

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: P842453

Luminaire Tested: **ARCH4-50-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

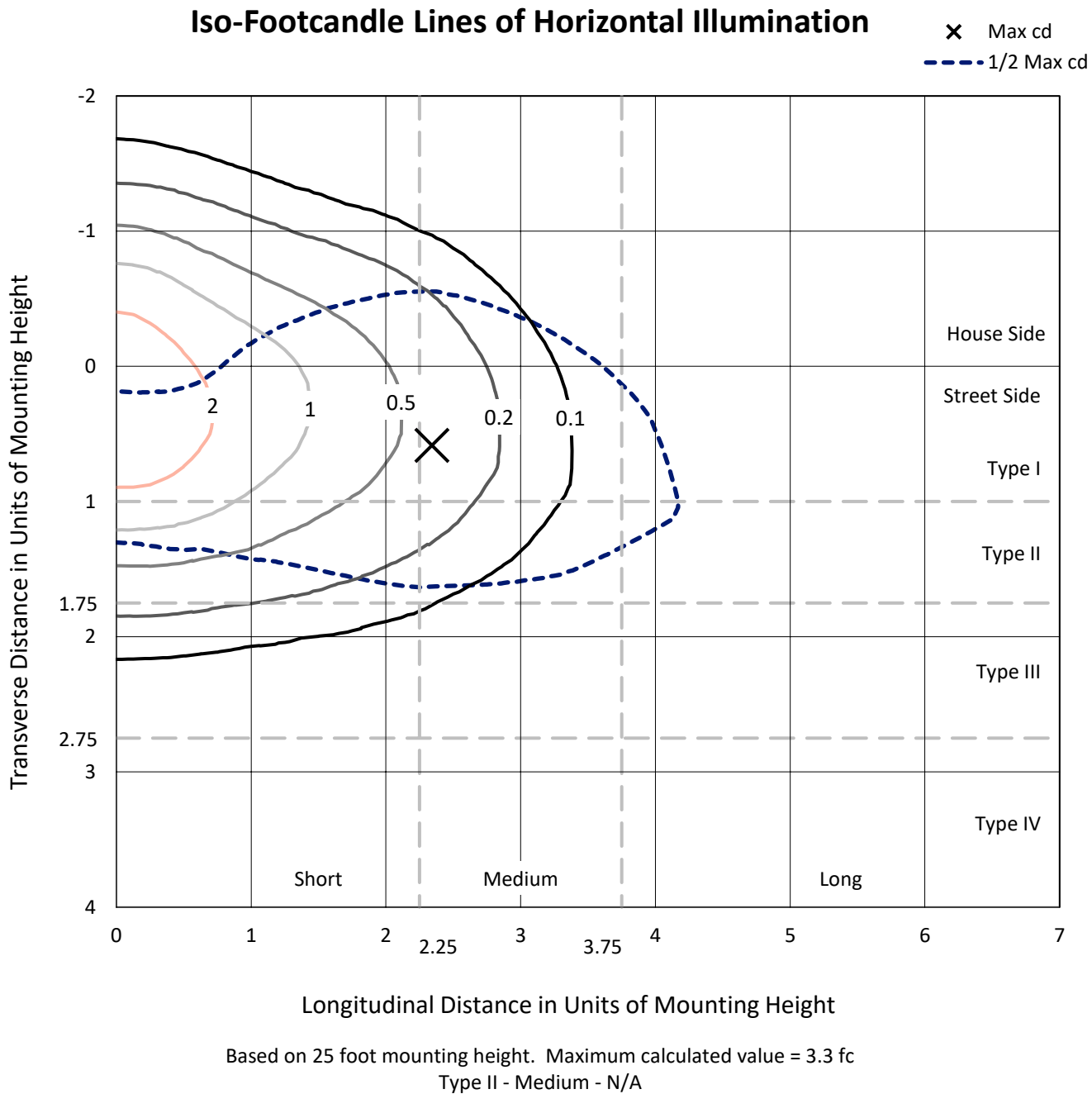
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9045 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

