

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: P307957

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP187-W2A-U-5000K**

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: P307957  
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-CP187-W2A-U-5000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 5000K 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**

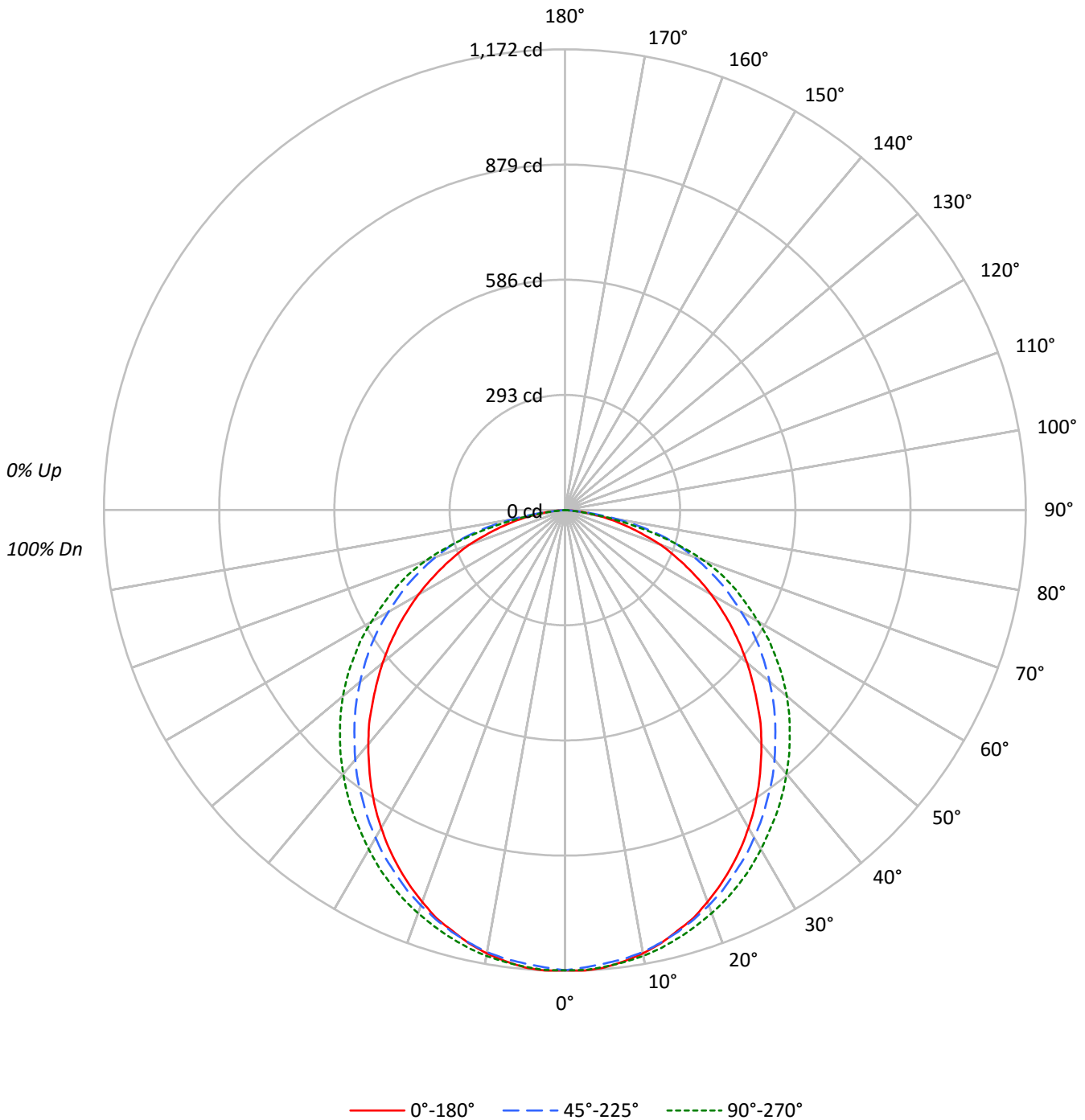
Lumens per Lamp: N/A  
Luminaire Lumens: 3280.0 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3151	3151	3151
5°	3154	3128	3150
10°	3128	3119	3146
15°	3085	3094	3135
20°	3036	3064	3125
25°	2975	3028	3114
30°	2901	2991	3098
35°	2821	2949	3088
40°	2731	2914	3079
45°	2630	2878	3076
50°	2533	2846	3084
55°	2426	2823	3075
60°	2310	2783	3055
65°	2174	2775	3054
70°	2047	2751	2969
75°	1776	2689	2536
80°	1437	2168	1689
85°	954	753	503



