

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: P1584332

Luminaire Tested: 14CZSP-49HE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-49HE-L830-S
Description: 1x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

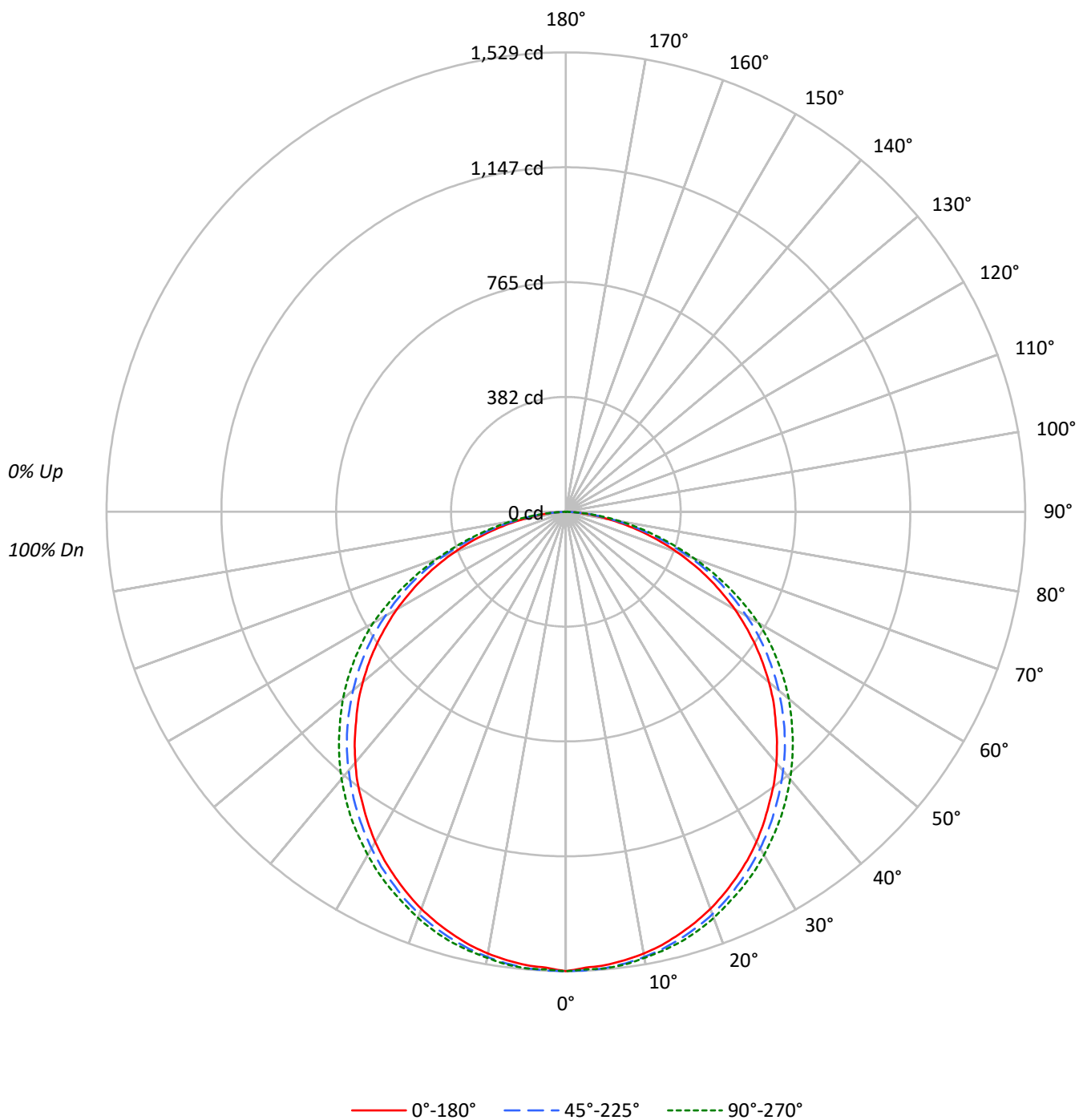
Lumens per Lamp: N/A
Luminaire Lumens: 4421.0 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5153	5153	5153
5°	5124	5157	5162
10°	5110	5148	5159
15°	5080	5133	5169
20°	5045	5113	5159
25°	4994	5073	5144
30°	4937	5034	5132
35°	4858	4990	5123
40°	4795	4949	5109
45°	4704	4906	5089
50°	4626	4847	5079
55°	4515	4778	5046
60°	4376	4684	4995
65°	4182	4555	4789
70°	3897	4301	4494
75°	3483	3880	4101
80°	2854	3270	3586
85°	1914	2389	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5089 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.3
10°-20°	415.2	9.4
20°-30°	628.7	14.2
30°-40°	759.2	17.2
40°-50°	793.5	17.9
50°-60°	727.1	16.4
60°-70°	561.2	12.7
70°-80°	315.7	7.1
80°-90°	75.5	1.7
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°	1188.7	26.9
0°-40°	1948.0	44.1
0°-60°	3468.5	78.5
0°-90°	4421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1515	1526	1525	1526	1526	144
15°	1456	1468	1471	1477	1482	411
25°	1343	1355	1365	1372	1384	619
35°	1181	1196	1213	1229	1246	740
45°	987	1007	1030	1050	1068	763
55°	768	789	813	839	859	687
65°	524	547	571	594	601	518
75°	268	292	298	310	315	284
85°	50	57	62	68	69	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1529.2	1529.2	1529.2	1529.2	1529.2
2.5°	1518.8	1530.5	1527.9	1531.8	1524.7
5°	1514.9	1526.0	1524.7	1526.0	1526.0
7.5°	1505.2	1516.9	1516.2	1518.2	1519.5
10°	1493.4	1504.5	1504.5	1506.5	1507.8
12.5°	1477.2	1488.9	1490.2	1493.4	1496.0
15°	1456.3	1468.1	1471.3	1477.2	1481.7
17.5°	1432.9	1445.3	1450.5	1456.3	1462.2
20°	1406.9	1418.0	1425.8	1430.3	1438.8
22.5°	1376.3	1388.7	1397.1	1401.7	1410.8
25°	1343.1	1354.8	1364.6	1371.7	1383.5
27.5°	1308.0	1319.7	1331.4	1339.9	1353.5
30°	1268.9	1281.3	1293.7	1306.7	1319.0
32.5°	1226.6	1241.0	1254.6	1268.9	1282.6
35°	1181.1	1196.1	1213.0	1229.2	1245.5
