

# Photometric Report

ELP CL IP (High Quality mode) – 19 degree

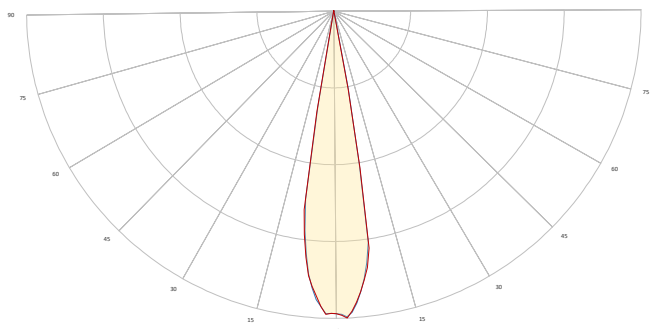
MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

## GENERAL SPECIFICATIONS

|                       |               |
|-----------------------|---------------|
| Total Fixture Output: | 6500 lm       |
| Light Engine Output:  | 20 klm        |
| Efficacy:             | 31 Lumen/Watt |
| Lens Option:          | 19° Lens      |
| Zoomrange:            | 19°           |
| CRI:                  | 90            |
| CQS:                  | N/A           |
| TM-30 Rf:             | 84.9          |
| TM-30 Rg:             | 104           |
| TLCI:                 | 88            |
| Color Temperature:    | Variable      |



## MEASUREMENT



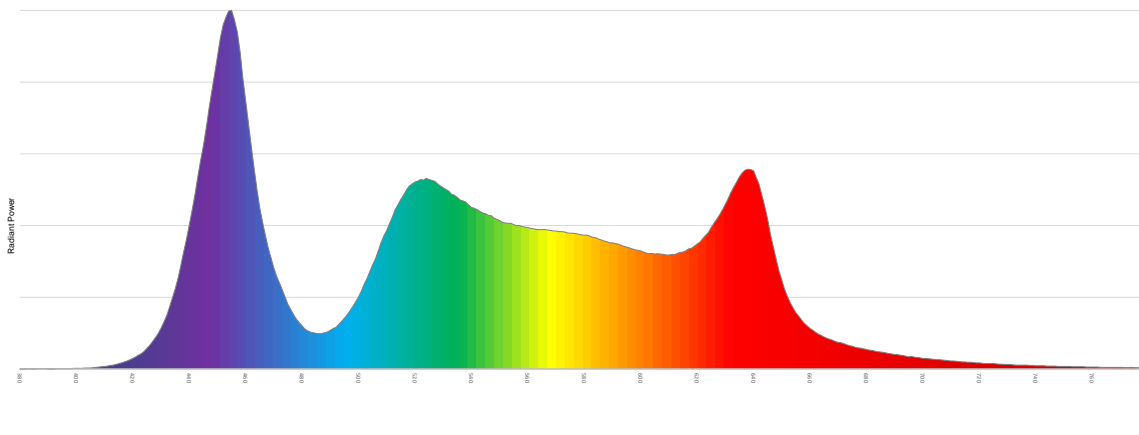
- Vertical - Horizontal

|                  |              |
|------------------|--------------|
| Catalog Number:  | 9045122814   |
| Measured Output: | 5778 lm      |
| Measured Peak:   | 76418 cd     |
| Consumed Power:  | 200 W        |
| Efficacy:        | 28.9 Lm/Watt |

|                    |       |
|--------------------|-------|
| Beam Angle (50%):  | 18.4° |
| Field Angle (10%): | 21.1° |
| Cutoff Angle (3%): | 21.6° |

|                        |              |
|------------------------|--------------|
| Measurement Condition: |              |
| Ambient Temperature:   | 25° +/- 5° C |
| AC Supply:             | 230V/50Hz    |

