

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: P308590

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP187-W2A-U-6500K**

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: P308590  
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-6500K  
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**

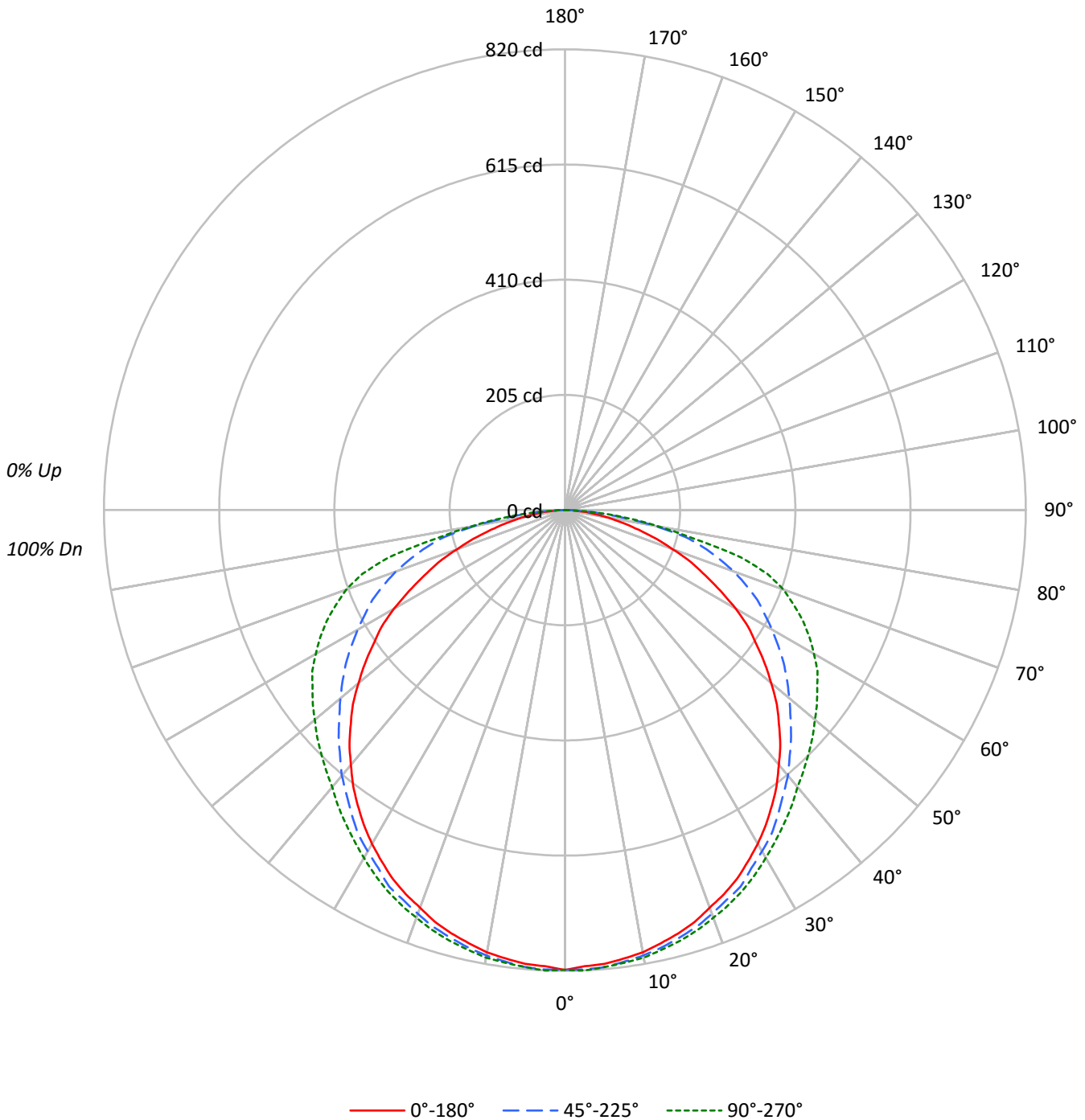
Lumens per Lamp: N/A  
Luminaire Lumens: 2605.0 lumens  
Efficiency: N/A  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2202	2202	2202
5°	2190	2205	2205
10°	2184	2199	2210
15°	2173	2194	2210
20°	2157	2190	2212
25°	2151	2196	2219
30°	2132	2179	2221
35°	2109	2172	2235
40°	2080	2168	2262
45°	2049	2166	2334
50°	2006	2182	2431
55°	1951	2230	2571
60°	1887	2289	2754
65°	1757	2404	2977
70°	1613	2518	3257
75°	1415	2650	3368
80°	1218	2524	2644
85°	1065	1834	2013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	3.0
10°-20°	222.2	8.5
20°-30°	339.1	13.0
30°-40°	414.0	15.9
40°-50°	442.7	17.0
50°-60°	427.3	16.4
60°-70°	367.8	14.1
70°-80°	248.9	9.6
80°-90°	65.7	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°	638.7	24.5
0°-40°	1052.7	40.4
0°-60°	1922.7	73.8
0°-90°	2605.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2605.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	811	812	816	816	816	77
15°	780	782	788	791	793	220
25°	724	728	740	744	747	333
35°	642	648	661	675	680	402
45°	538	548	569	598	613	416
55°	416	429	475	523	548	373
65°	276	303	378	437	468	274
75°	136	180	255	307	324	146
85°	34	48	59	61	65	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.3	818.3	818.3	818.3	818.3
2.5°	812.5	814.4	818.3	818.3	820.2
5°	810.6	812.5	816.4	816.4	816.4
7.5°	804.9	806.8	810.6	812.5	812.5
10°	799.1	801.0	804.9	806.8	808.7
12.5°	789.5	791.4	797.2	801.0	801.0
15°	779.9	781.9	787.6	791.4	793.4
17.5°	768.5	772.3	778.0	781.9	783.8
20°	753.1	757.0	764.6	770.4	772.3
22.5°	739.7	743.5	751.2	757.0	760.8
25°	724.4	728.2	739.7	743.5	747.4
27.5°	705.2	709.0	718.6	726.3	732.0
30°	686.0	689.9	701.4	711.0	714.8
32.5°	665.0	670.7	684.1	691.8	697.5
35°	642.0	647.7	661.1	674.6	680.3
37.5°	619.0	624.7	638.1	655.4	663.1
40°	592.1	599.8	617.1	640.1	643.9
42.5°	567.2	576.8	592.1	619.0	628.6
45°	538.5	548.1	569.2	597.9	613.2
47.5°	511.7	521.2	544.2	578.7	597.9
50°	479.1	492.5	521.2	561.5	580.7
52.5°	448.4	459.9	498.2	542.3	565.3
55°	415.8	429.3	475.3	523.2	548.1
57.5°	387.1	398.6	450.3	504.0	532.7
60°	350.7	366.0	425.4	482.9	511.7
62.5°	312.4	335.4	400.5	459.9	490.6
65°	276.0	302.8	377.5	436.9	467.6
67.5°	243.4	272.1	348.8	412.0	440.8
70°	205.0	241.5	320.0	381.4	413.9
72.5°	170.6	210.8	287.5	348.8	377.5
75°	136.1	180.1	254.9	306.6	323.9
77.5°	105.4	147.6	218.5	233.8	235.7
80°	78.6	116.9	162.9	164.8	170.6
82.5°	53.7	82.4	105.4	115.0	116.9
85°	34.5	47.9	59.4	61.3	65.2
87.5°	15.3	17.2	21.1	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)