FCC PART 15.249 EMI MEASUREMENT AND TEST REPORT For

SHENZHEN DIT SECURITY&SURVEILLANCE TECHNOLOGY CO.,LTD

3-4F, Building 5 th, Wandaiheng High-Tech park, Guangming, Shenzhen, china

FCC ID: 2ADESDIT

October 18, 2014

This Report Con Original Report	icerns:	Equipment Type: Wireless Kit Camera		
Test Engineer:	Lisa Chen	Lissa Chon		
Report No.:	BSL141018Y-1EE-4			
Receive EUT	October 08, 2014 /			
Date/Test Date:	October 08-18, 2014			
Reviewed By:	Mike moo	dikemoo		
Prepared By:	BSL Testing Co.,LTD. NO. 24, ZH Park, Nantou, Shenzhen, 518000 China Tel: 86- 755-26508703 Fax: 86- 755-26508703			

TABLE OF CONTENTS

1.	GEN	ERAL INFORMATION	3
	1.1.	Report information	3
	1.2.	Measurement Uncertainty	3
2.	PRO	DUCT DESCRIPTION	4
	2.1.	EUT Description	4
	2.2.	Block Diagram of EUT Configuration	6
	2.3.	Support Equipment List	6
	2.4.	Test Conditions	6
3.	TEST	Γ RESULTS SUMMARY	7
	Modi	fications	7
4.	TEST	Γ EQUIPMENT USED	8
5.	ANT	ENNA REQUIREMENT	9
	5.1.	Standard Applicable	9
	5.2.	Antenna Connected Construction	
	5.3.	Result	9
6.	CON	DUCTED POWER LINE TEST	.10
	6.1.	Test Equipment	
	6.2.	Test Procedure	
	6.3.	Test Setup	
	6.4.	Conducted Power line Emission Limits	
	6.5.	Conducted Power Line Test Result	
7.		IATED EMISSION TEST	
	7.1.	Test Equipment	
	7.2.	Test Procedure	
	7.3.	Radiated Test Setup	
	7.4. 7.5.	Radiated Emission Limit	
0			
8.		D EDGE	
	8.1.	Test Equipment	
	8.2. 8.3.	Test Procedure	
	8.4.	Band Edge Test Result	
9.		B BANDWIDTH	
J.	9.1.	Test Equipment	
	9.1. 9.2.	Test Procedure	
	9.2. 9.3.	Limit	
	9.4.		
	~···		

1. GENERAL INFORMATION

1.1. Report information

- 1.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BSL approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BSL in any way guarantees the later performance of the product/equipment.
- 1.1.2. The sample/s mentioned in this report is/are supplied by Applicant, BSL therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 1.1.3.Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BSL, unless the applicant has authorized BSL in writing to do so.

Test Facility -

The test site used to collect the radiated data is located on the address of

BSL Testing Co.,LTD.

(FCC Registered Test Site Number: 191509) on

NO. 24, ZH Park, Nantou, Shenzhen, 518000 China

The Test Site is constructed and calibrated to meet the FCC requirements.

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	Conducted Emission Test	+/-1.25dB
2	RF Power, Conducted	+/-0.20dB
3	Spurious emissions, conducted	+/-0.33dB
4	All emissions, radiated (<1G)	+/-3.47dB
5	All emissions, radiated (>1G)	+/-3.82dB
6	Temperature	+/-0.5°CdB
7	Humidity	+/-2%

2. PRODUCT DESCRIPTION

2.1. EUT Description

Description : Wireless Kit Camera

Trade : N/A

Applicant : SHENZHEN DIT SECURITY&SURVEILLANCE

TECHNOLOGY CO.,LTD

3-4F, Building 5 th, Wandaiheng High-Tech

park, Guangming, Shenzhen, china

Manufacturer : SHENZHEN DIT SECURITY&SURVEILLANCE

TECHNOLOGY CO.,LTD

3-4F,Building 5 th,Wandaiheng High-Tech

park, Guangming, Shenzhen, china

Model Number : L0712DW+C5664VD*4,L0712DW+C5664VD*1,L0712DW+C

5664VD*2

Modulation type : GFSK

Antenna gain : 2dBi

Antenna type : Integral Antenna

Frequency : 2408-2473MHz Number of Channels : 22 Channels

Power Supply : DC 5V By Adaptor

The product model(s):

L0712DW+C5664VD*1,L0712DW+C5664VD*2 are identical in the same PCB layout, interior structure and electrical circuits with the model L0712DW+C5664VD*4 which tested in Shenzhen BSL Technology Co., Ltd. the only differences are the model name and appearance color for commercial purpose.

