

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: P1589770

Luminaire Tested: 24CZSP-SB-43HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589770
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-43HE-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

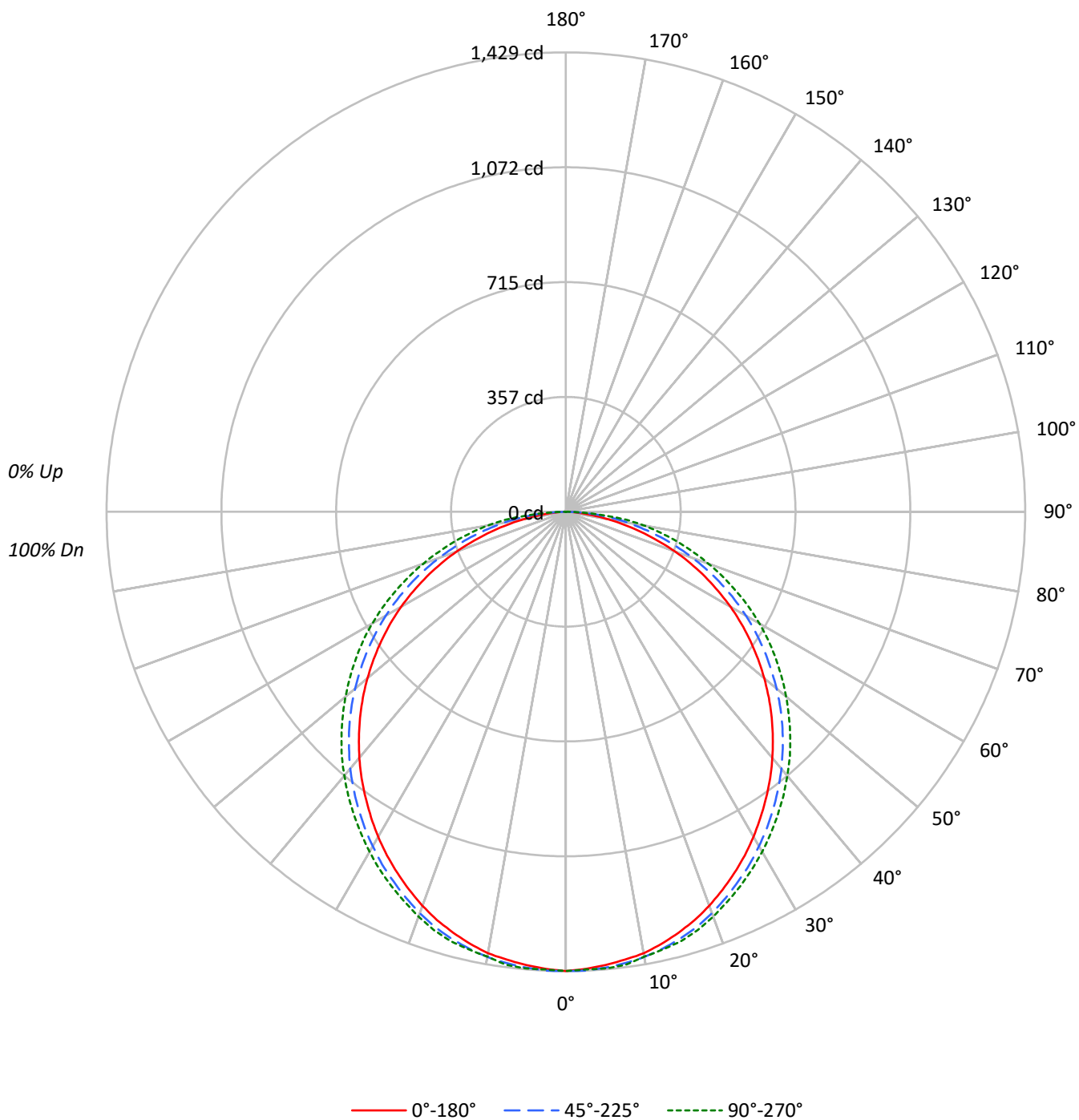
Lumens per Lamp: N/A
Luminaire Lumens: 4156.0 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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°	2188	2188	2188
5°	2176	2188	2192
10°	2169	2187	2186
15°	2149	2180	2193
20°	2126	2166	2184
25°	2096	2144	2171
30°	2065	2125	2160
35°	2031	2105	2150
40°	1998	2086	2143
45°	1962	2064	2138
50°	1919	2039	2132
55°	1872	2013	2130
60°	1813	1983	2131
65°	1730	1941	2119
70°	1618	1882	2114
75°	1434	1810	2122
80°	1167	1719	2185
85°	754	1587	1886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2213 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	3.3
10°-20°	387.2	9.3
20°-30°	583.7	14.0
30°-40°	702.4	16.9
40°-50°	732.7	17.6
50°-60°	671.6	16.2
60°-70°	527.3	12.7
70°-80°	321.0	7.7
80°-90°	94.9	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°	1106.1	26.6
0°-40°	1808.5	43.5
0°-60°	3212.7	77.3
0°-90°	4156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1415	1424	1423	1422	1426	134
15°	1355	1369	1375	1377	1383	382
25°	1240	1257	1269	1277	1285	571
35°	1086	1103	1126	1142	1150	680
45°	906	924	953	975	987	698
55°	701	719	754	784	798	626
65°	477	495	536	571	585	472
75°	242	265	306	342	358	257
85°	43	61	90	101	107	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1428.7	1428.7	1428.7	1428.7	1428.7
2.5°	1423.3	1430.5	1428.7	1422.4	1425.1
5°	1415.3	1424.2	1423.3	1421.5	1426.0
7.5°	1405.4	1415.3	1416.2	1416.2	1421.5
10°	1394.7	1404.5	1406.3	1403.7	1405.4
12.5°	1376.8	1388.5	1392.0	1392.0	1394.7
15°	1355.4	1368.8	1375.0	1376.8	1383.1
17.5°	1332.1	1346.4	1354.5	1359.0	1364.3
20°	1304.4	1319.6	1328.6	1333.9	1340.2
22.5°	1273.1	1290.1	1299.9	1305.3	1312.5
25°	1240.0	1257.0	1268.7	1276.7	1284.7
27.5°	1205.2	1221.3	1237.4	1247.2	1254.3
30°	1167.6	1184.6	1201.6	1214.1	1221.3
