

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: P237084

Luminaire Tested: **ARCH-L-AF72-110-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237084  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-110-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15743.2 lumens  
Efficiency: N/A  
Efficacy: 139.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 113  
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

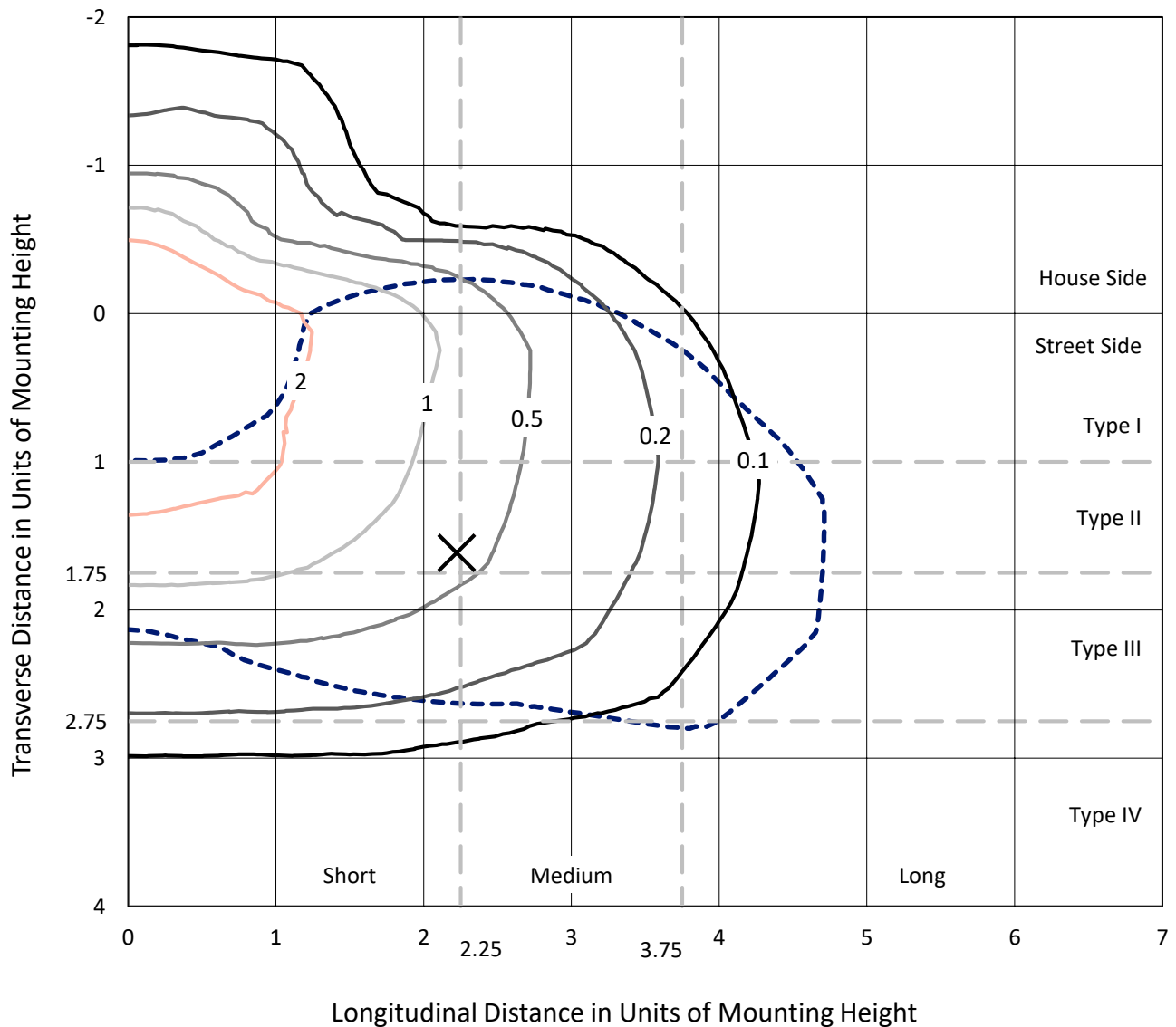


REPORT NUMBER: P237084

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

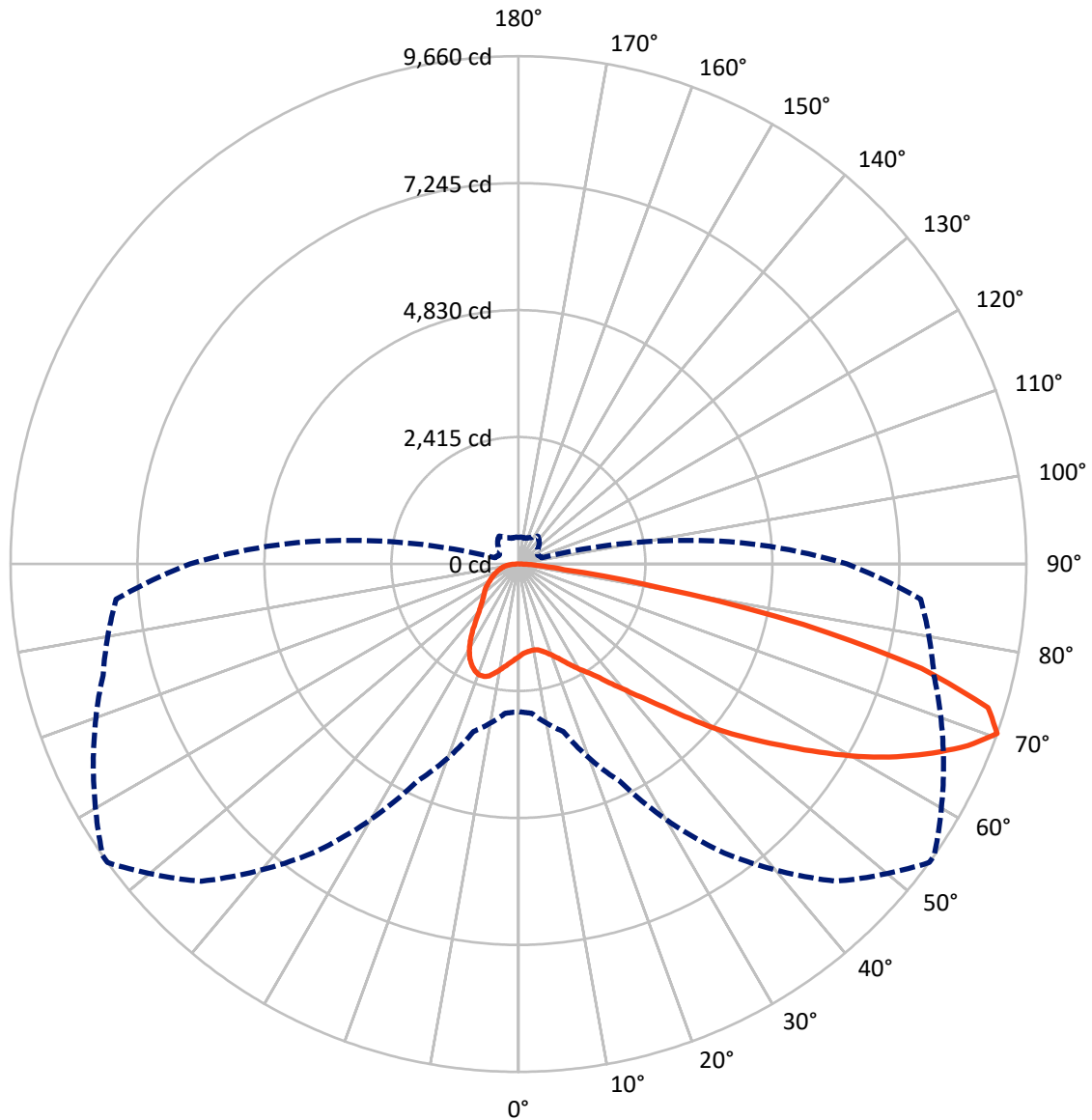


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P237084

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P237084

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T3

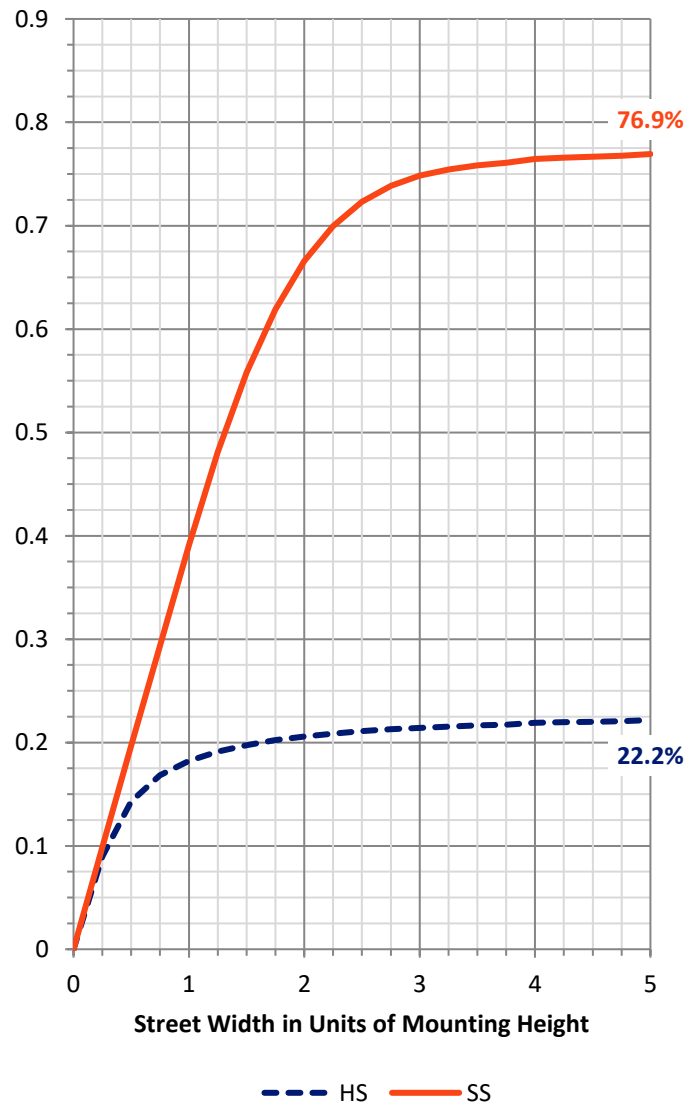
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3570.5	0.0	3570.5
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	12172.7	0.0	12172.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	15743.2	0.0	15743.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.9	1.1
10°-20°	552.3	3.5
20°-30°	959.6	6.1
30°-40°	1402.3	8.9
40°-50°	2200.8	14.0
50°-60°	3384.4	21.5
60°-70°	4134.9	26.3
70°-80°	2563.6	16.3
80°-90°	372.4	2.4
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°	15743.2	100.0
0°-180°	15743.2	100.0



