

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: P312727

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-RDP-CP125-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: P312727  
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: 22FCZ2-44HE-UNV-L83050-RDP-CP125-W2A-U-4000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET  
Light Source: (168) 4000K 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**

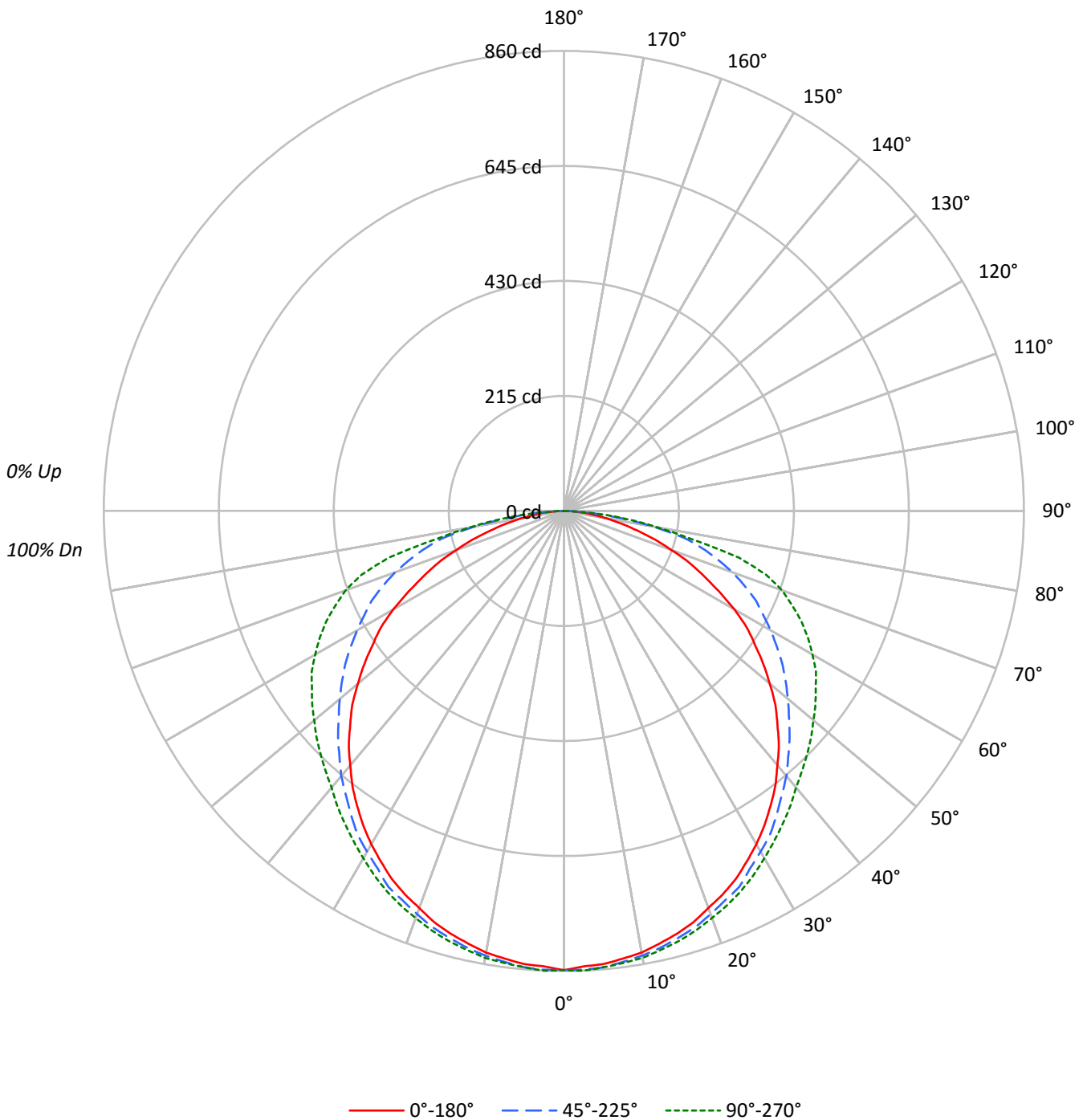
Lumens per Lamp: N/A  
Luminaire Lumens: 2732.0 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P312727

