

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: P230420

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-SQP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4053.6 lumens
Efficiency: N/A
Efficacy: 63.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

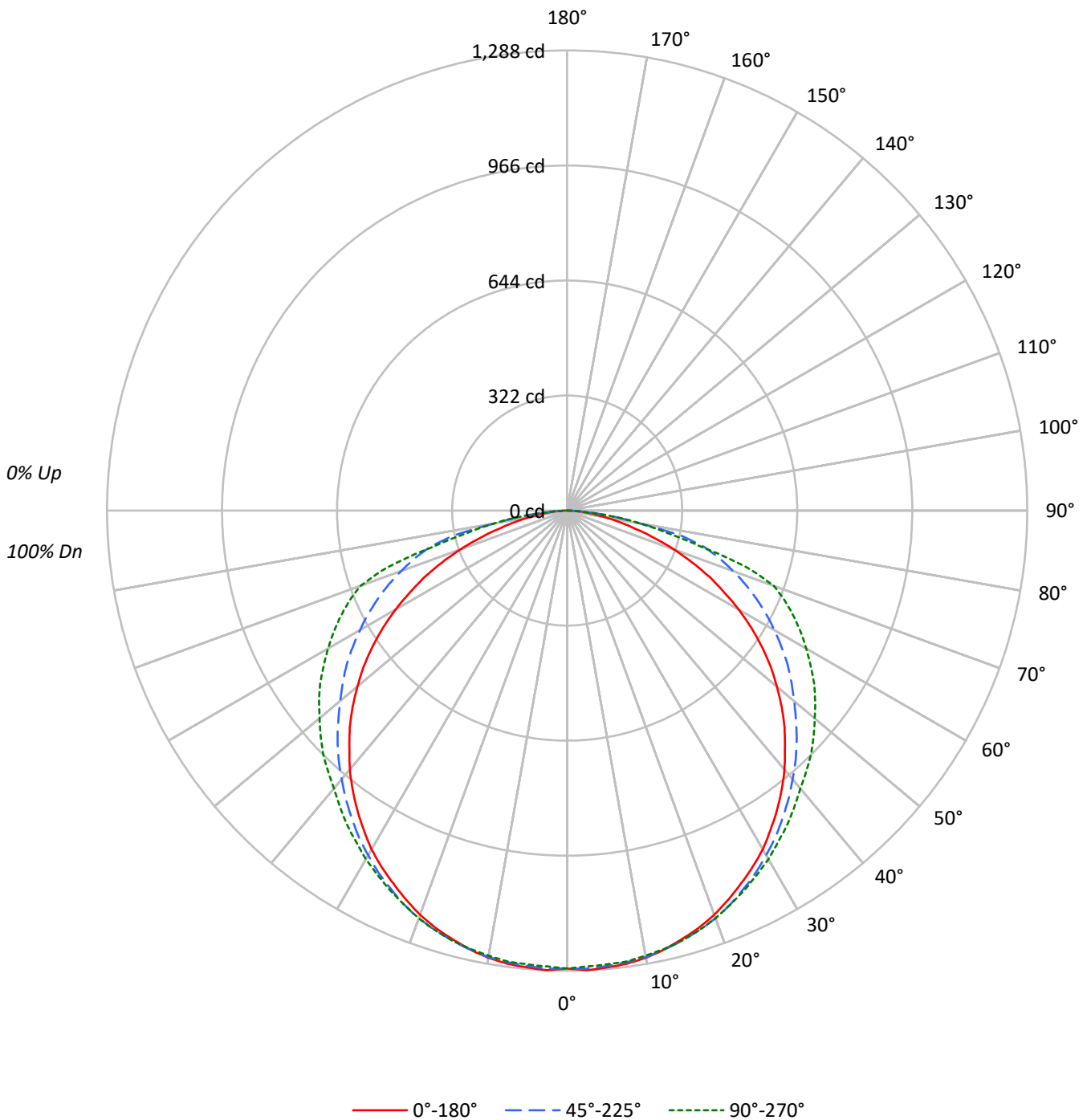
Input Watts (W): 64.22
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1724	1724	1724
5°	1734	1728	1722
10°	1736	1734	1728
15°	1729	1735	1735
20°	1724	1739	1739
25°	1710	1735	1741
30°	1701	1731	1750
35°	1682	1726	1764
40°	1662	1725	1784
45°	1638	1729	1837
50°	1604	1736	1893
55°	1562	1768	1979
60°	1493	1803	2079
65°	1400	1860	2226
70°	1252	1944	2422
75°	1034	2079	2003
80°	844	1606	1623
85°	679	1067	1002



