

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: P308036

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP125-W2A-U-4000K**

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: P308036
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-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4000K 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: 4096.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

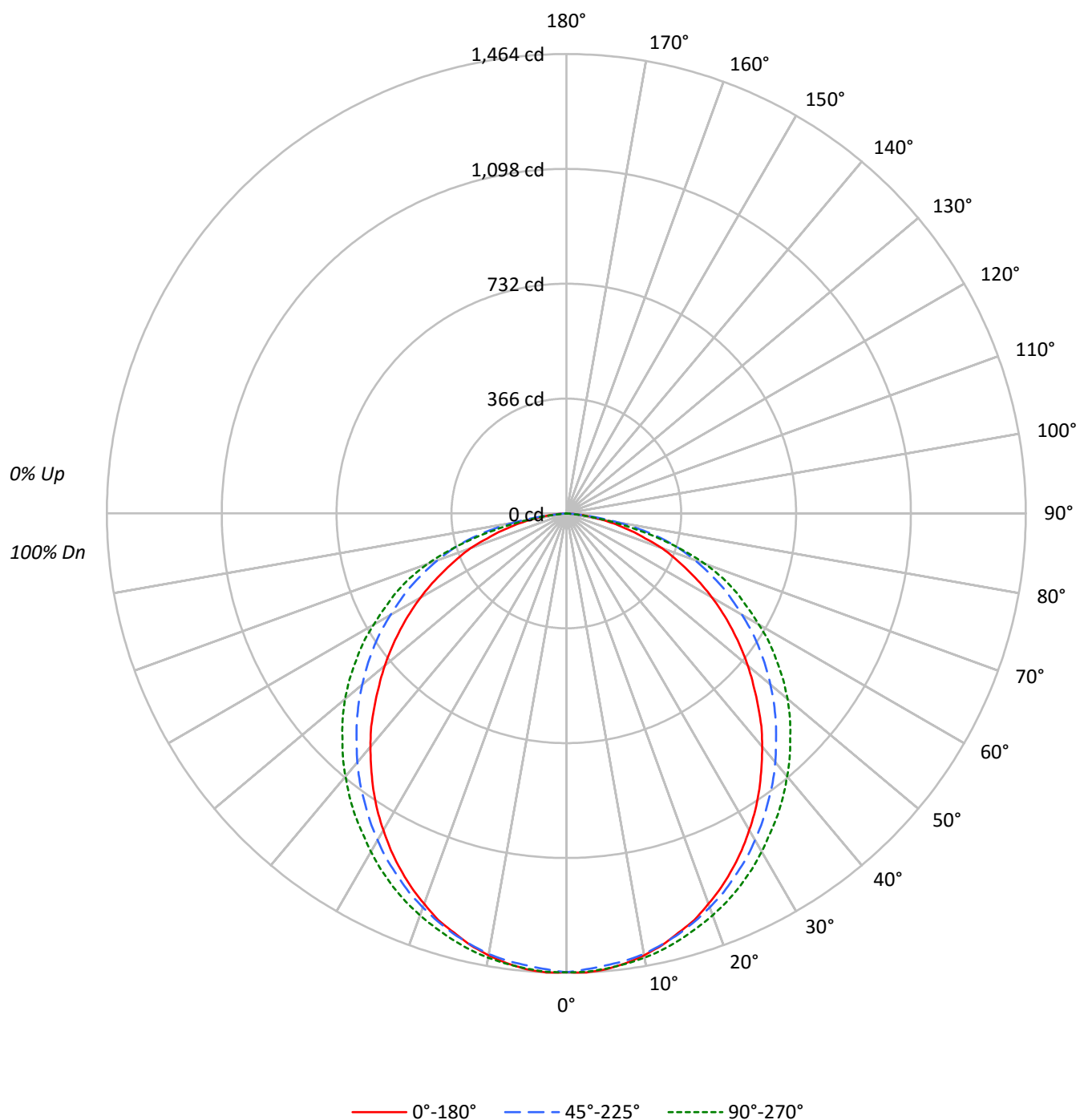
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3935	3935	3935
5°	3939	3906	3933
10°	3907	3895	3929
15°	3853	3864	3915
20°	3792	3827	3902
25°	3714	3781	3889
30°	3622	3736	3868
35°	3523	3683	3856
40°	3410	3638	3845
45°	3285	3594	3841
50°	3163	3554	3852
55°	3030	3525	3840
60°	2885	3476	3815
65°	2716	3466	3815
70°	2556	3435	3707
75°	2217	3357	3167
80°	1795	2707	2109
85°	1192	942	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.1	3.4
10°-20°	392.9	9.6
20°-30°	589.4	14.4
30°-40°	703.1	17.2
40°-50°	726.8	17.7
50°-60°	663.6	16.2
60°-70°	522.2	12.7
70°-80°	304.0	7.4
80°-90°	56.0	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°	1120.3	27.4
0°-40°	1823.4	44.5
0°-60°	3213.8	78.5
0°-90°	4096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1458	1454	1446	1458	1456	138
15°	1383	1385	1387	1405	1405	390
25°	1251	1257	1273	1304	1310	576
35°	1072	1086	1121	1164	1174	670
45°	863	892	944	997	1009	667
55°	646	680	751	806	818	578
65°	426	471	544	587	599	423
