

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P976563

Luminaire Tested: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P976563
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22SR-LD2-C-25-UNV-L850-CD1-PG-U
Description: METALUX SKYRIDGE 2x2 2500LM PACKAGE 80CRI 5000K TROFFER with Primary Green SKYTRII
Light Source: 5000K CCT, 80+ CRI LEDS
Ballast/Driver: -

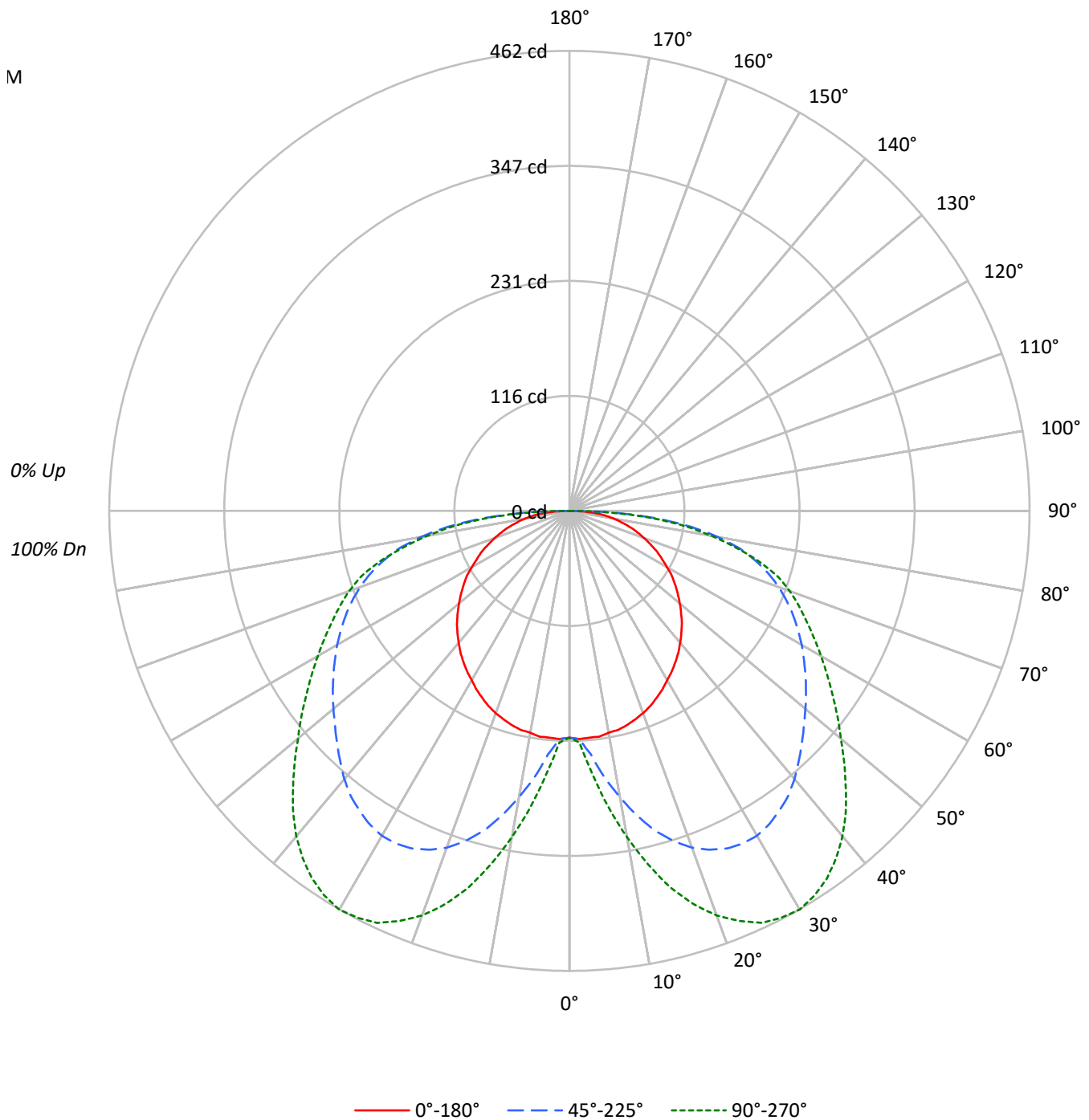
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1436.0 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.2 / 2
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

