

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: P1588830

Luminaire Tested: 24CZSP-A-65VHE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588830
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

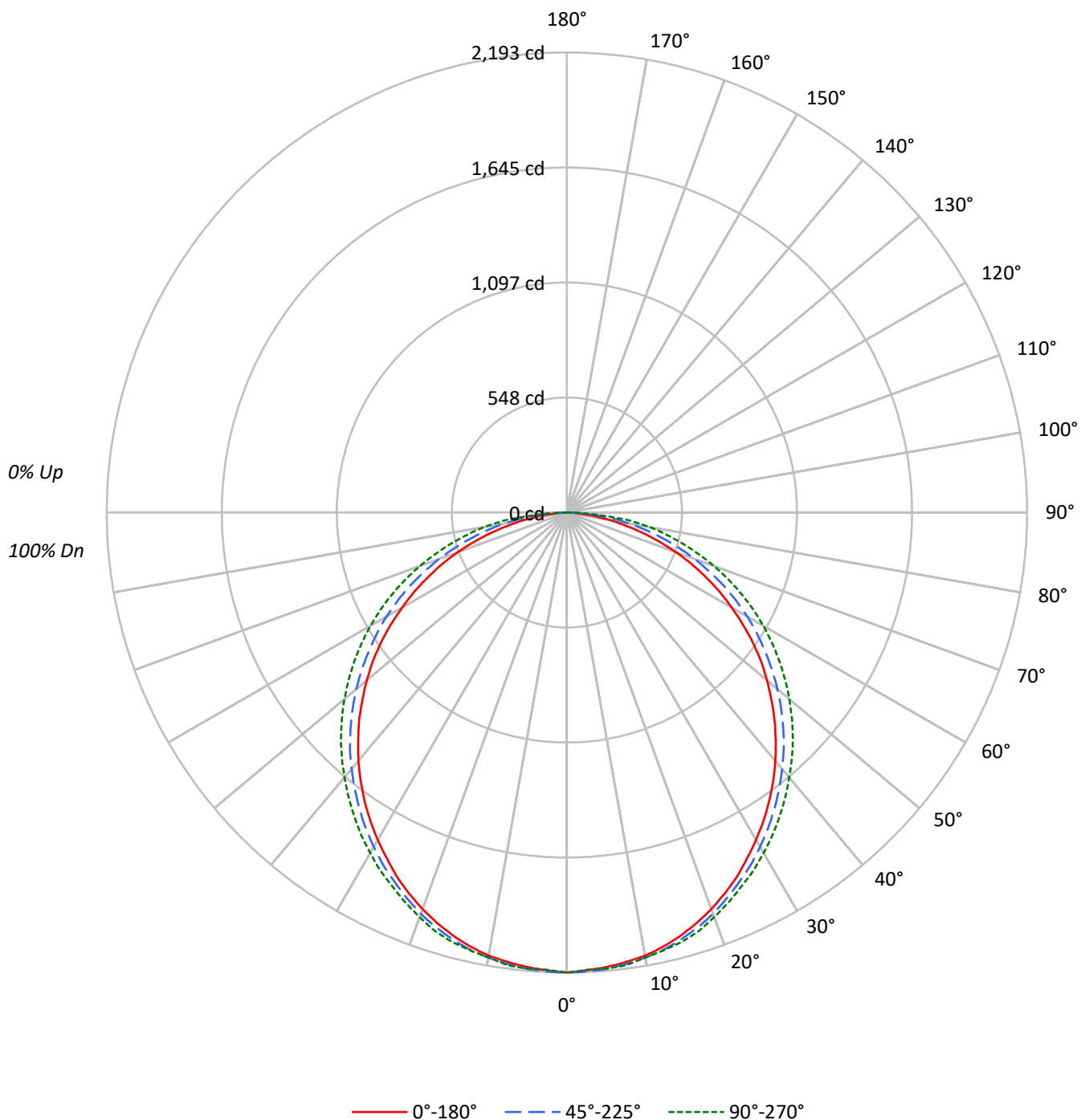
Lumens per Lamp: N/A
Luminaire Lumens: 6403.0 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3359	3359	3359
5°	3344	3357	3355
10°	3337	3352	3350
15°	3313	3340	3360
20°	3279	3318	3346
25°	3239	3284	3324
30°	3188	3255	3315
35°	3142	3223	3305
40°	3090	3191	3295
45°	3031	3159	3299
50°	2966	3120	3298
55°	2889	3076	3302
60°	2780	3043	3310
65°	2653	2984	3320
70°	2473	2901	3334
75°	2203	2785	3367
80°	1821	2652	3532
85°	1184	2395	3086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3643 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.4	3.2
10°-20°	593.9	9.3
20°-30°	895.7	14.0
30°-40°	1078.9	16.8
40°-50°	1126.7	17.6
50°-60°	1034.8	16.2
60°-70°	815.0	12.7
70°-80°	500.0	7.8
80°-90°	150.5	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°	1697.1	26.5
0°-40°	2776.0	43.4
0°-60°	4937.5	77.1
0°-90°	6403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6403.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2193	2193	2193	2193	2193	
5°	2175	2178	2183	2190	2182	207
15°	2089	2093	2106	2119	2119	589
25°	1916	1921	1943	1967	1967	882
35°	1680	1689	1724	1759	1768	1051
45°	1399	1415	1458	1509	1523	1079
55°	1082	1102	1152	1217	1236	966
65°	732	757	823	892	916	724
75°	372	402	471	545	569	395
85°	67	93	136	173	176	88
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2193.2	2193.2	2193.2	2193.2	2193.2
2.5°	2184.8	2189.0	2190.4	2191.8	2182.0
5°	2174.9	2177.7	2183.4	2190.4	2182.0
7.5°	2160.9	2163.7	2170.7	2180.6	2176.3
10°	2145.4	2146.8	2155.3	2162.3	2153.9
12.5°	2120.1	2124.4	2134.2	2139.8	2137.0
15°	2089.2	2093.4	2106.1	2118.7	2118.7
17.5°	2052.7	2058.3	2073.8	2090.6	2092.0
20°	2012.0	2016.2	2035.8	2052.7	2052.7
22.5°	1965.6	1971.2	1990.9	2009.1	2012.0
25°	1916.4	1920.6	1943.1	1967.0	1967.0
27.5°	1858.8	1867.2	1895.3	1919.2	1924.8
30°	1802.6	1809.6	1840.5	1870.0	1874.3
32.5°	1743.6	1752.0	1784.3	1816.7	1823.7
