

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: P1589721

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589721
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-37HE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 3500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

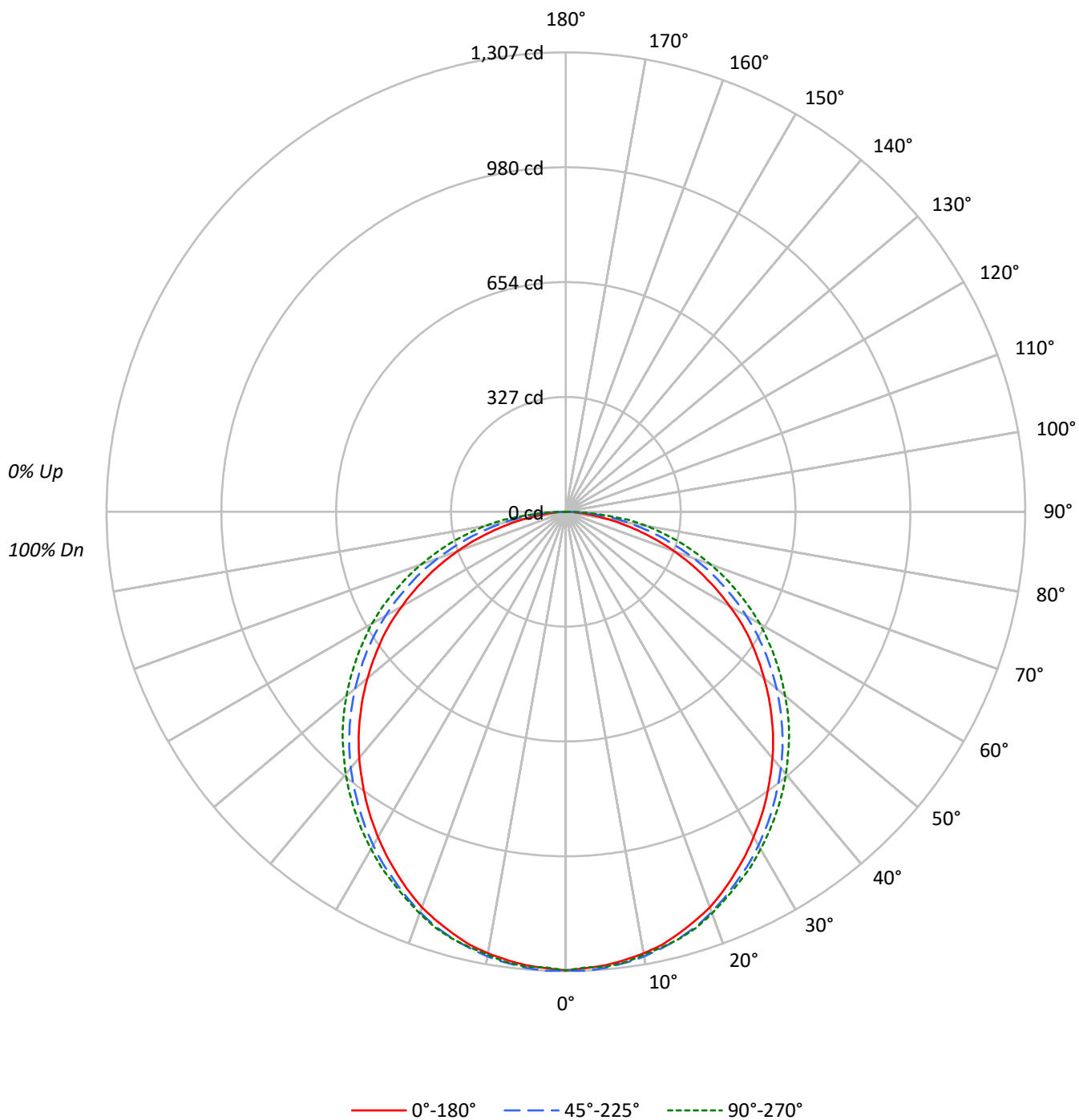
Lumens per Lamp: N/A
Luminaire Lumens: 3808.0 lumens
Efficiency: N/A
Efficacy: 154.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	93	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	68
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1998	1998	1998
5°	1991	2002	1997
10°	1984	1998	1991
15°	1969	1990	1992
20°	1952	1976	1982
25°	1920	1955	1968
30°	1890	1939	1960
35°	1860	1920	1953
40°	1829	1903	1948
45°	1795	1885	1946
50°	1755	1865	1941
55°	1715	1844	1941
60°	1652	1817	1953
65°	1574	1782	1954
70°	1469	1733	1960
75°	1307	1669	1994
80°	1073	1599	2068
85°	708	1501	1870

