

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: P1587778

Luminaire Tested: 22CZSP-SB-54HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-54HE-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

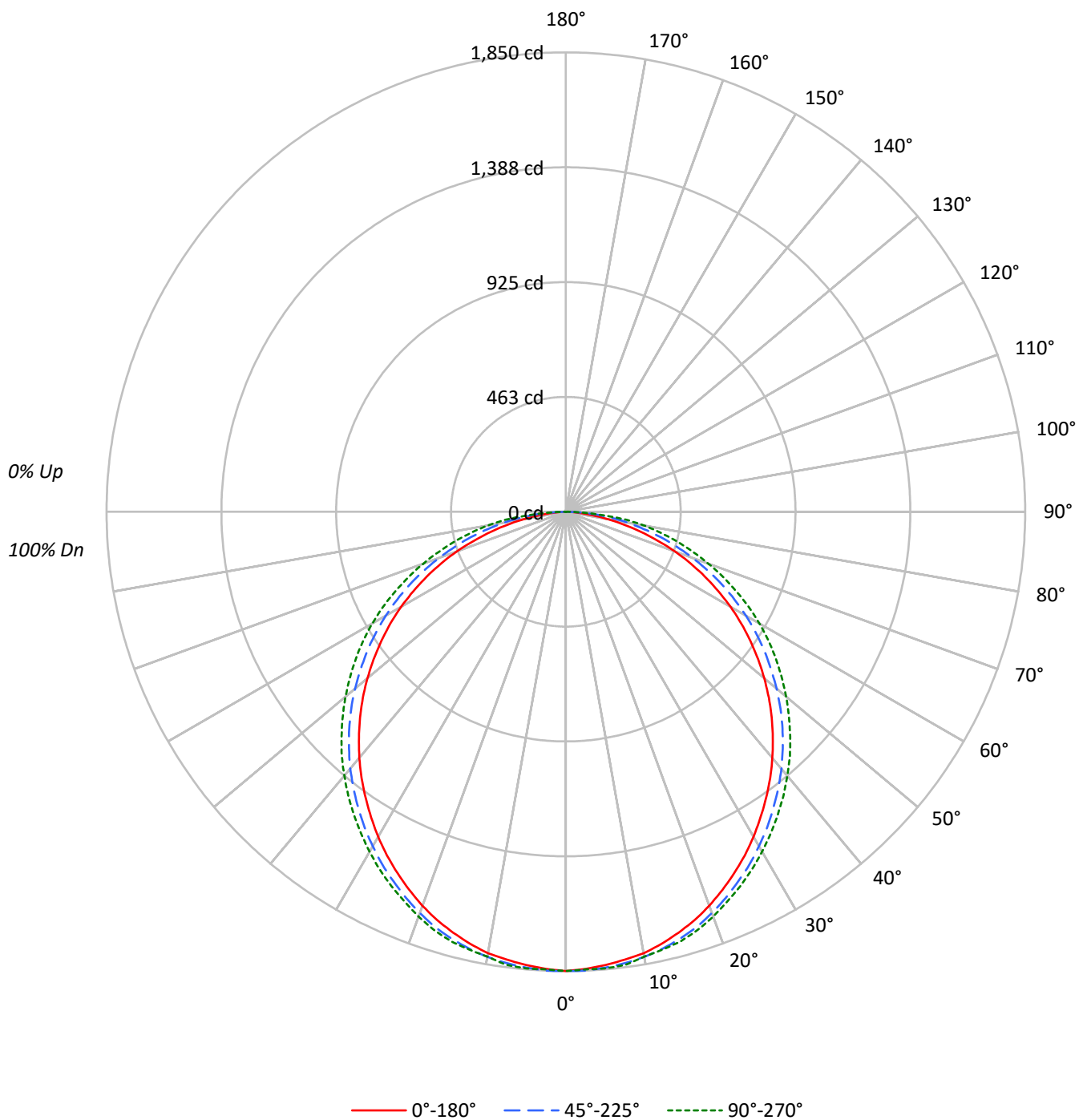
Lumens per Lamp: N/A
Luminaire Lumens: 5380.0 lumens
Efficiency: N/A
Efficacy: 149.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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			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	106	101	97	93	97	94	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5791	5791	5791
5°	5759	5792	5803
10°	5741	5789	5785
15°	5688	5770	5804
20°	5627	5731	5781
25°	5546	5674	5746
30°	5465	5624	5716
35°	5375	5570	5690
40°	5289	5521	5672
45°	5192	5463	5658
50°	5080	5396	5644
55°	4954	5327	5636
60°	4798	5247	5639
65°	4579	5137	5608
70°	4281	4981	5595
75°	3794	4789	5615
80°	3089	4550	5781
85°	1998	4200	4990

