

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: P1589738

Luminaire Tested: 24CZSP-SB-42-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-42-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

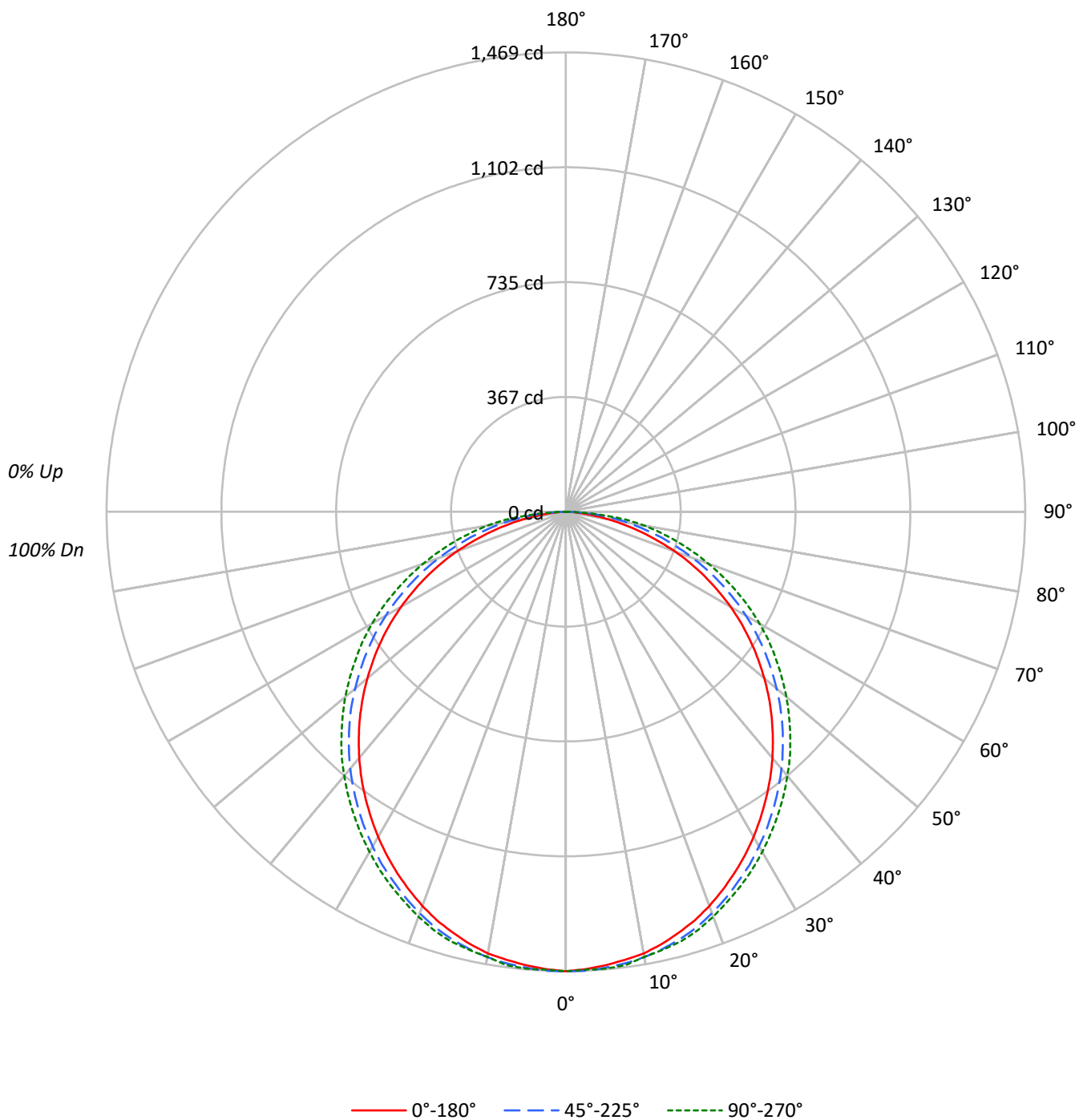
Lumens per Lamp: N/A
Luminaire Lumens: 4274.0 lumens
Efficiency: N/A
Efficacy: 148.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.7
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
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	100		
1	108	103	99	95	106	101	97	93	97	94	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	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	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	45	39	50	44	39	37		
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	33		
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2250	2250	2250
5°	2238	2250	2255
10°	2231	2249	2248
15°	2210	2242	2255
20°	2187	2227	2246
25°	2155	2205	2233
30°	2124	2185	2221
35°	2089	2164	2211
40°	2055	2145	2204
45°	2017	2123	2199
50°	1974	2097	2193
55°	1925	2070	2190
60°	1865	2039	2191
65°	1779	1996	2179
70°	1664	1935	2174
75°	1475	1861	2182
80°	1200	1768	2247
85°	775	1633	1938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	3.3
10°-20°	398.2	9.3
20°-30°	600.3	14.0
30°-40°	722.3	16.9
40°-50°	753.5	17.6
50°-60°	690.6	16.2
60°-70°	542.3	12.7
70°-80°	330.1	7.7
80°-90°	97.6	2.3
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°	1137.5	26.6
0°-40°	1859.9	43.5
0°-60°	3304.0	77.3
0°-90°	4274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1456	1465	1464	1462	1466	138
15°	1394	1408	1414	1416	1422	393
25°	1275	1293	1305	1313	1321	588
35°	1117	1135	1158	1174	1182	699
45°	931	951	980	1003	1015	718
55°	721	739	775	806	820	644
65°	491	509	551	588	601	486
75°	249	272	314	352	369	264
85°	44	62	93	104	110	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.3	1469.3	1469.3	1469.3	1469.3
2.5°	1463.7	1471.1	1469.3	1462.8	1465.6
5°	1455.5	1464.7	1463.7	1461.9	1466.5
7.5°	1445.3	1455.5	1456.4	1456.4	1461.9
10°	1434.3	1444.4	1446.3	1443.5	1445.3
12.5°	1415.9	1427.9	1431.6	1431.6	1434.3
15°	1393.9	1407.7	1414.1	1415.9	1422.4
17.5°	1370.0	1384.7	1392.9	1397.5	1403.1
20°	1341.5	1357.1	1366.3	1371.8	1378.2
22.5°	1309.3	1326.7	1336.9	1342.4	1349.7
