

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: P308255

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CA125-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: P308255
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-CA125-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 2855.0 lumens
Efficiency: N/A
Efficacy: 85.7 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

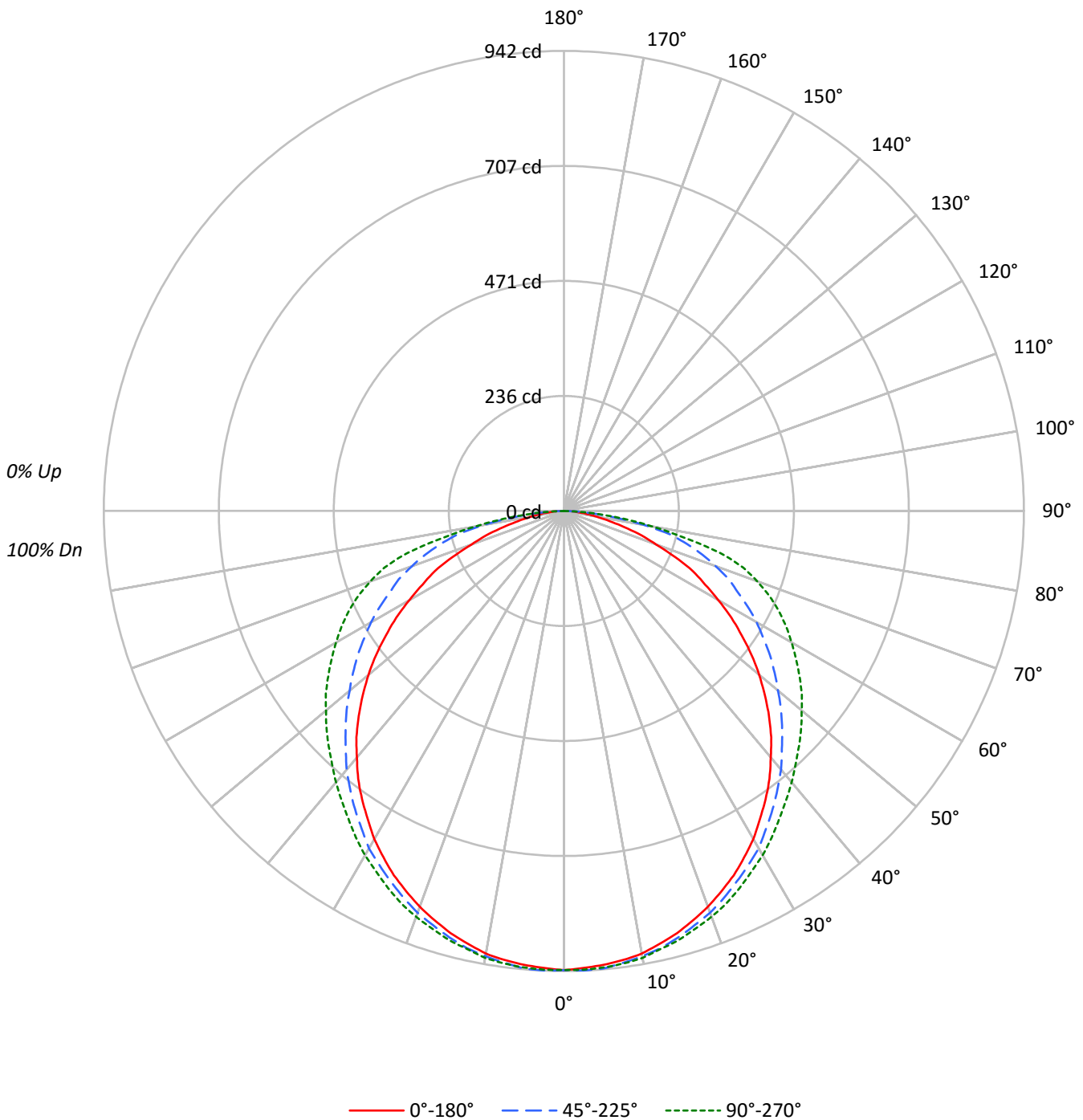
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2530	2530	2530
5°	2520	2539	2535
10°	2515	2529	2539
15°	2494	2519	2534
20°	2470	2507	2532
25°	2444	2487	2529
30°	2412	2479	2529
35°	2367	2449	2526
40°	2316	2429	2550
45°	2262	2406	2591
50°	2187	2398	2662
55°	2087	2417	2763
60°	1968	2453	2898
65°	1858	2500	3096
70°	1587	2607	3316
75°	1330	2715	3446
80°	1088	2624	2875
85°	945	1945	2112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.1	3.1
10°-20°	254.9	8.9
20°-30°	386.3	13.5
30°-40°	466.4	16.3
40°-50°	490.1	17.2
50°-60°	461.1	16.2
60°-70°	384.5	13.5
70°-80°	254.8	8.9
80°-90°	67.9	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°	730.2	25.6
0°-40°	1196.6	41.9
0°-60°	2147.9	75.2
0°-90°	2855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	933	935	940	940	938	89
15°	895	899	904	908	910	252
25°	823	828	838	848	852	379
35°	720	728	746	762	769	450
45°	594	603	632	665	681	458
55°	445	465	515	567	589	398
65°	292	317	393	458	486	284
75°	128	178	261	315	331	139
85°	31	47	63	68	68	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	940.1	940.1	940.1	940.1	940.1
2.5°	936.5	938.3	941.9	941.9	940.1
5°	932.9	934.7	940.1	940.1	938.3
7.5°	927.5	929.3	932.9	936.5	934.7
10°	920.3	922.1	925.7	929.3	929.3
12.5°	907.7	909.5	916.7	918.5	918.5
15°	895.1	898.7	904.1	907.7	909.5
17.5°	878.9	882.5	889.7	896.9	896.9
20°	862.7	866.3	875.3	882.5	884.3
22.5°	842.9	848.3	857.3	866.3	869.9
25°	823.1	828.5	837.5	848.3	851.9
27.5°	799.6	805.0	817.7	830.3	832.1
30°	776.2	781.6	797.8	808.6	814.0
32.5°	747.4	754.6	770.8	787.0	792.4
35°	720.4	727.6	745.6	761.8	769.0
37.5°	691.6	698.8	718.6	738.4	747.4
40°	659.2	668.2	691.6	713.2	725.8
42.5°	628.5	637.6	661.0	689.8	702.4
45°	594.3	603.3	632.1	664.6	680.8
47.5°	558.3	569.1	603.3	643.0	659.2
50°	522.3	534.9	572.7	617.7	635.8
52.5°	484.5	500.7	543.9	592.5	614.1
55°	444.8	464.7	515.1	567.3	588.9
57.5°	407.0	425.0	484.5	540.3	563.7
60°	365.6	389.0	455.7	513.3	538.5
62.5°	326.0	351.2	425.0	486.3	513.3
65°	291.8	317.0	392.6	457.5	486.3
67.5°	246.7	281.0	365.6	426.8	455.7
70°	201.7	248.5	331.4	394.4	421.4
72.5°	167.5	212.5	297.2	360.2	385.4
75°	127.9	178.3	261.1	315.2	331.4
77.5°	95.5	147.7	223.3	250.3	252.1
80°	70.2	113.5	169.3	178.3	185.5
82.5°	48.6	79.2	109.9	120.7	124.3
85°	30.6	46.8	63.0	68.4	68.4
87.5°	16.2	18.0	21.6	21.6	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)