

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: P1499239

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499239
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-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 2 HI ambient , LO exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

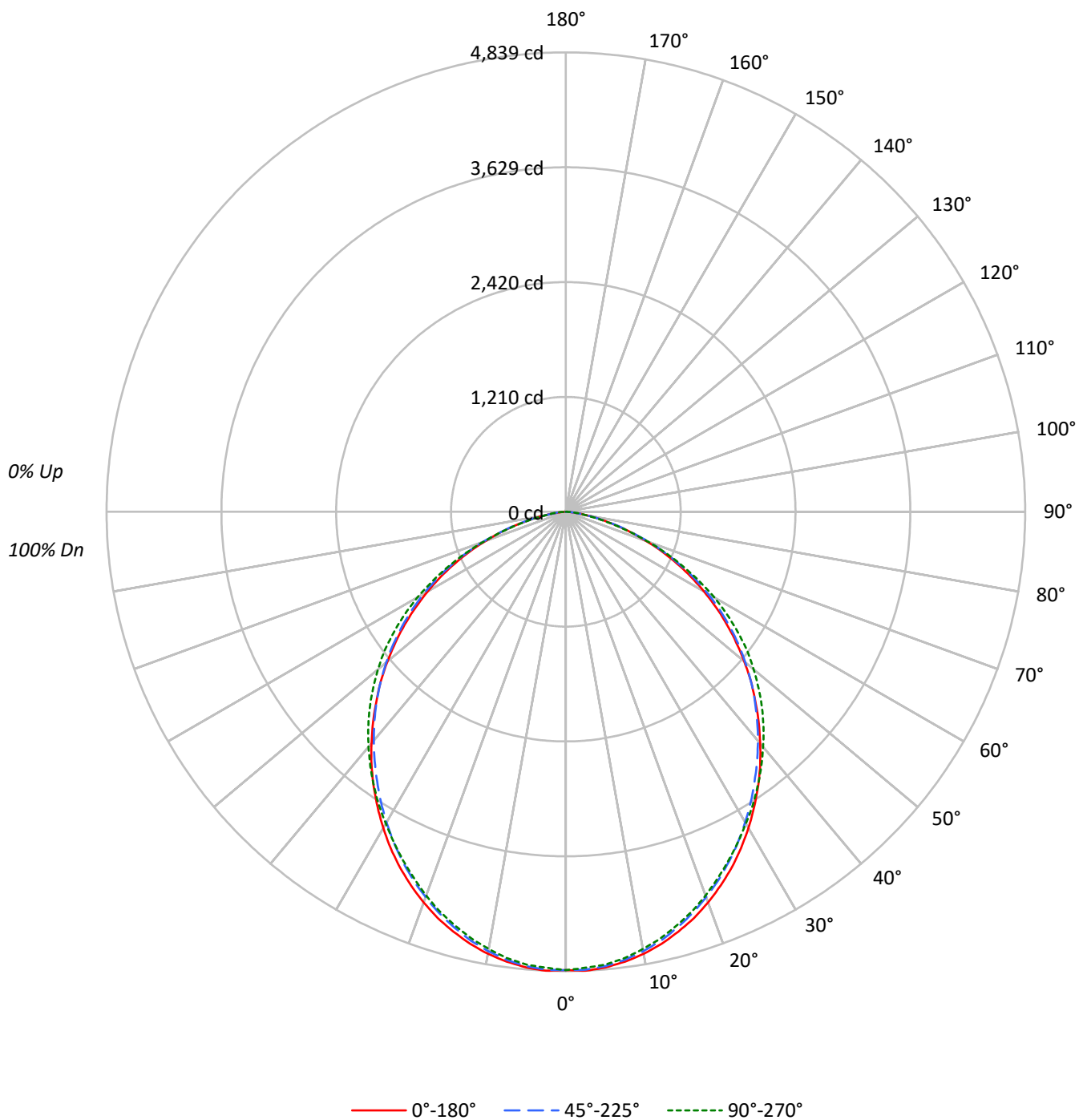
Lumens per Lamp: N/A
Luminaire Lumens: 11873.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	6496	6496	6496
5°	6506	6488	6465
10°	6460	6422	6389
15°	6378	6317	6284
20°	6272	6186	6160
25°	6138	6036	6018
30°	5978	5871	5894
35°	5798	5694	5789
40°	5593	5529	5679
45°	5374	5359	5563
50°	5134	5170	5405
55°	4860	4941	5188
60°	4529	4650	4868
65°	4109	4246	4339
70°	3537	3656	3626
75°	2807	2873	2702
80°	1881	1860	1710
85°	942	1132	1376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5563 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.6	3.8
10°-20°	1277.6	10.8
20°-30°	1876.5	15.8
30°-40°	2186.0	18.4
40°-50°	2191.5	18.5
50°-60°	1893.5	15.9
60°-70°	1312.3	11.1
70°-80°	582.8	4.9
80°-90°	98.2	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°	3608.8	30.4
0°-40°	5794.8	48.8
0°-60°	9879.7	83.2
0°-90°	11873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4828	4828	4828	4828	4828	
5°	4817	4797	4804	4782	4787	457
15°	4579	4551	4535	4506	4511	1291
25°	4134	4100	4066	4042	4054	1903
35°	3530	3491	3467	3492	3524	2206
45°	2824	2795	2816	2882	2923	2179
55°	2072	2054	2106	2182	2212	1850
65°	1291	1293	1334	1351	1363	1278
75°	540	544	553	529	520	581
85°	61	65	73	85	89	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4828.2	4828.2	4828.2	4828.2	4828.2
2.5°	4839.0	4819.0	4828.2	4812.0	4807.5
5°	4817.3	4796.9	4803.8	4781.9	4787.0
7.5°	4780.1	4758.3	4760.3	4737.1	4742.8
10°	4728.1	4702.8	4700.3	4672.9	4676.5
12.5°	4661.7	4635.0	4626.6	4596.4	4603.3
15°	4579.0	4550.6	4535.0	4506.0	4511.2
17.5°	4488.3	4459.8	4433.9	4404.0	4414.9
20°	4380.1	4351.0	4320.6	4289.3	4302.2
22.5°	4261.0	4229.1	4199.2	4169.5	4179.8
25°	4134.2	4100.5	4065.8	4041.9	4053.8
27.5°	3996.0	3958.8	3926.3	3907.7	3924.2
30°	3847.6	3809.8	3778.6	3771.9	3793.6
32.5°	3691.2	3654.4	3626.0	3635.6	3665.3
