

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: P1589752

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589752
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-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

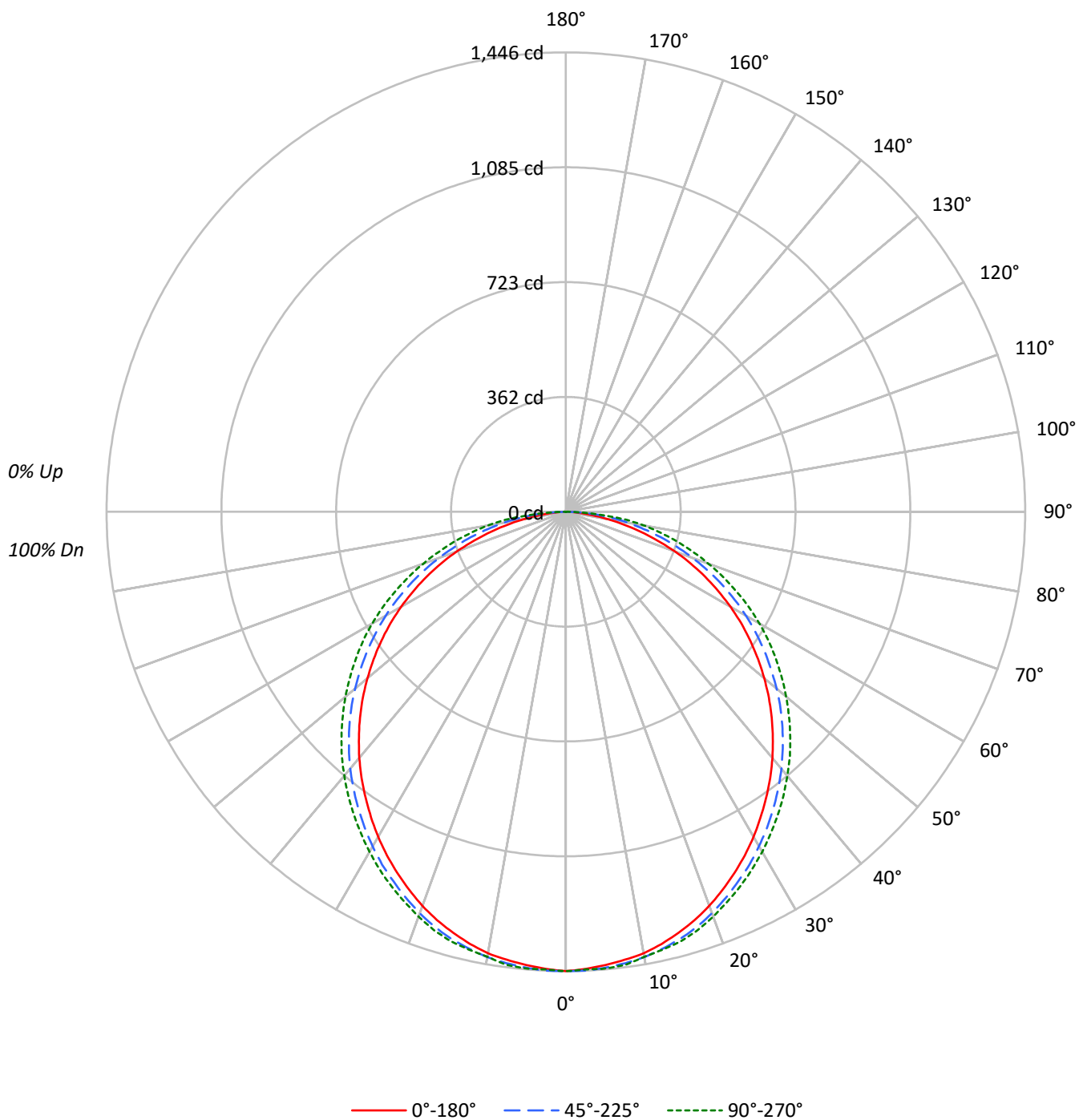
Lumens per Lamp: N/A
Luminaire Lumens: 4206.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1589752

CATALOG NUMBER: 24CZSP-SB-43HE-L830-S

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°	2215	2215	2215
5°	2202	2215	2219
10°	2195	2214	2212
15°	2175	2207	2219
20°	2152	2191	2211
25°	2121	2170	2197
30°	2090	2151	2186
35°	2055	2130	2176
40°	2023	2111	2169
45°	1985	2089	2164
50°	1942	2063	2158
55°	1894	2037	2155
60°	1835	2007	2156
65°	1751	1964	2144
70°	1637	1905	2139
75°	1451	1831	2147
80°	1181	1739	2210
85°	763	1606	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2240 cd/sqm

