

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: G3-1805-784-1

Luminaire Tested: **J2-WL-20L83050-1D-UNV-W2A-W-4 (3500K)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: G3-1805-784-1  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: J2-WL-20L83050-1D-UNV-W2A-W-4 (3500K)  
Description: JAYLUM J2 SUSPENDED LED LUMINAIRE, FROSTED LENS.  
3000K-5000K CCT VividTune LIGHT ENGINE.  
Light Source: (168) 3000K-5000K CCT, 80 CRI LEDS, TUNED TO 3500K CCT.  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2043.1 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.31' x L: 3.62' x H: 0')  
CIE Type: Semi-Direct

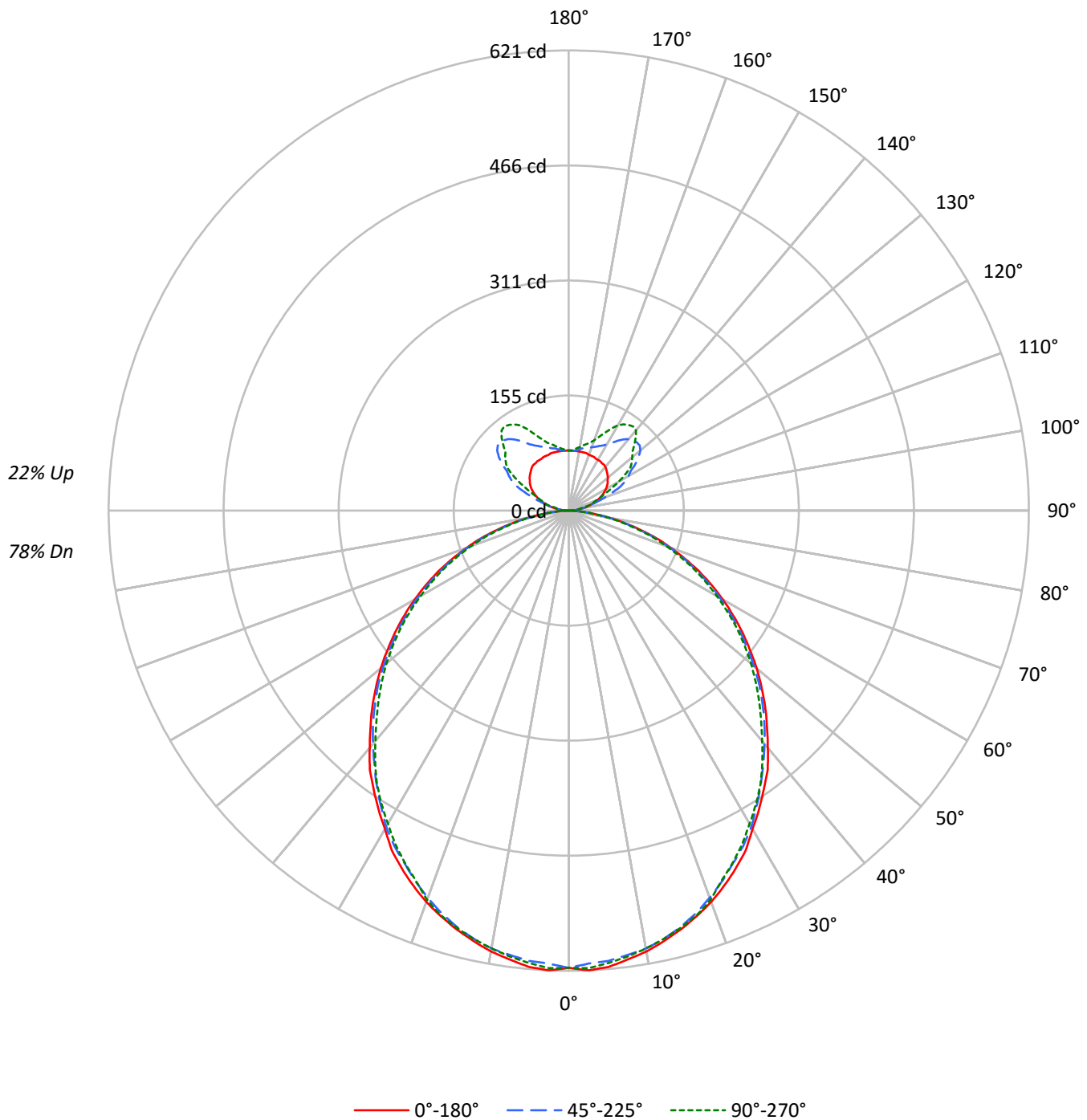
Input Watts (W): 17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |  |    |    |    |  |    |    |    |  |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|----|----|----|--|----|----|----|--|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     |  | 20 |    |    |  |    | 20 |    |  |    |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     |  | 50 |    |    |  |    | 30 |    |  |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  |  | 50 | 30 | 10 |  | 50 | 30 | 10 |  | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |  |    |    |    |  |    |    |    |  |    |    |    |
| 0   | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 |  | 99 | 99 | 99 |  | 90 | 90 | 90 |  | 82 | 82 | 82 |
| 1   | 104 | 100 | 96  | 92  | 99  | 95  | 92  | 88  |  | 87 | 84 | 82 |  | 80 | 78 | 76 |  | 73 | 71 | 70 |
| 2   | 95  | 87  | 81  | 75  | 90  | 83  | 78  | 73  |  | 76 | 72 | 68 |  | 70 | 66 | 63 |  | 64 | 61 | 59 |
| 3   | 87  | 77  | 69  | 63  | 82  | 73  | 66  | 61  |  | 67 | 62 | 57 |  | 62 | 57 | 53 |  | 57 | 53 | 50 |
