

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: P1586497

Luminaire Tested: 22CZSP-54HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-54HE-L840
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

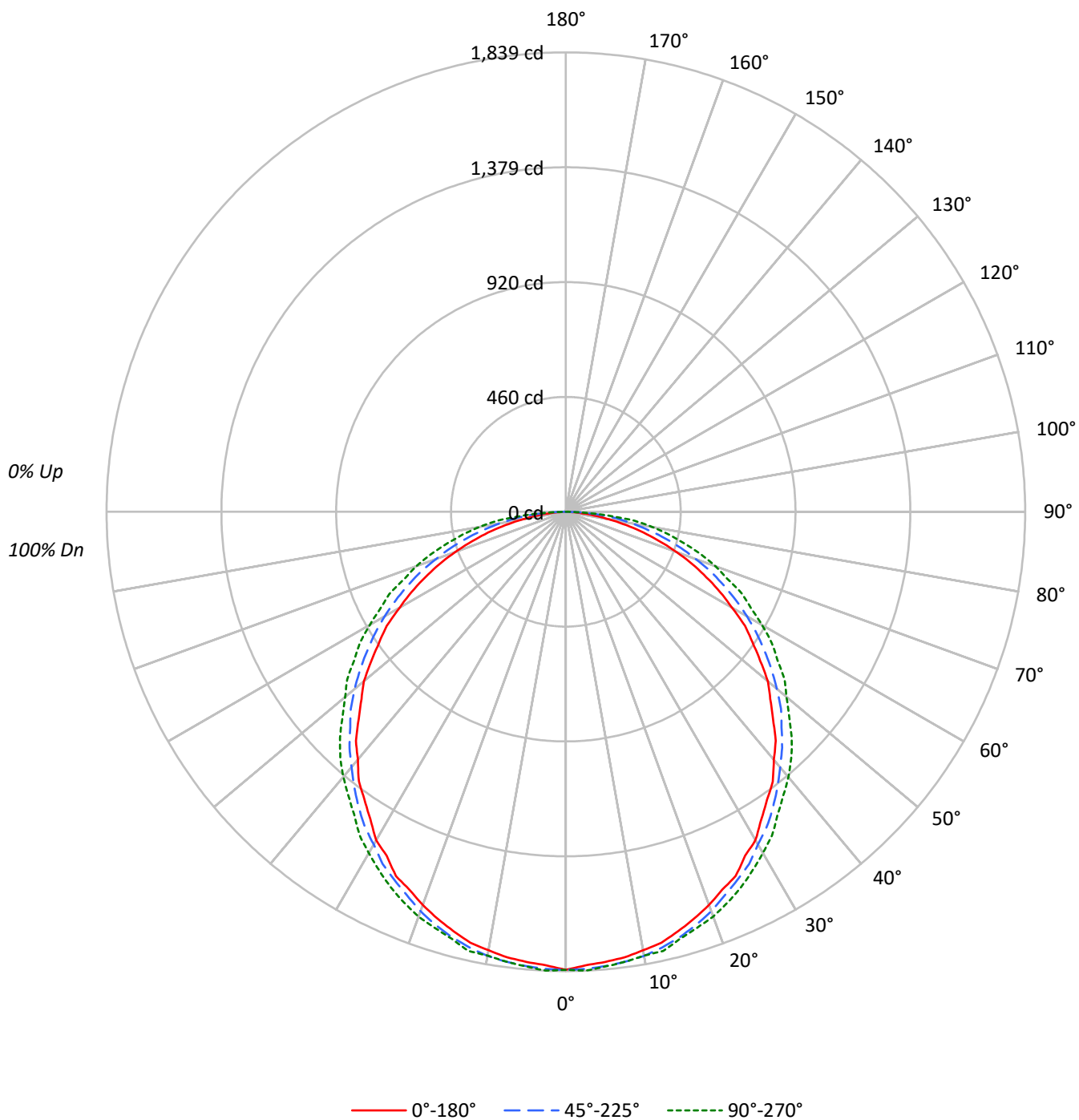
Lumens per Lamp: N/A
Luminaire Lumens: 5401.0 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5742	5742	5742
5°	5686	5738	5743
10°	5668	5741	5736
15°	5634	5714	5736
20°	5582	5670	5747
25°	5559	5616	5731
30°	5489	5561	5704
35°	5374	5526	5652
40°	5294	5456	5665
45°	5194	5406	5662
50°	5142	5376	5617
55°	4978	5303	5645
60°	4811	5246	5680
65°	4602	5165	5777
70°	4326	5067	5838
75°	3897	4976	5956
80°	3188	4885	6346
85°	2077	4868	5935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6657 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.3	3.2
10°-20°	496.3	9.2
20°-30°	750.1	13.9
30°-40°	904.7	16.8
40°-50°	945.7	17.5
50°-60°	872.2	16.1
60°-70°	691.1	12.8
70°-80°	432.1	8.0
80°-90°	135.5	2.5
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°	1419.7	26.3
0°-40°	2324.4	43.0
0°-60°	4142.3	76.7
0°-90°	5401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5401.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1809	1817	1825	1832	1827	172
15°	1738	1746	1763	1774	1769	490
25°	1609	1604	1626	1649	1659	738
35°	1406	1422	1446	1470	1478	882
45°	1173	1189	1221	1252	1279	908
55°	912	933	971	1024	1034	818
65°	621	648	697	752	780	615
75°	322	349	411	469	492	339
85°	58	83	136	159	165	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1833.7	1833.7	1833.7	1833.7	1833.7
2.5°	1817.2	1825.4	1832.0	1830.4	1838.6
5°	1808.9	1817.2	1825.4	1832.0	1827.1
7.5°	1799.0	1807.3	1817.2	1827.1	1817.2
10°	1782.5	1787.4	1805.6	1807.3	1804.0
12.5°	1767.6	1772.6	1785.8	1797.3	1800.7
15°	1737.9	1746.1	1762.7	1774.2	1769.3
17.5°	1708.1	1719.7	1734.6	1746.1	1746.1
20°	1675.1	1683.4	1701.5	1709.8	1724.7
22.5°	1637.1	1647.0	1661.9	1685.0	1693.3
25°	1609.0	1604.1	1625.5	1648.7	1658.6
27.5°	1552.9	1559.5	1589.2	1610.7	1618.9
30°	1518.2	1521.5	1538.0	1567.7	1577.6
32.5°	1457.0	1467.0	1496.7	1518.2	1536.3
