

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: P1589761

Luminaire Tested: 24CZSP-SB-43HE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-43HE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

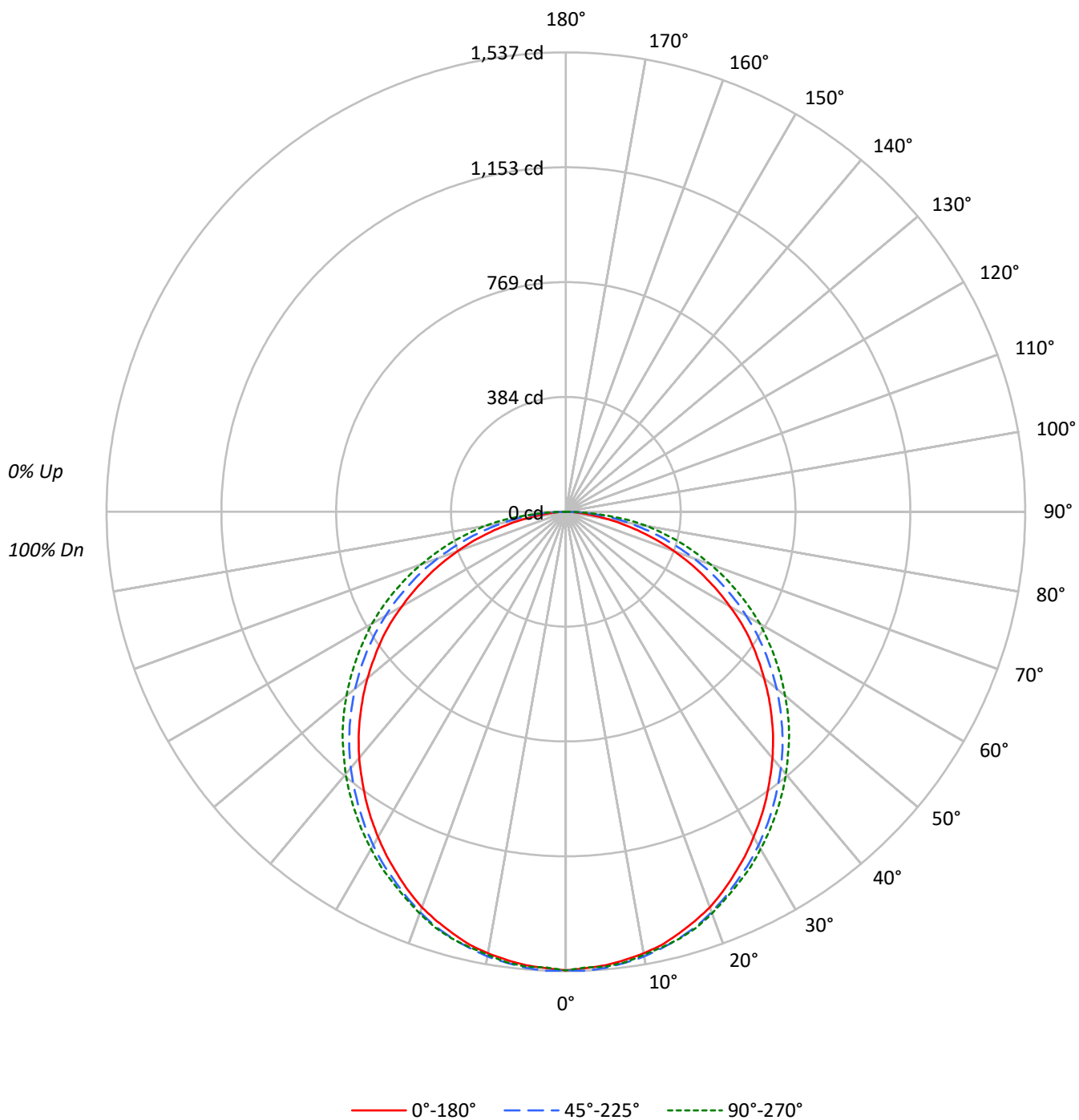
Lumens per Lamp: N/A
Luminaire Lumens: 4478.0 lumens
Efficiency: N/A
Efficacy: 151.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	68
3	89	79	70	63	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°	2350	2350	2350
5°	2342	2355	2349
10°	2333	2350	2341
15°	2316	2340	2343
20°	2296	2323	2331
25°	2258	2298	2314
30°	2223	2280	2305
35°	2187	2258	2297
40°	2151	2238	2291
45°	2110	2217	2289
50°	2064	2193	2283
55°	2017	2169	2283
60°	1942	2137	2297
65°	1851	2095	2298
70°	1727	2037	2304
75°	1537	1963	2345
80°	1262	1880	2433
85°	833	1766	2198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2491 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	3.2
10°-20°	415.5	9.3
20°-30°	626.2	14.0
30°-40°	754.1	16.8
40°-50°	787.9	17.6
50°-60°	723.8	16.2
60°-70°	570.0	12.7
70°-80°	349.5	7.8
80°-90°	106.0	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°	1186.8	26.5
0°-40°	1940.9	43.3
0°-60°	3452.6	77.1
0°-90°	4478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4478.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1534	1534	1534	1534	1534	
5°	1523	1526	1532	1530	1528	145
15°	1460	1466	1476	1481	1478	412
25°	1336	1345	1360	1374	1370	616
35°	1170	1185	1208	1229	1228	732
45°	974	995	1024	1052	1057	751
55°	755	777	812	847	855	674
65°	511	537	578	617	634	505
75°	260	290	332	372	396	276
85°	47	70	100	112	125	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1534.4	1534.4	1534.4	1534.4	1534.4
2.5°	1528.7	1532.5	1537.3	1529.7	1525.9
5°	1523.1	1525.9	1531.6	1529.7	1527.8
7.5°	1512.6	1514.5	1522.1	1522.1	1520.2
10°	1500.3	1504.1	1510.7	1509.8	1505.1
12.5°	1484.2	1487.0	1494.6	1494.6	1491.8
15°	1460.5	1466.2	1475.7	1481.4	1477.6
17.5°	1435.9	1441.6	1453.9	1459.6	1457.7
20°	1408.4	1413.1	1425.4	1434.0	1430.2
22.5°	1374.3	1379.9	1394.2	1403.6	1399.8
25°	1336.3	1344.9	1360.0	1374.3	1369.5
27.5°	1298.4	1307.9	1326.9	1341.1	1339.2
