

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: P307898

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP125-W2A-U-2700K**

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: P307898
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-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 2538.0 lumens
Efficiency: N/A
Efficacy: 106.6 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

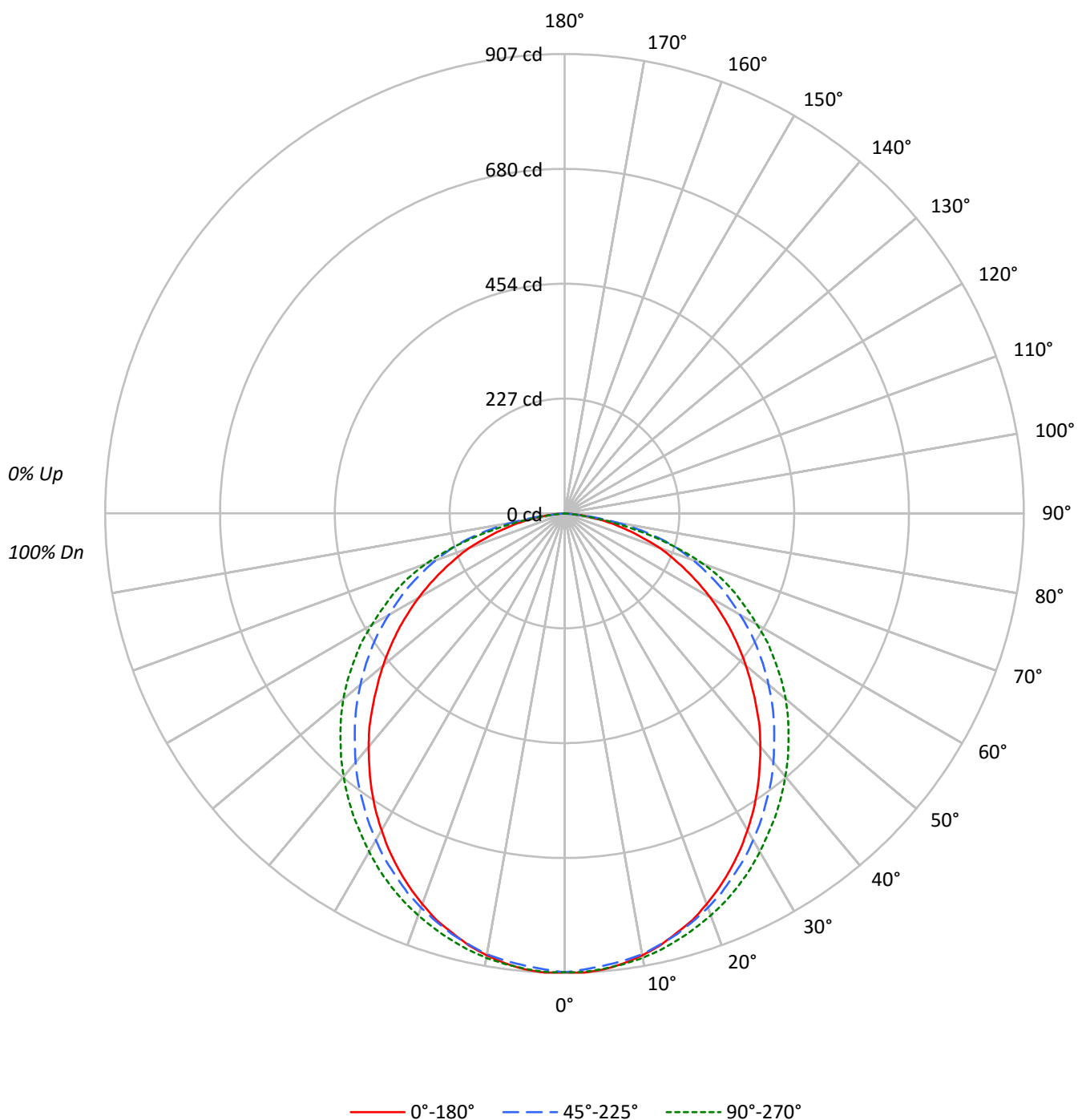
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307898

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307898

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP125-W2A-U-2700K

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°	2438	2438	2438
5°	2441	2420	2437
10°	2421	2414	2434
15°	2387	2394	2426
20°	2350	2371	2418
25°	2302	2343	2410
30°	2244	2315	2397
35°	2183	2282	2389
40°	2113	2255	2383
45°	2035	2227	2380
50°	1960	2202	2386
55°	1878	2184	2379
60°	1788	2154	2364
65°	1683	2147	2364
70°	1584	2128	2297
75°	1373	2080	1963
80°	1111	1677	1306
85°	738	584	389



TEST NUMBER: P307898

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	3.4
10°-20°	243.5	9.6
20°-30°	365.2	14.4
30°-40°	435.6	17.2
40°-50°	450.4	17.7
50°-60°	411.2	16.2
60°-70°	323.6	12.7
70°-80°	188.3	7.4
80°-90°	34.7	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°	694.2	27.4
0°-40°	1129.8	44.5
0°-60°	1991.4	78.5
0°-90°	2538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	904	901	896	904	902	86
15°	857	858	860	871	871	242
25°	775	779	789	808	812	357
35°	664	673	695	721	727	415
45°	535	552	585	618	625	413
55°	400	422	466	500	507	358
65°	264	292	337	364	371	262
75°	132	164	200	196	189	140
85°	24	34	19	15	13	31
90°	0	0	0	0	0	



TEST NUMBER: P307898

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.0	906.0	906.0	906.0	906.0
2.5°	907.3	904.8	901.0	907.3	906.0
5°	903.5	901.0	896.0	903.5	902.2
7.5°	896.0	893.4	890.9	898.5	897.2
10°	885.9	884.6	883.4	892.2	890.9
12.5°	873.3	873.3	872.0	882.1	882.1
15°	856.9	858.2	859.5	870.8	870.8
17.5°	841.8	840.6	844.4	856.9	858.2
20°	820.5	823.0	828.0	843.1	844.4
22.5°	799.1	801.6	810.4	825.5	829.3
25°	775.2	778.9	789.0	807.9	811.6
27.5°	750.0	755.0	768.9	789.0	792.8
30°	722.3	729.9	745.0	767.6	771.4
32.5°	694.6	702.2	721.0	743.7	748.7
35°	664.4	673.2	694.6	721.0	727.3
37.5°	633.0	644.3	669.5	695.9	703.4
40°	601.5	614.1	641.8	669.5	678.3
42.5°	570.0	582.6	612.8	644.3	653.1
45°	534.8	552.4	585.1	617.9	625.4
47.5°	500.8	519.7	556.2	588.9	599.0
50°	468.1	487.0	526.0	560.0	570.0
52.5°	434.1	454.3	495.8	531.0	539.8
55°	400.2	421.6	465.6	499.6	507.1
57.5°	366.2	388.8	434.1	466.9	475.7
60°	332.2	356.1	400.2	432.9	439.2
62.5°	298.2	323.4	368.7	397.6	403.9
65°	264.3	291.9	337.2	363.7	371.2
67.5°	231.5	259.2	303.3	328.4	334.7
70°	201.3	226.5	270.5	289.4	291.9
72.5°	163.6	195.0	237.8	247.9	241.6
75°	132.1	163.6	200.1	196.3	188.8
77.5°	100.7	132.1	156.0	143.5	133.4
80°	71.7	103.2	108.2	89.3	84.3
82.5°	46.6	71.7	60.4	46.6	37.8
85°	23.9	34.0	18.9	15.1	12.6
87.5°	7.6	5.0	2.5	2.5	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)