

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: P307975

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CA08-W2A-U-5000K**

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: P307975
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: 14FCZ2-39-UNV-L82765-S-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 3868.0 lumens
Efficiency: N/A
Efficacy: 113.4 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

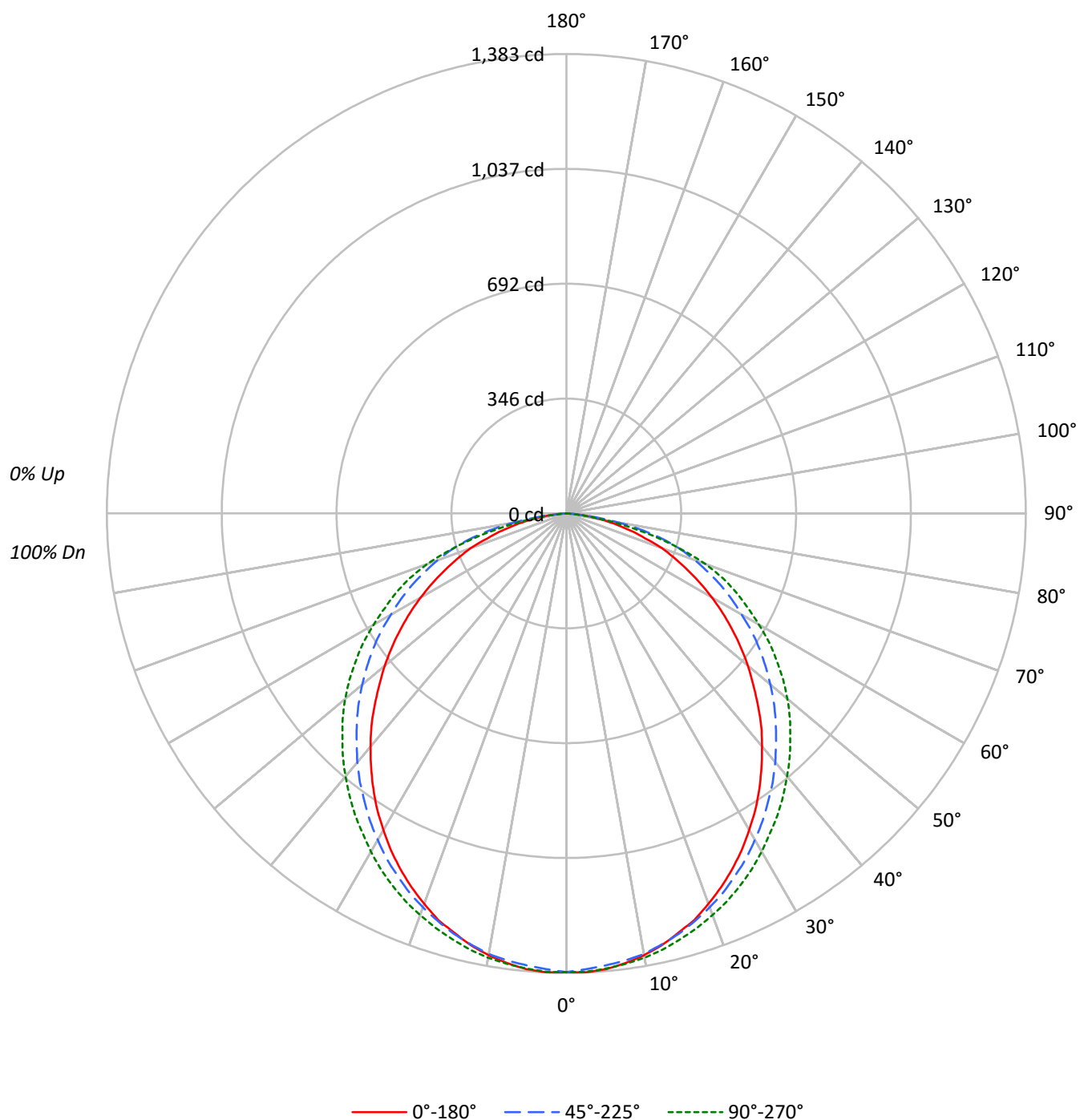
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3716	3716	3716
5°	3720	3689	3714
10°	3689	3679	3710
15°	3638	3649	3697
20°	3581	3614	3685
25°	3508	3570	3673
30°	3420	3528	3653
35°	3326	3478	3642
40°	3220	3436	3631
45°	3102	3394	3627
50°	2987	3356	3637
55°	2861	3329	3626
60°	2725	3282	3602
65°	2564	3273	3602
70°	2414	3244	3500
75°	2094	3170	2991
80°	1694	2555	1991
85°	1124	889	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	3.4
10°-20°	371.0	9.6
20°-30°	556.6	14.4
30°-40°	663.9	17.2
40°-50°	686.4	17.7
50°-60°	626.6	16.2
60°-70°	493.1	12.7
70°-80°	287.1	7.4
80°-90°	52.9	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°	1058.0	27.4
0°-40°	1721.9	44.5
0°-60°	3034.9	78.5
0°-90°	3868.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3868.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1377	1373	1366	1377	1375	131
15°	1306	1308	1310	1327	1327	369
25°	1181	1187	1202	1231	1237	544
35°	1013	1026	1059	1099	1108	633
45°	815	842	892	942	953	629
55°	610	642	710	761	773	545
