

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: P1499526

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499526
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-4-120-3HI-LO-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient , LO exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

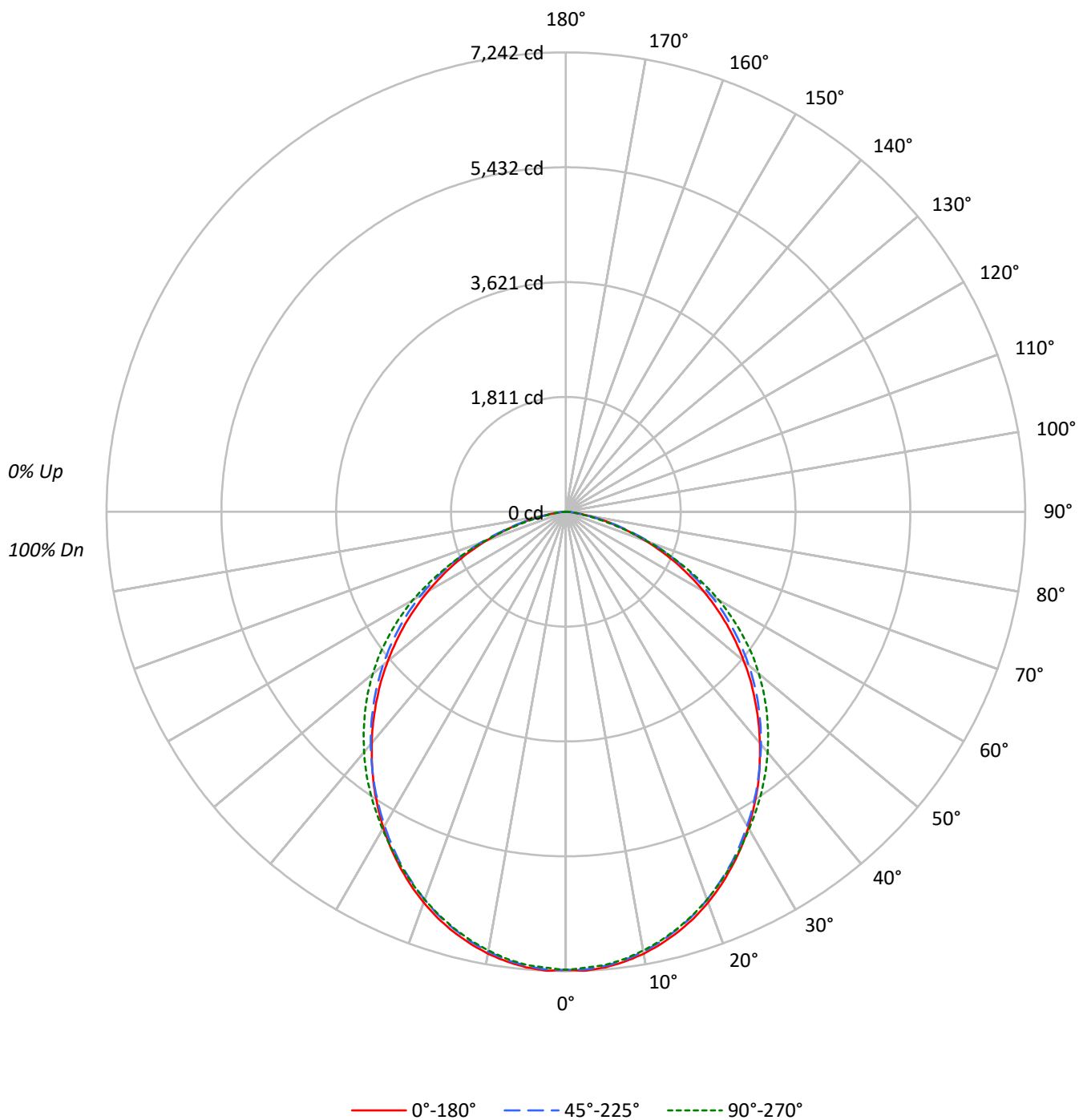
Lumens per Lamp: N/A
Luminaire Lumens: 17939.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 181.1
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: P1499526

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

Luminous Intensity Polar Plot



TEST NUMBER: P1499526

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9717	9717	9717
5°	9736	9708	9684
10°	9667	9621	9596
15°	9548	9486	9473
20°	9388	9320	9317
25°	9179	9117	9140
30°	8939	8883	8976
35°	8668	8641	8841
40°	8363	8405	8694
45°	8031	8161	8525
50°	7670	7879	8319
55°	7265	7548	7985
60°	6759	7115	7502
65°	6128	6507	6614
70°	5263	5591	5435
75°	4167	4323	3840
80°	2779	2647	2228
85°	1397	1501	1712

