

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: P1588234

Luminaire Tested: 24CZSP-37HE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588234
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-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 3500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

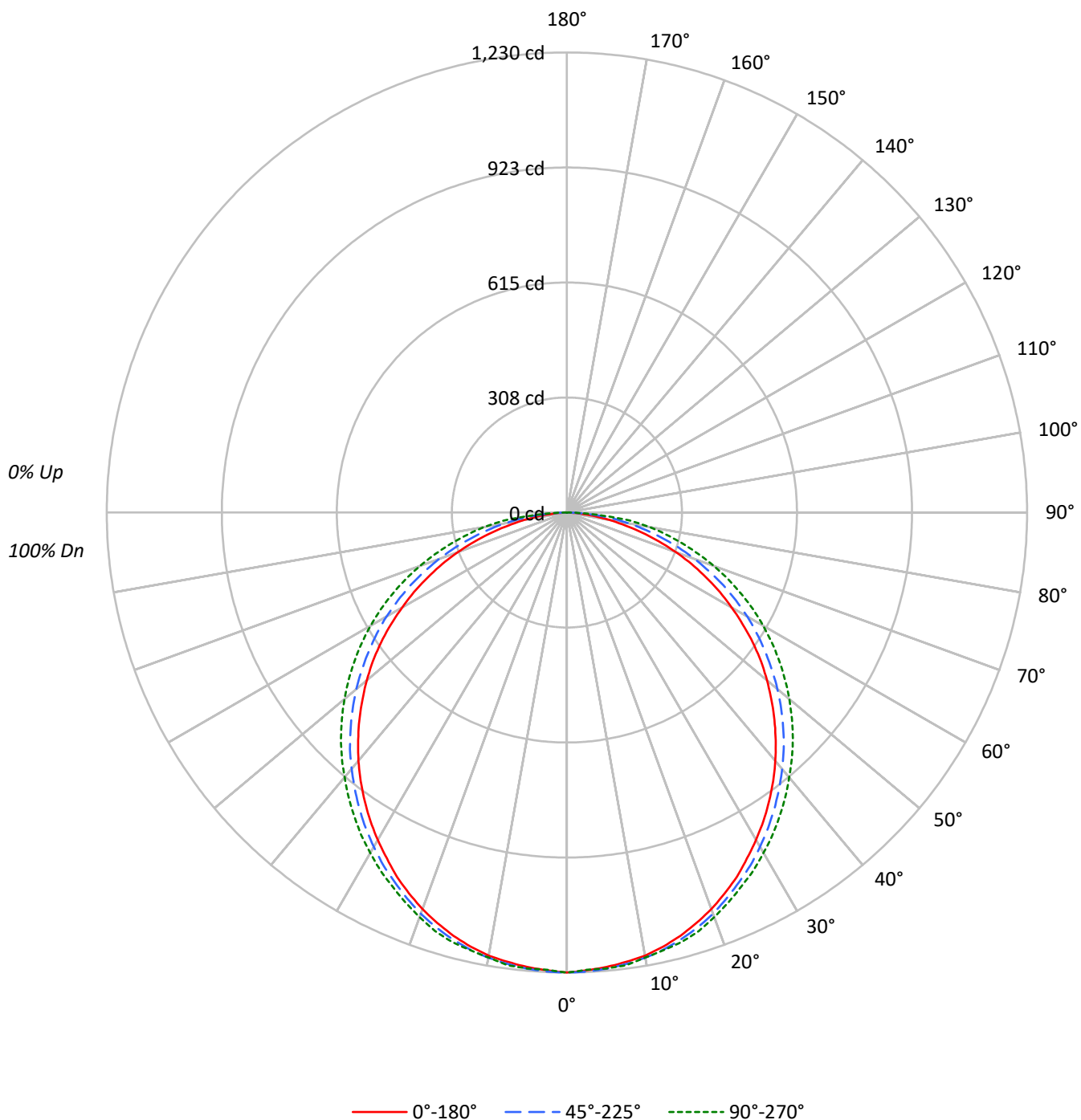
Lumens per Lamp: N/A
Luminaire Lumens: 3591.0 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1884	1884	1884
5°	1875	1883	1881
10°	1871	1880	1879
15°	1858	1873	1884
20°	1839	1861	1876
25°	1816	1842	1864
30°	1788	1826	1859
35°	1762	1808	1854
40°	1733	1790	1848
45°	1700	1772	1850
50°	1663	1750	1849
55°	1620	1725	1852
60°	1559	1707	1856
65°	1488	1673	1862
70°	1387	1627	1870
75°	1236	1562	1888
80°	1021	1487	1981
85°	664	1343	1731

