

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: P1585748

Luminaire Tested: 14CZSP-SB-49HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1585748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-4)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-SB-49HE-L945-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

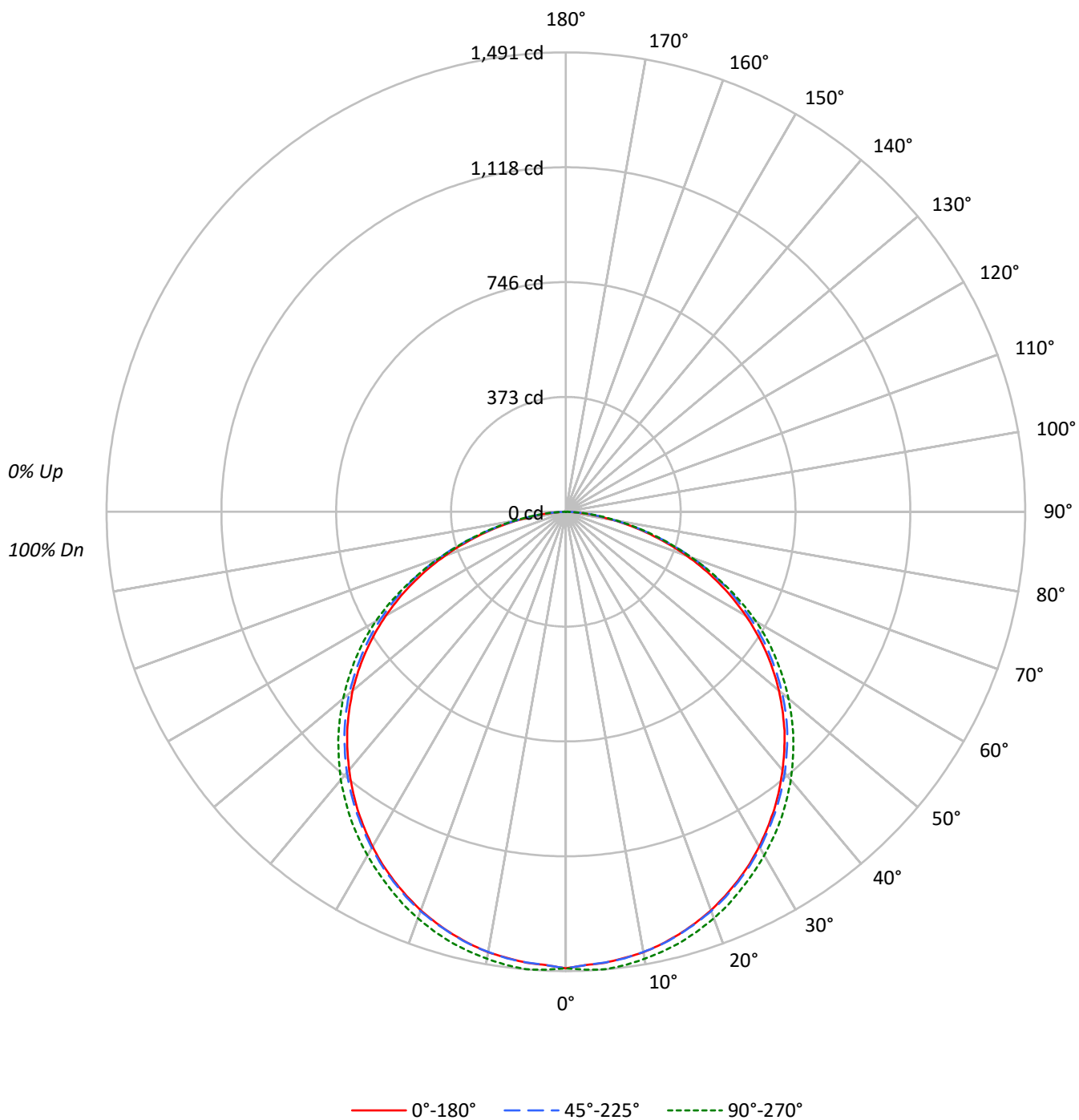
Lumens per Lamp: N/A
Luminaire Lumens: 4373.0 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	99	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	83	77	96	88	82	77	85	79	75		81	77	73		78
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		69
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		61
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55
6	70	56	47	40	68	55	46	40	53	46	40		52	45	40		50
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		46
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		42
9	56	42	34	28	55	42	34	28	41	33	28		40	33	28		39
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4993	4993	4993
5°	4969	4967	5042
10°	4967	4965	5040
15°	4952	4957	5043
20°	4937	4946	5035
25°	4912	4924	5019
30°	4883	4903	5010
35°	4851	4881	5008
40°	4813	4863	4998
45°	4783	4844	4978
50°	4735	4809	4946
55°	4662	4748	4898
60°	4549	4666	4810
65°	4378	4543	4592
70°	4116	4308	4282
75°	3696	3854	3880
80°	3054	3210	3378
85°	2045	2382	2513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.2
10°-20°	403.7	9.2
20°-30°	614.8	14.1
30°-40°	748.2	17.1
40°-50°	788.7	18.0
50°-60°	726.5	16.6
60°-70°	561.1	12.8
70°-80°	314.0	7.2
80°-90°	75.7	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°	1158.9	26.5
0°-40°	1907.1	43.6
0°-60°	3422.3	78.3
0°-90°	4373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4373.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1469	1490	1468	1470	1491	140
15°	1420	1439	1421	1429	1446	401
25°	1321	1340	1324	1333	1350	609
35°	1179	1197	1187	1201	1217	738
45°	1004	1018	1016	1032	1045	773
55°	794	807	808	825	834	708
65°	549	565	570	575	576	542
75°	284	301	296	295	298	301
85°	53	58	62	69	65	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1481.8	1481.8	1481.8	1481.8	1481.8
2.5°	1472.5	1493.9	1472.5	1475.8	1487.9
5°	1469.1	1489.9	1468.5	1470.5	1490.6
7.5°	1460.4	1481.8	1461.8	1464.4	1483.9
10°	1451.7	1471.1	1451.0	1454.4	1473.1
12.5°	1437.0	1457.1	1438.3	1442.3	1461.1
15°	1419.6	1439.0	1420.9	1428.9	1445.7
