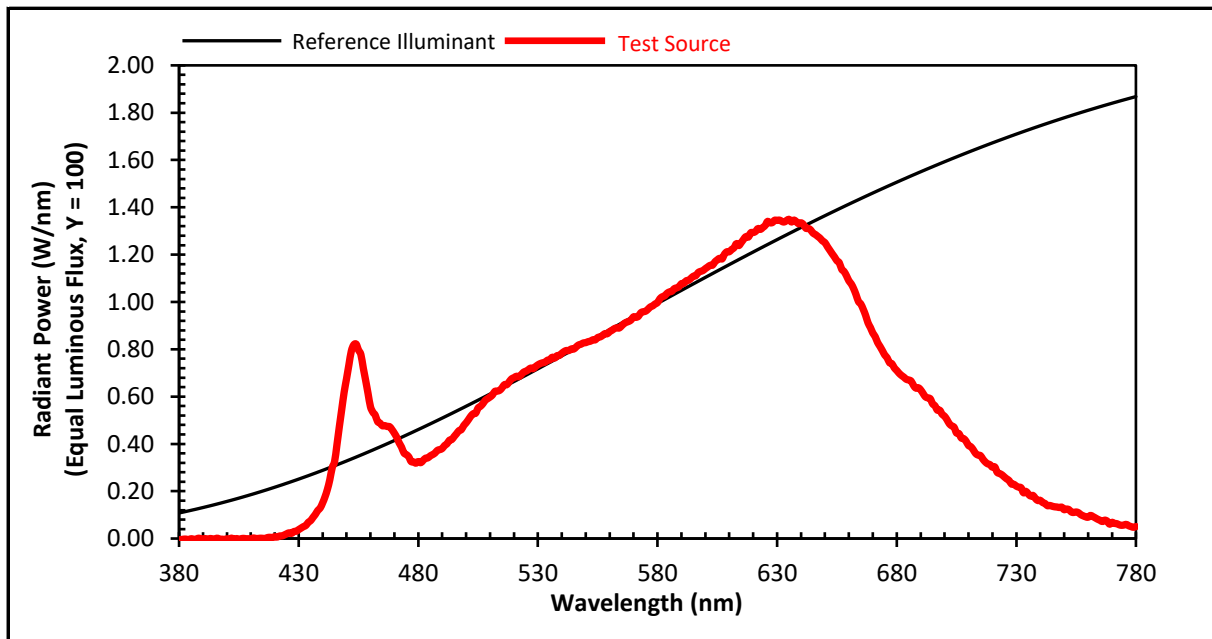


# Photometric Measurement Report

Measured via Labsphere's Integral™ Light Measurement Platform

TM-30 Graphical Data via IES TM-30 Basic Calculator Version 2.05

|             |   |                  |                 |
|-------------|---|------------------|-----------------|
| Product     | AL-NF-1018-24   Element Neon SideFlex Light | 3/6/25 12:26 PM  |                 |
| Description | Side Bending Neon - 3000K                   | Integration Time | 250.80          |
| Notes       | 1 meter                                     | Scans Averaged   | 3               |
| Scan ID     | 145   | Saturation       | 79.14%          |
|             | Test by                                     | EV               | Sphere Geometry |
|             |   |                  | 2pi             |



| CCT (K) | Lumens | Watts | Volts (DC) | Amps | Efficacy |
|---------|--------|-------|------------|------|----------|
| 3014 K  | 361.94 | 9.47  | 24.00      | 0.39 | 38.21    |

| CIE 1931 |      |      | CIE 1960 |      | CIE 1796 |      |
|----------|------|------|----------|------|----------|------|
| x        | y    | Y    | u        | v    | u'       | v'   |
| 0.43     | 0.40 | 0.53 | 0.25     | 0.35 | 0.25     | 0.52 |

| CRI (Ra) |    | 96.53 |    |     |    |  |  |
|----------|----|-------|----|-----|----|--|--|
| R1       | 98 | R6    | 97 | R11 | 98 |  |  |
| R2       | 99 | R7    | 95 | R12 | 80 |  |  |
| R3       | 98 | R8    | 91 | R13 | 98 |  |  |
| R4       | 97 | R9    | 81 | R14 | 98 |  |  |
| R5       | 97 | R10   | 96 | R15 | 95 |  |  |

| CQS (Qa) |    |      |    | 94.44 |    |  |
|----------|----|------|----|-------|----|--|
| VS1      | 93 | VS6  | 96 | VS11  | 97 |  |
| VS2      | 97 | VS7  | 95 | VS12  | 97 |  |
| VS3      | 91 | VS8  | 96 | VS13  | 97 |  |
| VS4      | 90 | VS9  | 99 | VS14  | 94 |  |
| VS5      | 93 | VS10 | 97 | VS15  | 94 |  |

