

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: P1499418

Luminaire Tested: MAE-G-4-120-2STD-LO-30-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189185)
Test Lab: INNOVATION CENTER
Issue Date: 6/26/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-120-2STD-LO-30-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 2 STD ambient , LO exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

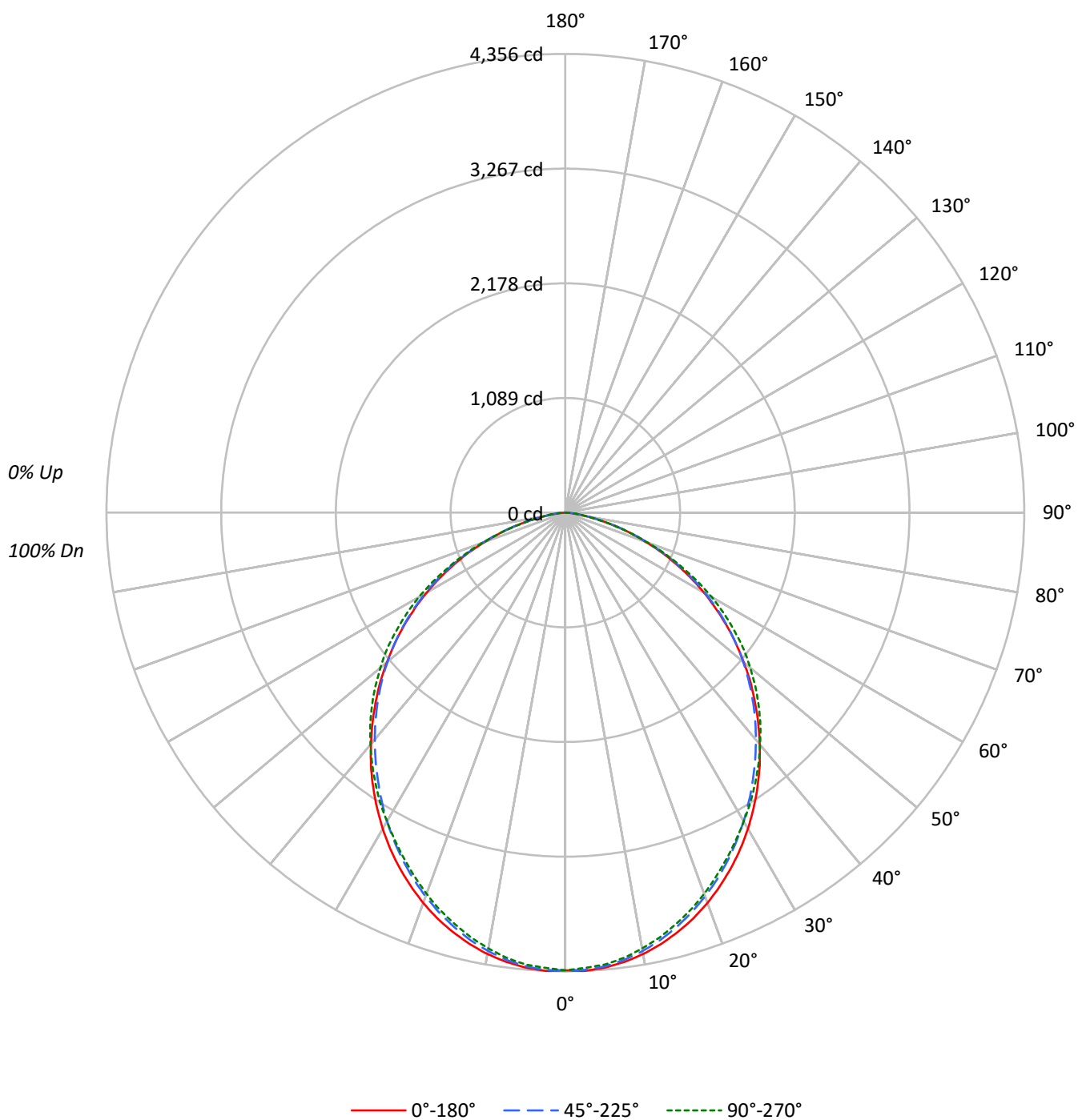
Lumens per Lamp: N/A
Luminaire Lumens: 10645.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.17 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 116.5
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	88	88	88	86
2	100	92	86	81	98	91	85	80	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	62
4	84	73	64	58	82	71	63	57	69	62	57	67	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	38	50	43	38	48	42	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	34	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5848	5848	5848
5°	5857	5839	5817
10°	5815	5776	5741
15°	5742	5676	5636
20°	5647	5552	5516
25°	5527	5411	5380
30°	5385	5257	5260
35°	5224	5094	5158
40°	5041	4942	5053
45°	4844	4784	4941
50°	4630	4612	4794
55°	4383	4404	4600
60°	4087	4143	4324
65°	3711	3786	3879
70°	3199	3278	3280
75°	2542	2608	2502
80°	1711	1737	1657
85°	865	1099	1366

