

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: P308049

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP187-W2A-U-5700K**

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: P308049
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-CP187-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5700K 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: 4097.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

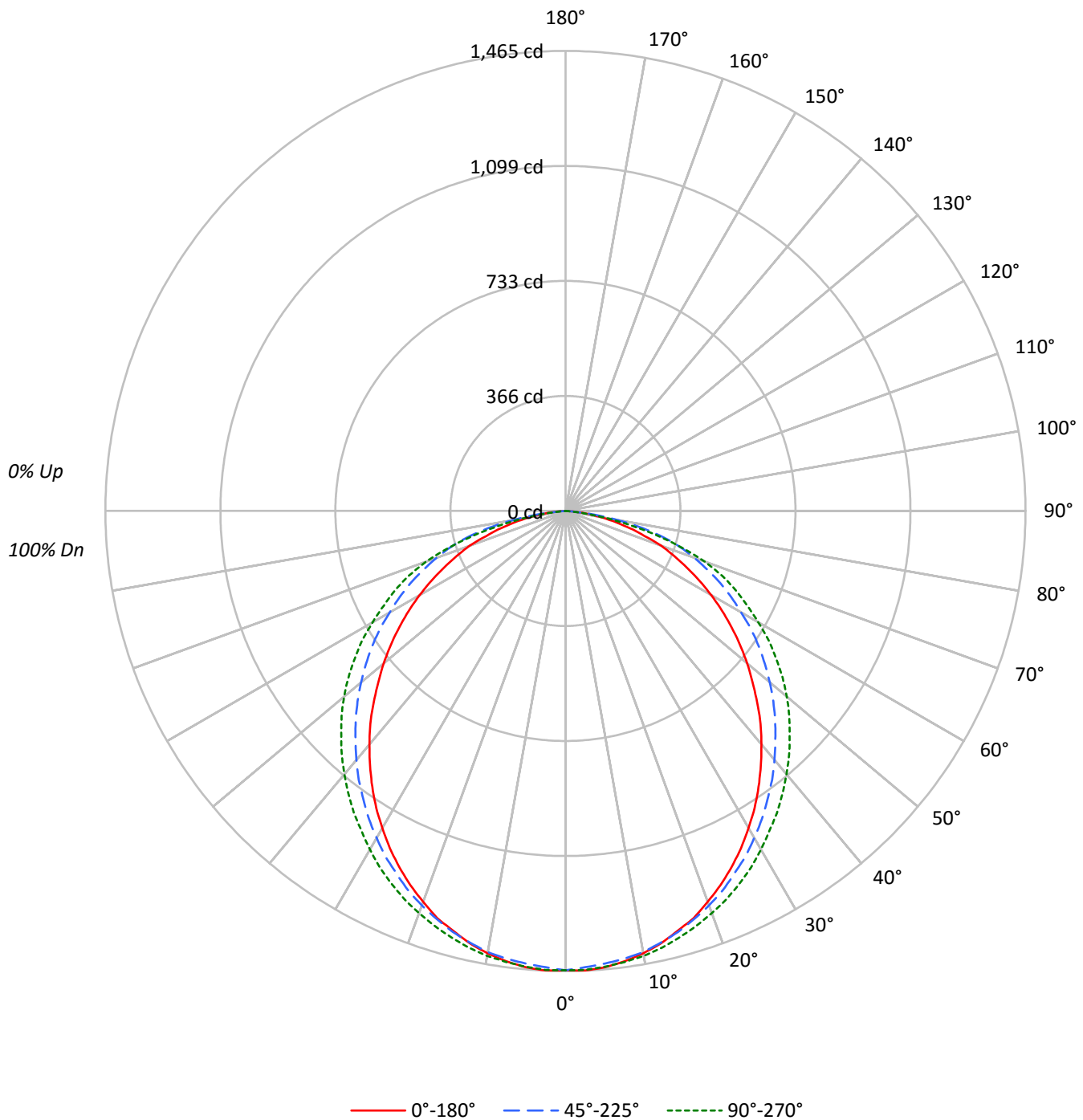
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3936	3936	3936
5°	3940	3907	3934
10°	3908	3897	3930
15°	3854	3865	3916
20°	3793	3828	3903
25°	3715	3782	3890
30°	3623	3737	3869
35°	3523	3684	3857
40°	3411	3639	3846
45°	3285	3595	3842
50°	3164	3555	3852
55°	3031	3526	3841
60°	2886	3477	3815
65°	2716	3466	3815
70°	2557	3436	3708
75°	2218	3358	3168
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°	393.0	9.6
20°-30°	589.5	14.4
30°-40°	703.2	17.2
40°-50°	727.0	17.7
50°-60°	663.7	16.2
60°-70°	522.4	12.7
70°-80°	304.1	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°	1120.6	27.4
0°-40°	1823.8	44.5
0°-60°	3214.6	78.5
0°-90°	4097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4097.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1458	1454	1446	1458	1456	138
15°	1383	1385	1387	1406	1406	390
25°	1251	1257	1274	1304	1310	576
35°	1072	1087	1121	1164	1174	670
45°	863	892	945	997	1010	667
55°	646	680	752	806	819	578
65°	427	471	544	587	599	424
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°	1462.6	1462.6	1462.6	1462.6	1462.6
2.5°	1464.6	1460.5	1454.4	1464.6	1462.6
5°	1458.5	1454.4	1446.3	1458.5	1456.5
7.5°	1446.3	1442.2	1438.2	1450.4	1448.3
10°	1430.1	1428.0	1426.0	1440.2	1438.2
12.5°	1409.7	1409.7	1407.7	1424.0	1424.0
15°	1383.3	1385.4	1387.4	1405.7	1405.7
17.5°	1359.0	1356.9	1363.0	1383.3	1385.4
20°	1324.4	1328.5	1336.6	1361.0	1363.0
22.5°	1289.9	1294.0	1308.2	1332.6	1338.6
25°	1251.3	1257.4	1273.6	1304.1	1310.2
27.5°	1210.7	1218.8	1241.1	1273.6	1279.7
30°	1166.0	1178.2	1202.6	1239.1	1245.2
32.5°	1121.3	1133.5	1164.0	1200.5	1208.6
35°	1072.5	1086.8	1121.3	1164.0	1174.1
37.5°	1021.8	1040.0	1080.7	1123.3	1135.5
40°	971.0	991.3	1036.0	1080.7	1094.9
42.5°	920.2	940.5	989.3	1040.0	1054.3
45°	863.3	891.8	944.6	997.4	1009.6
47.5°	808.5	838.9	897.8	950.7	966.9
50°	755.7	786.1	849.1	903.9	920.2
52.5°	700.8	733.3	800.3	857.2	871.4
55°	646.0	680.5	751.6	806.4	818.6
57.5°	591.1	627.7	700.8	753.6	767.8
60°	536.3	574.9	646.0	698.8	708.9
62.5°	481.4	522.1	595.2	641.9	652.1
65°	426.6	471.3	544.4	587.1	599.2
67.5°	373.8	418.5	489.6	530.2	540.3
70°	325.0	365.6	436.7	467.2	471.3
72.5°	264.1	314.9	383.9	400.2	390.0
75°	213.3	264.1	323.0	316.9	304.7
77.5°	162.5	213.3	251.9	231.6	215.3
80°	115.8	166.6	174.7	144.2	136.1
82.5°	75.2	115.8	97.5	75.2	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)