

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: P307076

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA08-W2A-U-5500K**

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: P307076  
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-5500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 5500K 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: 2210.0 lumens  
Efficiency: N/A  
Efficacy: 90.2 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

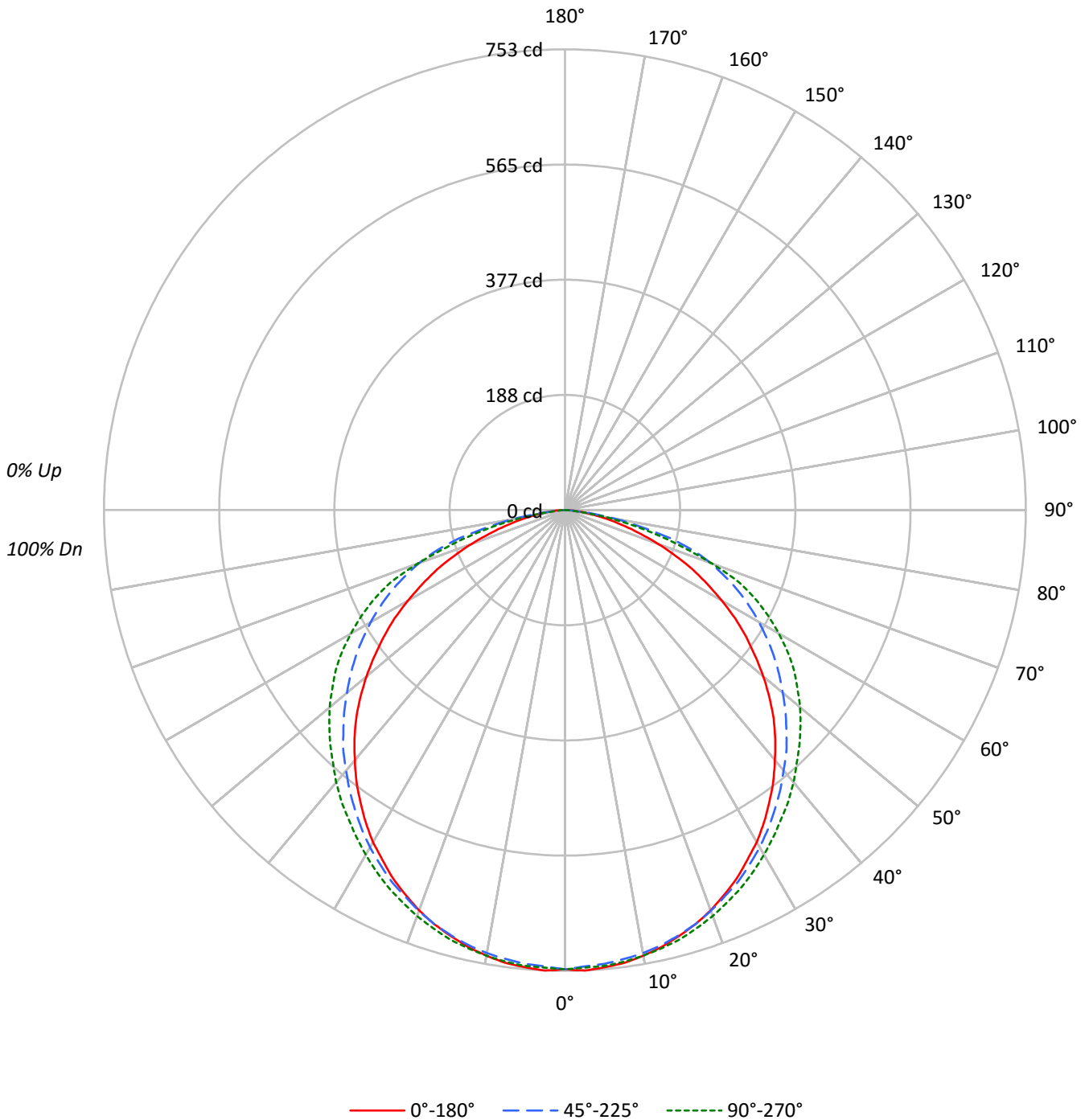
Input Watts (W): 24.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2020	2020	2020
5°	2025	2011	2020
10°	2020	2009	2020
15°	2008	2004	2023
20°	1994	1996	2022
25°	1973	1989	2022
30°	1948	1978	2021
35°	1913	1963	2025
40°	1875	1953	2041
45°	1835	1947	2063
50°	1772	1946	2100
55°	1696	1956	2145
60°	1593	1971	2173
65°	1469	1991	2186
70°	1279	1996	2012
75°	1055	1857	1626
80°	829	1336	1088
85°	642	516	256



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	3.2
10°-20°	203.9	9.2
20°-30°	309.6	14.0
30°-40°	375.2	17.0
40°-50°	395.3	17.9
50°-60°	369.1	16.7
60°-70°	294.9	13.3
70°-80°	162.3	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°	584.6	26.5
0°-40°	959.7	43.4
0°-60°	1724.1	78.0
0°-90°	2210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2210.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	750	748	744	749	748	71
15°	721	721	719	726	726	203
25°	664	666	670	680	681	306
35°	582	588	598	613	616	364
45°	482	491	512	534	542	371
55°	361	379	417	446	457	323
65°	231	260	313	338	343	227
75°	102	145	179	160	156	109
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°	750.5	750.5	750.5	750.5	750.5
2.5°	753.3	751.2	746.4	750.5	748.4
5°	749.8	747.7	744.3	749.1	747.7
7.5°	746.4	743.6	740.1	745.7	744.3
10°	739.4	737.3	735.2	740.1	739.4
12.5°	731.1	730.4	728.3	733.8	733.2
15°	720.6	720.6	719.3	726.2	726.2
17.5°	709.5	708.8	709.5	717.2	716.5
20°	696.3	696.3	697.0	706.1	706.1
22.5°	680.3	681.0	683.1	694.2	693.5
25°	664.4	665.7	669.9	679.6	681.0
27.5°	644.9	648.4	653.2	665.1	666.4
30°	626.8	628.9	636.6	647.7	650.5
32.5°	605.3	609.5	617.8	630.3	633.8
35°	582.4	587.9	597.6	612.9	616.4
37.5°	559.4	564.3	577.5	593.5	599.7
40°	533.7	542.0	555.9	574.0	581.0
42.5°	508.7	517.0	535.8	554.6	560.8
45°	482.3	491.3	511.5	534.4	542.0
47.5°	453.1	463.5	489.2	513.6	521.9
50°	423.2	436.4	464.9	492.0	501.7
52.5°	391.9	408.6	441.3	469.8	478.8
55°	361.4	379.4	417.0	446.1	457.3
57.5°	330.1	349.6	391.9	425.3	431.6
60°	296.0	319.7	366.2	395.4	403.8
62.5°	262.7	289.8	339.8	367.6	374.6
65°	230.7	259.9	312.7	338.4	343.3
67.5°	196.0	230.7	282.8	306.5	307.9
70°	162.6	202.9	253.7	264.8	255.7
72.5°	130.0	173.0	219.6	210.6	202.9
75°	101.5	145.2	178.6	160.5	156.4
77.5°	75.1	118.8	127.9	118.1	110.5
80°	53.5	93.8	86.2	73.7	70.2
82.5°	36.8	59.1	47.3	36.8	32.0
85°	20.8	26.4	16.7	10.4	8.3
87.5°	9.0	6.3	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)