

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: P391245

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L930-CD1-SDWPD1-U**

Issue Date: 2/28/2020

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: P391245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-RDP-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1630.2 lumens
Efficiency: N/A
Efficacy: 79.9 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

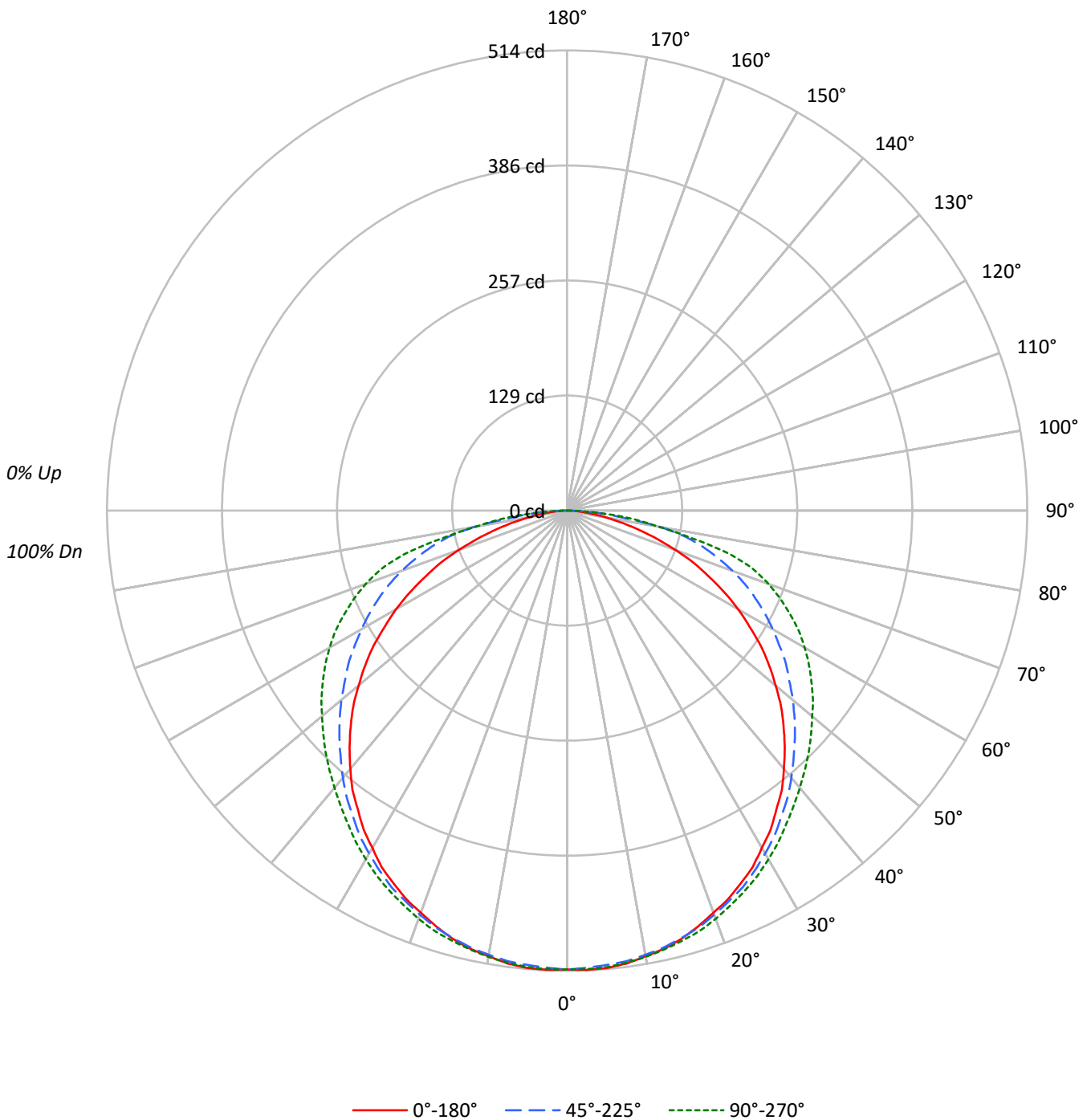
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	690	690	690
5°	692	688	691
10°	691	688	692
15°	689	688	693
20°	684	688	695
25°	682	689	696
30°	676	687	699
35°	669	685	701
40°	662	684	710
45°	651	685	726
50°	636	689	748
55°	620	700	781
60°	594	714	825
65°	556	739	875
70°	506	773	941
75°	429	816	984
80°	339	821	796
85°	250	624	699



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	3.0
10°-20°	140.0	8.6
20°-30°	214.0	13.1
30°-40°	261.6	16.0
40°-50°	278.9	17.1
50°-60°	266.6	16.4
60°-70°	225.9	13.9
70°-80°	151.8	9.3
80°-90°	42.8	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°	402.6	24.7
0°-40°	664.3	40.7
0°-60°	1209.7	74.2
0°-90°	1630.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1630.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	513	512	509	512	512	49
15°	495	495	494	498	497	140
25°	459	461	464	468	469	212
35°	408	411	417	425	427	255
45°	342	348	360	375	382	264
55°	264	274	298	322	333	235
65°	175	192	232	263	275	173
75°	82	112	157	184	189	88
85°	16	33	40	44	45	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	512.7	512.7	512.7	512.7	512.7
2.5°	513.5	513.5	511.0	512.7	512.7
5°	512.7	511.8	509.4	511.8	511.8
7.5°	510.2	509.4	507.8	510.2	509.4
10°	505.4	505.4	503.8	506.2	506.2
12.5°	501.3	500.5	499.7	502.9	502.1
15°	494.9	494.9	494.1	498.1	497.3
17.5°	486.8	487.6	488.4	491.6	492.4
20°	477.9	479.5	480.3	485.2	485.2
22.5°	469.8	470.6	472.2	477.1	477.1
25°	459.3	460.9	464.1	468.2	469.0
27.5°	448.8	449.6	453.6	459.3	460.1
30°	435.0	437.5	442.3	448.8	449.6
32.5°	422.9	425.3	431.0	437.5	439.1
35°	407.5	410.8	417.2	425.3	426.9
37.5°	393.8	396.2	404.3	413.2	415.6
40°	376.8	381.7	389.7	400.3	404.3
42.5°	359.8	364.7	374.4	388.1	393.0
45°	342.0	347.7	359.8	375.2	381.7
47.5°	324.2	330.7	344.5	362.3	369.5
50°	304.0	312.1	329.1	349.3	357.4
52.5°	284.6	294.3	312.9	335.6	346.1
55°	264.4	274.1	298.4	321.8	333.1
57.5°	241.8	254.7	281.4	308.1	320.2
60°	220.7	232.9	265.2	294.3	306.5
62.5°	198.1	214.3	249.0	279.8	291.9
65°	174.7	192.4	232.1	262.8	274.9
67.5°	153.6	173.0	215.1	245.8	257.9
70°	128.6	152.8	196.5	227.2	239.3
72.5°	105.1	131.8	177.1	207.0	218.3
75°	82.5	112.4	156.9	183.6	189.2
77.5°	61.5	93.0	135.8	147.2	143.1
80°	43.7	74.4	105.9	100.3	102.7
82.5°	28.3	56.6	65.5	74.4	76.8
85°	16.2	33.2	40.4	43.7	45.3
87.5°	7.3	12.1	16.2	16.2	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)