

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: P842451

Luminaire Tested: **ARCH4-50-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842451
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: ARCH4-50-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

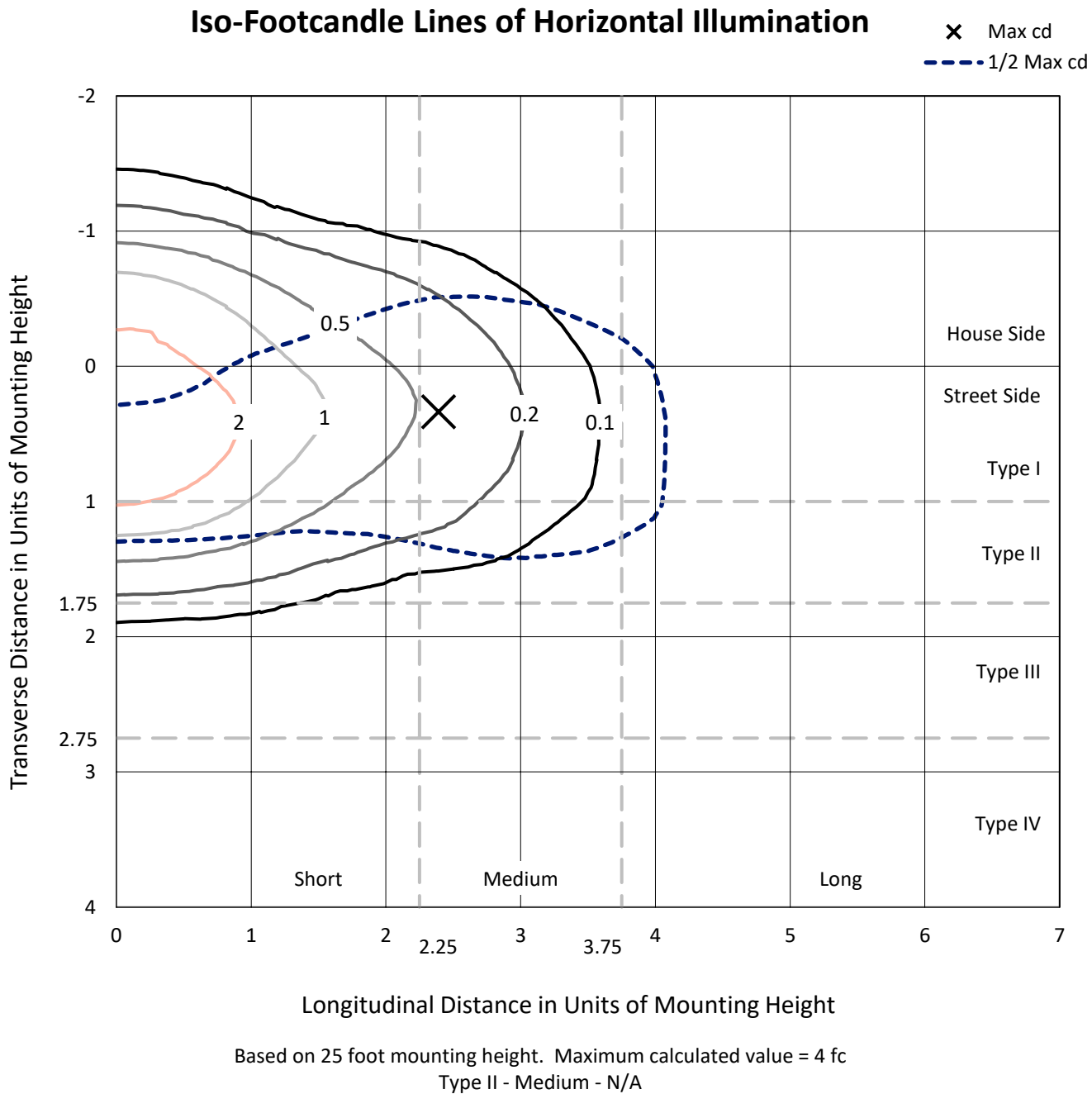
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9042 lumens
Efficiency: N/A
Efficacy: 170.0 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

