

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: P1584337

Luminaire Tested: 14CZSP-49HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584337
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-L840
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

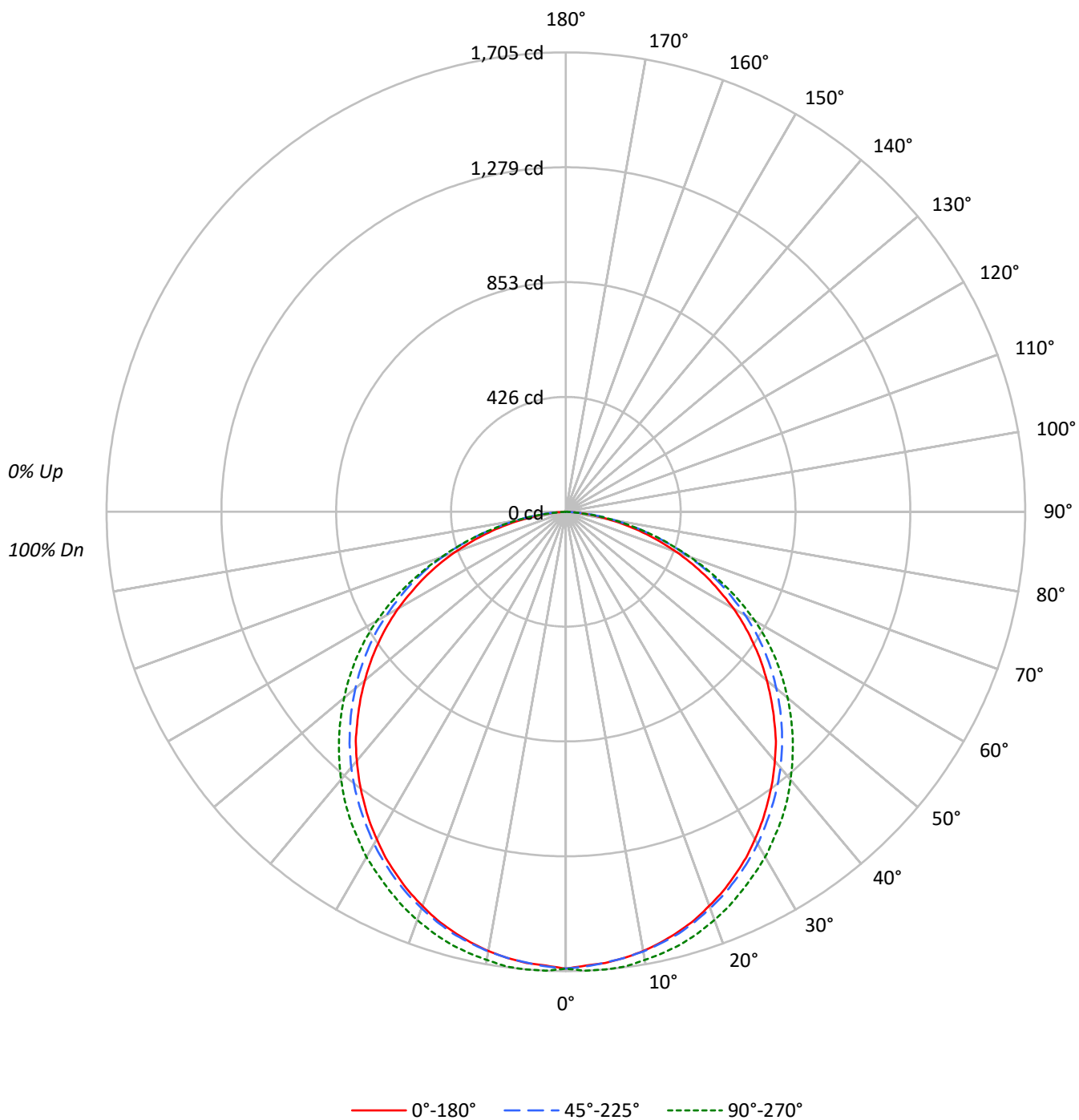
Lumens per Lamp: N/A
Luminaire Lumens: 4884.0 lumens
Efficiency: N/A
Efficacy: 147.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1584337

CATALOG NUMBER: 14CZSP-49HE-L840

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°	5713	5713	5713
5°	5687	5681	5767
10°	5665	5670	5779
15°	5631	5653	5792
20°	5582	5616	5782
25°	5526	5580	5764
30°	5460	5541	5758
35°	5385	5490	5740
40°	5309	5450	5709
45°	5211	5401	5675
50°	5105	5348	5633
55°	4990	5281	5580
60°	4841	5186	5465
65°	4620	5053	5219
70°	4310	4766	4844
75°	3846	4303	4344
80°	3130	3625	3594
85°	2037	2532	1976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5675 cd/sqm

