

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: P230500

Luminaire Tested: **24CZ-LD5-30SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30SE-RDP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1667.3 lumens
Efficiency: N/A
Efficacy: 70.9 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

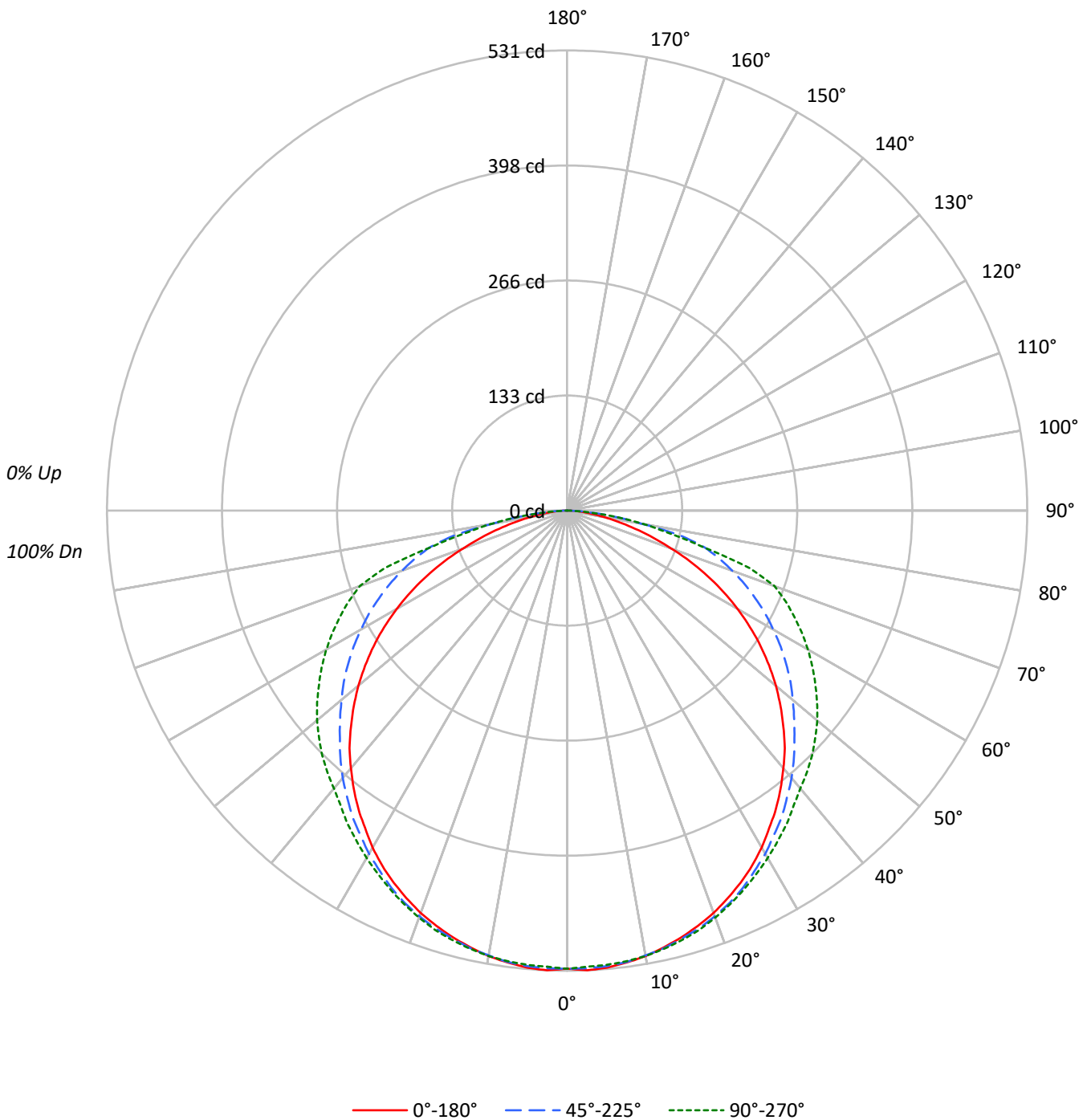
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	711	711	711
5°	715	713	711
10°	713	712	713
15°	710	712	715
20°	707	713	716
25°	703	713	716
30°	697	710	719
35°	690	709	725
40°	682	708	735
45°	672	706	761
50°	658	711	789
55°	639	724	820
60°	612	740	864
65°	570	763	920
70°	504	797	1001
75°	423	853	841
80°	337	674	700
85°	266	455	418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	3.0
10°-20°	144.3	8.7
20°-30°	220.4	13.2
30°-40°	269.4	16.2
40°-50°	288.4	17.3
50°-60°	276.6	16.6
60°-70°	233.6	14.0
70°-80°	149.2	9.0
80°-90°	35.3	2.1
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°	414.8	24.9
0°-40°	684.2	41.0
0°-60°	1249.2	74.9
0°-90°	1667.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1667.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	529	526	528	527	526	50
15°	510	508	511	513	513	144
25°	474	473	480	482	483	218
35°	420	424	432	438	442	263
45°	353	359	371	388	400	272
55°	272	282	309	336	350	243
65°	179	196	240	273	289	176
75°	81	116	164	167	162	87
85°	17	29	30	29	27	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.6	528.6	528.6	528.6	528.6
2.5°	531.0	527.7	528.6	528.6	526.9
5°	529.4	526.1	527.7	526.9	526.1
7.5°	526.1	523.6	525.3	525.3	524.5
10°	522.0	519.5	521.2	522.0	522.0
12.5°	516.2	514.6	517.1	517.1	517.9
15°	509.7	508.0	511.3	513.0	513.0
17.5°	502.3	501.5	505.6	506.4	507.2
20°	494.1	493.3	498.2	498.2	499.8
22.5°	484.2	483.4	490.0	490.0	491.6
25°	473.6	472.7	480.1	481.8	482.6
27.5°	462.1	461.3	468.6	471.1	472.7
30°	448.9	448.9	457.2	460.4	462.9
32.5°	434.2	436.6	444.0	448.9	452.2
35°	420.2	423.5	431.7	437.5	441.6
37.5°	404.6	407.9	416.9	424.3	429.2
40°	388.2	392.3	403.0	411.2	418.6
42.5°	371.8	375.9	387.4	399.7	409.5
45°	352.9	358.7	371.0	388.2	399.7
47.5°	334.0	339.8	355.4	376.7	388.2
50°	314.3	320.9	339.8	364.4	376.7
52.5°	293.8	301.2	325.0	351.3	363.6
55°	272.5	281.5	308.6	336.5	349.6
57.5°	250.3	260.2	292.2	321.7	335.7
60°	227.3	239.7	274.9	306.1	320.9
62.5°	203.5	218.3	257.7	289.7	305.3
65°	178.9	196.2	239.7	273.3	288.9
67.5°	153.5	176.5	221.6	256.9	272.5
70°	128.0	155.1	202.7	238.8	254.4
72.5°	104.2	135.4	183.8	217.5	220.8
75°	81.3	115.7	164.1	167.4	161.7
77.5°	60.7	96.0	135.4	120.6	119.8
80°	43.5	77.1	87.0	89.5	90.3
82.5°	28.7	58.3	56.6	58.3	57.5
85°	17.2	28.7	29.5	28.7	27.1
87.5°	8.2	10.7	8.2	7.4	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)