

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: P306994

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CA125-W2A-U-5000K**

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: P306994
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-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
ACRYLIC SHEET
Light Source: (168) 5000K 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: 1564.0 lumens
Efficiency: N/A
Efficacy: 92.5 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

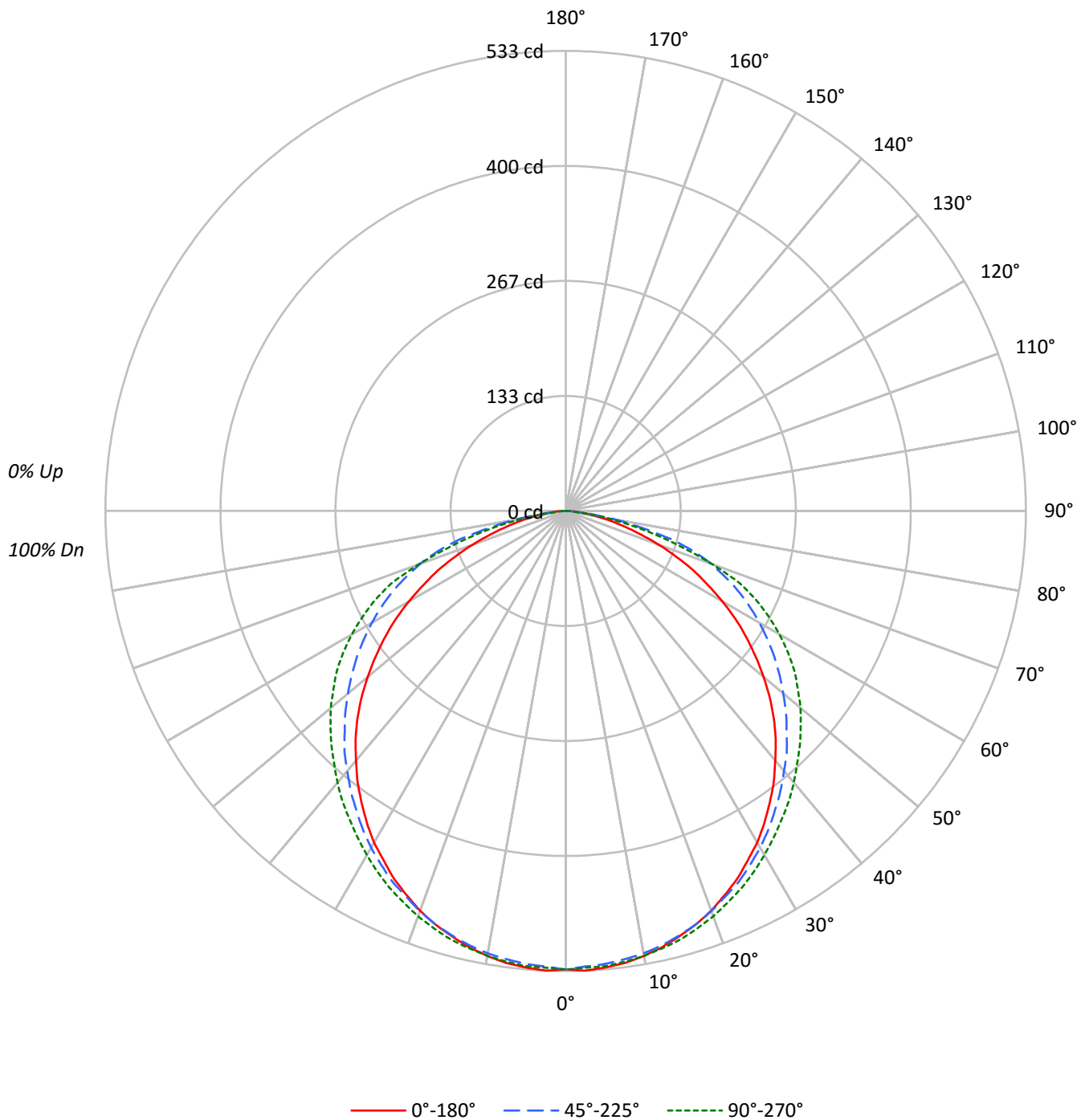
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1429	1429	1429
5°	1434	1423	1430
10°	1430	1422	1430
15°	1421	1418	1432
20°	1411	1413	1431
25°	1396	1408	1431
30°	1378	1400	1430
35°	1354	1389	1433
40°	1327	1382	1444
45°	1299	1378	1460
50°	1254	1377	1487
55°	1200	1384	1518
60°	1128	1395	1538
65°	1040	1409	1547
70°	906	1412	1424
75°	747	1314	1151
80°	587	945	770
85°	457	364	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	3.2
10°-20°	144.3	9.2
20°-30°	219.1	14.0
30°-40°	265.5	17.0
40°-50°	279.8	17.9
50°-60°	261.2	16.7
60°-70°	208.7	13.3
70°-80°	114.9	7.3
80°-90°	20.3	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°	413.7	26.5
0°-40°	679.2	43.4
0°-60°	1220.1	78.0
0°-90°	1564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	531	529	527	530	529	50
15°	510	510	509	514	514	144
25°	470	471	474	481	482	216
35°	412	416	423	434	436	258
45°	341	348	362	378	384	263
55°	256	268	295	316	324	228
65°	163	184	221	240	243	161
75°	72	103	126	114	111	77
85°	15	19	12	7	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	531.1	531.1	531.1	531.1	531.1
2.5°	533.1	531.6	528.2	531.1	529.7
5°	530.7	529.2	526.7	530.2	529.2
7.5°	528.2	526.2	523.8	527.7	526.7
10°	523.3	521.8	520.3	523.8	523.3
12.5°	517.4	516.9	515.4	519.3	518.8
15°	510.0	510.0	509.0	513.9	513.9
17.5°	502.1	501.6	502.1	507.5	507.0
20°	492.8	492.8	493.3	499.7	499.7
22.5°	481.5	482.0	483.4	491.3	490.8
25°	470.2	471.1	474.1	481.0	482.0
27.5°	456.4	458.8	462.3	470.7	471.6
30°	443.6	445.1	450.5	458.4	460.3
32.5°	428.4	431.3	437.2	446.1	448.5
35°	412.1	416.1	422.9	433.8	436.2
37.5°	395.9	399.3	408.7	420.0	424.4
40°	377.7	383.6	393.4	406.2	411.1
42.5°	360.0	365.9	379.2	392.5	396.9
45°	341.3	347.7	362.0	378.2	383.6
47.5°	320.7	328.0	346.2	363.4	369.3
50°	299.5	308.8	329.0	348.2	355.1
52.5°	277.4	289.2	312.3	332.5	338.8
55°	255.7	268.5	295.1	315.7	323.6
57.5°	233.6	247.4	277.4	301.0	305.4
60°	209.5	226.2	259.2	279.8	285.7
62.5°	185.9	205.1	240.5	260.2	265.1
65°	163.3	183.9	221.3	239.5	242.9
67.5°	138.7	163.3	200.2	216.9	217.9
70°	115.1	143.6	179.5	187.4	181.0
72.5°	92.0	122.5	155.4	149.0	143.6
75°	71.8	102.8	126.4	113.6	110.7
77.5°	53.1	84.1	90.5	83.6	78.2
80°	37.9	66.4	61.0	52.1	49.7
82.5°	26.1	41.8	33.4	26.1	22.6
85°	14.8	18.7	11.8	7.4	5.9
87.5°	6.4	4.4	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)