

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: P307992

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CP125-W2A-U-4500K**

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: P307992
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-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 3729.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

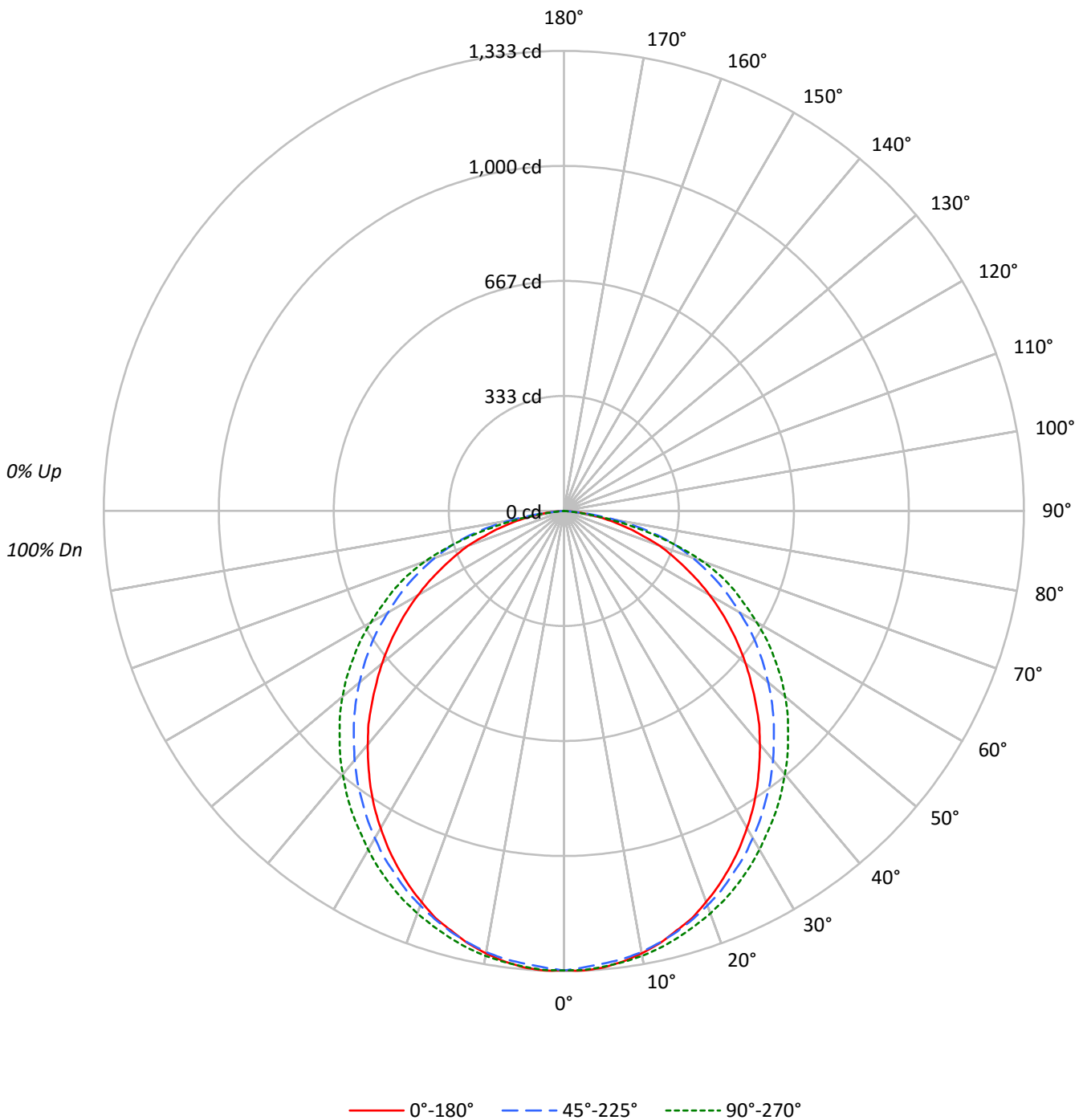
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3582	3582	3582
5°	3586	3556	3581
10°	3557	3547	3577
15°	3508	3518	3564
20°	3452	3484	3553
25°	3382	3442	3541
30°	3298	3401	3522
35°	3207	3353	3511
40°	3105	3312	3501
45°	2990	3272	3497
50°	2879	3235	3506
55°	2758	3210	3496
60°	2627	3164	3473
65°	2472	3155	3473
70°	2327	3127	3375
75°	2018	3057	2883
80°	1633	2464	1920
85°	1084	855	571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	3.4
10°-20°	357.7	9.6
20°-30°	536.6	14.4
30°-40°	640.1	17.2
40°-50°	661.7	17.7
50°-60°	604.1	16.2
60°-70°	475.4	12.7
70°-80°	276.7	7.4
80°-90°	51.0	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°	1020.0	27.4
0°-40°	1660.0	44.5
0°-60°	2925.8	78.5
0°-90°	3729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3729.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1331	1331	1331	1331	1331	
5°	1328	1324	1316	1328	1326	126
15°	1259	1261	1263	1279	1279	355
25°	1139	1144	1159	1187	1192	524
35°	976	989	1021	1059	1069	610
45°	786	812	860	908	919	607
55°	588	619	684	734	745	526
65°	388	429	496	534	545	386
