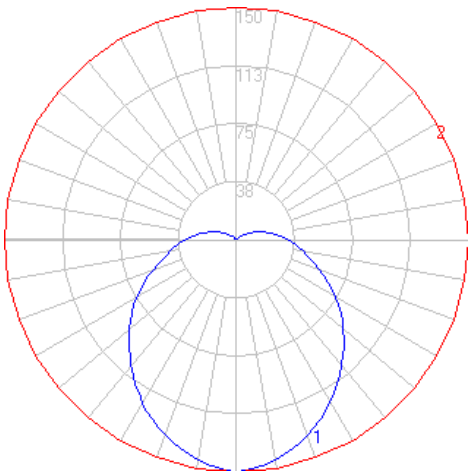
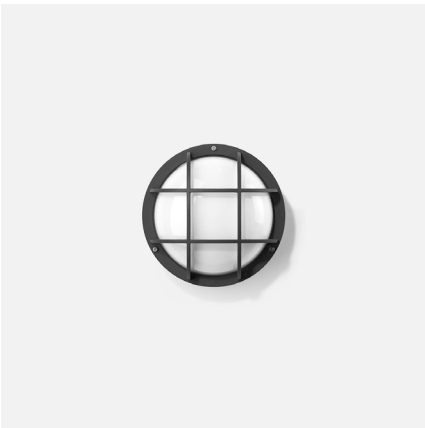


BEGA

File: 22463K4_BEGA_IES.ies

TEST: BE_22463K4
TEST LAB: BEGA
DATE: 08/06/2015
LUMINAIRE: 22 463K4
LAMP: 8.4W LED

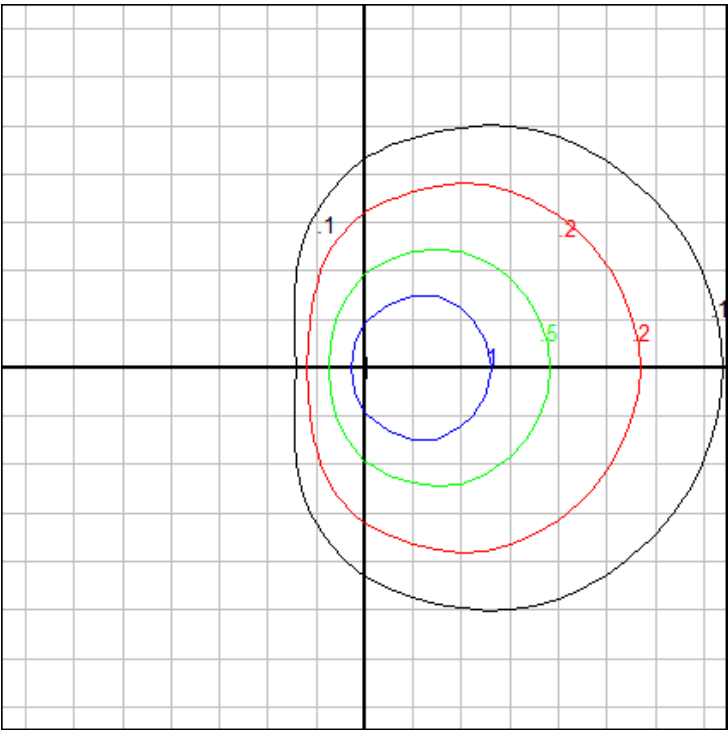


Characteristics

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	561
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	11
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.56 ft (Diameter)
Luminous Height	0.18 ft

