

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: P1499682

Luminaire Tested: MAE-G-4-120-3STD-HI-30-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499682
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-4-120-3STD-HI-30-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 STD ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

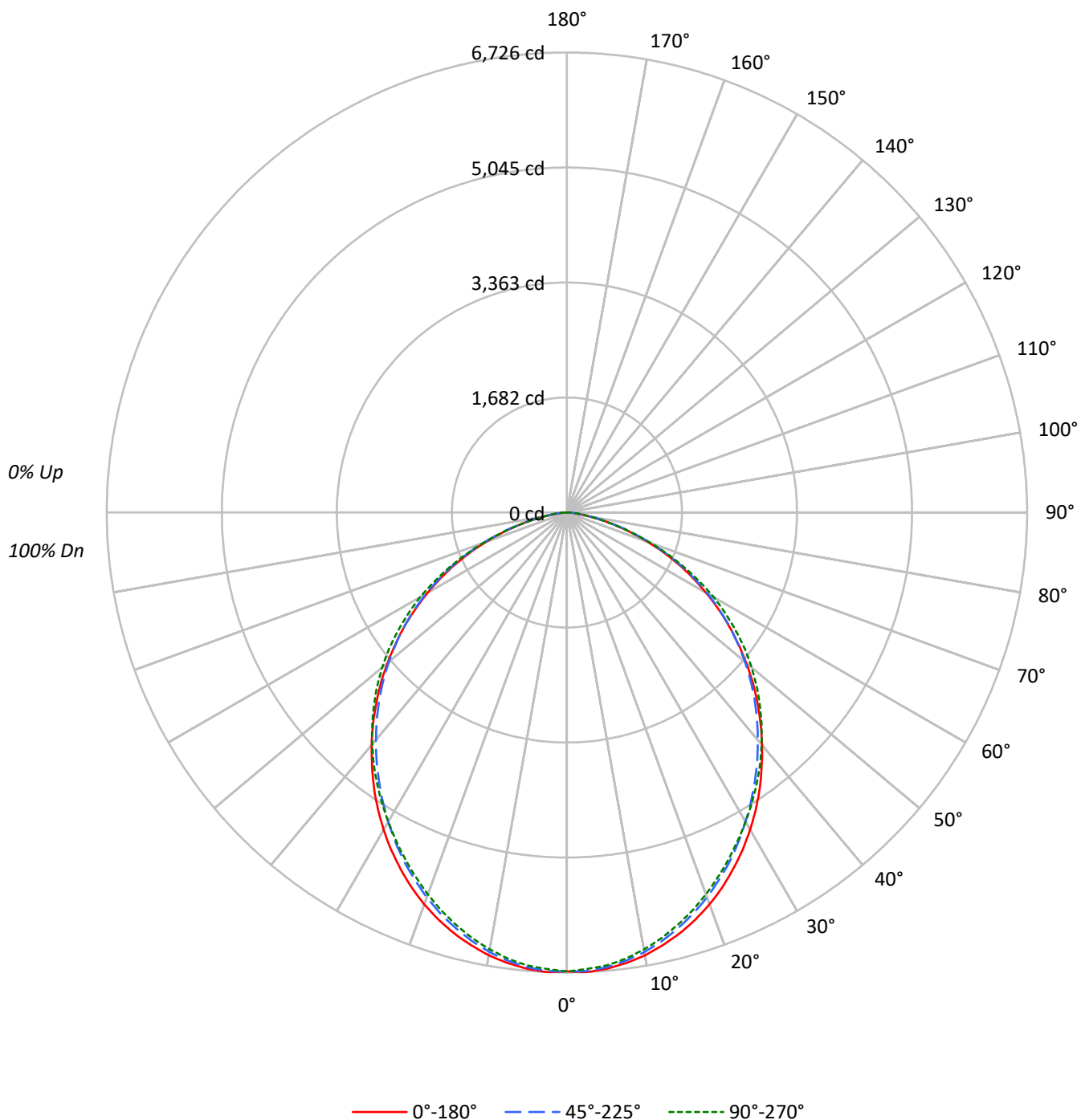
Lumens per Lamp: N/A
Luminaire Lumens: 16445.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.17 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 191.3
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	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		66	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	34	28	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9027	9027	9027
5°	9043	9013	8980
10°	8981	8914	8861
15°	8873	8760	8698
20°	8729	8573	8508
25°	8539	8356	8302
30°	8322	8113	8111
35°	8075	7867	7947
40°	7797	7627	7777
45°	7494	7383	7589
50°	7163	7109	7371
55°	6789	6794	7066
60°	6326	6393	6671
65°	5751	5859	6004
70°	4959	5115	5118
75°	3946	4106	3912
80°	2665	2762	2653
85°	1382	1791	2221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7589 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.4	3.8
10°-20°	1771.8	10.8
20°-30°	2597.6	15.8
30°-40°	3019.1	18.4
40°-50°	3021.0	18.4
50°-60°	2607.7	15.9
60°-70°	1818.8	11.1
70°-80°	828.4	5.0
80°-90°	149.2	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°	5000.7	30.4
0°-40°	8019.9	48.8
0°-60°	13648.5	83.0
0°-90°	16445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6709	6709	6709	6709	6709	
5°	6696	6669	6673	6639	6649	635
15°	6370	6327	6288	6236	6244	1795
25°	5752	5693	5629	5574	5592	2648
35°	4916	4844	4790	4797	4838	3072
45°	3938	3881	3880	3944	3988	3038
55°	2894	2850	2896	2981	3012	2583
65°	1806	1790	1840	1878	1886	1785
75°	759	760	790	770	752	815
85°	90	98	116	136	144	132
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6709.4	6709.4	6709.4	6709.4	6709.4
2.5°	6725.5	6700.1	6709.4	6682.7	6679.6
5°	6695.7	6668.6	6673.2	6639.1	6648.6
7.5°	6643.8	6614.3	6609.8	6571.7	6580.0
10°	6573.5	6538.0	6524.4	6479.9	6485.9
12.5°	6480.0	6442.2	6417.2	6365.9	6375.6
15°	6369.9	6327.4	6288.5	6236.1	6244.3
17.5°	6242.4	6194.6	6147.2	6086.8	6101.2
20°	6096.2	6043.7	5987.1	5923.5	5941.9
