

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: P1499550

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499550
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-STD-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient , STD exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

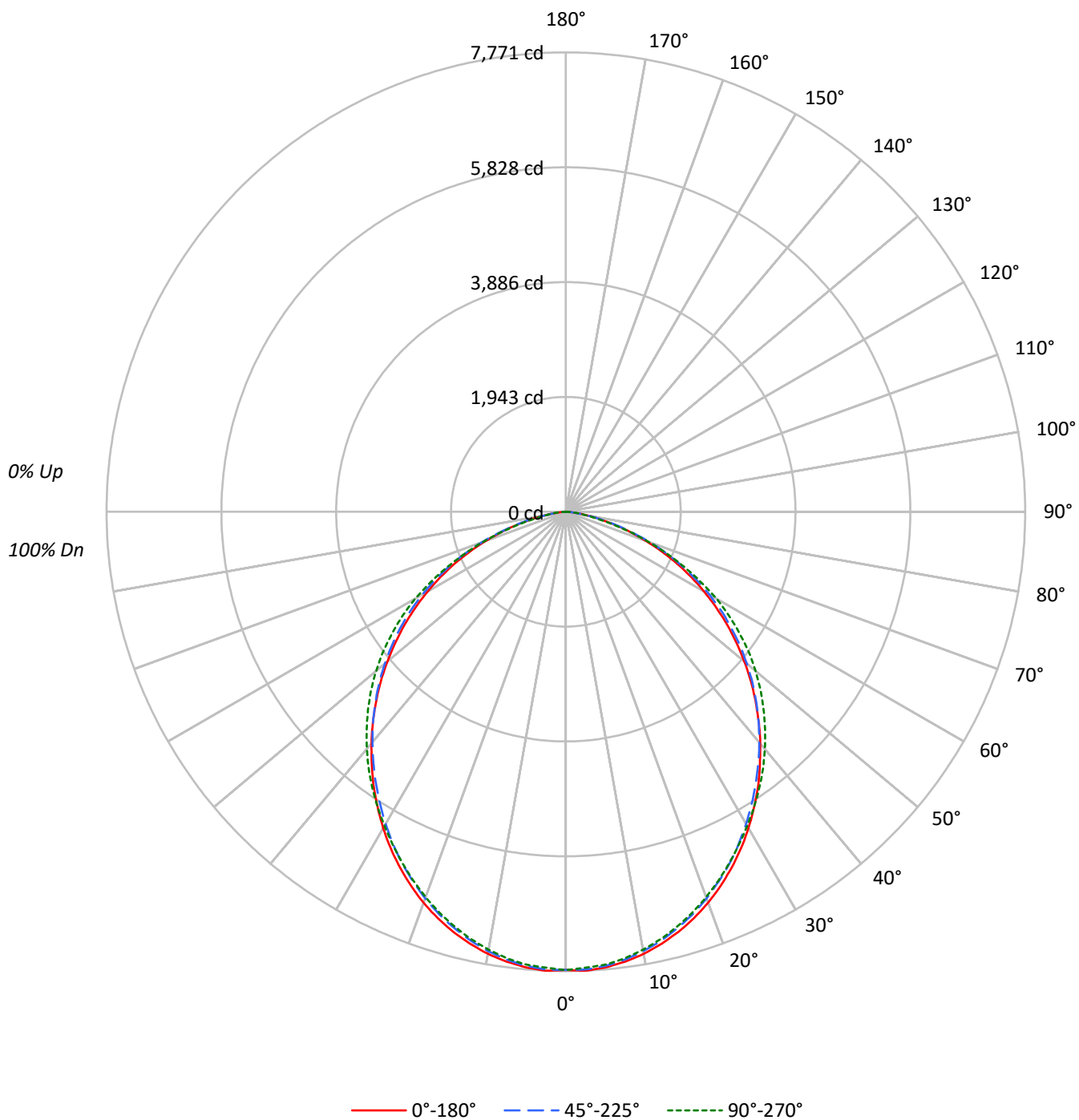
Lumens per Lamp: N/A
Luminaire Lumens: 19156.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 201.4
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	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	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	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10429	10429	10429
5°	10448	10416	10386
10°	10375	10315	10275
15°	10248	10157	10122
20°	10079	9965	9934
25°	9856	9735	9726
30°	9601	9473	9533
35°	9313	9203	9372
40°	8987	8941	9199
45°	8634	8671	9004
50°	8248	8364	8772
55°	7814	8005	8415
60°	7274	7541	7921
65°	6602	6903	7037
70°	5679	5966	5864
75°	4505	4679	4273
80°	3019	2974	2647
85°	1536	1785	2113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9004 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	730.1	3.8
10°-20°	2054.6	10.7
20°-30°	3022.9	15.8
30°-40°	3525.8	18.4
40°-50°	3539.7	18.5
50°-60°	3062.9	16.0
60°-70°	2125.6	11.1
70°-80°	939.2	4.9
80°-90°	155.3	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°	5807.6	30.3
0°-40°	9333.4	48.7
0°-60°	15935.9	83.2
0°-90°	19156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7751	7751	7751	7751	7751	
5°	7736	7701	7712	7680	7690	734
15°	7357	7312	7292	7254	7266	2073
25°	6639	6588	6558	6522	6551	3057
35°	5670	5612	5603	5645	5706	3542
45°	4537	4502	4557	4665	4732	3501
55°	3331	3310	3412	3542	3587	2974
65°	2074	2082	2168	2205	2210	2050
75°	866	881	900	853	822	931
85°	100	105	116	131	137	148
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7750.8	7750.8	7750.8	7750.8	7750.8
2.5°	7771.0	7736.0	7750.8	7726.2	7718.6
5°	7735.7	7700.6	7712.1	7680.2	7689.8
7.5°	7675.5	7639.2	7643.3	7609.6	7619.0
10°	7593.7	7552.1	7549.8	7512.9	7520.7
12.5°	7484.8	7443.2	7433.2	7391.9	7405.5
15°	7357.1	7312.3	7292.0	7253.7	7266.5
17.5°	7209.0	7160.9	7137.0	7091.5	7111.8
20°	7038.9	6988.4	6959.7	6910.7	6938.2
22.5°	6848.6	6796.9	6762.7	6721.4	6749.9
25°	6638.9	6588.4	6557.5	6521.5	6551.4
