

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: P551308

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-93-86-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: P551308
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-LD4-2HI-35-UNV-93-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

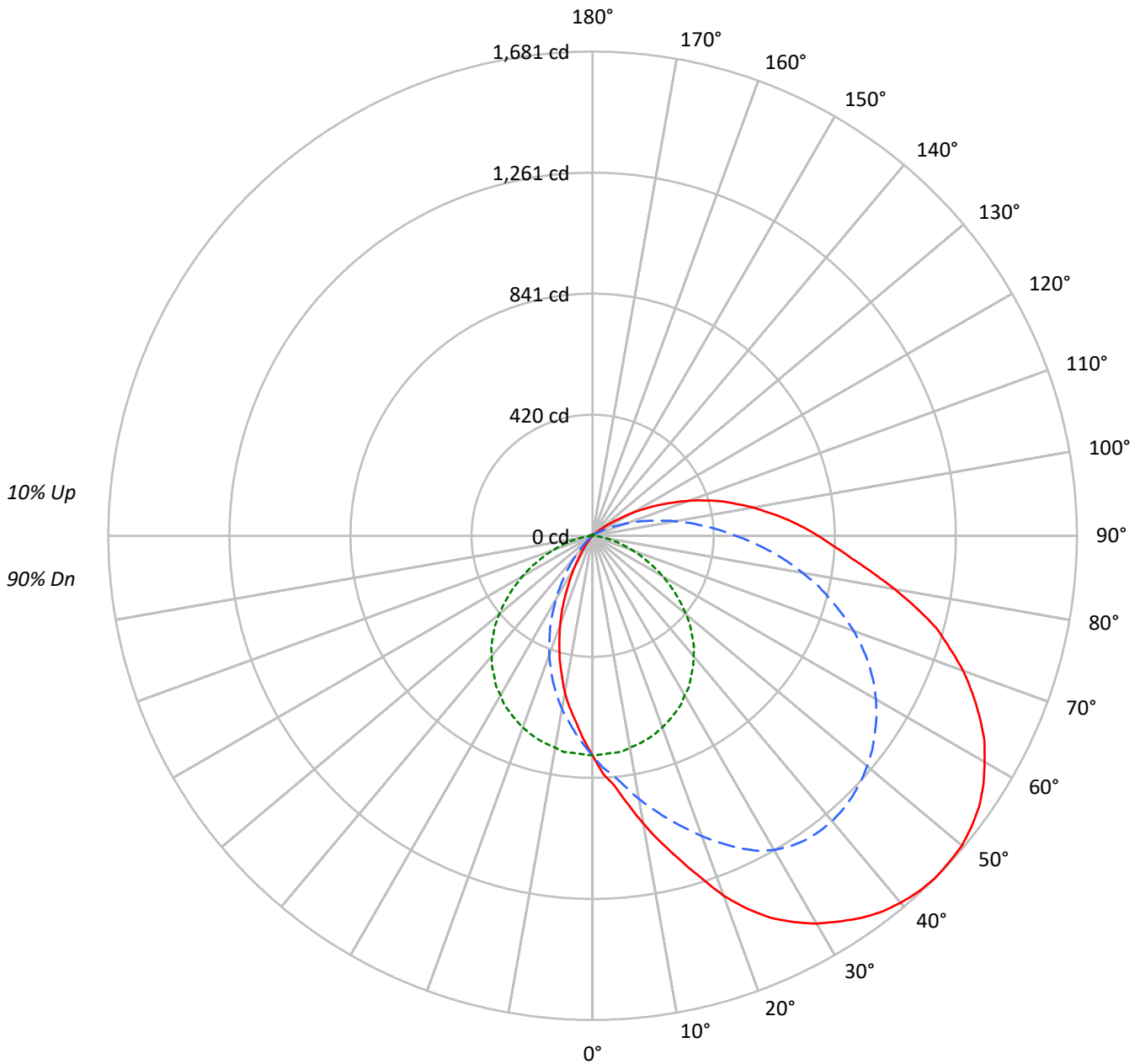
Lumens per Lamp: N/A
Luminaire Lumens: 3769.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
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: P551308