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2043 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	3.2
10°-20°	333.1	9.3
20°-30°	502.4	14.0
30°-40°	605.1	16.8
40°-50°	631.9	17.6
50°-60°	580.3	16.2
60°-70°	457.1	12.7
70°-80°	280.4	7.8
80°-90°	84.4	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°	951.8	26.5
0°-40°	1556.9	43.4
0°-60°	2769.1	77.1
0°-90°	3591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1220	1221	1224	1228	1224	116
15°	1172	1174	1181	1188	1188	330
25°	1075	1077	1090	1103	1103	495
35°	942	947	967	986	991	589
45°	785	794	818	846	854	605
55°	607	618	646	682	693	542
65°	410	425	462	500	514	406
75°	209	225	264	306	319	221
85°	38	52	76	97	98	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.0	1230.0	1230.0	1230.0	1230.0
2.5°	1225.3	1227.6	1228.4	1229.2	1223.7
5°	1219.8	1221.3	1224.5	1228.4	1223.7
7.5°	1211.9	1213.5	1217.4	1222.9	1220.6
10°	1203.2	1204.0	1208.7	1212.7	1208.0
12.5°	1189.0	1191.4	1196.9	1200.1	1198.5
15°	1171.7	1174.1	1181.2	1188.3	1188.3
17.5°	1151.2	1154.4	1163.0	1172.5	1173.3
20°	1128.4	1130.7	1141.8	1151.2	1151.2
22.5°	1102.4	1105.5	1116.5	1126.8	1128.4
25°	1074.8	1077.1	1089.8	1103.2	1103.2
27.5°	1042.5	1047.2	1063.0	1076.4	1079.5
30°	1011.0	1014.9	1032.2	1048.8	1051.1
32.5°	977.9	982.6	1000.7	1018.8	1022.8
35°	942.4	947.1	966.8	986.5	991.3
37.5°	905.4	910.9	931.4	954.2	959.0
40°	866.8	873.1	895.1	919.6	924.3
42.5°	825.8	834.5	858.1	883.3	890.4
45°	784.8	793.5	817.9	846.3	854.2
47.5°	741.5	751.7	776.9	806.9	815.5
50°	698.1	708.4	734.4	766.7	776.1
52.5°	654.0	664.3	691.0	724.9	735.2
55°	606.7	617.8	646.1	682.4	693.4
57.5°	557.9	572.1	602.0	639.0	650.1
60°	509.0	523.2	557.1	593.3	605.9
62.5°	461.0	474.4	509.0	547.6	561.0
65°	410.5	424.7	461.7	500.4	513.8
67.5°	360.9	375.1	412.1	452.3	466.5
70°	309.7	325.4	363.3	403.4	417.6
72.5°	258.5	275.0	313.6	354.6	368.0
75°	208.8	225.4	264.0	305.7	319.1
77.5°	160.0	178.1	215.9	258.5	271.1
80°	115.8	133.2	168.6	210.4	224.6
82.5°	74.1	89.0	124.5	163.9	174.1
85°	37.8	52.0	76.4	96.9	98.5
87.5°	11.8	16.5	25.2	37.8	38.6
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	13.68	15.34	14.04	15.66	15.97	14.51	16.17	14.87	16.48	16.80
	3H	15.43	16.94	15.81	17.27	17.63	16.62	18.13	17.00	18.46	18.82
	4H	16.05	17.48	16.45	17.82	18.20	17.51	18.94	17.91	19.28	19.66
	6H	16.46	17.78	16.87	18.15	18.54	18.30	19.62	18.71	19.98	20.37
	8H	16.57	17.83	17.00	18.22	18.62	18.62	19.88	19.04	20.27	20.66
	12H	16.62	17.83	17.05	18.22	18.64	18.83	20.04	19.26	20.42	20.85
4H	2H	14.45	15.87	14.85	16.22	16.59	15.10	16.52	15.49	16.87	17.24
	3H	16.43	17.63	16.84	18.02	18.42	17.45	18.65	17.86	19.05	19.45
	4H	17.16	18.25	17.60	18.66	19.10	18.50	19.59	18.93	20.00	20.44
	6H	17.69	18.65	18.15	19.09	19.54	19.46	20.41	19.91	20.85	21.30
	8H	17.84	18.73	18.30	19.17	19.64	19.85	20.75	20.31	21.19	21.65
	12H	17.92	18.73	18.40	19.20	19.67	20.13	20.93	20.61	21.41	21.88
8H	4H	17.62	18.52	18.08	18.96	19.42	18.79	19.68	19.25	20.13	20.59
	6H	18.28	19.03	18.78	19.52	19.99	19.90	20.65	20.40	21.14	21.61
	8H	18.50	19.16	19.00	19.67	20.15	20.42	21.08	20.92	21.59	22.07
	12H	18.63	19.23	19.14	19.72	20.27	20.80	21.39	21.31	21.88	22.44
12H	4H	17.71	18.52	18.19	18.99	19.46	18.82	19.62	19.30	20.09	20.56
	6H	18.42	19.09	18.92	19.59	20.08	19.95	20.62	20.46	21.13	21.61
	8H	18.69	19.29	19.20	19.78	20.34	20.53	21.12	21.04	21.61	22.17