

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: P1588821

Luminaire Tested: 24CZSP-A-65VHE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588821
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-65VHE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

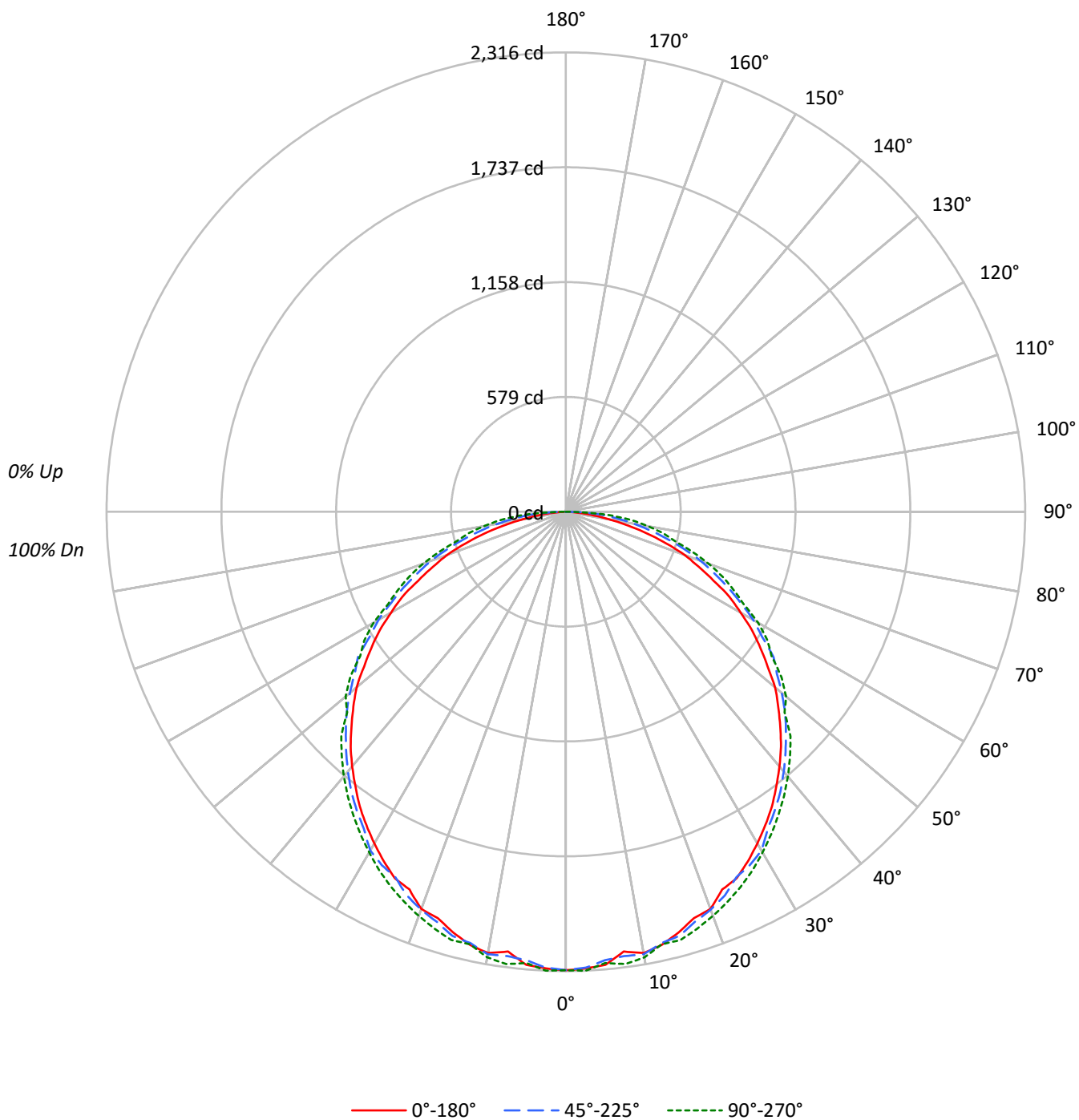
Lumens per Lamp: N/A
Luminaire Lumens: 6899.0 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 50.1
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			
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°	3540	3540	3540
5°	3524	3488	3511
10°	3514	3523	3548
15°	3481	3510	3544
20°	3473	3479	3534
25°	3445	3436	3525
30°	3415	3488	3508
35°	3389	3436	3492
40°	3351	3417	3481
45°	3310	3399	3468
50°	3283	3385	3453
55°	3200	3415	3380
60°	3118	3343	3429
65°	2978	3270	3383
70°	2855	3242	3432
75°	2529	3145	3362
80°	1996	3073	3719
85°	1221	3284	4240