REPORT NUMBER: P237084

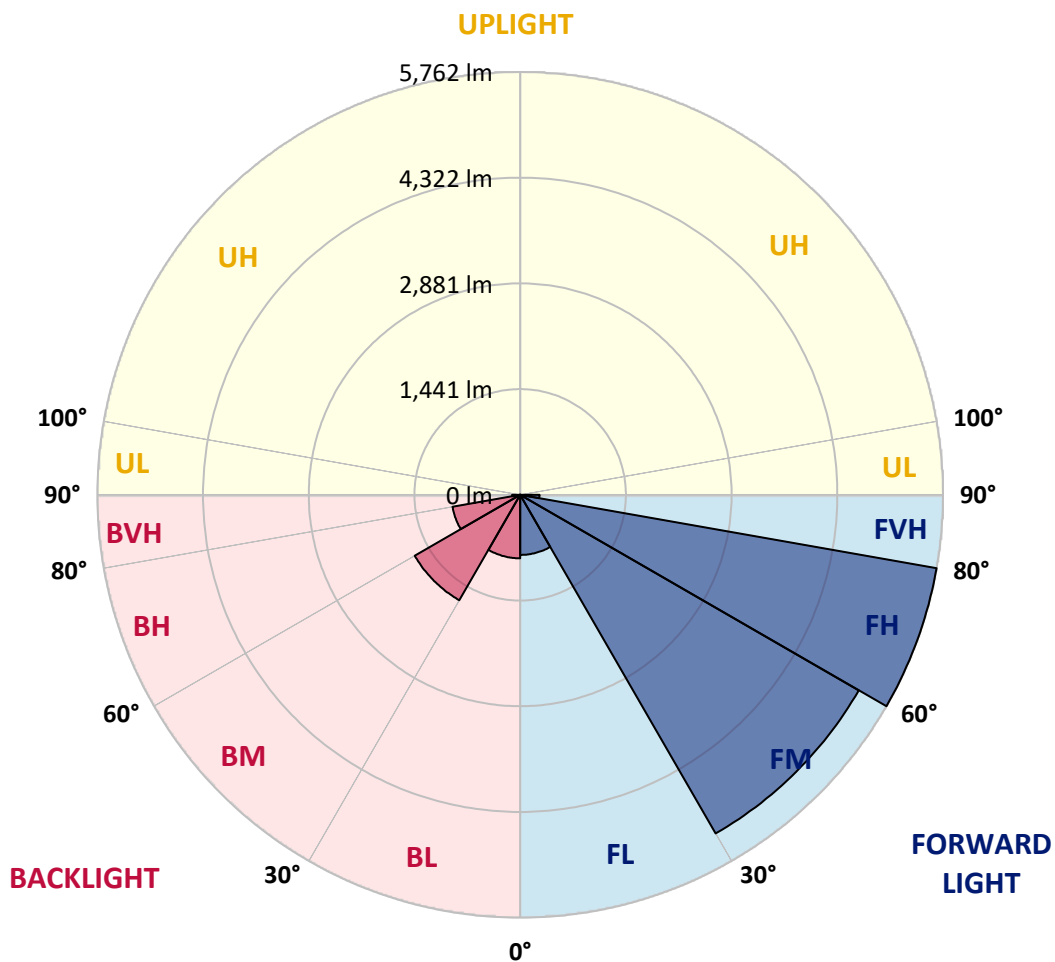
CATALOG NUMBER: ARCH-L-AF72-110-D-U-T3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	819.1	5.2			
FM	(30°-60°)	5328.3	33.8			
FH	(60°-80°)	5762.3	36.6			G3/7500
FVH	(80°-90°)	263.0	1.7			G3/500
BL	(0°-30°)	865.6	5.5	B2/1000		
BM	(30°-60°)	1659.2	10.5	B2/2500		
BH	(60°-80°)	936.3	5.9	B2/1000		G2/1000
BVH	(80°-90°)	109.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short





