

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: P399172

Luminaire Tested: **ARCH-L-PA3-100-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-100-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12248 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

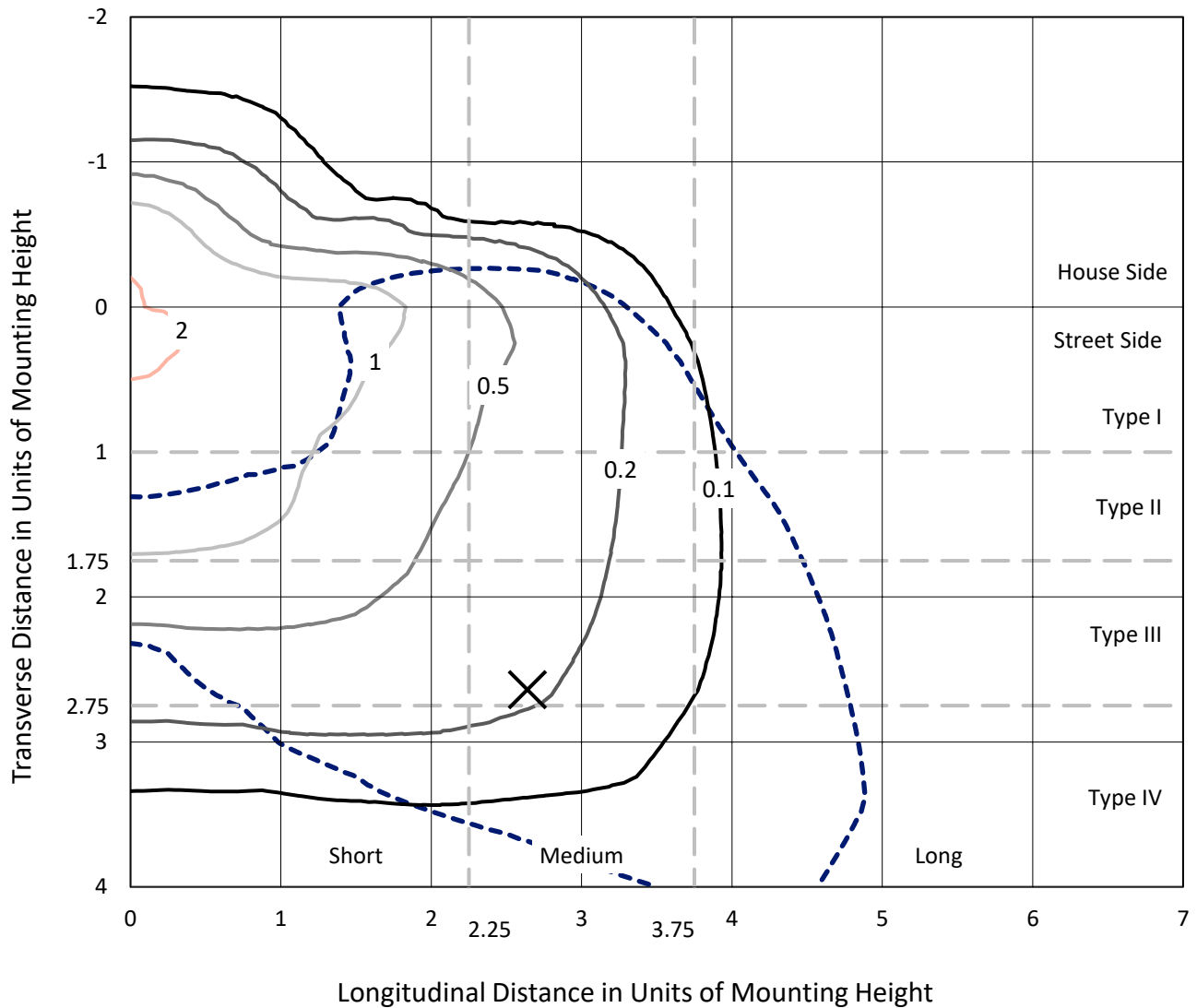
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

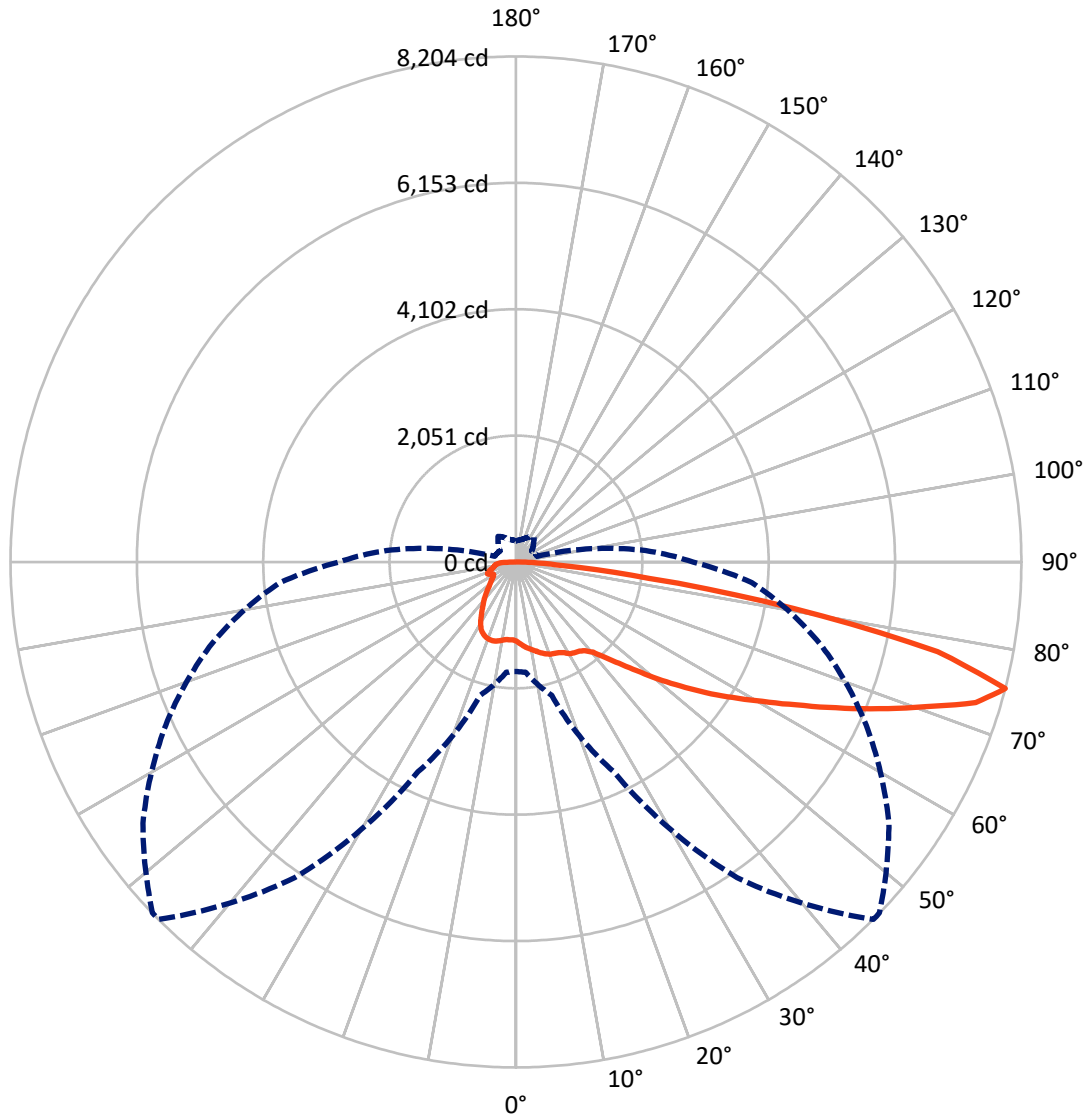
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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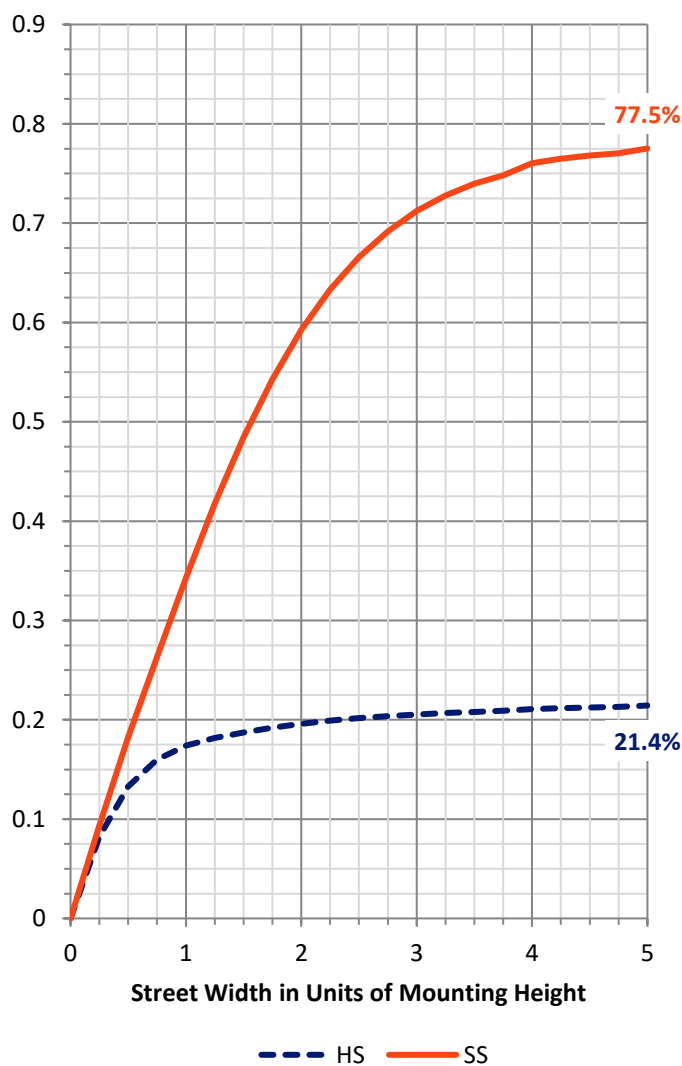
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2706.8	0.0	2706.8
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	9541.3	0.0	9541.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	12248.0	0.0	12248.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.3	1.0
10°-20°	404.8	3.3
20°-30°	690.2	5.6
30°-40°	967.0	7.9
40°-50°	1420.7	11.6
50°-60°	2261.1	18.5
60°-70°	3216.4	26.3
70°-80°	2693.1	22.0
80°-90°	467.4	3.8
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°	12248.0	100.0
0°-180°	12248.0	100.0

**Coefficient of Utilization**

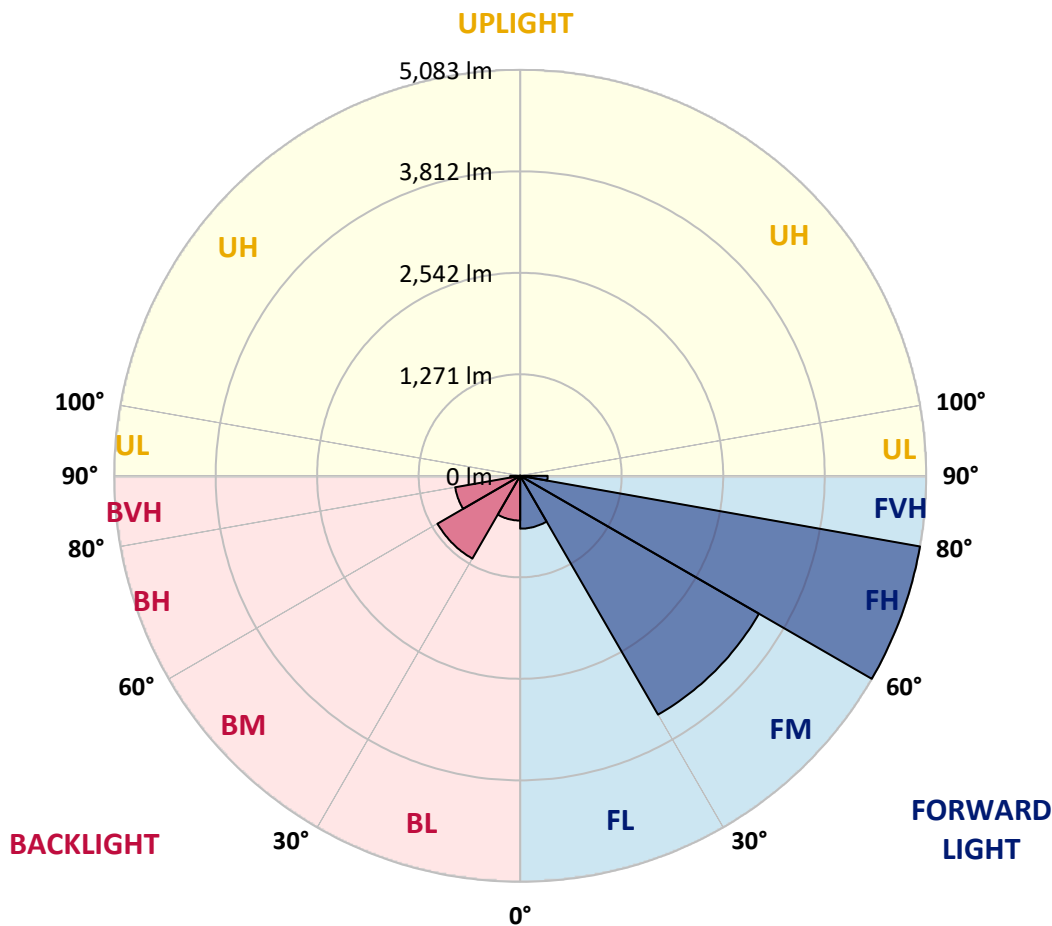


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	662.1	5.4			
