

RF EXPOSURE REPORT

FCC ID: 2BNU7-LEC-432DMX

Report Reference No. : 25EFSS01044 03771

Date of issue : 2025-03-01

Applicant's name.....: Minar Illumination Electronic Ltd.

Address.....: Room 504, Building 3, Taohui Home Appliance Park, Sanle East Road 23, Shunjiang Community, Beijiao Town, Shunde District, Foshan City, Guangdong Province, China

Manufacturer.....: Minar Illumination Electronic Ltd.

Equipment.....: LED Light Engine

Trade Mark.....: /

Model: LEC-432DMX

Ratings.....: I/P: 12VDC (From power adapter)

Testing Laboratory: DongGuan ShuoXin Electronic Technology Co., Ltd.

Address.....: Zone A, 1F, No. 6, XinGang Road YuanGang Street, XinAn District, ChangAn Town, DongGuan City, GuangDong, China

According: KDB 447498 D04 Interim General RF Exposure Guidance v01

Test Engineer:



Blue Qiu

Responsible Engineer :



Leo Chen

Authorized Signatory:



Smile Wang

MPE CALCULATION METHOD:

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B. 1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).
The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3	1.9953	6.543	4.5113	0.00179	1	Complies

The service distance is greater than 20cm.
Then SAR evaluation is not required.

END