

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: P307167

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5700K**

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: P307167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08"
ACRYLIC SHEET
Light Source: (168) 5700K 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: 2940.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

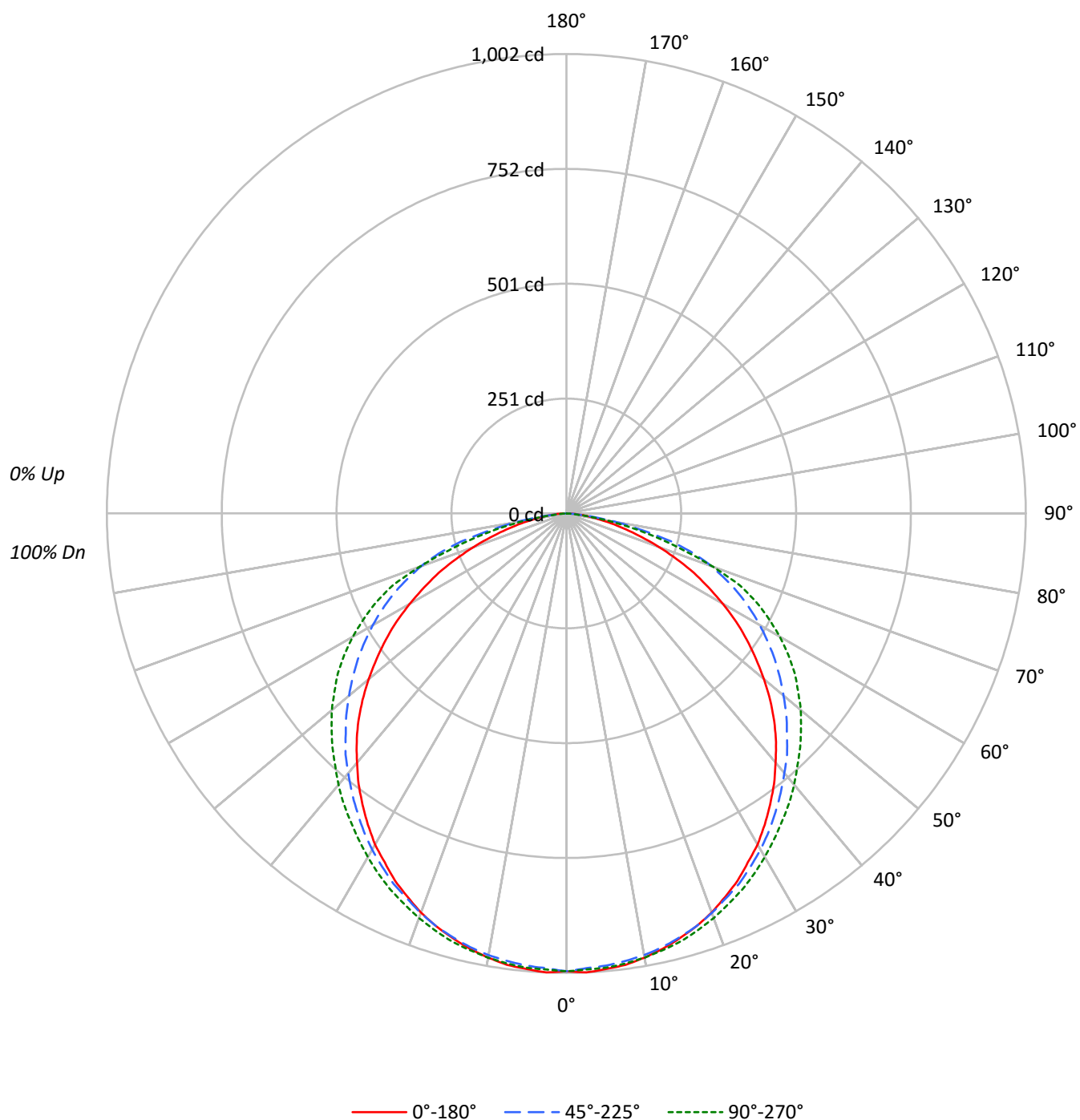
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307167

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307167

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5700K

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	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2687	2687	2687
5°	2695	2675	2687
10°	2688	2673	2688
15°	2671	2666	2691
20°	2653	2655	2690
25°	2624	2646	2690
30°	2591	2631	2689
35°	2545	2612	2694
40°	2494	2598	2715
45°	2442	2589	2744
50°	2357	2589	2794
55°	2255	2602	2854
60°	2119	2622	2891
65°	1954	2649	2908
70°	1702	2655	2677
75°	1404	2470	2163
80°	1103	1776	1447
85°	855	685	343



TEST NUMBER: P307167

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.2
10°-20°	271.2	9.2
20°-30°	411.9	14.0
30°-40°	499.1	17.0
40°-50°	525.9	17.9
50°-60°	491.0	16.7
60°-70°	392.4	13.3
70°-80°	215.9	7.3
80°-90°	38.1	1.3
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°	777.7	26.5
0°-40°	1276.7	43.4
0°-60°	2293.6	78.0
0°-90°	2940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2940.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	995	990	997	995	95
15°	959	959	957	966	966	271
25°	884	886	891	904	906	407
35°	775	782	795	815	820	485
45°	642	654	680	711	721	494
55°	481	505	555	594	608	429
65°	307	346	416	450	457	302
75°	135	193	238	214	208	145
85°	28	35	22	14	11	34
90°	0	0	0	0	0	



TEST NUMBER: P307167

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	998.4	998.4	998.4	998.4	998.4
2.5°	1002.1	999.4	992.9	998.4	995.7
5°	997.5	994.7	990.1	996.6	994.7
7.5°	992.9	989.2	984.6	992.0	990.1
10°	983.6	980.9	978.1	984.6	983.6
12.5°	972.6	971.6	968.9	976.3	975.3
15°	958.7	958.7	956.8	966.1	966.1
17.5°	943.9	943.0	943.9	954.1	953.1
20°	926.3	926.3	927.3	939.3	939.3
22.5°	905.1	906.0	908.8	923.6	922.6
25°	883.8	885.7	891.2	904.1	906.0
27.5°	857.9	862.5	869.0	884.7	886.6
30°	833.9	836.7	846.8	861.6	865.3
32.5°	805.2	810.8	821.9	838.5	843.1
35°	774.7	782.1	795.1	815.4	820.0
37.5°	744.2	750.7	768.2	789.5	797.8
40°	710.0	721.1	739.6	763.6	772.9
42.5°	676.7	687.8	712.8	737.7	746.1
45°	641.6	653.6	680.4	710.9	721.1
47.5°	602.8	616.6	650.8	683.2	694.3
50°	563.0	580.6	618.5	654.5	667.5
52.5°	521.4	543.6	587.0	624.9	637.0
55°	480.7	504.8	554.7	593.5	608.3
57.5°	439.1	465.0	521.4	565.8	574.1
60°	393.8	425.3	487.2	526.0	537.1
62.5°	349.5	385.5	452.1	489.1	498.3
65°	306.9	345.8	416.0	450.2	456.7
67.5°	260.7	306.9	376.3	407.7	409.5
70°	216.3	269.9	337.4	352.2	340.2
72.5°	172.9	230.2	292.1	280.1	269.9
75°	135.0	193.2	237.6	213.6	208.0
77.5°	99.8	158.1	170.1	157.2	147.0
80°	71.2	124.8	114.6	98.0	93.4
82.5°	49.0	78.6	62.9	49.0	42.5
85°	27.7	35.1	22.2	13.9	11.1
87.5°	12.0	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)