

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: P1589720

Luminaire Tested: 24CZSP-SB-37HE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589720
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-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 3500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

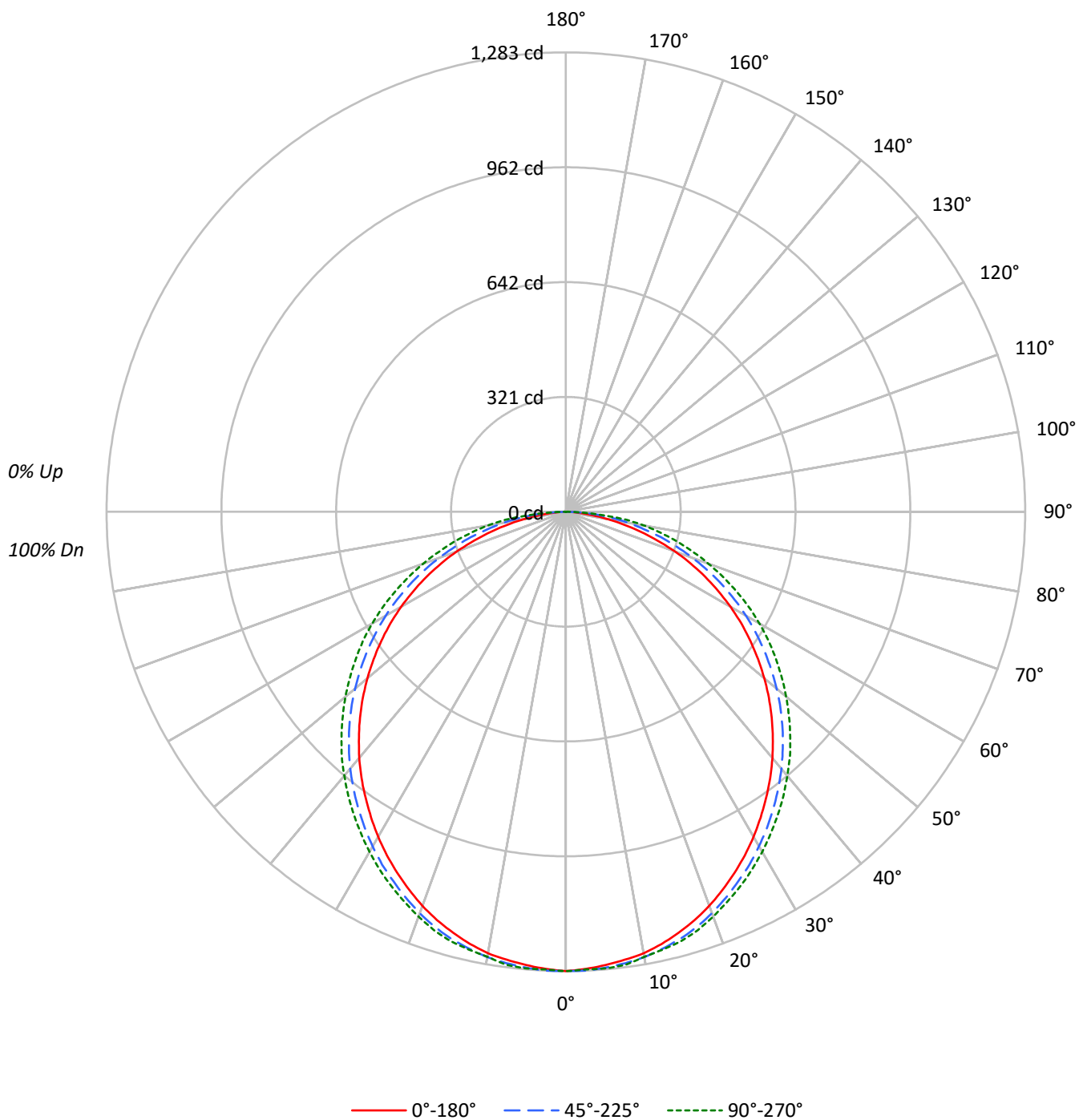
Lumens per Lamp: N/A
Luminaire Lumens: 3732.0 lumens
Efficiency: N/A
Efficacy: 151.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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°	1965	1965	1965
5°	1954	1965	1969
10°	1948	1964	1963
15°	1930	1958	1969
20°	1909	1944	1962
25°	1882	1925	1950
30°	1854	1908	1940
35°	1824	1890	1930
40°	1795	1873	1925
45°	1762	1854	1920
50°	1724	1831	1915
55°	1681	1807	1912
60°	1628	1781	1913
65°	1554	1743	1903
70°	1452	1690	1898
75°	1288	1625	1905
80°	1048	1544	1962
85°	677	1425	1692