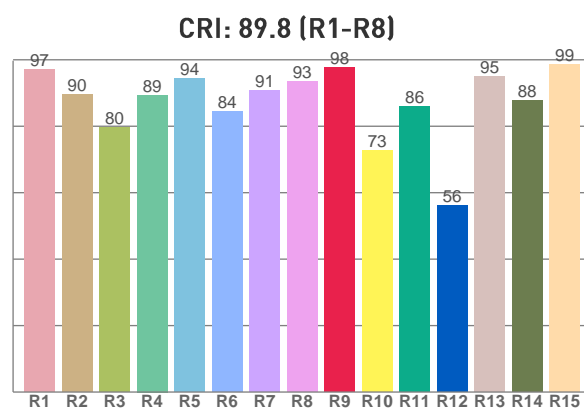
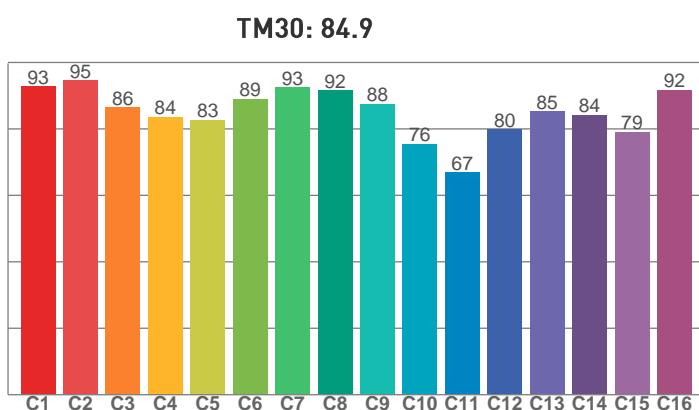
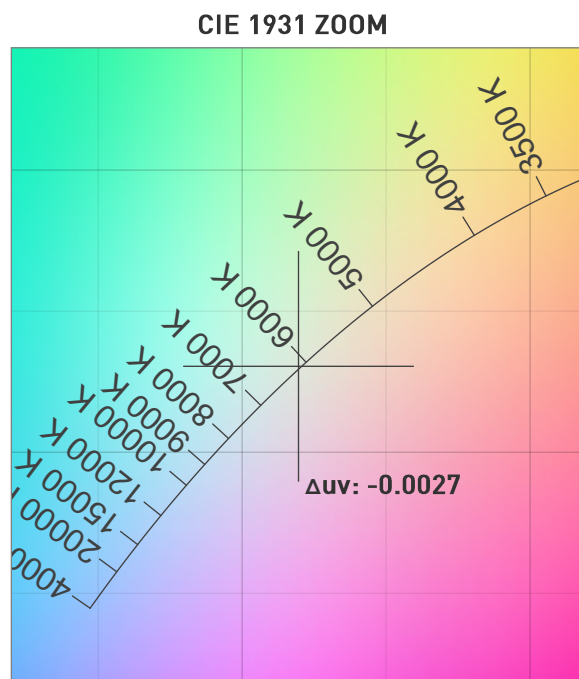
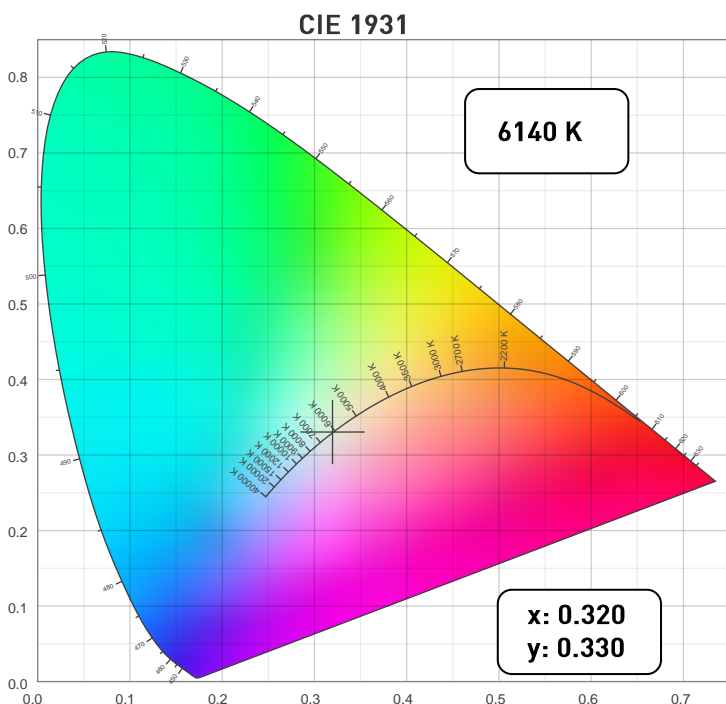
SPECTRAL DISTRIBUTION



# Photometric Report

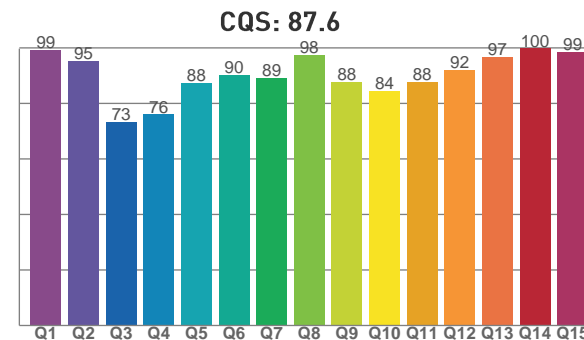
ELP CL IP (High Quality mode) – 19 degree

