

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: P312396

Luminaire Tested: **14FCZ2-39-UNV-L83050-S-CA125-W2A-U-3500K**

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: P312396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-L83050-S-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 3743.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

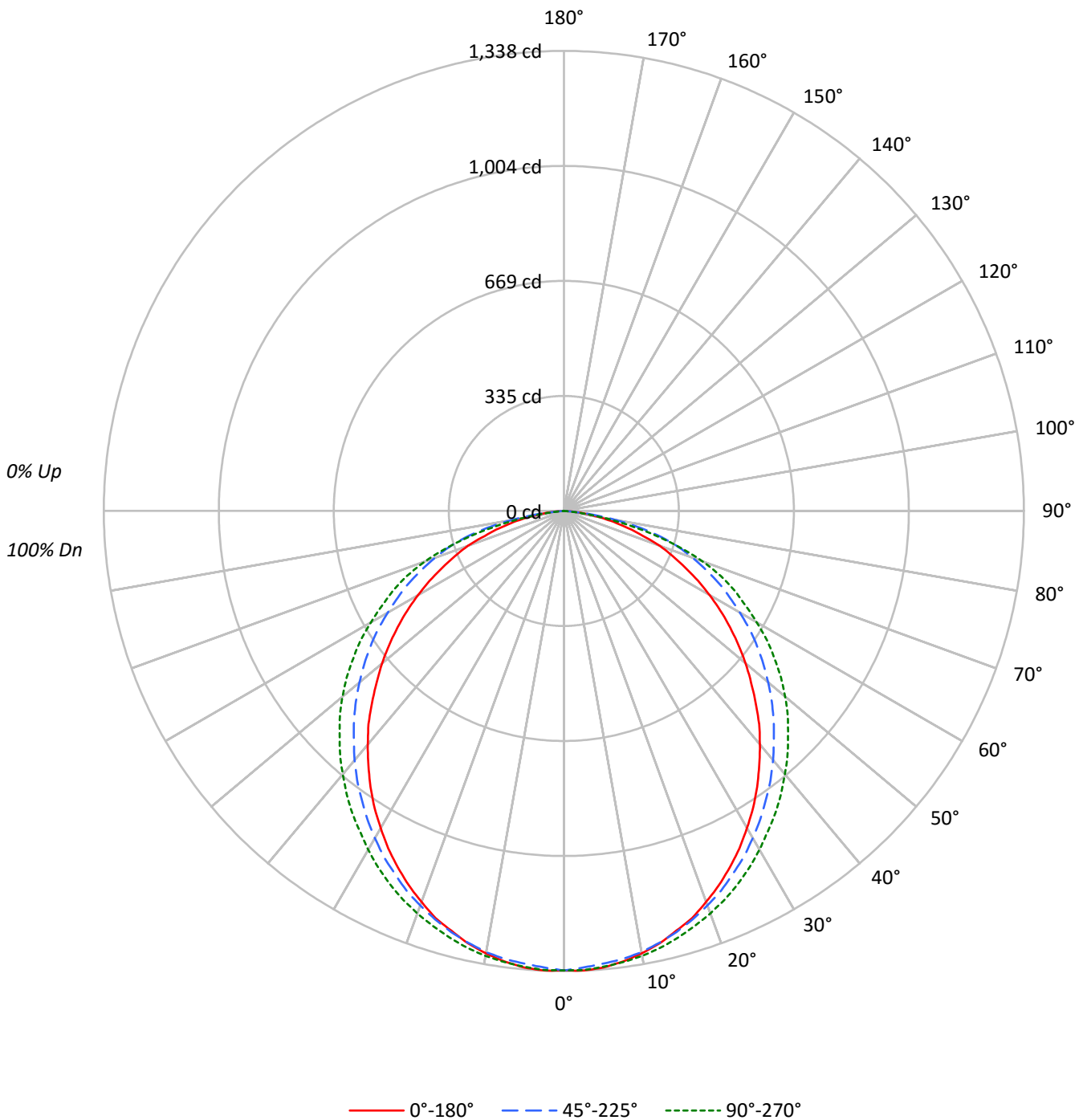
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3596	3596	3596
5°	3599	3569	3594
10°	3570	3560	3590
15°	3521	3531	3578
20°	3465	3497	3566
25°	3394	3455	3554
30°	3310	3414	3535
35°	3219	3365	3524
40°	3116	3325	3514
45°	3001	3284	3510
50°	2890	3247	3520
55°	2769	3222	3509
60°	2637	3176	3486
65°	2481	3167	3486
70°	2336	3139	3387
75°	2026	3068	2895
80°	1640	2473	1926
85°	1090	858	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	3.4
10°-20°	359.0	9.6
20°-30°	538.6	14.4
30°-40°	642.5	17.2
40°-50°	664.2	17.7
50°-60°	606.4	16.2
60°-70°	477.2	12.7
70°-80°	277.8	7.4
80°-90°	51.2	1.4
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°	1023.8	27.4
0°-40°	1666.3	44.5
0°-60°	2936.8	78.5
0°-90°	3743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3743.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1332	1329	1321	1332	1331	126
15°	1264	1266	1268	1284	1284	357
25°	1143	1149	1164	1191	1197	526
35°	980	993	1024	1063	1073	612
45°	789	815	863	911	922	609
55°	590	622	687	737	748	528
65°	390	430	497	536	548	387
