

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: P1588460

Luminaire Tested: 24CZSP-65-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-65-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

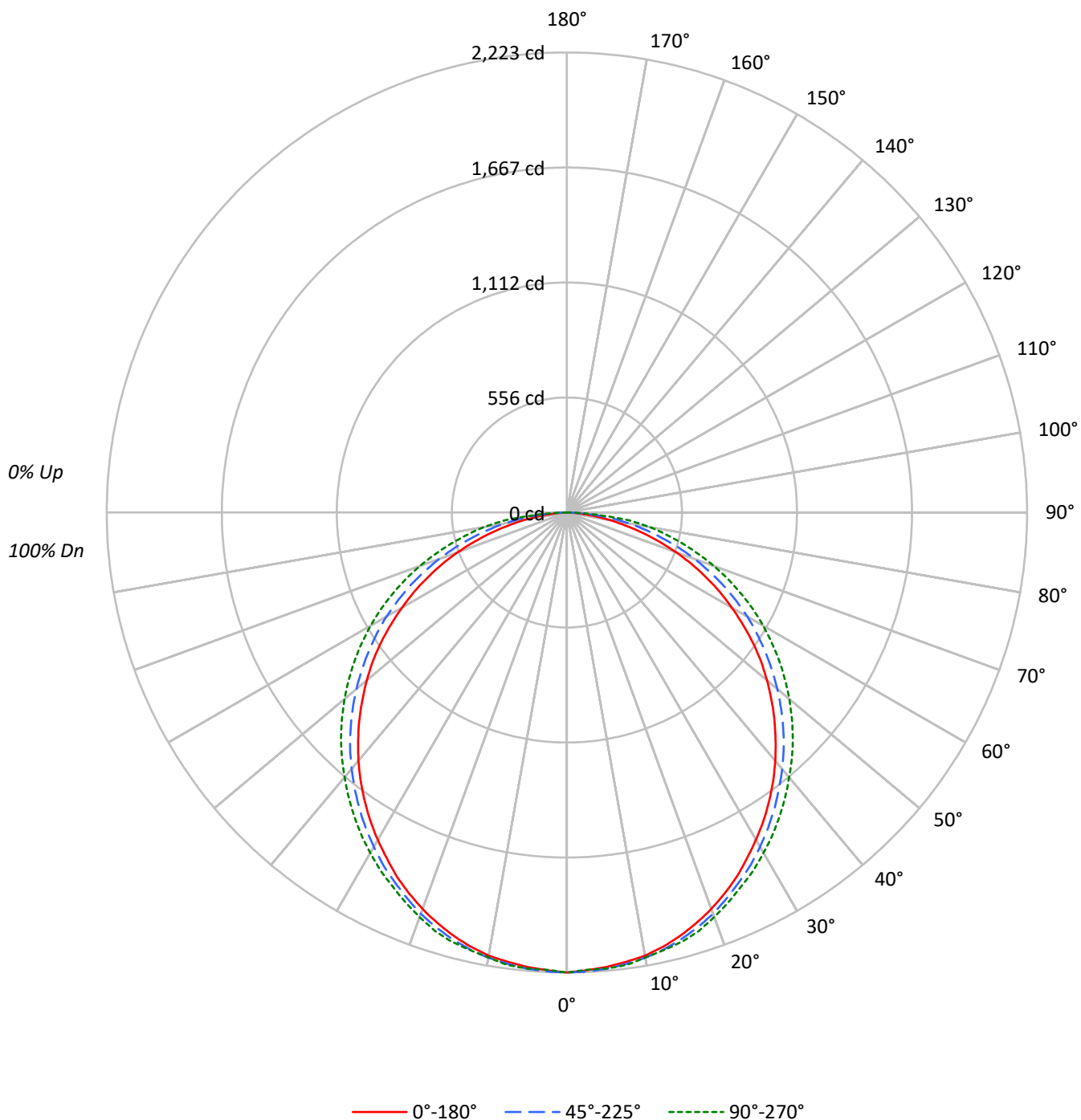
Lumens per Lamp: N/A
Luminaire Lumens: 6489.0 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 47.9
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	106	101	97	93	97	93	90	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69		
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57		
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	26	37	30	25	37	30	25	36	30	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3404	3404	3404
5°	3389	3402	3400
10°	3381	3397	3395
15°	3357	3384	3405
20°	3323	3363	3391
25°	3282	3328	3369
30°	3231	3299	3359
35°	3184	3267	3349
40°	3132	3234	3339
45°	3072	3201	3343
50°	3006	3162	3342
55°	2928	3118	3346
60°	2818	3084	3354
65°	2688	3024	3365
70°	2506	2939	3379
75°	2233	2823	3413
80°	1846	2688	3579
85°	1200	2427	3128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3693 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.2	3.2
10°-20°	601.9	9.3
20°-30°	907.8	14.0
30°-40°	1093.4	16.8
40°-50°	1141.9	17.6
50°-60°	1048.7	16.2
60°-70°	826.0	12.7
70°-80°	506.7	7.8
80°-90°	152.5	2.4
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°	1719.9	26.5
0°-40°	2813.3	43.4
0°-60°	5003.8	77.1
0°-90°	6489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2223	2223	2223	2223	2223	
5°	2204	2207	2213	2220	2211	209
15°	2117	2122	2134	2147	2147	597
25°	1942	1946	1969	1993	1993	894
35°	1703	1712	1747	1783	1791	1065
45°	1418	1434	1478	1529	1544	1093
55°	1096	1116	1168	1233	1253	979
65°	742	768	834	904	928	734
75°	377	407	477	552	577	400
85°	68	94	138	175	178	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2222.7	2222.7	2222.7	2222.7	2222.7
2.5°	2214.1	2218.4	2219.8	2221.2	2211.3
5°	2204.1	2207.0	2212.7	2219.8	2211.3
7.5°	2189.9	2192.8	2199.9	2209.8	2205.6
10°	2174.2	2175.7	2184.2	2191.3	2182.8
12.5°	2148.6	2152.9	2162.9	2168.5	2165.7
15°	2117.3	2121.6	2134.4	2147.2	2147.2
17.5°	2080.3	2086.0	2101.6	2118.7	2120.1
20°	2039.0	2043.2	2063.2	2080.3	2080.3
22.5°	1992.0	1997.7	2017.6	2036.1	2039.0
25°	1942.2	1946.4	1969.2	1993.4	1993.4