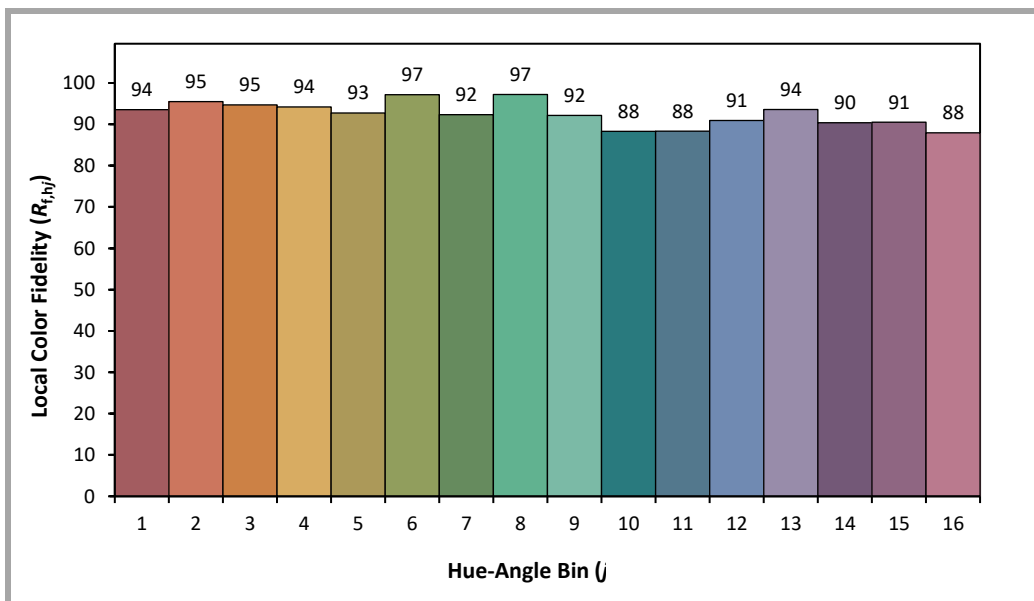
## Understanding TM-30

| <i>Measure</i>        | <i>Symbol</i> | <i>Description</i>  | <i>Typical Values</i> |
|-----------------------|---------------|---|-----------------------|
| Fidelity Index        | Rf            | Overall average similarity  | 70 to 100             |
| Gamut Index           | Rg            | Overall average saturation (change in chroma)<br>>100 = Oversaturated, <100 = Desaturated | 80 to 120             |
| Color Vector Graphic  | CVG           | Visual representation of hue and saturation changes                                       | n/a                   |
| Local Color Fidelity  | Rf,hj         | Average similarity for a specific hue-angle bin (16 values)                               | 60 to 100             |
| Local Chroma Shift    | Rcs,hj        | Average relative change in chroma for a specific hue-angle bin (16 values)                | -20% to 20%           |
| Local Hue Shift       | Rhs,hj        | Average change in hue angle (in radians) for a specific hue-angle bin (16 values)         | -0.2 to 0.2           |
| Sample Color Fidelity | Rf,ces        | Average similarity for a specific color sample (99 values)                                | 60 to 100             |

