

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: P307599

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP187-W2A-U-5700K**

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: P307599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
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-CP187-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 5700K 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**

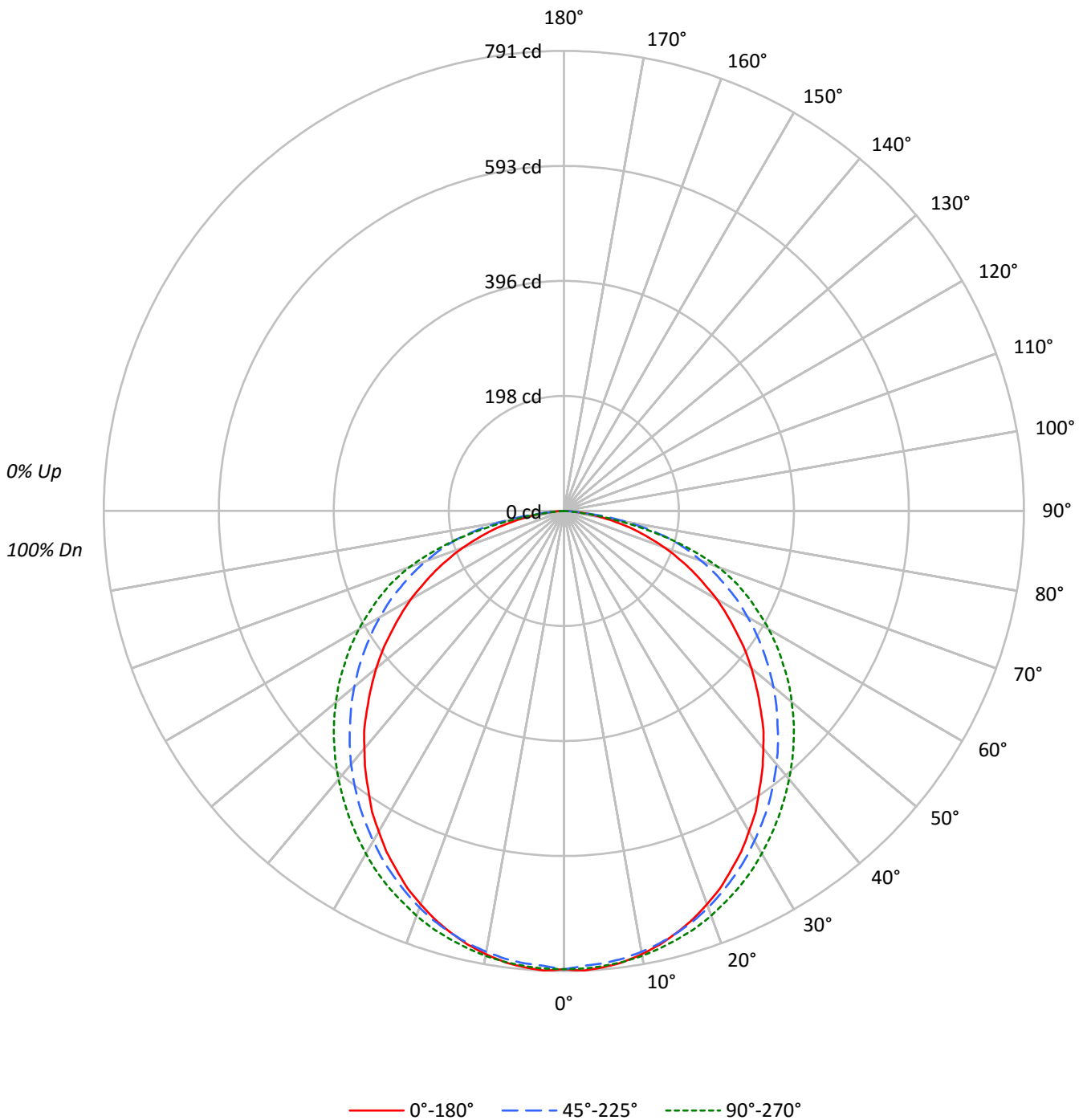
Lumens per Lamp: N/A  
Luminaire Lumens: 2287.0 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2120	2120	2120
5°	2127	2109	2121
10°	2114	2103	2122
15°	2091	2093	2121
20°	2060	2078	2121
25°	2021	2058	2118
30°	1977	2036	2114
35°	1925	2019	2113
40°	1874	1999	2116
45°	1816	1977	2127
50°	1763	1968	2141
55°	1696	1962	2160
60°	1636	1965	2190
65°	1552	1971	2224
70°	1456	1986	2223
75°	1320	2005	2010
80°	1083	1731	1430
85°	803	818	330



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.6	3.3
10°-20°	213.0	9.3
20°-30°	320.8	14.0
30°-40°	385.0	16.8
40°-50°	401.3	17.5
50°-60°	371.5	16.2
60°-70°	300.1	13.1
70°-80°	183.0	8.0
80°-90°	37.8	1.7
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°	608.4	26.6
0°-40°	993.3	43.4
0°-60°	1766.1	77.2
0°-90°	2287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2287.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	787	785	781	786	785	75
15°	751	751	751	761	761	212
25°	681	685	693	710	713	314
35°	586	595	614	637	643	367
45°	477	492	520	549	559	369
55°	362	380	418	451	460	324
65°	244	268	310	341	349	241
75°	127	155	193	196	193	133
85°	26	39	26	15	11	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	787.9	787.9	787.9	787.9	787.9
2.5°	790.9	788.4	782.8	788.4	787.4
5°	787.4	785.3	780.7	786.3	785.3
7.5°	782.3	780.2	776.2	782.8	781.8
10°	773.6	772.6	769.5	777.2	776.7
12.5°	763.4	762.9	761.4	770.0	769.5
15°	750.7	751.2	751.2	761.4	761.4
17.5°	736.4	737.4	739.4	750.7	752.2
20°	719.5	721.6	725.7	738.4	740.5
22.5°	702.2	703.7	709.9	725.2	727.2
25°	680.8	684.9	693.0	710.4	713.4
27.5°	660.4	664.0	675.2	693.0	698.1
30°	636.4	642.0	655.3	674.7	680.3
32.5°	613.5	619.6	634.9	657.3	662.4
35°	585.9	595.1	614.5	636.9	643.1
37.5°	560.9	569.6	591.5	616.0	623.2
40°	533.4	544.1	569.1	595.1	602.3
42.5°	507.9	518.1	545.1	571.7	581.3
45°	477.3	491.6	519.6	548.7	558.9
47.5°	449.3	463.5	495.7	526.8	536.0
50°	421.2	436.5	470.2	502.3	511.5
52.5°	392.2	408.5	444.7	476.8	487.5
55°	361.6	380.4	418.2	450.8	460.5
57.5°	332.5	351.9	392.2	425.3	435.0
60°	303.9	323.8	365.1	396.7	406.9
62.5°	272.3	295.8	338.6	369.7	377.4
65°	243.8	267.7	309.5	340.6	349.3
67.5°	213.7	239.7	281.5	310.1	318.2
70°	185.1	212.1	252.4	278.9	282.5
72.5°	154.5	182.1	222.8	239.7	239.7
75°	127.0	155.0	192.8	195.8	193.3
77.5°	96.9	128.0	152.5	146.4	140.2
80°	69.9	100.5	111.7	100.5	92.3
82.5°	46.9	72.9	67.3	53.5	47.4
85°	26.0	38.8	26.5	14.8	10.7
87.5°	9.7	8.7	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)