

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: P1586773

Luminaire Tested: 22CZSP-A-60HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586773
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-A-60HE-L830
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 6700 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

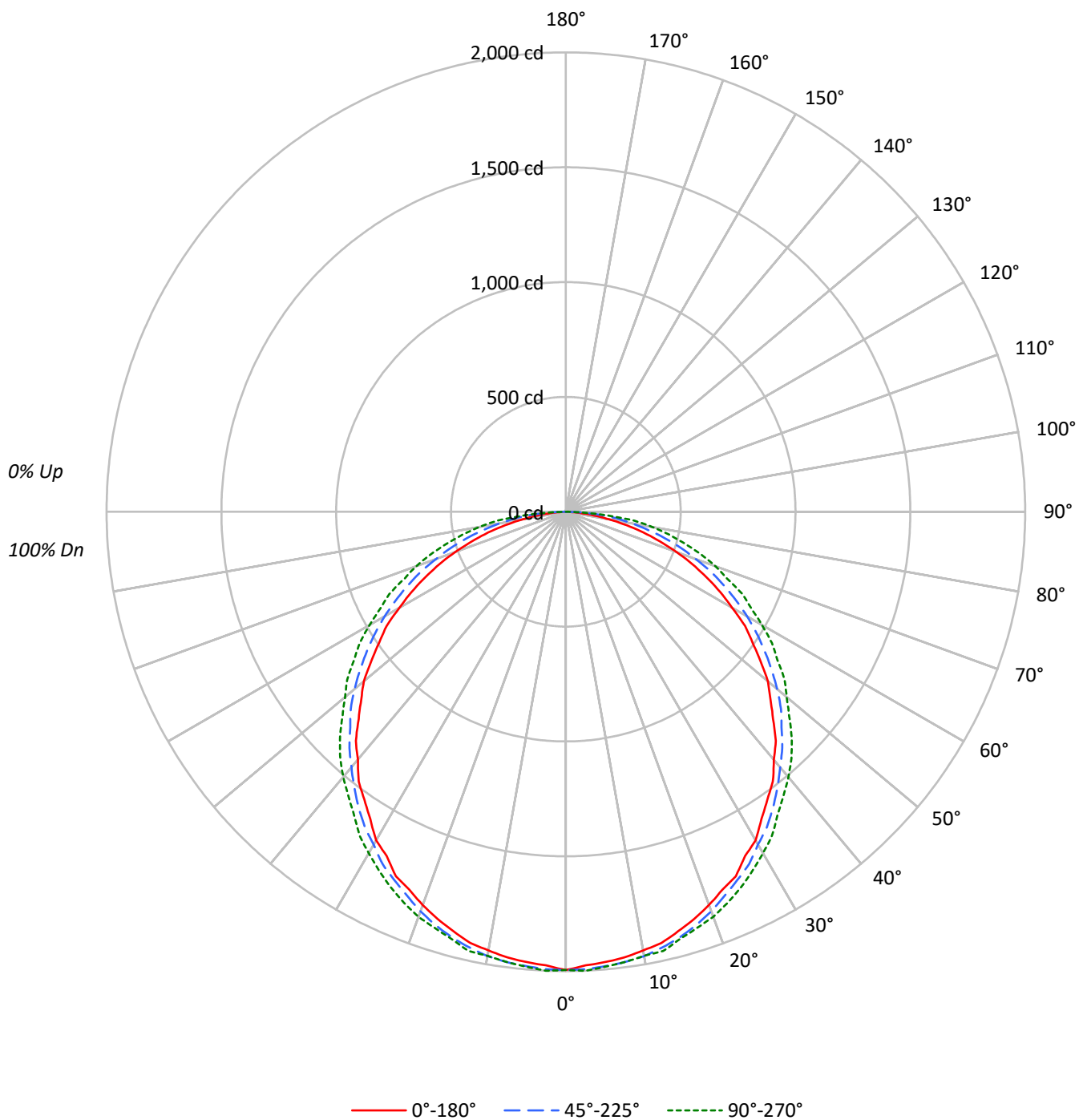
Lumens per Lamp: N/A
Luminaire Lumens: 5876.0 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1586773

CATALOG NUMBER: 22CZSP-A-60HE-L830

Luminous Intensity Polar Plot



TEST NUMBER: P1586773

CATALOG NUMBER: 22CZSP-A-60HE-L830

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°	6247	6247	6247
5°	6186	6243	6248
10°	6166	6246	6240
15°	6129	6217	6240
20°	6073	6169	6252
25°	6048	6110	6234
30°	5972	6050	6206
35°	5847	6011	6149
40°	5760	5936	6164
45°	5651	5882	6160
50°	5594	5849	6111
55°	5416	5769	6142
60°	5234	5707	6179
65°	5007	5619	6285
70°	4706	5512	6351
75°	4241	5414	6480
80°	3468	5316	6903
85°	2260	5296	6456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 7243 cd/sqm

