

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: P307421

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-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: P307421
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: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 1841.0 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

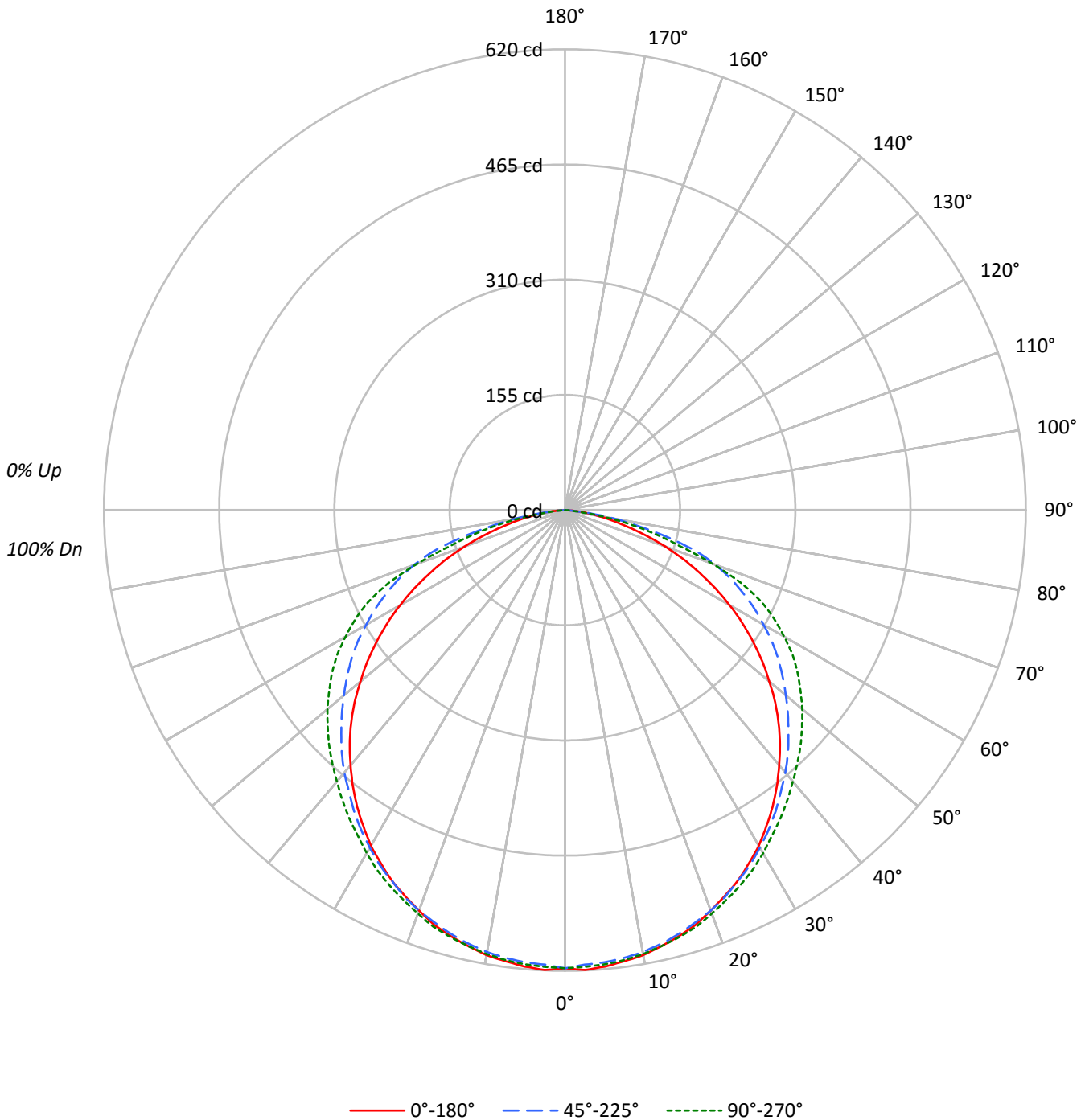
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1659	1659	1659
5°	1666	1650	1658
10°	1661	1650	1657
15°	1654	1646	1658
20°	1642	1642	1655
25°	1635	1635	1656
30°	1621	1630	1657
35°	1600	1624	1662
40°	1575	1621	1676
45°	1548	1619	1706
50°	1504	1625	1745
55°	1450	1645	1794
60°	1377	1663	1833
65°	1272	1684	1858
70°	1131	1696	1662
75°	912	1524	1330
80°	713	1069	869
85°	488	312	222



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	3.2
10°-20°	167.4	9.1
20°-30°	255.0	13.8
30°-40°	310.5	16.9
40°-50°	329.5	17.9
50°-60°	310.9	16.9
60°-70°	251.1	13.6
70°-80°	136.2	7.4
80°-90°	22.0	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°	480.8	26.1
0°-40°	791.3	43.0
0°-60°	1431.7	77.8
0°-90°	1841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	617	615	611	615	614	59
15°	594	592	591	595	595	167
25°	550	549	550	556	558	253
35°	487	490	494	504	506	305
45°	407	412	425	441	448	313
55°	309	322	351	374	382	276
65°	200	224	264	286	292	198
75°	88	128	147	132	128	96
85°	16	17	10	9	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.6	616.6	616.6	616.6	616.6
2.5°	619.5	616.6	612.3	616.6	615.2
5°	616.6	615.2	610.8	615.2	613.7
7.5°	612.3	612.3	608.0	610.8	610.8
10°	608.0	606.5	603.7	608.0	606.5
12.5°	600.8	599.4	597.9	602.2	600.8
15°	593.6	592.2	590.7	595.0	595.0
17.5°	585.0	583.5	582.1	587.9	587.9
20°	573.5	573.5	573.5	579.2	577.8
22.5°	562.0	562.0	563.4	569.2	567.7
25°	550.5	549.0	550.5	556.2	557.7
27.5°	536.1	537.5	539.0	544.7	546.2
30°	521.7	523.2	524.6	531.8	533.2
32.5°	504.5	507.4	510.2	518.9	518.9
35°	487.2	490.1	494.4	504.5	505.9
37.5°	468.6	471.4	477.2	488.7	491.6
40°	448.4	452.7	461.4	472.9	477.2
42.5°	428.3	434.1	444.1	457.1	462.8
45°	406.8	412.5	425.4	441.2	448.4
47.5°	383.8	390.9	406.8	426.9	432.6
50°	359.3	369.4	388.1	409.6	416.8
52.5°	334.9	346.4	369.4	392.4	399.6
55°	309.0	322.0	350.7	373.7	382.3
57.5°	283.1	297.5	330.6	355.0	363.6
60°	255.8	273.1	309.0	333.5	340.6
62.5°	228.5	248.7	287.5	311.9	317.6
65°	199.8	224.2	264.5	286.0	291.8
67.5°	172.5	201.2	241.5	257.3	257.3
70°	143.7	175.3	215.6	219.9	211.3
72.5°	115.0	150.9	186.8	171.0	163.9
75°	87.7	127.9	146.6	132.2	127.9
77.5°	66.1	103.5	103.5	94.9	92.0
80°	46.0	79.1	69.0	60.4	56.1
82.5°	30.2	44.6	35.9	28.7	24.4
85°	15.8	17.2	10.1	8.6	7.2
87.5°	5.7	2.9	1.4	2.9	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)