

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: P307790

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA08-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: P307790  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-L82765-S-CA08-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" 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**

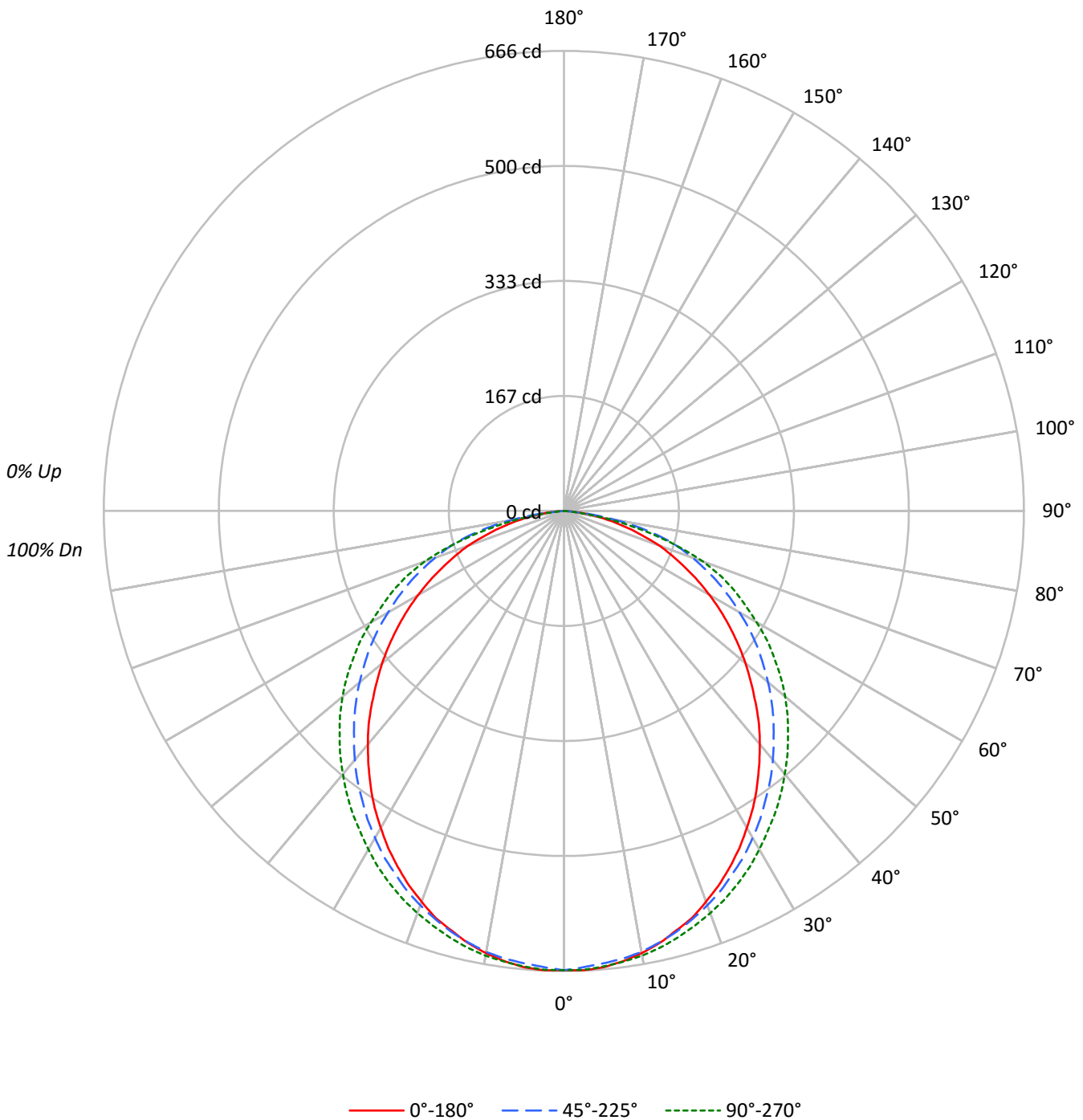
Lumens per Lamp: N/A  
Luminaire Lumens: 1862.0 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1789	1789	1789
5°	1791	1776	1788
10°	1776	1771	1786
15°	1751	1757	1780
20°	1724	1740	1774
25°	1689	1719	1768
30°	1647	1698	1758
35°	1601	1674	1753
40°	1550	1654	1748
45°	1493	1634	1746
50°	1438	1616	1751
55°	1377	1603	1745
60°	1312	1580	1734
65°	1235	1575	1734
70°	1162	1562	1685
75°	1007	1526	1440
80°	815	1230	959
85°	540	426	284



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.8	3.4
10°-20°	178.6	9.6
20°-30°	267.9	14.4
30°-40°	319.6	17.2
40°-50°	330.4	17.7
50°-60°	301.7	16.2
60°-70°	237.4	12.7
70°-80°	138.2	7.4
80°-90°	25.4	1.4
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°	509.3	27.4
0°-40°	828.9	44.5
0°-60°	1461.0	78.5
0°-90°	1862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	663	661	657	663	662	63
15°	629	630	630	639	639	177
25°	569	572	579	593	596	262
35°	487	494	510	529	534	305
45°	392	405	429	453	459	303
55°	294	309	342	366	372	263
65°	194	214	247	267	272	193
75°	97	120	147	144	138	103
85°	18	25	14	11	9	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	664.7	664.7	664.7	664.7	664.7
2.5°	665.6	663.8	661.0	665.6	664.7
5°	662.9	661.0	657.3	662.9	661.9
7.5°	657.3	655.5	653.6	659.2	658.2
10°	649.9	649.0	648.1	654.5	653.6
12.5°	640.7	640.7	639.8	647.2	647.2
15°	628.7	629.6	630.5	638.9	638.9
17.5°	617.6	616.7	619.5	628.7	629.6
20°	601.9	603.8	607.5	618.5	619.5
22.5°	586.2	588.1	594.5	605.6	608.4
25°	568.7	571.5	578.8	592.7	595.5
27.5°	550.2	553.9	564.1	578.8	581.6
30°	529.9	535.5	546.5	563.2	565.9
32.5°	509.6	515.1	529.0	545.6	549.3
35°	487.4	493.9	509.6	529.0	533.6
37.5°	464.4	472.7	491.1	510.5	516.1
40°	441.3	450.5	470.8	491.1	497.6
42.5°	418.2	427.4	449.6	472.7	479.1
45°	392.4	405.3	429.3	453.3	458.8
47.5°	367.4	381.3	408.1	432.1	439.4
50°	343.4	357.3	385.9	410.8	418.2
52.5°	318.5	333.3	363.7	389.6	396.1
55°	293.6	309.3	341.6	366.5	372.0
57.5°	268.7	285.3	318.5	342.5	349.0
60°	243.7	261.3	293.6	317.6	322.2
62.5°	218.8	237.3	270.5	291.7	296.3
65°	193.9	214.2	247.4	266.8	272.3
67.5°	169.9	190.2	222.5	241.0	245.6
70°	147.7	166.2	198.5	212.3	214.2
72.5°	120.0	143.1	174.5	181.9	177.3
75°	96.9	120.0	146.8	144.0	138.5
77.5°	73.9	96.9	114.5	105.2	97.9
80°	52.6	75.7	79.4	65.5	61.9
82.5°	34.2	52.6	44.3	34.2	27.7
85°	17.5	24.9	13.8	11.1	9.2
87.5°	5.5	3.7	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)