



TEST REPORT

Report No:	CHTEW18120273 Report verification:				
Project No:	SHT1812002301EW				
FCC ID:	2ANR8-GM3T				
Applicant's name:	Shenzhen H&T Intelligent Control Co., Ltd.				
Address	D zone, 10/F, Shenzhen Academy of Aerospace Technology, Hi- Tech Park, South Zone, Shenzhen, China				
Manufacturer	Shenzhen H&T Intelligent Control Co., Ltd.				
Address	D zone, 10/F, Shenzhen Academy of Aerospace Technology, Hi- Tech Park, South Zone, Shenzhen, China				
Test item description:	Master Remote				
Trade Mark:					
Model/Type reference	GM3T				
Listed Model(s)	GM3TJ				
Standard:	FCC CFR Title 47 Part 15 Subpart C Section 15.231(a)				
Date of receipt of test sample	Dec.06,2018				
Date of testing	Dec.06,2018 ~ Dec.12,2018				
Date of issue	Dec.13,2018				
Result	PASS				
Compiled by (position+printed name+signature):	File administrators Yueming Li				
Supervised by (position+printed name+signature):	Project Engineer Jerry Zhao				
Approved by	RE Manager Hans Hu				
Testing Laboratory Name	Shenzhen Huatongwei International Inspection Co. Ltd				
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placement and context. The test report merely correspond to the test sample.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.231(a): Periodic operation in the band 40.66–40.70 MHz and above 70 MHz.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

1.2. Report version

Revision No.	Date of issue	Description		
N/A	2018-12-13	Original		

2. TEST DESCRIPTION

Test Item	Section in CFR 47	Result	Test Engineer
Antenna requirement	t 15.203		Xiaokang Tan
Conducted Emissions	15.207	N/A	N/A
Field Strength of the Fundamental	15.231(b)	Pass	Tony Duan
20dB Bandwidth	15.231(c)	Pass	Xiaokang Tan
Continue Transmission Time	15.231(a)	Pass	Xiaokang Tan
Radiated Emissions	15.209/15.231(b)	Pass	Michael Jie

Note: The measurement uncertainty is not included in the test result. N/A: Not applicable.

3. <u>SUMMARY</u>

3.1. Client Information

Applicant:	Shenzhen H&T Intelligent Control Co., Ltd.
Address:	D zone, 10/F, Shenzhen Academy of Aerospace Technology, Hi-Tech Park, South Zone, Shenzhen, China
Manufacturer:	Shenzhen H&T Intelligent Control Co., Ltd.
Address:	D zone, 10/F, Shenzhen Academy of Aerospace Technology, Hi-Tech Park, South Zone, Shenzhen, China

3.2. Product Description

Name of EUT:	Master Remote
Trade Mark:	-
Model No.:	GM3T
Listed Model(s):	GM3TJ
Power supply:	DC 3V from Battery
Adapter information:	-
Hardware version:	Rev A
Software version:	Ver 1.2.1
RF Specification	
Operation frequency:	315MHz & 390MHz
Channel number:	1
Modulation Type:	ООК

3.3. EUT operation mode

The EUT has been tested under typical operating condition. The Applicant provides software to control the EUT for staying in continous transmitting mode for testing.

3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

• - supplied by the manufacturer

supplied by the lab

/	Manufacturer :	/
	1	Model No. :
/	Manufacturer :	/
	7	Model No. :

3.5. Modifications

No modifications were implemented to meet testing criteria.

4. TEST ENVIRONMENT

4.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd. Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China Phone: 86-755-26748019 Fax: 86-755-26748089

4.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No. 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 762235.

IC-Registration No.: 5377B-1

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B-1.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

4.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics;Part 1" and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurement characteristics;Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.63 dB	(1)
Transmitter power Radiated	2.38 dB	(1)
Conducted spurious emissions 9kHz~40GHz	0.63 dB	(1)
Conducted Disturbance 150kHz~30MHz	3.35 dB	(1)
Radiated Emissions below 1GHz	4.28 dB	(1)
Radiated Emissions above 1GHz	5.16 dB	(1)
Occupied Bandwidth	18 Hz	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.5. Equipments Used during the Test

Conducted Emissions						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
1	EMI Test Receiver	R&S	ESCI	101247	10/27/2018	10/26/2019
2	Artificial Mains	SCHWARZBECK	NNLK 8121	573	10/27/2018	10/26/2019
3	Pulse Limiter	R&S	ESH3-Z2	101488	10/27/2018	10/26/2019
4	RF Connection Cable	HUBER+SUHNER	EF400	N/A	11/14/2017	11/13/2019
5	Test Software	R&S	ES-K1	N/A	N/A	N/A
6	Temperature and Humidity Meter	ΜΙΑΟΧΙΝ	TH10R	N/A	10/30/2018	10/29/2019

