

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: P307145

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP187-W2A-U-4000K**

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: P307145  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
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-HRP-CP187-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
POLYCARB SHEET  
Light Source: (168) 4000K 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**

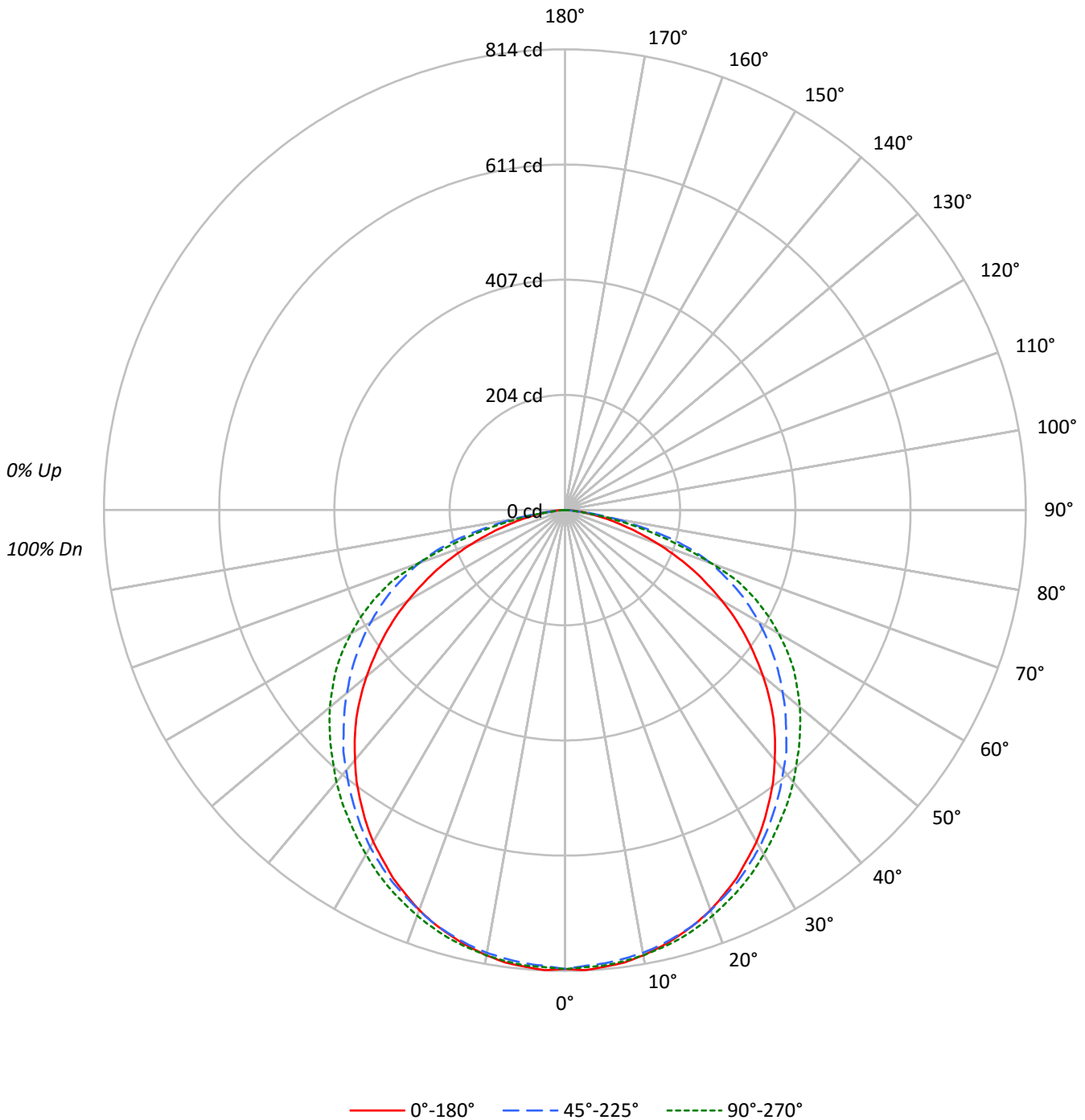
Lumens per Lamp: N/A  
Luminaire Lumens: 2387.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2181	2181	2181
5°	2188	2172	2182
10°	2182	2170	2182
15°	2169	2164	2185
20°	2154	2156	2184
25°	2131	2148	2184
30°	2104	2136	2183
35°	2066	2121	2187
40°	2025	2109	2204
45°	1982	2102	2228
50°	1914	2102	2269
55°	1831	2113	2317
60°	1721	2129	2347
65°	1587	2151	2361
70°	1382	2156	2173
75°	1140	2006	1756
80°	896	1443	1175
85°	695	556	278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.7	3.2
10°-20°	220.2	9.2
20°-30°	334.4	14.0
30°-40°	405.2	17.0
40°-50°	427.0	17.9
50°-60°	398.6	16.7
60°-70°	318.6	13.3
70°-80°	175.3	7.3
80°-90°	31.0	1.3
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°	631.4	26.5
0°-40°	1036.6	43.4
0°-60°	1862.2	78.0
0°-90°	2387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2387.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	810	808	804	809	808	77
15°	778	778	777	784	784	220
25°	718	719	724	734	736	330
35°	629	635	646	662	666	394
45°	521	531	552	577	586	401
55°	390	410	450	482	494	348
65°	249	281	338	366	371	245
75°	110	157	193	173	169	118
85°	22	28	18	11	9	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	810.6	810.6	810.6	810.6	810.6
2.5°	813.6	811.4	806.1	810.6	808.4
5°	809.9	807.6	803.9	809.1	807.6
7.5°	806.1	803.1	799.4	805.4	803.9
10°	798.6	796.4	794.1	799.4	798.6
12.5°	789.6	788.9	786.6	792.6	791.9
15°	778.4	778.4	776.9	784.4	784.4
17.5°	766.4	765.6	766.4	774.6	773.9
20°	752.1	752.1	752.8	762.6	762.6
22.5°	734.8	735.6	737.8	749.8	749.1
25°	717.6	719.1	723.6	734.1	735.6
27.5°	696.5	700.3	705.6	718.3	719.8
30°	677.0	679.3	687.5	699.5	702.6
32.5°	653.8	658.3	667.3	680.8	684.5
35°	629.0	635.0	645.5	662.0	665.8
37.5°	604.2	609.5	623.7	641.0	647.8
40°	576.5	585.5	600.5	620.0	627.5
42.5°	549.4	558.4	578.7	599.0	605.7
45°	520.9	530.7	552.4	577.2	585.5
47.5°	489.4	500.6	528.4	554.7	563.7
50°	457.1	471.4	502.1	531.4	541.9
52.5°	423.3	441.3	476.6	507.4	517.2
55°	390.3	409.8	450.4	481.9	493.9
57.5°	356.5	377.5	423.3	459.4	466.1
60°	319.8	345.3	395.6	427.1	436.1
62.5°	283.7	313.0	367.0	397.1	404.6
65°	249.2	280.7	337.8	365.5	370.8
67.5°	211.7	249.2	305.5	331.0	332.5
70°	175.6	219.2	274.0	286.0	276.2
72.5°	140.4	186.9	237.2	227.4	219.2
75°	109.6	156.9	192.9	173.4	168.9
77.5°	81.1	128.4	138.1	127.6	119.3
80°	57.8	101.3	93.1	79.6	75.8
82.5°	39.8	63.8	51.0	39.8	34.5
85°	22.5	28.5	18.0	11.3	9.0
87.5°	9.8	6.8	3.8	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)