

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: P307077

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA08-W2A-U-5700K**

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: P307077  
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: 14FCZ2-29-UNV-L82765-HRP-CA08-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 5700K 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**

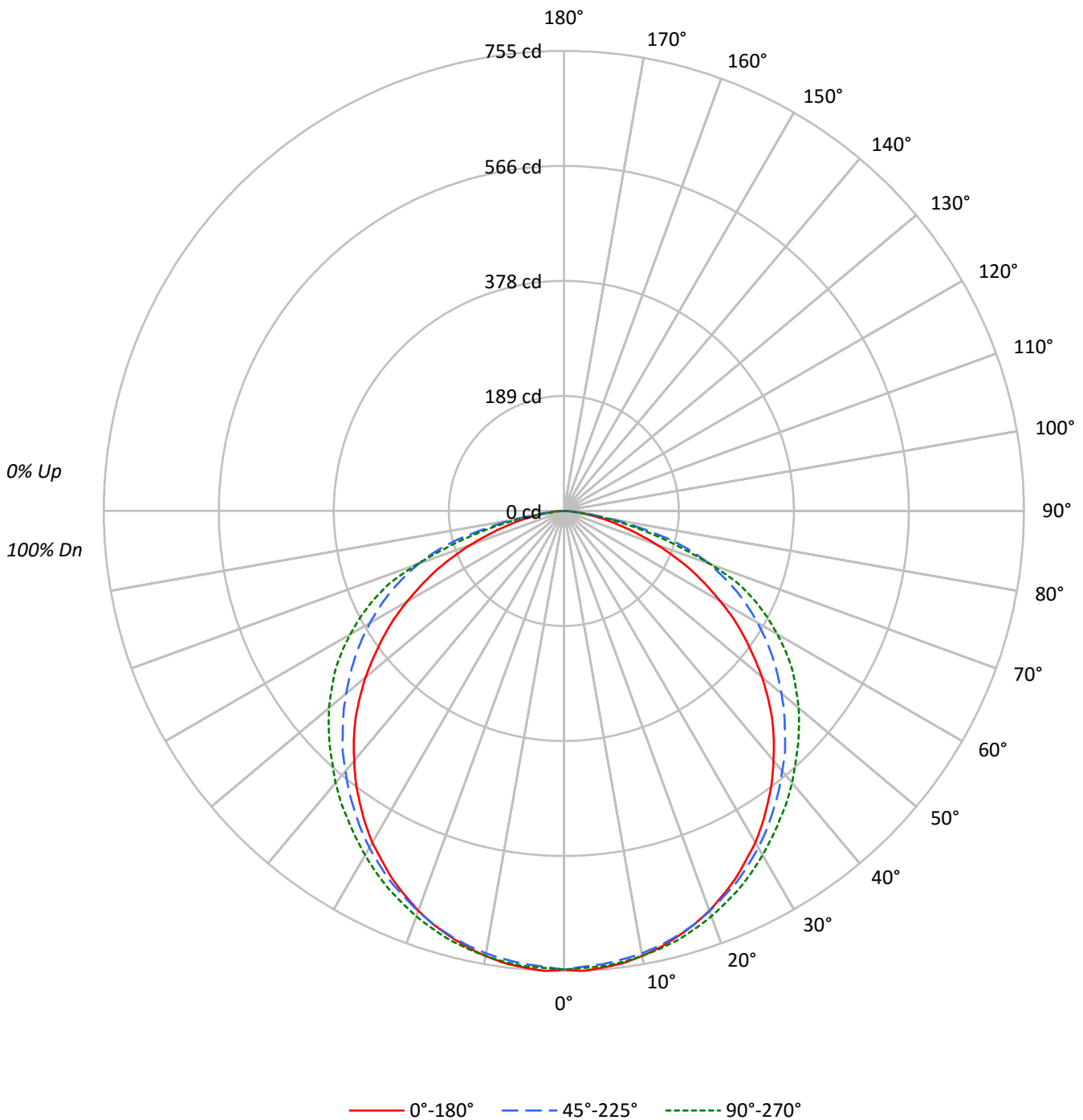
Lumens per Lamp: N/A  
Luminaire Lumens: 2216.0 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2025	2025	2025
5°	2031	2016	2025
10°	2026	2014	2026
15°	2013	2009	2029
20°	1999	2001	2027
25°	1978	1994	2028
30°	1953	1983	2027
35°	1918	1969	2031
40°	1880	1958	2046
45°	1840	1952	2068
50°	1777	1952	2106
55°	1700	1962	2151
60°	1597	1976	2179
65°	1473	1997	2192
70°	1283	2001	2017
75°	1057	1862	1630
80°	832	1339	1091
85°	645	516	259



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.2	3.2
10°-20°	204.4	9.2
20°-30°	310.5	14.0
30°-40°	376.2	17.0
40°-50°	396.4	17.9
50°-60°	370.1	16.7
60°-70°	295.7	13.3
70°-80°	162.7	7.3
80°-90°	28.7	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°	586.2	26.5
0°-40°	962.3	43.4
0°-60°	1728.8	78.0
0°-90°	2216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2216.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	752	750	746	751	750	71
15°	723	723	721	728	728	204
25°	666	668	672	682	683	307
35°	584	590	599	615	618	365
45°	484	493	513	536	544	372
55°	362	380	418	447	458	323
65°	231	261	314	339	344	228
75°	102	146	179	161	157	110
85°	21	26	17	10	8	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	752.6	752.6	752.6	752.6	752.6
2.5°	755.4	753.3	748.4	752.6	750.5
5°	751.9	749.8	746.3	751.2	749.8
7.5°	748.4	745.6	742.1	747.7	746.3
10°	741.4	739.3	737.2	742.1	741.4
12.5°	733.1	732.4	730.3	735.8	735.1
15°	722.6	722.6	721.2	728.2	728.2
17.5°	711.5	710.8	711.5	719.1	718.4
20°	698.2	698.2	698.9	708.0	708.0
22.5°	682.2	682.9	685.0	696.1	695.4
25°	666.2	667.6	671.7	681.5	682.9
27.5°	646.6	650.1	655.0	666.9	668.2
30°	628.5	630.6	638.3	649.4	652.2
32.5°	606.9	611.1	619.5	632.0	635.5
35°	583.9	589.5	599.3	614.6	618.1
37.5°	560.9	565.8	579.1	595.1	601.4
40°	535.2	543.5	557.5	575.6	582.5
42.5°	510.1	518.4	537.2	556.1	562.3
45°	483.6	492.7	512.9	535.9	543.5
47.5°	454.3	464.8	490.6	514.9	523.3
50°	424.4	437.6	466.2	493.3	503.1
52.5°	393.0	409.7	442.5	471.0	480.1
55°	362.3	380.5	418.1	447.4	458.5
57.5°	331.0	350.5	393.0	426.5	432.7
60°	296.8	320.5	367.2	396.5	404.9
62.5°	263.4	290.6	340.7	368.6	375.6
65°	231.3	260.6	313.6	339.4	344.2
67.5°	196.5	231.3	283.6	307.3	308.7
70°	163.1	203.5	254.3	265.5	256.4
72.5°	130.3	173.5	220.2	211.1	203.5
75°	101.7	145.6	179.1	161.0	156.8
77.5°	75.3	119.2	128.2	118.5	110.8
80°	53.7	94.1	86.4	73.9	70.4
82.5°	36.9	59.2	47.4	36.9	32.1
85°	20.9	26.5	16.7	10.5	8.4
87.5°	9.1	6.3	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)