

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: P308624

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-CP125-W2A-U-5500K**

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: P308624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-20HE-UNV-L82765-CP125-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 1977.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

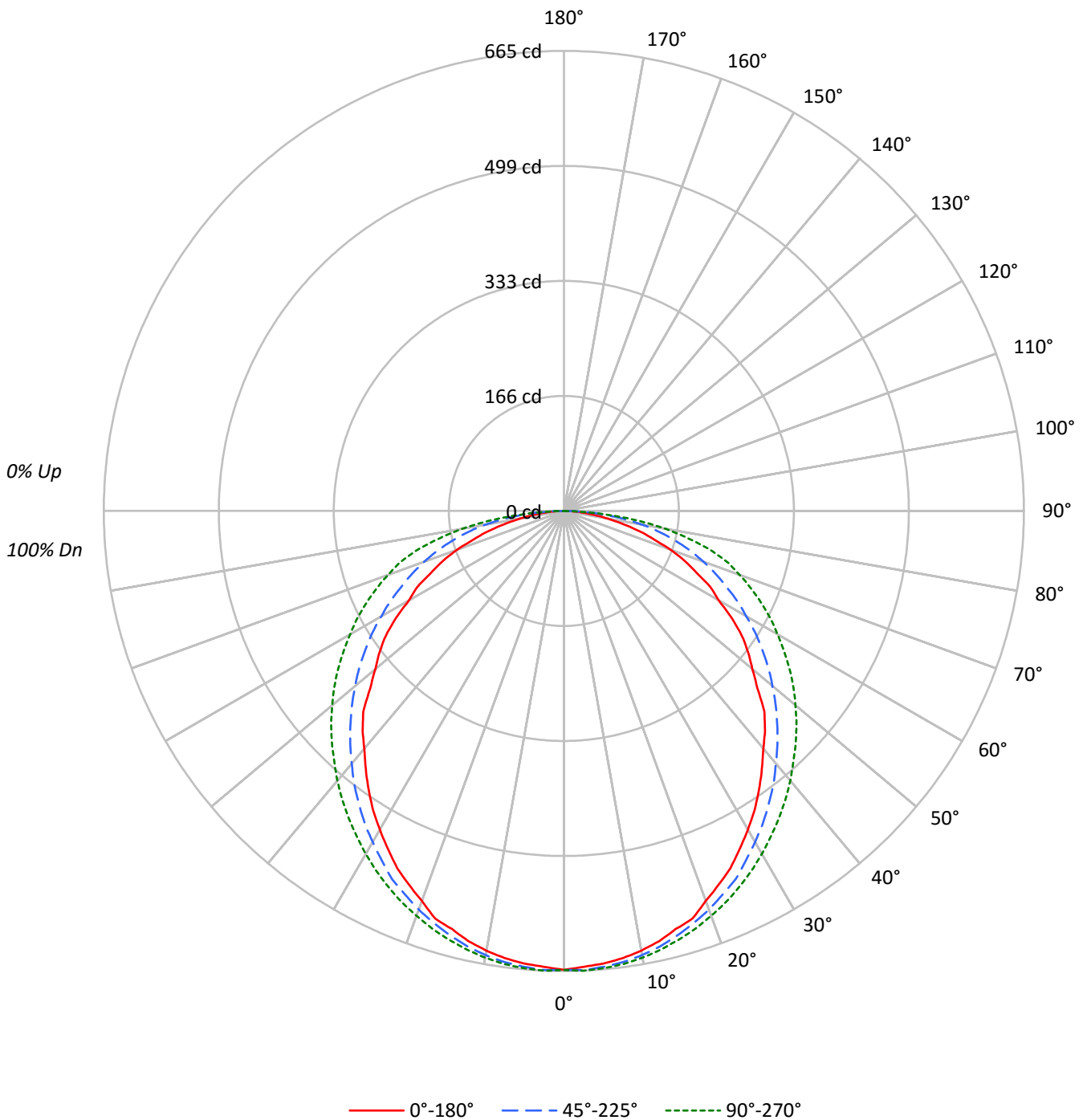
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1785	1785	1785
5°	1774	1787	1792
10°	1763	1781	1792
15°	1743	1769	1787
20°	1718	1756	1783
25°	1691	1745	1781
30°	1652	1717	1779
35°	1616	1697	1781
40°	1576	1675	1788
45°	1559	1660	1804
50°	1490	1648	1830
55°	1474	1643	1869
60°	1390	1640	1920
65°	1350	1651	2006
70°	1295	1690	2129
75°	1180	1742	2293
80°	1012	1804	2317
85°	818	1723	1985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	3.2
10°-20°	179.0	9.1
20°-30°	269.5	13.6
30°-40°	323.4	16.4
40°-50°	338.0	17.1
50°-60°	315.0	15.9
60°-70°	258.4	13.1
70°-80°	174.1	8.8
80°-90°	56.7	2.9
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°	511.3	25.9
0°-40°	834.7	42.2
0°-60°	1487.8	75.3
0°-90°	1977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	663	663	663	663	663	
5°	657	659	661	662	663	62
15°	626	629	635	641	642	177
25°	570	573	588	596	600	262
35°	492	499	517	535	542	308
45°	410	413	436	463	474	313
55°	314	320	350	383	398	278
65°	212	221	259	297	315	211
75°	114	126	168	205	220	119
85°	26	38	56	65	64	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	663.3	663.3	663.3	663.3	663.3
2.5°	659.5	661.4	664.2	665.2	665.2
5°	656.7	658.6	661.4	662.4	663.3
7.5°	651.9	653.8	657.6	659.5	660.5
10°	645.3	647.2	651.9	654.8	655.7
12.5°	636.8	638.7	644.4	648.2	649.1
15°	625.5	629.2	634.9	640.6	641.5
17.5°	617.9	616.9	624.5	631.1	633.0
20°	599.9	604.6	613.2	620.7	622.6
22.5°	584.8	588.5	599.9	608.4	612.2
25°	569.6	573.4	587.6	596.1	599.9
27.5°	550.7	556.4	569.6	581.9	586.7
30°	531.8	537.5	552.6	566.8	572.5
32.5°	512.9	519.5	535.6	550.7	557.3
35°	492.0	498.7	516.6	534.6	542.2
37.5°	470.3	478.8	497.7	517.6	526.1
40°	448.5	457.0	476.9	499.6	509.1
42.5°	430.5	434.3	457.0	481.6	491.1
45°	409.7	412.6	436.2	462.7	474.1
47.5°	379.4	389.8	415.4	444.7	456.1
50°	355.8	367.1	393.6	424.9	437.2
52.5°	335.9	343.5	372.8	404.0	418.2
55°	314.1	319.8	350.1	383.2	398.4
57.5°	287.7	298.1	328.3	362.4	377.5
60°	258.3	271.6	304.7	341.6	356.7
62.5°	239.4	247.0	282.9	319.8	336.9
65°	212.0	221.4	259.3	297.1	315.1
67.5°	189.2	198.7	237.5	275.4	293.3
70°	164.6	174.1	214.8	252.6	270.6
72.5°	136.3	149.5	192.1	229.9	248.9
75°	113.5	125.8	167.5	205.3	220.5
77.5°	88.0	104.1	142.9	174.1	185.5
80°	65.3	81.4	116.4	139.1	149.5
82.5°	44.5	60.6	87.1	104.1	109.8
85°	26.5	37.8	55.8	65.3	64.3
87.5°	12.3	16.1	22.7	22.7	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)