

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: P1499533

Luminaire Tested: MAE-G-4-120-3HI-LO-50-VRDCPH

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499533
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-50-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

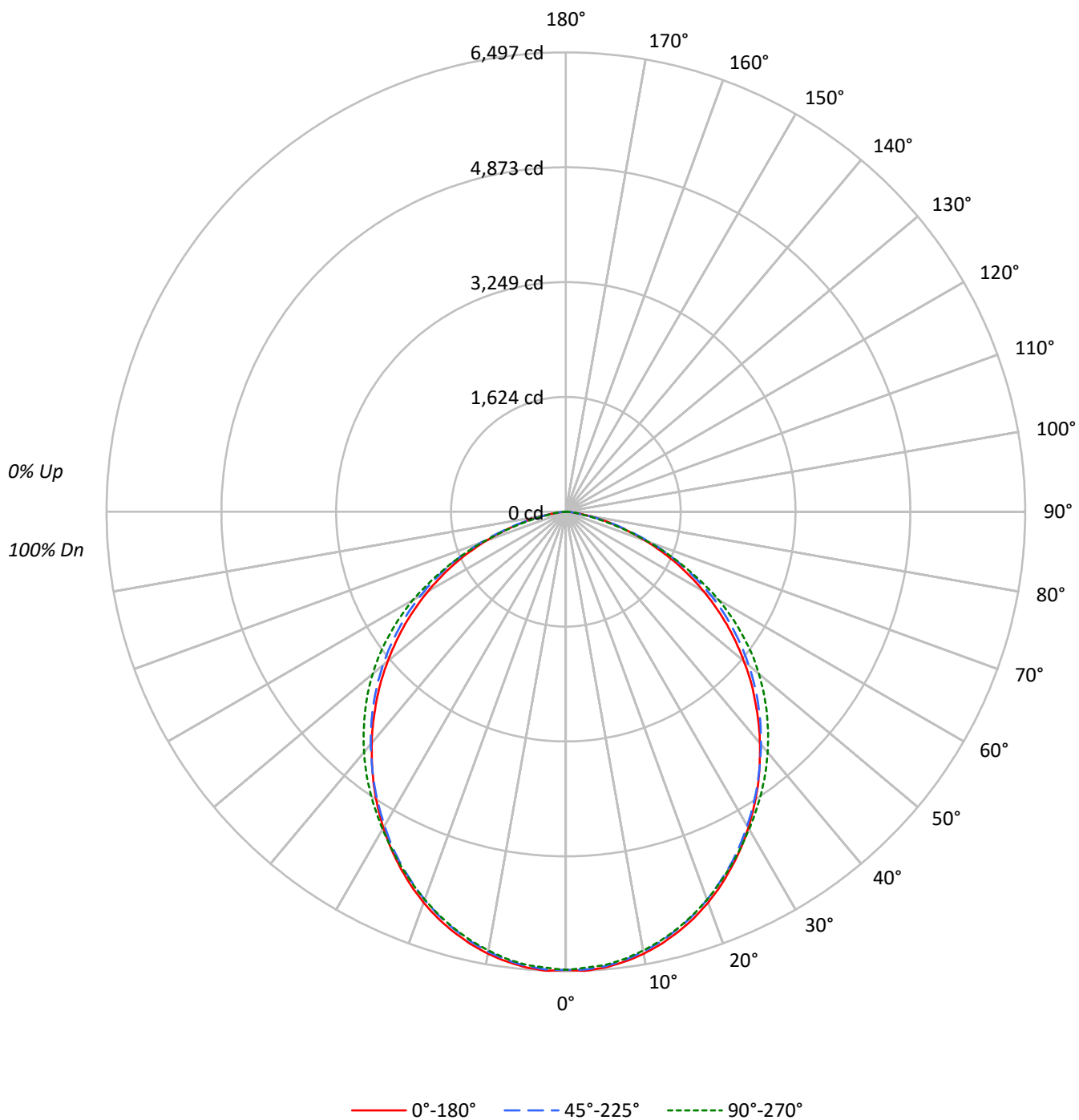
Lumens per Lamp: N/A
Luminaire Lumens: 16095.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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°	8718	8718	8718
5°	8735	8710	8689
10°	8673	8632	8609
15°	8566	8511	8500
20°	8423	8362	8359
25°	8235	8180	8200
30°	8020	7970	8053
35°	7777	7752	7932
40°	7503	7541	7800
45°	7206	7322	7649
50°	6881	7069	7464
55°	6518	6772	7164
60°	6064	6384	6731
65°	5498	5839	5934
70°	4722	5017	4877
75°	3739	3879	3446
80°	2493	2375	1999
85°	1254	1348	1536

