

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: P307443

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CA125-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: P307443
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC 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: 2415.0 lumens
Efficiency: N/A
Efficacy: 71.2 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

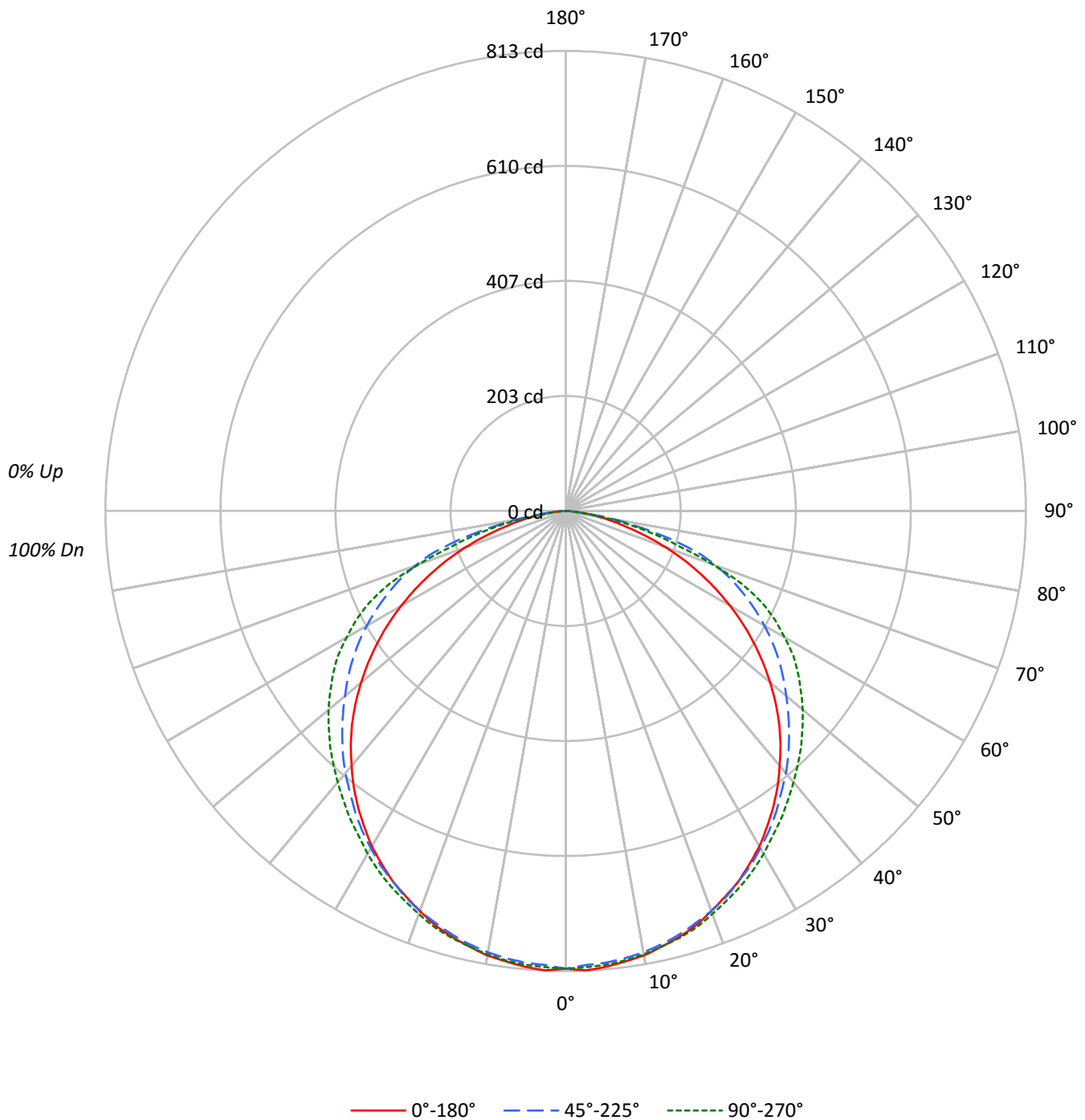
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307443

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CA125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307443

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CA125-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°	2176	2176	2176
5°	2185	2165	2175
10°	2179	2164	2174
15°	2169	2159	2175
20°	2154	2154	2170
25°	2144	2144	2172
30°	2127	2138	2174
35°	2100	2131	2180
40°	2067	2126	2199
45°	2031	2124	2239
50°	1973	2131	2289
55°	1902	2158	2353
60°	1806	2182	2405
65°	1669	2209	2437
70°	1483	2225	2181
75°	1196	1999	1745
80°	934	1402	1139
85°	639	408	290



TEST NUMBER: P307443

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CA125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	3.2
10°-20°	219.6	9.1
20°-30°	334.5	13.8
30°-40°	407.4	16.9
40°-50°	432.2	17.9
50°-60°	407.9	16.9
60°-70°	329.3	13.6
70°-80°	178.7	7.4
80°-90°	28.9	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°	630.7	26.1
0°-40°	1038.0	43.0
0°-60°	1878.1	77.8
0°-90°	2415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	809	807	801	807	805	77
15°	779	777	775	781	781	220
25°	722	720	722	730	732	332
35°	639	643	649	662	664	400
45°	534	541	558	579	588	411
55°	405	422	460	490	502	362
65°	262	294	347	375	383	260
75°	115	168	192	174	168	126
85°	21	23	13	11	9	27
90°	0	0	0	0	0	



TEST NUMBER: P307443

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CA125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.8	808.8	808.8	808.8	808.8
2.5°	812.6	808.8	803.2	808.8	807.0
5°	808.8	807.0	801.3	807.0	805.1
7.5°	803.2	803.2	797.5	801.3	801.3
10°	797.5	795.6	791.9	797.5	795.6
12.5°	788.1	786.2	784.3	790.0	788.1
15°	778.7	776.8	774.9	780.6	780.6
17.5°	767.4	765.5	763.6	771.1	771.1
20°	752.3	752.3	752.3	759.8	757.9
22.5°	737.2	737.2	739.1	746.6	744.7
25°	722.1	720.2	722.1	729.7	731.5
27.5°	703.3	705.1	707.0	714.6	716.5
30°	684.4	686.3	688.2	697.6	699.5
32.5°	661.8	665.6	669.3	680.6	680.6
35°	639.2	642.9	648.6	661.8	663.7
37.5°	614.6	618.4	626.0	641.0	644.8
40°	588.3	593.9	605.2	620.3	626.0
42.5°	561.9	569.4	582.6	599.6	607.1
45°	533.6	541.1	558.1	578.8	588.3
47.5°	503.4	512.8	533.6	560.0	567.5
50°	471.4	484.6	509.1	537.3	546.8
52.5°	439.3	454.4	484.6	514.7	524.1
55°	405.4	422.3	460.0	490.2	501.5
57.5°	371.4	390.3	433.6	465.7	477.0
60°	335.6	358.2	405.4	437.4	446.8
62.5°	299.8	326.2	377.1	409.1	416.7
65°	262.1	294.1	346.9	375.2	382.7
67.5°	226.3	264.0	316.8	337.5	337.5
70°	188.5	230.0	282.8	288.5	277.2
72.5°	150.8	198.0	245.1	224.4	214.9
75°	115.0	167.8	192.3	173.5	167.8
77.5°	86.7	135.8	135.8	124.4	120.7
80°	60.3	103.7	90.5	79.2	73.5
82.5°	39.6	58.4	47.1	37.7	32.1
85°	20.7	22.6	13.2	11.3	9.4
87.5°	7.5	3.8	1.9	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)