

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: P398054

Luminaire Tested: **ARCH-S-PA1-80-730-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398054  
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-PA1-80-730-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9911 lumens  
Efficiency: N/A  
Efficacy: 119.4 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): 83  
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

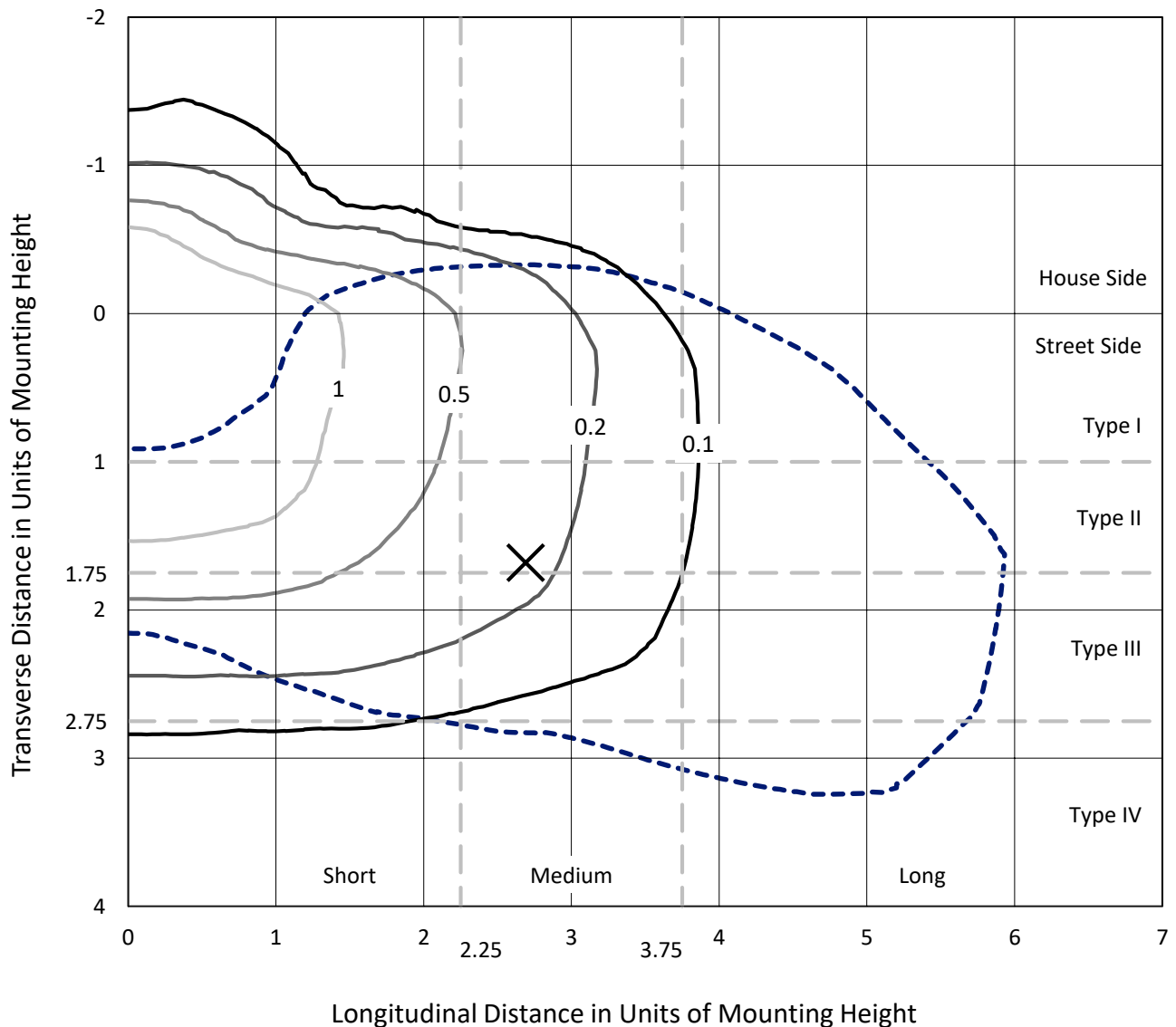


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

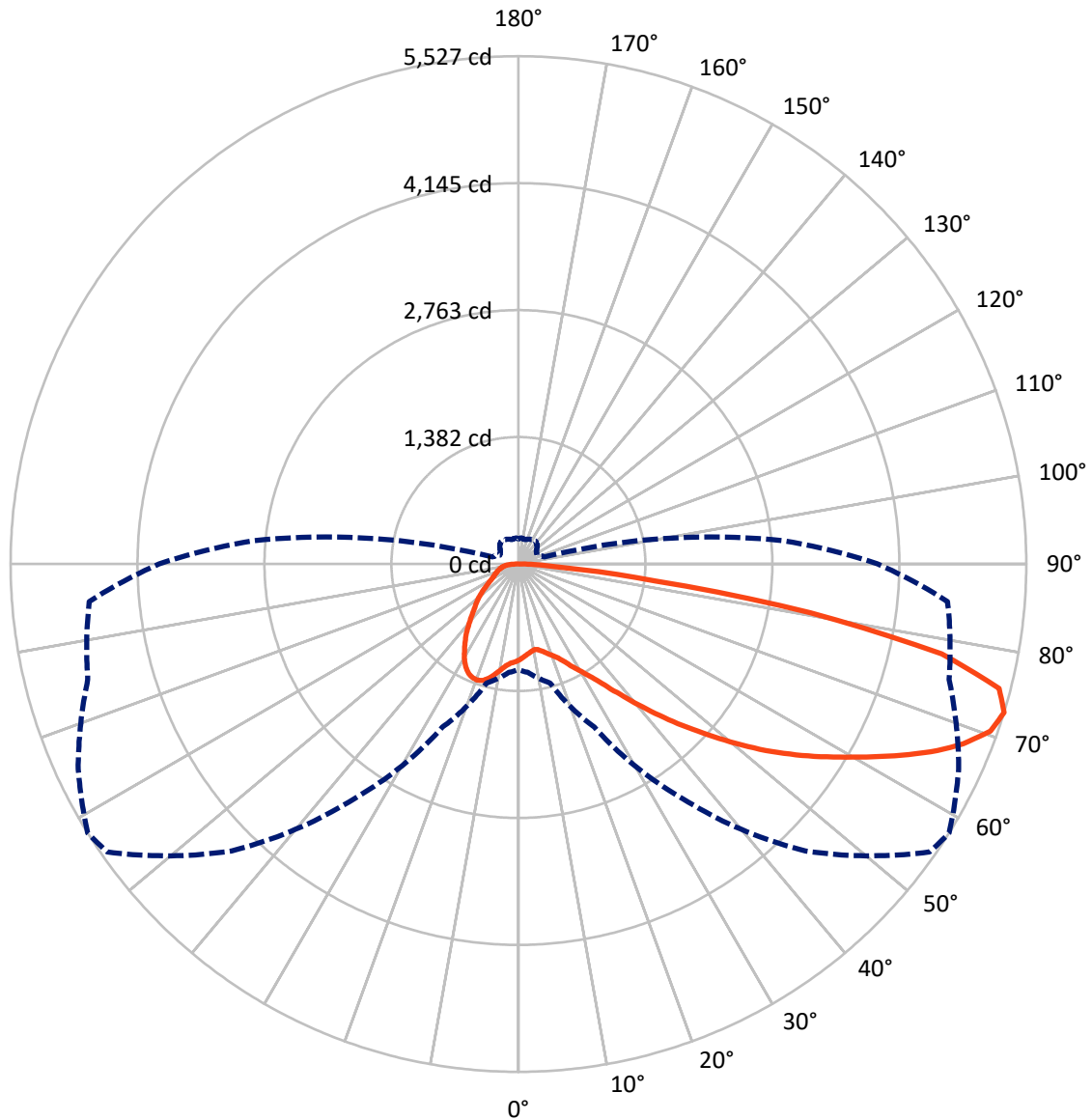


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Medium - Non-Cutoff

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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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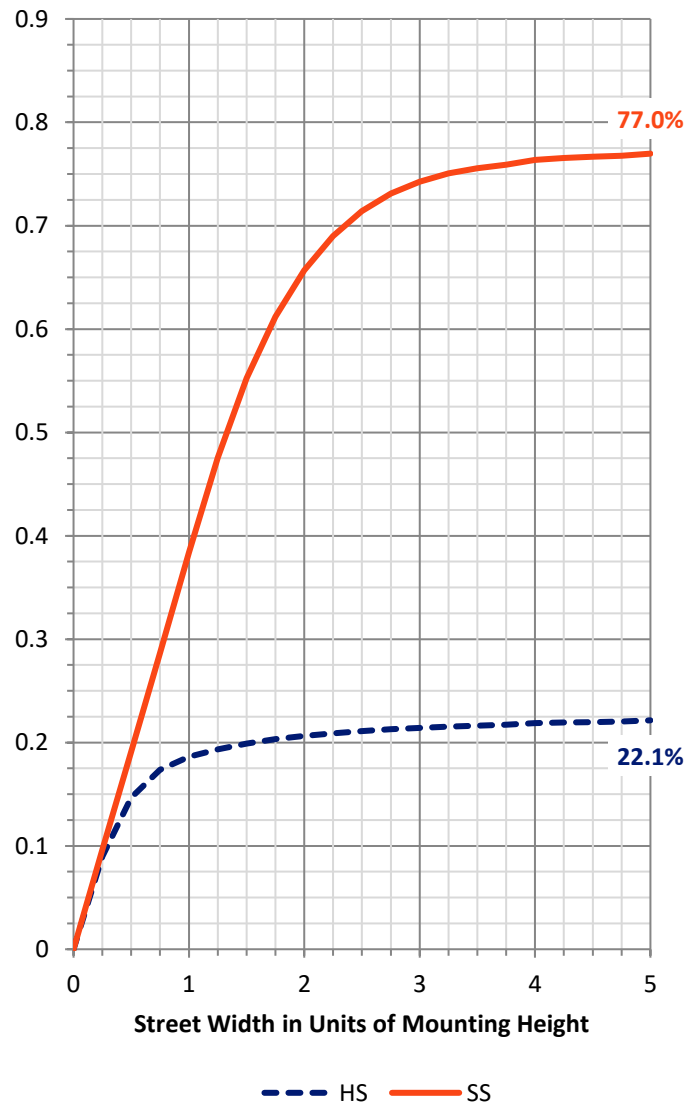
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2247.7	0.0	2247.7
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	7663.3	0.0	7663.3
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	9911.0	0.0	9911.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	1.0
10°-20°	319.8	3.2
20°-30°	572.9	5.8
30°-40°	861.8	8.7
40°-50°	1395.5	14.1
50°-60°	2100.7	21.2
60°-70°	2472.3	24.9
