

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: P307921

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5000K**

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: P307921
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-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 2705.0 lumens
Efficiency: N/A
Efficacy: 110.9 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

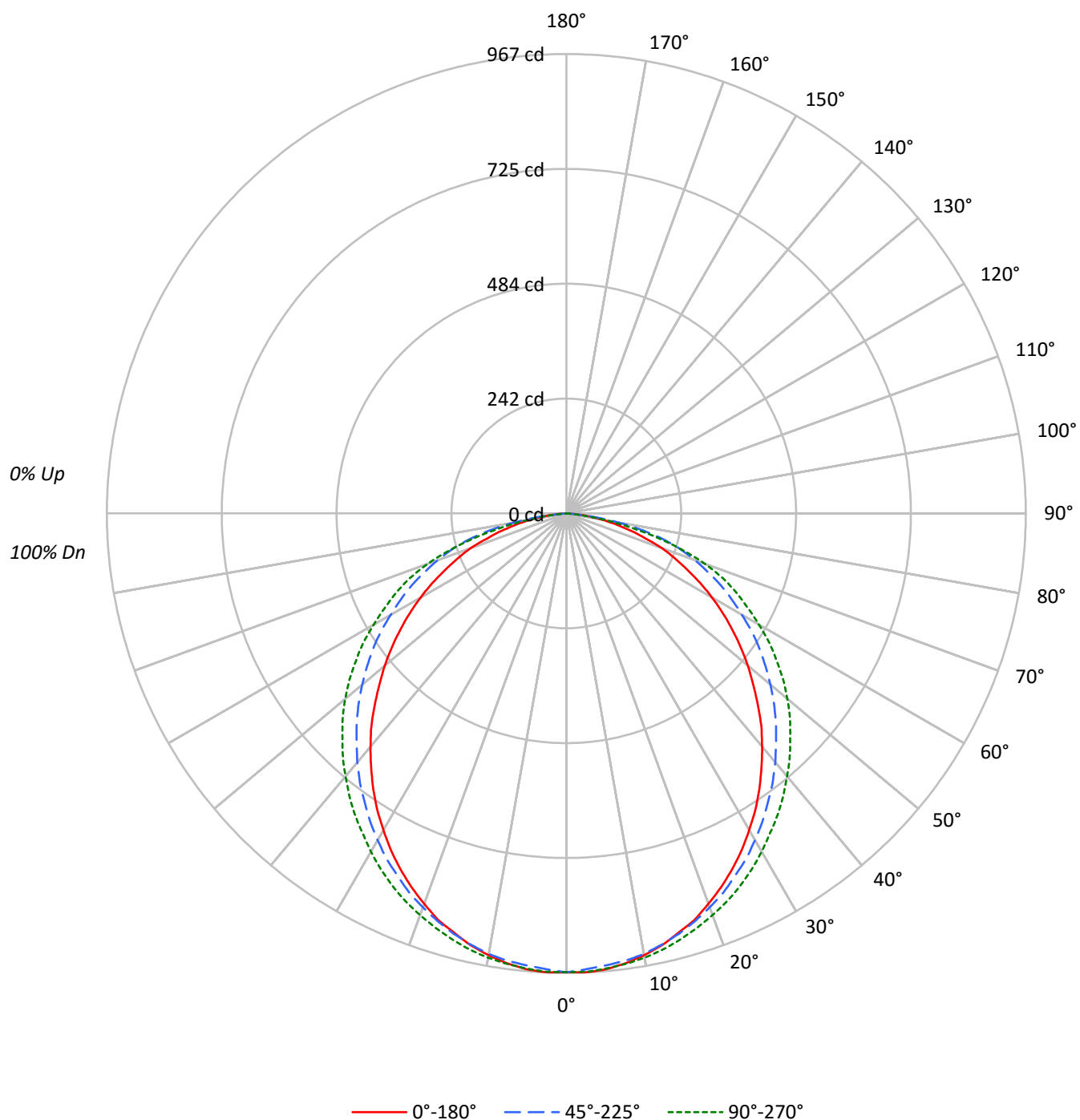
Input Watts (W): 24.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307921

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307921

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5000K

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	50	30	10	50	30	10
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°	2598	2598	2598
5°	2601	2579	2598
10°	2580	2573	2595
15°	2544	2552	2586
20°	2504	2527	2577
25°	2453	2497	2569
30°	2392	2467	2554
35°	2326	2432	2547
40°	2252	2403	2539
45°	2169	2373	2537
50°	2089	2347	2543
55°	2001	2328	2536
60°	1906	2295	2519
65°	1793	2288	2519
70°	1688	2269	2448
75°	1464	2217	2092
80°	1184	1787	1393
85°	787	621	414



TEST NUMBER: P307921

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	3.4
10°-20°	259.5	9.6
20°-30°	389.2	14.4
30°-40°	464.3	17.2
40°-50°	480.0	17.7
50°-60°	438.2	16.2
60°-70°	344.9	12.7
70°-80°	200.8	7.4
80°-90°	37.0	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°	739.9	27.4
0°-40°	1204.2	44.5
0°-60°	2122.4	78.5
0°-90°	2705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	963	960	955	963	962	91
15°	913	915	916	928	928	258
25°	826	830	841	861	865	380
35°	708	718	740	768	775	443
45°	570	589	624	658	667	440
55°	426	449	496	532	540	381
65°	282	311	359	388	396	280
75°	141	174	213	209	201	150
85°	26	36	20	16	13	33
90°	0	0	0	0	0	



TEST NUMBER: P307921

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	965.6	965.6	965.6	965.6	965.6
2.5°	967.0	964.3	960.3	967.0	965.6
5°	963.0	960.3	954.9	963.0	961.6
7.5°	954.9	952.2	949.5	957.6	956.3
10°	944.2	942.8	941.5	950.9	949.5
12.5°	930.8	930.8	929.4	940.2	940.2
15°	913.3	914.7	916.0	928.1	928.1
17.5°	897.2	895.9	899.9	913.3	914.7
20°	874.4	877.1	882.5	898.6	899.9
22.5°	851.6	854.3	863.7	879.8	883.8
25°	826.2	830.2	840.9	861.0	865.1
27.5°	799.3	804.7	819.5	840.9	844.9
30°	769.8	777.9	794.0	818.1	822.1
32.5°	740.3	748.4	768.5	792.6	798.0
35°	708.1	717.5	740.3	768.5	775.2
37.5°	674.6	686.7	713.5	741.7	749.7
40°	641.1	654.5	684.0	713.5	722.9
42.5°	607.5	621.0	653.1	686.7	696.1
45°	570.0	588.8	623.6	658.5	666.6
47.5°	533.8	553.9	592.8	627.7	638.4
50°	498.9	519.0	560.6	596.8	607.5
52.5°	462.7	484.2	528.4	566.0	575.4
55°	426.5	449.3	496.2	532.4	540.5
57.5°	390.3	414.4	462.7	497.6	507.0
60°	354.1	379.6	426.5	461.4	468.1
62.5°	317.9	344.7	393.0	423.8	430.5
65°	281.6	311.2	359.4	387.6	395.6
67.5°	246.8	276.3	323.2	350.0	356.8
70°	214.6	241.4	288.4	308.5	311.2
72.5°	174.4	207.9	253.5	264.2	257.5
75°	140.8	174.4	213.2	209.2	201.2
77.5°	107.3	140.8	166.3	152.9	142.2
80°	76.4	110.0	115.3	95.2	89.9
82.5°	49.6	76.4	64.4	49.6	40.2
85°	25.5	36.2	20.1	16.1	13.4
87.5°	8.0	5.4	2.7	2.7	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)