

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: P1588755

Luminaire Tested: 24CZSP-A-60VHE-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-60VHE-L835
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

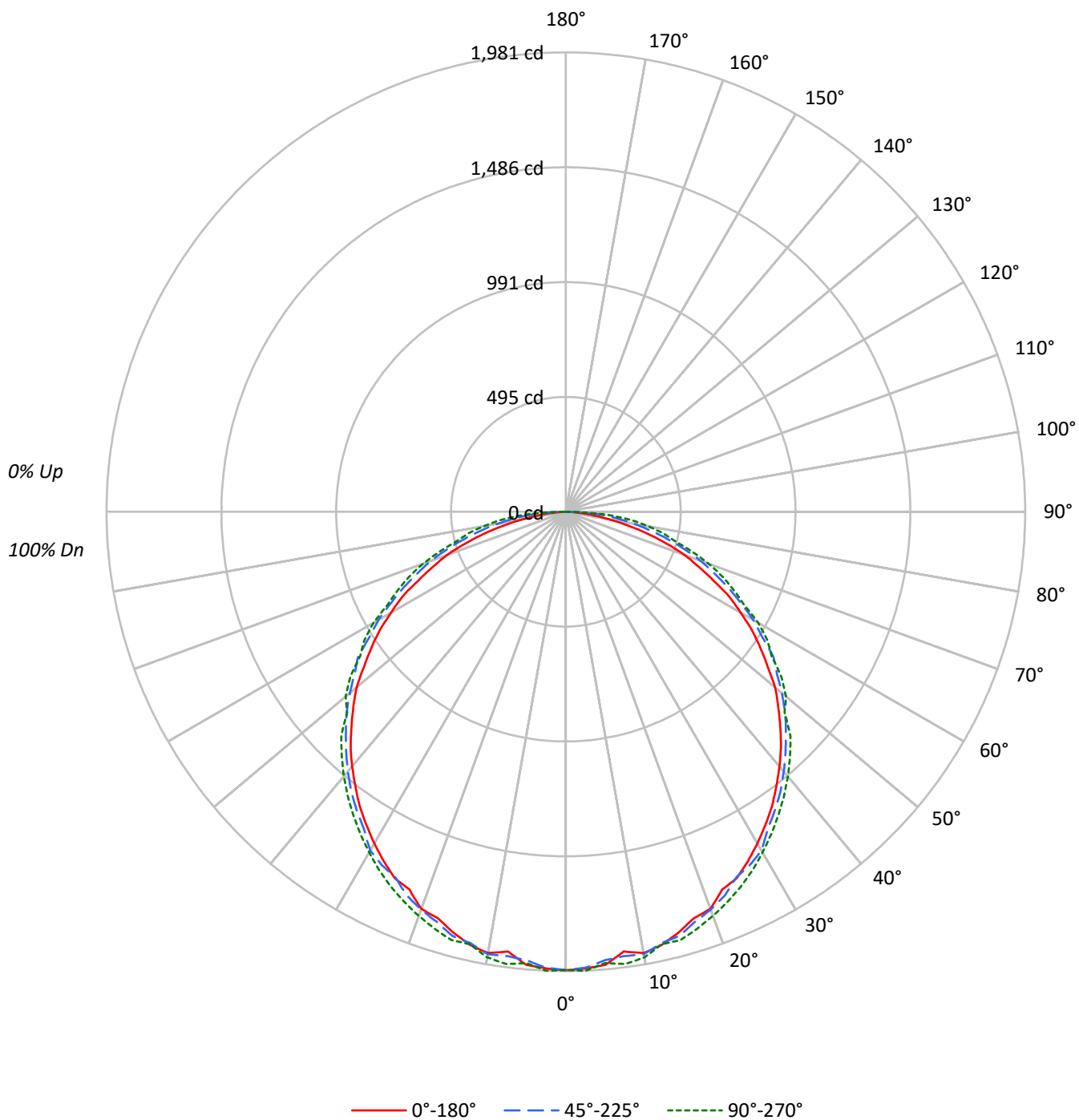
Lumens per Lamp: N/A
Luminaire Lumens: 5901.0 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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		0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85		83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70		68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59		57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51		48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44		42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38		36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34		32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30		28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27		26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3028	3028	3028
5°	3015	2984	3003
10°	3006	3013	3034
15°	2978	3002	3031
20°	2971	2976	3023
25°	2947	2939	3015
30°	2921	2983	3000
35°	2899	2939	2987
40°	2867	2923	2977
45°	2831	2907	2966
50°	2808	2896	2953
55°	2737	2921	2891
60°	2667	2859	2933
65°	2547	2797	2894
70°	2442	2773	2935
75°	2163	2690	2876
80°	1708	2628	3181
85°	1044	2808	3627

