

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: P976545

Luminaire Tested: 22SR-LD2-C-25-UNV-L935-CD1-MR-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P976545
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22SR-LD2-C-25-UNV-L935-CD1-MR-U
Description: METALUX SKYRIDGE 2x2 2500LM PACKAGE 90CRI 3500K TROFFER with Medium Red SKYTRIM
Light Source: 3500K CCT, 90+ CRI LEDS
Ballast/Driver: -

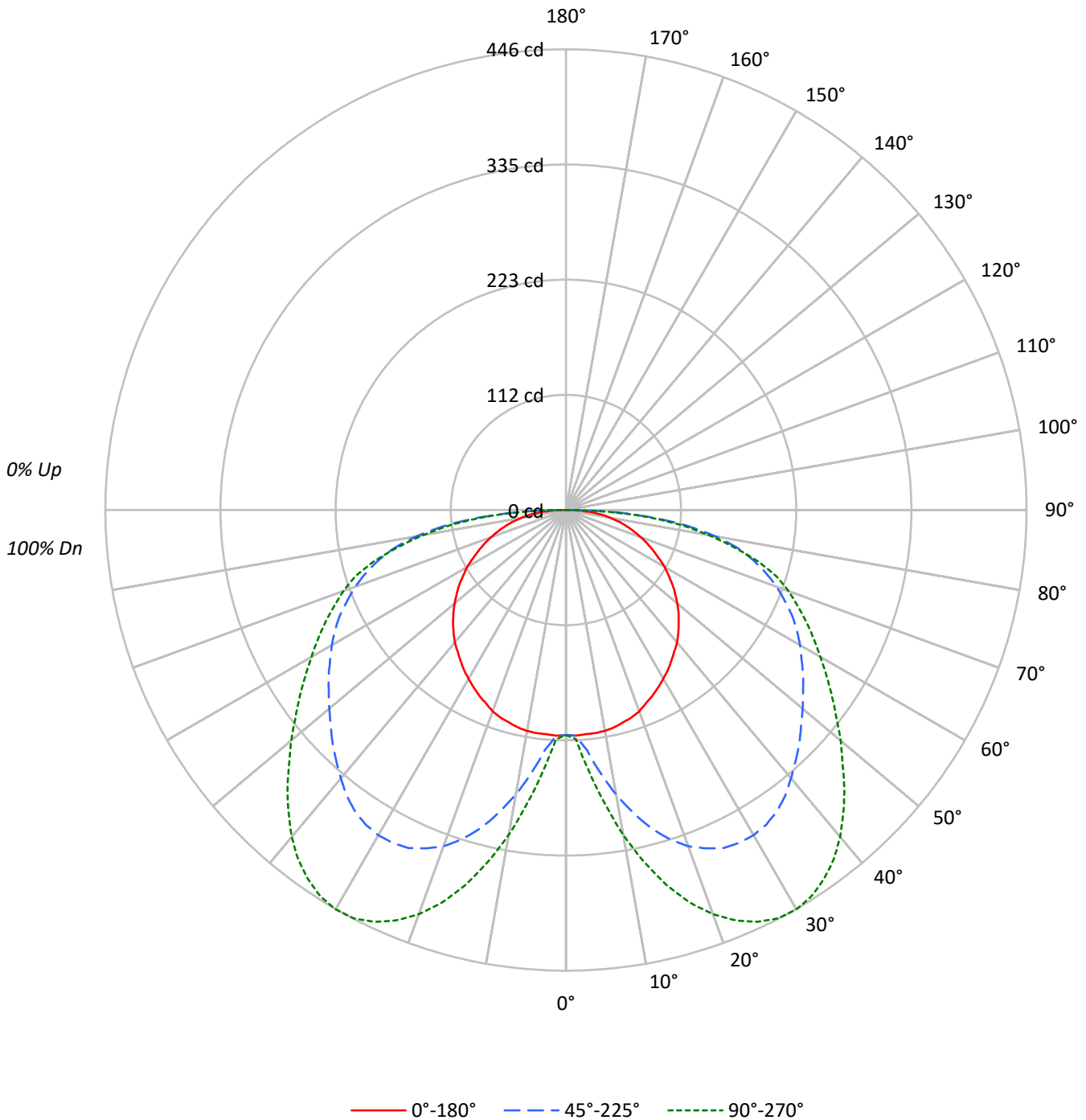
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1390.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.21 / 2.01
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: P976545
CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-U

