

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: P312265

Luminaire Tested: **14FCZ2-44-UNV-L83050-CA08-W2A-U-3000K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P312265
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L83050-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3927.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

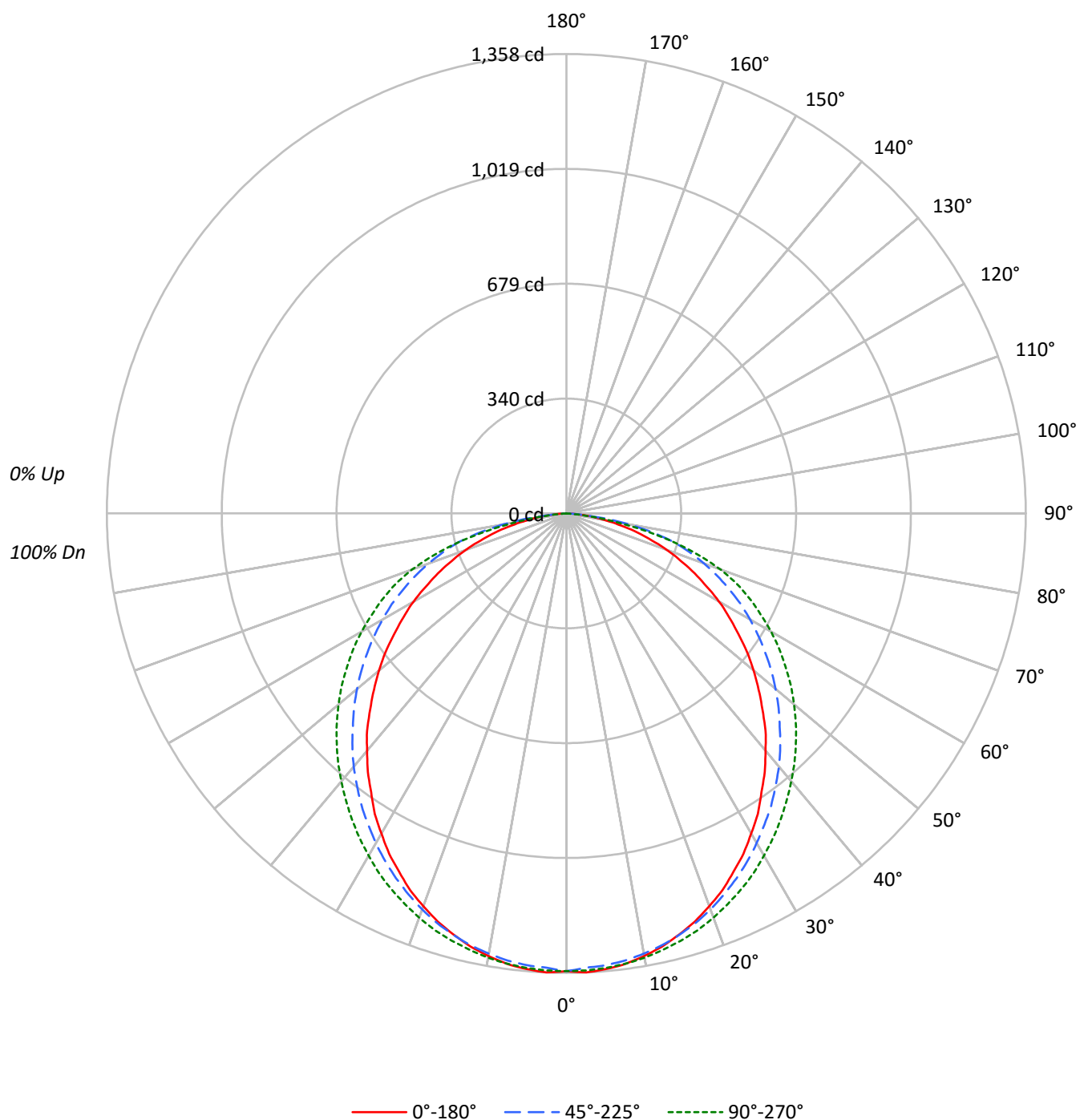
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3652	3621	3643
10°	3630	3610	3644
15°	3591	3593	3642
20°	3538	3568	3641
25°	3471	3533	3637
30°	3396	3496	3630
35°	3305	3466	3627
40°	3217	3433	3633
45°	3119	3396	3652
50°	3028	3380	3677
55°	2913	3369	3710
60°	2809	3374	3761
65°	2665	3384	3819
70°	2501	3410	3817
75°	2267	3441	3451
80°	1860	2972	2456
85°	1380	1405	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	3.3
10°-20°	365.7	9.3
20°-30°	550.9	14.0
30°-40°	661.1	16.8
40°-50°	689.0	17.5
50°-60°	637.9	16.2
60°-70°	515.4	13.1
70°-80°	314.2	8.0
80°-90°	64.9	1.7
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°	1044.6	26.6
0°-40°	1705.6	43.4
0°-60°	3032.5	77.2
0°-90°	3927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3927.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1353	1353	1353	1353	1353	
5°	1352	1348	1341	1350	1348	128
15°	1289	1290	1290	1307	1307	363
25°	1169	1176	1190	1220	1225	539
35°	1006	1022	1055	1094	1104	630
45°	820	844	892	942	960	633
55°	621	653	718	774	791	556
65°	419	460	532	585	600	414
