

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: P1589712

Luminaire Tested: 24CZSP-SB-37HE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589712
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-37HE-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 3500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

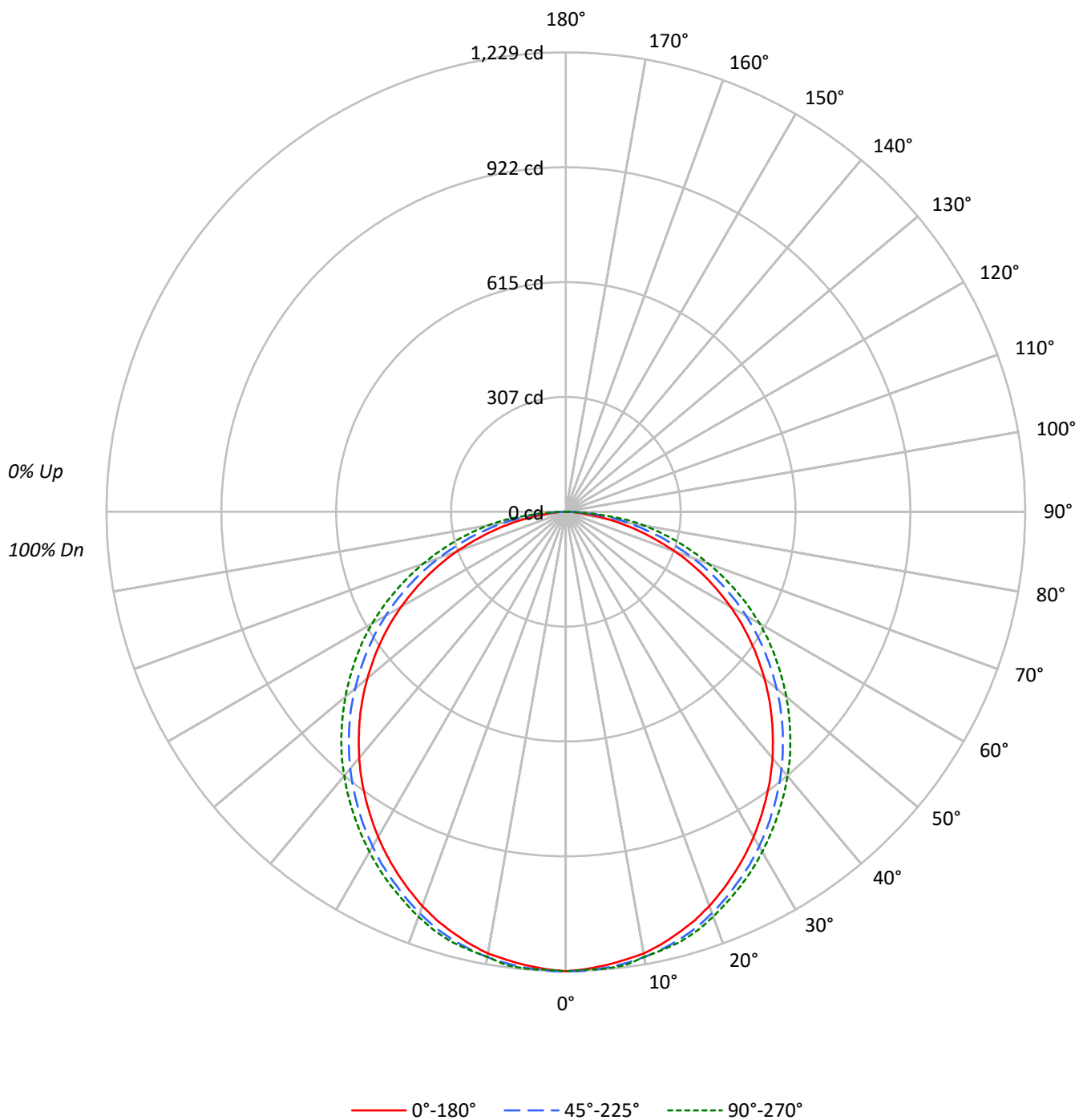
Lumens per Lamp: N/A
Luminaire Lumens: 3576.0 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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: P1589712

CATALOG NUMBER: 24CZSP-SB-37HE-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°	1883	1883	1883
5°	1872	1883	1886
10°	1866	1882	1881
15°	1849	1876	1887
20°	1829	1863	1879
25°	1803	1845	1868
30°	1777	1829	1858
35°	1748	1811	1850
40°	1720	1795	1844
45°	1688	1776	1840
50°	1652	1754	1835
55°	1610	1732	1832
60°	1560	1706	1833
65°	1489	1670	1823
70°	1392	1619	1819
75°	1234	1557	1826
80°	1005	1479	1880
85°	648	1365	1622