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4941 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.0	3.8
10°-20°	1148.0	10.8
20°-30°	1683.1	15.8
30°-40°	1957.3	18.4
40°-50°	1959.0	18.4
50°-60°	1690.6	15.9
60°-70°	1174.8	11.0
70°-80°	529.9	5.0
80°-90°	93.3	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°	3240.1	30.4
0°-40°	5197.4	48.8
0°-60°	8847.0	83.1
0°-90°	10645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10645.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4346	4346	4346	4346	4346	
5°	4336	4319	4323	4302	4307	411
15°	4122	4096	4075	4042	4046	1162
25°	3723	3688	3645	3616	3624	1714
35°	3181	3138	3102	3114	3140	1988
45°	2546	2511	2514	2564	2597	1964
55°	1868	1844	1878	1937	1961	1669
65°	1166	1160	1189	1207	1218	1154
75°	489	489	502	487	481	526
85°	56	61	71	84	88	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4346.1	4346.1	4346.1	4346.1	4346.1
2.5°	4355.5	4339.0	4346.1	4329.9	4326.9
5°	4336.3	4319.0	4323.3	4301.6	4306.6
7.5°	4302.8	4283.7	4282.9	4259.2	4264.4
10°	4256.1	4233.6	4227.4	4198.9	4201.9
12.5°	4196.6	4172.1	4159.2	4127.0	4132.5
15°	4122.4	4095.7	4074.8	4042.5	4046.3
17.5°	4041.0	4013.2	3981.5	3947.7	3956.5
20°	3944.1	3914.8	3877.6	3842.3	3852.3
22.5°	3837.2	3804.5	3766.7	3732.4	3739.7
25°	3723.1	3688.0	3645.0	3615.6	3624.1
27.5°	3599.1	3560.2	3517.8	3493.0	3505.5
30°	3465.9	3425.7	3383.8	3369.3	3385.9
32.5°	3325.5	3285.3	3245.6	3245.3	3268.7
35°	3180.6	3137.9	3101.5	3114.5	3140.3
37.5°	3030.1	2988.3	2958.9	2984.7	3011.7
40°	2870.0	2832.4	2813.5	2848.1	2876.7
42.5°	2709.6	2674.2	2665.8	2709.4	2740.3
45°	2545.8	2511.1	2514.4	2563.8	2596.7
47.5°	2383.7	2348.0	2361.5	2416.2	2445.8
50°	2211.8	2181.9	2203.4	2260.6	2290.5
52.5°	2039.8	2012.3	2042.1	2102.5	2136.9
55°	1868.5	1844.4	1877.6	1936.6	1960.9
57.5°	1693.1	1676.3	1711.9	1763.0	1786.1
60°	1518.6	1503.8	1539.7	1585.7	1606.8
62.5°	1342.1	1330.6	1366.3	1401.7	1413.1
65°	1165.6	1159.8	1189.3	1206.8	1218.3
67.5°	992.7	986.3	1013.2	1026.9	1029.1
70°	813.1	812.6	833.2	837.2	833.7
72.5°	648.7	646.2	661.2	656.1	649.2
75°	489.0	489.3	501.6	486.8	481.2
77.5°	344.1	350.2	350.7	337.6	332.8
80°	220.8	229.1	224.2	218.1	213.8
82.5°	123.2	128.9	128.2	140.0	144.7
85°	56.0	61.2	71.2	83.6	88.5
87.5°	19.0	23.4	29.7	31.5	29.8
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	17.06	18.64	17.43	18.96	19.27	17.42	19.00	17.78	19.31	19.63
	3H	18.52	19.94	18.90	20.27	20.63	18.83	20.25	19.21	20.58	20.94
	4H	18.94	20.27	19.34	20.62	21.00	19.21	20.54	19.61	20.89	21.27
	6H	19.14	20.37	19.55	20.74	21.13	19.37	20.61	19.78	20.97	21.37
	8H	19.16	20.34	19.59	20.73	21.13	19.40	20.58	19.83	20.97	21.37
	12H	19.16	20.29	19.59	20.67	21.10	19.42	20.54	19.85	20.93	21.36
4H	2H	17.64	18.97	18.04	19.32	19.70	17.92	19.26	18.32	19.61	19.99
	3H	19.27	20.38	19.68	20.78	21.18	19.52	20.63	19.93	21.03	21.43
	4H	19.77	20.77	20.20	21.19	21.62	19.98	20.98	20.41	21.40	21.83
	6H	20.05	20.92	20.51	21.36	21.82	20.22	21.09	20.67	21.53	21.99
	8H	20.09	20.90	20.55	21.34	21.81	20.27	21.08	20.73	21.52	21.99
	12H	20.10	20.82	20.58	21.30	21.77	20.30	21.03	20.78	21.50	21.97
8H	4H	19.95	20.76	20.41	21.21	21.67	20.14	20.95	20.60	21.40	21.86
	6H	20.28	20.95	20.78	21.44	21.92	20.43	21.10	20.92	21.59	22.06
	8H	20.34	20.94	20.86	21.45	21.94	20.50	21.10	21.02	21.61	22.10
	12H	20.38	20.91	20.89	21.40	21.96	20.57	21.10	21.08	21.59	22.15
12H	4H	19.95	20.67	20.43	21.15	21.62	20.14	20.86	20.62	21.34	21.81
	6H	20.27	20.88	20.79	21.38	21.87	20.42	21.02	20.93	21.53	22.02
	8H	20.37	20.90	20.88	21.39	21.96	20.53	21.06	21.04	21.55	22.11