

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: P398000

Luminaire Tested: **ARCH-S-PA1-70-750-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398000  
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-PA1-70-750-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10070 lumens  
Efficiency: N/A  
Efficacy: 136.1 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): 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

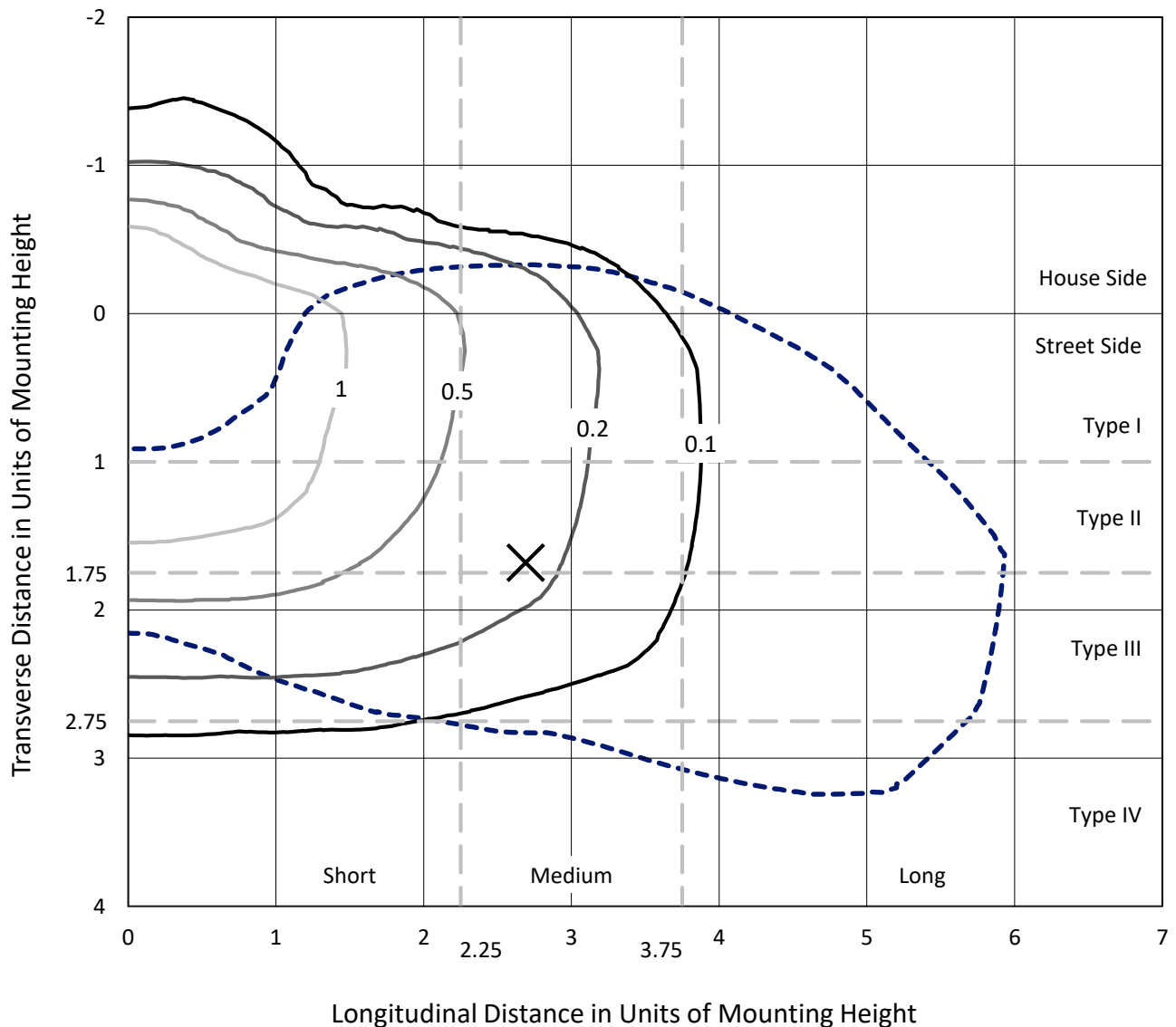


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

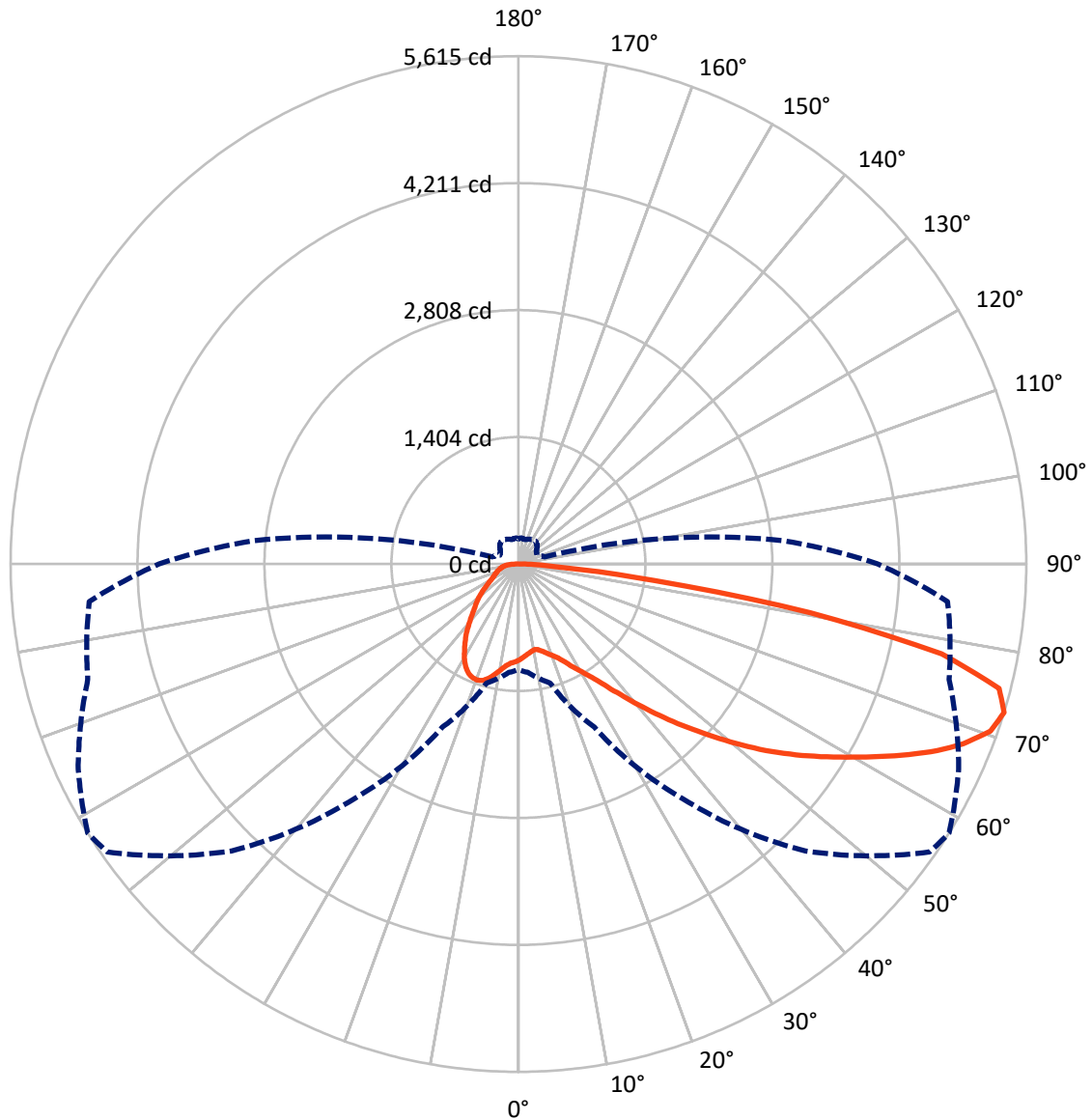


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Medium - Non-Cutoff

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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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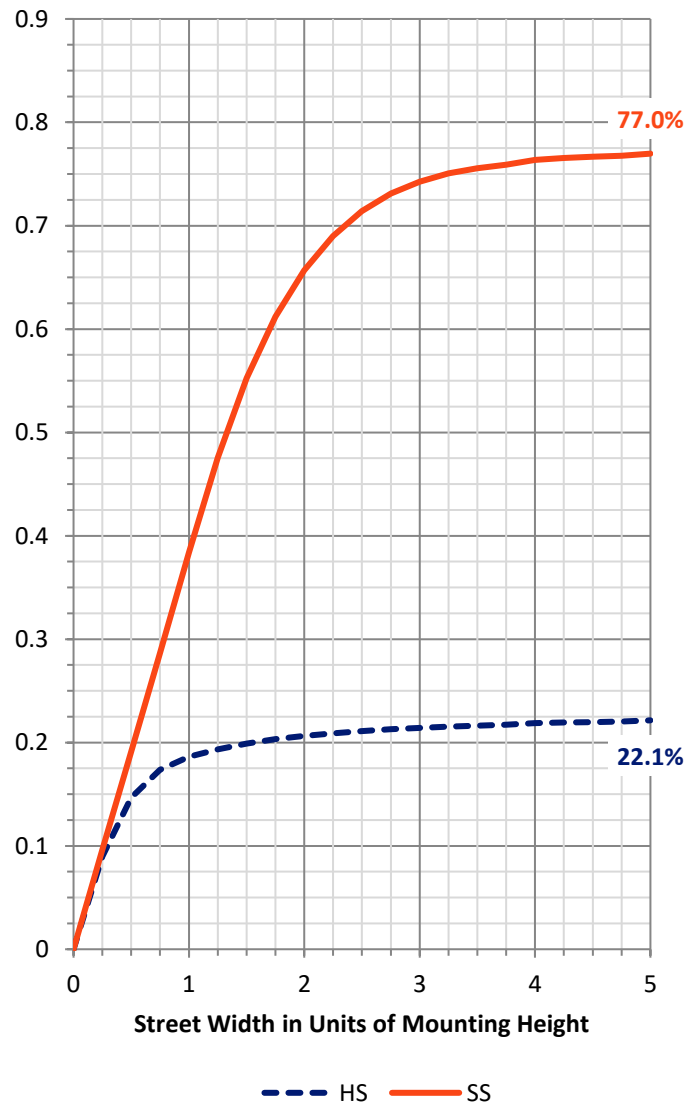
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2283.8	0.0	2283.8
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	7786.2	0.0	7786.2
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	10070.0	0.0	10070.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.3	1.0
10°-20°	324.9	3.2
20°-30°	582.1	5.8
30°-40°	875.6	8.7
40°-50°	1417.9	14.1
50°-60°	2134.4	21.2
60°-70°	2512.0	24.9
