

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: P312645

Luminaire Tested: **22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K**

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: P312645  
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: 22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

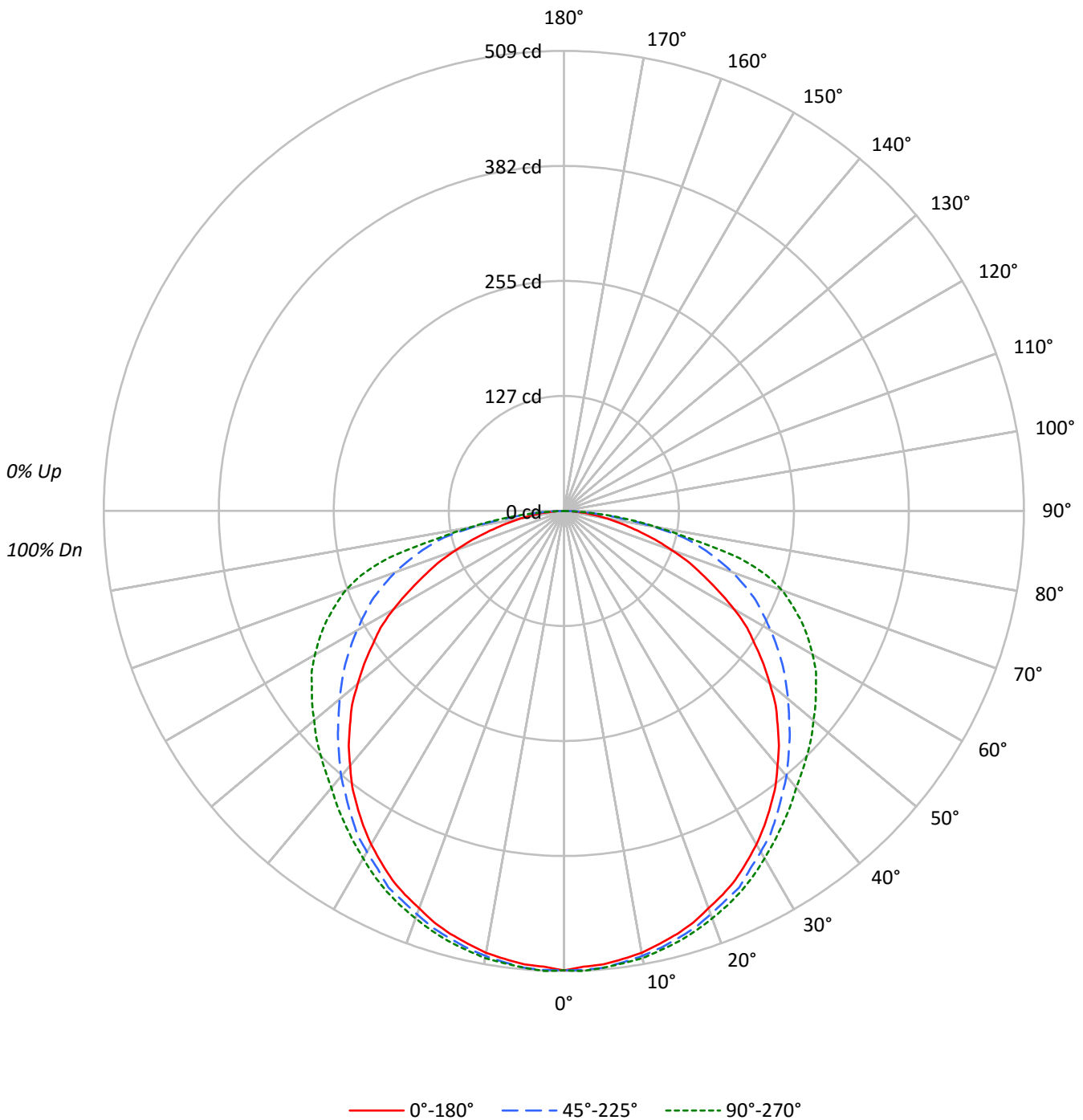
Lumens per Lamp: N/A  
Luminaire Lumens: 1618.0 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P312645

