

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: P800307

Luminaire Tested: **ARCH2-90-740-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-740-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12524 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.7
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



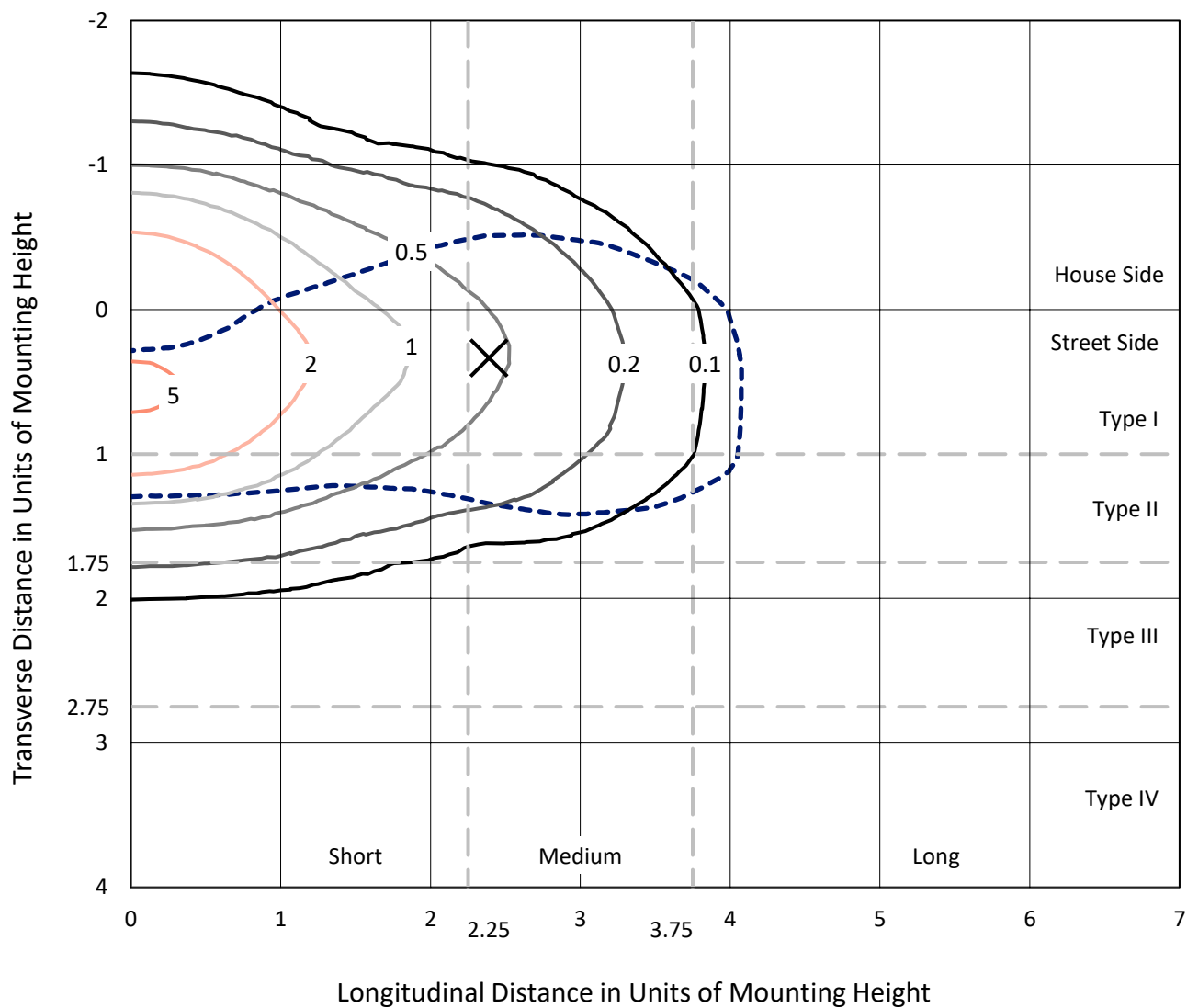
REPORT NUMBER: P800307

CATALOG NUMBER: ARCH2-90-740-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

