

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: FAIL-SAFE

Report Number: P1499010

Luminaire Tested: MAE-G-4-120-1LO-HI-30-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499010
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27581)
Test Lab: INNOVATION CENTER
Issue Date: 6/26/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-120-1LO-HI-30-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 1 LO ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

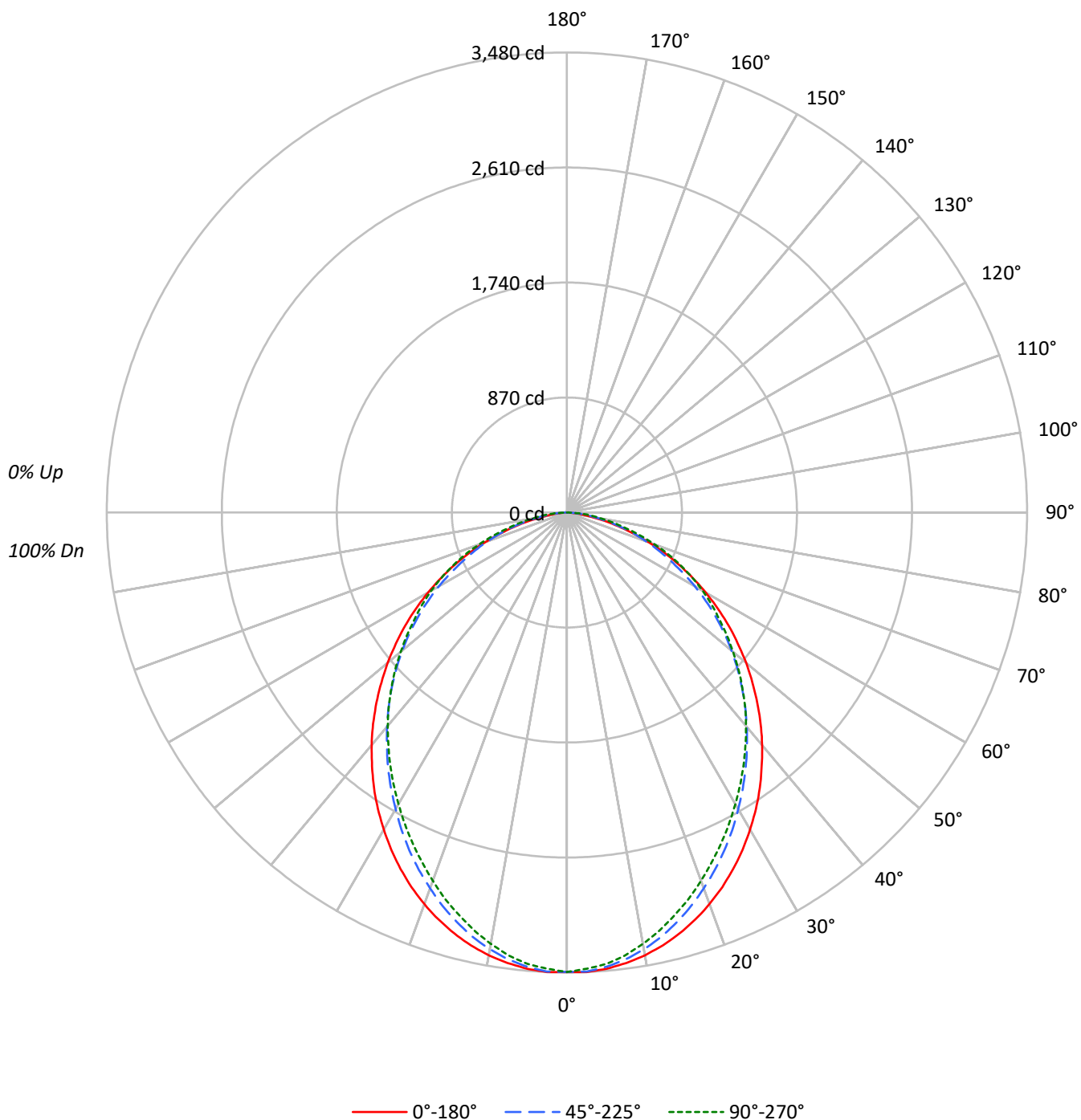
Lumens per Lamp: N/A
Luminaire Lumens: 8231.1 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.11 / 1.24
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 112.9
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

TEST NUMBER: P1499010

CATALOG NUMBER: MAE-G-4-120-1LO-HI-30-90

Luminous Intensity Polar Plot



TEST NUMBER: P1499010

CATALOG NUMBER: MAE-G-4-120-1LO-HI-30-90

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	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72
4	84	72	64	58	82	71	63	57	69	62	56		66	60	56		64
5	78	65	56	50	75	64	56	50	62	55	49		60	54	49		58
6	72	59	50	44	70	58	50	44	56	49	43		54	48	43		53
7	67	53	45	39	65	53	45	39	51	44	39		50	43	38		48
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		45
9	58	45	37	32	57	44	37	31	43	36	31		42	36	31		41
10	55	42	34	29	53	41	34	29	40	33	29		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4677	4677	4677
5°	4679	4659	4630
10°	4647	4585	4527
15°	4591	4470	4390
20°	4514	4331	4245
25°	4418	4185	4098
30°	4303	4024	3956
35°	4178	3872	3825
40°	4035	3716	3702
45°	3875	3563	3569
50°	3704	3402	3432
55°	3505	3218	3298
60°	3263	3009	3193
65°	2978	2754	3028
70°	2592	2510	2790
75°	2079	2202	2433
80°	1450	1793	2065
85°	818	1426	1916

