

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: P308264

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP125-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: P308264
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-5500K
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: 2800.0 lumens
Efficiency: N/A
Efficacy: 84.1 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

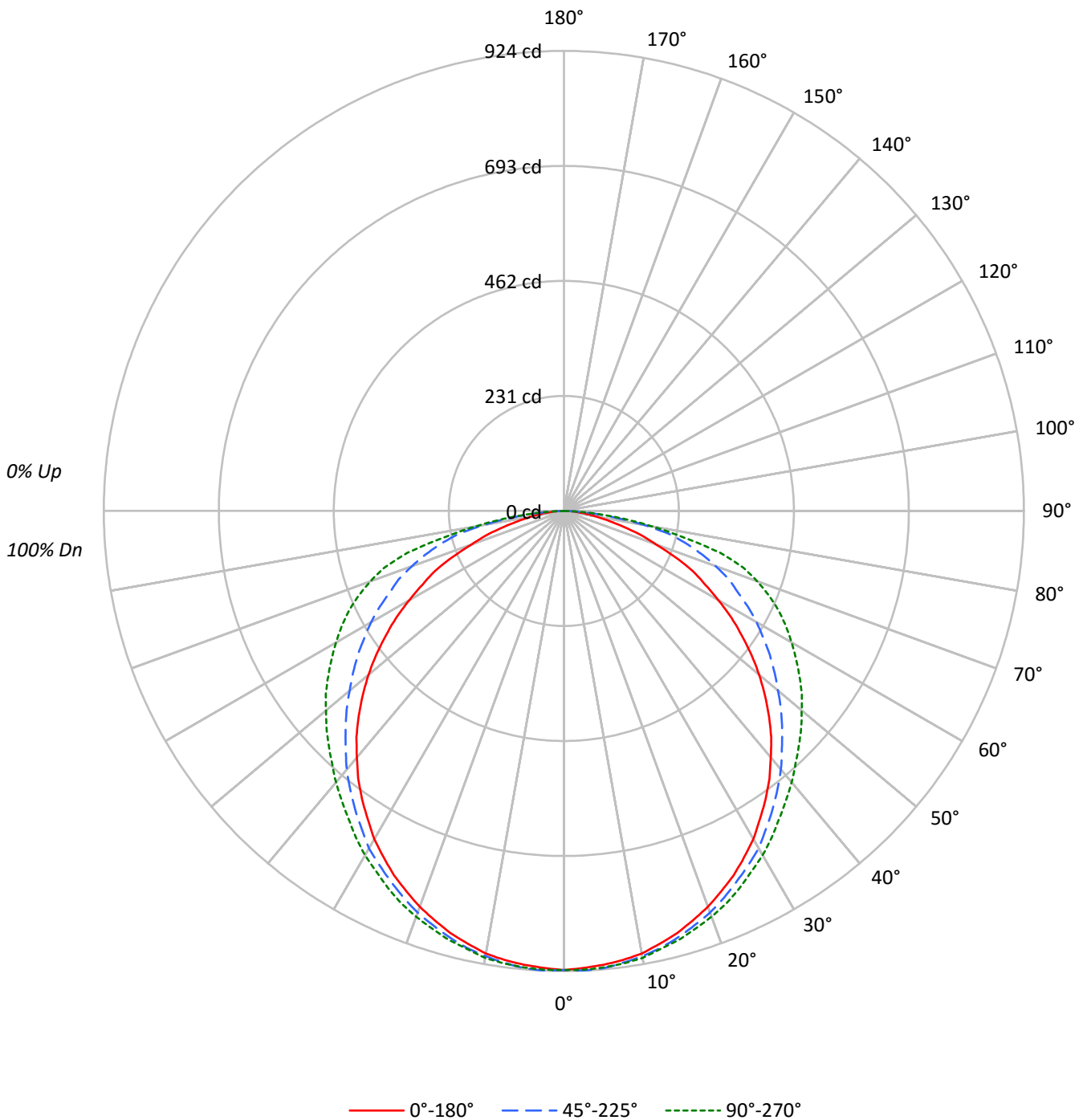
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2481	2481	2481
5°	2471	2491	2486
10°	2466	2481	2490
15°	2446	2470	2485
20°	2423	2458	2484
25°	2397	2439	2481
30°	2366	2431	2481
35°	2321	2402	2478
40°	2271	2383	2500
45°	2218	2359	2541
50°	2144	2352	2610
55°	2047	2370	2710
60°	1930	2405	2842
65°	1822	2452	3037
70°	1556	2557	3252
75°	1304	2663	3379
80°	1068	2572	2819
85°	926	1908	2072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	3.1
10°-20°	250.0	8.9
20°-30°	378.8	13.5
30°-40°	457.4	16.3
40°-50°	480.7	17.2
50°-60°	452.2	16.2
60°-70°	377.1	13.5
70°-80°	249.8	8.9
80°-90°	66.6	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°	716.2	25.6
0°-40°	1173.6	41.9
0°-60°	2106.5	75.2
0°-90°	2800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	915	917	922	922	920	87
15°	878	881	887	890	892	248
25°	807	812	821	832	836	372
35°	706	714	731	747	754	442
45°	583	592	620	652	668	449
55°	436	456	505	556	578	390
65°	286	311	385	449	477	278
75°	125	175	256	309	325	136
85°	30	46	62	67	67	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922.0	922.0	922.0	922.0	922.0
2.5°	918.5	920.2	923.8	923.8	922.0
5°	914.9	916.7	922.0	922.0	920.2
7.5°	909.6	911.4	914.9	918.5	916.7
10°	902.6	904.3	907.9	911.4	911.4
12.5°	890.2	892.0	899.0	900.8	900.8
15°	877.9	881.4	886.7	890.2	892.0
17.5°	862.0	865.5	872.6	879.6	879.6
20°	846.1	849.6	858.4	865.5	867.3
22.5°	826.6	831.9	840.8	849.6	853.1
25°	807.2	812.5	821.3	831.9	835.5
27.5°	784.2	789.5	801.9	814.3	816.0
30°	761.3	766.6	782.5	793.1	798.4
32.5°	733.0	740.1	756.0	771.9	777.2
35°	706.5	713.6	731.2	747.1	754.2
37.5°	678.3	685.3	704.8	724.2	733.0
40°	646.5	655.3	678.3	699.5	711.8
42.5°	616.4	625.3	648.2	676.5	688.9
45°	582.9	591.7	620.0	651.8	667.7
47.5°	547.6	558.2	591.7	630.6	646.5
50°	512.2	524.6	561.7	605.8	623.5
52.5°	475.1	491.0	533.4	581.1	602.3
55°	436.3	455.7	505.2	556.4	577.6
57.5°	399.2	416.8	475.1	529.9	552.9
60°	358.6	381.5	446.9	503.4	528.1
62.5°	319.7	344.4	416.8	476.9	503.4
65°	286.1	310.9	385.1	448.6	476.9
67.5°	242.0	275.5	358.6	418.6	446.9
70°	197.8	243.7	325.0	386.8	413.3
72.5°	164.3	208.4	291.4	353.3	378.0
75°	125.4	174.9	256.1	309.1	325.0
77.5°	93.6	144.8	219.0	245.5	247.3
80°	68.9	111.3	166.0	174.9	181.9
82.5°	47.7	77.7	107.7	118.3	121.9
85°	30.0	45.9	61.8	67.1	67.1
87.5°	15.9	17.7	21.2	21.2	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)