

FCC Test Report

APPLICANT	: HTC Corporation
EQUIPMENT	: VIVE Controller
MODEL NAME	: IHM100
FCC ID	: NM8IHM100
STANDARD	: FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	: Certification

The product was received on Feb. 12, 2018 and testing was completed on Feb. 22, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Lunis Wu

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



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SPORTON INTERNATIONAL INC. TEL : 886-3-327-3456 FAX : 886-3-328-4978 FCC ID : NM8IHM100 Page Number: 1 of 15Report Issued Date: Apr. 17, 2017Report Version: Rev. 01Report Template No.: BU5-FD15B Version 2.0



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC821217	Rev. 01	Initial issue of report	Apr. 17, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
-	15.107	AC Conducted Emission	< 15.107 limits	Not Required	-
3.1	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.50 dB at 252.750 MHz for Quasi-Peak
Note: Not requi	red means after a	assessing, test items are r	not necessary to carry o	ut.	



1. General Description

1.1. Applicant

HTC Corporation

88 Section 3, Zhongxing Road, Xindian District, New Taipei City 231, Taiwan

1.2. Manufacturer

Finch Technologies Ltd

33 Porter Road, P.O.Box 3169 PMB103, Road Town, Tortola, BVI

1.3. Product Feature of Equipment Under Test

Product Sp	ecification subjective to this standard
Antenna Type	Bluetooth: PIFA Antenna

1.4. Modification of EUT

No modifications are made to the EUT during all test items.



1.5. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1093 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park,		
	Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
	TEL: +886-3-327-3456		
	FAX: +886-3-328-4978		
Tast Site No	Sporton Site No.		
Test Site NO.	03CH06-HY		

1.6. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014
- **Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.





2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type									
Radiated	Mode 1: Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + USB Cable									
Emissions	(Charging from Adapter 2)									

2.2.Connection Diagram of Test System





2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
2.	iPhone Earphone	Apple	N/A	Verification	Unshielded, 1.2m	N/A
3.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was attached to the VIVE Controller or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Execute "Video player" to play MPEG4 files.



3. Test Result

3.1. Test of Radiated Emission Measurement

3.1.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(meters)		
30 – 88	100	3		
88 – 216	150	3		
216 - 960	200	3		
Above 960	500	3		

3.1.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.



