

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: P307755

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA125-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: P307755
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: 14FCZ2-44-UNV-L82765-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" 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

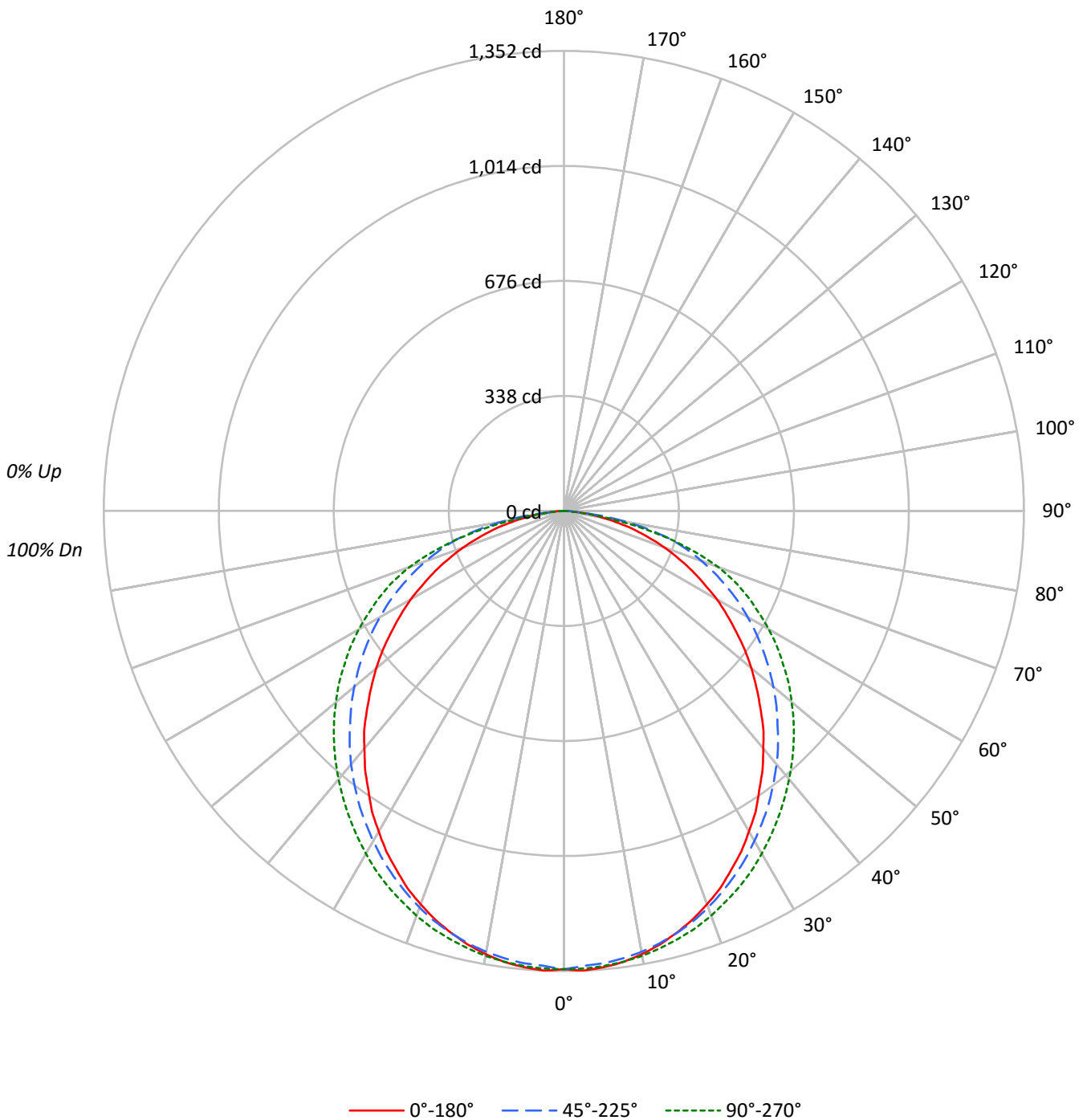
Lumens per Lamp: N/A
Luminaire Lumens: 3909.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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Luminous Intensity Polar Plot





