

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: P1588587

Luminaire Tested: 24CZSP-A-37HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588587
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-A-37HE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

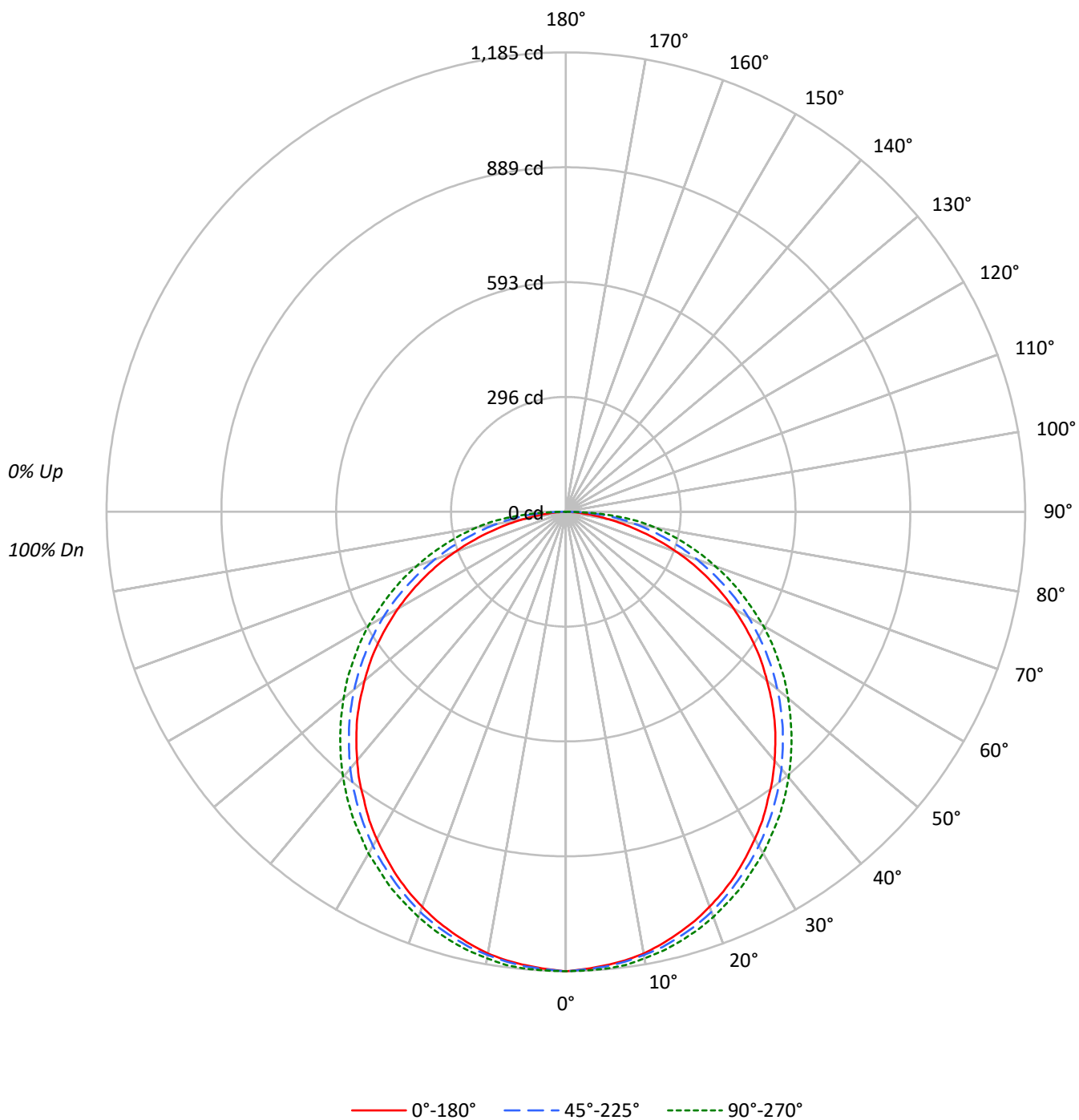
Lumens per Lamp: N/A
Luminaire Lumens: 3516.0 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1815	1815	1815
5°	1806	1810	1819
10°	1799	1805	1819
15°	1784	1799	1818
20°	1767	1791	1813
25°	1748	1774	1807
30°	1725	1761	1800
35°	1698	1745	1794
40°	1675	1730	1788
45°	1650	1714	1783
50°	1614	1697	1783
55°	1580	1681	1788
60°	1532	1666	1801
65°	1467	1640	1813
70°	1373	1613	1835
75°	1221	1590	1895
80°	1005	1596	2060
85°	684	1778	2274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2274 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	3.2
10°-20°	321.2	9.1
20°-30°	485.7	13.8
30°-40°	586.0	16.7
40°-50°	612.8	17.4
50°-60°	565.4	16.1
60°-70°	449.6	12.8
70°-80°	283.7	8.1
80°-90°	99.5	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°	919.0	26.1
0°-40°	1505.1	42.8
0°-60°	2683.2	76.3
0°-90°	3516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3516.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1175	1183	1178	1180	1183	112
15°	1125	1138	1135	1143	1146	317
25°	1034	1050	1050	1064	1070	476
35°	908	927	933	952	960	569
45°	762	778	791	814	823	587
55°	592	609	630	660	670	528
65°	405	423	452	490	500	400
75°	206	230	269	308	320	219
85°	39	64	101	126	129	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1185.3	1185.3	1185.3	1185.3	1185.3
2.5°	1180.4	1188.2	1181.4	1185.3	1184.3
5°	1174.6	1183.3	1177.5	1180.4	1183.3
7.5°	1167.7	1177.5	1170.7	1175.5	1179.4
10°	1157.0	1166.8	1160.9	1166.8	1169.7
12.5°	1142.4	1154.1	1150.2	1157.0	1160.0
15°	1124.9	1137.6	1134.7	1143.4	1146.3
17.5°	1106.4	1120.1	1118.1	1127.8	1130.8
20°	1084.1	1099.6	1098.6	1108.4	1112.3
22.5°	1060.7	1076.3	1075.3	1086.0	1090.9
25°	1034.4	1050.0	1050.0	1063.6	1069.5
27.5°	1005.2	1022.7	1023.7	1037.3	1042.2
30°	975.1	992.6	995.5	1010.1	1017.9
