

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: P261108

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261108
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40SE-S-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3509.6 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

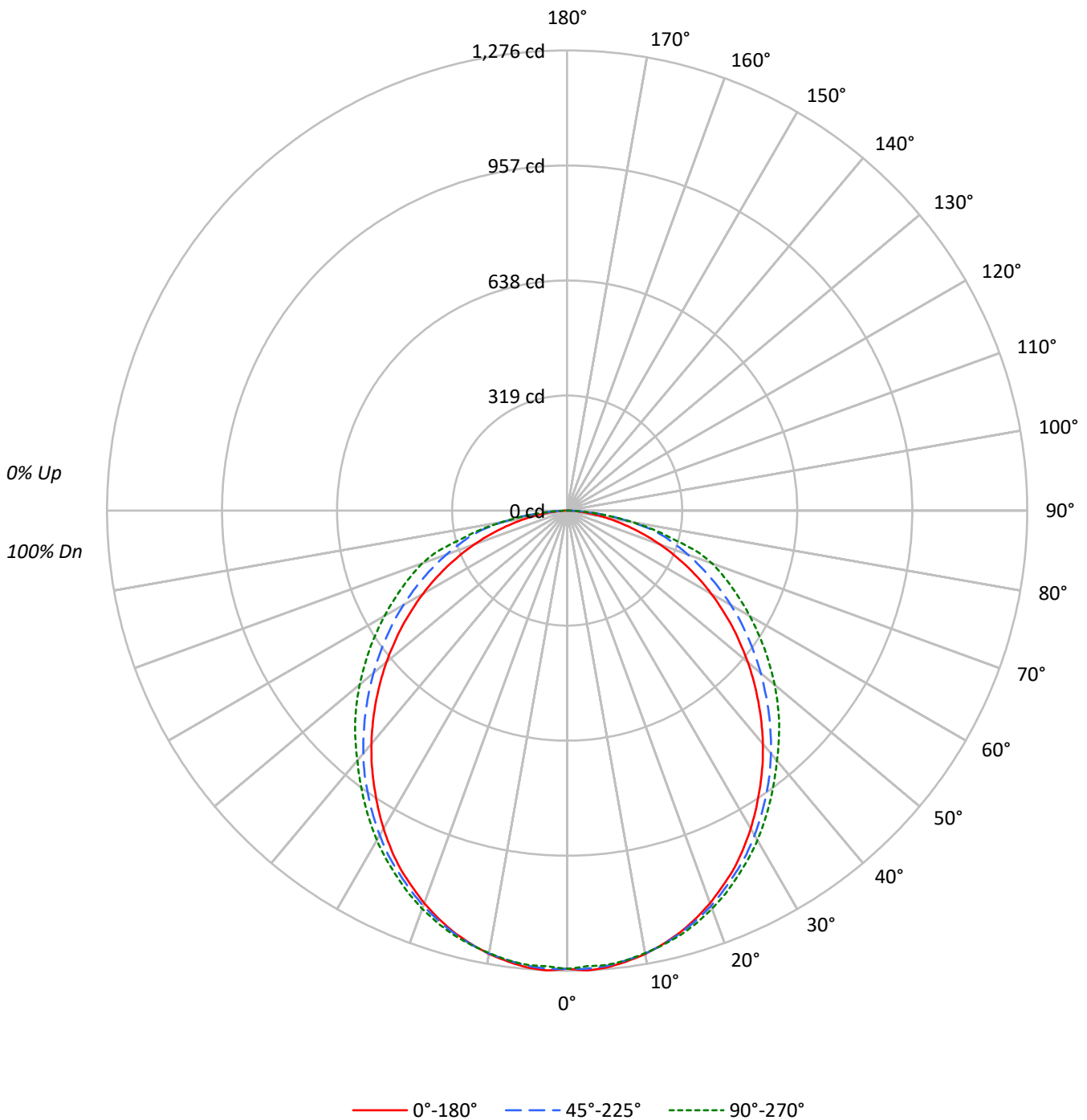
Input Watts (W): 30.988809
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1709	1709	1709
5°	1718	1711	1708
10°	1706	1704	1702
15°	1687	1690	1697
20°	1659	1670	1682
25°	1626	1644	1661
30°	1582	1615	1640
35°	1533	1581	1613
40°	1483	1544	1590
45°	1427	1504	1582
50°	1369	1467	1572
55°	1309	1435	1567
60°	1241	1411	1574
65°	1167	1394	1606
70°	1075	1401	1681
75°	953	1451	1566
80°	797	1375	1412
85°	594	1099	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.1	3.4
10°-20°	341.6	9.7
20°-30°	509.1	14.5
30°-40°	599.3	17.1
40°-50°	609.0	17.4
50°-60°	547.6	15.6
60°-70°	432.6	12.3
70°-80°	274.4	7.8
80°-90°	75.7	2.2
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°	970.9	27.7
0°-40°	1570.2	44.7
0°-60°	2726.8	77.7
0°-90°	3509.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3509.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1272	1261	1267	1265	1265	121
15°	1211	1205	1213	1217	1218	341
25°	1095	1094	1107	1114	1119	504
35°	933	939	962	973	982	584
45°	750	760	791	814	832	578
55°	558	572	612	652	668	499
65°	367	385	438	486	504	363
75°	183	215	279	304	301	195
85°	38	67	71	65	65	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1270.5	1270.5	1270.5	1270.5	1270.5
2.5°	1276.4	1267.0	1271.7	1269.4	1264.7
5°	1271.7	1261.2	1267.0	1264.7	1264.7
7.5°	1261.2	1253.0	1257.7	1256.5	1257.7
10°	1248.4	1240.2	1247.2	1247.2	1246.0
12.5°	1230.8	1223.8	1232.0	1232.0	1233.2
15°	1211.0	1205.1	1213.3	1216.8	1218.0
17.5°	1186.5	1180.6	1191.1	1194.6	1198.1
20°	1158.4	1156.1	1166.6	1170.1	1174.8
22.5°	1126.9	1126.9	1137.4	1142.1	1149.1
25°	1095.4	1094.2	1107.1	1114.1	1118.7
27.5°	1058.0	1059.2	1075.5	1082.5	1088.4
30°	1018.3	1020.6	1039.3	1047.5	1055.7
32.5°	976.3	980.9	1002.0	1011.3	1019.5
35°	933.1	938.9	962.3	972.8	982.1
37.5°	889.8	898.0	922.5	933.1	943.6
40°	844.3	851.3	879.3	892.2	905.0
42.5°	797.6	806.9	835.0	853.6	868.8
45°	749.7	760.2	790.6	813.9	831.5
47.5°	701.8	715.8	745.0	776.6	791.8
50°	654.0	668.0	700.7	735.7	750.9
52.5°	604.9	618.9	656.3	692.5	708.8
55°	558.2	572.2	611.9	651.6	668.0
57.5°	509.2	524.3	568.7	609.6	625.9
60°	461.3	476.5	524.3	567.5	585.1
62.5°	414.6	430.9	481.1	526.7	544.2
65°	366.7	385.4	437.9	485.8	504.5
67.5°	320.0	341.0	395.9	446.1	465.9
70°	273.3	297.8	356.2	407.6	427.4
72.5°	227.7	254.6	316.5	367.9	378.4
75°	183.3	214.9	279.1	303.6	301.3
77.5°	141.3	176.3	237.1	241.7	248.7
80°	102.8	141.3	177.5	186.8	182.2
82.5°	67.7	106.3	127.3	122.6	121.4
85°	38.5	66.6	71.2	65.4	65.4
87.5°	16.3	26.9	23.4	17.5	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)