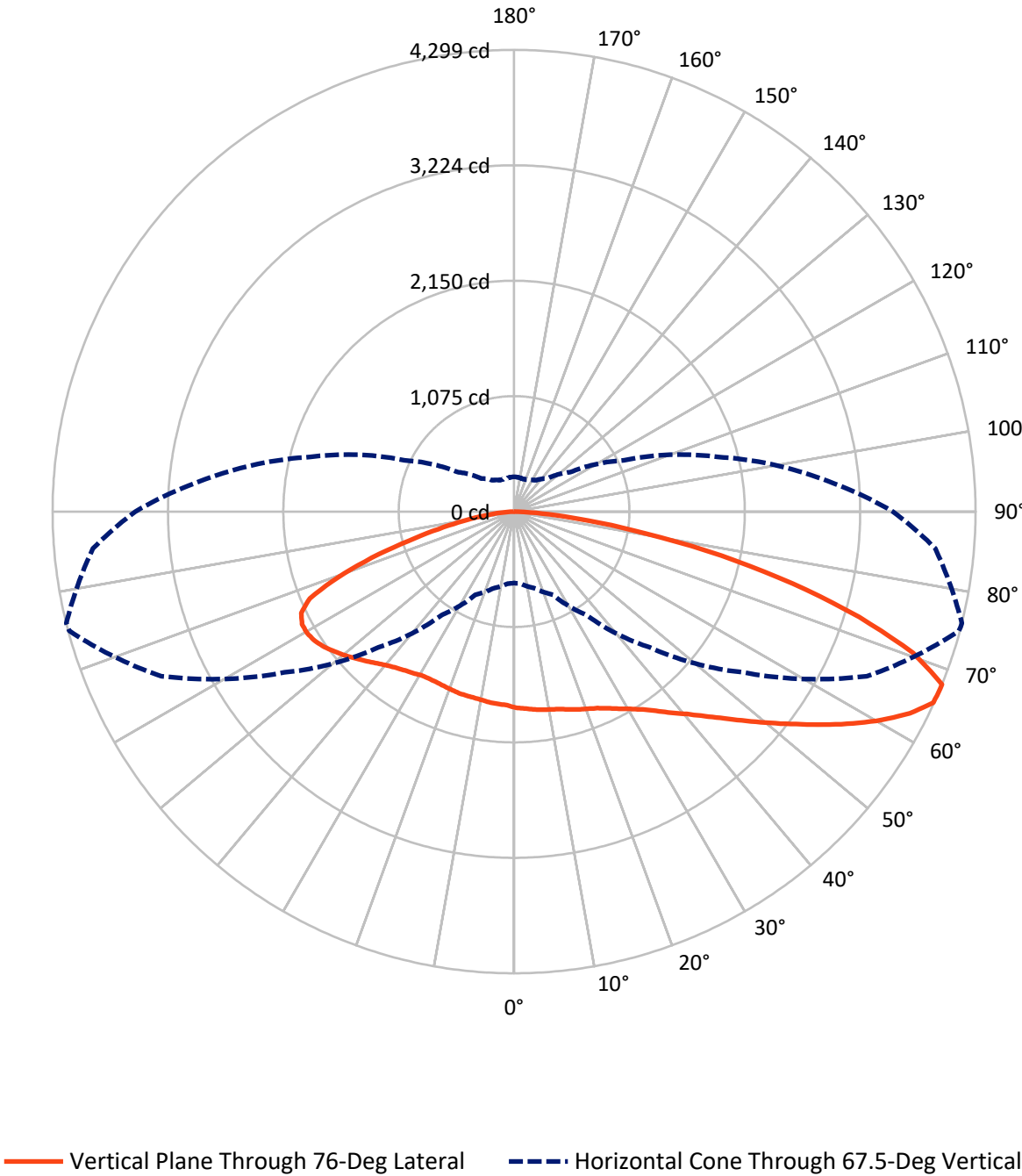


REPORT NUMBER: P842453
CATALOG NUMBER: ARCH4-50-727-U-T2U



REPORT NUMBER: P842453
CATALOG NUMBER: ARCH4-50-727-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P842453

CATALOG NUMBER: ARCH4-50-727-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3056.4	0.0	3056.4
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	5988.6	0.0	5988.6
	% Fixture	66.2	0.0	66.2
Total	Lumens	9045.0	0.0	9045.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.2	1.9
10°-20°	538.6	6.0
20°-30°	915.1	10.1
30°-40°	1302.1	14.4
40°-50°	1644.5	18.2
50°-60°	1780.5	19.7
60°-70°	1656.0	18.3
70°-80°	889.4	9.8
80°-90°	142.5	1.6
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°	9045.0	100.0
0°-180°	9045.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842453

