

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: P1589727

Luminaire Tested: 24CZSP-SB-37HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589727
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-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

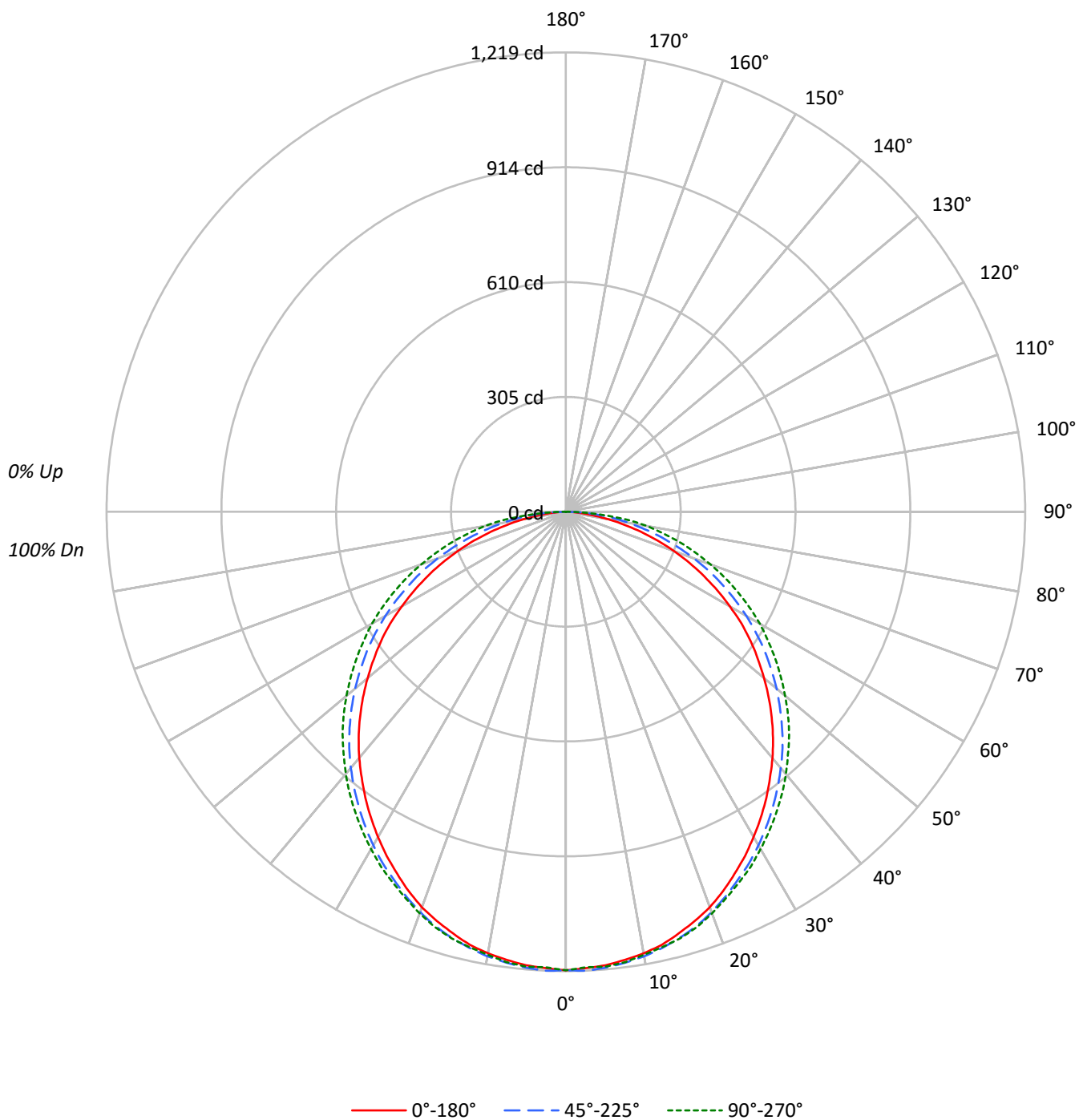
Lumens per Lamp: N/A
Luminaire Lumens: 3551.0 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1864	1864	1864
5°	1857	1867	1863
10°	1850	1863	1856
15°	1837	1856	1858
20°	1820	1842	1848
25°	1791	1823	1835
30°	1763	1808	1828
35°	1734	1790	1821
40°	1705	1775	1817
45°	1673	1758	1815
50°	1637	1739	1810
55°	1600	1720	1810
60°	1540	1695	1821
65°	1468	1662	1822
70°	1370	1616	1828
75°	1218	1556	1859
80°	1001	1492	1929
85°	661	1401	1743

