

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: P1588568

Luminaire Tested: 24CZSP-80-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588568
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-80-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 8000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

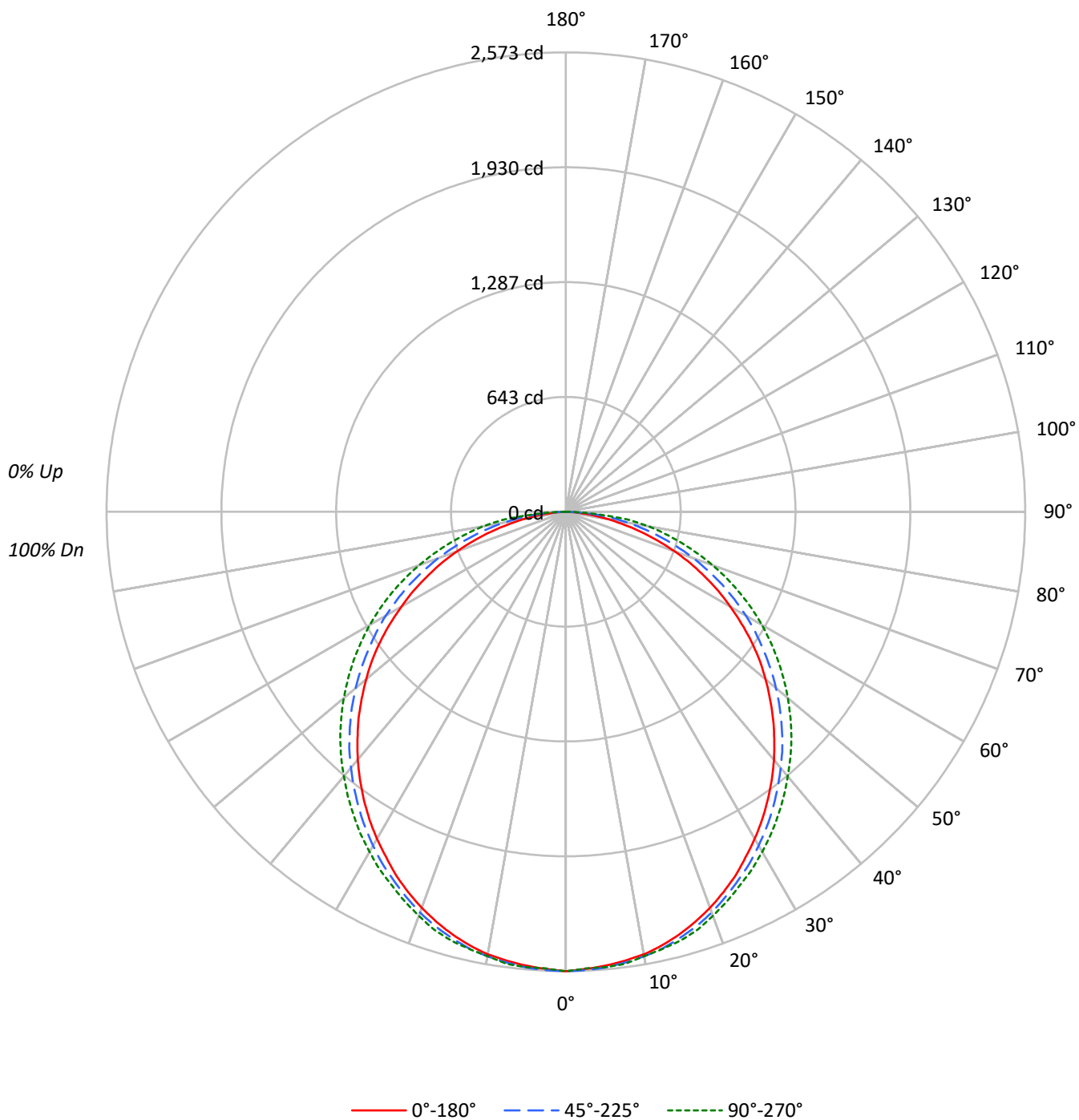
Lumens per Lamp: N/A
Luminaire Lumens: 7513.0 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3941	3941	3941
5°	3924	3939	3936
10°	3915	3933	3930
15°	3887	3918	3942
20°	3848	3894	3926
25°	3800	3853	3900
30°	3741	3819	3889
35°	3687	3782	3878
40°	3626	3744	3866
45°	3557	3707	3871
50°	3480	3661	3869
55°	3390	3610	3874
60°	3262	3570	3883
65°	3113	3501	3896
70°	2901	3403	3913
75°	2585	3268	3951
80°	2137	3112	4144
85°	1390	2810	3622

