

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: P1588819

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-65VHE-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

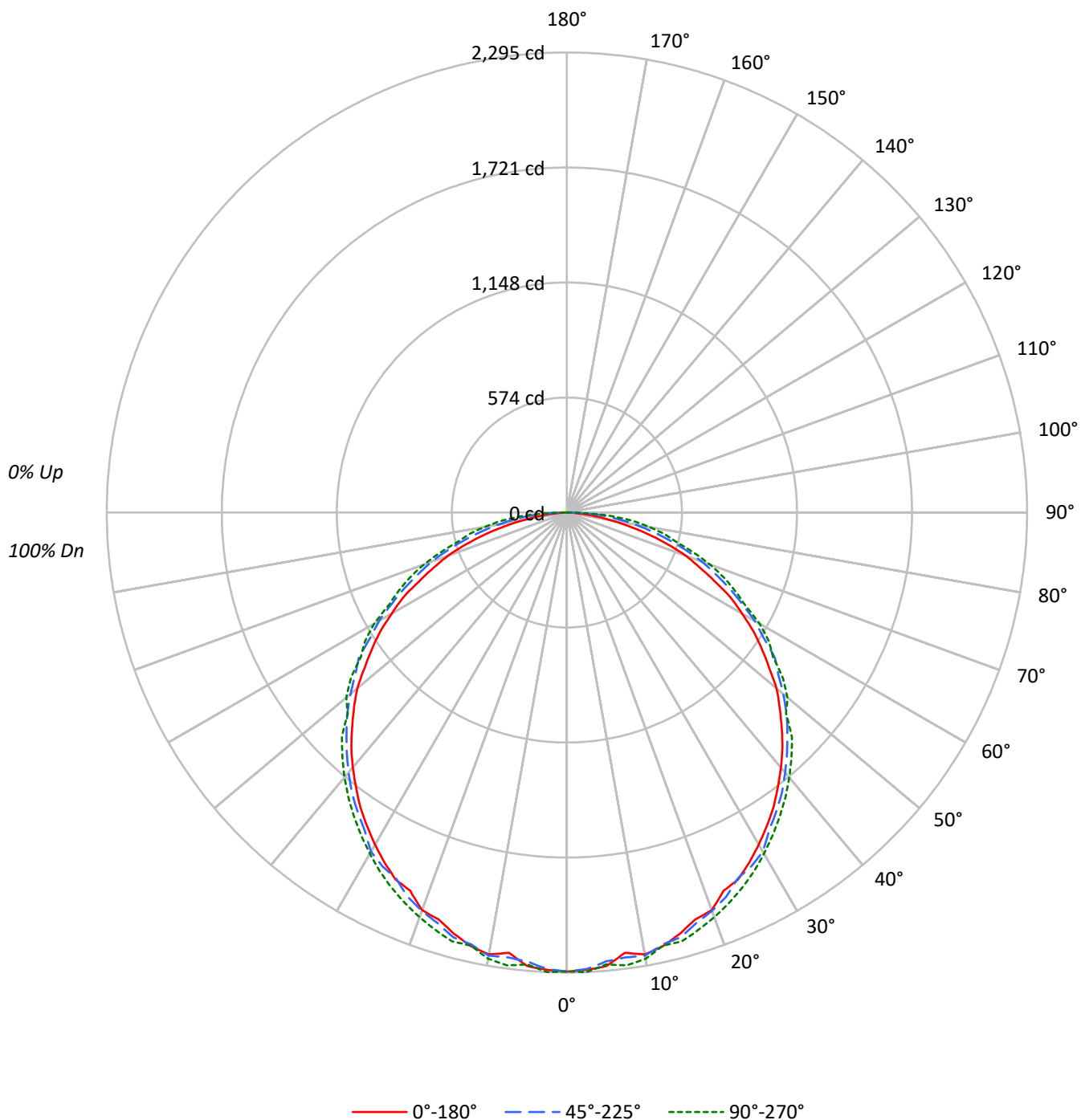
Lumens per Lamp: N/A
Luminaire Lumens: 6836.0 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3507	3507	3507
5°	3492	3456	3479
10°	3482	3491	3515
15°	3450	3478	3512
20°	3441	3447	3502
25°	3414	3404	3492
30°	3383	3456	3476
35°	3358	3405	3461
40°	3321	3386	3449
45°	3279	3368	3436
50°	3253	3354	3421
55°	3170	3384	3349
60°	3090	3312	3398
65°	2951	3241	3352
70°	2829	3213	3400
75°	2506	3117	3331
80°	1978	3045	3685
85°	1211	3255	4202

