

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: P398072

Luminaire Tested: **ARCH-S-PA1-80-750-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398072  
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-PA1-80-750-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10882 lumens  
Efficiency: N/A  
Efficacy: 131.1 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): 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

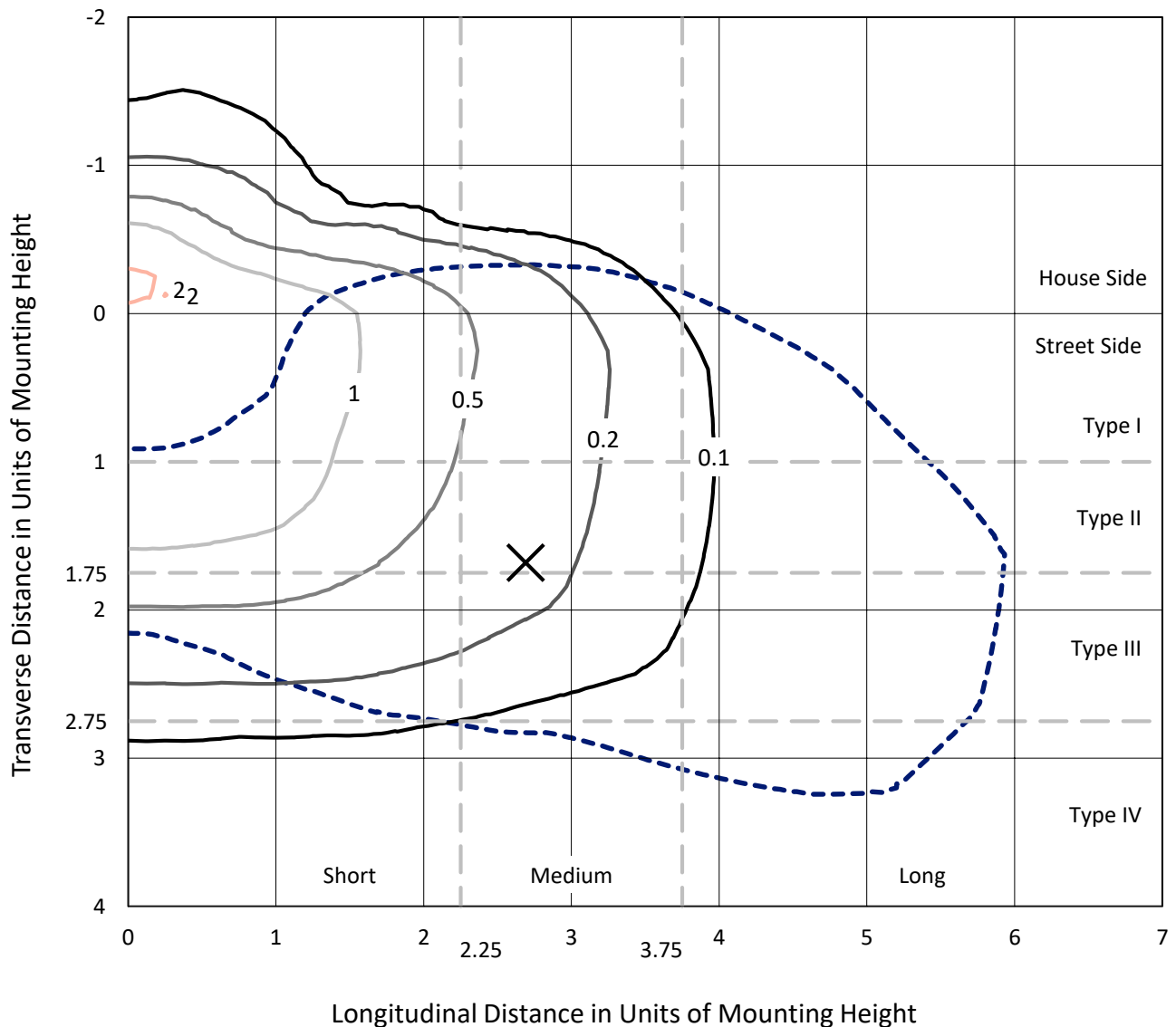


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

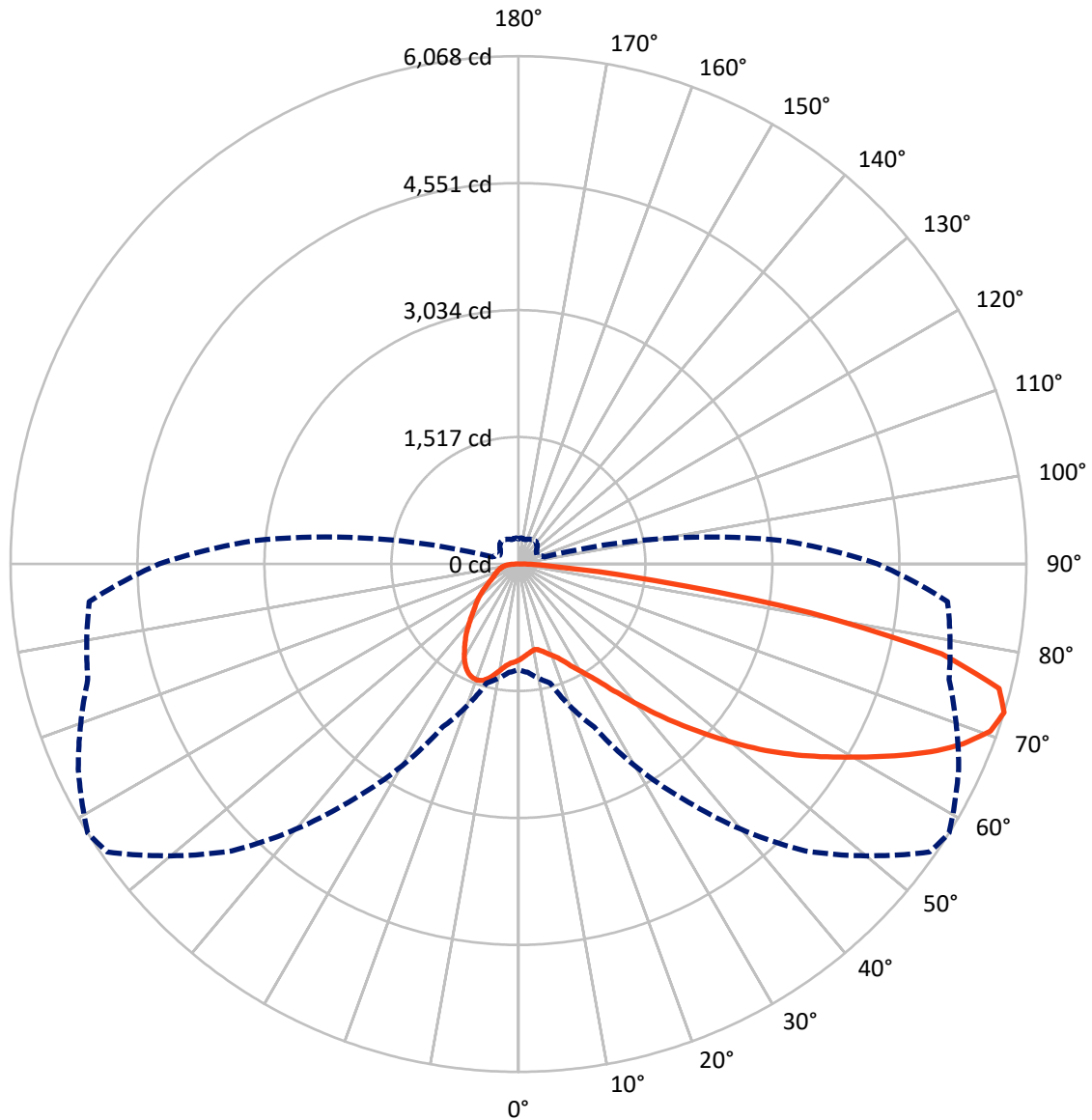


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Medium - Non-Cutoff

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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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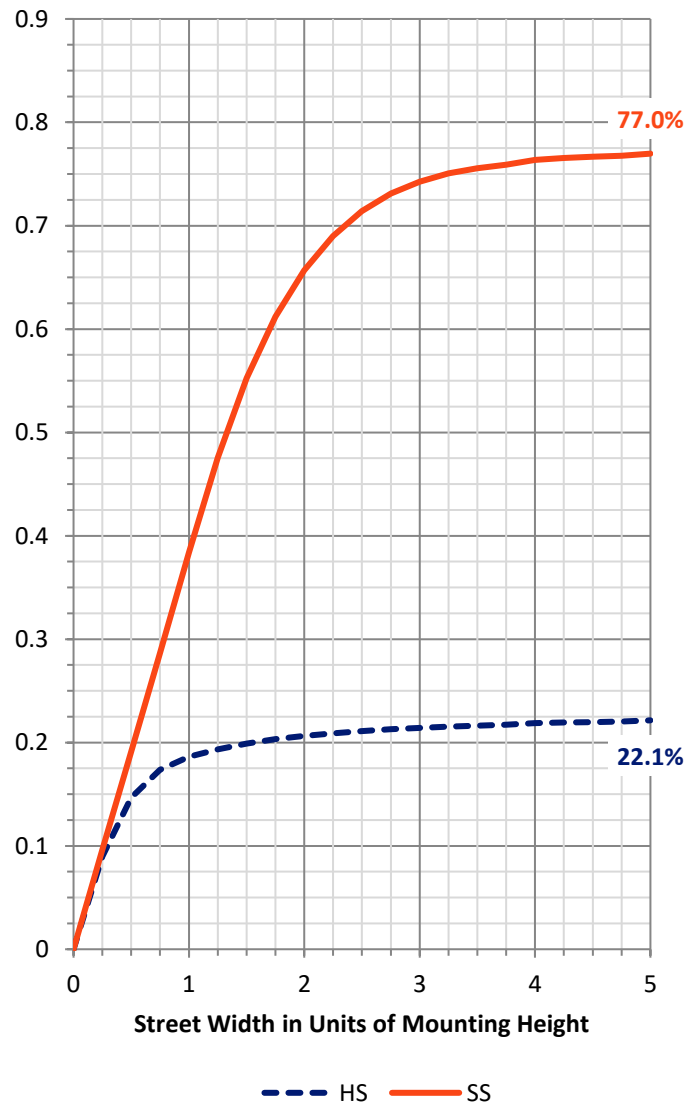
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2467.9	0.0	2467.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	8414.1	0.0	8414.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	10882.0	0.0	10882.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.6	1.0
10°-20°	351.1	3.2
20°-30°	629.0	5.8
30°-40°	946.2	8.7
40°-50°	1532.3	14.1
50°-60°	2306.6	21.2
60°-70°	2714.6	24.9
70°-80°	1924.9	17.7
