

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: P398083

Luminaire Tested: **ARCH-S-PA1-80-760-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398083  
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-PA1-80-760-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10813 lumens  
Efficiency: N/A  
Efficacy: 130.3 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

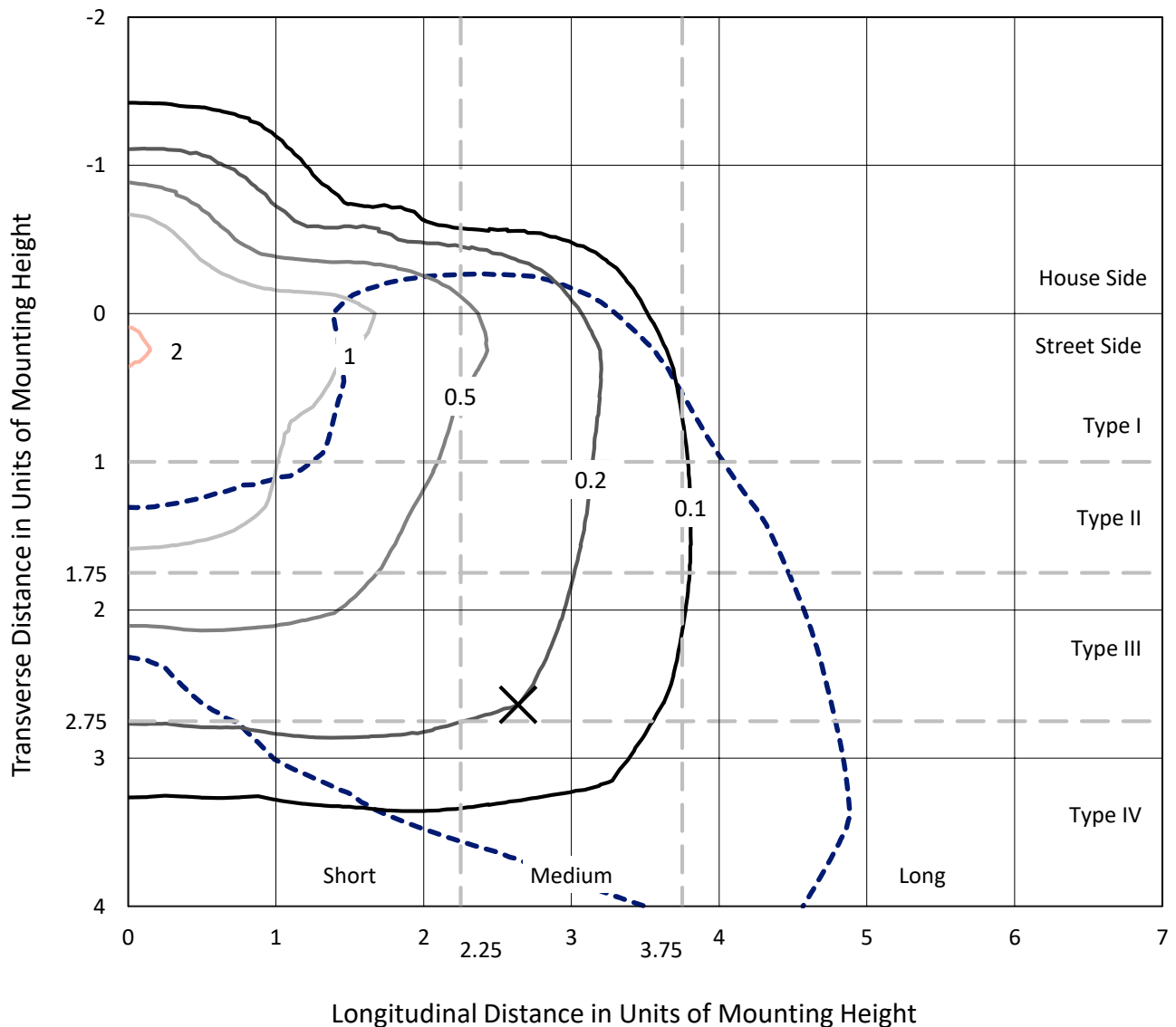
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

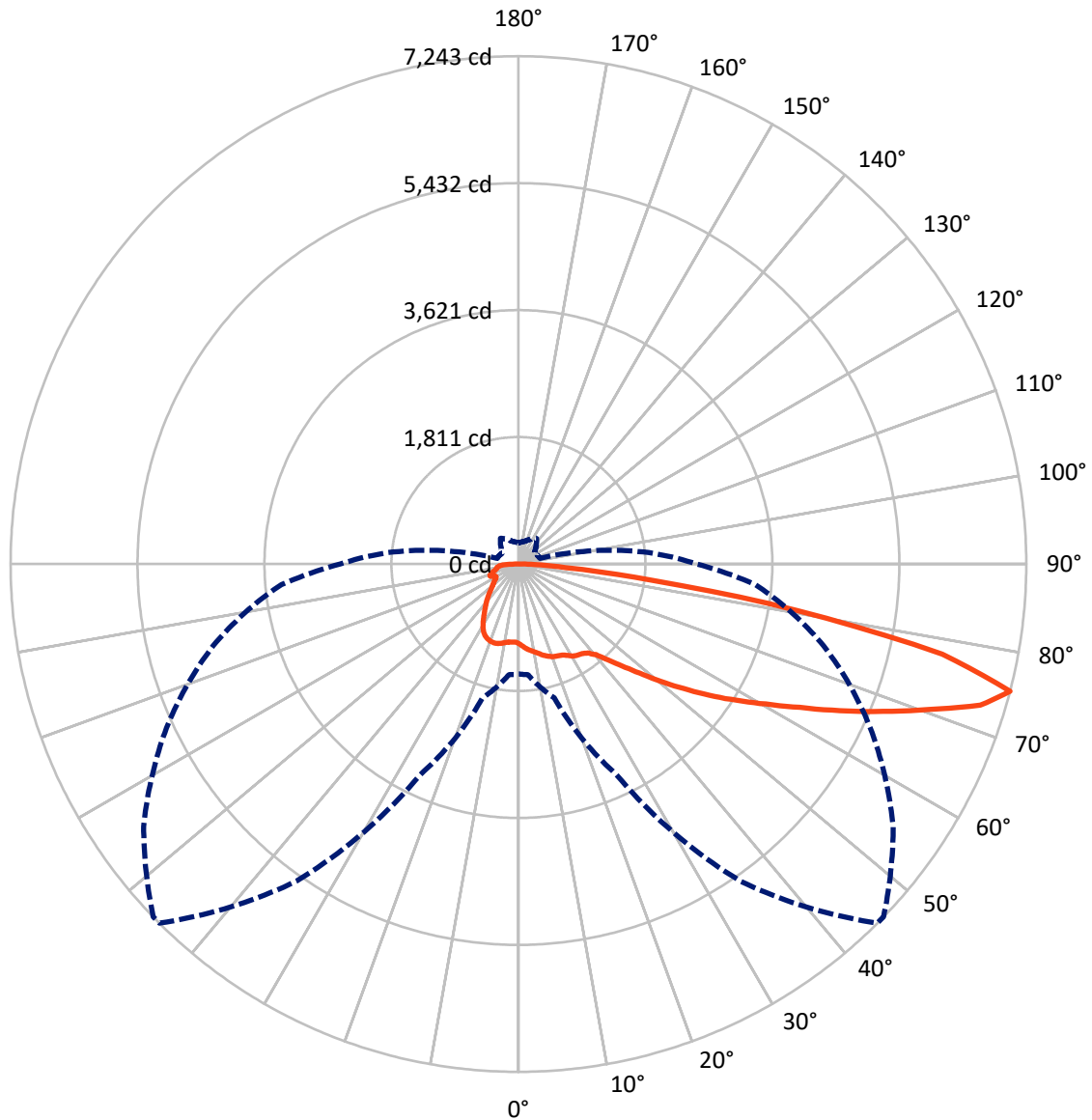


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Medium - Non-Cutoff

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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	2389.6	0.0	2389.6
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	8423.4	0.0	8423.4
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	10813.0	0.0	10813.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.3	1.0
10°-20°	357.4	3.3
20°-30°	609.3	5.6
30°-40°	853.7	7.9
40°-50°	1254.3	11.6
50°-60°	1996.2	18.5
60°-70°	2839.6	26.3
70°-80°	2377.6	22.0
80°-90°	412.6	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°	10813.0	100.0
0°-180°	10813.0	100.0



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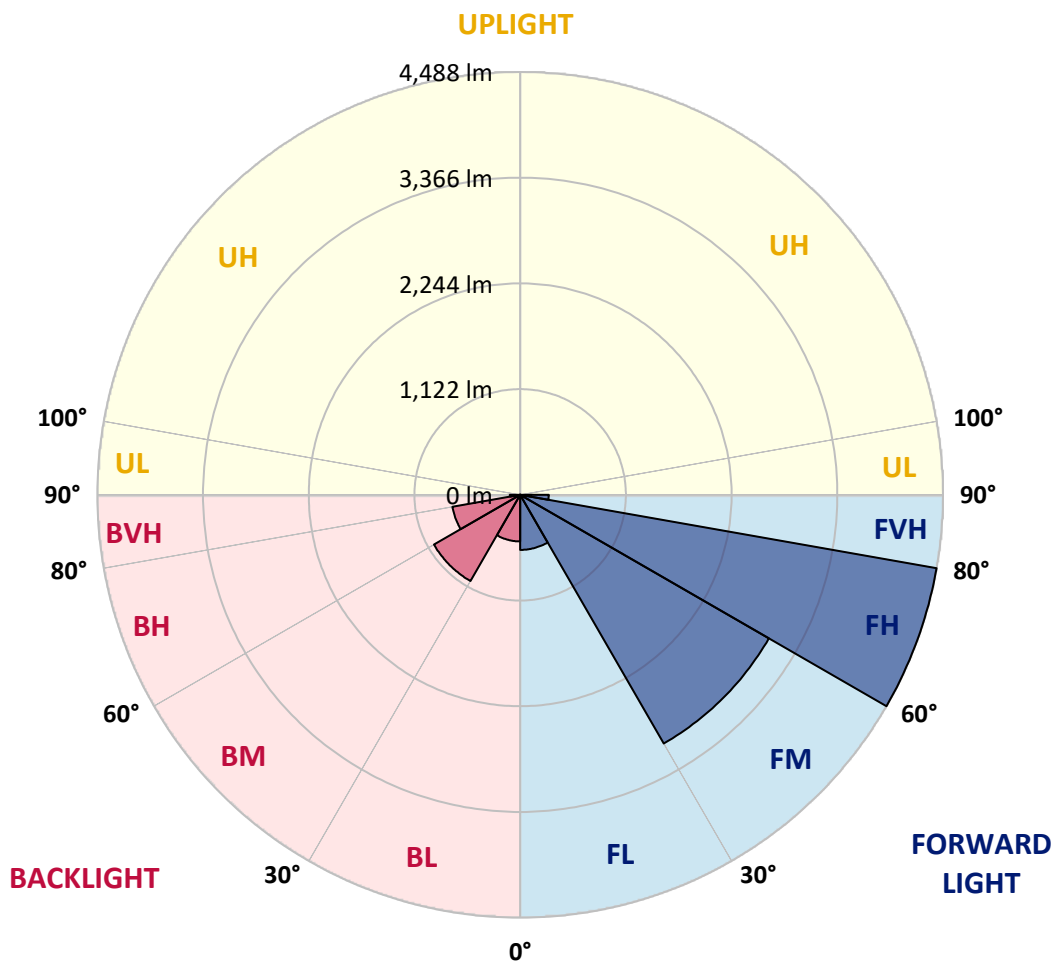
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	584.5	5.4			
FM (30°-60°)	3047.9	28.2			
FH (60°-80°)	4487.7	41.5			G2/5000
FVH (80°-90°)	303.4	2.8			G3/500
BL (0°-30°)	494.6	4.6	B1/500		
