

RF Exposure Report

Report No.: SA180515D12A

FCC ID: NRIRS420900

Test Model: ON-LRD-209S

Series Model: ON-LRD-20(W)(X)(Y)(Z)
(where (W)(X)(Y)(Z) may be A-Z, 0-9 or blank)

Received Date: Apr. 18, 2019

Test Date: Apr. 22 to Oct. 7, 2019

Issued Date: Oct. 8, 2019

Applicant: IR-TEC International Ltd.

Address: 6 Rong An Road, Luzhu Taoyuan 33852, TAIWAN

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

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**FCC Registration /
Designation Number:** 198487 / TW2021



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Release Control Record

Issue No.	Description	Date Issued
SA180515D12A	Original release.	Oct. 8, 2019

1 Certificate of Conformity

Product: Line Voltage OS-NET Sensor

Brand: IR-TEC

Test Model: ON-LRD-209S

Series Model: ON-LRD-20(W)(X)(Y)(Z)
(where (W)(X)(Y)(Z) may be A-Z, 0-9 or blank)

Sample Status: Engineering sample

Applicant: IR-TEC International Ltd.

Test Date: Apr. 22 to Oct. 7, 2019

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.3 -2002

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 RF characteristics under the conditions specified in this report.

Prepared by : Annie Chang, **Date:** Oct. 8, 2019
Annie Chang / Senior Specialist

Approved by : Rex Lai, **Date:** Oct. 8, 2019
Rex Lai / Associate Technical Manager

2 RF Exposure

2.1 Limits For Maximum Permissible Exposure (MPE)

2 Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
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

2.1 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.2 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2405-2480	6.19	1.05	20	0.0011	1

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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