

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: P1584340

Luminaire Tested: 14CZSP-49HE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584340
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-L850-S
Description: 1x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

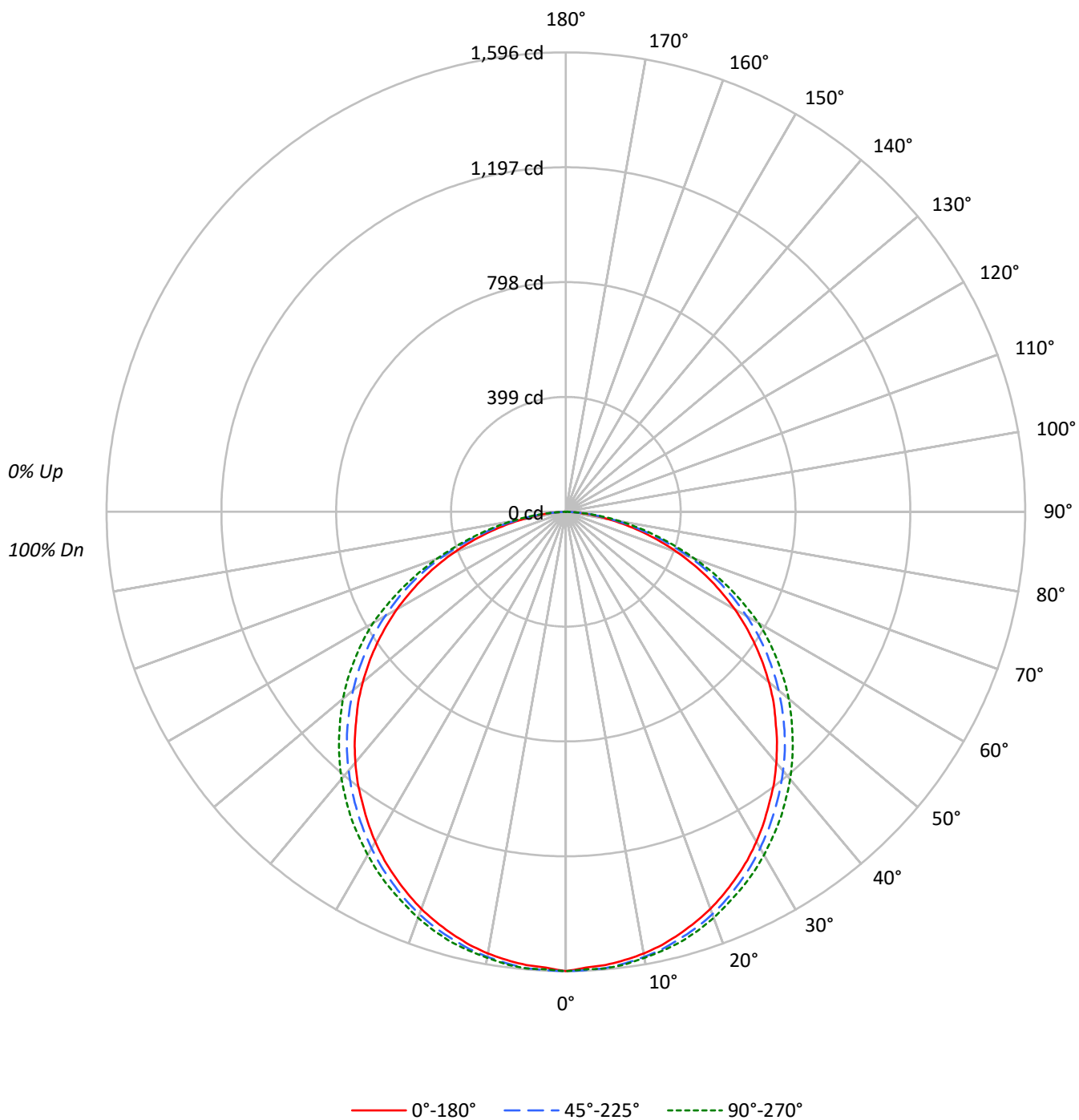
Lumens per Lamp: N/A
Luminaire Lumens: 4614.0 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69	65	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5378	5378	5378
5°	5348	5382	5387
10°	5333	5373	5384
15°	5302	5357	5395
20°	5265	5336	5384
25°	5212	5295	5368
30°	5153	5253	5356
35°	5070	5207	5347
40°	5004	5165	5333
45°	4910	5120	5311
50°	4827	5059	5301
55°	4712	4987	5267
60°	4568	4888	5213
65°	4364	4754	4998
70°	4068	4490	4691
75°	3634	4049	4279
80°	2979	3413	3743
85°	1995	2494	2784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5311 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.3
10°-20°	433.3	9.4
20°-30°	656.2	14.2
30°-40°	792.4	17.2
40°-50°	828.1	17.9
50°-60°	758.8	16.4
60°-70°	585.8	12.7
70°-80°	329.5	7.1
80°-90°	78.8	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°	1240.6	26.9
0°-40°	2033.0	44.1
0°-60°	3619.9	78.5
0°-90°	4614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1596	1596	1596	1596	1596	
5°	1581	1593	1591	1593	1593	150
15°	1520	1532	1536	1542	1546	429
25°	1402	1414	1424	1432	1444	646
35°	1233	1248	1266	1283	1300	772
45°	1030	1051	1074	1096	1114	796
55°	802	823	849	875	896	717
65°	547	571	596	620	627	541
75°	279	305	311	324	329	296
85°	52	59	64	71	72	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1596.0	1596.0	1596.0	1596.0	1596.0
2.5°	1585.1	1597.3	1594.6	1598.7	1591.2
5°	1581.0	1592.6	1591.2	1592.6	1592.6
7.5°	1570.9	1583.1	1582.4	1584.4	1585.8
10°	1558.6	1570.2	1570.2	1572.2	1573.6
12.5°	1541.7	1553.9	1555.2	1558.6	1561.4
15°	1519.9	1532.1	1535.5	1541.7	1546.4
17.5°	1495.5	1508.4	1513.8	1519.9	1526.0
20°	1468.3	1479.9	1488.0	1492.8	1501.6
22.5°	1436.4	1449.3	1458.1	1462.9	1472.4
25°	1401.8	1414.0	1424.2	1431.6	1443.9
27.5°	1365.1	1377.3	1389.5	1398.4	1412.6
30°	1324.3	1337.2	1350.1	1363.7	1376.6
