

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: P265801

Luminaire Tested: **ARCH-M-AF48-90-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T3-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10691.3 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

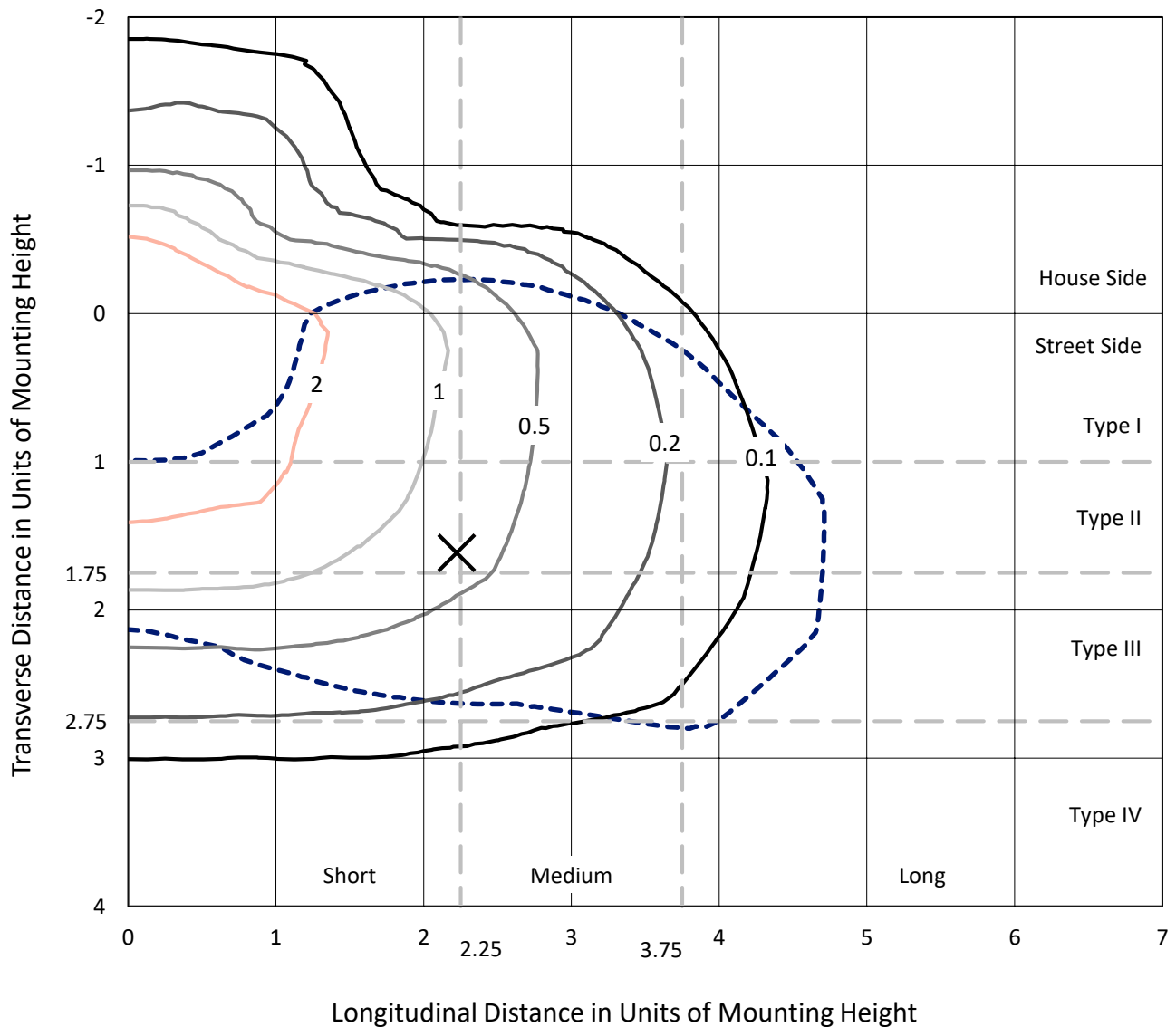
Input Watts (W): 92
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

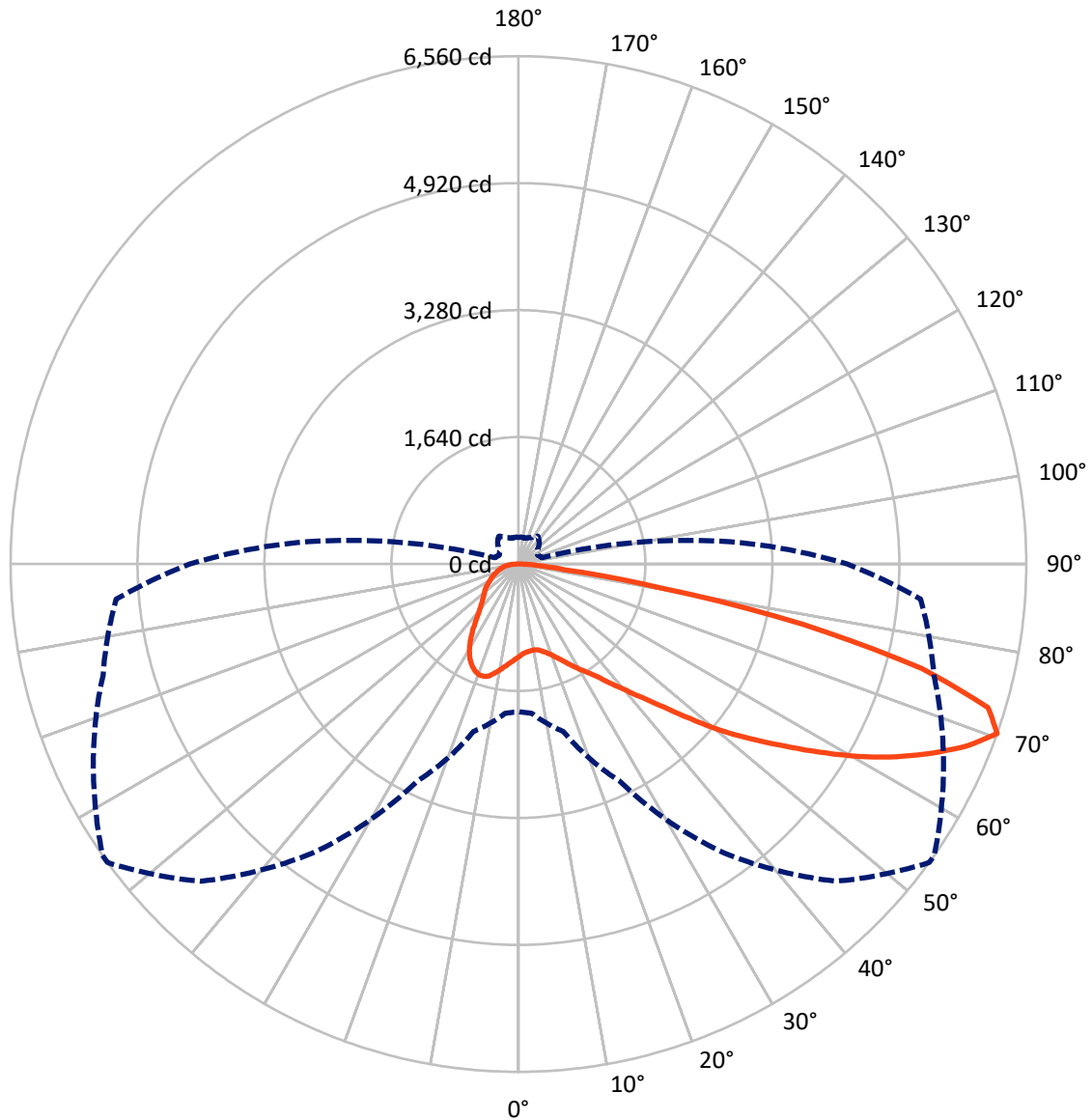
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2424.7	0.0	2424.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	8266.5	0.0	8266.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	10691.3	0.0	10691.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.4	1.1
10°-20°	375.1	3.5
20°-30°	651.6	6.1
30°-40°	952.3	8.9
40°-50°	1494.6	14.0
50°-60°	2298.3	21.5
60°-70°	2808.0	26.3
70°-80°	1741.0	16.3
80°-90°	252.9	2.4
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°	10691.3	100.0
0°-180°	10691.3	100.0

Coefficient of Utilization



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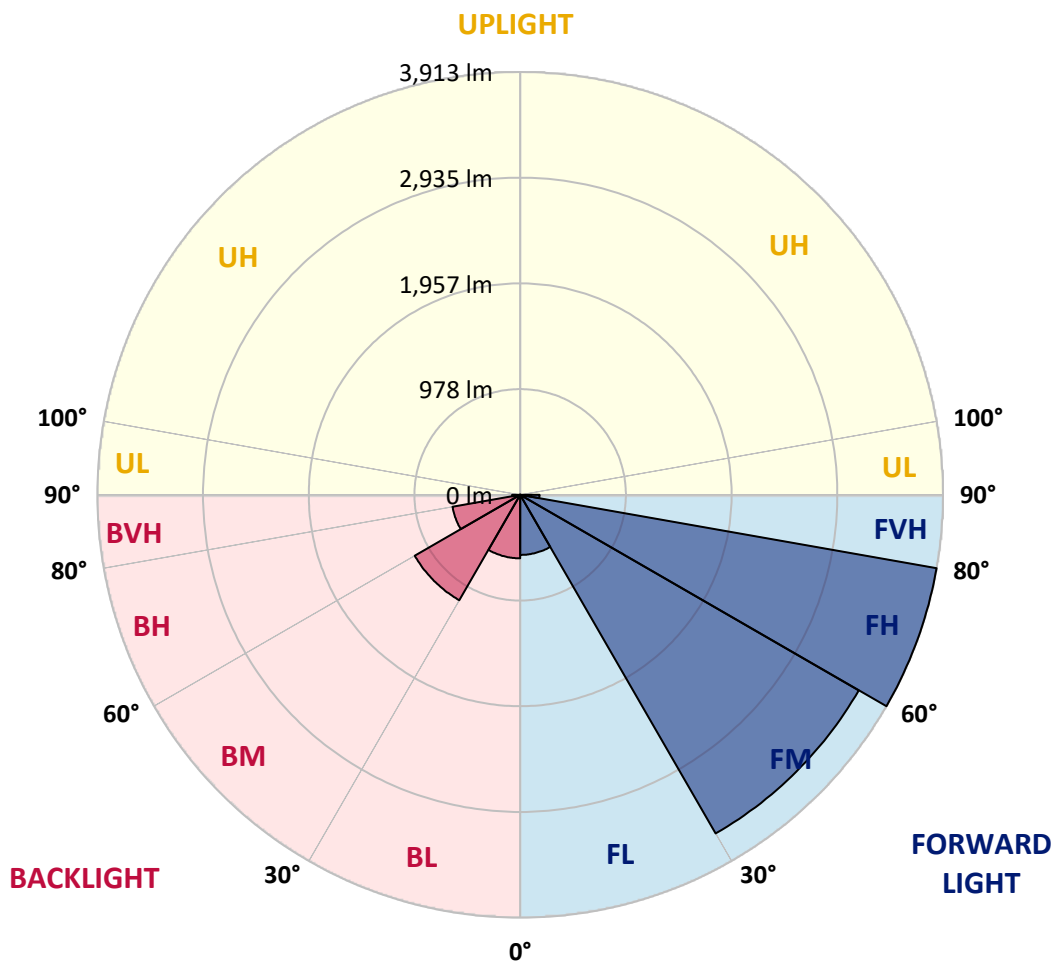
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	556.3	5.2			
FM	(30°-60°)	3618.5	33.8			
FH	(60°-80°)	3913.2	36.6			G2/5000
FVH	(80°-90°)	178.6	1.7			G2/225
BL	(0°-30°)	587.8	5.5	B2/1000		
BM	(30°-60°)	1126.7	10.5	B2/2500		
BH	(60°-80°)	635.8	5.9	B2/1000		G2/1000
BVH	(80°-90°)	74.3	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2
