

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: P307284

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP187-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: P307284  
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-CP187-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB 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: 1258.0 lumens  
Efficiency: N/A  
Efficacy: 74.0 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

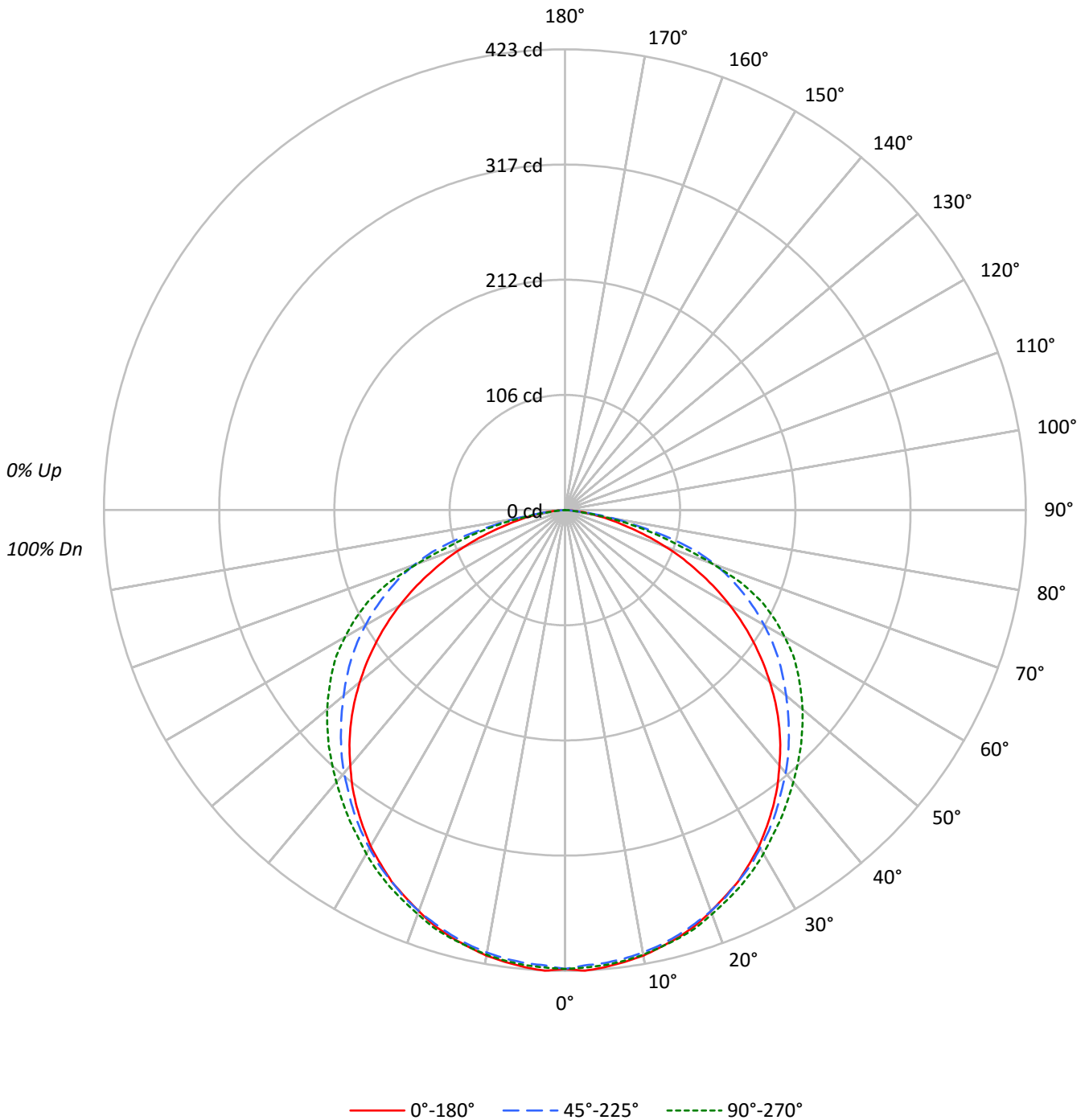
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1134	1134	1134
5°	1138	1128	1133
10°	1135	1127	1133
15°	1130	1125	1133
20°	1122	1122	1131
25°	1117	1117	1132
30°	1108	1114	1132
35°	1094	1110	1136
40°	1076	1108	1146
45°	1058	1106	1166
50°	1028	1110	1192
55°	991	1124	1225
60°	941	1137	1253
65°	869	1151	1270
70°	773	1159	1136
75°	623	1042	909
80°	487	730	594
85°	333	213	151



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.9	3.2
10°-20°	114.4	9.1
20°-30°	174.2	13.8
30°-40°	212.2	16.9
40°-50°	225.1	17.9
50°-60°	212.5	16.9
60°-70°	171.6	13.6
70°-80°	93.1	7.4
80°-90°	15.1	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°	328.5	26.1
0°-40°	540.7	43.0
0°-60°	978.3	77.8
0°-90°	1258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1258.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	421	421	421	421	421	
5°	421	420	417	420	419	40
15°	406	405	404	407	407	114
25°	376	375	376	380	381	173
35°	333	335	338	345	346	208
45°	278	282	291	302	306	214
55°	211	220	240	255	261	189
65°	136	153	181	195	199	135
75°	60	87	100	90	87	65
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	421.3	421.3	421.3	421.3	421.3
2.5°	423.3	421.3	418.4	421.3	420.4
5°	421.3	420.4	417.4	420.4	419.4
7.5°	418.4	418.4	415.4	417.4	417.4
10°	415.4	414.5	412.5	415.4	414.5
12.5°	410.5	409.6	408.6	411.5	410.5
15°	405.6	404.6	403.7	406.6	406.6
17.5°	399.7	398.7	397.8	401.7	401.7
20°	391.9	391.9	391.9	395.8	394.8
22.5°	384.0	384.0	385.0	388.9	387.9
25°	376.2	375.2	376.2	380.1	381.1
27.5°	366.3	367.3	368.3	372.2	373.2
30°	356.5	357.5	358.5	363.4	364.4
32.5°	344.7	346.7	348.7	354.6	354.6
35°	332.9	334.9	337.9	344.7	345.7
37.5°	320.2	322.1	326.1	333.9	335.9
40°	306.4	309.4	315.3	323.1	326.1
42.5°	292.7	296.6	303.5	312.3	316.2
45°	277.9	281.9	290.7	301.5	306.4
47.5°	262.2	267.1	277.9	291.7	295.6
50°	245.5	252.4	265.2	279.9	284.8
52.5°	228.8	236.7	252.4	268.1	273.0
55°	211.2	220.0	239.6	255.4	261.2
57.5°	193.5	203.3	225.9	242.6	248.5
60°	174.8	186.6	211.2	227.9	232.8
62.5°	156.2	169.9	196.4	213.1	217.1
65°	136.5	153.2	180.7	195.4	199.4
67.5°	117.9	137.5	165.0	175.8	175.8
70°	98.2	119.8	147.3	150.3	144.4
72.5°	78.6	103.1	127.7	116.9	112.0
75°	59.9	87.4	100.2	90.4	87.4
77.5°	45.2	70.7	70.7	64.8	62.9
80°	31.4	54.0	47.1	41.2	38.3
82.5°	20.6	30.4	24.6	19.6	16.7
85°	10.8	11.8	6.9	5.9	4.9
87.5°	3.9	2.0	1.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)