

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: P233040

Luminaire Tested: **FCB-12-4-LD4-25-50-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233040
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-LD4-25-50-UNV-EDD1-WDA6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

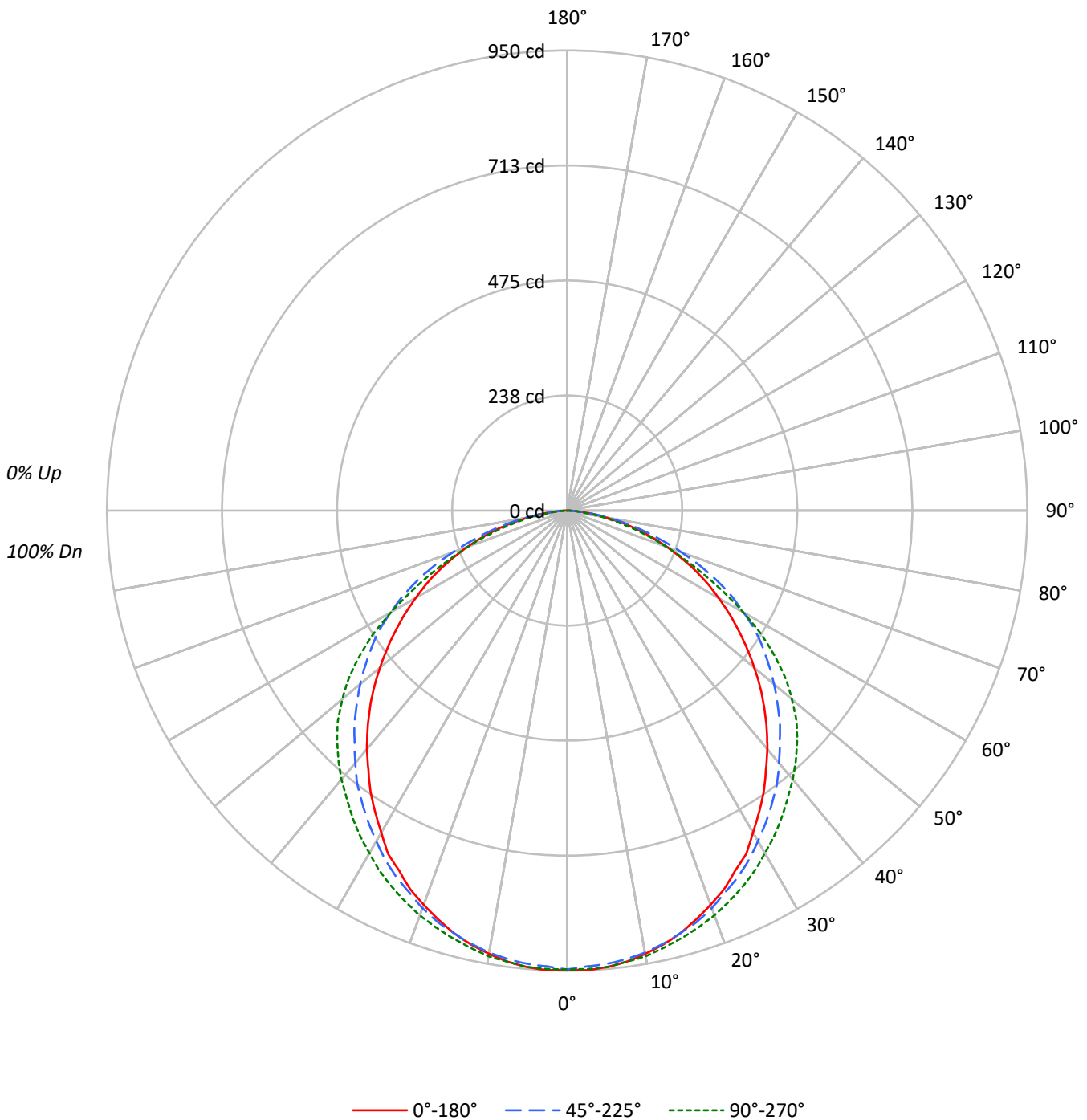
Lumens per Lamp: N/A
Luminaire Lumens: 2625.0 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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: P233040

