

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: P307938

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA125-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: P307938
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 3446.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

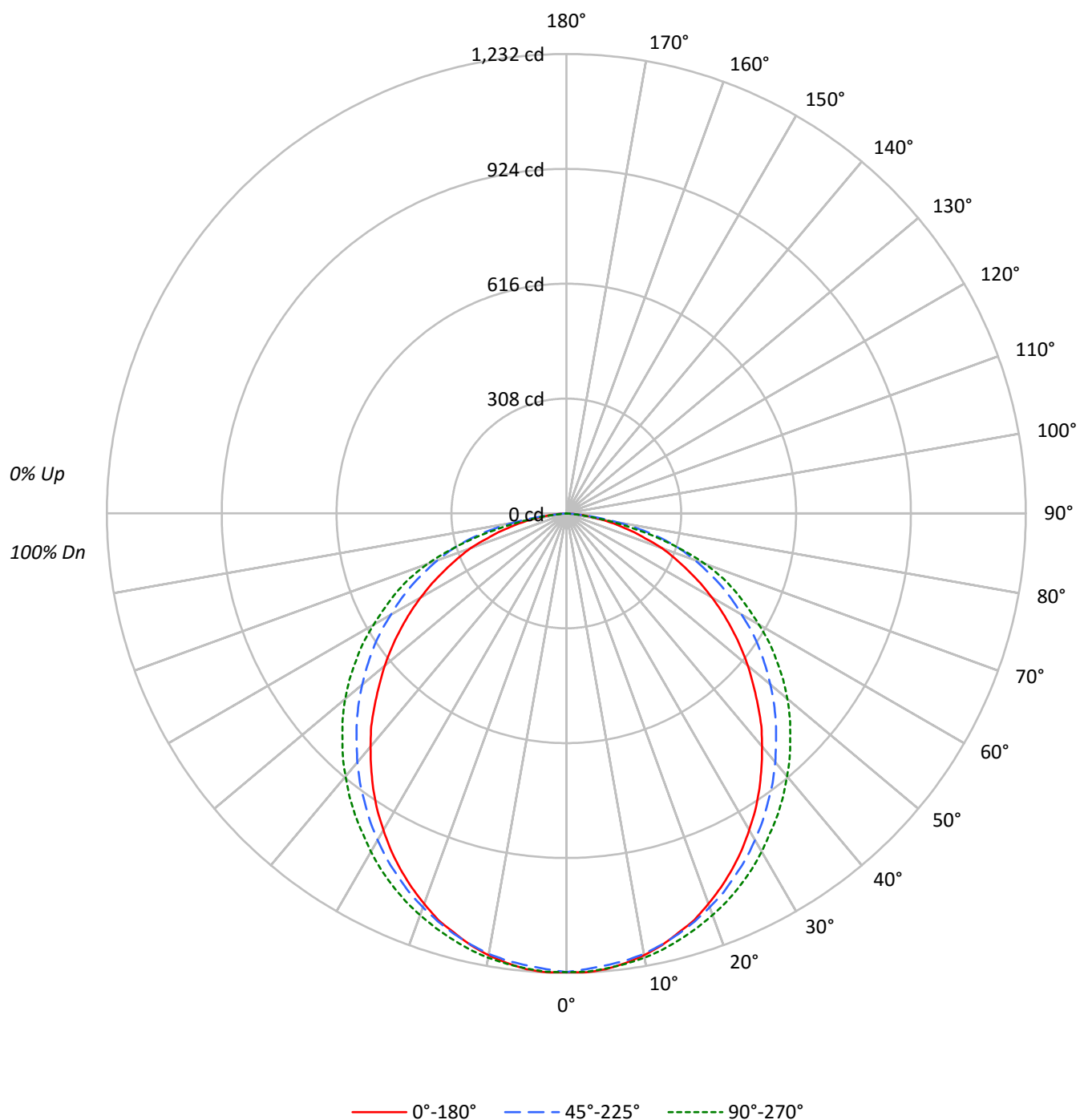
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307938

