

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: P1588812

Luminaire Tested: 24CZSP-A-65VHE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588812
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-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 7000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

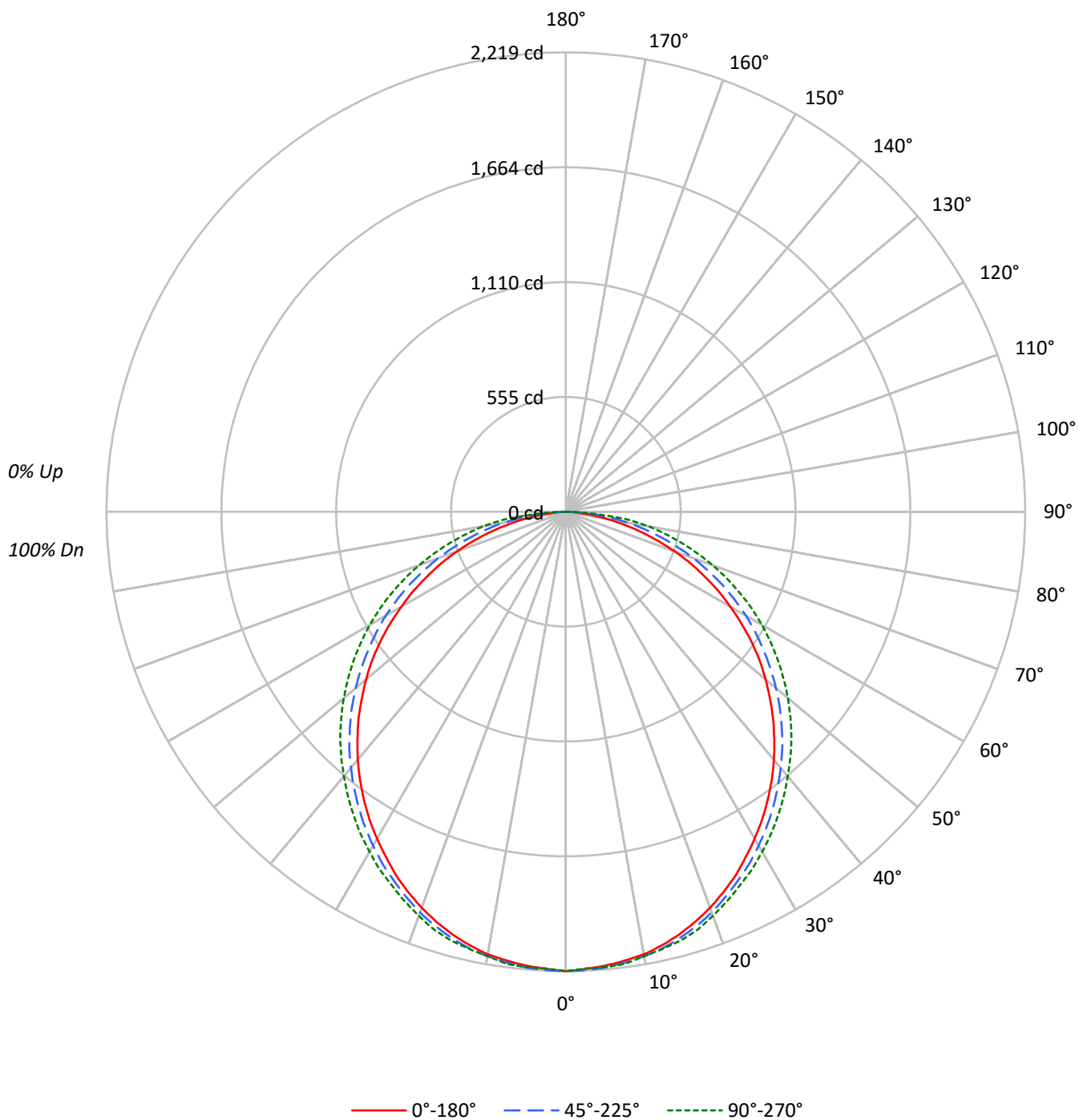
Lumens per Lamp: N/A
Luminaire Lumens: 6479.0 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3399	3399	3399
5°	3384	3397	3395
10°	3376	3392	3390
15°	3352	3379	3399
20°	3318	3358	3386
25°	3277	3323	3364
30°	3226	3294	3354
35°	3179	3262	3344
40°	3127	3229	3334
45°	3067	3196	3338
50°	3001	3157	3337
55°	2923	3113	3341
60°	2813	3079	3349
65°	2684	3019	3359
70°	2502	2935	3374
75°	2229	2819	3407
80°	1843	2683	3574
85°	1199	2423	3123

