

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: P398133

Luminaire Tested: **ARCH-S-PA1-90-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398133  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-90-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11688 lumens  
Efficiency: N/A  
Efficacy: 124.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

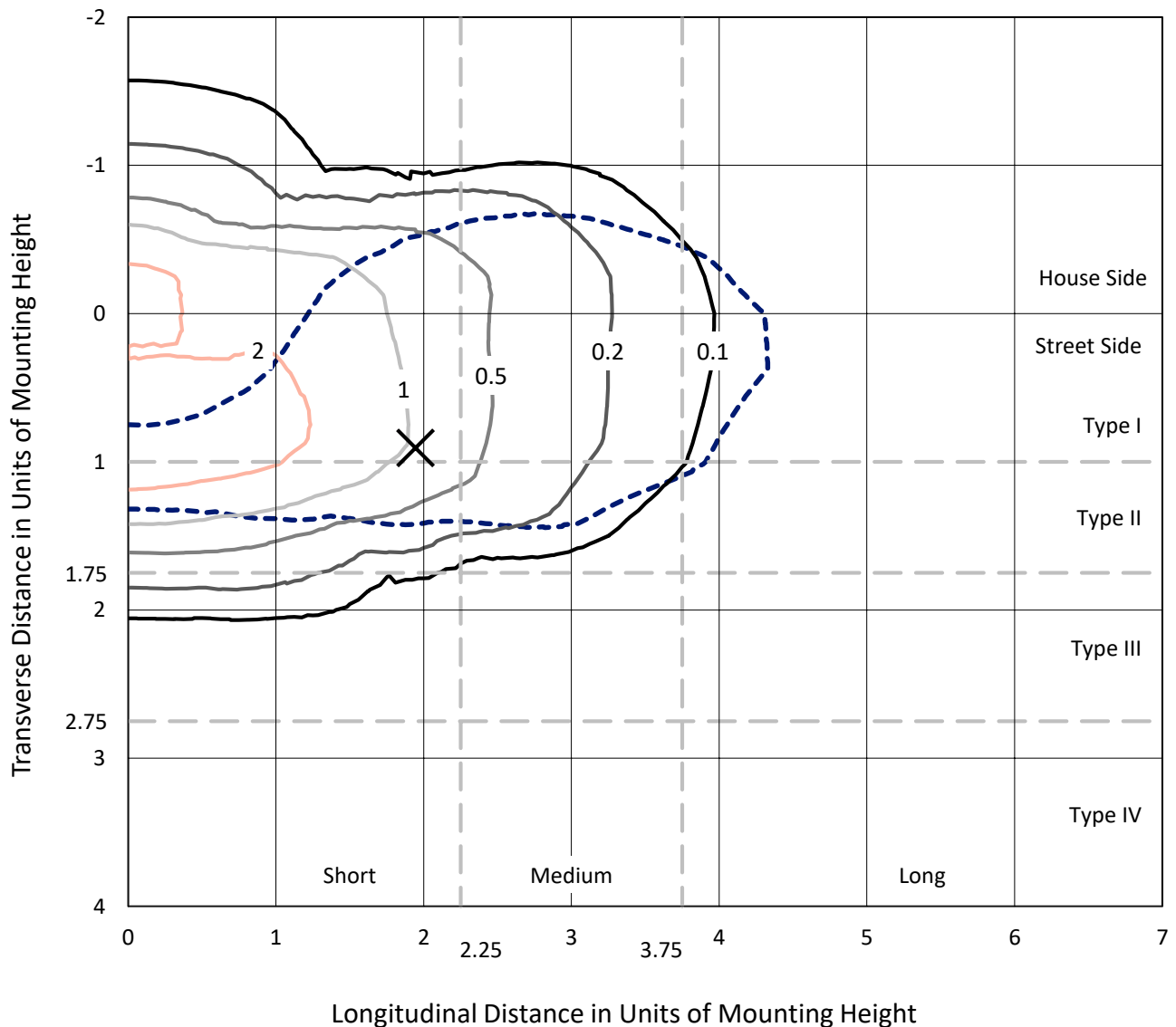
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

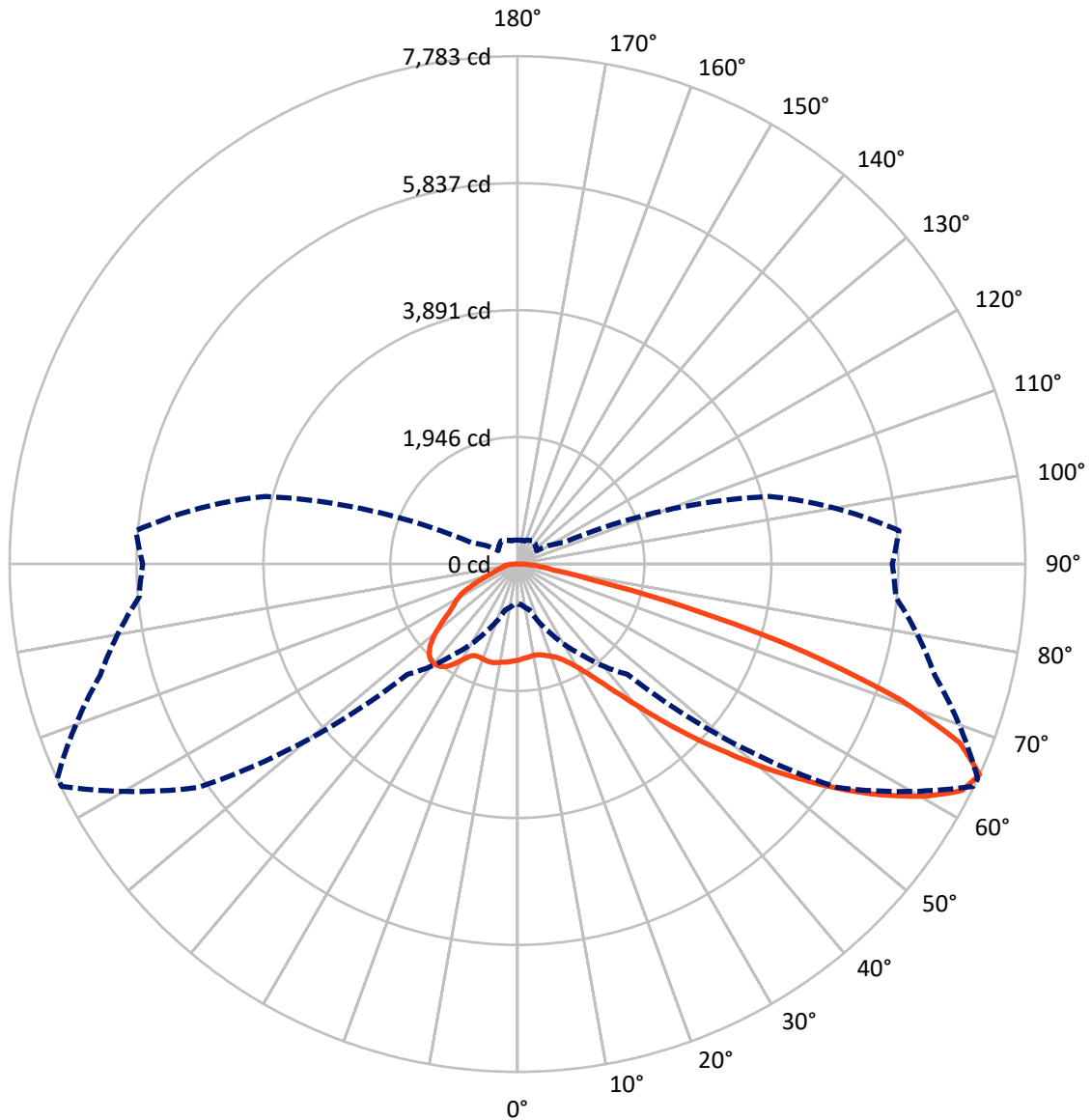
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3379.2	0.0	3379.2
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	8308.8	0.0	8308.8
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	11688.0	0.0	11688.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.7	1.2
10°-20°	420.1	3.6
20°-30°	746.2	6.4
30°-40°	1262.4	10.8
40°-50°	2197.6	18.8
50°-60°	2840.0	24.3
60°-70°	2485.1	21.3
70°-80°	1351.7	11.6
80°-90°	244.2	2.1
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°	11688.0	100.0
0°-180°	11688.0	100.0



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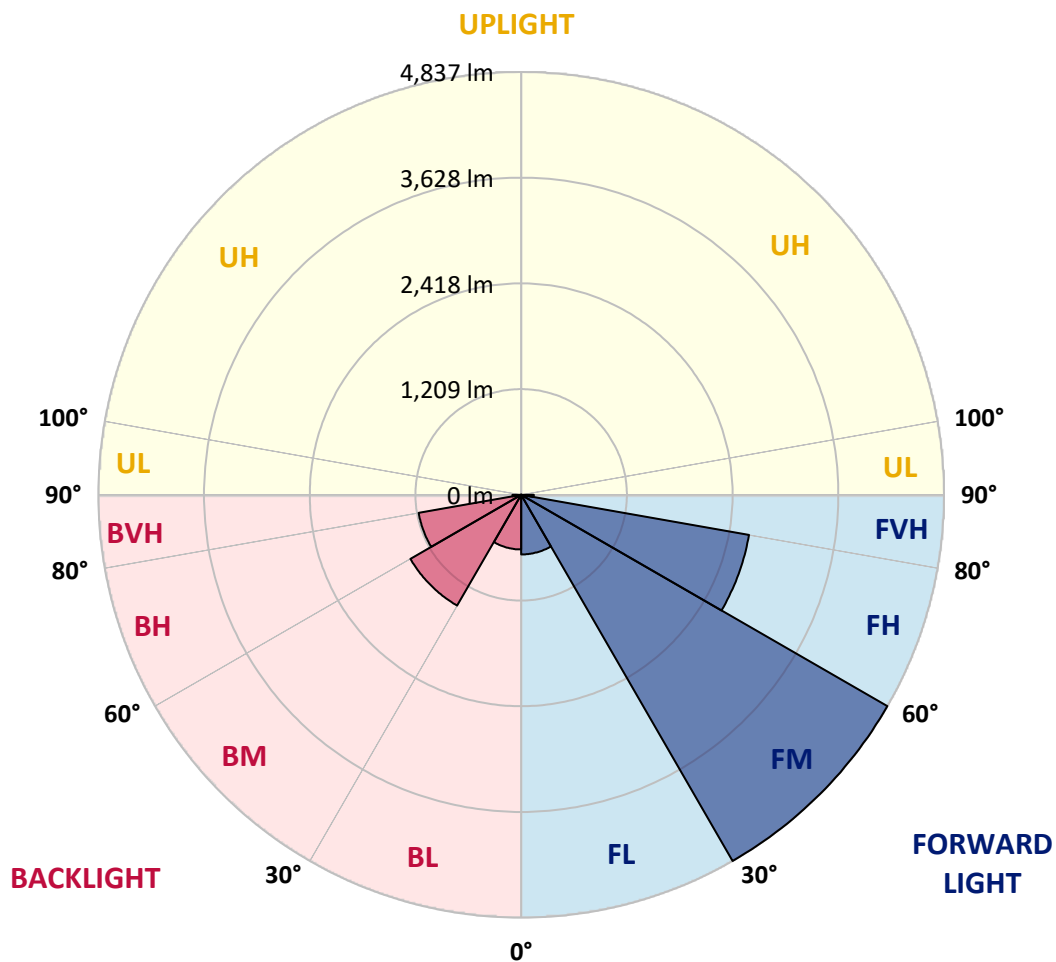
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	682.0	5.8			
FM	(30°-60°)	4836.8	41.4			
FH	(60°-80°)	2646.3	22.6			G2/5000
FVH	(80°-90°)	143.7	1.2			G2/225
BL	(0°-30°)	625.0	5.3	B2/1000		
BM	(30°-60°)	1463.1	12.5	B2/2500		
BH	(60°-80°)	1190.5	10.2	B3/2500		G3/2500
