

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: P1589759

Luminaire Tested: 24CZSP-SB-43HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589759
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-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

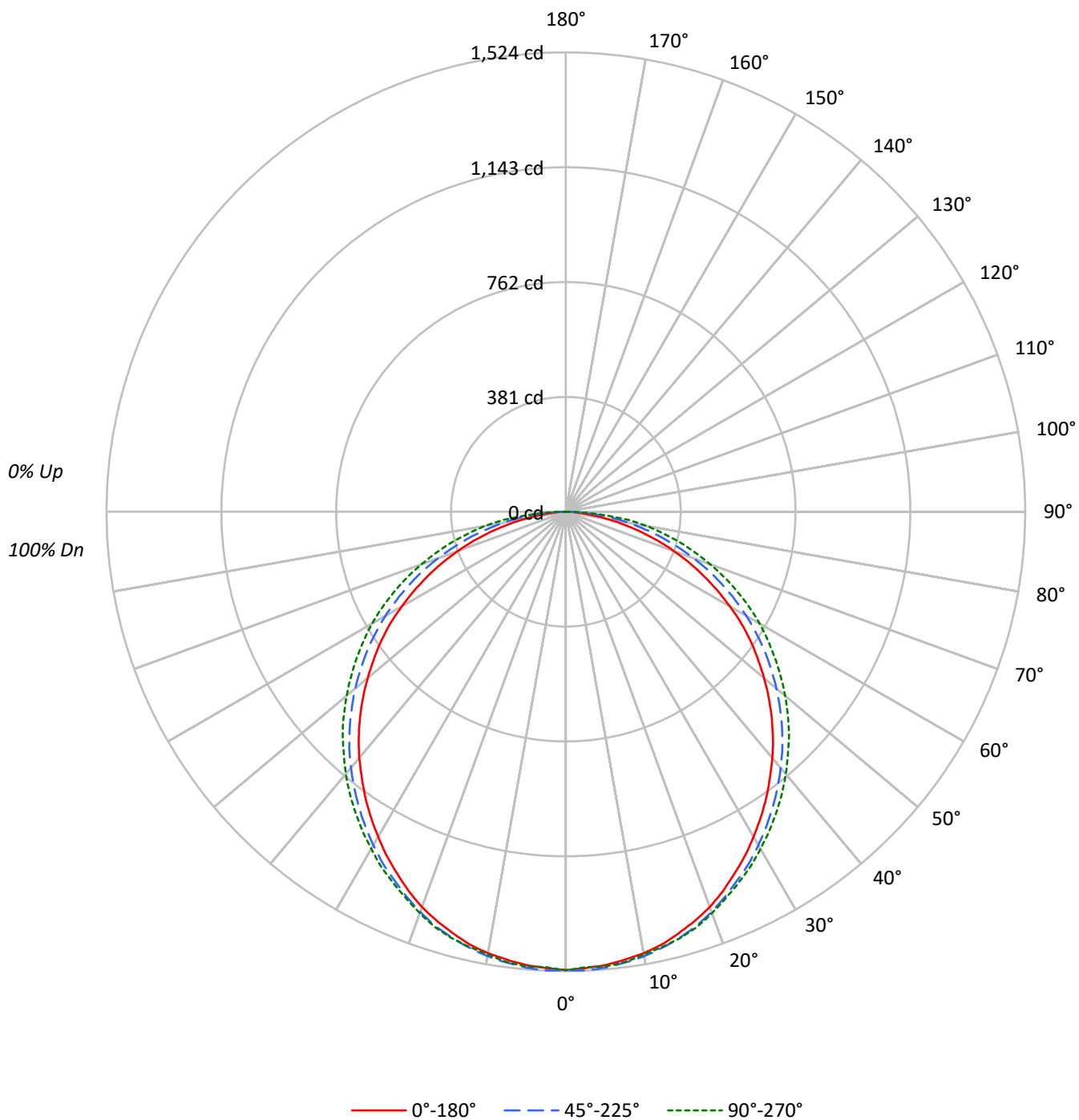
Lumens per Lamp: N/A
Luminaire Lumens: 4438.0 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	2329	2329	2329
5°	2321	2334	2328
10°	2313	2329	2320
15°	2295	2319	2322
20°	2275	2303	2310
25°	2238	2278	2294
30°	2203	2259	2284
35°	2167	2238	2276
40°	2132	2218	2271
45°	2092	2197	2269
50°	2046	2173	2263
55°	1999	2150	2262
60°	1925	2118	2276
65°	1835	2077	2277
70°	1712	2019	2284
75°	1523	1946	2323
80°	1251	1864	2411
85°	826	1750	2179

