

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: P550425

Luminaire Tested: **FCC-X-2-LD4-1HI-30-UNV-80-85-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: P550425
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-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

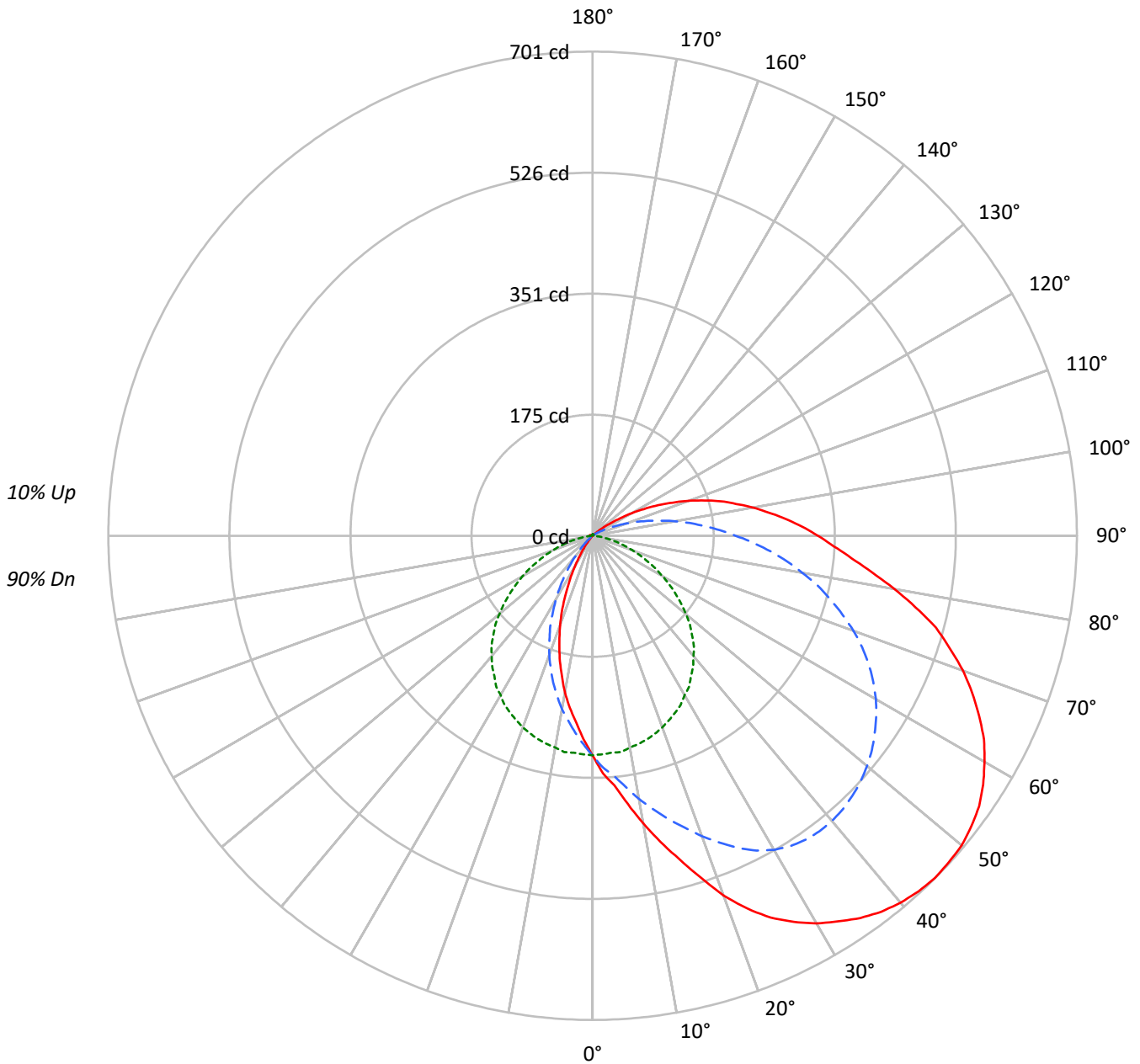
Lumens per Lamp: N/A
Luminaire Lumens: 1570.9 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (A_{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: P550425

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550425

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-85-ED1D-90

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°	3421	3421	3421
5°	3755	3370	2812
10°	4249	3329	2317
15°	4762	3286	1806
20°	5371	3233	1330
25°	5875	3171	874
30°	6251	3088	492
35°	6575	2998	217
40°	6864	2888	52
45°	7111	2750	0
50°	7319	2567	0
55°	7477	2333	0
60°	7557	2063	0
65°	7587	1755	0
70°	7562	1431	0
75°	7466	1055	6
80°	7164	646	32
85°	6925	310	44



