

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: P308040

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP125-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: P308040  
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: 14FCZ2-44-UNV-L82765-S-CP125-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB 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: 4278.0 lumens  
Efficiency: N/A  
Efficacy: 108.6 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

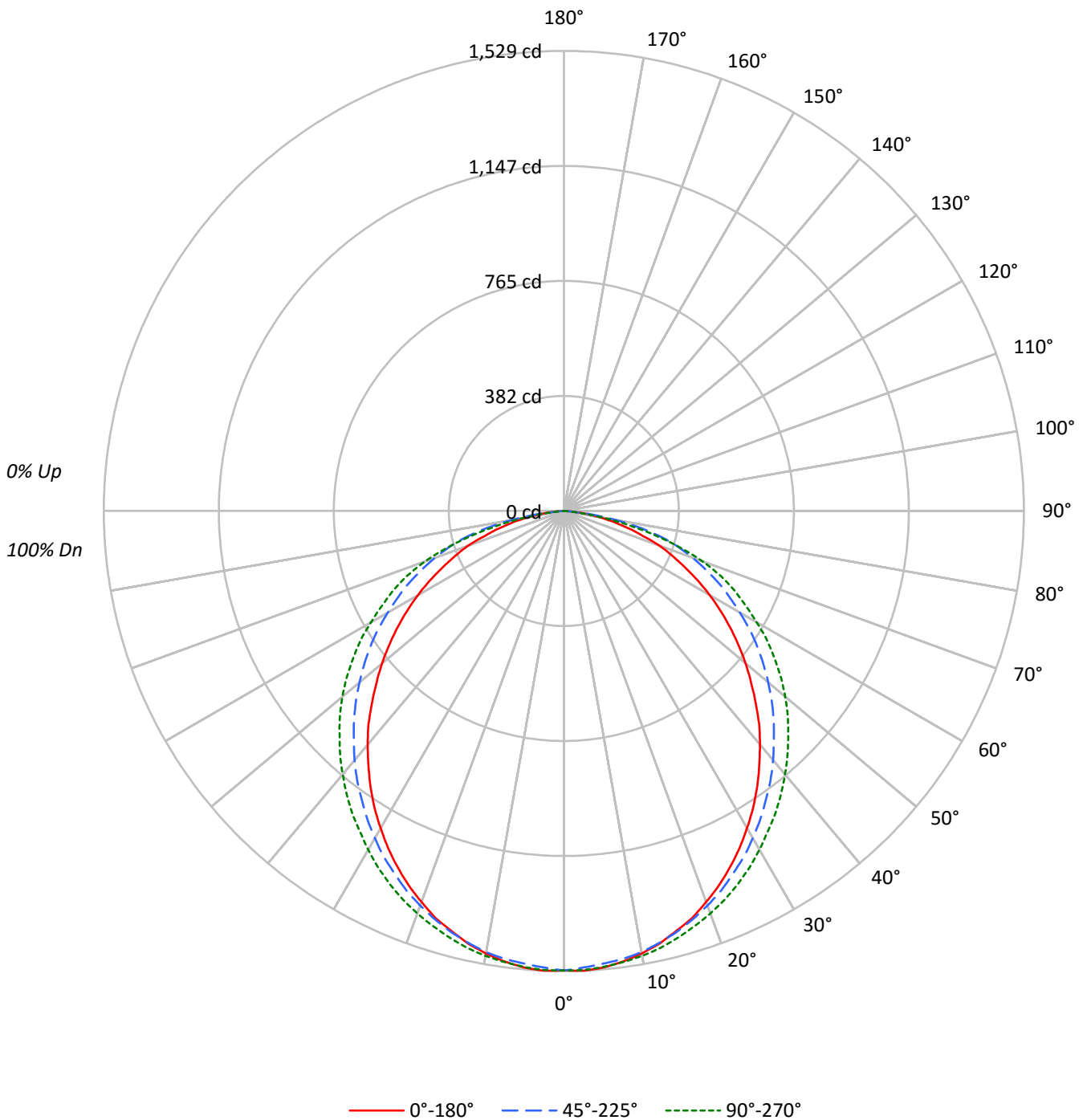
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4110	4110	4110
5°	4114	4079	4108
10°	4080	4069	4103
15°	4024	4036	4089
20°	3960	3997	4076
25°	3880	3949	4062
30°	3783	3902	4040
35°	3679	3846	4028
40°	3562	3800	4016
45°	3431	3753	4012
50°	3303	3712	4022
55°	3164	3682	4010
60°	3014	3630	3984
65°	2836	3619	3984
70°	2670	3588	3872
75°	2315	3507	3308
80°	1874	2827	2202
85°	1244	982	655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.2	3.4
10°-20°	410.4	9.6
20°-30°	615.6	14.4
30°-40°	734.3	17.2
40°-50°	759.1	17.7
50°-60°	693.1	16.2
60°-70°	545.4	12.7
70°-80°	317.5	7.4
80°-90°	58.5	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°	1170.1	27.4
0°-40°	1904.4	44.5
0°-60°	3356.6	78.5
0°-90°	4278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1527	1527	1527	1527	1527	
5°	1523	1519	1510	1523	1521	144
15°	1444	1447	1449	1468	1468	408
25°	1307	1313	1330	1362	1368	602
35°	1120	1135	1171	1215	1226	700
45°	902	931	986	1041	1054	696
55°	674	711	785	842	855	603
