

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: P1499527

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499527
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-40-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 HI ambient , LO exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

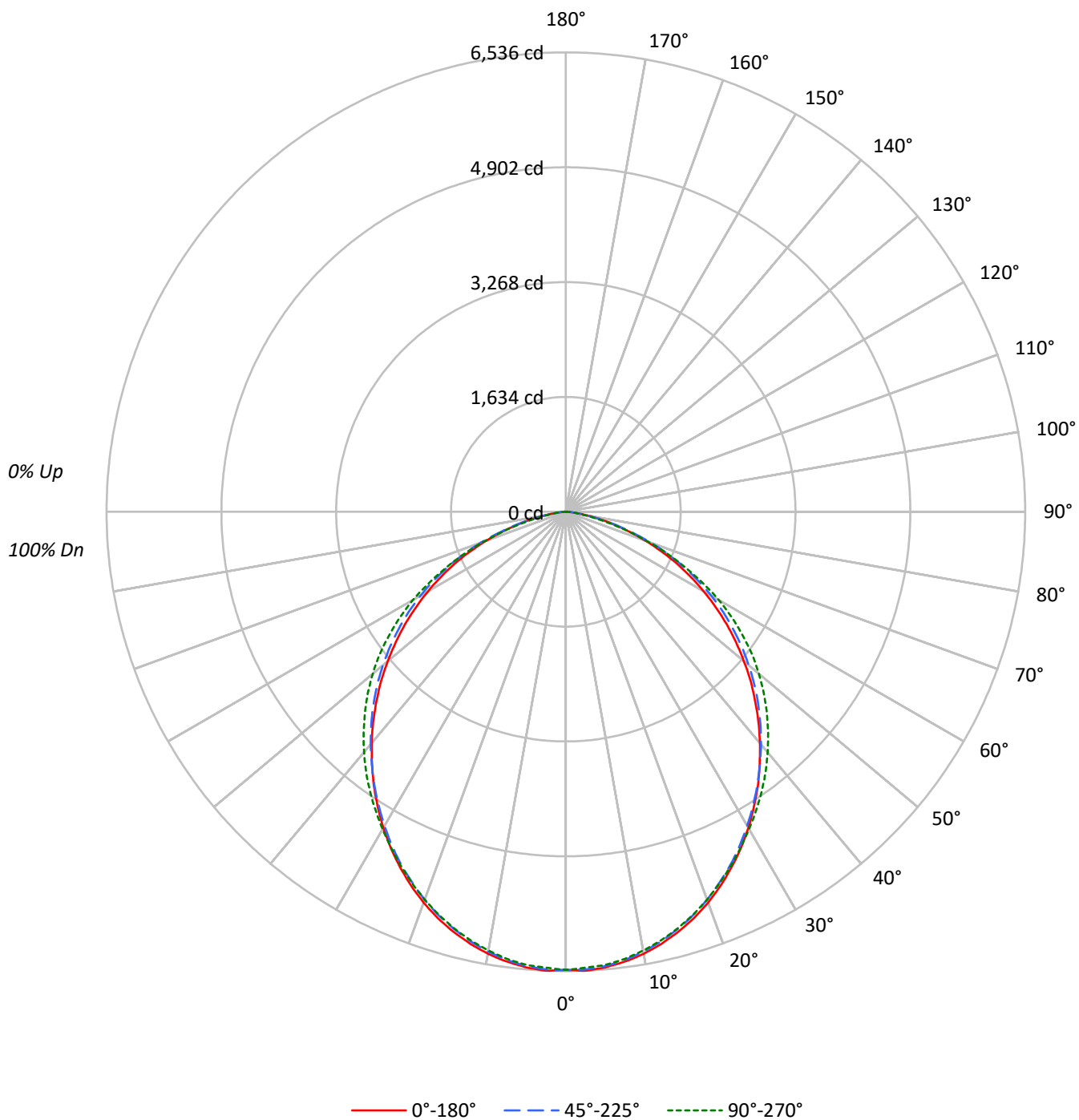
Lumens per Lamp: N/A
Luminaire Lumens: 16191.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	8770	8770	8770
5°	8787	8762	8741
10°	8725	8683	8661
15°	8617	8562	8550
20°	8473	8412	8409
25°	8284	8229	8249
30°	8068	8018	8101
35°	7823	7799	7980
40°	7548	7586	7846
45°	7249	7366	7694
50°	6922	7111	7509
55°	6557	6812	7207
60°	6100	6421	6771
65°	5531	5874	5970
70°	4751	5046	4906
75°	3761	3902	3466
80°	2508	2389	2011
85°	1263	1355	1545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7694 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	614.3	3.8
10°-20°	1731.8	10.7
20°-30°	2553.6	15.8
30°-40°	2984.6	18.4
40°-50°	3002.4	18.5
50°-60°	2601.7	16.1
60°-70°	1800.2	11.1
70°-80°	780.6	4.8
80°-90°	121.8	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°	4899.7	30.3
0°-40°	7884.3	48.7
0°-60°	13488.4	83.3
0°-90°	16191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16191.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6518	6518	6518	6518	6518	
5°	6506	6474	6487	6464	6472	617
15°	6186	6151	6146	6126	6138	1743
25°	5580	5546	5543	5527	5556	2569
35°	4763	4728	4748	4800	4858	2976
45°	3810	3796	3871	3980	4044	2940
55°	2795	2792	2904	3030	3072	2495
65°	1737	1758	1845	1873	1875	1717
75°	724	742	750	699	667	777
85°	82	84	88	97	100	122
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6518.1	6518.1	6518.1	6518.1	6518.1
2.5°	6535.9	6503.7	6518.1	6500.6	6492.2
5°	6505.8	6474.4	6487.2	6464.2	6471.6
7.5°	6455.1	6423.6	6431.5	6408.6	6416.4
10°	6385.9	6350.6	6355.7	6332.1	6339.1
12.5°	6293.9	6259.9	6261.3	6235.9	6248.6
15°	6186.4	6150.7	6146.3	6125.6	6138.2
17.5°	6061.4	6024.4	6020.3	5994.4	6013.6
20°	5917.7	5880.4	5875.0	5846.6	5872.8
22.5°	5757.1	5720.5	5712.1	5691.0	5719.4
25°	5580.1	5546.4	5543.0	5526.8	5556.5
27.5°	5394.3	5357.0	5357.2	5354.3	5386.6
30°	5193.1	5156.5	5160.5	5169.9	5214.3
