

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: P1499644

Luminaire Tested: MAE-G-4-120-3LO-STD-40-90-VRDCPH

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499644
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-4-120-3LO-STD-40-90-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 LO ambient , STD exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

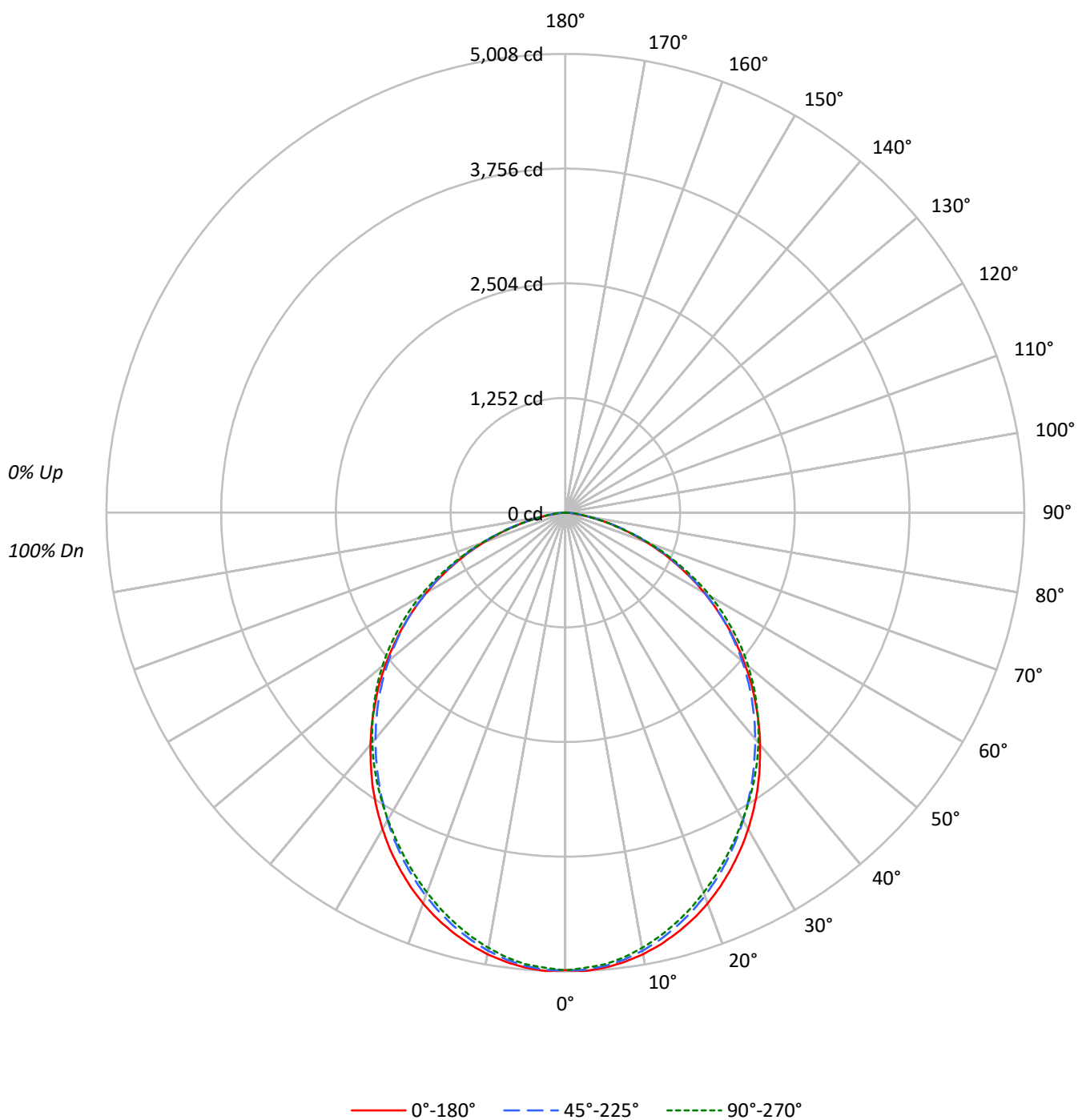
Lumens per Lamp: N/A
Luminaire Lumens: 12222.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.5
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
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	56		66	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	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	28	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6722	6722	6722
5°	6734	6711	6685
10°	6688	6635	6593
15°	6607	6517	6466
20°	6501	6374	6319
25°	6360	6210	6162
30°	6199	6027	6015
35°	6016	5841	5889
40°	5809	5660	5758
45°	5584	5476	5615
50°	5338	5271	5450
55°	5059	5035	5224
60°	4715	4737	4936
65°	4288	4343	4456
70°	3700	3800	3819
75°	2946	3067	2950
80°	1994	2090	2039
85°	1036	1377	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.1	3.8
10°-20°	1318.2	10.8
20°-30°	1930.9	15.8
30°-40°	2242.5	18.3
40°-50°	2242.1	18.3
50°-60°	1934.2	15.8
60°-70°	1350.7	11.1
70°-80°	619.6	5.1
80°-90°	113.7	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°	3719.2	30.4
0°-40°	5961.7	48.8
0°-60°	10138.0	82.9
0°-90°	12222.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12222.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4996	4996	4996	4996	4996	
5°	4986	4966	4969	4942	4950	473
15°	4744	4711	4679	4636	4642	1337
25°	4284	4238	4183	4138	4150	1972
35°	3662	3604	3556	3557	3585	2288
45°	2934	2887	2878	2920	2951	2264
55°	2157	2119	2146	2205	2227	1925
65°	1347	1330	1364	1393	1400	1331
75°	567	565	590	579	568	609
85°	67	74	89	105	112	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4996.1	4996.1	4996.1	4996.1	4996.1
2.5°	5008.0	4989.8	4996.1	4975.4	4973.7
5°	4985.9	4966.3	4968.7	4942.1	4949.5
7.5°	4947.3	4925.6	4920.9	4890.9	4897.1
10°	4895.0	4868.6	4856.4	4821.2	4825.5
12.5°	4825.5	4797.1	4775.7	4734.7	4741.5
15°	4743.5	4711.4	4678.7	4636.3	4641.9
17.5°	4648.7	4612.1	4572.2	4523.6	4533.7
20°	4540.0	4499.4	4451.8	4400.7	4413.4
