

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: P307268

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-2700K**

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: P307268
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 1156.0 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

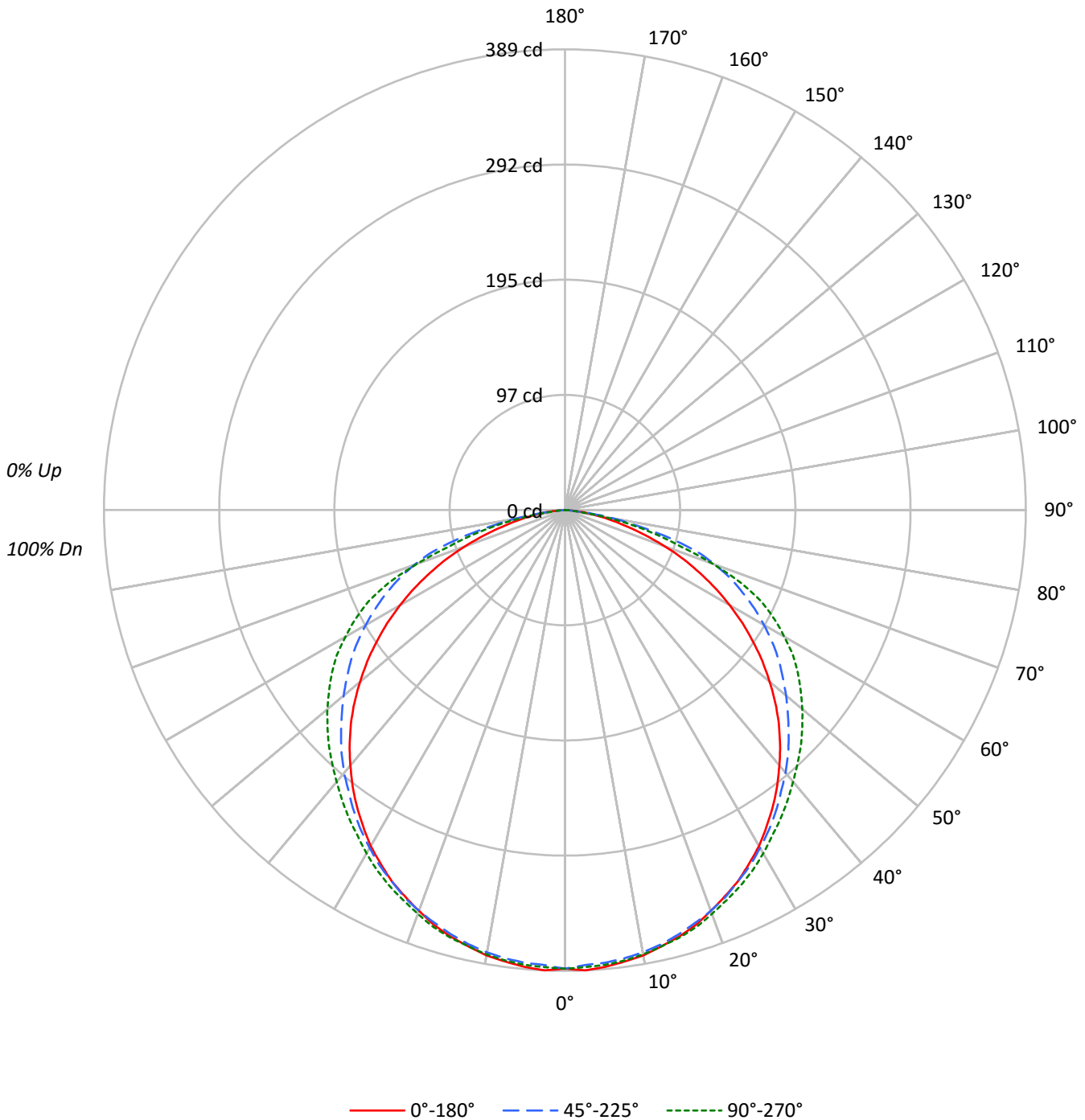
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CP125-W2A-U-2700K

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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1042	1042	1042
5°	1046	1036	1041
10°	1043	1036	1041
15°	1038	1033	1041
20°	1031	1031	1039
25°	1026	1026	1040
30°	1018	1024	1040
35°	1005	1020	1044
40°	989	1018	1052
45°	972	1016	1072
50°	944	1020	1096
55°	910	1033	1126
60°	864	1044	1151
65°	798	1058	1167
70°	710	1065	1044
75°	573	958	835
80°	448	671	545
85°	306	195	139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	3.2
10°-20°	105.1	9.1
20°-30°	160.1	13.8
30°-40°	195.0	16.9
40°-50°	206.9	17.9
50°-60°	195.2	16.9
60°-70°	157.6	13.6
70°-80°	85.5	7.4
80°-90°	13.8	1.2
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°	301.9	26.1
0°-40°	496.9	43.0
0°-60°	899.0	77.8
0°-90°	1156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	387	387	387	387	387	
5°	387	386	384	386	385	37
15°	373	372	371	374	374	105
25°	346	345	346	349	350	159
35°	306	308	310	317	318	191
45°	255	259	267	277	282	197
55°	194	202	220	235	240	173
65°	125	141	166	180	183	124
75°	55	80	92	83	80	60
85°	10	11	6	5	4	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	387.2	387.2	387.2	387.2	387.2
2.5°	389.0	387.2	384.5	387.2	386.3
5°	387.2	386.3	383.6	386.3	385.4
7.5°	384.5	384.5	381.8	383.6	383.6
10°	381.8	380.9	379.1	381.8	380.9
12.5°	377.2	376.3	375.4	378.1	377.2
15°	372.7	371.8	370.9	373.6	373.6
17.5°	367.3	366.4	365.5	369.1	369.1
20°	360.1	360.1	360.1	363.7	362.8
22.5°	352.9	352.9	353.8	357.4	356.5
25°	345.7	344.8	345.7	349.3	350.2
27.5°	336.6	337.5	338.4	342.0	343.0
30°	327.6	328.5	329.4	333.9	334.8
32.5°	316.8	318.6	320.4	325.8	325.8
35°	305.9	307.8	310.5	316.8	317.7
37.5°	294.2	296.0	299.6	306.9	308.7
40°	281.6	284.3	289.7	296.9	299.6
42.5°	268.9	272.6	278.9	287.0	290.6
45°	255.4	259.0	267.1	277.1	281.6
47.5°	241.0	245.5	255.4	268.0	271.7
50°	225.6	231.9	243.7	257.2	261.7
52.5°	210.3	217.5	231.9	246.4	250.9
55°	194.0	202.2	220.2	234.7	240.1
57.5°	177.8	186.8	207.6	222.9	228.3
60°	160.6	171.5	194.0	209.4	213.9
62.5°	143.5	156.1	180.5	195.8	199.5
65°	125.4	140.8	166.1	179.6	183.2
67.5°	108.3	126.4	151.6	161.5	161.5
70°	90.3	110.1	135.4	138.1	132.7
72.5°	72.2	94.8	117.3	107.4	102.9
75°	55.1	80.3	92.1	83.0	80.3
77.5°	41.5	65.0	65.0	59.6	57.8
80°	28.9	49.6	43.3	37.9	35.2
82.5°	19.0	28.0	22.6	18.1	15.3
85°	9.9	10.8	6.3	5.4	4.5
87.5°	3.6	1.8	0.9	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)