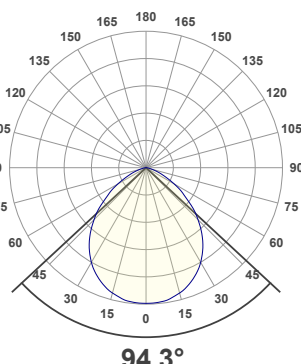
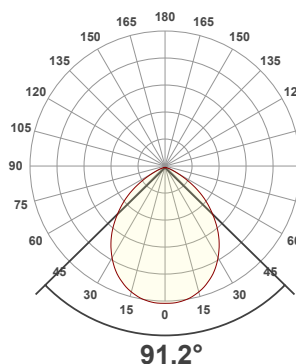


### PRODUCT INFORMATION

|                                 |                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MEASUREMENT SERIAL NUMBER:      | PH-GVA-2023.Dec.19-2213-VO                                                                                                                                             |
| DATE OF MEASUREMENT:            | 12/19/2023                                                                                                                                                             |
| MANUFACTURER:                   | GVA LIGHTING, INC.                                                                                                                                                     |
| PRODUCT NAME:                   | HIGHLIGHTER SERIES, HL-GEN4                                                                                                                                            |
| SIZE (width x length x height): | 23.3 mm x 300 mm x 42 mm                                                                                                                                               |
| LOT:                            | GP-5-G/HR-4-L/RO-4-L/U73GY1                                                                                                                                            |
| PROFILE LEGEND:                 | DLN – NICHE, DL – CLAMPING,<br>CM – CLEAR MATTE,<br>BM – BLACK MATTE,<br>COVE-F – COVE FIXED,<br>COVE-OD – COVE OUTDOOR,<br>INF – INFINITY 380 V DC, ELV – 48 V DC,    |
|                                 | DLN – NICHE, DL – CLAMPING,<br>F – FLAT, R – ROUND,<br>SW – SATIN WHITE, B – BLACK,<br>(RGBW) – ALL CHANNELS ON,<br>(R) – RED, (G) – GREEN,<br>(B) – BLUE, (W) – WHITE |

### ANGULAR DISTRIBUTION AT C0/180

### ANGULAR DISTRIBUTION AT C90/270



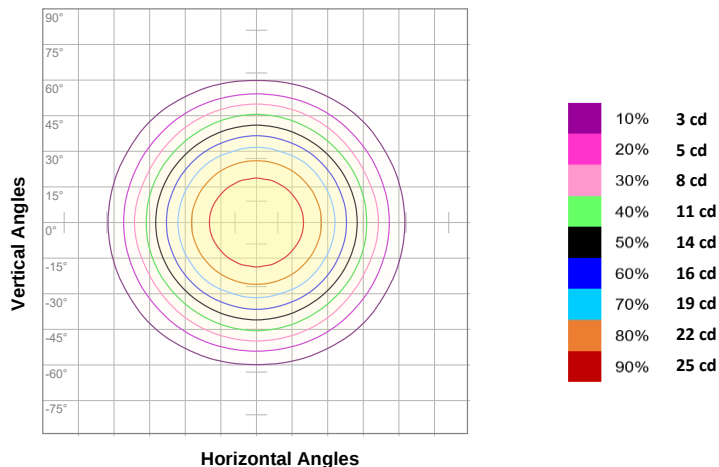
### LIGHT OUTPUT DATA

|                              |         |
|------------------------------|---------|
| TOTAL LUMEN OUTPUT:          | 57.3 lm |
| EFFICACY:                    | 12 lm/W |
| PEAK INTENSITY:              | 27.3 cd |
| COLOR RENDERING INDEX (CRI): | 0.0     |
| COLOR TEMPERATURE (CCT):     | 0K      |
| FIDELITY INDEX (TM30Rf):     | 0.0     |
| GAMUT INDEX (TM30Rg):        | 0.0     |

### BEAM OUTPUT DATA

|                              |        |
|------------------------------|--------|
| BEAM ANGLE (FWHM)   C0/180:  | 91.2°  |
| BEAM ANGLE (FWHM)   C90/270: | 94.3°  |
| FIELD ANGLE (10%)   C0/180:  | 133.2° |
| FIELD ANGLE (10%)   C90/270: | 138.9° |
| NUMBER OF PLANES MEASURED:   | 18     |

