

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: P307964

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP250-W2A-U-4000K**

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: P307964
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-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 3154.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

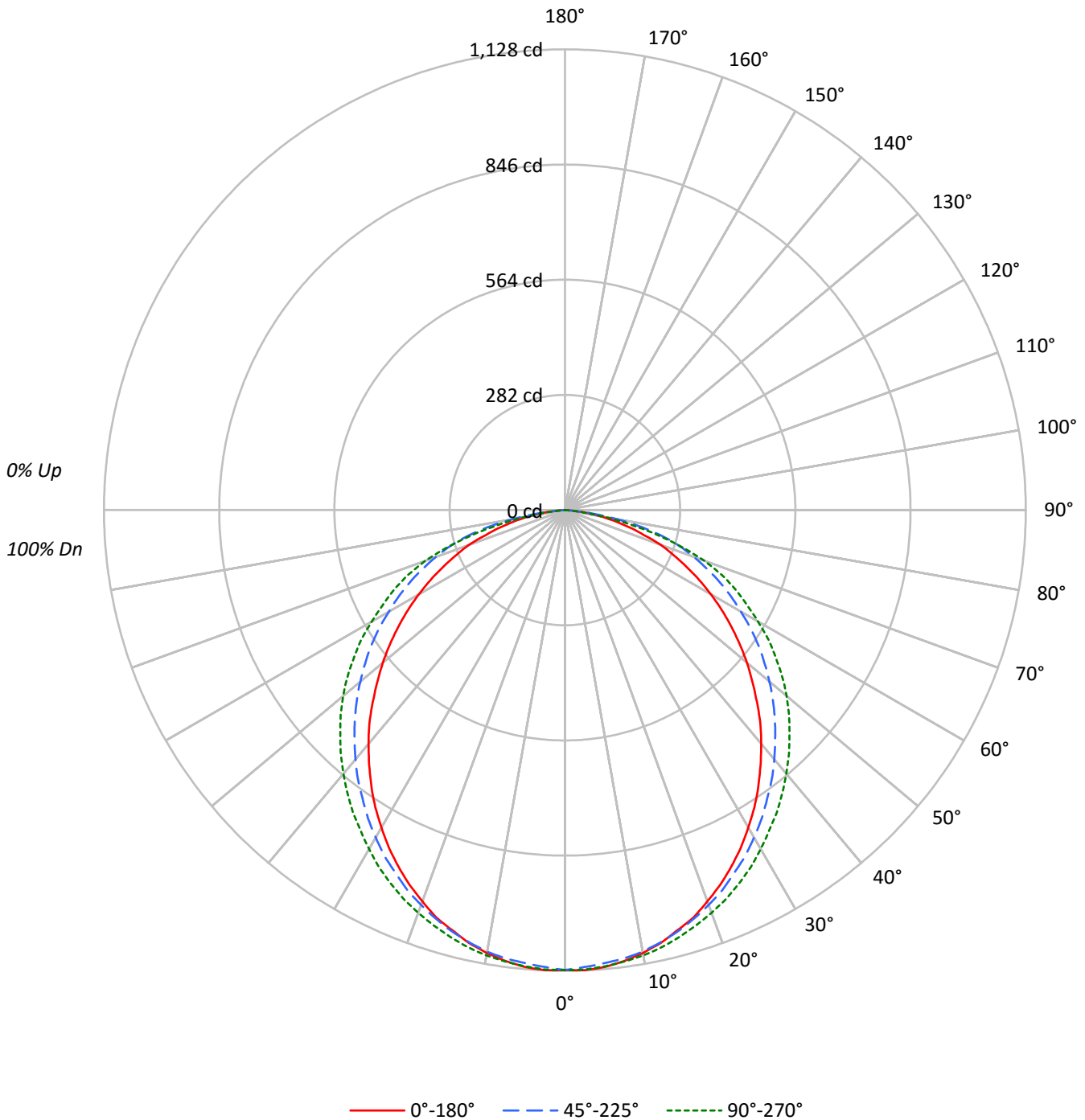
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307964

