

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: IRiS

Report Number: P1251188

Luminaire Tested: P3A05R309030DE010 E3DLD1WMH

Issue Date: 1/30/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1251188  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2601-647-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/30/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A05R309030DE010 E3DLD1WMH  
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3DLD1WMH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

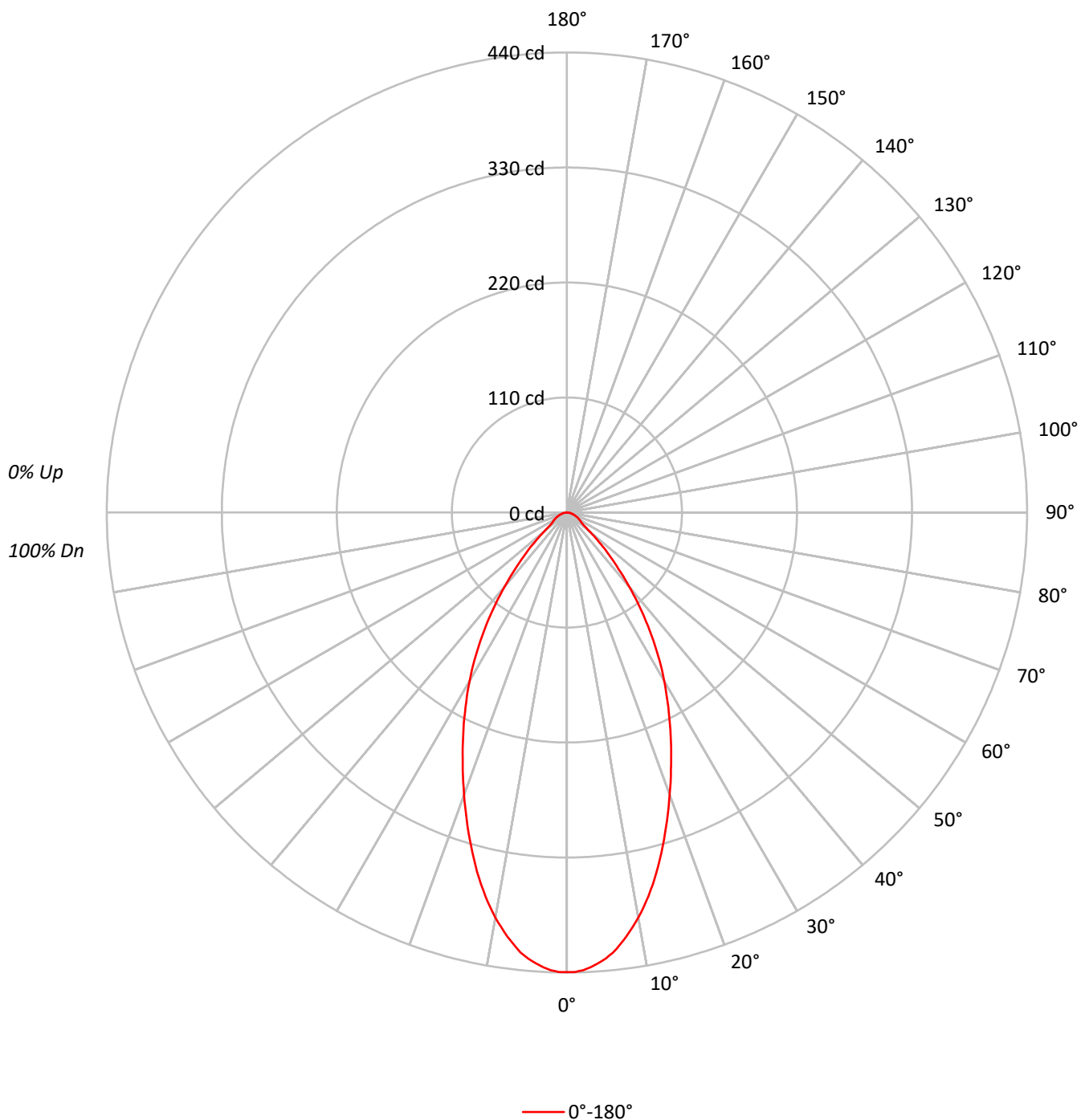
Lumens per Lamp: N/A  
Luminaire Lumens: 408.0 lumens  
Efficiency: N/A  
Efficacy: 56.7 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.78 / 0.85  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
Input Voltage (V): NR  
Input Current (Ain): 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: 24 FT

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CATALOG NUMBER: P3A05R309030DE010 E3DLD1WMH