REPORT NUMBER: P237084

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3
2.5°	1692.2	1686.4	1686.4	1695.0	1697.9	1706.6	1706.6	1709.5	1718.1	1732.5	1749.9
5°	1640.3	1637.4	1640.3	1651.8	1657.6	1674.9	1680.6	1683.5	1700.9	1723.9	1749.9
7.5°	1588.3	1585.5	1591.3	1608.6	1625.9	1651.8	1666.2	1669.1	1695.0	1726.7	1761.3
10°	1571.0	1568.2	1576.9	1591.3	1608.6	1637.4	1660.5	1663.3	1700.9	1738.3	1787.3
12.5°	1594.2	1591.3	1599.9	1614.3	1631.6	1651.8	1677.7	1680.6	1729.6	1778.6	1830.6
15°	1651.8	1651.8	1654.7	1663.3	1680.6	1697.9	1721.0	1723.9	1775.7	1833.4	1885.3
17.5°	1741.2	1735.4	1735.4	1732.5	1744.0	1752.7	1781.6	1784.4	1839.2	1891.0	1943.0
20°	1850.7	1847.9	1836.3	1821.9	1819.0	1824.7	1853.6	1856.5	1911.3	1954.4	2003.4
22.5°	1983.3	1986.2	1960.3	1928.6	1914.1	1922.7	1948.7	1951.6	1992.0	2029.4	2072.7
25°	2159.1	2150.5	2113.0	2066.9	2038.1	2038.1	2064.0	2064.0	2101.6	2124.6	2153.4
27.5°	2326.4	2309.1	2274.4	2208.1	2162.0	2170.7	2196.7	2196.7	2231.3	2239.9	2254.3
30°	2508.0	2490.7	2447.4	2363.8	2303.3	2297.5	2329.3	2326.4	2372.5	2369.6	2358.1
32.5°	2729.9	2721.3	2649.2	2542.5	2461.8	2441.7	2470.5	2473.4	2502.2	2493.5	2456.1
35°	3041.2	3038.4	2972.1	2784.7	2678.1	2640.5	2657.8	2657.8	2678.1	2655.0	2591.5
37.5°	3433.3	3439.1	3381.5	3104.7	2954.8	2891.4	2894.2	2891.4	2897.1	2871.2	2804.9
40°	3825.4	3839.7	3836.9	3502.5	3312.2	3202.8	3162.4	3156.6	3171.0	3159.5	3096.1
42.5°	4341.4	4376.0	4295.3	3992.6	3779.3	3594.8	3485.2	3470.8	3502.5	3516.9	3456.3
45°	4877.5	4866.1	4739.2	4520.1	4327.0	4090.6	3883.0	3860.0	3883.0	3926.3	3862.9
47.5°	5157.2	5148.5	5116.8	5007.3	4978.5	4707.5	4393.3	4373.1	4329.8	4390.4	4315.4
50°	5618.5	5627.0	5497.3	5485.9	5606.9	5457.0	4969.8	4923.7	4845.8	4894.9	4831.5
52.5°	5952.9	5915.3	5834.6	5935.6	6313.1	6232.4	5511.8	5491.6	5419.5	5408.0	5379.2
55°	6088.3	6088.3	6102.7	6336.3	6875.4	6768.7	6099.9	6120.0	6022.0	5941.3	5978.7
57.5°	6128.7	6146.0	6270.0	6656.2	7535.5	7186.6	6748.5	6777.3	6636.1	6474.6	6592.8
60°	5929.7	5981.7	6278.6	6837.8	7907.3	7630.6	7431.6	7440.3	7235.6	6999.2	7206.8
62.5°	5419.5	5482.9	6013.4	6912.8	7846.7	8086.0	8077.4	8097.6	7818.0	7523.9	7783.3
65°	4794.0	4857.4	5422.5	6702.4	7800.7	8411.8	8668.4	8723.1	8362.8	7967.9	8143.7
67.5°	3874.4	3958.0	4494.1	5993.2	7575.8	8679.9	9221.9	9279.5	8783.7	8198.4	8112.0
70°	2807.8	2848.1	3297.9	4554.7	6659.1	8532.8	9660.0	9657.2	8922.1	8181.2	7679.6
72.5°	1352.0	1383.7	1772.9	2827.9	4762.2	7241.4	9342.9	9397.7	8731.8	7930.4	6690.8
75°	556.4	588.1	717.8	1193.5	2499.4	4785.4	7918.9	8048.6	7930.4	7117.5	5235.1
77.5°	346.0	357.4	420.8	616.9	1141.5	2234.1	5543.5	5719.3	6284.4	5702.0	3456.3
80°	259.4	268.1	314.3	432.4	720.7	824.5	2753.0	2974.9	3808.0	3271.9	1565.3
82.5°	216.3	219.1	250.8	314.3	490.1	472.8	882.1	983.1	1775.7	1248.2	539.1
85°	201.8	207.6	224.8	224.8	311.3	297.0	366.1	383.4	516.0	426.7	187.4
87.5°	103.7	98.0	198.9	175.8	161.4	144.1	155.7	167.2	193.1	204.7	83.6
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: P237084

