

# FCC TEST REPORT

## FCC ID:2AL64-SP8

Report Number..... : ZKT-220812L5694E-1

Date of Test..... Aug.15, 2022 to Aug.22, 2022

Date of issue..... : Aug.22, 2022

Total number of pages..... 26

Test Result ..... : PASS

Testing Laboratory..... : Shenzhen ZKT Technology Co., Ltd.

Address ..... : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name ..... : Shenzhen qiuyu Electronic Co.,Ltd

Address ..... : F3, E Building, Hongzhuyongqi Technolgy Park, Lezhujiao village, Xixiang town, Bao'an district, Shenzhen, China

Manufacturer's name ..... : Shenzhen qiuyu Electronic Co.,Ltd

Address ..... : F3, E Building, Hongzhuyongqi Technolgy Park, Lezhujiao village, Xixiang town, Bao'an district, Shenzhen, China

Test specification:

Standard..... : FCC CFR Title 47 Part 15 Subpart C Section 15.225  
ANSI C63.10:2013

Test procedure..... : /

Non-standard test method ..... : N/A

Test Report Form No..... : TRF-EL-112\_V0

Test Report Form(s) Originator..... : ZKT Testing

Master TRF ..... : Dated: 2020-01-06

This device described above has been tested by ZKT, and 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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Product name..... : 8 Inch Hotel Tablet PC

Trademark ..... : N/A

Model/Type reference..... : SP8 QM808

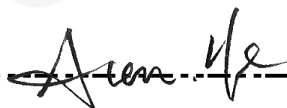
Ratings..... : Input: DC 5V or Battery DC 3.8V

**Testing procedure and testing location:**


**Testing Laboratory**.....: **Shenzhen ZKT Technology Co., Ltd.**

**Address**.....: 1/F, No. 101, Building B, No. 6, Tangwei Community  
Industrial Avenue, Fuhai Street, Bao'an District,  
Shenzhen, China

**Tested by (name + signature)**.....: Alen He



**Reviewer (name + signature)**.....: Joe Liu



**Approved (name + signature)**.....: Lake Xie



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## 1.VERSION

Report No.	Version	Description	Approved
ZKT-220812L5694E-1	Rev.01	Initial issue of report	Aug.22, 2022

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.225) , Subpart C			
Standard Section	Test Item	Judgment	Remark
FCC part 15.203	Antenna requirement	PASS	
FCC part 15.207	AC Power Line Conducted Emission	PASS	
FCC part 15.225(a)(b)(c)(d)	Fundamental & Radiated Spurious Emission Measurement	PASS	
FCC part 15.215	Channel Bandwidth	PASS	
FCC part 15.225(e)	Frequency Tolerance	PASS	

NOTE:

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

## 2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.

Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225

Designation Number: CN1299

IC Registered No.: 27033

## 2.2 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	$\pm 1.38\text{dB}$
2	RF power conducted	$\pm 0.16\text{dB}$
3	Spurious emissions conducted	$\pm 0.21\text{dB}$
4	All emissions radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Product Name:	8 Inch Hotel Tablet PC
Model No.:	SP8 QM808
Model Different.:	N/A
Serial No.:	N/A
Sample(s) Status:	Engineer sample
Operation Frequency:	13.56MHz
Channel Numbers:	1
Channel Separation:	N/A
Modulation Type:	ASK
Antenna Type:	Loop Antenna
Power supply:	Input: DC 5V or Battery DC 3.8V
SWITCHING POWER ADAPTER:	N/A



### 3.2 DESCRIPTION OF TEST MODES

Transmitting mode	Keep the EUT in continuously transmitting NFC mode
Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

### 3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Emission



Conducted Spurious



### 3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	8 Inch Hotel Tablet PC	N/A	SP8 QM808	N/A	EUT
A-1	Switching Adpter	N/A	PS18C050K3000ED	N/A	Auxiliary
A-2	Charging base	N/A	DV6	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