| 4   | 79  | 68  | 60  | 53  | 75  | 65  | 58  | 52  |  | 60 | 54 | 49 |  | 55 | 50 | 46 |  | 51 | 46 | 43 |
| 5   | 73  | 61  | 52  | 46  | 69  | 58  | 50  | 45  |  | 54 | 47 | 42 |  | 50 | 44 | 40 |  | 46 | 41 | 37 |
| 6   | 67  | 55  | 46  | 40  | 64  | 53  | 45  | 39  |  | 49 | 42 | 37 |  | 45 | 39 | 35 |  | 41 | 37 | 33 |
| 7   | 62  | 49  | 41  | 35  | 59  | 48  | 40  | 34  |  | 44 | 38 | 33 |  | 41 | 35 | 31 |  | 38 | 33 | 29 |
| 8   | 58  | 45  | 37  | 31  | 55  | 43  | 36  | 31  |  | 40 | 34 | 29 |  | 38 | 32 | 28 |  | 35 | 30 | 26 |
| 9   | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 27  |  | 37 | 31 | 26 |  | 35 | 29 | 25 |  | 32 | 27 | 24 |
| 10  | 51  | 38  | 30  | 25  | 48  | 37  | 30  | 25  |  | 34 | 28 | 24 |  | 32 | 27 | 23 |  | 30 | 25 | 22 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5863 | 5863 | 5863 |
| 5°  | 5895 | 5818 | 5847 |
| 10° | 5828 | 5789 | 5789 |
| 15° | 5755 | 5725 | 5735 |
| 20° | 5683 | 5622 | 5652 |
| 25° | 5588 | 5504 | 5494 |
| 30° | 5442 | 5409 | 5354 |
| 35° | 5324 | 5243 | 5231 |
| 40° | 5185 | 5098 | 5036 |
| 45° | 5039 | 4972 | 4878 |
| 50° | 4893 | 4819 | 4745 |
| 55° | 4738 | 4655 | 4589 |
| 60° | 4561 | 4485 | 4390 |
| 65° | 4362 | 4272 | 4182 |
| 70° | 4056 | 4001 | 3889 |
| 75° | 3671 | 3561 | 3451 |
| 80° | 3010 | 3010 | 2845 |
| 85° | 1962 | 2071 | 2071 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.2   | 2.8       |
| 10°-20°   | 164.5  | 8.1       |
| 20°-30°   | 243.1  | 11.9      |
| 30°-40°   | 283.8  | 13.9      |
| 40°-50°   | 285.4  | 14.0      |
| 50°-60°   | 251.5  | 12.3      |
| 60°-70°   | 188.0  | 9.2       |
| 70°-80°   | 103.3  | 5.1       |
