

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: P1499514

Luminaire Tested: MAE-G-4-120-3HI-LO-30-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499514
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-30-90
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

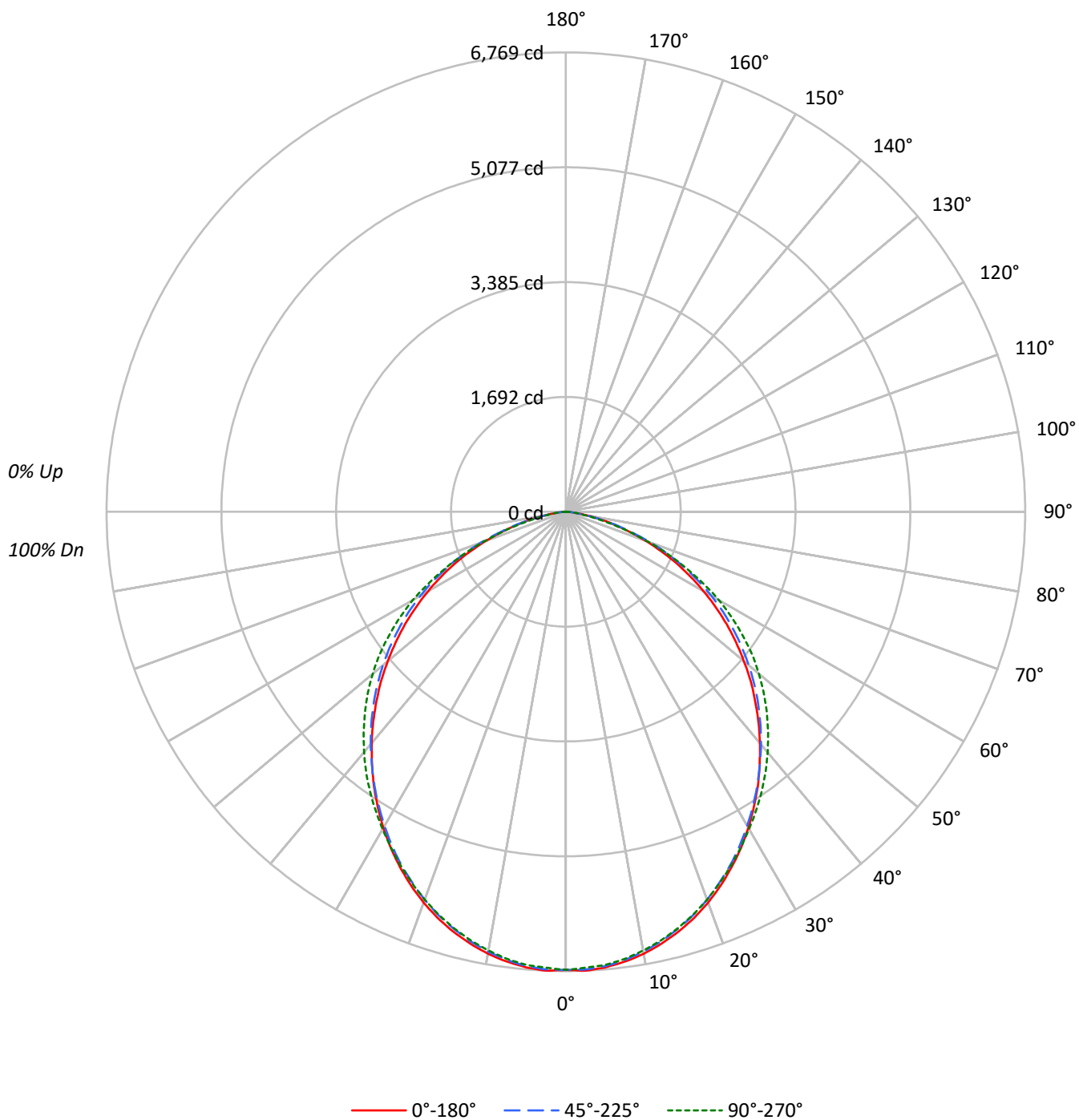
Lumens per Lamp: N/A
Luminaire Lumens: 16768.0 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	9082	9082	9082
5°	9100	9074	9052
10°	9036	8993	8969
15°	8924	8867	8855
20°	8775	8712	8709
25°	8579	8522	8543
30°	8356	8303	8390
35°	8102	8077	8264
40°	7817	7856	8126
45°	7507	7628	7968
50°	7169	7365	7776
55°	6790	7055	7464
60°	6318	6650	7012
65°	5728	6083	6182
70°	4920	5226	5080
75°	3895	4041	3590
80°	2597	2474	2083
85°	1306	1403	1601