70°-80°	1781.2	17.7
80°-90°	339.4	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°	10070.0	100.0
0°-180°	10070.0	100.0

**Coefficient of Utilization**



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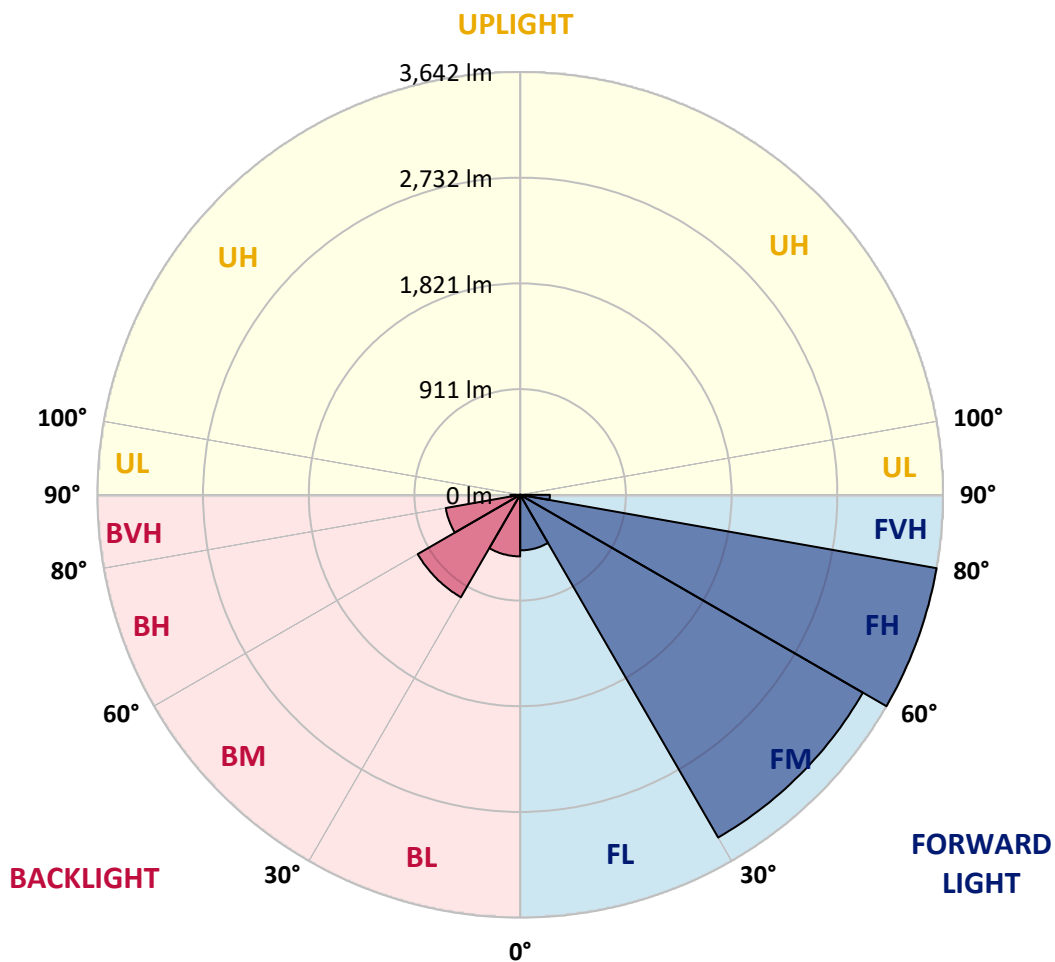
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	478.9	4.8			
FM	(30°-60°)	3409.0	33.9			
FH	(60°-80°)	3642.4	36.2			G2/5000
FVH	(80°-90°)	256.0	2.5			G3/500
BL	(0°-30°)	530.5	5.3	B2/1000		
BM	(30°-60°)	1019.0	10.1	B2/2500		
BH	(60°-80°)	650.9	6.5	B2/1000		G2/1000
BVH	(80°-90°)	83.4	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°	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2
2.5°	1022.3	1017.0	1018.3	1018.3	1023.6	1026.3	1027.6	1031.6	1034.3	1040.9	1050.2
5°	974.4	970.4	971.8	973.1	982.4	991.7	999.7	1005.0	1013.0	1023.6	1036.9
7.5°	939.9	937.2	938.5	941.2	949.2	959.8	973.1	981.1	993.0	1013.0	1035.6
10°	914.6	914.6	915.9	921.3	929.2	942.5	953.2	962.5	986.4	1022.3	1056.9
12.5°	894.7	894.7	898.7	909.3	922.6	935.9	961.1	971.8	1003.7	1052.9	1094.1
15°	893.3	894.7	896.0	905.3	919.9	949.2	986.4	1002.3	1040.9	1099.4	1147.3
17.5°	914.6	915.9	910.6	913.3	930.6	971.8	1021.0	1039.6	1088.8	1152.6	1201.8
20°	979.7	979.7	963.8	949.2	961.1	1006.3	1062.2	1080.8	1135.3	1205.7	1254.9
