

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: P307526

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA08-W2A-U-5500K**

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: P307526
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 2089.0 lumens
Efficiency: N/A
Efficacy: 122.9 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

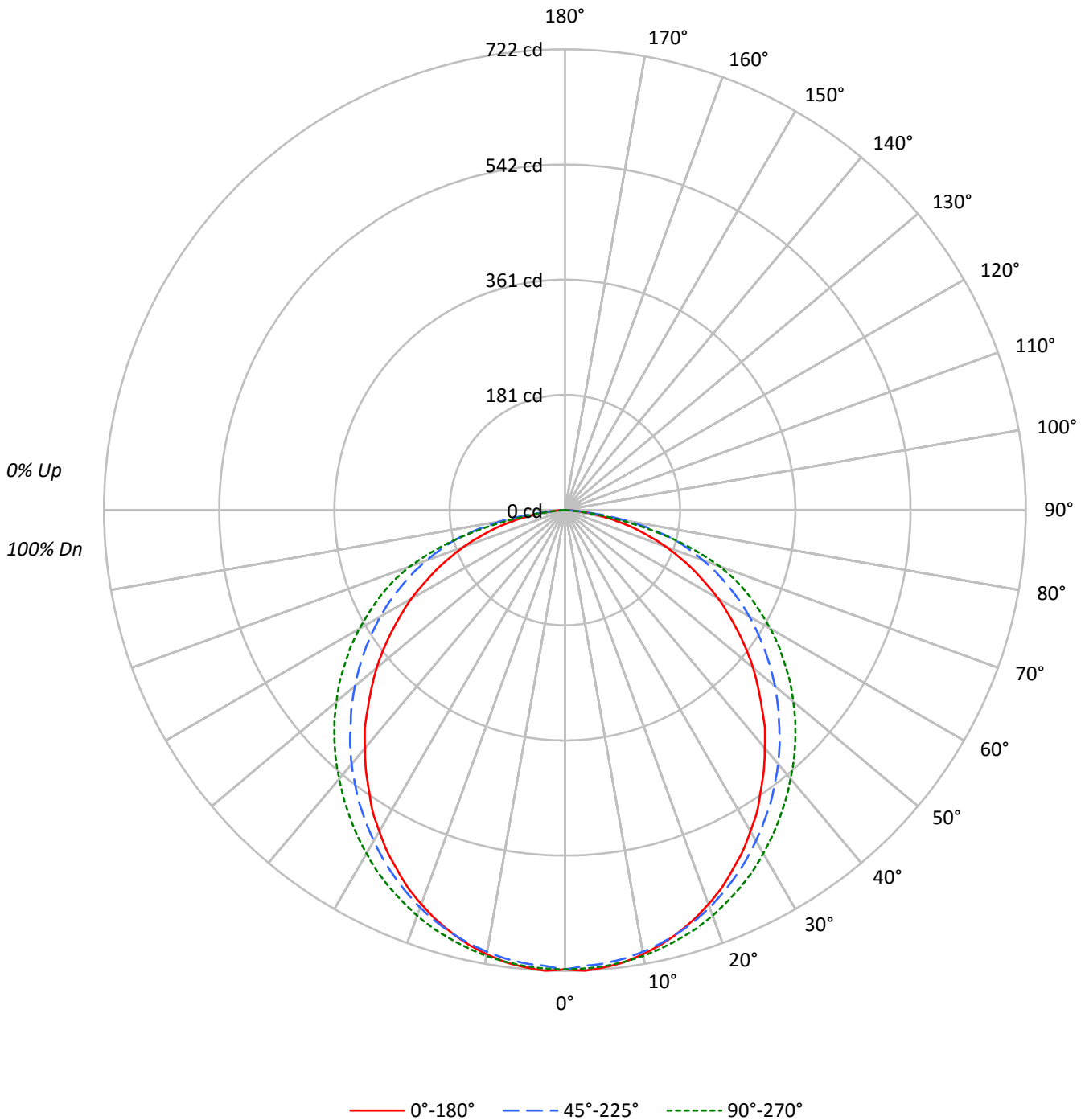
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-CA08-W2A-U-5500K

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°	1937	1937	1937
5°	1943	1926	1938
10°	1931	1921	1938
15°	1910	1911	1937
20°	1882	1898	1937
25°	1846	1879	1935
30°	1806	1860	1931
35°	1758	1844	1930
40°	1711	1826	1932
45°	1659	1807	1943
50°	1611	1798	1956
55°	1550	1792	1973
60°	1494	1795	2000
65°	1418	1800	2032
70°	1330	1814	2031
75°	1206	1831	1835
80°	989	1581	1306
85°	735	747	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	3.3
10°-20°	194.5	9.3
20°-30°	293.0	14.0
30°-40°	351.7	16.8
40°-50°	366.5	17.5
50°-60°	339.3	16.2
60°-70°	274.2	13.1
70°-80°	167.2	8.0
80°-90°	34.5	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°	555.7	26.6
0°-40°	907.3	43.4
0°-60°	1613.2	77.2
0°-90°	2089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2089.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	719	717	713	718	717	68
15°	686	686	686	695	695	193
25°	622	626	633	649	652	287
35°	535	544	561	582	587	335
45°	436	449	475	501	510	337
55°	330	348	382	412	421	296
65°	223	244	283	311	319	220
75°	116	142	176	179	176	122
85°	24	35	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°	719.7	719.7	719.7	719.7	719.7
2.5°	722.5	720.1	715.0	720.1	719.2
5°	719.2	717.3	713.1	718.3	717.3
7.5°	714.5	712.7	709.0	715.0	714.1
10°	706.6	705.7	702.9	709.9	709.4
12.5°	697.3	696.8	695.4	703.4	702.9
15°	685.7	686.1	686.1	695.4	695.4
17.5°	672.6	673.6	675.4	685.7	687.1
20°	657.2	659.1	662.8	674.5	676.3
22.5°	641.4	642.8	648.4	662.4	664.2
25°	621.8	625.6	633.0	648.9	651.7
27.5°	603.2	606.5	616.7	633.0	637.7
30°	581.3	586.4	598.6	616.3	621.4
32.5°	560.4	566.0	579.9	600.4	605.1
35°	535.2	543.6	561.3	581.8	587.4
37.5°	512.4	520.3	540.3	562.7	569.2
40°	487.2	497.0	519.8	543.6	550.1
42.5°	463.9	473.3	497.9	522.2	531.0
45°	436.0	449.0	474.7	501.2	510.5
47.5°	410.4	423.4	452.8	481.2	489.6
50°	384.8	398.7	429.5	458.8	467.2
52.5°	358.2	373.1	406.2	435.5	445.3
55°	330.3	347.5	382.0	411.8	420.6
57.5°	303.7	321.4	358.2	388.5	397.3
60°	277.6	295.8	333.5	362.4	371.7
62.5°	248.7	270.2	309.3	337.7	344.7
65°	222.7	244.5	282.7	311.2	319.1
67.5°	195.2	218.9	257.1	283.2	290.7
70°	169.1	193.8	230.6	254.8	258.1
72.5°	141.1	166.3	203.6	218.9	218.9
75°	116.0	141.6	176.1	178.9	176.5
77.5°	88.5	116.9	139.3	133.7	128.1
80°	63.8	91.8	102.0	91.8	84.3
82.5°	42.9	66.6	61.5	48.9	43.3
85°	23.8	35.4	24.2	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)