

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: P308466

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA08-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: P308466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" ACRYLIC 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**

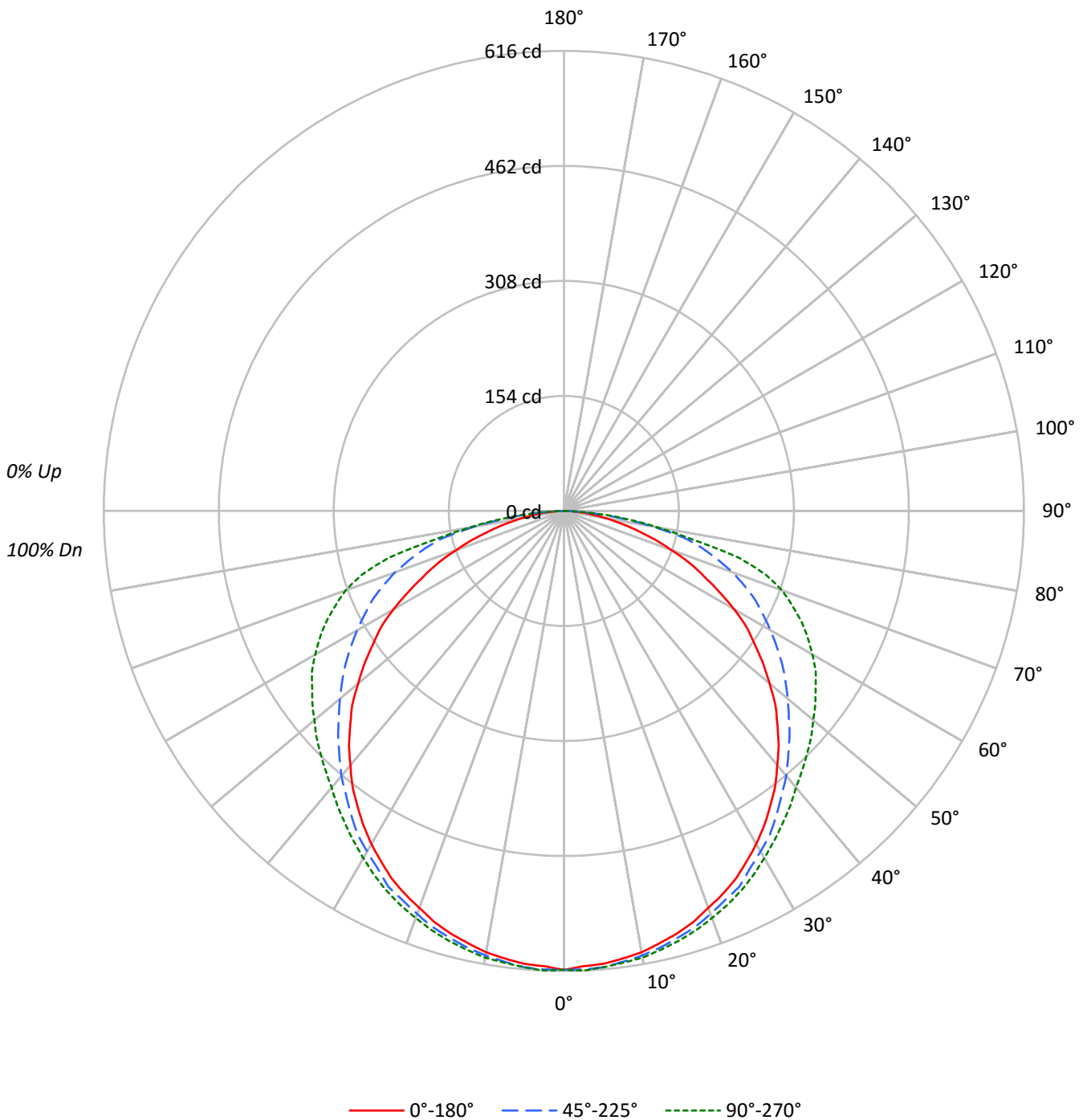
Lumens per Lamp: N/A  
Luminaire Lumens: 1956.0 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1653	1653	1653
5°	1644	1656	1656
10°	1639	1651	1659
15°	1631	1648	1660
20°	1619	1644	1661
25°	1615	1649	1666
30°	1601	1636	1668
35°	1583	1631	1678
40°	1562	1627	1698
45°	1539	1627	1752
50°	1506	1639	1825
55°	1465	1674	1931
60°	1417	1719	2068
65°	1319	1805	2236
70°	1212	1891	2445
75°	1063	1990	2529
80°	914	1895	1985
85°	800	1377	1510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	3.0
10°-20°	166.9	8.5
20°-30°	254.6	13.0
30°-40°	310.9	15.9
40°-50°	332.4	17.0
50°-60°	320.8	16.4
60°-70°	276.2	14.1
70°-80°	186.9	9.6
80°-90°	49.3	2.5
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°	479.6	24.5
0°-40°	790.5	40.4
0°-60°	1443.7	73.8
0°-90°	1956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	609	610	613	613	613	58
15°	586	587	591	594	596	165
25°	544	547	555	558	561	250
35°	482	486	496	506	511	302
45°	404	412	427	449	460	312
55°	312	322	357	393	412	280
65°	207	227	284	328	351	206
75°	102	135	191	230	243	110
85°	26	36	45	46	49	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	614.4	614.4	614.4	614.4	614.4
2.5°	610.1	611.5	614.4	614.4	615.9
5°	608.7	610.1	613.0	613.0	613.0
7.5°	604.3	605.8	608.7	610.1	610.1
10°	600.0	601.5	604.3	605.8	607.2
12.5°	592.8	594.3	598.6	601.5	601.5
15°	585.6	587.1	591.4	594.3	595.7
17.5°	577.0	579.9	584.2	587.1	588.5
20°	565.5	568.4	574.1	578.4	579.9
22.5°	555.4	558.3	564.1	568.4	571.2
25°	543.9	546.8	555.4	558.3	561.2
27.5°	529.5	532.4	539.6	545.3	549.7
30°	515.1	518.0	526.6	533.8	536.7
32.5°	499.3	503.6	513.7	519.4	523.8
35°	482.0	486.4	496.4	506.5	510.8
37.5°	464.8	469.1	479.2	492.1	497.9
40°	444.6	450.4	463.3	480.6	483.5
42.5°	425.9	433.1	444.6	464.8	472.0
45°	404.3	411.5	427.4	448.9	460.5
47.5°	384.2	391.4	408.6	434.6	448.9
50°	359.7	369.8	391.4	421.6	436.0
52.5°	336.7	345.3	374.1	407.2	424.5
55°	312.2	322.3	356.8	392.8	411.5
57.5°	290.7	299.3	338.1	378.4	400.0
60°	263.3	274.8	319.4	362.6	384.2
62.5°	234.5	251.8	300.7	345.3	368.4
65°	207.2	227.3	283.5	328.1	351.1
67.5°	182.7	204.3	261.9	309.4	330.9
70°	154.0	181.3	240.3	286.3	310.8
72.5°	128.1	158.3	215.8	261.9	283.5
75°	102.2	135.3	191.4	230.2	243.2
77.5°	79.1	110.8	164.0	175.5	177.0
80°	59.0	87.8	122.3	123.7	128.1
82.5°	40.3	61.9	79.1	86.3	87.8
85°	25.9	36.0	44.6	46.0	48.9
87.5°	11.5	13.0	15.8	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)