

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: P1499490

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499490
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-HI-30-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

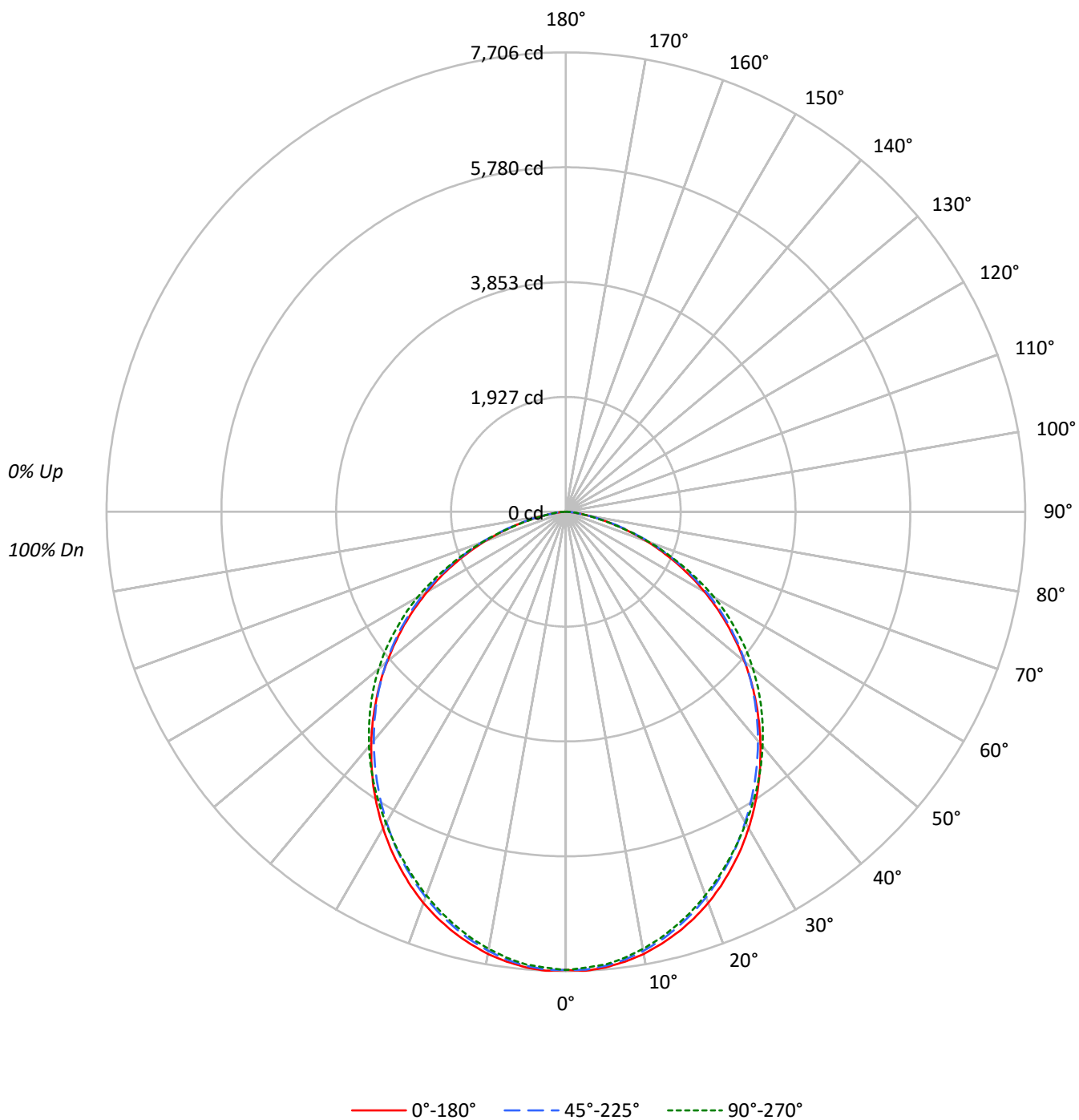
Lumens per Lamp: N/A
Luminaire Lumens: 18923.0 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 221.8
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: P1499490

CATALOG NUMBER: MAE-G-4-120-3HI-HI-30-90

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	92	90		91
2	100	92	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	29	53	41	33	28	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10343	10343	10343
5°	10362	10329	10295
10°	10290	10222	10172
15°	10165	10056	10003
20°	9998	9854	9802
25°	9779	9616	9582
30°	9528	9347	9377
35°	9244	9073	9204
40°	8922	8805	9021
45°	8574	8532	8817
50°	8193	8223	8578
55°	7763	7864	8226
60°	7230	7405	7754
65°	6568	6782	6931
70°	5656	5890	5839
75°	4493	4671	4355
80°	3023	3053	2824
85°	1551	1905	2313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8817 cd/sqm