Radiated Emissions(Below 1GHz)							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)	
1	Semi-Anechoic Chamber	Albatross projects	SAC-3m-02	C11121	09/30/2018	09/29/2021	
2	EMI Test Receiver	R&S	ESCI	100900	10/28/2018	10/27/2019	
3	Loop Antenna	R&S	HFH2-Z2	100020	04/02/2018	04/02/2021	
4	Ultra-Broadband Antenna	SCHWARZBECK	VULB9163	546	04/05/2017	04/04/2020	
5	Pre-amplifer	SCHWARZBECK	BBV 9742	N/A	11/15/2018	11/14/2019	
6	RF Connection Cable	HUBER+SUHNER	N/A	N/A	09/28/2018	09/27/2019	
7	RF Connection Cable	HUBER+SUHNER	SUCOFLEX104	501184/4	09/28/2018	09/27/2019	
8	Test Software	R&S	ES-K1	N/A	N/A	N/A	
9	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A	
10	Antenna Mast	Maturo Germany	TAM-4.0-P	N/A	N/A	N/A	
11	Temperature and Humidity Meter	KEJIAN	KJ03	N/A	10/30/2018	10/29/2019	

Radiated Emissions(Above 1GHz)							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)	
1	Anechoic Chamber	Albatross projects	SAC-3m-01	C11121	09/30/2018	09/29/2021	
2	Horn Antenna	SCHWARZBECK	9120D	1011	03/27/2017	03/26/2020	
3	Preamplifier	BONN	BLWA0160-2M	1811887	11/14/2018	11/13/2019	
4	Broadband Pre-amplifier	SCHWARZBECK	BBV 9718	9718-248	04/28/2018	04/27/2019	
5	Spectrum Analyzer	R&S	FSP40	100597	10/27/2018	10/26/2019	
6	RF Connection Cable	HUBER+SUHNER	RE-7-FL	N/A	11/15/2018	11/14/2019	
7	RF Connection Cable	HUBER+SUHNER	RE-7-FH	N/A	11/15/2018	11/14/2019	
8	Test Software	Audix	E3	N/A	N/A	N/A	
9	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A	
10	Antenna Mast	Maturo Germany	CAM-4.0-P-12	N/A	N/A	N/A	
11	Temperature and Humidity Meter	MINGLE	YH101	N/A	10/30/2018	10/29/2019	

RF Co	nducted Method					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
1	Spectrum analyzer	R&S	FSV40	100048	10/28/2018	10/27/2019

5. TEST CONDITIONS AND RESULTS

5.1. Antenna requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C 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. 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.

TEST RESULTS

☑ Passed □ Not Applicable

The directional gain of the antenna less than 6 dBi, please refer to the below antenna photo.



5.2. Conducted Emission (AC Main)

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207:

	Limit (d	BuV)
Frequency range (MHZ)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was setup according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above theconducting ground plane. The vertical conducting plane was located 40 cm to the rear of theEUT. All other surfaces of EUT were at least 80 cm from any other grounded conductingsurface.
- 3. The EUT and simulators are connected to the main power through a line impedancestabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for themeasuring equipment.
- 4. The peripheral devices are also connected to the main power through aLISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were foldedback and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHzusing a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Note: The EUT is DC supply, so this item is not applicable.

5.3. Field Strength of the Fundamental

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.231(b).

The field strength of emissions from intentional radiators operated **average value** under this section shall not exceed the following

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Unwanted emissions (millivolts/meter)
260 - 470 MHz	3,750 to 12,500 **	375 to 1,250 **

** linear interpolation with frequency, f, in MHz:

F is **315.00**MHz & **390.00**MHz

Field strength of fundamental: Limit at 3 meters = 41.67*F - 7083.34Field strength of harmonics: Limit at 3 meters = 4.167*F - 708.334

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

🛛 Passed 🛛 🗌

Not Applicable

Peak value:

Frequency(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Polarization	Test Result
315.00	80.10	95.63	Horizontal	Pass
315.00	70.70	95.63	Vertical	Pass

Average value:

