

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: P1499511

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499511
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
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

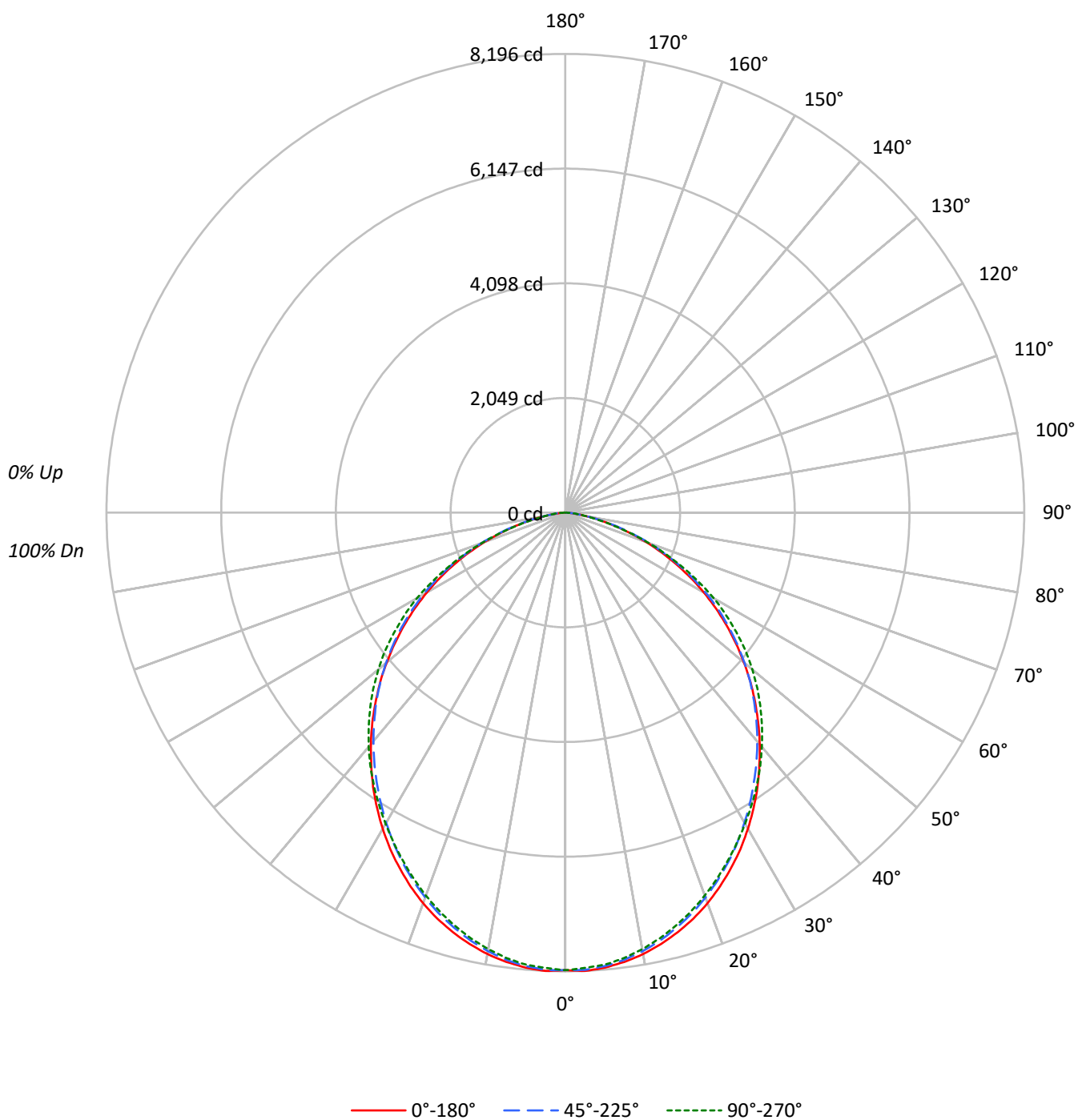
Lumens per Lamp: N/A
Luminaire Lumens: 20125.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P1499511

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

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°	11000	11000	11000
5°	11020	10985	10949
10°	10943	10871	10819
15°	10811	10695	10639
20°	10633	10480	10425
25°	10400	10227	10190
30°	10134	9941	9972
35°	9831	9649	9788
40°	9489	9365	9594
45°	9118	9074	9377
50°	8713	8745	9122
55°	8256	8364	8748
60°	7689	7875	8246
65°	6985	7213	7371
70°	6015	6264	6210
75°	4779	4968	4632
80°	3215	3247	3004
85°	1650	2027	2459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9377 cd/sqm

TEST NUMBER: P1499511

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	769.7	3.8
10°-20°	2163.2	10.7
20°-30°	3177.3	15.8
30°-40°	3699.6	18.4
40°-50°	3708.3	18.4
50°-60°	3205.0	15.9
60°-70°	2229.7	11.1
70°-80°	999.7	5.0
80°-90°	172.5	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°	6110.2	30.4
0°-40°	9809.8	48.7
0°-60°	16723.2	83.1
0°-90°	20125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8175	8175	8175	8175	8175	
5°	8159	8124	8133	8096	8106	774
15°	7761	7712	7678	7626	7638	2187
25°	7005	6944	6889	6837	6864	3225
35°	5985	5911	5874	5902	5959	3739
45°	4792	4740	4769	4865	4928	3697
55°	3520	3482	3565	3686	3729	3142
65°	2194	2188	2266	2307	2315	2168
75°	919	928	956	919	891	987
85°	107	114	131	151	159	158
90°	0	0	0	0	0	