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2469 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.9	3.2
10°-20°	411.8	9.3
20°-30°	620.6	14.0
30°-40°	747.4	16.8
40°-50°	780.8	17.6
50°-60°	717.3	16.2
60°-70°	564.9	12.7
70°-80°	346.3	7.8
80°-90°	105.0	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°	1176.2	26.5
0°-40°	1923.6	43.3
0°-60°	3421.7	77.1
0°-90°	4438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1521	1521	1521	1521	1521	
5°	1510	1512	1518	1516	1514	143
15°	1448	1453	1462	1468	1464	408
25°	1324	1333	1348	1362	1357	611
35°	1159	1174	1197	1218	1217	725
45°	966	986	1014	1043	1047	745
55°	749	770	805	840	847	668
65°	506	533	573	612	628	501
75°	257	287	329	368	393	274
85°	47	70	100	111	124	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1520.7	1520.7	1520.7	1520.7	1520.7
2.5°	1515.1	1518.8	1523.5	1516.0	1512.3
5°	1509.5	1512.3	1517.9	1516.0	1514.1
7.5°	1499.1	1501.0	1508.5	1508.5	1506.6
10°	1486.9	1490.7	1497.2	1496.3	1491.6
12.5°	1470.9	1473.8	1481.3	1481.3	1478.5
15°	1447.5	1453.1	1462.5	1468.1	1464.4
17.5°	1423.0	1428.7	1440.9	1446.5	1444.6
20°	1395.8	1400.5	1412.7	1421.2	1417.4
22.5°	1362.0	1367.6	1381.7	1391.1	1387.3
25°	1324.4	1332.9	1347.9	1362.0	1357.3
27.5°	1286.8	1296.2	1315.0	1329.1	1327.2
30°	1245.5	1257.7	1277.4	1295.3	1291.5
32.5°	1203.2	1217.3	1238.0	1256.8	1255.8
35°	1159.1	1174.1	1196.7	1218.3	1217.3
37.5°	1112.1	1130.0	1153.5	1176.9	1177.9
40°	1066.1	1083.0	1109.3	1134.7	1135.6
42.5°	1017.3	1035.1	1063.3	1089.6	1090.5
45°	965.6	986.3	1014.4	1042.6	1047.3
47.5°	913.0	934.6	963.7	993.8	999.4
50°	858.5	881.1	912.1	944.0	949.6
52.5°	803.1	826.6	858.5	890.5	898.9
55°	748.6	770.2	805.0	839.7	847.2
57.5°	691.3	711.0	748.6	785.3	794.6
60°	628.4	652.8	691.3	728.0	743.0
62.5°	567.3	593.6	633.1	669.7	686.6
65°	506.3	532.6	573.0	611.5	628.4
67.5°	444.3	471.5	514.7	551.4	570.2
70°	382.3	409.5	450.9	490.3	510.0
72.5°	320.3	349.4	389.8	430.2	449.9
75°	257.4	287.4	328.8	368.2	392.6
77.5°	198.2	227.3	268.6	309.0	329.7
80°	141.8	171.0	211.3	251.7	273.3
82.5°	90.2	117.4	156.9	190.7	210.4
85°	47.0	69.5	99.6	110.8	124.0
87.5°	14.1	27.2	38.5	43.2	53.5
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	14.45	16.11	14.82	16.43	16.74	15.20	16.86	15.56	17.17	17.49
	3H	16.21	17.72	16.59	18.05	18.41	17.29	18.80	17.67	19.13	19.49
	4H	16.84	18.26	17.24	18.61	18.98	18.18	19.60	18.57	19.95	20.32
	6H	17.25	18.57	17.66	18.93	19.33	18.94	20.27	19.35	20.63	21.02
	8H	17.36	18.62	17.78	19.01	19.41	19.26	20.52	19.68	20.91	21.31
	12H	17.41	18.62	17.84	19.00	19.43	19.47	20.68	19.90	21.06	21.49
4H	2H	15.22	16.64	15.62	16.99	17.37	15.80	17.22	16.20	17.57	17.95
	3H	17.21	18.41	17.62	18.81	19.21	18.13	19.33	18.54	19.72	20.12
	4H	17.97	19.05	18.40	19.47	19.90	19.16	20.25	19.59	20.66	21.10
	6H	18.50	19.46	18.96	19.90	20.35	20.09	21.05	20.55	21.49	21.94
	8H	18.65	19.54	19.11	19.99	20.45	20.48	21.37	20.94	21.81	22.28
	12H	18.74	19.54	19.22	20.02	20.48	20.75	21.56	21.23	22.03	22.50
8H	4H	18.42	19.31	18.88	19.75	20.22	19.46	20.36	19.92	20.80	21.26
	6H	19.10	19.84	19.59	20.33	20.80	20.55	21.29	21.04	21.78	22.25
	8H	19.32	19.99	19.83	20.49	20.98	21.04	21.70	21.54	22.21	22.69
	12H	19.47	20.06	19.97	20.55	21.11	21.41	22.00	21.92	22.49	23.05
12H	4H	18.50	19.31	18.98	19.78	20.25	19.49	20.30	19.97	20.77	21.24
	6H	19.23	19.90	19.73	20.40	20.89	20.60	21.27	21.11	21.78	22.26
	8H	19.52	20.11	20.02	20.60	21.16	21.15	21.75	21.66	22.24	22.79