

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: P307918

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP250-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: P307918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-S-CP250-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 3500K 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**

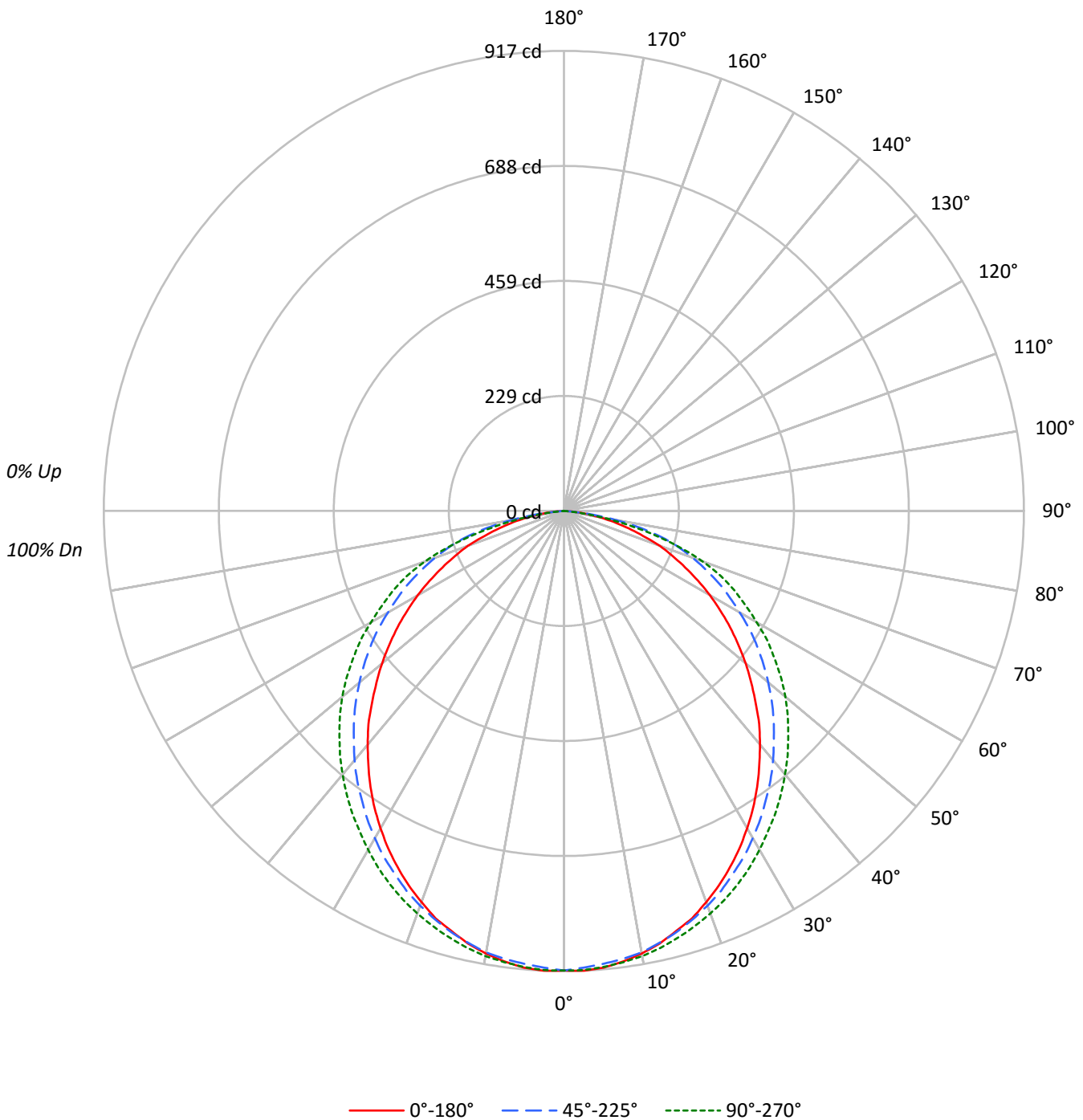
Lumens per Lamp: N/A  
Luminaire Lumens: 2566.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2465	2465	2465
5°	2468	2447	2464
10°	2447	2440	2461
15°	2414	2421	2453
20°	2375	2397	2445
25°	2327	2369	2436
30°	2269	2340	2423
35°	2207	2307	2416
40°	2136	2279	2409
45°	2058	2251	2406
50°	1981	2226	2413
55°	1898	2208	2405
60°	1808	2178	2390
65°	1701	2171	2390
70°	1602	2152	2323
75°	1389	2103	1984
80°	1124	1695	1320
85°	747	590	392



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	3.4
10°-20°	246.1	9.6
20°-30°	369.2	14.4
30°-40°	440.4	17.2
40°-50°	455.3	17.7
50°-60°	415.7	16.2
60°-70°	327.2	12.7
70°-80°	190.4	7.4
80°-90°	35.1	1.4
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°	701.9	27.4
0°-40°	1142.3	44.5
0°-60°	2013.3	78.5
0°-90°	2566.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2566.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	914	911	906	914	912	87
15°	866	868	869	880	880	244
25°	784	788	798	817	821	361
35°	672	681	702	729	735	420
45°	541	558	592	625	632	418
55°	405	426	471	505	513	362
65°	267	295	341	368	375	265
75°	134	165	202	198	191	142
85°	24	34	19	15	13	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	916.0	916.0	916.0	916.0	916.0
2.5°	917.3	914.7	910.9	917.3	916.0
5°	913.5	910.9	905.8	913.5	912.2
7.5°	905.8	903.3	900.8	908.4	907.1
10°	895.7	894.4	893.1	902.0	900.8
12.5°	882.9	882.9	881.7	891.8	891.8
15°	866.4	867.7	868.9	880.4	880.4
17.5°	851.1	849.9	853.7	866.4	867.7
20°	829.5	832.1	837.1	852.4	853.7
22.5°	807.9	810.4	819.3	834.6	838.4
25°	783.7	787.5	797.7	816.8	820.6
27.5°	758.3	763.3	777.3	797.7	801.5
30°	730.3	737.9	753.2	776.1	779.9
32.5°	702.3	709.9	729.0	751.9	757.0
35°	671.7	680.7	702.3	729.0	735.4
37.5°	639.9	651.4	676.8	703.6	711.2
40°	608.1	620.9	648.8	676.8	685.7
42.5°	576.3	589.1	619.6	651.4	660.3
45°	540.7	558.5	591.6	624.7	632.3
47.5°	506.4	525.4	562.3	595.4	605.6
50°	473.3	492.4	531.8	566.2	576.3
52.5°	438.9	459.3	501.3	536.9	545.8
55°	404.6	426.2	470.7	505.1	512.7
57.5°	370.2	393.1	438.9	472.0	480.9
60°	335.9	360.0	404.6	437.7	444.0
62.5°	301.5	327.0	372.8	402.0	408.4
65°	267.2	295.2	341.0	367.7	375.3
67.5°	234.1	262.1	306.6	332.1	338.4
70°	203.6	229.0	273.5	292.6	295.2
72.5°	165.4	197.2	240.5	250.6	244.3
75°	133.6	165.4	202.3	198.5	190.8
77.5°	101.8	133.6	157.8	145.0	134.9
80°	72.5	104.3	109.4	90.3	85.2
82.5°	47.1	72.5	61.1	47.1	38.2
85°	24.2	34.4	19.1	15.3	12.7
87.5°	7.6	5.1	2.5	2.5	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)