

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: P399458

Luminaire Tested: **ARCH-L-PA3-140-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399458  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-827-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16523 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

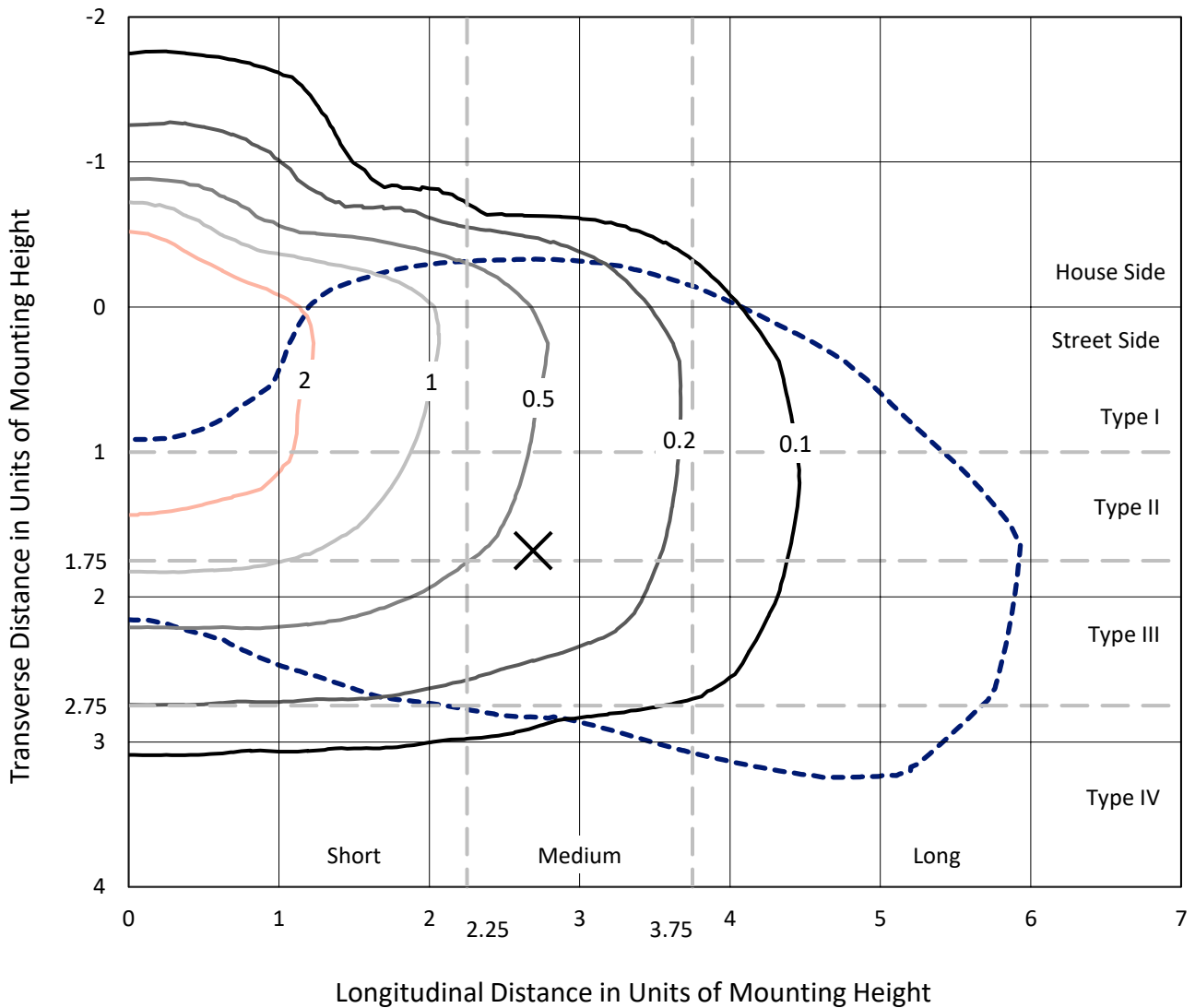
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

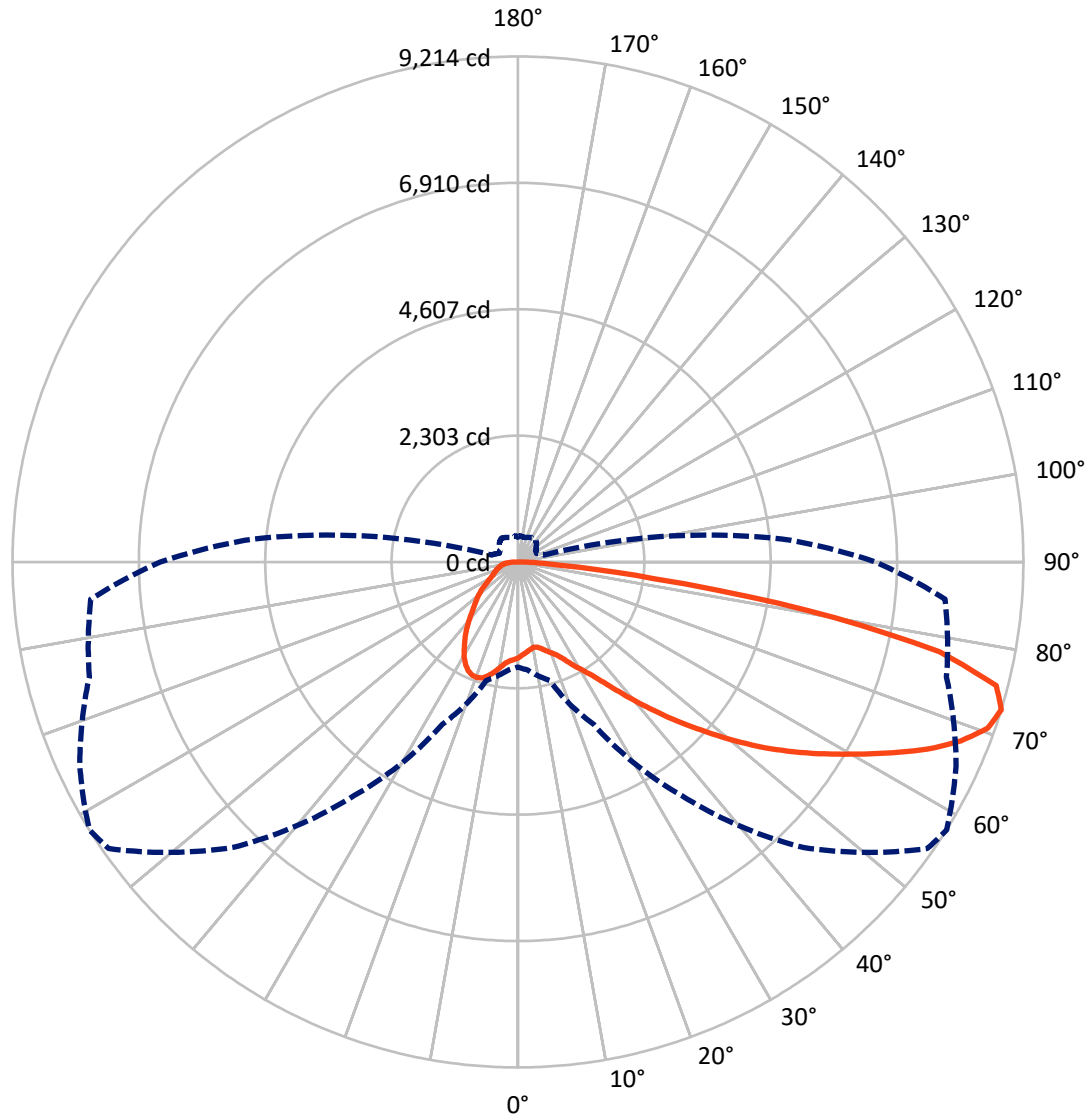
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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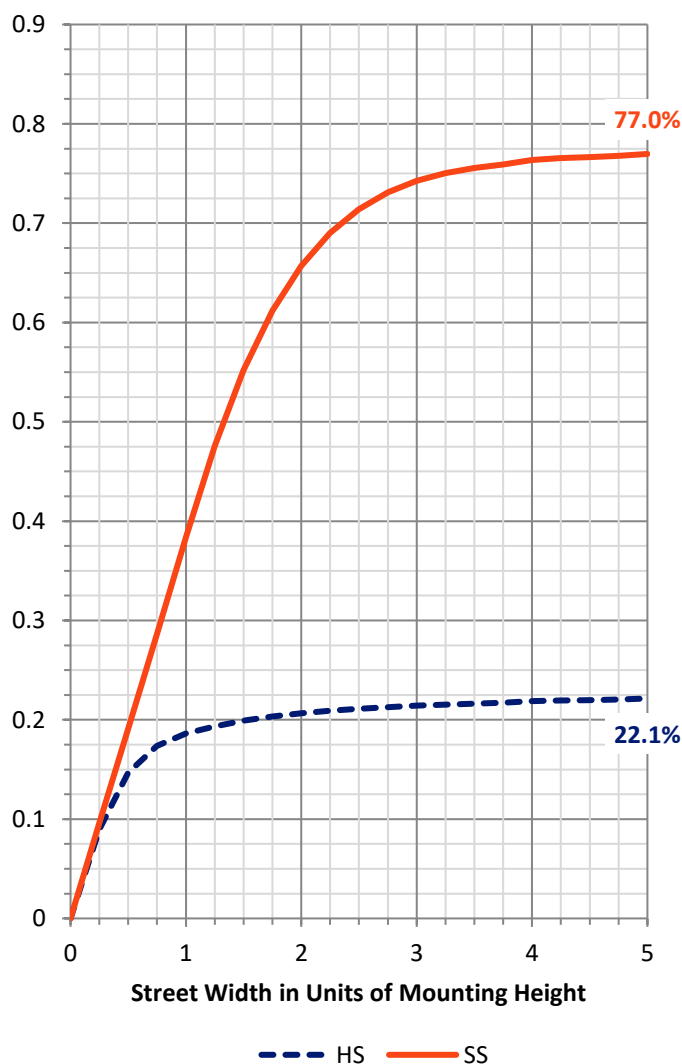
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3747.2	0.0	3747.2
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	12775.8	0.0	12775.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	16523.0	0.0	16523.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.9	1.0
10°-20°	533.2	3.2
20°-30°	955.1	5.8
30°-40°	1436.7	8.7
40°-50°	2326.6	14.1
50°-60°	3502.2	21.2
60°-70°	4121.7	24.9
70°-80°	2922.7	17.7
80°-90°	556.9	3.4
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°	16523.0	100.0
0°-180°	16523.0	100.0

**Coefficient of Utilization**



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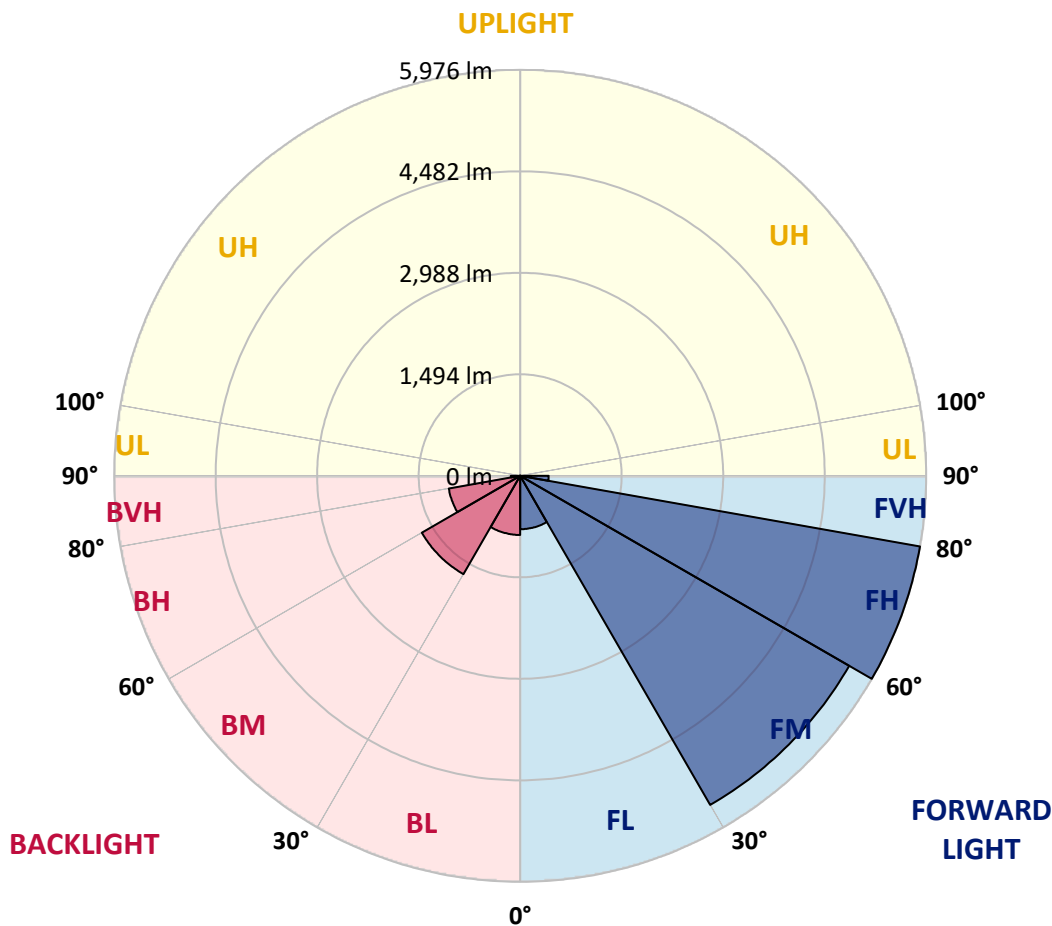
