

### ITU-R Art. 22.5D EPFD Calculations

	ES on the ground	ES on Super Heavy Booster	ES on Starship
Nominal altitude (km)	0	103	300
Nominal altitude (ft)	0	337927	984252
min distance to GSO [km]	35786	35683	35486
Spreading loss [dB]	-162.07	-162.04	-161.99
Max EIRP density towards the GSO arc [dBW/40kHz]	-21.1	-21.1	-21.1
Max EPFD_up [dB(W/m <sup>2</sup> )/40kHz]	-183.17	-183.14	-183.09
ITU-R Art 22.5 EPFD Limit [dB(W/m <sup>2</sup> )/40kHz]	-160		
Margin [dB]	23.17	23.14	23.09