

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: P398005

Luminaire Tested: **ARCH-S-PA1-70-760-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398005  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-760-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10126 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

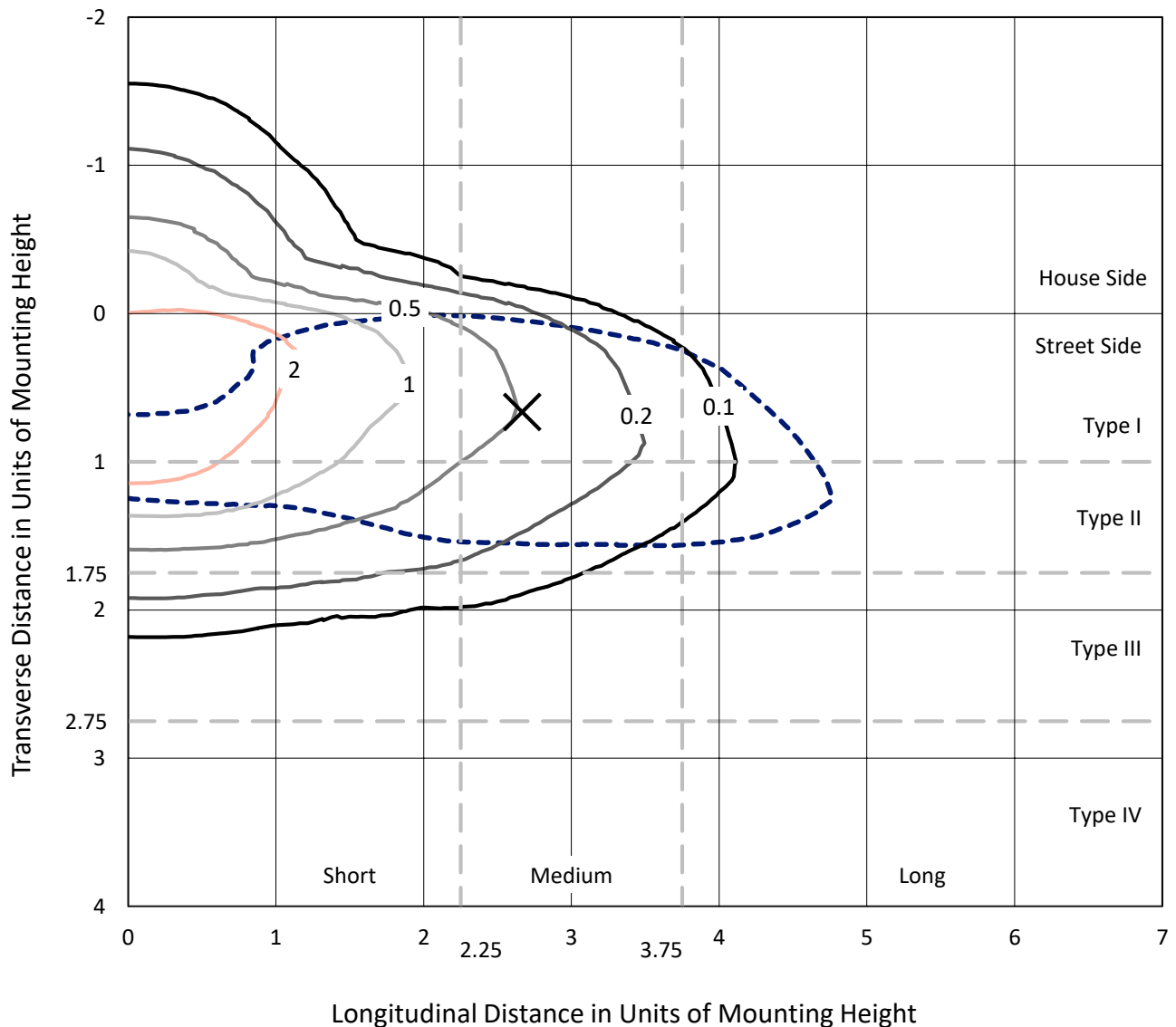
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

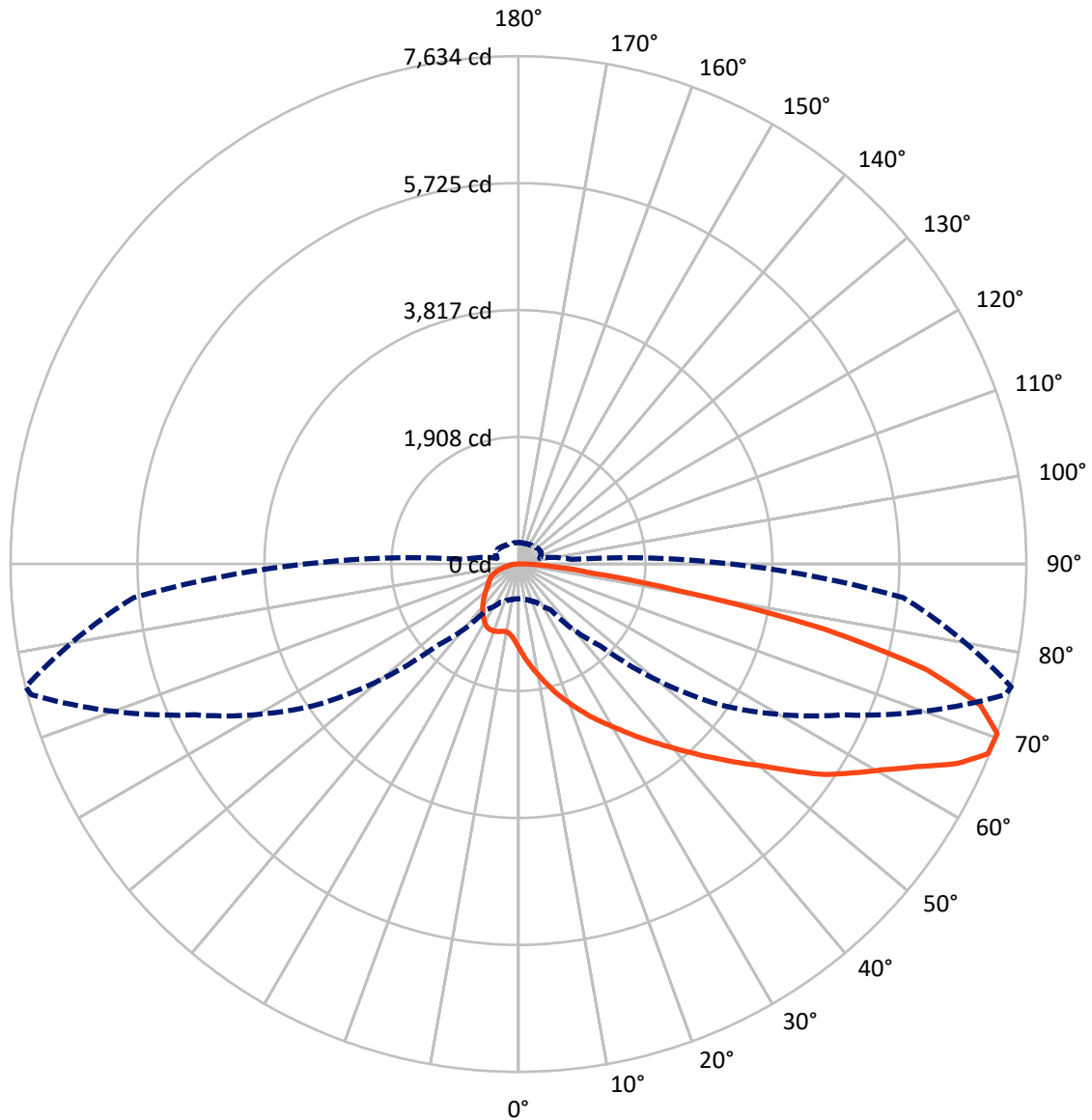


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1653.2	0.0	1653.2
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	8472.8	0.0	8472.8
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	10126.0	0.0	10126.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.6	1.3
10°-20°	447.2	4.4
20°-30°	800.1	7.9
30°-40°	1294.2	12.8
40°-50°	1872.3	18.5
50°-60°	2142.9	21.2
60°-70°	1971.3	19.5
70°-80°	1219.0	12.0
80°-90°	247.5	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°	10126.0	100.0
0°-180°	10126.0	100.0

**Coefficient of Utilization**



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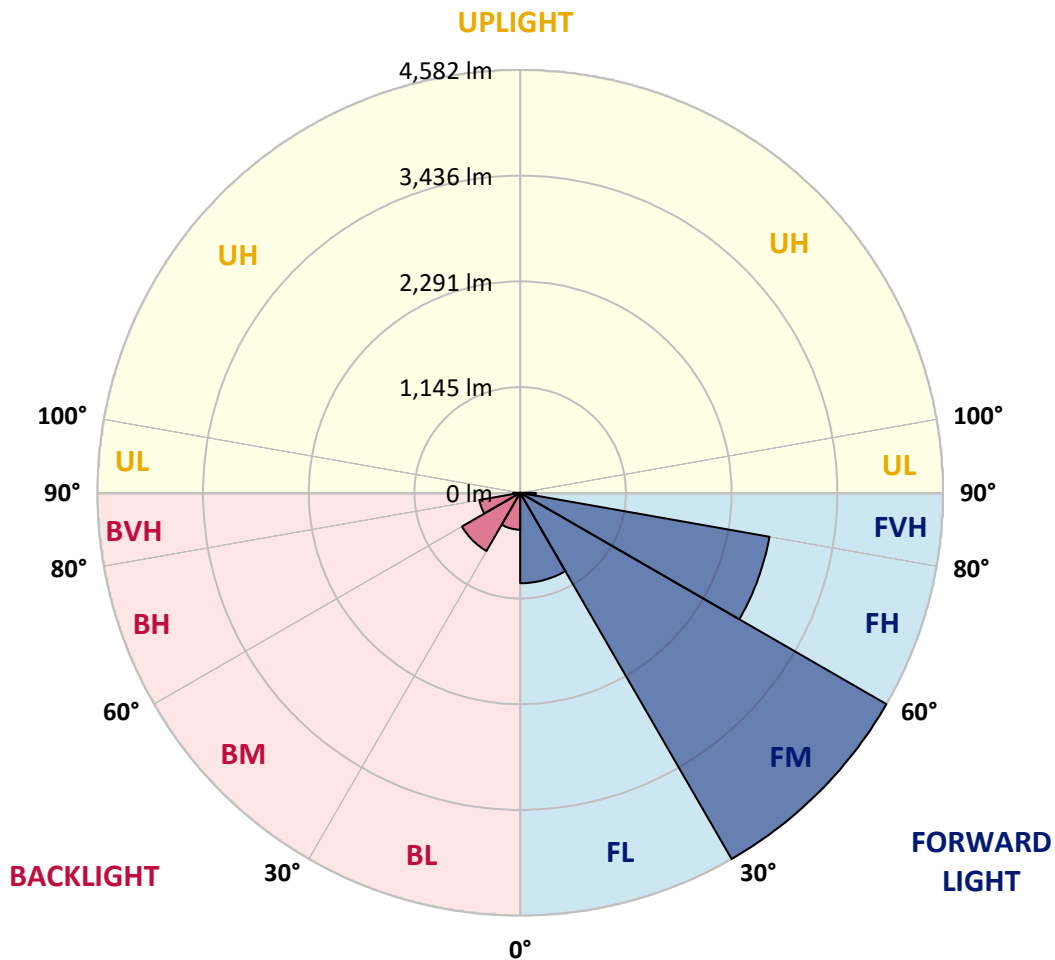
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	979.5	9.7			
FM (30°-60°)	4581.5	45.2			
FH (60°-80°)	2741.8	27.1			G2/5000
FVH (80°-90°)	169.9	1.7			G2/225
BL (0°-30°)	399.3	3.9	B1/500		
BM (30°-60°)	727.9	7.2	B1/1000		
BH (60°-80°)	448.4	4.4	B1/500		G1/500
