

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: P309605

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-HRP-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: P309605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-55HE-UNV-L82765-HRP-CA125-W2A-U-5500K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (336) 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: 3988.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

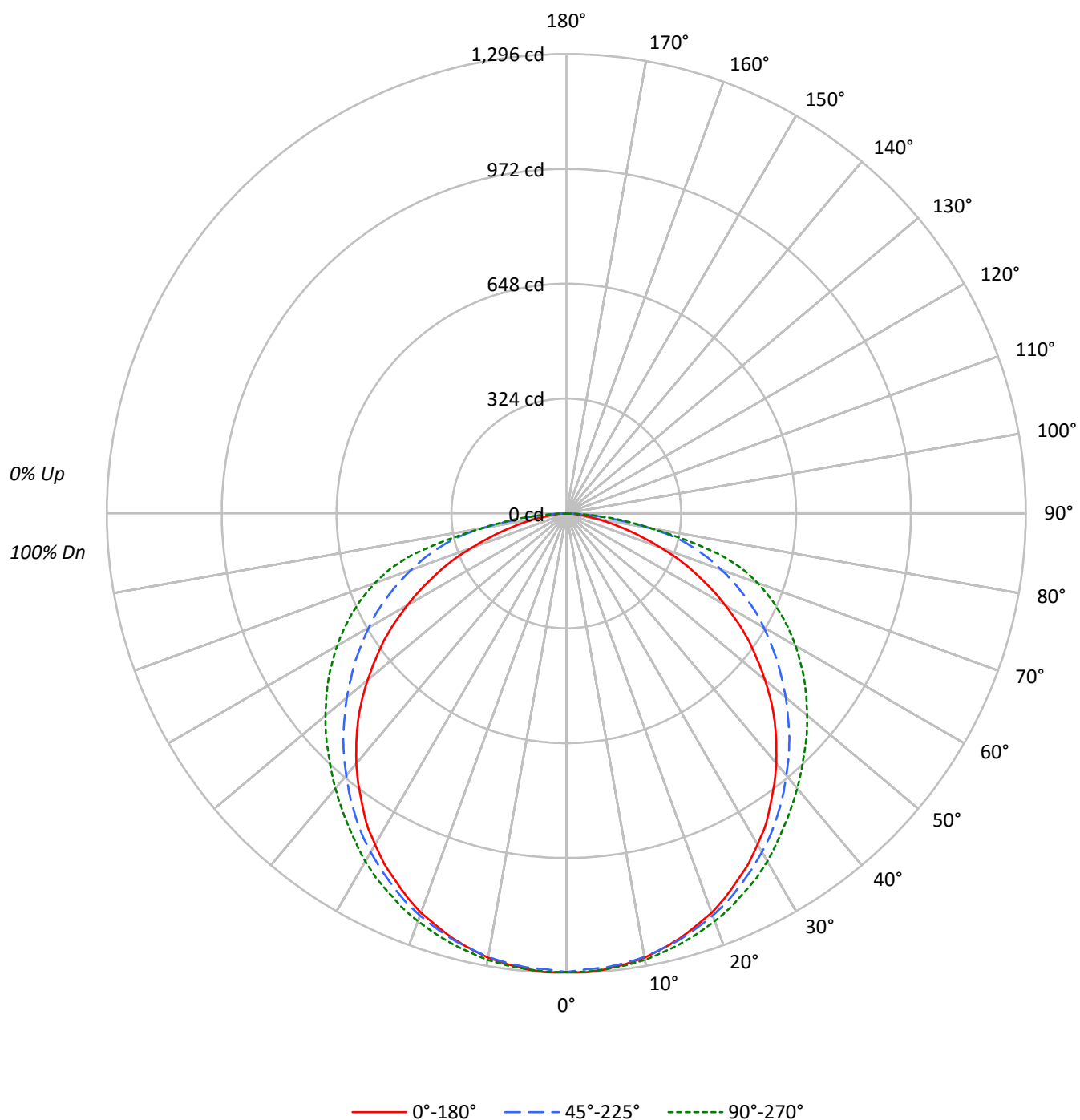
Input Watts (W): 44.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1741	1741	1741
5°	1743	1736	1743
10°	1738	1736	1747
15°	1728	1733	1749
20°	1716	1728	1752
25°	1695	1720	1755
30°	1676	1715	1761
35°	1648	1706	1763
40°	1619	1695	1780
45°	1582	1693	1808
50°	1531	1692	1856
55°	1476	1704	1923
60°	1393	1730	2008
65°	1286	1770	2121
70°	1123	1832	2259
75°	911	1927	2335
80°	673	1889	1889
85°	516	1392	1572



