

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: P397541

Luminaire Tested: **ARCH-S-PA1-100-727-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397541  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-727-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9856 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

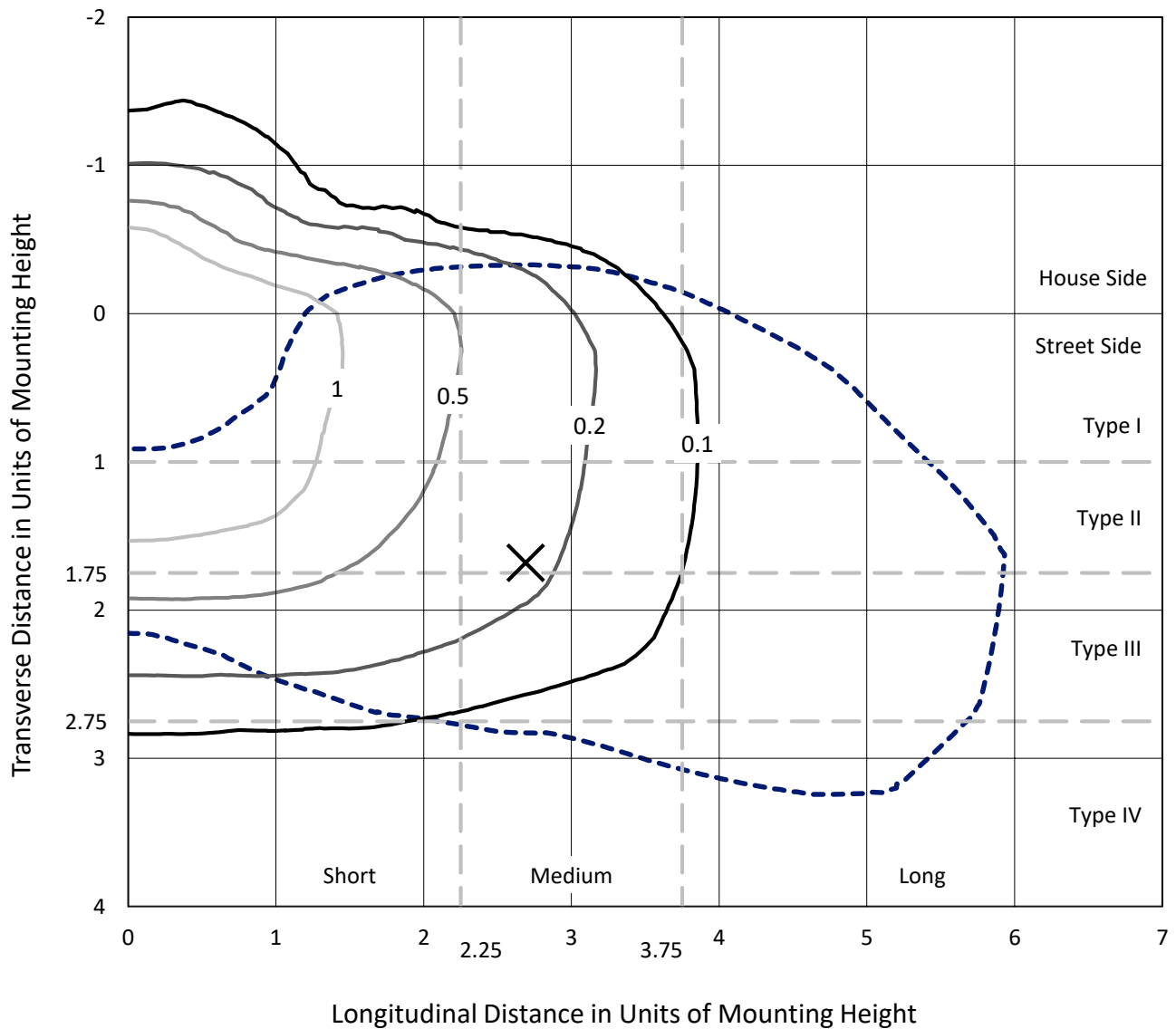


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

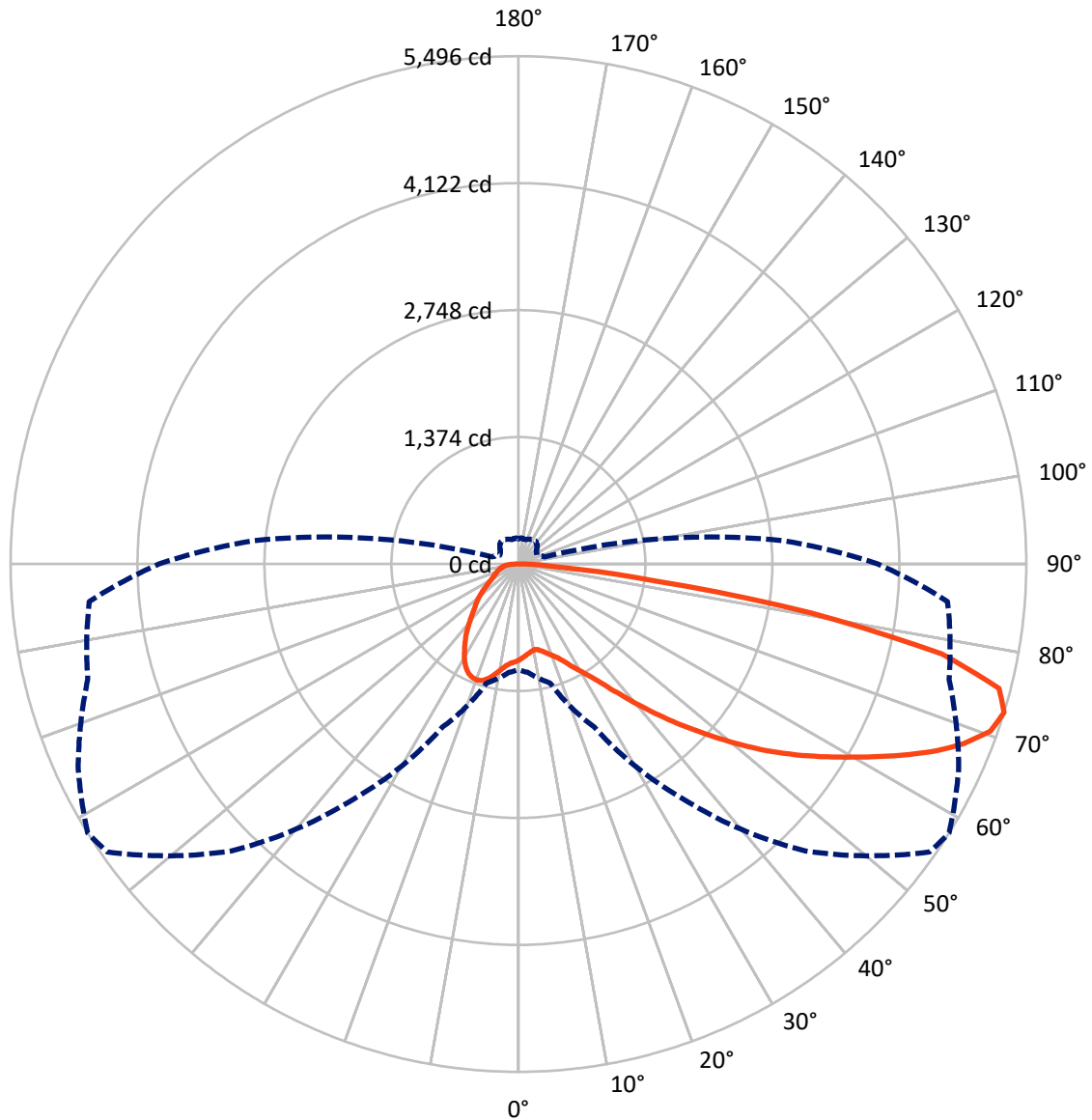


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2235.2	0.0	2235.2
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	7620.8	0.0	7620.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	9856.0	0.0	9856.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	1.0
10°-20°	318.0	3.2
20°-30°	569.7	5.8
30°-40°	857.0	8.7
40°-50°	1387.8	14.1
50°-60°	2089.1	21.2
60°-70°	2458.6	24.9
70°-80°	1743.4	17.7
80°-90°	332.2	3.4
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°	9856.0	100.0
0°-180°	9856.0	100.0



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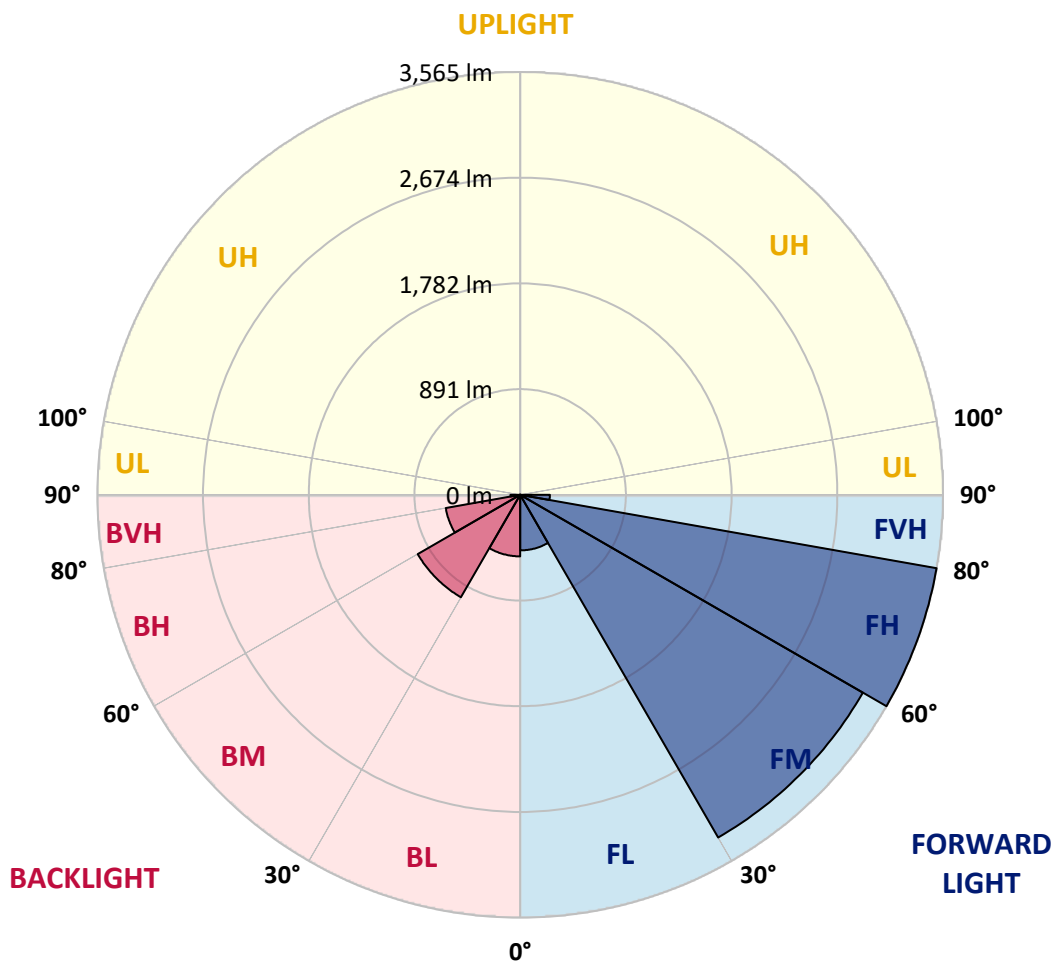
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	468.7	4.8			
FM	(30°-60°)	3336.5	33.9			
FH	(60°-80°)	3565.0	36.2			G2/5000
FVH	(80°-90°)	250.6	2.5			G3/500
BL	(0°-30°)	519.2	5.3	B2/1000		
BM	(30°-60°)	997.3	10.1	B1/1000		
BH	(60°-80°)	637.1	6.5	B2/1000		G2/1000
BVH	(80°-90°)	81.6	0.8			G1/100
