

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: P1588237

Luminaire Tested: 24CZSP-37HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-37HE-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

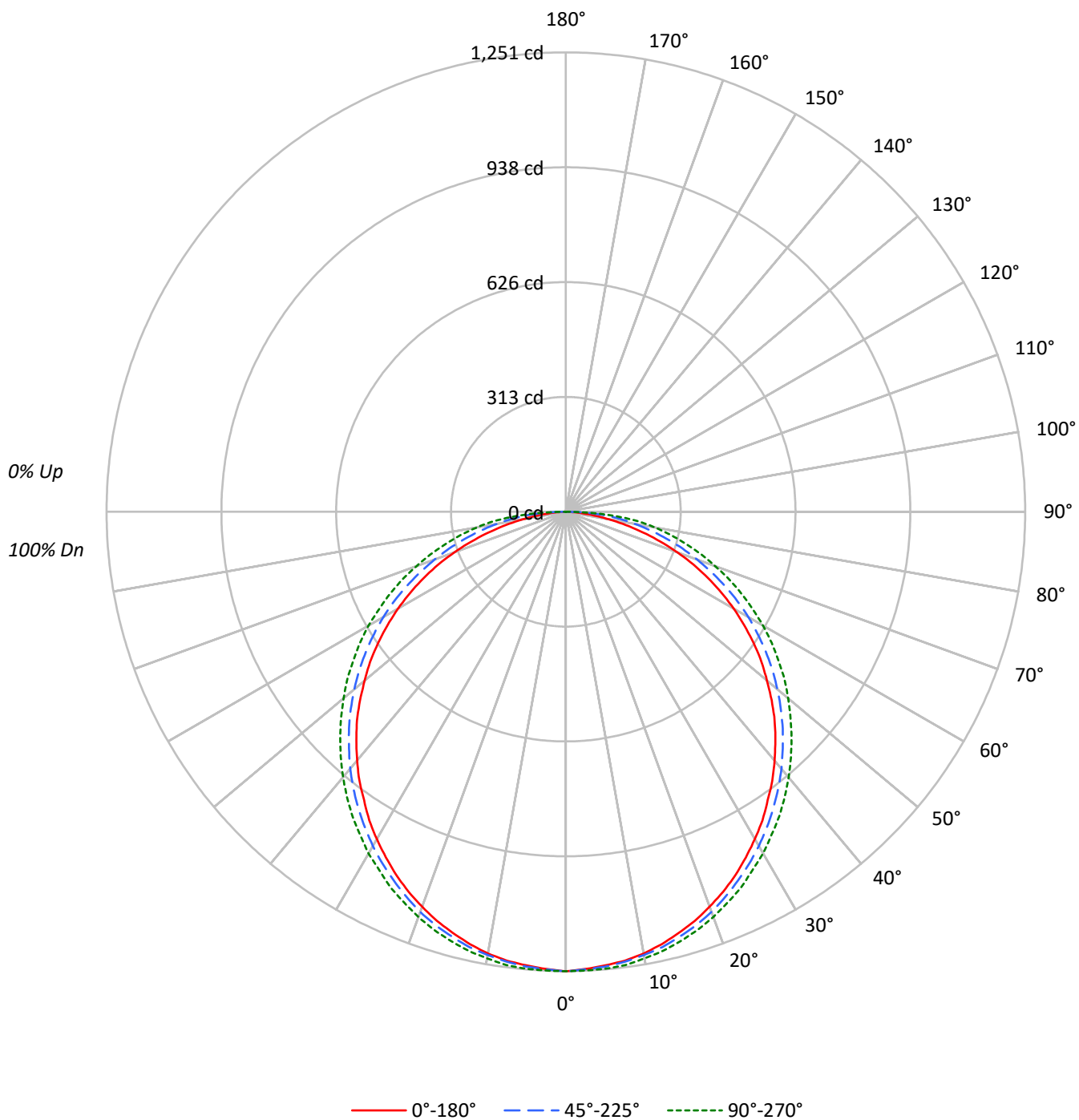
Lumens per Lamp: N/A
Luminaire Lumens: 3712.0 lumens
Efficiency: N/A
Efficacy: 150.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1917	1917	1917
5°	1906	1911	1921
10°	1900	1906	1921
15°	1883	1899	1919
20°	1865	1891	1914
25°	1846	1873	1908
30°	1821	1859	1901
35°	1792	1842	1894
40°	1769	1826	1888
45°	1742	1809	1883
50°	1704	1792	1882
55°	1668	1775	1887
60°	1618	1759	1901
65°	1549	1731	1914
70°	1449	1702	1937
75°	1289	1678	2000
80°	1060	1686	2175
85°	722	1877	2401

