

RF Exposure Report

Report No.: AGC00800191201EH03

FCC ID : 2AF63-IES3

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : Pivotal 20W wireless power transmitter

BRAND NAME : Pivotal Commware

MODEL NAME : IES3

APPLICANT : NEOSEN ENERGY

DATE OF ISSUE : Dec. 12, 2019

STANDARD(S) : KDB 680106 D01 RF Exposure Wireless Charging Base
App v03

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Attestation of Global Compliance

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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 12, 2019	Valid	Initial Release



TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	4
2. GENERAL INFORMATION.....	5
2.1. PRODUCT DESCRIPTION	5
3. DESCRIPTION OF TEST MODES.....	6
4. SYSTEM TEST CONFIGURATION	6
5. TEST FACILITY	7
6. RADIO FREQUENCY (RF) EXPOSURE TEST	8
6.1. LIMITS.....	8
6.2. TEST SETUP.....	8
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	11

1. VERIFICATION OF CONFORMITY

Applicant	NEOSEN ENERGY
Address	1506 CAPITAL AVE., SUITE 150, PLANO TX 75074
Manufacturer	NEOSEN ENERGY
Address	1506 CAPITAL AVE., SUITE 150, PLANO TX 75074
Factory	Suga Electronics
Address	Suga High-tech Industrial Park, No. 8, Fulong Road, Sanzhong, Qingxi Town, Dongguan, Guangdong, PRC
Product Designation	Pivotal 20W wireless power transmitter
Brand Name	Pivotal Commware
Test Model:	IES3
Date of test	Dec. 04, 2019~Dec. 12, 2019
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-BR/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in KDB 680106 D01.

The results of testing in this report apply to the product/system which was tested only.

Prepared By



Calvin Liu
(Project Engineer)

Dec. 12, 2019

Reviewed By



Max Zhang
(Reviewer)

Dec. 12, 2019

Approved By



Forrest Lei
(Authorized Officer)

Dec. 12, 2019

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency	110-205kHz
Test Frequency	125.8kHz
Maximum field strength	55.65dBuV/m(PK)@3m
Modulation	FSK
Number of channels	1
Antenna Gain	0dBi
Antenna Designation	Coil Antenna
Hardware Version	OC7-11C_Pivotal-TX-p2
Software Version	FW.
Power Supply	DC 24V 1.5A



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3. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Wireless charging Mode(Full load)
2	Wireless charging Mode(half load)
3	Wireless charging Mode(Null load)
Note: 1. The mode 1 was the worst case and only the data of the worst case record in this report. 2. Both adaptors are tested and reported the worst-case data.	

4. SYSTEM TEST CONFIGURATION

Item	Equipment	Model No.	ID or Specification	Remark
1	Pivotal 20W wireless power transmitter	IES3	2AF63-IES3	EUT
2	Load	N/A	10W	Accessory
3	Adapter	PPL36U-240(PV)	DC 24V 1.5A	Accessory

5. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT LIST

Description	Manufacturer	Model	S/N	Cal. Date	Cal. Due
Broadband Field Meter	Narda Safety Test Solutions GmbH	NBM-550	J-0004	Jun.12, 2019	Jun.11, 2020
Probe FHP	Narda Safety Test Solutions GmbH	EHP-50F	J-0015	Jun.12, 2019	Jun.11, 2020
Broadband Field Meter	Narda Safety Test Solutions GmbH	ELT-400	J-0003	Jun.12, 2019	Jun.11, 2020