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP125-W2A-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P312727

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP125-W2A-U-4000K

**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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82				82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67				67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55				55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47				47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40				40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35				35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31				31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27				27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24				24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22				22

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

	0°	45°	90°
0°	2309	2309	2309
5°	2296	2313	2313
10°	2290	2306	2317
15°	2279	2301	2318
20°	2262	2296	2319
25°	2256	2303	2327
30°	2236	2286	2329
35°	2212	2278	2344
40°	2181	2273	2372
45°	2149	2272	2447
50°	2103	2289	2550
55°	2046	2338	2697
60°	1979	2401	2888
65°	1843	2521	3123
70°	1692	2640	3415
75°	1484	2779	3531
80°	1277	2647	2772
85°	1118	1924	2109



TEST NUMBER: P312727

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP125-W2A-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	3.0
10°-20°	233.1	8.5
20°-30°	355.6	13.0
30°-40°	434.2	15.9
40°-50°	464.3	17.0
50°-60°	448.1	16.4
60°-70°	385.7	14.1
70°-80°	261.0	9.6
80°-90°	68.9	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°	669.9	24.5
0°-40°	1104.1	40.4
0°-60°	2016.4	73.8
0°-90°	2732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	850	852	856	856	856	81
15°	818	820	826	830	832	231
25°	760	764	776	780	784	350
35°	673	679	693	707	714	421
45°	565	575	597	627	643	436
55°	436	450	498	549	575	391
65°	289	318	396	458	490	288
75°	143	189	267	322	340	153
85°	36	50	62	64	68	41
90°	0	0	0	0	0	



TEST NUMBER: P312727

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP125-W2A-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	858.2	858.2	858.2	858.2	858.2
2.5°	852.1	854.1	858.2	858.2	860.2
5°	850.1	852.1	856.2	856.2	856.2
7.5°	844.1	846.1	850.1	852.1	852.1
10°	838.1	840.1	844.1	846.1	848.1
12.5°	828.0	830.0	836.1	840.1	840.1
15°	818.0	820.0	826.0	830.0	832.0
17.5°	805.9	809.9	816.0	820.0	822.0
20°	789.8	793.9	801.9	807.9	809.9
22.5°	775.8	779.8	787.8	793.9	797.9
25°	759.7	763.7	775.8	779.8	783.8
27.5°	739.6	743.6	753.7	761.7	767.7
30°	719.5	723.5	735.6	745.6	749.6
32.5°	697.4	703.4	717.5	725.5	731.6
35°	673.3	679.3	693.4	707.4	713.5
37.5°	649.2	655.2	669.3	687.3	695.4
40°	621.0	629.1	647.1	671.3	675.3
42.5°	594.9	604.9	621.0	649.2	659.2
45°	564.7	574.8	596.9	627.0	643.1
47.5°	536.6	546.7	570.8	606.9	627.0
50°	502.4	516.5	546.7	588.9	609.0
52.5°	470.3	482.3	522.5	568.8	592.9
55°	436.1	450.2	498.4	548.7	574.8
57.5°	406.0	418.0	472.3	528.6	558.7
60°	367.8	383.9	446.2	506.5	536.6
62.5°	327.6	351.7	420.0	482.3	514.5
65°	289.4	317.5	395.9	458.2	490.4
67.5°	255.2	285.4	365.8	432.1	462.2
70°	215.0	253.2	335.6	399.9	434.1
72.5°	178.9	221.1	301.5	365.8	395.9
75°	142.7	188.9	267.3	321.6	339.6
77.5°	110.5	154.8	229.1	245.2	247.2
80°	82.4	122.6	170.8	172.8	178.9
82.5°	56.3	86.4	110.5	120.6	122.6
85°	36.2	50.2	62.3	64.3	68.3
87.5°	16.1	18.1	22.1	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)