

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: P397595

Luminaire Tested: **ARCH-S-PA1-100-830-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397595  
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-PA1-100-830-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9365 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

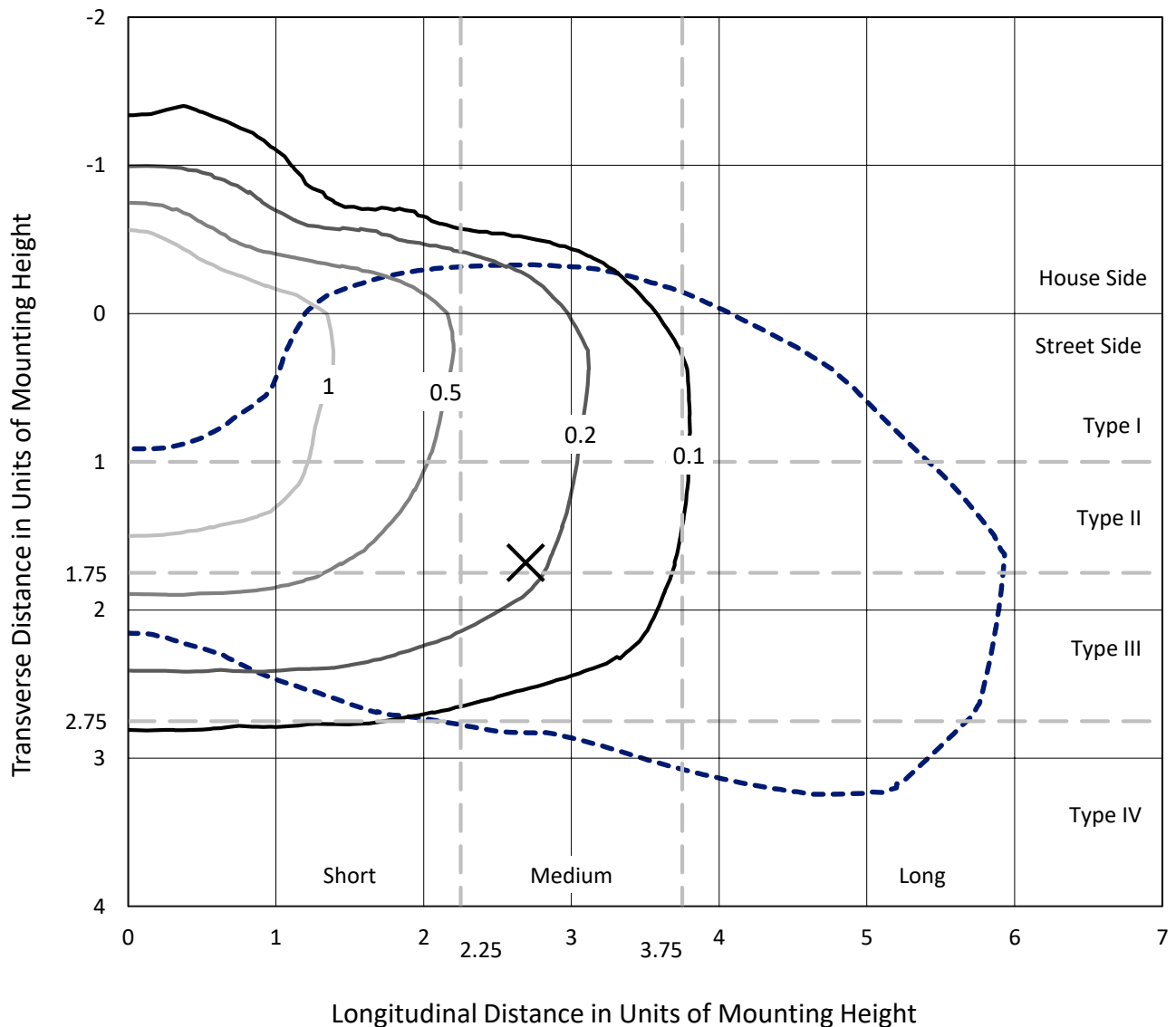
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

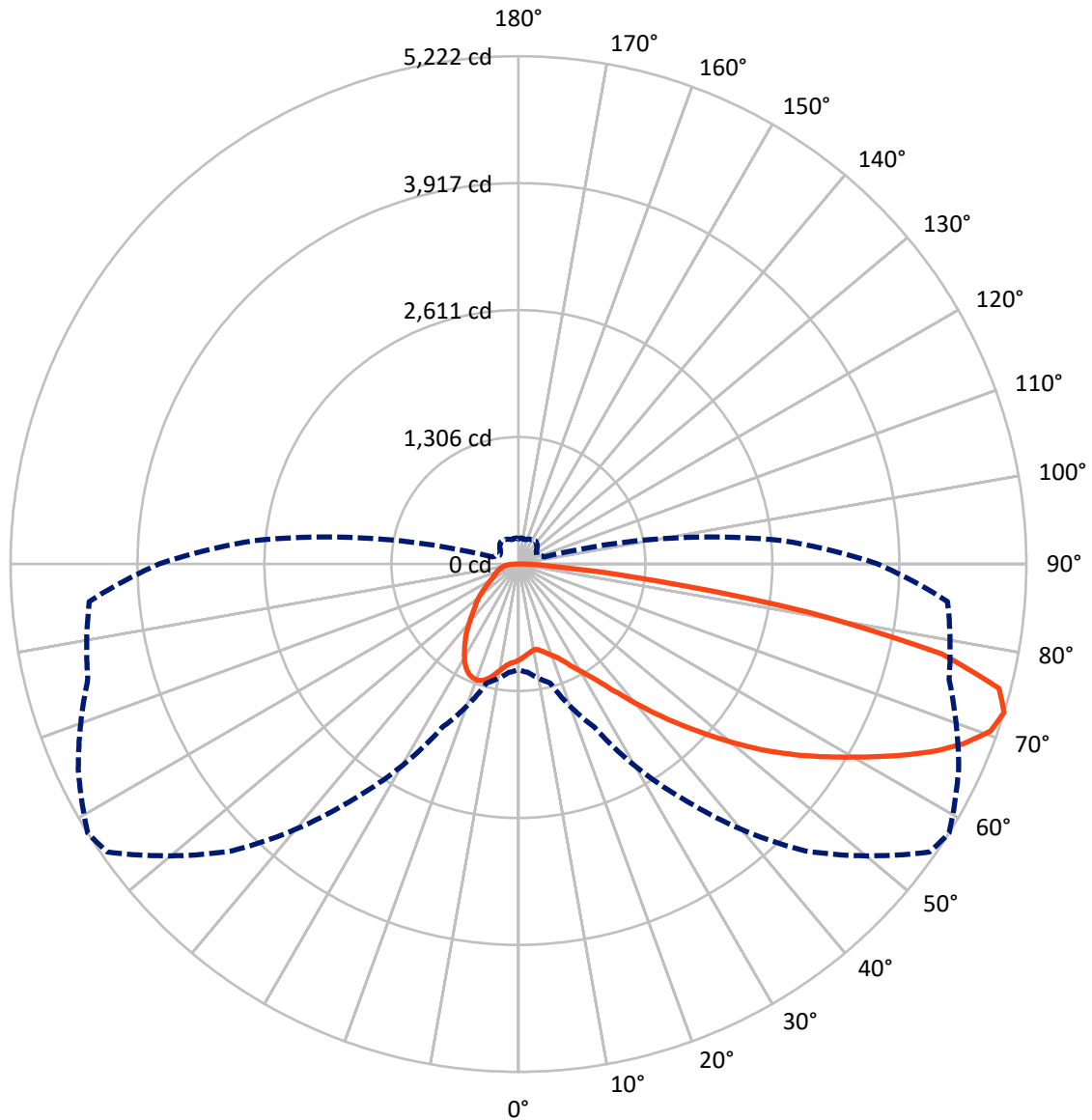
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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	2123.9	0.0	2123.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	7241.1	0.0	7241.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	9365.0	0.0	9365.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.2	1.0
10°-20°	302.2	3.2
20°-30°	541.3	5.8
30°-40°	814.3	8.7
40°-50°	1318.7	14.1
50°-60°	1985.0	21.2
60°-70°	2336.1	24.9
70°-80°	1656.5	17.7
80°-90°	315.6	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°	9365.0	100.0
0°-180°	9365.0	100.0

**Coefficient of Utilization**



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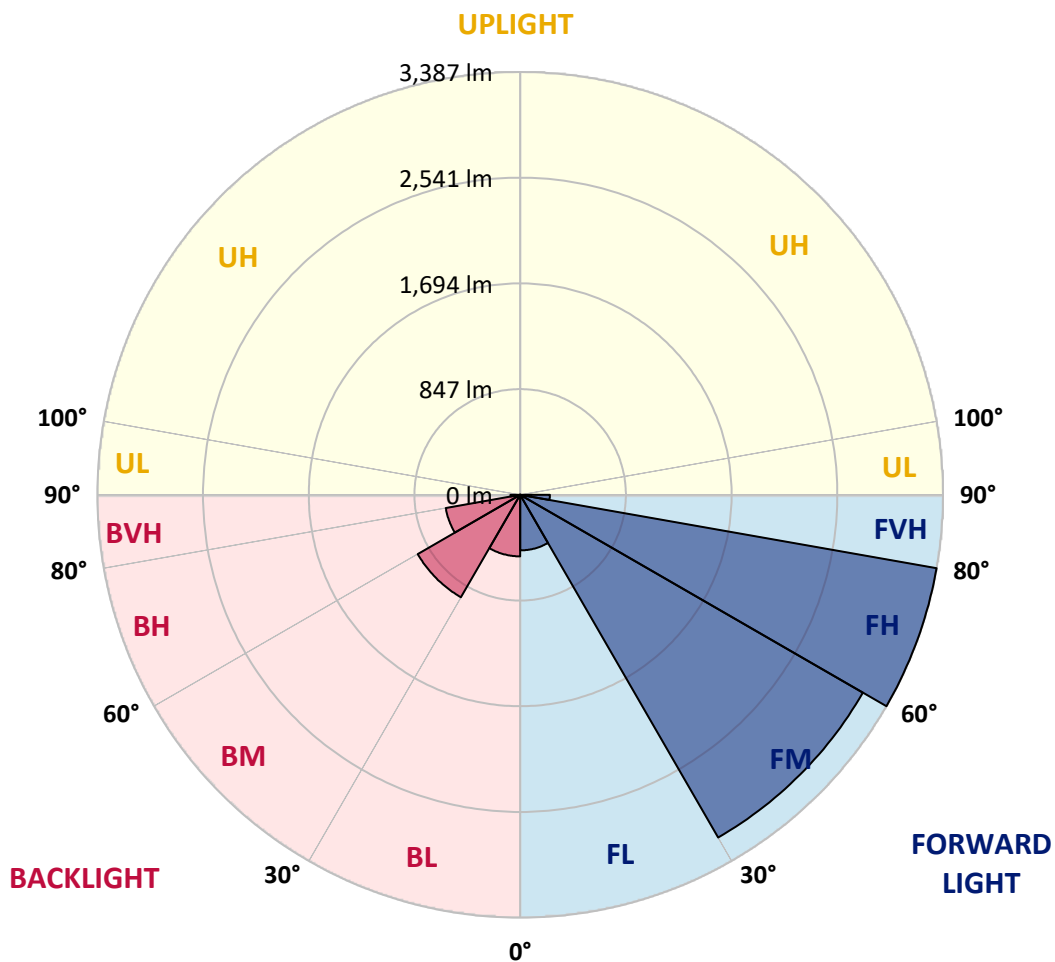
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	445.3	4.8			
FM	(30°-60°)	3170.3	33.9			
FH	(60°-80°)	3387.4	36.2			G2/5000
FVH	(80°-90°)	238.1	2.5			G3/500
BL	(0°-30°)	493.3	5.3	B1/500		
BM	(30°-60°)	947.7	10.1	B1/1000		
BH	(60°-80°)	605.3	6.5	B2/1000		G2/1000
