

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: P1588813

Luminaire Tested: 24CZSP-A-65VHE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588813
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 7000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

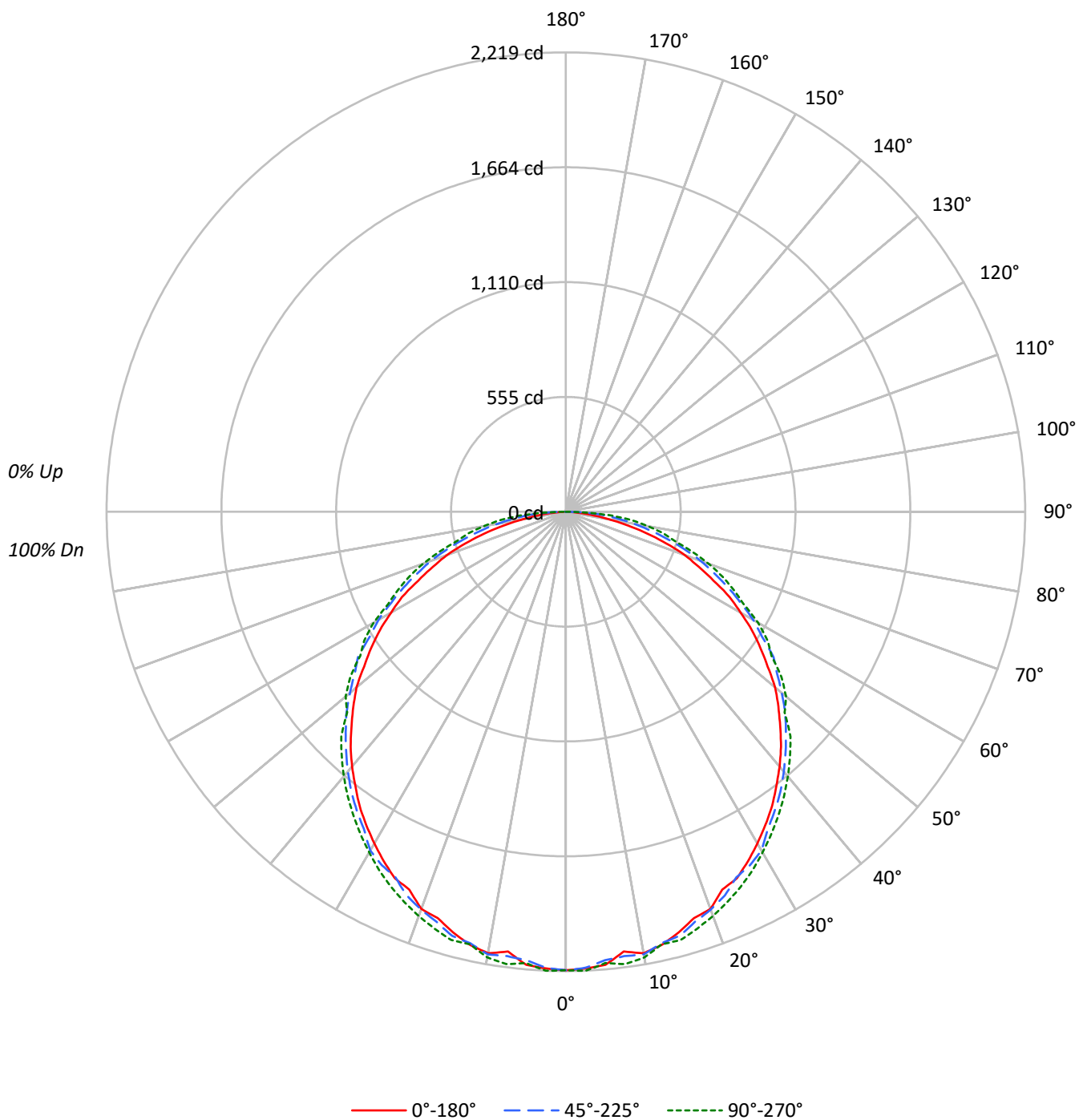
Lumens per Lamp: N/A
Luminaire Lumens: 6611.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3392	3392	3392
5°	3377	3343	3365
10°	3367	3376	3399
15°	3336	3363	3396
20°	3328	3334	3387
25°	3302	3292	3378
30°	3272	3342	3361
35°	3247	3293	3347
40°	3212	3275	3336
45°	3171	3257	3323
50°	3146	3244	3308
55°	3066	3273	3239
60°	2988	3203	3286
65°	2854	3134	3242
70°	2736	3107	3288
75°	2423	3014	3222
80°	1913	2945	3563
85°	1170	3147	4065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4065 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	3.2
10°-20°	597.4	9.0
20°-30°	910.2	13.8
30°-40°	1107.9	16.8
40°-50°	1161.7	17.6
50°-60°	1076.1	16.3
60°-70°	848.6	12.8
70°-80°	525.0	7.9
80°-90°	174.8	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°	1716.8	26.0
0°-40°	2824.7	42.7
0°-60°	5062.6	76.6
0°-90°	6611.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6611.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2215	2215	2215	2215	2215	
5°	2197	2196	2174	2222	2188	207
15°	2104	2115	2121	2106	2142	594
25°	1954	1964	1948	2002	1999	898
35°	1737	1753	1761	1794	1790	1085
45°	1464	1491	1504	1521	1534	1131
55°	1148	1182	1226	1236	1213	1027
65°	787	818	865	897	894	784
75°	409	442	509	548	544	432
85°	67	113	179	218	231	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2214.6	2214.6	2214.6	2214.6	2214.6
2.5°	2208.3	2221.8	2204.7	2219.1	2219.1
5°	2196.6	2195.7	2174.1	2221.8	2188.5
7.5°	2142.6	2180.4	2165.1	2223.6	2203.8
10°	2165.1	2155.2	2170.5	2210.1	2185.8
12.5°	2142.6	2158.8	2134.5	2114.7	2139.9
15°	2103.9	2114.7	2121.0	2105.7	2141.7
17.5°	2058.0	2098.5	2076.9	2069.7	2111.1
20°	2041.8	2043.6	2045.4	2082.3	2077.8
22.5°	1975.2	2011.2	2006.7	2036.4	2040.0
25°	1953.6	1964.4	1948.2	2002.2	1998.6
27.5°	1904.1	1927.5	1924.8	1942.8	1952.7
30°	1850.1	1873.5	1889.7	1869.9	1900.5
32.5°	1794.3	1833.9	1815.9	1852.8	1846.5
35°	1736.7	1752.9	1761.0	1794.3	1789.8
37.5°	1670.2	1698.1	1702.6	1752.9	1731.3
40°	1606.3	1634.2	1637.8	1667.5	1668.4
42.5°	1538.8	1552.3	1571.2	1605.4	1602.7
45°	1464.1	1491.1	1503.7	1520.8	1534.3
47.5°	1392.1	1420.9	1437.1	1465.0	1433.5
50°	1320.1	1340.8	1361.5	1391.2	1388.5
52.5°	1229.2	1276.0	1285.9	1302.1	1312.9
55°	1148.2	1182.4	1225.6	1236.4	1213.0
57.5°	1066.3	1092.4	1123.9	1157.2	1154.5
60°	975.5	1007.0	1045.6	1070.8	1072.6
62.5°	892.7	914.3	951.2	988.1	969.2
65°	787.4	818.0	864.8	897.2	894.5
67.5°	693.8	727.1	774.8	817.1	818.9
70°	611.0	629.0	693.8	726.2	734.3
72.5°	509.3	540.8	598.4	634.4	638.0
75°	409.4	441.8	509.3	548.0	544.4
77.5°	307.8	354.5	420.2	466.1	481.4
80°	216.9	259.2	333.9	378.8	404.0
82.5°	136.8	180.9	253.8	309.6	324.9
85°	66.6	113.4	179.1	217.8	231.3
87.5°	17.1	46.8	82.8	101.7	109.8
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	16.05	17.72	16.41	18.03	18.35	16.48	18.15	16.84	18.46	18.78
	3H	17.85	19.36	18.22	19.69	20.05	18.55	20.07	18.93	20.39	20.75
	4H	18.49	19.92	18.89	20.27	20.64	19.39	20.82	19.79	21.17	21.54
	6H	18.90	20.23	19.31	20.59	20.98	20.18	21.51	20.59	21.87	22.26
	8H	19.00	20.27	19.43	20.66	21.06	20.53	21.80	20.95	22.19	22.58
	12H	19.05	20.27	19.48	20.65	21.08	20.82	22.04	21.25	22.42	22.85
4H	2H	16.78	18.22	17.18	18.56	18.94	17.12	18.55	17.52	18.90	19.27
	3H	18.82	20.03	19.23	20.42	20.82	19.43	20.64	19.84	21.04	21.44
	4H	19.59	20.69	20.02	21.10	21.53	20.44	21.53	20.87	21.95	22.38
	6H	20.13	21.09	20.58	21.53	21.98	21.39	22.35	21.84	22.79	23.24
	8H	20.27	21.17	20.73	21.61	22.08	21.81	22.71	22.27	23.16	23.62
	12H	20.35	21.16	20.83	21.64	22.11	22.19	23.01	22.67	23.48	23.95
8H	4H	20.04	20.94	20.50	21.38	21.85	20.78	21.68	21.24	22.12	22.58
	6H	20.72	21.47	21.21	21.96	22.43	21.89	22.65	22.38	23.13	23.61
	8H	20.94	21.62	21.45	22.12	22.60	22.44	23.12	22.95	23.62	24.10
	12H	21.09	21.69	21.59	22.17	22.73	22.96	23.56	23.46	24.05	24.61
12H	4H	20.12	20.94	20.60	21.41	21.88	20.81	21.62	21.29	22.10	22.57
	6H	20.85	21.53	21.36	22.04	22.52	21.96	22.64	22.46	23.14	23.63
	8H	21.15	21.75	21.65	22.24	22.80	22.58	23.18	23.09	23.67	24.23