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	785.7	4.8			
FM (30°-60°)	5593.5	33.9			
FH (60°-80°)	5976.4	36.2			G3/7500
FVH (80°-90°)	420.1	2.5			G3/500
BL (0°-30°)	870.4	5.3	B2/1000		
BM (30°-60°)	1672.0	10.1	B2/2500		
BH (60°-80°)	1068.0	6.5	B3/2500		G3/2500
BVH (80°-90°)	136.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8
2.5°	1677.4	1668.7	1670.8	1670.8	1679.6	1683.9	1686.1	1692.7	1697.0	1707.9	1723.2
5°	1598.9	1592.3	1594.5	1596.7	1611.9	1627.2	1640.3	1649.0	1662.1	1679.6	1701.4
7.5°	1542.1	1537.8	1540.0	1544.3	1557.4	1574.9	1596.7	1609.8	1629.4	1662.1	1699.2
10°	1500.7	1500.7	1502.9	1511.6	1524.7	1546.5	1564.0	1579.2	1618.5	1677.4	1734.1
12.5°	1468.0	1468.0	1474.5	1492.0	1513.8	1535.6	1577.0	1594.5	1646.8	1727.6	1795.2
15°	1465.8	1468.0	1470.2	1485.4	1509.4	1557.4	1618.5	1644.7	1707.9	1803.9	1882.4
17.5°	1500.7	1502.9	1494.2	1498.5	1526.9	1594.5	1675.2	1705.7	1786.5	1891.2	1971.9
20°	1607.6	1607.6	1581.4	1557.4	1577.0	1651.2	1742.8	1773.4	1862.8	1978.4	2059.1
22.5°	1825.7	1836.6	1775.5	1723.2	1692.7	1734.1	1817.0	1849.7	1950.0	2074.4	2155.1
25°	2089.6	2100.6	2017.7	1943.5	1886.8	1880.2	1934.8	1969.7	2052.6	2181.3	2248.9
