

RF Exposure Report

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure(MPE), Limits for General Population/Uncontrolled Exposure table in (e) of this section:

Frequency range (MHz)	Power density (mW/cm ²)
300 – 1,500	f/1500
1,500 – 100,000	1.0

The RF Exposure level is calculated using the general equation:

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

R = 20 cm

π = 3.1416

Antenna gain: 2dBi

The power density limit is:

For 300-1,500 MHz: f/1500 mW/cm^{2c}

exact figure is showed as Limit column in table blow

Solving for S, the power density at 20 cm

EUT model number: 900M DATA-LINK-AIR. With the software which was provide by applicant he EUT could be set to continuous transmit mode (duty cycle \geq 98%) with a certain modulation scheme and data rate on a certain frequency. 10kbps data rate was identified as the worst case condition while EUT is continuously transmitting signal in single channel. The report was made base on the worst data recorded in report SH16050055W02.

10kbps:

Channel	dBm (PK)	mW	G (dBi)	Numeric	R (cm)	S (mW/cm ²)	Limit (mW/cm ²)
0	24.29	268.53	2.0	1.6	20	0.08467	0.60160
33	24.74	296.48	2.0	1.6	20	0.09348	0.61013
63	24.54	284.45	2.0	1.6	20	0.08969	0.61840

So, the power density is kept as PASS.

Please contact us if you have any further questions.

Best Regards

Skylabs

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