

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: P308560

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA08-W2A-U-5000K**

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: P308560  
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-CA08-W2A-U-5000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

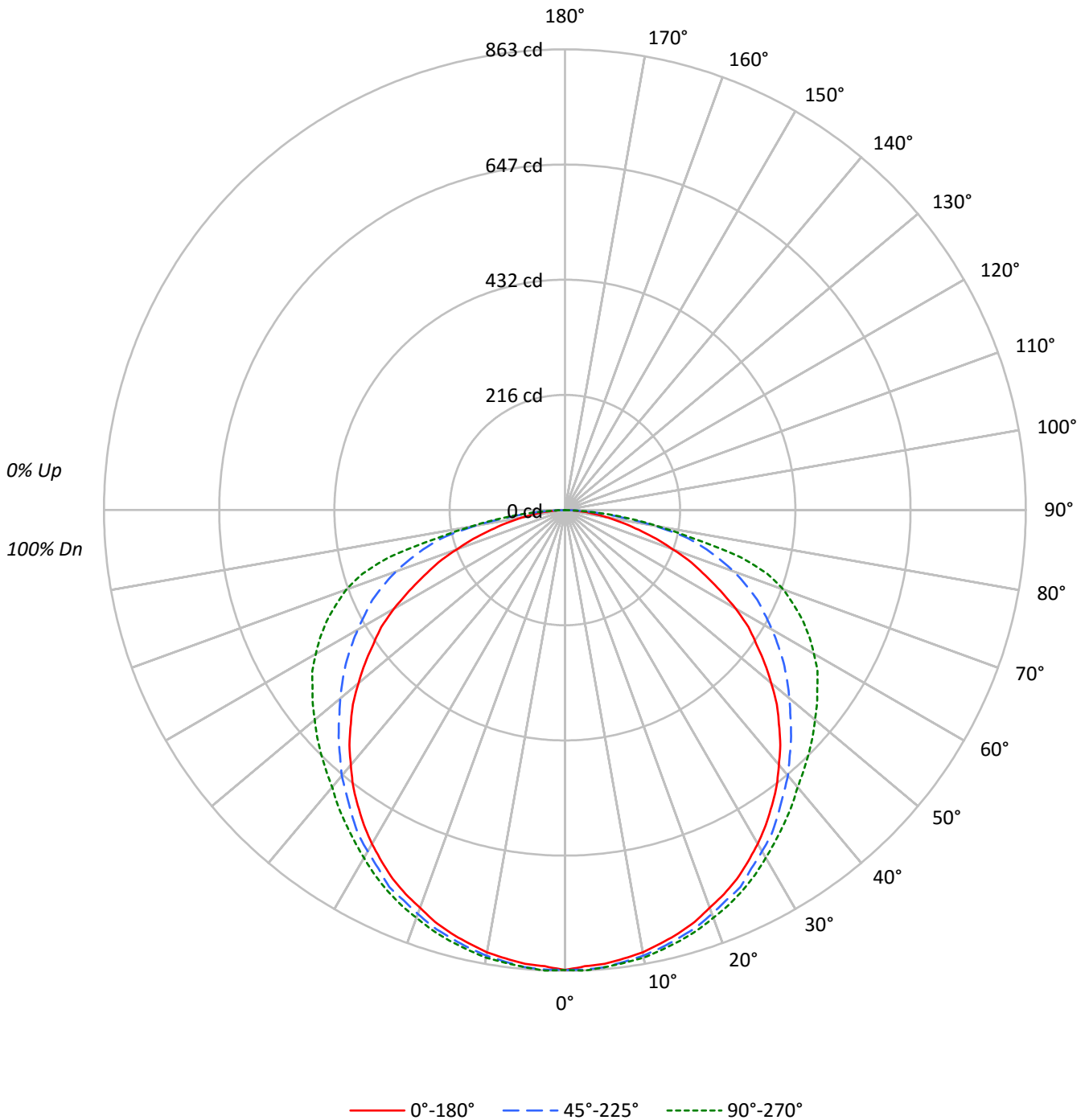
Lumens per Lamp: N/A  
Luminaire Lumens: 2742.0 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2318	2318	2318
5°	2305	2321	2321
10°	2298	2315	2326
15°	2287	2310	2327
20°	2270	2305	2328
25°	2264	2312	2336
30°	2244	2294	2338
35°	2220	2286	2352
40°	2190	2282	2381
45°	2157	2280	2457
50°	2111	2297	2559
55°	2054	2347	2707
60°	1986	2410	2899
65°	1850	2530	3134
70°	1698	2651	3428
75°	1489	2790	3544
80°	1282	2658	2782
85°	1121	1930	2118



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	3.0
10°-20°	233.9	8.5
20°-30°	356.9	13.0
30°-40°	435.8	15.9
40°-50°	466.0	17.0
50°-60°	449.7	16.4
60°-70°	387.2	14.1
70°-80°	261.9	9.6
80°-90°	69.1	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°	672.3	24.5
0°-40°	1108.1	40.4
0°-60°	2023.8	73.8
0°-90°	2742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2742.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	861	861	861	861	861	
5°	853	855	859	859	859	81
15°	821	823	829	833	835	232
25°	762	766	779	783	787	351
35°	676	682	696	710	716	423
45°	567	577	599	629	646	438
55°	438	452	500	551	577	392
65°	290	319	397	460	492	289
75°	143	190	268	323	341	154
85°	36	50	62	64	69	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	861.3	861.3	861.3	861.3	861.3
2.5°	855.3	857.3	861.3	861.3	863.3
5°	853.2	855.3	859.3	859.3	859.3
7.5°	847.2	849.2	853.2	855.3	855.3
10°	841.1	843.2	847.2	849.2	851.2
12.5°	831.1	833.1	839.1	843.2	843.2
15°	821.0	823.0	829.0	833.1	835.1
17.5°	808.9	812.9	819.0	823.0	825.0
20°	792.7	796.8	804.8	810.9	812.9
22.5°	778.6	782.6	790.7	796.8	800.8
25°	762.5	766.5	778.6	782.6	786.7
27.5°	742.3	746.3	756.4	764.5	770.5
30°	722.1	726.2	738.3	748.4	752.4
32.5°	699.9	706.0	720.1	728.2	734.2
35°	675.7	681.8	695.9	710.0	716.1
37.5°	651.5	657.6	671.7	689.9	697.9
40°	623.3	631.4	649.5	673.7	677.8
42.5°	597.1	607.2	623.3	651.5	661.6
45°	566.8	576.9	599.1	629.3	645.5
47.5°	538.6	548.7	572.9	609.2	629.3
50°	504.3	518.4	548.7	591.0	611.2
52.5°	472.0	484.1	524.5	570.8	595.1
55°	437.7	451.8	500.2	550.7	576.9
57.5°	407.5	419.6	474.0	530.5	560.8
60°	369.1	385.3	447.8	508.3	538.6
62.5°	328.8	353.0	421.6	484.1	516.4
65°	290.5	318.7	397.4	459.9	492.2
67.5°	256.2	286.4	367.1	433.7	463.9
70°	215.8	254.2	336.9	401.4	435.7
72.5°	179.5	221.9	302.6	367.1	397.4
75°	143.2	189.6	268.3	322.7	340.9
77.5°	110.9	155.3	230.0	246.1	248.1
80°	82.7	123.0	171.5	173.5	179.5
82.5°	56.5	86.7	110.9	121.0	123.0
85°	36.3	50.4	62.5	64.5	68.6
87.5°	16.1	18.2	22.2	20.2	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)