27.5°	2344.9	2325.2	2248.9	2179.1	2107.1	2048.2	2089.6	2120.2	2216.2	2314.3	2355.8
30°	2545.5	2530.3	2456.1	2405.9	2338.3	2262.0	2238.0	2270.7	2349.2	2440.8	2462.6
32.5°	2768.0	2757.1	2682.9	2617.5	2560.8	2488.8	2436.5	2451.7	2495.4	2560.8	2573.9
35°	3051.6	3075.6	2997.0	2864.0	2800.7	2730.9	2693.9	2698.2	2730.9	2772.4	2750.6
37.5°	3350.4	3378.8	3383.1	3173.7	3088.7	3025.4	2986.1	3001.4	3040.7	3069.0	3001.4
40°	3904.5	3876.1	3762.7	3607.8	3476.9	3415.9	3361.3	3359.1	3387.5	3437.7	3315.5
42.5°	4639.5	4613.4	4384.3	4183.7	3976.4	3906.6	3799.8	3753.9	3767.0	3830.3	3660.2
45°	5344.1	5333.2	5150.0	4916.6	4667.9	4532.7	4288.4	4177.1	4166.2	4216.4	4013.5
47.5°	5970.1	5922.1	5789.1	5608.0	5581.8	5228.5	4779.1	4628.6	4576.3	4604.6	4377.8
50°	6639.7	6476.2	6292.9	6181.7	6371.5	6042.1	5274.3	5117.2	4988.5	5008.2	4772.6
52.5°	6995.3	6720.5	6600.5	6633.2	6888.4	6761.9	5813.1	5621.1	5413.9	5442.2	5165.2
55°	6689.9	6687.7	6740.1	6942.9	7298.5	7152.3	6325.6	6109.7	5882.9	5889.4	5616.7
57.5°	6271.1	6356.2	6626.7	7073.8	7806.7	7562.4	6829.5	6600.5	6393.3	6360.5	6129.3
60°	5889.4	5983.2	6375.8	7052.0	7983.4	7937.6	7309.4	7108.7	6940.8	6844.8	6668.1
62.5°	5309.2	5379.0	5935.2	6912.4	7835.1	8208.1	7795.8	7658.4	7531.9	7333.4	7248.3
