

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: P214872

Luminaire Tested: **ARCH-AF24-70-D-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214872  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-70-D-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8614.3 lumens  
Efficiency: N/A  
Efficacy: 116.4 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): 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

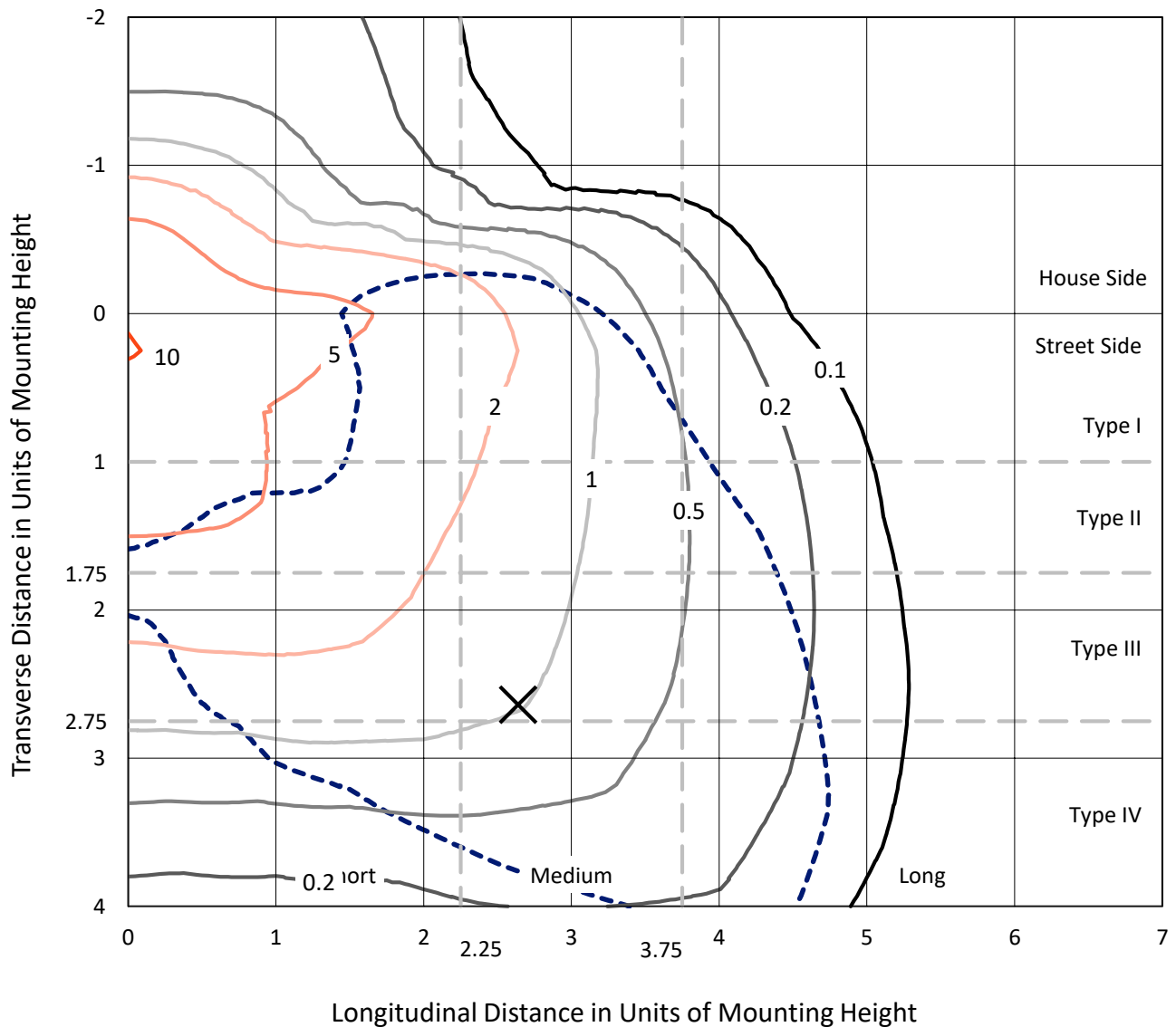


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

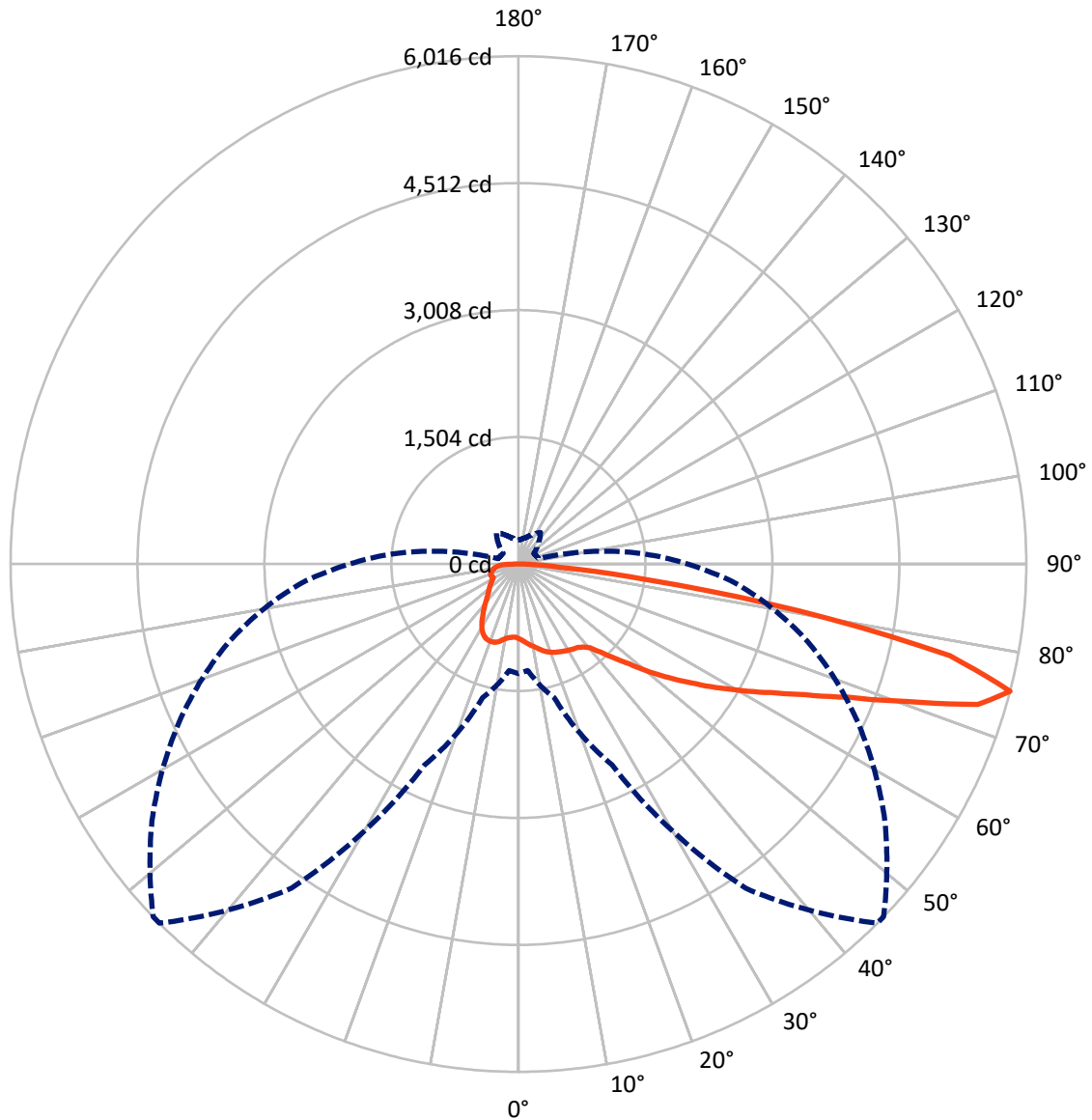


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical



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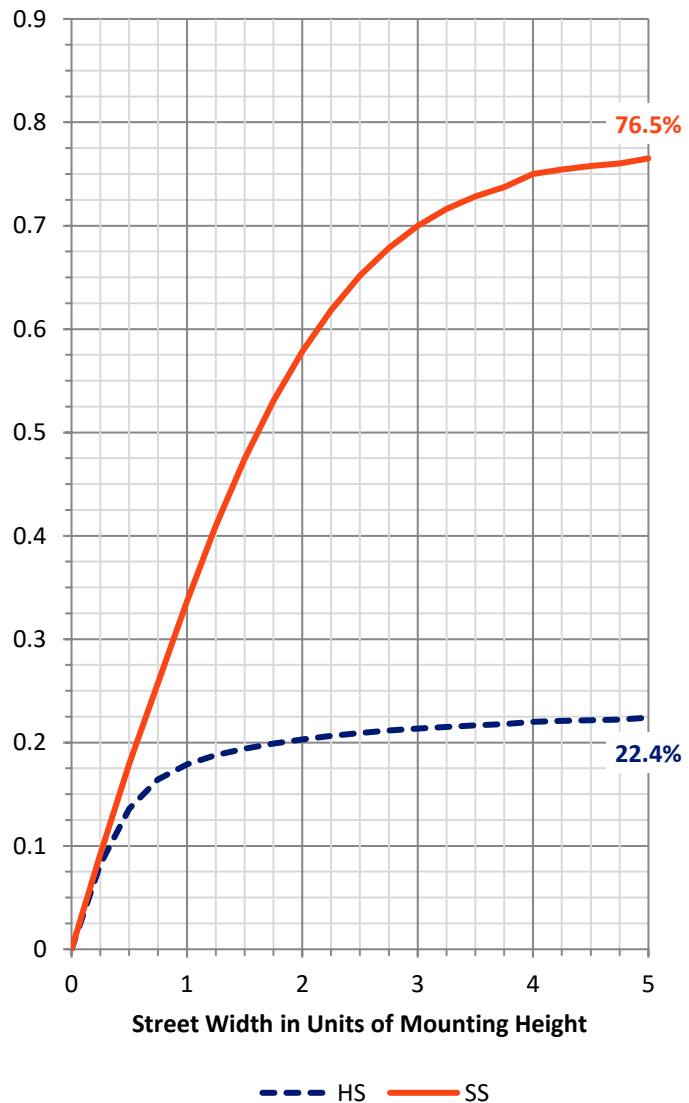
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1995.6	0.0	1995.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	6618.7	0.0	6618.7
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	8614.3	0.0	8614.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	1.0
10°-20°	283.6	3.3
20°-30°	486.7	5.6
30°-40°	680.6	7.9
40°-50°	998.4	11.6
50°-60°	1555.3	18.1
60°-70°	2237.9	26.0
70°-80°	1949.5	22.6
80°-90°	334.8	3.9
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°	8614.3	100.0