### 3.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

#### Radiation Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	9020A	MY45109572	Sep. 22, 2021	Sep. 21, 2022
2	Spectrum Analyzer (1GHz-40GHz)	Agilent	E4446A	100363	Sep. 22, 2021	Sep. 21, 2022
3	Test Receiver (9kHz-7GHz)	R&S	ESCI7	101169	Sep. 22, 2021	Sep. 21, 2022
4	Bilog Antenna (30MHz-1400MHz)	Schwarzbeck	VULB9168	00877	Sep. 22, 2021	Sep. 21, 2022
5	Horn Antenna (1GHz-18GHz)	SCHWARZBEC K	BBHA9120D	1541	Sep. 22, 2021	Sep. 21, 2022
6	Horn Antenna (18GHz-40GHz)	A.H. System	SAS-574	588	Sep. 22, 2021	Sep. 21, 2022
7	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	N/A	Sep. 22, 2021	Sep. 21, 2022
8	Amplifier (1GHz-40GHz)	全聚达	DLE-161	097	Sep. 22, 2021	Sep. 21, 2022
9	Loop Antenna (9kHz-30MHz)	SCHWARZBEC K	FMZB1519B	014	Sep. 22, 2021	Sep. 21, 2022
10	RF cables1 (9kHz-30MHz)	N/A	9kHz-30MHz	N/A	Sep. 22, 2021	Sep. 21, 2022
11	RF cables2 (30MHz-1GHz)	N/A	30MHz-1GHz	N/A	Sep. 22, 2021	Sep. 21, 2022
12	RF cables3 (1GHz-40GHz)	N/A	1GHz-40GHz	N/A	Sep. 22, 2021	Sep. 21, 2022
13	CMW500 Test	R&S	CMW500	106504	Sep. 22, 2021	Sep. 21, 2022
14	ESG Signal Generator	Agilent	E4421B	GB40051203	Sep. 22, 2021	Sep. 21, 2022
15	Signal Generator	Agilent	N5182A	MY47420215	Sep. 22, 2021	Sep. 21, 2022
16	D.C. Power Supply	LongWei	TPR-6405D	\	\	\
17	MWRF Power Meter Test system	MW	MW100-RPCB	\	Sep. 22, 2021	Sep. 21, 2022
17	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\
18	RF Software	MW	MTS8310	V2.0.0.0	\	\
19	Turntable	MF	MF-7802BS	\	\	\
20	Antenna tower	MF	MF-7802BS	\	\	\

#### Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	N/A	Sep. 22, 2021	Sep. 21, 2022
2	LISN	CYBERTEK	EM5040A	N/A	Sep. 22, 2021	Sep. 21, 2022
3	Test Cable	N/A	C01	N/A	Sep. 22, 2021	Sep. 21, 2022
4	Test Cable	N/A	C02	N/A	Sep. 22, 2021	Sep. 21, 2022
5	EMI Test Receiver	R&S	ESCI3	101421	Sep. 22, 2021	Sep. 21, 2022
6	Triple-Loop Antenna	LAPLACE	RF300	9194	Sep. 22, 2021	Sep. 21, 2022
7	Absorbing Clamp	DZ	ZN23201	N/A	Sep. 22, 2021	Sep. 21, 2022
8	EMC Software	Frad	EZ-EMC	Ver.EMC-CO N 3A1.1	\	\

#### 4. EMC EMISSION TEST

##### 4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

##### 4.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quas-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) \*Decreases with the logarithm of the frequency.

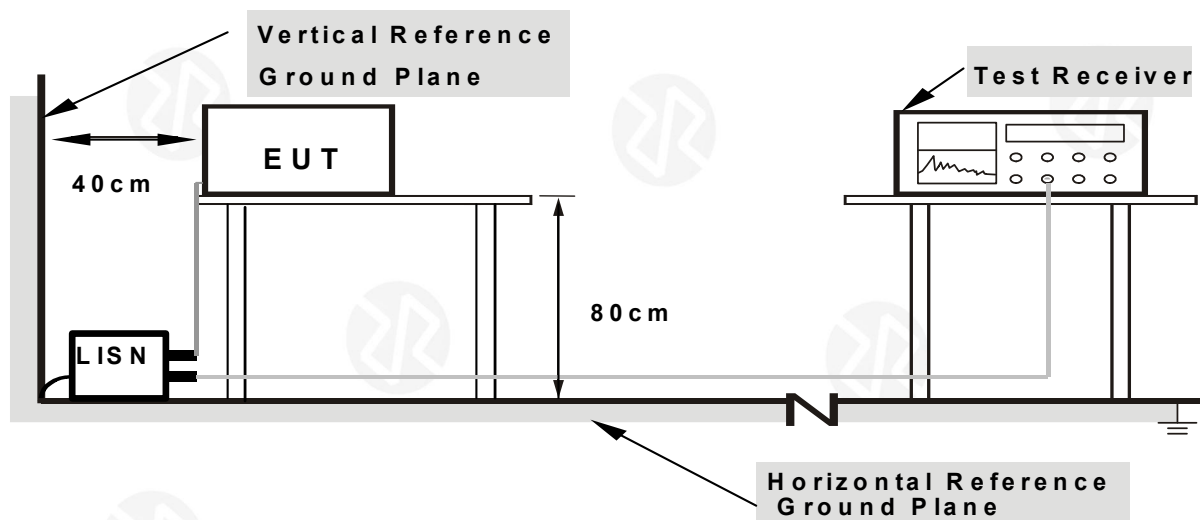
##### 4.1.2 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal 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.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

##### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.4 TEST SETUP



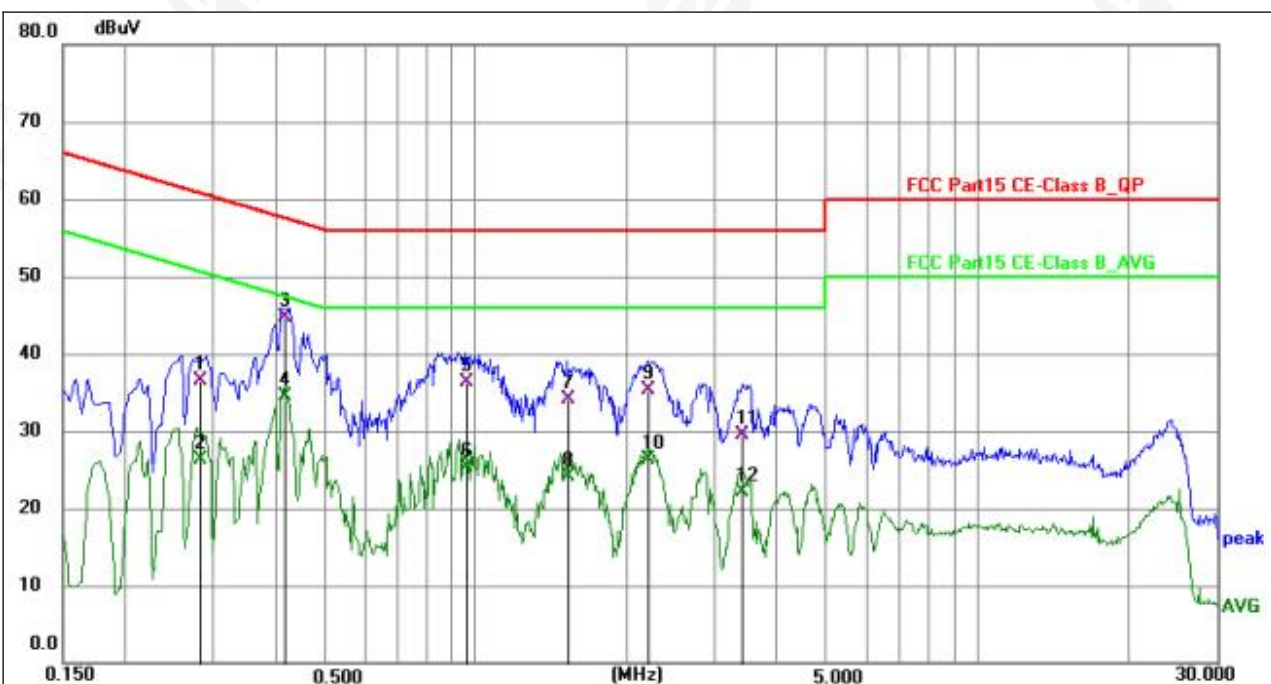
**Note:** 1.Support units were connected to second LISN.  
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

#### 4.1.5 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.

#### 4.1.6 TEST RESULTS

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Phase :	L
Test Voltage :	AC 120V/60Hz		