BM (30°-60°)	1056.3	9.8	B2/2500		
BH (60°-80°)	729.5	6.7	B2/1000		G2/1000
BVH (80°-90°)	109.3	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°	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6
2.5°	1200.6	1194.8	1191.9	1191.9	1180.4	1173.2	1171.7	1161.6	1152.9	1144.3	1137.0
5°	1270.0	1265.6	1257.0	1249.7	1233.8	1213.6	1210.7	1189.1	1167.4	1147.2	1129.8
7.5°	1333.5	1324.9	1314.8	1300.3	1274.3	1246.9	1242.5	1212.2	1181.8	1151.5	1128.4
10°	1387.0	1378.3	1363.9	1343.7	1310.4	1277.2	1272.9	1241.1	1209.3	1173.2	1139.9
12.5°	1437.6	1430.3	1408.7	1381.2	1342.2	1311.9	1307.5	1280.1	1246.9	1206.4	1163.1
15°	1480.9	1473.7	1450.6	1418.8	1374.0	1350.9	1345.1	1319.1	1285.9	1242.5	1197.7
17.5°	1502.6	1502.6	1478.0	1443.3	1401.4	1384.1	1379.8	1348.0	1317.6	1275.7	1231.0
20°	1509.8	1512.7	1495.4	1453.5	1417.3	1410.1	1405.8	1379.8	1345.1	1304.6	1262.7
22.5°	1514.1	1519.9	1505.5	1457.8	1427.4	1423.1	1420.2	1402.9	1375.4	1336.4	1294.5
25°	1528.6	1528.6	1518.5	1465.0	1440.5	1439.0	1439.0	1428.9	1410.1	1376.9	1335.0
27.5°	1550.3	1548.8	1535.8	1480.9	1469.3	1473.7	1472.2	1470.8	1457.8	1424.6	1379.8
30°	1586.4	1586.4	1571.9	1512.7	1505.5	1524.2	1525.7	1528.6	1508.4	1456.3	1420.2
32.5°	1641.3	1635.5	1621.0	1544.5	1532.9	1550.3	1553.1	1551.7	1534.4	1485.2	1467.9
35°	1810.3	1797.3	1745.3	1615.3	1557.5	1567.6	1569.0	1576.3	1579.2	1540.1	1531.5
37.5°	2106.5	2089.2	2009.7	1782.9	1635.5	1610.9	1609.5	1628.3	1644.2	1609.5	1609.5