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: 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°	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8
2.5°	950.7	945.8	947.0	947.0	952.0	954.4	955.7	959.4	961.8	968.0	976.7
5°	906.2	902.5	903.7	905.0	913.6	922.3	929.7	934.6	942.1	952.0	964.3
7.5°	874.1	871.6	872.8	875.3	882.7	892.6	905.0	912.4	923.5	942.1	963.1
10°	850.6	850.6	851.8	856.8	864.2	876.5	886.4	895.1	917.3	950.7	982.9
12.5°	832.0	832.0	835.7	845.6	858.0	870.4	893.8	903.7	933.4	979.2	1017.5
15°	830.8	832.0	833.3	841.9	855.5	882.7	917.3	932.2	968.0	1022.4	1066.9
17.5°	850.6	851.8	846.9	849.3	865.4	903.7	949.5	966.8	1012.5	1071.9	1117.6
20°	911.2	911.2	896.3	882.7	893.8	935.9	987.8	1005.1	1055.8	1121.3	1167.1
22.5°	1034.8	1041.0	1006.4	976.7	959.4	982.9	1029.8	1048.4	1105.3	1175.7	1221.5
25°	1184.4	1190.6	1143.6	1101.5	1069.4	1065.7	1096.6	1116.4	1163.4	1236.3	1274.6
27.5°	1329.0	1317.9	1274.6	1235.1	1194.3	1160.9	1184.4	1201.7	1256.1	1311.7	1335.2
30°	1442.8	1434.1	1392.1	1363.6	1325.3	1282.0	1268.4	1287.0	1331.5	1383.4	1395.8
32.5°	1568.9	1562.7	1520.7	1483.6	1451.4	1410.6	1381.0	1389.6	1414.3	1451.4	1458.8
35°	1729.6	1743.2	1698.7	1623.3	1587.4	1547.9	1526.8	1529.3	1547.9	1571.3	1559.0
37.5°	1899.0	1915.0	1917.5	1798.8	1750.6	1714.8	1692.5	1701.2	1723.4	1739.5	1701.2
40°	2213.0	2196.9	2132.6	2044.8	1970.7	1936.1	1905.1	1903.9	1920.0	1948.4	1879.2
