

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: P1588290

Luminaire Tested: 24CZSP-43HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588290
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

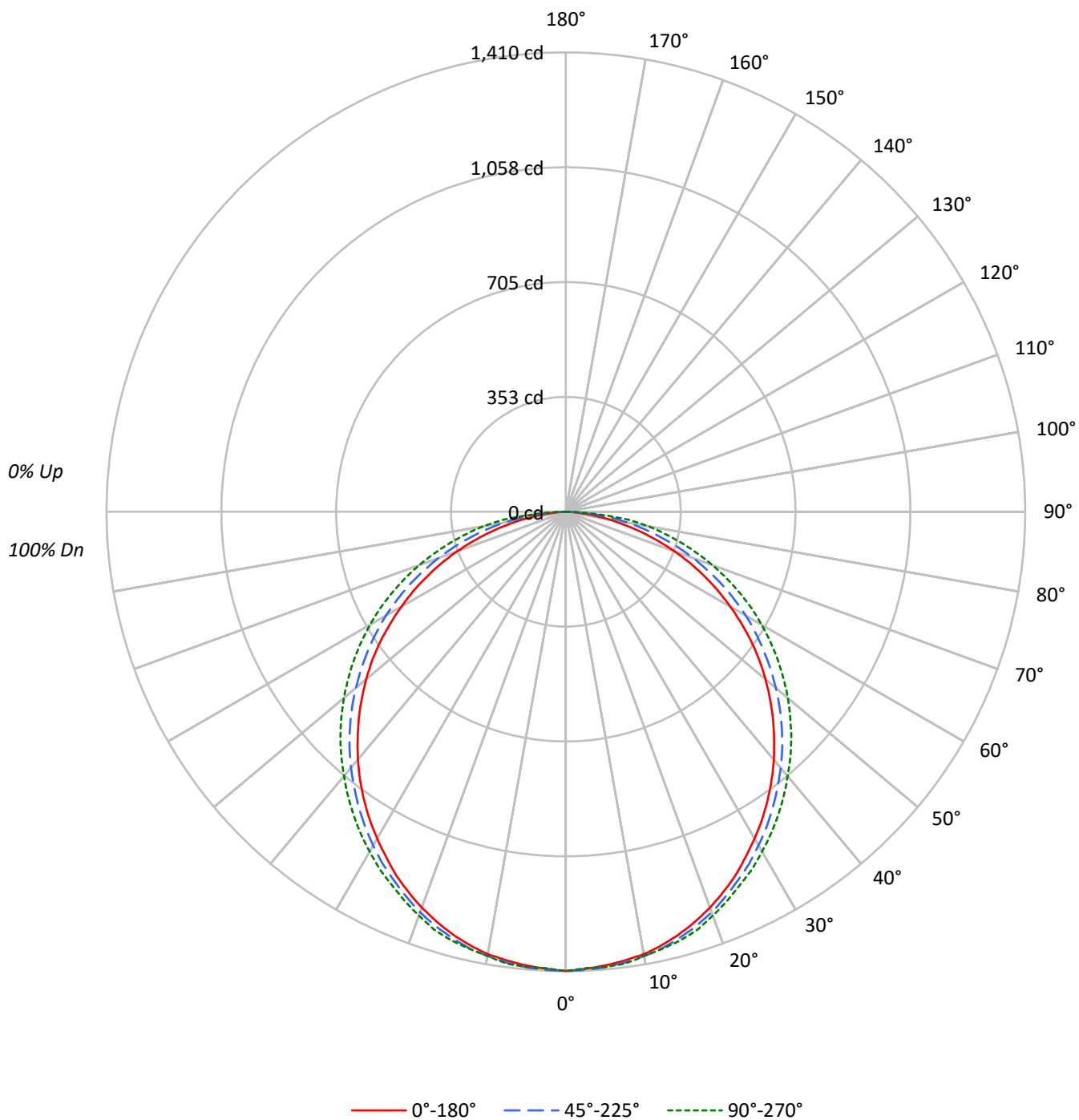
Lumens per Lamp: N/A
Luminaire Lumens: 4115.0 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2159	2159	2159
5°	2149	2157	2156
10°	2144	2154	2153
15°	2129	2146	2159
20°	2107	2133	2150
25°	2081	2110	2136
30°	2049	2092	2130
35°	2019	2072	2124
40°	1986	2051	2118
45°	1948	2030	2120
50°	1906	2005	2119
55°	1857	1977	2122
60°	1787	1956	2127
65°	1705	1918	2134
70°	1589	1864	2143
75°	1416	1790	2164
80°	1170	1704	2269
85°	761	1539	1984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2342 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	3.2
10°-20°	381.7	9.3
20°-30°	575.7	14.0
30°-40°	693.4	16.8
40°-50°	724.1	17.6
50°-60°	665.0	16.2
60°-70°	523.8	12.7
70°-80°	321.3	7.8
80°-90°	96.7	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°	1090.7	26.5
0°-40°	1784.0	43.4
0°-60°	3173.2	77.1
0°-90°	4115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1410	1410	1410	1410	1410	
5°	1398	1400	1403	1408	1402	133
15°	1343	1345	1354	1362	1362	379
25°	1232	1234	1249	1264	1264	567
35°	1080	1085	1108	1130	1136	675
45°	899	909	937	970	979	693
55°	695	708	740	782	795	621
65°	470	487	529	573	589	465
75°	239	258	302	350	366	254
85°	43	60	88	111	113	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1409.5	1409.5	1409.5	1409.5	1409.5
2.5°	1404.1	1406.8	1407.7	1408.6	1402.3
5°	1397.8	1399.6	1403.2	1407.7	1402.3
7.5°	1388.7	1390.5	1395.1	1401.4	1398.7
10°	1378.8	1379.7	1385.1	1389.6	1384.2
12.5°	1362.5	1365.3	1371.6	1375.2	1373.4
15°	1342.7	1345.4	1353.5	1361.6	1361.6
17.5°	1319.2	1322.8	1332.7	1343.6	1344.5
20°	1293.0	1295.7	1308.4	1319.2	1319.2
22.5°	1263.2	1266.8	1279.5	1291.2	1293.0
25°	1231.6	1234.3	1248.8	1264.1	1264.1
27.5°	1194.6	1200.0	1218.1	1233.4	1237.0
30°	1158.5	1163.0	1182.9	1201.8	1204.5
32.5°	1120.6	1126.0	1146.7	1167.5	1172.0
35°	1079.9	1085.3	1107.9	1130.5	1135.9
