

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: P307962

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K**

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: P307962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3000K 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: 2982.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

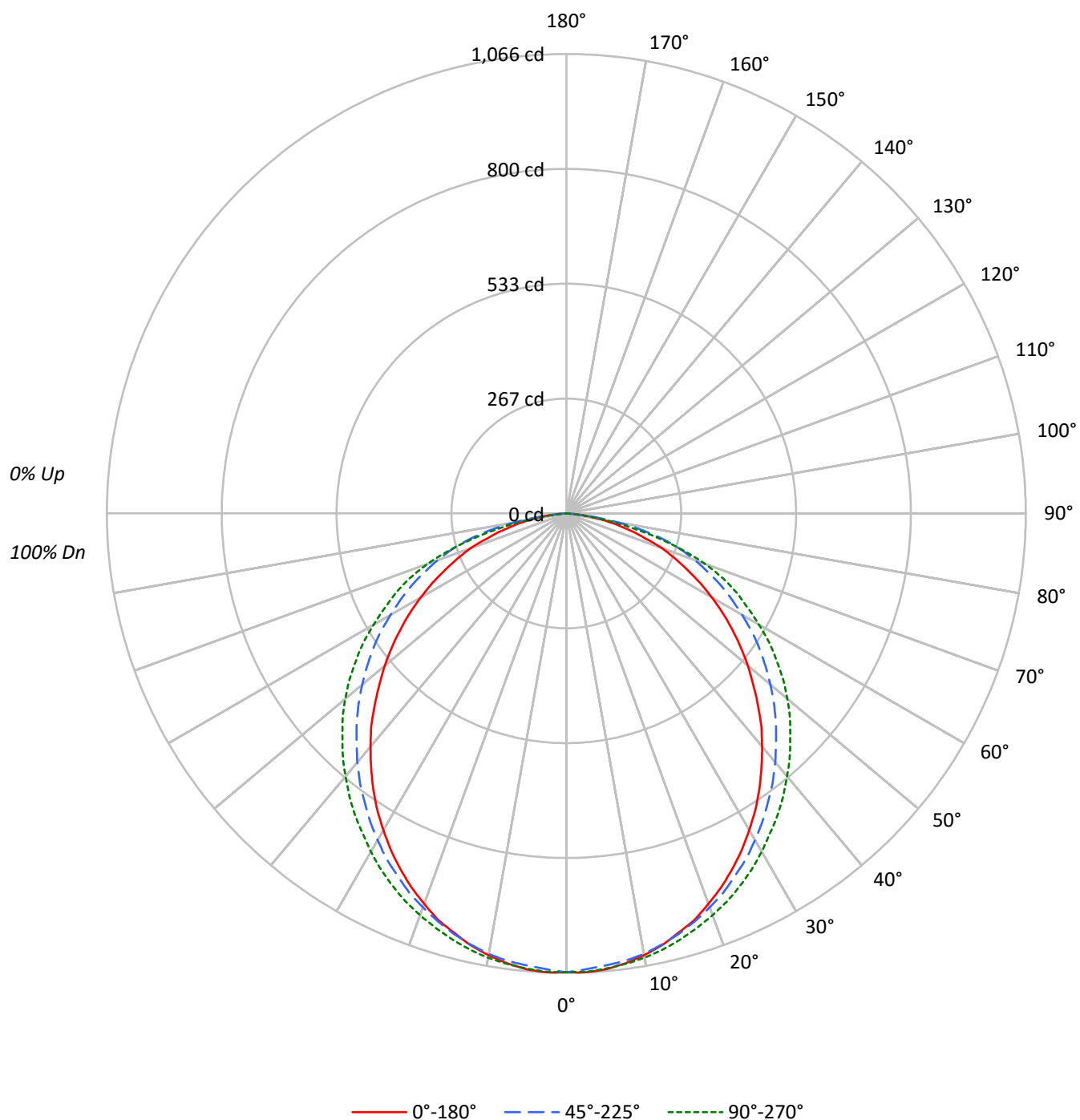
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307962

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307962

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K

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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2865	2865	2865
5°	2868	2844	2864
10°	2844	2836	2860
15°	2805	2813	2850
20°	2761	2786	2841
25°	2704	2752	2831
30°	2637	2720	2816
35°	2565	2681	2807
40°	2483	2649	2799
45°	2391	2616	2796
50°	2303	2587	2804
55°	2206	2566	2795
60°	2101	2531	2777
65°	1977	2523	2777
70°	1862	2501	2699
75°	1614	2444	2306
80°	1306	1971	1536
85°	868	685	457



TEST NUMBER: P307962

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	3.4
10°-20°	286.0	9.6
20°-30°	429.1	14.4
30°-40°	511.8	17.2
40°-50°	529.1	17.7
50°-60°	483.1	16.2
60°-70°	380.2	12.7
70°-80°	221.3	7.4
80°-90°	40.8	1.4
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°	815.6	27.4
0°-40°	1327.5	44.5
0°-60°	2339.7	78.5
0°-90°	2982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1062	1059	1053	1062	1060	101
15°	1007	1008	1010	1023	1023	284
25°	911	915	927	949	954	419
35°	781	791	816	847	855	488
45°	628	649	688	726	735	485
55°	470	495	547	587	596	420
65°	310	343	396	427	436	308
75°	155	192	235	231	222	165
85°	28	40	22	18	15	36
90°	0	0	0	0	0	



TEST NUMBER: P307962

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.5	1064.5	1064.5	1064.5	1064.5
2.5°	1066.0	1063.0	1058.6	1066.0	1064.5
5°	1061.6	1058.6	1052.7	1061.6	1060.1
7.5°	1052.7	1049.7	1046.8	1055.7	1054.2
10°	1040.9	1039.4	1037.9	1048.3	1046.8
12.5°	1026.1	1026.1	1024.6	1036.4	1036.4
15°	1006.9	1008.3	1009.8	1023.1	1023.1
17.5°	989.1	987.6	992.1	1006.9	1008.3
20°	964.0	966.9	972.9	990.6	992.1
22.5°	938.9	941.8	952.2	969.9	974.3
25°	910.8	915.2	927.0	949.2	953.6
27.5°	881.2	887.1	903.4	927.0	931.5
30°	848.7	857.5	875.3	901.9	906.3
32.5°	816.1	825.0	847.2	873.8	879.7
35°	780.7	791.0	816.1	847.2	854.6
37.5°	743.7	757.0	786.6	817.6	826.5
40°	706.7	721.5	754.0	786.6	796.9
42.5°	669.8	684.5	720.0	757.0	767.3
45°	628.4	649.1	687.5	725.9	734.8
47.5°	588.4	610.6	653.5	691.9	703.8
50°	550.0	572.2	618.0	657.9	669.8
52.5°	510.1	533.7	582.5	623.9	634.3
55°	470.2	495.3	547.0	587.0	595.8
57.5°	430.2	456.9	510.1	548.5	558.9
60°	390.3	418.4	470.2	508.6	516.0
62.5°	350.4	380.0	433.2	467.2	474.6
65°	310.5	343.0	396.2	427.3	436.2
67.5°	272.0	304.6	356.3	385.9	393.3
70°	236.6	266.1	317.9	340.1	343.0
72.5°	192.2	229.2	279.4	291.3	283.9
75°	155.2	192.2	235.1	230.6	221.8
77.5°	118.3	155.2	183.3	168.5	156.7
80°	84.3	121.2	127.2	105.0	99.1
82.5°	54.7	84.3	71.0	54.7	44.4
85°	28.1	39.9	22.2	17.7	14.8
87.5°	8.9	5.9	3.0	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)