

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: P1499212

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

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499212
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-HI-40-90-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 2 HI ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

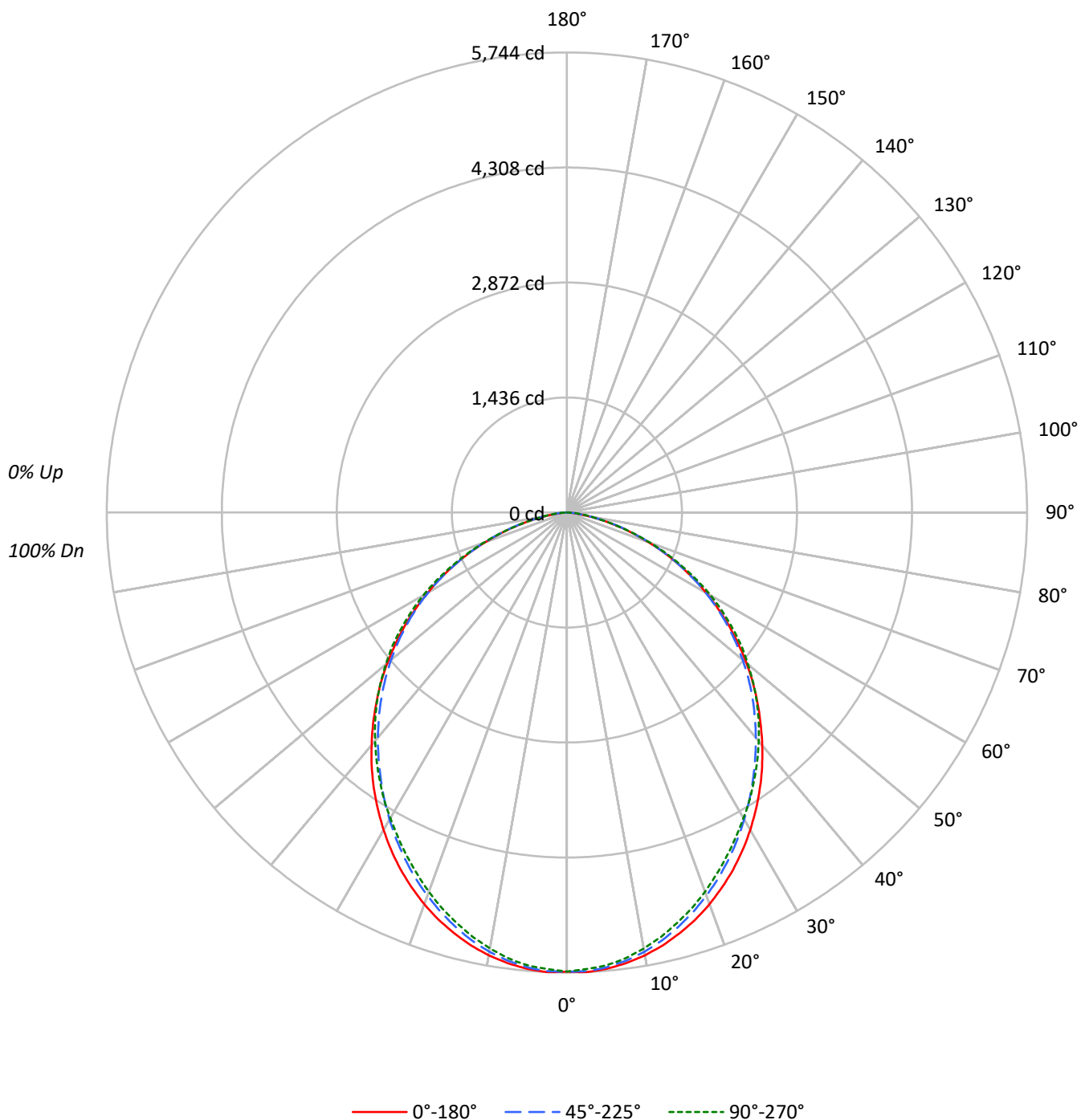
Lumens per Lamp: N/A
Luminaire Lumens: 13953.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 177.5
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	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	45	39	51	44	38		50	43	38		48
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		44
9	58	45	37	31	57	44	37	31	43	36	31		42	36	31		41
10	54	42	34	29	53	41	34	29	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7713	7713	7713
5°	7724	7699	7665
10°	7670	7608	7550
15°	7576	7465	7393
20°	7452	7288	7215
25°	7296	7092	7020
30°	7110	6878	6846
35°	6900	6655	6696
40°	6661	6445	6543
45°	6403	6231	6382
50°	6122	5998	6178
55°	5799	5722	5923
60°	5410	5378	5584
65°	4919	4921	5061
70°	4248	4297	4358
75°	3385	3482	3441
80°	2292	2419	2426
85°	1178	1616	2062

