

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: P307349

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA125-W2A-U-2700K**

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: P307349  
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: 14FCZ2-29-UNV-L82765-RDP-CA125-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET  
Light Source: (168) 2700K 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**

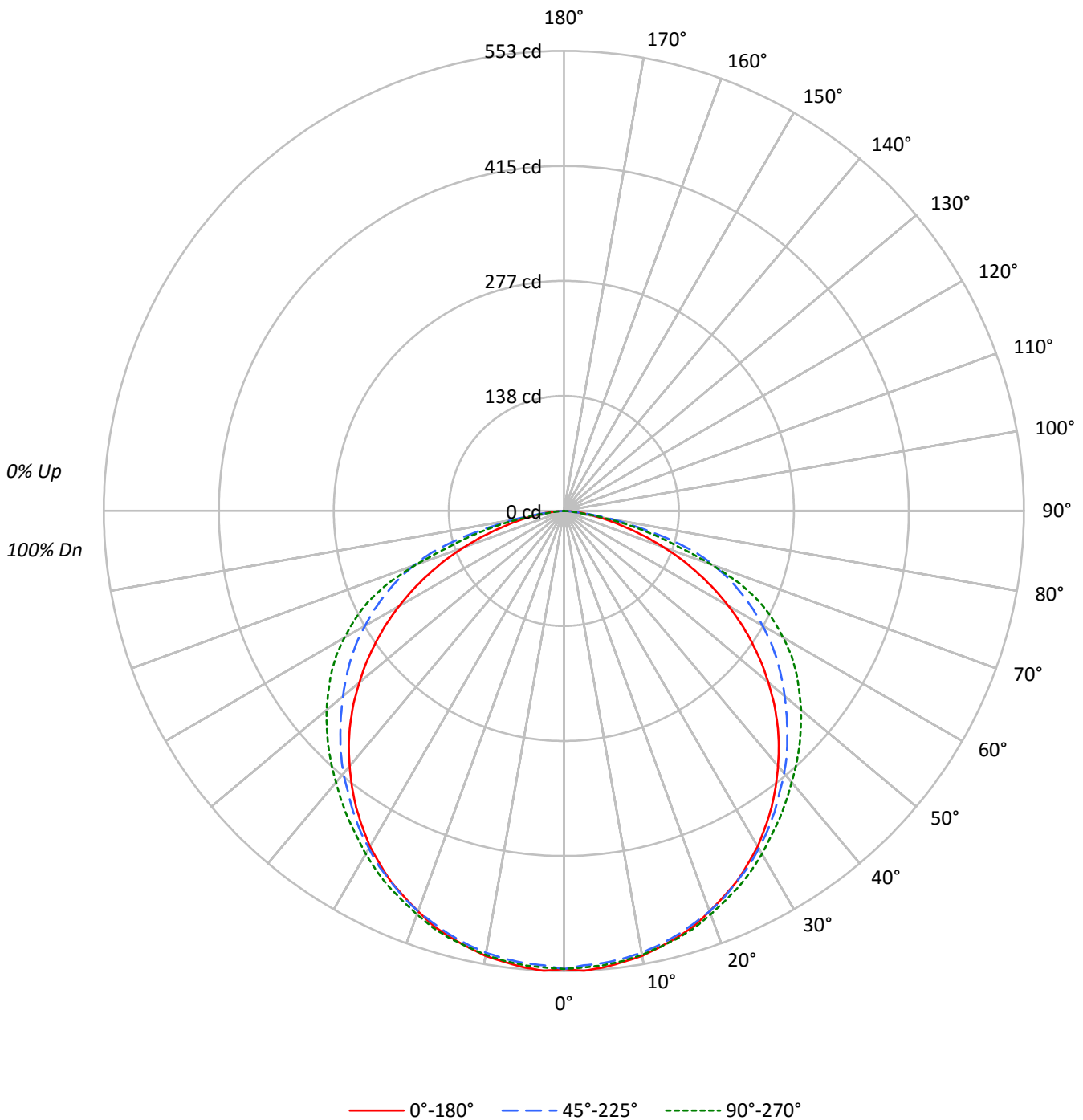
Lumens per Lamp: N/A  
Luminaire Lumens: 1644.0 lumens  
Efficiency: N/A  
Efficacy: 69.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	1482	1482	1482
5°	1487	1474	1481
10°	1483	1473	1480
15°	1477	1470	1480
20°	1466	1466	1478
25°	1460	1460	1479
30°	1448	1456	1480
35°	1429	1450	1484
40°	1407	1447	1497
45°	1382	1446	1524
50°	1343	1451	1558
55°	1295	1469	1602
60°	1230	1485	1637
65°	1136	1504	1659
70°	1009	1515	1485
75°	814	1361	1187
80°	637	955	776
85°	435	278	198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	3.2
10°-20°	149.5	9.1
20°-30°	227.7	13.8
30°-40°	277.3	16.9
40°-50°	294.2	17.9
50°-60°	277.7	16.9
60°-70°	224.2	13.6
70°-80°	121.6	7.4
80°-90°	19.7	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°	429.3	26.1
0°-40°	706.6	43.0
0°-60°	1278.5	77.8
0°-90°	1644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1644.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	551	549	546	549	548	52
15°	530	529	528	531	531	150
25°	492	490	492	497	498	226
35°	435	438	442	450	452	272
45°	363	368	380	394	400	280
55°	276	288	313	334	341	247
65°	178	200	236	255	260	177
75°	78	114	131	118	114	86
85°	14	15	9	8	6	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	550.6	550.6	550.6	550.6	550.6
2.5°	553.2	550.6	546.8	550.6	549.3
5°	550.6	549.3	545.5	549.3	548.1
7.5°	546.8	546.8	542.9	545.5	545.5
10°	542.9	541.6	539.1	542.9	541.6
12.5°	536.5	535.2	533.9	537.8	536.5
15°	530.1	528.8	527.5	531.4	531.4
17.5°	522.4	521.1	519.8	524.9	524.9
20°	512.1	512.1	512.1	517.2	516.0
22.5°	501.8	501.8	503.1	508.3	507.0
25°	491.6	490.3	491.6	496.7	498.0
27.5°	478.7	480.0	481.3	486.4	487.7
30°	465.9	467.2	468.5	474.9	476.2
32.5°	450.5	453.1	455.6	463.3	463.3
35°	435.1	437.7	441.5	450.5	451.8
37.5°	418.4	421.0	426.1	436.4	439.0
40°	400.4	404.3	412.0	422.3	426.1
42.5°	382.5	387.6	396.6	408.2	413.3
45°	363.2	368.4	379.9	394.0	400.4
47.5°	342.7	349.1	363.2	381.2	386.3
50°	320.9	329.9	346.5	365.8	372.2
52.5°	299.1	309.3	329.9	350.4	356.8
55°	276.0	287.5	313.2	333.7	341.4
57.5°	252.8	265.7	295.2	317.0	324.7
60°	228.5	243.9	276.0	297.8	304.2
62.5°	204.1	222.0	256.7	278.5	283.7
65°	178.4	200.2	236.2	255.4	260.5
67.5°	154.0	179.7	215.6	229.7	229.7
70°	128.3	156.6	192.5	196.4	188.7
72.5°	102.7	134.8	166.9	152.7	146.3
75°	78.3	114.2	130.9	118.1	114.2
77.5°	59.0	92.4	92.4	84.7	82.1
80°	41.1	70.6	61.6	53.9	50.1
82.5°	27.0	39.8	32.1	25.7	21.8
85°	14.1	15.4	9.0	7.7	6.4
87.5°	5.1	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)