

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: P233124

Luminaire Tested: **FCB-24-2-LD4-24-50-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233124
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-LD4-24-50-UNV-EDD1-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

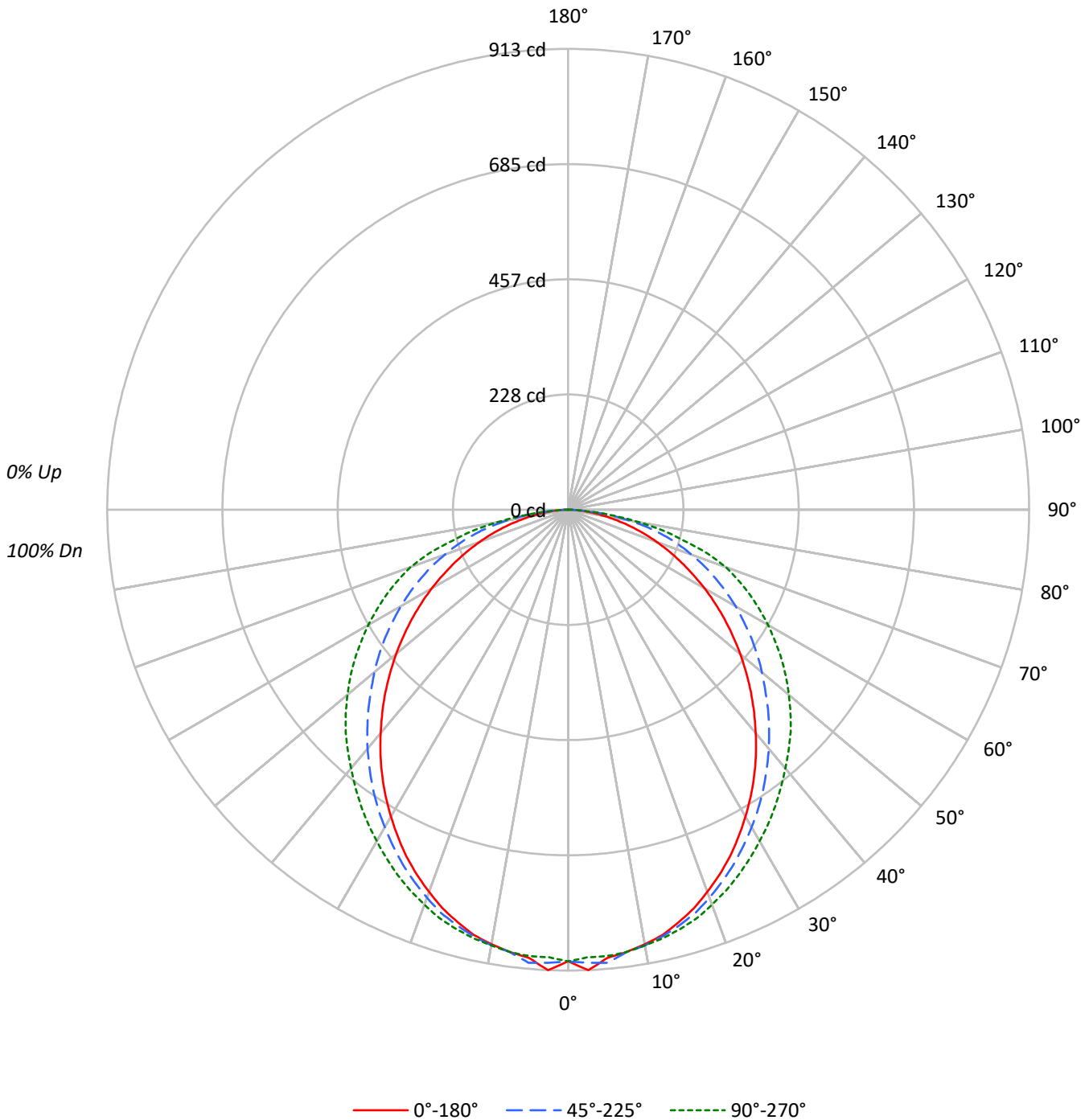
Lumens per Lamp: N/A
Luminaire Lumens: 2507.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2408	2408	2408
5°	2407	2434	2397
10°	2388	2395	2395
15°	2357	2374	2394
20°	2308	2342	2385
25°	2252	2302	2371
30°	2182	2258	2356
35°	2111	2215	2351
40°	2030	2171	2351
45°	1948	2130	2371
50°	1863	2098	2388
55°	1773	2076	2419
60°	1680	2060	2461
65°	1576	2049	2523
70°	1467	2043	2609
75°	1331	2041	2471
80°	1153	1889	2191
85°	979	1430	1392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	3.4
10°-20°	240.4	9.6
20°-30°	357.6	14.3
30°-40°	423.0	16.9
40°-50°	434.7	17.3
50°-60°	397.2	15.8
60°-70°	317.8	12.7
70°-80°	199.4	8.0
80°-90°	51.9	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°	682.9	27.2
0°-40°	1105.9	44.1
0°-60°	1937.8	77.3
0°-90°	2507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	891	891	901	895	888	85
15°	846	847	852	857	860	238
25°	758	763	775	789	798	349
35°	642	651	674	700	716	402
45°	512	525	560	601	623	395
55°	378	396	442	491	516	338
65°	248	269	322	371	396	246
75°	128	152	196	226	238	136
85°	32	40	46	45	45	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	894.8	894.8	894.8	894.8	894.8
2.5°	913.1	909.5	898.5	891.2	887.5
5°	891.2	891.2	900.9	894.8	887.5
7.5°	883.9	883.9	883.9	902.1	883.9
10°	874.1	875.3	876.5	883.9	876.5
12.5°	863.1	863.1	865.6	868.0	869.2
15°	846.1	847.3	852.2	857.0	859.5
17.5°	827.8	831.4	837.5	843.6	848.5
20°	805.8	810.7	818.0	827.8	832.7
22.5°	782.7	787.6	797.3	808.3	816.8
25°	758.3	763.2	775.4	788.8	798.5
27.5°	730.3	736.3	751.0	769.3	779.0
30°	702.2	709.5	726.6	747.3	758.3
32.5°	673.0	681.5	701.0	724.2	737.6
35°	642.5	651.0	674.2	699.8	715.6
37.5°	610.8	620.5	646.1	675.4	692.5
40°	577.9	588.8	618.1	649.8	669.3
42.5°	544.9	557.1	588.8	626.6	646.1
45°	512.0	525.4	559.6	601.0	623.0
47.5°	477.9	493.7	529.1	575.4	597.4
50°	445.0	460.8	501.1	548.6	570.5
52.5°	410.8	429.1	471.8	520.6	543.7
55°	377.9	396.2	442.5	491.3	515.7
57.5°	345.0	363.3	412.1	462.0	486.4
60°	312.1	331.6	382.8	431.6	457.2
62.5°	279.2	299.9	352.3	402.3	426.7
65°	247.5	269.4	321.8	370.6	396.2
67.5°	217.0	240.2	291.4	338.9	364.5
70°	186.5	209.7	259.7	306.0	331.6
72.5°	157.3	180.4	229.2	270.6	290.2
75°	128.0	152.4	196.3	225.5	237.7
77.5°	100.0	124.4	162.1	181.6	195.1
80°	74.4	95.1	121.9	136.5	141.4
82.5°	51.2	68.3	85.3	89.0	91.4
85°	31.7	40.2	46.3	45.1	45.1
87.5°	14.6	15.8	13.4	9.8	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)