

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: P398169

Luminaire Tested: **ARCH-S-PA1-90-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-90-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9288 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

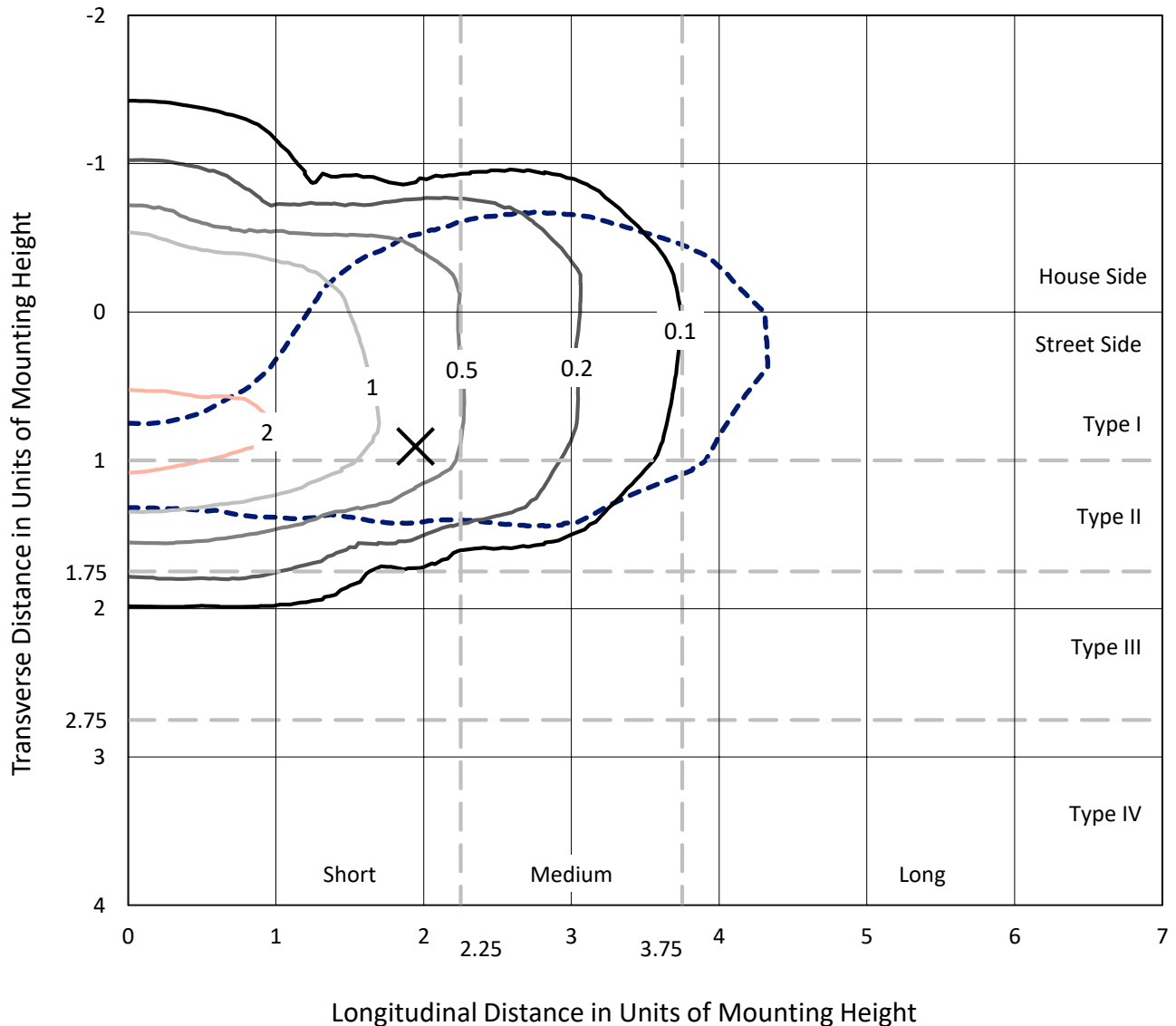
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

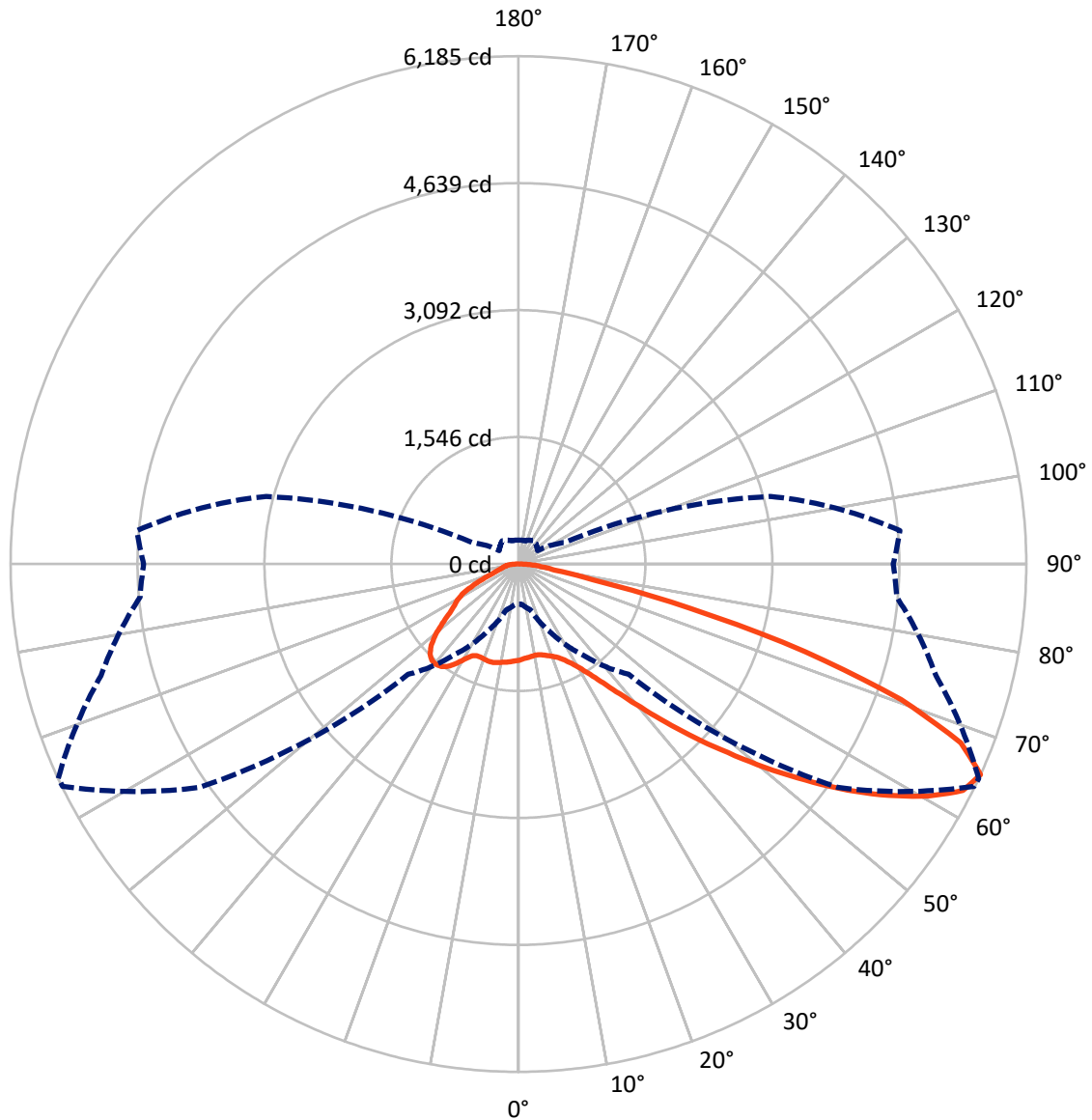
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2685.3	0.0	2685.3
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	6602.7	0.0	6602.7
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	9288.0	0.0	9288.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.8	1.2
10°-20°	333.8	3.6
20°-30°	593.0	6.4
30°-40°	1003.2	10.8
40°-50°	1746.3	18.8
50°-60°	2256.8	24.3
60°-70°	1974.8	21.3
70°-80°	1074.2	11.6
80°-90°	194.1	2.1
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°	9288.0	100.0
0°-180°	9288.0	100.0



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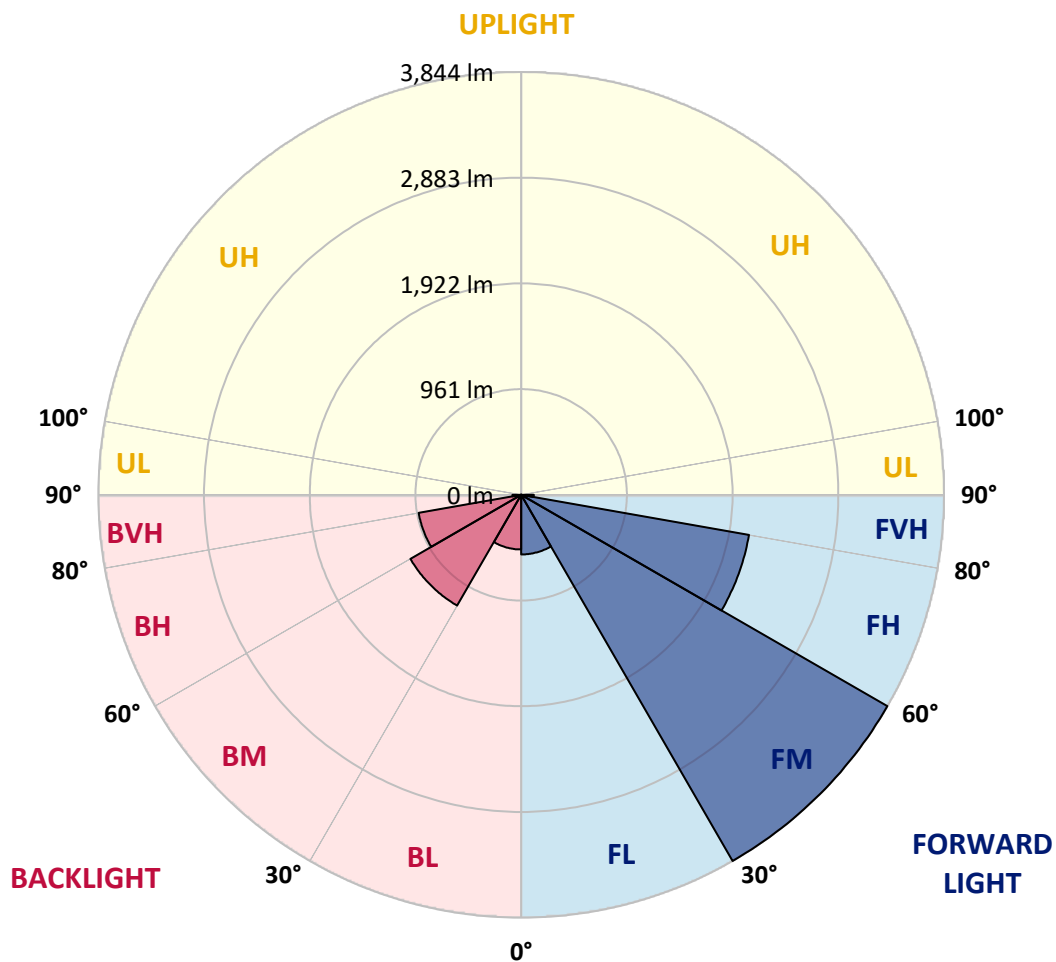
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	541.9	5.8			
FM	(30°-60°)	3843.6	41.4			
FH	(60°-80°)	2102.9	22.6			G2/5000
FVH	(80°-90°)	114.2	1.2			G2/225
BL	(0°-30°)	496.7	5.3	B1/500		
BM	(30°-60°)	1162.7	12.5	B2/2500		
BH	(60°-80°)	946.1	10.2	B2/1000		G2/1000
BVH	(80°-90°)	79.9	0.9			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6
