

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: STREETWORKS

Report Number: P214875

Luminaire Tested: **ARCH-AF24-100-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214875
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-100-D-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10081.2 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

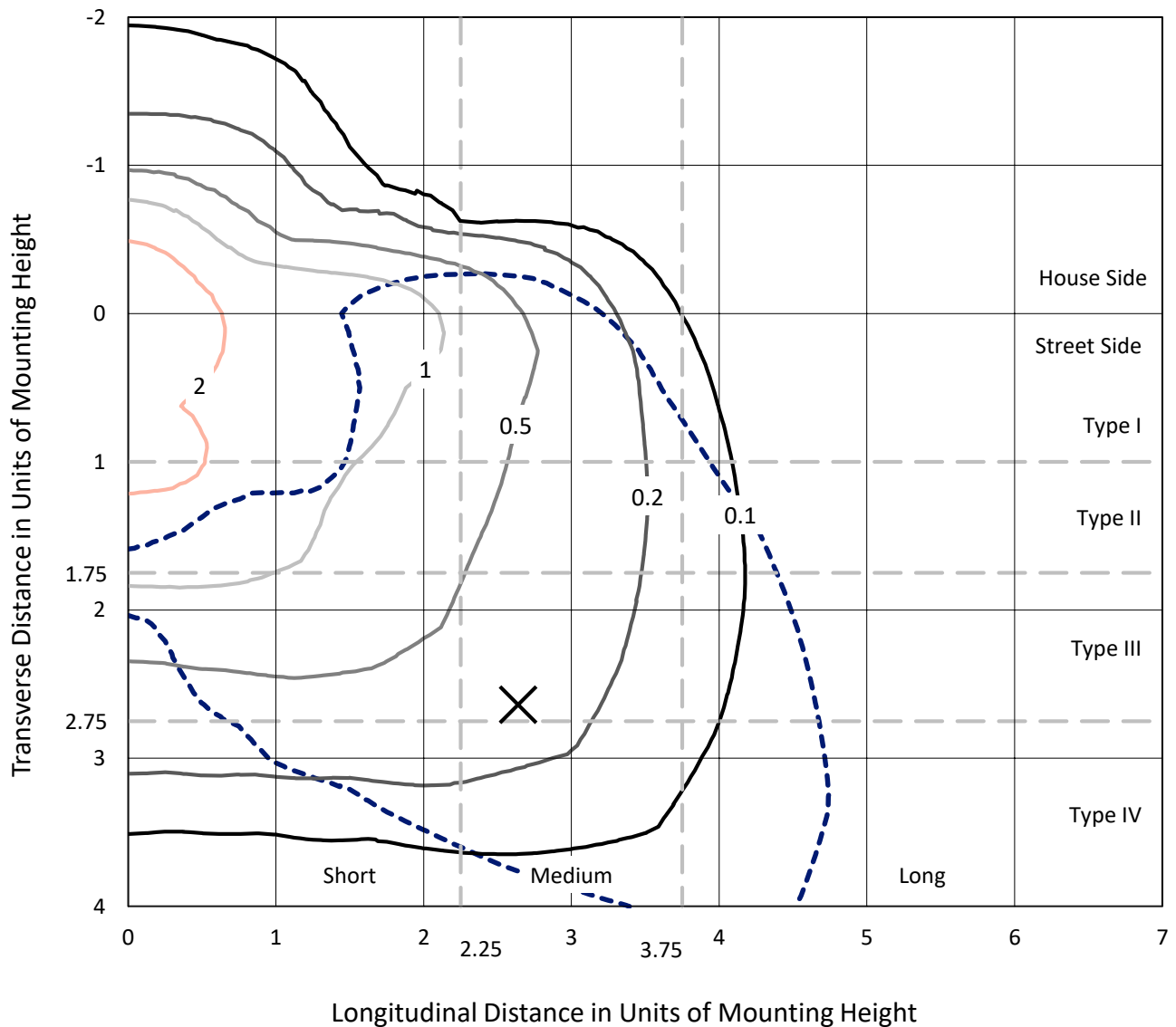
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

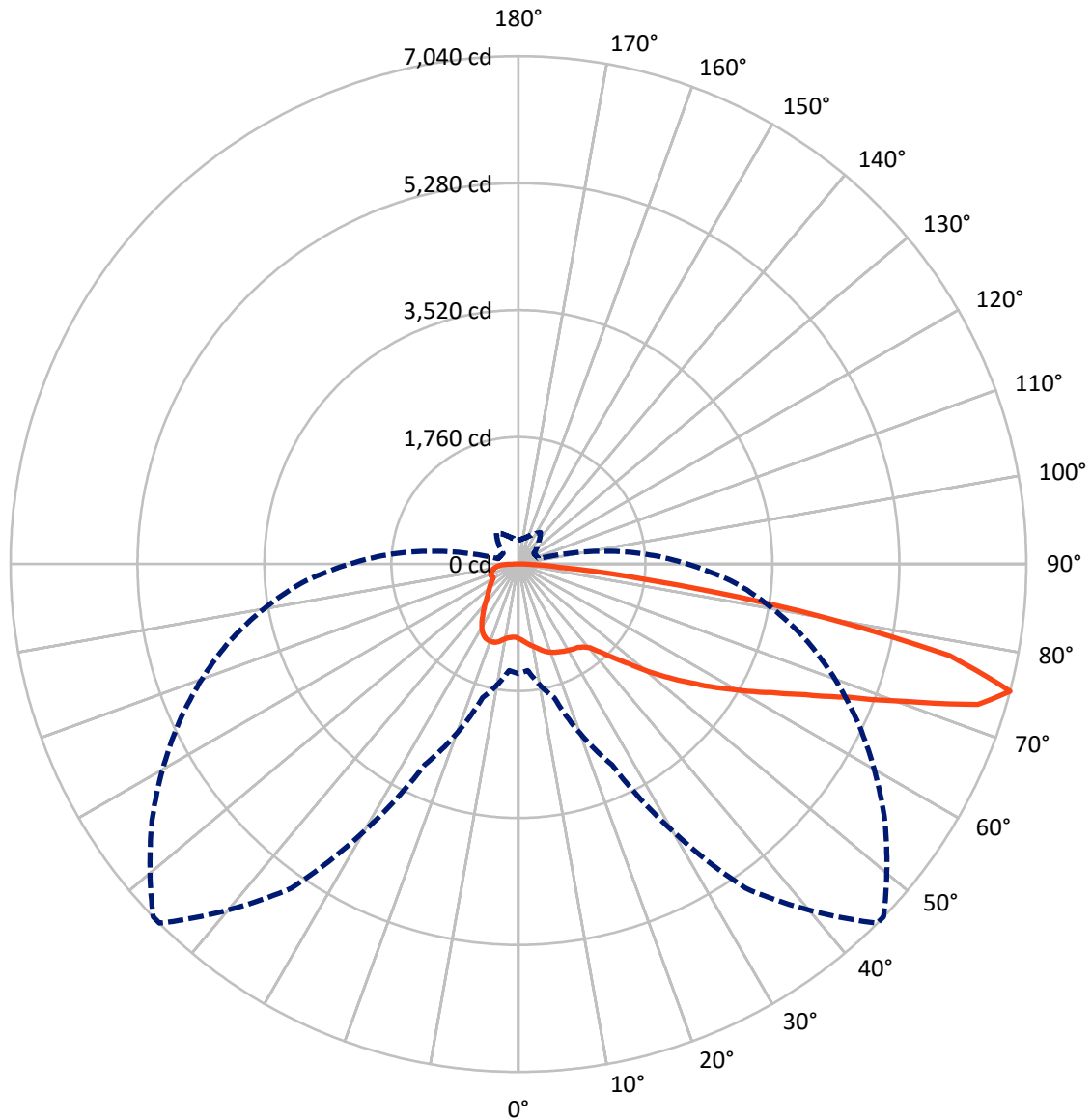


Based on 20 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2335.4	0.0	2335.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	7745.8	0.0	7745.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	10081.2	0.0	10081.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.0
10°-20°	331.9	3.3
20°-30°	569.5	5.6
30°-40°	796.5	7.9
40°-50°	1168.4	11.6
50°-60°	1820.1	18.1
60°-70°	2619.0	26.0
70°-80°	2281.5	22.6
80°-90°	391.8	3.9
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°-90°	10081.2	100.0
0°-180°	10081.2	100.0



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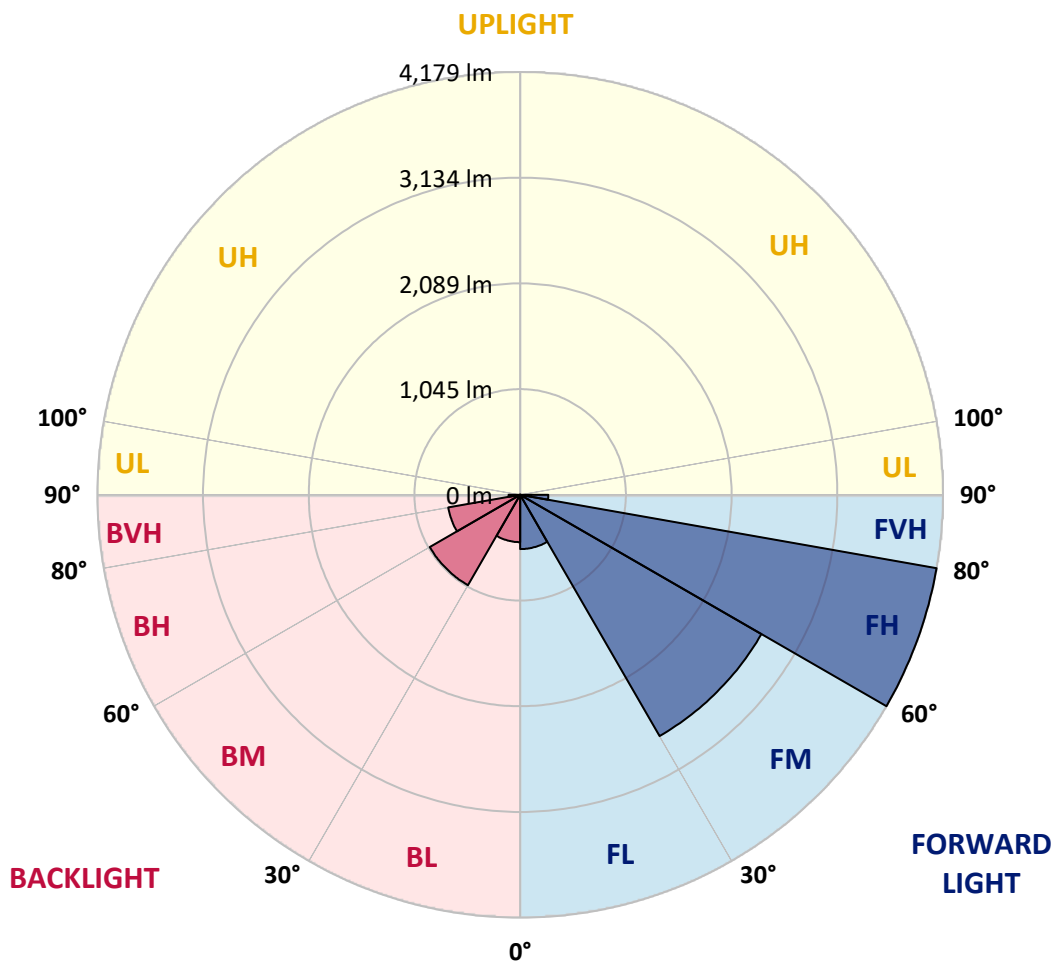
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	536.1	5.3			
FM (30°-60°)	2753.0	27.3			
FH (60°-80°)	4178.7	41.5			G2/5000
FVH (80°-90°)	278.0	2.8			G3/500
BL (0°-30°)	467.7	4.6	B1/500		
BM (30°-60°)	1032.1	10.2	B2/2500		
BH (60°-80°)	721.7	7.2	B2/1000		G2/1000
