

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: P550618

Luminaire Tested: **FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D**

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: P550618
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-LD4-1HI-50-UNV-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

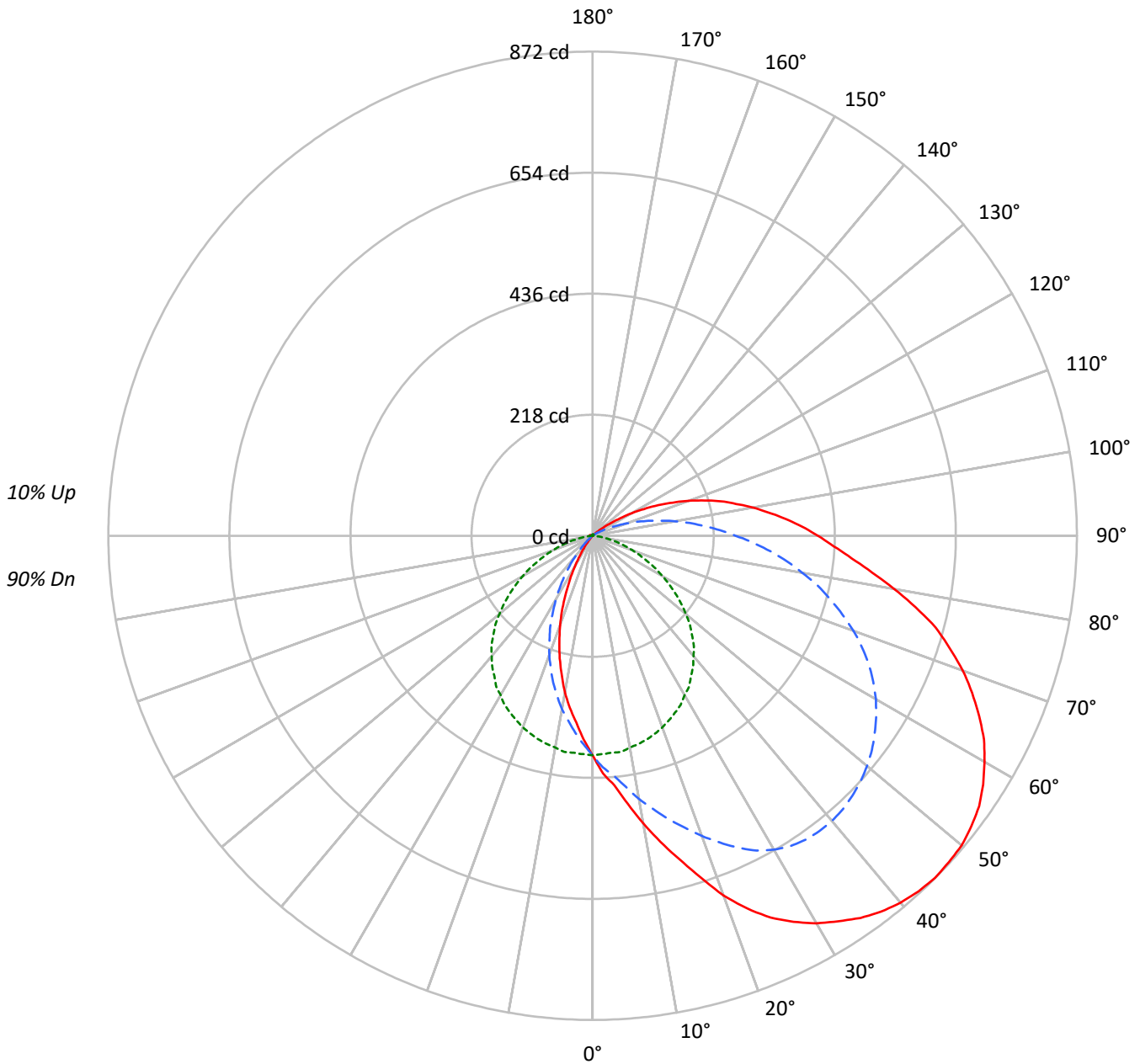
Lumens per Lamp: N/A
Luminaire Lumens: 1953.9 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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: 25 FT

TEST NUMBER: P550618

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550618

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4254	4254	4254
5°	4670	4192	3497
10°	5285	4141	2883
15°	5923	4088	2246
20°	6680	4022	1654
25°	7308	3944	1086
30°	7775	3841	611
35°	8178	3729	270
40°	8537	3593	64
45°	8845	3421	0
50°	9103	3192	0
55°	9300	2903	0
60°	9399	2566	0
65°	9437	2185	0
70°	9405	1780	0
75°	9286	1313	7
80°	8909	805	40
85°	8613	386	55