## CHROMATICITY



## COLOR PARAMETERS

| Color Temperature | Color Rendering Index | Red Component | Color Fidelity | Color Gamut |
|-------------------|-----------------------|---------------|----------------|-------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     |
| 6140 K            | 89.8                  | 97.6          | 84.9           | 104.0       |



| Television Lighting Consistency Index | Color Quality Scale | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 | Color Deviation from Black Body |
|---------------------------------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| TLCI                                  | CQS                 | x                         | y                         | u                         | v                         | $\Delta uv$                     |
| 88                                    | 87.6                | 0.320                     | 0.330                     | 0.202                     | 0.313                     | -0.0027                         |

# Photometric Report

ELP CL IP (High Quality mode) – 19 degree

TM30

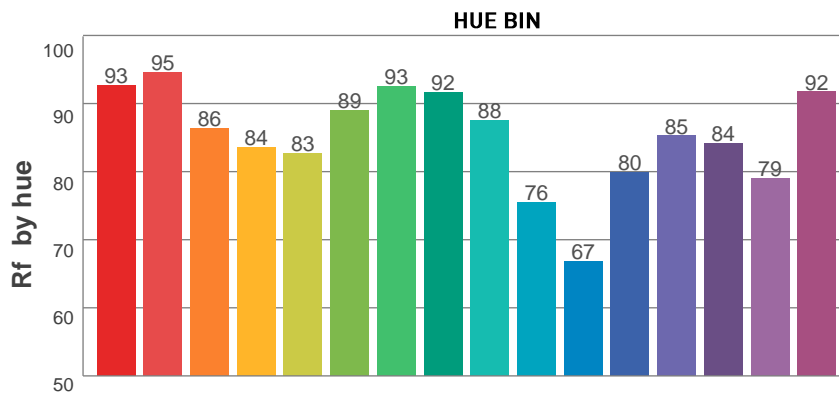
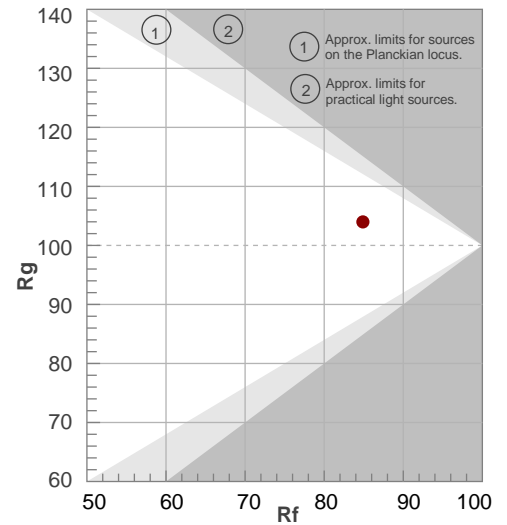
Rf 84.9

Fidelity index Rf

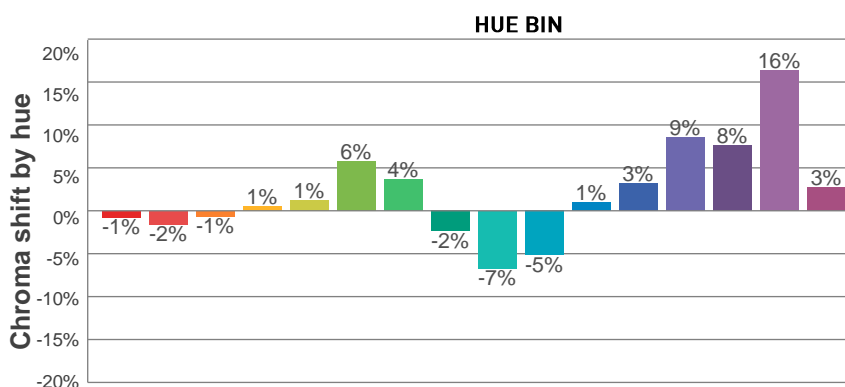
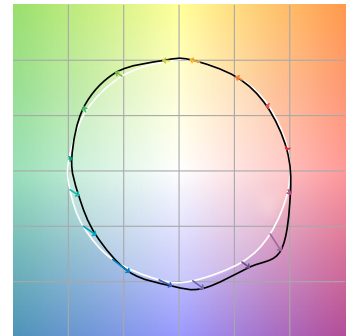
Rg 104.0

