

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: P1498980

Luminaire Tested: MAE-G-4-120-1HI-STD-50-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1498980
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-4-120-1HI-STD-50-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 1 HI ambient , STD exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

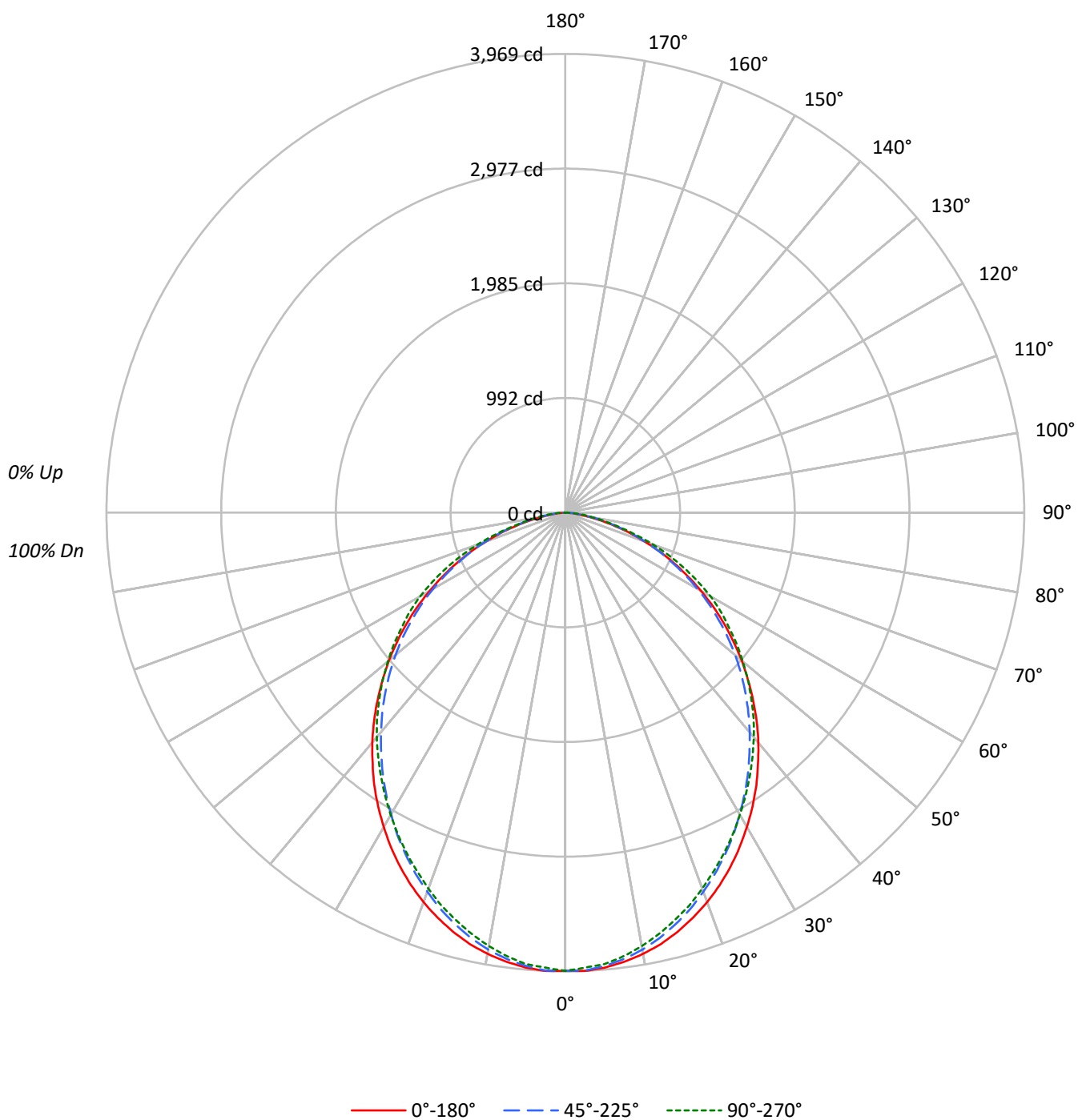
Lumens per Lamp: N/A
Luminaire Lumens: 9531.0 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 112.8
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

