

Note: Prior to deployment configuration at 28 days, only a single corner cube is visible. This corner cube does have an obstructed view, and approximately 60% of the diameter is visible. After deployment at 28 days, all corner cubes are visible.

Table 1

3-D location of the phase center of each corner cube relative to a satellite based origin.				
		X (mm)	Y (mm)	Z (mm)
Pre-Deployment				
Cube 2	10mm Cube	-26.25	48.12	166.62
Post-Deployment				
Cube 1	10mm Cube	140.63	13.88	453.33
Cube 2	10mm Cube	-26.3	138.91	469.77
Cube 3	10mm Cube	140.53	-14.03	453.33
Cube 4	10mm Cube	-24.5	133.49	449.51
Cube 5	12.7mm Cube	27.45	12.78	141.67
Cube 6	12.7mm Cube	-29.99	12.78	141.67
Cube 7	12.7mm Cube	-18.25	-43.9	141.35

Table 2

Center of mass of each corner cube relative to a satellite based origin.				
		X (mm)	Y (mm)	Z (mm)
Pre-Deployment				
Cube 2	10mm Cube	-26.25	49.78	164.45
Post-Deployment				
Cube 1	10mm Cube	138.47	13.88	451.66
Cube 2	10mm Cube	-26.3	136.75	-468.1
Cube 3	10mm Cube	138.46	-14.03	451.66
Cube 4	10mm Cube	-24.5	131.32	447.85
Cube 5	12.7mm Cube	24.98	14.71	141.67
Cube 6	12.7mm Cube	-27.53	14.71	141.67
Cube 7	12.7mm Cube	-18.25	-41.97	138.88

Table 3

Center front face of each corner cube with respect to the center of mass of the corner cube.				
		X (mm)	Y (mm)	Z (mm)
Pre-Deployment				
Cube 2	10mm Cube	0	1.66	2.17
Post-Deployment				
Cube 1	10mm Cube	2.07	0	-1.67
Cube 2	10mm Cube	0	2.16	-1.67
Cube 3	10mm Cube	-2.07	0	-1.67
Cube 4	10mm Cube	0	-2.17	-1.66
Cube 5	12.7mm Cube	2.47	-1.93	0
Cube 6	12.7mm Cube	-2.46	-1.93	0
Cube 7	12.7mm Cube	0	-1.93	2.47

Table 4

Orientation of each cube with respect to the spacecraft axes.				
		X (°)	Y (°)	Z (°)
Pre-Deployment				
Cube 2	10mm Cube	90	0	52.46
Post-Deployment				
Cube 1	10mm Cube	0	90	52.46
Cube 2	10mm Cube	90	0	52.46
Cube 3	10mm Cube	180	-90	52.46
Cube 4	10mm Cube	-90	180	52.46
Cube 5	12.7mm Cube	-38.09	90	0
Cube 6	12.7mm Cube	141.91	270	0
Cube 7	12.7mm Cube	0	90	38.09

