

APPLICATION FOR VERIFICATION On Behalf of Guangzhou Havit Technology Co., LTD.

Wireless charger Model No.: GT-Y414, VWC-002-DS-6, HV-W68, HV-W68A, W3009, W3010, W3008, W3011

FCC ID: 2AI6IVWC002DS6

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Report No. Date of Test Date of Report	:	RDG201028100-00 Nov. 23-Dec. 04, 2020 Dec. 04, 2020



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Test Report Declaration

Applicant	:	Guangzhou Havit Technology Co., LTD.
Address	:	ROOM 1307, 13F, PHASE 2 B,C BUILDING OF POLY WORLD
		TRADE CENTER, NO. 1000, XINGANG EAST ROAD, HAIZHU
		510000, GUANGDONG China
Manufacturer	:	Guangzhou Havit Technology Co., LTD.
Address	:	ROOM 1307, 13F, PHASE 2 B,C BUILDING OF POLY WORLD
		TRADE CENTER, NO. 1000, XINGANG EAST ROAD, HAIZHU
		510000, GUANGDONG China
Product	:	Wireless charger
Model No.	:	GT-Y414, VWC-002-DS-6, HV-W68, HV-W68A, W3009, W3010,
		W3008, W3011
		(Note: These samples are same except model name and appearance color. So we prepare GT-Y414 for test only.)
Trade name	:	n.a.
	•	

Measurement Procedure Used:

FCC CFR47 Part 15 Subpart C Section 15.207 and 15.209 ANSI C63.10: 2013

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : Date of Report : Nov. 23-Dec. 04, 2020 Dec. 04, 2020

BobWarg

Prepared by :

(Bob Wang, Engineer)

Candy . Li

Approved & Authorized Signer :

(Candy Li, RF Engineer)



1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15.207	Pass
Radiated Emission	FCC Part 15.209	Pass



2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name	:	Wireless charger
Frequency	:	110-205kHz
Modulation Type	:	ASK
Type of Antenna	:	Coil Antenna
Rating	:	Input: DC 5V/2A; DC 9V/2A; DC 12V/1.67A Output: DC 5V/1A; DC 9V/0.83A; DC 9V/1.12A; DC 9V/1.67A
Antenna Gain	:	0dBi

2.2. Special Accessory and Auxiliary Equipment

Manufact urer	Description	Model	Serial Number	
Unknown	Wireless Load	Unknown	WirelessLoad01	
Adapter	Input: AC 120-24V; 50/60Hz Output: DC 5V/3A; DC 9V/2A; DC 12V/2A	HNFCQC3024UU	Unknown	



2.3.Description of Test Facility

EMC Lab :		Recognition of accreditation by Federal Communications Commission (FCC) The Designation Number is CN1189 The Registration Number is 708358
		Canada (ISEDC) The Registration Number is 5077A-2
		Accredited by China National Accreditation Service for Conformity Assessment (CNAS) The Registration Number is CNAS L3193
		Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01
Name of Firm Site Location	:	Shenzhen Accurate Technology Co., Ltd 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

2.4. Measurement Uncertainty

Conducted emission expanded uncertainty	:	U=2.72dB, k=2
(Mains ports, 9kHz-30MHz)		
Radiated emission expanded uncertainty	:	U=2.66dB, k=2
(9kHz-30MHz)		
Radiated emission expanded uncertainty	:	U=4.28dB, k=2
(30MHz-1000MHz)		



3. MEASURING DEVICE AND TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.			
						Interval			
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan.04, 2020	1 Year			
2.	L.I.S.N.	Schwarzbeck	NSLK8126	8126431	Jan.04, 2020	1 Year			
3.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan.04, 2020	1 Year			
4.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	Jan.04, 2020	1 Year			
5	RF Coaxial Cable	Schwarzbeck	N-2m	No.2	Jan. 04, 2020	1 Year			
Cond	Conducted Emission Measurement Software: ES-K1 V1.71								