2.5°	1152.8	1151.6	1149.2	1151.6	1152.8	1155.3	1154.1	1156.5	1155.3	1159.0	1165.1
5°	1123.5	1121.1	1119.8	1125.9	1129.6	1135.7	1138.2	1146.7	1145.5	1151.6	1161.4
7.5°	1090.5	1090.5	1089.3	1096.6	1101.5	1112.5	1121.1	1135.7	1137.0	1148.0	1159.0
10°	1064.8	1066.0	1064.8	1070.9	1078.3	1091.7	1106.4	1127.2	1128.4	1144.3	1155.3
12.5°	1055.0	1055.0	1055.0	1063.6	1073.4	1091.7	1108.8	1130.8	1133.3	1150.4	1160.2
15°	1068.5	1069.7	1067.3	1075.8	1086.8	1108.8	1124.7	1148.0	1150.4	1166.3	1172.4
17.5°	1116.2	1121.1	1114.9	1119.8	1117.4	1134.5	1149.2	1172.4	1173.6	1187.1	1189.5
20°	1210.3	1215.2	1205.4	1199.3	1177.3	1176.1	1182.2	1200.5	1200.5	1209.1	1203.0
22.5°	1355.8	1360.7	1343.6	1320.3	1267.8	1242.1	1228.6	1237.2	1236.0	1239.6	1223.8
25°	1548.9	1547.7	1526.9	1484.2	1399.8	1337.4	1304.4	1291.0	1291.0	1283.7	1264.1
27.5°	1788.6	1770.2	1733.5	1682.2	1564.8	1478.0	1407.1	1372.9	1366.8	1344.8	1308.1
30°	2044.1	2030.6	1978.1	1903.5	1767.8	1656.5	1539.2	1470.7	1467.0	1419.4	1364.3
32.5°	2344.8	2322.8	2264.1	2174.9	2012.3	1855.8	1709.1	1605.2	1599.1	1523.3	1447.5
35°	2731.1	2712.8	2599.1	2509.9	2300.8	2095.4	1921.8	1783.7	1778.8	1685.9	1589.3
37.5°	3194.5	3146.8	3036.8	2869.3	2649.2	2405.9	2185.9	2012.3	2006.2	1903.5	1781.2
40°	3607.7	3564.9	3467.1	3313.1	3077.1	2806.9	2508.6	2298.4	2292.2	2167.5	2013.5
42.5°	3913.3	3884.0	3820.4	3731.2	3562.5	3398.6	2920.6	2644.3	2633.3	2472.0	2280.0
