

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: P307250

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CA08-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: P307250
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-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 1183.0 lumens
Efficiency: N/A
Efficacy: 71.7 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

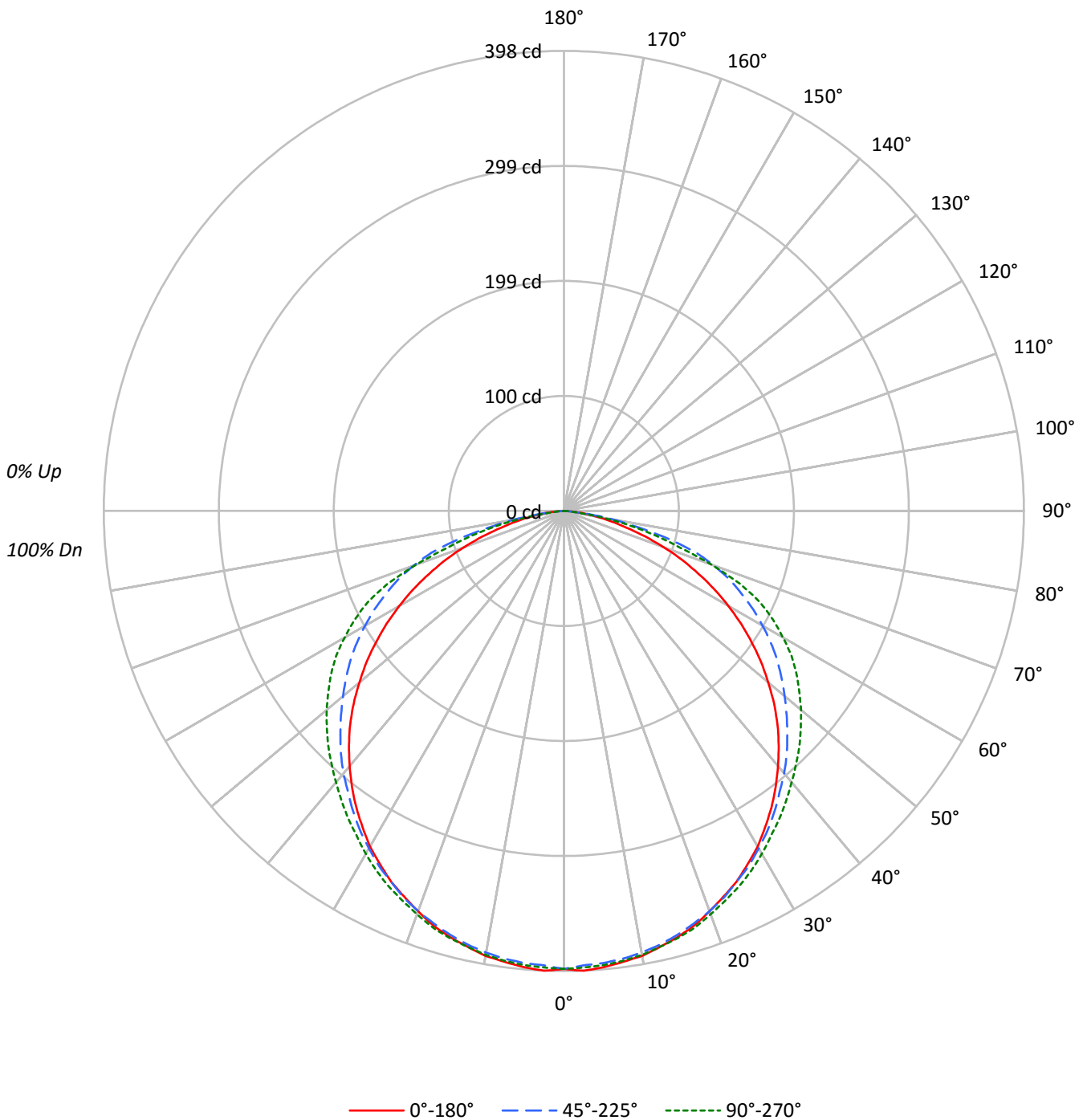
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1066	1066	1066
5°	1070	1060	1065
10°	1068	1060	1065
15°	1063	1058	1065
20°	1055	1055	1063
25°	1050	1050	1064
30°	1042	1047	1065
35°	1029	1044	1068
40°	1012	1042	1077
45°	995	1040	1097
50°	967	1044	1121
55°	932	1057	1153
60°	885	1069	1178
65°	818	1082	1194
70°	727	1090	1068
75°	585	979	855
80°	459	687	558
85°	315	201	142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	3.2
10°-20°	107.6	9.1
20°-30°	163.8	13.8
30°-40°	199.5	16.9
40°-50°	211.7	17.9
50°-60°	199.8	16.9
60°-70°	161.3	13.6
70°-80°	87.5	7.4
80°-90°	14.2	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°	308.9	26.1
0°-40°	508.5	43.0
0°-60°	920.0	77.8
0°-90°	1183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	394	38
15°	381	380	380	382	382	108
25°	354	353	354	357	358	163
35°	313	315	318	324	325	196
45°	261	265	273	284	288	201
55°	199	207	225	240	246	177
65°	128	144	170	184	188	127
75°	56	82	94	85	82	62
85°	10	11	6	6	5	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	396.2	396.2	396.2	396.2	396.2
2.5°	398.1	396.2	393.4	396.2	395.3
5°	396.2	395.3	392.5	395.3	394.4
7.5°	393.4	393.4	390.7	392.5	392.5
10°	390.7	389.8	387.9	390.7	389.8
12.5°	386.1	385.1	384.2	387.0	386.1
15°	381.4	380.5	379.6	382.4	382.4
17.5°	375.9	375.0	374.1	377.7	377.7
20°	368.5	368.5	368.5	372.2	371.3
22.5°	361.1	361.1	362.0	365.7	364.8
25°	353.7	352.8	353.7	357.4	358.4
27.5°	344.5	345.4	346.3	350.0	351.0
30°	335.3	336.2	337.1	341.7	342.6
32.5°	324.2	326.0	327.9	333.4	333.4
35°	313.1	314.9	317.7	324.2	325.1
37.5°	301.1	302.9	306.6	314.0	315.9
40°	288.2	290.9	296.5	303.9	306.6
42.5°	275.2	278.9	285.4	293.7	297.4
45°	261.4	265.1	273.4	283.5	288.2
47.5°	246.6	251.2	261.4	274.3	278.0
50°	230.9	237.4	249.4	263.2	267.8
52.5°	215.2	222.6	237.4	252.1	256.8
55°	198.6	206.9	225.4	240.1	245.7
57.5°	181.9	191.2	212.4	228.1	233.7
60°	164.4	175.5	198.6	214.3	218.9
62.5°	146.8	159.8	184.7	200.4	204.1
65°	128.4	144.1	169.9	183.8	187.5
67.5°	110.8	129.3	155.2	165.3	165.3
70°	92.4	112.7	138.5	141.3	135.8
72.5°	73.9	97.0	120.1	109.9	105.3
75°	56.3	82.2	94.2	85.0	82.2
77.5°	42.5	66.5	66.5	61.0	59.1
80°	29.6	50.8	44.3	38.8	36.0
82.5°	19.4	28.6	23.1	18.5	15.7
85°	10.2	11.1	6.5	5.5	4.6
87.5°	3.7	1.8	0.9	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)