Conducted Emissions Test/ RF Conducted Test

Radiated Emissions Test

Kind of	Manufacturer	Туре	S/N	Calibrated	Calibrated	
equipment				dates	until	
Test Receiver	Rohde&Schwarz	ESR	101817	Jan. 04, 2020	Jan. 03, 2021	
Pre-Amplifier	Agilent	8447D	294A10619	Jan. 04, 2020	Jan. 03, 2021	
LOOP	SCHWARZBECK	FMZB1516	1516131	Jan. 05, 2020	Jan. 04, 2021	
ANTENNA						
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 05, 2020	Jan. 04, 2021	
RF Coaxial	Schwarzbeck	N-5m	No.1	Jan. 04, 2020	Jan. 03, 2021	
Cable						
RF Coaxial	Schwarzbeck	N-1m	No.6	Jan. 04, 2020	Jan. 03, 2021	
Cable						
RF Coaxial	SUHNER	N-6m	No.10	Jan. 04, 2020	Jan. 03, 2021	
Cable						
RF Coaxial	SUHNER	N-0.5m	No.15	Jan. 04, 2020	Jan. 03, 2021	
Cable						
Radiated Test Software: EZ_EMC V1.1.4.2						

* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).



4. POWER LINE CONDUCTED MEASUREMENT

4.1.Block Diagram of Test Setup



4.2. Power Line Conducted Emission Measurement Limits

Frequency	Limit dB(µV)					
(MHz)	Quasi-peak Level	Average Level				
0.15 - 0.50	66.0 - 56.0 *	56.0 - 46.0 *				
0.50 - 5.00	56.0	46.0				
5.00 - 30.00	60.0	50.0				
NOTE1: The lower limit shall	ll apply at the transition freque	ncies.				
NOTE2: The limit decreases	linearly with the logarithm of	the frequency in the range				
0.15MHz to 0.50M	Hz.					

4.3.Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.4.Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

- 4.4.2. Turn on the power of all equipment.
- 4.4.3. Let the EUT work in test mode and measure it.



4.5.Test Procedure

The EUT is put on the plane 0.1 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 500hm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement. The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

4.6.Data Sample

Freque	QuasiP	Averag	Transd	QuasiPe	Averag	QuasiP	Averag	QuasiPe	Average	Remark
ncy	eak	e	ucer	ak	e	eak	e	ak	Margin	(Pass/Fail)
(MHz)	Level	Level	value	Result	Result	Limit	Limit	Margin	(dB)	
	(dBµv)	(dBµv)	(dB)	(dBµv)	(dBµv)	(dBµv)	(dBµv)	(dB)		
X.XX	29.4	18.3	11.1	40.5	29.4	56.0	56.0	15.5	16.6	Pass

Transducer value = Insertion loss of LISN + Cable Loss Result = Quasi-peak Level/Average Level + Transducer value Limit = Limit stated in standard

Calculation Formula:

Margin = Limit – Reading level value – Transducer value

4.7. Power Line Conducted Emission Measurement Results

PASS.

Test Lab: Shielding room

The frequency range from 150kHz to 30MHz is checked.

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

The spectral diagrams are attached as below.





MEASUREMENT RESULT: "B-1124-10 fin"

11/24/2	020 11:	11AM						
Freq	uency	Level	Transd	Limit	Margin	Detector	Line	ΡE
	MHz	dBµV	dB	dBµV	dB			
0.2	05000	42.60	10.4	63	20.8	QP	L1	GND
0.7	35000	45.20	10.5	56	10.8	QP	L1	GND
1.6	15000	46.40	10.6	56	9.6	QP	L1	GND
2.7	90000	44.90	10.7	56	11.1	QP	L1	GND
6.7	60000	43.60	10.8	60	16.4	QP	L1	GND
17.7	85000	44.70	10.9	60	15.3	QP	L1	GND

MEASUREMENT RESULT: "B-1124-10 fin2"

