

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: P307006

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-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: P307006
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-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB 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: 1556.0 lumens
Efficiency: N/A
Efficacy: 90.5 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

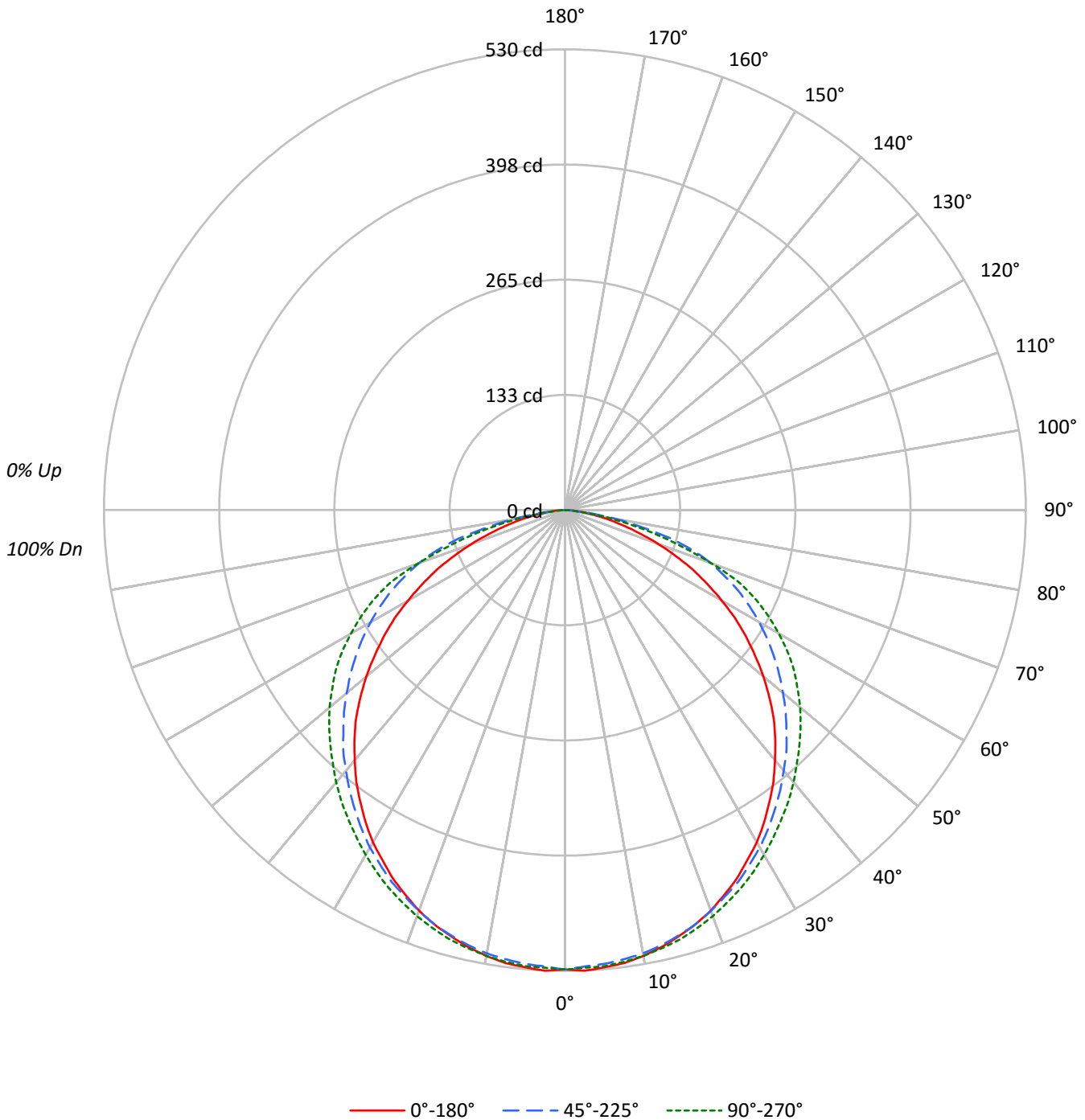
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1422	1422	1422
5°	1426	1415	1422
10°	1423	1415	1423
15°	1414	1411	1424
20°	1404	1405	1424
25°	1389	1401	1424
30°	1371	1393	1423
35°	1347	1382	1426
40°	1320	1375	1437
45°	1292	1370	1452
50°	1248	1370	1479
55°	1194	1377	1510
60°	1122	1388	1530
65°	1034	1402	1539
70°	901	1405	1417
75°	742	1307	1145
80°	584	941	766
85°	454	361	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	3.2
10°-20°	143.6	9.2
20°-30°	218.0	14.0
30°-40°	264.1	17.0
40°-50°	278.3	17.9
50°-60°	259.9	16.7
60°-70°	207.7	13.3
70°-80°	114.3	7.3
80°-90°	20.2	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°	411.6	26.5
0°-40°	675.7	43.4
0°-60°	1213.9	78.0
0°-90°	1556.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	528	526	524	527	526	50
15°	507	507	506	511	511	143
25°	468	469	472	478	480	215
35°	410	414	421	432	434	257
45°	340	346	360	376	382	261
55°	254	267	294	314	322	227
65°	162	183	220	238	242	160
75°	71	102	126	113	110	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°	528.4	528.4	528.4	528.4	528.4
2.5°	530.4	528.9	525.5	528.4	527.0
5°	527.9	526.5	524.0	527.4	526.5
7.5°	525.5	523.5	521.1	525.0	524.0
10°	520.6	519.1	517.7	521.1	520.6
12.5°	514.7	514.2	512.8	516.7	516.2
15°	507.4	507.4	506.4	511.3	511.3
17.5°	499.6	499.1	499.6	504.9	504.5
20°	490.3	490.3	490.8	497.1	497.1
22.5°	479.0	479.5	481.0	488.8	488.3
25°	467.8	468.7	471.7	478.5	479.5
27.5°	454.1	456.5	459.9	468.2	469.2
30°	441.3	442.8	448.2	456.0	458.0
32.5°	426.2	429.1	435.0	443.8	446.2
35°	410.0	413.9	420.8	431.5	434.0
37.5°	393.9	397.3	406.6	417.8	422.3
40°	375.8	381.6	391.4	404.1	409.0
42.5°	358.2	364.0	377.2	390.4	394.9
45°	339.6	345.9	360.1	376.3	381.6
47.5°	319.0	326.4	344.5	361.6	367.5
50°	298.0	307.3	327.3	346.4	353.3
52.5°	276.0	287.7	310.7	330.8	337.1
55°	254.4	267.1	293.6	314.1	321.9
57.5°	232.4	246.1	276.0	299.4	303.8
60°	208.4	225.1	257.9	278.4	284.3
62.5°	184.9	204.0	239.3	258.8	263.7
65°	162.4	183.0	220.2	238.3	241.7
67.5°	138.0	162.4	199.1	215.8	216.8
70°	114.5	142.9	178.6	186.4	180.1
72.5°	91.5	121.8	154.6	148.3	142.9
75°	71.4	102.3	125.7	113.0	110.1
77.5°	52.8	83.7	90.0	83.2	77.8
80°	37.7	66.1	60.7	51.9	49.4
82.5°	25.9	41.6	33.3	25.9	22.5
85°	14.7	18.6	11.7	7.3	5.9
87.5°	6.4	4.4	2.4	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)