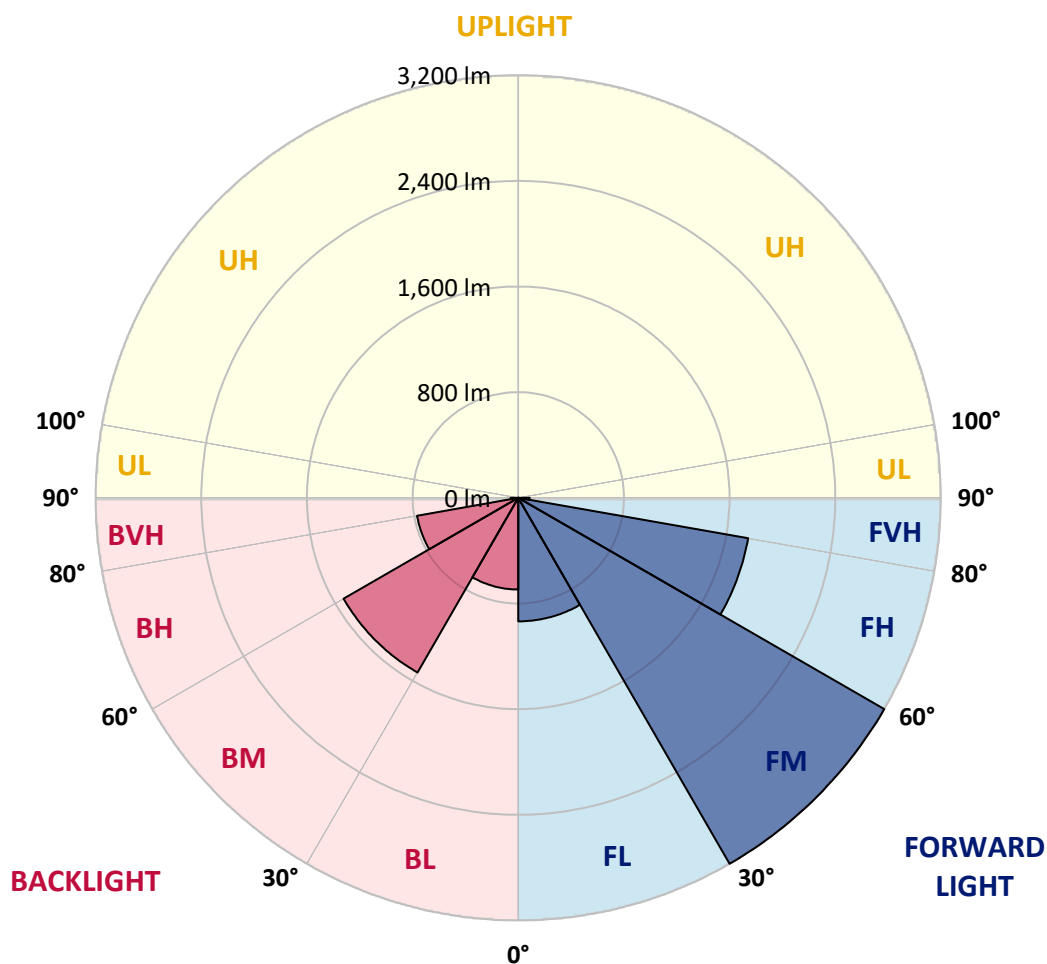
CATALOG NUMBER: ARCH4-50-727-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	935.4	10.3			
FM	(30°-60°)	3199.8	35.4			
FH	(60°-80°)	1767.3	19.5			G1/1800
FVH	(80°-90°)	86.2	1.0			G1/100
BL	(0°-30°)	694.6	7.7	B2/1000		
BM	(30°-60°)	1527.3	16.9	B2/2500		
BH	(60°-80°)	778.2	8.6	B2/1000		G2/1000
BVH	(80°-90°)	56.3	0.6			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: P842453