80°-90°	366.8	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°	10882.0	100.0
0°-180°	10882.0	100.0

**Coefficient of Utilization**



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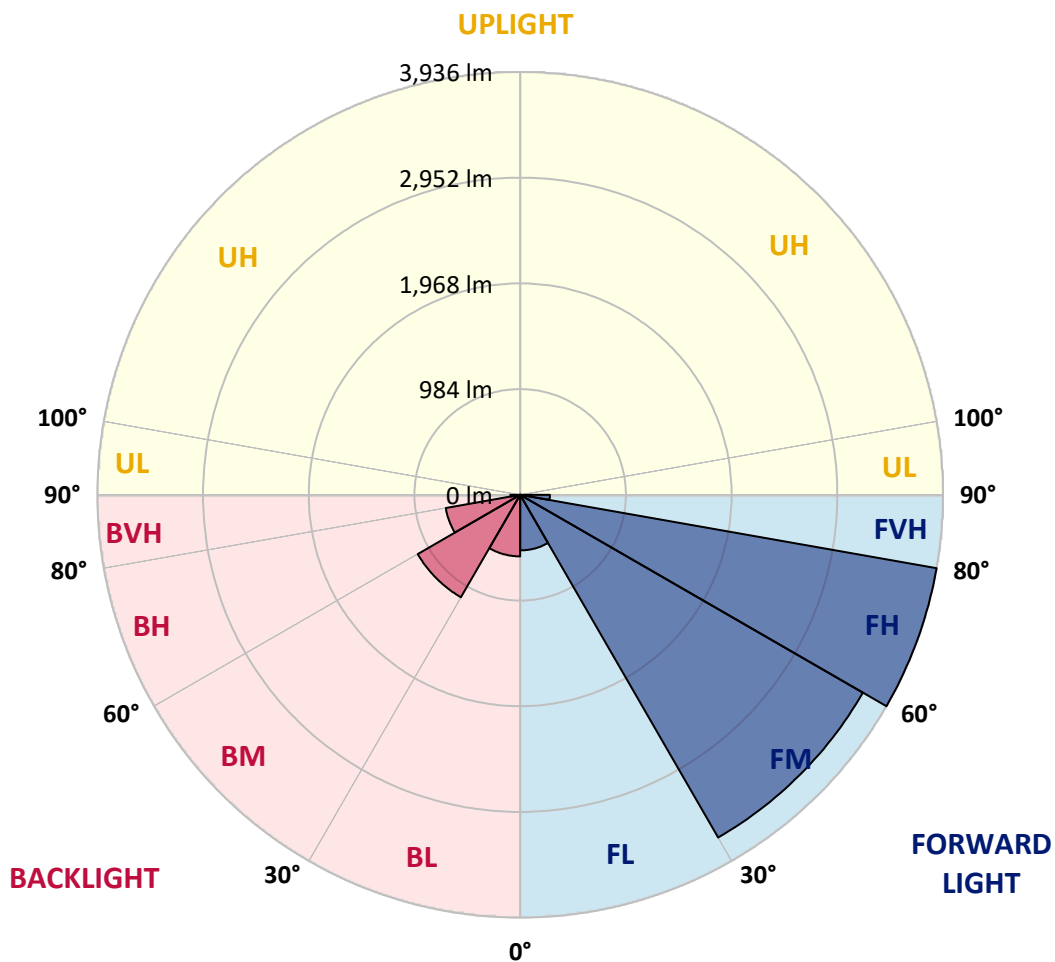
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.5	4.8			
FM	(30°-60°)	3683.9	33.9			
FH	(60°-80°)	3936.1	36.2			G2/5000
FVH	(80°-90°)	276.7	2.5			G3/500
BL	(0°-30°)	573.3	5.3	B2/1000		
BM	(30°-60°)	1101.2	10.1	B2/2500		
BH	(60°-80°)	703.4	6.5	B2/1000		G2/1000
BVH	(80°-90°)	90.1	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°	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8
2.5°	1104.7	1099.0	1100.4	1100.4	1106.2	1109.0	1110.5	1114.8	1117.7	1124.8	1134.9
5°	1053.0	1048.7	1050.1	1051.6	1061.6	1071.7	1080.3	1086.0	1094.7	1106.2	1120.5
7.5°	1015.7	1012.8	1014.2	1017.1	1025.7	1037.2	1051.6	1060.2	1073.1	1094.7	1119.1
10°	988.4	988.4	989.8	995.5	1004.2	1018.5	1030.0	1040.1	1065.9	1104.7	1142.1
12.5°	966.8	966.8	971.1	982.6	997.0	1011.3	1038.6	1050.1	1084.6	1137.8	1182.3
15°	965.4	966.8	968.2	978.3	994.1	1025.7	1065.9	1083.2	1124.8	1188.0	1239.8
17.5°	988.4	989.8	984.1	986.9	1005.6	1050.1	1103.3	1123.4	1176.6	1245.5	1298.7
20°	1058.8	1058.8	1041.5	1025.7	1038.6	1087.5	1147.8	1167.9	1226.8	1303.0	1356.1
