

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: P308170

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-HRP-CP125-W2A-U-3500K**

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: P308170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-29HE-UNV-L82765-HRP-CP125-W2A-U-3500K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 1903.0 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

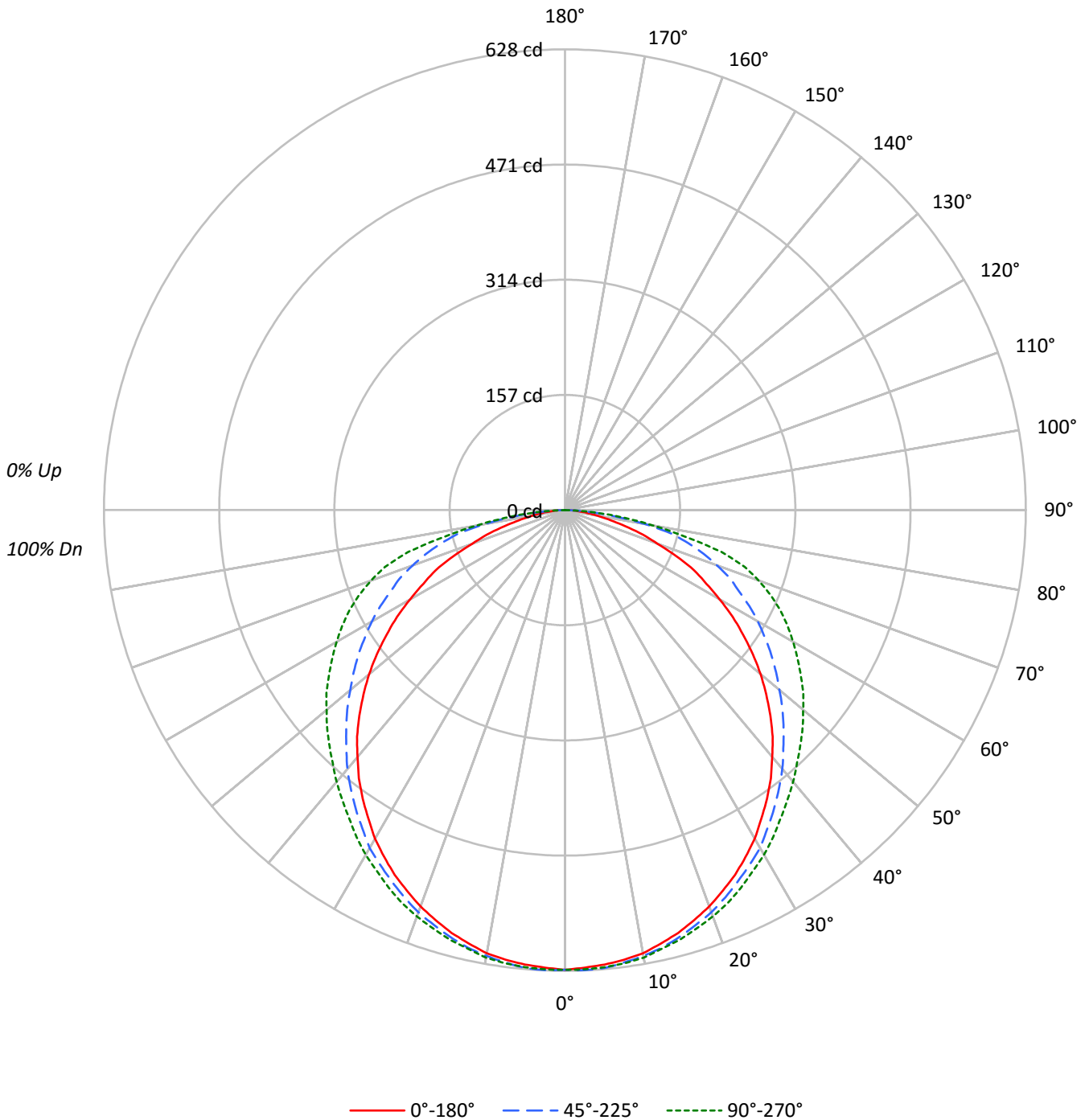
Input Watts (W): 22.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1686	1686	1686
5°	1680	1693	1689
10°	1676	1686	1693
15°	1662	1679	1689
20°	1647	1671	1688
25°	1629	1657	1686
30°	1608	1652	1686
35°	1577	1633	1684
40°	1544	1619	1700
45°	1507	1604	1727
50°	1457	1598	1774
55°	1391	1611	1841
60°	1312	1635	1932
65°	1238	1666	2064
70°	1058	1738	2210
75°	886	1810	2297
80°	725	1748	1915
85°	630	1297	1408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.1
10°-20°	169.9	8.9
20°-30°	257.5	13.5
30°-40°	310.9	16.3
40°-50°	326.7	17.2
50°-60°	307.3	16.2
60°-70°	256.3	13.5
70°-80°	169.8	8.9
80°-90°	45.2	2.4
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°	486.7	25.6
0°-40°	797.6	41.9
0°-60°	1431.6	75.2
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	622	623	627	627	625	59
15°	597	599	603	605	606	168
25°	549	552	558	565	568	253
35°	480	485	497	508	513	300
45°	396	402	421	443	454	305
55°	296	310	343	378	392	265
65°	194	211	262	305	324	189
75°	85	119	174	210	221	92
85°	20	31	42	46	46	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.6	626.6	626.6	626.6	626.6
2.5°	624.2	625.4	627.8	627.8	626.6
5°	621.8	623.0	626.6	626.6	625.4
7.5°	618.2	619.4	621.8	624.2	623.0
10°	613.4	614.6	617.0	619.4	619.4
12.5°	605.0	606.2	611.0	612.2	612.2
15°	596.6	599.0	602.6	605.0	606.2
17.5°	585.8	588.2	593.0	597.8	597.8
20°	575.0	577.4	583.4	588.2	589.4
22.5°	561.8	565.4	571.4	577.4	579.8
25°	548.6	552.2	558.2	565.4	567.8
27.5°	533.0	536.6	545.0	553.4	554.6
30°	517.4	521.0	531.8	539.0	542.6
32.5°	498.2	503.0	513.8	524.6	528.2
35°	480.2	485.0	497.0	507.8	512.6
37.5°	461.0	465.8	479.0	492.2	498.2
40°	439.4	445.4	461.0	475.4	483.8
42.5°	419.0	425.0	440.6	459.8	468.2
45°	396.1	402.2	421.4	443.0	453.8
47.5°	372.1	379.3	402.2	428.6	439.4
50°	348.1	356.5	381.7	411.8	423.8
52.5°	322.9	333.7	362.5	394.9	409.4
55°	296.5	309.7	343.3	378.1	392.5
57.5°	271.3	283.3	322.9	360.1	375.7
60°	243.7	259.3	303.7	342.1	358.9
62.5°	217.3	234.1	283.3	324.1	342.1
65°	194.5	211.3	261.7	304.9	324.1
67.5°	164.5	187.3	243.7	284.5	303.7
70°	134.5	165.7	220.9	262.9	280.9
72.5°	111.6	141.7	198.1	240.1	256.9
75°	85.2	118.8	174.1	210.1	220.9
77.5°	63.6	98.4	148.9	166.9	168.1
80°	46.8	75.6	112.8	118.8	123.6
82.5°	32.4	52.8	73.2	80.4	82.8
85°	20.4	31.2	42.0	45.6	45.6
87.5°	10.8	12.0	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)