Radio Test Report

Report No.: STS2406103W02

Issued for

Buddi Limited

Talbot House 17 Church Street Rickmansworth, WD3 1DE United Kingdom

Product Name:	RF On Body Charger Dock
Brand Name:	buddi
Model Name:	T5-APU-PTB-915-D
Series Model(s):	Colorado
FCC ID:	ZDLRF5
Test Standards:	FCC Part 15.249

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.



TEST REPORT

Applicant's Name	Buddi Limited
Address	Talbot House 17 Church Street Rickmansworth, WD3 1DE United Kingdom
Manufacturer's Name	Buddi Limited
Address	Talbot House 17 Church Street Rickmansworth, WD3 1DE United Kingdom
Product Description	
Product Name	RF On Body Charger Dock
Brand Name	buddi
Model Name:	T5-APU-PTB-915-D
Series Model(s):	Colorado
Test Standards	FCC Part 15.249
Test Procedure	ANSI C63.10-2020

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

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

Test Result	Pass
Date of Issue	25 June 2024
Date of performance of tests:	21 June 2024 ~ 25 June 2024
Date of receipt of test item:	21 June 2024
Date of Test	

Testing Engineer

Jan Bu

(Aaron Bu)

Technical Manager :

che

(Chris Chen)



Authorized Signatory :

unly

(Bovey Yang)



Table of Contents	Page
1. SUMMARY OF TEST RESULTS 1.1 TEST FACTORY 1.2 MEASUREMENT UNCERTAINTY	5 6
 2. GENERAL INFORMATION 2.1 GENERAL DESCRIPTION OF THE EUT 2.2 DESCRIPTION OF THE TEST MODES 2.3 TEST SOFTWARE AND POWER LEVEL 2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED 2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS 2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS 	7 7 8 9 10 11
3. EMC EMISSION TEST 3.1 CONDUCTED EMISSION MEASUREMENT 3.2 RADIATED EMISSION MEASUREMENT	12 12 16
 4. BANDWIDTH TEST 4.1 TEST PROCEDURE 4.2 TEST SETUP 4.3 EUT OPERATION CONDITIONS 4.4 TEST RESULTS 5. ANTENNA REQUIREMENT 	 29 29 29 30 31
5.1 STANDARD REQUIREMENT 5.2 EUT ANTENNA APPENDIX- PHOTOS OF TEST SETUP	31 31 32



Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	25 June 2024	STS2406103W02	ALL	Initial Issue
ŧ.	1		1	9





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part 15.249 , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.203	Antenna Requirement	Pass	
15.249	Radiated Spurious Emission	Pass	
15.249	Radiated Band Edge Emission	Pass	
15.249 Field Strength of fundamental		Pass	
15.215(c)	20dB Bandwidth	Pass	1

NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report.

(2) All tests are according to ANSI C63.10-2020.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD Add. :101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A A2LA Certificate No.: 4338.01

Page 6 of 32

1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	±0.755dB
2	Unwanted Emissions, conducted	±2.874dB
3	All emissions, radiated 9K-30MHz	±3.80dB
4	All emissions, radiated 30M-1GHz	±4.18dB
5	All emissions, radiated 1G-6GHz	±4.90dB
6	All emissions, radiated>6G	±5.24dB
7	Conducted Emission (9KHz-150KHz)	±2.19dB
8	Conducted Emission (150KHz-30MHz)	±2.53dB
9	Occupied Channel Bandwidth	±3.5%
10	Power Spectral Density, conducted	±1.245dB
11	Duty Cycle	±3.2%



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	RF On Body Charger Dock		
Brand Name	buddi		
Model Name	T5-APU-PTB-915-D		
Series Model(s)	Colorado		
Model Difference	The difference only in th	e model name.	
Product Description	exhibited in User Manua ITE/Computing Device. specification, please refe	914.5MHz FSK FPC Antenna 0.85dBi n, features, or specification al, the EUT is considered as an More details of EUT technical er to the User Manual.	
Rating	Input: AC 100-240V, 50-60Hz, 0.4A Output: DC 5.99V 2A Max		
Connecting I/O Port(s)	Please refer to the Note 1.		
Hardware version number	V5.2		
Software version number	2.14		

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.

2.