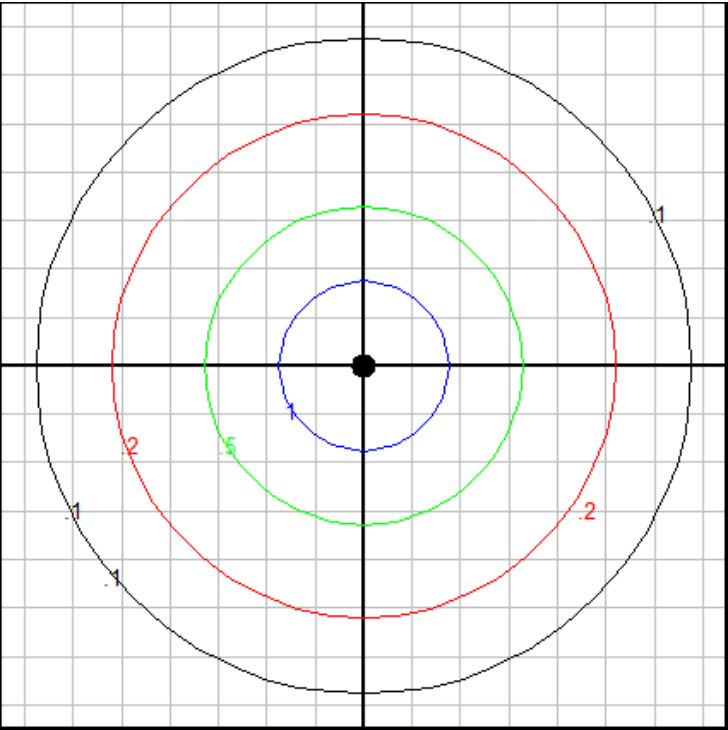
Zonal Lumen Summary

Zone	Lumens
0-10	14.07
10-20	39.61
20-30	59.30
30-40	71.55
40-50	76.09
50-60	74.13
60-70	65.44
70-80	52.86
80-90	42.14
90-100	30.80
100-110	19.72
110-120	10.74
120-130	4.16
130-140	0.53
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



Wall mount
Isofootcandle grid on floor

Mounting height: 5 ft.
Grid Spacing: 2.5 ft.



Ceiling mount
Isofootcandle grid on floor

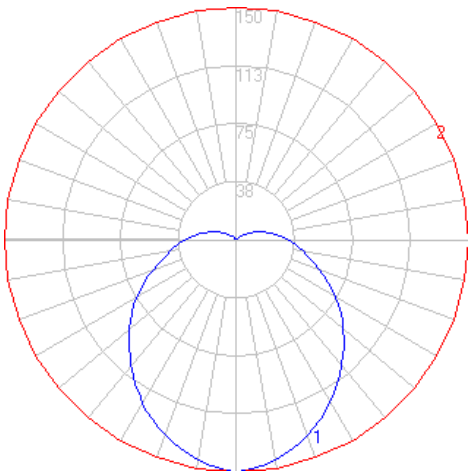
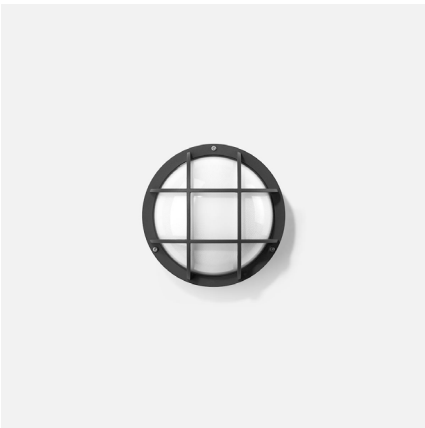
Mounting height: 10 ft.
Grid Spacing: 2.5 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 22463K35_BEGA_IES.ies

