

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: P310634

Luminaire Tested: **24FCZ2-35-UNV-L82765-CA125-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: P310634
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: 24FCZ2-35-UNV-L82765-CA125-W2A-U-2700K
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" ACRYLIC 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: 2974.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

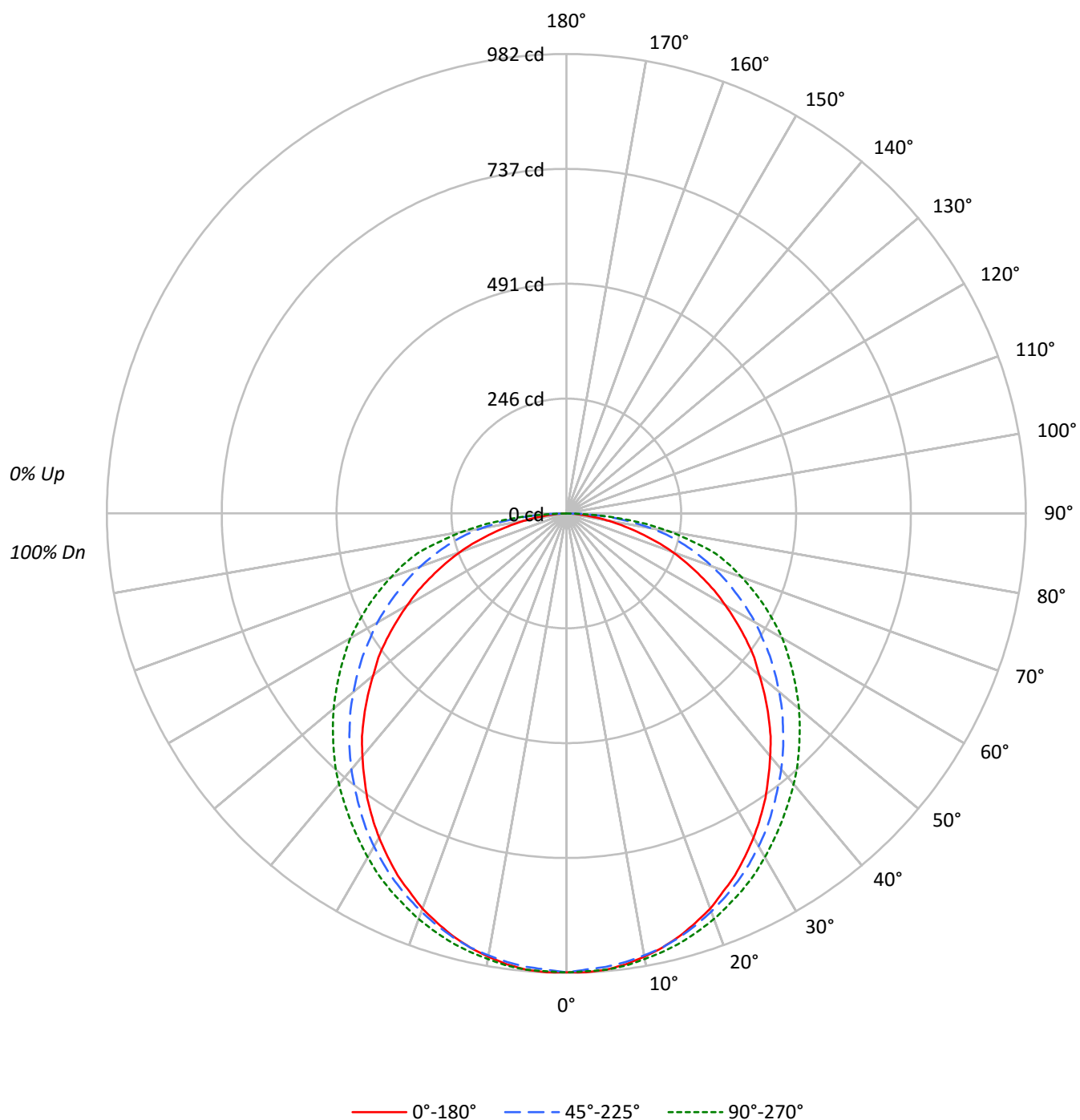
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1320	1320	1320
5°	1322	1314	1322
10°	1314	1310	1321
15°	1303	1306	1322
20°	1287	1297	1321
25°	1267	1288	1320
30°	1243	1277	1318
35°	1219	1264	1319
40°	1191	1255	1327
45°	1162	1247	1339
50°	1128	1243	1359
55°	1099	1245	1386
60°	1057	1256	1434
65°	1008	1269	1486
70°	955	1308	1568
75°	852	1365	1713
80°	726	1445	1751
85°	517	1433	1675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	3.1
10°-20°	265.4	8.9
20°-30°	400.9	13.5
30°-40°	483.1	16.2
40°-50°	507.2	17.1
50°-60°	474.5	16.0
60°-70°	391.9	13.2
70°-80°	267.0	9.0
80°-90°	91.1	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°	759.1	25.5
0°-40°	1242.3	41.8
0°-60°	2224.0	74.8
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	979	978	973	979	979	93
15°	935	936	937	947	949	264
25°	854	858	867	884	889	393
35°	742	750	770	795	803	464
45°	611	624	655	691	704	471
55°	469	487	531	574	591	418
65°	317	343	399	449	467	314
75°	164	201	262	312	330	175
85°	34	66	93	105	108	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	980.8	980.8	980.8	980.8	980.8
2.5°	981.8	980.8	975.9	980.8	979.8
5°	978.8	977.8	972.9	978.8	978.8
7.5°	971.9	971.9	967.0	973.9	974.9
10°	962.1	962.1	959.1	967.0	967.0
12.5°	950.2	950.2	950.2	958.1	959.1
15°	935.4	936.4	937.4	947.3	949.2
17.5°	917.6	919.6	922.6	934.4	936.4
20°	898.9	900.9	905.8	919.6	922.6
22.5°	875.2	880.2	887.1	902.8	905.8
25°	853.5	857.5	867.3	884.1	889.0
27.5°	826.9	832.8	845.6	863.4	870.3
30°	800.2	806.1	821.9	842.7	848.6
32.5°	771.6	780.5	797.3	819.0	825.9
35°	742.0	749.9	769.6	795.3	803.2
37.5°	709.5	720.3	742.0	769.6	779.5
40°	677.9	689.7	714.4	744.0	755.8
42.5°	646.3	658.1	685.8	719.3	731.2
45°	610.8	623.6	655.2	690.7	703.5
47.5°	575.3	591.0	625.6	663.1	676.9
50°	538.7	556.5	594.0	633.5	649.3
52.5°	506.2	523.0	562.4	604.9	619.7
55°	468.7	487.4	530.9	574.3	591.0
57.5°	430.2	450.9	497.3	544.7	561.4
60°	392.7	415.4	466.7	514.1	532.8
62.5°	356.2	378.9	432.2	481.5	500.3
65°	316.7	343.4	398.6	449.0	466.7
67.5°	279.2	307.9	366.1	415.4	433.2
70°	242.7	270.4	332.5	380.9	398.6
72.5°	203.3	234.8	297.0	347.3	366.1
75°	163.8	201.3	262.5	311.8	329.6
77.5°	127.3	165.8	226.9	267.4	276.3
80°	93.7	133.2	186.5	215.1	226.0
82.5°	60.2	99.7	142.1	162.8	171.7
85°	33.5	66.1	92.8	104.6	108.5
87.5°	13.8	28.6	37.5	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)