

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: P307005

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-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: P307005
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-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB 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: 1552.0 lumens
Efficiency: N/A
Efficacy: 91.3 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

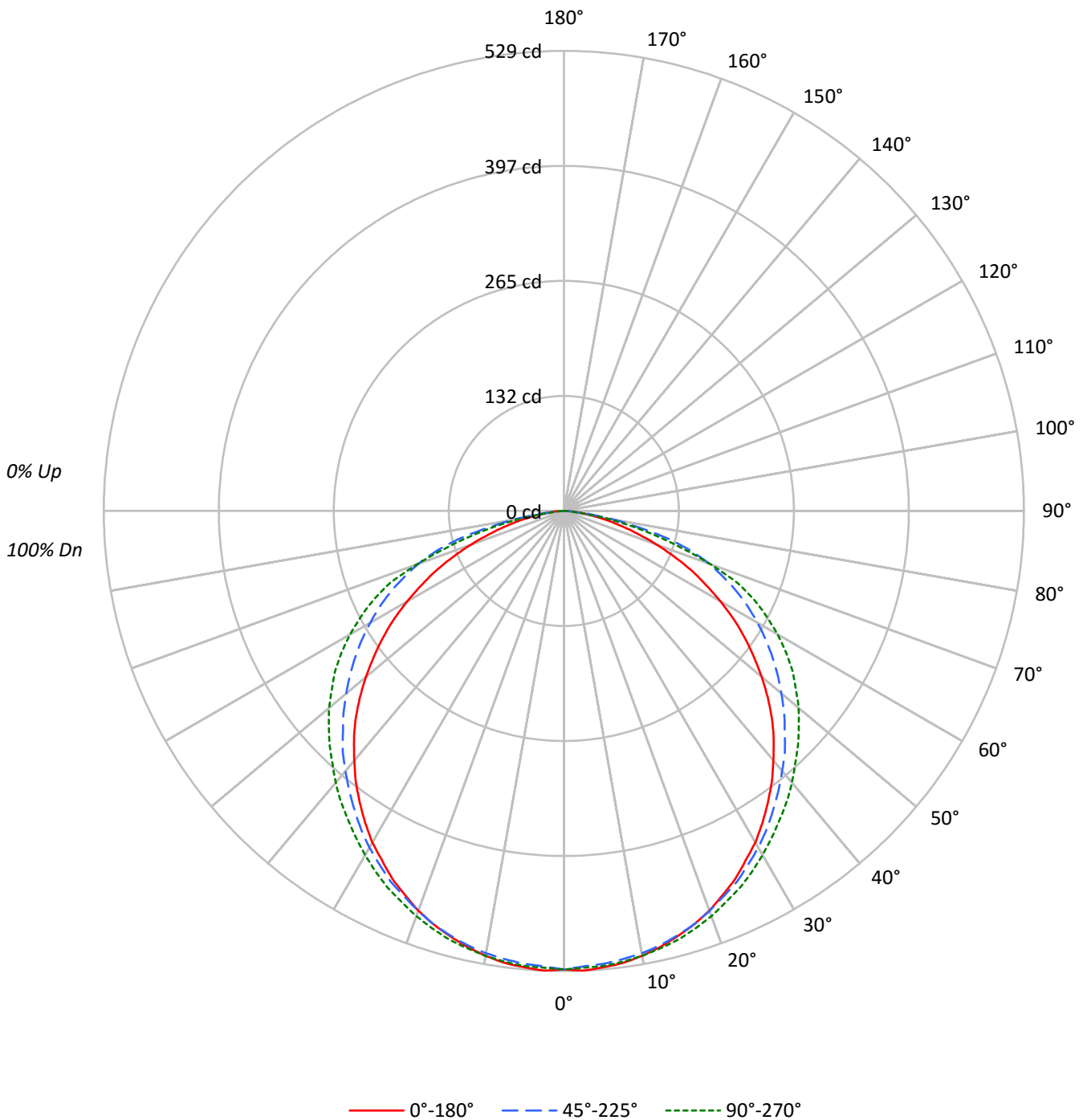
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1418	1418	1418
5°	1422	1412	1418
10°	1419	1411	1419
15°	1410	1407	1421
20°	1400	1402	1420
25°	1385	1397	1420
30°	1368	1389	1419
35°	1344	1379	1422
40°	1317	1371	1433
45°	1289	1367	1449
50°	1244	1367	1475
55°	1191	1374	1506
60°	1119	1384	1526
65°	1032	1398	1535
70°	899	1401	1413
75°	741	1304	1142
80°	583	938	764
85°	451	361	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	3.2
10°-20°	143.2	9.2
20°-30°	217.4	14.0
30°-40°	263.5	17.0
40°-50°	277.6	17.9
50°-60°	259.2	16.7
60°-70°	207.1	13.3
70°-80°	114.0	7.3
80°-90°	20.1	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°	410.5	26.5
0°-40°	674.0	43.4
0°-60°	1210.8	78.0
0°-90°	1552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	527	525	523	526	525	50
15°	506	506	505	510	510	143
25°	467	468	470	477	478	215
35°	409	413	420	430	433	256
45°	339	345	359	375	381	261
55°	254	266	293	313	321	227
65°	162	182	220	238	241	160
75°	71	102	125	113	110	77
85°	15	18	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°	527.1	527.1	527.1	527.1	527.1
2.5°	529.0	527.6	524.1	527.1	525.6
5°	526.6	525.1	522.7	526.1	525.1
7.5°	524.1	522.2	519.7	523.7	522.7
10°	519.3	517.8	516.3	519.7	519.3
12.5°	513.4	512.9	511.5	515.4	514.9
15°	506.1	506.1	505.1	510.0	510.0
17.5°	498.3	497.8	498.3	503.6	503.2
20°	489.0	489.0	489.5	495.8	495.8
22.5°	477.8	478.3	479.7	487.5	487.0
25°	466.6	467.5	470.5	477.3	478.3
27.5°	452.9	455.3	458.7	467.0	468.0
30°	440.2	441.7	447.0	454.8	456.8
32.5°	425.1	428.0	433.9	442.6	445.1
35°	409.0	412.9	419.7	430.4	432.9
37.5°	392.9	396.3	405.5	416.8	421.2
40°	374.8	380.7	390.4	403.1	408.0
42.5°	357.2	363.1	376.3	389.4	393.8
45°	338.7	345.0	359.2	375.3	380.7
47.5°	318.2	325.5	343.6	360.7	366.5
50°	297.2	306.5	326.5	345.5	352.4
52.5°	275.2	287.0	309.9	329.9	336.2
55°	253.8	266.5	292.8	313.3	321.1
57.5°	231.8	245.5	275.2	298.7	303.1
60°	207.9	224.5	257.2	277.7	283.5
62.5°	184.5	203.5	238.6	258.2	263.0
65°	162.0	182.5	219.6	237.7	241.1
67.5°	137.6	162.0	198.6	215.2	216.2
70°	114.2	142.5	178.1	185.9	179.6
72.5°	91.3	121.5	154.2	147.9	142.5
75°	71.3	102.0	125.4	112.7	109.8
77.5°	52.7	83.5	89.8	83.0	77.6
80°	37.6	65.9	60.5	51.7	49.3
82.5°	25.9	41.5	33.2	25.9	22.4
85°	14.6	18.5	11.7	7.3	5.9
87.5°	6.3	4.4	2.4	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)