

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: P307538

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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: 1801.0 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

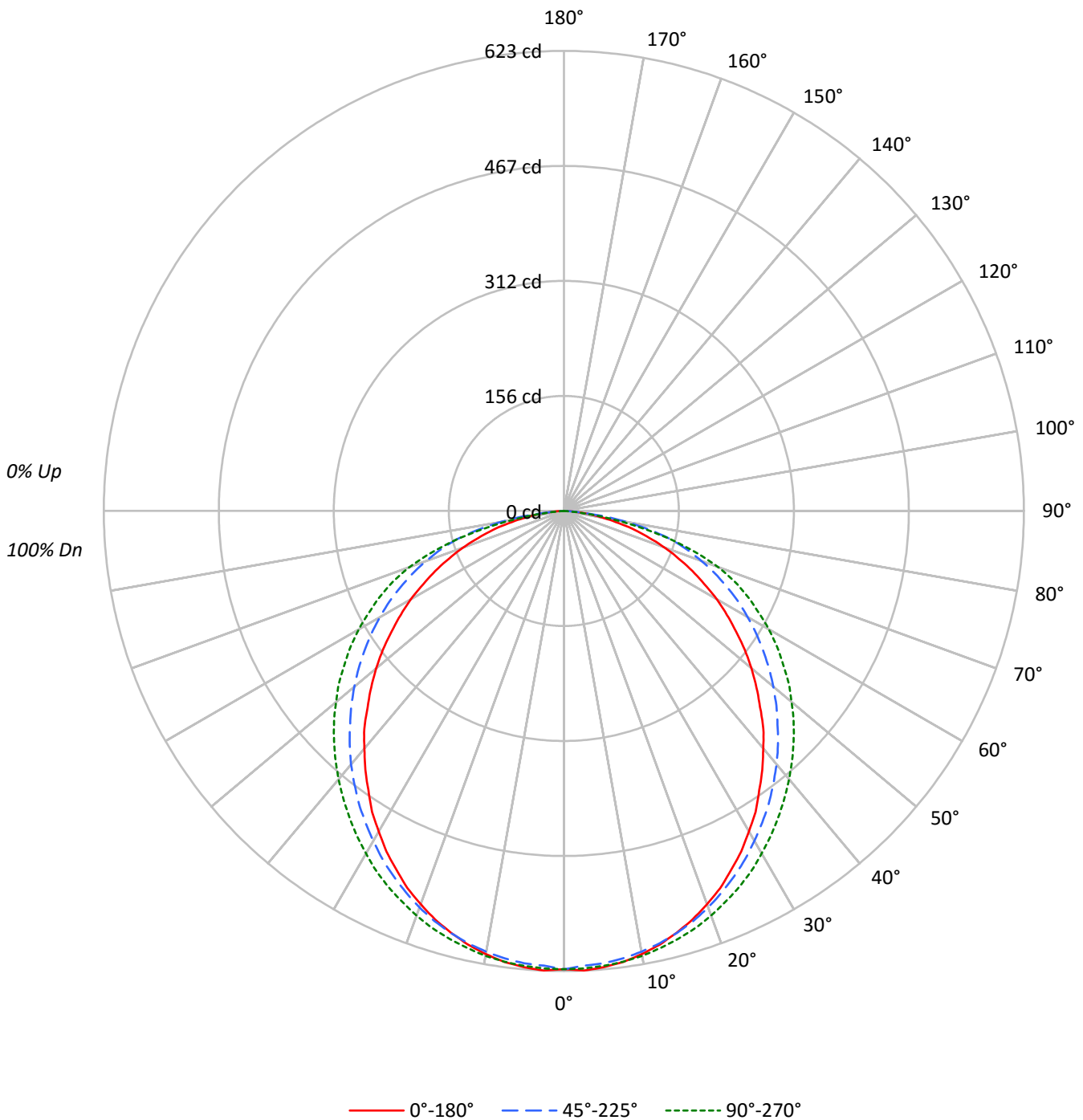
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1670	1670	1670
5°	1675	1661	1670
10°	1665	1656	1671
15°	1647	1648	1670
20°	1623	1637	1670
25°	1592	1621	1668
30°	1557	1603	1665
35°	1516	1590	1664
40°	1476	1574	1666
45°	1431	1557	1675
50°	1389	1550	1686
55°	1336	1545	1701
60°	1288	1547	1725
65°	1223	1552	1752
70°	1147	1564	1751
75°	1040	1578	1582
80°	852	1362	1127
85°	633	645	259



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	3.3
10°-20°	167.7	9.3
20°-30°	252.6	14.0
30°-40°	303.2	16.8
40°-50°	316.0	17.5
50°-60°	292.5	16.2
60°-70°	236.4	13.1
70°-80°	144.1	8.0
80°-90°	29.7	1.7
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°	479.1	26.6
0°-40°	782.2	43.4
0°-60°	1390.8	77.2
0°-90°	1801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	620	618	615	619	618	59
15°	591	592	592	600	600	167
25°	536	539	546	559	562	247
35°	461	469	484	502	506	289
45°	376	387	409	432	440	291
55°	285	300	329	355	363	255
65°	192	211	244	268	275	190
75°	100	122	152	154	152	105
85°	20	30	21	12	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	620.5	620.5	620.5	620.5	620.5
2.5°	622.9	620.9	616.4	620.9	620.0
5°	620.0	618.4	614.8	619.2	618.4
7.5°	616.0	614.4	611.2	616.4	615.6
10°	609.2	608.4	606.0	612.0	611.6
12.5°	601.2	600.8	599.6	606.4	606.0
15°	591.1	591.5	591.5	599.6	599.6
17.5°	579.9	580.7	582.3	591.1	592.3
20°	566.6	568.2	571.5	581.5	583.1
22.5°	553.0	554.2	559.0	571.1	572.7
25°	536.1	539.3	545.8	559.4	561.8
27.5°	520.1	522.9	531.7	545.8	549.8
30°	501.2	505.6	516.0	531.3	535.7
32.5°	483.1	487.9	500.0	517.6	521.7
35°	461.4	468.7	483.9	501.6	506.4
37.5°	441.7	448.6	465.8	485.1	490.7
40°	420.1	428.5	448.2	468.7	474.3
42.5°	400.0	408.0	429.3	450.2	457.8
45°	375.9	387.1	409.2	432.1	440.1
47.5°	353.8	365.0	390.3	414.8	422.1
50°	331.7	343.8	370.3	395.6	402.8
52.5°	308.8	321.7	350.2	375.5	383.9
55°	284.7	299.6	329.3	355.0	362.6
57.5°	261.8	277.1	308.8	334.9	342.6
60°	239.3	255.0	287.5	312.4	320.5
62.5°	214.4	232.9	266.7	291.1	297.2
65°	192.0	210.8	243.8	268.3	275.1
67.5°	168.3	188.7	221.7	244.2	250.6
70°	145.8	167.1	198.8	219.7	222.5
72.5°	121.7	143.4	175.5	188.7	188.7
75°	100.0	122.1	151.8	154.2	152.2
77.5°	76.3	100.8	120.1	115.3	110.4
80°	55.0	79.1	87.9	79.1	72.7
82.5°	36.9	57.4	53.0	42.2	37.3
85°	20.5	30.5	20.9	11.6	8.4
87.5°	7.6	6.8	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)