

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: P1499646

Luminaire Tested: MAE-G-4-120-3LO-STD-40-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189188)
Test Lab: INNOVATION CENTER
Issue Date: 6/26/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-120-3LO-STD-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 LO ambient , STD exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

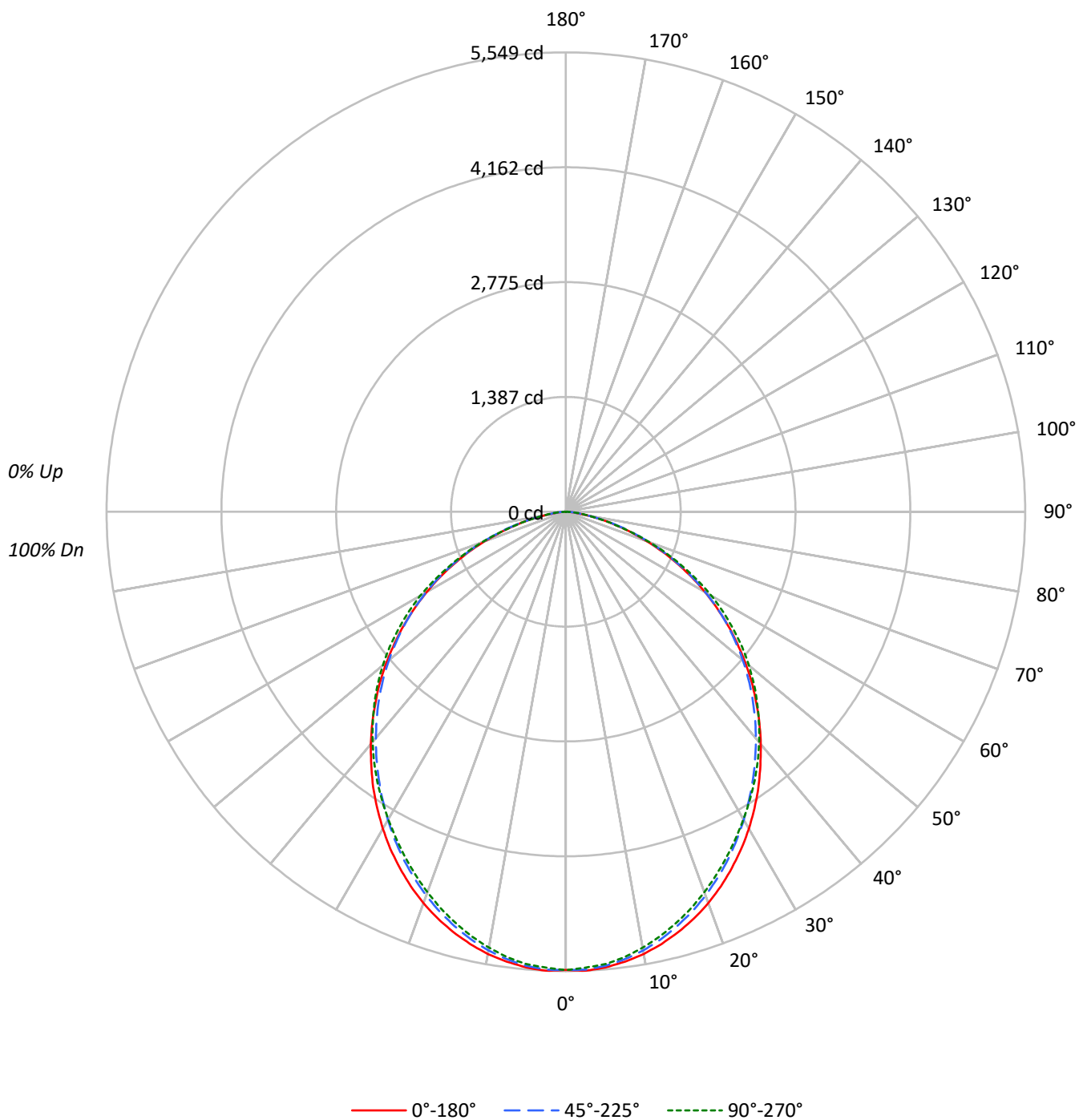
Lumens per Lamp: N/A
Luminaire Lumens: 13542.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.5
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: P1499646

CATALOG NUMBER: MAE-G-4-120-3LO-STD-40-90

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	88	88	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	64	64	61
4	84	73	64	58	82	71	63	57	69	62	56	66	61	56	64	59	55	55	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	48	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	42	42	40
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	38	34	34	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	29
10	54	41	34	29	53	41	34	28	40	33	28	39	33	28	38	32	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7448	7448	7448
5°	7461	7436	7407
10°	7410	7352	7305
15°	7321	7221	7164
20°	7203	7063	7002
25°	7047	6881	6827
30°	6868	6677	6665
35°	6666	6472	6525
40°	6436	6271	6380
45°	6187	6067	6222
50°	5914	5840	6039
55°	5606	5579	5788
60°	5225	5249	5469
65°	4751	4812	4937
70°	4100	4211	4231
75°	3264	3399	3269
80°	2209	2315	2259
85°	1149	1525	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6222 cd/sqm