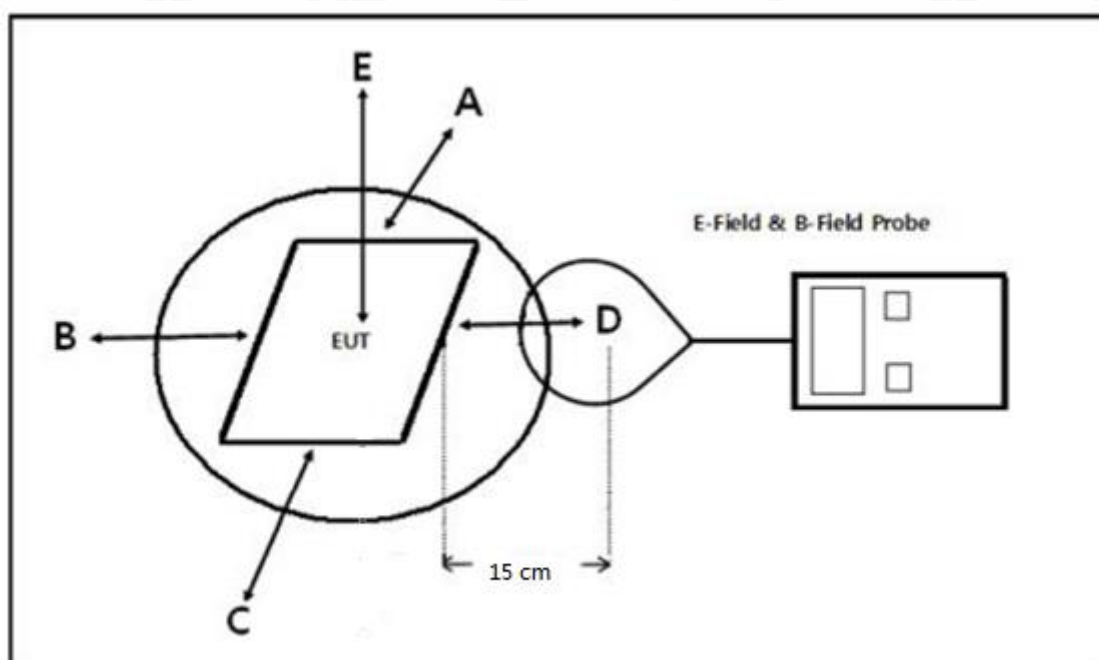


6. RADIO FREQUENCY (RF) EXPOSURE TEST

6.1. LIMITS

For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m.

6.2. TEST SETUP



Note: Position A: Front of EUT; Position B: Left of EUT; Position C: back of EUT; Position D: Right of EUT; Position E: Top of EUT(20 cm measure distance);

6.3. TEST PROCEDURE

The EUT was placed on a non-conductive table top and the ancillary equipment (e.g. mobile phone) was placed on the EUT for charging.

Maximum E-field and H-field measurements were tested 15cm from each side of the EUT. For top side the measure distance is 20cm.

Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.

6.4. TEST RESULT

Test condition: Mode 1

E-field strength test result:

Frequency Range	Probe Position A (V/m)	Probe Position B (V/m)	Probe Position C (V/m)	Probe Position D (V/m)	Probe Position E (V/m)	Limit (V/m)
125.8kHz	0.16	0.16	0.16	0.16	2.34	614

H-field strength test result:

Frequency Range	Probe Position A (A/m)	Probe Position B (A/m)	Probe Position C (A/m)	Probe Position D (A/m)	Probe Position E (A/m)	Limit (A/m)
125.8kHz	0.08	0.08	0.08	0.08	0.65	1.63

Test condition: Mode 2

E-field strength test result:

Frequency Range	Probe Position A (V/m)	Probe Position B (V/m)	Probe Position C (V/m)	Probe Position D (V/m)	Probe Position E (V/m)	Limit (V/m)
163.6kHz	0.16	0.16	0.16	0.16	1.82	614

H-field strength test result:

Frequency Range	Probe Position A (A/m)	Probe Position B (A/m)	Probe Position C (A/m)	Probe Position D (A/m)	Probe Position E (A/m)	Limit (A/m)
163.6kHz	0.08	0.08	0.08	0.08	0.49	1.63

Test condition: Mode 3

E-field strength test result:

Frequency Range	Probe Position A (V/m)	Probe Position B (V/m)	Probe Position C (V/m)	Probe Position D (V/m)	Probe Position E (V/m)	Limit (V/m)
183.4kHz	0.16	0.16	0.16	0.16	2.13	614

H-field strength test result:

Frequency Range	Probe Position A (A/m)	Probe Position B (A/m)	Probe Position C (A/m)	Probe Position D (A/m)	Probe Position E (A/m)	Limit (A/m)
183.4kHz	0.13	0.13	0.13	0.13	0.58	1.63