22.5°	1202.4	1209.6	1169.4	1134.9	1114.8	1142.1	1196.7	1218.2	1284.3	1366.2	1419.3
25°	1376.2	1383.4	1328.8	1280.0	1242.6	1238.3	1274.2	1297.2	1351.8	1436.6	1481.1
27.5°	1544.3	1531.4	1481.1	1435.1	1387.7	1348.9	1376.2	1396.3	1459.6	1524.2	1551.5
30°	1676.5	1666.4	1617.6	1584.5	1540.0	1489.7	1473.9	1495.5	1547.2	1607.5	1621.9
32.5°	1823.0	1815.8	1767.0	1723.9	1686.5	1639.1	1604.6	1614.7	1643.4	1686.5	1695.2
35°	2009.8	2025.6	1973.8	1886.2	1844.6	1798.6	1774.2	1777.0	1798.6	1825.9	1811.5
37.5°	2206.6	2225.2	2228.1	2090.2	2034.2	1992.5	1966.7	1976.7	2002.6	2021.3	1976.7
40°	2571.5	2552.8	2478.1	2376.1	2289.9	2249.7	2213.8	2212.3	2231.0	2264.0	2183.6
42.5°	3055.6	3038.3	2887.5	2755.3	2618.9	2572.9	2502.5	2472.3	2481.0	2522.6	2410.6
45°	3519.6	3512.4	3391.7	3238.0	3074.3	2985.2	2824.3	2751.0	2743.8	2776.9	2643.3
47.5°	3931.9	3900.3	3812.7	3693.4	3676.2	3443.5	3147.5	3048.4	3013.9	3032.6	2883.2
50°	4372.9	4265.2	4144.5	4071.2	4196.2	3979.3	3473.6	3370.2	3285.4	3298.4	3143.2
52.5°	4607.1	4426.1	4347.1	4368.6	4536.7	4453.4	3828.5	3702.0	3565.6	3584.2	3401.8
55°	4406.0	4404.5	4439.0	4572.6	4806.8	4710.5	4166.1	4023.8	3874.4	3878.7	3699.2
57.5°	4130.1	4186.2	4364.3	4658.8	5141.5	4980.6	4497.9	4347.1	4210.6	4189.0	4036.8
