

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: P1584341

Luminaire Tested: 14CZSP-49HE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584341
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2602-698-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-49HE-L850
Description: 1x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

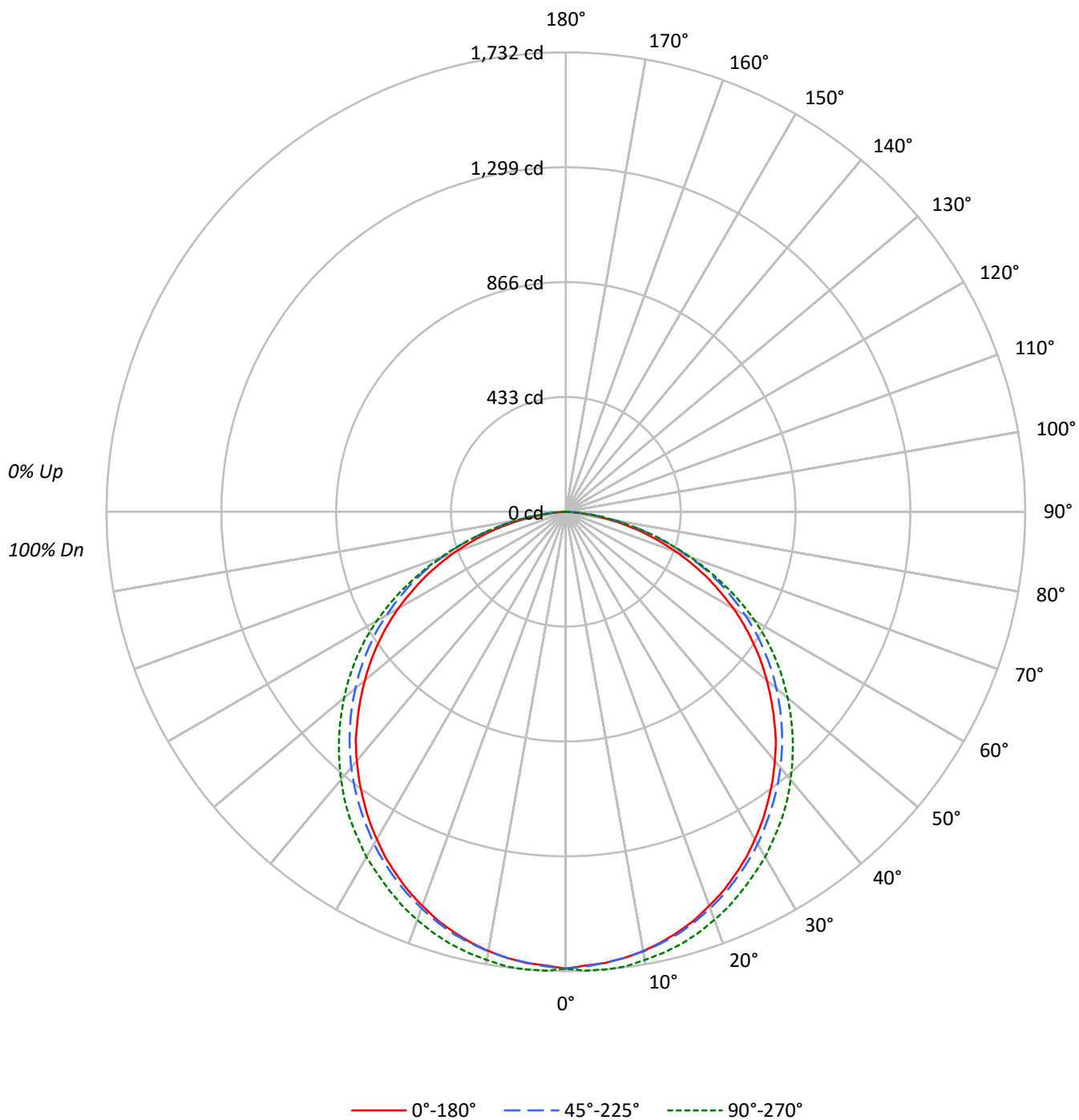
Lumens per Lamp: N/A
Luminaire Lumens: 4961.0 lumens
Efficiency: N/A
Efficacy: 149.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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		94	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	73	61	53	47	59	52	46		57	51	46		55
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	44	37	32		43	36	32		42
9	56	43	34	29	55	42	34	29	41	34	29		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°	5803	5803	5803
5°	5776	5770	5858
10°	5754	5760	5871
15°	5720	5742	5884
20°	5670	5705	5873
25°	5613	5668	5855
30°	5546	5629	5849
35°	5470	5577	5830
40°	5393	5536	5800
45°	5294	5487	5765
50°	5186	5432	5721
55°	5069	5364	5668
60°	4918	5268	5552
65°	4694	5133	5301
70°	4378	4841	4921
75°	3906	4370	4412
80°	3178	3681	3650
85°	2068	2571	2007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5765 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.1	3.3
10°-20°	467.4	9.4
20°-30°	707.9	14.3
30°-40°	855.2	17.2
40°-50°	893.3	18.0
50°-60°	818.0	16.5
60°-70°	628.5	12.7
70°-80°	350.0	7.1
80°-90°	77.5	1.6
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°	1338.5	27.0
0°-40°	2193.6	44.2
0°-60°	3905.0	78.7
0°-90°	4961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4961.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1708	1726	1706	1716	1732	162
15°	1640	1656	1646	1662	1687	463
25°	1510	1528	1524	1547	1575	696
35°	1330	1349	1356	1388	1417	832
45°	1111	1135	1151	1186	1210	857
55°	863	890	913	946	965	771
65°	589	620	644	657	665	582
75°	300	331	336	336	339	318
85°	54	63	66	55	52	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.3	1722.3	1722.3	1722.3	1722.3
2.5°	1712.5	1728.7	1715.8	1720.6	1732.0
5°	1707.7	1725.5	1706.0	1715.8	1732.0
7.5°	1696.3	1712.5	1696.3	1707.7	1728.7
10°	1681.7	1699.6	1683.3	1694.7	1715.8
12.5°	1662.3	1676.9	1665.5	1681.7	1702.8
15°	1639.6	1655.8	1646.0	1662.3	1686.6
17.5°	1613.6	1628.2	1620.1	1641.2	1663.9