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-93-86-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°	8206	8206	8206
5°	9008	8087	6747
10°	10194	7986	5561
15°	11424	7885	4333
20°	12884	7757	3190
25°	14096	7608	2095
30°	14997	7408	1181
35°	15776	7193	520
40°	16467	6928	125
45°	17060	6596	0
50°	17558	6158	0
55°	17938	5599	0
60°	18129	4950	0
65°	18204	4214	0
70°	18143	3434	0
75°	17912	2532	15
80°	17185	1549	79
85°	16612	742	107



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	1.9
10°-20°	218.7	5.8
20°-30°	354.1	9.4
30°-40°	454.9	12.1
40°-50°	514.9	13.7
50°-60°	533.4	14.2
60°-70°	503.1	13.3
70°-80°	421.6	11.2
80°-90°	305.6	8.1
90°-100°	200.9	5.3
100°-110°	116.0	3.1
110°-120°	51.2	1.4
120°-130°	13.9	0.4
130°-140°	3.2	0.1
140°-150°	2.1	0.1
150°-160°	1.5	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	645.8	17.1
0°-40°	1100.6	29.2
0°-60°	2149.0	57.0
0°-90°	3379.2	89.7
90°-120°	368.0	9.8
90°-150°	387.2	10.3
90°-180°	390.0	10.3
0°-180°	3769.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	762	762	762	762	762	
5°	870	836	757	687	652	88
15°	1162	1019	731	528	441	335
25°	1464	1196	678	348	218	676
35°	1621	1289	595	169	53	1017
45°	1681	1277	488	39	0	1298
55°	1638	1196	352	0	0	1463
65°	1481	1059	210	0	0	1465
75°	1234	854	89	1	1	1295
85°	903	619	15	4	6	771
90°	783	497	4	6	7	429
95°	672	388	2	7	9	527
105°	462	201	2	5	8	488
115°	252	66	3	3	5	252
125°	75	9	4	3	4	75
135°	4	3	5	4	3	7
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	5	3	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	762.4	762.4	762.4	762.4	762.4	762.4	762.4	762.4	762.4	762.4	762.4
2.5°	826.5	825.5	822.6	817.7	810.9	799.3	789.6	780.8	769.2	759.5	741.0
5°	870.2	865.3	861.4	856.6	841.0	830.4	812.9	793.5	775.0	756.6	719.6
7.5°	940.1	932.3	926.5	912.9	891.5	867.3	840.1	821.6	809.0	757.5	694.4
10°	1014.9	1008.1	996.4	972.2	945.9	911.0	872.1	828.4	789.6	746.8	672.1
12.5°	1088.7	1079.0	1062.5	1031.4	994.5	950.8	897.4	845.9	790.5	740.0	645.8
15°	1162.5	1151.8	1134.3	1096.5	1047.9	990.6	925.5	860.5	795.4	731.3	618.6
17.5°	1243.1	1228.5	1202.3	1159.6	1098.4	1027.5	950.8	872.1	793.5	720.6	589.5
20°	1329.5	1309.2	1281.0	1223.7	1151.8	1068.3	976.0	883.8	792.5	708.0	556.5
22.5°	1401.4	1381.0	1349.9	1290.7	1204.3	1102.3	997.4	891.5	788.6	693.4	525.4
25°	1463.6	1447.1	1413.1	1345.1	1253.8	1138.2	1017.8	897.4	782.8	677.9	492.4
27.5°	1512.1	1496.6	1458.7	1388.8	1295.6	1170.3	1033.3	900.3	775.0	662.3	458.4
30°	1554.9	1539.3	1493.7	1421.8	1323.7	1195.5	1048.9	901.3	765.3	639.0	421.5
32.5°	1587.9	1573.3	1526.7	1450.0	1343.1	1213.0	1057.6	900.3	752.7	622.5	381.7
35°	1620.9	1606.3	1551.9	1470.4	1357.7	1220.8	1064.4	895.4	737.1	595.3	343.8
