

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: P1589760

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589760
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-43HE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

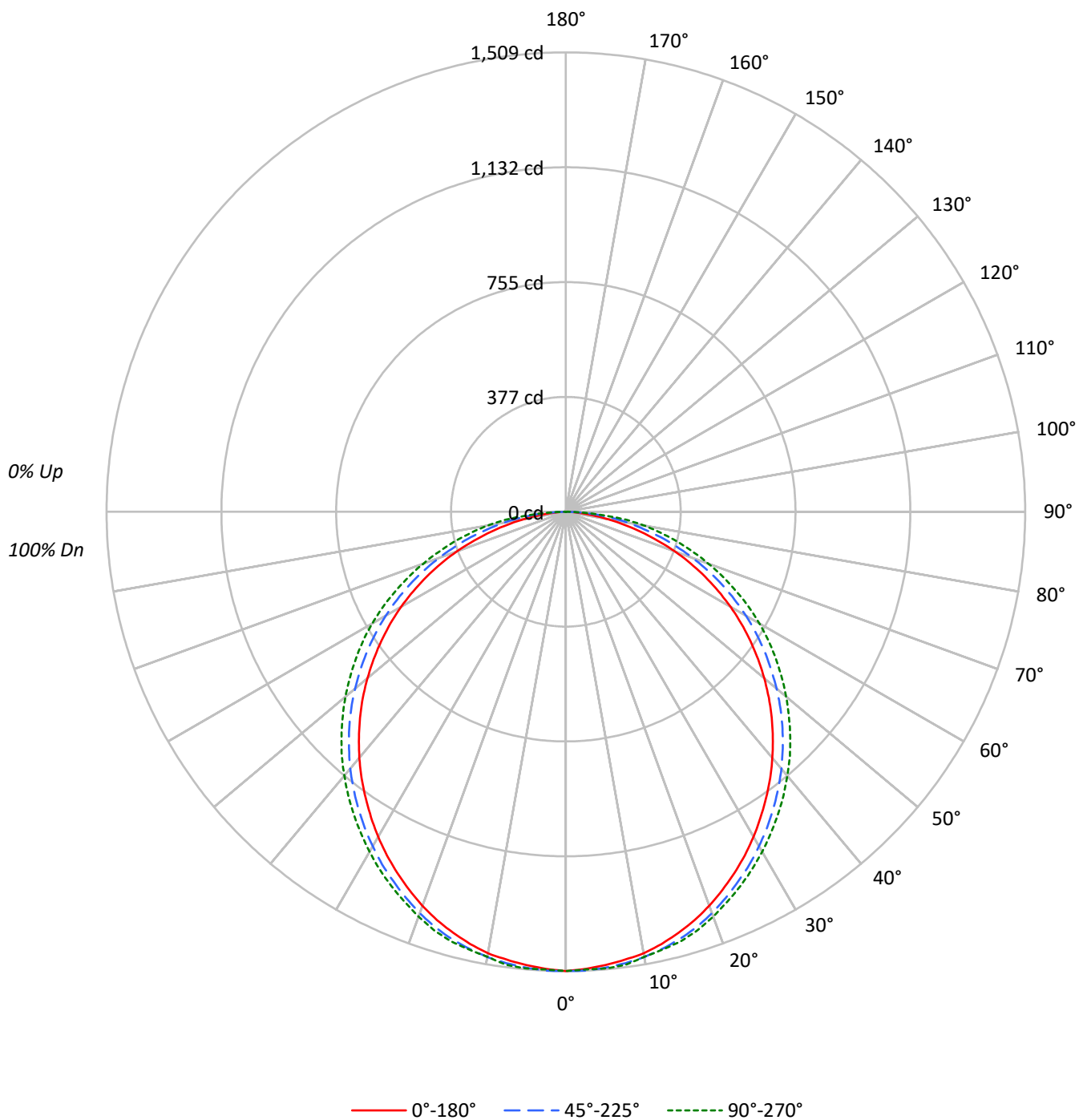
Lumens per Lamp: N/A
Luminaire Lumens: 4389.0 lumens
Efficiency: N/A
Efficacy: 148.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2311	2311	2311
5°	2298	2311	2315
10°	2291	2310	2308
15°	2270	2303	2316
20°	2245	2287	2307
25°	2213	2264	2293
30°	2181	2244	2281
35°	2145	2223	2270
40°	2111	2203	2264
45°	2072	2180	2258
50°	2027	2153	2252
55°	1977	2125	2249
60°	1915	2094	2250
65°	1827	2050	2238
70°	1708	1987	2232
75°	1514	1911	2240
80°	1232	1815	2307
85°	796	1677	1991

