

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: P274780

Luminaire Tested: **24CZ2-30-RDP-UNV-L935-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: P274780
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-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1724.0 lumens
Efficiency: N/A
Efficacy: 71.2 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

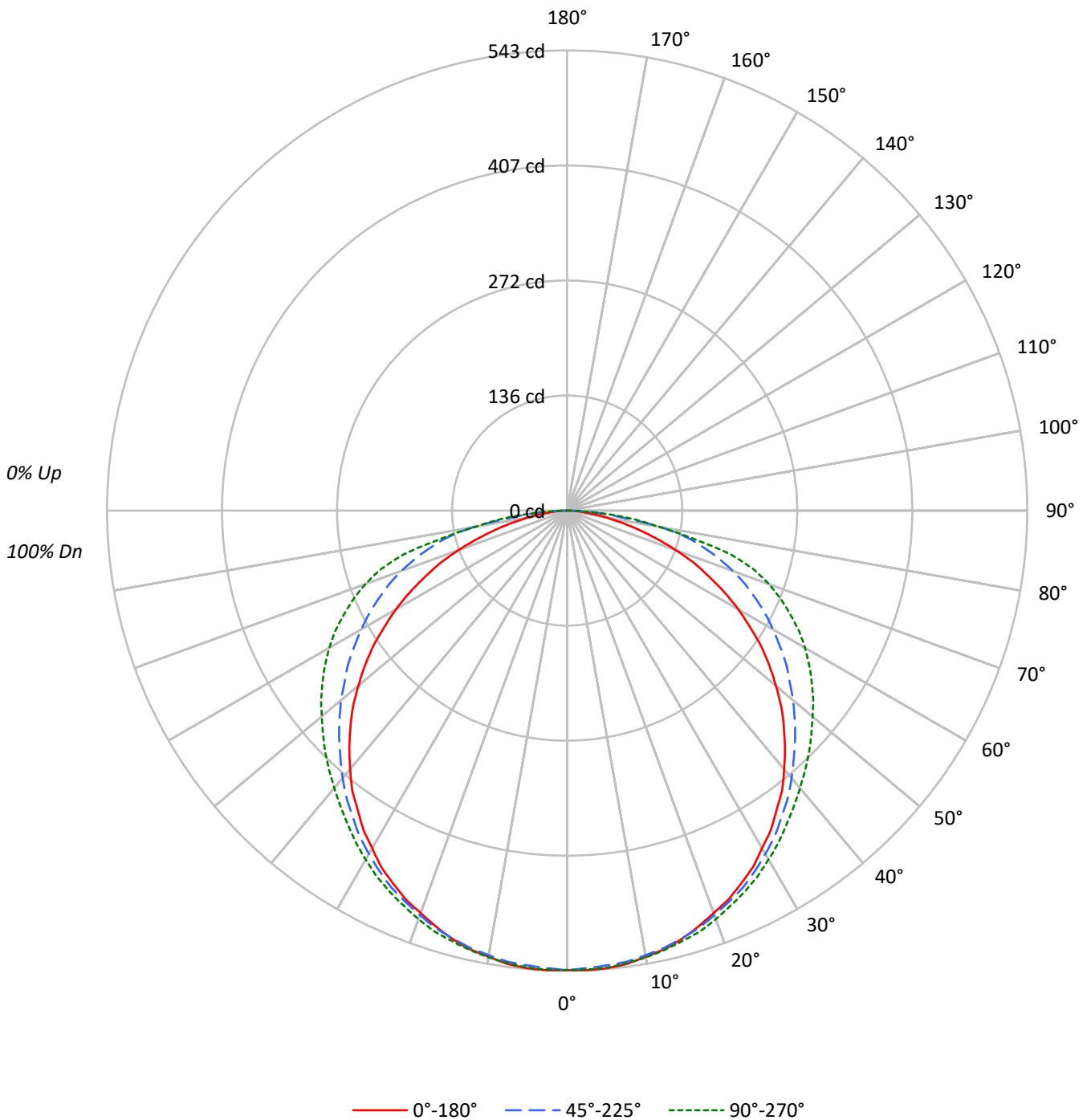
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	729	729	729
5°	732	728	731
10°	730	728	731
15°	729	728	733
20°	724	727	735
25°	721	729	736
30°	715	727	739
35°	708	725	742
40°	700	724	751
45°	688	724	768
50°	673	728	791
55°	656	740	826
60°	628	755	872
65°	588	781	926
70°	535	817	996
75°	453	862	1040
80°	358	868	841
85°	264	661	739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	3.0
10°-20°	148.0	8.6
20°-30°	226.3	13.1
30°-40°	276.7	16.0
40°-50°	294.9	17.1
50°-60°	282.0	16.4
60°-70°	238.9	13.9
70°-80°	160.5	9.3
80°-90°	45.3	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°	425.8	24.7
0°-40°	702.5	40.7
0°-60°	1279.3	74.2
0°-90°	1724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	542	541	539	541	541	52
15°	523	523	522	527	526	148
25°	486	487	491	495	496	224
35°	431	434	441	450	452	270
45°	362	368	380	397	404	279
55°	280	290	316	340	352	249
65°	185	204	245	278	291	183
75°	87	119	166	194	200	93
85°	17	35	43	46	48	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	542.1	542.1	542.1	542.1	542.1
2.5°	543.0	543.0	540.4	542.1	542.1
5°	542.1	541.3	538.7	541.3	541.3
7.5°	539.6	538.7	537.0	539.6	538.7
10°	534.5	534.5	532.7	535.3	535.3
12.5°	530.2	529.3	528.5	531.9	531.0
15°	523.3	523.3	522.5	526.8	525.9
17.5°	514.8	515.6	516.5	519.9	520.8
20°	505.4	507.1	507.9	513.1	513.1
22.5°	496.8	497.7	499.4	504.5	504.5
25°	485.7	487.4	490.8	495.1	496.0
27.5°	474.6	475.4	479.7	485.7	486.6
30°	460.1	462.6	467.8	474.6	475.4
32.5°	447.2	449.8	455.8	462.6	464.3
35°	431.0	434.4	441.2	449.8	451.5
37.5°	416.4	419.0	427.6	437.0	439.5
40°	398.5	403.6	412.2	423.3	427.6
42.5°	380.5	385.7	395.9	410.5	415.6
45°	361.7	367.7	380.5	396.8	403.6
47.5°	342.9	349.7	364.3	383.1	390.8
50°	321.5	330.1	348.0	369.4	378.0
52.5°	301.0	311.3	330.9	354.9	366.0
55°	279.6	289.9	315.5	340.3	352.3
57.5°	255.7	269.4	297.6	325.8	338.6
60°	233.4	246.3	280.5	311.3	324.1
62.5°	209.5	226.6	263.4	295.9	308.7
65°	184.7	203.5	245.4	277.9	290.7
67.5°	162.5	183.0	227.5	260.0	272.8
70°	136.0	161.6	207.8	240.3	253.1
72.5°	111.2	139.4	187.3	218.9	230.9
75°	87.2	118.9	165.9	194.1	200.1
77.5°	65.0	98.3	143.7	155.6	151.4
80°	46.2	78.7	112.0	106.0	108.6
82.5°	29.9	59.9	69.3	78.7	81.2
85°	17.1	35.1	42.8	46.2	47.9
87.5°	7.7	12.8	17.1	17.1	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)