| 80°-90°   | 24.3   | 1.2       |
| 90°-100°  | 11.4   | 0.6       |
| 100°-110° | 37.1   | 1.8       |
| 110°-120° | 69.7   | 3.4       |
| 120°-130° | 87.8   | 4.3       |
| 130°-140° | 86.6   | 4.2       |
| 140°-150° | 70.4   | 3.4       |
| 150°-160° | 45.3   | 2.2       |
| 160°-170° | 24.8   | 1.2       |
| 170°-180° | 7.9    | 0.4       |
| 0°-30°    | 465.8  | 22.8      |
| 0°-40°    | 749.6  | 36.7      |
| 0°-60°    | 1286.5 | 63.0      |
| 0°-90°    | 1602.1 | 78.4      |
| 90°-120°  | 118.2  | 5.8       |
| 90°-150°  | 362.9  | 17.8      |
| 90°-180°  | 441.0  | 21.6      |
| 0°-180°   | 2043.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 617 | 617   | 617 | 617   | 617 |      |
| 5°   | 618 | 614   | 610 | 613   | 613 | 58   |
| 15°  | 585 | 585   | 582 | 584   | 583 | 165  |
| 25°  | 533 | 530   | 525 | 528   | 524 | 245  |
| 35°  | 459 | 458   | 452 | 451   | 451 | 287  |
| 45°  | 375 | 374   | 370 | 367   | 363 | 289  |
| 55°  | 286 | 286   | 281 | 277   | 277 | 255  |
| 65°  | 194 | 194   | 190 | 187   | 186 | 191  |
| 75°  | 100 | 99    | 97  | 96    | 94  | 106  |
| 85°  | 18  | 19    | 19  | 19    | 19  | 23   |
| 90°  | 0   | 0     | 0   | 0     | 0   | 2    |
| 95°  | 11  | 10    | 10  | 11    | 11  | 11   |
| 105° | 31  | 49    | 32  | 32    | 30  | 33   |
| 115° | 50  | 97    | 77  | 59    | 54  | 49   |
| 125° | 64  | 101   | 110 | 102   | 102 | 57   |
| 135° | 73  | 91    | 130 | 130   | 125 | 56   |
| 145° | 78  | 88    | 115 | 137   | 141 | 49   |
| 155° | 80  | 86    | 96  | 109   | 116 | 37   |
| 165° | 81  | 83    | 87  | 91    | 93  | 23   |
| 175° | 81  | 82    | 81  | 83    | 83  | 8    |
| 180° | 81  | 81    | 81  | 81    | 81  |      |



