

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: P312550

Luminaire Tested: **22FCZ2-39HE-UNV-L83050-HRP-CP125-W2A-U-3000K**

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: P312550  
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-L83050-HRP-CP125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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**

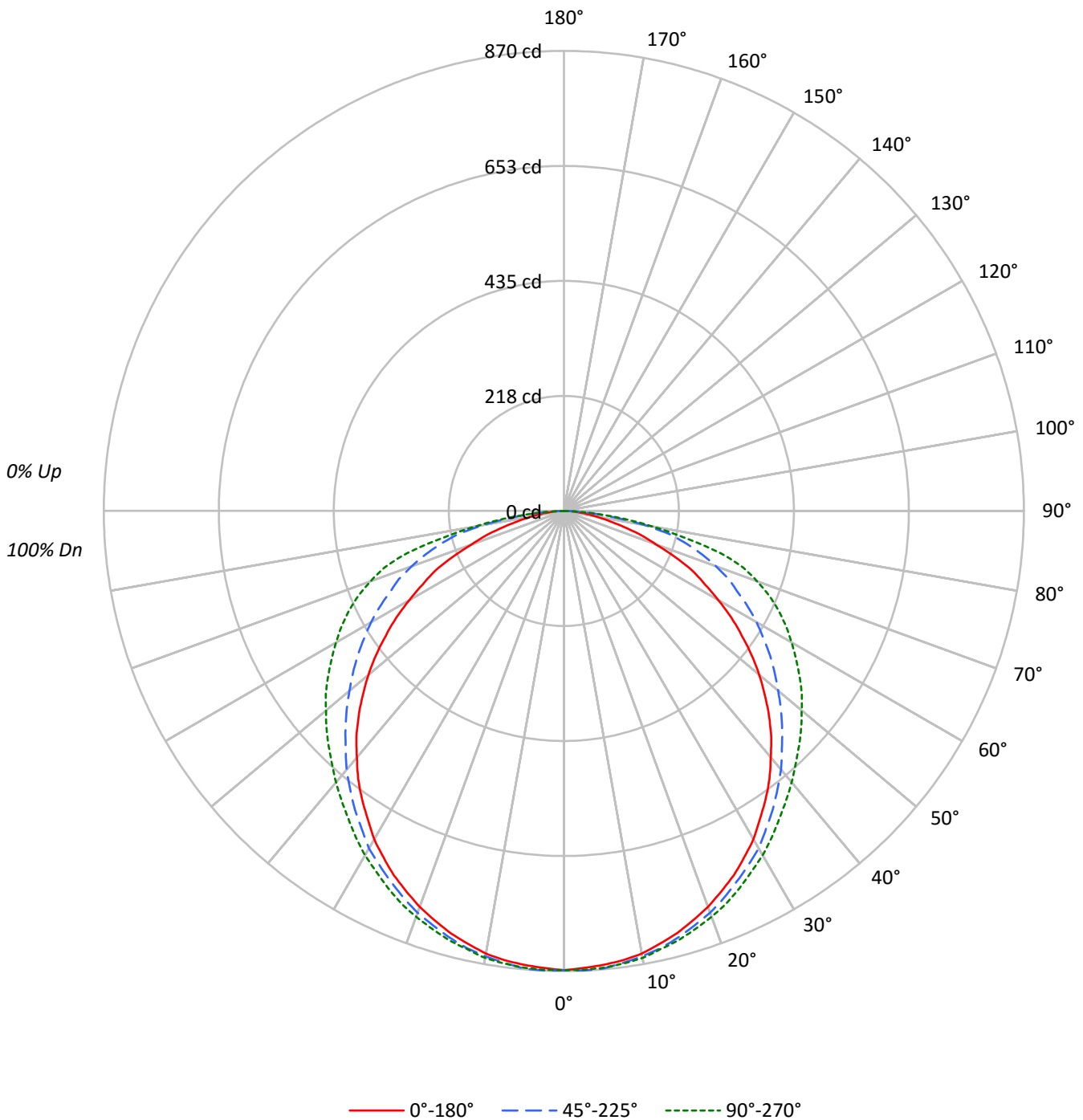
Lumens per Lamp: N/A  
Luminaire Lumens: 2637.0 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2337	2337	2337
5°	2328	2346	2341
10°	2323	2336	2346
15°	2303	2327	2340
20°	2282	2315	2339
25°	2257	2297	2336
30°	2228	2290	2336
35°	2186	2262	2333
40°	2139	2244	2355
45°	2089	2222	2393
50°	2020	2215	2458
55°	1928	2232	2552
60°	1817	2265	2677
65°	1716	2309	2860
70°	1466	2408	3063
75°	1228	2508	3183
80°	1006	2424	2655
85°	874	1797	1951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.3	3.1
10°-20°	235.4	8.9
20°-30°	356.8	13.5
30°-40°	430.8	16.3
40°-50°	452.7	17.2
50°-60°	425.9	16.2
60°-70°	355.1	13.5
70°-80°	235.3	8.9
80°-90°	62.7	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°	674.5	25.6
0°-40°	1105.3	41.9
0°-60°	1983.9	75.2
0°-90°	2637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2637.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	862	863	868	868	867	82
15°	827	830	835	838	840	233
25°	760	765	774	784	787	350
35°	665	672	689	704	710	416
45°	549	557	584	614	629	423
55°	411	429	476	524	544	368
65°	270	293	363	422	449	262
75°	118	165	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°	868.3	868.3	868.3	868.3	868.3
2.5°	865.0	866.7	870.0	870.0	868.3
5°	861.7	863.3	868.3	868.3	866.7
7.5°	856.7	858.4	861.7	865.0	863.3
10°	850.0	851.7	855.0	858.4	858.4
12.5°	838.4	840.1	846.7	848.4	848.4
15°	826.7	830.1	835.1	838.4	840.1
17.5°	811.8	815.1	821.8	828.4	828.4
20°	796.8	800.1	808.4	815.1	816.8
22.5°	778.5	783.5	791.8	800.1	803.5
25°	760.2	765.2	773.5	783.5	786.8
27.5°	738.6	743.6	755.2	766.9	768.5
30°	717.0	721.9	736.9	746.9	751.9
32.5°	690.3	697.0	712.0	726.9	731.9
35°	665.4	672.0	688.7	703.7	710.3
37.5°	638.8	645.4	663.7	682.0	690.3
40°	608.8	617.1	638.8	658.7	670.4
42.5°	580.6	588.9	610.5	637.1	648.8
45°	548.9	557.3	583.9	613.8	628.8
47.5°	515.7	525.7	557.3	593.9	608.8
50°	482.4	494.1	529.0	570.6	587.2
52.5°	447.5	462.4	502.4	547.3	567.2
55°	410.9	429.2	475.8	524.0	544.0
57.5°	375.9	392.6	447.5	499.0	520.7
60°	337.7	359.3	420.9	474.1	497.4
62.5°	301.1	324.4	392.6	449.1	474.1
65°	269.5	292.8	362.6	422.5	449.1
67.5°	227.9	259.5	337.7	394.2	420.9
70°	186.3	229.6	306.1	364.3	389.3
72.5°	154.7	196.3	274.5	332.7	356.0
75°	118.1	164.7	241.2	291.1	306.1
77.5°	88.2	136.4	206.3	231.2	232.9
80°	64.9	104.8	156.4	164.7	171.3
82.5°	44.9	73.2	101.5	111.5	114.8
85°	28.3	43.3	58.2	63.2	63.2
87.5°	15.0	16.6	20.0	20.0	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)