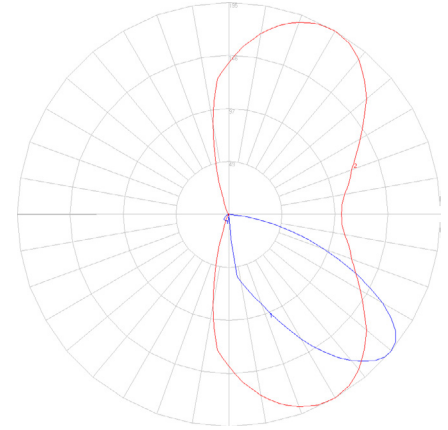


# BEGA

TEST: BE\_84228K4  
 TEST LAB: BEGA  
 DATE: 6/26/2017  
 LUMINAIRE: 84 228K4  
 LAMP: 4.2W LED



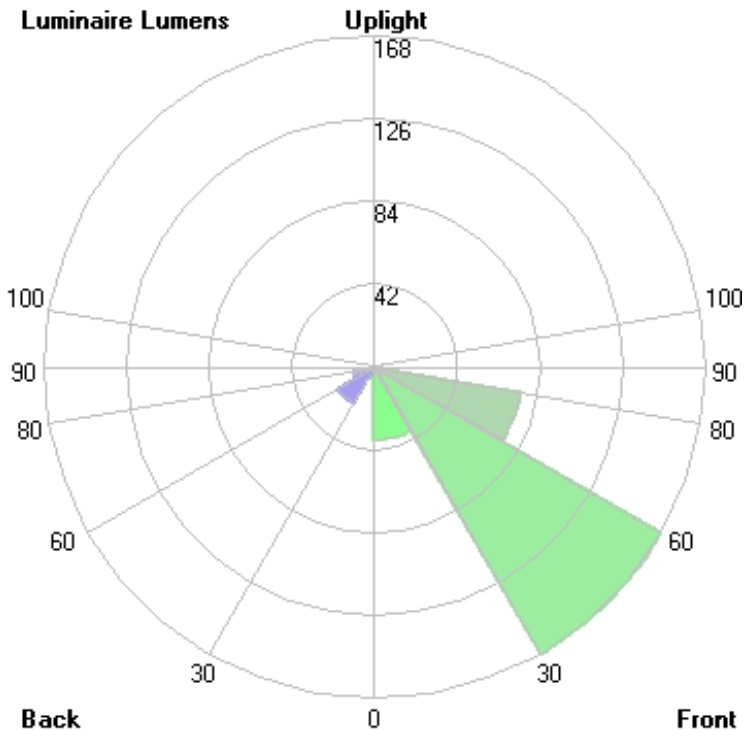
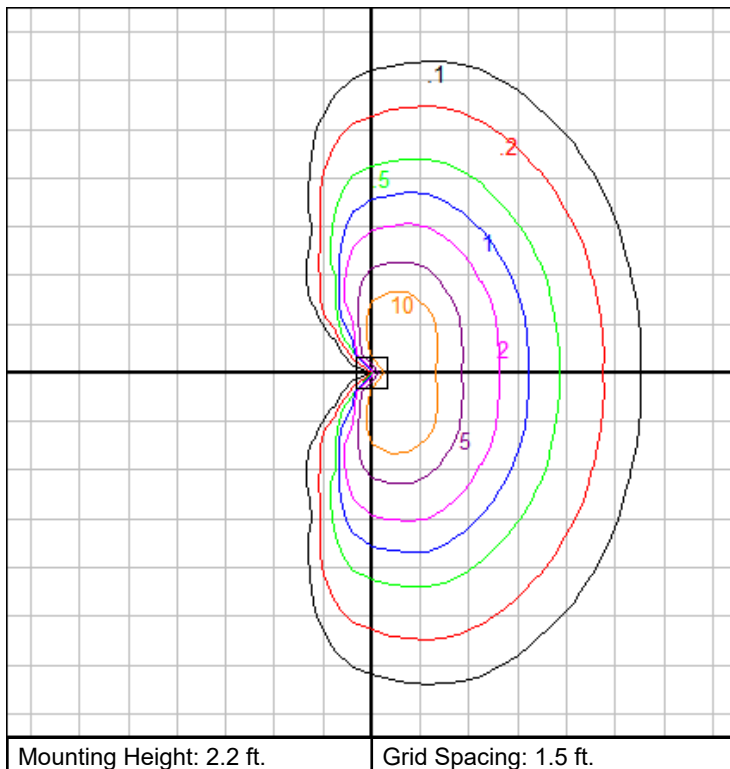
## Characteristics