37.5°	1646.2	1629.6	1574.3	1484.0	1364.5	1222.7	1063.4	888.6	720.6	573.0	305.9
40°	1663.6	1646.2	1586.9	1491.7	1366.5	1219.8	1055.7	877.0	701.2	544.8	266.1
42.5°	1675.3	1655.9	1592.7	1503.4	1362.6	1212.0	1044.0	862.4	679.8	520.6	228.2
45°	1681.1	1660.7	1593.7	1493.7	1355.8	1197.5	1026.5	844.0	656.5	487.5	190.4
47.5°	1678.2	1655.9	1588.9	1483.0	1343.1	1181.9	1007.1	821.6	628.4	458.4	154.4
50°	1673.3	1650.0	1578.2	1469.4	1325.7	1162.5	985.8	794.4	599.2	422.5	122.4
52.5°	1657.8	1634.5	1566.5	1450.0	1305.3	1140.2	956.6	766.3	568.1	387.5	93.2
55°	1638.4	1617.0	1546.1	1432.5	1279.0	1113.0	929.4	736.2	538.0	351.6	67.0
57.5°	1608.3	1588.9	1520.9	1404.3	1252.8	1082.9	899.3	703.1	500.2	315.6	46.6
60°	1571.4	1551.9	1485.9	1372.3	1222.7	1048.9	866.3	669.1	466.2	279.7	29.1
62.5°	1532.5	1514.1	1445.1	1332.5	1184.8	1012.9	830.4	635.2	430.2	246.7	17.5
65°	1481.1	1463.6	1401.4	1284.9	1143.1	974.1	790.5	594.4	393.3	209.8	9.7
67.5°	1426.7	1411.1	1348.0	1241.2	1094.5	931.4	749.8	554.5	354.5	177.7	4.9
70°	1368.4	1349.0	1290.7	1181.9	1045.0	882.8	705.1	513.8	317.6	146.6	0.0
72.5°	1300.4	1285.8	1229.5	1126.6	987.7	831.3	659.4	469.1	276.8	116.5	1.0
75°	1234.4	1215.9	1164.4	1067.3	931.4	776.9	608.9	427.3	237.0	89.3	1.0
77.5°	1148.9	1143.1	1094.5	1000.3	877.9	724.5	553.6	376.8	199.1	64.1	1.0
80°	1063.4	1057.6	1019.7	933.3	815.8	662.3	502.1	329.2	162.2	42.7	1.0
82.5°	979.0	971.2	935.2	863.4	752.7	609.9	448.7	281.6	128.2	26.2	1.0
85°	903.2	893.5	854.6	788.6	687.6	550.7	393.3	235.0	95.2	14.6	1.9
87.5°	838.1	831.3	788.6	720.6	621.6	495.3	344.8	190.4	67.0	6.8	2.9
90°	782.8	768.2	730.3	658.5	559.4	434.1	293.3	152.5	44.7	3.9	3.9
92.5°	728.4	715.8	674.0	600.2	504.0	381.7	243.8	116.5	28.2	1.9	4.9
95°	672.1	658.5	617.7	549.7	447.7	328.3	200.1	85.5	15.5	1.9	4.9
97.5°	616.7	604.1	561.3	493.4	397.2	281.6	158.3	60.2	7.8	1.9	3.9
100°	565.2	550.7	511.8	443.8	346.7	235.0	122.4	38.8	4.9	1.9	3.9
102.5°	510.8	499.2	459.4	393.3	294.3	191.3	91.3	24.3	1.9	1.9	2.9
105°	462.3	447.7	408.9	340.9	250.6	150.5	64.1	14.6	1.9	1.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	301.1	289.4	255.4	198.1	127.2	59.2	17.5	2.9	2.9	2.9	2.9
115°	251.5	234.1	203.9	153.4	94.2	38.8	8.7	2.9	2.9	2.9	2.9
117.5°	201.0	186.5	165.1	116.5	62.2	25.3	4.9	2.9	2.9	2.9	2.9
120°	157.3	143.7	119.5	80.6	41.8	14.6	1.9	2.9	2.9	2.9	2.9
122.5°	112.7	102.0	80.6	52.4	25.3	6.8	2.9	2.9	3.9	3.9	2.9
125°	74.8	69.0	53.4	32.0	15.5	2.9	2.9	2.9	3.9	3.9	2.9
127.5°	48.6	43.7	31.1	18.5	6.8	2.9	2.9	3.9	3.9	3.9	2.9
130°	27.2	24.3	18.5	10.7	2.9	2.9	2.9	3.9	3.9	3.9	2.9
132.5°	15.5	14.6	9.7	1.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9
135°	3.9	1.9	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	3.9
