

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: P1588748

Luminaire Tested: 24CZSP-A-57HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588748
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-A-57HE-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

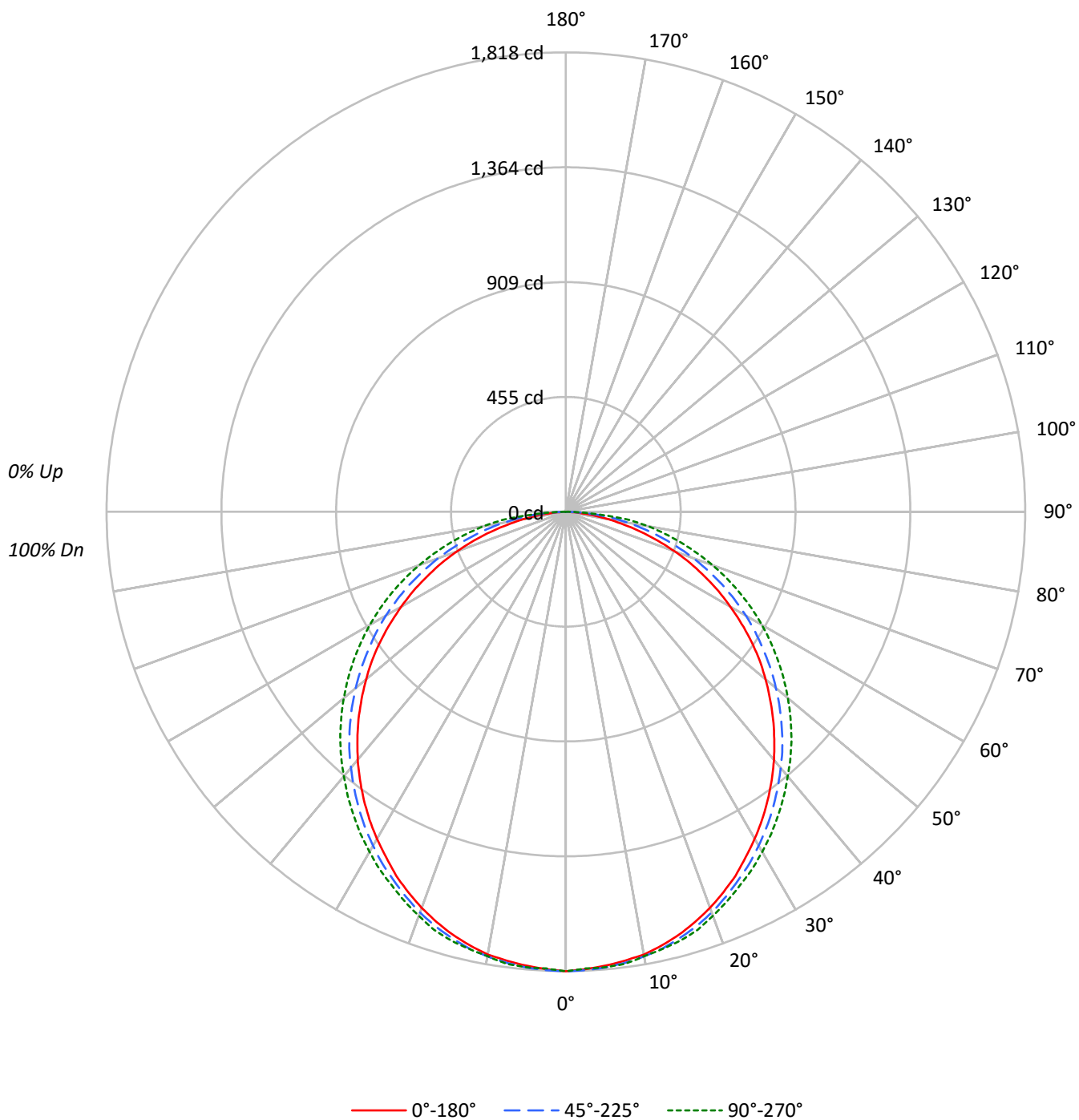
Lumens per Lamp: N/A
Luminaire Lumens: 5309.0 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 39.4
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2785	2785	2785
5°	2773	2783	2782
10°	2767	2779	2778
15°	2747	2769	2786
20°	2719	2751	2774
25°	2685	2723	2756
30°	2643	2699	2748
35°	2605	2673	2740
40°	2562	2646	2732
45°	2513	2619	2735
50°	2459	2587	2734
55°	2395	2551	2737
60°	2305	2523	2744
65°	2199	2474	2753
70°	2050	2405	2765
75°	1827	2310	2792
80°	1510	2199	2928
85°	982	1986	2559

