

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: P1499022

Luminaire Tested: MAE-G-4-120-1LO-HI-40-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27581)
Test Lab: INNOVATION CENTER
Issue Date: 6/26/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-120-1LO-HI-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 1 LO ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

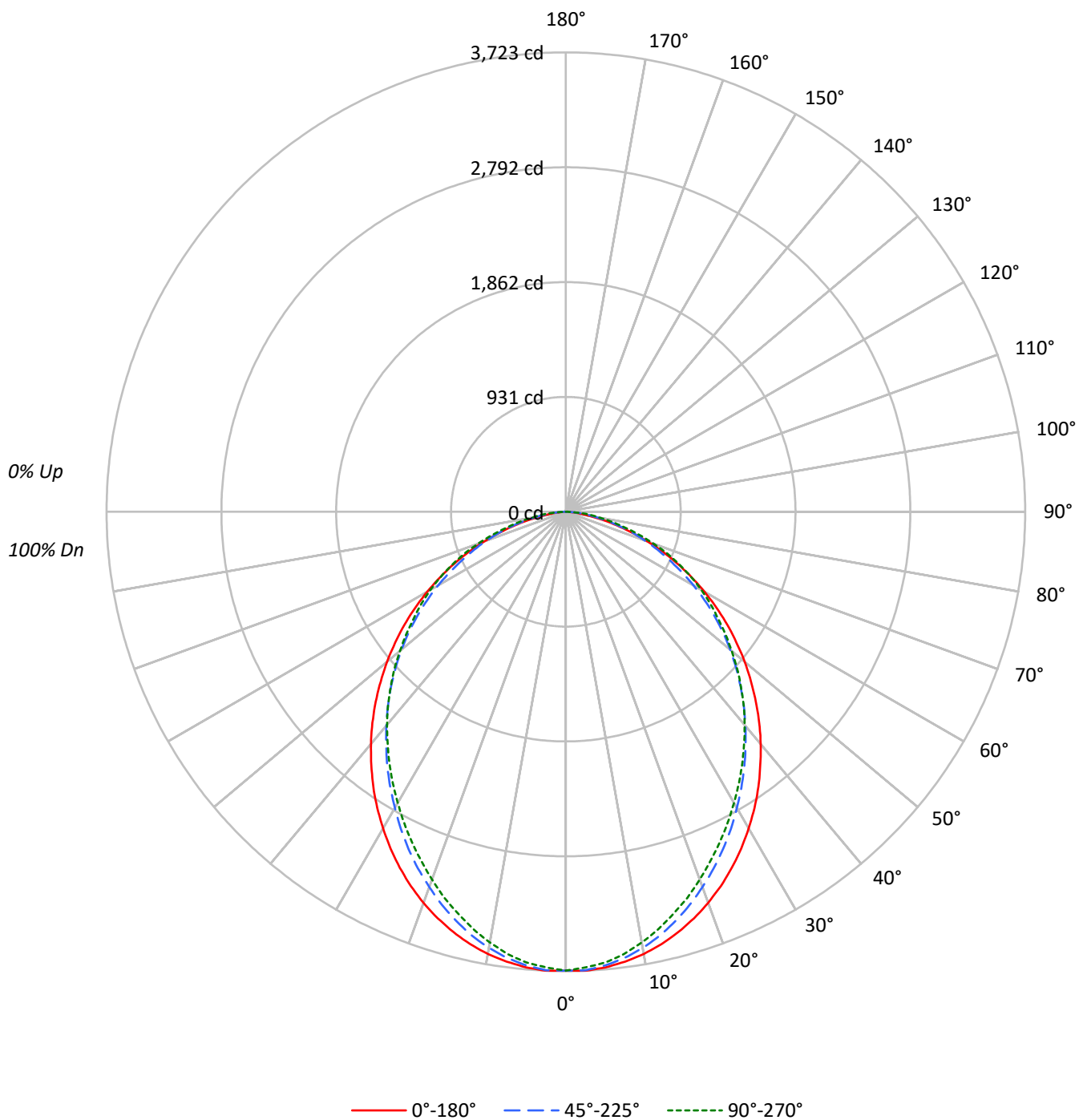
Lumens per Lamp: N/A
Luminaire Lumens: 8806.0 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.11 / 1.24
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 112.9
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72
4	84	72	64	58	82	71	63	57	69	62	56		66	60	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	45	39	51	44	39		50	43	38		48
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		45
9	58	45	37	32	57	44	37	31	43	36	31		42	36	31		41
10	55	42	34	29	53	41	34	29	40	33	29		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5003	5003	5003
5°	5006	4984	4954
10°	4971	4905	4843
15°	4911	4782	4697
20°	4830	4634	4542
25°	4726	4477	4384
30°	4604	4305	4233
35°	4470	4143	4093
40°	4317	3976	3961
45°	4146	3811	3819
50°	3963	3639	3672
55°	3750	3443	3528
60°	3491	3219	3416
65°	3186	2946	3239
70°	2773	2686	2985
75°	2224	2356	2603
80°	1551	1918	2209
85°	874	1528	2050

