

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: P307470

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-4500K**

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: P307470
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-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4500K 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: 2249.0 lumens
Efficiency: N/A
Efficacy: 66.3 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

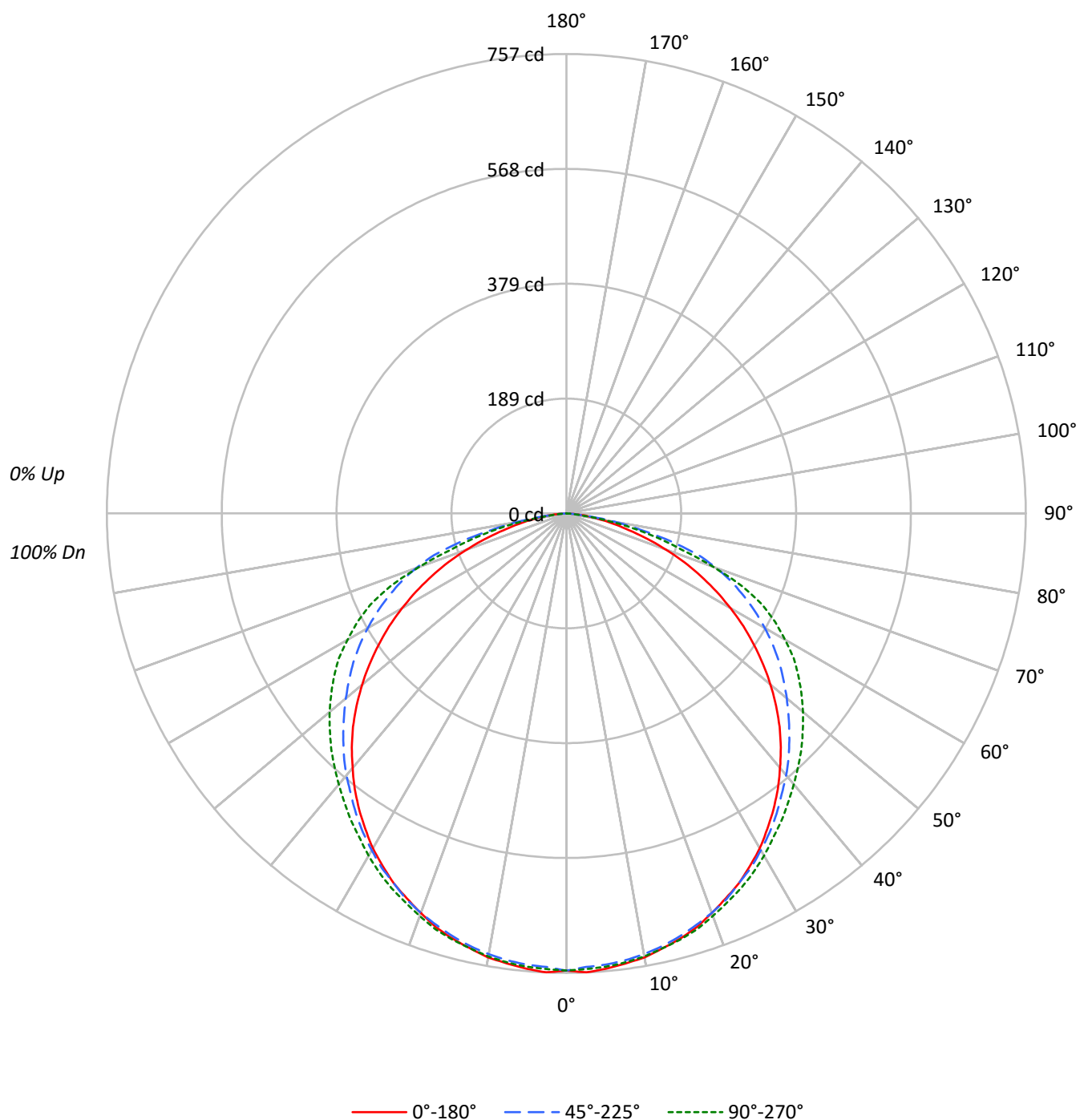
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307470

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307470

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-4500K

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		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2027	2027	2027
5°	2035	2016	2025
10°	2029	2015	2025
15°	2020	2010	2025
20°	2006	2006	2021
25°	1997	1997	2023
30°	1981	1991	2024
35°	1955	1984	2030
40°	1924	1980	2048
45°	1891	1978	2085
50°	1838	1985	2132
55°	1771	2010	2191
60°	1682	2032	2239
65°	1554	2057	2269
70°	1382	2072	2031
75°	1114	1862	1625
80°	871	1306	1062
85°	596	380	272



TEST NUMBER: P307470

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	3.2
10°-20°	204.6	9.1
20°-30°	311.5	13.8
30°-40°	379.4	16.9
40°-50°	402.5	17.9
50°-60°	379.8	16.9
60°-70°	306.7	13.6
70°-80°	166.4	7.4
80°-90°	26.9	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°	587.3	26.1
0°-40°	966.7	43.0
0°-60°	1749.0	77.8
0°-90°	2249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	753	752	746	752	750	72
15°	725	723	722	727	727	205
25°	672	671	672	680	681	310
35°	595	599	604	616	618	372
45°	497	504	520	539	548	383
55°	378	393	428	456	467	337
65°	244	274	323	349	356	242
75°	107	156	179	162	156	117
85°	19	21	12	10	9	25
90°	0	0	0	0	0	



TEST NUMBER: P307470

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	753.2	753.2	753.2	753.2	753.2
2.5°	756.8	753.2	748.0	753.2	751.5
5°	753.2	751.5	746.2	751.5	749.7
7.5°	748.0	748.0	742.7	746.2	746.2
10°	742.7	741.0	737.4	742.7	741.0
12.5°	733.9	732.2	730.4	735.7	733.9
15°	725.2	723.4	721.6	726.9	726.9
17.5°	714.6	712.9	711.1	718.1	718.1
20°	700.6	700.6	700.6	707.6	705.8
22.5°	686.5	686.5	688.3	695.3	693.5
25°	672.5	670.7	672.5	679.5	681.3
27.5°	654.9	656.7	658.4	665.5	667.2
30°	637.4	639.1	640.9	649.7	651.4
32.5°	616.3	619.8	623.3	633.9	633.9
35°	595.2	598.7	604.0	616.3	618.0
37.5°	572.4	575.9	582.9	597.0	600.5
40°	547.8	553.1	563.6	577.7	582.9
42.5°	523.2	530.3	542.5	558.4	565.4
45°	496.9	503.9	519.7	539.0	547.8
47.5°	468.8	477.6	496.9	521.5	528.5
50°	439.0	451.2	474.1	500.4	509.2
52.5°	409.1	423.2	451.2	479.3	488.1
55°	377.5	393.3	428.4	456.5	467.0
57.5°	345.9	363.5	403.8	433.7	444.2
60°	312.5	333.6	377.5	407.4	416.1
62.5°	279.2	303.8	351.2	381.0	388.0
65°	244.1	273.9	323.1	349.4	356.4
67.5°	210.7	245.8	295.0	314.3	314.3
70°	175.6	214.2	263.4	268.6	258.1
72.5°	140.5	184.4	228.3	208.9	200.2
75°	107.1	156.3	179.1	161.5	156.3
77.5°	80.8	126.4	126.4	115.9	112.4
80°	56.2	96.6	84.3	73.7	68.5
82.5°	36.9	54.4	43.9	35.1	29.8
85°	19.3	21.1	12.3	10.5	8.8
87.5°	7.0	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)