

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: P229963

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3354.0 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

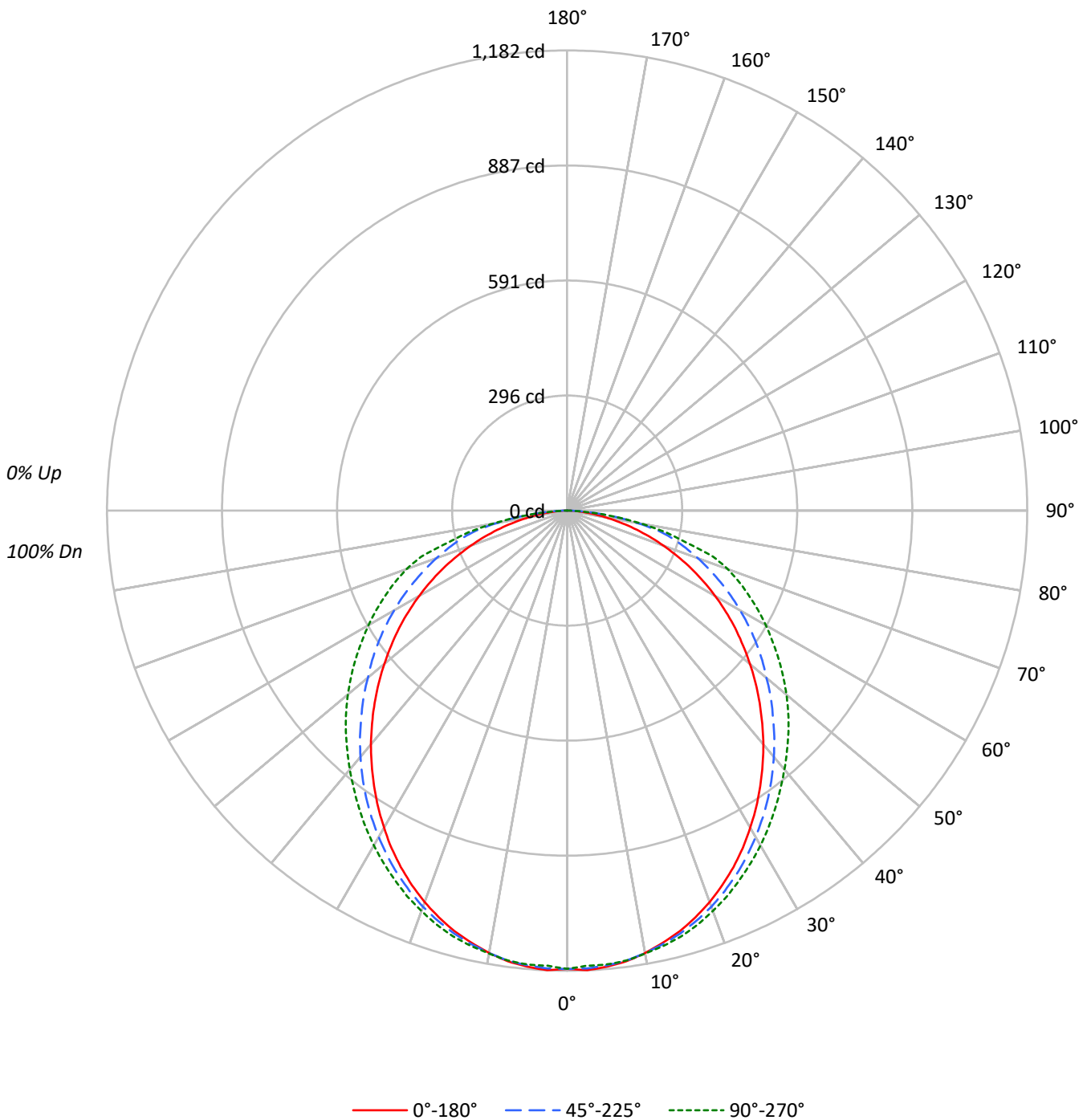
Input Watts (W): 25.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	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	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1584	1584	1584
5°	1588	1584	1581
10°	1577	1577	1578
15°	1558	1566	1577
20°	1532	1551	1567
25°	1500	1529	1555
30°	1461	1504	1543
35°	1420	1479	1532
40°	1378	1450	1525
45°	1331	1423	1530
50°	1284	1399	1539
55°	1236	1390	1554
60°	1181	1381	1585
65°	1119	1382	1638
70°	1035	1405	1726
75°	925	1469	1642
80°	774	1406	1504
85°	585	1082	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	3.3
10°-20°	316.6	9.4
20°-30°	473.3	14.1
30°-40°	561.4	16.7
40°-50°	577.9	17.2
50°-60°	530.1	15.8
60°-70°	428.6	12.8
70°-80°	278.2	8.3
80°-90°	76.7	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°	901.1	26.9
0°-40°	1462.5	43.6
0°-60°	2570.5	76.6
0°-90°	3354.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3354.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1176	1168	1172	1171	1170	112
15°	1118	1114	1124	1129	1132	315
25°	1011	1012	1030	1039	1047	465
35°	865	872	900	920	932	541
45°	699	711	748	783	804	540
55°	527	543	593	641	663	471
65°	351	372	434	492	514	347
75°	178	211	282	316	316	189
85°	38	64	70	68	67	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1177.1	1177.1	1177.1	1177.1	1177.1
2.5°	1181.7	1172.5	1177.1	1175.9	1170.2
5°	1175.9	1167.9	1172.5	1171.3	1170.2
7.5°	1167.9	1159.9	1165.6	1164.4	1165.6
10°	1154.1	1147.2	1154.1	1155.3	1155.3
12.5°	1136.9	1131.1	1140.3	1142.6	1144.9
15°	1118.5	1113.9	1124.3	1128.8	1132.3
17.5°	1095.5	1092.1	1104.7	1110.5	1115.1
20°	1070.3	1069.1	1082.9	1088.7	1094.4
22.5°	1041.6	1041.6	1057.6	1064.5	1072.6
25°	1010.6	1011.7	1030.1	1039.3	1047.3
27.5°	977.3	978.4	1000.2	1011.7	1020.9
30°	940.5	945.1	968.1	983.0	993.3
32.5°	903.8	909.5	934.8	952.0	963.5
35°	864.7	871.6	900.3	919.8	932.5
37.5°	824.5	832.6	863.6	885.4	900.3
40°	784.3	793.5	825.7	850.9	868.2
42.5°	741.8	752.2	787.8	817.6	836.0
45°	699.4	710.8	747.6	783.2	803.9
47.5°	656.9	670.6	709.7	748.7	770.6
50°	613.2	627.0	668.4	713.1	735.0
52.5°	569.6	585.7	631.6	677.5	699.4
55°	527.1	543.2	592.6	640.8	662.6
57.5°	483.5	499.5	553.5	604.0	625.9
60°	438.7	457.1	513.3	565.0	589.1
62.5°	395.0	414.6	474.3	529.4	552.4
65°	351.4	372.1	434.1	491.5	514.5
67.5°	306.6	330.7	395.0	453.6	477.7
70°	263.0	289.4	357.1	415.7	438.7
72.5°	220.5	249.2	319.2	379.0	392.7
75°	178.0	211.3	282.5	315.8	315.8
77.5°	137.8	174.6	241.2	253.8	260.7
80°	99.9	140.1	181.4	196.4	194.1
82.5°	66.6	106.8	129.8	129.8	126.3
85°	37.9	64.3	70.1	67.8	66.6
87.5°	16.1	24.1	21.8	17.2	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)