40°	2428.7	2414.2	2368.0	2071.8	1780.0	1699.1	1693.3	1710.6	1730.9	1706.3	1713.5
42.5°	2706.1	2717.6	2722.0	2378.1	1996.7	1863.8	1847.9	1823.3	1855.1	1833.4	1862.3
45°	2914.1	2908.4	2987.8	2691.6	2277.0	2070.4	2048.7	1982.2	2022.7	2021.3	2084.8
47.5°	3135.2	3125.1	3158.3	2986.4	2596.3	2323.2	2290.0	2191.7	2252.4	2294.3	2399.8
50°	3344.7	3347.6	3359.1	3219.0	2943.0	2631.0	2589.1	2457.6	2544.3	2632.4	2781.2
52.5°	3617.7	3597.5	3583.1	3490.6	3331.7	2951.7	2924.2	2774.0	2895.4	2999.4	3197.3
55°	3856.1	3843.1	3834.5	3830.1	3656.8	3305.7	3276.8	3120.7	3295.6	3369.2	3661.1
57.5°	4110.4	4103.2	4149.4	4223.1	4153.8	3665.4	3635.1	3484.8	3679.9	3731.9	4163.9
60°	4296.8	4301.1	4428.3	4616.1	4568.4	4055.5	4019.4	3886.5	4054.1	4100.3	4666.7
62.5°	4298.2	4341.6	4636.3	4973.0	5027.9	4504.8	4462.9	4318.5	4438.4	4438.4	5117.4
65°	3887.9	3937.0	4598.8	5061.1	5493.1	5039.4	4999.0	4772.1	4816.9	4756.2	5540.8
67.5°	3479.0	3536.8	4159.5	5068.3	5819.6	5611.5	5563.9	5225.8	5149.2	4996.1	5836.9
70°	3207.4	3247.9	3768.0	4974.4	6016.1	6209.7	6173.6	5656.3	5410.7	5196.9	5774.8
72.5°	2700.3	2685.9	3182.9	4528.0	6125.9	6888.7	6858.4	6124.4	5637.6	5101.5	4925.3
75°	1567.6	1584.9	1975.0	3317.2	5522.0	7242.7	7239.8	6524.7	5537.9	4506.3	3393.8
77.5°	452.2	465.2	648.7	1457.8	3492.0	6177.9	6375.8	5967.0	4681.1	3211.8	1759.7
80°	197.9	208.0	281.7	485.4	1504.0	4035.3	4208.7	4035.3	2823.1	1473.7	690.6
82.5°	117.0	124.3	183.5	300.5	720.9	1920.1	2154.2	1881.1	1218.0	625.6	286.1
85°	66.5	69.3	105.5	190.7	453.7	671.8	754.2	706.5	593.8	355.4	150.3
