

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: P398122

Luminaire Tested: **ARCH-S-PA1-90-730-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398122  
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-PA1-90-730-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10681 lumens  
Efficiency: N/A  
Efficacy: 113.6 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): 94  
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

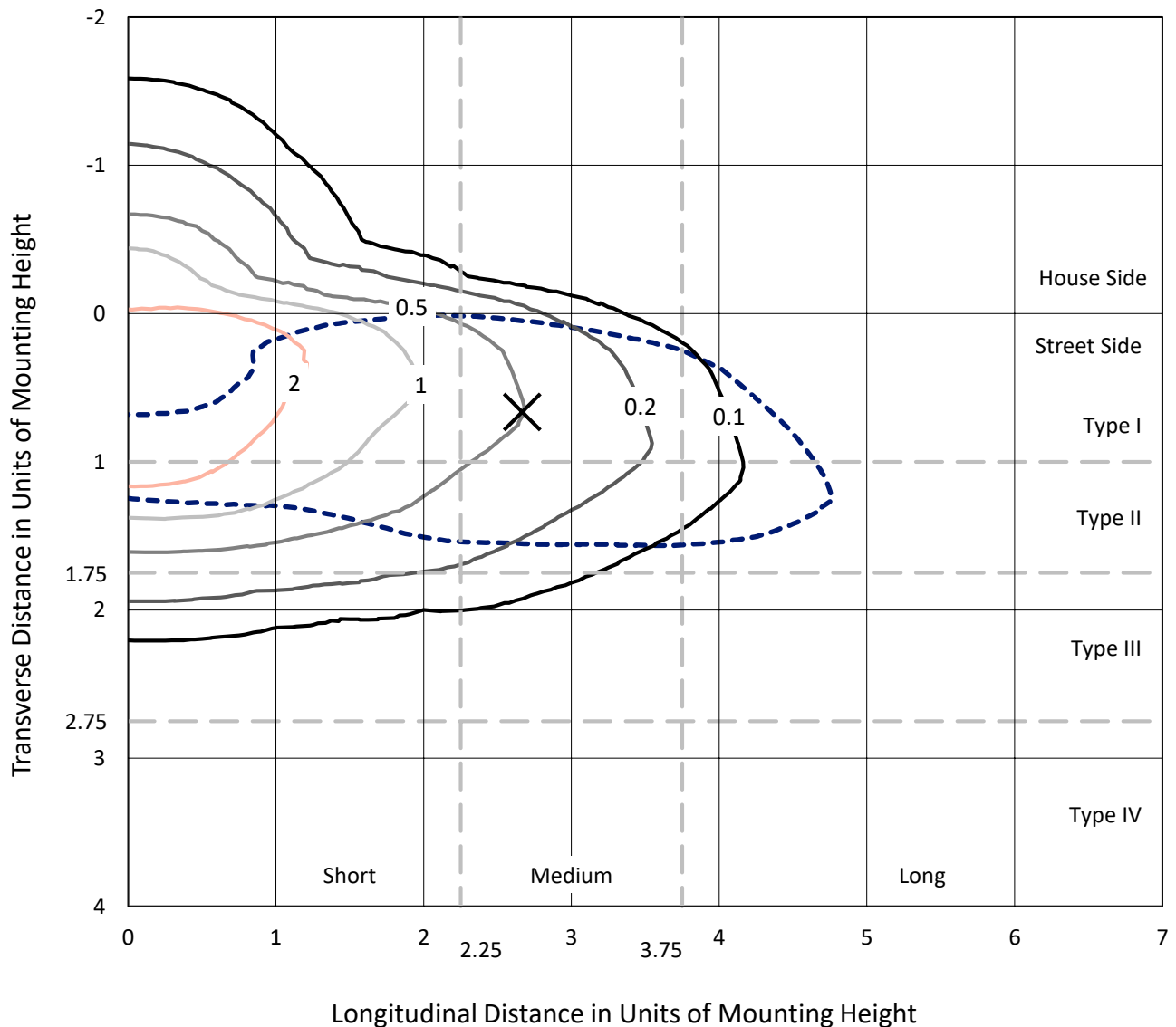


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

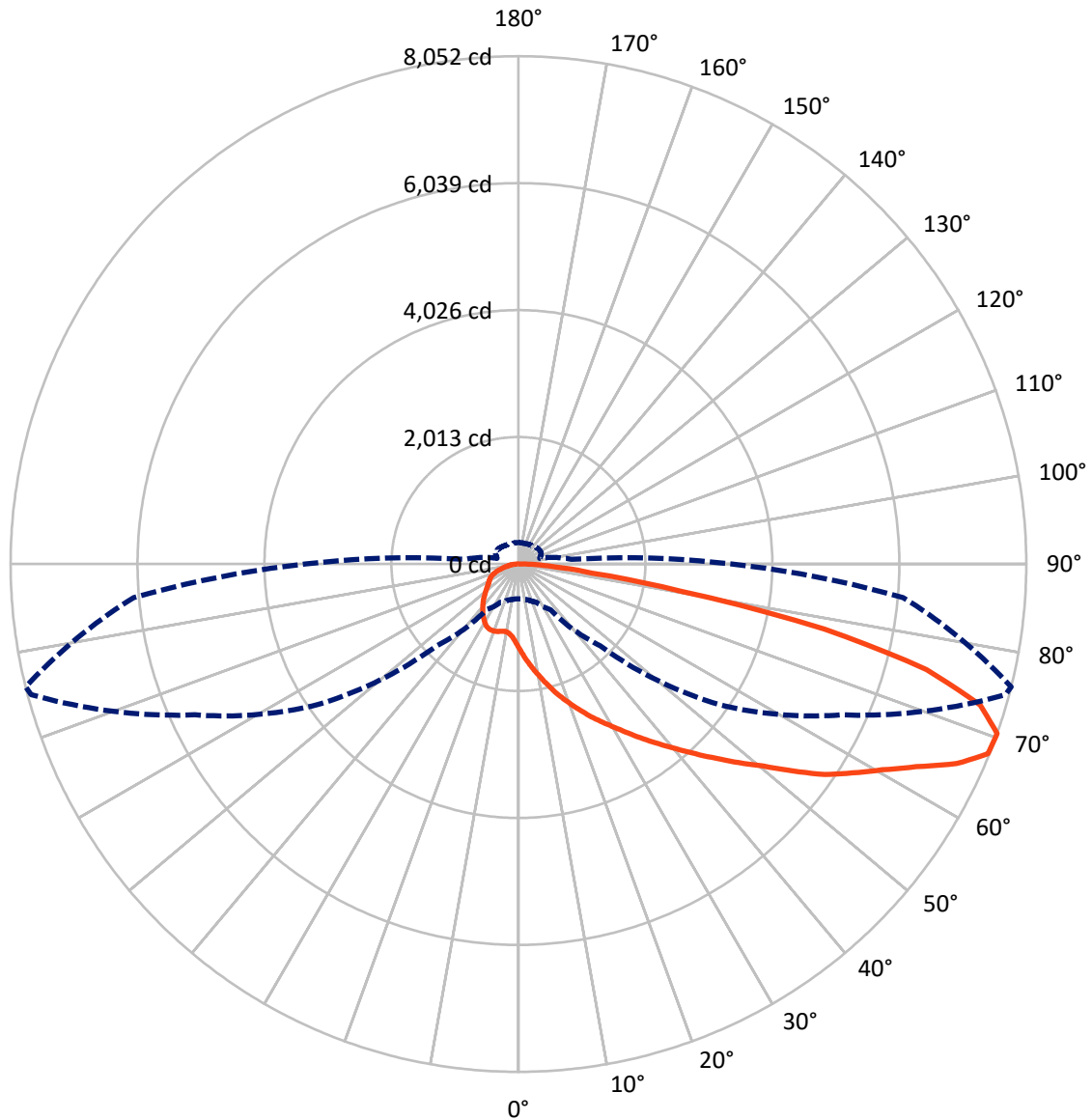


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type II - Medium - Non-Cutoff

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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	1743.8	0.0	1743.8
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	8937.2	0.0	8937.2
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	10681.0	0.0	10681.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.8	1.3
10°-20°	471.7	4.4
20°-30°	843.9	7.9
30°-40°	1365.2	12.8
40°-50°	1974.9	18.5
50°-60°	2260.4	21.2
60°-70°	2079.3	19.5
70°-80°	1285.8	12.0
80°-90°	261.1	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°	10681.0	100.0
0°-180°	10681.0	100.0

