

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: P312033

Luminaire Tested: **14FCZ2-25-UNV-L83050-RDP-CP187-W2A-U-4500K**

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: P312033  
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-L83050-RDP-CP187-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET  
Light Source: (168) 4500K 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**

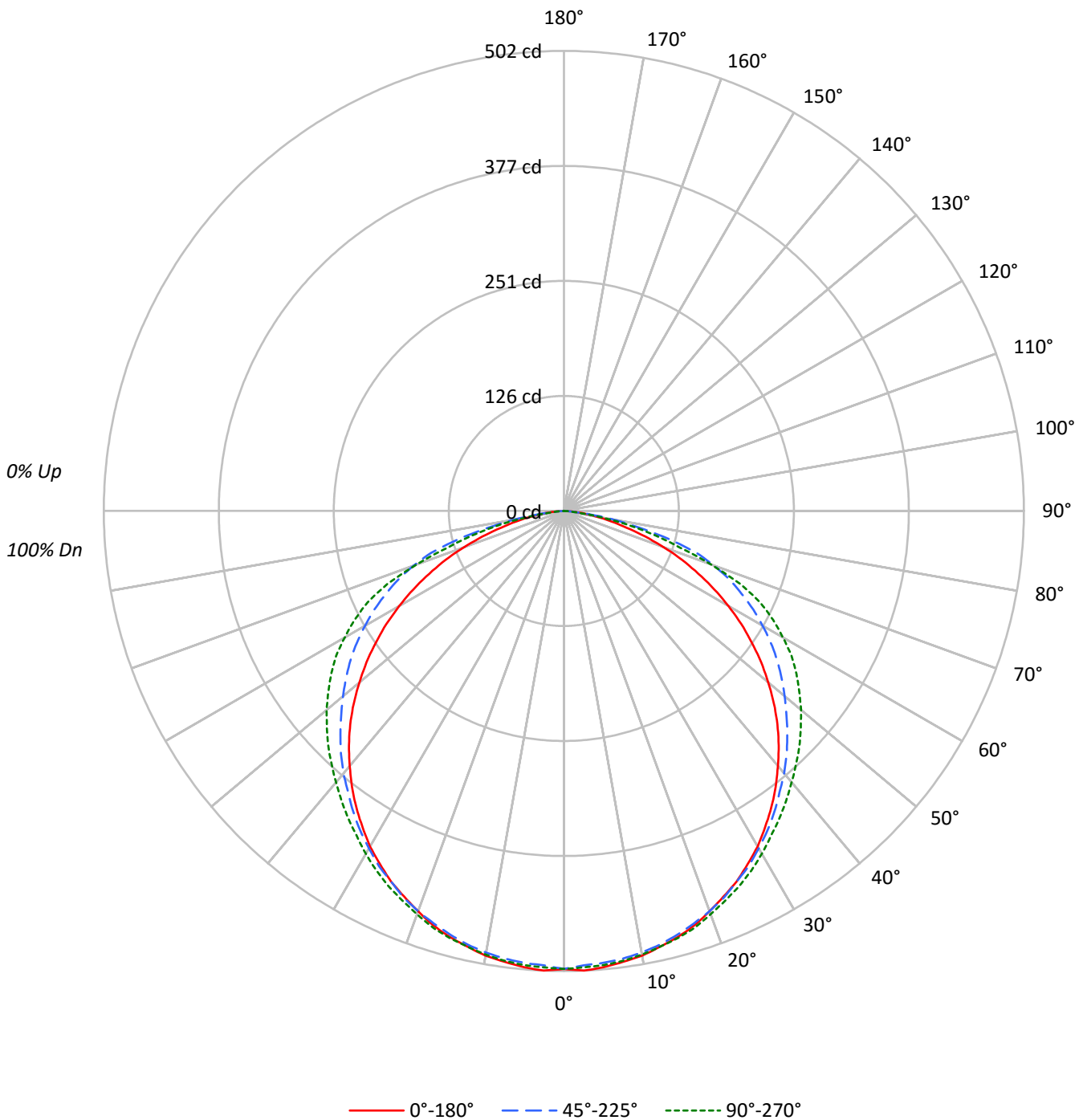
Lumens per Lamp: N/A  
Luminaire Lumens: 1492.0 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1345	1345	1345
5°	1350	1337	1344
10°	1346	1337	1343
15°	1340	1334	1343
20°	1331	1331	1341
25°	1325	1325	1342
30°	1314	1321	1343
35°	1297	1316	1347
40°	1277	1313	1358
45°	1254	1312	1383
50°	1219	1317	1414
55°	1175	1333	1453
60°	1116	1348	1486
65°	1031	1365	1506
70°	917	1375	1347
75°	739	1235	1078
80°	578	866	704
85°	395	253	179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.3	3.2
10°-20°	135.7	9.1
20°-30°	206.6	13.8
30°-40°	251.7	16.9
40°-50°	267.0	17.9
50°-60°	252.0	16.9
60°-70°	203.5	13.6
70°-80°	110.4	7.4
80°-90°	17.9	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°	389.6	26.1
0°-40°	641.3	43.0
0°-60°	1160.3	77.8
0°-90°	1492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1492.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	500	498	495	498	497	47
15°	481	480	479	482	482	136
25°	446	445	446	451	452	205
35°	395	397	401	409	410	247
45°	330	334	345	358	363	254
55°	250	261	284	303	310	224
65°	162	182	214	232	236	160
75°	71	104	119	107	104	78
85°	13	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°	499.7	499.7	499.7	499.7	499.7
2.5°	502.0	499.7	496.2	499.7	498.5
5°	499.7	498.5	495.0	498.5	497.4
7.5°	496.2	496.2	492.7	495.0	495.0
10°	492.7	491.6	489.2	492.7	491.6
12.5°	486.9	485.7	484.6	488.1	486.9
15°	481.1	479.9	478.7	482.2	482.2
17.5°	474.1	472.9	471.8	476.4	476.4
20°	464.8	464.8	464.8	469.4	468.3
22.5°	455.4	455.4	456.6	461.3	460.1
25°	446.1	445.0	446.1	450.8	452.0
27.5°	434.5	435.6	436.8	441.5	442.6
30°	422.8	424.0	425.2	431.0	432.1
32.5°	408.9	411.2	413.5	420.5	420.5
35°	394.9	397.2	400.7	408.9	410.0
37.5°	379.7	382.1	386.7	396.0	398.4
40°	363.4	366.9	373.9	383.2	386.7
42.5°	347.1	351.8	359.9	370.4	375.1
45°	329.6	334.3	344.8	357.6	363.4
47.5°	311.0	316.8	329.6	346.0	350.6
50°	291.2	299.4	314.5	332.0	337.8
52.5°	271.4	280.7	299.4	318.0	323.8
55°	250.4	260.9	284.2	302.9	309.8
57.5°	229.5	241.1	267.9	287.7	294.7
60°	207.3	221.3	250.4	270.2	276.1
62.5°	185.2	201.5	233.0	252.8	257.4
65°	161.9	181.7	214.3	231.8	236.5
67.5°	139.8	163.1	195.7	208.5	208.5
70°	116.5	142.1	174.7	178.2	171.2
72.5°	93.2	122.3	151.4	138.6	132.8
75°	71.1	103.7	118.8	107.2	103.7
77.5°	53.6	83.9	83.9	76.9	74.5
80°	37.3	64.1	55.9	48.9	45.4
82.5°	24.5	36.1	29.1	23.3	19.8
85°	12.8	14.0	8.2	7.0	5.8
87.5°	4.7	2.3	1.2	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)