70°-80°	1753.1	17.7
80°-90°	334.1	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°	9911.0	100.0
0°-180°	9911.0	100.0

**Coefficient of Utilization**



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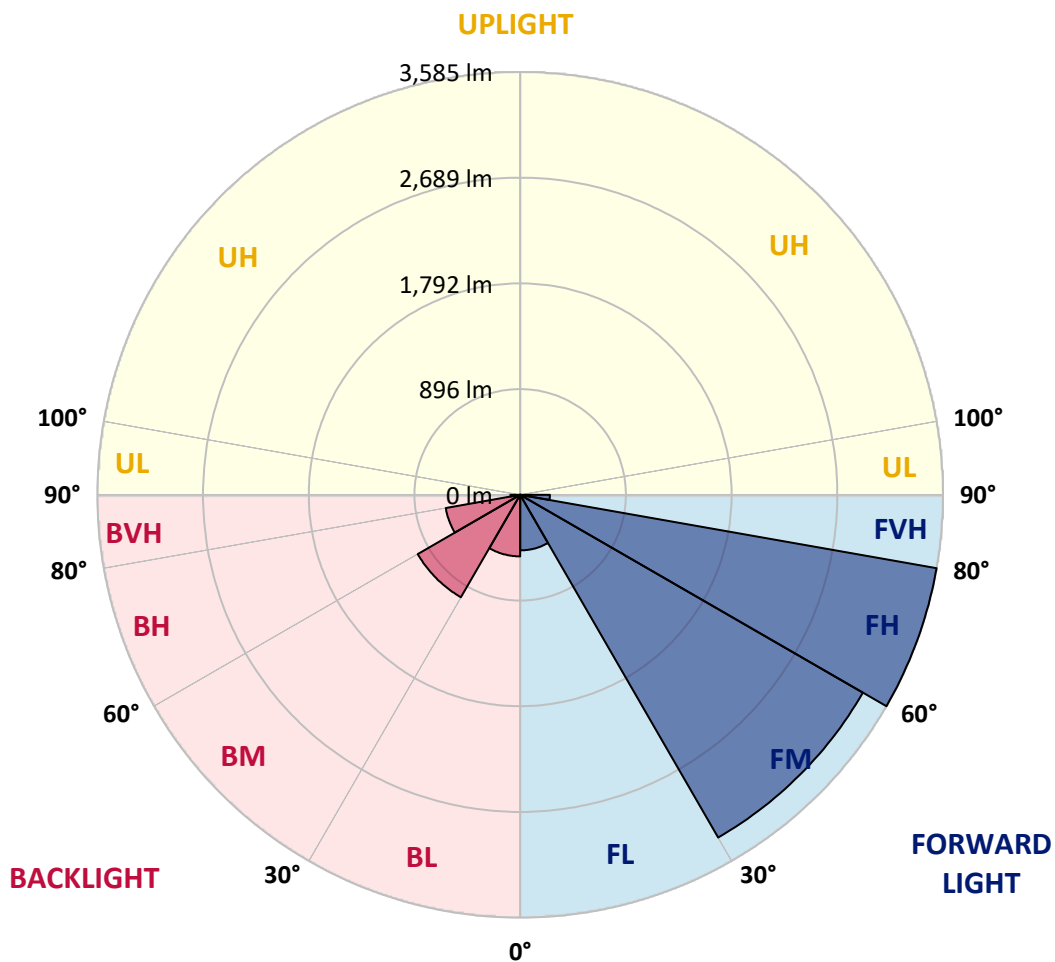
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	471.3	4.8			
FM	(30°-60°)	3355.2	33.9			
FH	(60°-80°)	3584.9	36.2			G2/5000
FVH	(80°-90°)	252.0	2.5			G3/500
BL	(0°-30°)	522.1	5.3	B2/1000		
BM	(30°-60°)	1002.9	10.1	B2/2500		
BH	(60°-80°)	640.6	6.5	B2/1000		G2/1000
BVH	(80°-90°)	82.1	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°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1006.1	1000.9	1002.2	1002.2	1007.5	1010.1	1011.4	1015.3	1017.9	1024.5	1033.6
5°	959.0	955.1	956.4	957.7	966.9	976.1	983.9	989.1	997.0	1007.5	1020.5
7.5°	925.0	922.4	923.7	926.3	934.2	944.7	957.7	965.6	977.4	997.0	1019.2
10°	900.2	900.2	901.5	906.7	914.6	927.6	938.1	947.3	970.8	1006.1	1040.2
12.5°	880.5	880.5	884.5	894.9	908.0	921.1	946.0	956.4	987.8	1036.2	1076.8
15°	879.2	880.5	881.9	891.0	905.4	934.2	970.8	986.5	1024.5	1082.0	1129.1
17.5°	900.2	901.5	896.2	898.9	915.9	956.4	1004.8	1023.2	1071.6	1134.4	1182.8
20°	964.3	964.3	948.6	934.2	946.0	990.4	1045.4	1063.7	1117.4	1186.7	1235.1