22.5°	1112.7	1119.3	1082.1	1050.2	1031.6	1056.9	1107.4	1127.3	1188.5	1264.2	1313.4
25°	1273.5	1280.2	1229.7	1184.5	1149.9	1145.9	1179.2	1200.4	1250.9	1329.4	1370.6
27.5°	1429.1	1417.1	1370.6	1328.0	1284.2	1248.3	1273.5	1292.2	1350.6	1410.5	1435.7
30°	1551.4	1542.1	1496.9	1466.3	1425.1	1378.6	1363.9	1383.9	1431.7	1487.6	1500.9
32.5°	1687.0	1680.3	1635.1	1595.3	1560.7	1516.8	1484.9	1494.2	1520.8	1560.7	1568.7
35°	1859.8	1874.4	1826.6	1745.5	1706.9	1664.4	1641.8	1644.4	1664.4	1689.6	1676.3
37.5°	2041.9	2059.2	2061.9	1934.2	1882.4	1843.8	1819.9	1829.2	1853.1	1870.4	1829.2
40°	2379.6	2362.3	2293.2	2198.8	2119.0	2081.8	2048.6	2047.2	2064.5	2095.1	2020.7
42.5°	2827.6	2811.6	2672.0	2549.7	2423.5	2380.9	2315.8	2287.9	2295.8	2334.4	2230.7
45°	3257.0	3250.3	3138.7	2996.4	2844.9	2762.4	2613.6	2545.8	2539.1	2569.7	2446.1
47.5°	3638.5	3609.3	3528.2	3417.8	3401.9	3186.5	2912.7	2820.9	2789.0	2806.3	2668.1
50°	4046.6	3946.9	3835.2	3767.4	3883.1	3682.4	3214.4	3118.7	3040.3	3052.2	2908.7
52.5°	4263.3	4095.8	4022.7	4042.6	4198.2	4121.1	3542.8	3425.8	3299.5	3316.8	3148.0
55°	4077.2	4075.9	4107.8	4231.4	4448.1	4359.0	3855.2	3723.6	3585.3	3589.3	3423.1
57.5°	3822.0	3873.8	4038.6	4311.2	4757.8	4608.9	4162.3	4022.7	3896.4	3876.5	3735.5
