

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: P308564

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-2700K**

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: P308564
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-2700K
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: 2435.0 lumens
Efficiency: N/A
Efficacy: 65.5 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

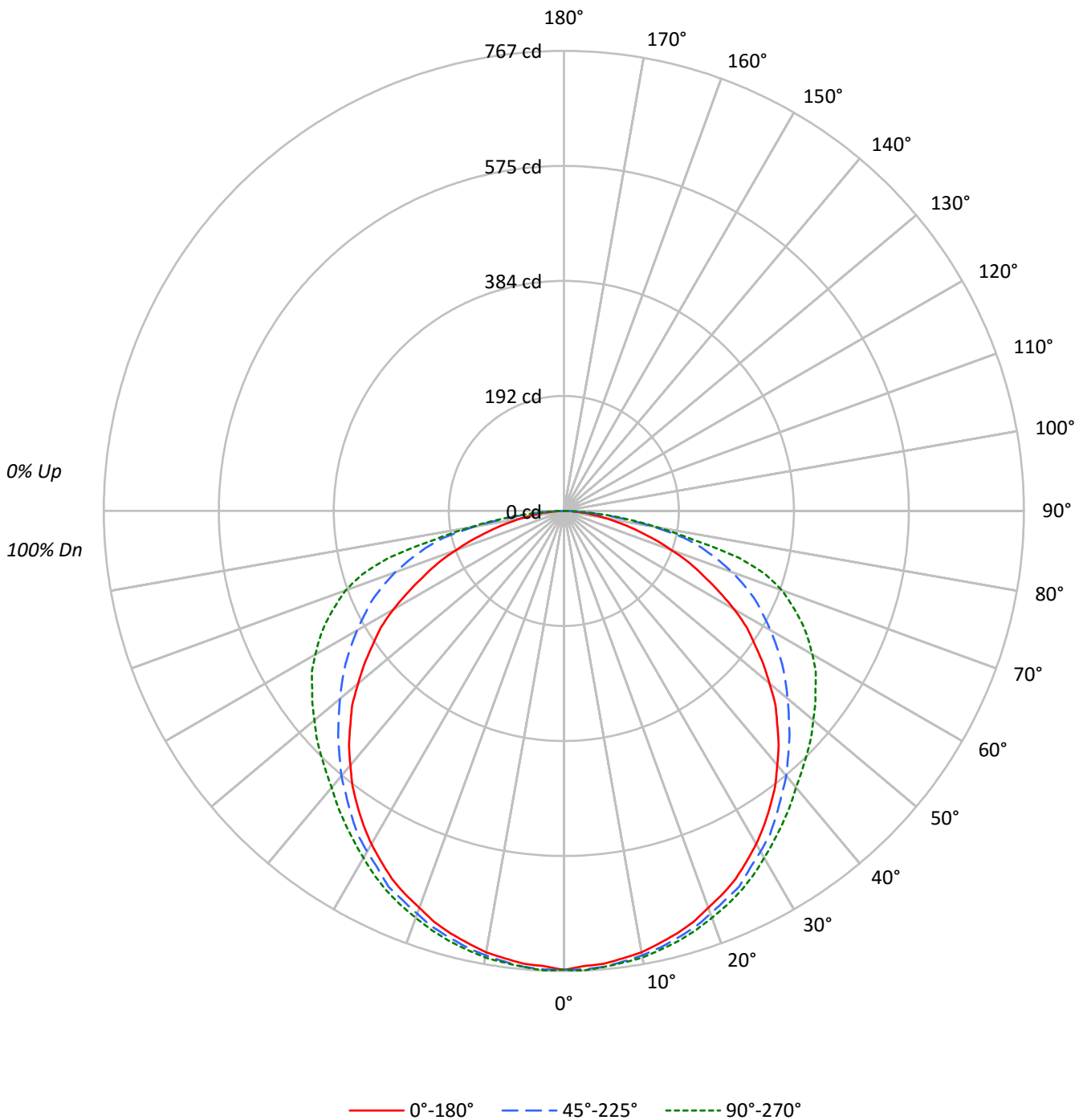
Input Watts (W): 37.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2058	2058	2058
5°	2047	2061	2061
10°	2041	2056	2065
15°	2031	2051	2066
20°	2016	2047	2067
25°	2010	2053	2074
30°	1993	2037	2076
35°	1971	2030	2089
40°	1944	2026	2114
45°	1915	2025	2181
50°	1875	2040	2272
55°	1824	2084	2403
60°	1764	2140	2574
65°	1642	2247	2783
70°	1508	2353	3044
75°	1323	2477	3147
80°	1137	2360	2470
85°	994	1714	1880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.0
10°-20°	207.7	8.5
20°-30°	316.9	13.0
30°-40°	387.0	15.9
40°-50°	413.8	17.0
50°-60°	399.4	16.4
60°-70°	343.8	14.1
70°-80°	232.6	9.6
80°-90°	61.4	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°	597.0	24.5
0°-40°	984.0	40.4
0°-60°	1797.2	73.8
0°-90°	2435.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2435.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	758	760	763	763	763	72
15°	729	731	736	740	742	206
25°	677	681	691	695	699	312
35°	600	606	618	630	636	375
45°	503	512	532	559	573	389
55°	389	401	444	489	512	348
65°	258	283	353	408	437	257
75°	127	168	238	287	303	136
85°	32	45	56	57	61	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	764.9	764.9	764.9	764.9	764.9
2.5°	759.5	761.3	764.9	764.9	766.7
5°	757.7	759.5	763.1	763.1	763.1
7.5°	752.3	754.1	757.7	759.5	759.5
10°	747.0	748.8	752.3	754.1	755.9
12.5°	738.0	739.8	745.2	748.8	748.8
15°	729.1	730.8	736.2	739.8	741.6
17.5°	718.3	721.9	727.3	730.8	732.6
20°	704.0	707.6	714.7	720.1	721.9
22.5°	691.4	695.0	702.2	707.6	711.1
25°	677.1	680.7	691.4	695.0	698.6
27.5°	659.2	662.8	671.7	678.9	684.3
30°	641.3	644.9	655.6	664.6	668.1
32.5°	621.6	626.9	639.5	646.7	652.0
35°	600.1	605.5	618.0	630.5	635.9
37.5°	578.6	584.0	596.5	612.6	619.8
40°	553.5	560.7	576.8	598.3	601.9
42.5°	530.2	539.2	553.5	578.6	587.5
45°	503.3	512.3	532.0	558.9	573.2
47.5°	478.3	487.2	508.7	541.0	558.9
50°	447.8	460.4	487.2	524.8	542.8
52.5°	419.2	429.9	465.7	506.9	528.4
55°	388.7	401.2	444.2	489.0	512.3
57.5°	361.8	372.6	421.0	471.1	498.0
60°	327.8	342.1	397.7	451.4	478.3
62.5°	292.0	313.5	374.4	429.9	458.6
65°	257.9	283.0	352.9	408.4	437.1
67.5°	227.5	254.4	326.0	385.1	412.0
70°	191.7	225.7	299.1	356.5	386.9
72.5°	159.4	197.0	268.7	326.0	352.9
75°	127.2	168.4	238.2	286.6	302.7
77.5°	98.5	137.9	204.2	218.5	220.3
80°	73.4	109.3	152.3	154.0	159.4
82.5°	50.2	77.0	98.5	107.5	109.3
85°	32.2	44.8	55.5	57.3	60.9
87.5°	14.3	16.1	19.7	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)