CATALOG NUMBER: FCB-12-4-LD4-25-50-UNV-EDD1-WDA6

Luminous Intensity Polar Plot





TEST NUMBER: P233040

CATALOG NUMBER: FCB-12-4-LD4-25-50-UNV-EDD1-WDA6

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°	2549	2549	2549
5°	2555	2538	2555
10°	2539	2532	2553
15°	2517	2517	2545
20°	2479	2501	2546
25°	2436	2478	2544
30°	2385	2449	2537
35°	2326	2423	2538
40°	2259	2391	2546
45°	2192	2364	2556
50°	2113	2335	2535
55°	2028	2313	2453
60°	1943	2264	2257
65°	1854	2167	1978
70°	1721	1976	1710
75°	1561	1722	1413
80°	1243	1364	1043
85°	880	760	599



TEST NUMBER: P233040

CATALOG NUMBER: FCB-12-4-LD4-25-50-UNV-EDD1-WDA6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	3.4
10°-20°	256.1	9.8
20°-30°	386.1	14.7
30°-40°	462.8	17.6
40°-50°	480.2	18.3
50°-60°	433.2	16.5
60°-70°	316.0	12.0
70°-80°	165.8	6.3
80°-90°	35.4	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°	731.7	27.9
0°-40°	1194.5	45.5
0°-60°	2107.9	80.3
0°-90°	2625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	946	943	940	946	946	90
15°	903	903	903	914	914	254
25°	820	824	835	853	857	379
35°	708	716	738	765	773	442
45°	576	588	621	659	672	444
55°	432	448	493	525	523	387
65°	291	308	340	327	311	288
75°	150	171	166	144	136	157
85°	28	35	25	21	19	36
90°	0	0	0	0	0	



TEST NUMBER: P233040

CATALOG NUMBER: FCB-12-4-LD4-25-50-UNV-EDD1-WDA6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	947.3	947.3	947.3	947.3	947.3
2.5°	949.9	947.3	942.1	947.3	947.3
5°	946.0	943.4	939.5	946.0	946.0
7.5°	939.5	936.9	934.3	940.8	939.5
10°	929.2	927.9	926.6	934.3	934.3
12.5°	917.5	917.5	916.2	925.3	924.0
15°	903.3	903.3	903.3	913.6	913.6
17.5°	885.2	887.8	890.3	902.0	902.0
20°	865.8	868.3	873.5	887.8	889.1
22.5°	846.3	847.6	852.8	869.6	873.5
25°	820.5	824.3	834.7	852.8	856.7
27.5°	799.8	801.1	812.7	833.4	838.6
30°	767.4	776.5	788.1	811.4	816.6
32.5°	737.6	745.4	763.5	788.1	795.9
35°	707.9	715.6	737.6	764.8	772.6
37.5°	674.2	685.9	711.8	738.9	748.0
40°	643.2	653.5	680.7	714.3	724.7
42.5°	609.5	619.9	649.6	687.2	698.8
45°	575.9	587.5	621.2	658.7	671.6
47.5°	540.9	553.9	588.8	630.2	641.9
50°	504.7	518.9	557.8	600.5	605.6
52.5°	468.5	484.0	525.4	562.9	568.1
55°	432.2	447.8	493.1	525.4	522.8
57.5°	397.3	414.1	460.7	477.5	474.9
60°	361.1	379.2	420.6	428.4	419.3
62.5°	327.4	344.2	383.1	376.6	364.9
65°	291.2	308.0	340.4	327.4	310.6
67.5°	254.9	275.6	296.4	274.4	261.4
70°	218.7	242.0	251.1	229.1	217.4
72.5°	183.8	208.4	205.8	183.8	176.0
75°	150.1	170.8	165.6	143.6	135.9
77.5°	113.9	137.2	125.5	107.4	100.9
80°	80.2	100.9	88.0	72.5	67.3
82.5°	53.1	67.3	54.4	42.7	38.8
85°	28.5	34.9	24.6	20.7	19.4
87.5°	11.6	10.4	9.1	9.1	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)