

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: P551387

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-86-ED1D-90**

Issue Date: 7/9/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P551387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCC-X-2-LD4-2HI-50-UNV-80-86-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

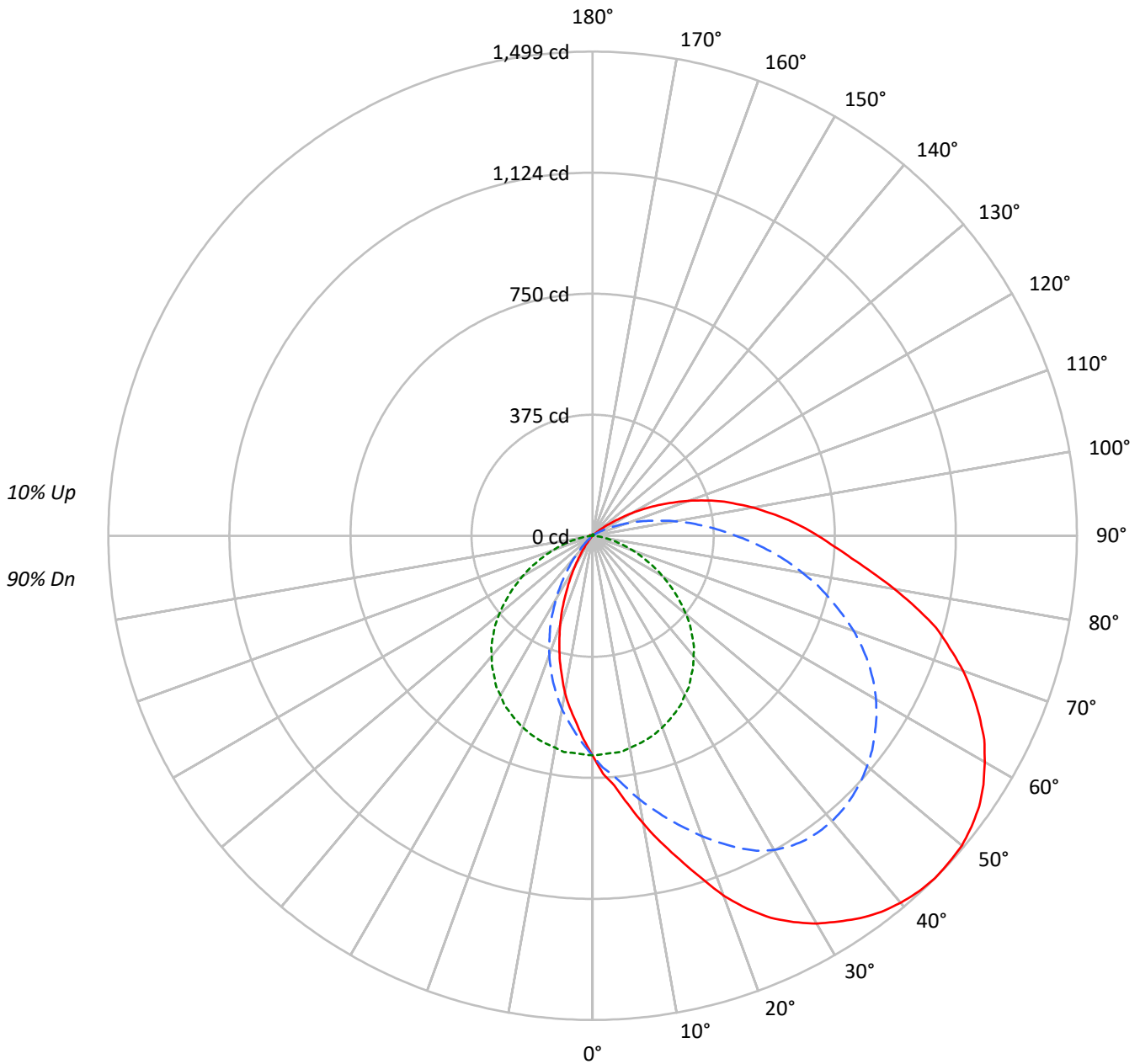
Lumens per Lamp: N/A
Luminaire Lumens: 3361.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (A_{in}): 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: P551387

