

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: P308246

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CA08-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: P308246  
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-CA08-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC 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**

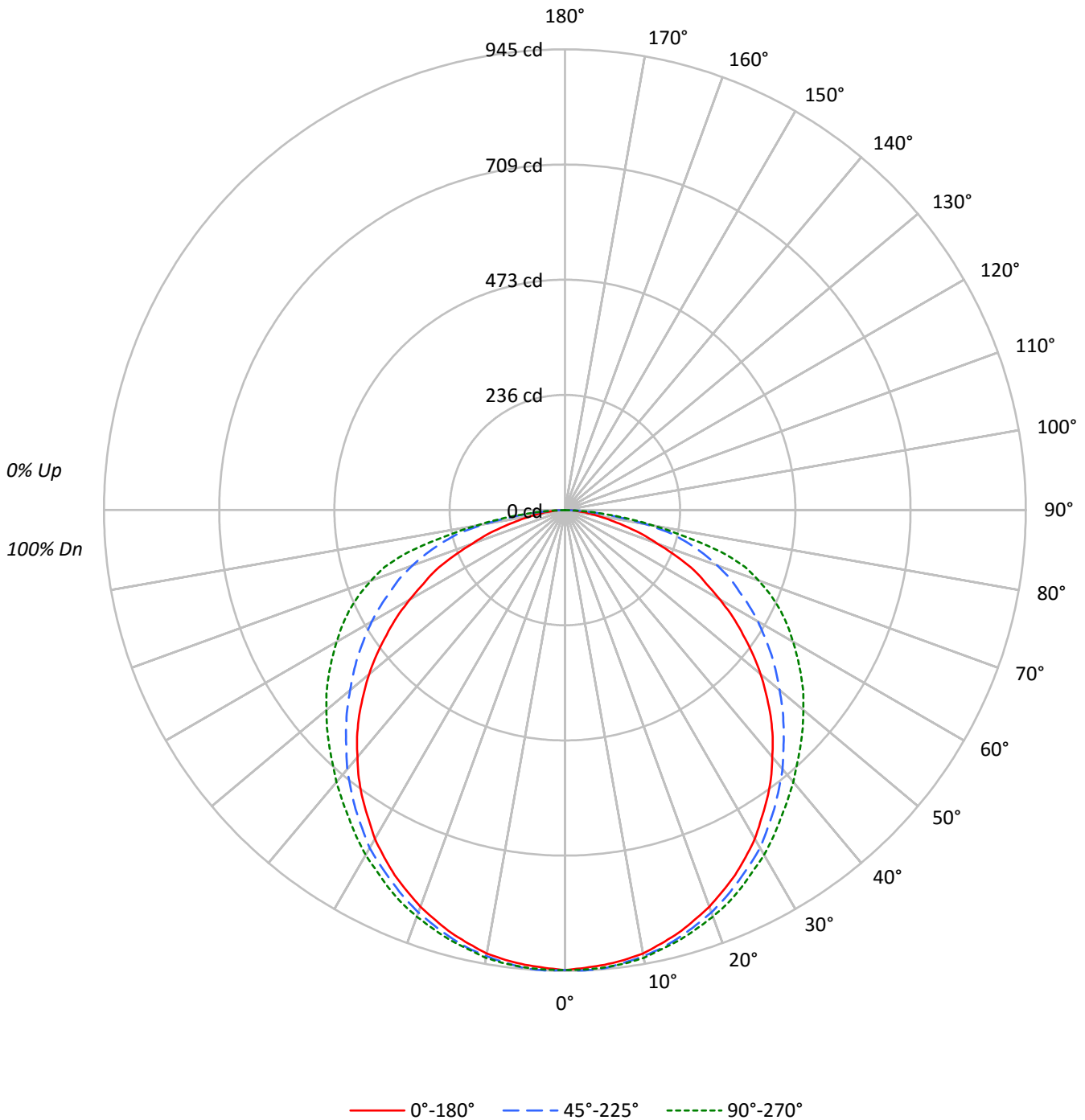
Lumens per Lamp: N/A  
Luminaire Lumens: 2865.0 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2539	2539	2539
5°	2529	2548	2544
10°	2523	2538	2548
15°	2502	2528	2543
20°	2479	2515	2541
25°	2452	2495	2538
30°	2420	2488	2538
35°	2375	2458	2535
40°	2324	2438	2558
45°	2270	2414	2600
50°	2194	2406	2671
55°	2094	2425	2773
60°	1975	2461	2908
65°	1864	2509	3107
70°	1592	2616	3327
75°	1334	2725	3457
80°	1093	2633	2885
85°	948	1954	2121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	3.1
10°-20°	255.8	8.9
20°-30°	387.6	13.5
30°-40°	468.0	16.3
40°-50°	491.8	17.2
50°-60°	462.7	16.2
60°-70°	385.8	13.5
70°-80°	255.7	8.9
80°-90°	68.1	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°	732.8	25.6
0°-40°	1200.8	41.9
0°-60°	2155.4	75.2
0°-90°	2865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2865.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	936	938	943	943	942	89
15°	898	902	907	911	913	253
25°	826	831	840	851	855	380
35°	723	730	748	764	772	452
45°	596	605	634	667	683	459
55°	446	466	517	569	591	399
65°	293	318	394	459	488	285
75°	128	179	262	316	332	139
85°	31	47	63	69	69	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	943.4	943.4	943.4	943.4	943.4
2.5°	939.8	941.6	945.2	945.2	943.4
5°	936.2	938.0	943.4	943.4	941.6
7.5°	930.8	932.6	936.2	939.8	938.0
10°	923.5	925.3	929.0	932.6	932.6
12.5°	910.9	912.7	919.9	921.7	921.7
15°	898.2	901.8	907.3	910.9	912.7
17.5°	882.0	885.6	892.8	900.0	900.0
20°	865.7	869.3	878.3	885.6	887.4
22.5°	845.8	851.2	860.3	869.3	872.9
25°	825.9	831.4	840.4	851.2	854.9
27.5°	802.4	807.9	820.5	833.2	835.0
30°	778.9	784.4	800.6	811.5	816.9
32.5°	750.0	757.3	773.5	789.8	795.2
35°	722.9	730.2	748.2	764.5	771.7
37.5°	694.0	701.2	721.1	741.0	750.0
40°	661.5	670.5	694.0	715.7	728.3
42.5°	630.7	639.8	663.3	692.2	704.8
45°	596.4	605.4	634.4	666.9	683.2
47.5°	560.3	571.1	605.4	645.2	661.5
50°	524.1	536.8	574.7	619.9	638.0
52.5°	486.2	502.4	545.8	594.6	616.3
55°	446.4	466.3	516.9	569.3	591.0
57.5°	408.5	426.5	486.2	542.2	565.7
60°	366.9	390.4	457.2	515.1	540.4
62.5°	327.1	352.4	426.5	488.0	515.1
65°	292.8	318.1	394.0	459.1	488.0
67.5°	247.6	281.9	366.9	428.3	457.2
70°	202.4	249.4	332.5	395.8	422.9
72.5°	168.1	213.3	298.2	361.5	386.8
75°	128.3	178.9	262.1	316.3	332.5
77.5°	95.8	148.2	224.1	251.2	253.0
80°	70.5	113.9	169.9	178.9	186.2
82.5°	48.8	79.5	110.2	121.1	124.7
85°	30.7	47.0	63.3	68.7	68.7
87.5°	16.3	18.1	21.7	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)