37.5°	1037.5	1043.8	1067.3	1093.5	1098.9
40°	993.2	1000.5	1025.7	1053.7	1059.2
42.5°	946.3	956.2	983.3	1012.2	1020.3
45°	899.3	909.3	937.3	969.8	978.8
47.5°	849.7	861.4	890.3	924.6	934.5
50°	800.0	811.7	841.5	878.6	889.4
52.5°	749.4	761.2	791.9	830.7	842.4
55°	695.3	707.9	740.4	782.0	794.6
57.5°	639.3	655.5	689.9	732.3	744.9
60°	583.3	599.6	638.4	679.9	694.4
62.5°	528.2	543.6	583.3	627.5	642.9
65°	470.4	486.7	529.1	573.4	588.7
67.5°	413.5	429.8	472.2	518.3	534.5
70°	354.9	372.9	416.3	462.3	478.6
72.5°	296.2	315.1	359.4	406.3	421.7
75°	239.3	258.2	302.5	350.3	365.7
77.5°	183.3	204.1	247.4	296.2	310.6
80°	132.7	152.6	193.2	241.1	257.3
82.5°	84.9	102.0	142.7	187.8	199.6
85°	43.3	59.6	87.6	111.1	112.9
87.5°	13.5	19.0	28.9	43.3	44.2
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	14.15	15.81	14.52	16.13	16.44	14.98	16.64	15.35	16.96	17.27
	3H	15.91	17.41	16.28	17.74	18.10	17.10	18.61	17.47	18.93	19.29
	4H	16.53	17.95	16.92	18.30	18.67	17.99	19.41	18.38	19.76	20.13
	6H	16.94	18.26	17.35	18.62	19.01	18.77	20.09	19.18	20.45	20.84
	8H	17.04	18.31	17.47	18.70	19.09	19.09	20.35	19.51	20.74	21.14
	12H	17.10	18.31	17.52	18.69	19.12	19.30	20.51	19.73	20.89	21.32
4H	2H	14.92	16.35	15.32	16.69	17.07	15.57	16.99	15.97	17.34	17.71
	3H	16.90	18.10	17.31	18.50	18.89	17.92	19.12	18.33	19.52	19.92
	4H	17.64	18.72	18.07	19.14	19.57	18.98	20.06	19.41	20.48	20.91
	6H	18.17	19.12	18.62	19.56	20.01	19.93	20.88	20.38	21.32	21.77
	8H	18.31	19.20	18.77	19.65	20.11	20.33	21.22	20.79	21.66	22.12
	12H	18.40	19.20	18.88	19.67	20.14	20.60	21.41	21.08	21.88	22.35
8H	4H	18.10	18.99	18.56	19.43	19.89	19.27	20.16	19.72	20.60	21.06
	6H	18.76	19.50	19.25	19.99	20.46	20.38	21.12	20.87	21.61	22.08
	8H	18.97	19.64	19.48	20.14	20.63	20.89	21.56	21.40	22.06	22.55
	12H	19.11	19.70	19.61	20.19	20.75	21.28	21.87	21.78	22.36	22.92
12H	4H	18.19	18.99	18.66	19.46	19.93	19.29	20.09	19.77	20.57	21.04
	6H	18.89	19.56	19.40	20.06	20.55	20.42	21.09	20.93	21.60	22.08
	8H	19.17	19.76	19.67	20.25	20.81	21.00	21.60	21.51	22.08	22.64