TEST NUMBER: P976563
CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

Luminous Intensity Polar Plot





TEST NUMBER: P976563

CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1 | 106 | 100 | 95 | 90 | 103 | 98 | 93 | 89 | 93 | 89 | 86 | 89 | 86 | 83 | 86 | 83 | 80 | 78 | 78 | 78 | 78 |
| 2 | 95 | 85 | 77 | 70 | 92 | 83 | 76 | 69 | 80 | 73 | 68 | 76 | 71 | 66 | 73 | 69 | 65 | 62 | 62 | 62 | 62 |
| 3 | 86 | 73 | 64 | 57 | 83 | 72 | 63 | 56 | 69 | 61 | 55 | 66 | 59 | 54 | 63 | 58 | 53 | 51 | 51 | 51 | 51 |
| 4 | 78 | 64 | 54 | 47 | 75 | 63 | 54 | 46 | 60 | 52 | 46 | 58 | 51 | 45 | 55 | 49 | 44 | 42 | 42 | 42 | 42 |
| 5 | 71 | 57 | 47 | 39 | 69 | 56 | 46 | 39 | 53 | 45 | 39 | 51 | 44 | 38 | 49 | 43 | 38 | 35 | 35 | 35 | 35 |
| 6 | 65 | 51 | 41 | 34 | 63 | 50 | 40 | 34 | 48 | 39 | 33 | 46 | 39 | 33 | 44 | 38 | 33 | 30 | 30 | 30 | 30 |
| 7 | 60 | 45 | 36 | 29 | 58 | 45 | 36 | 29 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 33 | 28 | 26 | 26 | 26 | 26 |
| 8 | 56 | 41 | 32 | 26 | 54 | 40 | 32 | 26 | 39 | 31 | 25 | 38 | 31 | 25 | 37 | 30 | 25 | 23 | 23 | 23 | 23 |
| 9 | 52 | 38 | 29 | 23 | 50 | 37 | 29 | 23 | 36 | 28 | 23 | 35 | 28 | 22 | 34 | 27 | 22 | 20 | 20 | 20 | 20 |
| 10 | 49 | 34 | 26 | 20 | 47 | 34 | 26 | 20 | 33 | 25 | 20 | 32 | 25 | 20 | 31 | 25 | 20 | 18 | 18 | 18 | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-----|------|------|
| 0° | 613 | 613 | 613 |
| 5° | 618 | 663 | 716 |
| 10° | 618 | 797 | 909 |
| 15° | 621 | 927 | 1091 |
| 20° | 619 | 1031 | 1238 |
| 25° | 615 | 1111 | 1355 |
| 30° | 610 | 1170 | 1436 |
| 35° | 609 | 1207 | 1480 |
| 40° | 607 | 1235 | 1498 |
| 45° | 608 | 1256 | 1493 |
| 50° | 606 | 1295 | 1490 |
| 55° | 608 | 1357 | 1514 |
| 60° | 609 | 1449 | 1570 |
| 65° | 620 | 1578 | 1673 |
| 70° | 628 | 1759 | 1851 |
| 75° | 657 | 2014 | 2057 |
| 80° | 708 | 2357 | 2255 |
| 85° | 797 | 2748 | 2594 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 2924 cd/sqm



TEST NUMBER: P976563
 CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 24.7 | 1.7 |
| 10°-20° | 90.9 | 6.3 |
| 20°-30° | 164.0 | 11.4 |
| 30°-40° | 217.2 | 15.1 |
| 40°-50° | 238.4 | 16.6 |
| 50°-60° | 235.7 | 16.4 |
| 60°-70° | 216.5 | 15.1 |
| 70°-80° | 173.2 | 12.1 |
| 80°-90° | 75.4 | 5.3 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 279.6 | 19.5 |
| 0°-40° | 496.8 | 34.6 |
| 0°-60° | 970.9 | 67.6 |
| 0°-90° | 1436.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1436.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 228 | 228 | 228 | 228 | 228 | |
| 5° | 229 | 230 | 245 | 260 | 265 | 22 |
| 15° | 223 | 266 | 333 | 375 | 392 | 63 |
| 25° | 207 | 285 | 374 | 434 | 456 | 95 |
| 35° | 185 | 274 | 368 | 429 | 451 | 116 |
| 45° | 160 | 248 | 330 | 378 | 392 | 123 |
| 55° | 130 | 216 | 289 | 317 | 323 | 116 |
| 65° | 97 | 182 | 248 | 260 | 263 | 96 |
| 75° | 63 | 139 | 194 | 197 | 198 | 66 |
| 85° | 26 | 63 | 89 | 84 | 84 | 27 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P976563

CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 |
| 2.5° | 229.4 | 229.4 | 228.6 | 229.4 | 228.6 | 229.4 | 228.6 | 228.6 | 229.4 | 229.4 | 230.3 |
| 5° | 228.6 | 228.6 | 228.6 | 228.6 | 229.4 | 231.1 | 233.6 | 237.0 | 241.1 | 245.3 | 249.4 |
| 7.5° | 228.6 | 228.6 | 228.6 | 229.4 | 233.6 | 240.3 | 247.8 | 255.2 | 263.5 | 270.2 | 276.0 |
| 10° | 226.2 | 227.0 | 227.0 | 232.0 | 241.1 | 251.9 | 263.5 | 272.7 | 282.7 | 291.8 | 300.1 |
| 12.5° | 225.3 | 226.2 | 227.7 | 237.0 | 250.2 | 265.2 | 277.7 | 290.1 | 302.6 | 313.5 | 323.4 |
| 15° | 222.8 | 222.8 | 228.6 | 242.0 | 258.5 | 274.3 | 290.1 | 305.1 | 319.3 | 332.6 | 344.2 |
| 17.5° | 219.5 | 219.5 | 228.6 | 246.1 | 264.3 | 282.7 | 300.1 | 316.7 | 333.4 | 347.5 | 360.8 |
| 20° | 216.2 | 217.0 | 228.6 | 249.4 | 269.3 | 290.1 | 308.5 | 326.7 | 344.2 | 360.0 | 375.0 |
| 22.5° | 212.1 | 212.8 | 228.6 | 251.1 | 272.7 | 294.3 | 314.3 | 333.4 | 351.6 | 368.3 | 384.1 |
| 25° | 207.1 | 209.5 | 227.0 | 250.2 | 273.6 | 296.0 | 316.7 | 337.5 | 357.5 | 374.1 | 390.8 |
| 27.5° | 202.1 | 205.4 | 224.5 | 248.5 | 272.7 | 296.0 | 317.6 | 339.2 | 358.3 | 376.6 | 393.2 |
| 30° | 196.2 | 200.4 | 222.0 | 247.0 | 271.0 | 294.3 | 316.7 | 338.4 | 358.3 | 376.6 | 393.2 |
| 32.5° | 191.3 | 196.2 | 218.6 | 243.5 | 267.7 | 291.0 | 313.5 | 335.1 | 355.0 | 373.3 | 389.9 |
| 35° | 185.4 | 190.4 | 213.6 | 238.6 | 262.8 | 286.0 | 308.5 | 329.3 | 350.1 | 367.5 | 384.1 |
| 37.5° | 179.6 | 185.4 | 208.7 | 233.6 | 257.8 | 281.0 | 302.6 | 323.4 | 342.5 | 360.8 | 376.6 |
| 40° | 172.9 | 179.6 | 202.8 | 227.7 | 251.1 | 273.6 | 295.1 | 315.0 | 334.3 | 351.6 | 366.6 |
| 42.5° | 166.3 | 173.8 | 196.2 | 221.2 | 244.4 | 266.9 | 287.7 | 306.8 | 325.0 | 340.8 | 355.0 |
| 45° | 159.7 | 167.9 | 190.4 | 213.6 | 237.0 | 258.5 | 278.6 | 297.7 | 314.3 | 330.0 | 343.4 |
| 47.5° | 152.1 | 161.2 | 183.7 | 207.1 | 229.4 | 250.2 | 270.2 | 288.5 | 305.1 | 319.3 | 331.7 |
| 50° | 144.7 | 154.7 | 177.0 | 199.5 | 221.2 | 242.8 | 261.9 | 279.3 | 295.1 | 309.3 | 320.9 |
| 52.5° | 137.2 | 148.0 | 169.6 | 192.0 | 213.6 | 234.4 | 253.5 | 270.2 | 286.0 | 299.4 | 309.3 |
| 55° | 129.7 | 140.6 | 162.9 | 184.6 | 206.2 | 226.2 | 245.3 | 261.9 | 276.9 | 289.3 | 298.5 |
| 57.5° | 122.2 | 133.9 | 155.5 | 176.3 | 197.8 | 218.6 | 237.0 | 253.5 | 267.7 | 279.3 | 288.5 |
| 60° | 113.1 | 126.3 | 147.1 | 168.8 | 189.6 | 210.4 | 228.6 | 244.4 | 258.5 | 269.3 | 277.7 |
| 62.5° | 104.8 | 118.9 | 139.7 | 160.5 | 181.3 | 201.2 | 219.5 | 235.3 | 248.5 | 258.5 | 266.0 |
| 65° | 97.3 | 110.5 | 131.3 | 151.3 | 172.1 | 192.8 | 210.4 | 226.2 | 238.6 | 247.8 | 254.4 |
| 67.5° | 88.2 | 102.3 | 122.2 | 142.1 | 162.9 | 182.9 | 200.4 | 215.3 | 227.7 | 236.1 | 242.0 |
| 70° | 79.8 | 94.0 | 113.1 | 133.0 | 153.0 | 172.1 | 189.6 | 204.5 | 215.3 | 223.6 | 227.7 |
| 72.5° | 71.5 | 85.6 | 104.0 | 123.1 | 142.1 | 161.2 | 177.9 | 191.3 | 202.1 | 209.5 | 212.8 |
| 75° | 63.2 | 76.5 | 94.0 | 112.2 | 129.7 | 148.0 | 164.6 | 177.9 | 187.0 | 193.7 | 196.2 |
| 77.5° | 54.0 | 67.4 | 83.2 | 99.8 | 116.4 | 133.9 | 148.8 | 161.2 | 170.5 | 175.5 | 177.9 |
| 80° | 45.7 | 56.5 | 70.6 | 86.5 | 101.4 | 117.2 | 130.5 | 141.3 | 148.8 | 152.1 | 151.3 |
| 82.5° | 36.6 | 44.9 | 56.5 | 69.8 | 82.3 | 95.6 | 107.2 | 116.4 | 121.3 | 123.1 | 123.1 |
| 85° | 25.8 | 30.8 | 39.0 | 48.3 | 58.2 | 68.2 | 77.3 | 84.0 | 88.2 | 89.0 | 89.0 |
| 87.5° | 13.3 | 15.0 | 18.2 | 23.2 | 28.2 | 34.0 | 40.7 | 44.9 | 46.6 | 47.4 | 47.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P976563

CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 | 227.7 |
| 2.5° | 230.3 | 231.1 | 232.0 | 232.0 | 232.0 | 232.8 | 232.8 | 232.8 |
| 5° | 252.8 | 256.9 | 259.4 | 261.1 | 262.8 | 264.3 | 266.0 | 265.2 |
| 7.5° | 281.0 | 286.0 | 290.1 | 293.5 | 296.0 | 298.5 | 300.1 | 300.1 |
| 10° | 306.8 | 313.5 | 319.3 | 324.3 | 328.4 | 330.0 | 332.6 | 332.6 |
| 12.5° | 332.6 | 340.1 | 346.7 | 353.3 | 357.5 | 360.8 | 363.3 | 363.3 |
| 15° | 354.2 | 363.3 | 370.9 | 378.3 | 384.1 | 388.2 | 389.9 | 391.5 |
| 17.5° | 372.4 | 382.4 | 391.5 | 399.9 | 405.8 | 409.9 | 412.3 | 414.0 |
| 20° | 386.5 | 398.2 | 408.2 | 416.6 | 424.0 | 428.1 | 430.7 | 432.4 |
| 22.5° | 397.4 | 409.9 | 420.7 | 429.8 | 436.5 | 441.5 | 444.8 | 445.6 |
| 25° | 404.9 | 418.2 | 429.8 | 438.9 | 446.5 | 451.5 | 454.8 | 456.5 |
| 27.5° | 408.2 | 421.6 | 434.0 | 443.9 | 451.5 | 457.3 | 459.7 | 460.6 |
| 30° | 409.0 | 422.3 | 434.8 | 444.8 | 453.1 | 458.0 | 460.6 | 462.3 |
| 32.5° | 405.8 | 419.0 | 431.5 | 441.5 | 448.9 | 453.9 | 457.3 | 458.0 |
| 35° | 399.1 | 412.3 | 424.0 | 434.0 | 441.5 | 446.5 | 449.8 | 450.6 |
| 37.5° | 390.8 | 403.2 | 414.9 | 424.0 | 431.5 | 436.5 | 438.9 | 439.8 |
| 40° | 380.0 | 392.4 | 402.3 | 411.6 | 418.2 | 422.3 | 425.7 | 426.5 |
| 42.5° | 368.3 | 380.0 | 389.9 | 397.4 | 403.2 | 408.2 | 409.9 | 410.7 |
| 45° | 355.0 | 365.9 | 375.0 | 381.6 | 386.5 | 390.8 | 392.4 | 392.4 |
| 47.5° | 342.5 | 352.5 | 360.0 | 365.9 | 369.2 | 372.4 | 373.3 | 374.1 |
| 50° | 330.0 | 338.4 | 345.1 | 349.2 | 352.5 | 355.0 | 355.8 | 355.8 |
| 52.5° | 318.4 | 325.0 | 330.0 | 334.3 | 335.8 | 338.4 | 339.2 | 339.2 |
| 55° | 306.8 | 311.8 | 315.9 | 318.4 | 320.0 | 321.7 | 321.7 | 322.6 |
| 57.5° | 295.1 | 299.4 | 301.8 | 303.5 | 305.1 | 305.9 | 306.8 | 306.8 |
| 60° | 282.7 | 286.0 | 287.7 | 288.5 | 289.3 | 291.0 | 291.0 | 291.8 |
| 62.5° | 270.2 | 272.7 | 273.6 | 274.3 | 275.2 | 276.0 | 276.9 | 276.9 |
| 65° | 256.9 | 258.5 | 259.4 | 260.2 | 261.1 | 261.9 | 263.5 | 262.8 |
| 67.5° | 243.5 | 244.4 | 245.3 | 246.1 | 247.0 | 248.5 | 249.4 | 249.4 |
| 70° | 229.4 | 229.4 | 230.3 | 231.1 | 232.0 | 233.6 | 234.4 | 235.3 |
| 72.5° | 214.5 | 213.6 | 214.5 | 215.3 | 217.0 | 218.6 | 219.5 | 219.5 |
| 75° | 197.0 | 197.0 | 197.0 | 197.0 | 197.0 | 197.8 | 197.8 | 197.8 |
| 77.5° | 177.0 | 172.9 | 172.1 | 171.3 | 171.3 | 171.3 | 171.3 | 172.1 |
| 80° | 149.7 | 146.3 | 145.5 | 144.7 | 145.5 | 145.5 | 145.5 | 145.5 |
| 82.5° | 121.3 | 118.1 | 117.2 | 116.4 | 116.4 | 116.4 | 116.4 | 117.2 |
| 85° | 87.3 | 85.6 | 84.7 | 83.2 | 84.0 | 84.0 | 84.7 | 84.0 |
| 87.5° | 47.4 | 44.9 | 44.9 | 44.0 | 45.7 | 44.9 | 44.9 | 44.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P976563
 CATALOG NUMBER: 22SR-LD2-C-25-UNV-L850-CD1-PG-U

