

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: P312365

Luminaire Tested: **14FCZ2-35-UNV-L83050-S-CA08-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: P312365
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" 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: 3217.0 lumens
Efficiency: N/A
Efficacy: 109.4 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

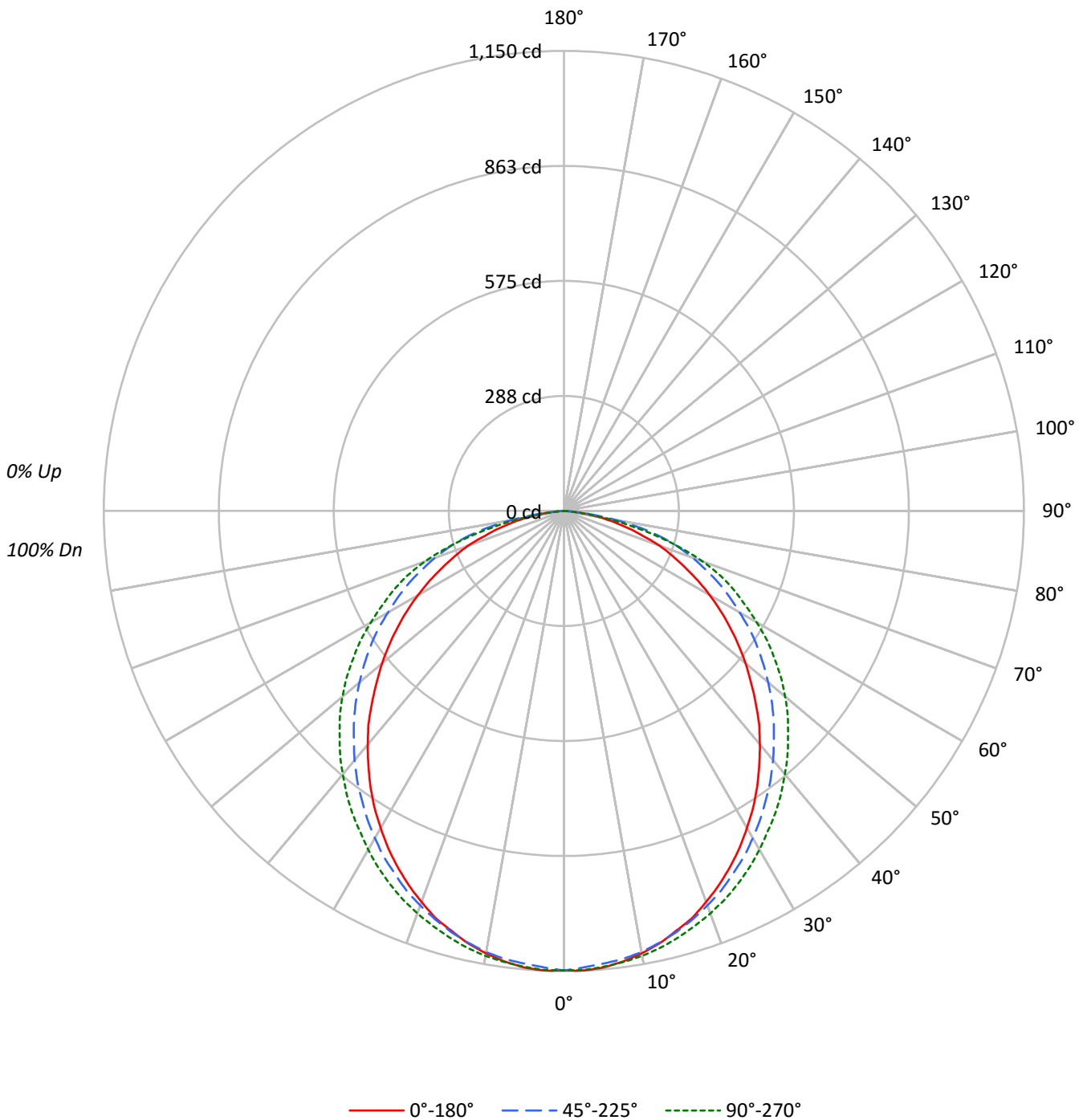
Input Watts (W): 29.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3090	3090	3090
5°	3093	3068	3089
10°	3068	3060	3086
15°	3026	3035	3075
20°	2978	3005	3065
25°	2917	2969	3055
30°	2845	2934	3038
35°	2767	2893	3029
40°	2678	2858	3020
45°	2580	2823	3017
50°	2484	2791	3025
55°	2380	2769	3016
60°	2266	2730	2996
65°	2133	2722	2996
70°	2008	2698	2911
75°	1742	2637	2488
80°	1409	2126	1657
85°	936	738	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	3.4
10°-20°	308.6	9.6
20°-30°	462.9	14.4
30°-40°	552.2	17.2
40°-50°	570.8	17.7
50°-60°	521.2	16.2
60°-70°	410.1	12.7
70°-80°	238.8	7.4
80°-90°	44.0	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°	879.9	27.4
0°-40°	1432.1	44.5
0°-60°	2524.1	78.5
0°-90°	3217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1145	1142	1136	1145	1144	109
15°	1086	1088	1089	1104	1104	307
25°	982	987	1000	1024	1029	452
35°	842	853	880	914	922	526
45°	678	700	742	783	793	523
55°	507	534	590	633	643	454
65°	335	370	428	461	470	333
