

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: P307642

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP187-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: P307642
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-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 2699.0 lumens
Efficiency: N/A
Efficacy: 110.6 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

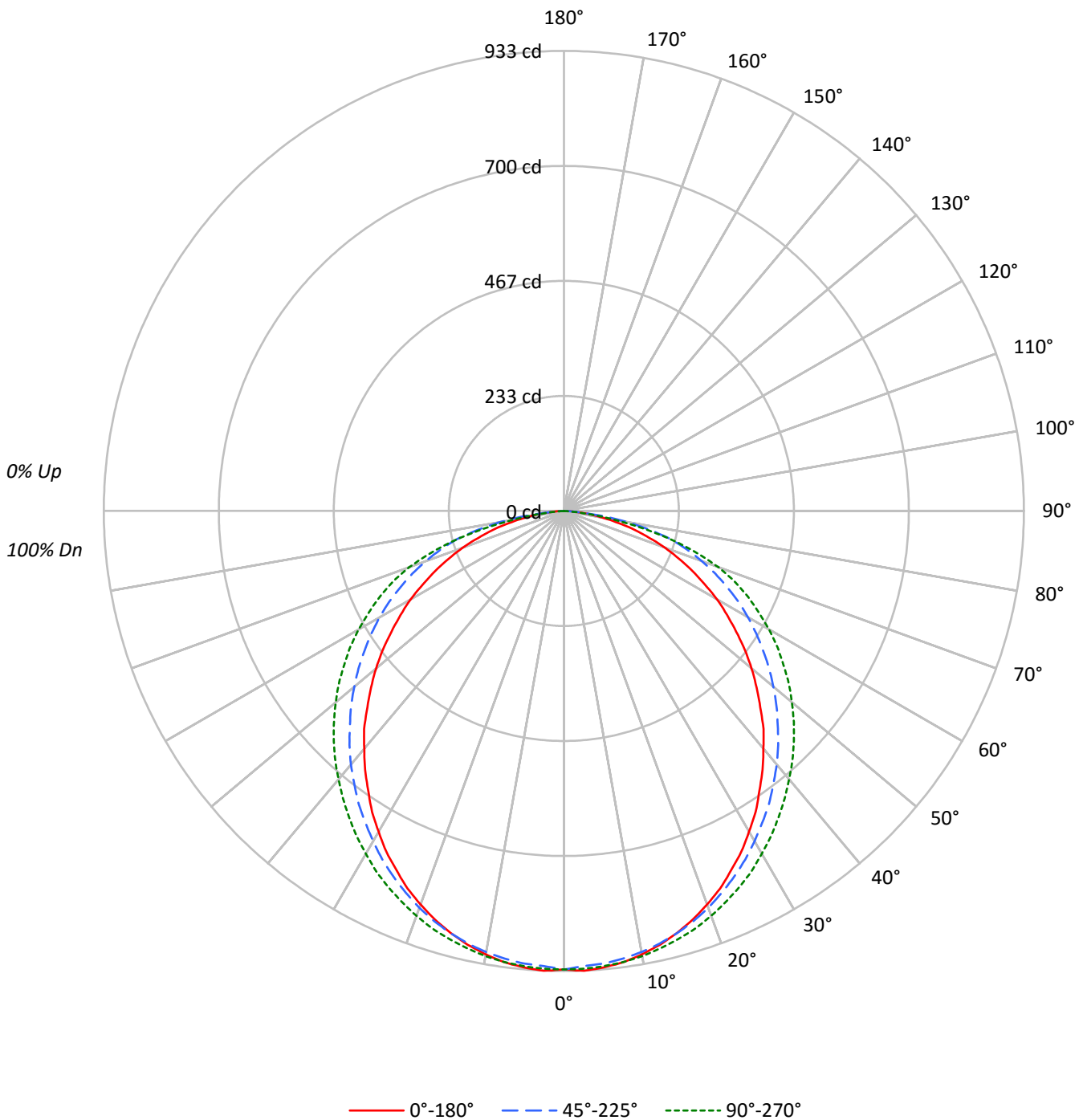
Input Watts (W): 24.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2502	2502	2502
5°	2510	2489	2504
10°	2495	2481	2505
15°	2468	2470	2503
20°	2432	2452	2502
25°	2385	2428	2500
30°	2334	2403	2495
35°	2272	2382	2493
40°	2211	2359	2497
45°	2144	2334	2510
50°	2081	2323	2527
55°	2002	2315	2549
60°	1931	2319	2585
65°	1832	2326	2625
70°	1719	2344	2623
75°	1559	2365	2372
80°	1277	2042	1688
85°	948	966	389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	3.3
10°-20°	251.3	9.3
20°-30°	378.6	14.0
30°-40°	454.3	16.8
40°-50°	473.6	17.5
50°-60°	438.4	16.2
60°-70°	354.2	13.1
70°-80°	216.0	8.0
80°-90°	44.6	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°	717.9	26.6
0°-40°	1172.3	43.4
0°-60°	2084.2	77.2
0°-90°	2699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	929	927	921	928	927	88
15°	886	886	886	898	898	250
25°	803	808	818	838	842	370
35°	692	702	725	752	759	433
45°	563	580	613	648	660	435
55°	427	449	494	532	543	382
65°	288	316	365	402	412	284
75°	150	183	228	231	228	157
85°	31	46	31	18	13	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.8	929.8	929.8	929.8	929.8
2.5°	933.4	930.4	923.8	930.4	929.2
5°	929.2	926.8	921.4	928.0	926.8
7.5°	923.2	920.8	916.0	923.8	922.6
10°	913.0	911.8	908.1	917.2	916.6
12.5°	900.9	900.3	898.5	908.8	908.1
15°	885.9	886.5	886.5	898.5	898.5
17.5°	869.0	870.2	872.6	885.9	887.7
20°	849.2	851.6	856.4	871.4	873.8
22.5°	828.7	830.5	837.7	855.8	858.2
25°	803.4	808.2	817.9	838.3	841.9
27.5°	779.4	783.6	796.8	817.9	823.9
30°	751.1	757.7	773.3	796.2	802.8
32.5°	724.0	731.2	749.3	775.7	781.8
35°	691.5	702.3	725.2	751.7	758.9
37.5°	662.0	672.2	698.1	727.0	735.4
40°	629.5	642.1	671.6	702.3	710.8
42.5°	599.4	611.5	643.3	674.6	686.1
45°	563.3	580.2	613.3	647.6	659.6
47.5°	530.2	547.1	585.0	621.7	632.5
50°	497.1	515.2	554.9	592.8	603.6
52.5°	462.8	482.1	524.8	562.7	575.3
55°	426.7	449.0	493.5	532.0	543.4
57.5°	392.4	415.3	462.8	501.9	513.4
60°	358.7	382.2	430.9	468.2	480.3
62.5°	321.4	349.1	399.6	436.3	445.3
65°	287.7	316.0	365.3	402.0	412.2
67.5°	252.2	282.9	332.2	365.9	375.5
70°	218.5	250.4	297.9	329.2	333.4
72.5°	182.4	214.9	263.0	282.9	282.9
75°	149.9	183.0	227.5	231.1	228.1
77.5°	114.3	151.1	179.9	172.7	165.5
80°	82.4	118.6	131.8	118.6	108.9
82.5°	55.4	86.1	79.4	63.2	56.0
85°	30.7	45.7	31.3	17.5	12.6
87.5°	11.4	10.2	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)