

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: P1499509

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499509
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-50-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

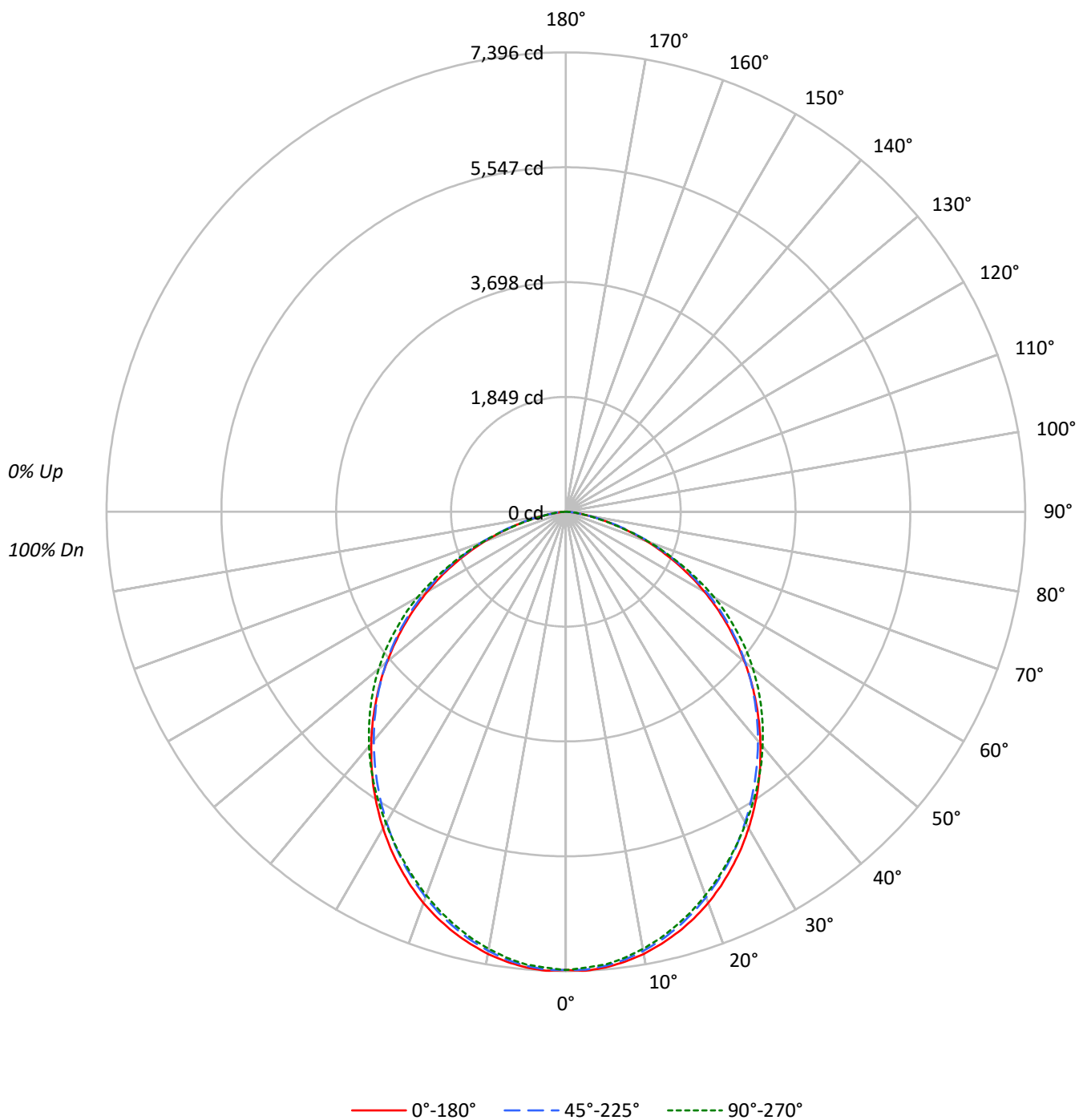
Lumens per Lamp: N/A
Luminaire Lumens: 18162.0 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P1499509

CATALOG NUMBER: MAE-G-4-120-3HI-HI-50-VRDCPH

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°	9927	9927	9927
5°	9945	9913	9881
10°	9876	9811	9763
15°	9756	9651	9601
20°	9596	9457	9408
25°	9386	9230	9196
30°	9145	8971	9000
35°	8872	8708	8834
40°	8564	8452	8658
45°	8229	8189	8462
50°	7863	7892	8232
55°	7451	7548	7895
60°	6939	7107	7442
65°	6303	6509	6652
70°	5428	5653	5604
75°	4313	4483	4180
80°	2901	2930	2711
85°	1488	1829	2218

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8462 cd/sqm

TEST NUMBER: P1499509

CATALOG NUMBER: MAE-G-4-120-3HI-HI-50-VRDCPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	694.6	3.8
10°-20°	1952.2	10.7
20°-30°	2867.4	15.8
30°-40°	3338.8	18.4
40°-50°	3346.6	18.4
50°-60°	2892.4	15.9
60°-70°	2012.2	11.1
70°-80°	902.1	5.0
80°-90°	155.6	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°	5514.2	30.4
0°-40°	8853.0	48.7
0°-60°	15092.0	83.1
0°-90°	18162.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18162.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7378	7378	7378	7378	7378	
5°	7363	7332	7340	7306	7316	698
15°	7004	6959	6929	6882	6893	1974
25°	6322	6266	6217	6170	6194	2911
35°	5402	5335	5301	5326	5378	3375
45°	4325	4277	4304	4391	4447	3337
55°	3176	3142	3218	3327	3366	2835
65°	1980	1975	2045	2082	2090	1957
75°	830	837	862	829	804	891
85°	96	103	118	136	144	143
90°	0	0	0	0	0	

