

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: P307649

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP250-W2A-U-4000K**

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: P307649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-29-UNV-L82765-CP250-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 4000K 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**

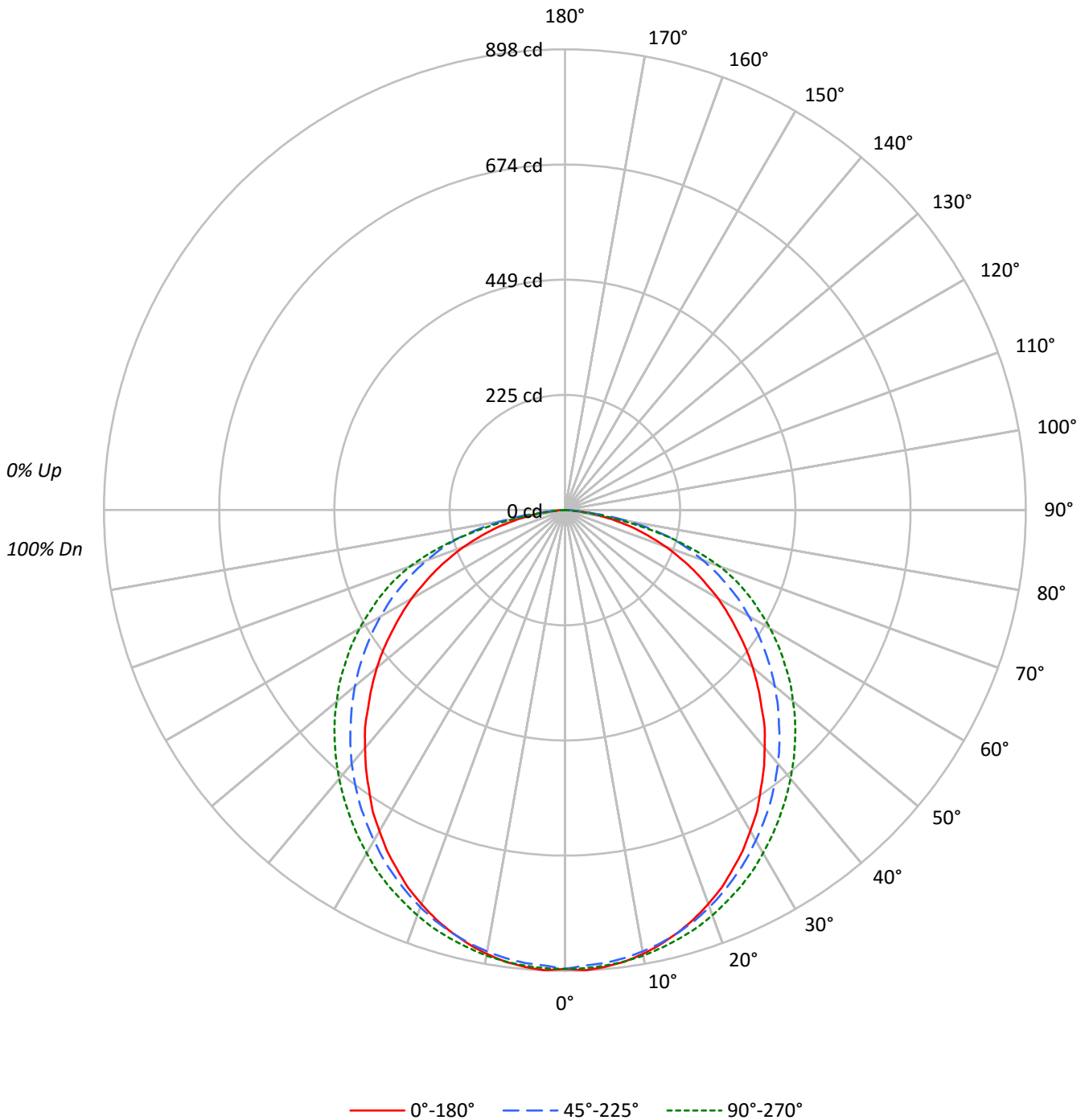
Lumens per Lamp: N/A  
Luminaire Lumens: 2596.0 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2407	2407	2407
5°	2414	2394	2408
10°	2399	2387	2409
15°	2374	2376	2408
20°	2339	2359	2407
25°	2295	2336	2404
30°	2245	2311	2399
35°	2185	2291	2398
40°	2127	2269	2401
45°	2062	2245	2414
50°	2002	2234	2431
55°	1925	2227	2452
60°	1857	2231	2486
65°	1762	2238	2525
70°	1653	2254	2523
75°	1498	2275	2281
80°	1229	1965	1624
85°	911	929	377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	3.3
10°-20°	241.7	9.3
20°-30°	364.2	14.0
30°-40°	437.0	16.8
40°-50°	455.5	17.5
50°-60°	421.7	16.2
60°-70°	340.7	13.1
70°-80°	207.7	8.0
80°-90°	42.9	1.7
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°	690.5	26.6
0°-40°	1127.5	43.4
0°-60°	2004.7	77.2
0°-90°	2596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2596.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	894	894	894	894	894	
5°	894	891	886	893	891	85
15°	852	853	853	864	864	240
25°	773	777	787	806	810	356
35°	665	676	698	723	730	417
45°	542	558	590	623	634	419
55°	410	432	475	512	523	368
65°	277	304	351	387	396	274
75°	144	176	219	222	219	151
85°	30	44	30	17	12	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	894.3	894.3	894.3	894.3	894.3
2.5°	897.8	894.9	888.5	894.9	893.8
5°	893.8	891.4	886.2	892.6	891.4
7.5°	888.0	885.6	881.0	888.5	887.4
10°	878.1	877.0	873.5	882.2	881.6
12.5°	866.5	866.0	864.2	874.1	873.5
15°	852.1	852.7	852.7	864.2	864.2
17.5°	835.9	837.0	839.3	852.1	853.8
20°	816.8	819.1	823.7	838.2	840.5
22.5°	797.1	798.8	805.8	823.1	825.4
25°	772.8	777.4	786.7	806.3	809.8
27.5°	749.6	753.7	766.4	786.7	792.5
30°	722.4	728.8	743.8	765.8	772.2
32.5°	696.4	703.3	720.7	746.1	751.9
35°	665.1	675.5	697.5	723.0	729.9
37.5°	636.7	646.6	671.5	699.3	707.4
40°	605.5	617.6	646.0	675.5	683.6
42.5°	576.5	588.1	618.8	648.9	659.9
45°	541.8	558.0	589.9	622.8	634.4
47.5°	510.0	526.2	562.6	598.0	608.4
50°	478.1	495.5	533.7	570.2	580.6
52.5°	445.1	463.7	504.8	541.2	553.4
55°	410.4	431.8	474.7	511.7	522.7
57.5°	377.4	399.4	445.1	482.8	493.8
60°	345.0	367.6	414.5	450.3	461.9
62.5°	309.1	335.7	384.4	419.7	428.4
65°	276.7	303.9	351.4	386.7	396.5
67.5°	242.5	272.1	319.5	351.9	361.2
70°	210.1	240.8	286.5	316.6	320.7
72.5°	175.4	206.7	253.0	272.1	272.1
75°	144.1	176.0	218.8	222.3	219.4
77.5°	110.0	145.3	173.1	166.1	159.2
80°	79.3	114.0	126.8	114.0	104.8
82.5°	53.3	82.8	76.4	60.8	53.8
85°	29.5	44.0	30.1	16.8	12.2
87.5°	11.0	9.8	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)