30°	1256.7	1269.1	1289.0	1307.0	1303.2
32.5°	1214.1	1228.3	1249.2	1268.1	1267.2
35°	1169.5	1184.7	1207.5	1229.3	1228.3
37.5°	1122.2	1140.2	1163.9	1187.5	1188.5
40°	1075.7	1092.8	1119.3	1144.9	1145.8
42.5°	1026.4	1044.4	1072.9	1099.4	1100.4
45°	974.3	995.2	1023.6	1052.0	1056.8
47.5°	921.2	943.0	972.4	1002.7	1008.4
50°	866.3	889.0	920.3	952.5	958.2
52.5°	810.3	834.0	866.3	898.5	907.0
55°	755.4	777.2	812.2	847.3	854.9
57.5°	697.6	717.5	755.4	792.3	801.8
60°	634.1	658.7	697.6	734.5	749.7
62.5°	572.4	599.0	638.8	675.8	692.8
65°	510.8	537.4	578.1	617.0	634.1
67.5°	448.3	475.8	519.4	556.3	575.3
70°	385.7	413.2	454.9	494.7	514.6
72.5°	323.2	352.6	393.3	434.1	454.0
75°	259.7	290.0	331.7	371.5	396.2
77.5°	200.0	229.4	271.1	311.8	332.7
80°	143.1	172.5	213.2	254.0	275.8
82.5°	91.0	118.5	158.3	192.4	212.3
85°	47.4	70.1	100.5	111.8	125.1
87.5°	14.2	27.5	38.9	43.6	54.0
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	14.48	16.15	14.85	16.46	16.77	15.23	16.89	15.59	17.21	17.52
	3H	16.24	17.75	16.62	18.08	18.44	17.32	18.83	17.70	19.16	19.52
	4H	16.87	18.29	17.27	18.64	19.01	18.21	19.63	18.61	19.98	20.35
	6H	17.28	18.60	17.69	18.97	19.36	18.98	20.30	19.39	20.66	21.05
	8H	17.39	18.65	17.81	19.04	19.44	19.29	20.55	19.71	20.94	21.34
	12H	17.44	18.65	17.87	19.03	19.46	19.50	20.71	19.93	21.09	21.52
4H	2H	15.25	16.68	15.65	17.02	17.40	15.83	17.25	16.23	17.60	17.98
	3H	17.25	18.44	17.65	18.84	19.24	18.16	19.36	18.57	19.75	20.15
	4H	18.00	19.09	18.43	19.50	19.93	19.19	20.28	19.63	20.69	21.13
	6H	18.54	19.49	18.99	19.93	20.38	20.13	21.08	20.58	21.52	21.97
	8H	18.68	19.58	19.14	20.02	20.48	20.51	21.40	20.97	21.84	22.31
	12H	18.77	19.57	19.25	20.05	20.52	20.79	21.59	21.26	22.06	22.53
8H	4H	18.45	19.34	18.91	19.79	20.25	19.49	20.39	19.95	20.83	21.29
	6H	19.13	19.87	19.62	20.36	20.83	20.58	21.32	21.07	21.81	22.28
	8H	19.35	20.02	19.86	20.52	21.01	21.07	21.74	21.57	22.24	22.73
	12H	19.50	20.09	20.00	20.58	21.14	21.44	22.03	21.95	22.52	23.08
12H	4H	18.54	19.34	19.01	19.81	20.28	19.52	20.33	20.00	20.80	21.27
	6H	19.26	19.93	19.76	20.43	20.92	20.63	21.30	21.14	21.81	22.29
	8H	19.55	20.14	20.05	20.63	21.19	21.19	21.78	21.69	22.27	22.83