

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: P1499700

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499700
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-4-120-3STD-HI-50-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 STD ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

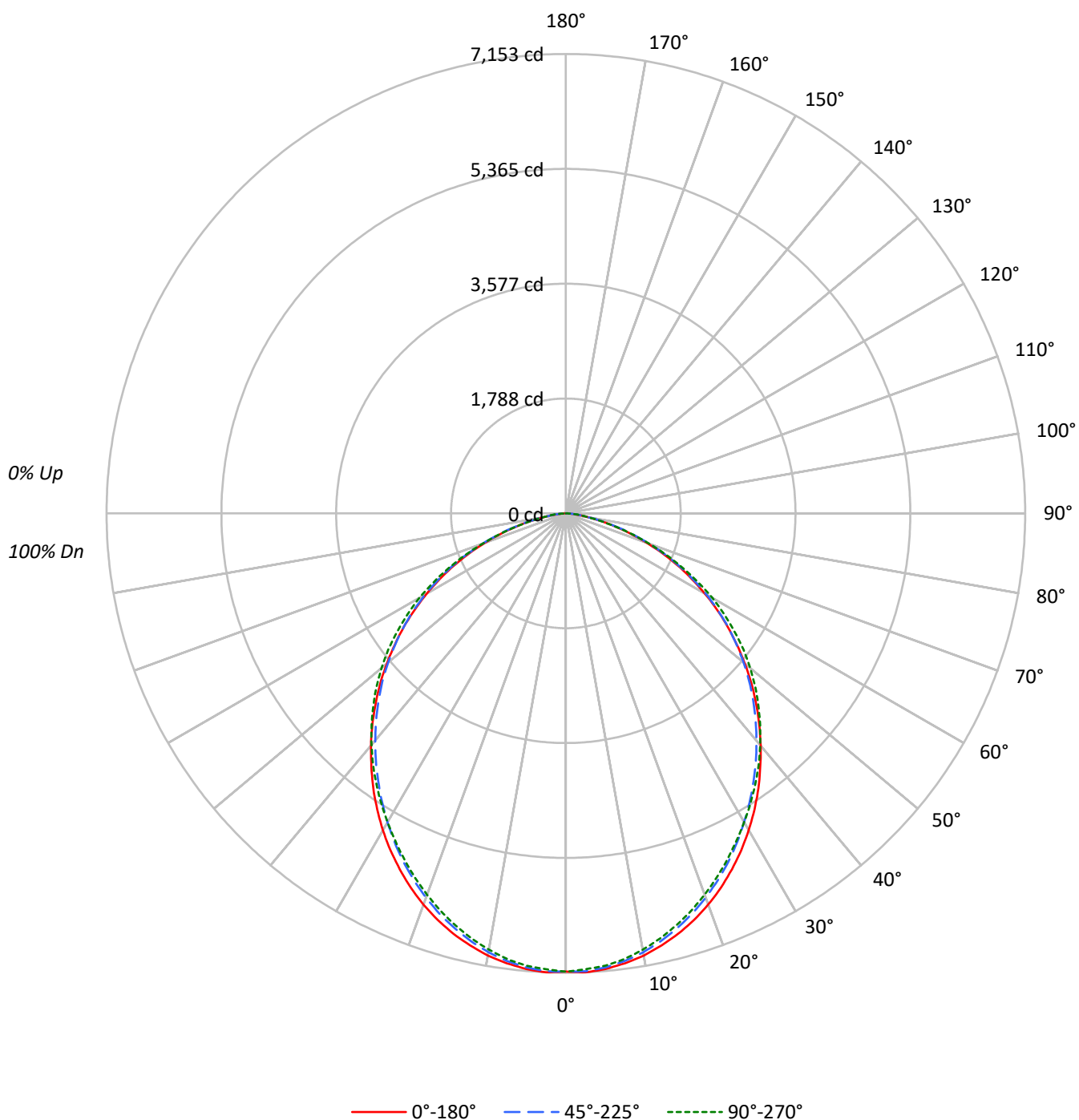
Lumens per Lamp: N/A
Luminaire Lumens: 17490.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.17 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 191.3
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	92	90	91	89	88	86		
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72		
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61		
4	84	73	64	58	82	71	63	57	69	62	57	66	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	42	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	29	53	41	34	28	40	33	28	39	33	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9601	9601	9601
5°	9618	9586	9550
10°	9552	9480	9424
15°	9437	9316	9251
20°	9283	9118	9048
25°	9082	8887	8829
30°	8851	8629	8626
35°	8589	8367	8452
40°	8292	8112	8271
45°	7970	7852	8071
50°	7618	7561	7839
55°	7220	7225	7515
60°	6728	6800	7095
65°	6116	6232	6386
70°	5274	5440	5444
75°	4196	4367	4160
80°	2835	2937	2822
85°	1468	1903	2364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	671.5	3.8
10°-20°	1884.4	10.8
20°-30°	2762.6	15.8
30°-40°	3211.0	18.4
40°-50°	3212.9	18.4
50°-60°	2773.3	15.9
60°-70°	1934.4	11.1
70°-80°	881.1	5.0
80°-90°	158.7	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°	5318.5	30.4
0°-40°	8529.5	48.8
0°-60°	14515.8	83.0
0°-90°	17490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17490.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7136	7136	7136	7136	7136	
5°	7121	7092	7097	7061	7071	675
15°	6775	6730	6688	6632	6641	1909
25°	6117	6055	5986	5928	5947	2817
35°	5229	5152	5094	5102	5146	3267
45°	4188	4128	4126	4194	4242	3231
55°	3078	3031	3080	3170	3204	2747
65°	1921	1903	1957	1997	2006	1898
75°	807	808	840	819	800	867
85°	95	104	123	144	153	140
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7135.7	7135.7	7135.7	7135.7	7135.7
2.5°	7152.9	7125.9	7135.7	7107.4	7104.1
5°	7121.1	7092.4	7097.2	7061.0	7071.1
7.5°	7066.0	7034.6	7029.8	6989.2	6998.1
10°	6991.2	6953.4	6938.9	6891.7	6898.0
12.5°	6891.8	6851.7	6825.1	6770.4	6780.7
15°	6774.6	6729.5	6688.2	6632.3	6641.2
