

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: P308016

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA08-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: P308016
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: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 3965.0 lumens
Efficiency: N/A
Efficacy: 104.3 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

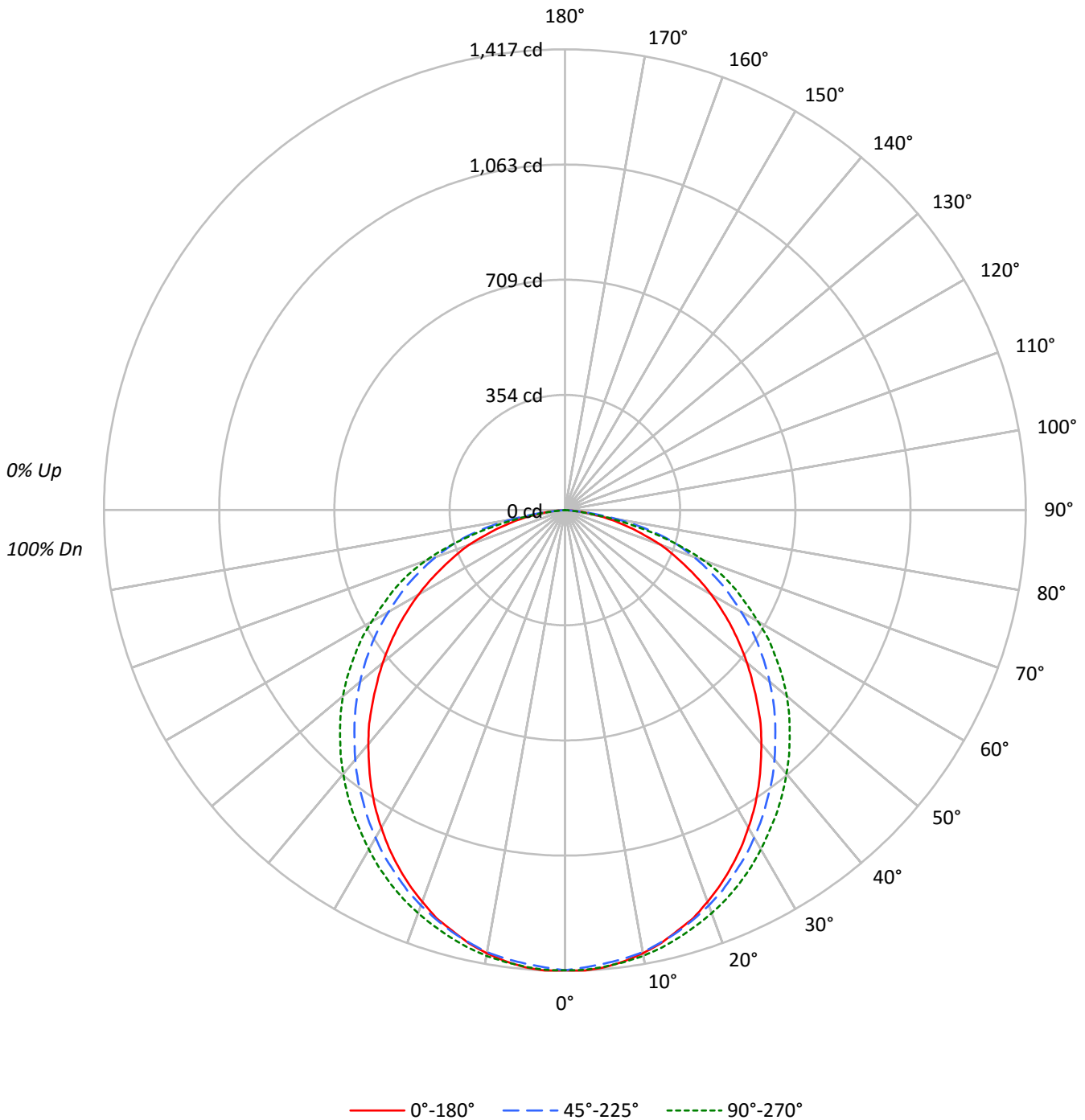
Input Watts (W): 38
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308016