Channel	List		
Channe	Freque	Channe	Freque
1	ncy		ncy
1	(MHz)	1	(MHz)
1	2408	12	2442
2	2412	13	2445
3	2415	14	2448
4	2418	15	2451
5	2421	16	2454
6	2424	17	2457
7	2427	18	2460
8	2430	19	2463
9	2433	20	2466
10	2436	21	2469
11	2439	22	2473

2.2. Block Diagram of EUT Configuration

Radiated emissions and Conducted Emission test

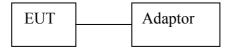


Figure 1 EUT Setup

2.3. Support Equipment List

Name	Model No	S/N	Manufacturer	Used "Yes/No"
Adaptor	JF005WR-0500100 VH		DIT	Yes

2.4. Test Conditions

Items		Required (IEC 68-1)	Actual
Temperature (°C))	15-35	20-25
Humidity (%RH))	25-75	50-63
Barometric	pressure	860-1060	950-1000
(mbar)			

3. TEST RESULTS SUMMARY

FCC 15 Subpart C, Paragraph 15.249:2013

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	Compliant
Section 15.249(a)	The fundamental field strength and the harmonics	Compliant
Section 15.209	Radiated Emission	Compliant
Section 15.249(d)		
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant
Section 15.249	20dB Bandwidth	Compliant

Remark: "N/A" means "Not applicable".

Statement: All testing was performed using the test procedures found in ANSI C63.4-2003.

Modifications

No modification was made.

4. TEST EQUIPMENT USED

EQUIPMENT/FACIL ITIES	MANUFACTURE R	MODEL	SERIAL NO.	DATE OF CAL.	CAL. INTERV AL
3m Semi-Anechoic	Chengyu Electron	9 (L)*6	BSL086	Aug. 23 2014	1 Year
Chamber		(W)* 6 (H)			
EMI Test Receiver	Rohde & Schwarz	ESCI3	BSL001	Sep. 28 2014	1 Year
BiConiLog Antenna	Rohde & Schwarz	HL562	BSL009	Sep. 28 2014	1 Year
Double -ridged waveguide horn	Rohde & Schwarz	9120D	BSL008	Aug. 27 2014	1 Year
Horn Antenna	ETS-LINDGREN	3160	BSL072	Dec. 28 2013	1 Year
Cable	Rohde & Schwarz	BSL045	BSL045	Aug. 27 2014	1 Year
Cable	Rohde & Schwarz	BSL046	BSL046	Aug. 27 2014	1 Year
Cable	Rohde & Schwarz	BSL047	BSL047	Aug. 27 2014	1 Year
Amplifier(100kHz-40G Hz)	R&S	SMR40	BSL007	Sep. 28 2014	1 Year
Band filter	Amindeon	82346	BSL049	Aug. 27 2014	1 Year
Active Loop Antenna	EMTES	EM15	BSL011	Sep. 28 2014	1 Year
Coaxial Switch	YUANFANG	TA218B	BSL004	Aug. 27 2014	1 Year
Spectrum analyzer	Rohde & Schwarz	FSP40	BSL049	Sep. 28 2014	1 Year
Shielding Room	zhongyu Electron	7.0(L)x3.0(W)x3.0(H)	BSL085	Sep. 28 2014	1 Year
EMI Test Receiver	R&S	ESPI	BSL002	Sep. 28 2014	1 Year
10dB Pulse Limita	R&S	BSL003	BSL003	Sep. 28 2014	1 Year
Coaxial Switch	YUANFANG	TA218B	BSL004	Aug. 27 2014	1 Year
LISN	Rohde & Schwarz	ESH3-Y5	BSL005	Sep. 28 2014	1 Year
Coaxial Cable	YUANFANG	BSL048	BSL048	Aug. 27 2014	1 Year
EMI TEST SOFTWARE	AUDIX	Е3	N/A	N/A	N/A

5. ANTENNA REQUIREMENT

5.1. Standard Applicable

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

5.2. Antenna Connected Construction

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

The antenna used in this product is integrated Antenna. The antenna is permanently attached. Refer to the product photo.