BVH	(80°-90°)	100.5	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9
2.5°	1450.7	1449.2	1446.1	1449.2	1450.7	1453.8	1452.3	1455.4	1453.8	1458.4	1466.1
5°	1413.8	1410.7	1409.2	1416.9	1421.5	1429.2	1432.3	1443.0	1441.5	1449.2	1461.5
7.5°	1372.3	1372.3	1370.7	1380.0	1386.1	1400.0	1410.7	1429.2	1430.7	1444.6	1458.4
10°	1340.0	1341.5	1340.0	1347.7	1356.9	1373.8	1392.3	1418.4	1420.0	1440.0	1453.8
12.5°	1327.7	1327.7	1327.7	1338.4	1350.7	1373.8	1395.4	1423.0	1426.1	1447.7	1460.0
15°	1344.6	1346.1	1343.0	1353.8	1367.7	1395.4	1415.4	1444.6	1447.7	1467.7	1475.4
17.5°	1404.6	1410.7	1403.0	1409.2	1406.1	1427.7	1446.1	1475.4	1476.9	1493.8	1496.9
20°	1523.0	1529.2	1516.9	1509.2	1481.5	1480.0	1487.7	1510.7	1510.7	1521.5	1513.8
22.5°	1706.1	1712.3	1690.7	1661.5	1595.4	1563.0	1546.1	1556.9	1555.4	1560.0	1540.0
25°	1949.2	1947.7	1921.5	1867.7	1761.5	1683.0	1641.5	1624.6	1624.6	1615.3	1590.7
27.5°	2250.7	2227.6	2181.5	2116.9	1969.2	1860.0	1770.7	1727.7	1720.0	1692.3	1646.1
30°	2572.3	2555.3	2489.2	2395.3	2224.6	2084.6	1936.9	1850.7	1846.1	1786.1	1716.9
32.5°	2950.7	2923.0	2849.2	2736.9	2532.3	2335.3	2150.7	2020.0	2012.3	1916.9	1821.5
35°	3436.8	3413.8	3270.7	3158.4	2895.3	2636.9	2418.4	2244.6	2238.4	2121.5	2000.0
37.5°	4019.9	3959.9	3821.5	3610.7	3333.8	3027.6	2750.7	2532.3	2524.6	2395.3	2241.5
40°	4539.9	4486.1	4363.0	4169.1	3872.2	3532.2	3156.9	2892.2	2884.6	2727.6	2533.8
42.5°	4924.5	4887.6	4807.6	4695.3	4483.0	4276.8	3675.3	3327.6	3313.8	3110.7	2869.2
