

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: P550426

Luminaire Tested: **FCC-X-2-LD4-1HI-30-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: P550426  
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-30-UNV-80-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

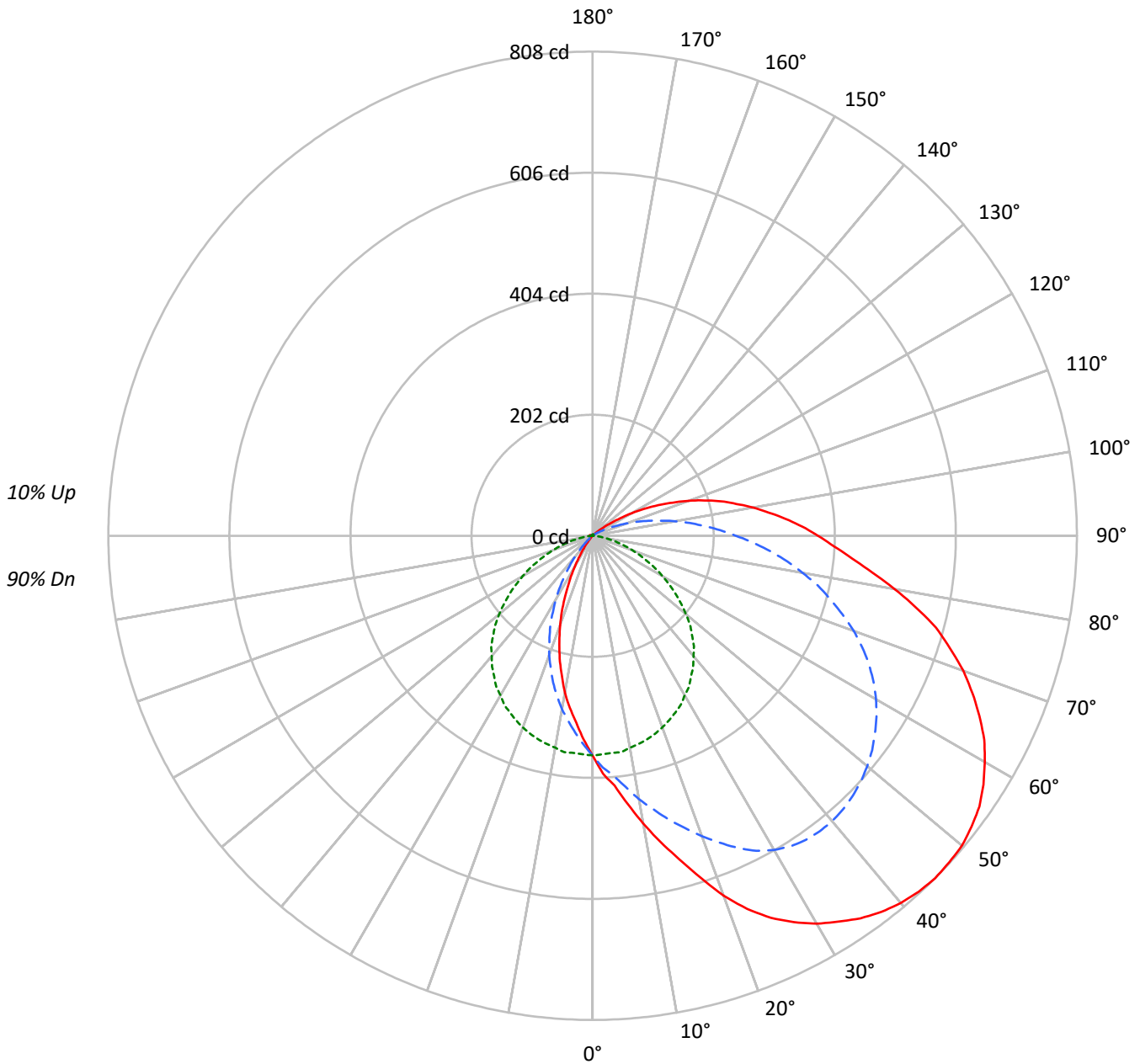
Lumens per Lamp: N/A  
Luminaire Lumens: 1812.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P550426

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-85-ED1D

### Luminous Intensity Polar Plot





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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	3945	3945	3945
5°	4331	3887	3243
10°	4901	3840	2673
15°	5492	3791	2083
20°	6195	3730	1534
25°	6776	3657	1007
30°	7210	3561	567
35°	7585	3458	250
40°	7917	3331	60
45°	8202	3172	0
50°	8442	2960	0
55°	8624	2691	0
60°	8716	2380	0
65°	8751	2027	0
70°	8723	1652	0
75°	8611	1219	7
80°	8263	744	37
85°	7986	356	51



