

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: P798981

Luminaire Tested: **ARCH1-50-727-U-T2U**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798981
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6274 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

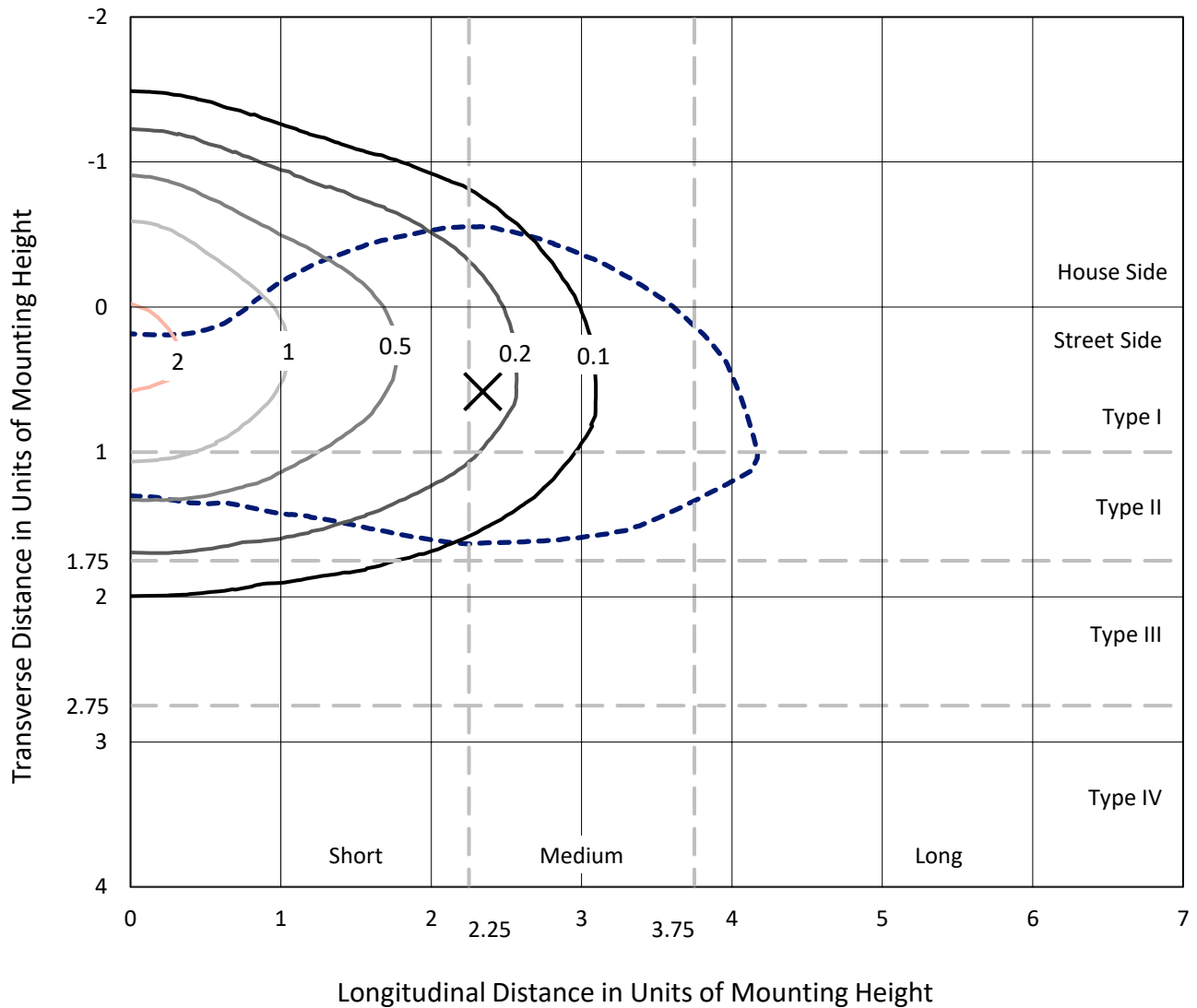
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

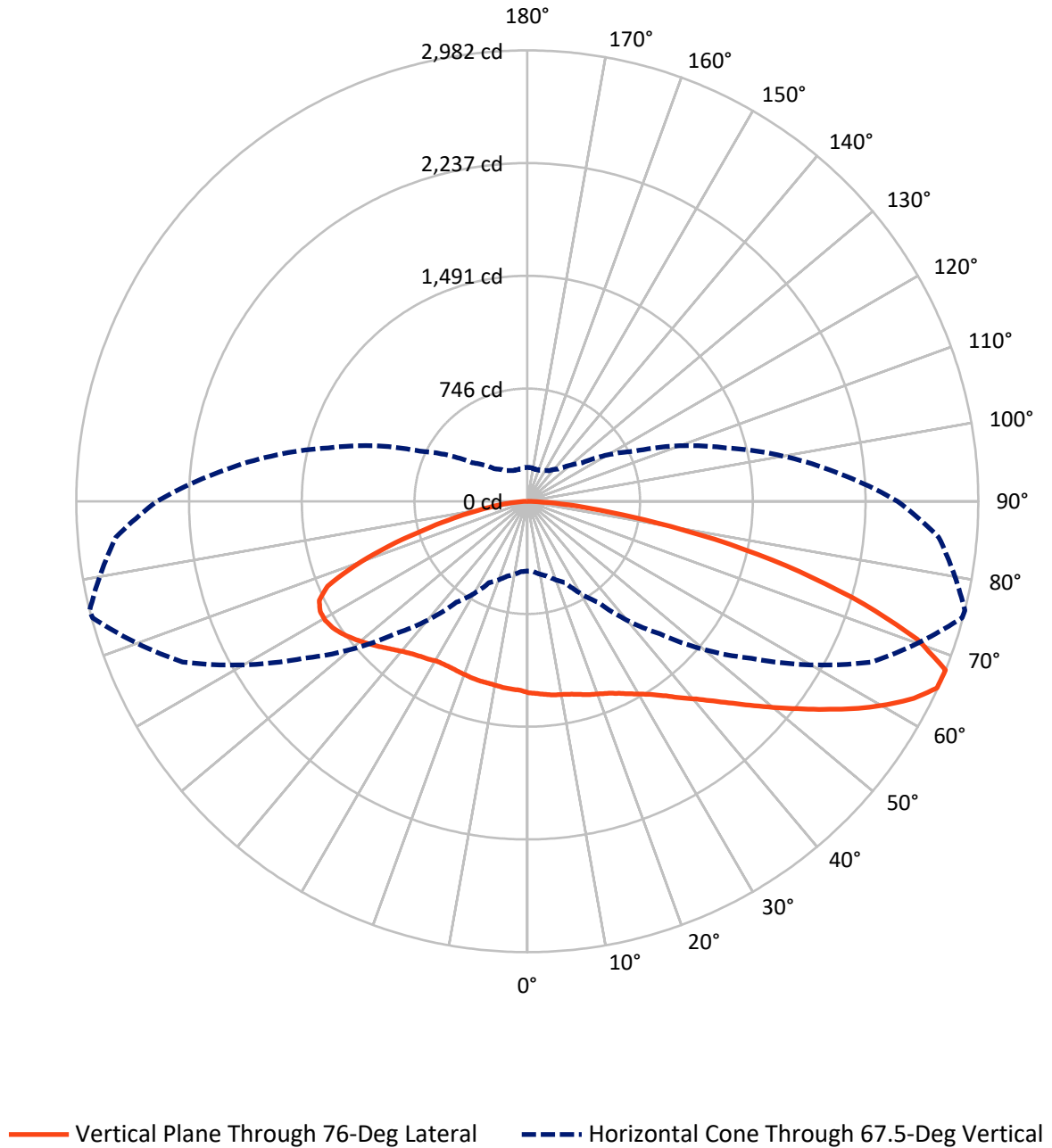
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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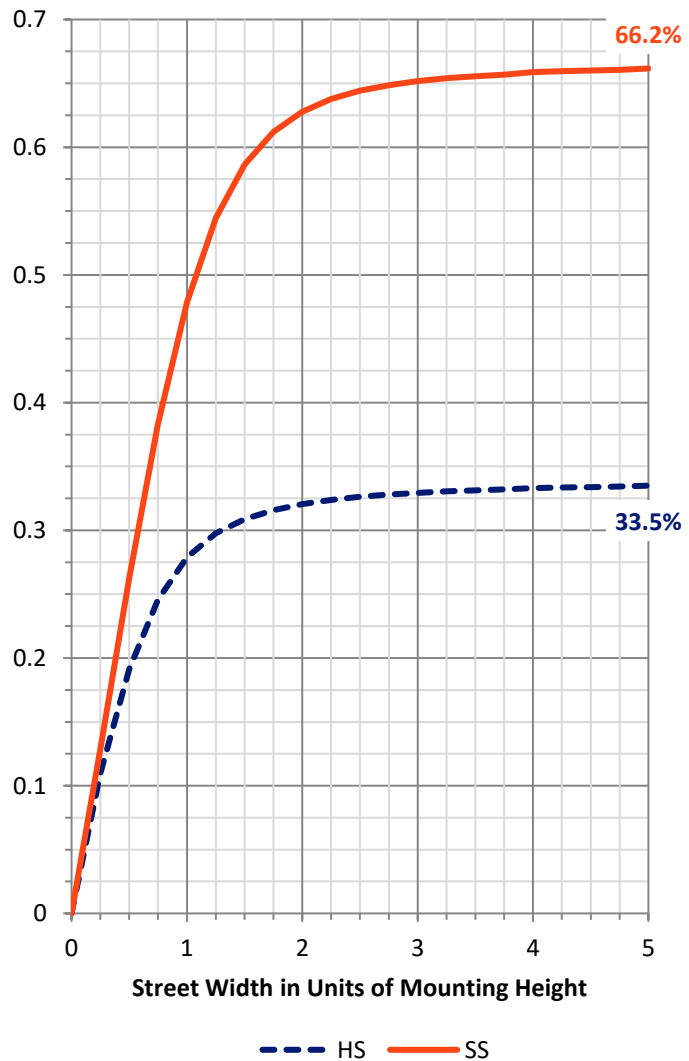
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2120.0	0.0	2120.0
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	4154.0	0.0	4154.0
	% Fixture	66.2	0.0	66.2
Total	Lumens	6274.0	0.0	6274.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	1.9
10°-20°	373.6	6.0
20°-30°	634.8	10.1
30°-40°	903.2	14.4
40°-50°	1140.7	18.2
50°-60°	1235.0	19.7
60°-70°	1148.7	18.3
70°-80°	617.0	9.8
80°-90°	98.9	1.6
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°	6274.0	100.0
0°-180°	6274.0	100.0

Coefficient of Utilization



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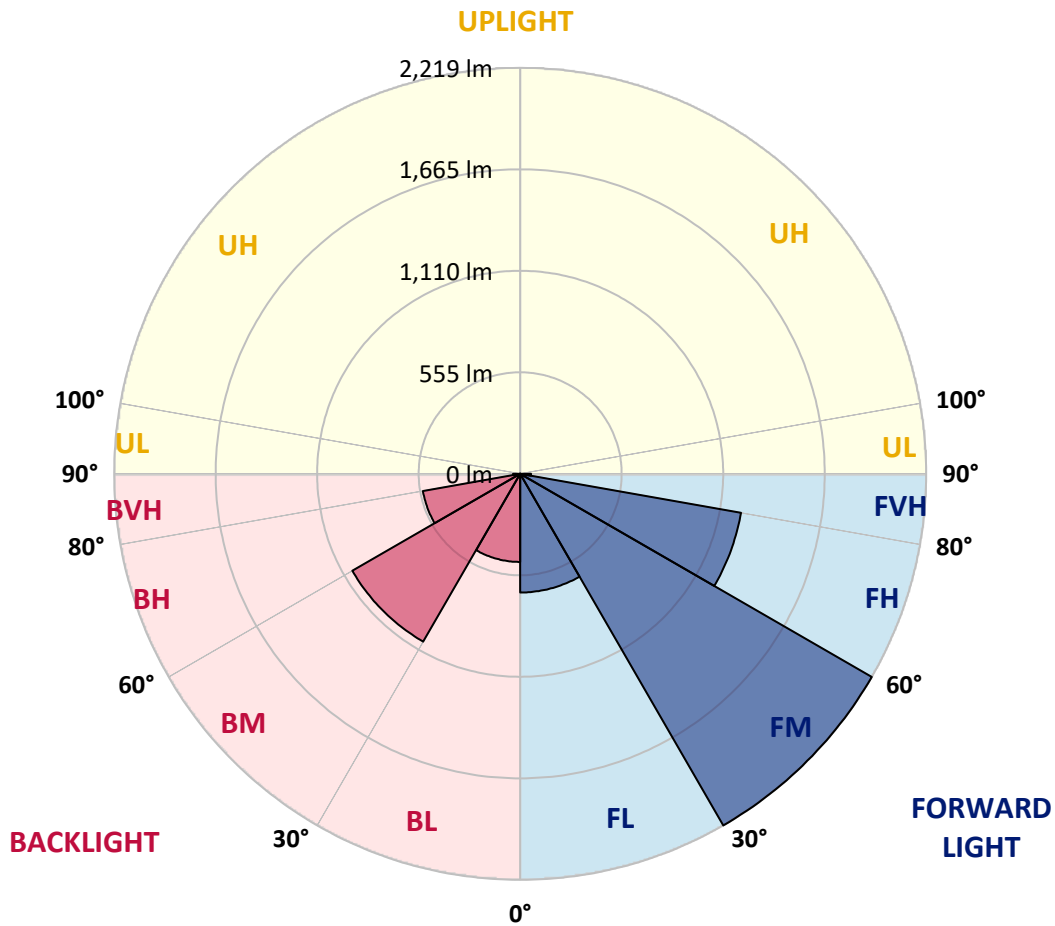