45°	5147.6	5118.4	5072.2	5099.9	5096.8	5058.4	4293.8	3846.1	3801.5	3538.4	3243.0
47.5°	5093.7	5067.6	5086.0	5301.4	5598.3	5821.4	5013.7	4376.8	4316.8	3973.8	3641.5
50°	4704.5	4715.3	4812.2	5224.5	5890.6	6386.0	5812.2	4981.4	4901.4	4412.2	4019.9
52.5°	3995.3	4021.5	4256.8	4833.7	5858.3	6752.2	6533.7	5606.0	5499.9	4839.9	4364.5
55°	3173.8	3239.9	3544.5	4150.7	5436.8	6778.3	7078.3	6233.7	6116.8	5241.4	4664.5
57.5°	2347.6	2446.1	2798.4	3355.3	4629.1	6364.5	7350.6	6833.7	6692.2	5639.9	4981.4
60°	1489.2	1549.2	1955.3	2612.3	3543.0	5352.2	7315.2	7344.5	7221.4	6036.8	5312.2
62.5°	950.7	980.0	1184.6	1863.0	2476.9	3963.0	6929.1	7730.6	7647.5	6398.3	5626.0
65°	610.8	623.1	727.7	1146.1	1686.1	2392.3	5967.6	7772.1	7782.9	6624.5	5819.9
67.5°	496.9	503.1	541.5	707.7	1192.3	1321.5	4156.8	7181.4	7312.2	6566.0	5753.7
70°	452.3	460.0	500.0	564.6	923.1	912.3	2012.3	6009.1	6222.9	6229.1	5459.9
72.5°	381.5	392.3	446.1	533.8	713.8	720.0	852.3	4279.9	4595.3	5567.6	5018.4
75°	318.5	324.6	370.8	470.8	604.6	575.4	598.4	2269.2	2724.6	4464.5	4549.1
77.5°	258.5	264.6	298.5	375.4	536.9	447.7	470.8	940.0	1161.5	3030.7	3718.4
80°	184.6	190.8	229.2	292.3	406.1	403.1	349.2	518.5	563.1	1638.4	2415.3
82.5°	132.3	136.9	173.8	209.2	281.5	404.6	263.1	352.3	369.2	726.1	973.8
85°	89.2	89.2	120.0	138.5	181.5	255.4	212.3	238.5	249.2	344.6	263.1
87.5°	38.5	38.5	64.6	70.8	95.4	118.5	158.5	120.0	123.1	186.1	107.7