45°	4090.6	4067.4	4030.7	4052.7	4050.2	4019.7	3412.1	3056.3	3020.9	2811.8	2577.1
47.5°	4047.8	4027.0	4041.7	4212.8	4448.8	4626.1	3984.2	3478.1	3430.4	3157.8	2893.7
50°	3738.5	3747.1	3824.1	4151.7	4681.1	5074.7	4618.7	3958.6	3895.0	3506.2	3194.5
52.5°	3174.9	3195.7	3382.7	3841.2	4655.4	5365.7	5192.1	4454.9	4370.5	3846.1	3468.3
55°	2522.1	2574.6	2816.7	3298.4	4320.4	5386.5	5624.9	4953.7	4860.8	4165.2	3706.7
57.5°	1865.6	1943.8	2223.8	2666.3	3678.6	5057.6	5841.2	5430.5	5318.0	4481.8	3958.6
60°	1183.4	1231.1	1553.8	2075.9	2815.5	4253.2	5813.1	5836.4	5738.6	4797.2	4221.4
62.5°	755.5	778.8	941.3	1480.5	1968.3	3149.2	5506.3	6143.2	6077.2	5084.5	4470.8
65°	485.3	495.1	578.3	910.8	1339.9	1901.0	4742.2	6176.2	6184.8	5264.2	4624.8
67.5°	394.9	399.8	430.3	562.4	947.5	1050.2	3303.3	5706.8	5810.7	5217.8	4572.3
70°	359.4	365.5	397.3	448.7	733.5	725.0	1599.1	4775.2	4945.1	4950.0	4338.8
72.5°	303.2	311.7	354.5	424.2	567.3	572.1	677.3	3401.1	3651.7	4424.3	3987.9
75°	253.1	258.0	294.6	374.1	480.5	457.2	475.6	1803.2	2165.1	3547.8	3615.0
77.5°	205.4	210.3	237.2	298.3	426.7	355.8	374.1	747.0	923.0	2408.4	2954.9
80°	146.7	151.6	182.2	232.3	322.7	320.3	277.5	412.0	447.4	1302.0	1919.4
82.5°	105.1	108.8	138.1	166.3	223.7	321.5	209.1	280.0	293.4	577.0	773.9
85°	70.9	70.9	95.4	110.0	144.3	202.9	168.7	189.5	198.0	273.8	209.1
87.5°	30.6	30.6	51.3	56.2	75.8	94.1	125.9	95.4	97.8	147.9	85.6
