

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: P550520

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-82-84-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: P550520  
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-35-UNV-82-84-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

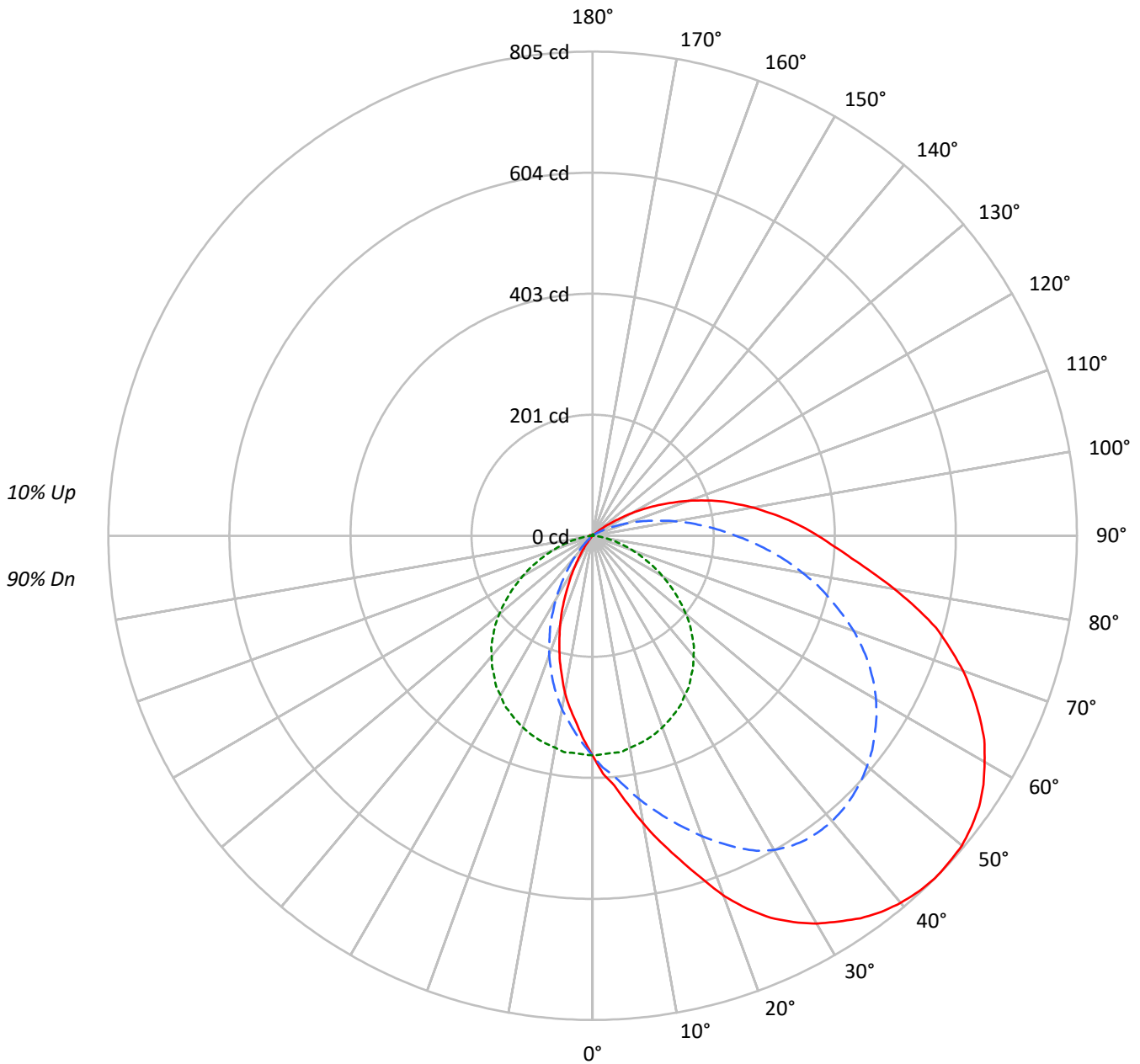
Lumens per Lamp: N/A  
Luminaire Lumens: 1805.1 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 21.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-84-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	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°	3930	3930	3930
5°	4314	3872	3231
10°	4882	3825	2663
15°	5471	3776	2075
20°	6170	3715	1528
25°	6750	3643	1004
30°	7182	3547	565
35°	7556	3445	249
40°	7886	3318	59
45°	8170	3160	0
50°	8409	2948	0
55°	8590	2682	0
60°	8681	2371	0
65°	8718	2019	0
70°	8688	1645	0
75°	8577	1214	7
80°	8231	744	37
85°	7954	356	51



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.0	1.9
10°-20°	104.7	5.8
20°-30°	169.6	9.4
30°-40°	217.8	12.1
40°-50°	246.6	13.7
50°-60°	255.5	14.2
60°-70°	240.9	13.3
70°-80°	201.9	11.2
80°-90°	146.4	8.1
90°-100°	96.2	5.3
100°-110°	55.6	3.1
110°-120°	24.5	1.4
120°-130°	6.6	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°	309.3	17.1
0°-40°	527.1	29.2
0°-60°	1029.1	57.0
0°-90°	1618.4	89.7
90°-120°	176.3	9.8
90°-150°	185.4	10.3
90°-180°	187.0	10.4
0°-180°	1805.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	365	365	365	365	365	
5°	417	400	362	329	312	42
15°	557	488	350	253	211	161
25°	701	573	325	166	104	324
35°	776	617	285	81	26	487
45°	805	611	234	19	0	622
55°	785	573	168	0	0	701
65°	709	507	100	0	0	702
75°	591	409	43	0	0	620
85°	432	296	7	2	3	369
90°	375	238	2	3	3	206
95°	322	186	1	3	4	253
105°	221	96	1	2	4	234
115°	120	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°	365.1	365.1	365.1	365.1	365.1	365.1	365.1	365.1	365.1	365.1	365.1
2.5°	395.8	395.3	393.9	391.6	388.4	382.8	378.1	373.9	368.4	363.7	354.9