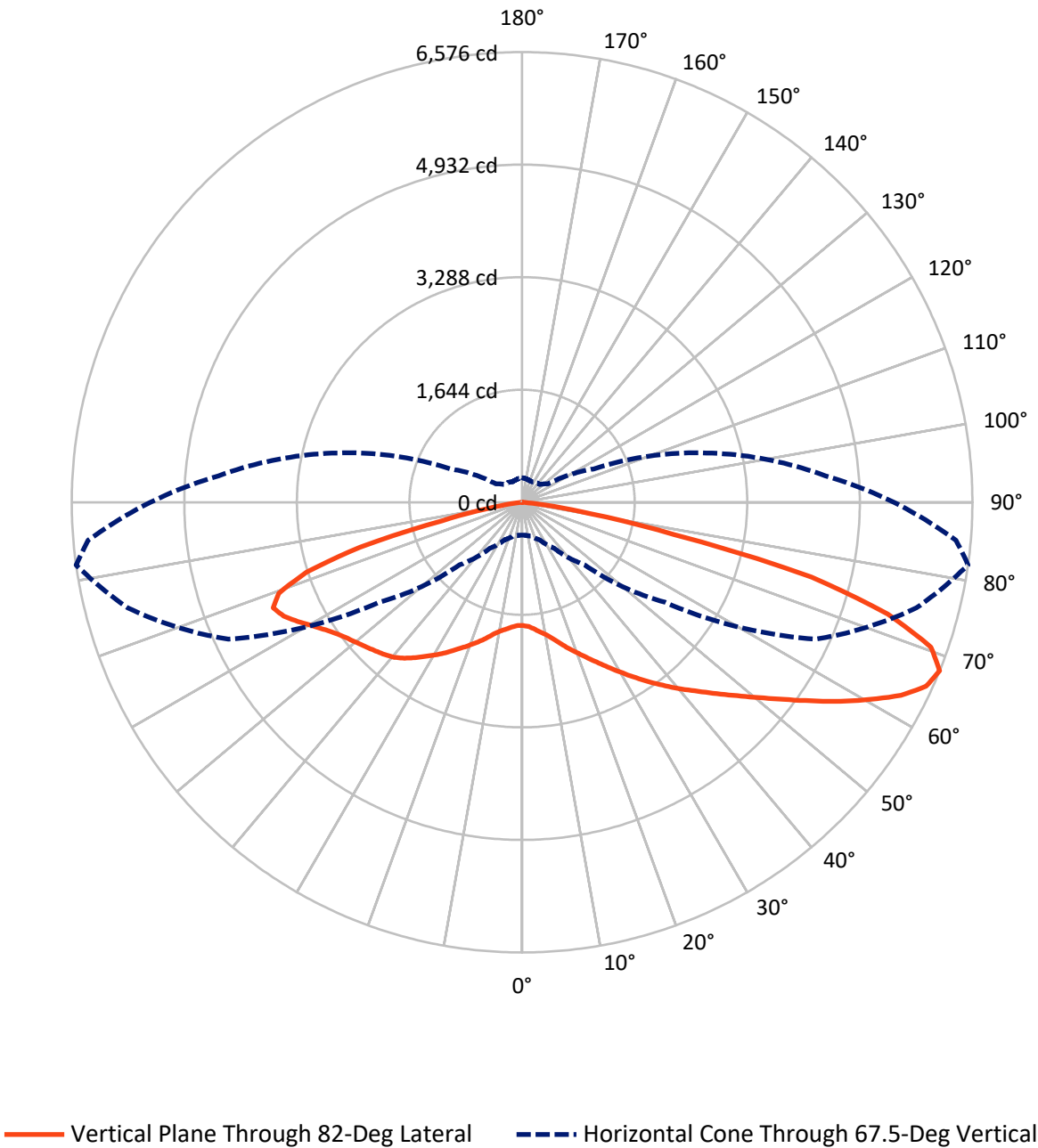
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type II - Medium - N/A

REPORT NUMBER: P800307
CATALOG NUMBER: ARCH2-90-740-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P800307