BVH (80°-90°)	77.6	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3
2.5°	1613.8	1601.8	1600.5	1581.9	1564.6	1518.0	1484.7	1426.1	1367.5	1366.2	1307.6
5°	1865.5	1853.5	1846.9	1824.2	1794.9	1733.7	1673.8	1583.2	1483.3	1476.7	1366.2
7.5°	2035.9	2025.3	2012.0	2002.6	1974.7	1920.1	1846.9	1739.0	1601.8	1588.5	1434.1
10°	2150.4	2143.8	2141.1	2134.5	2117.2	2073.2	2002.6	1888.1	1720.4	1705.7	1506.0
12.5°	2199.7	2197.0	2209.0	2227.7	2234.3	2217.0	2149.1	2041.3	1850.8	1834.9	1592.5
15°	2142.5	2145.1	2175.7	2239.7	2307.6	2344.9	2304.9	2199.7	1998.6	1976.0	1693.7
17.5°	2115.8	2119.8	2141.1	2202.4	2298.2	2414.1	2432.7	2350.2	2141.1	2109.2	1800.2
20°	2162.4	2167.8	2183.7	2231.7	2298.2	2422.1	2519.3	2494.0	2280.9	2247.6	1902.8
22.5°	2280.9	2287.6	2286.3	2316.9	2362.2	2447.4	2567.2	2629.8	2427.4	2390.1	2009.3
25°	2533.9	2528.6	2483.3	2468.7	2480.7	2535.3	2631.1	2760.3	2580.5	2543.3	2121.2
27.5°	2877.5	2870.8	2788.3	2713.7	2647.1	2671.1	2721.7	2865.5	2736.3	2693.7	2227.7
30°	3245.0	3237.0	3141.1	3019.9	2872.1	2837.5	2830.9	2957.4	2893.4	2848.2	2340.9
32.5°	3603.2	3596.5	3494.0	3352.8	3149.1	3045.2	2981.3	3059.9	3071.9	3027.9	2464.7
35°	3929.4	3929.4	3841.5	3673.7	3443.4	3286.3	3181.1	3186.4	3276.9	3226.3	2605.8
37.5°	4219.7	4218.3	4122.5	3957.4	3736.3	3556.6	3426.1	3339.5	3472.7	3428.7	2753.6
40°	4450.0	4440.7	4370.1	4226.3	4004.0	3825.5	3693.7	3519.3	3691.0	3651.1	2910.8
