

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: P397858

Luminaire Tested: **ARCH-S-PA1-50-750-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397858  
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-PA1-50-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7819 lumens  
Efficiency: N/A  
Efficacy: 144.8 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 - G2

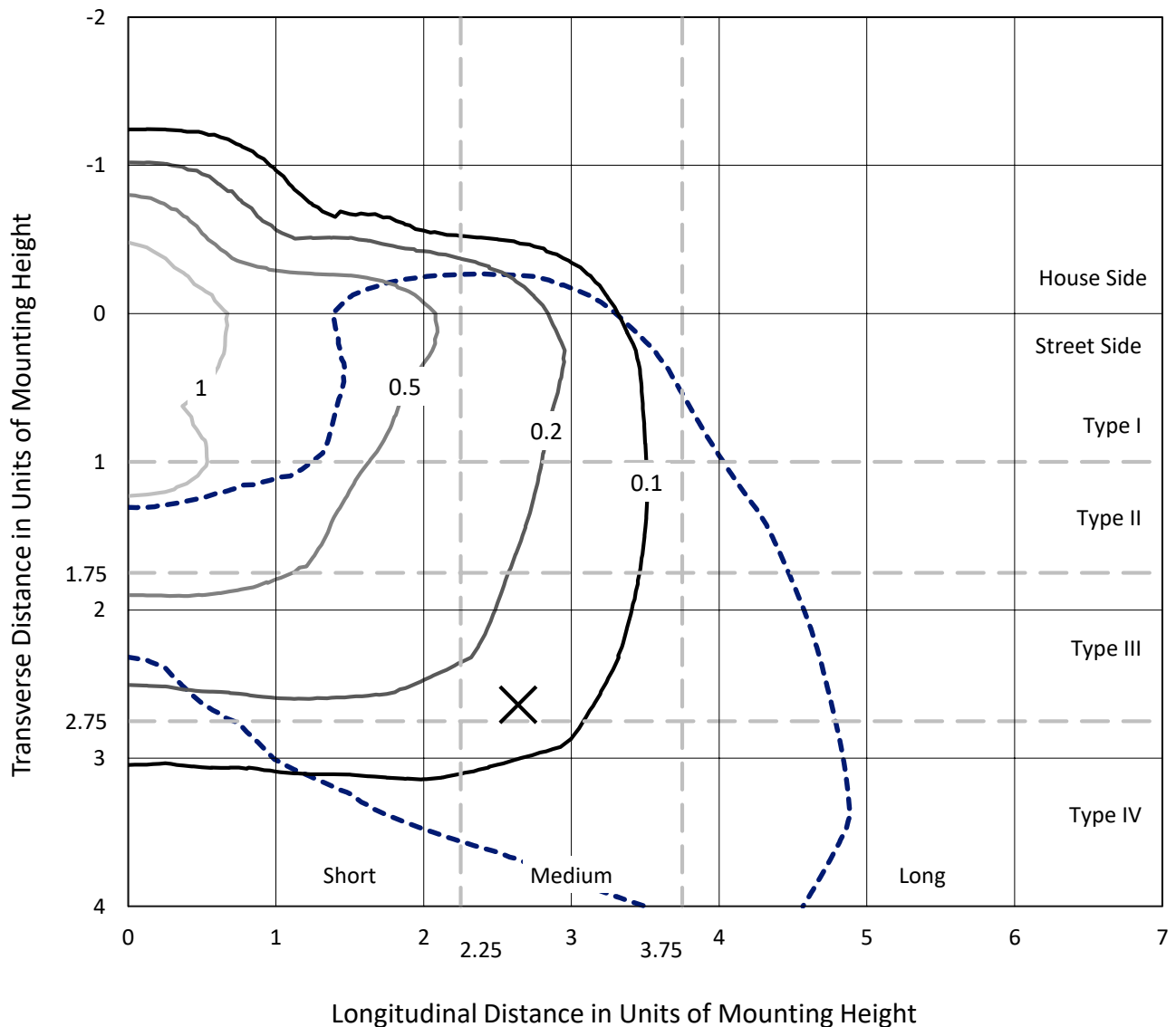
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

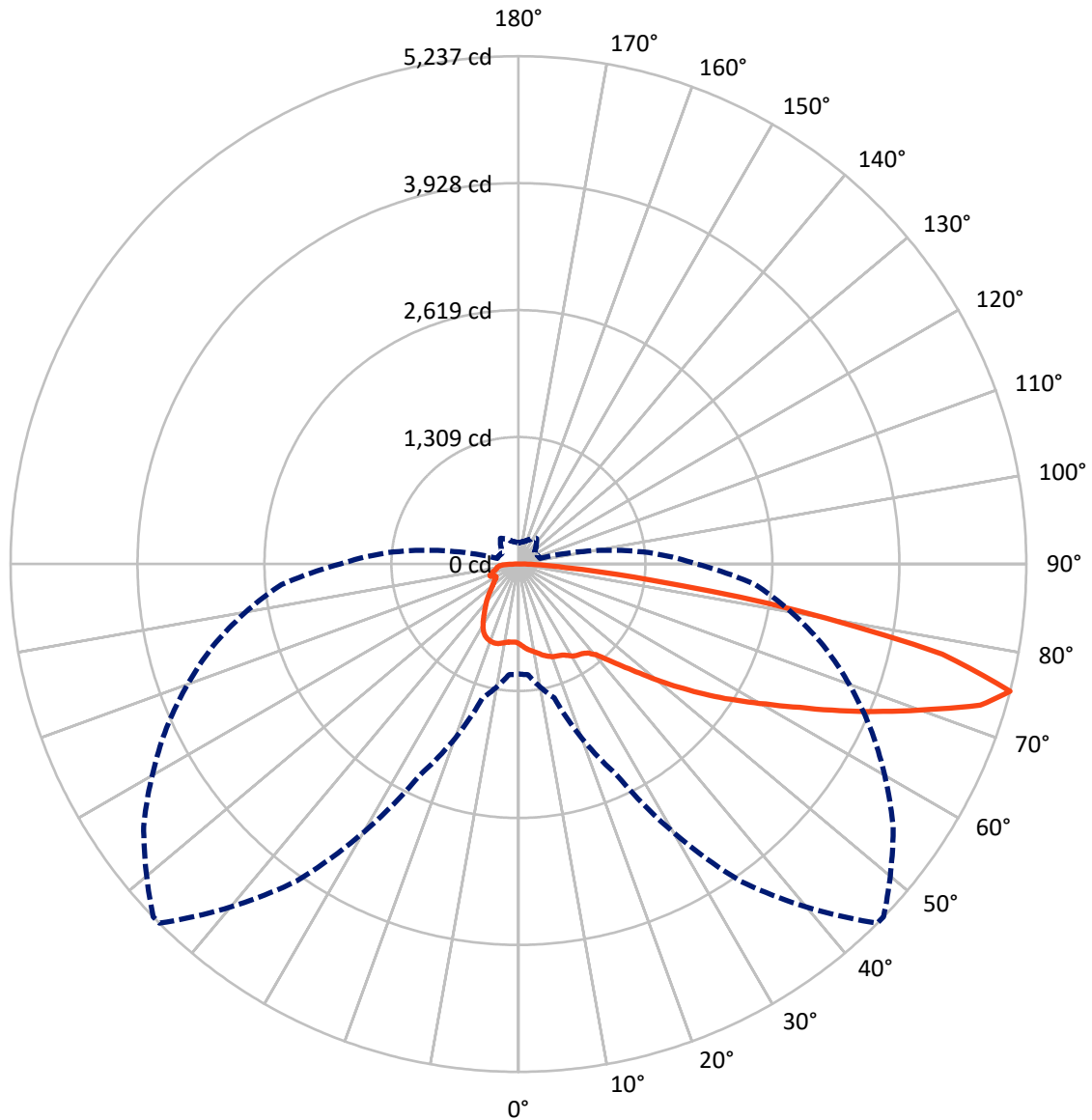


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type IV - Medium - Non-Cutoff

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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	1728.0	0.0	1728.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	6091.0	0.0	6091.0
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	7819.0	0.0	7819.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	1.0
10°-20°	258.4	3.3
20°-30°	440.6	5.6
30°-40°	617.3	7.9
40°-50°	907.0	11.6
50°-60°	1443.5	18.5
60°-70°	2053.3	26.3
70°-80°	1719.2	22.0
80°-90°	298.4	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°	7819.0	100.0
0°-180°	7819.0	100.0

**Coefficient of Utilization**



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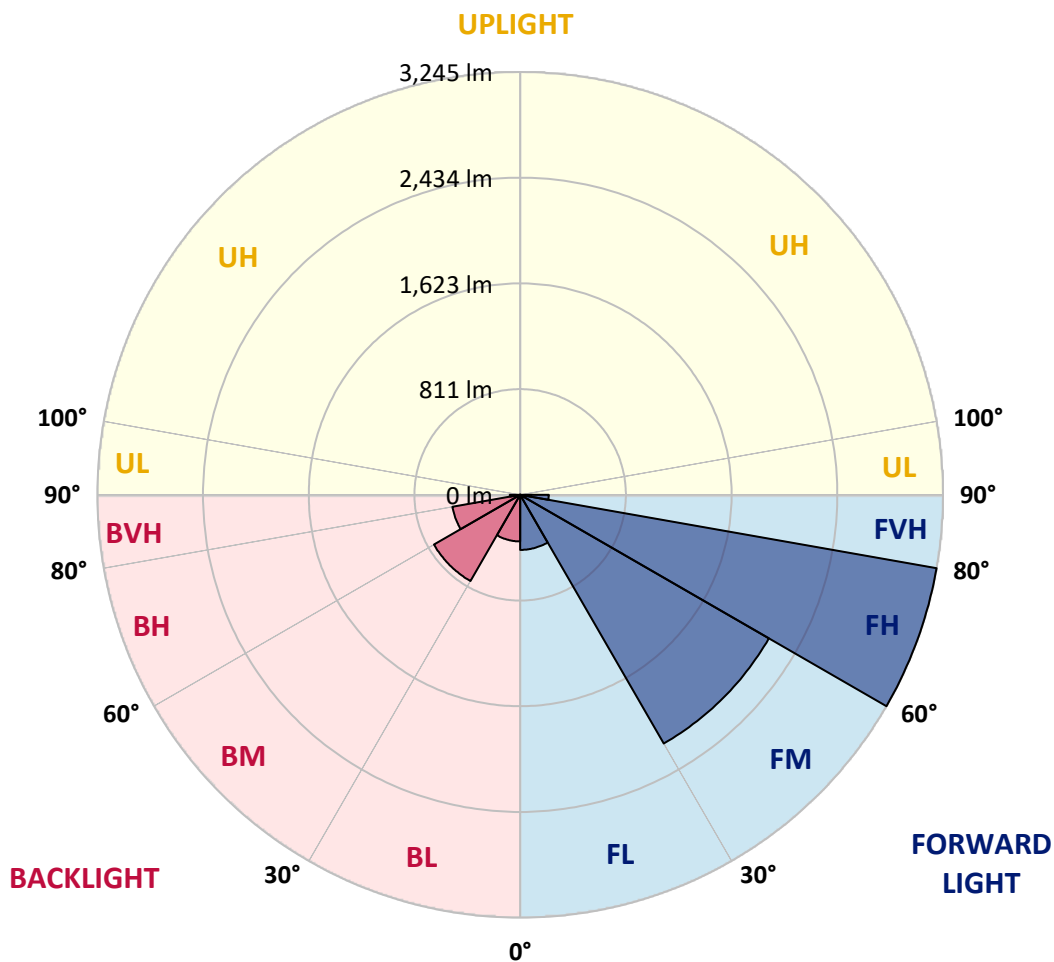
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	422.7	5.4			
FM (30°-60°)	2203.9	28.2			
FH (60°-80°)	3245.1	41.5			G2/5000
