

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: P1586539

Luminaire Tested: 22CZSP-60HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586539
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-60HE-L845
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

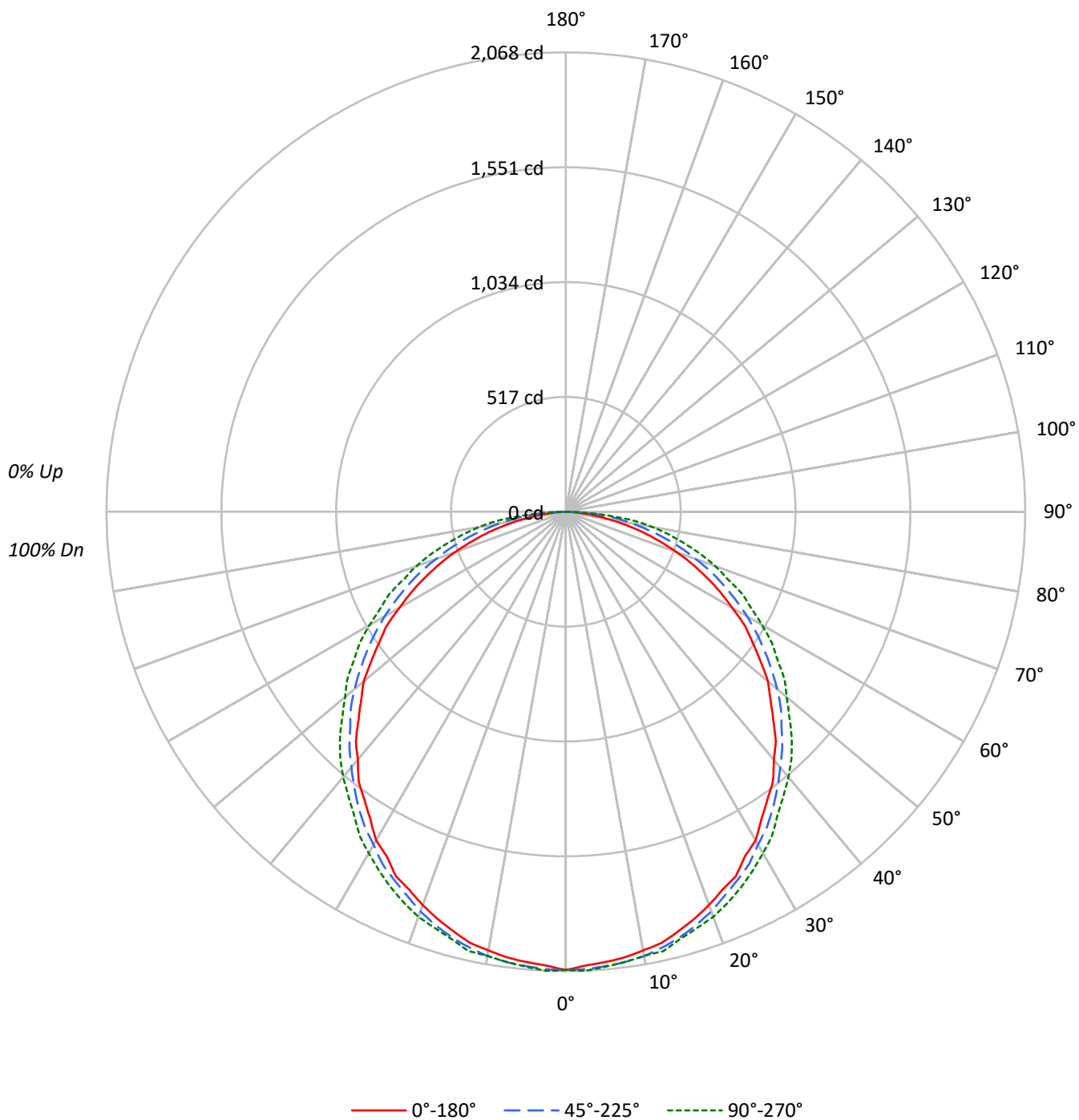
Lumens per Lamp: N/A
Luminaire Lumens: 6076.0 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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: P1586539

CATALOG NUMBER: 22CZSP-60HE-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1586539

CATALOG NUMBER: 22CZSP-60HE-L845

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°	6460	6460	6460
5°	6397	6455	6461
10°	6376	6459	6453
15°	6338	6428	6452
20°	6279	6379	6465
25°	6254	6318	6447
30°	6175	6256	6417
35°	6046	6216	6358
40°	5956	6138	6373
45°	5843	6082	6370
50°	5785	6047	6319
55°	5601	5966	6351
60°	5412	5901	6390
65°	5178	5811	6499
70°	4866	5700	6568
75°	4385	5598	6700
80°	3587	5496	7137
85°	2335	5475	6675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 7490 cd/sqm

