

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: P312090

Luminaire Tested: **14FCZ2-39-UNV-L83050-RDP-CA08-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: P312090  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
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-L83050-RDP-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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**

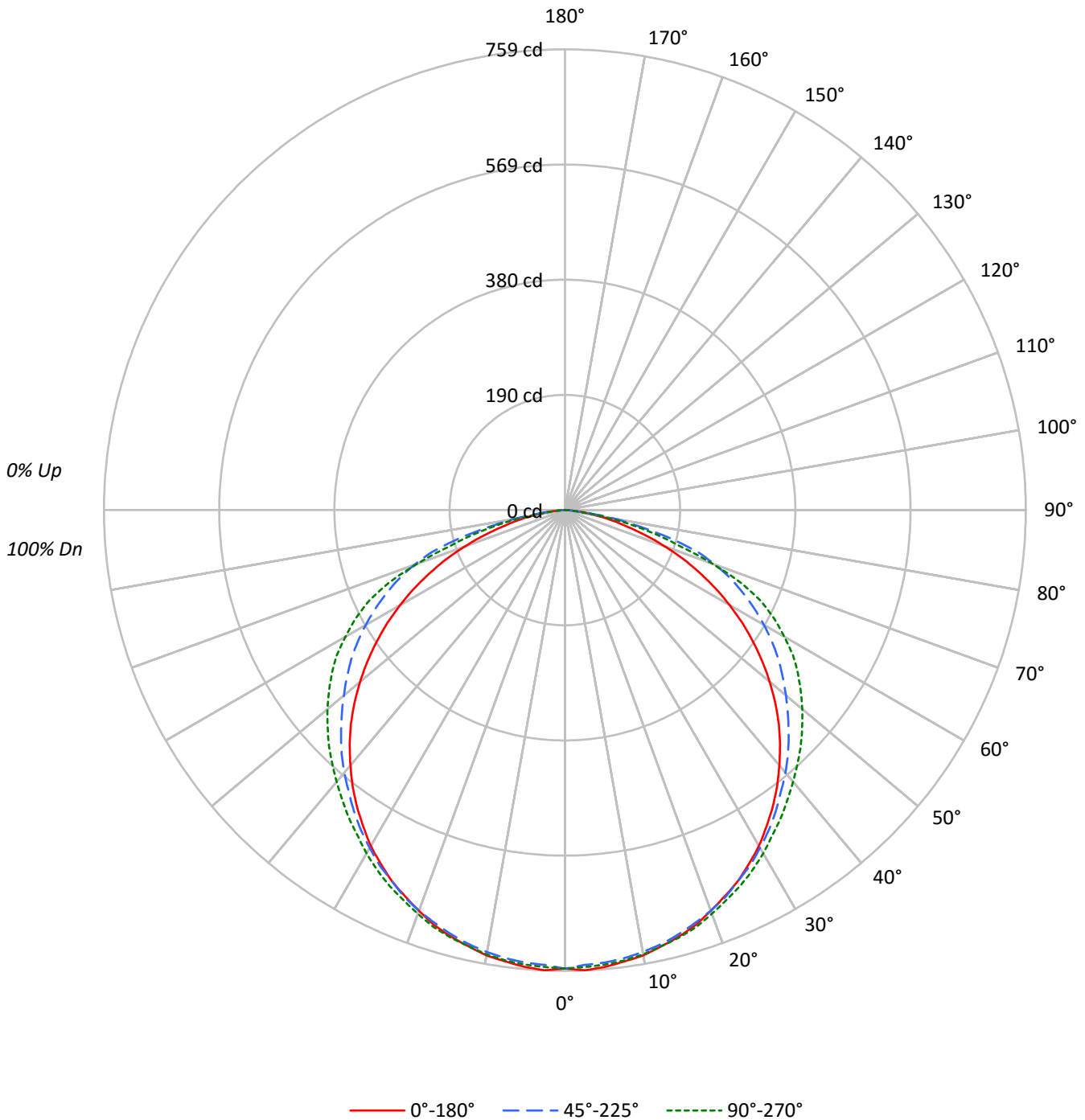
Lumens per Lamp: N/A  
Luminaire Lumens: 2255.0 lumens  
Efficiency: N/A  
Efficacy: 67.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2032	2032	2032
5°	2040	2021	2031
10°	2035	2020	2030
15°	2026	2016	2030
20°	2011	2011	2027
25°	2002	2002	2028
30°	1986	1997	2029
35°	1961	1989	2036
40°	1930	1985	2053
45°	1896	1983	2090
50°	1842	1990	2137
55°	1776	2016	2197
60°	1687	2037	2245
65°	1558	2062	2276
70°	1386	2078	2036
75°	1117	1867	1629
80°	872	1309	1065
85°	599	380	272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	3.2
10°-20°	205.1	9.1
20°-30°	312.3	13.8
30°-40°	380.4	16.9
40°-50°	403.6	17.9
50°-60°	380.9	16.9
60°-70°	307.5	13.6
70°-80°	166.8	7.4
80°-90°	27.0	1.2
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°	588.9	26.1
0°-40°	969.2	43.0
0°-60°	1753.7	77.8
0°-90°	2255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2255.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	755	754	748	754	752	72
15°	727	725	724	729	729	205
25°	674	672	674	681	683	310
35°	597	600	606	618	620	373
45°	498	505	521	540	549	384
55°	378	394	430	458	468	338
65°	245	275	324	350	357	242
75°	107	157	180	162	157	117
85°	19	21	12	11	9	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	755.3	755.3	755.3	755.3	755.3
2.5°	758.8	755.3	750.0	755.3	753.5
5°	755.3	753.5	748.2	753.5	751.7
7.5°	750.0	750.0	744.7	748.2	748.2
10°	744.7	742.9	739.4	744.7	742.9
12.5°	735.9	734.1	732.4	737.7	735.9
15°	727.1	725.3	723.6	728.8	728.8
17.5°	716.5	714.8	713.0	720.0	720.0
20°	702.4	702.4	702.4	709.5	707.7
22.5°	688.4	688.4	690.1	697.2	695.4
25°	674.3	672.5	674.3	681.3	683.1
27.5°	656.7	658.4	660.2	667.2	669.0
30°	639.1	640.8	642.6	651.4	653.1
32.5°	617.9	621.5	625.0	635.5	635.5
35°	596.8	600.3	605.6	617.9	619.7
37.5°	573.9	577.4	584.5	598.6	602.1
40°	549.3	554.6	565.1	579.2	584.5
42.5°	524.6	531.7	544.0	559.8	566.9
45°	498.2	505.3	521.1	540.5	549.3
47.5°	470.1	478.9	498.2	522.9	529.9
50°	440.1	452.5	475.3	501.7	510.5
52.5°	410.2	424.3	452.5	480.6	489.4
55°	378.5	394.4	429.6	457.7	468.3
57.5°	346.8	364.4	404.9	434.8	445.4
60°	313.4	334.5	378.5	408.4	417.2
62.5°	279.9	304.6	352.1	382.0	389.1
65°	244.7	274.6	323.9	350.3	357.4
67.5°	211.3	246.5	295.8	315.1	315.1
70°	176.1	214.8	264.1	269.4	258.8
72.5°	140.8	184.9	228.9	209.5	200.7
75°	107.4	156.7	179.6	162.0	156.7
77.5°	81.0	126.8	126.8	116.2	112.7
80°	56.3	96.8	84.5	73.9	68.7
82.5°	37.0	54.6	44.0	35.2	29.9
85°	19.4	21.1	12.3	10.6	8.8
87.5°	7.0	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)