

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: P

Luminaire Tested: **4APN-X-26L840-UNV-ASY**

Issue Date: 06/06/2024



Test Information

Test Method: LM-79-08
Report Number: P
Test Lab: INNOVATION CENTER(G2)
Issue Date: 06/06/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-26L840-UNV-ASY
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture EXAM Light w/
ASYMMETRIC Lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

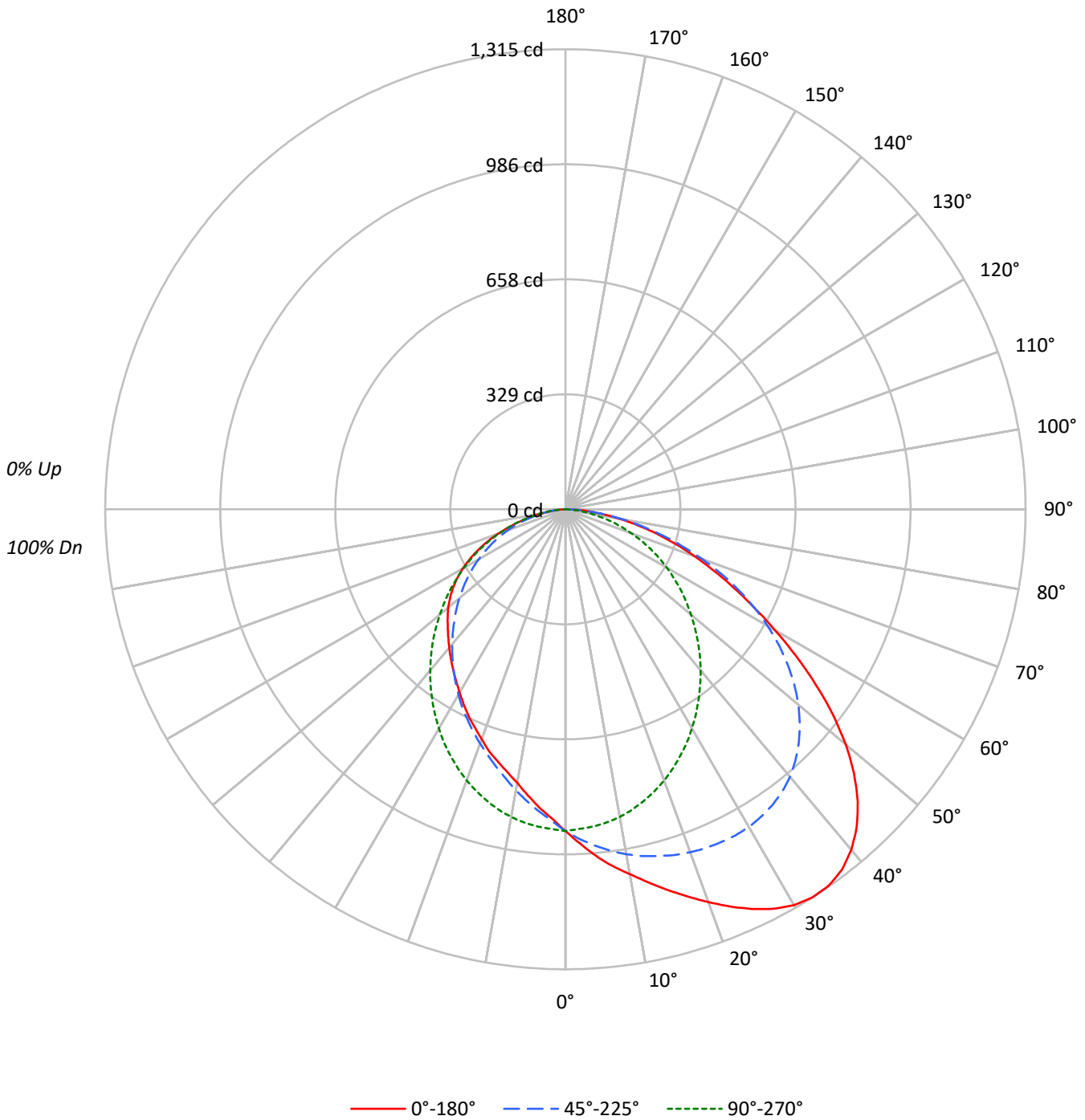
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2848.3 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 1.18 / 1.46
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
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

TEST NUMBER: P
CATALOG NUMBER: 4APN-X-26L840-UNV-ASY

Luminous Intensity Polar Plot





TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-26L840-UNV-ASY

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	84
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69	69	69	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58	58	58	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	62	56	52	49	49	49	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43	43	43	43
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37	37	37	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33	33	33	33
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29	29	29	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26	26	26	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23	23	23	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8853	8853	8853
5°	9606	8799	8270
10°	10350	8731	7759
15°	11226	8604	7440
20°	12240	8453	7163
25°	13390	8255	6942
30°	14525	8037	6719
35°	15428	7800	6575
40°	15975	7553	6489
45°	16086	7292	6474
50°	15663	7014	6544
55°	14667	6763	6585
60°	13332	6456	6522
65°	12089	6105	6269
70°	11065	5661	5756
75°	10040	5089	4947
80°	8782	4252	3814
85°	7390	3093	2839



