

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: P307707

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA08-W2A-U-5700K**

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: P307707
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: 14FCZ2-39-UNV-L82765-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5700K 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: 3876.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

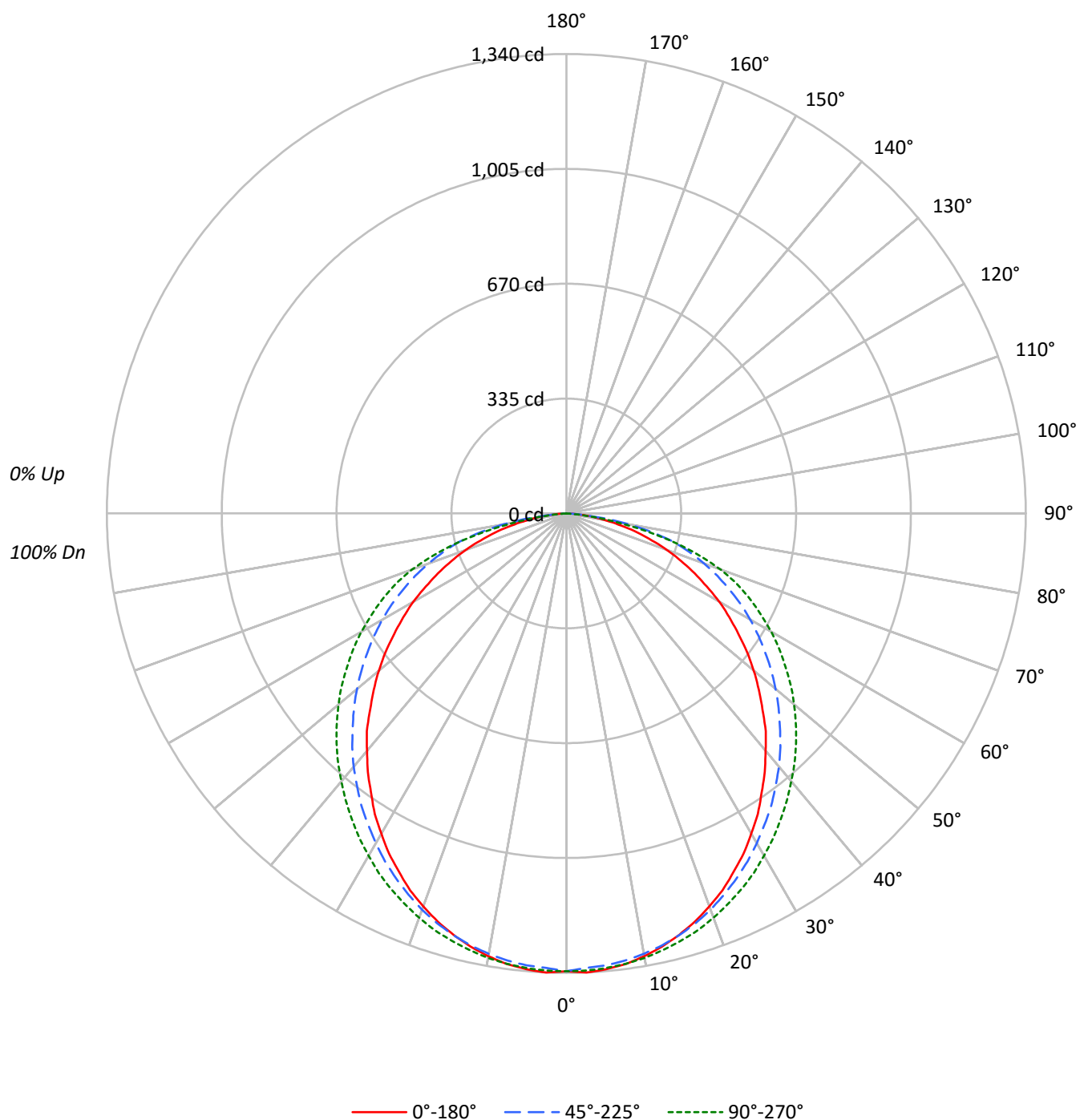
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3593	3593	3593
5°	3605	3574	3595
10°	3583	3564	3597
15°	3544	3547	3595
20°	3492	3522	3594
25°	3426	3487	3590
30°	3352	3451	3582
35°	3262	3421	3580
40°	3176	3388	3586
45°	3079	3352	3605
50°	2989	3336	3629
55°	2875	3325	3661
60°	2772	3330	3712
65°	2630	3340	3769
70°	2468	3366	3767
75°	2237	3397	3406
80°	1835	2934	2424
85°	1362	1386	559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.3
10°-20°	360.9	9.3
20°-30°	543.7	14.0
30°-40°	652.5	16.8
40°-50°	680.1	17.5
50°-60°	629.6	16.2
60°-70°	508.7	13.1
70°-80°	310.1	8.0
80°-90°	64.0	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°	1031.0	26.6
0°-40°	1683.5	43.4
0°-60°	2993.1	77.2
0°-90°	3876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3876.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1334	1331	1323	1333	1331	127
15°	1272	1273	1273	1290	1290	359
25°	1154	1161	1174	1204	1209	532
35°	993	1009	1041	1080	1090	622
45°	809	833	881	930	947	625
55°	613	645	709	764	780	549
65°	413	454	525	577	592	408
75°	215	263	327	332	328	226
85°	44	66	45	25	18	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1340.5	1336.2	1326.7	1336.2	1334.4
5°	1334.4	1331.0	1323.2	1332.7	1331.0
7.5°	1325.8	1322.3	1315.4	1326.7	1324.9
10°	1311.1	1309.4	1304.2	1317.1	1316.3
12.5°	1293.8	1292.9	1290.4	1305.0	1304.2
15°	1272.2	1273.1	1273.1	1290.4	1290.4
17.5°	1248.0	1249.7	1253.2	1272.2	1274.8
20°	1219.5	1222.9	1229.9	1251.5	1254.9
22.5°	1190.1	1192.7	1203.1	1229.0	1232.4
25°	1153.8	1160.7	1174.5	1203.9	1209.1
27.5°	1119.2	1125.3	1144.3	1174.5	1183.2
30°	1078.6	1088.1	1110.6	1143.4	1152.9
32.5°	1039.7	1050.1	1076.0	1114.0	1122.7
35°	993.0	1008.6	1041.4	1079.5	1089.8
37.5°	950.7	965.4	1002.6	1044.0	1056.1
40°	904.0	922.2	964.5	1008.6	1020.7
42.5°	860.8	878.1	923.9	968.8	985.3
45°	809.0	833.2	880.7	930.0	947.2
47.5°	761.4	785.6	840.1	892.8	908.3
50°	713.9	739.8	796.9	851.3	866.9
52.5°	664.6	692.3	753.6	808.1	826.2
55°	612.8	644.7	708.7	764.0	780.4
57.5°	563.5	596.3	664.6	720.8	737.2
60°	515.1	548.8	618.8	672.4	689.7
62.5°	461.5	501.3	573.9	626.6	639.6
65°	413.1	453.7	524.6	577.3	592.0
67.5°	362.1	406.2	477.1	525.5	539.3
70°	313.7	359.5	427.8	472.8	478.8
72.5°	261.9	308.5	377.7	406.2	406.2
75°	215.2	262.7	326.7	331.9	327.6
77.5°	164.2	216.9	258.4	248.0	237.7
80°	118.4	170.3	189.3	170.3	156.4
82.5°	79.5	123.6	114.1	90.7	80.4
85°	44.1	65.7	44.9	25.1	18.1
87.5°	16.4	14.7	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)