

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: P307767

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP125-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: P307767
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-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB 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: 4125.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

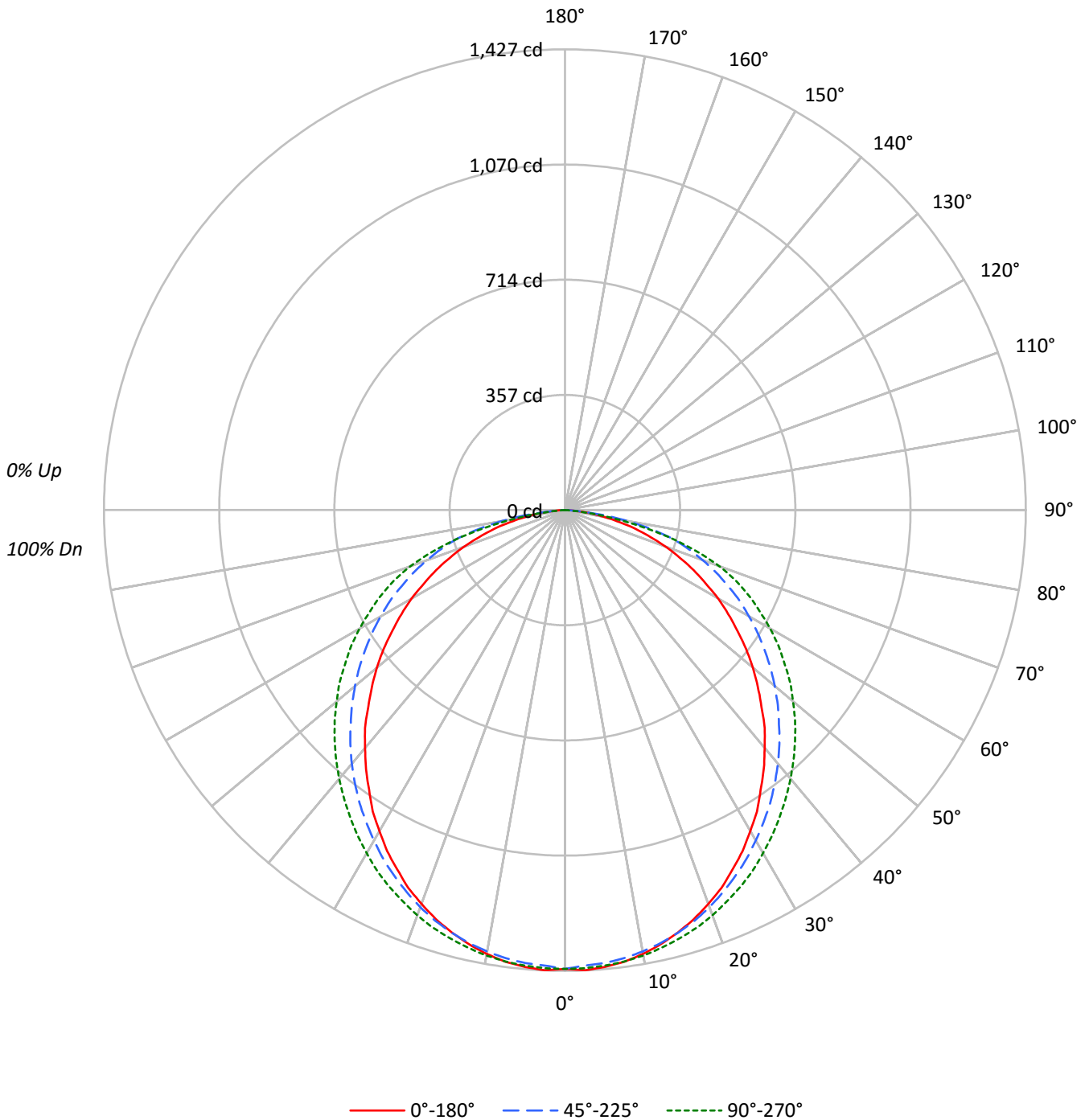
Input Watts (W): 39
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3824	3824	3824
5°	3836	3804	3826
10°	3813	3793	3828
15°	3772	3775	3826
20°	3716	3748	3824
25°	3646	3711	3821
30°	3567	3672	3813
35°	3472	3641	3810
40°	3380	3606	3816
45°	3276	3567	3836
50°	3180	3550	3862
55°	3059	3538	3897
60°	2950	3545	3950
65°	2800	3555	4012
70°	2627	3582	4009
75°	2381	3615	3624
80°	1953	3121	2580
85°	1448	1476	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.3
10°-20°	384.1	9.3
20°-30°	578.7	14.0
30°-40°	694.4	16.8
40°-50°	723.7	17.5
50°-60°	670.0	16.2
60°-70°	541.4	13.1
70°-80°	330.1	8.0
80°-90°	68.1	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°	1097.3	26.6
0°-40°	1791.6	43.4
0°-60°	3185.4	77.2
0°-90°	4125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1420	1416	1408	1418	1416	135
15°	1354	1355	1355	1373	1373	382
25°	1228	1235	1250	1281	1287	566
35°	1057	1073	1108	1149	1160	662
45°	861	887	937	990	1008	665
55°	652	686	754	813	831	584
65°	440	483	558	614	630	435
75°	229	280	348	353	349	241
85°	47	70	48	27	19	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.1	1421.1	1421.1	1421.1	1421.1
2.5°	1426.6	1422.0	1411.9	1422.0	1420.2
5°	1420.2	1416.5	1408.2	1418.3	1416.5
7.5°	1411.0	1407.3	1399.9	1411.9	1410.0
10°	1395.3	1393.5	1388.0	1401.8	1400.8
12.5°	1376.9	1376.0	1373.2	1388.9	1388.0
15°	1353.9	1354.9	1354.9	1373.2	1373.2
17.5°	1328.2	1330.0	1333.7	1353.9	1356.7
20°	1297.8	1301.5	1308.9	1331.9	1335.5
22.5°	1266.6	1269.3	1280.3	1307.9	1311.6
25°	1227.9	1235.3	1250.0	1281.3	1286.8
27.5°	1191.1	1197.6	1217.8	1250.0	1259.2
30°	1147.9	1158.0	1181.9	1216.9	1227.0
32.5°	1106.5	1117.5	1145.1	1185.6	1194.8
35°	1056.8	1073.4	1108.3	1148.8	1159.9
37.5°	1011.8	1027.4	1067.0	1111.1	1124.0
40°	962.1	981.4	1026.5	1073.4	1086.3
42.5°	916.1	934.5	983.3	1031.1	1048.6
45°	860.9	886.7	937.3	989.7	1008.1
47.5°	810.3	836.1	894.0	950.1	966.7
50°	759.7	787.3	848.0	906.0	922.5
52.5°	707.3	736.8	802.1	860.0	879.3
55°	652.1	686.2	754.2	813.1	830.6
57.5°	599.7	634.7	707.3	767.1	784.6
60°	548.2	584.1	658.6	715.6	734.0
62.5°	491.2	533.5	610.7	666.8	680.6
65°	439.7	482.9	558.3	614.4	630.1
67.5°	385.4	432.3	507.7	559.2	573.9
70°	333.9	382.6	455.3	503.1	509.6
72.5°	278.7	328.4	401.9	432.3	432.3
75°	229.0	279.6	347.7	353.2	348.6
77.5°	174.8	230.9	275.0	264.0	252.9
80°	126.0	181.2	201.4	181.2	166.5
82.5°	84.6	131.5	121.4	96.6	85.5
85°	46.9	69.9	47.8	26.7	19.3
87.5°	17.5	15.6	4.6	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)