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.4	1.9
10°-20°	91.1	5.8
20°-30°	147.6	9.4
30°-40°	189.6	12.1
40°-50°	214.6	13.7
50°-60°	222.3	14.2
60°-70°	209.7	13.3
70°-80°	175.7	11.2
80°-90°	127.4	8.1
90°-100°	83.7	5.3
100°-110°	48.3	3.1
110°-120°	21.3	1.4
120°-130°	5.8	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	269.2	17.1
0°-40°	458.8	29.2
0°-60°	895.7	57.0
0°-90°	1408.5	89.7
90°-120°	153.4	9.8
90°-150°	161.3	10.3
90°-180°	162.0	10.3
0°-180°	1570.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	318	318	318	318	318	
5°	363	348	315	286	272	37
15°	485	425	305	220	184	140
25°	610	498	283	145	91	282
35°	676	537	248	70	22	424
45°	701	532	203	16	0	541
55°	683	498	146	0	0	610
65°	617	441	87	0	0	611
75°	514	356	37	0	0	540
85°	376	258	6	2	2	322
90°	326	207	2	2	3	179
95°	280	162	1	3	4	220
105°	193	84	1	2	3	203
115°	105	28	1	1	2	105
125°	31	4	2	1	2	31
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	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°	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8
2.5°	344.5	344.1	342.9	340.8	338.0	333.2	329.1	325.5	320.6	316.6	308.9
5°	362.7	360.7	359.1	357.0	350.6	346.1	338.8	330.7	323.0	315.3	300.0
7.5°	391.9	388.6	386.2	380.5	371.6	361.5	350.2	342.5	337.2	315.8	289.4
10°	423.0	420.2	415.3	405.2	394.3	379.7	363.5	345.3	329.1	311.3	280.1
12.5°	453.8	449.7	442.9	429.9	414.5	396.3	374.0	352.6	329.5	308.5	269.2
15°	484.6	480.1	472.8	457.0	436.8	412.9	385.8	358.7	331.5	304.8	257.9
17.5°	518.2	512.1	501.2	483.3	457.8	428.3	396.3	363.5	330.7	300.4	245.7
20°	554.2	545.7	533.9	510.1	480.1	445.3	406.8	368.4	330.3	295.1	232.0
22.5°	584.1	575.6	562.7	538.0	502.0	459.5	415.7	371.6	328.7	289.0	219.0
25°	610.0	603.2	589.0	560.7	522.6	474.4	424.2	374.0	326.3	282.6	205.2
27.5°	630.3	623.8	608.0	578.9	540.0	487.8	430.7	375.3	323.0	276.1	191.1
30°	648.1	641.6	622.6	592.6	551.8	498.3	437.2	375.7	319.0	266.4	175.7
32.5°	661.9	655.8	636.4	604.4	559.9	505.6	440.8	375.3	313.7	259.5	159.1
35°	675.6	669.6	646.9	612.9	565.9	508.8	443.7	373.2	307.3	248.1	143.3
37.5°	686.2	679.3	656.2	618.5	568.8	509.7	443.3	370.4	300.4	238.8	127.5
40°	693.4	686.2	661.5	621.8	569.6	508.4	440.0	365.5	292.3	227.1	110.9
42.5°	698.3	690.2	663.9	626.6	567.9	505.2	435.2	359.5	283.4	217.0	95.1
45°	700.7	692.2	664.3	622.6	565.1	499.1	427.9	351.8	273.7	203.2	79.3
47.5°	699.5	690.2	662.3	618.1	559.9	492.7	419.8	342.5	261.9	191.1	64.4
50°	697.5	687.8	657.8	612.5	552.6	484.6	410.9	331.1	249.8	176.1	51.0
52.5°	691.0	681.3	653.0	604.4	544.1	475.2	398.7	319.4	236.8	161.5	38.9
55°	682.9	674.0	644.5	597.1	533.1	463.9	387.4	306.8	224.3	146.5	27.9
57.5°	670.4	662.3	633.9	585.4	522.2	451.4	374.9	293.1	208.5	131.6	19.4
60°	655.0	646.9	619.4	572.0	509.7	437.2	361.1	278.9	194.3	116.6	12.1
62.5°	638.8	631.1	602.4	555.4	493.9	422.2	346.1	264.7	179.3	102.8	7.3
65°	617.3	610.0	584.1	535.6	476.5	406.0	329.5	247.7	163.9	87.4	4.0
67.5°	594.7	588.2	561.9	517.3	456.2	388.2	312.5	231.1	147.8	74.1	2.0
70°	570.4	562.3	538.0	492.7	435.6	368.0	293.9	214.1	132.4	61.1	0.0
72.5°	542.0	536.0	512.5	469.6	411.7	346.5	274.9	195.5	115.4	48.6	0.4
75°	514.5	506.8	485.4	444.9	388.2	323.8	253.8	178.1	98.8	37.2	0.4
77.5°	478.9	476.5	456.2	417.0	365.9	302.0	230.7	157.1	83.0	26.7	0.4
80°	443.3	440.8	425.1	389.0	340.0	276.1	209.3	137.2	67.6	17.8	0.4
82.5°	408.0	404.8	389.8	359.9	313.7	254.2	187.0	117.4	53.4	10.9	0.4
85°	376.5	372.4	356.2	328.7	286.6	229.5	163.9	98.0	39.7	6.1	0.8
87.5°	349.4	346.5	328.7	300.4	259.1	206.5	143.7	79.3	27.9	2.8	1.2
90°	326.3	320.2	304.4	274.5	233.2	180.9	122.3	63.6	18.6	1.6	1.6
92.5°	303.6	298.3	280.9	250.2	210.1	159.1	101.6	48.6	11.7	0.8	2.0
95°	280.1	274.5	257.5	229.1	186.6	136.8	83.4	35.6	6.5	0.8	2.0
97.5°	257.1	251.8	234.0	205.6	165.6	117.4	66.0	25.1	3.2	0.8	1.6
100°	235.6	229.5	213.3	185.0	144.5	98.0	51.0	16.2	2.0	0.8	1.6
102.5°	212.9	208.1	191.5	163.9	122.7	79.7	38.1	10.1	0.8	0.8	1.2
105°	192.7	186.6	170.4	142.1	104.4	62.7	26.7	6.1	0.8	0.8	1.2



