

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: P307438

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CA08-W2A-U-6500K**

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: P307438  
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-L82765-RDP-CA08-W2A-U-6500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET  
Light Source: (168) 6500K 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**

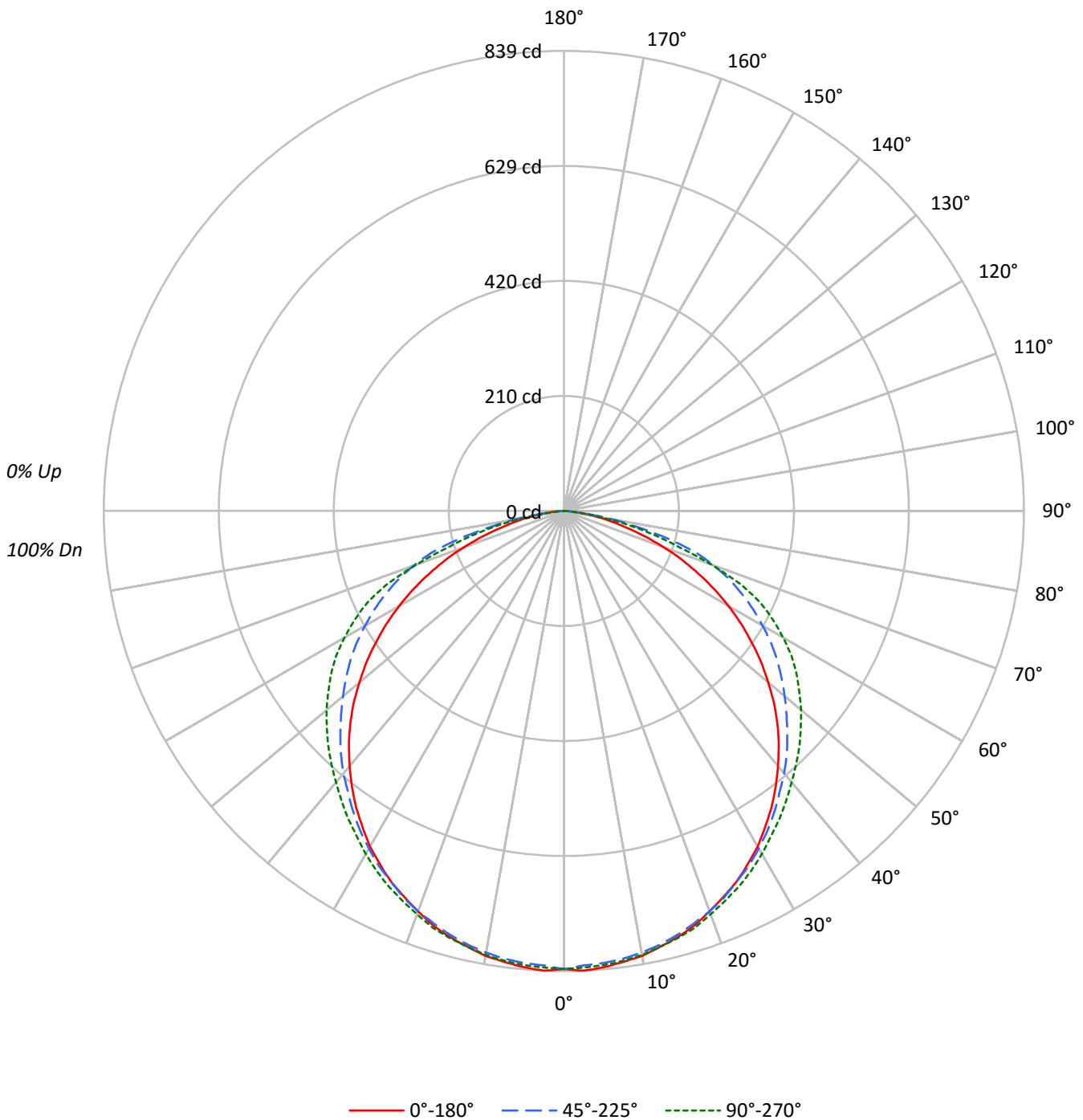
Lumens per Lamp: N/A  
Luminaire Lumens: 2494.0 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2248	2248	2248
5°	2256	2235	2246
10°	2250	2235	2245
15°	2240	2230	2246
20°	2225	2225	2241
25°	2214	2214	2243
30°	2196	2208	2245
35°	2168	2200	2252
40°	2134	2196	2271
45°	2097	2193	2312
50°	2038	2201	2364
55°	1964	2229	2430
60°	1865	2253	2484
65°	1723	2281	2517
70°	1532	2298	2252
75°	1235	2065	1802
80°	965	1449	1176
85°	661	420	299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	3.2
10°-20°	226.8	9.1
20°-30°	345.4	13.8
30°-40°	420.7	16.9
40°-50°	446.3	17.9
50°-60°	421.2	16.9
60°-70°	340.1	13.6
70°-80°	184.5	7.4
80°-90°	29.9	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°	651.3	26.1
0°-40°	1072.0	43.0
0°-60°	1939.5	77.8
0°-90°	2494.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2494.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	835	833	828	833	831	79
15°	804	802	800	806	806	227
25°	746	744	746	754	756	343
35°	660	664	670	683	685	413
45°	551	559	576	598	608	424
55°	419	436	475	506	518	374
65°	271	304	358	388	395	268
75°	119	173	199	179	173	130
85°	21	23	14	12	10	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	835.3	835.3	835.3	835.3	835.3
2.5°	839.2	835.3	829.5	835.3	833.4
5°	835.3	833.4	827.5	833.4	831.4
7.5°	829.5	829.5	823.6	827.5	827.5
10°	823.6	821.7	817.8	823.6	821.7
12.5°	813.9	811.9	810.0	815.8	813.9
15°	804.2	802.2	800.3	806.1	806.1
17.5°	792.5	790.5	788.6	796.4	796.4
20°	776.9	776.9	776.9	784.7	782.7
22.5°	761.3	761.3	763.3	771.1	769.1
25°	745.7	743.8	745.7	753.5	755.5
27.5°	726.3	728.2	730.2	737.9	739.9
30°	706.8	708.7	710.7	720.4	722.4
32.5°	683.4	687.3	691.2	702.9	702.9
35°	660.1	664.0	669.8	683.4	685.4
37.5°	634.8	638.6	646.4	662.0	665.9
40°	607.5	613.3	625.0	640.6	646.4
42.5°	580.2	588.0	601.7	619.2	627.0
45°	551.0	558.8	576.3	597.8	607.5
47.5°	519.9	529.6	551.0	578.3	586.1
50°	486.8	500.4	525.7	554.9	564.7
52.5°	453.7	469.3	500.4	531.6	541.3
55°	418.6	436.1	475.1	506.2	517.9
57.5°	383.6	403.0	447.8	480.9	492.6
60°	346.6	369.9	418.6	451.7	461.5
62.5°	309.6	336.8	389.4	422.5	430.3
65°	270.6	303.7	358.3	387.5	395.3
67.5°	233.7	272.6	327.1	348.5	348.5
70°	194.7	237.5	292.1	297.9	286.2
72.5°	155.8	204.4	253.1	231.7	222.0
75°	118.8	173.3	198.6	179.1	173.3
77.5°	89.6	140.2	140.2	128.5	124.6
80°	62.3	107.1	93.5	81.8	75.9
82.5°	40.9	60.4	48.7	38.9	33.1
85°	21.4	23.4	13.6	11.7	9.7
87.5°	7.8	3.9	1.9	3.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)