

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: P1584409

Luminaire Tested: 14CZSP-54VHE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-54VHE-L945
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 5200 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

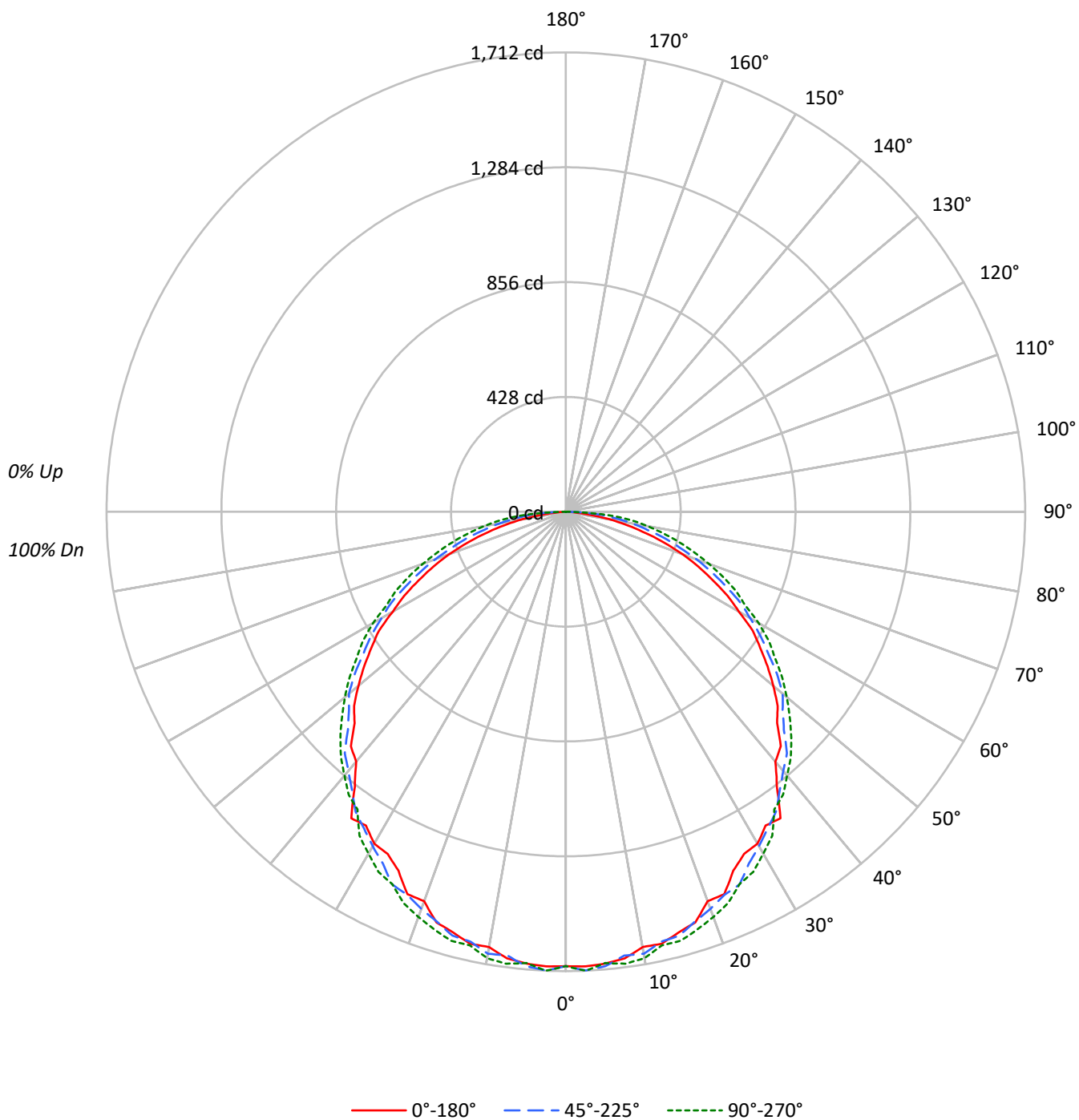
Lumens per Lamp: N/A
Luminaire Lumens: 5076.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61		71	65	60		68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	69	55	46	40	67	54	46	40	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5706	5706	5706
5°	5716	5748	5710
10°	5636	5723	5779
15°	5661	5704	5774
20°	5537	5647	5763
25°	5488	5696	5693
30°	5557	5601	5723
35°	5735	5617	5570
40°	5346	5545	5645
45°	5305	5475	5663
50°	5291	5529	5635
55°	5197	5407	5592
60°	5021	5345	5591
65°	4828	5252	5579
70°	4564	5105	5587
75°	4032	4986	5691
80°	3318	4859	6027
85°	1856	5127	6712