137.5°	1.0	1.0	1.9	1.9	2.9	2.9	3.9	4.9	4.9	4.9	3.9
140°	1.0	1.0	1.9	2.9	2.9	2.9	3.9	4.9	4.9	4.9	3.9
142.5°	1.0	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	3.9	3.9
145°	1.0	1.9	1.9	2.9	2.9	3.9	3.9	4.9	3.9	3.9	3.9
147.5°	1.9	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	3.9	3.9
150°	1.0	1.9	1.9	2.9	3.9	3.9	3.9	4.9	3.9	3.9	3.9
152.5°	1.0	1.9	1.9	2.9	3.9	3.9	3.9	4.9	3.9	3.9	3.9
155°	1.9	1.9	1.9	2.9	3.9	3.9	3.9	4.9	3.9	3.9	4.9
157.5°	1.9	1.9	1.9	2.9	3.9	3.9	3.9	4.9	3.9	3.9	4.9
160°	1.9	1.9	1.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9	3.9
162.5°	1.9	1.9	1.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9	3.9
165°	1.9	1.9	1.9	1.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9
167.5°	1.9	1.9	1.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9
170°	1.9	1.9	1.9	2.9	2.9	2.9	3.9	4.9	4.9	4.9	4.9
172.5°	1.9	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	4.9	4.9
175°	1.9	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	4.9	4.9
177.5°	1.0	1.9	1.9	2.9	2.9	3.9	3.9	4.9	4.9	4.9	3.9
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-93-86-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	762.4	762.4	762.4
2.5°	725.5	711.9	708.0
5°	686.6	664.3	651.7
7.5°	647.8	617.7	603.1
10°	611.8	569.1	553.6
12.5°	569.1	519.6	495.3
15°	528.3	464.2	440.9
17.5°	482.7	410.8	383.6
20°	439.9	357.4	329.2
22.5°	391.4	305.0	273.9
25°	347.7	252.5	217.5
27.5°	299.1	199.1	169.0
30°	253.5	152.5	122.4
32.5°	209.8	111.7	84.5
35°	169.0	75.8	53.4
37.5°	130.1	46.6	27.2
40°	94.2	24.3	12.6
42.5°	63.1	11.7	6.8
45°	38.8	5.8	0.0
47.5°	22.3	0.0	0.0
50°	11.7	0.0	0.0
52.5°	4.9	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°	1.0	1.0	1.0
77.5°	1.0	1.9	2.9
80°	1.9	3.9	4.9
82.5°	3.9	4.9	4.9
85°	3.9	4.9	5.8
87.5°	4.9	5.8	6.8
90°	5.8	6.8	6.8
92.5°	5.8	7.8	7.8
95°	6.8	7.8	8.7
97.5°	7.8	8.7	8.7
100°	6.8	8.7	9.7
102.5°	5.8	8.7	8.7
105°	4.9	6.8	7.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.9	4.9	4.9
115°	2.9	3.9	4.9
117.5°	2.9	3.9	3.9
120°	2.9	2.9	3.9
122.5°	2.9	2.9	3.9
125°	2.9	2.9	3.9
127.5°	3.9	2.9	2.9
130°	2.9	2.9	2.9
132.5°	3.9	2.9	2.9
135°	3.9	2.9	2.9
137.5°	3.9	2.9	2.9
140°	3.9	2.9	2.9
142.5°	3.9	2.9	2.9
145°	2.9	2.9	2.9
147.5°	2.9	2.9	2.9
150°	2.9	2.9	1.9
152.5°	2.9	1.9	1.9
155°	2.9	1.9	1.0
157.5°	3.9	1.9	1.0
160°	2.9	1.9	1.0
162.5°	2.9	1.9	1.0
165°	2.9	1.9	0.0
167.5°	2.9	1.9	1.0
170°	2.9	1.9	1.0
172.5°	2.9	1.9	1.0
175°	2.9	1.0	1.0
177.5°	2.9	1.0	1.0
180°	2.9	2.9	2.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	407.9	396.2	357.4	293.3	204.9	114.6	42.7	7.8	1.9	2.9	2.9
110°	355.5	345.7	305.9	243.8	165.1	85.5	28.2	4.9	2.9	2.9	2.9





107.5°	3.9	5.8	6.8
110°	3.9	4.9	5.8



(END OF REPORT)