

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: METALUX

Report Number: P274779

Luminaire Tested: **24CZ2-30-RDP-UNV-L930-CD1-U**

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: P274779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-RDP-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1682.0 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

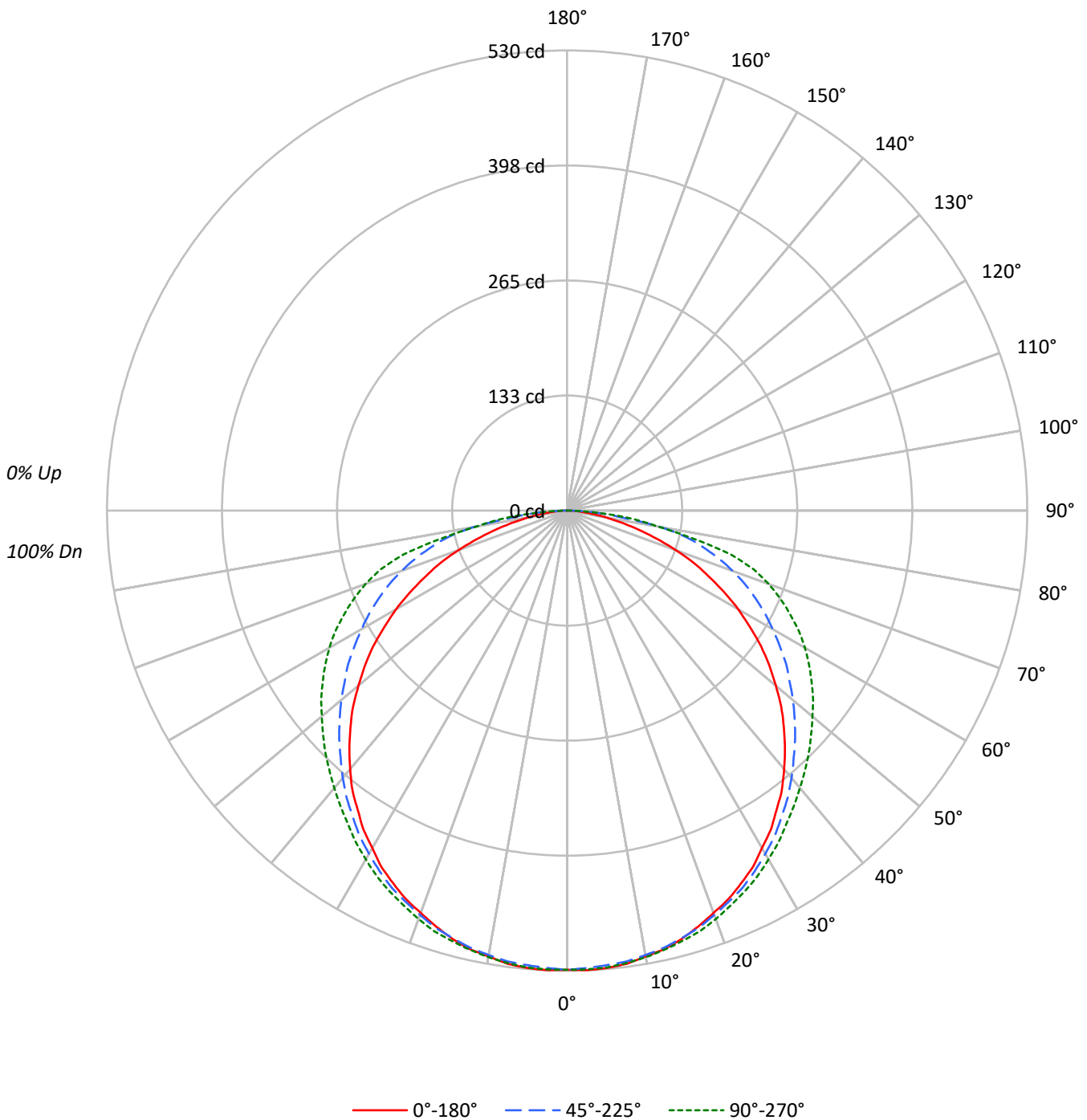
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	712	712	712
5°	714	710	713
10°	712	710	714
15°	711	710	715
20°	706	710	717
25°	704	711	718
30°	697	709	721
35°	691	707	724
40°	683	706	733
45°	672	707	749
50°	657	711	772
55°	640	722	806
60°	613	736	851
65°	574	762	903
70°	522	797	972
75°	442	842	1015
80°	349	847	821
85°	258	644	721



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	3.0
10°-20°	144.4	8.6
20°-30°	220.8	13.1
30°-40°	269.9	16.0
40°-50°	287.7	17.1
50°-60°	275.1	16.4
60°-70°	233.0	13.9
70°-80°	156.6	9.3
80°-90°	44.2	2.6
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°	415.4	24.7
0°-40°	685.4	40.7
0°-60°	1248.2	74.2
0°-90°	1682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1682.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	529	528	526	528	528	50
15°	511	511	510	514	513	144
25°	474	476	479	483	484	218
35°	420	424	430	439	440	263
45°	353	359	371	387	394	272
55°	273	283	308	332	344	243
65°	180	199	239	271	284	179
75°	85	116	162	189	195	91
85°	17	34	42	45	47	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.9	528.9	528.9	528.9	528.9
2.5°	529.8	529.8	527.3	528.9	528.9
5°	528.9	528.1	525.6	528.1	528.1
7.5°	526.4	525.6	523.9	526.4	525.6
10°	521.4	521.4	519.8	522.3	522.3
12.5°	517.3	516.4	515.6	518.9	518.1
15°	510.6	510.6	509.8	513.9	513.1
17.5°	502.2	503.1	503.9	507.2	508.1
20°	493.1	494.7	495.6	500.6	500.6
22.5°	484.7	485.6	487.2	492.2	492.2
25°	473.9	475.5	478.9	483.1	483.9
27.5°	463.0	463.9	468.0	473.9	474.7
30°	448.8	451.4	456.4	463.0	463.9
32.5°	436.3	438.8	444.7	451.4	453.0
35°	420.5	423.8	430.5	438.8	440.5
37.5°	406.3	408.8	417.1	426.3	428.8
40°	388.8	393.8	402.1	413.0	417.1
42.5°	371.3	376.3	386.3	400.5	405.5
45°	352.9	358.7	371.3	387.1	393.8
47.5°	334.6	341.2	355.4	373.8	381.3
50°	313.7	322.0	339.6	360.4	368.8
52.5°	293.7	303.7	322.9	346.2	357.1
55°	272.8	282.8	307.9	332.0	343.7
57.5°	249.5	262.8	290.3	317.9	330.4
60°	227.8	240.3	273.6	303.7	316.2
62.5°	204.4	221.1	257.0	288.7	301.2
65°	180.2	198.6	239.4	271.1	283.7
67.5°	158.5	178.5	221.9	253.6	266.1
70°	132.7	157.7	202.7	234.4	247.0
72.5°	108.5	136.0	182.7	213.6	225.3
75°	85.1	116.0	161.9	189.4	195.2
77.5°	63.4	95.9	140.2	151.8	147.7
80°	45.1	76.8	109.3	103.5	106.0
82.5°	29.2	58.4	67.6	76.8	79.3
85°	16.7	34.2	41.7	45.1	46.7
87.5°	7.5	12.5	16.7	16.7	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)