### Luminous Intensity Polar Plot



TEST NUMBER: P1251188

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  |  | 99  | 98  | 96  |  | 96  |
| 2   | 106 | 100 | 96  | 92  | 104 | 99  | 94  | 91  | 95  | 92  | 89  |  | 92  | 89  | 87  |  | 89  |
| 3   | 100 | 92  | 87  | 82  | 98  | 91  | 86  | 82  | 88  | 84  | 80  |  | 86  | 82  | 79  |  | 84  |
| 4   | 94  | 86  | 79  | 74  | 92  | 84  | 79  | 74  | 82  | 77  | 73  |  | 80  | 76  | 72  |  | 78  |
| 5   | 89  | 79  | 73  | 68  | 87  | 78  | 72  | 68  | 76  | 71  | 67  |  | 75  | 70  | 66  |  | 73  |
| 6   | 84  | 74  | 67  | 62  | 82  | 73  | 67  | 62  | 71  | 66  | 62  |  | 70  | 65  | 61  |  | 69  |
| 7   | 79  | 69  | 62  | 58  | 78  | 68  | 62  | 58  | 67  | 61  | 57  |  | 66  | 61  | 57  |  | 65  |
| 8   | 75  | 65  | 58  | 54  | 74  | 64  | 58  | 53  | 63  | 57  | 53  |  | 62  | 57  | 53  |  | 61  |
| 9   | 71  | 61  | 54  | 50  | 70  | 60  | 54  | 50  | 59  | 54  | 50  |  | 58  | 53  | 50  |  | 57  |
| 10  | 68  | 57  | 51  | 47  | 67  | 57  | 51  | 47  | 56  | 50  | 47  |  | 55  | 50  | 46  |  | 54  |

**AVERAGE LUMINANCE (cd/sqm):**

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 96396 |
| 5°  | 94233 |
| 10° | 87618 |
| 15° | 77980 |
| 20° | 67066 |
| 25° | 56810 |
| 30° | 47146 |
| 35° | 36995 |
| 40° | 26507 |
| 45° | 17397 |
| 50° | 9893  |
| 55° | 6499  |
| 60° | 6140  |
| 65° | 5707  |
| 70° | 5129  |
| 75° | 4660  |
| 80° | 4420  |
| 85° | 3774  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17397 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 39.7   | 9.7       |
| 10°-20°   | 95.5   | 23.4      |
| 20°-30°   | 107.6  | 26.4      |
| 30°-40°   | 85.9   | 21.1      |
| 40°-50°   | 44.2   | 10.8      |
| 50°-60°   | 16.6   | 4.1       |
| 60°-70°   | 10.9   | 2.7       |
| 70°-80°   | 5.9    | 1.4       |
| 80°-90°   | 1.7    | 0.4       |
| 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°    | 242.8  | 59.5      |
| 0°-40°    | 328.8  | 80.6      |
| 0°-60°    | 389.5  | 95.5      |
| 0°-90°    | 408.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 408.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 440 |      |
| 5°  | 428 | 40   |
| 15° | 344 | 95   |
| 25° | 235 | 108  |
| 35° | 138 | 86   |
| 45° | 56  | 44   |
| 55° | 17  | 17   |
| 65° | 11  | 11   |
| 75° | 6   | 6    |
| 85° | 2   | 2    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 439.6 |
| 1°    | 439.6 |
| 2°    | 438.1 |
| 3°    | 435.6 |
| 4°    | 432.1 |
| 5°    | 428.1 |
| 6°    | 423.1 |
| 7°    | 416.5 |
| 8°    | 409.5 |
| 9°    | 401.5 |
| 10°   | 393.5 |
| 11°   | 384.5 |
| 12°   | 375.0 |
| 13°   | 365.0 |
| 14°   | 354.5 |
| 15°   | 343.5 |
| 17.5° | 315.4 |
| 20°   | 287.4 |
| 22.5° | 260.3 |
| 25°   | 234.8 |
| 27.5° | 209.8 |
| 30°   | 186.2 |
| 32.5° | 162.2 |
| 35°   | 138.2 |
| 37.5° | 114.7 |
| 40°   | 92.6  |
| 42.5° | 73.1  |
| 45°   | 56.1  |
| 47.5° | 41.6  |
| 50°   | 29.0  |
| 52.5° | 20.5  |
| 55°   | 17.0  |
| 57.5° | 15.5  |
| 60°   | 14.0  |
| 62.5° | 12.5  |
| 65°   | 11.0  |
| 67.5° | 9.5   |
| 70°   | 8.0   |
| 72.5° | 6.5   |
| 75°   | 5.5   |
| 77.5° | 4.5   |
| 80°   | 3.5   |
| 82.5° | 2.5   |
| 85°   | 1.5   |
| 87.5° | 0.5   |