65°	4626.4	4650.4	5237.2	6452.2	7649.7	8312.8	8280.1	8219.0	8096.8	7804.5	7822.0
67.5°	3887.0	3935.0	4449.8	5717.1	7244.0	8264.8	8655.2	8705.4	8561.4	8123.0	8188.4
70°	3099.6	3158.5	3548.9	4700.6	6554.7	8057.6	9002.1	9082.8	8805.7	8227.7	8256.1
72.5°	1917.3	1974.0	2235.8	3265.3	5195.8	7361.7	9108.9	9213.6	8812.3	8088.1	7815.4
75°	663.1	669.6	874.7	1566.1	3084.3	5557.8	8759.9	9006.4	8535.3	7579.9	6801.2
77.5°	303.2	314.1	388.3	645.7	1367.6	2999.2	7233.1	7850.3	7693.3	6785.9	5235.0
80°	209.4	213.8	268.3	386.1	789.6	1055.7	4565.4	5370.3	5645.1	5254.7	3354.8
82.5°	157.1	161.4	207.2	261.8	569.3	512.6	1738.5	2495.4	3101.7	3045.0	1402.5
85°	150.5	148.3	161.4	174.5	379.5	305.4	562.8	772.2	1210.6	1036.1	353.4
87.5°	65.4	72.0	165.8	98.2	198.5	141.8	244.3	285.7	368.6	320.6	126.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8	1742.8
2.5°	1729.7	1734.1	1747.2	1766.8	1777.7	1799.5	1814.8	1823.5	1830.1	1832.3	1832.3
5°	1714.5	1723.2	1751.6	1784.3	1814.8	1860.6	1902.1	1926.1	1943.5	1950.0	1952.2
7.5°	1718.8	1740.6	1782.1	1830.1	1869.3	1928.2	1978.4	2026.4	2065.7	2080.9	2080.9
10°	1760.3	1790.8	1847.5	1910.8	1961.0	2022.0	2074.4	2115.8	2161.6	2187.8	2192.2
