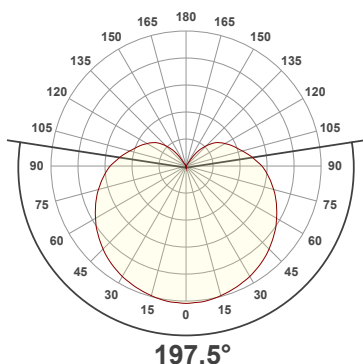


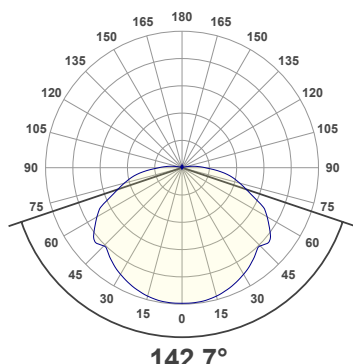
### PRODUCT INFORMATION

|                                 |                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MEASUREMENT SERIAL NUMBER:      | VFR-230907-1391-MS                                                                                                                                                     |
| DATE OF MEASUREMENT:            | 9/7/2023                                                                                                                                                               |
| MANUFACTURER:                   | GVA LIGHTING, INC.                                                                                                                                                     |
| PRODUCT NAME:                   | HIGHLIGHTER SERIES, HL-GEN4                                                                                                                                            |
| SIZE (width x length x height): | 50 mm x 300 mm x 87 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



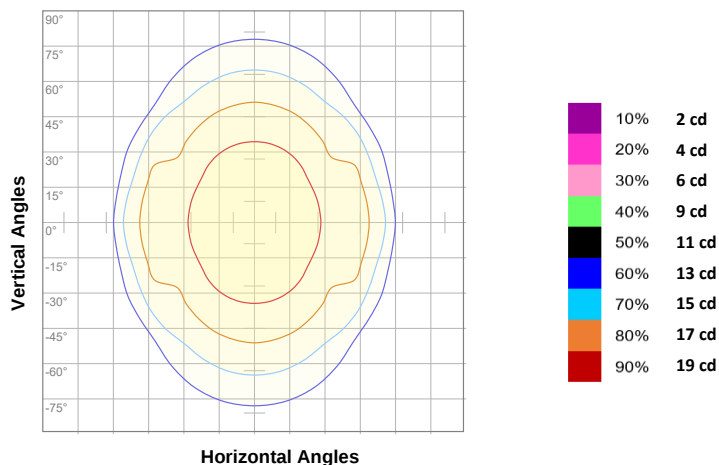
### LIGHT OUTPUT DATA

|                              |         |
|------------------------------|---------|
| TOTAL LUMEN OUTPUT:          | 122 lm  |
| EFFICACY:                    | 26 lm/W |
| PEAK INTENSITY:              | 21.3 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:  | 197.5° |
| BEAM ANGLE (FWHM)   C90/270: | 142.7° |
| FIELD ANGLE (10%)   C0/180:  | 295.8° |
| FIELD ANGLE (10%)   C90/270: | 191.6° |
| NUMBER OF PLANES MEASURED:   | 18     |