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1904 cd/sqm

TEST NUMBER: P1589712

CATALOG NUMBER: 24CZSP-SB-37HE-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	3.3
10°-20°	333.1	9.3
20°-30°	502.3	14.0
30°-40°	604.4	16.9
40°-50°	630.4	17.6
50°-60°	577.8	16.2
60°-70°	453.8	12.7
70°-80°	276.2	7.7
80°-90°	81.7	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°	951.8	26.6
0°-40°	1556.1	43.5
0°-60°	2764.4	77.3
0°-90°	3576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1218	1226	1225	1223	1227	116
15°	1166	1178	1183	1185	1190	329
25°	1067	1082	1092	1098	1106	492
35°	935	949	968	982	989	585
45°	779	795	820	839	849	601
55°	603	618	648	675	686	539
65°	411	426	461	492	503	406
75°	208	228	263	295	308	221
85°	37	52	78	87	92	48
90°	0	0	0	0	0	

TEST NUMBER: P1589712

CATALOG NUMBER: 24CZSP-SB-37HE-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.3	1229.3	1229.3	1229.3	1229.3
2.5°	1224.7	1230.8	1229.3	1223.9	1226.2
5°	1217.8	1225.5	1224.7	1223.2	1227.0
7.5°	1209.3	1217.8	1218.5	1218.5	1223.2
10°	1200.1	1208.5	1210.1	1207.8	1209.3
12.5°	1184.7	1194.7	1197.8	1197.8	1200.1
15°	1166.2	1177.8	1183.1	1184.7	1190.1
17.5°	1146.2	1158.5	1165.5	1169.3	1173.9
20°	1122.4	1135.5	1143.1	1147.8	1153.1
22.5°	1095.5	1110.1	1118.5	1123.1	1129.3
25°	1067.0	1081.6	1091.6	1098.5	1105.5
27.5°	1037.0	1050.8	1064.7	1073.1	1079.3
30°	1004.7	1019.3	1033.9	1044.7	1050.8
32.5°	970.1	985.4	1002.4	1013.9	1020.8
35°	934.7	949.3	968.5	982.4	989.3
37.5°	898.5	913.9	933.9	948.5	957.0
40°	860.1	876.2	897.7	913.9	922.4
42.5°	820.0	835.4	859.3	877.7	887.7
45°	779.3	795.4	820.0	839.3	849.3
47.5°	737.0	752.4	779.3	801.6	810.0
50°	693.1	707.7	736.2	760.0	770.0
52.5°	648.5	663.9	692.3	717.7	728.5
55°	603.1	618.5	648.5	674.7	686.2
57.5°	557.0	572.3	603.1	630.0	643.9
60°	509.3	524.6	557.0	584.7	598.5
62.5°	460.0	476.2	509.3	537.7	552.3
65°	410.8	426.2	460.8	491.6	503.1
67.5°	361.6	376.9	410.8	441.6	455.4
70°	310.8	328.5	361.6	393.9	406.2
72.5°	257.7	277.7	310.8	344.6	356.9
75°	208.5	227.7	263.1	294.6	308.5
77.5°	160.0	180.8	213.9	246.2	260.0
80°	113.9	133.9	167.7	198.5	213.1
82.5°	72.3	90.0	123.9	151.5	162.3
85°	36.9	52.3	77.7	86.9	92.3
87.5°	10.8	18.5	27.7	34.6	38.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589712

CATALOG NUMBER: 24CZSP-SB-37HE-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	13.70	15.36	14.06	15.67	15.99	14.43	16.09	14.80	16.41	16.72
	3H	15.47	16.97	15.84	17.30	17.66	16.51	18.02	16.89	18.34	18.70
	4H	16.09	17.51	16.48	17.85	18.23	17.38	18.80	17.78	19.14	19.52
	6H	16.49	17.81	16.90	18.18	18.57	18.12	19.44	18.53	19.80	20.19
	8H	16.60	17.86	17.02	18.25	18.64	18.42	19.68	18.84	20.07	20.46
	12H	16.65	17.85	17.08	18.24	18.66	18.61	19.82	19.04	20.20	20.63
4H	2H	14.47	15.89	14.86	16.23	16.61	15.04	16.46	15.44	16.80	17.18
	3H	16.46	17.65	16.87	18.05	18.45	17.35	18.55	17.76	18.94	19.34
	4H	17.20	18.28	17.63	18.70	19.13	18.37	19.45	18.80	19.87	20.30
	6H	17.73	18.68	18.18	19.12	19.57	19.27	20.22	19.73	20.66	21.12
	8H	17.87	18.76	18.33	19.20	19.67	19.64	20.53	20.10	20.97	21.44
	12H	17.95	18.75	18.43	19.23	19.69	19.90	20.70	20.37	21.17	21.64
8H	4H	17.65	18.54	18.10	18.98	19.44	18.67	19.56	19.13	20.00	20.46
	6H	18.31	19.05	18.80	19.54	20.01	19.72	20.47	20.22	20.95	21.43
	8H	18.52	19.18	19.03	19.69	20.17	20.20	20.86	20.70	21.37	21.85
	12H	18.65	19.24	19.16	19.73	20.29	20.55	21.14	21.05	21.63	22.19
12H	4H	17.73	18.53	18.21	19.00	19.47	18.69	19.49	19.17	19.97	20.44
	6H	18.43	19.10	18.94	19.61	20.09	19.78	20.44	20.28	20.95	21.43
	8H	18.71	19.30	19.22	19.79	20.35	20.31	20.90	20.82	21.39	21.95