

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: P230035

Luminaire Tested: **24CZ-LD5-35-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230035
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-LD5-35-S-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3421.0 lumens
Efficiency: N/A
Efficacy: 135.1 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

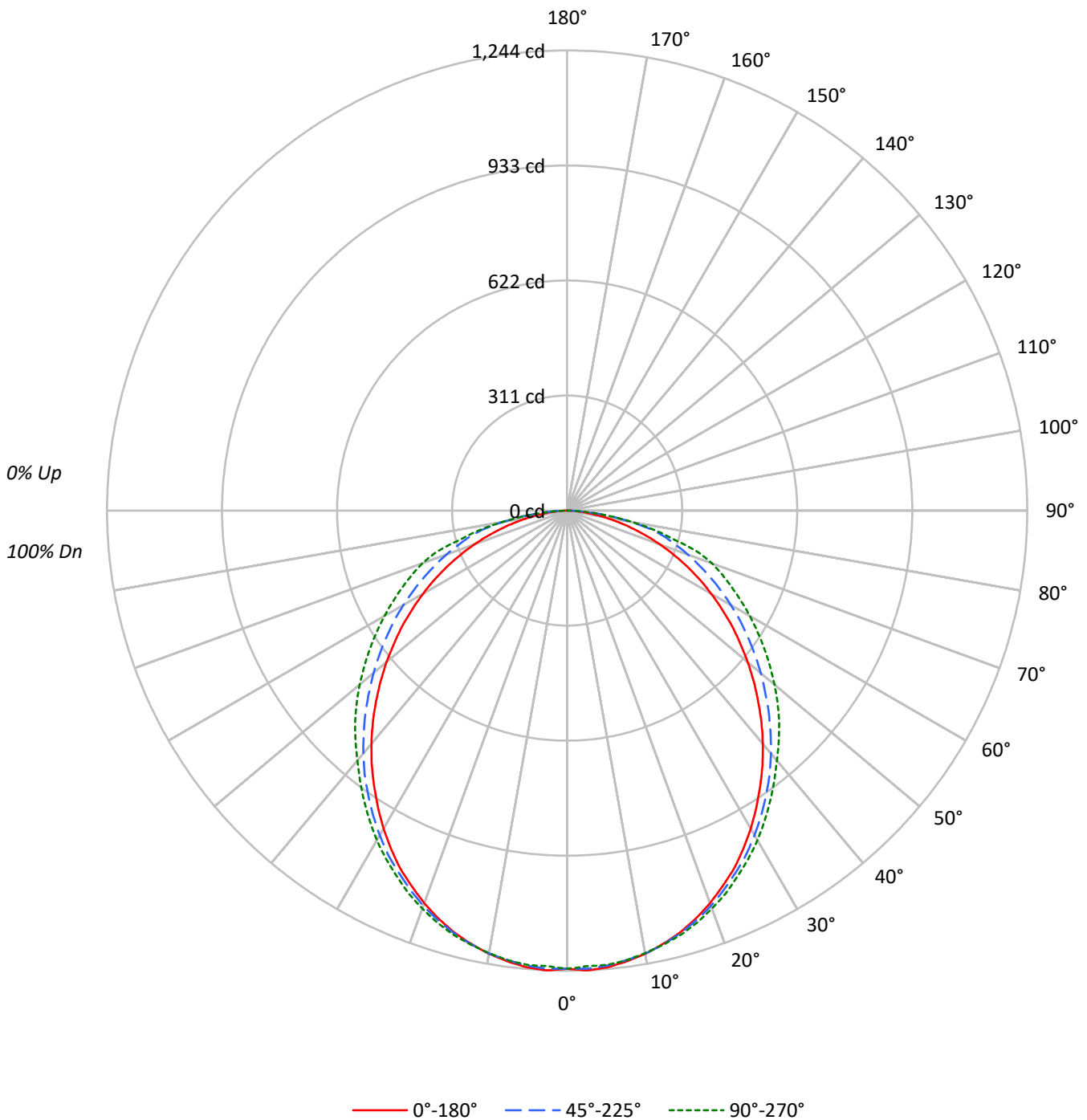
Input Watts (W): 25.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230035