0°-180°	8614.3	100.0

**Coefficient of Utilization**



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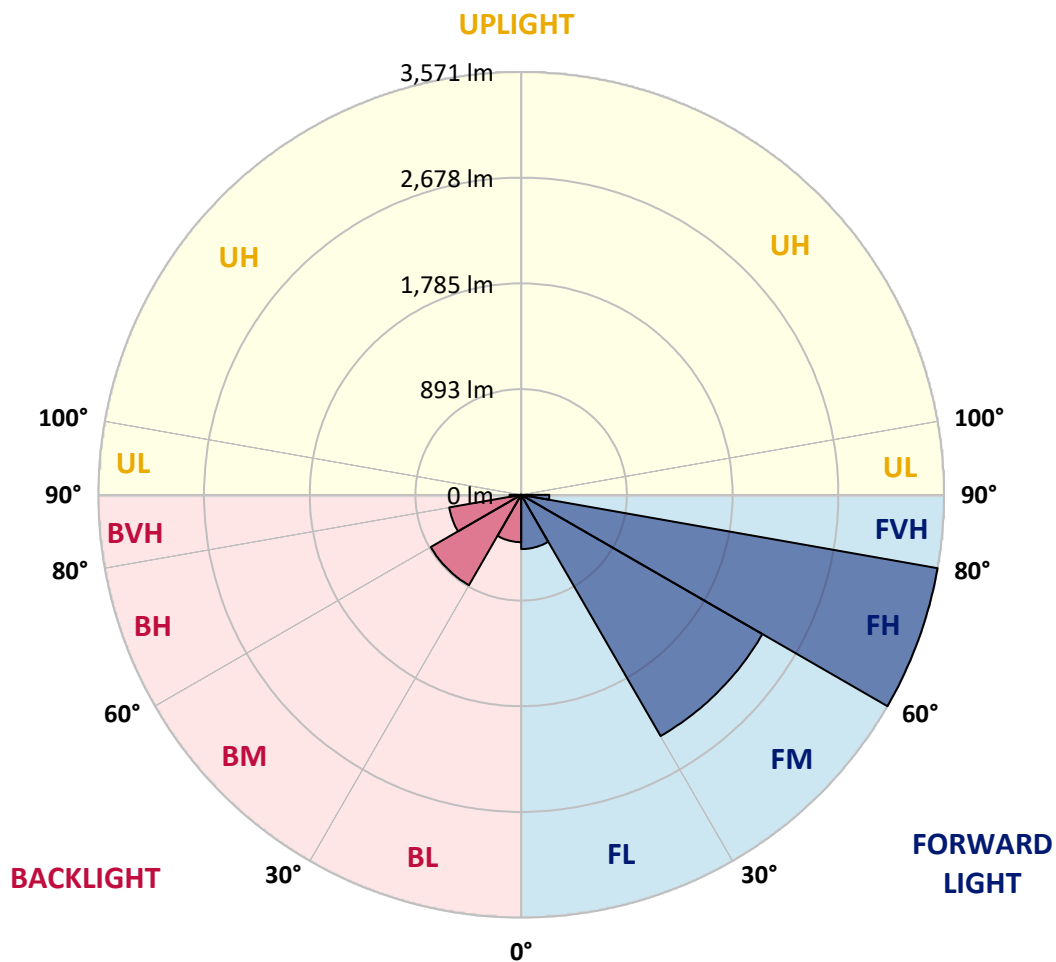
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	458.1	5.3			
FM	(30°-60°)	2352.4	27.3			
FH	(60°-80°)	3570.7	41.5			G2/5000
FVH	(80°-90°)	237.5	2.8			G3/500
BL	(0°-30°)	399.7	4.6	B1/500		
BM	(30°-60°)	881.9	10.2	B1/1000		
BH	(60°-80°)	616.7	7.2	B2/1000		G2/1000
BVH	(80°-90°)	97.3	1.1			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°	46°	55°	65°	75°	85°
0°	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1
2.5°	926.7	919.9	919.9	914.9	914.9	906.5	903.2	901.5	893.1	888.1	883.1
5°	980.3	971.9	970.3	958.5	953.5	935.1	933.3	921.6	906.5	891.5	879.7
7.5°	1028.9	1023.9	1015.5	1003.7	988.7	965.2	963.5	945.1	919.9	899.9	883.1
10°	1064.1	1060.7	1048.9	1033.9	1017.1	993.7	992.0	971.9	941.7	918.3	894.8
12.5°	1105.9	1100.9	1085.9	1065.7	1047.3	1025.5	1023.9	1007.1	973.5	943.4	913.3
15°	1146.2	1139.5	1121.1	1100.9	1080.8	1062.3	1062.3	1043.9	1008.7	973.5	938.4
17.5°	1166.3	1162.9	1144.5	1122.7	1105.9	1092.5	1090.9	1074.1	1038.9	1002.1	963.5
20°	1173.0	1174.7	1157.9	1134.5	1122.7	1116.0	1114.3	1102.6	1064.1	1028.9	992.0