22.5°	1095.1	1101.7	1065.0	1033.6	1015.3	1040.2	1089.9	1109.5	1169.7	1244.3	1292.7
25°	1253.4	1260.0	1210.3	1165.8	1131.8	1127.8	1160.5	1181.5	1231.2	1308.4	1348.9
27.5°	1406.5	1394.7	1348.9	1307.1	1263.9	1228.6	1253.4	1271.8	1329.3	1388.2	1413.1
30°	1526.9	1517.7	1473.2	1443.1	1402.6	1356.8	1342.4	1362.0	1409.1	1464.1	1477.2
32.5°	1660.3	1653.8	1609.3	1570.1	1536.0	1492.9	1461.5	1470.6	1496.8	1536.0	1543.9
35°	1830.4	1844.8	1797.7	1717.9	1680.0	1638.1	1615.9	1618.5	1638.1	1663.0	1649.9
37.5°	2009.7	2026.7	2029.3	1903.7	1852.7	1814.7	1791.2	1800.3	1823.9	1840.9	1800.3
40°	2342.0	2325.0	2257.0	2164.1	2085.6	2048.9	2016.2	2014.9	2031.9	2062.0	1988.7
42.5°	2782.9	2767.2	2629.9	2509.5	2385.2	2343.3	2279.2	2251.7	2259.6	2297.5	2195.5
45°	3205.5	3199.0	3089.1	2949.1	2799.9	2718.8	2572.3	2505.6	2499.0	2529.1	2407.4
47.5°	3581.1	3552.3	3472.5	3363.9	3348.2	3136.2	2866.7	2776.4	2745.0	2762.0	2625.9
50°	3982.7	3884.6	3774.7	3708.0	3821.8	3624.2	3163.7	3069.5	2992.3	3004.1	2862.7
52.5°	4196.0	4031.1	3959.2	3978.8	4131.9	4056.0	3486.8	3371.7	3247.4	3264.4	3098.3
55°	4012.8	4011.5	4042.9	4164.6	4377.9	4290.2	3794.3	3664.8	3528.7	3532.6	3369.1
57.5°	3761.6	3812.6	3974.9	4243.1	4682.7	4536.2	4096.6	3959.2	3834.9	3815.3	3676.6
