

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: P1589714

Luminaire Tested: 24CZSP-SB-37HE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589714
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-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 3500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

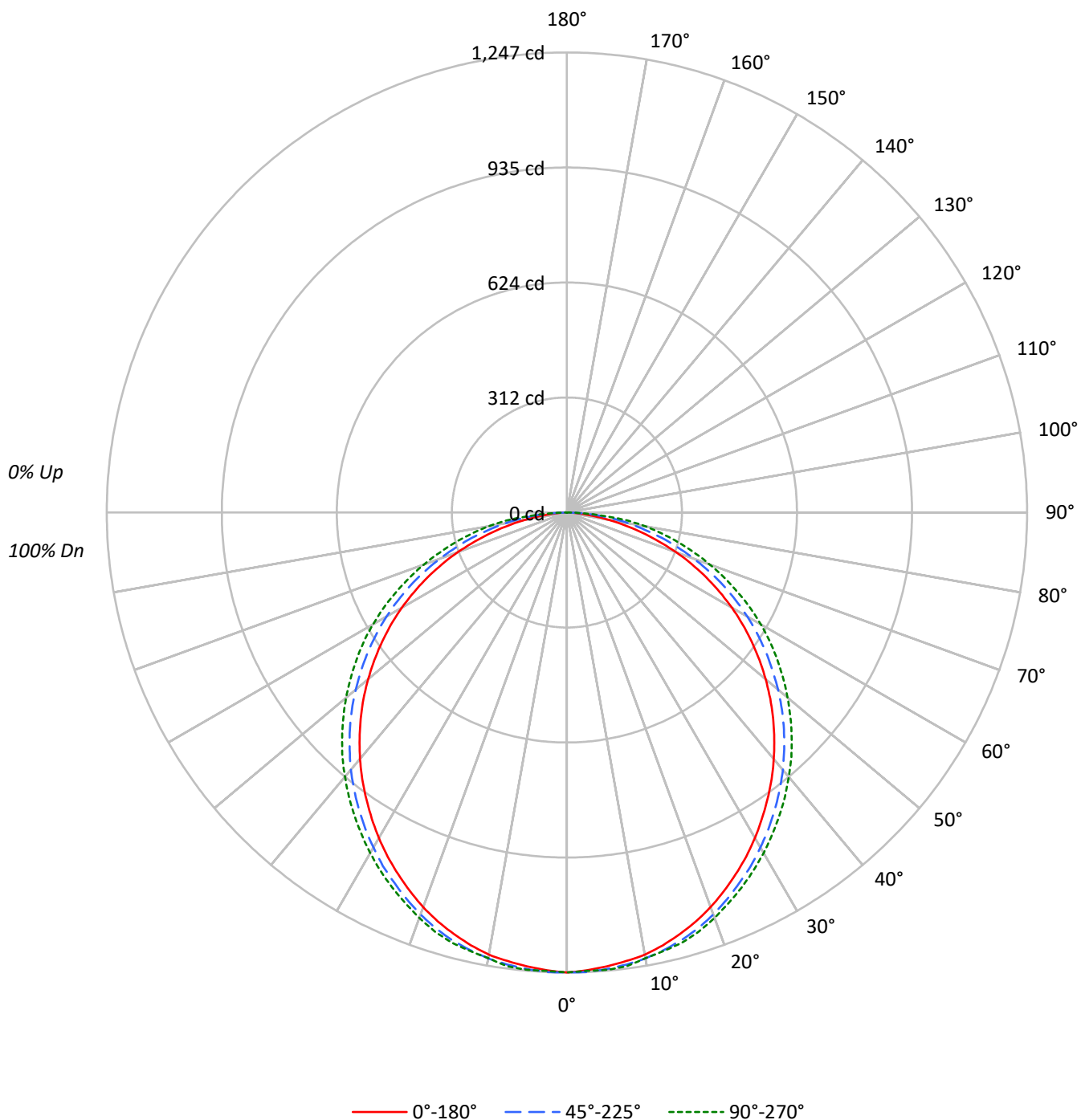
Lumens per Lamp: N/A
Luminaire Lumens: 3627.0 lumens
Efficiency: N/A
Efficacy: 146.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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°	1910	1910	1910
5°	1899	1910	1913
10°	1893	1909	1908
15°	1876	1903	1914
20°	1856	1890	1906
25°	1829	1871	1895
30°	1802	1855	1885
35°	1773	1837	1876
40°	1744	1820	1870
45°	1712	1802	1866
50°	1675	1779	1861
55°	1633	1756	1859
60°	1582	1730	1859
65°	1510	1694	1849
70°	1412	1642	1845
75°	1251	1579	1852
80°	1019	1500	1906
85°	659	1385	1645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1931 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	3.3
10°-20°	337.9	9.3
20°-30°	509.4	14.0
30°-40°	613.0	16.9
40°-50°	639.4	17.6
50°-60°	586.1	16.2
60°-70°	460.2	12.7
70°-80°	280.1	7.7
80°-90°	82.9	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°	965.3	26.6
0°-40°	1578.3	43.5
0°-60°	2803.8	77.3
0°-90°	3627.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3627.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1235	1243	1242	1241	1244	117
15°	1183	1195	1200	1202	1207	334
25°	1082	1097	1107	1114	1121	499
35°	948	963	982	996	1003	593
45°	790	807	832	851	861	609
55°	612	627	658	684	696	547
65°	417	432	467	499	510	412
75°	211	231	267	299	313	224
85°	38	53	79	88	94	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.8	1246.8	1246.8	1246.8	1246.8
2.5°	1242.2	1248.4	1246.8	1241.4	1243.7
5°	1235.1	1242.9	1242.2	1240.6	1244.5
7.5°	1226.6	1235.1	1235.9	1235.9	1240.6
10°	1217.2	1225.8	1227.3	1225.0	1226.6
12.5°	1201.6	1211.7	1214.8	1214.8	1217.2
15°	1182.9	1194.6	1200.0	1201.6	1207.0
17.5°	1162.6	1175.1	1182.1	1186.0	1190.7
20°	1138.4	1151.6	1159.4	1164.1	1169.6
22.5°	1111.1	1125.9	1134.5	1139.2	1145.4
25°	1082.2	1097.0	1107.2	1114.2	1121.2