CATALOG NUMBER: ARCH2-90-740-U-T2R

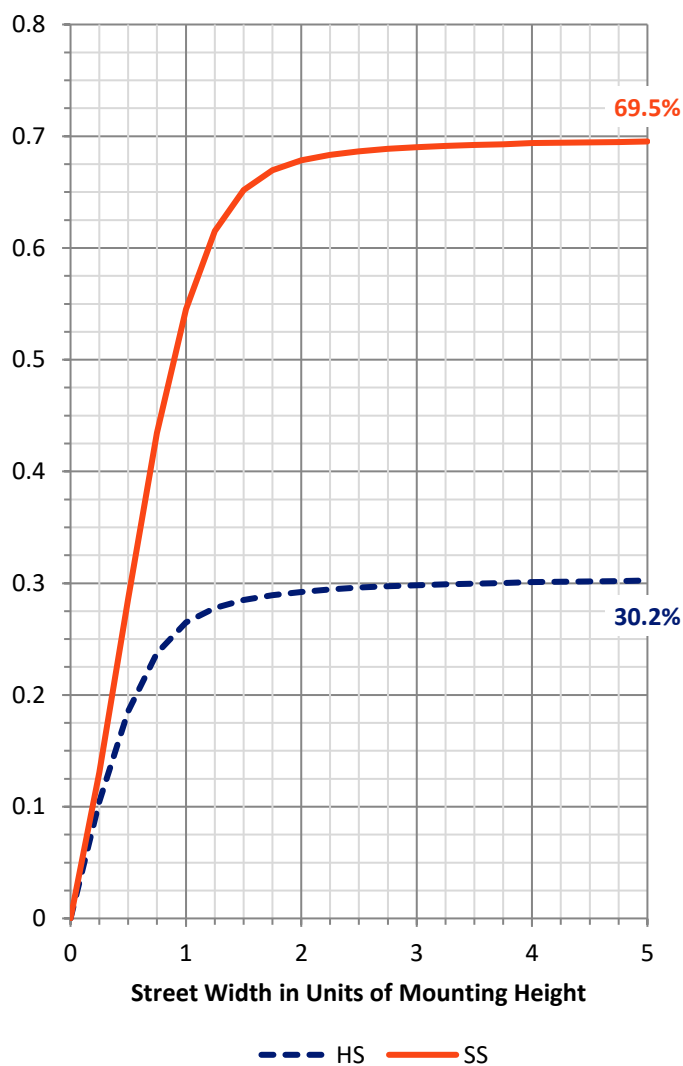
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3814.1	0.0	3814.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	8709.9	0.0	8709.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	12524.0	0.0	12524.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	1.5
10°-20°	670.2	5.4
20°-30°	1346.9	10.8
30°-40°	2115.8	16.9
40°-50°	2577.4	20.6
50°-60°	2435.4	19.4
60°-70°	2011.0	16.1
70°-80°	1095.1	8.7
80°-90°	86.1	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°	12524.0	100.0
0°-180°	12524.0	100.0