FM (30°-60°)	3452.3	28.2			
FH (60°-80°)	5083.2	41.5			G3/7500
FVH (80°-90°)	343.6	2.8			G3/500
BL (0°-30°)	560.2	4.6	B2/1000		
BM (30°-60°)	1196.5	9.8	B2/2500		
BH (60°-80°)	826.3	6.7	B2/1000		G2/1000
BVH (80°-90°)	123.8	1.0			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3
2.5°	1360.0	1353.4	1350.1	1350.1	1337.0	1328.9	1327.2	1315.8	1305.9	1296.1	1287.9
5°	1438.5	1433.6	1423.8	1415.6	1397.6	1374.7	1371.4	1346.9	1322.3	1299.4	1279.8
7.5°	1510.5	1500.7	1489.2	1472.9	1443.4	1412.3	1407.4	1373.0	1338.7	1304.3	1278.1
10°	1571.1	1561.2	1544.9	1522.0	1484.3	1446.7	1441.8	1405.8	1369.8	1328.9	1291.2
12.5°	1628.3	1620.2	1595.6	1564.5	1520.3	1486.0	1481.1	1450.0	1412.3	1366.5	1317.4
15°	1677.4	1669.3	1643.1	1607.1	1556.3	1530.2	1523.6	1494.1	1456.5	1407.4	1356.7
17.5°	1702.0	1702.0	1674.2	1634.9	1587.4	1567.8	1562.9	1526.9	1492.5	1445.1	1394.3
20°	1710.2	1713.4	1693.8	1646.3	1605.4	1597.2	1592.3	1562.9	1523.6	1477.8	1430.3
22.5°	1715.1	1721.6	1705.3	1651.3	1616.9	1612.0	1608.7	1589.1	1558.0	1513.8	1466.3
25°	1731.4	1731.4	1720.0	1659.4	1631.6	1630.0	1630.0	1618.5	1597.2	1559.6	1512.1
27.5°	1756.0	1754.4	1739.6	1677.4	1664.3	1669.3	1667.6	1666.0	1651.3	1613.6	1562.9
