

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: P307715

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-W2A-U-5500K**

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: P307715
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: 14FCZ2-39-UNV-L82765-CA125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5500K 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: 3851.0 lumens
Efficiency: N/A
Efficacy: 112.6 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

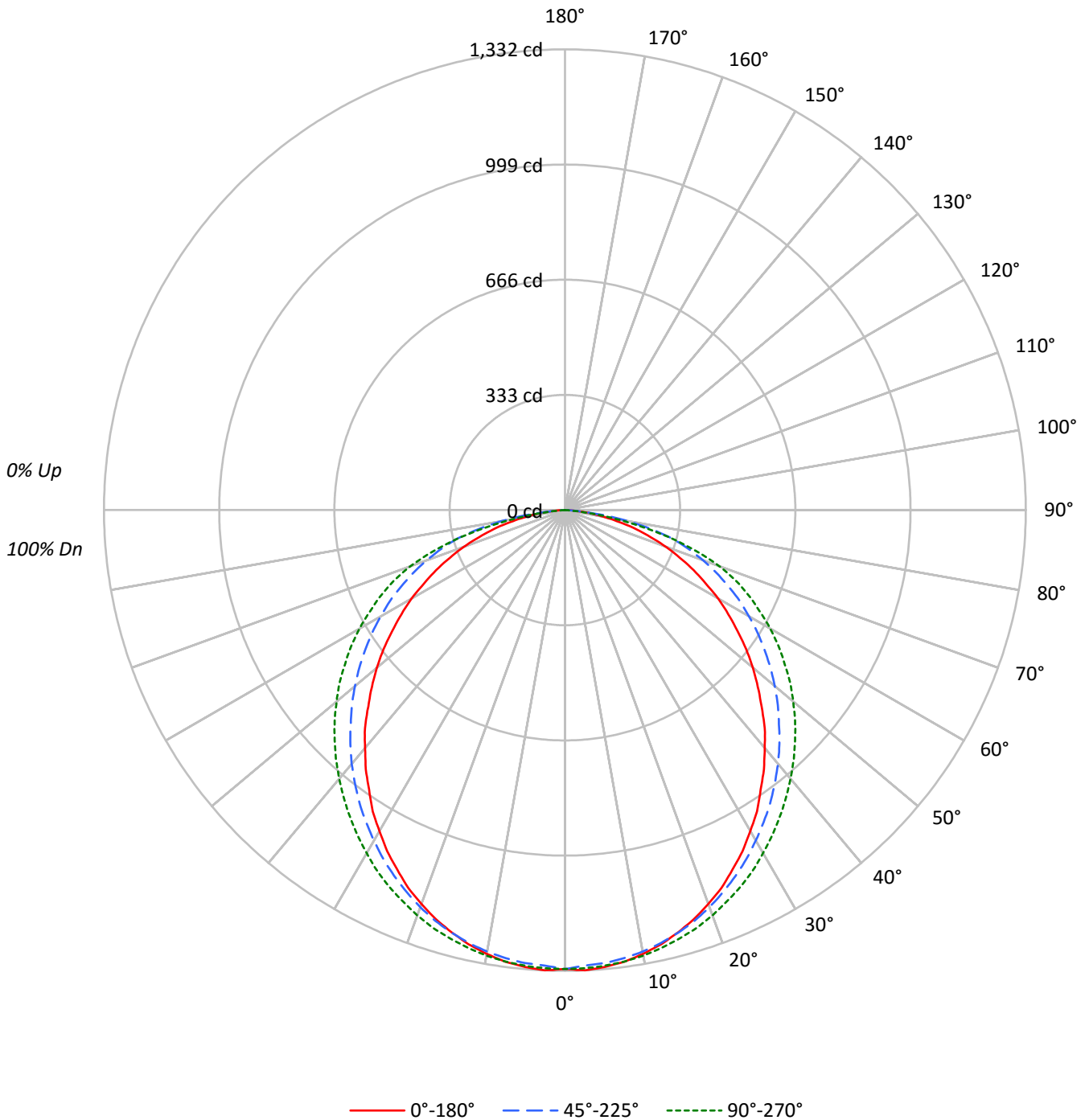
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3570	3570	3570
5°	3581	3551	3572
10°	3559	3541	3574
15°	3521	3524	3572
20°	3470	3499	3570
25°	3404	3465	3567
30°	3330	3429	3559
35°	3241	3399	3557
40°	3155	3366	3562
45°	3059	3330	3581
50°	2969	3314	3606
55°	2856	3303	3638
60°	2754	3309	3688
65°	2614	3319	3745
70°	2452	3345	3743
75°	2223	3375	3383
80°	1822	2915	2408
85°	1352	1380	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	3.3
10°-20°	358.6	9.3
20°-30°	540.2	14.0
30°-40°	648.3	16.8
40°-50°	675.7	17.5
50°-60°	625.5	16.2
60°-70°	505.4	13.1
70°-80°	308.1	8.0
80°-90°	63.6	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°	1024.4	26.6
0°-40°	1672.6	43.4
0°-60°	2973.8	77.2
0°-90°	3851.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1326	1322	1315	1324	1322	126
15°	1264	1265	1265	1282	1282	356
25°	1146	1153	1167	1196	1201	528
35°	987	1002	1035	1072	1083	618
45°	804	828	875	924	941	621
55°	609	641	704	759	775	545
