

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: P1589722

Luminaire Tested: 24CZSP-SB-37HE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589722
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-37HE-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 3500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

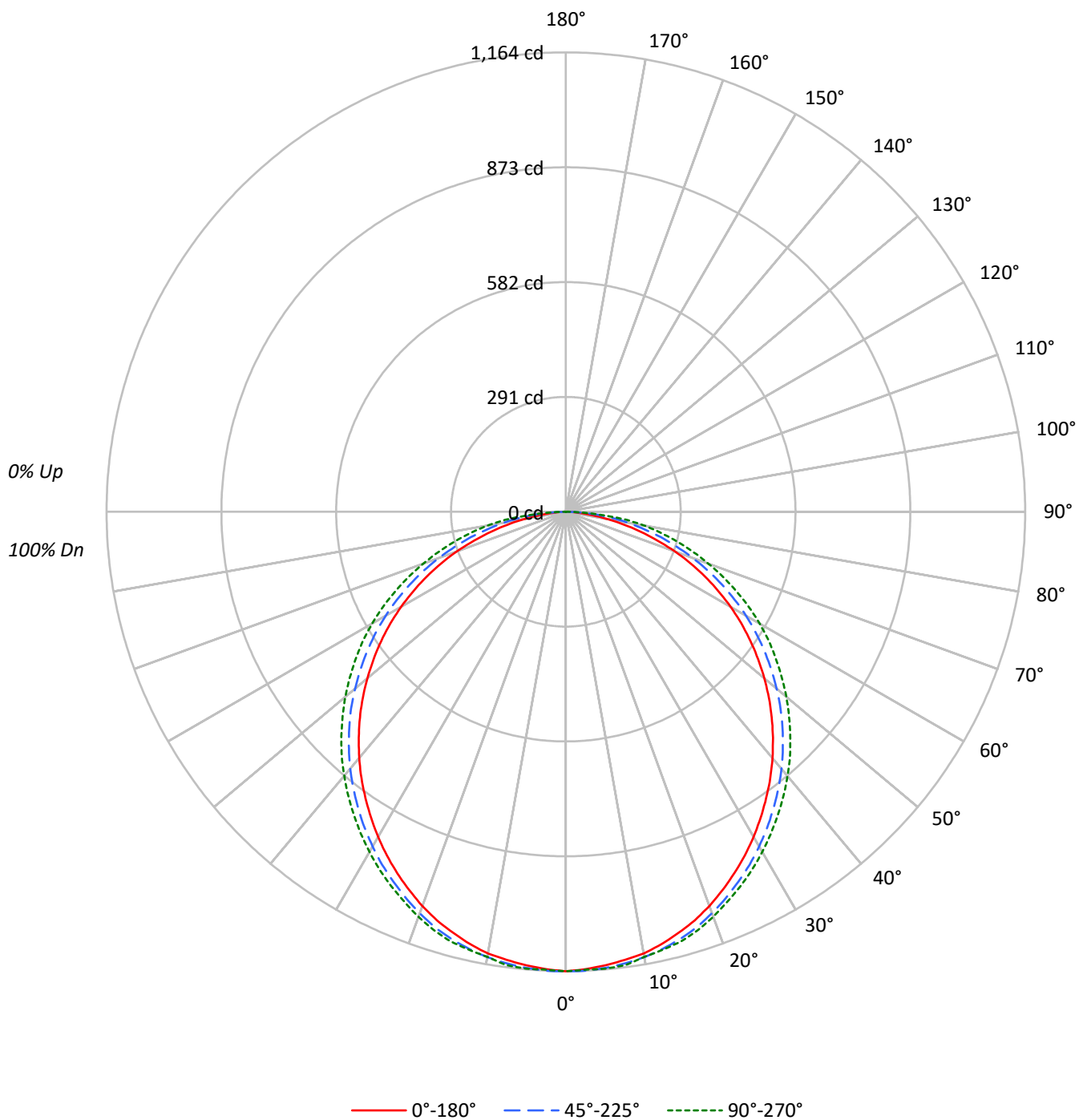
Lumens per Lamp: N/A
Luminaire Lumens: 3387.0 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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	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°	1783	1783	1783
5°	1773	1783	1787
10°	1768	1782	1781
15°	1752	1777	1787
20°	1733	1765	1780
25°	1708	1747	1769
30°	1683	1732	1760
35°	1655	1715	1752
40°	1629	1700	1747
45°	1599	1682	1742
50°	1564	1662	1738
55°	1525	1640	1735
60°	1477	1616	1737
65°	1410	1582	1727
70°	1318	1534	1723
75°	1169	1475	1729
80°	951	1401	1780
85°	615	1293	1536

