

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: P1588236

Luminaire Tested: 24CZSP-37HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588236
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-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

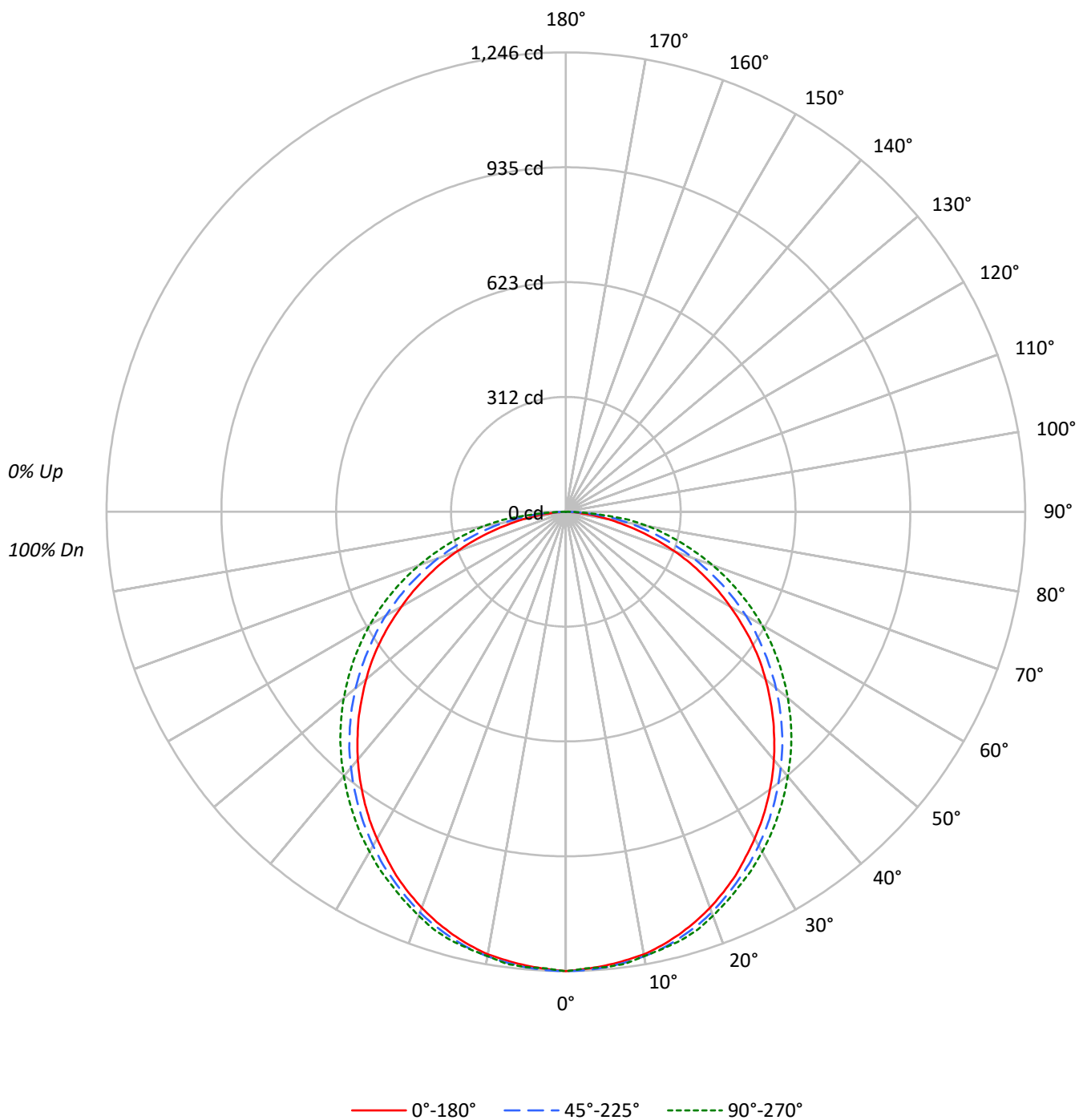
Lumens per Lamp: N/A
Luminaire Lumens: 3638.0 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1909	1909	1909
5°	1900	1907	1906
10°	1896	1905	1903
15°	1882	1897	1909
20°	1863	1885	1901
25°	1840	1866	1889
30°	1811	1849	1883
35°	1785	1831	1878
40°	1756	1813	1872
45°	1722	1795	1874
50°	1685	1773	1874
55°	1641	1748	1876
60°	1580	1729	1881
65°	1507	1695	1886
70°	1405	1648	1895
75°	1252	1582	1913
80°	1035	1507	2007
85°	673	1360	1754