Frequency(MHz)	Peak Level (dBuV/m)	Dutycycle Factor	Average Level (dBuV/m)	Limit (dBuV/m)	Polarization	Test Result
315.00	80.10	-6.72	73.38	75.63	Horizontal	Pass
315.00	70.70	-6.72	63.98	75.63	Vertical	Pass

Duty cycle factor:	
	Average value=Peak value + Duty Cycle Factor
Calculate Formula:	Duty cycle factor=20 log(Duty cycle)
	Duty cycle= T _{on} / T _{period}
	T _{on} time =46.125ms
Toot data:	T _{period} =100ms
Test data.	Duty cycle=0.4613
	Duty cycle factor=-6.72
Note: According to FC	C Subpart C 15.35, T _{period} =100ms

Test plot as follows:

T_{on} time:

Spectrum										
Ref Level	10.00 d	Bm Offset 1.0	0 dB 👄 RBW	/ 30 kHz						
Att	20	dB 👄 SWT 30) ms 👄 VBW	/ 100 kHz						
SGL										
1Pk Max										
					M	1[1]			-	26.07 dBn
										69.558 m
					D	[1]				-0.02 di
-10 dBm										6.537 m
I										
-20 dBm		Mler					_			
					D2			n		
-30 dBm					_		_			
10 10 -										
-40 asm										
-50 d8m										
00 40										
-60 d8m							_			
-70 dem	Whiteway	mark	fert	mulitely war	mal			hinder	member	
									1	
-80 dBm										
CF 315.0 M	Hz			679 pts						30.0 ms/
1arker										
Type Ref	Trc	X-value	Y-1	value	Func	tion		Fund	ction Result	
M1	1	69.558	ms -2	6.07 dBm						
D1 M1	1	6.537	ms	-0.02 dB						
D2 M1	1	102.151	ms	-0.17 dB						

1Pk Max									
					N	11[1]			-26.07 d
) dBm						1[1]			0.01
						1	1	1	39.588
-10 dBm								-	
20 dBm									
-20 ubm		M1	D1						
30 dBm	— I Г		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		- r	1	<u> </u>		
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70 dBm	utantuka a k			athrese Athrese	en-to do fai		- Londol	1 Mal the date	Look /
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00 40 m									_

Peak value:

Frequency(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Polarization	Test Result
390.00	79.10	99.25	Horizontal	Pass
390.00	71.80	99.25	Vertical	Pass

Average value:

U						
Frequency(MHz)	Peak Level (dBuV/m)	Dutycycle Factor	Average Level (dBuV/m)	Limit (dBuV/m)	Polarization	Test Result
390.00	79.10	-8.50	70.60	79.25	Horizontal	Pass
390.00	71.80	-8.50	62.50	79.25	Vertical	Pass

Duty cycle factor:	
	Average value=Peak value + Duty Cycle Factor
Calculate Formula:	Duty cycle factor=20 log(Duty cycle)
	Duty cycle= T _{on} / T _{period}
	T _{on} time =27019us
Toot doto:	T _{period} =71884us
Test data.	Duty cycle=0.3759
	Duty cycle factor=-8.50

Test plot as follows:

T_{on} & T_{period} time:



1Pk Max																	
									м	1[1]						-	19.29 dBr
0 dBm				+					-D:	I[1]							-0.20 d 2.899 m
-10 dBm				+								-			\vdash		-
20 dBm					м	1 D1							_				
-20 UBIII						Î											
-30 dBm				╢		_	-	++-	╢			\square	┝	╫	+		
-40 dBm												\square					
								U.									
-50 dBm														+			
-60 dBm						_		#						╢			
-70 dBm																	
Anthony	num	n HAULUM	mapping	Ч	ų	ŀ		ų	ų	H	V	ļļ	1	¥		Hully	Mundowshi
0.0 10			•	_											+		

Spectrun	n						
Ref Leve Att	10.00 dBm 20 dB	Offset e SWT	1.00 dB 👄 RB 400 ms 👄 VB	3W 100 kH 3W 300 kH	łz łz		
0 1Pk Max							
0 dBm					D1[1 M1[1	1 1	0.05 dB 71.884 ms -16.31 dBm 91 594 ms
-10 dBm		M1	01				51.051113
-20 dBr			T f				
-30 dBm							
-40 dBm							
-50 dBm							
-60 dBm							
-70, dBm							
with a .	. Nation	MAN IN	man	111	Margan 1.	nationalistical and	1 Med Meanway 1.
-80 dBm							
CF 390.0 M	/IHz	I		691	pts	I	40.0 ms/
	1					Ready	444

5.4. 20 dB Bandwidth

<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.231(c).

