

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: P308840

Luminaire Tested: **22FCZ2-44HE-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: P308840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-CA125-W2A-U-5500K
Description: 2'X2' 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: 4123.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

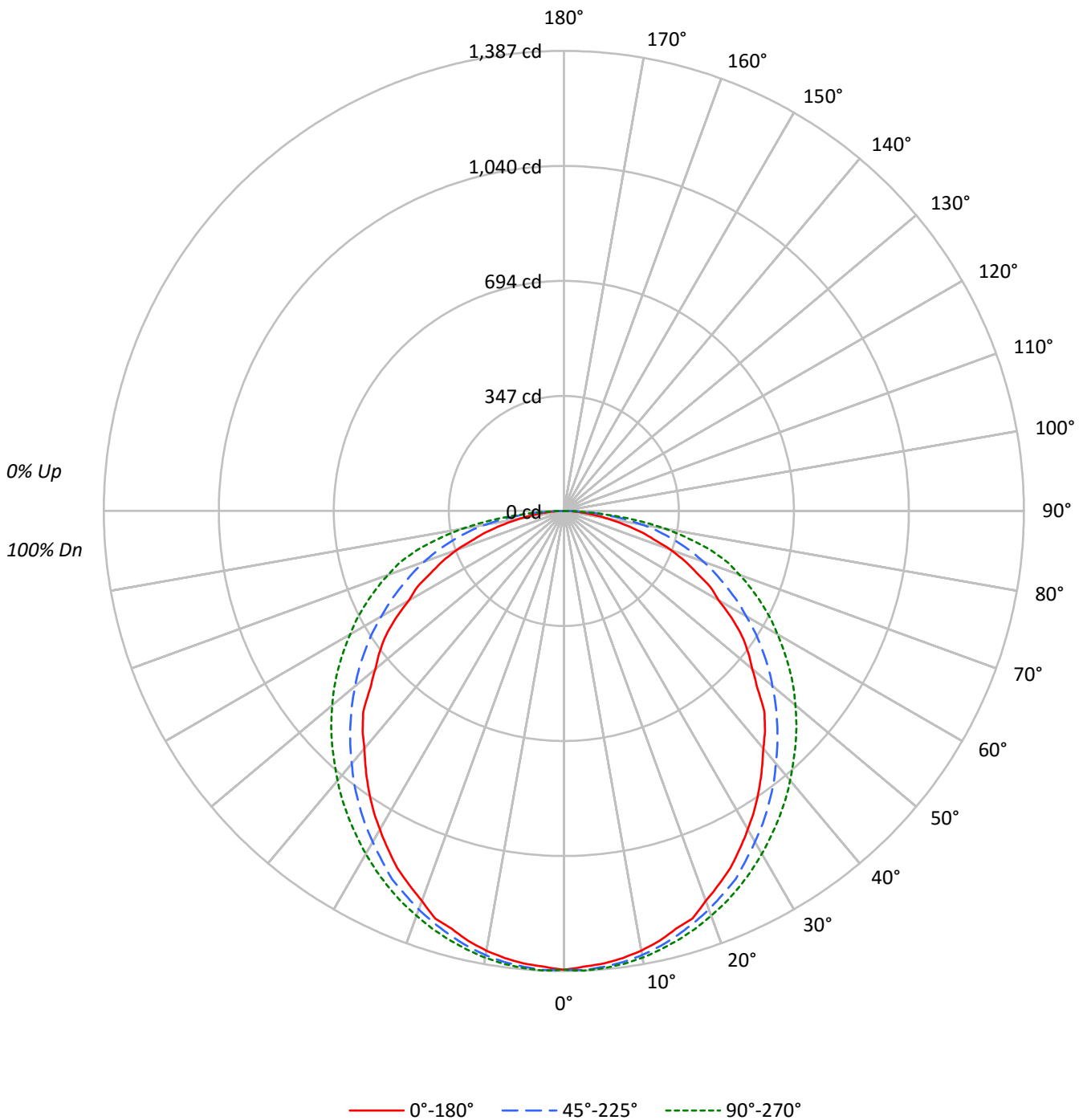
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3722	3722	3722
5°	3699	3726	3737
10°	3677	3715	3737
15°	3634	3689	3727
20°	3583	3662	3718
25°	3527	3638	3715
30°	3446	3581	3710
35°	3371	3539	3714
40°	3286	3494	3729
45°	3252	3462	3762
50°	3106	3437	3817
55°	3073	3425	3898
60°	2899	3420	4004
65°	2814	3443	4184
70°	2702	3524	4441
75°	2462	3632	4781
80°	2111	3761	4832
85°	1707	3594	4143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	3.2
10°-20°	373.4	9.1
20°-30°	562.0	13.6
30°-40°	674.5	16.4
40°-50°	705.0	17.1
50°-60°	657.0	15.9
60°-70°	538.9	13.1
70°-80°	363.1	8.8
80°-90°	118.3	2.9
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°	1066.3	25.9
0°-40°	1740.8	42.2
0°-60°	3102.8	75.3
0°-90°	4123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4123.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1383	1383	1383	1383	1383	
5°	1370	1373	1379	1381	1383	130
15°	1304	1312	1324	1336	1338	369
25°	1188	1196	1225	1243	1251	546
35°	1026	1040	1077	1115	1131	642
45°	854	860	910	965	989	653
55°	655	667	730	799	831	580
65°	442	462	541	620	657	440
