

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: P308261

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP125-W2A-U-4000K**

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: P308261
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-CP125-W2A-U-4000K
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: 2687.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

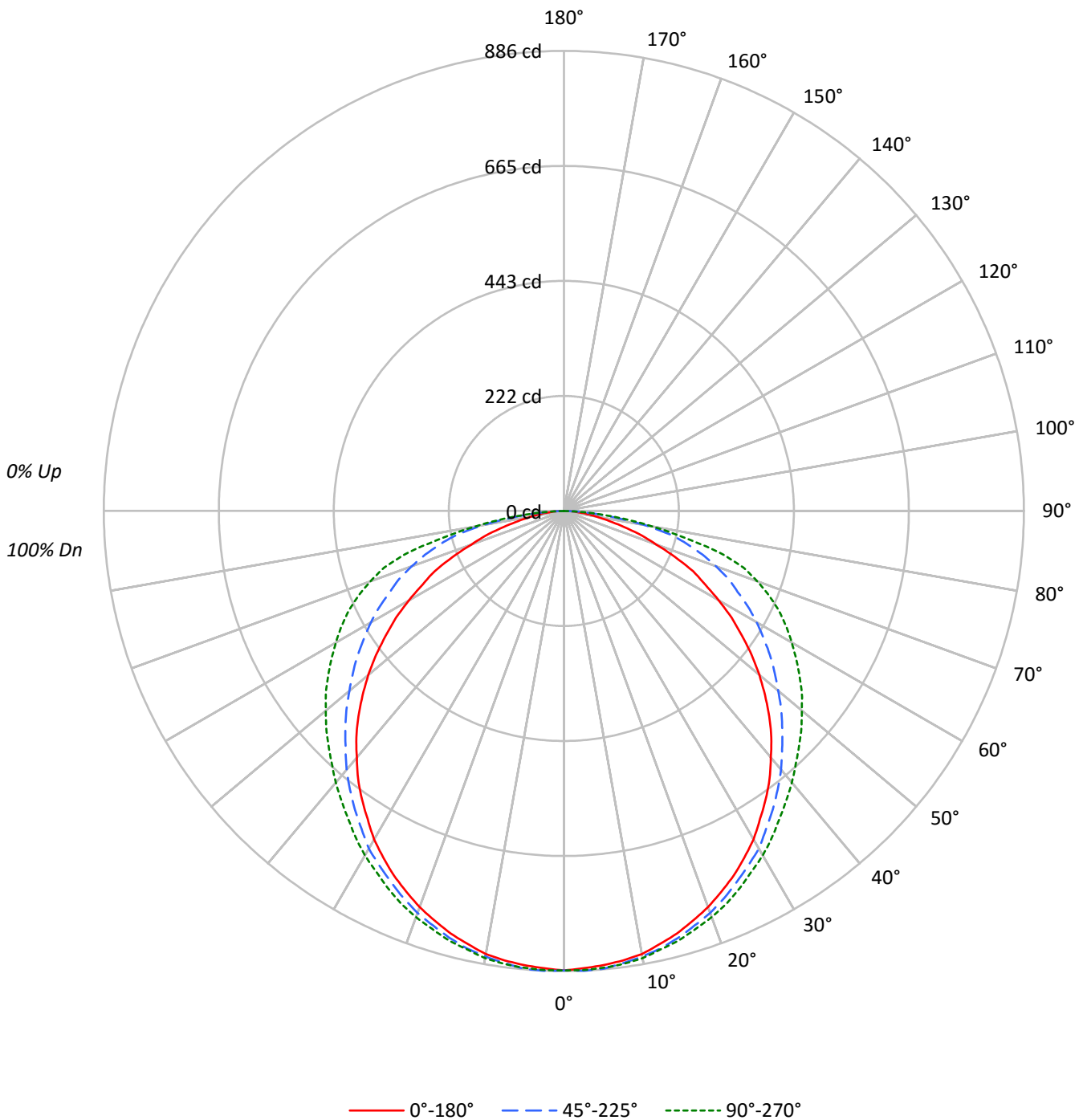
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2381	2381	2381
5°	2372	2390	2385
10°	2367	2381	2390
15°	2347	2371	2385
20°	2325	2359	2383
25°	2300	2340	2380
30°	2270	2333	2380
35°	2227	2305	2378
40°	2179	2286	2400
45°	2129	2264	2438
50°	2058	2256	2505
55°	1964	2274	2601
60°	1852	2308	2728
65°	1748	2353	2914
70°	1493	2454	3120
75°	1251	2556	3243
80°	1024	2469	2706
85°	889	1831	1988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.9	3.1
10°-20°	239.9	8.9
20°-30°	363.5	13.5
30°-40°	439.0	16.3
40°-50°	461.3	17.2
50°-60°	434.0	16.2
60°-70°	361.9	13.5
70°-80°	239.8	8.9
80°-90°	63.9	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°	687.3	25.6
0°-40°	1126.2	41.9
0°-60°	2021.5	75.2
0°-90°	2687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	878	880	885	885	883	83
15°	842	846	851	854	856	238
25°	775	780	788	798	802	357
35°	678	685	702	717	724	424
45°	559	568	595	626	641	431
55°	419	437	485	534	554	375
65°	275	298	370	430	458	267
75°	120	168	246	297	312	131
85°	29	44	59	64	64	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.8	884.8	884.8	884.8	884.8
2.5°	881.4	883.1	886.5	886.5	884.8
5°	878.0	879.7	884.8	884.8	883.1
7.5°	872.9	874.6	878.0	881.4	879.7
10°	866.2	867.8	871.2	874.6	874.6
12.5°	854.3	856.0	862.8	864.5	864.5
15°	842.4	845.8	850.9	854.3	856.0
17.5°	827.2	830.6	837.3	844.1	844.1
20°	811.9	815.3	823.8	830.6	832.3
22.5°	793.3	798.4	806.8	815.3	818.7
25°	774.6	779.7	788.2	798.4	801.7
27.5°	752.6	757.7	769.5	781.4	783.1
30°	730.6	735.6	750.9	761.1	766.1
32.5°	703.4	710.2	725.5	740.7	745.8
35°	678.0	684.8	701.7	717.0	723.8
37.5°	650.9	657.7	676.3	695.0	703.4
40°	620.4	628.9	650.9	671.2	683.1
42.5°	591.6	600.0	622.1	649.2	661.1
45°	559.4	567.8	595.0	625.5	640.7
47.5°	525.5	535.6	567.8	605.1	620.4
50°	491.6	503.4	539.0	581.4	598.3
52.5°	456.0	471.2	511.9	557.7	578.0
55°	418.7	437.3	484.8	533.9	554.3
57.5°	383.1	400.0	456.0	508.5	530.5
60°	344.1	366.1	428.8	483.1	506.8
62.5°	306.8	330.5	400.0	457.7	483.1
65°	274.6	298.3	369.5	430.5	457.7
67.5°	232.2	264.4	344.1	401.7	428.8
70°	189.8	233.9	311.9	371.2	396.6
72.5°	157.6	200.0	279.7	339.0	362.7
75°	120.3	167.8	245.8	296.6	311.9
77.5°	89.8	139.0	210.2	235.6	237.3
80°	66.1	106.8	159.3	167.8	174.6
82.5°	45.8	74.6	103.4	113.6	117.0
85°	28.8	44.1	59.3	64.4	64.4
87.5°	15.3	17.0	20.3	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)