

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: P260557

Luminaire Tested: **24CZ-LD5-35-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260557  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3325.0 lumens  
Efficiency: N/A  
Efficacy: 137.8 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

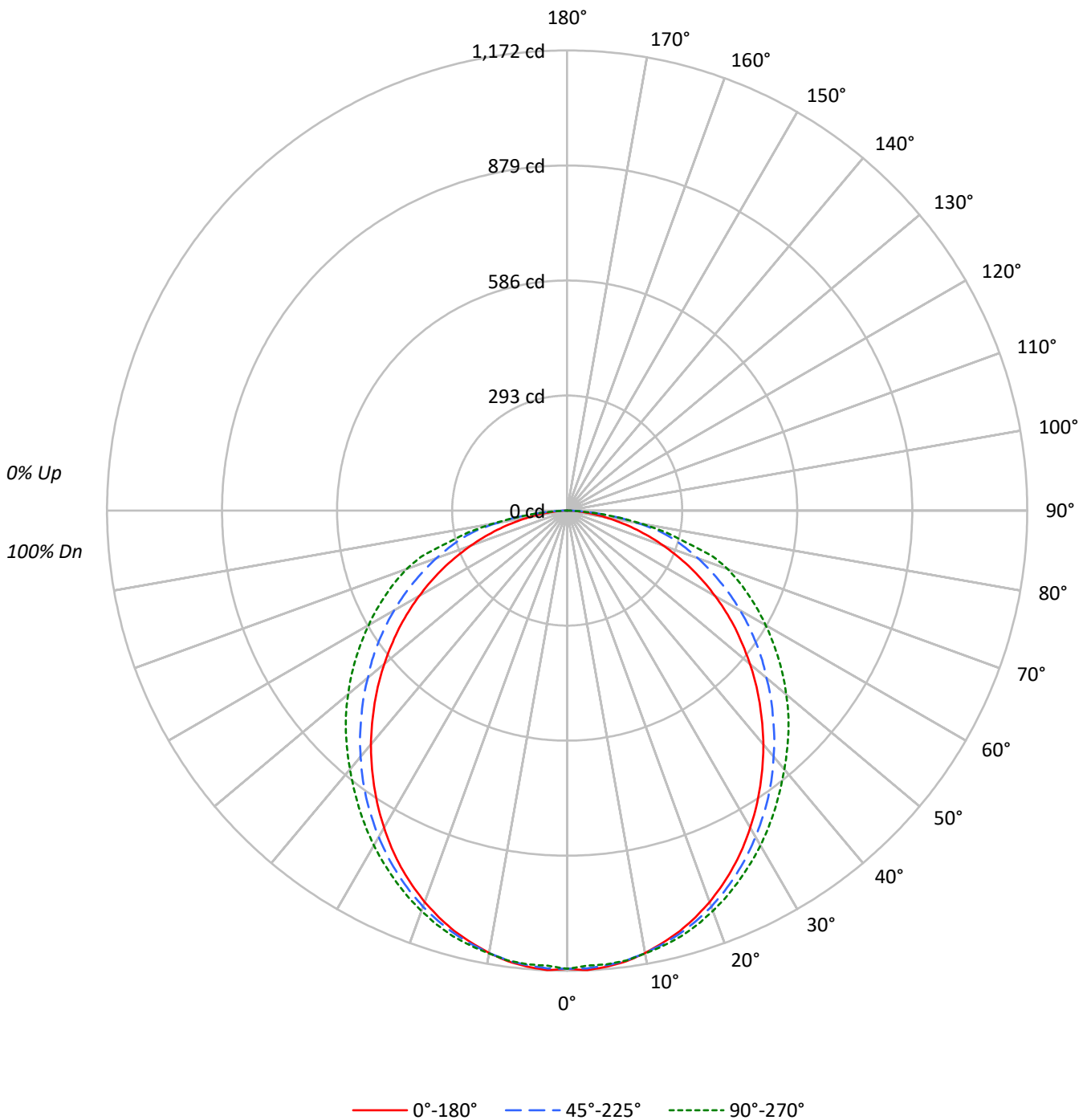
Input Watts (W): 24.13164  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1570	1570	1570
5°	1575	1570	1567
10°	1563	1563	1565
15°	1545	1552	1564
20°	1519	1537	1553
25°	1487	1516	1541
30°	1449	1491	1530
35°	1408	1466	1518
40°	1366	1438	1512
45°	1319	1410	1516
50°	1272	1387	1525
55°	1226	1378	1541
60°	1170	1369	1572
65°	1109	1370	1624
70°	1026	1393	1711
75°	918	1456	1628
80°	767	1394	1491
85°	580	1071	1019