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	3.2
10°-20°	337.5	9.3
20°-30°	508.9	14.0
30°-40°	613.0	16.8
40°-50°	640.2	17.6
50°-60°	587.9	16.2
60°-70°	463.1	12.7
70°-80°	284.1	7.8
80°-90°	85.5	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°	964.2	26.5
0°-40°	1577.2	43.4
0°-60°	2805.3	77.1
0°-90°	3638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1236	1237	1240	1244	1240	117
15°	1187	1189	1197	1204	1204	335
25°	1089	1091	1104	1118	1118	501
35°	955	960	980	999	1004	597
45°	795	804	829	857	865	613
55°	615	626	655	691	702	549
65°	416	430	468	507	520	411
75°	212	228	267	310	323	224
85°	38	53	77	98	100	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.1	1246.1	1246.1	1246.1	1246.1
2.5°	1241.3	1243.7	1244.5	1245.3	1239.7
5°	1235.7	1237.3	1240.5	1244.5	1239.7
7.5°	1227.8	1229.3	1233.3	1238.9	1236.5
10°	1219.0	1219.8	1224.6	1228.5	1223.8
12.5°	1204.6	1207.0	1212.6	1215.8	1214.2
15°	1187.0	1189.4	1196.6	1203.8	1203.8
17.5°	1166.3	1169.5	1178.3	1187.8	1188.6
20°	1143.1	1145.5	1156.7	1166.3	1166.3
22.5°	1116.8	1120.0	1131.2	1141.5	1143.1
25°	1088.9	1091.2	1104.0	1117.6	1117.6
27.5°	1056.1	1060.9	1076.9	1090.4	1093.6
30°	1024.2	1028.2	1045.7	1062.5	1064.9
32.5°	990.7	995.5	1013.8	1032.2	1036.2
35°	954.7	959.5	979.5	999.4	1004.2
37.5°	917.2	922.8	943.6	966.7	971.5
40°	878.1	884.5	906.8	931.6	936.4
42.5°	836.6	845.4	869.3	894.9	902.1
45°	795.1	803.9	828.6	857.4	865.3
47.5°	751.2	761.6	787.1	817.4	826.2
50°	707.3	717.7	744.0	776.7	786.3
52.5°	662.6	672.9	700.1	734.4	744.8
55°	614.7	625.9	654.6	691.3	702.5
57.5°	565.2	579.5	609.9	647.4	658.6
60°	515.7	530.1	564.4	601.1	613.9
62.5°	467.0	480.6	515.7	554.8	568.4
65°	415.9	430.3	467.8	506.9	520.5
67.5°	365.6	380.0	417.5	458.2	472.6
70°	313.7	329.7	368.0	408.7	423.1
72.5°	261.8	278.6	317.7	359.2	372.8
75°	211.5	228.3	267.4	309.7	323.3
77.5°	162.1	180.4	218.7	261.8	274.6
80°	117.3	134.9	170.8	213.1	227.5
82.5°	75.0	90.2	126.1	166.0	176.4
85°	38.3	52.7	77.4	98.2	99.8
87.5°	12.0	16.8	25.5	38.3	39.1
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	13.72	15.39	14.09	15.70	16.01	14.55	16.22	14.92	16.53	16.84
	3H	15.48	16.99	15.86	17.31	17.67	16.67	18.18	17.05	18.50	18.86
	4H	16.10	17.52	16.50	17.87	18.24	17.56	18.98	17.96	19.33	19.70
	6H	16.51	17.83	16.92	18.19	18.58	18.34	19.66	18.75	20.02	20.41
	8H	16.62	17.88	17.04	18.27	18.67	18.66	19.92	19.08	20.31	20.71
	12H	16.67	17.88	17.10	18.26	18.69	18.87	20.08	19.30	20.46	20.89
4H	2H	14.50	15.92	14.89	16.26	16.64	15.14	16.56	15.54	16.91	17.29
	3H	16.47	17.67	16.88	18.07	18.47	17.50	18.70	17.91	19.09	19.49
	4H	17.21	18.30	17.64	18.71	19.14	18.55	19.64	18.98	20.05	20.48
	6H	17.74	18.69	18.19	19.13	19.58	19.50	20.45	19.95	20.89	21.35
	8H	17.88	18.78	18.34	19.22	19.68	19.90	20.79	20.36	21.23	21.70
	12H	17.97	18.77	18.45	19.25	19.71	20.18	20.98	20.65	21.45	21.92
8H	4H	17.67	18.56	18.13	19.00	19.47	18.84	19.73	19.30	20.17	20.64
	6H	18.33	19.07	18.82	19.56	20.03	19.95	20.69	20.44	21.18	21.65
	8H	18.54	19.21	19.05	19.71	20.20	20.46	21.13	20.97	21.63	22.12
	12H	18.68	19.27	19.18	19.76	20.32	20.85	21.44	21.35	21.93	22.49
12H	4H	17.76	18.56	18.24	19.04	19.50	18.86	19.67	19.34	20.14	20.61
	6H	18.46	19.13	18.97	19.64	20.12	20.00	20.67	20.50	21.17	21.66
	8H	18.74	19.33	19.24	19.82	20.38	20.57	21.17	21.08	21.66	22.21