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7649 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.7	3.8
10°-20°	1721.6	10.7
20°-30°	2538.5	15.8
30°-40°	2966.9	18.4
40°-50°	2984.6	18.5
50°-60°	2586.3	16.1
60°-70°	1789.5	11.1
70°-80°	776.0	4.8
80°-90°	121.0	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°	4870.7	30.3
0°-40°	7837.5	48.7
0°-60°	13408.4	83.3
0°-90°	16095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6480	6480	6480	6480	6480	
5°	6467	6436	6449	6426	6433	613
15°	6150	6114	6110	6089	6102	1733
25°	5547	5514	5510	5494	5524	2554
35°	4735	4700	4720	4772	4829	2958
45°	3787	3774	3848	3956	4020	2922
55°	2778	2776	2887	3012	3054	2480
65°	1727	1748	1834	1861	1864	1707
75°	719	738	746	694	663	773
85°	81	83	87	96	100	122
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6479.5	6479.5	6479.5	6479.5	6479.5
2.5°	6497.1	6465.1	6479.5	6462.0	6453.8
5°	6467.3	6436.0	6448.8	6425.9	6433.3
7.5°	6416.8	6385.4	6393.5	6370.6	6378.3
10°	6348.0	6313.0	6318.1	6294.5	6301.5
12.5°	6256.6	6222.8	6224.2	6198.8	6211.6
15°	6149.6	6114.2	6109.9	6089.3	6101.8
17.5°	6025.5	5988.6	5984.6	5958.9	5977.9
20°	5882.6	5845.5	5840.2	5811.9	5838.0
22.5°	5723.0	5686.5	5678.2	5657.4	5685.4
25°	5547.1	5513.6	5510.1	5494.0	5523.5
27.5°	5362.3	5325.2	5325.5	5322.6	5354.7
30°	5162.3	5125.9	5129.9	5139.2	5183.4
32.5°	4950.9	4917.8	4928.1	4958.7	5008.8
35°	4734.8	4700.5	4719.8	4771.5	4829.3
37.5°	4501.9	4478.4	4509.5	4581.9	4641.0
40°	4271.7	4246.8	4293.4	4379.3	4440.8
42.5°	4033.8	4015.9	4073.4	4175.4	4233.6
45°	3787.0	3773.6	3848.1	3956.2	4019.6
47.5°	3546.2	3530.3	3616.9	3732.3	3799.3
50°	3287.5	3281.0	3377.3	3502.3	3565.9
52.5°	3033.8	3026.8	3133.8	3263.9	3323.3
55°	2778.5	2775.6	2886.8	3011.6	3054.1
57.5°	2515.2	2525.2	2635.6	2742.5	2785.0
60°	2253.4	2265.1	2372.2	2465.9	2501.2
62.5°	1991.6	2009.3	2106.6	2176.5	2183.7
65°	1727.0	1747.5	1833.9	1861.4	1864.0
67.5°	1460.3	1486.0	1557.9	1560.9	1554.8
70°	1200.4	1220.5	1275.2	1262.4	1239.6
72.5°	948.0	972.4	997.8	969.8	937.6
75°	719.2	738.1	746.1	694.5	662.8
77.5°	505.6	517.8	508.6	454.5	431.7
80°	321.7	332.4	306.5	273.2	258.0
82.5°	177.9	185.4	163.4	167.1	169.6
85°	81.2	83.2	87.3	96.4	99.5
87.5°	27.8	30.8	35.0	36.6	33.5
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	18.45	20.04	18.82	20.35	20.66	19.05	20.64	19.42	20.95	21.26
	3H	19.89	21.31	20.27	21.64	22.00	20.39	21.81	20.77	22.14	22.50
	4H	20.30	21.63	20.70	21.98	22.36	20.71	22.04	21.10	22.39	22.77
	6H	20.49	21.73	20.90	22.09	22.48	20.81	22.04	21.22	22.41	22.80
	8H	20.51	21.69	20.94	22.08	22.48	20.81	21.99	21.24	22.38	22.78
	12H	20.51	21.63	20.94	22.02	22.44	20.81	21.94	21.24	22.32	22.75
4H	2H	19.07	20.40	19.47	20.75	21.13	19.55	20.89	19.95	21.23	21.61
	3H	20.67	21.78	21.08	22.18	22.58	21.07	22.18	21.48	22.58	22.98
	4H	21.17	22.16	21.60	22.58	23.02	21.46	22.45	21.89	22.87	23.31
	6H	21.43	22.30	21.88	22.74	23.20	21.62	22.48	22.07	22.92	23.38
	8H	21.46	22.27	21.93	22.72	23.18	21.63	22.44	22.09	22.88	23.35
	12H	21.47	22.19	21.95	22.67	23.14	21.64	22.36	22.12	22.84	23.31
8H	4H	21.34	22.15	21.80	22.59	23.06	21.60	22.41	22.07	22.86	23.32
	6H	21.65	22.31	22.14	22.80	23.28	21.79	22.46	22.29	22.95	23.43
	8H	21.70	22.30	22.21	22.81	23.29	21.83	22.42	22.34	22.93	23.42
	12H	21.73	22.25	22.24	22.75	23.31	21.86	22.38	22.37	22.88	23.44
12H	4H	21.33	22.05	21.81	22.53	23.00	21.60	22.32	22.08	22.80	23.27
	6H	21.63	22.23	22.14	22.74	23.22	21.78	22.38	22.29	22.89	23.38
	8H	21.72	22.24	22.23	22.73	23.30	21.84	22.37	22.35	22.86	23.43