11,	/24/2020 11	:11AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	ΡE
	MHz	dBµV	dB	dBµV	dB			
				'				
	0.270000	32.00	10.4	51	19.1	AV	L1	GND
	0.735000	41.90	10.5	46	4.1	AV	L1	GND
	1.615000	43.50	10.6	46	2.5	AV	L1	GND
	2.790000	42.00	10.7	46	4.0	AV	L1	GND
	6.760000	41.60	10.8	50	8.4	AV	L1	GND
	18.670000	42.00	10.9	50	8.0	AV	L1	GND





MEASUREMENT RESULT: "B-1124-9 fin"

Frequency Level Transd Limit Margin De MHz dBµV dB dBµV dB	
MHz dBµV dB dBµV dB	tector Line PE
0.265000 39.50 10.4 61 21.8 QP	N GND
0.735000 48.90 10.5 56 7.1 QP	N GND
1.615000 50.30 10.6 56 5.7 QP	N GND
2.790000 49.30 10.7 56 6.7 QP	N GND
7.640000 47.40 10.8 60 12.6 QP	N GND
16.750000 44.40 10.9 60 15.6 QP	N GND

MEASUREMENT RESULT: "B-1124-9_fin2"

11/24/2020 13 Frequency MHz	1:06AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.735000	44.40	10.5	46	1.6	AV	Ν	GND
1.615000	45.90	10.6	46	0.1	AV	Ν	GND
2.790000	44.80	10.7	46	1.2	AV	Ν	GND
7.640000	43.90	10.8	50	6.1	AV	Ν	GND
17.485000	37.80	10.9	50	12.2	AV	Ν	GND



Mode 2: Input: DC 9V/1.67A



MEASUREMENT RESULT: "B-1124-7 fin"

11/24/2020 10:56AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.165000 0.545000 1.960000	47.70 42.90 38.40	10.4 10.5 10.6	65 56 56	17.5 13.1 17.6	QP QP QP	L1 L1 L1	GND GND GND
4.550000	40.80	10.7	56	15.2	QP	L1	GND
8.850000	45.00	10.8	60	15.0	QP	L1	GND
17.695000	43.50	10.9	60	16.5	QP	L1	GND

MEASUREMENT RESULT: "B-1124-7 fin2"

11/	24/2020 1	0:56AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	\mathbf{PE}
	MHz	dBµV	dB	dBµV	dB			
	0.160000	33.60	10.4	56	21.9	AV	L1	GND
	0.630000	30.00	10.5	46	16.0	AV	L1	GND
	2.020000	32.70	10.6	46	13.3	AV	L1	GND
	4.550000	38.70	10.7	46	7.3	AV	L1	GND
	8.850000	43.20	10.8	50	6.8	AV	L1	GND
	18.205000	42.10	10.9	50	7.9	AV	L1	GND





MEASUREMENT RESULT: "B-1124-8_fin"

11/24/2020 13 Frequency MHz	1:00AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.165000 0.525000 1.640000 2.280000 8.850000 17.950000	47.90 43.90 42.60 42.00 47.30 45.20	10.4 10.5 10.6 10.7 10.8 10.9	65 56 56 60 60	17.3 12.1 13.4 14.0 12.7 14.8	QP QP QP QP QP QP	N N N N N	GND GND GND GND GND GND

MEASUREMENT RESULT: "B-1124-8 fin2"

11	/24/2020	11:00AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dBµV	dB			
	0.160000	32.50	10.4	56	23.0	AV	Ν	GND
	0.630000	31.30	10.5	46	14.7	AV	Ν	GND
	1.770000	34.20	10.6	46	11.8	AV	Ν	GND
	4.550000	39.70	10.7	46	6.3	AV	Ν	GND
	8.850000	44.00	10.8	50	6.0	AV	Ν	GND
	18.205000	42.30	10.9	50	7.7	AV	Ν	GND





MEASUREMENT RESULT: "B-1124-11 fin"

11/24/2020 11:15AM Frequency Level Transd Limit Margin Detector Line MHz dBµV dB dBµV dB

	MHz	dBµV	dB	dBµV	dB			
	0.155000	45.80	10.4	66	19.9	QP	L1	GND
	0.545000	37.00	10.5	56	19.0	QP	L1	GND
	1.860000	37.70	10.6	56	18.3	QP	L1	GND
	2.330000	36.30	10.7	56	19.7	QP	L1	GND
	9.270000	30.40	10.8	60	29.6	QP	L1	GND
1	7.560000	41.40	10.9	60	18.6	QP	L1	GND

