

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: P308926

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-S-CA125-W2A-U-3500K**

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: P308926  
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-CA125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH 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**

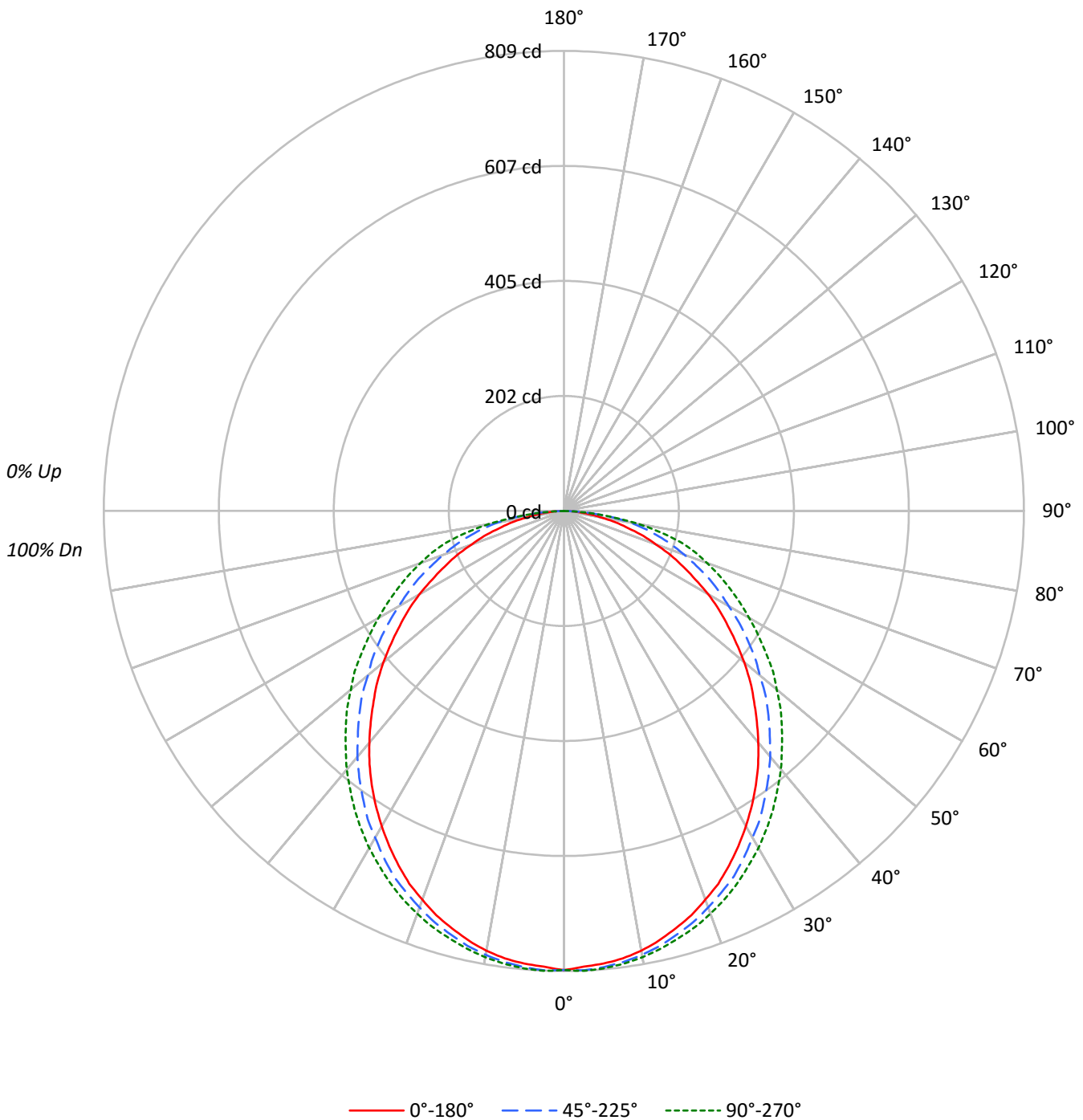
Lumens per Lamp: N/A  
Luminaire Lumens: 2253.0 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308926