3.1.3. Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level



3.1.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



Spectrum Analyzer / Receiver

For radiated emissions above 1GHz







			Temperature :			22~2	22~24°C					
est Engineer :	Eric Je	ing			Relati	ve Hun	nidity :	51~5	3%			
est Distance :	3m				Polarization :				Horizontal			
97 Leve	el (dBuV/m)	1				_		Date: 201	8-02-22			
-												
84.9												
										FCC CI	LASS-B	
72.8											-6dB	
60.6												
00.0									FC	C CLASS-	B (AVG)	
40.5									11	12	2 -6dB	
48.5				0		9		0			_	
4-		7		ľ								
36.4	56											
24.3	++-											
12.1												
0					••		7040		10100		12000	
030		2624.		521	18. Freque	ncy (MHz)	7812.		10406.		13000	
0 <u>-11</u> 30		2624.		52	18. Freque	ncy (MHz)	7812.		10406.		13000	
0 <u>30</u> Site Conditio	:	2624. 03CH06	-HY	52 ⁻	18. Freque	ncy (MHz)	7812.		10406.		13000	
0 <u>30</u> Site Conditio Project		2624. 03CH06 FCC CLA 821217)-НУ \SS-B 31	52 [.] m 9120D	18. Freque _1156_1	ncy (MHz) 70915 F	7812. 10RIZO	NTAL	10406.		13000	
0 <u>30</u> Site Conditio Project Power	n :	2624. 03CH06 FCC CLA 821217 120Vac/)-HY 155-B 31 /60Hz	52 [.] m 9120D	18. Freque _1156_1	ncy (MHz)	7812. 10RIZO	NTAL	10406.		13000	
0 <u>30</u> Site Conditio Project Power Mode	n : :	2624. 03CH06 FCC CLA 821217 120Vac/ Mode 1)-HY 155-B 31 /60Hz	52 m 9120D	18. Freque _1156_1	ncy (MHz)	7812.	NTAL	10406.		13000	
0 <u>-11</u> Site Conditio Project Power Mode	n : :	2624. 03CH06 FCC CLA 821217 120Vac/ Mode 1)-HY 155-B 31 /60Hz Over	52 [.] m 9120D	18. Freque _1156_1 ReadA	ncy (MHz) 70915 F	T812. HORIZO Cable	NTAL	10406. A/Pos	T/Pos	13000	
0 <u>-11</u> Site Conditio Project Power Mode	: n : : : Freq	2624. 03CH06 FCC CLA 821217 120Vac/ Mode 1 Level)-HY ASS-B31 /60Hz Over Limit	52 m 9120D Limit Line	18. Freque _1156_1 ReadA Level	ncy (MHz) 70915 F ntenna Factor	10RIZO Cable Loss	NTAL Preamp Factor	10406.	T/Pos	13000	
0-10- Site Conditio Project Power Mode	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CLA 821217 120Vac/ Mode 1 Level dBuV/m)-HY ASS-B31 /60Hz Over Limit dB	m 9120D Limit Line	18. Freque _1156_1 ReadA Leve1 	ncy (MHz) 70915 F ntenna Factor dB/m	T812. HORIZO Cable Loss dB	NTAL Preamp Factor	10406. A/Pos	T/Pos	13000 Remark	
0-10- Site Conditio Project Power Mode	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m	6-HY ASS-B31 /60Hz Over Limit dB	m 9120D Limit Line dBuV/m	18. Freque 1156_1 ReadA Leve1 dBuV	ncy (MHz) 70915 F Intenna Factor dB/m	T812. HORIZO Cable Loss dB	NTAL Preamp Factor dB	A/Pos	T/Pos deg	13000	
Site Conditio Project Power Mode	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40	5-HY 155-B 31 /60Hz Over Limit dB -4.60	m 9120D Limit Line dBuV/m 46.00	18. Freque 11561 	ncy (MHz) 70915 F untenna Factor dB/m 17.78	T812. TORIZO Cable Loss dB 2.17	NTAL Preamp Factor dB 31.76	A/Pos 	T/Pos deg 145	13000	
Site Conditio Project Power Mode 1 2	: n : : Freq MHz 245.19 252.75	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40 42.50	HY (60Hz 0ver Limit -4.60 -3.50	52 m 9120D Limit Line dBuV/m 46.00 46.00	18. Freque 11561 Read <i>A</i> Leve1 dBuV 53.21 53.20	ncy (MHz) 70915 F Intenna Factor dB/m 17.78 18.85	Cable Loss dB 2.17 2.20	NTAL Preamp Factor dB 31.76 31.75	A/Pos cm 132 140	T/Pos 	QP QP	
Site Conditio Project Power Mode 	: n : : Freq MHz 245.19 252.75 260.04	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40 42.50 42.75	6-HY ASS-B 31 /60Hz Over Limit dB -4.60 -3.50 -3.25	52" m 9120D Limit Line dBuV/m 46.00 46.00	18. Freque 1156_1 ReadA Leve1 dBuV 53.21 53.20 52.48	ncy (MHz) 70915 F Intenna Factor dB/m 17.78 18.85 19.79	Cable Loss dB 2.17 2.20 2.23	NTAL Preamp Factor dB 31.76 31.75 31.75	A/Pos	T/Pos deg 145 152	QP QP Peak	
Site Conditio Project Power Mode 	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16	6-HY ASS-B 3 /60Hz Over Limit dB -4.60 -3.50 -3.25 -7.84	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00	18. Freque 	ncy (MHz) 70915 F antenna Factor dB/m 17.78 18.85 19.79 19.44 27.06	Cable Loss dB 2.17 2.20 2.23 2.46	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75	A/Pos cm 132 140 	T/Pos deg 145 152 	QP QP QP Peak Peak	
Site Conditio Project Power Mode 	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CL4 821217 120Vac, Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82	6-HY ASS-B 3 /60Hz Over Limit dB -4.60 -3.50 -3.25 -7.84 -14.18	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00	18. Freque 	rcy (MHz) 70915 F antenna Factor dB/m 17.78 18.85 19.79 19.44 27.90 20.91	Cable Loss dB 2.17 2.20 2.23 2.46 3.66	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 32.03	A/Pos	T/Pos deg 145 152 	QP QP QP Peak Peak Peak Peak	
