

# **FCC Test Report**

Report No: FCS202108042W01

# Issued for

Applicant:	Unno Tekno LLC			
Address:	6451 NW 102nd Ave. Suite 4 Doral FL 33178 - USA			
Product Name:	CELL PHONE HOLDER WITH WIRELESS CHARGER			
Brand Name:	N/A			
Model Name:	CH3009BK			
Series Model:	N/A			
FCC ID:	2A3BU-CH3009BK			
Issued By: Flux Compliance Service Laboratory				

Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan

Tel: 769-27280901 Fax:769-27280901 http://www.fcs-lab.com



#### TEST RESULT CERTIFICATION

Applicant's Name:	Unno Tekno LLC
Address:	6451 NW 102nd Ave. Suite 4 Doral FL 33178 - USA
Manufacture's Name:	Dongguan Su Tong Jie Plastic Hardware Co., Ltd.
Address:	2/F No.5 Yin Qu Street Tangxia Town Dongguan China
<b>Product Description</b>	
Product Name:	CELL PHONE HOLDER WITH WIRELESS CHARGER
Brand Name	N/A
Model Name:	CH3009BK
Series Model:	N/A
Test Standards:	FCC Rules and Regulations Part 15 Subpart C, Section 209
Test Procedure:	ANSI C63.10:2013
	been tested FCS, the test results show that the equipment un

This device described above has been tested FCS, 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.

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 Date of Test
 :

 Date (s) of performance of tests. :
 04 Aug. 2021 ~ 18 Aug. 2021

 Date of Issue
 18 Aug. 2021

 Test Result
 Pass

Tested by	:	Scott shen
		(Scott Shen)
Reviewed by	:	Dute Run
		(Duke Qian)
Approved by	:	Kait Chen
		(Kait Chen)



Table of Contents	Page
1. SUMMARY OF TEST RESULTS	5
1.1 TEST FACTORY	6
1.2 MEASUREMENT UNCERTAINTY	6
2. GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF THE EUT	7
2.2 DESCRIPTION OF THE TEST MODES	8
2.3 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	9
2.4 EQUIPMENTS LIST	10
3 CONDUCTED EMISSION MEASUREMENT	11
3.1 LIMIT	11
3.2 TEST PROCEDURE	11
3.3 TEST SETUP	12
3.4 TEST RESULTS	13
4. RADIATED EMISSION MEASUREMENT	15
4.1 LIMIT	15
4.2 TEST PROCEDURE	16
4.3 TEST SETUP 4.4 TEST RESULTS	17 18
6. 20 DB BANDWIDTH TEST	23
6.1 LIMIT 6.2 TEST PROCEDURE	23 23
6.2 TEST PROCEDURE 6.3 TEST SETUP	23
6.4 TEST RESULTS	24
7. ANTENNA REQUIREMENT  7.1 STANDARD REQUIREMENT	<b>25</b> 25
7.1 STANDARD REQUIREMENT  7.2 EUT ANTENNA	25
	20



# **Revision History**

Rev.	Issue Date	Effect Page	Contents
00 18 Aug. 2021		All	Initial Issue



# 1. SUMMARY OF TEST RESULTS

FCC Rules and Regulations Part 15 Subpart C, Section 209					
Standard Section	lest Item   ludament   Rema				
15.207	Conducted Emission	PASS			
15.209(a) (f)	Radiated Spurious Emission	PASS	-		
15.215(c)	20dB Bandwidth	PASS			
15.203	Antenna Requirement	PASS			

# NOTE:

- (1)" N/A" denotes test is not applicable in this Test Report
- (2) All tests are according to ANSI C63.10-2013



## 1.1 TEST FACTORY

Flux Compliance Service Laboratory
Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan
+86-769-27280901
+86-769-27280901

FCC Test Firm Registration Number: 514908

Designation number: CN0127

A2LA accreditation number: 5545.01

## 1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	±0.71dB
2	Unwanted Emissions, conducted	±2.98 dB
3	Conducted Emission (9KHz-150KHz)	±4.13 dB
4	Conducted Emission (150KHz-30MHz)	±4.74 dB
5	All emissions,radiated (9KHz -30MHz)	±3.1 dB
6	All emissions,radiated(<1G) 30MHz-1000MHz	±3.2 dB
7	All emissions,radiated (1GHz -18GHz)	±3.66 dB
8	All emissions,radiated (18GHz -40GHz)	±4.31 dB