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|------|------|------|------|----------------|------|------|------|------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room Dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 11.1 | 12.9 | 11.5 | 13.2 | 13.5 | 14.3 | 16.1 | 14.7 | 16.4 | 16.7 |
| | 3H | 13.0 | 14.7 | 13.4 | 15.0 | 15.3 | 17.0 | 18.6 | 17.3 | 18.9 | 19.3 |
| | 4H | 13.8 | 15.4 | 14.2 | 15.7 | 16.1 | 18.2 | 19.8 | 18.6 | 20.1 | 20.5 |
| | 6H | 14.5 | 15.9 | 14.9 | 16.3 | 16.7 | 19.3 | 20.8 | 19.7 | 21.1 | 21.5 |
| | 8H | 14.7 | 16.1 | 15.2 | 16.5 | 16.9 | 19.8 | 21.2 | 20.2 | 21.5 | 21.9 |
| | 12H | 14.9 | 16.3 | 15.4 | 16.7 | 17.1 | 20.2 | 21.5 | 20.6 | 21.9 | 22.3 |
| 4H | 2H | 13.0 | 14.5 | 13.3 | 14.9 | 15.2 | 15.1 | 16.6 | 15.5 | 17.0 | 17.4 |
| | 3H | 15.4 | 16.7 | 15.8 | 17.1 | 17.5 | 18.0 | 19.4 | 18.4 | 19.7 | 20.1 |
| | 4H | 16.4 | 17.6 | 16.8 | 18.0 | 18.5 | 19.5 | 20.7 | 19.9 | 21.1 | 21.5 |
| | 6H | 17.3 | 18.3 | 17.7 | 18.8 | 19.2 | 20.7 | 21.8 | 21.2 | 22.2 | 22.7 |
| | 8H | 17.6 | 18.6 | 18.0 | 19.0 | 19.5 | 21.3 | 22.3 | 21.7 | 22.7 | 23.2 |
| | 12H | 17.8 | 18.7 | 18.3 | 19.2 | 19.7 | 21.7 | 22.7 | 22.2 | 23.1 | 23.6 |
| 8H | 4H | 17.7 | 18.7 | 18.1 | 19.1 | 19.6 | 20.0 | 21.0 | 20.4 | 21.5 | 21.9 |
| | 6H | 18.9 | 19.8 | 19.4 | 20.3 | 20.8 | 21.5 | 22.3 | 22.0 | 22.8 | 23.3 |
| | 8H | 19.4 | 20.2 | 19.9 | 20.7 | 21.2 | 22.1 | 22.9 | 22.6 | 23.4 | 23.9 |
| | 12H | 19.8 | 20.5 | 20.3 | 21.0 | 21.5 | 22.8 | 23.4 | 23.3 | 23.9 | 24.5 |
| 12H | 4H | 17.9 | 18.9 | 18.4 | 19.3 | 19.8 | 20.1 | 21.0 | 20.6 | 21.5 | 22.0 |
| | 6H | 19.4 | 20.1 | 19.9 | 20.6 | 21.1 | 21.7 | 22.4 | 22.2 | 22.9 | 23.4 |
| | 8H | 20.0 | 20.7 | 20.5 | 21.2 | 21.7 | 22.4 | 23.1 | 22.9 | 23.6 | 24.1 |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-457-8