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	648.8	10.3			
FM (30°-60°)	2219.5	35.4			
FH (60°-80°)	1225.9	19.5			G1/1800
FVH (80°-90°)	59.8	1.0			G1/100
BL (0°-30°)	481.8	7.7	B1/500		
BM (30°-60°)	1059.4	16.9	B2/2500		
BH (60°-80°)	539.8	8.6	B2/1000		G2/1000
BVH (80°-90°)	39.1	0.6			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1305.8	1303.4	1294.1	1295.3	1295.3	1294.1	1280.1	1274.3	1274.3	1273.2	1260.3
5°	1352.4	1348.9	1338.4	1336.1	1331.4	1325.6	1303.4	1290.6	1284.8	1283.6	1266.2
7.5°	1407.1	1402.5	1389.6	1382.7	1371.0	1355.9	1327.9	1308.1	1294.1	1293.0	1268.5
10°	1461.9	1457.2	1442.1	1429.2	1412.9	1388.5	1352.4	1323.2	1301.1	1298.8	1269.7
12.5°	1527.1	1522.4	1503.8	1487.5	1463.0	1430.4	1382.7	1343.0	1312.8	1309.3	1273.2
15°	1595.8	1588.8	1570.2	1551.6	1521.3	1479.3	1422.3	1369.8	1331.4	1325.6	1283.6
17.5°	1652.9	1643.6	1628.4	1609.8	1576.0	1527.1	1461.9	1396.6	1348.9	1344.2	1294.1
20°	1701.8	1694.8	1678.5	1661.0	1624.9	1571.4	1499.1	1423.4	1365.2	1359.4	1302.3
22.5°	1748.4	1739.1	1729.8	1717.0	1677.4	1617.9	1542.2	1456.0	1386.1	1379.2	1312.8
25°	1802.0	1791.5	1788.0	1781.0	1734.4	1673.9	1594.7	1496.8	1415.3	1407.1	1331.4
