

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: P307536

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA125-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: P307536
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-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" 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

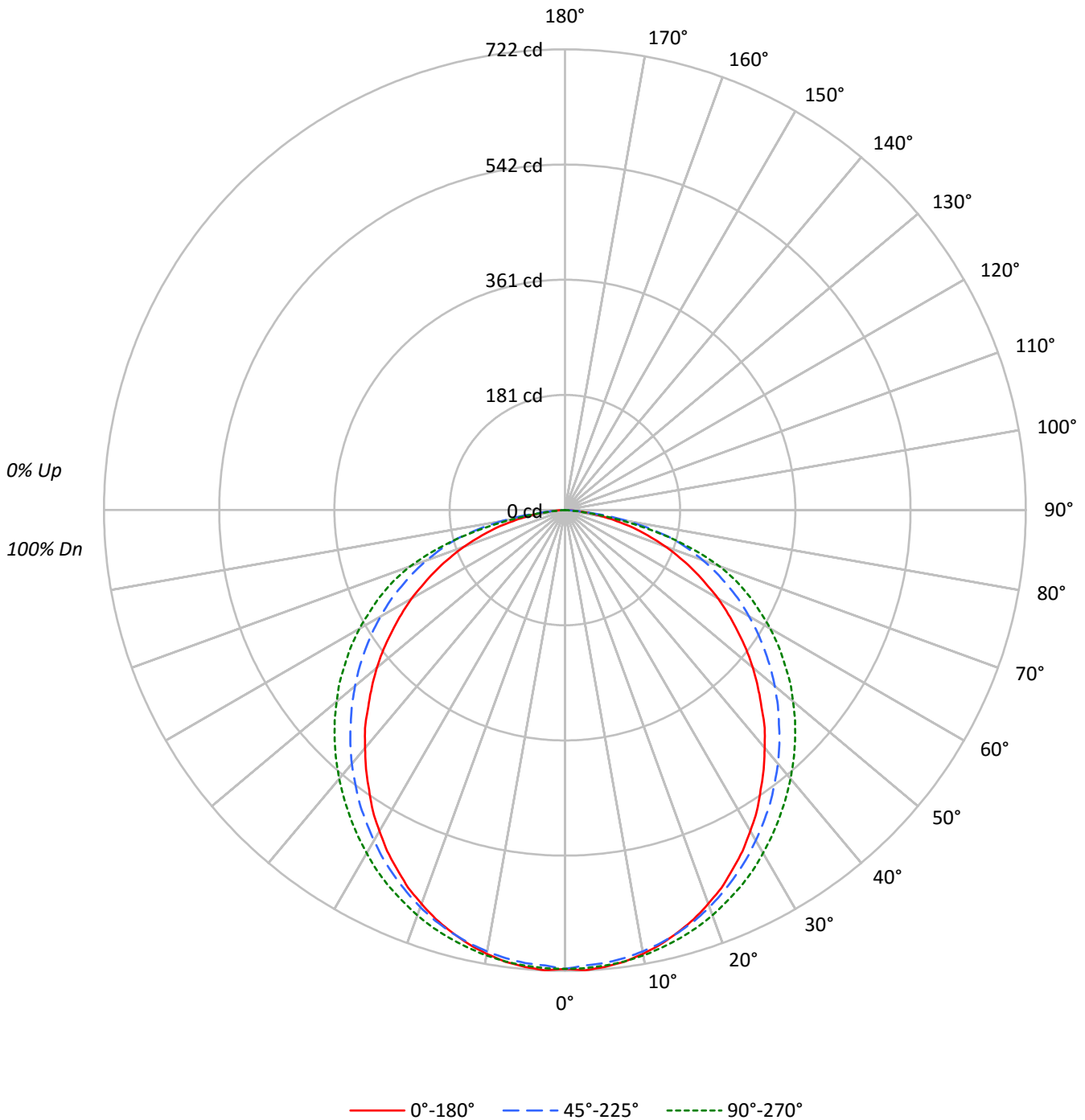
Lumens per Lamp: N/A
Luminaire Lumens: 2087.0 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	1935	1935	1935
5°	1941	1925	1936
10°	1929	1919	1937
15°	1908	1910	1936
20°	1880	1896	1935
25°	1845	1878	1933
30°	1805	1858	1929
35°	1757	1842	1928
40°	1710	1824	1931
45°	1658	1805	1941
50°	1609	1796	1954
55°	1548	1790	1971
60°	1493	1793	1999
65°	1416	1799	2030
70°	1329	1813	2028
75°	1205	1829	1834
80°	989	1579	1305
85°	732	747	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.3
10°-20°	194.3	9.3
20°-30°	292.8	14.0
30°-40°	351.3	16.8
40°-50°	366.2	17.5
50°-60°	339.0	16.2
60°-70°	273.9	13.1
70°-80°	167.0	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°	555.1	26.6
0°-40°	906.5	43.4
0°-60°	1611.6	77.2
0°-90°	2087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2087.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	718	717	712	718	717	68
15°	685	686	686	695	695	193
25°	621	625	632	648	651	286
35°	535	543	561	581	587	335
45°	436	449	474	501	510	337
55°	330	347	382	411	420	296
65°	222	244	282	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°	719.0	719.0	719.0	719.0	719.0
2.5°	721.8	719.4	714.3	719.4	718.5
5°	718.5	716.7	712.5	717.6	716.7
7.5°	713.9	712.0	708.3	714.3	713.4
10°	705.9	705.0	702.2	709.2	708.7
12.5°	696.6	696.2	694.8	702.7	702.2
15°	685.0	685.5	685.5	694.8	694.8
17.5°	672.0	672.9	674.8	685.0	686.4
20°	656.6	658.5	662.2	673.8	675.7
22.5°	640.8	642.2	647.8	661.7	663.6
25°	621.3	625.0	632.4	648.2	651.0
27.5°	602.6	605.9	616.1	632.4	637.1
30°	580.8	585.9	598.0	615.7	620.8
32.5°	559.8	565.4	579.4	599.8	604.5
35°	534.7	543.1	560.8	581.2	586.8
37.5°	511.9	519.8	539.8	562.2	568.7
40°	486.8	496.5	519.3	543.1	549.6
42.5°	463.5	472.8	497.5	521.7	530.5
45°	435.6	448.6	474.2	500.7	510.0
47.5°	410.0	423.0	452.3	480.7	489.1
50°	384.4	398.3	429.1	458.4	466.8
52.5°	357.9	372.8	405.8	435.1	444.9
55°	329.9	347.2	381.6	411.4	420.2
57.5°	303.4	321.1	357.9	388.1	397.0
60°	277.4	295.5	333.2	362.0	371.4
62.5°	248.5	269.9	309.0	337.4	344.4
65°	222.4	244.3	282.5	310.9	318.8
67.5°	195.0	218.7	256.9	282.9	290.4
70°	168.9	193.6	230.4	254.6	257.8
72.5°	141.0	166.1	203.4	218.7	218.7
75°	115.9	141.5	175.9	178.7	176.4
77.5°	88.4	116.8	139.1	133.6	128.0
80°	63.8	91.7	101.9	91.7	84.2
82.5°	42.8	66.5	61.4	48.9	43.3
85°	23.7	35.4	24.2	13.5	9.8
87.5°	8.8	7.9	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)