

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: P310560

Luminaire Tested: **24FCZ2-30-UNV-L82765-CP125-W2A-U-5700K**

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: P310560
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-30-UNV-L82765-CP125-W2A-U-5700K
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5700K 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: 2825.0 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

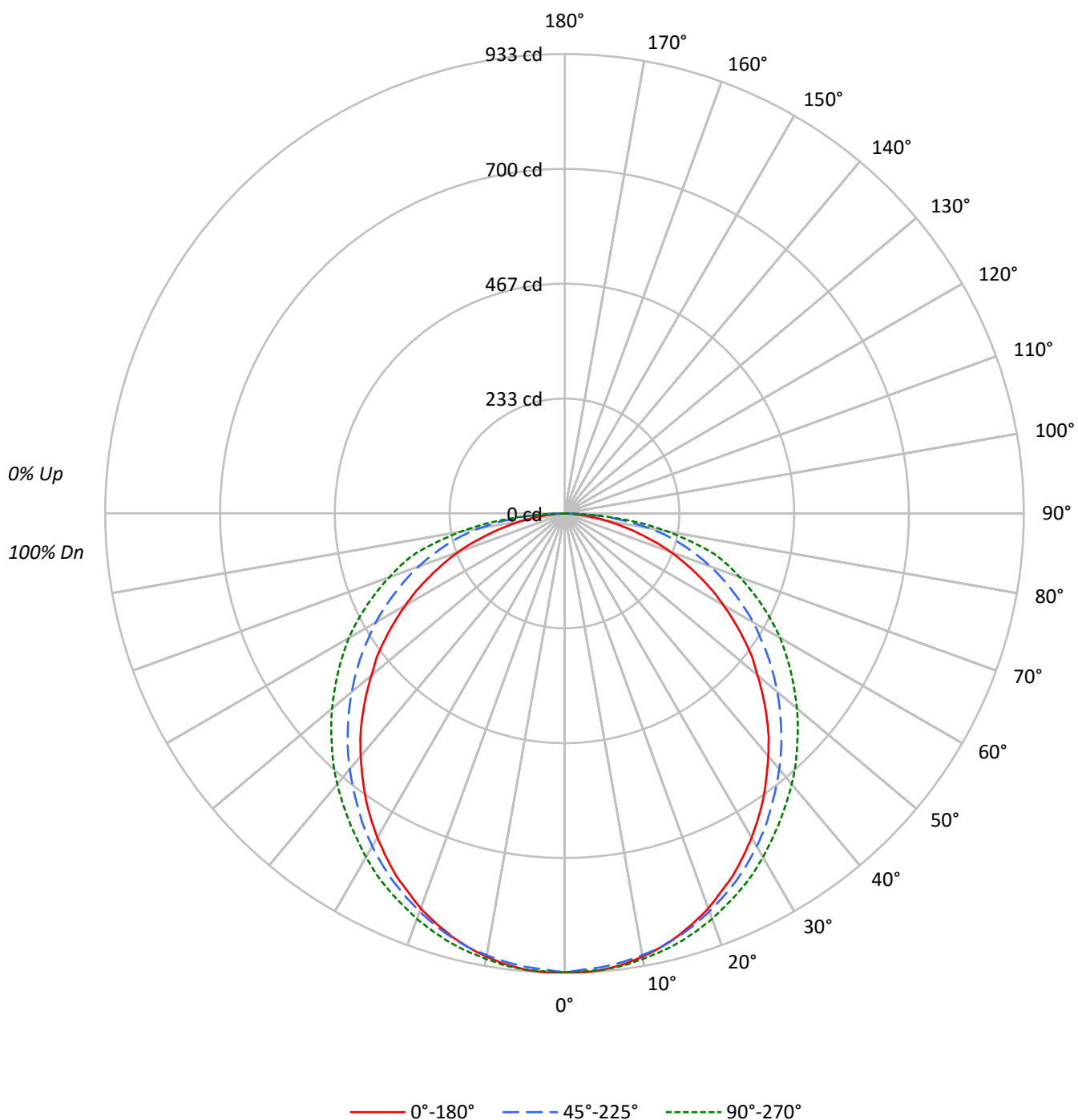
Input Watts (W): 24.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89		92	89	87		82
2	98	89	81	75	95	87	80	74	83	78	73		80	75	71		67
3	89	77	69	62	86	76	68	61	73	66	60		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	64	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	37	31	57	45	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1254	1254	1254
5°	1256	1248	1256
10°	1249	1245	1255
15°	1238	1240	1256
20°	1223	1232	1255
25°	1204	1223	1254
30°	1181	1213	1252
35°	1158	1201	1253
40°	1131	1192	1261
45°	1104	1184	1272
50°	1071	1181	1291
55°	1044	1183	1317
60°	1004	1193	1362
65°	958	1206	1411
70°	907	1243	1490
75°	809	1296	1628
80°	690	1372	1663
85°	492	1360	1592