60°	3589.3	3646.5	3885.8	4297.9	4865.5	4837.6	4454.7	4332.4	4230.1	4171.6	4063.9
62.5°	3235.7	3278.2	3617.2	4212.8	4775.1	5002.4	4751.2	4667.4	4590.3	4469.4	4417.5
65°	2819.6	2834.2	3191.8	3932.3	4662.1	5066.2	5046.3	5009.1	4934.6	4756.5	4767.1
67.5°	2368.9	2398.2	2711.9	3484.3	4414.9	5037.0	5275.0	5305.5	5217.8	4950.6	4990.5
70°	1889.0	1924.9	2162.9	2864.8	3994.8	4910.7	5486.3	5535.5	5366.7	5014.4	5031.7
72.5°	1168.5	1203.1	1362.6	1990.1	3166.6	4486.6	5551.5	5615.3	5370.7	4929.3	4763.2
75°	404.1	408.1	533.1	954.5	1879.7	3387.2	5338.8	5489.0	5201.8	4619.6	4145.0
77.5°	184.8	191.4	236.6	393.5	833.5	1827.9	4408.2	4784.4	4688.7	4135.7	3190.5
80°	127.6	130.3	163.5	235.3	481.2	643.4	2782.4	3272.9	3440.4	3202.5	2044.6
82.5°	95.7	98.4	126.3	159.5	347.0	312.4	1059.5	1520.8	1890.4	1855.8	854.8
85°	91.7	90.4	98.4	106.4	231.3	186.1	343.0	470.6	737.8	631.5	215.4
87.5°	39.9	43.9	101.0	59.8	121.0	86.4	148.9	174.1	224.7	195.4	77.1
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°	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2	1062.2
2.5°	1054.2	1056.9	1064.8	1076.8	1083.4	1096.7	1106.0	1111.4	1115.3	1116.7	1116.7
5°	1044.9	1050.2	1067.5	1087.4	1106.0	1134.0	1159.2	1173.8	1184.5	1188.5	1189.8
7.5°	1047.5	1060.8	1086.1	1115.3	1139.3	1175.2	1205.7	1235.0	1258.9	1268.2	1268.2
