

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: P1588279

Luminaire Tested: 24CZSP-43HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588279
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-43HE-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

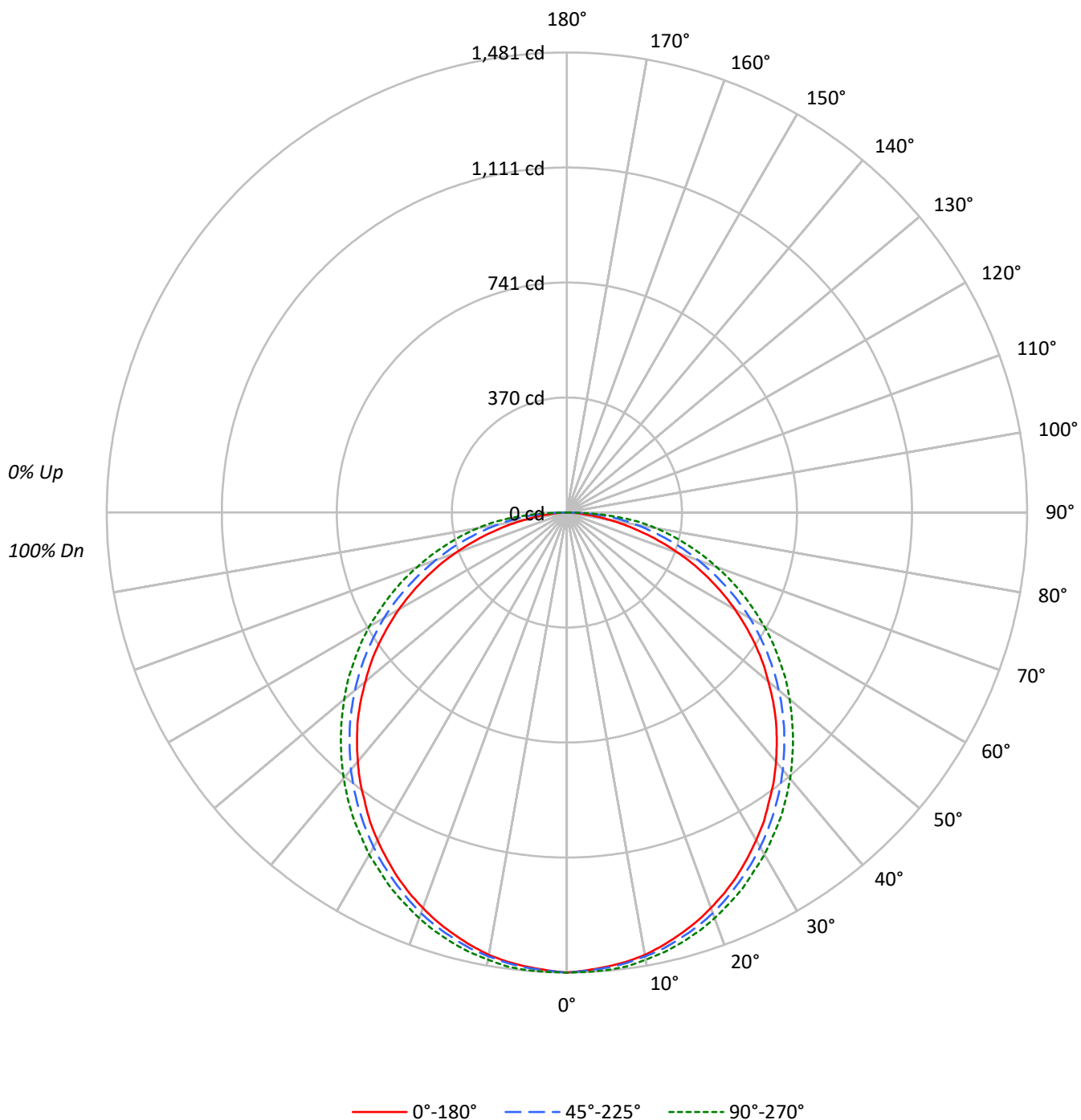
Lumens per Lamp: N/A
Luminaire Lumens: 4394.0 lumens
Efficiency: N/A
Efficacy: 148.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
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	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	85	85	85	82
2	98	89	82	76	95	87	81	75	84	78	73	81	76	72	77	74	70	70	70	68
3	89	78	70	63	87	77	69	62	74	67	61	71	65	60	68	63	59	59	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	51	51	51	48
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	38	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	34	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	30	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	27	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	25	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2269	2269	2269
5°	2257	2262	2274
10°	2249	2256	2273
15°	2229	2248	2272
20°	2208	2238	2266
25°	2185	2218	2259
30°	2155	2200	2250
35°	2121	2181	2242
40°	2094	2162	2235
45°	2063	2142	2228
50°	2017	2121	2228
55°	1974	2101	2234
60°	1915	2082	2250
65°	1833	2049	2265
70°	1716	2015	2293
75°	1526	1986	2368
80°	1255	1995	2575
85°	854	2223	2842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	3.2
10°-20°	401.4	9.1
20°-30°	606.9	13.8
30°-40°	732.4	16.7
40°-50°	765.8	17.4
50°-60°	706.5	16.1
60°-70°	561.8	12.8
70°-80°	354.6	8.1
80°-90°	124.3	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°	1148.5	26.1
0°-40°	1880.9	42.8
0°-60°	3353.3	76.3
0°-90°	4394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4394.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1481	1481	1481	1481	1481	
5°	1468	1479	1472	1475	1479	139
15°	1406	1422	1418	1429	1433	397
25°	1293	1312	1312	1329	1336	595
35°	1135	1159	1166	1189	1199	711
45°	952	973	989	1018	1029	733
55°	739	761	787	824	837	660
65°	506	529	566	613	625	500
75°	258	287	336	386	400	273
85°	49	80	126	157	162	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1481.2	1481.2	1481.2	1481.2	1481.2
2.5°	1475.2	1484.9	1476.4	1481.2	1480.0
5°	1467.9	1478.8	1471.5	1475.2	1478.8
7.5°	1459.3	1471.5	1463.0	1469.1	1473.9
10°	1446.0	1458.1	1450.8	1458.1	1461.8
