

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: P308580

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP125-W2A-U-5700K**

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: P308580  
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-CP125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2713.0 lumens  
Efficiency: N/A  
Efficacy: 71.0 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

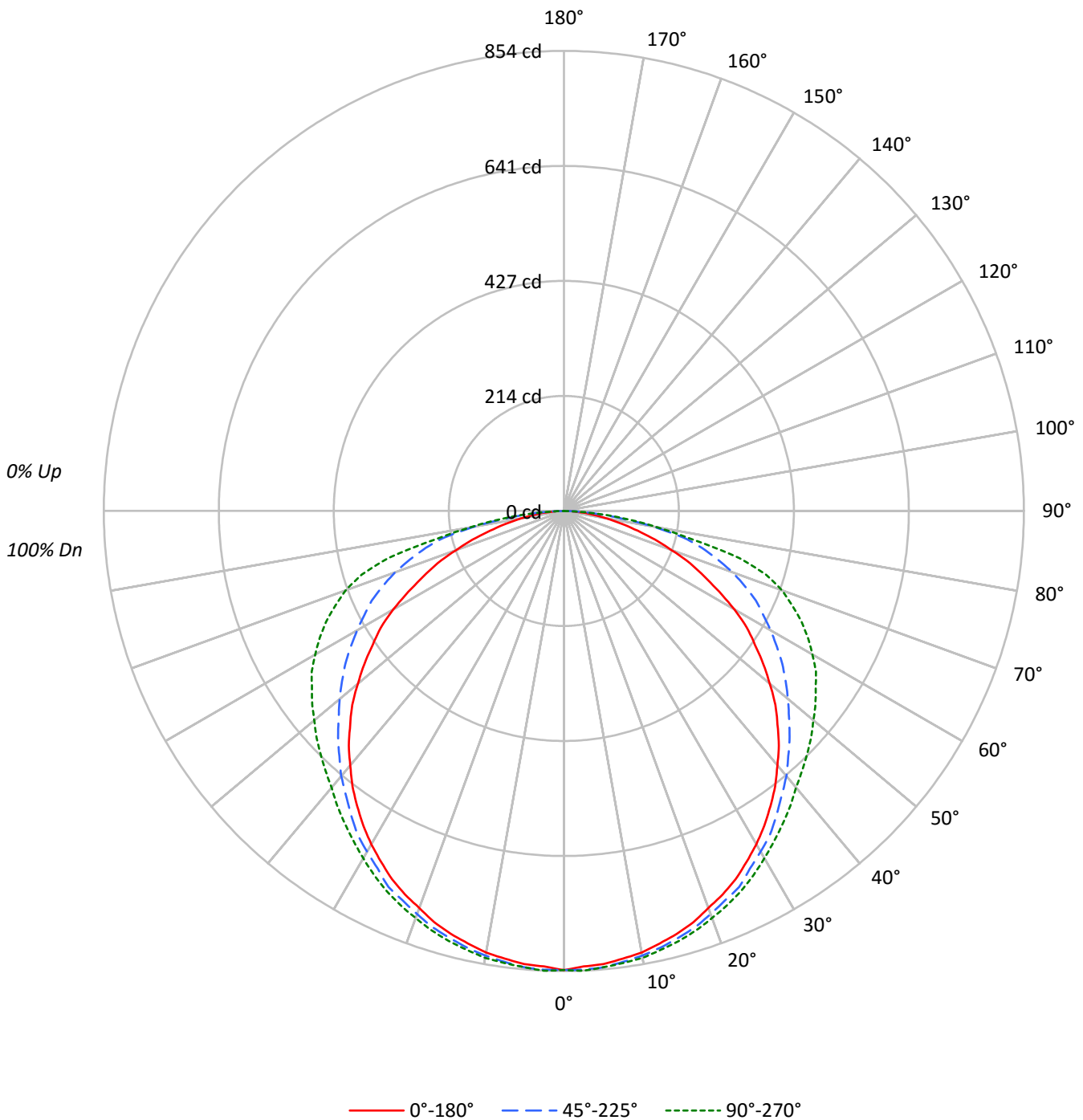
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2293	2293	2293
5°	2280	2297	2297
10°	2274	2290	2301
15°	2263	2285	2302
20°	2246	2280	2303
25°	2240	2287	2311
30°	2220	2270	2313
35°	2196	2262	2327
40°	2166	2257	2356
45°	2134	2256	2431
50°	2089	2273	2532
55°	2032	2322	2678
60°	1965	2385	2868
65°	1830	2504	3101
70°	1680	2622	3392
75°	1473	2759	3507
80°	1268	2628	2752
85°	1108	1911	2096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	3.0
10°-20°	231.5	8.5
20°-30°	353.1	13.0
30°-40°	431.2	15.9
40°-50°	461.0	17.0
50°-60°	445.0	16.4
60°-70°	383.1	14.1
70°-80°	259.2	9.6
80°-90°	68.4	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°	665.2	24.5
0°-40°	1096.4	40.4
0°-60°	2002.4	73.8
0°-90°	2713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2713.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	844	846	850	850	850	80
15°	812	814	820	824	826	229
25°	754	758	770	774	778	347
35°	669	675	688	702	708	418
45°	561	571	593	623	639	433
55°	433	447	495	545	571	388
65°	287	315	393	455	487	286
75°	142	188	265	319	337	152
85°	36	50	62	64	68	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	852.2	852.2	852.2	852.2	852.2
2.5°	846.2	848.2	852.2	852.2	854.2
5°	844.2	846.2	850.2	850.2	850.2
7.5°	838.2	840.2	844.2	846.2	846.2
10°	832.2	834.2	838.2	840.2	842.2
12.5°	822.3	824.3	830.2	834.2	834.2
15°	812.3	814.3	820.3	824.3	826.3
17.5°	800.3	804.3	810.3	814.3	816.3
20°	784.3	788.3	796.3	802.3	804.3
22.5°	770.4	774.4	782.3	788.3	792.3
25°	754.4	758.4	770.4	774.4	778.4
27.5°	734.4	738.4	748.4	756.4	762.4
30°	714.5	718.5	730.5	740.4	744.4
32.5°	692.5	698.5	712.5	720.5	726.5
35°	668.6	674.6	688.5	702.5	708.5
37.5°	644.6	650.6	664.6	682.6	690.5
40°	616.7	624.7	642.6	666.6	670.6
42.5°	590.8	600.7	616.7	644.6	654.6
45°	560.8	570.8	592.7	622.7	638.7
47.5°	532.9	542.9	566.8	602.7	622.7
50°	498.9	512.9	542.9	584.8	604.7
52.5°	467.0	479.0	518.9	564.8	588.8
55°	433.1	447.1	495.0	544.8	570.8
57.5°	403.1	415.1	469.0	524.9	554.8
60°	365.2	381.2	443.1	502.9	532.9
62.5°	325.3	349.3	417.1	479.0	510.9
65°	287.4	315.3	393.2	455.0	487.0
67.5°	253.5	283.4	363.2	429.1	459.0
70°	213.5	251.5	333.3	397.2	431.1
72.5°	177.6	219.5	299.4	363.2	393.2
75°	141.7	187.6	265.4	319.3	337.3
77.5°	109.8	153.7	227.5	243.5	245.5
80°	81.8	121.7	169.6	171.6	177.6
82.5°	55.9	85.8	109.8	119.7	121.7
85°	35.9	49.9	61.9	63.9	67.9
87.5°	16.0	18.0	22.0	20.0	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)