CATALOG NUMBER: ARCH4-50-727-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1
2.5°	1882.5	1879.1	1865.7	1867.4	1867.4	1865.7	1845.5	1837.1	1837.1	1835.5	1817.0
5°	1949.7	1944.6	1929.5	1926.1	1919.4	1911.0	1879.1	1860.7	1852.3	1850.6	1825.4
7.5°	2028.6	2021.9	2003.4	1993.3	1976.5	1954.7	1914.4	1885.8	1865.7	1864.0	1828.7
10°	2107.5	2100.8	2079.0	2060.5	2037.0	2001.7	1949.7	1907.7	1875.8	1872.4	1830.4
12.5°	2201.6	2194.8	2168.0	2144.5	2109.2	2062.2	1993.3	1936.2	1892.6	1887.5	1835.5
15°	2300.6	2290.6	2263.7	2236.8	2193.2	2132.7	2050.4	1974.8	1919.4	1911.0	1850.6
17.5°	2382.9	2369.5	2347.7	2320.8	2272.1	2201.6	2107.5	2013.5	1944.6	1937.9	1865.7
20°	2453.4	2443.4	2419.9	2394.7	2342.6	2265.4	2161.2	2052.1	1968.1	1959.7	1877.4
22.5°	2520.6	2507.2	2493.7	2475.3	2418.2	2332.5	2223.4	2099.1	1998.4	1988.3	1892.6
25°	2597.9	2582.8	2577.7	2567.6	2500.5	2413.1	2299.0	2157.9	2040.3	2028.6	1919.4
27.5°	2693.6	2676.8	2666.7	2666.7	2586.1	2495.4	2379.6	2226.7	2089.0	2079.0	1953.0
30°	2794.3	2774.2	2759.1	2759.1	2668.4	2577.7	2458.5	2295.6	2144.5	2132.7	1996.7
32.5°	2883.3	2863.2	2846.4	2844.7	2750.7	2660.0	2540.8	2371.2	2211.6	2196.5	2050.4
35°	2952.2	2933.7	2918.6	2922.0	2833.0	2744.0	2633.1	2471.9	2295.6	2278.8	2120.9
37.5°	2994.2	2987.5	2979.1	2990.8	2908.5	2824.6	2728.8	2569.3	2391.3	2376.2	2208.3
40°	3016.0	3011.0	3044.6	3059.7	2972.3	2896.8	2824.6	2670.1	2495.4	2478.6	2309.0
42.5°	3047.9	3089.9	3103.3	3100.0	3019.4	2952.2	2911.9	2779.2	2618.0	2602.9	2429.9
45°	2933.7	2923.6	2997.5	3037.8	3022.7	2987.5	2994.2	2910.2	2760.8	2745.6	2569.3
47.5°	2780.9	2767.5	2809.5	2908.5	2967.3	3000.9	3068.1	3046.2	2925.3	2911.9	2732.2
50°	2458.5	2477.0	2633.1	2765.8	2881.7	2997.5	3130.2	3192.3	3106.7	3093.3	2906.9
52.5°	2100.8	2119.3	2282.2	2587.8	2777.5	2972.3	3175.5	3338.4	3303.2	3288.1	3093.3
55°	1840.5	1880.8	2065.5	2287.2	2629.8	2893.4	3202.4	3487.9	3514.8	3501.3	3296.5
57.5°	1581.9	1612.1	1751.5	1948.0	2428.3	2755.7	3200.7	3627.3	3736.4	3723.0	3503.0
60°	1277.9	1316.6	1427.4	1639.0	2159.6	2591.1	3153.7	3736.4	3949.7	3939.6	3702.8
62.5°	1069.7	1081.5	1160.4	1343.4	1813.6	2382.9	3047.9	3795.2	4142.8	4136.1	3882.5
65°	861.5	863.2	935.4	1088.2	1479.5	2124.3	2868.2	3773.4	4288.9	4292.3	4011.8
67.5°	665.0	673.4	738.9	854.8	1175.5	1788.4	2611.3	3625.6	4290.6	4299.0	3937.9
70°	460.1	466.8	565.9	678.4	908.5	1425.7	2263.7	3234.3	3937.9	3944.7	3529.9
72.5°	324.1	327.5	433.3	542.4	710.3	1074.7	1707.8	2675.1	3356.9	3361.9	2969.0
75°	241.8	245.2	305.6	411.4	544.1	743.9	1167.1	2048.7	2681.8	2681.8	2344.3
77.5°	171.3	173.0	198.2	283.8	362.7	502.1	701.9	1341.8	1968.1	1971.5	1707.8
80°	115.9	117.6	129.3	191.4	226.7	272.0	381.2	703.6	1241.0	1246.0	1084.8
82.5°	60.5	63.8	72.2	97.4	114.2	151.1	196.5	357.7	686.8	700.3	651.6
85°	23.5	23.5	26.9	31.9	42.0	58.8	90.7	136.0	310.7	320.7	287.2
87.5°	8.4	8.4	10.1	10.1	11.8	13.4	15.1	20.2	35.3	35.3	33.6
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: P842453