BVH (80°-90°)	113.8	1.1			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5
2.5°	1084.4	1076.7	1076.7	1070.7	1070.7	1060.9	1057.0	1055.1	1045.3	1039.3	1033.5
5°	1147.2	1137.4	1135.5	1121.7	1115.8	1094.3	1092.3	1078.6	1060.9	1043.3	1029.5
7.5°	1204.1	1198.2	1188.4	1174.7	1157.1	1129.5	1127.6	1106.0	1076.7	1053.0	1033.5
10°	1245.2	1241.4	1227.6	1209.9	1190.3	1162.9	1160.9	1137.4	1102.1	1074.6	1047.2
12.5°	1294.2	1288.4	1270.7	1247.2	1225.6	1200.1	1198.2	1178.5	1139.4	1104.1	1068.8
15°	1341.4	1333.5	1311.9	1288.4	1264.9	1243.3	1243.3	1221.7	1180.6	1139.4	1098.1
17.5°	1364.9	1360.9	1339.3	1313.9	1294.2	1278.6	1276.6	1257.0	1215.9	1172.7	1127.6
20°	1372.7	1374.6	1355.1	1327.6	1313.9	1306.0	1304.1	1290.4	1245.2	1204.1	1160.9
22.5°	1370.8	1376.7	1360.9	1331.6	1327.6	1327.6	1327.6	1311.9	1276.6	1235.4	1192.4
25°	1378.6	1386.4	1374.6	1339.3	1339.3	1347.2	1347.2	1339.3	1308.0	1272.8	1229.6
27.5°	1406.0	1412.0	1402.2	1353.2	1355.1	1366.9	1364.9	1366.9	1347.2	1313.9	1270.7
30°	1439.4	1447.3	1435.5	1374.6	1372.7	1384.5	1384.5	1394.3	1380.6	1345.3	1310.0
32.5°	1529.6	1527.7	1490.3	1398.2	1392.3	1404.1	1404.1	1413.9	1406.0	1378.6	1345.3
35°	1798.2	1768.9	1686.4	1474.7	1415.9	1421.8	1421.8	1439.4	1443.3	1421.8	1392.3
37.5°	2072.8	2063.0	2000.3	1678.7	1502.1	1459.0	1457.1	1482.6	1500.2	1482.6	1462.9
40°	2349.3	2341.4	2327.7	1951.2	1682.5	1525.7	1519.8	1541.4	1572.8	1561.0	1549.3
42.5°	2606.2	2602.3	2616.0	2219.9	1912.0	1668.8	1651.1	1625.7	1670.8	1666.9	1666.9
