

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: P307012

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-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: P307012  
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-5000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

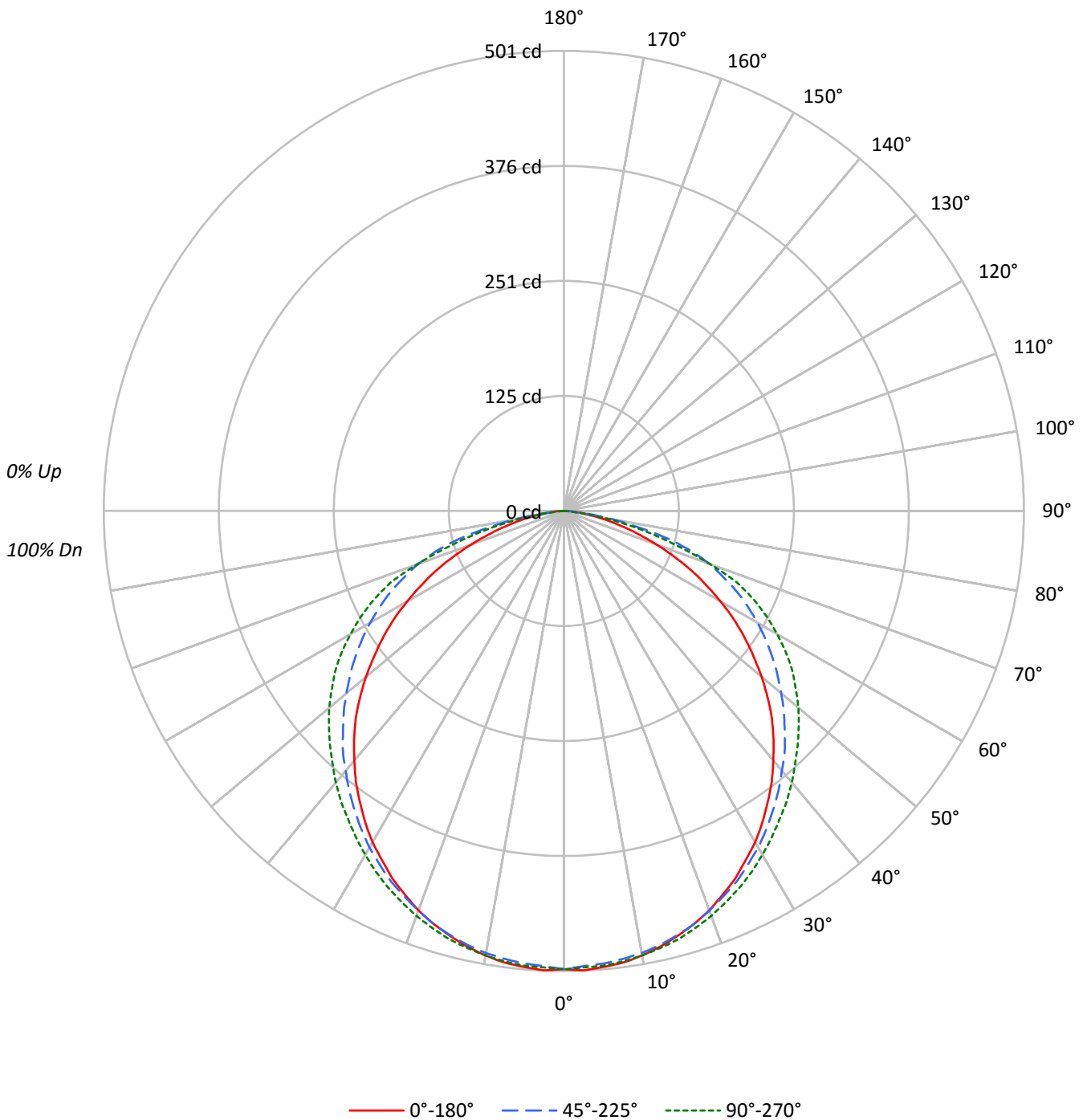
Lumens per Lamp: N/A  
Luminaire Lumens: 1469.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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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CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP187-W2A-U-5000K

**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°	1343	1343	1343
5°	1346	1336	1343
10°	1343	1335	1343
15°	1334	1332	1345
20°	1325	1327	1344
25°	1311	1322	1344
30°	1295	1315	1344
35°	1272	1305	1346
40°	1246	1298	1357
45°	1220	1294	1371
50°	1178	1294	1396
55°	1127	1301	1426
60°	1059	1310	1445
65°	977	1324	1453
70°	851	1327	1338
75°	701	1234	1080
80°	552	888	724
85°	429	343	170



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.2	3.2
10°-20°	135.5	9.2
20°-30°	205.8	14.0
30°-40°	249.4	17.0
40°-50°	262.8	17.9
50°-60°	245.3	16.7
60°-70°	196.1	13.3
70°-80°	107.9	7.3
80°-90°	19.1	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°	388.6	26.5
0°-40°	637.9	43.4
0°-60°	1146.0	78.0
0°-90°	1469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1469.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	497	495	498	497	47
15°	479	479	478	483	483	135
25°	442	442	445	452	453	203
35°	387	391	397	407	410	242
45°	321	327	340	355	360	247
55°	240	252	277	297	304	214
65°	153	173	208	225	228	151
75°	67	96	119	107	104	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°	498.9	498.9	498.9	498.9	498.9
2.5°	500.7	499.3	496.1	498.9	497.5
5°	498.4	497.0	494.7	498.0	497.0
7.5°	496.1	494.3	492.0	495.6	494.7
10°	491.5	490.1	488.7	492.0	491.5
12.5°	485.9	485.5	484.1	487.8	487.3
15°	479.0	479.0	478.1	482.7	482.7
17.5°	471.6	471.2	471.6	476.7	476.2
20°	462.8	462.8	463.3	469.3	469.3
22.5°	452.2	452.7	454.1	461.5	461.0
25°	441.6	442.5	445.3	451.8	452.7
27.5°	428.7	431.0	434.2	442.1	443.0
30°	416.7	418.0	423.1	430.5	432.4
32.5°	402.3	405.1	410.7	419.0	421.3
35°	387.1	390.8	397.3	407.4	409.7
37.5°	371.9	375.1	383.9	394.5	398.6
40°	354.8	360.3	369.5	381.6	386.2
42.5°	338.1	343.7	356.1	368.6	372.8
45°	320.6	326.6	340.0	355.2	360.3
47.5°	301.2	308.1	325.2	341.4	346.9
50°	281.3	290.1	309.0	327.0	333.5
52.5°	260.5	271.6	293.3	312.3	318.3
55°	240.2	252.2	277.2	296.6	303.9
57.5°	219.4	232.3	260.5	282.7	286.9
60°	196.8	212.5	243.4	262.8	268.4
62.5°	174.6	192.6	225.9	244.4	249.0
65°	153.4	172.8	207.9	225.0	228.2
67.5°	130.3	153.4	188.0	203.7	204.6
70°	108.1	134.9	168.6	176.0	170.0
72.5°	86.4	115.0	146.0	140.0	134.9
75°	67.4	96.5	118.7	106.7	103.9
77.5°	49.9	79.0	85.0	78.5	73.4
80°	35.6	62.4	57.3	49.0	46.7
82.5°	24.5	39.3	31.4	24.5	21.2
85°	13.9	17.6	11.1	6.9	5.5
87.5°	6.0	4.2	2.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)