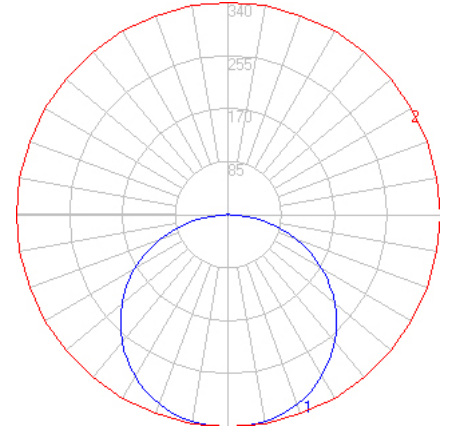


BEGA

File: 50290K27_BEGA_IES.ies

TEST: BE_50290K27
 TEST LAB: BEGA
 DATE: 05/12/2014
 LUMINAIRE: 50 290K27
 LAMP: 18.1W LED

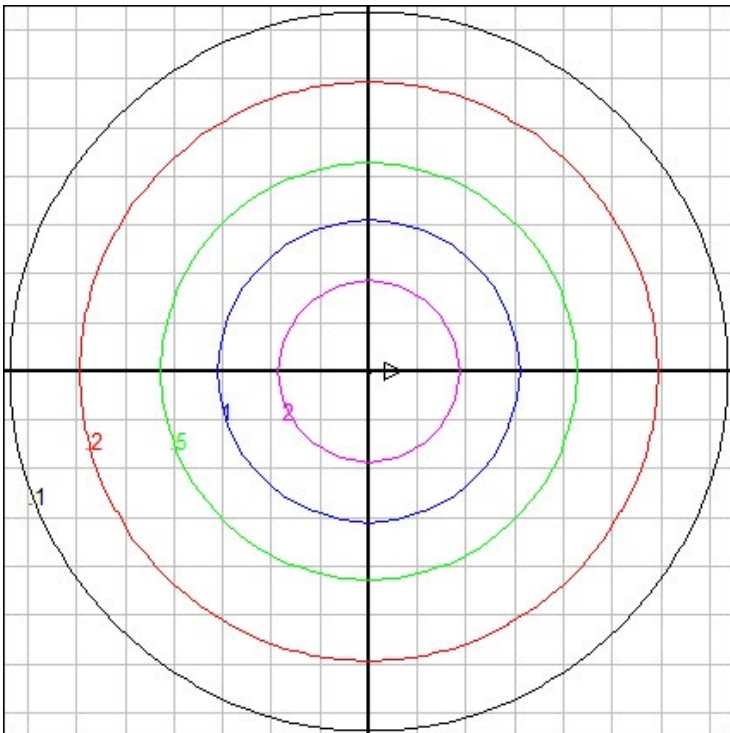


Characteristics

| | |
|---------------------------------|--------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 1082 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 47 |
| Total Luminaire Watts | 23 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.32 |
| Spacing Criterion (90-270) | 1.32 |
| Spacing Criterion (Diagonal) | 1.44 |
| Basic Luminous Shape | Circular w/ Sides |
| Luminous Length (0-180) | 0.00 ft |
| Luminous Width (90-270) | 0.67 ft (Diameter) |
| Luminous Height | 0.02 ft |

Zonal Lumen Summary

| Zone | Lumens |
|---------|--------|
| 0-10 | 32.27 |
| 10-20 | 93.51 |
| 20-30 | 144.10 |
| 30-40 | 177.42 |
| 40-50 | 189.28 |
| 50-60 | 178.19 |
| 60-70 | 144.07 |
| 70-80 | 91.63 |
| 80-90 | 30.97 |
| 90-100 | 0.88 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.01 |



Mounting Height: 10 ft.

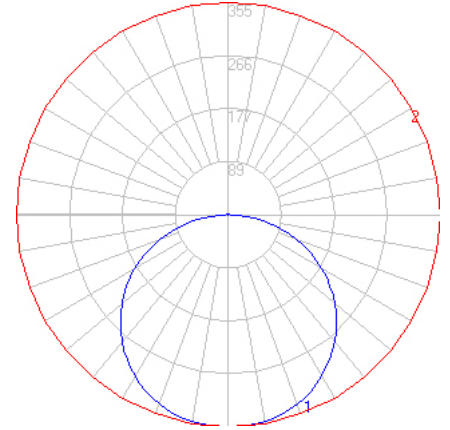
Grid Spacing: 3 ft.

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

BEGA

File: 50290K65_BEGA_IES.ies

TEST: BE_50290K27
 TEST LAB: BEGA
 DATE: 05/12/2014
 LUMINAIRE: 50 290K65
 LAMP: 18.1W LED

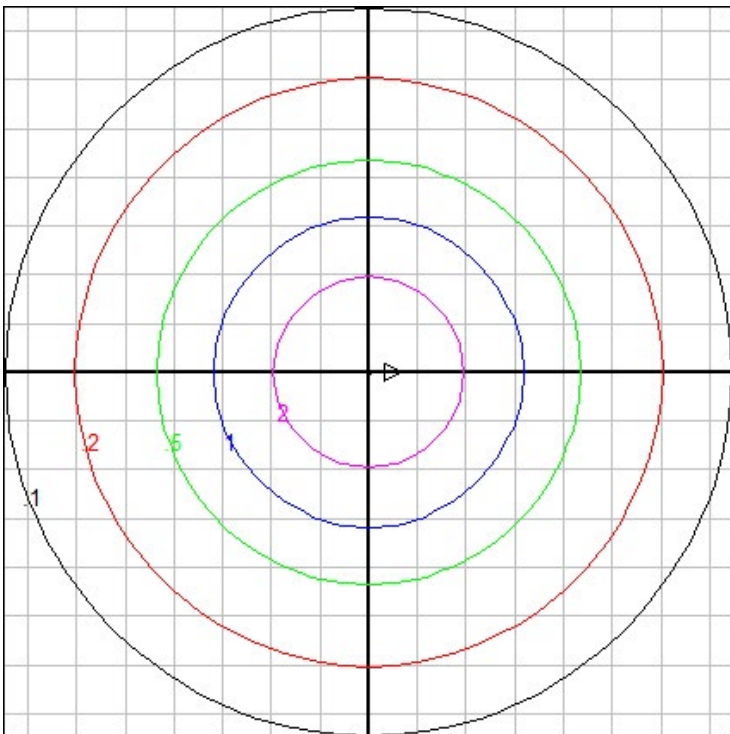


Characteristics

| | |
|---------------------------------|--------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 1130 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 49 |
| Total Luminaire Watts | 23 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.32 |
| Spacing Criterion (90-270) | 1.32 |
| Spacing Criterion (Diagonal) | 1.44 |
| Basic Luminous Shape | Circular w/ Sides |
| Luminous Length (0-180) | 0.00 ft |
| Luminous Width (90-270) | 0.67 ft (Diameter) |
| Luminous Height | 0.02 ft |

Zonal Lumen Summary

| Zone | Lumens |
|---------|--------|
| 0-10 | 33.69 |
| 10-20 | 97.62 |
| 20-30 | 150.44 |
| 30-40 | 185.23 |
| 40-50 | 197.60 |
| 50-60 | 186.03 |
| 60-70 | 150.41 |
| 70-80 | 95.67 |
| 80-90 | 32.33 |
| 90-100 | 0.91 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.01 |



Mounting Height: 10 ft.

Grid Spacing: 3 ft.

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