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3	1761.3
2.5°	1755.6	1764.2	1778.6	1793.0	1810.3	1830.6	1842.0	1856.5	1868.0	1862.3	1859.3
5°	1764.2	1778.6	1810.3	1839.2	1873.7	1914.1	1940.0	1968.9	1992.0	1997.7	1989.1
7.5°	1778.6	1804.6	1847.9	1899.7	1945.9	1997.7	2038.1	2078.4	2107.3	2113.0	2113.0
10°	1813.3	1842.0	1899.7	1968.9	2023.7	2078.4	2124.6	2156.3	2182.3	2193.7	2193.7
12.5°	1862.3	1896.9	1966.0	2049.6	2110.1	2162.0	2188.0	2202.4	2214.0	2225.4	2228.4
15°	1919.9	1957.4	2041.0	2130.3	2193.7	2219.7	2219.7	2216.8	2216.8	2222.6	2228.4
17.5°	1977.6	2017.9	2104.4	2199.5	2239.9	2225.4	2205.3	2196.7	2190.9	2188.0	2196.7
20°	2038.1	2078.4	2165.0	2254.3	2242.7	2182.3	2153.4	2133.3	2116.0	2107.3	2118.8
22.5°	2104.4	2141.9	2231.3	2291.8	2205.3	2113.0	2058.3	2026.6	1997.7	1980.4	1992.0
25°	2182.3	2219.7	2306.1	2303.3	2139.0	2009.3	1922.7	1870.9	1839.2	1821.9	1821.9
27.5°	2274.4	2306.1	2389.8	2274.4	2046.7	1870.9	1744.0	1695.0	1686.4	1672.0	1672.0
30°	2369.6	2395.5	2467.7	2208.1	1919.9	1689.3	1550.9	1527.9	1530.7	1516.3	1519.2
32.5°	2467.7	2493.5	2513.7	2110.1	1755.6	1484.6	1392.3	1375.1	1372.2	1360.6	1349.1
35°	2606.0	2643.5	2519.5	1977.6	1556.6	1314.5	1248.2	1230.9	1213.6	1173.2	1173.2
37.5°	2816.4	2856.8	2505.1	1813.3	1352.0	1181.9	1121.4	1098.3	1069.5	1029.1	1014.8
40°	3104.7	3104.7	2473.4	1628.7	1187.6	1075.2	1017.6	988.8	957.1	916.7	908.1
42.5°	3444.9	3364.2	2424.4	1441.3	1066.6	1003.2	951.3	919.6	882.1	836.0	830.2
45°	3842.7	3623.6	2355.1	1274.2	977.2	959.9	928.2	873.5	810.1	761.1	752.4
47.5°	4229.0	3857.1	2288.9	1155.9	902.3	942.6	916.7	824.5	738.0	668.8	660.1
50°	4652.7	4064.7	2211.0	1057.9	844.7	931.1	902.3	752.4	657.2	608.2	602.5
52.5°	5076.5	4275.1	2127.4	954.2	795.7	908.1	867.7	700.5	654.4	588.1	579.4
55°	5523.3	4520.1	2029.4	838.9	738.0	861.9	821.5	697.7	674.5	588.1	567.9
57.5°	5958.6	4791.1	1870.9	726.4	674.5	792.8	804.2	680.4	631.4	582.3	559.2
60°	6440.0	5079.4	1608.6	631.4	619.8	735.1	781.2	642.8	582.3	565.0	553.5
62.5°	6826.3	5338.8	1256.9	565.0	573.7	689.0	752.4	619.8	562.1	547.7	544.8
65°	6993.5	5344.6	902.3	507.4	527.5	645.7	723.5	599.7	544.8	539.1	536.2
67.5°	6817.7	5050.5	634.2	452.6	478.5	605.4	686.1	579.4	527.5	530.4	524.7
70°	6249.7	4430.7	464.1	400.7	432.4	562.1	645.7	553.5	507.4	513.1	504.5
72.5°	5229.2	3453.5	371.8	357.4	395.0	516.0	605.4	524.7	475.7	478.5	461.2
75°	3862.9	2288.9	311.3	320.0	351.7	472.8	553.5	487.2	441.1	429.5	418.0
77.5°	2297.5	1176.2	256.6	279.7	314.3	420.8	495.8	441.1	403.6	383.4	374.7
80°	948.4	475.7	210.4	236.4	273.8	374.7	438.1	386.3	360.4	340.1	328.7
82.5°	377.7	233.5	167.2	193.1	230.6	325.7	383.4	340.1	314.3	299.8	268.1
85°	144.1	115.3	112.4	135.4	173.0	250.8	317.1	285.4	265.3	227.7	219.1
87.5°	57.7	51.9	51.9	66.3	98.0	158.6	227.7	198.9	207.6	164.3	167.2
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)