

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: P307888

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-W2A-U-6500K**

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: P307888
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-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K 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: 2959.0 lumens
Efficiency: N/A
Efficacy: 118.8 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

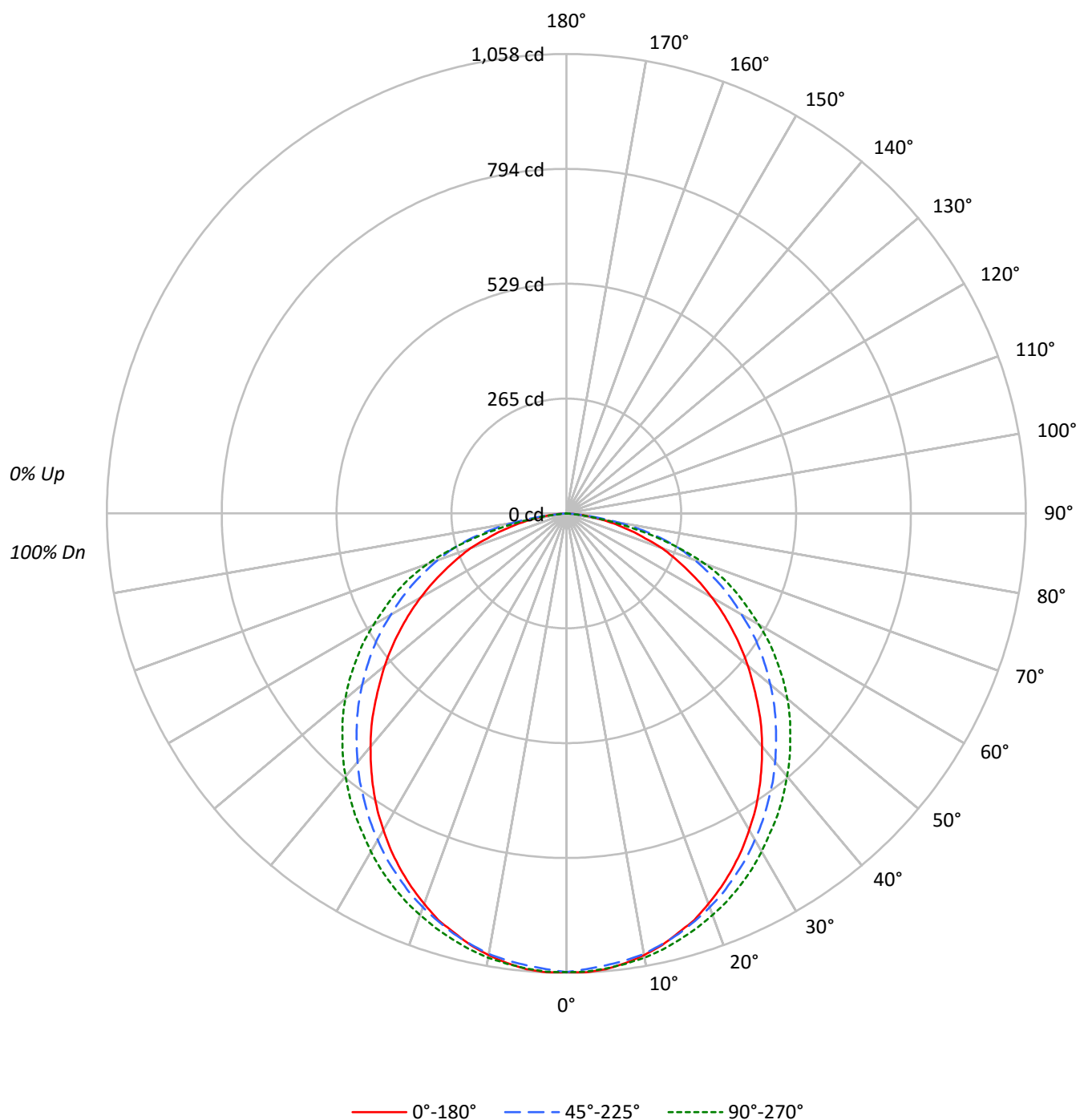
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2842	2842	2842
5°	2846	2822	2841
10°	2822	2814	2838
15°	2783	2791	2828
20°	2739	2765	2819
25°	2683	2731	2810
30°	2617	2699	2794
35°	2545	2660	2786
40°	2464	2628	2778
45°	2373	2596	2775
50°	2285	2567	2782
55°	2189	2547	2774
60°	2084	2511	2756
65°	1962	2504	2756
70°	1847	2482	2678
75°	1601	2426	2288
80°	1296	1956	1523
85°	861	679	454



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	3.4
10°-20°	283.8	9.6
20°-30°	425.8	14.4
30°-40°	507.9	17.2
40°-50°	525.1	17.7
50°-60°	479.4	16.2
60°-70°	377.2	12.7
70°-80°	219.6	7.4
80°-90°	40.5	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°	809.3	27.4
0°-40°	1317.2	44.5
0°-60°	2321.7	78.5
0°-90°	2959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1053	1050	1045	1053	1052	100
15°	999	1001	1002	1015	1015	282
25°	904	908	920	942	946	416
35°	775	785	810	841	848	484
45°	624	644	682	720	729	481
55°	466	492	543	582	591	417
65°	308	340	393	424	433	306
75°	154	191	233	229	220	164
85°	28	40	22	18	15	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1056.3	1056.3	1056.3	1056.3	1056.3
2.5°	1057.8	1054.8	1050.4	1057.8	1056.3
5°	1053.4	1050.4	1044.6	1053.4	1051.9
7.5°	1044.6	1041.6	1038.7	1047.5	1046.0
10°	1032.8	1031.4	1029.9	1040.2	1038.7
12.5°	1018.2	1018.2	1016.7	1028.4	1028.4
15°	999.1	1000.6	1002.0	1015.2	1015.2
17.5°	981.5	980.0	984.4	999.1	1000.6
20°	956.6	959.5	965.4	983.0	984.4
22.5°	931.6	934.5	944.8	962.4	966.8
25°	903.7	908.1	919.9	941.9	946.3
27.5°	874.4	880.3	896.4	919.9	924.3
30°	842.1	850.9	868.5	894.9	899.3
32.5°	809.8	818.6	840.6	867.1	872.9
35°	774.6	784.9	809.8	840.6	848.0
37.5°	738.0	751.2	780.5	811.3	820.1
40°	701.3	715.9	748.2	780.5	790.8
42.5°	664.6	679.3	714.5	751.2	761.4
45°	623.5	644.1	682.2	720.3	729.2
47.5°	583.9	605.9	648.5	686.6	698.3
50°	545.8	567.8	613.2	652.9	664.6
52.5°	506.2	529.6	578.0	619.1	629.4
55°	466.5	491.5	542.8	582.4	591.2
57.5°	426.9	453.3	506.2	544.3	554.6
60°	387.3	415.2	466.5	504.7	512.0
62.5°	347.7	377.0	429.9	463.6	470.9
65°	308.1	340.4	393.2	424.0	432.8
67.5°	269.9	302.2	353.6	382.9	390.2
70°	234.7	264.1	315.4	337.4	340.4
72.5°	190.7	227.4	277.3	289.0	281.7
75°	154.0	190.7	233.3	228.9	220.1
77.5°	117.4	154.0	181.9	167.2	155.5
80°	83.6	120.3	126.2	104.2	98.3
82.5°	54.3	83.6	70.4	54.3	44.0
85°	27.9	39.6	22.0	17.6	14.7
87.5°	8.8	5.9	2.9	2.9	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)