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CATALOG NUMBER: J2-WL-20L83050-1D-UNV-W2A-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

|        | 0°  | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 0°     | 617 | 617   | 617 | 617   | 617 |
| 2.5°   | 621 | 617   | 612 | 616   | 618 |
| 5°     | 618 | 614   | 610 | 613   | 613 |
| 7.5°   | 611 | 610   | 605 | 609   | 607 |
| 10°    | 604 | 603   | 600 | 603   | 600 |
| 12.5°  | 595 | 594   | 592 | 596   | 592 |
| 15°    | 585 | 585   | 582 | 584   | 583 |
| 17.5°  | 574 | 574   | 570 | 572   | 573 |
| 20°    | 562 | 560   | 556 | 558   | 559 |
| 22.5°  | 548 | 546   | 541 | 543   | 540 |
| 25°    | 533 | 530   | 525 | 528   | 524 |
| 27.5°  | 517 | 512   | 510 | 511   | 507 |
| 30°    | 496 | 495   | 493 | 491   | 488 |
| 32.5°  | 478 | 477   | 472 | 470   | 470 |
| 35°    | 459 | 458   | 452 | 451   | 451 |
| 37.5°  | 441 | 438   | 431 | 430   | 429 |
| 40°    | 418 | 417   | 411 | 409   | 406 |
| 42.5°  | 396 | 395   | 391 | 388   | 384 |
| 45°    | 375 | 374   | 370 | 367   | 363 |
| 47.5°  | 353 | 354   | 349 | 344   | 342 |
| 50°    | 331 | 332   | 326 | 322   | 321 |
| 52.5°  | 308 | 309   | 303 | 299   | 299 |
| 55°    | 286 | 286   | 281 | 277   | 277 |
| 57.5°  | 263 | 263   | 258 | 255   | 254 |
| 60°    | 240 | 239   | 236 | 233   | 231 |
| 62.5°  | 217 | 217   | 213 | 210   | 208 |
| 65°    | 194 | 194   | 190 | 187   | 186 |
| 67.5°  | 170 | 171   | 167 | 164   | 163 |
| 70°    | 146 | 146   | 144 | 140   | 140 |
| 72.5°  | 124 | 122   | 121 | 118   | 118 |
| 75°    | 100 | 99    | 97  | 96    | 94  |
| 77.5°  | 77  | 77    | 75  | 74    | 73  |
| 80°    | 55  | 57    | 55  | 54    | 52  |
| 82.5°  | 35  | 37    | 36  | 34    | 34  |
| 85°    | 18  | 19    | 19  | 19    | 19  |
| 87.5°  | 6   | 7     | 8   | 8     | 8   |
| 90°    | 0   | 0     | 0   | 0     | 0   |
| 92.5°  | 6   | 6     | 8   | 8     | 8   |
| 95°    | 11  | 10    | 10  | 11    | 11  |
| 97.5°  | 16  | 16    | 13  | 13    | 13  |
| 100°   | 21  | 26    | 20  | 16    | 16  |
| 102.5° | 26  | 37    | 26  | 22    | 20  |
| 105°   | 31  | 49    | 32  | 32    | 30  |
| 107.5° | 36  | 59    | 41  | 33    | 34  |
| 110°   | 41  | 73    | 51  | 41    | 39  |



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CATALOG NUMBER: J2-WL-20L83050-1D-UNV-W2A-W-4 (3500K)

**CANDELA DISTRIBUTION (continued):**

|        | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----|-------|-----|-------|-----|
| 112.5° | 46 | 87    | 64  | 49    | 46  |
| 115°   | 50 | 97    | 77  | 59    | 54  |
| 117.5° | 54 | 102   | 86  | 72    | 65  |
| 120°   | 58 | 104   | 93  | 84    | 78  |
| 122.5° | 61 | 104   | 99  | 96    | 90  |
| 125°   | 64 | 101   | 110 | 102   | 102 |
| 127.5° | 66 | 98    | 119 | 108   | 107 |
| 130°   | 69 | 95    | 126 | 111   | 112 |
| 132.5° | 71 | 92    | 130 | 121   | 116 |
| 135°   | 73 | 91    | 130 | 130   | 125 |
| 137.5° | 75 | 90    | 129 | 137   | 134 |
| 140°   | 77 | 90    | 126 | 140   | 141 |
| 142.5° | 78 | 89    | 121 | 140   | 143 |
| 145°   | 78 | 88    | 115 | 137   | 141 |
| 147.5° | 79 | 87    | 108 | 132   | 138 |
| 150°   | 79 | 87    | 103 | 126   | 133 |
| 152.5° | 79 | 86    | 99  | 117   | 125 |
| 155°   | 80 | 86    | 96  | 109   | 116 |
| 157.5° | 80 | 85    | 93  | 103   | 108 |
| 160°   | 80 | 84    | 91  | 98    | 101 |
| 162.5° | 81 | 83    | 89  | 94    | 96  |
| 165°   | 81 | 83    | 87  | 91    | 93  |
| 167.5° | 81 | 82    | 86  | 89    | 90  |
| 170°   | 81 | 82    | 84  | 86    | 87  |
| 172.5° | 81 | 82    | 82  | 84    | 85  |
| 175°   | 81 | 82    | 81  | 83    | 83  |
| 177.5° | 81 | 81    | 81  | 81    | 81  |
| 180°   | 81 | 81    | 81  | 81    | 81  |

(END OF REPORT)