

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: P260633

Luminaire Tested: **24CZ-LD5-35-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260633  
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-LD5-35-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: 2991.1 lumens  
Efficiency: N/A  
Efficacy: 121.4 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

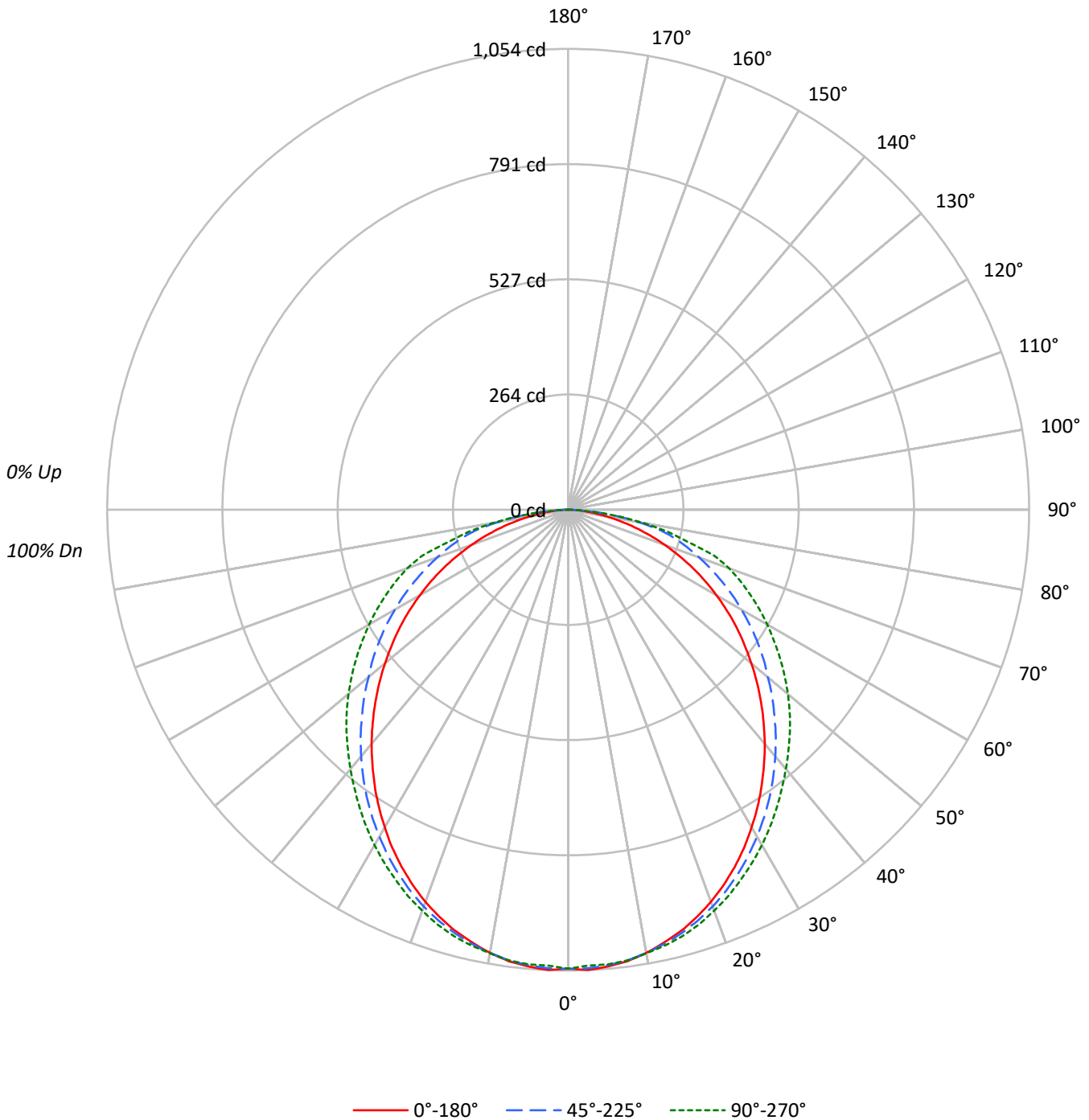
Input Watts (W): 24.63942  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1412	1412	1412
5°	1416	1412	1410
10°	1406	1406	1408
15°	1389	1397	1407
20°	1367	1383	1397
25°	1338	1364	1387
30°	1303	1341	1376
35°	1267	1319	1366
40°	1229	1293	1360
45°	1187	1269	1364
50°	1145	1248	1372
55°	1103	1240	1386
60°	1053	1232	1414
65°	998	1232	1461
70°	923	1253	1539
75°	825	1310	1464
80°	690	1254	1341
85°	522	965	917



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	3.3
10°-20°	282.3	9.4
20°-30°	422.1	14.1
30°-40°	500.7	16.7
40°-50°	515.4	17.2
50°-60°	472.8	15.8
60°-70°	382.2	12.8
70°-80°	248.1	8.3
80°-90°	68.4	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°	803.6	26.9
0°-40°	1304.3	43.6
0°-60°	2292.4	76.6
0°-90°	2991.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2991.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1049	1042	1046	1045	1044	100
15°	998	993	1003	1007	1010	281
25°	901	902	919	927	934	415
35°	771	777	803	820	832	482
45°	624	634	667	698	717	481
55°	470	484	528	572	591	420
65°	313	332	387	438	459	310
75°	159	188	252	282	282	169
85°	34	57	62	60	59	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1049.7	1049.7	1049.7	1049.7	1049.7
2.5°	1053.8	1045.6	1049.7	1048.7	1043.6
5°	1048.7	1041.5	1045.6	1044.6	1043.6
7.5°	1041.5	1034.4	1039.5	1038.5	1039.5
10°	1029.3	1023.1	1029.3	1030.3	1030.3
12.5°	1013.9	1008.8	1017.0	1019.0	1021.1
15°	997.5	993.4	1002.6	1006.7	1009.8
17.5°	977.0	974.0	985.2	990.3	994.4
20°	954.5	953.5	965.8	970.9	976.0
22.5°	928.9	928.9	943.2	949.4	956.5
25°	901.2	902.3	918.6	926.8	934.0
27.5°	871.5	872.6	892.0	902.3	910.5
30°	838.8	842.9	863.3	876.7	885.9
32.5°	806.0	811.1	833.6	849.0	859.2
35°	771.2	777.3	802.9	820.3	831.6
37.5°	735.3	742.5	770.1	789.6	802.9
40°	699.5	707.7	736.4	758.9	774.2
42.5°	661.6	670.8	702.6	729.2	745.6
45°	623.7	633.9	666.7	698.5	716.9
47.5°	585.8	598.1	632.9	667.7	687.2
50°	546.9	559.2	596.0	636.0	655.4
52.5°	508.0	522.3	563.3	604.2	623.7
55°	470.1	484.4	528.5	571.5	590.9
57.5°	431.2	445.5	493.6	538.7	558.2
60°	391.2	407.6	457.8	503.9	525.4
62.5°	352.3	369.7	423.0	472.1	492.6
65°	313.4	331.8	387.1	438.3	458.8
67.5°	273.4	295.0	352.3	404.5	426.0
70°	234.5	258.1	318.5	370.7	391.2
72.5°	196.6	222.2	284.7	338.0	350.3
75°	158.7	188.4	251.9	281.6	281.6
77.5°	122.9	155.7	215.1	226.3	232.5
80°	89.1	124.9	161.8	175.1	173.1
82.5°	59.4	95.2	115.7	115.7	112.7
85°	33.8	57.4	62.5	60.4	59.4
87.5°	14.3	21.5	19.5	15.4	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)