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4202 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.3	3.2
10°-20°	617.7	9.0
20°-30°	941.2	13.8
30°-40°	1145.6	16.8
40°-50°	1201.2	17.6
50°-60°	1112.8	16.3
60°-70°	877.5	12.8
70°-80°	542.8	7.9
80°-90°	180.8	2.6
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°	1775.2	26.0
0°-40°	2920.8	42.7
0°-60°	5234.9	76.6
0°-90°	6836.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6836.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2290	2290	2290	2290	2290	
5°	2271	2270	2248	2297	2263	214
15°	2176	2187	2193	2177	2215	614
25°	2020	2031	2014	2070	2067	928
35°	1796	1813	1821	1855	1851	1122
45°	1514	1542	1555	1572	1586	1170
55°	1187	1223	1267	1278	1254	1062
65°	814	846	894	928	925	810
75°	423	457	527	567	563	447
85°	69	117	185	225	239	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2289.9	2289.9	2289.9	2289.9	2289.9
2.5°	2283.4	2297.4	2279.7	2294.6	2294.6
5°	2271.3	2270.4	2248.1	2297.4	2263.0
7.5°	2215.5	2254.6	2238.8	2299.3	2278.8
10°	2238.8	2228.5	2244.4	2285.3	2260.2
12.5°	2215.5	2232.3	2207.1	2186.7	2212.7
15°	2175.5	2186.7	2193.2	2177.4	2214.6
17.5°	2128.0	2169.9	2147.6	2140.1	2182.9
20°	2111.3	2113.2	2115.0	2153.2	2148.5
22.5°	2042.4	2079.7	2075.0	2105.7	2109.4
25°	2020.1	2031.3	2014.5	2070.4	2066.6
27.5°	1968.9	1993.1	1990.3	2008.9	2019.2
30°	1913.1	1937.3	1954.0	1933.6	1965.2
32.5°	1855.4	1896.3	1877.7	1915.9	1909.4
35°	1795.9	1812.6	1821.0	1855.4	1850.8
37.5°	1727.0	1755.8	1760.5	1812.6	1790.3
40°	1660.9	1689.8	1693.5	1724.2	1725.1
42.5°	1591.1	1605.1	1624.6	1660.0	1657.2
45°	1513.9	1541.8	1554.9	1572.5	1586.5
47.5°	1439.5	1469.3	1486.0	1514.8	1482.3
50°	1365.0	1386.4	1407.8	1438.5	1435.8
52.5°	1271.1	1319.4	1329.7	1346.4	1357.6
55°	1187.3	1222.7	1267.3	1278.5	1254.3
57.5°	1102.6	1129.6	1162.2	1196.6	1193.8
60°	1008.7	1041.2	1081.2	1107.3	1109.2
62.5°	923.1	945.4	983.5	1021.7	1002.1
65°	814.2	845.8	894.2	927.7	924.9
67.5°	717.4	751.8	801.2	844.9	846.8
70°	631.8	650.4	717.4	750.9	759.3
72.5°	526.7	559.2	618.8	656.0	659.7
75°	423.4	456.9	526.7	566.7	562.9
77.5°	318.2	366.6	434.5	482.0	497.8
80°	224.2	268.0	345.2	391.7	417.8
82.5°	141.4	187.0	262.4	320.1	335.9
85°	68.9	117.2	185.2	225.2	239.1
87.5°	17.7	48.4	85.6	105.1	113.5
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	16.16	17.83	16.53	18.15	18.46	16.59	18.26	16.96	18.58	18.89
	3H	17.96	19.48	18.34	19.80	20.16	18.67	20.18	19.04	20.51	20.87
	4H	18.61	20.04	19.00	20.39	20.76	19.51	20.94	19.91	21.29	21.66
	6H	19.02	20.35	19.43	20.71	21.10	20.30	21.63	20.71	21.99	22.38
	8H	19.12	20.39	19.54	20.78	21.18	20.64	21.91	21.06	22.30	22.70
	12H	19.16	20.38	19.59	20.77	21.19	20.94	22.16	21.37	22.54	22.97
4H	2H	16.90	18.33	17.30	18.68	19.05	17.23	18.67	17.63	19.01	19.39
	3H	18.94	20.14	19.34	20.54	20.94	19.55	20.76	19.96	21.15	21.55
	4H	19.71	20.80	20.14	21.22	21.65	20.55	21.65	20.99	22.06	22.50
	6H	20.24	21.20	20.70	21.64	22.10	21.51	22.47	21.96	22.91	23.36
	8H	20.39	21.29	20.85	21.73	22.19	21.93	22.83	22.39	23.27	23.74
	12H	20.47	21.28	20.95	21.75	22.22	22.31	23.12	22.79	23.60	24.06
8H	4H	20.16	21.06	20.62	21.50	21.96	20.89	21.79	21.35	22.24	22.70
	6H	20.84	21.59	21.33	22.08	22.55	22.01	22.76	22.50	23.25	23.72
	8H	21.05	21.73	21.56	22.24	22.72	22.56	23.23	23.06	23.74	24.22
	12H	21.20	21.80	21.71	22.29	22.85	23.07	23.67	23.58	24.16	24.72
12H	4H	20.24	21.05	20.72	21.53	22.00	20.93	21.74	21.41	22.21	22.68
	6H	20.97	21.65	21.48	22.15	22.64	22.07	22.75	22.58	23.26	23.74
	8H	21.27	21.87	21.77	22.35	22.91	22.70	23.30	23.20	23.79	24.35