

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: P233065

Luminaire Tested: **FCB-12-4-LD4-35-30-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233065
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-LD4-35-30-UNV-EDD1-WDA12
Description: FAILSAFE 1X4 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

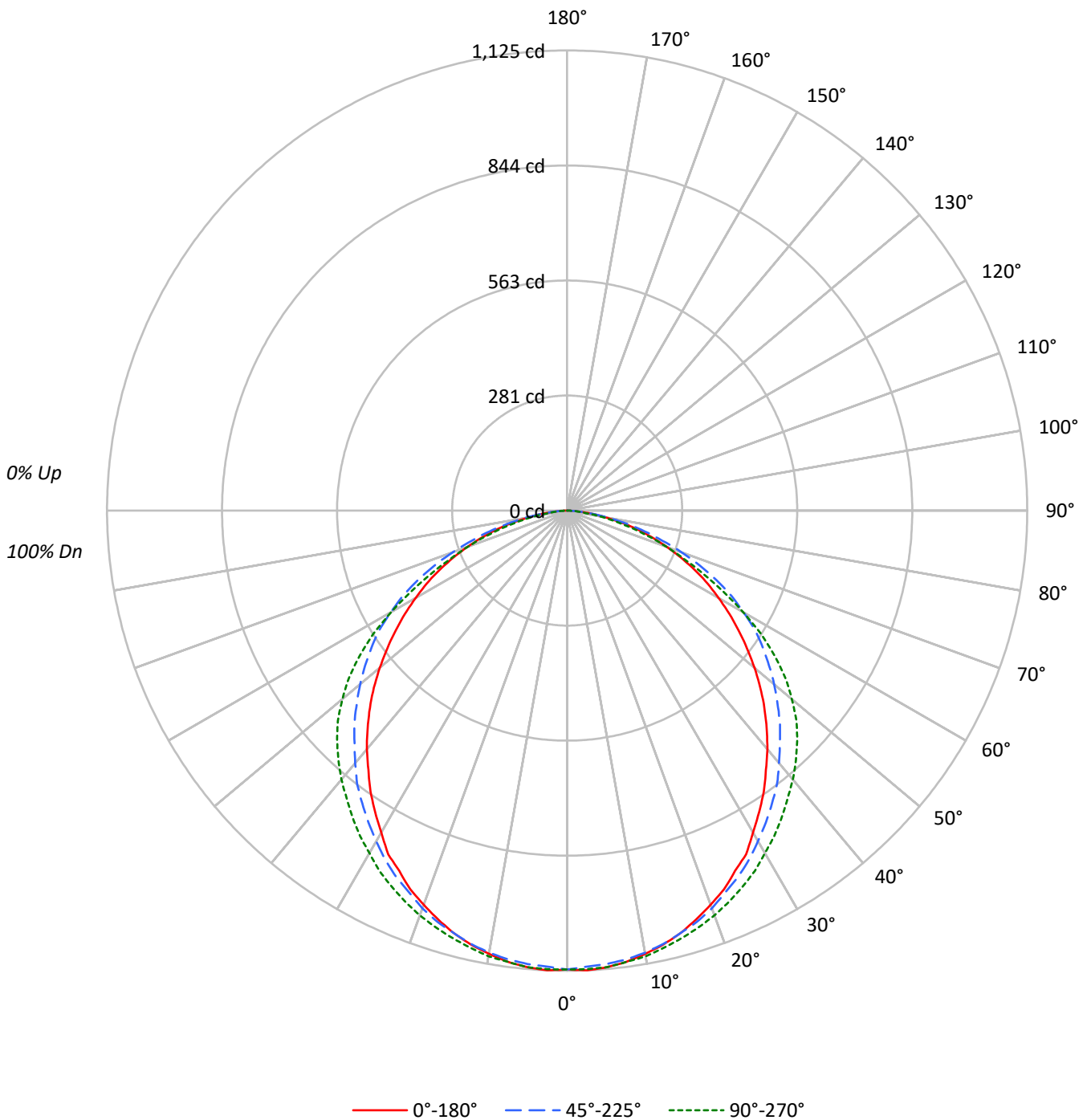
Lumens per Lamp: N/A
Luminaire Lumens: 3109.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P233065