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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	64	64	61
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	55	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	48	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	43	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	32	28	28	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5334	5334	5334
5°	5336	5316	5294
10°	5297	5244	5202
15°	5229	5134	5086
20°	5135	4998	4956
25°	5019	4849	4823
30°	4879	4682	4691
35°	4731	4524	4569
40°	4561	4357	4455
45°	4370	4190	4327
50°	4169	4012	4193
55°	3935	3801	4047
60°	3646	3559	3910
65°	3314	3237	3606
70°	2871	2893	3167
75°	2286	2428	2530
80°	1575	1830	1939
85°	877	1365	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.3	3.9
10°-20°	1039.8	10.9
20°-30°	1513.7	15.9
30°-40°	1745.5	18.3
40°-50°	1730.8	18.2
50°-60°	1483.9	15.6
60°-70°	1043.1	10.9
70°-80°	497.4	5.2
80°-90°	104.6	1.1
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°	2925.8	30.7
0°-40°	4671.2	49.0
0°-60°	7886.0	82.7
0°-90°	9531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3965	3965	3965	3965	3965	
5°	3951	3947	3936	3911	3920	375
15°	3754	3735	3686	3644	3651	1058
25°	3380	3337	3266	3236	3249	1556
35°	2880	2822	2754	2757	2782	1799
45°	2297	2245	2202	2243	2274	1772
55°	1677	1630	1620	1682	1725	1497
65°	1041	1004	1017	1097	1132	1030
75°	440	424	467	490	487	475
85°	57	68	88	106	113	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3964.6	3964.6	3964.6	3964.6	3964.6
2.5°	3969.3	3972.3	3964.6	3936.1	3940.2
5°	3950.7	3947.1	3936.3	3910.9	3919.5
7.5°	3918.9	3914.0	3894.6	3865.1	3870.8
10°	3876.7	3866.8	3838.5	3802.1	3807.5
12.5°	3822.2	3809.4	3769.9	3729.4	3735.6
15°	3753.7	3735.1	3685.6	3644.3	3651.1
17.5°	3675.1	3654.9	3595.4	3550.9	3564.1
20°	3586.1	3558.1	3490.3	3449.3	3461.6
22.5°	3488.3	3452.7	3382.5	3344.0	3355.1
25°	3380.5	3337.1	3266.3	3235.9	3248.7
27.5°	3264.2	3216.7	3145.3	3118.7	3137.0
30°	3140.3	3089.6	3013.5	2999.6	3019.6
32.5°	3013.5	2959.9	2885.4	2881.6	2901.5
35°	2880.3	2821.5	2754.2	2757.1	2781.6
37.5°	2737.5	2681.6	2615.9	2636.4	2659.8
40°	2596.6	2538.6	2480.4	2509.1	2536.4
42.5°	2450.0	2394.7	2343.1	2377.5	2409.1
45°	2296.8	2245.2	2202.2	2243.3	2273.8
47.5°	2143.7	2092.1	2060.5	2106.2	2141.4
50°	1991.5	1942.7	1916.6	1969.0	2003.2
52.5°	1832.5	1785.6	1771.4	1825.7	1867.3
55°	1677.4	1629.7	1620.5	1682.2	1725.2
57.5°	1517.6	1480.4	1473.2	1542.0	1594.4
60°	1355.0	1317.9	1322.5	1404.9	1453.0
62.5°	1196.8	1160.0	1167.3	1259.8	1292.2
65°	1040.9	1004.1	1016.7	1097.3	1132.5
67.5°	887.3	852.8	878.5	952.8	975.2
70°	729.9	699.5	735.3	796.0	805.1
72.5°	583.0	556.8	601.3	640.5	640.5
75°	439.8	424.4	467.1	489.9	486.6
77.5°	314.5	306.3	343.8	356.7	354.1
80°	203.3	208.0	236.2	245.1	250.3
82.5°	118.3	128.0	149.4	172.2	177.5
85°	56.8	68.4	88.4	106.1	113.1
87.5°	19.8	27.6	36.6	40.5	39.4
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	16.60	18.18	16.96	18.49	18.81	16.90	18.49	17.27	18.80	19.11
	3H	18.04	19.46	18.41	19.79	20.15	18.51	19.93	18.88	20.26	20.62
	4H	18.46	19.80	18.86	20.15	20.52	18.97	20.31	19.37	20.66	21.04
	6H	18.67	19.91	19.09	20.28	20.67	19.23	20.47	19.64	20.83	21.22
	8H	18.71	19.89	19.13	20.28	20.68	19.30	20.48	19.73	20.87	21.27
	12H	18.71	19.84	19.14	20.22	20.65	19.35	20.48	19.78	20.86	21.29
4H	2H	17.12	18.46	17.52	18.81	19.19	17.38	18.71	17.77	19.06	19.44
	3H	18.75	19.86	19.16	20.26	20.66	19.18	20.29	19.59	20.69	21.09
	4H	19.25	20.26	19.69	20.67	21.11	19.76	20.76	20.19	21.17	21.61
	6H	19.55	20.42	20.00	20.86	21.32	20.11	20.98	20.56	21.42	21.88
	8H	19.60	20.42	20.06	20.86	21.33	20.21	21.03	20.67	21.47	21.94
	12H	19.62	20.35	20.10	20.83	21.30	20.29	21.02	20.78	21.50	21.97
8H	4H	19.47	20.29	19.93	20.73	21.20	19.93	20.74	20.39	21.19	21.65
	6H	19.83	20.50	20.33	20.99	21.47	20.35	21.03	20.85	21.52	21.99
	8H	19.91	20.52	20.43	21.03	21.51	20.50	21.11	21.02	21.62	22.10
	12H	19.96	20.50	20.47	20.99	21.55	20.64	21.17	21.15	21.66	22.23
12H	4H	19.48	20.21	19.96	20.69	21.16	19.93	20.65	20.41	21.13	21.60
	6H	19.85	20.45	20.36	20.96	21.45	20.36	20.96	20.87	21.47	21.96
	8H	19.97	20.50	20.48	20.99	21.56	20.55	21.08	21.06	21.57	22.14