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°	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9
2.5°	1470.7	1472.3	1475.4	1484.6	1490.7	1500.0	1504.6	1510.7	1510.7	1507.7	1509.2
5°	1467.7	1472.3	1483.0	1500.0	1510.7	1527.7	1540.0	1549.2	1552.3	1549.2	1550.7
7.5°	1466.1	1473.8	1492.3	1516.9	1532.3	1553.8	1570.7	1581.5	1589.2	1586.1	1587.7
10°	1461.5	1473.8	1496.9	1527.7	1550.7	1572.3	1587.7	1592.3	1596.9	1593.8	1592.3
12.5°	1467.7	1481.5	1506.1	1543.0	1569.2	1586.1	1590.7	1583.0	1572.3	1566.1	1564.6
15°	1480.0	1493.8	1518.4	1556.9	1580.0	1586.1	1575.4	1550.7	1526.1	1512.3	1510.7
17.5°	1496.9	1506.1	1526.1	1560.0	1578.4	1570.7	1549.2	1520.0	1501.5	1490.7	1492.3
20°	1507.7	1507.7	1523.0	1549.2	1564.6	1558.4	1532.3	1500.0	1470.7	1456.9	1452.3
22.5°	1523.0	1515.4	1516.9	1540.0	1561.5	1552.3	1496.9	1440.0	1398.4	1383.0	1381.5
25°	1564.6	1543.0	1529.2	1543.0	1593.8	1518.4	1407.7	1341.5	1303.0	1289.2	1290.7
27.5°	1615.3	1586.1	1556.9	1580.0	1620.0	1441.5	1293.8	1218.4	1195.4	1184.6	1189.2
30°	1666.1	1627.7	1589.2	1672.3	1601.5	1321.5	1147.7	1073.8	1053.8	1046.1	1052.3
32.5°	1760.0	1696.9	1650.7	1795.3	1544.6	1184.6	989.2	921.5	903.1	893.8	890.8
35°	1916.9	1836.9	1790.7	1903.0	1464.6	1032.3	844.6	796.9	776.9	756.9	753.8
37.5°	2143.0	2046.1	2004.6	1964.6	1352.3	881.5	733.8	701.5	672.3	641.5	640.0
40°	2413.8	2287.6	2256.9	1992.3	1196.9	740.0	656.9	626.1	589.2	560.0	561.5
