

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: P1588364

Luminaire Tested: 24CZSP-52HE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588364
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-52HE-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 5000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

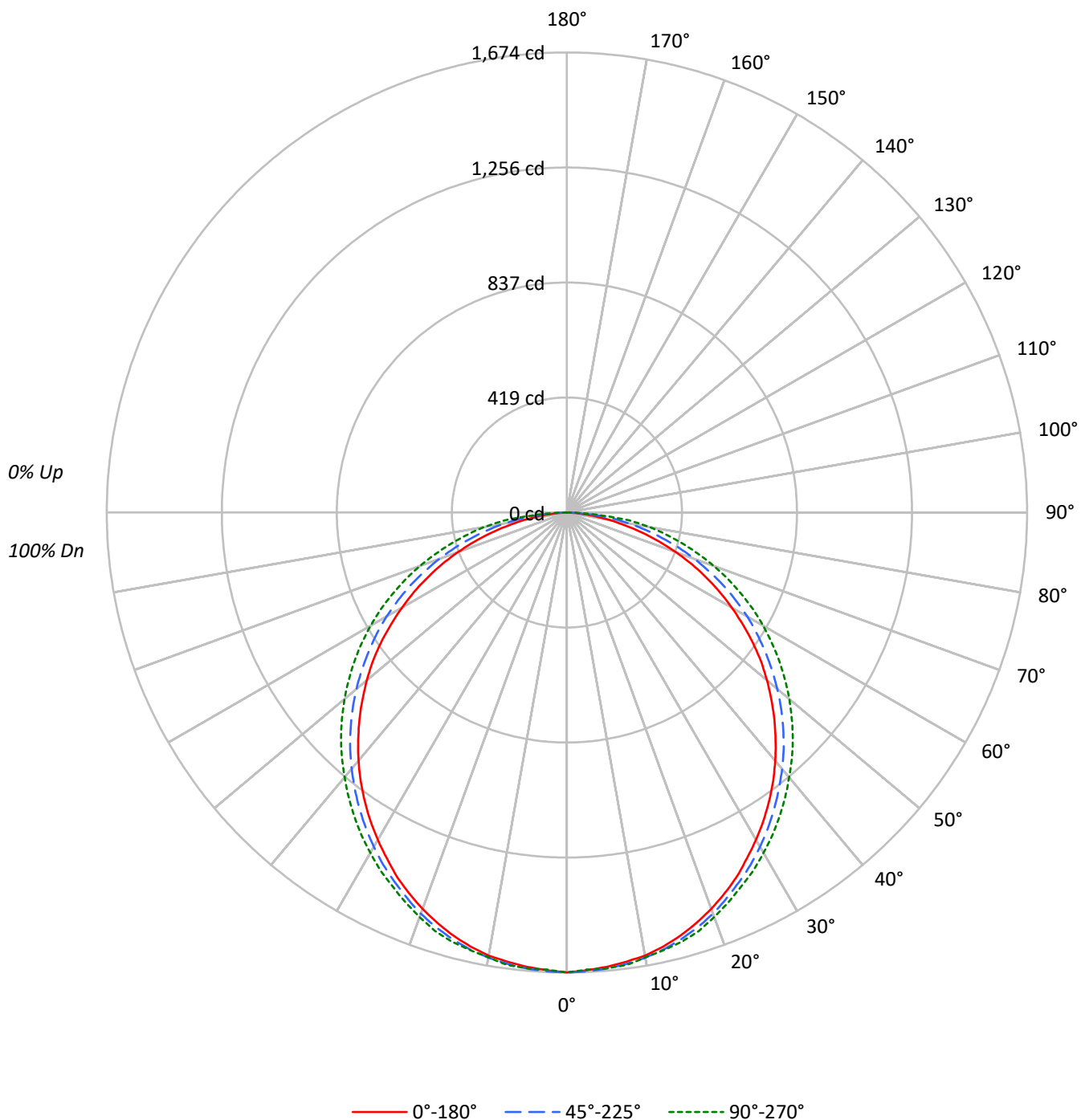
Lumens per Lamp: N/A
Luminaire Lumens: 4886.0 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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			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°	2563	2563	2563
5°	2552	2562	2560
10°	2546	2558	2556
15°	2528	2548	2564
20°	2502	2532	2553
25°	2471	2506	2537
30°	2433	2484	2529
35°	2398	2460	2522
40°	2358	2435	2514
45°	2313	2411	2517
50°	2263	2381	2516
55°	2204	2347	2519
60°	2122	2322	2526
65°	2024	2277	2533
70°	1887	2213	2544
75°	1681	2126	2569
80°	1390	2023	2695
85°	905	1828	2355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2780 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	3.2
10°-20°	453.2	9.3
20°-30°	683.5	14.0
30°-40°	823.3	16.8
40°-50°	859.8	17.6
50°-60°	789.6	16.2
60°-70°	621.9	12.7
70°-80°	381.6	7.8
80°-90°	114.8	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°	1295.0	26.5
0°-40°	2118.3	43.4
0°-60°	3767.7	77.1
0°-90°	4886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1674	1674	1674	1674	1674	
5°	1660	1662	1666	1671	1665	158
15°	1594	1598	1607	1617	1617	450
25°	1462	1466	1483	1501	1501	673
35°	1282	1289	1316	1342	1349	802
45°	1068	1080	1113	1152	1162	823
55°	826	840	879	928	944	737
65°	559	578	628	681	699	553
75°	284	307	359	416	434	301
85°	52	71	104	132	134	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1673.6	1673.6	1673.6	1673.6	1673.6
2.5°	1667.2	1670.4	1671.4	1672.5	1665.0
5°	1659.6	1661.8	1666.1	1671.4	1665.0
7.5°	1648.9	1651.1	1656.4	1663.9	1660.7
10°	1637.1	1638.2	1644.6	1650.0	1643.6
12.5°	1617.8	1621.1	1628.6	1632.8	1630.7
15°	1594.2	1597.5	1607.1	1616.8	1616.8
17.5°	1566.4	1570.7	1582.5	1595.3	1596.4
20°	1535.3	1538.5	1553.5	1566.4	1566.4
22.5°	1499.9	1504.2	1519.2	1533.1	1535.3
25°	1462.4	1465.6	1482.7	1501.0	1501.0
27.5°	1418.4	1424.9	1446.3	1464.5	1468.8
