

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: P307257

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CA08-W2A-U-5700K**

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: P307257  
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-5700K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET  
Light Source: (168) 5700K 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: 1344.0 lumens  
Efficiency: N/A  
Efficacy: 79.1 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

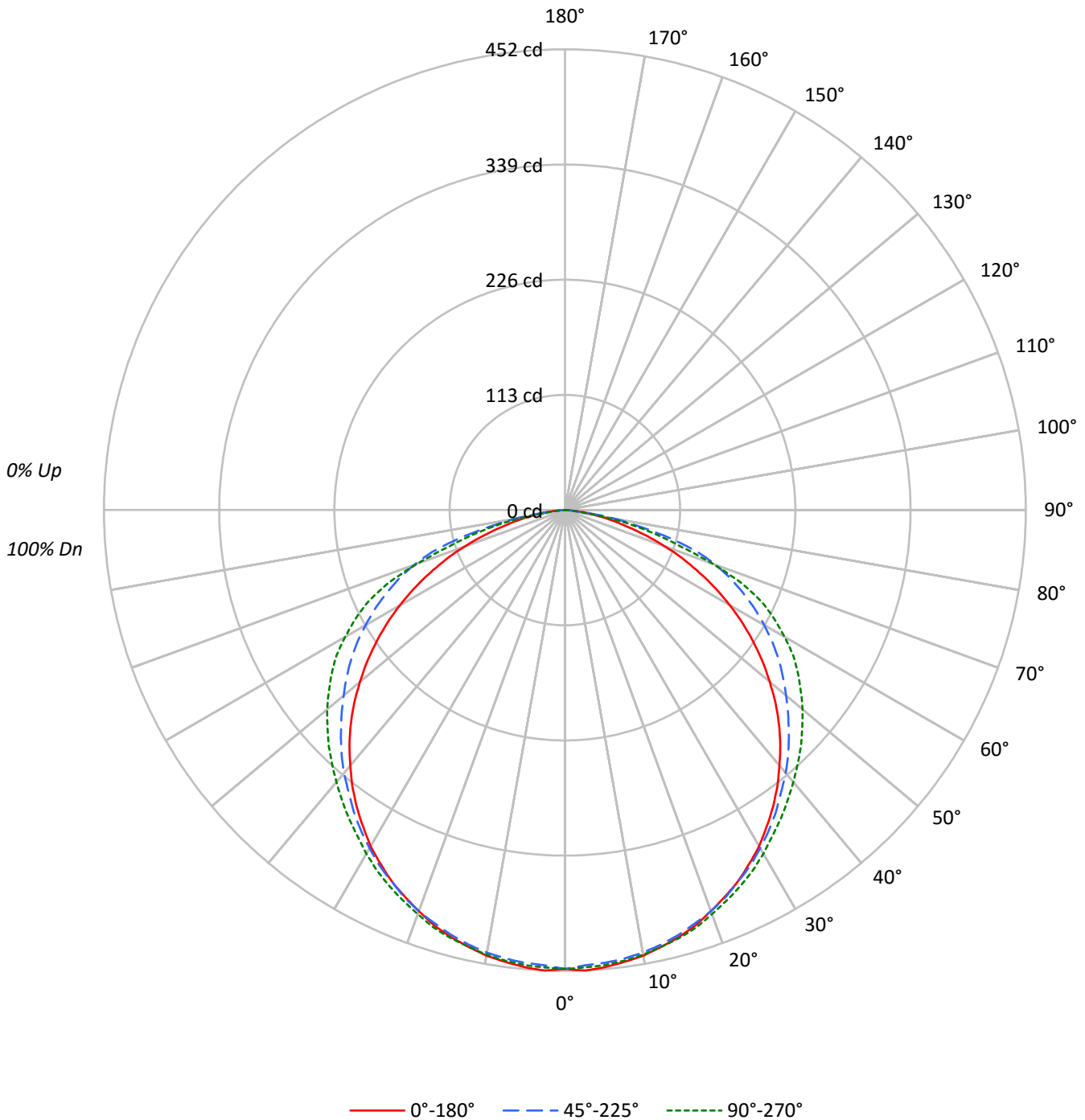
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1211	1211	1211
5°	1216	1204	1210
10°	1213	1204	1210
15°	1207	1202	1210
20°	1199	1199	1208
25°	1193	1193	1209
30°	1184	1190	1210
35°	1169	1186	1213
40°	1150	1183	1224
45°	1130	1182	1246
50°	1098	1186	1274
55°	1058	1201	1309
60°	1005	1214	1338
65°	928	1230	1356
70°	825	1238	1213
75°	665	1112	971
80°	521	781	634
85°	355	225	161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.6	3.2
10°-20°	122.2	9.1
20°-30°	186.1	13.8
30°-40°	226.7	16.9
40°-50°	240.5	17.9
50°-60°	227.0	16.9
60°-70°	183.3	13.6
70°-80°	99.4	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°	351.0	26.1
0°-40°	577.7	43.0
0°-60°	1045.2	77.8
0°-90°	1344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1344.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	450	450	450	450	450	
5°	450	449	446	449	448	43
15°	433	432	431	434	434	122
25°	402	401	402	406	407	185
35°	356	358	361	368	369	222
45°	297	301	311	322	327	229
55°	226	235	256	273	279	202
65°	146	164	193	209	213	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°	450.1	450.1	450.1	450.1	450.1
2.5°	452.2	450.1	447.0	450.1	449.1
5°	450.1	449.1	445.9	449.1	448.0
7.5°	447.0	447.0	443.8	445.9	445.9
10°	443.8	442.8	440.7	443.8	442.8
12.5°	438.6	437.5	436.5	439.6	438.6
15°	433.4	432.3	431.3	434.4	434.4
17.5°	427.1	426.0	425.0	429.2	429.2
20°	418.7	418.7	418.7	422.9	421.8
22.5°	410.3	410.3	411.3	415.5	414.5
25°	401.9	400.8	401.9	406.1	407.1
27.5°	391.4	392.4	393.5	397.7	398.7
30°	380.9	381.9	383.0	388.2	389.3
32.5°	368.3	370.4	372.5	378.8	378.8
35°	355.7	357.8	361.0	368.3	369.3
37.5°	342.1	344.2	348.4	356.8	358.9
40°	327.4	330.5	336.8	345.2	348.4
42.5°	312.7	316.9	324.2	333.7	337.9
45°	296.9	301.1	310.6	322.1	327.4
47.5°	280.2	285.4	296.9	311.6	315.8
50°	262.3	269.7	283.3	299.0	304.3
52.5°	244.5	252.9	269.7	286.5	291.7
55°	225.6	235.0	256.0	272.8	279.1
57.5°	206.7	217.2	241.3	259.2	265.5
60°	186.8	199.4	225.6	243.4	248.7
62.5°	166.8	181.5	209.9	227.7	231.9
65°	145.8	163.7	193.1	208.8	213.0
67.5°	125.9	146.9	176.3	187.8	187.8
70°	104.9	128.0	157.4	160.5	154.2
72.5°	83.9	110.2	136.4	124.9	119.6
75°	64.0	93.4	107.0	96.5	93.4
77.5°	48.3	75.5	75.5	69.3	67.2
80°	33.6	57.7	50.4	44.1	40.9
82.5°	22.0	32.5	26.2	21.0	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)