

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: P308033

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP125-W2A-U-2700K**

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: P308033
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: 14FCZ2-44-UNV-L82765-S-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 3765.0 lumens
Efficiency: N/A
Efficacy: 98.3 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

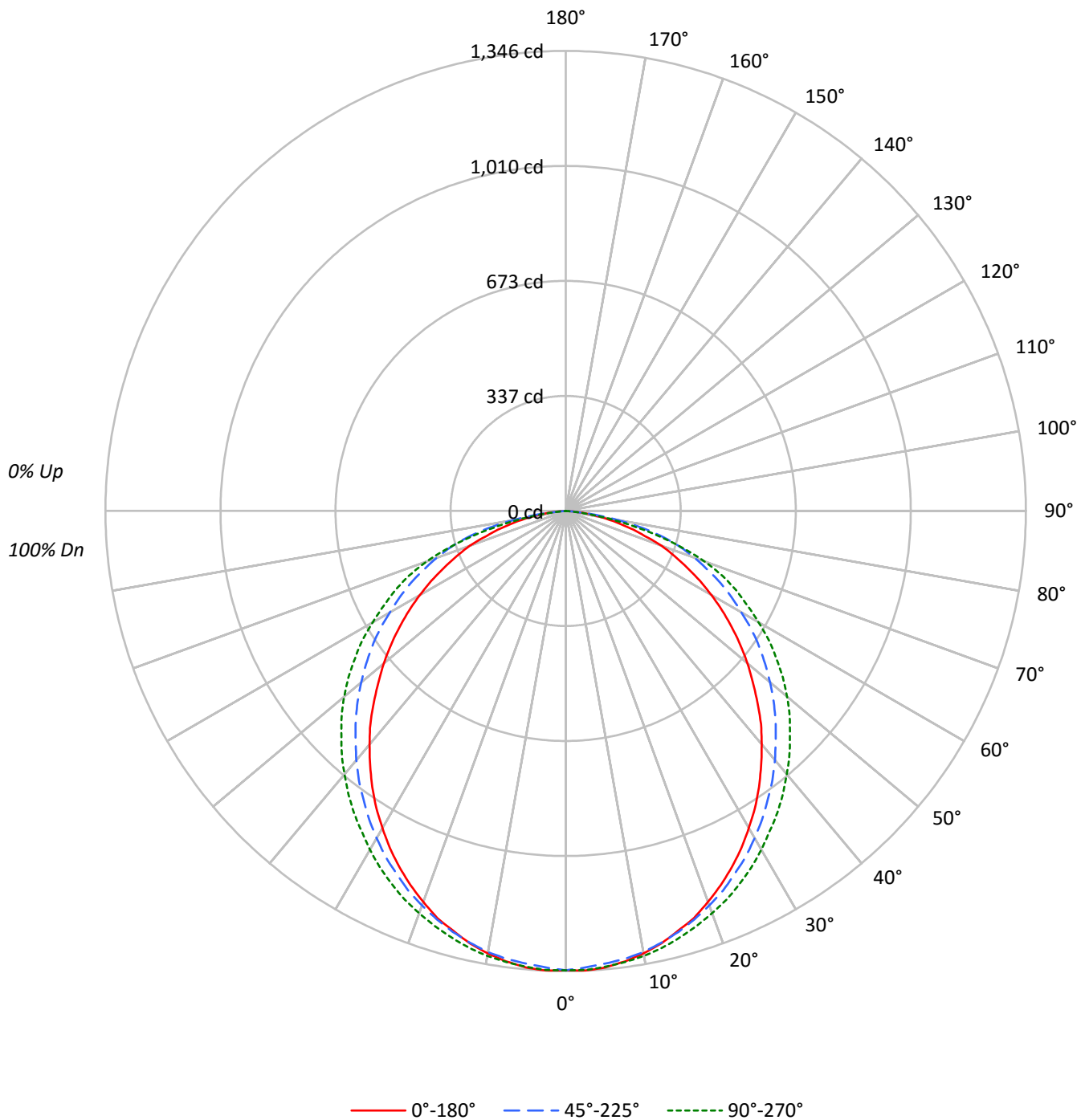
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3617	3617	3617
5°	3620	3590	3615
10°	3591	3581	3611
15°	3541	3552	3599
20°	3485	3517	3587
25°	3414	3475	3575
30°	3329	3434	3556
35°	3238	3385	3545
40°	3134	3344	3535
45°	3019	3303	3531
50°	2907	3267	3540
55°	2785	3240	3529
60°	2652	3195	3506
65°	2496	3186	3507
70°	2350	3157	3408
75°	2038	3086	2911
80°	1649	2487	1939
85°	1096	865	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	3.4
10°-20°	361.1	9.6
20°-30°	541.7	14.4
30°-40°	646.2	17.2
40°-50°	668.1	17.7
50°-60°	610.0	16.2
60°-70°	480.0	12.7
70°-80°	279.4	7.4
80°-90°	51.5	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°	1029.8	27.4
0°-40°	1676.0	44.5
0°-60°	2954.1	78.5
0°-90°	3765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3765.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1340	1337	1329	1340	1338	127
15°	1271	1273	1275	1292	1292	359
25°	1150	1156	1170	1198	1204	529
35°	986	999	1030	1070	1079	616
45°	793	820	868	917	928	613
55°	594	625	691	741	752	531
