

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: P1589757

Luminaire Tested: 24CZSP-SB-43HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589757
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

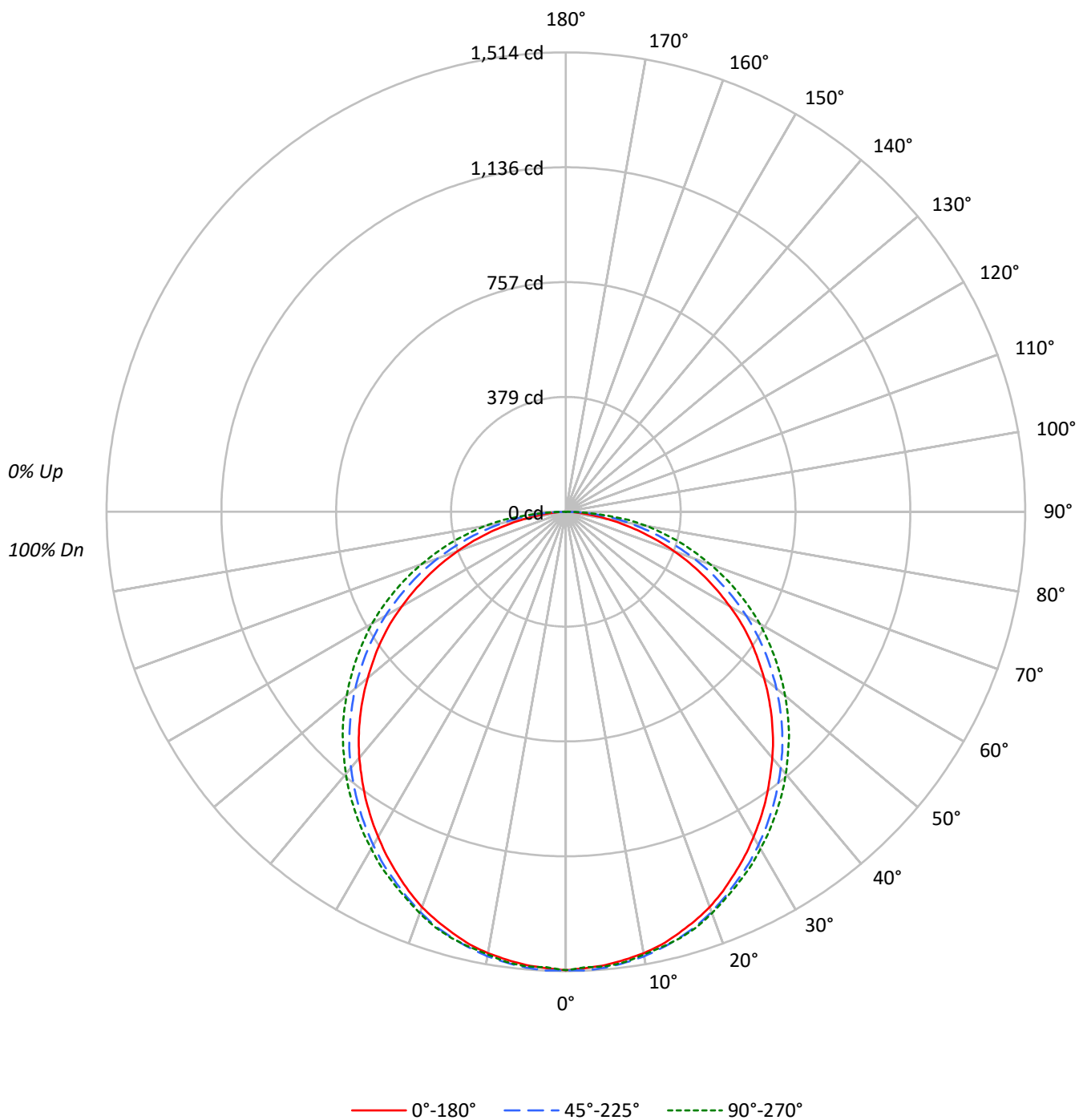
Lumens per Lamp: N/A
Luminaire Lumens: 4409.0 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	2314	2314	2314
5°	2306	2319	2313
10°	2297	2313	2305
15°	2280	2304	2307
20°	2260	2288	2295
25°	2224	2263	2279
30°	2188	2244	2269
35°	2153	2223	2261
40°	2118	2204	2256
45°	2078	2183	2254
50°	2032	2159	2248
55°	1986	2135	2248
60°	1912	2104	2261
65°	1823	2063	2263
70°	1701	2006	2269
75°	1513	1933	2309
80°	1243	1852	2395
85°	821	1738	2165

