

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: P307293

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP250-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: P307293  
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: 14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 1248.0 lumens  
Efficiency: N/A  
Efficacy: 73.4 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

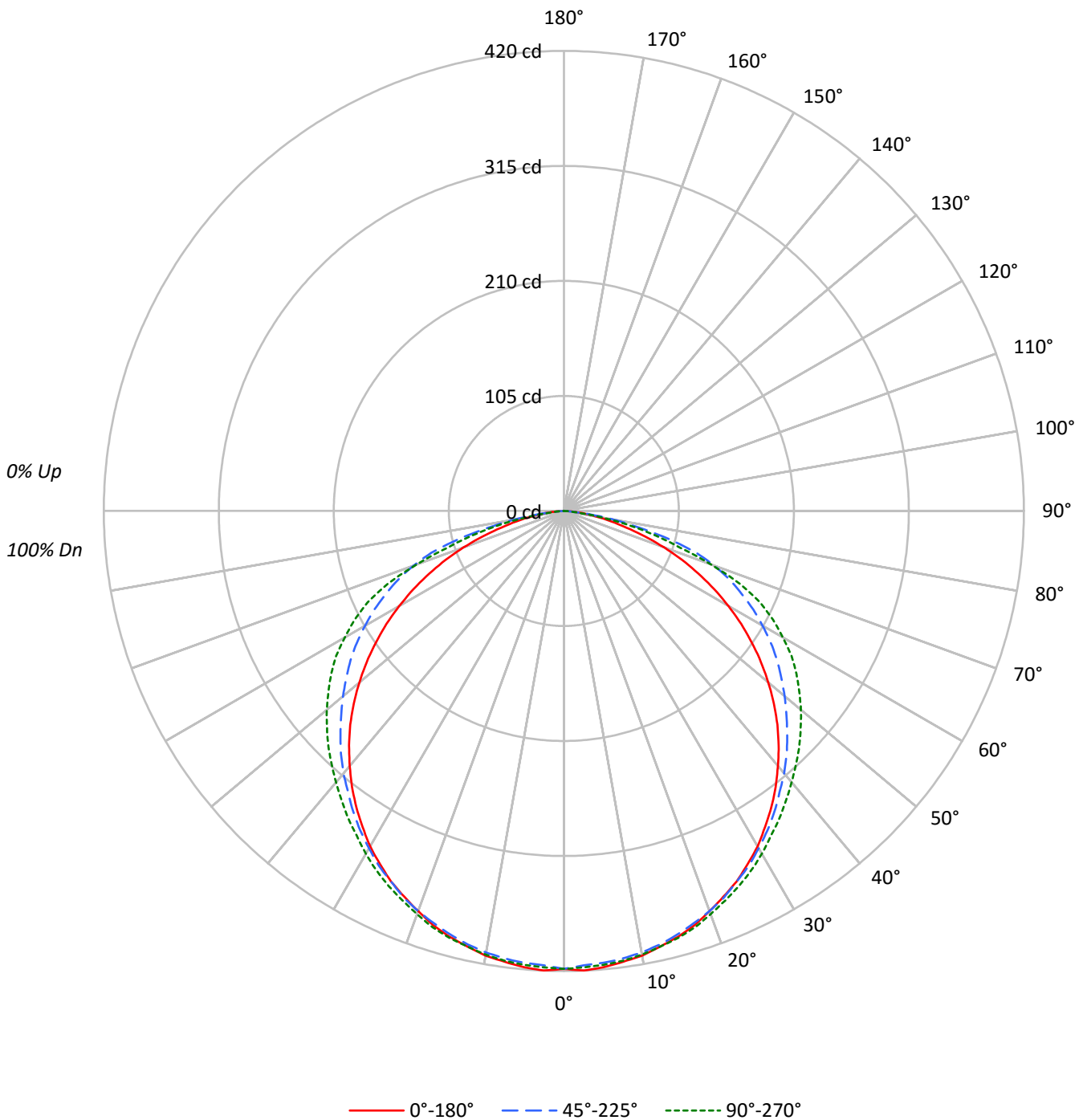
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CP250-W2A-U-5700K

**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°	1125	1125	1125
5°	1129	1119	1124
10°	1126	1118	1124
15°	1121	1115	1124
20°	1113	1113	1122
25°	1108	1108	1122
30°	1099	1105	1123
35°	1085	1101	1127
40°	1068	1099	1136
45°	1049	1098	1157
50°	1020	1101	1183
55°	983	1115	1216
60°	933	1128	1243
65°	862	1142	1259
70°	766	1149	1127
75°	618	1033	901
80°	483	725	589
85°	330	210	151



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.6	3.2
10°-20°	113.5	9.1
20°-30°	172.8	13.8
30°-40°	210.5	16.9
40°-50°	223.3	17.9
50°-60°	210.8	16.9
60°-70°	170.2	13.6
70°-80°	92.3	7.4
80°-90°	14.9	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°	325.9	26.1
0°-40°	536.4	43.0
0°-60°	970.5	77.8
0°-90°	1248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	417	414	417	416	40
15°	402	401	400	403	403	114
25°	373	372	373	377	378	172
35°	330	332	335	342	343	207
45°	276	280	288	299	304	212
55°	210	218	238	253	259	187
65°	135	152	179	194	198	134
75°	59	87	99	90	87	65
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	418.0	418.0	418.0	418.0	418.0
2.5°	419.9	418.0	415.1	418.0	417.0
5°	418.0	417.0	414.1	417.0	416.0
7.5°	415.1	415.1	412.1	414.1	414.1
10°	412.1	411.2	409.2	412.1	411.2
12.5°	407.3	406.3	405.3	408.2	407.3
15°	402.4	401.4	400.4	403.4	403.4
17.5°	396.6	395.6	394.6	398.5	398.5
20°	388.8	388.8	388.8	392.7	391.7
22.5°	381.0	381.0	381.9	385.8	384.9
25°	373.2	372.2	373.2	377.1	378.0
27.5°	363.4	364.4	365.4	369.3	370.2
30°	353.7	354.7	355.6	360.5	361.5
32.5°	342.0	343.9	345.9	351.7	351.7
35°	330.3	332.2	335.2	342.0	343.0
37.5°	317.6	319.6	323.5	331.3	333.2
40°	304.0	306.9	312.8	320.6	323.5
42.5°	290.3	294.2	301.1	309.8	313.7
45°	275.7	279.6	288.4	299.1	304.0
47.5°	260.1	265.0	275.7	289.4	293.3
50°	243.6	250.4	263.1	277.7	282.6
52.5°	227.0	234.8	250.4	266.0	270.9
55°	209.5	218.2	237.7	253.3	259.2
57.5°	191.9	201.7	224.1	240.7	246.5
60°	173.4	185.1	209.5	226.0	230.9
62.5°	154.9	168.6	194.9	211.4	215.3
65°	135.4	152.0	179.3	193.9	197.8
67.5°	116.9	136.4	163.7	174.4	174.4
70°	97.4	118.9	146.1	149.1	143.2
72.5°	77.9	102.3	126.7	115.9	111.1
75°	59.4	86.7	99.4	89.6	86.7
77.5°	44.8	70.2	70.2	64.3	62.4
80°	31.2	53.6	46.8	40.9	38.0
82.5°	20.5	30.2	24.4	19.5	16.6
85°	10.7	11.7	6.8	5.8	4.9
87.5°	3.9	1.9	1.0	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)