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CANDELA DISTRIBUTION (continued):



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

Report Prepared for

Cooper Lighting Solutions

IRiS

Report Number: SP1-2504-409-28

Test Date: 05/16/2025

Luminaire Tested: LD3A09R159030D010 E3D1H

Data in this report applies to families of products including LD3A

### Test Information

Test Method: LM-79-2019  
 Report Number: SP1-2504-409-28  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 Issue Date: 01/06/2026  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: IRiS  
 Catalog Number: **LD3A09R159030D010 E3D1H**  
 Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI LEDS, E3D1H TRIM

### Spectral Parameters

CCT (K): 3032  
 CIE  $u'$ : 0.2493  
 CIE  $v'$ : 0.5211  
 Duv: 0.0003  
 CIE x: 0.4351  
 CIE y: 0.4042  
 CIE z: 0.1608  
 Peak Wavelength (nm): 615  
 Dominant Wavelength (nm): 582  
 Purity: 51.90029  
 R<sub>f</sub>: 91.6  
 R<sub>g</sub>: 98.2

CRI (Ra): 92.8  
 R1: 93.5  
 R2: 97.3  
 R3: 98.7  
 R4: 93.9  
 R5: 93.6  
 R6: 96.7  
 R7: 90.3  
 R8: 78.4  
 R9: 51.3  
 R10: 93.2  
 R11: 96.4  
 R12: 82.1  
 R13: 94.8  
 R14: 99.6  
 R15: 87.6



### Test Conditions

Stabilization Time: 40M  
 Operation Time: 1H 40M  
 Sphere Temperature (°C): 25.1

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| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | 76INCH SPHERE IN0058  | 12/16/2024       | 6/16/2025            |
| 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           |

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**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 3000K 4-step quadrangle

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### Photopic Flux vs. Wavelength



### Photopic Lumens: NR

| λ<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>(φ/nm) |
|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|
| 360       | 0                           | NR               | 490       | 285                         | NR               | 620       | 993                         | NR               | 750       | 55                          | NR               | 880       | 1                           | NR               |
| 365       | 0                           | NR               | 495       | 338                         | NR               | 625       | 970                         | NR               | 755       | 47                          | NR               | 885       | 1                           | NR               |
| 370       | 0                           | NR               | 500       | 392                         | NR               | 630       | 942                         | NR               | 760       | 41                          | NR               | 890       | 1                           | NR               |
| 375       | 0                           | NR               | 505       | 440                         | NR               | 635       | 902                         | NR               | 765       | 35                          | NR               | 895       | 1                           | NR               |
| 380       | 0                           | NR               | 510       | 478                         | NR               | 640       | 855                         | NR               | 770       | 30                          | NR               | 900       | 1                           | NR               |
| 385       | 0                           | NR               | 515       | 505                         | NR               | 645       | 800                         | NR               | 775       | 26                          | NR               | 905       | 1                           | NR               |
| 390       | 0                           | NR               | 520       | 524                         | NR               | 650       | 743                         | NR               | 780       | 22                          | NR               | 910       | 0                           | NR               |
| 395       | 1                           | NR               | 525       | 539                         | NR               | 655       | 682                         | NR               | 785       | 19                          | NR               | 915       | 0                           | NR               |
| 400       | 2                           | NR               | 530       | 554                         | NR               | 660       | 621                         | NR               | 790       | 16                          | NR               | 920       | 0                           | NR               |
| 405       | 3                           | NR               | 535       | 565                         | NR               | 665       | 563                         | NR               | 795       | 14                          | NR               | 925       | 1                           | NR               |
| 410       | 5                           | NR               | 540       | 581                         | NR               | 670       | 505                         | NR               | 800       | 12                          | NR               | 930       | 0                           | NR               |
| 415       | 10                          | NR               | 545       | 593                         | NR               | 675       | 451                         | NR               | 805       | 10                          | NR               | 935       | 0                           | NR               |
| 420       | 17                          | NR               | 550       | 606                         | NR               | 680       | 401                         | NR               | 810       | 9                           | NR               | 940       | 0                           | NR               |
| 425       | 32                          | NR               | 555       | 623                         | NR               | 685       | 356                         | NR               | 815       | 8                           | NR               | 945       | 0                           | NR               |
| 430       | 57                          | NR               | 560       | 645                         | NR               | 690       | 313                         | NR               | 820       | 7                           | NR               | 950       | 0                           | NR               |
| 435       | 103                         | NR               | 565       | 667                         | NR               | 695       | 274                         | NR               | 825       | 6                           | NR               | 955       | 0                           | NR               |
| 440       | 175                         | NR               | 570       | 699                         | NR               | 700       | 238                         | NR               | 830       | 5                           | NR               | 960       | 0                           | NR               |
| 445       | 287                         | NR               | 575       | 732                         | NR               | 705       | 208                         | NR               | 835       | 4                           | NR               | 965       | 0                           | NR               |
| 450       | 460                         | NR               | 580       | 774                         | NR               | 710       | 180                         | NR               | 840       | 4                           | NR               | 970       | 0                           | NR               |
| 455       | 550                         | NR               | 585       | 816                         | NR               | 715       | 157                         | NR               | 845       | 3                           | NR               | 975       | 0                           | NR               |
| 460       | 423                         | NR               | 590       | 862                         | NR               | 720       | 136                         | NR               | 850       | 3                           | NR               | 980       | 0                           | NR               |
| 465       | 309                         | NR               | 595       | 907                         | NR               | 725       | 117                         | NR               | 855       | 2                           | NR               | 985       | 0                           | NR               |
| 470       | 269                         | NR               | 600       | 943                         | NR               | 730       | 100                         | NR               | 860       | 2                           | NR               | 990       | 0                           | NR               |
| 475       | 229                         | NR               | 605       | 974                         | NR               | 735       | 86                          | NR               | 865       | 2                           | NR               | 995       | 0                           | NR               |
| 480       | 214                         | NR               | 610       | 991                         | NR               | 740       | 72                          | NR               | 870       | 2                           | NR               | 1000      | 0                           | NR               |
| 485       | 241                         | NR               | 615       | 1000                        | NR               | 745       | 62                          | NR               | 875       | 1                           | NR               |           |                             |                  |

