

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: P311877

Luminaire Tested: **14FCZ2-25-UNV-L83050-HRP-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: P311877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L83050-HRP-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4000K 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: 1824.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

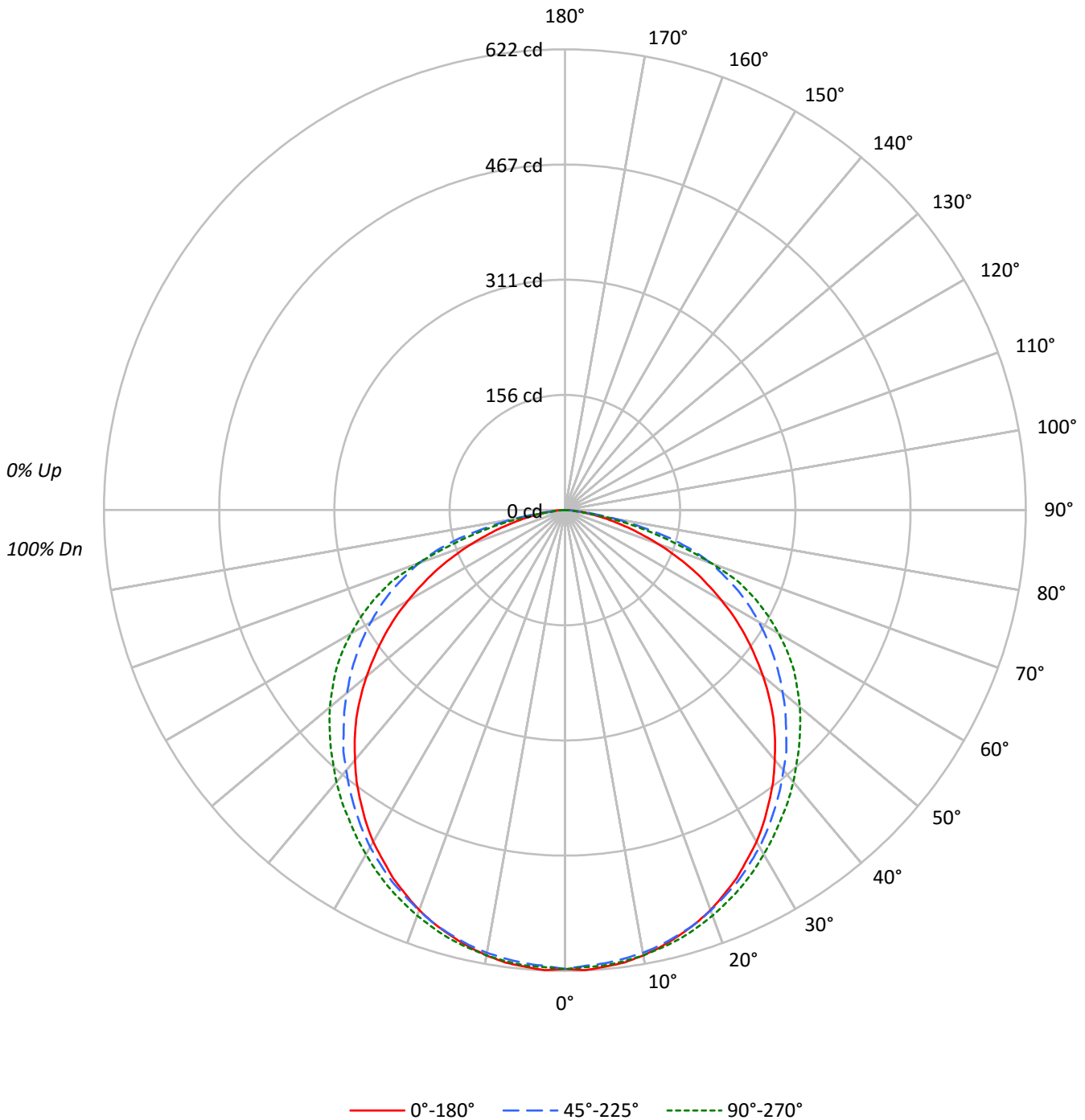
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P311877