30°	1796.9	1796.9	1780.5	1713.4	1705.3	1726.5	1728.2	1731.4	1708.5	1649.6	1608.7
32.5°	1859.1	1852.5	1836.2	1749.4	1736.4	1756.0	1759.3	1757.6	1738.0	1682.3	1662.7
35°	2050.6	2035.8	1976.9	1829.6	1764.2	1775.6	1777.3	1785.4	1788.7	1744.5	1734.7
37.5°	2386.1	2366.4	2276.4	2019.5	1852.5	1824.7	1823.1	1844.4	1862.4	1823.1	1823.1
40°	2751.0	2734.6	2682.3	2346.8	2016.2	1924.6	1918.0	1937.6	1960.6	1932.7	1940.9
42.5°	3065.2	3078.3	3083.2	2693.7	2261.7	2111.1	2093.1	2065.3	2101.3	2076.7	2109.5
45°	3300.9	3294.3	3384.3	3048.8	2579.2	2345.1	2320.6	2245.3	2291.1	2289.5	2361.5
47.5°	3551.3	3539.8	3577.4	3382.7	2940.8	2631.5	2593.9	2482.6	2551.3	2598.8	2718.3
50°	3788.6	3791.8	3804.9	3646.2	3333.6	2980.1	2932.7	2783.7	2881.9	2981.7	3150.3
52.5°	4097.9	4074.9	4058.6	3953.8	3773.8	3343.4	3312.3	3142.1	3279.6	3397.4	3621.6
55°	4367.9	4353.2	4343.3	4338.4	4142.0	3744.4	3711.6	3534.9	3732.9	3816.4	4147.0
57.5°	4655.9	4647.7	4700.1	4783.6	4705.0	4151.9	4117.5	3947.3	4168.2	4227.1	4716.5
60°	4867.0	4871.9	5015.9	5228.7	5174.7	4593.7	4552.8	4402.3	4592.1	4644.5	5286.0
62.5°	4868.7	4917.8	5251.6	5632.9	5695.1	5102.7	5055.2	4891.6	5027.4	5027.4	5796.6
65°	4403.9	4459.5	5209.1	5732.7	6222.1	5708.2	5662.4	5405.4	5456.2	5387.4	6276.1
