

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: P233144

Luminaire Tested: **FCB-24-2-LD4-44-50-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233144
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-LD4-44-50-UNV-EDD1-WDP12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

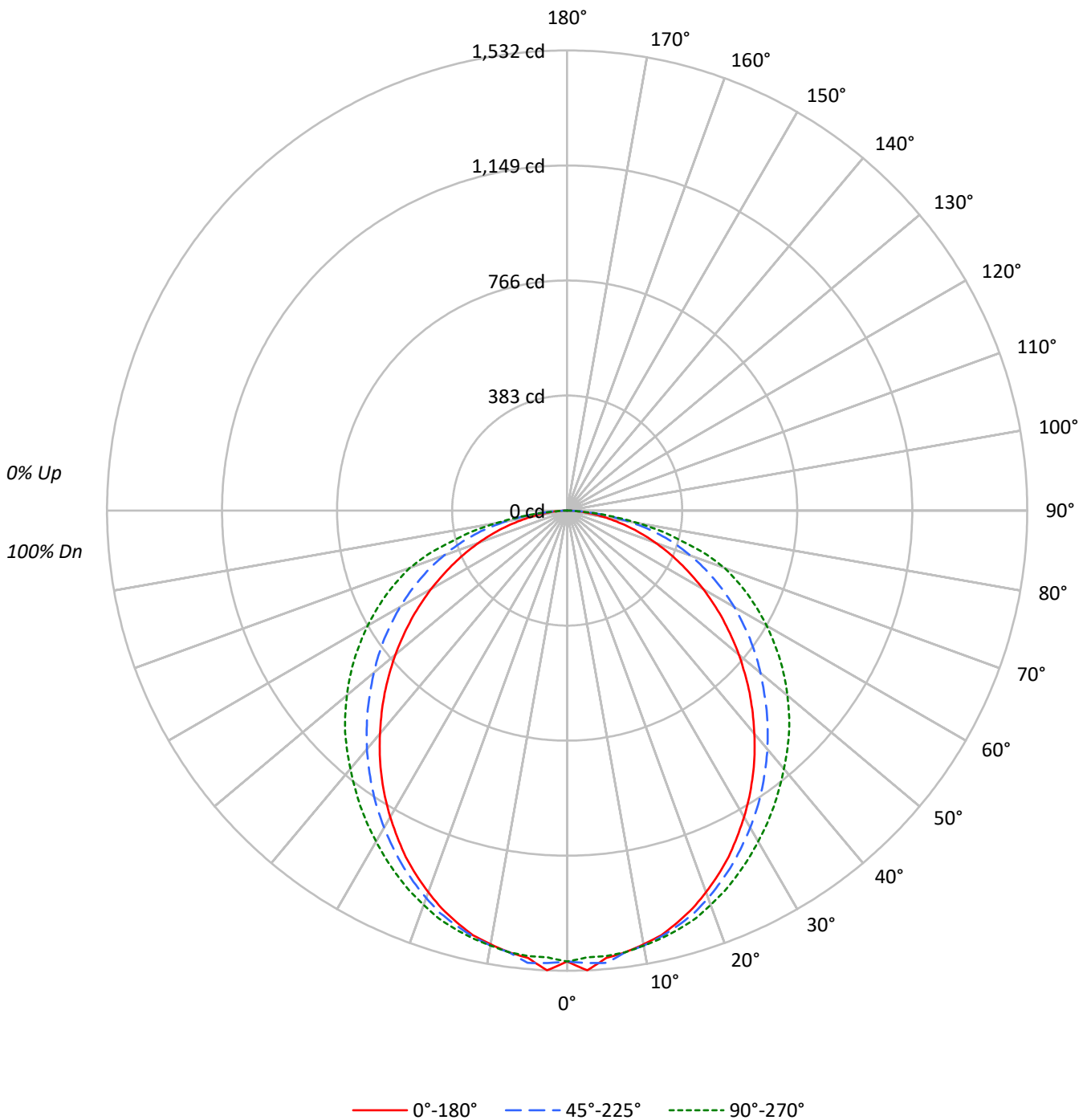
Lumens per Lamp: N/A
Luminaire Lumens: 4206.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	4040	4040	4040
5°	4039	4083	4022
10°	4007	4018	4018
15°	3955	3983	4017
20°	3872	3930	4001
25°	3777	3862	3978
30°	3661	3788	3953
35°	3541	3716	3944
40°	3406	3643	3945
45°	3269	3573	3978
50°	3125	3519	4007
55°	2974	3483	4059
60°	2818	3456	4128
65°	2644	3438	4232
70°	2462	3428	4377
75°	2233	3424	4146
80°	1934	3169	3677
85°	1643	2399	2337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.4	3.4
10°-20°	403.3	9.6
20°-30°	600.0	14.3
30°-40°	709.6	16.9
40°-50°	729.4	17.3
50°-60°	666.5	15.8
60°-70°	533.1	12.7
70°-80°	334.6	8.0
80°-90°	87.1	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°	1145.7	27.2
0°-40°	1855.3	44.1
0°-60°	3251.1	77.3
0°-90°	4206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4206.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1495	1495	1512	1501	1489	142
15°	1420	1422	1430	1438	1442	400
25°	1272	1280	1301	1323	1340	585
35°	1078	1092	1131	1174	1201	674
45°	859	882	939	1008	1045	662
55°	634	665	742	824	865	567
65°	415	452	540	622	665	412
75°	215	256	329	378	399	228