25°	1275.3	1292.7	1304.7	1312.9	1321.2
27.5°	1239.4	1255.9	1272.5	1282.6	1290.0
30°	1200.8	1218.2	1235.7	1248.6	1255.9
32.5°	1159.4	1177.8	1198.0	1211.8	1220.1
35°	1117.1	1134.6	1157.6	1174.1	1182.4
37.5°	1073.9	1092.3	1116.2	1133.7	1143.8
40°	1027.9	1047.2	1073.0	1092.3	1102.4
42.5°	980.1	998.5	1027.0	1049.1	1061.0
45°	931.4	950.7	980.1	1003.1	1015.1
47.5°	880.8	899.2	931.4	958.0	968.2
50°	828.4	845.9	879.9	908.4	920.4
52.5°	775.1	793.5	827.5	857.8	870.7
55°	720.8	739.2	775.1	806.3	820.1
57.5°	665.7	684.1	720.8	753.0	769.6
60°	608.7	627.1	665.7	698.8	715.3
62.5°	549.8	569.1	608.7	642.7	660.2
65°	491.0	509.4	550.7	587.5	601.3
67.5°	432.1	450.5	491.0	527.8	544.3
70°	371.5	392.6	432.1	470.7	485.5
72.5°	308.0	331.9	371.5	411.9	426.6
75°	249.2	272.2	314.4	352.1	368.7
77.5°	191.2	216.1	255.6	294.2	310.8
80°	136.1	160.0	200.4	237.2	254.7
82.5°	86.4	107.6	148.0	181.1	194.0
85°	44.1	62.5	92.9	103.9	110.3
87.5°	12.9	22.1	33.1	41.4	46.0
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	14.32	15.98	14.68	16.29	16.61	15.05	16.71	15.42	17.03	17.34
	3H	16.09	17.59	16.46	17.92	18.28	17.13	18.64	17.51	18.96	19.32
	4H	16.71	18.13	17.10	18.47	18.85	18.00	19.42	18.39	19.76	20.14
	6H	17.11	18.43	17.52	18.80	19.19	18.74	20.06	19.15	20.42	20.81
	8H	17.22	18.48	17.64	18.87	19.26	19.04	20.30	19.46	20.69	21.08
	12H	17.27	18.47	17.69	18.86	19.28	19.23	20.44	19.66	20.82	21.25
4H	2H	15.09	16.51	15.48	16.85	17.23	15.66	17.08	16.05	17.42	17.80
	3H	17.08	18.27	17.49	18.67	19.07	17.97	19.17	18.38	19.56	19.96
	4H	17.82	18.90	18.25	19.32	19.75	18.99	20.07	19.42	20.48	20.92
	6H	18.35	19.30	18.80	19.74	20.19	19.89	20.84	20.35	21.28	21.74
	8H	18.49	19.38	18.95	19.82	20.29	20.26	21.15	20.72	21.59	22.06
	12H	18.57	19.37	19.05	19.85	20.31	20.51	21.32	20.99	21.79	22.26
8H	4H	18.27	19.15	18.72	19.60	20.06	19.29	20.18	19.74	20.62	21.08
	6H	18.93	19.67	19.42	20.16	20.63	20.34	21.09	20.84	21.57	22.05
	8H	19.14	19.80	19.65	20.31	20.79	20.82	21.48	21.32	21.99	22.47
	12H	19.27	19.86	19.78	20.35	20.91	21.17	21.76	21.67	22.25	22.81
12H	4H	18.35	19.15	18.83	19.62	20.09	19.31	20.11	19.79	20.59	21.06
	6H	19.05	19.72	19.56	20.22	20.71	20.39	21.06	20.90	21.57	22.05
	8H	19.33	19.92	19.83	20.41	20.97	20.93	21.52	21.44	22.01	22.57