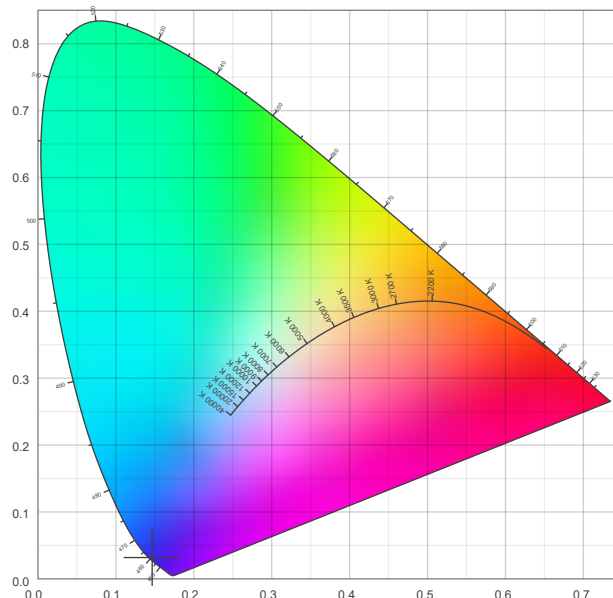
### ISOCANDELA DIAGRAM



### POWER OUTPUT DATA

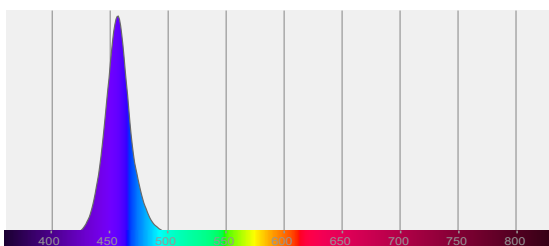
|                      |          |
|----------------------|----------|
| INPUT POWER:         | 4.7 W    |
| INPUT VOLTAGE:       | 380 V DC |
| INPUT CURRENT:       | 0.012 A  |
| POWER FACTOR:        | 1.0      |
| OPTICAL POWER:       | 1.28 mW  |
| PEAK WAVELENGTH:     | 457 nm   |
| DOMINANT WAVELENGTH: | 459 nm   |

