

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: P1499488

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499488
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-4-120-3HI-HI-30-90-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

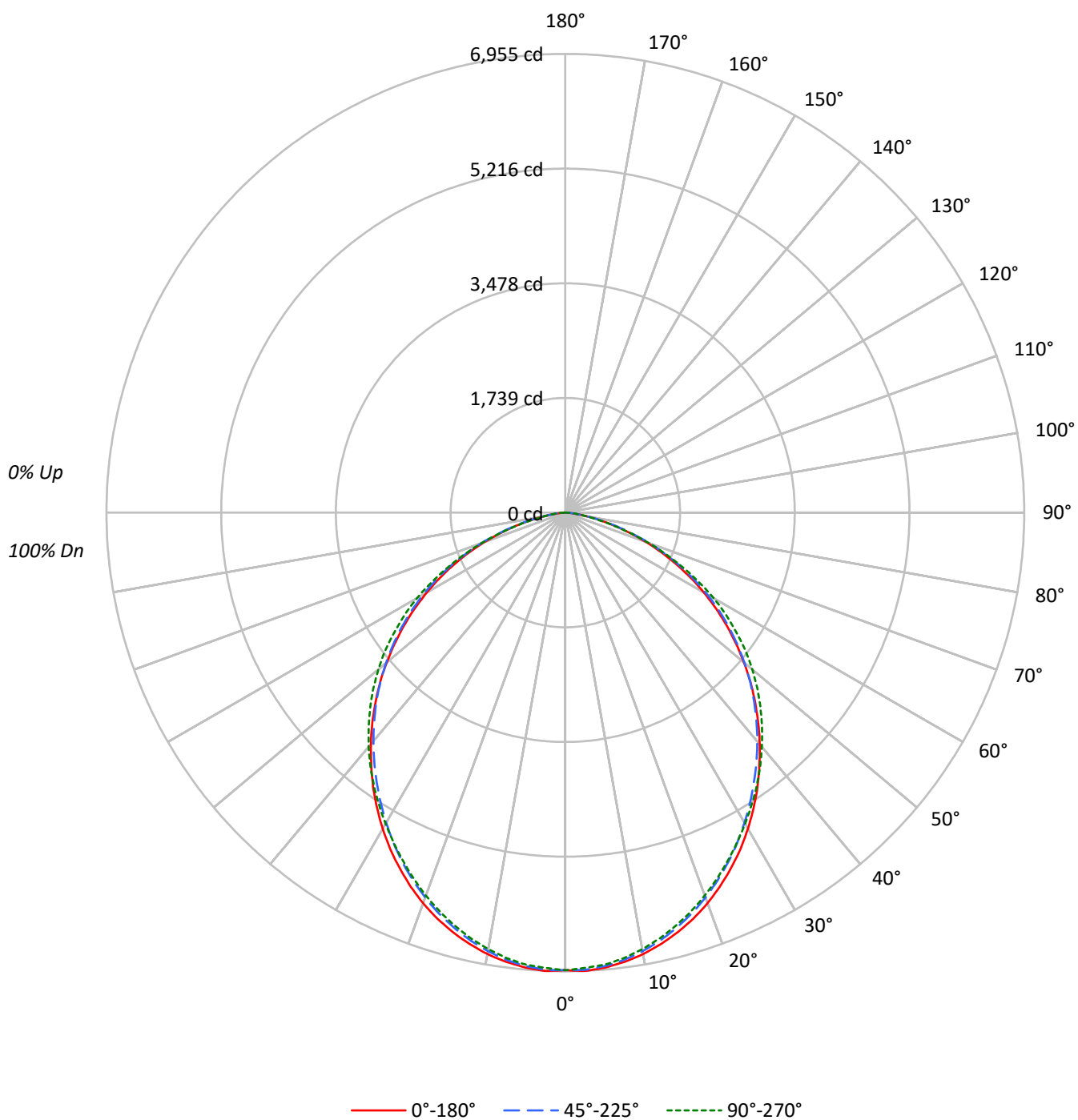
Lumens per Lamp: N/A
Luminaire Lumens: 17078.0 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 221.8
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
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		67	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	33	28	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9334	9334	9334
5°	9351	9322	9291
10°	9286	9225	9180
15°	9174	9075	9028
20°	9023	8893	8846
25°	8826	8679	8647
30°	8599	8436	8463
35°	8343	8188	8306
40°	8052	7947	8141
45°	7738	7700	7957
50°	7394	7421	7741
55°	7006	7098	7423
60°	6525	6683	6998
65°	5927	6121	6255
70°	5105	5316	5270
75°	4055	4216	3931
80°	2728	2755	2549
85°	1400	1720	2087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7957 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	653.2	3.8
10°-20°	1835.7	10.7
20°-30°	2696.2	15.8
30°-40°	3139.5	18.4
40°-50°	3146.9	18.4
50°-60°	2719.8	15.9
60°-70°	1892.1	11.1
70°-80°	848.3	5.0
80°-90°	146.4	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°	5185.1	30.4
0°-40°	8324.6	48.7
0°-60°	14191.2	83.1
0°-90°	17078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6938	6938	6938	6938	6938	
5°	6924	6894	6902	6870	6879	657
15°	6586	6544	6515	6471	6481	1856
25°	5945	5892	5846	5802	5825	2737
35°	5079	5016	4985	5008	5057	3173
45°	4067	4022	4047	4129	4182	3138
55°	2987	2955	3026	3128	3165	2666
65°	1862	1857	1923	1958	1965	1840
75°	780	787	811	780	756	838
85°	91	97	111	128	135	134
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6937.6	6937.6	6937.6	6937.6	6937.6
2.5°	6955.0	6926.2	6937.6	6912.9	6907.8
5°	6923.7	6894.0	6901.6	6869.9	6879.0
7.5°	6870.0	6838.5	6838.2	6803.6	6812.1
10°	6797.0	6760.1	6752.2	6712.9	6719.5
12.5°	6699.9	6661.8	6644.8	6600.1	6611.2
15°	6585.8	6543.9	6515.1	6471.2	6481.3
17.5°	6453.7	6407.5	6372.8	6321.7	6338.3
20°	6301.9	6252.3	6210.9	6156.5	6178.4
22.5°	6132.0	6079.9	6032.3	5983.8	6005.8
25°	5944.8	5892.3	5845.8	5801.7	5824.7
