

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: ITL50382

Luminaire Tested: **FCCT5-254-120-80/86-EB1-FNL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: ITL50382
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCCT5-254-120-80/86-EB1-FNL
Description: FABRICATED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH, FORMED WHITE PAINTED METAL REFLECTOR, 1/4" CLEAR FLAT POLYCARBONATE LENS WITH 1/8" CLEAR ACRYLIC PRISMATIC OVERLAY IN FABRICATED WHITE PAINTED METAL DOOR FRAME.
Light Source: TWO 54-WATT T-5 SYLVANIA FP54/835/HO LINEAR FLUORESCENTS.
Ballast/Driver: ENERGY SAVINGS ES-2-T5-54-UNV-K

Summary

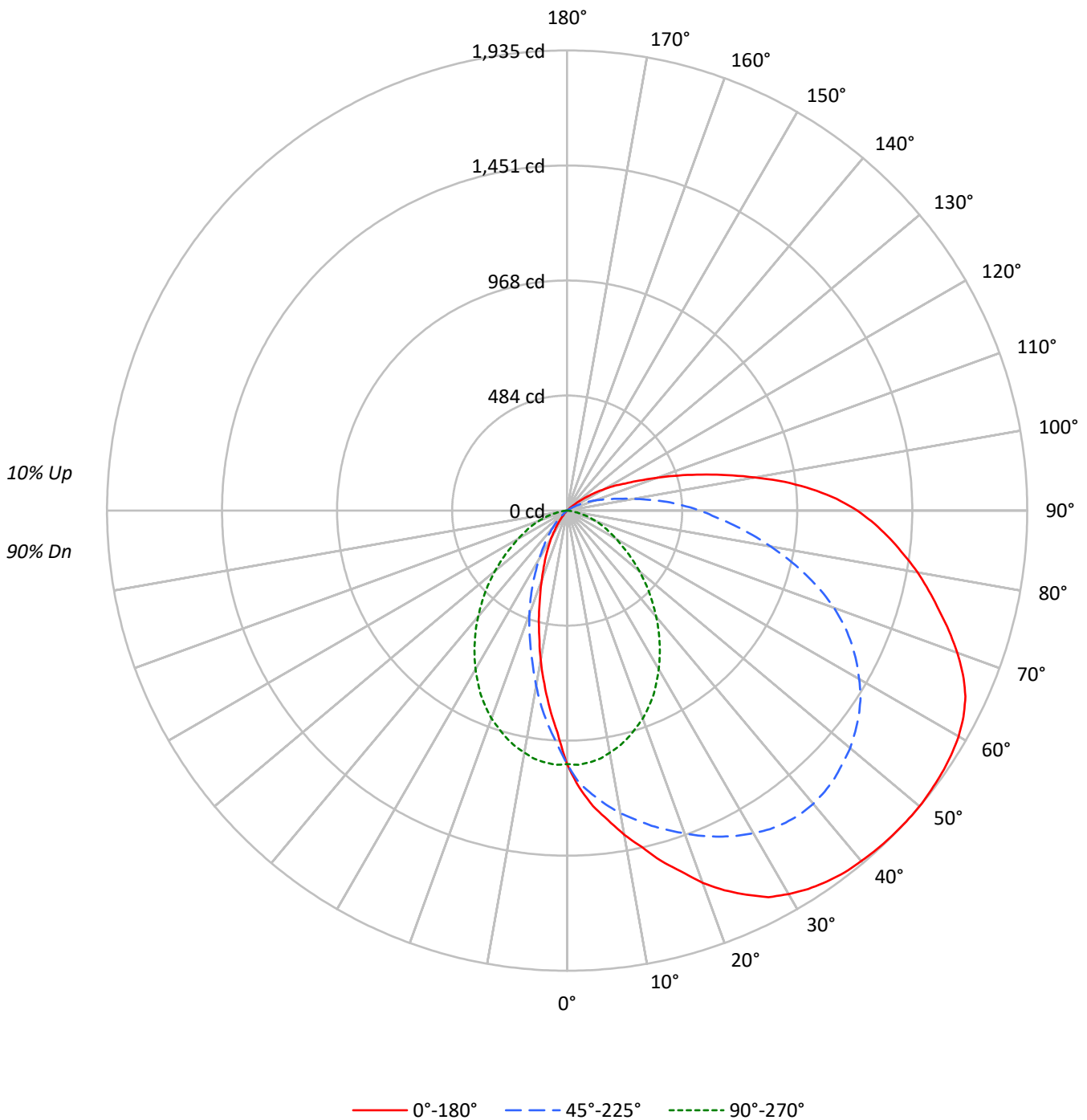
Lumens per Lamp: 5000 (2 lamps)
Luminaire Lumens: 4498.7 lumens
Efficiency: 45.0%
Efficacy: 41.2 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.1 / 1.49
Luminous Opening: Rectangular w/ Sides (W: 3.91' x L: 0.37' x H: 0.37')
CIE Type: Direct