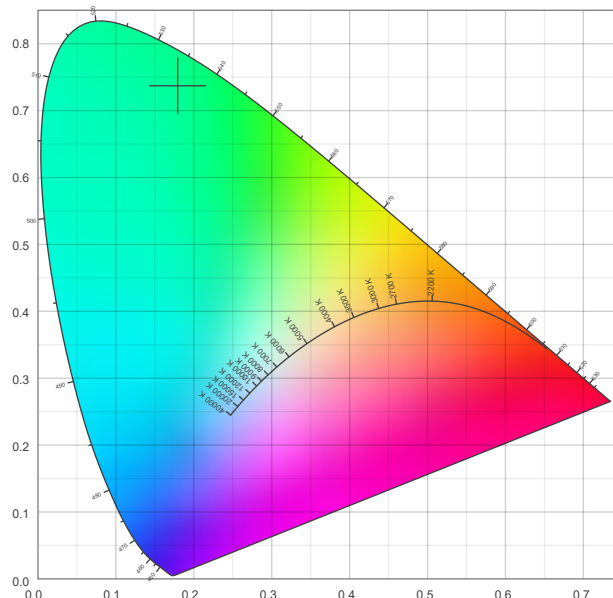
### ISOCANDELA DIAGRAM



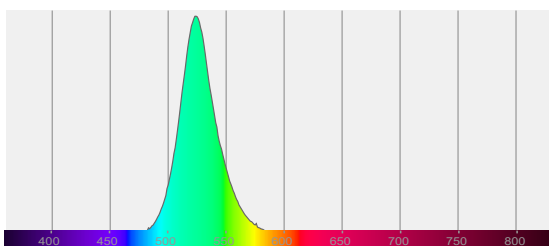
### POWER OUTPUT DATA

|                      |          |
|----------------------|----------|
| INPUT POWER:         | 4.8 W    |
| INPUT VOLTAGE:       | 380 V DC |
| INPUT CURRENT:       | 0.013 A  |
| POWER FACTOR:        | 1.0      |
| OPTICAL POWER:       | 0.237 mW |
| PEAK WAVELENGTH:     | 524 nm   |
| DOMINANT WAVELENGTH: | 530 nm   |

