

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: P1588818

Luminaire Tested: 24CZSP-A-65VHE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588818
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-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

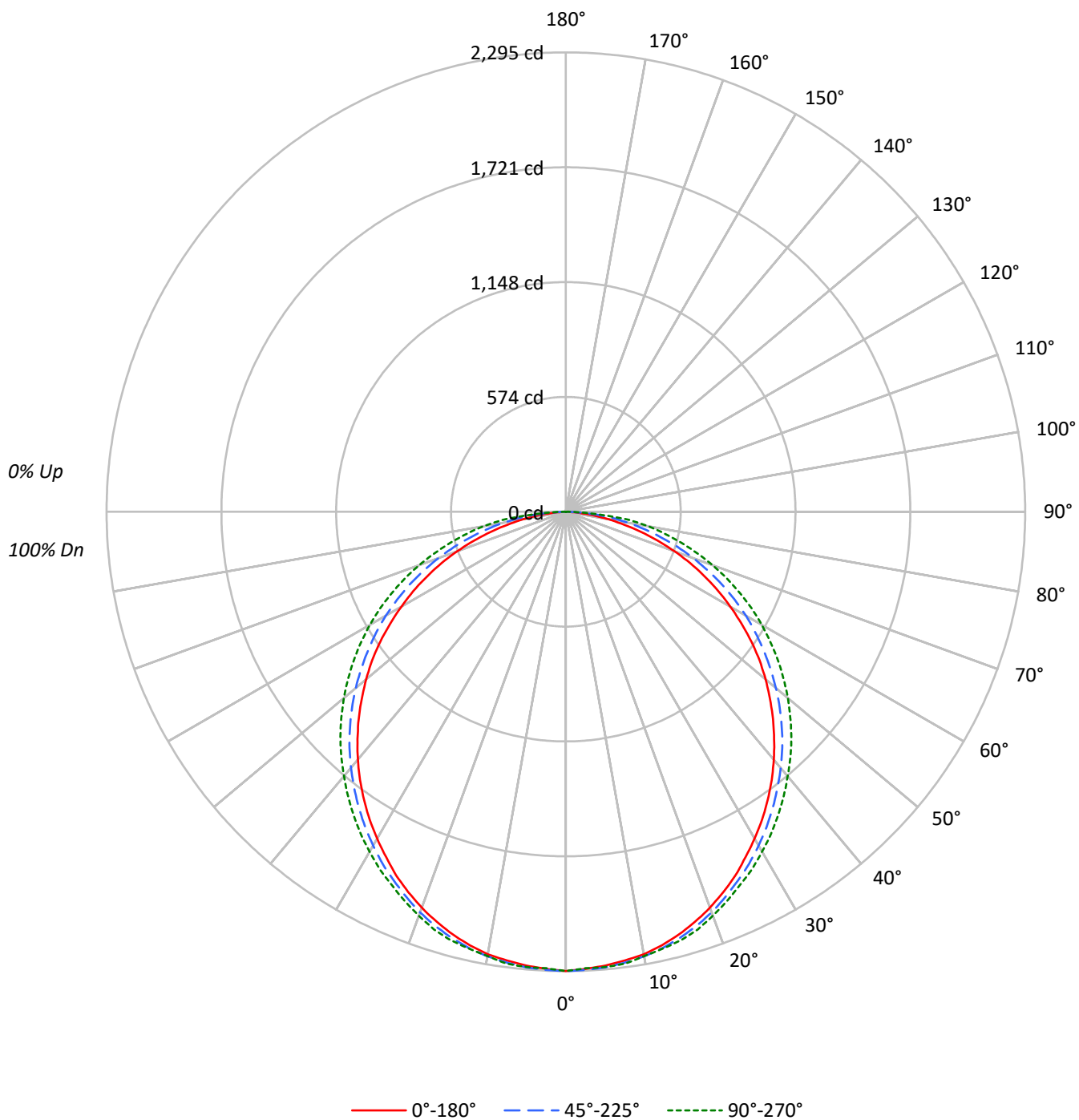
Lumens per Lamp: N/A
Luminaire Lumens: 6699.0 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3514	3514	3514
5°	3499	3512	3510
10°	3491	3507	3505
15°	3466	3494	3515
20°	3431	3472	3500
25°	3388	3436	3478
30°	3335	3406	3468
35°	3287	3372	3458
40°	3233	3339	3447
45°	3171	3305	3451
50°	3103	3264	3450
55°	3023	3219	3454
60°	2909	3184	3463
65°	2775	3122	3473
70°	2587	3034	3489
75°	2305	2914	3523
80°	1906	2775	3695
85°	1241	2506	3228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3812 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.0	3.2
10°-20°	621.4	9.3
20°-30°	937.1	14.0
30°-40°	1128.8	16.8
40°-50°	1178.8	17.6
50°-60°	1082.6	16.2
60°-70°	852.7	12.7
70°-80°	523.1	7.8
80°-90°	157.4	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°	1775.5	26.5
0°-40°	2904.3	43.4
0°-60°	5165.8	77.1
0°-90°	6699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2295	2295	2295	2295	2295	
5°	2276	2278	2284	2292	2283	216
15°	2186	2190	2203	2217	2217	616
25°	2005	2009	2033	2058	2058	923
35°	1758	1767	1804	1840	1849	1100
45°	1464	1480	1526	1579	1593	1129
55°	1132	1152	1205	1273	1294	1010
65°	766	792	861	933	958	758
75°	390	420	492	570	595	413
85°	71	97	143	181	184	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2294.6	2294.6	2294.6	2294.6	2294.6
2.5°	2285.8	2290.2	2291.6	2293.1	2282.8
5°	2275.5	2278.4	2284.3	2291.6	2282.8
7.5°	2260.8	2263.7	2271.1	2281.4	2276.9
10°	2244.6	2246.1	2254.9	2262.2	2253.4
12.5°	2218.1	2222.6	2232.8	2238.7	2235.8
15°	2185.8	2190.2	2203.4	2216.7	2216.7
17.5°	2147.6	2153.5	2169.6	2187.3	2188.8
20°	2105.0	2109.4	2130.0	2147.6	2147.6
22.5°	2056.5	2062.3	2082.9	2102.0	2105.0
25°	2005.0	2009.4	2032.9	2057.9	2057.9
27.5°	1944.7	1953.6	1983.0	2007.9	2013.8
30°	1885.9	1893.3	1925.6	1956.5	1960.9
32.5°	1824.2	1833.0	1866.8	1900.6	1908.0