CATALOG NUMBER: 14FCZ2-25-UNV-L83050-HRP-CP125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P311877

CATALOG NUMBER: 14FCZ2-25-UNV-L83050-HRP-CP125-W2A-U-4000K

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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1667	1667	1667
5°	1672	1659	1667
10°	1668	1658	1668
15°	1657	1654	1670
20°	1646	1647	1669
25°	1628	1642	1669
30°	1607	1633	1668
35°	1579	1621	1671
40°	1547	1612	1684
45°	1515	1606	1703
50°	1462	1606	1734
55°	1399	1614	1771
60°	1315	1627	1793
65°	1212	1643	1804
70°	1056	1647	1661
75°	870	1533	1341
80°	685	1102	897
85°	531	426	213



TEST NUMBER: P311877

CATALOG NUMBER: 14FCZ2-25-UNV-L83050-HRP-CP125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	3.2
10°-20°	168.3	9.2
20°-30°	255.5	14.0
30°-40°	309.6	17.0
40°-50°	326.3	17.9
50°-60°	304.6	16.7
60°-70°	243.4	13.3
70°-80°	133.9	7.3
80°-90°	23.7	1.3
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°	482.5	26.5
0°-40°	792.1	43.4
0°-60°	1423.0	78.0
0°-90°	1824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1824.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	619	617	614	618	617	59
15°	595	595	594	599	599	168
25°	548	550	553	561	562	252
35°	481	485	493	506	509	301
45°	398	406	422	441	447	306
55°	298	313	344	368	377	266
65°	190	214	258	279	283	187
75°	84	120	147	132	129	90
85°	17	22	14	9	7	21
90°	0	0	0	0	0	



TEST NUMBER: P311877

CATALOG NUMBER: 14FC22-25-UNV-L83050-HRP-CP125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	619.4	619.4	619.4	619.4	619.4
2.5°	621.7	620.0	616.0	619.4	617.7
5°	618.9	617.1	614.3	618.3	617.1
7.5°	616.0	613.7	610.8	615.4	614.3
10°	610.3	608.5	606.8	610.8	610.3
12.5°	603.4	602.8	601.1	605.7	605.1
15°	594.8	594.8	593.6	599.4	599.4
17.5°	585.6	585.0	585.6	591.9	591.3
20°	574.7	574.7	575.3	582.7	582.7
22.5°	561.5	562.1	563.8	573.0	572.4
25°	548.3	549.5	552.9	560.9	562.1
27.5°	532.3	535.1	539.1	548.9	550.0
30°	517.3	519.1	525.4	534.6	536.8
32.5°	499.6	503.0	509.9	520.2	523.1
35°	480.6	485.2	493.3	505.9	508.7
37.5°	461.7	465.7	476.6	489.8	495.0
40°	440.5	447.4	458.8	473.8	479.5
42.5°	419.8	426.7	442.2	457.7	462.9
45°	398.0	405.5	422.1	441.1	447.4
47.5°	374.0	382.6	403.8	423.9	430.7
50°	349.3	360.2	383.7	406.1	414.1
52.5°	323.5	337.3	364.2	387.7	395.2
55°	298.2	313.2	344.1	368.2	377.4
57.5°	272.4	288.5	323.5	351.0	356.2
60°	244.3	263.8	302.3	326.4	333.2
62.5°	216.8	239.2	280.5	303.4	309.1
65°	190.4	214.5	258.1	279.3	283.3
67.5°	161.7	190.4	233.4	252.9	254.1
70°	134.2	167.5	209.3	218.5	211.1
72.5°	107.3	142.8	181.2	173.8	167.5
75°	83.7	119.9	147.4	132.5	129.0
77.5°	61.9	98.1	105.5	97.5	91.2
80°	44.2	77.4	71.1	60.8	57.9
82.5°	30.4	48.8	39.0	30.4	26.4
85°	17.2	21.8	13.8	8.6	6.9
87.5°	7.5	5.2	2.9	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)