32.5°	1127.4	1145.3	1164.9	1178.4	1186.4
35°	1086.3	1103.3	1125.6	1141.7	1149.7
37.5°	1044.2	1062.1	1085.4	1102.4	1112.2
40°	999.5	1018.3	1043.4	1062.1	1072.0
42.5°	953.1	970.9	998.7	1020.1	1031.7
45°	905.7	924.4	953.1	975.4	987.0
47.5°	856.5	874.4	905.7	931.6	941.4
50°	805.5	822.5	855.6	883.3	894.9
52.5°	753.7	771.6	804.6	834.1	846.7
55°	700.9	718.8	753.7	784.1	797.5
57.5°	647.3	665.2	700.9	732.2	748.3
60°	591.9	609.7	647.3	679.5	695.6
62.5°	534.6	553.4	591.9	624.9	641.9
65°	477.4	495.3	535.5	571.3	584.7
67.5°	420.2	438.1	477.4	513.2	529.3
70°	361.2	381.8	420.2	457.8	472.1
72.5°	299.5	322.8	361.2	400.5	414.8
75°	242.3	264.6	305.8	342.4	358.5
77.5°	186.0	210.1	248.5	286.1	302.2
80°	132.3	155.6	194.9	230.7	247.7
82.5°	84.0	104.6	143.9	176.1	188.6
85°	42.9	60.8	90.3	101.0	107.3
87.5°	12.5	21.5	32.2	40.2	44.7
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	14.22	15.88	14.59	16.19	16.51	14.96	16.62	15.32	16.93	17.24
	3H	15.99	17.49	16.37	17.82	18.18	17.03	18.54	17.41	18.87	19.23
	4H	16.61	18.03	17.01	18.38	18.75	17.90	19.32	18.30	19.67	20.04
	6H	17.02	18.33	17.43	18.70	19.09	18.64	19.96	19.05	20.33	20.72
	8H	17.12	18.38	17.54	18.77	19.17	18.94	20.20	19.36	20.59	20.99
	12H	17.17	18.38	17.60	18.76	19.19	19.13	20.34	19.56	20.72	21.15
4H	2H	14.99	16.41	15.39	16.76	17.13	15.56	16.98	15.96	17.33	17.70
	3H	16.98	18.18	17.39	18.57	18.97	17.87	19.07	18.28	19.46	19.86
	4H	17.72	18.81	18.15	19.22	19.65	18.89	19.98	19.32	20.39	20.82
	6H	18.25	19.20	18.70	19.64	20.09	19.80	20.75	20.25	21.19	21.64
	8H	18.39	19.28	18.85	19.72	20.19	20.16	21.05	20.62	21.49	21.96
	12H	18.47	19.27	18.95	19.75	20.22	20.42	21.22	20.90	21.69	22.16
8H	4H	18.17	19.06	18.63	19.50	19.96	19.19	20.08	19.65	20.52	20.98
	6H	18.83	19.57	19.32	20.06	20.53	20.25	20.99	20.74	21.48	21.95
	8H	19.04	19.71	19.55	20.21	20.70	20.72	21.38	21.23	21.89	22.37
	12H	19.18	19.77	19.68	20.26	20.82	21.07	21.66	21.58	22.15	22.71
12H	4H	18.25	19.05	18.73	19.52	19.99	19.22	20.02	19.69	20.49	20.96
	6H	18.95	19.62	19.46	20.13	20.61	20.30	20.96	20.80	21.47	21.95
	8H	19.23	19.82	19.74	20.31	20.87	20.83	21.42	21.34	21.91	22.47