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	3.0
10°-20°	351.2	8.7
20°-30°	536.7	13.2
30°-40°	656.4	16.2
40°-50°	702.4	17.3
50°-60°	672.6	16.6
60°-70°	569.0	14.0
70°-80°	360.7	8.9
80°-90°	83.0	2.0
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°	1009.6	24.9
0°-40°	1666.1	41.1
0°-60°	3041.0	75.0
0°-90°	4053.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4053.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1284	1277	1279	1277	1275	122
15°	1242	1240	1246	1246	1246	351
25°	1152	1152	1168	1172	1172	531
35°	1024	1030	1051	1066	1074	641
45°	861	875	909	946	965	663
55°	666	687	754	817	844	594
65°	440	482	584	664	699	433
75°	199	281	400	398	385	216
85°	44	67	69	63	65	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.4	1281.4	1281.4	1281.4	1281.4
2.5°	1287.7	1281.4	1283.5	1281.4	1277.2
5°	1283.5	1277.2	1279.3	1277.2	1275.1
7.5°	1279.3	1273.0	1275.1	1273.0	1273.0
10°	1271.0	1264.7	1268.9	1266.8	1264.7
12.5°	1258.4	1254.2	1258.4	1256.3	1256.3
15°	1241.6	1239.5	1245.8	1245.8	1245.8
17.5°	1224.9	1222.8	1231.2	1231.2	1231.2
20°	1204.0	1201.9	1214.4	1214.4	1214.4
22.5°	1178.8	1176.7	1193.5	1193.5	1193.5
25°	1151.6	1151.6	1168.4	1172.5	1172.5
27.5°	1124.4	1124.4	1143.2	1149.5	1149.5
30°	1095.1	1095.1	1113.9	1122.3	1126.5
32.5°	1059.5	1063.7	1084.6	1095.1	1099.3
35°	1023.9	1030.2	1051.1	1065.8	1074.1
37.5°	986.2	992.5	1017.6	1034.4	1044.8
40°	946.4	954.8	982.0	1002.9	1015.5
42.5°	902.4	915.0	946.4	973.6	990.4
45°	860.6	875.2	908.7	946.4	965.3
47.5°	814.5	831.3	868.9	917.1	935.9
50°	766.3	783.1	829.2	883.6	904.5
52.5°	718.2	737.0	791.5	850.1	875.2
55°	665.8	686.8	753.8	816.6	843.8
57.5°	611.4	636.5	711.9	778.9	808.2
60°	554.9	586.3	670.0	741.2	772.6
62.5°	496.2	533.9	628.1	703.5	737.0
65°	439.7	481.6	584.2	663.7	699.3
67.5°	379.0	431.3	540.2	626.1	659.6
70°	318.3	379.0	494.1	582.1	615.6
72.5°	257.5	330.8	448.1	527.6	527.6
75°	198.9	280.6	399.9	397.8	385.3
77.5°	150.8	234.5	328.7	280.6	282.7
80°	108.9	188.4	207.3	207.3	209.4
82.5°	73.3	144.5	134.0	131.9	136.1
85°	44.0	67.0	69.1	62.8	64.9
87.5°	20.9	23.0	18.8	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)