

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: P1589717

Luminaire Tested: 24CZSP-SB-37HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589717
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

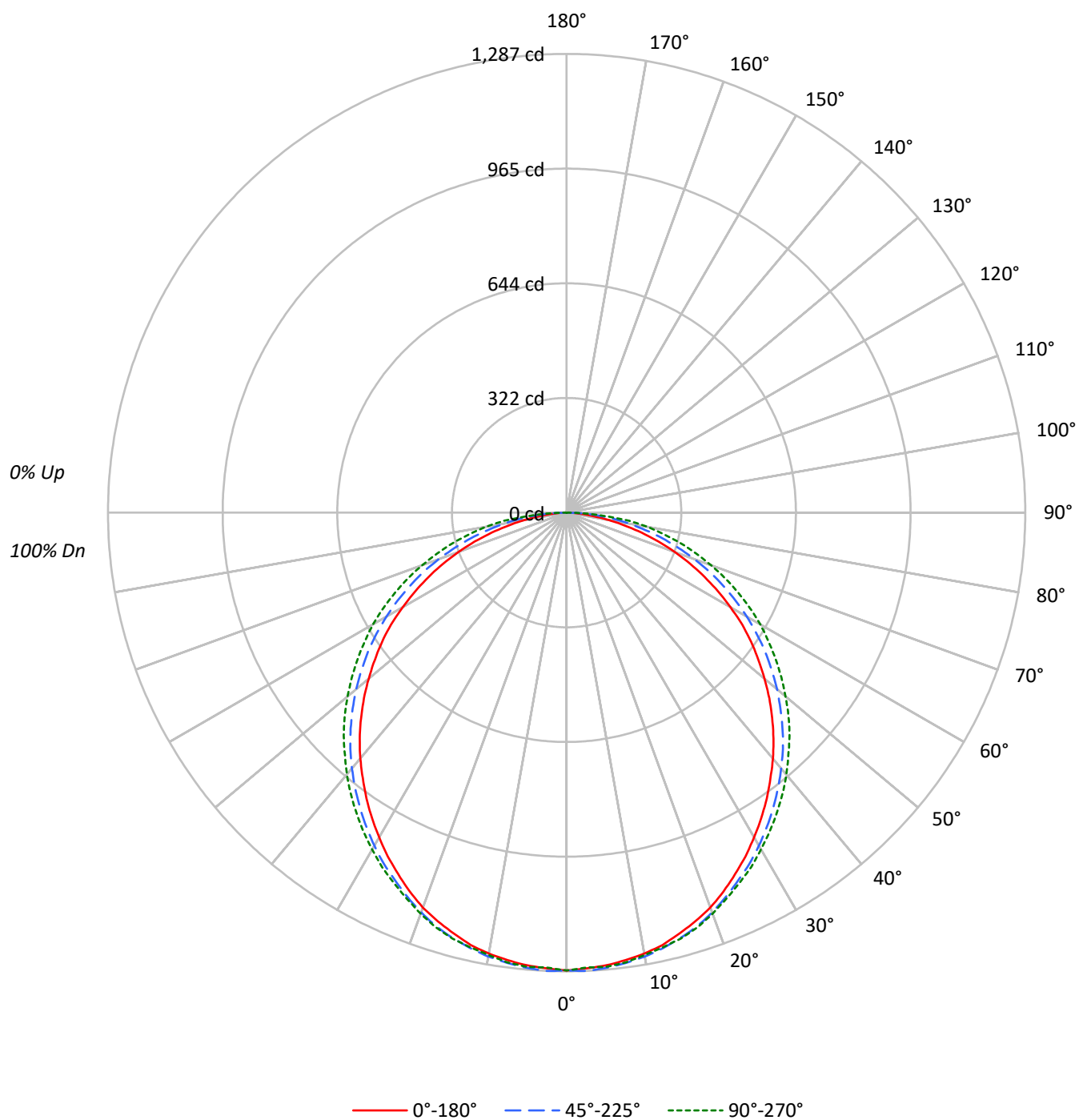
Lumens per Lamp: N/A
Luminaire Lumens: 3749.0 lumens
Efficiency: N/A
Efficacy: 151.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1968	1968	1968
5°	1960	1972	1967
10°	1954	1967	1960
15°	1939	1959	1961
20°	1922	1945	1952
25°	1891	1924	1938
30°	1861	1908	1930
35°	1831	1890	1923
40°	1801	1874	1918
45°	1767	1856	1916
50°	1728	1836	1911
55°	1689	1816	1911
60°	1626	1789	1922
65°	1550	1754	1924
70°	1446	1706	1930
75°	1287	1643	1963
80°	1057	1574	2037
85°	698	1478	1840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2085 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.5	3.2
10°-20°	347.8	9.3
20°-30°	524.3	14.0
30°-40°	631.3	16.8
40°-50°	659.6	17.6
50°-60°	606.0	16.2
60°-70°	477.2	12.7
70°-80°	292.6	7.8
80°-90°	88.7	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°	993.6	26.5
0°-40°	1625.0	43.3
0°-60°	2890.5	77.1
0°-90°	3749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1285	1285	1285	1285	1285	
5°	1275	1278	1282	1281	1279	121
15°	1223	1228	1235	1240	1237	345
25°	1119	1126	1139	1150	1147	516
35°	979	992	1011	1029	1028	612
45°	816	833	857	881	885	629
55°	632	651	680	709	716	564
65°	428	450	484	517	531	423
75°	217	243	278	311	332	231
85°	40	59	84	94	105	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1284.6	1284.6	1284.6	1284.6	1284.6
2.5°	1279.9	1283.0	1287.0	1280.7	1277.5
5°	1275.1	1277.5	1282.3	1280.7	1279.1
7.5°	1266.4	1268.0	1274.3	1274.3	1272.7
10°	1256.1	1259.2	1264.8	1264.0	1260.0
12.5°	1242.6	1245.0	1251.3	1251.3	1248.9
15°	1222.7	1227.5	1235.4	1240.2	1237.0
17.5°	1202.1	1206.9	1217.2	1221.9	1220.4
20°	1179.1	1183.1	1193.4	1200.5	1197.4
22.5°	1150.5	1155.3	1167.2	1175.1	1172.0
25°	1118.8	1125.9	1138.6	1150.5	1146.6
27.5°	1087.1	1095.0	1110.9	1122.8	1121.2
30°	1052.1	1062.5	1079.1	1094.2	1091.0
32.5°	1016.4	1028.3	1045.8	1061.7	1060.9
