

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: P307282

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP187-W2A-U-5000K**

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: P307282  
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-5000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET  
Light Source: (168) 5000K 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**

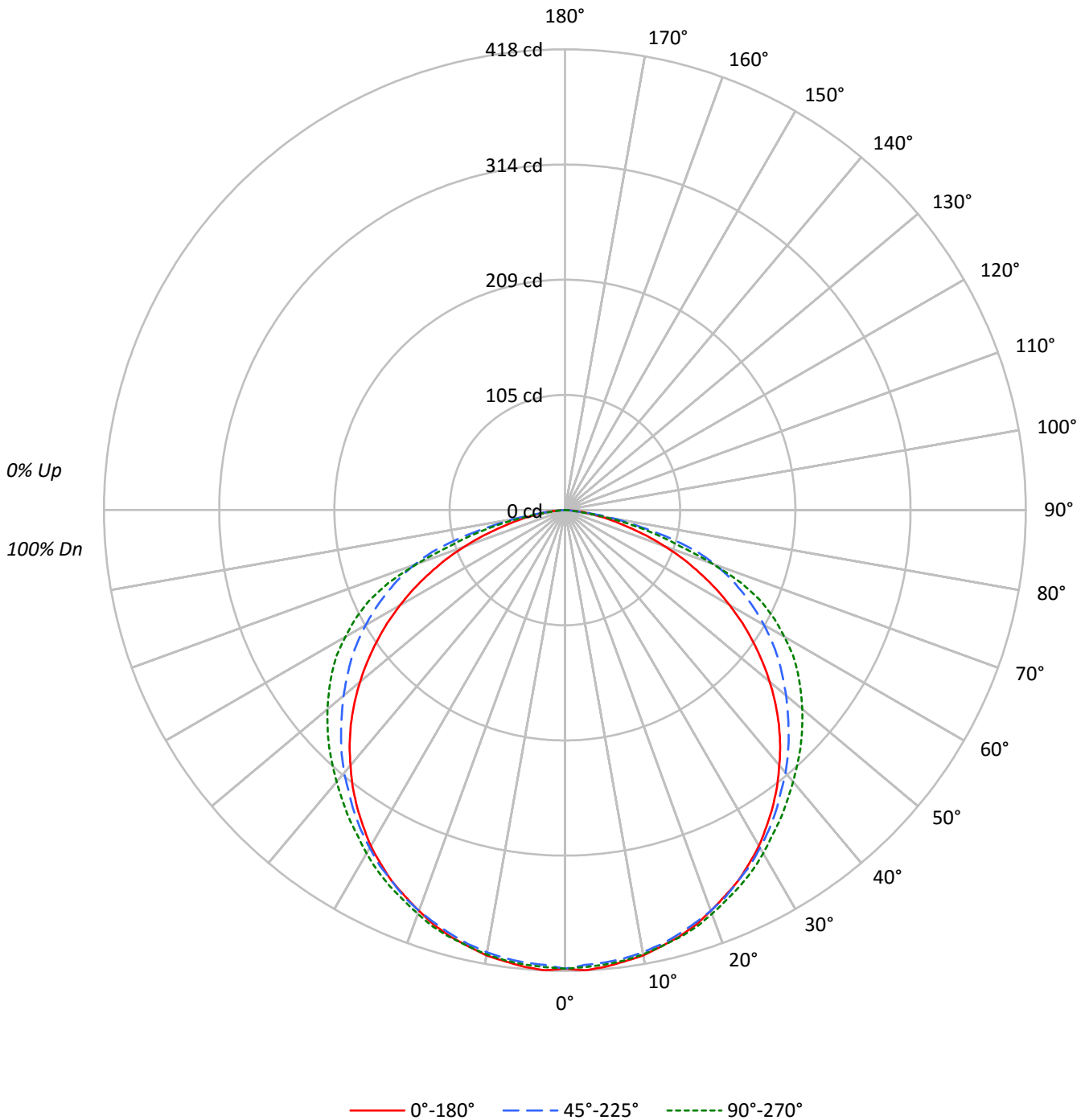
Lumens per Lamp: N/A  
Luminaire Lumens: 1242.0 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1119	1119	1119
5°	1124	1113	1118
10°	1121	1113	1118
15°	1116	1110	1118
20°	1108	1108	1116
25°	1103	1103	1117
30°	1094	1100	1118
35°	1080	1096	1121
40°	1063	1094	1131
45°	1044	1092	1151
50°	1015	1096	1177
55°	978	1110	1210
60°	929	1122	1237
65°	858	1136	1253
70°	763	1144	1121
75°	614	1028	897
80°	480	721	586
85°	330	210	148



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.4	3.2
10°-20°	113.0	9.1
20°-30°	172.0	13.8
30°-40°	209.5	16.9
40°-50°	222.3	17.9
50°-60°	209.8	16.9
60°-70°	169.4	13.6
70°-80°	91.9	7.4
80°-90°	14.9	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°	324.3	26.1
0°-40°	533.8	43.0
0°-60°	965.9	77.8
0°-90°	1242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1242.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	416	415	412	415	414	40
15°	400	400	398	401	401	113
25°	371	370	371	375	376	171
35°	329	331	334	340	341	206
45°	274	278	287	298	302	211
55°	208	217	237	252	258	186
65°	135	151	178	193	197	134
75°	59	86	99	89	86	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°	416.0	416.0	416.0	416.0	416.0
2.5°	417.9	416.0	413.1	416.0	415.0
5°	416.0	415.0	412.1	415.0	414.0
7.5°	413.1	413.1	410.2	412.1	412.1
10°	410.2	409.2	407.3	410.2	409.2
12.5°	405.3	404.3	403.4	406.3	405.3
15°	400.5	399.5	398.5	401.4	401.4
17.5°	394.6	393.7	392.7	396.6	396.6
20°	386.9	386.9	386.9	390.8	389.8
22.5°	379.1	379.1	380.1	384.0	383.0
25°	371.4	370.4	371.4	375.3	376.2
27.5°	361.7	362.6	363.6	367.5	368.5
30°	352.0	353.0	353.9	358.8	359.7
32.5°	340.3	342.3	344.2	350.0	350.0
35°	328.7	330.6	333.6	340.3	341.3
37.5°	316.1	318.0	321.9	329.7	331.6
40°	302.5	305.4	311.3	319.0	321.9
42.5°	289.0	292.8	299.6	308.3	312.2
45°	274.4	278.3	287.0	297.7	302.5
47.5°	258.9	263.7	274.4	288.0	291.9
50°	242.4	249.2	261.8	276.3	281.2
52.5°	225.9	233.7	249.2	264.7	269.6
55°	208.5	217.2	236.6	252.1	257.9
57.5°	191.0	200.7	223.0	239.5	245.3
60°	172.6	184.2	208.5	225.0	229.8
62.5°	154.2	167.7	193.9	210.4	214.3
65°	134.8	151.3	178.4	193.0	196.8
67.5°	116.4	135.8	162.9	173.6	173.6
70°	97.0	118.3	145.4	148.4	142.5
72.5°	77.6	101.8	126.1	115.4	110.5
75°	59.1	86.3	98.9	89.2	86.3
77.5°	44.6	69.8	69.8	64.0	62.1
80°	31.0	53.3	46.5	40.7	37.8
82.5°	20.4	30.1	24.2	19.4	16.5
85°	10.7	11.6	6.8	5.8	4.8
87.5°	3.9	1.9	1.0	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)