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### Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.44

| λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(Φ/nm) |
|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|
| 360       | 0                           | NR               | 490       | 285                         | NR               | 620       | 993                         | NR               | 750       | 55                          | NR               | 880       | 1                           | NR               |
| 365       | 0                           | NR               | 495       | 338                         | NR               | 625       | 970                         | NR               | 755       | 47                          | NR               | 885       | 1                           | NR               |
| 370       | 0                           | NR               | 500       | 392                         | NR               | 630       | 942                         | NR               | 760       | 41                          | NR               | 890       | 1                           | NR               |
| 375       | 0                           | NR               | 505       | 440                         | NR               | 635       | 902                         | NR               | 765       | 35                          | NR               | 895       | 1                           | NR               |
| 380       | 0                           | NR               | 510       | 478                         | NR               | 640       | 855                         | NR               | 770       | 30                          | NR               | 900       | 1                           | NR               |
| 385       | 0                           | NR               | 515       | 505                         | NR               | 645       | 800                         | NR               | 775       | 26                          | NR               | 905       | 1                           | NR               |
| 390       | 0                           | NR               | 520       | 524                         | NR               | 650       | 743                         | NR               | 780       | 22                          | NR               | 910       | 0                           | NR               |
| 395       | 1                           | NR               | 525       | 539                         | NR               | 655       | 682                         | NR               | 785       | 19                          | NR               | 915       | 0                           | NR               |
| 400       | 2                           | NR               | 530       | 554                         | NR               | 660       | 621                         | NR               | 790       | 16                          | NR               | 920       | 0                           | NR               |
| 405       | 3                           | NR               | 535       | 565                         | NR               | 665       | 563                         | NR               | 795       | 14                          | NR               | 925       | 1                           | NR               |
| 410       | 5                           | NR               | 540       | 581                         | NR               | 670       | 505                         | NR               | 800       | 12                          | NR               | 930       | 0                           | NR               |
| 415       | 10                          | NR               | 545       | 593                         | NR               | 675       | 451                         | NR               | 805       | 10                          | NR               | 935       | 0                           | NR               |
| 420       | 17                          | NR               | 550       | 606                         | NR               | 680       | 401                         | NR               | 810       | 9                           | NR               | 940       | 0                           | NR               |
| 425       | 32                          | NR               | 555       | 623                         | NR               | 685       | 356                         | NR               | 815       | 8                           | NR               | 945       | 0                           | NR               |
| 430       | 57                          | NR               | 560       | 645                         | NR               | 690       | 313                         | NR               | 820       | 7                           | NR               | 950       | 0                           | NR               |
| 435       | 103                         | NR               | 565       | 667                         | NR               | 695       | 274                         | NR               | 825       | 6                           | NR               | 955       | 0                           | NR               |
| 440       | 175                         | NR               | 570       | 699                         | NR               | 700       | 238                         | NR               | 830       | 5                           | NR               | 960       | 0                           | NR               |
| 445       | 287                         | NR               | 575       | 732                         | NR               | 705       | 208                         | NR               | 835       | 4                           | NR               | 965       | 0                           | NR               |
| 450       | 460                         | NR               | 580       | 774                         | NR               | 710       | 180                         | NR               | 840       | 4                           | NR               | 970       | 0                           | NR               |
| 455       | 550                         | NR               | 585       | 816                         | NR               | 715       | 157                         | NR               | 845       | 3                           | NR               | 975       | 0                           | NR               |
| 460       | 423                         | NR               | 590       | 862                         | NR               | 720       | 136                         | NR               | 850       | 3                           | NR               | 980       | 0                           | NR               |
| 465       | 309                         | NR               | 595       | 907                         | NR               | 725       | 117                         | NR               | 855       | 2                           | NR               | 985       | 0                           | NR               |
| 470       | 269                         | NR               | 600       | 943                         | NR               | 730       | 100                         | NR               | 860       | 2                           | NR               | 990       | 0                           | NR               |
| 475       | 229                         | NR               | 605       | 974                         | NR               | 735       | 86                          | NR               | 865       | 2                           | NR               | 995       | 0                           | NR               |
| 480       | 214                         | NR               | 610       | 991                         | NR               | 740       | 72                          | NR               | 870       | 2                           | NR               | 1000      | 0                           | NR               |
| 485       | 241                         | NR               | 615       | 1000                        | NR               | 745       | 62                          | NR               | 875       | 1                           | NR               |           |                             |                  |

