

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: P307775

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP187-W2A-U-4000K**

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: P307775
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-L82765-CP187-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 4000K 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: 3881.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

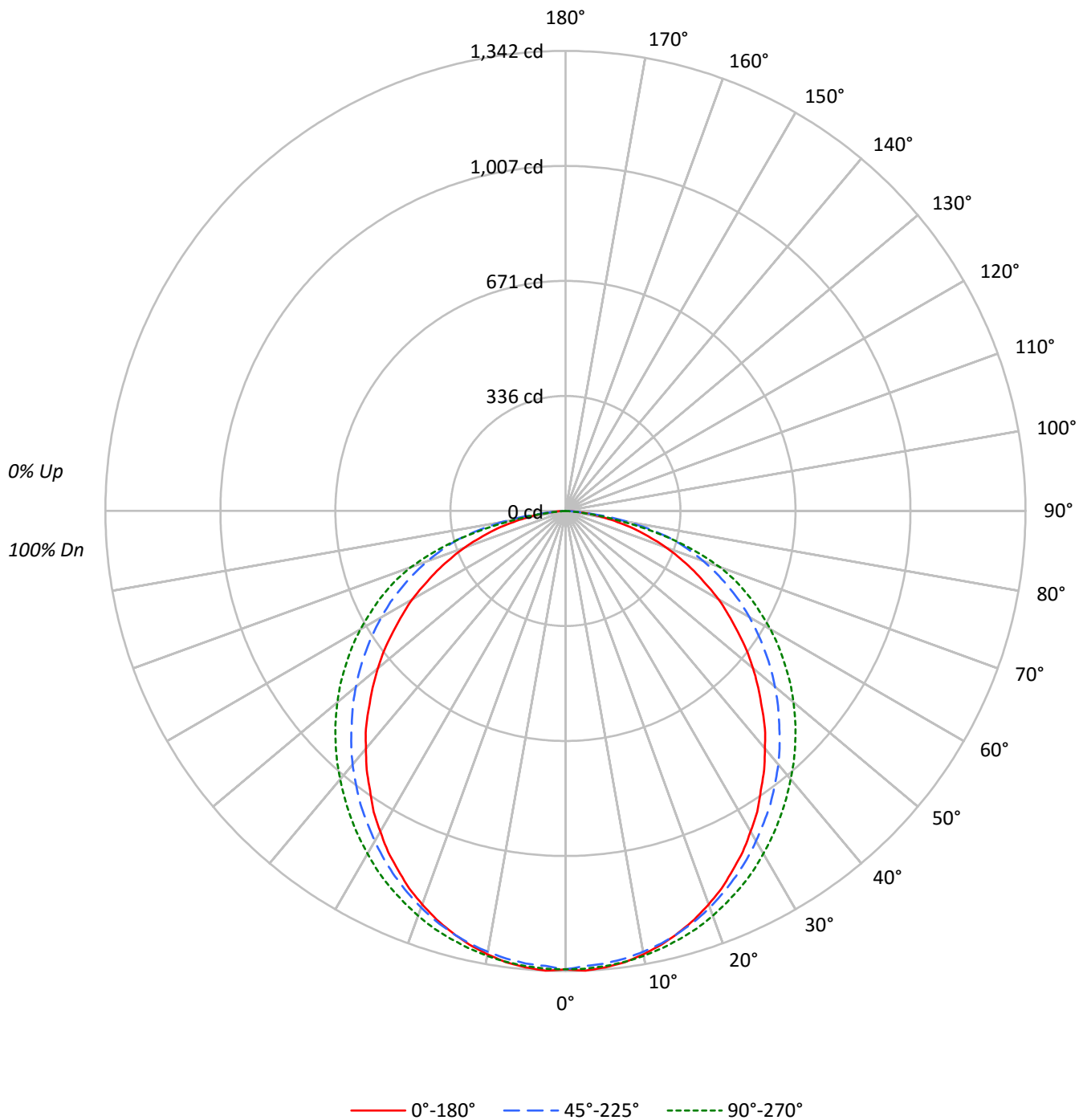
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3598	3598	3598
5°	3609	3579	3600
10°	3587	3568	3601
15°	3549	3551	3599
20°	3497	3526	3598
25°	3430	3492	3595
30°	3356	3455	3587
35°	3266	3426	3585
40°	3180	3393	3590
45°	3083	3356	3610
50°	2992	3340	3634
55°	2879	3329	3666
60°	2776	3335	3717
65°	2634	3345	3775
70°	2471	3371	3772
75°	2241	3401	3410
80°	1838	2937	2427
85°	1362	1389	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.5	3.3
10°-20°	361.4	9.3
20°-30°	544.4	14.0
30°-40°	653.3	16.8
40°-50°	680.9	17.5
50°-60°	630.4	16.2
60°-70°	509.3	13.1
70°-80°	310.5	8.0
80°-90°	64.1	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°	1032.3	26.6
0°-40°	1685.7	43.4
0°-60°	2997.0	77.2
0°-90°	3881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1337	1337	1337	1337	1337	
5°	1336	1333	1325	1334	1333	127
15°	1274	1275	1275	1292	1292	359
25°	1155	1162	1176	1206	1211	532
35°	994	1010	1043	1081	1091	623
45°	810	834	882	931	948	626
55°	614	646	710	765	781	550
65°	414	454	525	578	593	409
75°	216	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°	1337.0	1337.0	1337.0	1337.0	1337.0
2.5°	1342.2	1337.9	1328.4	1337.9	1336.2
5°	1336.2	1332.7	1324.9	1334.4	1332.7
7.5°	1327.5	1324.0	1317.1	1328.4	1326.6
10°	1312.8	1311.1	1305.9	1318.8	1318.0
12.5°	1295.5	1294.6	1292.0	1306.7	1305.9
15°	1273.8	1274.7	1274.7	1292.0	1292.0
17.5°	1249.6	1251.3	1254.8	1273.8	1276.4
20°	1221.1	1224.5	1231.4	1253.1	1256.5
22.5°	1191.6	1194.2	1204.6	1230.6	1234.0
25°	1155.3	1162.2	1176.1	1205.5	1210.7
27.5°	1120.7	1126.7	1145.8	1176.1	1184.7
30°	1080.0	1089.5	1112.0	1144.9	1154.4
32.5°	1041.1	1051.4	1077.4	1115.5	1124.1
35°	994.3	1009.9	1042.8	1080.9	1091.2
37.5°	951.9	966.6	1003.8	1045.4	1057.5
40°	905.2	923.4	965.8	1009.9	1022.0
42.5°	861.9	879.2	925.1	970.1	986.5
45°	810.0	834.2	881.8	931.2	948.5
47.5°	762.4	786.6	841.2	893.9	909.5
50°	714.8	740.8	797.9	852.4	868.0
52.5°	665.5	693.2	754.6	809.1	827.3
55°	613.6	645.6	709.6	765.0	781.4
57.5°	564.2	597.1	665.5	721.7	738.2
60°	515.8	549.5	619.6	673.3	690.6
62.5°	462.1	501.9	574.6	627.4	640.4
65°	413.7	454.3	525.3	578.1	592.8
67.5°	362.6	406.7	477.7	526.2	540.0
70°	314.1	360.0	428.4	473.4	479.4
72.5°	262.2	308.9	378.2	406.7	406.7
75°	215.5	263.1	327.1	332.3	328.0
77.5°	164.4	217.2	258.7	248.4	238.0
80°	118.6	170.5	189.5	170.5	156.6
82.5°	79.6	123.7	114.2	90.9	80.5
85°	44.1	65.8	45.0	25.1	18.2
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)