

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: P1588281

Luminaire Tested: 24CZSP-43HE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588281
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-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

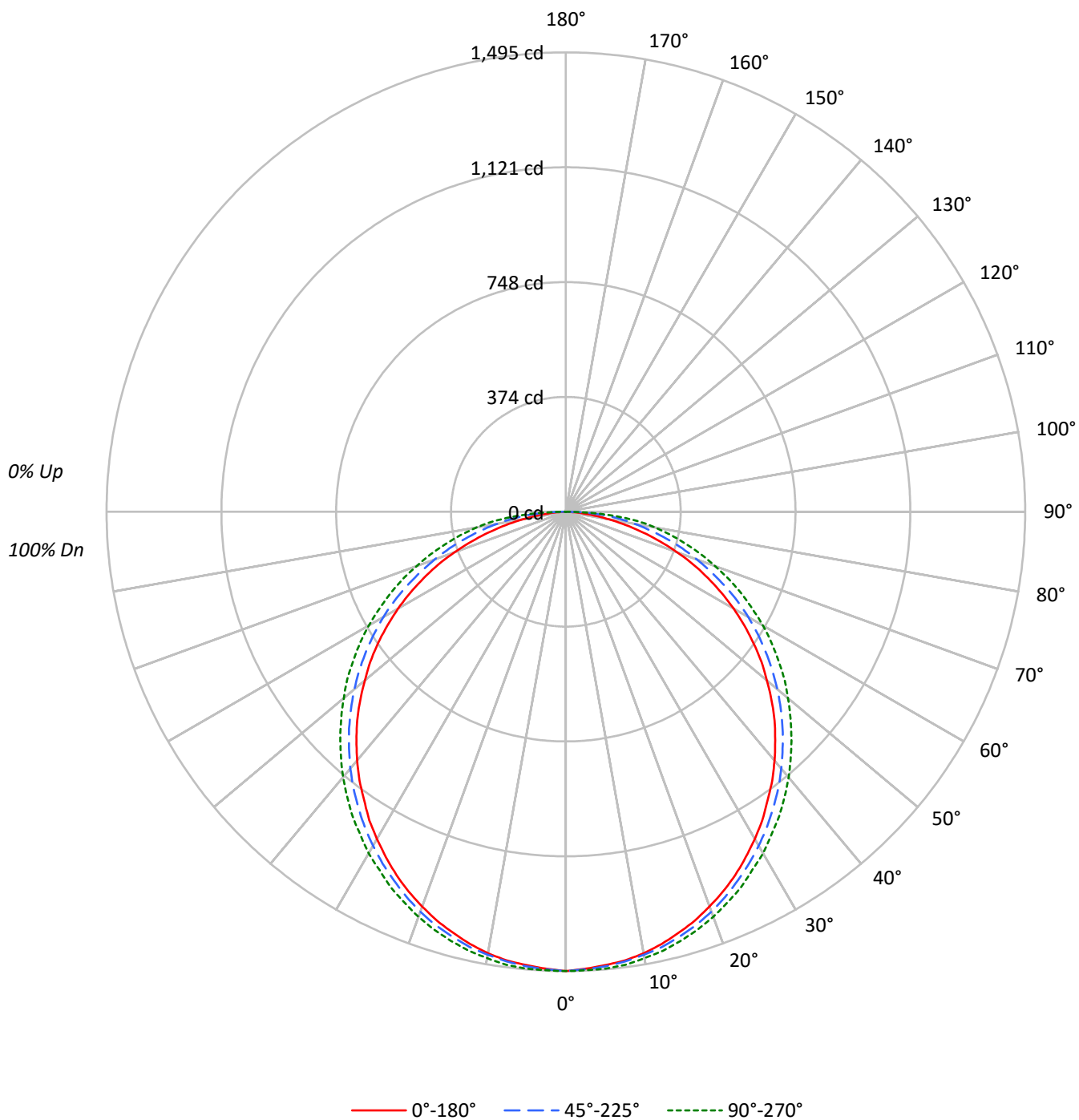
Lumens per Lamp: N/A
Luminaire Lumens: 4434.0 lumens
Efficiency: N/A
Efficacy: 150.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2289	2289	2289
5°	2277	2283	2294
10°	2269	2277	2294
15°	2249	2269	2292
20°	2228	2258	2286
25°	2205	2238	2279
30°	2175	2220	2270
35°	2141	2201	2262
40°	2113	2181	2255
45°	2081	2161	2249
50°	2035	2140	2249
55°	1992	2120	2255
60°	1932	2101	2270
65°	1850	2068	2286
70°	1731	2034	2313
75°	1540	2004	2389
80°	1267	2014	2598
85°	863	2242	2868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2868 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.5	3.2
10°-20°	405.0	9.1
20°-30°	612.5	13.8
30°-40°	739.1	16.7
40°-50°	772.8	17.4
50°-60°	713.0	16.1
60°-70°	566.9	12.8
70°-80°	357.8	8.1
80°-90°	125.5	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°	1158.9	26.1
0°-40°	1898.0	42.8
0°-60°	3383.8	76.3
0°-90°	4434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1481	1492	1485	1489	1492	141
15°	1419	1435	1431	1442	1446	400
25°	1304	1324	1324	1341	1349	601
35°	1145	1170	1177	1200	1210	717
45°	961	982	998	1027	1038	740
55°	746	768	794	832	844	666
65°	510	534	571	618	631	504
75°	260	290	339	389	404	276
85°	49	81	128	158	163	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1494.7	1494.7	1494.7	1494.7	1494.7
2.5°	1488.6	1498.4	1489.8	1494.7	1493.5
5°	1481.2	1492.3	1484.9	1488.6	1492.3
7.5°	1472.6	1484.9	1476.3	1482.4	1487.4
10°	1459.1	1471.4	1464.0	1471.4	1475.1
12.5°	1440.7	1455.4	1450.5	1459.1	1462.8
15°	1418.6	1434.6	1430.9	1441.9	1445.6
17.5°	1395.3	1412.5	1410.0	1422.3	1426.0
20°	1367.1	1386.7	1385.5	1397.8	1402.7
22.5°	1337.6	1357.3	1356.0	1369.5	1375.7
25°	1304.5	1324.1	1324.1	1341.3	1348.7
27.5°	1267.7	1289.8	1291.0	1308.2	1314.3
30°	1229.6	1251.7	1255.4	1273.8	1283.6
32.5°	1190.4	1211.2	1217.4	1238.2	1245.6