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### Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.84

| λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) |
|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|-----------|-----------------------------|------------------|
| 360       | 0                           | NR               | 490       | 285                         | NR               | 620       | 993                         | NR               | 750       | 55                          | NR               | 880       | 1                           | NR               |
| 365       | 0                           | NR               | 495       | 338                         | NR               | 625       | 970                         | NR               | 755       | 47                          | NR               | 885       | 1                           | NR               |
| 370       | 0                           | NR               | 500       | 392                         | NR               | 630       | 942                         | NR               | 760       | 41                          | NR               | 890       | 1                           | NR               |
| 375       | 0                           | NR               | 505       | 440                         | NR               | 635       | 902                         | NR               | 765       | 35                          | NR               | 895       | 1                           | NR               |
| 380       | 0                           | NR               | 510       | 478                         | NR               | 640       | 855                         | NR               | 770       | 30                          | NR               | 900       | 1                           | NR               |
| 385       | 0                           | NR               | 515       | 505                         | NR               | 645       | 800                         | NR               | 775       | 26                          | NR               | 905       | 1                           | NR               |
| 390       | 0                           | NR               | 520       | 524                         | NR               | 650       | 743                         | NR               | 780       | 22                          | NR               | 910       | 0                           | NR               |
| 395       | 1                           | NR               | 525       | 539                         | NR               | 655       | 682                         | NR               | 785       | 19                          | NR               | 915       | 0                           | NR               |
| 400       | 2                           | NR               | 530       | 554                         | NR               | 660       | 621                         | NR               | 790       | 16                          | NR               | 920       | 0                           | NR               |
| 405       | 3                           | NR               | 535       | 565                         | NR               | 665       | 563                         | NR               | 795       | 14                          | NR               | 925       | 1                           | NR               |
| 410       | 5                           | NR               | 540       | 581                         | NR               | 670       | 505                         | NR               | 800       | 12                          | NR               | 930       | 0                           | NR               |
| 415       | 10                          | NR               | 545       | 593                         | NR               | 675       | 451                         | NR               | 805       | 10                          | NR               | 935       | 0                           | NR               |
| 420       | 17                          | NR               | 550       | 606                         | NR               | 680       | 401                         | NR               | 810       | 9                           | NR               | 940       | 0                           | NR               |
| 425       | 32                          | NR               | 555       | 623                         | NR               | 685       | 356                         | NR               | 815       | 8                           | NR               | 945       | 0                           | NR               |
| 430       | 57                          | NR               | 560       | 645                         | NR               | 690       | 313                         | NR               | 820       | 7                           | NR               | 950       | 0                           | NR               |
| 435       | 103                         | NR               | 565       | 667                         | NR               | 695       | 274                         | NR               | 825       | 6                           | NR               | 955       | 0                           | NR               |
| 440       | 175                         | NR               | 570       | 699                         | NR               | 700       | 238                         | NR               | 830       | 5                           | NR               | 960       | 0                           | NR               |
| 445       | 287                         | NR               | 575       | 732                         | NR               | 705       | 208                         | NR               | 835       | 4                           | NR               | 965       | 0                           | NR               |
| 450       | 460                         | NR               | 580       | 774                         | NR               | 710       | 180                         | NR               | 840       | 4                           | NR               | 970       | 0                           | NR               |
| 455       | 550                         | NR               | 585       | 816                         | NR               | 715       | 157                         | NR               | 845       | 3                           | NR               | 975       | 0                           | NR               |
| 460       | 423                         | NR               | 590       | 862                         | NR               | 720       | 136                         | NR               | 850       | 3                           | NR               | 980       | 0                           | NR               |
| 465       | 309                         | NR               | 595       | 907                         | NR               | 725       | 117                         | NR               | 855       | 2                           | NR               | 985       | 0                           | NR               |
| 470       | 269                         | NR               | 600       | 943                         | NR               | 730       | 100                         | NR               | 860       | 2                           | NR               | 990       | 0                           | NR               |
| 475       | 229                         | NR               | 605       | 974                         | NR               | 735       | 86                          | NR               | 865       | 2                           | NR               | 995       | 0                           | NR               |
| 480       | 214                         | NR               | 610       | 991                         | NR               | 740       | 72                          | NR               | 870       | 2                           | NR               | 1000      | 0                           | NR               |
| 485       | 241                         | NR               | 615       | 1000                        | NR               | 745       | 62                          | NR               | 875       | 1                           | NR               |           |                             |                  |

