

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: P1588620

Luminaire Tested: 24CZSP-A-43HE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588620
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-43HE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

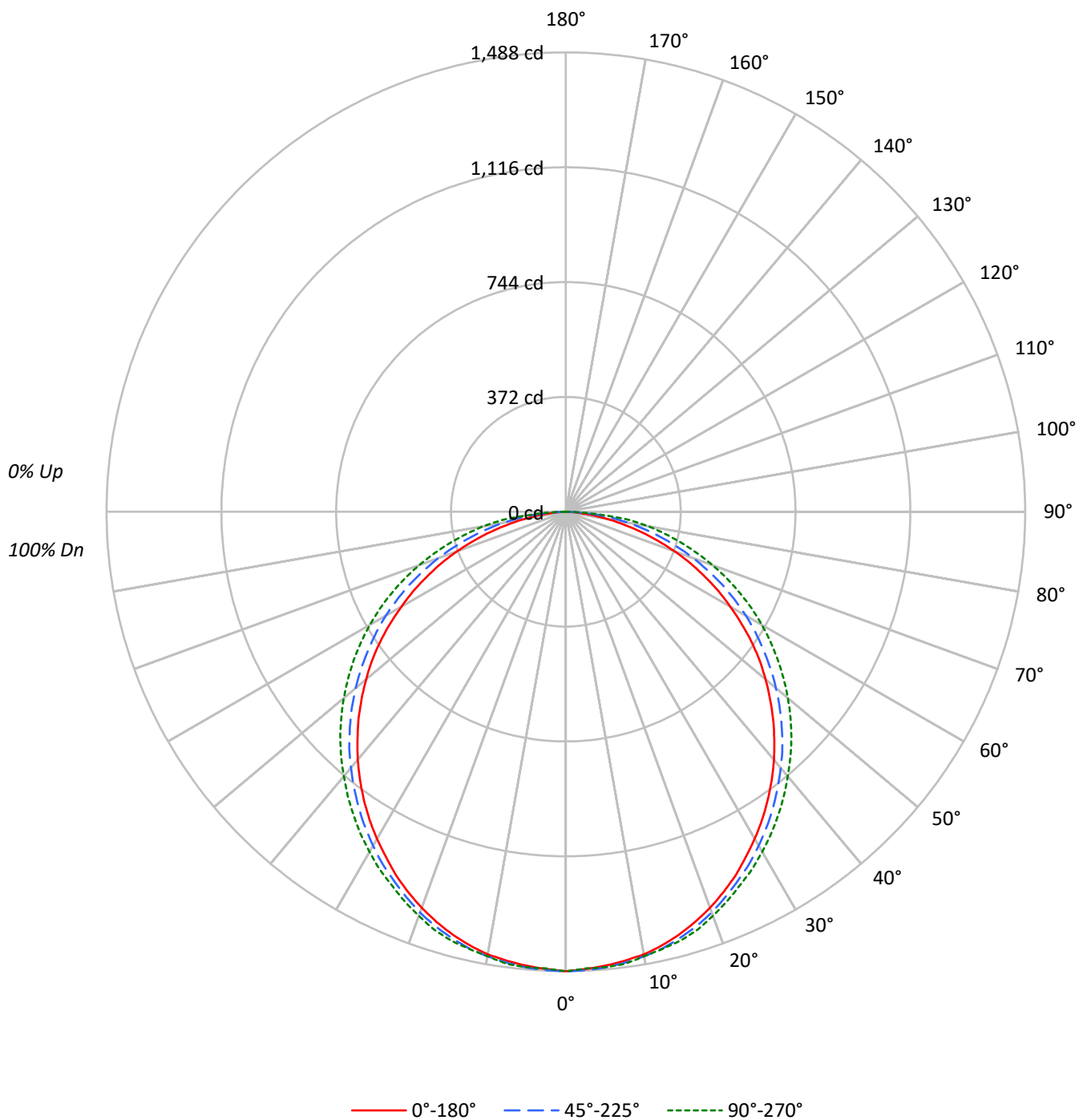
Lumens per Lamp: N/A
Luminaire Lumens: 4345.0 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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°	2280	2280	2280
5°	2269	2278	2277
10°	2264	2275	2273
15°	2248	2266	2280
20°	2225	2252	2270
25°	2198	2228	2256
30°	2163	2209	2249
35°	2132	2187	2243
40°	2097	2166	2236
45°	2057	2144	2239
50°	2013	2117	2238
55°	1960	2088	2240
60°	1887	2065	2246
65°	1800	2025	2253
70°	1678	1968	2263
75°	1495	1890	2285
80°	1237	1799	2396
85°	805	1626	2095

