

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: P1589730

Luminaire Tested: 24CZSP-SB-37HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589730
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 3500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

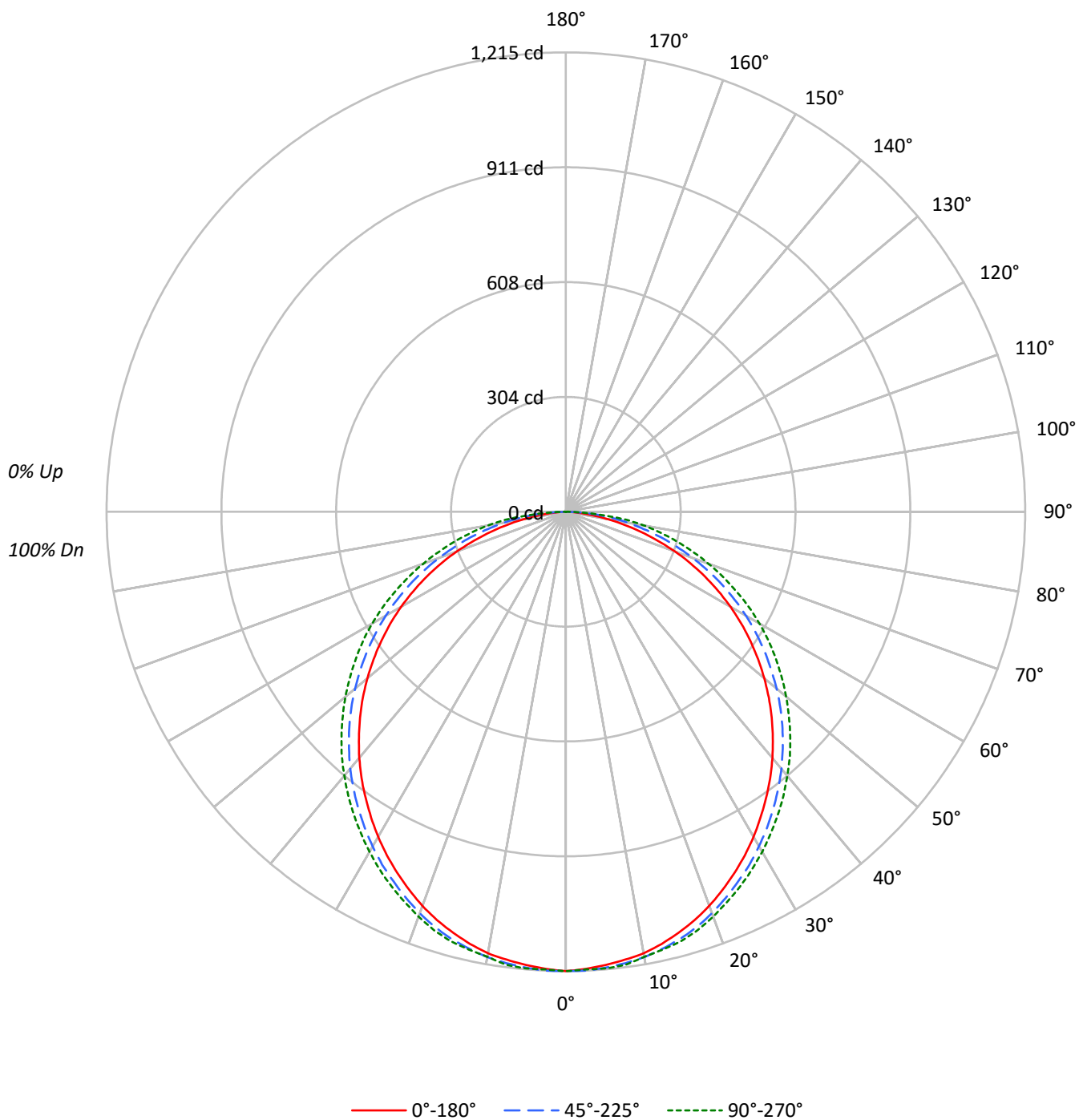
Lumens per Lamp: N/A
Luminaire Lumens: 3534.0 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			
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°	1861	1861	1861
5°	1850	1861	1864
10°	1845	1860	1859
15°	1827	1854	1865
20°	1808	1841	1857
25°	1782	1823	1846
30°	1756	1807	1837
35°	1727	1790	1828
40°	1699	1774	1822
45°	1668	1755	1818
50°	1632	1734	1813
55°	1592	1711	1811
60°	1542	1686	1812
65°	1471	1650	1802
70°	1375	1600	1798
75°	1219	1539	1804
80°	992	1462	1858
85°	641	1350	1603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1882 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	3.3
10°-20°	329.2	9.3
20°-30°	496.4	14.0
30°-40°	597.3	16.9
40°-50°	623.0	17.6
50°-60°	571.0	16.2
60°-70°	448.4	12.7
70°-80°	272.9	7.7
80°-90°	80.7	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°	940.6	26.6
0°-40°	1537.9	43.5
0°-60°	2731.9	77.3
0°-90°	3534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1204	1211	1210	1209	1213	114
15°	1152	1164	1169	1171	1176	325
25°	1054	1069	1079	1086	1092	486
35°	924	938	957	971	978	578
45°	770	786	810	829	839	594
55°	596	611	641	667	678	533
65°	406	421	455	486	497	402
75°	206	225	260	291	305	218
85°	36	52	77	86	91	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1214.9	1214.9	1214.9	1214.9	1214.9
2.5°	1210.3	1216.4	1214.9	1209.5	1211.8
5°	1203.5	1211.1	1210.3	1208.8	1212.6
7.5°	1195.1	1203.5	1204.2	1204.2	1208.8
10°	1186.0	1194.3	1195.9	1193.6	1195.1
12.5°	1170.8	1180.7	1183.7	1183.7	1186.0
15°	1152.5	1163.9	1169.3	1170.8	1176.1
17.5°	1132.8	1144.9	1151.8	1155.6	1160.1
20°	1109.2	1122.1	1129.7	1134.3	1139.6
22.5°	1082.6	1097.0	1105.4	1110.0	1116.0
25°	1054.5	1068.9	1078.8	1085.6	1092.5
27.5°	1024.8	1038.5	1052.2	1060.5	1066.6
30°	992.9	1007.3	1021.8	1032.4	1038.5