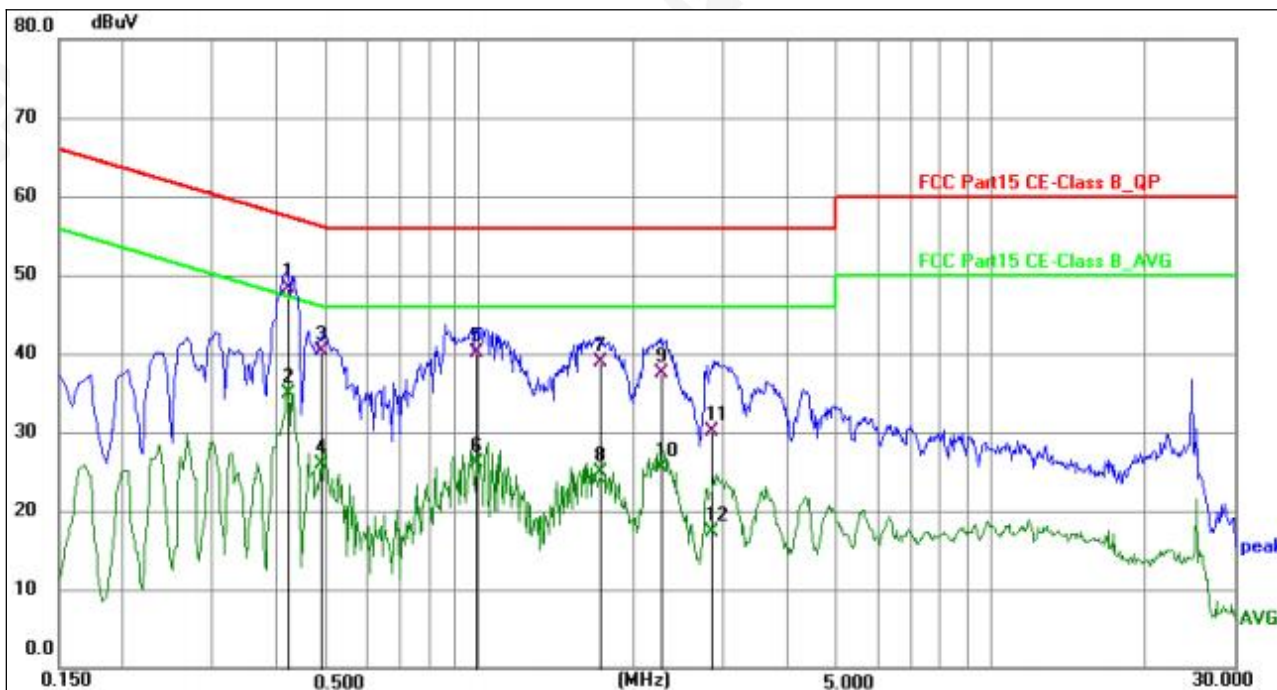
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2830	26.75	9.68	36.43	60.73	-24.30	QP	P	
2	0.2830	16.57	9.68	26.25	50.73	-24.48	AVG	P	
3 *	0.4189	35.05	9.64	44.69	57.47	-12.78	QP	P	
4	0.4189	24.96	9.64	34.60	47.47	-12.87	AVG	P	
5	0.9627	26.83	9.54	36.37	56.00	-19.63	QP	P	
6	0.9627	15.73	9.54	25.27	46.00	-20.73	AVG	P	
7	1.5315	24.51	9.63	34.14	56.00	-21.86	QP	P	
8	1.5315	14.46	9.63	24.09	46.00	-21.91	AVG	P	
9	2.2237	25.57	9.70	35.27	56.00	-20.73	QP	P	
10	2.2237	16.55	9.70	26.25	46.00	-19.75	AVG	P	
11	3.4091	19.84	9.59	29.43	56.00	-26.57	QP	P	
12	3.4091	12.49	9.59	22.08	46.00	-23.92	AVG	P	

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Measurement Level = Reading level + Correct Factor



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Phase :	N
Test Voltage :	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.4213	38.76	9.64	48.40	57.42	-9.02	QP	P	
2	0.4213	25.22	9.64	34.86	47.42	-12.56	AVG	P	
3	0.4909	30.64	9.61	40.25	56.15	-15.90	QP	P	
4	0.4909	16.23	9.61	25.84	46.15	-20.31	AVG	P	
5	0.9887	30.67	9.53	40.20	56.00	-15.80	QP	P	
6	0.9887	16.62	9.53	26.15	46.00	-19.85	AVG	P	
7	1.7292	29.23	9.67	38.90	56.00	-17.10	QP	P	
8	1.7292	15.29	9.67	24.96	46.00	-21.04	AVG	P	
9	2.2652	27.75	9.69	37.44	56.00	-18.56	QP	P	
10	2.2652	15.73	9.69	25.42	46.00	-20.58	AVG	P	
11	2.8494	20.53	9.64	30.17	56.00	-25.83	QP	P	
12	2.8494	7.59	9.64	17.23	46.00	-28.77	AVG	P	

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Measurement Level = Reading level + Correct Factor

## 4.2 RADIATED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 1GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average

### 4.2.1 RADIATED EMISSION LIMITS

Frequencies (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	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Field Strength of Fundamental Limit:

- The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters. 15,848 microvolts/meter at 3 meters=124 dBuV/m.
- Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters. 334 microvolts/meter at 3 meters=90.47 dBuV/m.
- Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters. 106 microvolts/meter at 3 meters=80.51 dBuV/m.
- The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

### 4.2.2 TEST PROCEDURE

- The measuring distance of at 3 m shall be used for measurements at frequency up to 25GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-chamber test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8m; above 1GHz, the height was 1.5m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

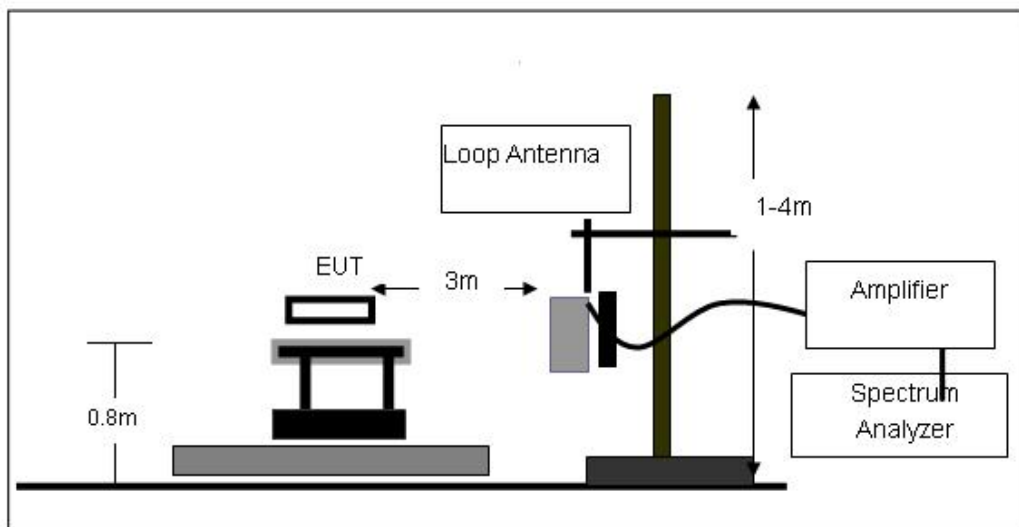
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi 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.
- g. For the radiated emission test above 1GHz:  
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.  
The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.  
Note:  
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

#### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

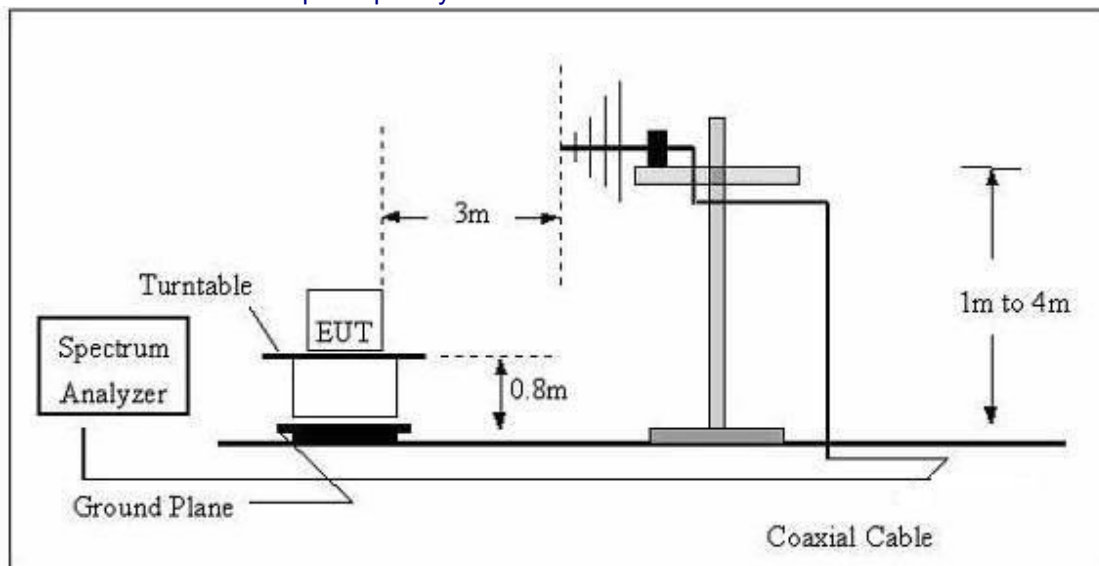
#### 4.2.4 TEST SETUP

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

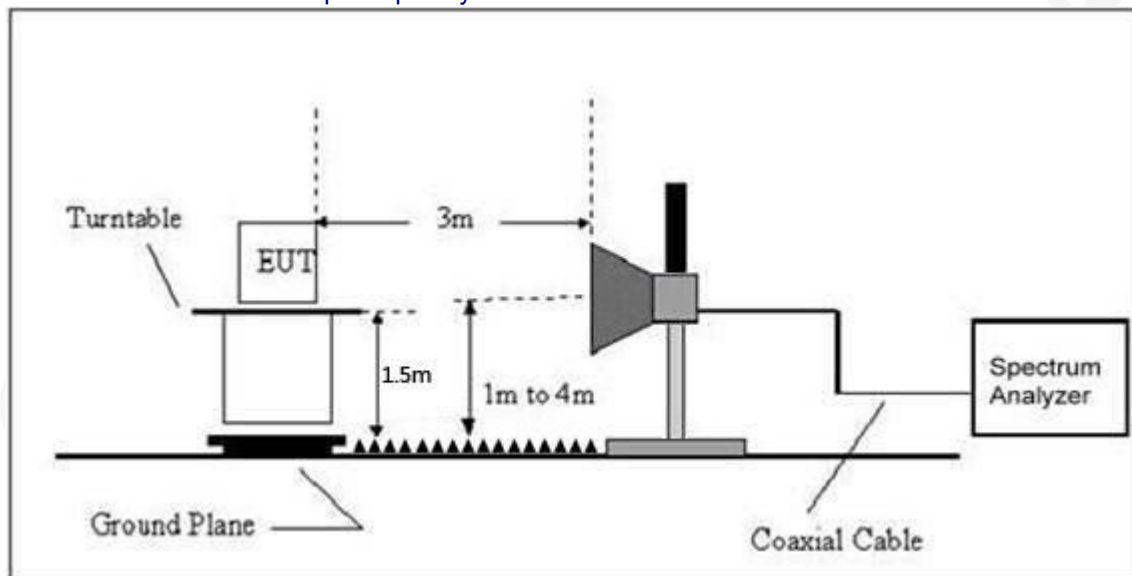




(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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



#### 4.2.5 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.

#### 4.2.6 TEST RESULTS

##### Field Strength of Fundamental

Frequency (MHz)	Reading (dBuV/m)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar (X/Y/ Z)	Detector
13.16	53.60	15.82	68.98	80.51	-11.53	X	QP
13.16	43.93	15.82	59.75	80.51	-20.76	Y	QP
13.16	49.51	15.82	65.33	80.51	-15.18	Z	QP
13.553	51.56	15.61	67.17	90.47	-23.3	X	QP
13.553	43.50	15.61	59.11	90.47	-31.36	Y	QP
13.553	46.26	15.61	61.87	90.47	-28.60	Z	QP
13.56	100.23	12.33	112.56	124.00	-11.44	X	Peak
13.56	101.23	12.33	113.56	124.00	-10.44	Y	Peak
13.56	101.03	12.33	113.36	124.00	-10.64	Z	Peak
13.568	54.39	12.33	66.72	90.47	-23.75	X	QP
13.568	43.13	12.33	56.46	90.47	-35.01	Y	QP
13.568	52.11	12.33	64.44	90.47	-36.03	Z	QP
13.711	50.70	15.82	66.52	80.51	-13.99	X	QP
13.711	43.30	15.82	59.12	80.51	-21.39	Y	QP
13.711	43.34	15.82	59.16	80.51	-21.35	Z	QP

Between 9KHz – 30 MHz

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80

Limit dBuV/m @3m = Limit dBuV/m @30m + 40

9 kHz~30 MHz

Frequency (MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
	dBμV @3m	PK/QP	dB/m	dB	dBμV/m @300m	dBμV/m @300m	dB
0.120	39.63	QP	20.74	80.00	-19.63	25.33	-44.96
3.620	21.98	QP	20.20	40.00	2.18	29.54	-27.36
10.340	22.54	QP	19.90	40.00	2.44	29.54	-27.10

Note:

Pre-scan in the all of mode, the worst case in of was recorded(The antenna Polar is X).

Factor = antenna factor + cable loss – pre-amplifier.

Margin = Emission Level- Limit.