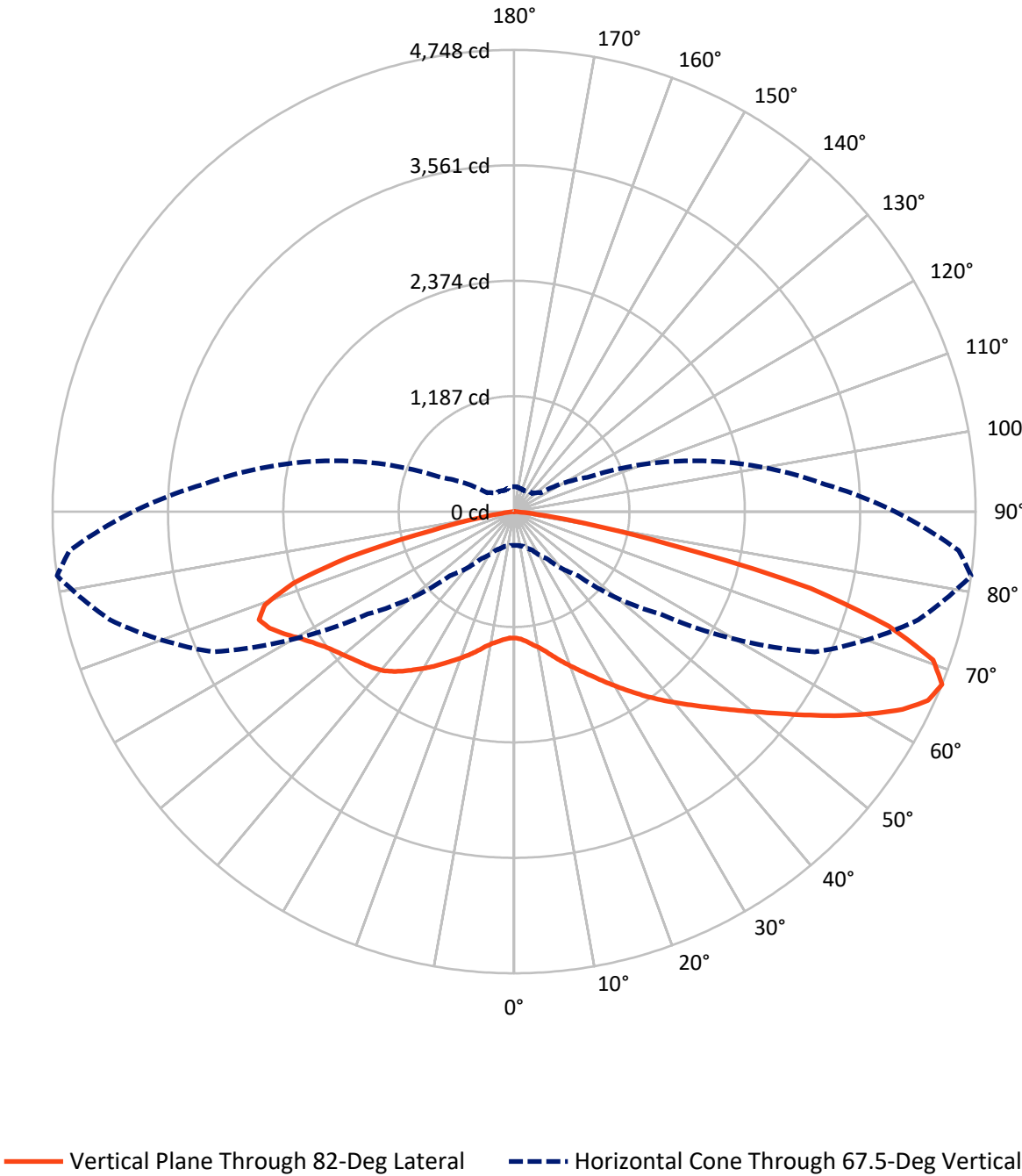


REPORT NUMBER: P842451
CATALOG NUMBER: ARCH4-50-727-U-T2R



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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2753.7	0.0	2753.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	6288.3	0.0	6288.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	9042.0	0.0	9042.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	1.5
10°-20°	483.8	5.4
20°-30°	972.4	10.8
30°-40°	1527.5	16.9
40°-50°	1860.9	20.6
50°-60°	1758.3	19.4
60°-70°	1451.9	16.1
70°-80°	790.6	8.7
80°-90°	62.2	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°	9042.0	100.0
0°-180°	9042.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842451