Luminous Intensity Polar Plot





TEST NUMBER: P976545

CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-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 | 79 | 73 | 68 | 76 | 71 | 66 | 73 | 68 | 65 | 62 | 62 | 62 | 62 |
| 3 | 86 | 73 | 64 | 57 | 83 | 72 | 63 | 56 | 69 | 61 | 55 | 66 | 59 | 54 | 63 | 58 | 53 | 50 | 50 | 50 | 50 |
| 4 | 78 | 64 | 54 | 47 | 75 | 63 | 53 | 46 | 60 | 52 | 46 | 58 | 51 | 45 | 55 | 49 | 44 | 42 | 42 | 42 | 42 |
| 5 | 71 | 57 | 47 | 39 | 69 | 55 | 46 | 39 | 53 | 45 | 39 | 51 | 44 | 38 | 49 | 43 | 38 | 35 | 35 | 35 | 35 |
| 6 | 65 | 50 | 41 | 34 | 63 | 49 | 40 | 33 | 48 | 39 | 33 | 46 | 38 | 33 | 44 | 38 | 32 | 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 | 30 | 25 | 36 | 30 | 25 | 23 | 23 | 23 | 23 |
| 9 | 52 | 38 | 29 | 23 | 50 | 37 | 28 | 23 | 36 | 28 | 23 | 35 | 27 | 22 | 33 | 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° | 586 | 586 | 586 |
| 5° | 588 | 630 | 685 |
| 10° | 593 | 764 | 873 |
| 15° | 593 | 888 | 1046 |
| 20° | 594 | 992 | 1192 |
| 25° | 589 | 1072 | 1306 |
| 30° | 586 | 1129 | 1387 |
| 35° | 585 | 1170 | 1432 |
| 40° | 588 | 1191 | 1451 |
| 45° | 588 | 1216 | 1451 |
| 50° | 589 | 1253 | 1454 |
| 55° | 591 | 1316 | 1476 |
| 60° | 595 | 1409 | 1531 |
| 65° | 595 | 1538 | 1636 |
| 70° | 608 | 1708 | 1803 |
| 75° | 634 | 1953 | 2002 |
| 80° | 680 | 2281 | 2180 |
| 85° | 778 | 2637 | 2485 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 87.5°
 Luminance: 2758 cd/sqm



