PRG

GroundControl Bad Boy® HP Spot Luminaire Photometrics

REFERENCE GUIDE

Bad Boy HP, NFOV with Standard Zoom Table

Iris Full Open

5.5° Beam Angle (Tn Beam = 0.096)

9.5° Field Angle (Tn Field = 0.166)

Peak Intensity = 3,940,000 cd

| Throw Distance (Ft)	20	40	60	80	100	120	140	160	180	200
Beam Diameter (Ft)	1.9	3.8	5.8	7.7	9.6	11.5	13.4	15.4	17.3	19.2
Illuminance (fc)	9,850	2,463	1,094	616	394	274	201	154	122	99
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Throw Distance (m)	10	20	30	40	50	60	70	80	90	100
Beam Diameter (m)	1.0	1.9	2.9	3.8	4.8	5.8	6.7	7.7	8.6	9.6
Illuminance (Lux)	39,400	9,850	4,378	2,463	1,576	1,094	804	616	486	394

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux
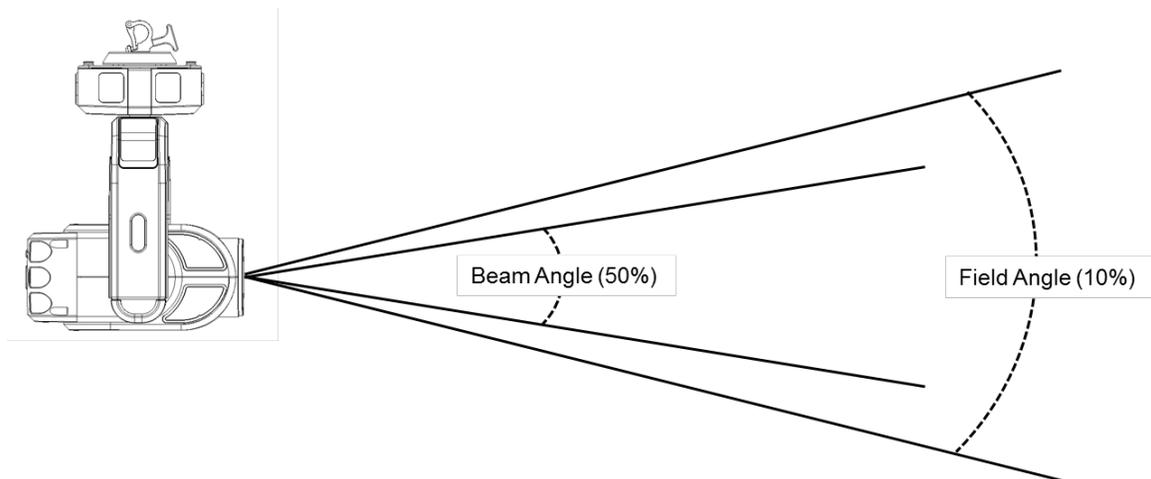
Beam Angle (50%)

Field Angle (10%)

Bad Boy HP, NFOV with Narrow Zoom Table

Iris Full Open

4.0º Beam Angle (Tn Beam = 0.070)

5.5º Field Angle (Tn Field = 0.096)

Peak Intensity = 4,576,000 cd

Throw Distance (Ft)	100	150	200	250	300	350	400	450	500
Beam Diameter (Ft)	7.0	10.5	14.0	17.5	21.0	24.4	27.9	31.4	34.9
Illuminance (fc)	458	203	114	73	51	37	29	23	18
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Throw Distance (m)	50	75	100	125	150	175	200	225	250
Beam Diameter (m)	3.5	5.2	7.0	8.7	10.5	12.2	14.0	15.7	17.5
Illuminance (Lux)	1,830	814	458	293	203	149	114	90	73

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux

Beam Angle (50%)   Field Angle (10%)
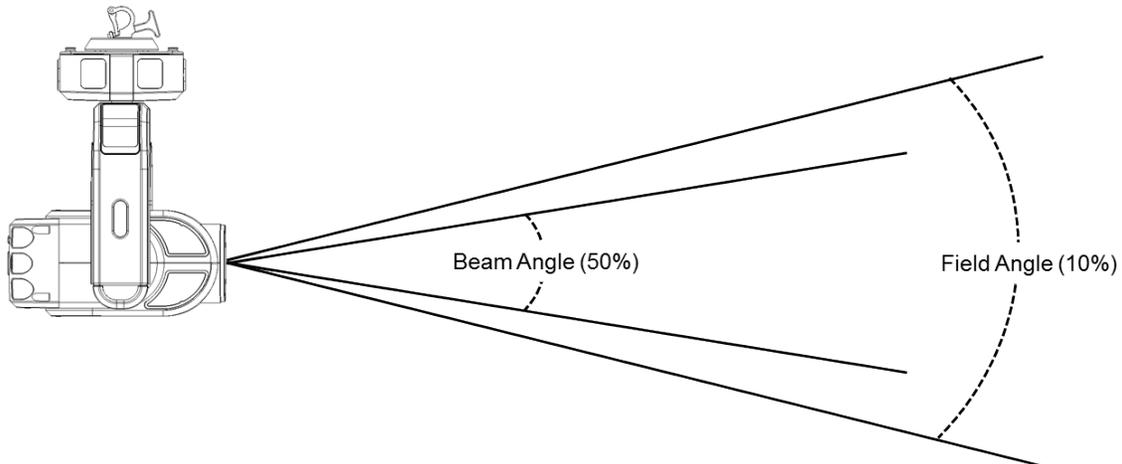
Medium Field of View, Standard Zoom Table