32.5°	958.7	973.9	990.6	1002.0	1008.8
35°	923.7	938.1	957.1	970.8	977.7
37.5°	888.0	903.2	922.9	937.4	945.7
40°	850.0	865.9	887.2	903.2	911.5
42.5°	810.4	825.6	849.2	867.4	877.3
45°	770.1	786.1	810.4	829.4	839.3
47.5°	728.3	743.5	770.1	792.2	800.5
50°	685.0	699.4	727.6	751.1	761.0
52.5°	640.9	656.1	684.2	709.3	719.9
55°	596.0	611.2	640.9	666.7	678.1
57.5°	550.4	565.6	596.0	622.6	636.3
60°	503.3	518.5	550.4	577.8	591.5
62.5°	454.6	470.6	503.3	531.4	545.9
65°	406.0	421.2	455.4	485.8	497.2
67.5°	357.3	372.5	406.0	436.4	450.1
70°	307.1	324.6	357.3	389.2	401.4
72.5°	254.7	274.4	307.1	340.6	352.8
75°	206.0	225.0	260.0	291.2	304.9
77.5°	158.1	178.7	211.3	243.3	257.0
80°	112.5	132.3	165.7	196.1	210.6
82.5°	71.5	88.9	122.4	149.8	160.4
85°	36.5	51.7	76.8	85.9	91.2
87.5°	10.6	18.2	27.4	34.2	38.0
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	13.66	15.32	14.02	15.63	15.95	14.39	16.05	14.76	16.37	16.68
	3H	15.43	16.93	15.80	17.26	17.62	16.47	17.98	16.85	18.30	18.66
	4H	16.04	17.46	16.44	17.81	18.19	17.34	18.76	17.73	19.10	19.48
	6H	16.45	17.77	16.86	18.13	18.52	18.08	19.40	18.49	19.76	20.15
	8H	16.56	17.82	16.98	18.20	18.60	18.38	19.64	18.80	20.03	20.42
	12H	16.60	17.81	17.03	18.19	18.62	18.57	19.78	19.00	20.16	20.59
4H	2H	14.43	15.85	14.82	16.19	16.57	15.00	16.42	15.39	16.76	17.14
	3H	16.42	17.61	16.83	18.01	18.41	17.31	18.50	17.72	18.90	19.30
	4H	17.16	18.24	17.59	18.65	19.09	18.33	19.41	18.76	19.82	20.26
	6H	17.69	18.64	18.14	19.08	19.53	19.23	20.18	19.69	20.62	21.08
	8H	17.83	18.72	18.29	19.16	19.62	19.60	20.49	20.06	20.93	21.40
	12H	17.91	18.71	18.39	19.19	19.65	19.85	20.66	20.33	21.13	21.60
8H	4H	17.60	18.49	18.06	18.94	19.40	18.63	19.52	19.08	19.96	20.42
	6H	18.27	19.01	18.76	19.50	19.97	19.68	20.43	20.18	20.91	21.39
	8H	18.48	19.14	18.98	19.65	20.13	20.16	20.82	20.66	21.33	21.81
	12H	18.61	19.20	19.12	19.69	20.25	20.51	21.10	21.01	21.59	22.15
12H	4H	17.68	18.49	18.16	18.96	19.43	18.65	19.45	19.13	19.93	20.40
	6H	18.39	19.06	18.90	19.56	20.05	19.73	20.40	20.24	20.91	21.39
	8H	18.67	19.26	19.17	19.75	20.31	20.27	20.86	20.78	21.35	21.91