

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: P1589769

Luminaire Tested: 24CZSP-SB-43HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589769
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-43HE-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

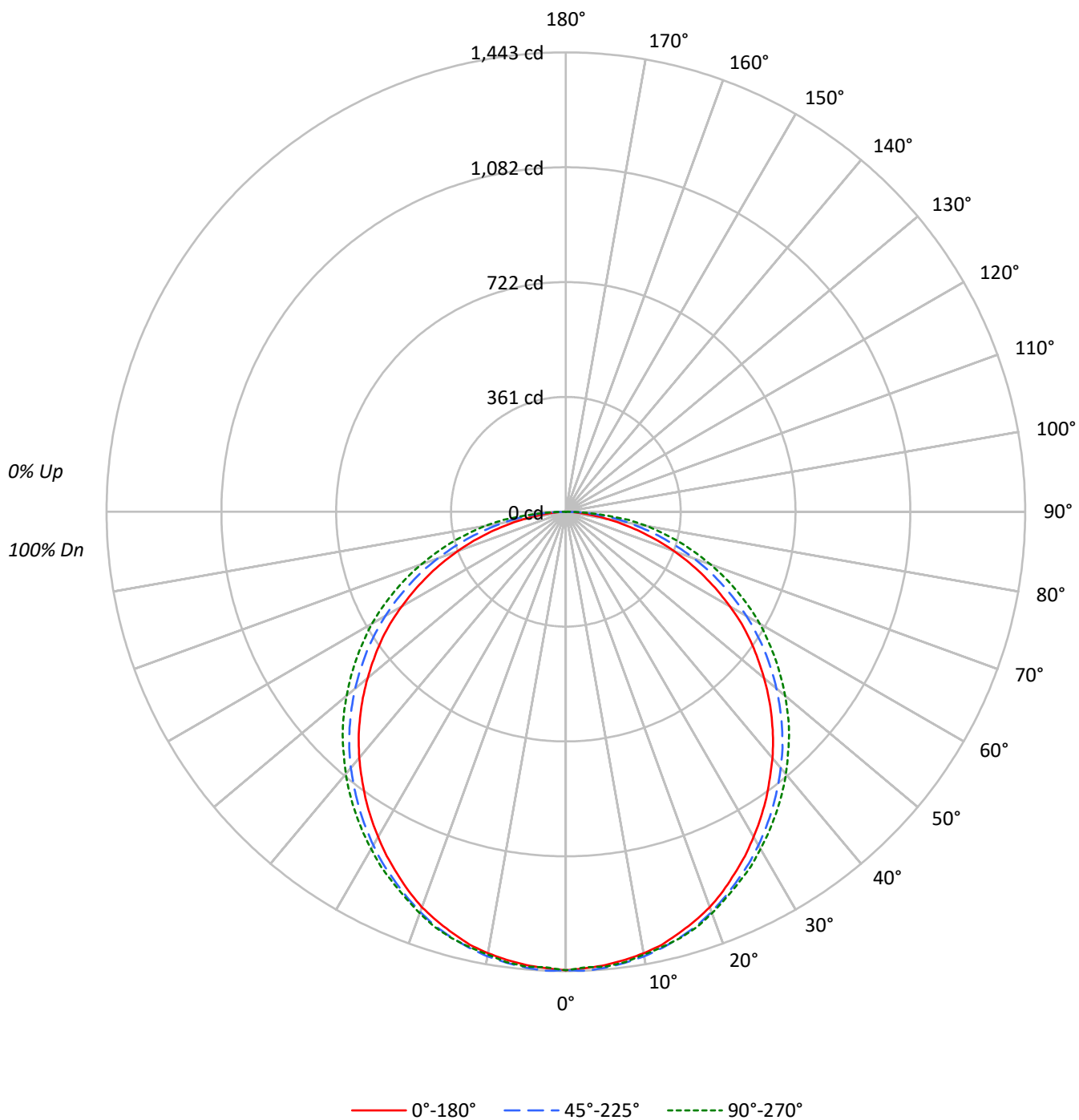
Lumens per Lamp: N/A
Luminaire Lumens: 4203.0 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	50	30	10
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°	2206	2206	2206
5°	2198	2210	2205
10°	2190	2205	2197
15°	2174	2196	2199
20°	2155	2181	2188
25°	2120	2157	2172
30°	2086	2140	2163
35°	2052	2119	2156
40°	2019	2101	2150
45°	1981	2081	2149
50°	1937	2058	2143
55°	1893	2036	2143
60°	1823	2006	2155
65°	1738	1966	2157
70°	1622	1912	2163
75°	1442	1842	2200
80°	1185	1766	2284
85°	782	1657	2063

