

Photometric Report

MAC Encore Two With Spectral Enhancement Filter – Narrow

MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

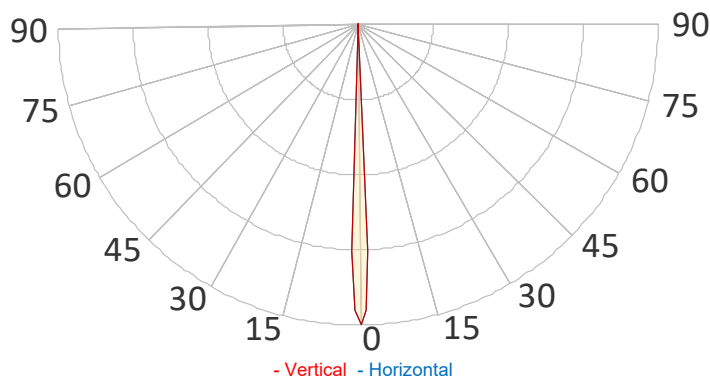
GENERAL SPECIFICATIONS

| | |
|-----------------------|-----------------|
| Total Fixture Output: | 13600 lm |
| Light Engine Output: | 57000 lm |
| Efficacy: | 15.9 lm/W |
| Lens Option: | N/A |
| Beam Angle (50%): | 5.1-51.9° |
| Field Angle (10%): | 5.7-53.6° |
| Cut-off Angle (3%): | 5.9-53.9° |
| CRI: | 95 (+/-3) |
| TM-30 Rf: | 95 (+/-3) |
| TM-30 Rg: | 100 (+/-3) |
| TLCI: | 95 (+/-3) |
| Color Temperature: | 5600K (+/-300K) |



SAMPLE MEASUREMENT

POLAR PLOT

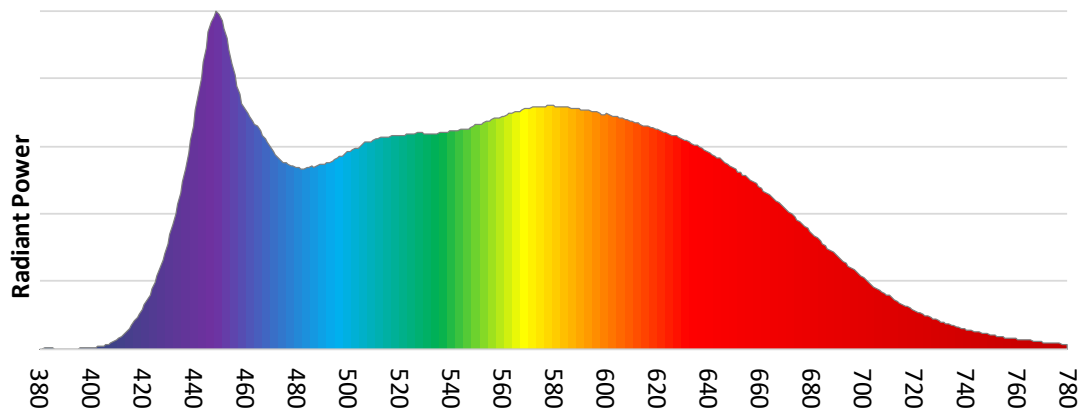


| | |
|------------------|----------------|
| Catalog Number: | MAR-90250600HU |
| Measured Output: | 8074 lm |
| Measured Peak: | 1302364 cd |
| Consumed Power: | 855 W |
| Efficacy: | 9.4 lm/W |

| | |
|---------------------|------|
| Beam Angle (50%): | 5.1° |
| Field Angle (10%): | 5.7° |
| Cut-off Angle (3%): | 5.9° |

| | |
|------------------------|----------------|
| Measurement Condition: | |
| Ambient Temperature: | 25° +/- 5° C |
| AC Supply: | 230V/50Hz |
| Fan Mode: | Regulated High |
| Fixture Warm-up Time: | 30 minutes |