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2401 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	3.2
10°-20°	339.1	9.1
20°-30°	512.7	13.8
30°-40°	618.7	16.7
40°-50°	646.9	17.4
50°-60°	596.9	16.1
60°-70°	474.6	12.8
70°-80°	299.6	8.1
80°-90°	105.0	2.8
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°	970.2	26.1
0°-40°	1589.0	42.8
0°-60°	2832.8	76.3
0°-90°	3712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1240	1249	1243	1246	1249	118
15°	1188	1201	1198	1207	1210	335
25°	1092	1108	1108	1123	1129	503
35°	958	979	985	1005	1013	601
45°	804	822	835	860	869	619
55°	625	643	665	697	707	558
65°	427	447	478	518	528	422
75°	218	242	284	326	338	231
85°	41	68	107	132	137	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.3	1251.3	1251.3	1251.3	1251.3
2.5°	1246.2	1254.4	1247.2	1251.3	1250.3
5°	1240.0	1249.3	1243.1	1246.2	1249.3
7.5°	1232.8	1243.1	1235.9	1241.1	1245.2
10°	1221.5	1231.8	1225.6	1231.8	1234.9
12.5°	1206.1	1218.5	1214.3	1221.5	1224.6
15°	1187.6	1201.0	1197.9	1207.2	1210.2
17.5°	1168.1	1182.5	1180.4	1190.7	1193.8
20°	1144.5	1160.9	1159.9	1170.2	1174.3
22.5°	1119.8	1136.3	1135.2	1146.5	1151.7
25°	1092.1	1108.5	1108.5	1122.9	1129.1
27.5°	1061.3	1079.8	1080.8	1095.2	1100.3
30°	1029.4	1047.9	1051.0	1066.4	1074.6
32.5°	996.5	1014.0	1019.1	1036.6	1042.8
35°	958.5	979.1	985.2	1004.8	1013.0
37.5°	923.6	942.1	950.3	970.9	979.1
40°	884.6	904.1	913.3	935.9	944.1
42.5°	844.5	864.0	874.3	898.9	907.2
45°	804.4	821.9	835.2	859.9	869.1
47.5°	760.2	779.8	794.2	820.9	830.1
50°	715.0	735.6	752.0	780.8	790.0
52.5°	671.9	690.4	708.9	740.7	751.0
55°	624.6	643.1	664.7	696.6	706.8
57.5°	576.4	594.8	619.5	653.4	664.7
60°	528.1	546.6	574.3	609.2	620.5
62.5°	477.7	496.2	527.0	563.0	573.3
65°	427.4	446.9	477.7	517.8	528.1
67.5°	376.0	395.5	428.4	470.5	481.8
70°	323.6	345.2	380.1	422.2	432.5
72.5°	269.2	293.8	332.9	374.0	386.3
75°	217.8	242.5	283.6	325.7	338.0
77.5°	167.5	195.2	236.3	280.5	293.8
80°	120.2	147.9	191.1	234.2	246.6
82.5°	77.1	105.8	149.0	190.1	200.3
85°	41.1	67.8	106.8	132.5	136.6
87.5°	13.4	34.9	48.3	63.7	64.7
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	13.82	15.49	14.18	15.80	16.12	14.54	16.21	14.90	16.52	16.84
	3H	15.60	17.12	15.98	17.45	17.81	16.70	18.22	17.08	18.55	18.91
	4H	16.23	17.67	16.63	18.01	18.39	17.64	19.07	18.04	19.42	19.79
	6H	16.66	17.99	17.07	18.35	18.74	18.50	19.83	18.91	20.19	20.58
	8H	16.77	18.04	17.19	18.43	18.83	18.87	20.15	19.30	20.54	20.93
	12H	16.83	18.05	17.26	18.43	18.86	19.19	20.41	19.61	20.79	21.22
4H	2H	14.58	16.01	14.98	16.36	16.74	15.14	16.57	15.54	16.92	17.30
	3H	16.60	17.81	17.01	18.21	18.61	17.55	18.76	17.96	19.16	19.56
	4H	17.37	18.46	17.80	18.88	19.31	18.66	19.76	19.09	20.17	20.60
	6H	17.92	18.88	18.37	19.32	19.78	19.70	20.66	20.15	21.10	21.55
	8H	18.08	18.98	18.54	19.42	19.89	20.16	21.07	20.62	21.51	21.97
	12H	18.18	18.99	18.66	19.47	19.93	20.56	21.37	21.04	21.85	22.32
8H	4H	17.85	18.76	18.31	19.20	19.66	18.97	19.88	19.43	20.32	20.78
	6H	18.56	19.32	19.05	19.81	20.28	20.19	20.95	20.68	21.43	21.91
	8H	18.80	19.48	19.31	19.99	20.47	20.79	21.47	21.30	21.97	22.46
	12H	18.98	19.58	19.48	20.07	20.63	21.33	21.93	21.84	22.42	22.98
12H	4H	17.96	18.77	18.44	19.25	19.72	19.01	19.82	19.48	20.29	20.76
	6H	18.72	19.41	19.23	19.91	20.39	20.26	20.94	20.76	21.44	21.93
	8H	19.05	19.65	19.55	20.14	20.70	20.93	21.53	21.44	22.02	22.58