27.5°	6418.5	6362.4	6333.3	6312.2	6345.2
30°	6180.0	6123.1	6097.0	6090.1	6136.0
32.5°	5928.1	5873.3	5854.0	5871.3	5923.9
35°	5669.8	5612.5	5603.0	5644.7	5705.7
37.5°	5391.8	5346.6	5350.0	5415.7	5478.0
40°	5116.7	5069.3	5090.5	5172.2	5237.2
42.5°	4832.2	4792.6	4827.0	4927.3	4988.3
45°	4537.4	4502.4	4557.1	4665.4	4732.0
47.5°	4248.7	4211.7	4281.4	4398.2	4469.4
50°	3940.3	3913.7	3995.7	4124.2	4190.5
52.5°	3635.6	3609.8	3706.1	3840.5	3903.7
55°	3331.1	3309.5	3412.4	3542.2	3587.3
57.5°	3016.3	3010.3	3114.2	3226.7	3272.9
60°	2703.2	2699.7	2802.3	2903.5	2943.4
62.5°	2389.8	2393.8	2488.9	2567.5	2578.3
65°	2073.7	2081.7	2168.1	2204.7	2210.3
67.5°	1754.6	1770.4	1845.3	1857.9	1854.0
70°	1443.6	1454.2	1516.5	1512.2	1490.5
72.5°	1141.4	1159.2	1194.0	1173.4	1141.0
75°	866.5	880.9	900.1	853.3	821.9
77.5°	610.5	620.6	621.9	571.9	550.7
80°	389.6	402.0	383.8	355.9	341.6
82.5°	216.6	227.6	211.8	223.2	228.8
85°	99.5	104.6	115.6	131.0	136.9
87.5°	34.0	39.2	47.0	49.8	46.1
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	19.08	20.66	19.44	20.97	21.29	19.58	21.16	19.94	21.47	21.79
	3H	20.52	21.94	20.90	22.27	22.63	20.95	22.38	21.33	22.70	23.06
	4H	20.93	22.27	21.33	22.62	22.99	21.29	22.63	21.69	22.98	23.35
	6H	21.13	22.36	21.54	22.73	23.12	21.42	22.66	21.83	23.02	23.41
	8H	21.15	22.33	21.58	22.72	23.12	21.44	22.61	21.86	23.00	23.40
	12H	21.15	22.28	21.58	22.66	23.09	21.44	22.57	21.87	22.95	23.38
4H	2H	19.68	21.01	20.07	21.36	21.74	20.08	21.42	20.48	21.76	22.14
	3H	21.29	22.40	21.70	22.80	23.20	21.64	22.75	22.05	23.15	23.55
	4H	21.79	22.79	22.22	23.20	23.64	22.06	23.06	22.49	23.47	23.91
	6H	22.06	22.93	22.51	23.37	23.83	22.25	23.12	22.71	23.56	24.02
	8H	22.09	22.91	22.56	23.35	23.82	22.28	23.09	22.74	23.53	24.00
	12H	22.10	22.83	22.58	23.31	23.78	22.30	23.02	22.78	23.50	23.97
8H	4H	21.97	22.78	22.43	23.22	23.69	22.21	23.02	22.67	23.47	23.93
	6H	22.28	22.95	22.78	23.44	23.92	22.44	23.11	22.94	23.60	24.08
	8H	22.34	22.94	22.86	23.45	23.94	22.49	23.09	23.01	23.60	24.09
	12H	22.37	22.90	22.88	23.39	23.96	22.54	23.07	23.05	23.56	24.12
12H	4H	21.96	22.68	22.44	23.16	23.63	22.21	22.93	22.69	23.41	23.88
	6H	22.27	22.87	22.78	23.38	23.87	22.43	23.03	22.95	23.54	24.03
	8H	22.36	22.89	22.87	23.38	23.95	22.52	23.04	23.02	23.53	24.10