

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: P307116

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CA08-W2A-U-3000K**

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: P307116  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-35-UNV-L82765-HRP-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

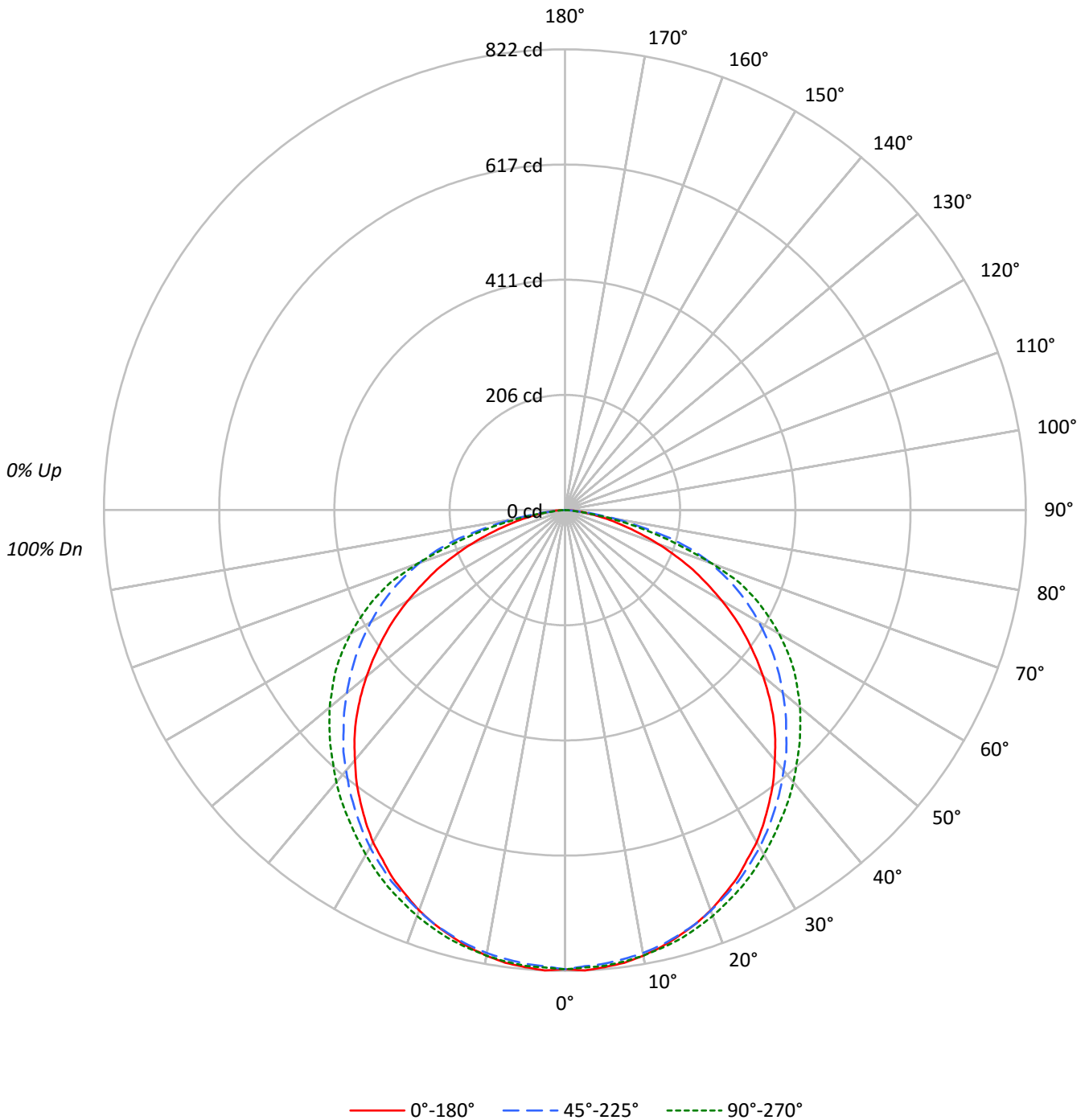
Lumens per Lamp: N/A  
Luminaire Lumens: 2412.0 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2204	2204	2204
5°	2211	2194	2204
10°	2205	2193	2205
15°	2191	2187	2208
20°	2176	2178	2207
25°	2153	2171	2207
30°	2126	2159	2206
35°	2088	2143	2210
40°	2046	2132	2227
45°	2003	2124	2251
50°	1934	2124	2292
55°	1850	2135	2342
60°	1739	2151	2372
65°	1603	2173	2386
70°	1397	2178	2196
75°	1151	2026	1775
80°	905	1457	1187
85°	704	562	281



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.5	3.2
10°-20°	222.5	9.2
20°-30°	337.9	14.0
30°-40°	409.5	17.0
40°-50°	431.5	17.9
50°-60°	402.8	16.7
60°-70°	321.9	13.3
70°-80°	177.1	7.3
80°-90°	31.3	1.3
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°	638.0	26.5
0°-40°	1047.4	43.4
0°-60°	1881.7	78.0
0°-90°	2412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2412.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	819	819	819	819	819	
5°	818	816	812	818	816	78
15°	786	786	785	793	793	222
25°	725	727	731	742	743	334
35°	636	642	652	669	673	398
45°	526	536	558	583	592	405
55°	394	414	455	487	499	352
65°	252	284	341	369	375	248
75°	111	158	195	175	171	119
85°	23	29	18	11	9	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	819.1	819.1	819.1	819.1	819.1
2.5°	822.2	819.9	814.6	819.1	816.9
5°	818.4	816.1	812.3	817.6	816.1
7.5°	814.6	811.5	807.8	813.8	812.3
10°	807.0	804.7	802.4	807.8	807.0
12.5°	797.9	797.1	794.9	800.9	800.2
15°	786.5	786.5	785.0	792.6	792.6
17.5°	774.4	773.6	774.4	782.7	782.0
20°	760.0	760.0	760.7	770.6	770.6
22.5°	742.5	743.3	745.6	757.7	756.9
25°	725.1	726.6	731.1	741.8	743.3
27.5°	703.8	707.6	712.9	725.8	727.4
30°	684.1	686.4	694.7	706.9	709.9
32.5°	660.6	665.2	674.3	687.9	691.7
35°	635.6	641.6	652.3	669.0	672.7
37.5°	610.6	615.9	630.3	647.7	654.5
40°	582.5	591.6	606.8	626.5	634.1
42.5°	555.2	564.3	584.8	605.2	612.1
45°	526.4	536.2	558.2	583.2	591.6
47.5°	494.5	505.9	533.9	560.5	569.6
50°	461.9	476.3	507.4	537.0	547.6
52.5°	427.8	446.0	481.6	512.7	522.6
55°	394.4	414.1	455.1	486.9	499.1
57.5°	360.3	381.5	427.8	464.2	471.0
60°	323.1	348.9	399.7	431.6	440.7
62.5°	286.7	316.3	370.9	401.2	408.8
65°	251.8	283.7	341.3	369.4	374.7
67.5°	213.9	251.8	308.7	334.5	336.0
70°	177.5	221.5	276.8	289.0	279.1
72.5°	141.8	188.9	239.7	229.8	221.5
75°	110.7	158.5	194.9	175.2	170.7
77.5°	81.9	129.7	139.6	128.9	120.6
80°	58.4	102.4	94.0	80.4	76.6
82.5°	40.2	64.5	51.6	40.2	34.9
85°	22.8	28.8	18.2	11.4	9.1
87.5°	9.9	6.8	3.8	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)