27.5°	1868.4	1856.7	1849.7	1849.7	1793.8	1730.9	1650.6	1544.6	1449.0	1442.1	1354.7
30°	1938.3	1924.3	1913.8	1913.8	1850.9	1788.0	1705.3	1592.3	1487.5	1479.3	1385.0
32.5°	2000.0	1986.0	1974.4	1973.2	1908.0	1845.1	1762.4	1644.7	1534.1	1523.6	1422.3
35°	2047.8	2035.0	2024.5	2026.8	1965.1	1903.3	1826.5	1714.6	1592.3	1580.7	1471.2
37.5°	2076.9	2072.2	2066.4	2074.6	2017.5	1959.2	1892.8	1782.2	1658.7	1648.2	1531.8
40°	2092.0	2088.5	2111.8	2122.3	2061.7	2009.3	1959.2	1852.1	1730.9	1719.3	1601.6
42.5°	2114.2	2143.3	2152.6	2150.3	2094.4	2047.8	2019.8	1927.8	1816.0	1805.5	1685.5
45°	2035.0	2028.0	2079.2	2107.2	2096.7	2072.2	2076.9	2018.6	1915.0	1904.5	1782.2
47.5°	1929.0	1919.6	1948.8	2017.5	2058.3	2081.5	2128.1	2113.0	2029.1	2019.8	1895.2
50°	1705.3	1718.1	1826.5	1918.5	1998.8	2079.2	2171.2	2214.3	2154.9	2145.6	2016.3
52.5°	1457.2	1470.0	1583.0	1795.0	1926.6	2061.7	2202.7	2315.7	2291.2	2280.7	2145.6
55°	1276.7	1304.6	1432.7	1586.5	1824.1	2007.0	2221.3	2419.4	2438.0	2428.7	2286.6
57.5°	1097.3	1118.2	1214.9	1351.2	1684.3	1911.5	2220.2	2516.0	2591.7	2582.4	2429.8
60°	886.4	913.2	990.1	1136.9	1498.0	1797.3	2187.5	2591.7	2739.7	2732.7	2568.4
62.5°	742.0	750.1	804.9	931.9	1258.0	1652.9	2114.2	2632.5	2873.6	2869.0	2693.1
