

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: P307161

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-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: P307161  
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: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

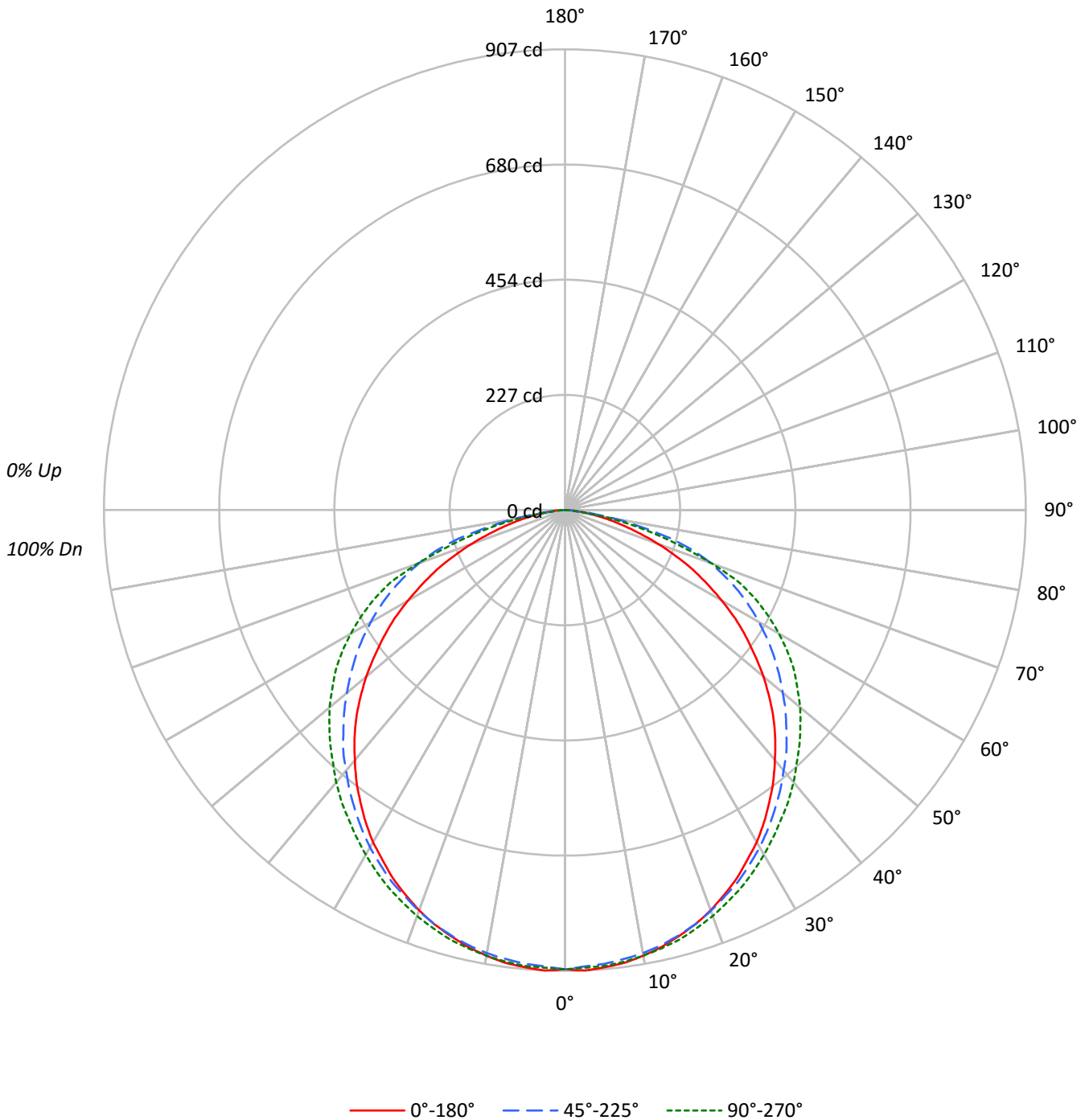
Lumens per Lamp: N/A  
Luminaire Lumens: 2662.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2433	2433	2433
5°	2440	2422	2433
10°	2434	2420	2434
15°	2418	2414	2437
20°	2402	2404	2436
25°	2376	2396	2436
30°	2346	2383	2435
35°	2304	2365	2439
40°	2258	2353	2458
45°	2211	2345	2485
50°	2134	2344	2530
55°	2042	2356	2584
60°	1919	2374	2617
65°	1769	2399	2633
70°	1541	2404	2423
75°	1271	2236	1958
80°	1000	1609	1309
85°	775	621	309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.6	3.2
10°-20°	245.6	9.2
20°-30°	372.9	14.0
30°-40°	451.9	17.0
40°-50°	476.2	17.9
50°-60°	444.5	16.7
60°-70°	355.3	13.3
70°-80°	195.5	7.3
80°-90°	34.5	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°	704.1	26.5
0°-40°	1156.0	43.4
0°-60°	2076.7	78.0
0°-90°	2662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2662.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	903	901	896	902	901	86
15°	868	868	866	875	875	245
25°	800	802	807	819	820	368
35°	702	708	720	738	742	439
45°	581	592	616	644	653	447
55°	435	457	502	537	551	389
65°	278	313	377	408	414	274
75°	122	175	215	193	188	132
85°	25	32	20	13	10	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.0	904.0	904.0	904.0	904.0
2.5°	907.4	904.9	899.0	904.0	901.5
5°	903.2	900.7	896.5	902.4	900.7
7.5°	899.0	895.7	891.5	898.2	896.5
10°	890.6	888.1	885.6	891.5	890.6
12.5°	880.6	879.8	877.2	883.9	883.1
15°	868.0	868.0	866.4	874.7	874.7
17.5°	854.6	853.8	854.6	863.8	863.0
20°	838.7	838.7	839.6	850.5	850.5
22.5°	819.5	820.3	822.8	836.2	835.4
25°	800.2	801.9	806.9	818.6	820.3
27.5°	776.8	781.0	786.8	801.1	802.7
30°	755.0	757.5	766.8	780.1	783.5
32.5°	729.1	734.1	744.1	759.2	763.4
35°	701.5	708.2	719.9	738.3	742.5
37.5°	673.8	679.7	695.6	714.9	722.4
40°	642.9	652.9	669.7	691.4	699.8
42.5°	612.7	622.8	645.4	668.0	675.5
45°	580.9	591.8	616.1	643.7	652.9
47.5°	545.8	558.3	589.3	618.6	628.6
50°	509.8	525.7	560.0	592.6	604.4
52.5°	472.1	492.2	531.5	565.9	576.7
55°	435.3	457.0	502.2	537.4	550.8
57.5°	397.6	421.0	472.1	512.3	519.8
60°	356.6	385.0	441.1	476.3	486.3
62.5°	316.4	349.1	409.3	442.8	451.2
65°	277.9	313.1	376.7	407.6	413.5
67.5°	236.1	277.9	340.7	369.1	370.8
70°	195.9	244.4	305.5	318.9	308.0
72.5°	156.5	208.4	264.5	253.6	244.4
75°	122.2	174.9	215.1	193.4	188.3
77.5°	90.4	143.1	154.0	142.3	133.1
80°	64.5	113.0	103.8	88.7	84.5
82.5°	44.4	71.2	56.9	44.4	38.5
85°	25.1	31.8	20.1	12.6	10.0
87.5°	10.9	7.5	4.2	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)