

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: P799747

Luminaire Tested: **ARCH2-50-727-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7470 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

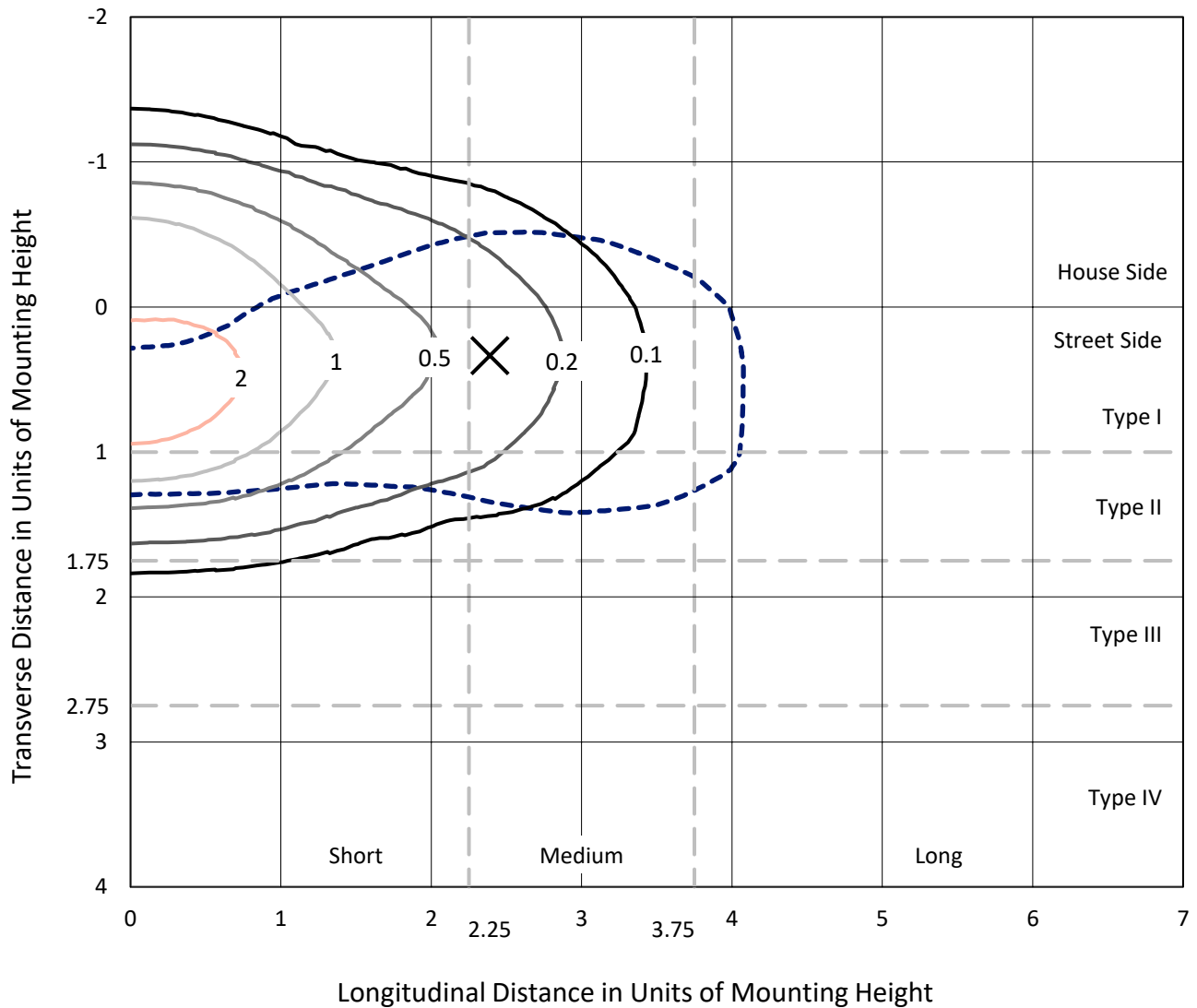
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P799747
 CATALOG NUMBER: ARCH2-50-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

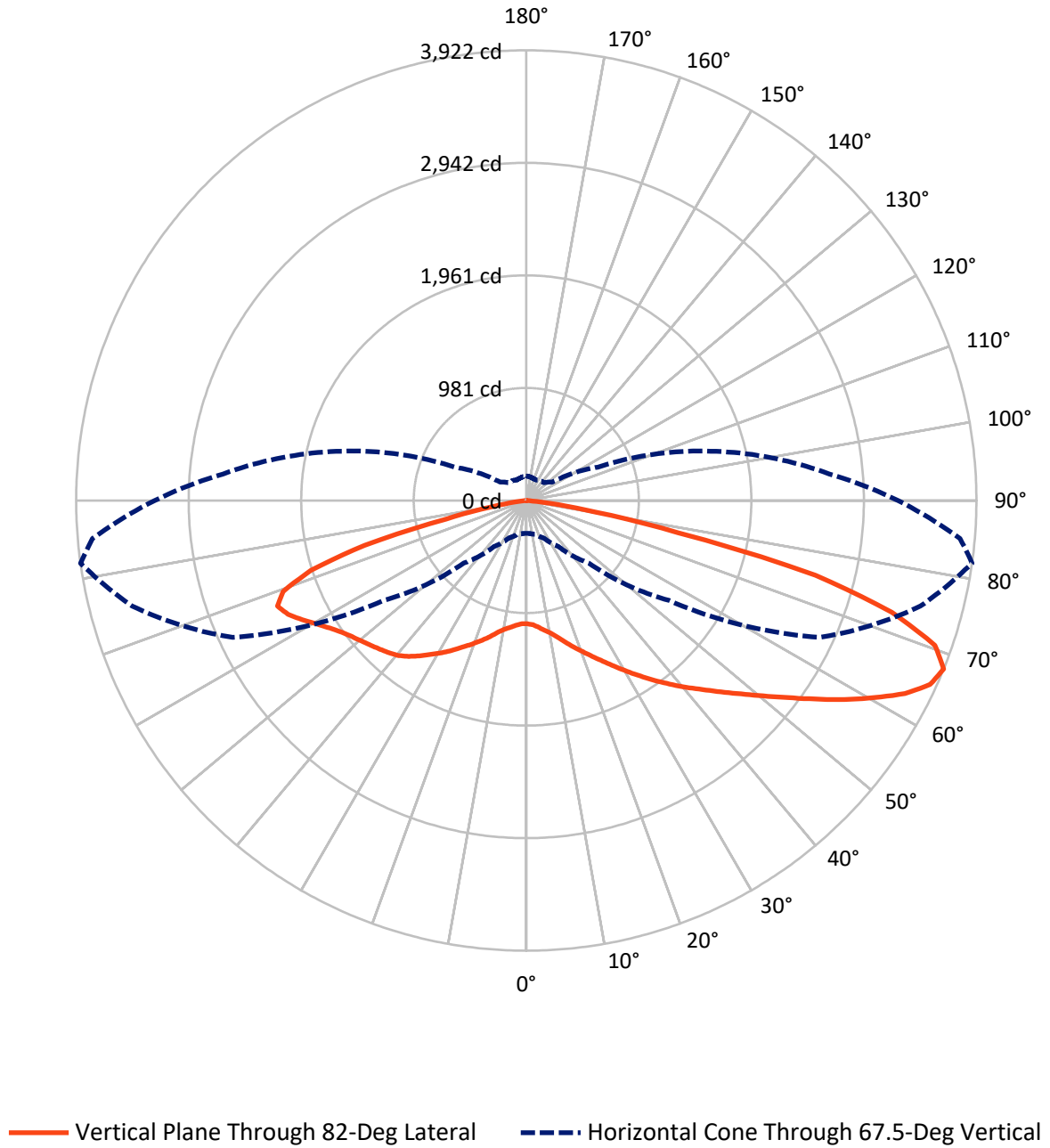
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P799747
CATALOG NUMBER: ARCH2-50-727-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P799747

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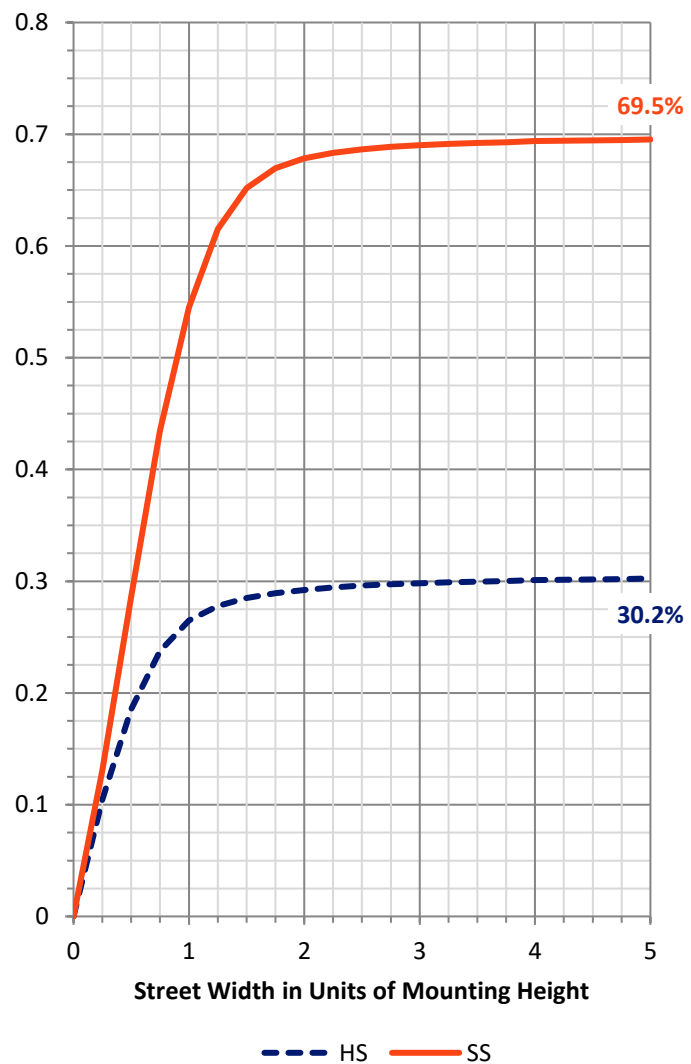
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2274.9	0.0	2274.9
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	5195.1	0.0	5195.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	7470.0	0.0	7470.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	1.5
10°-20°	399.7	5.4
20°-30°	803.4	10.8
30°-40°	1262.0	16.9
40°-50°	1537.3	20.6
50°-60°	1452.6	19.4
60°-70°	1199.5	16.1
70°-80°	653.2	8.7
80°-90°	51.4	0.7
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°	7470.0	100.0
0°-180°	7470.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799747

