

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: P799801

Luminaire Tested: **ARCH2-50-740-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799801
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: ARCH2-50-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7797 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
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

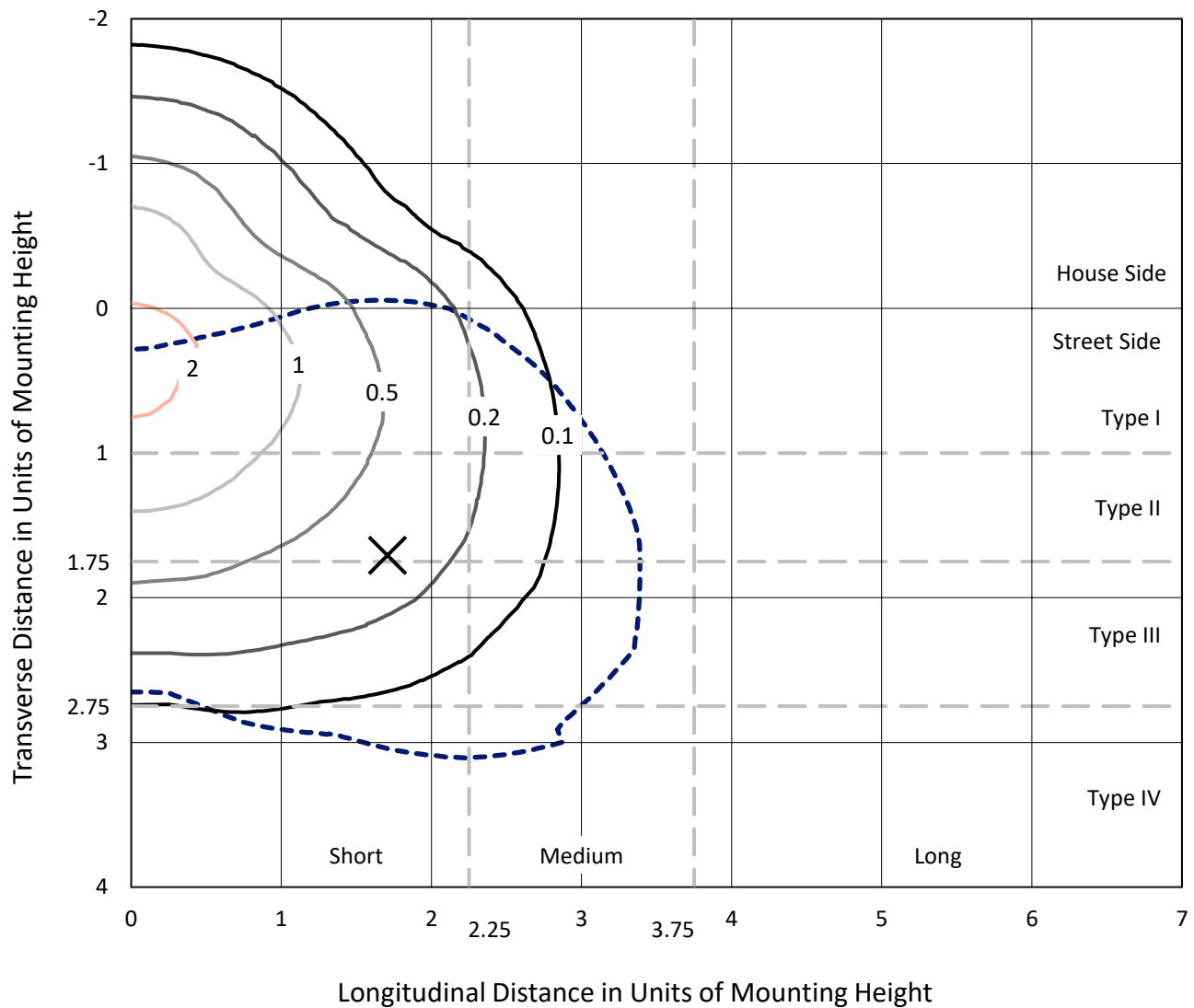


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Iso-Footcandle Lines of Horizontal Illumination

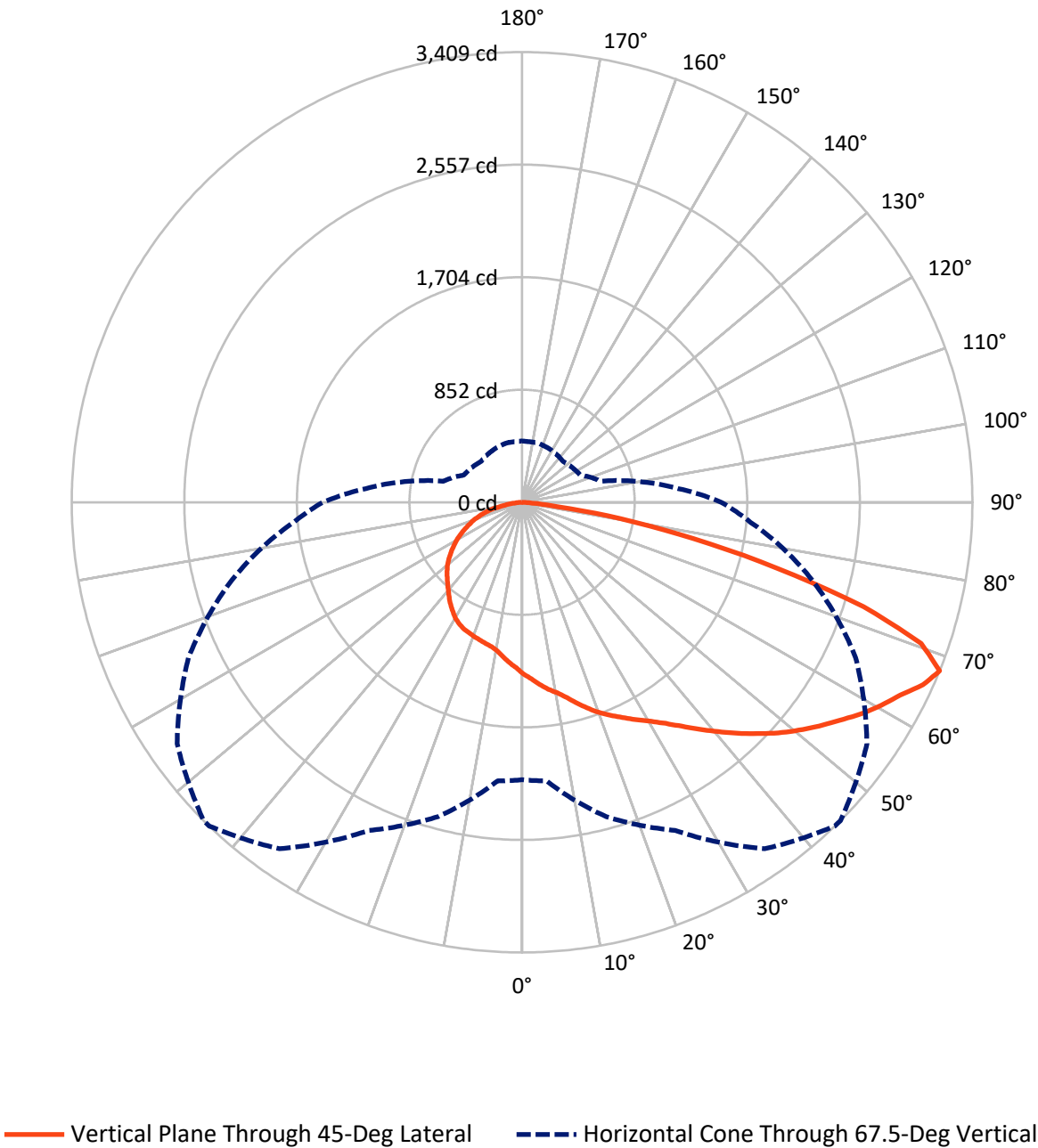
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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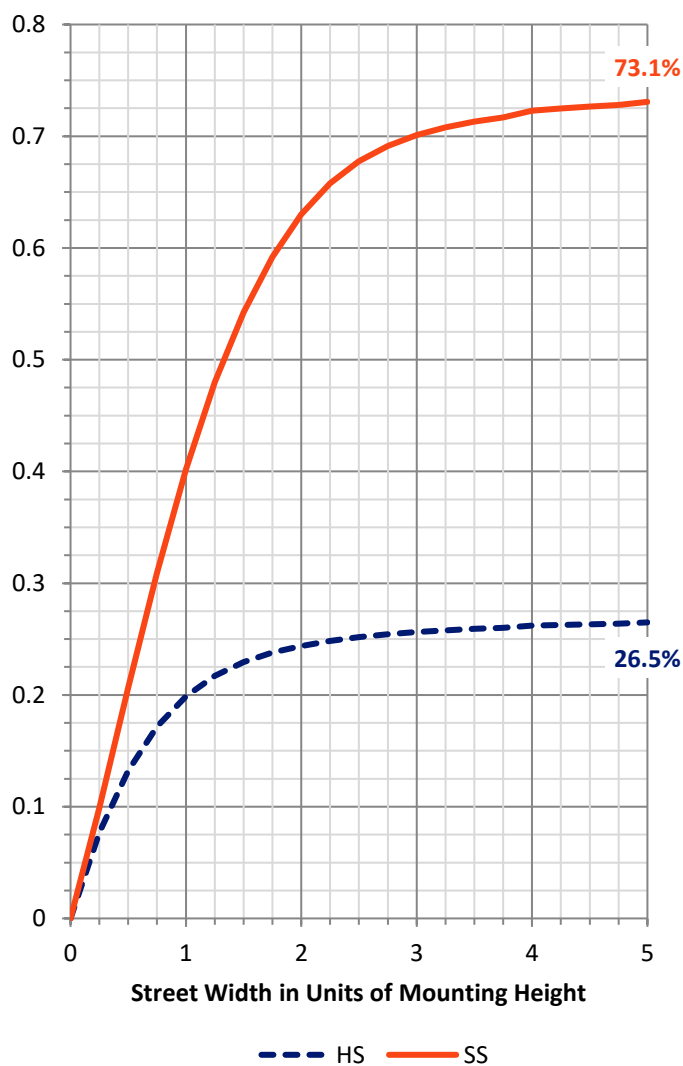
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2083.0	0.0	2083.0
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	5714.0	0.0	5714.0
	% Fixture	73.3	0.0	73.3
Total	Lumens	7797.0	0.0	7797.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	1.6
10°-20°	384.6	4.9
20°-30°	663.9	8.5
30°-40°	979.0	12.6
40°-50°	1326.4	17.0
50°-60°	1621.1	20.8
60°-70°	1672.0	21.4
70°-80°	915.8	11.7
80°-90°	109.8	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°	7797.0	100.0
0°-180°	7797.0	100.0

Coefficient of Utilization



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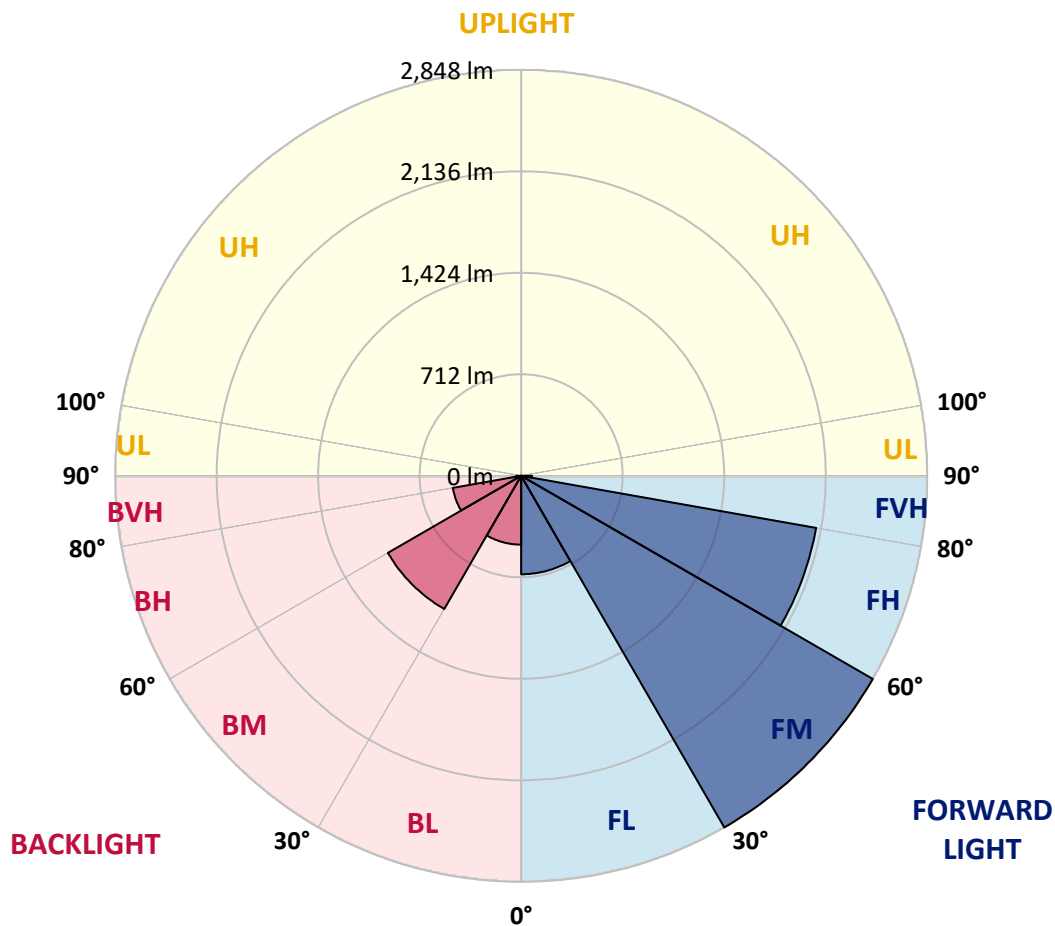
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	690.2	8.9			
FM	(30°-60°)	2847.5	36.5			
FH	(60°-80°)	2100.6	26.9			G2/5000
FVH	(80°-90°)	75.6	1.0			G1/100
BL	(0°-30°)	482.8	6.2	B1/500		
BM	(30°-60°)	1078.9	13.8	B2/2500		
BH	(60°-80°)	487.1	6.2	B1/500		G1/500
BVH	(80°-90°)	34.1	0.4			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4
2.5°	1357.3	1356.2	1358.5	1350.2	1339.5	1338.4	1338.4	1331.2	1322.9	1306.3	1293.3
5°	1421.4	1419.0	1420.2	1408.4	1394.1	1387.0	1385.8	1370.4	1351.4	1325.3	1301.6
7.5°	1480.7	1478.4	1477.2	1464.1	1442.8	1430.9	1429.7	1407.2	1384.6	1344.3	1309.9
10°	1536.5	1534.1	1531.8	1514.0	1487.9	1470.1	1467.7	1439.2	1410.7	1360.9	1317.0
12.5°	1607.7	1602.9	1600.6	1579.2	1541.2	1522.3	1518.7	1480.7	1445.1	1384.6	1331.2
15°	1682.4	1678.9	1675.3	1655.2	1612.4	1587.5	1581.6	1534.1	1485.5	1415.5	1352.6
17.5°	1738.2	1734.6	1734.6	1716.8	1677.7	1649.2	1644.5	1587.5	1527.0	1444.0	1369.2
20°	1772.6	1769.1	1772.6	1761.9	1732.3	1708.5	1703.8	1640.9	1568.5	1470.1	1383.4
22.5°	1797.5	1794.0	1799.9	1795.2	1773.8	1759.6	1756.0	1694.3	1611.3	1497.3	1397.7
25°	1841.4	1841.4	1841.4	1833.1	1813.0	1808.2	1808.2	1754.8	1665.8	1532.9	1419.0
27.5°	1929.2	1924.5	1918.6	1894.8	1860.4	1859.2	1866.3	1816.5	1728.7	1579.2	1445.1
30°	2058.6	2056.2	2033.6	1983.8	1925.7	1919.7	1924.5	1883.0	1796.3	1627.9	1474.8
32.5°	2225.9	2217.5	2171.3	2096.5	2013.5	1986.2	1995.7	1951.8	1867.5	1677.7	1503.3
35°	2344.5	2346.9	2313.7	2246.0	2147.5	2075.2	2082.3	2028.9	1944.7	1733.5	1538.9
37.5°	2480.9	2489.3	2439.4	2388.4	2297.0	2173.6	2180.8	2108.4	2021.8	1803.5	1576.8
40°	2669.6	2653.0	2568.7	2508.2	2407.4	2276.9	2282.8	2197.4	2110.8	1869.9	1620.7
42.5°	2827.4	2797.7	2695.7	2618.6	2497.6	2386.0	2392.0	2293.5	2200.9	1943.5	1669.4
45°	3054.0	2972.2	2825.0	2787.1	2590.1	2492.8	2498.7	2395.5	2295.9	2021.8	1721.6
47.5°	3185.7	3055.2	2961.5	2941.3	2692.1	2603.2	2610.3	2503.5	2397.9	2110.8	1776.2
50°	3177.4	3093.2	3065.9	3016.1	2782.3	2706.4	2713.5	2615.0	2501.1	2198.6	1828.4
52.5°	3122.8	3138.3	3124.0	3041.0	2872.5	2806.0	2814.4	2725.4	2606.7	2280.4	1877.0
55°	3207.1	3217.8	3190.5	3081.3	2972.2	2905.7	2915.2	2841.6	2711.1	2352.8	1918.6
57.5°	3307.9	3270.0	3242.7	3152.5	3075.4	3013.7	3024.4	2960.3	2801.3	2410.9	1950.6
60°	3303.2	3223.7	3251.0	3157.2	3145.4	3113.3	3122.8	3057.6	2870.1	2453.7	1963.6
62.5°	3060.0	3017.2	3154.9	3122.8	3202.3	3202.3	3214.2	3116.9	2911.6	2471.5	1956.5
65°	2637.6	2639.9	2882.0	3014.9	3270.0	3324.5	3334.0	3153.7	2887.9	2419.3	1890.1
67.5°	2101.3	2116.7	2464.3	2740.8	3202.3	3407.6	3408.8	3186.9	2785.9	2272.1	1735.8
70°	1537.7	1549.6	1960.1	2295.9	2883.2	3223.7	3204.7	3093.2	2564.0	2015.8	1495.0
72.5°	1039.4	1050.0	1472.4	1763.1	2365.9	2745.5	2704.0	2733.7	2185.5	1656.3	1201.9
75°	698.8	711.9	1047.7	1261.2	1740.6	2084.7	1992.1	2070.4	1690.7	1254.1	876.8
77.5°	440.2	448.5	665.6	827.0	1188.9	1419.0	1326.5	1327.7	974.1	675.1	471.0
80°	280.0	282.4	403.4	477.0	688.2	853.1	754.6	613.4	439.0	358.3	281.2
82.5°	162.5	159.0	240.9	269.3	327.5	323.9	268.1	253.9	192.2	179.2	143.6
85°	65.3	60.5	105.6	98.5	99.7	105.6	78.3	78.3	62.9	48.6	35.6
87.5°	13.1	13.1	14.2	13.1	13.1	14.2	10.7	10.7	9.5	9.5	9.5
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°	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4	1300.4
2.5°	1290.9	1288.5	1282.6	1267.2	1258.9	1254.1	1247.0	1244.6	1243.4	1244.6	1248.2
5°	1294.5	1286.2	1269.5	1244.6	1228.0	1217.3	1205.5	1200.7	1197.2	1197.2	1200.7
7.5°	1296.8	1283.8	1255.3	1218.5	1194.8	1178.2	1163.9	1158.0	1156.8	1160.4	1161.6
10°	1298.0	1279.0	1238.7	1192.4	1161.6	1140.2	1126.0	1122.4	1126.0	1133.1	1134.3
12.5°	1306.3	1280.2	1229.2	1174.6	1137.8	1116.5	1105.8	1105.8	1115.3	1128.4	1129.5
15°	1320.6	1288.5	1224.5	1160.4	1122.4	1103.4	1099.9	1105.8	1120.0	1140.2	1142.6
17.5°	1331.2	1293.3	1213.8	1141.4	1102.2	1090.4	1096.3	1110.6	1130.7	1158.0	1160.4
20°	1338.4	1293.3	1198.4	1118.9	1082.1	1079.7	1096.3	1118.9	1140.2	1172.3	1175.8
22.5°	1345.5	1290.9	1180.6	1091.6	1059.5	1066.7	1097.5	1126.0	1147.3	1181.7	1187.7
25°	1358.5	1294.5	1162.8	1064.3	1035.8	1056.0	1096.3	1130.7	1153.3	1188.9	1198.4
27.5°	1376.3	1302.8	1149.7	1039.4	1012.1	1039.4	1088.0	1129.5	1153.3	1187.7	1198.4
30°	1395.3	1312.3	1134.3	1012.1	984.8	1015.6	1070.2	1116.5	1143.8	1175.8	1188.9
32.5°	1415.5	1322.9	1121.2	982.4	951.6	983.6	1044.1	1096.3	1126.0	1155.6	1169.9
35°	1442.8	1341.9	1114.1	958.7	921.9	950.4	1010.9	1070.2	1102.2	1129.5	1146.1
37.5°	1476.0	1365.6	1110.6	935.0	889.9	913.6	975.3	1038.2	1072.6	1095.1	1110.6
40°	1514.0	1395.3	1109.4	912.4	857.8	875.6	938.5	1001.4	1034.6	1052.4	1065.5
42.5°	1556.7	1428.5	1107.0	889.9	825.8	840.0	902.9	964.6	993.1	1008.5	1020.4
45°	1601.8	1461.8	1102.2	862.6	791.4	808.0	866.1	920.7	950.4	963.4	976.5
47.5°	1646.8	1495.0	1092.8	831.7	760.5	776.0	827.0	874.4	898.2	910.0	923.1
50°	1690.7	1524.6	1070.2	796.1	728.5	742.7	781.9	813.9	831.7	841.2	854.3
52.5°	1729.9	1544.8	1038.2	754.6	696.5	703.6	729.7	757.0	771.2	772.4	784.3
55°	1763.1	1555.5	991.9	711.9	662.1	663.2	677.5	698.8	704.8	700.0	708.3
57.5°	1782.1	1549.6	940.9	668.0	626.5	621.7	632.4	643.1	644.3	632.4	640.7
60°	1786.9	1522.3	874.4	624.1	590.9	577.8	581.4	579.0	576.6	571.9	579.0
62.5°	1763.1	1464.1	800.9	581.4	552.9	532.7	531.5	530.4	533.9	535.1	536.3
65°	1676.5	1355.0	713.1	537.5	512.6	485.3	484.1	498.3	503.1	496.0	498.3
67.5°	1509.2	1187.7	617.0	486.5	461.5	437.8	447.3	455.6	463.9	461.5	463.9
70°	1271.9	975.3	529.2	429.5	405.8	392.7	403.4	410.5	411.7	409.3	411.7
72.5°	1000.2	761.7	447.3	371.4	350.0	344.1	357.1	363.1	373.7	378.5	379.7
75°	722.6	562.4	366.6	308.5	290.7	290.7	302.6	313.2	322.7	316.8	313.2
77.5°	403.4	335.8	263.4	212.4	215.9	232.6	237.3	249.2	258.7	257.5	255.1
80°	244.4	210.0	178.0	137.6	136.4	149.5	180.3	200.5	205.3	194.6	193.4
82.5°	127.0	110.3	94.9	77.1	85.4	99.7	104.4	125.8	138.8	134.1	140.0
85°	32.0	30.8	34.4	35.6	43.9	48.6	53.4	62.9	41.5	20.2	20.2
87.5°	9.5	9.5	11.9	11.9	15.4	19.0	17.8	17.8	9.5	1.2	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)