35°	3530.1	3491.0	3466.6	3491.6	3524.3
37.5°	3363.0	3325.0	3309.0	3348.4	3382.7
40°	3184.6	3151.9	3148.0	3197.5	3233.5
42.5°	3006.3	2976.0	2984.1	3043.8	3082.7
45°	2824.0	2795.0	2816.1	2882.0	2923.4
47.5°	2644.4	2613.7	2646.0	2717.7	2754.9
50°	2452.9	2429.1	2469.8	2544.3	2582.2
52.5°	2262.3	2240.7	2289.9	2367.6	2410.4
55°	2071.7	2054.1	2106.2	2181.6	2211.6
57.5°	1876.8	1867.2	1920.8	1985.4	2013.5
60°	1683.0	1675.2	1728.0	1784.3	1809.1
62.5°	1487.1	1482.7	1533.1	1574.6	1586.5
65°	1290.6	1292.8	1333.7	1350.9	1362.8
67.5°	1099.1	1099.2	1134.2	1144.8	1145.8
70°	899.2	905.7	929.4	928.2	921.6
72.5°	717.1	719.7	733.6	721.3	710.9
75°	540.0	544.3	552.7	529.0	519.8
77.5°	379.2	388.5	382.2	360.5	352.3
80°	242.8	252.3	240.1	227.3	220.7
82.5°	134.9	140.1	133.9	143.5	147.4
85°	61.0	65.3	73.3	84.8	89.1
87.5°	20.7	24.7	30.4	32.0	30.0
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	17.42	19.01	17.79	19.32	19.64	17.86	19.45	18.23	19.76	20.07
	3H	18.88	20.30	19.25	20.63	20.99	19.25	20.67	19.62	21.00	21.36
	4H	19.29	20.63	19.69	20.98	21.35	19.60	20.93	20.00	21.28	21.66
	6H	19.49	20.73	19.90	21.09	21.48	19.74	20.97	20.15	21.34	21.73
	8H	19.51	20.69	19.94	21.08	21.48	19.76	20.94	20.18	21.33	21.73
	12H	19.51	20.64	19.94	21.02	21.45	19.77	20.89	20.20	21.27	21.70
4H	2H	18.01	19.35	18.41	19.70	20.07	18.37	19.70	18.77	20.05	20.43
	3H	19.64	20.75	20.05	21.14	21.54	19.93	21.04	20.34	21.44	21.84
	4H	20.14	21.13	20.57	21.55	21.99	20.36	21.36	20.79	21.77	22.21
	6H	20.41	21.28	20.86	21.72	22.18	20.57	21.44	21.02	21.88	22.34
	8H	20.45	21.26	20.91	21.70	22.17	20.60	21.41	21.06	21.86	22.32
	12H	20.45	21.18	20.94	21.66	22.13	20.63	21.35	21.11	21.83	22.30
8H	4H	20.31	21.12	20.77	21.56	22.03	20.51	21.32	20.98	21.77	22.23
	6H	20.63	21.30	21.13	21.79	22.27	20.76	21.43	21.26	21.92	22.40
	8H	20.69	21.29	21.20	21.80	22.29	20.82	21.42	21.34	21.93	22.42
	12H	20.72	21.25	21.23	21.74	22.30	20.88	21.40	21.38	21.89	22.46
12H	4H	20.30	21.03	20.78	21.50	21.98	20.51	21.23	20.99	21.71	22.18
	6H	20.62	21.22	21.13	21.73	22.22	20.76	21.36	21.27	21.86	22.35
	8H	20.71	21.24	21.22	21.73	22.30	20.85	21.37	21.35	21.87	22.43