

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: 6026

Luminaire Tested: **FMCCR-240-80**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6026
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMCCR-240-80
Description: FAIL-SAFE
Light Source: F40T12 3200 LUMENS
Ballast/Driver: -

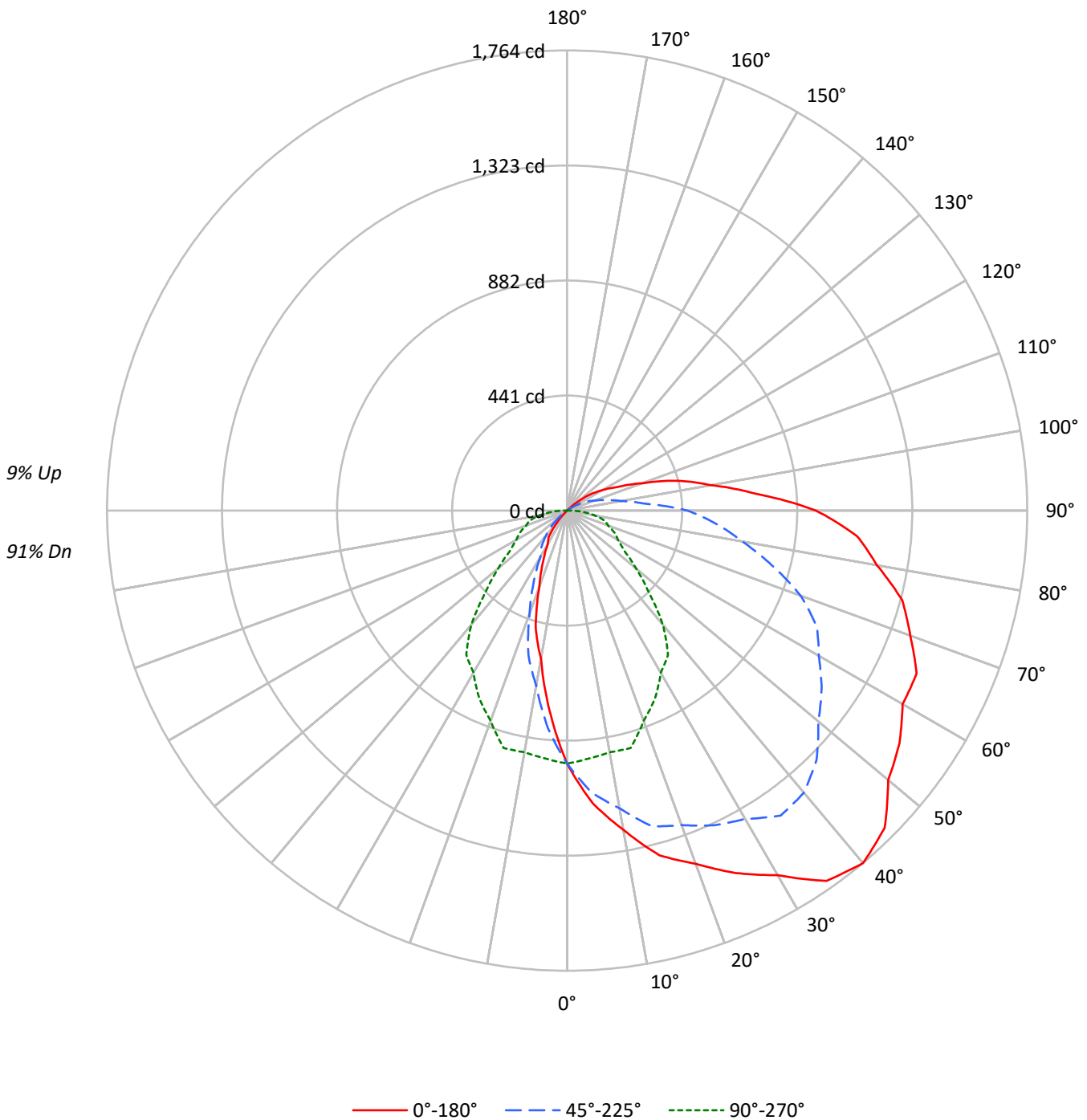
Summary

Lumens per Lamp: 3200 (2 lamps)
Luminaire Lumens: 4221.4 lumens
Efficiency: 66.0%
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 1.12 / 1.45
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.75' x H: 0.75')
CIE Type: Direct

