

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: P1589753

Luminaire Tested: 24CZSP-SB-43HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589753
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

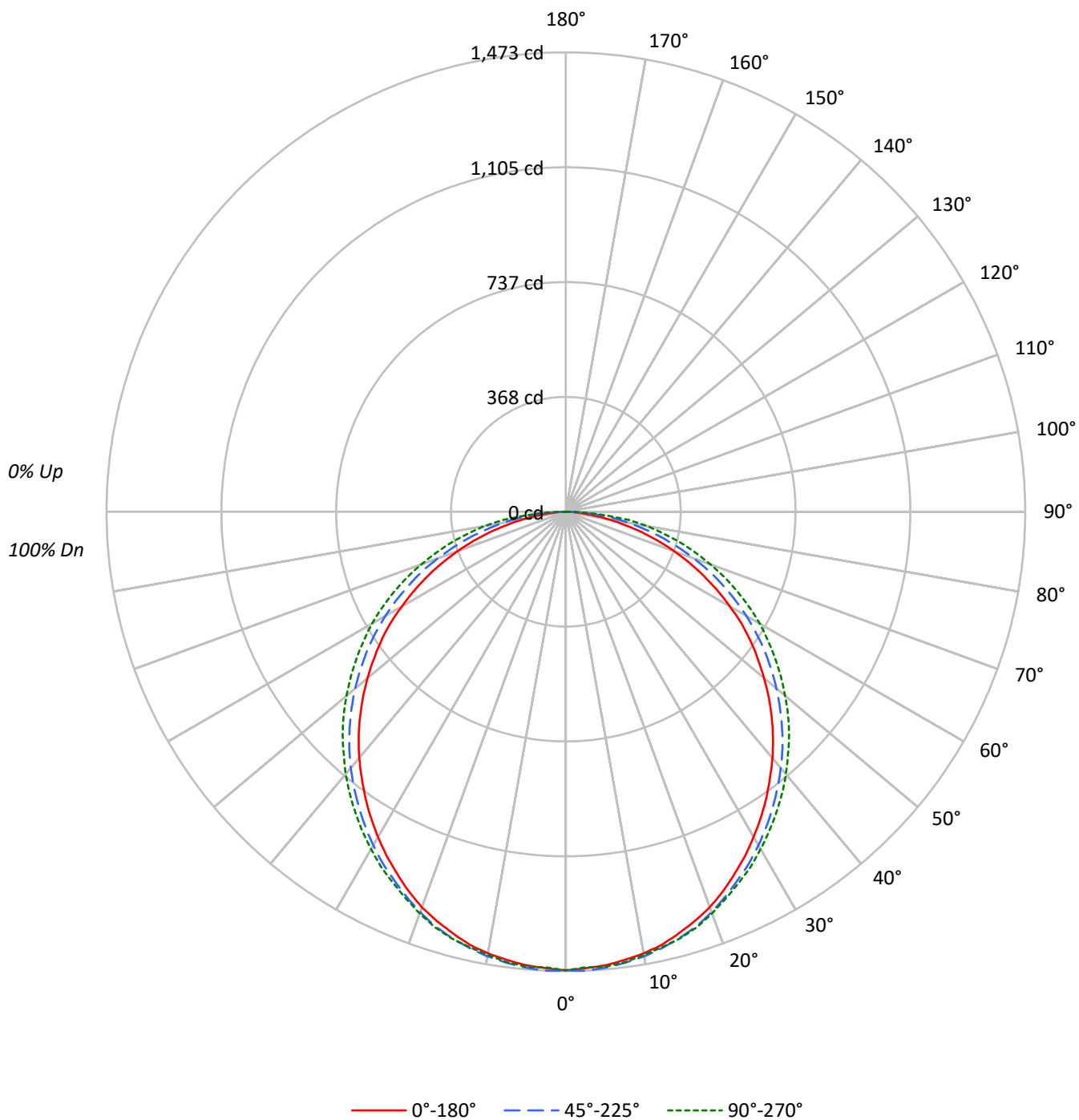
Lumens per Lamp: N/A
Luminaire Lumens: 4291.0 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2252	2252	2252
5°	2244	2256	2251
10°	2236	2251	2243
15°	2219	2242	2245
20°	2200	2226	2234
25°	2164	2202	2218
30°	2130	2184	2209
35°	2095	2163	2201
40°	2061	2145	2195
45°	2022	2124	2193
50°	1978	2101	2188
55°	1933	2078	2188
60°	1861	2047	2201
65°	1774	2008	2202
70°	1655	1952	2208
75°	1472	1881	2246
80°	1209	1802	2331
85°	798	1692	2107