35°	979.1	991.8	1010.9	1029.1	1028.3
37.5°	939.5	954.5	974.4	994.2	995.0
40°	900.6	914.9	937.1	958.5	959.3
42.5°	859.3	874.4	898.2	920.4	921.2
45°	815.7	833.1	857.0	880.8	884.7
47.5°	771.3	789.5	814.1	839.5	844.3
50°	725.2	744.3	770.5	797.4	802.2
52.5°	678.4	698.3	725.2	752.2	759.4
55°	632.4	650.6	680.0	709.4	715.7
57.5°	584.0	600.7	632.4	663.3	671.3
60°	530.8	551.5	584.0	614.9	627.6
62.5°	479.3	501.5	534.8	565.7	580.0
65°	427.7	449.9	484.0	516.6	530.8
67.5°	375.3	398.3	434.8	465.8	481.6
70°	322.9	346.0	380.9	414.2	430.9
72.5°	270.6	295.2	329.3	363.4	380.1
75°	217.4	242.8	277.7	311.0	331.7
77.5°	167.4	192.0	226.9	261.1	278.5
80°	119.8	144.4	178.5	212.7	230.9
82.5°	76.2	99.2	132.5	161.1	177.7
85°	39.7	58.7	84.1	93.6	104.7
87.5°	11.9	23.0	32.5	36.5	45.2
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	13.87	15.53	14.23	15.84	16.16	14.61	16.27	14.98	16.59	16.90
	3H	15.63	17.14	16.00	17.46	17.82	16.71	18.21	17.08	18.54	18.90
	4H	16.25	17.67	16.65	18.02	18.40	17.59	19.01	17.99	19.36	19.74
	6H	16.66	17.99	17.07	18.35	18.74	18.36	19.68	18.77	20.04	20.43
	8H	16.77	18.03	17.19	18.42	18.82	18.67	19.93	19.09	20.32	20.72
	12H	16.82	18.03	17.25	18.41	18.84	18.88	20.09	19.31	20.47	20.90
4H	2H	14.64	16.06	15.03	16.41	16.78	15.21	16.64	15.61	16.98	17.36
	3H	16.63	17.83	17.04	18.22	18.62	17.54	18.74	17.95	19.14	19.54
	4H	17.38	18.47	17.81	18.88	19.32	18.58	19.66	19.01	20.08	20.51
	6H	17.92	18.87	18.37	19.31	19.76	19.51	20.46	19.96	20.90	21.35
	8H	18.07	18.96	18.53	19.40	19.86	19.89	20.78	20.35	21.23	21.69
	12H	18.15	18.96	18.63	19.43	19.90	20.17	20.97	20.65	21.45	21.91
8H	4H	17.83	18.73	18.29	19.17	19.63	18.88	19.77	19.34	20.21	20.68
	6H	18.51	19.26	19.00	19.74	20.22	19.96	20.71	20.45	21.19	21.67
	8H	18.73	19.40	19.24	19.91	20.39	20.45	21.12	20.96	21.62	22.11
	12H	18.88	19.47	19.39	19.96	20.52	20.82	21.42	21.33	21.91	22.46
12H	4H	17.92	18.72	18.40	19.20	19.66	18.91	19.71	19.38	20.18	20.65
	6H	18.64	19.31	19.15	19.81	20.30	20.01	20.68	20.52	21.19	21.67
	8H	18.93	19.52	19.44	20.01	20.57	20.57	21.16	21.07	21.65	22.21