

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: P1584646

Luminaire Tested: 14CZSP-A-49HE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584646
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-A-49HE-L940-S
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

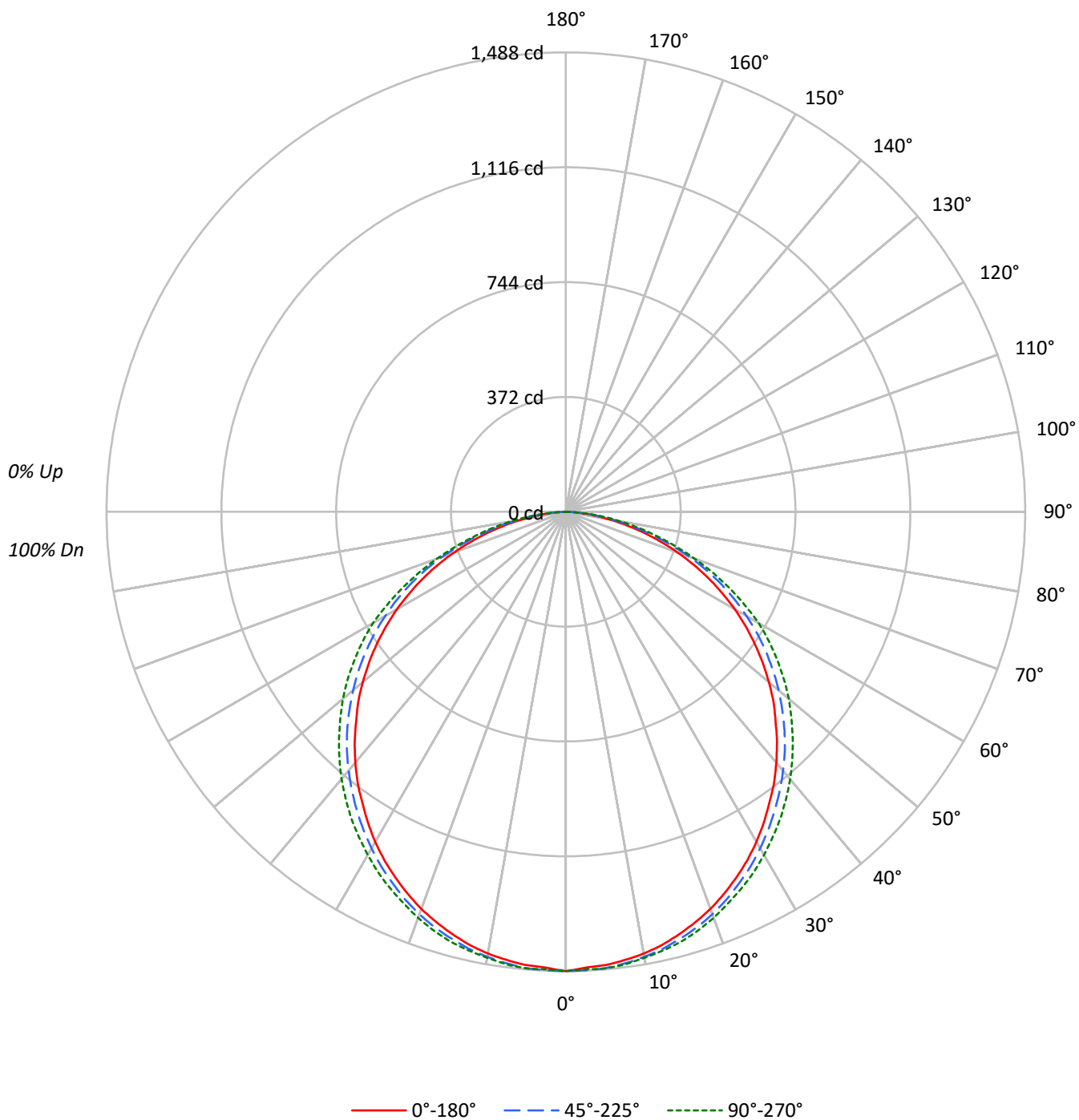
Lumens per Lamp: N/A
Luminaire Lumens: 4302.0 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	5014	5014	5014
5°	4986	5018	5023
10°	4972	5009	5020
15°	4943	4994	5030
20°	4909	4975	5020
25°	4859	4937	5005
30°	4804	4898	4994
35°	4728	4855	4986
40°	4665	4816	4972
45°	4578	4774	4952
50°	4501	4717	4943
55°	4393	4650	4910
60°	4259	4558	4860
65°	4069	4433	4660
70°	3793	4186	4373
75°	3389	3776	3990
80°	2777	3182	3489
85°	1860	2327	2594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4952 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.9	3.3
10°-20°	404.0	9.4
20°-30°	611.8	14.2
30°-40°	738.8	17.2
40°-50°	772.1	17.9
50°-60°	707.5	16.4
60°-70°	546.1	12.7
70°-80°	307.2	7.1
80°-90°	73.5	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°	1156.7	26.9
0°-40°	1895.5	44.1
0°-60°	3375.1	78.5
0°-90°	4302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4302.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1474	1485	1484	1485	1485	140
15°	1417	1428	1432	1437	1442	400
25°	1307	1318	1328	1335	1346	602
35°	1149	1164	1180	1196	1212	720
45°	961	980	1002	1022	1039	742
55°	748	768	792	816	836	668
65°	510	532	556	578	584	504
75°	260	284	290	302	306	276
85°	48	55	60	66	67	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1477.9	1489.3	1486.8	1490.6	1483.6
5°	1474.1	1484.9	1483.6	1484.9	1484.9
7.5°	1464.6	1476.0	1475.4	1477.3	1478.6
10°	1453.2	1464.0	1464.0	1465.9	1467.2
12.5°	1437.4	1448.8	1450.1	1453.2	1455.8
15°	1417.1	1428.5	1431.7	1437.4	1441.8
17.5°	1394.3	1406.4	1411.4	1417.1	1422.8
20°	1369.0	1379.8	1387.4	1391.8	1400.0
22.5°	1339.3	1351.3	1359.5	1364.0	1372.8
25°	1307.0	1318.4	1327.9	1334.8	1346.2
27.5°	1272.8	1284.2	1295.6	1303.8	1317.1
30°	1234.8	1246.8	1258.8	1271.5	1283.5
32.5°	1193.6	1207.5	1220.8	1234.8	1248.1