35°	1758.1	1766.9	1803.6	1840.4	1849.2
37.5°	1689.0	1699.3	1737.5	1780.1	1788.9
40°	1616.9	1628.7	1669.9	1715.4	1724.2
42.5°	1540.5	1556.7	1600.8	1647.8	1661.0
45°	1464.1	1480.2	1525.8	1578.7	1593.4
47.5°	1383.2	1402.3	1449.4	1505.2	1521.4
50°	1302.4	1321.5	1370.0	1430.3	1447.9
52.5°	1220.1	1239.2	1289.1	1352.4	1371.5
55°	1131.9	1152.4	1205.4	1273.0	1293.6
57.5°	1040.7	1067.2	1123.0	1192.1	1212.7
60°	949.6	976.0	1039.3	1106.9	1130.4
62.5°	859.9	884.9	949.6	1021.6	1046.6
65°	765.8	792.3	861.4	933.4	958.4
67.5°	673.2	699.7	768.8	843.7	870.2
70°	577.7	607.1	677.6	752.6	779.1
72.5°	482.1	513.0	585.0	661.5	686.5
75°	389.5	420.4	492.4	570.3	595.3
77.5°	298.4	332.2	402.8	482.1	505.7
80°	216.1	248.4	314.6	392.5	418.9
82.5°	138.2	166.1	232.3	305.7	324.9
85°	70.6	97.0	142.6	180.8	183.7
87.5°	22.0	30.9	47.0	70.6	72.0
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	15.84	17.51	16.21	17.82	18.14	16.67	18.34	17.04	18.65	18.97
	3H	17.60	19.11	17.98	19.43	19.79	18.79	20.30	19.17	20.62	20.98
	4H	18.22	19.64	18.62	19.99	20.36	19.68	21.10	20.08	21.45	21.82
	6H	18.63	19.95	19.04	20.31	20.70	20.46	21.78	20.87	22.15	22.54
	8H	18.74	20.00	19.16	20.39	20.79	20.78	22.04	21.21	22.43	22.83
	12H	18.79	20.00	19.22	20.38	20.81	20.99	22.20	21.42	22.58	23.01
4H	2H	16.62	18.04	17.01	18.39	18.76	17.26	18.69	17.66	19.03	19.41
	3H	18.59	19.79	19.00	20.19	20.59	19.62	20.82	20.03	21.21	21.61
	4H	19.33	20.42	19.76	20.83	21.26	20.67	21.76	21.10	22.17	22.60
	6H	19.86	20.81	20.31	21.25	21.70	21.62	22.57	22.07	23.01	23.47
	8H	20.01	20.90	20.46	21.34	21.80	22.02	22.91	22.48	23.35	23.82
	12H	20.09	20.89	20.57	21.37	21.84	22.30	23.10	22.78	23.57	24.04
8H	4H	19.79	20.68	20.25	21.12	21.59	20.96	21.85	21.42	22.29	22.76
	6H	20.45	21.20	20.94	21.68	22.16	22.07	22.82	22.56	23.30	23.78
	8H	20.66	21.33	21.17	21.83	22.32	22.58	23.25	23.09	23.76	24.24
	12H	20.80	21.39	21.31	21.88	22.44	22.97	23.56	23.47	24.05	24.61
12H	4H	19.88	20.68	20.36	21.16	21.63	20.98	21.79	21.46	22.26	22.73
	6H	20.58	21.25	21.09	21.76	22.24	22.12	22.79	22.62	23.29	23.78
	8H	20.86	21.45	21.37	21.94	22.50	22.70	23.29	23.20	23.78	24.34