RF EXPOSURE EVALUATION REPORT

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Test Report Number: SKT-RET-230008

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Applicant:	**Intellian Technologies, Inc.** 18-7, Jinwisandan-ro, Jinwi-myeon (Chungho-ri) Pyeongtaek-si, Gyeonggi-do, 17709 Korea
Manufacturer:	**Intellian Technologies, Inc.** 18-7, Jinwisandan-ro, Jinwi-myeon (Chungho-ri) Pyeongtaek-si, Gyeonggi-do, 17709 Korea
Product:	OW70L (P-P)
Model:	PS-OW70PP
FCC ID:	XXZ-INTOW70LPP
Project number:	SKTEU23-0806
EUT received:	June 26, 2023

Type of Evaluation:	RF Exposure Evaluation

The above equipment has been tested by SK Tech Co., Ltd., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product or system, which was tested.

Inhee Bae / **Testing Engineer**

Jongsoo Yoon / **Technical Manager**

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Revision History of Test Report

Rev.	Revisions	Effect page	Approved by	Date
-	Initial issue	All	Jongsoo Yoon	July 20, 2023

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1 Description of equipment under test (EUT)

Product:	OW70L (P-P)
Model:	PS-OW70PP
Serial number:	None (prototype)
Hardware version:	prototype
Software version:	prototype

Model differences:

Model name	Difference	Tested (checked)
PS-OW70PP	fully tested model that was provided by the applicant.	☒

Technical data:

Technologies	Bandwidth	Max. power output (conducted)	Max. antenna gain	Max. EIRP
Satellite 14000 MHz to 14500 MHz	19.8 MHz	24.6 dBm	39.0 dBi	63.6 dBm
Satellite 14000 MHz to 14500 MHz	39.6 MHz	27.6 dBm	39.0 dBi	66.6 dBm

2 FCC Exposure Limits

2.1. FCC, CFR 47 Section

The table below is excerpted from Table 1 of 47 CFR 1.1310 titled "Limits for Maximum Permissible Exposure (MPE), (ii) Limits for General Population/Uncontrolled Exposure"

Frequency Range (MHz)	Power Density (mW/cm^2)	Averaging Time (minutes)
1500 - 100000	1.0	30

where f = frequency in MHz

NOTE: 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.

3 Prediction of MPE limit at given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

Linear form $S = PG / 4\pi R^2$

Where: S is the power density (W/m^2)
P is the power delivered to the antenna (W)
G is the antenna gain observed in the far-field region (linear)
R is the distance from antenna to point of interest (m)

Prediction: worst case [under FCC, CFR 47 Section]

Technologies:		Satellite		
	Frequency	14 263	14 272.9	MHz
PG	Declared max power (EIRP)	63.6	66.6	dBm
R	Distance	750	750	cm
S	MPE limit for uncontrolled exposure	1.0	1.0	mW/cm^2
	Calculated Power density:	**0.324**	**0.647**	**mW/cm^2**

This prediction demonstrates the following:
The power density levels at a distance of 7.5 meters are below the maximum levels allowed by regulations.