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°	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6	1173.6
2.5°	1168.7	1170.0	1172.4	1179.7	1184.6	1192.0	1195.6	1200.5	1200.5	1198.1	1199.3
5°	1166.3	1170.0	1178.5	1192.0	1200.5	1214.0	1223.8	1231.1	1233.5	1231.1	1232.3
7.5°	1165.1	1171.2	1185.9	1205.4	1217.6	1234.8	1248.2	1256.8	1262.9	1260.4	1261.7
10°	1161.4	1171.2	1189.5	1214.0	1232.3	1249.4	1261.7	1265.3	1269.0	1266.5	1265.3
12.5°	1166.3	1177.3	1196.9	1226.2	1247.0	1260.4	1264.1	1258.0	1249.4	1244.5	1243.3
15°	1176.1	1187.1	1206.6	1237.2	1255.5	1260.4	1251.9	1232.3	1212.7	1201.7	1200.5
17.5°	1189.5	1196.9	1212.7	1239.6	1254.3	1248.2	1231.1	1207.9	1193.2	1184.6	1185.9
20°	1198.1	1198.1	1210.3	1231.1	1243.3	1238.4	1217.6	1192.0	1168.7	1157.7	1154.1
22.5°	1210.3	1204.2	1205.4	1223.8	1240.9	1233.5	1189.5	1144.3	1111.3	1099.1	1097.8
25°	1243.3	1226.2	1215.2	1226.2	1266.5	1206.6	1118.6	1066.0	1035.5	1024.5	1025.7
27.5°	1283.7	1260.4	1237.2	1255.5	1287.3	1145.5	1028.1	968.2	949.9	941.3	945.0
30°	1324.0	1293.4	1262.9	1328.9	1272.7	1050.2	912.0	853.3	837.4	831.3	836.2
32.5°	1398.6	1348.4	1311.8	1426.7	1227.4	941.3	786.1	732.3	717.6	710.3	707.8
35°	1523.3	1459.7	1423.0	1512.3	1163.8	820.3	671.2	633.3	617.4	601.5	599.0
37.5°	1703.0	1626.0	1593.0	1561.2	1074.6	700.5	583.1	557.5	534.2	509.8	508.6
40°	1918.1	1817.9	1793.5	1583.2	951.1	588.0	522.0	497.6	468.2	445.0	446.2
42.5°	2166.3	2038.0	1985.4	1577.1	798.3	528.1	478.0	451.1	425.4	404.7	403.4