TEST NUMBER: P550618

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	1.9
10°-20°	113.4	5.8
20°-30°	183.6	9.4
30°-40°	235.8	12.1
40°-50°	266.9	13.7
50°-60°	276.5	14.2
60°-70°	260.8	13.3
70°-80°	218.6	11.2
80°-90°	158.4	8.1
90°-100°	104.1	5.3
100°-110°	60.1	3.1
110°-120°	26.5	1.4
120°-130°	7.2	0.4
130°-140°	1.6	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	334.8	17.1
0°-40°	570.6	29.2
0°-60°	1114.1	57.0
0°-90°	1751.9	89.7
90°-120°	190.8	9.8
90°-150°	200.7	10.3
90°-180°	202.0	10.3
0°-180°	1953.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	395	395	395	395	395	
5°	451	433	392	356	338	45
15°	603	528	379	274	229	174
25°	759	620	351	180	113	351
35°	840	668	309	88	28	527
45°	872	662	253	20	0	673
55°	849	620	182	0	0	759
65°	768	549	109	0	0	760
75°	640	443	46	0	0	671
85°	468	321	8	2	3	400
90°	406	258	2	3	4	223
95°	348	201	1	4	4	273
105°	240	104	1	2	4	253
115°	130	34	2	2	2	131
125°	39	5	2	2	2	39
135°	2	2	2	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	2	2	0	0
180°	2	2	2	2	2	



TEST NUMBER: P550618

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	395.2	395.2	395.2	395.2	395.2	395.2	395.2	395.2	395.2	395.2	395.2
2.5°	428.5	428.0	426.5	423.9	420.4	414.4	409.3	404.8	398.8	393.7	384.2
5°	451.1	448.6	446.6	444.1	436.0	430.5	421.4	411.4	401.8	392.2	373.1
7.5°	487.4	483.4	480.3	473.3	462.2	449.6	435.5	426.0	419.4	392.7	360.0
10°	526.2	522.6	516.6	504.0	490.4	472.3	452.1	429.5	409.3	387.2	348.4
12.5°	564.4	559.4	550.8	534.7	515.6	492.9	465.2	438.5	409.8	383.7	334.8
15°	602.7	597.2	588.1	568.5	543.3	513.6	479.8	446.1	412.4	379.1	320.7
17.5°	644.5	636.9	623.3	601.2	569.5	532.7	492.9	452.1	411.4	373.6	305.6
20°	689.3	678.7	664.1	634.4	597.2	553.8	506.0	458.2	410.9	367.1	288.5
22.5°	726.6	716.0	699.9	669.2	624.3	571.5	517.1	462.2	408.8	359.5	272.4
25°	758.8	750.2	732.6	697.3	650.0	590.1	527.7	465.2	405.8	351.4	255.3
27.5°	783.9	775.9	756.3	720.0	671.7	606.7	535.7	466.7	401.8	343.4	237.7
30°	806.1	798.0	774.4	737.1	686.3	619.8	543.8	467.2	396.8	331.3	218.5
32.5°	823.2	815.7	791.5	751.7	696.3	628.9	548.3	466.7	390.2	322.7	197.9
35°	840.3	832.8	804.6	762.3	703.9	632.9	551.8	464.2	382.2	308.6	178.2
37.5°	853.4	844.9	816.2	769.3	707.4	633.9	551.3	460.7	373.6	297.1	158.6
40°	862.5	853.4	822.7	773.4	708.4	632.4	547.3	454.7	363.5	282.5	138.0
42.5°	868.5	858.5	825.7	779.4	706.4	628.4	541.3	447.1	352.4	269.9	118.3
45°	871.6	861.0	826.2	774.4	702.9	620.8	532.2	437.5	340.4	252.8	98.7
47.5°	870.0	858.5	823.7	768.8	696.3	612.8	522.1	426.0	325.8	237.7	80.1
50°	867.5	855.4	818.2	761.8	687.3	602.7	511.1	411.9	310.7	219.0	63.4
52.5°	859.5	847.4	812.1	751.7	676.7	591.1	495.9	397.3	294.5	200.9	48.3
55°	849.4	838.3	801.6	742.7	663.1	577.0	481.8	381.7	278.9	182.3	34.7
57.5°	833.8	823.7	788.5	728.1	649.5	561.4	466.2	364.5	259.3	163.6	24.2
60°	814.7	804.6	770.4	711.4	633.9	543.8	449.1	346.9	241.7	145.0	15.1
62.5°	794.5	785.0	749.2	690.8	614.3	525.2	430.5	329.3	223.1	127.9	9.1
65°	767.8	758.8	726.6	666.1	592.6	505.0	409.8	308.1	203.9	108.8	5.0
67.5°	739.6	731.6	698.9	643.5	567.4	482.9	388.7	287.5	183.8	92.1	2.5
70°	709.4	699.4	669.2	612.8	541.8	457.7	365.5	266.4	164.6	76.0	0.0
72.5°	674.2	666.6	637.4	584.1	512.1	431.0	341.9	243.2	143.5	60.4	0.5
75°	639.9	630.4	603.7	553.3	482.9	402.8	315.7	221.5	122.9	46.3	0.5
77.5°	595.6	592.6	567.4	518.6	455.2	375.6	287.0	195.4	103.2	33.2	0.5
80°	551.3	548.3	528.7	483.9	422.9	343.4	260.3	170.7	84.1	22.2	0.5
82.5°	507.5	503.5	484.9	447.6	390.2	316.2	232.6	146.0	66.5	13.6	0.5
85°	468.3	463.2	443.1	408.8	356.5	285.5	203.9	121.8	49.3	7.6	1.0
87.5°	434.5	431.0	408.8	373.6	322.2	256.8	178.7	98.7	34.7	3.5	1.5
90°	405.8	398.3	378.6	341.4	290.0	225.1	152.1	79.0	23.2	2.0	2.0
92.5°	377.6	371.1	349.4	311.2	261.3	197.9	126.4	60.4	14.6	1.0	2.5
95°	348.4	341.4	320.2	285.0	232.1	170.2	103.7	44.3	8.1	1.0	2.5
97.5°	319.7	313.2	291.0	255.8	205.9	146.0	82.1	31.2	4.0	1.0	2.0
100°	293.0	285.5	265.3	230.1	179.7	121.8	63.4	20.1	2.5	1.0	2.0
102.5°	264.8	258.8	238.2	203.9	152.6	99.2	47.3	12.6	1.0	1.0	1.5
105°	239.7	232.1	212.0	176.7	129.9	78.0	33.2	7.6	1.0	1.0	1.5



