

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: P308281

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP250-W2A-U-5000K**

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: P308281  
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-5000K  
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**

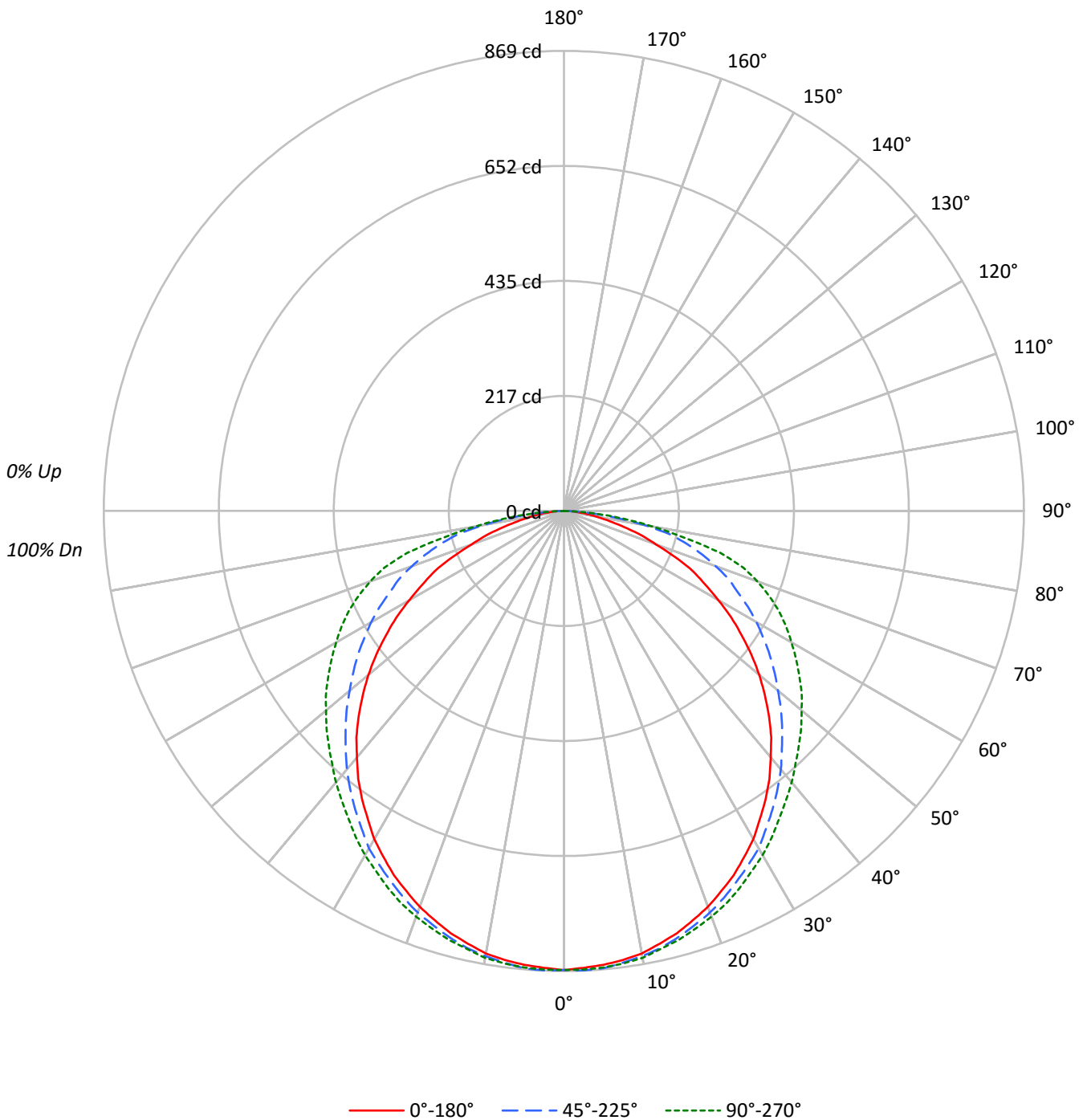
Lumens per Lamp: N/A  
Luminaire Lumens: 2633.0 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2333	2333	2333
5°	2324	2342	2338
10°	2319	2333	2342
15°	2300	2323	2337
20°	2278	2312	2335
25°	2254	2293	2333
30°	2224	2286	2333
35°	2183	2259	2330
40°	2135	2240	2351
45°	2086	2219	2389
50°	2017	2211	2454
55°	1925	2228	2548
60°	1815	2261	2673
65°	1713	2306	2856
70°	1463	2404	3058
75°	1226	2504	3177
80°	1004	2419	2651
85°	871	1794	1948



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.2	3.1
10°-20°	235.1	8.9
20°-30°	356.2	13.5
30°-40°	430.1	16.3
40°-50°	452.0	17.2
50°-60°	425.3	16.2
60°-70°	354.6	13.5
70°-80°	234.9	8.9
80°-90°	62.6	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°	673.5	25.6
0°-40°	1103.6	41.9
0°-60°	1980.8	75.2
0°-90°	2633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	867	867	867	867	867	
5°	860	862	867	867	865	82
15°	826	829	834	837	839	233
25°	759	764	772	782	786	350
35°	664	671	688	703	709	415
45°	548	556	583	613	628	422
55°	410	428	475	523	543	367
65°	269	292	362	422	448	262
75°	118	164	241	291	306	128
85°	28	43	58	63	63	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	867.0	867.0	867.0	867.0	867.0
2.5°	863.7	865.4	868.7	868.7	867.0
5°	860.4	862.0	867.0	867.0	865.4
7.5°	855.4	857.1	860.4	863.7	862.0
10°	848.7	850.4	853.7	857.1	857.1
12.5°	837.1	838.8	845.4	847.1	847.1
15°	825.5	828.8	833.8	837.1	838.8
17.5°	810.5	813.9	820.5	827.2	827.2
20°	795.6	798.9	807.2	813.9	815.5
22.5°	777.3	782.3	790.6	798.9	802.2
25°	759.1	764.0	772.3	782.3	785.6
27.5°	737.5	742.4	754.1	765.7	767.4
30°	715.9	720.9	735.8	745.8	750.8
32.5°	689.3	695.9	710.9	725.8	730.8
35°	664.4	671.0	687.6	702.6	709.2
37.5°	637.8	644.4	662.7	681.0	689.3
40°	607.9	616.2	637.8	657.7	669.4
42.5°	579.7	588.0	609.6	636.1	647.8
45°	548.1	556.4	583.0	612.9	627.8
47.5°	514.9	524.9	556.4	593.0	607.9
50°	481.7	493.3	528.2	569.7	586.3
52.5°	446.8	461.7	501.6	546.5	566.4
55°	410.3	428.5	475.0	523.2	543.1
57.5°	375.4	392.0	446.8	498.3	519.9
60°	337.2	358.8	420.2	473.4	496.6
62.5°	300.6	323.9	392.0	448.5	473.4
65°	269.1	292.3	362.1	421.9	448.5
67.5°	227.6	259.1	337.2	393.6	420.2
70°	186.0	229.2	305.6	363.7	388.7
72.5°	154.5	196.0	274.1	332.2	355.4
75°	117.9	164.4	240.8	290.7	305.6
77.5°	88.0	136.2	206.0	230.9	232.5
80°	64.8	104.6	156.1	164.4	171.1
82.5°	44.8	73.1	101.3	111.3	114.6
85°	28.2	43.2	58.1	63.1	63.1
87.5°	14.9	16.6	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)