

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: P308653

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-CA08-W2A-U-6500K**

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: P308653  
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-CA08-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 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**

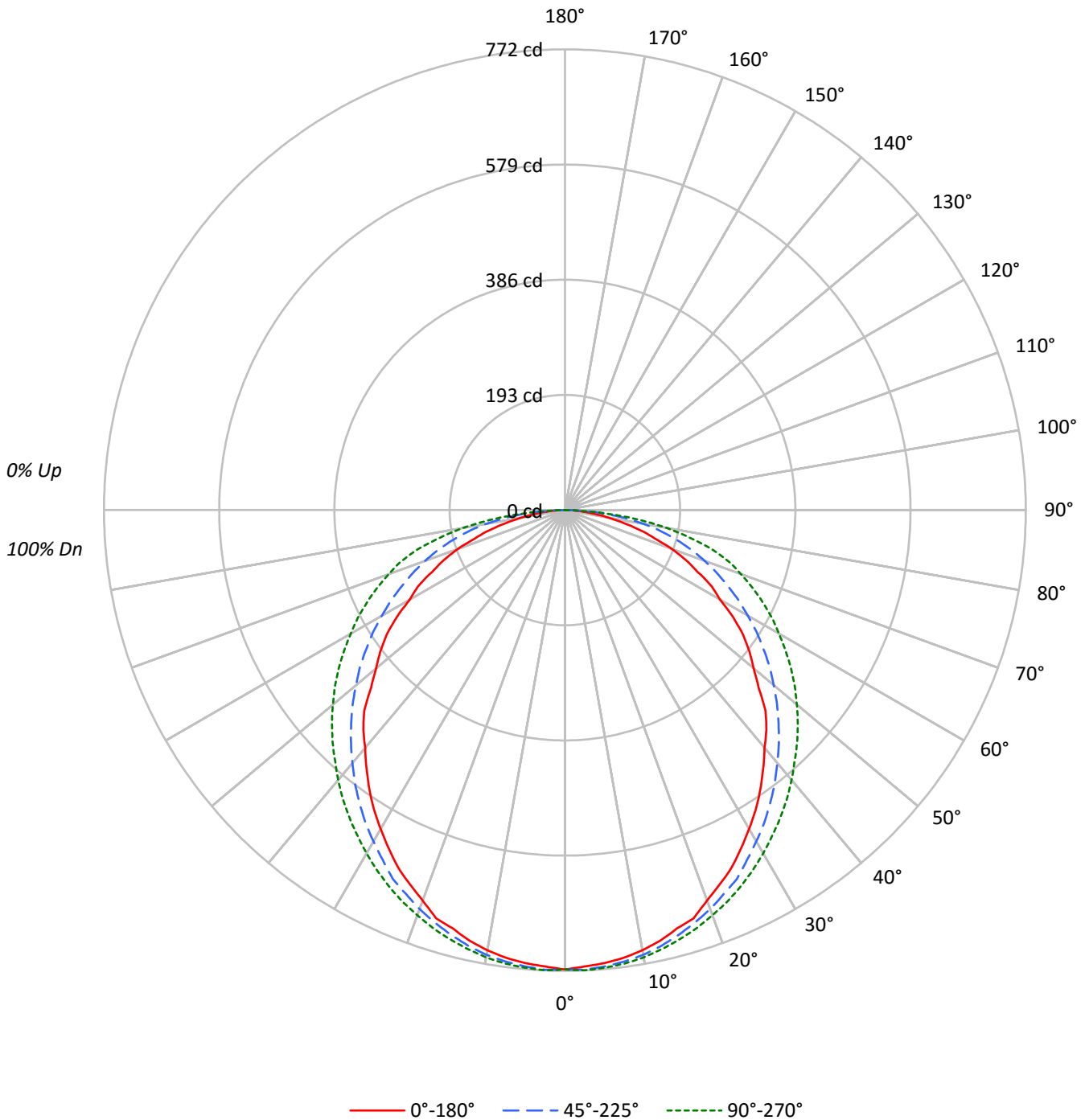
Lumens per Lamp: N/A  
Luminaire Lumens: 2294.0 lumens  
Efficiency: N/A  
Efficacy: 116.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2071	2071	2071
5°	2058	2073	2079
10°	2046	2067	2079
15°	2022	2052	2074
20°	1993	2038	2069
25°	1963	2024	2067
30°	1917	1992	2064
35°	1875	1969	2067
40°	1828	1944	2075
45°	1809	1926	2093
50°	1728	1912	2123
55°	1710	1906	2168
60°	1613	1903	2228
65°	1566	1915	2328
70°	1503	1961	2471
75°	1370	2020	2660
80°	1175	2092	2689
85°	948	2001	2306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.8	3.2
10°-20°	207.8	9.1
20°-30°	312.7	13.6
30°-40°	375.3	16.4
40°-50°	392.3	17.1
50°-60°	365.6	15.9
60°-70°	299.8	13.1
70°-80°	202.0	8.8
80°-90°	65.8	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°	593.3	25.9
0°-40°	968.6	42.2
0°-60°	1726.4	75.3
0°-90°	2294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2294.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	762	764	768	769	770	72
15°	726	730	737	743	744	205
25°	661	665	682	692	696	304
35°	571	579	600	620	629	357
45°	475	479	506	537	550	363
55°	364	371	406	445	462	323
65°	246	257	301	345	366	245
75°	132	146	194	238	256	139
85°	31	44	65	76	75	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	769.7	769.7	769.7	769.7	769.7
2.5°	765.3	767.5	770.8	771.9	771.9
5°	762.0	764.2	767.5	768.6	769.7
7.5°	756.5	758.7	763.1	765.3	766.4
10°	748.8	751.0	756.5	759.8	760.9
12.5°	738.9	741.1	747.7	752.1	753.2
15°	725.7	730.1	736.7	743.3	744.4
17.5°	717.0	715.9	724.6	732.3	734.5
20°	696.1	701.6	711.5	720.2	722.4
22.5°	678.5	682.9	696.1	706.0	710.4
25°	661.0	665.4	681.8	691.7	696.1
27.5°	639.0	645.6	661.0	675.2	680.7
30°	617.0	623.6	641.2	657.7	664.3
32.5°	595.1	602.8	621.4	639.0	646.7
35°	570.9	578.6	599.5	620.3	629.1
37.5°	545.7	555.6	577.5	600.6	610.5
40°	520.4	530.3	553.4	579.7	590.7
42.5°	499.6	504.0	530.3	558.9	569.8
45°	475.4	478.7	506.2	536.9	550.1
47.5°	440.3	452.4	482.0	516.0	529.2
50°	412.8	426.0	456.7	493.0	507.2
52.5°	389.8	398.6	432.6	468.8	485.3
55°	364.5	371.1	406.2	444.7	462.2
57.5°	333.8	345.9	381.0	420.5	438.1
60°	299.7	315.1	353.5	396.4	413.9
62.5°	277.8	286.6	328.3	371.1	390.9
65°	245.9	256.9	300.8	344.8	365.6
67.5°	219.6	230.6	275.6	319.5	340.4
70°	191.0	202.0	249.2	293.2	314.0
72.5°	158.1	173.5	222.9	266.8	288.8
75°	131.8	146.0	194.3	238.3	255.8
77.5°	102.1	120.8	165.8	202.0	215.2
80°	75.8	94.4	135.0	161.4	173.5
82.5°	51.6	70.3	101.0	120.8	127.4
85°	30.7	43.9	64.8	75.8	74.7
87.5°	14.3	18.7	26.4	26.4	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)