|                                    |                     |
|------------------------------------|---------------------|
| IES Classification                 | Type II             |
| Longitudinal Classification        | Short               |
| Lumens Per Lamp                    | N.A. (absolute)     |
| Total Lamp Lumens                  | N.A. (absolute)     |
| Luminaire Lumens                   | 321                 |
| Downward Total Efficiency          | N.A.                |
| Total Luminaire Efficiency         | N.A.                |
| Luminaire Efficacy Rating (LER)    | 64                  |
| Total Luminaire Watts              | 6                   |
| Ballast Factor                     | 1.00                |
| Upward Waste Light Ratio           | 0.00                |
| Max. Cd.                           | 194.957 (300H, 50V) |
| Max. Cd. (<90 Vert.)               | 194.957 (300H, 50V) |
| Max. Cd. (At 90 Deg. Vert.)        | .416 (0.1%Lum)      |
| Max. Cd. (80 to <90 Deg. Vert.)    | 32.32 (10.1%Lum)    |
| Cutoff Classification (deprecated) | N.A. (absolute)     |

## Zonal Lumen Summary

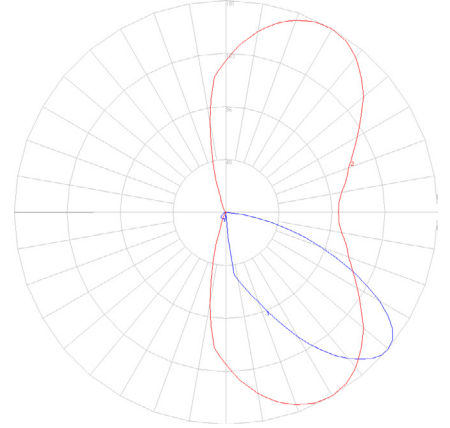
| LCS Zone |           | Lumens | %Lamp | %Lum  |
|----------|-----------|--------|-------|-------|
| FL       | (0-30)    | 37.1   | N.A.  | 11.5  |
| FM       | (30-60)   | 167.8  | N.A.  | 52.3  |
| FH       | (60-80)   | 75.1   | N.A.  | 23.4  |
| FVH      | (80-90)   | 3.8    | N.A.  | 1.2   |
| BL       | (0-30)    | 4.9    | N.A.  | 1.5   |
| BM       | (30-60)   | 21.5   | N.A.  | 6.7   |
| BH       | (60-80)   | 10.2   | N.A.  | 3.2   |
| BVH      | (80-90)   | 0.6    | N.A.  | 0.2   |
| UL       | (90-100)  | 0.0    | N.A.  | 0.0   |
| UH       | (100-180) | 0.0    | N.A.  | 0.0   |
| Total    |           | 321.0  | N.A.  | 100.0 |

