

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: P308483

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP125-W2A-U-2700K**

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: P308483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-34HE-UNV-L82765-RDP-CP125-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 1857.0 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

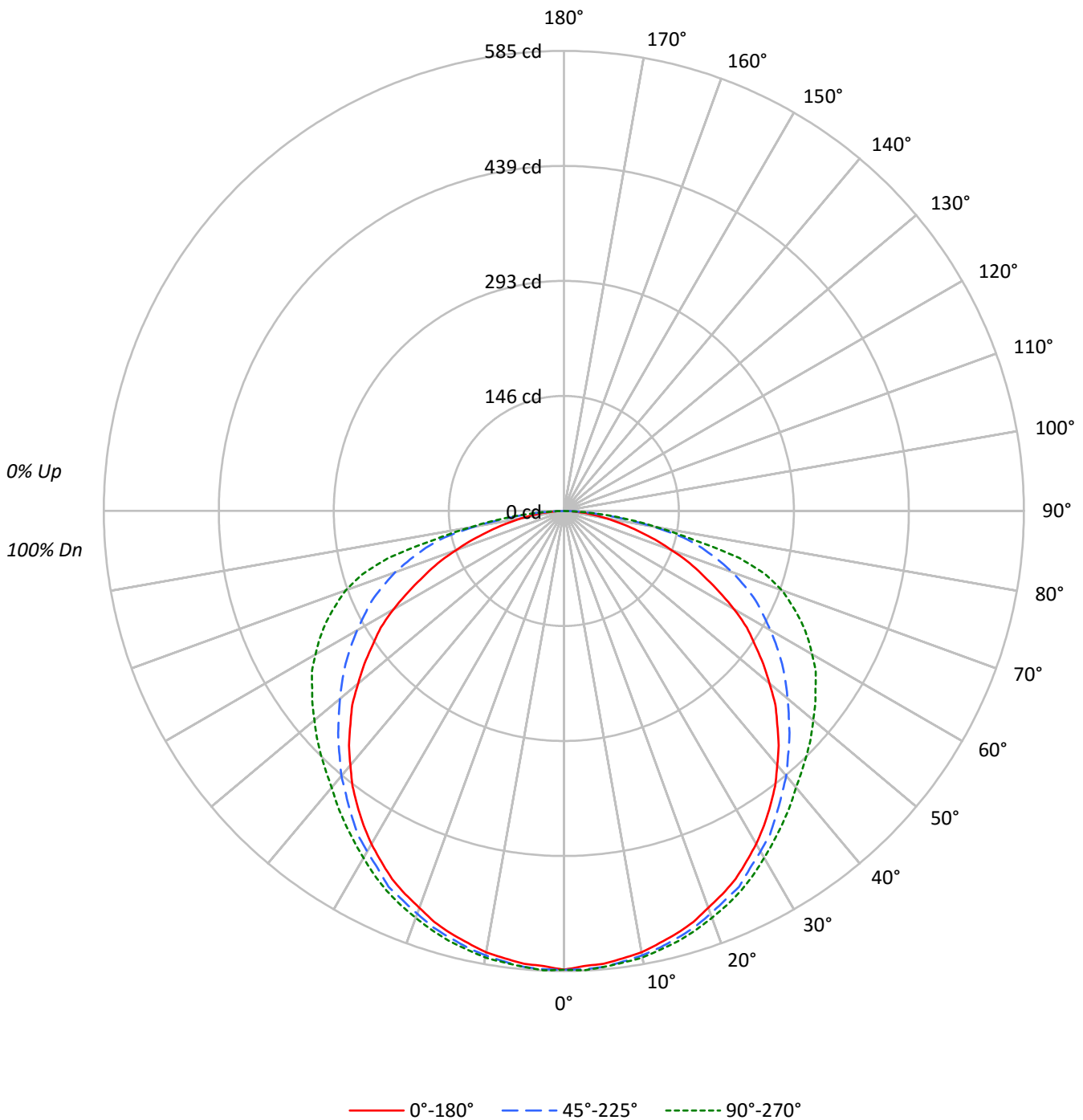
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1570	1570	1570
5°	1561	1572	1572
10°	1557	1568	1575
15°	1549	1564	1576
20°	1538	1561	1576
25°	1533	1566	1582
30°	1520	1554	1583
35°	1503	1548	1593
40°	1483	1545	1612
45°	1461	1544	1663
50°	1430	1556	1733
55°	1391	1590	1833
60°	1345	1632	1963
65°	1252	1713	2122
70°	1150	1795	2322
75°	1009	1889	2401
80°	868	1799	1884
85°	760	1306	1433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.0
10°-20°	158.4	8.5
20°-30°	241.7	13.0
30°-40°	295.1	15.9
40°-50°	315.6	17.0
50°-60°	304.6	16.4
60°-70°	262.2	14.1
70°-80°	177.4	9.6
80°-90°	46.8	2.5
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°	455.3	24.5
0°-40°	750.4	40.4
0°-60°	1370.6	73.8
0°-90°	1857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1857.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	578	579	582	582	582	55
15°	556	557	562	564	566	157
25°	516	519	527	530	533	238
35°	458	462	471	481	485	286
45°	384	391	406	426	437	296
55°	296	306	339	373	391	266
65°	197	216	269	312	333	196
75°	97	128	182	219	231	104
85°	25	34	42	44	46	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.3	583.3	583.3	583.3	583.3
2.5°	579.2	580.6	583.3	583.3	584.7
5°	577.9	579.2	581.9	581.9	581.9
7.5°	573.8	575.1	577.9	579.2	579.2
10°	569.7	571.0	573.8	575.1	576.5
12.5°	562.8	564.2	568.3	571.0	571.0
15°	556.0	557.4	561.5	564.2	565.6
17.5°	547.8	550.5	554.6	557.4	558.7
20°	536.9	539.6	545.1	549.2	550.5
22.5°	527.3	530.0	535.5	539.6	542.3
25°	516.4	519.1	527.3	530.0	532.8
27.5°	502.7	505.4	512.3	517.7	521.8
30°	489.1	491.8	500.0	506.8	509.5
32.5°	474.0	478.1	487.7	493.2	497.3
35°	457.6	461.7	471.3	480.9	485.0
37.5°	441.2	445.3	454.9	467.2	472.7
40°	422.1	427.6	439.9	456.3	459.0
42.5°	404.4	411.2	422.1	441.2	448.1
45°	383.9	390.7	405.7	426.2	437.1
47.5°	364.7	371.6	388.0	412.6	426.2
50°	341.5	351.1	371.6	400.3	413.9
52.5°	319.7	327.9	355.2	386.6	403.0
55°	296.4	306.0	338.8	372.9	390.7
57.5°	275.9	284.1	321.0	359.3	379.8
60°	250.0	260.9	303.3	344.3	364.7
62.5°	222.7	239.1	285.5	327.9	349.7
65°	196.7	215.8	269.1	311.5	333.3
67.5°	173.5	194.0	248.6	293.7	314.2
70°	146.2	172.1	228.1	271.8	295.1
72.5°	121.6	150.3	204.9	248.6	269.1
75°	97.0	128.4	181.7	218.6	230.9
77.5°	75.1	105.2	155.7	166.7	168.0
80°	56.0	83.3	116.1	117.5	121.6
82.5°	38.3	58.7	75.1	82.0	83.3
85°	24.6	34.2	42.3	43.7	46.4
87.5°	10.9	12.3	15.0	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)