

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-LD5-40-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 (P25689)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40-UNV-L830-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

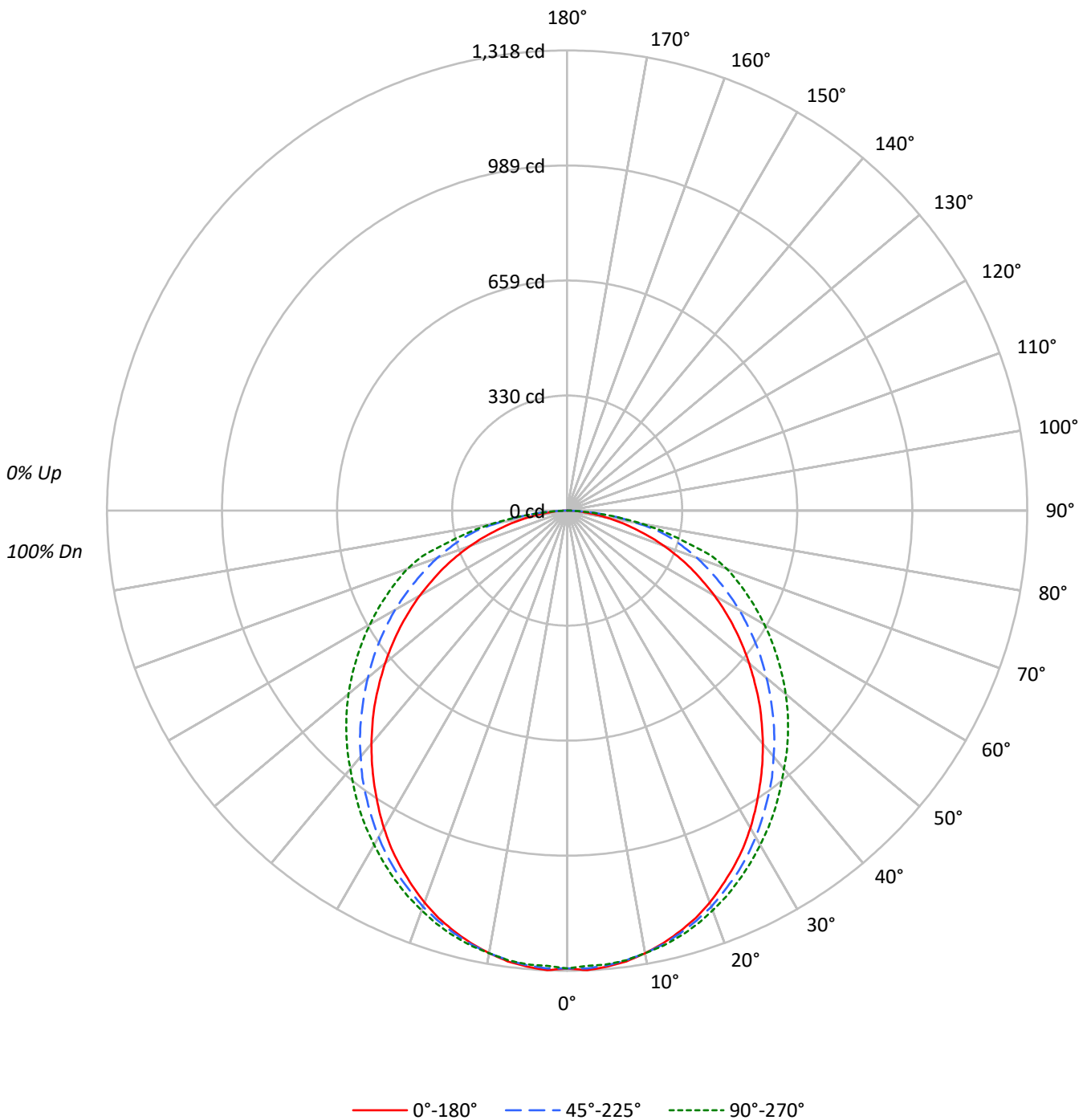
Lumens per Lamp: N/A
Luminaire Lumens: 3731.5 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 29.04
Input Voltage (V): NR
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



