

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: P307998

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CP187-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: P307998  
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: 14FCZ2-39-UNV-L82765-S-CP187-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB 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**

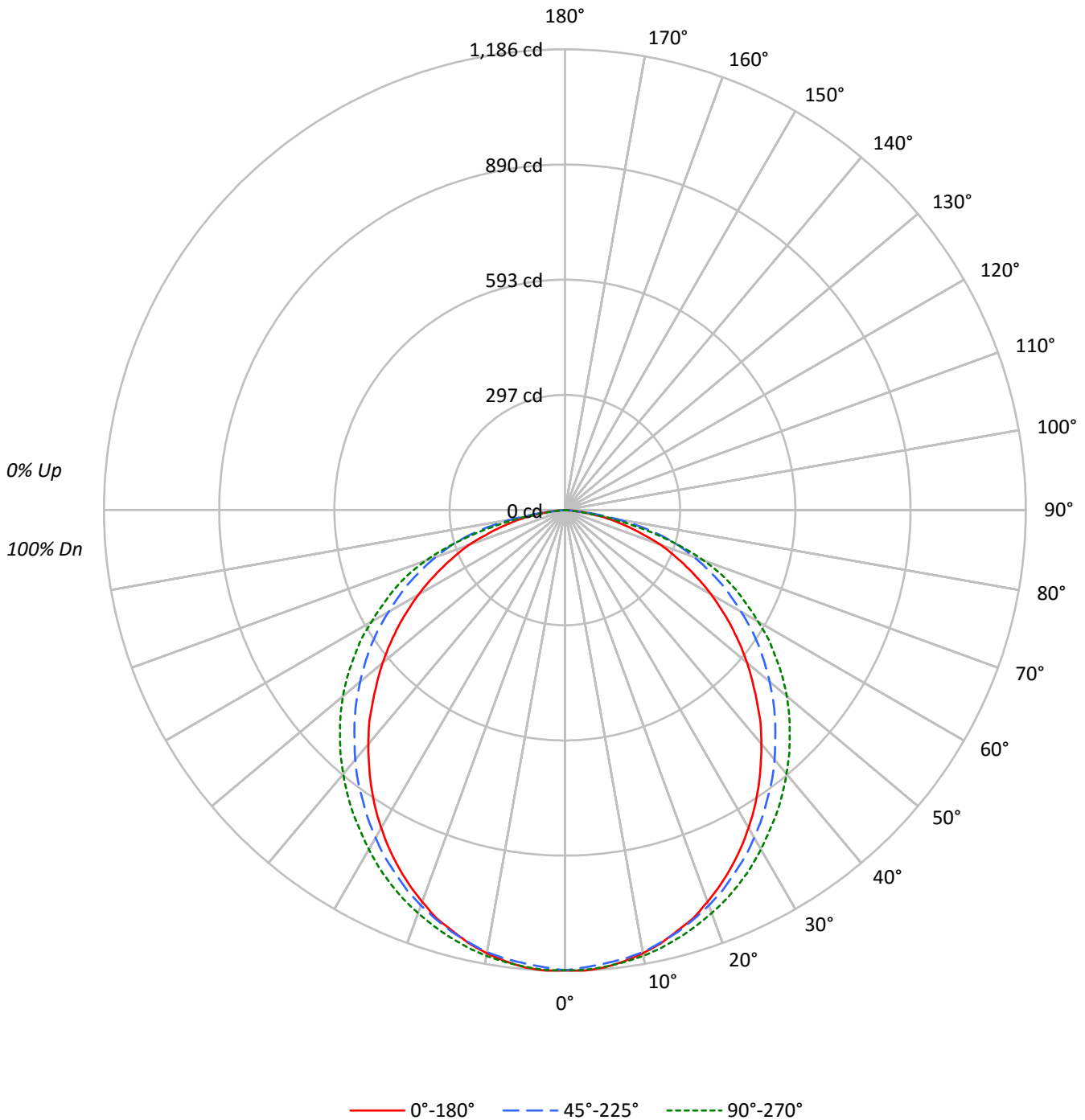
Lumens per Lamp: N/A  
Luminaire Lumens: 3319.0 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	3188	3188	3188
5°	3192	3165	3187
10°	3166	3157	3184
15°	3122	3131	3173
20°	3072	3101	3162
25°	3010	3064	3151
30°	2935	3027	3134
35°	2854	2984	3125
40°	2763	2948	3116
45°	2662	2912	3113
50°	2563	2880	3121
55°	2455	2857	3111
60°	2338	2816	3091
65°	2201	2808	3091
70°	2072	2784	3004
75°	1797	2720	2566
80°	1454	2193	1709
85°	966	763	509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.9	3.4
10°-20°	318.4	9.6
20°-30°	477.6	14.4
30°-40°	569.7	17.2
40°-50°	588.9	17.7
50°-60°	537.7	16.2
60°-70°	423.2	12.7
70°-80°	246.3	7.4
80°-90°	45.4	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°	907.8	27.4
0°-40°	1477.5	44.5
0°-60°	2604.2	78.5
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1182	1178	1172	1182	1180	112
15°	1121	1122	1124	1139	1139	316
25°	1014	1019	1032	1056	1061	467
35°	869	880	908	943	951	543
45°	699	722	765	808	818	540
55°	523	551	609	653	663	468
65°	346	382	441	476	486	343
75°	173	214	262	257	247	184
85°	31	44	25	20	16	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1186.5	1183.2	1178.2	1186.5	1184.8
5°	1181.5	1178.2	1171.7	1181.5	1179.9
7.5°	1171.7	1168.4	1165.1	1175.0	1173.3
10°	1158.5	1156.9	1155.2	1166.7	1165.1
12.5°	1142.0	1142.0	1140.4	1153.6	1153.6
15°	1120.6	1122.3	1123.9	1138.8	1138.8
17.5°	1100.9	1099.3	1104.2	1120.6	1122.3
20°	1072.9	1076.2	1082.8	1102.5	1104.2
22.5°	1045.0	1048.2	1059.8	1079.5	1084.4
25°	1013.7	1018.6	1031.8	1056.5	1061.4
27.5°	980.8	987.4	1005.5	1031.8	1036.7
30°	944.6	954.4	974.2	1003.8	1008.7
32.5°	908.4	918.2	942.9	972.5	979.1
35°	868.9	880.4	908.4	942.9	951.2
37.5°	827.7	842.5	875.5	910.0	919.9
40°	786.6	803.1	839.3	875.5	887.0
42.5°	745.5	761.9	801.4	842.5	854.1
45°	699.4	722.4	765.2	808.0	817.9
47.5°	654.9	679.6	727.4	770.1	783.3
50°	612.2	636.8	687.9	732.3	745.5
52.5°	567.7	594.1	648.4	694.4	706.0
55°	523.3	551.3	608.9	653.3	663.2
57.5°	478.9	508.5	567.7	610.5	622.0
60°	434.4	465.7	523.3	566.1	574.3
62.5°	390.0	422.9	482.2	520.0	528.2
65°	345.6	381.8	441.0	475.6	485.5
67.5°	302.8	339.0	396.6	429.5	437.7
70°	263.3	296.2	353.8	378.5	381.8
72.5°	213.9	255.1	311.0	324.2	316.0
75°	172.8	213.9	261.6	256.7	246.8
77.5°	131.6	172.8	204.1	187.6	174.4
80°	93.8	134.9	141.5	116.8	110.3
82.5°	60.9	93.8	79.0	60.9	49.4
85°	31.3	44.4	24.7	19.7	16.5
87.5°	9.9	6.6	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)