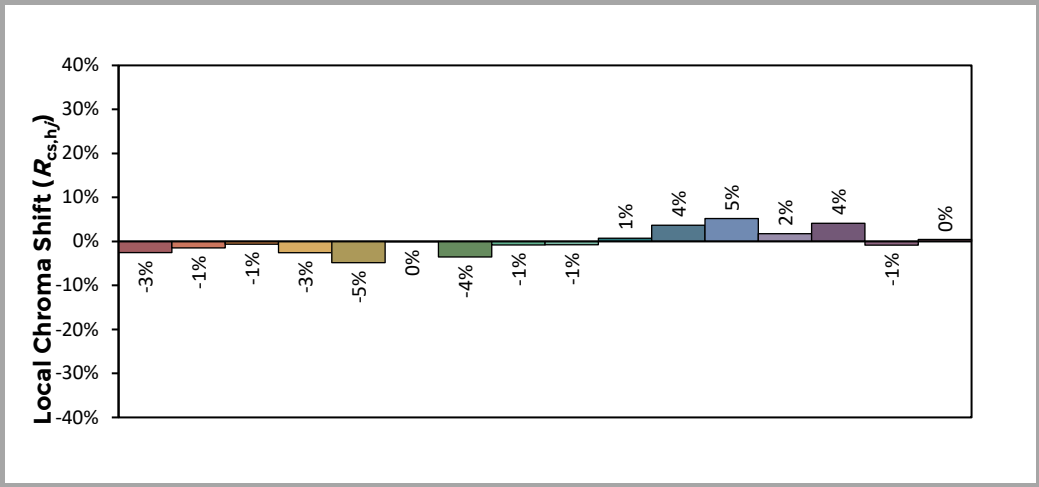
## TM-30 Measurements

|       |    |       |
|-------|----|-------|
| TM-30 | Rf | 92.49 |
|       | Rg | 99.46 |

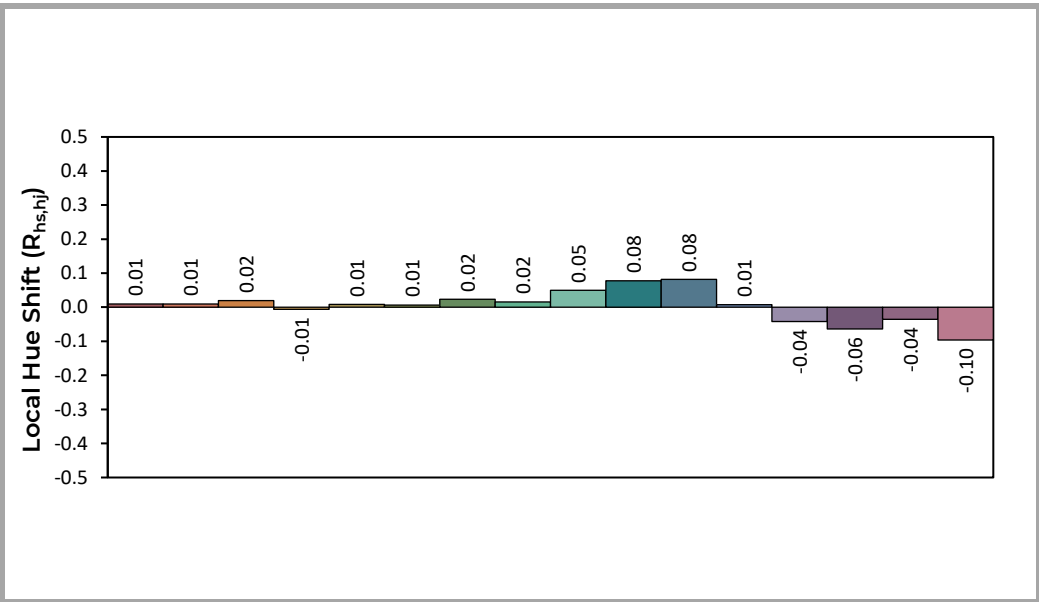
| Local Color Fidelity |      |         |      |          |      |          |      |
|----------------------|------|---------|------|----------|------|----------|------|
| Rf,hj 1              | 93.5 | Rf,hj 5 | 92.7 | Rf,hj 9  | 92.0 | Rf,hj 13 | 93.6 |
| Rf,hj 2              | 95.5 | Rf,hj 6 | 97.2 | Rf,hj 10 | 88.2 | Rf,hj 14 | 90.4 |
| Rf,hj 3              | 94.8 | Rf,hj 7 | 92.2 | Rf,hj 11 | 88.3 | Rf,hj 15 | 90.5 |
| Rf,hj 4              | 94.1 | Rf,hj 8 | 97.1 | Rf,hj 12 | 91.0 | Rf,hj 16 | 88.0 |



