

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: P307527

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA08-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: P307527
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: 14FCZ2-20-UNV-L82765-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 2095.0 lumens
Efficiency: N/A
Efficacy: 123.2 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

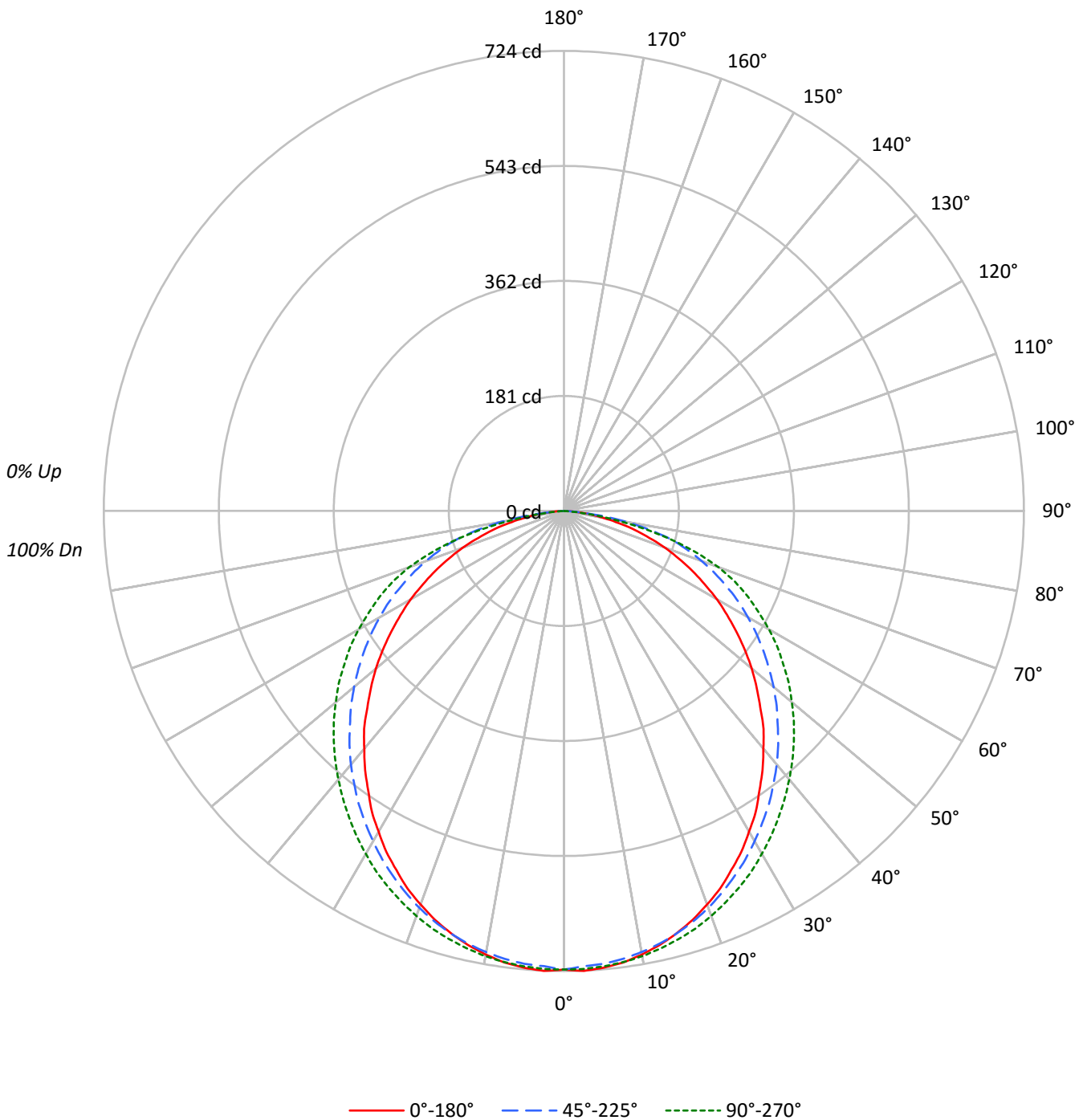
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1942	1942	1942
5°	1948	1932	1943
10°	1937	1926	1944
15°	1916	1917	1943
20°	1887	1903	1942
25°	1852	1885	1940
30°	1812	1865	1936
35°	1763	1849	1935
40°	1716	1831	1938
45°	1664	1811	1948
50°	1616	1803	1961
55°	1554	1797	1979
60°	1498	1800	2006
65°	1422	1806	2038
70°	1334	1819	2036
75°	1209	1836	1840
80°	992	1585	1311
85°	735	750	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.3
10°-20°	195.1	9.3
20°-30°	293.9	14.0
30°-40°	352.7	16.8
40°-50°	367.6	17.5
50°-60°	340.3	16.2
60°-70°	274.9	13.1
70°-80°	167.6	8.0
80°-90°	34.6	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°	557.3	26.6
0°-40°	909.9	43.4
0°-60°	1617.8	77.2
0°-90°	2095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	721	719	715	720	719	68
15°	688	688	688	697	697	194
25°	624	627	635	651	654	287
35°	537	545	563	584	589	336
45°	437	450	476	503	512	338
55°	331	348	383	413	422	297
65°	223	245	284	312	320	221
75°	116	142	177	179	177	122
85°	24	36	24	14	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.7	721.7	721.7	721.7	721.7
2.5°	724.5	722.2	717.1	722.2	721.3
5°	721.3	719.4	715.2	720.3	719.4
7.5°	716.6	714.7	711.0	717.1	716.1
10°	708.7	707.7	704.9	711.9	711.5
12.5°	699.3	698.8	697.4	705.4	704.9
15°	687.6	688.1	688.1	697.4	697.4
17.5°	674.6	675.5	677.4	687.6	689.0
20°	659.1	661.0	664.7	676.4	678.3
22.5°	643.3	644.7	650.3	664.3	666.1
25°	623.6	627.4	634.8	650.7	653.5
27.5°	604.9	608.2	618.5	634.8	639.5
30°	583.0	588.1	600.3	618.0	623.2
32.5°	562.0	567.6	581.6	602.1	606.8
35°	536.7	545.2	562.9	583.5	589.1
37.5°	513.9	521.8	541.9	564.3	570.8
40°	488.6	498.4	521.3	545.2	551.7
42.5°	465.3	474.6	499.4	523.7	532.5
45°	437.2	450.3	476.0	502.6	512.0
47.5°	411.6	424.6	454.1	482.6	491.0
50°	385.9	399.9	430.7	460.1	468.5
52.5°	359.2	374.2	407.3	436.8	446.6
55°	331.2	348.5	383.1	413.0	421.8
57.5°	304.6	322.3	359.2	389.6	398.5
60°	278.4	296.6	334.5	363.4	372.8
62.5°	249.5	270.9	310.2	338.7	345.7
65°	223.3	245.2	283.6	312.1	320.0
67.5°	195.7	219.6	257.9	284.0	291.5
70°	169.6	194.3	231.2	255.5	258.8
72.5°	141.5	166.8	204.1	219.6	219.6
75°	116.3	142.0	176.6	179.4	177.0
77.5°	88.8	117.3	139.7	134.1	128.5
80°	64.0	92.0	102.3	92.0	84.6
82.5°	43.0	66.8	61.7	49.0	43.4
85°	23.8	35.5	24.3	13.5	9.8
87.5°	8.9	7.9	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)