

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: P308665

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-CP125-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: P308665  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
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-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED 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**

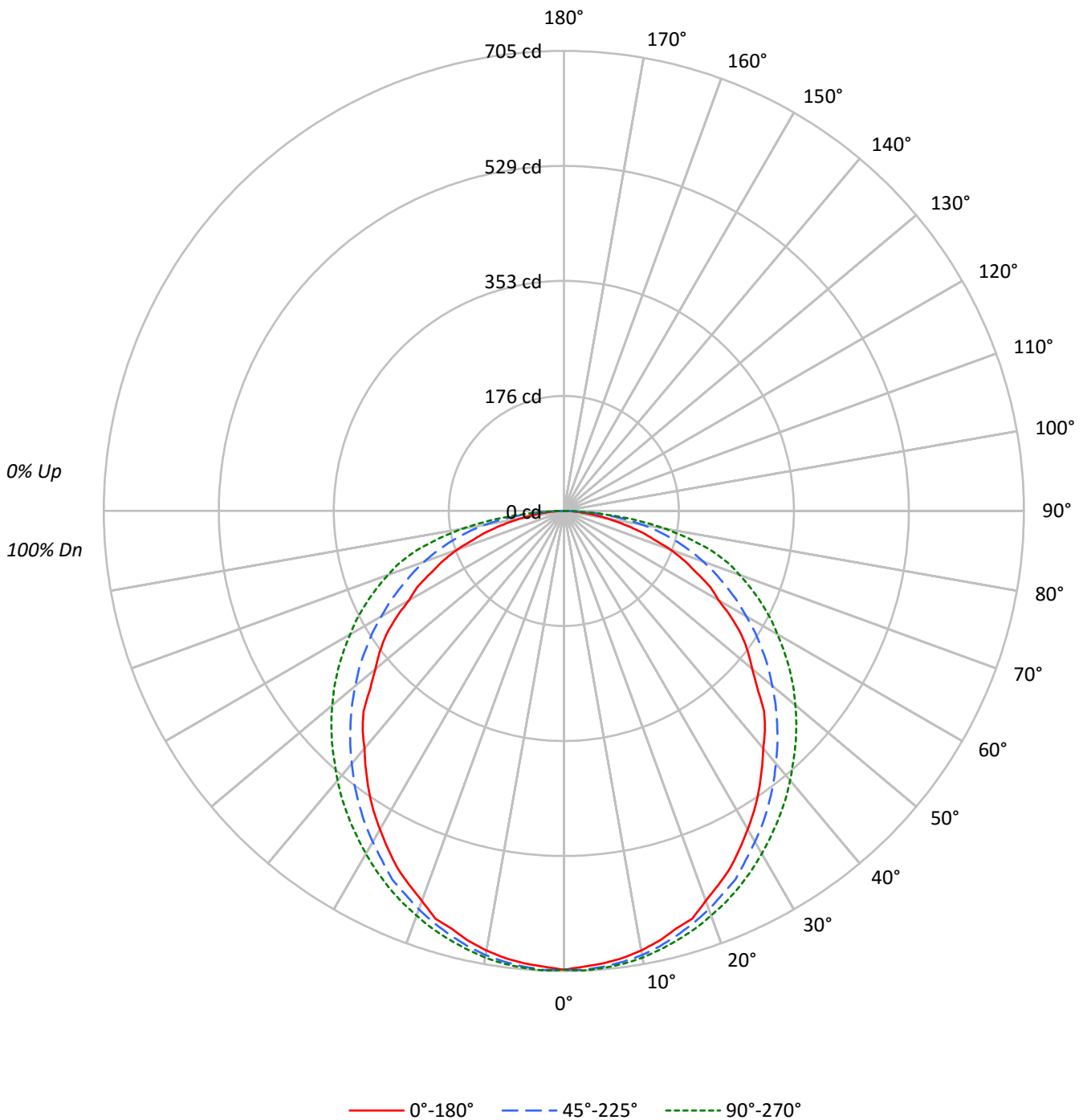
Lumens per Lamp: N/A  
Luminaire Lumens: 2095.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



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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	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	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	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1891	1891	1891
5°	1880	1893	1899
10°	1868	1888	1899
15°	1846	1874	1894
20°	1820	1861	1889
25°	1792	1849	1887
30°	1751	1820	1885
35°	1713	1799	1887
40°	1670	1775	1895
45°	1652	1759	1912
50°	1578	1746	1939
55°	1562	1741	1980
60°	1473	1738	2034
65°	1430	1749	2126
70°	1373	1791	2257
75°	1251	1845	2429
80°	1072	1911	2455
85°	868	1828	2106



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	3.2
10°-20°	189.7	9.1
20°-30°	285.6	13.6
30°-40°	342.7	16.4
40°-50°	358.2	17.1
50°-60°	333.8	15.9
60°-70°	273.8	13.1
70°-80°	184.5	8.8
80°-90°	60.1	2.9
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°	541.8	25.9
0°-40°	884.5	42.2
0°-60°	1576.6	75.3
0°-90°	2095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2095.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	696	698	701	702	703	66
15°	663	667	673	679	680	187
25°	604	608	623	632	636	277
35°	521	528	548	566	574	326
45°	434	437	462	490	502	332
55°	333	339	371	406	422	295
65°	225	235	275	315	334	223
75°	120	133	178	218	234	127
85°	28	40	59	69	68	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.9	702.9	702.9	702.9	702.9
2.5°	698.9	700.9	703.9	704.9	704.9
5°	695.9	697.9	700.9	701.9	702.9
7.5°	690.9	692.9	696.9	698.9	699.9
10°	683.8	685.8	690.9	693.9	694.9
12.5°	674.8	676.8	682.8	686.8	687.8
15°	662.8	666.8	672.8	678.8	679.8
17.5°	654.8	653.8	661.8	668.8	670.8
20°	635.7	640.7	649.7	657.8	659.8
22.5°	619.7	623.7	635.7	644.7	648.7
25°	603.6	607.6	622.7	631.7	635.7
27.5°	583.6	589.6	603.6	616.7	621.7
30°	563.5	569.5	585.6	600.6	606.6
32.5°	543.5	550.5	567.5	583.6	590.6
35°	521.4	528.4	547.5	566.5	574.5
37.5°	498.3	507.4	527.4	548.5	557.5
40°	475.3	484.3	505.4	529.4	539.5
42.5°	456.2	460.2	484.3	510.4	520.4
45°	434.2	437.2	462.2	490.3	502.4
47.5°	402.1	413.1	440.2	471.3	483.3
50°	377.0	389.0	417.1	450.2	463.2
52.5°	356.0	364.0	395.1	428.2	443.2
55°	332.9	338.9	371.0	406.1	422.1
57.5°	304.8	315.8	347.9	384.0	400.1
60°	273.7	287.8	322.9	362.0	378.0
62.5°	253.7	261.7	299.8	338.9	357.0
65°	224.6	234.6	274.7	314.8	333.9
67.5°	200.5	210.6	251.7	291.8	310.8
70°	174.5	184.5	227.6	267.7	286.8
72.5°	144.4	158.4	203.5	243.7	263.7
75°	120.3	133.4	177.5	217.6	233.6
77.5°	93.3	110.3	151.4	184.5	196.5
80°	69.2	86.2	123.3	147.4	158.4
82.5°	47.1	64.2	92.2	110.3	116.3
85°	28.1	40.1	59.2	69.2	68.2
87.5°	13.0	17.0	24.1	24.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)