

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: P312375

Luminaire Tested: **14FCZ2-35-UNV-L83050-S-CP125-W2A-U-3000K**

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: P312375
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: 14FCZ2-35-UNV-L83050-S-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 3143.0 lumens
Efficiency: N/A
Efficacy: 106.9 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

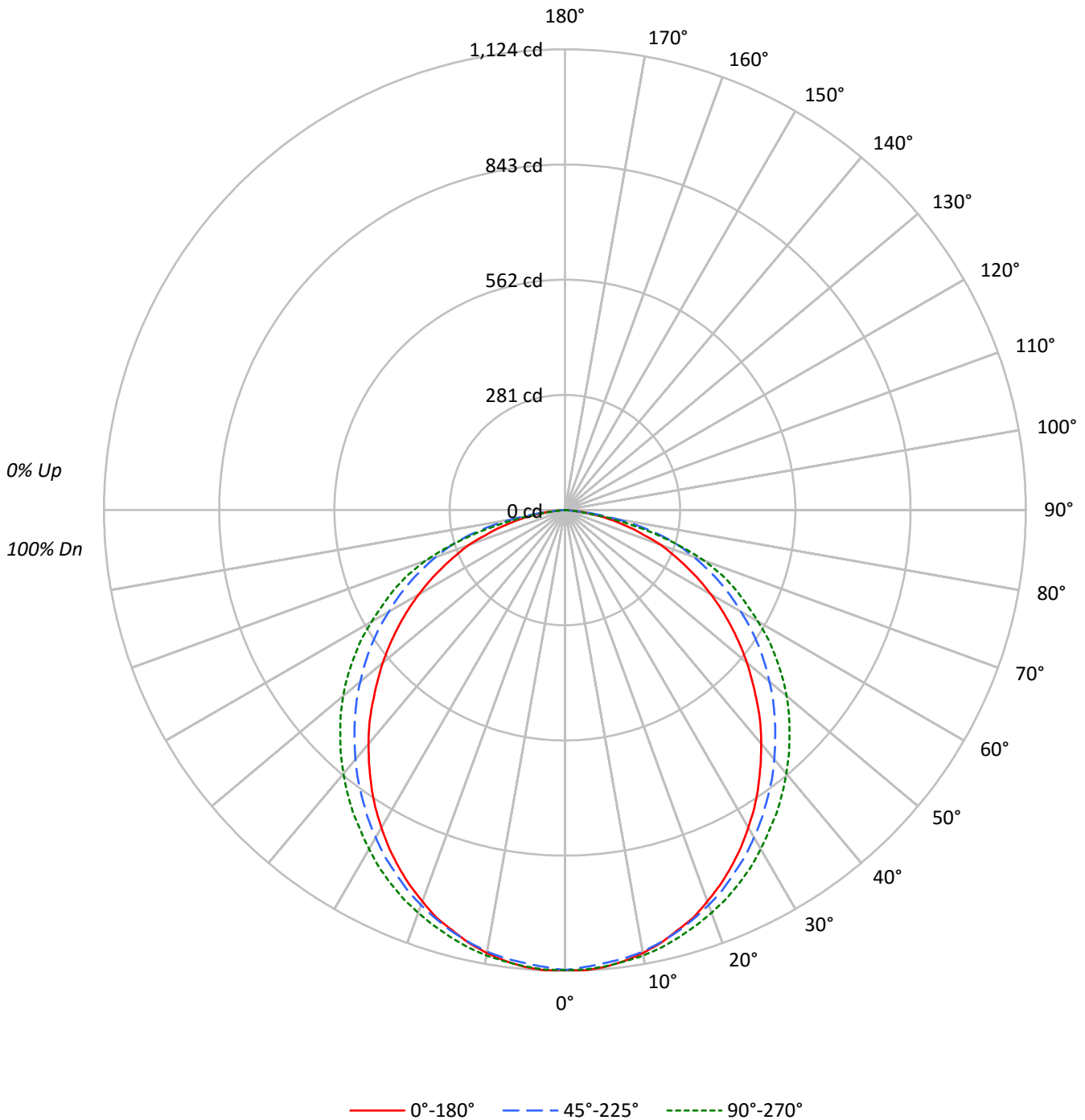
Input Watts (W): 29.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3019	3019	3019
5°	3022	2997	3018
10°	2998	2989	3015
15°	2956	2965	3004
20°	2909	2936	2994
25°	2850	2901	2984
30°	2779	2866	2968
35°	2703	2826	2959
40°	2617	2792	2950
45°	2520	2758	2947
50°	2427	2727	2955
55°	2325	2705	2946
60°	2214	2667	2927
65°	2083	2659	2927
70°	1961	2636	2844
75°	1701	2576	2430
80°	1376	2077	1618
85°	914	722	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	3.4
10°-20°	301.5	9.6
20°-30°	452.2	14.4
30°-40°	539.5	17.2
40°-50°	557.7	17.7
50°-60°	509.2	16.2
60°-70°	400.7	12.7
70°-80°	233.2	7.4
80°-90°	43.0	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°	859.7	27.4
0°-40°	1399.1	44.5
0°-60°	2466.0	78.5
0°-90°	3143.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3143.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1122	1122	1122	1122	1122	
5°	1119	1116	1110	1119	1117	106
15°	1061	1063	1064	1078	1078	299
25°	960	965	977	1000	1005	442
35°	823	834	860	893	901	514
45°	662	684	725	765	774	511