Channel List		
Channel Frequency (MHz)		
1	914.50	

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions

Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

	and the second se	
Pretest Mode	Description	Data/Modulation
Mode 1	TX/CH01	FSK

Note:

(1) All above mode have been measurement, only worst data was reported.

For AC Conducted Emission

10 10	Test Case
AC Conducted Emission	Mode 2 : Keeping TX

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Туре	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
Other SRD	914.5MHz	FSK	0.85	Default	The EUT has signal transmission when it is powered on





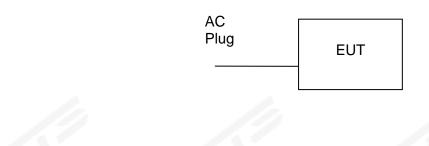




2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters.

Radiated Spurious Emission Test



Conducted Emission Test





2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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

 Necessary accessories						
ltem	Equipment	Mfr/Brand	Model/Type No.	Length	Note	
N/A	N/A	N/A	N/A	N/A	N/A	

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in [®] Length [』] column.



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

10		RF Radiation Test	Equipment		de.	
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until	
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14	
Pre-Amplifier(0.1M- 3GHz)	EM	EM330	060665	2024.02.23	2025.02.22	
Pre-Amplifier(1G-1 8GHz)	SKET	LNPA-01018G-45	SK2018080901	2023.09.26	2024.09.25	
Pre-Amplifier(18G- 40GHz)	SKET	LNPA_1840-50	SK2018101801	2024.02.23	2025.02.22	
Active loop Antenna	ZHINAN	ZN30900C	16035	2023.02.28	2025.02.27	
Bilog Antenna	TESEQ	CBL6111D	34678	2022.09.30	2024.09.29	
Horn Antenna	SCHWARZBE CK	BBHA 9120D	02014	2023.09.24	2025.09.23	
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2023.10.10	2025.10.09	
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A	
Signal Analyzer	R&S	FSV 40-N	101823	2023.09.26	2024.09.25	
Switch Control Box	N/A	N/A	N/A	N/A	N/A	
Filter Box	BALUN Technology	SU319E	BL-SZ1530051	N/A	N/A	
Antenna Mast	MF	MFA-440H	N/A	N/A	N/A	
Turn Table	MF	SC100_1	60531	N/A	N/A	
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A	
DC power supply	HONGSHENG FENG	DPS-305AF	17064939	2023.09.26	2024.09.25	
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14	
Test SW	EZ-EMC		Ver.STSLAB-03	A1 RE		
all an		Conduction Test	equipment		d a	
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Test Receiver	R&S	ESCI	101427	2023.09.25	2024.09.24	
Limtter	CYBERTEK	EM5010	N/A	2023.09.25	2024.09.24	
LISN	R&S	ENV216	101242	2023.09.25	2024.09.24	
LISN	EMCO	3810/2NM	23625	2023.09.25	2024.09.24	
Test SW	EZ-EMC		Ver.STSLAB-03	A1 CE	•	
		RF Connecte	ed Test			
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Signal Analyzer	Agilent	N9020A	MY51510623	2024.02.23	2025.02.22	
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14	



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

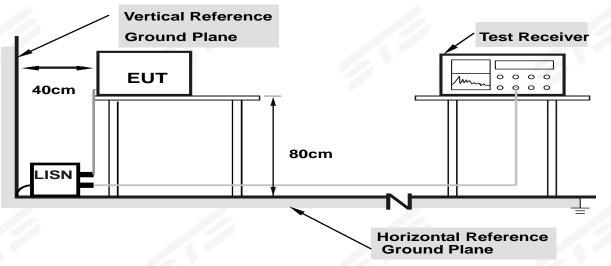
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.1.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.
- 3.1.3 TEST SETUP



Note: 1.Support units were connected to second LISN. 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support.

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



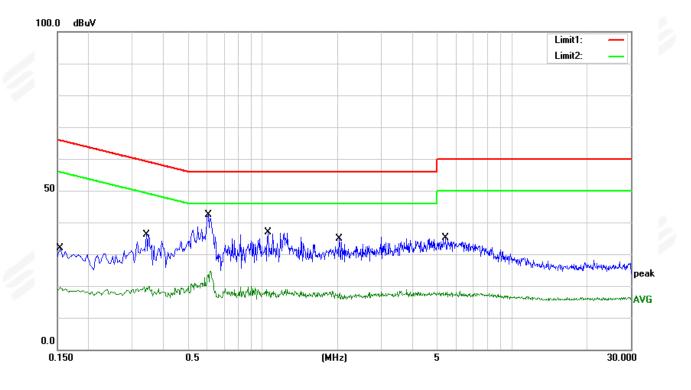
3.1.5 TEST RESULT

Temperature:	25.1C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 2	65	EV.

