

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: P398002

Luminaire Tested: **ARCH-S-PA1-70-750-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398002  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10006 lumens  
Efficiency: N/A  
Efficacy: 135.2 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): 74  
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

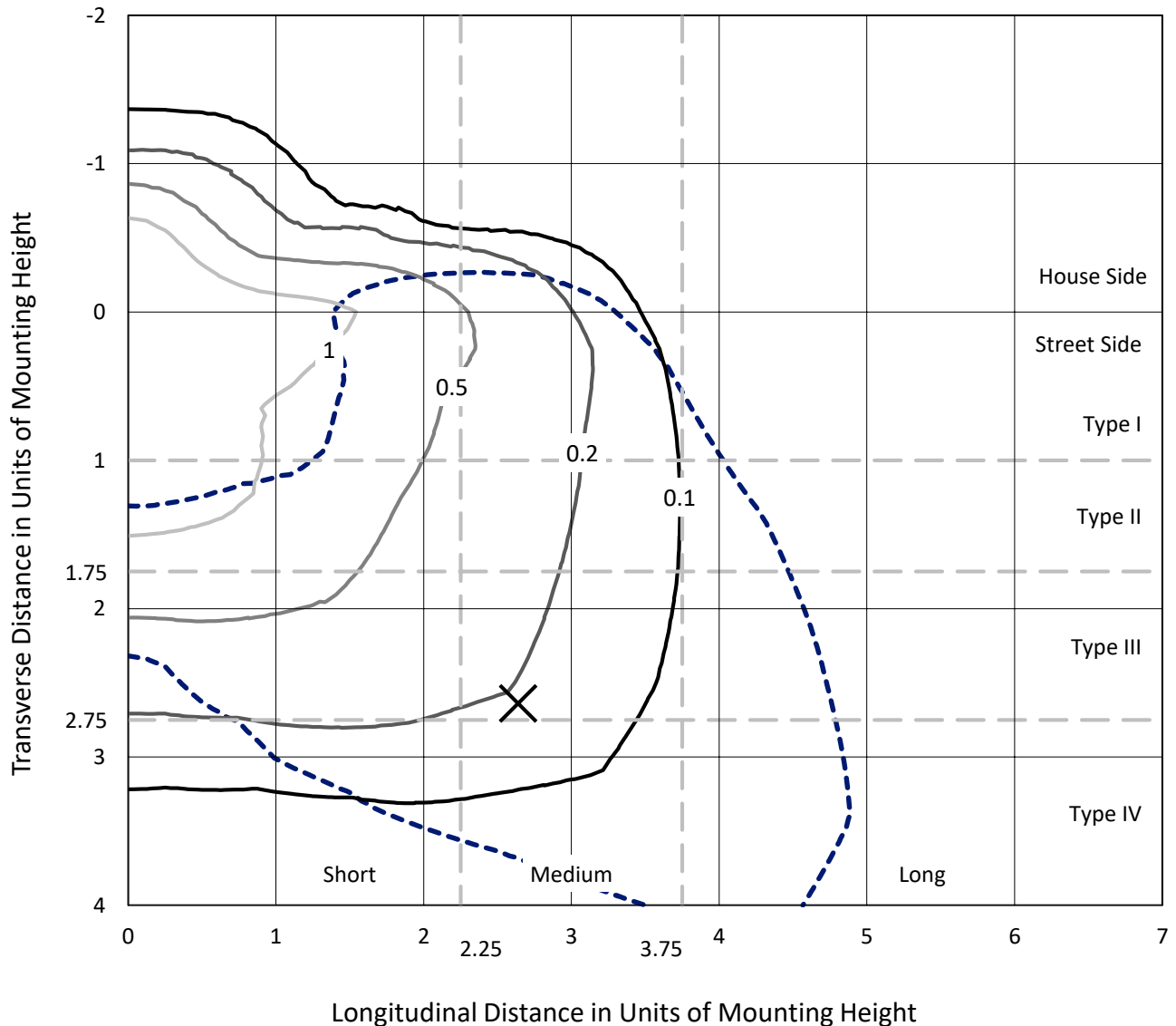


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

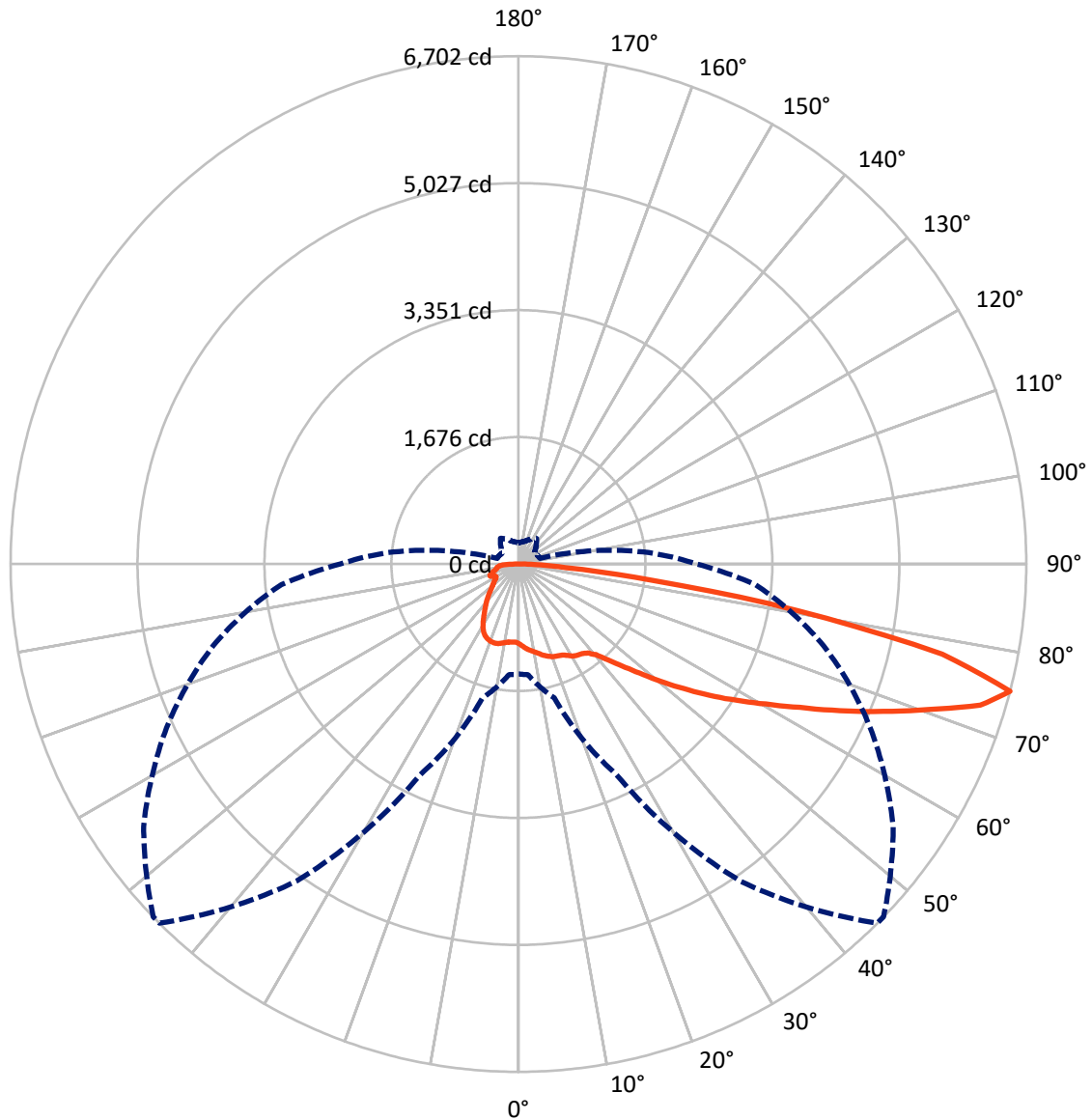


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	2211.3	0.0	2211.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	7794.7	0.0	7794.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	10006.0	0.0	10006.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	1.0
10°-20°	330.7	3.3
20°-30°	563.8	5.6
30°-40°	790.0	7.9
40°-50°	1160.7	11.6
50°-60°	1847.2	18.5
60°-70°	2627.6	26.3
70°-80°	2200.1	22.0
80°-90°	381.8	3.8
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°	10006.0	100.0
0°-180°	10006.0	100.0



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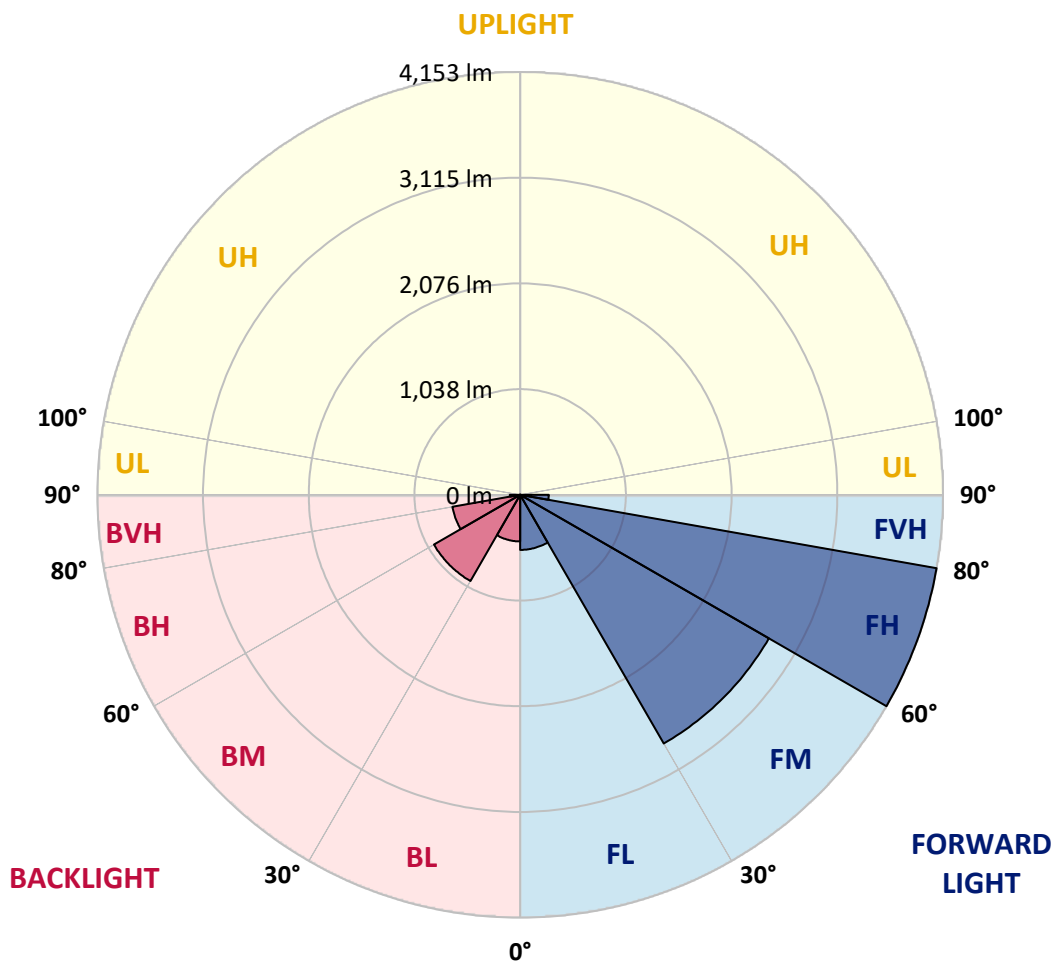
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	540.9	5.4			
FM	(30°-60°)	2820.4	28.2			
FH	(60°-80°)	4152.7	41.5			G2/5000
FVH	(80°-90°)	280.7	2.8			G3/500
BL	(0°-30°)	457.6	4.6	B1/500		
BM	(30°-60°)	977.5	9.8	B1/1000		
BH	(60°-80°)	675.0	6.7	B2/1000		G2/1000
