

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P709059

Luminaire Tested: **4APN-X-X-RL950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709059
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-X-RL950-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture READING Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

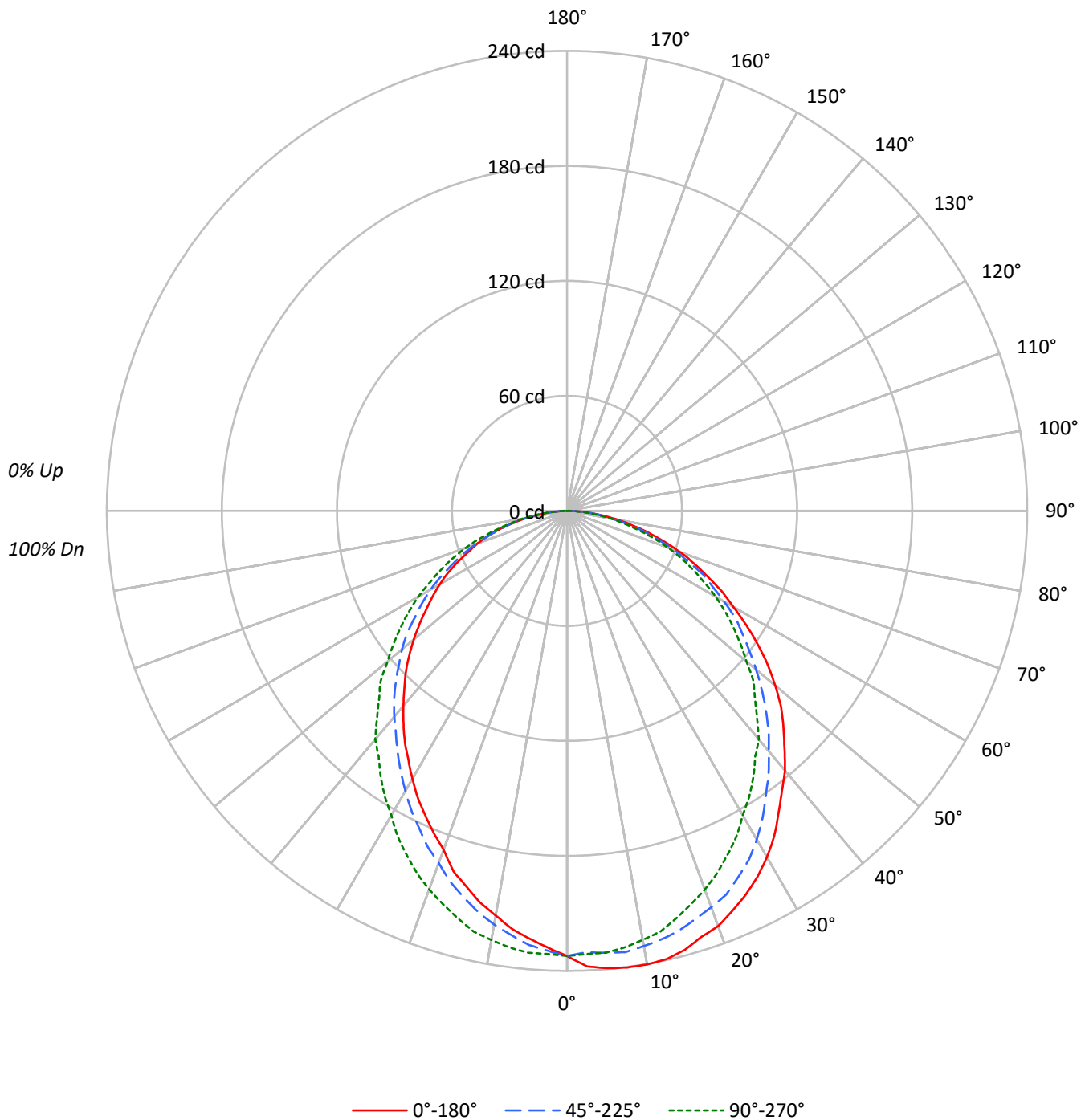
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 605.0 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
Input Voltage (V): 120
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: 25 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	109	104	100	96	106	102	98	94	98	94	91		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	56	81	70	61	55	67	60	54		65	59	54		63
5	76	63	55	48	74	62	54	48	60	53	47		58	52	47		56
6	71	57	48	42	69	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		47
8	61	48	39	33	59	47	39	33	45	38	33		44	38	33		43
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1250	1250	1250
5°	1294	1250	1210
10°	1313	1242	1171
15°	1321	1226	1130
20°	1320	1204	1078
25°	1311	1176	1040
30°	1296	1139	1002
35°	1263	1113	968
40°	1242	1093	933
45°	1216	1054	905
50°	1186	1023	873
55°	1139	994	841
60°	1079	964	825
65°	1026	923	798
70°	987	884	782
75°	915	796	744
80°	834	731	682
85°	753	605	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.9	3.6
10°-20°	61.7	10.2
20°-30°	90.8	15.0
30°-40°	105.5	17.4
40°-50°	106.3	17.6
50°-60°	94.3	15.6
60°-70°	71.3	11.8
70°-80°	41.2	6.8
80°-90°	12.0	2.0
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°	174.4	28.8
0°-40°	279.9	46.3
0°-60°	480.5	79.4
0°-90°	605.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	605.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	232	232	232	232	232	
5°	240	231	231	227	224	23
15°	237	226	220	208	203	67
25°	221	211	198	182	175	102
35°	192	181	169	154	147	121
45°	160	147	138	126	119	123
55°	121	112	106	97	90	108
65°	81	78	72	66	63	80
75°	44	42	38	35	36	47
85°	12	11	10	10	9	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2