60°	3532.6	3588.9	3824.4	4230.0	4788.7	4761.2	4384.4	4264.0	4163.3	4105.7	3999.7
62.5°	3184.6	3226.5	3560.1	4146.3	4699.7	4923.5	4676.2	4593.7	4517.9	4398.8	4347.8
65°	2775.1	2789.5	3141.4	3870.2	4588.5	4986.3	4966.6	4930.0	4856.7	4681.4	4691.9
67.5°	2331.5	2360.3	2669.1	3429.3	4345.1	4957.5	5191.7	5221.8	5135.4	4872.4	4911.7
70°	1859.2	1894.5	2128.7	2819.6	3931.7	4833.2	5399.7	5448.1	5282.0	4935.2	4952.2
72.5°	1150.1	1184.1	1341.1	1958.7	3116.6	4415.8	5463.8	5526.6	5285.9	4851.5	4687.9
75°	397.7	401.7	524.7	939.4	1850.1	3333.8	5254.5	5402.3	5119.7	4546.6	4079.5
77.5°	181.9	188.4	232.9	387.3	820.4	1799.0	4338.6	4708.9	4614.7	4070.4	3140.1
80°	125.6	128.2	160.9	231.6	473.6	633.3	2738.5	3221.2	3386.1	3151.9	2012.3
82.5°	94.2	96.8	124.3	157.0	341.5	307.5	1042.8	1496.8	1860.5	1826.5	841.3
85°	90.3	89.0	96.8	104.7	227.7	183.2	337.6	463.2	726.2	621.5	212.0
87.5°	39.3	43.2	99.4	58.9	119.1	85.0	146.5	171.4	221.1	192.3	75.9
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°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1037.5	1040.2	1048.0	1059.8	1066.3	1079.4	1088.6	1093.8	1097.7	1099.0	1099.0
5°	1028.4	1033.6	1050.6	1070.3	1088.6	1116.1	1140.9	1155.3	1165.8	1169.7	1171.0
7.5°	1031.0	1044.1	1069.0	1097.7	1121.3	1156.6	1186.7	1215.5	1239.0	1248.2	1248.2