22.5°	1171.3	1176.3	1162.9	1137.8	1134.5	1134.5	1134.5	1121.1	1090.9	1055.7	1018.9
25°	1178.0	1184.7	1174.7	1144.5	1144.5	1151.2	1151.2	1144.5	1117.7	1087.5	1050.7
27.5°	1201.5	1206.5	1198.1	1156.2	1157.9	1167.9	1166.3	1167.9	1151.2	1122.7	1085.9
30°	1230.0	1236.6	1226.6	1174.7	1173.0	1183.0	1183.0	1191.4	1179.7	1149.5	1119.3
32.5°	1307.0	1305.4	1273.5	1194.8	1189.7	1199.8	1199.8	1208.2	1201.5	1178.0	1149.5
35°	1536.6	1511.5	1441.1	1260.1	1209.8	1214.9	1214.9	1230.0	1233.3	1214.9	1189.7
37.5°	1771.2	1762.9	1709.1	1434.4	1283.6	1246.7	1245.0	1266.8	1281.9	1266.8	1250.0
40°	2007.4	2000.8	1989.0	1667.3	1437.8	1303.6	1298.6	1317.0	1343.9	1333.8	1323.8
42.5°	2227.0	2223.6	2235.4	1896.9	1633.8	1426.0	1411.0	1389.2	1427.7	1424.4	1424.4
45°	2399.5	2407.9	2414.7	2111.4	1846.6	1583.5	1565.1	1491.4	1543.3	1556.7	1566.8
47.5°	2496.8	2503.5	2526.9	2320.9	2059.4	1766.1	1752.7	1632.1	1700.9	1741.1	1769.5
50°	2635.8	2617.4	2637.5	2525.3	2315.8	2004.2	1967.2	1821.5	1908.6	1979.0	2046.0
52.5°	2769.9	2739.8	2756.5	2761.6	2607.4	2237.0	2198.5	2044.4	2153.2	2263.9	2382.9
55°	2890.6	2888.9	2905.6	2991.1	2888.9	2486.7	2443.1	2290.7	2448.1	2567.1	2768.2
57.5°	2987.7	3004.5	3078.3	3257.5	3214.0	2758.2	2709.6	2577.2	2763.2	2882.2	3215.6
