

RF Exposure Report

Report No.: SA150924D04

FCC ID: 2ADB4-FF05-05DB

Test Model: FF05-05DB

Received Date: Aug. 11, 2015

Test Date: Oct. 26, 2015

Issued Date: Oct. 27, 2015

Applicant: Foxconn Interconnect Technology Limited Taiwan Branch

Address: No. 66-1, JHONGSHAN RD., TUCHENG DIST., NEW TAIPEI CITY 23680, TAIWAN (R.O.C.)

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)



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Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 RF Exposure	5
2.1 Test Setup	5
2.2 Test Instruments	5
2.3 Limits For Maximum Permissible Exposure (MPE).....	6
2.4 Test Point Description	6
3 Calculation Result Of Maximum Conducted Power	7
4 Photographs of the Test Configuration	9

Release Control Record

Issue No.	Description	Date Issued
SA150924D04	Original release.	Oct. 27, 2015

1 Certificate of Conformity

Product: A4WP 5W OTT PTU

Brand: RATTAN

Test Model: FF05-05DB

Sample Status: Engineering sample

Applicant: FOXCONN INTERCONNECT TECHNOLOGY LIMITED TAIWAN BRANCH

Test Date: Oct. 26, 2015

Standards: FCC Part 1 (Section 1.1307(b), 1.1310)

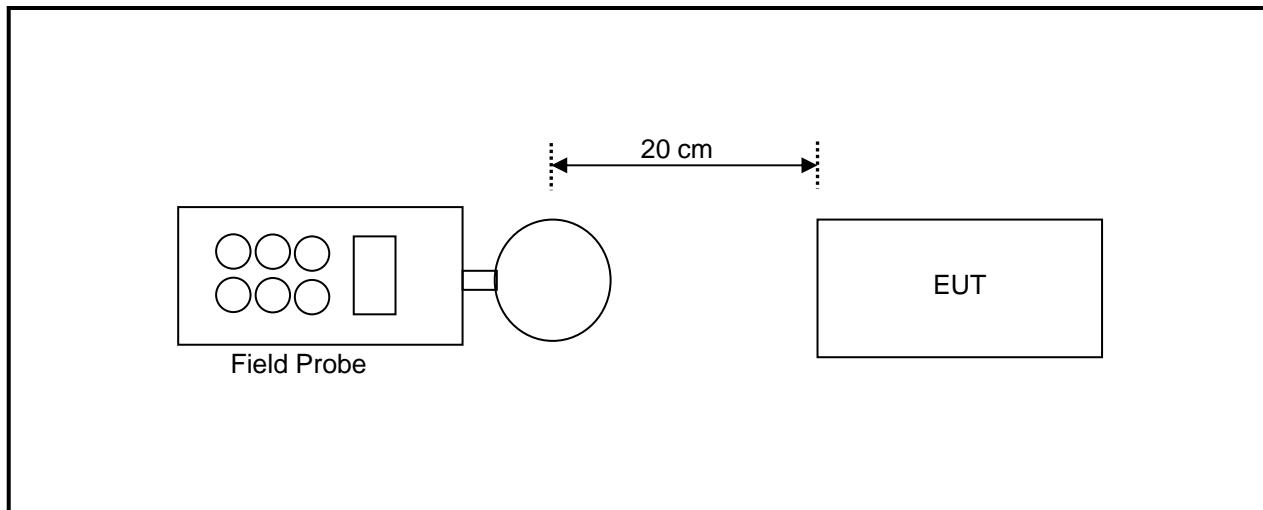
The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Annie Chang , **Date:** Oct. 27, 2015
Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Oct. 27, 2015
Rex Lai / Assistant Manager

2 RF Exposure

2.1 Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 20 cm measured from the center of the probe(s) to the edge of the device.

2.2 Test Instruments

Description	Brand	Model No.	Frequency Range	Calibrated Date	Calibrated Until
Broadband Field Meter	NARDA	NBM-550	-	Feb. 28, 2014	Feb. 27, 2016
Magnetic Field Meter	NARDA	ELT-400	1 – 400kHz	Feb. 26, 2014	Feb. 25, 2016
Magnetic Probe	NARDA	HF-3061	300kHz – 30MHz	Feb. 26, 2014	Feb. 25, 2016
Magnetic Probe	NARDA	HF-0191	27 – 1000MHz	Feb. 28, 2014	Feb. 27, 2016
Broadband Field Meter	NARDA	NBM-550	-	Feb. 28, 2014	Feb. 27, 2016
Electric Field Meter	COMBINOVIA	EFM 200	5Hz – 400kHz	Oct. 26, 2015	Oct. 13, 2016
E-Field Probe	NARDA	EF-0391	100kHz – 3GHz	Mar. 6, 2014	Mar. 5, 2016
E-Field Probe	NARDA	EF-6091	100MHz – 60GHz	Feb. 28, 2014	Feb. 27, 2016

