

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: P307327

Luminaire Tested: **14FCZ2-25-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: P307327  
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: 14FCZ2-25-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: 1450.0 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

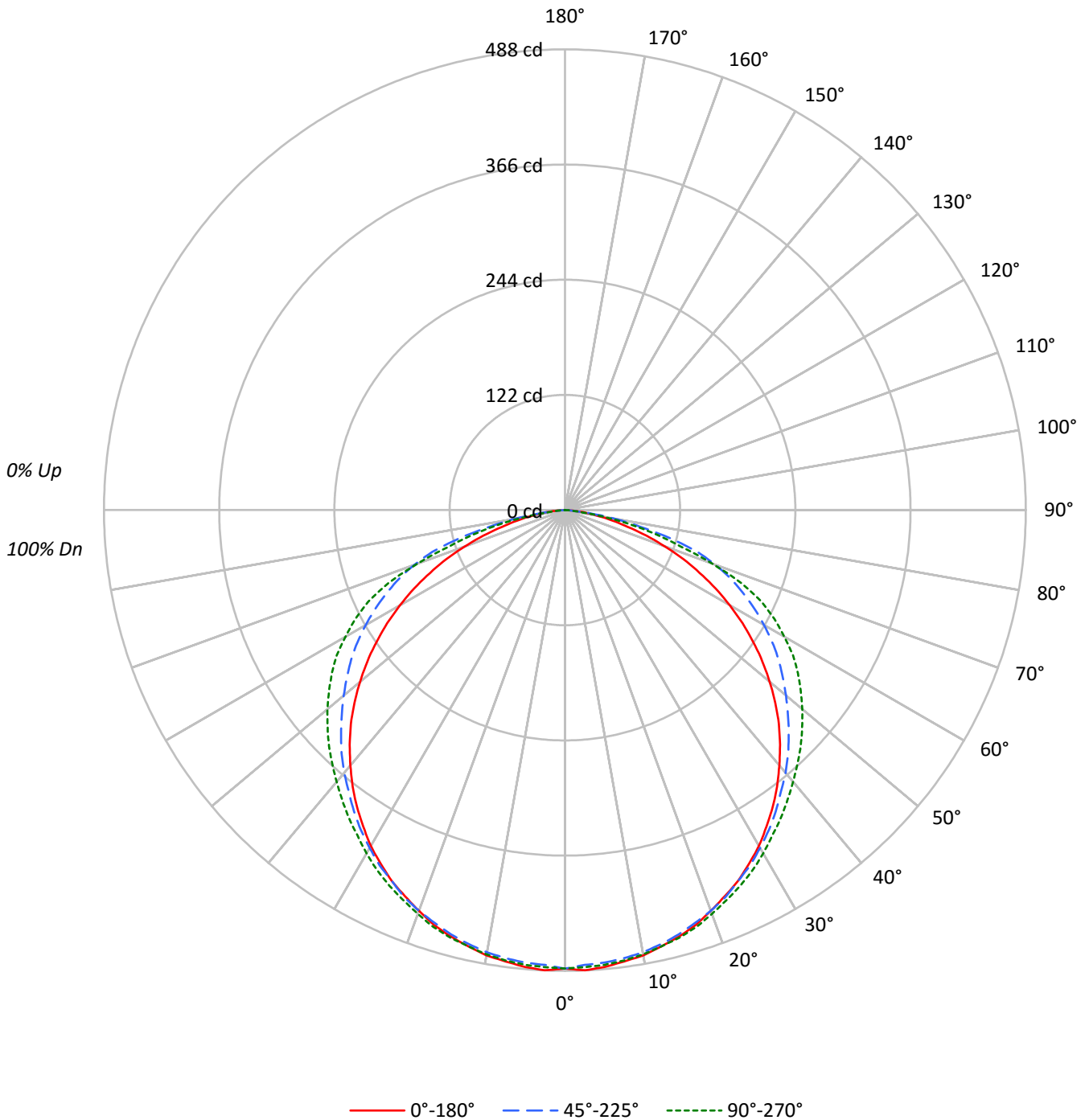
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1307	1307	1307
5°	1312	1300	1306
10°	1308	1299	1305
15°	1302	1296	1306
20°	1294	1294	1303
25°	1287	1287	1304
30°	1277	1284	1305
35°	1261	1279	1309
40°	1241	1277	1320
45°	1219	1275	1344
50°	1185	1279	1374
55°	1142	1296	1413
60°	1084	1310	1444
65°	1002	1326	1463
70°	891	1336	1309
75°	718	1201	1048
80°	561	841	683
85°	386	244	176



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	3.2
10°-20°	131.9	9.1
20°-30°	200.8	13.8
30°-40°	244.6	16.9
40°-50°	259.5	17.9
50°-60°	244.9	16.9
60°-70°	197.7	13.6
70°-80°	107.3	7.4
80°-90°	17.4	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°	378.7	26.1
0°-40°	623.2	43.0
0°-60°	1127.6	77.8
0°-90°	1450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1450.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	486	484	481	484	483	46
15°	468	466	465	469	469	132
25°	434	432	434	438	439	200
35°	384	386	389	397	398	240
45°	320	325	335	348	353	247
55°	243	254	276	294	301	217
65°	157	177	208	225	230	156
75°	69	101	116	104	101	75
85°	12	14	8	7	6	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	485.6	485.6	485.6	485.6	485.6
2.5°	487.9	485.6	482.2	485.6	484.5
5°	485.6	484.5	481.1	484.5	483.4
7.5°	482.2	482.2	478.8	481.1	481.1
10°	478.8	477.7	475.5	478.8	477.7
12.5°	473.2	472.1	470.9	474.3	473.2
15°	467.5	466.4	465.3	468.7	468.7
17.5°	460.7	459.6	458.5	463.0	463.0
20°	451.7	451.7	451.7	456.2	455.1
22.5°	442.6	442.6	443.8	448.3	447.2
25°	433.6	432.4	433.6	438.1	439.2
27.5°	422.2	423.4	424.5	429.0	430.2
30°	410.9	412.1	413.2	418.9	420.0
32.5°	397.3	399.6	401.9	408.7	408.7
35°	383.8	386.0	389.4	397.3	398.5
37.5°	369.0	371.3	375.8	384.9	387.2
40°	353.2	356.6	363.4	372.4	375.8
42.5°	337.3	341.9	349.8	360.0	364.5
45°	320.4	324.9	335.1	347.5	353.2
47.5°	302.3	307.9	320.4	336.2	340.7
50°	283.0	290.9	305.6	322.6	328.3
52.5°	263.8	272.8	290.9	309.0	314.7
55°	243.4	253.6	276.2	294.3	301.1
57.5°	223.0	234.3	260.4	279.6	286.4
60°	201.5	215.1	243.4	262.6	268.3
62.5°	180.0	195.8	226.4	245.7	250.2
65°	157.4	176.6	208.3	225.3	229.8
67.5°	135.8	158.5	190.2	202.6	202.6
70°	113.2	138.1	169.8	173.2	166.4
72.5°	90.6	118.9	147.2	134.7	129.1
75°	69.1	100.8	115.5	104.1	100.8
77.5°	52.1	81.5	81.5	74.7	72.5
80°	36.2	62.3	54.3	47.5	44.1
82.5°	23.8	35.1	28.3	22.6	19.2
85°	12.5	13.6	7.9	6.8	5.7
87.5°	4.5	2.3	1.1	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)