

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: P550535

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-93-84-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: P550535
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-93-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

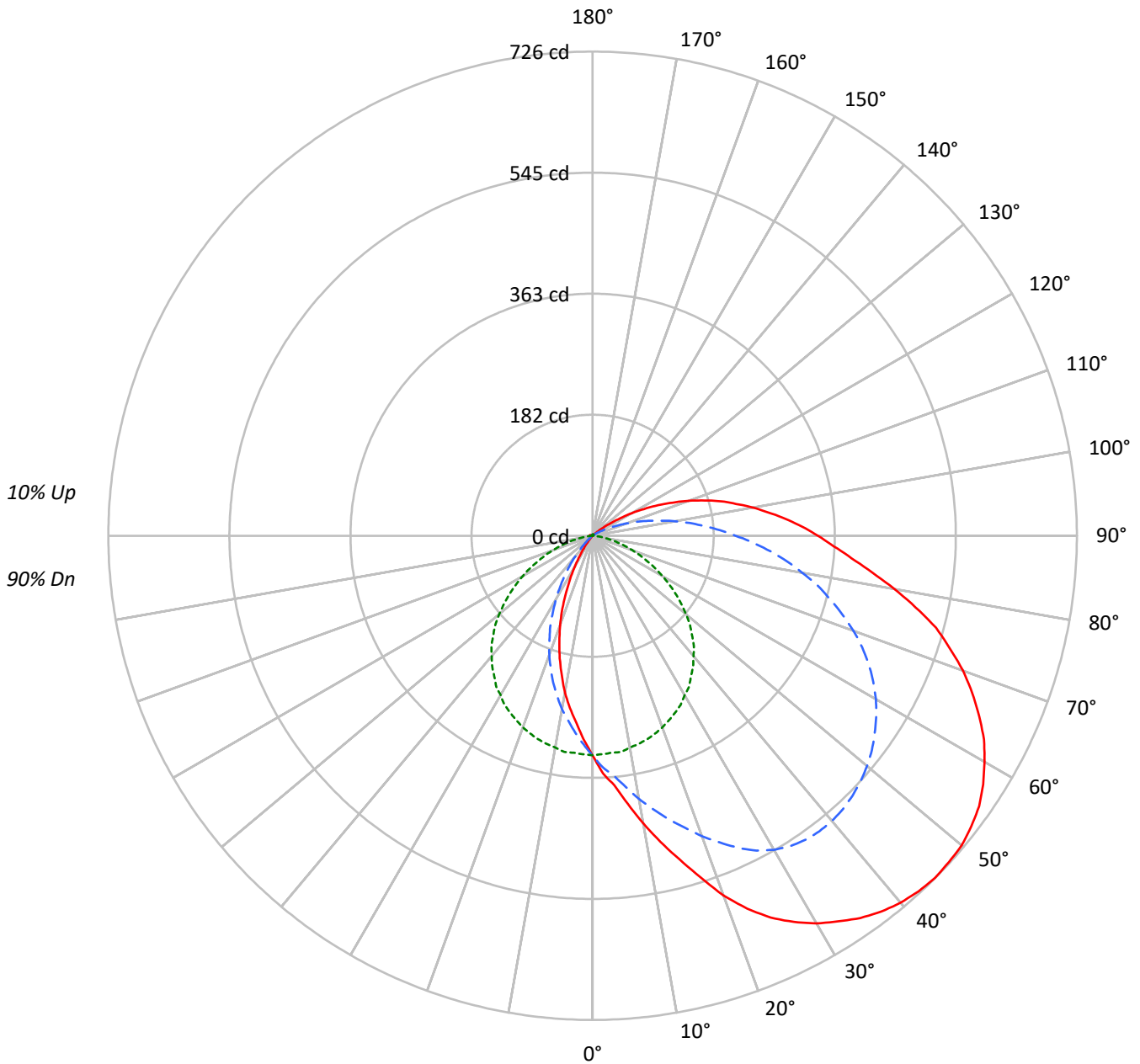
Lumens per Lamp: N/A
Luminaire Lumens: 1627.1 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (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: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-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°	3542	3542	3542
5°	3888	3491	2912
10°	4400	3448	2401
15°	4931	3404	1870
20°	5562	3348	1377
25°	6085	3284	904
30°	6474	3198	509
35°	6810	3105	225
40°	7109	2991	54
45°	7365	2848	0
50°	7579	2658	0
55°	7744	2417	0
60°	7825	2136	0
65°	7857	1820	0
70°	7832	1483	0
75°	7733	1095	6
80°	7419	667	34
85°	7171	320	46



TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.5	1.9
10°-20°	94.4	5.8
20°-30°	152.9	9.4
30°-40°	196.4	12.1
40°-50°	222.3	13.7
50°-60°	230.3	14.2
60°-70°	217.2	13.3
70°-80°	182.0	11.2
80°-90°	131.9	8.1
90°-100°	86.7	5.3
100°-110°	50.1	3.1
110°-120°	22.1	1.4
120°-130°	6.0	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	278.8	17.1
0°-40°	475.1	29.2
0°-60°	927.7	57.0
0°-90°	1458.8	89.7
90°-120°	158.9	9.8
90°-150°	167.2	10.3
90°-180°	168.0	10.3
0°-180°	1627.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	329	329	329	329	329	
5°	376	361	327	296	281	38
15°	502	440	316	228	190	145
25°	632	516	293	150	94	292
35°	700	557	257	73	23	439
45°	726	551	210	17	0	560
55°	707	516	152	0	0	632
65°	639	457	91	0	0	633
75°	533	369	39	0	0	559
85°	390	267	6	2	2	333
90°	338	214	2	2	3	185
95°	290	168	1	3	4	228
105°	200	87	1	2	3	211
115°	109	29	1	1	2	109
125°	32	4	2	1	2	32
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	



TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	329.1	329.1	329.1	329.1	329.1	329.1	329.1	329.1	329.1	329.1	329.1
2.5°	356.8	356.4	355.1	353.0	350.1	345.0	340.8	337.1	332.0	327.8	319.9
5°	375.6	373.5	371.9	369.8	363.1	358.4	350.9	342.5	334.6	326.6	310.7
7.5°	405.8	402.5	400.0	394.1	384.9	374.4	362.6	354.7	349.2	327.0	299.8
10°	438.1	435.2	430.1	419.7	408.3	393.2	376.5	357.6	340.8	322.4	290.1
12.5°	470.0	465.8	458.6	445.2	429.3	410.4	387.4	365.2	341.3	319.5	278.8
15°	501.8	497.2	489.7	473.3	452.4	427.6	399.5	371.4	343.4	315.7	267.1
17.5°	536.6	530.3	519.0	500.6	474.2	443.6	410.4	376.5	342.5	311.1	254.5
20°	573.9	565.1	553.0	528.2	497.2	461.2	421.3	381.5	342.1	305.6	240.2
22.5°	605.0	596.2	582.7	557.2	519.9	475.8	430.6	384.9	340.4	299.3	226.8
25°	631.8	624.7	610.0	580.6	541.2	491.3	439.4	387.4	337.9	292.6	212.6
27.5°	652.8	646.0	629.7	599.5	559.3	505.2	446.1	388.6	334.6	285.9	197.9
30°	671.2	664.5	644.8	613.8	571.4	516.1	452.8	389.1	330.4	275.9	181.9
32.5°	685.5	679.2	659.0	625.9	579.8	523.6	456.6	388.6	324.9	268.7	164.8
35°	699.7	693.4	669.9	634.7	586.1	527.0	459.5	386.5	318.2	257.0	148.4
37.5°	710.6	703.5	679.6	640.6	589.0	527.8	459.1	383.6	311.1	247.4	132.1
40°	718.2	710.6	685.0	644.0	589.9	526.6	455.7	378.6	302.7	235.2	114.9
42.5°	723.2	714.8	687.6	649.0	588.2	523.2	450.7	372.3	293.5	224.7	98.5
45°	725.7	716.9	688.0	644.8	585.3	516.9	443.1	364.3	283.4	210.5	82.2
47.5°	724.4	714.8	685.9	640.2	579.8	510.2	434.8	354.7	271.2	197.9	66.7
50°	722.3	712.3	681.3	634.3	572.3	501.8	425.5	342.9	258.7	182.4	52.8
52.5°	715.6	705.6	676.2	625.9	563.5	492.2	413.0	330.8	245.3	167.3	40.2
55°	707.3	698.0	667.4	618.4	552.1	480.4	401.2	317.8	232.3	151.8	28.9
57.5°	694.3	685.9	656.5	606.2	540.8	467.5	388.2	303.5	215.9	136.3	20.1
60°	678.3	669.9	641.4	592.4	527.8	452.8	374.0	288.9	201.2	120.7	12.6
62.5°	661.6	653.6	623.8	575.2	511.5	437.3	358.4	274.2	185.7	106.5	7.5
65°	639.3	631.8	605.0	554.7	493.4	420.5	341.3	256.6	169.8	90.6	4.2
67.5°	615.9	609.2	581.9	535.8	472.5	402.1	323.7	239.4	153.0	76.7	2.1
70°	590.7	582.3	557.2	510.2	451.1	381.1	304.4	221.8	137.1	63.3	0.0
72.5°	561.4	555.1	530.8	486.3	426.4	358.9	284.7	202.5	119.5	50.3	0.4
75°	532.9	524.9	502.7	460.7	402.1	335.4	262.9	184.5	102.3	38.6	0.4
77.5°	496.0	493.4	472.5	431.8	379.0	312.8	239.0	162.7	85.9	27.7	0.4
80°	459.1	456.6	440.2	402.9	352.2	285.9	216.7	142.1	70.0	18.4	0.4
82.5°	422.6	419.2	403.7	372.7	324.9	263.3	193.7	121.6	55.3	11.3	0.4
85°	389.9	385.7	368.9	340.4	296.8	237.7	169.8	101.5	41.1	6.3	0.8
87.5°	361.8	358.9	340.4	311.1	268.3	213.8	148.8	82.2	28.9	2.9	1.3
90°	337.9	331.6	315.3	284.2	241.5	187.4	126.6	65.8	19.3	1.7	1.7
92.5°	314.4	309.0	291.0	259.1	217.6	164.8	105.2	50.3	12.2	0.8	2.1
95°	290.1	284.2	266.6	237.3	193.3	141.7	86.4	36.9	6.7	0.8	2.1
97.5°	266.2	260.8	242.3	213.0	171.5	121.6	68.3	26.0	3.4	0.8	1.7
100°	244.0	237.7	220.9	191.6	149.7	101.5	52.8	16.8	2.1	0.8	1.7
102.5°	220.5	215.5	198.3	169.8	127.0	82.6	39.4	10.5	0.8	0.8	1.3
105°	199.6	193.3	176.5	147.2	108.2	65.0	27.7	6.3	0.8	0.8	1.3



TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	130.0	124.9	110.3	85.5	54.9	25.6	7.5	1.3	1.3	1.3	1.3
115°	108.6	101.0	88.0	66.2	40.7	16.8	3.8	1.3	1.3	1.3	1.3
117.5°	86.8	80.5	71.3	50.3	26.8	10.9	2.1	1.3	1.3	1.3	1.3
120°	67.9	62.0	51.6	34.8	18.0	6.3	0.8	1.3	1.3	1.3	1.3
122.5°	48.6	44.0	34.8	22.6	10.9	2.9	1.3	1.3	1.7	1.7	1.3
125°	32.3	29.8	23.1	13.8	6.7	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.0	18.9	13.4	8.0	2.9	1.3	1.3	1.7	1.7	1.7	1.3
130°	11.7	10.5	8.0	4.6	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.7	6.3	4.2	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.8	0.8	1.3	1.3	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	2.1
172.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	329.1	329.1	329.1
2.5°	313.2	307.3	305.6
5°	296.4	286.8	281.3
7.5°	279.6	266.6	260.3
10°	264.1	245.7	239.0
12.5°	245.7	224.3	213.8
15°	228.1	200.4	190.3
17.5°	208.4	177.3	165.6
20°	189.9	154.3	142.1
22.5°	169.0	131.6	118.2
25°	150.1	109.0	93.9
27.5°	129.1	85.9	72.9
30°	109.4	65.8	52.8
32.5°	90.6	48.2	36.5
35°	72.9	32.7	23.1
37.5°	56.2	20.1	11.7
40°	40.7	10.5	5.5
42.5°	27.3	5.0	2.9
45°	16.8	2.5	0.0
47.5°	9.6	0.0	0.0
50°	5.0	0.0	0.0
52.5°	2.1	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	1.3
80°	0.8	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.5
87.5°	2.1	2.5	2.9
90°	2.5	2.9	2.9
92.5°	2.5	3.4	3.4
95°	2.9	3.4	3.8
97.5°	3.4	3.8	3.8
100°	2.9	3.8	4.2
102.5°	2.5	3.8	3.8
105°	2.1	2.9	3.4



TEST NUMBER: P550535

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.3	1.7	2.1
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.8
152.5°	1.3	0.8	0.8
155°	1.3	0.8	0.4
157.5°	1.7	0.8	0.4
160°	1.3	0.8	0.4
162.5°	1.3	0.8	0.4
165°	1.3	0.8	0.0
167.5°	1.3	0.8	0.4
170°	1.3	0.8	0.4
172.5°	1.3	0.8	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	176.1	171.0	154.3	126.6	88.5	49.5	18.4	3.4	0.8	1.3	1.3
110°	153.4	149.2	132.1	105.2	71.3	36.9	12.2	2.1	1.3	1.3	1.3





107.5°	1.7	2.5	2.9
110°	1.7	2.1	2.5



(END OF REPORT)