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	3.1
10°-20°	252.1	8.9
20°-30°	380.8	13.5
30°-40°	458.9	16.2
40°-50°	481.8	17.1
50°-60°	450.8	16.0
60°-70°	372.2	13.2
70°-80°	253.7	9.0
80°-90°	86.5	3.1
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°	721.1	25.5
0°-40°	1180.0	41.8
0°-60°	2112.6	74.8
0°-90°	2825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	930	929	924	930	930	88
15°	888	890	890	900	902	250
25°	811	814	824	840	844	373
35°	705	712	731	756	763	440
45°	580	592	622	656	668	447
55°	445	463	504	546	561	397
65°	301	326	379	426	443	298
75°	156	191	249	296	313	166
85°	32	63	88	99	103	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	931.7	931.7	931.7	931.7	931.7
2.5°	932.6	931.7	927.0	931.7	930.7
5°	929.8	928.8	924.2	929.8	929.8
7.5°	923.2	923.2	918.5	925.1	926.0
10°	913.9	913.9	911.0	918.5	918.5
12.5°	902.6	902.6	902.6	910.1	911.0
15°	888.5	889.5	890.4	899.8	901.7
17.5°	871.7	873.5	876.4	887.6	889.5
20°	853.9	855.7	860.4	873.5	876.4
22.5°	831.4	836.1	842.6	857.6	860.4
25°	810.8	814.5	823.9	839.8	844.5
27.5°	785.4	791.1	803.3	820.1	826.7
30°	760.1	765.8	780.8	800.4	806.1
32.5°	733.0	741.4	757.3	777.9	784.5
35°	704.8	712.3	731.1	755.5	762.9
37.5°	673.9	684.2	704.8	731.1	740.5
40°	643.9	655.2	678.6	706.7	718.0
42.5°	613.9	625.2	651.4	683.3	694.5
45°	580.2	592.4	622.4	656.1	668.3
47.5°	546.4	561.4	594.2	629.9	643.0
50°	511.8	528.6	564.2	601.7	616.7
52.5°	480.8	496.8	534.3	574.6	588.6
55°	445.2	463.0	504.3	545.5	561.4
57.5°	408.7	428.3	472.4	517.4	533.3
60°	373.0	394.6	443.3	488.3	506.1
62.5°	338.4	359.9	410.5	457.4	475.2
65°	300.9	326.2	378.7	426.5	443.3
67.5°	265.3	292.4	347.7	394.6	411.5
70°	230.6	256.8	315.9	361.8	378.7
72.5°	193.1	223.1	282.1	329.9	347.7
75°	155.6	191.2	249.3	296.2	313.1
77.5°	120.9	157.5	215.6	254.0	262.4
80°	89.0	126.5	177.1	204.3	214.6
82.5°	57.2	94.7	135.0	154.7	163.1
85°	31.9	62.8	88.1	99.4	103.1
87.5°	13.1	27.2	35.6	40.3	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)