

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: P307982

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CA125-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: P307982
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-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" 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: 3736.0 lumens
Efficiency: N/A
Efficacy: 110.9 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

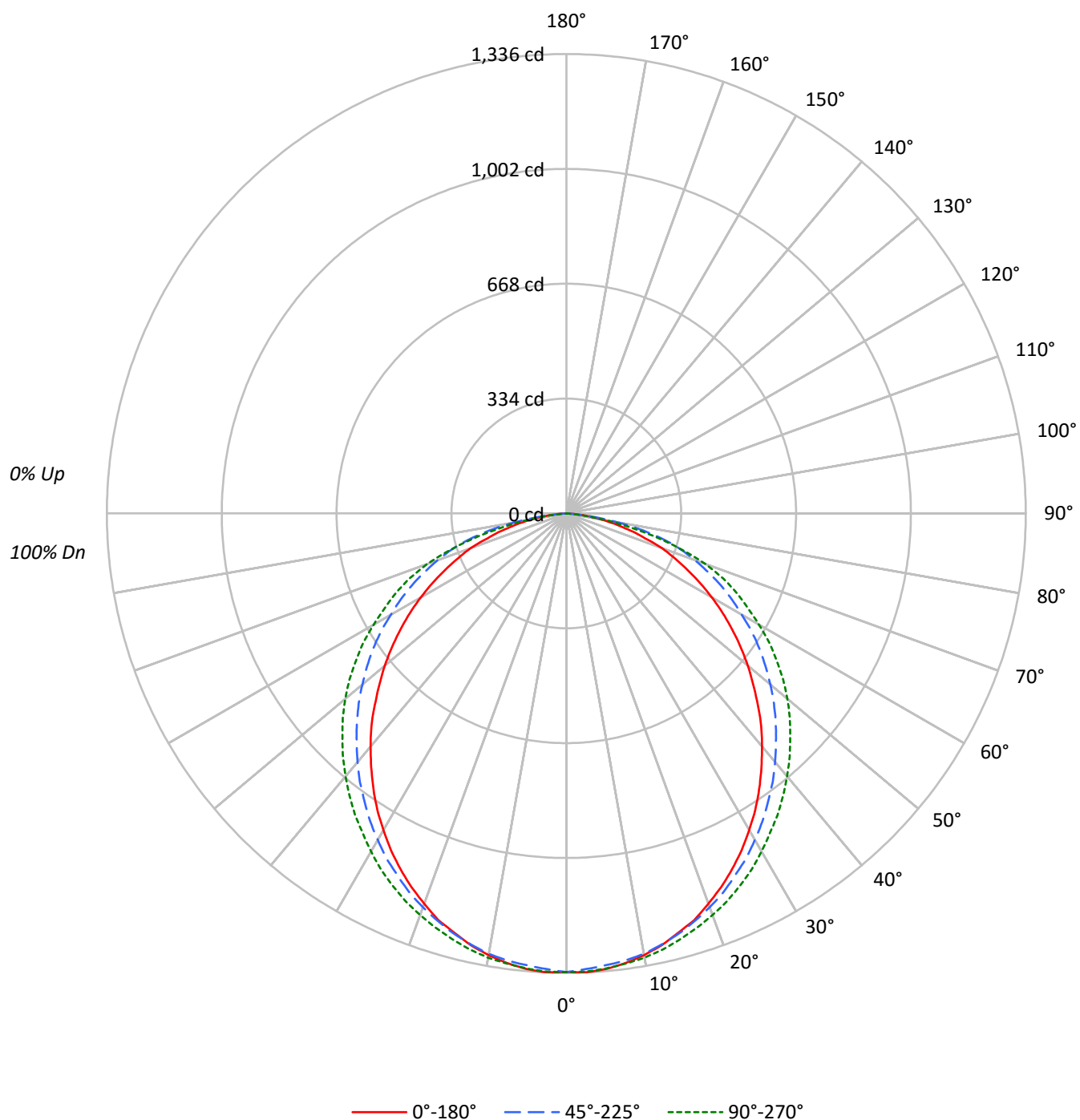
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3589	3589	3589
5°	3593	3563	3588
10°	3563	3553	3584
15°	3514	3525	3571
20°	3458	3490	3559
25°	3388	3448	3548
30°	3304	3407	3528
35°	3213	3359	3517
40°	3110	3319	3507
45°	2996	3278	3503
50°	2885	3242	3513
55°	2763	3216	3502
60°	2632	3170	3479
65°	2477	3161	3479
70°	2332	3134	3381
75°	2022	3062	2889
80°	1636	2469	1923
85°	1087	858	571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.9	3.4
10°-20°	358.4	9.6
20°-30°	537.6	14.4
30°-40°	641.3	17.2
40°-50°	662.9	17.7
50°-60°	605.3	16.2
60°-70°	476.3	12.7
70°-80°	277.3	7.4
80°-90°	51.1	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°	1021.9	27.4
0°-40°	1663.1	44.5
0°-60°	2931.3	78.5
0°-90°	3736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1334	1334	1334	1334	1334	
5°	1330	1326	1319	1330	1328	126
15°	1261	1263	1265	1282	1282	356
25°	1141	1147	1161	1189	1195	525
35°	978	991	1022	1061	1071	611
45°	787	813	861	910	921	608
55°	589	620	685	735	746	527
65°	389	430	496	535	546	386
75°	194	241	294	289	278	207
85°	35	50	28	22	18	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1335.5	1331.8	1326.3	1335.5	1333.7
5°	1330.0	1326.3	1318.9	1330.0	1328.1
7.5°	1318.9	1315.2	1311.5	1322.6	1320.7
10°	1304.1	1302.2	1300.3	1313.3	1311.5
12.5°	1285.5	1285.5	1283.7	1298.5	1298.5
15°	1261.4	1263.3	1265.2	1281.8	1281.8
17.5°	1239.2	1237.4	1242.9	1261.4	1263.3
20°	1207.7	1211.4	1218.8	1241.1	1242.9
22.5°	1176.2	1179.9	1192.9	1215.1	1220.7
25°	1141.0	1146.6	1161.4	1189.2	1194.8
27.5°	1104.0	1111.4	1131.8	1161.4	1167.0
30°	1063.2	1074.4	1096.6	1129.9	1135.5
32.5°	1022.5	1033.6	1061.4	1094.7	1102.1
35°	978.0	991.0	1022.5	1061.4	1070.7
37.5°	931.7	948.4	985.4	1024.3	1035.5
40°	885.4	903.9	944.7	985.4	998.4
42.5°	839.1	857.6	902.1	948.4	961.4
45°	787.2	813.2	861.3	909.5	920.6
47.5°	737.2	765.0	818.7	866.9	881.7
50°	689.1	716.9	774.3	824.3	839.1
52.5°	639.1	668.7	729.8	781.7	794.7
55°	589.0	620.5	685.4	735.4	746.5
57.5°	539.0	572.4	639.1	687.2	700.2
60°	489.0	524.2	589.0	637.2	646.5
62.5°	439.0	476.1	542.7	585.3	594.6
65°	389.0	429.7	496.4	535.3	546.4
67.5°	340.8	381.6	446.4	483.5	492.7
70°	296.4	333.4	398.3	426.0	429.7
72.5°	240.8	287.1	350.1	364.9	355.7
75°	194.5	240.8	294.5	289.0	277.9
77.5°	148.2	194.5	229.7	211.2	196.3
80°	105.6	151.9	159.3	131.5	124.1
82.5°	68.5	105.6	88.9	68.5	55.6
85°	35.2	50.0	27.8	22.2	18.5
87.5°	11.1	7.4	3.7	3.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)