

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: P307748

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-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: P307748
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-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 4148.0 lumens
Efficiency: N/A
Efficacy: 107.2 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

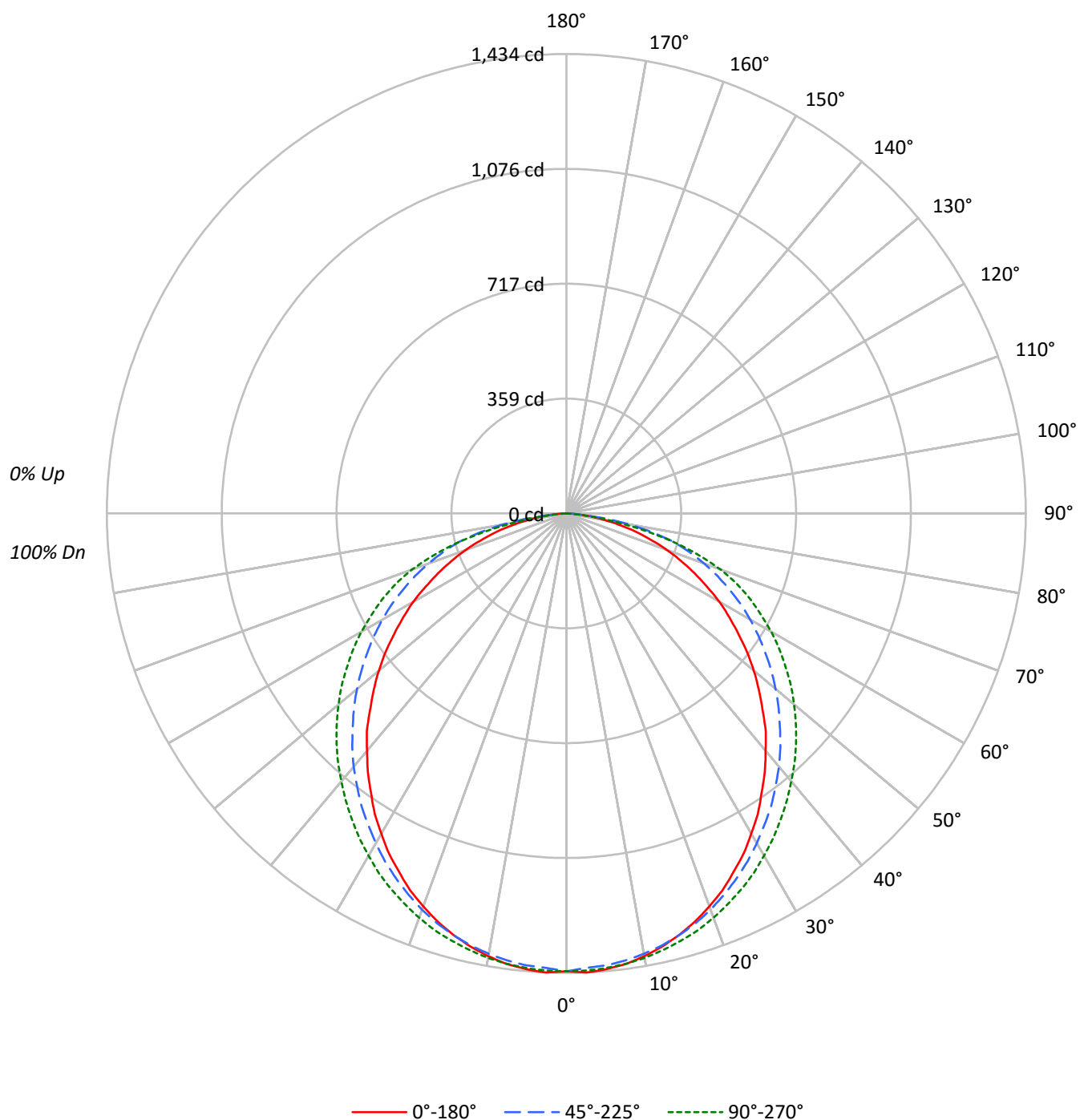
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3845	3845	3845
5°	3858	3825	3848
10°	3834	3814	3849
15°	3793	3796	3847
20°	3737	3769	3846
25°	3666	3732	3842
30°	3587	3693	3834
35°	3491	3661	3831
40°	3399	3626	3837
45°	3295	3587	3858
50°	3198	3570	3884
55°	3077	3558	3918
60°	2967	3564	3972
65°	2815	3575	4034
70°	2641	3602	4032
75°	2394	3635	3644
80°	1963	3140	2594
85°	1457	1485	599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	3.3
10°-20°	386.3	9.3
20°-30°	581.9	14.0
30°-40°	698.3	16.8
40°-50°	727.8	17.5
50°-60°	673.8	16.2
60°-70°	544.4	13.1
70°-80°	331.9	8.0
80°-90°	68.5	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°	1103.4	26.6
0°-40°	1801.6	43.4
0°-60°	3203.2	77.2
0°-90°	4148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1428	1424	1416	1426	1424	136
15°	1362	1362	1362	1381	1381	384
25°	1235	1242	1257	1288	1294	569
35°	1063	1079	1114	1155	1166	666
45°	866	892	942	995	1014	669
55°	656	690	758	818	835	588
65°	442	486	561	618	634	437
75°	230	281	350	355	350	242
