

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: P307893

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA125-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: P307893
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: 14FCZ2-29-UNV-L82765-S-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 2866.0 lumens
Efficiency: N/A
Efficacy: 118.4 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

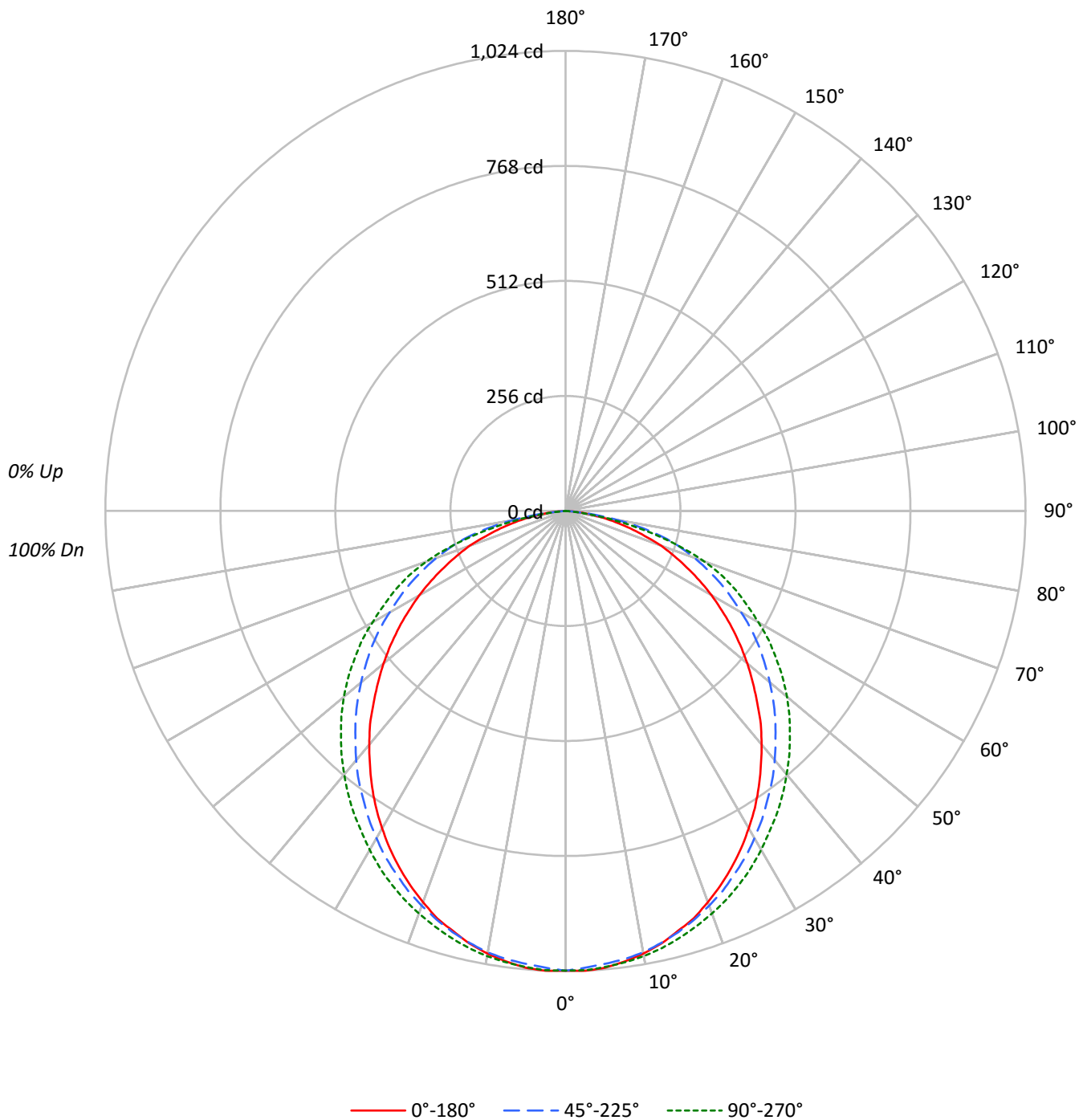
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2753	2753	2753
5°	2756	2733	2752
10°	2734	2726	2749
15°	2696	2704	2739
20°	2653	2678	2731
25°	2599	2646	2721
30°	2534	2614	2707
35°	2465	2577	2698
40°	2386	2546	2690
45°	2298	2515	2688
50°	2213	2487	2695
55°	2120	2467	2687
60°	2019	2432	2669
65°	1900	2425	2669
70°	1789	2404	2594
75°	1551	2349	2216
80°	1255	1894	1475
85°	834	658	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	3.4
10°-20°	274.9	9.6
20°-30°	412.4	14.4
30°-40°	491.9	17.2
40°-50°	508.6	17.7
50°-60°	464.3	16.2
60°-70°	365.4	12.7
70°-80°	212.7	7.4
80°-90°	39.2	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°	783.9	27.4
0°-40°	1275.8	44.5
0°-60°	2248.7	78.5
0°-90°	2866.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1023	1023	1023	1023	1023	
5°	1020	1017	1012	1020	1019	97
15°	968	969	970	983	983	273
25°	875	880	891	912	916	403
35°	750	760	784	814	821	469
45°	604	624	661	698	706	466
55°	452	476	526	564	573	404
65°	298	330	381	411	419	296
75°	149	185	226	222	213	159
85°	27	38	21	17	14	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1023.1	1023.1	1023.1	1023.1	1023.1
2.5°	1024.5	1021.7	1017.4	1024.5	1023.1
5°	1020.3	1017.4	1011.7	1020.3	1018.9
7.5°	1011.7	1008.9	1006.1	1014.6	1013.2
10°	1000.4	999.0	997.5	1007.5	1006.1
12.5°	986.2	986.2	984.7	996.1	996.1
15°	967.7	969.1	970.5	983.3	983.3
17.5°	950.6	949.2	953.5	967.7	969.1
20°	926.5	929.3	935.0	952.1	953.5
22.5°	902.3	905.2	915.1	932.2	936.4
25°	875.3	879.6	891.0	912.3	916.5
27.5°	846.9	852.6	868.2	891.0	895.2
30°	815.6	824.2	841.2	866.8	871.1
32.5°	784.4	792.9	814.2	839.8	845.5
35°	750.3	760.2	784.4	814.2	821.3
37.5°	714.8	727.5	756.0	785.8	794.3
40°	679.2	693.4	724.7	756.0	765.9
42.5°	643.7	657.9	692.0	727.5	737.5
45°	603.9	623.8	660.8	697.7	706.2
47.5°	565.6	586.9	628.1	665.0	676.4
50°	528.6	549.9	594.0	632.3	643.7
52.5°	490.2	513.0	559.9	599.7	609.6
55°	451.9	476.0	525.8	564.1	572.7
57.5°	413.5	439.1	490.2	527.2	537.1
60°	375.1	402.1	451.9	488.8	495.9
62.5°	336.8	365.2	416.4	449.0	456.1
65°	298.4	329.7	380.8	410.7	419.2
67.5°	261.5	292.7	342.5	370.9	378.0
70°	227.4	255.8	305.5	326.8	329.7
72.5°	184.7	220.3	268.6	279.9	272.8
75°	149.2	184.7	225.9	221.7	213.1
77.5°	113.7	149.2	176.2	162.0	150.6
80°	81.0	116.5	122.2	100.9	95.2
82.5°	52.6	81.0	68.2	52.6	42.6
85°	27.0	38.4	21.3	17.1	14.2
87.5°	8.5	5.7	2.8	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)