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-86-ED1D-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	90																			
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67																			
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53																			
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43																			
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	36																			
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	30																			
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26																			
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23																			
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	20																			
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18																			
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7317	7317	7317
5°	8033	7211	6016
10°	9090	7122	4958
15°	10188	7031	3864
20°	11490	6918	2845
25°	12570	6784	1868
30°	13373	6607	1052
35°	14068	6415	463
40°	14684	6179	112
45°	15213	5883	0
50°	15658	5490	0
55°	15996	4992	0
60°	16166	4413	0
65°	16232	3758	0
70°	16179	3064	0
75°	15974	2260	13
80°	15325	1382	69
85°	14813	661	96



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	1.9
10°-20°	195.0	5.8
20°-30°	315.8	9.4
30°-40°	405.6	12.1
40°-50°	459.2	13.7
50°-60°	475.7	14.2
60°-70°	448.6	13.3
70°-80°	376.0	11.2
80°-90°	272.5	8.1
90°-100°	179.1	5.3
100°-110°	103.4	3.1
110°-120°	45.6	1.4
120°-130°	12.4	0.4
130°-140°	2.8	0.1
140°-150°	1.9	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	575.9	17.1
0°-40°	981.5	29.2
0°-60°	1916.3	57.0
0°-90°	3013.4	89.7
90°-120°	328.2	9.8
90°-150°	345.3	10.3
90°-180°	348.0	10.4
0°-180°	3361.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	680	680	680	680	680	
5°	776	745	675	612	581	78
15°	1037	909	652	471	393	299
25°	1305	1067	604	310	194	603
35°	1445	1150	531	151	48	907
45°	1499	1138	435	35	0	1157
55°	1461	1067	314	0	0	1305
65°	1321	944	187	0	0	1307
75°	1101	762	80	1	1	1155
85°	805	552	13	4	5	688
90°	698	443	4	5	6	383
95°	599	346	2	6	8	470
105°	412	179	2	4	7	435
115°	224	59	3	3	4	225
125°	67	8	4	3	4	67
135°	4	3	4	4	3	6
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	0
175°	2	3	4	3	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8
2.5°	737.0	736.1	733.5	729.2	723.2	712.8	704.1	696.3	685.9	677.3	660.8
5°	776.0	771.7	768.2	763.9	750.0	740.5	724.9	707.6	691.1	674.7	641.7
7.5°	838.3	831.4	826.2	814.1	795.0	773.4	749.1	732.7	721.4	675.5	619.2
10°	905.0	899.0	888.6	866.9	843.5	812.4	777.7	738.7	704.1	666.0	599.3
12.5°	970.8	962.2	947.5	919.7	886.8	847.9	800.2	754.3	705.0	659.9	575.9
15°	1036.7	1027.1	1011.5	977.8	934.5	883.4	825.3	767.3	709.3	652.1	551.7
17.5°	1108.5	1095.6	1072.2	1034.1	979.5	916.3	847.9	777.7	707.6	642.6	525.7
20°	1185.6	1167.4	1142.3	1091.2	1027.1	952.7	870.4	788.1	706.7	631.4	496.2
