

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: P307927

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3500K**

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: P307927  
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-3500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 3500K 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**

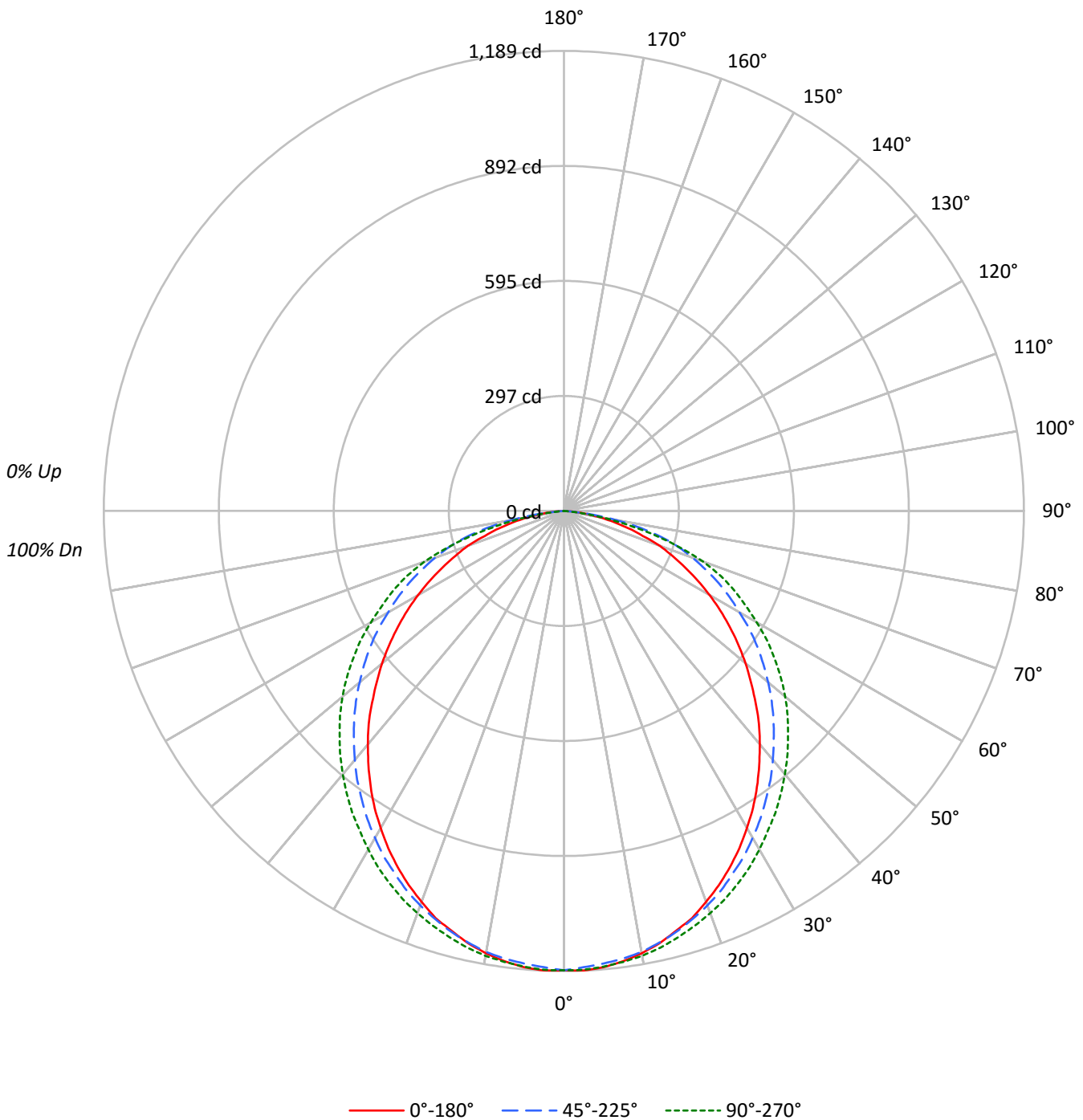
Lumens per Lamp: N/A  
Luminaire Lumens: 3325.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3194	3194	3194
5°	3197	3171	3193
10°	3171	3162	3189
15°	3128	3137	3178
20°	3078	3107	3168
25°	3015	3069	3157
30°	2940	3033	3140
35°	2859	2989	3130
40°	2768	2954	3121
45°	2666	2917	3118
50°	2568	2885	3126
55°	2459	2862	3117
60°	2342	2821	3097
65°	2204	2813	3096
70°	2076	2788	3009
75°	1800	2725	2571
80°	1457	2197	1712
85°	966	763	509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	3.4
10°-20°	318.9	9.6
20°-30°	478.4	14.4
30°-40°	570.7	17.2
40°-50°	590.0	17.7
50°-60°	538.7	16.2
60°-70°	423.9	12.7
70°-80°	246.8	7.4
80°-90°	45.5	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°	909.5	27.4
0°-40°	1480.2	44.5
0°-60°	2608.9	78.5
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1184	1180	1174	1184	1182	112
15°	1123	1124	1126	1141	1141	317
25°	1016	1020	1034	1058	1063	468
35°	870	882	910	945	953	544
45°	701	724	767	809	819	541
55°	524	552	610	654	664	469
65°	346	382	442	476	486	344
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°	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1188.6	1185.3	1180.4	1188.6	1187.0
5°	1183.7	1180.4	1173.8	1183.7	1182.0
7.5°	1173.8	1170.5	1167.2	1177.1	1175.4
10°	1160.6	1158.9	1157.3	1168.8	1167.2
12.5°	1144.1	1144.1	1142.5	1155.6	1155.6
15°	1122.7	1124.3	1126.0	1140.8	1140.8
17.5°	1102.9	1101.2	1106.2	1122.7	1124.3
20°	1074.9	1078.2	1084.8	1104.5	1106.2
22.5°	1046.8	1050.1	1061.7	1081.5	1086.4
25°	1015.5	1020.5	1033.7	1058.4	1063.3
27.5°	982.5	989.1	1007.3	1033.7	1038.6
30°	946.3	956.2	976.0	1005.6	1010.6
32.5°	910.0	919.9	944.6	974.3	980.9
35°	870.4	882.0	910.0	944.6	952.9
37.5°	829.2	844.1	877.0	911.7	921.6
40°	788.0	804.5	840.8	877.0	888.6
42.5°	746.8	763.3	802.9	844.1	855.6
45°	700.6	723.7	766.6	809.4	819.3
47.5°	656.1	680.9	728.7	771.5	784.7
50°	613.3	638.0	689.1	733.6	746.8
52.5°	568.8	595.1	649.5	695.7	707.2
55°	524.2	552.3	610.0	654.5	664.4
57.5°	479.7	509.4	568.8	611.6	623.2
60°	435.2	466.5	524.2	567.1	575.4
62.5°	390.7	423.7	483.0	520.9	529.2
65°	346.2	382.5	441.8	476.4	486.3
67.5°	303.3	339.6	397.3	430.3	438.5
70°	263.8	296.7	354.4	379.2	382.5
72.5°	214.3	255.5	311.6	324.8	316.5
75°	173.1	214.3	262.1	257.2	247.3
77.5°	131.9	173.1	204.4	187.9	174.7
80°	94.0	135.2	141.8	117.0	110.5
82.5°	61.0	94.0	79.1	61.0	49.5
85°	31.3	44.5	24.7	19.8	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)