85°	47	70	48	27	19	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.0	1429.0	1429.0	1429.0	1429.0
2.5°	1434.5	1429.9	1419.8	1429.9	1428.1
5°	1428.1	1424.4	1416.1	1426.2	1424.4
7.5°	1418.8	1415.1	1407.7	1419.8	1417.9
10°	1403.1	1401.3	1395.7	1409.6	1408.7
12.5°	1384.6	1383.7	1380.9	1396.6	1395.7
15°	1361.5	1362.4	1362.4	1380.9	1380.9
17.5°	1335.6	1337.4	1341.1	1361.5	1364.3
20°	1305.1	1308.8	1316.2	1339.3	1343.0
22.5°	1273.6	1276.4	1287.5	1315.2	1318.9
25°	1234.8	1242.2	1257.0	1288.4	1294.0
27.5°	1197.8	1204.2	1224.6	1257.0	1266.2
30°	1154.3	1164.5	1188.5	1223.7	1233.8
32.5°	1112.7	1123.8	1151.5	1192.2	1201.5
35°	1062.7	1079.4	1114.5	1155.2	1166.3
37.5°	1017.4	1033.1	1072.9	1117.3	1130.3
40°	967.5	986.9	1032.2	1079.4	1092.3
42.5°	921.2	939.7	988.7	1036.8	1054.4
45°	865.7	891.6	942.5	995.2	1013.7
47.5°	814.9	840.8	899.0	955.4	972.1
50°	764.0	791.7	852.8	911.0	927.7
52.5°	711.3	740.9	806.5	864.8	884.2
55°	655.8	690.0	758.4	817.6	835.2
57.5°	603.0	638.2	711.3	771.4	789.0
60°	551.3	587.3	662.2	719.6	738.1
62.5°	493.9	536.5	614.1	670.6	684.4
65°	442.1	485.6	561.4	617.8	633.6
67.5°	387.5	434.7	510.6	562.4	577.1
70°	335.7	384.8	457.8	505.9	512.4
72.5°	280.3	330.2	404.2	434.7	434.7
75°	230.3	281.2	349.6	355.2	350.5
77.5°	175.7	232.2	276.6	265.5	254.4
80°	126.7	182.2	202.6	182.2	167.4
82.5°	85.1	132.3	122.1	97.1	86.0
85°	47.2	70.3	48.1	26.8	19.4
87.5°	17.6	15.7	4.6	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)