

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: P307835

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-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: P307835
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: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 2173.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

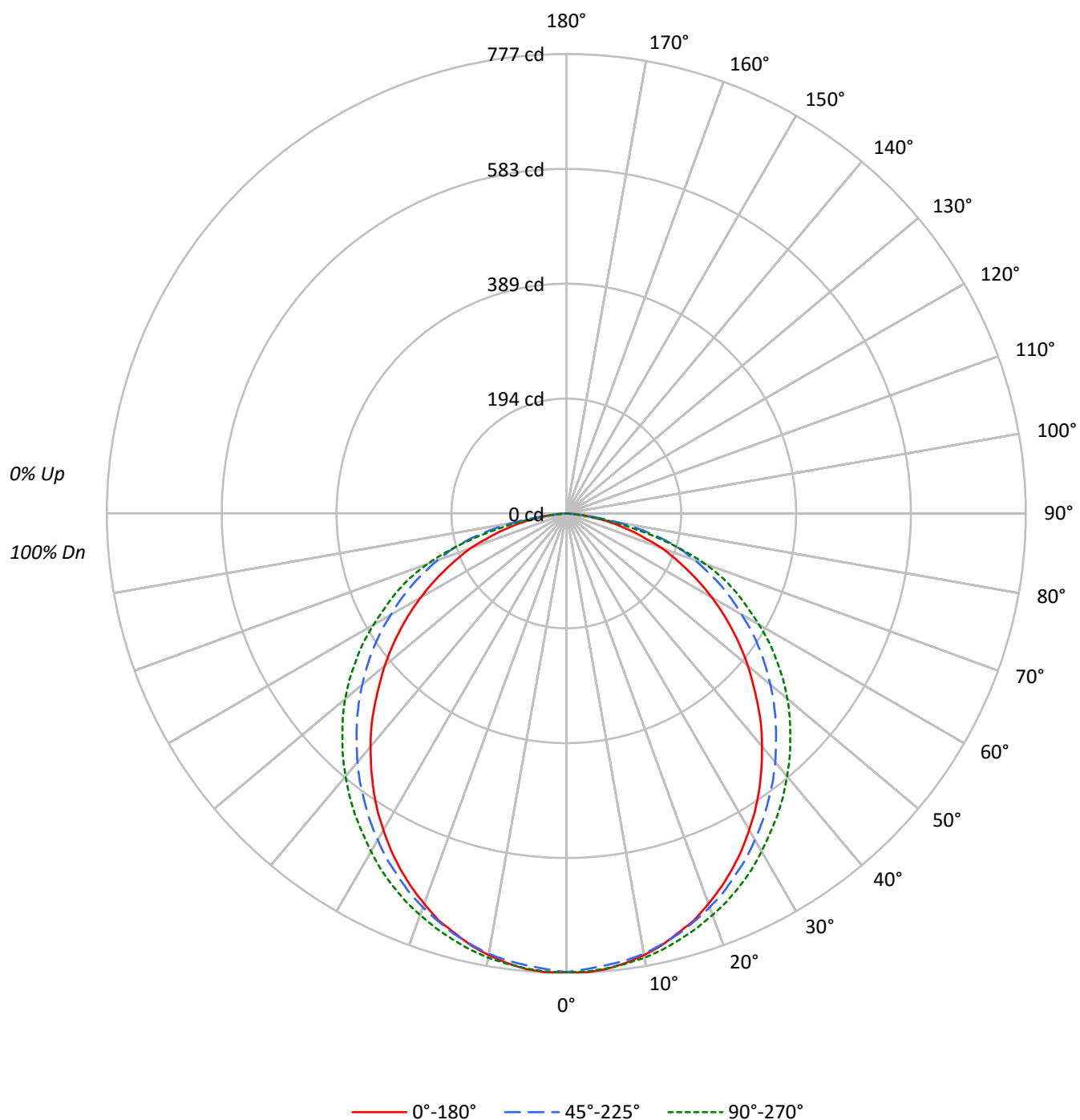
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307835

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307835

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-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	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°	2087	2087	2087
5°	2090	2072	2087
10°	2073	2067	2084
15°	2044	2050	2077
20°	2012	2030	2070
25°	1971	2006	2063
30°	1922	1982	2052
35°	1869	1954	2046
40°	1809	1930	2040
45°	1743	1907	2038
50°	1678	1886	2043
55°	1607	1870	2037
60°	1531	1844	2024
65°	1441	1838	2024
70°	1356	1822	1967
75°	1176	1781	1680
80°	951	1437	1119
85°	633	500	333



TEST NUMBER: P307835

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	3.4
10°-20°	208.4	9.6
20°-30°	312.7	14.4
30°-40°	373.0	17.2
40°-50°	385.6	17.7
50°-60°	352.0	16.2
60°-70°	277.0	12.7
70°-80°	161.3	7.4
80°-90°	29.7	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°	594.4	27.4
0°-40°	967.3	44.5
0°-60°	1705.0	78.5
0°-90°	2173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2173.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	774	771	767	774	772	73
15°	734	735	736	746	746	207
25°	664	667	676	692	695	306
35°	569	576	595	617	623	356
45°	458	473	501	529	536	354
55°	343	361	399	428	434	306
65°	226	250	289	311	318	225
75°	113	140	171	168	162	120
85°	20	29	16	13	11	27
90°	0	0	0	0	0	



TEST NUMBER: P307835

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.7	775.7	775.7	775.7	775.7
2.5°	776.8	774.6	771.4	776.8	775.7
5°	773.6	771.4	767.1	773.6	772.5
7.5°	767.1	765.0	762.8	769.3	768.2
10°	758.5	757.4	756.3	763.9	762.8
12.5°	747.7	747.7	746.6	755.3	755.3
15°	733.7	734.8	735.9	745.6	745.6
17.5°	720.8	719.7	722.9	733.7	734.8
20°	702.5	704.6	708.9	721.9	722.9
22.5°	684.1	686.3	693.8	706.8	710.0
25°	663.7	666.9	675.5	691.7	694.9
27.5°	642.1	646.4	658.3	675.5	678.8
30°	618.4	624.9	637.8	657.2	660.4
32.5°	594.7	601.2	617.3	636.7	641.1
35°	568.9	576.4	594.7	617.3	622.7
37.5°	541.9	551.6	573.2	595.8	602.3
40°	515.0	525.8	549.5	573.2	580.7
42.5°	488.1	498.8	524.7	551.6	559.2
45°	457.9	473.0	501.0	529.0	535.5
47.5°	428.8	445.0	476.2	504.2	512.8
50°	400.8	417.0	450.4	479.4	488.1
52.5°	371.7	388.9	424.5	454.7	462.2
55°	342.6	360.9	398.6	427.7	434.2
57.5°	313.5	332.9	371.7	399.7	407.3
60°	284.4	304.9	342.6	370.6	376.0
62.5°	255.3	276.9	315.7	340.5	345.8
65°	226.3	250.0	288.7	311.4	317.8
67.5°	198.2	221.9	259.7	281.2	286.6
70°	172.4	193.9	231.6	247.8	250.0
72.5°	140.1	167.0	203.6	212.2	206.9
75°	113.1	140.1	171.3	168.1	161.6
77.5°	86.2	113.1	133.6	122.8	114.2
80°	61.4	88.3	92.7	76.5	72.2
82.5°	39.9	61.4	51.7	39.9	32.3
85°	20.5	29.1	16.2	12.9	10.8
87.5°	6.5	4.3	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)