	50.24	68.20	-17.96	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Numbe	r: CAPI	RICA2L		Temp.(°C)/Hum.(%RH):			%RH
Test Mode:	Mode	<b>4</b>		Date:		05/12/2016	
Frequency:	5310	310MHz		Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
10620.000	45.66	5.75	51.41	74.00	-22.59	peak	Н
10620.000	45.44	5.75	51.19	74.00	-22.81	noak	V
10620.000	45.44	5.75	51.19	74.00	-22.81	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:	Power:		60Hz
Model Number	el Number: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:	Mode	e 4		Date:	Date:		6
Frequency:	5510	MHz	Test By:			Eric Ou Y	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11020.000	44.10	6.19	50.29	74.00	-23.71	peak	Н
11020.000	45.23	6.19	51.42	74.00	-22.58	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	del Number: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):			%RH
Test Mode:	Mode	Mode 4		Date:		05/12/2016	
Frequency:	5550	)MHz		Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11100.000	44.73	6.23	50.96	74.00	-23.04	peak	Н
11100.000	45.17	6.23	51.40	74.00	-22.60	peak	V

Standard:	FCC	Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:			60Hz
Model Number	r: CAPI	CAPRICA2L		Temp.(°C)/Hum.(%RH):			%RH
Test Mode:	Mode	<b>4</b>	Date:			05/12/201	6
Frequency:	5670	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11340.000	45.42	6.36	51.78	74.00	-22.22	peak	Н
11340.000	45.15	6.36	51.51	74.00	-22.49	peak	V

Standard:	FCC	FCC Part 15E		Test Distar	nce:	3m	
Test item:	Radia	Radiated Emission		Power:		AC 120V/	60Hz
Model Number	r: CAPI	RICA2L		Temp.(°ℂ)/	Hum.(%RH):	26(°C)/60%RH	
Test Mode:	Mode	<b>4</b>	Date:			05/12/201	6
Frequency:	5755	MHz	Test By:			Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11510.000	45.26	6.47	51.73	74.00	-22.27	peak	Н
11510.000	44.82	6.47	51.29	74.00	-22.71	peak	V

Standard:	FCC	FCC Part 15E		Test Distance:		3m	
Test item:	Radia	ated Emission		Power:		AC 120V/	60Hz
Model Number	mber: CAPRICA2L			Temp.(°ℂ)/Hum.(%RH):			%RH
Test Mode:	Mode	Mode 4		Date:			6
Frequency:	5795	5795MHz		Test By:		Eric Ou Ya	ang
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
11590.000	43.76	6.69	6.69 50.45		-23.55	peak	Н
11590.000	44.84	6.69	51.53	74.00	-22.47	peak	V

5180 MHz

47.57

36.87

Report Number: 1605FR18-01

#### **Band Edge**

Frequency:

5150.000

5150.000

Standard: FCC Part 15E Test Distance:

Test item: Radiated Emission Power: AC 120V/60Hz

Model Number: CAPRICA2L Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ RH): 26(°C)/60%RH

Test By:

74.00

54.00

-18.14

-8.84

peak

**AVG** 

Eric Ou Yang

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Test Mode: Mode 2 Date: 05/11/2016

Reading **Correct Factor** Limit Remark Ant.Polar. Frequency Result Margin (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) H/V4771.600 45.64 7.32 52.96 74.00 Н -21.04 peak 4771.600 36.32 43.64 54.00 -10.36 **AVG** 7.32 Н 5150.000 43.09 8.29 51.38 74.00 -22.62 peak Н 46.29 54.57 74.00 ٧ 5146.100 8.28 -19.43 peak 5146.100 35.97 8.28 44.25 54.00 -9.75 **AVG** V

Standard: FCC Part 15E Test Distance: 3m

8.29

8.29

Test item: Radiated Emission Power: AC 120V/60Hz

55.86

45.16

Model Number: CAPRICA2L Temp.(°C)/Hum.(%RH): 26(°C)/60%RH

Test Mode: Date: Mode 2 05/11/2016

Frequency:	5320 M	Hz		Test I	Зу:	Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5350.000	43.17	8.50	51.67	74.00	-22.33	peak	Н
5423.460	44.53	8.58	53.11	74.00	-20.89	peak	Н
5423.460	35.08	8.58	43.66	54.00	-10.34	AVG	Н
5350.000	49.84	8.50	58.34	74.00	-15.66	peak	V
5350.000	39.90	8.50	48.40	54.00	-5.60	AVG	V
5351.080	49.56	8.50	58.06	74.00	-15.94	peak	V
5351.080	38.61	8.50	47.11	54.00	-6.89	AVG	V