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.1	1.9
10°-20°	105.1	5.8
20°-30°	170.2	9.4
30°-40°	218.7	12.1
40°-50°	247.5	13.7
50°-60°	256.5	14.2
60°-70°	241.9	13.3
70°-80°	202.7	11.2
80°-90°	146.9	8.1
90°-100°	96.6	5.3
100°-110°	55.8	3.1
110°-120°	24.6	1.4
120°-130°	6.7	0.4
130°-140°	1.5	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	310.5	17.1
0°-40°	529.1	29.2
0°-60°	1033.1	57.0
0°-90°	1624.6	89.7
90°-120°	176.9	9.8
90°-150°	186.1	10.3
90°-180°	187.0	10.3
0°-180°	1812.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	366	366	366	366	366	
5°	418	402	364	330	313	42
15°	559	490	352	254	212	161
25°	704	575	326	167	105	325
35°	779	620	286	81	26	489
45°	808	614	234	19	0	624
55°	788	575	169	0	0	703
65°	712	509	101	0	0	704
75°	593	411	43	0	0	622
85°	434	298	7	2	3	371
90°	376	239	2	3	3	206
95°	323	186	1	3	4	253
105°	222	96	1	2	4	235
115°	121	32	1	1	2	121
125°	36	4	2	1	2	36
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	366.5	366.5	366.5	366.5	366.5	366.5	366.5	366.5	366.5	366.5	366.5
2.5°	397.3	396.9	395.5	393.1	389.9	384.3	379.6	375.4	369.8	365.1	356.3
5°	418.4	416.0	414.1	411.8	404.3	399.2	390.8	381.5	372.6	363.7	346.0
7.5°	452.0	448.2	445.4	438.9	428.6	417.0	403.9	395.0	388.9	364.2	333.8
10°	487.9	484.7	479.0	467.4	454.8	438.0	419.3	398.3	379.6	359.1	323.1
12.5°	523.4	518.7	510.8	495.9	478.1	457.1	431.4	406.7	380.1	355.8	310.5
15°	558.9	553.8	545.4	527.1	503.8	476.2	445.0	413.7	382.4	351.6	297.4
17.5°	597.6	590.6	578.0	557.5	528.1	494.0	457.1	419.3	381.5	346.4	283.4
20°	639.2	629.4	615.9	588.3	553.8	513.6	469.2	424.9	381.0	340.4	267.5
22.5°	673.8	663.9	649.0	620.5	579.0	529.9	479.5	428.6	379.1	333.4	252.6
25°	703.6	695.7	679.4	646.7	602.8	547.2	489.3	431.4	376.3	325.9	236.7
27.5°	727.0	719.5	701.3	667.7	622.9	562.6	496.8	432.8	372.6	318.4	220.4
30°	747.5	740.1	718.1	683.6	636.4	574.8	504.3	433.3	367.9	307.2	202.6
32.5°	763.4	756.4	734.0	697.1	645.7	583.2	508.5	432.8	361.9	299.3	183.5
35°	779.3	772.3	746.1	706.9	652.7	586.9	511.7	430.5	354.4	286.2	165.3
37.5°	791.4	783.5	756.9	713.4	656.0	587.8	511.3	427.2	346.4	275.5	147.1
40°	799.8	791.4	762.9	717.2	656.9	586.4	507.5	421.6	337.1	261.9	127.9
42.5°	805.4	796.1	765.7	722.8	655.1	582.7	501.9	414.6	326.8	250.3	109.7
45°	808.2	798.4	766.2	718.1	651.8	575.7	493.5	405.7	315.6	234.4	91.5
47.5°	806.8	796.1	763.9	713.0	645.7	568.2	484.2	395.0	302.1	220.4	74.2
50°	804.5	793.3	758.7	706.4	637.3	558.9	473.9	381.9	288.1	203.1	58.8
52.5°	797.0	785.8	753.1	697.1	627.5	548.2	459.9	368.4	273.1	186.3	44.8
55°	787.7	777.4	743.3	688.7	614.9	535.1	446.8	353.9	258.7	169.0	32.2
57.5°	773.2	763.9	731.2	675.2	602.3	520.6	432.4	338.0	240.5	151.7	22.4
60°	755.5	746.1	714.4	659.7	587.8	504.3	416.5	321.7	224.1	134.5	14.0
62.5°	736.8	727.9	694.8	640.6	569.6	487.0	399.2	305.4	206.8	118.6	8.4
65°	712.0	703.6	673.8	617.7	549.6	468.3	380.1	285.7	189.1	100.9	4.7
67.5°	685.9	678.4	648.1	596.7	526.2	447.8	360.5	266.6	170.4	85.4	2.3
70°	657.9	648.5	620.5	568.2	502.4	424.4	339.0	247.0	152.7	70.5	0.0
72.5°	625.2	618.2	591.1	541.6	474.8	399.7	317.0	225.5	133.1	56.0	0.5
75°	593.4	584.6	559.8	513.1	447.8	373.5	292.8	205.4	113.9	43.0	0.5
77.5°	552.4	549.6	526.2	480.9	422.1	348.3	266.1	181.2	95.7	30.8	0.5
80°	511.3	508.5	490.3	448.7	392.2	318.4	241.4	158.3	78.0	20.5	0.5
82.5°	470.6	466.9	449.6	415.1	361.9	293.2	215.7	135.4	61.6	12.6	0.5
85°	434.2	429.6	410.9	379.1	330.6	264.7	189.1	113.0	45.8	7.0	0.9
87.5°	402.9	399.7	379.1	346.4	298.8	238.1	165.8	91.5	32.2	3.3	1.4
90°	376.3	369.3	351.1	316.6	268.9	208.7	141.0	73.3	21.5	1.9	1.9
92.5°	350.2	344.1	324.0	288.6	242.3	183.5	117.2	56.0	13.5	0.9	2.3
95°	323.1	316.6	297.0	264.3	215.2	157.8	96.2	41.1	7.5	0.9	2.3
97.5°	296.5	290.4	269.9	237.2	191.0	135.4	76.1	28.9	3.7	0.9	1.9
100°	271.7	264.7	246.1	213.4	166.7	113.0	58.8	18.7	2.3	0.9	1.9
102.5°	245.6	240.0	220.8	189.1	141.5	92.0	43.9	11.7	0.9	0.9	1.4
105°	222.2	215.2	196.6	163.9	120.5	72.4	30.8	7.0	0.9	0.9	1.4



