

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: P1586778

Luminaire Tested: 22CZSP-A-60HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586778
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-60HE-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

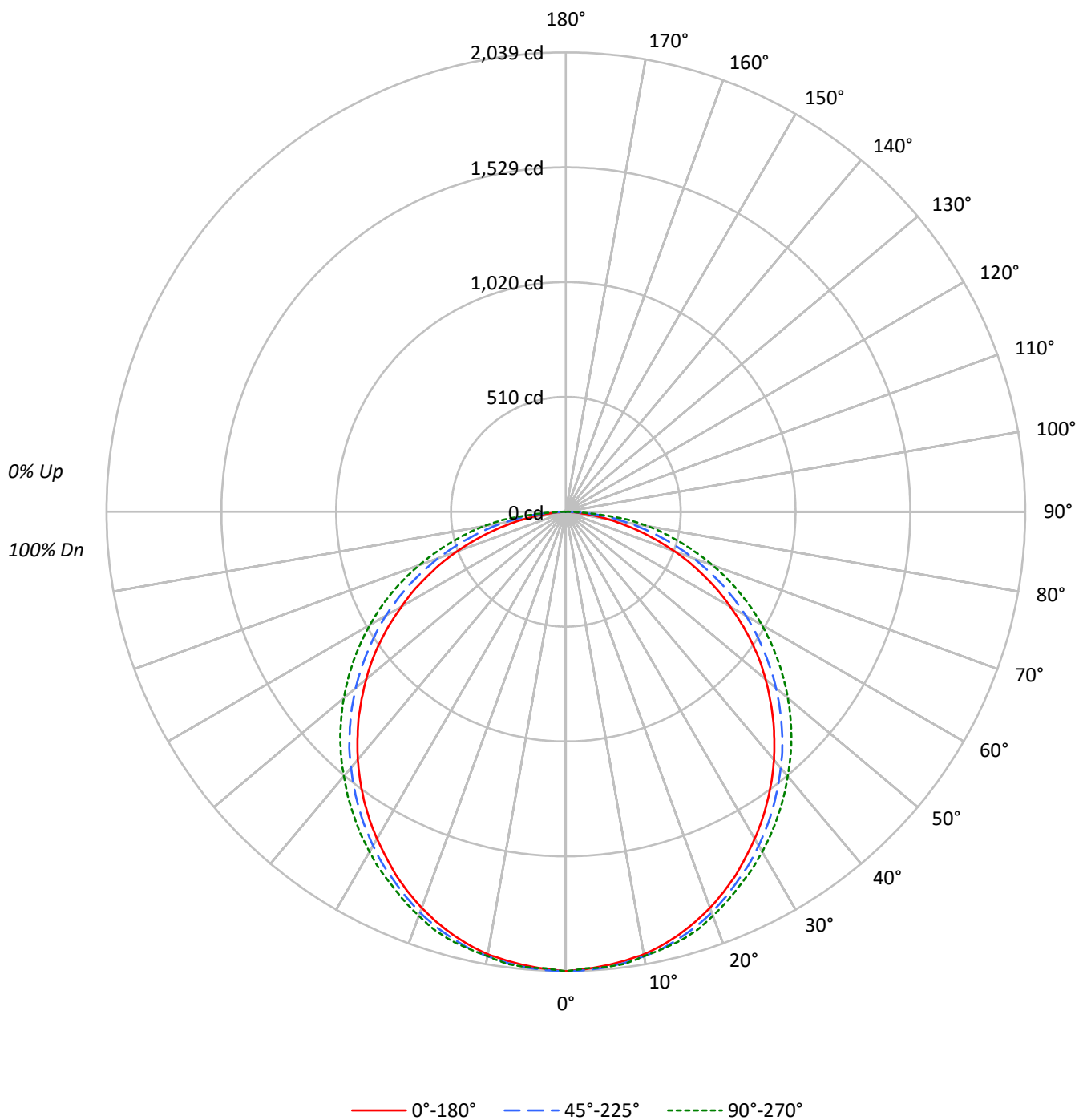
Lumens per Lamp: N/A
Luminaire Lumens: 5954.0 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 41.5
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	106	101	97	93	97	93	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	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6386	6386	6386
5°	6357	6382	6378
10°	6343	6372	6368
15°	6298	6349	6387
20°	6234	6308	6361
25°	6157	6243	6320
30°	6061	6188	6302
35°	5973	6128	6283
40°	5874	6067	6264
45°	5762	6005	6271
50°	5639	5932	6269
55°	5492	5849	6277
60°	5286	5785	6292
65°	5044	5673	6311
70°	4700	5514	6339
75°	4189	5296	6401
80°	3464	5042	6714
85°	2253	4552	5867