TEST NUMBER: P976545
 CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 23.6 | 1.7 |
| 10°-20° | 87.2 | 6.3 |
| 20°-30° | 158.0 | 11.4 |
| 30°-40° | 209.9 | 15.1 |
| 40°-50° | 230.8 | 16.6 |
| 50°-60° | 228.8 | 16.5 |
| 60°-70° | 210.7 | 15.2 |
| 70°-80° | 168.2 | 12.1 |
| 80°-90° | 72.6 | 5.2 |
| 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° | 268.9 | 19.3 |
| 0°-40° | 478.8 | 34.4 |
| 0°-60° | 938.5 | 67.5 |
| 0°-90° | 1390.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1390.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 218 | 218 | 218 | 218 | 218 | |
| 5° | 218 | 220 | 233 | 249 | 254 | 21 |
| 15° | 213 | 255 | 319 | 361 | 376 | 60 |
| 25° | 198 | 274 | 361 | 419 | 440 | 91 |
| 35° | 178 | 265 | 356 | 415 | 436 | 112 |
| 45° | 154 | 239 | 320 | 366 | 381 | 119 |
| 55° | 126 | 210 | 280 | 309 | 315 | 113 |
| 65° | 94 | 177 | 242 | 253 | 257 | 93 |
| 75° | 61 | 135 | 188 | 192 | 193 | 64 |
| 85° | 25 | 62 | 85 | 80 | 80 | 26 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P976545
 CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 |
| 2.5° | 218.7 | 218.7 | 218.7 | 218.7 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 218.7 | 219.5 |
| 5° | 217.8 | 217.8 | 217.8 | 218.7 | 218.7 | 220.3 | 222.7 | 226.0 | 229.2 | 233.3 | 238.2 |
| 7.5° | 217.8 | 217.8 | 217.8 | 218.7 | 222.7 | 229.2 | 236.6 | 243.9 | 250.4 | 257.0 | 264.2 |
| 10° | 217.1 | 217.1 | 217.1 | 222.0 | 230.9 | 241.5 | 252.1 | 261.8 | 270.7 | 279.7 | 288.6 |
| 12.5° | 215.5 | 215.5 | 217.8 | 226.9 | 239.8 | 253.6 | 265.0 | 278.0 | 289.4 | 300.0 | 310.6 |
| 15° | 213.0 | 213.0 | 217.8 | 231.7 | 247.9 | 262.5 | 278.0 | 292.6 | 306.5 | 318.7 | 330.9 |
| 17.5° | 210.6 | 210.6 | 218.7 | 235.8 | 253.6 | 271.6 | 288.6 | 304.9 | 320.3 | 334.1 | 347.2 |
| 20° | 207.4 | 207.4 | 218.7 | 239.0 | 258.5 | 278.0 | 296.8 | 313.8 | 330.9 | 346.4 | 360.2 |
| 22.5° | 202.5 | 204.0 | 218.7 | 240.7 | 261.8 | 282.2 | 301.7 | 321.2 | 339.0 | 354.5 | 369.9 |
| 25° | 198.3 | 200.8 | 217.8 | 240.7 | 262.5 | 284.5 | 305.7 | 325.2 | 343.9 | 361.0 | 376.5 |
| 27.5° | 193.5 | 196.8 | 216.3 | 239.8 | 262.5 | 284.5 | 306.5 | 326.9 | 346.4 | 363.4 | 379.7 |
| 30° | 188.6 | 192.6 | 213.8 | 237.5 | 261.0 | 283.7 | 304.9 | 326.0 | 345.5 | 363.4 | 379.7 |