20°	1581.2	1597.4	1590.9	1612.0	1637.9
22.5°	1548.7	1565.0	1560.1	1581.2	1608.7
25°	1509.8	1527.7	1524.4	1547.1	1574.7
27.5°	1470.9	1488.7	1487.1	1513.1	1539.0
30°	1425.5	1443.3	1446.6	1474.1	1503.3
32.5°	1380.1	1399.5	1401.2	1432.0	1459.5
35°	1329.8	1349.3	1355.8	1388.2	1417.4
37.5°	1279.5	1299.0	1308.7	1339.5	1370.4
40°	1226.0	1247.1	1258.5	1290.9	1318.5
42.5°	1172.5	1193.6	1206.6	1239.0	1264.9
45°	1110.9	1135.2	1151.4	1185.5	1209.8
47.5°	1050.9	1076.8	1094.7	1127.1	1151.4
50°	989.2	1016.8	1036.3	1068.7	1091.4
52.5°	927.6	956.8	976.3	1007.1	1029.8
55°	862.8	890.3	913.0	945.5	964.9
57.5°	797.9	825.5	849.8	879.0	896.8
60°	729.8	759.0	781.7	810.9	823.8
62.5°	658.4	689.2	711.9	734.6	746.0
65°	588.7	619.5	643.8	656.8	664.9
67.5°	517.3	548.1	570.8	577.3	582.2
70°	444.4	475.2	491.4	494.6	499.5
72.5°	371.4	402.2	415.2	415.2	416.8
75°	300.0	330.8	335.7	335.7	338.9
77.5°	230.3	257.9	261.1	261.1	261.1
80°	163.8	184.9	189.7	189.7	188.1
82.5°	103.8	118.4	126.5	120.0	116.8
85°	53.5	63.2	66.5	55.1	51.9
87.5°	16.2	19.5	16.2	9.7	8.1
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	17.85	19.50	18.22	19.82	20.13	18.36	20.01	18.72	20.32	20.64
	3H	19.63	21.12	20.00	21.44	21.80	20.16	21.65	20.53	21.97	22.33
	4H	20.25	21.65	20.65	22.00	22.37	20.79	22.19	21.19	22.54	22.91
	6H	20.65	21.95	21.06	22.32	22.71	21.21	22.51	21.62	22.88	23.27
	8H	20.75	21.99	21.17	22.38	22.78	21.31	22.56	21.74	22.95	23.35
	12H	20.80	21.99	21.22	22.37	22.80	21.35	22.55	21.78	22.93	23.36
4H	2H	18.58	19.98	18.97	20.33	20.70	18.97	20.37	19.37	20.72	21.10
	3H	20.57	21.75	20.98	22.14	22.54	20.98	22.16	21.39	22.56	22.96
	4H	21.33	22.39	21.76	22.80	23.24	21.73	22.80	22.17	23.21	23.65
	6H	21.85	22.78	22.30	23.22	23.67	22.27	23.20	22.73	23.64	24.10
	8H	21.98	22.85	22.44	23.29	23.76	22.41	23.28	22.87	23.73	24.19
	12H	22.05	22.84	22.53	23.31	23.78	22.48	23.26	22.96	23.74	24.21
8H	4H	21.66	22.53	22.12	22.97	23.43	22.02	22.89	22.48	23.33	23.80
	6H	22.29	23.01	22.78	23.50	23.98	22.66	23.38	23.15	23.87	24.35
	8H	22.48	23.13	22.99	23.64	24.12	22.86	23.50	23.37	24.01	24.50
	12H	22.61	23.18	23.11	23.67	24.23	22.96	23.53	23.47	24.02	24.58
12H	4H	21.69	22.47	22.17	22.95	23.41	22.05	22.83	22.52	23.30	23.77
	6H	22.34	22.99	22.85	23.50	23.98	22.70	23.35	23.21	23.86	24.34
	8H	22.59	23.16	23.09	23.65	24.21	22.94	23.52	23.45	24.01	24.57