

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: P308072

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P308072  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
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-HRP-CA125-W2A-U-4000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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**

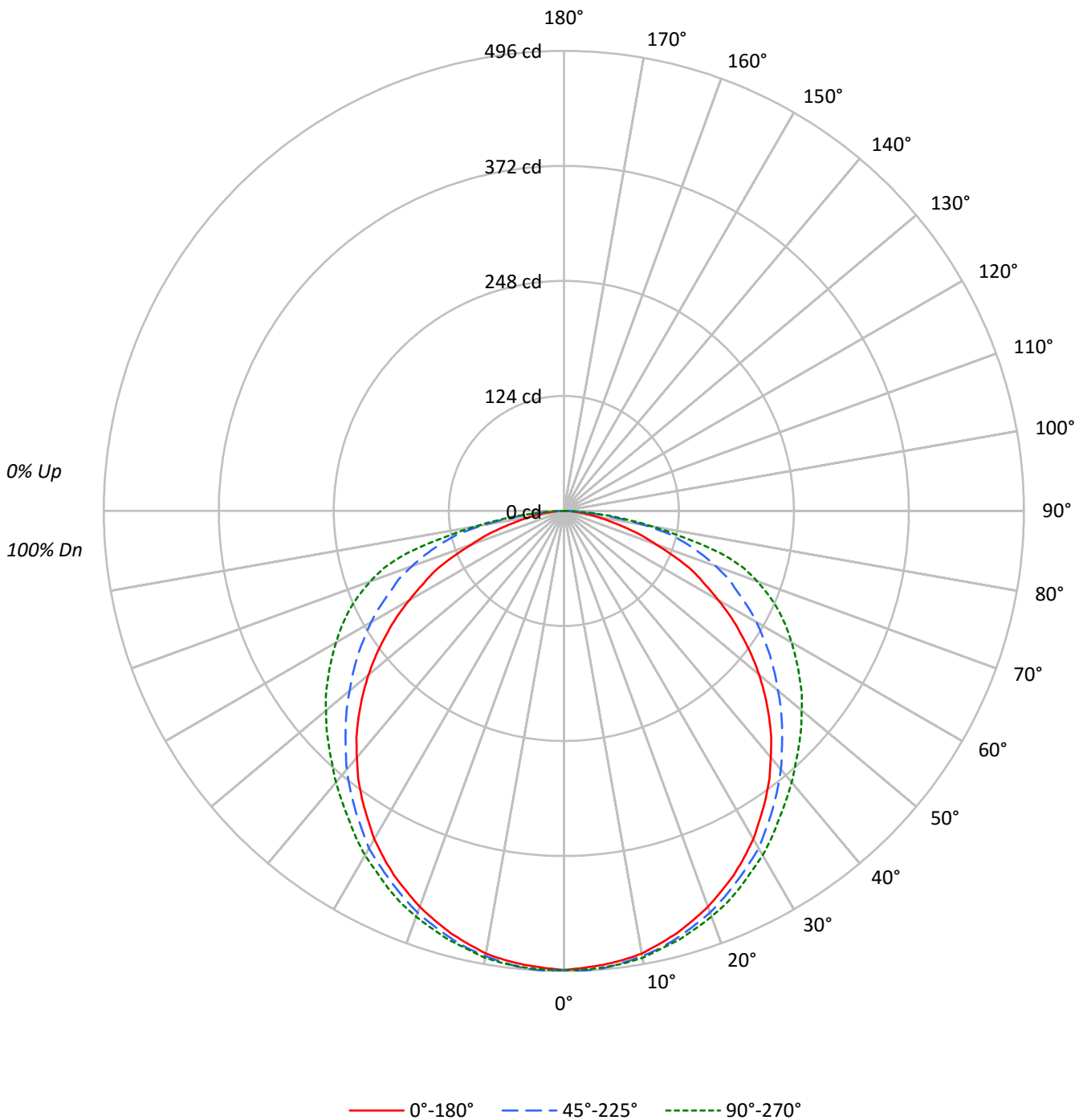
Lumens per Lamp: N/A  
Luminaire Lumens: 1503.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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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**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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1332	1332	1332
5°	1327	1337	1334
10°	1324	1332	1337
15°	1313	1326	1334
20°	1301	1320	1333
25°	1287	1309	1332
30°	1270	1305	1332
35°	1246	1289	1330
40°	1219	1279	1342
45°	1191	1267	1364
50°	1151	1262	1401
55°	1099	1272	1454
60°	1036	1291	1526
65°	978	1316	1630
70°	836	1373	1746
75°	700	1430	1814
80°	573	1381	1514
85°	497	1025	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	3.1
10°-20°	134.2	8.9
20°-30°	203.3	13.5
30°-40°	245.5	16.3
40°-50°	258.0	17.2
50°-60°	242.8	16.2
60°-70°	202.4	13.5
70°-80°	134.1	8.9
80°-90°	35.7	2.4
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°	384.4	25.6
0°-40°	630.0	41.9
0°-60°	1130.7	75.2
0°-90°	1503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1503.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	491	492	495	495	494	47
15°	471	473	476	478	479	133
25°	433	436	441	447	448	200
35°	379	383	392	401	405	237
45°	313	318	333	350	358	241
55°	234	245	271	299	310	210
65°	154	167	207	241	256	149
75°	67	94	138	166	174	73
85°	16	25	33	36	36	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	494.9	494.9	494.9	494.9	494.9
2.5°	493.0	494.0	495.9	495.9	494.9
5°	491.1	492.1	494.9	494.9	494.0
7.5°	488.3	489.2	491.1	493.0	492.1
10°	484.5	485.4	487.3	489.2	489.2
12.5°	477.9	478.8	482.6	483.5	483.5
15°	471.2	473.1	476.0	477.9	478.8
17.5°	462.7	464.6	468.4	472.2	472.2
20°	454.2	456.0	460.8	464.6	465.5
22.5°	443.7	446.6	451.3	456.0	457.9
25°	433.3	436.1	440.9	446.6	448.5
27.5°	421.0	423.8	430.4	437.1	438.0
30°	408.6	411.5	420.0	425.7	428.6
32.5°	393.5	397.3	405.8	414.3	417.2
35°	379.2	383.0	392.5	401.1	404.8
37.5°	364.1	367.9	378.3	388.7	393.5
40°	347.0	351.8	364.1	375.5	382.1
42.5°	330.9	335.6	348.0	363.1	369.8
45°	312.9	317.6	332.8	349.9	358.4
47.5°	293.9	299.6	317.6	338.5	347.0
50°	275.0	281.6	301.5	325.2	334.7
52.5°	255.0	263.6	286.3	311.9	323.3
55°	234.2	244.6	271.2	298.7	310.0
57.5°	214.3	223.8	255.0	284.4	296.8
60°	192.5	204.8	239.9	270.2	283.5
62.5°	171.6	184.9	223.8	256.0	270.2
65°	153.6	166.9	206.7	240.8	256.0
67.5°	129.9	147.9	192.5	224.7	239.9
70°	106.2	130.8	174.5	207.6	221.9
72.5°	88.2	111.9	156.4	189.6	202.9
75°	67.3	93.9	137.5	165.9	174.5
77.5°	50.3	77.7	117.6	131.8	132.7
80°	37.0	59.7	89.1	93.9	97.7
82.5°	25.6	41.7	57.8	63.5	65.4
85°	16.1	24.7	33.2	36.0	36.0
87.5°	8.5	9.5	11.4	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)