42.5°	2629.6	2614.8	2485.0	2371.2	2253.8	2214.2	2153.6	2127.7	2135.1	2171.0	2074.5
45°	3028.9	3022.8	2918.9	2786.6	2645.7	2569.0	2430.6	2367.5	2361.3	2389.8	2274.8
47.5°	3383.8	3356.6	3281.2	3178.5	3163.7	2963.4	2708.7	2623.4	2593.8	2609.8	2481.3
50°	3763.3	3670.6	3566.7	3503.7	3611.2	3424.6	2989.4	2900.4	2827.4	2838.6	2705.0
52.5°	3964.8	3809.1	3741.1	3759.6	3904.3	3832.5	3294.8	3186.0	3068.5	3084.6	2927.6
55°	3791.8	3790.5	3820.2	3935.2	4136.7	4053.8	3585.3	3462.9	3334.3	3338.0	3183.5
57.5°	3554.4	3602.6	3755.9	4009.3	4424.7	4286.3	3870.9	3741.1	3623.6	3605.1	3474.0
60°	3338.0	3391.2	3613.7	3997.0	4524.9	4498.9	4142.9	4029.1	3933.9	3879.5	3779.4
62.5°	3009.2	3048.7	3364.0	3917.9	4440.8	4652.2	4418.6	4340.7	4269.0	4156.5	4108.2
65°	2622.2	2635.8	2968.4	3657.0	4335.7	4711.6	4693.0	4658.4	4589.2	4423.5	4433.4
67.5°	2203.1	2230.3	2522.1	3240.4	4105.8	4684.4	4905.7	4934.1	4852.5	4604.0	4641.1
70°	1756.8	1790.2	2011.5	2664.2	3715.1	4566.9	5102.2	5148.0	4991.0	4663.3	4679.4
72.5°	1086.7	1118.9	1267.2	1850.7	2944.9	4172.5	5162.8	5222.2	4994.7	4584.2	4429.7
75°	375.8	379.5	495.8	887.7	1748.1	3150.1	4965.0	5104.7	4837.7	4296.2	3854.8
77.5°	171.8	178.0	220.1	365.9	775.2	1699.9	4099.6	4449.5	4360.5	3846.1	2967.1
80°	118.7	121.2	152.1	218.8	447.5	598.4	2587.6	3043.8	3199.6	2978.3	1901.4
82.5°	89.0	91.5	117.4	148.4	322.7	290.5	985.3	1414.3	1758.0	1725.9	794.9
85°	85.3	84.1	91.5	98.9	215.1	173.1	319.0	437.7	686.1	587.2	200.3
