

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: P308754

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-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: P308754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-34HE-UNV-L82765-CP125-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, RIBBED 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: 2855.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

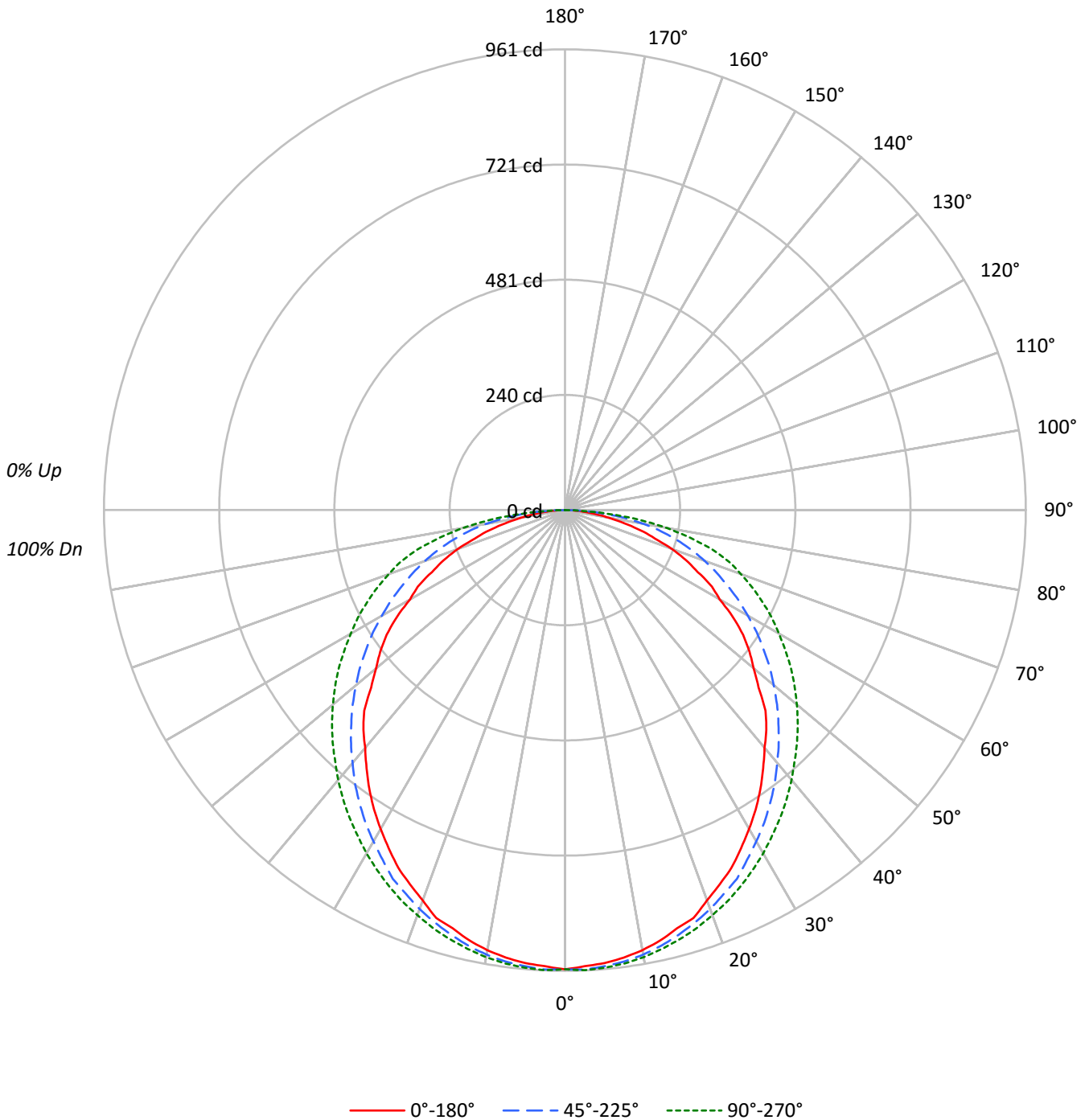
Input Watts (W): 27.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	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	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2578	2578	2578
5°	2562	2580	2588
10°	2546	2573	2587
15°	2516	2554	2581
20°	2481	2536	2575
25°	2442	2520	2572
30°	2386	2480	2569
35°	2334	2451	2572
40°	2275	2419	2582
45°	2252	2397	2605
50°	2151	2380	2643
55°	2129	2372	2699
60°	2007	2368	2772
65°	1949	2384	2897
70°	1871	2441	3075
75°	1705	2515	3310
80°	1461	2605	3346
85°	1183	2489	2868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	3.2
10°-20°	258.6	9.1
20°-30°	389.2	13.6
30°-40°	467.1	16.4
40°-50°	488.2	17.1
50°-60°	454.9	15.9
60°-70°	373.1	13.1
70°-80°	251.4	8.8
80°-90°	81.9	2.9
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°	738.4	25.9
0°-40°	1205.4	42.2
0°-60°	2148.5	75.3
0°-90°	2855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	948	951	955	956	958	90
15°	903	909	917	925	926	255
25°	823	828	849	861	866	378
35°	711	720	746	772	783	444
45°	592	596	630	668	685	452
55°	454	462	506	553	575	402
65°	306	320	374	429	455	304
75°	164	182	242	296	318	172
85°	38	55	81	94	93	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.9	957.9	957.9	957.9	957.9
2.5°	952.4	955.1	959.2	960.6	960.6
5°	948.3	951.0	955.1	956.5	957.9
7.5°	941.5	944.2	949.7	952.4	953.8
10°	931.9	934.6	941.5	945.6	946.9
12.5°	919.6	922.3	930.5	936.0	937.4
15°	903.2	908.7	916.9	925.1	926.4
17.5°	892.3	890.9	901.9	911.4	914.2
20°	866.3	873.2	885.5	896.4	899.1
22.5°	844.5	849.9	866.3	878.6	884.1
25°	822.6	828.1	848.6	860.9	866.3
27.5°	795.3	803.5	822.6	840.4	847.2
30°	767.9	776.1	798.0	818.5	826.7
32.5°	740.6	750.2	773.4	795.3	804.8
35°	710.6	720.1	746.1	772.0	783.0
37.5°	679.1	691.4	718.7	747.4	759.7
40°	647.7	660.0	688.7	721.5	735.1
42.5°	621.7	627.2	660.0	695.5	709.2
45°	591.7	595.8	629.9	668.2	684.6
47.5°	547.9	563.0	599.9	642.2	658.6
50°	513.8	530.2	568.4	613.5	631.3
52.5°	485.1	496.0	538.4	583.5	604.0
55°	453.7	461.9	505.6	553.4	575.3
57.5°	415.4	430.4	474.2	523.3	545.2
60°	373.0	392.2	440.0	493.3	515.1
62.5°	345.7	356.6	408.6	461.9	486.5
65°	306.1	319.7	374.4	429.1	455.0
67.5°	273.3	287.0	343.0	397.6	423.6
70°	237.8	251.4	310.2	364.8	390.8
72.5°	196.8	215.9	277.4	332.0	359.4
75°	164.0	181.7	241.9	296.5	318.4
77.5°	127.1	150.3	206.3	251.4	267.8
80°	94.3	117.5	168.1	200.9	215.9
82.5°	64.2	87.5	125.7	150.3	158.5
85°	38.3	54.7	80.6	94.3	92.9
87.5°	17.8	23.2	32.8	32.8	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)