

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: P276037

Luminaire Tested: **24CZ2-50-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276037
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3681.4 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

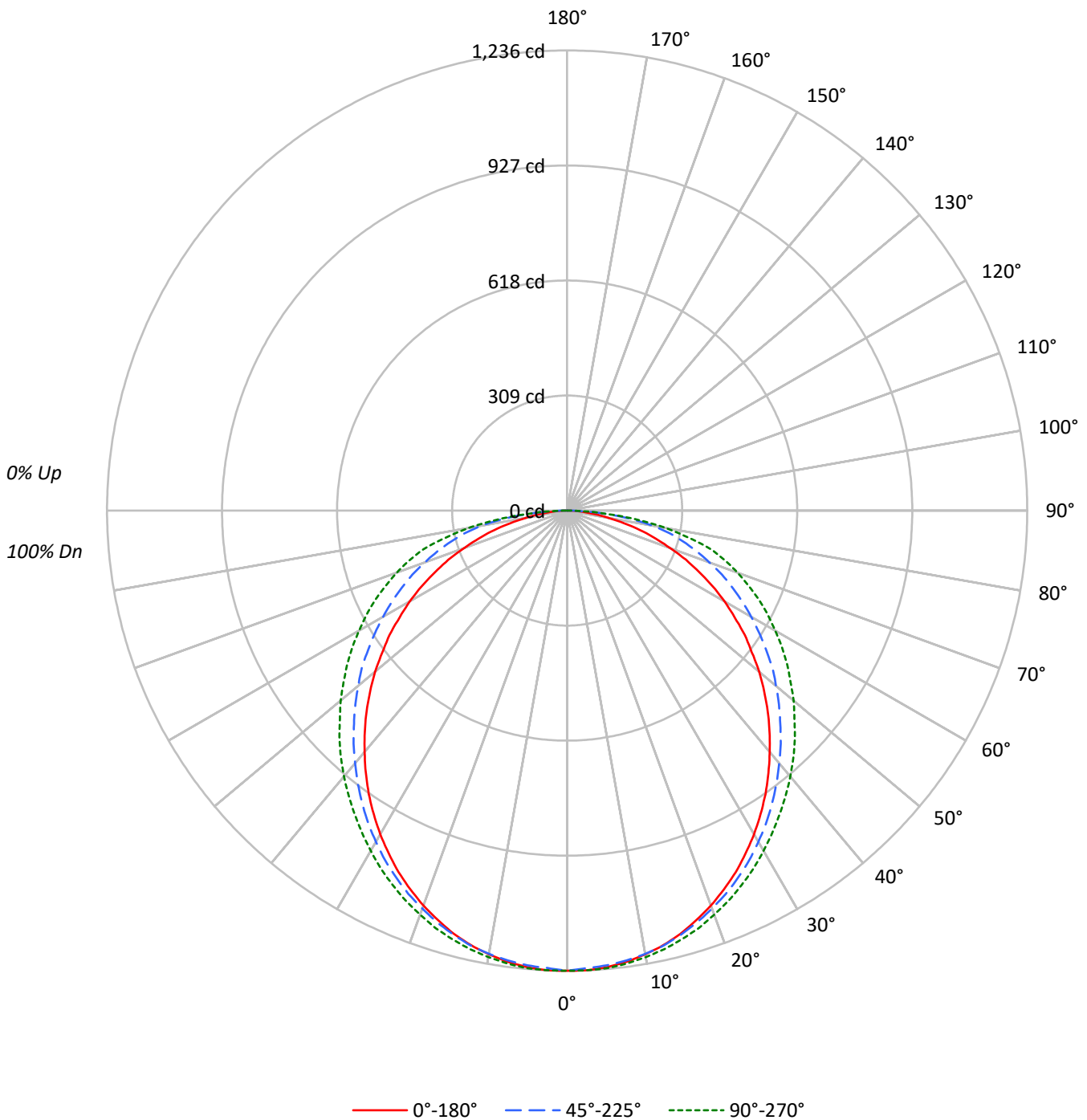
Input Watts (W): 40.624353
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276037