2.5°	237.9	235.4	230.5	229.7	231.4	233.8	229.7	230.5	228.1
5°	239.5	236.2	231.4	228.9	231.4	231.4	227.3	226.5	224.0
7.5°	240.3	237.1	232.2	228.1	229.7	228.9	223.2	222.4	220.0
10°	240.3	237.1	230.5	226.5	227.3	225.7	219.1	217.5	214.3
12.5°	239.5	235.4	228.9	224.0	224.8	221.6	214.3	211.8	209.4
15°	237.1	232.2	226.5	221.6	220.0	216.7	208.5	206.1	202.8
17.5°	233.0	229.7	223.2	217.5	215.1	211.0	202.8	199.6	197.1
20°	230.5	225.7	220.0	213.4	210.2	204.5	195.5	192.3	188.2
22.5°	225.7	221.6	216.7	206.9	204.5	198.0	189.8	184.9	181.7
25°	220.8	215.9	211.0	202.0	198.0	192.3	182.5	178.4	175.1
27.5°	215.1	210.2	205.3	195.5	191.4	184.9	176.0	171.1	168.6
30°	208.5	203.7	198.0	189.8	183.3	177.6	168.6	164.6	161.3
32.5°	201.2	195.5	189.8	181.7	176.8	170.3	161.3	157.2	154.0
35°	192.3	186.6	180.8	174.3	169.4	162.9	154.0	150.7	147.4
37.5°	184.1	178.4	172.7	167.0	161.3	157.2	146.6	143.4	140.1
40°	176.8	169.4	163.7	158.9	155.6	147.4	140.1	136.0	132.8
42.5°	167.8	161.3	155.6	151.5	146.6	141.7	133.6	129.5	125.5
45°	159.7	152.3	146.6	143.4	138.5	132.8	126.3	122.2	118.9
47.5°	151.5	143.4	137.7	134.4	132.0	124.6	118.9	115.7	111.6
50°	141.7	134.4	128.7	126.3	122.2	116.5	112.4	108.3	104.3
52.5°	132.0	126.3	119.8	118.1	114.0	110.0	105.1	101.8	96.9
55°	121.4	116.5	111.6	110.0	105.9	102.6	96.9	94.5	89.6
57.5°	110.8	107.5	104.3	101.8	97.8	93.7	89.6	87.2	83.1
60°	100.2	98.6	94.5	95.3	89.6	85.5	82.3	79.8	76.6
62.5°	91.2	89.6	85.5	83.1	80.6	76.6	74.1	72.5	70.1
65°	80.6	79.8	78.2	74.9	72.5	68.4	66.0	64.4	62.7
67.5°	71.7	70.9	67.6	66.0	64.4	60.3	58.7	57.0	55.4
70°	62.7	61.1	59.5	58.7	56.2	52.1	50.5	48.9	49.7
72.5°	53.0	52.1	49.7	50.5	47.2	44.0	42.4	44.0	43.2
75°	44.0	43.2	41.5	39.9	38.3	35.8	35.0	36.7	35.8
77.5°	35.0	34.2	32.6	31.8	30.1	27.7	29.3	28.5	27.7
80°	26.9	26.1	24.4	24.4	23.6	21.2	22.0	22.0	22.0
82.5°	18.7	18.7	17.9	17.1	15.5	14.7	15.5	15.5	14.7
85°	12.2	12.2	11.4	10.6	9.8	9.0	9.8	9.8	9.0
87.5°	7.3	6.5	5.7	5.7	4.9	4.9	4.9	4.9	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)