

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: P1588679

Luminaire Tested: 24CZSP-A-52-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-52-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

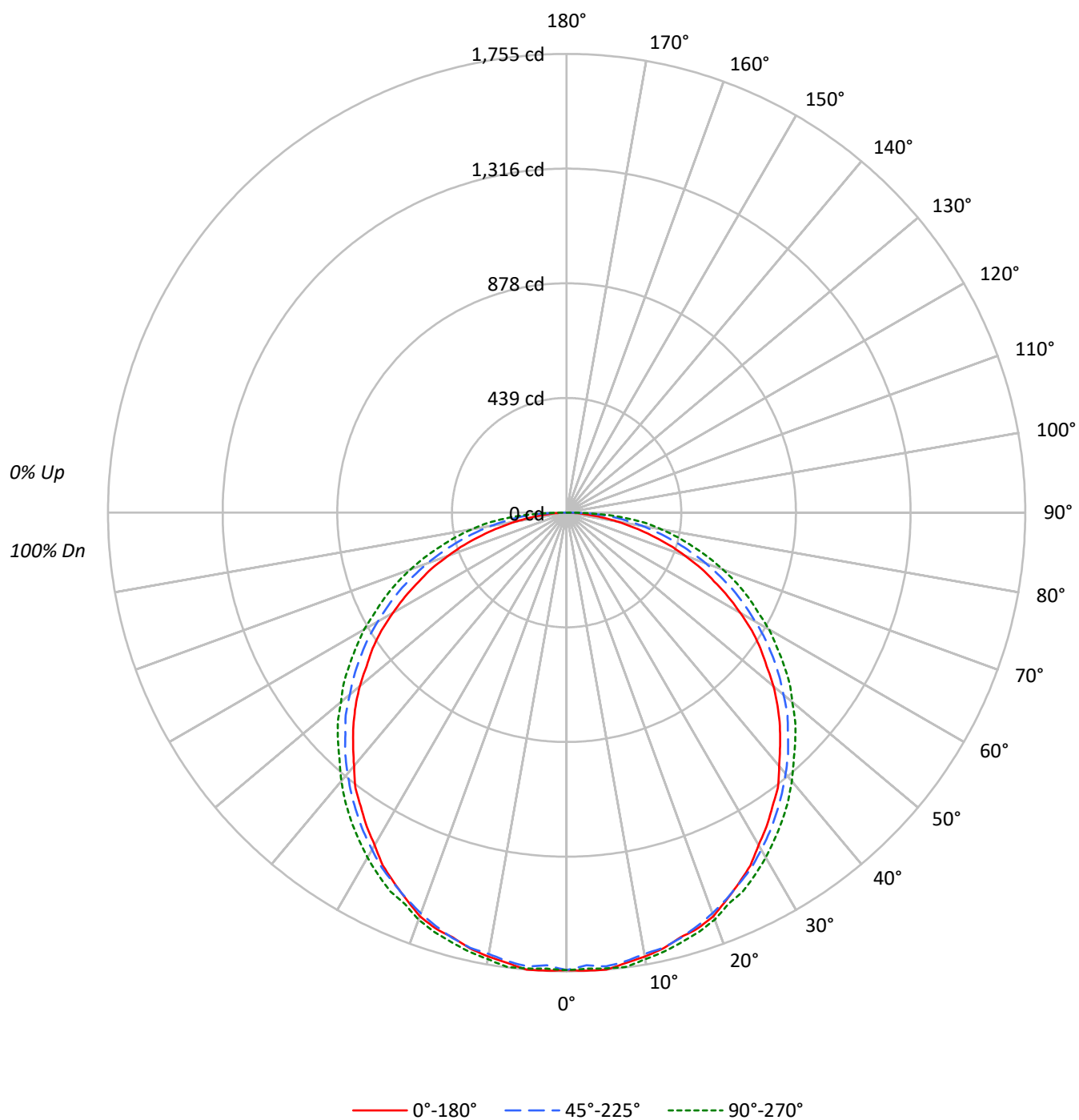
Lumens per Lamp: N/A
Luminaire Lumens: 5342.0 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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: P1588679

CATALOG NUMBER: 24CZSP-A-52-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1588679

CATALOG NUMBER: 24CZSP-A-52-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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2681	2681	2681
5°	2699	2679	2691
10°	2682	2666	2698
15°	2668	2672	2698
20°	2677	2659	2700
25°	2640	2644	2700
30°	2597	2634	2695
35°	2567	2619	2689
40°	2530	2607	2681
45°	2500	2594	2680
50°	2463	2582	2686
55°	2419	2573	2709
60°	2351	2555	2739
65°	2258	2555	2782
70°	2154	2538	2847
75°	1984	2544	2952
80°	1738	2596	3250
85°	1327	2991	3889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4312 cd/sqm