FVH (80°-90°)	219.4	2.8			G2/225
BL (0°-30°)	357.6	4.6	B1/500		
BM (30°-60°)	763.8	9.8	B1/1000		
BH (60°-80°)	527.5	6.7	B2/1000		G2/1000
BVH (80°-90°)	79.0	1.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2
2.5°	868.2	864.0	861.9	861.9	853.6	848.3	847.3	840.0	833.7	827.4	822.2
5°	918.3	915.2	908.9	903.7	892.2	877.6	875.5	859.8	844.2	829.5	817.0
7.5°	964.3	958.0	950.7	940.3	921.5	901.6	898.5	876.5	854.6	832.7	815.9
10°	1003.0	996.7	986.2	971.6	947.6	923.6	920.4	897.4	874.4	848.3	824.3
12.5°	1039.5	1034.3	1018.6	998.8	970.6	948.6	945.5	925.6	901.6	872.4	841.0
15°	1070.9	1065.6	1048.9	1025.9	993.5	976.8	972.7	953.8	929.8	898.5	866.1
17.5°	1086.5	1086.5	1068.8	1043.7	1013.4	1000.9	997.7	974.7	952.8	922.5	890.1
20°	1091.8	1093.8	1081.3	1051.0	1024.9	1019.7	1016.5	997.7	972.7	943.4	913.1
22.5°	1094.9	1099.1	1088.6	1054.1	1032.2	1029.1	1027.0	1014.4	994.6	966.4	936.1
25°	1105.3	1105.3	1098.0	1059.4	1041.6	1040.6	1040.6	1033.2	1019.7	995.6	965.3
27.5°	1121.0	1120.0	1110.6	1070.9	1062.5	1065.6	1064.6	1063.5	1054.1	1030.1	997.7
30°	1147.1	1147.1	1136.7	1093.8	1088.6	1102.2	1103.2	1105.3	1090.7	1053.1	1027.0
32.5°	1186.8	1182.6	1172.2	1116.8	1108.5	1121.0	1123.1	1122.1	1109.5	1074.0	1061.5
35°	1309.1	1299.7	1262.0	1168.0	1126.2	1133.5	1134.6	1139.8	1141.9	1113.7	1107.4
37.5°	1523.2	1510.7	1453.2	1289.2	1182.6	1164.9	1163.8	1177.4	1188.9	1163.8	1163.8
