

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: P307758

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA125-W2A-U-4500K**

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: P307758
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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

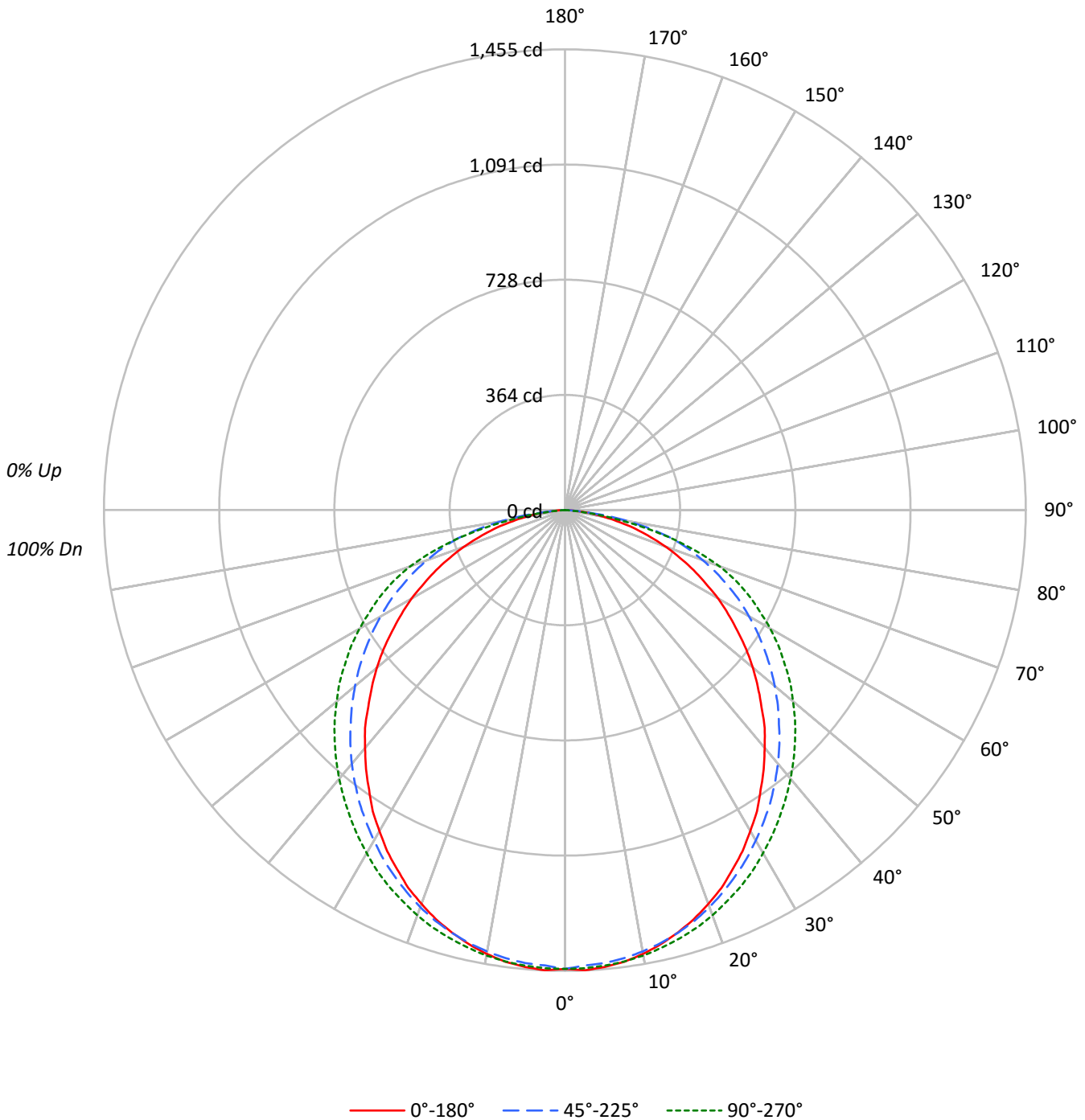
Lumens per Lamp: N/A
Luminaire Lumens: 4206.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39
Input Voltage (V): NR
Input Current (A_{in}): 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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3899	3899	3899
5°	3911	3879	3901
10°	3888	3867	3903
15°	3846	3849	3901
20°	3790	3822	3900
25°	3717	3784	3896
30°	3637	3745	3888
35°	3540	3712	3885
40°	3446	3677	3891
45°	3341	3637	3912
50°	3243	3620	3938
55°	3119	3608	3973
60°	3009	3614	4028
65°	2855	3625	4090
70°	2678	3652	4088
75°	2428	3686	3695
80°	1991	3183	2631
85°	1476	1507	608