65°	597.6	598.7	648.8	754.8	1026.2	1473.5	1989.5	2617.4	2975.0	2977.3	2782.8
67.5°	461.3	467.1	512.5	592.9	815.4	1240.5	1811.3	2514.9	2976.1	2982.0	2731.5
70°	319.2	323.8	392.5	470.6	630.2	988.9	1570.2	2243.5	2731.5	2736.2	2448.5
72.5°	224.8	227.1	300.5	376.2	492.7	745.5	1184.6	1855.6	2328.5	2332.0	2059.4
75°	167.7	170.1	212.0	285.4	377.4	516.0	809.6	1421.1	1860.2	1860.2	1626.1
77.5°	118.8	120.0	137.4	196.9	251.6	348.3	486.9	930.7	1365.2	1367.5	1184.6
80°	80.4	81.5	89.7	132.8	157.3	188.7	264.4	488.1	860.8	864.3	752.5
82.5°	41.9	44.3	50.1	67.6	79.2	104.8	136.3	248.1	476.4	485.7	452.0
85°	16.3	16.3	18.6	22.1	29.1	40.8	62.9	94.4	215.5	222.5	199.2
87.5°	5.8	5.8	7.0	7.0	8.2	9.3	10.5	14.0	24.5	24.5	23.3
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°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1255.7	1255.7	1249.9	1252.2	1251.0	1248.7	1246.4	1249.9	1246.4	1238.2	1237.0
5°	1258.0	1255.7	1246.4	1245.2	1241.7	1237.0	1231.2	1233.6	1227.7	1220.7	1219.6
7.5°	1259.2	1254.5	1241.7	1237.0	1230.1	1220.7	1211.4	1211.4	1203.3	1196.3	1195.1
10°	1256.9	1251.0	1233.6	1224.2	1211.4	1197.4	1184.6	1181.1	1171.8	1163.7	1163.7
