

LASERS

Mounting Height vs Line Length

The below chart was generated to assist with picking the line angle in correlation with the required length needed for application. "Mounting height" refers to the distance between the laser and the area to be illuminated, typically ground level. "Line angle" refers to the optical angle that the laser is preconfigured to. "Line length" refers to the length of the laser when installed at "mounting height." This chart does not account for ambient light or incorporate laser power. The further the distance from mounting height, and the higher ambient light levels, the more power the laser needs to illuminate the line on ground level.



Lasers - Mounting Height vs Line Length

Mounting Height (ft.)	Line Angle	Line Length (ft.)
0.5	30°	0.27
1	30°	0.54
1.5	30°	0.8
2	30°	1.07
2.5	30°	1.34
5	30°	2.68
7.5	30°	4.02
10	30°	5.36
12.5	30°	6.7
15	30°	8.04
17.5	30°	9.38
20	30°	10.72
25	30°	13.4
30	30°	16.08
35	30°	18.76
40	30°	21.44
45	30°	24.12
50	30°	26.79
55	30°	29.47
60	30°	32.15
65	30°	34.83
70	30°	37.51
75	30°	40.19
80	30°	42.87
85	30°	45.55
90	30°	48.23
95	30°	50.91
100	30°	53.59
105	30°	56.27
110	30°	58.95
115	30°	61.63
120	30°	64.31
125	30°	66.99
130	30°	69.67
0.5	45°	0.41
1	45°	0.83
1.5	45°	1.24
2	45°	1.66
2.5	45°	2.07
5	45°	4.14
7.5	45°	6.21
10	45°	8.28
12.5	45°	10.36
15	45°	12.43
17.5	45°	14.5
20	45°	16.57

Mounting Height (ft.)	Line Angle	Line Length (ft.)
25	45°	20.71
30	45°	24.85
35	45°	28.99
40	45°	33.14
45	45°	37.28
50	45°	41.42
55	45°	45.56
60	45°	49.71
65	45°	53.85
70	45°	57.99
75	45°	62.13
80	45°	66.27
85	45°	70.42
90	45°	74.56
95	45°	78.7
100	45°	82.84
105	45°	86.98
110	45°	110
115	45°	95.27
120	45°	99.41
125	45°	103.55
130	45°	107.7
0.5	60°	0.58
1	60°	1.15
1.5	60°	1.73
2	60°	2.31
2.5	60°	2.89
5	60°	5.77
7.5	60°	8.66
10	60°	11.55
12.5	60°	14.43
15	60°	17.32
17.5	60°	20.21
20	60°	23.09
25	60°	28.87
30	60°	34.64
35	60°	40.41
40	60°	46.19
45	60°	51.96
50	60°	57.74
55	60°	63.51
60	60°	69.28
65	60°	75.06
70	60°	80.83
75	60°	86.6
80	60°	92.38

Mounting Height (ft.)	Line Angle	Line Length (ft.)
85	60°	98.15
90	60°	103.92
95	60°	109.7
100	60°	115.47
105	60°	121.24
110	60°	127.02
115	60°	132.79
120	60°	138.56
125	60°	144.34
130	60°	150.11
0.5	120°	1.73
1	120°	3.46
1.5	120°	5.2
2	120°	6.93
2.5	120°	8.66
5	120°	17.32
7.5	120°	25.98
10	120°	34.64
12.5	120°	43.3
15	120°	51.96
17.5	120°	60.62
20	120°	69.28
25	120°	86.6
30	120°	103.92
35	120°	121.24
40	120°	138.56
45	120°	155.88
50	120°	173.21
55	120°	190.53
60	120°	207.85
65	120°	225.17
70	120°	242.49
75	120°	259.81
80	120°	277.13
85	120°	294.45
90	120°	311.77
95	120°	329.09
100	120°	346.41
105	120°	363.73
110	120°	381.05
115	120°	398.37
120	120°	415.69
125	120°	433.01
130	120°	450.33
75	60°	86.6
80	60°	92.38

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