

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: P307816

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP125-W2A-U-6500K**

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: P307816
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-CP125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 6500K 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: 2073.0 lumens
Efficiency: N/A
Efficacy: 120.5 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

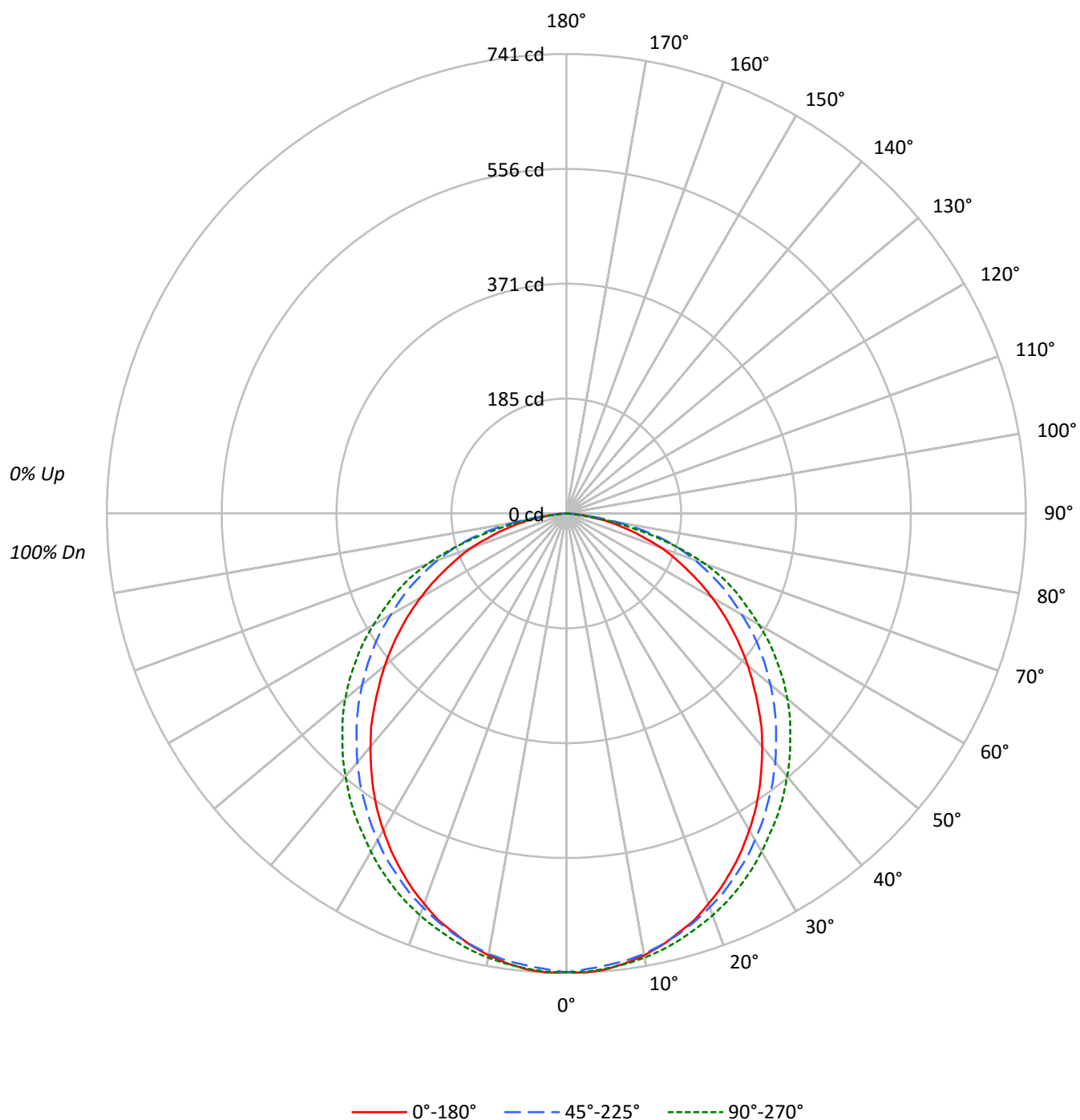
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	1991	1991	1991
5°	1994	1977	1991
10°	1977	1971	1988
15°	1950	1956	1981
20°	1919	1937	1975
25°	1880	1913	1968
30°	1833	1891	1958
35°	1783	1864	1952
40°	1726	1841	1946
45°	1662	1819	1944
50°	1600	1798	1949
55°	1533	1784	1943
60°	1460	1759	1931
65°	1374	1754	1931
70°	1294	1739	1876
75°	1122	1699	1603
80°	908	1370	1068
85°	602	475	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	3.4
10°-20°	198.8	9.6
20°-30°	298.3	14.4
30°-40°	355.8	17.2
40°-50°	367.8	17.7
50°-60°	335.8	16.2
60°-70°	264.3	12.7
70°-80°	153.8	7.4
80°-90°	28.3	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°	567.0	27.4
0°-40°	922.8	44.5
0°-60°	1626.5	78.5
0°-90°	2073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	738	736	732	738	737	70
15°	700	701	702	711	711	198
25°	633	636	644	660	663	291
35°	543	550	567	589	594	339
45°	437	451	478	505	511	337
55°	327	344	380	408	414	292
65°	216	238	276	297	303	214
75°	108	134	163	160	154	115
85°	20	28	15	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.0	740.0	740.0	740.0	740.0
2.5°	741.1	739.0	735.9	741.1	740.0
5°	738.0	735.9	731.8	738.0	736.9
7.5°	731.8	729.7	727.7	733.9	732.8
10°	723.6	722.6	721.5	728.7	727.7
12.5°	713.3	713.3	712.3	720.5	720.5
15°	699.9	701.0	702.0	711.2	711.2
17.5°	687.6	686.6	689.7	699.9	701.0
20°	670.1	672.2	676.3	688.6	689.7
22.5°	652.7	654.7	661.9	674.2	677.3
25°	633.1	636.2	644.4	659.9	662.9
27.5°	612.6	616.7	628.0	644.4	647.5
30°	590.0	596.1	608.5	627.0	630.1
32.5°	567.4	573.5	588.9	607.4	611.5
35°	542.7	549.9	567.4	588.9	594.1
37.5°	517.0	526.2	546.8	568.4	574.5
40°	491.3	501.6	524.2	546.8	554.0
42.5°	465.6	475.9	500.5	526.2	533.4
45°	436.8	451.2	477.9	504.7	510.8
47.5°	409.1	424.5	454.3	481.0	489.2
50°	382.3	397.8	429.6	457.4	465.6
52.5°	354.6	371.0	405.0	433.7	440.9
55°	326.8	344.3	380.3	408.0	414.2
57.5°	299.1	317.6	354.6	381.3	388.5
60°	271.3	290.9	326.8	353.6	358.7
62.5°	243.6	264.1	301.1	324.8	329.9
65°	215.8	238.5	275.5	297.0	303.2
67.5°	189.1	211.7	247.7	268.3	273.4
70°	164.5	185.0	221.0	236.4	238.5
72.5°	133.6	159.3	194.3	202.5	197.3
75°	107.9	133.6	163.4	160.3	154.2
77.5°	82.2	107.9	127.4	117.2	108.9
80°	58.6	84.3	88.4	73.0	68.9
82.5°	38.0	58.6	49.3	38.0	30.8
85°	19.5	27.8	15.4	12.3	10.3
87.5°	6.2	4.1	2.1	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)