

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: P1499221

Luminaire Tested: MAE-G-4-120-2HI-HI-50-VRDCPH

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499221
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-50-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 2 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

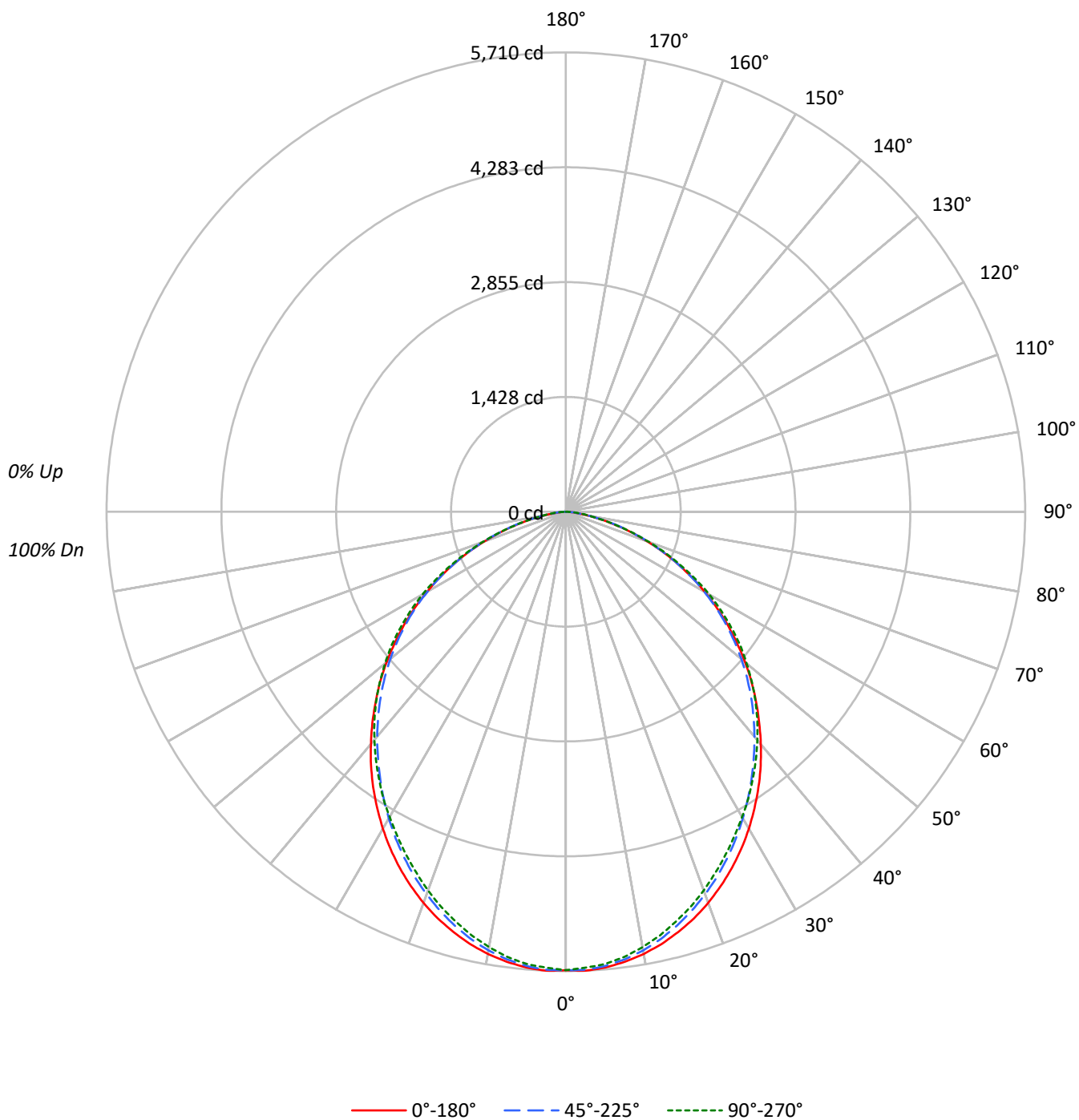
Lumens per Lamp: N/A
Luminaire Lumens: 13870.0 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	100		
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85		
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72		
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61		
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53		
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46		
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41		
7	67	53	45	39	65	53	45	39	51	44	38	50	43	38	48	42	38	36		
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32		
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29		
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7667	7667	7667
5°	7678	7653	7619
10°	7624	7563	7505
15°	7530	7420	7349
20°	7408	7245	7173
25°	7252	7050	6979
30°	7067	6837	6806
35°	6859	6616	6656
40°	6621	6407	6504
45°	6365	6194	6344
50°	6086	5962	6141
55°	5764	5688	5888
60°	5378	5346	5551
65°	4890	4892	5031
70°	4222	4271	4332
75°	3365	3461	3420
80°	2279	2404	2411
85°	1170	1606	2050