Coefficient of Utilization



REPORT NUMBER: P800307

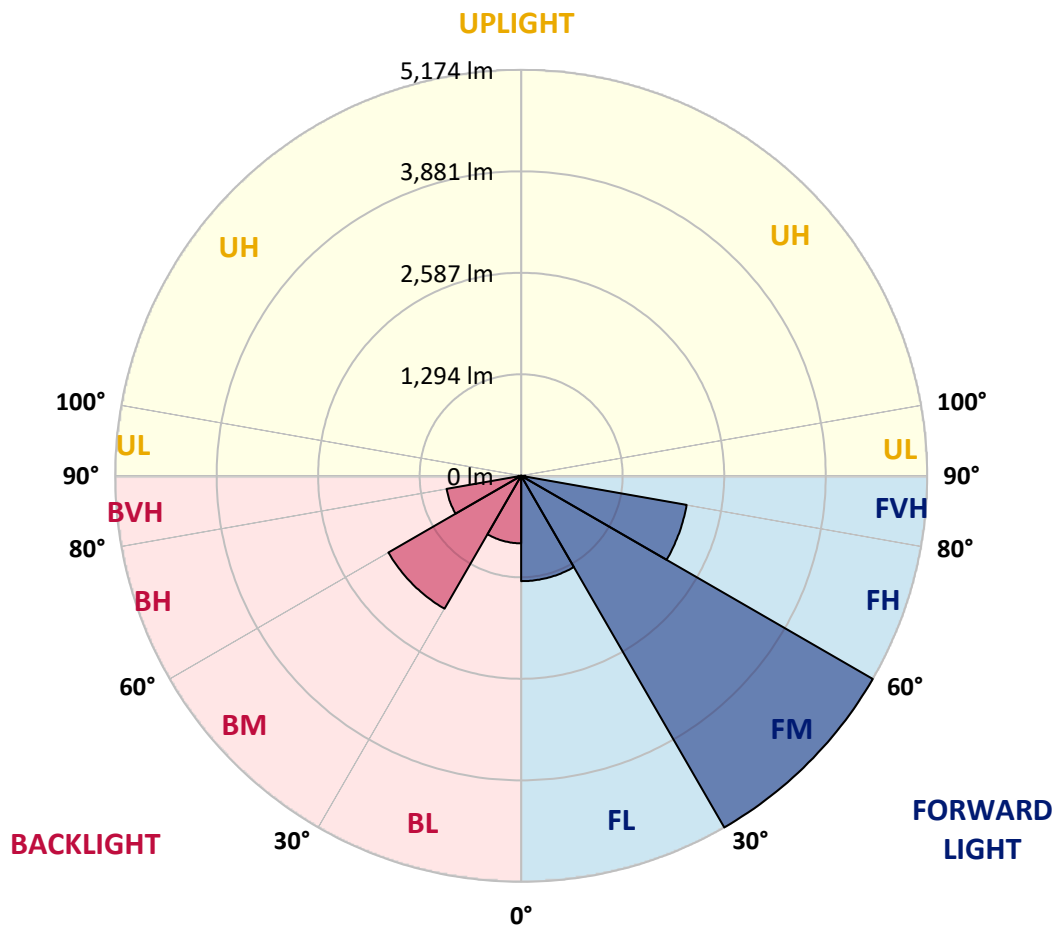
CATALOG NUMBER: ARCH2-90-740-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1343.0	10.7			
FM	(30°-60°)	5174.2	41.3			
FH	(60°-80°)	2140.8	17.1			G2/5000
FVH	(80°-90°)	51.9	0.4			G1/100
BL	(0°-30°)	860.1	6.9	B2/1000		
BM	(30°-60°)	1954.4	15.6	B2/2500		
BH	(60°-80°)	965.4	7.7	B2/1000		G2/1000
BVH	(80°-90°)	34.2	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: P800307

