

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: P799001

Luminaire Tested: **ARCH1-50-730-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799001
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: ARCH1-50-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6258 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

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

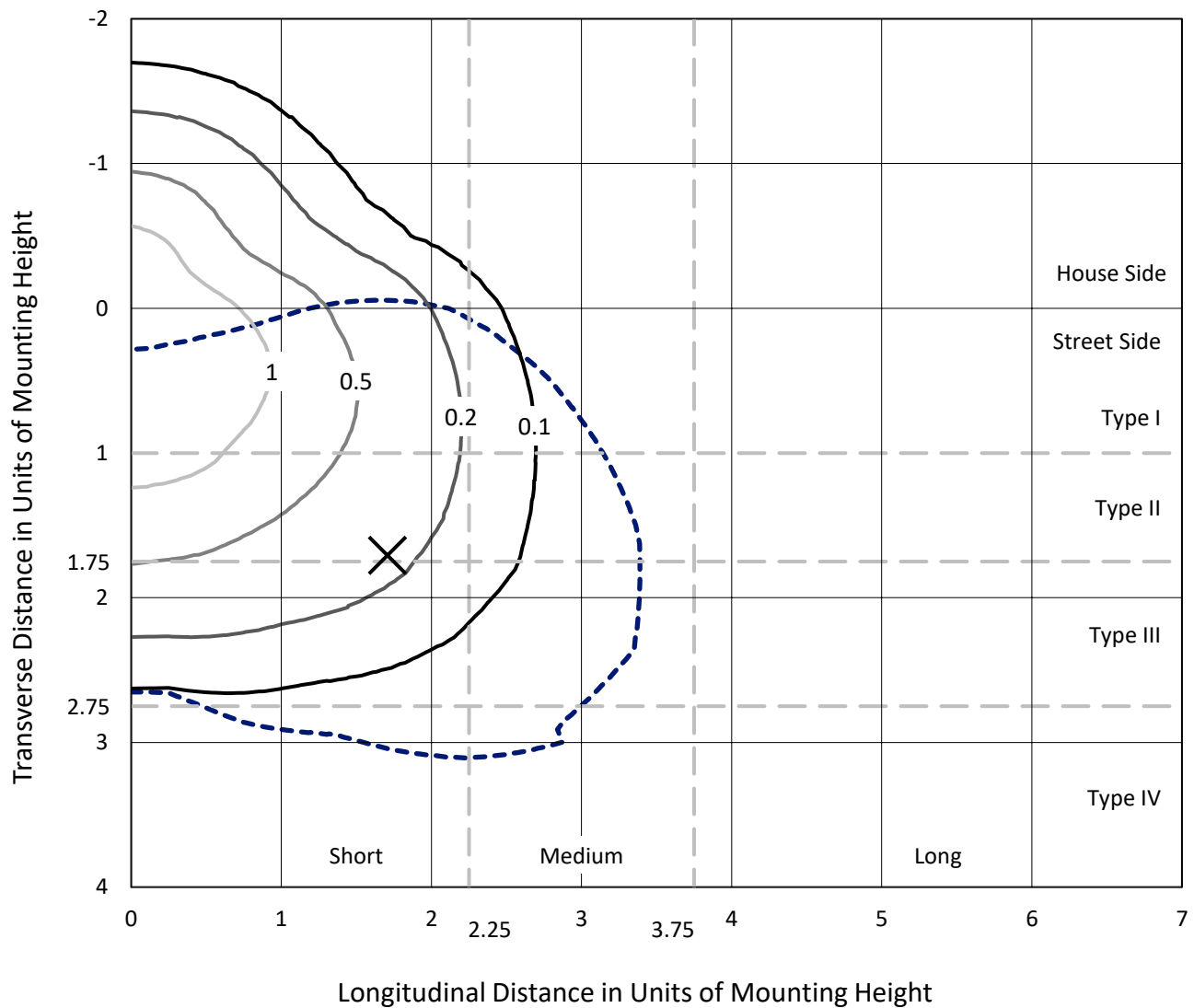


REPORT NUMBER: P799001

CATALOG NUMBER: ARCH1-50-730-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

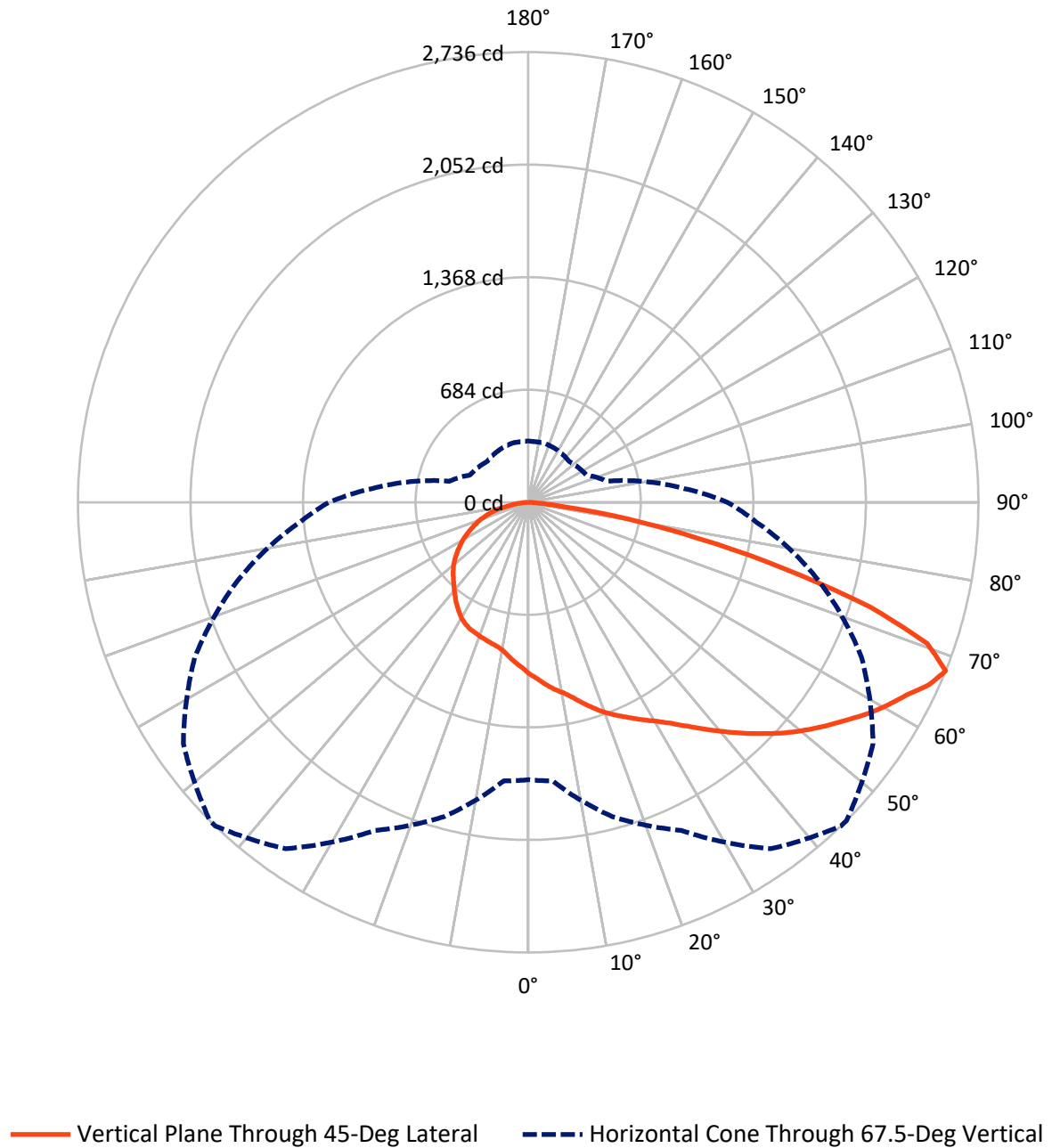


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P799001

CATALOG NUMBER: ARCH1-50-730-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P799001

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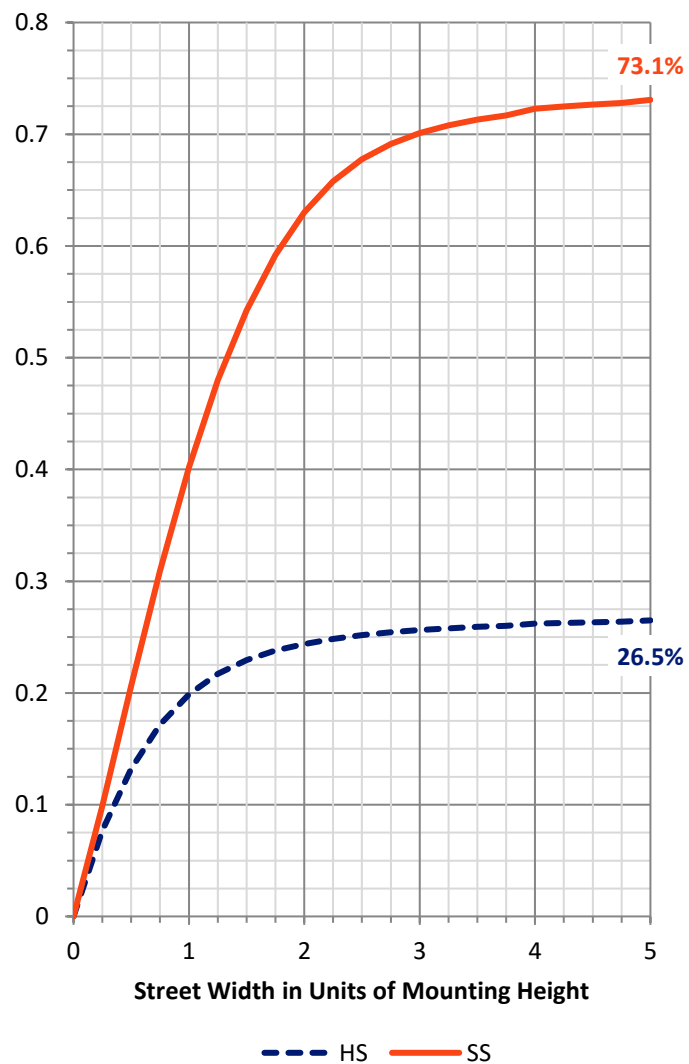
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1671.8	0.0	1671.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	4586.2	0.0	4586.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	6258.0	0.0	6258.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.6
10°-20°	308.7	4.9
20°-30°	532.8	8.5
30°-40°	785.8	12.6
40°-50°	1064.6	17.0
50°-60°	1301.1	20.8
60°-70°	1341.9	21.4
70°-80°	735.0	11.7
80°-90°	88.1	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°	6258.0	100.0
0°-180°	6258.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799001

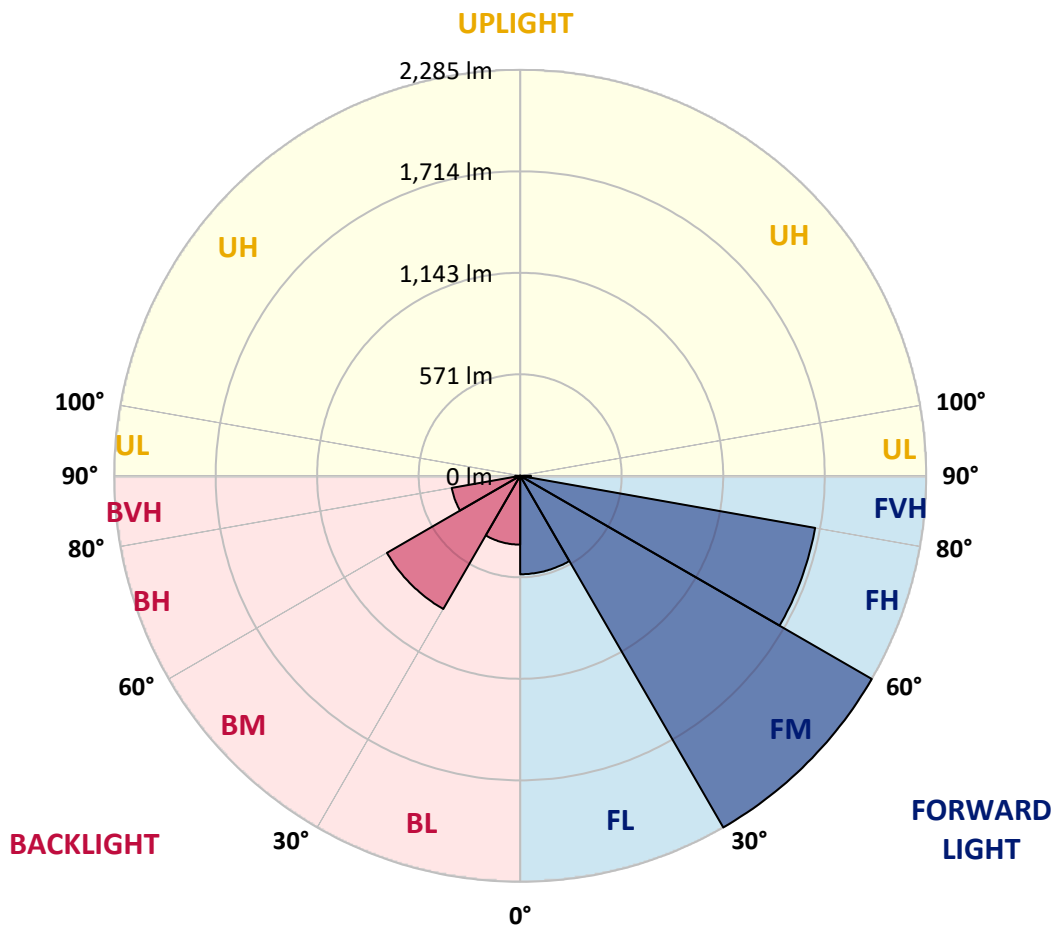
CATALOG NUMBER: ARCH1-50-730-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	554.0	8.9			
FM	(30°-60°)	2285.5	36.5			
FH	(60°-80°)	1686.0	26.9			G1/1800
FVH	(80°-90°)	60.7	1.0			G1/100
BL	(0°-30°)	387.5	6.2	B1/500		
BM	(30°-60°)	866.0	13.8	B1/1000		
BH	(60°-80°)	391.0	6.2	B1/500		G1/500
BVH	(80°-90°)	27.4	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-G1

Type IV Short



REPORT NUMBER: P799001

CATALOG NUMBER: ARCH1-50-730-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	1089.4	1088.5	1090.4	1083.7	1075.1	1074.2	1074.2	1068.5	1061.8	1048.5	1038.0
5°	1140.8	1138.9	1139.9	1130.4	1118.9	1113.2	1112.3	1099.9	1084.7	1063.7	1044.7
7.5°	1188.5	1186.6	1185.6	1175.1	1158.0	1148.5	1147.5	1129.4	1111.3	1079.0	1051.3
10°	1233.2	1231.3	1229.4	1215.1	1194.2	1179.9	1178.0	1155.1	1132.3	1092.3	1057.0
12.5°	1290.4	1286.6	1284.6	1267.5	1237.0	1221.8	1218.9	1188.5	1159.9	1111.3	1068.5
15°	1350.4	1347.5	1344.6	1328.5	1294.2	1274.2	1269.4	1231.3	1192.3	1136.1	1085.6
17.5°	1395.1	1392.3	1392.3	1378.0	1346.5	1323.7	1319.9	1274.2	1225.6	1158.9	1098.9
20°	1422.7	1419.9	1422.7	1414.2	1390.4	1371.3	1367.5	1317.0	1258.9	1179.9	1110.4
22.5°	1442.7	1439.9	1444.6	1440.8	1423.7	1412.3	1409.4	1359.9	1293.2	1201.8	1121.8
25°	1478.0	1478.0	1478.0	1471.3	1455.1	1451.3	1451.3	1408.4	1337.0	1230.4	1138.9
27.5°	1548.4	1544.6	1539.9	1520.8	1493.2	1492.2	1498.0	1458.0	1387.5	1267.5	1159.9
30°	1652.2	1650.3	1632.2	1592.2	1545.6	1540.8	1544.6	1511.3	1441.8	1306.5	1183.7
32.5°	1786.5	1779.8	1742.7	1682.7	1616.0	1594.1	1601.8	1566.5	1498.9	1346.5	1206.6
35°	1881.7	1883.6	1857.0	1802.7	1723.7	1665.6	1671.3	1628.4	1560.8	1391.3	1235.1
37.5°	1991.2	1997.9	1957.9	1917.0	1843.6	1744.6	1750.3	1692.2	1622.7	1447.5	1265.6
40°	2142.7	2129.3	2061.7	2013.2	1932.2	1827.5	1832.2	1763.7	1694.1	1500.8	1300.8
42.5°	2269.3	2245.5	2163.6	2101.7	2004.6	1915.1	1919.8	1840.8	1766.5	1559.9	1339.9
45°	2451.2	2385.5	2267.4	2236.9	2078.9	2000.8	2005.5	1922.7	1842.7	1622.7	1381.8
47.5°	2556.9	2452.2	2376.9	2360.7	2160.8	2089.3	2095.0	2009.3	1924.6	1694.1	1425.6
50°	2550.2	2482.6	2460.7	2420.7	2233.1	2172.2	2177.9	2098.9	2007.4	1764.6	1467.5
52.5°	2506.4	2518.8	2507.4	2440.7	2305.5	2252.2	2258.8	2187.4	2092.2	1830.3	1506.5
55°	2574.1	2582.6	2560.7	2473.1	2385.5	2332.2	2339.8	2280.7	2176.0	1888.4	1539.9
57.5°	2655.0	2624.5	2602.6	2530.2	2468.3	2418.8	2427.4	2376.0	2248.4	1935.1	1565.6
60°	2651.2	2587.4	2609.3	2534.1	2524.5	2498.8	2506.4	2454.1	2303.6	1969.3	1576.0
62.5°	2456.0	2421.7	2532.2	2506.4	2570.2	2570.2	2579.8	2501.7	2336.9	1983.6	1570.3
65°	2117.0	2118.9	2313.1	2419.8	2624.5	2668.3	2675.9	2531.2	2317.9	1941.7	1517.0
67.5°	1686.5	1698.9	1977.9	2199.8	2570.2	2735.0	2735.9	2557.9	2236.0	1823.6	1393.2
70°	1234.2	1243.7	1573.2	1842.7	2314.1	2587.4	2572.1	2482.6	2057.9	1617.9	1199.9
72.5°	834.2	842.8	1181.8	1415.1	1898.9	2203.6	2170.3	2194.1	1754.1	1329.4	964.7
75°	560.9	571.4	840.9	1012.3	1397.0	1673.2	1598.9	1661.8	1357.0	1006.6	703.7
77.5°	353.3	360.0	534.2	663.7	954.2	1138.9	1064.7	1065.6	781.8	541.9	378.1
80°	224.7	226.6	323.8	382.8	552.3	684.7	605.7	492.3	352.3	287.6	225.7
82.5°	130.5	127.6	193.3	216.2	262.8	260.0	215.2	203.8	154.3	143.8	115.2
85°	52.4	48.6	84.8	79.0	80.0	84.8	62.9	62.9	50.5	39.0	28.6
87.5°	10.5	10.5	11.4	10.5	10.5	11.4	8.6	8.6	7.6	7.6	7.6
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: P799001

CATALOG NUMBER: ARCH1-50-730-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	1036.1	1034.2	1029.4	1017.1	1010.4	1006.6	1000.9	999.0	998.0	999.0	1001.8
5°	1039.0	1032.3	1019.0	999.0	985.6	977.1	967.5	963.7	960.9	960.9	963.7
7.5°	1040.9	1030.4	1007.5	978.0	959.0	945.6	934.2	929.4	928.5	931.3	932.3
10°	1041.8	1026.6	994.2	957.1	932.3	915.2	903.7	900.9	903.7	909.4	910.4
12.5°	1048.5	1027.5	986.6	942.8	913.3	896.1	887.5	887.5	895.2	905.6	906.6
15°	1059.9	1034.2	982.8	931.3	900.9	885.6	882.8	887.5	899.0	915.2	917.1
17.5°	1068.5	1038.0	974.2	916.1	884.7	875.2	879.9	891.3	907.5	929.4	931.3
20°	1074.2	1038.0	961.8	898.0	868.5	866.6	879.9	898.0	915.2	940.9	943.7
22.5°	1079.9	1036.1	947.5	876.1	850.4	856.1	880.9	903.7	920.9	948.5	953.2
25°	1090.4	1039.0	933.2	854.2	831.4	847.5	879.9	907.5	925.6	954.2	961.8
27.5°	1104.7	1045.6	922.8	834.2	812.3	834.2	873.3	906.6	925.6	953.2	961.8
30°	1119.9	1053.2	910.4	812.3	790.4	815.2	859.0	896.1	918.0	943.7	954.2
32.5°	1136.1	1061.8	899.9	788.5	763.7	789.5	838.0	879.9	903.7	927.5	939.0
35°	1158.0	1077.0	894.2	769.5	739.9	762.8	811.4	859.0	884.7	906.6	919.9
37.5°	1184.7	1096.1	891.3	750.4	714.2	733.3	782.8	833.3	860.9	879.0	891.3
40°	1215.1	1119.9	890.4	732.3	688.5	702.8	753.3	803.7	830.4	844.7	855.2
42.5°	1249.4	1146.6	888.5	714.2	662.8	674.2	724.7	774.2	797.1	809.5	819.0
45°	1285.6	1173.2	884.7	692.3	635.2	648.5	695.2	739.0	762.8	773.3	783.7
47.5°	1321.8	1199.9	877.1	667.6	610.4	622.8	663.7	701.8	720.9	730.4	740.9
50°	1357.0	1223.7	859.0	639.0	584.7	596.1	627.6	653.3	667.6	675.2	685.7
52.5°	1388.4	1239.9	833.3	605.7	559.0	564.7	585.7	607.6	619.0	619.9	629.5
55°	1415.1	1248.5	796.1	571.4	531.4	532.3	543.8	560.9	565.7	561.9	568.5
57.5°	1430.3	1243.7	755.2	536.1	502.8	499.0	507.6	516.1	517.1	507.6	514.2
60°	1434.2	1221.8	701.8	500.9	474.2	463.8	466.6	464.7	462.8	459.0	464.7
62.5°	1415.1	1175.1	642.8	466.6	443.8	427.6	426.6	425.7	428.5	429.5	430.4
65°	1345.6	1087.5	572.3	431.4	411.4	389.5	388.5	400.0	403.8	398.1	400.0
67.5°	1211.3	953.2	495.2	390.4	370.4	351.4	359.0	365.7	372.3	370.4	372.3
70°	1020.9	782.8	424.7	344.7	325.7	315.2	323.8	329.5	330.4	328.5	330.4
72.5°	802.8	611.4	359.0	298.1	280.9	276.2	286.6	291.4	300.0	303.8	304.7
75°	579.9	451.4	294.3	247.6	233.3	233.3	242.8	251.4	259.0	254.3	251.4
77.5°	323.8	269.5	211.4	170.5	173.3	186.6	190.5	200.0	207.6	206.6	204.7
80°	196.2	168.6	142.8	110.5	109.5	120.0	144.7	160.9	164.7	156.2	155.2
82.5°	101.9	88.6	76.2	61.9	68.6	80.0	83.8	100.9	111.4	107.6	112.4
85°	25.7	24.8	27.6	28.6	35.2	39.0	42.9	50.5	33.3	16.2	16.2
87.5°	7.6	7.6	9.5	9.5	12.4	15.2	14.3	14.3	7.6	1.0	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)