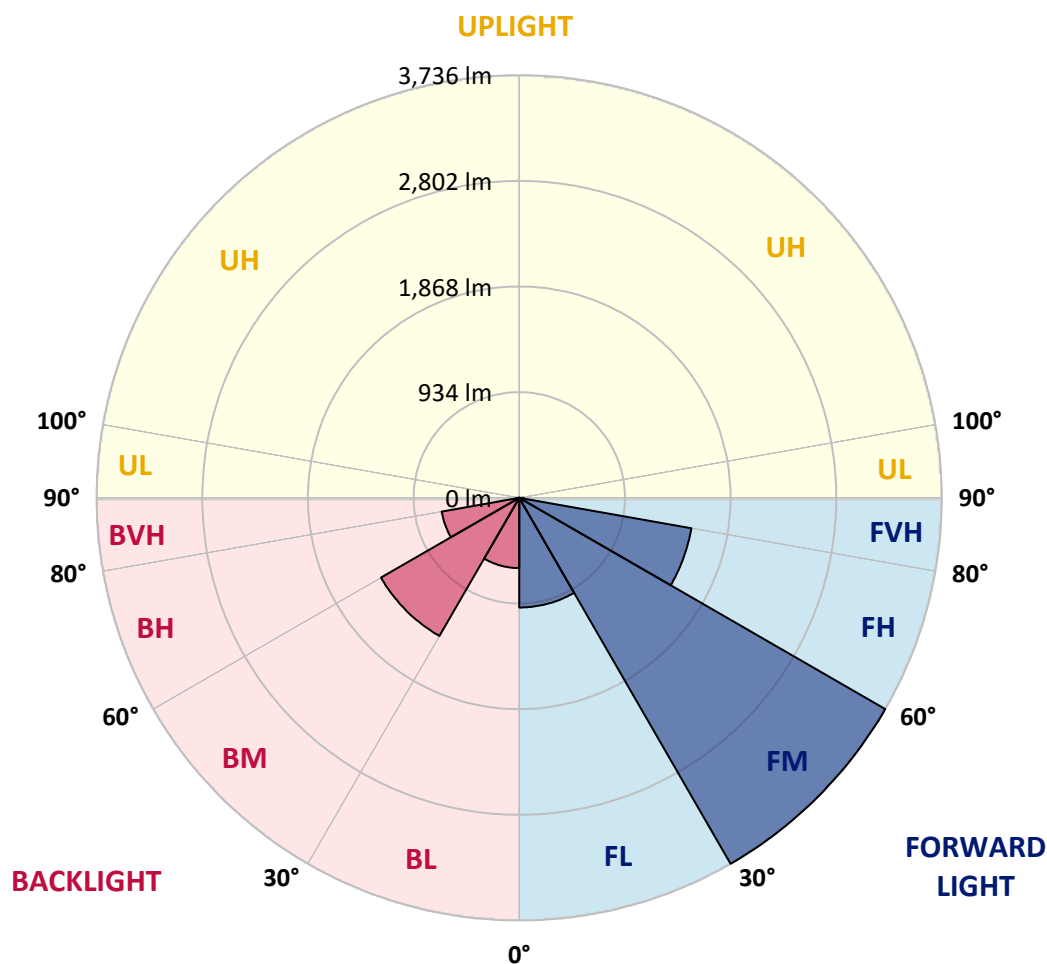
CATALOG NUMBER: ARCH4-50-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	969.6	10.7			
FM	(30°-60°)	3735.6	41.3			
FH	(60°-80°)	1545.6	17.1			G1/1800
FVH	(80°-90°)	37.5	0.4			G1/100
BL	(0°-30°)	621.0	6.9	B2/1000		
BM	(30°-60°)	1411.0	15.6	B2/2500		
BH	(60°-80°)	697.0	7.7	B2/1000		G2/1000
BVH	(80°-90°)	24.7	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: P842451

