

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: P1588580

Luminaire Tested: 24CZSP-A-37HE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588580
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-A-37HE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 3500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

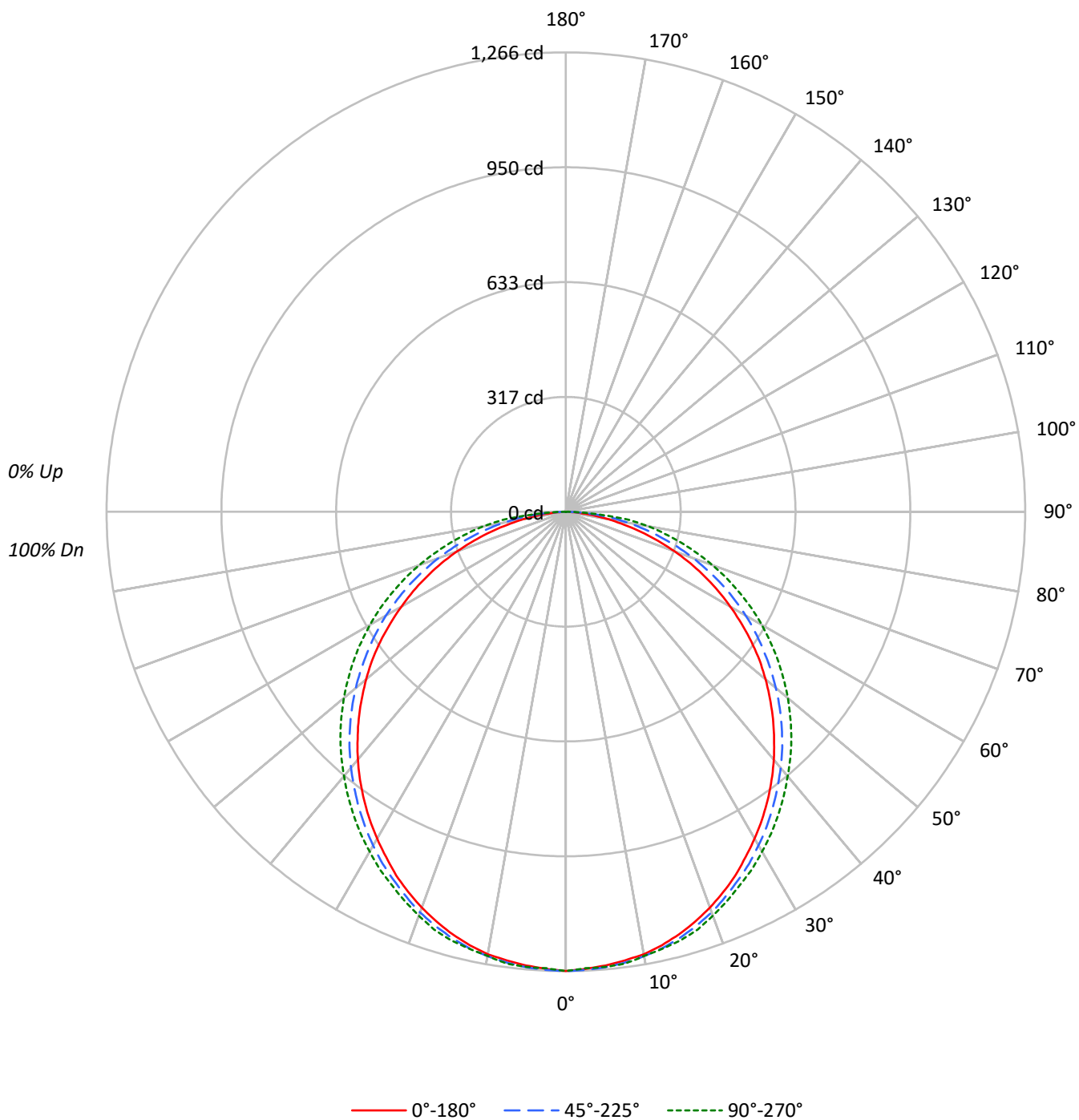
Lumens per Lamp: N/A
Luminaire Lumens: 3695.0 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1938	1938	1938
5°	1930	1937	1936
10°	1926	1934	1933
15°	1912	1927	1939
20°	1892	1915	1931
25°	1869	1895	1918
30°	1840	1878	1913
35°	1813	1860	1907
40°	1783	1842	1902
45°	1749	1823	1904
50°	1712	1801	1903
55°	1667	1775	1905
60°	1605	1756	1910
65°	1531	1722	1916
70°	1427	1674	1924
75°	1272	1607	1943
80°	1051	1530	2038
85°	684	1381	1780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2103 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	3.2
10°-20°	342.7	9.3
20°-30°	516.9	14.0
30°-40°	622.6	16.8
40°-50°	650.2	17.6
50°-60°	597.1	16.2
60°-70°	470.3	12.7
70°-80°	288.5	7.8
80°-90°	86.8	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°	979.3	26.5
0°-40°	1601.9	43.4
0°-60°	2849.3	77.1
0°-90°	3695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3695.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1255	1257	1260	1264	1259	119
15°	1206	1208	1215	1223	1223	340
25°	1106	1108	1121	1135	1135	509
35°	970	975	995	1015	1020	607
45°	808	816	842	871	879	623
55°	624	636	665	702	714	557
65°	422	437	475	515	529	418
75°	215	232	272	315	328	228
85°	39	54	79	100	101	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.6	1265.6	1265.6	1265.6	1265.6
2.5°	1260.8	1263.2	1264.0	1264.8	1259.1
5°	1255.1	1256.7	1260.0	1264.0	1259.1
7.5°	1247.0	1248.6	1252.7	1258.3	1255.9
10°	1238.1	1238.9	1243.7	1247.8	1242.9
12.5°	1223.5	1225.9	1231.6	1234.8	1233.2
15°	1205.6	1208.1	1215.4	1222.7	1222.7
17.5°	1184.6	1187.8	1196.7	1206.4	1207.3
20°	1161.0	1163.5	1174.8	1184.6	1184.6
22.5°	1134.3	1137.5	1148.9	1159.4	1161.0
25°	1105.9	1108.3	1121.3	1135.1	1135.1
27.5°	1072.7	1077.5	1093.7	1107.5	1110.8
30°	1040.2	1044.3	1062.1	1079.2	1081.6
