

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: P312150

Luminaire Tested: **14FCZ2-20-UNV-L83050-CP125-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: P312150  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-20-UNV-L83050-CP125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB 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**

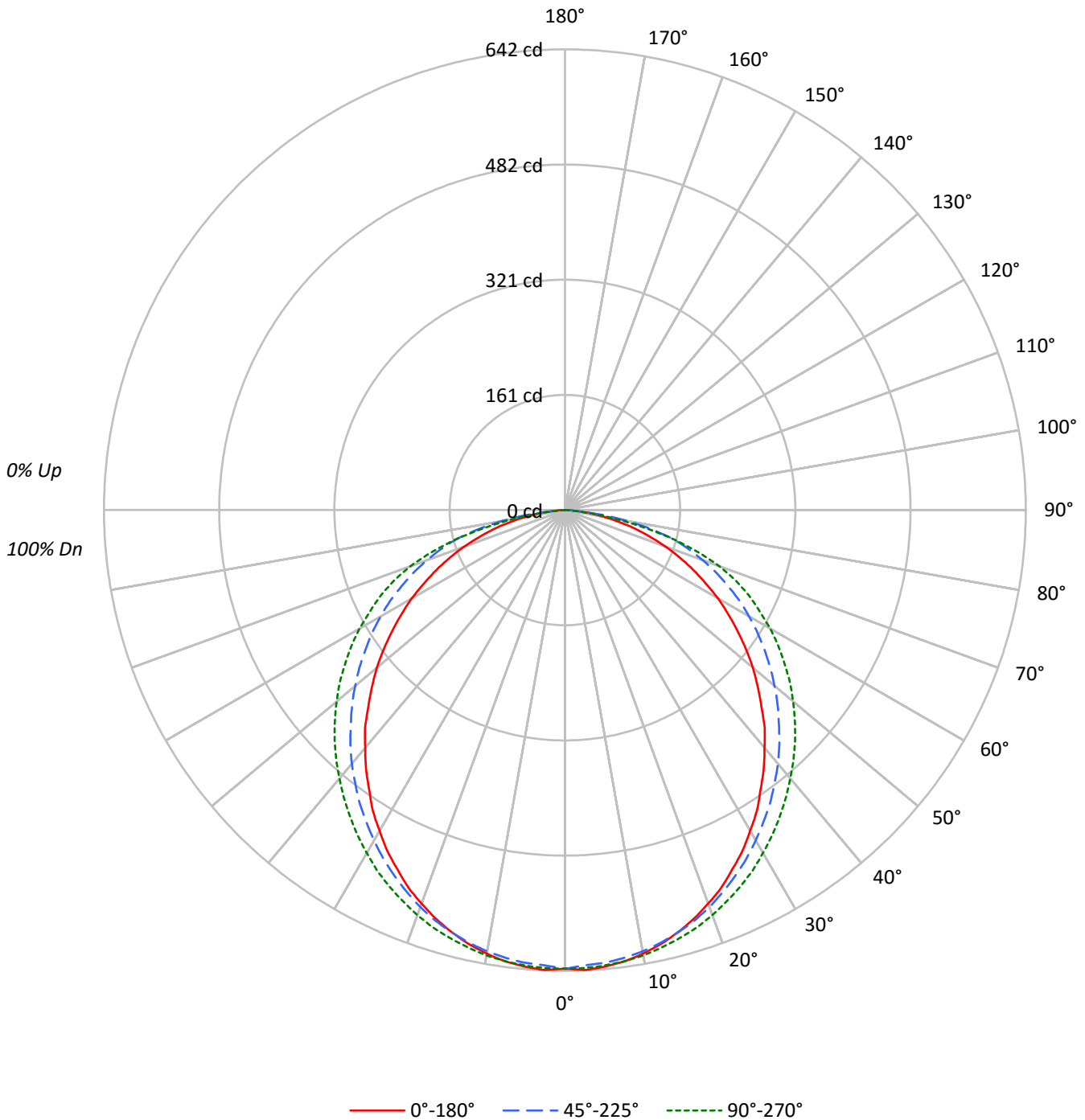
Lumens per Lamp: N/A  
Luminaire Lumens: 1855.0 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1720	1720	1720
5°	1725	1711	1721
10°	1715	1706	1721
15°	1696	1697	1720
20°	1671	1686	1720
25°	1640	1669	1718
30°	1604	1652	1715
35°	1561	1637	1713
40°	1520	1622	1716
45°	1474	1604	1725
50°	1430	1597	1737
55°	1376	1591	1752
60°	1327	1594	1777
65°	1259	1599	1804
70°	1181	1611	1803
75°	1071	1626	1630
80°	879	1404	1161
85°	651	664	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.5	3.3
10°-20°	172.7	9.3
20°-30°	260.2	14.0
30°-40°	312.3	16.8
40°-50°	325.5	17.5
50°-60°	301.3	16.2
60°-70°	243.5	13.1
70°-80°	148.4	8.0
80°-90°	30.6	1.7
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°	493.4	26.6
0°-40°	805.7	43.4
0°-60°	1432.5	77.2
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	639	637	633	638	637	61
15°	609	609	609	618	618	172
25°	552	556	562	576	579	255
35°	475	483	498	517	522	298
45°	387	399	422	445	453	299
55°	293	309	339	366	374	263
65°	198	217	251	276	283	195
75°	103	126	156	159	157	108
85°	21	31	22	12	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	639.1	639.1	639.1	639.1	639.1
2.5°	641.5	639.5	634.9	639.5	638.6
5°	638.6	637.0	633.3	637.8	637.0
7.5°	634.5	632.8	629.5	634.9	634.1
10°	627.5	626.6	624.2	630.4	630.0
12.5°	619.2	618.8	617.5	624.6	624.2
15°	608.9	609.3	609.3	617.5	617.5
17.5°	597.3	598.1	599.8	608.9	610.1
20°	583.6	585.3	588.6	598.9	600.6
22.5°	569.6	570.8	575.8	588.2	589.8
25°	552.2	555.5	562.1	576.2	578.7
27.5°	535.6	538.5	547.6	562.1	566.3
30°	516.2	520.8	531.5	547.2	551.8
32.5°	497.6	502.6	515.0	533.2	537.3
35°	475.3	482.7	498.4	516.6	521.6
37.5°	455.0	462.0	479.8	499.7	505.5
40°	432.7	441.3	461.6	482.7	488.5
42.5°	412.0	420.2	442.2	463.7	471.5
45°	387.2	398.7	421.5	445.1	453.3
47.5°	364.4	376.0	402.0	427.3	434.7
50°	341.7	354.1	381.4	407.4	414.9
52.5°	318.1	331.3	360.7	386.7	395.4
55°	293.3	308.6	339.2	365.6	373.5
57.5°	269.7	285.4	318.1	345.0	352.8
60°	246.5	262.7	296.2	321.8	330.1
62.5°	220.9	239.9	274.6	299.9	306.1
65°	197.7	217.2	251.1	276.3	283.3
67.5°	173.3	194.4	228.3	251.5	258.1
70°	150.1	172.1	204.7	226.3	229.1
72.5°	125.3	147.7	180.8	194.4	194.4
75°	103.0	125.7	156.4	158.8	156.8
77.5°	78.6	103.8	123.7	118.7	113.7
80°	56.7	81.5	90.6	81.5	74.9
82.5°	38.1	59.1	54.6	43.4	38.5
85°	21.1	31.4	21.5	12.0	8.7
87.5°	7.9	7.0	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)