Bad Boy HP, MFOV with Standard Zoom Table

Iris Full Open

21.0° Beam Angle (Tn Beam = 0.371)

30.5° Field Angle (Tn Field = 0.545)

Peak Intensity = 378,000 cd

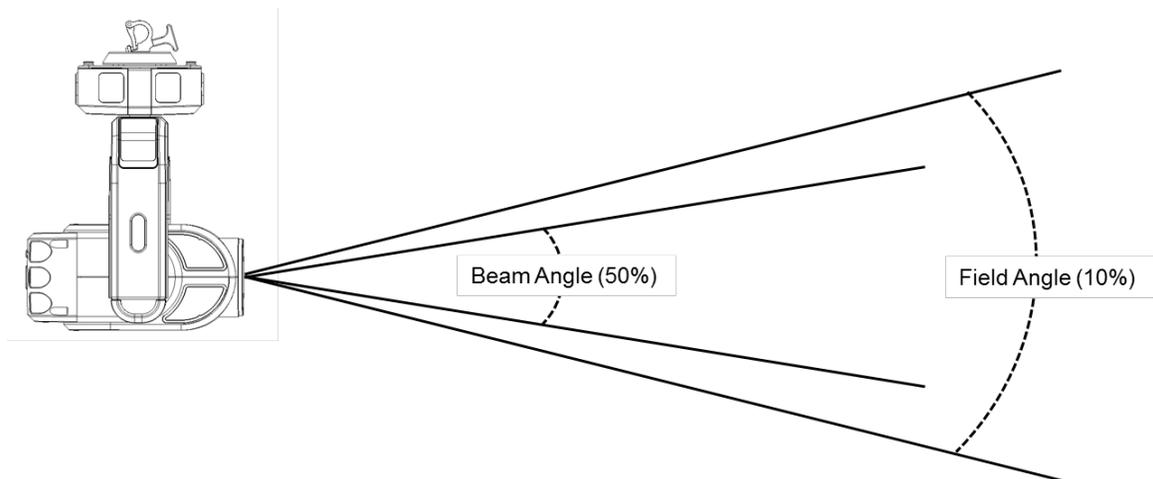| Throw Distance (Ft)	20	40	60	80	100	120	140	160	180	200
Beam Diameter (Ft)	7.4	14.8	22.2	29.7	37.1	44.5	51.9	59.3	66.7	74.1
Illuminance (fc)	945	236	105	59	38	26	19	15	12	9
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Throw Distance (m)	10	20	30	40	50	60	70	80	90	100
Beam Diameter (m)	3.7	7.4	11.1	14.8	18.5	22.2	25.9	29.7	33.4	37.1
Illuminance (Lux)	3,780	945	420	236	151	105	77	59	47	38

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux

Beam Angle (50%)

Field Angle (10%)

Bad Boy HP, MFOV with Narrow Zoom Table

Iris Full Open

5.0º Beam Angle (Tn Beam = 0.087)

7.5º Field Angle (Tn Field = 0.131)

Peak Intensity = 4,424,000 cd
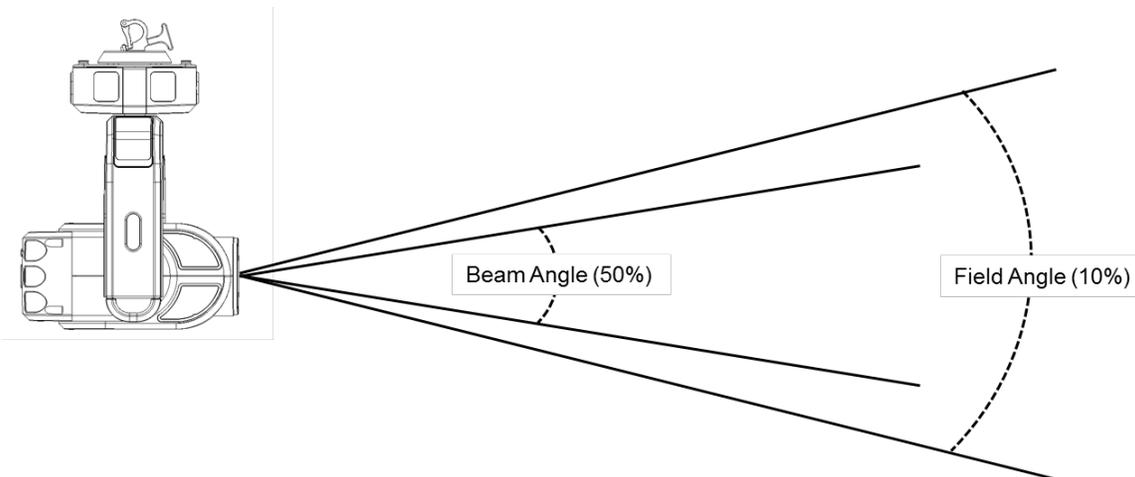
Throw Distance (Ft)	100	150	200	250	300	350	400	450	500
Beam Diameter (Ft)	8.7	13.1	17.5	21.8	26.2	30.6	34.9	39.3	43.7
Illuminance (fc)	442	197	111	71	49	36	28	22	18
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Throw Distance (m)	50	75	100	125	150	175	200	225	250
Beam Diameter (m)	4.4	6.5	8.7	10.9	13.1	15.3	17.5	19.6	21.8
Illuminance (Lux)	1,770	786	442	283	197	144	111	87	71

