

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: P312526

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-HRP-CP125-W2A-U-3500K**

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: P312526  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
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-HRP-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 3500K 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**

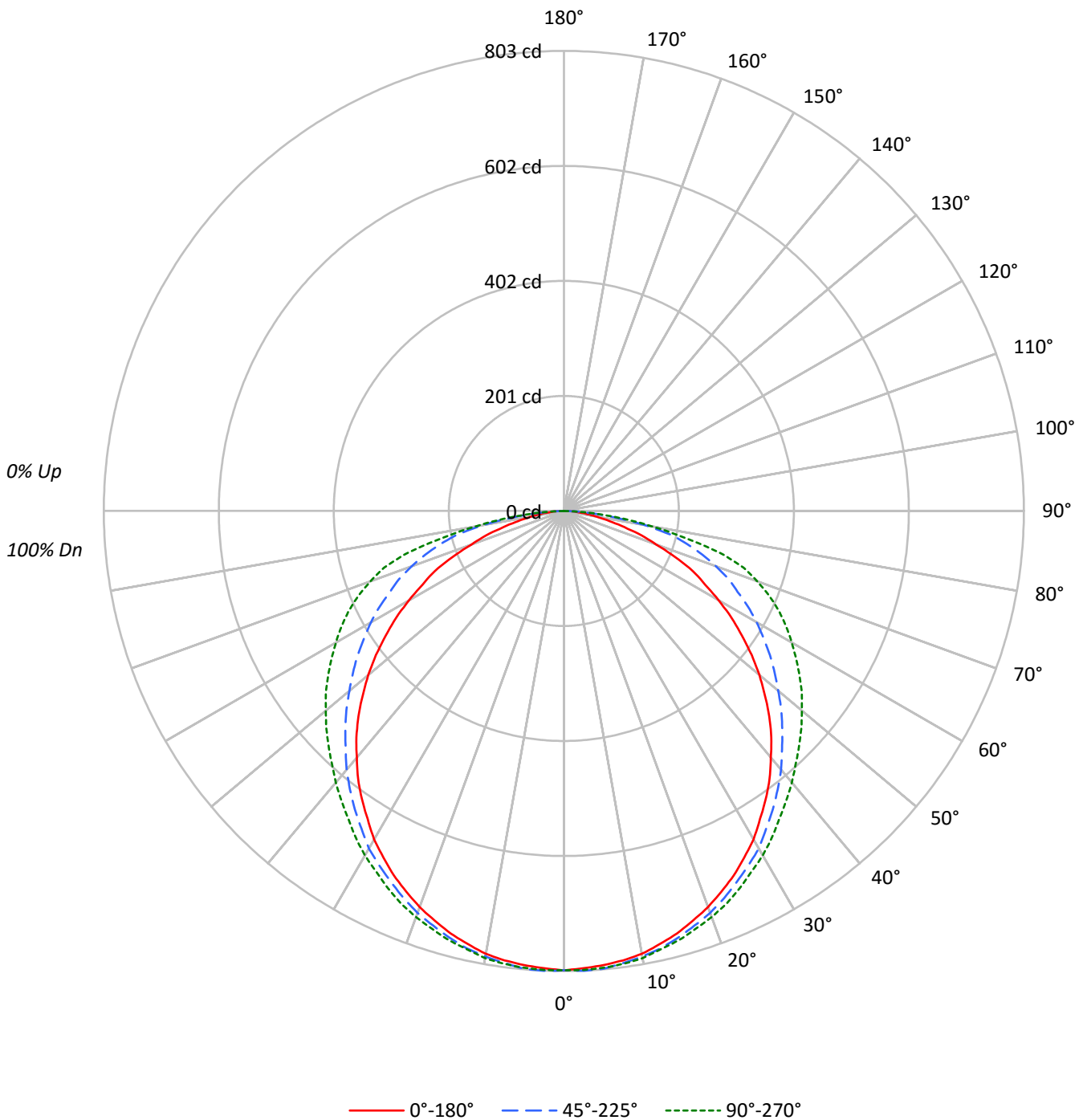
Lumens per Lamp: N/A  
Luminaire Lumens: 2435.0 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2158	2158	2158
5°	2149	2166	2162
10°	2145	2157	2166
15°	2127	2148	2161
20°	2107	2138	2160
25°	2084	2121	2157
30°	2057	2115	2157
35°	2018	2089	2155
40°	1975	2072	2174
45°	1929	2052	2210
50°	1865	2045	2270
55°	1780	2061	2357
60°	1678	2091	2472
65°	1584	2132	2641
70°	1353	2223	2828
75°	1134	2315	2938
80°	928	2238	2452
85°	806	1661	1803



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.0	3.1
10°-20°	217.4	8.9
20°-30°	329.4	13.5
30°-40°	397.8	16.3
40°-50°	418.0	17.2
50°-60°	393.3	16.2
60°-70°	327.9	13.5
70°-80°	217.3	8.9
80°-90°	57.9	2.4
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°	622.8	25.6
0°-40°	1020.6	41.9
0°-60°	1831.9	75.2
0°-90°	2435.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2435.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	796	797	802	802	800	76
15°	763	766	771	774	776	215
25°	702	707	714	724	727	323
35°	614	621	636	650	656	384
45°	507	515	539	567	581	390
55°	379	396	439	484	502	339
65°	249	270	335	390	415	242
75°	109	152	223	269	283	118
85°	26	40	54	58	58	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	801.8	801.8	801.8	801.8	801.8
2.5°	798.7	800.3	803.4	803.4	801.8
5°	795.7	797.2	801.8	801.8	800.3
7.5°	791.1	792.6	795.7	798.7	797.2
10°	784.9	786.5	789.5	792.6	792.6
12.5°	774.2	775.7	781.8	783.4	783.4
15°	763.4	766.5	771.1	774.2	775.7
17.5°	749.6	752.7	758.8	765.0	765.0
20°	735.8	738.8	746.5	752.7	754.2
22.5°	718.9	723.5	731.2	738.8	741.9
25°	702.0	706.6	714.3	723.5	726.6
27.5°	682.0	686.6	697.4	708.1	709.7
30°	662.0	666.6	680.5	689.7	694.3
32.5°	637.5	643.6	657.4	671.3	675.9
35°	614.4	620.6	635.9	649.7	655.9
37.5°	589.8	596.0	612.9	629.8	637.5
40°	562.2	569.9	589.8	608.3	619.0
42.5°	536.1	543.8	563.7	588.3	599.1
45°	506.9	514.6	539.2	566.8	580.6
47.5°	476.2	485.4	514.6	548.4	562.2
50°	445.5	456.2	488.5	526.9	542.2
52.5°	413.2	427.0	463.9	505.4	523.8
55°	379.4	396.3	439.3	483.9	502.3
57.5°	347.1	362.5	413.2	460.8	480.8
60°	311.8	331.8	388.6	437.8	459.3
62.5°	278.0	299.5	362.5	414.7	437.8
65°	248.8	270.3	334.9	390.2	414.7
67.5°	210.4	239.6	311.8	364.0	388.6
70°	172.0	212.0	282.6	336.4	359.4
72.5°	142.9	181.3	253.4	307.2	328.7
75°	109.1	152.1	222.7	268.8	282.6
77.5°	81.4	126.0	190.5	213.5	215.0
80°	59.9	96.8	144.4	152.1	158.2
82.5°	41.5	67.6	93.7	102.9	106.0
85°	26.1	39.9	53.8	58.4	58.4
87.5°	13.8	15.4	18.4	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)