

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: P307709

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-W2A-U-2700K**

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: P307709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 2700K 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: 3399.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

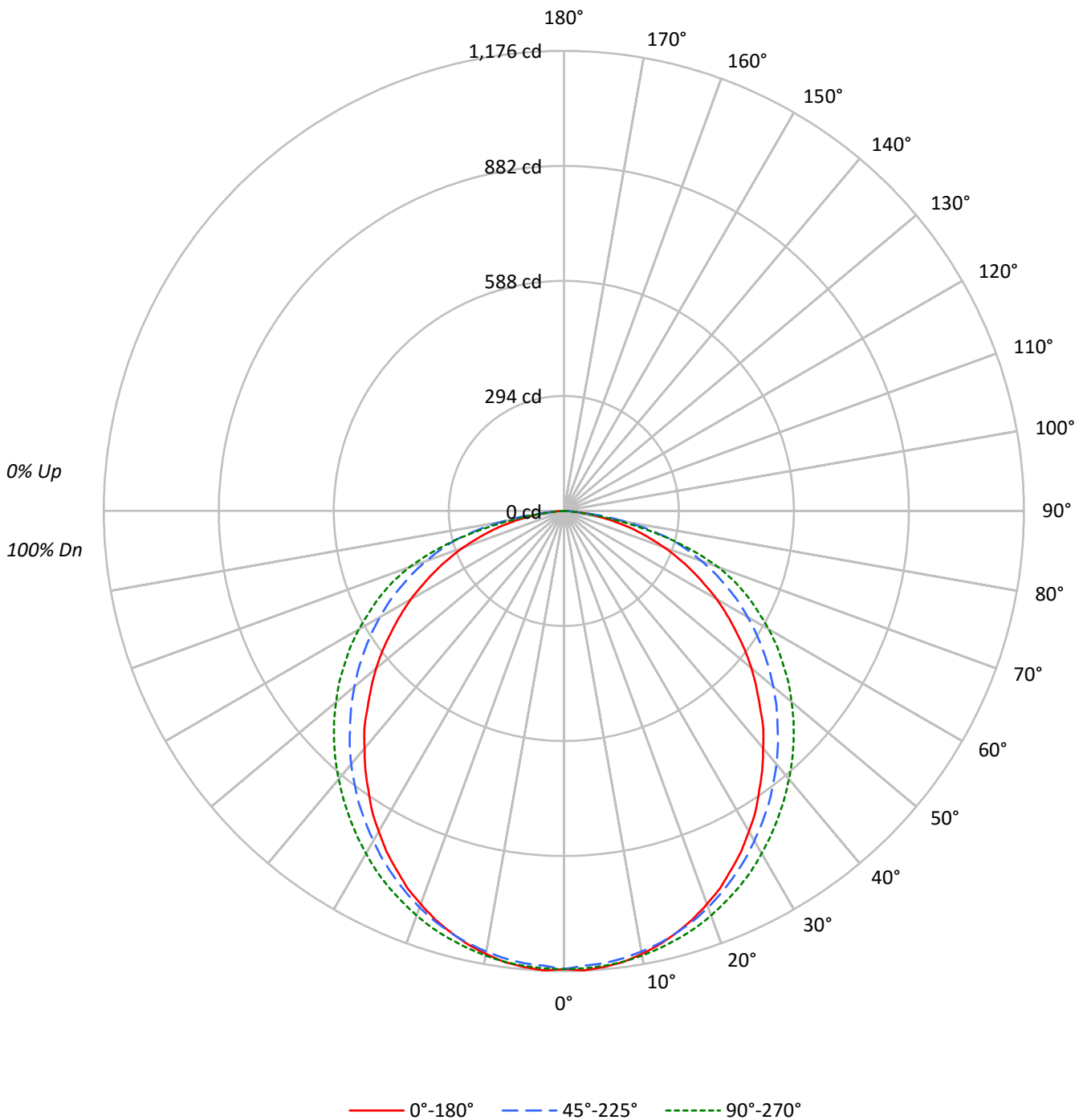
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307709