CATALOG NUMBER: FCB-12-4-LD4-35-30-UNV-EDD1-WDA12

Luminous Intensity Polar Plot





TEST NUMBER: P233065

CATALOG NUMBER: FCB-12-4-LD4-35-30-UNV-EDD1-WDA12

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°	3019	3019	3019
5°	3026	3006	3026
10°	3007	2999	3024
15°	2980	2980	3015
20°	2936	2963	3015
25°	2885	2935	3013
30°	2824	2900	3005
35°	2754	2870	3006
40°	2676	2832	3015
45°	2596	2800	3027
50°	2503	2766	3003
55°	2402	2740	2905
60°	2301	2681	2673
65°	2196	2567	2343
70°	2038	2339	2026
75°	1849	2040	1673
80°	1472	1615	1235
85°	1041	898	710



TEST NUMBER: P233065

CATALOG NUMBER: FCB-12-4-LD4-35-30-UNV-EDD1-WDA12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	3.4
10°-20°	303.3	9.8
20°-30°	457.2	14.7
30°-40°	548.1	17.6
40°-50°	568.8	18.3
50°-60°	513.0	16.5
60°-70°	374.2	12.0
70°-80°	196.3	6.3
80°-90°	41.9	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°	866.7	27.9
0°-40°	1414.7	45.5
0°-60°	2496.5	80.3
0°-90°	3109.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3109.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1122	1122	1122	1122	1122	
5°	1120	1117	1113	1120	1120	106
15°	1070	1070	1070	1082	1082	301
25°	972	976	989	1010	1015	448
35°	838	848	874	906	915	524
45°	682	696	736	780	796	526
55°	512	530	584	622	619	458
65°	345	365	403	388	368	341
75°	178	202	196	170	161	186
85°	34	41	29	24	23	43
90°	0	0	0	0	0	



TEST NUMBER: P233065

CATALOG NUMBER: FCB-12-4-LD4-35-30-UNV-EDD1-WDA12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.0	1122.0	1122.0	1122.0	1122.0
2.5°	1125.0	1122.0	1115.8	1122.0	1122.0
5°	1120.4	1117.4	1112.8	1120.4	1120.4
7.5°	1112.8	1109.7	1106.6	1114.3	1112.8
10°	1100.5	1099.0	1097.4	1106.6	1106.6
12.5°	1086.7	1086.7	1085.2	1095.9	1094.4
15°	1069.8	1069.8	1069.8	1082.1	1082.1
17.5°	1048.4	1051.4	1054.5	1068.3	1068.3
20°	1025.4	1028.5	1034.6	1051.4	1053.0
22.5°	1002.4	1003.9	1010.1	1030.0	1034.6
25°	971.7	976.3	988.6	1010.1	1014.7
27.5°	947.2	948.8	962.5	987.1	993.2
30°	908.9	919.6	933.4	961.0	967.1
32.5°	873.6	882.8	904.3	933.4	942.6
35°	838.4	847.6	873.6	905.8	915.0
37.5°	798.5	812.3	843.0	875.2	885.9
40°	761.8	774.0	806.2	846.1	858.3
42.5°	721.9	734.2	769.4	813.9	827.7
45°	682.1	695.9	735.7	780.2	795.5
47.5°	640.7	656.0	697.4	746.4	760.2
50°	597.8	614.6	660.6	711.2	717.3
52.5°	554.8	573.2	622.3	666.7	672.9
55°	511.9	530.3	584.0	622.3	619.2
57.5°	470.5	490.5	545.6	565.6	562.5
60°	427.6	449.1	498.1	507.3	496.6
62.5°	387.8	407.7	453.7	446.0	432.2
65°	344.9	364.8	403.1	387.8	367.9
67.5°	301.9	326.5	351.0	324.9	309.6
70°	259.0	286.6	297.3	271.3	257.5
72.5°	217.6	246.8	243.7	217.6	208.4
75°	177.8	202.3	196.2	170.1	160.9
77.5°	134.9	162.5	148.7	127.2	119.6
80°	95.0	119.6	104.2	85.8	79.7
82.5°	62.8	79.7	64.4	50.6	46.0
85°	33.7	41.4	29.1	24.5	23.0
87.5°	13.8	12.3	10.7	10.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)