

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: P1584638

Luminaire Tested: 14CZSP-A-49HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584638
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-L845-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

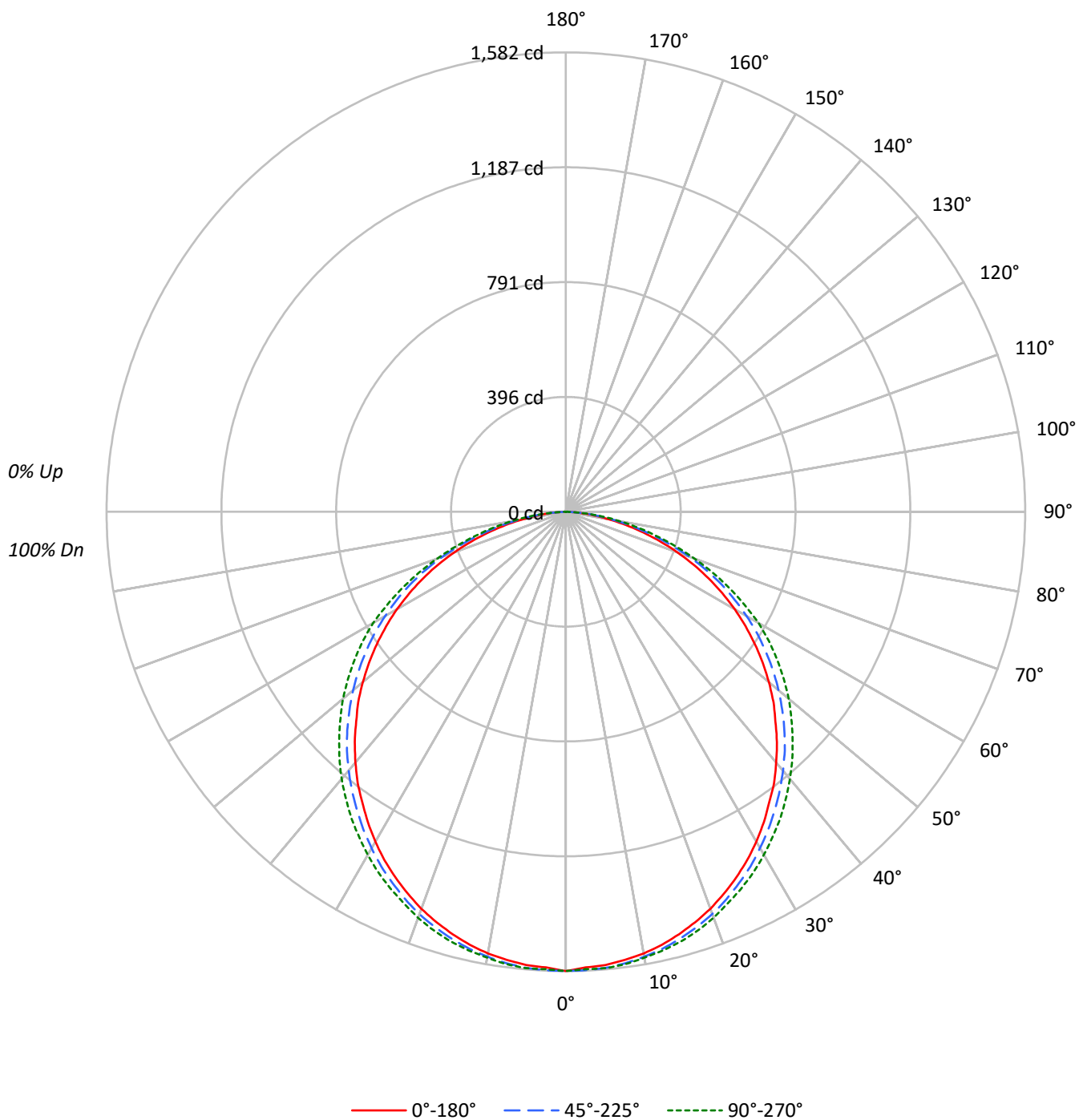
Lumens per Lamp: N/A
Luminaire Lumens: 4572.0 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	5329	5329	5329
5°	5299	5333	5338
10°	5284	5324	5335
15°	5254	5308	5345
20°	5217	5287	5335
25°	5164	5247	5319
30°	5106	5205	5308
35°	5024	5160	5298
40°	4958	5118	5284
45°	4865	5073	5262
50°	4783	5013	5253
55°	4669	4942	5218
60°	4526	4843	5166
65°	4325	4711	4952
70°	4031	4449	4647
75°	3601	4012	4240
80°	2951	3382	3708
85°	1976	2470	2757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5262 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.8	3.3
10°-20°	429.4	9.4
20°-30°	650.2	14.2
30°-40°	785.2	17.2
40°-50°	820.6	17.9
50°-60°	751.9	16.4
60°-70°	580.4	12.7
70°-80°	326.5	7.1
80°-90°	78.1	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°	1229.3	26.9
0°-40°	2014.5	44.1
0°-60°	3587.0	78.5
0°-90°	4572.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4572.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1567	1578	1577	1578	1578	149
15°	1506	1518	1522	1528	1532	425
25°	1389	1401	1411	1419	1431	640
35°	1221	1237	1254	1271	1288	765
45°	1021	1041	1065	1086	1104	789
55°	795	816	841	867	888	710
65°	542	566	591	614	621	536
75°	277	302	308	321	326	293
85°	51	58	64	70	71	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581.5	1581.5	1581.5	1581.5	1581.5
2.5°	1570.7	1582.8	1580.1	1584.2	1576.7
5°	1566.7	1578.1	1576.7	1578.1	1578.1
7.5°	1556.6	1568.7	1568.0	1570.0	1571.4
10°	1544.4	1555.9	1555.9	1557.9	1559.3
12.5°	1527.6	1539.7	1541.1	1544.4	1547.1
15°	1506.1	1518.2	1521.6	1527.6	1532.3
17.5°	1481.9	1494.6	1500.0	1506.1	1512.1
20°	1454.9	1466.4	1474.5	1479.2	1487.9
22.5°	1423.3	1436.1	1444.8	1449.6	1459.0
25°	1389.0	1401.1	1411.2	1418.6	1430.7
27.5°	1352.7	1364.8	1376.9	1385.6	1399.8
30°	1312.3	1325.1	1337.8	1351.3	1364.1