**BUG Rating B0-U0-G0**



# BEGA

TEST: BE\_84228K4  
 TEST LAB: BEGA  
 DATE: 6/26/2017  
 LUMINAIRE: 84 228K35  
 LAMP: 4.2W LED



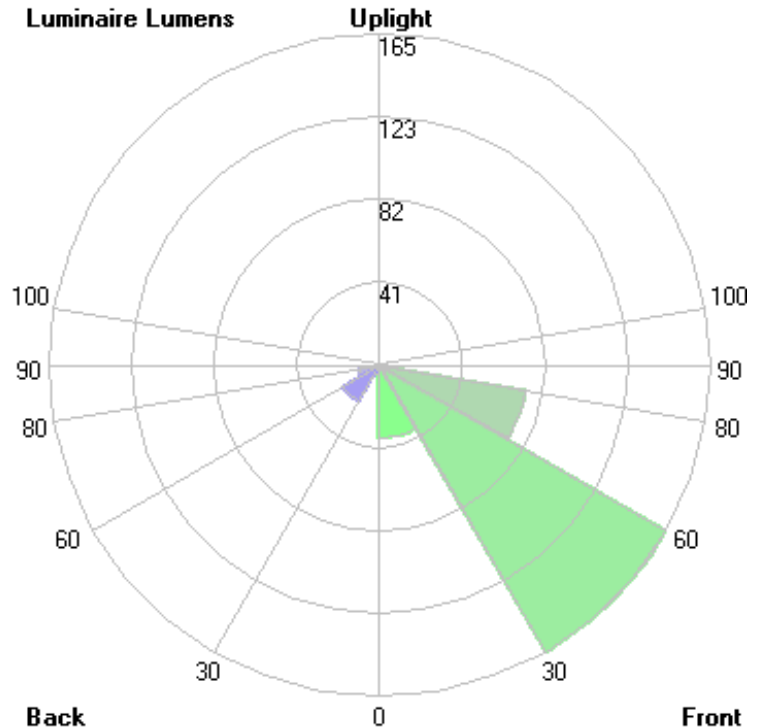
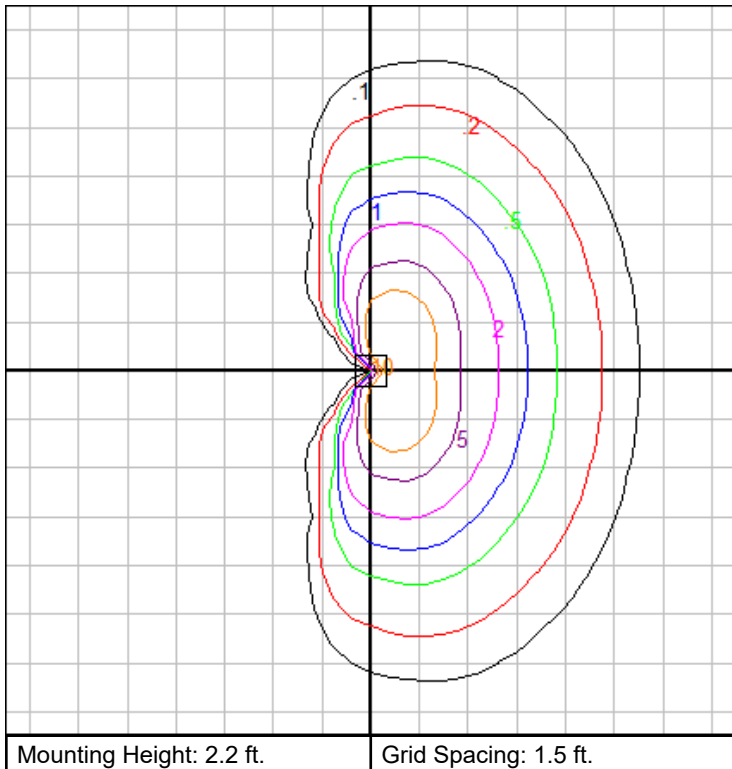
## Characteristics

|                                    |                     |
|------------------------------------|---------------------|
| ES Classification                  | Type II             |
| Longitudinal Classification        | Short               |
| Lumens Per Lamp                    | N.A. (absolute)     |
| Total Lamp Lumens                  | N.A. (absolute)     |
| Luminaire Lumens                   | 315                 |
| Downward Total Efficiency          | N.A.                |
| Total Luminaire Efficiency         | N.A.                |
| Luminaire Efficacy Rating (LER)    | 63                  |
| Total Luminaire Watts              | 6                   |
| Ballast Factor                     | 1.00                |
| Upward Waste Light Ratio           | 0.00                |
| Max. Cd.                           | 191.278 (300H, 50V) |
| Max. Cd. (<90 Vert.)               | 191.278 (300H, 50V) |
| Max. Cd. (At 90 Deg. Vert.)        | .408 (0.1%Lum)      |
| Max. Cd. (80 to <90 Deg. Vert.)    | 31.71 (10.1%Lum)    |
| Cutoff Classification (deprecated) | N.A. (absolute)     |

## Zonal Lumen Summary

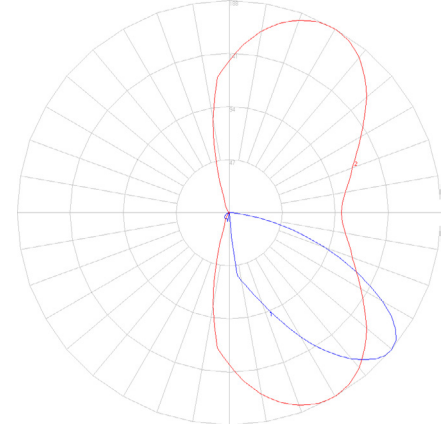
| LCS Zone |           | Lumens | %Lamp | %Lum  |
|----------|-----------|--------|-------|-------|
| FL       | (0-30)    | 36.4   | N.A.  | 11.5  |
| FM       | (30-60)   | 164.6  | N.A.  | 52.3  |
| FH       | (60-80)   | 73.7   | N.A.  | 23.4  |
| FVH      | (80-90)   | 3.7    | N.A.  | 1.2   |
| BL       | (0-30)    | 4.8    | N.A.  | 1.5   |
| BM       | (30-60)   | 21.1   | N.A.  | 6.7   |
| BH       | (60-80)   | 10.0   | N.A.  | 3.2   |
| BVH      | (80-90)   | 0.6    | N.A.  | 0.2   |
| UL       | (90-100)  | 0.0    | N.A.  | 0.0   |
| UH       | (100-180) | 0.0    | N.A.  | 0.0   |
| Total    |           | 314.9  | N.A.  | 100.0 |

