

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: P308941

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-S-CP125-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: P308941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-24HE-UNV-L82765-S-CP125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 0.125" 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**

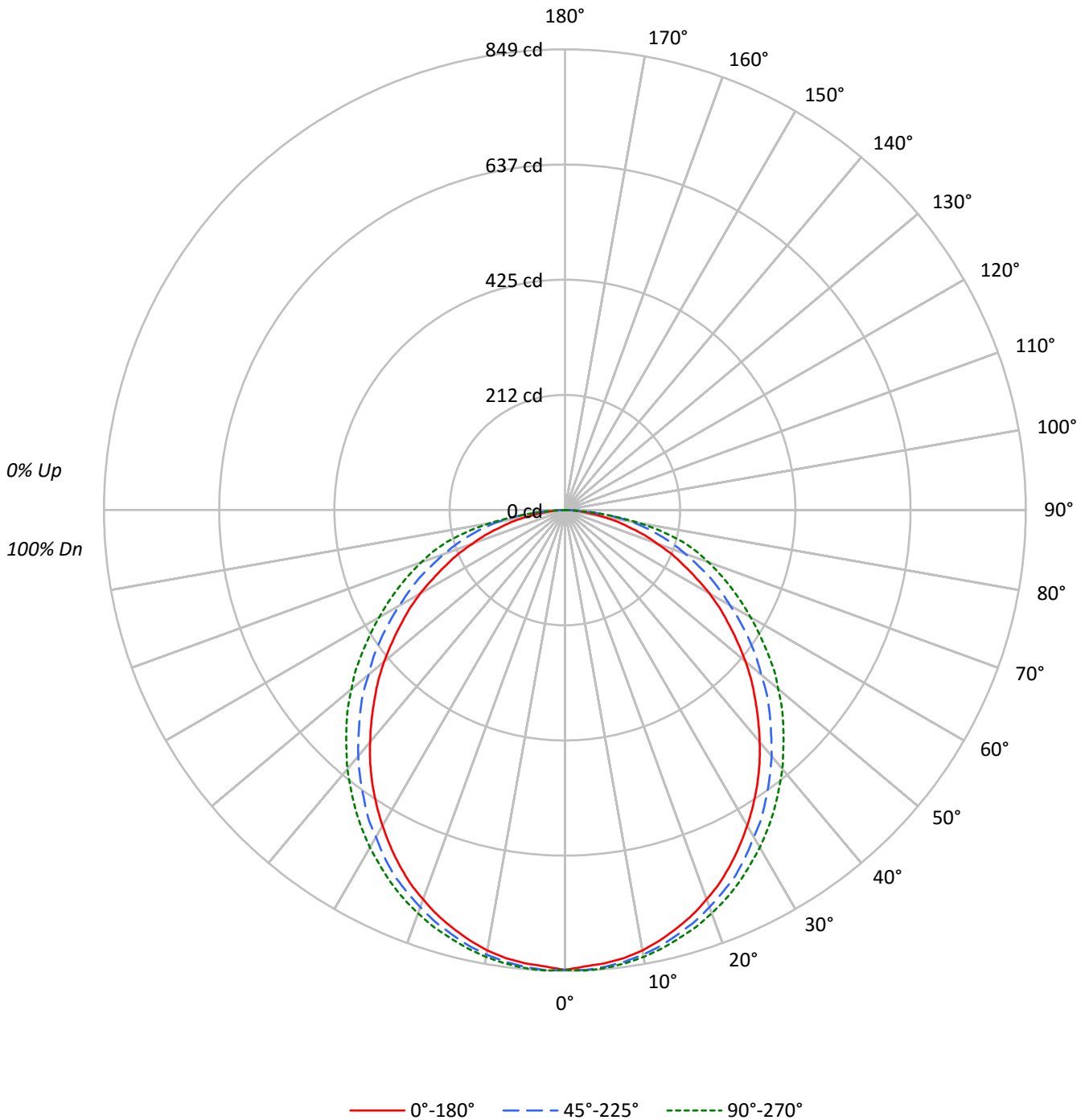
Lumens per Lamp: N/A  
Luminaire Lumens: 2364.0 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P308941

