

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: P308274

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K**

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: P308274  
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: 22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
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**

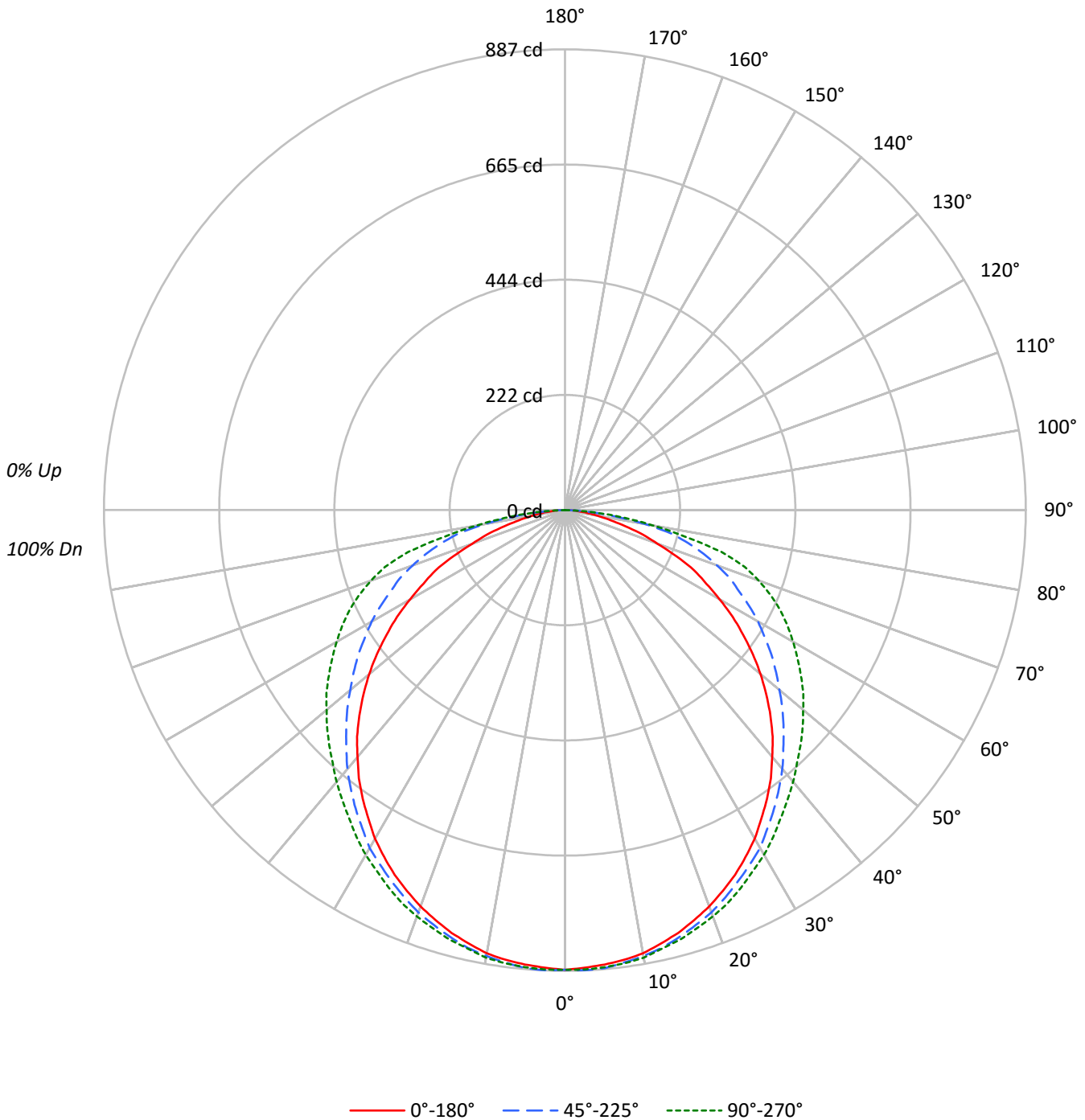
Lumens per Lamp: N/A  
Luminaire Lumens: 2688.0 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P308274

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P308274

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K

**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°	2382	2382	2382
5°	2373	2391	2386
10°	2368	2382	2391
15°	2348	2371	2386
20°	2326	2360	2384
25°	2301	2341	2381
30°	2271	2334	2381
35°	2228	2306	2378
40°	2180	2287	2400
45°	2130	2265	2439
50°	2058	2257	2506
55°	1965	2275	2601
60°	1852	2309	2729
65°	1749	2354	2915
70°	1494	2455	3122
75°	1252	2557	3244
80°	1024	2470	2707
85°	889	1831	1988



TEST NUMBER: P308274

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.9	3.1
10°-20°	240.0	8.9
20°-30°	363.7	13.5
30°-40°	439.1	16.3
40°-50°	461.4	17.2
50°-60°	434.2	16.2
60°-70°	362.0	13.5
70°-80°	239.9	8.9
80°-90°	63.9	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°	687.5	25.6
0°-40°	1126.7	41.9
0°-60°	2022.2	75.2
0°-90°	2688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2688.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	878	880	885	885	883	83
15°	843	846	851	855	856	238
25°	775	780	788	799	802	357
35°	678	685	702	717	724	424
45°	560	568	595	626	641	431
55°	419	438	485	534	554	375
65°	275	298	370	431	458	267
75°	120	168	246	297	312	131
85°	29	44	59	64	64	33
90°	0	0	0	0	0	



TEST NUMBER: P308274

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-HRP-CP187-W2A-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	885.1	885.1	885.1	885.1	885.1
2.5°	881.7	883.4	886.8	886.8	885.1
5°	878.3	880.0	885.1	885.1	883.4
7.5°	873.3	875.0	878.3	881.7	880.0
10°	866.5	868.2	871.6	875.0	875.0
12.5°	854.6	856.3	863.1	864.8	864.8
15°	842.7	846.1	851.2	854.6	856.3
17.5°	827.5	830.9	837.7	844.4	844.4
20°	812.2	815.6	824.1	830.9	832.6
22.5°	793.6	798.7	807.1	815.6	819.0
25°	774.9	780.0	788.5	798.7	802.0
27.5°	752.9	758.0	769.8	781.7	783.4
30°	730.8	735.9	751.2	761.3	766.4
32.5°	703.7	710.5	725.7	741.0	746.1
35°	678.3	685.0	702.0	717.3	724.0
37.5°	651.1	657.9	676.6	695.2	703.7
40°	620.6	629.1	651.1	671.5	683.3
42.5°	591.8	600.3	622.3	649.4	661.3
45°	559.6	568.0	595.2	625.7	641.0
47.5°	525.7	535.8	568.0	605.3	620.6
50°	491.7	503.6	539.2	581.6	598.6
52.5°	456.1	471.4	512.1	557.9	578.2
55°	418.8	437.5	485.0	534.1	554.5
57.5°	383.2	400.2	456.1	508.7	530.7
60°	344.2	366.3	429.0	483.3	507.0
62.5°	306.9	330.7	400.2	457.8	483.3
65°	274.7	298.4	369.7	430.7	457.8
67.5°	232.3	264.5	344.2	401.9	429.0
70°	189.9	234.0	312.0	371.3	396.8
72.5°	157.7	200.1	279.8	339.1	362.9
75°	120.4	167.9	245.9	296.7	312.0
77.5°	89.9	139.0	210.3	235.7	237.4
80°	66.1	106.8	159.4	167.9	174.7
82.5°	45.8	74.6	103.4	113.6	117.0
85°	28.8	44.1	59.3	64.4	64.4
87.5°	15.3	17.0	20.3	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)