10°	1055.9	1074.2	1108.2	1146.1	1176.2	1212.9	1244.3	1269.1	1296.6	1312.3	1314.9
12.5°	1093.8	1116.1	1160.5	1202.4	1236.4	1265.2	1294.0	1312.3	1325.4	1337.2	1339.8
15°	1147.5	1174.9	1219.4	1262.6	1292.7	1311.0	1318.9	1318.9	1317.5	1318.9	1321.5
17.5°	1201.1	1227.3	1271.8	1314.9	1329.3	1318.9	1309.7	1307.1	1305.8	1303.2	1304.5
20°	1253.4	1278.3	1316.2	1348.9	1337.2	1300.5	1288.8	1287.5	1283.5	1280.9	1278.3
22.5°	1305.8	1324.1	1355.5	1367.3	1320.2	1267.8	1253.4	1245.6	1240.3	1233.8	1227.3
25°	1366.0	1371.2	1394.7	1376.4	1278.3	1207.6	1186.7	1174.9	1169.7	1163.2	1157.9
27.5°	1422.2	1422.2	1426.1	1362.0	1216.8	1127.8	1096.4	1075.5	1074.2	1072.9	1071.6
30°	1473.2	1466.7	1453.6	1318.9	1137.0	1029.7	982.6	961.7	969.5	976.1	977.4
32.5°	1533.4	1520.3	1483.7	1260.0	1041.5	919.8	862.2	853.1	862.2	870.1	864.8
35°	1627.6	1604.1	1515.1	1191.9	949.9	819.0	764.1	751.0	748.4	747.1	736.6
37.5°	1762.4	1721.8	1540.0	1118.7	859.6	730.1	689.5	662.0	637.2	611.0	607.1
40°	1927.3	1857.9	1557.0	1034.9	764.1	655.5	612.3	577.0	535.1	489.3	484.1
42.5°	2107.8	2004.4	1564.8	942.0	680.4	594.0	540.4	495.9	448.8	413.4	406.9
45°	2302.8	2162.8	1558.3	853.1	612.3	541.7	481.5	433.1	395.1	370.3	365.0
47.5°	2492.5	2344.6	1540.0	782.4	560.0	497.2	435.7	391.2	362.4	334.9	328.4
