

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: P1584336

Luminaire Tested: 14CZSP-49HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584336
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-L840-S
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

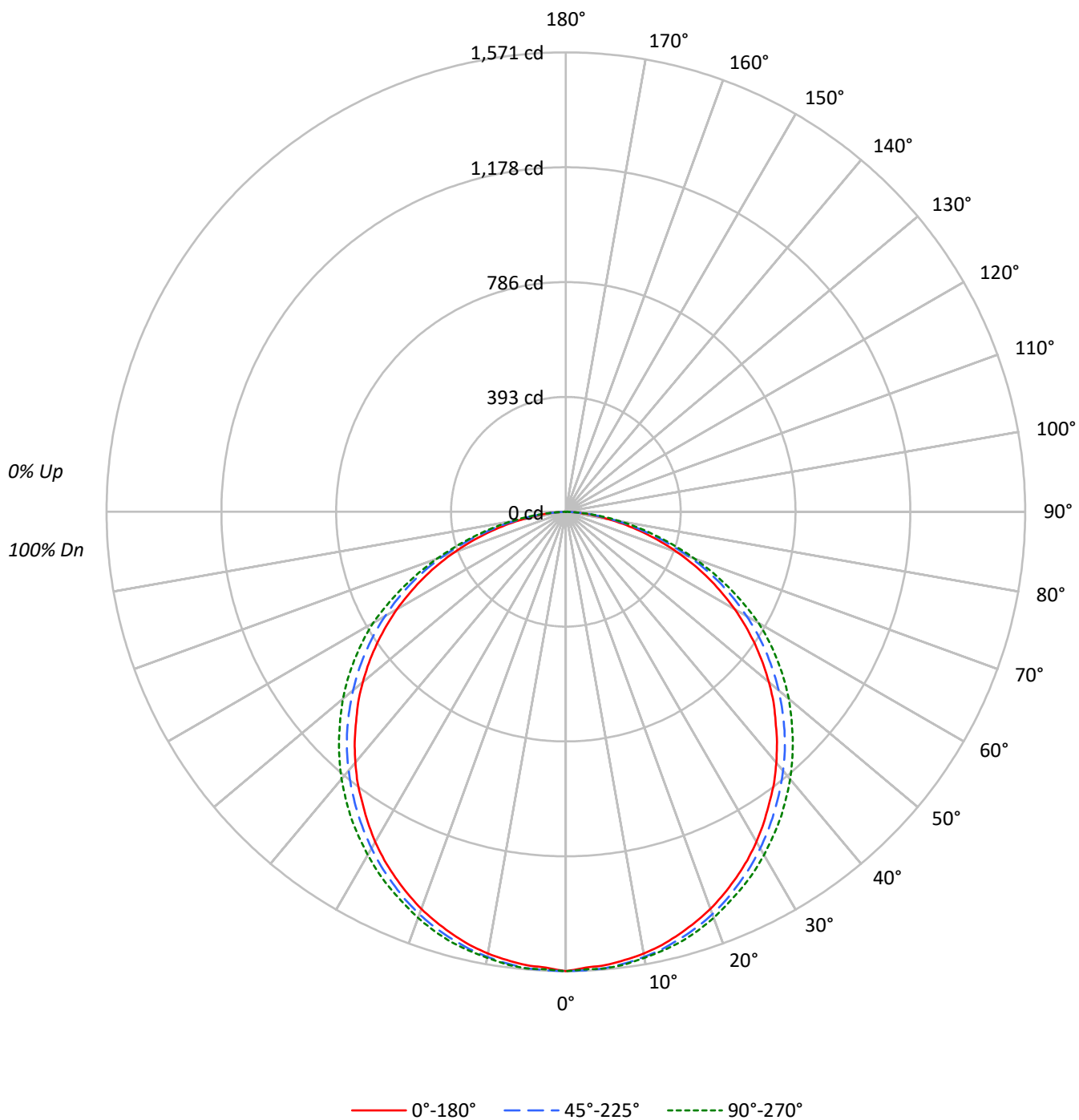
Lumens per Lamp: N/A
Luminaire Lumens: 4542.0 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	5294	5294	5294
5°	5264	5298	5303
10°	5250	5289	5300
15°	5219	5273	5310
20°	5183	5253	5301
25°	5130	5212	5284
30°	5073	5171	5272
35°	4991	5126	5264
40°	4926	5084	5249
45°	4833	5040	5228
50°	4752	4980	5219
55°	4639	4909	5184
60°	4496	4812	5132
65°	4296	4680	4920
70°	4005	4420	4618
75°	3578	3986	4213
80°	2932	3361	3685
85°	1964	2455	2741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5228 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.3
10°-20°	426.6	9.4
20°-30°	645.9	14.2
30°-40°	780.0	17.2
40°-50°	815.2	17.9
50°-60°	747.0	16.4
60°-70°	576.6	12.7
70°-80°	324.4	7.1
80°-90°	77.6	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°	1221.3	26.9
0°-40°	2001.3	44.1
0°-60°	3563.5	78.5
0°-90°	4542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1556	1568	1566	1568	1568	148
15°	1496	1508	1512	1518	1522	422
25°	1380	1392	1402	1409	1421	636
35°	1213	1229	1246	1263	1280	760
45°	1014	1034	1058	1079	1097	784
55°	790	810	836	862	882	705
65°	539	562	587	610	617	532
75°	275	300	306	319	324	291
85°	51	58	64	70	71	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1571.1	1571.1	1571.1	1571.1	1571.1
2.5°	1560.4	1572.4	1569.7	1573.8	1566.4
5°	1556.4	1567.7	1566.4	1567.7	1567.7
7.5°	1546.3	1558.4	1557.7	1559.7	1561.1
10°	1534.3	1545.7	1545.7	1547.7	1549.0
12.5°	1517.6	1529.6	1531.0	1534.3	1537.0
15°	1496.2	1508.2	1511.6	1517.6	1522.3
17.5°	1472.1	1484.8	1490.2	1496.2	1502.2
20°	1445.4	1456.8	1464.8	1469.5	1478.2
22.5°	1414.0	1426.7	1435.4	1440.0	1449.4
25°	1379.9	1391.9	1401.9	1409.3	1421.3
27.5°	1343.8	1355.8	1367.8	1376.5	1390.6
30°	1303.7	1316.4	1329.1	1342.4	1355.1
32.5°	1260.2	1274.9	1289.0	1303.7	1317.7
