

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: P307862

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP187-W2A-U-2700K**

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: P307862
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-CP187-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 2700K 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: 2034.0 lumens
Efficiency: N/A
Efficacy: 103.8 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

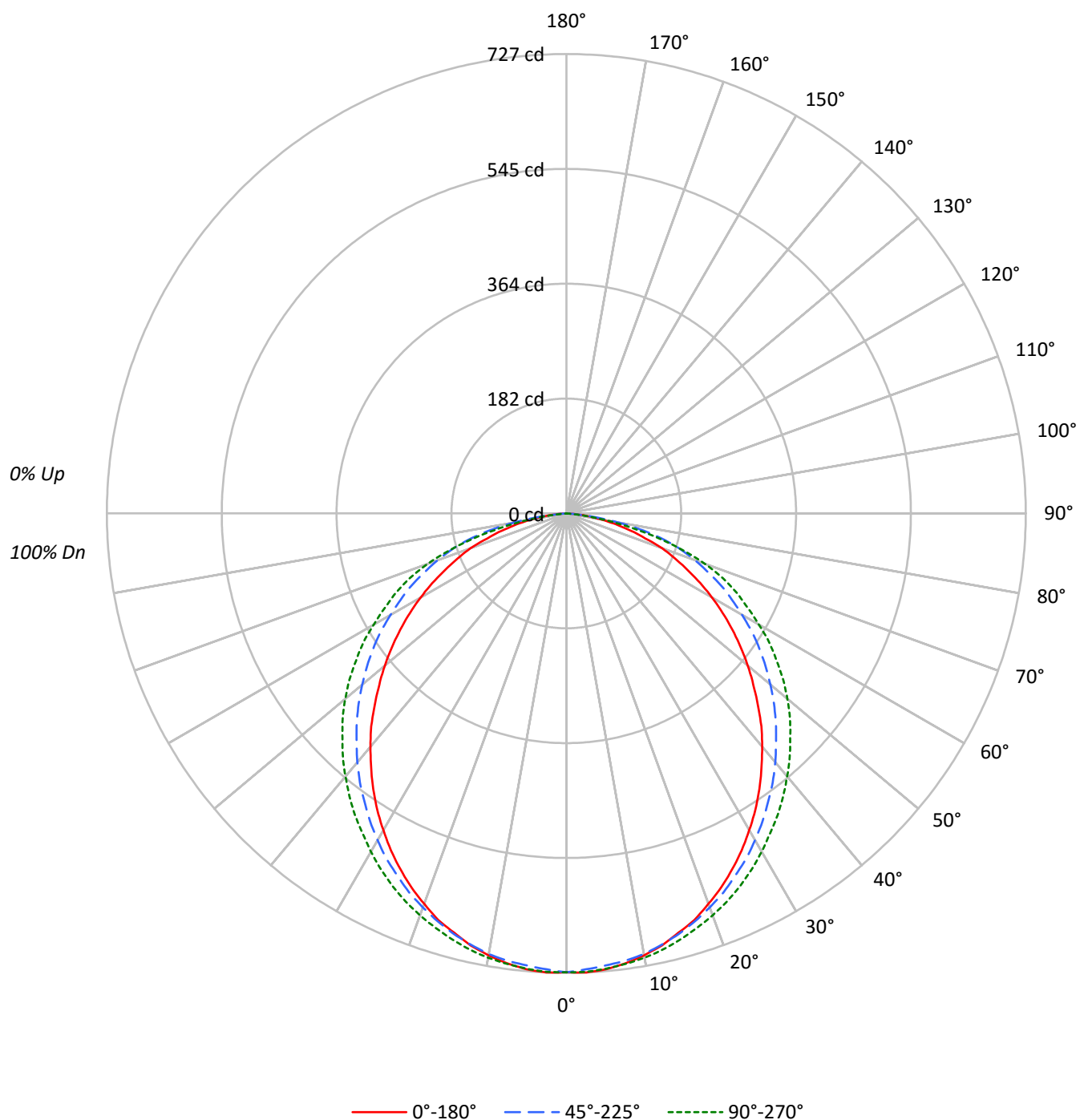
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1954	1954	1954
5°	1956	1940	1953
10°	1940	1935	1951
15°	1913	1919	1944
20°	1883	1900	1938
25°	1844	1877	1931
30°	1799	1855	1921
35°	1749	1829	1915
40°	1694	1807	1910
45°	1631	1784	1907
50°	1571	1765	1912
55°	1505	1750	1907
60°	1433	1726	1894
65°	1349	1721	1894
70°	1270	1706	1841
75°	1101	1667	1573
80°	891	1344	1048
85°	593	466	312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	3.4
10°-20°	195.1	9.6
20°-30°	292.7	14.4
30°-40°	349.1	17.2
40°-50°	360.9	17.7
50°-60°	329.5	16.2
60°-70°	259.3	12.7
70°-80°	151.0	7.4
80°-90°	27.8	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°	556.3	27.4
0°-40°	905.5	44.5
0°-60°	1595.9	78.5
0°-90°	2034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2034.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	724	722	718	724	723	69
15°	687	688	689	698	698	194
25°	621	624	632	647	650	286
35°	532	540	557	578	583	333
45°	429	443	469	495	501	331
55°	321	338	373	400	406	287
65°	212	234	270	292	298	210
75°	106	131	160	157	151	113
85°	19	27	15	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.1	726.1	726.1	726.1	726.1
2.5°	727.1	725.1	722.1	727.1	726.1
5°	724.1	722.1	718.0	724.1	723.1
7.5°	718.0	716.0	714.0	720.1	719.0
10°	710.0	709.0	708.0	715.0	714.0
12.5°	699.9	699.9	698.9	706.9	706.9
15°	686.8	687.8	688.8	697.9	697.9
17.5°	674.7	673.7	676.7	686.8	687.8
20°	657.5	659.5	663.6	675.7	676.7
22.5°	640.4	642.4	649.5	661.6	664.6
25°	621.2	624.2	632.3	647.4	650.5
27.5°	601.1	605.1	616.2	632.3	635.3
30°	578.9	584.9	597.0	615.2	618.2
32.5°	556.7	562.7	577.9	596.0	600.0
35°	532.5	539.5	556.7	577.9	582.9
37.5°	507.3	516.3	536.5	557.7	563.7
40°	482.1	492.1	514.3	536.5	543.6
42.5°	456.8	466.9	491.1	516.3	523.4
45°	428.6	442.7	468.9	495.2	501.2
47.5°	401.4	416.5	445.7	472.0	480.0
50°	375.2	390.3	421.5	448.8	456.8
52.5°	347.9	364.1	397.3	425.6	432.6
55°	320.7	337.8	373.1	400.4	406.4
57.5°	293.5	311.6	347.9	374.1	381.2
60°	266.2	285.4	320.7	346.9	352.0
62.5°	239.0	259.2	295.5	318.7	323.7
65°	211.8	234.0	270.3	291.5	297.5
67.5°	185.6	207.7	243.0	263.2	268.3
70°	161.4	181.5	216.8	231.9	234.0
72.5°	131.1	156.3	190.6	198.7	193.6
75°	105.9	131.1	160.3	157.3	151.3
77.5°	80.7	105.9	125.1	115.0	106.9
80°	57.5	82.7	86.7	71.6	67.6
82.5°	37.3	57.5	48.4	37.3	30.3
85°	19.2	27.2	15.1	12.1	10.1
87.5°	6.1	4.0	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)