

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: P229966

Luminaire Tested: **24CZ-LD5-40-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229966
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-LD5-40-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3497.0 lumens
Efficiency: N/A
Efficacy: 120.4 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

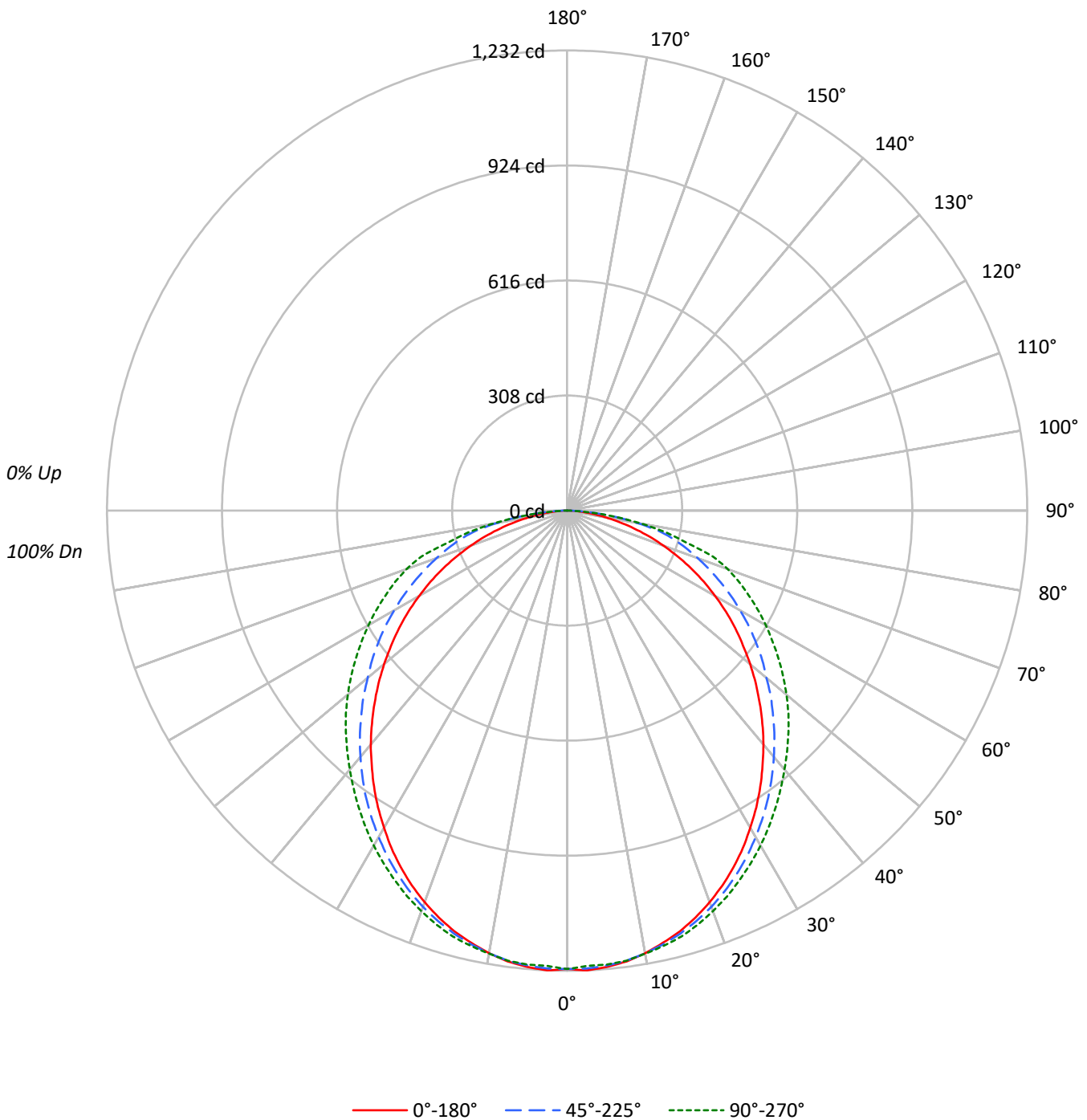
Input Watts (W): 29.04
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1651	1651	1651
5°	1656	1651	1648
10°	1644	1644	1646
15°	1624	1633	1645
20°	1598	1617	1634
25°	1564	1594	1621
30°	1523	1568	1609
35°	1481	1542	1597
40°	1436	1512	1590
45°	1388	1483	1595
50°	1338	1459	1604
55°	1289	1449	1621
60°	1231	1440	1653
65°	1167	1441	1708
70°	1079	1465	1799
75°	965	1531	1712
80°	807	1466	1567
85°	610	1127	1071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	3.3
10°-20°	330.1	9.4
20°-30°	493.4	14.1
30°-40°	585.4	16.7
40°-50°	602.5	17.2
50°-60°	552.7	15.8
60°-70°	446.9	12.8
70°-80°	290.0	8.3
80°-90°	80.0	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°	939.5	26.9
0°-40°	1524.9	43.6
0°-60°	2680.1	76.6
0°-90°	3497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1226	1218	1222	1221	1220	116
15°	1166	1161	1172	1177	1181	329
25°	1054	1055	1074	1084	1092	485
35°	902	909	939	959	972	564
45°	729	741	780	817	838	563
55°	550	566	618	668	691	491
65°	366	388	453	512	536	362
75°	186	220	294	329	329	197