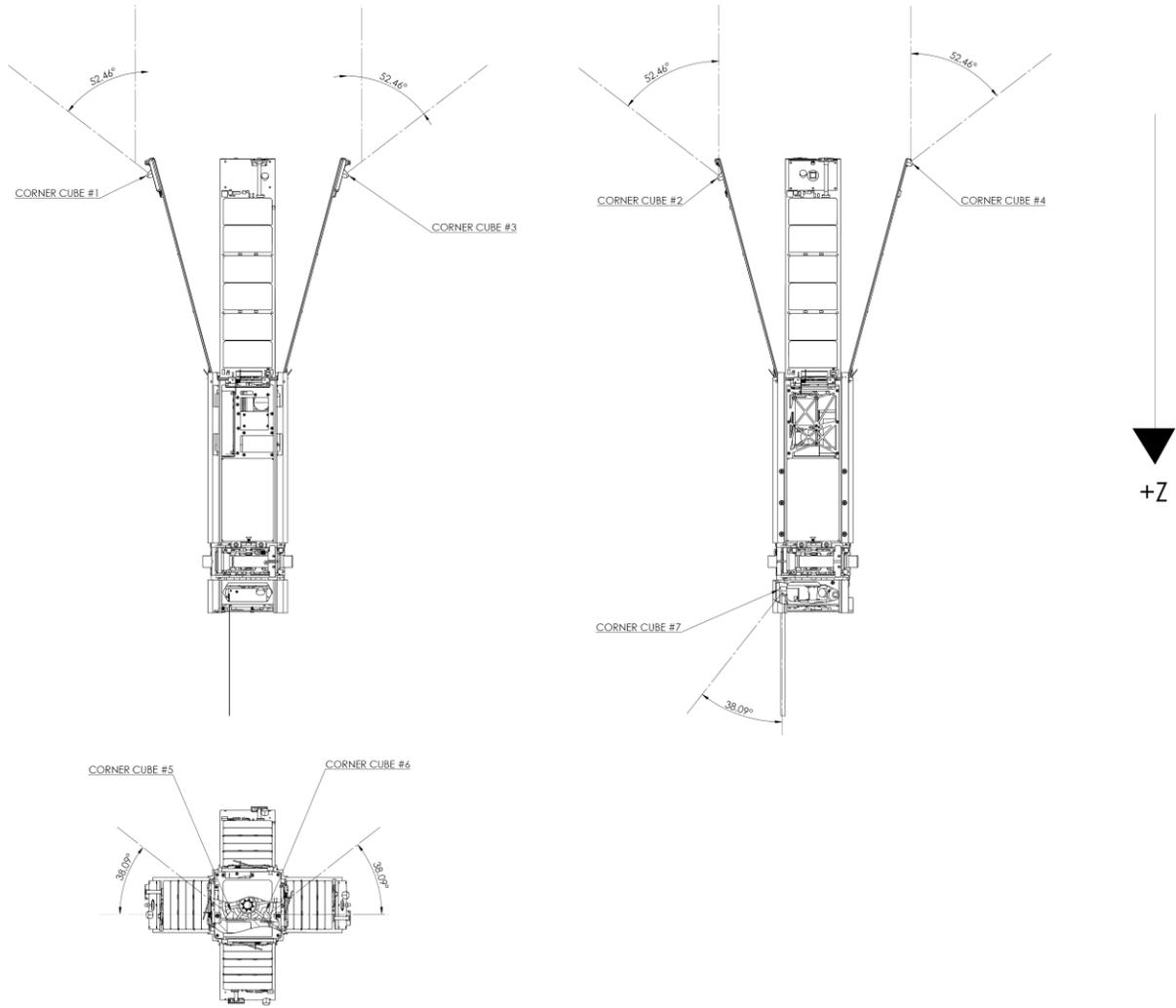


Figure 1: Corner Cube Pointing Direction

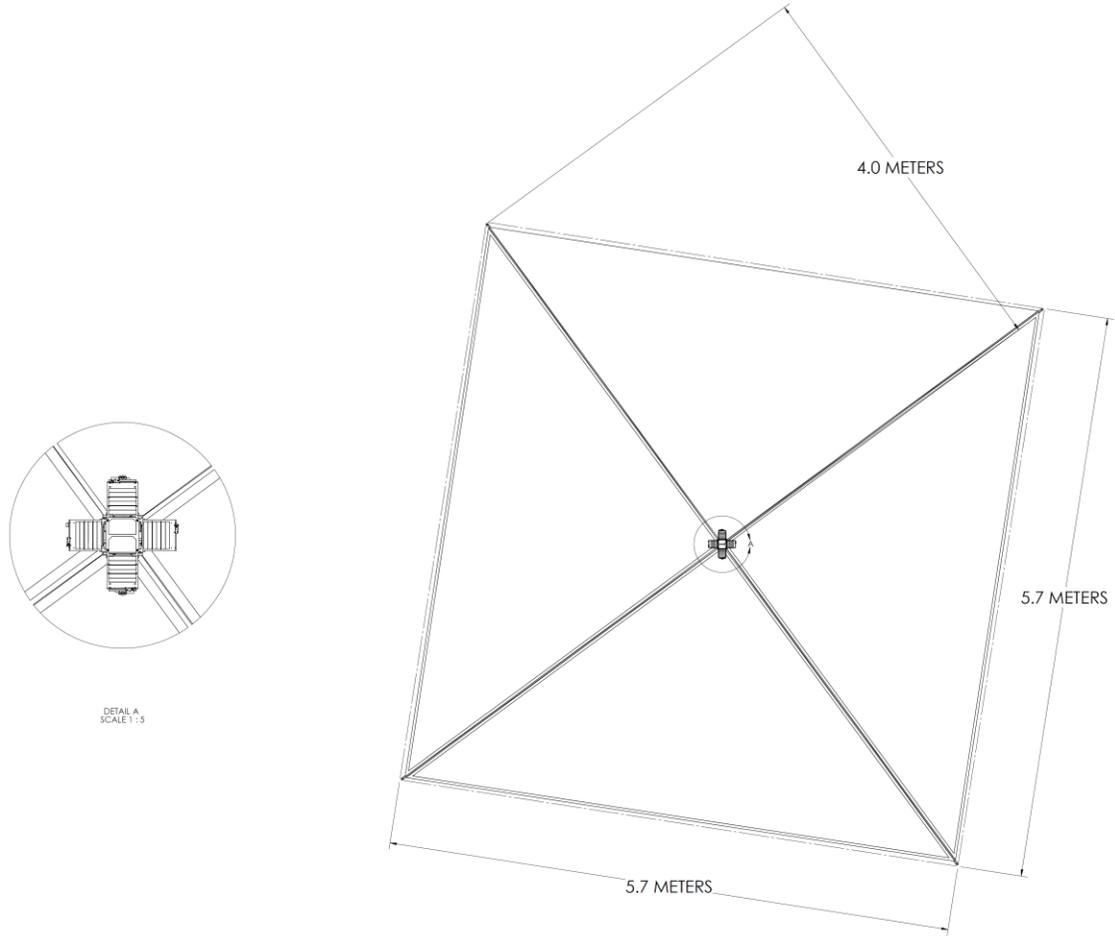


Figure 2: Top View of