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2118 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	3.2
10°-20°	353.3	9.3
20°-30°	532.5	14.0
30°-40°	641.3	16.8
40°-50°	670.0	17.6
50°-60°	615.5	16.2
60°-70°	484.7	12.7
70°-80°	297.2	7.8
80°-90°	90.1	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°	1009.3	26.5
0°-40°	1650.5	43.3
0°-60°	2936.0	77.1
0°-90°	3808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1295	1298	1302	1301	1299	123
15°	1242	1247	1255	1260	1256	350
25°	1136	1144	1157	1169	1165	524
35°	995	1007	1027	1045	1044	622
45°	828	846	870	895	899	639
55°	642	661	691	720	727	573
65°	434	457	492	525	539	429
75°	221	247	282	316	337	235
85°	40	60	85	95	106	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.8	1304.8	1304.8	1304.8	1304.8
2.5°	1300.0	1303.2	1307.3	1300.8	1297.6
5°	1295.2	1297.6	1302.4	1300.8	1299.2
7.5°	1286.3	1287.9	1294.4	1294.4	1292.8
10°	1275.8	1279.1	1284.7	1283.9	1279.9
12.5°	1262.1	1264.6	1271.0	1271.0	1268.6
15°	1242.0	1246.8	1254.9	1259.7	1256.5
17.5°	1221.0	1225.9	1236.3	1241.2	1239.6
20°	1197.7	1201.7	1212.2	1219.4	1216.2
22.5°	1168.6	1173.5	1185.6	1193.6	1190.4
25°	1136.4	1143.7	1156.6	1168.6	1164.6
27.5°	1104.2	1112.2	1128.3	1140.4	1138.8
30°	1068.7	1079.2	1096.1	1111.4	1108.2
32.5°	1032.4	1044.5	1062.3	1078.4	1077.6
35°	994.6	1007.4	1026.8	1045.3	1044.5
37.5°	954.3	969.6	989.7	1009.9	1010.7
40°	914.8	929.3	951.8	973.6	974.4
42.5°	872.9	888.2	912.3	934.9	935.7
45°	828.5	846.3	870.4	894.6	898.6
47.5°	783.4	801.9	826.9	852.7	857.5
50°	736.6	756.0	782.6	810.0	814.8
52.5°	689.1	709.2	736.6	764.1	771.3
55°	642.4	660.9	690.7	720.5	727.0
57.5°	593.2	610.1	642.4	673.8	681.8
60°	539.2	560.1	593.2	624.6	637.5
62.5°	486.8	509.4	543.2	574.6	589.2
65°	434.4	457.0	491.6	524.7	539.2
67.5°	381.2	404.6	441.7	473.1	489.2
70°	328.0	351.4	386.9	420.7	437.6
72.5°	274.8	299.8	334.5	369.1	386.1
75°	220.8	246.6	282.1	315.9	336.9
77.5°	170.1	195.0	230.5	265.2	282.9
80°	121.7	146.7	181.3	216.0	234.5
82.5°	77.4	100.7	134.6	163.6	180.5
85°	40.3	59.6	85.4	95.1	106.4
87.5°	12.1	23.4	33.0	37.1	45.9
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	13.92	15.58	14.28	15.90	16.21	14.67	16.33	15.03	16.64	16.96
	3H	15.68	17.19	16.06	17.52	17.87	16.76	18.27	17.14	18.59	18.95
	4H	16.31	17.73	16.70	18.08	18.45	17.65	19.07	18.04	19.42	19.79
	6H	16.72	18.04	17.13	18.40	18.79	18.41	19.73	18.82	20.10	20.49
	8H	16.82	18.09	17.25	18.48	18.87	18.72	19.99	19.15	20.38	20.77
	12H	16.88	18.09	17.31	18.47	18.90	18.94	20.15	19.37	20.53	20.96
4H	2H	14.69	16.11	15.09	16.46	16.83	15.27	16.69	15.67	17.04	17.41
	3H	16.68	17.88	17.09	18.28	18.68	17.60	18.80	18.01	19.19	19.59
	4H	17.44	18.52	17.87	18.94	19.37	18.63	19.72	19.06	20.13	20.57
	6H	17.97	18.93	18.43	19.36	19.82	19.56	20.52	20.02	20.95	21.41
	8H	18.12	19.01	18.58	19.45	19.92	19.95	20.84	20.41	21.28	21.74
	12H	18.21	19.01	18.68	19.48	19.95	20.22	21.03	20.70	21.50	21.97
8H	4H	17.89	18.78	18.35	19.22	19.69	18.93	19.82	19.39	20.27	20.73
	6H	18.57	19.31	19.06	19.80	20.27	20.02	20.76	20.51	21.25	21.72
	8H	18.79	19.46	19.29	19.96	20.44	20.50	21.17	21.01	21.68	22.16
	12H	18.93	19.53	19.44	20.02	20.57	20.88	21.47	21.38	21.96	22.52
12H	4H	17.97	18.78	18.45	19.25	19.72	18.96	19.76	19.44	20.24	20.71
	6H	18.69	19.36	19.20	19.87	20.35	20.07	20.74	20.58	21.24	21.73
	8H	18.99	19.58	19.49	20.07	20.63	20.62	21.21	21.13	21.70	22.26