

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: P1588816

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588816
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-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

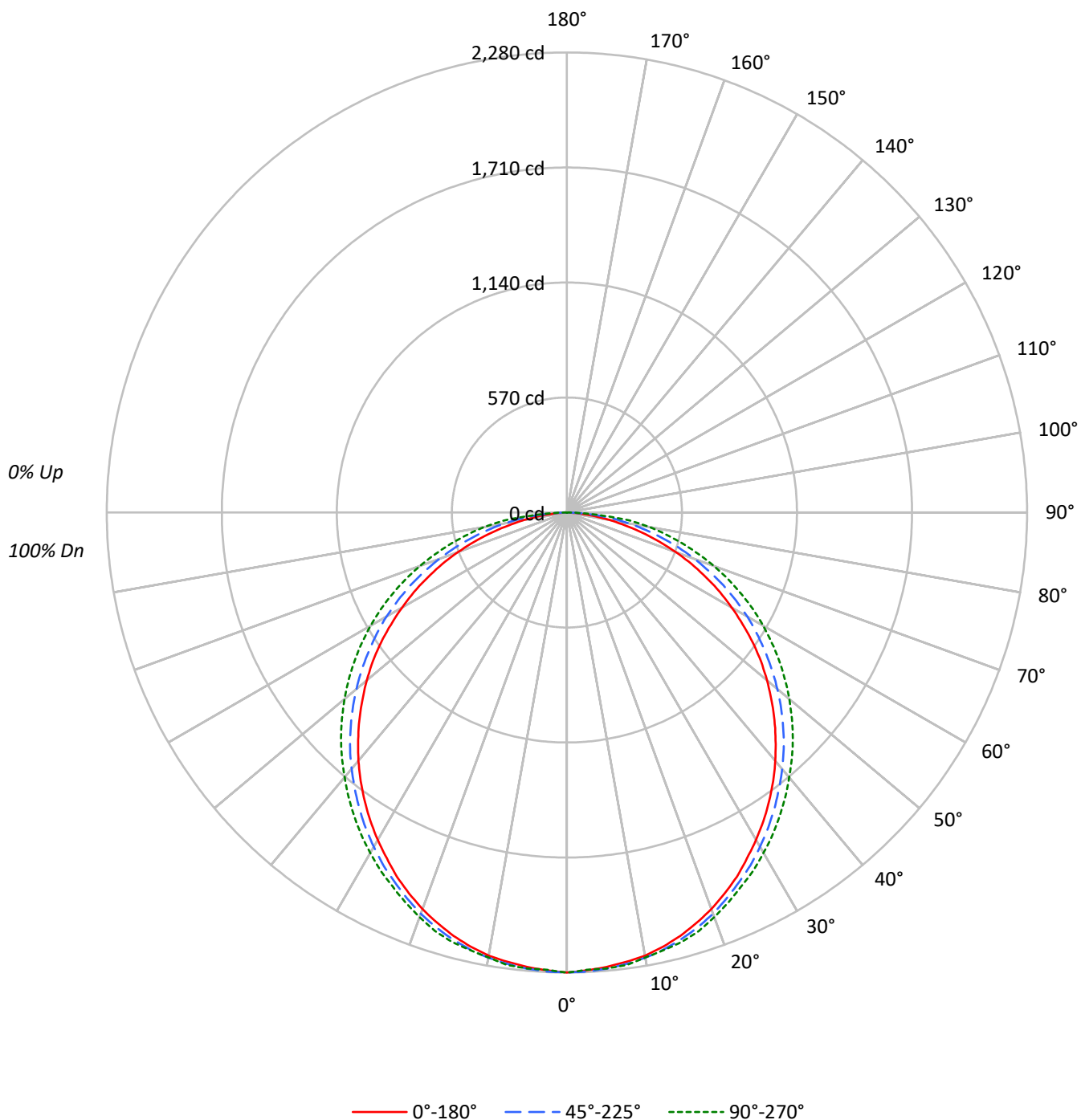
Lumens per Lamp: N/A
Luminaire Lumens: 6656.0 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3492	3492	3492
5°	3476	3489	3487
10°	3469	3484	3482
15°	3444	3471	3492
20°	3409	3449	3478
25°	3367	3414	3455
30°	3314	3384	3446
35°	3266	3351	3435
40°	3212	3317	3425
45°	3151	3284	3429
50°	3083	3243	3428
55°	3003	3198	3432
60°	2890	3163	3440
65°	2758	3102	3451
70°	2570	3015	3467
75°	2290	2896	3500
80°	1894	2756	3671
85°	1232	2490	3209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3788 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.6	3.2
10°-20°	617.4	9.3
20°-30°	931.1	14.0
30°-40°	1121.5	16.8
40°-50°	1171.3	17.6
50°-60°	1075.7	16.2
60°-70°	847.2	12.7
70°-80°	519.8	7.8
80°-90°	156.4	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°	1764.1	26.5
0°-40°	2885.7	43.4
0°-60°	5132.6	77.1
0°-90°	6656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6656.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2280	2280	2280	2280	2280	
5°	2261	2264	2270	2277	2268	215
15°	2172	2176	2189	2202	2202	612
25°	1992	1996	2020	2045	2045	917
35°	1747	1756	1792	1829	1837	1093
45°	1455	1471	1516	1569	1583	1122
55°	1125	1145	1198	1265	1285	1004
65°	761	787	856	927	952	753
75°	387	418	489	567	592	410
85°	70	96	142	180	183	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2279.9	2279.9	2279.9	2279.9	2279.9
2.5°	2271.1	2275.5	2276.9	2278.4	2268.2
5°	2260.9	2263.8	2269.6	2276.9	2268.2
7.5°	2246.3	2249.2	2256.5	2266.7	2262.3
10°	2230.2	2231.7	2240.4	2247.7	2239.0
12.5°	2203.9	2208.3	2218.5	2224.4	2221.4
15°	2171.8	2176.2	2189.3	2202.5	2202.5
17.5°	2133.8	2139.6	2155.7	2173.2	2174.7
20°	2091.5	2095.8	2116.3	2133.8	2133.8
22.5°	2043.3	2049.1	2069.5	2088.5	2091.5
25°	1992.1	1996.5	2019.9	2044.7	2044.7
27.5°	1932.3	1941.0	1970.2	1995.1	2000.9
30°	1873.8	1881.1	1913.3	1943.9	1948.3
32.5°	1812.5	1821.3	1854.8	1888.4	1895.7