87.5°	30.3	31.8	52.0	89.6	254.3	226.8	235.5	312.1	343.9	216.7	75.1
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°	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6	1135.6
2.5°	1134.2	1129.8	1121.2	1118.3	1113.9	1115.4	1116.8	1116.8	1118.3	1113.9	1113.9
5°	1122.6	1115.4	1106.7	1106.7	1106.7	1118.3	1128.4	1134.2	1137.0	1137.0	1134.2
7.5°	1118.3	1109.6	1099.5	1102.4	1105.3	1119.7	1138.5	1157.3	1163.1	1163.1	1160.2
10°	1126.9	1118.3	1111.0	1115.4	1122.6	1134.2	1148.6	1165.9	1180.4	1181.8	1180.4
12.5°	1147.2	1137.0	1129.8	1138.5	1147.2	1154.4	1161.6	1168.8	1187.6	1190.5	1190.5
15°	1180.4	1170.3	1161.6	1168.8	1171.7	1171.7	1171.7	1171.7	1190.5	1193.4	1193.4
17.5°	1213.6	1205.0	1196.3	1197.7	1189.1	1177.5	1173.2	1171.7	1181.8	1190.5	1191.9
20°	1245.4	1238.2	1229.5	1215.1	1193.4	1171.7	1164.5	1164.5	1170.3	1183.3	1183.3
22.5°	1280.1	1271.4	1257.0	1223.7	1187.6	1157.3	1150.0	1154.4	1161.6	1178.9	1177.5
25°	1319.1	1307.5	1283.0	1220.8	1168.8	1132.7	1134.2	1147.2	1160.2	1178.9	1178.9
27.5°	1362.4	1346.5	1297.4	1197.7	1126.9	1092.3	1105.3	1135.6	1154.4	1174.6	1177.5
30°	1410.1	1395.7	1309.0	1157.3	1059.0	1027.2	1059.0	1108.2	1137.0	1155.8	1160.2
32.5°	1467.9	1456.3	1319.1	1105.3	970.9	943.4	989.7	1050.4	1096.6	1118.3	1122.6
35°	1540.1	1528.6	1332.1	1046.0	888.5	859.6	901.5	963.7	1024.4	1051.8	1060.5
37.5°	1634.1	1616.7	1343.7	982.5	819.2	786.0	806.2	862.5	917.4	955.0	965.1
40°	1754.0	1726.5	1353.8	910.2	758.5	720.9	728.2	755.6	787.4	820.6	833.6