75°	168	207	254	249	239	178
85°	30	43	24	19	16	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.4	1148.4	1148.4	1148.4	1148.4
2.5°	1150.0	1146.8	1142.0	1150.0	1148.4
5°	1145.2	1142.0	1135.7	1145.2	1143.6
7.5°	1135.7	1132.5	1129.3	1138.8	1137.3
10°	1122.9	1121.3	1119.7	1130.9	1129.3
12.5°	1106.9	1106.9	1105.4	1118.1	1118.1
15°	1086.2	1087.8	1089.4	1103.8	1103.8
17.5°	1067.1	1065.5	1070.3	1086.2	1087.8
20°	1040.0	1043.1	1049.5	1068.7	1070.3
22.5°	1012.8	1016.0	1027.2	1046.3	1051.1
25°	982.5	987.3	1000.1	1024.0	1028.8
27.5°	950.6	957.0	974.6	1000.1	1004.9
30°	915.5	925.1	944.3	973.0	977.7
32.5°	880.5	890.0	913.9	942.7	949.0
35°	842.2	853.3	880.5	913.9	921.9
37.5°	802.3	816.7	848.6	882.0	891.6
40°	762.4	778.4	813.5	848.6	859.7
42.5°	722.5	738.5	776.8	816.7	827.8
45°	677.9	700.2	741.7	783.2	792.7
47.5°	634.8	658.7	705.0	746.5	759.2
50°	593.3	617.3	666.7	709.8	722.5
52.5°	550.3	575.8	628.4	673.1	684.3
55°	507.2	534.3	590.2	633.2	642.8
57.5°	464.2	492.9	550.3	591.8	602.9
60°	421.1	451.4	507.2	548.7	556.7
62.5°	378.0	409.9	467.3	504.0	512.0
65°	335.0	370.0	427.5	461.0	470.5
67.5°	293.5	328.6	384.4	416.3	424.3
70°	255.2	287.1	342.9	366.9	370.0
72.5°	207.4	247.2	301.5	314.2	306.2
75°	167.5	207.4	253.6	248.8	239.3
77.5°	127.6	167.5	197.8	181.8	169.1
80°	90.9	130.8	137.2	113.2	106.9
82.5°	59.0	90.9	76.6	59.0	47.9
85°	30.3	43.1	23.9	19.1	16.0
87.5°	9.6	6.4	3.2	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)