5.3. Result

Compliance

6. CONDUCTED POWER LINE TEST

6.1. Test Equipment

Please refer to section 4 this report.

6.2. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uh coupling inpedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uh coupling inpedance with 50ohm termination.

Both sides of A.C. Line are check for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ASIN C63.4:2003 on conducted measurement. Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

6.3. Test Setup



For the actual test configuration, Please refer to the related items-Photos of testing

6.4. Conducted Power line Emission Limits

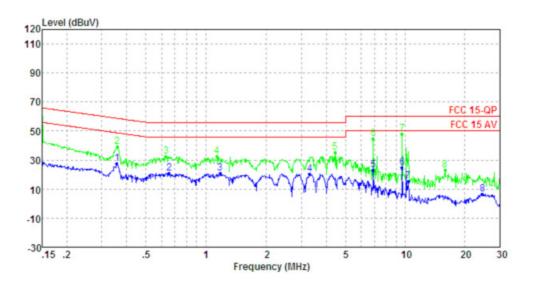
FCC Part 15 Paragraph 15.207 (dBuV)				
Frequency Range (MHZ)	Class A OP/AV	Class B OP/AV		
0.15-0.5	79/66	65-56/56-46		
0.5-5.0	73/60	56-46		
5.0-3.0	73/60	60-50		

Note: In the above table, the tighter limit applies at the band edges.

6.5. Conducted Power Line Test Result

PASS

Link Mode

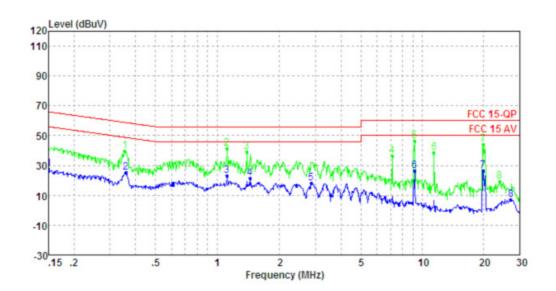


Condition:

: RBW:9.000KHz VBW:30.000KHz

	Freq	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBu₹	dBu₹	₫B		
1	0.358	27.8	48.8	-21.0	Average	LINE
	0.654	21.0	46.0		Average	LINE
2	1.184	21.1	46.0	-24.9	Average	LINE
4	3.310	20.6	46.0	-25.4	Average	LINE
4 5 6 7	6.914	23.0	50.0	-27.0	Average	LINE
6	9.654	24.9	50.0	-25.1	Average	LINE
7	10.342	15.4	50.0	-34.6	Average	LINE
8	24.529	6.8	50.0	-43.2	Average	LINE

Condi		W:9.000	OKHz VI	BW:30.	000KHz	
	Freq	Level	Line		Remark	Pol/Phase
-	MHz	dBu₹	dBu∀	₫B		
1 2 3 4 5 6 7 8	0.150 0.360 0.630 1.141 4.430 6.914 9.654 15.885	53.7 39.3 32.3 32.3 35.3 44.5 48.0 22.9	56.0 56.0 56.0	-12.3 -19.4 -23.7 -23.7 -20.7 -15.5 -12.0 -37.1	QP QP QP QP	LINE LINE LINE LINE LINE LINE LINE LINE



Condit		W:9.000	OKHz VI	BW:30.	000KHz	
	Freq	Level	Line		Remark	Pol/Phase
-	MHz	dBu∀	dBu∀	₫B		
1 2 3 4 5 6 7 8	0. 150 0. 360 1. 117 1. 449 2. 869 9. 156 19. 845 27. 127	27.6 25.4 23.1 21.7 17.9 26.4 26.5	46.0 46.0 46.0 50.0	-23.3 -22.9 -24.3 -28.1 -23.6 -23.5	Average Average Average Average Average Average Average Average	NEUTRAL NEUTRAL NEUTRAL NEUTRAL NEUTRAL NEUTRAL NEUTRAL NEUTRAL NEUTRAL