55°	496	522	577	619	628	443
65°	327	362	418	450	460	325
75°	164	203	248	243	234	174
85°	30	42	23	19	16	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.0	1122.0	1122.0	1122.0	1122.0
2.5°	1123.6	1120.4	1115.8	1123.6	1122.0
5°	1118.9	1115.8	1109.5	1118.9	1117.3
7.5°	1109.5	1106.4	1103.3	1112.6	1111.1
10°	1097.1	1095.5	1093.9	1104.9	1103.3
12.5°	1081.5	1081.5	1079.9	1092.4	1092.4
15°	1061.2	1062.8	1064.3	1078.4	1078.4
17.5°	1042.5	1041.0	1045.6	1061.2	1062.8
20°	1016.0	1019.1	1025.4	1044.1	1045.6
22.5°	989.5	992.7	1003.6	1022.3	1026.9
25°	959.9	964.6	977.1	1000.4	1005.1
27.5°	928.8	935.0	952.1	977.1	981.7
30°	894.5	903.8	922.5	950.6	955.3
32.5°	860.2	869.5	892.9	921.0	927.2
35°	822.8	833.7	860.2	892.9	900.7
37.5°	783.8	797.9	829.0	861.8	871.1
40°	744.9	760.5	794.7	829.0	839.9
42.5°	705.9	721.5	758.9	797.9	808.8
45°	662.3	684.1	724.6	765.1	774.5
47.5°	620.2	643.6	688.8	729.3	741.8
50°	579.7	603.1	651.4	693.5	705.9
52.5°	537.6	562.6	614.0	657.6	668.5
55°	495.5	522.0	576.6	618.7	628.0
57.5°	453.5	481.5	537.6	578.1	589.0
60°	411.4	441.0	495.5	536.1	543.9
62.5°	369.3	400.5	456.6	492.4	500.2
65°	327.2	361.5	417.6	450.4	459.7
67.5°	286.7	321.0	375.6	406.7	414.5
70°	249.3	280.5	335.0	358.4	361.5
72.5°	202.6	241.5	294.5	307.0	299.2
75°	163.6	202.6	247.8	243.1	233.7
77.5°	124.7	163.6	193.2	177.6	165.2
80°	88.8	127.8	134.0	110.6	104.4
82.5°	57.7	88.8	74.8	57.7	46.7
85°	29.6	42.1	23.4	18.7	15.6
87.5°	9.3	6.2	3.1	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)