TEST NUMBER: P1586539

CATALOG NUMBER: 22CZSP-60HE-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.0	3.2
10°-20°	558.4	9.2
20°-30°	843.8	13.9
30°-40°	1017.7	16.8
40°-50°	1064.0	17.5
50°-60°	981.1	16.1
60°-70°	777.4	12.8
70°-80°	486.1	8.0
80°-90°	152.5	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°	1597.2	26.3
0°-40°	2614.9	43.0
0°-60°	4660.0	76.7
0°-90°	6076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2063	2063	2063	2063	2063	
5°	2035	2044	2054	2061	2055	193
15°	1955	1964	1983	1996	1990	552
25°	1810	1804	1829	1855	1866	830
35°	1582	1600	1626	1654	1663	992
45°	1320	1338	1373	1409	1438	1021
55°	1026	1050	1093	1152	1163	920
65°	699	728	784	846	877	692
75°	362	392	463	528	554	382
85°	65	93	152	178	186	85
90°	0	0	0	0	0	

TEST NUMBER: P1586539

CATALOG NUMBER: 22CZSP-60HE-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.9	2062.9	2062.9	2062.9	2062.9
2.5°	2044.3	2053.6	2061.0	2059.1	2068.4
5°	2035.0	2044.3	2053.6	2061.0	2055.4
7.5°	2023.8	2033.1	2044.3	2055.4	2044.3
10°	2005.2	2010.8	2031.3	2033.1	2029.4
12.5°	1988.5	1994.1	2009.0	2022.0	2025.7
15°	1955.1	1964.4	1982.9	1996.0	1990.4
17.5°	1921.6	1934.6	1951.4	1964.4	1964.4
20°	1884.4	1893.7	1914.2	1923.5	1940.2
22.5°	1841.7	1852.9	1869.6	1895.6	1904.9
25°	1810.1	1804.5	1828.7	1854.7	1865.9
27.5°	1746.9	1754.4	1787.8	1812.0	1821.3
30°	1707.9	1711.6	1730.2	1763.7	1774.8
32.5°	1639.1	1650.3	1683.7	1707.9	1728.3
35°	1581.5	1600.1	1626.1	1654.0	1663.3
37.5°	1531.3	1535.1	1564.8	1602.0	1609.4
40°	1457.0	1479.3	1501.6	1548.1	1559.2
42.5°	1399.4	1410.5	1442.1	1486.7	1503.5
45°	1319.5	1338.1	1373.4	1408.7	1438.4
47.5°	1248.9	1267.4	1313.9	1358.5	1364.1
50°	1187.5	1195.0	1241.4	1291.6	1297.2
52.5°	1103.9	1122.5	1167.1	1222.8	1241.4
55°	1025.9	1050.0	1092.8	1152.2	1163.4
57.5°	957.1	968.2	1018.4	1077.9	1100.2
60°	864.2	895.8	942.2	999.8	1020.3
62.5°	784.3	814.0	864.2	918.1	940.4
65°	698.8	728.5	784.3	845.6	877.2
67.5°	617.0	641.2	708.1	771.2	786.1
70°	531.5	559.4	622.6	687.6	717.4
72.5°	442.3	473.9	544.5	605.8	637.4
75°	362.4	392.1	462.7	527.8	553.8
77.5°	278.8	312.2	381.0	446.0	475.8
80°	198.9	232.3	304.8	369.8	395.8
82.5°	128.2	163.5	232.3	289.9	312.2
85°	65.0	92.9	152.4	178.4	185.8
87.5°	20.4	33.5	52.0	59.5	59.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586539

CATALOG NUMBER: 22CZSP-60HE-L845

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	18.01	19.67	18.37	19.99	20.30	18.80	20.46	19.16	20.78	21.09
	3H	19.79	21.30	20.16	21.63	21.99	20.94	22.45	21.32	22.78	23.14
	4H	20.43	21.85	20.82	22.20	22.57	21.86	23.29	22.26	23.64	24.01
	6H	20.85	22.18	21.26	22.54	22.93	22.69	24.01	23.10	24.38	24.77
	8H	20.96	22.23	21.39	22.62	23.02	23.03	24.30	23.46	24.69	25.09
	12H	21.02	22.23	21.45	22.62	23.04	23.28	24.49	23.71	24.88	25.30
4H	2H	18.78	20.21	19.18	20.55	20.93	19.39	20.82	19.79	21.17	21.54
	3H	20.79	21.99	21.20	22.39	22.79	21.78	22.98	22.19	23.38	23.78
	4H	21.55	22.64	21.98	23.05	23.49	22.87	23.96	23.30	24.37	24.80
	6H	22.10	23.06	22.55	23.50	23.95	23.86	24.82	24.32	25.26	25.71
	8H	22.25	23.15	22.71	23.59	24.06	24.29	25.19	24.75	25.63	26.09
	12H	22.34	23.15	22.82	23.62	24.09	24.60	25.41	25.08	25.89	26.35
8H	4H	22.03	22.93	22.49	23.37	23.83	23.17	24.07	23.63	24.51	24.98
	6H	22.72	23.47	23.21	23.96	24.43	24.34	25.09	24.83	25.57	26.05
	8H	22.95	23.62	23.45	24.13	24.61	24.88	25.56	25.39	26.06	26.54
	12H	23.10	23.69	23.60	24.18	24.74	25.31	25.91	25.82	26.40	26.96
12H	4H	22.13	22.94	22.61	23.41	23.88	23.20	24.01	23.68	24.48	24.95
	6H	22.87	23.54	23.37	24.05	24.53	24.39	25.07	24.90	25.57	26.06
	8H	23.17	23.77	23.68	24.26	24.82	25.01	25.61	25.52	26.10	26.66