35°	1405.8	1422.3	1445.5	1470.3	1478.5
37.5°	1361.2	1364.5	1391.0	1424.0	1430.6
40°	1295.1	1315.0	1334.8	1376.1	1386.0
42.5°	1243.9	1253.8	1281.9	1321.6	1336.4
45°	1172.9	1189.4	1220.8	1252.2	1278.6
47.5°	1110.1	1126.6	1167.9	1207.6	1212.5
50°	1055.6	1062.2	1103.5	1148.1	1153.1
52.5°	981.3	997.8	1037.4	1087.0	1103.5
55°	911.9	933.4	971.4	1024.2	1034.1
57.5°	850.8	860.7	905.3	958.1	978.0
60°	768.2	796.3	837.6	888.8	906.9
62.5°	697.1	723.6	768.2	816.1	835.9
65°	621.1	647.6	697.1	751.6	779.7
67.5°	548.5	569.9	629.4	685.6	698.8
70°	472.5	497.2	553.4	611.2	637.7
72.5°	393.2	421.3	484.0	538.5	566.6
75°	322.1	348.6	411.3	469.2	492.3
77.5°	247.8	277.5	338.7	396.5	422.9
80°	176.8	206.5	270.9	328.7	351.9
82.5°	114.0	145.4	206.5	257.7	277.5
85°	57.8	82.6	135.5	158.6	165.2
87.5°	18.2	29.7	46.3	52.9	52.9
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	17.96	19.58	19.89	18.39	20.05	18.75	20.37	20.68
	3H	19.38	20.89	19.76	21.22	21.58	20.53	22.04	20.91	22.37	22.73
	4H	20.02	21.44	20.41	21.79	22.17	21.45	22.88	21.85	23.23	23.60
	6H	20.44	21.77	20.85	22.13	22.52	22.28	23.61	22.69	23.97	24.36
	8H	20.56	21.82	20.98	22.21	22.61	22.63	23.89	23.05	24.28	24.68
	12H	20.61	21.83	21.04	22.21	22.64	22.87	24.08	23.30	24.47	24.89
4H	2H	18.37	19.80	18.77	20.14	20.52	18.98	20.41	19.38	20.76	21.13
	3H	20.38	21.58	20.79	21.98	22.38	21.37	22.57	21.78	22.97	23.37
	4H	21.14	22.23	21.57	22.65	23.08	22.46	23.55	22.89	23.96	24.40
	6H	21.69	22.65	22.14	23.09	23.54	23.45	24.41	23.91	24.85	25.31
	8H	21.84	22.74	22.30	23.18	23.65	23.88	24.78	24.34	25.22	25.68
	12H	21.93	22.74	22.41	23.22	23.68	24.19	25.00	24.67	25.48	25.95
8H	4H	21.62	22.52	22.08	22.96	23.42	22.76	23.66	23.22	24.10	24.57
	6H	22.31	23.06	22.80	23.55	24.02	23.93	24.68	24.42	25.16	25.64
	8H	22.54	23.21	23.05	23.72	24.20	24.47	25.15	24.98	25.65	26.14
	12H	22.69	23.28	23.19	23.77	24.33	24.90	25.50	25.41	25.99	26.55
12H	4H	21.72	22.53	22.20	23.00	23.47	22.79	23.60	23.27	24.08	24.54
	6H	22.46	23.13	22.97	23.64	24.12	23.99	24.66	24.49	25.16	25.65
	8H	22.76	23.36	23.27	23.85	24.41	24.60	25.20	25.11	25.69	26.25