35°	1746.8	1755.5	1792.0	1828.6	1837.3
37.5°	1678.1	1688.4	1726.3	1768.7	1777.4
40°	1606.6	1618.2	1659.1	1704.4	1713.2
42.5°	1530.6	1546.7	1590.5	1637.2	1650.4
45°	1454.7	1470.7	1516.0	1568.6	1583.2
47.5°	1374.3	1393.3	1440.1	1495.6	1511.6
50°	1294.0	1313.0	1361.2	1421.1	1438.6
52.5°	1212.2	1231.2	1280.9	1343.7	1362.7
55°	1124.6	1145.0	1197.6	1264.8	1285.2
57.5°	1034.0	1060.3	1115.8	1184.5	1204.9
60°	943.5	969.8	1032.6	1099.8	1123.1
62.5°	854.4	879.2	943.5	1015.1	1039.9
65°	760.9	787.2	855.9	927.4	952.3
67.5°	668.9	695.2	763.8	838.3	864.6
70°	574.0	603.2	673.3	747.8	774.1
72.5°	479.0	509.7	581.3	657.2	682.1
75°	387.0	417.7	489.3	566.7	591.5
77.5°	296.5	330.1	400.2	479.0	502.4
80°	214.7	246.8	312.5	390.0	416.2
82.5°	137.3	165.0	230.8	303.8	322.8
85°	70.1	96.4	141.7	179.6	182.6
87.5°	21.9	30.7	46.7	70.1	71.6
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	15.82	17.48	16.19	17.80	18.11	16.65	18.31	17.02	18.63	18.94
	3H	17.58	19.09	17.95	19.41	19.77	18.77	20.28	19.15	20.60	20.96
	4H	18.20	19.62	18.59	19.97	20.34	19.66	21.08	20.06	21.43	21.80
	6H	18.61	19.93	19.02	20.29	20.68	20.44	21.76	20.85	22.12	22.51
	8H	18.72	19.98	19.14	20.37	20.76	20.76	22.02	21.18	22.41	22.81
	12H	18.77	19.98	19.20	20.36	20.79	20.97	22.18	21.40	22.56	22.99
4H	2H	16.59	18.02	16.99	18.36	18.74	17.24	18.66	17.64	19.01	19.38
	3H	18.57	19.77	18.98	20.17	20.57	19.60	20.79	20.00	21.19	21.59
	4H	19.31	20.39	19.74	20.81	21.24	20.65	21.73	21.08	22.15	22.58
	6H	19.84	20.79	20.29	21.23	21.68	21.60	22.55	22.05	22.99	23.45
	8H	19.98	20.88	20.44	21.32	21.78	22.00	22.89	22.46	23.33	23.79
	12H	20.07	20.87	20.55	21.34	21.81	22.27	23.08	22.75	23.55	24.02
8H	4H	19.77	20.66	20.23	21.10	21.56	20.94	21.83	21.40	22.27	22.73
	6H	20.43	21.17	20.92	21.66	22.13	22.05	22.79	22.54	23.28	23.75
	8H	20.64	21.31	21.15	21.81	22.30	22.56	23.23	23.07	23.73	24.22
	12H	20.78	21.37	21.28	21.86	22.42	22.95	23.54	23.45	24.03	24.59
12H	4H	19.86	20.66	20.34	21.13	21.60	20.96	21.76	21.44	22.24	22.71
	6H	20.56	21.23	21.07	21.73	22.22	22.10	22.77	22.60	23.27	23.75
	8H	20.84	21.43	21.34	21.92	22.48	22.67	23.27	23.18	23.76	24.31