TEST NUMBER: P1499646

CATALOG NUMBER: MAE-G-4-120-3LO-STD-40-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.8	3.8
10°-20°	1460.6	10.8
20°-30°	2139.5	15.8
30°-40°	2484.7	18.3
40°-50°	2484.2	18.3
50°-60°	2143.1	15.8
60°-70°	1496.6	11.1
70°-80°	686.5	5.1
80°-90°	126.0	0.9
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°	4120.9	30.4
0°-40°	6605.6	48.8
0°-60°	11232.9	82.9
0°-90°	13542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5536	5536	5536	5536	5536	
5°	5524	5503	5505	5476	5484	524
15°	5256	5220	5184	5137	5143	1481
25°	4747	4696	4635	4585	4599	2185
35°	4058	3994	3940	3941	3973	2535
45°	3251	3199	3189	3236	3270	2508
55°	2390	2348	2378	2443	2467	2133
65°	1492	1474	1512	1543	1551	1475
75°	628	626	654	642	629	675
85°	74	82	99	116	124	109
90°	0	0	0	0	0	

TEST NUMBER: P1499646

CATALOG NUMBER: MAE-G-4-120-3LO-STD-40-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5535.8	5535.8	5535.8	5535.8	5535.8
2.5°	5548.8	5528.7	5535.8	5512.7	5510.8
5°	5524.3	5502.6	5505.3	5476.0	5484.1
7.5°	5481.5	5457.5	5452.4	5419.2	5426.0
10°	5423.7	5394.5	5380.9	5341.9	5346.6
12.5°	5346.7	5315.2	5291.4	5246.1	5253.6
15°	5255.8	5220.2	5184.0	5137.0	5143.2
17.5°	5150.8	5110.3	5066.0	5012.2	5023.3
20°	5030.3	4985.4	4932.7	4876.0	4890.1
22.5°	4895.3	4846.6	4787.4	4734.4	4747.4
25°	4746.6	4695.6	4634.9	4585.0	4598.7
27.5°	4590.2	4533.0	4470.1	4429.6	4445.2
30°	4420.8	4360.9	4297.9	4266.8	4289.8
32.5°	4242.1	4181.2	4122.0	4106.4	4133.4
35°	4058.1	3993.6	3940.0	3940.9	3972.7
37.5°	3860.4	3803.5	3757.2	3774.3	3806.4
40°	3664.2	3605.1	3570.5	3598.4	3632.6
42.5°	3461.2	3406.7	3381.7	3422.1	3453.5
45°	3251.3	3199.1	3188.7	3235.5	3269.9
47.5°	3044.2	2991.8	2992.9	3045.6	3083.5
50°	2825.5	2779.4	2790.2	2851.6	2885.1
52.5°	2606.2	2562.5	2585.6	2651.3	2684.8
55°	2389.8	2348.3	2378.4	2443.2	2467.3
57.5°	2165.1	2135.1	2168.8	2227.0	2253.2
60°	1941.6	1914.1	1950.6	2007.2	2032.3
62.5°	1717.4	1695.7	1733.0	1781.9	1792.7
65°	1492.4	1474.3	1511.6	1543.1	1550.7
67.5°	1264.5	1254.1	1291.6	1313.6	1315.8
70°	1042.1	1030.2	1070.3	1083.1	1075.6
72.5°	825.9	822.2	853.3	857.3	843.0
75°	627.9	626.3	653.8	641.7	628.8
77.5°	444.1	444.9	463.6	448.9	442.6
80°	285.1	293.5	298.8	296.0	291.5
82.5°	160.2	170.7	174.9	192.9	200.6
85°	74.4	82.1	98.8	116.2	123.6
87.5°	25.3	31.5	40.9	44.1	41.4
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	17.91	19.49	18.27	19.81	20.12	18.20	19.79	18.57	20.10	20.41
	3H	19.36	20.79	19.74	21.12	21.48	19.66	21.08	20.03	21.41	21.77
	4H	19.79	21.12	20.19	21.47	21.85	20.06	21.39	20.46	21.74	22.12
	6H	19.99	21.23	20.40	21.59	21.99	20.25	21.48	20.66	21.85	22.24
	8H	20.02	21.20	20.44	21.59	21.99	20.29	21.46	20.71	21.85	22.25
	12H	20.02	21.15	20.45	21.53	21.96	20.31	21.44	20.74	21.82	22.25
4H	2H	18.48	19.82	18.88	20.17	20.54	18.72	20.06	19.12	20.40	20.78
	3H	20.11	21.22	20.52	21.62	22.02	20.36	21.47	20.77	21.87	22.27
	4H	20.62	21.62	21.05	22.04	22.47	20.85	21.85	21.28	22.27	22.70
	6H	20.90	21.77	21.36	22.21	22.67	21.12	21.99	21.57	22.43	22.89
	8H	20.94	21.76	21.41	22.20	22.67	21.18	21.99	21.64	22.43	22.90
	12H	20.96	21.68	21.44	22.16	22.63	21.22	21.95	21.70	22.43	22.90
8H	4H	20.81	21.62	21.27	22.07	22.53	21.02	21.83	21.48	22.28	22.74
	6H	21.15	21.82	21.64	22.31	22.78	21.34	22.01	21.84	22.50	22.98
	8H	21.22	21.82	21.73	22.33	22.81	21.43	22.03	21.94	22.54	23.03
	12H	21.25	21.78	21.76	22.27	22.84	21.51	22.04	22.02	22.54	23.10
12H	4H	20.81	21.54	21.29	22.01	22.48	21.02	21.74	21.50	22.22	22.69
	6H	21.15	21.75	21.66	22.26	22.74	21.34	21.94	21.85	22.45	22.93
	8H	21.25	21.78	21.76	22.27	22.83	21.46	21.99	21.97	22.49	23.05