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux

Beam Angle (50%)

Field Angle (10%)

Bad Boy HP, WFOV with Standard Zoom Table

Iris Full Open

46.5º Beam Angle (Tn Beam = 0.859)

56.0º Field Angle (Tn Field = 1.063)

Peak Intensity = 76,200 cd

Throw Distance (Ft)	20	40	60	80	100	120	140	160	180	200
Beam Diameter (Ft)	17.2	34.4	51.6	68.7	85.9	103.1	120.3	137.5	154.7	171.9
Illuminance (fc)	191	48	21	12	8	5	4	3	2	2
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Throw Distance (m)	10	20	30	40	50	60	70	80	90	100
Beam Diameter (m)	8.6	17.2	25.8	34.4	43.0	51.6	60.1	68.7	77.3	85.9
Illuminance (lux)	762	191	85	48	30	21	16	12	9	8

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux
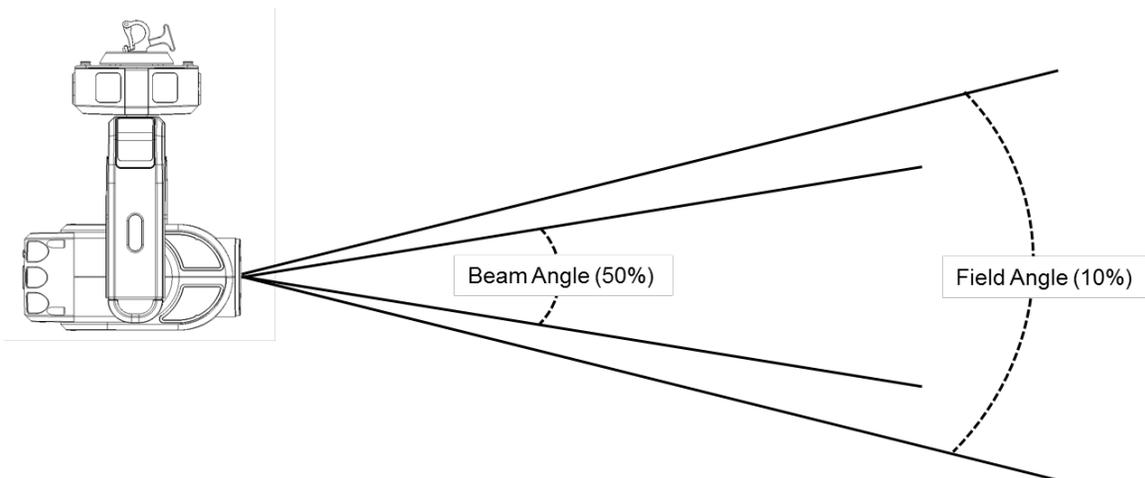
Beam Angle (50%)

Field Angle (10%)

Bad Boy HP, WFOV with Narrow Zoom Table

Iris Full Open

6.5º Beam Angle (Tn Beam = 0.114)

11.0º Field Angle (Tn Field = 0.193)

Peak Intensity = 3,072,000 cd

Throw Distance (Ft)	100	150	200	250	300	350	400	450	500
Beam Diameter (Ft)	11.4	17.0	22.7	28.4	34.1	39.7	45.4	51.1	56.8
Illuminance (fc)	307	137	77	49	34	25	19	15	12
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Throw Distance (m)	50	75	100	125	150	175	200	225	250
Beam Diameter (m)	5.7	8.5	11.4	14.2	17.0	19.9	22.7	25.6	28.4
Illuminance (Lux)	1,229	546	307	197	137	100	77	61	49

Multiply throw distance by Tn Beam to find beam diameter.

Multiply throw distance by Tn Field to find field diameter.

Divide peak intensity in candela (cd) by throw distance squared to find center beam illuminance.
Distance in feet = foot candles
Distance in meters = lux

Beam Angle (50%)

Field Angle (10%)