# 2. GENERAL INFORMATION

## 2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	CELL PHONE HOLDER WITH WIRELESS CHARGER
Trade Name	N/A
Model Name	CH3009BK
Series Model	N/A
Model Difference	N/A
Channel List	Please refer to the Note 2.
Operation frequency	115-205KHz
Modulation Type	MSK
Antenna Type	Inductive Loop Antenna with 1.0dBi
Dower Supply	Input: 9V/1.5A,5V/2A
Power Supply	Output: 5W,7.5W,10W
Hardware version number	V1.0
Software version number	V1.0
Connecting I/O Port(s)	Please refer to the User's Manual

# Note:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2. Operation frequency:115-205KHz
- 3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	YTNS	Inductive Loop Antenna	N/A	1.0dBi	Antenna



n

## 2.2 DESCRIPTION OF THE TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test software: KCC

The test softeware was used to control EUT work in continuous TX mode, and select test channel, Wireless mode as below table

Will closs friede as below to					
Tested mode, Description					
Mode	Description				
Mode 1	5W				
Mode 2	7.5W				
Mode 3	10W				



## 2.3 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

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
1	Adapter	HW	0789SK	N/A	This adapter is for testing only in report.
2	Phone	HW	Mate 20	N/A	This phone is for testing only in report.

# Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note

## Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- For detachable type I/O cable should be specified the length in cm in Length column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".



# 2.4 EQUIPMENTS LIST

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESRP 3	2021.05.26	2021.05.25	2022.05.26
Signal Analyzer	R&S	FSV40-N	FCS-E012	2021.05.03	2022.05.02
Active loop Antenna	ZHINAN	ZN30900C	FCS-E013	2021.07.09	2022.07.10
Bilog Antenna	SCHWARZBECK	VULB 9168	FCS-E002	2021.07.26	2022.07.25
Horn Antenna	SCHWARZBECK	BBHA 9120D	FCS-E003	2021.07.26	2022.07.25
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	FCS-E018	2021.05.26	2022.05.25
Pre-Amplifier(0.1M-3G Hz)	EMCI	EM330N	FCS-E004	2021.05.26	2022.05.25
Pre-Amplifier (1G-18GHz)	N/A	TSAMP-0518SE	FCS-E014	2021.05.03	2022.05.02
Pre-Amplifier (18G-40GHz)	TERA-MW	TRLA-0400	FCS-E019	2021.07.09	2022.07.10
Temperature & Humidity	HTC-1	victor	FCS-E005	2021.07.26	2022.07.25

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESPI	FCS-E020	2021.05.03	2022.05.02
LISN	R&S	ENV216	FCS-E007	2021.07.09	2022.07.10
LISN	ETS	3810/2NM	FCS-E009	2021.05.03	2022.05.02
Temperature & Humidity	HTC-1	victor	FCS-E008	2021.07.09	2022.07.10

# **RF Connected Test**

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
Spectrum Analyzer	Keysight	N9020A	FCS-E015	2021.05.03	2022.05.02
Spectrum Analyzer	Agilent	E4447A	MY50180039	2021.07.09	2022.07.10
Spectrum Analyzer	R&S	FSV-40	101499	2021.07.26	2022.07.25



## 3 CONDUCTED EMISSION MEASUREMENT

#### 3.1 LIMIT

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

EDECHENCY (MH-)	Conducted Emissionlimit (dBuV)		
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.

## 3.2 TEST PROCEDURE

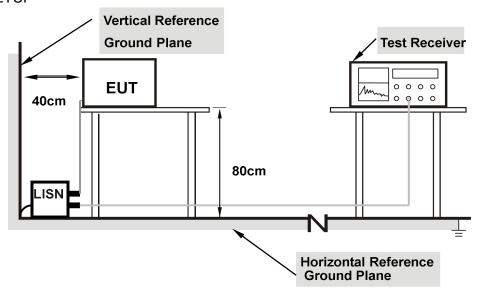
The following table is the setting of the receiver

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

- a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 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 at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.



## 3.3 TEST SETUP



Note: 1.Support units were connected to second LISN.