45°	2808.2	2818.0	2825.8	2470.9	2161.1	1853.2	1831.6	1745.4	1806.1	1821.8	1833.5
47.5°	2922.0	2929.7	2957.2	2716.0	2410.1	2067.0	2051.2	1910.1	1990.5	2037.5	2070.9
50°	3084.7	3063.1	3086.7	2955.3	2710.1	2345.4	2302.3	2131.6	2233.6	2316.0	2394.4
52.5°	3241.6	3206.3	3225.9	3231.8	3051.4	2617.9	2572.8	2392.5	2519.9	2649.3	2788.6
55°	3382.8	3380.9	3400.4	3500.4	3380.9	2910.2	2859.1	2680.7	2865.1	3004.3	3239.6
57.5°	3496.5	3516.1	3602.4	3812.2	3761.3	3227.8	3170.9	3016.1	3233.8	3373.0	3763.2
60°	3629.8	3661.2	3804.4	4077.0	4108.4	3561.2	3502.4	3390.7	3612.2	3753.4	4369.2
62.5°	3675.0	3720.1	4014.3	4355.4	4471.1	3926.0	3873.0	3798.5	4010.3	4137.7	4973.2
65°	3374.9	3461.3	4130.0	4498.6	4861.4	4365.2	4320.1	4255.5	4406.5	4490.8	5383.1
67.5°	3292.6	3331.8	3904.4	4704.6	5228.1	4930.0	4884.9	4773.2	4777.1	4741.8	5516.4
70°	3176.9	3220.0	3673.0	4859.4	5753.7	5702.6	5647.8	5318.3	5116.3	4902.6	5253.6
72.5°	2706.2	2692.5	3165.1	4441.8	6006.7	6659.7	6595.0	5904.7	5367.3	4763.4	4433.9
75°	1519.8	1480.6	1919.9	3072.9	5485.0	7040.2	7038.1	6200.8	5190.9	4149.5	3018.0
77.5°	441.2	429.4	633.4	1288.4	3692.6	6116.4	6191.0	5592.9	4331.9	2980.8	1657.1
80°	207.9	211.8	272.6	425.5	1576.7	3947.6	4161.3	3682.8	2588.6	1374.6	684.4
82.5°	131.3	133.4	186.3	274.6	666.8	1792.4	1968.9	1657.1	1025.6	594.2	302.0
85°	82.3	82.3	123.6	180.4	398.1	572.6	621.6	564.8	439.3	323.6	164.7
