

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: P309226

Luminaire Tested: **24FCZ2-30-UNV-L82765-HRP-CP250-W2A-U-5000K**

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: P309226
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-30-UNV-L82765-HRP-CP250-W2A-U-5000K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 5000K 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: 2010.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

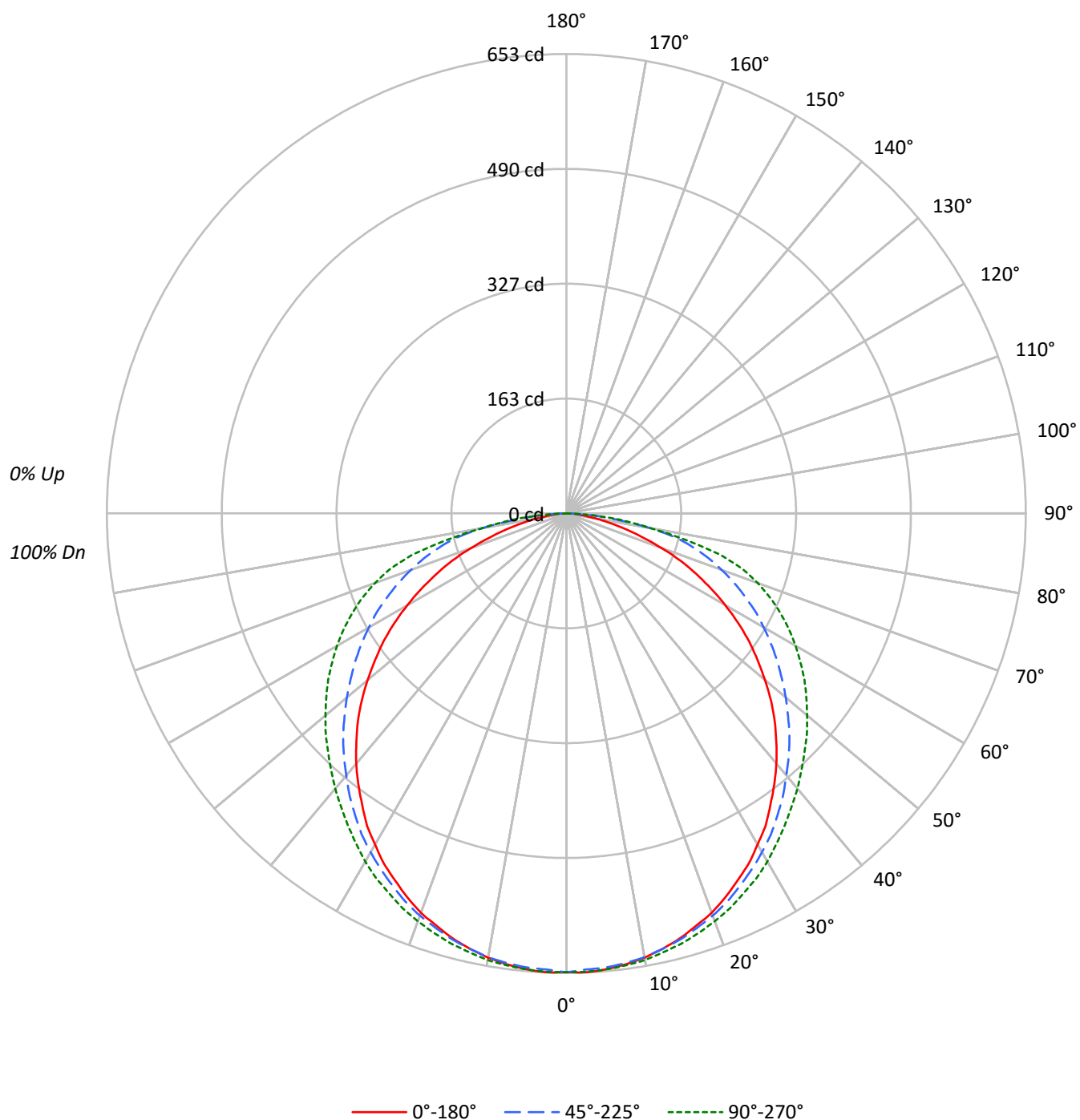
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	877	877	877
5°	879	875	879
10°	876	875	881
15°	871	873	881
20°	865	871	883
25°	855	867	885
30°	845	864	888
35°	831	860	889
40°	816	854	897
45°	797	853	911
50°	772	853	935
55°	744	859	969
60°	702	872	1012
65°	648	892	1069
70°	566	924	1139
75°	460	971	1177
80°	339	952	952
85°	259	701	792



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.1
10°-20°	177.4	8.8
20°-30°	270.1	13.4
30°-40°	327.9	16.3
40°-50°	346.5	17.2
50°-60°	326.9	16.3
60°-70°	271.8	13.5
70°-80°	178.8	8.9
80°-90°	48.7	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°	509.3	25.3
0°-40°	837.2	41.7
0°-60°	1510.6	75.2
0°-90°	2010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	650	650	648	650	650	62
15°	625	626	627	633	633	176
25°	576	579	584	594	596	266
35°	506	512	523	537	541	317
45°	419	428	448	470	479	323
55°	317	331	366	400	413	283
65°	204	227	280	321	336	201
75°	88	129	187	221	226	95
85°	17	37	45	50	51	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	652.1	652.1	652.1	652.1	652.1
2.5°	653.0	652.1	648.8	652.1	652.1
5°	650.5	650.5	647.9	650.5	650.5
7.5°	646.3	646.3	644.6	647.9	647.9
10°	641.2	641.2	640.4	644.6	644.6
12.5°	633.6	634.5	633.6	638.7	638.7
15°	625.2	626.1	626.9	632.8	632.8
17.5°	614.3	616.0	617.6	624.4	625.2
20°	604.2	605.0	608.4	616.0	616.8
22.5°	590.7	593.2	597.4	605.0	607.5
25°	575.6	578.9	584.0	594.1	595.8
27.5°	561.3	563.8	570.5	581.5	584.8
30°	543.6	547.8	556.2	567.2	571.4
32.5°	526.8	531.0	541.1	552.9	556.2
35°	505.7	511.6	523.4	536.9	541.1
37.5°	485.5	491.4	505.7	520.9	525.9
40°	464.5	471.2	486.4	504.0	510.8
42.5°	441.8	451.0	467.9	487.2	494.8
45°	419.1	427.5	448.5	470.4	478.8
47.5°	394.7	404.8	427.5	453.6	463.7
50°	368.6	381.2	407.3	435.9	446.8
52.5°	342.5	356.8	386.2	418.2	430.0
55°	317.2	330.7	366.0	400.5	413.2
57.5°	289.5	306.3	345.0	382.0	394.7
60°	260.9	279.4	324.0	362.7	376.1
62.5°	232.2	253.3	303.8	342.5	356.8
65°	203.6	227.2	280.2	321.4	335.8
67.5°	175.9	202.0	258.3	299.6	313.9
70°	143.9	176.7	234.8	275.2	289.5
72.5°	114.4	152.3	212.1	249.9	262.5
75°	88.4	128.7	186.8	221.3	226.4
77.5°	64.8	105.2	160.7	172.5	173.3
80°	43.8	84.1	122.9	121.2	122.9
82.5°	28.6	63.1	77.4	86.7	87.5
85°	16.8	37.0	45.4	50.5	51.3
87.5°	8.4	12.6	16.0	16.8	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)