TEST: BE_22463K4
TEST LAB: BEGA
DATE: 08/06/2015
LUMINAIRE: 22 463K35
LAMP: 8.4W LED

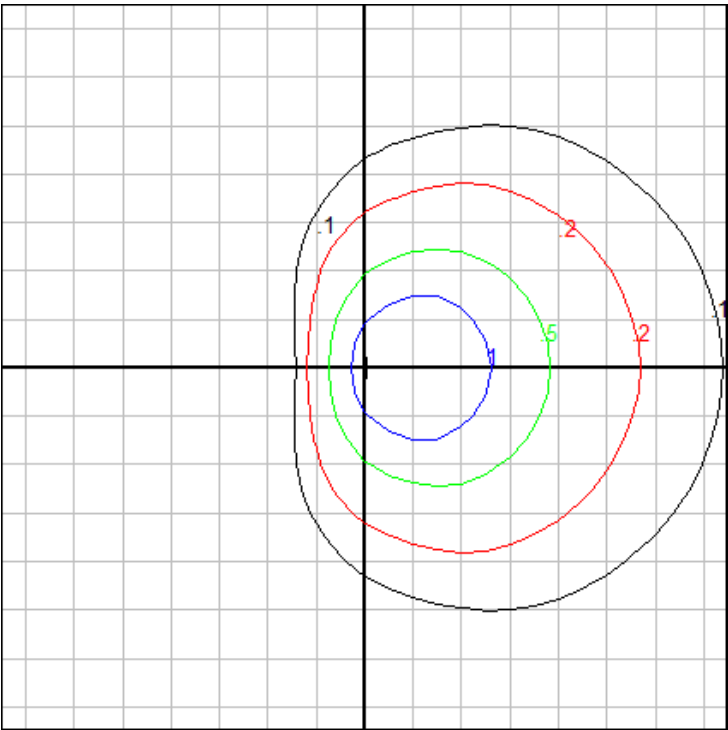


Characteristics

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	561
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	11
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.56 ft (Diameter)
Luminous Height	0.18 ft

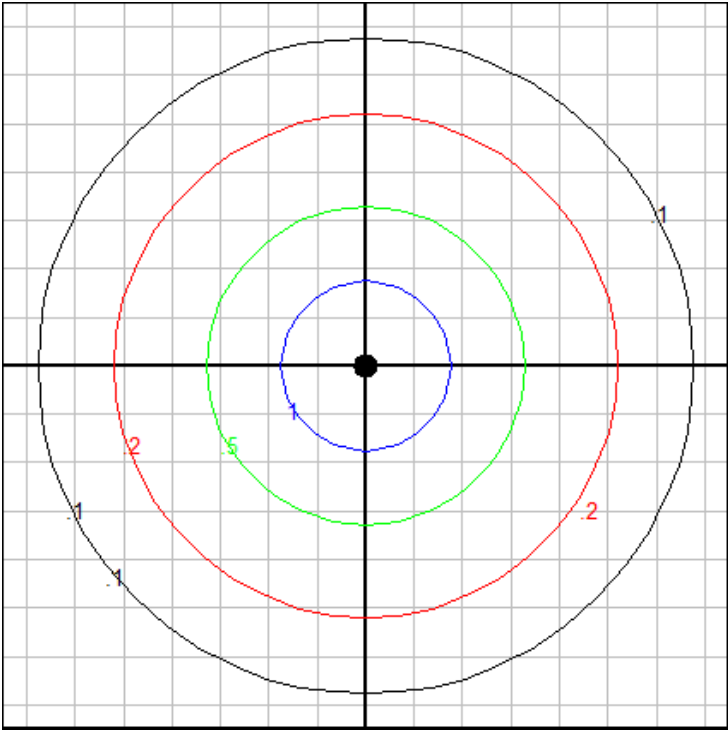
Zonal Lumen Summary

Zone	Lumens
0-10	14.07
10-20	39.61
20-30	59.30
30-40	71.55
40-50	76.09
50-60	74.13
60-70	65.44
70-80	52.86
80-90	42.14
90-100	30.80
100-110	19.72
110-120	10.74
120-130	4.16
130-140	0.53
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



Wall mount
Isofootcandle grid on floor

Mounting height: 5 ft.
Grid Spacing: 2.5 ft.



