

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: P1588388

Luminaire Tested: 24CZSP-57-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588388
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: 24CZSP-57-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

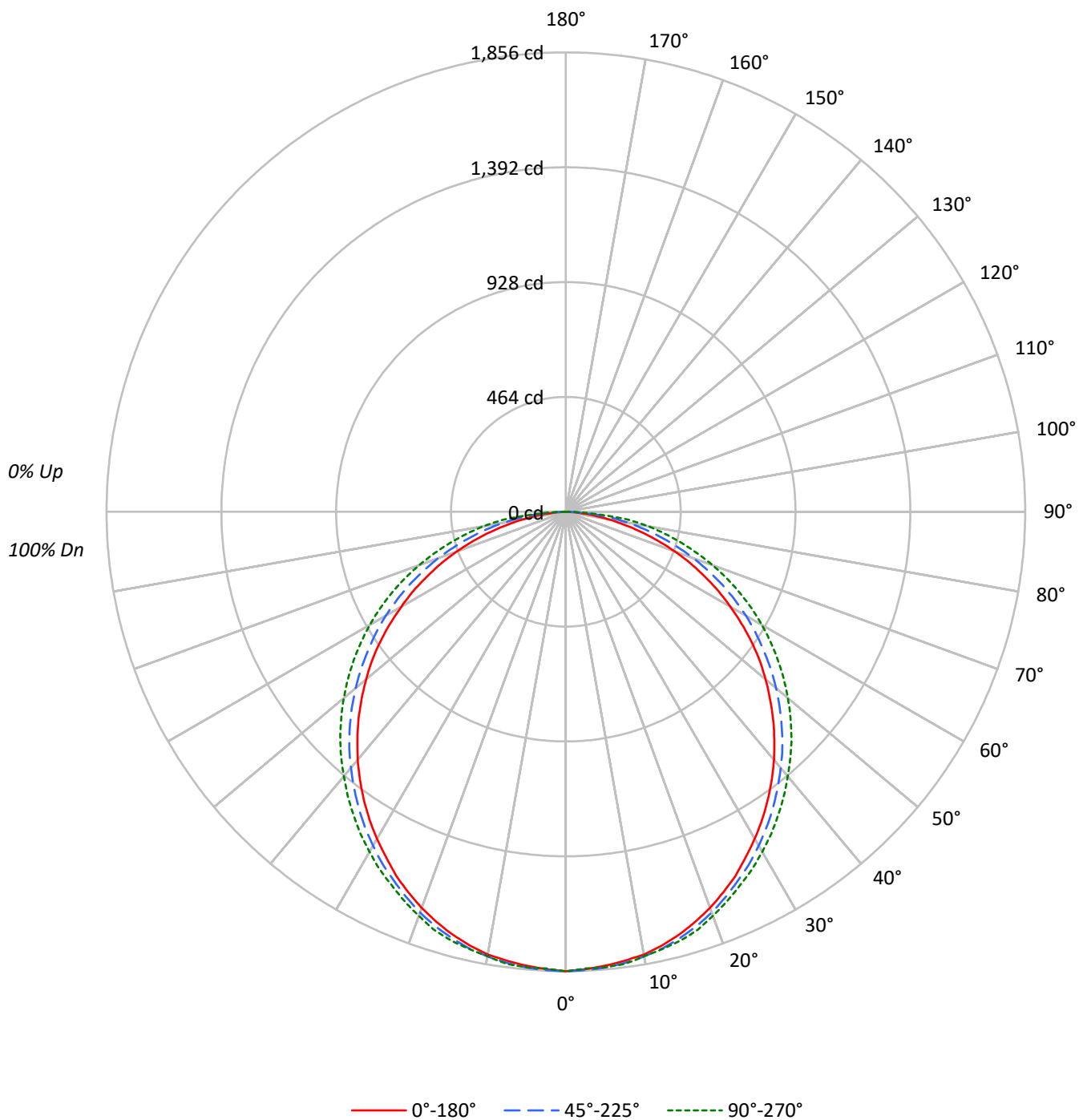
Lumens per Lamp: N/A
Luminaire Lumens: 5420.0 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 40.9
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: P1588388

CATALOG NUMBER: 24CZSP-57-L945-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588388

CATALOG NUMBER: 24CZSP-57-L945-S

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°	2843	2843	2843
5°	2830	2842	2840
10°	2824	2837	2836
15°	2804	2827	2844
20°	2776	2809	2832
25°	2741	2780	2814
30°	2699	2755	2806
35°	2660	2729	2797
40°	2616	2701	2789
45°	2566	2674	2792
50°	2511	2641	2791
55°	2445	2604	2795
60°	2353	2576	2802
65°	2246	2526	2810
70°	2093	2455	2823
75°	1865	2358	2851
80°	1542	2245	2990
85°	1003	2028	2613