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.3
10°-20°	391.7	9.3
20°-30°	590.0	14.0
30°-40°	708.0	16.8
40°-50°	738.0	17.5
50°-60°	683.2	16.2
60°-70°	552.0	13.1
70°-80°	336.6	8.0
80°-90°	69.5	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°	1118.8	26.6
0°-40°	1826.8	43.4
0°-60°	3248.0	77.2
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°	1449	1449	1449	1449	1449	
5°	1448	1444	1436	1446	1444	137
15°	1380	1382	1382	1400	1400	389
25°	1252	1260	1274	1306	1312	577
35°	1078	1094	1130	1171	1183	675
45°	878	904	956	1009	1028	679
55°	665	700	769	829	847	596
65°	448	492	569	626	642	443
75°	234	285	354	360	355	245
85°	48	71	49	27	20	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.0	1449.0	1449.0	1449.0	1449.0
2.5°	1454.6	1449.9	1439.6	1449.9	1448.0
5°	1448.0	1444.3	1435.9	1446.2	1444.3
7.5°	1438.7	1434.9	1427.4	1439.6	1437.7
10°	1422.7	1420.8	1415.2	1429.3	1428.3
12.5°	1404.0	1403.0	1400.2	1416.2	1415.2
15°	1380.5	1381.5	1381.5	1400.2	1400.2
17.5°	1354.3	1356.1	1359.9	1380.5	1383.3
20°	1323.3	1327.1	1334.6	1358.0	1361.8
22.5°	1291.4	1294.2	1305.5	1333.6	1337.4
25°	1252.0	1259.5	1274.5	1306.4	1312.1
27.5°	1214.5	1221.1	1241.7	1274.5	1283.9
30°	1170.4	1180.8	1205.1	1240.8	1251.1
32.5°	1128.2	1139.5	1167.6	1208.9	1218.3
35°	1077.6	1094.5	1130.1	1171.4	1182.6
37.5°	1031.6	1047.6	1087.9	1132.9	1146.1
40°	981.0	1000.7	1046.6	1094.5	1107.6
42.5°	934.1	952.9	1002.6	1051.3	1069.2
45°	877.8	904.1	955.7	1009.1	1027.9
47.5°	826.2	852.5	911.6	968.8	985.7
50°	774.7	802.8	864.7	923.8	940.7
52.5°	721.2	751.2	817.8	876.9	896.6
55°	664.9	699.6	769.0	829.1	846.9
57.5°	611.5	647.1	721.2	782.2	800.0
60°	559.0	595.5	671.5	729.6	748.4
62.5°	500.8	544.0	622.7	679.9	694.0
65°	448.3	492.4	569.3	626.5	642.4
67.5°	393.0	440.8	517.7	570.2	585.2
70°	340.4	390.1	464.2	513.0	519.6
72.5°	284.2	334.8	409.8	440.8	440.8
75°	233.5	285.1	354.5	360.1	355.4
77.5°	178.2	235.4	280.4	269.2	257.9
80°	128.5	184.8	205.4	184.8	169.8
82.5°	86.3	134.1	123.8	98.5	87.2
85°	47.8	71.3	48.8	27.2	19.7
87.5°	17.8	15.9	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)