42.5°	4617.8	4612.5	4564.5	4439.4	4227.7	4059.9	3969.3	3745.6	3938.7	3898.8	3094.5
45°	4683.0	4693.7	4693.7	4575.2	4407.4	4254.3	4214.3	3994.6	4206.4	4166.4	3291.6
47.5°	4577.9	4605.8	4663.1	4671.1	4523.3	4419.4	4432.7	4245.0	4482.0	4460.7	3507.3
50°	4249.0	4300.9	4426.1	4652.4	4569.9	4545.9	4619.1	4500.6	4777.6	4770.9	3769.6
52.5°	3400.8	3527.3	3917.4	4323.5	4537.9	4604.5	4804.2	4788.2	5158.4	5169.1	4111.8
55°	2608.5	2656.4	3107.8	3798.9	4342.2	4585.8	4928.0	5069.2	5571.2	5584.5	4426.1
57.5°	2109.2	2141.1	2387.5	3107.8	3896.1	4484.6	5025.3	5233.0	5888.1	5922.7	4705.7
60°	1671.1	1717.7	1882.8	2378.1	3271.6	4241.0	5093.2	5415.4	6229.0	6280.9	5039.9
62.5°	1242.3	1265.0	1420.8	1761.6	2589.9	3802.9	5057.2	5613.8	6647.1	6709.7	5442.0
65°	884.1	904.1	1014.6	1253.0	1914.8	3210.4	4848.2	5761.6	7171.7	7235.6	5846.8
67.5°	661.8	669.8	732.3	876.2	1290.3	2494.0	4424.7	5736.3	7555.2	7612.4	6009.3
70°	523.3	526.0	556.6	633.8	838.9	1736.3	3683.1	5364.8	7583.2	7633.7	5804.2
72.5°	434.1	432.8	450.1	487.3	584.5	1098.5	2728.3	4675.1	7223.6	7258.3	5231.6
75°	358.2	360.8	372.8	394.1	446.1	724.4	1768.3	3729.7	6372.8	6335.5	4390.1
77.5°	300.9	299.6	304.9	323.6	360.8	520.6	1035.9	2695.0	4723.0	4704.3	2881.5
80°	242.3	245.0	253.0	269.0	303.6	396.8	612.5	1681.7	2533.9	2466.0	1376.8
82.5°	162.4	187.7	203.7	222.4	262.3	292.9	388.8	854.9	1133.1	1115.8	624.5
85°	77.2	102.5	151.8	173.1	213.0	183.8	263.6	407.5	567.2	560.6	225.0