40°	1756.2	1745.8	1712.3	1498.2	1287.1	1228.6	1224.4	1237.0	1251.6	1233.8	1239.1
42.5°	1956.8	1965.2	1968.3	1719.6	1443.8	1347.7	1336.2	1318.5	1341.4	1325.8	1346.7
45°	2107.2	2103.1	2160.5	1946.4	1646.5	1497.1	1481.4	1433.4	1462.6	1461.6	1507.6
47.5°	2267.1	2259.8	2283.8	2159.5	1877.4	1679.9	1655.9	1584.9	1628.8	1659.0	1735.3
50°	2418.6	2420.7	2429.0	2327.7	2128.1	1902.5	1872.2	1777.1	1839.8	1903.5	2011.1
52.5°	2616.0	2601.4	2591.0	2524.1	2409.2	2134.4	2114.6	2005.9	2093.7	2168.9	2312.0
55°	2788.4	2779.0	2772.7	2769.6	2644.2	2390.4	2369.5	2256.6	2383.1	2436.3	2647.4
57.5°	2972.3	2967.1	3000.5	3053.8	3003.6	2650.5	2628.6	2519.9	2661.0	2698.6	3010.9
60°	3107.1	3110.2	3202.1	3337.9	3303.5	2932.6	2906.5	2810.4	2931.5	2965.0	3374.5
62.5°	3108.1	3139.4	3352.6	3596.0	3635.7	3257.5	3227.2	3122.7	3209.4	3209.4	3700.5
65°	2811.4	2846.9	3325.4	3659.7	3972.1	3644.1	3614.8	3450.8	3483.2	3439.3	4006.6
67.5°	2515.7	2557.5	3007.8	3664.9	4208.2	4057.8	4023.3	3778.8	3723.5	3612.7	4220.8
70°	2319.3	2348.6	2724.7	3597.0	4350.3	4490.3	4464.2	4090.2	3912.6	3757.9	4175.8
72.5°	1952.6	1942.2	2301.6	3274.2	4429.7	4981.3	4959.4	4428.7	4076.6	3689.0	3561.5
75°	1133.5	1146.1	1428.2	2398.7	3993.0	5237.3	5235.2	4718.0	4004.5	3258.5	2454.1
77.5°	327.0	336.4	469.1	1054.1	2525.1	4467.3	4610.4	4314.8	3385.0	2322.5	1272.5
80°	143.1	150.4	203.7	351.0	1087.6	2918.0	3043.3	2918.0	2041.4	1065.6	499.4
82.5°	84.6	89.8	132.7	217.3	521.3	1388.5	1557.7	1360.3	880.7	452.4	206.9