35°	1145.0	1169.5	1176.9	1200.2	1210.0
37.5°	1103.2	1125.3	1135.1	1159.7	1169.5
40°	1056.6	1079.9	1091.0	1118.0	1127.8
42.5°	1008.7	1032.1	1044.3	1073.8	1083.6
45°	960.9	981.8	997.7	1027.2	1038.2
47.5°	908.1	931.4	948.6	980.5	991.6
50°	854.1	878.7	898.3	932.7	943.7
52.5°	802.6	824.7	846.8	884.8	897.1
55°	746.1	768.2	794.0	832.0	844.3
57.5°	688.5	710.5	740.0	780.5	794.0
60°	630.8	652.9	686.0	727.7	741.2
62.5°	570.6	592.7	629.5	672.5	684.8
65°	510.5	533.8	570.6	618.5	630.8
67.5°	449.2	472.5	511.7	562.1	575.6
70°	386.6	412.3	454.1	504.4	516.6
72.5°	321.5	351.0	397.6	446.7	461.4
75°	260.2	289.6	338.7	389.0	403.7
77.5°	200.0	233.2	282.3	335.0	351.0
80°	143.6	176.7	228.3	279.8	294.5
82.5°	92.0	126.4	177.9	227.0	239.3
85°	49.1	81.0	127.6	158.3	163.2
87.5°	16.0	41.7	57.7	76.1	77.3
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	16.11	14.80	16.42	16.73	15.16	16.83	15.52	17.14	17.46
	3H	16.22	17.74	16.60	18.06	18.42	17.32	18.84	17.70	19.17	19.53
	4H	16.85	18.28	17.25	18.63	19.01	18.26	19.69	18.65	20.04	20.41
	6H	17.28	18.61	17.69	18.97	19.36	19.12	20.45	19.53	20.81	21.20
	8H	17.39	18.66	17.81	19.05	19.45	19.49	20.77	19.92	21.15	21.55
	12H	17.45	18.67	17.87	19.05	19.48	19.80	21.02	20.23	21.41	21.83
4H	2H	15.20	16.63	15.60	16.98	17.35	15.76	17.19	16.16	17.54	17.91
	3H	17.22	18.43	17.63	18.83	19.23	18.17	19.38	18.58	19.78	20.18
	4H	17.98	19.08	18.41	19.49	19.93	19.27	20.37	19.71	20.78	21.22
	6H	18.54	19.50	18.99	19.94	20.39	20.32	21.28	20.77	21.72	22.17
	8H	18.70	19.60	19.15	20.04	20.51	20.78	21.68	21.24	22.12	22.59
	12H	18.79	19.61	19.27	20.08	20.55	21.18	21.99	21.65	22.47	22.93
8H	4H	18.47	19.38	18.93	19.82	20.28	19.59	20.50	20.05	20.94	21.40
	6H	19.18	19.94	19.67	20.42	20.90	20.81	21.57	21.30	22.05	22.53
	8H	19.42	20.10	19.93	20.61	21.09	21.41	22.09	21.91	22.59	23.07
	12H	19.59	20.20	20.10	20.69	21.24	21.95	22.55	22.45	23.04	23.60
12H	4H	18.58	19.39	19.05	19.86	20.33	19.62	20.44	20.10	20.91	21.38
	6H	19.34	20.02	19.85	20.53	21.01	20.87	21.55	21.38	22.06	22.54
	8H	19.67	20.27	20.17	20.76	21.32	21.55	22.15	22.05	22.64	23.20