**Coefficient of Utilization**



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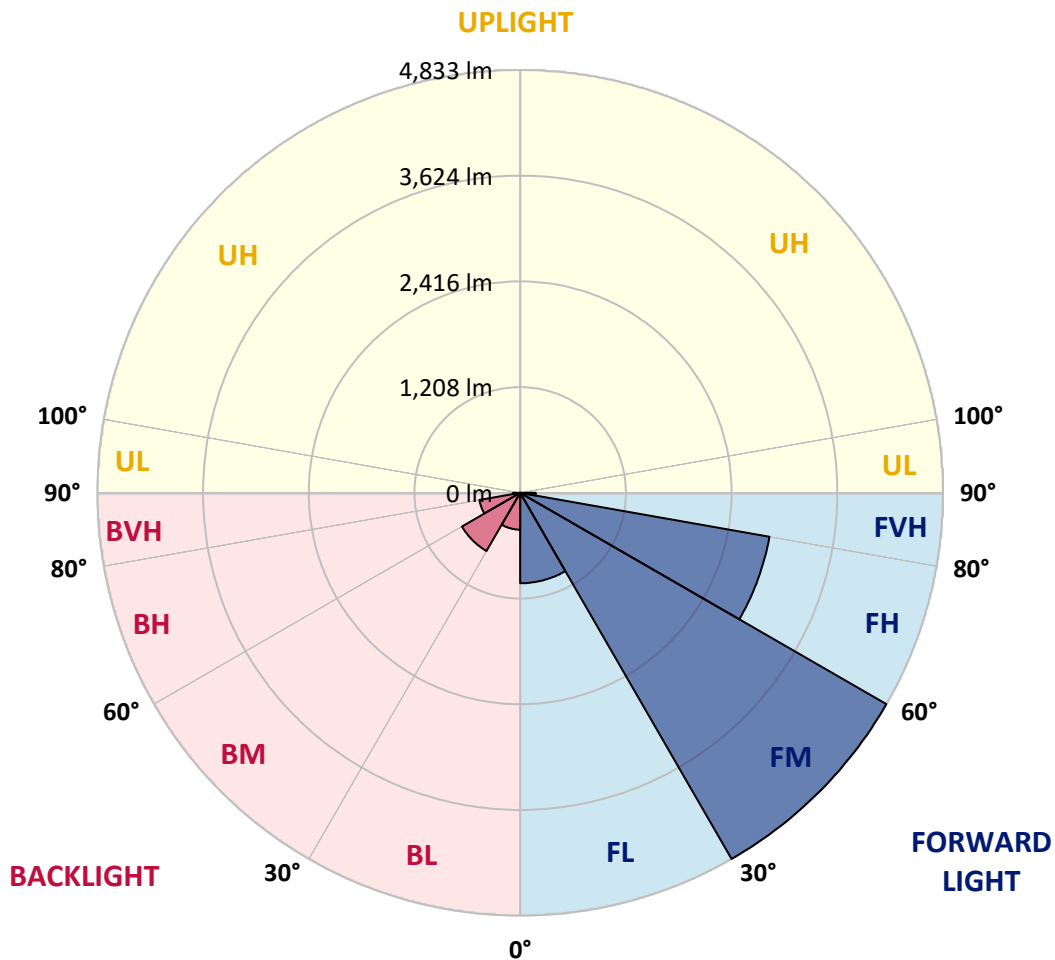
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1033.2	9.7			
FM (30°-60°)	4832.6	45.2			
FH (60°-80°)	2892.1	27.1			G2/5000
FVH (80°-90°)	179.2	1.7			G2/225
BL (0°-30°)	421.2	3.9	B1/500		
BM (30°-60°)	767.8	7.2	B1/1000		
BH (60°-80°)	473.0	4.4	B1/500		G1/500
BVH (80°-90°)	81.9	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°	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7
2.5°	1702.3	1689.6	1688.2	1668.6	1650.3	1601.2	1566.0	1504.2	1442.4	1441.0	1379.2
5°	1967.7	1955.1	1948.1	1924.2	1893.3	1828.7	1765.5	1670.0	1564.6	1557.6	1441.0
7.5°	2147.5	2136.3	2122.2	2112.4	2082.9	2025.3	1948.1	1834.3	1689.6	1675.6	1512.7
10°	2268.3	2261.3	2258.5	2251.5	2233.2	2186.8	2112.4	1991.6	1814.6	1799.2	1588.5
12.5°	2320.3	2317.5	2330.1	2349.8	2356.8	2338.5	2266.9	2153.1	1952.3	1935.4	1679.8
15°	2259.9	2262.7	2295.0	2362.4	2434.0	2473.4	2431.2	2320.3	2108.2	2084.3	1786.6
17.5°	2231.8	2236.0	2258.5	2323.1	2424.2	2546.4	2566.1	2479.0	2258.5	2224.8	1898.9
20°	2281.0	2286.6	2303.4	2354.0	2424.2	2554.8	2657.4	2630.7	2406.0	2370.8	2007.1
22.5°	2406.0	2413.0	2411.6	2443.9	2491.6	2581.5	2707.9	2773.9	2560.5	2521.1	2119.4
25°	2672.8	2667.2	2619.4	2604.0	2616.6	2674.2	2775.3	2911.6	2722.0	2682.6	2237.4
27.5°	3035.2	3028.2	2941.1	2862.4	2792.2	2817.5	2870.9	3022.5	2886.3	2841.4	2349.8
30°	3422.8	3414.4	3313.3	3185.5	3029.6	2993.0	2986.0	3119.5	3052.0	3004.3	2469.2
32.5°	3800.6	3793.6	3685.5	3536.6	3321.7	3212.2	3144.7	3227.6	3240.2	3193.9	2599.8
35°	4144.8	4144.8	4052.1	3875.1	3632.1	3466.4	3355.4	3361.0	3456.5	3403.2	2748.7
37.5°	4450.9	4449.5	4348.4	4174.3	3941.1	3751.5	3613.8	3522.6	3663.0	3616.7	2904.6
40°	4693.9	4684.1	4609.7	4458.0	4223.4	4035.2	3896.2	3712.2	3893.3	3851.2	3070.3
42.5°	4870.9	4865.3	4814.7	4682.7	4459.4	4282.4	4186.9	3950.9	4154.6	4112.5	3264.1
45°	4939.7	4951.0	4951.0	4826.0	4649.0	4487.5	4445.3	4213.6	4436.9	4394.8	3472.0
