

# 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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### REPORT REVISE RECORD

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



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## 1. VERIFICATION OF CONFORMITY

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



### 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:<br>1. The mode 1 was the worst case and only the data of the worst case record in this report.<br>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

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

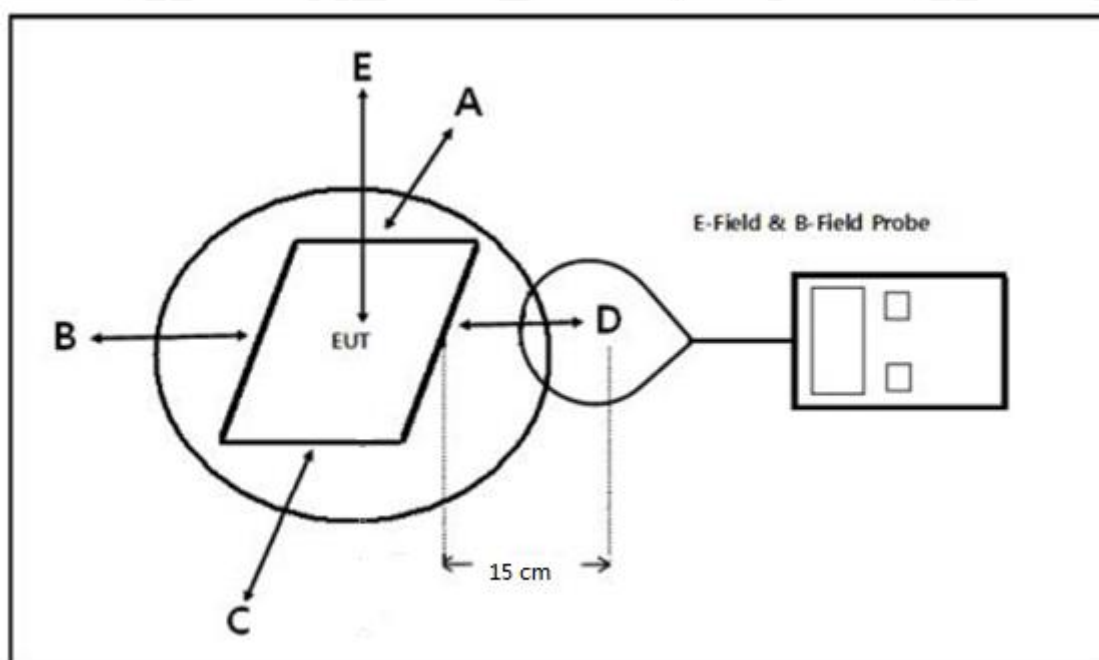


## 6. RADIO FREQUENCY (RF) EXPOSURE TEST

### 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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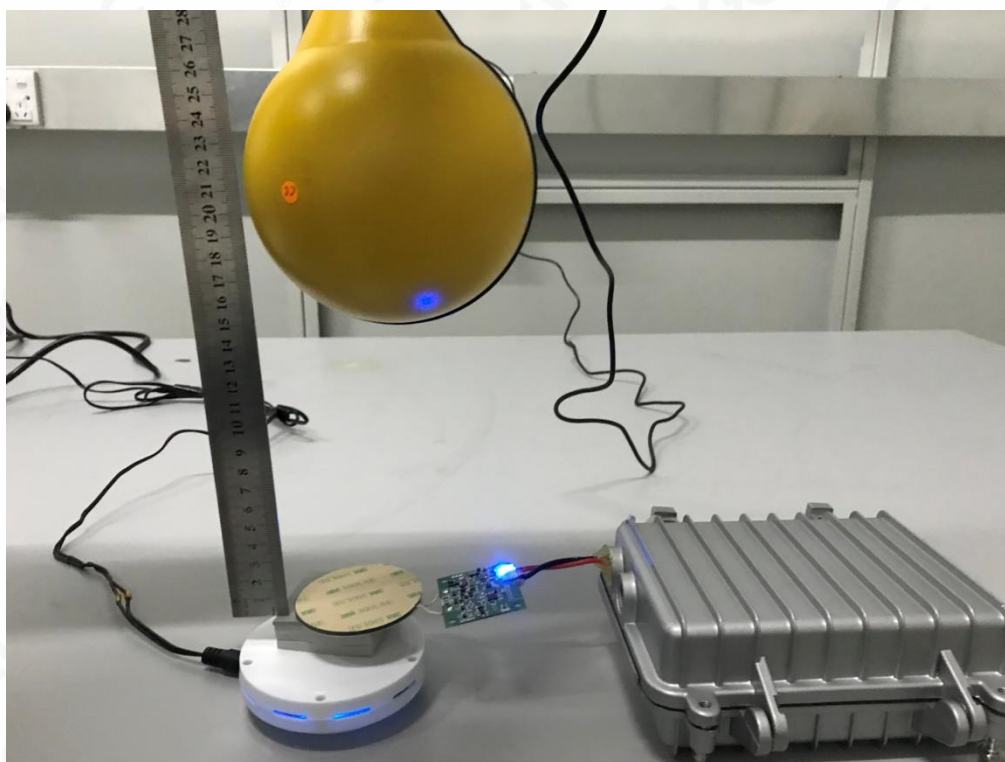
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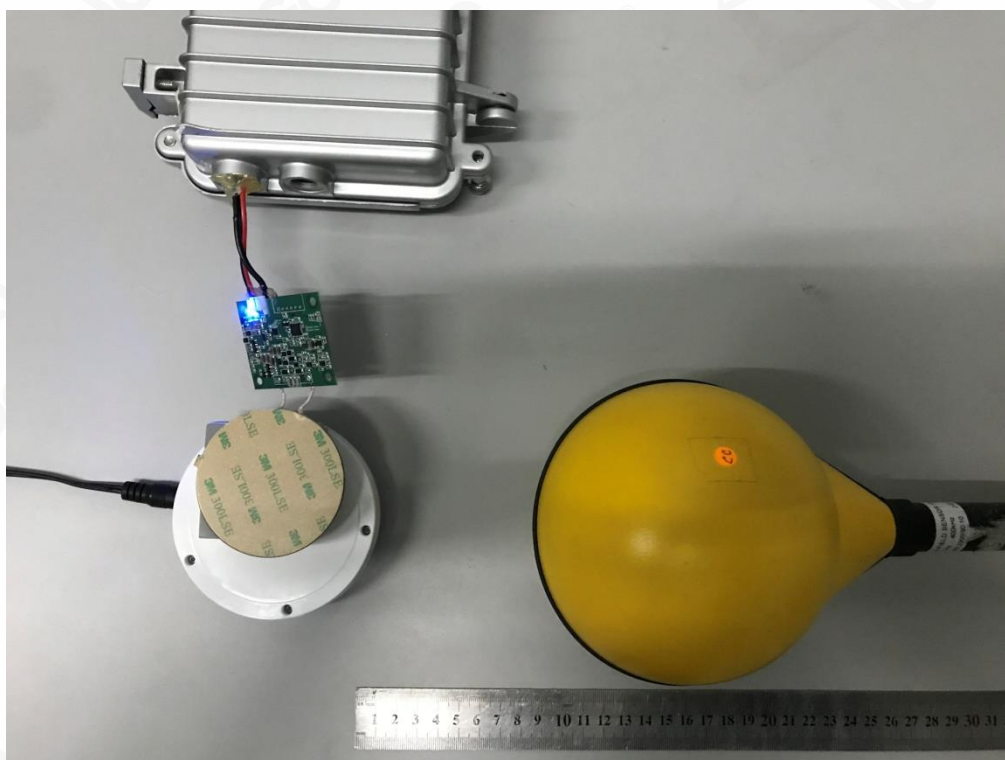
Service Hotline: 400 089 2118

