

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: P307249

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-6500K**

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: P307249
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: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 6500K 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: 3058.0 lumens
Efficiency: N/A
Efficacy: 76.4 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

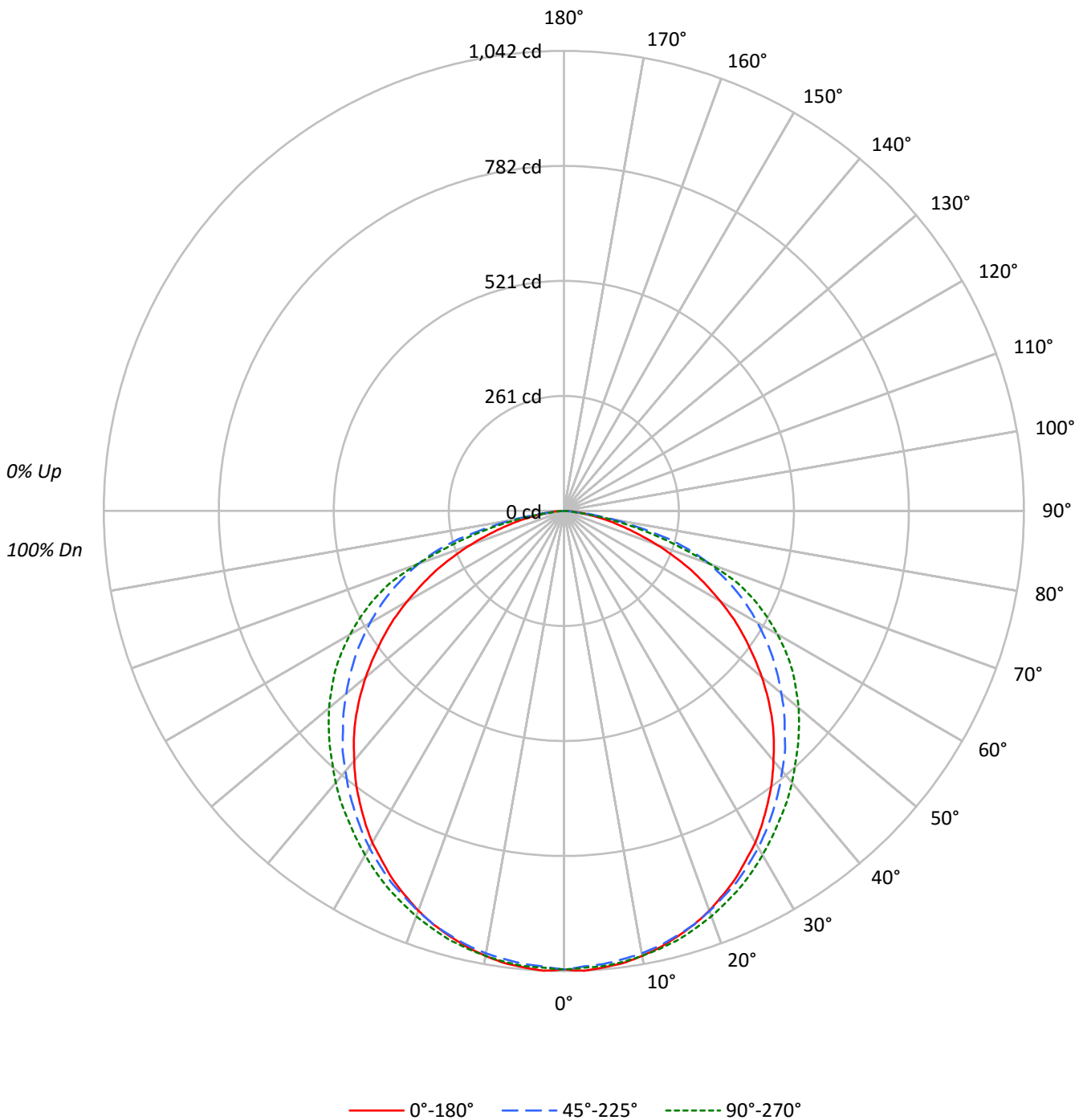
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307249

