

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: P1499598

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499598
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-HI-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 LO ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

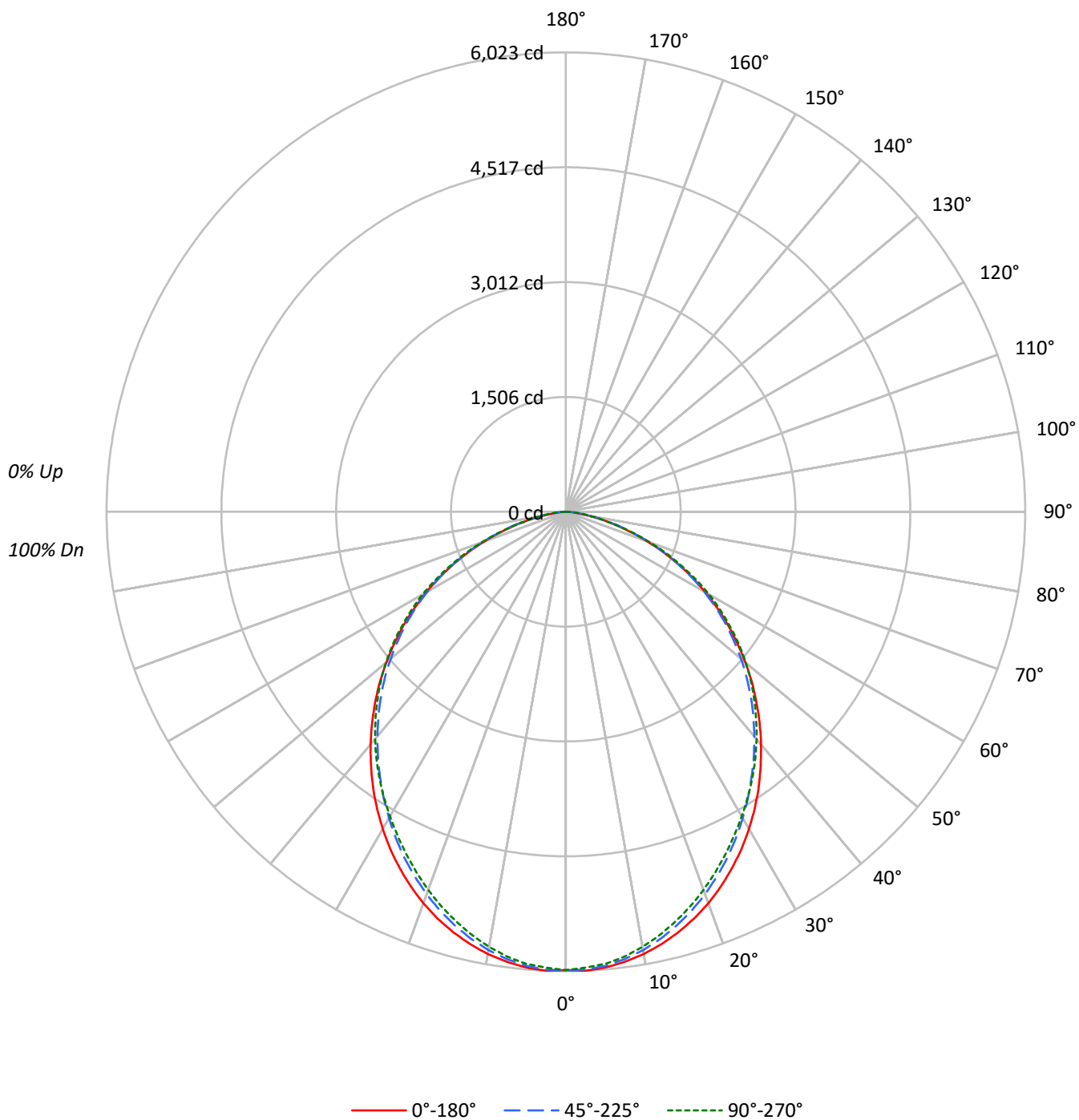
Lumens per Lamp: N/A
Luminaire Lumens: 14631.0 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 160.9
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