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-26L840-UNV-ASY

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	3.1
10°-20°	254.0	8.9
20°-30°	397.9	14.0
30°-40°	498.9	17.5
40°-50°	531.1	18.6
50°-60°	479.4	16.8
60°-70°	354.9	12.5
70°-80°	194.7	6.8
80°-90°	50.0	1.8
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°	739.3	26.0
0°-40°	1238.1	43.5
0°-60°	2248.7	78.9
0°-90°	2848.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2848.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	920	920	920	920	920	
5°	994	965	910	867	856	97
15°	1126	1026	863	762	746	321
25°	1260	1050	777	663	654	583
35°	1313	1032	664	558	559	819
45°	1182	943	536	449	476	906
55°	874	776	403	341	392	779
65°	531	546	268	231	275	529
75°	270	286	137	118	133	287
85°	67	66	28	26	26	79
90°	0	0	0	0	0	



TEST NUMBER: P

CATALOG NUMBER: 4APN-X-26L840-UNV-ASY

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6
2.5°	956.6	954.7	952.5	951.7	948.3	943.8	939.6	939.6	934.7	923.0	914.7
5°	994.0	991.0	985.3	980.8	973.6	964.9	956.2	951.0	939.2	921.5	910.5
7.5°	1028.4	1024.7	1017.5	1008.8	997.1	984.2	969.8	958.5	940.7	916.9	903.0
10°	1058.7	1055.3	1046.6	1036.0	1019.4	1001.2	980.1	963.0	938.9	909.4	893.1
12.5°	1091.9	1088.5	1076.4	1062.1	1039.4	1015.2	987.2	963.8	933.9	898.4	879.9
15°	1126.3	1121.8	1108.2	1088.9	1058.7	1026.2	991.8	961.5	926.0	885.2	863.3
17.5°	1160.3	1155.8	1138.8	1114.2	1076.4	1036.0	993.7	956.2	914.7	868.9	845.1
20°	1194.7	1190.2	1168.7	1137.7	1091.9	1043.2	993.3	948.3	901.1	850.4	825.1
22.5°	1229.1	1223.8	1197.8	1160.0	1104.8	1048.1	989.1	937.3	884.1	829.2	802.0
25°	1260.5	1255.2	1226.5	1181.9	1118.4	1050.4	981.9	922.2	865.2	805.8	777.1
27.5°	1287.7	1281.3	1251.4	1202.3	1130.1	1051.1	972.5	905.2	843.2	780.5	751.4
30°	1306.6	1300.9	1269.2	1216.7	1136.9	1048.5	960.4	885.2	817.9	753.3	723.0
32.5°	1314.9	1310.0	1278.6	1223.5	1138.0	1041.7	945.7	862.9	791.5	724.6	693.9
35°	1312.7	1307.7	1277.9	1222.3	1134.6	1031.8	927.1	837.6	763.1	694.7	663.7
37.5°	1298.3	1292.6	1265.4	1212.1	1124.8	1017.5	906.0	810.0	732.5	664.1	632.7
40°	1271.1	1265.4	1242.0	1192.8	1108.2	998.2	881.8	780.5	701.1	632.0	601.0
42.5°	1232.2	1226.1	1207.6	1162.6	1084.4	972.9	854.2	749.1	667.9	601.0	568.5
45°	1181.5	1175.5	1163.0	1124.8	1053.4	943.0	822.8	715.1	633.1	565.8	535.6
47.5°	1118.8	1113.5	1107.4	1077.9	1015.2	908.6	787.7	678.8	596.8	532.9	501.9
50°	1045.8	1040.5	1042.4	1022.4	971.0	868.9	749.1	640.6	559.4	496.3	468.3
52.5°	963.0	958.9	968.0	959.3	919.6	824.7	707.9	601.3	521.2	461.5	434.7
55°	873.8	869.3	886.7	889.3	862.1	776.0	661.1	560.5	482.7	427.5	402.9
57.5°	782.0	778.2	800.5	813.0	799.4	723.4	613.8	518.6	443.0	391.9	367.4
60°	692.4	689.4	712.8	733.2	731.7	667.9	564.7	473.2	403.3	356.0	335.3
62.5°	608.1	604.7	628.2	652.4	661.1	608.5	515.9	428.6	363.6	320.1	301.6
65°	530.7	527.3	547.3	572.2	588.1	546.5	463.4	382.5	323.5	283.8	268.0
67.5°	459.6	459.6	472.1	495.1	514.4	483.0	409.7	338.7	282.3	250.2	234.3
70°	393.1	392.7	401.8	418.0	440.3	415.0	355.3	292.5	243.4	215.1	201.1
72.5°	330.0	332.6	336.0	348.5	371.9	350.0	301.2	247.2	205.2	180.3	168.6
75°	269.9	269.5	274.4	285.4	302.4	286.1	247.2	203.0	167.4	147.0	136.8
77.5°	212.4	212.0	216.2	222.6	237.0	224.1	195.0	162.1	130.4	113.4	106.2
80°	158.4	158.4	162.1	165.5	176.1	165.9	145.5	121.3	95.6	82.4	76.7
82.5°	110.0	112.3	110.7	115.3	121.3	112.6	99.8	83.2	63.5	54.4	50.6
85°	66.9	68.8	66.9	70.7	73.3	65.8	59.3	49.5	36.7	30.6	28.0
87.5°	34.4	34.0	33.6	35.5	36.3	31.7	28.0	23.8	16.3	12.5	10.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-26L840-UNV-ASY