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3875 cd/sqm

TEST NUMBER: P1499010

CATALOG NUMBER: MAE-G-4-120-1LO-HI-30-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.9	4.0
10°-20°	904.9	11.0
20°-30°	1308.1	15.9
30°-40°	1498.5	18.2
40°-50°	1476.8	17.9
50°-60°	1260.5	15.3
60°-70°	896.1	10.9
70°-80°	454.1	5.5
80°-90°	106.3	1.3
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°	2538.8	30.8
0°-40°	4037.3	49.0
0°-60°	6774.6	82.3
0°-90°	8231.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8231.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3464	3462	3450	3420	3428	329
15°	3296	3273	3209	3150	3152	929
25°	2976	2921	2819	2760	2760	1370
35°	2544	2467	2358	2323	2329	1589
45°	2037	1961	1872	1868	1876	1571
55°	1494	1425	1372	1386	1406	1334
65°	935	880	865	925	951	925
75°	400	376	424	461	468	431
85°	53	66	92	114	124	75
90°	0	0	0	0	0	

TEST NUMBER: P1499010

CATALOG NUMBER: MAE-G-4-120-1LO-HI-30-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3475.8	3475.8	3475.8	3475.8	3475.8
2.5°	3479.6	3483.1	3475.8	3447.5	3453.9
5°	3464.4	3461.9	3449.5	3420.2	3428.4
7.5°	3437.2	3431.5	3409.1	3373.4	3378.5
10°	3401.1	3389.7	3355.6	3310.3	3313.4
12.5°	3354.1	3337.7	3288.9	3235.9	3238.3
15°	3295.6	3272.6	3209.0	3150.5	3151.9
17.5°	3228.6	3200.5	3122.5	3058.5	3064.3
20°	3152.7	3115.7	3024.9	2961.8	2965.0
22.5°	3068.3	3022.7	2925.8	2862.5	2862.6
25°	2975.7	2920.8	2818.7	2759.9	2760.5
27.5°	2876.2	2815.2	2707.5	2651.5	2655.2
30°	2769.7	2703.3	2590.2	2542.6	2546.6
32.5°	2659.7	2588.3	2475.6	2434.9	2438.9
35°	2543.8	2466.6	2357.5	2322.8	2329.0
37.5°	2420.3	2344.8	2235.7	2213.6	2218.5
40°	2297.2	2219.3	2115.8	2100.0	2107.7
42.5°	2169.1	2092.8	1995.3	1984.5	1994.2
45°	2036.7	1961.4	1872.3	1867.6	1875.8
47.5°	1902.6	1829.0	1749.9	1748.9	1761.1
50°	1769.7	1697.7	1625.1	1630.1	1639.6
52.5°	1629.0	1560.8	1500.2	1507.4	1523.9
55°	1494.3	1425.1	1371.8	1386.1	1405.8
57.5°	1354.1	1293.8	1246.1	1270.3	1297.5
60°	1212.5	1153.9	1118.1	1157.9	1186.6
62.5°	1072.7	1015.9	989.6	1044.2	1069.0
65°	935.4	880.3	864.9	924.7	951.1
67.5°	797.6	748.4	751.2	814.7	834.4
70°	658.8	614.3	638.1	695.5	709.2
72.5°	527.2	490.7	530.9	577.7	585.6
75°	399.9	375.9	423.6	460.9	468.1
77.5°	286.9	274.4	322.3	353.0	361.2
80°	187.2	190.9	231.4	257.5	266.5
82.5°	109.6	120.8	153.5	182.9	192.2
85°	53.0	66.4	92.4	114.5	124.1
87.5°	18.1	27.0	39.1	43.6	42.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1499010

CATALOG NUMBER: MAE-G-4-120-1LO-HI-30-90

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	16.20	17.78	16.56	18.09	18.41	16.05	17.63	16.41	17.95	18.26
	3H	17.67	19.09	18.05	19.42	19.78	17.79	19.22	18.17	19.54	19.90
	4H	18.11	19.45	18.51	19.80	20.17	18.38	19.72	18.78	20.07	20.44
	6H	18.34	19.58	18.75	19.95	20.34	18.77	20.01	19.18	20.38	20.77
	8H	18.38	19.56	18.80	19.95	20.35	18.90	20.08	19.32	20.47	20.87
	12H	18.39	19.52	18.82	19.90	20.33	18.99	20.12	19.42	20.50	20.93
4H	2H	16.68	18.02	17.08	18.37	18.75	16.56	17.90	16.96	18.25	18.63
	3H	18.35	19.46	18.76	19.86	20.26	18.51	19.63	18.92	20.03	20.43
	4H	18.87	19.88	19.31	20.30	20.73	19.23	20.23	19.66	20.65	21.09
	6H	19.19	20.07	19.65	20.51	20.97	19.74	20.61	20.19	21.05	21.51
	8H	19.25	20.07	19.71	20.51	20.98	19.91	20.73	20.37	21.17	21.63
	12H	19.28	20.01	19.76	20.49	20.96	20.04	20.77	20.52	21.25	21.72
8H	4H	19.11	19.93	19.57	20.38	20.84	19.43	20.25	19.89	20.69	21.16
	6H	19.50	20.18	20.00	20.67	21.15	20.04	20.72	20.53	21.21	21.68
	8H	19.60	20.21	20.11	20.72	21.20	20.27	20.88	20.78	21.39	21.88
	12H	19.66	20.20	20.17	20.69	21.25	20.48	21.02	20.99	21.51	22.07
12H	4H	19.13	19.87	19.61	20.34	20.81	19.43	20.17	19.91	20.64	21.11
	6H	19.54	20.15	20.05	20.65	21.14	20.05	20.66	20.56	21.17	21.65
	8H	19.68	20.22	20.19	20.71	21.27	20.33	20.87	20.84	21.36	21.92