CATALOG NUMBER: ARCH4-50-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8
2.5°	1358.9	1358.9	1369.4	1369.4	1360.2	1345.7	1341.8	1326.0	1311.6	1311.6	1312.9
5°	1488.8	1487.5	1495.4	1484.9	1462.6	1433.7	1414.0	1379.9	1351.0	1341.8	1340.5
7.5°	1647.7	1646.4	1650.3	1633.3	1591.2	1544.0	1504.6	1449.5	1402.2	1382.5	1377.2
10°	1824.9	1823.6	1819.7	1790.8	1734.4	1660.8	1601.8	1525.6	1454.7	1423.2	1416.6
12.5°	2028.4	2025.8	2016.6	1974.6	1897.2	1802.6	1717.3	1618.8	1524.3	1481.0	1466.5
15°	2255.6	2251.6	2234.6	2183.4	2079.7	1960.2	1849.9	1723.9	1608.3	1551.9	1532.2
17.5°	2494.5	2494.5	2468.3	2392.1	2276.6	2128.2	1991.7	1831.5	1696.3	1626.7	1603.1
20°	2737.4	2736.1	2703.3	2611.4	2474.8	2304.2	2130.9	1954.9	1786.9	1702.8	1674.0
22.5°	2993.4	2990.8	2950.1	2845.1	2682.3	2489.3	2287.1	2077.0	1886.7	1785.6	1748.8
25°	3287.5	3283.6	3233.7	3105.0	2912.0	2694.1	2463.0	2220.1	2000.9	1877.5	1834.1
27.5°	3600.0	3594.8	3535.7	3386.0	3174.6	2912.0	2657.3	2385.6	2126.9	1979.9	1931.3
30°	3878.3	3874.4	3810.1	3656.5	3413.6	3128.7	2842.5	2551.0	2259.5	2088.8	2028.4
32.5°	4088.4	4088.4	4030.6	3879.7	3627.6	3336.1	3028.9	2707.2	2397.4	2205.7	2134.8
35°	4215.8	4219.7	4169.8	4049.0	3811.4	3531.7	3221.9	2891.0	2544.4	2330.4	2254.3
37.5°	4234.1	4247.3	4218.4	4137.0	3938.7	3694.5	3410.9	3068.3	2696.7	2456.5	2371.1
40°	4148.8	4158.0	4159.3	4127.8	3991.3	3811.4	3577.7	3256.0	2858.2	2589.1	2490.6
42.5°	3978.1	3984.7	3996.5	4005.7	3953.2	3862.6	3705.0	3430.6	3030.2	2724.3	2608.8
45°	3757.6	3756.2	3775.9	3815.3	3812.7	3833.7	3775.9	3589.5	3208.8	2877.9	2740.0
47.5°	3428.0	3421.4	3491.0	3580.3	3624.9	3723.4	3777.2	3714.2	3403.1	3047.3	2889.7
50°	2912.0	2905.5	3057.8	3267.8	3399.1	3548.8	3705.0	3789.1	3606.6	3237.6	3052.5
52.5°	2284.5	2277.9	2470.9	2838.5	3124.7	3342.7	3559.3	3806.1	3799.6	3450.3	3236.3
55°	1698.9	1693.7	1881.4	2279.2	2742.7	3103.7	3380.7	3761.5	3980.7	3694.5	3459.5
57.5°	1197.4	1194.7	1357.6	1687.1	2251.6	2812.3	3208.8	3674.8	4147.5	3959.7	3711.6
60°	840.3	836.3	954.5	1209.2	1702.8	2372.4	3038.1	3559.3	4272.2	4221.0	3979.4
62.5°	565.9	563.2	647.3	860.0	1209.2	1826.3	2779.4	3481.8	4343.1	4483.6	4249.9
65°	429.3	428.0	466.1	582.9	856.0	1311.6	2368.5	3472.7	4352.3	4680.5	4479.7
67.5°	346.6	347.9	368.9	435.9	592.1	932.2	1836.8	3414.9	4303.7	4747.5	4591.3
70°	283.6	283.6	292.8	337.4	437.2	628.9	1282.7	3152.3	4168.5	4572.9	4458.6
72.5°	216.6	217.9	246.8	273.1	329.5	441.1	821.9	2608.8	3849.5	4032.0	3945.3
75°	172.0	170.7	187.7	224.5	256.0	315.1	504.2	1870.9	3275.7	3151.0	3095.8
77.5°	123.4	122.1	135.2	166.7	194.3	223.2	300.7	944.0	1781.6	1637.2	1596.5
80°	84.0	81.4	93.2	115.5	128.7	131.3	147.0	362.4	777.2	732.6	723.4
82.5°	43.3	43.3	49.9	65.6	67.0	68.3	65.6	116.8	257.3	240.3	229.8
85°	17.1	17.1	18.4	22.3	22.3	23.6	23.6	30.2	27.6	26.3	24.9
87.5°	1.3	1.3	2.6	2.6	3.9	3.9	3.9	5.3	6.6	6.6	6.6
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: P842451