22.5°	1249.7	1231.5	1203.8	1151.0	1073.9	983.0	889.4	795.0	703.2	618.4	468.5
25°	1305.1	1290.4	1260.1	1199.5	1118.1	1015.0	907.6	800.2	698.0	604.5	439.1
27.5°	1348.4	1334.6	1300.8	1238.5	1155.3	1043.6	921.5	802.8	691.1	590.6	408.8
30°	1386.5	1372.7	1332.0	1267.9	1180.4	1066.1	935.3	803.7	682.4	569.9	375.9
32.5°	1416.0	1403.0	1361.4	1293.0	1197.7	1081.7	943.1	802.8	671.2	555.1	340.4
35°	1445.4	1432.4	1383.9	1311.2	1210.7	1088.6	949.2	798.5	657.3	530.9	306.6
37.5°	1468.0	1453.2	1403.9	1323.3	1216.8	1090.4	948.3	792.4	642.6	511.0	272.8
40°	1483.5	1468.0	1415.1	1330.3	1218.5	1087.8	941.4	782.0	625.3	485.9	237.3
42.5°	1493.9	1476.6	1420.3	1340.6	1215.1	1080.8	931.0	769.1	606.2	464.2	203.5
45°	1499.1	1480.9	1421.2	1332.0	1209.0	1067.8	915.4	752.6	585.5	434.8	169.7
47.5°	1496.5	1476.6	1416.9	1322.5	1197.7	1054.0	898.1	732.7	560.3	408.8	137.7
50°	1492.2	1471.4	1407.3	1310.3	1182.2	1036.7	879.0	708.4	534.4	376.7	109.1
52.5°	1478.3	1457.6	1396.9	1293.0	1164.0	1016.7	853.1	683.3	506.6	345.6	83.1
55°	1461.0	1442.0	1378.8	1277.4	1140.6	992.5	828.8	656.5	479.8	313.5	59.8
57.5°	1434.2	1416.9	1356.2	1252.3	1117.2	965.6	802.0	627.0	446.0	281.5	41.6
60°	1401.3	1383.9	1325.1	1223.7	1090.4	935.3	772.5	596.7	415.7	249.4	26.0
62.5°	1366.6	1350.2	1288.7	1188.2	1056.6	903.3	740.5	566.4	383.7	220.0	15.6
65°	1320.7	1305.1	1249.7	1145.8	1019.3	868.6	705.0	530.0	350.8	187.1	8.7
67.5°	1272.2	1258.4	1202.1	1106.8	976.0	830.5	668.6	494.5	316.1	158.5	4.3
70°	1220.3	1202.9	1151.0	1054.0	931.9	787.2	628.8	458.1	283.2	130.8	0.0
72.5°	1159.6	1146.7	1096.4	1004.6	880.8	741.3	588.0	418.3	246.8	103.9	0.9
75°	1100.8	1084.3	1038.4	951.8	830.5	692.8	543.0	381.1	211.3	79.7	0.9
77.5°	1024.5	1019.3	976.0	892.0	782.9	646.1	493.6	336.0	177.5	57.2	0.9
80°	948.3	943.1	909.4	832.3	727.5	590.6	447.7	293.6	144.6	38.1	0.9
82.5°	873.0	866.1	834.0	769.9	671.2	543.9	400.1	251.2	114.3	23.4	0.9
85°	805.4	796.8	762.1	703.2	613.2	491.1	350.8	209.6	84.9	13.0	1.7
87.5°	747.4	741.3	703.2	642.6	554.3	441.7	307.4	169.7	59.8	6.1	2.6
90°	698.0	685.0	651.3	587.2	498.8	387.1	261.5	136.0	39.8	3.5	3.5
92.5°	649.5	638.3	601.0	535.2	449.5	340.4	217.4	103.9	25.1	1.7	4.3
95°	599.3	587.2	550.8	490.2	399.2	292.7	178.4	76.2	13.9	1.7	4.3
97.5°	549.9	538.7	500.6	440.0	354.2	251.2	141.2	53.7	6.9	1.7	3.5
100°	504.0	491.1	456.4	395.8	309.2	209.6	109.1	34.6	4.3	1.7	3.5
102.5°	455.5	445.1	409.6	350.8	262.4	170.6	81.4	21.7	1.7	1.7	2.6
105°	412.2	399.2	364.6	304.0	223.4	134.2	57.2	13.0	1.7	1.7	2.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	268.5	258.1	227.8	176.7	113.5	52.8	15.6	2.6	2.6	2.6	2.6
115°	224.3	208.7	181.9	136.8	84.0	34.6	7.8	2.6	2.6	2.6	2.6
117.5°	179.3	166.3	147.2	103.9	55.4	22.5	4.3	2.6	2.6	2.6	2.6
120°	140.3	128.2	106.5	71.9	37.2	13.0	1.7	2.6	2.6	2.6	2.6
122.5°	100.5	90.9	71.9	46.8	22.5	6.1	2.6	2.6	3.5	3.5	2.6
125°	66.7	61.5	47.6	28.6	13.9	2.6	2.6	2.6	3.5	3.5	2.6
127.5°	43.3	39.0	27.7	16.5	6.1	2.6	2.6	3.5	3.5	3.5	2.6