30°	1375.5	1380.9	1404.5	1427.0	1430.2
32.5°	1330.5	1336.9	1361.6	1386.3	1391.6
35°	1282.3	1288.7	1315.5	1342.3	1348.7
37.5°	1231.9	1239.4	1267.3	1298.3	1304.8
40°	1179.3	1187.9	1217.9	1251.2	1257.6
42.5°	1123.6	1135.4	1167.5	1201.9	1211.5
45°	1067.8	1079.6	1112.9	1151.5	1162.2
47.5°	1008.9	1022.8	1057.1	1097.9	1109.6
50°	949.9	963.8	999.2	1043.2	1056.0
52.5°	889.9	903.8	940.3	986.4	1000.3
55°	825.5	840.5	879.1	928.5	943.5
57.5°	759.1	778.4	819.1	869.5	884.5
60°	692.6	711.9	758.0	807.3	824.5
62.5°	627.2	645.4	692.6	745.1	763.4
65°	558.6	577.9	628.3	680.8	699.0
67.5°	491.0	510.3	560.7	615.4	634.7
70°	421.3	442.8	494.2	548.9	568.2
72.5°	351.7	374.2	426.7	482.5	500.7
75°	284.1	306.6	359.2	416.0	434.2
77.5°	217.6	242.3	293.8	351.7	368.8
80°	157.6	181.2	229.4	286.3	305.6
82.5°	100.8	121.2	169.4	223.0	236.9
85°	51.5	70.8	104.0	131.9	134.0
87.5°	16.1	22.5	34.3	51.5	52.5
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	14.75	16.41	15.11	16.73	17.04	15.58	17.24	15.94	17.56	17.87
	3H	16.50	18.01	16.88	18.34	18.70	17.70	19.20	18.07	19.53	19.89
	4H	17.12	18.55	17.52	18.89	19.27	18.58	20.01	18.98	20.35	20.73
	6H	17.53	18.85	17.94	19.22	19.61	19.37	20.69	19.78	21.05	21.44
	8H	17.64	18.90	18.06	19.29	19.69	19.69	20.95	20.11	21.34	21.73
	12H	17.69	18.90	18.12	19.28	19.71	19.90	21.11	20.33	21.49	21.92
4H	2H	15.52	16.94	15.92	17.29	17.66	16.17	17.59	16.56	17.94	18.31
	3H	17.50	18.70	17.91	19.09	19.49	18.52	19.72	18.93	20.12	20.52
	4H	18.23	19.32	18.66	19.73	20.17	19.57	20.66	20.00	21.07	21.51
	6H	18.76	19.72	19.22	20.15	20.61	20.53	21.48	20.98	21.92	22.37
	8H	18.91	19.80	19.37	20.24	20.71	20.92	21.82	21.38	22.26	22.72
	12H	18.99	19.80	19.47	20.27	20.74	21.20	22.00	21.68	22.48	22.95
8H	4H	18.69	19.59	19.15	20.03	20.49	19.86	20.75	20.32	21.20	21.66
	6H	19.35	20.10	19.85	20.59	21.06	20.97	21.72	21.47	22.21	22.68
	8H	19.57	20.23	20.07	20.74	21.22	21.49	22.15	21.99	22.66	23.14
	12H	19.70	20.30	20.21	20.79	21.34	21.87	22.46	22.38	22.95	23.51
12H	4H	18.78	19.59	19.26	20.06	20.53	19.89	20.69	20.37	21.16	21.63
	6H	19.49	20.16	19.99	20.66	21.15	21.02	21.69	21.53	22.20	22.68
	8H	19.76	20.36	20.27	20.85	21.40	21.60	22.19	22.11	22.68	23.24