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4240 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	3.2
10°-20°	623.4	9.0
20°-30°	949.9	13.8
30°-40°	1156.2	16.8
40°-50°	1212.3	17.6
50°-60°	1123.0	16.3
60°-70°	885.6	12.8
70°-80°	547.8	7.9
80°-90°	182.4	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°	1791.6	26.0
0°-40°	2947.8	42.7
0°-60°	5283.1	76.6
0°-90°	6899.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6899.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2311	2311	2311	2311	2311	
5°	2292	2291	2269	2319	2284	216
15°	2196	2207	2213	2197	2235	620
25°	2039	2050	2033	2089	2086	937
35°	1812	1829	1838	1872	1868	1133
45°	1528	1556	1569	1587	1601	1180
55°	1198	1234	1279	1290	1266	1072
65°	822	854	902	936	933	818
75°	427	461	532	572	568	451
85°	70	118	187	227	241	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2311.1	2311.1	2311.1	2311.1	2311.1
2.5°	2304.5	2318.6	2300.7	2315.7	2315.7
5°	2292.3	2291.3	2268.8	2318.6	2283.8
7.5°	2235.9	2275.4	2259.4	2320.4	2299.8
10°	2259.4	2249.1	2265.0	2306.4	2281.0
12.5°	2235.9	2252.8	2227.5	2206.8	2233.1
15°	2195.5	2206.8	2213.4	2197.4	2235.0
17.5°	2147.7	2189.9	2167.4	2159.9	2203.1
20°	2130.8	2132.6	2134.5	2173.0	2168.3
22.5°	2061.3	2098.8	2094.1	2125.1	2128.9
25°	2038.7	2050.0	2033.1	2089.4	2085.7
27.5°	1987.1	2011.5	2008.7	2027.5	2037.8
30°	1930.7	1955.1	1972.0	1951.4	1983.3
32.5°	1872.5	1913.8	1895.0	1933.5	1927.0
35°	1812.4	1829.3	1837.8	1872.5	1867.8
37.5°	1742.9	1772.0	1776.7	1829.3	1806.8
40°	1676.2	1705.4	1709.1	1740.1	1741.0
42.5°	1605.8	1619.9	1639.6	1675.3	1672.5
45°	1527.9	1556.0	1569.2	1587.0	1601.1
47.5°	1452.7	1482.8	1499.7	1528.8	1495.9
50°	1377.6	1399.2	1420.8	1451.8	1449.0
52.5°	1282.8	1331.6	1341.9	1358.8	1370.1
55°	1198.3	1233.9	1279.0	1290.3	1265.9
57.5°	1112.8	1140.0	1172.9	1207.6	1204.8
60°	1018.0	1050.8	1091.2	1117.5	1119.4
62.5°	931.6	954.1	992.6	1031.1	1011.4
65°	821.7	853.6	902.4	936.3	933.4
67.5°	724.0	758.8	808.5	852.7	854.6
70°	637.6	656.4	724.0	757.8	766.3
72.5°	531.5	564.4	624.5	662.0	665.8
75°	427.3	461.1	531.5	571.9	568.1
77.5°	321.2	370.0	438.5	486.4	502.4
80°	226.3	270.5	348.4	395.3	421.6
82.5°	142.7	188.8	264.8	323.0	339.0
85°	69.5	118.3	186.9	227.3	241.3
87.5°	17.8	48.8	86.4	106.1	114.6
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	16.19	17.87	16.56	18.18	18.49	16.62	18.30	16.99	18.61	18.92
	3H	17.99	19.51	18.37	19.84	20.20	18.70	20.21	19.07	20.54	20.90
	4H	18.64	20.07	19.04	20.42	20.79	19.54	20.97	19.94	21.32	21.69
	6H	19.05	20.38	19.46	20.74	21.13	20.33	21.66	20.74	22.02	22.41
	8H	19.15	20.42	19.57	20.81	21.21	20.67	21.94	21.10	22.33	22.73
	12H	19.20	20.42	19.63	20.80	21.23	20.97	22.19	21.40	22.57	23.00
4H	2H	16.93	18.36	17.33	18.71	19.09	17.27	18.70	17.66	19.05	19.42
	3H	18.97	20.18	19.38	20.57	20.97	19.58	20.79	19.99	21.18	21.58
	4H	19.74	20.83	20.17	21.25	21.68	20.59	21.68	21.02	22.09	22.53
	6H	20.28	21.24	20.73	21.68	22.13	21.54	22.50	21.99	22.94	23.39
	8H	20.42	21.32	20.88	21.76	22.22	21.96	22.86	22.42	23.30	23.77
	12H	20.50	21.31	20.98	21.79	22.25	22.34	23.15	22.82	23.63	24.10
8H	4H	20.19	21.09	20.65	21.53	22.00	20.93	21.83	21.38	22.27	22.73
	6H	20.87	21.62	21.36	22.11	22.58	22.04	22.79	22.53	23.28	23.75
	8H	21.09	21.76	21.59	22.27	22.75	22.59	23.26	23.09	23.77	24.25
	12H	21.23	21.83	21.74	22.32	22.88	23.11	23.71	23.61	24.19	24.75
12H	4H	20.27	21.08	20.75	21.56	22.03	20.96	21.77	21.44	22.25	22.71
	6H	21.00	21.68	21.51	22.18	22.67	22.11	22.78	22.61	23.29	23.77
	8H	21.30	21.90	21.80	22.39	22.94	22.73	23.33	23.24	23.82	24.38