

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: P1499202

Luminaire Tested: MAE-G-4-120-2HI-HI-30-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499202
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-4-120-2HI-HI-30-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 2 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

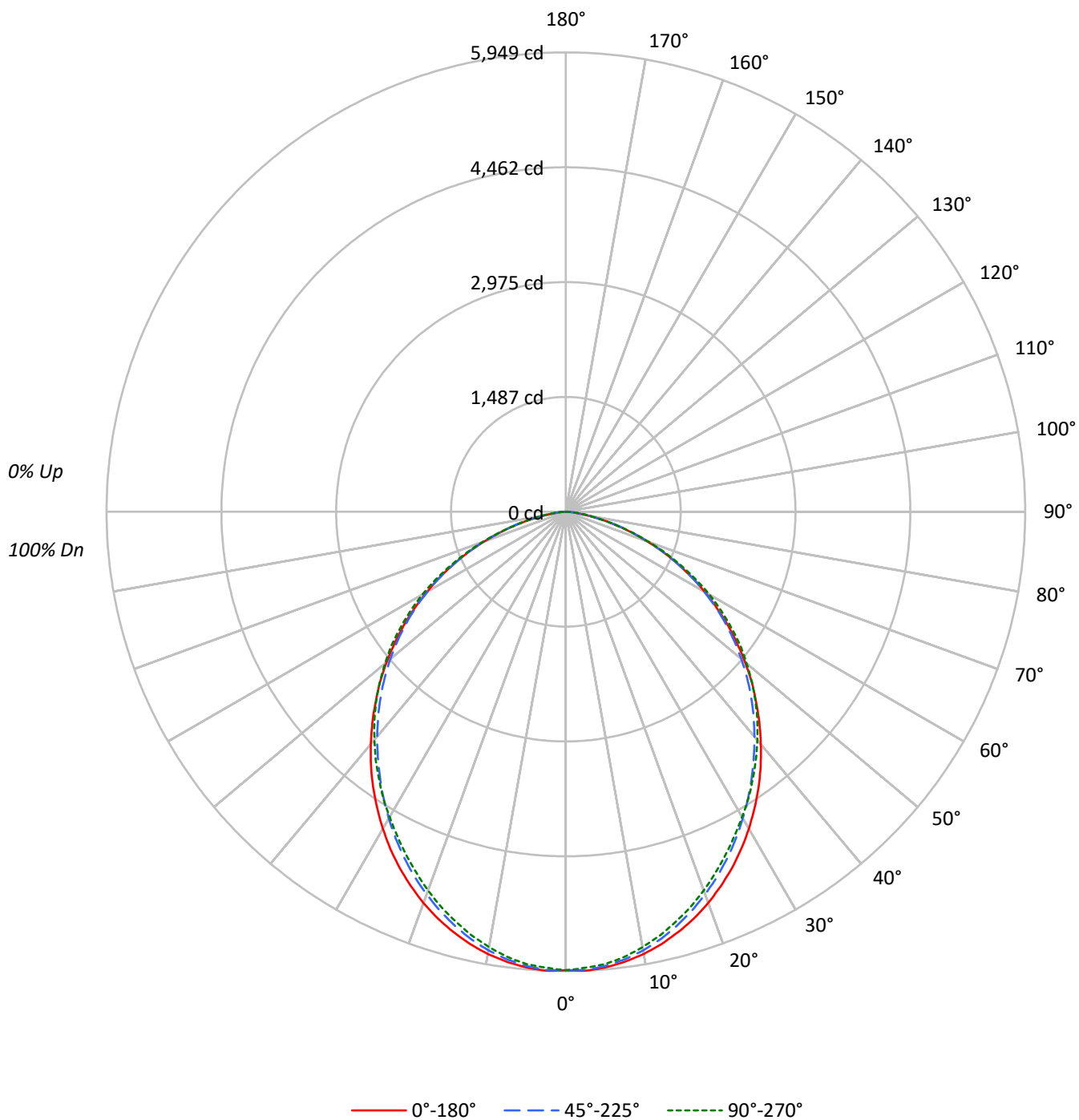
Lumens per Lamp: N/A
Luminaire Lumens: 14452.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 177.5
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	85
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	61
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°	7989	7989	7989
5°	8000	7974	7939
10°	7944	7880	7820
15°	7847	7732	7657
20°	7719	7549	7474
25°	7556	7346	7271
30°	7364	7124	7091
35°	7147	6893	6935
40°	6899	6676	6777
45°	6632	6454	6610
50°	6341	6212	6399
55°	6006	5926	6135
60°	5603	5571	5783
65°	5095	5097	5242
70°	4400	4450	4513
75°	3506	3606	3564
80°	2374	2505	2512
85°	1221	1673	2137