10°	1072.8	1091.4	1126.0	1164.5	1195.1	1232.3	1264.2	1289.5	1317.4	1333.4	1336.0
12.5°	1111.4	1134.0	1179.2	1221.7	1256.3	1285.5	1314.8	1333.4	1346.7	1358.6	1361.3
15°	1165.9	1193.8	1239.0	1282.8	1313.4	1332.0	1340.0	1340.0	1338.7	1340.0	1342.7
17.5°	1220.4	1247.0	1292.2	1336.0	1350.6	1340.0	1330.7	1328.0	1326.7	1324.1	1325.4
20°	1273.5	1298.8	1337.4	1370.6	1358.6	1321.4	1309.4	1308.1	1304.1	1301.5	1298.8
22.5°	1326.7	1345.3	1377.2	1389.2	1341.3	1288.2	1273.5	1265.6	1260.2	1253.6	1247.0
25°	1387.9	1393.2	1417.1	1398.5	1298.8	1227.0	1205.7	1193.8	1188.5	1181.8	1176.5
27.5°	1445.0	1445.0	1449.0	1383.9	1236.3	1145.9	1114.0	1092.7	1091.4	1090.1	1088.8
30°	1496.9	1490.2	1476.9	1340.0	1155.2	1046.2	998.4	977.1	985.1	991.7	993.0
32.5°	1558.0	1544.7	1507.5	1280.2	1058.2	934.6	876.1	866.8	876.1	884.0	878.7
35°	1653.7	1629.8	1539.4	1211.1	965.1	832.2	776.4	763.1	760.4	759.1	748.4
37.5°	1790.7	1749.5	1564.7	1136.6	873.4	741.8	700.6	672.7	647.4	620.8	616.8
40°	1958.2	1887.7	1582.0	1051.5	776.4	666.0	622.1	586.3	543.7	497.2	491.9
42.5°	2141.6	2036.6	1589.9	957.2	691.3	603.5	549.0	503.8	456.0	420.1	413.4
45°	2339.7	2197.5	1583.3	866.8	622.1	550.4	489.2	440.0	401.5	376.2	370.9
47.5°	2532.5	2382.2	1564.7	795.0	569.0	505.2	442.7	397.5	368.2	340.3	333.7