17.5°	1399.5	1418.2	1400.8	1410.2	1426.3
20°	1376.7	1394.8	1379.4	1386.1	1404.2
22.5°	1349.9	1368.7	1354.0	1360.0	1379.4
25°	1321.1	1339.9	1324.5	1333.2	1349.9
27.5°	1289.7	1307.8	1294.4	1305.1	1319.8
30°	1254.9	1272.3	1260.2	1272.9	1287.7
32.5°	1217.4	1236.1	1224.0	1238.8	1253.5
35°	1179.2	1196.6	1186.6	1201.3	1217.4
37.5°	1137.7	1154.4	1147.0	1162.4	1177.2
40°	1094.1	1112.9	1105.5	1121.6	1136.3
42.5°	1049.3	1067.4	1061.3	1078.1	1090.8
45°	1003.7	1017.8	1016.5	1031.9	1044.6
47.5°	953.5	970.9	968.3	983.7	995.0
50°	903.3	917.4	917.4	932.1	943.5
52.5°	849.1	863.1	863.1	880.5	889.9
55°	793.5	806.9	808.2	825.0	833.7
57.5°	734.6	748.6	751.3	768.0	776.1
60°	675.0	688.4	692.4	709.1	713.8
62.5°	612.7	628.8	630.8	644.2	646.8
65°	549.1	565.2	569.8	575.2	575.9
67.5°	484.1	500.9	505.6	505.6	505.6
70°	417.8	433.2	437.3	434.6	434.6
72.5°	350.9	367.6	365.6	362.9	364.3
75°	283.9	301.3	296.0	295.3	298.0
77.5°	219.6	236.4	227.7	233.0	233.7
80°	157.4	170.1	165.4	173.4	174.1
82.5°	101.1	109.1	110.5	117.2	115.2
85°	52.9	58.3	61.6	69.0	65.0
87.5°	16.7	22.1	20.1	23.4	18.1
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	17.62	19.28	17.99	19.59	19.91	17.84	19.49	18.20	19.81	20.12
	3H	19.44	20.94	19.82	21.27	21.63	19.64	21.14	20.01	21.46	21.82
	4H	20.09	21.50	20.49	21.85	22.22	20.28	21.69	20.67	22.04	22.41
	6H	20.52	21.83	20.93	22.19	22.58	20.73	22.04	21.14	22.40	22.79
	8H	20.63	21.88	21.05	22.27	22.66	20.86	22.11	21.29	22.50	22.90
	12H	20.68	21.88	21.11	22.26	22.69	20.94	22.14	21.37	22.52	22.95
4H	2H	18.30	19.71	18.70	20.06	20.44	18.47	19.88	18.87	20.23	20.60
	3H	20.34	21.53	20.75	21.92	22.32	20.48	21.67	20.89	22.07	22.47
	4H	21.12	22.19	21.55	22.61	23.04	21.24	22.32	21.67	22.73	23.16
	6H	21.67	22.61	22.12	23.05	23.50	21.82	22.75	22.27	23.19	23.65
	8H	21.82	22.69	22.28	23.14	23.60	21.99	22.87	22.45	23.31	23.78
	12H	21.90	22.69	22.38	23.16	23.63	22.11	22.89	22.58	23.37	23.84
8H	4H	21.43	22.31	21.89	22.75	23.21	21.54	22.41	22.00	22.86	23.32
	6H	22.09	22.82	22.58	23.30	23.78	22.22	22.95	22.71	23.44	23.91
	8H	22.29	22.95	22.80	23.45	23.94	22.46	23.11	22.97	23.62	24.10
	12H	22.43	23.01	22.93	23.50	24.06	22.63	23.21	23.14	23.70	24.26
12H	4H	21.46	22.25	21.94	22.72	23.19	21.57	22.35	22.04	22.83	23.30
	6H	22.13	22.79	22.64	23.29	23.78	22.26	22.92	22.77	23.42	23.91
	8H	22.39	22.97	22.90	23.46	24.02	22.55	23.13	23.06	23.62	24.18