

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: P307593

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP187-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: P307593
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-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB 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: 2070.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

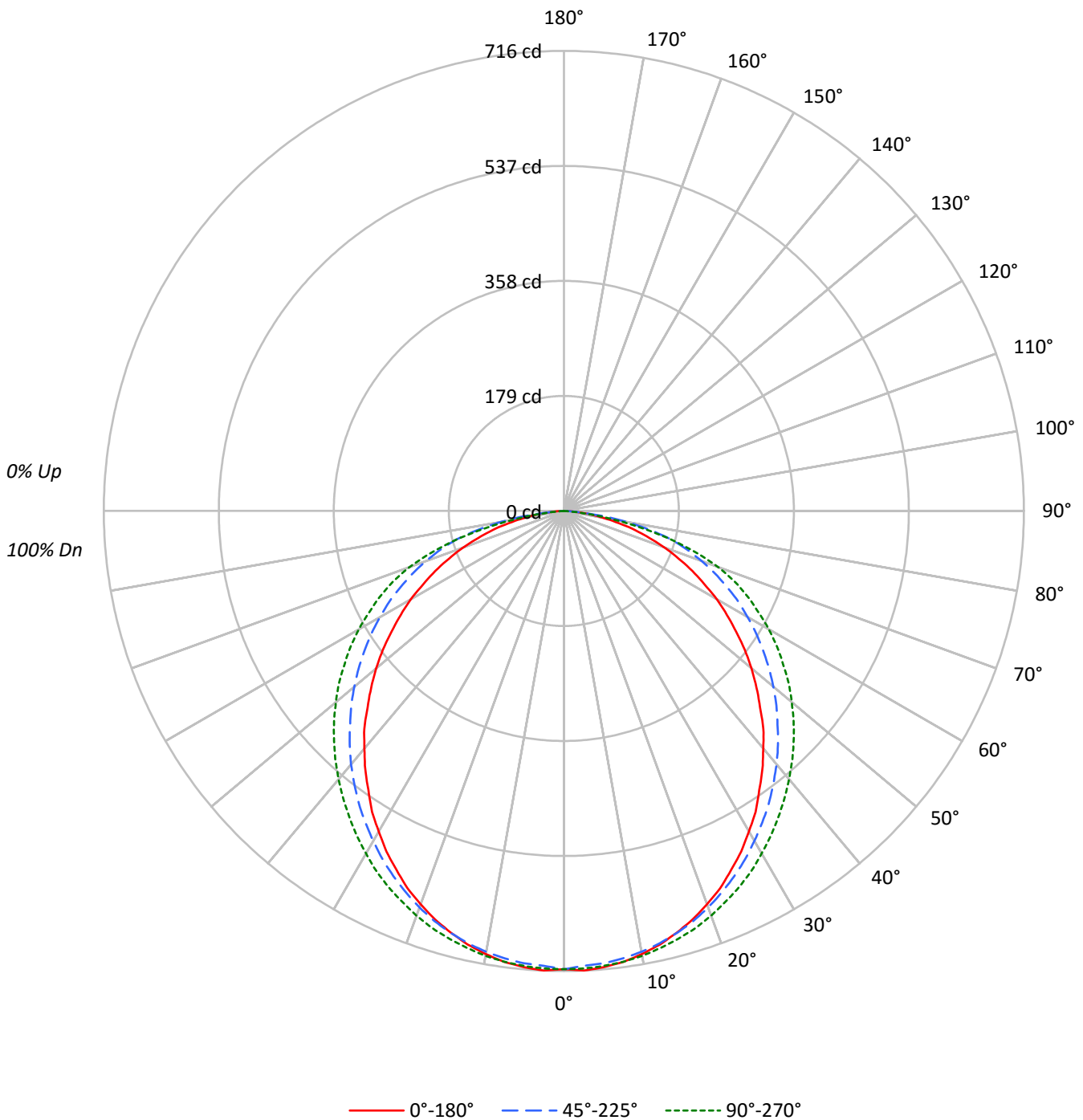
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1919	1919	1919
5°	1925	1909	1920
10°	1913	1903	1921
15°	1893	1894	1920
20°	1865	1881	1919
25°	1830	1863	1917
30°	1790	1843	1913
35°	1742	1827	1912
40°	1696	1809	1915
45°	1644	1790	1925
50°	1596	1782	1938
55°	1536	1776	1955
60°	1481	1779	1982
65°	1405	1784	2013
70°	1318	1798	2012
75°	1195	1814	1818
80°	979	1567	1294
85°	726	741	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	3.3
10°-20°	192.8	9.3
20°-30°	290.4	14.0
30°-40°	348.5	16.8
40°-50°	363.2	17.5
50°-60°	336.2	16.2
60°-70°	271.7	13.1
70°-80°	165.6	8.0
80°-90°	34.2	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°	550.6	26.6
0°-40°	899.1	43.4
0°-60°	1598.5	77.2
0°-90°	2070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2070.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	713	711	707	712	711	68
15°	679	680	680	689	689	192
25°	616	620	627	643	646	284
35°	530	539	556	576	582	332
45°	432	445	470	497	506	334
55°	327	344	378	408	417	293
65°	221	242	280	308	316	218
75°	115	140	174	177	175	121
85°	24	35	24	13	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	713.1	713.1	713.1	713.1	713.1
2.5°	715.9	713.6	708.5	713.6	712.7
5°	712.7	710.8	706.7	711.7	710.8
7.5°	708.0	706.2	702.5	708.5	707.6
10°	700.2	699.3	696.5	703.4	703.0
12.5°	691.0	690.5	689.1	697.0	696.5
15°	679.4	679.9	679.9	689.1	689.1
17.5°	666.5	667.4	669.3	679.4	680.8
20°	651.3	653.1	656.8	668.3	670.2
22.5°	635.6	637.0	642.5	656.3	658.2
25°	616.2	619.9	627.3	643.0	645.7
27.5°	597.7	601.0	611.1	627.3	631.9
30°	576.0	581.1	593.1	610.7	615.7
32.5°	555.3	560.8	574.7	595.0	599.6
35°	530.3	538.6	556.2	576.5	582.0
37.5°	507.7	515.6	535.4	557.6	564.0
40°	482.8	492.5	515.1	538.6	545.1
42.5°	459.7	469.0	493.4	517.4	526.2
45°	432.0	445.0	470.3	496.6	505.9
47.5°	406.6	419.6	448.6	476.8	485.1
50°	381.3	395.1	425.6	454.6	463.0
52.5°	354.9	369.7	402.5	431.6	441.3
55°	327.3	344.3	378.5	408.0	416.8
57.5°	300.9	318.5	354.9	384.9	393.7
60°	275.1	293.1	330.5	359.1	368.3
62.5°	246.5	267.7	306.5	334.6	341.6
65°	220.6	242.3	280.2	308.3	316.2
67.5°	193.4	216.9	254.8	280.6	288.0
70°	167.5	192.0	228.5	252.5	255.7
72.5°	139.9	164.8	201.7	216.9	216.9
75°	114.9	140.3	174.5	177.2	174.9
77.5°	87.7	115.9	138.0	132.5	126.9
80°	63.2	90.9	101.1	90.9	83.5
82.5°	42.5	66.0	60.9	48.5	42.9
85°	23.5	35.1	24.0	13.4	9.7
87.5°	8.8	7.8	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)