Test Date: 07/02/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L950-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L950-CD1-U

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-457-8
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/02/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **24SR-LD2-64-C-UNV-L950-CD1-U**
 Description: 2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K): 4803
 CIE u': 0.2133
 CIE v': 0.4881
 Duv: 0.0004
 CIE x: 0.3510
 CIE y: 0.3570
 CIE z: 0.2921
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 12.41797
 Rf: 91.5
 Rg: 100.9

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 94.6 | | |
| R1: | 95.9 | R9: | 74.3 |
| R2: | 96.0 | R10: | 88.6 |
| R3: | 94.0 | R11: | 95.2 |
| R4: | 95.8 | R12: | 71.3 |
| R5: | 94.6 | R13: | 96.0 |
| R6: | 92.9 | R14: | 96.1 |
| R7: | 96.3 | R15: | 94.1 |
| R8: | 91.2 | | |



Test Conditions

Stabilization Time: 43M
 Operation Time: 1H 43M
 Sphere Temperature (°C): 24.9

REPORT NUMBER: SP1-2506-457-8

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 6/16/2025 | 12/16/2025 |
| Power Meter | XITRON INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | CHROMA 61603 IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | AGILENT E3634A IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | ONSET IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | ONSET IN0046 | 10/22/2024 | 10/22/2025 |

