

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: P307018

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP250-W2A-U-3500K**

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: P307018  
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-CP250-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
POLYCARB SHEET  
Light Source: (168) 3500K 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**

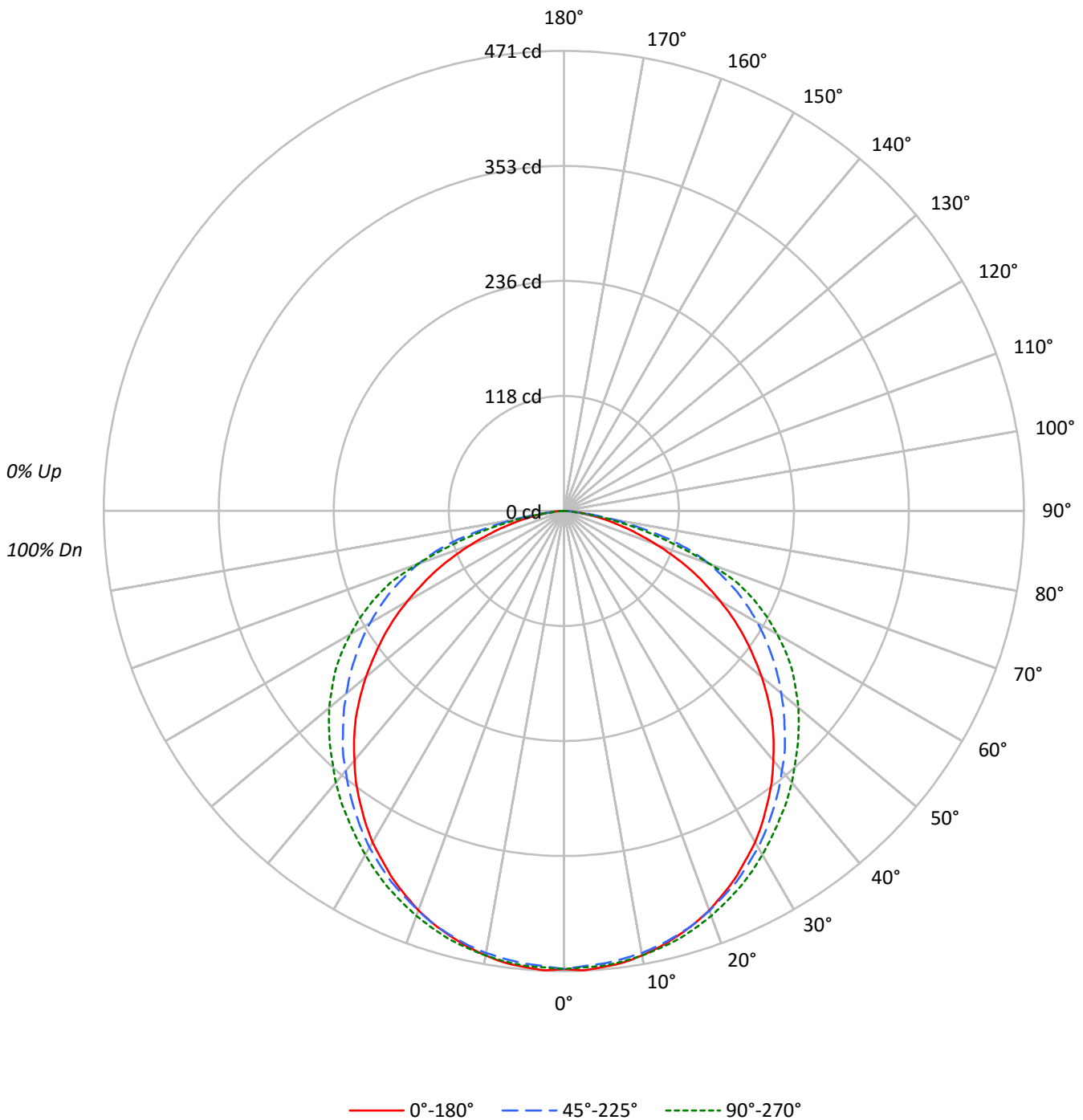
Lumens per Lamp: N/A  
Luminaire Lumens: 1381.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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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CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP250-W2A-U-3500K

**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°	1262	1262	1262
5°	1266	1256	1262
10°	1262	1255	1262
15°	1254	1252	1264
20°	1246	1247	1263
25°	1233	1243	1264
30°	1217	1236	1263
35°	1195	1227	1265
40°	1172	1220	1275
45°	1147	1216	1289
50°	1107	1216	1312
55°	1059	1223	1340
60°	996	1232	1358
65°	918	1244	1366
70°	799	1247	1257
75°	659	1160	1016
80°	518	834	680
85°	401	321	161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	3.2
10°-20°	127.4	9.2
20°-30°	193.5	14.0
30°-40°	234.4	17.0
40°-50°	247.0	17.9
50°-60°	230.6	16.7
60°-70°	184.3	13.3
70°-80°	101.4	7.3
80°-90°	17.9	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°	365.3	26.5
0°-40°	599.7	43.4
0°-60°	1077.4	78.0
0°-90°	1381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1381.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	469	469	469	469	469	
5°	469	467	465	468	467	45
15°	450	450	450	454	454	127
25°	415	416	419	425	426	191
35°	364	367	374	383	385	228
45°	301	307	320	334	339	232
55°	226	237	261	279	286	202
65°	144	162	195	212	214	142
75°	63	91	112	100	98	68
85°	13	16	10	6	5	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	469.0	469.0	469.0	469.0	469.0
2.5°	470.7	469.4	466.4	469.0	467.7
5°	468.6	467.3	465.1	468.1	467.3
7.5°	466.4	464.7	462.5	466.0	465.1
10°	462.0	460.7	459.4	462.5	462.0
12.5°	456.8	456.4	455.1	458.6	458.1
15°	450.3	450.3	449.5	453.8	453.8
17.5°	443.4	442.9	443.4	448.2	447.7
20°	435.1	435.1	435.6	441.2	441.2
22.5°	425.1	425.6	426.9	433.8	433.4
25°	415.1	416.0	418.6	424.7	425.6
27.5°	403.0	405.2	408.2	415.6	416.4
30°	391.7	393.0	397.8	404.7	406.5
32.5°	378.2	380.8	386.1	393.9	396.0
35°	363.9	367.4	373.5	383.0	385.2
37.5°	349.6	352.6	360.9	370.9	374.8
40°	333.5	338.7	347.4	358.7	363.0
42.5°	317.9	323.1	334.8	346.5	350.4
45°	301.4	307.0	319.6	333.9	338.7
47.5°	283.1	289.6	305.7	320.9	326.1
50°	264.5	272.7	290.5	307.5	313.5
52.5°	244.9	255.3	275.8	293.6	299.2
55°	225.8	237.1	260.6	278.8	285.7
57.5°	206.3	218.4	244.9	265.8	269.7
60°	185.0	199.8	228.9	247.1	252.3
62.5°	164.1	181.1	212.4	229.7	234.1
65°	144.2	162.4	195.4	211.5	214.5
67.5°	122.5	144.2	176.7	191.5	192.4
70°	101.6	126.8	158.5	165.5	159.8
72.5°	81.2	108.1	137.2	131.6	126.8
75°	63.4	90.8	111.6	100.3	97.7
77.5°	46.9	74.3	79.9	73.8	69.0
80°	33.4	58.6	53.8	46.0	43.9
82.5°	23.0	36.9	29.5	23.0	20.0
85°	13.0	16.5	10.4	6.5	5.2
87.5°	5.6	3.9	2.2	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)