5°	416.7	414.4	412.5	410.2	402.8	397.7	389.3	380.0	371.2	362.3	344.6
7.5°	450.2	446.5	443.7	437.2	427.0	415.3	402.3	393.5	387.4	362.8	332.6
10°	486.0	482.8	477.2	465.6	453.0	436.3	417.7	396.7	378.1	357.7	321.9
12.5°	521.4	516.7	508.8	493.9	476.3	455.3	429.8	405.1	378.6	354.4	309.3
15°	556.7	551.6	543.2	525.1	501.8	474.4	443.2	412.1	380.9	350.2	296.3
17.5°	595.3	588.4	575.8	555.3	526.0	492.1	455.3	417.7	380.0	345.1	282.3
20°	636.7	627.0	613.5	586.0	551.6	511.6	467.4	423.2	379.5	339.1	266.5
22.5°	671.1	661.4	646.5	618.1	576.7	527.9	477.7	427.0	377.7	332.1	251.6
25°	700.9	693.0	676.7	644.2	600.5	545.1	487.4	429.8	374.9	324.6	235.8
27.5°	724.2	716.7	698.6	665.1	620.5	560.5	494.9	431.2	371.2	317.2	219.5
30°	744.6	737.2	715.3	680.9	633.9	572.5	502.3	431.6	366.5	306.0	201.9
32.5°	760.4	753.5	731.1	694.4	643.2	580.9	506.5	431.2	360.5	298.1	182.8
35°	776.3	769.3	743.2	704.2	650.2	584.6	509.8	428.8	353.0	285.1	164.6
37.5°	788.4	780.4	753.9	710.7	653.5	585.6	509.3	425.6	345.1	274.4	146.5
40°	796.7	788.4	760.0	714.4	654.4	584.2	505.6	420.0	335.8	260.9	127.4
42.5°	802.3	793.0	762.8	720.0	652.5	580.5	500.0	413.0	325.6	249.3	109.3
45°	805.1	795.3	763.2	715.3	649.3	573.5	491.6	404.2	314.4	233.5	91.2
47.5°	803.7	793.0	760.9	710.2	643.2	566.0	482.3	393.5	300.9	219.5	74.0
50°	801.4	790.2	755.8	703.7	634.9	556.7	472.1	380.5	287.0	202.3	58.6
52.5°	793.9	782.8	750.2	694.4	625.1	546.0	458.1	367.0	272.1	185.6	44.7
55°	784.6	774.4	740.4	686.0	612.5	533.0	445.1	352.6	257.7	168.4	32.1
57.5°	770.2	760.9	728.4	672.5	600.0	518.6	430.7	336.7	239.5	151.2	22.3
60°	752.5	743.2	711.6	657.2	585.6	502.3	414.9	320.5	223.3	134.0	14.0
62.5°	733.9	725.1	692.1	638.1	567.4	485.1	397.7	304.2	206.0	118.1	8.4
65°	709.3	700.9	671.1	615.3	547.4	466.5	378.6	284.6	188.4	100.5	4.7
67.5°	683.2	675.8	645.6	594.4	524.2	446.0	359.1	265.6	169.8	85.1	2.3
70°	655.3	646.0	618.1	566.0	500.5	422.8	337.7	246.0	152.1	70.2	0.0
72.5°	622.8	615.8	588.8	539.5	473.0	398.1	315.8	224.6	132.6	55.8	0.5
75°	591.1	582.3	557.7	511.2	446.0	372.1	291.6	204.6	113.5	42.8	0.5
