

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: P1588232

Luminaire Tested: 24CZSP-37HE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588232
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-37HE-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 3500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

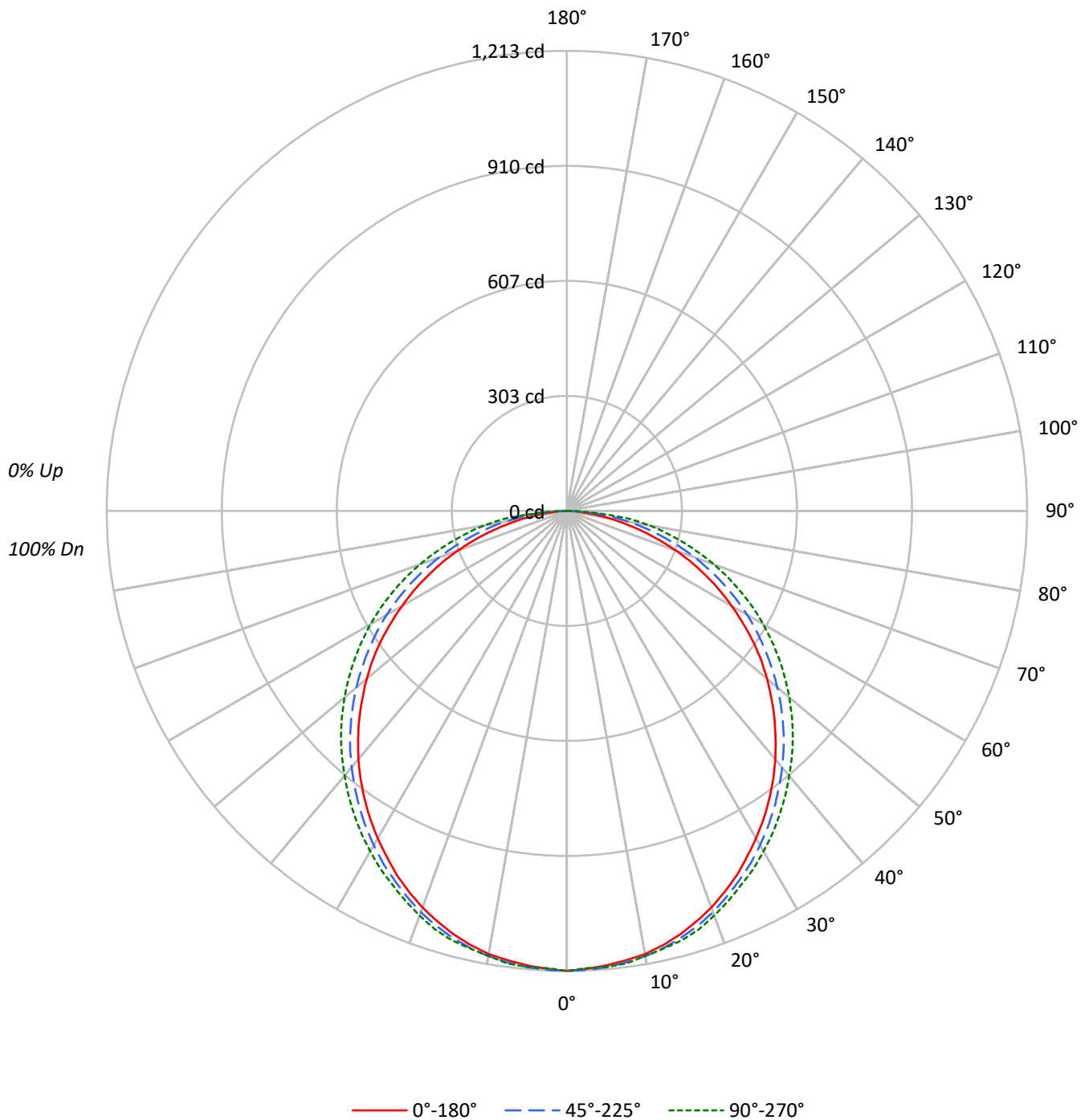
Lumens per Lamp: N/A
Luminaire Lumens: 3541.0 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	1858	1858	1858
5°	1849	1856	1855
10°	1845	1854	1852
15°	1832	1847	1858
20°	1814	1835	1850
25°	1791	1816	1838
30°	1763	1800	1833
35°	1738	1783	1828
40°	1709	1765	1822
45°	1676	1747	1824
50°	1640	1726	1824
55°	1598	1701	1826
60°	1537	1683	1830
65°	1467	1650	1836
70°	1368	1604	1844
75°	1218	1540	1862
80°	1007	1467	1953
85°	655	1325	1706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2015 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	3.2
10°-20°	328.5	9.3
20°-30°	495.4	14.0
30°-40°	596.7	16.8
40°-50°	623.1	17.6
50°-60°	572.2	16.2
60°-70°	450.7	12.7
70°-80°	276.5	7.8
80°-90°	83.2	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°	938.5	26.5
0°-40°	1535.2	43.4
0°-60°	2730.5	77.1
0°-90°	3541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3541.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1213	1213	1213	1213	1213	
5°	1203	1204	1207	1211	1207	114
15°	1155	1158	1165	1172	1172	326
25°	1060	1062	1075	1088	1088	488
35°	929	934	953	973	978	581
45°	774	782	806	834	842	597
55°	598	609	637	673	684	534
65°	405	419	455	493	507	400
75°	206	222	260	302	315	218
85°	37	51	75	96	97	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1212.9	1212.9	1212.9	1212.9	1212.9
2.5°	1208.2	1210.6	1211.3	1212.1	1206.7
5°	1202.8	1204.3	1207.4	1211.3	1206.7
7.5°	1195.0	1196.6	1200.5	1205.9	1203.6
10°	1186.5	1187.2	1191.9	1195.8	1191.1
12.5°	1172.5	1174.8	1180.3	1183.4	1181.8
15°	1155.4	1157.7	1164.7	1171.7	1171.7
17.5°	1135.2	1138.3	1146.8	1156.2	1156.9
20°	1112.7	1115.0	1125.9	1135.2	1135.2
22.5°	1087.0	1090.1	1101.0	1111.1	1112.7
25°	1059.8	1062.2	1074.6	1087.8	1087.8
27.5°	1028.0	1032.6	1048.2	1061.4	1064.5