35°	1149.3	1163.9	1180.3	1196.2	1212.0
37.5°	1108.1	1121.4	1138.5	1155.6	1171.5
40°	1060.6	1075.2	1094.8	1113.8	1130.3
42.5°	1012.5	1028.3	1049.9	1068.2	1086.0
45°	960.6	979.6	1001.8	1022.0	1039.1
47.5°	912.5	928.9	951.1	973.3	991.0
50°	858.6	877.0	899.8	923.2	942.9
52.5°	804.2	823.2	846.6	870.0	890.3
55°	747.8	767.5	791.5	816.2	835.8
57.5°	690.2	711.1	735.8	760.5	780.1
60°	632.0	652.8	676.3	703.5	721.2
62.5°	571.2	594.6	616.8	642.1	652.8
65°	510.4	532.5	556.0	578.1	584.5
67.5°	448.3	471.1	492.0	506.6	514.8
70°	385.0	409.7	424.9	438.8	443.9
72.5°	322.3	347.0	355.9	369.2	374.2
75°	260.3	284.3	290.0	302.0	306.5
77.5°	200.1	222.3	224.2	238.1	241.9
80°	143.1	160.8	164.0	177.3	179.8
82.5°	91.8	104.5	108.9	120.3	124.1
85°	48.1	55.1	60.2	65.9	67.1
87.5°	15.8	19.6	16.5	17.1	15.8
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	17.31	18.96	17.68	19.28	19.59	17.85	19.50	18.22	19.82	20.13
	3H	19.09	20.58	19.47	20.91	21.27	19.71	21.20	20.09	21.53	21.89
	4H	19.72	21.12	20.11	21.47	21.85	20.38	21.79	20.78	22.13	22.51
	6H	20.12	21.43	20.54	21.79	22.18	20.86	22.16	21.27	22.52	22.92
	8H	20.23	21.47	20.65	21.86	22.26	21.00	22.25	21.43	22.64	23.04
	12H	20.28	21.47	20.71	21.85	22.28	21.09	22.28	21.51	22.66	23.09
4H	2H	18.04	19.45	18.44	19.79	20.17	18.46	19.87	18.86	20.21	20.59
	3H	20.03	21.21	20.44	21.61	22.01	20.53	21.71	20.94	22.11	22.51
	4H	20.79	21.86	21.22	22.27	22.71	21.33	22.40	21.76	22.81	23.24
	6H	21.32	22.25	21.77	22.69	23.15	21.93	22.86	22.38	23.30	23.76
	8H	21.46	22.33	21.92	22.77	23.24	22.12	23.00	22.58	23.44	23.90
	12H	21.54	22.32	22.02	22.80	23.27	22.24	23.03	22.72	23.50	23.97
8H	4H	21.13	22.00	21.59	22.44	22.91	21.60	22.48	22.06	22.92	23.38
	6H	21.77	22.49	22.26	22.98	23.46	22.32	23.04	22.81	23.53	24.00
	8H	21.97	22.62	22.48	23.12	23.61	22.57	23.22	23.08	23.73	24.22
	12H	22.10	22.67	22.60	23.16	23.72	22.76	23.33	23.26	23.82	24.38
12H	4H	21.16	21.95	21.64	22.42	22.89	21.63	22.41	22.11	22.89	23.36
	6H	21.82	22.47	22.33	22.98	23.47	22.35	23.01	22.86	23.51	24.00
	8H	22.07	22.65	22.58	23.14	23.70	22.66	23.24	23.17	23.73	24.29