

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: P260628

Luminaire Tested: **24CZ-LD5-30-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2609.5 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

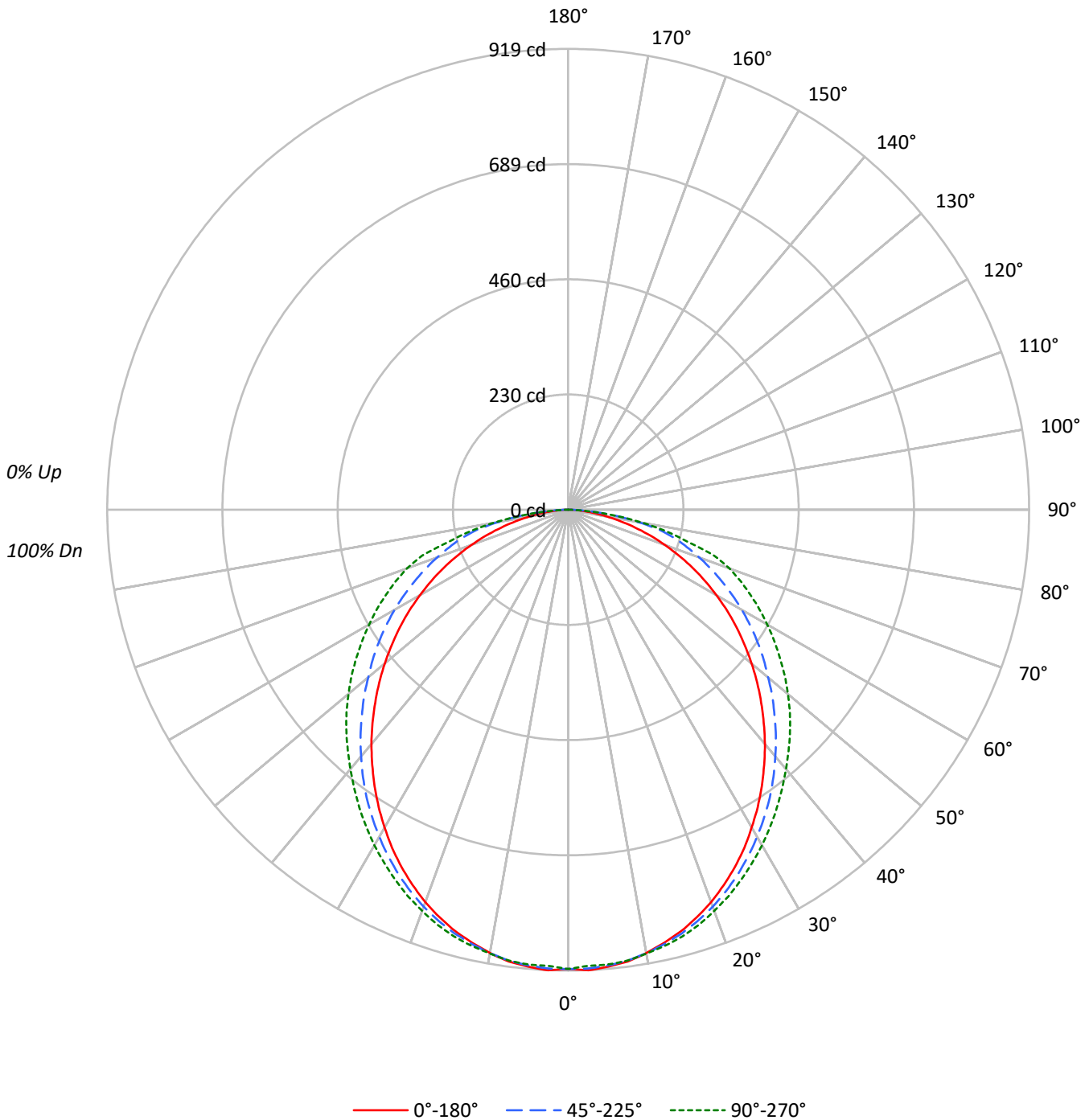
Input Watts (W): 19.995837  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1232	1232	1232
5°	1236	1232	1230
10°	1227	1227	1228
15°	1212	1218	1227
20°	1192	1206	1219
25°	1167	1190	1210
30°	1137	1170	1201
35°	1105	1151	1192
40°	1072	1128	1186
45°	1035	1107	1190
50°	999	1088	1197
55°	962	1081	1209
60°	918	1075	1233
65°	870	1075	1274
70°	805	1093	1343
75°	720	1143	1277
80°	602	1094	1170
85°	455	841	800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	3.3
10°-20°	246.3	9.4
20°-30°	368.2	14.1
30°-40°	436.8	16.7
40°-50°	449.6	17.2
50°-60°	412.4	15.8
60°-70°	333.5	12.8
70°-80°	216.4	8.3
80°-90°	59.7	2.3
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°	701.1	26.9
0°-40°	1137.9	43.6
0°-60°	1999.9	76.6
0°-90°	2609.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2609.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	915	909	912	911	910	87
15°	870	867	875	878	881	245
25°	786	787	801	809	815	362
35°	673	678	700	716	726	421
45°	544	553	582	609	625	420
55°	410	423	461	499	516	366
65°	273	290	338	382	400	270
75°	138	164	220	246	246	147
85°	30	50	54	53	52	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	915.8	915.8	915.8	915.8	915.8
2.5°	919.4	912.2	915.8	914.9	910.4
5°	914.9	908.7	912.2	911.3	910.4
7.5°	908.7	902.4	906.9	906.0	906.9
10°	897.9	892.6	897.9	898.8	898.8
12.5°	884.5	880.1	887.2	889.0	890.8
15°	870.2	866.7	874.7	878.3	881.0
17.5°	852.4	849.7	859.5	864.0	867.6
20°	832.7	831.8	842.5	847.0	851.5
22.5°	810.4	810.4	822.9	828.2	834.5
25°	786.2	787.1	801.4	808.6	814.8
27.5°	760.3	761.2	778.2	787.1	794.3
30°	731.7	735.3	753.2	764.8	772.8
32.5°	703.2	707.6	727.3	740.7	749.6
35°	672.8	678.1	700.5	715.7	725.5
37.5°	641.5	647.8	671.9	688.9	700.5
40°	610.2	617.4	642.4	662.1	675.5
42.5°	577.2	585.2	612.9	636.1	650.4
45°	544.1	553.1	581.6	609.3	625.4
47.5°	511.1	521.8	552.2	582.5	599.5
50°	477.1	487.8	520.0	554.8	571.8
52.5°	443.2	455.7	491.4	527.1	544.1
55°	410.1	422.6	461.0	498.6	515.5
57.5°	376.1	388.7	430.6	470.0	486.9
60°	341.3	355.6	399.4	439.6	458.3
62.5°	307.4	322.5	369.0	411.9	429.8
65°	273.4	289.5	337.7	382.4	400.3
67.5°	238.6	257.3	307.4	352.9	371.7
70°	204.6	225.2	277.9	323.4	341.3
72.5°	171.5	193.9	248.4	294.8	305.6
75°	138.5	164.4	219.8	245.7	245.7
77.5°	107.2	135.8	187.6	197.5	202.8
80°	77.7	109.0	141.2	152.8	151.0
82.5°	51.8	83.1	101.0	101.0	98.3
85°	29.5	50.0	54.5	52.7	51.8
87.5°	12.5	18.8	17.0	13.4	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)