

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: P307537

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA125-W2A-U-6500K**

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: P307537
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-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 6500K 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

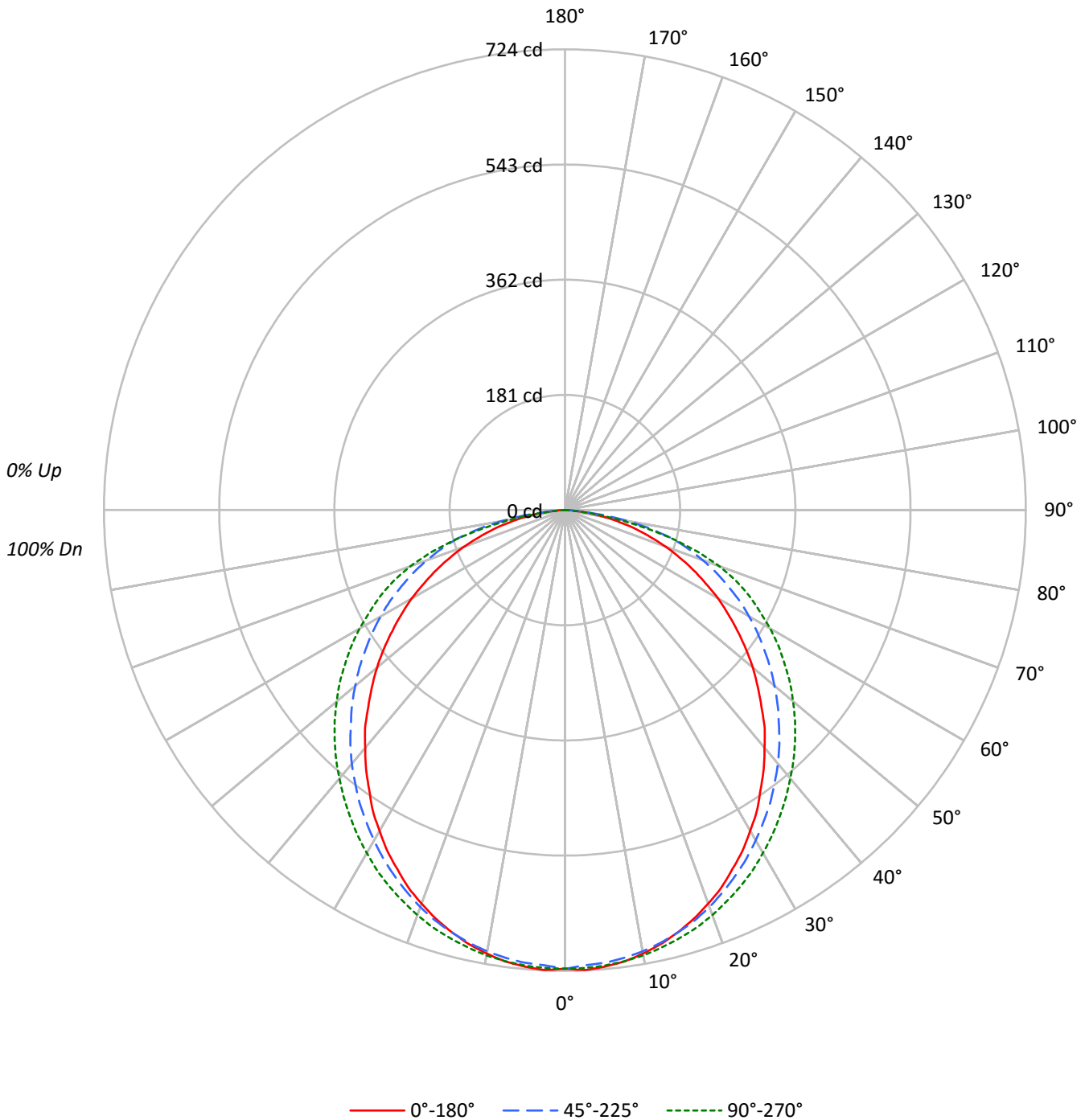
Lumens per Lamp: N/A
Luminaire Lumens: 2092.0 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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-CA125-W2A-U-6500K

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°	1939	1939	1939
5°	1945	1929	1941
10°	1934	1923	1941
15°	1913	1914	1940
20°	1885	1901	1940
25°	1849	1882	1938
30°	1809	1863	1934
35°	1761	1847	1932
40°	1714	1829	1935
45°	1662	1809	1946
50°	1613	1801	1959
55°	1552	1795	1976
60°	1496	1798	2003
65°	1420	1803	2034
70°	1332	1817	2033
75°	1208	1833	1838
80°	990	1584	1308
85°	735	750	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.3
10°-20°	194.8	9.3
20°-30°	293.5	14.0
30°-40°	352.2	16.8
40°-50°	367.1	17.5
50°-60°	339.8	16.2
60°-70°	274.5	13.1
70°-80°	167.4	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°	556.5	26.6
0°-40°	908.6	43.4
0°-60°	1615.5	77.2
0°-90°	2092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	720	718	714	719	718	68
15°	687	687	687	696	696	194
25°	623	626	634	650	653	287
35°	536	544	562	583	588	336
45°	437	450	475	502	511	337
55°	331	348	382	412	421	296
65°	223	245	283	312	320	220
75°	116	142	176	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°	720.7	720.7	720.7	720.7	720.7
2.5°	723.5	721.2	716.0	721.2	720.2
5°	720.2	718.4	714.2	719.3	718.4
7.5°	715.6	713.7	710.0	716.0	715.1
10°	707.6	706.7	703.9	710.9	710.4
12.5°	698.3	697.8	696.4	704.4	703.9
15°	686.6	687.1	687.1	696.4	696.4
17.5°	673.6	674.5	676.4	686.6	688.0
20°	658.2	660.1	663.8	675.5	677.3
22.5°	642.3	643.7	649.3	663.3	665.2
25°	622.7	626.5	633.9	649.8	652.6
27.5°	604.1	607.3	617.6	633.9	638.6
30°	582.2	587.3	599.4	617.1	622.3
32.5°	561.2	566.8	580.8	601.3	605.9
35°	536.0	544.4	562.1	582.6	588.2
37.5°	513.1	521.1	541.1	563.5	570.0
40°	487.9	497.7	520.6	544.4	550.9
42.5°	464.6	473.9	498.7	522.9	531.8
45°	436.6	449.7	475.3	501.9	511.3
47.5°	411.0	424.0	453.4	481.9	490.3
50°	385.3	399.3	430.1	459.5	467.9
52.5°	358.7	373.6	406.8	436.2	445.9
55°	330.7	348.0	382.5	412.4	421.2
57.5°	304.1	321.9	358.7	389.0	397.9
60°	278.0	296.2	334.0	362.9	372.2
62.5°	249.1	270.6	309.7	338.2	345.2
65°	223.0	244.9	283.1	311.6	319.5
67.5°	195.5	219.2	257.5	283.6	291.1
70°	169.3	194.1	230.9	255.2	258.4
72.5°	141.3	166.5	203.8	219.2	219.2
75°	116.2	141.8	176.3	179.1	176.8
77.5°	88.6	117.1	139.5	133.9	128.3
80°	63.9	91.9	102.2	91.9	84.4
82.5°	42.9	66.7	61.6	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)