BVH	(80°-90°)	101.1	1.0			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°	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8
2.5°	1111.0	1105.7	1103.0	1103.0	1092.3	1085.6	1084.3	1074.9	1066.9	1058.9	1052.2
5°	1175.2	1171.2	1163.2	1156.5	1141.8	1123.0	1120.4	1100.3	1080.3	1061.5	1045.5
7.5°	1234.0	1226.0	1216.6	1203.3	1179.2	1153.8	1149.8	1121.7	1093.6	1065.6	1044.2
10°	1283.5	1275.5	1262.1	1243.4	1212.6	1181.9	1177.9	1148.4	1119.0	1085.6	1054.9
12.5°	1330.3	1323.6	1303.5	1278.1	1242.0	1214.0	1209.9	1184.5	1153.8	1116.4	1076.3
15°	1370.4	1363.7	1342.3	1312.9	1271.4	1250.1	1244.7	1220.6	1189.9	1149.8	1108.3
17.5°	1390.4	1390.4	1367.7	1335.6	1296.8	1280.8	1276.8	1247.4	1219.3	1180.5	1139.1
20°	1397.1	1399.8	1383.8	1345.0	1311.6	1304.9	1300.9	1276.8	1244.7	1207.3	1168.5
22.5°	1401.1	1406.5	1393.1	1349.0	1320.9	1316.9	1314.2	1298.2	1272.8	1236.7	1197.9
25°	1414.5	1414.5	1405.1	1355.7	1332.9	1331.6	1331.6	1322.3	1304.9	1274.1	1235.3
27.5°	1434.6	1433.2	1421.2	1370.4	1359.7	1363.7	1362.4	1361.0	1349.0	1318.2	1276.8
30°	1468.0	1468.0	1454.6	1399.8	1393.1	1410.5	1411.8	1414.5	1395.8	1347.7	1314.2
32.5°	1518.8	1513.4	1500.1	1429.2	1418.5	1434.6	1437.2	1435.9	1419.8	1374.4	1358.3
35°	1675.2	1663.2	1615.0	1494.7	1441.2	1450.6	1451.9	1458.6	1461.3	1425.2	1417.2
37.5°	1949.3	1933.2	1859.7	1649.8	1513.4	1490.7	1489.4	1506.8	1521.5	1489.4	1489.4
40°	2247.4	2234.1	2191.3	1917.2	1647.1	1572.3	1566.9	1583.0	1601.7	1578.9	1585.6