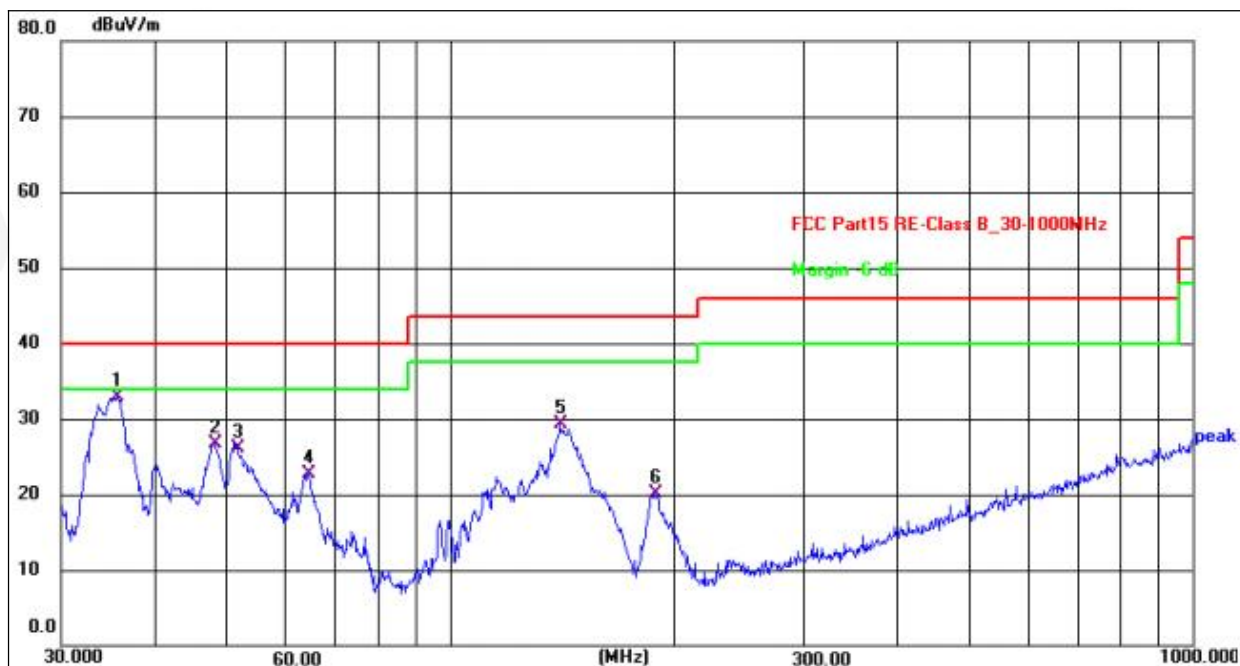
Between 30MHz – 1GHz

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	35.7490	35.04	-16.33	18.71	40.00	-21.29	QP
2	48.1625	32.52	-16.37	16.15	40.00	-23.85	QP
3	119.8556	36.82	-18.17	18.65	43.50	-24.85	QP
4	140.3420	37.35	-16.78	20.57	43.50	-22.93	QP
5	195.1363	38.22	-18.90	19.32	43.50	-24.18	QP
6	390.7225	35.73	-13.55	22.18	46.00	-23.82	QP

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	35.7490	49.33	-16.33	33.00	40.00	-7.00	QP
2	48.3318	43.02	-16.40	26.62	40.00	-13.38	QP
3	51.8430	42.83	-16.76	26.07	40.00	-13.93	QP
4	64.6594	40.46	-17.69	22.77	40.00	-17.23	QP
5	140.8351	46.05	-16.72	29.33	43.50	-14.17	QP
6	189.0743	38.84	-18.66	20.18	43.50	-23.32	QP

Remarks:

- 1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2.The emission levels of other frequencies are very lower than the limit and not show in test report.



## 5. FREQUENCY TOLERANCE

Test Requirement:	FCC Part15 C Section 15.225(e)
Test Method:	ANSI C63.10:2013

### 5.1 LIMIT

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of  $-20$  degrees to  $+ 50$  degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

Limit:  $\pm 0.01\%$  of 13.56MHz= $\pm 1356$ Hz

### 5.2 TEST PROCEDURE

1. Set RBW = 10 kHz.
2. Set the video bandwidth (VBW)  $\geq$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. The transmitter output (antenna port) was connected to the spectrum analyzer.