75°	237	262	349	428	460	249
85°	55	79	116	136	134	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1383.3	1383.3	1383.3	1383.3	1383.3
2.5°	1375.4	1379.4	1385.3	1387.2	1387.2
5°	1369.5	1373.4	1379.4	1381.3	1383.3
7.5°	1359.6	1363.6	1371.5	1375.4	1377.4
10°	1345.8	1349.8	1359.6	1365.5	1367.5
12.5°	1328.0	1332.0	1343.8	1351.7	1353.7
15°	1304.4	1312.3	1324.1	1335.9	1337.9
17.5°	1288.6	1286.6	1302.4	1316.2	1320.2
20°	1251.1	1261.0	1278.7	1294.5	1298.4
22.5°	1219.5	1227.4	1251.1	1268.8	1276.7
25°	1187.9	1195.8	1225.4	1243.2	1251.1
27.5°	1148.5	1160.3	1187.9	1213.6	1223.5
30°	1109.0	1120.8	1152.4	1182.0	1193.9
32.5°	1069.5	1083.4	1116.9	1148.5	1162.3
35°	1026.1	1039.9	1077.4	1114.9	1130.7
37.5°	980.7	998.5	1038.0	1079.4	1097.2
40°	935.4	953.1	994.6	1041.9	1061.6
42.5°	897.9	905.8	953.1	1004.4	1024.2
45°	854.5	860.4	909.7	965.0	988.6
47.5°	791.3	813.0	866.3	927.5	951.1
50°	742.0	765.7	820.9	886.0	911.7
52.5°	700.5	716.3	777.5	842.6	872.2
55°	655.1	667.0	730.1	799.2	830.8
57.5°	599.9	621.6	684.7	755.8	787.4
60°	538.7	566.3	635.4	712.4	743.9
62.5°	499.3	515.0	590.0	667.0	702.5
65°	442.0	461.8	540.7	619.6	657.1
67.5°	394.7	414.4	495.3	574.2	611.7
70°	343.4	363.1	447.9	526.9	564.4
72.5°	284.2	311.8	400.6	479.5	519.0
75°	236.8	262.5	349.3	428.2	459.8
77.5°	183.5	217.1	298.0	363.1	386.8
80°	136.2	169.7	242.7	290.1	311.8
82.5°	92.7	126.3	181.5	217.1	228.9
85°	55.3	78.9	116.4	136.2	134.2
87.5°	25.7	33.5	47.4	47.4	45.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)