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CATALOG NUMBER: MAE-G-4-120-3HI-HI-50-VRDCPH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7378.0	7378.0	7378.0	7378.0	7378.0
2.5°	7396.4	7365.7	7378.0	7351.6	7346.4
5°	7363.2	7331.6	7339.7	7305.9	7315.7
7.5°	7306.1	7272.5	7272.2	7235.3	7244.4
10°	7228.4	7189.1	7180.8	7139.0	7146.0
12.5°	7125.2	7084.7	7066.6	7018.9	7030.9
15°	7003.8	6959.2	6928.7	6882.0	6892.8
17.5°	6863.3	6814.2	6777.3	6722.9	6740.6
20°	6701.9	6649.2	6605.1	6547.3	6570.5
22.5°	6521.1	6465.8	6415.3	6363.7	6387.1
25°	6322.2	6266.3	6216.9	6169.9	6194.4
27.5°	6112.8	6050.6	6001.1	5967.8	5994.8
30°	5886.3	5822.1	5774.3	5754.1	5792.7
32.5°	5647.1	5583.7	5541.8	5543.7	5588.2
35°	5401.5	5334.7	5301.4	5326.0	5378.0
37.5°	5137.4	5081.5	5059.4	5106.6	5159.4
40°	4875.7	4817.4	4811.8	4873.6	4929.2
42.5°	4604.9	4553.6	4560.6	4639.9	4691.7
45°	4324.7	4277.2	4303.6	4390.7	4447.3
47.5°	4049.4	4000.6	4041.7	4136.9	4198.0
50°	3756.6	3717.2	3770.4	3876.9	3932.9
52.5°	3465.8	3427.9	3495.9	3608.2	3662.2
55°	3176.3	3142.3	3217.7	3326.8	3365.5
57.5°	2876.8	2857.8	2935.6	3031.2	3071.6
60°	2578.7	2562.6	2641.1	2729.3	2765.5
62.5°	2280.3	2271.4	2346.0	2417.1	2429.0
65°	1979.9	1975.0	2044.6	2082.3	2089.5
67.5°	1676.1	1679.8	1742.9	1761.6	1760.4
70°	1379.9	1379.8	1437.0	1441.1	1424.6
72.5°	1092.1	1100.4	1136.8	1127.0	1100.7
75°	829.6	837.1	862.4	828.9	804.0
77.5°	585.3	591.6	602.2	565.4	549.7
80°	374.4	386.0	378.2	360.5	349.9
82.5°	209.1	220.8	213.9	229.8	237.1
85°	96.4	103.4	118.5	136.4	143.7
87.5°	32.9	39.1	48.5	51.8	48.2
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	18.91	20.49	19.27	20.80	21.12	19.33	20.91	19.69	21.22	21.54
	3H	20.35	21.78	20.73	22.10	22.46	20.73	22.16	21.11	22.48	22.84
	4H	20.77	22.11	21.17	22.46	22.83	21.10	22.43	21.49	22.78	23.16
	6H	20.97	22.21	21.38	22.57	22.96	21.25	22.48	21.66	22.85	23.24
	8H	21.00	22.17	21.42	22.56	22.96	21.27	22.45	21.70	22.84	23.24
	12H	20.99	22.12	21.42	22.50	22.93	21.28	22.41	21.71	22.79	23.22
4H	2H	19.49	20.83	19.89	21.18	21.56	19.83	21.17	20.23	21.52	21.90
	3H	21.11	22.23	21.52	22.62	23.02	21.42	22.54	21.83	22.93	23.33
	4H	21.62	22.62	22.05	23.03	23.47	21.87	22.87	22.30	23.29	23.72
	6H	21.89	22.76	22.35	23.20	23.66	22.09	22.96	22.55	23.40	23.86
	8H	21.93	22.74	22.39	23.19	23.65	22.13	22.94	22.59	23.39	23.85
	12H	21.94	22.67	22.42	23.14	23.61	22.16	22.89	22.64	23.36	23.83
8H	4H	21.80	22.61	22.26	23.05	23.52	22.03	22.84	22.49	23.29	23.75
	6H	22.12	22.79	22.62	23.28	23.76	22.30	22.97	22.79	23.46	23.93
	8H	22.19	22.79	22.70	23.30	23.78	22.36	22.96	22.87	23.47	23.96
	12H	22.22	22.75	22.73	23.24	23.80	22.42	22.95	22.93	23.44	24.00
12H	4H	21.79	22.52	22.28	23.00	23.47	22.03	22.75	22.51	23.23	23.70
	6H	22.12	22.72	22.63	23.23	23.71	22.29	22.89	22.80	23.40	23.88
	8H	22.21	22.74	22.72	23.23	23.80	22.39	22.92	22.90	23.41	23.97