

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: P306992

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P306992
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-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 1516.0 lumens
Efficiency: N/A
Efficacy: 90.8 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

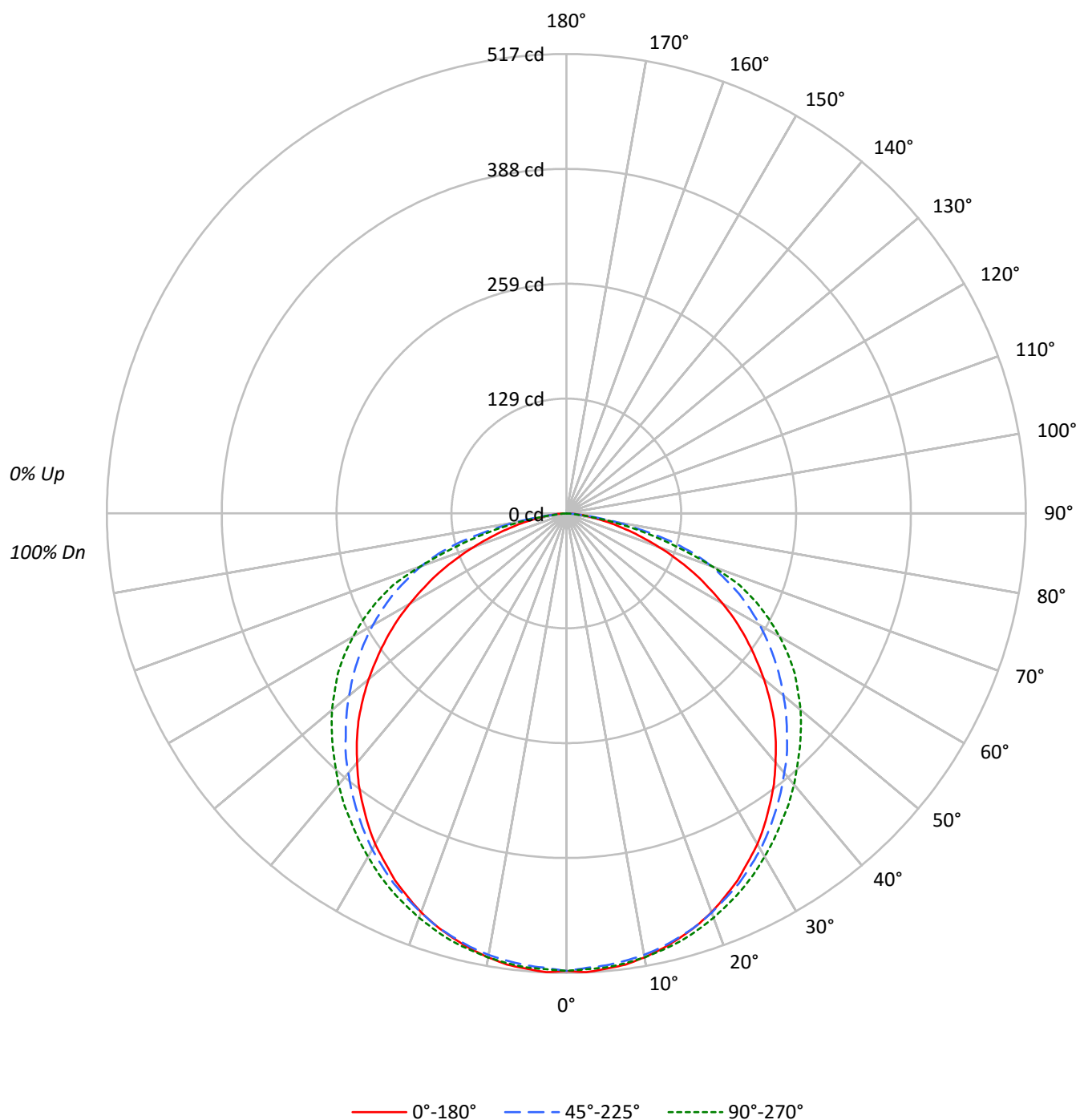
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1385	1385	1385
5°	1390	1379	1385
10°	1386	1378	1386
15°	1377	1375	1388
20°	1368	1369	1387
25°	1353	1364	1387
30°	1336	1357	1386
35°	1312	1347	1389
40°	1286	1340	1400
45°	1259	1335	1415
50°	1215	1335	1441
55°	1163	1342	1472
60°	1093	1352	1491
65°	1008	1366	1500
70°	877	1369	1380
75°	724	1274	1116
80°	569	916	745
85°	442	352	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	3.2
10°-20°	139.9	9.2
20°-30°	212.4	14.0
30°-40°	257.4	17.0
40°-50°	271.2	17.9
50°-60°	253.2	16.7
60°-70°	202.3	13.3
70°-80°	111.3	7.3
80°-90°	19.7	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°	401.0	26.5
0°-40°	658.4	43.4
0°-60°	1182.7	78.0
0°-90°	1516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1516.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	515	515	515	515	515	
5°	514	513	511	514	513	49
15°	494	494	493	498	498	140
25°	456	457	460	466	467	210
35°	400	403	410	420	423	250
45°	331	337	351	367	372	255
55°	248	260	286	306	314	221
65°	158	178	214	232	236	156
75°	70	100	122	110	107	75
85°	14	18	11	7	6	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	514.8	514.8	514.8	514.8	514.8
2.5°	516.7	515.3	512.0	514.8	513.4
5°	514.4	512.9	510.6	513.9	512.9
7.5°	512.0	510.1	507.7	511.5	510.6
10°	507.2	505.8	504.4	507.7	507.2
12.5°	501.5	501.0	499.6	503.4	502.9
15°	494.3	494.3	493.4	498.2	498.2
17.5°	486.7	486.2	486.7	492.0	491.5
20°	477.7	477.7	478.1	484.3	484.3
22.5°	466.7	467.2	468.6	476.2	475.8
25°	455.7	456.7	459.5	466.2	467.2
27.5°	442.4	444.8	448.1	456.2	457.2
30°	430.0	431.4	436.7	444.3	446.2
32.5°	415.2	418.1	423.8	432.4	434.8
35°	399.5	403.3	410.0	420.5	422.8
37.5°	383.7	387.1	396.1	407.1	411.4
40°	366.1	371.8	381.4	393.8	398.5
42.5°	348.9	354.7	367.5	380.4	384.7
45°	330.8	337.0	350.9	366.6	371.8
47.5°	310.8	318.0	335.6	352.3	358.0
50°	290.3	299.4	318.9	337.5	344.2
52.5°	268.9	280.3	302.7	322.3	328.4
55°	247.9	260.3	286.0	306.0	313.7
57.5°	226.4	239.8	268.9	291.7	296.0
60°	203.1	219.3	251.2	271.2	277.0
62.5°	180.2	198.8	233.1	252.2	256.9
65°	158.3	178.3	214.5	232.2	235.5
67.5°	134.4	158.3	194.0	210.2	211.2
70°	111.5	139.2	174.0	181.6	175.4
72.5°	89.1	118.7	150.6	144.4	139.2
75°	69.6	99.6	122.5	110.1	107.3
77.5°	51.5	81.5	87.7	81.0	75.8
80°	36.7	64.4	59.1	50.5	48.1
82.5°	25.3	40.5	32.4	25.3	21.9
85°	14.3	18.1	11.4	7.2	5.7
87.5°	6.2	4.3	2.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)