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CP125-W2A-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308941

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CP125-W2A-U-6500K

**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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2280	2280	2280
5°	2264	2282	2288
10°	2251	2273	2285
15°	2222	2252	2274
20°	2186	2230	2265
25°	2142	2207	2250
30°	2087	2163	2231
35°	2029	2123	2210
40°	1961	2081	2189
45°	1889	2031	2166
50°	1819	1976	2147
55°	1734	1940	2132
60°	1656	1894	2125
65°	1545	1882	2149
70°	1423	1865	2213
75°	1284	1892	2328
80°	1111	1948	2188
85°	920	1633	1633



TEST NUMBER: P308941

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CP125-W2A-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	3.4
10°-20°	228.0	9.6
20°-30°	341.1	14.4
30°-40°	404.0	17.1
40°-50°	411.7	17.4
50°-60°	369.0	15.6
60°-70°	288.9	12.2
70°-80°	186.3	7.9
80°-90°	55.0	2.3
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°	649.2	27.5
0°-40°	1053.1	44.5
0°-60°	1833.8	77.6
0°-90°	2364.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2364.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	838	840	845	846	847	80
15°	798	802	808	815	816	225
25°	721	728	743	753	758	332
35°	618	625	646	666	673	386
45°	496	507	534	561	569	383
55°	370	382	414	442	454	331
65°	243	257	296	324	338	241
75°	124	142	182	213	224	132
85°	30	41	53	53	53	35
90°	0	0	0	0	0	



TEST NUMBER: P308941

CATALOG NUMBER: 22FC22-24HE-UNV-L82765-S-CP125-W2A-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	847.1	847.1	847.1	847.1	847.1
2.5°	841.6	843.8	848.2	849.3	849.3
5°	838.3	840.5	844.9	846.0	847.1
7.5°	832.8	833.9	839.4	841.6	842.7
10°	823.9	826.1	831.7	835.0	836.1
12.5°	811.8	815.1	821.7	826.1	827.2
15°	797.5	801.9	808.5	815.1	816.2
17.5°	782.0	786.4	795.3	803.0	805.2
20°	763.3	768.8	778.7	787.5	790.8
22.5°	744.5	748.9	761.1	772.1	775.4
25°	721.4	728.0	743.4	753.3	757.8
27.5°	697.1	704.8	720.3	733.5	737.9
30°	671.7	679.4	696.0	712.5	718.0
32.5°	645.2	654.1	673.9	690.5	696.0
35°	617.7	625.4	646.4	666.2	672.8
37.5°	589.0	595.6	619.9	640.8	647.5
40°	558.1	566.9	592.3	616.6	623.2
42.5°	527.2	537.2	562.5	589.0	595.6
45°	496.3	507.4	533.8	561.4	569.1
47.5°	466.6	475.4	505.2	531.6	542.7
50°	434.6	443.4	472.1	501.9	512.9
52.5°	401.5	413.6	444.5	473.2	486.4
55°	369.5	381.6	413.6	442.3	454.4
57.5°	339.7	349.6	382.7	412.5	424.7
60°	307.7	316.6	351.9	383.8	394.9
62.5°	273.5	286.8	323.2	353.0	366.2
65°	242.7	257.0	295.6	324.3	337.5
67.5°	214.0	227.2	264.7	295.6	309.9
70°	180.9	198.5	237.1	268.0	281.3
72.5°	154.4	169.9	209.6	240.5	254.8
75°	123.5	142.3	182.0	212.9	223.9
77.5°	98.2	116.9	154.4	178.7	184.2
80°	71.7	90.4	125.7	137.9	141.2
82.5°	48.5	66.2	90.4	93.8	94.9
85°	29.8	40.8	52.9	52.9	52.9
87.5°	14.3	16.5	18.8	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)