TEST NUMBER: P1584337

CATALOG NUMBER: 14CZSP-49HE-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	3.3
10°-20°	460.1	9.4
20°-30°	696.9	14.3
30°-40°	841.9	17.2
40°-50°	879.4	18.0
50°-60°	805.3	16.5
60°-70°	618.8	12.7
70°-80°	344.5	7.1
80°-90°	76.3	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°	1317.7	27.0
0°-40°	2159.6	44.2
0°-60°	3844.4	78.7
0°-90°	4884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1696	1696	1696	1696	1696	
5°	1681	1699	1680	1689	1705	160
15°	1614	1630	1620	1636	1660	455
25°	1486	1504	1501	1523	1550	685
35°	1309	1328	1335	1367	1395	819
45°	1094	1118	1134	1167	1191	844
55°	849	876	899	931	950	759
65°	580	610	634	647	655	573
75°	295	326	330	330	334	313
85°	53	62	66	54	51	68
90°	0	0	0	0	0	

TEST NUMBER: P1584337

CATALOG NUMBER: 14CZSP-49HE-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1695.5	1695.5	1695.5	1695.5	1695.5
2.5°	1686.0	1701.9	1689.1	1693.9	1705.1
5°	1681.2	1698.7	1679.6	1689.1	1705.1
7.5°	1670.0	1686.0	1670.0	1681.2	1701.9
10°	1655.6	1673.2	1657.2	1668.4	1689.1
12.5°	1636.5	1650.8	1639.7	1655.6	1676.4
15°	1614.1	1630.1	1620.5	1636.5	1660.4
17.5°	1588.6	1602.9	1594.9	1615.7	1638.1
20°	1556.6	1572.6	1566.2	1587.0	1612.5
22.5°	1524.7	1540.7	1535.9	1556.6	1583.8
25°	1486.4	1503.9	1500.8	1523.1	1550.2
27.5°	1448.1	1465.6	1464.0	1489.6	1515.1
30°	1403.4	1420.9	1424.1	1451.3	1480.0
32.5°	1358.7	1377.8	1379.4	1409.7	1436.9
35°	1309.2	1328.3	1334.7	1366.6	1395.4
37.5°	1259.7	1278.8	1288.4	1318.7	1349.1
40°	1207.0	1227.7	1238.9	1270.9	1298.0
42.5°	1154.3	1175.1	1187.8	1219.8	1245.3
45°	1093.6	1117.6	1133.5	1167.1	1191.0
47.5°	1034.6	1060.1	1077.7	1109.6	1133.5
50°	973.9	1001.0	1020.2	1052.1	1074.5
52.5°	913.2	942.0	961.1	991.5	1013.8
55°	849.4	876.5	898.9	930.8	949.9
57.5°	785.5	812.6	836.6	865.3	882.9
60°	718.4	747.2	769.5	798.3	811.0
62.5°	648.2	678.5	700.9	723.2	734.4
65°	579.5	609.9	633.8	646.6	654.6
67.5°	509.3	539.6	562.0	568.4	573.2
70°	437.5	467.8	483.8	486.9	491.7
72.5°	365.6	395.9	408.7	408.7	410.3
75°	295.4	325.7	330.5	330.5	333.7
77.5°	226.7	253.9	257.0	257.0	257.0
80°	161.3	182.0	186.8	186.8	185.2
82.5°	102.2	116.5	124.5	118.1	115.0
85°	52.7	62.3	65.5	54.3	51.1
87.5°	16.0	19.2	16.0	9.6	8.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1584337

CATALOG NUMBER: 14CZSP-49HE-L840

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	17.80	19.45	18.16	19.76	20.07	18.31	19.95	18.67	20.27	20.58
	3H	19.57	21.06	19.95	21.39	21.75	20.10	21.59	20.48	21.92	22.28
	4H	20.19	21.60	20.59	21.95	22.32	20.73	22.14	21.13	22.49	22.86
	6H	20.60	21.90	21.01	22.26	22.65	21.16	22.46	21.57	22.82	23.21
	8H	20.70	21.94	21.12	22.33	22.73	21.26	22.50	21.68	22.89	23.29
	12H	20.74	21.93	21.17	22.31	22.74	21.30	22.49	21.73	22.87	23.30
4H	2H	18.52	19.92	18.92	20.27	20.65	18.92	20.32	19.31	20.67	21.04
	3H	20.51	21.69	20.92	22.09	22.49	20.93	22.11	21.34	22.50	22.90
	4H	21.27	22.34	21.70	22.75	23.18	21.68	22.74	22.11	23.16	23.59
	6H	21.79	22.72	22.25	23.16	23.62	22.22	23.15	22.67	23.59	24.04
	8H	21.93	22.80	22.39	23.24	23.70	22.36	23.23	22.82	23.67	24.14
	12H	22.00	22.78	22.48	23.26	23.72	22.43	23.21	22.91	23.68	24.15
8H	4H	21.60	22.47	22.06	22.92	23.38	21.97	22.84	22.43	23.28	23.74
	6H	22.24	22.96	22.73	23.45	23.92	22.61	23.33	23.10	23.82	24.29
	8H	22.43	23.08	22.94	23.58	24.07	22.80	23.45	23.31	23.96	24.44
	12H	22.55	23.12	23.06	23.61	24.17	22.91	23.48	23.41	23.97	24.53
12H	4H	21.63	22.42	22.11	22.89	23.36	21.99	22.77	22.47	23.25	23.72
	6H	22.29	22.94	22.80	23.44	23.93	22.65	23.30	23.16	23.80	24.29
	8H	22.53	23.10	23.04	23.59	24.15	22.89	23.46	23.40	23.95	24.51