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6365 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	535.9	3.9
10°-20°	1500.8	10.8
20°-30°	2194.4	15.8
30°-40°	2545.0	18.3
40°-50°	2540.6	18.3
50°-60°	2188.5	15.8
60°-70°	1527.2	11.0
70°-80°	705.5	5.1
80°-90°	132.2	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°	4231.0	30.5
0°-40°	6776.0	48.9
0°-60°	11505.0	82.9
0°-90°	13870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5698	5698	5698	5698	5698	
5°	5685	5664	5666	5634	5641	539
15°	5406	5369	5327	5272	5276	1524
25°	4885	4829	4749	4694	4701	2248
35°	4176	4105	4028	4026	4052	2610
45°	3345	3282	3255	3300	3334	2581
55°	2457	2409	2425	2484	2510	2194
65°	1536	1513	1536	1564	1580	1520
75°	647	640	666	660	658	696
85°	76	85	104	124	133	112
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5698.2	5698.2	5698.2	5698.2	5698.2
2.5°	5709.8	5691.1	5698.2	5673.2	5671.8
5°	5684.9	5664.3	5666.4	5633.7	5641.2
7.5°	5641.2	5617.3	5611.0	5573.9	5580.9
10°	5580.6	5551.2	5535.3	5489.8	5493.4
12.5°	5502.8	5469.6	5441.8	5389.4	5395.4
15°	5406.1	5368.8	5327.1	5272.2	5275.6
17.5°	5299.7	5259.1	5200.4	5142.1	5151.6
20°	5173.7	5129.1	5060.1	4999.4	5009.3
22.5°	5034.1	4983.5	4911.5	4851.3	4856.8
25°	4885.0	4829.0	4748.7	4694.0	4700.7
27.5°	4723.0	4660.8	4578.8	4529.9	4541.2
30°	4548.9	4483.6	4400.7	4364.5	4380.5
32.5°	4365.7	4298.7	4218.2	4199.2	4223.1
35°	4176.0	4104.7	4027.8	4025.5	4052.1
37.5°	3978.6	3908.4	3839.3	3853.4	3881.1
40°	3769.8	3703.9	3647.8	3672.9	3702.8
42.5°	3559.6	3496.2	3453.7	3490.3	3522.6
45°	3345.1	3282.2	3255.0	3299.5	3333.9
47.5°	3132.0	3068.6	3055.2	3106.3	3137.3
50°	2907.5	2851.0	2848.3	2903.8	2934.0
52.5°	2681.0	2628.7	2638.4	2698.0	2735.1
55°	2457.2	2408.7	2424.6	2483.9	2510.0
57.5°	2227.3	2188.8	2209.4	2262.4	2288.2
60°	1998.4	1962.9	1986.8	2037.2	2062.7
62.5°	1767.0	1736.1	1763.5	1805.9	1822.4
65°	1535.9	1512.7	1536.5	1563.7	1580.2
67.5°	1308.4	1286.6	1312.5	1338.7	1344.6
70°	1073.3	1059.6	1085.8	1101.3	1101.2
72.5°	857.0	843.6	868.3	874.3	869.9
75°	647.3	640.1	665.8	660.2	657.9
77.5°	456.6	460.0	473.5	469.3	468.2
80°	294.1	304.4	310.3	313.3	311.2
82.5°	165.3	174.7	183.7	205.4	214.1
85°	75.8	85.1	104.0	124.3	132.8
87.5°	25.7	32.9	43.7	47.0	44.5
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	18.00	19.59	18.37	19.90	20.22	18.23	19.81	18.59	20.13	20.44
	3H	19.47	20.89	19.85	21.22	21.58	19.69	21.12	20.07	21.45	21.81
	4H	19.89	21.23	20.29	21.58	21.96	20.11	21.45	20.51	21.80	22.17
	6H	20.10	21.34	20.51	21.70	22.09	20.32	21.55	20.73	21.92	22.31
	8H	20.13	21.31	20.55	21.70	22.10	20.36	21.54	20.79	21.93	22.33
	12H	20.13	21.26	20.56	21.64	22.07	20.39	21.52	20.82	21.90	22.33
4H	2H	18.56	19.90	18.96	20.25	20.63	18.74	20.08	19.14	20.43	20.81
	3H	20.20	21.32	20.61	21.71	22.12	20.40	21.51	20.81	21.91	22.31
	4H	20.71	21.72	21.15	22.13	22.57	20.90	21.91	21.34	22.32	22.76
	6H	21.00	21.87	21.46	22.31	22.77	21.19	22.06	21.65	22.50	22.96
	8H	21.04	21.86	21.51	22.30	22.77	21.26	22.07	21.72	22.52	22.98
	12H	21.06	21.78	21.54	22.26	22.73	21.31	22.04	21.79	22.52	22.99
8H	4H	20.90	21.72	21.36	22.16	22.63	21.07	21.89	21.54	22.33	22.80
	6H	21.24	21.92	21.74	22.41	22.88	21.42	22.09	21.92	22.58	23.06
	8H	21.31	21.92	21.83	22.42	22.91	21.52	22.12	22.04	22.63	23.12
	12H	21.35	21.88	21.86	22.37	22.94	21.61	22.14	22.12	22.64	23.20
12H	4H	20.90	21.63	21.38	22.11	22.58	21.07	21.80	21.55	22.28	22.75
	6H	21.24	21.85	21.76	22.36	22.84	21.42	22.02	21.93	22.53	23.02
	8H	21.35	21.88	21.86	22.37	22.93	21.56	22.09	22.07	22.58	23.14