

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: P307881

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-W2A-U-3000K**

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: P307881
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-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2673.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

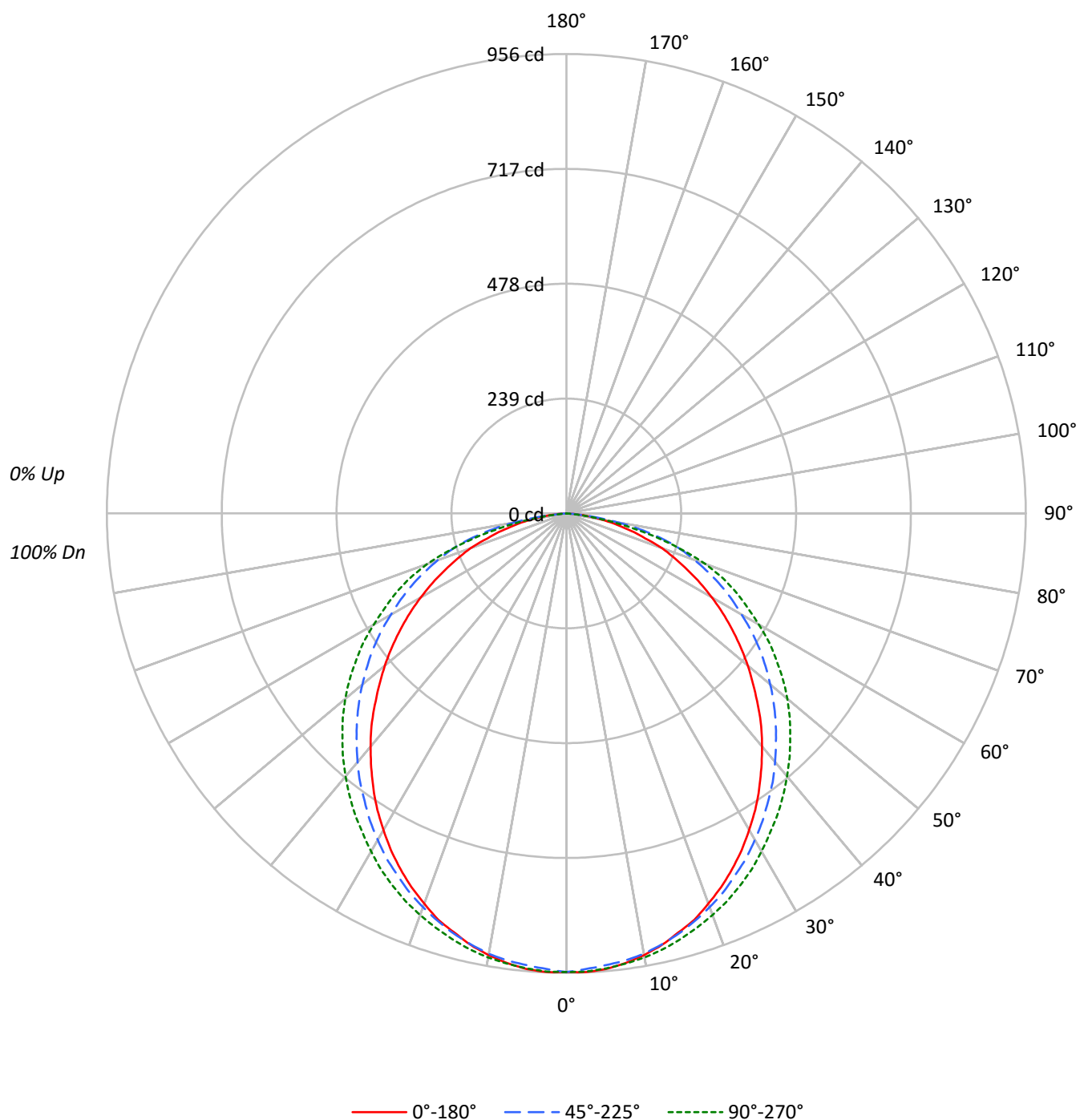
Input Watts (W): 23.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2568	2568	2568
5°	2571	2549	2567
10°	2549	2542	2564
15°	2514	2522	2555
20°	2475	2497	2547
25°	2424	2467	2538
30°	2364	2438	2524
35°	2299	2403	2516
40°	2225	2374	2509
45°	2144	2345	2507
50°	2064	2319	2514
55°	1977	2301	2506
60°	1883	2268	2489
65°	1772	2262	2490
70°	1668	2242	2419
75°	1447	2191	2067
80°	1170	1767	1376
85°	778	614	411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	3.4
10°-20°	256.4	9.6
20°-30°	384.6	14.4
30°-40°	458.8	17.2
40°-50°	474.3	17.7
50°-60°	433.1	16.2
60°-70°	340.8	12.7
70°-80°	198.4	7.4
80°-90°	36.6	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°	731.1	27.4
0°-40°	1189.9	44.5
0°-60°	2097.3	78.5
0°-90°	2673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2673.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	952	949	944	952	950	90
15°	902	904	905	917	917	255
25°	816	820	831	851	855	376
35°	700	709	732	759	766	437
45°	563	582	616	651	659	435
55°	421	444	490	526	534	377
65°	278	308	355	383	391	276
75°	139	172	211	207	199	148
85°	25	36	20	16	13	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.2	954.2	954.2	954.2	954.2
2.5°	955.5	952.9	948.9	955.5	954.2
5°	951.6	948.9	943.6	951.6	950.2
7.5°	943.6	941.0	938.3	946.3	944.9
10°	933.0	931.7	930.4	939.6	938.3
12.5°	919.8	919.8	918.4	929.0	929.0
15°	902.5	903.9	905.2	917.1	917.1
17.5°	886.6	885.3	889.3	902.5	903.9
20°	864.1	866.7	872.0	888.0	889.3
22.5°	841.6	844.2	853.5	869.4	873.4
25°	816.4	820.4	831.0	850.8	854.8
27.5°	789.9	795.2	809.8	831.0	834.9
30°	760.7	768.7	784.6	808.4	812.4
32.5°	731.6	739.5	759.4	783.3	788.6
35°	699.8	709.0	731.6	759.4	766.0
37.5°	666.6	678.6	705.1	732.9	740.8
40°	633.5	646.7	675.9	705.1	714.3
42.5°	600.4	613.6	645.4	678.6	687.8
45°	563.3	581.8	616.3	650.7	658.7
47.5°	527.5	547.3	585.8	620.2	630.8
50°	493.0	512.9	554.0	589.8	600.4
52.5°	457.2	478.4	522.2	559.3	568.6
55°	421.4	444.0	490.4	526.1	534.1
57.5°	385.7	409.5	457.2	491.7	501.0
60°	349.9	375.1	421.4	455.9	462.5
62.5°	314.1	340.6	388.3	418.8	425.4
65°	278.3	307.5	355.2	383.0	391.0
67.5°	243.9	273.0	319.4	345.9	352.5
70°	212.0	238.6	284.9	304.8	307.5
72.5°	172.3	205.4	250.5	261.1	254.5
75°	139.2	172.3	210.7	206.7	198.8
77.5°	106.0	139.2	164.3	151.1	140.5
80°	75.5	108.7	114.0	94.1	88.8
82.5°	49.0	75.5	63.6	49.0	39.8
85°	25.2	35.8	19.9	15.9	13.3
87.5°	8.0	5.3	2.7	2.7	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)