27.5°	5748.0	5689.5	5642.8	5611.6	5637.1
30°	5535.0	5474.6	5429.7	5410.7	5446.9
32.5°	5310.1	5250.4	5210.9	5212.7	5254.7
35°	5079.1	5016.3	4985.0	5008.1	5057.0
37.5°	4830.8	4778.2	4757.5	4801.7	4851.5
40°	4584.6	4529.9	4524.6	4582.7	4635.0
42.5°	4330.1	4281.9	4288.4	4362.9	4411.7
45°	4066.6	4021.9	4046.7	4128.7	4181.8
47.5°	3807.7	3761.8	3800.5	3890.0	3947.4
50°	3532.4	3495.3	3545.3	3645.5	3698.2
52.5°	3258.9	3223.4	3287.2	3392.8	3443.5
55°	2986.8	2954.7	3025.7	3128.1	3164.6
57.5°	2705.1	2687.2	2760.4	2850.2	2888.3
60°	2424.8	2409.7	2483.4	2566.4	2600.4
62.5°	2144.2	2135.8	2205.9	2272.8	2284.0
65°	1861.7	1857.1	1922.6	1958.0	1964.8
67.5°	1576.0	1579.6	1638.9	1656.5	1655.4
70°	1297.6	1297.5	1351.2	1355.0	1339.6
72.5°	1026.9	1034.7	1068.9	1059.7	1035.0
75°	780.0	787.1	811.0	779.5	756.1
77.5°	550.4	556.3	566.2	531.7	516.9
80°	352.1	362.9	355.6	339.0	329.0
82.5°	196.6	207.6	201.2	216.2	223.0
85°	90.7	97.2	111.4	128.3	135.2
87.5°	30.9	36.8	45.7	48.7	45.4
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	18.69	20.28	19.06	20.59	20.90	19.11	20.70	19.48	21.01	21.32
	3H	20.14	21.56	20.52	21.89	22.25	20.52	21.94	20.90	22.27	22.63
	4H	20.56	21.89	20.96	22.24	22.62	20.88	22.22	21.28	22.57	22.94
	6H	20.76	21.99	21.17	22.36	22.75	21.03	22.27	21.44	22.63	23.03
	8H	20.78	21.96	21.21	22.35	22.75	21.06	22.23	21.48	22.62	23.02
	12H	20.78	21.91	21.21	22.29	22.72	21.07	22.20	21.50	22.58	23.01
4H	2H	19.28	20.62	19.68	20.97	21.34	19.62	20.96	20.02	21.31	21.68
	3H	20.90	22.01	21.31	22.41	22.81	21.21	22.32	21.62	22.72	23.12
	4H	21.40	22.40	21.84	22.82	23.26	21.66	22.66	22.09	23.07	23.51
	6H	21.68	22.55	22.13	22.99	23.45	21.88	22.75	22.33	23.19	23.65
	8H	21.72	22.53	22.18	22.97	23.44	21.92	22.73	22.38	23.17	23.64
	12H	21.73	22.45	22.21	22.93	23.40	21.95	22.67	22.43	23.15	23.62
8H	4H	21.59	22.40	22.05	22.84	23.31	21.82	22.63	22.28	23.07	23.54
	6H	21.91	22.58	22.41	23.07	23.55	22.08	22.75	22.58	23.24	23.72
	8H	21.97	22.57	22.49	23.08	23.57	22.15	22.75	22.66	23.26	23.74
	12H	22.01	22.54	22.52	23.03	23.59	22.21	22.74	22.72	23.23	23.79
12H	4H	21.58	22.31	22.06	22.78	23.25	21.81	22.54	22.29	23.02	23.49
	6H	21.90	22.50	22.42	23.01	23.50	22.07	22.68	22.59	23.18	23.67
	8H	22.00	22.53	22.51	23.02	23.58	22.17	22.70	22.68	23.19	23.76