### CIE 1931



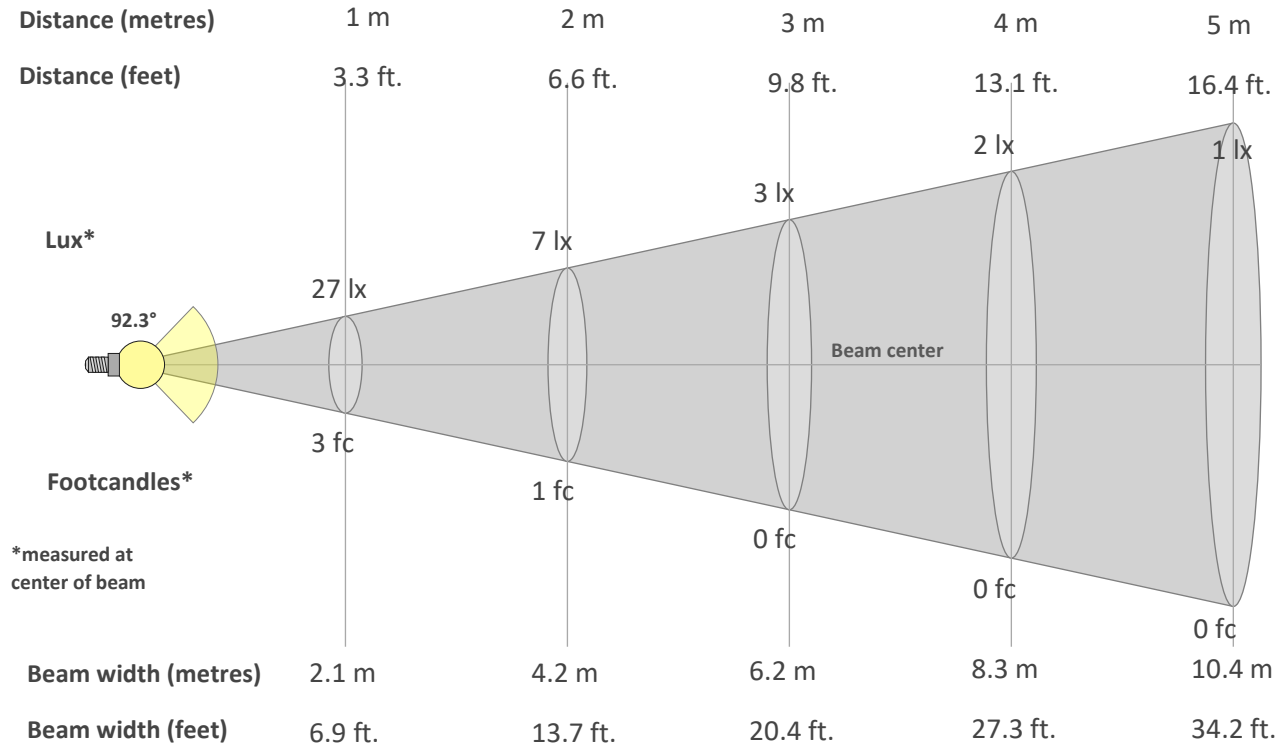
### SPECTRAL DISTRIBUTION

### CIE 1931 ZOOM



x: 0.147  
y: 0.032  
u: 0.190  
v: 0.062  
Δuv:  
n/a

### BEAM DETAILS



#### Beam intensity from 1-20m

| 1m    | 2m    | 3m    | 4m     | 5m     | 6m     | 7m    | 8m     | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|-------|-------|-------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft  | 26.2ft | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 27lx  | 7lx   | 3lx   | 2lx    | 1lx    | 1lx    | 1lx   | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    |
| 2.5fc | 0.6fc | 0.3fc | 0.2fc  | 0.1fc  | 0.1fc  | 0.1fc | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    |

#### Intensity in 0° c-plane

| 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 27.2 | 27.2 | 26.7 | 25.9 | 24.8 | 23.3 | 21.3 | 19.1 | 16.7 | 13.9 | 11.2 | 8.4 | 5.6 | 3.3 | 1.8 | 1.1 | 0.6 | 0.3 | 0.1 | 0.1 |
| 100% | 100% | 98%  | 95%  | 91%  | 85%  | 78%  | 70%  | 61%  | 51%  | 41%  | 31% | 20% | 12% | 7%  | 4%  | 2%  | 1%  | 0%  | 0%  |

#### Intensity in 90° c-plane

| 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 27.2 | 27.2 | 26.8 | 26.1 | 25.0 | 23.6 | 21.9 | 19.9 | 17.5 | 14.8 | 11.9 | 9.1 | 6.5 | 4.2 | 2.6 | 1.3 | 0.6 | 0.2 | 0.0 | 0.0 |
| 100% | 100% | 98%  | 96%  | 92%  | 87%  | 81%  | 73%  | 64%  | 54%  | 44%  | 33% | 24% | 16% | 9%  | 5%  | 2%  | 1%  | 0%  | 0%  |

#### Intensity in 180° c-plane

| 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 27.2 | 27.2 | 26.7 | 25.9 | 24.8 | 23.3 | 21.3 | 19.1 | 16.7 | 13.9 | 11.2 | 8.4 | 5.6 | 3.3 | 1.8 | 1.1 | 0.6 | 0.3 | 0.1 | 0.1 |
| 100% | 100% | 98%  | 95%  | 91%  | 85%  | 78%  | 70%  | 61%  | 51%  | 41%  | 31% | 20% | 12% | 7%  | 4%  | 2%  | 1%  | 0%  | 0%  |

#### Intensity in 270° c-plane

| 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 27.2 | 27.2 | 26.8 | 26.1 | 25.0 | 23.6 | 21.9 | 19.9 | 17.5 | 14.8 | 11.9 | 9.1 | 6.5 | 4.2 | 2.6 | 1.3 | 0.6 | 0.2 | 0.0 | 0.0 |
| 100% | 100% | 98%  | 96%  | 92%  | 87%  | 81%  | 73%  | 64%  | 54%  | 44%  | 33% | 24% | 16% | 9%  | 5%  | 2%  | 1%  | 0%  | 0%  |