60°	3101.7	3128.5	3250.8	3483.8	3510.6	3043.1	2992.7	2897.3	3086.7	3207.3	3733.5
62.5°	3140.3	3178.8	3430.2	3721.7	3820.5	3354.8	3309.5	3245.8	3426.8	3535.7	4249.5
65°	2883.8	2957.6	3529.0	3844.0	4154.0	3730.1	3691.5	3636.2	3765.3	3837.3	4599.7
67.5°	2813.4	2847.0	3336.3	4020.0	4467.3	4212.7	4174.2	4078.6	4082.0	4051.8	4713.7
70°	2714.6	2751.4	3138.5	4152.4	4916.4	4872.9	4826.0	4544.5	4371.9	4189.2	4489.1
72.5°	2312.5	2300.7	2704.6	3795.5	5132.7	5690.6	5635.3	5045.5	4586.3	4070.2	3788.7
75°	1298.6	1265.2	1640.5	2625.8	4686.9	6015.7	6014.0	5298.5	4435.5	3545.8	2578.9
77.5°	377.1	366.9	541.2	1100.9	3155.3	5226.5	5290.1	4779.0	3701.5	2547.0	1416.0
80°	177.6	181.0	232.9	363.7	1347.2	3373.2	3555.8	3146.9	2211.9	1174.7	584.8
82.5°	112.3	114.0	159.2	234.6	569.7	1531.6	1682.3	1416.0	876.4	507.7	258.1
85°	70.4	70.4	105.6	154.2	340.1	489.3	531.2	482.6	375.3	276.5	140.8
87.5°	38.6	38.6	63.6	88.8	186.0	157.5	162.5	192.7	234.6	169.2	70.4
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°	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1	883.1
2.5°	881.4	878.1	873.0	871.3	869.7	868.0	869.7	873.0	869.7	869.7	871.3
5°	876.4	873.0	866.3	866.3	868.0	869.7	878.1	883.1	884.8	884.8	884.8
