

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: P308584

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP187-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: P308584  
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-CP187-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.187" 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**

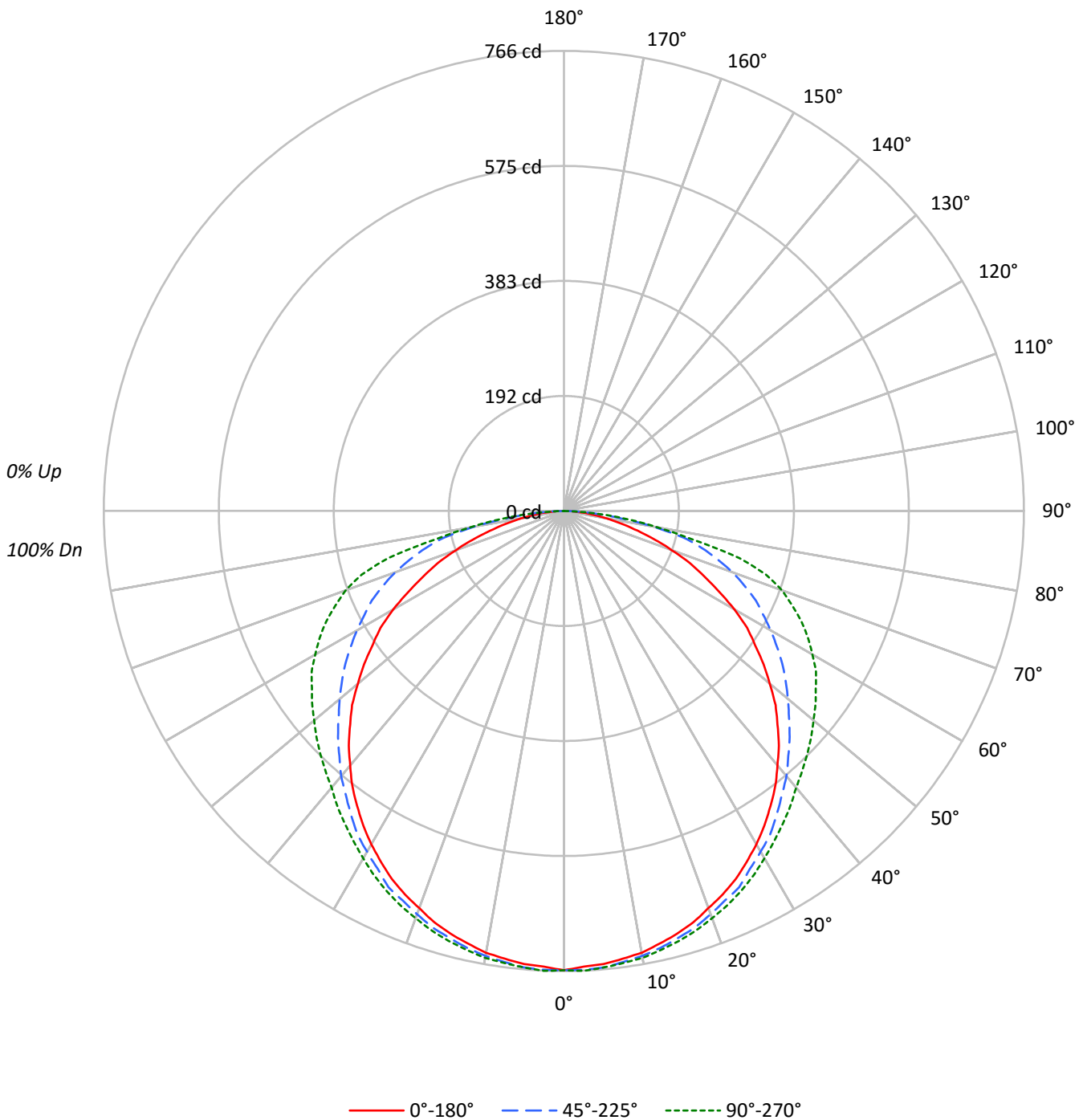
Lumens per Lamp: N/A  
Luminaire Lumens: 2434.0 lumens  
Efficiency: N/A  
Efficacy: 65.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2058	2058	2058
5°	2046	2061	2061
10°	2040	2055	2065
15°	2030	2050	2065
20°	2015	2046	2066
25°	2010	2052	2073
30°	1992	2036	2075
35°	1970	2029	2088
40°	1944	2025	2113
45°	1915	2024	2181
50°	1874	2039	2271
55°	1823	2084	2403
60°	1764	2139	2573
65°	1642	2246	2782
70°	1507	2353	3043
75°	1321	2476	3146
80°	1137	2359	2470
85°	994	1714	1880



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.3	3.0
10°-20°	207.7	8.5
20°-30°	316.8	13.0
30°-40°	386.8	15.9
40°-50°	413.6	17.0
50°-60°	399.2	16.4
60°-70°	343.7	14.1
70°-80°	232.5	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°	596.8	24.5
0°-40°	983.6	40.4
0°-60°	1796.4	73.8
0°-90°	2434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2434.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	757	759	763	763	763	72
15°	729	730	736	740	741	206
25°	677	680	691	695	698	311
35°	600	605	618	630	636	375
45°	503	512	532	559	573	388
55°	388	401	444	489	512	348
65°	258	283	353	408	437	256
75°	127	168	238	286	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°	764.6	764.6	764.6	764.6	764.6
2.5°	759.2	761.0	764.6	764.6	766.4
5°	757.4	759.2	762.8	762.8	762.8
7.5°	752.0	753.8	757.4	759.2	759.2
10°	746.7	748.4	752.0	753.8	755.6
12.5°	737.7	739.5	744.9	748.4	748.4
15°	728.8	730.5	735.9	739.5	741.3
17.5°	718.0	721.6	727.0	730.5	732.3
20°	703.7	707.3	714.4	719.8	721.6
22.5°	691.1	694.7	701.9	707.3	710.8
25°	676.8	680.4	691.1	694.7	698.3
27.5°	658.9	662.5	671.5	678.6	684.0
30°	641.0	644.6	655.3	664.3	667.9
32.5°	621.3	626.7	639.2	646.4	651.8
35°	599.8	605.2	617.7	630.3	635.6
37.5°	578.3	583.7	596.3	612.4	619.5
40°	553.3	560.4	576.6	598.0	601.6
42.5°	530.0	539.0	553.3	578.3	587.3
45°	503.1	512.1	531.8	558.6	573.0
47.5°	478.1	487.0	508.5	540.7	558.6
50°	447.6	460.2	487.0	524.6	542.5
52.5°	419.0	429.7	465.5	506.7	528.2
55°	388.5	401.1	444.1	488.8	512.1
57.5°	361.7	372.4	420.8	470.9	497.8
60°	327.7	342.0	397.5	451.2	478.1
62.5°	291.9	313.3	374.2	429.7	458.4
65°	257.8	282.9	352.7	408.2	436.9
67.5°	227.4	254.3	325.9	385.0	411.8
70°	191.6	225.6	299.0	356.3	386.8
72.5°	159.4	197.0	268.6	325.9	352.7
75°	127.1	168.3	238.1	286.5	302.6
77.5°	98.5	137.9	204.1	218.4	220.2
80°	73.4	109.2	152.2	154.0	159.4
82.5°	50.1	77.0	98.5	107.4	109.2
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)