

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: P308231

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K**

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: P308231  
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: 22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

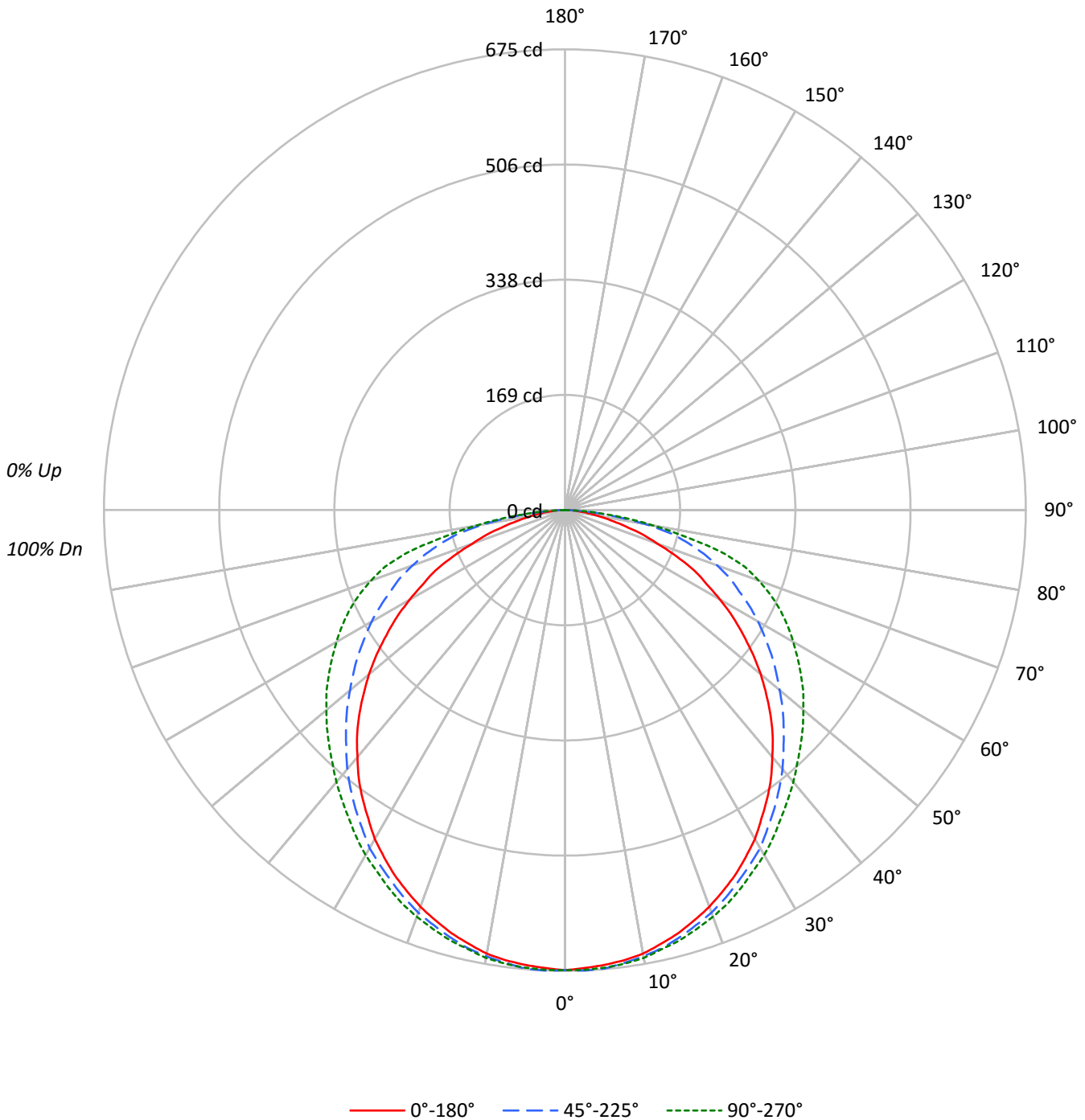
Lumens per Lamp: N/A  
Luminaire Lumens: 2047.0 lumens  
Efficiency: N/A  
Efficacy: 74.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P308231