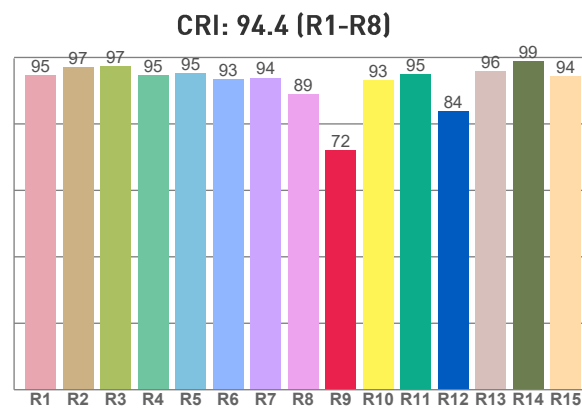
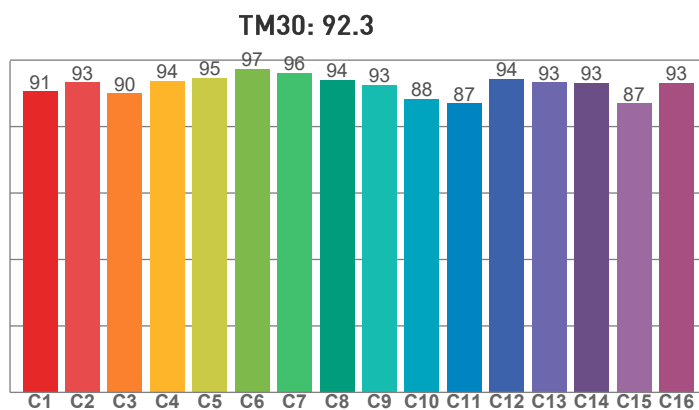
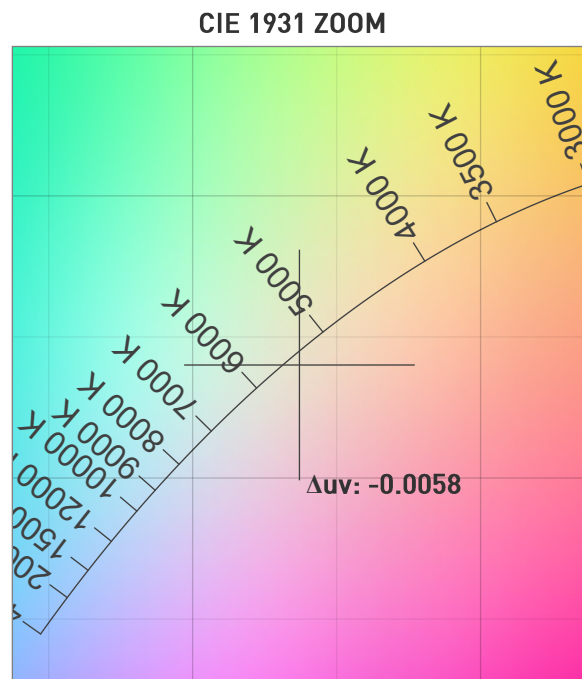
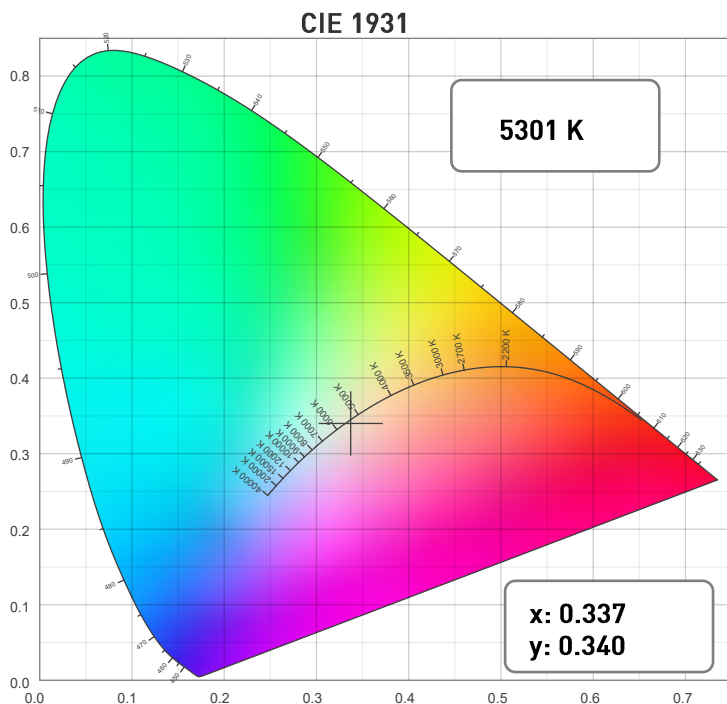
SPECTRAL DISTRIBUTION



