

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: P307014

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-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: P307014  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
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-HRP-CP187-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

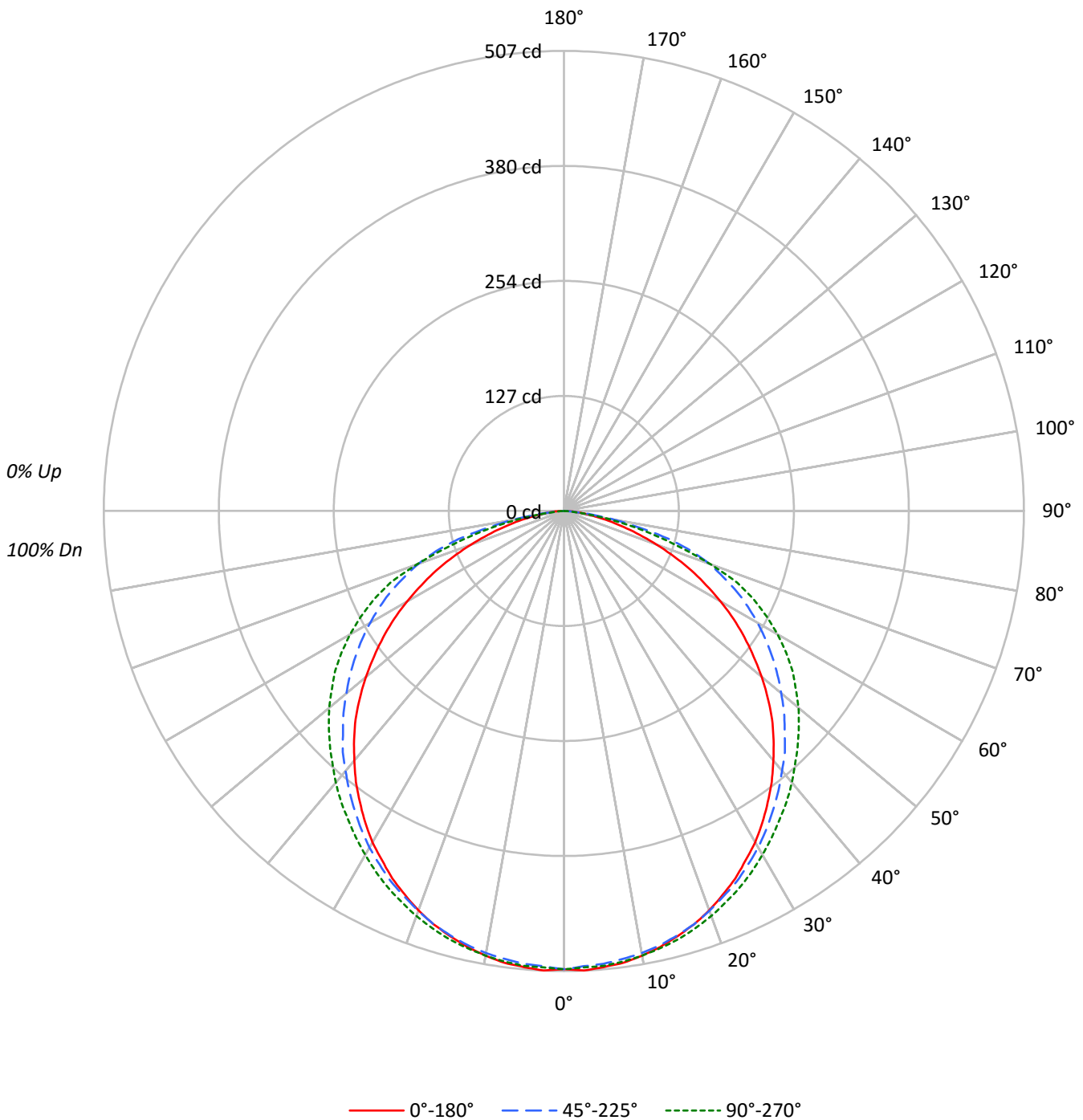
Lumens per Lamp: N/A  
Luminaire Lumens: 1487.0 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1359	1359	1359
5°	1363	1353	1359
10°	1359	1352	1359
15°	1351	1348	1361
20°	1342	1343	1361
25°	1327	1339	1360
30°	1311	1331	1360
35°	1287	1321	1362
40°	1261	1314	1373
45°	1235	1310	1388
50°	1192	1310	1413
55°	1141	1316	1444
60°	1072	1326	1462
65°	988	1340	1471
70°	861	1343	1354
75°	710	1250	1094
80°	558	899	731
85°	432	346	173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.8	3.2
10°-20°	137.2	9.2
20°-30°	208.3	14.0
30°-40°	252.4	17.0
40°-50°	266.0	17.9
50°-60°	248.3	16.7
60°-70°	198.4	13.3
70°-80°	109.2	7.3
80°-90°	19.3	1.3
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°	393.3	26.5
0°-40°	645.7	43.4
0°-60°	1160.1	78.0
0°-90°	1487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1487.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	505	505	505	505	505	
5°	504	503	501	504	503	48
15°	485	485	484	489	489	137
25°	447	448	451	457	458	206
35°	392	396	402	412	415	245
45°	324	331	344	360	365	250
55°	243	255	281	300	308	217
65°	155	175	210	228	231	153
75°	68	98	120	108	105	73
85°	14	18	11	7	6	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	505.0	505.0	505.0	505.0	505.0
2.5°	506.9	505.5	502.2	505.0	503.6
5°	504.5	503.1	500.8	504.1	503.1
7.5°	502.2	500.3	498.0	501.7	500.8
10°	497.5	496.1	494.7	498.0	497.5
12.5°	491.9	491.4	490.0	493.8	493.3
15°	484.9	484.9	484.0	488.6	488.6
17.5°	477.4	476.9	477.4	482.5	482.1
20°	468.5	468.5	469.0	475.1	475.1
22.5°	457.8	458.2	459.6	467.1	466.7
25°	447.0	447.9	450.8	457.3	458.2
27.5°	433.9	436.3	439.5	447.5	448.4
30°	421.8	423.2	428.3	435.8	437.7
32.5°	407.3	410.1	415.7	424.1	426.4
35°	391.8	395.6	402.1	412.4	414.7
37.5°	376.4	379.7	388.6	399.3	403.5
40°	359.1	364.7	374.1	386.2	390.9
42.5°	342.3	347.9	360.5	373.1	377.3
45°	324.5	330.6	344.1	359.6	364.7
47.5°	304.9	311.9	329.2	345.5	351.2
50°	284.8	293.6	312.8	331.1	337.6
52.5°	263.7	274.9	296.9	316.1	322.2
55°	243.1	255.3	280.6	300.2	307.7
57.5°	222.1	235.2	263.7	286.2	290.4
60°	199.2	215.1	246.4	266.1	271.7
62.5°	176.7	195.0	228.6	247.4	252.0
65°	155.2	174.9	210.4	227.7	231.0
67.5°	131.9	155.2	190.3	206.2	207.1
70°	109.4	136.5	170.7	178.2	172.1
72.5°	87.4	116.4	147.8	141.7	136.5
75°	68.3	97.7	120.2	108.0	105.2
77.5°	50.5	80.0	86.0	79.5	74.3
80°	36.0	63.1	58.0	49.6	47.2
82.5°	24.8	39.7	31.8	24.8	21.5
85°	14.0	17.8	11.2	7.0	5.6
87.5°	6.1	4.2	2.3	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)