75°	194	240	294	288	277	206
85°	35	50	28	22	18	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1331.2	1331.2	1331.2	1331.2	1331.2
2.5°	1333.0	1329.3	1323.8	1333.0	1331.2
5°	1327.5	1323.8	1316.4	1327.5	1325.6
7.5°	1316.4	1312.7	1309.0	1320.1	1318.2
10°	1301.6	1299.8	1297.9	1310.9	1309.0
12.5°	1283.1	1283.1	1281.3	1296.1	1296.1
15°	1259.1	1260.9	1262.8	1279.4	1279.4
17.5°	1236.9	1235.0	1240.6	1259.1	1260.9
20°	1205.5	1209.2	1216.6	1238.7	1240.6
22.5°	1174.0	1177.7	1190.7	1212.9	1218.4
25°	1138.9	1144.5	1159.2	1187.0	1192.5
27.5°	1101.9	1109.3	1129.7	1159.2	1164.8
30°	1061.3	1072.3	1094.5	1127.8	1133.4
32.5°	1020.6	1031.7	1059.4	1092.7	1100.1
35°	976.2	989.1	1020.6	1059.4	1068.7
37.5°	930.0	946.6	983.6	1022.4	1033.5
40°	883.8	902.3	942.9	983.6	996.5
42.5°	837.5	856.0	900.4	946.6	959.6
45°	785.8	811.7	859.7	907.8	918.9
47.5°	735.9	763.6	817.2	865.3	880.1
50°	687.8	715.5	772.8	822.8	837.5
52.5°	637.9	667.4	728.5	780.2	793.2
55°	587.9	619.4	684.1	734.0	745.1
57.5°	538.0	571.3	637.9	685.9	698.9
60°	488.1	523.2	587.9	636.0	645.3
62.5°	438.2	475.2	541.7	584.2	593.5
65°	388.3	428.9	495.5	534.3	545.4
67.5°	340.2	380.9	445.6	482.6	491.8
70°	295.8	332.8	397.5	425.2	428.9
72.5°	240.4	286.6	349.4	364.2	355.0
75°	194.1	240.4	294.0	288.4	277.3
77.5°	147.9	194.1	229.3	210.8	196.0
80°	105.4	151.6	159.0	131.3	123.9
82.5°	68.4	105.4	88.7	68.4	55.5
85°	35.1	49.9	27.7	22.2	18.5
87.5°	11.1	7.4	3.7	3.7	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)