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307709

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-2700K

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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3151	3151	3151
5°	3161	3135	3153
10°	3142	3125	3154
15°	3108	3110	3153
20°	3062	3088	3151
25°	3004	3058	3148
30°	2939	3026	3141
35°	2861	3000	3140
40°	2785	2971	3144
45°	2700	2939	3161
50°	2621	2925	3183
55°	2521	2916	3211
60°	2431	2921	3255
65°	2307	2929	3306
70°	2164	2952	3304
75°	1962	2979	2986
80°	1609	2572	2126
85°	1195	1216	491



TEST NUMBER: P307709

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	3.3
10°-20°	316.5	9.3
20°-30°	476.8	14.0
30°-40°	572.2	16.8
40°-50°	596.4	17.5
50°-60°	552.1	16.2
60°-70°	446.1	13.1
70°-80°	272.0	8.0
80°-90°	56.2	1.7
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°	904.1	26.6
0°-40°	1476.3	43.4
0°-60°	2624.8	77.2
0°-90°	3399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1170	1167	1160	1169	1167	111
15°	1116	1116	1116	1132	1132	314
25°	1012	1018	1030	1056	1060	466
35°	871	884	913	947	956	546
45°	709	731	772	816	831	548
55°	537	565	622	670	684	481
65°	362	398	460	506	519	358
75°	189	230	286	291	287	198
85°	39	58	39	22	16	48
90°	0	0	0	0	0	



TEST NUMBER: P307709

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1171.0	1171.0	1171.0	1171.0	1171.0
2.5°	1175.5	1171.7	1163.4	1171.7	1170.2
5°	1170.2	1167.2	1160.4	1168.7	1167.2
7.5°	1162.6	1159.6	1153.5	1163.4	1161.9
10°	1149.7	1148.2	1143.7	1155.1	1154.3
12.5°	1134.6	1133.8	1131.6	1144.4	1143.7
15°	1115.6	1116.4	1116.4	1131.6	1131.6
17.5°	1094.4	1095.9	1099.0	1115.6	1117.9
20°	1069.4	1072.4	1078.5	1097.4	1100.5
22.5°	1043.6	1045.9	1055.0	1077.7	1080.8
25°	1011.8	1017.9	1030.0	1055.8	1060.3
27.5°	981.5	986.8	1003.5	1030.0	1037.6
30°	945.9	954.2	973.9	1002.7	1011.0
32.5°	911.8	920.9	943.6	976.9	984.5
35°	870.8	884.5	913.3	946.6	955.7
37.5°	833.7	846.6	879.2	915.6	926.2
40°	792.8	808.7	845.8	884.5	895.1
42.5°	754.9	770.0	810.2	849.6	864.0
45°	709.4	730.6	772.3	815.5	830.7
47.5°	667.7	688.9	736.7	782.9	796.6
50°	626.0	648.8	698.8	746.5	760.2
52.5°	582.8	607.1	660.9	708.6	724.6
55°	537.4	565.4	621.5	670.0	684.4
57.5°	494.2	523.0	582.8	632.1	646.5
60°	451.7	481.3	542.7	589.7	604.8
62.5°	404.7	439.6	503.3	549.5	560.9
65°	362.3	397.9	460.0	506.3	519.2
67.5°	317.6	356.2	418.4	460.8	472.9
70°	275.1	315.3	375.2	414.6	419.9
72.5°	229.6	270.6	331.2	356.2	356.2
75°	188.7	230.4	286.5	291.0	287.2
77.5°	144.0	190.2	226.6	217.5	208.4
80°	103.8	149.3	166.0	149.3	137.2
82.5°	69.7	108.4	100.0	79.6	70.5
85°	38.7	57.6	39.4	22.0	15.9
87.5°	14.4	12.9	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)