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1976 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.1	3.2
10°-20°	329.5	9.3
20°-30°	496.6	14.0
30°-40°	598.0	16.8
40°-50°	624.8	17.6
50°-60°	574.0	16.2
60°-70°	452.0	12.7
70°-80°	277.1	7.8
80°-90°	84.0	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°	941.1	26.5
0°-40°	1539.1	43.3
0°-60°	2737.9	77.1
0°-90°	3551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1208	1210	1214	1213	1212	115
15°	1158	1163	1170	1175	1172	327
25°	1060	1066	1078	1090	1086	489
35°	927	940	958	975	974	580
45°	773	789	812	834	838	596
55°	599	616	644	672	678	534
65°	405	426	458	489	503	400
75°	206	230	263	295	314	219
85°	38	56	80	89	99	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.8	1216.8	1216.8	1216.8	1216.8
2.5°	1212.3	1215.3	1219.0	1213.0	1210.0
5°	1207.8	1210.0	1214.5	1213.0	1211.5
7.5°	1199.5	1201.0	1207.0	1207.0	1205.5
10°	1189.7	1192.7	1198.0	1197.2	1193.5
12.5°	1177.0	1179.2	1185.2	1185.2	1183.0
15°	1158.2	1162.7	1170.2	1174.7	1171.7
17.5°	1138.6	1143.1	1152.9	1157.4	1155.9
20°	1116.8	1120.6	1130.4	1137.1	1134.1
22.5°	1089.8	1094.3	1105.6	1113.1	1110.1
25°	1059.7	1066.5	1078.5	1089.8	1086.0
27.5°	1029.6	1037.2	1052.2	1063.5	1062.0
30°	996.6	1006.3	1022.1	1036.4	1033.4
32.5°	962.8	974.0	990.6	1005.6	1004.8
35°	927.4	939.5	957.5	974.8	974.0
37.5°	889.9	904.1	922.9	941.7	942.5
40°	853.0	866.6	887.6	907.9	908.6
42.5°	813.9	828.2	850.8	871.8	872.6
45°	772.6	789.1	811.7	834.2	838.0
47.5°	730.5	747.8	771.1	795.2	799.7
50°	686.9	705.0	729.8	755.3	759.8
52.5°	642.6	661.4	686.9	712.5	719.2
55°	599.0	616.3	644.1	671.9	677.9
57.5°	553.2	568.9	599.0	628.3	635.8
60°	502.8	522.3	553.2	582.5	594.5
62.5°	453.9	475.0	506.6	535.9	549.4
65°	405.1	426.1	458.5	489.3	502.8
67.5°	355.5	377.3	411.9	441.2	456.2
70°	305.9	327.7	360.8	392.3	408.1
72.5°	256.3	279.6	311.9	344.2	360.0
75°	205.9	230.0	263.0	294.6	314.2
77.5°	158.6	181.9	214.9	247.3	263.8
80°	113.5	136.8	169.1	201.4	218.7
82.5°	72.2	93.9	125.5	152.6	168.4
85°	37.6	55.6	79.7	88.7	99.2
87.5°	11.3	21.8	30.8	34.6	42.8
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	13.68	15.34	14.04	15.65	15.97	14.42	16.08	14.79	16.40	16.71
	3H	15.44	16.95	15.82	17.27	17.63	16.52	18.03	16.89	18.35	18.71
	4H	16.06	17.49	16.46	17.83	18.21	17.40	18.83	17.80	19.17	19.55
	6H	16.48	17.80	16.89	18.16	18.55	18.17	19.49	18.58	19.85	20.24
	8H	16.58	17.84	17.01	18.23	18.63	18.48	19.74	18.90	20.13	20.53
	12H	16.63	17.84	17.06	18.23	18.65	18.69	19.90	19.12	20.29	20.71
4H	2H	14.45	15.87	14.84	16.22	16.59	15.03	16.45	15.42	16.80	17.17
	3H	16.44	17.64	16.85	18.03	18.43	17.35	18.55	17.76	18.95	19.35
	4H	17.19	18.28	17.62	18.69	19.13	18.39	19.48	18.82	19.89	20.32
	6H	17.73	18.68	18.18	19.12	19.58	19.32	20.27	19.77	20.71	21.17
	8H	17.88	18.77	18.34	19.21	19.68	19.70	20.60	20.16	21.04	21.50
	12H	17.96	18.77	18.44	19.24	19.71	19.98	20.78	20.46	21.26	21.73
8H	4H	17.65	18.54	18.10	18.98	19.44	18.69	19.58	19.15	20.02	20.49
	6H	18.32	19.07	18.82	19.55	20.03	19.77	20.52	20.27	21.00	21.48
	8H	18.54	19.21	19.05	19.72	20.20	20.26	20.93	20.77	21.43	21.92
	12H	18.69	19.28	19.20	19.77	20.33	20.64	21.23	21.14	21.72	22.28
12H	4H	17.73	18.53	18.21	19.01	19.48	18.72	19.52	19.20	19.99	20.46
	6H	18.45	19.12	18.96	19.63	20.11	19.83	20.50	20.33	21.00	21.49
	8H	18.74	19.33	19.25	19.82	20.38	20.38	20.97	20.88	21.46	22.02