NOTE: 1. The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in Chia Pau RF Chamber

2.3 Limits For Maximum Permissible Exposure (MPE)

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500 .....	.....	.....	f/300	6
1500–100,000 .....	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500 .....	.....	.....	f/1500	30
1500–100,000 .....	.....	.....	1.0	30

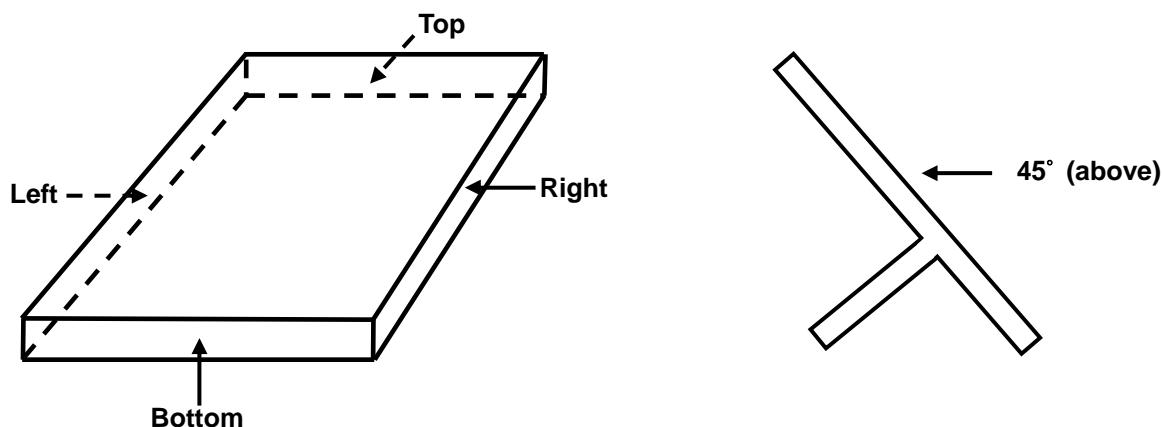
f = frequency in MHz

* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

2.4 Test Point Description



3 Calculation Result Of Maximum Conducted Power

10% Load with iPhone

E-Field Measurement (20cm)					
EUT Side	Left	Right	Top	Bottom	45° (above)
Max E-field (V/m)	5.69	5.91	3.71	3.94	5.67
Limit 824/f (V/m)	121.50	121.50	121.50	121.50	121.50
Margin (V/m)	-115.81	-115.59	-117.79	-117.56	-115.83

H-Field Measurement (20cm)					
EUT Side	Left	Right	Top	Bottom	45° (above)
Max H-field (A/m)	0.092	0.092	0.070	0.082	0.250
Limit 2.19/f (A/m)	0.323	0.323	0.323	0.323	0.323
Margin (A/m)	-0.231	-0.231	-0.253	-0.241	-0.072

Measurements was made from all sides and the top of the primary/client pair, with the 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

50% Load with iPhone

E-Field Measurement (20cm)					
EUT Side	Left	Right	Top	Bottom	45° (above)
Max E-field (V/m)	6.18	4.50	4.75	3.54	6.24
Limit 824/f (V/m)	121.50	121.50	121.50	121.50	121.50
Margin (V/m)	-115.32	-117.00	-116.75	-117.96	-115.26

H-Field Measurement (20cm)					
EUT Side	Left	Right	Top	Bottom	45° (above)
Max H-field (A/m)	0.087	0.092	0.058	0.077	0.264
Limit 2.19/f (A/m)	0.323	0.323	0.323	0.323	0.323
Margin (A/m)	-0.236	-0.231	-0.265	-0.246	-0.059

Measurements was made from all sides and the top of the primary/client pair, with the 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

90% Load with iPhone**E-Field Measurement (20cm)**

EUT Side	Left	Right	Top	Bottom	45° (above)
Max E-field (V/m)	3.86	2.04	3.68	2.44	5.72
Limit 824/f (V/m)	121.50	121.50	121.50	121.50	121.50
Margin (V/m)	-117.64	-119.46	-117.82	-119.06	-115.78

H-Field Measurement (20cm)

EUT Side	Left	Right	Top	Bottom	45° (above)
Max H-field (A/m)	0.074	0.071	0.072	0.054	0.264
Limit 2.19/f (A/m)	0.323	0.323	0.323	0.323	0.323
Margin (A/m)	-0.249	-0.252	-0.251	-0.269	-0.059

Measurements was made from all sides and the top of the primary/client pair, with the 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

4 Photographs of the Test Configuration



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