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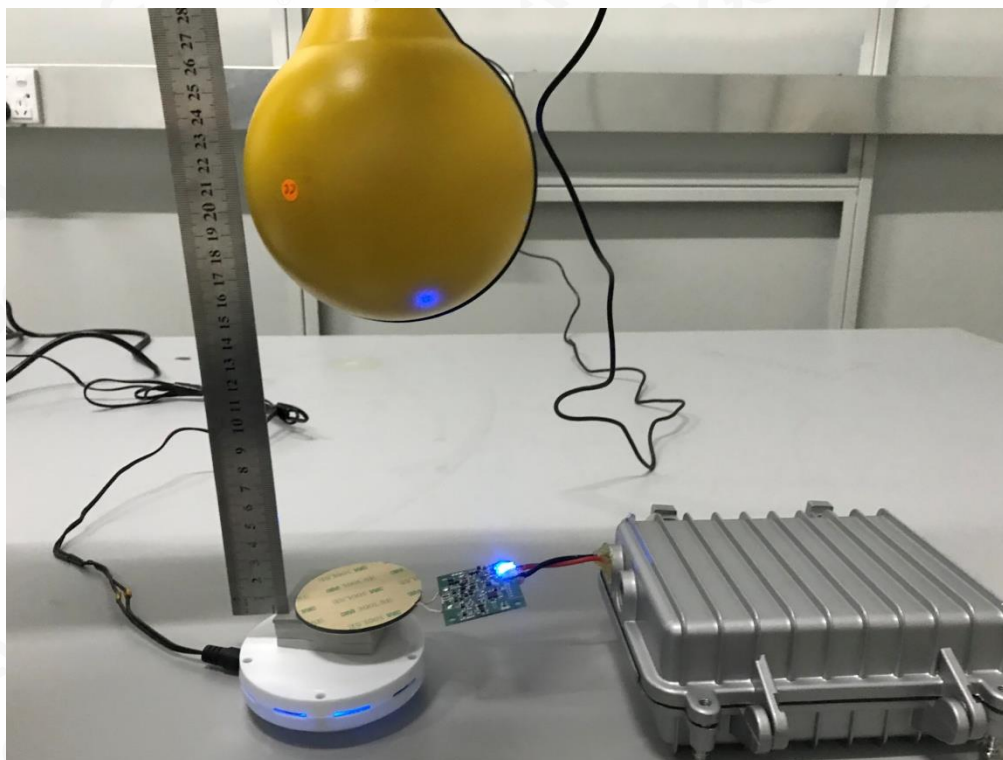
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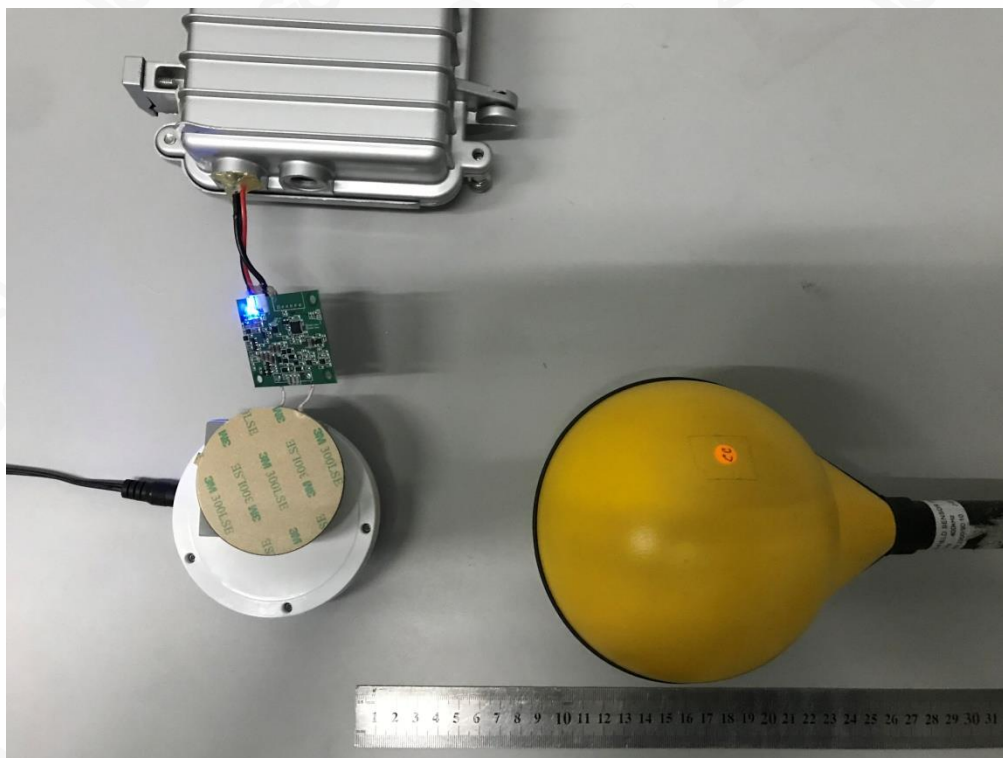
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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