32.5°	1280.2	1295.1	1309.4	1324.3	1338.6
35°	1232.6	1248.3	1265.9	1282.9	1299.9
37.5°	1188.5	1202.8	1221.1	1239.4	1256.4
40°	1137.6	1153.2	1174.2	1194.6	1212.3
42.5°	1085.9	1102.9	1126.0	1145.7	1164.7
45°	1030.3	1050.6	1074.4	1096.1	1114.5
47.5°	978.6	996.3	1020.1	1043.8	1062.9
50°	920.9	940.6	965.1	990.2	1011.2
52.5°	862.5	882.9	908.0	933.1	954.9
55°	802.1	823.1	848.9	875.4	896.5
57.5°	740.3	762.7	789.2	815.7	836.7
60°	677.8	700.2	725.3	754.5	773.5
62.5°	612.6	637.7	661.5	688.7	700.2
65°	547.4	571.2	596.3	620.1	626.8
67.5°	480.8	505.3	527.7	543.3	552.1
70°	412.9	439.4	455.7	470.6	476.1
72.5°	345.7	372.2	381.7	395.9	401.4
75°	279.1	304.9	311.0	324.0	328.7
77.5°	214.6	238.4	240.4	255.4	259.4
80°	153.5	172.5	175.9	190.2	192.9
82.5°	98.5	112.1	116.8	129.0	133.1
85°	51.6	59.1	64.5	70.6	72.0
87.5°	17.0	21.1	17.7	18.3	17.0
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	17.56	19.21	17.92	19.52	19.84	18.10	19.75	18.46	20.06	20.38
	3H	19.33	20.83	19.71	21.15	21.51	19.95	21.45	20.33	21.77	22.13
	4H	19.96	21.37	20.36	21.71	22.09	20.62	22.03	21.02	22.38	22.75
	6H	20.37	21.67	20.78	22.04	22.43	21.10	22.40	21.51	22.77	23.16
	8H	20.47	21.72	20.90	22.11	22.50	21.25	22.49	21.67	22.88	23.28
	12H	20.52	21.72	20.95	22.10	22.53	21.33	22.52	21.76	22.90	23.33
4H	2H	18.28	19.69	18.68	20.04	20.41	18.70	20.11	19.10	20.46	20.83
	3H	20.28	21.46	20.69	21.85	22.25	20.78	21.96	21.18	22.35	22.75
	4H	21.03	22.10	21.46	22.51	22.95	21.57	22.64	22.00	23.05	23.49
	6H	21.56	22.49	22.01	22.94	23.39	22.17	23.11	22.63	23.55	24.00
	8H	21.70	22.57	22.16	23.02	23.48	22.37	23.24	22.83	23.68	24.15
	12H	21.78	22.56	22.26	23.04	23.51	22.49	23.27	22.97	23.75	24.22
8H	4H	21.37	22.24	21.83	22.69	23.15	21.85	22.72	22.31	23.16	23.63
	6H	22.01	22.74	22.50	23.22	23.70	22.56	23.29	23.05	23.77	24.25
	8H	22.21	22.86	22.72	23.37	23.85	22.82	23.47	23.33	23.97	24.46
	12H	22.34	22.92	22.85	23.41	23.97	23.00	23.57	23.51	24.06	24.62
12H	4H	21.41	22.19	21.89	22.67	23.14	21.87	22.66	22.35	23.13	23.60
	6H	22.07	22.72	22.57	23.22	23.71	22.60	23.25	23.11	23.75	24.24
	8H	22.32	22.89	22.82	23.38	23.94	22.90	23.48	23.41	23.97	24.53