

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: P312077

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4000K**

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: P312077  
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: 14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET  
Light Source: (168) 4000K 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**

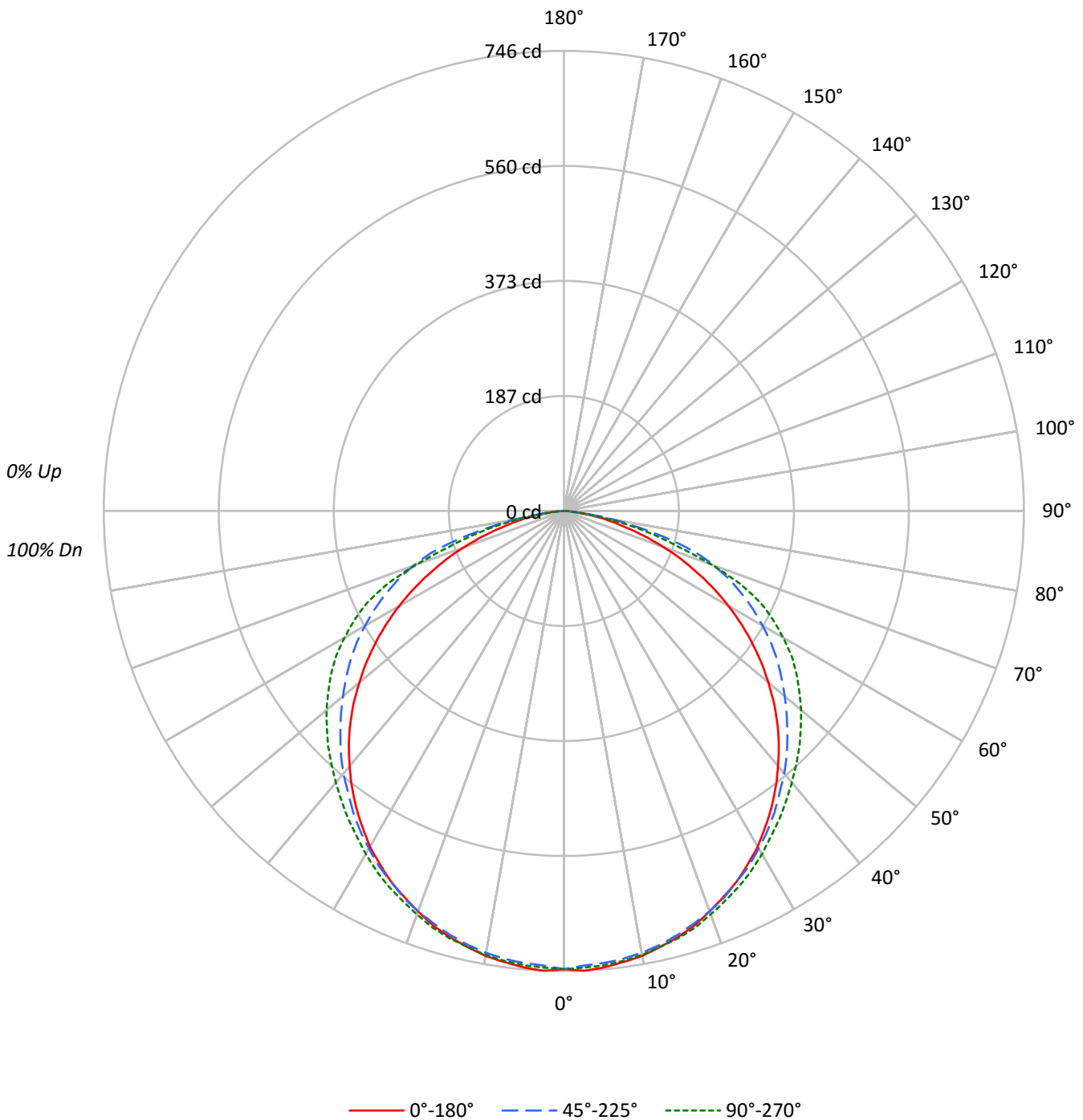
Lumens per Lamp: N/A  
Luminaire Lumens: 2218.0 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1999	1999	1999
5°	2007	1988	1997
10°	2002	1987	1997
15°	1992	1983	1997
20°	1979	1979	1993
25°	1969	1969	1995
30°	1953	1964	1996
35°	1928	1957	2002
40°	1898	1952	2020
45°	1865	1951	2056
50°	1812	1957	2102
55°	1747	1982	2161
60°	1659	2004	2209
65°	1533	2029	2238
70°	1363	2043	2002
75°	1098	1836	1602
80°	859	1288	1046
85°	587	374	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	3.2
10°-20°	201.7	9.1
20°-30°	307.2	13.8
30°-40°	374.1	16.9
40°-50°	396.9	17.9
50°-60°	374.6	16.9
60°-70°	302.5	13.6
70°-80°	164.1	7.4
80°-90°	26.5	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°	579.2	26.1
0°-40°	953.3	43.0
0°-60°	1724.9	77.8
0°-90°	2218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2218.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	743	741	736	741	739	71
15°	715	713	712	717	717	202
25°	663	662	663	670	672	305
35°	587	590	596	608	610	367
45°	490	497	513	532	540	377
55°	372	388	422	450	461	333
65°	241	270	319	345	352	238
75°	106	154	177	159	154	115
85°	19	21	12	10	9	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	742.9	742.9	742.9	742.9	742.9
2.5°	746.3	742.9	737.7	742.9	741.1
5°	742.9	741.1	735.9	741.1	739.4
7.5°	737.7	737.7	732.5	735.9	735.9
10°	732.5	730.7	727.3	732.5	730.7
12.5°	723.8	722.1	720.4	725.5	723.8
15°	715.2	713.4	711.7	716.9	716.9
17.5°	704.8	703.0	701.3	708.2	708.2
20°	690.9	690.9	690.9	697.8	696.1
22.5°	677.1	677.1	678.8	685.7	684.0
25°	663.2	661.5	663.2	670.1	671.9
27.5°	645.9	647.6	649.4	656.3	658.0
30°	628.6	630.3	632.0	640.7	642.4
32.5°	607.8	611.3	614.7	625.1	625.1
35°	587.0	590.5	595.7	607.8	609.5
37.5°	564.5	568.0	574.9	588.8	592.2
40°	540.3	545.5	555.8	569.7	574.9
42.5°	516.0	522.9	535.1	550.7	557.6
45°	490.0	497.0	512.6	531.6	540.3
47.5°	462.3	471.0	490.0	514.3	521.2
50°	432.9	445.0	467.5	493.5	502.2
52.5°	403.5	417.3	445.0	472.7	481.4
55°	372.3	387.9	422.5	450.2	460.6
57.5°	341.1	358.4	398.3	427.7	438.1
60°	308.2	329.0	372.3	401.7	410.4
62.5°	275.3	299.6	346.3	375.8	382.7
65°	240.7	270.1	318.6	344.6	351.5
67.5°	207.8	242.4	290.9	310.0	310.0
70°	173.2	211.3	259.7	264.9	254.5
72.5°	138.5	181.8	225.1	206.1	197.4
75°	105.6	154.1	176.6	159.3	154.1
77.5°	79.7	124.7	124.7	114.3	110.8
80°	55.4	95.2	83.1	72.7	67.5
82.5°	36.4	53.7	43.3	34.6	29.4
85°	19.0	20.8	12.1	10.4	8.7
87.5°	6.9	3.5	1.7	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)