

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: P307925

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-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: P307925
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-L82765-S-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" 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: 3124.0 lumens
Efficiency: N/A
Efficacy: 105.9 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

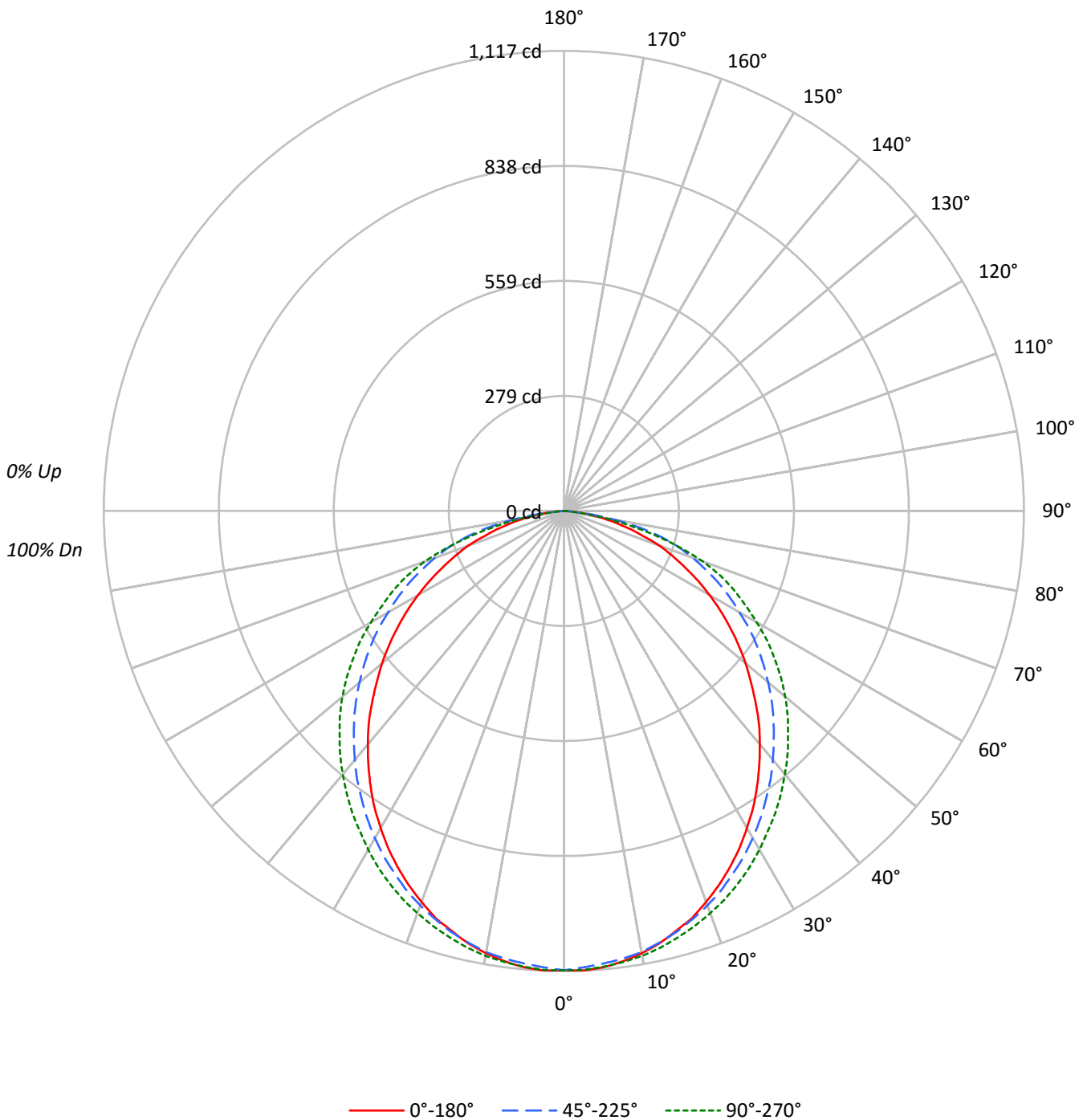
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3001	3001	3001
5°	3004	2979	3000
10°	2980	2971	2996
15°	2939	2947	2986
20°	2892	2919	2976
25°	2833	2884	2966
30°	2763	2849	2950
35°	2687	2809	2941
40°	2601	2775	2933
45°	2505	2741	2930
50°	2412	2710	2938
55°	2311	2689	2928
60°	2201	2651	2909
65°	2071	2643	2909
70°	1950	2620	2827
75°	1691	2561	2415
80°	1368	2064	1609
85°	908	716	479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	3.4
10°-20°	299.7	9.6
20°-30°	449.5	14.4
30°-40°	536.2	17.2
40°-50°	554.3	17.7
50°-60°	506.1	16.2
60°-70°	398.3	12.7
70°-80°	231.8	7.4
80°-90°	42.7	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°	854.5	27.4
0°-40°	1390.7	44.5
0°-60°	2451.1	78.5
0°-90°	3124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1112	1109	1103	1112	1111	105
15°	1055	1056	1058	1072	1072	298
25°	954	959	971	994	999	439
35°	818	829	855	888	895	511
45°	658	680	720	760	770	508
55°	493	519	573	615	624	440
65°	325	359	415	448	457	323
75°	163	201	246	242	232	173
85°	29	42	23	19	16	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1115.2	1115.2	1115.2	1115.2	1115.2
2.5°	1116.8	1113.7	1109.0	1116.8	1115.2
5°	1112.1	1109.0	1102.8	1112.1	1110.6
7.5°	1102.8	1099.7	1096.6	1105.9	1104.4
10°	1090.4	1088.9	1087.3	1098.2	1096.6
12.5°	1074.9	1074.9	1073.4	1085.8	1085.8
15°	1054.8	1056.4	1057.9	1071.8	1071.8
17.5°	1036.2	1034.7	1039.3	1054.8	1056.4
20°	1009.9	1013.0	1019.2	1037.8	1039.3
22.5°	983.6	986.7	997.5	1016.1	1020.7
25°	954.1	958.8	971.2	994.4	999.0
27.5°	923.2	929.3	946.4	971.2	975.8
30°	889.1	898.4	917.0	944.8	949.5
32.5°	855.0	864.3	887.5	915.4	921.6
35°	817.8	828.7	855.0	887.5	895.3
37.5°	779.1	793.0	824.0	856.5	865.8
40°	740.4	755.9	789.9	824.0	834.9
42.5°	701.7	717.1	754.3	793.0	803.9
45°	658.3	680.0	720.2	760.5	769.8
47.5°	616.5	639.7	684.6	724.9	737.3
50°	576.2	599.4	647.4	689.3	701.7
52.5°	534.4	559.2	610.3	653.6	664.5
55°	492.6	518.9	573.1	614.9	624.2
57.5°	450.7	478.6	534.4	574.6	585.5
60°	408.9	438.3	492.6	532.8	540.6
62.5°	367.1	398.1	453.8	489.5	497.2
65°	325.3	359.3	415.1	447.6	456.9
67.5°	285.0	319.1	373.3	404.3	412.0
70°	247.8	278.8	333.0	356.2	359.3
72.5°	201.4	240.1	292.7	305.1	297.4
75°	162.6	201.4	246.3	241.6	232.3
77.5°	123.9	162.6	192.1	176.6	164.2
80°	88.3	127.0	133.2	110.0	103.8
82.5°	57.3	88.3	74.3	57.3	46.5
85°	29.4	41.8	23.2	18.6	15.5
87.5°	9.3	6.2	3.1	3.1	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)