

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: P307612

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA08-W2A-U-3500K**

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: P307612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3500K 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: 2736.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

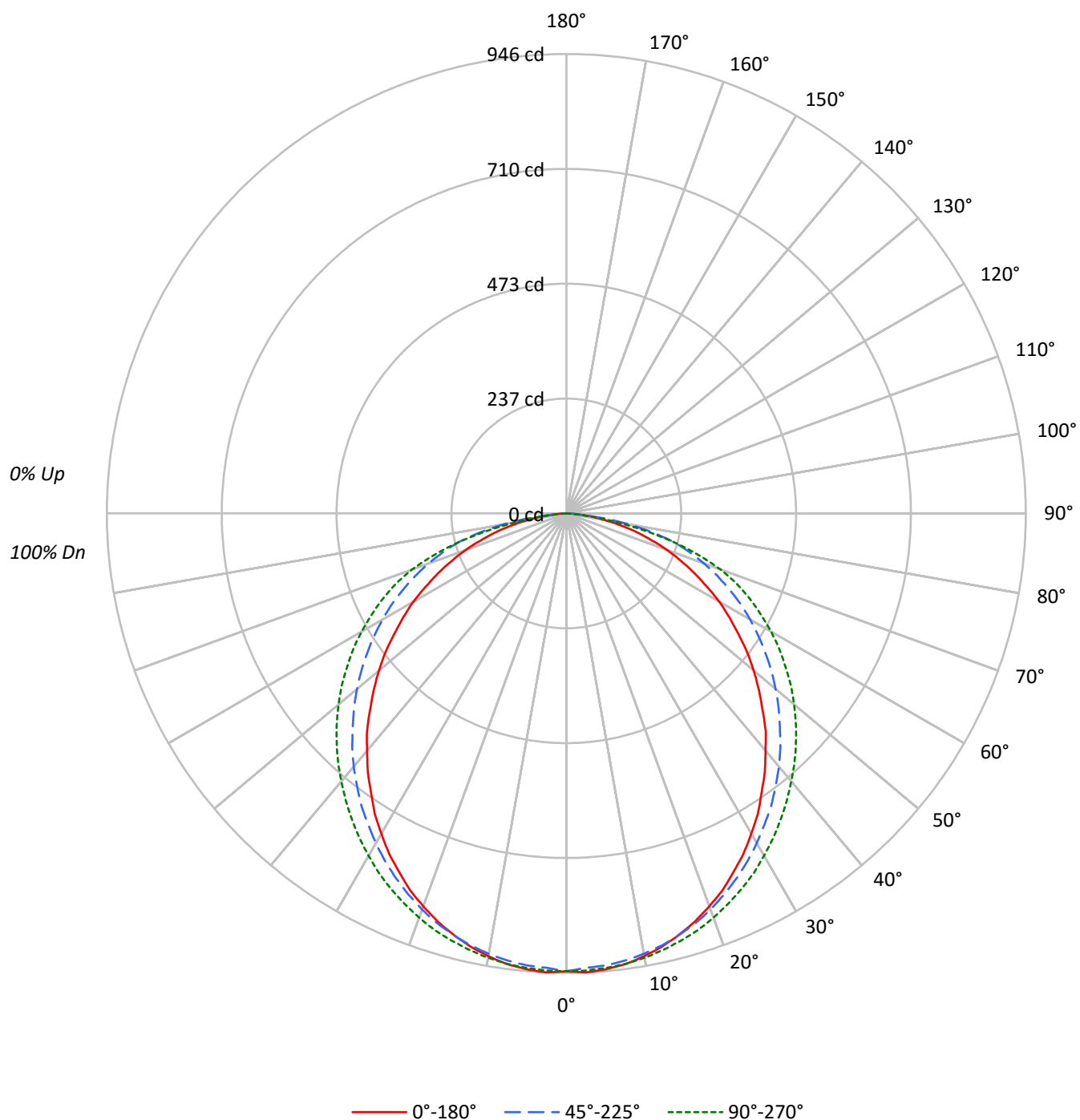
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307612

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA08-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P307612

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA08-W2A-U-3500K

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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2537	2537	2537
5°	2545	2523	2538
10°	2529	2516	2539
15°	2502	2503	2537
20°	2465	2486	2537
25°	2418	2462	2534
30°	2366	2436	2529
35°	2303	2415	2527
40°	2242	2392	2531
45°	2173	2366	2544
50°	2110	2355	2562
55°	2029	2347	2585
60°	1957	2351	2620
65°	1857	2358	2661
70°	1743	2376	2659
75°	1579	2398	2404
80°	1296	2070	1711
85°	960	979	395



TEST NUMBER: P307612

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA08-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	3.3
10°-20°	254.8	9.3
20°-30°	383.8	14.0
30°-40°	460.6	16.8
40°-50°	480.0	17.5
50°-60°	444.4	16.2
60°-70°	359.1	13.1
70°-80°	218.9	8.0
80°-90°	45.2	1.7
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°	727.8	26.6
0°-40°	1188.3	43.4
0°-60°	2112.8	77.2
0°-90°	2736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	942	940	934	941	940	89
15°	898	899	899	911	911	253
25°	814	819	829	850	854	375
35°	701	712	735	762	769	439
45°	571	588	622	656	669	441
55°	432	455	500	539	551	388
65°	292	320	370	408	418	288
75°	152	186	231	234	231	160
85°	31	46	32	18	13	38
90°	0	0	0	0	0	



TEST NUMBER: P307612

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA08-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	942.6	942.6	942.6	942.6	942.6
2.5°	946.2	943.2	936.5	943.2	942.0
5°	942.0	939.5	934.0	940.7	939.5
7.5°	935.9	933.4	928.5	936.5	935.2
10°	925.5	924.3	920.6	929.7	929.1
12.5°	913.3	912.7	910.8	921.2	920.6
15°	898.0	898.6	898.6	910.8	910.8
17.5°	880.9	882.2	884.6	898.0	899.9
20°	860.8	863.3	868.1	883.4	885.8
22.5°	840.1	841.9	849.2	867.5	870.0
25°	814.4	819.3	829.1	849.8	853.5
27.5°	790.0	794.3	807.7	829.1	835.2
30°	761.4	768.1	783.9	807.1	813.8
32.5°	733.9	741.2	759.5	786.4	792.5
35°	701.0	712.0	735.1	762.0	769.3
37.5°	671.1	681.5	707.7	737.0	745.5
40°	638.1	650.9	680.8	712.0	720.5
42.5°	607.6	619.8	652.2	683.9	695.5
45°	571.0	588.1	621.7	656.4	668.6
47.5°	537.5	554.6	593.0	630.2	641.2
50°	503.9	522.2	562.5	600.9	611.9
52.5°	469.1	488.7	532.0	570.4	583.2
55°	432.5	455.1	500.3	539.3	550.9
57.5°	397.8	420.9	469.1	508.8	520.4
60°	363.6	387.4	436.8	474.6	486.8
62.5°	325.8	353.8	405.1	442.3	451.5
65°	291.6	320.3	370.3	407.5	417.9
67.5°	255.6	286.7	336.8	370.9	380.7
70°	221.5	253.8	302.0	333.7	338.0
72.5°	184.9	217.8	266.6	286.7	286.7
75°	151.9	185.5	230.6	234.3	231.2
77.5°	115.9	153.1	182.4	175.1	167.8
80°	83.6	120.2	133.6	120.2	110.4
82.5°	56.1	87.2	80.5	64.1	56.7
85°	31.1	46.4	31.7	17.7	12.8
87.5°	11.6	10.4	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)