

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: P307286

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-2700K**

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: P307286
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: 14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 1098.0 lumens
Efficiency: N/A
Efficacy: 66.5 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

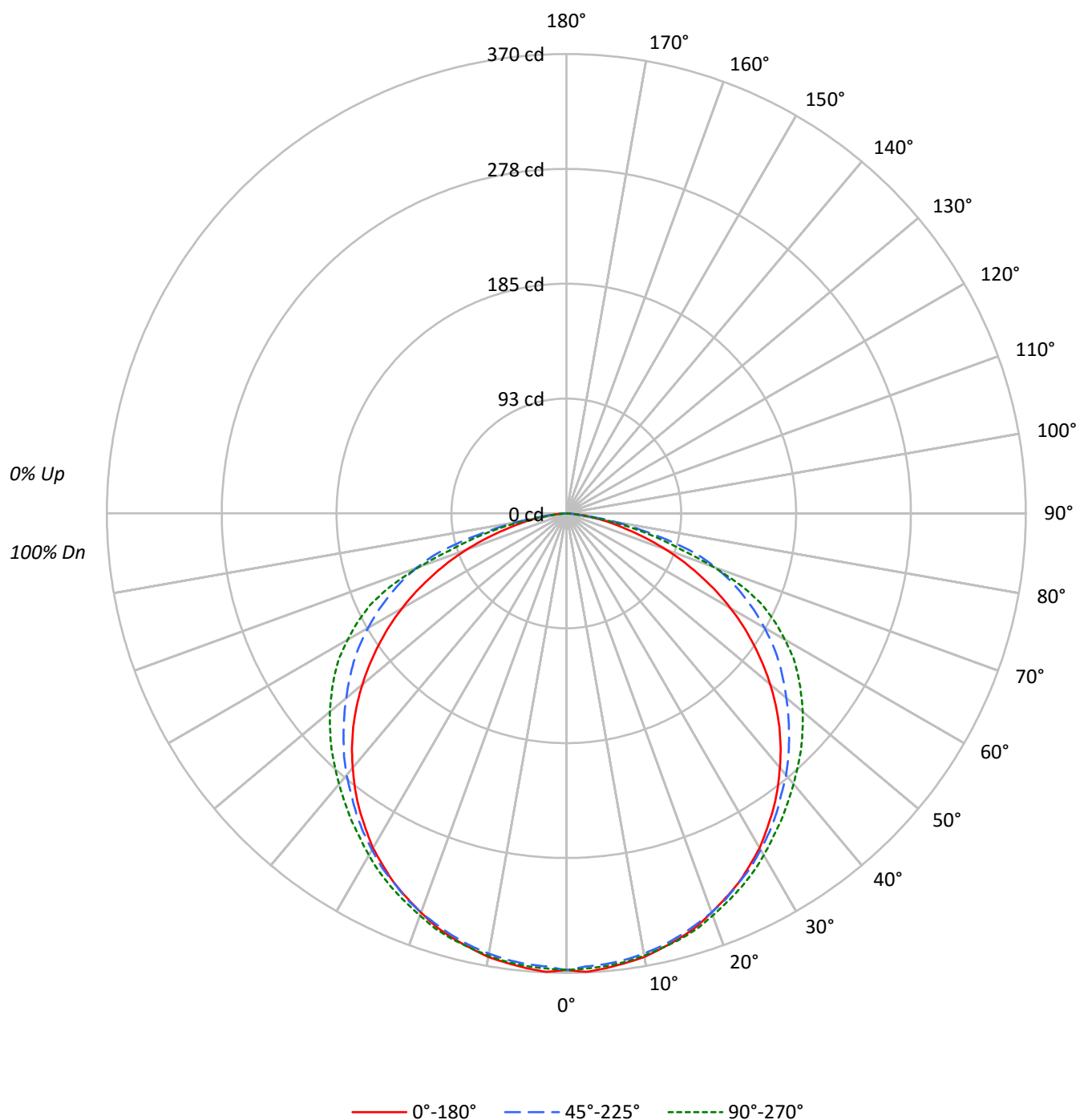
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	989	989	989
5°	993	984	989
10°	991	984	988
15°	986	981	989
20°	979	979	987
25°	975	975	988
30°	967	972	988
35°	955	969	991
40°	940	967	1000
45°	923	965	1018
50°	897	969	1041
55°	865	981	1070
60°	821	992	1094
65°	759	1004	1108
70°	674	1012	991
75°	544	909	793
80°	425	637	518
85°	290	185	133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	3.2
10°-20°	99.9	9.1
20°-30°	152.1	13.8
30°-40°	185.2	16.9
40°-50°	196.5	17.9
50°-60°	185.5	16.9
60°-70°	149.7	13.6
70°-80°	81.2	7.4
80°-90°	13.1	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°	286.7	26.1
0°-40°	472.0	43.0
0°-60°	853.9	77.8
0°-90°	1098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	368	368	368	368	368	
5°	368	367	364	367	366	35
15°	354	353	352	355	355	100
25°	328	328	328	332	333	151
35°	291	292	295	301	302	182
45°	243	246	254	263	268	187
55°	184	192	209	223	228	165
65°	119	134	158	171	174	118
75°	52	76	87	79	76	57
85°	9	10	6	5	4	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	367.7	367.7	367.7	367.7	367.7
2.5°	369.5	367.7	365.2	367.7	366.9
5°	367.7	366.9	364.3	366.9	366.0
7.5°	365.2	365.2	362.6	364.3	364.3
10°	362.6	361.7	360.0	362.6	361.7
12.5°	358.3	357.5	356.6	359.2	358.3
15°	354.0	353.2	352.3	354.9	354.9
17.5°	348.9	348.0	347.2	350.6	350.6
20°	342.0	342.0	342.0	345.5	344.6
22.5°	335.2	335.2	336.0	339.5	338.6
25°	328.3	327.5	328.3	331.7	332.6
27.5°	319.7	320.6	321.5	324.9	325.7
30°	311.2	312.0	312.9	317.2	318.0
32.5°	300.9	302.6	304.3	309.5	309.5
35°	290.6	292.3	294.9	300.9	301.7
37.5°	279.5	281.2	284.6	291.5	293.2
40°	267.5	270.0	275.2	282.0	284.6
42.5°	255.5	258.9	264.9	272.6	276.0
45°	242.6	246.0	253.7	263.2	267.5
47.5°	228.9	233.2	242.6	254.6	258.0
50°	214.3	220.3	231.4	244.3	248.6
52.5°	199.7	206.6	220.3	234.0	238.3
55°	184.3	192.0	209.2	222.9	228.0
57.5°	168.9	177.4	197.2	211.7	216.9
60°	152.6	162.9	184.3	198.9	203.2
62.5°	136.3	148.3	171.4	186.0	189.4
65°	119.2	133.7	157.7	170.6	174.0
67.5°	102.9	120.0	144.0	153.4	153.4
70°	85.7	104.6	128.6	131.2	126.0
72.5°	68.6	90.0	111.4	102.0	97.7
75°	52.3	76.3	87.4	78.9	76.3
77.5°	39.4	61.7	61.7	56.6	54.9
80°	27.4	47.1	41.1	36.0	33.4
82.5°	18.0	26.6	21.4	17.1	14.6
85°	9.4	10.3	6.0	5.1	4.3
87.5°	3.4	1.7	0.9	1.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)