

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: P307718

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP125-W2A-U-2700K**

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: P307718
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: 14FCZ2-39-UNV-L82765-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 3333.0 lumens
Efficiency: N/A
Efficacy: 100.1 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

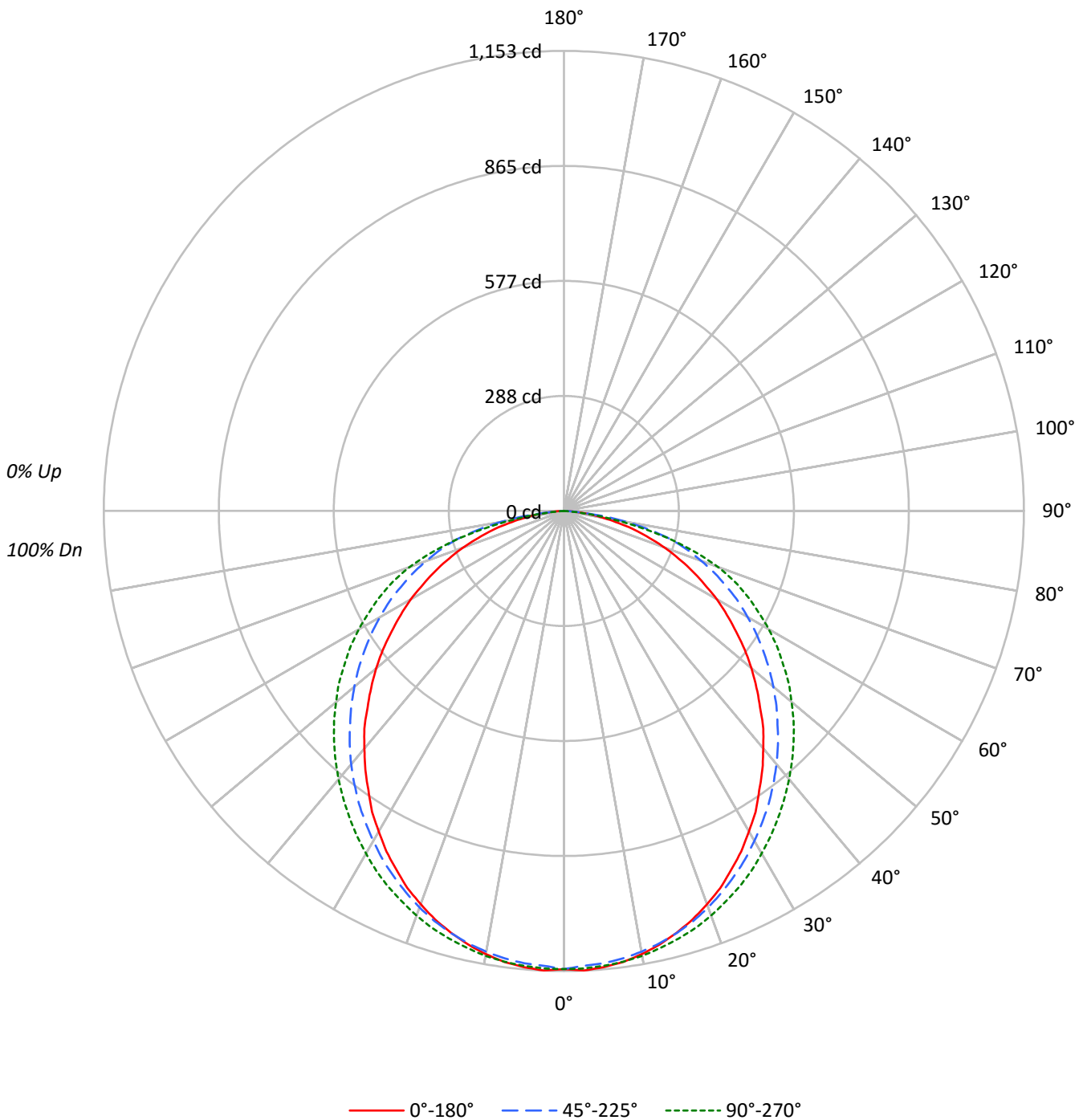
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3090	3090	3090
5°	3100	3073	3092
10°	3081	3064	3093
15°	3048	3050	3091
20°	3003	3029	3090
25°	2946	2999	3087
30°	2882	2967	3081
35°	2805	2942	3079
40°	2731	2914	3083
45°	2647	2882	3100
50°	2570	2869	3121
55°	2472	2859	3149
60°	2384	2864	3192
65°	2262	2872	3242
70°	2123	2895	3239
75°	1925	2921	2929
80°	1578	2523	2084
85°	1170	1192	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.7	3.3
10°-20°	310.4	9.3
20°-30°	467.6	14.0
30°-40°	561.1	16.8
40°-50°	584.8	17.5
50°-60°	541.4	16.2
60°-70°	437.4	13.1
70°-80°	266.7	8.0
80°-90°	55.1	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°	886.6	26.6
0°-40°	1447.7	43.4
0°-60°	2573.8	77.2
0°-90°	3333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3333.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1148	1144	1138	1146	1144	109
15°	1094	1095	1095	1110	1110	308
25°	992	998	1010	1035	1040	457
35°	854	867	896	928	937	535
45°	696	716	757	800	814	538
55°	527	554	609	657	671	472
65°	355	390	451	496	509	351
75°	185	226	281	285	282	194
85°	38	56	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.2	1148.2	1148.2	1148.2	1148.2
2.5°	1152.7	1149.0	1140.8	1149.0	1147.5
5°	1147.5	1144.5	1137.8	1146.0	1144.5
7.5°	1140.1	1137.1	1131.1	1140.8	1139.3
10°	1127.4	1125.9	1121.5	1132.6	1131.9
12.5°	1112.6	1111.8	1109.6	1122.2	1121.5
15°	1094.0	1094.7	1094.7	1109.6	1109.6
17.5°	1073.2	1074.7	1077.6	1094.0	1096.2
20°	1048.6	1051.6	1057.6	1076.1	1079.1
22.5°	1023.4	1025.6	1034.5	1056.8	1059.8
25°	992.2	998.1	1010.0	1035.3	1039.7
27.5°	962.4	967.6	984.0	1010.0	1017.4
30°	927.5	935.7	955.0	983.2	991.4
32.5°	894.1	903.0	925.3	958.0	965.4
35°	853.9	867.3	895.5	928.2	937.2
37.5°	817.5	830.1	862.1	897.8	908.2
40°	777.4	793.0	829.4	867.3	877.7
42.5°	740.2	755.1	794.5	833.1	847.2
45°	695.6	716.4	757.3	799.7	814.5
47.5°	654.8	675.6	722.4	767.7	781.1
50°	613.9	636.2	685.2	732.0	745.4
52.5°	571.5	595.3	648.1	694.9	710.5
55°	526.9	554.4	609.4	657.0	671.1
57.5°	484.6	512.8	571.5	619.8	633.9
60°	442.9	471.9	532.1	578.2	593.1
62.5°	396.9	431.1	493.5	538.8	550.0
65°	355.2	390.2	451.1	496.5	509.1
67.5°	311.4	349.3	410.2	451.9	463.8
70°	269.8	309.2	367.9	406.5	411.7
72.5°	225.2	265.3	324.8	349.3	349.3
75°	185.1	225.9	280.9	285.4	281.7
77.5°	141.2	186.5	222.2	213.3	204.4
80°	101.8	146.4	162.8	146.4	134.5
82.5°	68.4	106.3	98.1	78.0	69.1
85°	37.9	56.5	38.6	21.6	15.6
87.5°	14.1	12.6	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)