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

433.92MHz*0.25%=1.085MHz

TEST CONFIGURATION



TEST PROCEDURE

- 1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously
- Use the following spectrum analyzer settings: Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a operation channel RBW≥1% of the 20 dB bandwidth, VBW ≥ RBW Sweep = auto, Detector function = peak, Trace = max hold
- 4. Measure and record the results in the test report.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☑ Passed □ Not Applicable

Channel Frequency(MHz) 20dB Bandwidth(kHz)		Limit (MHz)	Result
315.00	118.70	1.085	PASS



Channel Frequency(MHz)	20dB Bandwidth(kHz)	Limit (MHz)	Result
390.00	114.30	1.085	PASS

spectrum								(
Att 20 dBm	Offset 1	1.00 dB 👄 R	BW 30 kH	Z Z Mode	Auto EET			
1Pk Max	, on (ю.т µр 🕌 🖡	DH 100 KH	- mode /	aatonni			
dBm				м ————————————————————————————————————	1[1] 1[1]	1	389.	36.21 dBn 88570 MH 0.09 di 114.30 kH
10 dBm								
D1 -16.280	dBm		\bigwedge					
30 dBm		MJ	\square	1				
40 dBm 02 -36	5.280 dBm-		7					
50 dBm				\rightarrow				
60 dBm	\square				$\frown $			
78, dBm	1					1-7-		h~
80 dBm						~		
			(01				0	

5.5. Continue Transmission Time

<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.231(a).

A manually operated transmitter shall employ a switch that will auto-matically deactivate the transmitter within not more than 5 seconds of being released.

TEST CONFIGURATION



TEST PROCEDURE

- 1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously
- Use the following spectrum analyzer settings: Frequency=Center carrier frequency RBW=100KHz, VBW=300KHz, Span= 0, Sweep time= 10second, Detector function = peak, Trace = single
- Measure and record the results in the test report

Not Applicable

4. Measure and record the results in the test report.

TEST RESULTS

🛛 Passed

Frequency (MHz)	Transmission time (s)	Limit (s)	Result
315.00	0.45652	<5.00	Pass



Frequency (MHz)	Transmission time (s)	Limit (s)	Result
390.00	0.68841	<5.00	Pass

Spectrum)						
Ref Level 10.0	0 dBm Offset	1.00 dB 👄	RBW 30 k	Hz			
SGL	20 08 🖶 3141	55 🖷	4 D W 100 K	Π2			
●1Pk Max							
0.48m				M	1[1]		-20.87 dBr 2.14493
0 dbin				U.			688.41 m
-10 dBm							
20 dBm			M1	D1			
-20 0811			T				
-30 dBm							
40 d0m							
-40 dBm							
-50 dBm							
60 d8m							
-00 0811							
-70 dBm							
-80 dBm	underthemak	manne	ահ ՈՈՈ	10110414	hround	nderbarbyra	howwww.
CF 390.0 MHz		-	691	pts		-	500.0 ms/
					Я	eady	4 0 0

5.6. Radiated Emission

<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.231(b) and 15.209. Limit for frequency below 30MHz:

Frequency	Limit (uV/m)	Measurement Distance(m)	Remark
0.009~0.490	2400/F(kHz)	300	Quasi-peak
0.490~1.705	24000/F(kHz)	30	Quasi-peak
1.705~30.0	30	30	Quasi-peak

Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)= Limit dBuV/m @300m +80,

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)= Limit dBuV/m @30m + 40.

Limit for frequency above 30MHz:

Frequency	Limit (dBuV/m@3m)	Remark
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
	54.00	Average
Above TGHZ	74.00	Peak

Unwanted emissions of the harmonic level:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Unwanted emissions (millivolts/meter)	
260 - 470 MHz	3,750 to 12,500 **	375 to 1,250 **	

** linear interpolation with frequency, f, in MHz:

F is 315MHz and 390MHz

Field strength of harmonics(millivolts/meter): Limit at 3 meters = 4.167*F - 708.334

TEST CONFIGURATION



2) 30MHz ~ 1GHz



3) Above 1GHz



TEST PROCEDURE

- 1. The EUT was tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 0.8/1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.

TEST RESULTS

☑ Passed □ Not Applicable

Below 30MHz:

The EUT was pre-scanned the frequency band (9KHz~30MHz), found the radiated level lower than the limit, so don't show on the report.