65°	410	451	521	574	588	406
75°	214	261	325	330	325	225
85°	44	65	45	25	18	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1326.7	1326.7	1326.7	1326.7	1326.7
2.5°	1331.8	1327.5	1318.1	1327.5	1325.8
5°	1325.8	1322.4	1314.7	1324.1	1322.4
7.5°	1317.2	1313.8	1306.9	1318.1	1316.4
10°	1302.6	1300.9	1295.8	1308.6	1307.8
12.5°	1285.5	1284.6	1282.0	1296.6	1295.8
15°	1264.0	1264.9	1264.9	1282.0	1282.0
17.5°	1240.0	1241.7	1245.1	1264.0	1266.6
20°	1211.6	1215.1	1221.9	1243.4	1246.8
22.5°	1182.4	1185.0	1195.3	1221.1	1224.5
25°	1146.4	1153.2	1167.0	1196.2	1201.3
27.5°	1112.0	1118.0	1136.9	1167.0	1175.6
30°	1071.6	1081.1	1103.4	1136.1	1145.5
32.5°	1033.0	1043.3	1069.1	1106.9	1115.4
35°	986.6	1002.1	1034.7	1072.5	1082.8
37.5°	944.6	959.2	996.1	1037.3	1049.3
40°	898.2	916.2	958.3	1002.1	1014.1
42.5°	855.3	872.4	917.9	962.6	978.9
45°	803.7	827.8	875.0	924.0	941.1
47.5°	756.5	780.6	834.7	887.0	902.5
50°	709.3	735.0	791.7	845.8	861.3
52.5°	660.3	687.8	748.8	802.9	820.9
55°	608.8	640.6	704.1	759.1	775.4
57.5°	559.9	592.5	660.3	716.2	732.5
60°	511.8	545.3	614.8	668.1	685.2
62.5°	458.5	498.0	570.2	622.6	635.4
65°	410.5	450.8	521.2	573.6	588.2
67.5°	359.8	403.6	474.0	522.1	535.8
70°	311.7	357.2	425.1	469.7	475.7
72.5°	260.2	306.6	375.2	403.6	403.6
75°	213.8	261.0	324.6	329.7	325.4
77.5°	163.2	215.5	256.7	246.4	236.1
80°	117.6	169.2	188.1	169.2	155.4
82.5°	79.0	122.8	113.3	90.2	79.9
85°	43.8	65.3	44.7	24.9	18.0
87.5°	16.3	14.6	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)