

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: P1499502

Luminaire Tested: MAE-G-4-120-3HI-HI-40-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499502
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-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

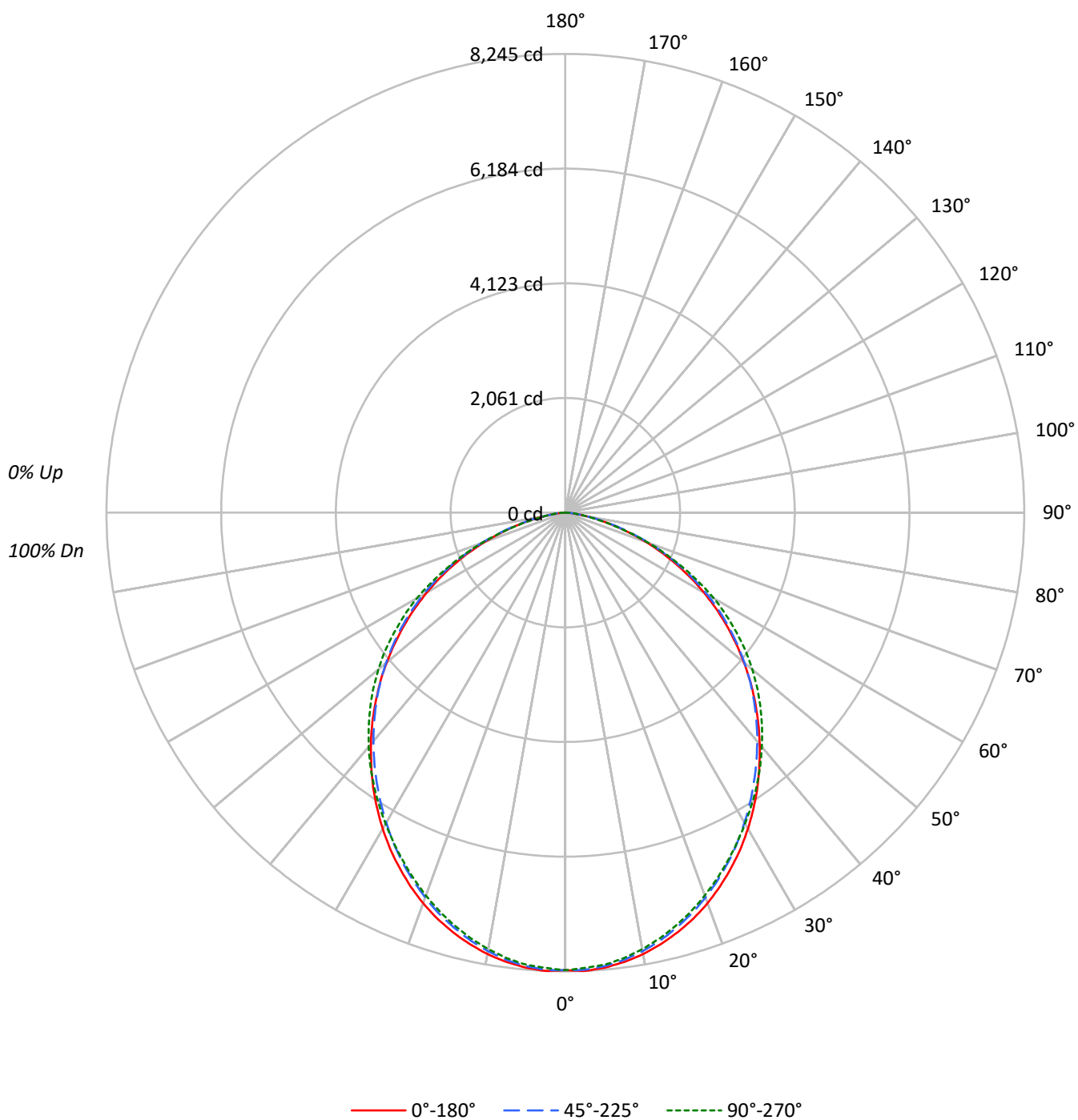
Lumens per Lamp: N/A
Luminaire Lumens: 20245.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	11065	11065	11065
5°	11086	11050	11014
10°	11009	10936	10883
15°	10875	10758	10702
20°	10697	10542	10487
25°	10462	10288	10251
30°	10194	10000	10032
35°	9890	9706	9847
40°	9546	9421	9651
45°	9173	9128	9433
50°	8765	8797	9176
55°	8306	8414	8800
60°	7735	7922	8295
65°	7026	7256	7415
70°	6051	6301	6247
75°	4807	4998	4659
80°	3234	3266	3022
85°	1660	2039	2473