85°	48.1	50.1	76.3	137.9	328.0	485.8	545.4	510.9	429.4	257.0	108.7
87.5°	21.9	23.0	37.6	64.8	183.9	164.0	170.3	225.7	248.6	156.7	54.3
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°	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2	821.2
2.5°	820.1	817.0	810.7	808.6	805.5	806.5	807.6	807.6	808.6	805.5	805.5
5°	811.8	806.5	800.3	800.3	800.3	808.6	815.9	820.1	822.2	822.2	820.1
7.5°	808.6	802.4	795.0	797.1	799.2	809.7	823.3	836.8	841.0	841.0	838.9
10°	814.9	808.6	803.4	806.5	811.8	820.1	830.6	843.1	853.6	854.6	853.6
12.5°	829.5	822.2	817.0	823.3	829.5	834.7	840.0	845.2	858.8	860.9	860.9
15°	853.6	846.2	840.0	845.2	847.3	847.3	847.3	847.3	860.9	863.0	863.0
17.5°	877.6	871.3	865.0	866.1	859.8	851.5	848.3	847.3	854.6	860.9	861.9
20°	900.6	895.3	889.1	878.6	863.0	847.3	842.1	842.1	846.2	855.6	855.6
22.5°	925.6	919.4	908.9	884.9	858.8	836.8	831.6	834.7	840.0	852.5	851.5
25°	953.8	945.5	927.7	882.8	845.2	819.1	820.1	829.5	838.9	852.5	852.5
27.5°	985.2	973.7	938.2	866.1	814.9	789.8	799.2	821.2	834.7	849.4	851.5
30°	1019.7	1009.2	946.5	836.8	765.8	742.8	765.8	801.3	822.2	835.8	838.9
32.5°	1061.5	1053.1	953.8	799.2	702.1	682.2	715.6	759.5	793.0	808.6	811.8
35°	1113.7	1105.3	963.3	756.4	642.5	621.6	651.9	696.8	740.7	760.6	766.8
37.5°	1181.6	1169.1	971.6	710.4	592.4	568.3	583.0	623.7	663.4	690.6	697.9
40°	1268.3	1248.5	978.9	658.2	548.5	521.3	526.5	546.4	569.4	593.4	602.8