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1540	11.99	19.78	31.77	65.78	-34.01	QP
2	0.1540	-0.19	19.78	19.59	55.78	-36.19	AVG
3	0.3420	16.03	20.13	36.16	59.15	-22.99	QP
4	0.3420	-0.15	20.13	19.98	49.15	-29.17	AVG
5	0.6060	22.56	19.91	42.47	56.00	-13.53	QP
6	0.6060	4.83	19.91	24.74	46.00	-21.26	AVG
7	1.0540	17.14	19.77	36.91	56.00	-19.09	QP
8	1.0540	-0.37	19.77	19.40	46.00	-26.60	AVG
9	2.0300	15.05	19.79	34.84	56.00	-21.16	QP
10	2.0300	-1.37	19.79	18.42	46.00	-27.58	AVG
11	5.4420	15.31	19.80	35.11	60.00	-24.89	QP
12	5.4420	-1.49	19.80	18.31	50.00	-31.69	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Margin = Result (Result =Reading + Factor)–Limit



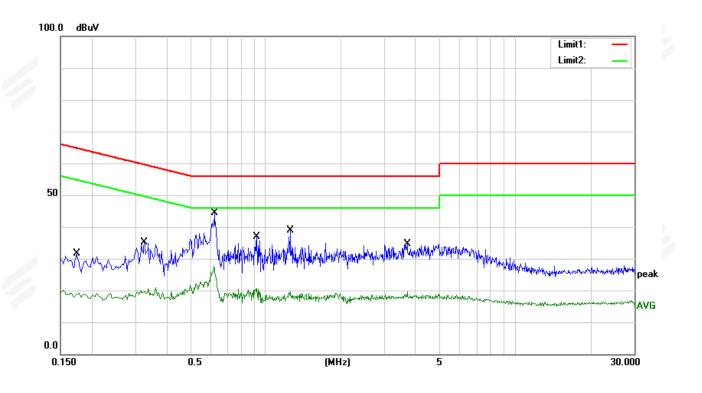


Temperature:	25.1(C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 2	19	

1.1.1		and the second second					
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1740	11.77	19.78	31.55	64.77	-33.22	QP
2	0.1740	0.33	19.78	20.11	54.77	-34.66	AVG
3	0.3260	15.05	20.17	35.22	59.55	-24.33	QP
4	0.3260	0.65	20.17	20.82	49.55	-28.73	AVG
5	0.6220	24.47	19.89	44.36	56.00	-11.64	QP
6	0.6220	7.77	19.89	27.66	46.00	-18.34	AVG
7	0.9220	17.17	19.78	36.95	56.00	-19.05	QP
8	0.9220	0.81	19.78	20.59	46.00	-25.41	AVG
9	1.2500	19.09	19.78	38.87	56.00	-17.13	QP
10	1.2500	-0.17	19.78	19.61	46.00	-26.39	AVG
11	3.6940	14.71	19.83	34.54	56.00	-21.46	QP
12	3.6940	-0.21	19.83	19.62	46.00	-26.38	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Margin = Result (Result =Reading + Factor)–Limit



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.249 and the Part 15.209(a) limit in the table below has to be followed. Standard FCC 15.209

010110010.200		
Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/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
Above 1000	Other:74.0 dB(µV)/m (Peak)	3
	54.0 dB(µV)/m (Average)	

Standard FCC 15.249

Frequency of Emission (MHz)	Field Strength of fundamental (millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
900~928	50	500
2400~2483.5	50	500
5725~5875	50	500
24000~242500	250	2500

Notes:

- (1) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.
- (2) Emission level (dBuV/m) =20log Emission level (uV/m).