35°	1680.4	1688.8	1723.9	1759.1	1767.5
37.5°	1614.3	1624.2	1660.7	1701.4	1709.9
40°	1545.5	1556.7	1596.1	1639.6	1648.1
42.5°	1472.4	1487.9	1530.0	1575.0	1587.6
45°	1399.4	1414.8	1458.4	1509.0	1523.0
47.5°	1322.1	1340.4	1385.3	1438.7	1454.2
50°	1244.8	1263.1	1309.5	1367.1	1383.9
52.5°	1166.1	1184.4	1232.2	1292.6	1310.9
55°	1081.8	1101.5	1152.1	1216.7	1236.4
57.5°	994.7	1020.0	1073.4	1139.5	1159.1
60°	907.6	932.9	993.3	1058.0	1080.4
62.5°	821.9	845.8	907.6	976.5	1000.4
65°	732.0	757.3	823.3	892.2	916.1
67.5°	643.5	668.8	734.8	806.5	831.8
70°	552.2	580.3	647.7	719.4	744.6
72.5°	460.8	490.3	559.2	632.2	656.1
75°	372.3	401.8	470.7	545.1	569.0
77.5°	285.2	317.5	385.0	460.8	483.3
80°	206.5	237.4	300.7	375.1	400.4
82.5°	132.1	158.8	222.0	292.2	310.5
85°	67.4	92.7	136.3	172.8	175.6
87.5°	21.1	29.5	45.0	67.4	68.8
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	15.69	17.35	16.05	17.66	17.98	16.52	18.18	16.88	18.49	18.81
	3H	17.44	18.95	17.82	19.28	19.64	18.63	20.14	19.01	20.47	20.83
	4H	18.06	19.48	18.46	19.83	20.21	19.52	20.95	19.92	21.29	21.67
	6H	18.47	19.79	18.88	20.16	20.55	20.30	21.63	20.72	21.99	22.38
	8H	18.58	19.84	19.00	20.23	20.63	20.62	21.89	21.05	22.28	22.67
	12H	18.63	19.84	19.06	20.22	20.65	20.84	22.05	21.26	22.43	22.86
4H	2H	16.46	17.88	16.86	18.23	18.60	17.11	18.53	17.50	18.88	19.25
	3H	18.44	19.63	18.85	20.03	20.43	19.46	20.66	19.87	21.06	21.46
	4H	19.17	20.26	19.60	20.67	21.11	20.51	21.60	20.94	22.01	22.45
	6H	19.70	20.65	20.15	21.09	21.55	21.47	22.42	21.92	22.86	23.31
	8H	19.85	20.74	20.31	21.18	21.65	21.86	22.75	22.32	23.20	23.66
	12H	19.93	20.74	20.41	21.21	21.68	22.14	22.94	22.62	23.42	23.89
8H	4H	19.63	20.52	20.09	20.97	21.43	20.80	21.69	21.26	22.14	22.60
	6H	20.29	21.04	20.79	21.52	22.00	21.91	22.66	22.41	23.14	23.62
	8H	20.50	21.17	21.01	21.68	22.16	22.43	23.09	22.93	23.60	24.08
	12H	20.64	21.24	21.15	21.73	22.28	22.81	23.40	23.32	23.89	24.45
12H	4H	19.72	20.53	20.20	21.00	21.47	20.83	21.63	21.31	22.10	22.57
	6H	20.43	21.10	20.93	21.60	22.08	21.96	22.63	22.47	23.14	23.62
	8H	20.70	21.30	21.21	21.79	22.34	22.54	23.13	23.04	23.62	24.18