CATALOG NUMBER: ARCH2-90-740-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3
2.5°	1882.2	1882.2	1896.7	1896.7	1884.0	1864.0	1858.5	1836.7	1816.7	1816.7	1818.5
5°	2062.2	2060.4	2071.3	2056.7	2025.8	1985.8	1958.5	1911.2	1871.2	1858.5	1856.7
7.5°	2282.2	2280.4	2285.9	2262.2	2204.0	2138.6	2084.0	2007.6	1942.2	1914.9	1907.6
10°	2527.7	2525.9	2520.4	2480.4	2402.2	2300.4	2218.6	2113.1	2014.9	1971.3	1962.2
12.5°	2809.6	2806.0	2793.2	2735.0	2627.7	2496.8	2378.6	2242.2	2111.3	2051.3	2031.3
15°	3124.2	3118.7	3095.1	3024.2	2880.5	2715.0	2562.3	2387.7	2227.7	2149.5	2122.2
17.5°	3455.2	3455.2	3418.8	3313.3	3153.3	2947.8	2758.7	2536.8	2349.5	2253.1	2220.4
20°	3791.6	3789.8	3744.3	3617.0	3427.9	3191.5	2951.4	2707.8	2475.0	2358.6	2318.6
22.5°	4146.2	4142.6	4086.2	3940.7	3715.2	3447.9	3167.8	2876.9	2613.2	2473.2	2422.2
25°	4553.5	4548.1	4479.0	4300.8	4033.4	3731.6	3411.5	3075.1	2771.4	2600.5	2540.4
27.5°	4986.3	4979.1	4897.2	4689.9	4397.1	4033.4	3680.7	3304.2	2946.0	2742.3	2675.0
30°	5371.9	5366.4	5277.3	5064.5	4728.1	4333.5	3937.1	3533.4	3129.6	2893.2	2809.6
32.5°	5662.8	5662.8	5582.8	5373.7	5024.5	4620.8	4195.3	3749.8	3320.6	3055.1	2956.9
35°	5839.2	5844.7	5775.6	5608.3	5279.1	4891.8	4462.6	4004.3	3524.3	3227.8	3122.4
37.5°	5864.7	5882.9	5842.9	5730.1	5455.5	5117.3	4724.5	4249.8	3735.2	3402.4	3284.2
40°	5746.5	5759.2	5761.0	5717.4	5528.3	5279.1	4955.4	4509.9	3958.9	3586.1	3449.7
42.5°	5510.1	5519.2	5535.5	5548.3	5475.5	5350.0	5131.8	4751.7	4197.1	3773.4	3613.4
45°	5204.6	5202.7	5230.0	5284.6	5280.9	5310.0	5230.0	4971.8	4444.4	3986.2	3795.2
47.5°	4748.1	4739.0	4835.4	4959.1	5020.9	5157.3	5231.8	5144.5	4713.6	4220.7	4002.5
50°	4033.4	4024.3	4235.3	4526.3	4708.1	4915.4	5131.8	5248.2	4995.4	4484.4	4228.0
52.5°	3164.2	3155.1	3422.4	3931.6	4328.0	4629.9	4930.0	5271.8	5262.7	4779.0	4482.6
55°	2353.1	2345.9	2605.9	3156.9	3798.9	4298.9	4682.6	5210.0	5513.7	5117.3	4791.8
57.5°	1658.5	1654.8	1880.3	2336.8	3118.7	3895.2	4444.4	5090.0	5744.7	5484.6	5140.9
60°	1163.8	1158.4	1322.1	1674.8	2358.6	3286.0	4208.0	4930.0	5917.4	5846.5	5511.9
62.5°	783.8	780.1	896.5	1191.1	1674.8	2529.5	3849.8	4822.7	6015.6	6210.2	5886.5
65°	594.7	592.8	645.6	807.4	1185.7	1816.7	3280.6	4809.9	6028.3	6483.0	6204.7
67.5°	480.1	481.9	511.0	603.7	820.1	1291.1	2544.1	4729.9	5961.1	6575.7	6359.3
70°	392.8	392.8	405.5	467.4	605.6	871.1	1776.7	4366.2	5773.7	6333.8	6175.6
72.5°	300.1	301.9	341.9	378.2	456.4	611.0	1138.4	3613.4	5331.9	5584.6	5464.6
75°	238.2	236.4	260.0	311.0	354.6	436.4	698.3	2591.4	4537.2	4364.4	4288.0
77.5°	170.9	169.1	187.3	230.9	269.1	309.1	416.4	1307.5	2467.7	2267.7	2211.3
80°	116.4	112.7	129.1	160.0	178.2	181.9	203.7	501.9	1076.6	1014.7	1002.0
82.5°	60.0	60.0	69.1	90.9	92.7	94.6	90.9	161.8	356.4	332.8	318.2
85°	23.6	23.6	25.5	30.9	30.9	32.7	32.7	41.8	38.2	36.4	34.6
87.5°	1.8	1.8	3.6	3.6	5.5	5.5	5.5	7.3	9.1	9.1	9.1
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: P800307