42.5°	2504.1	2514.8	2518.8	2200.6	1847.7	1724.7	1710.0	1687.2	1716.7	1696.6	1723.3
45°	2696.6	2691.3	2764.8	2490.8	2107.0	1915.9	1895.8	1834.3	1871.7	1870.4	1929.2
47.5°	2901.2	2891.8	2922.6	2763.5	2402.5	2149.8	2119.1	2028.2	2084.3	2123.1	2220.7
50°	3095.1	3097.7	3108.4	2978.7	2723.4	2434.6	2395.8	2274.2	2354.4	2435.9	2573.6
52.5°	3347.7	3329.0	3315.7	3230.1	3083.0	2731.4	2706.0	2567.0	2679.3	2775.5	2958.7
55°	3568.3	3556.3	3548.3	3544.3	3383.8	3059.0	3032.2	2887.8	3049.6	3117.8	3387.9
57.5°	3803.6	3797.0	3839.7	3907.9	3843.8	3391.9	3363.8	3224.7	3405.2	3453.4	3853.1
60°	3976.1	3980.1	4097.8	4271.6	4227.5	3752.8	3719.4	3596.4	3751.5	3794.3	4318.4
62.5°	3977.4	4017.6	4290.3	4601.8	4652.6	4168.6	4129.9	3996.2	4107.1	4107.1	4735.5
65°	3597.8	3643.2	4255.5	4683.4	5083.1	4663.3	4625.9	4416.0	4457.4	4401.3	5127.2
67.5°	3219.4	3272.9	3849.1	4690.0	5385.3	5192.7	5148.6	4835.8	4764.9	4623.2	5401.3
70°	2968.0	3005.5	3486.8	4603.1	5567.1	5746.2	5712.8	5234.2	5006.9	4809.0	5343.8
72.5°	2498.8	2485.4	2945.3	4190.0	5668.7	6374.6	6346.5	5667.4	5216.8	4720.8	4557.7
75°	1450.6	1466.6	1827.6	3069.7	5109.9	6702.2	6699.5	6037.7	5124.6	4170.0	3140.5
77.5°	418.5	430.5	600.3	1349.0	3231.4	5716.8	5900.0	5521.6	4331.7	2972.1	1628.4
80°	183.2	192.5	260.7	449.2	1391.8	3734.1	3894.6	3734.1	2612.4	1363.7	639.1
82.5°	108.3	115.0	169.8	278.1	667.1	1776.8	1993.4	1740.7	1127.1	578.9	264.7
85°	61.5	64.2	97.6	176.5	419.8	621.7	697.9	653.8	549.5	328.9	139.0