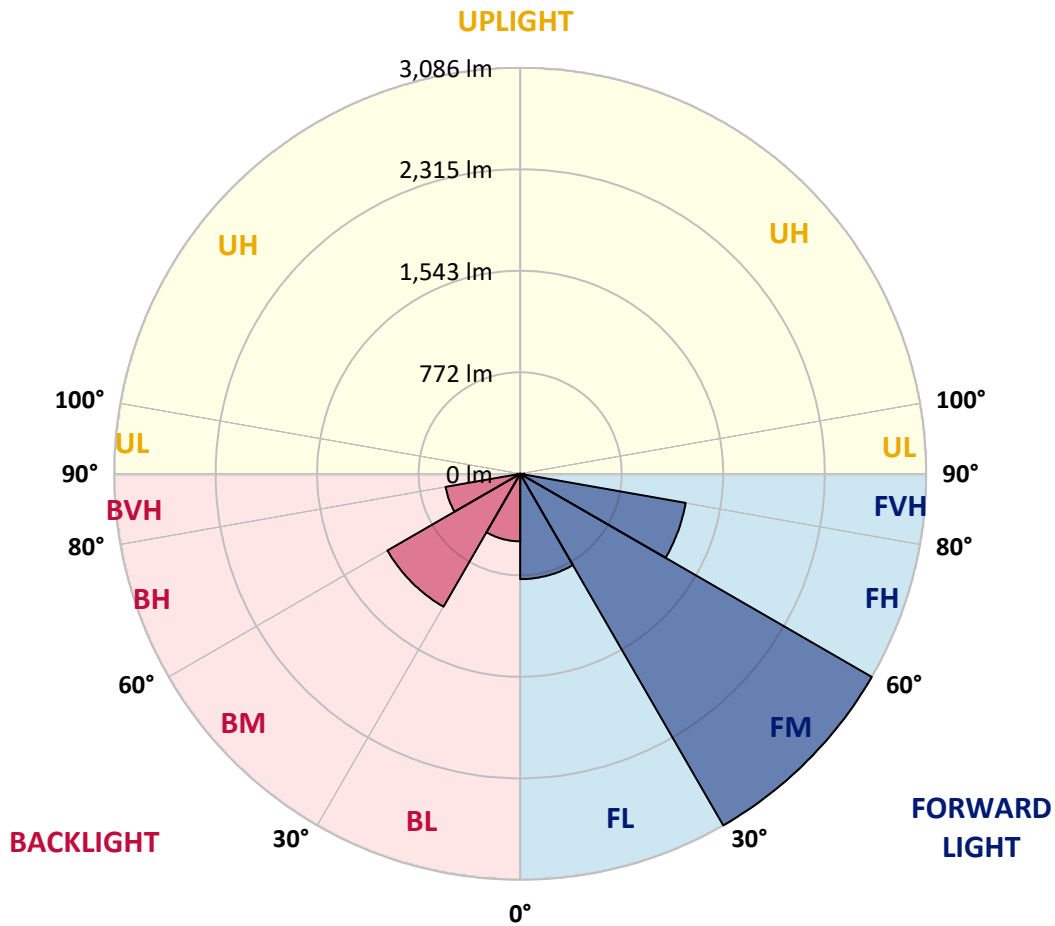
CATALOG NUMBER: ARCH2-50-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	801.1	10.7			
FM (30°-60°)	3086.2	41.3			
FH (60°-80°)	1276.9	17.1			G1/1800
FVH (80°-90°)	31.0	0.4			G1/100
BL (0°-30°)	513.0	6.9	B2/1000		
BM (30°-60°)	1165.7	15.6	B2/2500		
BH (60°-80°)	575.8	7.7	B2/1000		G2/1000
BVH (80°-90°)	20.4	0.3			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 Medium



REPORT NUMBER: P799747
 CATALOG NUMBER: ARCH2-50-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8
2.5°	1122.6	1122.6	1131.3	1131.3	1123.7	1111.8	1108.5	1095.5	1083.6	1083.6	1084.7
5°	1230.0	1228.9	1235.4	1226.7	1208.3	1184.4	1168.2	1140.0	1116.1	1108.5	1107.4
7.5°	1361.2	1360.2	1363.4	1349.3	1314.6	1275.6	1243.0	1197.5	1158.4	1142.1	1137.8
10°	1507.7	1506.6	1503.3	1479.5	1432.8	1372.1	1323.3	1260.4	1201.8	1175.8	1170.3
12.5°	1675.8	1673.6	1666.0	1631.3	1567.3	1489.2	1418.7	1337.4	1259.3	1223.5	1211.6
15°	1863.4	1860.2	1846.1	1803.8	1718.1	1619.4	1528.3	1424.2	1328.7	1282.1	1265.8
17.5°	2060.8	2060.8	2039.2	1976.2	1880.8	1758.2	1645.4	1513.1	1401.4	1343.9	1324.4
20°	2261.5	2260.4	2233.3	2157.4	2044.6	1903.6	1760.4	1615.1	1476.2	1406.8	1382.9