CATALOG NUMBER: ARCH2-90-740-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3	1800.3
2.5°	1814.9	1807.6	1784.0	1778.5	1774.9	1769.4	1771.2	1758.5	1753.0	1754.9	1747.6
5°	1847.6	1834.9	1805.8	1793.0	1789.4	1784.0	1789.4	1780.3	1771.2	1774.9	1771.2
7.5°	1893.1	1874.9	1838.5	1825.8	1824.0	1818.5	1825.8	1818.5	1811.2	1814.9	1807.6
10°	1940.3	1916.7	1876.7	1864.0	1864.0	1862.1	1869.4	1858.5	1851.2	1853.1	1849.4
12.5°	2009.4	1978.5	1934.9	1924.0	1918.5	1924.0	1925.8	1911.2	1898.5	1900.3	1894.9
15°	2093.1	2058.5	2011.3	1994.9	1991.3	1989.4	1982.2	1964.0	1947.6	1945.8	1940.3
17.5°	2184.0	2140.4	2084.0	2067.6	2051.3	2045.8	2027.6	2004.0	1978.5	1978.5	1971.3
20°	2271.3	2222.2	2154.9	2131.3	2107.6	2085.8	2054.9	2016.7	1984.0	1978.5	1971.3
22.5°	2365.9	2307.7	2229.5	2194.9	2153.1	2109.5	2056.7	2005.8	1964.0	1954.9	1949.4
25°	2471.3	2398.6	2305.9	2254.9	2187.7	2120.4	2042.2	1976.7	1927.6	1913.1	1909.4
27.5°	2587.7	2500.4	2387.7	2313.1	2214.9	2109.5	2009.4	1931.3	1871.2	1853.1	1847.6
30°	2705.9	2602.3	2462.3	2353.1	2214.9	2074.9	1949.4	1858.5	1789.4	1763.9	1760.3
32.5°	2824.1	2707.8	2529.5	2375.0	2193.1	2016.7	1871.2	1763.9	1685.8	1654.8	1662.1
35°	2966.0	2824.1	2591.4	2384.1	2156.7	1945.8	1782.1	1656.7	1576.6	1549.4	1554.8
37.5°	3113.3	2940.5	2640.5	2376.8	2105.8	1865.8	1682.1	1560.3	1460.3	1413.0	1418.4
40°	3240.6	3046.0	2675.0	2351.3	2040.4	1774.9	1583.9	1423.9	1285.7	1240.2	1234.8
42.5°	3360.6	3124.2	2693.2	2313.1	1965.8	1669.4	1443.9	1238.4	1100.2	1043.8	1045.6
45°	3486.1	3200.6	2685.9	2262.2	1873.1	1545.7	1263.9	1056.6	934.7	883.8	885.6
47.5°	3629.7	3282.4	2678.7	2207.7	1760.3	1385.7	1091.1	896.5	791.0	754.7	751.0
50°	3782.5	3373.3	2669.6	2140.4	1634.8	1207.5	920.2	747.4	658.3	634.7	629.2
52.5°	3955.2	3471.5	2664.1	2060.4	1483.9	1018.4	767.4	616.5	556.5	540.1	538.3
55°	4162.6	3586.1	2671.4	1964.0	1302.0	840.1	638.3	531.0	491.0	481.9	480.1
57.5°	4415.3	3733.4	2693.2	1851.2	1111.1	685.6	543.7	478.3	452.8	445.5	445.5
60°	4689.9	3900.7	2733.2	1723.9	920.2	565.6	481.9	436.4	425.5	434.6	434.6
62.5°	4986.3	4097.1	2804.1	1569.4	741.9	478.3	432.8	401.9	394.6	412.8	414.6
65°	5260.9	4288.0	2849.6	1383.9	589.2	414.6	394.6	367.3	371.0	389.2	387.3
67.5°	5430.1	4446.2	2785.9	1151.1	467.4	367.3	354.6	331.0	340.1	354.6	356.4
70°	5326.4	4357.1	2471.3	869.2	365.5	320.1	311.0	296.4	303.7	321.9	329.1
72.5°	4819.0	3902.5	1922.2	587.4	294.6	269.1	272.8	265.5	274.6	291.0	307.3
75°	3911.6	2949.6	1289.3	376.4	232.8	229.1	234.6	229.1	232.8	249.1	258.2
77.5°	2042.2	1438.4	641.9	234.6	172.8	178.2	187.3	189.1	200.0	203.7	207.3
80°	952.9	647.4	267.3	130.9	114.6	125.5	143.7	145.5	149.1	154.6	156.4
82.5°	311.0	194.6	123.7	70.9	65.5	70.9	92.7	110.9	112.7	123.7	123.7
85°	32.7	20.0	27.3	29.1	25.5	30.9	41.8	40.0	18.2	10.9	10.9
87.5°	9.1	7.3	9.1	9.1	7.3	7.3	5.5	1.8	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)