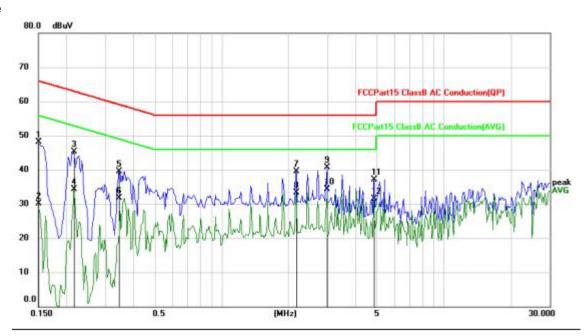
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes



# 3.4 TEST RESULTS

Temperature:	<b>25</b> ℃	Relative Humidity:	50%
Test Mode:	Mode 3	i legi Voltade.	Input AC 120V/60Hz by adapter
Result:	Pass		

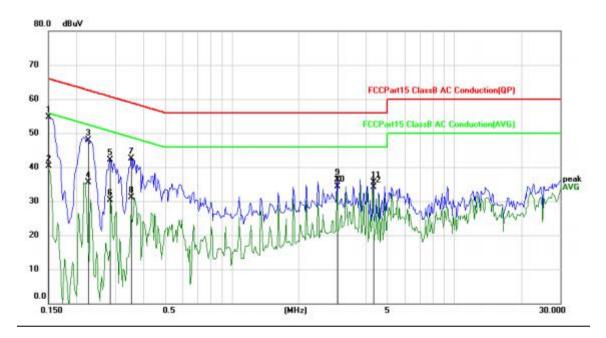
# L-line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀	dBu∀	dB	Detector
1		0.1500	38.36	9.73	48.09	66.00	-17.91	QP
2		0.1500	20.34	9.73	30.07	56.00	-25.93	AVG
3		0.2164	35.48	9.73	45.21	62.96	-17.75	QP
4		0.2164	24.55	9.73	34.28	52.96	-18.68	AVG
5		0.3453	29.82	9.78	39.60	59.07	-19.47	QP
6		0.3453	21.99	9.78	31.77	49.07	-17.30	AVG
7		2.1656	29.50	9.98	39.48	56.00	-16.52	QP
8		2.1656	23.26	9.98	33.24	46.00	-12.76	AVG
9		2.9781	30.80	9.99	40.79	56.00	-15.21	QP
10	*	2.9781	24.34	9.99	34.33	46.00	-11.67	AVG
11		4.8438	27.01	10.05	37.06	56.00	-18.94	QP
12		4.8438	21.37	10.05	31.42	46.00	-14.58	AVG



## N-line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∀	dBu∀	dB	Detector
1	*	0.1500	44.91	9.73	54.64	66.00	-11.36	QP
2		0.1500	30.55	9.73	40.28	56.00	-15.72	AVG
3		0.2256	38.11	9.73	47.84	62.61	-14.77	QP
4		0.2256	25.84	9.73	35.57	52.61	-17.04	AVG
5		0.2833	32.36	9.75	42.11	60.72	-18.61	QP
6		0.2833	20.63	9.75	30.38	50.72	-20.34	AVG
7		0.3531	32.81	9.79	42.60	58.89	-16.29	QP
8		0.3531	21.33	9.79	31.12	48.89	-17.77	AVG
9		2.9742	26.30	9.99	36.29	56.00	-19.71	QP
10		2.9742	24.29	9.99	34.28	46.00	-11.72	AVG
11		4.3242	25.45	10.03	35.48	56.00	-20.52	QP
12		4.3242	24.16	10.03	34.19	46.00	-11.81	AVG



## 4. RADIATED EMISSION MEASUREMENT

#### 4.1 LIMIT

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009mhz - 1000mhz)

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
Above 960	500	3

#### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- (5) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits inthese three bands are based on measurements employing an average detector.



## **4.2 TEST PROCEDURE**

Spectrum Parameter	Setting	
Attenuation	Auto	
Detector	Peak/AV	
Start Frequency	1000 MHz(Peak/AV)	
Stop Frequency	10th carrier hamonic(Peak/AV)	
RB / VB (emission in restricted		
band)	PK=1MHz / 1MHz, AV=1 MHz /10 Hz	

- a. The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 meters (above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m(above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

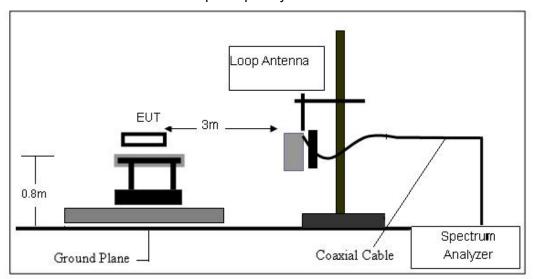
#### Note:

Both horizontal and vertical antenna polarities were tested. The worst case emissions were reported

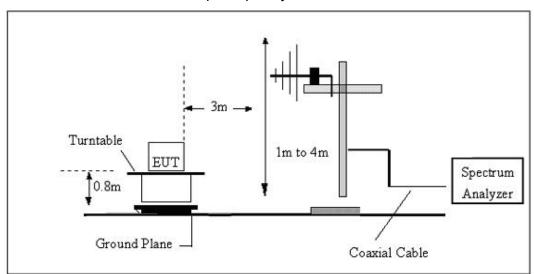


## 4.3 TEST SETUP

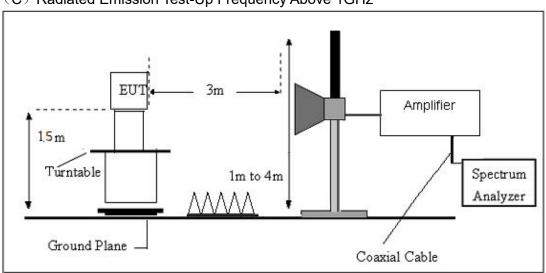
# (A) Radiated Emission Test-Up Frequency Below 30MHz



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



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





# 4.4 TEST RESULTS

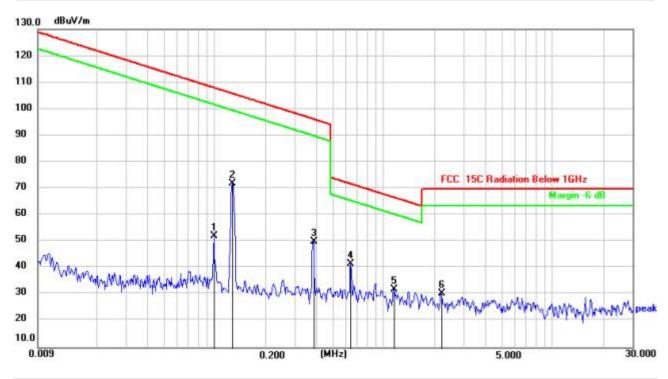
Temperature:	<b>25</b> ℃	Relative Humidity:	60%
Test Mode:	Mode 3	Test Voltage:	DC 9V



# For spurious emission

(9KHz-30MHz)

Temperature:	23.7℃	Relative Humidity:	61%
Test Voltage:	DC 9V	Phase:	Horizontal
Test Mode:	Mode 3		



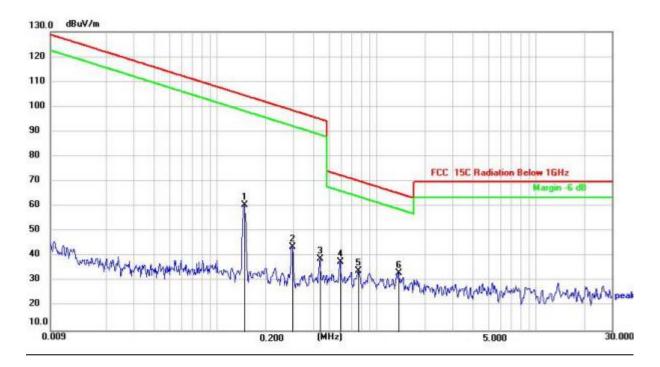
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0993	31.63	20.62	52.25	107.67	-55.42	peak
2	0.1276	51.91	20.16	72.07	105.49	-33.42	peak
3	0.3849	29.72	20.27	49.99	95.90	-45.91	peak
4 *	0.6416	21.27	20.42	41.69	71.47	-29.78	peak
5	1.1506	11.43	20.54	31.97	66.41	-34.44	peak
6	2.2017	10.16	20.36	30.52	69.50	-38.98	peak

## Remarks:

1. Final Level =Receiver Read level + Factor



Temperature:	23.7℃	Relative Humidity:	61%
Test Voltage:	DC 9V	Phase:	Vertical
Test Mode:	Mode 3		