22.5°	4418.1	4374.1	4320.8	4272.8	4284.7
25°	4283.9	4237.8	4183.2	4138.0	4150.4
27.5°	4142.8	4091.2	4034.5	3997.9	4011.8
30°	3989.9	3935.7	3879.0	3850.9	3871.6
32.5°	3828.5	3773.6	3720.2	3706.1	3730.5
35°	3662.5	3604.4	3556.0	3556.8	3585.4
37.5°	3484.1	3432.7	3391.0	3406.4	3435.4
40°	3307.1	3253.8	3222.4	3247.6	3278.5
42.5°	3123.8	3074.7	3052.1	3088.5	3116.9
45°	2934.5	2887.3	2877.9	2920.1	2951.1
47.5°	2747.5	2700.1	2701.2	2748.8	2783.0
50°	2550.1	2508.4	2518.1	2573.6	2603.8
52.5°	2352.2	2312.6	2333.5	2392.9	2423.0
55°	2156.8	2119.4	2146.5	2205.0	2226.8
57.5°	1954.1	1926.9	1957.4	2009.8	2033.5
60°	1752.3	1727.6	1760.5	1811.6	1834.1
62.5°	1550.0	1530.4	1564.0	1608.2	1618.0
65°	1347.0	1330.5	1364.2	1392.7	1399.5
67.5°	1141.2	1131.8	1165.7	1185.6	1187.5
70°	940.5	929.7	966.0	977.6	970.8
72.5°	745.5	742.1	770.2	773.7	760.8
75°	566.7	565.3	590.0	579.1	567.5
77.5°	400.8	401.5	418.5	405.2	399.5
80°	257.4	264.8	269.7	267.2	263.1
82.5°	144.7	154.0	157.9	174.2	181.1
85°	67.1	74.0	89.2	104.8	111.6
87.5°	22.8	28.4	36.9	39.8	37.4
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	17.55	19.14	17.92	19.45	19.76	17.84	19.43	18.21	19.74	20.06
	3H	19.01	20.43	19.38	20.76	21.12	19.30	20.72	19.68	21.05	21.41
	4H	19.43	20.77	19.83	21.12	21.49	19.70	21.04	20.10	21.39	21.76
	6H	19.64	20.87	20.05	21.24	21.63	19.89	21.13	20.30	21.49	21.88
	8H	19.66	20.84	20.09	21.23	21.63	19.93	21.11	20.35	21.50	21.90
	12H	19.66	20.79	20.09	21.17	21.60	19.95	21.08	20.38	21.46	21.89
4H	2H	18.12	19.46	18.52	19.81	20.19	18.36	19.70	18.76	20.05	20.42
	3H	19.76	20.87	20.17	21.27	21.67	20.00	21.12	20.41	21.52	21.92
	4H	20.26	21.27	20.70	21.68	22.12	20.49	21.50	20.93	21.91	22.35
	6H	20.55	21.42	21.00	21.86	22.32	20.76	21.63	21.22	22.07	22.53
	8H	20.59	21.40	21.05	21.84	22.31	20.82	21.63	21.28	22.08	22.54
	12H	20.60	21.33	21.08	21.81	22.28	20.86	21.59	21.35	22.07	22.54
8H	4H	20.45	21.27	20.92	21.71	22.18	20.66	21.48	21.13	21.92	22.39
	6H	20.79	21.46	21.29	21.95	22.43	20.98	21.66	21.48	22.15	22.62
	8H	20.86	21.46	21.37	21.97	22.46	21.08	21.68	21.59	22.19	22.67
	12H	20.90	21.43	21.40	21.92	22.48	21.16	21.69	21.67	22.18	22.74
12H	4H	20.45	21.18	20.93	21.66	22.13	20.66	21.39	21.14	21.87	22.34
	6H	20.79	21.39	21.30	21.90	22.39	20.98	21.58	21.49	22.09	22.58
	8H	20.89	21.42	21.40	21.91	22.48	21.11	21.64	21.62	22.13	22.69

END OF REPORT