12.5°	1258.0	1249.9	1227.7	1212.6	1195.1	1177.6	1161.3	1156.7	1148.5	1140.4	1139.2
15°	1265.0	1253.4	1225.4	1205.6	1180.0	1160.2	1142.7	1139.2	1132.2	1126.4	1126.4
17.5°	1272.0	1256.9	1221.9	1193.9	1162.5	1140.4	1124.1	1124.1	1119.4	1115.9	1115.9
20°	1275.5	1258.0	1214.9	1177.6	1141.5	1118.2	1103.1	1105.4	1104.3	1103.1	1103.1
22.5°	1283.6	1260.3	1209.1	1162.5	1119.4	1094.9	1081.0	1084.5	1083.3	1083.3	1084.5
25°	1296.5	1266.2	1204.4	1148.5	1098.4	1071.6	1056.5	1058.8	1058.8	1058.8	1058.8
27.5°	1313.9	1277.8	1203.3	1135.7	1077.5	1047.2	1028.5	1028.5	1023.9	1025.0	1026.2
30°	1340.7	1299.9	1205.6	1124.1	1055.3	1016.9	994.8	991.3	990.1	992.4	993.6
32.5°	1373.3	1330.2	1219.6	1115.9	1032.0	983.1	955.2	954.0	950.5	950.5	950.5
35°	1414.1	1359.4	1232.4	1114.7	1008.7	947.0	916.7	913.2	905.1	901.6	901.6
37.5°	1466.5	1404.8	1247.5	1106.6	988.9	912.1	876.0	864.3	855.0	853.8	853.8
40°	1530.6	1456.0	1269.7	1097.3	968.0	876.0	828.2	808.4	809.6	814.2	814.2
42.5°	1606.3	1518.9	1297.6	1092.6	937.7	838.7	772.3	749.0	757.1	761.8	763.0
45°	1694.8	1593.5	1329.1	1086.8	909.7	796.7	712.9	683.8	687.2	688.4	689.6
47.5°	1797.3	1676.2	1361.7	1082.1	878.3	744.3	647.6	609.2	608.0	601.1	603.4