60°	3878.7	3940.5	4199.1	4644.4	5257.8	5227.7	4813.9	4681.8	4571.2	4508.0	4391.6
62.5°	3496.6	3542.6	3908.9	4552.5	5160.2	5405.8	5134.3	5043.8	4960.5	4829.7	4773.7
65°	3047.0	3062.8	3449.2	4249.4	5038.1	5474.8	5453.2	5413.0	5332.5	5140.0	5151.5
67.5°	2560.0	2591.6	2930.6	3765.3	4770.8	5443.2	5700.3	5733.4	5638.5	5349.8	5392.9
70°	2041.4	2080.2	2337.3	3095.8	4316.9	5306.7	5928.7	5981.9	5799.4	5418.7	5437.4
72.5°	1262.7	1300.1	1472.5	2150.5	3421.9	4848.4	5999.1	6068.1	5803.7	5326.8	5147.2
75°	436.7	441.0	576.1	1031.5	2031.3	3660.4	5769.3	5931.6	5621.3	4992.1	4479.2
77.5°	199.7	206.9	255.7	425.2	900.7	1975.3	4763.7	5170.2	5066.8	4469.2	3447.8
80°	137.9	140.8	176.7	254.3	520.0	695.3	3006.7	3536.8	3717.8	3460.7	2209.4
82.5°	103.4	106.3	136.5	172.4	374.9	337.6	1144.9	1643.4	2042.8	2005.5	923.7
85°	99.1	97.7	106.3	114.9	250.0	201.1	370.6	508.5	797.3	682.4	232.7
87.5°	43.1	47.4	109.2	64.6	130.7	93.4	160.9	188.2	242.8	211.2	83.3
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°	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8	1147.8
2.5°	1139.2	1142.1	1150.7	1163.6	1170.8	1185.2	1195.2	1201.0	1205.3	1206.7	1206.7
5°	1129.1	1134.9	1153.6	1175.1	1195.2	1225.4	1252.7	1268.5	1280.0	1284.3	1285.7
7.5°	1132.0	1146.4	1173.7	1205.3	1231.1	1269.9	1303.0	1334.6	1360.4	1370.5	1370.5