67.5°	3940.8	4006.2	4711.6	5740.9	6591.9	6356.3	6302.3	5919.3	5832.6	5659.1	6611.6
70°	3633.1	3678.9	4268.1	5634.6	6814.5	7033.8	6992.9	6407.0	6128.8	5886.6	6541.2
72.5°	3058.7	3042.3	3605.3	5128.9	6938.9	7802.9	7768.6	6937.2	6385.7	5778.6	5578.9
75°	1775.6	1795.3	2237.1	3757.5	6254.8	8203.9	8200.6	7390.5	6272.8	5104.3	3844.2
77.5°	512.2	527.0	734.8	1651.3	3955.5	6997.8	7222.0	6758.8	5302.3	3638.0	1993.3
80°	224.2	235.7	319.1	549.9	1703.6	4570.8	4767.2	4570.8	3197.8	1669.3	782.3
82.5°	132.6	140.7	207.8	340.4	816.6	2174.9	2440.1	2130.8	1379.6	708.6	324.0
85°	75.3	78.6	119.5	216.0	513.9	761.0	854.3	800.3	672.6	402.6	170.2
87.5°	34.4	36.0	58.9	101.5	288.0	256.9	266.8	353.5	389.5	245.5	85.1
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°	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3	1286.3
2.5°	1284.7	1279.8	1269.9	1266.7	1261.8	1263.4	1265.0	1265.0	1266.7	1261.8	1261.8
5°	1271.6	1263.4	1253.6	1253.6	1253.6	1266.7	1278.1	1284.7	1287.9	1287.9	1284.7
7.5°	1266.7	1256.9	1245.4	1248.7	1251.9	1268.3	1289.6	1310.9	1317.4	1317.4	1314.1
10°	1276.5	1266.7	1258.5	1263.4	1271.6	1284.7	1301.0	1320.7	1337.0	1338.7	1337.0
