

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: P308893

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-S-CP125-W2A-U-5000K**

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: P308893  
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: 22FCZ2-20HE-UNV-L82765-S-CP125-W2A-U-5000K  
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**

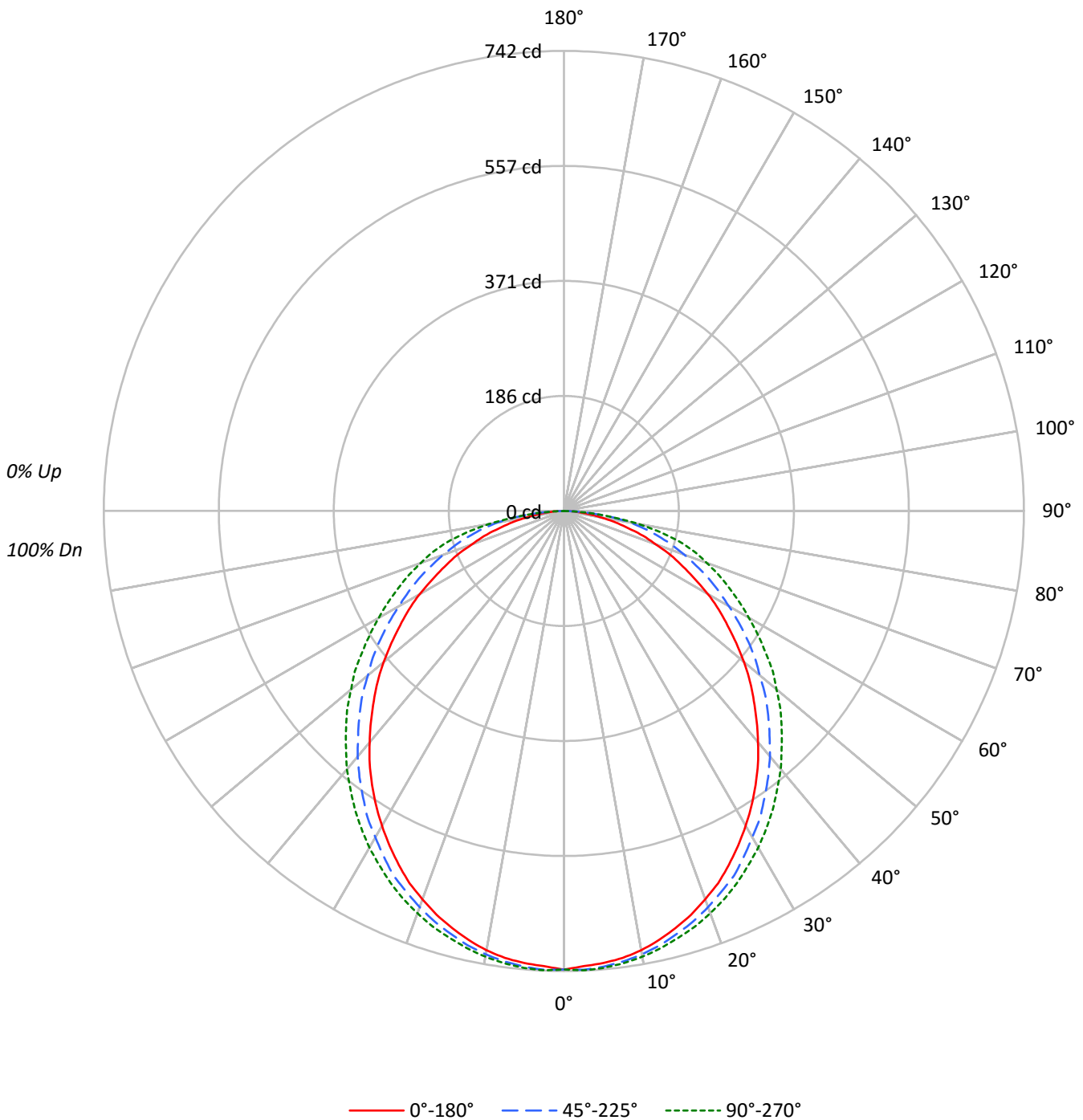
Lumens per Lamp: N/A  
Luminaire Lumens: 2064.0 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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



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### Luminous Intensity Polar Plot





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**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°	1990	1990	1990
5°	1977	1993	1998
10°	1966	1984	1995
15°	1940	1967	1985
20°	1908	1947	1977
25°	1870	1927	1964
30°	1822	1888	1948
35°	1772	1854	1930
40°	1712	1816	1911
45°	1649	1774	1891
50°	1588	1726	1875
55°	1514	1694	1862
60°	1446	1653	1856
65°	1349	1643	1876
70°	1242	1629	1932
75°	1122	1652	2033
80°	970	1702	1911
85°	803	1426	1426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.9	3.4
10°-20°	199.0	9.6
20°-30°	297.8	14.4
30°-40°	352.7	17.1
40°-50°	359.4	17.4
50°-60°	322.2	15.6
60°-70°	252.2	12.2
70°-80°	162.6	7.9
80°-90°	48.0	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°	566.8	27.5
0°-40°	919.5	44.5
0°-60°	1601.1	77.6
0°-90°	2064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	732	734	738	739	740	69
15°	696	700	706	712	713	196
25°	630	636	649	658	662	290
35°	539	546	564	582	587	337
45°	433	443	466	490	497	335
55°	323	333	361	386	397	289
65°	212	224	258	283	295	210
75°	108	124	159	186	196	116
85°	26	36	46	46	46	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	739.6	739.6	739.6	739.6	739.6
2.5°	734.8	736.7	740.6	741.5	741.5
5°	731.9	733.8	737.7	738.6	739.6
7.5°	727.1	728.0	732.9	734.8	735.7
10°	719.4	721.3	726.1	729.0	730.0
12.5°	708.8	711.7	717.4	721.3	722.3
15°	696.3	700.1	705.9	711.7	712.6
17.5°	682.8	686.6	694.3	701.1	703.0
20°	666.4	671.2	679.9	687.6	690.5
22.5°	650.0	653.9	664.5	674.1	677.0
25°	629.8	635.6	649.1	657.7	661.6
27.5°	608.6	615.4	628.8	640.4	644.3
30°	586.5	593.2	607.7	622.1	626.9
32.5°	563.4	571.1	588.4	602.8	607.7
35°	539.3	546.0	564.3	581.7	587.4
37.5°	514.3	520.0	541.2	559.5	565.3
40°	487.3	495.0	517.1	538.3	544.1
42.5°	460.3	469.0	491.1	514.3	520.0
45°	433.4	443.0	466.1	490.2	496.9
47.5°	407.4	415.1	441.1	464.2	473.8
50°	379.4	387.1	412.2	438.2	447.8
52.5°	350.5	361.1	388.1	413.1	424.7
55°	322.6	333.2	361.1	386.2	396.8
57.5°	296.6	305.3	334.2	360.2	370.8
60°	268.7	276.4	307.2	335.1	344.8
62.5°	238.8	250.4	282.2	308.2	319.7
65°	211.9	224.4	258.1	283.1	294.7
67.5°	186.8	198.4	231.1	258.1	270.6
70°	157.9	173.3	207.0	234.0	245.6
72.5°	134.8	148.3	183.0	209.9	222.5
75°	107.9	124.2	158.9	185.9	195.5
77.5°	85.7	102.1	134.8	156.0	160.8
80°	62.6	79.0	109.8	120.4	123.3
82.5°	42.4	57.8	79.0	81.9	82.8
85°	26.0	35.6	46.2	46.2	46.2
87.5°	12.5	14.4	16.4	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)