

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: P307378

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-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: P307378
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-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 1630.0 lumens
Efficiency: N/A
Efficacy: 68.2 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

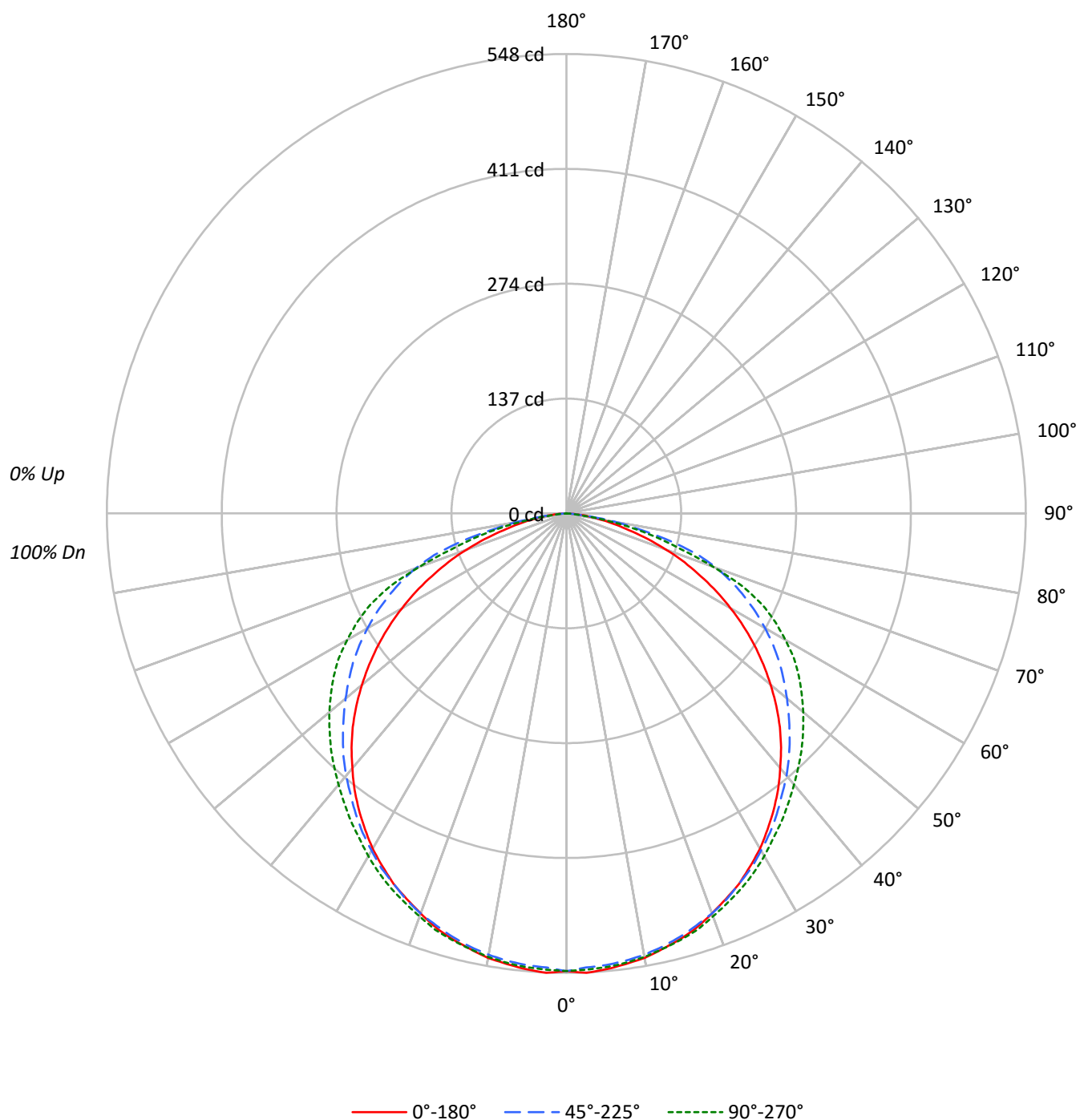
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1469	1469	1469
5°	1475	1461	1468
10°	1471	1461	1467
15°	1464	1457	1468
20°	1454	1454	1465
25°	1447	1447	1466
30°	1435	1443	1467
35°	1417	1438	1471
40°	1395	1435	1484
45°	1370	1434	1511
50°	1332	1438	1545
55°	1284	1457	1588
60°	1219	1473	1623
65°	1126	1491	1645
70°	1002	1502	1472
75°	807	1350	1178
80°	631	947	769
85°	432	275	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.7	3.2
10°-20°	148.3	9.1
20°-30°	225.7	13.8
30°-40°	275.0	16.9
40°-50°	291.7	17.9
50°-60°	275.3	16.9
60°-70°	222.3	13.6
70°-80°	120.6	7.4
80°-90°	19.5	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°	425.7	26.1
0°-40°	700.6	43.0
0°-60°	1267.6	77.8
0°-90°	1630.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	546	545	541	545	543	52
15°	526	524	523	527	527	148
25°	487	486	487	492	494	224
35°	431	434	438	447	448	270
45°	360	365	377	391	397	277
55°	274	285	310	331	338	244
65°	177	198	234	253	258	175
75°	78	113	130	117	113	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°	545.9	545.9	545.9	545.9	545.9
2.5°	548.5	545.9	542.1	545.9	544.7
5°	545.9	544.7	540.8	544.7	543.4
7.5°	542.1	542.1	538.3	540.8	540.8
10°	538.3	537.0	534.5	538.3	537.0
12.5°	531.9	530.7	529.4	533.2	531.9
15°	525.6	524.3	523.0	526.8	526.8
17.5°	517.9	516.7	515.4	520.5	520.5
20°	507.8	507.8	507.8	512.8	511.6
22.5°	497.6	497.6	498.8	503.9	502.7
25°	487.4	486.1	487.4	492.5	493.8
27.5°	474.7	475.9	477.2	482.3	483.6
30°	461.9	463.2	464.5	470.8	472.1
32.5°	446.7	449.2	451.8	459.4	459.4
35°	431.4	433.9	437.8	446.7	447.9
37.5°	414.9	417.4	422.5	432.7	435.2
40°	397.0	400.9	408.5	418.7	422.5
42.5°	379.2	384.3	393.2	404.7	409.8
45°	360.1	365.2	376.7	390.7	397.0
47.5°	339.8	346.1	360.1	378.0	383.0
50°	318.1	327.0	343.6	362.7	369.0
52.5°	296.5	306.7	327.0	347.4	353.8
55°	273.6	285.1	310.5	330.9	338.5
57.5°	250.7	263.4	292.7	314.3	322.0
60°	226.5	241.8	273.6	295.2	301.6
62.5°	202.3	220.2	254.5	276.1	281.2
65°	176.9	198.5	234.2	253.2	258.3
67.5°	152.7	178.2	213.8	227.8	227.8
70°	127.3	155.3	190.9	194.7	187.1
72.5°	101.8	133.6	165.4	151.4	145.1
75°	77.6	113.3	129.8	117.1	113.3
77.5°	58.5	91.6	91.6	84.0	81.4
80°	40.7	70.0	61.1	53.4	49.6
82.5°	26.7	39.4	31.8	25.5	21.6
85°	14.0	15.3	8.9	7.6	6.4
87.5°	5.1	2.5	1.3	2.5	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)