65°	403	445	514	554	566	400
75°	201	249	305	299	288	214
85°	36	52	29	23	19	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1380.8	1380.8	1380.8	1380.8	1380.8
2.5°	1382.7	1378.9	1373.1	1382.7	1380.8
5°	1377.0	1373.1	1365.5	1377.0	1375.1
7.5°	1365.5	1361.6	1357.8	1369.3	1367.4
10°	1350.1	1348.2	1346.3	1359.7	1357.8
12.5°	1330.9	1330.9	1329.0	1344.4	1344.4
15°	1306.0	1307.9	1309.9	1327.1	1327.1
17.5°	1283.0	1281.1	1286.8	1306.0	1307.9
20°	1250.4	1254.2	1261.9	1284.9	1286.8
22.5°	1217.8	1221.6	1235.1	1258.1	1263.8
25°	1181.4	1187.1	1202.5	1231.2	1237.0
27.5°	1143.0	1150.7	1171.8	1202.5	1208.2
30°	1100.8	1112.3	1135.3	1169.9	1175.6
32.5°	1058.6	1070.1	1098.9	1133.4	1141.1
35°	1012.6	1026.0	1058.6	1098.9	1108.5
37.5°	964.7	981.9	1020.3	1060.5	1072.0
40°	916.7	935.9	978.1	1020.3	1033.7
42.5°	868.8	887.9	934.0	981.9	995.3
45°	815.1	841.9	891.8	941.6	953.1
47.5°	763.3	792.0	847.7	897.5	912.9
50°	713.4	742.2	801.6	853.4	868.8
52.5°	661.6	692.3	755.6	809.3	822.7
55°	609.9	642.5	709.6	761.4	772.9
57.5°	558.1	592.6	661.6	711.5	724.9
60°	506.3	542.7	609.9	659.7	669.3
62.5°	454.5	492.9	561.9	606.0	615.6
65°	402.7	444.9	514.0	554.2	565.7
67.5°	352.9	395.1	462.2	500.5	510.1
70°	306.8	345.2	412.3	441.1	444.9
72.5°	249.3	297.3	362.5	377.8	368.2
75°	201.4	249.3	304.9	299.2	287.7
77.5°	153.4	201.4	237.8	218.6	203.3
80°	109.3	157.3	164.9	136.2	128.5
82.5°	71.0	109.3	92.1	71.0	57.5
85°	36.4	51.8	28.8	23.0	19.2
87.5°	11.5	7.7	3.8	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)