

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: P308282

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP250-W2A-U-5500K**

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: P308282  
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-CP250-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

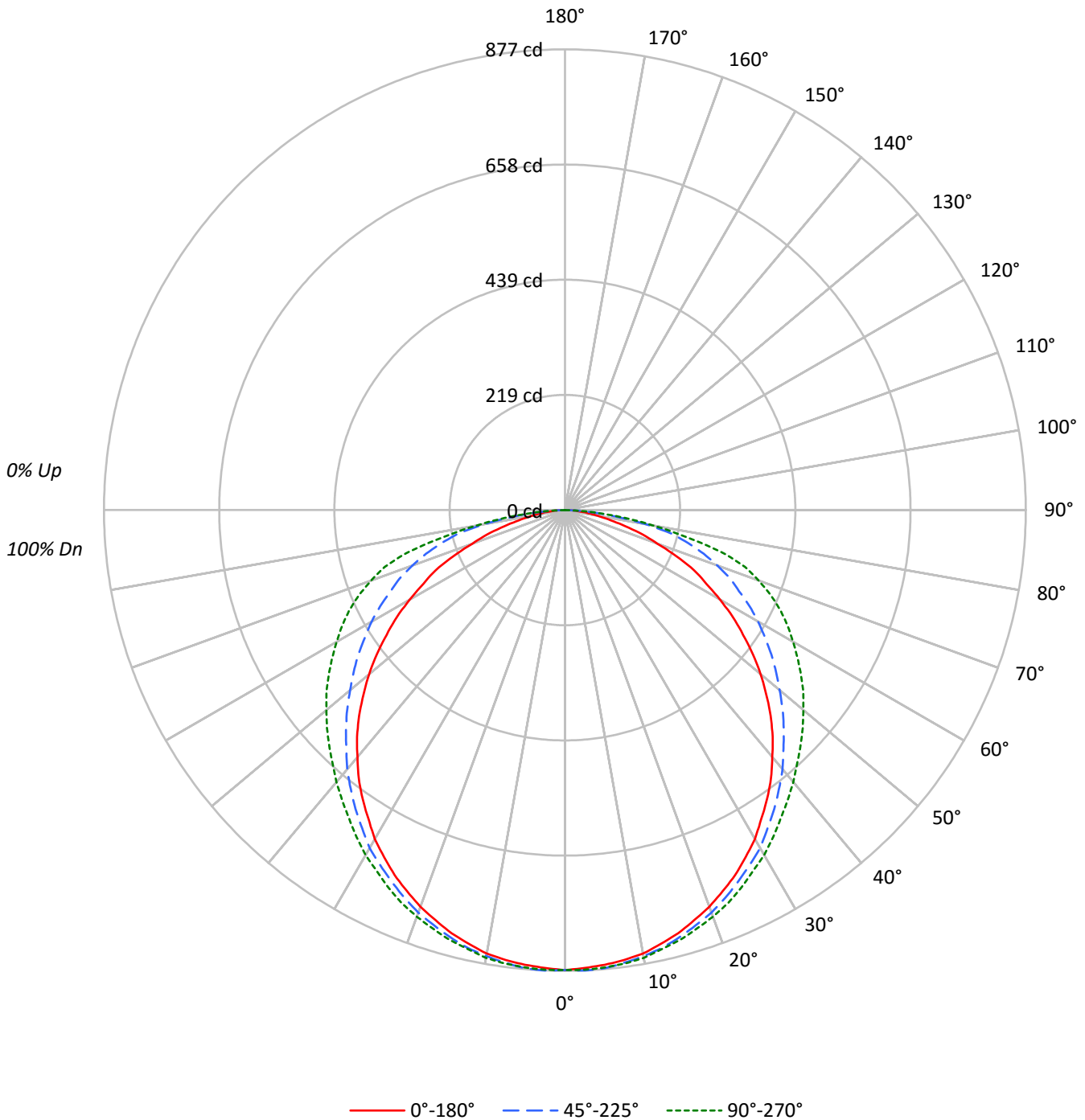
Lumens per Lamp: N/A  
Luminaire Lumens: 2659.0 lumens  
Efficiency: N/A  
Efficacy: 79.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



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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°	2356	2356	2356
5°	2347	2365	2361
10°	2342	2356	2365
15°	2322	2346	2360
20°	2301	2334	2359
25°	2276	2316	2356
30°	2246	2309	2356
35°	2204	2281	2353
40°	2157	2263	2375
45°	2106	2241	2413
50°	2036	2233	2479
55°	1944	2251	2573
60°	1833	2284	2699
65°	1730	2329	2884
70°	1478	2428	3088
75°	1238	2529	3209
80°	1013	2444	2678
85°	880	1812	1967



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.0	3.1
10°-20°	237.4	8.9
20°-30°	359.7	13.5
30°-40°	434.4	16.3
40°-50°	456.4	17.2
50°-60°	429.5	16.2
60°-70°	358.1	13.5
70°-80°	237.3	8.9
80°-90°	63.2	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°	680.1	25.6
0°-40°	1114.5	41.9
0°-60°	2000.4	75.2
0°-90°	2659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	869	870	876	876	874	83
15°	834	837	842	845	847	235
25°	767	772	780	790	793	353
35°	671	678	694	710	716	420
45°	554	562	589	619	634	426
55°	414	433	480	528	548	371
65°	272	295	366	426	453	264
75°	119	166	243	294	309	129
85°	28	44	59	64	64	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	875.6	875.6	875.6	875.6	875.6
2.5°	872.2	873.9	877.3	877.3	875.6
5°	868.9	870.5	875.6	875.6	873.9
7.5°	863.8	865.5	868.9	872.2	870.5
10°	857.1	858.8	862.2	865.5	865.5
12.5°	845.4	847.1	853.8	855.5	855.5
15°	833.6	837.0	842.0	845.4	847.1
17.5°	818.5	821.9	828.6	835.3	835.3
20°	803.5	806.8	815.2	821.9	823.6
22.5°	785.0	790.0	798.4	806.8	810.2
25°	766.6	771.6	780.0	790.0	793.4
27.5°	744.7	749.8	761.5	773.3	774.9
30°	722.9	728.0	743.1	753.1	758.2
32.5°	696.1	702.8	717.9	733.0	738.0
35°	670.9	677.7	694.4	709.5	716.2
37.5°	644.1	650.8	669.3	687.7	696.1
40°	613.9	622.3	644.1	664.2	676.0
42.5°	585.4	593.8	615.6	642.4	654.2
45°	553.5	561.9	588.8	618.9	634.0
47.5°	520.0	530.0	561.9	598.8	613.9
50°	486.4	498.2	533.4	575.3	592.1
52.5°	451.2	466.3	506.6	551.8	572.0
55°	414.3	432.8	479.7	528.4	548.5
57.5°	379.1	395.9	451.2	503.2	525.0
60°	340.5	362.3	424.4	478.0	501.5
62.5°	303.6	327.1	395.9	452.9	478.0
65°	271.7	295.2	365.7	426.0	452.9
67.5°	229.8	261.7	340.5	397.5	424.4
70°	187.9	231.5	308.6	367.3	392.5
72.5°	156.0	197.9	276.8	335.5	359.0
75°	119.1	166.1	243.2	293.5	308.6
77.5°	88.9	137.5	208.0	233.2	234.8
80°	65.4	105.7	157.7	166.1	172.8
82.5°	45.3	73.8	102.3	112.4	115.7
85°	28.5	43.6	58.7	63.7	63.7
87.5°	15.1	16.8	20.1	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)