

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: P1588817

Luminaire Tested: 24CZSP-A-65VHE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588817
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

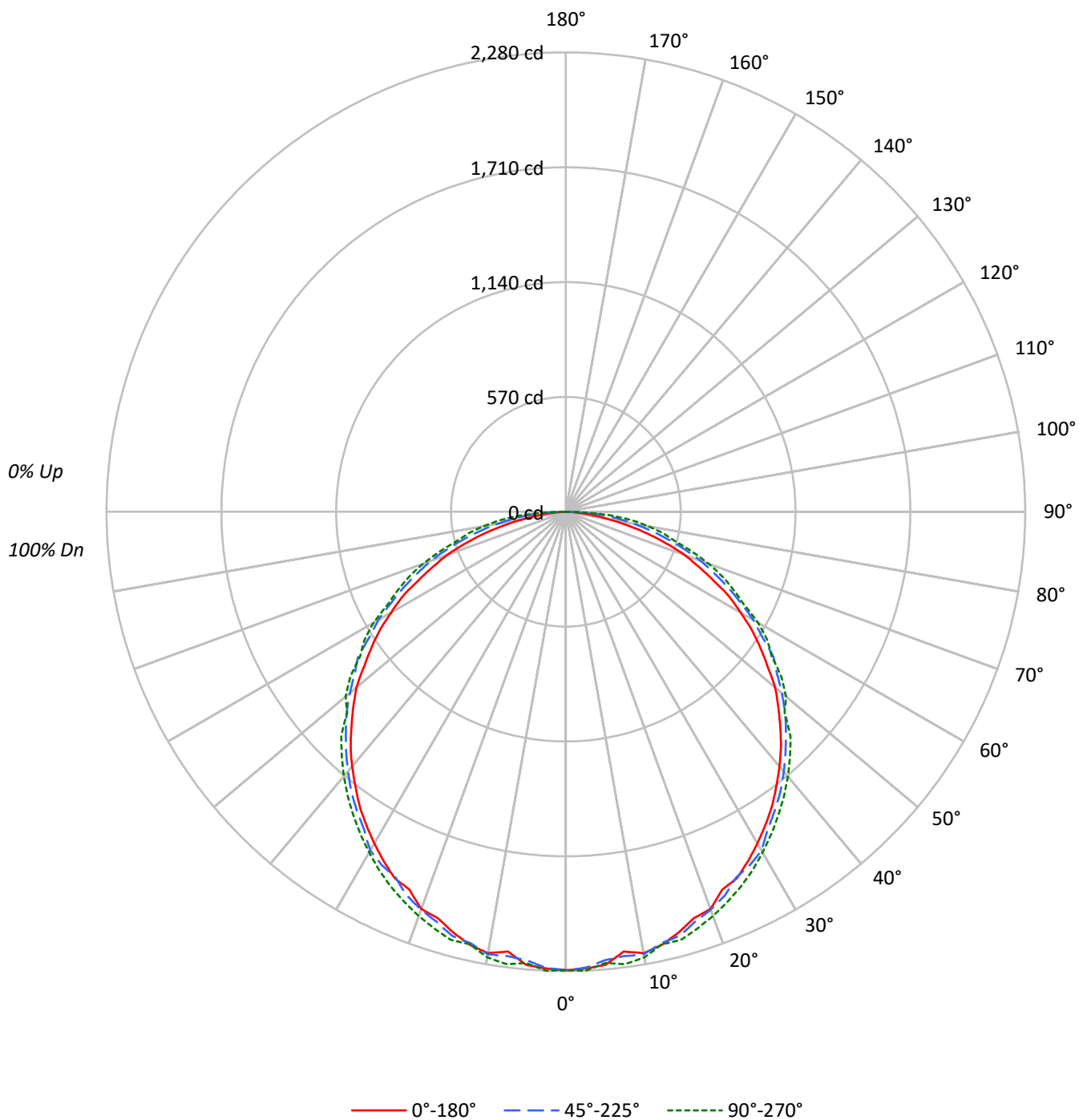
Lumens per Lamp: N/A
Luminaire Lumens: 6792.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3485	3485	3485
5°	3470	3434	3457
10°	3460	3468	3492
15°	3427	3455	3489
20°	3419	3425	3479
25°	3392	3383	3470
30°	3362	3434	3453
35°	3336	3383	3438
40°	3299	3364	3427
45°	3258	3346	3414
50°	3232	3333	3399
55°	3150	3362	3328
60°	3070	3291	3376
65°	2932	3220	3331
70°	2811	3192	3378
75°	2490	3097	3310
80°	1965	3025	3661
85°	1202	3234	4175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4175 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	3.2
10°-20°	613.8	9.0
20°-30°	935.1	13.8
30°-40°	1138.3	16.8
40°-50°	1193.5	17.6
50°-60°	1105.6	16.3
60°-70°	871.9	12.8
70°-80°	539.4	7.9
80°-90°	179.6	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°	1763.8	26.0
0°-40°	2902.1	42.7
0°-60°	5201.2	76.6
0°-90°	6792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2275	2275	2275	2275	2275	
5°	2257	2256	2234	2283	2248	213
15°	2162	2173	2179	2163	2200	610
25°	2007	2018	2002	2057	2053	922
35°	1784	1801	1809	1844	1839	1115
45°	1504	1532	1545	1562	1576	1162
55°	1180	1215	1259	1270	1246	1055
65°	809	840	888	922	919	805
75°	421	454	523	563	559	444
85°	68	116	184	224	238	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2275.2	2275.2	2275.2	2275.2	2275.2
2.5°	2268.7	2282.6	2265.0	2279.8	2279.8
5°	2256.7	2255.8	2233.6	2282.6	2248.4
7.5°	2201.2	2240.1	2224.4	2284.5	2264.1
10°	2224.4	2214.2	2229.9	2270.6	2245.6
12.5°	2201.2	2217.9	2192.9	2172.6	2198.5
15°	2161.5	2172.6	2179.1	2163.3	2200.3
17.5°	2114.3	2155.9	2133.8	2126.4	2168.9
20°	2097.7	2099.6	2101.4	2139.3	2134.7
22.5°	2029.3	2066.3	2061.6	2092.2	2095.9
25°	2007.1	2018.2	2001.6	2057.0	2053.3
27.5°	1956.3	1980.3	1977.5	1996.0	2006.2
30°	1900.8	1924.8	1941.5	1921.1	1952.6
32.5°	1843.5	1884.1	1865.7	1903.6	1897.1
35°	1784.3	1800.9	1809.3	1843.5	1838.8