65°	445	492	568	613	626	442
75°	223	276	337	331	318	237
85°	40	57	32	26	21	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1527.2	1527.2	1527.2	1527.2	1527.2
2.5°	1529.3	1525.1	1518.7	1529.3	1527.2
5°	1522.9	1518.7	1510.2	1522.9	1520.8
7.5°	1510.2	1506.0	1501.7	1514.4	1512.3
10°	1493.2	1491.1	1489.0	1503.8	1501.7
12.5°	1472.0	1472.0	1469.9	1486.9	1486.9
15°	1444.5	1446.6	1448.7	1467.8	1467.8
17.5°	1419.0	1416.9	1423.2	1444.5	1446.6
20°	1382.9	1387.2	1395.7	1421.1	1423.2
22.5°	1346.9	1351.1	1366.0	1391.4	1397.8
25°	1306.6	1312.9	1329.9	1361.7	1368.1
27.5°	1264.2	1272.6	1296.0	1329.9	1336.3
30°	1217.5	1230.2	1255.7	1293.9	1300.2
32.5°	1170.8	1183.6	1215.4	1253.6	1262.0
35°	1119.9	1134.8	1170.8	1215.4	1226.0
37.5°	1066.9	1086.0	1128.4	1173.0	1185.7
40°	1013.9	1035.1	1081.7	1128.4	1143.3
42.5°	960.8	982.1	1033.0	1086.0	1100.8
45°	901.5	931.2	986.3	1041.4	1054.2
47.5°	844.2	876.0	937.5	992.7	1009.6
50°	789.0	820.9	886.6	943.9	960.8
52.5°	731.8	765.7	835.7	895.1	909.9
55°	674.5	710.6	784.8	842.1	854.8
57.5°	617.2	655.4	731.8	786.9	801.8
60°	560.0	600.3	674.5	729.7	740.3
62.5°	502.7	545.1	621.5	670.3	680.9
65°	445.4	492.1	568.4	613.0	625.7
67.5°	390.3	436.9	511.2	553.6	564.2
70°	339.4	381.8	456.0	487.8	492.1
72.5°	275.7	328.8	400.9	417.9	407.2
75°	222.7	275.7	337.3	330.9	318.2
77.5°	169.7	222.7	263.0	241.8	224.8
80°	120.9	173.9	182.4	150.6	142.1
82.5°	78.5	120.9	101.8	78.5	63.6
85°	40.3	57.3	31.8	25.5	21.2
87.5°	12.7	8.5	4.2	4.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)