

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: P307452

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP125-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: P307452
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-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" 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: 2368.0 lumens
Efficiency: N/A
Efficacy: 69.9 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

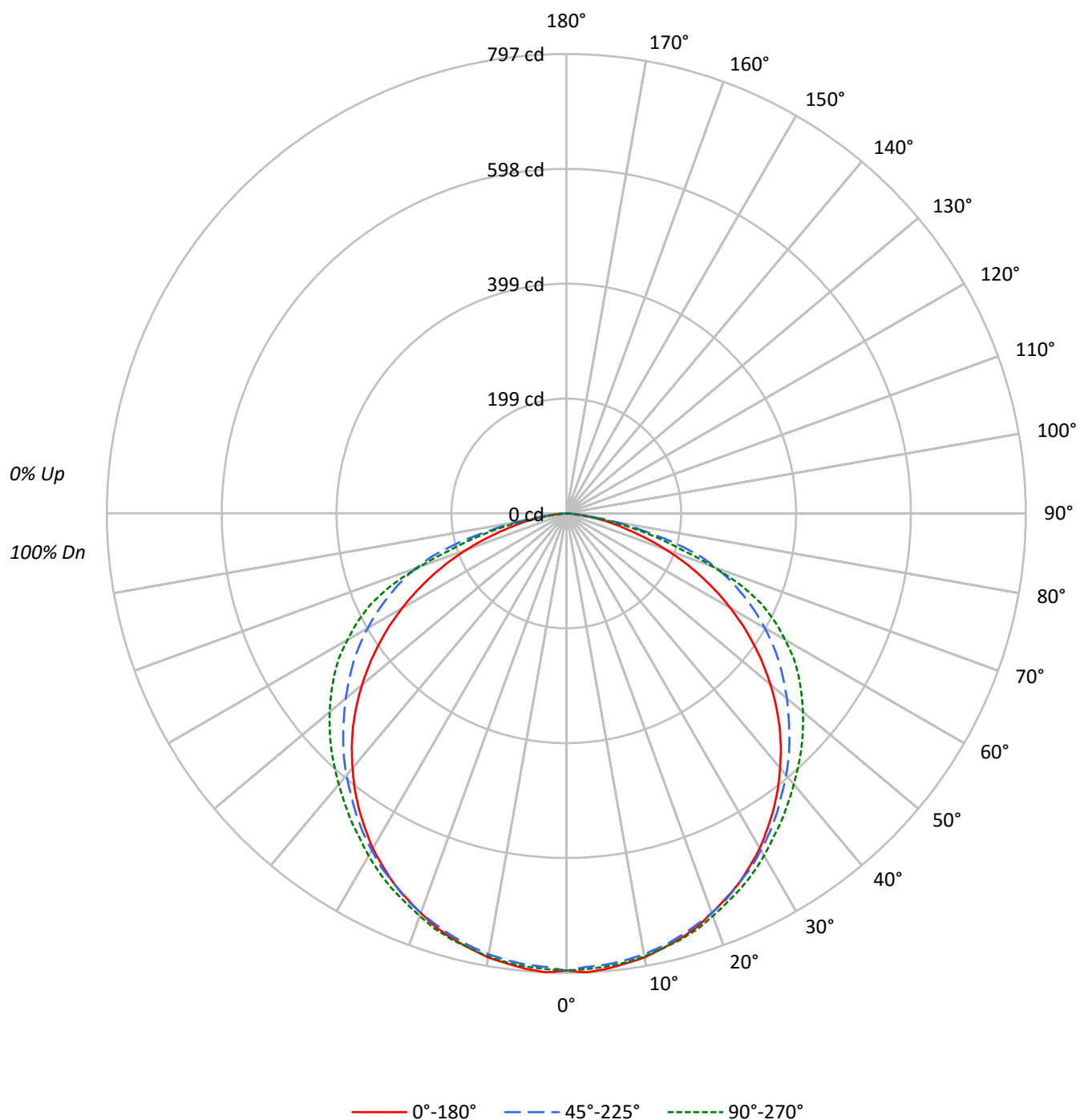
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307452

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307452

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-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°	2134	2134	2134
5°	2142	2122	2132
10°	2137	2122	2132
15°	2127	2117	2132
20°	2112	2112	2128
25°	2102	2102	2130
30°	2085	2097	2131
35°	2059	2089	2138
40°	2026	2085	2156
45°	1991	2082	2195
50°	1935	2090	2244
55°	1865	2116	2307
60°	1771	2139	2358
65°	1636	2166	2390
70°	1455	2182	2138
75°	1173	1961	1710
80°	917	1375	1117
85°	627	398	284



TEST NUMBER: P307452

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	3.2
10°-20°	215.4	9.1
20°-30°	327.9	13.8
30°-40°	399.4	16.9
40°-50°	423.8	17.9
50°-60°	400.0	16.9
60°-70°	322.9	13.6
70°-80°	175.2	7.4
80°-90°	28.3	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°	618.4	26.1
0°-40°	1017.8	43.0
0°-60°	1841.6	77.8
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	793	791	786	791	789	75
15°	764	762	760	765	765	215
25°	708	706	708	716	717	326
35°	627	630	636	649	651	392
45°	523	531	547	568	577	403
55°	398	414	451	481	492	355
65°	257	288	340	368	375	255
75°	113	164	189	170	164	123
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



TEST NUMBER: P307452

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	793.1	793.1	793.1	793.1	793.1
2.5°	796.8	793.1	787.6	793.1	791.3
5°	793.1	791.3	785.7	791.3	789.4
7.5°	787.6	787.6	782.0	785.7	785.7
10°	782.0	780.2	776.5	782.0	780.2
12.5°	772.8	770.9	769.1	774.6	772.8
15°	763.5	761.7	759.8	765.4	765.4
17.5°	752.4	750.6	748.7	756.1	756.1
20°	737.6	737.6	737.6	745.0	743.2
22.5°	722.9	722.9	724.7	732.1	730.2
25°	708.1	706.2	708.1	715.5	717.3
27.5°	689.6	691.4	693.3	700.7	702.5
30°	671.1	672.9	674.8	684.0	685.9
32.5°	648.9	652.6	656.3	667.4	667.4
35°	626.7	630.4	636.0	648.9	650.8
37.5°	602.7	606.4	613.8	628.6	632.3
40°	576.8	582.3	593.4	608.2	613.8
42.5°	550.9	558.3	571.3	587.9	595.3
45°	523.2	530.6	547.2	567.6	576.8
47.5°	493.6	502.9	523.2	549.1	556.5
50°	462.2	475.1	499.2	526.9	536.1
52.5°	430.8	445.5	475.1	504.7	513.9
55°	397.5	414.1	451.1	480.7	491.8
57.5°	364.2	382.7	425.2	456.6	467.7
60°	329.1	351.3	397.5	428.9	438.1
62.5°	293.9	319.8	369.7	401.2	408.6
65°	257.0	288.4	340.2	367.9	375.3
67.5°	221.8	258.8	310.6	330.9	330.9
70°	184.9	225.5	277.3	282.9	271.8
72.5°	147.9	194.1	240.3	220.0	210.8
75°	112.8	164.5	188.6	170.1	164.5
77.5°	85.0	133.1	133.1	122.0	118.3
80°	59.2	101.7	88.7	77.6	72.1
82.5°	38.8	57.3	46.2	37.0	31.4
85°	20.3	22.2	12.9	11.1	9.2
87.5°	7.4	3.7	1.8	3.7	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)