Gamut index Rg

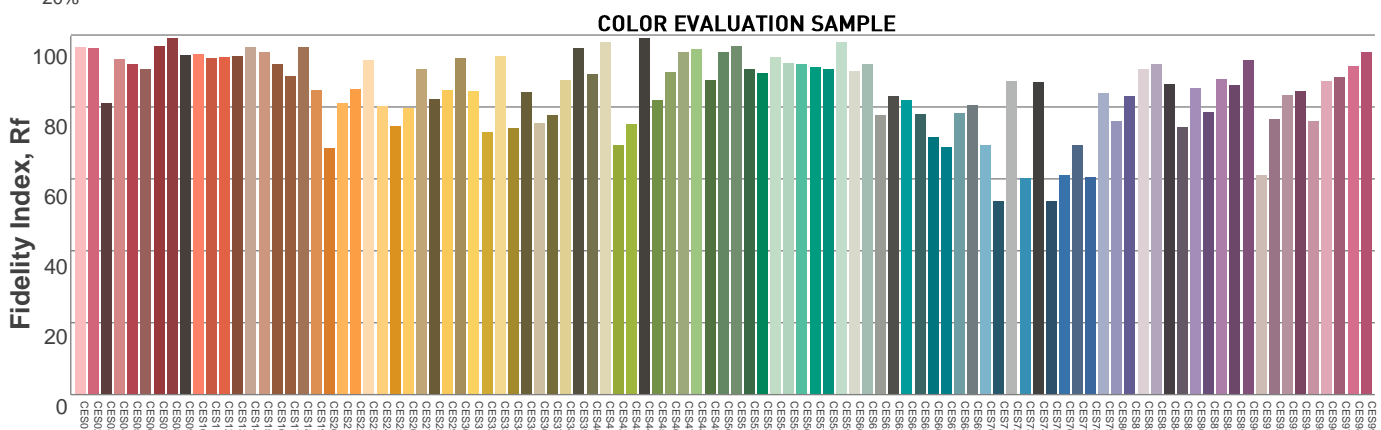
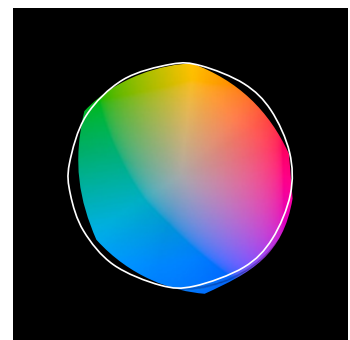
| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |     |
|---------|----------------|--------------------|-----|
|         |                | Chroma             | Hue |
| 1       | 93             | -1%                | -1% |
| 2       | 95             | -2%                | 1%  |
| 3       | 86             | -1%                | 6%  |
| 4       | 84             | 1%                 | 9%  |
| 5       | 83             | 1%                 | 6%  |
| 6       | 89             | 6%                 | 3%  |
| 7       | 93             | 4%                 | -3% |
| 8       | 92             | -2%                | -1% |
| 9       | 88             | -7%                | 6%  |
| 10      | 76             | -5%                | 13% |
| 11      | 67             | 1%                 | 19% |
| 12      | 80             | 3%                 | 12% |
| 13      | 85             | 9%                 | 8%  |
| 14      | 84             | 8%                 | 3%  |
| 15      | 79             | 16%                | -7% |
| 16      | 92             | 3%                 | -3% |