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2387 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.2
10°-20°	398.1	9.3
20°-30°	600.1	14.0
30°-40°	722.6	16.8
40°-50°	754.9	17.6
50°-60°	693.6	16.2
60°-70°	546.2	12.7
70°-80°	334.9	7.8
80°-90°	101.5	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°	1137.3	26.5
0°-40°	1859.9	43.3
0°-60°	3308.4	77.1
0°-90°	4291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1460	1462	1468	1466	1464	139
15°	1400	1405	1414	1420	1416	395
25°	1280	1289	1303	1317	1312	590
35°	1121	1135	1157	1178	1177	701
45°	934	954	981	1008	1013	720
55°	724	745	778	812	819	646
65°	490	515	554	591	608	484
75°	249	278	318	356	380	264
85°	45	67	96	107	120	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.4	1470.4	1470.4	1470.4	1470.4
2.5°	1464.9	1468.5	1473.1	1465.8	1462.2
5°	1459.5	1462.2	1467.6	1465.8	1464.0
7.5°	1449.5	1451.3	1458.5	1458.5	1456.7
10°	1437.7	1441.3	1447.6	1446.7	1442.2
12.5°	1422.2	1424.9	1432.2	1432.2	1429.5
15°	1399.5	1405.0	1414.0	1419.5	1415.9
17.5°	1375.9	1381.4	1393.2	1398.6	1396.8
20°	1349.6	1354.1	1365.9	1374.1	1370.5
22.5°	1316.9	1322.3	1335.9	1345.0	1341.4
25°	1280.5	1288.7	1303.2	1316.9	1312.3
27.5°	1244.2	1253.3	1271.5	1285.1	1283.3
30°	1204.3	1216.1	1235.1	1252.4	1248.8
32.5°	1163.4	1177.0	1197.0	1215.2	1214.2
35°	1120.7	1135.2	1157.0	1177.9	1177.0
37.5°	1075.3	1092.5	1115.3	1138.0	1138.9
40°	1030.8	1047.1	1072.6	1097.1	1098.0
42.5°	983.6	1000.8	1028.1	1053.5	1054.4
45°	933.6	953.6	980.8	1008.1	1012.6
47.5°	882.8	903.6	931.8	960.9	966.3
50°	830.1	851.9	881.8	912.7	918.2
52.5°	776.5	799.2	830.1	861.0	869.1
55°	723.8	744.7	778.3	811.9	819.2
57.5°	668.4	687.5	723.8	759.2	768.3
60°	607.6	631.2	668.4	703.8	718.4
62.5°	548.5	574.0	612.1	647.5	663.9
65°	489.5	514.9	554.0	591.2	607.6
67.5°	429.6	455.9	497.7	533.1	551.3
70°	369.6	396.0	435.9	474.1	493.1
72.5°	309.7	337.8	376.9	415.9	435.0
75°	248.8	277.9	317.9	356.0	379.6
77.5°	191.6	219.8	259.7	298.8	318.8
80°	137.1	165.3	204.3	243.4	264.3
82.5°	87.2	113.5	151.7	184.4	203.4
85°	45.4	67.2	96.3	107.2	119.9
87.5°	13.6	26.3	37.2	41.8	51.8
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	14.33	16.00	14.70	16.31	16.63	15.08	16.74	15.44	17.06	17.37
	3H	16.10	17.60	16.47	17.93	18.29	17.18	18.68	17.55	19.01	19.37
	4H	16.72	18.14	17.12	18.49	18.87	18.06	19.48	18.46	19.83	20.20
	6H	17.13	18.45	17.54	18.82	19.21	18.83	20.15	19.24	20.51	20.90
	8H	17.24	18.50	17.66	18.89	19.29	19.14	20.40	19.56	20.79	21.19
	12H	17.29	18.50	17.72	18.88	19.31	19.35	20.56	19.78	20.94	21.37
4H	2H	15.10	16.53	15.50	16.87	17.25	15.68	17.11	16.08	17.45	17.83
	3H	17.10	18.30	17.51	18.69	19.09	18.01	19.21	18.42	19.61	20.01
	4H	17.85	18.94	18.28	19.35	19.79	19.05	20.13	19.48	20.55	20.98
	6H	18.39	19.34	18.84	19.78	20.23	19.98	20.93	20.43	21.37	21.82
	8H	18.54	19.43	18.99	19.87	20.33	20.36	21.25	20.82	21.69	22.16
	12H	18.62	19.42	19.10	19.90	20.37	20.64	21.44	21.12	21.91	22.38
8H	4H	18.30	19.20	18.76	19.64	20.10	19.35	20.24	19.81	20.68	21.14
	6H	18.98	19.73	19.47	20.21	20.69	20.43	21.18	20.92	21.66	22.14
	8H	19.20	19.87	19.71	20.38	20.86	20.92	21.59	21.43	22.09	22.58
	12H	19.35	19.94	19.85	20.43	20.99	21.29	21.89	21.80	22.38	22.93
12H	4H	18.39	19.19	18.87	19.67	20.13	19.37	20.18	19.85	20.65	21.12
	6H	19.11	19.78	19.62	20.28	20.77	20.48	21.15	20.99	21.66	22.14
	8H	19.40	19.99	19.91	20.48	21.04	21.04	21.63	21.54	22.12	22.68