TEST NUMBER: P1499490

CATALOG NUMBER: MAE-G-4-120-3HI-HI-30-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	723.7	3.8
10°-20°	2034.0	10.7
20°-30°	2987.5	15.8
30°-40°	3478.7	18.4
40°-50°	3486.9	18.4
50°-60°	3013.6	15.9
60°-70°	2096.5	11.1
70°-80°	940.0	5.0
80°-90°	162.2	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°	5745.3	30.4
0°-40°	9223.9	48.7
0°-60°	15724.4	83.1
0°-90°	18923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18923.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7687	7687	7687	7687	7687	
5°	7672	7639	7647	7612	7622	728
15°	7297	7251	7219	7170	7182	2056
25°	6587	6529	6477	6428	6454	3033
35°	5628	5558	5524	5549	5603	3516
45°	4506	4456	4484	4575	4634	3477
55°	3310	3274	3352	3466	3506	2954
65°	2063	2058	2130	2170	2177	2039
75°	864	872	899	864	838	928
85°	100	108	123	142	150	149
90°	0	0	0	0	0	

TEST NUMBER: P1499490

CATALOG NUMBER: MAE-G-4-120-3HI-HI-30-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7687.1	7687.1	7687.1	7687.1	7687.1
2.5°	7706.4	7674.4	7687.1	7659.7	7654.1
5°	7671.8	7638.9	7647.3	7612.0	7622.3
7.5°	7612.2	7577.3	7576.8	7538.5	7548.0
10°	7531.3	7490.4	7481.7	7438.2	7445.5
12.5°	7423.8	7381.5	7362.6	7313.1	7325.5
15°	7297.4	7250.9	7218.9	7170.4	7181.5
17.5°	7150.9	7099.7	7061.4	7004.6	7023.0
20°	6982.8	6927.8	6881.8	6821.6	6845.9
22.5°	6794.4	6736.8	6684.0	6630.3	6654.7
25°	6587.1	6528.8	6477.4	6428.5	6454.0
27.5°	6368.9	6304.2	6252.5	6217.8	6246.1
30°	6133.0	6066.1	6016.3	5995.2	6035.4
32.5°	5883.8	5817.7	5774.0	5775.9	5822.4
35°	5627.8	5558.3	5523.6	5549.2	5603.4
37.5°	5352.7	5294.4	5271.5	5320.5	5375.5
40°	5079.9	5019.3	5013.3	5077.8	5135.8
42.5°	4797.9	4744.5	4751.7	4834.2	4888.3
45°	4505.9	4456.4	4483.9	4574.7	4633.6
47.5°	4219.1	4168.3	4211.1	4310.3	4373.9
50°	3913.9	3872.9	3928.4	4039.4	4097.8
52.5°	3611.0	3571.6	3642.4	3759.4	3815.6
55°	3309.5	3273.9	3352.5	3466.1	3506.5
57.5°	2997.3	2977.5	3058.6	3158.2	3200.3
60°	2686.9	2670.0	2751.8	2843.6	2881.4
62.5°	2375.9	2366.5	2444.2	2518.3	2530.7
65°	2062.9	2057.8	2130.2	2169.5	2177.0
67.5°	1746.3	1750.2	1815.9	1835.4	1834.2
70°	1437.7	1437.7	1497.1	1501.5	1484.2
72.5°	1137.9	1146.5	1184.5	1174.2	1146.8
75°	864.3	872.1	898.6	863.7	837.8
77.5°	609.8	616.4	627.3	589.2	572.8
80°	390.2	402.1	394.0	375.7	364.5
82.5°	217.8	230.1	223.0	239.5	247.1
85°	100.5	107.7	123.4	142.1	149.8
87.5°	34.2	40.7	50.6	54.0	50.3
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	19.05	20.63	19.41	20.95	21.26	19.47	21.05	19.83	21.37	21.68
	3H	20.50	21.92	20.87	22.25	22.61	20.87	22.30	21.25	22.63	22.99
	4H	20.91	22.25	21.31	22.60	22.98	21.24	22.57	21.64	22.92	23.30
	6H	21.11	22.35	21.52	22.71	23.11	21.39	22.63	21.80	22.99	23.38
	8H	21.14	22.32	21.56	22.71	23.11	21.41	22.59	21.84	22.98	23.38
	12H	21.14	22.26	21.56	22.64	23.07	21.42	22.55	21.85	22.93	23.36
4H	2H	19.64	20.97	20.04	21.32	21.70	19.98	21.31	20.38	21.66	22.04
	3H	21.26	22.37	21.67	22.77	23.17	21.57	22.68	21.98	23.08	23.48
	4H	21.76	22.76	22.19	23.17	23.61	22.01	23.01	22.45	23.43	23.87
	6H	22.03	22.90	22.49	23.35	23.80	22.23	23.10	22.69	23.54	24.00
	8H	22.07	22.89	22.54	23.33	23.79	22.27	23.09	22.74	23.53	23.99
	12H	22.08	22.81	22.56	23.29	23.76	22.30	23.03	22.78	23.51	23.98
8H	4H	21.94	22.75	22.40	23.20	23.66	22.17	22.99	22.64	23.43	23.90
	6H	22.27	22.94	22.76	23.43	23.90	22.44	23.11	22.93	23.60	24.08
	8H	22.33	22.93	22.84	23.44	23.93	22.50	23.10	23.02	23.61	24.10
	12H	22.36	22.89	22.87	23.38	23.95	22.56	23.09	23.07	23.58	24.15
12H	4H	21.94	22.66	22.42	23.14	23.61	22.17	22.90	22.65	23.37	23.84
	6H	22.26	22.86	22.77	23.37	23.86	22.43	23.03	22.94	23.54	24.03
	8H	22.36	22.88	22.86	23.38	23.94	22.53	23.06	23.04	23.55	24.11