

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: P307710

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-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: P307710
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-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC 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: 3497.0 lumens
Efficiency: N/A
Efficacy: 105.6 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

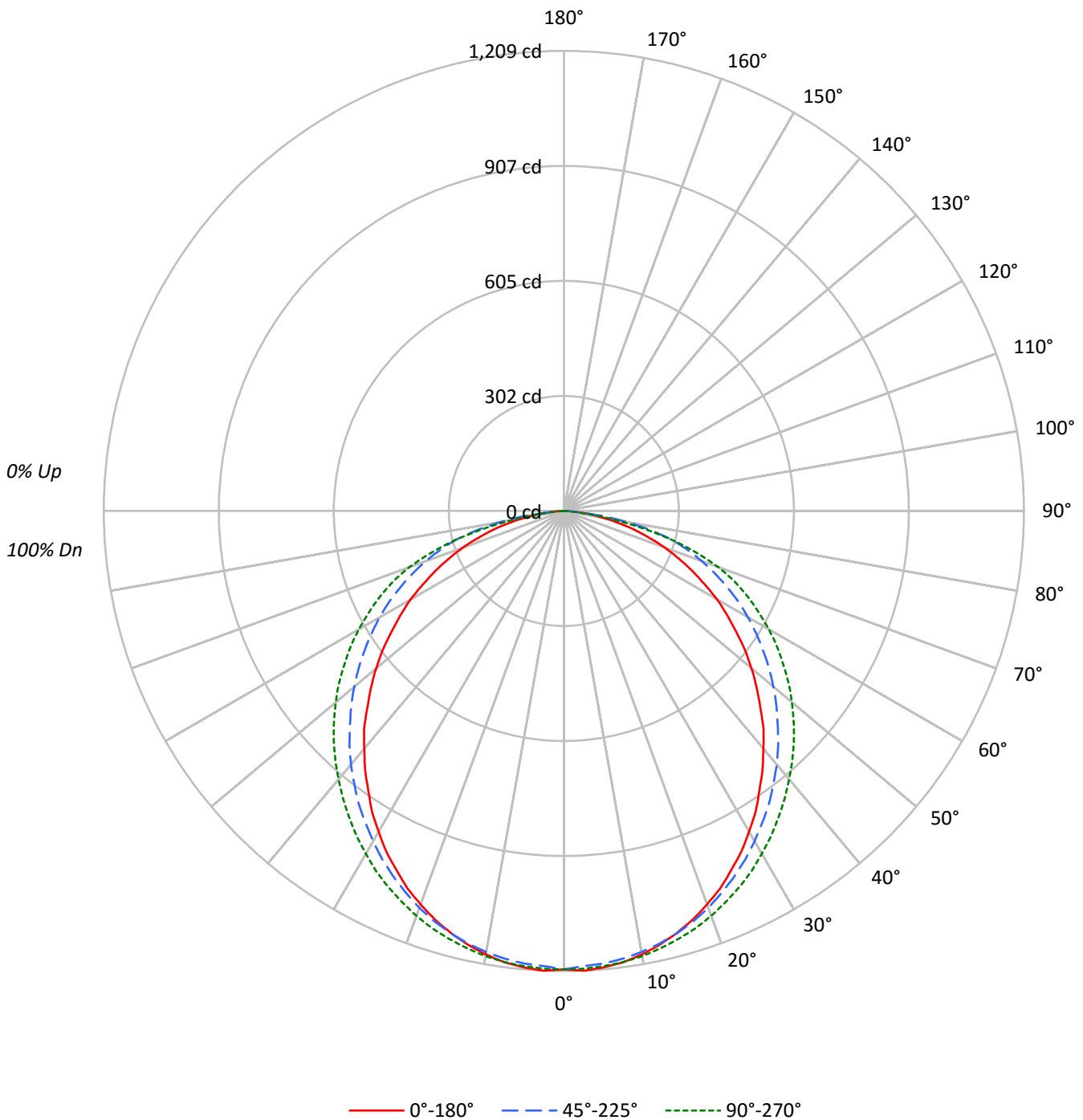
Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3242	3242	3242
5°	3252	3225	3244
10°	3232	3215	3245
15°	3198	3200	3243
20°	3151	3178	3242
25°	3091	3146	3239
30°	3024	3113	3232
35°	2943	3087	3230
40°	2865	3057	3235
45°	2778	3024	3252
50°	2696	3010	3274
55°	2594	3000	3303
60°	2501	3005	3349
65°	2373	3014	3401
70°	2227	3037	3399
75°	2019	3064	3072
80°	1655	2647	2187
85°	1229	1250	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	3.3
10°-20°	325.6	9.3
20°-30°	490.6	14.0
30°-40°	588.7	16.8
40°-50°	613.6	17.5
50°-60°	568.0	16.2
60°-70°	458.9	13.1
70°-80°	279.8	8.0
80°-90°	57.8	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°	930.2	26.6
0°-40°	1518.9	43.4
0°-60°	2700.4	77.2
0°-90°	3497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1205	1205	1205	1205	1205	
5°	1204	1201	1194	1202	1201	114
15°	1148	1149	1149	1164	1164	324
25°	1041	1047	1060	1086	1091	480
35°	896	910	940	974	983	561
45°	730	752	795	839	855	564
55°	553	582	639	689	704	495