**BUG Rating B0-U0-G0**



# BEGA

TEST: BE\_84228K4  
 TEST LAB: BEGA  
 DATE: 6/26/2017  
 LUMINAIRE: 84 228K3  
 LAMP: 4.2W LED



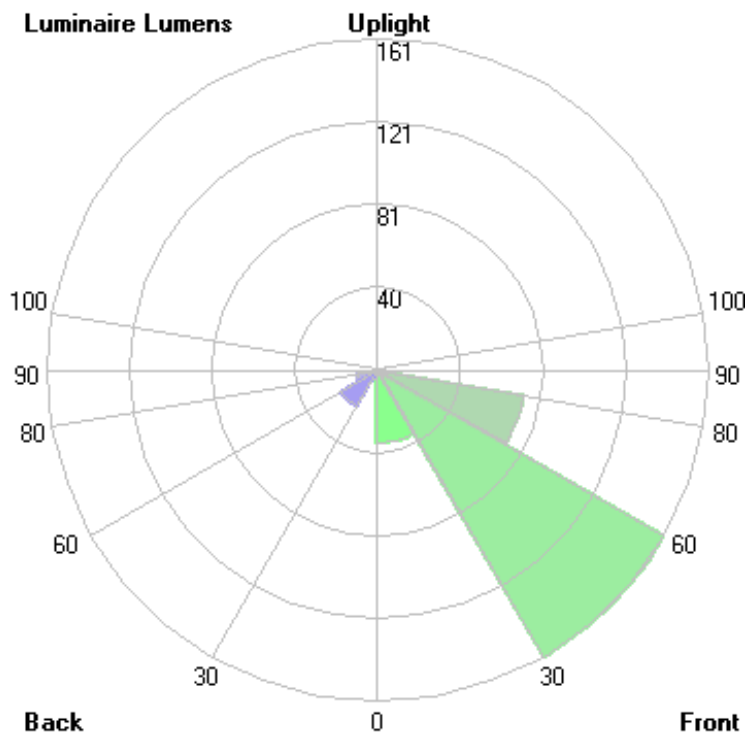
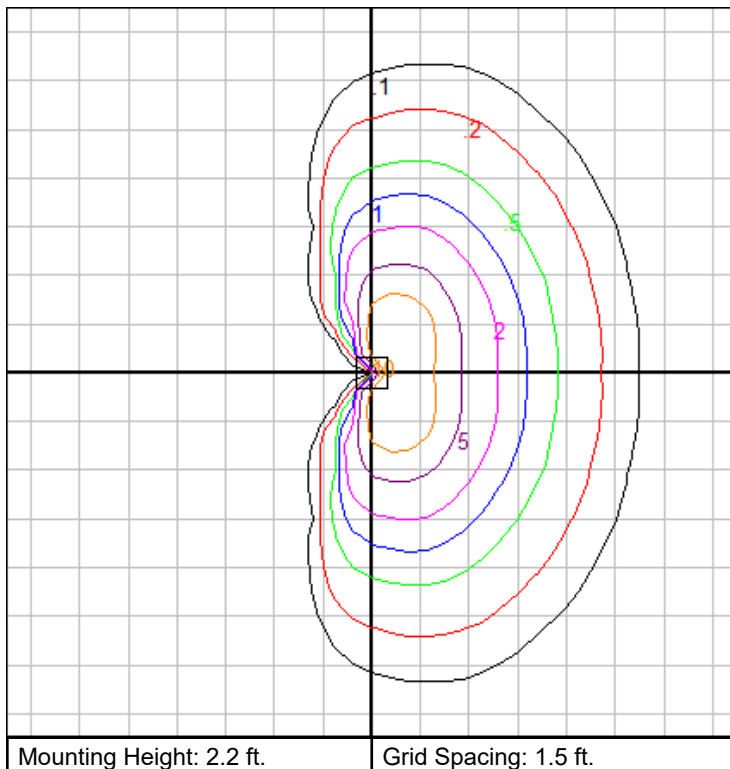
## Characteristics

|                                    |                   |
|------------------------------------|-------------------|
| IES Classification                 | Type II           |
| Longitudinal Classification        | Short             |
| Lumens Per Lamp                    | N.A. (absolute)   |
| Total Lamp Lumens                  | N.A. (absolute)   |
| Luminaire Lumens                   | 309               |
| Downward Total Efficiency          | N.A.              |
| Total Luminaire Efficiency         | N.A.              |
| Luminaire Efficacy Rating (LER)    | 62                |
| Total Luminaire Watts              | 6                 |
| Ballast Factor                     | 1.00              |
| Upward Waste Light Ratio           | 0.00              |
| Max. Cd.                           | 187.6 (300H, 50V) |
| Max. Cd. (<90 Vert.)               | 187.6 (300H, 50V) |
| Max. Cd. (At 90 Deg. Vert.)        | .4 (0.1%Lum)      |
| Max. Cd. (80 to <90 Deg. Vert.)    | 31.1 (10.1%Lum)   |
| Cutoff Classification (deprecated) | N.A. (absolute)   |

