

MPE exemption letter according Interim procedure KDB 447498 D04

Customer	Product	Model	Type	HW Status	SW status	FCC ID
Giraffe360 SIA Delu iela 4 LV-1004, Riga Latvija	360 Degree Camera	GRF-400	n/a	V1.0	G0-105- 06-09- 2022	2A8A7-V599

Declared minimum distance to human body according to customer = 10 cm according customer's document "MPE Information Requirements_v3".

The customer thus declares that the device is not body-worn.

According 1.1307(b)(3)(i)(C) Option C – ERP frequencies above 300 kHz but at distances $R > \lambda/2\pi$ can be exempted as follows:

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES
SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source Frequency			Minimum Distance			Threshold ERP
f_L MHz		f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W
0.3	–	1.34	159 m	–	35.6 m	1,920 R ²
1.34	–	30	35.6 m	–	1.6 m	3,450 R ² /f ²
30	–	300	1.6 m	–	159 mm	3.83 R ²
300	–	1,500	159 mm	–	31.8 mm	0.0128 R ² f
1,500	–	100,000	31.8 mm	–	0.5 mm	19.2R ²
Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.						

Calculation based on external document "MPE Information Requirements_v3" provided by customer.

WiFi 2.4GHz										
Frequency [MHz]	$\lambda/2\pi$ [m]	R [m]	$R \geq \lambda/2\pi$ fulfilled	Threshold ERP [W]	Cond. PWR incl. Tolerance [dBm]	Maximum Antenna Gain [dBi]	EIRP [dBm]	ERP [dBm]	ERP [W]	MPE Exemption fulfilled
2412	0.020	0.100	yes	0.192	6.5	2.7	9.2	7.05	0.005	yes
2437	0.020	0.100	yes	0.192	6.5	2.7	9.2	7.05	0.005	yes
2462	0.019	0.100	yes	0.192	6.5	2.7	9.2	7.05	0.005	yes

WiFi 5GHz										
Frequency [MHz]	$\lambda/2\pi$ [m]	R [m]	$R \geq \lambda/2\pi$ fulfilled	Threshold ERP [W]	Cond. PWR incl. Tolerance [dBm]	Maximum Antenna Gain [dBi]	EIRP [dBm]	ERP [dBm]	ERP [W]	MPE Exemption fulfilled
5180	0.009	0.100	yes	0.192	6.5	4.3	10.8	8.65	0.007	yes
5500	0.009	0.100	yes	0.192	6.5	4.3	10.8	8.65	0.007	yes
5825	0.008	0.100	yes	0.192	6.5	4.3	10.8	8.65	0.007	yes

BT 2.4GHz										
Frequency [MHz]	$\lambda/2\pi$ [m]	R [m]	$R \geq \lambda/2\pi$ fulfilled	Threshold ERP [W]	Cond. PWR incl. Tolerance [dBm]	Maximum Antenna Gain [dBi]	EIRP [dBm]	ERP [dBm]	ERP [W]	MPE Exemption fulfilled
2402	0.020	0.100	yes	0.192	1.5	2.7	4.2	2.05	0.002	yes
2440	0.020	0.100	yes	0.192	1.5	2.7	4.2	2.05	0.002	yes
2480	0.019	0.100	yes	0.192	1.5	2.7	4.2	2.05	0.002	yes

Conclusion: MPE-Based Exemption fulfilled

The current version of test report 22-1-0025001T07a-C01 replaces the test report 22-1-0025001T07a dated 2022-Oct-06. The replaced test report is herewith invalid.

Dipl.-Ing. Ninovic Perez

B.Eng. Martin Nunier

Version	Applied changes	Date of release
--	Initial release	2022-Oct-06
C01	Changed model name, hardware version, software version and FCC ID.	2023-Jan-05