65°	373	409	473	521	534	369
75°	194	237	295	299	296	204
85°	40	59	40	23	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1204.7	1204.7	1204.7	1204.7	1204.7
2.5°	1209.4	1205.5	1196.9	1205.5	1203.9
5°	1203.9	1200.8	1193.8	1202.4	1200.8
7.5°	1196.2	1193.0	1186.8	1196.9	1195.4
10°	1182.9	1181.3	1176.7	1188.4	1187.6
12.5°	1167.3	1166.5	1164.2	1177.4	1176.7
15°	1147.8	1148.6	1148.6	1164.2	1164.2
17.5°	1126.0	1127.5	1130.7	1147.8	1150.1
20°	1100.2	1103.4	1109.6	1129.1	1132.2
22.5°	1073.7	1076.1	1085.4	1108.8	1111.9
25°	1041.0	1047.2	1059.7	1086.2	1090.9
27.5°	1009.8	1015.2	1032.4	1059.7	1067.5
30°	973.1	981.7	1002.0	1031.6	1040.2
32.5°	938.1	947.4	970.8	1005.1	1012.9
35°	895.9	910.0	939.6	973.9	983.3
37.5°	857.7	871.0	904.5	941.9	952.9
40°	815.6	832.0	870.2	910.0	920.9
42.5°	776.6	792.2	833.6	874.1	888.9
45°	729.9	751.7	794.6	839.0	854.6
47.5°	687.0	708.8	757.9	805.5	819.5
50°	644.1	667.5	718.9	768.1	782.1
52.5°	599.6	624.6	679.9	729.1	745.4
55°	552.8	581.7	639.4	689.3	704.1
57.5°	508.4	538.0	599.6	650.3	665.1
60°	464.7	495.1	558.3	606.7	622.2
62.5°	416.4	452.3	517.8	565.3	577.0
65°	372.7	409.4	473.3	520.9	534.1
67.5°	326.7	366.5	430.4	474.1	486.6
70°	283.1	324.4	386.0	426.5	432.0
72.5°	236.3	278.4	340.8	366.5	366.5
75°	194.2	237.0	294.7	299.4	295.5
77.5°	148.2	195.7	233.1	223.8	214.4
80°	106.8	153.6	170.8	153.6	141.1
82.5°	71.7	111.5	102.9	81.9	72.5
85°	39.8	59.3	40.5	22.6	16.4
87.5°	14.8	13.3	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)