

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: P1588820

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588820
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-A-65VHE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

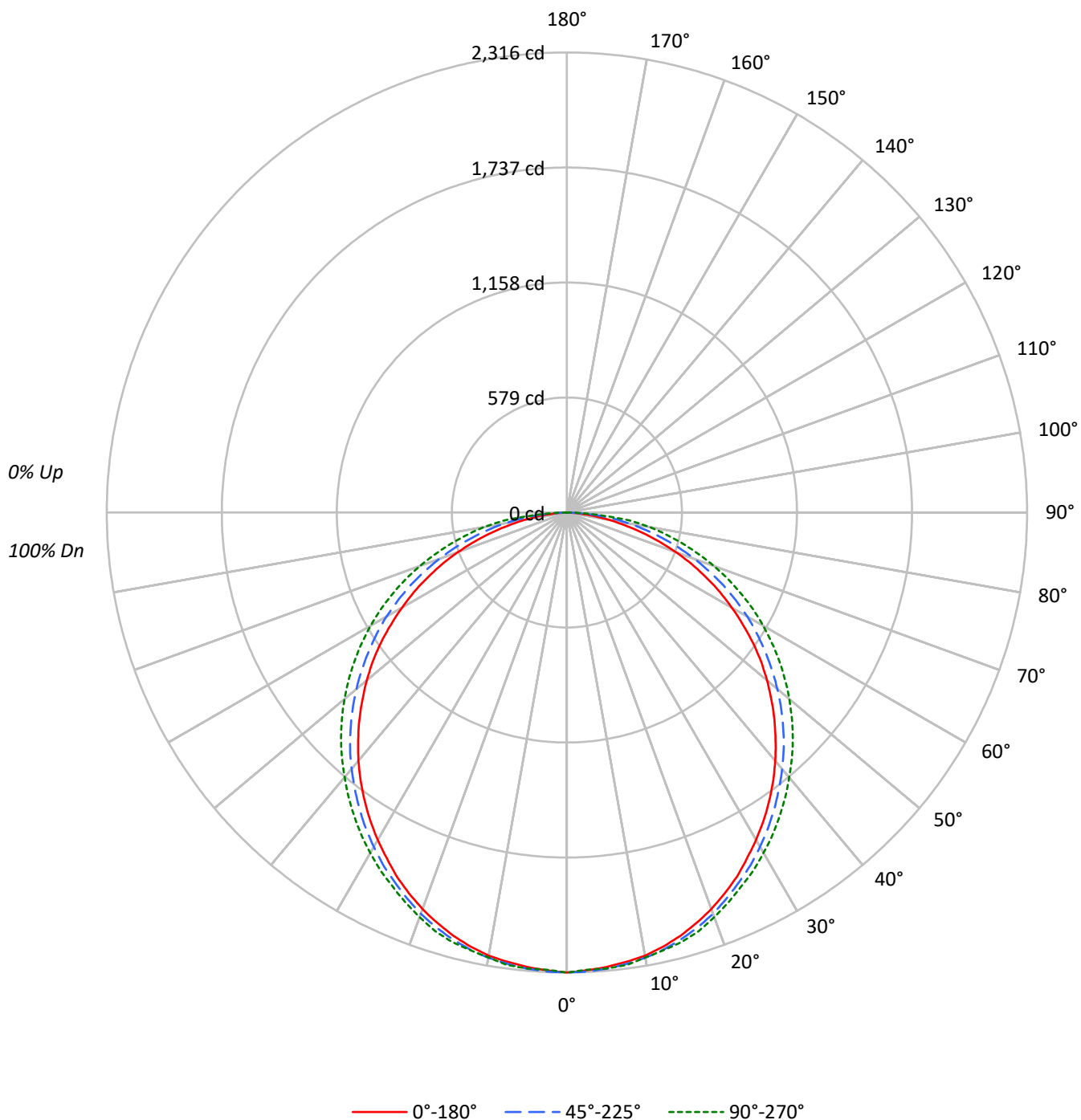
Lumens per Lamp: N/A
Luminaire Lumens: 6761.0 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3547	3547	3547
5°	3531	3544	3542
10°	3523	3539	3537
15°	3498	3526	3547
20°	3463	3504	3533
25°	3420	3467	3510
30°	3366	3437	3500
35°	3318	3404	3490
40°	3263	3370	3479
45°	3201	3335	3483
50°	3132	3295	3482
55°	3050	3248	3486
60°	2936	3213	3495
65°	2801	3151	3506
70°	2611	3063	3521
75°	2326	2941	3555
80°	1924	2800	3729
85°	1251	2529	3258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.0	3.2
10°-20°	627.1	9.3
20°-30°	945.8	14.0
30°-40°	1139.2	16.8
40°-50°	1189.7	17.6
50°-60°	1092.6	16.2
60°-70°	860.6	12.7
70°-80°	528.0	7.8
80°-90°	158.9	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°	1792.0	26.5
0°-40°	2931.2	43.4
0°-60°	5213.6	77.1
0°-90°	6761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6761.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2316	2316	2316	2316	2316	
5°	2296	2300	2305	2313	2304	218
15°	2206	2210	2224	2237	2237	622
25°	2024	2028	2052	2077	2077	931
35°	1774	1783	1820	1857	1866	1110
45°	1478	1494	1540	1593	1608	1139
55°	1142	1163	1216	1285	1306	1020
65°	773	800	869	942	967	765
75°	393	424	497	576	601	417
85°	71	98	144	182	185	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2315.8	2315.8	2315.8	2315.8	2315.8
2.5°	2306.9	2311.4	2312.9	2314.3	2304.0
5°	2296.5	2299.5	2305.4	2312.9	2304.0
7.5°	2281.7	2284.7	2292.1	2302.5	2298.0
10°	2265.4	2266.9	2275.8	2283.2	2274.3
12.5°	2238.7	2243.1	2253.5	2259.4	2256.5
15°	2206.0	2210.5	2223.8	2237.2	2237.2
17.5°	2167.5	2173.4	2189.7	2207.5	2209.0
20°	2124.4	2128.9	2149.7	2167.5	2167.5
22.5°	2075.5	2081.4	2102.2	2121.5	2124.4
25°	2023.6	2028.0	2051.8	2077.0	2077.0
27.5°	1962.7	1971.6	2001.3	2026.5	2032.5
30°	1903.4	1910.8	1943.5	1974.6	1979.1
32.5°	1841.1	1850.0	1884.1	1918.2	1925.6
