

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: P312675

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-RDP-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: P312675  
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-L83050-RDP-CP125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

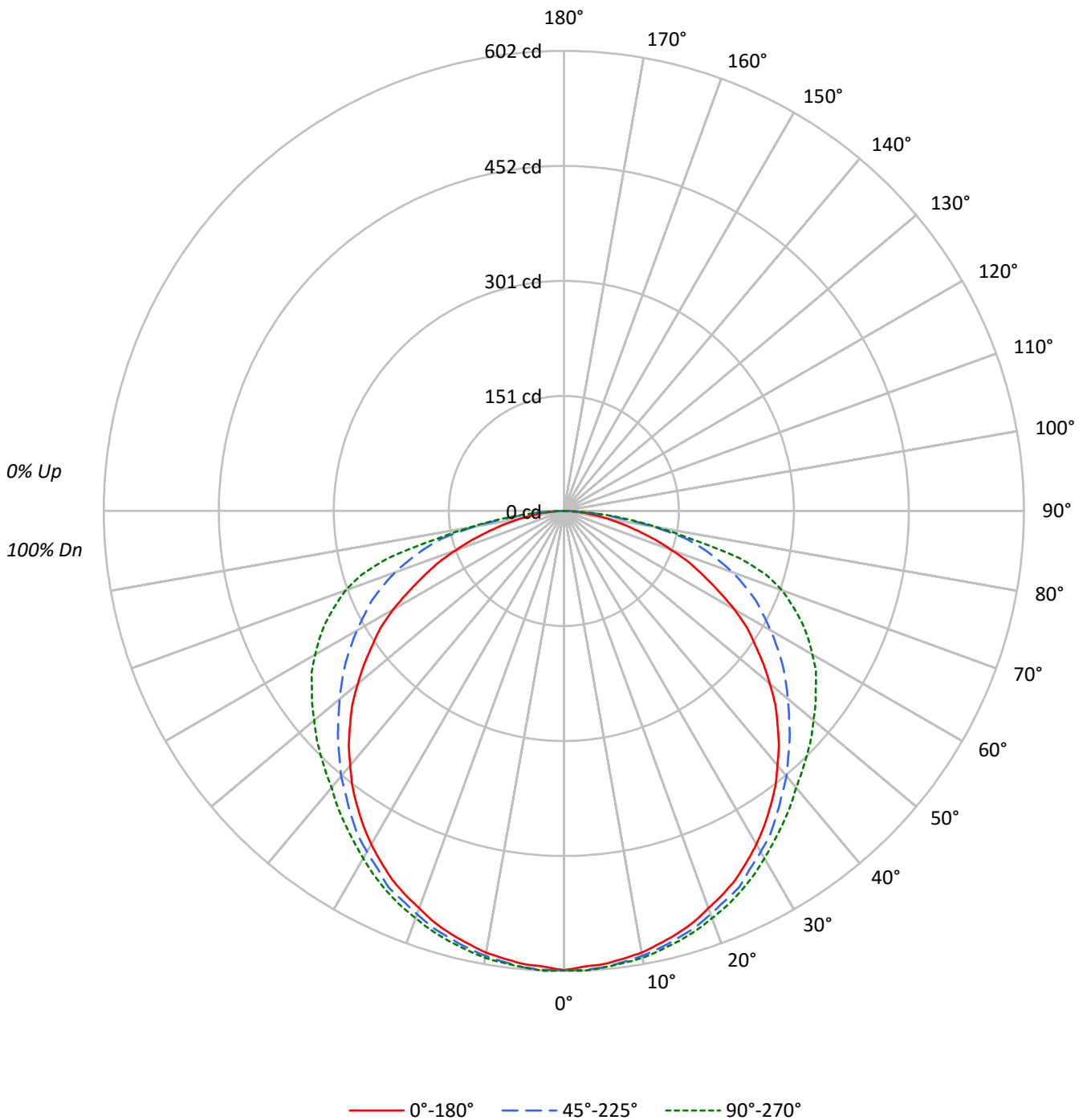
Lumens per Lamp: N/A  
Luminaire Lumens: 1913.0 lumens  
Efficiency: N/A  
Efficacy: 69.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	1617	1617	1617
5°	1608	1619	1619
10°	1603	1615	1623
15°	1596	1611	1623
20°	1584	1608	1624
25°	1580	1613	1629
30°	1565	1601	1631
35°	1549	1595	1641
40°	1527	1592	1661
45°	1505	1591	1714
50°	1473	1603	1785
55°	1433	1637	1888
60°	1386	1681	2022
65°	1290	1765	2187
70°	1185	1849	2392
75°	1039	1946	2472
80°	894	1853	1940
85°	781	1346	1476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	3.0
10°-20°	163.2	8.5
20°-30°	249.0	13.0
30°-40°	304.0	15.9
40°-50°	325.1	17.0
50°-60°	313.8	16.4
60°-70°	270.1	14.1
70°-80°	182.7	9.6
80°-90°	48.2	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°	469.0	24.5
0°-40°	773.1	40.4
0°-60°	1411.9	73.8
0°-90°	1913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1913.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	595	597	600	600	600	57
15°	573	574	578	581	583	162
25°	532	535	543	546	549	245
35°	471	476	486	495	500	295
45°	395	402	418	439	450	305
55°	305	315	349	384	402	274
65°	203	222	277	321	343	202
75°	100	132	187	225	238	107
85°	25	35	44	45	48	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	600.9	600.9	600.9	600.9	600.9
2.5°	596.7	598.1	600.9	600.9	602.3
5°	595.3	596.7	599.5	599.5	599.5
7.5°	591.1	592.5	595.3	596.7	596.7
10°	586.8	588.2	591.1	592.5	593.9
12.5°	579.8	581.2	585.4	588.2	588.2
15°	572.8	574.2	578.4	581.2	582.6
17.5°	564.3	567.1	571.4	574.2	575.6
20°	553.1	555.9	561.5	565.7	567.1
22.5°	543.2	546.0	551.7	555.9	558.7
25°	532.0	534.8	543.2	546.0	548.8
27.5°	517.9	520.7	527.7	533.4	537.6
30°	503.8	506.6	515.1	522.1	524.9
32.5°	488.3	492.5	502.4	508.0	512.2
35°	471.4	475.7	485.5	495.4	499.6
37.5°	454.5	458.8	468.6	481.3	486.9
40°	434.8	440.5	453.1	470.0	472.8
42.5°	416.6	423.6	434.8	454.5	461.6
45°	395.4	402.5	418.0	439.1	450.3
47.5°	375.7	382.8	399.7	425.0	439.1
50°	351.8	361.7	382.8	412.3	426.4
52.5°	329.3	337.7	365.9	398.3	415.1
55°	305.4	315.2	349.0	384.2	402.5
57.5°	284.3	292.7	330.7	370.1	391.2
60°	257.5	268.8	312.4	354.6	375.7
62.5°	229.4	246.3	294.1	337.7	360.3
65°	202.6	222.3	277.2	320.9	343.4
67.5°	178.7	199.8	256.1	302.6	323.7
70°	150.6	177.3	235.0	280.0	304.0
72.5°	125.2	154.8	211.1	256.1	277.2
75°	99.9	132.3	187.2	225.2	237.8
77.5°	77.4	108.4	160.4	171.7	173.1
80°	57.7	85.8	119.6	121.0	125.2
82.5°	39.4	60.5	77.4	84.4	85.8
85°	25.3	35.2	43.6	45.0	47.8
87.5°	11.3	12.7	15.5	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)