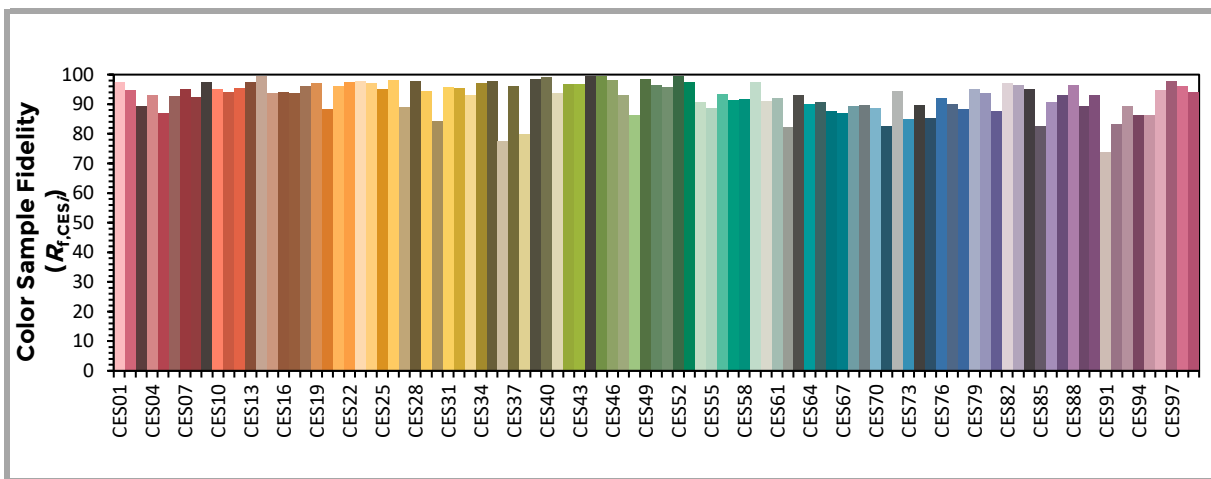
| Local Chroma Shift |      |          |      |           |      |           |      |
|--------------------|------|----------|------|-----------|------|-----------|------|
| Rcs,hj 1           | -2.5 | Rcs,hj 5 | -4.9 | Rcs,hj 9  | -0.8 | Rcs,hj 13 | 1.7  |
| Rcs,hj 2           | -1.5 | Rcs,hj 6 | -0.2 | Rcs,hj 10 | 0.8  | Rcs,hj 14 | 4.1  |
| Rcs,hj 3           | -0.7 | Rcs,hj 7 | -3.6 | Rcs,hj 11 | 3.7  | Rcs,hj 15 | -0.9 |
| Rcs,hj 4           | -2.6 | Rcs,hj 8 | -0.9 | Rcs,hj 12 | 5.2  | Rcs,hj 16 | 0.4  |



| Local Hue Shift |       |          |      |           |      |           |       |
|-----------------|-------|----------|------|-----------|------|-----------|-------|
| Rhs,hj 1        | 0.01  | Rhs,hj 5 | 0.01 | Rhs,hj 9  | 0.05 | Rhs,hj 13 | -0.04 |
| Rhs,hj 2        | 0.01  | Rhs,hj 6 | 0.01 | Rhs,hj 10 | 0.08 | Rhs,hj 14 | -0.06 |
| Rhs,hj 3        | 0.02  | Rhs,hj 7 | 0.02 | Rhs,hj 11 | 0.08 | Rhs,hj 15 | -0.04 |
| Rhs,hj 4        | -0.01 | Rhs,hj 8 | 0.02 | Rhs,hj 12 | 0.01 | Rhs,hj 16 | -0.10 |