| 32.5° | 183.7 | 188.6 | 209.7 | 234.1 | 257.7 | 280.5 | 302.5 | 323.5 | 343.0 | 361.0 | 377.3 |
| 35° | 178.0 | 183.7 | 205.7 | 230.1 | 253.6 | 276.5 | 297.6 | 318.7 | 338.2 | 356.1 | 371.6 |
| 37.5° | 172.4 | 178.8 | 200.8 | 225.2 | 247.9 | 270.7 | 291.9 | 312.2 | 331.7 | 348.7 | 364.2 |
| 40° | 167.5 | 173.1 | 195.1 | 219.5 | 242.3 | 264.2 | 285.4 | 304.9 | 323.5 | 339.0 | 354.5 |
| 42.5° | 161.0 | 168.3 | 189.4 | 213.8 | 235.8 | 257.0 | 278.0 | 296.8 | 314.6 | 329.2 | 343.9 |
| 45° | 154.5 | 162.5 | 183.7 | 206.5 | 229.2 | 249.6 | 269.9 | 288.6 | 304.9 | 319.5 | 332.6 |
| 47.5° | 147.9 | 156.1 | 177.3 | 200.0 | 222.0 | 242.3 | 261.8 | 279.7 | 295.1 | 308.9 | 322.0 |
| 50° | 140.7 | 150.4 | 170.7 | 192.6 | 214.6 | 235.0 | 253.6 | 270.7 | 286.2 | 299.2 | 311.4 |
| 52.5° | 133.3 | 143.9 | 164.2 | 186.2 | 206.5 | 226.9 | 245.5 | 261.8 | 276.5 | 289.4 | 300.0 |
| 55° | 126.0 | 136.6 | 157.7 | 178.8 | 199.2 | 220.3 | 238.2 | 254.5 | 269.1 | 280.5 | 290.2 |
| 57.5° | 117.8 | 130.1 | 150.4 | 171.6 | 191.9 | 211.4 | 230.1 | 246.4 | 259.3 | 270.7 | 279.7 |
| 60° | 110.6 | 122.7 | 143.0 | 163.4 | 184.5 | 204.0 | 222.0 | 237.5 | 250.4 | 261.8 | 269.9 |
| 62.5° | 101.7 | 115.5 | 135.0 | 156.1 | 176.5 | 195.1 | 213.8 | 229.2 | 242.3 | 252.1 | 258.5 |
| 65° | 93.5 | 107.4 | 126.9 | 147.2 | 167.5 | 187.0 | 204.9 | 220.3 | 231.7 | 241.5 | 247.2 |
| 67.5° | 85.4 | 99.2 | 118.7 | 139.0 | 158.5 | 177.3 | 195.1 | 209.7 | 221.2 | 229.2 | 234.1 |
| 70° | 77.3 | 91.1 | 109.7 | 129.2 | 148.8 | 167.5 | 184.5 | 198.3 | 208.9 | 217.1 | 221.2 |
| 72.5° | 69.1 | 82.9 | 100.8 | 119.5 | 138.2 | 156.1 | 173.1 | 186.2 | 196.0 | 203.2 | 207.4 |
| 75° | 61.0 | 74.0 | 91.1 | 108.9 | 126.0 | 143.9 | 160.2 | 172.4 | 182.2 | 187.8 | 191.1 |
| 77.5° | 52.8 | 65.0 | 80.5 | 96.8 | 113.8 | 130.1 | 144.7 | 157.0 | 165.0 | 170.7 | 172.4 |
| 80° | 43.9 | 55.3 | 68.3 | 83.7 | 98.3 | 113.8 | 126.9 | 137.5 | 144.7 | 147.2 | 147.2 |
| 82.5° | 35.8 | 43.9 | 54.5 | 67.5 | 79.7 | 92.6 | 104.0 | 113.0 | 117.1 | 119.5 | 118.7 |
| 85° | 25.2 | 30.1 | 37.5 | 47.2 | 56.1 | 67.5 | 75.6 | 81.3 | 84.5 | 85.4 | 84.5 |
| 87.5° | 13.0 | 13.8 | 17.8 | 22.7 | 27.6 | 35.0 | 38.2 | 43.0 | 44.7 | 44.7 | 44.7 |
| 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: P976545

CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-U

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 | 217.8 |
| 2.5° | 219.5 | 219.5 | 221.2 | 221.2 | 222.0 | 221.2 | 222.0 | 222.0 |
| 5° | 241.5 | 244.7 | 247.9 | 249.6 | 252.1 | 252.8 | 253.6 | 253.6 |
| 7.5° | 268.2 | 273.1 | 277.3 | 279.7 | 283.7 | 285.4 | 286.2 | 286.2 |
| 10° | 294.3 | 300.8 | 306.5 | 310.6 | 314.6 | 317.1 | 318.7 | 319.5 |
| 12.5° | 318.7 | 326.9 | 333.3 | 339.0 | 343.0 | 346.4 | 347.9 | 348.7 |
| 15° | 339.8 | 349.6 | 357.7 | 363.4 | 369.1 | 372.4 | 374.8 | 375.6 |
| 17.5° | 358.5 | 368.2 | 377.3 | 384.5 | 390.2 | 394.3 | 396.8 | 398.3 |
| 20° | 372.4 | 383.7 | 393.5 | 400.8 | 408.1 | 412.2 | 414.6 | 416.3 |
| 22.5° | 382.9 | 395.1 | 405.7 | 413.8 | 421.2 | 426.0 | 428.4 | 430.1 |
| 25° | 390.2 | 403.2 | 414.6 | 422.7 | 430.9 | 435.8 | 439.0 | 439.8 |
| 27.5° | 394.3 | 408.1 | 419.5 | 428.4 | 436.6 | 441.5 | 444.7 | 445.5 |
| 30° | 395.1 | 408.1 | 420.3 | 429.2 | 437.5 | 442.3 | 445.5 | 446.4 |
| 32.5° | 392.6 | 405.7 | 417.1 | 426.9 | 434.1 | 439.0 | 442.3 | 443.0 |
| 35° | 387.0 | 400.0 | 410.6 | 420.3 | 427.6 | 432.6 | 435.8 | 435.8 |
| 37.5° | 378.0 | 391.1 | 401.7 | 410.6 | 417.8 | 422.0 | 425.2 | 426.0 |
| 40° | 368.2 | 379.7 | 390.2 | 398.3 | 404.9 | 408.9 | 412.2 | 413.0 |
| 42.5° | 357.0 | 367.5 | 376.5 | 383.7 | 390.2 | 395.1 | 396.8 | 397.6 |
| 45° | 344.7 | 354.5 | 362.7 | 369.1 | 374.8 | 377.3 | 380.5 | 381.3 |
| 47.5° | 332.6 | 341.5 | 347.9 | 353.6 | 358.5 | 361.8 | 363.4 | 363.4 |
| 50° | 320.3 | 327.6 | 334.1 | 339.0 | 342.3 | 343.9 | 345.5 | 347.2 |
| 52.5° | 308.9 | 314.6 | 320.3 | 323.5 | 326.0 | 328.4 | 329.2 | 330.1 |
| 55° | 297.6 | 303.2 | 307.4 | 309.7 | 311.4 | 313.8 | 313.8 | 314.6 |
| 57.5° | 286.2 | 290.2 | 293.5 | 295.1 | 296.8 | 297.6 | 298.3 | 299.2 |
| 60° | 274.8 | 278.0 | 279.7 | 281.3 | 282.2 | 283.7 | 283.7 | 284.5 |
| 62.5° | 263.4 | 265.0 | 266.7 | 267.5 | 268.2 | 269.9 | 270.7 | 270.7 |
| 65° | 250.4 | 252.1 | 252.8 | 253.6 | 254.5 | 256.1 | 257.0 | 257.0 |
| 67.5° | 237.5 | 238.2 | 238.2 | 239.8 | 240.7 | 242.3 | 242.3 | 243.0 |
| 70° | 223.5 | 223.5 | 224.4 | 225.2 | 226.0 | 226.9 | 228.4 | 229.2 |
