

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: P307380

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CP250-W2A-U-4500K**

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: P307380
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-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4500K 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: 1695.0 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

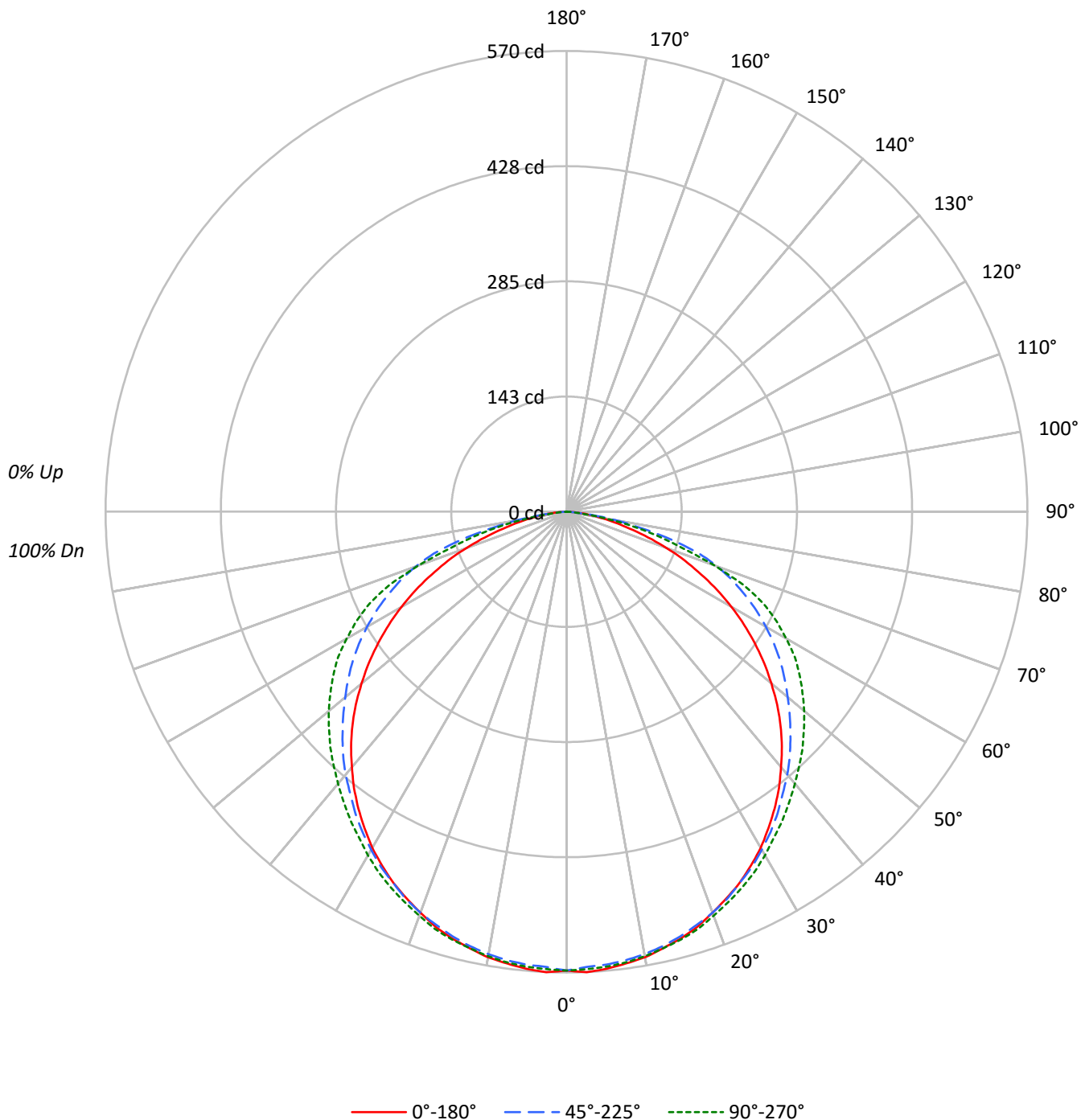
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1528	1528	1528
5°	1534	1519	1526
10°	1530	1519	1526
15°	1522	1515	1526
20°	1512	1512	1523
25°	1505	1505	1524
30°	1493	1501	1525
35°	1474	1495	1530
40°	1450	1492	1543
45°	1425	1491	1571
50°	1385	1496	1607
55°	1335	1515	1651
60°	1267	1531	1688
65°	1171	1550	1710
70°	1041	1562	1530
75°	839	1404	1225
80°	656	984	800
85°	451	287	204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	3.2
10°-20°	154.2	9.1
20°-30°	234.7	13.8
30°-40°	285.9	16.9
40°-50°	303.3	17.9
50°-60°	286.3	16.9
60°-70°	231.1	13.6
70°-80°	125.4	7.4
80°-90°	20.3	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°	442.6	26.1
0°-40°	728.5	43.0
0°-60°	1318.2	77.8
0°-90°	1695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1695.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	568	566	562	566	565	54
15°	546	545	544	548	548	154
25°	507	506	507	512	513	233
35°	449	451	455	464	466	280
45°	374	380	392	406	413	288
55°	284	296	323	344	352	254
65°	184	206	244	263	269	182
75°	81	118	135	122	118	88
85°	15	16	9	8	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.7	567.7	567.7	567.7	567.7
2.5°	570.3	567.7	563.7	567.7	566.4
5°	567.7	566.4	562.4	566.4	565.1
7.5°	563.7	563.7	559.8	562.4	562.4
10°	559.8	558.4	555.8	559.8	558.4
12.5°	553.1	551.8	550.5	554.5	553.1
15°	546.5	545.2	543.9	547.8	547.8
17.5°	538.6	537.3	535.9	541.2	541.2
20°	528.0	528.0	528.0	533.3	532.0
22.5°	517.4	517.4	518.7	524.0	522.7
25°	506.8	505.5	506.8	512.1	513.4
27.5°	493.6	494.9	496.2	501.5	502.9
30°	480.4	481.7	483.0	489.6	490.9
32.5°	464.5	467.1	469.8	477.7	477.7
35°	448.6	451.2	455.2	464.5	465.8
37.5°	431.4	434.0	439.3	449.9	452.6
40°	412.9	416.8	424.8	435.4	439.3
42.5°	394.3	399.6	408.9	420.8	426.1
45°	374.5	379.8	391.7	406.3	412.9
47.5°	353.3	359.9	374.5	393.0	398.3
50°	330.8	340.1	357.3	377.1	383.8
52.5°	308.3	318.9	340.1	361.3	367.9
55°	284.5	296.4	322.9	344.1	352.0
57.5°	260.7	273.9	304.4	326.9	334.8
60°	235.5	251.4	284.5	307.0	313.6
62.5°	210.4	228.9	264.7	287.2	292.5
65°	183.9	206.4	243.5	263.3	268.6
67.5°	158.8	185.3	222.3	236.9	236.9
70°	132.3	161.4	198.5	202.5	194.5
72.5°	105.9	138.9	172.0	157.5	150.9
75°	80.7	117.8	135.0	121.7	117.8
77.5°	60.9	95.3	95.3	87.3	84.7
80°	42.3	72.8	63.5	55.6	51.6
82.5°	27.8	41.0	33.1	26.5	22.5
85°	14.6	15.9	9.3	7.9	6.6
87.5°	5.3	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)