65°	392	433	500	540	551	389
75°	196	243	297	291	280	208
85°	36	50	28	22	19	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.0	1344.0	1344.0	1344.0	1344.0
2.5°	1345.9	1342.2	1336.6	1345.9	1344.0
5°	1340.3	1336.6	1329.1	1340.3	1338.4
7.5°	1329.1	1325.4	1321.6	1332.8	1331.0
10°	1314.2	1312.3	1310.4	1323.5	1321.6
12.5°	1295.5	1295.5	1293.6	1308.6	1308.6
15°	1271.2	1273.1	1275.0	1291.8	1291.8
17.5°	1248.8	1247.0	1252.6	1271.2	1273.1
20°	1217.1	1220.8	1228.3	1250.7	1252.6
22.5°	1185.4	1189.1	1202.2	1224.6	1230.2
25°	1149.9	1155.5	1170.4	1198.4	1204.0
27.5°	1112.6	1120.0	1140.6	1170.4	1176.0
30°	1071.5	1082.7	1105.1	1138.7	1144.3
32.5°	1030.4	1041.6	1069.6	1103.2	1110.7
35°	985.6	998.7	1030.4	1069.6	1079.0
37.5°	939.0	955.8	993.1	1032.3	1043.5
40°	892.3	911.0	952.0	993.1	1006.2
42.5°	845.6	864.3	909.1	955.8	968.8
45°	793.4	819.5	868.0	916.6	927.8
47.5°	743.0	771.0	825.1	873.6	888.6
50°	694.4	722.4	780.3	830.7	845.6
52.5°	644.0	673.9	735.5	787.8	800.8
55°	593.6	625.4	690.7	741.1	752.3
57.5°	543.2	576.8	644.0	692.6	705.6
60°	492.8	528.3	593.6	642.2	651.5
62.5°	442.4	479.7	547.0	589.9	599.2
65°	392.0	433.1	500.3	539.5	550.7
67.5°	343.5	384.5	449.9	487.2	496.5
70°	298.7	336.0	401.3	429.3	433.1
72.5°	242.7	289.3	352.8	367.7	358.4
75°	196.0	242.7	296.8	291.2	280.0
77.5°	149.3	196.0	231.5	212.8	197.9
80°	106.4	153.1	160.5	132.5	125.1
82.5°	69.1	106.4	89.6	69.1	56.0
85°	35.5	50.4	28.0	22.4	18.7
87.5°	11.2	7.5	3.7	3.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)