Directional Antenna Exhibit: FCC STA File 0708-EX-ST-2022

Ground station is a land based mobile platform in place for the duration of the balloon flight only and will be used for command/control communications with the balloon and to downlink high-rate payload data from the balloon. Balloons may also relay data to other balloons in a mesh network, but at a much lower EIRP.

There are two possible configurations that may be used.

Antenna Characteristics	Configuration
Description	Dual polarized dual 2-ft dish
Half-Power beam width	7.1°
Horizontal Orientation	Variable, direction of flight
Vertical Orientation	Variable, typ. 10 - 50°
Gain	26.6 dBi

Or,

Antenna Characteristics	Configuration
Description	Dual polarized single 3-ft dish
Half-Power beam width	4.7°
Horizontal Orientation	Variable, direction of flight
Vertical Orientation	Variable, typ. 10 - 50°
Gain	30 dBi

