

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: P1499238

Luminaire Tested: MAE-G-4-120-2HI-LO-40-90

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499238
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-LO-40-90
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 2 HI ambient , LO exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

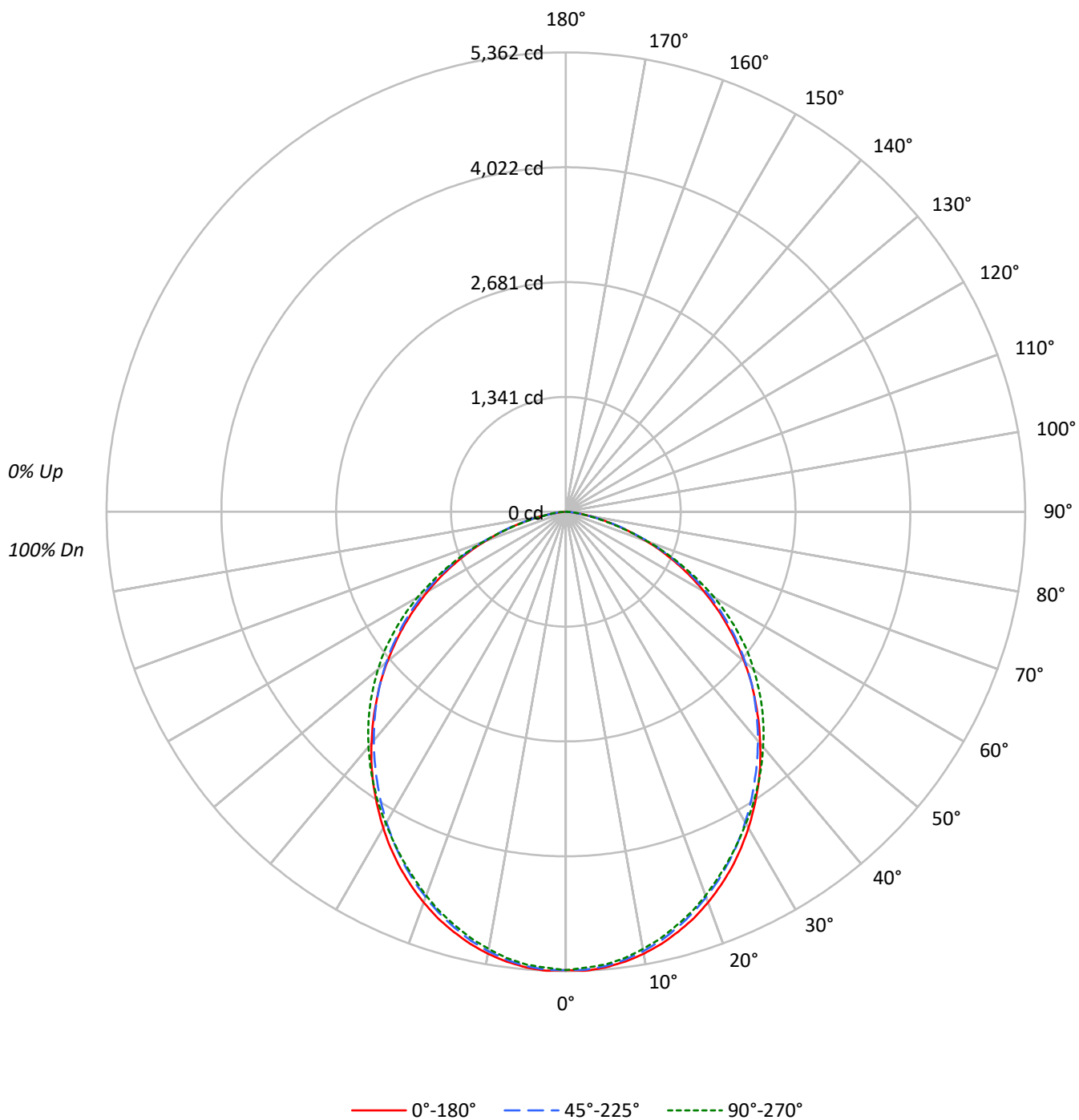
Lumens per Lamp: N/A
Luminaire Lumens: 13156.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 136.8
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	93	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	76	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	45	39	51	44	38		50	43	38		48
8	62	49	41	35	61	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	29	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7198	7198	7198
5°	7210	7189	7164
10°	7158	7116	7080
15°	7067	7000	6963
20°	6949	6855	6826
25°	6801	6688	6669
30°	6624	6505	6531
35°	6425	6309	6414
40°	6198	6127	6293
45°	5954	5938	6164
50°	5689	5728	5989
55°	5385	5475	5749
60°	5018	5152	5394
65°	4553	4705	4807
70°	3919	4052	4017
75°	3110	3184	2994
80°	2084	2061	1894
85°	1044	1252	1524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6164 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.7	3.8
10°-20°	1415.7	10.8
20°-30°	2079.3	15.8
30°-40°	2422.2	18.4
40°-50°	2428.3	18.5
50°-60°	2098.1	15.9
60°-70°	1454.1	11.1
70°-80°	645.7	4.9
80°-90°	108.8	0.8
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°	3998.7	30.4
0°-40°	6421.0	48.8
0°-60°	10947.4	83.2
0°-90°	13156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5350	5350	5350	5350	5350	
5°	5338	5315	5323	5299	5304	506
15°	5074	5042	5025	4993	4999	1430
25°	4581	4544	4505	4479	4492	2108
35°	3912	3868	3841	3869	3905	2445
45°	3129	3097	3120	3193	3239	2414
55°	2296	2276	2334	2417	2451	2050
65°	1430	1432	1478	1497	1510	1415
75°	598	603	612	586	576	644
85°	68	72	81	94	99	102
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5350.0	5350.0	5350.0	5350.0	5350.0
2.5°	5361.9	5339.7	5350.0	5332.0	5326.9
5°	5337.9	5315.4	5322.9	5298.7	5304.2
7.5°	5296.7	5272.4	5274.7	5249.0	5255.2
10°	5238.9	5211.0	5208.2	5177.8	5181.8
12.5°	5165.5	5135.8	5126.6	5093.0	5100.7
15°	5073.7	5042.4	5025.1	4992.9	4998.6
17.5°	4973.2	4941.7	4913.0	4879.9	4892.0
20°	4853.5	4821.2	4787.6	4752.8	4767.1