TEST NUMBER: P550425

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	125.5	120.6	106.5	82.6	53.0	24.7	7.3	1.2	1.2	1.2	1.2
115°	104.8	97.6	85.0	64.0	39.3	16.2	3.6	1.2	1.2	1.2	1.2
117.5°	83.8	77.7	68.8	48.6	25.9	10.5	2.0	1.2	1.2	1.2	1.2
120°	65.6	59.9	49.8	33.6	17.4	6.1	0.8	1.2	1.2	1.2	1.2
122.5°	47.0	42.5	33.6	21.9	10.5	2.8	1.2	1.2	1.6	1.6	1.2
125°	31.2	28.7	22.3	13.4	6.5	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	20.2	18.2	13.0	7.7	2.8	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.3	10.1	7.7	4.5	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.5	6.1	4.0	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	2.0
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



TEST NUMBER: P550425

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	317.8	317.8	317.8
2.5°	302.4	296.7	295.1
5°	286.2	276.9	271.6
7.5°	270.0	257.5	251.4
10°	255.0	237.2	230.7
12.5°	237.2	216.6	206.5
15°	220.2	193.5	183.8
17.5°	201.2	171.2	159.9
20°	183.4	149.0	137.2
22.5°	163.1	127.1	114.2
25°	144.9	105.3	90.7
27.5°	124.7	83.0	70.4
30°	105.7	63.6	51.0
32.5°	87.4	46.6	35.2
35°	70.4	31.6	22.3
37.5°	54.2	19.4	11.3
40°	39.3	10.1	5.3
42.5°	26.3	4.9	2.8
45°	16.2	2.4	0.0
47.5°	9.3	0.0	0.0
50°	4.9	0.0	0.0
52.5°	2.0	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.6	2.0
82.5°	1.6	2.0	2.0
85°	1.6	2.0	2.4
87.5°	2.0	2.4	2.8
90°	2.4	2.8	2.8
92.5°	2.4	3.2	3.2
95°	2.8	3.2	3.6
97.5°	3.2	3.6	3.6
100°	2.8	3.6	4.0
102.5°	2.4	3.6	3.6
105°	2.0	2.8	3.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	2.0	2.0
115°	1.2	1.6	2.0
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	170.0	165.2	149.0	122.3	85.4	47.8	17.8	3.2	0.8	1.2	1.2
110°	148.2	144.1	127.5	101.6	68.8	35.6	11.7	2.0	1.2	1.2	1.2





107.5°	1.6	2.4	2.8
110°	1.6	2.0	2.4



(END OF REPORT)