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TM-30-18

### Summary

$R_f = 91.6$   
 $R_g = 98.2$   
 $\text{CIE } R_a = 92.8$   
 $R_9 = 51.3$



### Color Vector Graphics



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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 96 | CES51 = 97 | CES76 = 92 |
| CES02 = 63 | CES27 = 91 | CES52 = 99 | CES77 = 88 |
| CES03 = 32 | CES28 = 98 | CES53 = 98 | CES78 = 88 |
| CES04 = 70 | CES29 = 97 | CES54 = 93 | CES79 = 91 |
| CES05 = 50 | CES30 = 90 | CES55 = 91 | CES80 = 92 |
| CES06 = 51 | CES31 = 97 | CES56 = 94 | CES81 = 78 |
| CES07 = 43 | CES32 = 93 | CES57 = 93 | CES82 = 96 |
| CES08 = 42 | CES33 = 97 | CES58 = 94 | CES83 = 95 |
| CES09 = 29 | CES34 = 97 | CES59 = 97 | CES84 = 95 |
| CES10 = 76 | CES35 = 98 | CES60 = 93 | CES85 = 80 |
| CES11 = 59 | CES36 = 82 | CES61 = 93 | CES86 = 79 |
| CES12 = 65 | CES37 = 98 | CES62 = 87 | CES87 = 91 |
| CES13 = 44 | CES38 = 86 | CES63 = 94 | CES88 = 95 |
| CES14 = 74 | CES39 = 98 | CES64 = 92 | CES89 = 84 |
| CES15 = 72 | CES40 = 97 | CES65 = 89 | CES90 = 94 |
| CES16 = 48 | CES41 = 96 | CES66 = 90 | CES91 = 77 |
| CES17 = 50 | CES42 = 97 | CES67 = 89 | CES92 = 76 |
| CES18 = 57 | CES43 = 96 | CES68 = 91 | CES93 = 86 |
| CES19 = 72 | CES44 = 99 | CES69 = 92 | CES94 = 76 |
| CES20 = 67 | CES45 = 99 | CES70 = 89 | CES95 = 83 |
| CES21 = 86 | CES46 = 96 | CES71 = 85 | CES96 = 91 |
| CES22 = 79 | CES47 = 93 | CES72 = 95 | CES97 = 96 |
| CES23 = 92 | CES48 = 89 | CES73 = 85 | CES98 = 93 |
| CES24 = 90 | CES49 = 97 | CES74 = 90 | CES99 = 89 |
| CES25 = 72 | CES50 = 97 | CES75 = 86 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**


(END OF REPORT)