87.5°	16.0	16.0	81.2	97.2	131.8	78.6	146.5	177.1	274.3	257.0	91.9
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°	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3	1266.3
2.5°	1273.0	1237.0	1165.1	1107.8	1049.3	1016.0	974.7	954.7	950.7	940.1	948.1
5°	1295.6	1225.0	1089.2	1000.0	940.1	910.8	896.1	890.8	889.5	886.8	886.8
7.5°	1326.2	1218.4	1041.3	950.7	912.1	902.8	906.8	914.8	916.1	918.8	917.4
10°	1363.5	1219.7	1014.6	938.7	920.1	921.4	934.7	945.4	950.7	954.7	953.4
12.5°	1415.4	1235.7	1010.6	946.7	938.7	944.1	957.4	968.0	973.4	974.7	974.7
15°	1483.3	1269.0	1020.0	964.0	957.4	961.4	969.4	973.4	974.7	973.4	973.4
17.5°	1557.9	1308.9	1033.3	974.7	964.0	960.0	957.4	953.4	945.4	940.1	940.1
20°	1629.8	1344.9	1039.9	973.4	954.7	938.7	922.8	902.8	889.5	878.8	878.8
22.5°	1701.7	1378.1	1039.9	958.7	929.4	898.8	865.5	833.5	813.6	800.3	800.3
25°	1777.6	1410.1	1031.9	933.4	889.5	845.5	800.3	760.3	740.3	727.0	724.4
27.5°	1841.5	1428.7	1010.6	897.5	840.2	784.3	732.3	691.1	676.4	664.4	664.4
30°	1909.4	1440.7	970.7	850.9	784.3	720.4	667.1	633.8	617.8	600.5	599.2
32.5°	1985.3	1448.7	925.4	801.6	727.0	659.1	613.8	587.2	552.6	533.9	531.3
35°	2073.2	1459.4	877.5	745.7	669.8	608.5	581.9	537.9	504.7	488.7	487.3
37.5°	2166.4	1467.4	825.6	696.4	617.8	575.2	548.6	496.7	467.4	443.4	440.7
40°	2265.0	1467.4	772.3	648.5	576.6	560.6	510.0	463.4	414.1	402.1	399.5
