

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: P1499532

Luminaire Tested: MAE-G-4-120-3HI-LO-50-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499532
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-50-90
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

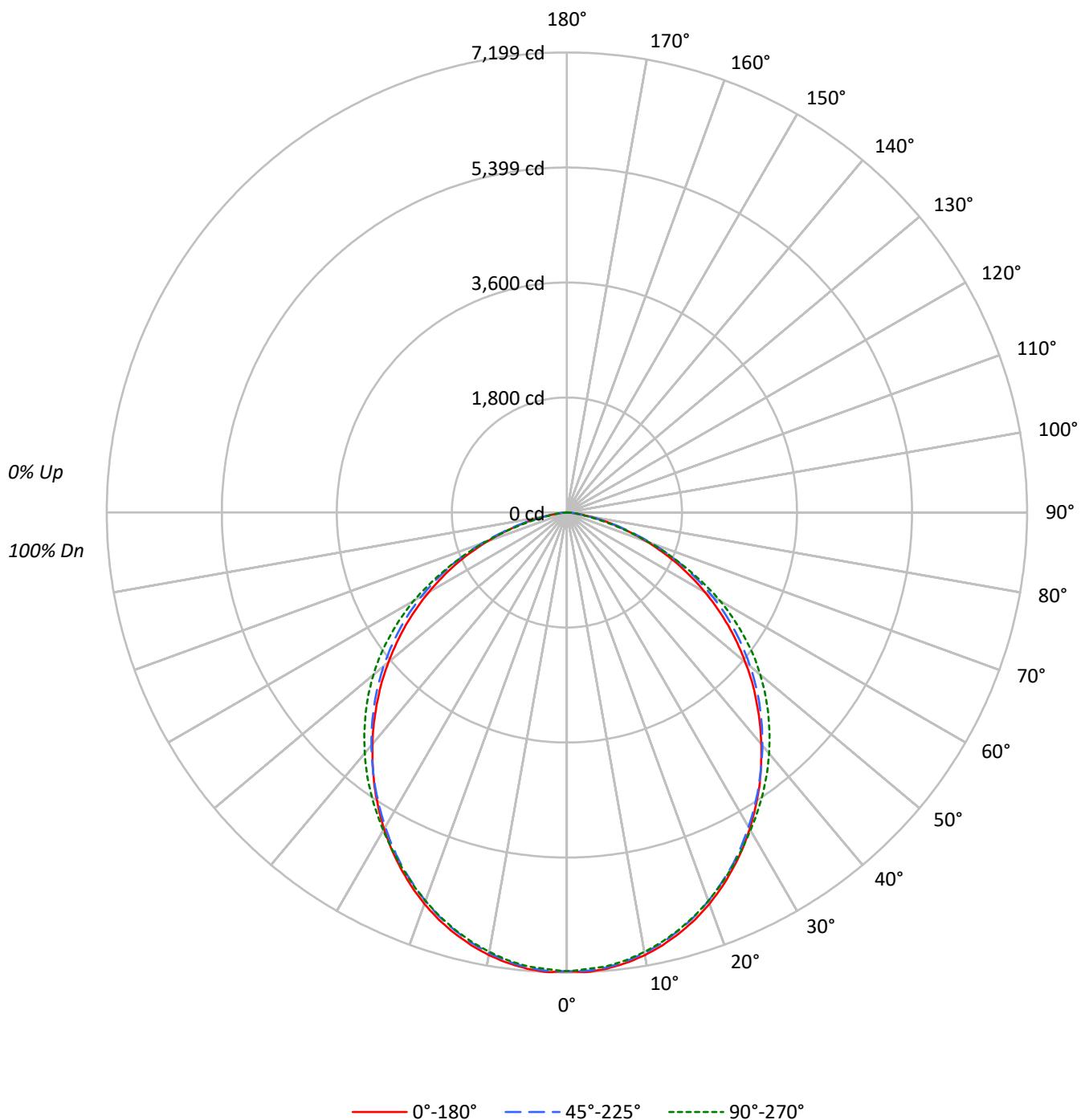
Lumens per Lamp: N/A
Luminaire Lumens: 17833.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P1499532

CATALOG NUMBER: MAE-G-4-120-3HI-LO-50-90

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9659	9659	9659
5°	9678	9650	9627
10°	9609	9564	9539
15°	9491	9430	9417
20°	9332	9265	9262
25°	9124	9064	9086
30°	8886	8831	8923
35°	8617	8590	8789
40°	8313	8355	8642
45°	7984	8113	8475
50°	7624	7833	8270
55°	7222	7503	7938
60°	6719	7073	7458
65°	6092	6469	6575
70°	5233	5558	5403
75°	4142	4298	3818
80°	2762	2631	2214
85°	1391	1493	1701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8475 cd/sqm