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2452 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	3.2
10°-20°	409.1	9.3
20°-30°	616.6	14.0
30°-40°	742.5	16.8
40°-50°	775.7	17.6
50°-60°	712.6	16.2
60°-70°	561.2	12.7
70°-80°	344.1	7.8
80°-90°	104.3	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°	1168.5	26.5
0°-40°	1911.0	43.3
0°-60°	3399.4	77.1
0°-90°	4409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4409.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1511	1511	1511	1511	1511	
5°	1500	1502	1508	1506	1504	142
15°	1438	1444	1453	1458	1455	406
25°	1316	1324	1339	1353	1348	607
35°	1152	1166	1189	1210	1209	720
45°	959	980	1008	1036	1040	740
55°	744	765	800	834	842	664
65°	503	529	569	608	624	497
75°	256	286	327	366	390	272
85°	47	69	99	110	123	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1510.8	1510.8	1510.8	1510.8	1510.8
2.5°	1505.2	1508.9	1513.6	1506.1	1502.4
5°	1499.6	1502.4	1508.0	1506.1	1504.3
7.5°	1489.3	1491.2	1498.7	1498.7	1496.8
10°	1477.2	1480.9	1487.5	1486.5	1481.9
12.5°	1461.3	1464.1	1471.6	1471.6	1468.8
15°	1438.0	1443.6	1452.9	1458.5	1454.8
17.5°	1413.7	1419.3	1431.5	1437.1	1435.2
20°	1386.7	1391.3	1403.5	1411.9	1408.1
22.5°	1353.1	1358.7	1372.7	1382.0	1378.3
25°	1315.8	1324.2	1339.1	1353.1	1348.4
27.5°	1278.4	1287.8	1306.4	1320.4	1318.6
30°	1237.4	1249.5	1269.1	1286.8	1283.1
32.5°	1195.4	1209.4	1229.9	1248.6	1247.6
35°	1151.5	1166.5	1188.8	1210.3	1209.4
37.5°	1104.9	1122.6	1145.9	1169.3	1170.2
40°	1059.1	1075.9	1102.1	1127.3	1128.2
42.5°	1010.6	1028.3	1056.3	1082.5	1083.4
45°	959.3	979.8	1007.8	1035.8	1040.5
47.5°	907.0	928.5	957.4	987.3	992.9
50°	852.9	875.3	906.1	937.8	943.4
52.5°	797.9	821.2	852.9	884.6	893.0
55°	743.7	765.2	799.7	834.2	841.7
57.5°	686.8	706.4	743.7	780.1	789.5
60°	624.3	648.5	686.8	723.2	738.1
62.5°	563.6	589.8	629.0	665.3	682.1
65°	503.0	529.1	569.2	607.5	624.3
67.5°	441.4	468.4	511.4	547.8	566.4
70°	379.8	406.9	447.9	487.1	506.7
72.5°	318.2	347.1	387.3	427.4	447.0
75°	255.7	285.5	326.6	365.8	390.1
77.5°	196.9	225.8	266.9	307.0	327.5
80°	140.9	169.8	210.0	250.1	271.5
82.5°	89.6	116.6	155.8	189.4	209.0
85°	46.7	69.1	98.9	110.1	123.2
87.5°	14.0	27.1	38.3	42.9	53.2
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	14.43	16.09	14.79	16.41	16.72	15.17	16.84	15.54	17.15	17.47
	3H	16.19	17.70	16.57	18.02	18.38	17.27	18.78	17.65	19.10	19.46
	4H	16.82	18.24	17.21	18.59	18.96	18.15	19.58	18.55	19.92	20.30
	6H	17.23	18.55	17.64	18.91	19.30	18.92	20.24	19.33	20.61	21.00
	8H	17.33	18.60	17.76	18.99	19.38	19.23	20.50	19.66	20.88	21.28
	12H	17.39	18.60	17.81	18.98	19.41	19.45	20.66	19.87	21.04	21.47
4H	2H	15.20	16.62	15.60	16.97	17.34	15.78	17.20	16.18	17.55	17.92
	3H	17.19	18.39	17.60	18.79	19.19	18.11	19.30	18.52	19.70	20.10
	4H	17.95	19.03	18.38	19.44	19.88	19.14	20.23	19.57	20.64	21.07
	6H	18.48	19.43	18.93	19.87	20.33	20.07	21.02	20.52	21.46	21.92
	8H	18.63	19.52	19.09	19.96	20.43	20.46	21.35	20.91	21.79	22.25
	12H	18.72	19.52	19.19	19.99	20.46	20.73	21.53	21.21	22.01	22.48
8H	4H	18.40	19.29	18.86	19.73	20.20	19.44	20.33	19.90	20.77	21.24
	6H	19.08	19.82	19.57	20.31	20.78	20.53	21.27	21.02	21.76	22.23
	8H	19.30	19.96	19.80	20.47	20.95	21.01	21.68	21.52	22.19	22.67
	12H	19.44	20.04	19.95	20.52	21.08	21.39	21.98	21.89	22.47	23.03
12H	4H	18.48	19.29	18.96	19.76	20.23	19.47	20.27	19.95	20.75	21.22
	6H	19.20	19.87	19.71	20.38	20.86	20.58	21.25	21.08	21.75	22.24
	8H	19.49	20.09	20.00	20.58	21.13	21.13	21.72	21.64	22.21	22.77