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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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	92	86	80	98	90	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	56		66	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	41	35	61	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	42	34	29	53	41	34	29	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8085	8085	8085
5°	8099	8070	8035
10°	8044	7973	7913
15°	7948	7822	7745
20°	7821	7640	7554
25°	7653	7434	7352
30°	7461	7205	7164
35°	7242	6975	7000
40°	6995	6751	6832
45°	6726	6524	6651
50°	6432	6274	6444
55°	6098	5988	6173
60°	5686	5630	5843
65°	5176	5166	5315
70°	4471	4546	4615
75°	3567	3717	3656
80°	2424	2607	2634
85°	1272	1780	2268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6726 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	565.1	3.9
10°-20°	1582.1	10.8
20°-30°	2312.8	15.8
30°-40°	2680.6	18.3
40°-50°	2674.9	18.3
50°-60°	2304.4	15.8
60°-70°	1613.9	11.0
70°-80°	752.9	5.1
80°-90°	144.2	1.0
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°	4459.9	30.5
0°-40°	7140.6	48.8
0°-60°	12119.9	82.8
0°-90°	14631.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14631.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6009	6009	6009	6009	6009	
5°	5996	5974	5975	5940	5949	569
15°	5706	5665	5615	5555	5560	1608
25°	5155	5092	5007	4941	4952	2373
35°	4409	4328	4246	4233	4262	2755
45°	3535	3464	3429	3464	3495	2727
55°	2599	2541	2553	2609	2631	2320
65°	1626	1594	1623	1659	1670	1606
75°	686	678	715	712	703	737
85°	82	93	115	137	147	121
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6009.1	6009.1	6009.1	6009.1	6009.1
2.5°	6022.6	6003.2	6009.1	5981.4	5981.1
5°	5996.3	5974.5	5974.7	5939.6	5949.0
7.5°	5950.0	5924.9	5915.3	5874.8	5882.3
10°	5887.5	5856.1	5835.4	5786.9	5791.6
12.5°	5804.3	5769.2	5735.2	5678.2	5685.3
15°	5705.9	5665.4	5615.4	5554.6	5560.0
17.5°	5592.2	5545.2	5483.6	5414.7	5425.2
20°	5462.0	5408.8	5335.7	5263.4	5276.0
22.5°	5315.8	5257.1	5175.7	5106.5	5117.1
25°	5155.0	5092.1	5007.3	4941.1	4952.2
27.5°	4985.6	4915.2	4826.0	4769.6	4782.4
30°	4802.2	4727.6	4637.4	4590.7	4610.8
32.5°	4608.8	4532.0	4445.3	4414.6	4438.7
35°	4409.3	4327.7	4246.4	4233.1	4261.8
37.5°	4195.3	4121.2	4046.9	4050.8	4079.5
40°	3982.4	3905.8	3843.6	3858.8	3890.0
42.5°	3762.1	3690.0	3638.3	3666.7	3694.9
45°	3534.6	3464.4	3428.7	3464.4	3495.2
47.5°	3309.3	3239.6	3216.7	3258.8	3293.6
50°	3072.6	3009.2	2997.3	3048.9	3078.5
52.5°	2833.8	2773.8	2776.3	2832.7	2863.3
55°	2599.4	2541.4	2552.7	2609.2	2631.4
57.5°	2355.6	2310.3	2326.8	2379.0	2404.2
60°	2113.0	2070.9	2092.2	2146.0	2171.5
62.5°	1869.4	1833.8	1859.1	1908.6	1921.9
65°	1625.7	1594.1	1622.6	1659.4	1669.5
67.5°	1378.2	1356.2	1389.1	1419.3	1424.1
70°	1136.6	1114.1	1155.6	1177.2	1173.1
72.5°	901.8	889.6	926.6	940.2	928.9
75°	686.1	678.5	715.1	712.5	703.2
77.5°	486.0	483.7	512.9	507.3	504.8
80°	312.9	321.7	336.5	342.0	339.9
82.5°	176.7	189.3	201.6	226.0	236.2
85°	82.4	92.7	115.3	137.3	146.9
87.5°	27.9	35.9	48.0	52.1	49.2
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	18.19	19.78	18.56	20.09	20.41	18.39	19.97	18.76	20.29	20.60
	3H	19.66	21.08	20.03	21.41	21.77	19.88	21.31	20.26	21.64	22.00
	4H	20.08	21.42	20.48	21.77	22.15	20.31	21.65	20.71	22.00	22.38
	6H	20.29	21.53	20.70	21.90	22.29	20.53	21.77	20.94	22.14	22.53
	8H	20.32	21.50	20.75	21.89	22.29	20.58	21.76	21.01	22.15	22.55
	12H	20.32	21.45	20.75	21.83	22.26	20.62	21.75	21.05	22.13	22.56
4H	2H	18.75	20.09	19.15	20.44	20.82	18.91	20.25	19.31	20.60	20.98
	3H	20.39	21.51	20.80	21.90	22.31	20.60	21.71	21.01	22.11	22.51
	4H	20.91	21.91	21.34	22.32	22.76	21.12	22.12	21.55	22.54	22.97
	6H	21.19	22.07	21.65	22.51	22.96	21.42	22.29	21.88	22.74	23.19
	8H	21.24	22.05	21.70	22.50	22.96	21.50	22.31	21.96	22.76	23.22
	12H	21.25	21.98	21.73	22.46	22.93	21.56	22.28	22.04	22.76	23.23
8H	4H	21.10	21.92	21.56	22.36	22.83	21.30	22.11	21.76	22.56	23.02
	6H	21.45	22.12	21.94	22.61	23.09	21.66	22.33	22.16	22.82	23.30
	8H	21.52	22.12	22.03	22.63	23.12	21.77	22.38	22.29	22.88	23.37
	12H	21.56	22.09	22.07	22.58	23.15	21.87	22.41	22.38	22.90	23.46
12H	4H	21.10	21.83	21.59	22.31	22.78	21.30	22.02	21.78	22.50	22.97
	6H	21.45	22.05	21.96	22.56	23.05	21.66	22.26	22.17	22.77	23.26
	8H	21.56	22.09	22.07	22.58	23.15	21.81	22.34	22.32	22.83	23.40