| Sample Color Fidelity |      |           |      |           |      |           |      |
|-----------------------|------|-----------|------|-----------|------|-----------|------|
| Rf,ces 1              | 97.4 | Rf,ces 26 | 98.0 | Rf,ces 51 | 95.4 | Rf,ces 76 | 92.0 |
| Rf,ces 2              | 94.7 | Rf,ces 27 | 88.9 | Rf,ces 52 | 99.3 | Rf,ces 77 | 90.1 |
| Rf,ces 3              | 89.3 | Rf,ces 28 | 97.9 | Rf,ces 53 | 97.3 | Rf,ces 78 | 88.3 |
| Rf,ces 4              | 92.9 | Rf,ces 29 | 94.1 | Rf,ces 54 | 90.3 | Rf,ces 79 | 94.9 |
| Rf,ces 5              | 86.9 | Rf,ces 30 | 83.9 | Rf,ces 55 | 88.5 | Rf,ces 80 | 93.6 |
| Rf,ces 6              | 92.5 | Rf,ces 31 | 95.4 | Rf,ces 56 | 93.1 | Rf,ces 81 | 87.5 |
| Rf,ces 7              | 95.2 | Rf,ces 32 | 95.4 | Rf,ces 57 | 90.9 | Rf,ces 82 | 96.9 |
| Rf,ces 8              | 92.3 | Rf,ces 33 | 92.8 | Rf,ces 58 | 91.5 | Rf,ces 83 | 96.2 |
| Rf,ces 9              | 97.3 | Rf,ces 34 | 97.3 | Rf,ces 59 | 97.4 | Rf,ces 84 | 95.1 |
| Rf,ces 10             | 95.2 | Rf,ces 35 | 97.8 | Rf,ces 60 | 91.0 | Rf,ces 85 | 82.7 |
| Rf,ces 11             | 93.9 | Rf,ces 36 | 77.4 | Rf,ces 61 | 92.0 | Rf,ces 86 | 90.7 |
| Rf,ces 12             | 95.2 | Rf,ces 37 | 96.0 | Rf,ces 62 | 81.8 | Rf,ces 87 | 93.2 |
| Rf,ces 13             | 97.4 | Rf,ces 38 | 79.6 | Rf,ces 63 | 92.8 | Rf,ces 88 | 96.2 |
| Rf,ces 14             | 99.3 | Rf,ces 39 | 98.4 | Rf,ces 64 | 89.8 | Rf,ces 89 | 89.5 |
| Rf,ces 15             | 93.6 | Rf,ces 40 | 99.0 | Rf,ces 65 | 90.7 | Rf,ces 90 | 92.9 |
| Rf,ces 16             | 93.9 | Rf,ces 41 | 93.4 | Rf,ces 66 | 87.6 | Rf,ces 91 | 73.6 |
| Rf,ces 17             | 93.6 | Rf,ces 42 | 96.7 | Rf,ces 67 | 86.9 | Rf,ces 92 | 83.4 |
| Rf,ces 18             | 96.0 | Rf,ces 43 | 96.8 | Rf,ces 68 | 89.3 | Rf,ces 93 | 89.1 |
| Rf,ces 19             | 97.1 | Rf,ces 44 | 99.4 | Rf,ces 69 | 89.7 | Rf,ces 94 | 86.2 |
| Rf,ces 20             | 88.5 | Rf,ces 45 | 99.6 | Rf,ces 70 | 88.7 | Rf,ces 95 | 86.2 |
| Rf,ces 21             | 96.0 | Rf,ces 46 | 97.8 | Rf,ces 71 | 82.5 | Rf,ces 96 | 94.9 |
| Rf,ces 22             | 97.3 | Rf,ces 47 | 92.6 | Rf,ces 72 | 94.3 | Rf,ces 97 | 97.9 |
| Rf,ces 23             | 97.7 | Rf,ces 48 | 86.0 | Rf,ces 73 | 85.1 | Rf,ces 98 | 95.9 |
| Rf,ces 24             | 97.1 | Rf,ces 49 | 98.4 | Rf,ces 74 | 89.5 | Rf,ces 99 | 93.9 |
| Rf,ces 25             | 95.0 | Rf,ces 50 | 96.2 | Rf,ces 75 | 85.1 |           |      |



## TM-30 Color Vector Graphic (CVG)

The Color Vector Graphic (CVG) shows a normalized version of the average change in  $(a', b')$  coordinates of CAM02-UCS for the CES within each hue-angle bin.