TEST NUMBER: P550618

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	156.1	150.0	132.4	102.7	66.0	30.7	9.1	1.5	1.5	1.5	1.5
115°	130.4	121.3	105.7	79.6	48.8	20.1	4.5	1.5	1.5	1.5	1.5
117.5°	104.2	96.7	85.6	60.4	32.2	13.1	2.5	1.5	1.5	1.5	1.5
120°	81.6	74.5	61.9	41.8	21.7	7.6	1.0	1.5	1.5	1.5	1.5
122.5°	58.4	52.9	41.8	27.2	13.1	3.5	1.5	1.5	2.0	2.0	1.5
125°	38.8	35.7	27.7	16.6	8.1	1.5	1.5	1.5	2.0	2.0	1.5
127.5°	25.2	22.7	16.1	9.6	3.5	1.5	1.5	2.0	2.0	2.0	1.5
130°	14.1	12.6	9.6	5.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5
132.5°	8.1	7.6	5.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0
135°	2.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.5	2.5	2.5	2.0
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.0
142.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
145°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.0	2.0	2.0
147.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
150°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
152.5°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
155°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
157.5°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
160°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
162.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
165°	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0
170°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.5
172.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
175°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
177.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.0
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



TEST NUMBER: P550618

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	395.2	395.2	395.2
2.5°	376.1	369.1	367.1
5°	356.0	344.4	337.8
7.5°	335.8	320.2	312.7
10°	317.2	295.1	287.0
12.5°	295.1	269.4	256.8
15°	273.9	240.7	228.6
17.5°	250.2	213.0	198.9
20°	228.1	185.3	170.7
22.5°	202.9	158.1	142.0
25°	180.3	130.9	112.8
27.5°	155.1	103.2	87.6
30°	131.4	79.0	63.4
32.5°	108.8	57.9	43.8
35°	87.6	39.3	27.7
37.5°	67.5	24.2	14.1
40°	48.8	12.6	6.5
42.5°	32.7	6.0	3.5
45°	20.1	3.0	0.0
47.5°	11.6	0.0	0.0
50°	6.0	0.0	0.0
52.5°	2.5	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°	0.5	0.5	0.5
77.5°	0.5	1.0	1.5
80°	1.0	2.0	2.5
82.5°	2.0	2.5	2.5
85°	2.0	2.5	3.0
87.5°	2.5	3.0	3.5
90°	3.0	3.5	3.5
92.5°	3.0	4.0	4.0
95°	3.5	4.0	4.5
97.5°	4.0	4.5	4.5
100°	3.5	4.5	5.0
102.5°	3.0	4.5	4.5
105°	2.5	3.5	4.0



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CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.0	2.5	2.5
115°	1.5	2.0	2.5
117.5°	1.5	2.0	2.0
120°	1.5	1.5	2.0
122.5°	1.5	1.5	2.0
125°	1.5	1.5	2.0
127.5°	2.0	1.5	1.5
130°	1.5	1.5	1.5
132.5°	2.0	1.5	1.5
135°	2.0	1.5	1.5
137.5°	2.0	1.5	1.5
140°	2.0	1.5	1.5
142.5°	2.0	1.5	1.5
145°	1.5	1.5	1.5
147.5°	1.5	1.5	1.5
150°	1.5	1.5	1.0
152.5°	1.5	1.0	1.0
155°	1.5	1.0	0.5
157.5°	2.0	1.0	0.5
160°	1.5	1.0	0.5
162.5°	1.5	1.0	0.5
165°	1.5	1.0	0.0
167.5°	1.5	1.0	0.5
170°	1.5	1.0	0.5
172.5°	1.5	1.0	0.5
175°	1.5	0.5	0.5
177.5°	1.5	0.5	0.5
180°	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	211.5	205.4	185.3	152.1	106.2	59.4	22.2	4.0	1.0	1.5	1.5
110°	184.3	179.2	158.6	126.4	85.6	44.3	14.6	2.5	1.5	1.5	1.5





107.5°	2.0	3.0	3.5
110°	2.0	2.5	3.0



(END OF REPORT)