22.5°	2473.0	2470.8	2437.2	2350.4	2216.0	2056.5	1889.5	1715.9	1558.6	1475.1	1444.8
25°	2716.0	2712.7	2671.5	2565.2	2405.8	2225.7	2034.8	1834.2	1653.0	1551.1	1515.3
27.5°	2974.1	2969.8	2921.0	2797.3	2622.7	2405.8	2195.3	1970.8	1757.1	1635.7	1595.5
30°	3204.1	3200.8	3147.7	3020.8	2820.1	2584.7	2348.3	2107.5	1866.7	1725.7	1675.8
32.5°	3377.6	3377.6	3329.9	3205.2	2996.9	2756.1	2502.3	2236.6	1980.6	1822.2	1763.6
35°	3482.8	3486.1	3444.9	3345.1	3148.8	2917.7	2661.7	2388.4	2102.1	1925.3	1862.4
37.5°	3498.0	3508.9	3485.0	3417.7	3254.0	3052.2	2817.9	2534.8	2227.9	2029.4	1958.9
40°	3427.5	3435.1	3436.2	3410.2	3297.4	3148.8	2955.7	2689.9	2361.3	2138.9	2057.6
42.5°	3286.5	3291.9	3301.7	3309.3	3265.9	3191.1	3060.9	2834.2	2503.4	2250.7	2155.2
45°	3104.3	3103.2	3119.5	3152.0	3149.8	3167.2	3119.5	2965.4	2650.9	2377.6	2263.7
47.5°	2832.0	2826.6	2884.1	2957.9	2994.7	3076.1	3120.6	3068.5	2811.4	2517.5	2387.3
50°	2405.8	2400.3	2526.2	2699.7	2808.2	2931.8	3060.9	3130.3	2979.5	2674.8	2521.8
52.5°	1887.3	1881.9	2041.3	2345.0	2581.5	2761.5	2940.5	3144.4	3139.0	2850.5	2673.7
55°	1403.5	1399.2	1554.3	1883.0	2265.8	2564.1	2793.0	3107.5	3288.7	3052.2	2858.1
57.5°	989.2	987.0	1121.5	1393.8	1860.2	2323.3	2650.9	3035.9	3426.4	3271.3	3066.3