42.5°	1923.0	1868.1	1355.2	833.6	696.4	661.7	658.8	667.5	667.5	667.5	671.8
45°	2158.5	2054.5	1358.1	761.4	632.8	596.7	588.0	585.1	563.5	521.6	518.7
47.5°	2456.1	2298.7	1371.1	700.7	566.4	534.6	523.0	511.5	471.0	427.7	419.0
50°	2837.6	2581.8	1397.1	642.9	510.0	488.3	473.9	446.4	401.7	368.4	359.8
52.5°	3276.8	2918.5	1421.7	582.2	468.1	453.7	436.3	403.1	355.4	335.2	332.3
55°	3781.0	3294.1	1470.8	528.8	432.0	421.9	406.0	374.2	338.1	323.6	322.2
57.5°	4296.8	3714.5	1540.1	481.1	397.3	391.5	391.5	364.1	341.0	335.2	335.2
60°	4793.8	4075.7	1486.7	436.3	365.5	368.4	395.9	388.6	371.3	378.5	382.9
62.5°	5179.6	4288.1	1206.4	400.2	342.4	368.4	439.2	439.2	419.0	416.1	416.1
65°	5344.3	4285.2	848.1	372.8	333.7	404.5	489.8	466.7	413.2	393.0	388.6
67.5°	5302.4	4097.4	585.1	354.0	330.9	442.1	512.9	447.9	387.2	369.9	356.9
70°	4933.9	3700.1	450.8	336.6	326.5	426.2	505.7	426.2	367.0	351.1	339.5
72.5°	3980.4	2967.6	374.2	319.3	309.2	394.4	481.1	406.0	351.1	333.7	322.2
75°	2538.5	1866.7	316.4	296.2	276.0	354.0	447.9	385.8	333.7	310.6	302.0
77.5°	1220.8	804.7	276.0	268.7	248.5	328.0	414.7	359.8	310.6	291.8	286.1
80°	494.1	368.4	239.8	241.3	228.3	312.1	391.5	335.2	287.5	267.3	257.2
82.5°	257.2	213.8	202.3	208.0	208.0	297.6	374.2	315.0	267.3	258.6	225.4
85°	138.7	132.9	156.0	167.6	180.6	268.7	348.2	293.3	244.2	209.5	202.3
87.5°	67.9	86.7	88.1	101.1	125.7	215.3	293.3	245.6	203.7	169.0	166.2
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)