Condi	tion: : RB	W:9.00	OKHz V	BW:30.	000KHz	
		924 10	Limit	Over		221727223
	Freq	Level	Line	Limit	Remark	Pol/Phase
	MHz	₫₿u₹	dBu₹	₫B		
1	0.354	39.8	58.9	-19.1	QP	NEUTRAL
2	1.117	41.5	56.0	-14.5	QP	NEUTRAL
3	1.396	39.5	56.0	-16.5	QP	NEUTRAL
4	7.137	36.5	60.0	-23.5	QP	NEUTRAL
1 2 3 4 5 6 7	9.156	46.6	60.0	-13.4	QP	NEUTRAL
6	11.438	38.5	60.0	-21.5	QP	NEUTRAL
7	19.845	44.4	60.0	-15.6	QP	NEUTRAL
8	23.888	19.5	60.0	-40.5	-	NEUTRAL

7. RADIATED EMISSION TEST

7.1. Test Equipment

Please refer to section 4 this report.

7.2. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level.

Calibrated Loop antenna is used as receiving antenna for frequencies below 30MHz, Calibrated Bilog antenna is used as receiving antenna for frequencies between 30 MHz and 1 GHz, Calibrated Horn antenna is used as receiving antenna for frequencies above 1000MHz. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9kHz to 25GHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Peak detector and Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

Through three orthogonal axes to determine which attitude and equipment arrangement produces the highest emission relative to the limit. And Y direction is worst mode

7.3. Radiated Test Setup

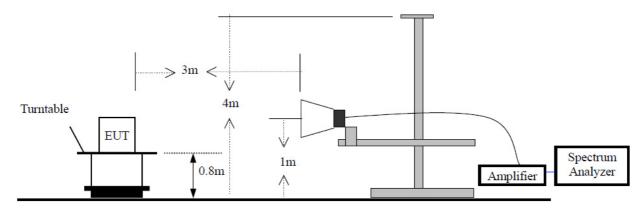
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



7.4. Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

A. Fundamental and Harmonics Radiated Emissions 15.249(a) Limit

Fundamental Frequency	Field as treng	eld as trength of Fundamental(3m)			Field as trength of Harmonics(3m)		
(MHZ)	mV/m	dBuV/m	dBuV/m		dBuV/m		
902-928	50	94(AV)	94(AV) 114(Peak)		54(AV)	74(Peak)	
2400-2483.5	50	94(AV)	114(Peak)	500	54(AV)	74(Peak)	

Note: (1) RF Voltage (dBuV)=20 log Voltage(uV)

- (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- (3) The emission limit in this paragraph os based on measurement instrumentation employing an average detector. Measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

B. Spurious Radiated Emissions.

		Limit									
Frequency (MHz)	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBµV/m)	Measurement distance (m)	The final measurement in band 9-90kHz,							
0.009 - 0.490	2400/F(kHz)	/	300	110-490kHz and above 1000MHz is							
0.490 - 1.705	24000/F(kHz)	/	30	performed with							
1.705-30	30	29.5	30	Average detector. Except those							
30 - 88	100	40	3	frequency bands mention above, the							
88 - 216	150	43.5	3	final measurement for frequencies							
216 - 960	200	46	3	below 1000MHz is performed with							
Above 960	500	54	3	Quasi Peak detector.							

Note: (1) RF Voltage (dBuV)=20 log Voltage(uV)

- (2) In the Above Table, the tighter limit applies at the band edges.
- (3) Distagnce refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

7.5. Radiated Emission Test Result

Pass

A. Fundamental Radiated Emissions Data

CH Low

Freq. (MHz)	Read Level (dBuV) AV/PK	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission (dBuV/m) AV/PK	HORIZ/ VERT	Limits (dBuV/m) AV/PK	Margin (dB)
2408	61.79/76.68	27.47	5.42	30.17	64.51/79.95	VERT	94/114	-29.49/-34.05
2408	73.94/86.16	27.47	5.42	30.17	76.66/89.43	HORIZ	94/114	-17.34/-24.57

CH Middle

Freq. (MHz)	Read Level (dBuV) AV/PK	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission (dBuV/m) AV/PK	HORIZ/ VERT	Limits (dBuV/m) AV/PK	Margin (dB)
2442	61.69/77.43	27.40	5.40	30.15	64.34/80.08	VERT	94/114	-24.66/-28.92
2442	73.52/88.74	27.40	5.40	30.15	76.17/91.39	HORIZ	94/114	-17.83/-22.61