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7

LIMITS OF RESTRICTED FREQUENCY BANDS



6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

Spectrum Parameter	Setting		
Detector	Peak/AV		
Attenuation	Auto		
Start Frequency	1000 MHz		
Stop Frequency	10th carrier harmonic		
RB (emission in restricted band)	>20BW		
VB (emission in restricted band)	=3xRB		

Receiver Parameter	Setting
Attenuation	Auto
1	9kHz~90kHz / RB 200Hz for PK & AV
	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
	490kHz~30MHz / RB 9kHz for QP
	30MHz~1000MHz / RB 120kHz for QP



3.2.2 TEST PROCEDURE

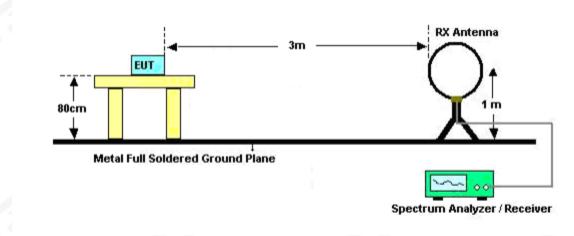
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of arotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- b. The measuring distance of 3m shall 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 test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization Of the antenna are set to make the measurement.
- d. The initial step in collecting radiated emission data is a receive peak detector mode.
 Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- f. 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 Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)
- 9. For the actual test configuration, please refer to the related Item –EUT Test Photos.
 Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 DEVIATION FROM TEST STANDARD No deviation

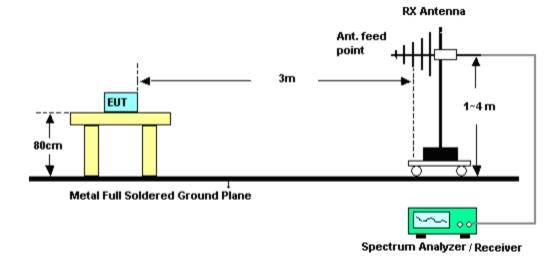


3.2.4 TEST SETUP

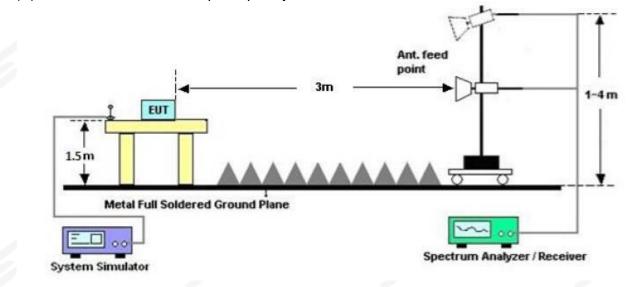
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz





3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

Margin=PL-PK L or AL- AV L; Margin only shown the worst case.

Where

PR = Peak Reading AR = Average Reading PL = Peak Level AL = Average Level AF = Antenna Factor PK L = Peak Limit

AV L = AV Limit

For example

Frequency	PR	AR	AF	PL	AL	PK L	AV L	Margin
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)
2178	40.23	30.31	9.83	50.06	40.14	74.00	54.00	-13.86









3.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

Below 30 MHz				
Temperature:	23.1(C)	Relative Humidity:	60%RH	
Test Voltage:	AC 120V/60Hz	Polarization:		
Test Mode:	TX Mode			

Freq.	Reading	Limit Margin (dBuV/m) (dB)		State	
(MHz)	(dBuV/m)			P/F	
				PASS	
				PASS	

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



Between 30MHz – 1000 MHz Radiation Spurious

Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	AC 120V60Hz	Phase:	Horizontal
Test Mode:	Mode 1	9	9

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	36.7900	33.95	-16.39	17.56	40.00	-22.44	peak
2	92.0800	36.00	-21.20	14.80	43.50	-28.70	peak
3	265.7100	30.35	-14.83	15.52	46.00	-30.48	peak
4	579.0200	29.23	-5.75	23.48	46.00	-22.52	peak
5	733.2500	31.35	-2.35	29.00	46.00	-17.00	peak
6	914.6400	33.49	-0.10	33.39	46.00	-12.61	peak

Remark:

- 1. Margin = Result (Result = Reading + Factor)–Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

80.0 dBuV/m





Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	AC 120V60Hz	Phase:	Vertical
Test Mode:	Mode 1	19	