## Zonal Lumen Summary

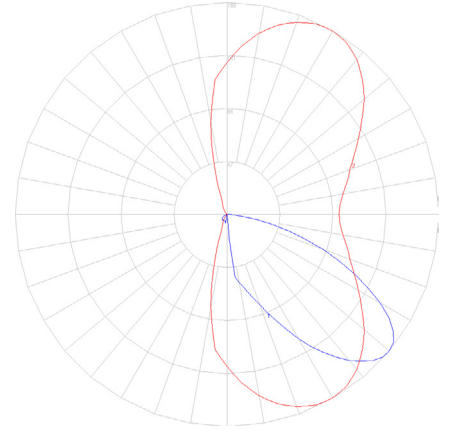
| LCS Zone |           | Lumens | %Lamp | %Lum  |
|----------|-----------|--------|-------|-------|
| FL       | (0-30)    | 35.7   | N.A.  | 11.5  |
| FM       | (30-60)   | 161.5  | N.A.  | 52.3  |
| FH       | (60-80)   | 72.2   | N.A.  | 23.4  |
| FVH      | (80-90)   | 3.6    | N.A.  | 1.2   |
| BL       | (0-30)    | 4.8    | N.A.  | 1.5   |
| BM       | (30-60)   | 20.7   | N.A.  | 6.7   |
| BH       | (60-80)   | 9.8    | N.A.  | 3.2   |
| BVH      | (80-90)   | 0.6    | N.A.  | 0.2   |
| UL       | (90-100)  | 0.0    | N.A.  | 0.0   |
| UH       | (100-180) | 0.0    | N.A.  | 0.0   |
| Total    |           | 308.9  | N.A.  | 100.0 |

**BUG Rating B0-U0-G0**



# BEGA

TEST: BE\_84228K4  
 TEST LAB: BEGA  
 DATE: 6/26/2017  
 LUMINAIRE: 84 228K27  
 LAMP: 4.2W LED



## Characteristics

|                                    |                   |
|------------------------------------|-------------------|
| IES Classification                 | Type II           |
| Longitudinal Classification        | Short             |
| Lumens Per Lamp                    | N.A. (absolute)   |
| Total Lamp Lumens                  | N.A. (absolute)   |
| Luminaire Lumens                   | 309               |
| Downward Total Efficiency          | N.A.              |
| Total Luminaire Efficiency         | N.A.              |
| Luminaire Efficacy Rating (LER)    | 62                |
| Total Luminaire Watts              | 6                 |
| Ballast Factor                     | 1.00              |
| Upward Waste Light Ratio           | 0.00              |
| Max. Cd.                           | 187.6 (300H, 50V) |
| Max. Cd. (<90 Vert.)               | 187.6 (300H, 50V) |
| Max. Cd. (At 90 Deg. Vert.)        | .4 (0.1%Lum)      |
| Max. Cd. (80 to <90 Deg. Vert.)    | 31.1 (10.1%Lum)   |
| Cutoff Classification (deprecated) | N.A. (absolute)   |

## Zonal Lumen Summary

| LCS Zone     | Lumens | %Lamp | %Lum  |
|--------------|--------|-------|-------|
| FL (0-30)    | 35.7   | N.A.  | 11.5  |
| FM (30-60)   | 161.5  | N.A.  | 52.3  |
| FH (60-80)   | 72.2   | N.A.  | 23.4  |
| FVH (80-90)  | 3.6    | N.A.  | 1.2   |
| BL (0-30)    | 4.8    | N.A.  | 1.5   |
| BM (30-60)   | 20.7   | N.A.  | 6.7   |
| BH (60-80)   | 9.8    | N.A.  | 3.2   |
| BVH (80-90)  | 0.6    | N.A.  | 0.2   |
| UL (90-100)  | 0.0    | N.A.  | 0.0   |
| UH (100-180) | 0.0    | N.A.  | 0.0   |
| Total        | 308.9  | N.A.  | 100.0 |

**BUG Rating B0-U0-G0**

