

Calculation and sample for Confirmation

Dear Reviewer,

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

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:

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

The EUT antenna gain is 2.0dBi

R = 3 cm

$\pi = 3.1416$

The power density limit is:

For 1,500 – 100,000MHz: 1.0 mW/cm²

Solving for S, the power density at 3 cm is

tune up power is 8.5+1dBm=9.5dbm

Frequency (MHz)	dBm	tune up	mW	G (dBi)	Numeric	R (cm)	S (mW/cm ²)	Limit (mW/cm ²)
2421	8.65	9.5	8.91	2.0	1.6	2	0.28101	1
2442	8.79	9.5	8.91	2.0	1.6	2	0.28101	1
2464	8.46	9.5	8.91	2.0	1.6	2	0.28101	1

So, the power density is kept.

Please contact us if you have any additional questions.

Best Regards!

Shanghai Skylabs Co., Ltd.

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