

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: P1589754

Luminaire Tested: 24CZSP-SB-43HE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589754
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-43HE-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

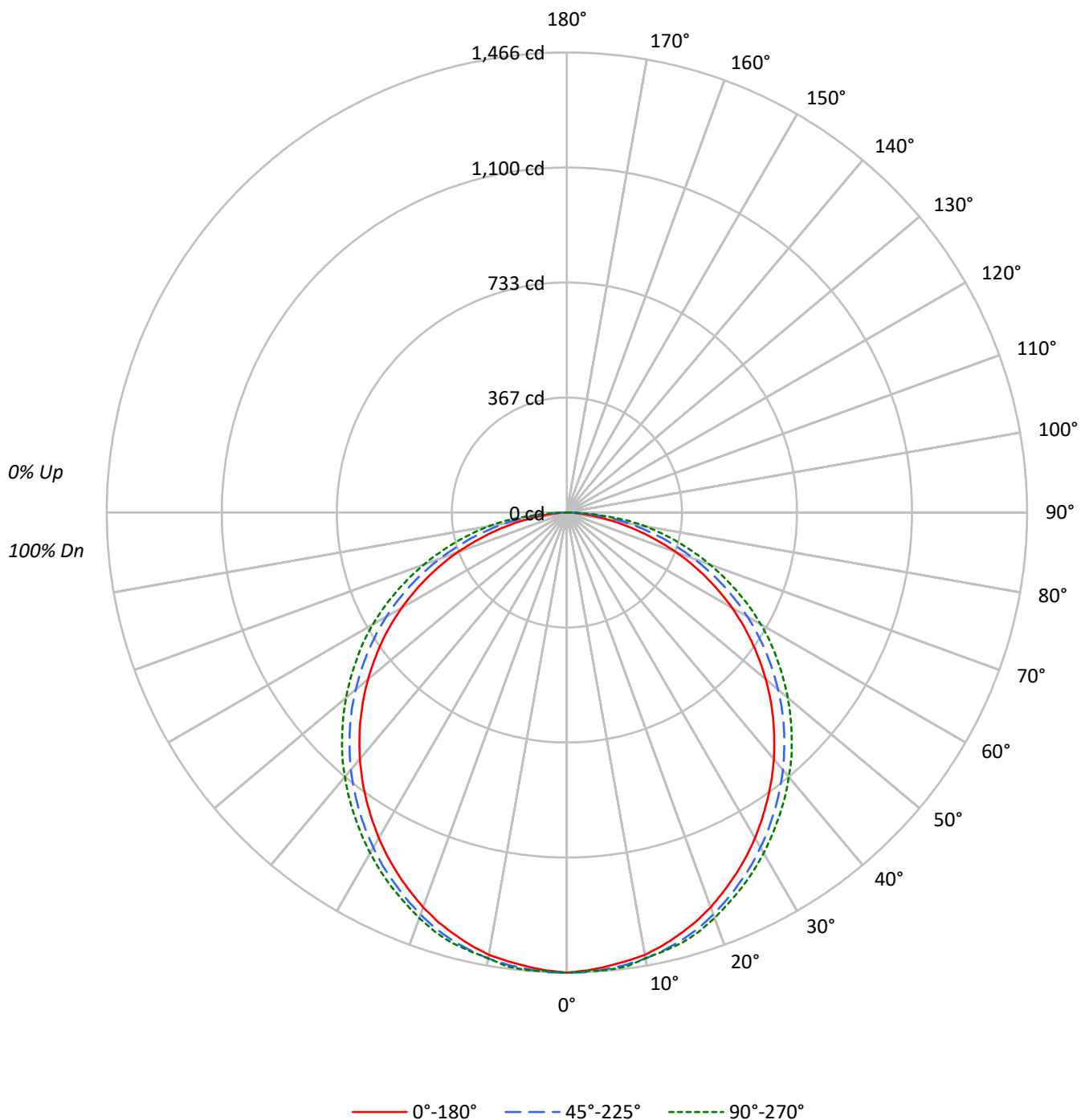
Lumens per Lamp: N/A
Luminaire Lumens: 4265.0 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2246	2246	2246
5°	2233	2246	2250
10°	2226	2245	2243
15°	2205	2238	2251
20°	2182	2222	2242
25°	2151	2200	2228
30°	2119	2181	2217
35°	2084	2160	2206
40°	2051	2141	2200
45°	2013	2119	2194
50°	1970	2092	2188
55°	1921	2065	2185
60°	1861	2035	2187
65°	1775	1992	2174
70°	1660	1931	2169
75°	1471	1857	2177
80°	1198	1764	2241
85°	773	1629	1935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2272 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	3.3
10°-20°	397.3	9.3
20°-30°	599.1	14.0
30°-40°	720.8	16.9
40°-50°	751.9	17.6
50°-60°	689.2	16.2
60°-70°	541.2	12.7
70°-80°	329.4	7.7
80°-90°	97.4	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°	1135.1	26.6
0°-40°	1855.9	43.5
0°-60°	3297.0	77.3
0°-90°	4265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4265.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1452	1462	1461	1459	1463	138
15°	1391	1405	1411	1413	1419	392
25°	1273	1290	1302	1310	1318	586
35°	1115	1132	1155	1172	1180	698
45°	929	949	978	1001	1013	717
55°	719	738	773	805	818	643
65°	490	508	550	586	600	485
75°	249	272	314	351	368	264
85°	44	62	93	104	110	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.2	1466.2	1466.2	1466.2	1466.2
2.5°	1460.7	1468.0	1466.2	1459.7	1462.5
5°	1452.4	1461.6	1460.7	1458.8	1463.4
7.5°	1442.3	1452.4	1453.3	1453.3	1458.8
10°	1431.3	1441.4	1443.2	1440.5	1442.3
12.5°	1412.9	1424.9	1428.5	1428.5	1431.3
15°	1390.9	1404.7	1411.1	1412.9	1419.4
17.5°	1367.1	1381.7	1390.0	1394.6	1400.1
20°	1338.6	1354.2	1363.4	1368.9	1375.3
22.5°	1306.5	1323.9	1334.0	1339.5	1346.9
25°	1272.6	1290.0	1301.9	1310.2	1318.4
27.5°	1236.8	1253.3	1269.8	1279.9	1287.2
30°	1198.3	1215.7	1233.1	1246.0	1253.3
