

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: P307667

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA125-W2A-U-4000K**

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: P307667
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-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 3351.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

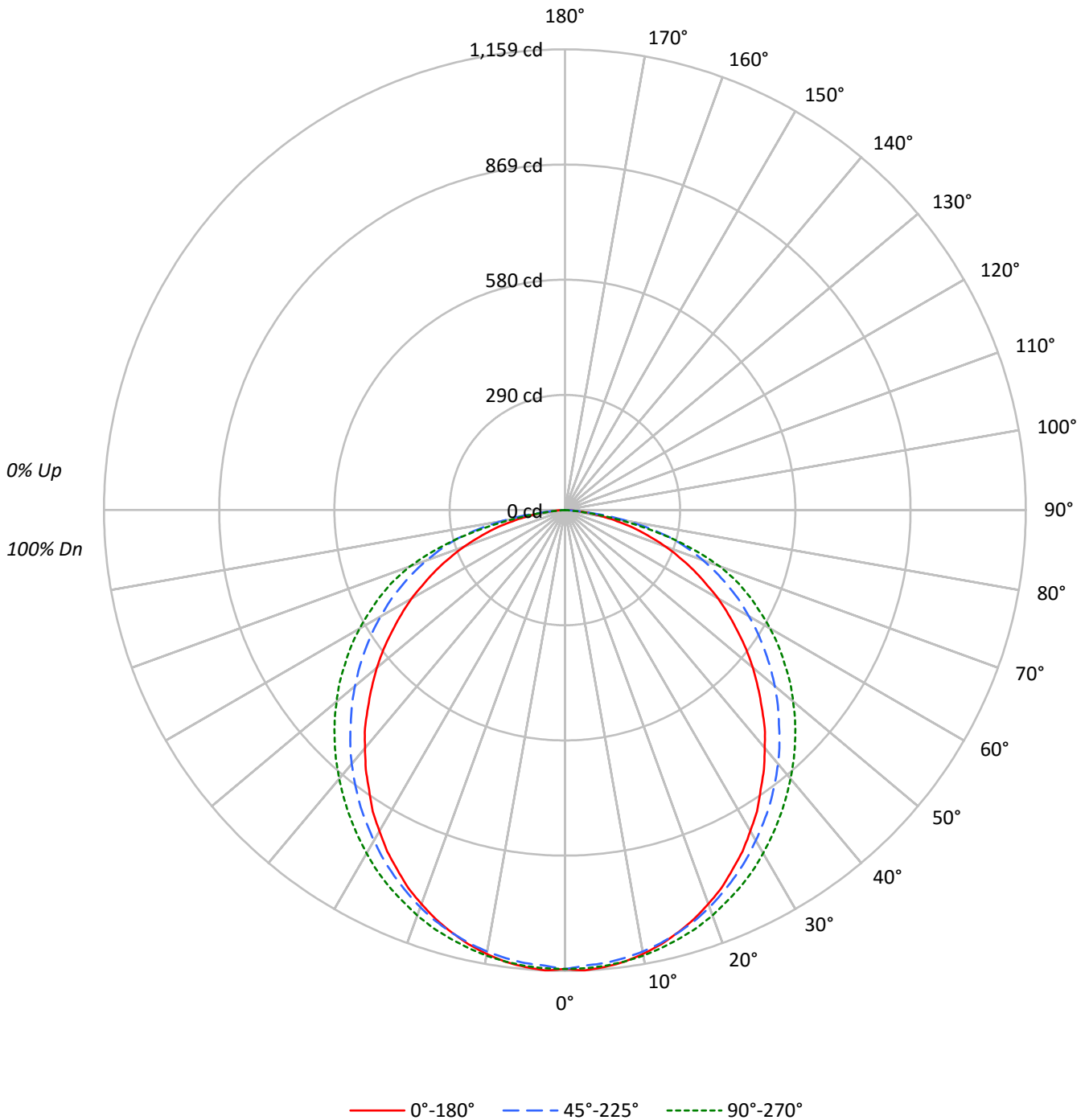
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3106	3106	3106
5°	3116	3090	3108
10°	3097	3081	3110
15°	3064	3066	3108
20°	3019	3045	3107
25°	2962	3015	3104
30°	2898	2984	3097
35°	2820	2958	3095
40°	2746	2929	3100
45°	2662	2898	3116
50°	2584	2884	3137
55°	2486	2875	3165
60°	2397	2879	3209
65°	2274	2888	3259
70°	2134	2910	3257
75°	1935	2936	2944
80°	1587	2535	2095
85°	1176	1201	485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	3.3
10°-20°	312.1	9.3
20°-30°	470.1	14.0
30°-40°	564.1	16.8
40°-50°	588.0	17.5
50°-60°	544.3	16.2
60°-70°	439.8	13.1
70°-80°	268.1	8.0
80°-90°	55.4	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°	891.4	26.6
0°-40°	1455.5	43.4
0°-60°	2587.7	77.2
0°-90°	3351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1154	1151	1144	1152	1151	110
15°	1100	1101	1101	1116	1116	310
25°	998	1004	1016	1041	1045	460
35°	858	872	900	933	942	538
45°	699	720	761	804	819	541
55°	530	557	613	660	675	475
65°	357	392	454	499	512	353
75°	186	227	282	287	283	195
85°	38	57	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°	1154.4	1154.4	1154.4	1154.4	1154.4
2.5°	1158.9	1155.2	1147.0	1155.2	1153.7
5°	1153.7	1150.7	1144.0	1152.2	1150.7
7.5°	1146.2	1143.2	1137.2	1147.0	1145.5
10°	1133.5	1132.0	1127.5	1138.7	1138.0
12.5°	1118.6	1117.8	1115.6	1128.3	1127.5
15°	1099.9	1100.6	1100.6	1115.6	1115.6
17.5°	1079.0	1080.5	1083.4	1099.9	1102.1
20°	1054.3	1057.3	1063.3	1082.0	1084.9
22.5°	1028.9	1031.1	1040.1	1062.5	1065.5
25°	997.5	1003.5	1015.5	1040.9	1045.3
27.5°	967.6	972.9	989.3	1015.5	1022.9
30°	932.5	940.7	960.2	988.6	996.8
32.5°	898.9	907.9	930.3	963.1	970.6
35°	858.5	872.0	900.4	933.3	942.2
37.5°	821.9	834.6	866.8	902.6	913.1
40°	781.6	797.3	833.9	872.0	882.4
42.5°	744.2	759.2	798.8	837.6	851.8
45°	699.4	720.3	761.4	804.0	818.9
47.5°	658.3	679.2	726.3	771.9	785.3
50°	617.2	639.6	688.9	736.0	749.4
52.5°	574.6	598.5	651.6	698.6	714.3
55°	529.8	557.4	612.7	660.5	674.7
57.5°	487.2	515.6	574.6	623.2	637.4
60°	445.3	474.5	535.0	581.3	596.3
62.5°	399.0	433.4	496.1	541.7	552.9
65°	357.2	392.3	453.6	499.1	511.8
67.5°	313.1	351.2	412.5	454.3	466.3
70°	271.2	310.8	369.9	408.7	414.0
72.5°	226.4	266.8	326.5	351.2	351.2
75°	186.1	227.2	282.4	286.9	283.2
77.5°	142.0	187.5	223.4	214.4	205.5
80°	102.4	147.2	163.6	147.2	135.2
82.5°	68.7	106.9	98.6	78.5	69.5
85°	38.1	56.8	38.9	21.7	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)