

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: P306996

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-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: P306996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 1583.0 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

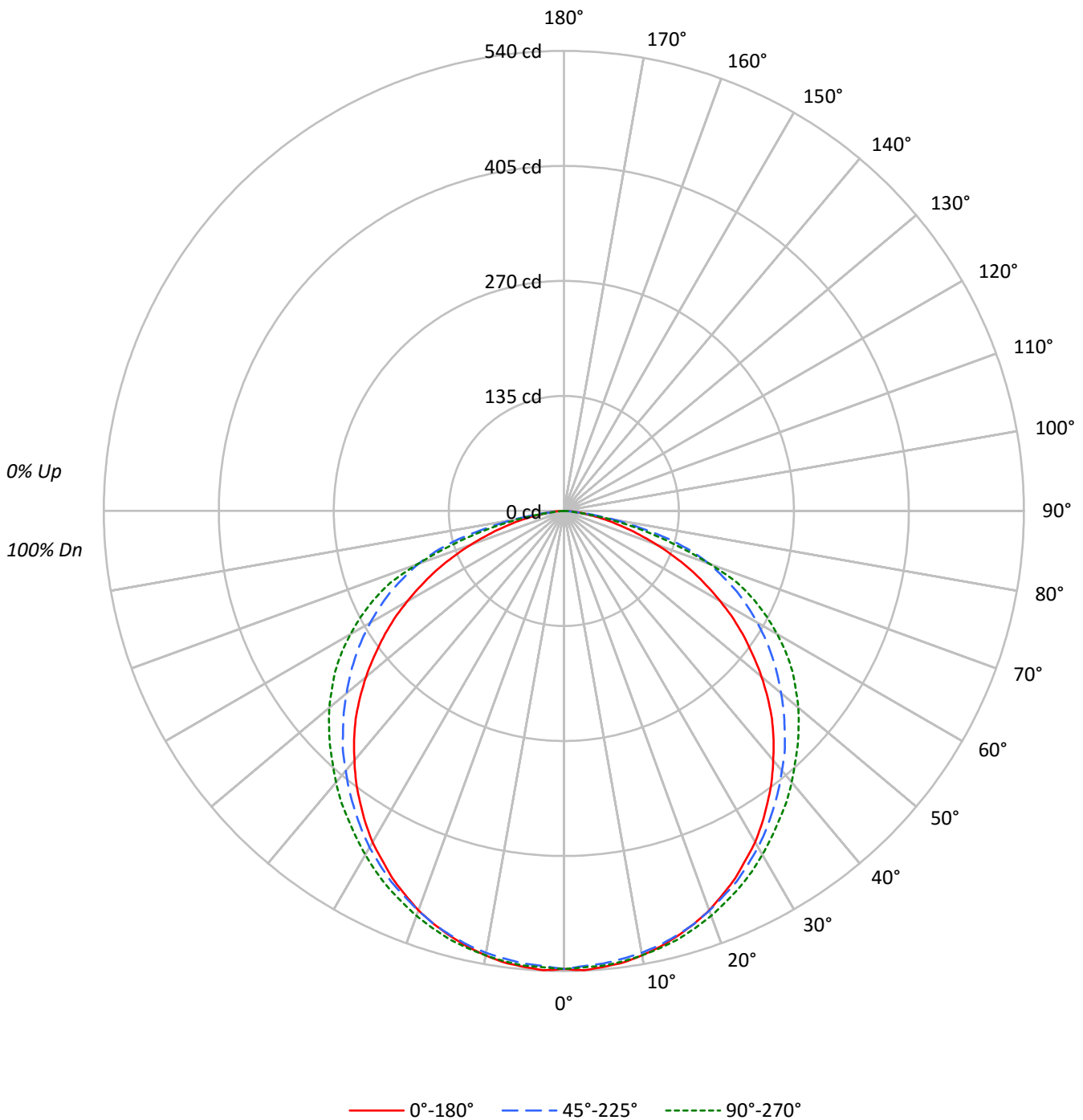
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1447	1447	1447
5°	1451	1440	1447
10°	1447	1439	1447
15°	1438	1435	1449
20°	1428	1430	1448
25°	1413	1425	1448
30°	1395	1417	1448
35°	1370	1406	1450
40°	1343	1399	1462
45°	1315	1394	1478
50°	1269	1394	1505
55°	1214	1401	1536
60°	1142	1412	1556
65°	1053	1426	1566
70°	917	1430	1441
75°	756	1330	1164
80°	594	956	779
85°	460	367	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.9	3.2
10°-20°	146.0	9.2
20°-30°	221.8	14.0
30°-40°	268.7	17.0
40°-50°	283.2	17.9
50°-60°	264.4	16.7
60°-70°	211.3	13.3
70°-80°	116.2	7.3
80°-90°	20.5	1.3
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°	418.7	26.5
0°-40°	687.4	43.4
0°-60°	1235.0	78.0
0°-90°	1583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	537	536	533	537	536	51
15°	516	516	515	520	520	146
25°	476	477	480	487	488	219
35°	417	421	428	439	442	261
45°	346	352	366	383	388	266
55°	259	272	299	320	328	231
65°	165	186	224	242	246	163
75°	73	104	128	115	112	78
85°	15	19	12	8	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.6	537.6	537.6	537.6	537.6
2.5°	539.6	538.1	534.6	537.6	536.1
5°	537.1	535.6	533.1	536.6	535.6
7.5°	534.6	532.6	530.1	534.1	533.1
10°	529.6	528.1	526.6	530.1	529.6
12.5°	523.7	523.2	521.7	525.6	525.2
15°	516.2	516.2	515.2	520.2	520.2
17.5°	508.2	507.7	508.2	513.7	513.2
20°	498.8	498.8	499.3	505.7	505.7
22.5°	487.3	487.8	489.3	497.3	496.8
25°	475.9	476.9	479.9	486.8	487.8
27.5°	461.9	464.4	467.9	476.4	477.4
30°	449.0	450.5	456.0	463.9	465.9
32.5°	433.6	436.5	442.5	451.5	454.0
35°	417.1	421.1	428.1	439.0	441.5
37.5°	400.7	404.2	413.6	425.1	429.6
40°	382.3	388.3	398.2	411.2	416.1
42.5°	364.4	370.3	383.8	397.2	401.7
45°	345.5	351.9	366.4	382.8	388.3
47.5°	324.5	332.0	350.4	367.9	373.8
50°	303.1	312.6	333.0	352.4	359.4
52.5°	280.7	292.7	316.1	336.5	343.0
55°	258.8	271.8	298.7	319.6	327.5
57.5°	236.4	250.4	280.7	304.6	309.1
60°	212.1	229.0	262.3	283.2	289.2
62.5°	188.2	207.6	243.4	263.3	268.3
65°	165.3	186.2	224.0	242.4	245.9
67.5°	140.4	165.3	202.6	219.5	220.5
70°	116.5	145.3	181.7	189.7	183.2
72.5°	93.1	123.9	157.3	150.8	145.3
75°	72.7	104.0	127.9	115.0	112.0
77.5°	53.8	85.1	91.6	84.6	79.1
80°	38.3	67.2	61.7	52.8	50.3
82.5°	26.4	42.3	33.8	26.4	22.9
85°	14.9	18.9	11.9	7.5	6.0
87.5°	6.5	4.5	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)