2.5°	1149.1	1145.2	1145.2	1151.1	1153.1	1159.0	1159.0	1160.9	1166.8	1176.6	1188.3
5°	1113.9	1111.9	1113.9	1121.8	1125.7	1137.4	1141.3	1143.4	1155.0	1170.8	1188.3
7.5°	1078.7	1076.7	1080.7	1092.3	1104.1	1121.8	1131.5	1133.5	1151.1	1172.6	1196.2
10°	1066.9	1065.0	1070.9	1080.7	1092.3	1111.9	1127.6	1129.6	1155.0	1180.5	1213.8
12.5°	1082.5	1080.7	1086.5	1096.3	1108.0	1121.8	1139.4	1141.3	1174.7	1208.0	1243.2
15°	1121.8	1121.8	1123.7	1129.6	1141.3	1153.1	1168.8	1170.8	1206.0	1245.1	1280.4
17.5°	1182.3	1178.5	1178.5	1176.6	1184.3	1190.3	1209.8	1211.9	1249.1	1284.2	1319.5
20°	1256.8	1254.8	1247.0	1237.2	1235.3	1239.2	1258.7	1260.7	1298.0	1327.2	1360.7
22.5°	1346.9	1348.8	1331.2	1309.6	1299.8	1305.7	1323.5	1325.4	1352.8	1378.2	1407.6
25°	1466.4	1460.5	1435.0	1403.6	1384.1	1384.1	1401.6	1401.6	1427.1	1442.8	1462.4
27.5°	1579.8	1568.1	1544.5	1499.6	1468.3	1474.1	1491.7	1491.7	1515.3	1521.1	1530.9
30°	1703.1	1691.4	1662.0	1605.4	1564.2	1560.3	1581.7	1579.8	1611.2	1609.3	1601.4
32.5°	1853.9	1848.1	1799.0	1726.6	1671.8	1658.1	1677.8	1679.7	1699.2	1693.3	1668.0
35°	2065.4	2063.3	2018.3	1891.1	1818.7	1793.2	1805.0	1805.0	1818.7	1803.0	1760.0
37.5°	2331.6	2335.6	2296.3	2108.4	2006.6	1963.5	1965.5	1963.5	1967.5	1949.9	1904.9
40°	2597.8	2607.6	2605.7	2378.6	2249.4	2174.9	2147.6	2143.6	2153.4	2145.6	2102.6
42.5°	2948.2	2971.8	2916.9	2711.4	2566.5	2441.2	2366.9	2357.1	2378.6	2388.4	2347.2
