

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: P1588617

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588617
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-43HE-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

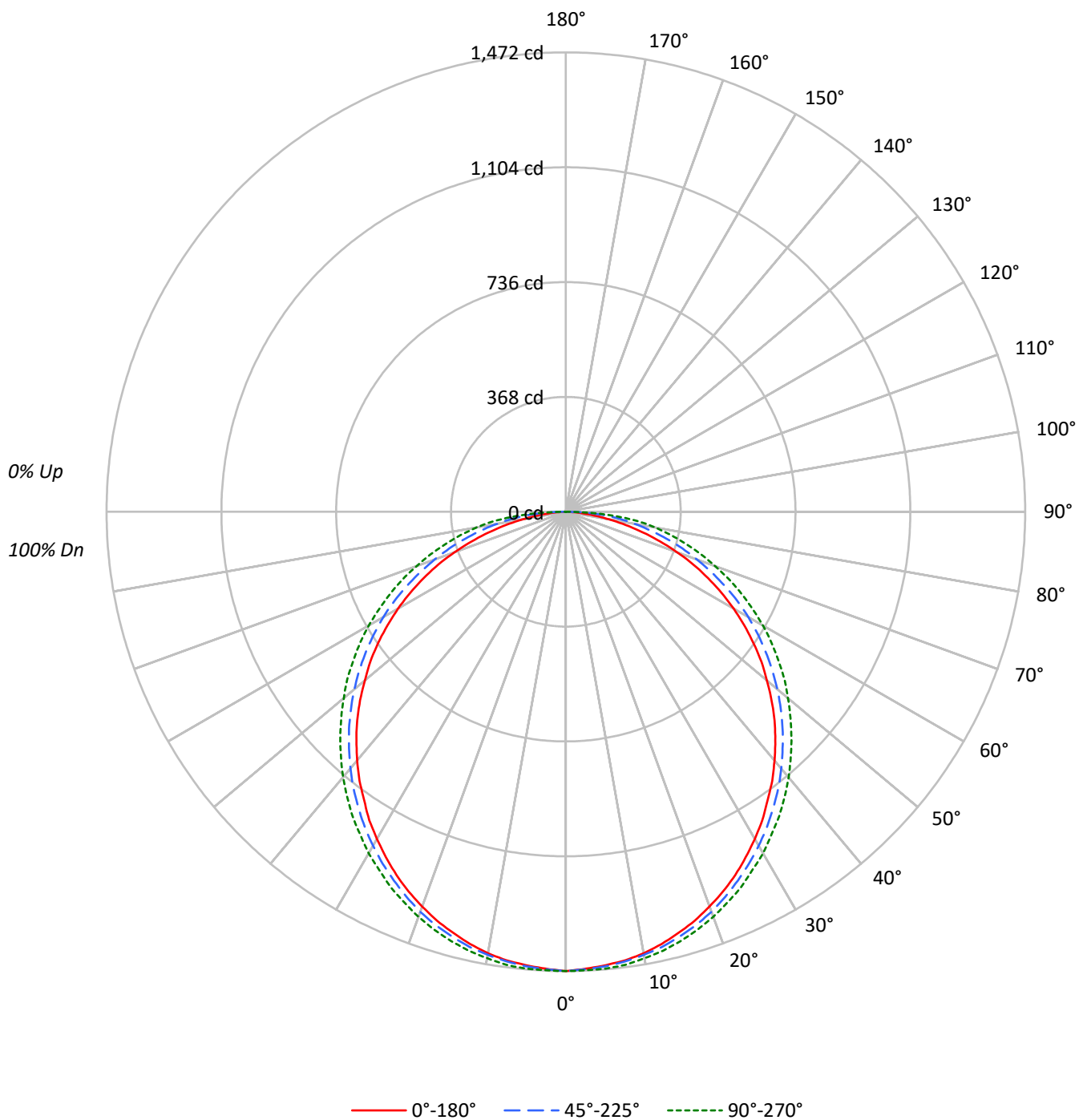
Lumens per Lamp: N/A
Luminaire Lumens: 4366.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2254	2254	2254
5°	2242	2248	2259
10°	2235	2242	2259
15°	2215	2234	2257
20°	2194	2224	2251
25°	2171	2203	2244
30°	2141	2186	2235
35°	2108	2167	2228
40°	2080	2148	2220
45°	2050	2128	2214
50°	2004	2108	2214
55°	1962	2088	2220
60°	1903	2069	2236
65°	1822	2036	2251
70°	1704	2002	2278
75°	1516	1974	2353
80°	1247	1983	2558
85°	849	2209	2824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	3.2
10°-20°	398.8	9.1
20°-30°	603.1	13.8
30°-40°	727.7	16.7
40°-50°	760.9	17.4
50°-60°	702.0	16.1
60°-70°	558.2	12.8
70°-80°	352.3	8.1
80°-90°	123.5	2.8
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°	1141.2	26.1
0°-40°	1868.9	42.8
0°-60°	3331.9	76.3
0°-90°	4366.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4366.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1458	1469	1462	1466	1469	139
15°	1397	1413	1409	1420	1424	394
25°	1284	1304	1304	1321	1328	592
35°	1127	1152	1159	1182	1192	706
45°	946	967	982	1011	1022	729
55°	735	756	782	819	831	656
65°	503	526	562	609	621	497
75°	256	285	334	383	398	272
85°	48	80	126	156	161	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.8	1471.8	1471.8	1471.8	1471.8
2.5°	1465.8	1475.4	1467.0	1471.8	1470.6
5°	1458.5	1469.4	1462.1	1465.8	1469.4
7.5°	1450.0	1462.1	1453.7	1459.7	1464.5
10°	1436.8	1448.8	1441.6	1448.8	1452.5
12.5°	1418.6	1433.1	1428.3	1436.8	1440.4
15°	1396.9	1412.6	1409.0	1419.8	1423.5
17.5°	1373.9	1390.8	1388.4	1400.5	1404.1
20°	1346.1	1365.5	1364.2	1376.3	1381.2
22.5°	1317.1	1336.5	1335.2	1348.5	1354.6
25°	1284.5	1303.8	1303.8	1320.7	1328.0
27.5°	1248.2	1270.0	1271.2	1288.1	1294.2
30°	1210.8	1232.5	1236.2	1254.3	1264.0
32.5°	1172.1	1192.7	1198.7	1219.2	1226.5
35°	1127.4	1151.6	1158.8	1181.8	1191.5
