

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: P306997

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-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: P306997
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-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 1587.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

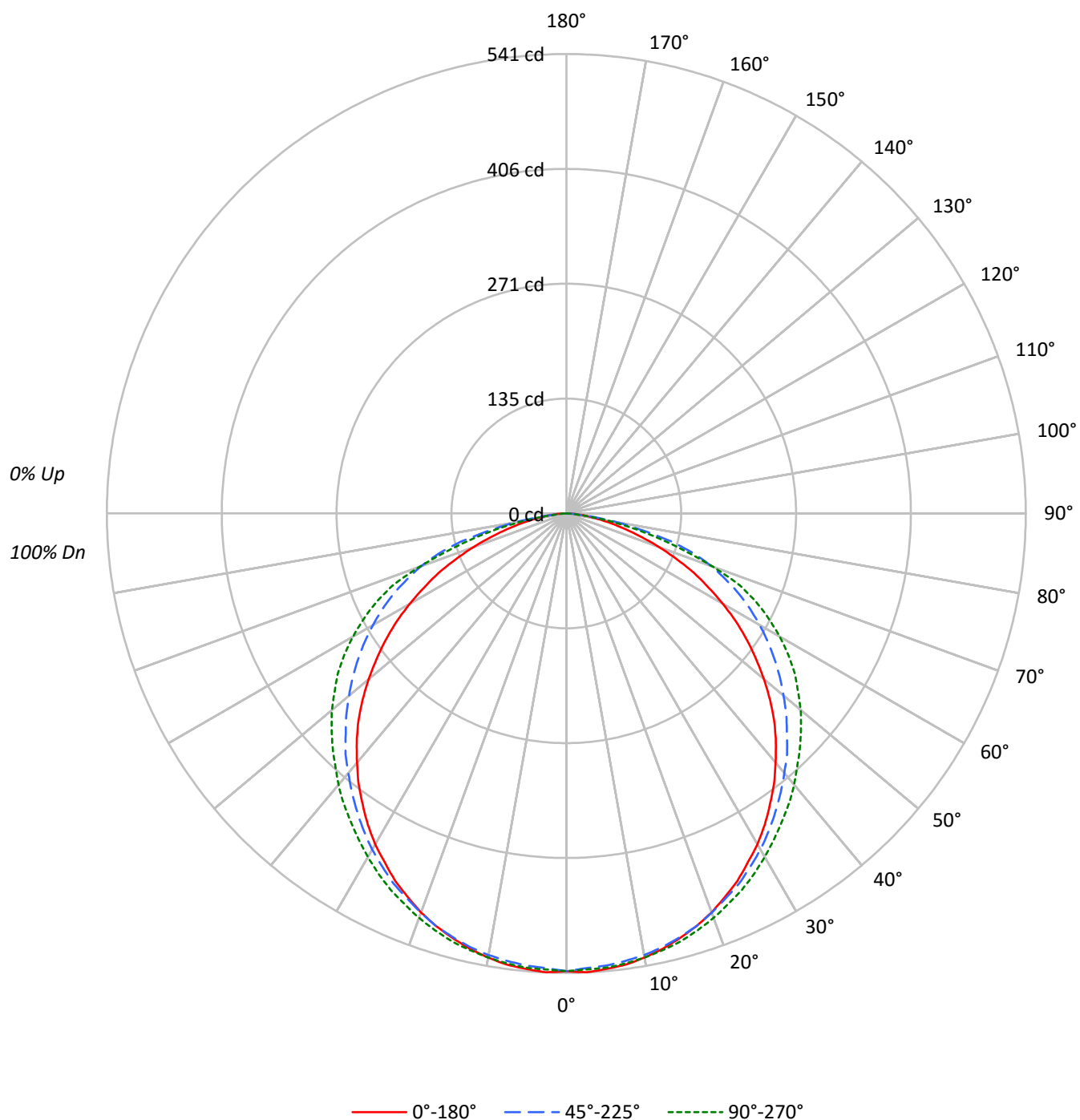
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1450	1450	1450
5°	1455	1444	1451
10°	1451	1443	1451
15°	1442	1439	1453
20°	1432	1433	1452
25°	1417	1428	1452
30°	1399	1420	1451
35°	1374	1410	1454
40°	1346	1402	1466
45°	1318	1398	1481
50°	1272	1398	1508
55°	1217	1405	1541
60°	1144	1415	1560
65°	1055	1430	1570
70°	919	1433	1445
75°	758	1334	1168
80°	595	959	781
85°	463	371	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	3.2
10°-20°	146.4	9.2
20°-30°	222.3	14.0
30°-40°	269.4	17.0
40°-50°	283.9	17.9
50°-60°	265.0	16.7
60°-70°	211.8	13.3
70°-80°	116.5	7.3
80°-90°	20.6	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°	419.8	26.5
0°-40°	689.2	43.4
0°-60°	1238.1	78.0
0°-90°	1587.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	538	537	534	538	537	51
15°	518	518	516	522	522	146
25°	477	478	481	488	489	220
35°	418	422	429	440	443	262
45°	346	353	367	384	389	266
55°	260	272	299	320	328	232
65°	166	187	225	243	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°	539.0	539.0	539.0	539.0	539.0
2.5°	540.9	539.5	536.0	539.0	537.5
5°	538.5	537.0	534.5	538.0	537.0
7.5°	536.0	534.0	531.5	535.5	534.5
10°	531.0	529.5	528.0	531.5	531.0
12.5°	525.0	524.5	523.0	527.0	526.5
15°	517.5	517.5	516.5	521.5	521.5
17.5°	509.5	509.0	509.5	515.0	514.5
20°	500.0	500.0	500.5	507.0	507.0
22.5°	488.6	489.1	490.5	498.5	498.0
25°	477.1	478.1	481.1	488.1	489.1
27.5°	463.1	465.6	469.1	477.6	478.6
30°	450.1	451.6	457.1	465.1	467.1
32.5°	434.7	437.7	443.6	452.6	455.1
35°	418.2	422.2	429.2	440.1	442.6
37.5°	401.7	405.2	414.7	426.2	430.7
40°	383.3	389.2	399.2	412.2	417.2
42.5°	365.3	371.3	384.8	398.2	402.7
45°	346.3	352.8	367.3	383.8	389.2
47.5°	325.4	332.9	351.3	368.8	374.8
50°	303.9	313.4	333.9	353.3	360.3
52.5°	281.5	293.4	316.9	337.3	343.8
55°	259.5	272.5	299.4	320.4	328.4
57.5°	237.0	251.0	281.5	305.4	309.9
60°	212.6	229.6	263.0	283.9	289.9
62.5°	188.6	208.1	244.0	264.0	269.0
65°	165.7	186.6	224.6	243.0	246.5
67.5°	140.7	165.7	203.1	220.1	221.1
70°	116.8	145.7	182.1	190.1	183.6
72.5°	93.3	124.3	157.7	151.2	145.7
75°	72.9	104.3	128.3	115.3	112.3
77.5°	53.9	85.3	91.8	84.8	79.3
80°	38.4	67.4	61.9	52.9	50.4
82.5°	26.4	42.4	33.9	26.4	23.0
85°	15.0	19.0	12.0	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)