12.5°	1427.7	1442.3	1437.5	1446.0	1449.6
15°	1405.8	1421.6	1418.0	1428.9	1432.6
17.5°	1382.7	1399.8	1397.3	1409.5	1413.1
20°	1354.8	1374.2	1373.0	1385.2	1390.0
22.5°	1325.6	1345.0	1343.8	1357.2	1363.3
25°	1292.7	1312.2	1312.2	1329.2	1336.5
27.5°	1256.3	1278.1	1279.4	1296.4	1302.5
30°	1218.6	1240.4	1244.1	1262.3	1272.1
32.5°	1179.6	1200.3	1206.4	1227.1	1234.4
35°	1134.6	1159.0	1166.3	1189.4	1199.1
37.5°	1093.3	1115.2	1124.9	1149.2	1159.0
40°	1047.1	1070.2	1081.1	1107.9	1117.6
42.5°	999.6	1022.8	1034.9	1064.1	1073.8
45°	952.2	972.9	988.7	1017.9	1028.8
47.5°	899.9	923.0	940.1	971.7	982.6
50°	846.4	870.7	890.2	924.2	935.2
52.5°	795.3	817.2	839.1	876.8	889.0
55°	739.4	761.3	786.8	824.5	836.7
57.5°	682.2	704.1	733.3	773.5	786.8
60°	625.1	647.0	679.8	721.2	734.5
62.5°	565.5	587.4	623.9	666.4	678.6
65°	505.9	529.0	565.5	612.9	625.1
67.5°	445.1	468.2	507.1	557.0	570.4
70°	383.1	408.6	450.0	499.8	512.0
72.5°	318.6	347.8	394.0	442.7	457.3
75°	257.8	287.0	335.6	385.5	400.1
77.5°	198.2	231.1	279.7	332.0	347.8
80°	142.3	175.1	226.2	277.3	291.9
82.5°	91.2	125.3	176.3	225.0	237.1
85°	48.6	80.3	126.5	156.9	161.7
87.5°	15.8	41.3	57.2	75.4	76.6
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	14.40	16.07	14.77	16.39	16.70	15.12	16.80	15.49	17.11	17.42
	3H	16.19	17.71	16.57	18.03	18.39	17.29	18.81	17.67	19.13	19.49
	4H	16.82	18.25	17.22	18.60	18.97	18.22	19.66	18.62	20.00	20.38
	6H	17.24	18.57	17.65	18.94	19.33	19.08	20.42	19.49	20.78	21.17
	8H	17.36	18.63	17.78	19.02	19.42	19.46	20.73	19.88	21.12	21.52
	12H	17.41	18.64	17.84	19.02	19.45	19.77	20.99	20.20	21.37	21.80
4H	2H	15.17	16.60	15.56	16.95	17.32	15.73	17.16	16.13	17.51	17.88
	3H	17.19	18.40	17.60	18.80	19.19	18.14	19.35	18.55	19.75	20.15
	4H	17.95	19.05	18.38	19.46	19.90	19.24	20.34	19.67	20.75	21.19
	6H	18.51	19.47	18.96	19.91	20.36	20.28	21.25	20.74	21.69	22.14
	8H	18.67	19.57	19.12	20.01	20.47	20.75	21.65	21.21	22.09	22.56
	12H	18.76	19.58	19.24	20.05	20.52	21.14	21.96	21.62	22.43	22.90
8H	4H	18.44	19.34	18.90	19.78	20.25	19.56	20.46	20.02	20.90	21.37
	6H	19.15	19.91	19.64	20.39	20.86	20.78	21.53	21.27	22.02	22.49
	8H	19.39	20.07	19.90	20.57	21.06	21.38	22.06	21.88	22.56	23.04
	12H	19.56	20.17	20.07	20.65	21.21	21.92	22.52	22.42	23.01	23.57
12H	4H	18.54	19.36	19.02	19.83	20.30	19.59	20.41	20.07	20.88	21.35
	6H	19.31	19.99	19.82	20.49	20.98	20.84	21.52	21.35	22.03	22.51
	8H	19.63	20.24	20.14	20.73	21.28	21.52	22.12	22.02	22.61	23.17