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CA125-W2A-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308926

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CA125-W2A-U-3500K

**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°	2172	2172	2172
5°	2158	2175	2181
10°	2146	2166	2177
15°	2117	2147	2167
20°	2083	2125	2158
25°	2041	2104	2144
30°	1989	2061	2126
35°	1934	2024	2106
40°	1868	1983	2086
45°	1800	1936	2064
50°	1734	1883	2046
55°	1652	1849	2032
60°	1579	1805	2025
65°	1473	1794	2048
70°	1356	1778	2109
75°	1224	1803	2219
80°	1058	1857	2086
85°	877	1559	1559



TEST NUMBER: P308926

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-S-CA125-W2A-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	3.4
10°-20°	217.3	9.6
20°-30°	325.1	14.4
30°-40°	385.0	17.1
40°-50°	392.4	17.4
50°-60°	351.7	15.6
60°-70°	275.3	12.2
70°-80°	177.5	7.9
80°-90°	52.5	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°	618.7	27.5
0°-40°	1003.7	44.5
0°-60°	1747.7	77.6
0°-90°	2253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2253.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	799	801	805	806	807	76
15°	760	764	770	777	778	214
25°	688	694	708	718	722	316
35°	589	596	616	635	641	368
45°	473	484	509	535	542	365
55°	352	364	394	422	433	316
65°	231	245	282	309	322	230
75°	118	136	173	203	213	126
85°	28	39	50	50	50	33
90°	0	0	0	0	0	



TEST NUMBER: P308926

CATALOG NUMBER: 22FC22-24HE-UNV-L82765-S-CA125-W2A-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	807.3	807.3	807.3	807.3	807.3
2.5°	802.1	804.2	808.4	809.4	809.4
5°	798.9	801.0	805.2	806.3	807.3
7.5°	793.7	794.7	800.0	802.1	803.1
10°	785.2	787.3	792.6	795.8	796.8
12.5°	773.7	776.8	783.1	787.3	788.4
15°	760.0	764.2	770.5	776.8	777.9
17.5°	745.3	749.5	757.9	765.3	767.4
20°	727.4	732.7	742.1	750.6	753.7
22.5°	709.6	713.8	725.3	735.8	739.0
25°	687.5	693.8	708.5	718.0	722.2
27.5°	664.4	671.7	686.4	699.0	703.3
30°	640.2	647.5	663.3	679.1	684.3
32.5°	615.0	623.4	642.3	658.1	663.3
35°	588.7	596.0	616.0	634.9	641.2
37.5°	561.3	567.6	590.8	610.7	617.1
40°	531.9	540.3	564.5	587.6	593.9
42.5°	502.5	511.9	536.1	561.3	567.6
45°	473.0	483.6	508.8	535.1	542.4
47.5°	444.7	453.1	481.4	506.7	517.2
50°	414.2	422.6	449.9	478.3	488.8
52.5°	382.6	394.2	423.6	451.0	463.6
55°	352.2	363.7	394.2	421.5	433.1
57.5°	323.8	333.2	364.8	393.1	404.7
60°	293.3	301.7	335.3	365.8	376.3
62.5°	260.7	273.3	308.0	336.4	349.0
65°	231.3	244.9	281.7	309.1	321.7
67.5°	203.9	216.5	252.3	281.7	295.4
70°	172.4	189.2	226.0	255.4	268.1
72.5°	147.2	161.9	199.7	229.2	242.8
75°	117.7	135.6	173.4	202.9	213.4
77.5°	93.6	111.4	147.2	170.3	175.6
80°	68.3	86.2	119.8	131.4	134.6
82.5°	46.3	63.1	86.2	89.4	90.4
85°	28.4	38.9	50.5	50.5	50.5
87.5°	13.7	15.8	17.9	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)