LightSail-A with solar sail fully deployed

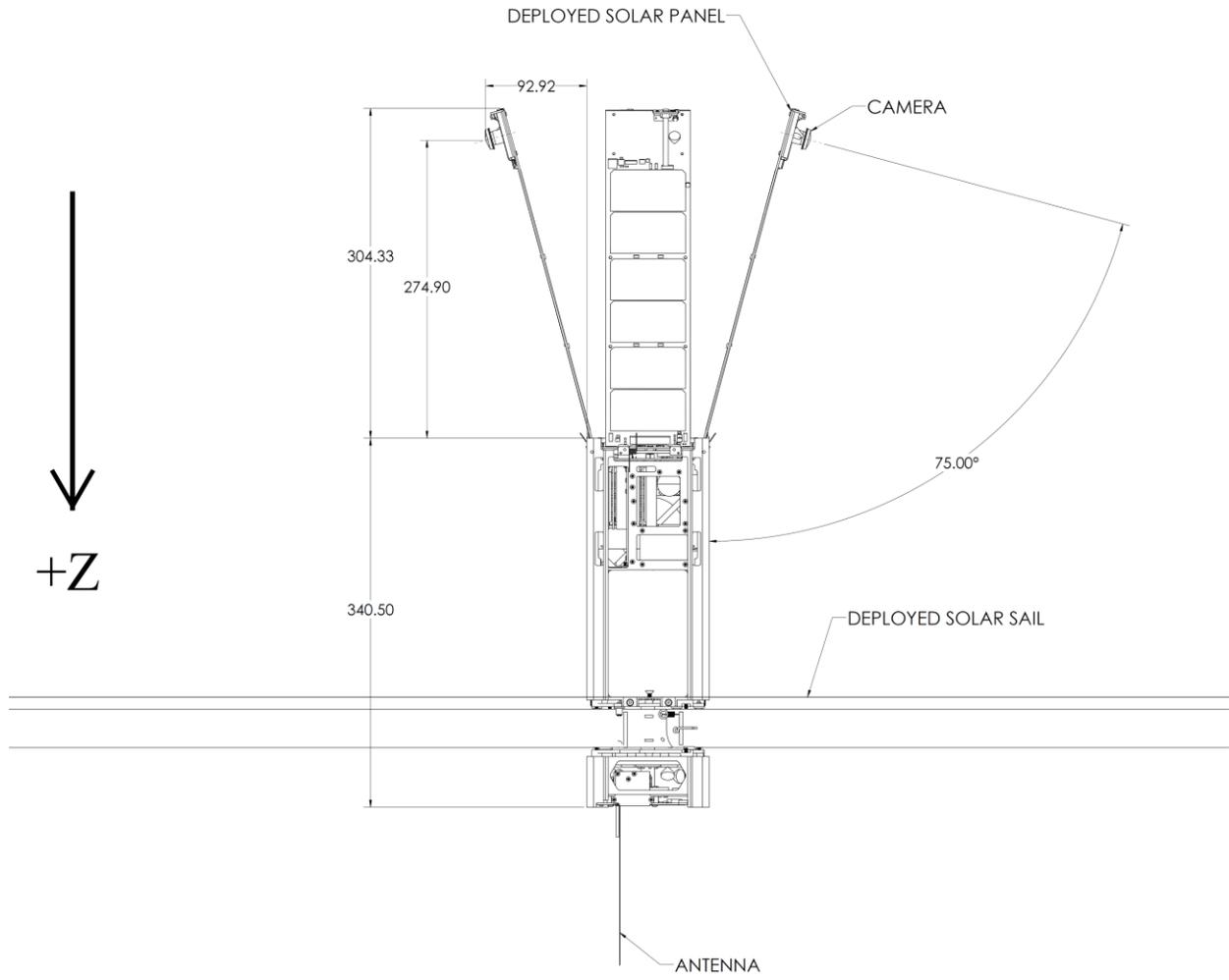


Figure 3: Close up side view of LightSail-A with solar sail fully deployed