

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: P1589767

Luminaire Tested: 24CZSP-SB-43HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589767
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-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

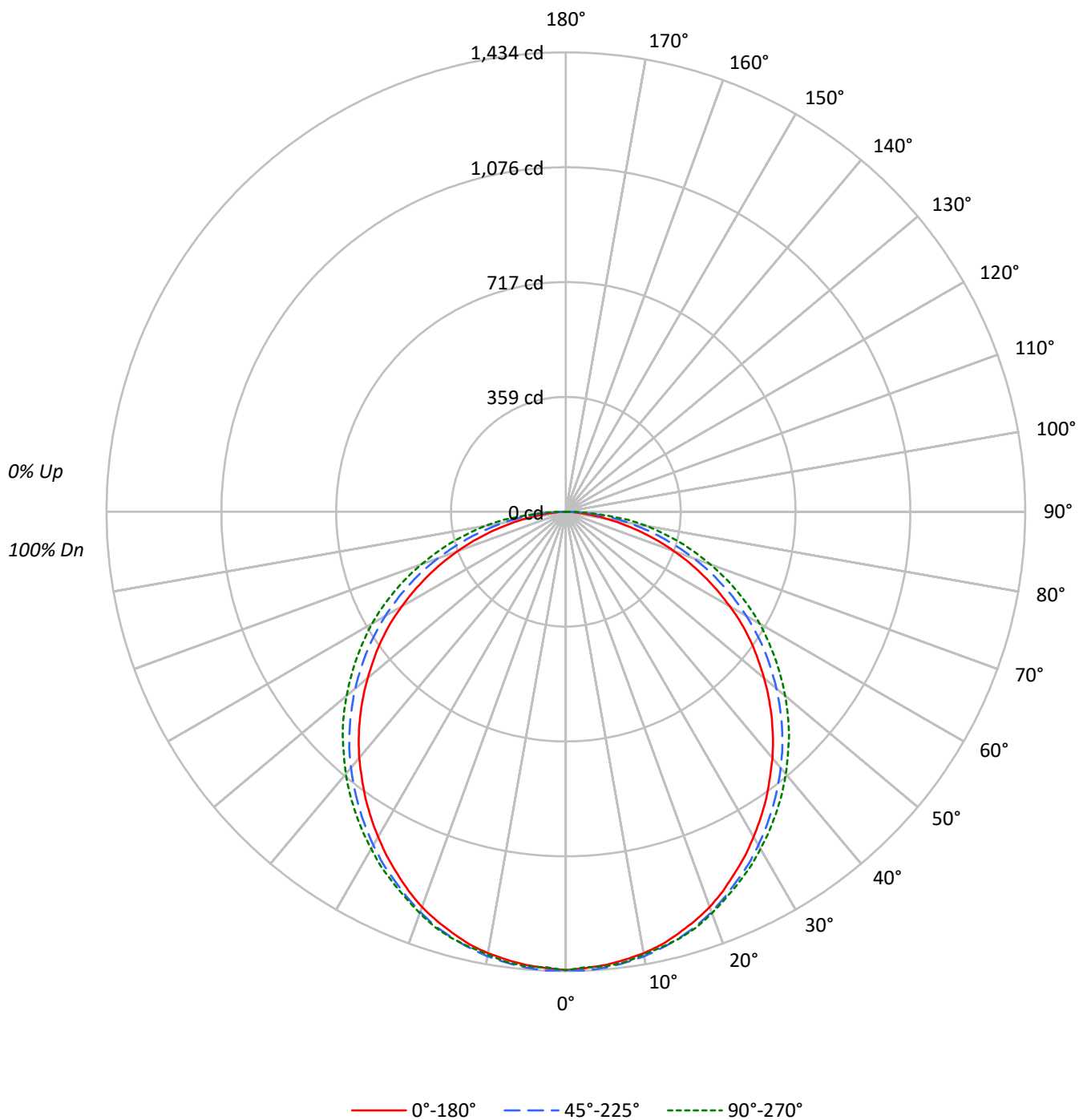
Lumens per Lamp: N/A
Luminaire Lumens: 4176.0 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2192	2192	2192
5°	2184	2196	2191
10°	2176	2191	2183
15°	2160	2182	2185
20°	2141	2167	2174
25°	2106	2143	2158
30°	2073	2126	2149
35°	2039	2105	2142
40°	2006	2087	2137
45°	1968	2068	2135
50°	1925	2045	2129
55°	1881	2023	2129
60°	1811	1993	2142
65°	1727	1954	2143
70°	1611	1900	2149
75°	1433	1830	2186
80°	1178	1754	2269
85°	777	1647	2051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2323 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	3.2
10°-20°	387.4	9.3
20°-30°	584.0	14.0
30°-40°	703.3	16.8
40°-50°	734.7	17.6
50°-60°	675.0	16.2
60°-70°	531.5	12.7
70°-80°	325.9	7.8
80°-90°	98.8	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°	1106.8	26.5
0°-40°	1810.0	43.3
0°-60°	3219.8	77.1
0°-90°	4176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4176.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1420	1423	1428	1426	1425	135
15°	1362	1367	1376	1382	1378	384
25°	1246	1254	1268	1282	1277	575
35°	1091	1105	1126	1146	1146	682
45°	909	928	955	981	986	701
55°	704	725	758	790	797	628
65°	476	501	539	575	591	471
75°	242	270	309	346	369	257
85°	44	65	94	104	117	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1430.9	1430.9	1430.9	1430.9	1430.9
2.5°	1425.6	1429.2	1433.6	1426.5	1423.0
5°	1420.3	1423.0	1428.3	1426.5	1424.8
7.5°	1410.6	1412.4	1419.5	1419.5	1417.7
10°	1399.1	1402.7	1408.9	1408.0	1403.5
12.5°	1384.1	1386.8	1393.8	1393.8	1391.2
15°	1362.0	1367.3	1376.1	1381.5	1377.9
17.5°	1339.0	1344.3	1355.8	1361.1	1359.4
20°	1313.4	1317.8	1329.3	1337.3	1333.7
22.5°	1281.6	1286.9	1300.1	1309.0	1305.4
25°	1246.2	1254.2	1268.3	1281.6	1277.2
27.5°	1210.9	1219.7	1237.4	1250.6	1248.9
30°	1172.0	1183.5	1202.0	1218.8	1215.3