TEST NUMBER: P1588679

CATALOG NUMBER: 24CZSP-A-52-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.2	3.1
10°-20°	477.7	8.9
20°-30°	725.6	13.6
30°-40°	879.0	16.5
40°-50°	924.7	17.3
50°-60°	859.8	16.1
60°-70°	692.3	13.0
70°-80°	448.5	8.4
80°-90°	168.2	3.1
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°	1369.5	25.6
0°-40°	2248.5	42.1
0°-60°	4033.0	75.5
0°-90°	5342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1755	1753	1742	1753	1750	166
15°	1682	1689	1685	1705	1702	477
25°	1562	1561	1565	1592	1598	720
35°	1373	1383	1401	1425	1438	860
45°	1154	1169	1198	1223	1237	890
55°	906	929	963	1002	1014	808
65°	623	651	705	747	768	619
75°	335	368	430	480	499	356
85°	76	111	170	212	221	93
90°	0	0	0	0	0	

TEST NUMBER: P1588679

CATALOG NUMBER: 24CZSP-A-52-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1750.2	1750.2	1750.2	1750.2	1750.2
2.5°	1754.0	1754.0	1733.5	1755.3	1746.3
5°	1755.3	1752.7	1742.5	1752.7	1750.2
7.5°	1737.4	1739.9	1731.0	1743.8	1752.7
10°	1724.6	1727.1	1714.3	1734.8	1734.8
12.5°	1707.9	1710.5	1705.4	1724.6	1720.7
15°	1682.4	1688.8	1684.9	1705.4	1701.5
17.5°	1668.3	1663.2	1659.3	1674.7	1682.4
20°	1642.7	1631.2	1631.2	1651.6	1656.8
22.5°	1601.8	1597.9	1599.2	1624.8	1619.7
25°	1562.1	1560.8	1564.7	1591.5	1597.9
27.5°	1522.4	1519.9	1531.4	1557.0	1562.1
30°	1468.7	1473.8	1489.2	1517.3	1523.7
32.5°	1423.9	1432.9	1447.0	1473.8	1481.5
35°	1372.7	1383.0	1400.9	1425.2	1438.0
37.5°	1328.0	1334.4	1353.6	1376.6	1391.9
40°	1265.3	1281.9	1303.7	1336.9	1340.8
42.5°	1209.0	1225.6	1253.8	1289.6	1285.8
45°	1154.0	1169.3	1197.5	1223.1	1237.1
47.5°	1095.1	1109.2	1146.3	1177.0	1187.2
50°	1033.7	1051.6	1083.6	1115.6	1127.1
52.5°	964.6	983.8	1024.8	1059.3	1075.9
55°	905.8	928.8	963.4	1001.7	1014.5
57.5°	840.5	859.7	901.9	940.3	953.1
60°	767.6	790.6	834.1	875.1	894.3
62.5°	697.2	722.8	768.9	811.1	826.5
65°	623.0	651.2	704.9	747.1	767.6
67.5°	559.1	582.1	634.6	681.9	703.6
70°	481.0	511.7	566.8	619.2	635.8
72.5°	412.0	438.8	496.4	548.8	569.3
75°	335.2	368.5	429.9	479.8	498.9
77.5°	264.8	299.4	360.8	413.2	435.0
80°	197.0	230.3	294.3	348.0	368.5
82.5°	133.1	166.3	230.3	282.7	305.8
85°	75.5	111.3	170.2	212.4	221.3
87.5°	33.3	64.0	96.0	115.1	122.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588679

CATALOG NUMBER: 24CZSP-A-52-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	15.11	16.79	15.47	17.11	17.42	15.78	17.47	16.15	17.78	18.09
	3H	16.96	18.49	17.34	18.82	19.18	18.00	19.53	18.38	19.86	20.22
	4H	17.65	19.09	18.05	19.44	19.82	18.97	20.41	19.36	20.76	21.13
	6H	18.14	19.49	18.55	19.85	20.24	19.86	21.20	20.27	21.56	21.95
	8H	18.29	19.57	18.71	19.96	20.36	20.26	21.55	20.68	21.93	22.33
	12H	18.38	19.61	18.81	19.99	20.42	20.62	21.85	21.05	22.23	22.66
4H	2H	15.90	17.35	16.30	17.69	18.07	16.42	17.87	16.82	18.21	18.59
	3H	17.99	19.21	18.40	19.61	20.01	18.88	20.10	19.29	20.50	20.90
	4H	18.81	19.92	19.24	20.33	20.77	20.01	21.12	20.44	21.53	21.97
	6H	19.44	20.41	19.89	20.85	21.30	21.08	22.06	21.53	22.50	22.95
	8H	19.63	20.55	20.09	20.99	21.45	21.57	22.49	22.03	22.93	23.39
	12H	19.77	20.59	20.25	21.07	21.54	22.02	22.85	22.50	23.32	23.79
8H	4H	19.32	20.23	19.78	20.68	21.14	20.35	21.27	20.81	21.71	22.17
	6H	20.10	20.87	20.60	21.36	21.83	21.60	22.37	22.10	22.86	23.33
	8H	20.39	21.08	20.89	21.58	22.07	22.23	22.92	22.73	23.42	23.91
	12H	20.61	21.22	21.11	21.71	22.26	22.84	23.45	23.34	23.94	24.50
12H	4H	19.43	20.25	19.91	20.73	21.19	20.39	21.22	20.87	21.69	22.16
	6H	20.27	20.96	20.78	21.47	21.95	21.68	22.37	22.18	22.87	23.36
	8H	20.64	21.25	21.15	21.74	22.30	22.38	23.00	22.89	23.49	24.04