

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: P308593

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-3500K**

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: P308593  
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-CP250-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" 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: 2414.0 lumens  
Efficiency: N/A  
Efficacy: 64.5 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

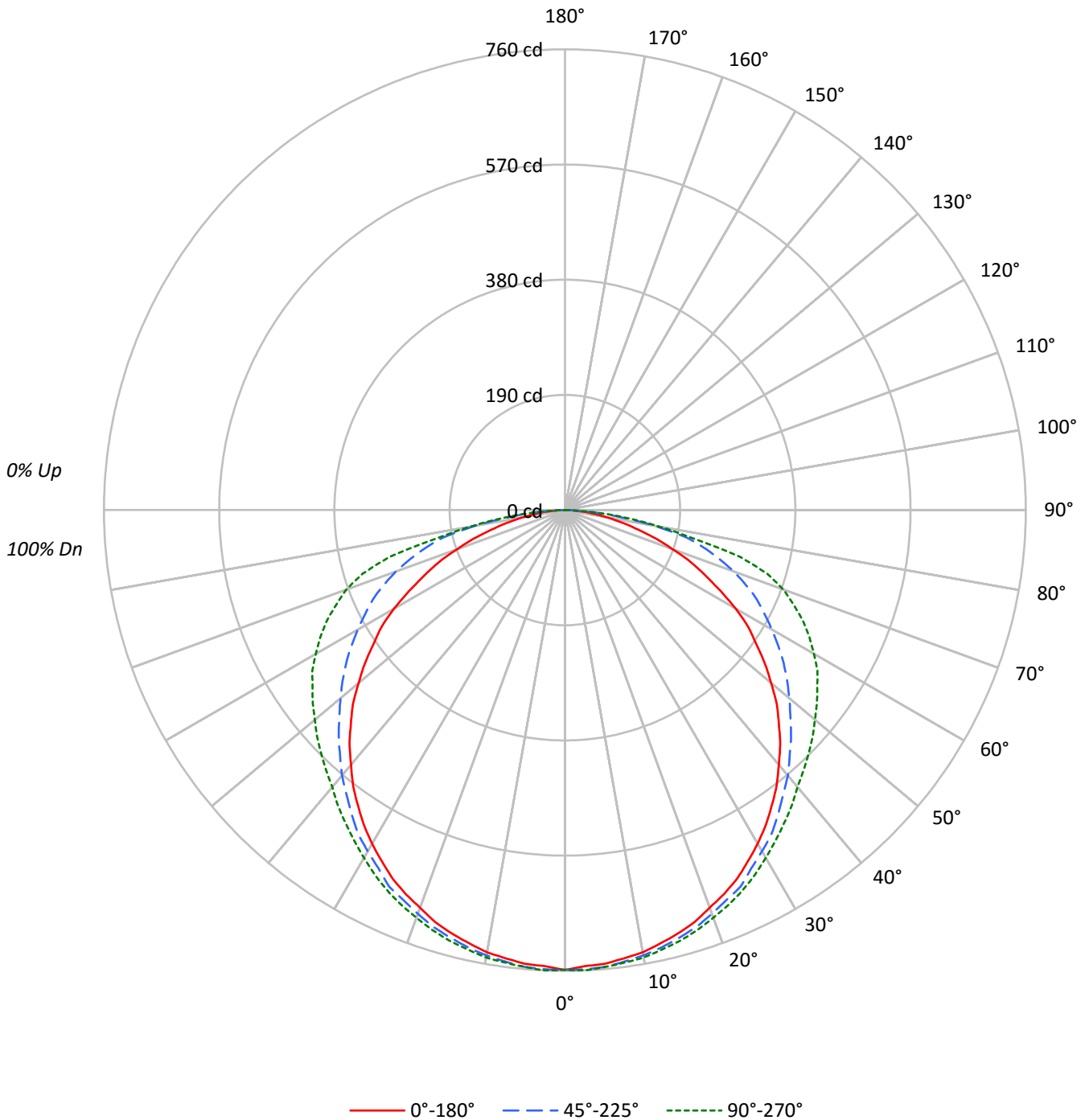
Input Watts (W): 37.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2041	2041	2041
5°	2029	2044	2044
10°	2023	2038	2048
15°	2014	2033	2048
20°	1999	2029	2050
25°	1993	2035	2056
30°	1975	2020	2058
35°	1954	2013	2071
40°	1927	2009	2096
45°	1899	2007	2163
50°	1859	2022	2253
55°	1808	2066	2383
60°	1749	2122	2552
65°	1628	2227	2759
70°	1495	2334	3018
75°	1311	2456	3120
80°	1128	2338	2448
85°	988	1701	1865



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.7	3.0
10°-20°	205.9	8.5
20°-30°	314.2	13.0
30°-40°	383.7	15.9
40°-50°	410.2	17.0
50°-60°	395.9	16.4
60°-70°	340.8	14.1
70°-80°	230.6	9.6
80°-90°	60.9	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°	591.9	24.5
0°-40°	975.5	40.4
0°-60°	1781.7	73.8
0°-90°	2414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2414.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	751	753	756	756	756	71
15°	723	724	730	733	735	204
25°	671	675	686	689	693	309
35°	595	600	613	625	630	372
45°	499	508	527	554	568	385
55°	385	398	440	485	508	345
65°	256	281	350	405	433	254
75°	126	167	236	284	300	135
85°	32	44	55	57	60	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	758.3	758.3	758.3	758.3	758.3
2.5°	753.0	754.7	758.3	758.3	760.1
5°	751.2	753.0	756.5	756.5	756.5
7.5°	745.8	747.6	751.2	753.0	753.0
10°	740.5	742.3	745.8	747.6	749.4
12.5°	731.6	733.4	738.7	742.3	742.3
15°	722.8	724.5	729.9	733.4	735.2
17.5°	712.1	715.7	721.0	724.5	726.3
20°	697.9	701.5	708.6	713.9	715.7
22.5°	685.5	689.0	696.1	701.5	705.0
25°	671.3	674.8	685.5	689.0	692.6
27.5°	653.5	657.1	665.9	673.0	678.4
30°	635.7	639.3	650.0	658.8	662.4
32.5°	616.2	621.5	634.0	641.1	646.4
35°	594.9	600.2	612.7	625.1	630.4
37.5°	573.6	578.9	591.4	607.3	614.4
40°	548.7	555.8	571.8	593.1	596.7
42.5°	525.6	534.5	548.7	573.6	582.5
45°	499.0	507.9	527.4	554.1	568.3
47.5°	474.1	483.0	504.3	536.3	554.1
50°	444.0	456.4	483.0	520.3	538.1
52.5°	415.5	426.2	461.7	502.6	523.9
55°	385.4	397.8	440.4	484.8	507.9
57.5°	358.7	369.4	417.3	467.0	493.7
60°	325.0	339.2	394.2	447.5	474.1
62.5°	289.5	310.8	371.1	426.2	454.6
65°	255.7	280.6	349.8	404.9	433.3
67.5°	225.5	252.2	323.2	381.8	408.4
70°	190.0	223.8	296.6	353.4	383.6
72.5°	158.0	195.3	266.4	323.2	349.8
75°	126.1	166.9	236.2	284.1	300.1
77.5°	97.7	136.7	202.4	216.7	218.4
80°	72.8	108.3	150.9	152.7	158.0
82.5°	49.7	76.4	97.7	106.5	108.3
85°	32.0	44.4	55.1	56.8	60.4
87.5°	14.2	16.0	19.5	17.8	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)