MEASUREMENT RESULT: "B-1124-11 fin2"

11/24/2020 Frequency MHz	11:15AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.345000	27.80	10.5	49	21.3	AV	L1	GND
0.810000	27.30	10.6	46	18.7	AV	L1	GND
1.510000	31.90	10.6	46	14.1	AV	L1	GND
4.650000	37.70	10.7	46	8.3	AV	L1	GND
9.270000	20.40	10.8	50	29.6	AV	L1	GND
17.560000	34.50	10.9	50	15.5	AV	L1	GND

PE





MEASUREMENT RESULT: "B-1124-12 fin"

11/24/2020 11:19AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.350000	42.30	10.5	59	16.7	OP	Ν	GND
0.555000	41.20	10.5	56	14.8	ÕP	Ν	GND
1.050000	40.20	10.6	56	15.8	ΏΡ	Ν	GND
4.900000	44.30	10.7	56	11.7	QP	Ν	GND
7.700000	46.00	10.8	60	14.0	QP	Ν	GND
16.390000	38.30	10.9	60	21.7	QP	Ν	GND

MEASUREMENT RESULT: "B-1124-12 fin2"

11/24/2020 1	1:19AM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.350000	30.00	10.5	49	19.0	AV	Ν	GND
0.815000	31.00	10.6	46	15.0	AV	Ν	GND
1.050000	31.80	10.6	46	14.2	AV	Ν	GND
4.900000	38.40	10.7	46	7.6	AV	Ν	GND
9.300000	31.10	10.8	50	18.9	AV	Ν	GND
16.390000	30.20	10.9	50	19.8	AV	Ν	GND



5. RADIATED EMISSION MEASUREMENT

5.1.Block Diagram of Test

5.1.1.Block diagram of connection between the EUT and simulators

AC Mains



(EUT: Wireless charger)

5.1.2.Block diagram of test setup (In chamber)



(B)Radiated Emission Test Set-Up, Frequency 30-1000MHz





Frequency	Field Streng Limitation	gth I	Field Strength Limitation at 3m Measurement Dist			
	(uV/m)	Dist	(uV/m)	(dBuV/m)		
0.009 - 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80		
0.490 - 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40		
1.705 – 30.00	30	30m	100* 30	20log 30 + 40		
30.0 - 88.0	100	3m	100	20log 100		
88.0 - 216.0	150	3m	150	20log 150		
216.0 - 960.0	200	3m	200	20log 200		
Above 960.0	500	3m	500	20log 500		

5.2.Radiated Emission Limit {FCC part 15.209(a)}

For Example:

Limit: 2400/125=19.2uV/m@300m

Distance Correction Factor=40log(test distance/specific distance)

5.3.EUT Configuration on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1.Wireless charger (EUT)

Model Number : GT-Y414 Manufacturer : Guangzhou Havit Technology Co., LTD.

5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

- 5.4.2. Turn on the power of all equipment.
- 5.4.3. Let the EUT work in test mode and measure it.



5.5.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. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. 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 C63.10: 2013 on radiated emission measurement.

From 9kHz to 30MHz at distance 3m The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

From 30MHz to 1000MHz at distance 3m The measuring antenna height varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.

The final measurement will be performed with an EMI Receiver set to Quasi Peak detector for the frequency bands 9kHz to 90kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209(d)(2).

The final level, expressed in dBuV/m, is arrived at by taking the reading from the EMI receiver(Level dBuV) and adding the antenna correction factor and cable loss factor(Factor dB) to it. This result then has to be compared with the relevant FCC limit.The resolution bandwidth during the measurement is as follows: 9kHz - 150kHz: ResBW:200Hz 150kHz - 30MHz: ResBW:9kHz

The bandwidth of the EMI test receiver is set at 120kHz from 30MHz to 1000MHz.