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P307249

CATALOG NUMBER: 14FC22-44-UNV-L82765-HRP-CP250-W2A-U-6500K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2795	2795	2795
5°	2803	2782	2795
10°	2796	2780	2796
15°	2778	2773	2800
20°	2759	2762	2798
25°	2730	2752	2798
30°	2695	2737	2797
35°	2647	2717	2802
40°	2594	2702	2824
45°	2539	2693	2854
50°	2452	2693	2907
55°	2346	2707	2968
60°	2204	2728	3007
65°	2032	2755	3025
70°	1770	2762	2784
75°	1460	2569	2250
80°	1147	1847	1505
85°	889	713	355



TEST NUMBER: P307249

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.2
10°-20°	282.1	9.2
20°-30°	428.4	14.0
30°-40°	519.1	17.0
40°-50°	547.0	17.9
50°-60°	510.7	16.7
60°-70°	408.1	13.3
70°-80°	224.6	7.3
80°-90°	39.6	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°	808.9	26.5
0°-40°	1328.0	43.4
0°-60°	2385.7	78.0
0°-90°	3058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1038	1035	1030	1037	1035	99
15°	997	997	995	1005	1005	281
25°	919	921	927	940	942	423
35°	806	814	827	848	853	504
45°	667	680	708	740	750	513
55°	500	525	577	617	633	446
65°	319	360	433	468	475	314
75°	140	201	247	222	216	151
85°	29	36	23	14	12	35
90°	0	0	0	0	0	



TEST NUMBER: P307249

CATALOG NUMBER: 14FC22-44-UNV-L82765-HRP-CP250-W2A-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1038.5	1038.5	1038.5	1038.5	1038.5
2.5°	1042.4	1039.5	1032.7	1038.5	1035.6
5°	1037.6	1034.7	1029.9	1036.6	1034.7
7.5°	1032.7	1028.9	1024.1	1031.8	1029.9
10°	1023.1	1020.2	1017.4	1024.1	1023.1
12.5°	1011.6	1010.6	1007.7	1015.4	1014.5
15°	997.2	997.2	995.2	1004.9	1004.9
17.5°	981.8	980.8	981.8	992.4	991.4
20°	963.5	963.5	964.5	977.0	977.0
22.5°	941.4	942.4	945.2	960.6	959.7
25°	919.3	921.2	927.0	940.4	942.4
27.5°	892.4	897.2	903.9	920.2	922.2
30°	867.4	870.2	880.8	896.2	900.0
32.5°	837.5	843.3	854.8	872.2	877.0
35°	805.8	813.5	827.0	848.1	852.9
37.5°	774.1	780.8	799.1	821.2	829.8
40°	738.5	750.0	769.3	794.3	803.9
42.5°	703.9	715.4	741.4	767.3	776.0
45°	667.3	679.8	707.7	739.5	750.0
47.5°	627.0	641.4	677.0	710.6	722.2
50°	585.6	603.9	643.3	680.8	694.3
52.5°	542.3	565.4	610.6	650.0	662.5
55°	500.0	525.0	577.0	617.3	632.7
57.5°	456.8	483.7	542.3	588.5	597.1
60°	409.6	442.3	506.8	547.1	558.7
62.5°	363.5	401.0	470.2	508.7	518.3
65°	319.2	359.6	432.7	468.3	475.0
67.5°	271.2	319.2	391.4	424.1	426.0
70°	225.0	280.8	351.0	366.4	353.9
72.5°	179.8	239.4	303.9	291.4	280.8
75°	140.4	201.0	247.1	222.1	216.4
77.5°	103.9	164.4	176.9	163.5	152.9
80°	74.0	129.8	119.2	101.9	97.1
82.5°	51.0	81.7	65.4	51.0	44.2
85°	28.8	36.5	23.1	14.4	11.5
87.5°	12.5	8.7	4.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)