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°	55°	58°	65°	75°	85°
0°	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6
2.5°	1000.6	995.4	996.7	996.7	1001.9	1004.5	1005.8	1009.7	1012.3	1018.8	1027.9
5°	953.7	949.8	951.1	952.4	961.5	970.6	978.4	983.7	991.5	1001.9	1014.9
7.5°	919.9	917.3	918.6	921.2	929.0	939.4	952.4	960.2	971.9	991.5	1013.6
10°	895.2	895.2	896.5	901.7	909.5	922.5	932.9	942.0	965.4	1000.6	1034.4
12.5°	875.7	875.7	879.6	890.0	903.0	916.0	940.7	951.1	982.3	1030.5	1070.8
15°	874.4	875.7	877.0	886.1	900.4	929.0	965.4	981.0	1018.8	1076.0	1122.9
17.5°	895.2	896.5	891.3	893.9	910.8	951.1	999.3	1017.5	1065.6	1128.1	1176.2
20°	958.9	958.9	943.3	929.0	940.7	985.0	1039.6	1057.8	1111.2	1180.1	1228.3
22.5°	1089.0	1095.5	1059.1	1027.9	1009.7	1034.4	1083.8	1103.4	1163.2	1237.4	1285.5
25°	1246.5	1253.0	1203.5	1159.3	1125.5	1121.6	1154.1	1174.9	1224.4	1301.1	1341.5
27.5°	1398.7	1387.0	1341.5	1299.8	1256.9	1221.8	1246.5	1264.7	1321.9	1380.5	1405.2
30°	1518.4	1509.3	1465.1	1435.1	1394.8	1349.3	1335.0	1354.5	1401.3	1456.0	1469.0
32.5°	1651.1	1644.6	1600.4	1561.3	1527.5	1484.6	1453.4	1462.5	1488.5	1527.5	1535.3
35°	1820.3	1834.6	1787.7	1708.4	1670.6	1629.0	1606.9	1609.5	1629.0	1653.7	1640.7
37.5°	1998.5	2015.4	2018.0	1893.1	1842.4	1804.7	1781.2	1790.3	1813.8	1830.7	1790.3
40°	2329.0	2312.1	2244.4	2152.1	2074.0	2037.6	2005.0	2003.7	2020.6	2050.6	1977.7
42.5°	2767.5	2751.9	2615.3	2495.6	2371.9	2330.3	2266.6	2239.2	2247.0	2284.8	2183.3
