

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: P230389

Luminaire Tested: **24CZ-LD5-30-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30-SQP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1790.6 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

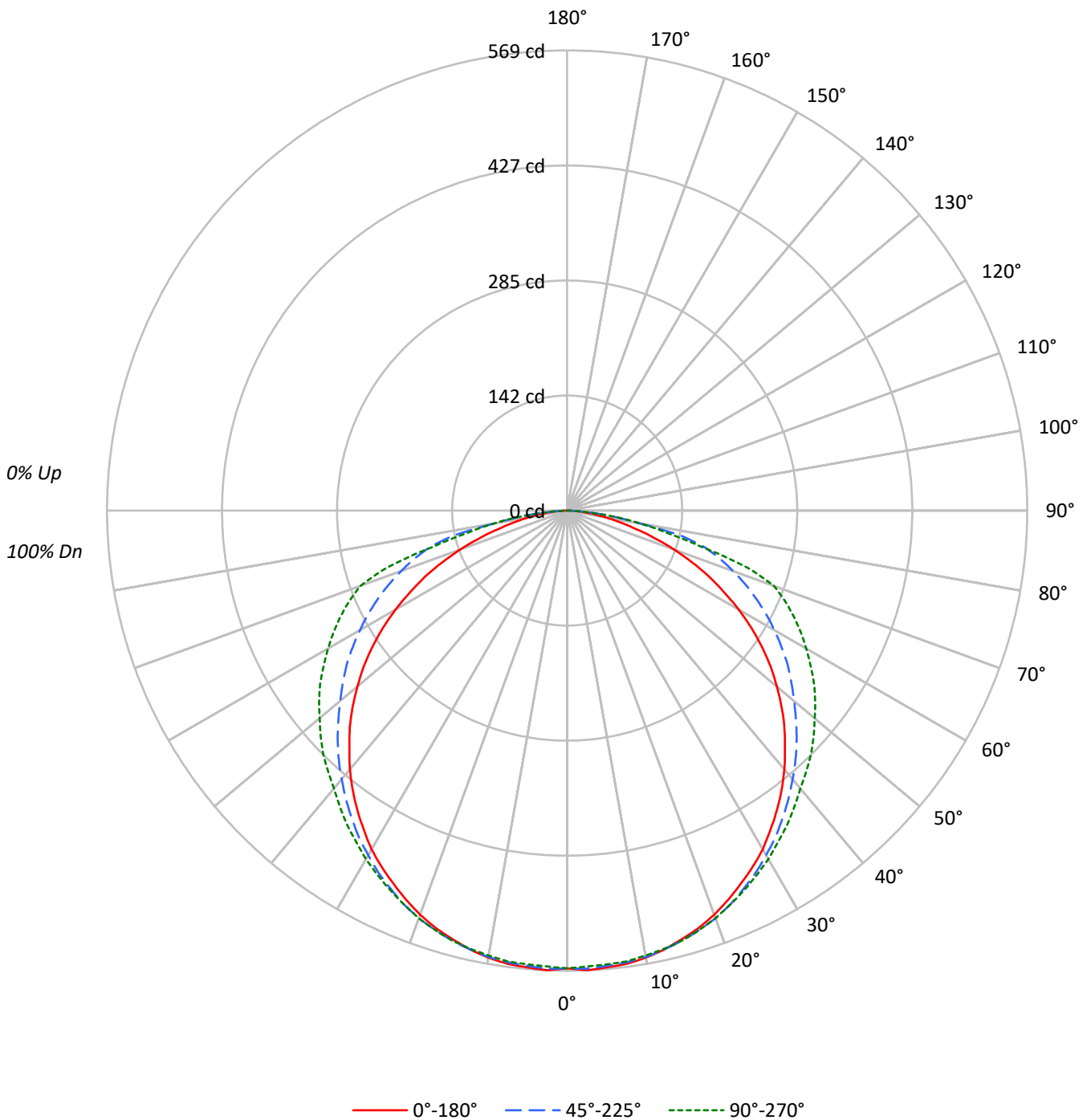
Input Watts (W): 21.62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34		45	39	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	28
9	55	41	33	27	54	41	33	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°	762	762	762
5°	766	763	761
10°	767	766	763
15°	764	767	767
20°	761	768	768
25°	755	766	769
30°	751	764	773
35°	743	763	779
40°	734	762	788
45°	723	764	811
50°	709	767	836
55°	690	781	874
60°	660	797	918
65°	618	821	983
70°	553	859	1070
75°	457	919	885
80°	373	710	717
85°	299	471	443



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	3.0
10°-20°	155.1	8.7
20°-30°	237.1	13.2
30°-40°	290.0	16.2
40°-50°	310.3	17.3
50°-60°	297.1	16.6
60°-70°	251.3	14.0
70°-80°	159.3	8.9
80°-90°	36.6	2.0
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°	446.0	24.9
0°-40°	735.9	41.1
0°-60°	1343.3	75.0
0°-90°	1790.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1790.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	567	564	565	564	563	54
15°	548	548	550	550	550	155
25°	509	509	516	518	518	235
35°	452	455	464	471	474	283
45°	380	387	401	418	426	293
55°	294	303	333	361	373	262
65°	194	213	258	293	309	191
75°	88	124	177	176	170	96
85°	19	30	30	28	29	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	566.0	566.0	566.0	566.0	566.0
2.5°	568.8	566.0	567.0	566.0	564.2
5°	567.0	564.2	565.1	564.2	563.3
7.5°	565.1	562.3	563.3	562.3	562.3
10°	561.4	558.6	560.5	559.6	558.6
12.5°	555.9	554.0	555.9	554.9	554.9
15°	548.5	547.5	550.3	550.3	550.3
17.5°	541.1	540.1	543.8	543.8	543.8
20°	531.8	530.9	536.4	536.4	536.4
22.5°	520.7	519.8	527.2	527.2	527.2
25°	508.7	508.7	516.1	517.9	517.9
27.5°	496.7	496.7	505.0	507.8	507.8
30°	483.7	483.7	492.0	495.7	497.6
32.5°	468.0	469.8	479.1	483.7	485.6
35°	452.3	455.0	464.3	470.8	474.5
37.5°	435.6	438.4	449.5	456.9	461.5
40°	418.0	421.7	433.8	443.0	448.6
42.5°	398.6	404.2	418.0	430.1	437.5
45°	380.1	386.6	401.4	418.0	426.4
47.5°	359.8	367.2	383.8	405.1	413.4
50°	338.5	345.9	366.3	390.3	399.5
52.5°	317.2	325.6	349.6	375.5	386.6
55°	294.1	303.4	333.0	360.7	372.7
57.5°	270.1	281.2	314.5	344.1	357.0
60°	245.1	259.0	296.0	327.4	341.3
62.5°	219.2	235.8	277.5	310.8	325.6
65°	194.2	212.7	258.0	293.2	308.9
67.5°	167.4	190.5	238.6	276.5	291.3
70°	140.6	167.4	218.3	257.1	271.9
72.5°	113.8	146.1	197.9	233.1	233.1
75°	87.9	123.9	176.7	175.7	170.2
77.5°	66.6	103.6	145.2	123.9	124.9
80°	48.1	83.2	91.6	91.6	92.5
82.5°	32.4	63.8	59.2	58.3	60.1
85°	19.4	29.6	30.5	27.7	28.7
87.5°	9.2	10.2	8.3	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)