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3687 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.9	3.2
10°-20°	601.0	9.3
20°-30°	906.4	14.0
30°-40°	1091.7	16.8
40°-50°	1140.1	17.6
50°-60°	1047.1	16.2
60°-70°	824.7	12.7
70°-80°	505.9	7.8
80°-90°	152.3	2.3
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°	1717.2	26.5
0°-40°	2808.9	43.4
0°-60°	4996.1	77.1
0°-90°	6479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6479.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2201	2204	2209	2216	2208	209
15°	2114	2118	2131	2144	2144	596
25°	1939	1943	1966	1990	1990	893
35°	1700	1709	1744	1780	1788	1063
45°	1416	1432	1476	1527	1541	1092
55°	1095	1115	1166	1231	1251	977
65°	741	766	833	903	927	733
75°	377	407	476	552	576	399
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°	2219.2	2219.2	2219.2	2219.2	2219.2
2.5°	2210.7	2215.0	2216.4	2217.8	2207.9
5°	2200.7	2203.6	2209.3	2216.4	2207.9
7.5°	2186.5	2189.4	2196.5	2206.4	2202.2
10°	2170.9	2172.3	2180.8	2188.0	2179.4
12.5°	2145.3	2149.6	2159.5	2165.2	2162.4
15°	2114.0	2118.3	2131.1	2143.9	2143.9
17.5°	2077.1	2082.7	2098.4	2115.4	2116.9
20°	2035.8	2040.1	2060.0	2077.1	2077.1
22.5°	1988.9	1994.6	2014.5	2033.0	2035.8
25°	1939.2	1943.4	1966.2	1990.3	1990.3
27.5°	1880.9	1889.4	1917.8	1942.0	1947.7
30°	1824.0	1831.1	1862.4	1892.2	1896.5
32.5°	1764.3	1772.8	1805.5	1838.2	1845.3
35°	1700.3	1708.9	1744.4	1779.9	1788.5
37.5°	1633.5	1643.5	1680.4	1721.6	1730.2
40°	1563.8	1575.2	1615.0	1659.1	1667.6
42.5°	1489.9	1505.6	1548.2	1593.7	1606.5
45°	1416.0	1431.6	1475.7	1526.9	1541.1
47.5°	1337.8	1356.3	1401.8	1455.8	1471.4
50°	1259.6	1278.1	1325.0	1383.3	1400.3
52.5°	1180.0	1198.5	1246.8	1307.9	1326.4
55°	1094.7	1114.6	1165.8	1231.2	1251.1
57.5°	1006.5	1032.1	1086.2	1153.0	1172.9
60°	918.4	944.0	1005.1	1070.5	1093.3
62.5°	831.7	855.8	918.4	988.1	1012.2
65°	740.7	766.3	833.1	902.8	926.9
67.5°	651.1	676.7	743.5	816.0	841.6
70°	558.7	587.2	655.4	727.9	753.5
72.5°	466.3	496.2	565.8	639.8	663.9
75°	376.7	406.6	476.3	551.6	575.8
77.5°	288.6	321.3	389.5	466.3	489.1
80°	209.0	240.3	304.2	379.6	405.2
82.5°	133.6	160.6	224.6	295.7	314.2
85°	68.2	93.8	137.9	174.9	177.7
87.5°	21.3	29.9	45.5	68.2	69.7
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	15.73	17.39	16.09	17.71	18.02	16.56	18.22	16.92	18.54	18.85
	3H	17.48	18.99	17.86	19.32	19.68	18.68	20.18	19.05	20.51	20.87
	4H	18.10	19.53	18.50	19.87	20.25	19.56	20.99	19.96	21.33	21.71
	6H	18.51	19.83	18.92	20.20	20.59	20.35	21.67	20.76	22.03	22.42
	8H	18.62	19.88	19.05	20.27	20.67	20.67	21.93	21.09	22.32	22.71
	12H	18.67	19.88	19.10	20.27	20.69	20.88	22.09	21.31	22.47	22.90
4H	2H	16.50	17.92	16.90	18.27	18.64	17.15	18.57	17.54	18.92	19.29
	3H	18.48	19.68	18.89	20.07	20.47	19.50	20.70	19.91	21.10	21.50
	4H	19.21	20.30	19.65	20.71	21.15	20.55	21.64	20.98	22.05	22.49
	6H	19.74	20.70	20.20	21.14	21.59	21.51	22.46	21.96	22.90	23.35
	8H	19.89	20.78	20.35	21.22	21.69	21.90	22.80	22.36	23.24	23.70
	12H	19.97	20.78	20.45	21.25	21.72	22.18	22.98	22.66	23.46	23.93
8H	4H	19.67	20.57	20.13	21.01	21.47	20.84	21.74	21.30	22.18	22.64
	6H	20.33	21.08	20.83	21.57	22.04	21.95	22.70	22.45	23.19	23.66
	8H	20.55	21.21	21.05	21.72	22.20	22.47	23.14	22.97	23.64	24.12
	12H	20.68	21.28	21.19	21.77	22.32	22.85	23.44	23.36	23.93	24.49
12H	4H	19.76	20.57	20.24	21.04	21.51	20.87	21.67	21.35	22.15	22.61
	6H	20.47	21.14	20.97	21.64	22.13	22.00	22.67	22.51	23.18	23.66
	8H	20.74	21.34	21.25	21.83	22.38	22.58	23.17	23.09	23.66	24.22