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2472 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.8	3.2
10°-20°	403.0	9.3
20°-30°	607.8	14.0
30°-40°	732.1	16.8
40°-50°	764.6	17.6
50°-60°	702.2	16.2
60°-70°	553.1	12.7
70°-80°	339.3	7.8
80°-90°	102.1	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°	1151.6	26.5
0°-40°	1883.7	43.4
0°-60°	3350.5	77.1
0°-90°	4345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1476	1478	1482	1486	1481	140
15°	1418	1421	1429	1438	1438	400
25°	1300	1303	1319	1335	1335	599
35°	1140	1146	1170	1194	1199	713
45°	950	960	990	1024	1034	732
55°	734	748	782	826	839	655
65°	497	514	559	605	622	491
75°	253	273	319	370	386	268
85°	46	63	92	117	119	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.3	1488.3	1488.3	1488.3	1488.3
2.5°	1482.6	1485.4	1486.4	1487.3	1480.7
5°	1475.9	1477.8	1481.6	1486.4	1480.7
7.5°	1466.3	1468.3	1473.0	1479.7	1476.8
10°	1455.9	1456.8	1462.5	1467.3	1461.6
12.5°	1438.7	1441.6	1448.2	1452.0	1450.1
15°	1417.7	1420.6	1429.2	1437.7	1437.7
17.5°	1392.9	1396.8	1407.2	1418.7	1419.6
20°	1365.3	1368.1	1381.5	1392.9	1392.9
22.5°	1333.8	1337.6	1351.0	1363.4	1365.3
25°	1300.5	1303.3	1318.6	1334.8	1334.8
27.5°	1261.4	1267.1	1286.2	1302.4	1306.2
30°	1223.2	1228.0	1249.0	1269.0	1271.9
32.5°	1183.2	1188.9	1210.8	1232.8	1237.5
35°	1140.3	1146.0	1169.8	1193.7	1199.4
37.5°	1095.5	1102.1	1126.9	1154.6	1160.3
40°	1048.8	1056.4	1083.1	1112.6	1118.4
42.5°	999.2	1009.7	1038.3	1068.8	1077.4
45°	949.6	960.1	989.6	1024.0	1033.5
47.5°	897.2	909.6	940.1	976.3	986.8
50°	844.7	857.1	888.6	927.7	939.1
52.5°	791.3	803.7	836.1	877.1	889.5
55°	734.1	747.5	781.8	825.7	839.0
57.5°	675.0	692.2	728.4	773.2	786.6
60°	615.9	633.1	674.1	717.9	733.2
62.5°	557.7	574.0	615.9	662.6	678.8
65°	496.7	513.9	558.7	605.4	621.6
67.5°	436.7	453.8	498.6	547.3	564.4
70°	374.7	393.8	439.5	488.1	505.3
72.5°	312.7	332.7	379.5	429.0	445.2
75°	252.7	272.7	319.4	369.9	386.1
77.5°	193.5	215.5	261.2	312.7	328.0
80°	140.2	161.1	204.0	254.6	271.7
82.5°	89.6	107.7	150.6	198.3	210.7
85°	45.8	62.9	92.5	117.3	119.2
87.5°	14.3	20.0	30.5	45.8	46.7
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	14.34	16.00	14.71	16.32	16.63	15.17	16.83	15.54	17.15	17.46
	3H	16.10	17.60	16.47	17.93	18.29	17.29	18.79	17.66	19.12	19.48
	4H	16.72	18.14	17.11	18.48	18.86	18.18	19.60	18.57	19.95	20.32
	6H	17.13	18.45	17.54	18.81	19.20	18.96	20.28	19.37	20.64	21.03
	8H	17.23	18.50	17.66	18.88	19.28	19.28	20.54	19.70	20.93	21.33
	12H	17.29	18.50	17.71	18.88	19.31	19.49	20.70	19.92	21.08	21.51
4H	2H	15.11	16.54	15.51	16.88	17.26	15.76	17.18	16.16	17.53	17.90
	3H	17.09	18.29	17.50	18.68	19.08	18.11	19.31	18.52	19.71	20.11
	4H	17.83	18.91	18.26	19.33	19.76	19.17	20.25	19.60	20.66	21.10
	6H	18.36	19.31	18.81	19.75	20.20	20.12	21.07	20.57	21.51	21.96
	8H	18.50	19.39	18.96	19.83	20.30	20.52	21.41	20.97	21.85	22.31
	12H	18.59	19.39	19.06	19.86	20.33	20.79	21.60	21.27	22.07	22.54
8H	4H	18.29	19.18	18.74	19.62	20.08	19.45	20.35	19.91	20.79	21.25
	6H	18.95	19.69	19.44	20.18	20.65	20.57	21.31	21.06	21.80	22.27
	8H	19.16	19.83	19.66	20.33	20.82	21.08	21.75	21.59	22.25	22.74
	12H	19.30	19.89	19.80	20.38	20.94	21.46	22.06	21.97	22.55	23.10
12H	4H	18.38	19.18	18.85	19.65	20.12	19.48	20.28	19.96	20.76	21.23
	6H	19.08	19.75	19.59	20.25	20.74	20.61	21.28	21.12	21.79	22.27
	8H	19.36	19.95	19.86	20.44	21.00	21.19	21.78	21.70	22.27	22.83