75°	195	241	295	290	278	207
85°	35	50	28	22	19	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1336.2	1336.2	1336.2	1336.2	1336.2
2.5°	1338.0	1334.3	1328.8	1338.0	1336.2
5°	1332.5	1328.8	1321.3	1332.5	1330.6
7.5°	1321.3	1317.6	1313.9	1325.1	1323.2
10°	1306.5	1304.6	1302.8	1315.8	1313.9
12.5°	1287.9	1287.9	1286.1	1300.9	1300.9
15°	1263.8	1265.7	1267.5	1284.2	1284.2
17.5°	1241.5	1239.7	1245.3	1263.8	1265.7
20°	1210.0	1213.7	1221.1	1243.4	1245.3
22.5°	1178.4	1182.2	1195.1	1217.4	1223.0
25°	1143.2	1148.8	1163.6	1191.4	1197.0
27.5°	1106.1	1113.5	1133.9	1163.6	1169.2
30°	1065.2	1076.4	1098.6	1132.0	1137.6
32.5°	1024.4	1035.5	1063.4	1096.8	1104.2
35°	979.9	992.9	1024.4	1063.4	1072.7
37.5°	933.5	950.2	987.3	1026.3	1037.4
40°	887.1	905.6	946.5	987.3	1000.3
42.5°	840.7	859.2	903.8	950.2	963.2
45°	788.7	814.7	863.0	911.2	922.3
47.5°	738.6	766.5	820.3	868.5	883.4
50°	690.4	718.2	775.7	825.8	840.7
52.5°	640.3	670.0	731.2	783.2	796.1
55°	590.2	621.7	686.7	736.8	747.9
57.5°	540.0	573.4	640.3	688.5	701.5
60°	489.9	525.2	590.2	638.4	647.7
62.5°	439.8	476.9	543.8	586.4	595.7
65°	389.7	430.5	497.4	536.3	547.5
67.5°	341.5	382.3	447.3	484.4	493.6
70°	296.9	334.0	399.0	426.8	430.5
72.5°	241.3	287.7	350.7	365.6	356.3
75°	194.9	241.3	295.1	289.5	278.4
77.5°	148.5	194.9	230.1	211.6	196.7
80°	105.8	152.2	159.6	131.8	124.3
82.5°	68.7	105.8	89.1	68.7	55.7
85°	35.3	50.1	27.8	22.3	18.6
87.5°	11.1	7.4	3.7	3.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)