| 72.5° | 208.9 | 208.1 | 208.9 | 209.7 | 211.4 | 212.2 | 213.0 | 213.8 |
| 75° | 191.1 | 191.1 | 191.9 | 191.1 | 191.1 | 191.9 | 191.9 | 192.6 |
| 77.5° | 171.6 | 169.1 | 166.7 | 166.7 | 166.7 | 165.9 | 165.9 | 166.7 |
| 80° | 145.5 | 142.3 | 140.7 | 140.7 | 139.8 | 139.8 | 140.7 | 140.7 |
| 82.5° | 116.3 | 115.5 | 112.2 | 112.2 | 113.0 | 111.4 | 112.2 | 113.0 |
| 85° | 82.9 | 82.2 | 80.5 | 80.5 | 80.5 | 78.8 | 79.7 | 80.5 |
| 87.5° | 43.9 | 43.0 | 41.5 | 42.3 | 42.3 | 40.7 | 42.3 | 41.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P976545
 CATALOG NUMBER: 22SR-LD2-C-25-UNV-L935-CD1-MR-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 | 11.0 | 12.8 | 11.4 | 13.1 | 13.4 | 14.2 | 16.0 | 14.6 | 16.3 | 16.7 |
| | 3H | 12.9 | 14.6 | 13.3 | 14.9 | 15.3 | 16.9 | 18.5 | 17.3 | 18.8 | 19.2 |
| | 4H | 13.7 | 15.3 | 14.1 | 15.6 | 16.0 | 18.1 | 19.7 | 18.5 | 20.0 | 20.4 |
| | 6H | 14.4 | 15.8 | 14.8 | 16.2 | 16.6 | 19.2 | 20.7 | 19.6 | 21.0 | 21.4 |
| | 8H | 14.6 | 16.0 | 15.1 | 16.4 | 16.8 | 19.7 | 21.1 | 20.1 | 21.5 | 21.8 |
| | 12H | 14.8 | 16.2 | 15.3 | 16.6 | 17.0 | 20.0 | 21.4 | 20.5 | 21.8 | 22.2 |
| 4H | 2H | 12.9 | 14.4 | 13.3 | 14.8 | 15.1 | 15.0 | 16.6 | 15.4 | 16.9 | 17.3 |
| | 3H | 15.3 | 16.6 | 15.7 | 17.0 | 17.4 | 17.9 | 19.3 | 18.4 | 19.7 | 20.1 |
| | 4H | 16.3 | 17.6 | 16.8 | 18.0 | 18.4 | 19.4 | 20.6 | 19.8 | 21.0 | 21.4 |
| | 6H | 17.2 | 18.3 | 17.6 | 18.7 | 19.1 | 20.6 | 21.7 | 21.1 | 22.2 | 22.6 |
| | 8H | 17.5 | 18.5 | 17.9 | 18.9 | 19.4 | 21.2 | 22.2 | 21.6 | 22.6 | 23.1 |
| | 12H | 17.7 | 18.6 | 18.2 | 19.1 | 19.6 | 21.6 | 22.5 | 22.1 | 23.0 | 23.5 |
| 8H | 4H | 17.6 | 18.6 | 18.1 | 19.1 | 19.5 | 19.9 | 20.9 | 20.4 | 21.4 | 21.8 |
| | 6H | 18.8 | 19.7 | 19.3 | 20.2 | 20.7 | 21.4 | 22.2 | 21.9 | 22.7 | 23.2 |
| | 8H | 19.3 | 20.1 | 19.8 | 20.6 | 21.1 | 22.0 | 22.8 | 22.5 | 23.3 | 23.8 |
| | 12H | 19.7 | 20.4 | 20.2 | 20.9 | 21.4 | 22.6 | 23.3 | 23.1 | 23.8 | 24.4 |
| 12H | 4H | 17.8 | 18.8 | 18.3 | 19.2 | 19.7 | 20.0 | 20.9 | 20.5 | 21.4 | 21.9 |
| | 6H | 19.3 | 20.1 | 19.8 | 20.5 | 21.0 | 21.6 | 22.3 | 22.1 | 22.8 | 23.3 |
| | 8H | 19.9 | 20.6 | 20.4 | 21.1 | 21.6 | 22.3 | 23.0 | 22.8 | 23.5 | 24.0 |

