

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: P1588363

Luminaire Tested: 24CZSP-52HE-L930

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-52HE-L930
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 5000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

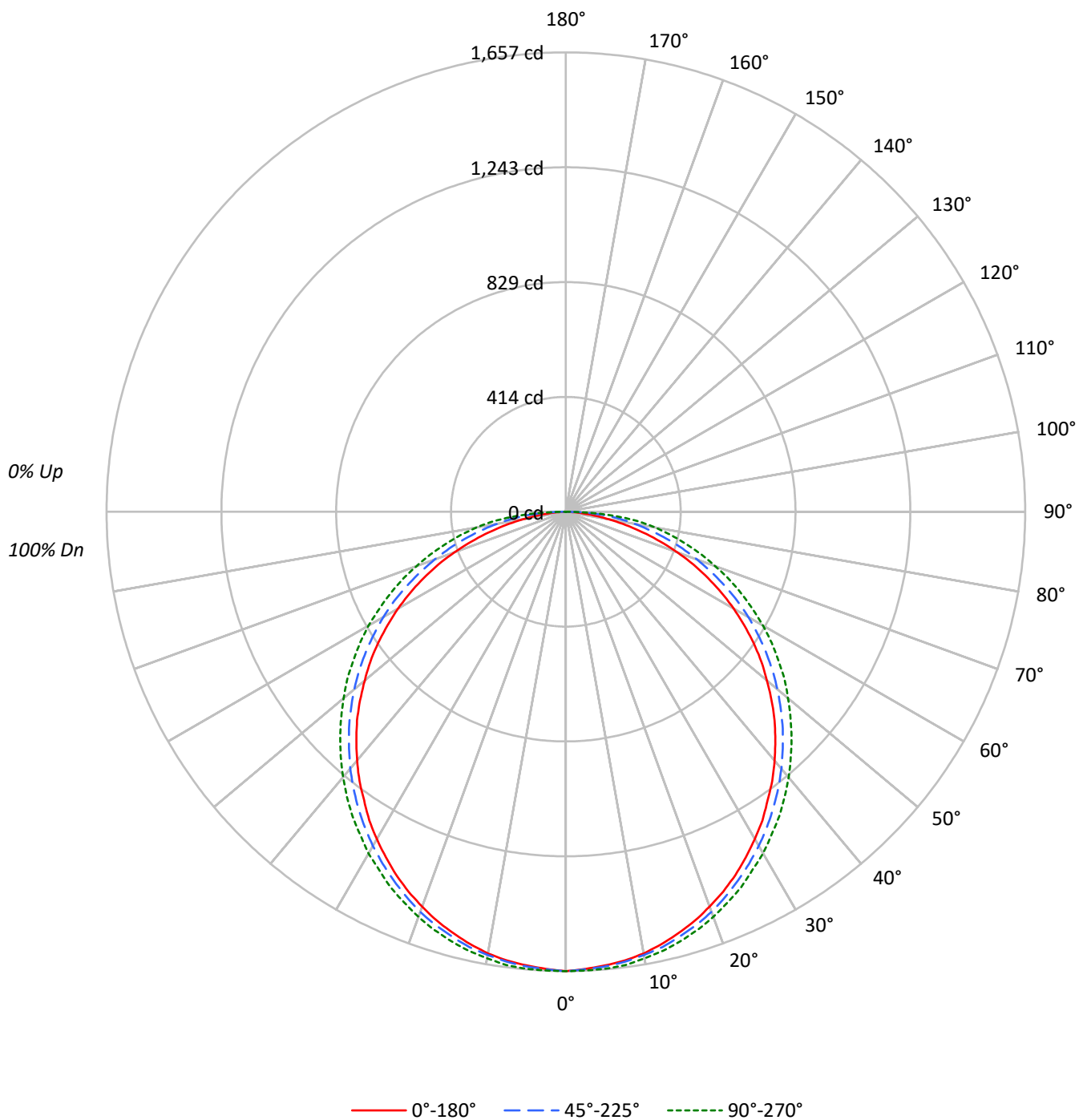
Lumens per Lamp: N/A
Luminaire Lumens: 4916.0 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588363

CATALOG NUMBER: 24CZSP-52HE-L930

Luminous Intensity Polar Plot



TEST NUMBER: P1588363

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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	85	85	85	82
2	98	89	82	76	95	87	81	75	84	78	73	81	76	72	77	74	70	70	70	68
3	89	78	70	63	87	77	69	62	74	67	61	71	65	60	68	63	59	59	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	51	51	51	48
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	38	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	34	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	30	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	27	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	25	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2538	2538	2538
5°	2525	2531	2544
10°	2516	2524	2543
15°	2494	2515	2541
20°	2470	2504	2535
25°	2444	2481	2527
30°	2411	2462	2517
35°	2373	2440	2508
40°	2342	2418	2500
45°	2307	2396	2493
50°	2256	2373	2493
55°	2209	2351	2500
60°	2142	2330	2517
65°	2051	2293	2534
70°	1919	2254	2565
75°	1707	2222	2649
80°	1404	2232	2880
85°	956	2487	3181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3181 cd/sqm