35°	1774.3	1783.2	1820.3	1857.4	1866.3
37.5°	1704.6	1715.0	1753.6	1796.6	1805.5
40°	1631.9	1643.8	1685.3	1731.3	1740.2
42.5°	1554.8	1571.1	1615.6	1663.1	1676.4
45°	1477.6	1493.9	1539.9	1593.3	1608.2
47.5°	1396.0	1415.3	1462.8	1519.2	1535.5
50°	1314.4	1333.7	1382.7	1443.5	1461.3
52.5°	1231.3	1250.6	1301.1	1364.9	1384.2
55°	1142.3	1163.1	1216.5	1284.8	1305.5
57.5°	1050.4	1077.1	1133.4	1203.2	1223.9
60°	958.4	985.1	1048.9	1117.1	1140.9
62.5°	867.9	893.1	958.4	1031.1	1056.3
65°	772.9	799.6	869.4	942.1	967.3
67.5°	679.5	706.2	775.9	851.6	878.3
70°	583.0	612.7	683.9	759.6	786.3
72.5°	486.6	517.8	590.5	667.6	692.8
75°	393.1	424.3	497.0	575.6	600.8
77.5°	301.2	335.3	406.5	486.6	510.3
80°	218.1	250.7	317.5	396.1	422.8
82.5°	139.5	167.6	234.4	308.6	327.9
85°	71.2	97.9	143.9	182.5	185.4
87.5°	22.3	31.2	47.5	71.2	72.7
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	15.88	17.54	16.24	17.85	18.17	16.71	18.37	17.07	18.68	19.00
	3H	17.63	19.14	18.01	19.47	19.83	18.82	20.33	19.20	20.66	21.02
	4H	18.25	19.67	18.65	20.02	20.40	19.71	21.13	20.11	21.48	21.86
	6H	18.66	19.98	19.07	20.35	20.74	20.49	21.81	20.90	22.18	22.57
	8H	18.77	20.03	19.19	20.42	20.82	20.81	22.08	21.24	22.46	22.86
	12H	18.82	20.03	19.25	20.41	20.84	21.02	22.24	21.45	22.62	23.05
4H	2H	16.65	18.07	17.05	18.42	18.79	17.30	18.72	17.69	19.06	19.44
	3H	18.63	19.82	19.03	20.22	20.62	19.65	20.85	20.06	21.24	21.64
	4H	19.36	20.45	19.79	20.86	21.30	20.70	21.79	21.13	22.20	22.64
	6H	19.89	20.84	20.34	21.28	21.74	21.65	22.61	22.11	23.05	23.50
	8H	20.04	20.93	20.50	21.37	21.84	22.05	22.94	22.51	23.39	23.85
	12H	20.12	20.93	20.60	21.40	21.87	22.33	23.13	22.81	23.61	24.07
8H	4H	19.82	20.71	20.28	21.16	21.62	20.99	21.88	21.45	22.32	22.79
	6H	20.48	21.23	20.97	21.71	22.19	22.10	22.85	22.59	23.33	23.81
	8H	20.69	21.36	21.20	21.87	22.35	22.61	23.28	23.12	23.79	24.27
	12H	20.83	21.42	21.34	21.91	22.47	23.00	23.59	23.51	24.08	24.64
12H	4H	19.91	20.71	20.39	21.19	21.66	21.02	21.82	21.49	22.29	22.76
	6H	20.61	21.28	21.12	21.79	22.27	22.15	22.82	22.66	23.32	23.81
	8H	20.89	21.49	21.40	21.97	22.53	22.73	23.32	23.23	23.81	24.37