60°	694.2	690.9	788.5	999.0	1406.8	1960.0	2509.9	2940.5	3529.5	3487.2	3287.6
62.5°	467.5	465.3	534.7	710.4	999.0	1508.8	2296.2	2876.5	3588.0	3704.1	3511.0
65°	354.7	353.6	385.1	481.6	707.2	1083.6	1956.7	2868.9	3595.6	3866.8	3700.8
67.5°	286.3	287.4	304.8	360.1	489.2	770.1	1517.4	2821.2	3555.5	3922.1	3793.0
70°	234.3	234.3	241.9	278.8	361.2	519.5	1059.7	2604.3	3443.8	3777.9	3683.5
72.5°	179.0	180.1	203.9	225.6	272.2	364.4	679.0	2155.2	3180.2	3331.0	3259.4
75°	142.1	141.0	155.1	185.5	211.5	260.3	416.5	1545.6	2706.2	2603.2	2557.6
77.5°	102.0	100.9	111.7	137.8	160.5	184.4	248.4	779.9	1471.9	1352.6	1318.9
80°	69.4	67.2	77.0	95.4	106.3	108.5	121.5	299.4	642.1	605.2	597.6
82.5°	35.8	35.8	41.2	54.2	55.3	56.4	54.2	96.5	212.6	198.5	189.8
85°	14.1	14.1	15.2	18.4	18.4	19.5	19.5	24.9	22.8	21.7	20.6
87.5°	1.1	1.1	2.2	2.2	3.3	3.3	3.3	4.3	5.4	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P799747
 CATALOG NUMBER: ARCH2-50-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8	1073.8
2.5°	1082.5	1078.1	1064.0	1060.8	1058.6	1055.4	1056.5	1048.9	1045.6	1046.7	1042.4
5°	1102.0	1094.4	1077.1	1069.5	1067.3	1064.0	1067.3	1061.9	1056.5	1058.6	1056.5
7.5°	1129.1	1118.3	1096.6	1089.0	1087.9	1084.7	1089.0	1084.7	1080.3	1082.5	1078.1
