

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: P308266

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP125-W2A-U-6500K**

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: P308266
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-6500K
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: 2814.0 lumens
Efficiency: N/A
Efficacy: 83.3 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

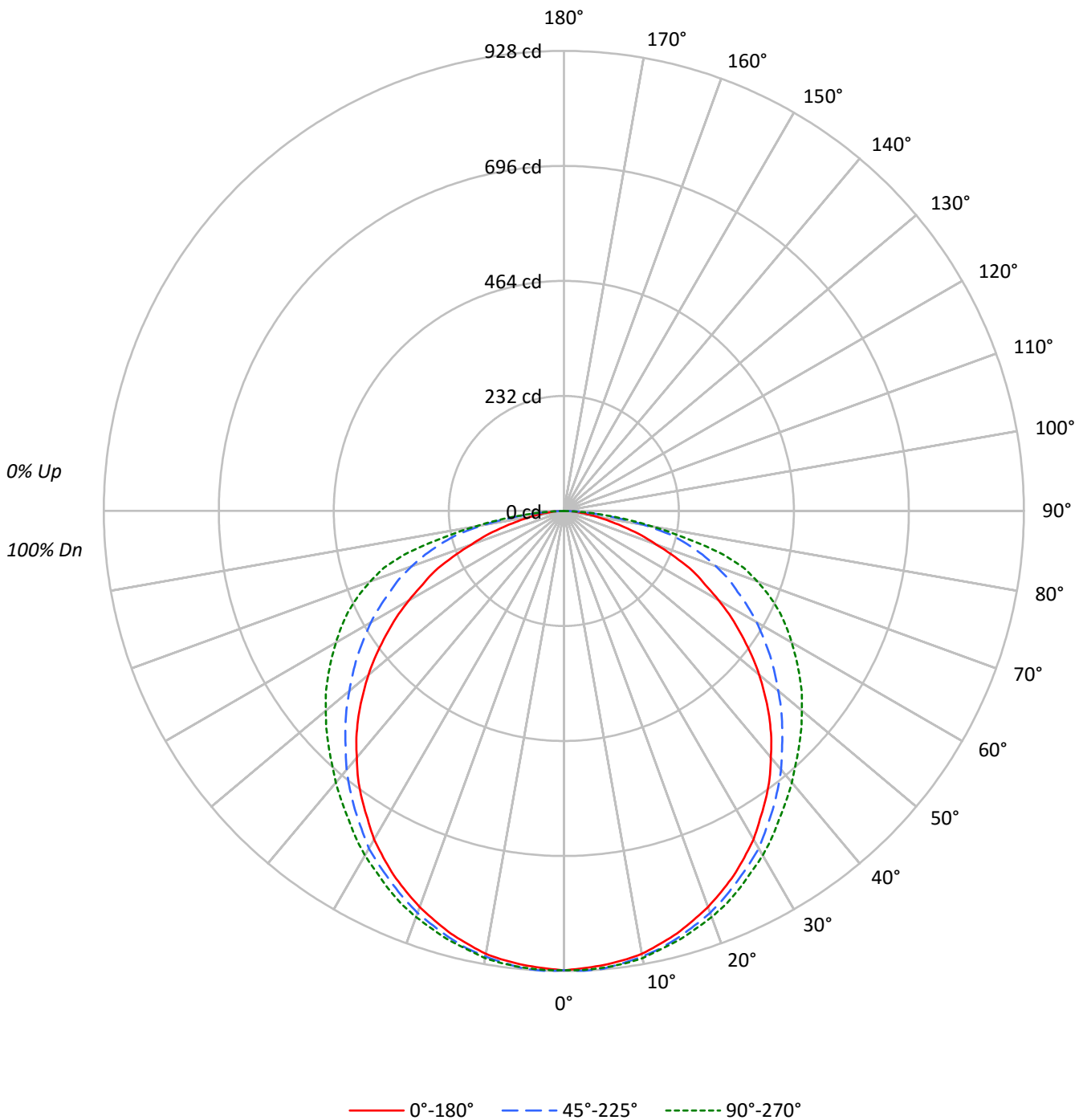
Input Watts (W): 33.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2493	2493	2493
5°	2484	2503	2498
10°	2479	2493	2503
15°	2458	2483	2497
20°	2435	2470	2496
25°	2409	2451	2493
30°	2377	2444	2493
35°	2333	2414	2490
40°	2282	2395	2513
45°	2229	2371	2554
50°	2155	2363	2623
55°	2057	2382	2723
60°	1940	2417	2857
65°	1831	2464	3052
70°	1564	2570	3268
75°	1310	2676	3396
80°	1072	2586	2833
85°	932	1917	2084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	3.1
10°-20°	251.2	8.9
20°-30°	380.7	13.5
30°-40°	459.7	16.3
40°-50°	483.1	17.2
50°-60°	454.5	16.2
60°-70°	379.0	13.5
70°-80°	251.1	8.9
80°-90°	66.9	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°	719.7	25.6
0°-40°	1179.5	41.9
0°-60°	2117.0	75.2
0°-90°	2814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2814.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	920	921	927	927	925	87
15°	882	886	891	895	896	249
25°	811	817	825	836	840	374
35°	710	717	735	751	758	444
45°	586	595	623	655	671	451
55°	438	458	508	559	580	392
65°	288	312	387	451	479	280
75°	126	176	257	311	327	137
85°	30	46	62	68	68	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	926.6	926.6	926.6	926.6	926.6
2.5°	923.1	924.8	928.4	928.4	926.6
5°	919.5	921.3	926.6	926.6	924.8
7.5°	914.2	916.0	919.5	923.1	921.3
10°	907.1	908.9	912.4	916.0	916.0
12.5°	894.7	896.4	903.5	905.3	905.3
15°	882.2	885.8	891.1	894.7	896.4
17.5°	866.3	869.8	876.9	884.0	884.0
20°	850.3	853.8	862.7	869.8	871.6
22.5°	830.8	836.1	845.0	853.8	857.4
25°	811.2	816.6	825.4	836.1	839.6
27.5°	788.2	793.5	805.9	818.3	820.1
30°	765.1	770.4	786.4	797.0	802.4
32.5°	736.7	743.8	759.8	775.7	781.1
35°	710.1	717.2	734.9	750.9	758.0
37.5°	681.7	688.8	708.3	727.8	736.7
40°	649.7	658.6	681.7	703.0	715.4
42.5°	619.5	628.4	651.5	679.9	692.3
45°	585.8	594.7	623.1	655.0	671.0
47.5°	550.3	560.9	594.7	633.7	649.7
50°	514.8	527.2	564.5	608.9	626.6
52.5°	477.5	493.5	536.1	584.0	605.3
55°	438.5	458.0	507.7	559.2	580.5
57.5°	401.2	418.9	477.5	532.5	555.6
60°	360.4	383.4	449.1	505.9	530.8
62.5°	321.3	346.2	418.9	479.3	505.9
65°	287.6	312.4	387.0	450.9	479.3
67.5°	243.2	276.9	360.4	420.7	449.1
70°	198.8	245.0	326.6	388.8	415.4
72.5°	165.1	209.5	292.9	355.0	379.9
75°	126.0	175.7	257.4	310.6	326.6
77.5°	94.1	145.6	220.1	246.7	248.5
80°	69.2	111.8	166.9	175.7	182.8
82.5°	47.9	78.1	108.3	118.9	122.5
85°	30.2	46.2	62.1	67.5	67.5
87.5°	16.0	17.8	21.3	21.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)