87.5°	45.1	45.1	74.5	103.9	217.7	184.3	190.3	225.6	274.6	198.0	82.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5	1033.5
2.5°	1031.5	1027.6	1021.7	1019.8	1017.7	1015.8	1017.7	1021.7	1017.7	1017.7	1019.8
5°	1025.6	1021.7	1013.8	1013.8	1015.8	1017.7	1027.6	1033.5	1035.4	1035.4	1035.4
7.5°	1025.6	1019.8	1013.8	1015.8	1019.8	1027.6	1043.3	1053.0	1060.9	1062.8	1062.8
10°	1035.4	1027.6	1023.7	1027.6	1039.3	1045.3	1060.9	1076.7	1086.4	1090.4	1090.4
12.5°	1053.0	1045.3	1045.3	1053.0	1068.8	1076.7	1090.4	1102.1	1113.9	1119.7	1119.7
15°	1082.5	1072.7	1074.6	1088.4	1106.0	1113.9	1123.7	1127.6	1137.4	1145.2	1145.2
17.5°	1109.9	1100.2	1104.1	1119.7	1131.5	1135.5	1141.3	1139.4	1143.2	1149.2	1151.1
20°	1141.3	1131.5	1133.4	1143.2	1145.2	1141.3	1141.3	1135.5	1133.4	1143.2	1147.2
22.5°	1172.7	1162.9	1160.9	1155.0	1145.2	1135.5	1129.5	1123.7	1119.7	1129.5	1133.4
25°	1209.9	1196.2	1186.4	1160.9	1135.5	1117.8	1109.9	1106.0	1104.1	1113.9	1117.8
27.5°	1251.2	1237.4	1208.0	1153.1	1111.9	1082.5	1076.7	1076.7	1080.5	1086.4	1090.4
30°	1290.4	1276.6	1223.7	1135.5	1070.7	1027.6	1021.7	1027.6	1037.4	1043.3	1049.1
32.5°	1329.5	1315.8	1233.5	1108.0	1010.0	955.0	951.1	960.9	976.6	980.5	984.5
35°	1382.5	1368.8	1245.2	1068.8	933.4	874.6	870.7	876.6	890.3	896.2	902.0
37.5°	1457.1	1449.2	1262.9	1025.6	862.9	798.1	786.3	782.5	790.3	788.3	796.2
40°	1555.1	1561.0	1294.2	968.7	794.2	727.5	702.1	690.3	682.4	666.8	674.6