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.3	3.3
10°-20°	313.8	9.4
20°-30°	469.2	14.1
30°-40°	556.6	16.7
40°-50°	572.9	17.2
50°-60°	525.5	15.8
60°-70°	424.9	12.8
70°-80°	275.8	8.3
80°-90°	76.0	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°	893.3	26.9
0°-40°	1449.9	43.6
0°-60°	2548.3	76.6
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1166	1158	1162	1161	1160	111
15°	1109	1104	1114	1119	1122	312
25°	1002	1003	1021	1030	1038	461
35°	857	864	892	912	924	536
45°	693	705	741	776	797	535
55°	522	538	587	635	657	467
65°	348	369	430	487	510	344
75°	176	210	280	313	313	188
85°	38	64	69	67	66	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1166.9	1166.9	1166.9	1166.9	1166.9
2.5°	1171.5	1162.3	1166.9	1165.8	1160.1
5°	1165.8	1157.8	1162.3	1161.2	1160.1
7.5°	1157.8	1149.8	1155.5	1154.4	1155.5
10°	1144.1	1137.3	1144.1	1145.3	1145.3
12.5°	1127.1	1121.4	1130.5	1132.7	1135.0
15°	1108.8	1104.3	1114.5	1119.1	1122.5
17.5°	1086.1	1082.7	1095.2	1100.9	1105.4
20°	1061.0	1059.9	1073.5	1079.2	1084.9
22.5°	1032.6	1032.6	1048.5	1055.3	1063.3
25°	1001.8	1003.0	1021.2	1030.3	1038.3
27.5°	968.8	970.0	991.6	1003.0	1012.1
30°	932.4	936.9	959.7	974.5	984.8
32.5°	896.0	901.6	926.7	943.8	955.2
35°	857.2	864.1	892.5	911.9	924.4
37.5°	817.4	825.4	856.1	877.7	892.5
40°	777.6	786.7	818.5	843.6	860.7
42.5°	735.4	745.7	781.0	810.6	828.8
45°	693.3	704.7	741.1	776.4	796.9
47.5°	651.2	664.8	703.6	742.3	763.9
50°	607.9	621.6	662.6	707.0	728.6
52.5°	564.7	580.6	626.1	671.7	693.3
55°	522.5	538.5	587.4	635.3	656.9
57.5°	479.3	495.2	548.7	598.8	620.5
60°	434.9	453.1	508.9	560.1	584.0
62.5°	391.6	411.0	470.2	524.8	547.6
65°	348.4	368.9	430.3	487.3	510.0
67.5°	304.0	327.9	391.6	449.7	473.6
70°	260.7	286.9	354.1	412.1	434.9
72.5°	218.6	247.0	316.5	375.7	389.3
75°	176.5	209.5	280.1	313.1	313.1
77.5°	136.6	173.0	239.1	251.6	258.4
80°	99.0	138.9	179.9	194.7	192.4
82.5°	66.0	105.9	128.6	128.6	125.2
85°	37.6	63.8	69.4	67.2	66.0
87.5°	15.9	23.9	21.6	17.1	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)