42.5°	2726.1	2564.6	2498.4	1984.6	1004.6	664.6	601.5	567.7	535.4	509.2	507.7
45°	3059.9	2876.9	2724.6	1930.7	813.8	612.3	567.7	527.7	495.4	466.1	463.1
47.5°	3429.2	3224.5	2933.8	1826.1	672.3	575.4	547.7	490.8	461.5	443.1	443.1
50°	3801.5	3556.8	3126.1	1667.7	589.2	547.7	518.5	470.8	447.7	432.3	432.3
52.5°	4119.9	3903.0	3284.5	1478.4	536.9	524.6	498.5	461.5	436.9	423.1	421.5
55°	4429.1	4224.5	3426.1	1290.7	493.8	493.8	493.8	453.8	426.1	413.8	412.3
57.5°	4736.8	4563.0	3573.8	1167.7	455.4	467.7	484.6	444.6	416.9	406.1	404.6
60°	5084.5	4969.1	3744.5	1081.5	421.5	440.0	472.3	433.8	401.5	392.3	390.8
62.5°	5453.7	5453.7	3899.9	960.0	390.8	416.9	453.8	420.0	387.7	380.0	378.5
65°	5743.0	5867.6	3999.9	778.4	360.0	393.8	432.3	401.5	369.2	367.7	364.6
67.5°	5776.8	5972.2	3936.8	587.7	332.3	369.2	410.8	381.5	350.8	350.8	346.1
70°	5533.7	5732.2	3739.9	440.0	312.3	344.6	383.1	356.9	327.7	330.8	323.1
72.5°	5127.6	5176.8	3250.7	347.7	289.2	318.5	349.2	329.2	303.1	303.1	292.3
75°	4592.2	4318.4	2361.5	290.8	261.5	287.7	315.4	298.5	275.4	267.7	261.5
77.5°	3655.3	3129.2	1372.3	250.8	238.5	258.5	276.9	264.6	244.6	227.7	227.7
80°	2227.6	1833.8	606.1	216.9	210.8	226.1	238.5	224.6	207.7	190.8	186.1
82.5°	847.7	707.7	293.8	186.1	184.6	193.8	203.1	189.2	176.9	169.2	146.2
85°	232.3	213.8	201.5	155.4	152.3	150.8	161.5	155.4	138.5	113.8	101.5
87.5°	87.7	100.0	109.2	95.4	101.5	93.8	107.7	98.5	87.7	56.9	50.8
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)