87.5°	28.1	29.4	48.1	82.9	235.3	209.9	217.9	288.8	318.2	200.5	69.5
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°	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8	1050.8
2.5°	1049.5	1045.5	1037.5	1034.8	1030.8	1032.1	1033.5	1033.5	1034.8	1030.8	1030.8
5°	1038.8	1032.1	1024.1	1024.1	1024.1	1034.8	1044.2	1049.5	1052.2	1052.2	1049.5
7.5°	1034.8	1026.8	1017.4	1020.1	1022.8	1036.1	1053.5	1070.9	1076.3	1076.3	1073.6
10°	1042.8	1034.8	1028.1	1032.1	1038.8	1049.5	1062.9	1078.9	1092.3	1093.6	1092.3
12.5°	1061.5	1052.2	1045.5	1053.5	1061.5	1068.2	1074.9	1081.6	1099.0	1101.7	1101.7
15°	1092.3	1082.9	1074.9	1081.6	1084.3	1084.3	1084.3	1084.3	1101.7	1104.3	1104.3
17.5°	1123.0	1115.0	1107.0	1108.3	1100.3	1089.6	1085.6	1084.3	1093.6	1101.7	1103.0
20°	1152.5	1145.8	1137.8	1124.4	1104.3	1084.3	1077.6	1077.6	1082.9	1095.0	1095.0
22.5°	1184.5	1176.5	1163.2	1132.4	1099.0	1070.9	1064.2	1068.2	1074.9	1091.0	1089.6
25°	1220.6	1209.9	1187.2	1129.7	1081.6	1048.2	1049.5	1061.5	1073.6	1091.0	1091.0
27.5°	1260.8	1246.0	1200.6	1108.3	1042.8	1010.7	1022.8	1050.8	1068.2	1086.9	1089.6
30°	1304.9	1291.5	1211.3	1070.9	980.0	950.6	980.0	1025.4	1052.2	1069.6	1073.6
32.5°	1358.3	1347.7	1220.6	1022.8	898.4	873.0	915.8	972.0	1014.8	1034.8	1038.8
35°	1425.2	1414.5	1232.7	968.0	822.2	795.5	834.3	891.8	947.9	973.3	981.3
37.5°	1512.1	1496.1	1243.4	909.1	758.1	727.3	746.0	798.2	849.0	883.7	893.1
40°	1623.1	1597.7	1252.7	842.3	701.9	667.1	673.8	699.2	728.6	759.4	771.4