45°	3187.8	3181.2	3072.0	2932.7	2784.4	2703.7	2558.0	2491.7	2485.1	2515.1	2394.1
47.5°	3561.2	3532.6	3453.2	3345.2	3329.6	3118.8	2850.8	2761.0	2729.8	2746.7	2611.4
50°	3960.6	3863.0	3753.7	3687.4	3800.6	3604.1	3146.1	3052.4	2975.7	2987.4	2846.9
52.5°	4172.7	4008.8	3937.2	3956.7	4109.0	4033.5	3467.5	3353.0	3229.4	3246.3	3081.1
55°	3990.5	3989.2	4020.5	4141.5	4353.6	4266.4	3773.3	3644.4	3509.1	3513.0	3350.4
57.5°	3740.7	3791.5	3952.8	4219.5	4656.7	4511.0	4073.8	3937.2	3813.6	3794.1	3656.2
60°	3513.0	3569.0	3803.2	4206.5	4762.1	4734.8	4360.1	4240.4	4140.2	4082.9	3977.5
62.5°	3166.9	3208.6	3540.4	4123.3	4673.6	4896.1	4650.2	4568.2	4492.8	4374.4	4323.6
65°	2759.7	2774.0	3124.0	3848.7	4563.0	4958.6	4939.1	4902.6	4829.8	4655.4	4665.8
67.5°	2318.6	2347.2	2654.3	3410.2	4321.0	4930.0	5162.9	5192.8	5106.9	4845.4	4884.4
70°	1848.9	1884.0	2116.9	2803.9	3909.9	4806.4	5369.7	5417.9	5252.6	4907.8	4924.8
72.5°	1143.7	1177.5	1333.7	1947.8	3099.3	4391.3	5433.5	5495.9	5256.5	4824.6	4661.9
75°	395.5	399.4	521.8	934.2	1839.8	3315.3	5225.3	5372.3	5091.3	4521.4	4056.9
77.5°	180.9	187.4	231.6	385.1	815.8	1789.0	4314.5	4682.7	4589.1	4047.8	3122.7
80°	124.9	127.5	160.0	230.3	471.0	629.7	2723.3	3203.4	3367.3	3134.4	2001.1
82.5°	93.7	96.3	123.6	156.1	339.6	305.8	1037.0	1488.5	1850.2	1816.4	836.6
85°	89.8	88.5	96.3	104.1	226.4	182.2	335.7	460.6	722.1	618.0	210.8
87.5°	39.0	42.9	98.9	58.6	118.4	84.6	145.7	170.4	219.9	191.3	75.5
