

Manufacturer: ELEVADORES ATLAS
SCHINDLER LTDA

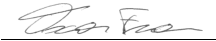
Name: Oscar Frau

Product: CUBE PLUS XA

Title: Project Handler

FCC ID: 2AZ9H-CUBE PXA

Signature:



MPE limits (\$1.1310)

Mode	Frequency	Duty Cycle	Power	Antenna								2.1091 EIRP	2.1091 EIRP		Worst PD/PD values to be considered
	MHz	%	dBm	Gain	EIRP ¹	EIRP	Distance	PD ²	PD Limit ³	Margin		Limit	Margin	PD/PD Limit	
				dBi		mW	cm	mW/cm^2	mW/cm^2	dB		mW	dB		
BT ⁴	2441,0	100	10,0	3,4	13,39	21,8	20	0,004	1,000	23,62		1260	17,61	0,00434	0,17327
WiFi ⁴	2412,0	100	26,0	3,4	29,40	871,0	20	0,173	1,000	7,61		1260	1,60	0,17327	
GSM 850 ⁵	824,2	100	32,81	0,25	33,06	2023,0	20	0,402	0,549	1,35		2757	1,35	0,73247	
DCS 1900 ⁵	1850,2	100	29,79	0,25	30,04	1009,3	20	0,201	1,000	6,97		1260	0,96	0,20078	
WCDMA B2 ⁵	1852,4	100	23,15	0,25	23,40	218,8	20	0,044	1,000	13,61		1260	7,60	0,04352	0,73247
WCDMA B4 ⁵	1712,4	100	23,05	0,25	23,30	213,8	20	0,043	1,000	13,71		1260	7,70	0,04253	
WCDMA B5 ⁵	826,4	100	23,37	0,25	23,62	230,1	20	0,046	0,551	10,80		2757	10,79	0,08311	
LTE B2 ⁵	1850,7	100	23,40	0,25	23,65	231,7	20	0,046	1,000	13,36		1260	7,35	0,04610	
LTE B4 ⁵	1732,5	100	23,20	0,25	23,45	221,3	20	0,044	1,000	13,56		1260	7,55	0,04403	0,08323
LTE B5 ⁵	848,3	100	23,49	0,25	23,74	236,6	20	0,047	0,566	10,80		2757	10,67	0,08323	
LTE B7 ⁵	2535,0	100	23,48	0,25	23,73	236,0	20	0,047	1,000	13,28		1260	7,27	0,04696	

FCC Co-Location = 0,90574 < 1

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)

²PD = EIRP / (4πr²)

³CFR 47 Part 1, §1.1310(e), table 1

⁴See FCC ID: 2AC7Z-ESP32WROOM32E; Report No: RSHD200218007-00A, p.68: Max Conducted Power, p.17: Antenna Gain; Report No: RSHD200218007-00B, p.63: Max Conducted Power, p.4: Antenna Gain

⁵See FCC ID: R17LE910CXLA; Report No. 1970268R-RF-US-Exp

New Cellular antenna, type SL10413Z, Gain 0,25 dBi

2.1091 EIRP Limit

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

RF Source	F	R	λ	λ/2π	R/(λ/2π)	Threshold	Threshold	Threshold	EIRP	Margin
Frequency	MHz	m	m	m		ERP	EIRP	EIRP	mW	dB
						W	W	mW		
300-1500	824,2	0,20	0,364	0,0579	3,45	0,42199	0,692	692	2023,0	-4,66
1500-100000	2441,0	0,20	0,123	0,0196	10,2	0,76800	1,260	1260	21,8	17,6
	2412,0	0,20	0,124	0,0198	10,1	0,76800	1,260	1260	871,0	1,60
	1850,2	0,20	0,162	0,0258	7,75	0,76800	1,260	1260	1009,3	0,962

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

0.3 GHz ≤ f ≤ 1.5 GHz		0.5 cm ≤ d ≤ 20 cm													
f	ERP _{20cm}	d	Pth	Threshold EIRP	EIRP	Margin	f	ERP _{20cm}	d	Pth	Threshold EIRP	EIRP	Margin	f	ERP _{20cm}
GHz	mW	cm	mW	mW	mW	dB	GHz	mW	cm	mW	mW	mW	dB	GHz	mW
1,5	3060	1,796	20	3060	5018		0,8242	1681,368	1681	2757	2023,0	1,345	0,8242	1681,368	
0.3 GHz ≤ f ≤ 1.5 GHz		20 cm < d ≤ 40 cm													
f	ERP _{20cm}	Pth = ERP _{20cm}						f	ERP _{20cm}	Pth = ERP _{20cm}					
GHz	mW	mW						GHz	mW	mW					
0,8242	1681,368	1681		2757		2023,0		0,8242	1681,368	1681		2757		2023,0	
1.5 GHz < f ≤ 6.0 GHz		0.5 cm ≤ d ≤ 20 cm													
f	ERP _{20cm}	d	Pth	Threshold EIRP	EIRP	Margin	f	ERP _{20cm}	d	Pth	Threshold EIRP	EIRP	Margin	f	ERP _{20cm}
GHz	mW	cm	mW	mW	mW	dB	GHz	mW	cm	mW	mW	mW	dB	GHz	mW
6	3060	2,097	20	3060	5018		1850,2	3060	3060	5018	1009,3	23,6	1850,2	3060	
1.5 GHz < f ≤ 6.0 GHz		20 cm < d ≤ 40 cm													
f	ERP _{20cm}	Pth = ERP _{20cm}						f	ERP _{20cm}	Pth = ERP _{20cm}					
GHz	mW	mW						GHz	mW	mW					
2441,0	3060	3060		5018		21,8		2441,0	3060	3060		5018		21,8	
2412,0	3060	3060		5018		871,0		2412,0	3060	3060		5018		871,0	