

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: P260984

Luminaire Tested: **24CZ-LD5-40-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260984
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-LD5-40-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4362.0 lumens
Efficiency: N/A
Efficacy: 150.8 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

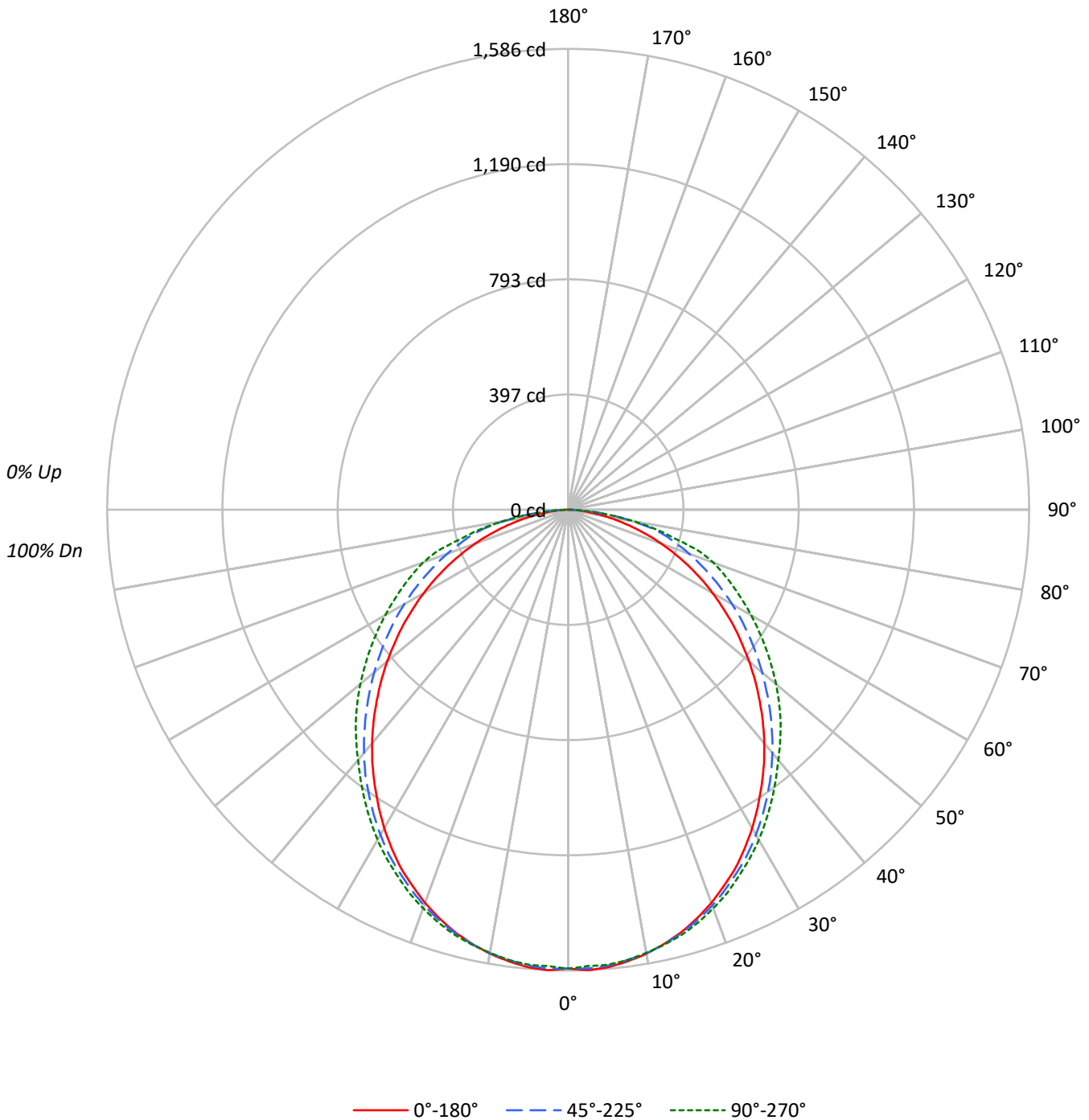
Input Watts (W): 28.922256
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2125	2125	2125
5°	2135	2127	2123
10°	2120	2118	2116
15°	2097	2101	2109
20°	2062	2076	2091
25°	2021	2043	2064
30°	1966	2007	2039
35°	1905	1964	2005
40°	1843	1920	1976
45°	1773	1870	1966
50°	1701	1823	1954
55°	1628	1784	1947
60°	1543	1754	1957
65°	1451	1733	1996
70°	1336	1742	2090
75°	1185	1803	1947
80°	989	1709	1754
85°	739	1366	1255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.3	3.4
10°-20°	424.6	9.7
20°-30°	632.8	14.5
30°-40°	744.9	17.1
40°-50°	757.0	17.4
50°-60°	680.6	15.6
60°-70°	537.7	12.3
70°-80°	341.1	7.8
80°-90°	94.1	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°	1206.7	27.7
0°-40°	1951.6	44.7
0°-60°	3389.1	77.7
0°-90°	4362.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4362.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1581	1568	1575	1572	1572	150
15°	1505	1498	1508	1512	1514	424
25°	1361	1360	1376	1385	1390	626
35°	1160	1167	1196	1209	1221	726
45°	932	945	983	1012	1033	719
55°	694	711	760	810	830	620
65°	456	479	544	604	627	451