87.5°	37.1	40.8	94.0	55.6	112.5	80.4	138.5	162.0	208.9	181.7	71.7
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°	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8
2.5°	980.4	982.9	990.3	1001.4	1007.6	1020.0	1028.6	1033.6	1037.3	1038.5	1038.5
5°	971.7	976.7	992.8	1011.3	1028.6	1054.6	1078.1	1091.7	1101.5	1105.3	1106.5
7.5°	974.2	986.6	1010.1	1037.3	1059.5	1092.9	1121.3	1148.5	1170.8	1179.4	1179.4
10°	997.7	1015.0	1047.2	1083.0	1111.4	1146.1	1175.7	1199.2	1225.2	1240.0	1242.5
12.5°	1033.6	1054.6	1096.6	1136.2	1168.3	1195.5	1222.7	1240.0	1252.4	1263.5	1266.0
15°	1084.2	1110.2	1152.2	1193.0	1221.5	1238.8	1246.2	1246.2	1245.0	1246.2	1248.7
17.5°	1134.9	1159.7	1201.7	1242.5	1256.1	1246.2	1237.5	1235.1	1233.8	1231.4	1232.6
20°	1184.4	1207.9	1243.7	1274.6	1263.5	1228.9	1217.8	1216.5	1212.8	1210.3	1207.9
22.5°	1233.8	1251.1	1280.8	1291.9	1247.4	1198.0	1184.4	1177.0	1172.0	1165.8	1159.7
25°	1290.7	1295.6	1317.9	1300.6	1207.9	1141.1	1121.3	1110.2	1105.3	1099.1	1094.1
27.5°	1343.9	1343.9	1347.6	1287.0	1149.8	1065.7	1036.0	1016.2	1015.0	1013.8	1012.5
30°	1392.1	1385.9	1373.5	1246.2	1074.3	973.0	928.5	908.7	916.1	922.3	923.5
32.5°	1449.0	1436.6	1402.0	1190.6	984.1	869.1	814.7	806.1	814.7	822.1	817.2
35°	1538.0	1515.7	1431.6	1126.3	897.6	773.9	722.0	709.6	707.2	705.9	696.0
37.5°	1665.3	1627.0	1455.1	1057.0	812.3	689.9	651.5	625.6	602.1	577.4	573.6
40°	1821.1	1755.6	1471.2	977.9	722.0	619.4	578.6	545.2	505.6	462.4	457.4