35°	1213.4	1228.8	1246.2	1262.9	1279.6
37.5°	1170.0	1184.0	1202.0	1220.1	1236.8
40°	1119.8	1135.2	1155.9	1176.0	1193.4
42.5°	1069.0	1085.7	1108.4	1127.8	1146.6
45°	1014.2	1034.2	1057.6	1079.0	1097.1
47.5°	963.4	980.8	1004.2	1027.6	1046.3
50°	906.5	925.9	950.0	974.7	995.5
52.5°	849.1	869.1	893.8	918.6	940.0
55°	789.6	810.3	835.7	861.8	882.5
57.5°	728.7	750.8	776.8	802.9	823.6
60°	667.2	689.3	714.0	742.8	761.5
62.5°	603.0	627.8	651.2	677.9	689.3
65°	538.8	562.2	587.0	610.4	617.1
67.5°	473.3	497.4	519.5	534.8	543.5
70°	406.5	432.5	448.6	463.3	468.7
72.5°	340.3	366.4	375.7	389.8	395.1
75°	274.8	300.2	306.2	318.9	323.6
77.5°	211.3	234.7	236.7	251.4	255.4
80°	151.1	169.8	173.2	187.2	189.9
82.5°	96.9	110.3	115.0	127.0	131.0
85°	50.8	58.2	63.5	69.5	70.9
87.5°	16.7	20.7	17.4	18.1	16.7
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	17.50	19.15	17.87	19.47	19.78	18.04	19.69	18.41	20.01	20.32
	3H	19.28	20.77	19.65	21.10	21.46	19.90	21.39	20.28	21.72	22.08
	4H	19.90	21.31	20.30	21.66	22.03	20.57	21.98	20.97	22.32	22.70
	6H	20.31	21.62	20.72	21.98	22.37	21.04	22.35	21.46	22.71	23.10
	8H	20.42	21.66	20.84	22.05	22.45	21.19	22.44	21.61	22.83	23.22
	12H	20.47	21.66	20.90	22.04	22.47	21.27	22.47	21.70	22.85	23.28
4H	2H	18.23	19.63	18.62	19.98	20.36	18.65	20.06	19.05	20.40	20.78
	3H	20.22	21.40	20.63	21.80	22.20	20.72	21.90	21.13	22.30	22.70
	4H	20.98	22.05	21.41	22.46	22.90	21.52	22.59	21.95	23.00	23.43
	6H	21.51	22.44	21.96	22.88	23.34	22.12	23.05	22.57	23.49	23.95
	8H	21.65	22.52	22.11	22.96	23.43	22.31	23.18	22.77	23.63	24.09
	12H	21.72	22.51	22.20	22.99	23.45	22.43	23.22	22.91	23.69	24.16
8H	4H	21.32	22.19	21.78	22.63	23.10	21.79	22.67	22.25	23.11	23.57
	6H	21.96	22.68	22.45	23.17	23.64	22.51	23.23	23.00	23.72	24.19
	8H	22.16	22.81	22.66	23.31	23.80	22.76	23.41	23.27	23.92	24.40
	12H	22.29	22.86	22.79	23.35	23.91	22.94	23.52	23.45	24.01	24.57
12H	4H	21.35	22.14	21.83	22.61	23.08	21.82	22.60	22.30	23.08	23.55
	6H	22.01	22.66	22.52	23.17	23.65	22.54	23.19	23.05	23.70	24.19
	8H	22.26	22.84	22.77	23.33	23.89	22.85	23.43	23.36	23.92	24.48