45°	3312.4	3304.5	3218.4	3069.6	2938.4	2778.0	2637.0	2621.3	2637.0	2666.3	2623.3
47.5°	3502.3	3496.5	3474.9	3400.4	3381.0	3196.9	2983.5	2969.7	2940.4	2981.6	2930.6
50°	3815.6	3821.4	3733.3	3725.5	3807.6	3705.9	3375.0	3343.8	3290.9	3324.1	3281.1
52.5°	4042.6	4017.1	3962.3	4030.9	4287.3	4232.5	3743.1	3729.4	3680.4	3672.6	3653.0
55°	4134.5	4134.5	4144.4	4303.1	4669.0	4596.5	4142.4	4156.2	4089.5	4034.7	4060.2
57.5°	4161.9	4173.7	4258.0	4520.4	5117.4	4880.5	4583.0	4602.5	4506.5	4396.9	4477.2
60°	4026.9	4062.1	4263.9	4643.6	5369.9	5182.0	5046.9	5052.7	4913.8	4753.2	4894.1
62.5°	3680.4	3723.5	4083.8	4694.5	5328.7	5491.2	5485.4	5499.2	5309.3	5109.5	5285.6
65°	3255.5	3298.7	3682.4	4551.6	5297.5	5712.5	5886.8	5924.0	5679.3	5411.0	5530.4
67.5°	2631.1	2687.9	3052.0	4070.0	5144.8	5894.6	6262.7	6301.7	5965.0	5567.6	5508.9
70°	1906.8	1934.2	2239.6	3093.1	4522.2	5794.6	6560.1	6558.2	6059.0	5555.8	5215.2
72.5°	918.2	939.6	1204.0	1920.4	3234.1	4917.7	6344.8	6382.0	5929.8	5385.6	4543.7
75°	377.8	399.3	487.5	810.5	1697.3	3249.8	5377.8	5465.8	5385.6	4833.5	3555.1
77.5°	234.9	242.7	285.8	418.9	775.2	1517.1	3764.5	3884.0	4267.7	3872.2	2347.2
80°	176.2	182.0	213.3	293.7	489.4	560.0	1869.6	2020.3	2586.1	2222.0	1063.1
82.5°	146.9	148.8	170.3	213.3	332.8	321.1	599.1	667.6	1206.0	847.7	366.1
85°	137.0	140.9	152.7	152.7	211.5	201.6	248.7	260.4	350.3	289.8	127.2
87.5°	70.4	66.6	135.0	119.5	109.7	97.8	105.7	113.5	131.2	139.0	56.8
