

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: P312525

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-HRP-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: P312525  
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-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

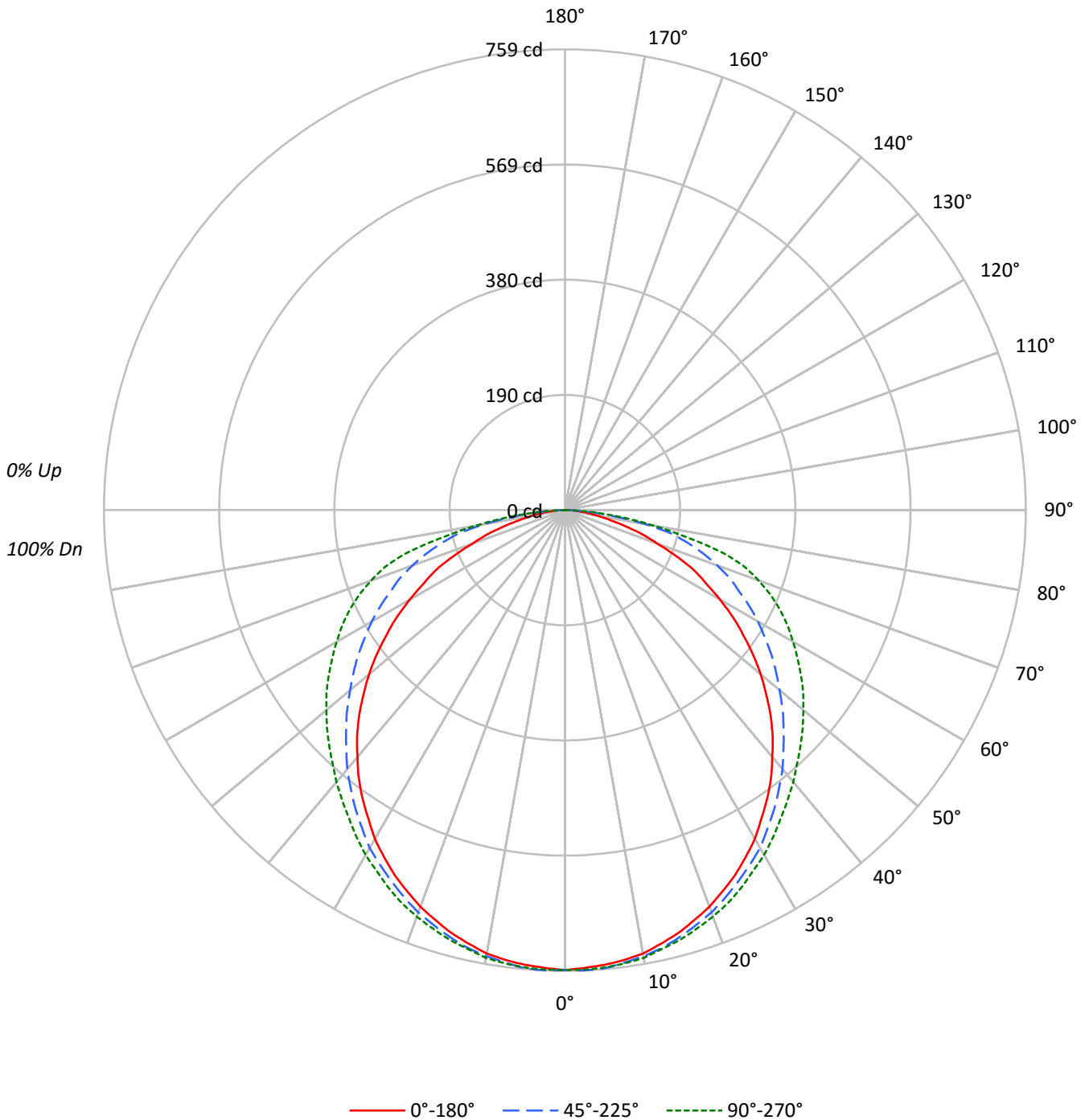
Lumens per Lamp: N/A  
Luminaire Lumens: 2301.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2039	2039	2039
5°	2031	2047	2043
10°	2027	2039	2047
15°	2010	2030	2042
20°	1991	2020	2041
25°	1969	2004	2039
30°	1944	1998	2039
35°	1907	1974	2036
40°	1866	1958	2055
45°	1823	1939	2088
50°	1762	1932	2145
55°	1682	1947	2227
60°	1586	1976	2336
65°	1497	2015	2495
70°	1279	2102	2673
75°	1072	2189	2777
80°	877	2114	2317
85°	763	1568	1704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.8	3.1
10°-20°	205.4	8.9
20°-30°	311.3	13.5
30°-40°	375.9	16.3
40°-50°	395.0	17.2
50°-60°	371.7	16.2
60°-70°	309.9	13.5
70°-80°	205.3	8.9
80°-90°	54.7	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°	588.5	25.6
0°-40°	964.5	41.9
0°-60°	1731.1	75.2
0°-90°	2301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2301.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	752	753	758	758	756	71
15°	721	724	729	732	733	203
25°	663	668	675	684	687	305
35°	581	586	601	614	620	363
45°	479	486	510	536	549	369
55°	358	374	415	457	475	321
65°	235	256	316	369	392	229
75°	103	144	210	254	267	112
85°	25	38	51	55	55	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	757.7	757.7	757.7	757.7	757.7
2.5°	754.8	756.2	759.1	759.1	757.7
5°	751.9	753.3	757.7	757.7	756.2
7.5°	747.5	749.0	751.9	754.8	753.3
10°	741.7	743.2	746.1	749.0	749.0
12.5°	731.6	733.0	738.8	740.3	740.3
15°	721.4	724.3	728.7	731.6	733.0
17.5°	708.3	711.2	717.1	722.9	722.9
20°	695.3	698.2	705.4	711.2	712.7
22.5°	679.3	683.7	690.9	698.2	701.1
25°	663.3	667.7	675.0	683.7	686.6
27.5°	644.5	648.8	659.0	669.2	670.6
30°	625.6	630.0	643.0	651.7	656.1
32.5°	602.4	608.2	621.3	634.3	638.7
35°	580.6	586.4	600.9	614.0	619.8
37.5°	557.4	563.2	579.2	595.1	602.4
40°	531.3	538.5	557.4	574.8	585.0
42.5°	506.6	513.8	532.7	555.9	566.1
45°	479.0	486.3	509.5	535.6	548.7
47.5°	450.0	458.7	486.3	518.2	531.3
50°	420.9	431.1	461.6	497.9	512.4
52.5°	390.5	403.5	438.4	477.6	495.0
55°	358.5	374.5	415.1	457.2	474.6
57.5°	328.0	342.6	390.5	435.5	454.3
60°	294.7	313.5	367.2	413.7	434.0
62.5°	262.7	283.0	342.6	391.9	413.7
65°	235.1	255.5	316.4	368.7	391.9
67.5°	198.9	226.4	294.7	344.0	367.2
70°	162.6	200.3	267.1	317.9	339.7
72.5°	135.0	171.3	239.5	290.3	310.6
75°	103.1	143.7	210.5	254.0	267.1
77.5°	76.9	119.0	180.0	201.8	203.2
80°	56.6	91.4	136.4	143.7	149.5
82.5°	39.2	63.9	88.5	97.3	100.2
85°	24.7	37.7	50.8	55.2	55.2
87.5°	13.1	14.5	17.4	17.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)