Test Mode:

Mode 2

Report Number: 1605FR18-01

05/11/2016

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\cite{C}})$/Hum.(%RH): } 26(^{\cite{C}})/60\%RH$ 

Test Mode: Mode 2 Date: 05/11/2016

Frequency:	5500 M	Hz		Test I	Ву:	Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5448.250	44.62	8.61	53.23	74.00	-20.77	peak	Н
5448.250	34.76	8.61	43.37	54.00	-10.63	AVG	Н
5460.000	42.41	8.62	51.03	74.00	-22.97	peak	Н
5470.000	43.89	8.63	52.52	74.00	-21.48	peak	Н
5406.100	45.85	8.56	54.41	74.00	-19.59	peak	V
5406.100	34.67	8.56	43.23	54.00	-10.77	AVG	V
5460.000	43.72	8.62	52.34	74.00	-21.66	peak	V
5460.000	34.66	8.62	43.28	54.00	-10.72	AVG	V
5470.000	48.09	8.63	56.72	74.00	-17.28	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $C$APRICA2L} \mbox{ $Temp.(^{\circ}C)/Hum.(^{\circ}RH)$:} \mbox{ $26(^{\circ}C)/60\%RH$}$ 

Date:

Frequency: 5745 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5650.000	42.36	9.01	51.37	68.20	-16.83	peak	Н
5700.000	48.15	9.13	57.28	105.20	-47.92	peak	Н
5720.000	62.66	9.17	71.83	110.80	-38.97	peak	Н
5725.000	70.46	9.19	79.65	122.20	-42.55	peak	Н
5650.000	41.69	9.01	50.70	68.20	-17.50	peak	V
5700.000	49.38	9.13	58.51	105.20	-46.69	peak	V
5720.000	60.85	9.17	70.02	110.80	-40.78	peak	V
5725.000	72.20	9.19	81.39	122.20	-40.81	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\cite{C}})$/Hum.(%RH): } 26(^{\cite{C}})/60\%RH$ 

Test Mode: Mode 2 Date: 05/11/2016

Frequency: 5825 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5850.000	53.58	9.46	63.04	122.20	-59.16	peak	Н
5855.000	49.43	9.48	58.91	110.80	-51.89	peak	Н
5875.000	43.51	9.53	53.04	105.20	-52.16	peak	Н
5925.000	42.55	9.65	52.20	68.20	-16.00	peak	Н
5850.000	52.99	9.46	62.45	122.20	-59.75	peak	V
5855.000	48.64	9.48	58.12	110.80	-52.68	peak	V
5875.000	42.91	9.53	52.44	105.20	-52.76	peak	V
5925.000	41.75	9.65	51.40	68.20	-16.80	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\circ})/Hum.(\%RH): $26(^{\circ})/60\%RH$}$ 

Test Mode: Mode 3 Date: 05/11/2016

Frequency: 5180 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
4945.900	44.62	7.93	52.55	74.00	-21.45	peak	Н
4945.900	35.49	7.93	43.42	54.00	-10.58	AVG	Н
5150.000	43.58	8.29	51.87	74.00	-22.13	peak	Н
5108.300	45.47	8.24	53.71	74.00	-20.29	peak	V
5108.300	35.25	8.24	43.49	54.00	-10.51	AVG	V
5150.000	45.18	8.29	53.47	74.00	-20.53	peak	V
5150.000	35.26	8.29	43.55	54.00	-10.45	AVG	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\cite{c}})$/Hum.(%RH): } 26(^{\cite{c}})/60\%RH$ 

Test Mode: Mode 3 Date: 05/11/2016

Frequency: 5320 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5350.000	46.31	8.50	54.81	74.00	-19.19	peak	Н
5350.000	35.08	8.50	43.58	54.00	-10.42	AVG	Н
5350.520	46.34	8.50	54.84	74.00	-19.16	peak	Н
5350.520	35.01	8.50	43.51	54.00	-10.49	AVG	Н
5050.000	40.00	0.50	50.40	71.00	24.22		.,
5350.000	43.62	8.50	52.12	74.00	-21.88	peak	V
5350.000	34.81	8.50	43.31	54.00	-10.69	AVG	V
5425.140	44.93	8.59	53.52	74.00	-20.48	peak	V
5425.140	34.61	8.59	43.20	54.00	-10.80	AVG	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