Above 30MHz:

Peak value: 315MHz

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dBuV/m)	Polarization	Test Result
629.46	28.30	75.63	-47.33	Vertical	Pass
945.68	36.50	75.63	-39.13	Vertical	Pass
1260.03	39.00	74.00	-35.00	Vertical	Pass
1573.52	38.26	74.00	-35.74	Vertical	Pass
1889.05	43.70	74.00	-30.30	Vertical	Pass
3147.87	42.26	74.00	-31.74	Vertical	Pass
629.46	44.30	75.63	-31.33	Horizontal	Pass
945.68	48.60	75.63	-27.03	Horizontal	Pass
1260.03	33.97	74.00	-40.03	Horizontal	Pass
1573.52	35.31	74.00	-38.69	Horizontal	Pass
1889.05	42.86	74.00	-31.14	Horizontal	Pass
3153.52	39.76	74.00	-34.24	Horizontal	Pass

Average value: 315MHz

Frequency (MHz)	Peak Value (dBuV/m)	Dutycycle Factor	Average Value(dBuV/m)	Limit (dBuV/m)	Over Limit (dBuV/m)	Polarization	Test Result
629.46	28.30	-6.72	21.58	55.63	-34.05	Vertical	Pass
945.68	36.50	-6.72	29.78	55.63	-25.85	Vertical	Pass
1260.03	39.00	-6.72	32.28	54.00	-21.72	Vertical	Pass
1573.52	38.26	-6.72	31.54	54.00	-22.46	Vertical	Pass
1889.05	43.70	-6.72	36.98	54.00	-17.02	Vertical	Pass
3147.87	42.26	-6.72	35.54	54.00	-18.46	Vertical	Pass
629.46	44.30	-6.72	37.58	55.63	-18.05	Horizontal	Pass
945.68	48.60	-6.72	41.88	55.63	-13.75	Horizontal	Pass
1260.03	33.97	-6.72	27.25	54.00	-26.75	Horizontal	Pass
1573.52	35.31	-6.72	28.59	54.00	-25.41	Horizontal	Pass
1889.05	42.86	-6.72	36.14	54.00	-17.86	Horizontal	Pass
3153.52	39.76	-6.72	33.04	54.00	-20.96	Horizontal	Pass

Peak value: 390MHz

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dBuV/m)	Polarization	Test Result	
780.78	66.10	79.25	-13.15	Vertical	Pass	
1559.49	49.95	74.00	-24.05	Vertical	Pass	
1950.97	47.33	74.00	-26.67	Vertical	Pass	
2342.19	49.34	74.00	-24.66	Vertical	Pass	
2732.39	44.57	74.00	-29.43	Vertical	Pass	
3902.97	38.37	74.00	-35.63	Vertical	Pass	
780.78	53.90	79.25	-25.35	Horizontal	Pass	
1559.49	48.51	74.00	-25.49	Horizontal	Pass	
1950.97	46.21	74.00	-27.79	Horizontal	Pass	
2342.19	44.33	74.00	-29.67	Horizontal	Pass	
2732.39	46.12	74.00	-27.88	Horizontal	Pass	
3902.97	37.29	74.00	-36.71	Horizontal	Pass	

Average value: 390MHz

Frequency (MHz)	Peak Value (dBuV/m)	Dutycycle Factor	Average Value(dBuV/m)	Limit (dBuV/m)	Over Limit (dBuV/m)	Polarization	Test Result
780.78	66.10	-8.50	57.60	59.25	-1.65	Vertical	Pass
1559.49	49.95	-8.50	41.45	54.00	-12.55	Vertical	Pass
1950.97	47.33	-8.50	38.83	54.00	-15.17	Vertical	Pass
2342.19	49.34	-8.50	40.84	54.00	-13.16	Vertical	Pass
2732.39	44.57	-8.50	36.07	54.00	-17.93	Vertical	Pass
3902.97	38.37	-8.50	29.87	54.00	-24.13	Vertical	Pass
780.78	53.90	-8.50	45.40	59.25	-13.85	Horizontal	Pass
1559.49	48.51	-8.50	40.01	54.00	-13.99	Horizontal	Pass
1950.97	46.21	-8.50	37.71	54.00	-16.29	Horizontal	Pass
2342.19	44.33	-8.50	35.83	54.00	-18.17	Horizontal	Pass
2732.39	46.12	-8.50	37.62	54.00	-16.38	Horizontal	Pass
3902.97	37.29	-8.50	28.79	54.00	-25.21	Horizontal	Pass

6. Test Setup Photos of the EUT







7. External and Internal Photos of the EUT

External photo









Internal photo







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.....End of Report.....