

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: P1499500

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499500
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-40-90-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

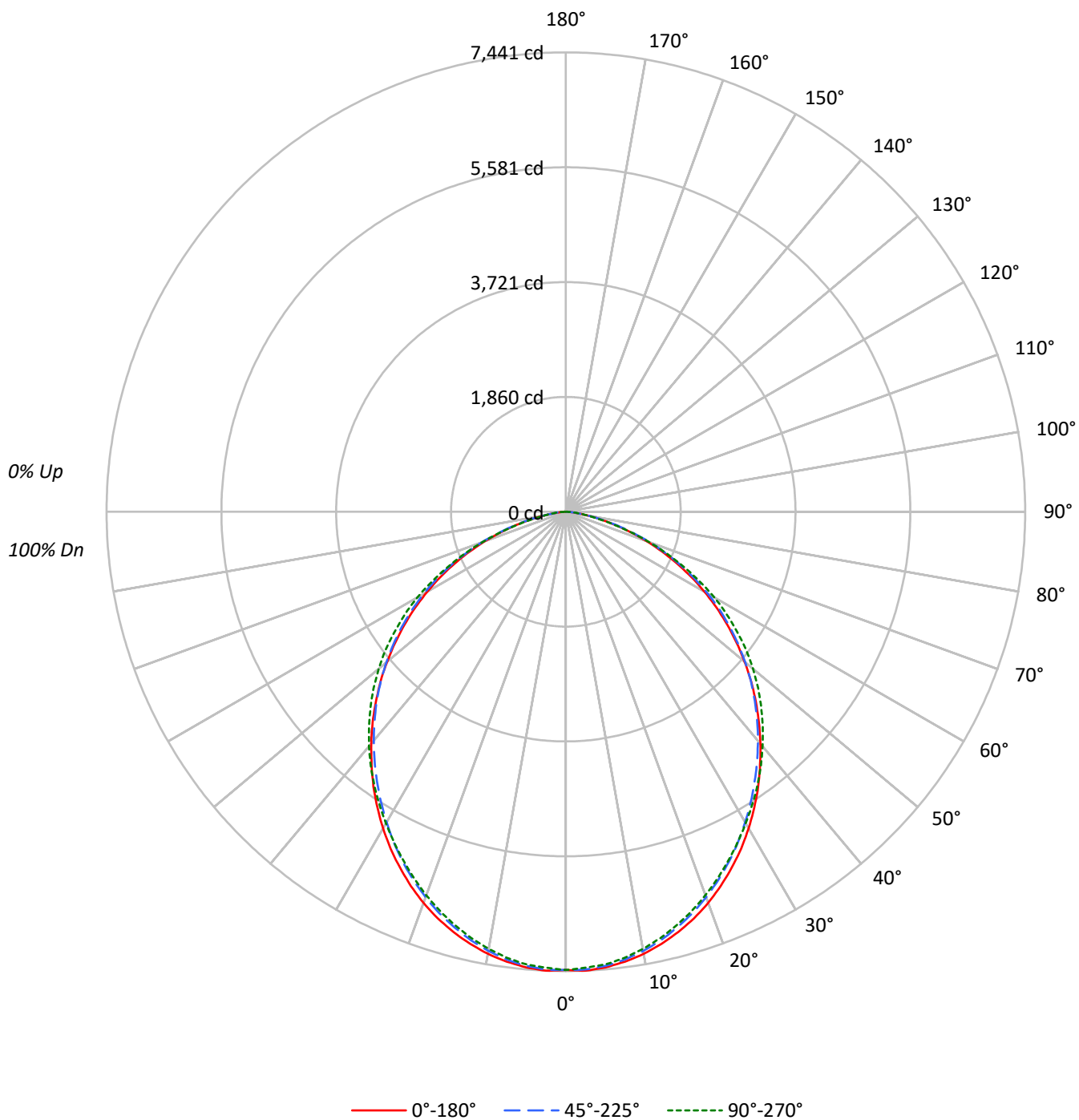
Lumens per Lamp: N/A
Luminaire Lumens: 18271.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P1499500

CATALOG NUMBER: MAE-G-4-120-3HI-HI-40-90-VRDCPH

Luminous Intensity Polar Plot



TEST NUMBER: P1499500

CATALOG NUMBER: MAE-G-4-120-3HI-HI-40-90-VRDCPH

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°	9986	9986	9986
5°	10005	9973	9940
10°	9935	9870	9822
15°	9815	9709	9659
20°	9654	9514	9464
25°	9442	9285	9251
30°	9200	9025	9054
35°	8925	8760	8887
40°	8615	8502	8710
45°	8278	8238	8513
50°	7910	7940	8282
55°	7496	7593	7942
60°	6981	7150	7487
65°	6341	6549	6692
70°	5461	5687	5638
75°	4339	4510	4205
80°	2919	2947	2727
85°	1499	1840	2232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8513 cd/sqm

