

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: P307887

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-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: P307887
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-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 2951.0 lumens
Efficiency: N/A
Efficacy: 120.4 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

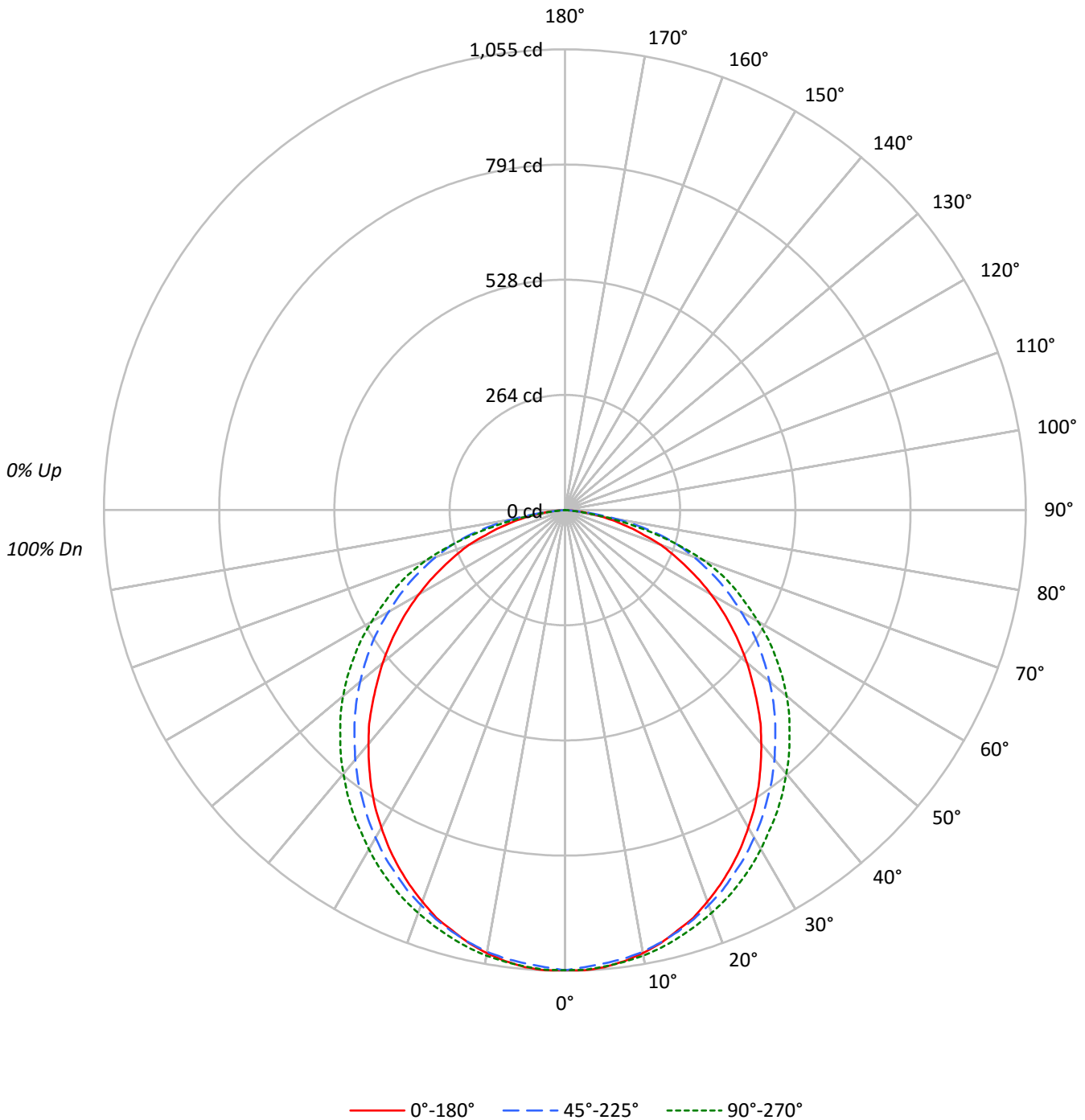
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2835	2835	2835
5°	2838	2814	2834
10°	2814	2807	2831
15°	2776	2784	2821
20°	2732	2757	2812
25°	2676	2724	2802
30°	2609	2692	2787
35°	2538	2653	2778
40°	2457	2621	2770
45°	2366	2589	2767
50°	2279	2560	2775
55°	2183	2540	2766
60°	2079	2504	2748
65°	1957	2497	2748
70°	1842	2475	2670
75°	1597	2418	2282
80°	1292	1949	1519
85°	858	676	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	3.4
10°-20°	283.1	9.6
20°-30°	424.6	14.4
30°-40°	506.5	17.2
40°-50°	523.6	17.7
50°-60°	478.1	16.2
60°-70°	376.2	12.7
70°-80°	219.0	7.4
80°-90°	40.3	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°	807.2	27.4
0°-40°	1313.7	44.5
0°-60°	2315.4	78.5
0°-90°	2951.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2951.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1050	1048	1042	1050	1049	100
15°	996	998	999	1012	1012	281
25°	901	906	917	939	944	415
35°	772	783	808	838	846	483
45°	622	642	680	718	727	480
55°	465	490	541	581	590	416
65°	307	339	392	423	432	305
75°	154	190	233	228	220	163
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°	1053.5	1053.5	1053.5	1053.5	1053.5
2.5°	1054.9	1052.0	1047.6	1054.9	1053.5
5°	1050.5	1047.6	1041.8	1050.5	1049.1
7.5°	1041.8	1038.8	1035.9	1044.7	1043.2
10°	1030.0	1028.6	1027.1	1037.4	1035.9
12.5°	1015.4	1015.4	1014.0	1025.7	1025.7
15°	996.4	997.9	999.3	1012.5	1012.5
17.5°	978.8	977.4	981.8	996.4	997.9
20°	954.0	956.9	962.7	980.3	981.8
22.5°	929.1	932.0	942.3	959.8	964.2
25°	901.3	905.7	917.4	939.3	943.7
27.5°	872.0	877.9	894.0	917.4	921.8
30°	839.8	848.6	866.2	892.5	896.9
32.5°	807.7	816.4	838.4	864.7	870.6
35°	772.5	782.8	807.7	838.4	845.7
37.5°	736.0	749.1	778.4	809.1	817.9
40°	699.4	714.0	746.2	778.4	788.6
42.5°	662.8	677.4	712.5	749.1	759.4
45°	621.8	642.3	680.4	718.4	727.2
47.5°	582.3	604.3	646.7	684.7	696.5
50°	544.3	566.2	611.6	651.1	662.8
52.5°	504.8	528.2	576.5	617.4	627.7
55°	465.3	490.2	541.4	580.9	589.6
57.5°	425.8	452.1	504.8	542.8	553.1
60°	386.3	414.1	465.3	503.3	510.6
62.5°	346.8	376.0	428.7	462.4	469.7
65°	307.3	339.4	392.1	422.8	431.6
67.5°	269.2	301.4	352.6	381.9	389.2
70°	234.1	263.4	314.6	336.5	339.4
72.5°	190.2	226.8	276.5	288.2	280.9
75°	153.6	190.2	232.6	228.2	219.5
77.5°	117.1	153.6	181.4	166.8	155.1
80°	83.4	120.0	125.8	103.9	98.0
82.5°	54.1	83.4	70.2	54.1	43.9
85°	27.8	39.5	21.9	17.6	14.6
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)