Model Number: CAPRICA2L Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ RH): 26( $^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/11/2016

Frequency: 5500 MHz Test By: Eric Ou Yang

Frequency:	5500 M	Hz		Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5427.400	46.20	8.59	54.79	74.00	-19.21	peak	Н
5427.400	34.79	8.59	43.38	54.00	-10.62	AVG	Н
5460.000	45.35	8.62	53.97	74.00	-20.03	peak	Н
5460.000	35.41	8.62	44.03	54.00	-9.97	AVG	Н
5470.000	51.10	8.63	59.73	74.00	-14.27	peak	Н
5382.850	44.94	8.54	53.48	74.00	-20.52	peak	V
5382.850	34.86	8.54	43.40	54.00	-10.60	AVG	V
5460.000	41.93	8.62	50.55	74.00	-23.45	peak	V
5470.000	42.42	8.63	51.05	74.00	-22.95	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{ CAPRICA2L} \qquad \qquad \mbox{Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \qquad 26({^{\circ}$C})/60\mbox{RH}$ 

Test Mode: Mode 3 Date: 05/11/2016

Frequency: 5745 MHz Test By: Eric Ou Yan

Frequency: Test By: Eric Ou Yang Reading **Correct Factor** Result Limit Remark Ant.Polar. Frequency Margin (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) H/V5650.000 42.40 9.01 51.41 -16.79 Н 68.20 peak 5700.000 45.49 54.62 105.20 -50.58 9.13 peak Н -45.27 5720.000 56.36 9.17 65.53 110.80 peak Н 65.87 75.06 -47.14 5725.000 9.19 122.20 peak Н 5650.000 41.74 50.75 -17.45 ٧ 9.01 68.20 peak 5700.000 44.18 9.13 53.31 105.20 -51.89 ٧ peak 5720.000 56.09 9.17 65.26 110.80 -45.54 ٧ peak 5725.000 67.82 9.19 77.01 122.20 -45.19 peak ٧

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\circ}C)/Hum.(\%RH): } \mbox{$26(^{\circ}C)/60\%RH$}$ 

Test Mode: Mode 3 Date: 05/11/2016

Frequency: 5825 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5850.000	48.75	9.46	58.21	122.20	-63.99	peak	Н
5855.000	44.20	9.48	53.68	110.80	-57.12	peak	Н
5875.000	42.91	9.53	52.44	105.20	-52.76	peak	Н
5925.000	42.46	9.65	52.11	68.20	-16.09	peak	Н
5850.000	47.27	9.46	56.73	122.20	-65.47	peak	V
5855.000	43.34	9.48	52.82	110.80	-57.98	peak	V
5875.000	42.89	9.53	52.42	105.20	-52.78	peak	V
5925.000	42.09	9.65	51.74	68.20	-16.46	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{Model Number:} \mbox{ $CAPRICA2L} \mbox{ $Temp.(^{\cite{c}})$/Hum.(%RH): } 26(^{\cite{c}})/60\%RH$ 

Test Mode: Mode 4 Date: 05/11/2016

Frequency: 5190 MHz Test By: Eric Ou Yang

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5142.600	49.37	8.28	57.65	74.00	-16.35	peak	Н
5142.600	37.97	8.28	46.25	54.00	-7.75	AVG	Н
5150.000	49.02	8.29	57.31	74.00	-16.69	peak	Н
5150.000	38.93	8.29	47.22	54.00	-6.78	AVG	Н
4968.300	44.76	8.00	52.76	74.00	-21.24	peak	V
4968.300	35.39	8.00	43.39	54.00	-10.61	AVG	V
5150.000	44.35	8.29	52.64	74.00	-21.36	peak	V
5150.000	36.23	8.29	44.52	54.00	-9.48	AVG	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

Model Number: CAPRICA2L Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ RH): 26( $^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/11/2016