## APPENDIX A: PHOTOGRAPHS OF TEST SETUP

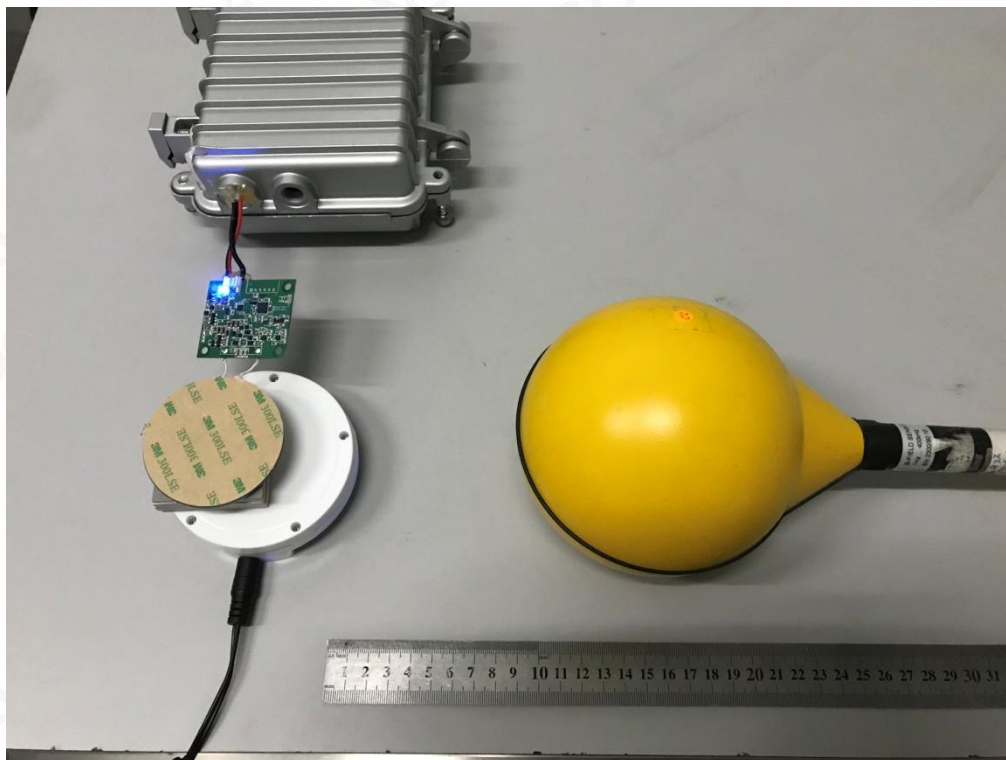
Position E



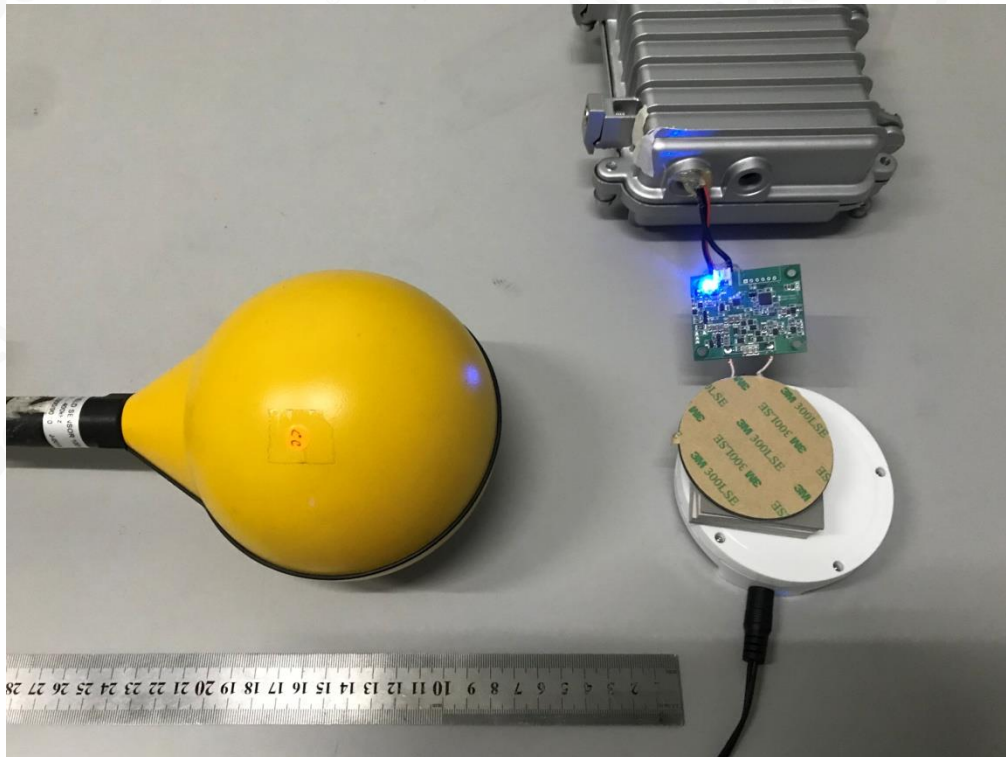