130°	24.2	21.7	16.5	9.5	2.6	2.6	2.6	3.5	3.5	3.5	2.6
132.5°	13.9	13.0	8.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5
135°	3.5	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5
137.5°	0.9	0.9	1.7	1.7	2.6	2.6	3.5	4.3	4.3	4.3	3.5
140°	0.9	0.9	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	3.5
142.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
145°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	3.5	3.5	3.5
147.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
150°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
152.5°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
155°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
157.5°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
160°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
162.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
165°	1.7	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5
167.5°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5	3.5
170°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	4.3
172.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
175°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
177.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	3.5
180°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	679.8	679.8	679.8
2.5°	646.9	634.8	631.4
5°	612.3	592.4	581.1
7.5°	577.7	550.8	537.8
10°	545.6	507.5	493.6
12.5°	507.5	463.3	441.7
15°	471.1	414.0	393.2
17.5°	430.4	366.3	342.1
20°	392.3	318.7	293.6
22.5°	349.0	271.9	244.2
25°	310.0	225.2	194.0
27.5°	266.7	177.5	150.7
30°	226.0	136.0	109.1
32.5°	187.1	99.6	75.3
35°	150.7	67.6	47.6
37.5°	116.1	41.6	24.2
40°	84.0	21.7	11.3
42.5°	56.3	10.4	6.1
45°	34.6	5.2	0.0
47.5°	19.9	0.0	0.0
50°	10.4	0.0	0.0
52.5°	4.3	0.0	0.0
55°	0.0	0.0	0.0
57.5°	0.0	0.0	0.0
60°	0.0	0.0	0.0
62.5°	0.0	0.0	0.0
65°	0.0	0.0	0.0
67.5°	0.0	0.0	0.0
70°	0.0	0.0	0.0
72.5°	0.0	0.0	0.0
75°	0.9	0.9	0.9
77.5°	0.9	1.7	2.6
80°	1.7	3.5	4.3
82.5°	3.5	4.3	4.3
85°	3.5	4.3	5.2
87.5°	4.3	5.2	6.1
90°	5.2	6.1	6.1
92.5°	5.2	6.9	6.9
95°	6.1	6.9	7.8
97.5°	6.9	7.8	7.8
100°	6.1	7.8	8.7
102.5°	5.2	7.8	7.8
105°	4.3	6.1	6.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.5	4.3	4.3
115°	2.6	3.5	4.3
117.5°	2.6	3.5	3.5
120°	2.6	2.6	3.5
122.5°	2.6	2.6	3.5
125°	2.6	2.6	3.5
127.5°	3.5	2.6	2.6
130°	2.6	2.6	2.6
132.5°	3.5	2.6	2.6
135°	3.5	2.6	2.6
137.5°	3.5	2.6	2.6
140°	3.5	2.6	2.6
142.5°	3.5	2.6	2.6
145°	2.6	2.6	2.6
147.5°	2.6	2.6	2.6
150°	2.6	2.6	1.7
152.5°	2.6	1.7	1.7
155°	2.6	1.7	0.9
157.5°	3.5	1.7	0.9
160°	2.6	1.7	0.9
162.5°	2.6	1.7	0.9
165°	2.6	1.7	0.0
167.5°	2.6	1.7	0.9
170°	2.6	1.7	0.9
172.5°	2.6	1.7	0.9
175°	2.6	0.9	0.9
177.5°	2.6	0.9	0.9
180°	2.6	2.6	2.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	363.7	353.3	318.7	261.5	182.7	102.2	38.1	6.9	1.7	2.6	2.6
110°	317.0	308.3	272.8	217.4	147.2	76.2	25.1	4.3	2.6	2.6	2.6





107.5°	3.5	5.2	6.1
110°	3.5	4.3	5.2



(END OF REPORT)