

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: P308426

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CA08-W2A-U-5500K**

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: P308426  
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-L82765-RDP-CA08-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

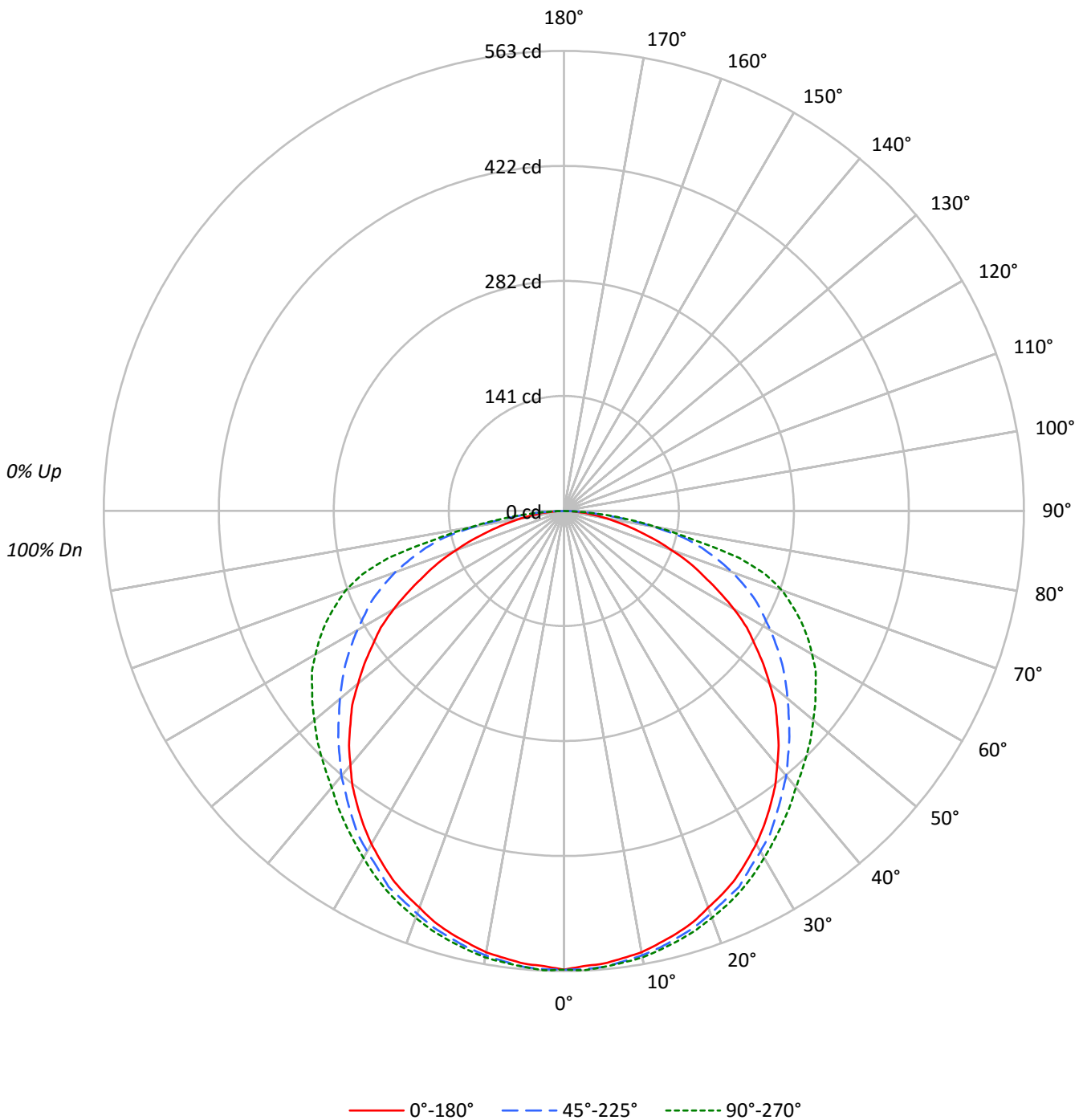
Lumens per Lamp: N/A  
Luminaire Lumens: 1787.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P308426