TEST NUMBER: P1499532

CATALOG NUMBER: MAE-G-4-120-3HI-LO-50-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.6	3.8
10°-20°	1907.5	10.7
20°-30°	2812.6	15.8
30°-40°	3287.3	18.4
40°-50°	3306.9	18.5
50°-60°	2865.6	16.1
60°-70°	1982.7	11.1
70°-80°	859.8	4.8
80°-90°	134.1	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°	5396.6	30.3
0°-40°	8683.9	48.7
0°-60°	14856.4	83.3
0°-90°	17833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7179	7179	7179	7179	7179	
5°	7166	7131	7145	7120	7128	680
15°	6814	6774	6770	6747	6761	1920
25°	6146	6109	6105	6087	6120	2830
35°	5246	5208	5230	5287	5351	3277
45°	4196	4181	4264	4383	4454	3238
55°	3078	3075	3199	3337	3384	2748
65°	1914	1936	2032	2062	2065	1891
75°	797	818	827	770	734	856
85°	90	92	97	107	110	135
90°	0	0	0	0	0	

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CATALOG NUMBER: MAE-G-4-120-3HI-LO-50-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7179.1	7179.1	7179.1	7179.1	7179.1
2.5°	7198.7	7163.2	7179.1	7159.9	7150.6
5°	7165.6	7131.0	7145.1	7119.9	7127.9
7.5°	7109.7	7074.9	7083.8	7058.6	7067.1
10°	7033.5	6994.7	7000.3	6974.2	6982.0
12.5°	6932.3	6894.8	6896.3	6868.2	6882.3
15°	6813.7	6774.5	6769.6	6746.7	6760.7
17.5°	6676.1	6635.3	6630.8	6602.4	6623.4
20°	6517.8	6476.7	6470.9	6439.5	6468.5
22.5°	6341.0	6300.5	6291.4	6268.2	6299.3
25°	6146.0	6109.0	6105.1	6087.2	6120.1
27.5°	5941.3	5900.3	5900.5	5897.3	5932.9
30°	5719.8	5679.4	5683.9	5694.2	5743.1
32.5°	5485.5	5448.9	5460.2	5494.1	5549.7
35°	5246.0	5208.1	5229.5	5286.8	5350.8
37.5°	4988.0	4962.0	4996.5	5076.7	5142.3
40°	4733.0	4705.4	4757.1	4852.3	4920.4
42.5°	4469.4	4449.6	4513.3	4626.3	4690.8
45°	4195.9	4181.1	4263.5	4383.4	4453.7
47.5°	3929.2	3911.5	4007.4	4135.3	4209.7
50°	3642.4	3635.2	3742.0	3880.6	3951.0
52.5°	3361.4	3353.6	3472.2	3616.3	3682.2
55°	3078.5	3075.4	3198.6	3336.8	3383.9
57.5°	2786.8	2798.0	2920.2	3038.7	3085.7
60°	2496.7	2509.6	2628.3	2732.2	2771.3
62.5°	2206.7	2226.2	2334.0	2411.5	2419.5
65°	1913.5	1936.2	2032.0	2062.4	2065.2
67.5°	1617.9	1646.5	1726.1	1729.5	1722.7
70°	1330.1	1352.4	1412.8	1398.7	1373.4
72.5°	1050.3	1077.4	1105.5	1074.4	1038.8
75°	796.8	817.8	826.7	769.6	734.4
77.5°	560.3	573.8	563.5	503.6	478.3
80°	356.5	368.3	339.6	302.8	285.8
82.5°	197.1	205.5	181.1	185.1	187.9
85°	90.1	92.1	96.7	106.8	110.2
87.5°	30.9	34.1	38.8	40.6	37.2
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	18.81	20.39	19.17	20.71	21.02	19.41	20.99	19.77	21.31	21.62
	3H	20.24	21.67	20.62	21.99	22.36	20.75	22.17	21.12	22.50	22.86
	4H	20.65	21.99	21.05	22.34	22.72	21.06	22.40	21.46	22.75	23.12
	6H	20.85	22.08	21.26	22.45	22.84	21.16	22.40	21.57	22.76	23.16
	8H	20.87	22.05	21.29	22.43	22.83	21.17	22.35	21.59	22.74	23.14
	12H	20.86	21.99	21.29	22.37	22.80	21.17	22.29	21.59	22.67	23.10
4H	2H	19.42	20.76	19.82	21.11	21.48	19.91	21.24	20.31	21.59	21.97
	3H	21.03	22.14	21.44	22.54	22.94	21.42	22.53	21.83	22.93	23.33
	4H	21.52	22.52	21.95	22.93	23.37	21.81	22.81	22.24	23.23	23.66
	6H	21.79	22.65	22.24	23.09	23.55	21.97	22.84	22.43	23.28	23.74
	8H	21.82	22.63	22.28	23.07	23.54	21.99	22.80	22.45	23.24	23.71
	12H	21.83	22.55	22.31	23.03	23.50	22.00	22.72	22.48	23.20	23.67
8H	4H	21.69	22.50	22.15	22.95	23.41	21.96	22.77	22.42	23.21	23.68
	6H	22.00	22.67	22.50	23.16	23.64	22.15	22.82	22.65	23.31	23.79
	8H	22.06	22.65	22.57	23.16	23.65	22.18	22.78	22.70	23.29	23.78
	12H	22.08	22.61	22.59	23.10	23.67	22.21	22.74	22.72	23.23	23.80
12H	4H	21.68	22.41	22.16	22.88	23.35	21.95	22.68	22.43	23.15	23.62
	6H	21.99	22.58	22.50	23.09	23.58	22.14	22.74	22.65	23.25	23.73
	8H	22.07	22.60	22.58	23.09	23.65	22.20	22.73	22.71	23.22	23.78