

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: P307369

Luminaire Tested: **14FCZ2-29-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: P307369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CP187-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" 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: 1643.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

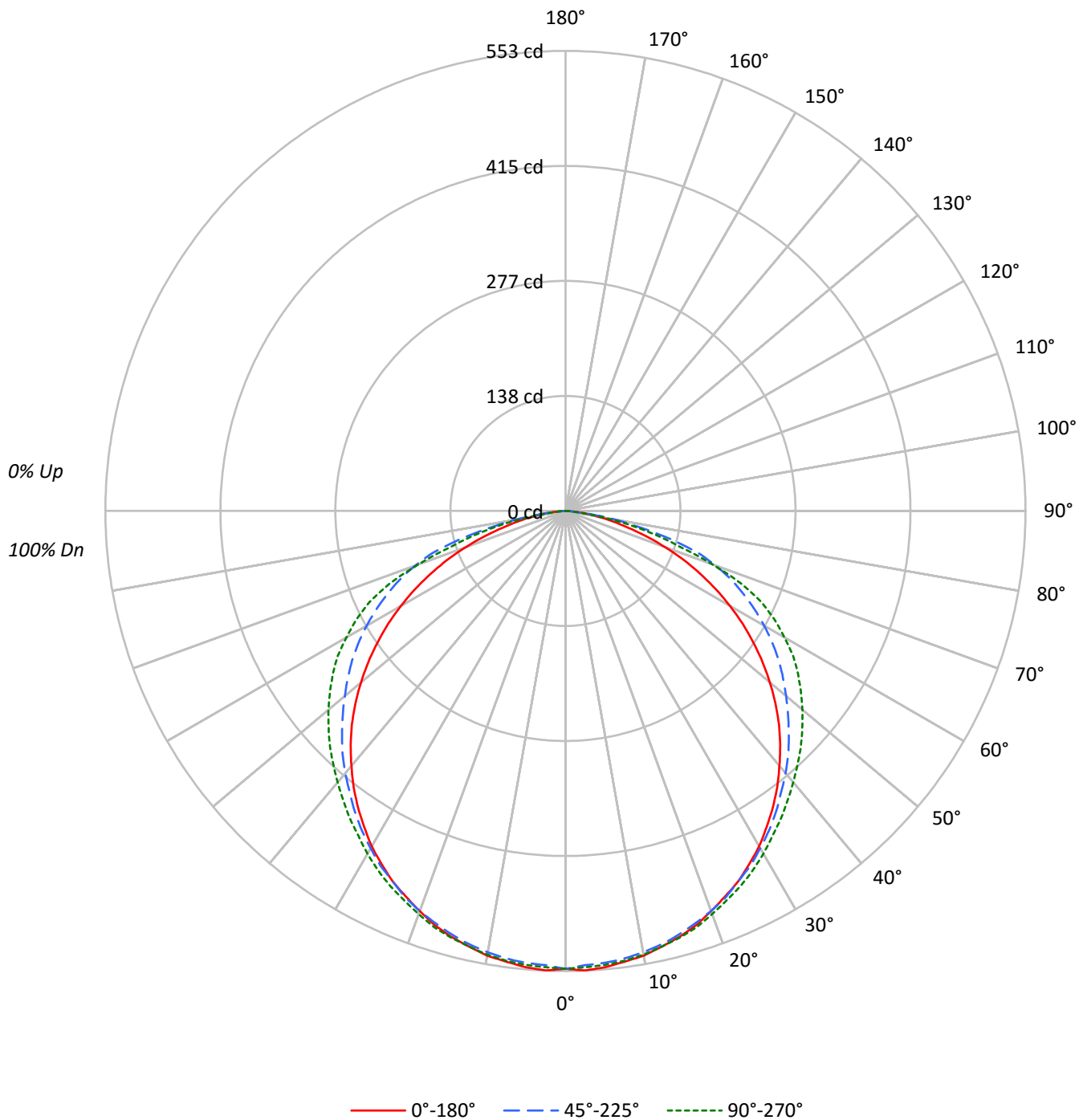
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1481	1481	1481
5°	1487	1473	1479
10°	1483	1472	1479
15°	1476	1469	1479
20°	1466	1466	1477
25°	1459	1459	1478
30°	1447	1455	1479
35°	1428	1450	1483
40°	1406	1446	1496
45°	1381	1445	1523
50°	1343	1450	1557
55°	1294	1468	1601
60°	1229	1484	1636
65°	1135	1503	1658
70°	1009	1514	1484
75°	813	1360	1187
80°	635	955	775
85°	435	278	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	3.2
10°-20°	149.4	9.1
20°-30°	227.5	13.8
30°-40°	277.1	16.9
40°-50°	294.0	17.9
50°-60°	277.5	16.9
60°-70°	224.1	13.6
70°-80°	121.6	7.4
80°-90°	19.7	1.2
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°	429.1	26.1
0°-40°	706.2	43.0
0°-60°	1277.7	77.8
0°-90°	1643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	550	549	545	549	548	52
15°	530	528	527	531	531	149
25°	491	490	491	496	498	226
35°	435	437	441	450	452	272
45°	363	368	380	394	400	280
55°	276	287	313	334	341	246
65°	178	200	236	255	260	177
75°	78	114	131	118	114	85
85°	14	15	9	8	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.3	550.3	550.3	550.3	550.3
2.5°	552.8	550.3	546.4	550.3	549.0
5°	550.3	549.0	545.2	549.0	547.7
7.5°	546.4	546.4	542.6	545.2	545.2
10°	542.6	541.3	538.7	542.6	541.3
12.5°	536.2	534.9	533.6	537.5	536.2
15°	529.8	528.5	527.2	531.0	531.0
17.5°	522.1	520.8	519.5	524.6	524.6
20°	511.8	511.8	511.8	516.9	515.6
22.5°	501.5	501.5	502.8	508.0	506.7
25°	491.3	490.0	491.3	496.4	497.7
27.5°	478.5	479.7	481.0	486.1	487.4
30°	465.6	466.9	468.2	474.6	475.9
32.5°	450.2	452.8	455.4	463.1	463.1
35°	434.8	437.4	441.3	450.2	451.5
37.5°	418.2	420.7	425.9	436.1	438.7
40°	400.2	404.1	411.7	422.0	425.9
42.5°	382.2	387.4	396.4	407.9	413.0
45°	363.0	368.1	379.7	393.8	400.2
47.5°	342.5	348.9	363.0	381.0	386.1
50°	320.7	329.7	346.3	365.6	372.0
52.5°	298.9	309.1	329.7	350.2	356.6
55°	275.8	287.3	313.0	333.5	341.2
57.5°	252.7	265.5	295.0	316.8	324.5
60°	228.3	243.7	275.8	297.6	304.0
62.5°	204.0	221.9	256.5	278.3	283.5
65°	178.3	200.1	236.0	255.3	260.4
67.5°	153.9	179.6	215.5	229.6	229.6
70°	128.3	156.5	192.4	196.3	188.6
72.5°	102.6	134.7	166.8	152.6	146.2
75°	78.2	114.2	130.8	118.0	114.2
77.5°	59.0	92.4	92.4	84.7	82.1
80°	41.0	70.5	61.6	53.9	50.0
82.5°	26.9	39.8	32.1	25.7	21.8
85°	14.1	15.4	9.0	7.7	6.4
87.5°	5.1	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)