

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: P1586746

Luminaire Tested: 22CZSP-A-54HE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-54HE-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

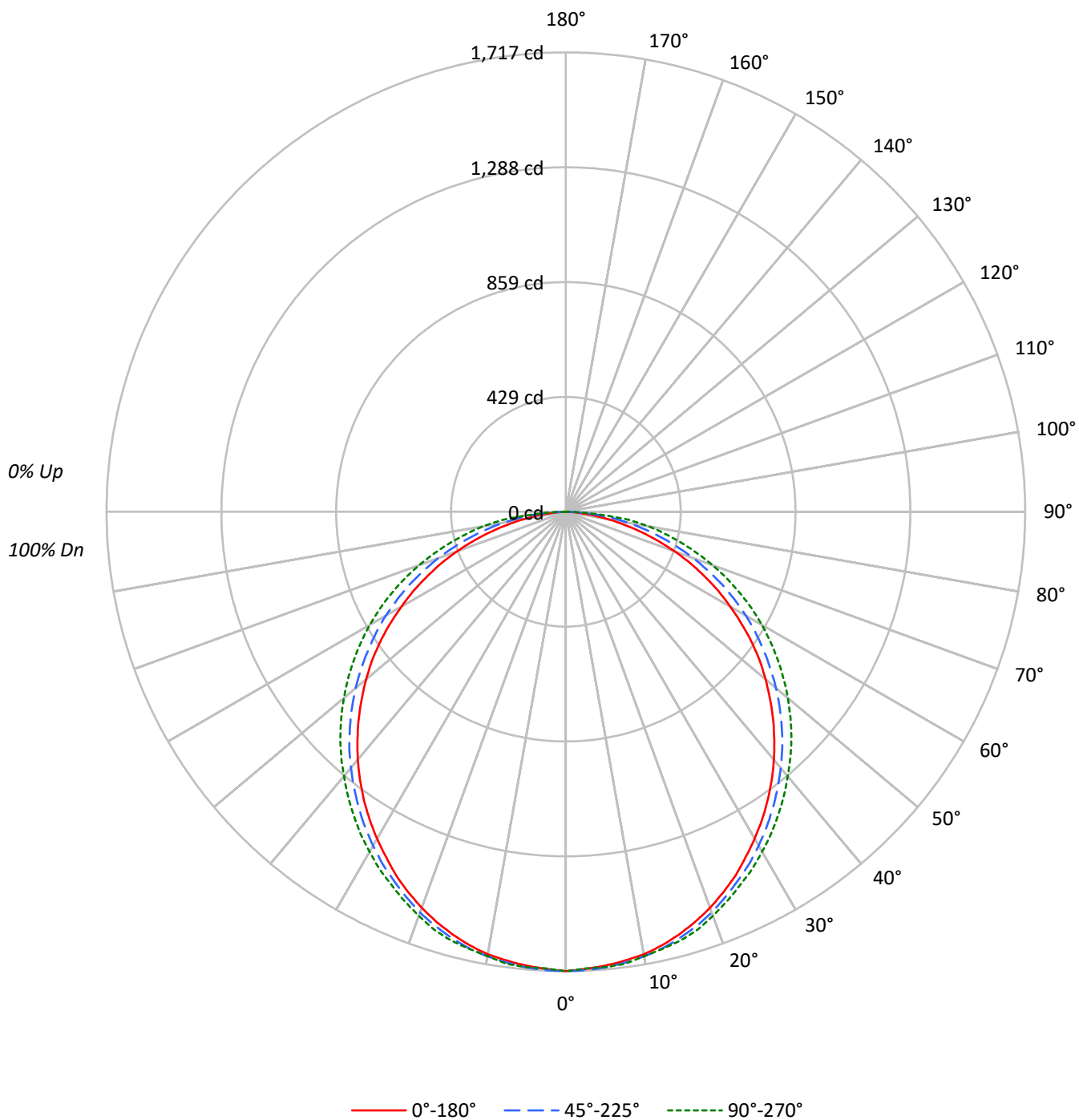
Lumens per Lamp: N/A
Luminaire Lumens: 5013.0 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.1
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	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5377	5377	5377
5°	5352	5373	5370
10°	5341	5365	5362
15°	5303	5345	5377
20°	5249	5311	5355
25°	5184	5256	5321
30°	5103	5210	5306
35°	5029	5159	5290
40°	4946	5108	5274
45°	4852	5056	5280
50°	4748	4994	5278
55°	4624	4924	5285
60°	4450	4870	5298
65°	4246	4776	5314
70°	3958	4643	5338
75°	3527	4458	5390
80°	2916	4245	5653
85°	1897	3834	4940