42.5°	1390.5	1350.8	980.0	602.8	503.6	478.5	476.4	482.7	482.7	482.7	485.8
45°	1560.8	1485.6	982.1	550.6	457.6	431.5	425.2	423.1	407.4	377.2	375.1
47.5°	1776.1	1662.2	991.5	506.7	409.5	386.6	378.2	369.8	340.6	309.2	303.0
50°	2051.9	1867.0	1010.3	464.9	368.8	353.1	342.7	322.8	290.4	266.4	260.1
52.5°	2369.5	2110.4	1028.0	421.0	338.5	328.0	315.5	291.5	257.0	242.4	240.3
55°	2734.1	2382.0	1063.5	382.4	312.4	305.1	293.6	270.6	244.5	234.0	233.0
57.5°	3107.1	2686.0	1113.7	347.9	287.3	283.1	283.1	263.3	246.6	242.4	242.4
60°	3466.4	2947.2	1075.0	315.5	264.3	266.4	286.3	281.0	268.5	273.7	276.9
62.5°	3745.4	3100.8	872.4	289.4	247.6	266.4	317.6	317.6	303.0	300.9	300.9
65°	3864.5	3098.7	613.3	269.5	241.3	292.5	354.2	337.5	298.8	284.2	281.0
67.5°	3834.2	2962.9	423.1	256.0	239.2	319.7	370.9	323.9	280.0	267.5	258.1
70°	3567.8	2675.6	326.0	243.4	236.1	308.2	365.7	308.2	265.4	253.9	245.5
72.5°	2878.3	2145.9	270.6	230.9	223.6	285.2	347.9	293.6	253.9	241.3	233.0
75°	1835.6	1349.8	228.8	214.2	199.5	256.0	323.9	278.9	241.3	224.6	218.4
77.5°	882.8	581.9	199.5	194.3	179.7	237.2	299.8	260.1	224.6	211.0	206.9
80°	357.3	266.4	173.4	174.5	165.1	225.7	283.1	242.4	207.9	193.3	186.0
82.5°	186.0	154.6	146.3	150.4	150.4	215.2	270.6	227.8	193.3	187.0	163.0
85°	100.3	96.1	112.8	121.2	130.6	194.3	251.8	212.1	176.6	151.5	146.3
87.5°	49.1	62.7	63.7	73.1	90.9	155.7	212.1	177.6	147.3	122.2	120.1
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)