85°	40	67	73	71	69	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.3	1227.3	1227.3	1227.3	1227.3
2.5°	1232.1	1222.5	1227.3	1226.1	1220.1
5°	1226.1	1217.7	1222.5	1221.3	1220.1
7.5°	1217.7	1209.3	1215.3	1214.1	1215.3
10°	1203.3	1196.1	1203.3	1204.5	1204.5
12.5°	1185.4	1179.4	1189.0	1191.3	1193.7
15°	1166.2	1161.4	1172.2	1177.0	1180.6
17.5°	1142.3	1138.7	1151.8	1157.8	1162.6
20°	1115.9	1114.7	1129.1	1135.1	1141.1
22.5°	1086.0	1086.0	1102.7	1109.9	1118.3
25°	1053.7	1054.8	1074.0	1083.6	1092.0
27.5°	1018.9	1020.1	1042.9	1054.8	1064.4
30°	980.6	985.4	1009.4	1024.9	1035.7
32.5°	942.3	948.3	974.6	992.6	1004.6
35°	901.6	908.8	938.7	959.1	972.2
37.5°	859.7	868.1	900.4	923.1	938.7
40°	817.8	827.4	860.9	887.2	905.2
42.5°	773.5	784.3	821.4	852.5	871.7
45°	729.2	741.1	779.5	816.6	838.1
47.5°	684.9	699.2	740.0	780.7	803.4
50°	639.4	653.7	696.8	743.5	766.3
52.5°	593.9	610.6	658.5	706.4	729.2
55°	549.6	566.3	617.8	668.1	690.9
57.5°	504.1	520.8	577.1	629.8	652.5
60°	457.4	476.5	535.2	589.1	614.2
62.5°	411.9	432.2	494.5	552.0	575.9
65°	366.4	387.9	452.6	512.5	536.4
67.5°	319.7	344.8	411.9	472.9	498.1
70°	274.2	301.7	372.4	433.4	457.4
72.5°	229.9	259.8	332.9	395.1	409.5
75°	185.6	220.3	294.5	329.3	329.3
77.5°	143.7	182.0	251.4	264.6	271.8
80°	104.2	146.1	189.2	204.7	202.3
82.5°	69.4	111.4	135.3	135.3	131.7
85°	39.5	67.1	73.0	70.6	69.4
87.5°	16.8	25.1	22.7	18.0	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)