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-457-6

Test Date: 07/01/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L935-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L935-CD1-U

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-457-6
 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-L935-CD1-U**
 Description: 2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K): 3329
 CIE u': 0.2411
 CIE v': 0.5118
 Duv: -0.0021
 CIE x: 0.4128
 CIE y: 0.3894
 CIE z: 0.1979
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 582
 Purity: 40.74075
 Rf: 91.4
 Rg: 100.2

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 93.9 | | |
| R1: | 95.4 | R9: | 60.5 |
| R2: | 97.4 | R10: | 92.5 |
| R3: | 97.7 | R11: | 95.9 |
| R4: | 94.9 | R12: | 82.0 |
| R5: | 95.1 | R13: | 96.0 |
| R6: | 95.7 | R14: | 98.0 |
| R7: | 91.7 | R15: | 91.5 |
| R8: | 83.2 | | |



Test Conditions

Stabilization Time: 48M
 Operation Time: 1H 48M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2506-457-6

| 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: SP1-2506-457-6

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2506-457-6

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 | 143 | NR | 620 | 358 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 166 | NR | 625 | 357 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 191 | NR | 630 | 1000 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 210 | NR | 635 | 705 | NR | 765 | 5 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 223 | NR | 640 | 239 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 233 | NR | 645 | 226 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 240 | NR | 650 | 201 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 246 | NR | 655 | 170 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 251 | NR | 660 | 145 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 260 | NR | 665 | 123 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 267 | NR | 670 | 113 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 9 | NR | 545 | 276 | NR | 675 | 93 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 16 | NR | 550 | 284 | NR | 680 | 80 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 28 | NR | 555 | 294 | NR | 685 | 69 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 46 | NR | 560 | 303 | NR | 690 | 59 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 75 | NR | 565 | 313 | NR | 695 | 51 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 120 | NR | 570 | 319 | NR | 700 | 43 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 203 | NR | 575 | 327 | NR | 705 | 37 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 311 | NR | 580 | 336 | NR | 710 | 31 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 290 | NR | 585 | 344 | NR | 715 | 26 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 197 | NR | 590 | 349 | NR | 720 | 22 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 163 | NR | 595 | 350 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 135 | NR | 600 | 355 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 110 | NR | 605 | 357 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 108 | NR | 610 | 391 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 123 | NR | 615 | 421 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-6

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.57

| 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 | 143 | NR | 620 | 358 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 166 | NR | 625 | 357 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 191 | NR | 630 | 1000 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 210 | NR | 635 | 705 | NR | 765 | 5 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 223 | NR | 640 | 239 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 233 | NR | 645 | 226 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 240 | NR | 650 | 201 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 246 | NR | 655 | 170 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 251 | NR | 660 | 145 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 260 | NR | 665 | 123 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 267 | NR | 670 | 113 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 9 | NR | 545 | 276 | NR | 675 | 93 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 16 | NR | 550 | 284 | NR | 680 | 80 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 28 | NR | 555 | 294 | NR | 685 | 69 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 46 | NR | 560 | 303 | NR | 690 | 59 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 75 | NR | 565 | 313 | NR | 695 | 51 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 120 | NR | 570 | 319 | NR | 700 | 43 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 203 | NR | 575 | 327 | NR | 705 | 37 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 311 | NR | 580 | 336 | NR | 710 | 31 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 290 | NR | 585 | 344 | NR | 715 | 26 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 197 | NR | 590 | 349 | NR | 720 | 22 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 163 | NR | 595 | 350 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 135 | NR | 600 | 355 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 110 | NR | 605 | 357 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 108 | NR | 610 | 391 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 123 | NR | 615 | 421 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-6