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5858 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.0	3.3
10°-20°	501.2	9.3
20°-30°	755.7	14.0
30°-40°	909.3	16.9
40°-50°	948.4	17.6
50°-60°	869.4	16.2
60°-70°	682.7	12.7
70°-80°	415.5	7.7
80°-90°	122.9	2.3
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°	1431.9	26.6
0°-40°	2341.1	43.5
0°-60°	4159.0	77.3
0°-90°	5380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5380.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1832	1844	1842	1840	1846	174
15°	1755	1772	1780	1782	1790	495
25°	1605	1627	1642	1653	1663	740
35°	1406	1428	1457	1478	1488	880
45°	1172	1197	1234	1263	1278	904
55°	907	930	976	1015	1032	811
65°	618	641	693	740	757	611
75°	314	343	396	443	464	332
85°	56	79	117	131	139	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1849.5	1849.5	1849.5	1849.5	1849.5
2.5°	1842.5	1851.8	1849.5	1841.4	1844.8
5°	1832.1	1843.7	1842.5	1840.2	1846.0
7.5°	1819.4	1832.1	1833.3	1833.3	1840.2
10°	1805.5	1818.2	1820.5	1817.1	1819.4
12.5°	1782.3	1797.4	1802.0	1802.0	1805.5
15°	1754.6	1771.9	1780.0	1782.3	1790.4
17.5°	1724.5	1743.0	1753.4	1759.2	1766.1
20°	1688.6	1708.3	1719.8	1726.8	1734.9
22.5°	1648.1	1670.1	1682.8	1689.7	1699.0
25°	1605.3	1627.2	1642.3	1652.7	1663.1
27.5°	1560.1	1581.0	1601.8	1614.5	1623.8
30°	1511.5	1533.5	1555.5	1571.7	1581.0
32.5°	1459.4	1482.6	1508.0	1525.4	1535.8
35°	1406.2	1428.2	1457.1	1477.9	1488.4
37.5°	1351.8	1374.9	1405.0	1427.0	1439.8
40°	1293.9	1318.2	1350.6	1374.9	1387.7
42.5°	1233.7	1256.9	1292.8	1320.5	1335.6
45°	1172.4	1196.7	1233.7	1262.7	1277.7
47.5°	1108.7	1131.9	1172.4	1206.0	1218.7
50°	1042.8	1064.8	1107.6	1143.5	1158.5
52.5°	975.7	998.8	1041.6	1079.8	1096.0
55°	907.4	930.5	975.7	1015.0	1032.4
57.5°	837.9	861.1	907.4	947.9	968.7
60°	766.2	789.3	837.9	879.6	900.4
62.5°	692.1	716.4	766.2	809.0	831.0
65°	618.0	641.2	693.3	739.6	756.9
67.5°	544.0	567.1	618.0	664.3	685.2
70°	467.6	494.2	544.0	592.6	611.1
72.5°	387.7	417.8	467.6	518.5	537.0
75°	313.6	342.6	395.8	443.3	464.1
77.5°	240.7	272.0	321.7	370.4	391.2
80°	171.3	201.4	252.3	298.6	320.6
82.5°	108.8	135.4	186.3	228.0	244.2
85°	55.6	78.7	116.9	130.8	138.9
87.5°	16.2	27.8	41.7	52.1	57.9
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	17.60	19.26	17.97	19.58	19.89	18.34	20.00	18.70	20.31	20.63
	3H	19.37	20.88	19.75	21.20	21.56	20.42	21.92	20.79	22.25	22.61
	4H	19.99	21.41	20.39	21.76	22.13	21.28	22.70	21.68	23.05	23.42
	6H	20.40	21.72	20.81	22.08	22.47	22.03	23.34	22.44	23.71	24.10
	8H	20.50	21.76	20.92	22.15	22.55	22.32	23.58	22.74	23.97	24.37
	12H	20.55	21.76	20.98	22.14	22.57	22.51	23.72	22.94	24.10	24.53
4H	2H	18.37	19.79	18.77	20.14	20.51	18.94	20.36	19.34	20.71	21.08
	3H	20.36	21.56	20.77	21.95	22.35	21.25	22.45	21.66	22.85	23.25
	4H	21.10	22.19	21.53	22.60	23.03	22.27	23.36	22.70	23.77	24.20
	6H	21.63	22.58	22.09	23.02	23.48	23.18	24.13	23.63	24.57	25.02
	8H	21.77	22.66	22.23	23.11	23.57	23.55	24.43	24.00	24.88	25.34
	12H	21.86	22.66	22.33	23.13	23.60	23.80	24.60	24.28	25.07	25.54
8H	4H	21.55	22.44	22.01	22.88	23.34	22.57	23.46	23.03	23.90	24.37
	6H	22.21	22.95	22.70	23.44	23.92	23.63	24.37	24.12	24.86	25.33
	8H	22.42	23.09	22.93	23.59	24.08	24.10	24.77	24.61	25.27	25.76
	12H	22.56	23.15	23.06	23.64	24.20	24.45	25.04	24.96	25.53	26.09
12H	4H	21.63	22.43	22.11	22.91	23.37	22.60	23.40	23.08	23.87	24.34
	6H	22.34	23.00	22.84	23.51	23.99	23.68	24.35	24.19	24.85	25.34
	8H	22.61	23.20	23.12	23.69	24.25	24.22	24.81	24.72	25.30	25.85