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4275 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	3.2
10°-20°	696.9	9.3
20°-30°	1051.0	14.0
30°-40°	1265.9	16.8
40°-50°	1322.1	17.6
50°-60°	1214.2	16.2
60°-70°	956.3	12.7
70°-80°	586.7	7.8
80°-90°	176.6	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°	1991.3	26.5
0°-40°	3257.2	43.4
0°-60°	5793.5	77.1
0°-90°	7513.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7513.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2573	2573	2573	2573	2573	
5°	2552	2555	2562	2570	2560	242
15°	2451	2456	2471	2486	2486	691
25°	2249	2254	2280	2308	2308	1035
35°	1972	1982	2023	2064	2074	1233
45°	1642	1660	1711	1771	1787	1266
55°	1269	1292	1352	1428	1451	1133
65°	859	889	966	1047	1075	850
75°	437	472	552	640	668	463
85°	79	109	160	203	206	103
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2573.4	2573.4	2573.4	2573.4	2573.4
2.5°	2563.5	2568.5	2570.1	2571.8	2560.2
5°	2552.0	2555.3	2561.9	2570.1	2560.2
7.5°	2535.5	2538.8	2547.0	2558.6	2553.6
10°	2517.4	2519.0	2528.9	2537.1	2527.2
12.5°	2487.7	2492.6	2504.2	2510.8	2507.5
15°	2451.4	2456.4	2471.2	2486.0	2486.0
17.5°	2408.5	2415.1	2433.3	2453.1	2454.7
20°	2360.7	2365.7	2388.8	2408.5	2408.5
22.5°	2306.3	2312.9	2336.0	2357.4	2360.7
25°	2248.6	2253.6	2280.0	2308.0	2308.0
27.5°	2181.0	2190.9	2223.9	2251.9	2258.5
30°	2115.1	2123.3	2159.6	2194.2	2199.2
32.5°	2045.9	2055.8	2093.7	2131.6	2139.8
35°	1971.7	1981.6	2022.8	2064.0	2073.9
37.5°	1894.2	1905.7	1948.6	1996.4	2006.3
40°	1813.4	1826.6	1872.8	1923.9	1933.8
42.5°	1727.7	1745.8	1795.3	1848.0	1862.9
45°	1642.0	1660.1	1711.2	1770.6	1787.0
47.5°	1551.3	1572.7	1625.5	1688.1	1706.3
50°	1460.6	1482.1	1536.5	1604.0	1623.8
52.5°	1368.3	1389.7	1445.8	1516.7	1538.1
55°	1269.4	1292.5	1351.8	1427.7	1450.7
57.5°	1167.2	1196.9	1259.5	1337.0	1360.1
60°	1065.0	1094.6	1165.5	1241.4	1267.7
62.5°	964.4	992.4	1065.0	1145.7	1173.8
65°	858.9	888.6	966.1	1046.8	1074.9
67.5°	755.0	784.7	862.2	946.3	975.9
70°	647.9	680.9	760.0	844.1	873.7
72.5°	540.7	575.3	656.1	741.9	769.9
75°	436.9	471.5	552.3	639.6	667.7
77.5°	334.7	372.6	451.7	540.7	567.1
80°	242.3	278.6	352.8	440.2	469.8
82.5°	155.0	186.3	260.5	342.9	364.3
85°	79.1	108.8	159.9	202.8	206.1
87.5°	24.7	34.6	52.8	79.1	80.8
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	16.24	17.91	16.61	18.22	18.53	17.07	18.74	17.44	19.05	19.36
	3H	18.00	19.51	18.38	19.83	20.19	19.19	20.70	19.57	21.02	21.38
	4H	18.62	20.04	19.02	20.39	20.76	20.08	21.50	20.48	21.85	22.22
	6H	19.03	20.35	19.44	20.71	21.10	20.86	22.18	21.27	22.54	22.93
	8H	19.14	20.40	19.56	20.79	21.19	21.18	22.44	21.60	22.83	23.23
	12H	19.19	20.40	19.62	20.78	21.21	21.39	22.60	21.82	22.98	23.41
4H	2H	17.02	18.44	17.41	18.78	19.16	17.66	19.08	18.06	19.43	19.81
	3H	18.99	20.19	19.40	20.59	20.99	20.02	21.21	20.43	21.61	22.01
	4H	19.73	20.82	20.16	21.23	21.66	21.07	22.15	21.50	22.57	23.00
	6H	20.26	21.21	20.71	21.65	22.10	22.02	22.97	22.47	23.41	23.87
	8H	20.40	21.30	20.86	21.74	22.20	22.42	23.31	22.88	23.75	24.22
	12H	20.49	21.29	20.97	21.77	22.23	22.69	23.50	23.17	23.97	24.44
8H	4H	20.19	21.08	20.65	21.52	21.99	21.36	22.25	21.82	22.69	23.16
	6H	20.85	21.59	21.34	22.08	22.55	22.47	23.21	22.96	23.70	24.17
	8H	21.06	21.73	21.57	22.23	22.72	22.98	23.65	23.49	24.15	24.64
	12H	21.20	21.79	21.70	22.28	22.84	23.37	23.96	23.87	24.45	25.01
12H	4H	20.28	21.08	20.76	21.56	22.02	21.38	22.19	21.86	22.66	23.13
	6H	20.98	21.65	21.49	22.16	22.64	22.52	23.19	23.02	23.69	24.18
	8H	21.26	21.85	21.76	22.34	22.90	23.09	23.69	23.60	24.18	24.73