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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	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69	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	33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28		40	33	28		39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1764	1764	1764
5°	1767	1758	1755
10°	1751	1742	1743
15°	1727	1721	1733
20°	1695	1696	1714
25°	1654	1664	1692
30°	1608	1628	1670
35°	1553	1588	1650
40°	1500	1548	1628
45°	1444	1507	1622
50°	1383	1467	1615
55°	1322	1434	1609
60°	1257	1402	1616
65°	1181	1372	1635
70°	1084	1356	1682
75°	948	1350	1546
80°	776	1187	1311
85°	534	769	749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	3.3
10°-20°	352.9	9.5
20°-30°	527.6	14.1
30°-40°	625.6	16.8
40°-50°	643.4	17.2
50°-60°	588.5	15.8
60°-70°	474.6	12.7
70°-80°	308.1	8.3
80°-90°	86.7	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°	1004.5	26.9
0°-40°	1630.1	43.7
0°-60°	2862.0	76.7
0°-90°	3731.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3731.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1311	1302	1308	1305	1305	124
15°	1248	1242	1253	1258	1260	352
25°	1127	1127	1149	1158	1167	519
35°	962	971	1003	1023	1040	602
45°	778	792	834	872	895	600
55°	584	603	658	710	735	522
65°	391	414	480	542	569	387
75°	199	236	311	349	353	212
85°	44	74	80	79	76	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1311.3	1311.3	1311.3	1311.3	1311.3
2.5°	1317.6	1307.5	1312.5	1310.0	1304.9
5°	1311.3	1302.4	1307.5	1304.9	1304.9
7.5°	1302.4	1293.5	1298.6	1298.6	1298.6
10°	1287.2	1279.6	1287.2	1287.2	1287.2
12.5°	1269.4	1263.0	1272.0	1273.2	1275.8
15°	1247.8	1241.5	1252.9	1258.0	1260.5
17.5°	1223.7	1218.6	1231.3	1237.7	1241.5
20°	1194.5	1190.6	1207.2	1213.5	1218.6
22.5°	1161.5	1161.5	1178.0	1185.6	1194.5
25°	1127.2	1127.2	1148.8	1157.7	1166.6
27.5°	1090.4	1091.6	1115.8	1128.5	1137.3
30°	1049.8	1054.9	1080.2	1095.4	1105.6
32.5°	1006.6	1013.0	1042.1	1061.2	1073.9
35°	962.2	971.1	1002.8	1023.2	1039.6
37.5°	917.8	929.2	963.5	986.3	1002.8
40°	872.1	884.7	920.3	947.0	966.0
42.5°	825.1	839.0	878.4	908.9	931.8
45°	778.1	792.1	834.0	872.1	894.9
47.5°	728.6	745.1	789.5	834.0	856.8
50°	680.4	698.2	745.1	793.3	817.5
52.5°	632.1	652.5	702.0	752.8	776.8
55°	583.9	603.0	657.5	709.6	735.0
57.5°	535.7	556.0	613.1	667.7	694.4
60°	487.4	509.0	568.7	625.8	652.5
62.5°	438.0	460.8	524.2	583.9	610.6
65°	390.9	413.8	479.8	542.1	568.7
67.5°	342.8	368.1	436.6	500.2	528.1
70°	294.5	322.4	394.8	458.3	486.2
72.5°	246.2	278.0	351.6	415.1	435.4
75°	199.3	236.1	311.0	349.1	352.9
77.5°	156.2	194.2	265.3	280.5	288.1
80°	114.3	156.2	199.3	218.3	217.1
82.5°	76.2	119.3	143.4	146.0	143.4
85°	44.5	73.6	80.0	78.7	76.2
87.5°	19.0	29.2	25.4	21.6	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)