10°	1157.3	1143.2	1119.4	1111.8	1111.8	1110.7	1115.0	1108.5	1104.2	1105.3	1103.1
12.5°	1198.5	1180.1	1154.1	1147.6	1144.3	1147.6	1148.6	1140.0	1132.4	1133.5	1130.2
15°	1248.4	1227.8	1199.6	1189.9	1187.7	1186.6	1182.3	1171.4	1161.7	1160.6	1157.3
17.5°	1302.7	1276.6	1243.0	1233.3	1223.5	1220.2	1209.4	1195.3	1180.1	1180.1	1175.8
20°	1354.7	1325.4	1285.3	1271.2	1257.1	1244.1	1225.7	1202.9	1183.4	1180.1	1175.8
22.5°	1411.1	1376.4	1329.8	1309.2	1284.2	1258.2	1226.7	1196.4	1171.4	1166.0	1162.8
25°	1474.0	1430.7	1375.3	1345.0	1304.8	1264.7	1218.1	1179.0	1149.7	1141.1	1138.9
27.5°	1543.5	1491.4	1424.2	1379.7	1321.1	1258.2	1198.5	1151.9	1116.1	1105.3	1102.0
30°	1614.0	1552.1	1468.6	1403.5	1321.1	1237.6	1162.8	1108.5	1067.3	1052.1	1049.9
32.5°	1684.5	1615.1	1508.8	1416.6	1308.1	1202.9	1116.1	1052.1	1005.5	987.0	991.4
35°	1769.1	1684.5	1545.6	1422.0	1286.4	1160.6	1063.0	988.1	940.4	924.1	927.4
37.5°	1856.9	1753.9	1574.9	1417.6	1256.0	1112.9	1003.3	930.6	871.0	842.8	846.0
40°	1932.9	1816.8	1595.5	1402.5	1217.0	1058.6	944.7	849.3	766.9	739.7	736.5
42.5°	2004.4	1863.4	1606.4	1379.7	1172.5	995.7	861.2	738.7	656.2	622.6	623.7
45°	2079.3	1909.0	1602.0	1349.3	1117.2	922.0	753.8	630.2	557.5	527.1	528.2
