

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: P307760

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA125-W2A-U-5500K**

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: P307760
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5500K 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

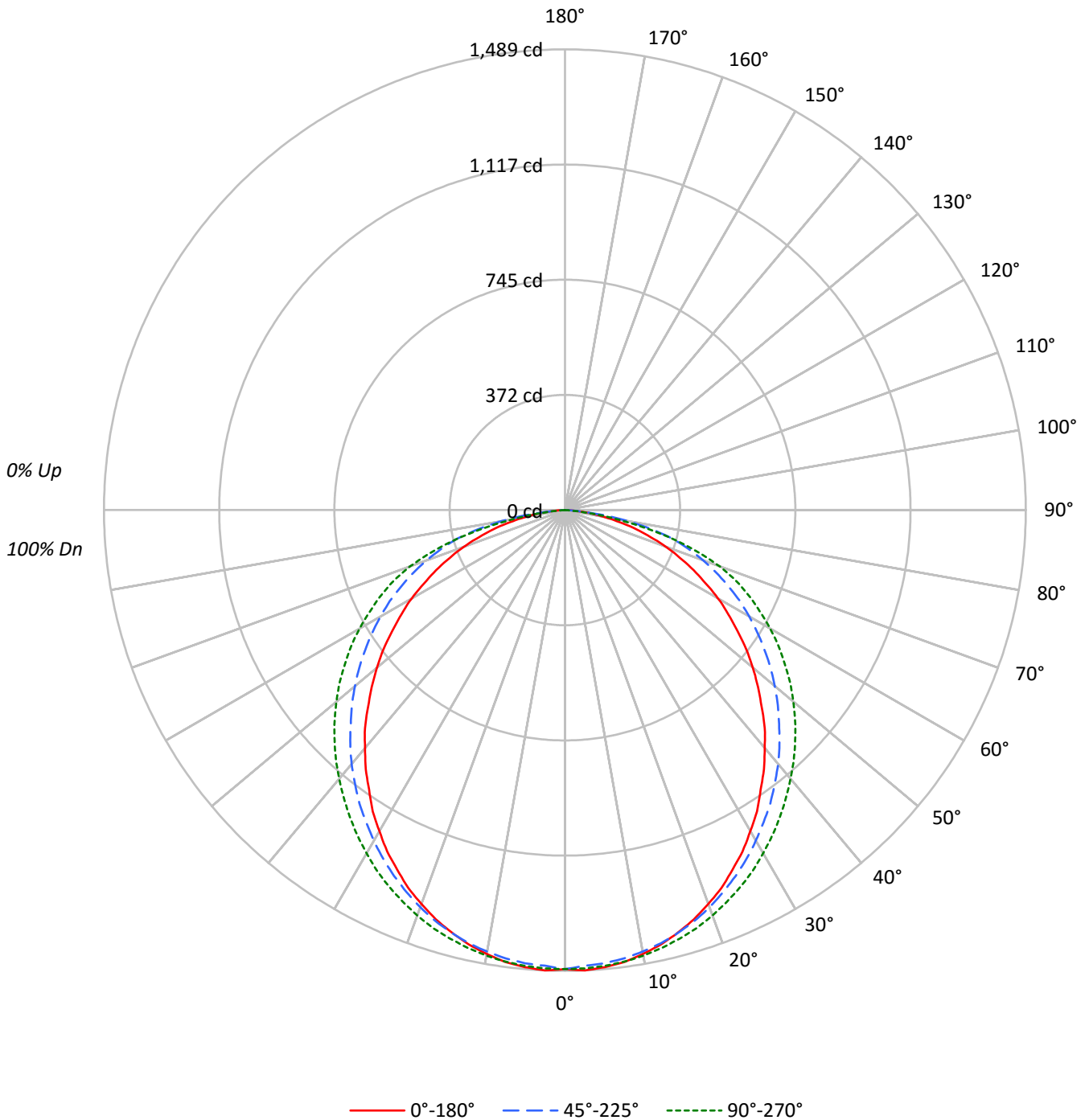
Lumens per Lamp: N/A
Luminaire Lumens: 4306.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.4
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°	3992	3992	3992
5°	4005	3971	3994
10°	3980	3959	3996
15°	3937	3940	3994
20°	3880	3913	3992
25°	3806	3874	3988
30°	3723	3834	3980
35°	3624	3801	3977
40°	3528	3764	3983
45°	3420	3723	4005
50°	3320	3706	4032
55°	3194	3694	4068
60°	3080	3700	4124
65°	2923	3711	4188
70°	2742	3740	4185
75°	2486	3773	3784
80°	2038	3259	2693
85°	1513	1541	624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.3
10°-20°	401.0	9.3
20°-30°	604.0	14.0
30°-40°	724.9	16.8
40°-50°	755.5	17.5
50°-60°	699.4	16.2
60°-70°	565.1	13.1
70°-80°	344.6	8.0
80°-90°	71.1	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°	1145.4	26.6
0°-40°	1870.3	43.4
0°-60°	3325.2	77.2
0°-90°	4306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4306.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1483	1483	1483	1483	1483	
5°	1482	1479	1470	1481	1479	141
15°	1413	1414	1414	1434	1434	398
25°	1282	1290	1305	1338	1343	591
35°	1103	1120	1157	1199	1211	691
45°	899	926	978	1033	1052	695
55°	681	716	787	849	867	610