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P308016

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-3000K

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°	3809	3809	3809
5°	3813	3781	3807
10°	3782	3771	3803
15°	3730	3741	3790
20°	3671	3704	3777
25°	3596	3660	3765
30°	3506	3616	3745
35°	3410	3565	3733
40°	3301	3522	3722
45°	3180	3479	3718
50°	3062	3440	3728
55°	2933	3413	3717
60°	2793	3365	3693
65°	2628	3355	3692
70°	2474	3326	3589
75°	2146	3250	3066
80°	1737	2620	2041
85°	1155	911	608



TEST NUMBER: P308016

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	3.4
10°-20°	380.3	9.6
20°-30°	570.5	14.4
30°-40°	680.6	17.2
40°-50°	703.6	17.7
50°-60°	642.4	16.2
60°-70°	505.5	12.7
70°-80°	294.3	7.4
80°-90°	54.2	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°	1084.5	27.4
0°-40°	1765.1	44.5
0°-60°	3111.0	78.5
0°-90°	3965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3965.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1412	1408	1400	1412	1410	134
15°	1339	1341	1343	1360	1360	378
25°	1211	1217	1233	1262	1268	558
35°	1038	1052	1085	1126	1136	649
45°	836	863	914	965	977	645
55°	625	659	727	780	792	559
65°	413	456	527	568	580	410
75°	206	256	313	307	295	219
85°	37	53	30	24	20	48
90°	0	0	0	0	0	



TEST NUMBER: P308016

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.4	1415.4	1415.4	1415.4	1415.4
2.5°	1417.4	1413.5	1407.6	1417.4	1415.4
5°	1411.5	1407.6	1399.7	1411.5	1409.5
7.5°	1399.7	1395.8	1391.8	1403.6	1401.7
10°	1384.0	1382.0	1380.1	1393.8	1391.8
12.5°	1364.3	1364.3	1362.4	1378.1	1378.1
15°	1338.8	1340.7	1342.7	1360.4	1360.4
17.5°	1315.2	1313.2	1319.1	1338.8	1340.7
20°	1281.8	1285.7	1293.6	1317.1	1319.1
22.5°	1248.3	1252.3	1266.0	1289.6	1295.5
25°	1211.0	1216.9	1232.6	1262.1	1268.0
27.5°	1171.7	1179.5	1201.2	1232.6	1238.5
30°	1128.4	1140.2	1163.8	1199.2	1205.1
32.5°	1085.2	1097.0	1126.5	1161.8	1169.7
35°	1038.0	1051.7	1085.2	1126.5	1136.3
37.5°	988.8	1006.5	1045.9	1087.1	1098.9
40°	939.7	959.4	1002.6	1045.9	1059.6
42.5°	890.5	910.2	957.4	1006.5	1020.3
45°	835.5	863.0	914.1	965.3	977.0
47.5°	782.4	811.9	868.9	920.0	935.8
50°	731.3	760.8	821.7	874.8	890.5
52.5°	678.2	709.7	774.6	829.6	843.4
55°	625.2	658.6	727.4	780.5	792.3
57.5°	572.1	607.5	678.2	729.3	743.1
60°	519.0	556.3	625.2	676.3	686.1
62.5°	465.9	505.2	576.0	621.2	631.0
65°	412.8	456.1	526.9	568.1	579.9
67.5°	361.7	405.0	473.8	513.1	522.9
70°	314.5	353.9	422.7	452.2	456.1
72.5°	255.6	304.7	371.6	387.3	377.5
75°	206.4	255.6	312.6	306.7	294.9
77.5°	157.3	206.4	243.8	224.1	208.4
80°	112.1	161.2	169.1	139.6	131.7
82.5°	72.7	112.1	94.4	72.7	59.0
85°	37.4	53.1	29.5	23.6	19.7
87.5°	11.8	7.9	3.9	3.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)