### 5.3 DEVIATION FROM TEST STANDARD

No deviation

### 5.4 TEST SETUP



### 5.5 TEST RESULT

Test Conditions			Frequency Deviation		Limit
Frequency MHz	Power(Vdc)	Temperature (°C)	Measured Freq. (MHz)	Deviation (%)	
13.56	Normal	-20	13.5601	0.0007	$\pm 0.01\%$
	Normal	-10	13.5601	0.0007	
	Normal	0	13.5600	0.0000	
	Normal	10	13.5603	0.0022	
	Normal	20	13.5603	0.0022	
	Normal	30	13.5601	0.0007	
	Normal	40	13.5603	0.0022	
	Normal	50	13.5601	0.0007	
	Normal*85%	20	13.5601	0.0007	
	Normal *115%	20	13.5601	0.0007	

## 6. CHANNEL BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.215
Test Method:	ANSI C63.10: 2013

### 6.1 APPLIED PROCEDURES / LIMIT

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 20dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equip compliance with the 20dB attenuation specification may base on measurement at the intentional radiator's antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated emissions.

### 6.2 TEST PROCEDURE

1. Set RBW = 1 kHz.
2. Set the video bandwidth (VBW)  $\geq$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



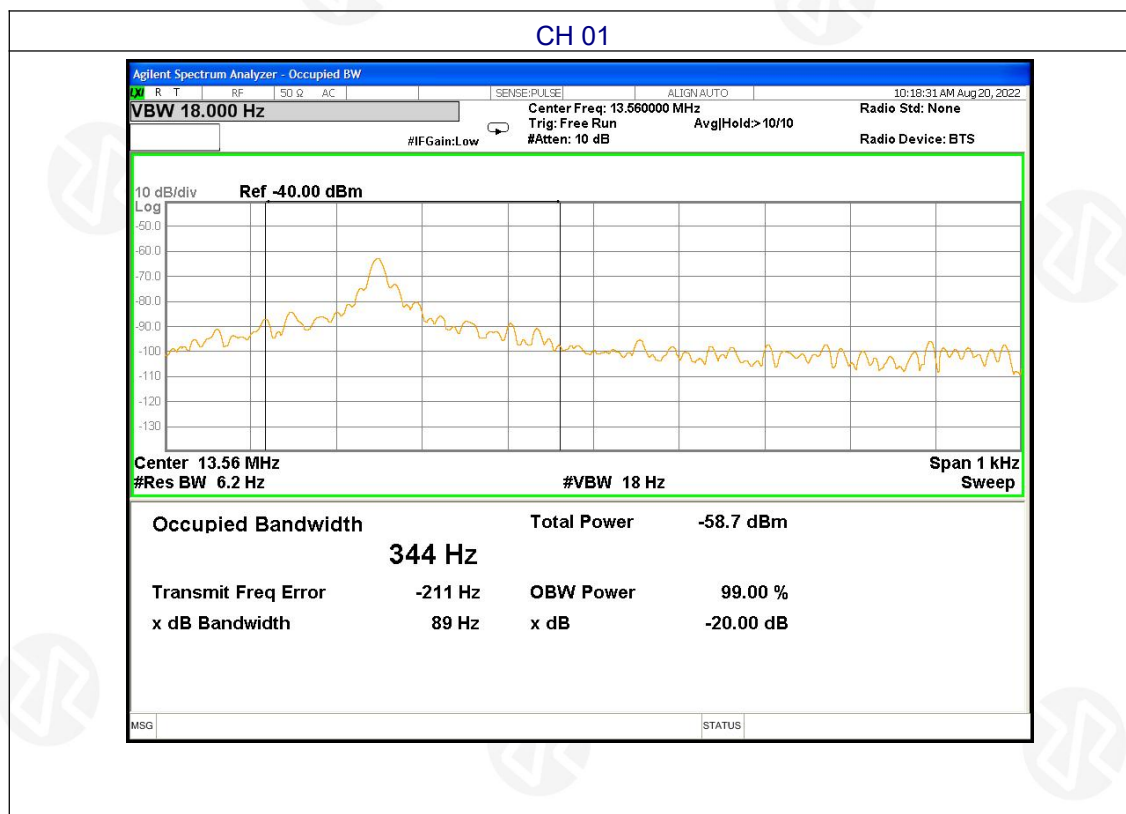
### 6.5 EUT OPERATION CONDITIONS

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

## 6.6 TEST RESULT

Temperature :	26°C	Relative Humidity :	54%
Test Mode :	ASK	Test Voltage :	DC 5V

Test channel	20dB Channel Bandwidth (KHz)	Result
1	0.089	Pass





## 7.ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: 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, 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.	
EUT Antenna:	
The antennas is Loop Antenna, reference to the appendix II for details	

## 8. TEST SETUP PHOTO

Reference to the appendix I for details.

## 9. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

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