65°	459	504	583	641	658	454
75°	239	292	363	369	364	251
85°	49	73	50	28	20	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1483.4	1483.4	1483.4	1483.4	1483.4
2.5°	1489.2	1484.4	1473.8	1484.4	1482.5
5°	1482.5	1478.6	1470.0	1480.6	1478.6
7.5°	1472.9	1469.0	1461.3	1473.8	1471.9
10°	1456.5	1454.6	1448.9	1463.3	1462.3
12.5°	1437.3	1436.4	1433.5	1449.8	1448.9
15°	1413.3	1414.3	1414.3	1433.5	1433.5
17.5°	1386.5	1388.4	1392.2	1413.3	1416.2
20°	1354.8	1358.6	1366.3	1390.3	1394.1
22.5°	1322.1	1325.0	1336.5	1365.3	1369.2
25°	1281.8	1289.5	1304.8	1337.5	1343.2
27.5°	1243.4	1250.1	1271.2	1304.8	1314.4
30°	1198.3	1208.8	1233.8	1270.3	1280.8
32.5°	1155.1	1166.6	1195.4	1237.6	1247.2
35°	1103.2	1120.5	1157.0	1199.2	1210.7
37.5°	1056.2	1072.5	1113.8	1159.9	1173.3
40°	1004.3	1024.5	1071.5	1120.5	1133.9
42.5°	956.3	975.5	1026.4	1076.3	1094.6
45°	898.7	925.6	978.4	1033.1	1052.3
47.5°	845.9	872.8	933.3	991.8	1009.1
50°	793.1	821.9	885.3	945.7	963.0
52.5°	738.4	769.1	837.3	897.7	917.9
55°	680.7	716.3	787.3	848.8	867.0
57.5°	626.0	662.5	738.4	800.8	819.0
60°	572.2	609.7	687.5	747.0	766.2
62.5°	512.7	556.9	637.5	696.1	710.5
65°	459.0	504.1	582.8	641.4	657.7
67.5°	402.3	451.3	530.0	583.8	599.1
70°	348.5	399.4	475.3	525.2	531.9
72.5°	290.9	342.8	419.6	451.3	451.3
75°	239.1	291.9	362.9	368.7	363.9
77.5°	182.4	241.0	287.1	275.6	264.0
80°	131.5	189.1	210.3	189.1	173.8
82.5°	88.3	137.3	126.7	100.8	89.3
85°	49.0	73.0	49.9	27.8	20.2
87.5°	18.2	16.3	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)