77.5°	550.2	547.4	524.2	479.1	420.5	347.0	265.1	180.5	95.3	30.7	0.5
80°	509.3	506.5	488.4	447.0	390.7	317.2	240.5	157.7	77.7	20.5	0.5
82.5°	468.8	465.1	447.9	413.5	360.5	292.1	214.9	134.9	61.4	12.6	0.5
85°	432.5	427.9	409.3	377.7	329.3	263.7	188.4	112.6	45.6	7.0	0.9
87.5°	401.4	398.1	377.7	345.1	297.7	237.2	165.1	91.2	32.1	3.3	1.4
90°	374.9	367.9	349.8	315.3	267.9	207.9	140.5	73.0	21.4	1.9	1.9
92.5°	348.8	342.8	322.8	287.4	241.4	182.8	116.7	55.8	13.5	0.9	2.3
95°	321.9	315.3	295.8	263.2	214.4	157.2	95.8	40.9	7.4	0.9	2.3
97.5°	295.3	289.3	268.8	236.3	190.2	134.9	75.8	28.8	3.7	0.9	1.9
100°	270.7	263.7	245.1	212.6	166.0	112.6	58.6	18.6	2.3	0.9	1.9
102.5°	244.6	239.1	220.0	188.4	140.9	91.6	43.7	11.6	0.9	0.9	1.4
105°	221.4	214.4	195.8	163.3	120.0	72.1	30.7	7.0	0.9	0.9	1.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	144.2	138.6	122.3	94.9	60.9	28.4	8.4	1.4	1.4	1.4	1.4
115°	120.5	112.1	97.7	73.5	45.1	18.6	4.2	1.4	1.4	1.4	1.4
117.5°	96.3	89.3	79.1	55.8	29.8	12.1	2.3	1.4	1.4	1.4	1.4
120°	75.3	68.8	57.2	38.6	20.0	7.0	0.9	1.4	1.4	1.4	1.4
122.5°	54.0	48.8	38.6	25.1	12.1	3.3	1.4	1.4	1.9	1.9	1.4
125°	35.8	33.0	25.6	15.3	7.4	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.3	20.9	14.9	8.8	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.0	11.6	8.8	5.1	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.4	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°	365.1	365.1	365.1
2.5°	347.4	340.9	339.1
5°	328.8	318.1	312.1
7.5°	310.2	295.8	288.8
10°	293.0	272.6	265.1
12.5°	272.6	248.8	237.2
15°	253.0	222.3	211.2
17.5°	231.2	196.7	183.7
20°	210.7	171.2	157.7
22.5°	187.4	146.0	131.2
25°	166.5	120.9	104.2
27.5°	143.3	95.3	80.9
30°	121.4	73.0	58.6
32.5°	100.5	53.5	40.5
35°	80.9	36.3	25.6
37.5°	62.3	22.3	13.0
40°	45.1	11.6	6.0
42.5°	30.2	5.6	3.3
45°	18.6	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°	195.3	189.8	171.2	140.5	98.1	54.9	20.5	3.7	0.9	1.4	1.4
110°	170.2	165.6	146.5	116.7	79.1	40.9	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)