

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: P307833

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K**

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: P307833
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: 14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5700K 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: 1964.0 lumens
Efficiency: N/A
Efficacy: 115.5 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

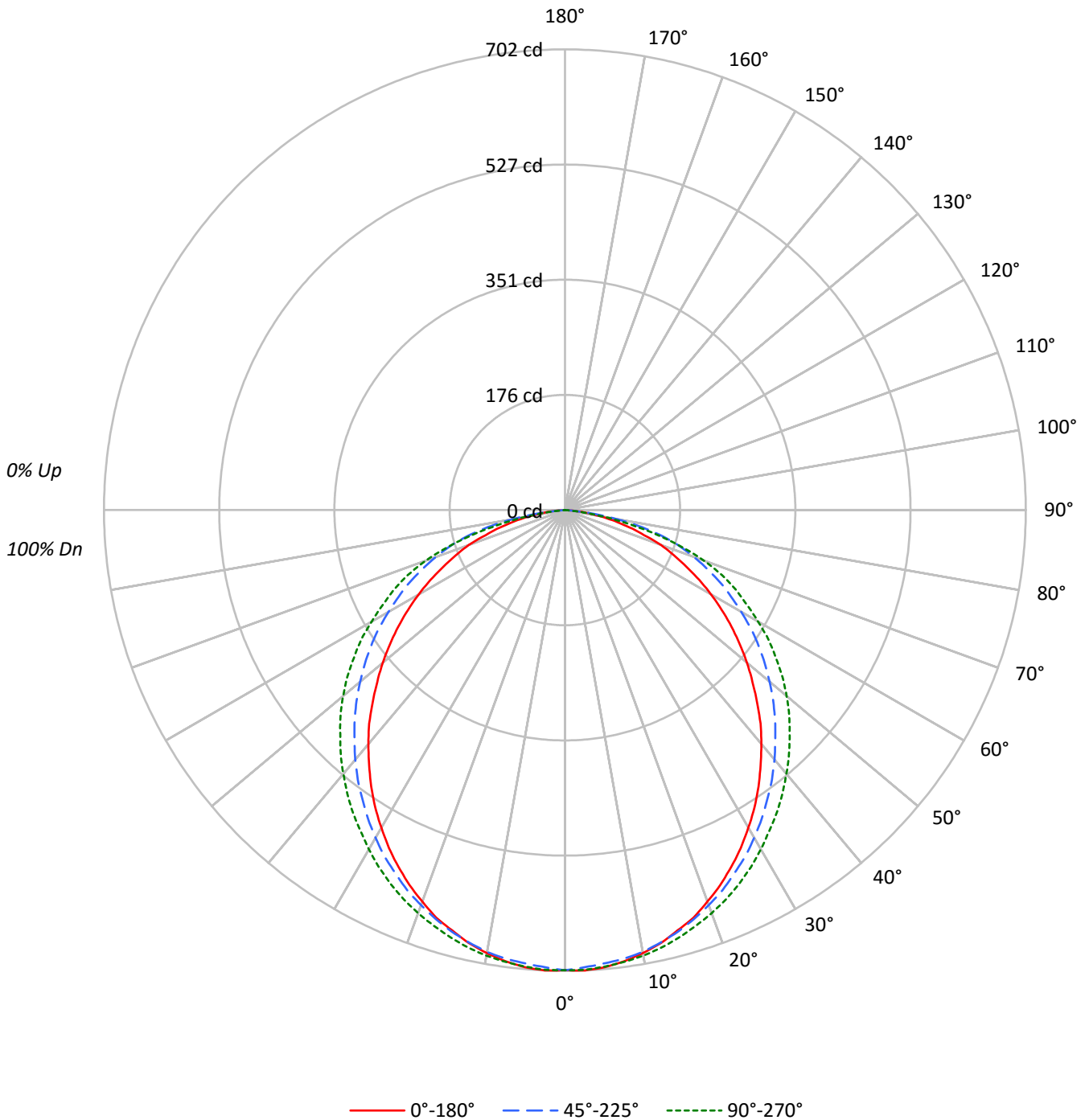
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307833

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307833

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	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	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°	1887	1887	1887
5°	1889	1873	1886
10°	1873	1868	1884
15°	1847	1853	1877
20°	1818	1835	1871
25°	1781	1813	1865
30°	1737	1791	1855
35°	1689	1766	1849
40°	1635	1744	1844
45°	1575	1723	1842
50°	1516	1704	1847
55°	1453	1690	1841
60°	1384	1667	1829
65°	1302	1662	1829
70°	1226	1648	1777
75°	1063	1609	1519
80°	860	1297	1010
85°	571	451	299



TEST NUMBER: P307833

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	3.4
10°-20°	188.4	9.6
20°-30°	282.6	14.4
30°-40°	337.1	17.2
40°-50°	348.5	17.7
50°-60°	318.2	16.2
60°-70°	250.4	12.8
70°-80°	145.7	7.4
80°-90°	26.8	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°	537.2	27.4
0°-40°	874.3	44.5
0°-60°	1541.0	78.5
0°-90°	1964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	699	697	693	699	698	66
15°	663	664	665	674	674	187
25°	600	603	611	625	628	276
35°	514	521	538	558	563	321
45°	414	428	453	478	484	320
55°	310	326	360	387	392	277
65°	204	226	261	281	287	203
75°	102	127	155	152	146	109
85°	18	26	15	12	10	24
90°	0	0	0	0	0	



TEST NUMBER: P307833

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP250-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.1	701.1	701.1	701.1	701.1
2.5°	702.1	700.1	697.2	702.1	701.1
5°	699.2	697.2	693.3	699.2	698.2
7.5°	693.3	691.4	689.4	695.3	694.3
10°	685.5	684.6	683.6	690.4	689.4
12.5°	675.8	675.8	674.8	682.6	682.6
15°	663.1	664.1	665.1	673.8	673.8
17.5°	651.5	650.5	653.4	663.1	664.1
20°	634.9	636.8	640.7	652.4	653.4
22.5°	618.3	620.3	627.1	638.8	641.7
25°	599.8	602.8	610.6	625.2	628.1
27.5°	580.4	584.3	595.0	610.6	613.5
30°	558.9	564.8	576.5	594.0	596.9
32.5°	537.5	543.4	558.0	575.5	579.4
35°	514.2	521.0	537.5	558.0	562.8
37.5°	489.8	498.6	518.0	538.5	544.3
40°	465.5	475.2	496.6	518.0	524.9
42.5°	441.1	450.9	474.2	498.6	505.4
45°	413.9	427.5	452.8	478.1	484.0
47.5°	387.6	402.2	430.4	455.7	463.5
50°	362.2	376.8	407.0	433.3	441.1
52.5°	336.0	351.5	383.7	410.9	417.7
55°	309.7	326.2	360.3	386.6	392.4
57.5°	283.4	300.9	336.0	361.3	368.1
60°	257.1	275.6	309.7	335.0	339.8
62.5°	230.8	250.3	285.3	307.7	312.6
65°	204.5	225.9	261.0	281.4	287.3
67.5°	179.2	200.6	234.7	254.2	259.0
70°	155.8	175.3	209.4	224.0	225.9
72.5°	126.6	150.9	184.0	191.8	187.0
75°	102.2	126.6	154.8	151.9	146.1
77.5°	77.9	102.2	120.7	111.0	103.2
80°	55.5	79.8	83.7	69.1	65.2
82.5°	36.0	55.5	46.7	36.0	29.2
85°	18.5	26.3	14.6	11.7	9.7
87.5°	5.8	3.9	1.9	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)