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA08-W2A-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308426

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA08-W2A-U-5500K

**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°	1510	1510	1510
5°	1502	1513	1513
10°	1498	1509	1516
15°	1490	1505	1516
20°	1479	1502	1517
25°	1475	1507	1522
30°	1462	1495	1523
35°	1447	1490	1533
40°	1427	1487	1552
45°	1406	1486	1601
50°	1376	1497	1667
55°	1339	1529	1764
60°	1295	1570	1889
65°	1205	1649	2043
70°	1107	1727	2234
75°	970	1817	2310
80°	835	1731	1813
85°	732	1260	1380



TEST NUMBER: P308426

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA08-W2A-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	3.0
10°-20°	152.5	8.5
20°-30°	232.6	13.0
30°-40°	284.0	15.9
40°-50°	303.7	17.0
50°-60°	293.1	16.4
60°-70°	252.3	14.1
70°-80°	170.7	9.6
80°-90°	45.1	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°	438.2	24.5
0°-40°	722.2	40.4
0°-60°	1318.9	73.8
0°-90°	1787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1787.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	556	557	560	560	560	53
15°	535	536	540	543	544	151
25°	497	500	507	510	513	229
35°	440	444	454	463	467	276
45°	369	376	390	410	421	285
55°	285	294	326	359	376	256
65°	189	208	259	300	321	188
75°	93	124	175	210	222	100
85°	24	33	41	42	45	27
90°	0	0	0	0	0	



TEST NUMBER: P308426

CATALOG NUMBER: 22FC22-29HE-UNV-L82765-RDP-CA08-W2A-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	561.3	561.3	561.3	561.3	561.3
2.5°	557.4	558.7	561.3	561.3	562.6
5°	556.1	557.4	560.0	560.0	560.0
7.5°	552.1	553.4	556.1	557.4	557.4
10°	548.2	549.5	552.1	553.4	554.8
12.5°	541.6	542.9	546.9	549.5	549.5
15°	535.0	536.4	540.3	542.9	544.2
17.5°	527.1	529.8	533.7	536.4	537.7
20°	516.6	519.3	524.5	528.5	529.8
22.5°	507.4	510.1	515.3	519.3	521.9
25°	496.9	499.5	507.4	510.1	512.7
27.5°	483.8	486.4	493.0	498.2	502.2
30°	470.6	473.3	481.1	487.7	490.3
32.5°	456.2	460.1	469.3	474.6	478.5
35°	440.4	444.3	453.5	462.7	466.7
37.5°	424.6	428.6	437.8	449.6	454.8
40°	406.2	411.5	423.3	439.1	441.7
42.5°	389.1	395.7	406.2	424.6	431.2
45°	369.4	376.0	390.4	410.2	420.7
47.5°	351.0	357.6	373.3	397.0	410.2
50°	328.6	337.8	357.6	385.2	398.3
52.5°	307.6	315.5	341.8	372.0	387.8
55°	285.3	294.5	326.0	358.9	376.0
57.5°	265.5	273.4	308.9	345.7	365.5
60°	240.6	251.1	291.8	331.3	351.0
62.5°	214.3	230.1	274.7	315.5	336.5
65°	189.3	207.7	259.0	299.7	320.8
67.5°	167.0	186.7	239.3	282.6	302.4
70°	140.7	165.6	219.5	261.6	284.0
72.5°	117.0	144.6	197.2	239.3	259.0
75°	93.3	123.6	174.8	210.3	222.2
77.5°	72.3	101.2	149.9	160.4	161.7
80°	53.9	80.2	111.7	113.1	117.0
82.5°	36.8	56.5	72.3	78.9	80.2
85°	23.7	32.9	40.8	42.1	44.7
87.5°	10.5	11.8	14.5	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)