

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: P312670

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-RDP-CA125-W2A-U-3000K**

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: P312670
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-L83050-RDP-CA125-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC 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: 1951.0 lumens
Efficiency: N/A
Efficacy: 70.9 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

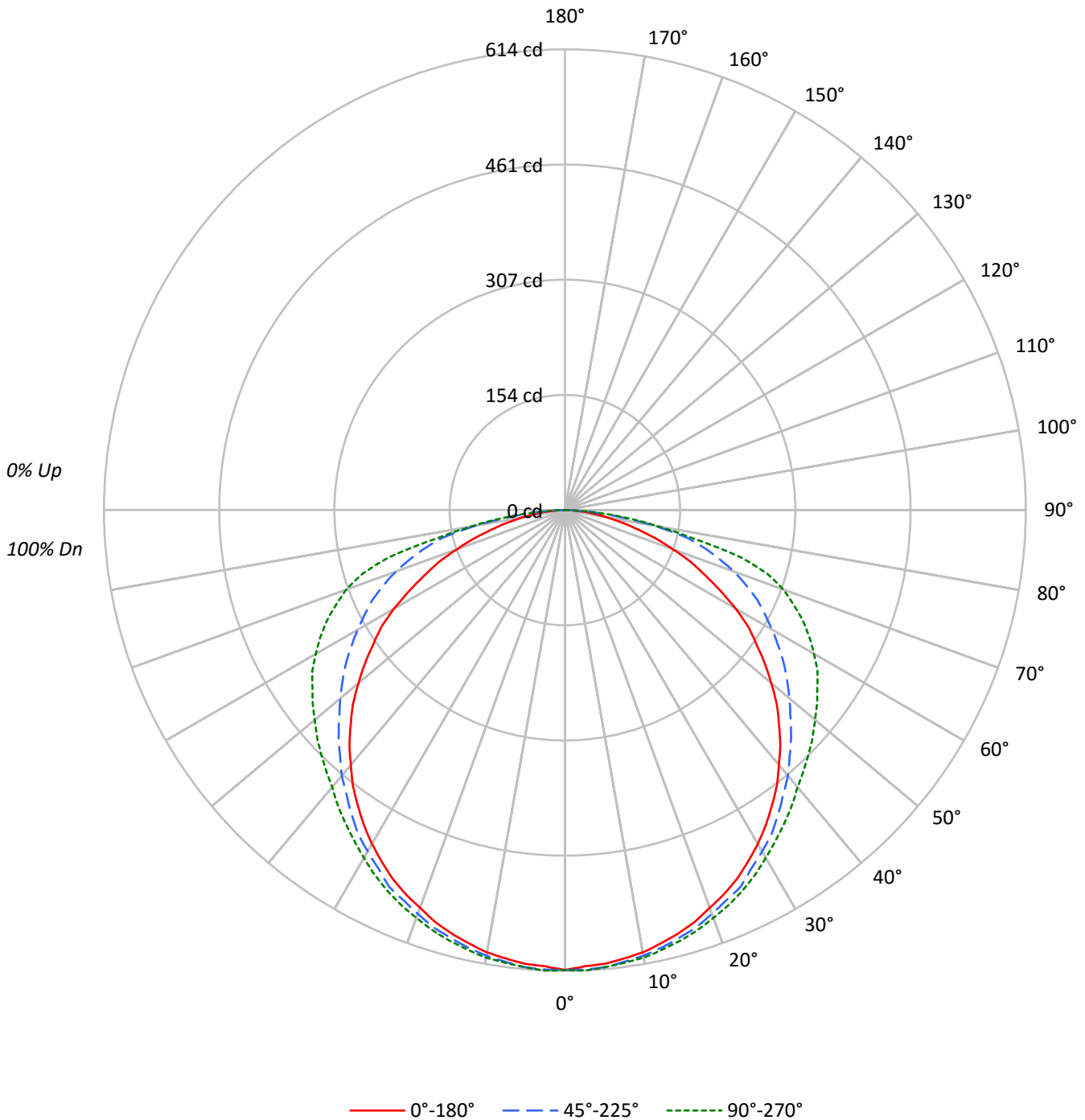
Input Watts (W): 27.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312670