32.5°	1268.5	1283.3	1297.5	1312.3	1326.4
35°	1221.4	1236.9	1254.4	1271.2	1288.0
37.5°	1177.7	1191.8	1210.0	1228.2	1245.0
40°	1127.2	1142.7	1163.5	1183.7	1201.2
42.5°	1076.1	1092.9	1115.8	1135.3	1154.1
45°	1020.9	1041.1	1064.6	1086.2	1104.3
47.5°	969.7	987.2	1010.8	1034.3	1053.2
50°	912.5	932.1	956.3	981.2	1002.0
52.5°	854.7	874.8	899.7	924.6	946.2
55°	794.8	815.6	841.2	867.4	888.3
57.5°	733.5	755.7	782.0	808.2	829.1
60°	671.6	693.8	718.7	747.7	766.5
62.5°	607.0	631.9	655.5	682.4	693.8
65°	542.4	566.0	590.9	614.4	621.1
67.5°	476.5	500.7	522.9	538.4	547.1
70°	409.2	435.4	451.6	466.4	471.7
72.5°	342.5	368.8	378.2	392.3	397.7
75°	276.6	302.2	308.2	321.0	325.7
77.5°	212.7	236.2	238.2	253.0	257.1
80°	152.1	170.9	174.3	188.4	191.1
82.5°	97.6	111.0	115.7	127.9	131.9
85°	51.1	58.5	63.9	70.0	71.3
87.5°	16.8	20.9	17.5	18.2	16.8
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	17.53	19.18	17.89	19.49	19.80	18.07	19.72	18.43	20.03	20.34
	3H	19.30	20.79	19.68	21.12	21.48	19.92	21.42	20.30	21.74	22.10
	4H	19.93	21.33	20.33	21.68	22.06	20.59	22.00	20.99	22.35	22.72
	6H	20.34	21.64	20.75	22.00	22.40	21.07	22.37	21.48	22.74	23.13
	8H	20.44	21.69	20.86	22.07	22.47	21.21	22.46	21.64	22.85	23.25
	12H	20.49	21.68	20.92	22.07	22.49	21.30	22.49	21.73	22.87	23.30
4H	2H	18.25	19.66	18.65	20.00	20.38	18.67	20.08	19.07	20.43	20.80
	3H	20.24	21.43	20.65	21.82	22.22	20.74	21.92	21.15	22.32	22.72
	4H	21.00	22.07	21.43	22.48	22.92	21.54	22.61	21.97	23.02	23.46
	6H	21.53	22.46	21.98	22.90	23.36	22.14	23.08	22.60	23.52	23.97
	8H	21.67	22.54	22.13	22.98	23.45	22.33	23.21	22.79	23.65	24.11
	12H	21.75	22.53	22.23	23.01	23.48	22.45	23.24	22.93	23.71	24.18
8H	4H	21.34	22.21	21.80	22.65	23.12	21.82	22.69	22.28	23.13	23.60
	6H	21.98	22.71	22.47	23.19	23.67	22.53	23.25	23.02	23.74	24.22
	8H	22.18	22.83	22.69	23.34	23.82	22.79	23.44	23.29	23.94	24.43
	12H	22.31	22.88	22.81	23.37	23.93	22.97	23.54	23.47	24.03	24.59
12H	4H	21.38	22.16	21.86	22.64	23.11	21.84	22.63	22.32	23.10	23.57
	6H	22.03	22.69	22.54	23.19	23.68	22.56	23.22	23.07	23.72	24.21
	8H	22.29	22.86	22.79	23.35	23.91	22.87	23.45	23.38	23.94	24.50