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3022 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	3.2
10°-20°	492.5	9.3
20°-30°	742.7	14.0
30°-40°	894.6	16.8
40°-50°	934.2	17.6
50°-60°	858.0	16.2
60°-70°	675.8	12.7
70°-80°	414.6	7.8
80°-90°	124.8	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°	1407.1	26.5
0°-40°	2301.7	43.4
0°-60°	4093.9	77.1
0°-90°	5309.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5309.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1803	1806	1810	1816	1809	171
15°	1732	1736	1746	1757	1757	488
25°	1589	1592	1611	1631	1631	731
35°	1393	1400	1429	1458	1466	871
45°	1160	1173	1209	1251	1263	895
55°	897	913	955	1009	1025	801
65°	607	628	683	740	760	600
75°	309	333	390	452	472	327
85°	56	77	113	143	146	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.5	1818.5	1818.5	1818.5	1818.5
2.5°	1811.5	1815.0	1816.1	1817.3	1809.2
5°	1803.3	1805.7	1810.3	1816.1	1809.2
7.5°	1791.7	1794.0	1799.8	1808.0	1804.5
10°	1778.9	1780.0	1787.0	1792.8	1785.9
12.5°	1757.9	1761.4	1769.5	1774.2	1771.9
15°	1732.3	1735.8	1746.2	1756.7	1756.7
17.5°	1702.0	1706.6	1719.5	1733.4	1734.6
20°	1668.2	1671.7	1688.0	1702.0	1702.0
22.5°	1629.8	1634.4	1650.7	1665.9	1668.2
25°	1589.0	1592.5	1611.1	1630.9	1630.9
27.5°	1541.2	1548.2	1571.5	1591.3	1596.0
30°	1494.6	1500.4	1526.1	1550.5	1554.0
32.5°	1445.7	1452.7	1479.5	1506.3	1512.1
35°	1393.3	1400.3	1429.4	1458.5	1465.5
37.5°	1338.5	1346.7	1377.0	1410.7	1417.7
40°	1281.4	1290.8	1323.4	1359.5	1366.5
42.5°	1220.9	1233.7	1268.6	1305.9	1316.4
45°	1160.3	1173.1	1209.2	1251.1	1262.8
47.5°	1096.2	1111.4	1148.6	1192.9	1205.7
50°	1032.1	1047.3	1085.7	1133.5	1147.5
52.5°	966.9	982.0	1021.7	1071.7	1086.9
55°	897.0	913.3	955.3	1008.8	1025.1
57.5°	824.8	845.7	890.0	944.8	961.1
60°	752.6	773.5	823.6	877.2	895.8
62.5°	681.5	701.3	752.6	809.6	829.4
65°	606.9	627.9	682.7	739.7	759.5
67.5°	533.5	554.5	609.3	668.7	689.6
70°	457.8	481.1	537.0	596.5	617.4
72.5°	382.1	406.6	463.6	524.2	544.0
75°	308.7	333.2	390.3	452.0	471.8
77.5°	236.5	263.3	319.2	382.1	400.7
80°	171.2	196.9	249.3	311.0	332.0
82.5°	109.5	131.6	184.1	242.3	257.5
85°	55.9	76.9	113.0	143.3	145.6
87.5°	17.5	24.5	37.3	55.9	57.1
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	15.04	16.70	15.40	17.01	17.33	15.87	17.53	16.23	17.84	18.16
	3H	16.79	18.30	17.17	18.63	18.99	17.98	19.49	18.36	19.82	20.18
	4H	17.41	18.83	17.81	19.18	19.56	18.87	20.29	19.27	20.64	21.02
	6H	17.82	19.14	18.23	19.51	19.90	19.65	20.97	20.06	21.34	21.73
	8H	17.93	19.19	18.35	19.58	19.98	19.97	21.24	20.40	21.62	22.02
	12H	17.98	19.19	18.41	19.57	20.00	20.19	21.40	20.61	21.78	22.21
4H	2H	15.81	17.23	16.21	17.58	17.95	16.46	17.88	16.85	18.22	18.60
	3H	17.79	18.98	18.19	19.38	19.78	18.81	20.01	19.22	20.40	20.80
	4H	18.52	19.61	18.95	20.02	20.46	19.86	20.95	20.29	21.36	21.80
	6H	19.05	20.00	19.50	20.44	20.90	20.81	21.77	21.27	22.21	22.66
	8H	19.20	20.09	19.66	20.53	21.00	21.21	22.10	21.67	22.55	23.01
	12H	19.28	20.08	19.76	20.56	21.03	21.49	22.29	21.97	22.77	23.23
8H	4H	18.98	19.87	19.44	20.32	20.78	20.15	21.04	20.61	21.48	21.95
	6H	19.64	20.39	20.13	20.87	21.35	21.26	22.01	21.75	22.49	22.97
	8H	19.85	20.52	20.36	21.03	21.51	21.77	22.44	22.28	22.95	23.43
	12H	19.99	20.58	20.50	21.07	21.63	22.16	22.75	22.67	23.24	23.80
12H	4H	19.07	19.87	19.55	20.35	20.82	20.18	20.98	20.65	21.45	21.92
	6H	19.77	20.44	20.28	20.95	21.43	21.31	21.98	21.82	22.48	22.97
	8H	20.05	20.64	20.56	21.13	21.69	21.89	22.48	22.39	22.97	23.53