12.5°	1823.5	1860.6	1934.8	2004.6	2061.3	2109.3	2157.3	2187.8	2209.6	2229.2	2233.6
15°	1913.0	1958.8	2032.9	2104.9	2155.1	2185.6	2198.7	2198.7	2196.5	2198.7	2203.1
17.5°	2002.4	2046.0	2120.2	2192.2	2216.2	2198.7	2183.4	2179.1	2176.9	2172.5	2174.7
20°	2089.6	2131.1	2194.3	2248.9	2229.2	2168.2	2148.5	2146.4	2139.8	2135.5	2131.1
22.5°	2176.9	2207.4	2259.8	2279.4	2200.9	2113.6	2089.6	2076.6	2067.8	2056.9	2046.0
25°	2277.2	2286.0	2325.2	2294.7	2131.1	2013.3	1978.4	1958.8	1950.0	1939.1	1930.4
27.5°	2371.0	2371.0	2377.6	2270.7	2028.6	1880.2	1827.9	1793.0	1790.8	1788.6	1786.5
30°	2456.1	2445.2	2423.4	2198.7	1895.5	1716.7	1638.1	1603.2	1616.3	1627.2	1629.4
32.5°	2556.4	2534.6	2473.5	2100.6	1736.3	1533.4	1437.4	1422.2	1437.4	1450.5	1441.8
35°	2713.5	2674.2	2525.9	1987.1	1583.6	1365.5	1273.9	1252.0	1247.7	1245.5	1228.0
37.5°	2938.2	2870.5	2567.3	1865.0	1433.1	1217.1	1149.5	1103.7	1062.3	1018.6	1012.1
40°	3213.0	3097.4	2595.7	1725.4	1273.9	1092.8	1020.8	961.9	892.1	815.8	807.1
42.5°	3514.0	3341.7	2608.8	1570.5	1134.3	990.3	900.9	826.7	748.2	689.3	678.4
45°	3839.0	3605.6	2597.9	1422.2	1020.8	903.0	802.7	722.0	658.7	617.3	608.6
47.5°	4155.3	3908.8	2567.3	1304.4	933.6	828.9	726.4	652.2	604.2	558.4	547.5