47.5°	4828.8	4858.3	4918.7	4927.1	4771.2	4661.6	4675.7	4477.6	4727.6	4705.2	3699.5
50°	4481.8	4536.6	4668.6	4907.4	4820.3	4795.1	4872.3	4747.3	5039.4	5032.4	3976.2
52.5°	3587.2	3720.6	4132.1	4560.5	4786.6	4856.9	5067.5	5050.7	5441.1	5452.4	4337.2
55°	2751.5	2802.0	3278.2	4007.1	4580.2	4837.2	5198.2	5347.0	5876.5	5890.6	4668.6
57.5°	2224.8	2258.5	2518.3	3278.2	4109.6	4730.4	5300.7	5519.8	6210.8	6247.3	4963.6
60°	1762.7	1811.8	1986.0	2508.5	3450.9	4473.4	5372.3	5712.2	6570.4	6625.2	5316.1
62.5°	1310.4	1334.3	1498.6	1858.2	2731.8	4011.3	5334.4	5921.5	7011.4	7077.4	5740.3
65°	932.6	953.7	1070.2	1321.7	2019.7	3386.3	5113.9	6077.4	7564.8	7632.2	6167.3
67.5°	698.0	706.5	772.5	924.2	1361.0	2630.7	4667.2	6050.7	7969.3	8029.7	6338.6
70°	552.0	554.8	587.1	668.6	884.9	1831.5	3884.9	5658.8	7998.8	8052.2	6122.3
72.5°	457.9	456.5	474.7	514.1	616.6	1158.7	2877.9	4931.3	7619.6	7656.1	5518.4
75°	377.8	380.6	393.3	415.7	470.5	764.1	1865.2	3934.1	6722.1	6682.7	4630.7
77.5°	317.4	316.0	321.6	341.3	380.6	549.2	1092.7	2842.8	4981.9	4962.2	3039.4
80°	255.6	258.4	266.9	283.7	320.2	418.5	646.1	1773.9	2672.8	2601.2	1452.3
82.5°	171.4	198.0	214.9	234.6	276.7	309.0	410.1	901.7	1195.3	1177.0	658.7
85°	81.5	108.1	160.1	182.6	224.7	193.8	278.1	429.8	598.3	591.3	237.4
87.5°	16.9	16.9	85.7	102.5	139.0	82.9	154.5	186.8	289.3	271.1	96.9
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°	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7	1335.7
2.5°	1342.7	1304.8	1229.0	1168.6	1106.8	1071.7	1028.1	1007.0	1002.8	991.6	1000.0
5°	1366.6	1292.2	1148.9	1054.8	991.6	960.7	945.2	939.6	938.2	935.4	935.4
7.5°	1398.9	1285.1	1098.3	1002.8	962.1	952.3	956.5	964.9	966.3	969.1	967.7
10°	1438.2	1286.5	1070.2	990.2	970.5	971.9	986.0	997.2	1002.8	1007.0	1005.6
12.5°	1493.0	1303.4	1066.0	998.6	990.2	995.8	1009.9	1021.1	1026.7	1028.1	1028.1
15°	1564.6	1338.5	1075.9	1016.9	1009.9	1014.1	1022.5	1026.7	1028.1	1026.7	1026.7
17.5°	1643.3	1380.6	1089.9	1028.1	1016.9	1012.7	1009.9	1005.6	997.2	991.6	991.6
20°	1719.1	1418.6	1096.9	1026.7	1007.0	990.2	973.3	952.3	938.2	927.0	927.0