7.5°	876.4	871.3	866.3	868.0	871.3	878.1	891.5	899.9	906.5	908.2	908.2
10°	884.8	878.1	874.7	878.1	888.1	893.1	906.5	919.9	928.3	931.7	931.7
12.5°	899.9	893.1	893.1	899.9	913.3	919.9	931.7	941.7	951.8	956.8	956.8
15°	925.0	916.6	918.3	930.0	945.1	951.8	960.1	963.5	971.9	978.6	978.6
17.5°	948.5	940.1	943.4	956.8	966.9	970.3	975.3	973.5	976.9	981.9	983.7
20°	975.3	966.9	968.5	976.9	978.6	975.3	975.3	970.3	968.5	976.9	980.3
22.5°	1002.1	993.7	992.0	986.9	978.6	970.3	965.2	960.1	956.8	965.2	968.5
25°	1033.9	1022.1	1013.7	992.0	970.3	955.1	948.5	945.1	943.4	951.8	955.1
27.5°	1069.1	1057.3	1032.3	985.3	950.1	925.0	919.9	919.9	923.3	928.3	931.7
30°	1102.6	1090.9	1045.7	970.3	914.9	878.1	873.0	878.1	886.4	891.5	896.5
32.5°	1136.1	1124.4	1054.0	946.7	863.0	816.0	812.7	821.1	834.5	837.8	841.2
35°	1181.4	1169.6	1064.1	913.3	797.6	747.4	744.0	749.0	760.8	765.8	770.8
37.5°	1245.0	1238.3	1079.1	876.4	737.3	682.0	672.0	668.6	675.2	673.6	680.4
40°	1328.8	1333.8	1105.9	827.8	678.6	621.6	599.9	589.8	583.2	569.7	576.4
42.5°	1451.2	1454.5	1136.1	772.5	628.4	564.7	536.2	517.8	504.4	482.6	485.9
45°	1630.5	1601.9	1171.3	713.8	583.2	519.5	485.9	464.2	445.7	427.3	429.0
47.5°	1868.4	1781.3	1209.8	665.2	537.9	482.6	452.5	427.3	405.5	390.5	392.1
