

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: P308621

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-CP125-W2A-U-4000K**

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: P308621
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-4000K
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: 1897.0 lumens
Efficiency: N/A
Efficacy: 112.3 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

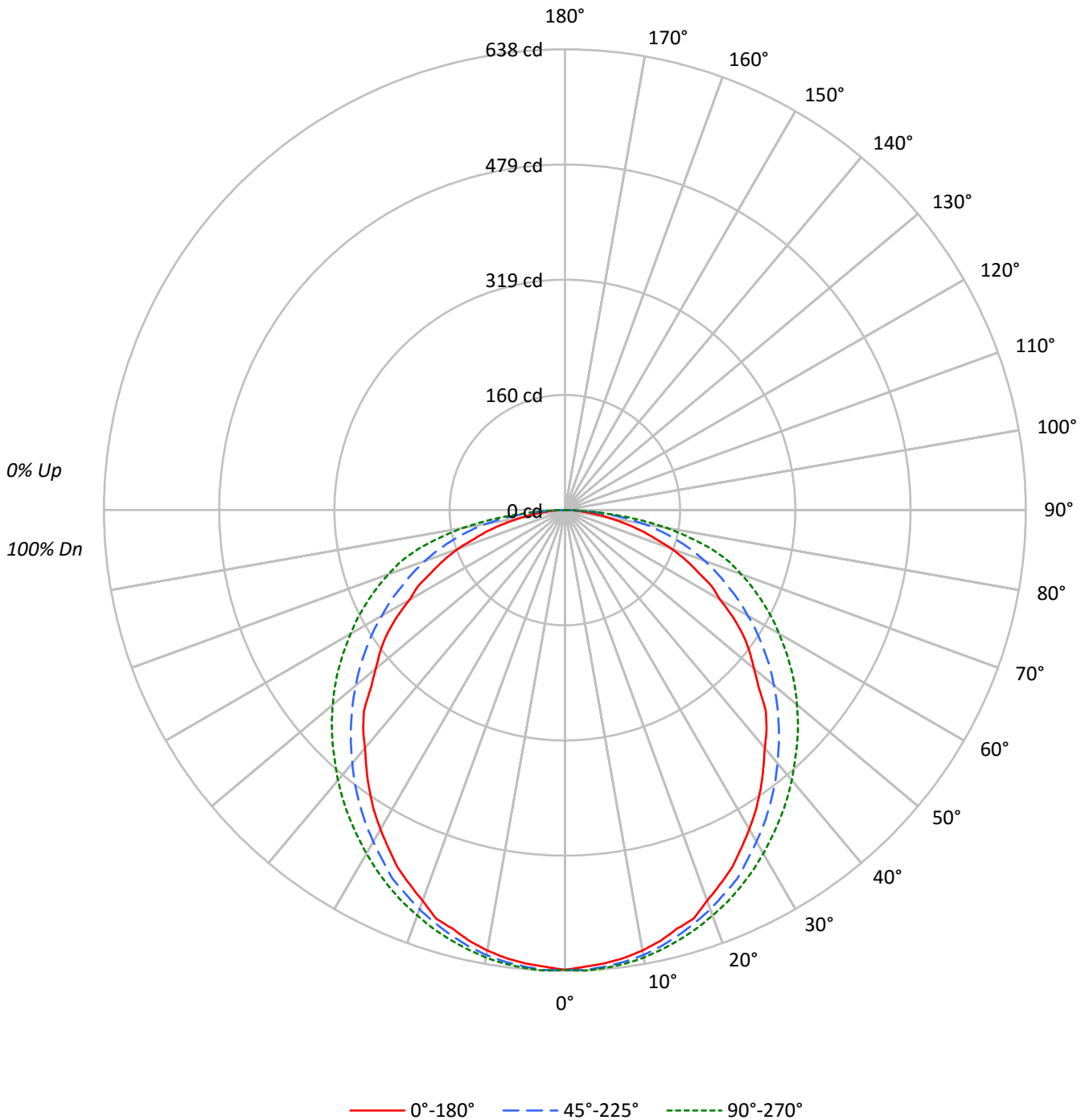
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1713	1713	1713
5°	1702	1714	1719
10°	1692	1709	1719
15°	1672	1697	1715
20°	1648	1685	1711
25°	1623	1674	1709
30°	1586	1647	1707
35°	1551	1628	1709
40°	1512	1607	1716
45°	1496	1593	1731
50°	1429	1581	1756
55°	1414	1576	1793
60°	1334	1574	1842
65°	1295	1584	1925
70°	1243	1622	2043
75°	1133	1671	2199
80°	970	1731	2224
85°	784	1655	1905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	3.2
10°-20°	171.8	9.1
20°-30°	258.6	13.6
30°-40°	310.3	16.4
40°-50°	324.4	17.1
50°-60°	302.3	15.9
60°-70°	247.9	13.1
70°-80°	167.1	8.8
80°-90°	54.4	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°	490.6	25.9
0°-40°	800.9	42.2
0°-60°	1427.6	75.3
0°-90°	1897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	630	632	635	636	636	60
15°	600	604	609	615	616	170
25°	547	550	564	572	576	251
35°	472	478	496	513	520	295
45°	393	396	419	444	455	300
55°	301	307	336	368	382	267
65°	203	212	249	285	302	202
75°	109	121	161	197	212	115
85°	25	36	54	63	62	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	636.5	636.5	636.5	636.5	636.5
2.5°	632.8	634.6	637.4	638.3	638.3
5°	630.1	631.9	634.6	635.6	636.5
7.5°	625.6	627.4	631.0	632.8	633.7
10°	619.2	621.0	625.6	628.3	629.2
12.5°	611.0	612.9	618.3	621.9	622.8
15°	600.1	603.8	609.2	614.7	615.6
17.5°	592.9	592.0	599.2	605.6	607.4
20°	575.6	580.2	588.3	595.6	597.4
22.5°	561.1	564.7	575.6	583.8	587.4
25°	546.6	550.2	563.8	572.0	575.6
27.5°	528.4	533.9	546.6	558.4	562.9
30°	510.3	515.7	530.2	543.9	549.3
32.5°	492.1	498.5	513.9	528.4	534.8
35°	472.1	478.5	495.7	513.0	520.2
37.5°	451.2	459.4	477.6	496.6	504.8
40°	430.4	438.5	457.6	479.4	488.5
42.5°	413.1	416.7	438.5	462.1	471.2
45°	393.1	395.9	418.6	444.0	454.9
47.5°	364.1	374.1	398.6	426.7	437.6
50°	341.4	352.3	377.7	407.7	419.5
52.5°	322.3	329.6	357.7	387.7	401.3
55°	301.4	306.9	335.9	367.7	382.2
57.5°	276.0	286.0	315.1	347.7	362.3
60°	247.9	260.6	292.4	327.8	342.3
62.5°	229.7	237.0	271.5	306.9	323.2
65°	203.4	212.5	248.8	285.1	302.3
67.5°	181.6	190.7	227.9	264.2	281.5
70°	158.0	167.1	206.1	242.4	259.7
72.5°	130.7	143.5	184.3	220.6	238.8
75°	109.0	120.8	160.7	197.0	211.5
77.5°	84.4	99.9	137.1	167.1	178.0
80°	62.6	78.1	111.7	133.5	143.5
82.5°	42.7	58.1	83.5	99.9	105.3
85°	25.4	36.3	53.6	62.6	61.7
87.5°	11.8	15.4	21.8	21.8	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)