

Manufacturer: Cassina S.p.A.

Name: Oscar Frau

Product: RADIO842

Title: Project Handler

FCC ID: 2A3CQ-RADIO842

Signature: 

MPE limits (§1.1310)

Mode	Frequency MHz	Duty Cycle %	Antenna		EIRP ¹ dBm	EIRP mW	Distance cm	PD ² mW/cm^2	PD Limit ³ mW/cm^2	Margin dB	2.1091 EIRP Limit mW	2.1091 EIRP Margin dB	PD/PD Limit	Worst PD/PD values to be considered
			Power dBm	Gain dBi										
BLE ⁴	2406,0	100	13,78	1,16	14,94	31,2	20	0,006	1,000	22,07	1260	16,06	0,00620	0,00620

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)
²PD = EIRP / (4xπxD²)
³CFR 47 Part 1, §1.1310(e), table 1
⁴See FCC ID: SH6MD8SXXP1; Report No: ER/2015/60026, p.18: Max Conducted Power, p.7: Antenna Gain

2.1091 EIRP Limit

1.1307 (b)(3)(i)(C) exemption limit

RF Source Frequency MHz	F MHz	R m	λ m	λ/2π m	R/(λ/2π)	Threshold ERP W	Threshold EIRP W	Threshold EIRP mW	EIRP mW	Margin dB
300-1500										
1500-100000	2406	0,20	0,125	0,0198	10,1	0,76800	1,260	1260	31,2	16,1

1.1307 (b)(3)(i)(B) exemption limit

0.3 GHz ≤ f ≤ 1.5 GHz
0.5 cm ≤ d ≤ 20 cm

f GHz	ERP _{20cm} mW	x	d cm	Pth mW	Threshold EIRP mW	EIRP mW	Margin dB
1,5	3060	1,796	20	3060	5018		

0.3 GHz ≤ f ≤ 1.5 GHz
20 cm < d ≤ 40 cm

f GHz	ERP _{20cm} mW	Pth = ERP _{20cm} mW
GHz	mW	mW

1.5 GHz < f ≤ 6.0 GHz
0.5 cm ≤ d ≤ 20 cm

f GHz	ERP _{20cm} mW	x	d cm	Pth mW	Threshold EIRP mW
6	3060	2,097	20	3060	5018

1.5 GHz < f ≤ 6.0 GHz
20 cm < d ≤ 40 cm

f GHz	ERP _{20cm} mW	Pth = ERP _{20cm} mW	EIRP mW	Margin dB
2406	3060	3060	5018	31,2
				22,1