CATALOG NUMBER: ARCH4-50-727-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1
2.5°	1810.3	1810.3	1801.9	1805.2	1803.6	1800.2	1796.8	1801.9	1796.8	1785.1	1783.4
5°	1813.6	1810.3	1796.8	1795.2	1790.1	1783.4	1775.0	1778.4	1770.0	1759.9	1758.2
7.5°	1815.3	1808.6	1790.1	1783.4	1773.3	1759.9	1746.5	1746.5	1734.7	1724.6	1723.0
10°	1812.0	1803.6	1778.4	1764.9	1746.5	1726.3	1707.8	1702.8	1689.4	1677.6	1677.6
12.5°	1813.6	1801.9	1770.0	1748.1	1723.0	1697.8	1674.3	1667.5	1655.8	1644.0	1642.3
15°	1823.7	1806.9	1766.6	1738.1	1701.1	1672.6	1647.4	1642.3	1632.3	1623.9	1623.9
17.5°	1833.8	1812.0	1761.6	1721.3	1675.9	1644.0	1620.5	1620.5	1613.8	1608.8	1608.8
20°	1838.8	1813.6	1751.5	1697.8	1645.7	1612.1	1590.3	1593.6	1592.0	1590.3	1590.3
22.5°	1850.6	1817.0	1743.1	1675.9	1613.8	1578.5	1558.4	1563.4	1561.7	1561.7	1563.4
25°	1869.1	1825.4	1736.4	1655.8	1583.6	1544.9	1523.1	1526.5	1526.5	1526.5	1526.5
27.5°	1894.2	1842.2	1734.7	1637.3	1553.3	1509.7	1482.8	1482.8	1476.1	1477.8	1479.5
30°	1932.9	1874.1	1738.1	1620.5	1521.4	1466.0	1434.1	1429.1	1427.4	1430.8	1432.4
32.5°	1979.9	1917.8	1758.2	1608.8	1487.9	1417.3	1377.0	1375.3	1370.3	1370.3	1370.3
35°	2038.7	1959.7	1776.7	1607.1	1454.3	1365.3	1321.6	1316.6	1304.8	1299.8	1299.8
37.5°	2114.2	2025.2	1798.5	1595.3	1425.7	1314.9	1262.8	1246.0	1232.6	1230.9	1230.9
40°	2206.6	2099.1	1830.4	1581.9	1395.5	1262.8	1194.0	1165.4	1167.1	1173.8	1173.8
42.5°	2315.7	2189.8	1870.7	1575.2	1351.8	1209.1	1113.4	1079.8	1091.5	1098.3	1099.9
45°	2443.4	2297.3	1916.1	1566.8	1311.5	1148.6	1027.7	985.7	990.8	992.5	994.1
47.5°	2591.1	2416.5	1963.1	1560.1	1266.2	1073.1	933.7	878.3	876.6	866.5	869.9
50°	2745.6	2542.4	2011.8	1548.3	1210.8	984.1	834.6	769.1	755.7	740.6	742.2
52.5°	2910.2	2671.8	2057.1	1529.8	1141.9	893.4	740.6	670.0	643.2	626.4	629.7
55°	3091.6	2804.4	2100.8	1501.3	1069.7	802.7	656.6	584.4	550.8	537.4	539.1
57.5°	3257.8	2932.0	2132.7	1466.0	990.8	720.4	582.7	512.2	490.4	488.7	490.4
60°	3419.0	3039.5	2146.1	1417.3	910.2	644.8	513.9	460.1	445.0	453.4	455.1
62.5°	3555.1	3108.4	2139.4	1351.8	827.9	572.6	458.4	419.8	409.7	426.5	428.2
65°	3634.0	3130.2	2092.4	1257.8	738.9	502.1	406.4	364.4	359.4	369.4	374.5
67.5°	3529.9	2994.2	1964.8	1128.5	639.8	436.6	356.0	322.4	314.0	322.4	322.4
70°	3128.5	2594.5	1662.5	923.6	530.7	372.8	309.0	285.5	278.8	285.5	283.8
72.5°	2606.3	2157.9	1309.8	720.4	418.1	314.0	268.7	246.9	240.1	233.4	230.1
75°	2021.9	1639.0	950.5	529.0	315.7	251.9	225.0	204.9	188.1	194.8	191.4
77.5°	1481.1	1150.3	673.4	366.1	226.7	194.8	176.3	161.2	149.5	162.9	161.2
80°	953.8	743.9	450.1	245.2	156.2	136.0	129.3	120.9	132.7	173.0	176.3
82.5°	582.7	471.9	268.7	159.5	102.4	90.7	84.0	84.0	136.0	149.5	151.1
85°	260.3	250.2	146.1	82.3	57.1	52.1	47.0	60.5	55.4	40.3	42.0
87.5°	42.0	43.7	31.9	28.5	21.8	21.8	16.8	11.8	8.4	5.0	5.0
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)