

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: P799753

Luminaire Tested: **ARCH2-50-727-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7166 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

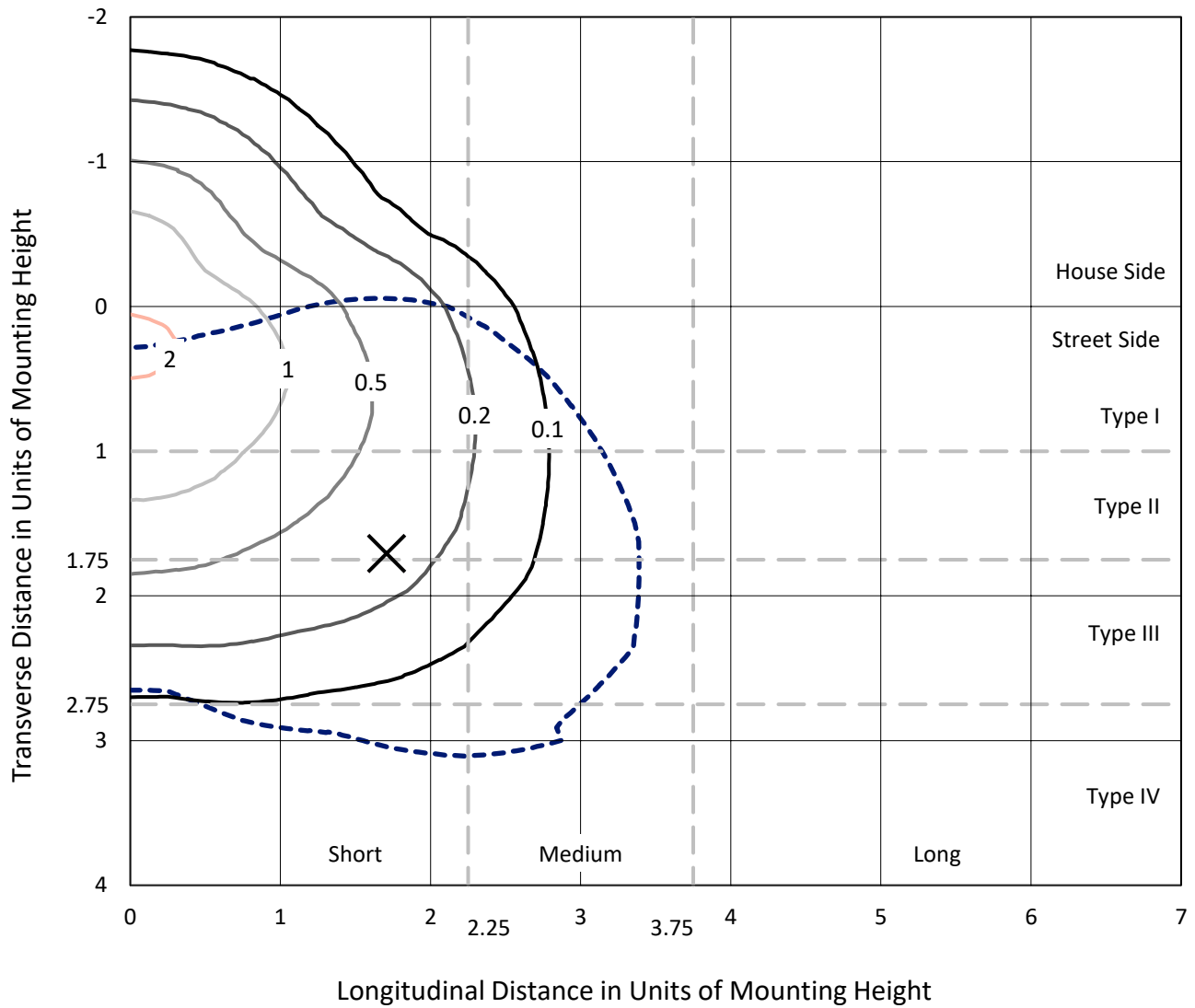
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

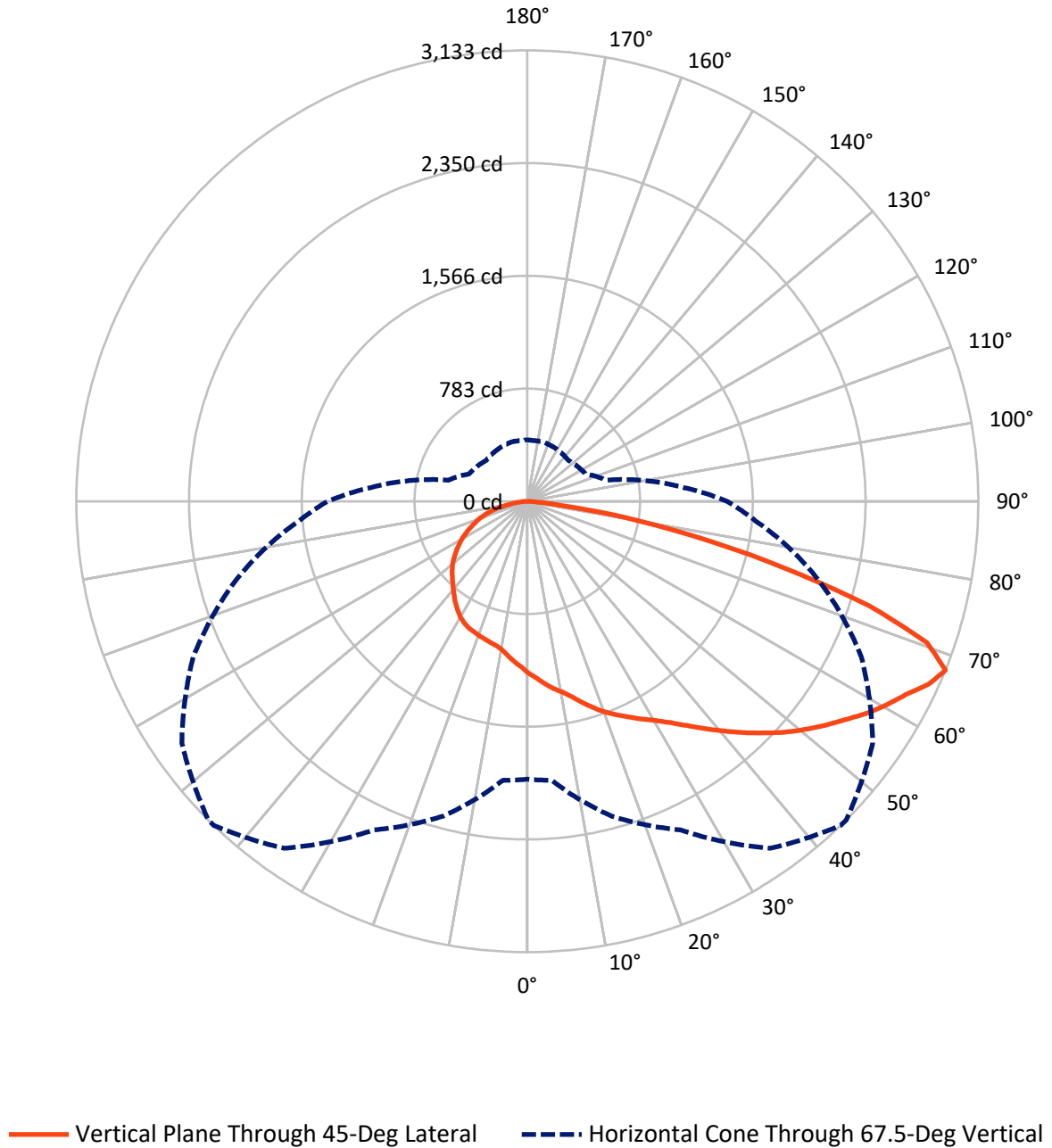
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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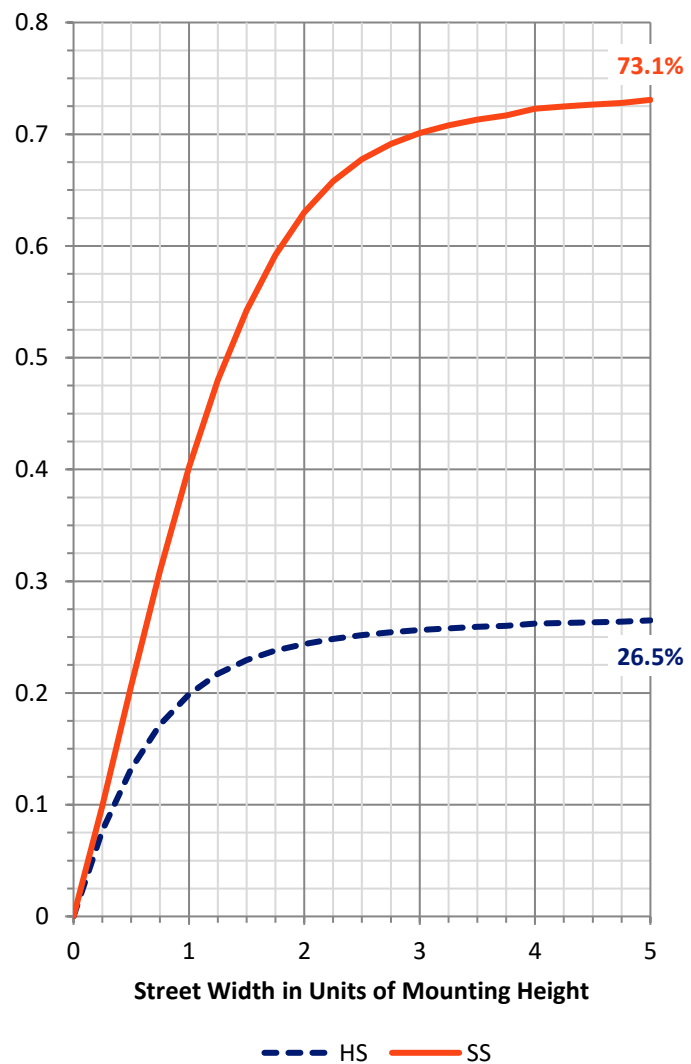
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1914.4	0.0	1914.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	5251.6	0.0	5251.6
	% Fixture	73.3	0.0	73.3
Total	Lumens	7166.0	0.0	7166.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.6
10°-20°	353.5	4.9
20°-30°	610.2	8.5
30°-40°	899.8	12.6
40°-50°	1219.0	17.0
50°-60°	1489.9	20.8
60°-70°	1536.7	21.4
70°-80°	841.7	11.7
80°-90°	100.9	1.4
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°	7166.0	100.0
0°-180°	7166.0	100.0

Coefficient of Utilization



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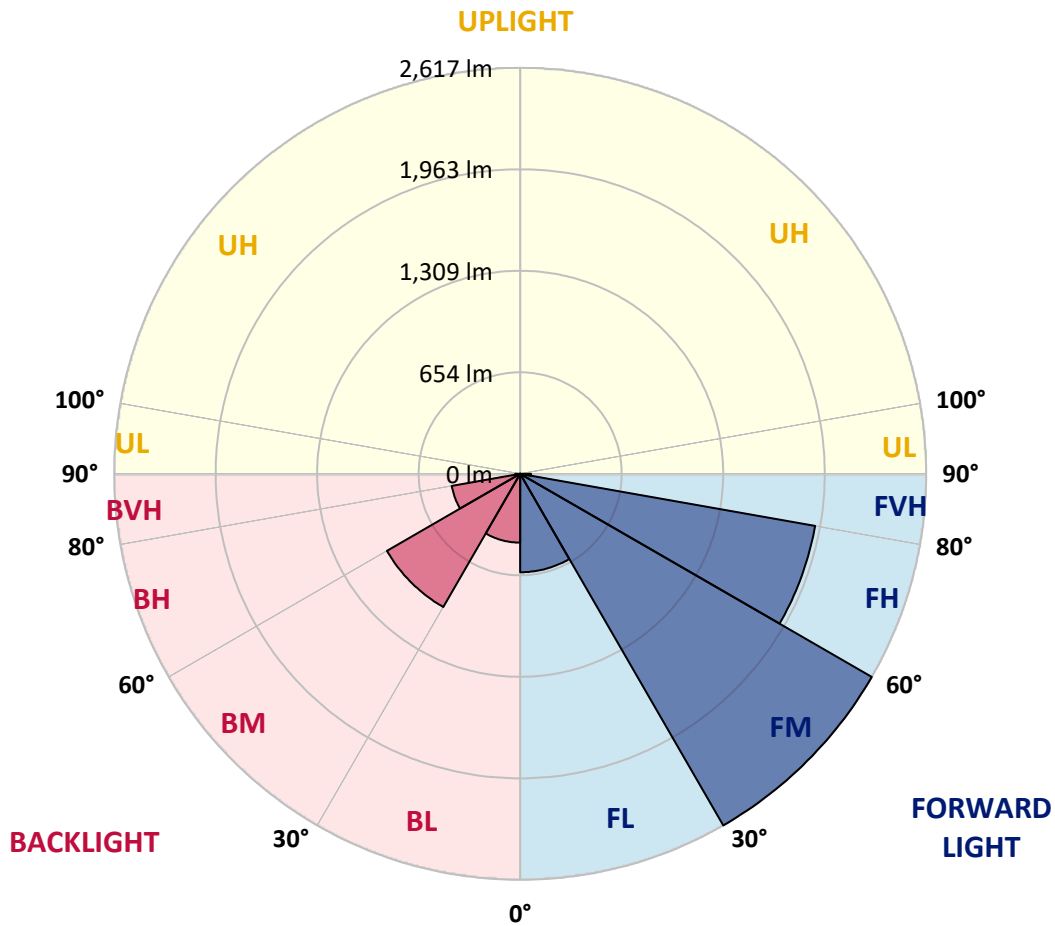
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	634.4	8.9			