37.5°	1715.9	1744.5	1749.2	1800.9	1778.7
40°	1650.2	1678.9	1682.6	1713.1	1714.0
42.5°	1580.9	1594.8	1614.2	1649.3	1646.5
45°	1504.2	1531.9	1544.8	1562.4	1576.3
47.5°	1430.2	1459.8	1476.4	1505.1	1472.7
50°	1356.3	1377.5	1398.8	1429.3	1426.5
52.5°	1262.9	1310.9	1321.1	1337.8	1348.9
55°	1179.7	1214.8	1259.2	1270.3	1246.2
57.5°	1095.5	1122.4	1154.7	1188.9	1186.1
60°	1002.2	1034.5	1074.3	1100.2	1102.0
62.5°	917.1	939.3	977.2	1015.1	995.7
65°	808.9	840.4	888.5	921.7	919.0
67.5°	712.8	747.0	796.0	839.5	841.3
70°	627.7	646.2	712.8	746.1	754.4
72.5°	523.3	555.6	614.8	651.8	655.5
75°	420.7	453.9	523.3	563.0	559.3
77.5°	316.2	364.3	431.7	478.9	494.6
80°	222.8	266.3	343.0	389.2	415.1
82.5°	140.5	185.8	260.7	318.0	333.7
85°	68.4	116.5	184.0	223.7	237.6
87.5°	17.6	48.1	85.1	104.5	112.8
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	16.14	17.81	16.51	18.13	18.44	16.57	18.24	16.94	18.56	18.87
	3H	17.94	19.46	18.32	19.78	20.14	18.64	20.16	19.02	20.49	20.85
	4H	18.58	20.02	18.98	20.36	20.74	19.49	20.92	19.88	21.26	21.64
	6H	18.99	20.32	19.40	20.69	21.08	20.27	21.60	20.68	21.97	22.36
	8H	19.10	20.37	19.52	20.76	21.15	20.62	21.89	21.04	22.28	22.68
	12H	19.14	20.36	19.57	20.74	21.17	20.92	22.14	21.35	22.52	22.95
4H	2H	16.88	18.31	17.28	18.66	19.03	17.21	18.64	17.61	18.99	19.37
	3H	18.91	20.12	19.32	20.52	20.92	19.53	20.73	19.94	21.13	21.53
	4H	19.69	20.78	20.12	21.19	21.63	20.53	21.63	20.96	22.04	22.47
	6H	20.22	21.18	20.67	21.62	22.07	21.48	22.44	21.94	22.88	23.34
	8H	20.36	21.27	20.82	21.71	22.17	21.91	22.81	22.37	23.25	23.71
	12H	20.45	21.26	20.92	21.73	22.20	22.29	23.10	22.77	23.57	24.04
8H	4H	20.13	21.04	20.59	21.48	21.94	20.87	21.77	21.33	22.21	22.68
	6H	20.81	21.57	21.31	22.05	22.53	21.99	22.74	22.48	23.23	23.70
	8H	21.03	21.71	21.54	22.21	22.70	22.53	23.21	23.04	23.71	24.20
	12H	21.18	21.78	21.68	22.27	22.83	23.05	23.65	23.56	24.14	24.70
12H	4H	20.22	21.03	20.70	21.50	21.97	20.90	21.72	21.38	22.19	22.66
	6H	20.95	21.63	21.45	22.13	22.61	22.05	22.73	22.56	23.23	23.72
	8H	21.24	21.84	21.75	22.33	22.89	22.68	23.28	23.18	23.77	24.32