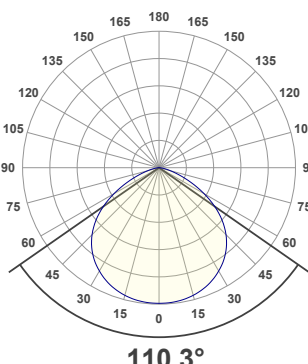
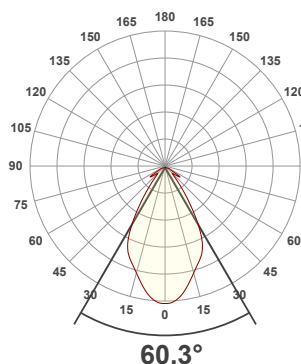


## PRODUCT INFORMATION

|                                 |                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MEASUREMENT SERIAL NUMBER:      | PH-GVA-2023.Dec.15-2187-VO                                                                                                                                             |
| DATE OF MEASUREMENT:            | 12/15/2023                                                                                                                                                             |
| MANUFACTURER:                   | GVA LIGHTING, INC.                                                                                                                                                     |
| PRODUCT NAME:                   | HIGHLIGHTER SERIES, HL-GEN4                                                                                                                                            |
| SIZE (width x length x height): | 23.3 mm x 298 mm x 35.5 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



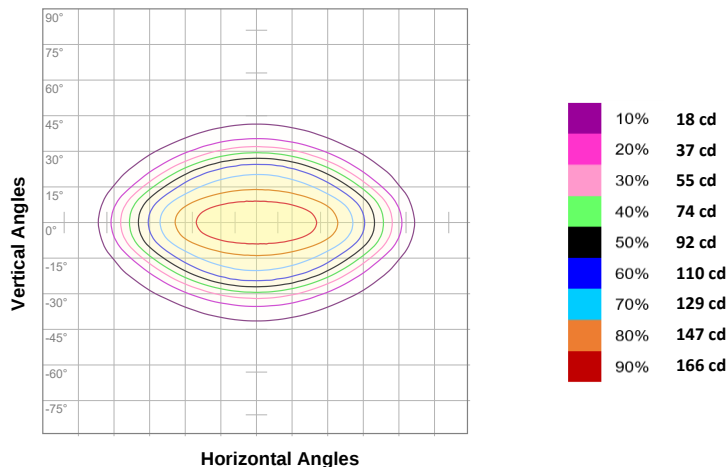
## LIGHT OUTPUT DATA

|                              |         |
|------------------------------|---------|
| TOTAL LUMEN OUTPUT:          | 296 lm  |
| EFFICACY:                    | 59 lm/W |
| PEAK INTENSITY:              | 185 cd  |
| COLOR RENDERING INDEX (CRI): | 40.0    |
| COLOR TEMPERATURE (CCT):     | 8955K   |
| FIDELITY INDEX (TM30Rf):     | 0.0     |
| GAMUT INDEX (TM30Rg):        | n/a     |

## BEAM OUTPUT DATA

|                              |        |
|------------------------------|--------|
| BEAM ANGLE (FWHM)   C0/180:  | 60.3°  |
| BEAM ANGLE (FWHM)   C90/270: | 110.3° |
| FIELD ANGLE (10%)   C0/180:  | 122.4° |
| FIELD ANGLE (10%)   C90/270: | 148°   |
| NUMBER OF PLANES MEASURED:   | 36     |

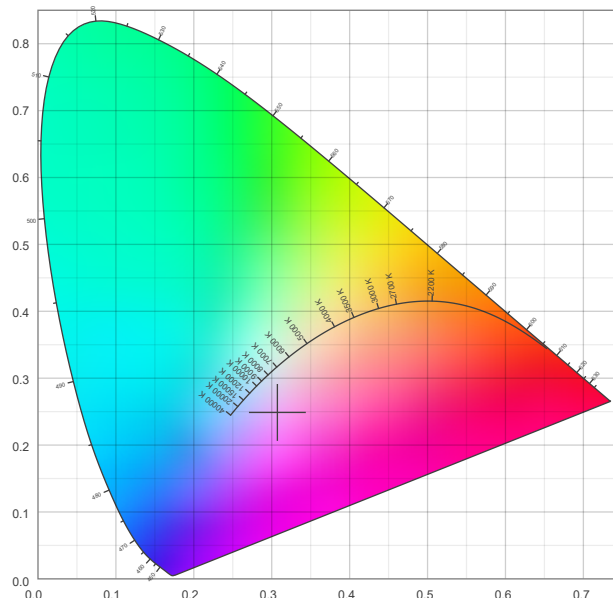
## ISOCANDELA DIAGRAM



## POWER OUTPUT DATA

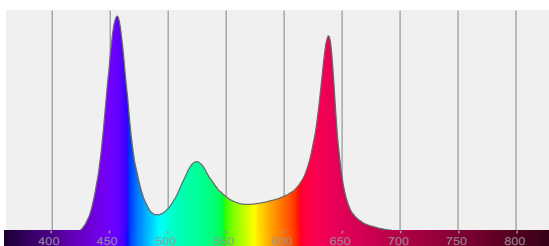
|                      |          |
|----------------------|----------|
| INPUT POWER:         | 5.1 W    |
| INPUT VOLTAGE:       | 380 V DC |
| INPUT CURRENT:       | 0.013 A  |
| POWER FACTOR:        | 1.0      |
| OPTICAL POWER:       | 1.31 mW  |
| PEAK WAVELENGTH:     | 456 nm   |
| DOMINANT WAVELENGTH: | 360 nm   |

