

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: P308374

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-RDP-CP250-W2A-U-6500K**

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: P308374  
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-6500K  
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**

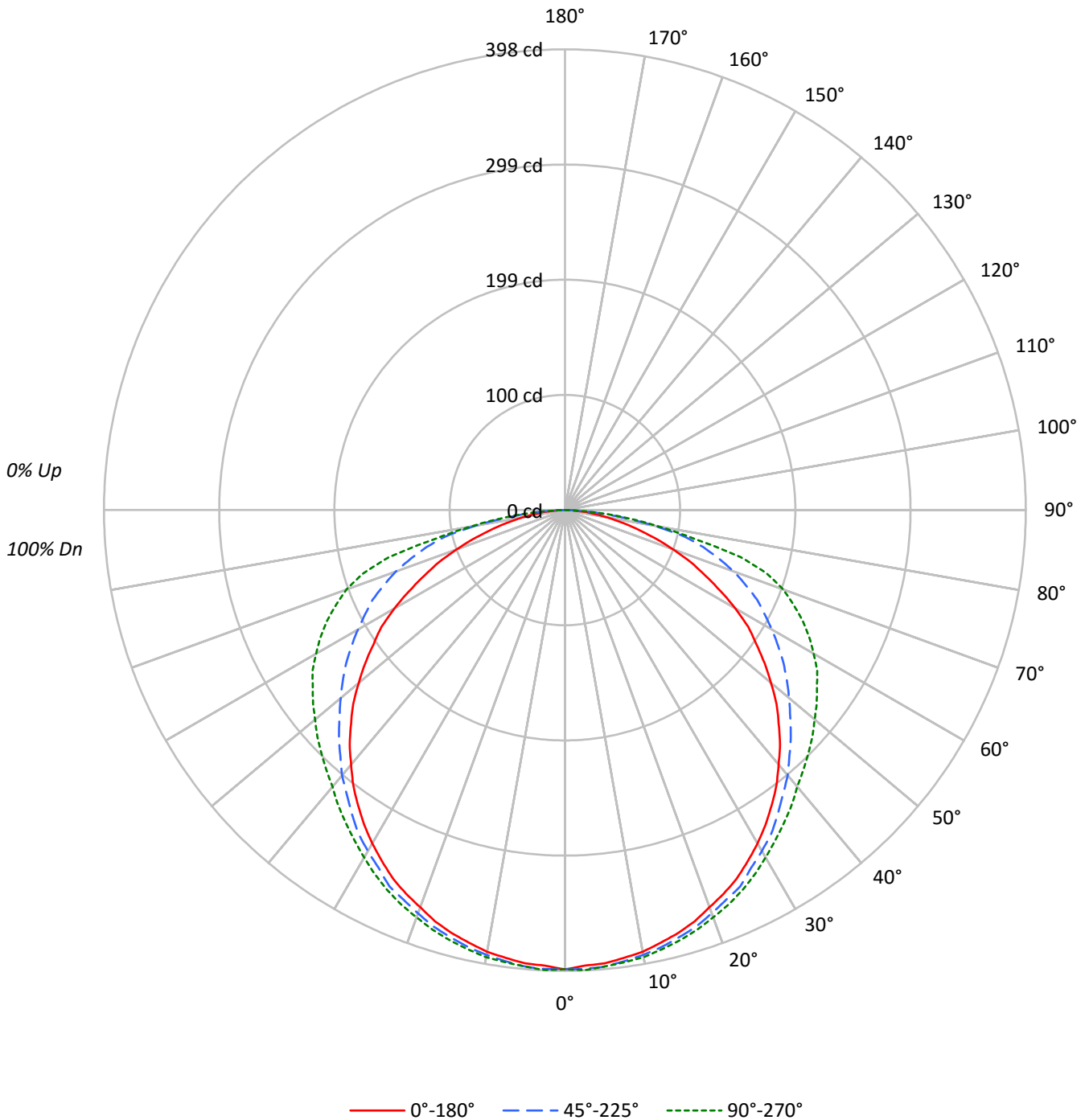
Lumens per Lamp: N/A  
Luminaire Lumens: 1263.0 lumens  
Efficiency: N/A  
Efficacy: 72.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1068	1068	1068
5°	1062	1069	1069
10°	1059	1066	1071
15°	1053	1064	1072
20°	1046	1062	1072
25°	1043	1065	1076
30°	1033	1057	1077
35°	1023	1053	1083
40°	1009	1051	1097
45°	994	1050	1131
50°	973	1058	1178
55°	946	1081	1247
60°	915	1110	1335
65°	852	1165	1443
70°	782	1221	1579
75°	686	1285	1632
80°	590	1224	1282
85°	516	889	976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.5	3.0
10°-20°	107.8	8.5
20°-30°	164.4	13.0
30°-40°	200.7	15.9
40°-50°	214.6	17.0
50°-60°	207.2	16.4
60°-70°	178.3	14.1
70°-80°	120.7	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°	309.7	24.5
0°-40°	510.4	40.4
0°-60°	932.2	73.8
0°-90°	1263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1263.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	397	397	397	397	397	
5°	393	394	396	396	396	37
15°	378	379	382	384	385	107
25°	351	353	359	360	362	162
35°	311	314	320	327	330	195
45°	261	266	276	290	297	202
55°	202	208	230	254	266	181
65°	134	147	183	212	227	133
75°	66	87	124	149	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°	396.7	396.7	396.7	396.7	396.7
2.5°	393.9	394.9	396.7	396.7	397.7
5°	393.0	393.9	395.8	395.8	395.8
7.5°	390.2	391.2	393.0	393.9	393.9
10°	387.4	388.4	390.2	391.2	392.1
12.5°	382.8	383.7	386.5	388.4	388.4
15°	378.1	379.1	381.9	383.7	384.7
17.5°	372.6	374.4	377.2	379.1	380.0
20°	365.1	367.0	370.7	373.5	374.4
22.5°	358.6	360.5	364.2	367.0	368.9
25°	351.2	353.1	358.6	360.5	362.4
27.5°	341.9	343.8	348.4	352.1	354.9
30°	332.6	334.5	340.1	344.7	346.6
32.5°	322.4	325.2	331.7	335.4	338.2
35°	311.3	314.0	320.5	327.0	329.8
37.5°	300.1	302.9	309.4	317.8	321.5
40°	287.1	290.8	299.2	310.3	312.2
42.5°	275.0	279.7	287.1	300.1	304.7
45°	261.1	265.7	275.9	289.9	297.3
47.5°	248.1	252.7	263.9	280.6	289.9
50°	232.3	238.8	252.7	272.2	281.5
52.5°	217.4	223.0	241.6	262.9	274.1
55°	201.6	208.1	230.4	253.6	265.7
57.5°	187.7	193.3	218.3	244.4	258.3
60°	170.0	177.5	206.3	234.1	248.1
62.5°	151.4	162.6	194.2	223.0	237.9
65°	133.8	146.8	183.0	211.8	226.7
67.5°	118.0	131.9	169.1	199.8	213.7
70°	99.4	117.1	155.2	184.9	200.7
72.5°	82.7	102.2	139.4	169.1	183.0
75°	66.0	87.3	123.6	148.7	157.0
77.5°	51.1	71.5	105.9	113.4	114.3
80°	38.1	56.7	79.0	79.9	82.7
82.5°	26.0	40.0	51.1	55.7	56.7
85°	16.7	23.2	28.8	29.7	31.6
87.5°	7.4	8.4	10.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)