CH High

Freq. (MHz)	Read Level (dBuV) AV/PK	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission (dBuV/m) AV/PK	HORIZ/ VERT	Limits (dBuV/m) AV/PK	Margin (dB)
2473	68.38/82.15	27.50	5.46	29.98	71.36/85.13	VERT	94/114	-22.64/-28.87
2473	72.53/86.96	27.50	5.46	29.98	75.51/89.94	HORIZ	94/114	-18.57/-24.06

Remark:

Final Emission = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

D	C 1	D 1' / 1	т.		D 4
В.	(teneral	Radiated	Emis	sions	Data

For below 9kHz-30MHz Spurious

Freq. (MHz)	Emission(dBuV/m) AV/PK	Limits(dBuV/m) AV/PK	Margin (dB)
-	-	-	-
-	-	-	-

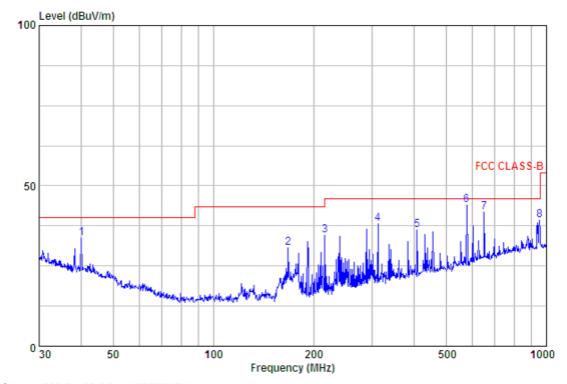
N	ota

1. Emissions attenuated more than 20 dB below the permissible value are not reported.

For 30M-1000MHz Spurious

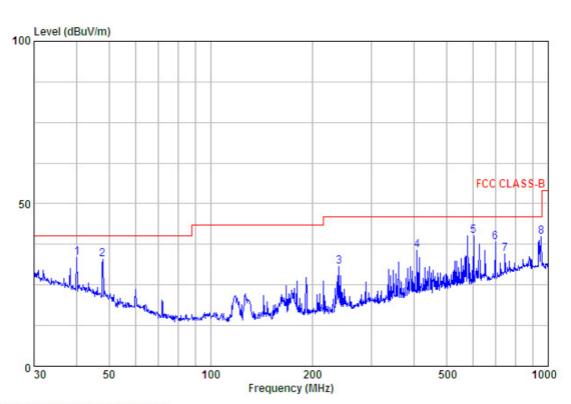
2442MHz Transmitting(Worst case mode)

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain



Condition : FCC CLASS-B 3m HORIZONTAL : RBW:120.000KHz VBW:300.000KHz SWT:Auto

	rreq	Line	Tever	Limit Hemaik	101)IMase
	MHz	dBuV/m	$\overline{dBuV/m}$	dB —	
1 2 3 4 5 6 max 7	40, 135 167, 824 216, 024 312, 179 408, 946 576, 644 649, 660 952, 094	40. 0 43. 5 46. 0 46. 0 46. 0 46. 0 46. 0	30.6 34.5	-6.2 QP -12.9 QP -11.5 QP -7.9 QP -9.9 QP -1.9 QP -4.2 QP -6.8 QP	HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL



Condition : FCC CLASS-B 3m VERTICAL : RBW:120.000KHz VBW:300.000KHz SWT:Auto

	Freq	Line	Level	Limit	Remark	Pol/Phase
	MHz	dBuV/m	$\overline{dBuV/m}$	dB		
1	40.135	40.0	33.4	-6.6	QP	VERTICAL
2	47.994	40.0	32.8	-7.2	QP	VERTICAL
3	239.987	46.0	30.7	-15.3	QP	VERTICAL
4	408.946	46.0	35.7	-10.3	QP	VERTICAL
5 max	601.427	46.0	40.2	-5.8	QP	VERTICAL
6	696.857	46.0	38.2	-7.8	QP	VERTICAL
7	744.866	46.0	34.5	-11.5	QP	VERTICAL
8	952.094	46.0	39.9	-6.1	QP	VERTICAL