22.5°	5932.2	5875.9	5812.2	5753.2	5770.8
25°	5751.8	5693.3	5628.8	5573.7	5592.1
27.5°	5561.9	5496.7	5430.0	5386.8	5407.4
30°	5356.5	5288.2	5222.1	5190.4	5220.5
32.5°	5139.6	5070.8	5009.4	4996.9	5032.1
35°	4916.4	4843.7	4789.5	4797.1	4838.4
37.5°	4676.8	4613.3	4568.4	4595.9	4637.7
40°	4438.9	4373.0	4342.4	4383.2	4427.5
42.5°	4192.7	4132.8	4113.8	4169.8	4210.8
45°	3938.3	3881.1	3879.9	3943.6	3988.2
47.5°	3687.4	3629.8	3642.3	3713.3	3762.2
50°	3421.8	3372.2	3396.3	3477.7	3521.5
52.5°	3156.7	3109.3	3147.8	3234.4	3277.6
55°	2894.0	2849.6	2896.1	2981.0	3012.1
57.5°	2621.6	2591.2	2641.3	2716.9	2750.2
60°	2350.7	2323.2	2375.8	2448.0	2479.2
62.5°	2079.1	2058.4	2110.6	2171.5	2183.9
65°	1806.3	1789.7	1840.4	1877.5	1885.9
67.5°	1530.0	1522.3	1571.5	1595.1	1596.6
70°	1260.5	1250.5	1300.2	1312.1	1301.1
72.5°	998.6	997.8	1034.2	1034.7	1015.2
75°	759.0	759.8	789.9	770.4	752.5
77.5°	536.4	538.9	557.5	534.9	525.1
80°	344.0	354.2	356.5	349.3	342.4
82.5°	192.9	205.0	206.7	226.2	234.6
85°	89.5	97.8	116.0	135.6	143.9
87.5°	30.4	37.3	47.9	51.5	48.2
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	18.58	20.16	18.94	20.47	20.79	18.91	20.49	19.27	20.81	21.12
	3H	20.03	21.45	20.41	21.78	22.14	20.35	21.77	20.73	22.10	22.46
	4H	20.45	21.79	20.85	22.14	22.51	20.74	22.07	21.14	22.42	22.80
	6H	20.65	21.89	21.07	22.26	22.65	20.91	22.15	21.33	22.52	22.91
	8H	20.68	21.86	21.11	22.25	22.65	20.95	22.13	21.37	22.52	22.92
	12H	20.68	21.81	21.11	22.19	22.62	20.97	22.10	21.40	22.48	22.91
4H	2H	19.15	20.49	19.55	20.84	21.22	19.42	20.76	19.82	21.11	21.48
	3H	20.78	21.89	21.19	22.29	22.69	21.05	22.16	21.46	22.56	22.96
	4H	21.29	22.29	21.72	22.70	23.14	21.53	22.53	21.96	22.94	23.38
	6H	21.57	22.44	22.02	22.88	23.34	21.78	22.65	22.23	23.09	23.55
	8H	21.61	22.42	22.07	22.87	23.33	21.83	22.64	22.29	23.09	23.55
	12H	21.62	22.35	22.10	22.83	23.30	21.87	22.60	22.35	23.07	23.54
8H	4H	21.48	22.29	21.94	22.73	23.20	21.69	22.51	22.15	22.95	23.41
	6H	21.81	22.48	22.30	22.97	23.45	22.00	22.67	22.49	23.16	23.63
	8H	21.88	22.48	22.39	22.99	23.47	22.08	22.68	22.59	23.19	23.67
	12H	21.91	22.44	22.42	22.93	23.50	22.15	22.68	22.66	23.17	23.74
12H	4H	21.47	22.20	21.95	22.68	23.15	21.69	22.42	22.17	22.89	23.36
	6H	21.80	22.41	22.32	22.92	23.40	21.99	22.59	22.50	23.10	23.59
	8H	21.91	22.44	22.41	22.93	23.49	22.11	22.64	22.62	23.13	23.69