

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: P307460

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-4000K**

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: P307460  
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: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET  
Light Source: (168) 4000K 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: 2228.0 lumens  
Efficiency: N/A  
Efficacy: 66.1 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

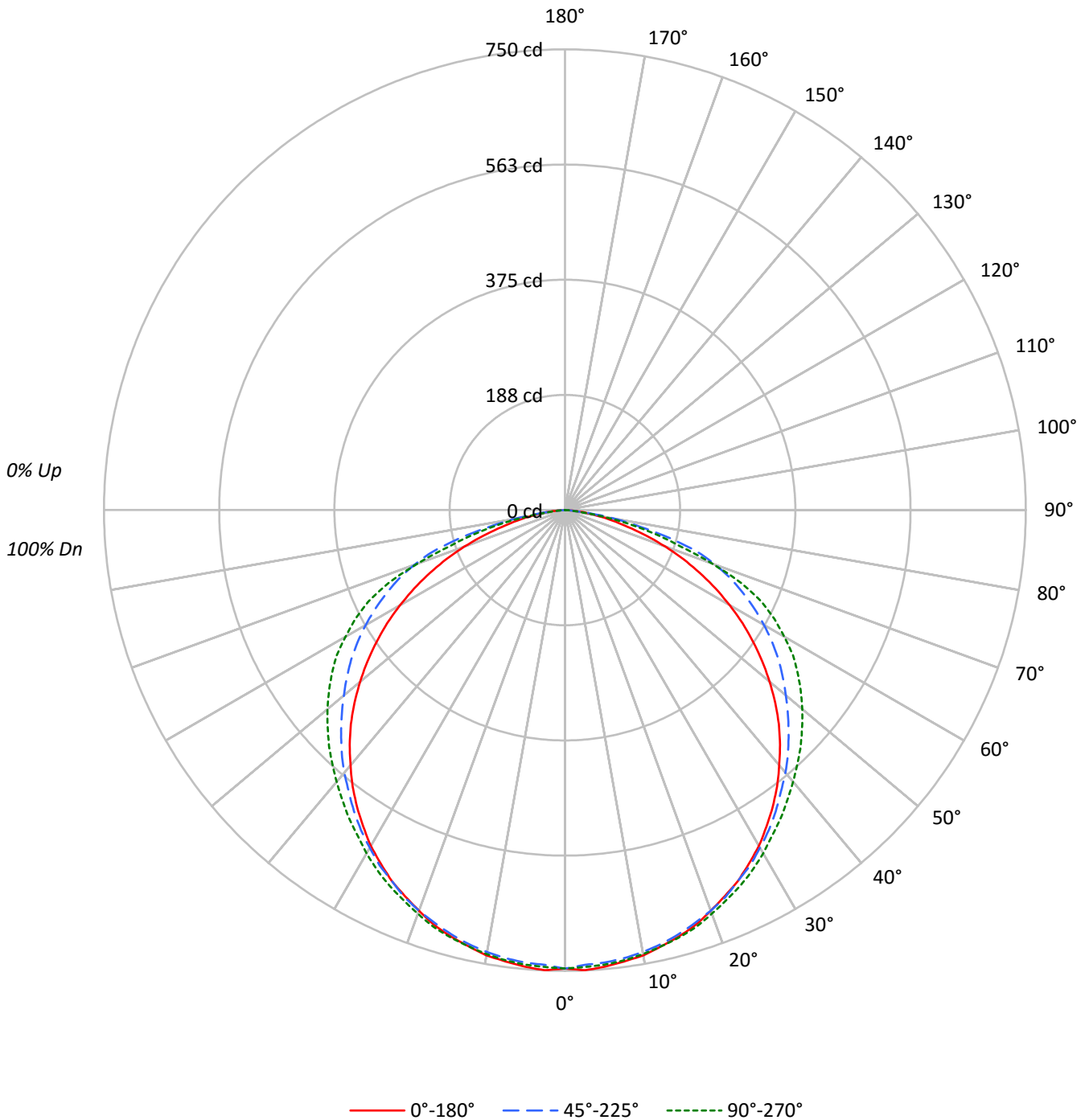
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2008	2008	2008
5°	2016	1997	2006
10°	2011	1996	2006
15°	2001	1992	2006
20°	1987	1987	2002
25°	1978	1978	2004
30°	1962	1973	2005
35°	1937	1966	2011
40°	1906	1962	2029
45°	1874	1960	2065
50°	1821	1966	2112
55°	1755	1991	2171
60°	1666	2013	2218
65°	1540	2038	2248
70°	1368	2053	2012
75°	1103	1844	1609
80°	863	1294	1051
85°	590	377	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	3.2
10°-20°	202.6	9.1
20°-30°	308.6	13.8
30°-40°	375.8	16.9
40°-50°	398.7	17.9
50°-60°	376.3	16.9
60°-70°	303.8	13.6
70°-80°	164.8	7.4
80°-90°	26.7	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°	581.8	26.1
0°-40°	957.6	43.0
0°-60°	1732.7	77.8
0°-90°	2228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2228.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	746	744	739	744	743	71
15°	718	717	715	720	720	203
25°	666	664	666	673	675	307
35°	590	593	598	610	612	369
45°	492	499	515	534	543	379
55°	374	390	424	452	463	334
65°	242	271	320	346	353	240
75°	106	155	177	160	155	116
85°	19	21	12	10	9	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	746.2	746.2	746.2	746.2	746.2
2.5°	749.7	746.2	741.0	746.2	744.5
5°	746.2	744.5	739.3	744.5	742.7
7.5°	741.0	741.0	735.8	739.3	739.3
10°	735.8	734.0	730.6	735.8	734.0
12.5°	727.1	725.3	723.6	728.8	727.1
15°	718.4	716.6	714.9	720.1	720.1
17.5°	707.9	706.2	704.5	711.4	711.4
20°	694.0	694.0	694.0	701.0	699.2
22.5°	680.1	680.1	681.9	688.8	687.1
25°	666.2	664.5	666.2	673.2	674.9
27.5°	648.8	650.5	652.3	659.2	661.0
30°	631.4	633.2	634.9	643.6	645.3
32.5°	610.5	614.0	617.5	627.9	627.9
35°	589.7	593.1	598.4	610.5	612.3
37.5°	567.1	570.5	577.5	591.4	594.9
40°	542.7	547.9	558.4	572.3	577.5
42.5°	518.3	525.3	537.5	553.1	560.1
45°	492.3	499.2	514.9	534.0	542.7
47.5°	464.4	473.1	492.3	516.6	523.6
50°	434.9	447.0	469.6	495.7	504.4
52.5°	405.3	419.2	447.0	474.9	483.6
55°	374.0	389.6	424.4	452.3	462.7
57.5°	342.7	360.1	400.1	429.6	440.1
60°	309.6	330.5	374.0	403.5	412.2
62.5°	276.6	300.9	347.9	377.5	384.4
65°	241.8	271.4	320.1	346.1	353.1
67.5°	208.7	243.5	292.2	311.4	311.4
70°	173.9	212.2	260.9	266.1	255.7
72.5°	139.2	182.6	226.1	207.0	198.3
75°	106.1	154.8	177.4	160.0	154.8
77.5°	80.0	125.2	125.2	114.8	111.3
80°	55.7	95.7	83.5	73.1	67.8
82.5°	36.5	53.9	43.5	34.8	29.6
85°	19.1	20.9	12.2	10.4	8.7
87.5°	7.0	3.5	1.7	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)