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.9	3.2
10°-20°	552.3	9.3
20°-30°	832.9	14.0
30°-40°	1003.2	16.8
40°-50°	1047.7	17.6
50°-60°	962.2	16.2
60°-70°	757.9	12.7
70°-80°	465.0	7.8
80°-90°	139.9	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°	1578.1	26.5
0°-40°	2581.3	43.4
0°-60°	4591.3	77.1
0°-90°	5954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5954.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2039	2039	2039	2039	2039	
5°	2022	2025	2030	2037	2029	192
15°	1943	1947	1958	1970	1970	548
25°	1782	1786	1807	1829	1829	820
35°	1562	1570	1603	1636	1644	977
45°	1301	1316	1356	1403	1416	1003
55°	1006	1024	1071	1131	1150	898
65°	681	704	766	830	852	673
75°	346	374	438	507	529	367
85°	63	86	127	161	163	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2039.4	2039.4	2039.4	2039.4	2039.4
2.5°	2031.6	2035.5	2036.8	2038.1	2029.0
5°	2022.4	2025.0	2030.3	2036.8	2029.0
7.5°	2009.4	2012.0	2018.5	2027.6	2023.7
10°	1995.0	1996.3	2004.1	2010.7	2002.8
12.5°	1971.5	1975.4	1984.5	1989.8	1987.1
15°	1942.7	1946.6	1958.4	1970.2	1970.2
17.5°	1908.8	1914.0	1928.4	1944.0	1945.3
20°	1870.9	1874.8	1893.1	1908.8	1908.8
22.5°	1827.8	1833.0	1851.3	1868.3	1870.9
25°	1782.0	1785.9	1806.9	1829.1	1829.1
27.5°	1728.5	1736.3	1762.4	1784.6	1789.9
30°	1676.2	1682.7	1711.5	1738.9	1742.8
32.5°	1621.3	1629.2	1659.2	1689.3	1695.8
35°	1562.5	1570.4	1603.0	1635.7	1643.5
37.5°	1501.1	1510.3	1544.3	1582.1	1590.0
40°	1437.1	1447.6	1484.2	1524.7	1532.5
42.5°	1369.2	1383.6	1422.7	1464.6	1476.3
45°	1301.2	1315.6	1356.1	1403.2	1416.2
47.5°	1229.4	1246.4	1288.2	1337.8	1352.2
50°	1157.5	1174.5	1217.6	1271.2	1286.9
52.5°	1084.4	1101.4	1145.8	1202.0	1218.9
55°	1006.0	1024.3	1071.3	1131.4	1149.7
57.5°	925.0	948.5	998.1	1059.5	1077.8
60°	844.0	867.5	923.7	983.8	1004.7
62.5°	764.3	786.5	844.0	908.0	930.2
65°	680.7	704.2	765.6	829.6	851.8
67.5°	598.4	621.9	683.3	749.9	773.4
70°	513.4	539.6	602.3	668.9	692.4
72.5°	428.5	456.0	520.0	587.9	610.1
75°	346.2	373.7	437.7	506.9	529.1
77.5°	265.2	295.3	358.0	428.5	449.4
80°	192.1	220.8	279.6	348.8	372.3
82.5°	122.8	147.6	206.4	271.7	288.7
85°	62.7	86.2	126.7	160.7	163.3
87.5°	19.6	27.4	41.8	62.7	64.0
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	17.92	19.58	18.28	19.90	20.21	18.75	20.41	19.11	20.73	21.04
	3H	19.68	21.18	20.05	21.51	21.87	20.87	22.37	21.24	22.70	23.06
	4H	20.29	21.72	20.69	22.06	22.44	21.76	23.18	22.15	23.52	23.90
	6H	20.71	22.03	21.12	22.39	22.78	22.54	23.86	22.95	24.22	24.61
	8H	20.81	22.08	21.24	22.46	22.86	22.86	24.12	23.28	24.51	24.91
	12H	20.86	22.08	21.29	22.46	22.88	23.07	24.28	23.50	24.66	25.09
4H	2H	18.69	20.11	19.09	20.46	20.84	19.34	20.76	19.74	21.11	21.48
	3H	20.67	21.87	21.08	22.26	22.66	21.69	22.89	22.10	23.29	23.69
	4H	21.41	22.49	21.84	22.90	23.34	22.74	23.83	23.18	24.24	24.68
	6H	21.93	22.89	22.39	23.33	23.78	23.70	24.65	24.15	25.09	25.54
	8H	22.08	22.97	22.54	23.41	23.88	24.09	24.99	24.55	25.43	25.89
	12H	22.16	22.97	22.64	23.44	23.91	24.37	25.17	24.85	25.65	26.12
8H	4H	21.86	22.76	22.32	23.20	23.66	23.03	23.93	23.49	24.37	24.83
	6H	22.53	23.27	23.02	23.76	24.23	24.15	24.89	24.64	25.38	25.85
	8H	22.74	23.41	23.24	23.91	24.39	24.66	25.33	25.16	25.83	26.32
	12H	22.88	23.47	23.38	23.96	24.52	25.04	25.63	25.55	26.12	26.68
12H	4H	21.95	22.76	22.43	23.23	23.70	23.06	23.86	23.54	24.34	24.80
	6H	22.66	23.33	23.16	23.83	24.32	24.19	24.86	24.70	25.37	25.85
	8H	22.94	23.53	23.44	24.02	24.58	24.77	25.36	25.28	25.85	26.41