27.5°	1051.8	1065.8	1079.9	1088.4	1094.7
30°	1019.0	1033.8	1048.7	1059.6	1065.8
32.5°	983.9	999.5	1016.7	1028.4	1035.4
35°	948.0	962.8	982.3	996.4	1003.4
37.5°	911.3	926.9	947.2	962.0	970.6
40°	872.3	888.7	910.5	926.9	935.5
42.5°	831.7	847.3	871.5	890.3	900.4
45°	790.4	806.8	831.7	851.3	861.4
47.5°	747.5	763.1	790.4	813.0	821.6
50°	703.0	717.8	746.7	770.9	781.0
52.5°	657.7	673.4	702.2	728.0	738.9
55°	611.7	627.3	657.7	684.3	696.0
57.5°	564.9	580.5	611.7	639.0	653.1
60°	516.5	532.1	564.9	593.0	607.0
62.5°	466.6	483.0	516.5	545.4	560.2
65°	416.7	432.3	467.4	498.6	510.3
67.5°	366.7	382.3	416.7	447.9	461.9
70°	315.2	333.2	366.7	399.5	412.0
72.5°	261.4	281.7	315.2	349.6	362.0
75°	211.4	231.0	266.8	298.8	312.9
77.5°	162.3	183.4	216.9	249.7	263.7
80°	115.5	135.8	170.1	201.3	216.1
82.5°	73.3	91.3	125.6	153.7	164.6
85°	37.5	53.1	78.8	88.2	93.6
87.5°	10.9	18.7	28.1	35.1	39.0
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	13.75	15.41	14.11	15.72	16.04	14.48	16.14	14.85	16.46	16.77
	3H	15.52	17.02	15.89	17.35	17.71	16.56	18.07	16.94	18.39	18.75
	4H	16.13	17.55	16.53	17.90	18.28	17.43	18.85	17.82	19.19	19.57
	6H	16.54	17.86	16.95	18.23	18.62	18.17	19.49	18.58	19.85	20.24
	8H	16.65	17.91	17.07	18.30	18.69	18.47	19.73	18.89	20.11	20.51
	12H	16.70	17.90	17.12	18.28	18.71	18.66	19.87	19.09	20.25	20.68
4H	2H	14.52	15.94	14.91	16.28	16.66	15.09	16.51	15.48	16.85	17.23
	3H	16.51	17.70	16.92	18.10	18.50	17.40	18.60	17.81	18.99	19.39
	4H	17.25	18.33	17.68	18.75	19.18	18.42	19.50	18.85	19.91	20.35
	6H	17.78	18.73	18.23	19.17	19.62	19.32	20.27	19.78	20.71	21.17
	8H	17.92	18.81	18.38	19.25	19.72	19.69	20.58	20.15	21.02	21.49
	12H	18.00	18.80	18.48	19.28	19.74	19.94	20.75	20.42	21.22	21.69
8H	4H	17.69	18.58	18.15	19.03	19.49	18.72	19.61	19.17	20.05	20.51
	6H	18.36	19.10	18.85	19.59	20.06	19.77	20.52	20.27	21.00	21.48
	8H	18.57	19.23	19.07	19.74	20.22	20.25	20.91	20.75	21.42	21.90
	12H	18.70	19.29	19.21	19.78	20.34	20.60	21.19	21.10	21.68	22.24
12H	4H	17.78	18.58	18.25	19.05	19.52	18.74	19.54	19.22	20.02	20.49
	6H	18.48	19.15	18.99	19.65	20.14	19.82	20.49	20.33	21.00	21.48
	8H	18.76	19.35	19.26	19.84	20.40	20.36	20.95	20.87	21.44	22.00