42.5°	1779.5	1728.7	1254.1	771.4	644.4	612.3	609.7	617.7	617.7	617.7	621.7
45°	1997.4	1901.2	1256.7	704.6	585.6	552.2	544.1	541.5	521.4	482.6	480.0
47.5°	2272.8	2127.1	1268.8	648.4	524.1	494.7	484.0	473.3	435.8	395.7	387.7
50°	2625.8	2389.1	1292.8	594.9	471.9	451.9	438.5	413.1	371.7	340.9	332.9
52.5°	3032.2	2700.7	1315.6	538.8	433.2	419.8	403.8	373.0	328.9	310.2	307.5
55°	3498.8	3048.3	1361.0	489.3	399.8	390.4	375.7	346.3	312.8	299.5	298.1
57.5°	3976.1	3437.3	1425.2	445.2	367.7	362.3	362.3	336.9	315.5	310.2	310.2
60°	4436.0	3771.6	1375.7	403.8	338.3	340.9	366.3	359.6	343.6	350.3	354.3
62.5°	4793.0	3968.1	1116.4	370.3	316.9	340.9	406.4	406.4	387.7	385.0	385.0
65°	4945.4	3965.4	784.8	344.9	308.8	374.3	453.2	431.8	382.4	363.7	359.6
67.5°	4906.6	3791.6	541.5	327.6	306.2	409.1	474.6	414.5	358.3	342.3	330.2
70°	4565.7	3423.9	417.1	311.5	302.2	394.4	467.9	394.4	339.6	324.9	314.2
72.5°	3683.3	2746.1	346.3	295.5	286.1	365.0	445.2	375.7	324.9	308.8	298.1
75°	2349.0	1727.3	292.8	274.1	255.4	327.6	414.5	357.0	308.8	287.4	279.4
77.5°	1129.7	744.7	255.4	248.7	230.0	303.5	383.7	332.9	287.4	270.1	264.7
80°	457.2	340.9	221.9	223.3	211.2	288.8	362.3	310.2	266.1	247.3	238.0
82.5°	238.0	197.9	187.2	192.5	192.5	275.4	346.3	291.5	247.3	239.3	208.6
85°	128.3	123.0	144.4	155.1	167.1	248.7	322.2	271.4	225.9	193.9	187.2
87.5°	62.8	80.2	81.6	93.6	116.3	199.2	271.4	227.3	188.5	156.4	153.8
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)