## CIE 1931



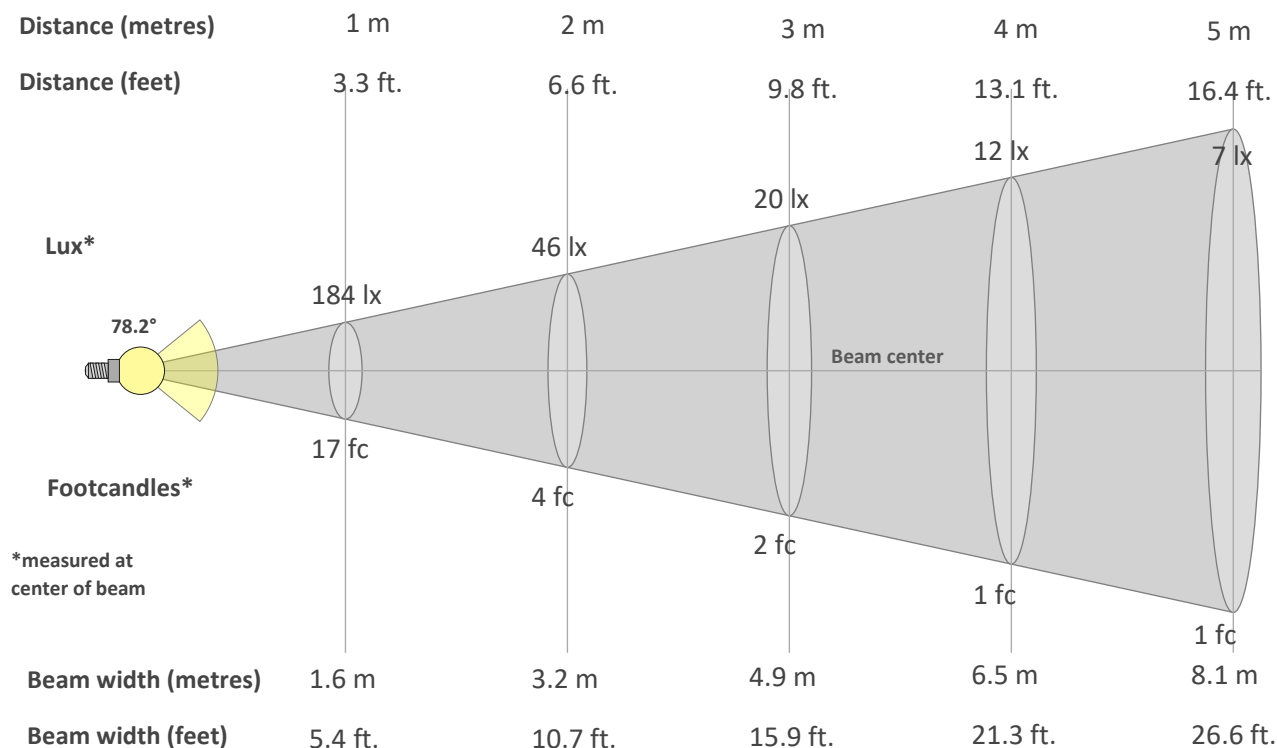
## SPECTRAL DISTRIBUTION

## CIE 1931 ZOOM



x: 0.307  
y: 0.249  
u: 0.229  
v: 0.278  
 $\Delta uv$ : -0.0444

**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 |
| 184lx  | 46lx  | 20lx  | 12lx   | 7lx    | 5lx    | 4lx   | 3lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 0lx    |
| 17.1fc | 4.3fc | 1.9fc | 1.1fc  | 0.7fc  | 0.5fc  | 0.3fc | 0.3fc  | 0.2fc  | 0.2fc  | 0.1fc  | 0.1fc  | 0.1fc  | 0.1fc  | 0.1fc  | 0.1fc  | 0.1fc  | 0.1fc  | 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 184  | 179 | 165 | 149 | 135 | 120 | 92  | 59  | 34  | 20  | 14  | 16  | 22  | 11  | 8   | 6   | 4   | 2   | 1   | 1   |
| 100% | 97% | 90% | 81% | 73% | 65% | 50% | 32% | 19% | 11% | 7%  | 9%  | 12% | 6%  | 4%  | 3%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 184  | 185  | 183 | 180 | 176 | 170 | 163 | 154 | 143 | 129 | 113 | 93  | 71  | 49  | 30  | 16  | 8   | 2   | 0   | 0   |
| 100% | 100% | 99% | 98% | 96% | 92% | 88% | 84% | 78% | 70% | 61% | 51% | 39% | 27% | 16% | 9%  | 4%  | 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 184  | 179 | 165 | 149 | 135 | 120 | 92  | 59  | 34  | 20  | 14  | 16  | 22  | 11  | 8   | 6   | 4   | 2   | 1   | 1   |
| 100% | 97% | 90% | 81% | 73% | 65% | 50% | 32% | 19% | 11% | 7%  | 9%  | 12% | 6%  | 4%  | 3%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 184  | 185  | 183 | 180 | 176 | 170 | 163 | 154 | 143 | 129 | 113 | 93  | 71  | 49  | 30  | 16  | 8   | 2   | 0   | 0   |
| 100% | 100% | 99% | 98% | 96% | 92% | 88% | 84% | 78% | 70% | 61% | 51% | 39% | 27% | 16% | 9%  | 4%  | 1%  | 0%  | 0%  |