50°	4561.0	4198.9	2530.3	1212.8	837.6	754.7	678.4	599.8	545.3	523.5	519.1
52.5°	5010.3	4489.0	2486.6	1097.2	743.8	695.8	647.8	578.0	560.6	519.1	512.6
55°	5496.8	4833.7	2477.9	951.0	660.9	654.4	617.3	597.7	602.0	519.1	508.2
57.5°	6009.4	5202.3	2497.5	804.9	593.3	617.3	630.4	615.1	608.6	530.0	508.2
60°	6543.8	5557.8	2438.6	669.6	541.0	586.8	645.7	606.4	558.4	525.7	510.4
62.5°	7062.9	5856.7	2183.4	573.7	501.7	578.0	636.9	573.7	519.1	519.1	512.6
65°	7440.3	5989.7	1707.9	503.9	475.5	567.1	621.7	551.9	508.2	523.5	514.8
67.5°	7483.9	5852.3	1147.3	449.3	453.7	547.5	586.8	532.2	497.3	536.6	523.5
70°	7215.6	5494.6	702.4	407.9	425.3	512.6	556.2	512.6	482.1	525.7	506.1
72.5°	6519.8	4827.1	495.1	373.0	394.8	479.9	527.9	495.1	460.2	475.5	455.9
75°	5348.4	3740.9	392.6	340.3	364.3	449.3	503.9	469.0	434.1	427.5	414.4
77.5°	3788.8	2397.2	316.3	314.1	331.6	412.3	471.2	438.4	403.5	390.4	381.7
80°	2179.1	1175.7	272.7	283.6	301.0	375.2	431.9	403.5	370.8	351.2	338.1
82.5°	833.2	410.1	239.9	246.5	266.1	335.9	392.6	368.6	335.9	353.4	296.7
85°	270.5	224.7	196.3	202.9	222.5	279.2	346.8	327.2	290.1	257.4	237.8
87.5°	120.0	122.2	104.7	115.6	139.6	185.4	253.0	239.9	211.6	176.7	170.1
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)