

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: P230391

Luminaire Tested: **24CZ-LD5-30-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230391  
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-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1995.7 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

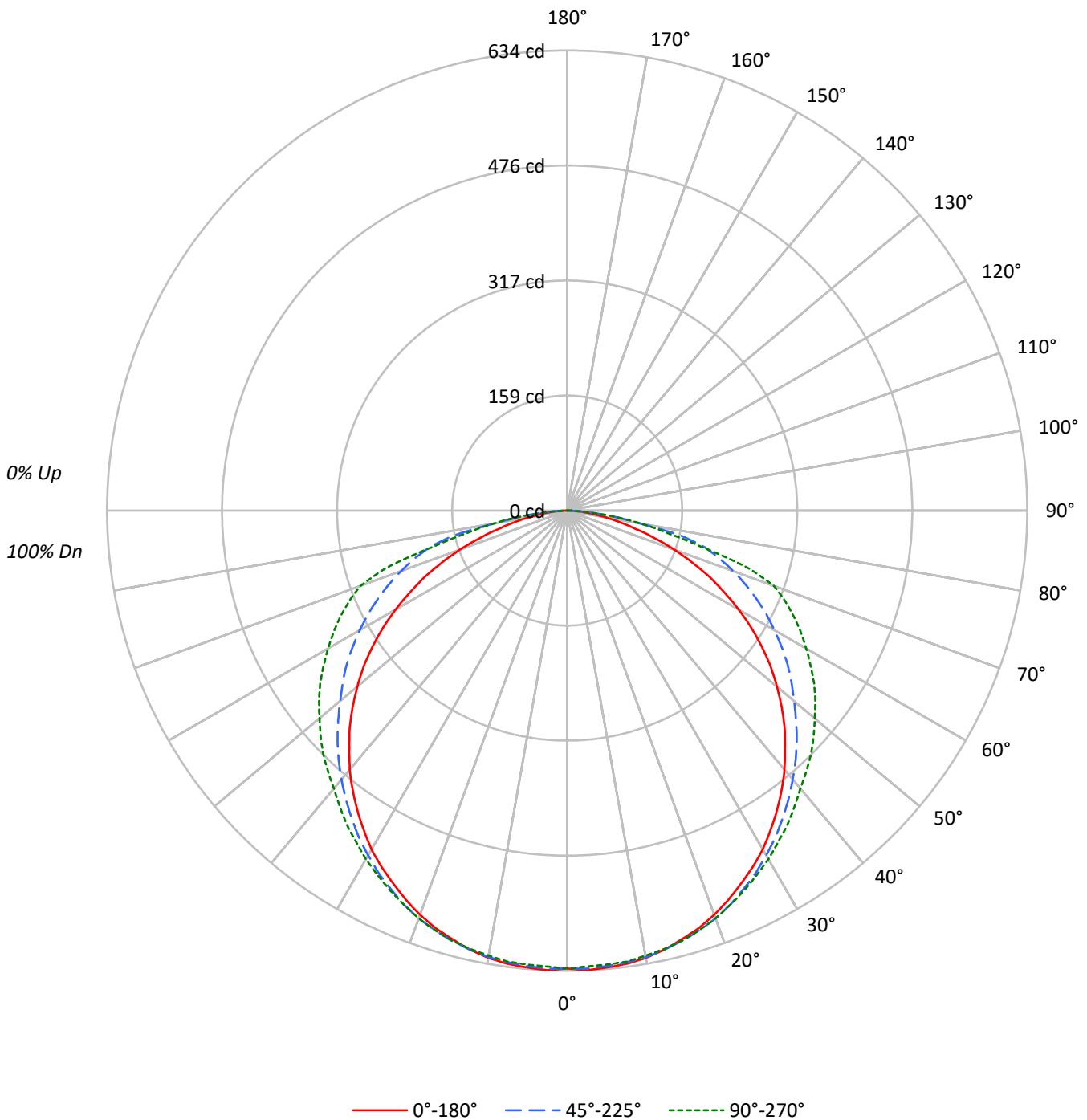
Input Watts (W): 21.62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	849	849	849
5°	853	851	848
10°	855	853	851
15°	852	854	854
20°	849	856	856
25°	842	854	857
30°	838	852	862
35°	828	850	869
40°	818	849	878
45°	806	851	904
50°	790	854	932
55°	769	871	974
60°	735	888	1024
65°	689	916	1096
70°	616	957	1192
75°	509	1024	986
80°	415	791	799
85°	333	525	494



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.9	3.0
10°-20°	172.9	8.7
20°-30°	264.2	13.2
30°-40°	323.2	16.2
40°-50°	345.8	17.3
50°-60°	331.1	16.6
60°-70°	280.1	14.0
70°-80°	177.6	8.9
80°-90°	40.8	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°	497.1	24.9
0°-40°	820.2	41.1
0°-60°	1497.2	75.0
0°-90°	1995.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1995.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	631	631	631	631	631	
5°	632	629	630	629	628	60
15°	611	610	613	613	613	173
25°	567	567	575	577	577	262
35°	504	507	518	525	529	315
45°	424	431	447	466	475	326
55°	328	338	371	402	415	292
65°	216	237	288	327	344	213
75°	98	138	197	196	190	106
85°	22	33	34	31	32	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	630.9	630.9	630.9	630.9	630.9
2.5°	634.0	630.9	631.9	630.9	628.8
5°	631.9	628.8	629.9	628.8	627.8
7.5°	629.9	626.8	627.8	626.8	626.8
10°	625.7	622.6	624.7	623.7	622.6
12.5°	619.5	617.5	619.5	618.5	618.5
15°	611.3	610.3	613.4	613.4	613.4
17.5°	603.1	602.0	606.1	606.1	606.1
20°	592.7	591.7	597.9	597.9	597.9
22.5°	580.4	579.3	587.6	587.6	587.6
25°	567.0	567.0	575.2	577.3	577.3
27.5°	553.6	553.6	562.8	565.9	565.9
30°	539.1	539.1	548.4	552.5	554.6
32.5°	521.6	523.7	534.0	539.1	541.2
35°	504.1	507.2	517.5	524.7	528.8
37.5°	485.5	488.6	501.0	509.2	514.4
40°	465.9	470.1	483.5	493.8	500.0
42.5°	444.3	450.5	465.9	479.3	487.6
45°	423.7	430.9	447.4	465.9	475.2
47.5°	401.0	409.3	427.8	451.5	460.8
50°	377.3	385.5	408.2	435.0	445.3
52.5°	353.6	362.9	389.7	418.5	430.9
55°	327.8	338.1	371.1	402.0	415.4
57.5°	301.0	313.4	350.5	383.5	397.9
60°	273.2	288.6	329.9	364.9	380.4
62.5°	244.3	262.9	309.3	346.4	362.9
65°	216.5	237.1	287.6	326.8	344.3
67.5°	186.6	212.4	266.0	308.2	324.7
70°	156.7	186.6	243.3	286.6	303.1
72.5°	126.8	162.9	220.6	259.8	259.8
75°	97.9	138.1	196.9	195.9	189.7
77.5°	74.2	115.5	161.8	138.1	139.2
80°	53.6	92.8	102.1	102.1	103.1
82.5°	36.1	71.1	66.0	64.9	67.0
85°	21.6	33.0	34.0	30.9	32.0
87.5°	10.3	11.3	9.3	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)