

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: P1588284

Luminaire Tested: 24CZSP-43HE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-43HE-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

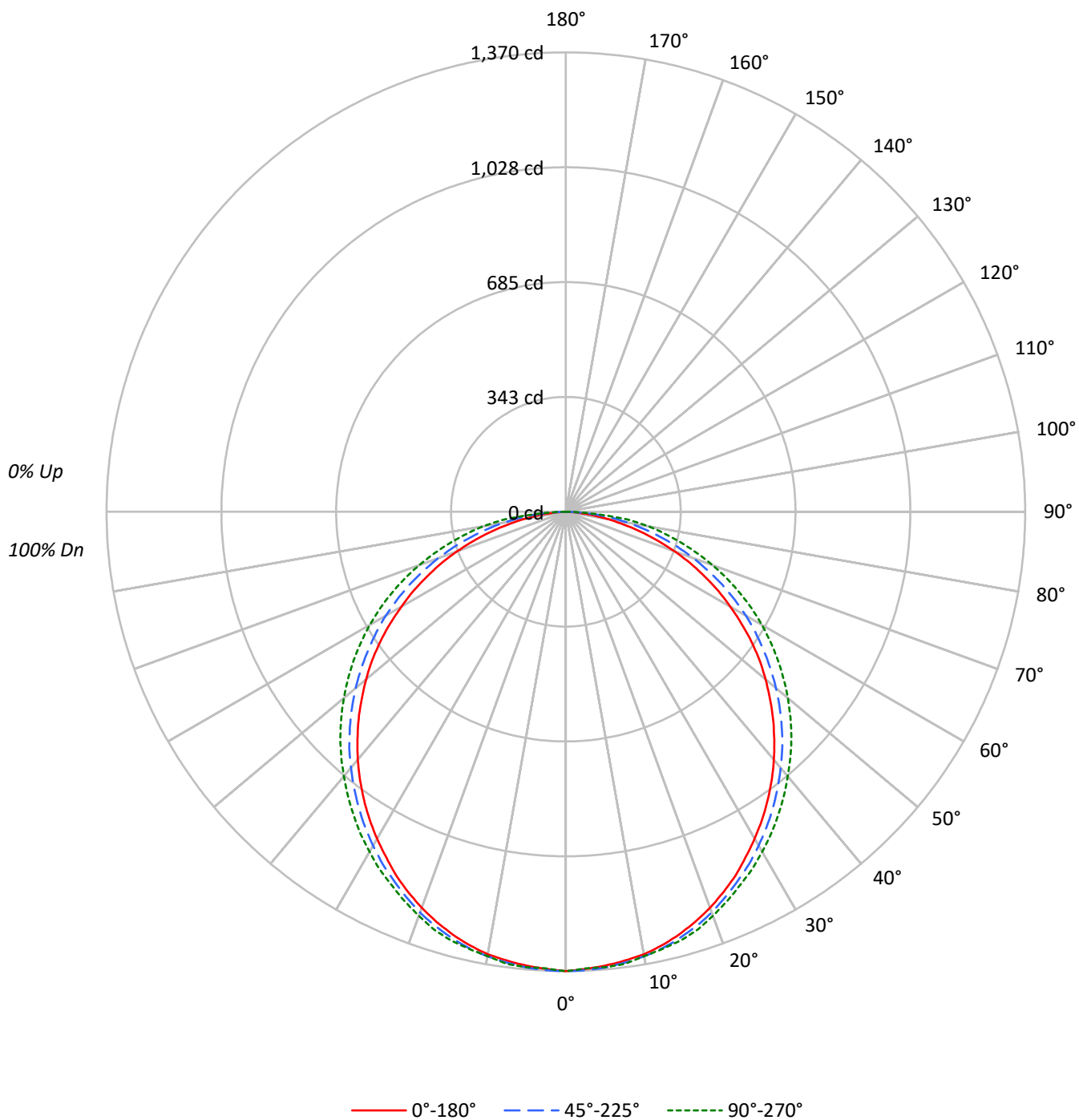
Lumens per Lamp: N/A
Luminaire Lumens: 4000.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	69
3	89	79	70	64	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°	2098	2098	2098
5°	2089	2097	2096
10°	2085	2094	2093
15°	2070	2086	2099
20°	2049	2073	2090
25°	2023	2051	2077
30°	1992	2034	2071
35°	1963	2014	2065
40°	1930	1994	2059
45°	1894	1973	2061
50°	1853	1949	2060
55°	1805	1922	2063
60°	1737	1901	2068
65°	1657	1864	2074
70°	1545	1812	2083
75°	1376	1740	2104
80°	1138	1656	2206
85°	740	1495	1928

