

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: P307597

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP187-W2A-U-5000K**

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: P307597
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-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 2259.0 lumens
Efficiency: N/A
Efficacy: 112.4 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

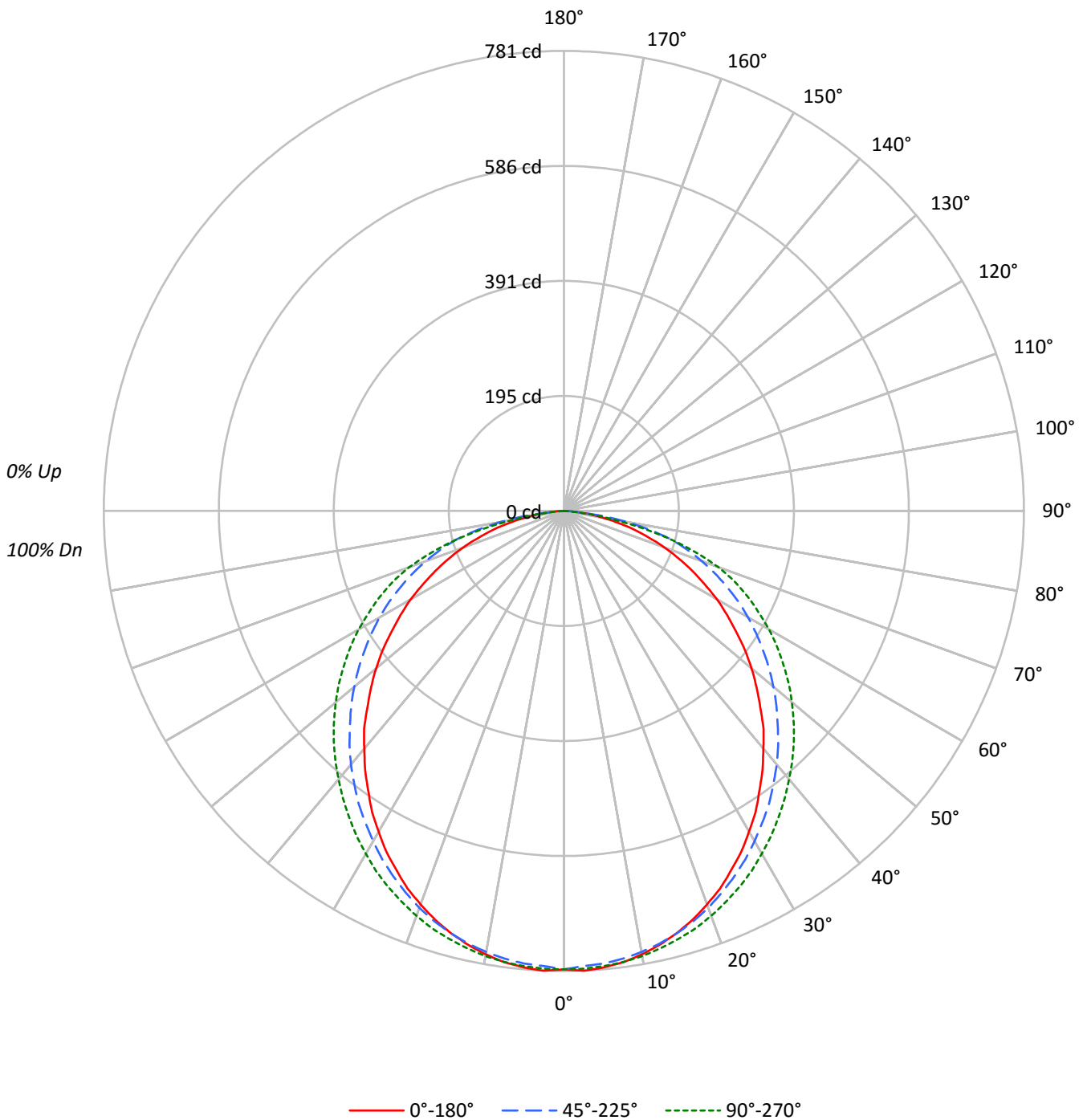
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2094	2094	2094
5°	2101	2083	2095
10°	2088	2077	2096
15°	2066	2067	2095
20°	2035	2053	2094
25°	1997	2032	2092
30°	1953	2011	2088
35°	1901	1994	2087
40°	1851	1975	2090
45°	1794	1953	2101
50°	1742	1944	2115
55°	1675	1938	2134
60°	1616	1941	2164
65°	1533	1947	2197
70°	1438	1961	2196
75°	1304	1980	1985
80°	1069	1709	1413
85°	794	809	327



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	3.3
10°-20°	210.4	9.3
20°-30°	316.9	14.0
30°-40°	380.3	16.8
40°-50°	396.4	17.5
50°-60°	366.9	16.2
60°-70°	296.5	13.1
70°-80°	180.7	8.0
80°-90°	37.3	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°	600.9	26.6
0°-40°	981.2	43.4
0°-60°	1744.5	77.2
0°-90°	2259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	778	776	771	777	776	74
15°	742	742	742	752	752	209
25°	672	676	684	702	705	310
35°	579	588	607	629	635	363
45°	472	486	513	542	552	364
55°	357	376	413	445	455	320
65°	241	264	306	336	345	238
75°	125	153	190	193	191	132
85°	26	38	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°	778.2	778.2	778.2	778.2	778.2
2.5°	781.3	778.7	773.2	778.7	777.7
5°	777.7	775.7	771.2	776.7	775.7
7.5°	772.7	770.7	766.6	773.2	772.2
10°	764.1	763.1	760.1	767.7	767.2
12.5°	754.1	753.6	752.0	760.6	760.1
15°	741.5	742.0	742.0	752.0	752.0
17.5°	727.4	728.4	730.4	741.5	743.0
20°	710.7	712.8	716.8	729.4	731.4
22.5°	693.6	695.1	701.2	716.3	718.3
25°	672.5	676.5	684.5	701.7	704.7
27.5°	652.3	655.8	666.9	684.5	689.6
30°	628.6	634.2	647.3	666.4	671.9
32.5°	606.0	612.0	627.1	649.3	654.3
35°	578.8	587.8	607.0	629.1	635.2
37.5°	554.1	562.6	584.3	608.5	615.5
40°	526.9	537.5	562.1	587.8	594.9
42.5°	501.7	511.8	538.5	564.7	574.2
45°	471.5	485.6	513.3	542.0	552.1
47.5°	443.8	457.9	489.6	520.3	529.4
50°	416.1	431.2	464.4	496.2	505.2
52.5°	387.4	403.5	439.2	471.0	481.5
55°	357.1	375.8	413.0	445.3	454.9
57.5°	328.4	347.6	387.4	420.1	429.7
60°	300.2	319.9	360.7	391.9	402.0
62.5°	269.0	292.2	334.5	365.2	372.7
65°	240.8	264.4	305.8	336.5	345.0
67.5°	211.1	236.7	278.0	306.3	314.3
70°	182.8	209.5	249.3	275.5	279.1
72.5°	152.6	179.8	220.1	236.7	236.7
75°	125.4	153.1	190.4	193.4	190.9
77.5°	95.7	126.4	150.6	144.6	138.5
80°	69.0	99.2	110.3	99.2	91.2
82.5°	46.3	72.0	66.5	52.9	46.8
85°	25.7	38.3	26.2	14.6	10.6
87.5°	9.6	8.6	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)