Ceiling mount
Isofootcandle grid on floor

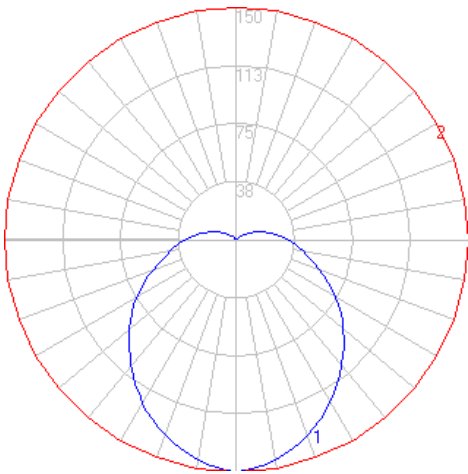
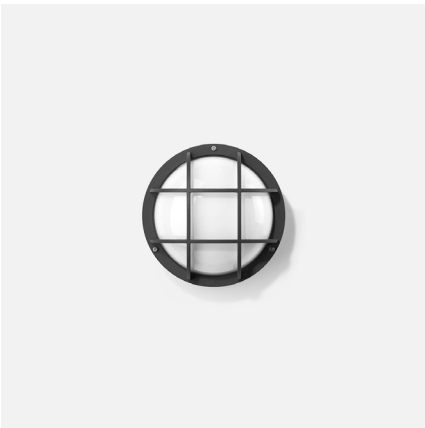
Mounting height: 10 ft.
Grid Spacing: 2.5 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 22463K3_BEGA_IES.ies

TEST: BE_22463K4
TEST LAB: BEGA
DATE: 08/06/2015
LUMINAIRE: 22 463K3
LAMP: 8.4W LED

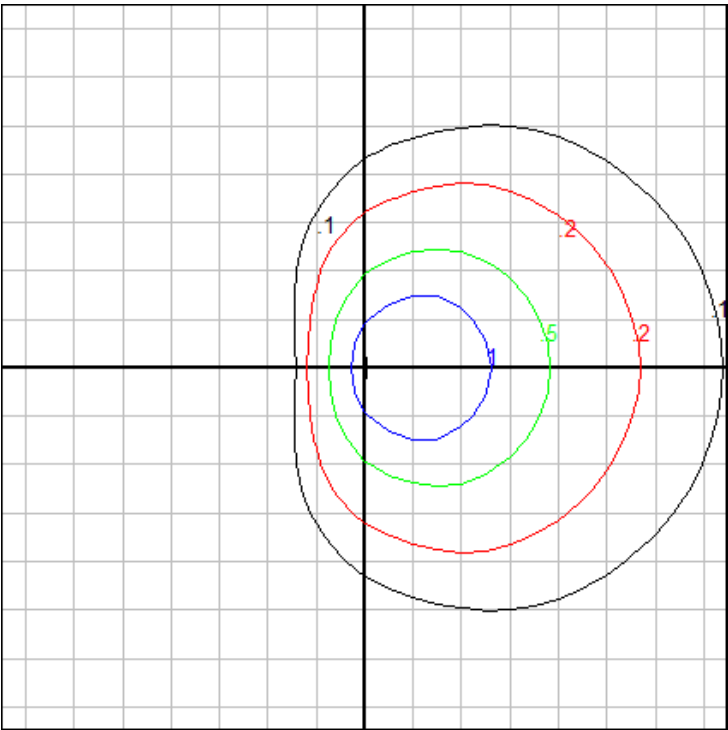


Characteristics

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	561
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	11
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.56 ft (Diameter)
Luminous Height	0.18 ft