50°	1904.5	1763.6	1395.5	1074.0	839.8	682.6	578.9	533.5	524.2	513.7	514.9
52.5°	2018.6	1853.2	1426.9	1061.2	792.1	619.7	513.7	464.8	446.1	434.5	436.8
55°	2144.5	1945.3	1457.2	1041.4	742.0	556.8	455.4	405.4	382.1	372.7	373.9
57.5°	2259.8	2033.8	1479.3	1016.9	687.2	499.7	404.2	355.3	340.1	339.0	340.1
60°	2371.6	2108.3	1488.7	983.1	631.3	447.3	356.4	319.2	308.7	314.5	315.7
62.5°	2465.9	2156.1	1484.0	937.7	574.3	397.2	318.0	291.2	284.2	295.9	297.0
65°	2520.7	2171.2	1451.4	872.5	512.5	348.3	281.9	252.8	249.3	256.3	259.8
67.5°	2448.5	2076.9	1362.9	782.8	443.8	302.9	246.9	223.6	217.8	223.6	223.6
70°	2170.1	1799.7	1153.2	640.7	368.1	258.6	214.3	198.0	193.4	198.0	196.9
72.5°	1807.8	1496.8	908.6	499.7	290.0	217.8	186.4	171.2	166.6	161.9	159.6
75°	1402.5	1136.9	659.3	366.9	219.0	174.7	156.1	142.1	130.5	135.1	132.8
77.5°	1027.4	797.9	467.1	253.9	157.3	135.1	122.3	111.8	103.7	113.0	111.8
80°	661.6	516.0	312.2	170.1	108.3	94.4	89.7	83.9	92.0	120.0	122.3
82.5°	404.2	327.3	186.4	110.7	71.1	62.9	58.2	58.2	94.4	103.7	104.8
85°	180.5	173.6	101.3	57.1	39.6	36.1	32.6	41.9	38.4	28.0	29.1
87.5°	29.1	30.3	22.1	19.8	15.1	15.1	11.6	8.2	5.8	3.5	3.5
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)