50°	2161.6	2004.2	1248.4	620.0	492.7	454.1	427.3	400.5	378.7	363.7	361.9
52.5°	2548.7	2272.2	1273.5	569.7	447.4	429.0	405.5	380.3	353.5	335.1	333.5
55°	2950.9	2583.9	1295.3	509.4	403.9	400.5	388.7	360.3	328.5	304.9	301.7
57.5°	3393.2	2917.4	1312.0	450.7	370.3	377.1	373.7	340.1	304.9	283.2	281.5
60°	3795.5	3262.6	1258.4	398.8	340.1	353.5	356.9	328.5	310.0	315.1	316.7
62.5°	4201.0	3529.0	1054.0	360.3	320.1	338.5	366.9	365.3	356.9	365.3	366.9
65°	4346.7	3584.3	747.4	328.5	299.9	345.1	398.8	395.5	356.9	341.9	338.5
67.5°	4264.6	3420.0	502.7	303.3	284.9	353.5	432.3	395.5	343.5	323.5	316.7
70°	3874.2	3016.3	368.7	278.1	271.5	351.9	450.7	393.8	336.9	315.1	306.7
72.5°	3089.9	2327.5	296.6	254.7	251.3	343.5	460.8	390.5	330.1	306.7	296.6
75°	2000.8	1447.8	249.7	231.3	221.2	330.1	455.8	380.3	321.7	291.5	284.9
77.5°	928.3	623.4	212.8	204.4	192.7	310.0	440.7	360.3	303.3	274.8	266.5
80°	432.3	294.9	179.3	177.6	172.6	293.3	420.6	336.9	281.5	258.1	244.7
82.5°	231.3	177.6	145.8	145.8	150.8	273.1	395.5	308.3	253.1	241.3	206.1
85°	122.3	102.2	105.6	114.0	129.0	241.3	361.9	278.1	221.2	184.3	179.3
87.5°	62.0	65.4	65.4	77.1	98.8	196.1	298.3	229.6	187.7	150.8	147.5
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)