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2339 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	3.2
10°-20°	389.9	9.3
20°-30°	587.7	14.0
30°-40°	707.8	16.8
40°-50°	739.5	17.6
50°-60°	679.4	16.2
60°-70°	535.0	12.7
70°-80°	328.0	7.8
80°-90°	99.5	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°	1113.9	26.5
0°-40°	1821.7	43.3
0°-60°	3240.6	77.1
0°-90°	4203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1430	1432	1438	1436	1434	136
15°	1371	1376	1385	1390	1387	387
25°	1254	1262	1276	1290	1285	578
35°	1098	1112	1133	1154	1153	687
45°	914	934	961	987	992	705
55°	709	729	762	795	802	633
65°	480	504	543	579	595	474
75°	244	272	311	349	372	259
85°	44	66	94	105	117	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.2	1440.2	1440.2	1440.2	1440.2
2.5°	1434.9	1438.4	1442.9	1435.8	1432.2
5°	1429.5	1432.2	1437.5	1435.8	1434.0
7.5°	1419.7	1421.5	1428.6	1428.6	1426.9
10°	1408.2	1411.7	1418.0	1417.1	1412.6
12.5°	1393.1	1395.7	1402.8	1402.8	1400.2
15°	1370.8	1376.2	1385.0	1390.4	1386.8
17.5°	1347.7	1353.0	1364.6	1369.9	1368.1
20°	1321.9	1326.3	1337.9	1345.9	1342.3
22.5°	1289.9	1295.2	1308.5	1317.4	1313.9
25°	1254.3	1262.3	1276.5	1289.9	1285.4
27.5°	1218.7	1227.6	1245.4	1258.7	1257.0
30°	1179.6	1191.1	1209.8	1226.7	1223.1
32.5°	1139.5	1152.9	1172.4	1190.2	1189.3
35°	1097.7	1112.0	1133.3	1153.8	1152.9
37.5°	1053.2	1070.1	1092.4	1114.6	1115.5
40°	1009.7	1025.7	1050.6	1074.6	1075.5
42.5°	963.4	980.3	1007.0	1031.9	1032.8
45°	914.5	934.0	960.7	987.4	991.9
47.5°	864.7	885.1	912.7	941.2	946.5
50°	813.1	834.4	863.8	894.0	899.3
52.5°	760.6	782.8	813.1	843.3	851.3
55°	709.0	729.4	762.4	795.3	802.4
57.5°	654.7	673.4	709.0	743.7	752.6
60°	595.1	618.2	654.7	689.4	703.6
62.5°	537.3	562.2	599.6	634.3	650.3
65°	479.5	504.4	542.6	579.1	595.1
67.5°	420.8	446.6	487.5	522.2	540.0
70°	362.1	387.8	427.0	464.4	483.0
72.5°	303.3	330.9	369.2	407.4	426.1
75°	243.7	272.2	311.3	348.7	371.8
77.5°	187.7	215.3	254.4	292.7	312.2
80°	134.3	161.9	200.2	238.4	258.9
82.5°	85.4	111.2	148.6	180.6	199.3
85°	44.5	65.8	94.3	105.0	117.4
87.5°	13.3	25.8	36.5	40.9	50.7
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	14.26	15.92	14.63	16.24	16.55	15.01	16.67	15.37	16.99	17.30
	3H	16.02	17.53	16.40	17.86	18.22	17.10	18.61	17.48	18.94	19.30
	4H	16.65	18.07	17.05	18.42	18.79	17.99	19.41	18.39	19.76	20.13
	6H	17.06	18.38	17.47	18.75	19.14	18.76	20.08	19.17	20.44	20.83
	8H	17.17	18.43	17.59	18.82	19.22	19.07	20.33	19.49	20.72	21.12
	12H	17.22	18.43	17.65	18.81	19.24	19.28	20.49	19.71	20.87	21.30
4H	2H	15.03	16.45	15.43	16.80	17.18	15.61	17.03	16.01	17.38	17.76
	3H	17.03	18.22	17.43	18.62	19.02	17.94	19.14	18.35	19.54	19.93
	4H	17.78	18.87	18.21	19.28	19.71	18.97	20.06	19.41	20.47	20.91
	6H	18.32	19.27	18.77	19.71	20.16	19.91	20.86	20.36	21.30	21.75
	8H	18.46	19.36	18.92	19.80	20.26	20.29	21.18	20.75	21.62	22.09
	12H	18.55	19.35	19.03	19.83	20.30	20.57	21.37	21.04	21.84	22.31
8H	4H	18.23	19.12	18.69	19.57	20.03	19.27	20.17	19.73	20.61	21.07
	6H	18.91	19.65	19.40	20.14	20.61	20.36	21.10	20.85	21.59	22.06
	8H	19.13	19.80	19.64	20.30	20.79	20.85	21.52	21.35	22.02	22.51
	12H	19.28	19.87	19.78	20.36	20.92	21.22	21.81	21.73	22.30	22.86
12H	4H	18.32	19.12	18.79	19.59	20.06	19.30	20.11	19.78	20.58	21.05
	6H	19.04	19.71	19.54	20.21	20.70	20.41	21.08	20.92	21.59	22.07
	8H	19.33	19.92	19.83	20.41	20.97	20.97	21.56	21.47	22.05	22.61