

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: P1588898

Luminaire Tested: 24CZSP-A-80-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588898
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-80-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 8000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

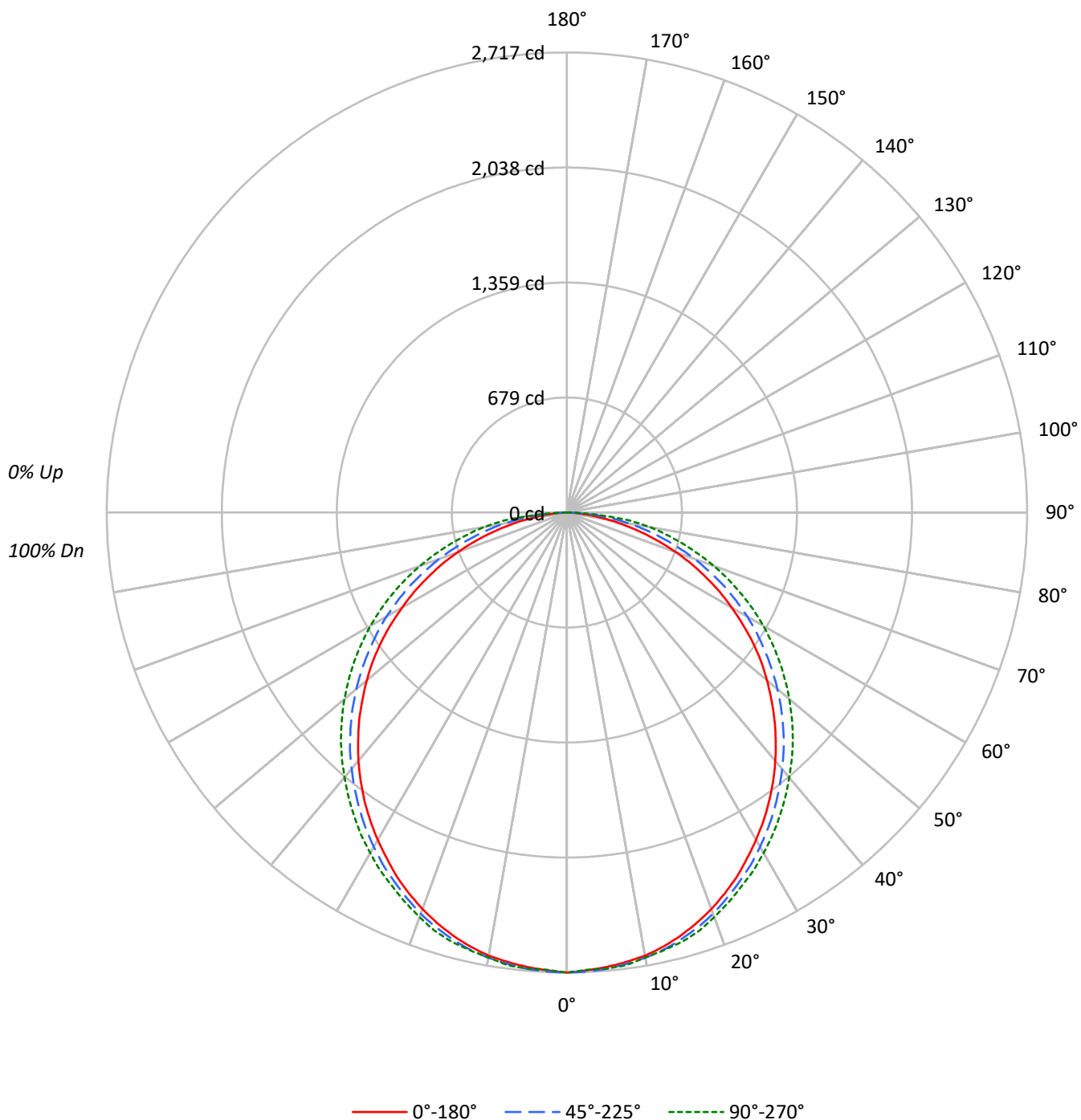
Lumens per Lamp: N/A
Luminaire Lumens: 7933.0 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 62.7
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°	4162	4162	4162
5°	4143	4159	4156
10°	4134	4153	4150
15°	4104	4137	4162
20°	4063	4111	4145
25°	4012	4068	4118
30°	3950	4033	4107
35°	3893	3994	4094
40°	3828	3954	4083
45°	3755	3914	4087
50°	3675	3866	4086
55°	3579	3812	4090
60°	3445	3770	4100
65°	3287	3697	4113
70°	3064	3594	4132
75°	2730	3451	4172
80°	2257	3286	4376
85°	1469	2966	3824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4514 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.0	3.2
10°-20°	735.9	9.3
20°-30°	1109.8	14.0
30°-40°	1336.7	16.8
40°-50°	1396.0	17.6
50°-60°	1282.0	16.2
60°-70°	1009.8	12.7
70°-80°	619.5	7.8
80°-90°	186.4	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°	2102.6	26.5
0°-40°	3439.3	43.4
0°-60°	6117.3	77.1
0°-90°	7933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7933.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2717	2717	2717	2717	2717	
5°	2695	2698	2705	2714	2703	256
15°	2588	2594	2609	2625	2625	730
25°	2374	2380	2407	2437	2437	1093
35°	2082	2092	2136	2179	2190	1302
45°	1734	1753	1807	1870	1887	1337
55°	1340	1365	1427	1508	1532	1197
65°	907	938	1020	1105	1135	897
75°	461	498	583	675	705	489
85°	84	115	169	214	218	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2717.3	2717.3	2717.3	2717.3	2717.3
2.5°	2706.8	2712.0	2713.8	2715.5	2703.3
5°	2694.6	2698.1	2705.1	2713.8	2703.3
7.5°	2677.2	2680.7	2689.4	2701.6	2696.4
10°	2658.1	2659.8	2670.3	2679.0	2668.5
12.5°	2626.7	2632.0	2644.2	2651.1	2647.6
15°	2588.5	2593.7	2609.3	2625.0	2625.0
17.5°	2543.2	2550.2	2569.3	2590.2	2591.9
20°	2492.7	2497.9	2522.3	2543.2	2543.2
22.5°	2435.3	2442.2	2466.6	2489.2	2492.7
25°	2374.3	2379.6	2407.4	2437.0	2437.0
27.5°	2303.0	2313.4	2348.2	2377.8	2384.8