32.5°	1006.2	1011.0	1029.7	1048.3	1052.4
35°	969.7	974.6	994.8	1015.1	1020.0
37.5°	931.6	937.3	958.3	981.9	986.7
40°	891.9	898.4	921.1	946.2	951.1
42.5°	849.7	858.6	882.9	908.9	916.2
45°	807.5	816.5	841.6	870.8	878.9
47.5°	762.9	773.5	799.4	830.2	839.2
50°	718.4	728.9	755.7	788.9	798.6
52.5°	673.0	683.5	711.1	745.9	756.5
55°	624.3	635.7	664.8	702.1	713.5
57.5°	574.0	588.6	619.4	657.5	668.9
60°	523.8	538.4	573.2	610.5	623.5
62.5°	474.3	488.1	523.8	563.5	577.3
65°	422.4	437.0	475.1	514.8	528.6
67.5°	371.3	385.9	424.0	465.4	480.0
70°	318.6	334.9	373.8	415.1	429.7
72.5°	265.9	283.0	322.7	364.9	378.6
75°	214.9	231.9	271.6	314.6	328.4
77.5°	164.6	183.2	222.2	265.9	278.9
80°	119.2	137.0	173.5	216.5	231.1
82.5°	76.2	91.6	128.1	168.6	179.2
85°	38.9	53.5	78.6	99.7	101.3
87.5°	12.2	17.0	25.9	38.9	39.7
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	13.78	15.44	14.14	15.75	16.07	14.61	16.27	14.97	16.58	16.90
	3H	15.53	17.04	15.91	17.37	17.73	16.72	18.23	17.10	18.56	18.92
	4H	16.15	17.57	16.55	17.92	18.30	17.61	19.04	18.01	19.38	19.76
	6H	16.56	17.88	16.97	18.25	18.64	18.39	19.72	18.80	20.08	20.47
	8H	16.67	17.93	17.09	18.32	18.72	18.71	19.98	19.14	20.37	20.76
	12H	16.72	17.93	17.15	18.31	18.74	18.93	20.14	19.35	20.52	20.95
4H	2H	14.55	15.97	14.95	16.32	16.69	15.20	16.62	15.59	16.97	17.34
	3H	16.53	17.72	16.94	18.12	18.52	17.55	18.75	17.96	19.15	19.54
	4H	17.26	18.35	17.69	18.76	19.20	18.60	19.69	19.03	20.10	20.54
	6H	17.79	18.74	18.24	19.18	19.64	19.56	20.51	20.01	20.95	21.40
	8H	17.94	18.83	18.40	19.27	19.74	19.95	20.84	20.41	21.29	21.75
	12H	18.02	18.83	18.50	19.30	19.77	20.23	21.03	20.71	21.51	21.98
8H	4H	17.72	18.61	18.18	19.06	19.52	18.89	19.78	19.35	20.23	20.69
	6H	18.38	19.13	18.88	19.61	20.09	20.00	20.75	20.50	21.23	21.71
	8H	18.59	19.26	19.10	19.77	20.25	20.52	21.18	21.02	21.69	22.17
	12H	18.73	19.33	19.24	19.81	20.37	20.90	21.49	21.41	21.98	22.54
12H	4H	17.81	18.62	18.29	19.09	19.56	18.92	19.72	19.40	20.19	20.66
	6H	18.52	19.19	19.02	19.69	20.17	20.05	20.72	20.56	21.23	21.71
	8H	18.79	19.39	19.30	19.88	20.43	20.63	21.22	21.13	21.71	22.27