

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: P307808

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP125-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: P307808  
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-CP125-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB 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**

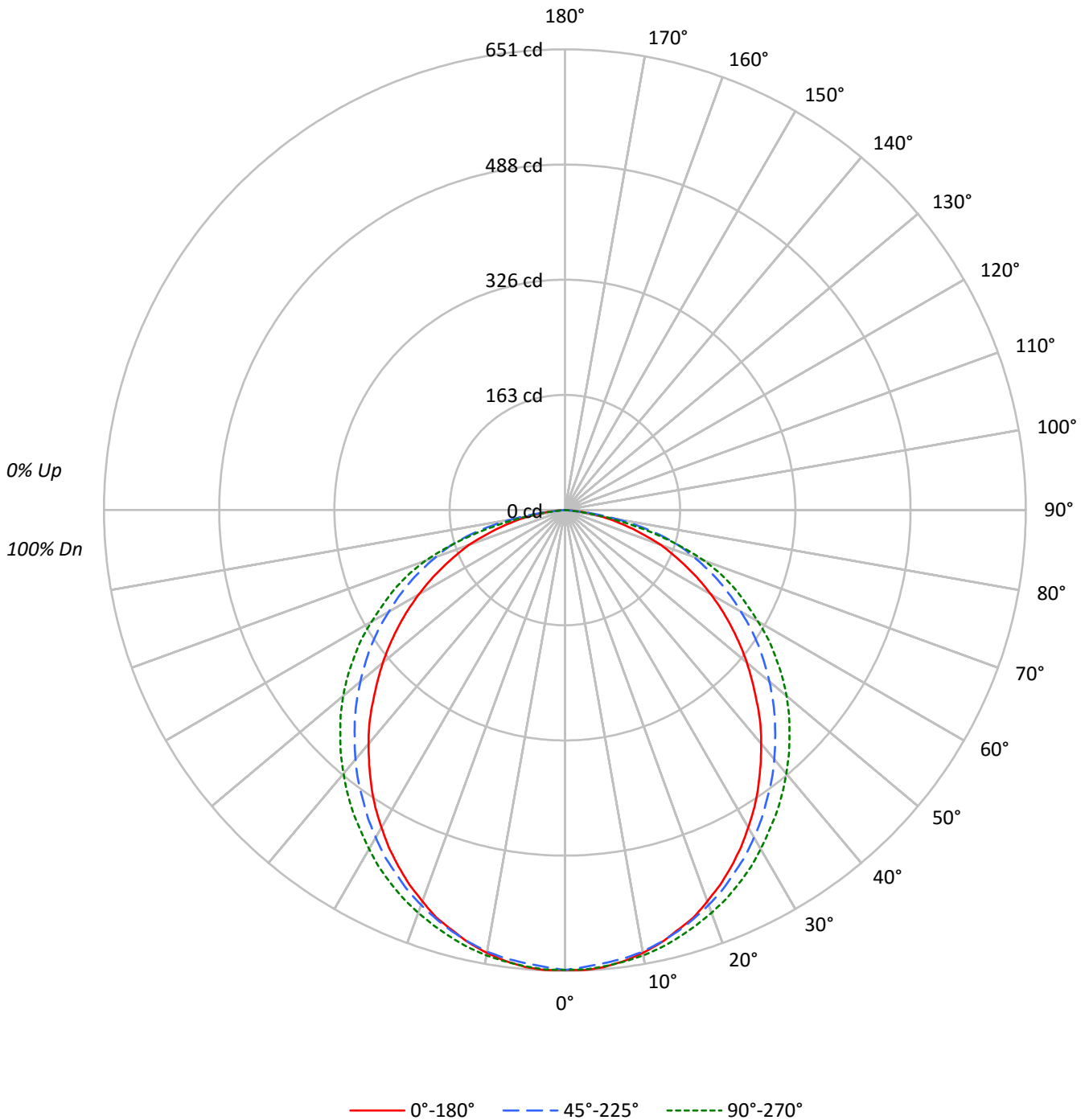
Lumens per Lamp: N/A  
Luminaire Lumens: 1820.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1748	1748	1748
5°	1750	1736	1748
10°	1736	1731	1746
15°	1712	1717	1740
20°	1685	1700	1734
25°	1651	1680	1728
30°	1610	1660	1719
35°	1565	1636	1713
40°	1515	1617	1709
45°	1459	1597	1707
50°	1405	1579	1711
55°	1346	1567	1706
60°	1282	1545	1695
65°	1207	1540	1695
70°	1136	1526	1648
75°	985	1492	1408
80°	797	1203	938
85°	528	417	278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.4	3.4
10°-20°	174.6	9.6
20°-30°	261.9	14.4
30°-40°	312.4	17.2
40°-50°	323.0	17.7
50°-60°	294.9	16.2
60°-70°	232.0	12.7
70°-80°	135.1	7.4
80°-90°	24.9	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°	497.8	27.4
0°-40°	810.2	44.5
0°-60°	1428.0	78.5
0°-90°	1820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	648	646	642	648	647	61
15°	614	615	616	624	624	173
25°	556	559	566	579	582	256
35°	476	483	498	517	522	298
45°	384	396	420	443	448	296
55°	287	302	334	358	364	257
65°	190	209	242	261	266	188
75°	95	117	144	141	135	101
85°	17	24	14	11	9	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	649.7	649.7	649.7	649.7	649.7
2.5°	650.6	648.8	646.1	650.6	649.7
5°	647.9	646.1	642.5	647.9	647.0
7.5°	642.5	640.7	638.9	644.3	643.4
10°	635.3	634.4	633.5	639.8	638.9
12.5°	626.2	626.2	625.3	632.6	632.6
15°	614.5	615.4	616.3	624.4	624.4
17.5°	603.7	602.8	605.5	614.5	615.4
20°	588.3	590.2	593.8	604.6	605.5
22.5°	573.0	574.8	581.1	592.0	594.7
25°	555.9	558.6	565.8	579.3	582.0
27.5°	537.8	541.4	551.4	565.8	568.5
30°	518.0	523.4	534.2	550.4	553.2
32.5°	498.1	503.5	517.1	533.3	536.9
35°	476.5	482.8	498.1	517.1	521.6
37.5°	453.9	462.0	480.1	499.0	504.4
40°	431.3	440.4	460.2	480.1	486.4
42.5°	408.8	417.8	439.5	462.0	468.3
45°	383.5	396.1	419.6	443.1	448.5
47.5°	359.1	372.7	398.8	422.3	429.5
50°	335.7	349.2	377.2	401.6	408.8
52.5°	311.3	325.8	355.5	380.8	387.1
55°	287.0	302.3	333.9	358.2	363.7
57.5°	262.6	278.8	311.3	334.8	341.1
60°	238.2	255.4	287.0	310.4	314.9
62.5°	213.9	231.9	264.4	285.2	289.7
65°	189.5	209.4	241.8	260.8	266.2
67.5°	166.0	185.9	217.5	235.5	240.0
70°	144.4	162.4	194.0	207.5	209.4
72.5°	117.3	139.9	170.5	177.8	173.3
75°	94.7	117.3	143.5	140.8	135.4
77.5°	72.2	94.7	111.9	102.9	95.7
80°	51.4	74.0	77.6	64.1	60.5
82.5°	33.4	51.4	43.3	33.4	27.1
85°	17.1	24.4	13.5	10.8	9.0
87.5°	5.4	3.6	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)