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2337 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.8	3.3
10°-20°	408.9	9.3
20°-30°	616.5	14.0
30°-40°	741.8	16.9
40°-50°	773.7	17.6
50°-60°	709.2	16.2
60°-70°	556.9	12.7
70°-80°	338.9	7.7
80°-90°	100.3	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°	1168.1	26.6
0°-40°	1909.9	43.5
0°-60°	3392.9	77.3
0°-90°	4389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1509	1509	1509	1509	1509	
5°	1495	1504	1503	1501	1506	142
15°	1431	1446	1452	1454	1461	404
25°	1310	1328	1340	1348	1357	603
35°	1147	1165	1189	1206	1214	718
45°	956	976	1006	1030	1042	738
55°	740	759	796	828	842	661
65°	504	523	566	603	618	499
75°	256	280	323	362	379	271
85°	45	64	95	107	113	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.8	1508.8	1508.8	1508.8	1508.8
2.5°	1503.1	1510.7	1508.8	1502.2	1505.0
5°	1494.6	1504.1	1503.1	1501.2	1506.0
7.5°	1484.2	1494.6	1495.6	1495.6	1501.2
10°	1472.9	1483.3	1485.2	1482.3	1484.2
12.5°	1454.0	1466.3	1470.1	1470.1	1472.9
15°	1431.4	1445.5	1452.1	1454.0	1460.6
17.5°	1406.8	1421.9	1430.4	1435.1	1440.8
20°	1377.5	1393.6	1403.0	1408.7	1415.3
22.5°	1344.5	1362.4	1372.8	1378.5	1386.0
25°	1309.6	1327.5	1339.8	1348.3	1356.8
27.5°	1272.7	1289.7	1306.7	1317.1	1324.7
30°	1233.1	1251.0	1269.0	1282.2	1289.7
32.5°	1190.6	1209.5	1230.3	1244.4	1252.9
35°	1147.2	1165.1	1188.7	1205.7	1214.2
37.5°	1102.8	1121.7	1146.2	1164.2	1174.5
40°	1055.6	1075.4	1101.8	1121.7	1132.1
42.5°	1006.5	1025.4	1054.6	1077.3	1089.6
45°	956.4	976.3	1006.5	1030.1	1042.4
47.5°	904.5	923.4	956.4	983.8	994.2
50°	850.7	868.6	903.6	932.8	945.1
52.5°	795.9	814.8	849.8	880.9	894.1
55°	740.2	759.1	795.9	828.0	842.2
57.5°	683.6	702.5	740.2	773.3	790.3
60°	625.0	643.9	683.6	717.6	734.6
62.5°	564.6	584.4	625.0	660.0	677.9
65°	504.2	523.1	565.6	603.3	617.5
67.5°	443.8	462.6	504.2	542.0	558.9
70°	381.4	403.2	443.8	483.4	498.5
72.5°	316.3	340.8	381.4	423.0	438.1
75°	255.9	279.5	322.9	361.6	378.6
77.5°	196.4	221.9	262.5	302.1	319.1
80°	139.7	164.3	205.8	243.6	261.5
82.5°	88.8	110.5	152.0	186.0	199.2
85°	45.3	64.2	95.4	106.7	113.3
87.5°	13.2	22.7	34.0	42.5	47.2
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	14.41	16.07	14.77	16.38	16.70	15.15	16.80	15.51	17.12	17.43
	3H	16.18	17.68	16.55	18.01	18.37	17.22	18.73	17.60	19.06	19.41
	4H	16.80	18.22	17.20	18.56	18.94	18.09	19.51	18.49	19.86	20.23
	6H	17.21	18.52	17.62	18.89	19.28	18.83	20.15	19.24	20.52	20.91
	8H	17.31	18.57	17.73	18.96	19.36	19.13	20.39	19.55	20.78	21.18
	12H	17.36	18.57	17.79	18.95	19.38	19.32	20.53	19.75	20.91	21.34
4H	2H	15.18	16.60	15.58	16.95	17.32	15.75	17.17	16.15	17.52	17.89
	3H	17.17	18.36	17.58	18.76	19.16	18.06	19.26	18.47	19.65	20.05
	4H	17.91	19.00	18.34	19.41	19.84	19.08	20.16	19.51	20.58	21.01
	6H	18.44	19.39	18.89	19.83	20.28	19.99	20.94	20.44	21.38	21.83
	8H	18.58	19.47	19.04	19.91	20.38	20.35	21.24	20.81	21.68	22.15
	12H	18.66	19.46	19.14	19.94	20.41	20.61	21.41	21.09	21.88	22.35
8H	4H	18.36	19.25	18.82	19.69	20.15	19.38	20.27	19.84	20.71	21.17
	6H	19.02	19.76	19.51	20.25	20.72	20.44	21.18	20.93	21.66	22.14
	8H	19.23	19.90	19.74	20.40	20.89	20.91	21.57	21.42	22.08	22.56
	12H	19.37	19.96	19.87	20.45	21.00	21.26	21.85	21.76	22.34	22.90
12H	4H	18.44	19.24	18.92	19.71	20.18	19.40	20.21	19.88	20.68	21.15
	6H	19.14	19.81	19.65	20.32	20.80	20.49	21.15	20.99	21.66	22.14
	8H	19.42	20.01	19.93	20.50	21.06	21.02	21.61	21.53	22.10	22.66