75°	213	264	323	317	305	227
85°	39	55	30	24	20	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.2	1462.2	1462.2	1462.2	1462.2
2.5°	1464.2	1460.2	1454.1	1464.2	1462.2
5°	1458.1	1454.1	1446.0	1458.1	1456.1
7.5°	1446.0	1441.9	1437.8	1450.0	1448.0
10°	1429.7	1427.7	1425.6	1439.9	1437.8
12.5°	1409.4	1409.4	1407.4	1423.6	1423.6
15°	1383.0	1385.0	1387.1	1405.3	1405.3
17.5°	1358.6	1356.6	1362.7	1383.0	1385.0
20°	1324.1	1328.2	1336.3	1360.7	1362.7
22.5°	1289.6	1293.6	1307.9	1332.2	1338.3
25°	1251.0	1257.1	1273.3	1303.8	1309.9
27.5°	1210.4	1218.5	1240.8	1273.3	1279.4
30°	1165.7	1177.9	1202.3	1238.8	1244.9
32.5°	1121.0	1133.2	1163.7	1200.2	1208.3
35°	1072.3	1086.5	1121.0	1163.7	1173.8
37.5°	1021.5	1039.8	1080.4	1123.1	1135.2
40°	970.7	991.0	1035.7	1080.4	1094.6
42.5°	920.0	940.3	989.0	1039.8	1054.0
45°	863.1	891.5	944.3	997.1	1009.3
47.5°	808.3	838.7	897.6	950.4	966.7
50°	755.5	785.9	848.9	903.7	920.0
52.5°	700.6	733.1	800.2	857.0	871.2
55°	645.8	680.3	751.4	806.2	818.4
57.5°	591.0	627.5	700.6	753.4	767.7
60°	536.1	574.7	645.8	698.6	708.8
62.5°	481.3	521.9	595.0	641.7	651.9
65°	426.5	471.2	544.3	586.9	599.1
67.5°	373.7	418.4	489.4	530.0	540.2
70°	324.9	365.6	436.6	467.1	471.2
72.5°	264.0	314.8	383.8	400.1	389.9
75°	213.2	264.0	322.9	316.8	304.6
77.5°	162.5	213.2	251.8	231.5	215.3
80°	115.8	166.5	174.7	144.2	136.1
82.5°	75.1	115.8	97.5	75.1	60.9
85°	38.6	54.8	30.5	24.4	20.3
87.5°	12.2	8.1	4.1	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)