45°	2431.6	2286.1	2165.1	1534.3	646.7	486.6	451.1	419.3	393.7	370.4	368.0
47.5°	2725.0	2562.4	2331.4	1451.1	534.2	457.2	435.2	390.0	366.8	352.1	352.1
50°	3020.9	2826.5	2484.2	1325.2	468.2	435.2	412.0	374.1	355.8	343.5	343.5
52.5°	3273.9	3101.6	2610.1	1174.9	426.7	416.9	396.1	366.8	347.2	336.2	335.0
55°	3519.7	3357.1	2722.6	1025.7	392.4	392.4	392.4	360.6	338.6	328.9	327.6
57.5°	3764.2	3626.0	2839.9	927.9	361.9	371.6	385.1	353.3	331.3	322.7	321.5
60°	4040.5	3948.8	2975.6	859.4	335.0	349.6	375.3	344.8	319.1	311.7	310.5
62.5°	4333.9	4333.9	3099.1	762.9	310.5	331.3	360.6	333.8	308.1	302.0	300.7
65°	4563.7	4662.7	3178.6	618.6	286.1	313.0	343.5	319.1	293.4	292.2	289.7
67.5°	4590.6	4745.9	3128.5	467.0	264.1	293.4	326.4	303.2	278.7	278.7	275.1
70°	4397.4	4555.1	2972.0	349.6	248.2	273.8	304.4	283.6	260.4	262.8	256.7
72.5°	4074.7	4113.8	2583.2	276.3	229.8	253.1	277.5	261.6	240.8	240.8	232.3
75°	3649.3	3431.6	1876.6	231.1	207.8	228.6	250.6	237.2	218.8	212.7	207.8
77.5°	2904.7	2486.6	1090.5	199.3	189.5	205.4	220.1	210.3	194.4	180.9	180.9
80°	1770.2	1457.3	481.7	172.4	167.5	179.7	189.5	178.5	165.0	151.6	147.9
82.5°	673.6	562.4	233.5	147.9	146.7	154.0	161.4	150.4	140.6	134.5	116.1
85°	184.6	169.9	160.2	123.5	121.0	119.8	128.4	123.5	110.0	90.5	80.7
87.5°	69.7	79.5	86.8	75.8	80.7	74.6	85.6	78.2	69.7	45.2	40.3
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)