

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: P309149

Luminaire Tested: **24FCZ2-30HE-UNV-L82765-HRP-CA125-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: P309149
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: 24FCZ2-30HE-UNV-L82765-HRP-CA125-W2A-U-2700K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (336) 2700K 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: 1947.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

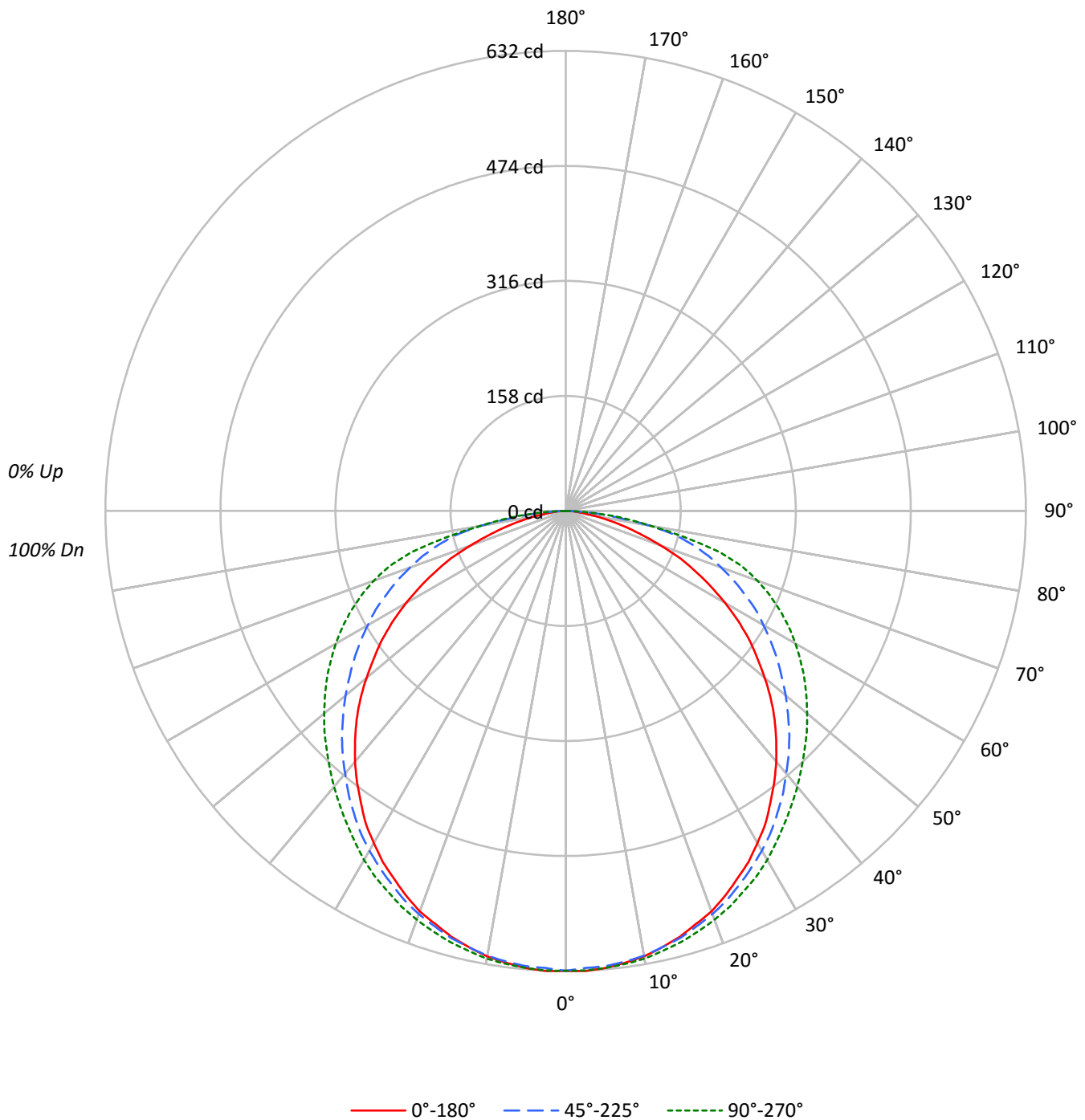
Input Watts (W): 21.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	850	850	850
5°	851	848	851
10°	849	847	853
15°	844	846	854
20°	838	844	856
25°	828	840	857
30°	818	837	860
35°	805	833	861
40°	790	827	869
45°	772	827	883
50°	747	826	906
55°	721	832	939
60°	680	844	981
65°	628	864	1035
70°	548	895	1103
75°	445	941	1140
80°	329	922	922
85°	252	679	767



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	3.1
10°-20°	171.8	8.8
20°-30°	261.6	13.4
30°-40°	317.7	16.3
40°-50°	335.6	17.2
50°-60°	316.7	16.3
60°-70°	263.3	13.5
70°-80°	173.2	8.9
80°-90°	47.2	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°	493.3	25.3
0°-40°	811.0	41.7
0°-60°	1463.2	75.2
0°-90°	1947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1947.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	630	630	628	630	630	60
15°	606	606	607	613	613	171
25°	558	561	566	576	577	257
35°	490	496	507	520	524	307
45°	406	414	434	456	464	313
55°	307	320	355	388	400	274
65°	197	220	271	311	325	195
75°	86	125	181	214	219	92
85°	16	36	44	49	50	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	631.7	631.7	631.7	631.7	631.7
2.5°	632.5	631.7	628.4	631.7	631.7
5°	630.1	630.1	627.6	630.1	630.1
7.5°	626.0	626.0	624.4	627.6	627.6
10°	621.1	621.1	620.3	624.4	624.4
12.5°	613.8	614.6	613.8	618.7	618.7
15°	605.6	606.4	607.3	613.0	613.0
17.5°	595.0	596.7	598.3	604.8	605.6
20°	585.2	586.1	589.3	596.7	597.5
22.5°	572.2	574.6	578.7	586.1	588.5
25°	557.5	560.8	565.7	575.5	577.1
27.5°	543.7	546.1	552.6	563.2	566.5
30°	526.6	530.6	538.8	549.4	553.5
32.5°	510.3	514.3	524.1	535.5	538.8
35°	489.9	495.6	507.0	520.0	524.1
37.5°	470.3	476.0	489.9	504.5	509.4
40°	449.9	456.5	471.1	488.2	494.8
42.5°	427.9	436.9	453.2	471.9	479.3
45°	405.9	414.1	434.5	455.6	463.8
47.5°	382.3	392.1	414.1	439.3	449.1
50°	357.0	369.2	394.5	422.2	432.8
52.5°	331.7	345.6	374.1	405.1	416.5
55°	307.3	320.3	354.6	388.0	400.2
57.5°	280.4	296.7	334.2	370.1	382.3
60°	252.7	270.6	313.8	351.3	364.4
62.5°	225.0	245.3	294.3	331.7	345.6
65°	197.3	220.1	271.4	311.4	325.2
67.5°	170.4	195.6	250.2	290.2	304.0
70°	139.4	171.2	227.4	266.5	280.4
72.5°	110.9	147.5	205.4	242.1	254.3
75°	85.6	124.7	181.0	214.4	219.3
77.5°	62.8	101.9	155.7	167.1	167.9
80°	42.4	81.5	119.0	117.4	119.0
82.5°	27.7	61.1	75.0	84.0	84.8
85°	16.3	35.9	44.0	48.9	49.7
87.5°	8.2	12.2	15.5	16.3	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)