Position A



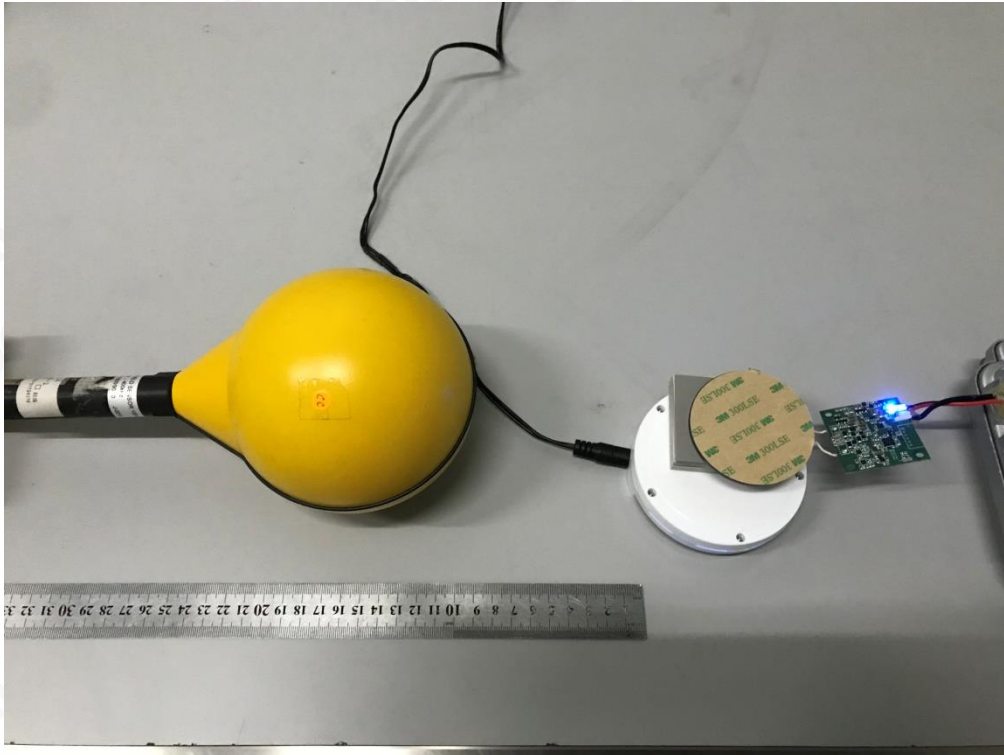
Position B



Position C



Position D



----END OF REPORT----