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P307964

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-4000K

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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3030	3030	3030
5°	3033	3008	3029
10°	3008	3000	3025
15°	2967	2976	3015
20°	2920	2947	3005
25°	2860	2911	2995
30°	2789	2877	2979
35°	2712	2836	2969
40°	2626	2801	2961
45°	2529	2767	2958
50°	2435	2737	2966
55°	2333	2715	2957
60°	2222	2676	2937
65°	2091	2669	2937
70°	1969	2645	2854
75°	1707	2585	2439
80°	1381	2084	1624
85°	917	726	482



TEST NUMBER: P307964

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	3.4
10°-20°	302.5	9.6
20°-30°	453.8	14.4
30°-40°	541.4	17.2
40°-50°	559.7	17.7
50°-60°	511.0	16.2
60°-70°	402.1	12.7
70°-80°	234.1	7.4
80°-90°	43.1	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°	862.7	27.4
0°-40°	1404.0	44.5
0°-60°	2474.7	78.5
0°-90°	3154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3154.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1123	1120	1113	1123	1121	106
15°	1065	1066	1068	1082	1082	300
25°	963	968	980	1004	1009	443
35°	826	837	863	896	904	516
45°	665	686	727	768	777	513
55°	497	524	579	621	630	445
65°	328	363	419	452	461	326
75°	164	203	249	244	235	175
85°	30	42	24	19	16	38
90°	0	0	0	0	0	



TEST NUMBER: P307964

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CP250-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.9	1125.9	1125.9	1125.9	1125.9
2.5°	1127.5	1124.4	1119.7	1127.5	1125.9
5°	1122.8	1119.7	1113.4	1122.8	1121.2
7.5°	1113.4	1110.3	1107.2	1116.5	1115.0
10°	1100.9	1099.3	1097.8	1108.7	1107.2
12.5°	1085.3	1085.3	1083.7	1096.2	1096.2
15°	1064.9	1066.5	1068.1	1082.1	1082.1
17.5°	1046.2	1044.6	1049.3	1064.9	1066.5
20°	1019.6	1022.7	1029.0	1047.7	1049.3
22.5°	993.0	996.1	1007.1	1025.8	1030.5
25°	963.3	968.0	980.5	1004.0	1008.6
27.5°	932.0	938.3	955.5	980.5	985.2
30°	897.6	907.0	925.8	953.9	958.6
32.5°	863.2	872.6	896.0	924.2	930.5
35°	825.7	836.6	863.2	896.0	903.9
37.5°	786.6	800.7	831.9	864.8	874.2
40°	747.5	763.1	797.5	831.9	842.9
42.5°	708.4	724.0	761.6	800.7	811.6
45°	664.6	686.5	727.2	767.8	777.2
47.5°	622.4	645.8	691.2	731.9	744.4
50°	581.7	605.2	653.7	695.9	708.4
52.5°	539.5	564.5	616.1	659.9	670.9
55°	497.3	523.9	578.6	620.8	630.2
57.5°	455.1	483.2	539.5	580.2	591.1
60°	412.8	442.6	497.3	537.9	545.8
62.5°	370.6	401.9	458.2	494.2	502.0
65°	328.4	362.8	419.1	451.9	461.3
67.5°	287.7	322.1	376.9	408.1	416.0
70°	250.2	281.5	336.2	359.7	362.8
72.5°	203.3	242.4	295.6	308.1	300.2
75°	164.2	203.3	248.6	244.0	234.6
77.5°	125.1	164.2	193.9	178.3	165.8
80°	89.1	128.2	134.5	111.0	104.8
82.5°	57.9	89.1	75.1	57.9	46.9
85°	29.7	42.2	23.5	18.8	15.6
87.5°	9.4	6.3	3.1	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)