

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: P307466

Luminaire Tested: **14FCZ2-39-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: P307466
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: 14FCZ2-39-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: 2032.0 lumens
Efficiency: N/A
Efficacy: 61.0 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

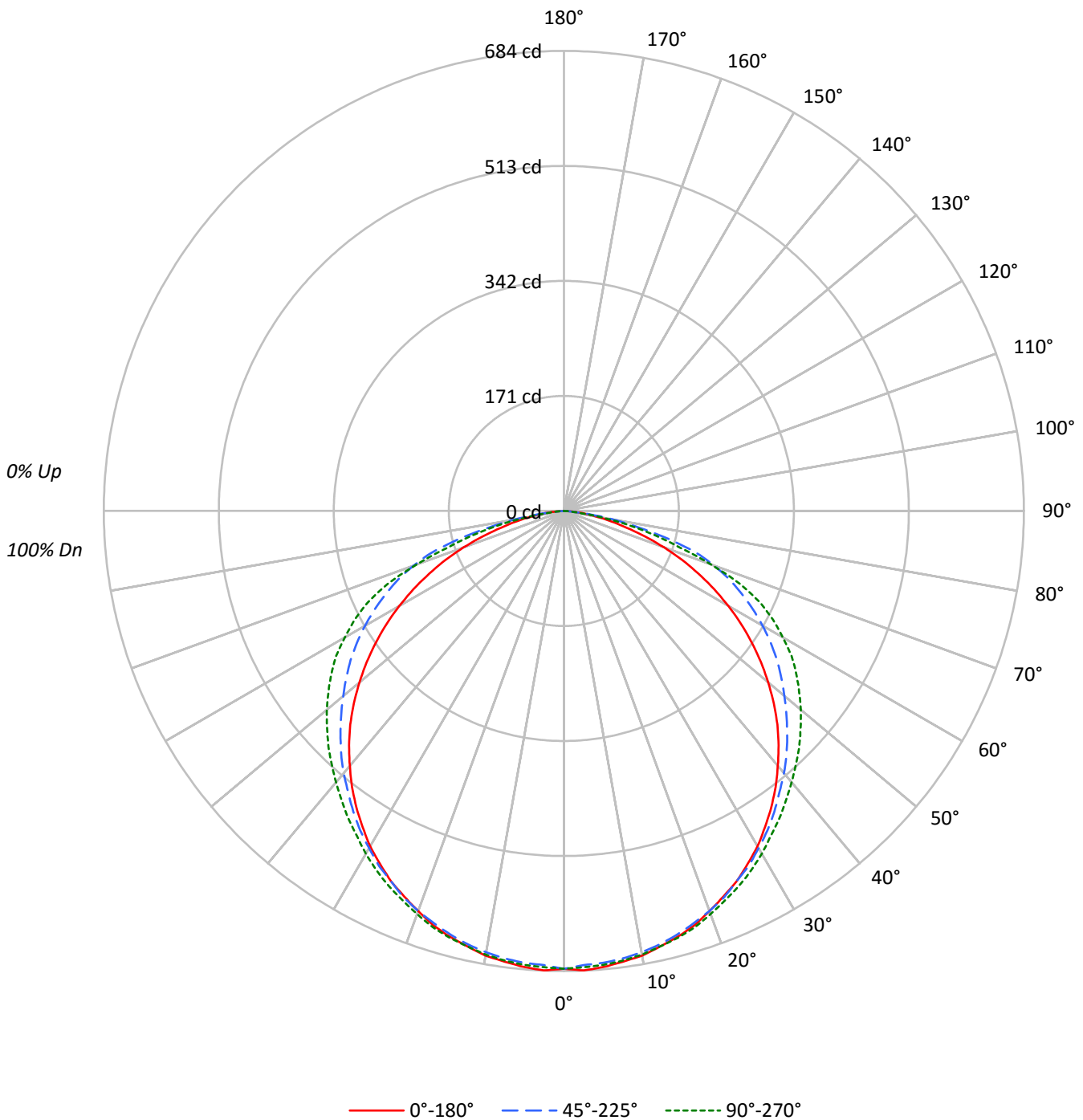
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1831	1831	1831
5°	1838	1821	1830
10°	1834	1821	1829
15°	1825	1816	1830
20°	1813	1813	1826
25°	1804	1804	1828
30°	1789	1799	1829
35°	1767	1793	1834
40°	1739	1789	1850
45°	1709	1787	1884
50°	1660	1793	1926
55°	1600	1816	1980
60°	1520	1836	2024
65°	1404	1859	2050
70°	1248	1873	1835
75°	1006	1682	1468
80°	787	1179	959
85°	540	343	244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	3.2
10°-20°	184.8	9.1
20°-30°	281.4	13.8
30°-40°	342.8	16.9
40°-50°	363.6	17.9
50°-60°	343.2	16.9
60°-70°	277.1	13.6
70°-80°	150.3	7.4
80°-90°	24.3	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°	530.6	26.1
0°-40°	873.4	43.0
0°-60°	1580.3	77.8
0°-90°	2032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	681	679	674	679	677	65
15°	655	654	652	657	657	185
25°	608	606	608	614	616	280
35°	538	541	546	557	558	336
45°	449	455	470	487	495	346
55°	341	355	387	412	422	305
65°	220	248	292	316	322	218
75°	97	141	162	146	141	106
85°	18	19	11	10	8	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.6	680.6	680.6	680.6	680.6
2.5°	683.7	680.6	675.8	680.6	679.0
5°	680.6	679.0	674.2	679.0	677.4
7.5°	675.8	675.8	671.1	674.2	674.2
10°	671.1	669.5	666.3	671.1	669.5
12.5°	663.1	661.5	659.9	664.7	663.1
15°	655.2	653.6	652.0	656.8	656.8
17.5°	645.7	644.1	642.5	648.8	648.8
20°	633.0	633.0	633.0	639.3	637.7
22.5°	620.3	620.3	621.9	628.2	626.6
25°	607.6	606.0	607.6	613.9	615.5
27.5°	591.7	593.3	594.9	601.2	602.8
30°	575.9	577.5	579.0	587.0	588.6
32.5°	556.8	560.0	563.2	572.7	572.7
35°	537.8	541.0	545.7	556.8	558.4
37.5°	517.2	520.3	526.7	539.4	542.6
40°	495.0	499.7	509.2	521.9	526.7
42.5°	472.7	479.1	490.2	504.5	510.8
45°	449.0	455.3	469.6	487.0	495.0
47.5°	423.6	431.5	449.0	471.2	477.5
50°	396.6	407.7	428.3	452.1	460.1
52.5°	369.6	382.3	407.7	433.1	441.0
55°	341.1	355.4	387.1	412.5	422.0
57.5°	312.5	328.4	364.9	391.8	401.4
60°	282.4	301.4	341.1	368.0	376.0
62.5°	252.2	274.4	317.3	344.3	350.6
65°	220.5	247.5	291.9	315.7	322.0
67.5°	190.4	222.1	266.5	284.0	284.0
70°	158.6	193.5	238.0	242.7	233.2
72.5°	126.9	166.6	206.2	188.8	180.9
75°	96.8	141.2	161.8	145.9	141.2
77.5°	73.0	114.2	114.2	104.7	101.5
80°	50.8	87.3	76.1	66.6	61.9
82.5°	33.3	49.2	39.7	31.7	27.0
85°	17.5	19.0	11.1	9.5	7.9
87.5°	6.3	3.2	1.6	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)