No.	Frequency Reading		Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	36.7900	46.15	-16.39	29.76	40.00	-10.24	peak
2	92.0800	41.61	-21.20	20.41	43.50	-23.09	peak
3	332.6400	47.03	-13.62	33.41	46.00	-12.59	peak
4	654.6800	32.91	-4.86	28.05	46.00	-17.95	peak
5	735.1900	39.08	-2.28	36.80	46.00	-9.20	peak
6	980.6000	27.93	2.63	30.56	54.00	-23.44	peak

Remark:

- Margin = Result (Result =Reading + Factor)–Limit
 Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





8710.500

11364.250

14422.250

59.28

62.59

63.24

48.08

51.82

53.06

5.13

9.67

11.16

74.0

74.0

74.0

54.0

54.0

54.0

-5.92

-2.18

-0.94

164.40

346.30

151.80

100

100

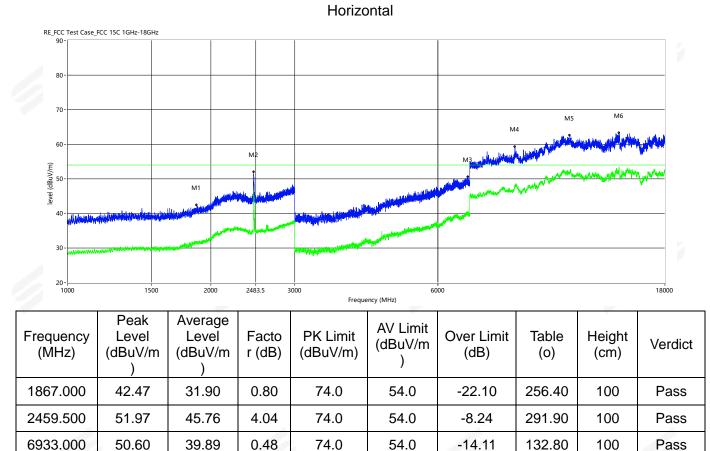
100

Pass

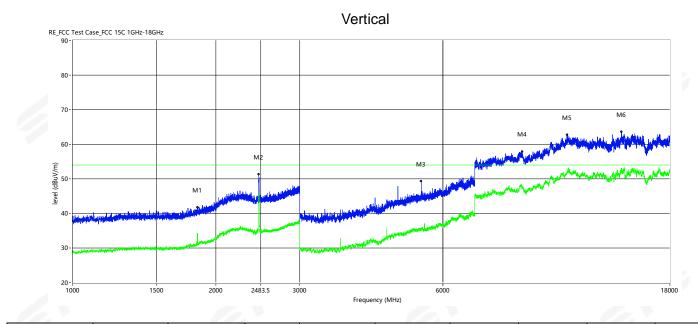
Pass

Pass

Above 1G Radiation Spurious







Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	Verdict		
1828.500	41.70	33.05	0.41	74.0	54.0	-20.95	130.80	100	Pass		
2460.500	51.22	46.26	4.04	74.0	54.0	-7.74	139.50	100	Pass		
5403.000	49.35	35.67	-4.76	74.0	54.0	-18.33	162.90	100	Pass		
8804.000	57.81	47.88	4.83	74.0	54.0	-6.12	134.90	100	Pass		
10960.000	62.78	51.80	9.91	74.0	54.0	-2.20	203.40	100	Pass		
14238.000	63.57	53.17	11.31	74.0	54.0	-0.83	283.10	100	Pass		







Duty cycle

gilent Spect Ø RL	trum Analyzer - Sw							
	RF 50 Ω Freq 914.500	P	NO: Fast	E:PULSE Trig: Free Run Atten: 10 dB	ALIGNAUTO Avg Type	:: Log-Pwr	TI	5 PM Jun 24, 2024 RACE 1 2 3 4 5 TYPE WWWWWW DET P N N N N
0 dB/div	Ref Offset 0. Ref 0.50 d						∆Mkr1	100.0 ms 0.10 dE
9.50								1Δ2
19.5 🗙 🔁 💳								
39.5								
9.5								
9.5								
9.5								
9.5								
9.5								
	14.500000 M 1.0 MHz	Hz	VBW	1.0 MHz		Sweep	100.0 ms	Span 0 H: s (1001 pts
<u>KR MODE</u> 1 Δ2 2 F 3 4	rrc scl 1 t (Δ) 1 t	× 100.0 ms 0.000 s	(Δ) 0.10 -17.27 dl		FUNCTION WIDTH	FU	NCTION VALUE	
5 6 7 8 9								
0								>
G					STATUS			