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6632 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	558.4	3.9
10°-20°	1563.7	10.8
20°-30°	2286.4	15.8
30°-40°	2651.8	18.3
40°-50°	2647.2	18.3
50°-60°	2280.3	15.8
60°-70°	1591.3	11.0
70°-80°	735.1	5.1
80°-90°	137.8	1.0
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°	4408.5	30.5
0°-40°	7060.4	48.9
0°-60°	11987.8	82.9
0°-90°	14452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14452.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5937	5937	5937	5937	5937	
5°	5924	5902	5904	5870	5878	562
15°	5633	5594	5551	5493	5497	1588
25°	5090	5032	4948	4891	4898	2343
35°	4351	4277	4197	4194	4222	2720
45°	3486	3420	3392	3438	3474	2689
55°	2560	2510	2526	2588	2615	2287
65°	1600	1576	1601	1629	1646	1583
75°	674	667	694	688	686	726
85°	79	89	108	130	138	117
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5937.4	5937.4	5937.4	5937.4	5937.4
2.5°	5949.4	5930.0	5937.4	5911.4	5909.7
5°	5923.5	5902.0	5904.2	5870.1	5877.9
7.5°	5877.9	5853.1	5846.4	5807.8	5815.1
10°	5814.7	5784.2	5767.6	5720.3	5724.0
12.5°	5733.7	5699.1	5670.1	5615.5	5621.9
15°	5633.0	5594.1	5550.6	5493.4	5496.9
17.5°	5522.1	5479.7	5418.7	5357.9	5367.7
20°	5390.8	5344.3	5272.4	5209.2	5219.6
22.5°	5245.3	5192.6	5117.6	5054.8	5060.5
25°	5089.9	5031.6	4947.9	4891.0	4898.0
27.5°	4921.2	4856.4	4770.8	4720.0	4731.8
30°	4739.8	4671.8	4585.3	4547.6	4564.3
32.5°	4548.9	4479.1	4395.2	4375.4	4400.4
35°	4351.3	4276.9	4196.8	4194.5	4222.2
37.5°	4145.6	4072.5	4000.4	4015.0	4043.9
40°	3927.9	3859.3	3800.8	3827.0	3858.2
42.5°	3708.9	3643.0	3598.6	3636.7	3670.4
45°	3485.6	3419.9	3391.6	3437.9	3473.7
47.5°	3263.4	3197.4	3183.4	3236.7	3268.9
50°	3029.5	2970.6	2967.9	3025.7	3057.2
52.5°	2793.5	2739.0	2749.1	2811.2	2849.8
55°	2560.4	2509.7	2526.3	2588.1	2615.4
57.5°	2320.8	2280.6	2302.2	2357.3	2384.2
60°	2082.3	2045.3	2070.1	2122.7	2149.2
62.5°	1841.1	1808.9	1837.5	1881.6	1898.8
65°	1600.4	1576.2	1600.9	1629.3	1646.5
67.5°	1363.3	1340.6	1367.5	1394.9	1401.1
70°	1118.4	1104.1	1131.3	1147.6	1147.3
72.5°	893.0	879.0	904.8	911.0	906.3
75°	674.4	666.9	693.7	687.9	685.6
77.5°	475.7	479.3	493.3	489.0	487.9
80°	306.4	317.1	323.3	326.5	324.2
82.5°	172.2	182.1	191.4	214.1	223.0
85°	79.1	88.7	108.4	129.6	138.4
87.5°	26.7	34.3	45.6	49.0	46.4
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	18.15	19.73	18.51	20.04	20.36	18.37	19.95	18.74	20.27	20.58
	3H	19.61	21.04	19.99	21.36	21.72	19.84	21.26	20.21	21.59	21.95
	4H	20.04	21.37	20.44	21.72	22.10	20.25	21.59	20.65	21.94	22.32
	6H	20.24	21.48	20.66	21.85	22.24	20.46	21.70	20.87	22.06	22.45
	8H	20.27	21.45	20.70	21.84	22.24	20.51	21.68	20.93	22.07	22.47
	12H	20.27	21.40	20.70	21.78	22.21	20.53	21.66	20.96	22.04	22.47
4H	2H	18.71	20.04	19.10	20.39	20.77	18.89	20.22	19.29	20.57	20.95
	3H	20.35	21.46	20.76	21.86	22.26	20.54	21.65	20.95	22.05	22.45
	4H	20.86	21.86	21.29	22.27	22.71	21.05	22.05	21.48	22.46	22.90
	6H	21.14	22.01	21.60	22.46	22.91	21.33	22.20	21.79	22.65	23.10
	8H	21.19	22.00	21.65	22.44	22.91	21.40	22.22	21.86	22.66	23.12
	12H	21.20	21.93	21.68	22.40	22.87	21.45	22.18	21.93	22.66	23.13
8H	4H	21.05	21.86	21.51	22.30	22.77	21.22	22.03	21.68	22.47	22.94
	6H	21.39	22.06	21.88	22.55	23.02	21.56	22.23	22.06	22.72	23.20
	8H	21.46	22.06	21.97	22.57	23.05	21.67	22.27	22.18	22.78	23.26
	12H	21.49	22.02	22.00	22.51	23.08	21.76	22.29	22.27	22.78	23.34
12H	4H	21.05	21.77	21.53	22.25	22.72	21.22	21.94	21.70	22.42	22.89
	6H	21.39	21.99	21.90	22.50	22.99	21.56	22.16	22.07	22.67	23.16
	8H	21.49	22.02	22.00	22.51	23.08	21.70	22.23	22.21	22.72	23.28