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P308231

CATALOG NUMBER: 22FC22-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K

**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°	1814	1814	1814
5°	1807	1821	1817
10°	1803	1814	1821
15°	1788	1806	1817
20°	1771	1797	1816
25°	1752	1783	1814
30°	1729	1777	1814
35°	1697	1756	1811
40°	1660	1742	1828
45°	1622	1725	1858
50°	1568	1719	1908
55°	1496	1733	1981
60°	1411	1758	2078
65°	1332	1792	2220
70°	1138	1869	2378
75°	953	1946	2470
80°	781	1881	2061
85°	679	1396	1516



TEST NUMBER: P308231

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.9	3.1
10°-20°	182.7	8.9
20°-30°	276.9	13.5
30°-40°	334.4	16.3
40°-50°	351.4	17.2
50°-60°	330.6	16.2
60°-70°	275.7	13.5
70°-80°	182.7	8.9
80°-90°	48.7	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°	523.6	25.6
0°-40°	858.0	41.9
0°-60°	1540.0	75.2
0°-90°	2047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	669	670	674	674	673	64
15°	642	644	648	651	652	181
25°	590	594	600	608	611	272
35°	516	522	535	546	551	323
45°	426	433	453	476	488	328
55°	319	333	369	407	422	285
65°	209	227	282	328	349	204
75°	92	128	187	226	238	100
85°	22	34	45	49	49	25
90°	0	0	0	0	0	



TEST NUMBER: P308231

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	674.1	674.1	674.1	674.1	674.1
2.5°	671.5	672.8	675.3	675.3	674.1
5°	668.9	670.2	674.1	674.1	672.8
7.5°	665.0	666.3	668.9	671.5	670.2
10°	659.8	661.1	663.7	666.3	666.3
12.5°	650.8	652.1	657.3	658.6	658.6
15°	641.8	644.4	648.2	650.8	652.1
17.5°	630.2	632.7	637.9	643.1	643.1
20°	618.5	621.1	627.6	632.7	634.0
22.5°	604.3	608.2	614.7	621.1	623.7
25°	590.1	594.0	600.5	608.2	610.8
27.5°	573.3	577.2	586.2	595.3	596.6
30°	556.5	560.4	572.0	579.8	583.7
32.5°	535.9	541.1	552.7	564.3	568.2
35°	516.5	521.7	534.6	546.2	551.4
37.5°	495.9	501.0	515.2	529.4	535.9
40°	472.6	479.1	495.9	511.4	520.4
42.5°	450.7	457.1	473.9	494.6	503.6
45°	426.1	432.6	453.2	476.5	488.1
47.5°	400.3	408.0	432.6	461.0	472.6
50°	374.5	383.5	410.6	442.9	455.8
52.5°	347.4	359.0	390.0	424.8	440.3
55°	318.9	333.2	369.3	406.8	422.3
57.5°	291.8	304.7	347.4	387.4	404.2
60°	262.1	278.9	326.7	368.0	386.1
62.5°	233.7	251.8	304.7	348.6	368.0
65°	209.2	227.3	281.5	328.0	348.6
67.5°	176.9	201.4	262.1	306.0	326.7
70°	144.6	178.2	237.6	282.8	302.2
72.5°	120.1	152.4	213.1	258.3	276.3
75°	91.7	127.8	187.2	226.0	237.6
77.5°	68.4	105.9	160.1	179.5	180.8
80°	50.4	81.4	121.4	127.8	133.0
82.5°	34.9	56.8	78.8	86.5	89.1
85°	22.0	33.6	45.2	49.1	49.1
87.5°	11.6	12.9	15.5	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)