

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: P233099

Luminaire Tested: **FCB-24-2-LD4-24-40-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-24-2-LD4-24-40-UNV-EDD1-WDA6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

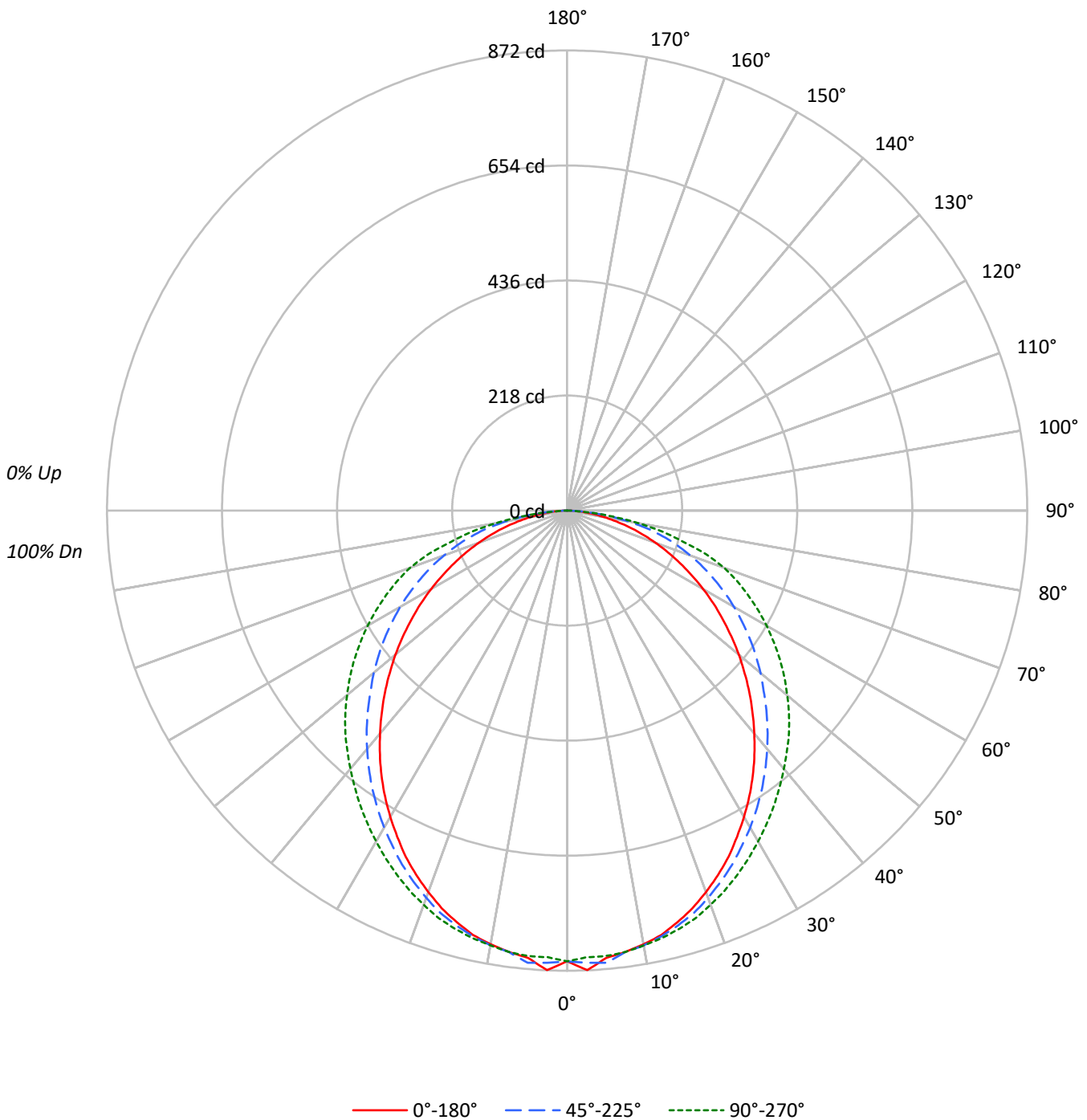
Lumens per Lamp: N/A
Luminaire Lumens: 2393.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2298	2298	2298
5°	2298	2323	2289
10°	2280	2286	2286
15°	2250	2266	2286
20°	2203	2236	2276
25°	2149	2197	2263
30°	2083	2155	2249
35°	2015	2114	2244
40°	1938	2073	2244
45°	1860	2033	2263
50°	1778	2002	2280
55°	1692	1982	2309
60°	1603	1967	2349
65°	1504	1956	2408
70°	1400	1950	2490
75°	1271	1948	2359
80°	1100	1804	2092
85°	936	1365	1331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	3.4
10°-20°	229.5	9.6
20°-30°	341.4	14.3
30°-40°	403.7	16.9
40°-50°	415.0	17.3
50°-60°	379.2	15.8
60°-70°	303.3	12.7
70°-80°	190.4	8.0
80°-90°	49.6	2.1
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°	651.8	27.2
0°-40°	1055.6	44.1
0°-60°	1849.7	77.3
0°-90°	2393.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2393.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	851	851	860	854	847	81
15°	808	809	813	818	820	227
25°	724	728	740	753	762	333
35°	613	621	644	668	683	383
45°	489	502	534	574	595	377
55°	361	378	422	469	492	323
65°	236	257	307	354	378	234
75°	122	146	187	215	227	130
85°	30	38	44	43	43	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	854.1	854.1	854.1	854.1	854.1
2.5°	871.6	868.1	857.6	850.7	847.2
5°	850.7	850.7	860.0	854.1	847.2
7.5°	843.7	843.7	843.7	861.1	843.7
10°	834.4	835.5	836.7	843.7	836.7
12.5°	823.9	823.9	826.2	828.5	829.7
15°	807.6	808.8	813.4	818.1	820.4
17.5°	790.1	793.6	799.4	805.3	809.9
20°	769.2	773.8	780.8	790.1	794.8
22.5°	747.1	751.7	761.0	771.5	779.7
25°	723.8	728.5	740.1	752.9	762.2
27.5°	697.0	702.9	716.8	734.3	743.6
30°	670.3	677.3	693.6	713.3	723.8
32.5°	642.4	650.5	669.1	691.2	704.0
35°	613.3	621.4	643.5	668.0	683.1
37.5°	583.0	592.3	616.8	644.7	661.0
40°	551.6	562.1	590.0	620.2	638.9
42.5°	520.2	531.8	562.1	598.1	616.8
45°	488.7	501.5	534.1	573.7	594.6
47.5°	456.2	471.3	505.0	549.3	570.2
50°	424.7	439.9	478.3	523.7	544.6
52.5°	392.2	409.6	450.3	496.9	519.0
55°	360.7	378.2	422.4	469.0	492.2
57.5°	329.3	346.8	393.3	441.0	464.3
60°	297.9	316.5	365.4	411.9	436.4
62.5°	266.5	286.3	336.3	384.0	407.3
65°	236.2	257.2	307.2	353.8	378.2
67.5°	207.1	229.2	278.1	323.5	347.9
70°	178.0	200.2	247.9	292.1	316.5
72.5°	150.1	172.2	218.8	258.3	277.0
75°	122.2	145.5	187.4	215.3	226.9
77.5°	95.4	118.7	154.8	173.4	186.2
80°	71.0	90.8	116.4	130.3	135.0
82.5°	48.9	65.2	81.5	84.9	87.3
85°	30.3	38.4	44.2	43.1	43.1
87.5°	14.0	15.1	12.8	9.3	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)