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7968 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	636.2	3.8
10°-20°	1793.5	10.7
20°-30°	2644.6	15.8
30°-40°	3090.9	18.4
40°-50°	3109.4	18.5
50°-60°	2694.4	16.1
60°-70°	1864.3	11.1
70°-80°	808.4	4.8
80°-90°	126.1	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°	5074.3	30.3
0°-40°	8165.3	48.7
0°-60°	13969.2	83.3
0°-90°	16768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16768.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6750	6750	6750	6750	6750	
5°	6738	6705	6718	6695	6702	639
15°	6407	6370	6365	6344	6357	1805
25°	5779	5744	5740	5724	5754	2661
35°	4933	4897	4917	4971	5031	3082
45°	3945	3931	4009	4122	4188	3044
55°	2895	2892	3008	3138	3182	2584
65°	1799	1820	1911	1939	1942	1778
75°	749	769	777	724	691	805
85°	85	87	91	100	104	127
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6750.3	6750.3	6750.3	6750.3	6750.3
2.5°	6768.8	6735.4	6750.3	6732.2	6723.5
5°	6737.7	6705.2	6718.4	6694.6	6702.3
7.5°	6685.1	6652.4	6660.7	6637.0	6645.1
10°	6613.4	6577.0	6582.2	6557.7	6565.0
12.5°	6518.2	6483.0	6484.4	6458.1	6471.3
15°	6406.8	6369.9	6365.3	6343.9	6356.9
17.5°	6277.4	6239.0	6234.9	6208.0	6227.8
20°	6128.6	6089.9	6084.4	6054.9	6082.2
22.5°	5962.3	5924.3	5915.6	5893.9	5923.2
25°	5779.0	5744.1	5740.5	5723.8	5754.5
27.5°	5586.4	5548.0	5548.2	5545.1	5578.7
30°	5378.2	5340.3	5344.5	5354.2	5400.2
32.5°	5158.0	5123.5	5134.2	5166.1	5218.3
35°	4932.7	4897.1	4917.2	4971.0	5031.3
37.5°	4690.1	4665.6	4698.2	4773.5	4835.1
40°	4450.3	4424.4	4472.9	4562.5	4626.5
42.5°	4202.6	4183.9	4243.8	4350.1	4410.7
45°	3945.3	3931.4	4008.9	4121.7	4187.7
47.5°	3694.5	3678.0	3768.1	3888.5	3958.3
50°	3424.9	3418.2	3518.5	3648.8	3715.1
52.5°	3160.6	3153.4	3264.9	3400.4	3462.3
55°	2894.7	2891.7	3007.6	3137.5	3181.8
57.5°	2620.3	2630.8	2745.8	2857.2	2901.5
60°	2347.7	2359.8	2471.4	2569.0	2605.9
62.5°	2074.9	2093.3	2194.6	2267.5	2275.0
65°	1799.2	1820.5	1910.6	1939.2	1941.9
67.5°	1521.3	1548.1	1623.1	1626.3	1619.8
70°	1250.6	1271.7	1328.4	1315.2	1291.4
72.5°	987.6	1013.0	1039.5	1010.2	976.8
75°	749.2	768.9	777.3	723.5	690.6
77.5°	526.8	539.5	529.8	473.6	449.7
80°	335.2	346.3	319.3	284.7	268.8
82.5°	185.3	193.2	170.2	174.0	176.8
85°	84.6	86.6	90.9	100.4	103.7
87.5°	29.0	32.0	36.5	38.1	35.0
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	18.60	20.18	18.96	20.49	20.81	19.19	20.78	19.56	21.09	21.41
	3H	20.03	21.45	20.41	21.78	22.14	20.53	21.96	20.91	22.28	22.65
	4H	20.44	21.78	20.84	22.13	22.50	20.85	22.18	21.25	22.53	22.91
	6H	20.63	21.87	21.04	22.23	22.62	20.95	22.18	21.36	22.55	22.94
	8H	20.65	21.83	21.08	22.22	22.62	20.96	22.13	21.38	22.52	22.92
	12H	20.65	21.78	21.08	22.16	22.59	20.95	22.08	21.38	22.46	22.89
4H	2H	19.21	20.55	19.61	20.89	21.27	19.69	21.03	20.09	21.38	21.75
	3H	20.81	21.92	21.22	22.32	22.72	21.21	22.32	21.62	22.72	23.12
	4H	21.31	22.31	21.74	22.72	23.16	21.60	22.60	22.03	23.01	23.45
	6H	21.57	22.44	22.03	22.88	23.34	21.76	22.62	22.21	23.07	23.52
	8H	21.61	22.41	22.07	22.86	23.32	21.77	22.58	22.23	23.03	23.49
	12H	21.61	22.34	22.09	22.81	23.28	21.78	22.51	22.26	22.98	23.45
8H	4H	21.48	22.29	21.94	22.73	23.20	21.75	22.55	22.21	23.00	23.46
	6H	21.79	22.45	22.28	22.94	23.42	21.94	22.60	22.43	23.09	23.57
	8H	21.84	22.44	22.36	22.95	23.44	21.97	22.57	22.48	23.08	23.56
	12H	21.87	22.40	22.38	22.89	23.45	22.00	22.53	22.51	23.02	23.58
12H	4H	21.47	22.19	21.95	22.67	23.14	21.74	22.46	22.22	22.94	23.41
	6H	21.77	22.37	22.28	22.88	23.37	21.92	22.52	22.44	23.03	23.52
	8H	21.86	22.39	22.37	22.88	23.44	21.99	22.51	22.49	23.00	23.57