CATALOG NUMBER: 22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P312645

CATALOG NUMBER: 22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K

**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°	1368	1368	1368
5°	1360	1370	1370
10°	1356	1366	1373
15°	1349	1363	1373
20°	1340	1360	1374
25°	1336	1364	1378
30°	1324	1354	1380
35°	1310	1349	1388
40°	1292	1346	1405
45°	1273	1345	1450
50°	1246	1356	1510
55°	1212	1385	1597
60°	1172	1422	1710
65°	1091	1493	1849
70°	1002	1564	2023
75°	879	1646	2092
80°	756	1568	1641
85°	661	1139	1250



TEST NUMBER: P312645

CATALOG NUMBER: 22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.1	3.0
10°-20°	138.0	8.5
20°-30°	210.6	13.0
30°-40°	257.1	15.9
40°-50°	275.0	17.0
50°-60°	265.4	16.4
60°-70°	228.5	14.1
70°-80°	154.6	9.6
80°-90°	40.8	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°	396.7	24.5
0°-40°	653.9	40.4
0°-60°	1194.2	73.8
0°-90°	1618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1618.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	504	505	507	507	507	48
15°	484	486	489	492	493	137
25°	450	452	459	462	464	207
35°	399	402	411	419	422	249
45°	334	340	354	371	381	258
55°	258	267	295	325	340	231
65°	171	188	234	271	290	170
75°	84	112	158	190	201	91
85°	21	30	37	38	40	24
90°	0	0	0	0	0	



TEST NUMBER: P312645

CATALOG NUMBER: 22FCZ2-29HE-UNV-L83050-RDP-CA125-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	508.2	508.2	508.2	508.2	508.2
2.5°	504.7	505.9	508.2	508.2	509.4
5°	503.5	504.7	507.1	507.1	507.1
7.5°	499.9	501.1	503.5	504.7	504.7
10°	496.3	497.5	499.9	501.1	502.3
12.5°	490.4	491.6	495.1	497.5	497.5
15°	484.4	485.6	489.2	491.6	492.8
17.5°	477.3	479.7	483.2	485.6	486.8
20°	467.8	470.2	474.9	478.5	479.7
22.5°	459.4	461.8	466.6	470.2	472.5
25°	449.9	452.3	459.4	461.8	464.2
27.5°	438.0	440.4	446.3	451.1	454.7
30°	426.1	428.5	435.6	441.6	444.0
32.5°	413.0	416.6	424.9	429.7	433.3
35°	398.7	402.3	410.6	419.0	422.5
37.5°	384.5	388.0	396.4	407.1	411.8
40°	367.8	372.6	383.3	397.5	399.9
42.5°	352.3	358.3	367.8	384.5	390.4
45°	334.5	340.4	353.5	371.4	380.9
47.5°	317.8	323.8	338.0	359.5	371.4
50°	297.6	305.9	323.8	348.7	360.6
52.5°	278.5	285.7	309.5	336.8	351.1
55°	258.3	266.6	295.2	324.9	340.4
57.5°	240.4	247.6	279.7	313.0	330.9
60°	217.8	227.3	264.2	299.9	317.8
62.5°	194.0	208.3	248.8	285.7	304.7
65°	171.4	188.1	234.5	271.4	290.4
67.5°	151.2	169.0	216.6	255.9	273.8
70°	127.4	150.0	198.8	236.9	257.1
72.5°	105.9	130.9	178.5	216.6	234.5
75°	84.5	111.9	158.3	190.4	201.2
77.5°	65.5	91.7	135.7	145.2	146.4
80°	48.8	72.6	101.2	102.4	105.9
82.5°	33.3	51.2	65.5	71.4	72.6
85°	21.4	29.8	36.9	38.1	40.5
87.5°	9.5	10.7	13.1	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)