For 1000MHz-25000MHz Spurious

CH Low

Freq. (MHz)	Emission(dBuV/m) AV/PK	HORIZ/ VERT	Limits(dBuV/m) AV/PK	Margin (dB)
4816.0	42.74/59.56		54.0/74.0	-11.26/-14.44
7224.0	42.22/60.11	VERT	54.0/74.0	-11.78/-13.89
9632.0	44.95/61.15		54.0/74.0	-9.05/-12.85
4816.0	44/61.03		54.0/74.0	-10/-12.97
7224.0	43.61/61.35	HORIZ	54.0/74.0	-10.39/-12.65
9632.0	45.05/62.23		54.0/74.0	-8.95/-11.77

CH Middle

Freq. (MHz)	Emission(dBuV/m) AV/PK	HORIZ/ VERT	Limits(dBuV/m) AV/PK	Margin (dB)
4884.0	42.83/59.92		54.0/74.0	-11.17/-14.08
7326.0	42.8/60.25	VERT	54.0/74.0	-11.2/-13.75
9768.0	44.61/61.41		54.0/74.0	-9.39/-12.59
4884.0	43.8/61.17		54.0/74.0	-10.2/-12.83
7326.0	43.61/61.95	HORIZ	54.0/74.0	-10.39/-12.05
9768.0	44.89/62.55		54.0/74.0	-9.11/-11.45

CH High

ıgn				
Freq. (MHz)	Emission(dBuV/m) AV/PK	HORIZ/ VERT	Limits(dBuV/m) AV/PK	Margin (dB)
4946.0	43.2/61.02		54.0/74.0	-10.8/-12.98
7419.0	42.3/60.17	VERT	54.0/74.0	-11.7/-13.83
9892.0	43.55/61.46		54.0/74.0	-10.45/-12.54
4946.0	44.3/62.13		54.0/74.0	-9.7/-11.87
7419.0	43.7/61.66	HORIZ	54.0/74.0	-10.3/-12.34
9892.0	44.71/62.69		54.0/74.0	-9.29/-11.31

Note:

- 1. The average measurement was not performed when the peak measured data under the limit of average detection.
- 2. Emissions attenuated more than 20 dB below the permissible value are not reported.

8. BAND EDGE

8.1. Test Equipment

Please refer to Section 4 this report.

8.2. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement. The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz respectively.

8.3. Band Edge FCC 15.249(d) Limit

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.

8.4. Band Edge Test Result

Pass

ALL of the restriction bands were tested, and only the data of worst case was exhibited.

CH Low

Freq. (MHz)	Emission(dBuV/m) AV/PK	HORIZ/ VERT	Limits(dBuV/m) AV/PK	Margin (dB)
2390	29.04/38.76		54.0/74.0	-24.96/-35.24
2400	39.33/55.3	VERT	54.0/74.0	-14.67/-18.7
2390	27.43/35.82		54.0/74.0	-26.57/-38.18
2400	38.59/54.87	HORIZ	54.0/74.0	-15.41/-19.13

CH High

Freq. (MHz)	Emission(dBuV/m) AV/PK	HORIZ/ VERT	Limits(dBuV/m) AV/PK	Margin (dB)
2483.5	38.52/47.18		54.0/74.0	-15.48/-26.82
2500.00	34.07/46.52	VERT	54.0/74.0	-19.93/-27.48
2483.5	37.53/46.66		54.0/74.0	-16.47/-27.34
2500.00	33.34/44.98	HORIZ	54.0/74.0	-20.66/-29.02

Remark

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

9. 20-DB BANDWIDTH

9.1. Test Equipment

Please refer to Section 4 this report.

9.2. Test Procedure

- 1. The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on measurement.
- 2. Set center frequency of spectrum analyzer = operating frequency.
- 3. The spectrum analyzer as RBW=30 KHz, VBW=100 KHz, Sweep=auto
- 4. Mark the peak frequency and –20dB (upper and lower) frequency.

9.3. Limit

Please refer section 15.249

9.4. Test Result /Plots

	Channel	20dB	
Limit	Frequency	Bandwidth	
	(MHz)	(MHz)	
/	2408	4.06	
/	2442	4.088	
/	2473	4.116	