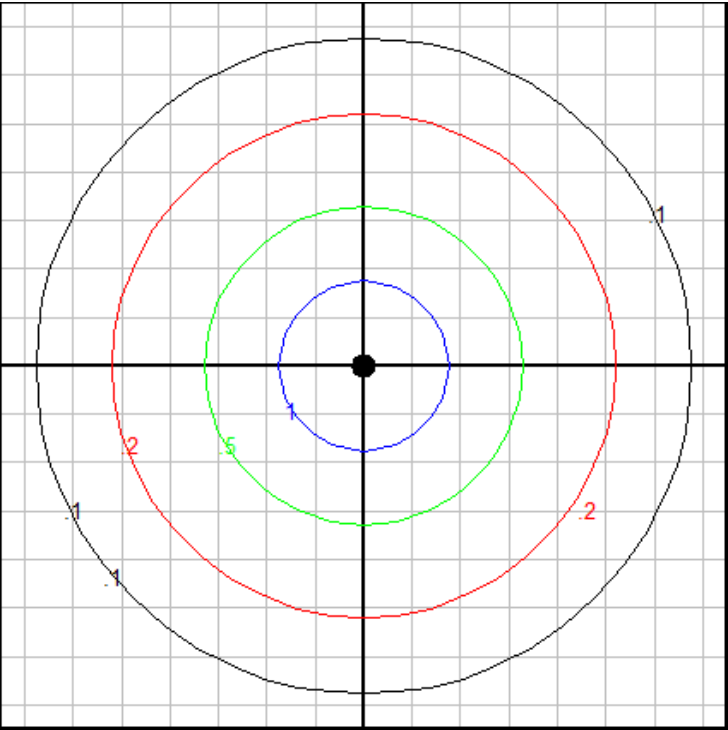
Zonal Lumen Summary

Zone	Lumens
0-10	14.07
10-20	39.61
20-30	59.30
30-40	71.55
40-50	76.09
50-60	74.13
60-70	65.44
70-80	52.86
80-90	42.14
90-100	30.80
100-110	19.72
110-120	10.74
120-130	4.16
130-140	0.53
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



Wall mount
Isofootcandle grid on floor

Mounting height: 5 ft.
Grid Spacing: 2.5 ft.



Ceiling mount
Isofootcandle grid on floor

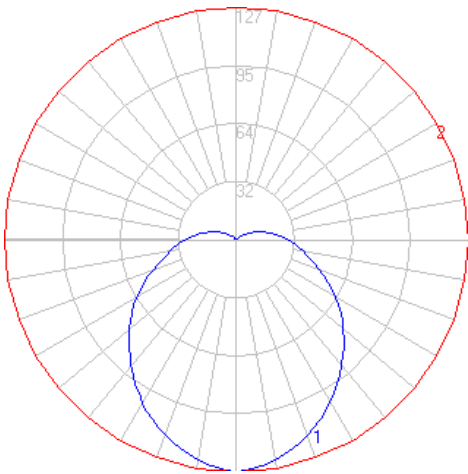
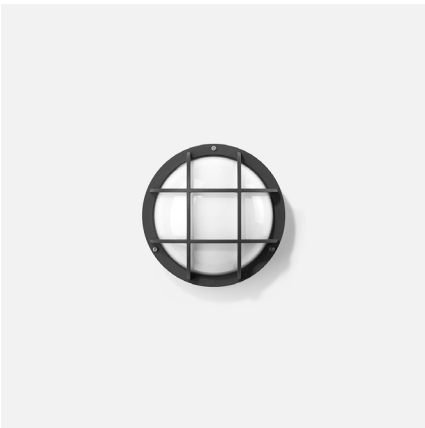
Mounting height: 10 ft.
Grid Spacing: 2.5 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 22463K27_BEGA_IES.ies