TEST NUMBER: P1588363

CATALOG NUMBER: 24CZSP-52HE-L930

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	3.2
10°-20°	449.0	9.1
20°-30°	679.0	13.8
30°-40°	819.4	16.7
40°-50°	856.8	17.4
50°-60°	790.5	16.1
60°-70°	628.6	12.8
70°-80°	396.7	8.1
80°-90°	139.1	2.8
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°	1284.9	26.1
0°-40°	2104.3	42.8
0°-60°	3751.6	76.3
0°-90°	4916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1657	1657	1657	1657	1657	
5°	1642	1654	1646	1650	1654	156
15°	1573	1590	1586	1599	1603	444
25°	1446	1468	1468	1487	1495	666
35°	1269	1297	1305	1331	1342	795
45°	1065	1088	1106	1139	1151	820
55°	827	852	880	922	936	739
65°	566	592	633	686	699	559
75°	288	321	376	431	448	306
85°	54	90	142	176	181	69
90°	0	0	0	0	0	

TEST NUMBER: P1588363

CATALOG NUMBER: 24CZSP-52HE-L930

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.2	1657.2	1657.2	1657.2	1657.2
2.5°	1650.4	1661.3	1651.8	1657.2	1655.8
5°	1642.2	1654.5	1646.3	1650.4	1654.5
7.5°	1632.7	1646.3	1636.8	1643.6	1649.0
10°	1617.7	1631.3	1623.2	1631.3	1635.4
12.5°	1597.3	1613.7	1608.2	1617.7	1621.8
15°	1572.8	1590.5	1586.4	1598.7	1602.8
17.5°	1547.0	1566.0	1563.3	1576.9	1581.0
20°	1515.7	1537.5	1536.1	1549.7	1555.2
22.5°	1483.0	1504.8	1503.5	1518.4	1525.2
25°	1446.3	1468.1	1468.1	1487.1	1495.3
27.5°	1405.5	1430.0	1431.3	1450.4	1457.2
30°	1363.3	1387.8	1391.9	1412.3	1423.2
32.5°	1319.8	1342.9	1349.7	1372.8	1381.0
35°	1269.4	1296.6	1304.8	1330.7	1341.5
37.5°	1223.2	1247.7	1258.5	1285.8	1296.6
40°	1171.5	1197.3	1209.6	1239.5	1250.4
42.5°	1118.4	1144.3	1157.9	1190.5	1201.4
45°	1065.3	1088.5	1106.2	1138.8	1151.1
47.5°	1006.8	1032.7	1051.7	1087.1	1099.4
50°	947.0	974.2	996.0	1034.0	1046.3
52.5°	889.8	914.3	938.8	981.0	994.6
55°	827.2	851.7	880.3	922.5	936.1
57.5°	763.3	787.8	820.4	865.3	880.3
60°	699.3	723.8	760.6	806.8	821.8
62.5°	632.7	657.2	698.0	745.6	759.2
65°	566.0	591.9	632.7	685.7	699.3
67.5°	498.0	523.8	567.4	623.2	638.1
70°	428.6	457.2	503.4	559.2	572.8
72.5°	356.5	389.1	440.8	495.3	511.6
75°	288.4	321.1	375.5	431.3	447.6
77.5°	221.8	258.5	312.9	371.4	389.1
80°	159.2	195.9	253.1	310.2	326.5
82.5°	102.0	140.1	197.3	251.7	265.3
85°	54.4	89.8	141.5	175.5	181.0
87.5°	17.7	46.3	63.9	84.4	85.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588363

CATALOG NUMBER: 24CZSP-52HE-L930

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	14.79	16.46	15.16	16.78	17.09	15.51	17.19	15.88	17.50	17.81
	3H	16.58	18.10	16.96	18.42	18.78	17.68	19.20	18.06	19.52	19.88
	4H	17.21	18.64	17.61	18.99	19.36	18.61	20.05	19.01	20.39	20.77
	6H	17.63	18.97	18.04	19.33	19.72	19.47	20.81	19.88	21.17	21.56
	8H	17.75	19.02	18.17	19.41	19.81	19.85	21.12	20.27	21.51	21.91
	12H	17.80	19.03	18.23	19.41	19.84	20.16	21.38	20.59	21.76	22.19
4H	2H	15.56	16.99	15.95	17.34	17.71	16.12	17.55	16.52	17.90	18.27
	3H	17.58	18.79	17.99	19.19	19.58	18.53	19.74	18.94	20.14	20.53
	4H	18.34	19.44	18.77	19.85	20.29	19.63	20.73	20.06	21.14	21.58
	6H	18.90	19.86	19.35	20.30	20.75	20.67	21.64	21.13	22.08	22.53
	8H	19.06	19.96	19.51	20.40	20.86	21.14	22.04	21.60	22.48	22.95
	12H	19.15	19.97	19.63	20.44	20.91	21.53	22.35	22.01	22.82	23.29
8H	4H	18.83	19.73	19.29	20.18	20.64	19.95	20.85	20.41	21.29	21.76
	6H	19.54	20.30	20.03	20.78	21.25	21.17	21.92	21.66	22.41	22.88
	8H	19.78	20.46	20.29	20.96	21.45	21.77	22.45	22.27	22.95	23.43
	12H	19.95	20.55	20.46	21.04	21.60	22.31	22.91	22.81	23.40	23.96
12H	4H	18.93	19.75	19.41	20.22	20.69	19.98	20.80	20.46	21.27	21.74
	6H	19.70	20.38	20.21	20.89	21.37	21.23	21.91	21.74	22.42	22.90
	8H	20.02	20.63	20.53	21.12	21.67	21.91	22.51	22.41	23.00	23.56