75°	228	267	347	377	374	243
85°	48	83	88	81	81	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1579.1	1579.1	1579.1	1579.1	1579.1
2.5°	1586.4	1574.8	1580.6	1577.7	1571.9
5°	1580.6	1567.5	1574.8	1571.9	1571.9
7.5°	1567.5	1557.4	1563.2	1561.7	1563.2
10°	1551.5	1541.4	1550.1	1550.1	1548.6
12.5°	1529.8	1521.1	1531.2	1531.2	1532.7
15°	1505.1	1497.8	1508.0	1512.4	1513.8
17.5°	1474.6	1467.4	1480.4	1484.8	1489.1
20°	1439.8	1436.9	1449.9	1454.3	1460.1
22.5°	1400.6	1400.6	1413.7	1419.5	1428.2
25°	1361.4	1360.0	1375.9	1384.6	1390.4
27.5°	1315.0	1316.4	1336.7	1345.4	1352.7
30°	1265.6	1268.5	1291.7	1301.9	1312.1
32.5°	1213.4	1219.2	1245.3	1256.9	1267.1
35°	1159.7	1166.9	1196.0	1209.0	1220.6
37.5°	1106.0	1116.1	1146.6	1159.7	1172.7
40°	1049.4	1058.1	1092.9	1108.9	1124.8
42.5°	991.3	1002.9	1037.8	1061.0	1079.8
45°	931.8	944.9	982.6	1011.6	1033.4
47.5°	872.3	889.7	926.0	965.2	984.0
50°	812.8	830.2	870.8	914.4	933.3
52.5°	751.8	769.2	815.7	860.7	881.0
55°	693.8	711.2	760.5	809.9	830.2
57.5°	632.8	651.7	706.8	757.6	778.0
60°	573.3	592.2	651.7	705.4	727.2
62.5°	515.2	535.6	598.0	654.6	676.4
65°	455.7	479.0	544.3	603.8	627.0
67.5°	397.7	423.8	492.0	554.4	579.1
70°	339.6	370.1	442.7	506.5	531.2
72.5°	283.0	316.4	393.3	457.2	470.3
75°	227.9	267.1	346.9	377.4	374.5
77.5°	175.6	219.2	294.6	300.4	309.1
80°	127.7	175.6	220.6	232.2	226.4
82.5°	84.2	132.1	158.2	152.4	150.9
85°	47.9	82.7	88.5	81.3	81.3
87.5°	20.3	33.4	29.0	21.8	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)