12.5°	1299.4	1287.9	1279.8	1289.6	1299.4	1307.6	1315.8	1323.9	1345.2	1348.5	1348.5
15°	1337.0	1325.6	1315.8	1323.9	1327.2	1327.2	1327.2	1327.2	1348.5	1351.8	1351.8
17.5°	1374.7	1364.9	1355.0	1356.7	1346.9	1333.8	1328.9	1327.2	1338.7	1348.5	1350.1
20°	1410.7	1402.5	1392.7	1376.3	1351.8	1327.2	1319.0	1319.0	1325.6	1340.3	1340.3
22.5°	1450.0	1440.1	1423.8	1386.1	1345.2	1310.9	1302.7	1307.6	1315.8	1335.4	1333.8
25°	1494.1	1481.1	1453.2	1382.9	1323.9	1283.0	1284.7	1299.4	1314.1	1335.4	1335.4
27.5°	1543.2	1525.2	1469.6	1356.7	1276.5	1237.2	1251.9	1286.3	1307.6	1330.5	1333.8
30°	1597.2	1580.9	1482.7	1310.9	1199.6	1163.6	1199.6	1255.2	1287.9	1309.2	1314.1
32.5°	1662.7	1649.6	1494.1	1251.9	1099.7	1068.7	1121.0	1189.8	1242.1	1266.7	1271.6
35°	1744.5	1731.4	1508.9	1184.8	1006.5	973.7	1021.2	1091.6	1160.3	1191.4	1201.2
37.5°	1850.9	1831.3	1522.0	1112.8	927.9	890.3	913.2	977.0	1039.2	1081.7	1093.2
40°	1986.7	1955.6	1533.4	1031.0	859.2	816.6	824.8	855.9	891.9	929.5	944.3
42.5°	2178.2	2116.0	1535.1	944.3	788.8	749.5	746.3	756.1	756.1	756.1	761.0
45°	2445.0	2327.1	1538.3	862.4	716.8	675.9	666.1	662.8	638.2	590.8	587.5
47.5°	2782.1	2603.7	1553.1	793.7	641.5	605.5	592.4	579.3	533.5	484.4	474.6