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.6	3.2
10°-20°	371.0	9.3
20°-30°	559.6	14.0
30°-40°	674.0	16.8
40°-50°	703.9	17.6
50°-60°	646.4	16.2
60°-70°	509.1	12.7
70°-80°	312.4	7.8
80°-90°	94.0	2.3
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°	1060.2	26.5
0°-40°	1734.2	43.4
0°-60°	3084.5	77.1
0°-90°	4000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4000.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1359	1360	1364	1368	1363	129
15°	1305	1308	1316	1324	1324	368
25°	1197	1200	1214	1229	1229	551
35°	1050	1055	1077	1099	1104	657
45°	874	884	911	943	951	674
55°	676	688	720	760	772	603
65°	457	473	514	557	572	452
75°	233	251	294	341	356	247
85°	42	58	85	108	110	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.1	1370.1	1370.1	1370.1	1370.1
2.5°	1364.8	1367.5	1368.4	1369.2	1363.1
5°	1358.7	1360.5	1364.0	1368.4	1363.1
7.5°	1349.9	1351.7	1356.1	1362.2	1359.6
10°	1340.3	1341.1	1346.4	1350.8	1345.5
12.5°	1324.5	1327.1	1333.2	1336.8	1335.0
15°	1305.2	1307.8	1315.7	1323.6	1323.6
17.5°	1282.3	1285.8	1295.5	1306.0	1306.9
20°	1256.9	1259.5	1271.8	1282.3	1282.3
22.5°	1227.9	1231.4	1243.7	1255.1	1256.9
25°	1197.2	1199.8	1213.9	1228.8	1228.8
27.5°	1161.2	1166.5	1184.0	1199.0	1202.5
30°	1126.1	1130.5	1149.8	1168.2	1170.9
32.5°	1089.2	1094.5	1114.7	1134.9	1139.3
35°	1049.7	1055.0	1077.0	1098.9	1104.2
37.5°	1008.5	1014.6	1037.5	1062.9	1068.2
40°	965.5	972.5	997.1	1024.3	1029.6
42.5°	919.8	929.5	955.8	983.9	991.8
45°	874.2	883.9	911.1	942.7	951.4
47.5°	825.9	837.3	865.4	898.8	908.4
50°	777.7	789.1	818.0	854.0	864.5
52.5°	728.5	739.9	769.8	807.5	818.9
55°	675.8	688.1	719.7	760.1	772.4
57.5°	621.4	637.2	670.6	711.8	724.1
60°	567.0	582.8	620.5	660.9	675.0
62.5°	513.5	528.4	567.0	610.0	624.9
65°	457.3	473.1	514.3	557.3	572.3
67.5°	402.0	417.8	459.0	503.8	519.6
70°	344.9	362.5	404.6	449.4	465.2
72.5°	287.9	306.3	349.3	395.0	409.9
75°	232.6	251.0	294.0	340.6	355.5
77.5°	178.2	198.4	240.5	287.9	301.9
80°	129.0	148.3	187.8	234.3	250.1
82.5°	82.5	99.2	138.7	182.6	194.0
85°	42.1	57.9	85.1	108.0	109.7
87.5°	13.2	18.4	28.1	42.1	43.0
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	14.05	15.72	14.42	16.03	16.34	14.88	16.55	15.25	16.86	17.17
	3H	15.81	17.32	16.19	17.64	18.00	17.00	18.51	17.38	18.83	19.19
	4H	16.43	17.85	16.83	18.20	18.57	17.89	19.31	18.29	19.66	20.03
	6H	16.84	18.16	17.25	18.52	18.91	18.67	19.99	19.08	20.35	20.74
	8H	16.95	18.21	17.37	18.60	19.00	18.99	20.25	19.41	20.64	21.04
	12H	17.00	18.21	17.43	18.59	19.02	19.20	20.41	19.63	20.79	21.22
4H	2H	14.82	16.25	15.22	16.59	16.97	15.47	16.89	15.87	17.24	17.62
	3H	16.80	18.00	17.21	18.40	18.80	17.83	19.02	18.24	19.42	19.82
	4H	17.54	18.63	17.97	19.04	19.47	18.88	19.96	19.31	20.38	20.81
	6H	18.07	19.02	18.52	19.46	19.91	19.83	20.78	20.28	21.22	21.68
	8H	18.21	19.11	18.67	19.55	20.01	20.23	21.12	20.69	21.56	22.03
	12H	18.30	19.10	18.78	19.58	20.04	20.50	21.31	20.98	21.78	22.25
8H	4H	18.00	18.89	18.46	19.33	19.80	19.17	20.06	19.63	20.50	20.97
	6H	18.66	19.40	19.15	19.89	20.36	20.28	21.02	20.77	21.51	21.98
	8H	18.87	19.54	19.38	20.04	20.53	20.79	21.46	21.30	21.96	22.45
	12H	19.01	19.60	19.51	20.09	20.65	21.18	21.77	21.68	22.26	22.82
12H	4H	18.09	18.89	18.57	19.37	19.83	19.19	20.00	19.67	20.47	20.94
	6H	18.79	19.46	19.30	19.97	20.45	20.33	21.00	20.83	21.50	21.99
	8H	19.07	19.66	19.57	20.15	20.71	20.90	21.50	21.41	21.99	22.54