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4146 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.6	4.0
10°-20°	968.1	11.0
20°-30°	1399.4	15.9
30°-40°	1603.2	18.2
40°-50°	1580.0	17.9
50°-60°	1348.6	15.3
60°-70°	958.7	10.9
70°-80°	485.8	5.5
80°-90°	113.7	1.3
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°	2716.2	30.8
0°-40°	4319.3	49.0
0°-60°	7247.8	82.3
0°-90°	8806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3719	3719	3719	3719	3719	
5°	3706	3704	3690	3659	3668	352
15°	3526	3501	3433	3370	3372	994
25°	3184	3125	3016	2953	2953	1465
35°	2722	2639	2522	2485	2492	1700
45°	2179	2098	2003	1998	2007	1681
55°	1599	1525	1468	1483	1504	1427
65°	1001	942	925	989	1018	990
75°	428	402	453	493	501	461
85°	57	71	99	122	133	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3718.6	3718.6	3718.6	3718.6	3718.6
2.5°	3722.6	3726.3	3718.6	3688.4	3695.2
5°	3706.4	3703.7	3690.4	3659.1	3667.9
7.5°	3677.3	3671.2	3647.3	3609.1	3614.5
10°	3638.8	3626.6	3589.9	3541.6	3544.9
12.5°	3588.4	3570.9	3518.7	3462.0	3464.6
15°	3525.9	3501.2	3433.3	3370.5	3372.2
17.5°	3454.1	3424.1	3340.6	3272.1	3278.4
20°	3373.0	3333.4	3236.2	3168.7	3172.1
22.5°	3282.7	3233.8	3130.2	3062.6	3062.6
25°	3183.6	3124.8	3015.6	2952.6	2953.3
27.5°	3077.1	3011.9	2896.6	2836.7	2840.7
30°	2963.1	2892.0	2771.1	2720.2	2724.5
32.5°	2845.4	2769.1	2648.5	2605.0	2609.3
35°	2721.6	2638.9	2522.2	2485.1	2491.7
37.5°	2589.4	2508.5	2391.9	2368.3	2373.5
40°	2457.7	2374.3	2263.6	2246.7	2255.0
42.5°	2320.7	2238.9	2134.6	2123.1	2133.4
45°	2179.0	2098.4	2003.0	1998.0	2006.9
47.5°	2035.5	1956.8	1872.1	1871.1	1884.1
50°	1893.4	1816.3	1738.6	1743.9	1754.1
52.5°	1742.7	1669.8	1604.9	1612.7	1630.4
55°	1598.7	1524.7	1467.6	1483.0	1504.0
57.5°	1448.8	1384.2	1333.1	1359.0	1388.1
60°	1297.2	1234.4	1196.1	1238.8	1269.5
62.5°	1147.5	1086.9	1058.8	1117.1	1143.7
65°	1000.7	941.7	925.3	989.2	1017.5
67.5°	853.4	800.7	803.8	871.7	892.6
70°	704.8	657.2	682.7	744.0	758.8
72.5°	564.0	524.9	568.0	618.1	626.5
75°	427.9	402.2	453.2	493.1	500.8
77.5°	306.9	293.5	344.8	377.6	386.4
80°	200.2	204.3	247.5	275.4	285.1
82.5°	117.3	129.2	164.2	195.6	205.6
85°	56.6	70.9	99.0	122.5	132.8
87.5°	19.3	28.9	41.8	46.6	45.3
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	16.43	18.02	16.80	18.33	18.64	16.28	17.87	16.65	18.18	18.50
	3H	17.90	19.33	18.28	19.66	20.02	18.03	19.45	18.40	19.78	20.14
	4H	18.34	19.68	18.74	20.03	20.41	18.61	19.95	19.01	20.30	20.68
	6H	18.58	19.82	18.99	20.18	20.57	19.00	20.24	19.42	20.61	21.00
	8H	18.61	19.80	19.04	20.19	20.59	19.13	20.31	19.56	20.70	21.10
	12H	18.62	19.75	19.05	20.14	20.56	19.22	20.35	19.65	20.74	21.17
4H	2H	16.92	18.26	17.32	18.61	18.98	16.80	18.14	17.19	18.48	18.86
	3H	18.58	19.70	18.99	20.10	20.50	18.75	19.87	19.16	20.26	20.67
	4H	19.11	20.12	19.54	20.53	20.97	19.46	20.47	19.89	20.88	21.32
	6H	19.42	20.30	19.88	20.74	21.20	19.97	20.85	20.43	21.29	21.75
	8H	19.49	20.31	19.95	20.75	21.22	20.14	20.96	20.60	21.40	21.87
	12H	19.51	20.25	19.99	20.72	21.19	20.27	21.01	20.76	21.49	21.96
8H	4H	19.35	20.17	19.81	20.61	21.08	19.66	20.48	20.13	20.93	21.39
	6H	19.74	20.42	20.23	20.91	21.38	20.27	20.95	20.77	21.44	21.92
	8H	19.83	20.44	20.35	20.95	21.44	20.51	21.11	21.02	21.62	22.11
	12H	19.89	20.43	20.40	20.92	21.49	20.71	21.25	21.22	21.74	22.30
12H	4H	19.37	20.10	19.85	20.58	21.05	19.67	20.40	20.15	20.88	21.35
	6H	19.77	20.38	20.28	20.89	21.37	20.28	20.89	20.80	21.40	21.89
	8H	19.91	20.45	20.42	20.94	21.50	20.57	21.11	21.08	21.60	22.16