5.6.Data Sample

Frequency(Reading	Factor	Result	Limit	Margin	Remark
MHz)	(dBµv)	(dB/m)	(dBµv/m)	(dBµv/m)	(dB)	
X.XX	49.83	-22.03	27.80	43.50	-15.70	QP

$$\label{eq:requency} \begin{split} & \text{Frequency}(\text{MHz}) = \text{Emission frequency in MHz} \\ & \text{Reading}(\text{dB}\mu\nu) = \text{Uncorrected Analyzer/Receiver reading} \\ & \text{Factor (dB/m)} = \text{Antenna factor + Cable Loss - Amplifier gain} \\ & \text{Result}(\text{dB}\mu\nu/\text{m}) = \text{Reading + Factor} \\ & \text{Limit (dB}\mu\nu/\text{m}) = \text{Limit stated in standard} \end{split}$$

Margin (dB) = Result(dB μ v/m) - Limit (dB μ v/m) Calculation Formula:

 $Margin(dB) = Result (dB\mu v/m)-Limit(dB\mu v/m)$ $Result(dB\mu v/m)=Reading(dB\mu v)+Factor(dB/m)$

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.



5.7.Radiated Emission Measurement Result

PASS.

Test Lab: 3m Anechoic chamber

We pretest all the mode and worst case (X) was recorded in the report.





MEASUREMENT RESULT: "12321L1_fin"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
0.115600	67.50	20.1	106.3	38.8	QP	105.0	0.00	х
0.495000	39.70	20.3	73.7	34.0	QP	105.0	0.00	Х
0.575000	48.70	20.3	72.4	23.7	QP	105.0	0.00	Х
1.665000	34.50	20.4	63.2	28.7	QP	105.0	0.00	Х
3.580000	33.50	20.5	69.5	36.0	QP	105.0	0.00	Х
11.910000	45.90	20.8	69.5	23.6	QP	105.0	0.00	Х
15.165000	48.40	21.1	69.5	21.1	OP	105.0	0.00	Х



MEASUREMENT RESULT: "12321L2_fin"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
0.116000	70.20	20.1	106.3	36.1	QP	105.0	0.00	х
0.350000	65.30	20.2	96.7	31.4	QP	105.0	0.00	Х
0.580000	57.70	20.3	72.3	14.6	QP	105.0	0.00	Х
1.275000	40.70	20.4	65.5	24.8	QP	105.0	0.00	Х
3.600000	36.70	20.5	69.5	32.8	QP	105.0	0.00	Х
11.945000	40.50	20.8	69.5	29.0	QP	105.0	0.00	Х
29.710000	45.90	21.9	69.5	23.6	QP	105.0	0.00	Х



Input: DC 12V/1.67A



MEASUREMENT RESULT: "12321L_fin"

2020-12-4 11:	:23							
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
0.114400	68.00	20.1	106.4	38.4	QP	105.0	0.00	Х
0.515000	38.50	20.3	73.4	34.9	QP	105.0	0.00	Х
0.800000	45.20	20.3	69.5	24.3	QP	105.0	0.00	Х
1.260000	40.70	20.4	65.6	24.9	QP	105.0	0.00	Х
3.685000	34.40	20.5	69.5	35.1	QP	105.0	0.00	Х
7.315000	56.00	20.6	69.5	13.5	QP	105.0	0.00	Х
18.895000	32.10	21.4	69.5	37.4	QP	105.0	0.00	Х

Part 15 Section 15.31(f)(2) (9kHz-30MHz) Limit at 3m=Limit at 300m-40*log(3(m)/300(m)) Limit at 3m=Limit at 30m-40*log(3(m)/30(m))



From 30MHz to 1000MHz Mode 1: Input: DC 5V/1A





Vertical





Mode 2: Input: DC 9V/1.67A



Vertical





Mode 3: Input: DC 12V/1.67A



Vertical



6. ANTENNA REQUIREMENT

6.1.The Requirement

According to 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.

6.2. Antenna Construction

Device is equipped with permanent attached coil antenna, which isn't displaced by other antenna. The max Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



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