50°	3214.1	2924.5	1582.5	728.3	577.7	553.1	536.8	505.7	455.0	417.3	407.5
52.5°	3711.6	3305.8	1610.3	659.5	530.2	513.9	494.2	456.6	402.6	379.7	376.4
55°	4282.8	3731.3	1666.0	599.0	489.3	477.9	459.9	423.9	382.9	366.6	364.9
57.5°	4867.0	4207.5	1744.5	545.0	450.0	443.5	443.5	412.4	386.2	379.7	379.7
60°	5430.0	4616.6	1684.0	494.2	414.0	417.3	448.4	440.2	420.6	428.8	433.7
62.5°	5866.9	4857.2	1366.5	453.3	387.9	417.3	497.5	497.5	474.6	471.3	471.3
65°	6053.5	4853.9	960.6	422.2	378.0	458.2	554.8	528.6	468.0	445.1	440.2
67.5°	6006.0	4641.2	662.8	400.9	374.8	500.8	581.0	507.3	438.6	419.0	404.2
70°	5588.7	4191.1	510.6	381.3	369.9	482.8	572.8	482.8	415.7	397.7	384.6
72.5°	4508.6	3361.4	423.9	361.7	350.2	446.8	545.0	459.9	397.7	378.0	364.9
75°	2875.4	2114.4	358.4	335.5	312.6	400.9	507.3	437.0	378.0	351.9	342.0
77.5°	1382.9	911.5	312.6	304.4	281.5	371.5	469.7	407.5	351.9	330.6	324.0
80°	559.7	417.3	271.7	273.3	258.6	353.5	443.5	379.7	325.7	302.8	291.3
82.5°	291.3	242.2	229.1	235.7	235.7	337.1	423.9	356.8	302.8	292.9	255.3
85°	157.1	150.6	176.7	189.8	204.6	304.4	394.4	332.2	276.6	237.3	229.1
87.5°	76.9	98.2	99.8	114.6	142.4	243.8	332.2	278.2	230.7	191.5	188.2
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)