22.5°	4721.5	4686.1	4653.0	4620.1	4631.4
25°	4581.0	4543.6	4505.1	4478.7	4491.9
27.5°	4427.8	4386.6	4350.6	4330.1	4348.3
30°	4263.3	4221.6	4186.9	4179.5	4203.5
32.5°	4090.1	4049.3	4017.8	4028.6	4061.5
35°	3911.6	3868.3	3841.3	3868.9	3905.1
37.5°	3726.3	3684.3	3666.5	3710.3	3748.3
40°	3528.7	3492.4	3488.2	3543.0	3582.8
42.5°	3331.1	3297.6	3306.7	3372.7	3415.8
45°	3129.2	3097.1	3120.4	3193.4	3239.3
47.5°	2930.2	2896.1	2931.9	3011.5	3052.6
50°	2717.9	2691.6	2736.7	2819.2	2861.3
52.5°	2506.8	2482.9	2537.3	2623.6	2670.9
55°	2295.6	2276.1	2333.8	2417.3	2450.7
57.5°	2079.6	2068.9	2128.3	2200.0	2231.2
60°	1864.8	1856.3	1914.7	1977.2	2004.6
62.5°	1647.7	1642.9	1698.8	1744.7	1757.9
65°	1430.0	1432.5	1477.7	1496.8	1510.0
67.5°	1217.8	1218.1	1256.7	1268.6	1269.6
70°	996.3	1003.6	1029.9	1028.4	1021.2
72.5°	794.6	797.6	812.9	799.1	787.7
75°	598.3	603.1	612.4	586.0	575.9
77.5°	420.1	430.4	423.5	399.4	390.3
80°	269.0	279.5	266.0	251.9	244.5
82.5°	149.4	155.3	148.4	159.0	163.4
85°	67.6	72.4	81.1	94.0	98.7
87.5°	22.9	27.3	33.6	35.4	33.2
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	17.78	19.36	18.15	19.68	19.99	18.22	19.80	18.59	20.12	20.43
	3H	19.23	20.66	19.61	20.98	21.34	19.60	21.03	19.98	21.35	21.71
	4H	19.65	20.99	20.05	21.33	21.71	19.95	21.29	20.35	21.64	22.02
	6H	19.85	21.08	20.26	21.45	21.84	20.10	21.33	20.51	21.70	22.09
	8H	19.87	21.05	20.30	21.44	21.84	20.12	21.29	20.54	21.68	22.08
	12H	19.87	20.99	20.30	21.38	21.80	20.12	21.25	20.55	21.63	22.06
4H	2H	18.37	19.70	18.77	20.05	20.43	18.72	20.06	19.12	20.41	20.78
	3H	19.99	21.10	20.40	21.50	21.90	20.28	21.39	20.69	21.79	22.19
	4H	20.49	21.49	20.92	21.91	22.34	20.72	21.71	21.15	22.13	22.57
	6H	20.77	21.63	21.22	22.07	22.53	20.92	21.79	21.38	22.23	22.69
	8H	20.80	21.61	21.26	22.06	22.52	20.96	21.77	21.42	22.21	22.68
	12H	20.81	21.54	21.29	22.01	22.48	20.98	21.71	21.46	22.18	22.66
8H	4H	20.67	21.48	21.13	21.92	22.39	20.87	21.68	21.33	22.12	22.59
	6H	20.99	21.66	21.48	22.15	22.62	21.12	21.79	21.62	22.28	22.76
	8H	21.05	21.65	21.56	22.16	22.64	21.18	21.78	21.69	22.29	22.77
	12H	21.08	21.61	21.59	22.10	22.66	21.23	21.76	21.74	22.25	22.81
12H	4H	20.66	21.38	21.14	21.86	22.33	20.87	21.59	21.35	22.07	22.54
	6H	20.98	21.58	21.49	22.09	22.57	21.11	21.71	21.62	22.22	22.71
	8H	21.07	21.60	21.58	22.09	22.65	21.20	21.73	21.71	22.22	22.78