

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: P307556

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP250-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: P307556
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-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" 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: 1710.0 lumens
Efficiency: N/A
Efficacy: 103.6 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

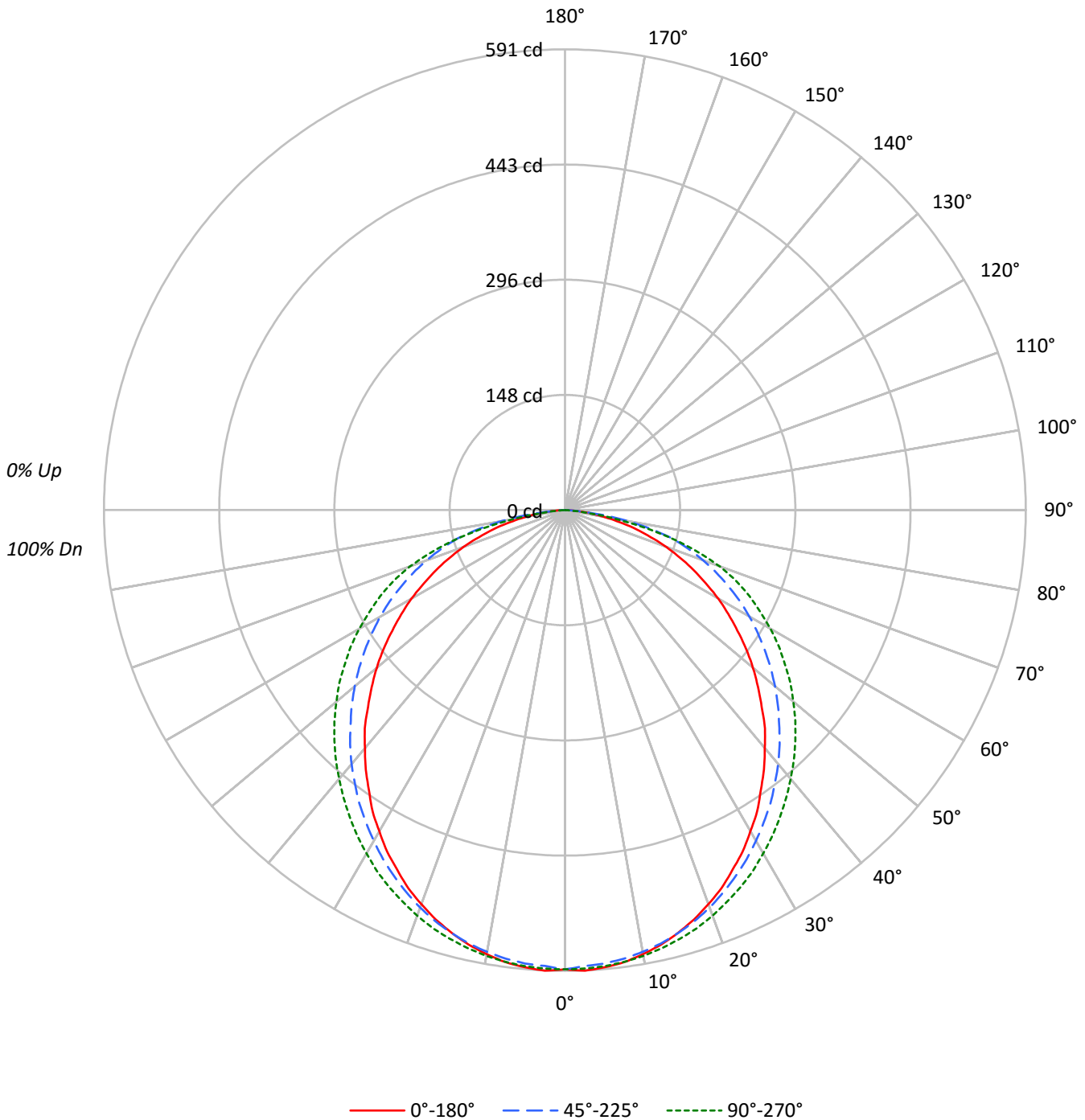
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-CP250-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°	1585	1585	1585
5°	1590	1577	1586
10°	1580	1572	1587
15°	1564	1565	1586
20°	1541	1554	1585
25°	1511	1539	1584
30°	1479	1523	1580
35°	1439	1509	1579
40°	1401	1495	1582
45°	1358	1478	1590
50°	1318	1472	1601
55°	1268	1467	1615
60°	1223	1469	1638
65°	1161	1473	1663
70°	1089	1485	1662
75°	987	1498	1502
80°	809	1294	1069
85°	599	611	247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.3
10°-20°	159.2	9.3
20°-30°	239.9	14.0
30°-40°	287.9	16.8
40°-50°	300.0	17.5
50°-60°	277.8	16.2
60°-70°	224.4	13.1
70°-80°	136.8	8.0
80°-90°	28.2	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°	454.9	26.6
0°-40°	742.7	43.4
0°-60°	1320.5	77.2
0°-90°	1710.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	589	587	584	588	587	56
15°	561	562	562	569	569	158
25°	509	512	518	531	533	235
35°	438	445	460	476	481	274
45°	357	368	388	410	418	276
55°	270	284	313	337	344	242
65°	182	200	231	255	261	180
75°	95	116	144	146	144	100
85°	19	29	20	11	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.1	589.1	589.1	589.1	589.1
2.5°	591.4	589.5	585.3	589.5	588.7
5°	588.7	587.2	583.8	588.0	587.2
7.5°	584.9	583.4	580.3	585.3	584.5
10°	578.4	577.7	575.4	581.1	580.7
12.5°	570.8	570.4	569.3	575.8	575.4
15°	561.3	561.6	561.6	569.3	569.3
17.5°	550.6	551.4	552.9	561.3	562.4
20°	538.0	539.5	542.6	552.1	553.6
22.5°	525.0	526.2	530.8	542.2	543.7
25°	509.0	512.1	518.2	531.1	533.4
27.5°	493.8	496.4	504.8	518.2	522.0
30°	475.9	480.1	490.0	504.5	508.6
32.5°	458.7	463.3	474.7	491.5	495.3
35°	438.1	445.0	459.5	476.2	480.8
37.5°	419.4	425.9	442.3	460.6	465.9
40°	398.8	406.8	425.5	445.0	450.3
42.5°	379.8	387.4	407.6	427.4	434.7
45°	356.9	367.6	388.5	410.3	417.9
47.5°	335.9	346.6	370.6	393.9	400.7
50°	314.9	326.4	351.6	375.6	382.4
52.5°	293.2	305.4	332.5	356.5	364.5
55°	270.3	284.4	312.7	337.1	344.3
57.5°	248.6	263.1	293.2	318.0	325.2
60°	227.3	242.1	273.0	296.6	304.3
62.5°	203.6	221.2	253.2	276.4	282.2
65°	182.3	200.2	231.4	254.7	261.2
67.5°	159.8	179.2	210.5	231.8	237.9
70°	138.4	158.6	188.7	208.6	211.2
72.5°	115.5	136.1	166.6	179.2	179.2
75°	94.9	115.9	144.1	146.4	144.5
77.5°	72.4	95.7	114.0	109.4	104.9
80°	52.2	75.1	83.5	75.1	69.0
82.5°	35.1	54.5	50.3	40.0	35.5
85°	19.4	29.0	19.8	11.1	8.0
87.5°	7.2	6.5	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)