TEST: BE_22463K4
TEST LAB: BEGA
DATE: 08/06/2015
LUMINAIRE: 22 463K27
LAMP: 8.4W LED

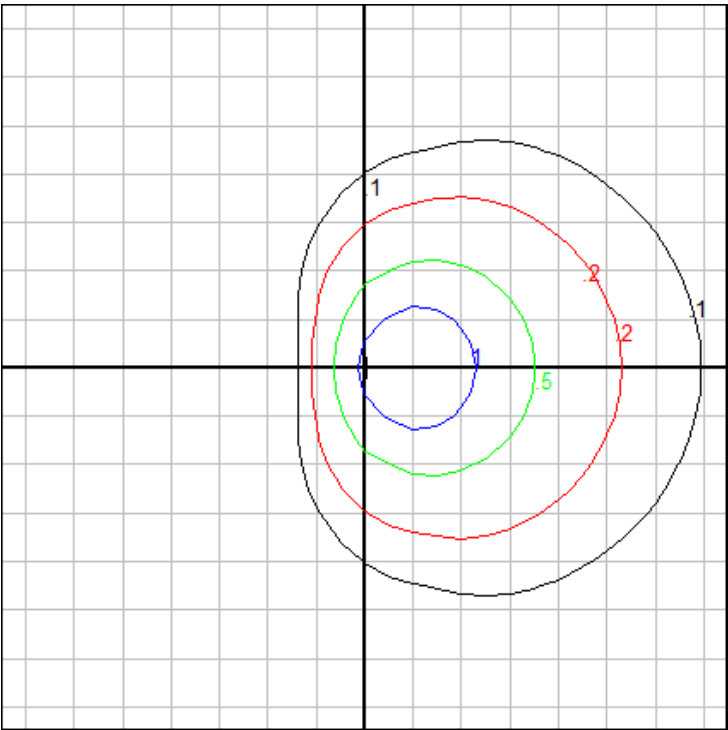


Characteristics

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	474
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	43
Total Luminaire Watts	11
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.56 ft (Diameter)
Luminous Height	0.18 ft

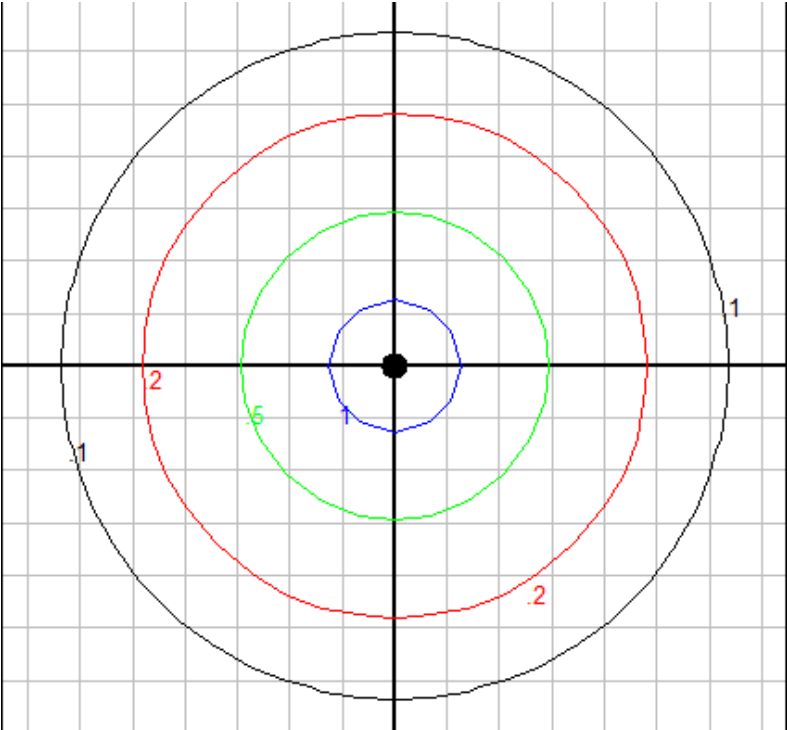
Zonal Lumen Summary

Zone	Lumens
0-10	11.89
10-20	33.47
20-30	50.11
30-40	60.46
40-50	64.29
50-60	62.64
60-70	55.30
70-80	44.66
80-90	35.61
90-100	26.02
100-110	16.67
110-120	9.08
120-130	3.52
130-140	0.45
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



Wall mount
Isofootcandle grid on floor

Mounting height: 5 ft.
Grid Spacing: 2.5 ft.



Ceiling mount
Isofootcandle grid on floor

Mounting height: 10 ft.
Grid Spacing: 2.5 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.