Input Watts (W): 83
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				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	0
RCR																				
0	77	77	77	77	75	75	75	75	70	70	70		66	66	66		62	62	62	60
1	69	65	61	58	66	63	59	57	59	56	54		55	53	51		52	50	49	47
2	62	56	51	46	60	54	49	45	51	47	43		48	44	42		45	42	40	38
3	56	49	43	38	54	47	42	37	44	40	36		42	38	35		39	36	33	32
4	51	43	37	32	49	42	36	32	39	34	31		37	33	30		35	31	29	27
5	47	38	32	28	45	37	32	27	35	30	26		33	29	26		32	28	25	23
6	44	35	29	24	42	34	28	24	32	27	23		30	26	22		29	25	22	20
7	41	31	25	21	39	31	25	21	29	24	20		28	23	20		26	22	19	18
8	38	29	23	19	36	28	23	19	27	22	18		25	21	18		24	20	17	16
9	35	26	21	17	34	26	20	17	24	20	16		23	19	16		22	19	16	14
10	33	24	19	15	32	24	19	15	23	18	15		22	18	15		21	17	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3480	3480	3480
5°	3729	3381	2550
10°	3850	3319	1787
15°	4008	3332	1362
20°	4034	3067	871
25°	4139	2898	591
30°	4239	2684	389
35°	4465	2610	317
40°	4493	2311	153
45°	4366	1889	25
50°	4093	1569	0
55°	4006	1308	0
60°	3900	1219	0
65°	3990	1211	0
70°	3919	1156	0
75°	3896	1215	0
80°	3735	1081	0
85°	3693	838	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	90.1	2.1	1.4	0°	970	970	970	970	970	
10°-20°	256.0	6.1	4.0	5°	1126	1085	954	838	770	110
20°-30°	769.8	18.2	12.0	15°	1368	1253	942	574	465	386
30°-40°	491.0	11.6	7.7	25°	1533	1331	796	303	219	710
40°-50°	525.8	12.5	8.2	35°	1733	1427	674	173	123	1076
50°-60°	508.0	12.0	7.9	45°	1721	1352	442	85	10	1318
60°-70°	482.7	11.4	7.5	55°	1555	1191	265	9	0	1390
70°-80°	418.9	9.9	6.5	65°	1478	1057	200	0	0	1449
80°-90°	319.8	7.6	5.0	75°	1330	813	149	0	0	1392
90°-100°	195.5	4.6	3.1	85°	1115	572	64	0	0	925
100°-110°	101.7	2.4	1.6	90°	954	461	13	0	0	514
110°-120°	45.4	1.1	0.7	95°	729	300	0	0	0	573
120°-130°	15.3	0.4	0.2	105°	441	155	0	0	0	463
130°-140°	1.5	0.0	0.0	115°	214	79	0	0	0	222
140°-150°	0.0	0.0	0.0	125°	107	1	0	0	0	96
150°-160°	0.0	0.0	0.0	135°	5	0	0	0	0	12
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°	1115.8	26.4	17.4	165°	0	0	0	0	0	0
0°-40°	1606.9	38.1	25.1	175°	0	0	0	0	0	0
0°-60°	2640.7	62.6	41.3	180°	0	0	0	0	0	0
0°-90°	3862.1	91.5	60.3							
90°-120°	342.5	8.1	5.4							
90°-150°	359.2	8.5	5.6							
90°-180°	359.0	8.5	5.6							
0°-180°	4221.4	100.0	66.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	970	970	970	970	970	970	970	970	970
5°	1126	1107	1085	1026	954	890	838	781	770
10°	1243	1210	1159	1073	941	795	681	605	577
15°	1368	1334	1253	1123	942	728	574	487	465
20°	1441	1404	1283	1112	858	596	421	338	311
25°	1533	14893	1331	1103	796	487	303	239	219
30°	1614	1567	1365	1070	718	354	204	167	148
35°	1733	1661	1427	1079	674	287	173	136	123
40°	1764	1683	1412	1004	571	190	127	79	60
45°	1721	1655	1352	899	442	134	85	16	10
50°	1607	1537	1257	783	344	123	42	9	0
55°	1555	1492	1191	691	265	107	9	0	0
60°	1485	1412	1114	600	225	75	9	0	0
65°	1478	1384	1057	513	200	28	0	0	0
70°	1400	1312	952	417	167	8	0	0	0
75°	1330	1220	813	348	149	0	0	0	0
80°	1206	1068	681	274	108	0	0	0	0
85°	1115	939	572	228	64	0	0	0	0
90°	954	796	461	182	13	0	0	0	0
95°	729	600	300	125	0	0	0	0	0
100°	560	449	210	83	0	0	0	0	0
105°	441	347	155	49	0	0	0	0	0
110°	306	239	112	0	0	0	0	0	0
115°	214	170	79	0	0	0	0	0	0
120°	158	120	42	0	0	0	0	0	0
125°	107	71	1	0	0	0	0	0	0
130°	52	20	0	0	0	0	0	0	0
135°	5	4	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)