32.5°	1132.2	1145.5	1164.9	1182.6	1181.7
35°	1090.7	1104.8	1126.0	1146.3	1145.5
37.5°	1046.5	1063.3	1085.4	1107.5	1108.3
40°	1003.2	1019.1	1043.8	1067.7	1068.6
42.5°	957.2	974.0	1000.5	1025.3	1026.1
45°	908.6	928.0	954.6	981.1	985.5
47.5°	859.1	879.4	906.8	935.1	940.4
50°	807.8	829.0	858.2	888.3	893.6
52.5°	755.7	777.8	807.8	837.9	845.8
55°	704.4	724.8	757.5	790.2	797.2
57.5°	650.5	669.1	704.4	738.9	747.7
60°	591.3	614.3	650.5	685.0	699.1
62.5°	533.8	558.6	595.7	630.2	646.1
65°	476.4	501.1	539.1	575.4	591.3
67.5°	418.1	443.7	484.3	518.8	536.5
70°	359.7	385.4	424.2	461.4	479.9
72.5°	301.4	328.8	366.8	404.8	423.4
75°	242.2	270.5	309.3	346.5	369.4
77.5°	186.5	213.9	252.8	290.8	310.2
80°	133.5	160.9	198.9	236.9	257.2
82.5°	84.8	110.5	147.6	179.4	198.0
85°	44.2	65.4	93.7	104.3	116.7
87.5°	13.3	25.6	36.2	40.7	50.4
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	14.24	15.90	14.60	16.22	16.53	14.99	16.65	15.35	16.96	17.28
	3H	16.00	17.51	16.38	17.84	18.20	17.08	18.59	17.46	18.91	19.27
	4H	16.63	18.05	17.02	18.40	18.77	17.97	19.39	18.36	19.74	20.11
	6H	17.04	18.36	17.45	18.72	19.11	18.73	20.05	19.14	20.42	20.81
	8H	17.15	18.41	17.57	18.80	19.19	19.04	20.31	19.47	20.70	21.09
	12H	17.20	18.41	17.63	18.79	19.22	19.26	20.47	19.69	20.85	21.28
4H	2H	15.01	16.43	15.41	16.78	17.15	15.59	17.01	15.99	17.36	17.73
	3H	17.00	18.20	17.41	18.60	19.00	17.92	19.12	18.33	19.51	19.91
	4H	17.76	18.84	18.19	19.26	19.69	18.95	20.04	19.38	20.45	20.89
	6H	18.29	19.25	18.75	19.69	20.14	19.88	20.84	20.34	21.28	21.73
	8H	18.44	19.33	18.90	19.77	20.24	20.27	21.16	20.73	21.60	22.06
	12H	18.53	19.33	19.01	19.80	20.27	20.54	21.35	21.02	21.82	22.29
8H	4H	18.21	19.10	18.67	19.54	20.01	19.25	20.14	19.71	20.59	21.05
	6H	18.89	19.63	19.38	20.12	20.59	20.34	21.08	20.83	21.57	22.04
	8H	19.11	19.78	19.61	20.28	20.77	20.82	21.49	21.33	22.00	22.48
	12H	19.26	19.85	19.76	20.34	20.90	21.20	21.79	21.70	22.28	22.84
12H	4H	18.29	19.10	18.77	19.57	20.04	19.28	20.08	19.76	20.56	21.03
	6H	19.01	19.69	19.52	20.19	20.67	20.39	21.06	20.90	21.56	22.05
	8H	19.31	19.90	19.81	20.39	20.95	20.94	21.53	21.45	22.02	22.58