Client:	Topcon Positioning Systems	Job Number:	PR079758
Product:	R2L UHF	T-Log Number:	TL079758-Radio
		Project Manager:	Suzan Hill
Contact:	Ferdinand Riodique	Project Coordinator:	Deniz Demirci
Standard:	FCC Part 90, RSS-119 Issue 12	Class:	N/A

Maximum Permissible Exposure / SAR Exclusion

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 8/27/2018

Test Engineer: Deniz Demirci

General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4\ \pi d^2)$$

Where: S is power density (W/m^2), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

Summary of Results

Device complies with Power Density requirements at 20 cm separation:	No
If not, required separation distance (in cm):	30.9

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

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Standard:	FCC Part 90, RSS-119 Issue 12	Class:	N/A

FCC MPE Calculation

Use: General

Antenna: 2.5 dBi

USE THIS FOR 300-1500 MHz single transmitters (General use)

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2
406.1125	30.3	1071.5	0	2.5	30.3	1905.46	0.379	0.271
469.9875	30.3	1071.5	0	2.5	30.3	1905.46	0.379	0.313

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
406.1125	0.379	0.271	23.7
469.9875	0.379	0.313	22.0

Industry Canada MPE Calculation

Use: General

Antenna: 2.5 dBi

USE THIS FOR 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2
406.1125	30.3	1071.5	0	2.5	30.3	1905.46	0.379	0.159
469.9875	30.3	1071.5	0	2.5	30.3	1905.46	0.379	0.175

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
406.1125	0.379	0.159	30.9
469.9875	0.379	0.175	29.4