Photometric Report

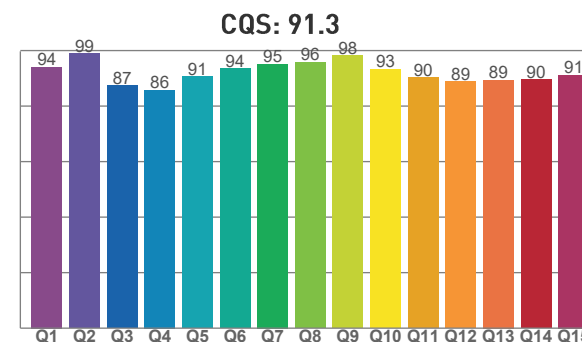
MAC Encore Two With Spectral Enhancement Filter – Narrow

CHROMATICITY



COLOR PARAMETERS

| Color Temperature | Color Rendering Index | Red Component | Color Fidelity | Color Gamut |
|-------------------|-----------------------|---------------|----------------|-------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg |
| 5301 K | 94.4 | 72.0 | 92.3 | 99.7 |



| 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 | Δuv |
| 96 | 91.3 | 0.337 | 0.340 | 0.210 | 0.318 | -0.0058 |

Photometric Report

MAC Encore Two With Spectral Enhancement Filter – Narrow

TM30

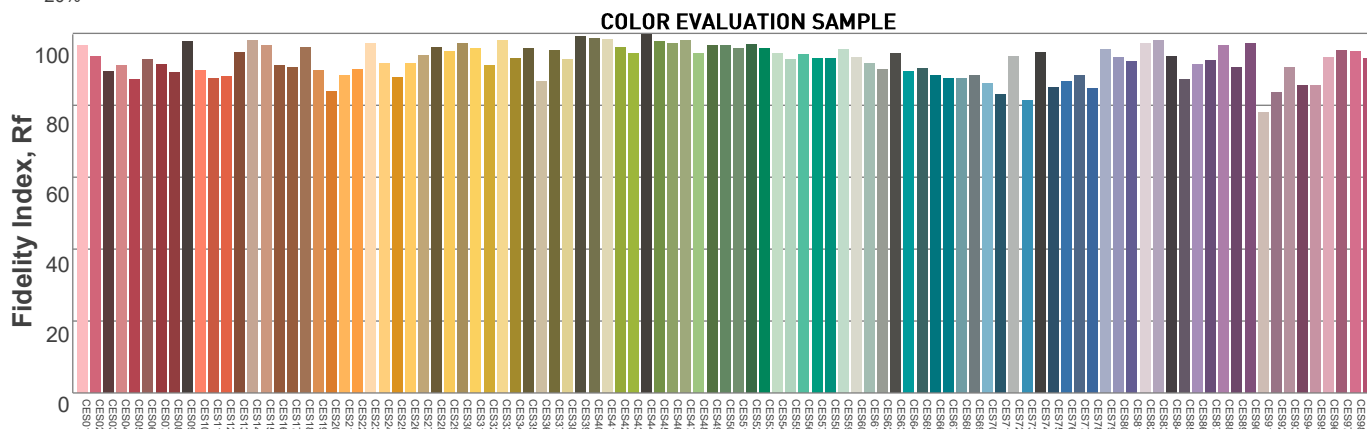
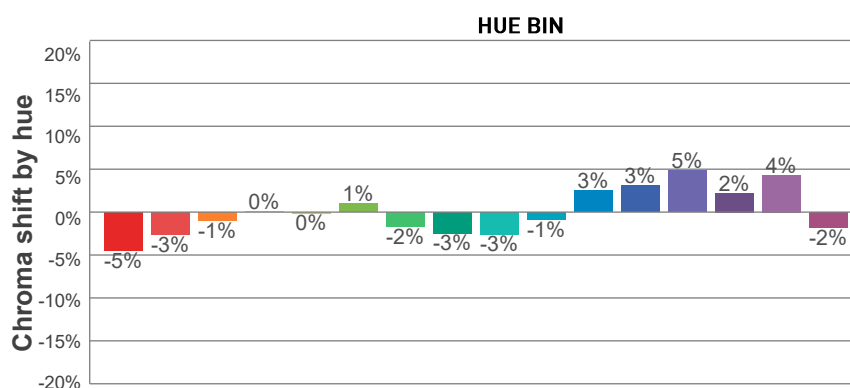
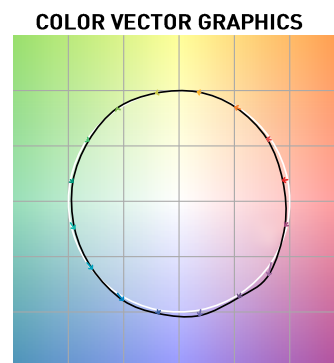
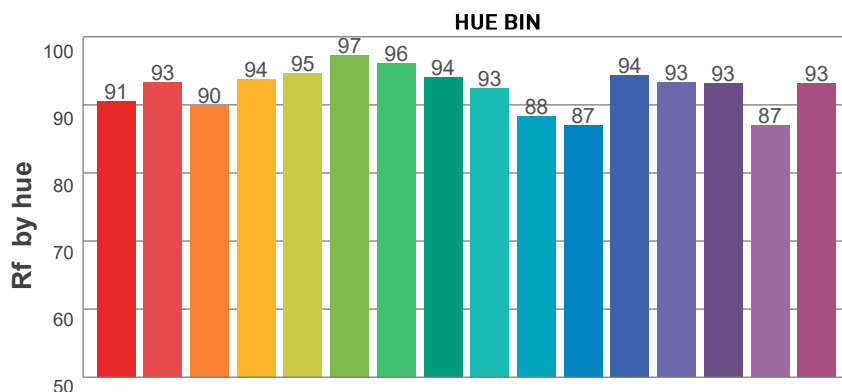
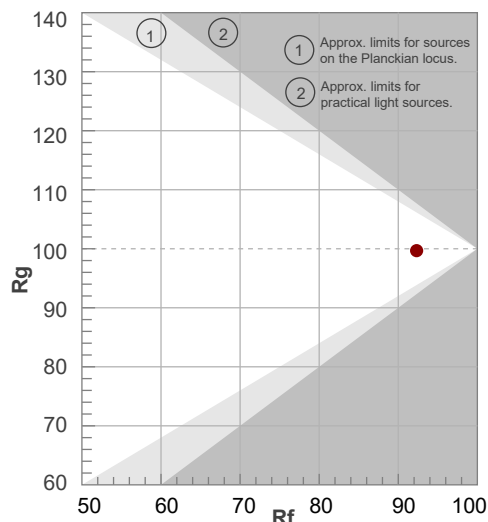
Rf 92.3