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°	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6
2.5°	1031.8	1034.4	1042.2	1053.9	1060.4	1073.4	1082.5	1087.7	1091.6	1092.9	1092.9
5°	1022.7	1027.9	1044.8	1064.3	1082.5	1109.9	1134.6	1148.9	1159.3	1163.2	1164.5
7.5°	1025.3	1038.3	1063.0	1091.6	1115.1	1150.2	1180.1	1208.7	1232.2	1241.3	1241.3
10°	1050.0	1068.2	1102.1	1139.8	1169.7	1206.1	1237.4	1262.1	1289.4	1305.0	1307.6
12.5°	1087.7	1109.9	1154.1	1195.7	1229.6	1258.2	1286.8	1305.0	1318.0	1329.7	1332.4
15°	1141.1	1168.4	1212.6	1255.6	1285.5	1303.7	1311.5	1311.5	1310.2	1311.5	1314.1
17.5°	1194.4	1220.5	1264.7	1307.6	1321.9	1311.5	1302.4	1299.8	1298.5	1295.9	1297.2
20°	1246.5	1271.2	1308.9	1341.5	1329.7	1293.3	1281.6	1280.3	1276.4	1273.8	1271.2
22.5°	1298.5	1316.7	1348.0	1359.7	1312.8	1260.8	1246.5	1238.7	1233.5	1227.0	1220.5
25°	1358.4	1363.6	1387.0	1368.8	1271.2	1200.9	1180.1	1168.4	1163.2	1156.7	1151.5
27.5°	1414.3	1414.3	1418.2	1354.5	1210.0	1121.6	1090.3	1069.5	1068.2	1066.9	1065.6
30°	1465.1	1458.6	1445.5	1311.5	1130.7	1024.0	977.1	956.3	964.1	970.6	971.9
32.5°	1524.9	1511.9	1475.5	1253.0	1035.7	914.7	857.4	848.3	857.4	865.2	860.0
35°	1618.6	1595.2	1506.7	1185.3	944.6	814.5	759.9	746.8	744.2	742.9	732.5
37.5°	1752.6	1712.3	1531.4	1112.5	854.8	726.0	685.7	658.4	633.6	607.6	603.7
40°	1916.6	1847.6	1548.3	1029.2	759.9	651.9	608.9	573.8	532.2	486.6	481.4