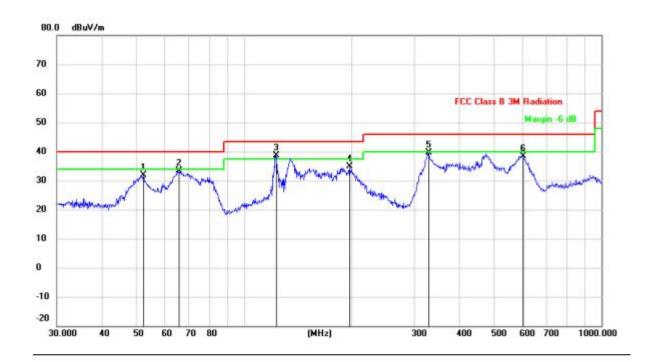


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.1478	40.58	20.11	60.69	104.21	-43.52	peak
2	0.2945	23.52	20.21	43.73	98.22	-54.49	peak
3	0.4418	18.58	20.31	38.89	94.70	-55.81	peak
4	0.5916	17.35	20.39	37.74	72.17	-34.43	peak
5	0.7669	13.72	20.47	34.19	69.92	-35.73	peak
6 *	1.3754	12.80	20.50	33.30	64.86	-31.56	peak



# (30MHZ-1000MHZ)

Temperature:	23.7℃	Relative Humidity:	61%	
Test Voltage:	DC 9V	Phase:	Horizontal	
Test Mode:	Mode 3			



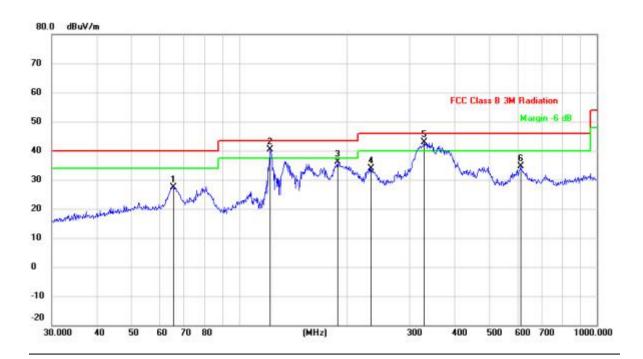
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector
1		52.3912	38.68	-6.92	31.76	40.00	-8.24	QP
2		66.0342	42.53	-9.14	33.39	40.00	-6.61	QP
3	*	122.8340	48.06	-9.32	38.74	43.50	-4.76	QP
4		197.8928	41.97	-7.20	34.77	43.50	-8.73	QP
5		327.8873	44.25	-4.66	39.59	46.00	-6.41	QP
6		603.5392	38.96	-0.51	38.45	46.00	-7.55	QP

#### Remarks

1. Final Level =Receiver Read level + Factor



Temperature:	22.7℃	Relative Humidity:	61%
Test Voltage:	DC 9V	Phase:	Vertical
Test Mode:	Mode 3		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector
1		65.3432	36.53	-9.04	27.49	40.00	-12.51	QP
2	*	122.4039	49.59	-9.20	40.39	43.50	-3.11	QP
3		188.4125	44.19	-7.98	36.21	43.50	-7.29	QP
4		233.3487	40.40	-6.50	33.90	46.00	-12.10	QP
5	!	329.0389	47.48	-4.60	42.88	46.00	-3.12	QP
6		612.0642	35.05	-0.43	34.62	46.00	-11.38	QP

# Remarks:

1. Final Level =Receiver Read level + Factor



## 5. 20 DB BANDWIDTH TEST

#### 5.1 LIMIT

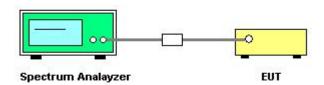
According to 15.215 (c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation

## 5.2 TEST PROCEDURE

Check the calibration of the measuring instrument using either an internal calibrator or a

- a. known signal from an external generator
- b. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- c. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.

#### 5.3 TEST SETUP





## **5.4 TEST RESULTS**

Temperature:	<b>25</b> ℃	Relative Humidity:	50%
Test Mode:	Mode 3	Test Voltage:	DC 9V

Frequency (KHz)	20dB Bandwidth (Hz)	Result
127.71	813	PASS





## 6. ANTENNA REQUIREMENT

## **6.1 STANDARD REQUIREMENT**

15.203 requirement: 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.

## **6.2 EUT ANTENNA**

The antennas used for this product is Inductive Loop Antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 1.0dBi.

\*\*\*\*\*END OF THE REPORT\*\*\*