32.5°	1157.0	1175.3	1195.5	1209.3	1217.5
35°	1114.8	1132.2	1155.1	1171.6	1179.9
37.5°	1071.6	1090.0	1113.8	1131.3	1141.4
40°	1025.8	1045.0	1070.7	1090.0	1100.1
42.5°	978.1	996.4	1024.8	1046.9	1058.8
45°	929.4	948.7	978.1	1001.0	1012.9
47.5°	879.0	897.3	929.4	956.0	966.1
50°	826.7	844.1	878.0	906.5	918.4
52.5°	773.4	791.8	825.7	856.0	868.9
55°	719.3	737.7	773.4	804.6	818.4
57.5°	664.3	682.6	719.3	751.4	767.9
60°	607.4	625.7	664.3	697.3	713.8
62.5°	548.7	567.9	607.4	641.3	658.8
65°	489.9	508.3	549.6	586.3	600.0
67.5°	431.2	449.6	489.9	526.6	543.2
70°	370.7	391.8	431.2	469.8	484.4
72.5°	307.4	331.2	370.7	411.0	425.7
75°	248.6	271.6	313.8	351.4	367.9
77.5°	190.8	215.6	255.1	293.6	310.1
80°	135.8	159.6	200.0	236.7	254.1
82.5°	86.2	107.3	147.7	180.7	193.6
85°	44.0	62.4	92.7	103.7	110.1
87.5°	12.8	22.0	33.0	41.3	45.9
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	14.31	15.97	14.67	16.28	16.60	15.04	16.70	15.41	17.02	17.33
	3H	16.08	17.58	16.46	17.91	18.27	17.12	18.63	17.50	18.96	19.32
	4H	16.70	18.12	17.10	18.47	18.84	17.99	19.41	18.39	19.76	20.13
	6H	17.11	18.42	17.52	18.79	19.18	18.73	20.05	19.14	20.42	20.81
	8H	17.21	18.47	17.63	18.86	19.26	19.03	20.29	19.45	20.68	21.08
	12H	17.26	18.47	17.69	18.85	19.28	19.22	20.43	19.65	20.81	21.24
4H	2H	15.08	16.50	15.48	16.85	17.22	15.65	17.07	16.05	17.42	17.79
	3H	17.07	18.27	17.48	18.66	19.06	17.96	19.16	18.37	19.55	19.95
	4H	17.81	18.90	18.24	19.31	19.74	18.98	20.07	19.41	20.48	20.91
	6H	18.34	19.29	18.79	19.73	20.18	19.89	20.84	20.34	21.28	21.73
	8H	18.48	19.37	18.94	19.81	20.28	20.25	21.14	20.71	21.58	22.05
	12H	18.56	19.36	19.04	19.84	20.31	20.51	21.31	20.99	21.78	22.25
8H	4H	18.26	19.15	18.72	19.59	20.05	19.28	20.17	19.74	20.61	21.07
	6H	18.92	19.66	19.41	20.15	20.62	20.34	21.08	20.83	21.56	22.04
	8H	19.13	19.80	19.64	20.30	20.79	20.81	21.47	21.32	21.98	22.46
	12H	19.27	19.86	19.77	20.35	20.90	21.16	21.75	21.67	22.24	22.80
12H	4H	18.34	19.14	18.82	19.61	20.08	19.31	20.11	19.78	20.58	21.05
	6H	19.04	19.71	19.55	20.22	20.70	20.39	21.05	20.89	21.56	22.04
	8H	19.32	19.91	19.83	20.40	20.96	20.92	21.51	21.43	22.00	22.56