

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: P308567

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA125-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: P308567
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: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-4000K
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: 2649.0 lumens
Efficiency: N/A
Efficacy: 70.5 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

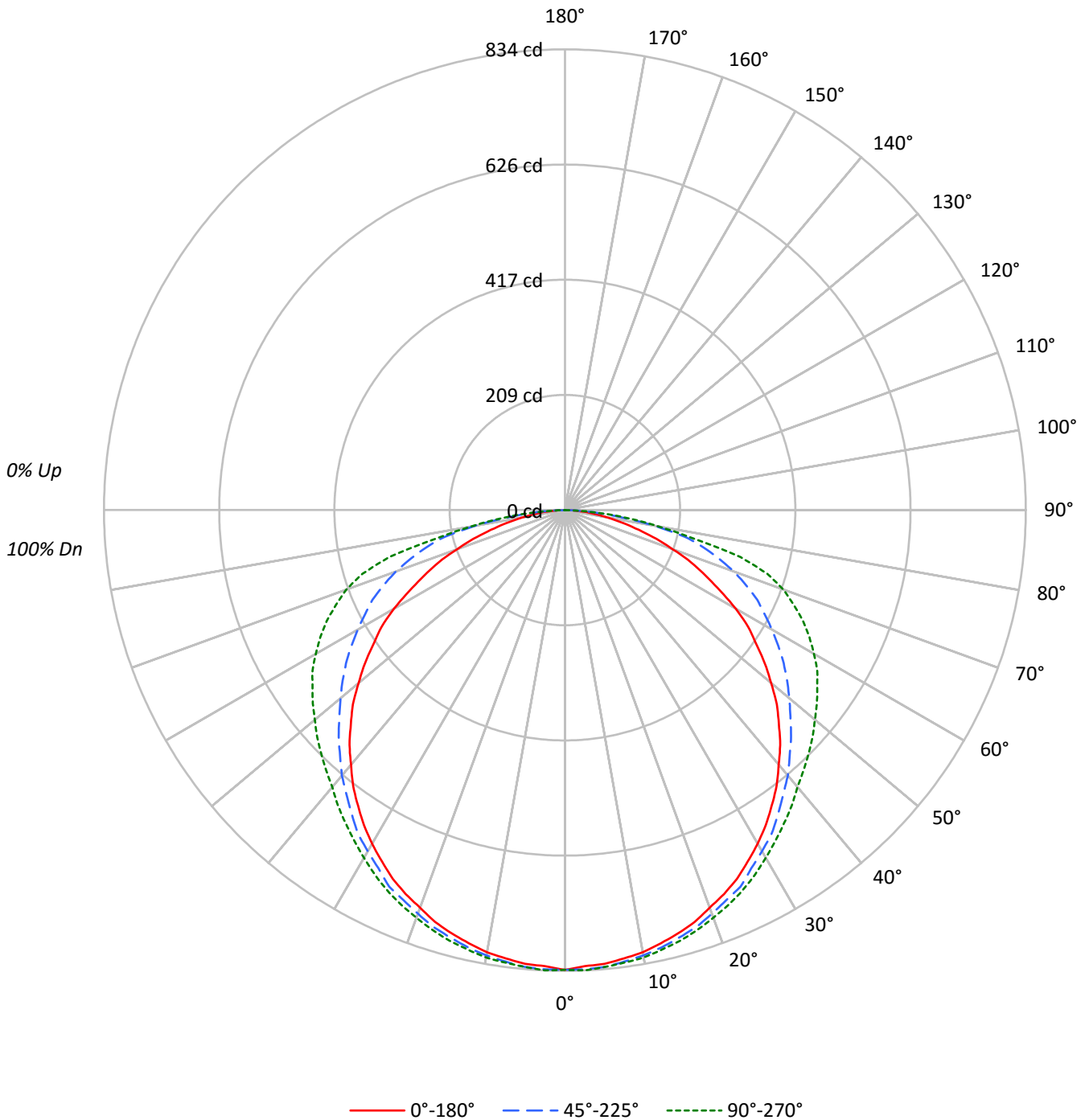
Input Watts (W): 37.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2239	2239	2239
5°	2227	2242	2242
10°	2220	2237	2247
15°	2210	2231	2248
20°	2193	2227	2249
25°	2187	2233	2257
30°	2168	2216	2259
35°	2144	2209	2273
40°	2115	2204	2300
45°	2084	2203	2373
50°	2040	2219	2472
55°	1984	2267	2615
60°	1919	2328	2800
65°	1787	2444	3028
70°	1640	2560	3312
75°	1439	2695	3424
80°	1238	2566	2687
85°	1084	1865	2047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	3.0
10°-20°	226.0	8.5
20°-30°	344.8	13.0
30°-40°	421.0	15.9
40°-50°	450.1	17.0
50°-60°	434.5	16.4
60°-70°	374.0	14.1
70°-80°	253.1	9.6
80°-90°	66.8	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°	649.5	24.5
0°-40°	1070.5	40.4
0°-60°	1955.1	73.8
0°-90°	2649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	824	826	830	830	830	78
15°	793	795	801	805	807	224
25°	737	740	752	756	760	339
35°	653	659	672	686	692	408
45°	548	557	579	608	624	423
55°	423	436	483	532	557	379
65°	281	308	384	444	476	279
75°	138	183	259	312	329	148
85°	35	49	60	62	66	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	832.1	832.1	832.1	832.1	832.1
2.5°	826.3	828.2	832.1	832.1	834.0
5°	824.3	826.3	830.1	830.1	830.1
7.5°	818.5	820.4	824.3	826.3	826.3
10°	812.6	814.6	818.5	820.4	822.4
12.5°	802.9	804.8	810.7	814.6	814.6
15°	793.1	795.1	800.9	804.8	806.8
17.5°	781.4	785.3	791.2	795.1	797.0
20°	765.8	769.7	777.5	783.4	785.3
22.5°	752.2	756.1	763.9	769.7	773.6
25°	736.6	740.5	752.2	756.1	760.0
27.5°	717.1	721.0	730.8	738.6	744.4
30°	697.6	701.5	713.2	723.0	726.9
32.5°	676.2	682.0	695.7	703.5	709.3
35°	652.8	658.7	672.3	685.9	691.8
37.5°	629.4	635.3	648.9	666.5	674.3
40°	602.1	609.9	627.5	650.9	654.8
42.5°	576.8	586.6	602.1	629.4	639.2
45°	547.6	557.3	578.8	608.0	623.6
47.5°	520.3	530.0	553.4	588.5	608.0
50°	487.2	500.8	530.0	571.0	590.5
52.5°	456.0	467.7	506.7	551.5	574.9
55°	422.9	436.5	483.3	532.0	557.3
57.5°	393.6	405.3	457.9	512.5	541.7
60°	356.6	372.2	432.6	491.1	520.3
62.5°	317.6	341.0	407.3	467.7	498.9
65°	280.6	307.9	383.9	444.3	475.5
67.5°	247.5	276.7	354.7	419.0	448.2
70°	208.5	245.5	325.4	387.8	420.9
72.5°	173.4	214.4	292.3	354.7	383.9
75°	138.4	183.2	259.2	311.8	329.3
77.5°	107.2	150.1	222.2	237.7	239.7
80°	79.9	118.9	165.6	167.6	173.4
82.5°	54.6	83.8	107.2	116.9	118.9
85°	35.1	48.7	60.4	62.4	66.3
87.5°	15.6	17.5	21.4	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)