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.6	3.4
10°-20°	314.6	9.6
20°-30°	472.0	14.4
30°-40°	563.0	17.2
40°-50°	582.0	17.7
50°-60°	531.4	16.2
60°-70°	418.2	12.7
70°-80°	243.4	7.4
80°-90°	44.9	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°	897.1	27.4
0°-40°	1460.1	44.5
0°-60°	2573.5	78.5
0°-90°	3280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1168	1164	1158	1168	1166	111
15°	1108	1109	1111	1125	1125	313
25°	1002	1007	1020	1044	1049	461
35°	859	870	898	932	940	537
45°	691	714	756	798	808	534
55°	517	545	602	646	655	462
65°	342	377	436	470	480	339
75°	171	211	259	254	244	182
85°	31	44	24	20	16	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1170.9	1170.9	1170.9	1170.9	1170.9
2.5°	1172.5	1169.3	1164.4	1172.5	1170.9
5°	1167.7	1164.4	1157.9	1167.7	1166.0
7.5°	1157.9	1154.6	1151.4	1161.1	1159.5
10°	1144.9	1143.3	1141.6	1153.0	1151.4
12.5°	1128.6	1128.6	1127.0	1140.0	1140.0
15°	1107.5	1109.1	1110.7	1125.4	1125.4
17.5°	1088.0	1086.3	1091.2	1107.5	1109.1
20°	1060.3	1063.6	1070.1	1089.6	1091.2
22.5°	1032.7	1035.9	1047.3	1066.8	1071.7
25°	1001.8	1006.7	1019.7	1044.1	1048.9
27.5°	969.2	975.8	993.6	1019.7	1024.5
30°	933.5	943.2	962.7	992.0	996.9
32.5°	897.7	907.5	931.8	961.1	967.6
35°	858.7	870.0	897.7	931.8	940.0
37.5°	818.0	832.6	865.2	899.3	909.1
40°	777.4	793.6	829.4	865.2	876.6
42.5°	736.7	753.0	792.0	832.6	844.0
45°	691.2	713.9	756.2	798.5	808.3
47.5°	647.3	671.6	718.8	761.1	774.1
50°	605.0	629.4	679.8	723.7	736.7
52.5°	561.1	587.1	640.7	686.3	697.7
55°	517.1	544.8	601.7	645.6	655.4
57.5°	473.2	502.5	561.1	603.3	614.7
60°	429.3	460.2	517.1	559.4	567.6
62.5°	385.4	417.9	476.5	513.9	522.0
65°	341.5	377.3	435.8	470.0	479.7
67.5°	299.2	335.0	391.9	424.5	432.6
70°	260.2	292.7	349.6	374.0	377.3
72.5°	211.4	252.1	307.4	320.4	312.2
75°	170.8	211.4	258.6	253.7	243.9
77.5°	130.1	170.8	201.7	185.4	172.4
80°	92.7	133.4	139.9	115.5	109.0
82.5°	60.2	92.7	78.1	60.2	48.8
85°	30.9	43.9	24.4	19.5	16.3
87.5°	9.8	6.5	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)