85°	53	68	78	76	76	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1501.3	1501.3	1501.3	1501.3	1501.3
2.5°	1531.9	1525.8	1507.4	1495.1	1489.0
5°	1495.1	1495.1	1511.5	1501.3	1489.0
7.5°	1482.9	1482.9	1482.9	1513.5	1482.9
10°	1466.5	1468.5	1470.6	1482.9	1470.6
12.5°	1448.1	1448.1	1452.2	1456.3	1458.3
15°	1419.5	1421.5	1429.7	1437.9	1441.9
17.5°	1388.8	1394.9	1405.1	1415.4	1423.5
20°	1352.0	1360.1	1372.4	1388.8	1397.0
22.5°	1313.1	1321.3	1337.6	1356.0	1370.4
25°	1272.2	1280.4	1300.8	1323.3	1339.7
27.5°	1225.1	1235.4	1259.9	1290.6	1307.0
30°	1178.1	1190.4	1219.0	1253.8	1272.2
32.5°	1129.0	1143.3	1176.1	1214.9	1237.4
35°	1077.9	1092.2	1131.1	1174.0	1200.6
37.5°	1024.7	1041.1	1084.0	1133.1	1161.7
40°	969.5	987.9	1037.0	1090.2	1122.9
42.5°	914.3	934.7	987.9	1051.3	1084.0
45°	859.0	881.5	938.8	1008.3	1045.2
47.5°	801.8	828.4	887.7	965.4	1002.2
50°	746.5	773.1	840.6	920.4	957.2
52.5°	689.3	720.0	791.5	873.4	912.2
55°	634.0	664.7	742.5	824.3	865.2
57.5°	578.8	609.5	691.3	775.2	816.1
60°	523.6	556.3	642.2	724.0	767.0
62.5°	468.4	503.1	591.1	675.0	715.9
65°	415.2	452.0	540.0	621.8	664.7
67.5°	364.1	402.9	488.8	568.6	611.5
70°	312.9	351.8	435.7	513.4	556.3
72.5°	263.8	302.7	384.5	454.1	486.8
75°	214.8	255.7	329.3	378.4	398.8
77.5°	167.7	208.6	272.0	304.8	327.3
80°	124.8	159.5	204.5	229.1	237.3
82.5°	85.9	114.5	143.2	149.3	153.4
85°	53.2	67.5	77.7	75.7	75.7
87.5°	24.5	26.6	22.5	16.4	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)