10°	1159.3	1179.4	1216.8	1258.4	1291.5	1331.7	1366.2	1393.5	1423.6	1440.9	1443.8
12.5°	1201.0	1225.4	1274.2	1320.2	1357.6	1389.2	1420.8	1440.9	1455.2	1468.2	1471.0
15°	1259.9	1290.0	1338.9	1386.3	1419.3	1439.4	1448.1	1448.1	1446.6	1448.1	1450.9
17.5°	1318.8	1347.5	1396.3	1443.8	1459.6	1448.1	1438.0	1435.1	1433.7	1430.8	1432.3
20°	1376.2	1403.5	1445.2	1481.1	1468.2	1428.0	1415.0	1413.6	1409.3	1406.4	1403.5
22.5°	1433.7	1453.8	1488.3	1501.2	1449.5	1392.0	1376.2	1367.6	1361.9	1354.7	1347.5
25°	1499.8	1505.5	1531.4	1511.3	1403.5	1326.0	1303.0	1290.0	1284.3	1277.1	1271.4
27.5°	1561.6	1561.6	1565.9	1495.5	1336.0	1238.3	1203.8	1180.9	1179.4	1178.0	1176.6
30°	1617.6	1610.4	1596.0	1448.1	1248.4	1130.6	1078.9	1055.9	1064.5	1071.7	1073.1
32.5°	1683.7	1669.3	1629.1	1383.4	1143.5	1009.9	946.7	936.6	946.7	955.3	949.6
35°	1787.1	1761.2	1663.5	1308.7	1043.0	899.3	839.0	824.6	821.7	820.3	808.8
37.5°	1935.1	1890.5	1690.8	1228.3	943.8	801.6	757.1	726.9	699.6	670.9	666.6
40°	2116.1	2039.9	1709.5	1136.3	839.0	719.7	672.3	633.5	587.6	537.3	531.5
42.5°	2314.3	2200.8	1718.1	1034.3	747.0	652.2	593.3	544.5	492.7	454.0	446.8
45°	2528.4	2374.7	1711.0	936.6	672.3	594.7	528.7	475.5	433.8	406.5	400.8