75°	218	266	331	336	332	229
85°	45	66	46	25	18	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1352.9	1352.9	1352.9	1352.9	1352.9
2.5°	1358.1	1353.7	1344.1	1353.7	1352.0
5°	1352.0	1348.5	1340.6	1350.2	1348.5
7.5°	1343.2	1339.7	1332.7	1344.1	1342.4
10°	1328.3	1326.6	1321.3	1334.5	1333.6
12.5°	1310.8	1310.0	1307.3	1322.2	1321.3
15°	1288.9	1289.8	1289.8	1307.3	1307.3
17.5°	1264.4	1266.2	1269.7	1288.9	1291.6
20°	1235.5	1239.0	1246.0	1267.9	1271.4
22.5°	1205.8	1208.4	1218.9	1245.2	1248.7
25°	1169.0	1176.0	1190.0	1219.8	1225.0
27.5°	1134.0	1140.1	1159.3	1190.0	1198.8
30°	1092.8	1102.4	1125.2	1158.5	1168.1
32.5°	1053.4	1063.9	1090.2	1128.7	1137.5
35°	1006.1	1021.9	1055.1	1093.7	1104.2
37.5°	963.2	978.1	1015.7	1057.8	1070.0
40°	915.9	934.3	977.2	1021.9	1034.1
42.5°	872.1	889.7	936.1	981.6	998.2
45°	819.6	844.1	892.3	942.2	959.7
47.5°	771.4	796.0	851.1	904.5	920.3
50°	723.3	749.5	807.3	862.5	878.3
52.5°	673.4	701.4	763.6	818.7	837.1
55°	620.8	653.2	718.0	774.1	790.7
57.5°	570.9	604.2	673.4	730.3	746.9
60°	521.9	556.0	627.0	681.2	698.8
62.5°	467.6	507.9	581.4	634.8	648.0
65°	418.6	459.7	531.5	584.9	599.8
67.5°	366.9	411.6	483.4	532.4	546.4
70°	317.9	364.3	433.4	479.0	485.1
72.5°	265.3	312.6	382.7	411.6	411.6
75°	218.0	266.2	331.0	336.2	331.9
77.5°	166.4	219.8	261.8	251.3	240.8
80°	120.0	172.5	191.8	172.5	158.5
82.5°	80.6	125.2	115.6	91.9	81.4
85°	44.7	66.5	45.5	25.4	18.4
87.5°	16.6	14.9	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)