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6403 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	539.1	3.9
10°-20°	1509.7	10.8
20°-30°	2207.5	15.8
30°-40°	2560.2	18.3
40°-50°	2555.8	18.3
50°-60°	2201.5	15.8
60°-70°	1536.4	11.0
70°-80°	709.7	5.1
80°-90°	133.0	1.0
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°	4256.3	30.5
0°-40°	6816.6	48.9
0°-60°	11573.8	82.9
0°-90°	13953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13953.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5732	5732	5732	5732	5732	
5°	5719	5698	5700	5667	5675	542
15°	5438	5401	5359	5304	5307	1533
25°	4914	4858	4777	4722	4729	2262
35°	4201	4129	4052	4050	4076	2626
45°	3365	3302	3274	3319	3354	2596
55°	2472	2423	2439	2499	2525	2208
65°	1545	1522	1546	1573	1590	1529
75°	651	644	670	664	662	701
85°	76	86	105	125	134	113
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5732.3	5732.3	5732.3	5732.3	5732.3
2.5°	5743.9	5725.3	5732.3	5707.2	5705.7
5°	5718.9	5698.1	5700.4	5667.4	5675.0
7.5°	5675.0	5650.9	5644.6	5607.3	5614.3
10°	5614.0	5584.5	5568.5	5522.7	5526.3
12.5°	5535.8	5502.3	5474.3	5421.6	5427.8
15°	5438.5	5400.9	5359.0	5303.7	5307.1
17.5°	5331.4	5290.5	5231.6	5172.9	5182.4
20°	5204.6	5159.7	5090.3	5029.3	5039.3
22.5°	5064.2	5013.2	4940.9	4880.3	4885.8
25°	4914.2	4857.9	4777.0	4722.1	4728.9
27.5°	4751.2	4688.7	4606.1	4557.0	4568.5
30°	4576.1	4510.4	4427.0	4390.6	4406.7
32.5°	4391.8	4324.5	4243.5	4224.2	4248.4
35°	4201.0	4129.2	4051.8	4049.6	4076.4
37.5°	4002.5	3931.9	3862.3	3876.4	3904.3
40°	3792.3	3726.0	3669.6	3694.9	3725.0
42.5°	3580.9	3517.1	3474.3	3511.1	3543.7
45°	3365.1	3301.8	3274.5	3319.2	3353.8
47.5°	3150.7	3086.9	3073.5	3124.9	3156.1
50°	2924.9	2868.0	2865.4	2921.2	2951.6
52.5°	2697.1	2644.4	2654.2	2714.2	2751.4
55°	2472.0	2423.0	2439.1	2498.7	2525.1
57.5°	2240.7	2201.8	2222.7	2275.8	2301.9
60°	2010.4	1974.6	1998.6	2049.4	2075.0
62.5°	1777.5	1746.4	1774.0	1816.7	1833.3
65°	1545.1	1521.7	1545.7	1573.1	1589.7
67.5°	1316.2	1294.3	1320.3	1346.7	1352.7
70°	1079.8	1066.0	1092.3	1107.9	1107.7
72.5°	862.1	848.6	873.6	879.5	875.0
75°	651.1	643.9	669.8	664.2	661.9
77.5°	459.3	462.7	476.3	472.1	471.0
80°	295.8	306.2	312.2	315.1	313.1
82.5°	166.3	175.8	184.8	206.7	215.3
85°	76.3	85.6	104.7	125.1	133.6
87.5°	25.7	33.2	43.9	47.3	44.8
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	18.02	19.61	18.39	19.92	20.24	18.25	19.83	18.61	20.15	20.46
	3H	19.49	20.91	19.87	21.24	21.60	19.72	21.14	20.09	21.47	21.83
	4H	19.91	21.25	20.31	21.60	21.98	20.13	21.47	20.53	21.82	22.19
	6H	20.12	21.36	20.53	21.72	22.11	20.34	21.57	20.75	21.94	22.33
	8H	20.15	21.33	20.57	21.72	22.12	20.38	21.56	20.81	21.95	22.35
	12H	20.15	21.28	20.58	21.66	22.09	20.41	21.54	20.84	21.92	22.35
4H	2H	18.58	19.92	18.98	20.27	20.65	18.77	20.10	19.16	20.45	20.83
	3H	20.22	21.34	20.63	21.74	22.14	20.42	21.53	20.83	21.93	22.33
	4H	20.74	21.74	21.17	22.15	22.59	20.92	21.93	21.36	22.34	22.78
	6H	21.02	21.89	21.48	22.33	22.79	21.21	22.08	21.67	22.52	22.98
	8H	21.06	21.88	21.53	22.32	22.79	21.28	22.09	21.74	22.54	23.00
	12H	21.08	21.80	21.56	22.28	22.75	21.33	22.06	21.81	22.54	23.01
8H	4H	20.92	21.74	21.39	22.18	22.65	21.10	21.91	21.56	22.35	22.82
	6H	21.27	21.94	21.76	22.43	22.90	21.44	22.11	21.94	22.60	23.08
	8H	21.33	21.94	21.85	22.44	22.93	21.54	22.15	22.06	22.65	23.14
	12H	21.37	21.90	21.88	22.39	22.96	21.64	22.17	22.14	22.66	23.22
12H	4H	20.92	21.65	21.40	22.13	22.60	21.09	21.82	21.57	22.30	22.77
	6H	21.26	21.87	21.78	22.38	22.86	21.44	22.04	21.95	22.55	23.04
	8H	21.37	21.90	21.88	22.39	22.95	21.58	22.11	22.09	22.60	23.16