17.5°	6639.1	6588.3	6537.8	6473.6	6488.9
20°	6483.5	6427.8	6367.7	6299.9	6319.4
22.5°	6309.2	6249.3	6181.5	6118.8	6137.5
25°	6117.3	6055.1	5986.4	5927.9	5947.4
27.5°	5915.4	5846.0	5775.1	5729.2	5751.0
30°	5696.9	5624.2	5553.9	5520.2	5552.2
32.5°	5466.1	5393.1	5327.8	5314.5	5351.9
35°	5228.9	5151.5	5093.9	5102.0	5145.9
37.5°	4973.9	4906.4	4858.7	4888.0	4932.4
40°	4721.0	4650.9	4618.4	4661.7	4708.9
42.5°	4459.1	4395.4	4375.2	4434.9	4478.3
45°	4188.5	4127.8	4126.4	4194.1	4241.7
47.5°	3921.7	3860.4	3873.7	3949.2	4001.3
50°	3639.4	3586.5	3612.0	3698.6	3745.2
52.5°	3357.2	3306.8	3347.8	3440.0	3485.8
55°	3077.8	3030.7	3080.1	3170.4	3203.5
57.5°	2788.2	2755.8	2809.2	2889.5	2924.9
60°	2500.1	2470.8	2526.8	2603.6	2636.7
62.5°	2211.3	2189.2	2244.6	2309.5	2322.7
65°	1921.1	1903.4	1957.4	1996.8	2005.8
67.5°	1627.2	1619.0	1671.4	1696.5	1698.1
70°	1340.6	1330.0	1382.8	1395.4	1383.9
72.5°	1062.1	1061.2	1099.8	1100.4	1079.7
75°	807.2	808.1	840.1	819.3	800.3
77.5°	570.5	573.1	592.9	568.8	558.5
80°	365.9	376.7	379.1	371.4	364.2
82.5°	205.2	218.0	219.8	240.5	249.5
85°	95.1	104.0	123.3	144.2	153.1
87.5°	32.4	39.7	51.0	54.7	51.3
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	18.79	20.37	19.16	20.69	21.00	19.12	20.71	19.49	21.02	21.34
	3H	20.24	21.67	20.62	21.99	22.36	20.56	21.99	20.94	22.31	22.68
	4H	20.66	22.00	21.06	22.35	22.73	20.95	22.29	21.35	22.64	23.01
	6H	20.87	22.11	21.28	22.47	22.86	21.13	22.36	21.54	22.73	23.12
	8H	20.89	22.07	21.32	22.46	22.86	21.16	22.34	21.59	22.73	23.13
	12H	20.89	22.02	21.32	22.40	22.83	21.18	22.31	21.61	22.69	23.12
4H	2H	19.37	20.71	19.77	21.05	21.43	19.64	20.97	20.04	21.32	21.70
	3H	21.00	22.11	21.41	22.51	22.91	21.26	22.37	21.67	22.77	23.17
	4H	21.50	22.50	21.93	22.92	23.35	21.74	22.74	22.17	23.16	23.59
	6H	21.78	22.65	22.24	23.09	23.55	21.99	22.86	22.45	23.30	23.76
	8H	21.82	22.64	22.28	23.08	23.55	22.04	22.86	22.51	23.30	23.77
	12H	21.83	22.56	22.32	23.04	23.51	22.08	22.81	22.56	23.29	23.76
8H	4H	21.69	22.50	22.15	22.95	23.41	21.91	22.72	22.37	23.16	23.63
	6H	22.02	22.69	22.52	23.18	23.66	22.21	22.88	22.70	23.37	23.85
	8H	22.09	22.69	22.60	23.20	23.69	22.29	22.89	22.80	23.40	23.89
	12H	22.12	22.65	22.63	23.15	23.71	22.37	22.90	22.88	23.39	23.95
12H	4H	21.69	22.41	22.17	22.89	23.36	21.90	22.63	22.38	23.11	23.58
	6H	22.02	22.62	22.53	23.13	23.62	22.20	22.81	22.72	23.31	23.80
	8H	22.12	22.65	22.63	23.14	23.70	22.32	22.85	22.83	23.34	23.91