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9433 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	774.3	3.8
10°-20°	2176.1	10.7
20°-30°	3196.2	15.8
30°-40°	3721.7	18.4
40°-50°	3730.4	18.4
50°-60°	3224.1	15.9
60°-70°	2243.0	11.1
70°-80°	1005.6	5.0
80°-90°	173.5	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°	6146.6	30.4
0°-40°	9868.3	48.7
0°-60°	16822.9	83.1
0°-90°	20245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8224	8224	8224	8224	8224	
5°	8208	8172	8182	8144	8155	779
15°	7807	7758	7723	7671	7683	2200
25°	7047	6985	6930	6878	6905	3245
35°	6021	5947	5909	5937	5995	3762
45°	4821	4768	4797	4894	4957	3719
55°	3541	3503	3587	3708	3751	3161
65°	2207	2202	2279	2321	2329	2181
75°	925	933	961	924	896	993
85°	108	115	132	152	160	159
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8224.1	8224.1	8224.1	8224.1	8224.1
2.5°	8244.8	8210.5	8224.1	8194.9	8188.9
5°	8207.7	8172.5	8181.5	8143.8	8154.7
7.5°	8144.0	8106.6	8106.2	8065.2	8075.3
10°	8057.5	8013.7	8004.3	7957.9	7965.7
12.5°	7942.4	7897.2	7877.0	7824.0	7837.2
15°	7807.2	7757.5	7723.4	7671.3	7683.3
17.5°	7650.4	7595.8	7554.6	7494.0	7513.7
20°	7470.6	7411.8	7362.7	7298.1	7324.1
22.5°	7269.1	7207.4	7151.0	7093.5	7119.6
25°	7047.3	6984.9	6929.9	6877.6	6904.9
27.5°	6813.9	6744.6	6689.2	6652.2	6682.4
30°	6561.4	6489.8	6436.5	6414.0	6457.0
32.5°	6294.8	6224.1	6177.3	6179.5	6229.2
35°	6021.0	5946.6	5909.4	5936.9	5994.8
37.5°	5726.7	5664.3	5639.7	5692.2	5751.1
40°	5434.9	5370.0	5363.6	5432.6	5494.6
42.5°	5133.1	5075.9	5083.6	5171.9	5229.7
45°	4820.7	4767.7	4797.1	4894.3	4957.3
47.5°	4513.8	4459.5	4505.2	4611.4	4679.5
50°	4187.4	4143.5	4202.8	4321.5	4383.9
52.5°	3863.2	3821.1	3896.8	4021.9	4082.2
55°	3540.7	3502.6	3586.7	3708.2	3751.4
57.5°	3206.8	3185.5	3272.2	3378.7	3423.9
60°	2874.6	2856.5	2943.9	3042.3	3082.6
62.5°	2541.8	2531.9	2615.0	2694.2	2707.5
65°	2207.0	2201.5	2279.1	2321.0	2329.1
67.5°	1868.3	1872.5	1942.8	1963.6	1962.3
70°	1538.1	1538.1	1601.8	1606.3	1588.0
72.5°	1217.3	1226.6	1267.3	1256.3	1226.9
75°	924.7	933.1	961.4	924.1	896.3
77.5°	652.4	659.4	671.2	630.3	612.9
80°	417.4	430.2	421.5	401.9	390.0
82.5°	233.1	246.2	238.5	256.3	264.4
85°	107.5	115.2	132.1	152.1	160.2
87.5°	36.6	43.6	54.1	57.8	53.9
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	19.28	20.87	19.65	21.18	21.50	19.70	21.29	20.07	21.60	21.91
	3H	20.73	22.15	21.11	22.48	22.84	21.11	22.53	21.49	22.86	23.22
	4H	21.15	22.48	21.55	22.83	23.21	21.47	22.81	21.87	23.16	23.53
	6H	21.35	22.58	21.76	22.95	23.34	21.62	22.86	22.03	23.22	23.62
	8H	21.37	22.55	21.80	22.94	23.34	21.65	22.83	22.07	23.22	23.62
	12H	21.37	22.50	21.80	22.88	23.31	21.66	22.79	22.09	23.17	23.60
4H	2H	19.87	21.21	20.27	21.56	21.93	20.21	21.55	20.61	21.90	22.27
	3H	21.49	22.60	21.90	23.00	23.40	21.80	22.91	22.21	23.31	23.71
	4H	21.99	22.99	22.43	23.41	23.85	22.25	23.25	22.68	23.66	24.10
	6H	22.27	23.14	22.72	23.58	24.04	22.47	23.34	22.92	23.78	24.24
	8H	22.31	23.12	22.77	23.56	24.03	22.51	23.32	22.97	23.76	24.23
	12H	22.32	23.04	22.80	23.52	23.99	22.54	23.26	23.02	23.74	24.21
8H	4H	22.18	22.99	22.64	23.43	23.90	22.41	23.22	22.87	23.66	24.13
	6H	22.50	23.17	23.00	23.66	24.14	22.67	23.34	23.17	23.83	24.31
	8H	22.57	23.17	23.08	23.67	24.16	22.74	23.34	23.25	23.85	24.33
	12H	22.60	23.13	23.11	23.62	24.18	22.80	23.33	23.31	23.82	24.38
12H	4H	22.17	22.90	22.65	23.38	23.85	22.40	23.13	22.89	23.61	24.08
	6H	22.49	23.10	23.01	23.60	24.09	22.67	23.27	23.18	23.77	24.26
	8H	22.59	23.12	23.10	23.61	24.17	22.76	23.29	23.27	23.78	24.35