Ton (ms)	n (ms) Tp (ms)		Duty Factor	
100	100	100.00%	0.00	

Note: Duty Factor=20*LOG10(1/(Ton/Tp))

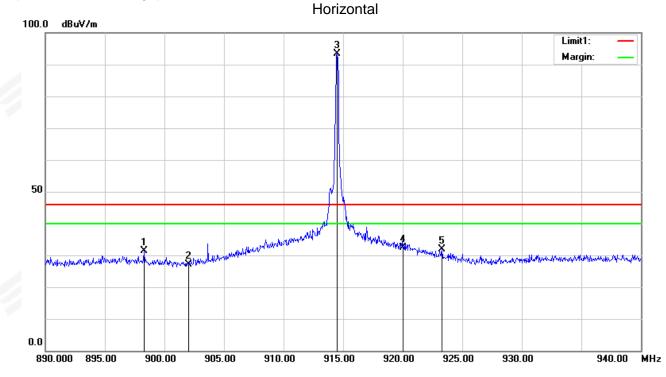








(Radiation Band edge)



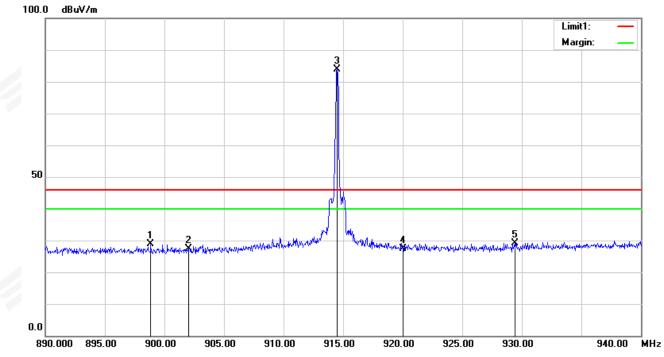
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	898.3000	31.89	-0.49	31.40	46.00	-14.60	peak
2	902.0000	27.59	-0.40	27.19	46.00	-18.81	peak
4	928.0000	28.09	0.43	28.52	46.00	-17.48	peak
5	930.8000	29.63	0.61	30.24	46.00	-15.76	peak

Fundamental Frequency

	No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
		(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
ſ	3	914.5000	93.56	-0.11	93.45	94	-0.55	QP







No.	Frequency	Reading	Correct	Result	esult Limit		Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	898.8500	29.27	-0.48	28.79	46.00	-17.21	peak
2	902.0000	27.70	-0.40	27.30	46.00	-18.70	peak
4	928.0000	26.71	0.43	27.14	46.00	-18.86	peak
5	933.5500	28.66	0.84	29.50	46.00	-16.50	peak

Fundamental Frequency

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
3	914.5000	83.92	-0.11	83.81	94	-10.19	QP



4. BANDWIDTH TEST

- 4.1 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= 1% to 5% OBW, VBW≧RBW, Sweep time = Auto.

4.2 TEST SETUP

EUT	SPECTRUM
	ANALYZER

4.3 EUT OPERATION CONDITIONS TX mode.









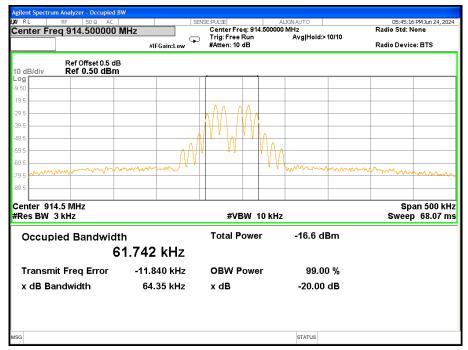




4.4 TEST RESULTS

Temper	ature:	25 ℃			Relative Humidity: 50%			
Test Vo	ltage:	AC 120	V/60H	z				
	Test Channel			Frequency(MHz	<u>z)</u>	20 dB	Bandwidth(KHz)	
				914.5			64.35	

CH01





5. ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

According to the FCC Part 15 Paragraph 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.

5.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It conforms to the standard requirements.



APPENDIX- PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.