Frequency: 5310 MHz Test By: Eric Ou Yang

Frequency:	5310 M	Hz		Test I	Зу:	Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5350.000	52.17	8.50	60.67	74.00	-13.33	peak	Н
5350.000	42.55	8.50	51.05	54.00	-2.95	AVG	Н
5350.800	54.98	8.50	63.48	74.00	-10.52	peak	Н
5350.800	42.32	8.50	50.82	54.00	-3.18	AVG	Н
5350.000	45.13	8.50	53.63	74.00	-20.37	peak	V
5350.000	35.97	8.50	44.47	54.00	-9.53	AVG	V
5354.720	47.77	8.51	56.28	74.00	-17.72	peak	V
5354.720	35.08	8.51	43.59	54.00	-10.41	AVG	V

5510 MHz

CAPRICA2L

Model Number:

Report Number: 1605FR18-01

Standard: FCC Part 15E Test Distance:

Test item: Radiated Emission Power: AC 120V/60Hz

Model Number: CAPRICA2L Temp.(°C)/Hum.(%RH): 26(°C)/60%RH

Test Mode: Mode 4 Date: 05/11/2016

Frequency: Test By: Eric Ou Yang Reading **Correct Factor** Limit Ant.Polar. Frequency Result Margin Remark (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) H/V5459.050 53.97 62.59 74.00 -11.41 Н 8.62 peak 5459.050 39.88 48.50 54.00 -5.50 **AVG** 8.62 Η 74.00 -14.09 5460.000 51.29 8.62 59.91 peak Н AVG 5460.000 40.50 8.62 49.12 54.00 -4.88 Н 5470.000 56.27 8.63 64.90 74.00 -9.10 peak Н ٧ 5447.650 44.90 8.61 53.51 74.00 -20.49 peak 5447.650 35.02 8.61 43.63 54.00 -10.37 **AVG** ٧ 44.37 V 5460.000 52.99 74.00 -21.01 8.62 peak 5460,000 35.53 8.62 44.15 54.00 -9.85 **AVG** ٧ 5470.000 47.37 8.63 56.00 74.00 -18.00 ٧ peak

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

Temp.(°C)/Hum.(%RH): 26(°C)/60%RH Test Mode: Mode 4 Date: 05/11/2016

5755 MHz Eroguenov. Test Rv Fric Ou Yang

Frequency:	5755 M	Hz		Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5650.000	44.52	9.01	53.53	68.20	-14.67	peak	Н
5700.000	50.40	9.13	59.53	105.20	-45.67	peak	Н
5720.000	63.82	9.17	72.99	110.80	-37.81	peak	Н
5725.000	66.15	9.19	75.34	122.20	-46.86	peak	Н
5650.000	43.97	9.01	52.98	68.20	-15.22	peak	V
5700.000	48.31	9.13	57.44	105.20	-47.76	peak	V
5720.000	61.45	9.17	70.62	110.80	-40.18	peak	V
5725.000	63.52	9.19	72.71	122.20	-49.49	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_number:} \mbox{ CAPRICA2L} \qquad \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH): } \mbox{ 26($^{\circ}$C)/60$\%RH}$ 

Test Mode: Mode 4 Date: 05/11/2016

Frequency: 5795 MHz Test By: Eric Ou Yang

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Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
5850.000	45.34	9.46	54.80	122.20	-67.40	peak	Н
5855.000	43.08	9.48	52.56	110.80	-58.24	peak	Н
5875.000	42.92	9.53	52.45	105.20	-52.75	peak	Н
5925.000	42.83	9.65	52.48	68.20	-15.72	peak	Н
5850.000	44.70	9.46	54.16	122.20	-68.04	peak	V
5855.000	44.74	9.48	54.22	110.80	-56.58	peak	V
5875.000	44.02	9.53	53.55	105.20	-51.65	peak	V
5925.000	43.11	9.65	52.76	68.20	-15.44	peak	V

# 5 Antenna Requirement

### **5.1.** Limit

For intentional device, according to 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.

Report Number: 1605FR18-01

And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 5.2. Antenna Connector Construction

The antenna used in this product is listed below.

Manufacturer	Model Number	Туре	Max. Gain	
HWA SUNG ELECOM CO., LTD.	CSA3A022Z	PIFA Antenna	U-NII Band I: 3.40 dBi U-NII Band II-A: 3.40 dBi U-NII Band II-C: 1.36 dBi U-NII Band III: 2.62 dBi	