FM (30°-60°)	2617.1	36.5			
FH (60°-80°)	1930.6	26.9			G2/5000
FVH (80°-90°)	69.5	1.0			G1/100
BL (0°-30°)	443.7	6.2	B1/500		
BM (30°-60°)	991.6	13.8	B1/1000		
BH (60°-80°)	447.7	6.2	B1/500		G1/500
BVH (80°-90°)	31.4	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2
2.5°	1247.5	1246.4	1248.6	1241.0	1231.1	1230.0	1230.0	1223.5	1215.9	1200.6	1188.6
5°	1306.4	1304.2	1305.3	1294.4	1281.3	1274.8	1273.7	1259.5	1242.0	1218.1	1196.2
7.5°	1360.9	1358.7	1357.6	1345.6	1326.0	1315.1	1314.0	1293.3	1272.6	1235.5	1203.9
10°	1412.2	1410.0	1407.8	1391.4	1367.4	1351.1	1348.9	1322.7	1296.6	1250.8	1210.4
12.5°	1477.6	1473.2	1471.0	1451.4	1416.5	1399.1	1395.8	1360.9	1328.2	1272.6	1223.5
15°	1546.3	1543.0	1539.7	1521.2	1481.9	1459.0	1453.6	1410.0	1365.3	1300.9	1243.1
17.5°	1597.5	1594.3	1594.3	1577.9	1541.9	1515.8	1511.4	1459.0	1403.4	1327.1	1258.4
20°	1629.2	1625.9	1629.2	1619.3	1592.1	1570.3	1565.9	1508.1	1441.6	1351.1	1271.5
22.5°	1652.1	1648.8	1654.2	1649.9	1630.2	1617.2	1613.9	1557.2	1480.9	1376.2	1284.6
25°	1692.4	1692.4	1692.4	1684.8	1666.2	1661.9	1661.9	1612.8	1531.0	1408.9	1304.2
27.5°	1773.1	1768.7	1763.3	1741.5	1709.9	1708.8	1715.3	1669.5	1588.8	1451.4	1328.2
30°	1892.0	1889.8	1869.1	1823.3	1769.8	1764.4	1768.7	1730.6	1651.0	1496.1	1355.5
32.5°	2045.7	2038.1	1995.6	1926.9	1850.5	1825.4	1834.2	1793.8	1716.4	1541.9	1381.6
35°	2154.8	2156.9	2126.4	2064.3	1973.7	1907.2	1913.8	1864.7	1787.3	1593.2	1414.3
37.5°	2280.2	2287.8	2242.0	2195.1	2111.1	1997.7	2004.3	1937.8	1858.2	1657.5	1449.2
40°	2453.6	2438.3	2360.9	2305.2	2212.6	2092.6	2098.1	2019.5	1939.9	1718.6	1489.6
42.5°	2598.6	2571.3	2477.5	2406.7	2295.4	2192.9	2198.4	2107.9	2022.8	1786.2	1534.3
45°	2806.9	2731.6	2596.4	2561.5	2380.5	2291.1	2296.5	2201.7	2110.1	1858.2	1582.3
47.5°	2927.9	2808.0	2721.8	2703.3	2474.3	2392.5	2399.0	2300.9	2203.8	1939.9	1632.4
50°	2920.3	2842.8	2817.8	2772.0	2557.1	2487.4	2493.9	2403.4	2298.7	2020.6	1680.4
52.5°	2870.1	2884.3	2871.2	2794.9	2640.0	2579.0	2586.6	2504.8	2395.8	2095.9	1725.1
55°	2947.5	2957.3	2932.3	2831.9	2731.6	2670.6	2679.3	2611.7	2491.7	2162.4	1763.3
57.5°	3040.2	3005.3	2980.2	2897.4	2826.5	2769.8	2779.6	2720.7	2574.6	2215.8	1792.7
60°	3035.9	2962.8	2987.9	2901.7	2890.8	2861.4	2870.1	2810.1	2637.8	2255.1	1804.7
62.5°	2812.3	2773.1	2899.6	2870.1	2943.2	2943.2	2954.1	2864.7	2676.0	2271.4	1798.2
65°	2424.1	2426.3	2648.7	2770.9	3005.3	3055.5	3064.2	2898.5	2654.2	2223.5	1737.1
67.5°	1931.2	1945.4	2264.9	2519.0	2943.2	3131.8	3132.9	2929.0	2560.4	2088.2	1595.4
70°	1413.2	1424.2	1801.5	2110.1	2649.8	2962.8	2945.4	2842.8	2356.5	1852.7	1374.0
72.5°	955.2	965.1	1353.3	1620.4	2174.4	2523.3	2485.2	2512.4	2008.6	1522.3	1104.6
75°	642.3	654.3	962.9	1159.2	1599.7	1916.0	1830.9	1902.9	1553.9	1152.6	805.9
77.5°	404.6	412.2	611.8	760.1	1092.6	1304.2	1219.1	1220.2	895.3	620.5	432.9
80°	257.4	259.5	370.8	438.4	632.5	784.0	693.5	563.8	403.5	329.3	258.4
82.5°	149.4	146.1	221.4	247.5	301.0	297.7	246.4	233.4	176.7	164.7	131.9
85°	60.0	55.6	97.1	90.5	91.6	97.1	72.0	72.0	57.8	44.7	32.7
87.5°	12.0	12.0	13.1	12.0	12.0	13.1	9.8	9.8	8.7	8.7	8.7
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°	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2	1195.2
2.5°	1186.4	1184.2	1178.8	1164.6	1157.0	1152.6	1146.1	1143.9	1142.8	1143.9	1147.2
5°	1189.7	1182.1	1166.8	1143.9	1128.6	1118.8	1107.9	1103.6	1100.3	1100.3	1103.6
7.5°	1191.9	1179.9	1153.7	1119.9	1098.1	1082.8	1069.7	1064.3	1063.2	1066.5	1067.6
10°	1193.0	1175.5	1138.4	1095.9	1067.6	1047.9	1034.9	1031.6	1034.9	1041.4	1042.5
12.5°	1200.6	1176.6	1129.7	1079.6	1045.8	1026.1	1016.3	1016.3	1025.0	1037.0	1038.1
15°	1213.7	1184.2	1125.4	1066.5	1031.6	1014.1	1010.9	1016.3	1029.4	1047.9	1050.1
17.5°	1223.5	1188.6	1115.5	1049.0	1013.0	1002.1	1007.6	1020.7	1039.2	1064.3	1066.5
20°	1230.0	1188.6	1101.4	1028.3	994.5	992.3	1007.6	1028.3	1047.9	1077.4	1080.7
22.5°	1236.6	1186.4	1085.0	1003.2	973.8	980.3	1008.7	1034.9	1054.5	1086.1	1091.6
25°	1248.6	1189.7	1068.7	978.1	952.0	970.5	1007.6	1039.2	1059.9	1092.6	1101.4
27.5°	1264.9	1197.3	1056.7	955.2	930.2	955.2	1000.0	1038.1	1059.9	1091.6	1101.4
30°	1282.4	1206.1	1042.5	930.2	905.1	933.4	983.6	1026.1	1051.2	1080.7	1092.6
32.5°	1300.9	1215.9	1030.5	902.9	874.6	904.0	959.6	1007.6	1034.9	1062.1	1075.2
35°	1326.0	1233.3	1023.9	881.1	847.3	873.5	929.1	983.6	1013.0	1038.1	1053.4
37.5°	1356.5	1255.1	1020.7	859.3	817.9	839.7	896.4	954.2	985.8	1006.5	1020.7
40°	1391.4	1282.4	1019.6	838.6	788.4	804.8	862.6	920.4	950.9	967.2	979.2
42.5°	1430.7	1312.9	1017.4	817.9	759.0	772.1	829.8	886.6	912.7	926.9	937.8
45°	1472.1	1343.5	1013.0	792.8	727.3	742.6	796.0	846.2	873.5	885.5	897.5
47.5°	1513.6	1374.0	1004.3	764.4	699.0	713.2	760.1	803.7	825.5	836.4	848.4
50°	1553.9	1401.3	983.6	731.7	669.5	682.6	718.6	748.1	764.4	773.1	785.1
52.5°	1589.9	1419.8	954.2	693.5	640.1	646.6	670.6	695.7	708.8	709.9	720.8
55°	1620.4	1429.6	911.6	654.3	608.5	609.6	622.7	642.3	647.7	643.4	651.0
57.5°	1637.9	1424.2	864.7	613.9	575.8	571.4	581.2	591.0	592.1	581.2	588.9
60°	1642.2	1399.1	803.7	573.6	543.1	531.1	534.3	532.1	530.0	525.6	532.1
62.5°	1620.4	1345.6	736.1	534.3	508.2	489.6	488.5	487.4	490.7	491.8	492.9
65°	1540.8	1245.3	655.4	494.0	471.1	446.0	444.9	458.0	462.4	455.8	458.0
67.5°	1387.1	1091.6	567.0	447.1	424.2	402.4	411.1	418.7	426.4	424.2	426.4
70°	1169.0	896.4	486.3	394.7	372.9	360.9	370.8	377.3	378.4	376.2	378.4
72.5°	919.3	700.1	411.1	341.3	321.7	316.2	328.2	333.7	343.5	347.9	348.9
75°	664.1	516.9	337.0	283.5	267.2	267.2	278.1	287.9	296.6	291.2	287.9
77.5°	370.8	308.6	242.1	195.2	198.5	213.7	218.1	229.0	237.7	236.6	234.5
80°	224.6	193.0	163.6	126.5	125.4	137.4	165.8	184.3	188.7	178.8	177.7
82.5°	116.7	101.4	87.2	70.9	78.5	91.6	96.0	115.6	127.6	123.2	128.7
85°	29.4	28.4	31.6	32.7	40.3	44.7	49.1	57.8	38.2	18.5	18.5
87.5°	8.7	8.7	10.9	10.9	14.2	17.4	16.4	16.4	8.7	1.1	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)