REPORT NUMBER: SP1-2506-457-8

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 7-step quadrangle

REPORT NUMBER: SP1-2506-457-8

Photopic Flux vs. Wavelength



Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-8

Scotopic Flux vs. Wavelength



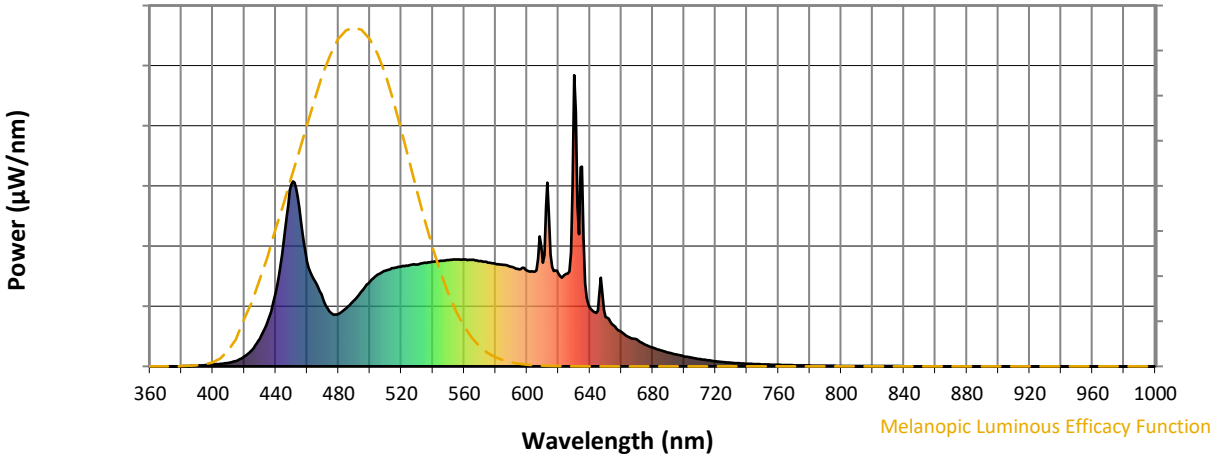
Scotopic Lumens: NR

S/P: 2.02

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.33

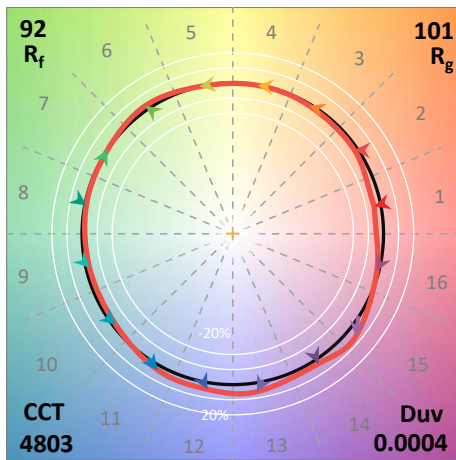
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 91.5$
 $R_g = 100.9$
 $CIE R_a = 94.6$
 $R_9 = 74.3$

