

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: P307664

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA125-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: P307664
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: 14FCZ2-35-UNV-L82765-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC 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: 3080.0 lumens
Efficiency: N/A
Efficacy: 104.4 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

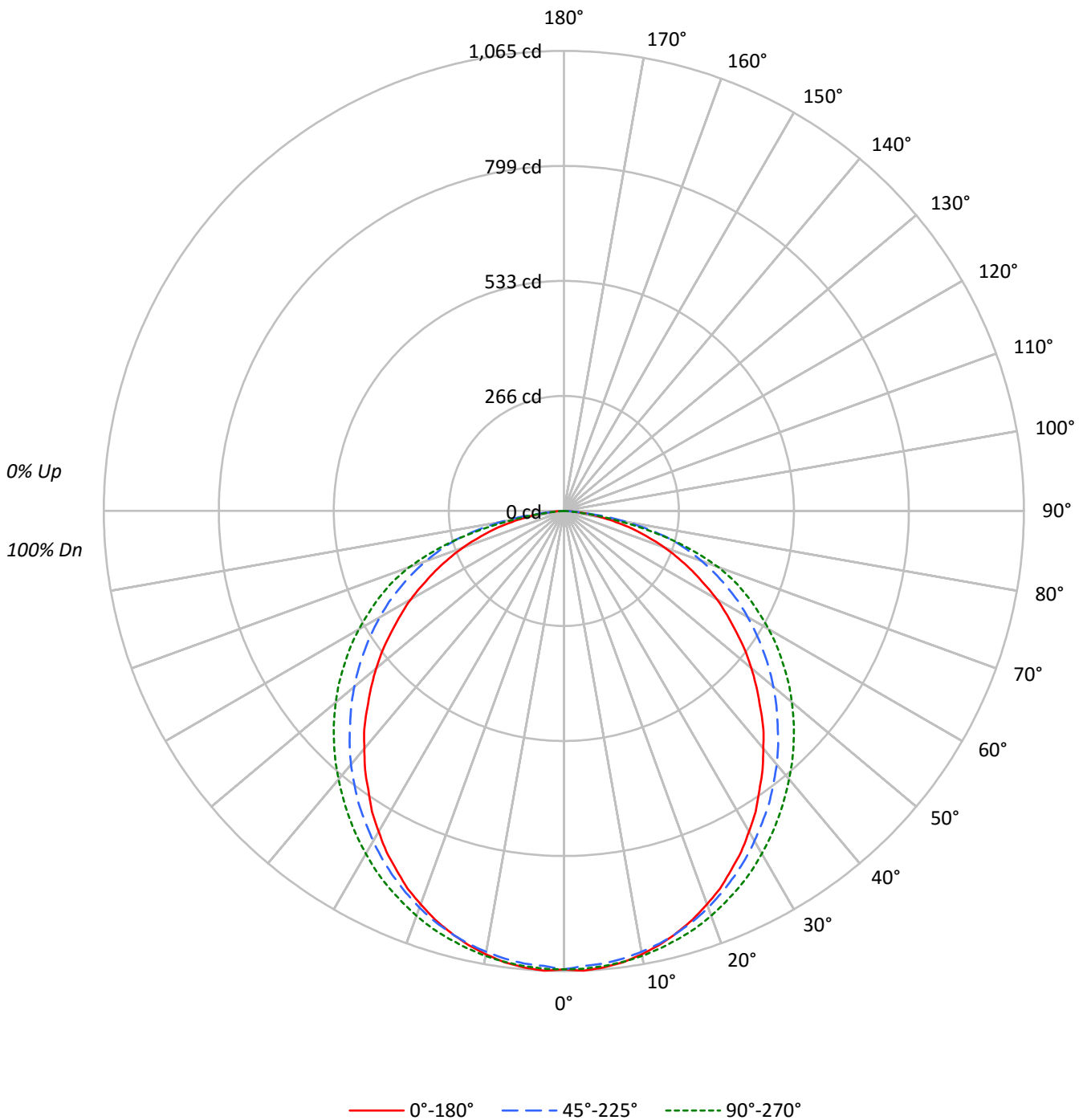
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2855	2855	2855
5°	2864	2840	2857
10°	2847	2832	2858
15°	2816	2818	2857
20°	2775	2799	2856
25°	2722	2771	2853
30°	2663	2742	2847
35°	2592	2719	2845
40°	2524	2692	2849
45°	2446	2663	2864
50°	2375	2651	2884
55°	2284	2642	2910
60°	2203	2646	2949
65°	2090	2655	2995
70°	1961	2675	2994
75°	1778	2699	2706
80°	1458	2331	1926
85°	1081	1102	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.3
10°-20°	286.8	9.3
20°-30°	432.1	14.0
30°-40°	518.5	16.8
40°-50°	540.4	17.5
50°-60°	500.3	16.2
60°-70°	404.2	13.1
70°-80°	246.5	8.0
80°-90°	50.9	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°	819.3	26.6
0°-40°	1337.8	43.4
0°-60°	2378.5	77.2
0°-90°	3080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1060	1058	1052	1059	1058	101
15°	1011	1012	1012	1025	1025	285
25°	917	922	933	957	961	423
35°	789	802	828	858	866	494
45°	643	662	700	739	753	497
55°	487	512	563	607	620	436
65°	328	361	417	459	470	325
75°	171	209	260	264	260	180
85°	35	52	36	20	14	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.1	1061.1	1061.1	1061.1	1061.1
2.5°	1065.2	1061.8	1054.2	1061.8	1060.4
5°	1060.4	1057.6	1051.5	1059.0	1057.6
7.5°	1053.5	1050.8	1045.3	1054.2	1052.8
10°	1041.8	1040.5	1036.3	1046.6	1046.0
12.5°	1028.1	1027.4	1025.4	1037.0	1036.3
15°	1010.9	1011.6	1011.6	1025.4	1025.4
17.5°	991.7	993.1	995.8	1010.9	1013.0
20°	969.0	971.8	977.3	994.5	997.2
22.5°	945.7	947.8	956.0	976.6	979.3
25°	916.8	922.3	933.3	956.7	960.8
27.5°	889.4	894.2	909.3	933.3	940.2
30°	857.1	864.7	882.5	908.6	916.2
32.5°	826.2	834.4	855.0	885.3	892.1
35°	789.1	801.5	827.6	857.8	866.0
37.5°	755.5	767.1	796.7	829.6	839.2
40°	718.4	732.8	766.4	801.5	811.1
42.5°	684.0	697.8	734.2	769.9	782.9
45°	642.8	662.1	699.8	739.0	752.7
47.5°	605.1	624.3	667.5	709.4	721.8
50°	567.3	587.9	633.2	676.5	688.8
52.5°	528.1	550.1	598.9	642.1	656.6
55°	486.9	512.3	563.2	607.1	620.2
57.5°	447.8	473.9	528.1	572.8	585.8
60°	409.3	436.1	491.7	534.3	548.0
62.5°	366.7	398.3	456.0	497.9	508.2
65°	328.3	360.6	416.9	458.8	470.4
67.5°	287.8	322.8	379.1	417.6	428.5
70°	249.3	285.7	340.0	375.7	380.5
72.5°	208.1	245.2	300.1	322.8	322.8
75°	171.0	208.8	259.6	263.7	260.3
77.5°	130.5	172.4	205.3	197.1	188.9
80°	94.1	135.3	150.4	135.3	124.3
82.5°	63.2	98.2	90.7	72.1	63.9
85°	35.0	52.2	35.7	19.9	14.4
87.5°	13.0	11.7	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)