

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: P307913

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP187-W2A-U-5500K**

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: P307913
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-CP187-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5500K 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: 2755.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

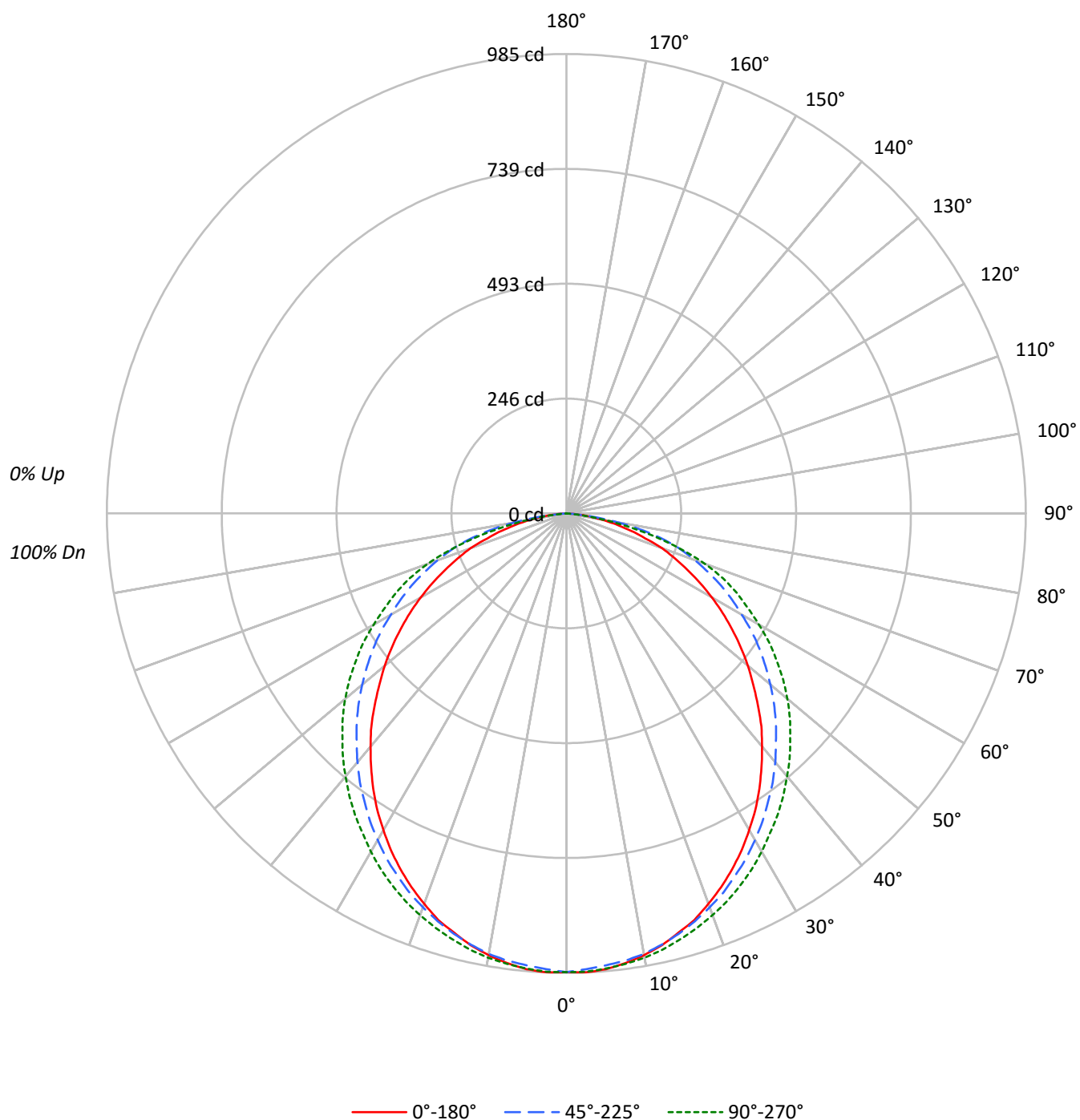
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307913

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP187-W2A-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P307913

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP187-W2A-U-5500K

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°	2647	2647	2647
5°	2649	2627	2646
10°	2628	2620	2643
15°	2591	2599	2633
20°	2550	2574	2625
25°	2498	2543	2616
30°	2436	2513	2602
35°	2369	2477	2594
40°	2294	2447	2586
45°	2209	2417	2584
50°	2127	2390	2591
55°	2038	2371	2583
60°	1941	2338	2566
65°	1827	2331	2566
70°	1720	2311	2493
75°	1491	2258	2130
80°	1207	1821	1418
85°	803	633	423



TEST NUMBER: P307913

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP187-W2A-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	3.4
10°-20°	264.3	9.6
20°-30°	396.4	14.4
30°-40°	472.9	17.2
40°-50°	488.9	17.7
50°-60°	446.3	16.2
60°-70°	351.3	12.7
70°-80°	204.5	7.4
80°-90°	37.7	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°	753.6	27.4
0°-40°	1226.4	44.5
0°-60°	2161.6	78.5
0°-90°	2755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	981	978	973	981	979	93
15°	930	932	933	945	945	262
25°	841	846	856	877	881	387
35°	721	731	754	783	790	451
45°	580	600	635	671	679	448
55°	434	458	505	542	550	388
65°	287	317	366	395	403	285
75°	143	178	217	213	205	152
85°	26	37	20	16	14	34
90°	0	0	0	0	0	



TEST NUMBER: P307913

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP187-W2A-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.5	983.5	983.5	983.5	983.5
2.5°	984.9	982.1	978.0	984.9	983.5
5°	980.8	978.0	972.6	980.8	979.4
7.5°	972.6	969.8	967.1	975.3	973.9
10°	961.6	960.3	958.9	968.5	967.1
12.5°	948.0	948.0	946.6	957.5	957.5
15°	930.2	931.6	932.9	945.2	945.2
17.5°	913.8	912.5	916.6	930.2	931.6
20°	890.6	893.3	898.8	915.2	916.6
22.5°	867.4	870.1	879.7	896.1	900.2
25°	841.4	845.5	856.5	876.9	881.0
27.5°	814.1	819.6	834.6	856.5	860.6
30°	784.1	792.3	808.6	833.2	837.3
32.5°	754.0	762.2	782.7	807.3	812.7
35°	721.2	730.8	754.0	782.7	789.5
37.5°	687.1	699.4	726.7	755.4	763.6
40°	652.9	666.6	696.6	726.7	736.3
42.5°	618.8	632.4	665.2	699.4	708.9
45°	580.5	599.7	635.2	670.7	678.9
47.5°	543.7	564.1	603.8	639.3	650.2
50°	508.1	528.6	571.0	607.9	618.8
52.5°	471.3	493.1	538.2	576.4	586.0
55°	434.4	457.6	505.4	542.3	550.5
57.5°	397.5	422.1	471.3	506.8	516.3
60°	360.6	386.6	434.4	469.9	476.7
62.5°	323.7	351.1	400.2	431.6	438.5
65°	286.9	316.9	366.1	394.8	403.0
67.5°	251.3	281.4	329.2	356.5	363.3
70°	218.6	245.9	293.7	314.2	316.9
72.5°	177.6	211.7	258.2	269.1	262.3
75°	143.4	177.6	217.2	213.1	204.9
77.5°	109.3	143.4	169.4	155.7	144.8
80°	77.9	112.0	117.5	97.0	91.5
82.5°	50.5	77.9	65.6	50.5	41.0
85°	26.0	36.9	20.5	16.4	13.7
87.5°	8.2	5.5	2.7	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)