

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: P307256

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CA08-W2A-U-5500K**

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: P307256
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-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 1341.0 lumens
Efficiency: N/A
Efficacy: 78.9 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

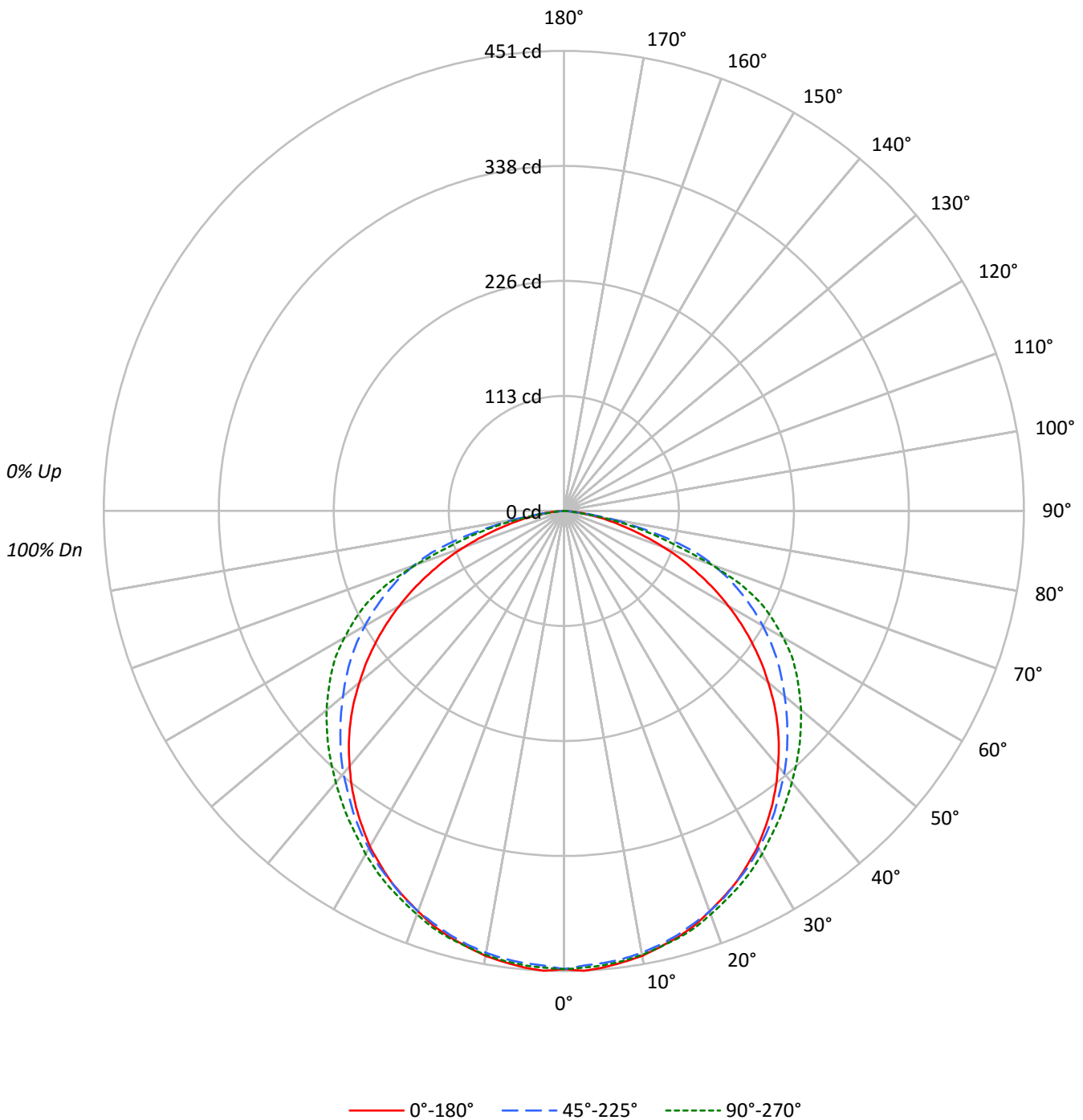
Input Watts (W): 17
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1209	1209	1209
5°	1213	1202	1207
10°	1210	1201	1207
15°	1205	1199	1207
20°	1196	1196	1205
25°	1191	1191	1206
30°	1181	1187	1207
35°	1166	1183	1211
40°	1147	1181	1221
45°	1128	1179	1243
50°	1096	1184	1271
55°	1056	1199	1307
60°	1003	1211	1335
65°	926	1226	1353
70°	824	1235	1211
75°	664	1110	969
80°	519	779	632
85°	355	225	161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.5	3.2
10°-20°	122.0	9.1
20°-30°	185.7	13.8
30°-40°	226.2	16.9
40°-50°	240.0	17.9
50°-60°	226.5	16.9
60°-70°	182.9	13.6
70°-80°	99.2	7.4
80°-90°	16.1	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°	350.2	26.1
0°-40°	576.4	43.0
0°-60°	1042.9	77.8
0°-90°	1341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1341.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	449	448	445	448	447	43
15°	432	431	430	433	433	122
25°	401	400	401	405	406	185
35°	355	357	360	368	368	222
45°	296	300	310	321	327	228
55°	225	234	256	272	278	201
65°	146	163	193	208	212	144
75°	64	93	107	96	93	70
85°	12	13	7	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	449.1	449.1	449.1	449.1	449.1
2.5°	451.2	449.1	446.0	449.1	448.1
5°	449.1	448.1	444.9	448.1	447.0
7.5°	446.0	446.0	442.9	444.9	444.9
10°	442.9	441.8	439.7	442.9	441.8
12.5°	437.6	436.6	435.5	438.7	437.6
15°	432.4	431.3	430.3	433.4	433.4
17.5°	426.1	425.1	424.0	428.2	428.2
20°	417.7	417.7	417.7	421.9	420.9
22.5°	409.4	409.4	410.4	414.6	413.5
25°	401.0	399.9	401.0	405.2	406.2
27.5°	390.5	391.6	392.6	396.8	397.8
30°	380.0	381.1	382.1	387.4	388.4
32.5°	367.5	369.6	371.7	377.9	377.9
35°	354.9	357.0	360.1	367.5	368.5
37.5°	341.3	343.4	347.6	356.0	358.1
40°	326.6	329.8	336.1	344.4	347.6
42.5°	312.0	316.2	323.5	332.9	337.1
45°	296.3	300.5	309.9	321.4	326.6
47.5°	279.5	284.8	296.3	310.9	315.1
50°	261.7	269.1	282.7	298.4	303.6
52.5°	243.9	252.3	269.1	285.8	291.0
55°	225.1	234.5	255.5	272.2	278.5
57.5°	206.2	216.7	240.8	258.6	264.9
60°	186.4	198.9	225.1	242.9	248.1
62.5°	166.5	181.1	209.4	227.2	231.4
65°	145.5	163.3	192.6	208.3	212.5
67.5°	125.6	146.6	175.9	187.4	187.4
70°	104.7	127.7	157.0	160.2	153.9
72.5°	83.8	109.9	136.1	124.6	119.4
75°	63.9	93.2	106.8	96.3	93.2
77.5°	48.2	75.4	75.4	69.1	67.0
80°	33.5	57.6	50.3	44.0	40.8
82.5°	22.0	32.5	26.2	20.9	17.8
85°	11.5	12.6	7.3	6.3	5.2
87.5°	4.2	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)