

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: P307007

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP187-W2A-U-2700K**

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: P307007  
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-2700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
POLYCARB SHEET  
Light Source: (168) 2700K 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**

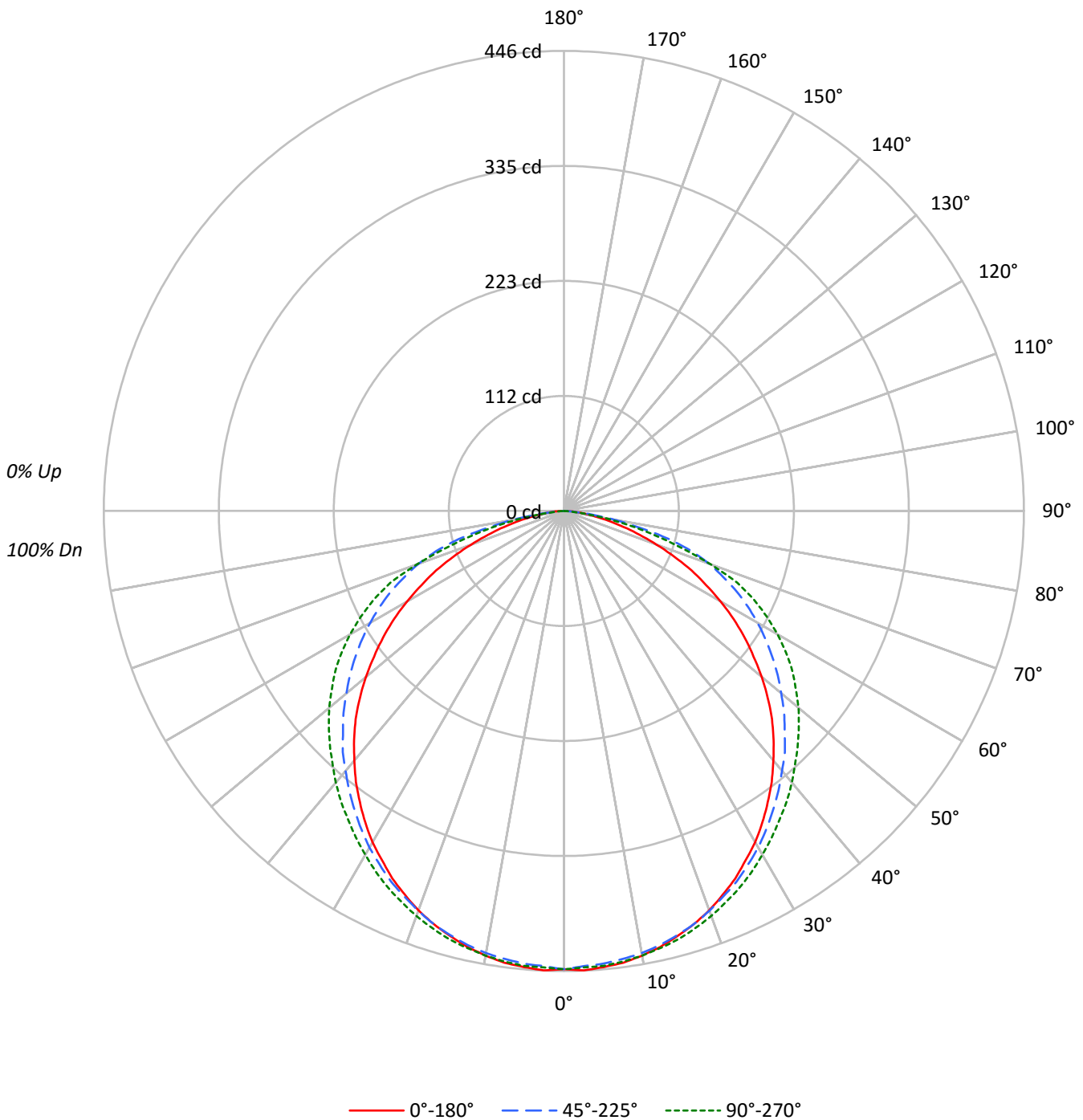
Lumens per Lamp: N/A  
Luminaire Lumens: 1308.0 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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-2700K

**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°	1195	1195	1195
5°	1199	1190	1196
10°	1196	1189	1196
15°	1188	1186	1197
20°	1180	1181	1197
25°	1167	1177	1197
30°	1153	1171	1196
35°	1132	1162	1198
40°	1110	1156	1208
45°	1086	1152	1221
50°	1049	1152	1243
55°	1004	1158	1270
60°	943	1167	1286
65°	870	1179	1294
70°	757	1181	1191
75°	624	1099	962
80°	491	790	643
85°	380	306	151



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.1	3.2
10°-20°	120.7	9.2
20°-30°	183.3	14.0
30°-40°	222.0	17.0
40°-50°	234.0	17.9
50°-60°	218.4	16.7
60°-70°	174.6	13.3
70°-80°	96.0	7.3
80°-90°	17.0	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°	346.0	26.5
0°-40°	568.0	43.4
0°-60°	1020.4	78.0
0°-90°	1308.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1308.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	443	443	42
15°	426	426	426	430	430	120
25°	393	394	396	402	403	181
35°	345	348	354	363	365	216
45°	285	291	303	316	321	220
55°	214	225	247	264	271	191
65°	137	154	185	200	203	134
75°	60	86	106	95	92	65
85°	12	16	10	6	5	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	444.2	444.2	444.2	444.2	444.2
2.5°	445.8	444.6	441.7	444.2	443.0
5°	443.8	442.6	440.5	443.4	442.6
7.5°	441.7	440.1	438.0	441.3	440.5
10°	437.6	436.4	435.2	438.0	437.6
12.5°	432.7	432.3	431.0	434.3	433.9
15°	426.5	426.5	425.7	429.8	429.8
17.5°	419.9	419.5	419.9	424.5	424.0
20°	412.1	412.1	412.5	417.9	417.9
22.5°	402.7	403.1	404.3	410.9	410.5
25°	393.2	394.0	396.5	402.3	403.1
27.5°	381.7	383.7	386.6	393.6	394.4
30°	371.0	372.2	376.8	383.3	385.0
32.5°	358.2	360.7	365.6	373.0	375.1
35°	344.7	348.0	353.7	362.8	364.8
37.5°	331.1	334.0	341.8	351.2	355.0
40°	315.9	320.8	329.0	339.7	343.8
42.5°	301.1	306.0	317.1	328.2	331.9
45°	285.4	290.8	302.7	316.3	320.8
47.5°	268.2	274.3	289.6	304.0	308.9
50°	250.5	258.3	275.2	291.2	297.0
52.5°	232.0	241.8	261.2	278.0	283.4
55°	213.9	224.6	246.8	264.1	270.6
57.5°	195.4	206.9	232.0	251.7	255.4
60°	175.2	189.2	216.8	234.0	239.0
62.5°	155.5	171.5	201.1	217.6	221.7
65°	136.6	153.8	185.1	200.3	203.2
67.5°	116.0	136.6	167.4	181.4	182.2
70°	96.2	120.1	150.1	156.7	151.4
72.5°	76.9	102.4	130.0	124.6	120.1
75°	60.0	86.0	105.7	95.0	92.5
77.5°	44.4	70.3	75.7	69.9	65.4
80°	31.7	55.5	51.0	43.6	41.5
82.5°	21.8	35.0	28.0	21.8	18.9
85°	12.3	15.6	9.9	6.2	4.9
87.5°	5.3	3.7	2.1	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)