Input Watts (W): 109.2
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	52	52	52	52	51	51	51	51	47	47	47	45	45	45	42	42	42	40				40
1	46	43	41	38	44	42	40	37	39	37	35	36	35	33	34	33	32	30				30
2	41	37	33	30	40	36	32	29	33	30	28	31	29	27	29	27	25	24				24
3	37	32	28	24	36	31	27	24	29	25	23	27	24	22	25	23	21	19				19
4	34	28	23	20	32	27	23	20	25	22	19	24	21	18	22	20	17	16				16
5	31	25	20	17	30	24	20	17	22	19	16	21	18	15	20	17	15	14				14
6	29	22	18	15	27	21	17	14	20	17	14	19	16	13	18	15	13	12				12
7	26	20	16	13	25	19	15	13	18	15	12	17	14	12	16	13	11	10				10
8	25	18	14	11	24	18	14	11	17	13	11	16	13	10	15	12	10	9				9
9	23	17	13	10	22	16	12	10	15	12	10	14	11	9	14	11	9	8				8
10	21	15	12	9	21	15	11	9	14	11	9	13	10	8	13	10	8	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7933	7933	7933
5°	8566	7875	5736
10°	8890	7685	4111
15°	9266	7431	2783
20°	9673	7120	1811
25°	9979	6740	1176
30°	10143	6274	735
35°	10173	5777	358
40°	10163	5238	100
45°	10171	4692	0
50°	10221	4131	0
55°	10280	3566	0
60°	10356	3057	0
65°	10348	2621	0
70°	10137	2176	0
75°	9837	1636	0
80°	9616	976	0
85°	9369	246	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	99.4	2.2	1.0	0°	1066	1066	1066	1066	1066	
10°-20°	278.8	6.2	2.8	5°	1247	1197	1063	907	835	123
20°-30°	427.9	9.5	4.3	15°	1525	1372	989	594	458	436
30°-40°	535.7	11.9	5.4	25°	1782	1513	857	340	210	825
40°-50°	597.2	13.3	6.0	35°	1904	1602	678	153	67	1195
50°-60°	620.7	13.8	6.2	45°	1933	1591	488	46	0	1496
60°-70°	595.4	13.2	6.0	55°	1924	1498	312	0	0	1724
70°-80°	508.5	11.3	5.1	65°	1848	1319	179	0	0	1824
80°-90°	386.6	8.6	3.9	75°	1619	1039	77	0	0	1714
90°-100°	253.8	5.6	2.5	85°	1364	704	6	0	0	1141
100°-110°	128.4	2.9	1.3	90°	1220	560	0	0	0	667
110°-120°	52.2	1.2	0.5	95°	1033	421	0	0	0	796
120°-130°	13.6	0.3	0.1	105°	585	186	0	0	0	627
130°-140°	0.7	0.0	0.0	115°	269	71	0	0	0	278
140°-150°	0.0	0.0	0.0	125°	99	0	0	0	0	94
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	8
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	806.1	17.9	8.1	165°	0	0	0	0	0	0
0°-40°	1341.7	29.8	13.4	175°	0	0	0	0	0	0
0°-60°	2559.5	56.9	25.6	180°	0	0	0	0	0	0
0°-90°	4050.0	90.0	40.5							
90°-120°	434.4	9.7	4.3							