CATALOG NUMBER: 24CZ-LD5-35-S-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230035

CATALOG NUMBER: 24CZ-LD5-35-S-UNV-L950-CD1-U

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°	1666	1666	1666
5°	1674	1668	1665
10°	1662	1661	1659
15°	1644	1647	1654
20°	1617	1628	1640
25°	1585	1602	1619
30°	1542	1574	1599
35°	1494	1541	1572
40°	1446	1505	1550
45°	1391	1466	1542
50°	1334	1430	1532
55°	1276	1399	1527
60°	1210	1375	1535
65°	1138	1359	1565
70°	1048	1366	1639
75°	929	1415	1527
80°	776	1340	1376
85°	580	1071	983



TEST NUMBER: P230035

CATALOG NUMBER: 24CZ-LD5-35-S-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.4
10°-20°	333.0	9.7
20°-30°	496.3	14.5
30°-40°	584.2	17.1
40°-50°	593.7	17.4
50°-60°	533.7	15.6
60°-70°	421.7	12.3
70°-80°	267.5	7.8
80°-90°	73.8	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°	946.4	27.7
0°-40°	1530.6	44.7
0°-60°	2658.0	77.7
0°-90°	3421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1240	1229	1235	1233	1233	118
15°	1180	1175	1183	1186	1187	333
25°	1068	1067	1079	1086	1090	491
35°	910	915	938	948	957	569
45°	731	741	771	793	810	564
55°	544	558	596	635	651	486
65°	357	376	427	474	492	354
75°	179	209	272	296	294	190
85°	38	65	69	64	64	46
90°	0	0	0	0	0	



TEST NUMBER: P230035

CATALOG NUMBER: 24CZ-LD5-35-S-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1238.5	1238.5	1238.5	1238.5	1238.5
2.5°	1244.2	1235.1	1239.6	1237.3	1232.8
5°	1239.6	1229.4	1235.1	1232.8	1232.8
7.5°	1229.4	1221.4	1225.9	1224.8	1225.9
10°	1216.8	1208.9	1215.7	1215.7	1214.6
12.5°	1199.8	1192.9	1200.9	1200.9	1202.0
15°	1180.4	1174.7	1182.7	1186.1	1187.2
17.5°	1156.5	1150.8	1161.1	1164.5	1167.9
20°	1129.2	1126.9	1137.2	1140.6	1145.1
22.5°	1098.5	1098.5	1108.7	1113.3	1120.1
25°	1067.7	1066.6	1079.1	1085.9	1090.5
27.5°	1031.3	1032.4	1048.4	1055.2	1060.9
30°	992.6	994.9	1013.1	1021.1	1029.0
32.5°	951.6	956.2	976.7	985.8	993.7
35°	909.5	915.2	938.0	948.2	957.3
37.5°	867.4	875.3	899.3	909.5	919.7
40°	823.0	829.8	857.1	869.7	882.2
42.5°	777.5	786.6	813.9	832.1	846.9
45°	730.8	741.0	770.6	793.4	810.5
47.5°	684.1	697.8	726.2	757.0	771.8
50°	637.4	651.1	683.0	717.1	731.9
52.5°	589.6	603.3	639.7	675.0	690.9
55°	544.1	557.8	596.5	635.2	651.1
57.5°	496.3	511.1	554.3	594.2	610.1
60°	449.6	464.4	511.1	553.2	570.3
62.5°	404.1	420.0	469.0	513.4	530.4
65°	357.4	375.6	426.9	473.5	491.7
67.5°	311.9	332.4	385.9	434.8	454.2
70°	266.4	290.3	347.2	397.3	416.6
72.5°	222.0	248.1	308.5	358.6	368.8
75°	178.7	209.4	272.1	296.0	293.7
77.5°	137.7	171.9	231.1	235.6	242.5
80°	100.2	137.7	173.0	182.1	177.6
82.5°	66.0	103.6	124.1	119.5	118.4
85°	37.6	64.9	69.4	63.7	63.7
87.5°	15.9	26.2	22.8	17.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)