37.5°	1086.3	1108.1	1117.7	1141.9	1151.6
40°	1040.4	1063.4	1074.2	1100.8	1110.5
42.5°	993.3	1016.2	1028.3	1057.3	1067.0
45°	946.2	966.7	982.4	1011.4	1022.3
47.5°	894.2	917.2	934.1	965.5	976.4
50°	841.0	865.2	884.5	918.4	929.2
52.5°	790.3	812.0	833.8	871.2	883.3
55°	734.7	756.4	781.8	819.3	831.4
57.5°	677.9	699.6	728.6	768.5	781.8
60°	621.1	642.9	675.5	716.6	729.9
62.5°	561.9	583.6	619.9	662.2	674.3
65°	502.7	525.6	561.9	609.0	621.1
67.5°	442.3	465.2	503.9	553.4	566.7
70°	380.6	406.0	447.1	496.6	508.7
72.5°	316.6	345.6	391.5	439.8	454.3
75°	256.2	285.2	333.5	383.1	397.6
77.5°	197.0	229.6	277.9	329.9	345.6
80°	141.4	174.0	224.8	275.5	290.0
82.5°	90.6	124.5	175.2	223.5	235.6
85°	48.3	79.8	125.7	155.9	160.7
87.5°	15.7	41.1	56.8	74.9	76.1
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	14.38	16.05	14.75	16.37	16.68	15.10	16.77	15.47	17.09	17.40
	3H	16.17	17.68	16.54	18.01	18.37	17.27	18.79	17.64	19.11	19.47
	4H	16.80	18.23	17.20	18.58	18.95	18.20	19.63	18.60	19.98	20.36
	6H	17.22	18.55	17.63	18.92	19.31	19.06	20.39	19.47	20.76	21.15
	8H	17.33	18.61	17.76	19.00	19.39	19.44	20.71	19.86	21.10	21.50
	12H	17.39	18.61	17.82	18.99	19.42	19.75	20.97	20.18	21.35	21.78
4H	2H	15.14	16.58	15.54	16.92	17.30	15.71	17.14	16.10	17.49	17.86
	3H	17.17	18.38	17.58	18.77	19.17	18.12	19.33	18.53	19.72	20.12
	4H	17.93	19.03	18.36	19.44	19.87	19.22	20.32	19.65	20.73	21.17
	6H	18.48	19.45	18.94	19.89	20.34	20.26	21.23	20.71	21.67	22.12
	8H	18.64	19.55	19.10	19.99	20.45	20.73	21.63	21.18	22.07	22.53
	12H	18.74	19.56	19.22	20.03	20.50	21.12	21.94	21.60	22.41	22.88
8H	4H	18.42	19.32	18.88	19.76	20.23	19.54	20.44	20.00	20.88	21.35
	6H	19.13	19.88	19.62	20.37	20.84	20.76	21.51	21.25	22.00	22.47
	8H	19.37	20.05	19.87	20.55	21.04	21.35	22.03	21.86	22.54	23.02
	12H	19.54	20.14	20.04	20.63	21.19	21.90	22.50	22.40	22.99	23.55
12H	4H	18.52	19.34	19.00	19.81	20.28	19.57	20.38	20.05	20.86	21.33
	6H	19.29	19.97	19.79	20.47	20.96	20.82	21.50	21.33	22.00	22.49
	8H	19.61	20.21	20.12	20.70	21.26	21.50	22.10	22.00	22.59	23.15