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-RDP-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P312670

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-RDP-CA125-W2A-U-3000K

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°	1649	1649	1649
5°	1640	1652	1652
10°	1635	1647	1655
15°	1627	1643	1655
20°	1615	1640	1656
25°	1611	1645	1662
30°	1597	1632	1663
35°	1579	1627	1674
40°	1558	1623	1694
45°	1535	1622	1748
50°	1502	1634	1821
55°	1461	1670	1926
60°	1413	1715	2062
65°	1316	1800	2230
70°	1209	1886	2439
75°	1059	1985	2522
80°	911	1891	1979
85°	797	1374	1507



TEST NUMBER: P312670

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-RDP-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	3.0
10°-20°	166.4	8.5
20°-30°	253.9	13.0
30°-40°	310.1	15.9
40°-50°	331.5	17.0
50°-60°	320.0	16.4
60°-70°	275.5	14.1
70°-80°	186.4	9.6
80°-90°	49.2	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°	478.4	24.5
0°-40°	788.4	40.4
0°-60°	1440.0	73.8
0°-90°	1951.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	607	608	611	611	611	58
15°	584	586	590	593	594	165
25°	542	545	554	557	560	250
35°	481	485	495	505	510	301
45°	403	410	426	448	459	311
55°	311	322	356	392	410	279
65°	207	227	283	327	350	206
75°	102	135	191	230	243	109
85°	26	36	44	46	49	29
90°	0	0	0	0	0	



TEST NUMBER: P312670

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-RDP-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	612.8	612.8	612.8	612.8	612.8
2.5°	608.5	610.0	612.8	612.8	614.3
5°	607.1	608.5	611.4	611.4	611.4
7.5°	602.8	604.2	607.1	608.5	608.5
10°	598.5	599.9	602.8	604.2	605.7
12.5°	591.3	592.7	597.1	599.9	599.9
15°	584.1	585.6	589.9	592.7	594.2
17.5°	575.5	578.4	582.7	585.6	587.0
20°	564.0	566.9	572.7	577.0	578.4
22.5°	554.0	556.9	562.6	566.9	569.8
25°	542.5	545.4	554.0	556.9	559.7
27.5°	528.2	531.0	538.2	544.0	548.3
30°	513.8	516.7	525.3	532.5	535.3
32.5°	498.0	502.3	512.4	518.1	522.4
35°	480.8	485.1	495.2	505.2	509.5
37.5°	463.6	467.9	477.9	490.8	496.6
40°	443.5	449.2	462.1	479.4	482.2
42.5°	424.8	432.0	443.5	463.6	470.8
45°	403.3	410.5	426.3	447.8	459.3
47.5°	383.2	390.4	407.6	433.4	447.8
50°	358.8	368.9	390.4	420.5	434.9
52.5°	335.8	344.5	373.2	406.2	423.4
55°	311.4	321.5	355.9	391.8	410.5
57.5°	289.9	298.5	337.3	377.5	399.0
60°	262.6	274.1	318.6	361.7	383.2
62.5°	233.9	251.2	300.0	344.5	367.4
65°	206.7	226.8	282.7	327.2	350.2
67.5°	182.3	203.8	261.2	308.6	330.1
70°	153.6	180.8	239.7	285.6	310.0
72.5°	127.7	157.9	215.3	261.2	282.7
75°	101.9	134.9	190.9	229.6	242.6
77.5°	78.9	110.5	163.6	175.1	176.5
80°	58.8	87.5	122.0	123.4	127.7
82.5°	40.2	61.7	78.9	86.1	87.5
85°	25.8	35.9	44.5	45.9	48.8
87.5°	11.5	12.9	15.8	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)