50°	2735.8	2518.6	1517.7	727.5	502.4	452.7	406.9	359.8	327.1	314.0	311.4
52.5°	3005.4	2692.7	1491.6	658.1	446.2	417.4	388.6	346.7	336.3	311.4	307.5
55°	3297.1	2899.4	1486.3	570.5	396.4	392.5	370.3	358.5	361.1	311.4	304.9
57.5°	3604.6	3120.5	1498.1	482.8	355.9	370.3	378.1	369.0	365.0	317.9	304.9
60°	3925.2	3333.8	1462.8	401.7	324.5	352.0	387.3	363.7	334.9	315.3	306.2
62.5°	4236.6	3513.0	1309.7	344.1	300.9	346.7	382.0	344.1	311.4	311.4	307.5
65°	4462.9	3592.8	1024.5	302.2	285.2	340.2	372.9	331.0	304.9	314.0	308.8
67.5°	4489.1	3510.4	688.2	269.5	272.1	328.4	352.0	319.2	298.3	321.9	314.0
70°	4328.1	3295.8	421.3	244.7	255.1	307.5	333.6	307.5	289.2	315.3	303.5
72.5°	3910.8	2895.5	297.0	223.7	236.8	287.8	316.6	297.0	276.1	285.2	273.5
75°	3208.2	2243.9	235.5	204.1	218.5	269.5	302.2	281.3	260.4	256.4	248.6
77.5°	2272.7	1437.9	189.7	188.4	198.9	247.3	282.6	263.0	242.1	234.2	229.0
80°	1307.1	705.2	163.5	170.1	180.6	225.0	259.1	242.1	222.4	210.7	202.8
82.5°	499.8	246.0	143.9	147.8	159.6	201.5	235.5	221.1	201.5	212.0	177.9
85°	162.2	134.8	117.8	121.7	133.5	167.5	208.0	196.3	174.0	154.4	142.6
87.5°	72.0	73.3	62.8	69.3	83.7	111.2	151.8	143.9	126.9	106.0	102.1
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)