TEST NUMBER: P1499511

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8175.4	8175.4	8175.4	8175.4	8175.4
2.5°	8195.9	8161.9	8175.4	8146.3	8140.4
5°	8159.1	8124.0	8133.0	8095.6	8106.4
7.5°	8095.8	8058.6	8058.1	8017.4	8027.4
10°	8009.7	7966.1	7956.9	7910.7	7918.5
12.5°	7895.4	7850.5	7830.4	7777.6	7790.8
15°	7760.9	7711.5	7677.6	7625.8	7637.8
17.5°	7605.2	7550.7	7509.9	7449.6	7469.2
20°	7426.3	7367.9	7319.1	7254.9	7280.7
22.5°	7226.0	7164.6	7108.6	7051.4	7077.3
25°	7005.4	6943.6	6888.8	6836.8	6864.0
27.5°	6773.5	6704.6	6649.6	6612.8	6642.8
30°	6522.6	6451.3	6398.4	6376.0	6418.8
32.5°	6257.4	6187.3	6140.7	6142.8	6192.2
35°	5985.3	5911.3	5874.4	5901.7	5959.3
37.5°	5692.7	5630.7	5606.3	5658.5	5717.0
40°	5402.7	5338.1	5331.8	5400.4	5462.0
42.5°	5102.6	5045.8	5053.5	5141.3	5198.7
45°	4792.1	4739.5	4768.7	4865.2	4928.0
47.5°	4487.1	4433.0	4478.5	4584.0	4651.7
50°	4162.6	4118.9	4177.9	4296.0	4358.0
52.5°	3840.4	3798.4	3873.7	3998.1	4057.9
55°	3519.6	3481.9	3565.4	3686.3	3729.2
57.5°	3187.7	3166.7	3252.9	3358.8	3403.5
60°	2857.5	2839.5	2926.5	3024.3	3064.3
62.5°	2526.8	2516.8	2599.4	2678.2	2691.4
65°	2193.9	2188.5	2265.6	2307.3	2315.3
67.5°	1857.2	1861.4	1931.3	1952.0	1950.8
70°	1529.1	1529.0	1592.2	1596.8	1578.6
72.5°	1210.1	1219.4	1259.7	1248.8	1219.6
75°	919.2	927.6	955.7	918.6	891.0
77.5°	648.6	655.6	667.2	626.5	609.2
80°	414.9	427.7	419.0	399.5	387.7
82.5°	231.7	244.7	237.1	254.7	262.7
85°	106.9	114.5	131.3	151.2	159.3
87.5°	36.5	43.4	53.8	57.4	53.5
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	19.26	20.85	19.63	21.16	21.47	19.68	21.27	20.05	21.58	21.89
	3H	20.71	22.13	21.09	22.46	22.82	21.09	22.51	21.47	22.84	23.20
	4H	21.13	22.46	21.53	22.81	23.19	21.45	22.79	21.85	23.14	23.51
	6H	21.33	22.56	21.74	22.93	23.32	21.60	22.84	22.01	23.20	23.60
	8H	21.35	22.53	21.78	22.92	23.32	21.63	22.81	22.05	23.19	23.59
	12H	21.35	22.48	21.78	22.86	23.29	21.64	22.77	22.07	23.15	23.58
4H	2H	19.85	21.19	20.25	21.54	21.91	20.19	21.53	20.59	21.88	22.25
	3H	21.47	22.58	21.88	22.98	23.38	21.78	22.89	22.19	23.29	23.69
	4H	21.97	22.97	22.41	23.39	23.83	22.23	23.23	22.66	23.64	24.08
	6H	22.25	23.12	22.70	23.56	24.02	22.45	23.32	22.90	23.76	24.22
	8H	22.29	23.10	22.75	23.54	24.01	22.49	23.30	22.95	23.74	24.21
	12H	22.30	23.02	22.78	23.50	23.97	22.52	23.24	23.00	23.72	24.19
8H	4H	22.16	22.97	22.62	23.41	23.88	22.39	23.20	22.85	23.64	24.11
	6H	22.48	23.15	22.98	23.64	24.12	22.65	23.32	23.15	23.81	24.29
	8H	22.55	23.14	23.06	23.65	24.14	22.72	23.32	23.23	23.83	24.31
	12H	22.58	23.11	23.09	23.60	24.16	22.78	23.31	23.29	23.80	24.36
12H	4H	22.15	22.88	22.63	23.35	23.82	22.38	23.11	22.86	23.59	24.06
	6H	22.47	23.07	22.99	23.58	24.07	22.64	23.25	23.16	23.75	24.24
	8H	22.57	23.10	23.08	23.59	24.15	22.74	23.27	23.25	23.76	24.33