TEST NUMBER: P550426

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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	144.7	139.1	122.8	95.2	61.2	28.5	8.4	1.4	1.4	1.4	1.4
115°	120.9	112.5	98.1	73.8	45.3	18.7	4.2	1.4	1.4	1.4	1.4
117.5°	96.7	89.6	79.4	56.0	29.9	12.1	2.3	1.4	1.4	1.4	1.4
120°	75.6	69.1	57.4	38.8	20.1	7.0	0.9	1.4	1.4	1.4	1.4
122.5°	54.2	49.0	38.8	25.2	12.1	3.3	1.4	1.4	1.9	1.9	1.4
125°	36.0	33.2	25.7	15.4	7.5	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.3	21.0	14.9	8.9	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.1	11.7	8.9	5.1	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.5	7.0	4.7	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9
137.5°	0.5	0.5	0.9	0.9	1.4	1.4	1.9	2.3	2.3	2.3	1.9
140°	0.5	0.5	0.9	1.4	1.4	1.4	1.9	2.3	2.3	2.3	1.9
142.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9	1.9
145°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	1.9	1.9	1.9
147.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9	1.9
150°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	1.9
152.5°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	1.9
155°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	2.3
157.5°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	2.3
160°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	0.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	2.3	2.3	2.3	2.3
172.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	2.3
175°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	2.3
177.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	1.9
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	366.5	366.5	366.5
2.5°	348.8	342.2	340.4
5°	330.1	319.4	313.3
7.5°	311.4	297.0	290.0
10°	294.2	273.6	266.1
12.5°	273.6	249.8	238.1
15°	254.0	223.2	212.0
17.5°	232.1	197.5	184.4
20°	211.5	171.8	158.3
22.5°	188.2	146.6	131.7
25°	167.2	121.4	104.6
27.5°	143.8	95.7	81.2
30°	121.9	73.3	58.8
32.5°	100.9	53.7	40.6
35°	81.2	36.4	25.7
37.5°	62.6	22.4	13.1
40°	45.3	11.7	6.1
42.5°	30.3	5.6	3.3
45°	18.7	2.8	0.0
47.5°	10.7	0.0	0.0
50°	5.6	0.0	0.0
52.5°	2.3	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°	0.5	0.5	0.5
77.5°	0.5	0.9	1.4
80°	0.9	1.9	2.3
82.5°	1.9	2.3	2.3
85°	1.9	2.3	2.8
87.5°	2.3	2.8	3.3
90°	2.8	3.3	3.3
92.5°	2.8	3.7	3.7
95°	3.3	3.7	4.2
97.5°	3.7	4.2	4.2
100°	3.3	4.2	4.7
102.5°	2.8	4.2	4.2
105°	2.3	3.3	3.7





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.9	2.3	2.3
115°	1.4	1.9	2.3
117.5°	1.4	1.9	1.9
120°	1.4	1.4	1.9
122.5°	1.4	1.4	1.9
125°	1.4	1.4	1.9
127.5°	1.9	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.9	1.4	1.4
135°	1.9	1.4	1.4
137.5°	1.9	1.4	1.4
140°	1.9	1.4	1.4
142.5°	1.9	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	0.9
152.5°	1.4	0.9	0.9
155°	1.4	0.9	0.5
157.5°	1.9	0.9	0.5
160°	1.4	0.9	0.5
162.5°	1.4	0.9	0.5
165°	1.4	0.9	0.0
167.5°	1.4	0.9	0.5
170°	1.4	0.9	0.5
172.5°	1.4	0.9	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	196.1	190.5	171.8	141.0	98.5	55.1	20.5	3.7	0.9	1.4	1.4
110°	170.9	166.2	147.1	117.2	79.4	41.1	13.5	2.3	1.4	1.4	1.4







107.5°	1.9	2.8	3.3
110°	1.9	2.3	2.8



(END OF REPORT)