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307938

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA125-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		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°	3310	3310	3310
5°	3314	3286	3309
10°	3287	3277	3305
15°	3241	3251	3294
20°	3190	3219	3283
25°	3125	3181	3272
30°	3047	3143	3254
35°	2963	3098	3244
40°	2869	3061	3235
45°	2763	3024	3232
50°	2661	2990	3240
55°	2549	2966	3231
60°	2428	2924	3209
65°	2285	2916	3209
70°	2151	2890	3119
75°	1865	2825	2665
80°	1509	2276	1774
85°	1003	790	528



TEST NUMBER: P307938

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.4
10°-20°	330.5	9.6
20°-30°	495.8	14.4
30°-40°	591.5	17.2
40°-50°	611.5	17.7
50°-60°	558.3	16.2
60°-70°	439.3	12.7
70°-80°	255.7	7.4
80°-90°	47.1	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°	942.5	27.4
0°-40°	1534.0	44.5
0°-60°	2703.8	78.5
0°-90°	3446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3446.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1227	1223	1216	1227	1225	116
15°	1164	1165	1167	1182	1182	328
25°	1052	1058	1071	1097	1102	485
35°	902	914	943	979	988	564
45°	726	750	794	839	849	561
55°	543	572	632	678	689	486
65°	359	396	458	494	504	356
75°	179	222	272	266	256	191
85°	32	46	26	20	17	42
90°	0	0	0	0	0	



TEST NUMBER: P307938

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.2	1230.2	1230.2	1230.2	1230.2
2.5°	1231.9	1228.5	1223.3	1231.9	1230.2
5°	1226.7	1223.3	1216.5	1226.7	1225.0
7.5°	1216.5	1213.1	1209.7	1219.9	1218.2
10°	1202.8	1201.1	1199.4	1211.4	1209.7
12.5°	1185.7	1185.7	1184.0	1197.7	1197.7
15°	1163.5	1165.2	1166.9	1182.3	1182.3
17.5°	1143.0	1141.3	1146.4	1163.5	1165.2
20°	1114.0	1117.4	1124.2	1144.7	1146.4
22.5°	1084.9	1088.4	1100.3	1120.8	1125.9
25°	1052.5	1057.6	1071.3	1096.9	1102.0
27.5°	1018.3	1025.1	1043.9	1071.3	1076.4
30°	980.7	991.0	1011.5	1042.2	1047.3
32.5°	943.1	953.4	979.0	1009.8	1016.6
35°	902.1	914.1	943.1	979.0	987.5
37.5°	859.4	874.8	909.0	944.8	955.1
40°	816.7	833.8	871.4	909.0	920.9
42.5°	774.0	791.1	832.1	874.8	886.7
45°	726.1	750.1	794.5	838.9	849.2
47.5°	680.0	705.6	755.2	799.6	813.3
50°	635.6	661.2	714.2	760.3	774.0
52.5°	589.5	616.8	673.2	721.0	733.0
55°	543.3	572.4	632.2	678.3	688.6
57.5°	497.2	527.9	589.5	633.9	645.8
60°	451.1	483.5	543.3	587.7	596.3
62.5°	404.9	439.1	500.6	539.9	548.4
65°	358.8	396.4	457.9	493.8	504.0
67.5°	314.4	352.0	411.8	445.9	454.5
70°	273.4	307.5	367.3	393.0	396.4
72.5°	222.1	264.8	322.9	336.6	328.0
75°	179.4	222.1	271.7	266.5	256.3
77.5°	136.7	179.4	211.9	194.8	181.1
80°	97.4	140.1	146.9	121.3	114.5
82.5°	63.2	97.4	82.0	63.2	51.3
85°	32.5	46.1	25.6	20.5	17.1
87.5°	10.3	6.8	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)