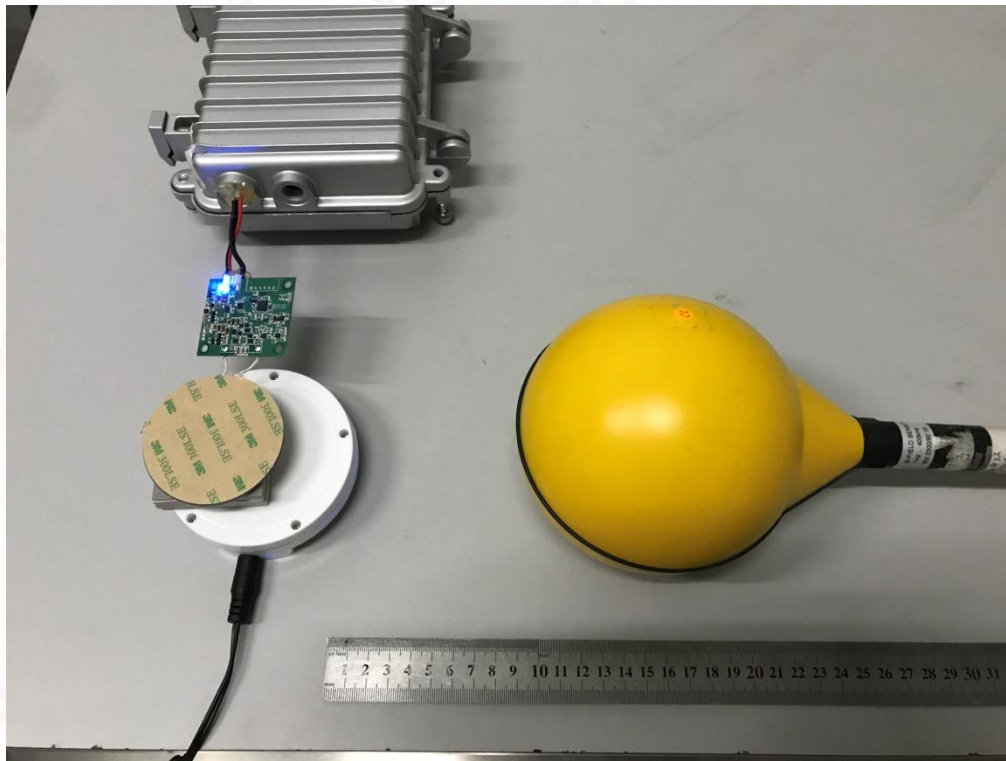
Position E



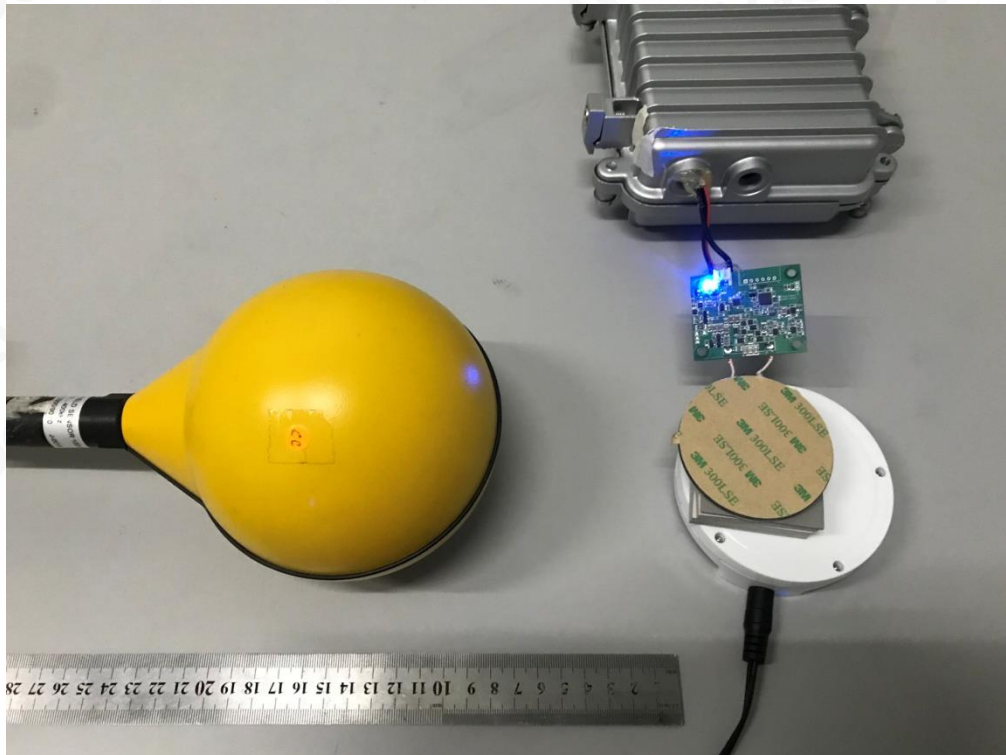
Position A



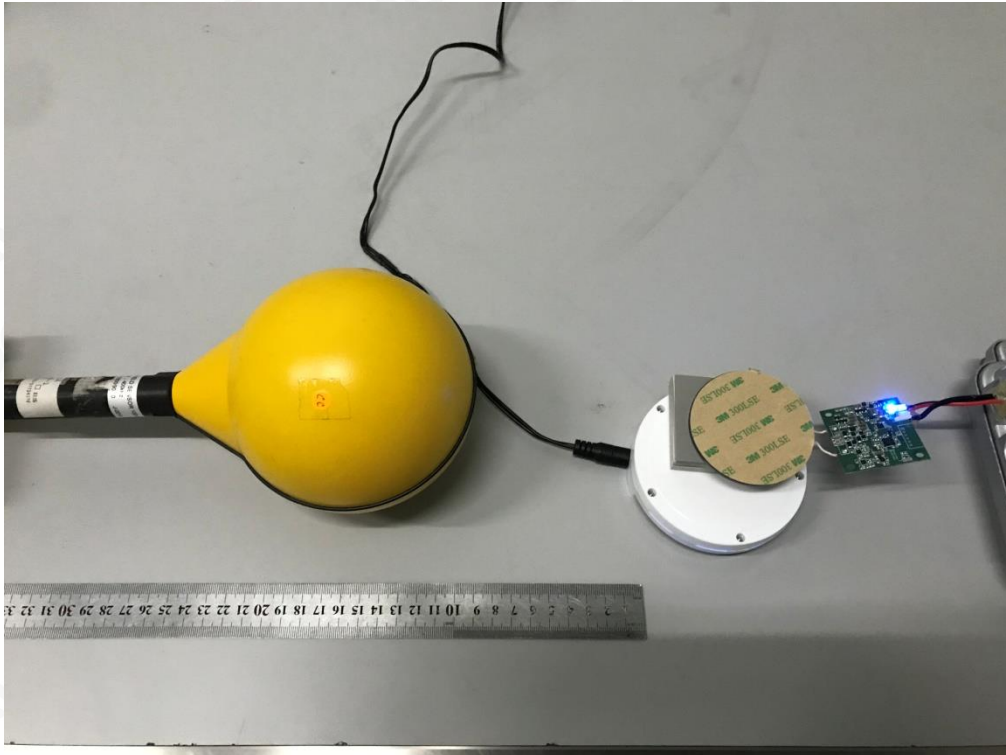
Position B



Position C



Position D



----END OF REPORT----



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