42.5°	2096.1	1993.3	1556.1	936.8	676.6	590.7	537.4	493.1	446.3	411.2	404.6
45°	2290.0	2150.8	1549.6	848.3	608.9	538.7	478.8	430.7	392.9	368.2	363.0
47.5°	2478.6	2331.6	1531.4	778.1	556.9	494.4	433.3	389.0	360.4	333.1	326.6
50°	2720.7	2504.7	1509.3	723.4	499.6	450.2	404.6	357.8	325.3	312.3	309.7
52.5°	2988.7	2677.7	1483.3	654.5	443.7	415.1	386.4	344.8	334.4	309.7	305.8
55°	3278.8	2883.3	1478.1	567.3	394.2	390.3	368.2	356.5	359.1	309.7	303.2
57.5°	3584.6	3103.2	1489.8	480.1	353.9	368.2	376.0	366.9	363.0	316.2	303.2
60°	3903.4	3315.3	1454.7	399.4	322.7	350.0	385.1	361.7	333.1	313.6	304.5
62.5°	4213.0	3493.5	1302.4	342.2	299.3	344.8	379.9	342.2	309.7	309.7	305.8
65°	4438.1	3572.9	1018.8	300.6	283.6	338.3	370.8	329.2	303.2	312.3	307.1
67.5°	4464.2	3490.9	684.4	268.0	270.6	326.6	350.0	317.5	296.7	320.1	312.3
70°	4304.1	3277.5	419.0	243.3	253.7	305.8	331.8	305.8	287.5	313.6	301.9
72.5°	3889.1	2879.4	295.4	222.5	235.5	286.2	314.9	295.4	274.5	283.6	271.9
75°	3190.4	2231.4	234.2	203.0	217.3	268.0	300.6	279.7	258.9	255.0	247.2
77.5°	2260.1	1429.9	188.7	187.4	197.8	245.9	281.0	261.5	240.7	232.9	227.7
80°	1299.8	701.3	162.6	169.1	179.6	223.8	257.6	240.7	221.2	209.5	201.7
82.5°	497.0	244.6	143.1	147.0	158.7	200.4	234.2	219.9	200.4	210.8	177.0
85°	161.3	134.0	117.1	121.0	132.7	166.5	206.9	195.2	173.0	153.5	141.8
87.5°	71.6	72.9	62.5	69.0	83.3	110.6	150.9	143.1	126.2	105.4	101.5
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)