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5832 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.4	3.2
10°-20°	465.0	9.3
20°-30°	701.3	14.0
30°-40°	844.7	16.8
40°-50°	882.1	17.6
50°-60°	810.2	16.2
60°-70°	638.1	12.7
70°-80°	391.5	7.8
80°-90°	117.8	2.4
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°	1328.7	26.5
0°-40°	2173.4	43.4
0°-60°	3865.7	77.1
0°-90°	5013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5013.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1703	1705	1709	1715	1708	162
15°	1636	1639	1649	1659	1659	461
25°	1500	1504	1521	1540	1540	691
35°	1316	1322	1350	1377	1384	823
45°	1096	1108	1142	1181	1192	845
55°	847	862	902	953	968	756
65°	573	593	645	698	717	567
75°	292	315	368	427	446	309
85°	53	73	107	135	138	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1717.1	1717.1	1717.1	1717.1	1717.1
2.5°	1710.5	1713.8	1714.9	1716.0	1708.3
5°	1702.8	1705.0	1709.4	1714.9	1708.3
7.5°	1691.8	1694.0	1699.5	1707.2	1703.9
10°	1679.7	1680.8	1687.4	1692.9	1686.3
12.5°	1659.9	1663.2	1670.9	1675.3	1673.1
15°	1635.7	1639.0	1648.9	1658.8	1658.8
17.5°	1607.1	1611.5	1623.6	1636.8	1637.9
20°	1575.2	1578.5	1593.9	1607.1	1607.1
22.5°	1538.9	1543.3	1558.7	1573.0	1575.2
25°	1500.4	1503.7	1521.3	1540.0	1540.0
27.5°	1455.3	1461.9	1483.9	1502.6	1507.0
30°	1411.3	1416.8	1441.0	1464.1	1467.4
32.5°	1365.1	1371.7	1397.0	1422.3	1427.8
35°	1315.6	1322.2	1349.7	1377.2	1383.8
37.5°	1263.9	1271.6	1300.2	1332.1	1338.7
40°	1210.0	1218.8	1249.6	1283.7	1290.3
42.5°	1152.8	1164.9	1197.9	1233.1	1243.0
45°	1095.6	1107.7	1141.8	1181.4	1192.4
47.5°	1035.1	1049.4	1084.6	1126.4	1138.5
50°	974.6	988.9	1025.2	1070.3	1083.5
52.5°	913.0	927.3	964.7	1012.0	1026.3
55°	847.0	862.4	902.0	952.6	968.0
57.5°	778.8	798.6	840.4	892.1	907.5
60°	710.6	730.4	777.7	828.3	845.9
62.5°	643.5	662.2	710.6	764.5	783.2
65°	573.1	592.9	644.6	698.5	717.2
67.5°	503.8	523.6	575.3	631.4	651.2
70°	432.3	454.3	507.1	563.2	583.0
72.5°	360.8	383.9	437.8	495.0	513.7
75°	291.5	314.6	368.5	426.8	445.5
77.5°	223.3	248.6	301.4	360.8	378.4
80°	161.7	185.9	235.4	293.7	313.5
82.5°	103.4	124.3	173.8	228.8	243.1
85°	52.8	72.6	106.7	135.3	137.5
87.5°	16.5	23.1	35.2	52.8	53.9
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	17.32	18.98	17.69	19.30	19.61	18.15	19.81	18.52	20.13	20.44
	3H	19.08	20.59	19.45	20.91	21.27	20.27	21.78	20.65	22.10	22.46
	4H	19.70	21.12	20.09	21.47	21.84	21.16	22.58	21.56	22.93	23.30
	6H	20.11	21.43	20.52	21.79	22.18	21.94	23.26	22.35	23.62	24.01
	8H	20.21	21.48	20.64	21.87	22.26	22.26	23.52	22.68	23.91	24.31
	12H	20.27	21.48	20.70	21.86	22.29	22.47	23.68	22.90	24.06	24.49
4H	2H	18.09	19.52	18.49	19.86	20.24	18.74	20.16	19.14	20.51	20.88
	3H	20.07	21.27	20.48	21.67	22.07	21.10	22.29	21.50	22.69	23.09
	4H	20.81	21.89	21.24	22.31	22.74	22.15	23.23	22.58	23.65	24.08
	6H	21.34	22.29	21.79	22.73	23.18	23.10	24.05	23.55	24.49	24.95
	8H	21.48	22.37	21.94	22.82	23.28	23.50	24.39	23.96	24.83	25.29
	12H	21.57	22.37	22.05	22.84	23.31	23.77	24.58	24.25	25.05	25.52
8H	4H	21.27	22.16	21.73	22.60	23.06	22.44	23.33	22.90	23.77	24.23
	6H	21.93	22.67	22.42	23.16	23.63	23.55	24.29	24.04	24.78	25.25
	8H	22.14	22.81	22.65	23.31	23.80	24.06	24.73	24.57	25.23	25.72
	12H	22.28	22.87	22.78	23.36	23.92	24.45	25.04	24.95	25.53	26.09
12H	4H	21.36	22.16	21.84	22.63	23.10	22.46	23.26	22.94	23.74	24.21
	6H	22.06	22.73	22.57	23.23	23.72	23.60	24.27	24.10	24.77	25.25
	8H	22.34	22.93	22.84	23.42	23.98	24.17	24.77	24.68	25.26	25.81