32.5°	943.9	960.5	965.3	981.9	987.7
35°	907.9	927.4	933.2	951.7	959.5
37.5°	874.8	892.3	900.1	919.6	927.4
40°	837.9	856.3	865.1	886.5	894.3
42.5°	799.9	818.4	828.1	851.5	859.3
45°	761.9	778.5	791.1	814.5	823.3
47.5°	720.1	738.6	752.2	777.5	786.3
50°	677.3	696.8	712.3	739.6	748.3
52.5°	636.4	653.9	671.5	701.6	711.3
55°	591.7	609.2	629.6	659.8	669.5
57.5°	545.9	563.4	586.8	618.9	629.6
60°	500.2	517.7	544.0	577.1	587.8
62.5°	452.5	470.0	499.2	533.3	543.0
65°	404.8	423.3	452.5	490.5	500.2
67.5°	356.2	374.6	405.8	445.7	456.4
70°	306.5	327.0	360.1	400.0	409.7
72.5°	255.0	278.3	315.3	354.2	365.9
75°	206.3	229.7	268.6	308.5	320.2
77.5°	158.6	184.9	223.8	265.7	278.3
80°	113.9	140.1	181.0	221.9	233.5
82.5°	73.0	100.2	141.1	180.0	189.8
85°	38.9	64.2	101.2	125.5	129.4
87.5°	12.7	33.1	45.7	60.3	61.3
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	15.30	13.99	15.61	15.93	14.35	16.02	14.71	16.34	16.65
	3H	15.42	16.93	15.79	17.26	17.62	16.52	18.03	16.89	18.36	18.72
	4H	16.05	17.48	16.44	17.83	18.20	17.45	18.88	17.85	19.23	19.60
	6H	16.47	17.80	16.88	18.16	18.55	18.31	19.64	18.72	20.00	20.39
	8H	16.58	17.85	17.00	18.24	18.64	18.69	19.96	19.11	20.35	20.75
	12H	16.64	17.86	17.07	18.24	18.67	19.00	20.22	19.43	20.60	21.03
4H	2H	14.39	15.83	14.79	16.17	16.55	14.95	16.39	15.35	16.73	17.11
	3H	16.42	17.62	16.82	18.02	18.42	17.37	18.58	17.77	18.97	19.37
	4H	17.18	18.28	17.61	18.69	19.12	18.47	19.57	18.90	19.98	20.41
	6H	17.73	18.70	18.18	19.14	19.59	19.51	20.47	19.96	20.91	21.37
	8H	17.89	18.79	18.35	19.24	19.70	19.97	20.88	20.43	21.32	21.78
	12H	17.99	18.80	18.47	19.28	19.75	20.37	21.19	20.85	21.66	22.13
8H	4H	17.67	18.57	18.12	19.01	19.47	18.79	19.69	19.24	20.13	20.59
	6H	18.37	19.13	18.87	19.62	20.09	20.00	20.76	20.50	21.25	21.72
	8H	18.62	19.30	19.12	19.80	20.28	20.60	21.28	21.11	21.79	22.27
	12H	18.79	19.39	19.29	19.88	20.44	21.14	21.75	21.65	22.24	22.79
12H	4H	17.77	18.59	18.25	19.06	19.53	18.82	19.63	19.30	20.11	20.57
	6H	18.54	19.22	19.04	19.72	20.20	20.07	20.75	20.57	21.25	21.74
	8H	18.86	19.46	19.36	19.95	20.51	20.74	21.35	21.25	21.84	22.39