

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: P307843

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-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: P307843  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-6500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 6500K 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**

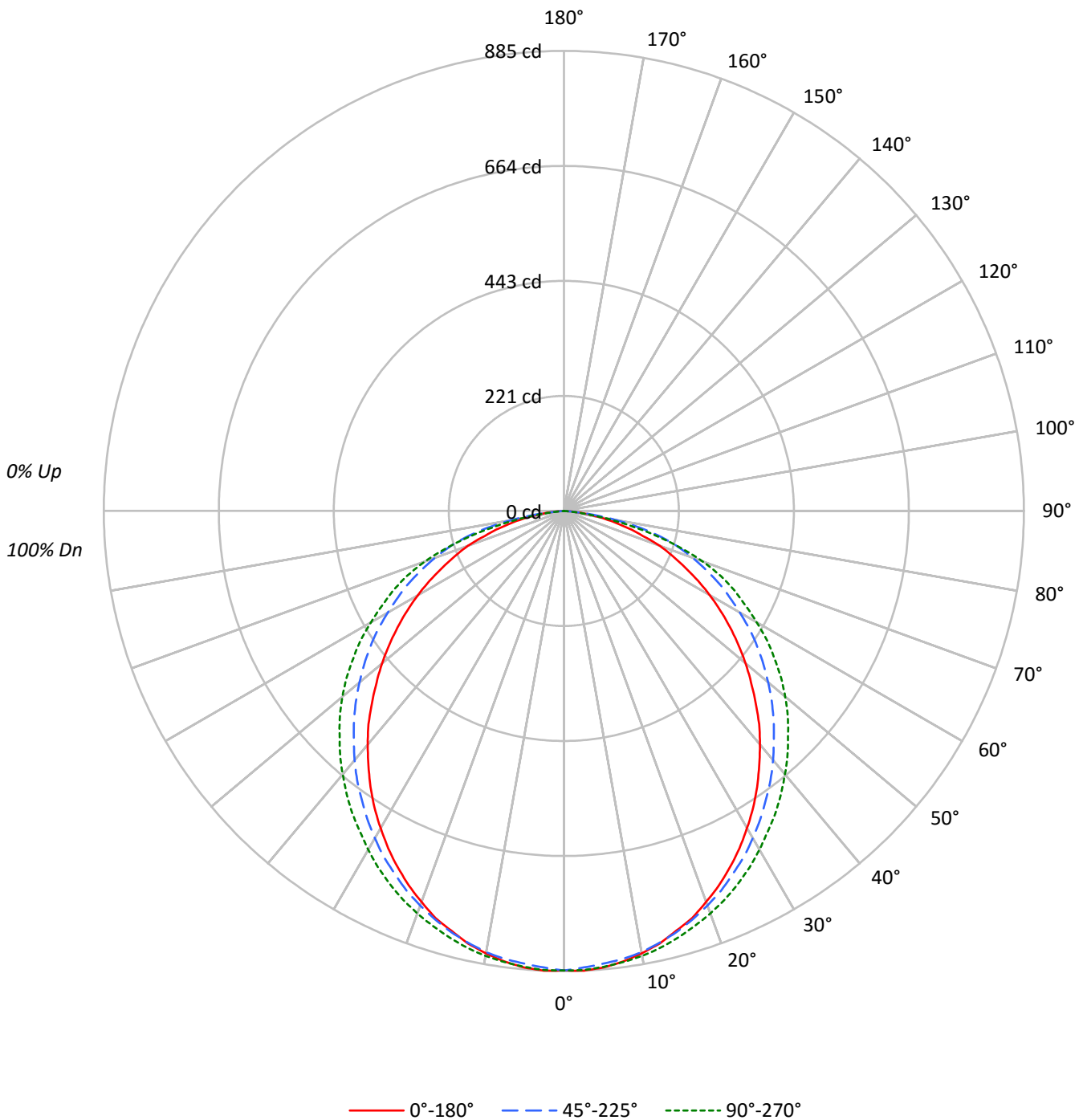
Lumens per Lamp: N/A  
Luminaire Lumens: 2476.0 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	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	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2379	2379	2379
5°	2381	2361	2378
10°	2361	2355	2375
15°	2329	2336	2367
20°	2292	2313	2359
25°	2245	2285	2351
30°	2190	2258	2338
35°	2129	2226	2331
40°	2061	2199	2324
45°	1985	2172	2322
50°	1912	2148	2328
55°	1832	2131	2321
60°	1744	2101	2306
65°	1642	2095	2306
70°	1545	2076	2241
75°	1340	2030	1914
80°	1085	1636	1275
85°	719	568	380



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.5	3.4
10°-20°	237.5	9.6
20°-30°	356.3	14.4
30°-40°	425.0	17.2
40°-50°	439.3	17.7
50°-60°	401.1	16.2
60°-70°	315.7	12.7
70°-80°	183.8	7.4
80°-90°	33.9	1.4
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°	677.2	27.4
0°-40°	1102.2	44.5
0°-60°	1942.7	78.5
0°-90°	2476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2476.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	881	879	874	881	880	84
15°	836	837	838	850	850	236
25°	756	760	770	788	792	348
35°	648	657	678	703	710	405
45°	522	539	571	603	610	403
55°	390	411	454	487	495	349
65°	258	285	329	355	362	256
75°	129	160	195	192	184	137
85°	23	33	18	15	12	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	883.9	883.9	883.9	883.9	883.9
2.5°	885.1	882.7	879.0	885.1	883.9
5°	881.4	879.0	874.1	881.4	880.2
7.5°	874.1	871.6	869.2	876.5	875.3
10°	864.2	863.0	861.8	870.4	869.2
12.5°	852.0	852.0	850.7	860.6	860.6
15°	836.0	837.2	838.5	849.5	849.5
17.5°	821.3	820.1	823.7	836.0	837.2
20°	800.4	802.9	807.8	822.5	823.7
22.5°	779.5	782.0	790.6	805.3	809.0
25°	756.2	759.9	769.7	788.1	791.8
27.5°	731.7	736.6	750.1	769.7	773.4
30°	704.7	712.0	726.8	748.9	752.5
32.5°	677.6	685.0	703.4	725.5	730.4
35°	648.2	656.8	677.6	703.4	709.6
37.5°	617.5	628.5	653.1	678.9	686.2
40°	586.8	599.1	626.1	653.1	661.7
42.5°	556.1	568.4	597.9	628.5	637.1
45°	521.7	538.9	570.8	602.8	610.1
47.5°	488.6	507.0	542.6	574.5	584.4
50°	456.7	475.1	513.1	546.3	556.1
52.5°	423.5	443.2	483.7	518.1	526.7
55°	390.4	411.3	454.2	487.4	494.7
57.5°	357.2	379.3	423.5	455.4	464.0
60°	324.1	347.4	390.4	422.3	428.4
62.5°	290.9	315.5	359.7	387.9	394.1
65°	257.8	284.8	329.0	354.8	362.1
67.5°	225.9	252.9	295.9	320.4	326.5
70°	196.4	221.0	263.9	282.4	284.8
72.5°	159.6	190.3	232.0	241.8	235.7
75°	128.9	159.6	195.2	191.5	184.1
77.5°	98.2	128.9	152.2	139.9	130.1
80°	70.0	100.7	105.6	87.2	82.3
82.5°	45.4	70.0	58.9	45.4	36.8
85°	23.3	33.1	18.4	14.7	12.3
87.5°	7.4	4.9	2.5	2.5	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)