90°-150°	448.7	10.0	4.5							
90°-180°	449.0	10.0	4.5							
0°-180°	4498.7	100.0	45.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1066	1066	1066	1066	1066	1066	1066	1066	1066
2.5°	1166	1150	1145	1110	1070	1027	981	957	934
5°	1247	1224	1197	1138	1063	984	907	859	835
7.5°	1312	1288	1247	1162	1053	937	830	765	735
10°	1384	1350	1292	1180	1034	881	748	673	640
12.5°	1449	1414	1331	1193	1014	826	667	582	541
15°	1525	1474	1372	1204	989	769	594	500	458
17.5°	1590	1534	1408	1209	959	707	527	425	379
20°	1666	1595	1445	1213	930	653	464	356	312
22.5°	1728	1655	1481	1215	895	595	401	293	257
25°	1782	1708	1513	1214	857	546	340	242	210
27.5°	1833	1755	1542	1209	814	493	285	193	170
30°	1862	1791	1567	1202	770	438	235	155	135
32.5°	1887	1815	1588	1189	725	384	191	118	96
35°	1904	1831	1602	1172	678	329	153	88	67
37.5°	1918	1841	1610	1150	631	280	121	59	40
40°	1924	1845	1610	1123	582	237	94	36	19
42.5°	1930	1848	1603	1095	534	200	68	19	9
45°	1933	1847	1591	1063	488	166	46	6	0
47.5°	1935	1844	1572	1025	442	138	27	0	0
50°	1935	1838	1554	983	397	114	15	0	0
52.5°	1930	1828	1527	936	353	91	5	0	0
55°	1924	1818	1498	889	312	70	0	0	0
57.5°	1915	1803	1463	831	271	49	0	0	0
60°	1901	1782	1418	779	239	32	0	0	0
62.5°	1879	1757	1371	725	206	18	0	0	0
65°	1848	1721	1319	667	179	9	0	0	0
67.5°	1802	1677	1261	606	153	2	0	0	0
70°	1746	1618	1194	546	126	0	0	0	0
72.5°	1684	1561	1119	487	101	0	0	0	0
75°	1619	1494	1039	432	77	0	0	0	0
77.5°	1558	1425	954	377	54	0	0	0	0
80°	1497	1356	868	326	35	0	0	0	0
82.5°	1429	1275	786	282	19	0	0	0	0
85°	1364	1199	704	240	6	0	0	0	0
87.5°	1295	1111	623	203	0	0	0	0	0
90°	1220	1032	560	167	0	0	0	0	0
92.5°	1134	921	486	132	0	0	0	0	0
95°	1033	818	421	106	0	0	0	0	0
97.5°	923	719	345	80	0	0	0	0	0
100°	801	621	284	56	0	0	0	0	0
102.5°	688	534	230	36	0	0	0	0	0
105°	585	451	186	20	0	0	0	0	0
107.5°	489	374	152	10	0	0	0	0	0
110°	404	311	124	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	329	251	100	0	0	0	0	0	0
115°	269	199	71	0	0	0	0	0	0
117.5°	226	154	49	0	0	0	0	0	0
120°	179	118	30	0	0	0	0	0	0
122.5°	138	84	15	0	0	0	0	0	0
125°	99	56	0	0	0	0	0	0	0
127.5°	67	35	0	0	0	0	0	0	0
130°	37	17	0	0	0	0	0	0	0
132.5°	19	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)