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°	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2	1196.2
2.5°	1192.2	1198.1	1208.0	1217.7	1229.4	1243.2	1251.0	1260.7	1268.5	1264.6	1262.7
5°	1198.1	1208.0	1229.4	1249.1	1272.4	1299.8	1317.5	1337.0	1352.8	1356.7	1350.8
7.5°	1208.0	1225.5	1254.8	1290.1	1321.4	1356.7	1384.1	1411.4	1431.1	1435.0	1435.0
10°	1231.3	1251.0	1290.1	1337.0	1374.2	1411.4	1442.8	1464.3	1481.9	1489.7	1489.7
12.5°	1264.6	1288.2	1335.2	1392.0	1433.1	1468.3	1485.8	1495.7	1503.6	1511.3	1513.3
15°	1303.8	1329.2	1386.1	1446.7	1489.7	1507.4	1507.4	1505.5	1505.5	1509.3	1513.3
17.5°	1343.0	1370.4	1429.2	1493.7	1521.1	1511.3	1497.7	1491.7	1487.9	1485.8	1491.7
20°	1384.1	1411.4	1470.3	1530.9	1523.0	1481.9	1462.4	1448.6	1436.8	1431.1	1438.8
22.5°	1429.2	1454.5	1515.3	1556.4	1497.7	1435.0	1397.9	1376.3	1356.7	1344.9	1352.8
25°	1481.9	1507.4	1566.1	1564.2	1452.6	1364.4	1305.7	1270.6	1249.1	1237.2	1237.2
27.5°	1544.5	1566.1	1622.9	1544.5	1389.9	1270.6	1184.3	1151.1	1145.2	1135.5	1135.5
30°	1609.3	1626.8	1675.8	1499.6	1303.8	1147.1	1053.3	1037.5	1039.5	1029.7	1031.8
32.5°	1675.8	1693.3	1707.0	1433.1	1192.2	1008.2	945.6	933.8	931.8	924.0	916.2
35°	1769.8	1795.3	1711.0	1343.0	1057.1	892.6	847.7	836.0	824.1	796.7	796.7
37.5°	1912.6	1940.1	1701.2	1231.3	918.2	802.6	761.6	745.9	726.3	698.9	689.1
40°	2108.4	2108.4	1679.7	1106.2	806.6	730.2	691.1	671.6	650.0	622.5	616.6