32.5°	4980.4	4947.1	4957.5	4988.3	5038.7
35°	4763.0	4728.5	4748.0	4800.0	4858.2
37.5°	4528.8	4505.1	4536.5	4609.2	4668.8
40°	4297.2	4272.2	4319.0	4405.5	4467.3
42.5°	4057.9	4039.8	4097.8	4200.3	4258.9
45°	3809.5	3796.1	3871.0	3979.8	4043.6
47.5°	3567.3	3551.4	3638.4	3754.6	3822.0
50°	3307.1	3300.5	3397.4	3523.3	3587.1
52.5°	3051.8	3044.8	3152.6	3283.3	3343.1
55°	2795.1	2792.2	2904.1	3029.5	3072.2
57.5°	2530.2	2540.3	2651.3	2758.9	2801.7
60°	2266.9	2278.5	2386.3	2480.6	2516.2
62.5°	2003.6	2021.3	2119.1	2189.4	2196.7
65°	1737.2	1758.0	1844.9	1872.6	1875.2
67.5°	1469.0	1494.8	1567.2	1570.3	1564.1
70°	1207.6	1227.9	1282.7	1270.0	1247.0
72.5°	953.6	978.1	1003.7	975.5	943.2
75°	723.5	742.5	750.5	698.7	666.8
77.5°	508.7	520.9	511.6	457.2	434.3
80°	323.7	334.4	308.3	274.9	259.6
82.5°	179.0	186.5	164.3	168.0	170.6
85°	81.8	83.7	87.8	96.9	100.1
87.5°	28.0	30.9	35.3	36.9	33.8
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	18.47	20.06	18.84	20.37	20.69	19.07	20.66	19.44	20.97	21.28
	3H	19.91	21.33	20.29	21.66	22.02	20.41	21.84	20.79	22.16	22.52
	4H	20.32	21.66	20.72	22.00	22.38	20.73	22.06	21.12	22.41	22.79
	6H	20.51	21.75	20.92	22.11	22.50	20.83	22.06	21.24	22.43	22.82
	8H	20.53	21.71	20.96	22.10	22.50	20.83	22.01	21.26	22.40	22.80
	12H	20.53	21.65	20.96	22.04	22.47	20.83	21.96	21.26	22.34	22.77
4H	2H	19.09	20.42	19.49	20.77	21.15	19.57	20.91	19.97	21.26	21.63
	3H	20.69	21.80	21.10	22.20	22.60	21.09	22.20	21.50	22.60	23.00
	4H	21.19	22.18	21.62	22.60	23.04	21.48	22.48	21.91	22.89	23.33
	6H	21.45	22.32	21.91	22.76	23.22	21.64	22.50	22.09	22.94	23.40
	8H	21.48	22.29	21.95	22.74	23.20	21.65	22.46	22.11	22.90	23.37
	12H	21.49	22.21	21.97	22.69	23.16	21.66	22.38	22.14	22.86	23.33
8H	4H	21.36	22.17	21.82	22.61	23.08	21.62	22.43	22.09	22.88	23.34
	6H	21.67	22.33	22.16	22.82	23.30	21.82	22.48	22.31	22.97	23.45
	8H	21.72	22.32	22.23	22.83	23.32	21.85	22.45	22.36	22.95	23.44
	12H	21.75	22.27	22.26	22.77	23.33	21.88	22.40	22.39	22.90	23.46
12H	4H	21.35	22.07	21.83	22.55	23.02	21.62	22.34	22.10	22.82	23.29
	6H	21.65	22.25	22.16	22.76	23.24	21.80	22.40	22.31	22.91	23.40
	8H	21.74	22.26	22.25	22.76	23.32	21.86	22.39	22.37	22.88	23.45