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 6712 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.5	3.2
10°-20°	460.7	9.1
20°-30°	700.1	13.8
30°-40°	851.4	16.8
40°-50°	893.7	17.6
50°-60°	826.6	16.3
60°-70°	651.2	12.8
70°-80°	400.3	7.9
80°-90°	131.5	2.6
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°	1321.3	26.0
0°-40°	2172.8	42.8
0°-60°	3893.1	76.7
0°-90°	5076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1693	1693	1693	1693	1693	
5°	1690	1660	1700	1685	1688	160
15°	1623	1618	1635	1657	1655	457
25°	1476	1503	1532	1528	1531	686
35°	1394	1344	1365	1386	1354	845
45°	1113	1137	1149	1182	1188	865
55°	885	913	920	944	952	791
65°	606	629	659	688	700	600
75°	310	344	383	422	437	330
85°	48	84	133	162	174	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1693.4	1693.4	1693.4	1693.4	1693.4
2.5°	1696.1	1698.7	1710.9	1683.8	1711.8
5°	1690.0	1660.3	1699.5	1684.7	1688.2
7.5°	1678.6	1682.1	1668.1	1676.9	1698.7
10°	1647.2	1669.0	1672.5	1676.0	1689.1
12.5°	1648.9	1635.0	1641.1	1666.4	1655.1
15°	1622.8	1618.4	1635.0	1656.8	1655.1
17.5°	1604.4	1594.9	1601.0	1611.4	1631.5
20°	1544.2	1569.6	1574.8	1607.1	1607.1
22.5°	1542.5	1541.6	1545.1	1561.7	1579.1
25°	1476.2	1503.2	1532.0	1527.7	1531.2
27.5°	1437.8	1468.3	1477.9	1507.6	1512.8
30°	1428.2	1433.4	1439.6	1471.8	1471.0
32.5°	1386.3	1395.1	1399.4	1417.7	1431.7
35°	1394.2	1344.5	1365.4	1386.3	1354.1
37.5°	1292.1	1300.0	1308.7	1324.4	1329.6
40°	1215.3	1235.4	1260.7	1279.0	1283.4
42.5°	1185.7	1215.3	1219.7	1236.3	1240.6
45°	1113.3	1136.8	1149.0	1182.2	1188.3
47.5°	1070.5	1074.0	1095.8	1127.2	1131.6
50°	1009.4	1033.0	1054.8	1068.8	1074.9
52.5°	947.5	973.7	991.1	1004.2	1016.4
55°	884.7	912.6	920.4	944.0	951.9
57.5°	826.2	834.9	860.2	882.9	896.9
60°	745.1	774.7	793.1	834.9	829.7
62.5°	679.6	699.7	733.7	754.7	752.1
65°	605.5	629.0	658.7	687.5	699.7
67.5°	534.8	566.2	588.0	625.6	634.3
70°	463.3	478.1	518.2	554.9	567.1
72.5°	386.5	410.1	445.0	485.1	499.9
75°	309.7	343.7	383.0	422.3	437.1
77.5°	237.3	267.0	311.5	356.8	371.7
80°	171.0	198.0	250.4	292.3	310.6
82.5°	100.3	137.0	188.5	234.7	248.7
85°	48.0	83.8	132.6	162.3	173.6
87.5°	13.1	37.5	58.5	75.9	78.5
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	17.86	19.53	18.22	19.84	20.15	18.29	19.96	18.65	20.27	20.59
	3H	19.66	21.18	20.04	21.50	21.86	20.37	21.89	20.75	22.21	22.57
	4H	20.30	21.73	20.70	22.08	22.45	21.25	22.68	21.65	23.03	23.40
	6H	20.72	22.04	21.13	22.41	22.80	22.04	23.37	22.45	23.73	24.12
	8H	20.81	22.08	21.24	22.47	22.87	22.38	23.65	22.80	24.04	24.43
	12H	20.85	22.07	21.28	22.45	22.88	22.66	23.88	23.09	24.26	24.69
4H	2H	18.59	20.02	18.98	20.36	20.74	18.92	20.35	19.32	20.70	21.07
	3H	20.61	21.82	21.02	22.22	22.62	21.24	22.44	21.64	22.84	23.24
	4H	21.39	22.49	21.82	22.90	23.33	22.28	23.37	22.71	23.78	24.22
	6H	21.93	22.89	22.38	23.33	23.78	23.23	24.19	23.68	24.63	25.08
	8H	22.07	22.97	22.53	23.41	23.87	23.65	24.55	24.10	24.99	25.45
	12H	22.14	22.95	22.62	23.43	23.90	24.01	24.82	24.49	25.30	25.77
8H	4H	21.82	22.72	22.28	23.16	23.63	22.60	23.50	23.06	23.94	24.40
	6H	22.50	23.25	22.99	23.74	24.21	23.71	24.46	24.20	24.95	25.42
	8H	22.72	23.39	23.22	23.90	24.38	24.25	24.93	24.76	25.43	25.92
	12H	22.85	23.45	23.36	23.94	24.50	24.75	25.35	25.26	25.84	26.40
12H	4H	21.91	22.72	22.39	23.19	23.66	22.63	23.44	23.11	23.91	24.38
	6H	22.63	23.31	23.14	23.81	24.30	23.77	24.45	24.28	24.95	25.44
	8H	22.92	23.52	23.42	24.01	24.57	24.39	24.99	24.89	25.48	26.03