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	3.1
10°-20°	352.0	8.8
20°-30°	535.9	13.4
30°-40°	650.7	16.3
40°-50°	687.4	17.2
50°-60°	648.6	16.3
60°-70°	539.3	13.5
70°-80°	354.8	8.9
80°-90°	96.7	2.4
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°	1010.4	25.3
0°-40°	1661.1	41.7
0°-60°	2997.1	75.2
0°-90°	3988.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3988.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1291	1291	1286	1291	1291	123
15°	1240	1242	1244	1256	1256	350
25°	1142	1149	1159	1179	1182	527
35°	1003	1015	1038	1065	1074	628
45°	831	848	890	933	950	640
55°	629	656	726	795	820	561
65°	404	451	556	638	666	399
75°	175	255	371	439	449	189
85°	33	74	90	100	102	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.9	1293.9	1293.9	1293.9	1293.9
2.5°	1295.6	1293.9	1287.2	1293.9	1293.9
5°	1290.6	1290.6	1285.6	1290.6	1290.6
7.5°	1282.2	1282.2	1278.9	1285.6	1285.6
10°	1272.2	1272.2	1270.5	1278.9	1278.9
12.5°	1257.2	1258.8	1257.2	1267.2	1267.2
15°	1240.5	1242.2	1243.8	1255.5	1255.5
17.5°	1218.8	1222.1	1225.5	1238.8	1240.5
20°	1198.7	1200.4	1207.1	1222.1	1223.8
22.5°	1172.0	1177.0	1185.4	1200.4	1205.4
25°	1142.0	1148.7	1158.7	1178.7	1182.0
27.5°	1113.6	1118.6	1132.0	1153.7	1160.3
30°	1078.5	1086.9	1103.6	1125.3	1133.6
32.5°	1045.1	1053.5	1073.5	1096.9	1103.6
35°	1003.4	1015.1	1038.5	1065.2	1073.5
37.5°	963.3	975.0	1003.4	1033.5	1043.5
40°	921.6	935.0	965.0	1000.1	1013.4
42.5°	876.5	894.9	928.3	966.7	981.7
45°	831.4	848.1	889.9	933.3	950.0
47.5°	783.0	803.1	848.1	899.9	919.9
50°	731.3	756.3	808.1	864.8	886.5
52.5°	679.5	707.9	766.3	829.8	853.1
55°	629.4	656.1	726.3	794.7	819.8
57.5°	574.3	607.7	684.5	758.0	783.0
60°	517.6	554.3	642.8	719.6	746.3
62.5°	460.8	502.5	602.7	679.5	707.9
65°	404.0	450.8	556.0	637.8	666.2
67.5°	348.9	400.7	512.6	594.4	622.7
70°	285.5	350.6	465.8	545.9	574.3
72.5°	227.1	302.2	420.7	495.9	520.9
75°	175.3	255.4	370.6	439.1	449.1
77.5°	128.6	208.7	318.9	342.3	343.9
80°	86.8	167.0	243.8	240.4	243.8
82.5°	56.8	125.2	153.6	172.0	173.6
85°	33.4	73.5	90.2	100.2	101.8
87.5°	16.7	25.0	31.7	33.4	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)