30°	2233.3	2242.0	2280.3	2316.9	2322.1
32.5°	2160.2	2170.7	2210.7	2250.8	2259.5
35°	2081.9	2092.3	2135.9	2179.4	2189.8
37.5°	2000.1	2012.3	2057.5	2108.0	2118.5
40°	1914.8	1928.7	1977.5	2031.4	2041.9
42.5°	1824.3	1843.4	1895.6	1951.3	1967.0
45°	1733.8	1752.9	1806.9	1869.5	1886.9
47.5°	1638.0	1660.6	1716.4	1782.5	1801.6
50°	1542.3	1564.9	1622.4	1693.7	1714.6
52.5°	1444.8	1467.4	1526.6	1601.5	1624.1
55°	1340.4	1364.7	1427.4	1507.5	1531.8
57.5°	1232.4	1263.8	1329.9	1411.7	1436.1
60°	1124.5	1155.8	1230.7	1310.8	1338.6
62.5°	1018.3	1047.9	1124.5	1209.8	1239.4
65°	906.9	938.2	1020.1	1105.4	1134.9
67.5°	797.2	828.6	910.4	999.2	1030.5
70°	684.1	718.9	802.5	891.2	922.6
72.5°	571.0	607.5	692.8	783.3	812.9
75°	461.3	497.8	583.1	675.4	705.0
77.5°	353.4	393.4	477.0	571.0	598.8
80°	255.9	294.2	372.5	464.8	496.1
82.5°	163.6	196.7	275.0	362.1	384.7
85°	83.6	114.9	168.8	214.1	217.6
87.5°	26.1	36.6	55.7	83.6	85.3
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	16.43	18.09	16.80	18.41	18.72	17.26	18.92	17.63	19.24	19.55
	3H	18.19	19.70	18.56	20.02	20.38	19.38	20.89	19.76	21.21	21.57
	4H	18.81	20.23	19.20	20.58	20.95	20.27	21.69	20.67	22.04	22.41
	6H	19.22	20.54	19.63	20.90	21.29	21.05	22.37	21.46	22.73	23.12
	8H	19.33	20.59	19.75	20.98	21.37	21.37	22.63	21.79	23.02	23.42
	12H	19.38	20.59	19.81	20.97	21.40	21.58	22.79	22.01	23.17	23.60
4H	2H	17.20	18.63	17.60	18.97	19.35	17.85	19.27	18.25	19.62	19.99
	3H	19.18	20.38	19.59	20.78	21.18	20.21	21.40	20.61	21.80	22.20
	4H	19.92	21.00	20.35	21.42	21.85	21.26	22.34	21.69	22.76	23.19
	6H	20.45	21.40	20.90	21.84	22.29	22.21	23.16	22.66	23.60	24.06
	8H	20.59	21.49	21.05	21.93	22.39	22.61	23.50	23.07	23.94	24.40
	12H	20.68	21.48	21.16	21.95	22.42	22.88	23.69	23.36	24.16	24.63
8H	4H	20.38	21.27	20.84	21.71	22.17	21.55	22.44	22.01	22.88	23.34
	6H	21.04	21.78	21.53	22.27	22.74	22.66	23.40	23.15	23.89	24.36
	8H	21.25	21.92	21.76	22.42	22.91	23.17	23.84	23.68	24.34	24.83
	12H	21.39	21.98	21.89	22.47	23.03	23.56	24.15	24.06	24.64	25.20
12H	4H	20.47	21.27	20.95	21.74	22.21	21.57	22.37	22.05	22.85	23.32
	6H	21.17	21.84	21.68	22.34	22.83	22.71	23.38	23.21	23.88	24.36
	8H	21.45	22.04	21.95	22.53	23.09	23.28	23.88	23.79	24.37	24.92