30°	996.9	1000.8	1017.9	1034.2	1036.5
32.5°	964.2	968.9	986.8	1004.7	1008.5
35°	929.3	933.9	953.4	972.8	977.5
37.5°	892.8	898.2	918.4	940.9	945.6
40°	854.7	860.9	882.7	906.8	911.4
42.5°	814.3	822.8	846.1	871.0	878.0
45°	773.9	782.4	806.5	834.5	842.3
47.5°	731.2	741.3	766.1	795.6	804.2
50°	688.4	698.5	724.2	756.0	765.3
52.5°	644.9	655.0	681.4	714.8	724.9
55°	598.3	609.2	637.1	672.9	683.8
57.5°	550.1	564.1	593.6	630.1	641.0
60°	501.9	515.9	549.3	585.1	597.5
62.5°	454.5	467.8	501.9	540.0	553.2
65°	404.8	418.8	455.3	493.4	506.6
67.5°	355.9	369.8	406.4	446.0	460.0
70°	305.4	320.9	358.2	397.8	411.8
72.5°	254.9	271.2	309.2	349.6	362.9
75°	205.9	222.2	260.3	301.5	314.7
77.5°	157.7	175.6	212.9	254.9	267.3
80°	114.2	131.3	166.3	207.5	221.4
82.5°	73.0	87.8	122.8	161.6	171.7
85°	37.3	51.3	75.4	95.6	97.1
87.5°	11.7	16.3	24.9	37.3	38.1
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	13.63	15.29	13.99	15.61	15.92	14.46	16.12	14.82	16.44	16.75
	3H	15.39	16.89	15.76	17.22	17.58	16.58	18.08	16.95	18.41	18.77
	4H	16.00	17.43	16.40	17.77	18.15	17.47	18.89	17.86	19.23	19.61
	6H	16.41	17.74	16.83	18.10	18.49	18.25	19.57	18.66	19.93	20.32
	8H	16.52	17.78	16.95	18.17	18.57	18.57	19.83	18.99	20.22	20.62
	12H	16.57	17.78	17.00	18.17	18.59	18.78	19.99	19.21	20.37	20.80
4H	2H	14.40	15.82	14.80	16.17	16.55	15.05	16.47	15.45	16.82	17.19
	3H	16.38	17.58	16.79	17.97	18.37	17.40	18.60	17.81	19.00	19.40
	4H	17.12	18.20	17.55	18.61	19.05	18.45	19.54	18.89	19.95	20.39
	6H	17.64	18.60	18.10	19.04	19.49	19.41	20.36	19.86	20.80	21.25
	8H	17.79	18.68	18.25	19.12	19.59	19.80	20.70	20.26	21.14	21.60
	12H	17.87	18.68	18.35	19.15	19.62	20.08	20.89	20.56	21.36	21.83
8H	4H	17.57	18.47	18.03	18.91	19.37	18.74	19.64	19.20	20.08	20.54
	6H	18.24	18.98	18.73	19.47	19.94	19.86	20.60	20.35	21.09	21.56
	8H	18.45	19.11	18.95	19.62	20.10	20.37	21.04	20.88	21.54	22.03
	12H	18.59	19.18	19.09	19.67	20.23	20.75	21.35	21.26	21.83	22.39
12H	4H	17.66	18.47	18.14	18.94	19.41	18.77	19.57	19.25	20.05	20.51
	6H	18.37	19.04	18.87	19.54	20.03	19.90	20.57	20.41	21.08	21.56
	8H	18.65	19.24	19.15	19.73	20.29	20.48	21.07	20.99	21.56	22.12