47.5°	2736.7	2574.3	1690.8	859.1	614.9	545.9	478.4	429.5	397.9	367.8	360.6
50°	3003.9	2765.4	1666.4	798.7	551.6	497.1	446.8	395.1	359.1	344.8	341.9
52.5°	3299.8	2956.5	1637.7	722.6	489.9	458.3	426.7	380.7	369.2	341.9	337.6
55°	3620.2	3183.4	1631.9	626.3	435.3	431.0	406.5	393.6	396.5	341.9	334.7
57.5°	3957.8	3426.2	1644.9	530.1	390.7	406.5	415.2	405.1	400.8	349.1	334.7
60°	4309.7	3660.4	1606.1	441.0	356.3	386.4	425.2	399.4	367.8	346.2	336.2
62.5°	4651.6	3857.2	1438.0	377.8	330.4	380.7	419.5	377.8	341.9	341.9	337.6
65°	4900.1	3944.8	1124.8	331.8	313.2	373.5	409.4	363.5	334.7	344.8	339.0
67.5°	4928.9	3854.3	755.6	295.9	298.8	360.6	386.4	350.5	327.5	353.4	344.8
70°	4752.2	3618.7	462.6	268.6	280.1	337.6	366.3	337.6	317.5	346.2	333.3
72.5°	4293.9	3179.1	326.1	245.7	260.0	316.0	347.7	326.1	303.1	313.2	300.2
75°	3522.5	2463.7	258.6	224.1	239.9	295.9	331.8	308.9	285.9	281.6	272.9
77.5°	2495.3	1578.8	208.3	206.9	218.4	271.5	310.3	288.8	265.8	257.1	251.4
80°	1435.1	774.3	179.6	186.8	198.2	247.1	284.4	265.8	244.2	231.3	222.7
82.5°	548.8	270.1	158.0	162.3	175.3	221.2	258.6	242.8	221.2	232.7	195.4
85°	178.1	148.0	129.3	133.6	146.5	183.9	228.4	215.5	191.1	169.5	156.6
87.5°	79.0	80.4	69.0	76.1	91.9	122.1	166.6	158.0	139.3	116.4	112.1
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)