Fidelity index Rf

Rg 99.7

Gamut index Rg

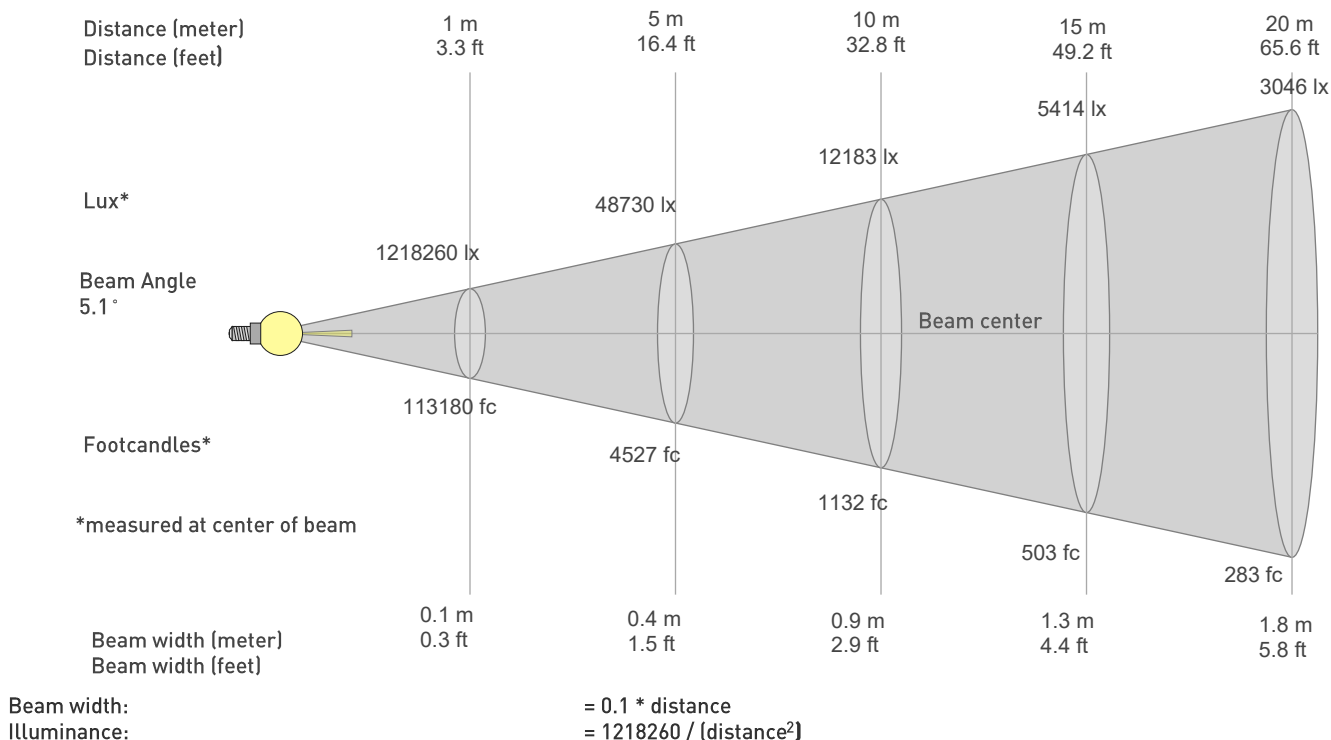
| Hue Bin | Rf | Graphic shifts (%) | |
|---------|----|--------------------|------|
| | | Chroma | Hue |
| 1 | 91 | -5% | 0% |
| 2 | 93 | -3% | 3% |
| 3 | 90 | -1% | 5% |
| 4 | 94 | 0% | 3% |
| 5 | 95 | 0% | 1% |
| 6 | 97 | 1% | 0% |
| 7 | 96 | -2% | 0% |
| 8 | 94 | -3% | 2% |
| 9 | 93 | -3% | 6% |
| 10 | 88 | -1% | 7% |
| 11 | 87 | 3% | 8% |
| 12 | 94 | 3% | 2% |
| 13 | 93 | 5% | -2% |
| 14 | 93 | 2% | -3% |
| 15 | 87 | 4% | -11% |
| 16 | 93 | -2% | -3% |