CATALOG NUMBER: ARCH4-50-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8	1299.8
2.5°	1310.3	1305.0	1288.0	1284.0	1281.4	1277.5	1278.8	1269.6	1265.6	1267.0	1261.7
5°	1333.9	1324.7	1303.7	1294.5	1291.9	1288.0	1291.9	1285.3	1278.8	1281.4	1278.8
7.5°	1366.7	1353.6	1327.4	1318.2	1316.9	1312.9	1318.2	1312.9	1307.7	1310.3	1305.0
10°	1400.9	1383.8	1354.9	1345.7	1345.7	1344.4	1349.7	1341.8	1336.5	1337.9	1335.2
12.5°	1450.8	1428.4	1396.9	1389.1	1385.1	1389.1	1390.4	1379.9	1370.7	1372.0	1368.1
15°	1511.2	1486.2	1452.1	1440.3	1437.6	1436.3	1431.1	1417.9	1406.1	1404.8	1400.9
17.5°	1576.8	1545.3	1504.6	1492.8	1481.0	1477.0	1463.9	1446.8	1428.4	1428.4	1423.2
20°	1639.8	1604.4	1555.8	1538.7	1521.7	1505.9	1483.6	1456.0	1432.4	1428.4	1423.2
22.5°	1708.1	1666.1	1609.6	1584.7	1554.5	1523.0	1484.9	1448.1	1417.9	1411.4	1407.4
25°	1784.2	1731.7	1664.8	1628.0	1579.4	1530.9	1474.4	1427.1	1391.7	1381.2	1378.6
27.5°	1868.3	1805.3	1723.9	1670.0	1599.1	1523.0	1450.8	1394.3	1351.0	1337.9	1333.9
30°	1953.6	1878.8	1777.7	1698.9	1599.1	1498.0	1407.4	1341.8	1291.9	1273.5	1270.9
32.5°	2039.0	1954.9	1826.3	1714.7	1583.4	1456.0	1351.0	1273.5	1217.1	1194.7	1200.0
35°	2141.4	2039.0	1870.9	1721.2	1557.1	1404.8	1286.7	1196.1	1138.3	1118.6	1122.5
37.5°	2247.7	2123.0	1906.3	1716.0	1520.4	1347.0	1214.4	1126.5	1054.3	1020.1	1024.1
40°	2339.6	2199.1	1931.3	1697.6	1473.1	1281.4	1143.5	1028.0	928.2	895.4	891.5
42.5°	2426.3	2255.6	1944.4	1670.0	1419.3	1205.3	1042.5	894.1	794.3	753.6	754.9
45°	2516.9	2310.7	1939.2	1633.3	1352.3	1116.0	912.5	762.8	674.8	638.1	639.4
47.5°	2620.6	2369.8	1933.9	1593.9	1270.9	1000.4	787.7	647.3	571.1	544.9	542.2
50°	2730.9	2435.5	1927.4	1545.3	1180.3	871.8	664.3	539.6	475.3	458.2	454.3
52.5°	2855.6	2506.3	1923.4	1487.5	1071.3	735.2	554.0	445.1	401.8	389.9	388.6
55°	3005.3	2589.1	1928.7	1417.9	940.0	606.6	460.8	383.4	354.5	347.9	346.6
57.5°	3187.8	2695.4	1944.4	1336.5	802.2	495.0	392.6	345.3	326.9	321.7	321.7
60°	3386.0	2816.2	1973.3	1244.6	664.3	408.3	347.9	315.1	307.2	313.8	313.8
62.5°	3600.0	2958.0	2024.5	1133.0	535.7	345.3	312.5	290.2	284.9	298.0	299.3
65°	3798.3	3095.8	2057.3	999.1	425.4	299.3	284.9	265.2	267.8	281.0	279.7
67.5°	3920.4	3210.1	2011.4	831.1	337.4	265.2	256.0	238.9	245.5	256.0	257.3
70°	3845.5	3145.7	1784.2	627.6	263.9	231.1	224.5	214.0	219.3	232.4	237.6
72.5°	3479.2	2817.5	1387.7	424.1	212.7	194.3	196.9	191.7	198.2	210.1	221.9
75°	2824.1	2129.5	930.9	271.8	168.1	165.4	169.4	165.4	168.1	179.9	186.4
77.5°	1474.4	1038.5	463.5	169.4	124.7	128.7	135.2	136.5	144.4	147.0	149.7
80°	688.0	467.4	193.0	94.5	82.7	90.6	103.7	105.0	107.7	111.6	112.9
82.5°	224.5	140.5	89.3	51.2	47.3	51.2	67.0	80.1	81.4	89.3	89.3
85°	23.6	14.4	19.7	21.0	18.4	22.3	30.2	28.9	13.1	7.9	7.9
87.5°	6.6	5.3	6.6	6.6	5.3	5.3	3.9	1.3	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)