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8525 cd/sqm

TEST NUMBER: P1499526

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	680.6	3.8
10°-20°	1918.8	10.7
20°-30°	2829.3	15.8
30°-40°	3306.8	18.4
40°-50°	3326.6	18.5
50°-60°	2882.6	16.1
60°-70°	1994.5	11.1
70°-80°	864.9	4.8
80°-90°	134.9	0.8
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°	5428.7	30.3
0°-40°	8735.5	48.7
0°-60°	14944.7	83.3
0°-90°	17939.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17939.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7222	7222	7222	7222	7222	
5°	7208	7173	7188	7162	7170	684
15°	6854	6815	6810	6787	6801	1931
25°	6183	6145	6141	6124	6156	2847
35°	5277	5239	5261	5318	5383	3297
45°	4221	4206	4289	4410	4480	3257
55°	3097	3094	3218	3357	3404	2764
65°	1925	1948	2044	2075	2078	1903
75°	802	823	832	774	739	861
85°	90	93	97	107	111	136
90°	0	0	0	0	0	

TEST NUMBER: P1499526

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7221.8	7221.8	7221.8	7221.8	7221.8
2.5°	7241.5	7205.8	7221.8	7202.4	7193.1
5°	7208.2	7173.4	7187.6	7162.1	7170.3
7.5°	7152.0	7116.9	7125.9	7100.4	7109.1
10°	7075.3	7036.3	7041.9	7015.7	7023.5
12.5°	6973.4	6935.7	6937.3	6909.0	6923.2
15°	6854.2	6814.8	6809.9	6786.9	6800.8
17.5°	6715.7	6674.8	6670.2	6641.6	6662.8
20°	6556.6	6515.2	6509.4	6477.7	6506.9
22.5°	6378.7	6338.1	6328.7	6305.5	6336.8
25°	6182.6	6145.2	6141.4	6123.5	6156.4
27.5°	5976.6	5935.4	5935.6	5932.4	5968.2
30°	5753.7	5713.2	5717.6	5728.1	5777.2
32.5°	5518.2	5481.3	5492.7	5526.9	5582.8
35°	5277.2	5239.1	5260.6	5318.2	5382.6
37.5°	5017.7	4991.5	5026.2	5106.8	5172.8
40°	4761.2	4733.4	4785.3	4881.1	4949.6
42.5°	4496.0	4476.0	4540.2	4653.8	4718.6
45°	4220.8	4205.9	4288.9	4409.5	4480.1
47.5°	3952.5	3934.8	4031.2	4160.0	4234.7
50°	3664.1	3656.9	3764.2	3903.6	3974.4
52.5°	3381.3	3373.6	3492.9	3637.8	3704.1
55°	3096.9	3093.6	3217.6	3356.6	3403.9
57.5°	2803.4	2814.5	2937.5	3056.7	3104.2
60°	2511.6	2524.6	2643.9	2748.4	2787.8
62.5°	2219.8	2239.4	2347.9	2425.8	2433.9
65°	1924.8	1947.7	2044.0	2074.6	2077.5
67.5°	1627.5	1656.3	1736.4	1739.8	1732.9
70°	1337.9	1360.4	1421.3	1407.0	1381.6
72.5°	1056.6	1083.8	1112.1	1080.8	1044.9
75°	801.5	822.6	831.6	774.1	738.7
77.5°	563.6	577.1	566.9	506.6	481.2
80°	358.6	370.4	341.6	304.6	287.6
82.5°	198.2	206.7	182.1	186.2	189.1
85°	90.5	92.7	97.2	107.4	110.9
87.5°	31.0	34.2	39.0	40.8	37.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1499526

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

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	18.83	20.41	19.19	20.73	21.04	19.43	21.01	19.79	21.33	21.64
	3H	20.27	21.69	20.64	22.02	22.38	20.77	22.19	21.15	22.52	22.88
	4H	20.68	22.01	21.07	22.36	22.74	21.08	22.42	21.48	22.77	23.14
	6H	20.87	22.10	21.28	22.47	22.86	21.18	22.42	21.60	22.78	23.18
	8H	20.89	22.07	21.31	22.46	22.86	21.19	22.37	21.61	22.76	23.16
	12H	20.88	22.01	21.31	22.39	22.82	21.19	22.31	21.62	22.69	23.12
4H	2H	19.44	20.78	19.84	21.13	21.50	19.93	21.26	20.33	21.61	21.99
	3H	21.05	22.16	21.46	22.56	22.96	21.44	22.55	21.85	22.95	23.35
	4H	21.54	22.54	21.97	22.95	23.39	21.83	22.83	22.27	23.25	23.68
	6H	21.81	22.67	22.26	23.11	23.57	21.99	22.86	22.45	23.30	23.76
	8H	21.84	22.65	22.30	23.09	23.56	22.01	22.82	22.47	23.26	23.73
	12H	21.85	22.57	22.33	23.05	23.52	22.02	22.74	22.50	23.22	23.69
8H	4H	21.71	22.52	22.17	22.97	23.43	21.98	22.79	22.44	23.23	23.70
	6H	22.02	22.69	22.52	23.18	23.66	22.17	22.84	22.67	23.33	23.81
	8H	22.08	22.68	22.59	23.18	23.67	22.20	22.80	22.72	23.31	23.80
	12H	22.10	22.63	22.61	23.12	23.69	22.23	22.76	22.74	23.25	23.82
12H	4H	21.70	22.43	22.18	22.90	23.37	21.97	22.70	22.45	23.17	23.64
	6H	22.01	22.60	22.52	23.11	23.60	22.16	22.76	22.67	23.27	23.75
	8H	22.09	22.62	22.60	23.11	23.67	22.22	22.75	22.73	23.24	23.80