Site Conditio Project Power Mode 1 2 3 4 5 6 7	n : : : : : : : : : : : : : : : : : : :	2624. 03CH06 FCC CL4 821217 120Vac, Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82 32.60 37.01	-4.60 -3.50 -3.25 -7.84 -14.18 -13.40 -3.6 99	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00 46.00 74.00	18. Freque 	ncy (MHz) 70915 F antenna Factor 17.78 18.85 19.79 19.44 27.90 30.81 27.57	Cable Loss dB 2.17 2.20 2.23 2.46 3.66 4.14 7.41	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 31.07 61.06	A/Pos	T/Pos deg 145 152 	QP QP QP Peak Peak Peak Peak Peak	
Site Conditio Project Power Mode 1 2 3 4 5 6 7	n : Freq MHz 245.19 252.75 260.04 320.30 759.90 954.50 2594.00 4884.00	2624. 03CH06 FCC CL4 821217 120Vac, Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82 32.60 37.01 41.04	-HY ASS-B3 /60Hz 0ver Limit -4.60 -3.50 -3.25 -7.84 -14.18 -13.40 -36.99 -32.96	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00 74.00 74.00 74.00	18. Freque 1156_1 1156_1 	ncy (MHz) 70915 F antenna Factor dB/m 17.78 18.85 19.79 19.44 27.90 30.81 27.57 31.23	Cable Loss dB 2.17 2.20 2.23 2.46 3.66 4.14 7.41 10.69	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 31.07 61.06 59.35	A/Pos	T/Pos deg 145 152 	Remark QP QP Peak Peak Peak Peak Peak Peak	
Site Conditio Project Power Mode 1 2 3 4 5 6 7 7 8 9	n : Freq HHz 245.19 252.75 260.04 320.30 759.90 954.50 2594.00 4884.00 5526.00	2624. 03CH06 FCC CL4 821217 120Vac, Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82 32.60 37.01 41.04 44.35	-HY ASS-B3 /60Hz 0ver Limit -4.60 -3.50 -3.25 -7.84 -14.18 -13.40 -36.99 -32.96 -29.65	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00	18. Freque 	ncy (MHz) 70915 F 70915 F antenna Factor dB/m 17.78 18.85 19.79 19.44 27.90 30.81 27.57 31.23 34.23	Cable Loss dB 2.17 2.20 2.23 2.46 3.66 4.14 7.41 10.69 12.33	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 31.75 31.07 61.06 59.35 59.39	A/Pos cm 132 140 	T/Pos deg 145 152 	QP QP QP Peak Peak Peak Peak Peak Peak Peak Pea	
Site Conditio Project Power Mode 	n : Freq HHz 245.19 252.75 260.04 320.30 759.90 954.50 2594.00 4884.00 5526.00 8766.00	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82 32.60 37.01 41.04 44.35 45.18		52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00	18. Freque 	Antenna Factor dB/m 17.78 18.85 19.79 19.44 27.90 30.81 27.57 31.23 34.23 36.78	ACRIZO Cable Loss dB 2.17 2.20 2.46 3.66 4.14 7.41 10.69 12.33 14.82	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 31.07 61.06 59.35 59.39 58.13	A/Pos cm 132 140 	T/Pos deg 145 152 	13000 13000 QP QP Peak Peak Peak Peak Peak Peak Peak Pea	
0 Site Conditio Project Power Mode 	n : Freq HTz 245.19 252.75 260.04 320.30 759.90 954.50 2594.00 4884.00 5526.00 8766.00 2816.00	2624. 03CH06 FCC CL4 821217 120Vac/ Mode 1 Level dBuV/m 41.40 42.50 42.75 38.16 31.82 32.60 37.01 41.04 44.35 45.18 48.72	-4.60 -3.50 -3.25 -7.84 -14.18 -3.699 -32.96 -29.65 -28.82 -25.28	52" m 9120D Limit Line dBuV/m 46.00 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 74.00	18. Freque 	Antenna Factor dB/m 17.78 18.85 19.79 19.44 27.90 30.81 27.57 31.23 34.23 36.78 39.90	Cable Loss dB 2.17 2.20 2.23 2.46 3.66 4.14 7.41 10.69 12.33 14.82 16.57	NTAL Preamp Factor dB 31.76 31.75 31.75 31.75 31.75 31.07 61.06 59.35 59.39 58.13 57.45	A/Pos cm 132 140 	T/Pos deg 145 152 	QP QP QP Peak Peak Peak Peak Peak Peak Peak Pea	

3.1.5. Test Result of Radiated Emission







4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	Schaffner	CBL6111C&N- 6-06	2725&AT-N06 01	30MHz~1GHz	Oct. 14, 2017	Feb. 22, 2018	Oct. 13, 2018	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 04, 2018	Feb. 22, 2018	Jan. 03, 2019	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 08, 2017	Feb. 22, 2018	Aug. 07, 2018	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 25, 2017	Feb. 22, 2018	Apr. 24, 2018	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	May 22, 2017	Feb. 22, 2018	May 21, 2018	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF78020821 2	1m~4m	N/A	Feb. 22, 2018	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Feb. 22, 2018	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence	20
of 95% (U = 2Uc(y))	3.9

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.7
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