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1804 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	3.3
10°-20°	315.5	9.3
20°-30°	475.7	14.0
30°-40°	572.4	16.9
40°-50°	597.1	17.6
50°-60°	547.3	16.2
60°-70°	429.8	12.7
70°-80°	261.6	7.7
80°-90°	77.4	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°	901.5	26.6
0°-40°	1473.9	43.5
0°-60°	2618.3	77.3
0°-90°	3387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3387.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1153	1161	1160	1158	1162	110
15°	1105	1116	1121	1122	1127	312
25°	1011	1024	1034	1040	1047	466
35°	885	899	917	930	937	554
45°	738	753	777	795	804	569
55°	571	586	614	639	650	510
65°	389	404	436	466	476	385
75°	198	216	249	279	292	209
85°	35	50	74	82	87	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1164.3	1164.3	1164.3	1164.3	1164.3
2.5°	1160.0	1165.8	1164.3	1159.2	1161.4
5°	1153.4	1160.7	1160.0	1158.5	1162.1
7.5°	1145.4	1153.4	1154.1	1154.1	1158.5
10°	1136.6	1144.7	1146.1	1143.9	1145.4
12.5°	1122.1	1131.5	1134.5	1134.5	1136.6
15°	1104.6	1115.5	1120.6	1122.1	1127.2
17.5°	1085.6	1097.3	1103.9	1107.5	1111.9
20°	1063.1	1075.4	1082.7	1087.1	1092.2
22.5°	1037.6	1051.4	1059.4	1063.8	1069.6
25°	1010.6	1024.4	1033.9	1040.5	1047.0
27.5°	982.2	995.3	1008.4	1016.4	1022.3
30°	951.6	965.4	979.3	989.5	995.3
32.5°	918.8	933.4	949.4	960.3	966.9
35°	885.3	899.1	917.3	930.4	937.0
37.5°	851.0	865.6	884.5	898.4	906.4
40°	814.6	829.9	850.3	865.6	873.6
42.5°	776.7	791.3	813.9	831.4	840.8
45°	738.1	753.4	776.7	794.9	804.4
47.5°	698.0	712.6	738.1	759.2	767.2
50°	656.5	670.3	697.3	719.9	729.3
52.5°	614.2	628.8	655.8	679.8	690.0
55°	571.2	585.8	614.2	639.0	649.9
57.5°	527.5	542.1	571.2	596.7	609.9
60°	482.3	496.9	527.5	553.8	566.9
62.5°	435.7	451.0	482.3	509.3	523.1
65°	389.1	403.7	436.4	465.6	476.5
67.5°	342.5	357.0	389.1	418.2	431.3
70°	294.4	311.1	342.5	373.1	384.7
72.5°	244.1	263.0	294.4	326.4	338.1
75°	197.5	215.7	249.2	279.1	292.2
77.5°	151.6	171.2	202.6	233.2	246.3
80°	107.8	126.8	158.8	188.0	201.8
82.5°	68.5	85.2	117.3	143.5	153.7
85°	35.0	49.5	73.6	82.3	87.4
87.5°	10.2	17.5	26.2	32.8	36.4
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	13.51	15.17	13.87	15.48	15.80	14.24	15.90	14.61	16.22	16.53
	3H	15.28	16.78	15.65	17.11	17.47	16.32	17.83	16.70	18.15	18.51
	4H	15.90	17.32	16.30	17.66	18.04	17.19	18.61	17.59	18.96	19.33
	6H	16.31	17.62	16.72	17.99	18.38	17.93	19.25	18.34	19.62	20.01
	8H	16.41	17.67	16.83	18.06	18.46	18.23	19.49	18.65	19.88	20.28
	12H	16.46	17.67	16.89	18.05	18.48	18.42	19.63	18.85	20.01	20.44
4H	2H	14.28	15.70	14.68	16.04	16.42	14.85	16.27	15.25	16.62	16.99
	3H	16.27	17.46	16.68	17.86	18.26	17.16	18.36	17.57	18.75	19.15
	4H	17.01	18.10	17.44	18.51	18.94	18.18	19.26	18.61	19.68	20.11
	6H	17.54	18.49	17.99	18.93	19.38	19.09	20.04	19.54	20.48	20.93
	8H	17.68	18.57	18.14	19.01	19.48	19.45	20.34	19.91	20.78	21.25
	12H	17.76	18.56	18.24	19.04	19.51	19.71	20.51	20.19	20.98	21.45
8H	4H	17.46	18.35	17.92	18.79	19.25	18.48	19.37	18.94	19.81	20.27
	6H	18.12	18.86	18.61	19.35	19.82	19.54	20.28	20.03	20.76	21.24
	8H	18.33	19.00	18.84	19.50	19.99	20.01	20.67	20.51	21.18	21.66
	12H	18.47	19.06	18.97	19.55	20.10	20.36	20.95	20.86	21.44	22.00
12H	4H	17.54	18.34	18.02	18.81	19.28	18.50	19.31	18.98	19.78	20.25
	6H	18.24	18.91	18.75	19.42	19.90	19.59	20.25	20.09	20.76	21.24
	8H	18.52	19.11	19.03	19.60	20.16	20.12	20.71	20.63	21.20	21.76