50°	2779.7	2559.0	1542.1	739.1	510.5	460.0	413.4	365.6	332.3	319.1	316.4
52.5°	3053.6	2735.9	1515.5	668.7	453.3	424.1	394.8	352.3	341.6	316.4	312.4
55°	3350.0	2945.9	1510.2	579.6	402.8	398.8	376.2	364.2	366.9	316.4	309.7
57.5°	3662.4	3170.6	1522.1	490.5	361.6	376.2	384.2	374.9	370.9	323.0	309.7
60°	3988.1	3387.2	1486.2	408.1	329.7	357.6	393.5	369.6	340.3	320.4	311.1
62.5°	4304.5	3569.4	1330.7	349.6	305.8	352.3	388.2	349.6	316.4	316.4	312.4
65°	4534.5	3650.5	1040.9	307.1	289.8	345.6	378.9	336.3	309.7	319.1	313.7
67.5°	4561.1	3566.7	699.3	273.9	276.5	333.7	357.6	324.4	303.1	327.0	319.1
70°	4397.6	3348.7	428.1	248.6	259.2	312.4	339.0	312.4	293.8	320.4	308.4
72.5°	3973.5	2941.9	301.8	227.3	240.6	292.5	321.7	301.8	280.5	289.8	277.8
75°	3259.6	2279.9	239.3	207.4	222.0	273.9	307.1	285.8	264.5	260.6	252.6
77.5°	2309.1	1461.0	192.8	191.4	202.1	251.3	287.1	267.2	245.9	238.0	232.6
80°	1328.0	716.5	166.2	172.8	183.5	228.7	263.2	245.9	226.0	214.0	206.1
82.5°	507.8	249.9	146.2	150.2	162.2	204.7	239.3	224.7	204.7	215.4	180.8
85°	164.8	136.9	119.6	123.6	135.6	170.2	211.4	199.4	176.8	156.9	144.9
87.5°	73.1	74.4	63.8	70.5	85.1	113.0	154.2	146.2	128.9	107.7	103.7
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)