Photometric Report

MAC Encore Two With Spectral Enhancement Filter – Narrow

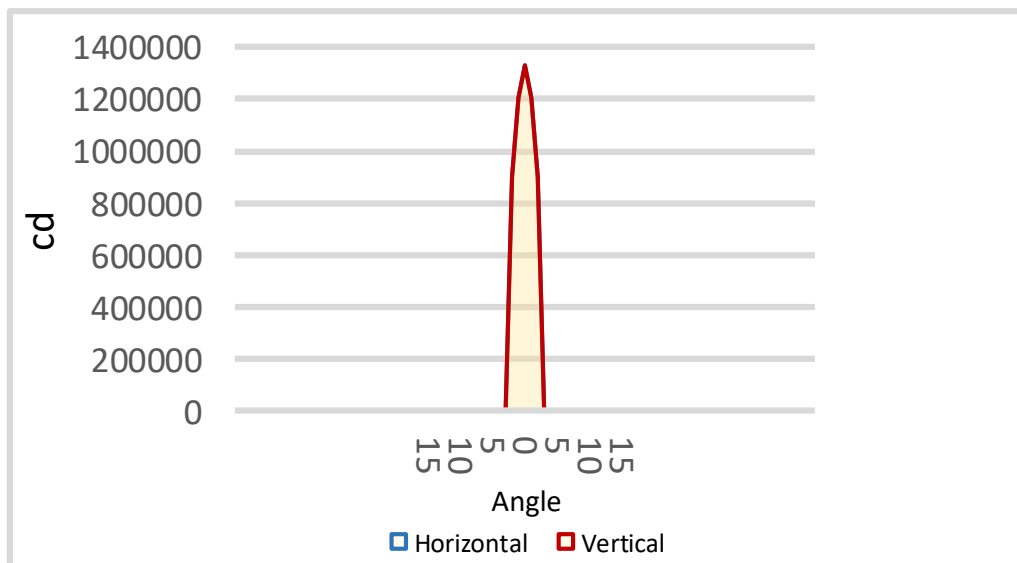
BEAM DETAILS



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 |
| 1218260lx | 304565lx | 135362lx | 76141lx | 48730lx | 33841lx | 24862lx | 19035lx | 15040lx | 12183lx | 10068lx | 8460lx | 7209lx | 6216lx | 5414lx | 4759lx | 4215lx | 3760lx | 3375lx | 3046lx |
| 113180.1fc | 28295fc | 12575.6fc | 7073.8fc | 4527.2fc | 3143.9fc | 2309.8fc | 1768.4fc | 1397.3fc | 1131.8fc | 935.4fc | 786fc | 669.7fc | 577.4fc | 503fc | 442.1fc | 391.6fc | 349.3fc | 313.5fc | 283fc |



| BEAM ANGLE 50% | FIELD ANGLE 10% | CUTOFF ANGLE 3% |
|----------------|-----------------|-----------------|
| 5.1° | 5.7° | 5.9° |