TEST NUMBER: P1586773

CATALOG NUMBER: 22CZSP-A-60HE-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.6	3.2
10°-20°	540.0	9.2
20°-30°	816.0	13.9
30°-40°	984.2	16.8
40°-50°	1028.9	17.5
50°-60°	948.9	16.1
60°-70°	751.8	12.8
70°-80°	470.1	8.0
80°-90°	147.5	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°	1544.6	26.3
0°-40°	2528.8	43.0
0°-60°	4506.6	76.7
0°-90°	5876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5876.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1995	1995	1995	1995	1995	
5°	1968	1977	1986	1993	1988	187
15°	1891	1900	1918	1930	1925	533
25°	1750	1745	1768	1794	1804	803
35°	1530	1547	1573	1600	1608	959
45°	1276	1294	1328	1362	1391	988
55°	992	1016	1057	1114	1125	889
65°	676	704	758	818	848	669
75°	350	379	448	510	536	369
85°	63	90	147	172	180	82
90°	0	0	0	0	0	

TEST NUMBER: P1586773

CATALOG NUMBER: 22CZSP-A-60HE-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1995.0	1995.0	1995.0	1995.0	1995.0
2.5°	1977.0	1986.0	1993.2	1991.4	2000.3
5°	1968.0	1977.0	1986.0	1993.2	1987.8
7.5°	1957.2	1966.2	1977.0	1987.8	1977.0
10°	1939.2	1944.6	1964.4	1966.2	1962.6
12.5°	1923.1	1928.5	1942.8	1955.4	1959.0
15°	1890.7	1899.7	1917.7	1930.3	1924.9
17.5°	1858.4	1870.9	1887.1	1899.7	1899.7
20°	1822.4	1831.4	1851.2	1860.2	1876.3
22.5°	1781.1	1791.9	1808.0	1833.2	1842.2
25°	1750.5	1745.1	1768.5	1793.7	1804.4
27.5°	1689.4	1696.6	1729.0	1752.3	1761.3
30°	1651.7	1655.3	1673.2	1705.6	1716.4
32.5°	1585.2	1596.0	1628.3	1651.7	1671.5
35°	1529.5	1547.4	1572.6	1599.6	1608.5
37.5°	1480.9	1484.5	1513.3	1549.2	1556.4
40°	1409.1	1430.6	1452.2	1497.1	1507.9
42.5°	1353.3	1364.1	1394.7	1437.8	1454.0
45°	1276.1	1294.0	1328.2	1362.3	1391.1
47.5°	1207.8	1225.7	1270.7	1313.8	1319.2
50°	1148.4	1155.6	1200.6	1249.1	1254.5
52.5°	1067.6	1085.5	1128.7	1182.6	1200.6
55°	992.1	1015.5	1056.8	1114.3	1125.1
57.5°	925.6	936.4	984.9	1042.4	1064.0
60°	835.7	866.3	911.2	966.9	986.7
62.5°	758.4	787.2	835.7	887.8	909.4
65°	675.8	704.5	758.4	817.8	848.3
67.5°	596.7	620.1	684.8	745.9	760.2
70°	514.0	541.0	602.1	665.0	693.7
72.5°	427.7	458.3	526.6	585.9	616.5
75°	350.5	379.2	447.5	510.4	535.6
77.5°	269.6	301.9	368.4	431.3	460.1
80°	192.3	224.7	294.8	357.7	382.8
82.5°	124.0	158.2	224.7	280.4	301.9
85°	62.9	89.9	147.4	172.5	179.7
87.5°	19.8	32.4	50.3	57.5	57.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586773

CATALOG NUMBER: 22CZSP-A-60HE-L830

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	17.89	19.56	18.26	19.87	20.19	18.68	20.35	19.04	20.66	20.98
	3H	19.67	21.18	20.05	21.51	21.87	20.82	22.34	21.20	22.66	23.02
	4H	20.31	21.74	20.71	22.08	22.46	21.75	23.17	22.14	23.52	23.90
	6H	20.74	22.06	21.15	22.43	22.82	22.57	23.90	22.98	24.26	24.65
	8H	20.85	22.12	21.27	22.50	22.90	22.92	24.19	23.34	24.58	24.97
	12H	20.90	22.12	21.33	22.50	22.93	23.16	24.38	23.59	24.76	25.19
4H	2H	18.66	20.09	19.06	20.44	20.81	19.28	20.70	19.67	21.05	21.43
	3H	20.67	21.88	21.08	22.27	22.67	21.66	22.87	22.07	23.26	23.66
	4H	21.43	22.53	21.86	22.94	23.37	22.75	23.84	23.18	24.25	24.69
	6H	21.98	22.94	22.43	23.38	23.83	23.75	24.71	24.20	25.14	25.60
	8H	22.14	23.03	22.59	23.48	23.94	24.17	25.07	24.63	25.51	25.98
	12H	22.22	23.03	22.70	23.51	23.98	24.49	25.30	24.97	25.77	26.24
8H	4H	21.91	22.81	22.37	23.25	23.72	23.06	23.95	23.52	24.40	24.86
	6H	22.60	23.35	23.10	23.84	24.31	24.22	24.97	24.71	25.46	25.93
	8H	22.83	23.51	23.34	24.01	24.49	24.77	25.44	25.27	25.94	26.43
	12H	22.98	23.58	23.48	24.07	24.62	25.20	25.79	25.70	26.28	26.84
12H	4H	22.01	22.82	22.49	23.29	23.76	23.09	23.89	23.56	24.37	24.84
	6H	22.75	23.43	23.26	23.93	24.42	24.28	24.95	24.78	25.46	25.94
	8H	23.06	23.65	23.56	24.14	24.70	24.89	25.49	25.40	25.98	26.54