42.5°	1698.3	1702.2	1329.5	904.1	735.4	660.8	627.6	606.0	590.2	564.8	568.7
45°	1908.1	1874.8	1370.8	835.4	682.4	607.9	568.7	543.2	521.6	500.0	502.1
47.5°	2186.6	2084.6	1415.9	778.6	629.5	564.8	529.5	500.0	474.5	457.0	458.9
50°	2529.8	2345.4	1461.0	725.6	576.5	531.4	500.0	468.7	443.1	425.5	423.6
52.5°	2982.7	2659.2	1490.3	666.8	523.5	502.1	474.5	445.2	413.8	392.2	390.3
55°	3453.4	3023.9	1515.9	596.2	472.6	468.7	455.0	421.7	384.3	356.9	353.0
57.5°	3971.1	3414.2	1535.4	527.5	433.4	441.2	437.3	398.1	356.9	331.4	329.5
60°	4441.8	3818.2	1472.7	466.8	398.1	413.8	417.7	384.3	362.8	368.7	370.6
62.5°	4916.3	4130.0	1233.5	421.7	374.6	396.1	429.4	427.5	417.7	427.5	429.4
65°	5086.9	4194.6	874.6	384.3	351.0	404.0	466.8	462.8	417.7	400.1	396.1
67.5°	4990.9	4002.5	588.3	355.0	333.4	413.8	506.0	462.8	402.0	378.5	370.6
70°	4533.9	3529.9	431.4	325.5	317.7	411.8	527.5	460.8	394.1	368.7	358.9
72.5°	3616.1	2723.9	347.1	298.1	294.2	402.0	539.3	457.0	386.4	358.9	347.1
75°	2341.4	1694.3	292.2	270.7	258.8	386.4	533.4	445.2	376.5	341.3	333.4
77.5°	1086.4	729.5	249.1	239.3	225.6	362.8	515.8	421.7	355.0	321.6	311.8
80°	506.0	345.1	209.8	207.9	202.0	343.2	492.2	394.1	329.5	302.0	286.3
82.5°	270.7	207.9	170.6	170.6	176.5	319.7	462.8	360.8	296.1	282.4	241.2
85°	143.1	119.6	123.6	133.4	151.0	282.4	423.6	325.5	258.8	215.7	209.8
87.5°	72.5	76.5	76.5	90.2	115.7	229.4	349.0	268.6	219.6	176.5	172.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)