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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°	3624	3624	3624
5°	3635	3605	3626
10°	3613	3594	3627
15°	3574	3577	3625
20°	3522	3552	3624
25°	3455	3517	3621
30°	3380	3480	3613
35°	3290	3450	3611
40°	3203	3417	3616
45°	3105	3380	3636
50°	3014	3364	3660
55°	2899	3353	3693
60°	2796	3359	3744
65°	2653	3369	3802
70°	2489	3395	3799
75°	2256	3426	3434
80°	1850	2958	2445
85°	1374	1399	565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	3.3
10°-20°	364.0	9.3
20°-30°	548.4	14.0
30°-40°	658.0	16.8
40°-50°	685.9	17.5
50°-60°	634.9	16.2
60°-70°	513.0	13.1
70°-80°	312.8	8.0
80°-90°	64.6	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°	1039.8	26.6
0°-40°	1697.8	43.4
0°-60°	3018.6	77.2
0°-90°	3909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1346	1342	1334	1344	1342	128
15°	1283	1284	1284	1301	1301	362
25°	1164	1171	1184	1214	1219	536
35°	1002	1017	1050	1089	1099	627
45°	816	840	888	938	955	631
55°	618	650	715	770	787	554
65°	417	458	529	582	597	412
75°	217	265	330	335	330	228
85°	44	66	45	25	18	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1346.7	1346.7	1346.7	1346.7	1346.7
2.5°	1351.9	1347.5	1337.9	1347.5	1345.8
5°	1345.8	1342.3	1334.5	1344.0	1342.3
7.5°	1337.1	1333.6	1326.6	1337.9	1336.2
10°	1322.3	1320.5	1315.3	1328.4	1327.5
12.5°	1304.8	1304.0	1301.3	1316.2	1315.3
15°	1283.0	1283.9	1283.9	1301.3	1301.3
17.5°	1258.6	1260.4	1263.9	1283.0	1285.6
20°	1229.9	1233.4	1240.3	1262.1	1265.6
22.5°	1200.2	1202.8	1213.3	1239.5	1242.9
25°	1163.6	1170.6	1184.5	1214.2	1219.4
27.5°	1128.8	1134.9	1154.0	1184.5	1193.3
30°	1087.8	1097.4	1120.0	1153.2	1162.8
32.5°	1048.6	1059.0	1085.2	1123.5	1132.2
35°	1001.5	1017.2	1050.3	1088.7	1099.1
37.5°	958.8	973.6	1011.1	1052.9	1065.1
40°	911.7	930.0	972.7	1017.2	1029.4
42.5°	868.1	885.6	931.8	977.1	993.7
45°	815.8	840.2	888.2	937.9	955.3
47.5°	767.9	792.3	847.2	900.4	916.1
50°	720.0	746.1	803.6	858.6	874.2
52.5°	670.3	698.2	760.1	815.0	833.3
55°	618.0	650.2	714.7	770.5	787.1
57.5°	568.3	601.4	670.3	726.9	743.5
60°	519.5	553.5	624.1	678.1	695.6
62.5°	465.4	505.5	578.8	631.9	645.0
65°	416.6	457.6	529.1	582.2	597.1
67.5°	365.2	409.7	481.1	529.9	543.9
70°	316.4	362.6	431.5	476.8	482.9
72.5°	264.1	311.2	380.9	409.7	409.7
75°	217.0	265.0	329.5	334.7	330.3
77.5°	165.6	218.8	260.6	250.2	239.7
80°	119.4	171.7	190.9	171.7	157.8
82.5°	80.2	124.6	115.1	91.5	81.1
85°	44.5	66.2	45.3	25.3	18.3
87.5°	16.6	14.8	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)