

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: P#

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
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-L830-CD1-U  
Description: CRUZE 2x4 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

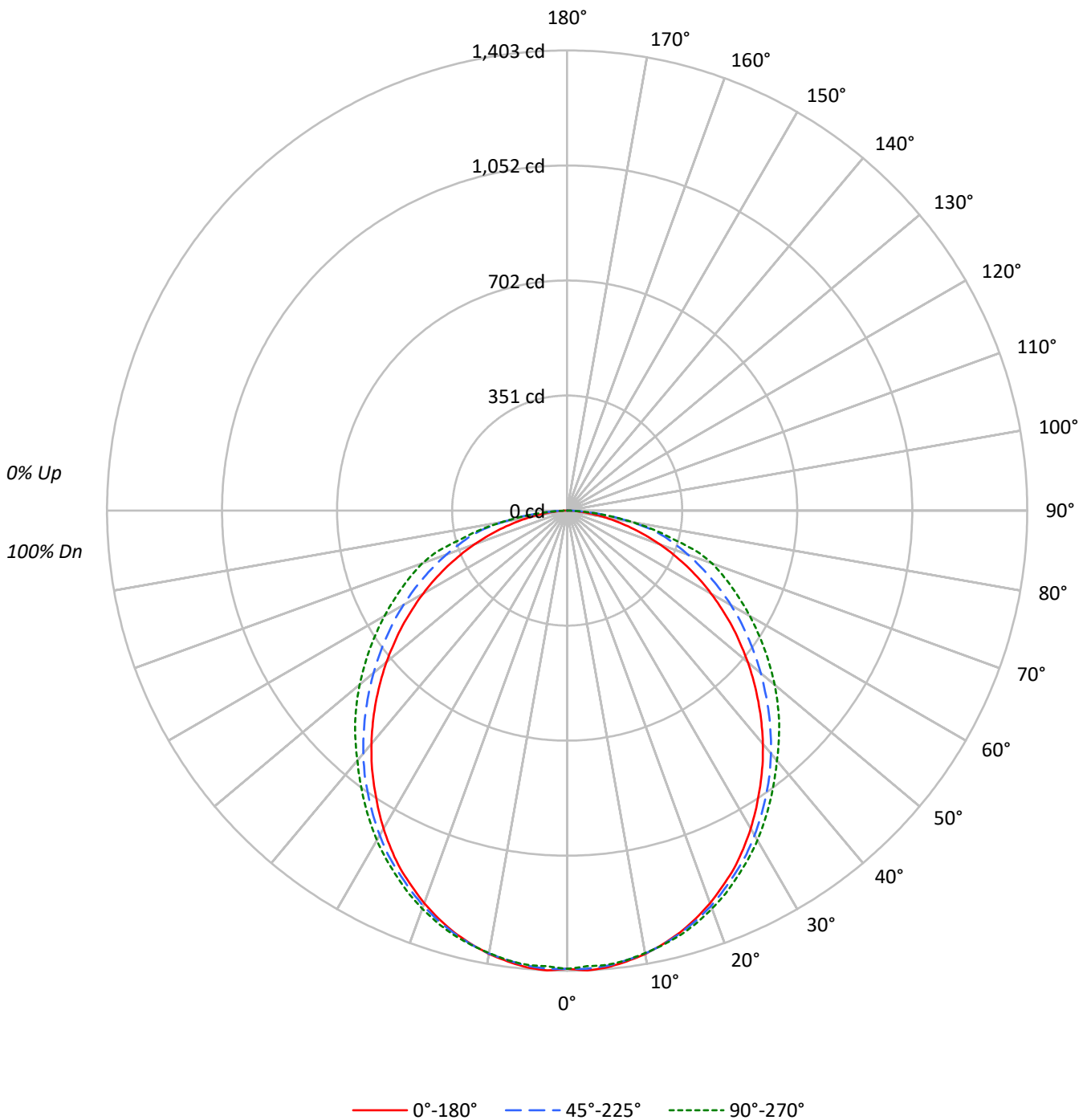
Lumens per Lamp: N/A  
Luminaire Lumens: 3858.9 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 32.55  
Input Voltage (V): NR  
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	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°	1880	1880	1880
5°	1884	1873	1870
10°	1867	1856	1855
15°	1842	1832	1841
20°	1807	1802	1816
25°	1767	1763	1785
30°	1715	1723	1753
35°	1656	1676	1714
40°	1597	1626	1677
45°	1530	1571	1657
50°	1462	1517	1631
55°	1390	1467	1608
60°	1308	1421	1593
65°	1218	1376	1595
70°	1106	1345	1626
75°	959	1331	1451
80°	767	1162	1209
85°	509	753	706