42.5°	2339.5	2284.6	1646.5	978.9	724.4	681.3	646.1	624.5	599.1	567.6	563.7
45°	2609.5	2460.7	1599.4	865.2	663.7	651.9	630.4	593.2	550.1	516.9	511.0
47.5°	2871.9	2619.4	1554.3	784.9	612.7	640.1	622.5	560.0	501.2	454.2	448.3
50°	3159.7	2760.3	1501.5	718.5	573.6	632.3	612.7	511.0	446.4	413.1	409.2
52.5°	3447.4	2903.2	1444.7	647.9	540.3	616.6	589.3	475.7	444.4	399.3	393.5
55°	3751.0	3069.6	1378.2	569.6	501.2	585.3	557.9	473.8	458.0	399.3	385.6
57.5°	4046.5	3253.7	1270.6	493.3	458.0	538.4	546.2	462.0	428.8	395.4	379.9
60°	4373.5	3449.4	1092.3	428.8	420.9	499.2	530.4	436.5	395.4	383.7	375.9
62.5°	4635.8	3625.6	853.5	383.7	389.5	467.8	511.0	420.9	381.7	372.0	370.0
65°	4749.2	3629.5	612.7	344.6	358.2	438.6	491.4	407.2	370.0	366.1	364.2
67.5°	4630.0	3429.9	430.6	307.4	324.9	411.2	466.0	393.5	358.2	360.2	356.3
70°	4244.2	3009.0	315.1	272.1	293.7	381.7	438.6	375.9	344.6	348.5	342.7
72.5°	3551.2	2345.3	252.6	242.7	268.2	350.3	411.2	356.3	323.0	324.9	313.1
75°	2623.3	1554.3	211.5	217.3	238.8	321.1	375.9	330.8	299.6	291.7	283.9
77.5°	1560.3	798.8	174.2	189.9	213.3	285.8	336.8	299.6	274.1	260.4	254.5
80°	644.1	323.0	142.9	160.5	185.9	254.5	297.6	262.3	244.7	231.0	223.1
82.5°	256.5	158.6	113.5	131.2	156.7	221.3	260.4	231.0	213.3	203.6	182.0
85°	97.8	78.3	76.4	91.9	117.5	170.3	215.4	193.9	180.1	154.7	148.8
87.5°	39.2	35.3	35.3	45.0	66.6	107.6	154.7	135.0	140.9	111.6	113.5
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)