TEST NUMBER: P1499500

CATALOG NUMBER: MAE-G-4-120-3HI-HI-40-90-VRDCPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	698.8	3.8
10°-20°	1963.9	10.7
20°-30°	2884.6	15.8
30°-40°	3358.8	18.4
40°-50°	3366.7	18.4
50°-60°	2909.8	15.9
60°-70°	2024.3	11.1
70°-80°	907.6	5.0
80°-90°	156.6	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°	5547.3	30.4
0°-40°	8906.1	48.7
0°-60°	15182.6	83.1
0°-90°	18271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7422	7422	7422	7422	7422	
5°	7407	7376	7384	7350	7360	703
15°	7046	7001	6970	6923	6934	1986
25°	6360	6304	6254	6207	6232	2928
35°	5434	5367	5333	5358	5410	3395
45°	4351	4303	4329	4417	4474	3357
55°	3195	3161	3237	3347	3386	2852
65°	1992	1987	2057	2095	2102	1968
75°	835	842	868	834	809	896
85°	97	104	119	137	145	144
90°	0	0	0	0	0	

TEST NUMBER: P1499500

CATALOG NUMBER: MAE-G-4-120-3HI-HI-40-90-VRDCPH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7422.2	7422.2	7422.2	7422.2	7422.2
2.5°	7440.8	7410.0	7422.2	7395.8	7390.4
5°	7407.4	7375.6	7383.8	7349.7	7359.6
7.5°	7350.0	7316.2	7315.8	7278.8	7287.9
10°	7271.8	7232.3	7223.9	7181.9	7188.9
12.5°	7168.0	7127.2	7109.0	7061.1	7073.1
15°	7045.9	7001.0	6970.3	6923.3	6934.1
17.5°	6904.5	6855.1	6818.0	6763.3	6781.1
20°	6742.2	6689.1	6644.7	6586.6	6609.9
22.5°	6560.3	6504.6	6453.8	6401.8	6425.4
25°	6360.1	6303.8	6254.2	6207.0	6231.6
27.5°	6149.5	6086.9	6037.0	6003.6	6030.9
30°	5921.6	5857.1	5808.9	5788.6	5827.4
32.5°	5681.0	5617.2	5575.0	5576.9	5621.8
35°	5433.9	5366.7	5333.2	5358.0	5410.3
37.5°	5168.3	5112.0	5089.8	5137.2	5190.4
40°	4904.9	4846.3	4840.6	4902.9	4958.8
42.5°	4632.5	4580.9	4588.0	4667.6	4719.9
45°	4350.6	4302.9	4329.4	4417.0	4474.0
47.5°	4073.6	4024.6	4065.9	4161.8	4223.2
50°	3779.1	3739.4	3793.0	3900.2	3956.5
52.5°	3486.6	3448.5	3516.9	3629.9	3684.1
55°	3195.4	3161.1	3237.0	3346.6	3385.7
57.5°	2894.1	2874.9	2953.2	3049.3	3090.1
60°	2594.3	2577.9	2656.9	2745.7	2782.1
62.5°	2294.0	2285.0	2360.0	2431.5	2443.5
65°	1991.7	1986.9	2056.9	2094.8	2102.1
67.5°	1686.1	1689.9	1753.3	1772.2	1771.0
70°	1388.2	1388.2	1445.6	1449.7	1433.1
72.5°	1098.6	1107.0	1143.7	1133.7	1107.3
75°	834.6	842.1	867.6	833.9	808.9
77.5°	588.8	595.1	605.7	568.8	553.0
80°	376.7	388.3	380.4	362.7	352.0
82.5°	210.4	222.2	215.2	231.2	238.5
85°	97.1	104.0	119.2	137.2	144.6
87.5°	33.0	39.4	48.8	52.2	48.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1499500

CATALOG NUMBER: MAE-G-4-120-3HI-HI-40-90-VRDCPH

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	18.93	20.51	19.29	20.82	21.14	19.35	20.93	19.71	21.24	21.56
	3H	20.37	21.80	20.75	22.12	22.49	20.75	22.18	21.13	22.50	22.86
	4H	20.79	22.13	21.19	22.48	22.85	21.12	22.45	21.51	22.80	23.18
	6H	20.99	22.23	21.40	22.59	22.98	21.27	22.50	21.68	22.87	23.26
	8H	21.02	22.19	21.44	22.58	22.98	21.29	22.47	21.72	22.86	23.26
	12H	21.01	22.14	21.44	22.52	22.95	21.30	22.43	21.73	22.81	23.24
4H	2H	19.52	20.85	19.91	21.20	21.58	19.85	21.19	20.25	21.54	21.92
	3H	21.14	22.25	21.55	22.65	23.05	21.44	22.56	21.85	22.95	23.36
	4H	21.64	22.64	22.07	23.05	23.49	21.89	22.89	22.32	23.31	23.74
	6H	21.91	22.78	22.37	23.22	23.68	22.11	22.98	22.57	23.42	23.88
	8H	21.95	22.76	22.41	23.21	23.67	22.15	22.96	22.61	23.41	23.87
	12H	21.96	22.69	22.44	23.17	23.64	22.18	22.91	22.66	23.38	23.85
8H	4H	21.82	22.63	22.28	23.08	23.54	22.05	22.86	22.51	23.31	23.77
	6H	22.15	22.82	22.64	23.31	23.78	22.32	22.99	22.81	23.48	23.95
	8H	22.21	22.81	22.72	23.32	23.80	22.38	22.98	22.90	23.49	23.98
	12H	22.24	22.77	22.75	23.26	23.82	22.44	22.97	22.95	23.46	24.03
12H	4H	21.82	22.54	22.30	23.02	23.49	22.05	22.77	22.53	23.25	23.72
	6H	22.14	22.74	22.65	23.25	23.73	22.31	22.91	22.82	23.42	23.91
	8H	22.23	22.76	22.74	23.25	23.82	22.41	22.94	22.92	23.43	23.99