CATALOG NUMBER: 24CZ2-50-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P276037

CATALOG NUMBER: 24CZ2-50-UNV-L93050-W2A1-U-3000K

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	100	96	92	96	93	89	92	89	87	89	86	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	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1663	1663	1663
5°	1663	1656	1666
10°	1653	1652	1664
15°	1640	1643	1660
20°	1617	1629	1654
25°	1591	1614	1647
30°	1560	1596	1640
35°	1526	1576	1635
40°	1487	1556	1638
45°	1450	1541	1646
50°	1409	1533	1661
55°	1366	1530	1692
60°	1313	1537	1736
65°	1244	1561	1811
70°	1155	1600	1914
75°	1054	1680	2076
80°	866	1808	2075
85°	664	1669	1783



TEST NUMBER: P276037

CATALOG NUMBER: 24CZ2-50-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	3.2
10°-20°	333.7	9.1
20°-30°	502.2	13.6
30°-40°	601.9	16.3
40°-50°	627.2	17.0
50°-60°	583.5	15.9
60°-70°	480.6	13.1
70°-80°	327.3	8.9
80°-90°	108.0	2.9
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°	952.9	25.9
0°-40°	1554.7	42.2
0°-60°	2765.4	75.1
0°-90°	3681.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1231	1231	1226	1232	1234	117
15°	1177	1178	1180	1191	1192	332
25°	1071	1076	1087	1106	1110	493
35°	929	940	960	985	995	581
45°	762	778	810	850	865	588
55°	582	602	652	704	721	519
65°	391	424	490	548	569	388
75°	203	248	323	381	399	214
85°	43	84	108	116	116	53
90°	0	0	0	0	0	



TEST NUMBER: P276037

CATALOG NUMBER: 24CZ2-50-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.0	1236.0	1236.0	1236.0	1236.0
2.5°	1236.0	1236.0	1229.9	1236.0	1236.0
5°	1231.1	1231.1	1226.2	1232.3	1233.6
7.5°	1222.5	1223.7	1218.8	1226.2	1227.4
10°	1210.2	1211.4	1209.0	1216.4	1217.6
12.5°	1195.5	1196.7	1196.7	1205.3	1206.5
15°	1177.0	1178.3	1179.5	1190.6	1191.8
17.5°	1153.7	1157.4	1159.8	1173.4	1175.8
20°	1129.1	1132.8	1137.7	1152.5	1154.9
22.5°	1100.9	1105.8	1114.4	1130.4	1134.0
25°	1071.4	1076.3	1087.4	1105.8	1109.5
27.5°	1038.2	1045.6	1059.1	1078.8	1083.7
30°	1003.8	1011.2	1027.2	1048.0	1055.4
32.5°	966.9	976.8	995.2	1018.6	1025.9
35°	928.9	939.9	959.6	985.4	995.2
37.5°	888.3	900.6	923.9	952.2	964.5
40°	846.5	861.3	885.9	919.0	932.5
42.5°	804.8	818.3	849.0	884.6	899.4
45°	761.8	777.7	809.7	850.2	865.0
47.5°	717.5	733.5	771.6	814.6	828.1
50°	673.3	689.3	732.3	777.7	793.7
52.5°	625.4	646.3	695.4	740.9	756.8
55°	582.4	602.0	652.4	704.0	721.2
57.5°	533.2	556.6	611.9	665.9	684.4
60°	487.8	512.3	571.3	626.6	645.0
62.5°	441.1	468.1	530.8	587.3	608.2
65°	390.7	423.9	490.2	548.0	568.9
67.5°	345.3	379.7	449.7	508.7	527.1
70°	293.6	335.4	406.7	465.7	486.5
72.5°	249.4	291.2	366.1	423.9	444.8
75°	202.7	248.2	323.1	380.9	399.3
77.5°	156.0	206.4	281.4	325.6	331.7
80°	111.8	164.6	233.4	259.2	267.8
82.5°	78.6	126.6	172.0	189.2	194.1
85°	43.0	83.5	108.1	115.5	115.5
87.5°	18.4	35.6	43.0	44.2	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)