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3084 cd/sqm

TEST NUMBER: P1588388

CATALOG NUMBER: 24CZSP-57-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	3.2
10°-20°	502.8	9.3
20°-30°	758.2	14.0
30°-40°	913.3	16.8
40°-50°	953.8	17.6
50°-60°	875.9	16.2
60°-70°	689.9	12.7
70°-80°	423.2	7.8
80°-90°	127.4	2.4
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°	1436.5	26.5
0°-40°	2349.8	43.4
0°-60°	4179.5	77.1
0°-90°	5420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5420.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1841	1843	1848	1854	1847	175
15°	1768	1772	1783	1794	1794	499
25°	1622	1626	1645	1665	1665	747
35°	1422	1430	1459	1489	1496	890
45°	1184	1198	1234	1277	1289	913
55°	916	932	975	1030	1047	818
65°	620	641	697	755	775	613
75°	315	340	398	461	482	334
85°	57	78	115	146	149	75
90°	0	0	0	0	0	

TEST NUMBER: P1588388

CATALOG NUMBER: 24CZSP-57-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.5	1856.5	1856.5	1856.5	1856.5
2.5°	1849.4	1852.9	1854.1	1855.3	1847.0
5°	1841.0	1843.4	1848.2	1854.1	1847.0
7.5°	1829.1	1831.5	1837.5	1845.8	1842.2
10°	1816.1	1817.2	1824.4	1830.3	1823.2
12.5°	1794.7	1798.2	1806.5	1811.3	1808.9
15°	1768.5	1772.1	1782.8	1793.5	1793.5
17.5°	1737.6	1742.3	1755.4	1769.7	1770.9
20°	1703.1	1706.6	1723.3	1737.6	1737.6
22.5°	1663.8	1668.6	1685.2	1700.7	1703.1
25°	1622.2	1625.8	1644.8	1665.0	1665.0
27.5°	1573.4	1580.6	1604.4	1624.6	1629.3
30°	1525.9	1531.8	1558.0	1583.0	1586.5
32.5°	1475.9	1483.1	1510.4	1537.8	1543.7
35°	1422.4	1429.5	1459.3	1489.0	1496.1
37.5°	1366.5	1374.8	1405.8	1440.2	1447.4
40°	1308.2	1317.7	1351.0	1387.9	1395.0
42.5°	1246.4	1259.5	1295.1	1333.2	1343.9
45°	1184.5	1197.6	1234.5	1277.3	1289.2
47.5°	1119.1	1134.6	1172.6	1217.8	1230.9
50°	1053.7	1069.2	1108.4	1157.2	1171.5
52.5°	987.1	1002.6	1043.0	1094.2	1109.6
55°	915.8	932.4	975.2	1029.9	1046.6
57.5°	842.0	863.4	908.6	964.5	981.2
60°	768.3	789.7	840.8	895.5	914.6
62.5°	695.7	716.0	768.3	826.6	846.8
65°	619.6	641.0	696.9	755.2	775.4
67.5°	544.7	566.1	622.0	682.7	704.1
70°	467.4	491.2	548.3	608.9	630.3
72.5°	390.1	415.1	473.3	535.2	555.4
75°	315.2	340.1	398.4	461.4	481.7
77.5°	241.4	268.8	325.9	390.1	409.1
80°	174.8	201.0	254.5	317.5	339.0
82.5°	111.8	134.4	187.9	247.4	262.8
85°	57.1	78.5	115.4	146.3	148.7
87.5°	17.8	25.0	38.1	57.1	58.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588388

CATALOG NUMBER: 24CZSP-57-L945-S

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	16.77	15.47	17.09	17.40	15.94	17.60	16.30	17.92	18.23
	3H	16.86	18.37	17.24	18.70	19.06	18.06	19.56	18.43	19.89	20.25
	4H	17.48	18.91	17.88	19.25	19.63	18.94	20.37	19.34	20.71	21.09
	6H	17.89	19.21	18.30	19.58	19.97	19.73	21.05	20.14	21.41	21.80
	8H	18.00	19.26	18.43	19.65	20.05	20.05	21.31	20.47	21.70	22.09
	12H	18.05	19.26	18.48	19.65	20.07	20.26	21.47	20.69	21.85	22.28
4H	2H	15.88	17.30	16.28	17.65	18.02	16.53	17.95	16.92	18.30	18.67
	3H	17.86	19.06	18.27	19.45	19.85	18.88	20.08	19.29	20.48	20.88
	4H	18.59	19.68	19.03	20.09	20.53	19.93	21.02	20.36	21.43	21.87
	6H	19.12	20.08	19.58	20.52	20.97	20.89	21.84	21.34	22.28	22.73
	8H	19.27	20.16	19.73	20.60	21.07	21.28	22.18	21.74	22.62	23.08
	12H	19.35	20.16	19.83	20.63	21.10	21.56	22.36	22.04	22.84	23.31
8H	4H	19.05	19.95	19.51	20.39	20.85	20.22	21.12	20.68	21.56	22.02
	6H	19.71	20.46	20.21	20.95	21.42	21.33	22.08	21.83	22.57	23.04
	8H	19.93	20.59	20.43	21.10	21.58	21.85	22.52	22.35	23.02	23.50
	12H	20.06	20.66	20.57	21.15	21.70	22.23	22.82	22.74	23.31	23.87
12H	4H	19.14	19.95	19.62	20.42	20.89	20.25	21.05	20.73	21.53	21.99
	6H	19.85	20.52	20.35	21.02	21.51	21.38	22.05	21.89	22.56	23.04
	8H	20.12	20.72	20.63	21.21	21.77	21.96	22.55	22.47	23.04	23.60