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3627 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.7	3.2
10°-20°	533.2	9.0
20°-30°	812.5	13.8
30°-40°	989.0	16.8
40°-50°	1036.9	17.6
50°-60°	960.6	16.3
60°-70°	757.5	12.8
70°-80°	468.6	7.9
80°-90°	156.1	2.6
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°	1532.4	26.0
0°-40°	2521.3	42.7
0°-60°	4518.9	76.6
0°-90°	5901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5901.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1977	1977	1977	1977	1977	
5°	1961	1960	1941	1983	1953	185
15°	1878	1888	1893	1880	1912	530
25°	1744	1753	1739	1787	1784	801
35°	1550	1565	1572	1602	1598	969
45°	1307	1331	1342	1358	1370	1010
55°	1025	1055	1094	1104	1083	917
65°	703	730	772	801	798	699
75°	366	394	455	489	486	386
85°	59	101	160	194	206	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1976.7	1976.7	1976.7	1976.7	1976.7
2.5°	1971.1	1983.2	1967.9	1980.8	1980.8
5°	1960.7	1959.9	1940.6	1983.2	1953.4
7.5°	1912.5	1946.2	1932.6	1984.8	1967.1
10°	1932.6	1923.7	1937.4	1972.7	1951.0
12.5°	1912.5	1926.9	1905.3	1887.6	1910.1
15°	1877.9	1887.6	1893.2	1879.5	1911.7
17.5°	1837.0	1873.1	1853.8	1847.4	1884.4
20°	1822.5	1824.1	1825.7	1858.7	1854.6
22.5°	1763.1	1795.2	1791.2	1817.7	1820.9
25°	1743.8	1753.4	1739.0	1787.2	1784.0
27.5°	1699.6	1720.5	1718.1	1734.2	1743.0
30°	1651.4	1672.3	1686.8	1669.1	1696.4
32.5°	1601.6	1637.0	1620.9	1653.8	1648.2
35°	1550.2	1564.7	1571.9	1601.6	1597.6
37.5°	1490.8	1515.7	1519.7	1564.7	1545.4
40°	1433.8	1458.7	1461.9	1488.4	1489.2
42.5°	1373.5	1385.6	1402.4	1433.0	1430.5
45°	1306.8	1330.9	1342.2	1357.5	1369.5
47.5°	1242.6	1268.3	1282.8	1307.7	1279.5
50°	1178.3	1196.8	1215.3	1241.8	1239.4
52.5°	1097.2	1139.0	1147.8	1162.3	1171.9
55°	1024.9	1055.4	1094.0	1103.6	1082.7
57.5°	951.8	975.1	1003.2	1032.9	1030.5
60°	870.7	898.8	933.3	955.8	957.4
62.5°	796.8	816.1	849.0	881.9	865.1
65°	702.8	730.1	771.9	800.8	798.4
67.5°	619.3	649.0	691.6	729.3	730.9
70°	545.4	561.5	619.3	648.2	655.4
72.5°	454.6	482.7	534.1	566.3	569.5
75°	365.5	394.4	454.6	489.2	486.0
77.5°	274.7	316.5	375.1	416.1	429.7
80°	193.6	231.3	298.0	338.2	360.6
82.5°	122.1	161.4	226.5	276.3	290.0
85°	59.4	101.2	159.8	194.4	206.4
87.5°	15.3	41.8	73.9	90.8	98.0
90°	0.0	0.0	0.0	0.0	0.0

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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	15.65	17.32	16.02	17.64	17.95	16.08	17.75	16.45	18.07	18.38
	3H	17.45	18.97	17.83	19.29	19.65	18.15	19.67	18.53	20.00	20.36
	4H	18.10	19.53	18.49	19.87	20.25	19.00	20.43	19.39	20.78	21.15
	6H	18.51	19.84	18.92	20.20	20.59	19.79	21.12	20.20	21.48	21.87
	8H	18.61	19.88	19.03	20.27	20.67	20.13	21.40	20.55	21.79	22.19
	12H	18.65	19.87	19.08	20.25	20.68	20.43	21.65	20.86	22.03	22.46
4H	2H	16.39	17.82	16.79	18.17	18.54	16.72	18.16	17.12	18.50	18.88
	3H	18.42	19.63	18.83	20.03	20.43	19.04	20.24	19.45	20.64	21.04
	4H	19.20	20.29	19.63	20.70	21.14	20.04	21.14	20.47	21.55	21.99
	6H	19.73	20.69	20.18	21.13	21.59	20.99	21.96	21.45	22.40	22.85
	8H	19.88	20.78	20.33	21.22	21.68	21.42	22.32	21.88	22.76	23.22
	12H	19.96	20.77	20.44	21.24	21.71	21.80	22.61	22.28	23.08	23.55
8H	4H	19.65	20.55	20.10	20.99	21.45	20.38	21.28	20.84	21.72	22.19
	6H	20.33	21.08	20.82	21.56	22.04	21.50	22.25	21.99	22.74	23.21
	8H	20.54	21.22	21.05	21.72	22.21	22.04	22.72	22.55	23.23	23.71
	12H	20.69	21.29	21.20	21.78	22.34	22.56	23.16	23.07	23.65	24.21
12H	4H	19.73	20.54	20.21	21.02	21.48	20.42	21.23	20.89	21.70	22.17
	6H	20.46	21.14	20.97	21.64	22.13	21.56	22.24	22.07	22.75	23.23
	8H	20.75	21.35	21.26	21.84	22.40	22.19	22.79	22.69	23.28	23.84