37.5°	1138.8	1152.5	1170.0	1187.6	1203.9
40°	1090.0	1104.9	1125.1	1144.6	1161.6
42.5°	1040.5	1056.8	1078.9	1097.8	1116.0
45°	987.2	1006.7	1029.5	1050.3	1067.9
47.5°	937.7	954.6	977.4	1000.2	1018.4
50°	882.4	901.3	924.7	948.8	968.9
52.5°	826.4	846.0	870.0	894.1	914.9
55°	768.5	788.7	813.4	838.8	859.0
57.5°	709.3	730.8	756.2	781.5	801.7
60°	649.4	670.9	695.0	723.0	741.2
62.5°	587.0	611.0	633.8	659.8	670.9
65°	524.5	547.3	571.3	594.1	600.6
67.5°	460.7	484.1	505.6	520.6	529.0
70°	395.6	421.0	436.6	451.0	456.2
72.5°	331.2	356.6	365.7	379.4	384.6
75°	267.5	292.2	298.0	310.4	315.0
77.5°	205.6	228.4	230.4	244.7	248.6
80°	147.1	165.3	168.5	182.2	184.8
82.5°	94.4	107.4	111.9	123.6	127.5
85°	49.5	56.6	61.8	67.7	69.0
87.5°	16.3	20.2	16.9	17.6	16.3
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	17.41	19.06	17.77	19.37	19.69	17.95	19.60	18.31	19.91	20.23
	3H	19.18	20.68	19.56	21.00	21.36	19.81	21.30	20.18	21.62	21.98
	4H	19.81	21.22	20.21	21.57	21.94	20.47	21.88	20.87	22.23	22.60
	6H	20.22	21.52	20.63	21.89	22.28	20.95	22.26	21.36	22.62	23.01
	8H	20.32	21.57	20.75	21.96	22.36	21.10	22.34	21.52	22.73	23.13
	12H	20.37	21.57	20.80	21.95	22.38	21.18	22.37	21.61	22.76	23.18
4H	2H	18.13	19.54	18.53	19.89	20.26	18.55	19.96	18.95	20.31	20.68
	3H	20.13	21.31	20.54	21.70	22.10	20.63	21.81	21.04	22.20	22.60
	4H	20.89	21.95	21.32	22.37	22.80	21.42	22.49	21.85	22.90	23.34
	6H	21.41	22.35	21.87	22.79	23.24	22.03	22.96	22.48	23.40	23.85
	8H	21.55	22.43	22.01	22.87	23.33	22.22	23.09	22.68	23.53	24.00
	12H	21.63	22.42	22.11	22.89	23.36	22.34	23.12	22.82	23.60	24.07
8H	4H	21.22	22.10	21.68	22.54	23.00	21.70	22.57	22.16	23.01	23.48
	6H	21.86	22.59	22.36	23.08	23.55	22.41	23.14	22.90	23.63	24.10
	8H	22.06	22.71	22.57	23.22	23.70	22.67	23.32	23.18	23.83	24.31
	12H	22.19	22.77	22.70	23.26	23.82	22.85	23.43	23.36	23.92	24.48
12H	4H	21.26	22.04	21.74	22.52	22.99	21.72	22.51	22.20	22.98	23.45
	6H	21.92	22.57	22.43	23.08	23.56	22.45	23.10	22.96	23.61	24.09
	8H	22.17	22.74	22.68	23.23	23.79	22.76	23.33	23.26	23.82	24.38