

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: P233042

Luminaire Tested: **FCB-12-4-LD4-35-35-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-12-4-LD4-35-35-UNV-EDD1-WDA6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

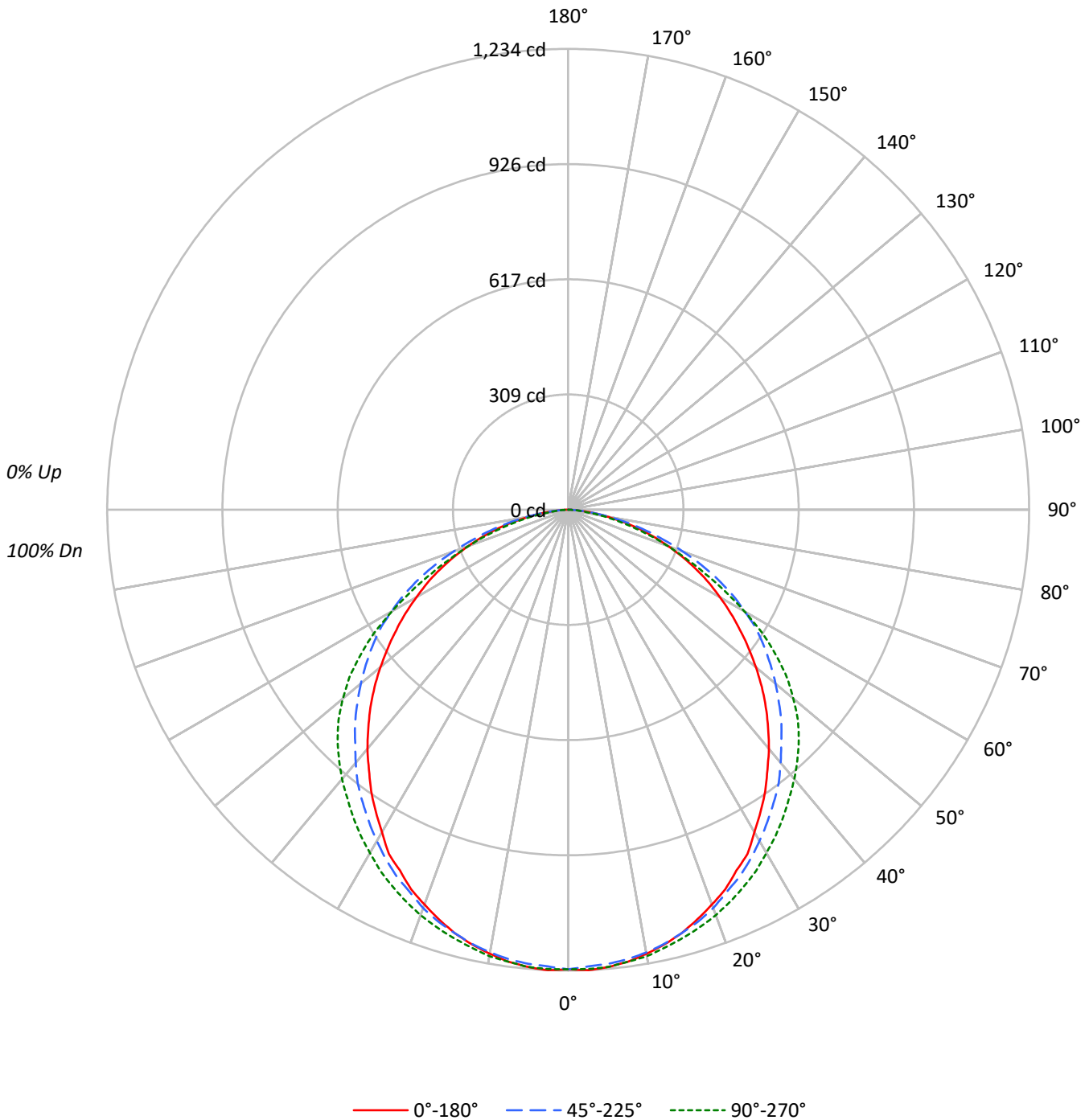
Lumens per Lamp: N/A
Luminaire Lumens: 3411.0 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
Input Voltage (V): 120
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3312	3312	3312
5°	3321	3298	3321
10°	3299	3290	3318
15°	3270	3270	3307
20°	3222	3251	3308
25°	3165	3220	3305
30°	3099	3182	3297
35°	3022	3149	3298
40°	2936	3107	3308
45°	2848	3072	3322
50°	2745	3034	3295
55°	2635	3006	3187
60°	2525	2941	2932
65°	2409	2816	2570
70°	2236	2567	2223
75°	2028	2237	1836
80°	1616	1771	1354
85°	1142	988	778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.4
10°-20°	332.7	9.8
20°-30°	501.7	14.7
30°-40°	601.3	17.6
40°-50°	624.0	18.3
50°-60°	562.8	16.5
60°-70°	410.6	12.0
70°-80°	215.4	6.3
80°-90°	46.0	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	950.9	27.9
0°-40°	1552.2	45.5
0°-60°	2739.0	80.3
0°-90°	3411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1229	1226	1221	1229	1229	117
15°	1174	1174	1174	1187	1187	331
25°	1066	1071	1085	1108	1113	492
35°	920	930	958	994	1004	575
45°	748	763	807	856	873	577
55°	562	582	641	683	679	503
65°	378	400	442	425	404	374
75°	195	222	215	187	177	205