TEST NUMBER: P1589752

CATALOG NUMBER: 24CZSP-SB-43HE-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.3
10°-20°	391.8	9.3
20°-30°	590.8	14.0
30°-40°	710.8	16.9
40°-50°	741.5	17.6
50°-60°	679.6	16.2
60°-70°	533.7	12.7
70°-80°	324.8	7.7
80°-90°	96.1	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°	1119.4	26.6
0°-40°	1830.3	43.5
0°-60°	3251.4	77.3
0°-90°	4206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4206.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1432	1441	1440	1439	1443	136
15°	1372	1385	1392	1393	1400	387
25°	1255	1272	1284	1292	1300	578
35°	1099	1116	1139	1155	1164	688
45°	917	936	964	987	999	707
55°	709	728	763	794	807	634
65°	483	501	542	578	592	478
75°	245	268	309	346	363	260
85°	43	62	91	102	109	57
90°	0	0	0	0	0	

TEST NUMBER: P1589752

CATALOG NUMBER: 24CZSP-SB-43HE-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.9	1445.9	1445.9	1445.9	1445.9
2.5°	1440.4	1447.7	1445.9	1439.5	1442.3
5°	1432.3	1441.4	1440.4	1438.6	1443.2
7.5°	1422.4	1432.3	1433.2	1433.2	1438.6
10°	1411.5	1421.4	1423.3	1420.5	1422.4
12.5°	1393.4	1405.2	1408.8	1408.8	1411.5
15°	1371.7	1385.3	1391.6	1393.4	1399.7
17.5°	1348.2	1362.6	1370.8	1375.3	1380.7
20°	1320.1	1335.5	1344.5	1350.0	1356.3
22.5°	1288.4	1305.6	1315.6	1321.0	1328.3
25°	1255.0	1272.2	1283.9	1292.1	1300.2
27.5°	1219.7	1236.0	1252.2	1262.2	1269.4
30°	1181.7	1198.9	1216.1	1228.7	1236.0
32.5°	1141.0	1159.1	1179.0	1192.5	1200.7
35°	1099.3	1116.5	1139.1	1155.4	1163.6
37.5°	1056.8	1074.9	1098.4	1115.6	1125.6
40°	1011.6	1030.6	1055.9	1074.9	1084.9
42.5°	964.5	982.6	1010.7	1032.4	1044.1
45°	916.6	935.6	964.5	987.1	998.9
47.5°	866.8	884.9	916.6	942.8	952.8
50°	815.2	832.4	865.9	893.9	905.7
52.5°	762.7	780.8	814.3	844.2	856.8
55°	709.4	727.5	762.7	793.5	807.1
57.5°	655.1	673.2	709.4	741.0	757.3
60°	599.0	617.1	655.1	687.7	703.9
62.5°	541.1	560.1	599.0	632.5	649.6
65°	483.2	501.3	542.0	578.2	591.7
67.5°	425.3	443.4	483.2	519.4	535.6
70°	365.5	386.4	425.3	463.3	477.7
72.5°	303.1	326.6	365.5	405.4	419.8
75°	245.2	267.8	309.4	346.5	362.8
77.5°	188.2	212.6	251.5	289.5	305.8
80°	133.9	157.4	197.2	233.4	250.6
82.5°	85.1	105.9	145.7	178.2	190.9
85°	43.4	61.5	91.4	102.2	108.6
87.5°	12.7	21.7	32.6	40.7	45.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589752

CATALOG NUMBER: 24CZSP-SB-43HE-L830-S

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	14.26	15.92	14.63	16.24	16.55	15.00	16.66	15.36	16.97	17.28
	3H	16.03	17.54	16.41	17.86	18.22	17.08	18.58	17.45	18.91	19.27
	4H	16.65	18.07	17.05	18.42	18.79	17.94	19.36	18.34	19.71	20.08
	6H	17.06	18.38	17.47	18.74	19.13	18.69	20.00	19.10	20.37	20.76
	8H	17.16	18.42	17.59	18.81	19.21	18.98	20.24	19.40	20.63	21.03
	12H	17.21	18.42	17.64	18.80	19.23	19.17	20.38	19.60	20.76	21.19
4H	2H	15.03	16.45	15.43	16.80	17.17	15.60	17.02	16.00	17.37	17.74
	3H	17.02	18.22	17.43	18.61	19.01	17.91	19.11	18.32	19.51	19.91
	4H	17.76	18.85	18.19	19.26	19.69	18.93	20.02	19.36	20.43	20.86
	6H	18.29	19.24	18.75	19.68	20.14	19.84	20.79	20.29	21.23	21.68
	8H	18.43	19.32	18.89	19.77	20.23	20.20	21.09	20.66	21.54	22.00
	12H	18.52	19.32	18.99	19.79	20.26	20.46	21.26	20.94	21.73	22.20
8H	4H	18.21	19.10	18.67	19.54	20.00	19.23	20.12	19.69	20.56	21.03
	6H	18.87	19.61	19.36	20.10	20.58	20.29	21.03	20.78	21.52	21.99
	8H	19.08	19.75	19.59	20.25	20.74	20.76	21.43	21.27	21.93	22.42
	12H	19.22	19.81	19.72	20.30	20.86	21.11	21.70	21.62	22.19	22.75
12H	4H	18.29	19.09	18.77	19.57	20.03	19.26	20.06	19.74	20.53	21.00
	6H	19.00	19.66	19.50	20.17	20.65	20.34	21.01	20.85	21.51	22.00
	8H	19.27	19.86	19.78	20.35	20.91	20.88	21.47	21.38	21.96	22.51