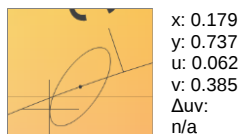
### CIE 1931



### SPECTRAL DISTRIBUTION

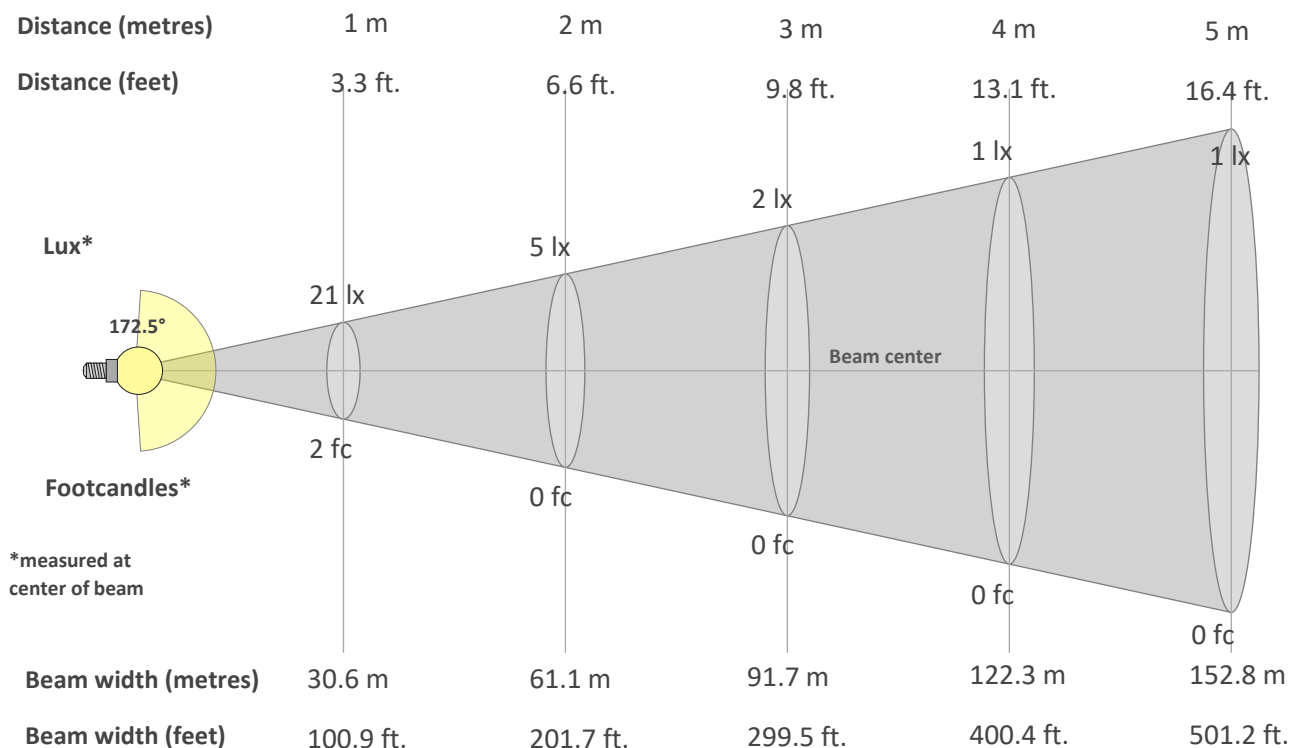


### CIE 1931 ZOOM



x: 0.179  
y: 0.737  
u: 0.062  
v: 0.385  
 $\Delta uv$ :  
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 |
| 21lx  | 5lx   | 2lx   | 1lx    | 1lx    | 1lx    | 0lx  | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    | 0lx    |
| 2fc   | 0.5fc | 0.2fc | 0.1fc  | 0.1fc  | 0.1fc  | 0fc  | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    | 0fc    |

### Intensity in 0° c-plane

| 0°   | 9°   | 18°  | 27°  | 36°  | 45°  | 54°  | 63°  | 72°  | 81°  | 90°  | 99°  | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 21.3 | 21.1 | 20.7 | 20.1 | 19.3 | 18.4 | 17.3 | 16.1 | 14.9 | 13.6 | 12.2 | 10.6 | 9.0  | 7.8  | 6.7  | 5.1  | 3.1  | 1.0  | 0.5  | 0.1  |
| 100% | 99%  | 97%  | 94%  | 91%  | 87%  | 81%  | 76%  | 70%  | 64%  | 57%  | 50%  | 43%  | 37%  | 31%  | 24%  | 15%  | 5%   | 2%   | 1%   |

### Intensity in 90° c-plane

| 0°   | 9°   | 18°  | 27°  | 36°  | 45°  | 54°  | 63°  | 72°  | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|------|------|------|------|
| 21.3 | 21.2 | 20.6 | 19.7 | 18.5 | 17.4 | 17.1 | 14.5 | 10.4 | 7.4 | 3.6 | 1.4 | 0.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 100% | 100% | 97%  | 92%  | 87%  | 82%  | 80%  | 68%  | 49%  | 35% | 17% | 7%  | 1%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |

### Intensity in 180° c-plane

| 0°   | 9°   | 18°  | 27°  | 36°  | 45°  | 54°  | 63°  | 72°  | 81°  | 90°  | 99°  | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 21.3 | 21.1 | 20.7 | 20.1 | 19.3 | 18.4 | 17.3 | 16.1 | 14.9 | 13.6 | 12.2 | 10.6 | 9.0  | 7.8  | 6.7  | 5.1  | 3.1  | 1.0  | 0.5  | 0.1  |
| 100% | 99%  | 97%  | 94%  | 91%  | 87%  | 81%  | 76%  | 70%  | 64%  | 57%  | 50%  | 43%  | 37%  | 31%  | 24%  | 15%  | 5%   | 2%   | 1%   |

### Intensity in 270° c-plane

| 0°   | 9°   | 18°  | 27°  | 36°  | 45°  | 54°  | 63°  | 72°  | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|------|------|------|------|
| 21.3 | 21.2 | 20.6 | 19.7 | 18.5 | 17.4 | 17.1 | 14.5 | 10.4 | 7.4 | 3.6 | 1.4 | 0.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 100% | 100% | 97%  | 92%  | 87%  | 82%  | 80%  | 68%  | 49%  | 35% | 17% | 7%  | 1%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |