

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: P842460

Luminaire Tested: **ARCH4-50-730-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9370 lumens
Efficiency: N/A
Efficacy: 176.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 53.2
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

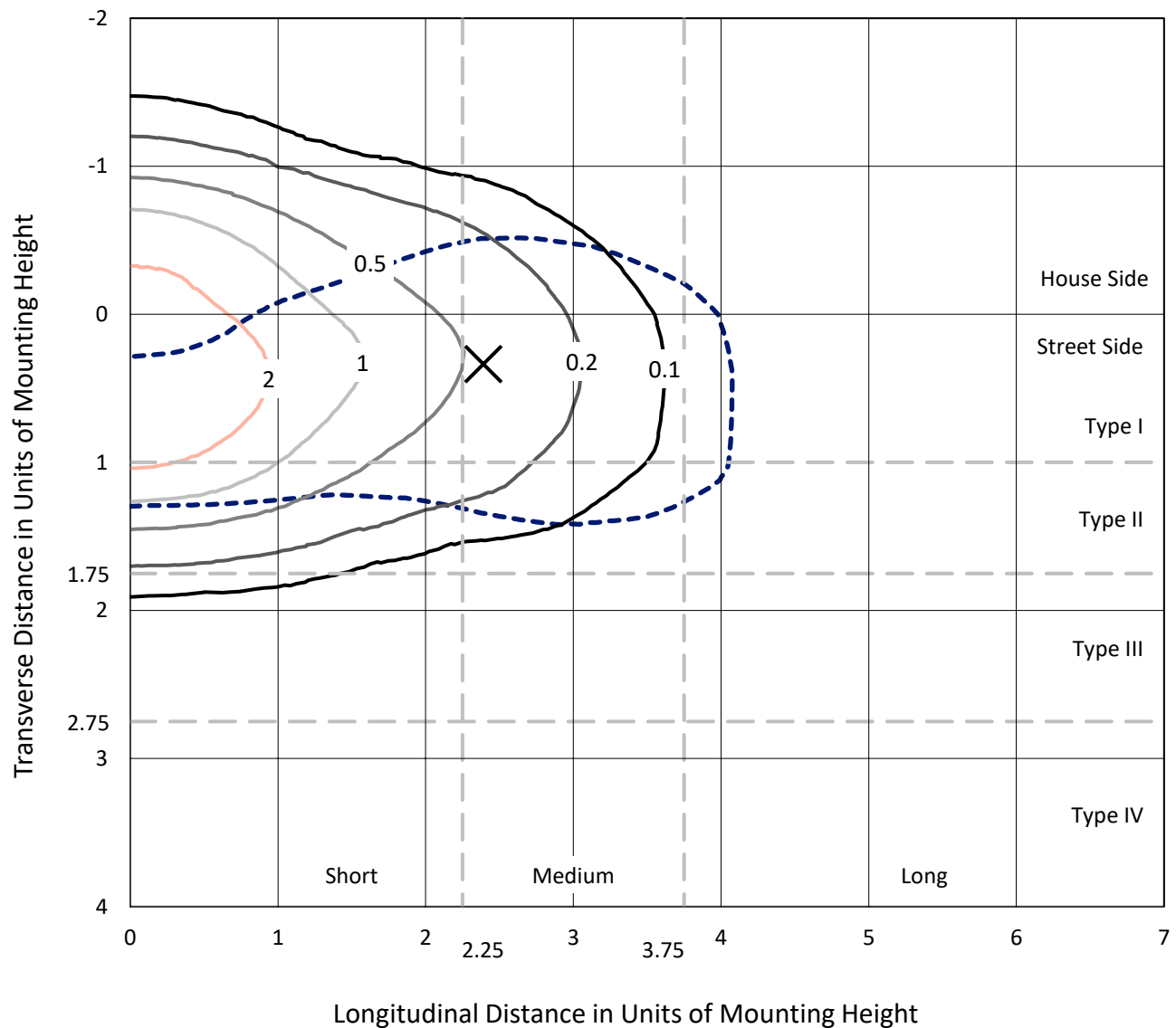


REPORT NUMBER: P842460

CATALOG NUMBER: ARCH4-50-730-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

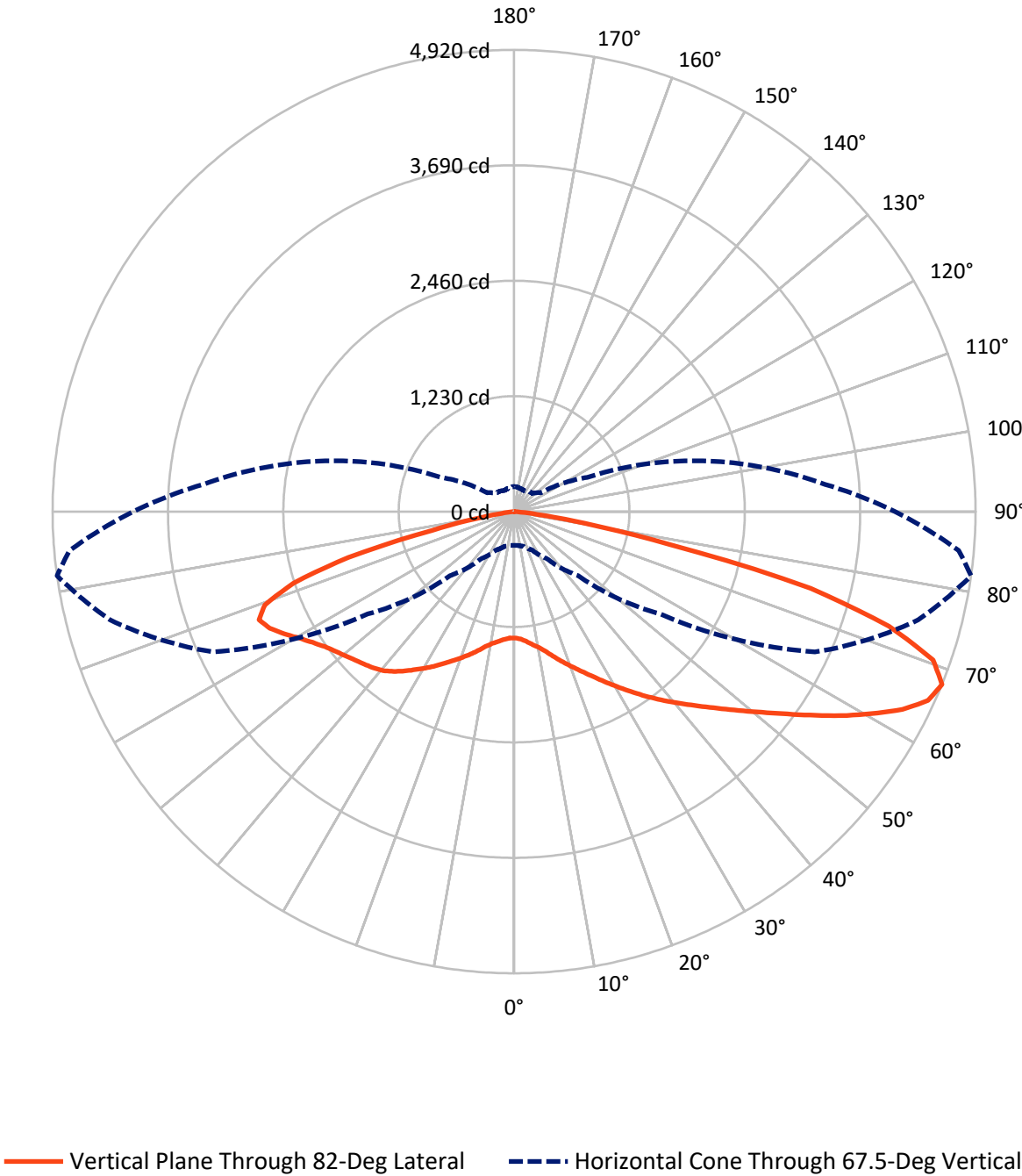
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type II - Medium - N/A

REPORT NUMBER: P842460
CATALOG NUMBER: ARCH4-50-730-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P842460

CATALOG NUMBER: ARCH4-50-730-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2853.5	0.0	2853.5
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	6516.5	0.0	6516.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	9370.0	0.0	9370.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.2	1.5
10°-20°	501.4	5.4
20°-30°	1007.7	10.8
30°-40°	1583.0	16.9
40°-50°	1928.4	20.6
50°-60°	1822.1	19.4
60°-70°	1504.6	16.1
70°-80°	819.3	8.7
80°-90°	64.4	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°	9370.0	100.0
0°-180°	9370.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842460

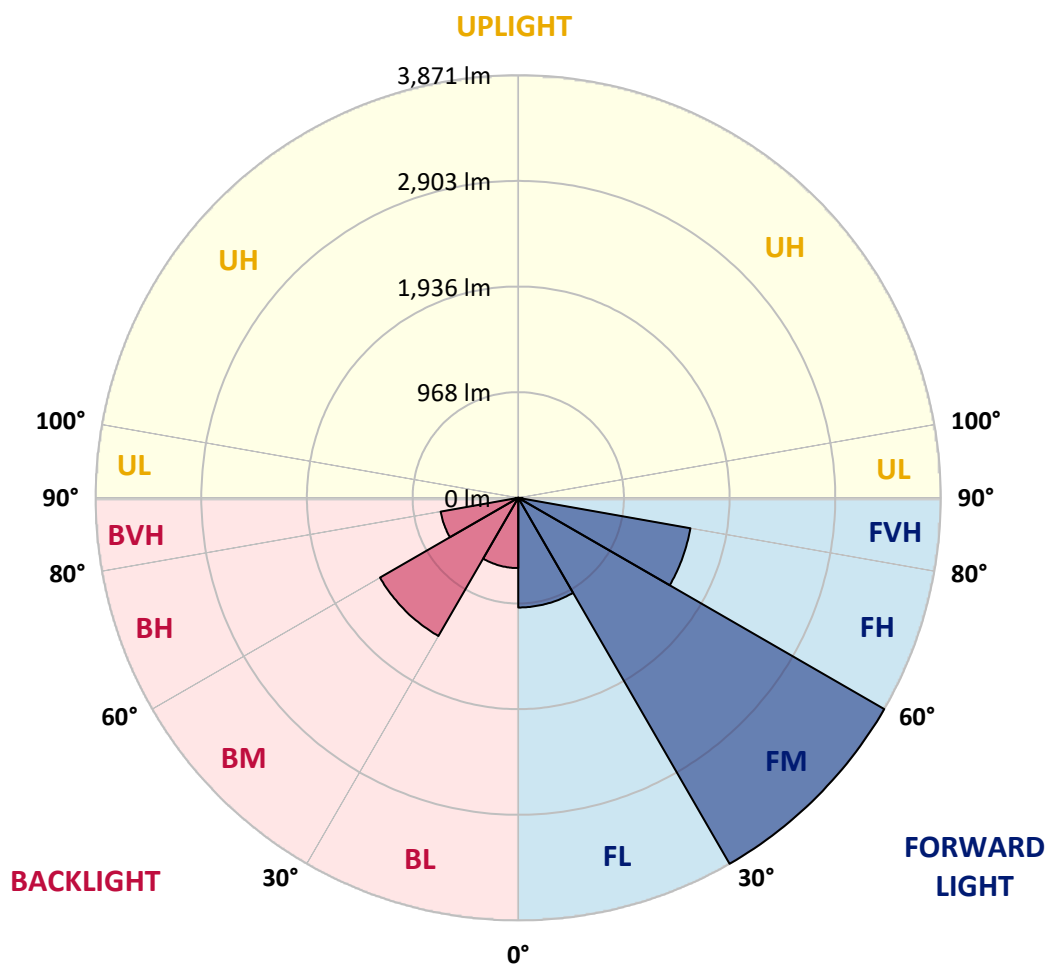
CATALOG NUMBER: ARCH4-50-730-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1004.8	10.7			
FM	(30°-60°)	3871.1	41.3			
FH	(60°-80°)	1601.7	17.1			G1/1800
FVH	(80°-90°)	38.8	0.4			G1/100
BL	(0°-30°)	643.5	6.9	B2/1000		
BM	(30°-60°)	1462.2	15.6	B2/2500		
BH	(60°-80°)	722.2	7.7	B2/1000		G2/1000
BVH	(80°-90°)	25.6	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: P842460

CATALOG NUMBER: ARCH4-50-730-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9
2.5°	1408.2	1408.2	1419.0	1419.0	1409.5	1394.6	1390.5	1374.1	1359.2	1359.2	1360.5
5°	1542.9	1541.5	1549.7	1538.8	1515.6	1485.7	1465.3	1429.9	1400.0	1390.5	1389.1
7.5°	1707.5	1706.1	1710.2	1692.5	1649.0	1600.0	1559.2	1502.0	1453.1	1432.6	1427.2
10°	1891.1	1889.8	1885.7	1855.8	1797.3	1721.1	1659.9	1580.9	1507.5	1474.8	1468.0
12.5°	2102.0	2099.3	2089.8	2046.2	1966.0	1868.0	1779.6	1677.5	1579.6	1534.7	1519.7
15°	2337.4	2333.3	2315.6	2262.6	2155.1	2031.3	1917.0	1786.4	1666.7	1608.2	1587.7
17.5°	2585.0	2585.0	2557.8	2478.9	2359.2	2205.4	2063.9	1898.0	1757.8	1685.7	1661.2
20°	2836.7	2835.4	2801.3	2706.1	2564.6	2387.7	2208.2	2025.8	1851.7	1764.6	1734.7
22.5°	3102.0	3099.3	3057.1	2948.3	2779.6	2579.6	2370.1	2152.4	1955.1	1850.3	1812.2
25°	3406.8	3402.7	3351.0	3217.7	3017.7	2791.8	2552.4	2300.7	2073.5	1945.6	1900.7
27.5°	3730.6	3725.2	3663.9	3508.8	3289.8	3017.7	2753.7	2472.1	2204.1	2051.7	2001.4
30°	4019.0	4014.9	3948.3	3789.1	3537.4	3242.2	2945.6	2643.5	2341.5	2164.6	2102.0
32.5°	4236.7	4236.7	4176.9	4020.4	3759.2	3457.1	3138.8	2805.4	2484.3	2285.7	2212.2
35°	4368.7	4372.8	4321.1	4195.9	3949.6	3659.8	3338.8	2995.9	2636.7	2415.0	2336.0
37.5°	4387.7	4401.3	4371.4	4287.1	4081.6	3828.6	3534.7	3179.6	2794.5	2545.6	2457.1
40°	4299.3	4308.8	4310.2	4277.5	4136.0	3949.6	3707.5	3374.1	2961.9	2683.0	2580.9
42.5°	4122.4	4129.2	4141.5	4151.0	4096.6	4002.7	3839.4	3555.1	3140.1	2823.1	2703.4
45°	3893.9	3892.5	3912.9	3953.7	3951.0	3972.8	3912.9	3719.7	3325.2	2982.3	2839.4
47.5°	3552.4	3545.6	3617.7	3710.2	3756.4	3858.5	3914.3	3849.0	3526.5	3157.8	2994.5
50°	3017.7	3010.9	3168.7	3386.4	3522.4	3677.5	3839.4	3926.5	3737.4	3355.1	3163.3
52.5°	2367.3	2360.5	2560.5	2941.5	3238.1	3463.9	3688.4	3944.2	3937.4	3575.5	3353.7
55°	1760.5	1755.1	1949.7	2361.9	2842.2	3216.3	3503.4	3897.9	4125.2	3828.6	3585.0
57.5°	1240.8	1238.1	1406.8	1748.3	2333.3	2914.3	3325.2	3808.1	4297.9	4103.4	3846.2
60°	870.7	866.7	989.1	1253.1	1764.6	2458.5	3148.3	3688.4	4427.2	4374.1	4123.8
62.5°	586.4	583.7	670.7	891.2	1253.1	1892.5	2880.3	3608.1	4500.7	4646.2	4404.1
65°	444.9	443.5	483.0	604.1	887.1	1359.2	2454.4	3598.6	4510.2	4850.3	4642.2
67.5°	359.2	360.5	382.3	451.7	613.6	966.0	1903.4	3538.8	4459.8	4919.7	4757.8
70°	293.9	293.9	303.4	349.7	453.1	651.7	1329.2	3266.7	4319.7	4738.8	4620.4
72.5°	224.5	225.8	255.8	283.0	341.5	457.1	851.7	2703.4	3989.1	4178.2	4088.4
75°	178.2	176.9	194.6	232.7	265.3	326.5	522.4	1938.8	3394.5	3265.3	3208.1
77.5°	127.9	126.5	140.1	172.8	201.4	231.3	311.6	978.2	1846.3	1696.6	1654.4
80°	87.1	84.4	96.6	119.7	133.3	136.1	152.4	375.5	805.4	759.2	749.7
82.5°	44.9	44.9	51.7	68.0	69.4	70.7	68.0	121.1	266.7	249.0	238.1
85°	17.7	17.7	19.0	23.1	23.1	24.5	24.5	31.3	28.6	27.2	25.9
87.5°	1.4	1.4	2.7	2.7	4.1	4.1	4.1	5.4	6.8	6.8	6.8
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: P842460

CATALOG NUMBER: ARCH4-50-730-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9
2.5°	1357.8	1352.4	1334.7	1330.6	1327.9	1323.8	1325.2	1315.6	1311.6	1312.9	1307.5
5°	1382.3	1372.8	1351.0	1341.5	1338.8	1334.7	1338.8	1332.0	1325.2	1327.9	1325.2
7.5°	1416.3	1402.7	1375.5	1366.0	1364.6	1360.5	1366.0	1360.5	1355.1	1357.8	1352.4
10°	1451.7	1434.0	1404.1	1394.6	1394.6	1393.2	1398.6	1390.5	1385.0	1386.4	1383.7
12.5°	1503.4	1480.3	1447.6	1439.4	1435.4	1439.4	1440.8	1429.9	1420.4	1421.8	1417.7
15°	1566.0	1540.1	1504.8	1492.5	1489.8	1488.4	1483.0	1469.4	1457.1	1455.8	1451.7
17.5°	1634.0	1601.4	1559.2	1546.9	1534.7	1530.6	1517.0	1499.3	1480.3	1480.3	1474.8
20°	1699.3	1662.6	1612.2	1594.6	1576.9	1560.5	1537.4	1508.8	1484.3	1480.3	1474.8
22.5°	1770.1	1726.5	1668.0	1642.2	1610.9	1578.2	1538.8	1500.7	1469.4	1462.6	1458.5
25°	1849.0	1794.5	1725.2	1687.1	1636.7	1586.4	1527.9	1478.9	1442.2	1431.3	1428.6
27.5°	1936.0	1870.7	1786.4	1730.6	1657.1	1578.2	1503.4	1444.9	1400.0	1386.4	1382.3
30°	2024.5	1946.9	1842.2	1760.5	1657.1	1552.4	1458.5	1390.5	1338.8	1319.7	1317.0
32.5°	2112.9	2025.8	1892.5	1776.9	1640.8	1508.8	1400.0	1319.7	1261.2	1238.1	1243.5
35°	2219.0	2112.9	1938.8	1783.7	1613.6	1455.8	1333.3	1239.5	1179.6	1159.2	1163.3
37.5°	2329.2	2200.0	1975.5	1778.2	1575.5	1395.9	1258.5	1167.3	1092.5	1057.1	1061.2
40°	2424.5	2278.9	2001.4	1759.2	1526.5	1327.9	1185.0	1065.3	961.9	927.9	923.8
42.5°	2514.3	2337.4	2015.0	1730.6	1470.7	1249.0	1080.3	926.5	823.1	780.9	782.3
45°	2608.2	2394.5	2009.5	1692.5	1401.4	1156.5	945.6	790.5	699.3	661.2	662.6
47.5°	2715.6	2455.8	2004.1	1651.7	1317.0	1036.7	816.3	670.7	591.8	564.6	561.9
50°	2829.9	2523.8	1997.3	1601.4	1223.1	903.4	688.4	559.2	492.5	474.8	470.7
52.5°	2959.2	2597.3	1993.2	1541.5	1110.2	761.9	574.1	461.2	416.3	404.1	402.7
55°	3114.3	2683.0	1998.6	1469.4	974.1	628.6	477.5	397.3	367.3	360.5	359.2
57.5°	3303.4	2793.2	2015.0	1385.0	831.3	512.9	406.8	357.8	338.8	333.3	333.3
60°	3508.8	2918.4	2044.9	1289.8	688.4	423.1	360.5	326.5	318.4	325.2	325.2
62.5°	3730.6	3065.3	2097.9	1174.1	555.1	357.8	323.8	300.7	295.2	308.8	310.2
65°	3936.0	3208.1	2132.0	1035.4	440.8	310.2	295.2	274.8	277.5	291.2	289.8
67.5°	4062.6	3326.5	2084.3	861.2	349.7	274.8	265.3	247.6	254.4	265.3	266.7
70°	3985.0	3259.8	1849.0	650.3	273.5	239.5	232.7	221.8	227.2	240.8	246.3
72.5°	3605.4	2919.7	1438.1	439.5	220.4	201.4	204.1	198.6	205.4	217.7	229.9
75°	2926.5	2206.8	964.6	281.6	174.1	171.4	175.5	171.4	174.1	186.4	193.2
77.5°	1527.9	1076.2	480.3	175.5	129.3	133.3	140.1	141.5	149.7	152.4	155.1
80°	712.9	484.4	200.0	98.0	85.7	93.9	107.5	108.8	111.6	115.6	117.0
82.5°	232.7	145.6	92.5	53.1	49.0	53.1	69.4	83.0	84.4	92.5	92.5
85°	24.5	15.0	20.4	21.8	19.0	23.1	31.3	29.9	13.6	8.2	8.2
87.5°	6.8	5.4	6.8	6.8	5.4	5.4	4.1	1.4	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)