

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: P308373

Luminaire Tested: **22FCZ2-20HE-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: P308373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-20HE-UNV-L82765-RDP-CP250-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" POLYCARB SHEET  
Light Source: (168) 3000K 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**

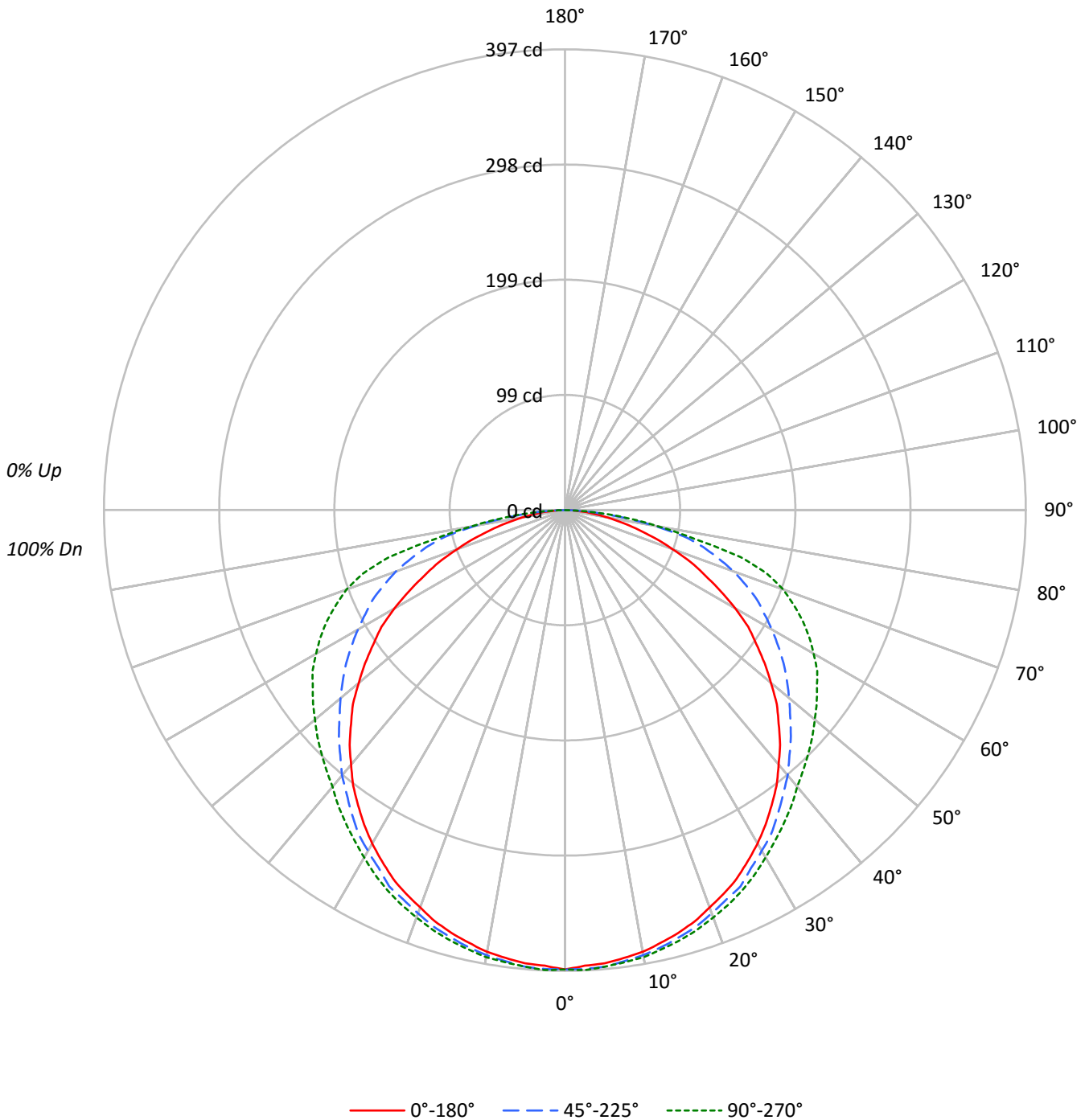
Lumens per Lamp: N/A  
Luminaire Lumens: 1260.0 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1065	1065	1065
5°	1059	1067	1067
10°	1056	1064	1069
15°	1051	1061	1069
20°	1043	1059	1070
25°	1040	1062	1073
30°	1031	1054	1074
35°	1020	1051	1081
40°	1006	1049	1094
45°	991	1048	1129
50°	970	1055	1176
55°	943	1079	1244
60°	913	1108	1332
65°	850	1163	1440
70°	780	1218	1575
75°	684	1282	1628
80°	589	1221	1278
85°	516	886	973



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.4	3.0
10°-20°	107.5	8.5
20°-30°	164.0	13.0
30°-40°	200.3	15.9
40°-50°	214.1	17.0
50°-60°	206.7	16.4
60°-70°	177.9	14.1
70°-80°	120.4	9.6
80°-90°	31.8	2.5
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°	308.9	24.5
0°-40°	509.2	40.4
0°-60°	930.0	73.8
0°-90°	1260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	392	393	395	395	395	37
15°	377	378	381	383	384	106
25°	350	352	358	360	362	161
35°	310	313	320	326	329	194
45°	260	265	275	289	297	201
55°	201	208	230	253	265	180
65°	134	146	183	211	226	133
75°	66	87	123	148	157	71
85°	17	23	29	30	32	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	395.8	395.8	395.8	395.8	395.8
2.5°	393.0	393.9	395.8	395.8	396.7
5°	392.1	393.0	394.9	394.9	394.9
7.5°	389.3	390.2	392.1	393.0	393.0
10°	386.5	387.4	389.3	390.2	391.2
12.5°	381.9	382.8	385.6	387.4	387.4
15°	377.2	378.2	381.0	382.8	383.7
17.5°	371.7	373.5	376.3	378.2	379.1
20°	364.3	366.1	369.8	372.6	373.5
22.5°	357.8	359.6	363.3	366.1	368.0
25°	350.4	352.2	357.8	359.6	361.5
27.5°	341.1	343.0	347.6	351.3	354.1
30°	331.8	333.7	339.2	343.9	345.7
32.5°	321.6	324.4	330.9	334.6	337.4
35°	310.5	313.3	319.8	326.3	329.1
37.5°	299.4	302.2	308.7	317.0	320.7
40°	286.4	290.1	298.5	309.6	311.4
42.5°	274.4	279.0	286.4	299.4	304.0
45°	260.5	265.1	275.3	289.2	296.6
47.5°	247.5	252.1	263.2	279.9	289.2
50°	231.7	238.2	252.1	271.6	280.9
52.5°	216.9	222.5	241.0	262.3	273.4
55°	201.1	207.6	229.9	253.0	265.1
57.5°	187.2	192.8	217.8	243.8	257.7
60°	169.6	177.0	205.8	233.6	247.5
62.5°	151.1	162.2	193.7	222.5	237.3
65°	133.5	146.5	182.6	211.3	226.2
67.5°	117.7	131.6	168.7	199.3	213.2
70°	99.2	116.8	154.8	184.5	200.2
72.5°	82.5	102.0	139.0	168.7	182.6
75°	65.8	87.1	123.3	148.3	156.6
77.5°	51.0	71.4	105.7	113.1	114.0
80°	38.0	56.5	78.8	79.7	82.5
82.5°	26.0	39.9	51.0	55.6	56.5
85°	16.7	23.2	28.7	29.7	31.5
87.5°	7.4	8.3	10.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)