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.17

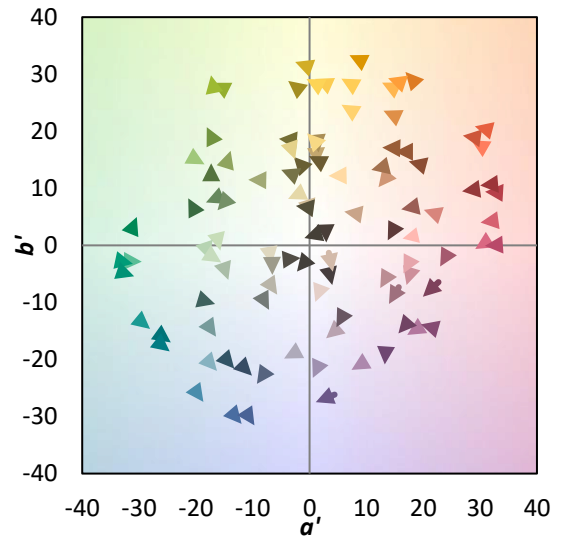
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 143 | NR | 620 | 358 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 166 | NR | 625 | 357 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 191 | NR | 630 | 1000 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 210 | NR | 635 | 705 | NR | 765 | 5 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 223 | NR | 640 | 239 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 233 | NR | 645 | 226 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 240 | NR | 650 | 201 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 246 | NR | 655 | 170 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 251 | NR | 660 | 145 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 260 | NR | 665 | 123 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 267 | NR | 670 | 113 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 9 | NR | 545 | 276 | NR | 675 | 93 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 16 | NR | 550 | 284 | NR | 680 | 80 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 28 | NR | 555 | 294 | NR | 685 | 69 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 46 | NR | 560 | 303 | NR | 690 | 59 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 75 | NR | 565 | 313 | NR | 695 | 51 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 120 | NR | 570 | 319 | NR | 700 | 43 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 203 | NR | 575 | 327 | NR | 705 | 37 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 311 | NR | 580 | 336 | NR | 710 | 31 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 290 | NR | 585 | 344 | NR | 715 | 26 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 197 | NR | 590 | 349 | NR | 720 | 22 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 163 | NR | 595 | 350 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 135 | NR | 600 | 355 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 110 | NR | 605 | 357 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 108 | NR | 610 | 391 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 123 | NR | 615 | 421 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 91.4$
 $R_g = 100.2$
 $CIE R_a = 93.9$
 $R_9 = 60.5$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 93 | CES51 = 98 | CES76 = 88 |
| CES02 = 63 | CES27 = 93 | CES52 = 98 | CES77 = 87 |
| CES03 = 31 | CES28 = 96 | CES53 = 97 | CES78 = 85 |
| CES04 = 70 | CES29 = 95 | CES54 = 95 | CES79 = 91 |
| CES05 = 50 | CES30 = 96 | CES55 = 94 | CES80 = 92 |
| CES06 = 51 | CES31 = 95 | CES56 = 96 | CES81 = 75 |
| CES07 = 43 | CES32 = 87 | CES57 = 95 | CES82 = 96 |
| CES08 = 42 | CES33 = 97 | CES58 = 96 | CES83 = 94 |
| CES09 = 29 | CES34 = 94 | CES59 = 98 | CES84 = 95 |
| CES10 = 75 | CES35 = 96 | CES60 = 94 | CES85 = 80 |
| CES11 = 58 | CES36 = 84 | CES61 = 93 | CES86 = 79 |
| CES12 = 64 | CES37 = 95 | CES62 = 89 | CES87 = 91 |
| CES13 = 44 | CES38 = 91 | CES63 = 94 | CES88 = 97 |
| CES14 = 74 | CES39 = 99 | CES64 = 92 | CES89 = 83 |
| CES15 = 72 | CES40 = 97 | CES65 = 90 | CES90 = 98 |
| CES16 = 48 | CES41 = 97 | CES66 = 90 | CES91 = 77 |
| CES17 = 49 | CES42 = 93 | CES67 = 89 | CES92 = 77 |
| CES18 = 56 | CES43 = 92 | CES68 = 89 | CES93 = 86 |
| CES19 = 71 | CES44 = 99 | CES69 = 91 | CES94 = 74 |
| CES20 = 67 | CES45 = 96 | CES70 = 88 | CES95 = 84 |
| CES21 = 86 | CES46 = 96 | CES71 = 84 | CES96 = 92 |
| CES22 = 78 | CES47 = 91 | CES72 = 94 | CES97 = 95 |
| CES23 = 91 | CES48 = 94 | CES73 = 83 | CES98 = 94 |
| CES24 = 90 | CES49 = 94 | CES74 = 91 | CES99 = 92 |
| CES25 = 71 | CES50 = 98 | CES75 = 86 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)