

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: 01282

Luminaire Tested: **FLPW-40**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 01282
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FLPW-40
Description: FORMED STEEL HOUSING, WHITE ENAMEL REFLECTOR, WHITE PLASTIC LENS.
Light Source: -
Ballast/Driver: MAGNETEK 412-L-SLH-TC-P

Summary

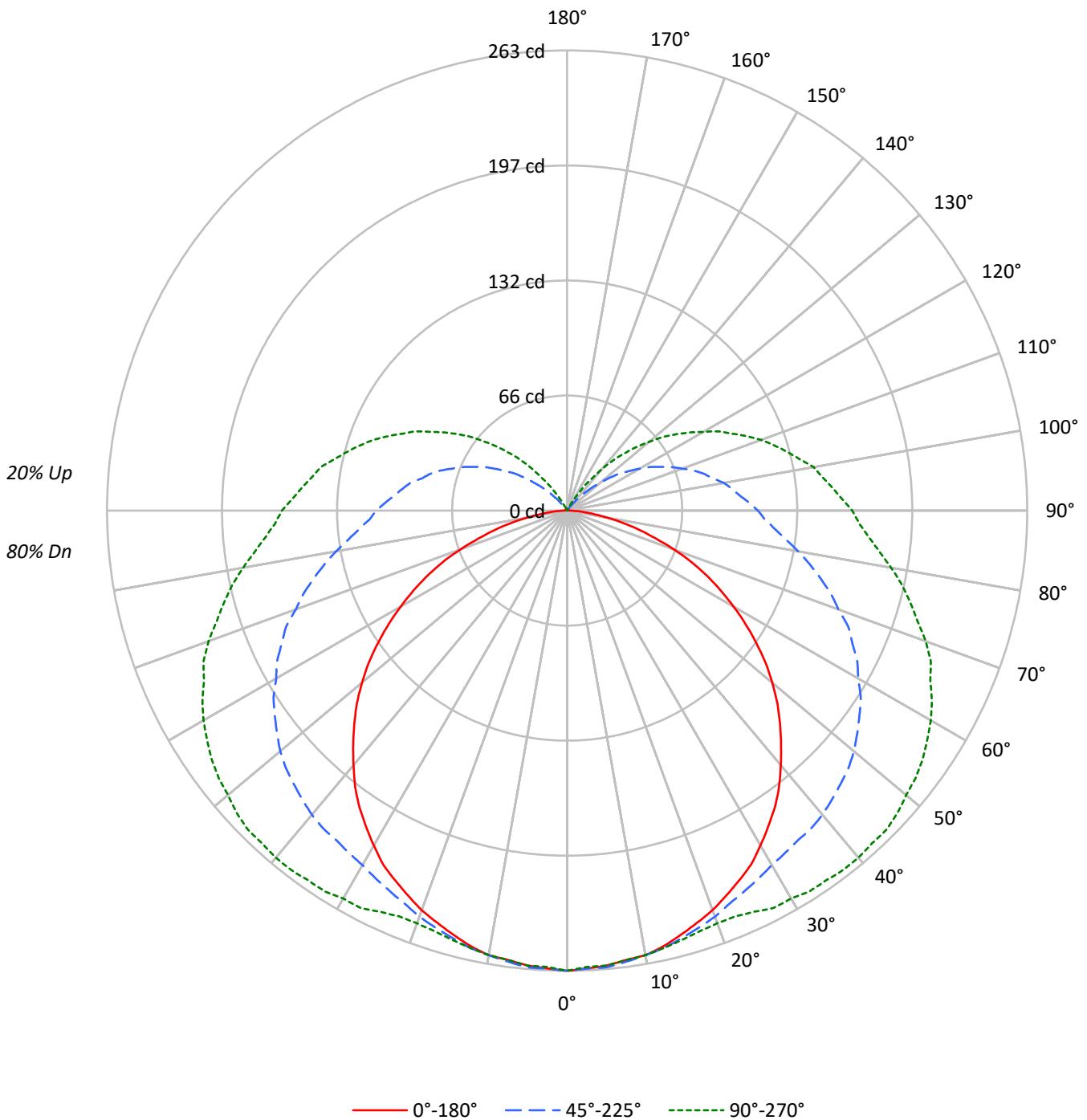
Lumens per Lamp: 3150 (1 lamp)
Luminaire Lumens: 1412.7 lumens
Efficiency: 44.8%
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.51 / 1.57
Luminous Opening: Rectangular w/ Sides (W: 0.46' x L: 4.19' x H: 0.34')
CIE Type: Semi-Direct

Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): 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										
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	50	30	10	0														
RCR																																						
0	51	51	51	51	49	49	49	49	45	45	45	41	41	41	38	38	38	36	36	36	36	36	36	36														
1	45	42	40	38	43	40	38	36	37	35	33	33	32	31	30	29	28	27	27	27	27	27	27	27														
2	40	36	32	29	38	34	31	28	31	28	26	28	26	24	26	24	22	21	21	21	21	21	21	21														
3	36	31	27	24	34	30	26	23	27	24	21	24	22	20	22	20	18	17	17	17	17	17	17	17														
4	33	27	23	19	31	26	22	19	24	20	18	21	19	16	19	17	15	14	14	14	14	14	14	14														
5	30	24	20	16	29	23	19	16	21	18	15	19	16	14	17	15	13	12	12	12	12	12	12	12														
6	28	21	17	14	26	20	17	14	19	15	13	17	14	12	16	13	11	10	10	10	10	10	10	10														
7	26	19	15	12	24	18	15	12	17	14	11	16	13	10	14	12	10	9	9	9	9	9	9	9														
8	24	17	13	11	23	17	13	10	15	12	10	14	11	9	13	11	9	8	8	8	8	8	8	8														
9	22	16	12	10	21	15	12	9	14	11	9	13	10	8	12	10	8	7	7	7	7	7	7	7														
10	21	15	11	9	20	14	11	8	13	10	8	12	9	7	11	9	7	6	6	6	6	6	6	6														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1469	1469	1469
5°	1453	1398	1374
10°	1442	1327	1294
15°	1420	1266	1226
20°	1403	1212	1175
25°	1383	1164	1159
30°	1361	1130	1157
35°	1335	1115	1159
40°	1297	1113	1165
45°	1256	1105	1172
50°	1212	1099	1169
55°	1152	1086	1175
60°	1077	1070	1176
65°	991	1060	1171
70°	868	1039	1175
75°	712	1023	1165
80°	507	1005	1165
85°	299	999	1173



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	24.9	1.8	0.8	0°	263	263	263	263	263	
10°-20°	71.5	5.1	2.3	5°	261	262	262	261	261	25
20°-30°	111.8	7.9	3.6	15°	251	252	253	254	254	71
30°-40°	145.2	10.3	4.6	25°	233	235	240	248	253	107
40°-50°	167.8	11.9	5.3	35°	207	212	230	252	258	129
50°-60°	176.2	12.5	5.6	45°	172	184	221	248	258	133
60°-70°	169.3	12.0	5.4	55°	132	157	204	237	248	118
70°-80°	146.8	10.4	4.7	65°	88	127	180	217	229	87
80°-90°	118.3	8.4	3.8	75°	43	93	150	189	203	46
90°-100°	97.4	6.9	3.1	85°	9	61	119	159	173	10
100°-110°	76.9	5.4	2.4	90°	2	51	109	149	163	1
110°-120°	54.2	3.8	1.7	95°	1	43	99	138	152	1
120°-130°	32.6	2.3	1.0	105°	1	27	81	117	130	1
130°-140°	15.2	1.1	0.5	115°	1	13	59	93	104	1
140°-150°	3.9	0.3	0.1	125°	1	3	37	66	76	1
150°-160°	0.4	0.0	0.0	135°	1	1	15	38	46	1
160°-170°	0.2	0.0	0.0	145°	1	1	1	11	17	1
170°-180°	0.1	0.0	0.0	155°	1	1	1	0	0	0
0°-30°	208.2	14.7	6.6	165°	1	1	1	0	0	0
0°-40°	353.5	25.0	11.2	175°	1	1	1	0	0	0
0°-60°	697.5	49.4	22.1	180°	1	1	1	1	1	
0°-90°	1131.9	80.1	35.9							
90°-120°	228.5	16.2	7.3							
90°-150°	280.2	19.8	8.9							
90°-180°	281.0	19.9	8.9							
0°-180°	1412.7	100.0	44.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	263	263	263	263	263
2.5°	262	263	262	262	261
5°	261	262	262	261	261
7.5°	259	261	260	260	259
10°	258	259	258	258	258
12.5°	255	256	256	256	256
15°	251	252	253	254	254
17.5°	247	249	250	252	252
20°	243	245	247	250	251
22.5°	238	240	243	249	251
25°	233	235	240	248	253
27.5°	228	231	237	250	256
30°	221	224	234	251	256
32.5°	214	218	232	251	258
35°	207	212	230	252	258
37.5°	199	205	229	252	259
40°	190	198	227	251	259
42.5°	181	191	224	250	258
45°	172	184	221	248	258
47.5°	163	178	218	247	256
50°	153	171	214	243	253
52.5°	143	164	209	240	251
55°	132	157	204	237	248
57.5°	121	150	199	232	244
60°	110	143	192	228	240
62.5°	99	135	187	223	235
65°	88	127	180	217	229
67.5°	77	120	174	212	225
70°	65	111	165	204	218
72.5°	53	102	158	197	210
75°	43	93	150	189	203
77.5°	33	85	142	181	196
80°	23	77	134	174	188
82.5°	15	69	126	166	180
85°	9	61	119	159	173
87.5°	4	55	113	153	167
90°	2	51	109	149	163
92.5°	1	46	104	143	157
95°	1	43	99	138	152
97.5°	1	38	95	133	147
100°	1	35	91	129	143
102.5°	1	31	85	123	136
105°	1	27	81	117	130
107.5°	1	23	76	112	124
110°	1	20	70	105	118



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1	16	65	99	111
115°	1	13	59	93	104
117.5°	1	10	54	87	98
120°	1	7	48	80	90
122.5°	1	5	42	73	83
125°	1	3	37	66	76
127.5°	1	2	31	59	69
130°	1	1	25	52	61
132.5°	1	1	20	45	54
135°	1	1	15	38	46
137.5°	1	1	10	31	39
140°	1	1	6	24	31
142.5°	1	1	3	18	23
145°	1	1	1	11	17
147.5°	1	1	1	6	10
150°	1	1	1	3	5
152.5°	1	1	1	0	1
155°	1	1	1	0	0
157.5°	1	1	1	0	0
160°	1	1	1	0	0
162.5°	1	1	1	0	0
165°	1	1	1	0	0
167.5°	1	1	1	0	0
170°	1	1	1	0	0
172.5°	1	1	1	0	0
175°	1	1	1	0	0
177.5°	1	1	1	0	0
180°	1	1	1	1	1

(END OF REPORT)