42.5°	1991.7	1894.0	1478.6	890.1	642.9	561.3	510.6	468.6	424.1	390.7	384.5
45°	2175.9	2043.6	1472.4	806.1	578.6	511.8	455.0	409.2	373.4	349.9	344.9
47.5°	2355.2	2215.5	1455.1	739.3	529.1	469.8	411.7	369.7	342.5	316.5	310.3
50°	2585.1	2379.9	1434.1	687.4	474.7	427.8	384.5	340.0	309.1	296.7	294.2
52.5°	2839.8	2544.3	1409.4	621.9	421.6	394.4	367.2	327.6	317.7	294.2	290.5
55°	3115.5	2739.7	1404.4	539.0	374.6	370.9	349.9	338.7	341.2	294.2	288.1
57.5°	3406.0	2948.6	1415.6	456.2	336.3	349.9	357.3	348.6	344.9	300.4	288.1
60°	3708.9	3150.1	1382.2	379.5	306.6	332.6	365.9	343.7	316.5	297.9	289.3
62.5°	4003.2	3319.5	1237.5	325.1	284.4	327.6	361.0	325.1	294.2	294.2	290.5
65°	4217.0	3394.9	968.0	285.6	269.5	321.4	352.3	312.8	288.1	296.7	291.8
67.5°	4241.8	3317.0	650.3	254.7	257.2	310.3	332.6	301.7	281.9	304.1	296.7
70°	4089.7	3114.3	398.1	231.2	241.1	290.5	315.3	290.5	273.2	297.9	286.8
72.5°	3695.3	2735.9	280.6	211.4	223.8	272.0	299.2	280.6	260.9	269.5	258.4
75°	3031.4	2120.3	222.5	192.9	206.5	254.7	285.6	265.8	246.0	242.3	234.9
77.5°	2147.5	1358.7	179.3	178.0	187.9	233.7	267.0	248.5	228.7	221.3	216.4
80°	1235.1	666.4	154.5	160.7	170.6	212.6	244.8	228.7	210.2	199.0	191.6
82.5°	472.3	232.4	136.0	139.7	150.8	190.4	222.5	208.9	190.4	200.3	168.1
85°	153.3	127.3	111.3	115.0	126.1	158.2	196.6	185.4	164.4	145.9	134.8
87.5°	68.0	69.2	59.3	65.5	79.1	105.1	143.4	136.0	119.9	100.1	96.4
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)