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1988 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.3
10°-20°	347.7	9.3
20°-30°	524.2	14.0
30°-40°	630.7	16.9
40°-50°	657.9	17.6
50°-60°	603.0	16.2
60°-70°	473.6	12.7
70°-80°	288.2	7.7
80°-90°	85.3	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°	993.3	26.6
0°-40°	1624.0	43.5
0°-60°	2885.0	77.3
0°-90°	3732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1271	1279	1278	1276	1280	121
15°	1217	1229	1235	1236	1242	343
25°	1114	1129	1139	1146	1154	513
35°	975	991	1011	1025	1032	610
45°	813	830	856	876	886	627
55°	629	646	677	704	716	562
65°	429	445	481	513	525	424
75°	218	238	275	308	322	231
85°	38	55	81	91	96	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.9	1282.9	1282.9	1282.9	1282.9
2.5°	1278.1	1284.5	1282.9	1277.3	1279.7
5°	1270.9	1278.9	1278.1	1276.5	1280.5
7.5°	1262.1	1270.9	1271.7	1271.7	1276.5
10°	1252.4	1261.3	1262.9	1260.5	1262.1
12.5°	1236.4	1246.8	1250.0	1250.0	1252.4
15°	1217.1	1229.1	1234.8	1236.4	1242.0
17.5°	1196.2	1209.1	1216.3	1220.3	1225.1
20°	1171.3	1185.0	1193.0	1197.8	1203.5
22.5°	1143.2	1158.5	1167.3	1172.1	1178.6
25°	1113.5	1128.8	1139.2	1146.5	1153.7
27.5°	1082.2	1096.7	1111.1	1120.0	1126.4
30°	1048.5	1063.8	1079.0	1090.3	1096.7
32.5°	1012.4	1028.4	1046.1	1058.1	1065.4
35°	975.4	990.7	1010.8	1025.2	1032.4
37.5°	937.7	953.8	974.6	989.9	998.7
40°	897.6	914.4	936.9	953.8	962.6
42.5°	855.8	871.9	896.8	916.0	926.5
45°	813.3	830.1	855.8	875.9	886.3
47.5°	769.1	785.2	813.3	836.6	845.4
50°	723.4	738.6	768.3	793.2	803.6
52.5°	676.8	692.8	722.6	749.0	760.3
55°	629.4	645.5	676.8	704.1	716.1
57.5°	581.3	597.3	629.4	657.5	672.0
60°	531.5	547.5	581.3	610.2	624.6
62.5°	480.1	497.0	531.5	561.2	576.4
65°	428.7	444.8	480.9	513.0	525.1
67.5°	377.3	393.4	428.7	460.8	475.3
70°	324.3	342.8	377.3	411.1	423.9
72.5°	269.0	289.8	324.3	359.7	372.5
75°	217.6	237.6	274.6	307.5	321.9
77.5°	167.0	188.7	223.2	256.9	271.4
80°	118.8	139.7	175.0	207.1	222.4
82.5°	75.5	93.9	129.3	158.2	169.4
85°	38.5	54.6	81.1	90.7	96.3
87.5°	11.2	19.3	28.9	36.1	40.1
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	13.85	15.51	14.21	15.82	16.13	14.58	16.24	14.95	16.56	16.87
	3H	15.61	17.12	15.99	17.45	17.81	16.66	18.17	17.04	18.49	18.85
	4H	16.23	17.65	16.63	18.00	18.38	17.53	18.95	17.92	19.29	19.67
	6H	16.64	17.96	17.05	18.32	18.71	18.27	19.59	18.68	19.95	20.34
	8H	16.75	18.01	17.17	18.39	18.79	18.57	19.83	18.99	20.21	20.61
	12H	16.79	18.00	17.22	18.38	18.81	18.76	19.97	19.19	20.35	20.78
4H	2H	14.61	16.03	15.01	16.38	16.76	15.19	16.61	15.58	16.95	17.33
	3H	16.61	17.80	17.01	18.20	18.60	17.50	18.69	17.91	19.09	19.49
	4H	17.35	18.43	17.78	18.84	19.28	18.52	19.60	18.95	20.01	20.45
	6H	17.88	18.83	18.33	19.27	19.72	19.42	20.37	19.88	20.81	21.27
	8H	18.02	18.91	18.48	19.35	19.81	19.79	20.68	20.25	21.12	21.59
	12H	18.10	18.90	18.58	19.37	19.84	20.04	20.85	20.52	21.32	21.79
8H	4H	17.79	18.68	18.25	19.12	19.59	18.82	19.70	19.27	20.15	20.61
	6H	18.46	19.20	18.95	19.69	20.16	19.87	20.61	20.36	21.10	21.58
	8H	18.67	19.33	19.17	19.84	20.32	20.34	21.01	20.85	21.52	22.00
	12H	18.80	19.39	19.31	19.88	20.44	20.70	21.29	21.20	21.78	22.33
12H	4H	17.87	18.68	18.35	19.15	19.62	18.84	19.64	19.32	20.12	20.59
	6H	18.58	19.25	19.09	19.75	20.24	19.92	20.59	20.43	21.10	21.58
	8H	18.86	19.45	19.36	19.94	20.50	20.46	21.05	20.97	21.54	22.10