85°	37	45	32	27	25	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.9	1230.9	1230.9	1230.9	1230.9
2.5°	1234.3	1230.9	1224.2	1230.9	1230.9
5°	1229.3	1225.9	1220.8	1229.3	1229.3
7.5°	1220.8	1217.5	1214.1	1222.5	1220.8
10°	1207.4	1205.7	1204.0	1214.1	1214.1
12.5°	1192.3	1192.3	1190.6	1202.3	1200.7
15°	1173.8	1173.8	1173.8	1187.2	1187.2
17.5°	1150.2	1153.6	1156.9	1172.1	1172.1
20°	1125.0	1128.4	1135.1	1153.6	1155.3
22.5°	1099.8	1101.4	1108.2	1130.0	1135.1
25°	1066.1	1071.2	1084.6	1108.2	1113.2
27.5°	1039.2	1040.9	1056.0	1083.0	1089.7
30°	997.2	1009.0	1024.1	1054.4	1061.1
32.5°	958.5	968.6	992.1	1024.1	1034.2
35°	919.8	929.9	958.5	993.8	1003.9
37.5°	876.1	891.2	924.9	960.2	972.0
40°	835.8	849.2	884.5	928.2	941.7
42.5°	792.0	805.5	844.2	892.9	908.1
45°	748.3	763.4	807.2	855.9	872.8
47.5°	702.9	719.7	765.1	818.9	834.1
50°	655.8	674.3	724.8	780.3	787.0
52.5°	608.7	628.9	682.7	731.5	738.2
55°	561.7	581.8	640.7	682.7	679.4
57.5°	516.3	538.1	598.7	620.5	617.1
60°	469.2	492.7	546.5	556.6	544.8
62.5°	425.4	447.3	497.8	489.3	474.2
65°	378.4	400.2	442.3	425.4	403.6
67.5°	331.3	358.2	385.1	356.5	339.7
70°	284.2	314.5	326.2	297.6	282.5
72.5°	238.8	270.7	267.4	238.8	228.7
75°	195.1	222.0	215.2	186.7	176.6
77.5°	148.0	178.2	163.1	139.6	131.2
80°	104.3	131.2	114.3	94.2	87.4
82.5°	68.9	87.4	70.6	55.5	50.4
85°	37.0	45.4	32.0	26.9	25.2
87.5°	15.1	13.5	11.8	11.8	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)