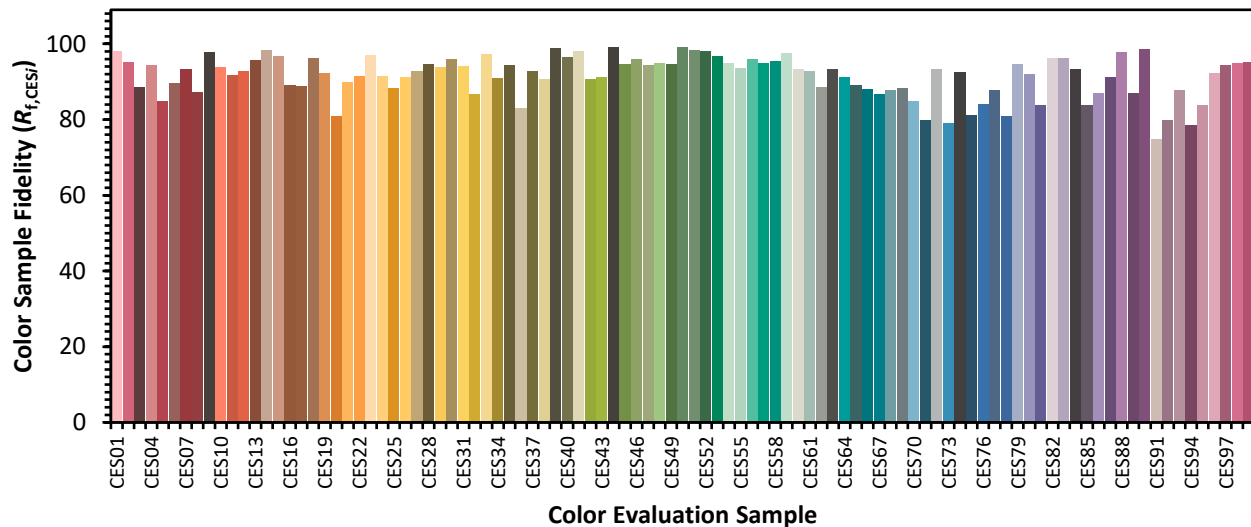


Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

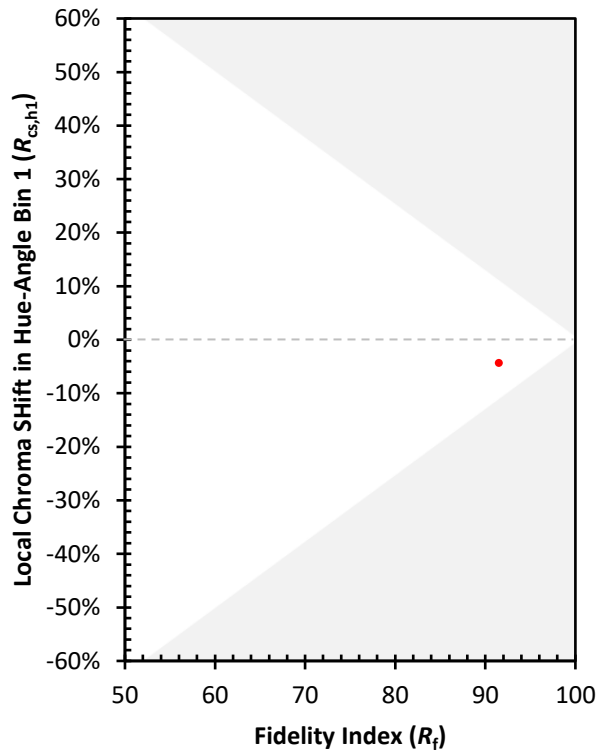
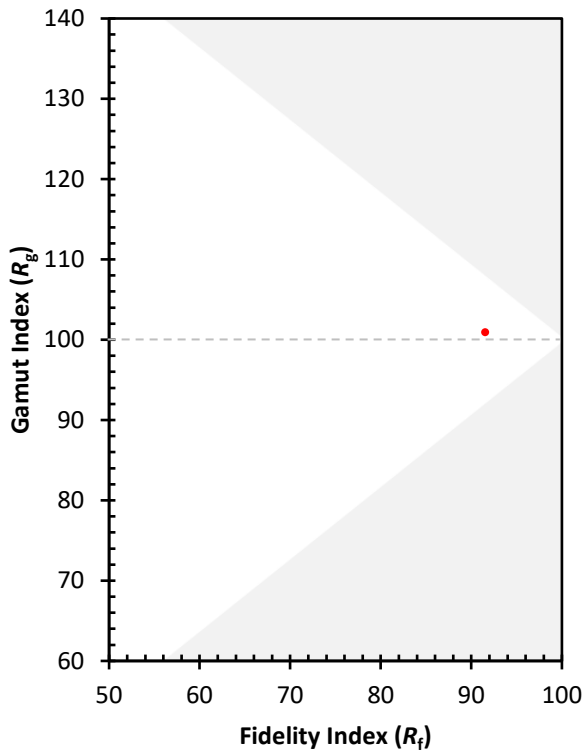
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 91 | CES51 = 98 | CES76 = 84 |
| CES02 = 61 | CES27 = 93 | CES52 = 98 | CES77 = 88 |
| CES03 = 31 | CES28 = 95 | CES53 = 97 | CES78 = 81 |
| CES04 = 69 | CES29 = 94 | CES54 = 95 | CES79 = 95 |
| CES05 = 48 | CES30 = 96 | CES55 = 94 | CES80 = 92 |
| CES06 = 50 | CES31 = 94 | CES56 = 96 | CES81 = 84 |
| CES07 = 41 | CES32 = 87 | CES57 = 95 | CES82 = 96 |
| CES08 = 40 | CES33 = 97 | CES58 = 95 | CES83 = 96 |
| CES09 = 29 | CES34 = 91 | CES59 = 98 | CES84 = 93 |
| CES10 = 73 | CES35 = 94 | CES60 = 93 | CES85 = 84 |
| CES11 = 56 | CES36 = 83 | CES61 = 93 | CES86 = 87 |
| CES12 = 62 | CES37 = 93 | CES62 = 89 | CES87 = 91 |
| CES13 = 43 | CES38 = 91 | CES63 = 93 | CES88 = 98 |
| CES14 = 74 | CES39 = 99 | CES64 = 91 | CES89 = 87 |
| CES15 = 71 | CES40 = 97 | CES65 = 89 | CES90 = 99 |
| CES16 = 47 | CES41 = 98 | CES66 = 88 | CES91 = 75 |
| CES17 = 48 | CES42 = 91 | CES67 = 87 | CES92 = 80 |
| CES18 = 56 | CES43 = 91 | CES68 = 88 | CES93 = 88 |
| CES19 = 70 | CES44 = 99 | CES69 = 88 | CES94 = 79 |
| CES20 = 65 | CES45 = 95 | CES70 = 85 | CES95 = 84 |
| CES21 = 85 | CES46 = 96 | CES71 = 80 | CES96 = 92 |
| CES22 = 77 | CES47 = 94 | CES72 = 93 | CES97 = 94 |
| CES23 = 91 | CES48 = 95 | CES73 = 79 | CES98 = 95 |
| CES24 = 90 | CES49 = 95 | CES74 = 93 | CES99 = 95 |
| CES25 = 70 | CES50 = 99 | CES75 = 81 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)