

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: P308525

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-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: P308525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
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-RDP-CA125-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2460.0 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

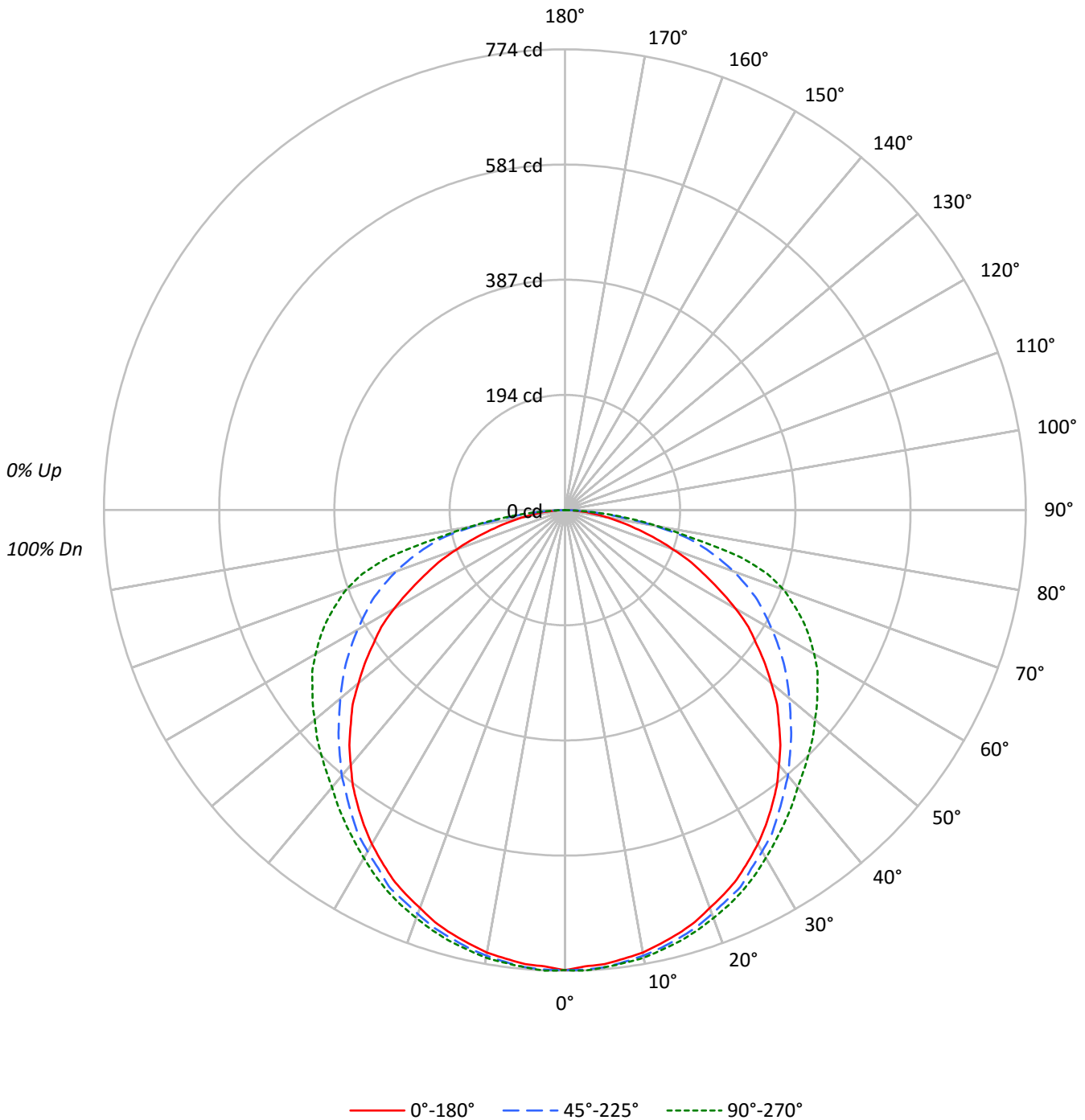
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2079	2079	2079
5°	2068	2082	2082
10°	2062	2077	2087
15°	2052	2072	2087
20°	2037	2068	2088
25°	2031	2074	2096
30°	2013	2058	2097
35°	1991	2051	2110
40°	1964	2047	2136
45°	1935	2046	2204
50°	1894	2061	2295
55°	1842	2106	2428
60°	1783	2162	2601
65°	1659	2270	2812
70°	1523	2378	3076
75°	1336	2503	3179
80°	1150	2383	2497
85°	1007	1732	1899



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	3.0
10°-20°	209.9	8.5
20°-30°	320.2	13.0
30°-40°	391.0	15.9
40°-50°	418.0	17.0
50°-60°	403.5	16.4
60°-70°	347.3	14.1
70°-80°	235.0	9.6
80°-90°	62.0	2.5
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°	603.2	24.5
0°-40°	994.1	40.4
0°-60°	1815.6	73.8
0°-90°	2460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	766	767	771	771	771	73
15°	736	738	744	747	749	208
25°	684	688	698	702	706	315
35°	606	612	624	637	642	379
45°	508	518	538	565	579	393
55°	393	405	449	494	518	352
65°	261	286	356	413	442	259
75°	128	170	241	290	306	138
85°	33	45	56	58	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.7	772.7	772.7	772.7	772.7
2.5°	767.3	769.1	772.7	772.7	774.5
5°	765.5	767.3	770.9	770.9	770.9
7.5°	760.1	761.9	765.5	767.3	767.3
10°	754.6	756.4	760.1	761.9	763.7
12.5°	745.6	747.4	752.8	756.4	756.4
15°	736.5	738.3	743.8	747.4	749.2
17.5°	725.7	729.3	734.7	738.3	740.2
20°	711.2	714.8	722.1	727.5	729.3
22.5°	698.5	702.2	709.4	714.8	718.4
25°	684.1	687.7	698.5	702.2	705.8
27.5°	666.0	669.6	678.6	685.9	691.3
30°	647.9	651.5	662.3	671.4	675.0
32.5°	628.0	633.4	646.1	653.3	658.7
35°	606.2	611.7	624.3	637.0	642.4
37.5°	584.5	590.0	602.6	618.9	626.1
40°	559.2	566.4	582.7	604.4	608.0
42.5°	535.7	544.7	559.2	584.5	593.6
45°	508.5	517.6	537.5	564.6	579.1
47.5°	483.2	492.2	513.9	546.5	564.6
50°	452.4	465.1	492.2	530.2	548.3
52.5°	423.5	434.3	470.5	512.1	533.9
55°	392.7	405.4	448.8	494.0	517.6
57.5°	365.6	376.4	425.3	475.9	503.1
60°	331.2	345.6	401.7	456.0	483.2
62.5°	295.0	316.7	378.2	434.3	463.3
65°	260.6	285.9	356.5	412.6	441.6
67.5°	229.8	257.0	329.4	389.1	416.2
70°	193.6	228.0	302.2	360.1	390.9
72.5°	161.1	199.1	271.5	329.4	356.5
75°	128.5	170.1	240.7	289.5	305.8
77.5°	99.5	139.3	206.3	220.8	222.6
80°	74.2	110.4	153.8	155.6	161.1
82.5°	50.7	77.8	99.5	108.6	110.4
85°	32.6	45.2	56.1	57.9	61.5
87.5°	14.5	16.3	19.9	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)