COLOR VECTOR GRAPHICS



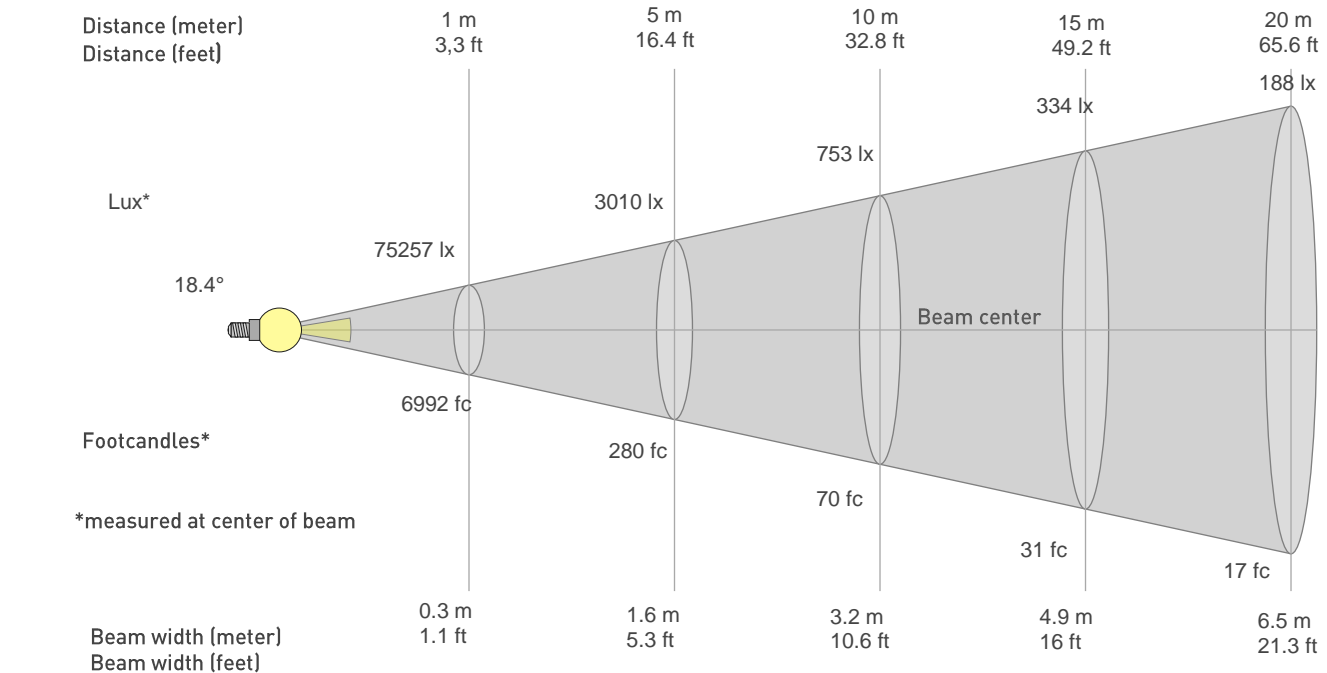
COLOR DISTORTION GRAPHICS



# Photometric Report

ELP CL IP (High Quality mode) – 19 degree

## BEAM DETAILS

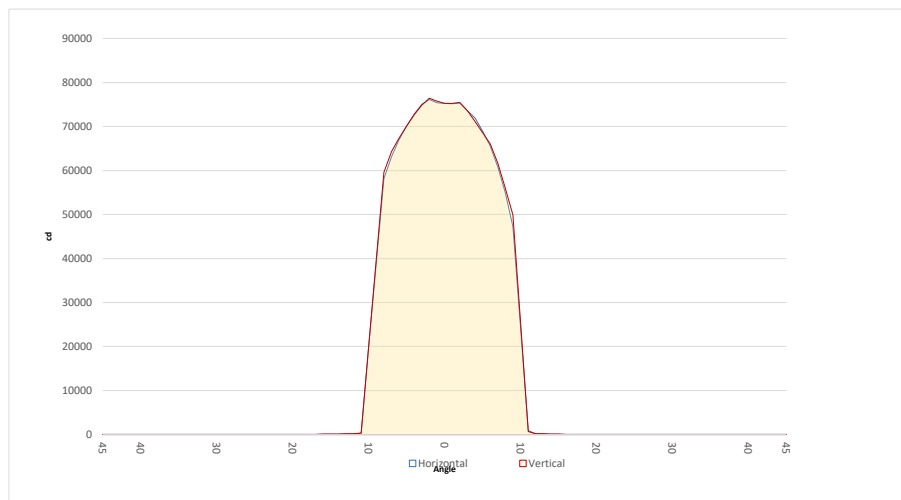


Beam width:  $= 0.3 * \text{distance}$   
Illuminance:  $= 75257 / (\text{distance}^2)$

distance in [m] for illuminance in [lux] distance in [ft] for illuminance in [fc]

## BEAM ILLUMINANCE 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 |
| 75257lx  | 18814lx  | 8362lx  | 4704lx | 3010lx  | 2090lx  | 1536lx  | 1176lx  | 929lx  | 753lx  | 622lx  | 523lx  | 445lx  | 384lx  | 334lx  | 294lx  | 260lx  | 232lx  | 208lx  | 188lx  |
| 6991.6fc | 1747.9fc | 776.8fc | 437fc  | 279.7fc | 194.2fc | 142.7fc | 109.2fc | 86.3fc | 69.9fc | 57.8fc | 48.6fc | 41.4fc | 35.7fc | 31.1fc | 27.3fc | 24.2fc | 21.6fc | 19.4fc | 17.5fc |



| BEAM ANGLE 50% | FIELD ANGLE 10% | CUTOFF ANGLE 3% |
|----------------|-----------------|-----------------|
| 18.4°          | 21.1°           | 21.6°           |