

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: P307826

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-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: P307826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH 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: 1728.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

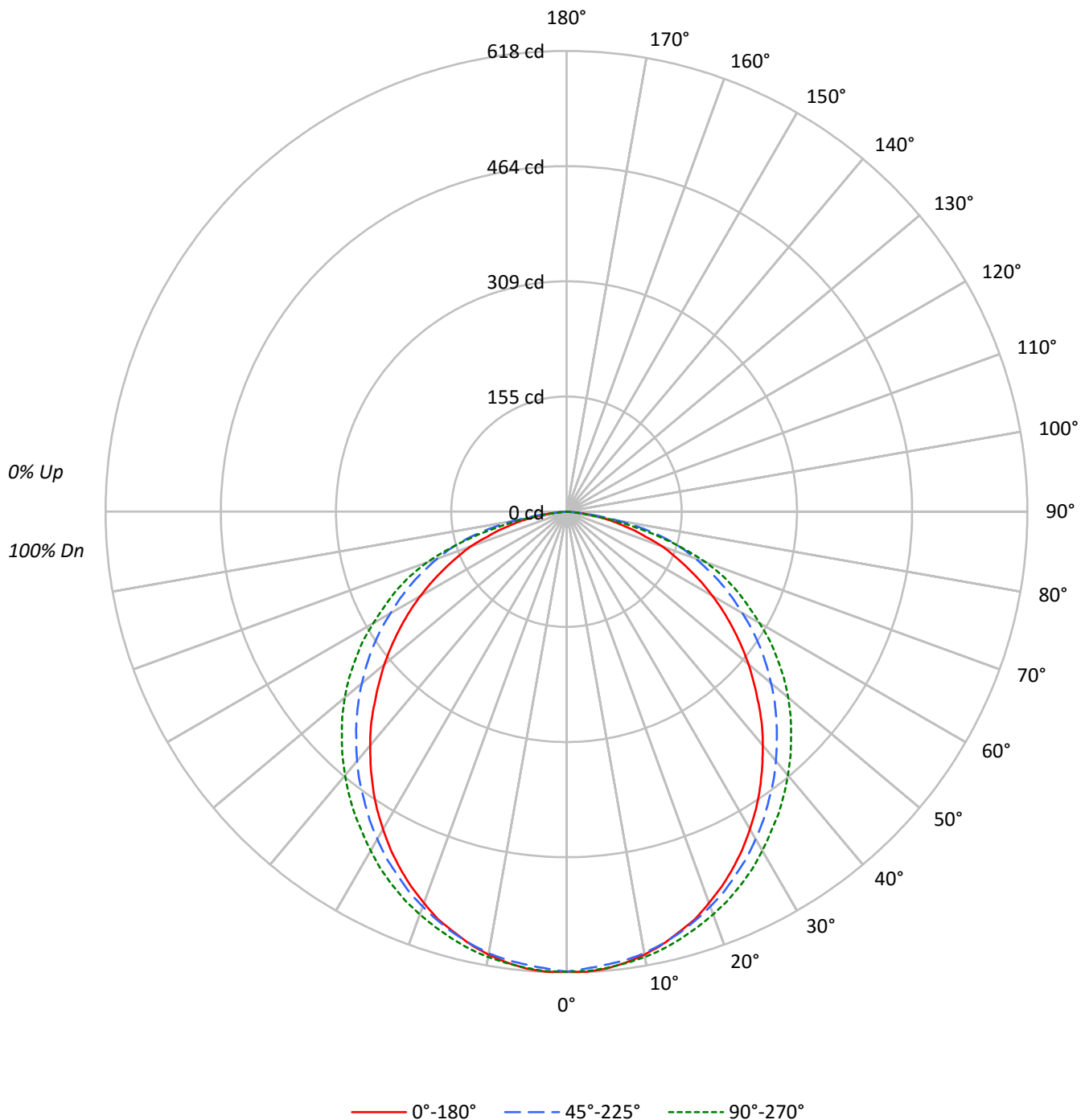
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1660	1660	1660
5°	1662	1648	1659
10°	1648	1643	1658
15°	1626	1630	1652
20°	1600	1614	1646
25°	1567	1595	1641
30°	1528	1576	1632
35°	1486	1554	1627
40°	1439	1535	1622
45°	1386	1516	1620
50°	1334	1499	1625
55°	1278	1487	1620
60°	1217	1466	1609
65°	1145	1462	1609
70°	1079	1449	1564
75°	936	1416	1336
80°	756	1142	890
85°	503	398	266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	3.4
10°-20°	165.8	9.6
20°-30°	248.6	14.4
30°-40°	296.6	17.2
40°-50°	306.6	17.7
50°-60°	280.0	16.2
60°-70°	220.3	12.7
70°-80°	128.2	7.4
80°-90°	23.6	1.4
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°	472.6	27.4
0°-40°	769.2	44.5
0°-60°	1355.8	78.5
0°-90°	1728.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1728.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	615	613	610	615	614	58
15°	584	584	585	593	593	165
25°	528	530	537	550	553	243
35°	452	458	473	491	495	283
45°	364	376	398	421	426	281
55°	272	287	317	340	345	244
65°	180	199	230	248	253	179
75°	90	111	136	134	128	96
85°	16	23	13	10	9	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.9	616.9	616.9	616.9	616.9
2.5°	617.7	616.0	613.4	617.7	616.9
5°	615.2	613.4	610.0	615.2	614.3
7.5°	610.0	608.3	606.6	611.7	610.9
10°	603.2	602.3	601.4	607.4	606.6
12.5°	594.6	594.6	593.7	600.6	600.6
15°	583.5	584.3	585.2	592.9	592.9
17.5°	573.2	572.3	574.9	583.5	584.3
20°	558.6	560.3	563.7	574.0	574.9
22.5°	544.0	545.8	551.8	562.0	564.6
25°	527.8	530.3	537.2	550.0	552.6
27.5°	510.6	514.1	523.5	537.2	539.8
30°	491.8	496.9	507.2	522.6	525.2
32.5°	472.9	478.1	490.9	506.3	509.8
35°	452.4	458.4	472.9	490.9	495.2
37.5°	431.0	438.7	455.8	473.8	478.9
40°	409.5	418.1	436.9	455.8	461.8
42.5°	388.1	396.7	417.2	438.7	444.7
45°	364.1	376.1	398.4	420.7	425.8
47.5°	341.0	353.8	378.7	401.0	407.8
50°	318.7	331.6	358.1	381.3	388.1
52.5°	295.6	309.3	337.6	361.6	367.6
55°	272.4	287.0	317.0	340.1	345.3
57.5°	249.3	264.7	295.6	317.9	323.9
60°	226.2	242.5	272.4	294.7	299.0
62.5°	203.1	220.2	251.0	270.7	275.0
65°	179.9	198.8	229.6	247.6	252.7
67.5°	157.6	176.5	206.5	223.6	227.9
70°	137.1	154.2	184.2	197.1	198.8
72.5°	111.4	132.8	161.9	168.8	164.5
75°	90.0	111.4	136.2	133.7	128.5
77.5°	68.5	90.0	106.2	97.7	90.8
80°	48.8	70.3	73.7	60.8	57.4
82.5°	31.7	48.8	41.1	31.7	25.7
85°	16.3	23.1	12.9	10.3	8.6
87.5°	5.1	3.4	1.7	1.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)