42.5°	2374.1	1464.7	719.0	601.9	537.9	527.3	487.3	438.1	412.8	402.1	399.5
45°	2490.0	1455.4	668.4	548.6	498.0	476.7	446.1	432.8	422.1	422.1	422.1
47.5°	2621.8	1447.4	611.2	500.7	468.7	444.7	422.1	414.1	412.8	416.8	420.8
50°	2790.9	1444.7	563.2	466.0	446.1	418.1	415.4	408.8	410.1	410.1	410.1
52.5°	2996.0	1420.8	518.0	440.7	423.4	390.1	398.1	404.8	407.5	406.1	404.8
55°	3146.4	1378.1	479.4	423.4	407.5	379.5	390.1	400.8	403.5	399.5	399.5
57.5°	3282.3	1318.2	448.7	410.1	396.8	372.8	384.8	395.5	392.8	391.5	390.1
60°	3438.1	1261.0	424.8	403.5	386.1	370.2	380.8	387.5	383.5	380.8	379.5
62.5°	3607.2	1205.0	407.5	403.5	378.2	368.8	376.8	379.5	371.5	368.8	368.8
65°	3685.7	1117.2	388.8	403.5	374.2	366.2	368.8	366.2	358.2	358.2	356.9
67.5°	3556.6	972.0	364.8	398.1	379.5	362.2	356.9	352.9	343.5	343.5	340.9
70°	3199.7	798.9	330.2	380.8	380.8	360.8	340.9	331.6	320.9	324.9	319.6
72.5°	2733.7	633.8	287.6	351.5	372.8	359.5	323.6	308.9	299.6	303.6	295.6
75°	2214.4	491.3	237.0	304.9	352.9	352.9	306.3	286.3	275.6	275.6	266.3
77.5°	1411.4	363.5	193.1	253.0	316.9	343.5	291.6	261.0	245.0	241.0	234.4
80°	699.1	255.7	158.5	201.1	270.3	322.2	281.0	231.7	209.1	201.1	189.1
82.5°	371.5	177.1	126.5	157.1	215.7	290.3	267.6	199.7	171.8	159.8	146.5
85°	166.4	109.2	101.2	119.8	163.8	238.3	241.0	163.8	131.8	157.1	115.8
87.5°	61.3	49.3	49.3	61.3	94.5	99.9	170.4	105.2	83.9	57.3	45.3
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)