22.5°	1795.0	1453.7	1096.9	1011.3	980.4	948.1	912.9	879.2	858.2	844.1	844.1
25°	1875.0	1487.4	1088.5	984.6	938.2	891.9	844.1	802.0	780.9	766.9	764.1
27.5°	1942.5	1507.1	1066.0	946.7	886.3	827.3	772.5	728.9	713.5	700.9	700.9
30°	2014.1	1519.7	1023.9	897.5	827.3	759.8	703.7	668.6	651.7	633.4	632.0
32.5°	2094.1	1528.1	976.1	845.5	766.9	695.2	647.5	619.4	582.9	563.2	560.4
35°	2186.8	1539.4	925.6	786.5	706.5	641.9	613.8	567.4	532.3	515.5	514.1
37.5°	2285.2	1547.8	870.8	734.6	651.7	606.8	578.7	523.9	493.0	467.7	464.9
40°	2389.1	1547.8	814.6	684.0	608.2	591.3	537.9	488.8	436.8	424.2	421.4
42.5°	2504.3	1545.0	758.4	634.8	567.4	556.2	514.1	462.1	435.4	424.2	421.4
45°	2626.5	1535.1	705.1	578.7	525.3	502.8	470.5	456.5	445.2	445.2	445.2
47.5°	2765.5	1526.7	644.7	528.1	494.4	469.1	445.2	436.8	435.4	439.6	443.8
50°	2943.9	1523.9	594.1	491.6	470.5	441.0	438.2	431.2	432.6	432.6	432.6
52.5°	3160.2	1498.6	546.4	464.9	446.6	411.5	420.0	427.0	429.8	428.4	427.0
55°	3318.9	1453.7	505.6	446.6	429.8	400.3	411.5	422.8	425.6	421.4	421.4
57.5°	3462.2	1390.5	473.3	432.6	418.5	393.3	405.9	417.1	414.3	412.9	411.5
60°	3626.5	1330.1	448.0	425.6	407.3	390.5	401.7	408.7	404.5	401.7	400.3
62.5°	3804.9	1271.1	429.8	425.6	398.9	389.1	397.5	400.3	391.9	389.1	389.1
65°	3887.7	1178.4	410.1	425.6	394.7	386.2	389.1	386.2	377.8	377.8	376.4
67.5°	3751.5	1025.3	384.8	420.0	400.3	382.0	376.4	372.2	362.4	362.4	359.6
70°	3375.1	842.7	348.3	401.7	401.7	380.6	359.6	349.7	338.5	342.7	337.1
72.5°	2883.5	668.6	303.4	370.8	393.3	379.2	341.3	325.9	316.0	320.2	311.8
75°	2335.7	518.3	250.0	321.6	372.2	372.2	323.0	302.0	290.7	290.7	280.9
77.5°	1488.8	383.4	203.7	266.9	334.3	362.4	307.6	275.3	258.4	254.2	247.2
80°	737.4	269.7	167.1	212.1	285.1	339.9	296.4	244.4	220.5	212.1	199.4
82.5°	391.9	186.8	133.4	165.7	227.5	306.2	282.3	210.7	181.2	168.5	154.5
85°	175.6	115.2	106.7	126.4	172.8	251.4	254.2	172.8	139.0	165.7	122.2
87.5°	64.6	52.0	52.0	64.6	99.7	105.3	179.8	111.0	88.5	60.4	47.8
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)