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.1	3.4
10°-20°	375.6	9.7
20°-30°	559.8	14.5
30°-40°	659.0	17.1
40°-50°	669.7	17.4
50°-60°	602.1	15.6
60°-70°	475.7	12.3
70°-80°	301.8	7.8
80°-90°	83.3	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°	1067.5	27.7
0°-40°	1726.5	44.7
0°-60°	2998.2	77.7
0°-90°	3858.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3858.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1397	1397	1397	1397	1397	
5°	1398	1387	1393	1391	1391	133
15°	1332	1325	1334	1338	1339	375
25°	1204	1203	1217	1225	1230	554
35°	1026	1032	1058	1070	1080	642
45°	824	836	869	895	914	636
55°	614	629	673	716	734	548
65°	403	424	482	534	555	399
75°	202	236	307	334	331	215
85°	42	73	78	72	72	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1397.0	1397.0	1397.0	1397.0	1397.0
2.5°	1403.4	1393.2	1398.3	1395.7	1390.6
5°	1398.3	1386.7	1393.2	1390.6	1390.6
7.5°	1386.7	1377.7	1382.9	1381.6	1382.9
10°	1372.6	1363.6	1371.3	1371.3	1370.0
12.5°	1353.4	1345.7	1354.6	1354.6	1355.9
15°	1331.5	1325.1	1334.1	1337.9	1339.2
17.5°	1304.5	1298.1	1309.7	1313.6	1317.4
20°	1273.8	1271.2	1282.7	1286.6	1291.7
22.5°	1239.1	1239.1	1250.6	1255.7	1263.5
25°	1204.4	1203.1	1217.2	1224.9	1230.1
27.5°	1163.3	1164.6	1182.6	1190.3	1196.7
30°	1119.7	1122.2	1142.8	1151.8	1160.7
32.5°	1073.4	1078.5	1101.7	1112.0	1120.9
35°	1025.9	1032.4	1058.0	1069.6	1079.9
37.5°	978.4	987.4	1014.3	1025.9	1037.5
40°	928.3	936.0	966.8	981.0	995.1
42.5°	876.9	887.2	918.1	938.6	955.3
45°	824.3	835.9	869.2	895.0	914.2
47.5°	771.7	787.1	819.2	853.9	870.6
50°	719.1	734.4	770.4	808.9	825.6
52.5°	665.1	680.5	721.6	761.4	779.4
55°	613.8	629.2	672.8	716.5	734.4
57.5°	559.8	576.6	625.3	670.2	688.2
60°	507.2	523.8	576.6	624.1	643.2
62.5°	455.8	473.8	529.1	579.1	598.3
65°	403.2	423.7	481.5	534.2	554.7
67.5°	351.8	375.0	435.3	490.5	512.3
70°	300.5	327.5	391.6	448.1	470.0
72.5°	250.4	279.9	348.0	404.4	416.0
75°	201.6	236.3	306.8	333.8	331.3
77.5°	155.3	193.9	260.7	265.8	273.5
80°	113.0	155.3	195.1	205.5	200.3
82.5°	74.5	116.8	139.9	134.8	133.6
85°	42.4	73.1	78.3	71.9	71.9
87.5°	18.0	29.5	25.6	19.3	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)