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6	919.6
2.5°	909.8	912.0	908.6	896.1	891.2	885.9	883.7	881.4	885.6	884.4
5°	902.2	899.5	890.9	875.0	866.7	858.0	853.8	851.2	856.8	855.7
7.5°	892.0	884.4	871.6	852.3	841.7	830.0	824.3	820.9	824.7	824.0
10°	879.1	866.7	850.8	827.7	815.3	802.4	796.0	791.1	794.1	793.7
12.5°	862.9	846.6	827.4	801.3	788.4	775.2	769.5	766.1	769.9	768.8
15°	844.7	825.1	802.8	776.3	762.3	750.3	746.1	743.5	746.5	746.5
17.5°	824.7	801.7	777.1	750.3	737.0	727.6	723.4	721.5	723.0	725.3
20°	802.4	776.7	750.3	724.2	712.8	703.0	699.2	697.3	700.7	699.2
22.5°	777.8	750.6	723.0	698.5	688.3	678.4	674.7	673.5	677.3	675.8
25°	751.8	722.3	695.1	672.8	662.6	654.3	650.9	649.7	651.6	653.5
27.5°	727.2	693.9	667.1	647.1	638.0	630.1	627.0	625.1	626.7	628.9
30°	697.3	665.2	638.8	620.2	611.5	604.0	601.7	600.2	602.5	604.4
32.5°	669.4	636.9	610.4	592.3	584.7	577.5	577.1	576.4	579.0	581.3
35°	639.1	607.4	581.7	564.7	557.5	551.4	552.6	553.7	556.7	559.4
37.5°	608.5	577.5	553.0	537.5	530.7	525.7	529.1	530.7	534.8	537.5
40°	577.5	546.5	523.9	509.9	503.1	500.8	505.7	509.1	514.0	516.3
42.5°	545.8	517.1	494.4	481.5	475.9	475.9	482.3	487.6	493.2	495.5
45°	514.0	486.1	464.5	452.8	448.6	451.7	459.2	466.0	473.2	475.5
47.5°	481.9	454.7	435.0	424.5	422.2	426.7	436.2	445.2	453.6	456.6
50°	449.8	425.2	405.6	395.7	395.7	401.4	413.5	424.8	433.9	436.9
52.5°	417.6	394.2	374.2	367.0	368.5	376.4	390.4	402.2	412.4	415.4
55°	385.1	362.1	344.7	338.7	341.3	351.1	365.5	379.1	388.9	392.3
57.5°	353.0	331.1	315.2	310.3	314.1	325.0	341.7	353.4	363.6	366.6
60°	320.5	298.2	285.7	282.0	286.9	298.2	315.2	326.2	335.6	338.7
62.5°	288.4	267.6	256.6	253.2	258.9	271.0	287.6	297.5	304.6	307.7
65°	255.9	237.4	227.2	224.9	230.9	242.7	258.5	266.8	272.1	275.2
67.5°	223.8	207.9	198.4	196.5	203.0	213.5	228.3	232.8	237.7	240.8
70°	192.0	177.6	169.7	168.6	174.2	184.4	196.9	199.2	201.8	204.5
72.5°	160.6	149.3	141.4	141.0	146.3	154.6	164.8	165.2	165.9	168.6
75°	130.4	120.2	114.1	115.3	118.3	125.1	133.0	130.8	131.2	133.0
77.5°	101.3	93.0	88.8	89.6	91.8	96.8	102.0	99.4	97.9	99.8
80°	72.9	65.8	64.3	64.6	66.1	69.5	72.6	70.3	67.3	68.8
82.5°	48.0	43.5	42.7	43.1	44.2	46.1	46.9	43.5	42.7	43.8
85°	26.5	24.6	24.6	25.7	26.1	26.5	26.5	24.6	24.9	25.7
87.5°	10.6	10.6	11.7	12.9	12.1	10.6	9.1	6.0	6.0	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)