47.5°	2165.0	1957.8	1597.7	1316.8	1049.9	826.5	650.8	534.7	471.8	450.1	448.0
50°	2256.1	2012.0	1592.3	1276.6	975.1	720.2	548.8	445.8	392.6	378.5	375.3
52.5°	2359.1	2070.6	1589.0	1228.9	885.1	607.4	457.7	367.7	331.9	322.1	321.1
55°	2482.8	2138.9	1593.4	1171.4	776.6	501.1	380.7	316.7	292.9	287.4	286.3
57.5°	2633.5	2226.8	1606.4	1104.2	662.7	408.9	324.3	285.3	270.1	265.7	265.7
60°	2797.3	2326.6	1630.2	1028.3	548.8	337.3	287.4	260.3	253.8	259.2	259.2
62.5°	2974.1	2443.7	1672.5	936.1	442.5	285.3	258.1	239.7	235.4	246.2	247.3
65°	3137.9	2557.6	1699.7	825.4	351.4	247.3	235.4	219.1	221.3	232.1	231.0
67.5°	3238.8	2652.0	1661.7	686.6	278.8	219.1	211.5	197.4	202.8	211.5	212.6
70°	3177.0	2598.8	1474.0	518.5	218.0	190.9	185.5	176.8	181.1	192.0	196.3
72.5°	2874.3	2327.7	1146.5	350.3	175.7	160.5	162.7	158.4	163.8	173.5	183.3
75°	2333.1	1759.3	769.0	224.5	138.8	136.7	139.9	136.7	138.8	148.6	154.0
77.5°	1218.1	858.0	382.9	139.9	103.0	106.3	111.7	112.8	119.3	121.5	123.7
80°	568.4	386.1	159.4	78.1	68.3	74.8	85.7	86.8	88.9	92.2	93.3
82.5°	185.5	116.1	73.8	42.3	39.0	42.3	55.3	66.2	67.2	73.8	73.8
85°	19.5	11.9	16.3	17.4	15.2	18.4	24.9	23.9	10.8	6.5	6.5
87.5°	5.4	4.3	5.4	5.4	4.3	4.3	3.3	1.1	0.0	0.0	0.0
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)