27.5°	1883.8	1892.3	1920.8	1945.0	1950.7
30°	1826.8	1833.9	1865.3	1895.2	1899.4
32.5°	1767.0	1775.6	1808.3	1841.1	1848.2
35°	1702.9	1711.5	1747.1	1782.7	1791.2
37.5°	1636.0	1646.0	1683.0	1724.3	1732.8
40°	1566.3	1577.6	1617.5	1661.7	1670.2
42.5°	1492.2	1507.9	1550.6	1596.2	1609.0
45°	1418.2	1433.8	1478.0	1529.2	1543.5
47.5°	1339.9	1358.4	1403.9	1458.0	1473.7
50°	1261.5	1280.1	1327.0	1385.4	1402.5
52.5°	1181.8	1200.3	1248.7	1310.0	1328.5
55°	1096.4	1116.3	1167.6	1233.1	1253.0
57.5°	1008.1	1033.7	1087.8	1154.8	1174.7
60°	919.8	945.4	1006.7	1072.2	1095.0
62.5°	833.0	857.2	919.8	989.6	1013.8
65°	741.8	767.5	834.4	904.2	928.4
67.5°	652.1	677.8	744.7	817.3	842.9
70°	559.6	588.1	656.4	729.0	754.6
72.5°	467.0	496.9	566.7	640.7	664.9
75°	377.3	407.2	477.0	552.5	576.7
77.5°	289.0	321.8	390.1	467.0	489.8
80°	209.3	240.6	304.7	380.2	405.8
82.5°	133.8	160.9	225.0	296.2	314.7
85°	68.3	94.0	138.1	175.1	178.0
87.5°	21.4	29.9	45.6	68.3	69.8
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	15.73	17.40	16.10	17.71	18.02	16.56	18.23	16.93	18.54	18.86
	3H	17.49	19.00	17.87	19.32	19.68	18.68	20.19	19.06	20.51	20.87
	4H	18.11	19.53	18.51	19.88	20.25	19.57	20.99	19.97	21.34	21.71
	6H	18.52	19.84	18.93	20.20	20.59	20.35	21.67	20.76	22.04	22.43
	8H	18.63	19.89	19.05	20.28	20.68	20.67	21.93	21.09	22.32	22.72
	12H	18.68	19.89	19.11	20.27	20.70	20.88	22.09	21.31	22.47	22.90
4H	2H	16.51	17.93	16.90	18.28	18.65	17.15	18.57	17.55	18.92	19.30
	3H	18.48	19.68	18.89	20.08	20.48	19.51	20.71	19.92	21.10	21.50
	4H	19.22	20.31	19.65	20.72	21.15	20.56	21.65	20.99	22.06	22.49
	6H	19.75	20.70	20.20	21.14	21.59	21.51	22.46	21.96	22.90	23.36
	8H	19.89	20.79	20.35	21.23	21.69	21.91	22.80	22.37	23.24	23.71
	12H	19.98	20.78	20.46	21.26	21.72	22.19	22.99	22.66	23.46	23.93
8H	4H	19.68	20.57	20.14	21.01	21.48	20.85	21.74	21.31	22.18	22.65
	6H	20.34	21.08	20.83	21.57	22.04	21.96	22.70	22.45	23.19	23.67
	8H	20.55	21.22	21.06	21.72	22.21	22.47	23.14	22.98	23.65	24.13
	12H	20.69	21.28	21.20	21.77	22.33	22.86	23.45	23.36	23.94	24.50
12H	4H	19.77	20.57	20.25	21.05	21.51	20.87	21.68	21.35	22.15	22.62
	6H	20.47	21.14	20.98	21.65	22.13	22.01	22.68	22.51	23.18	23.67
	8H	20.75	21.34	21.26	21.83	22.39	22.59	23.18	23.09	23.67	24.23