

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: P399167

Luminaire Tested: **ARCH-L-PA3-100-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399167  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
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-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8497 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

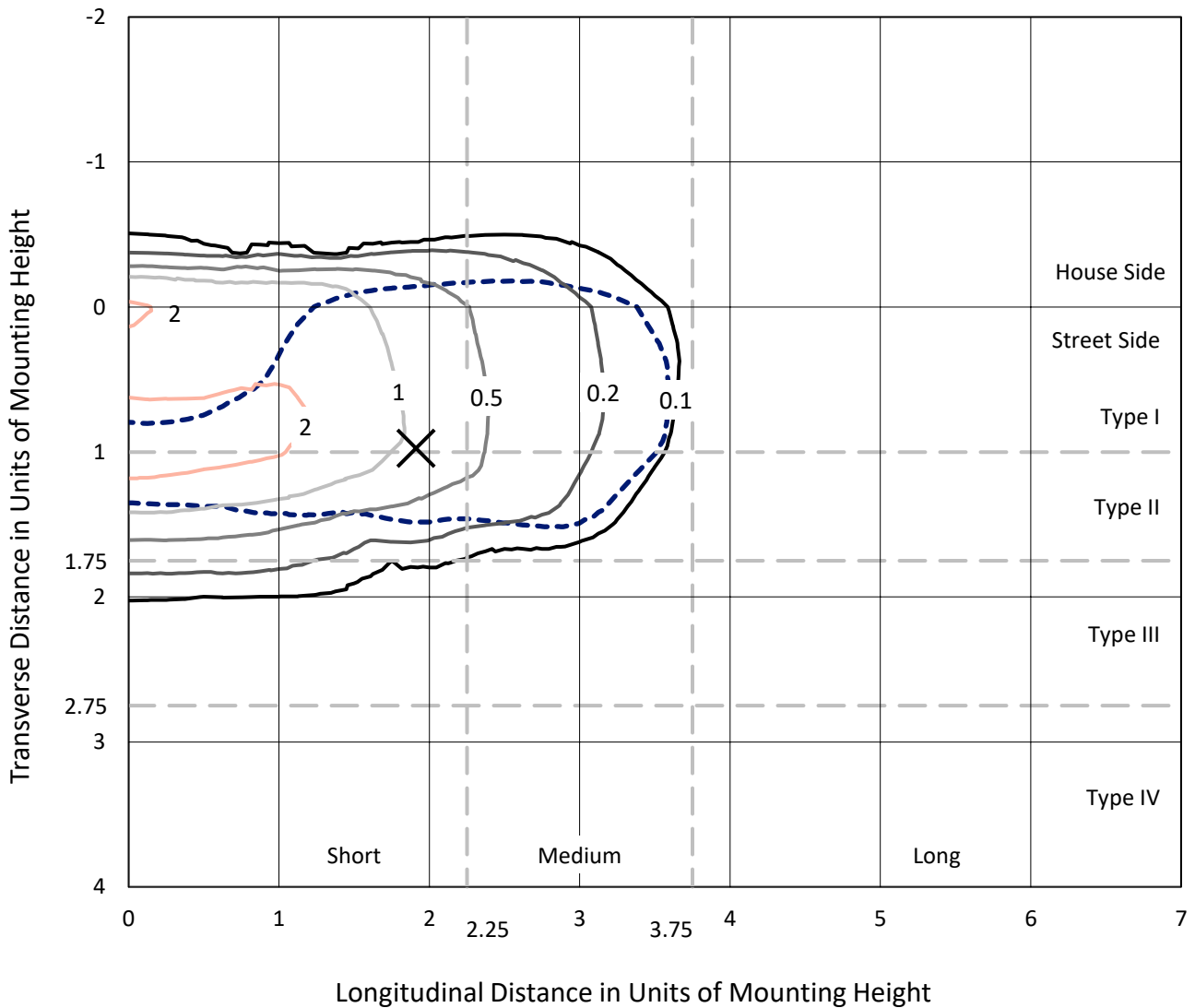
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399167  
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

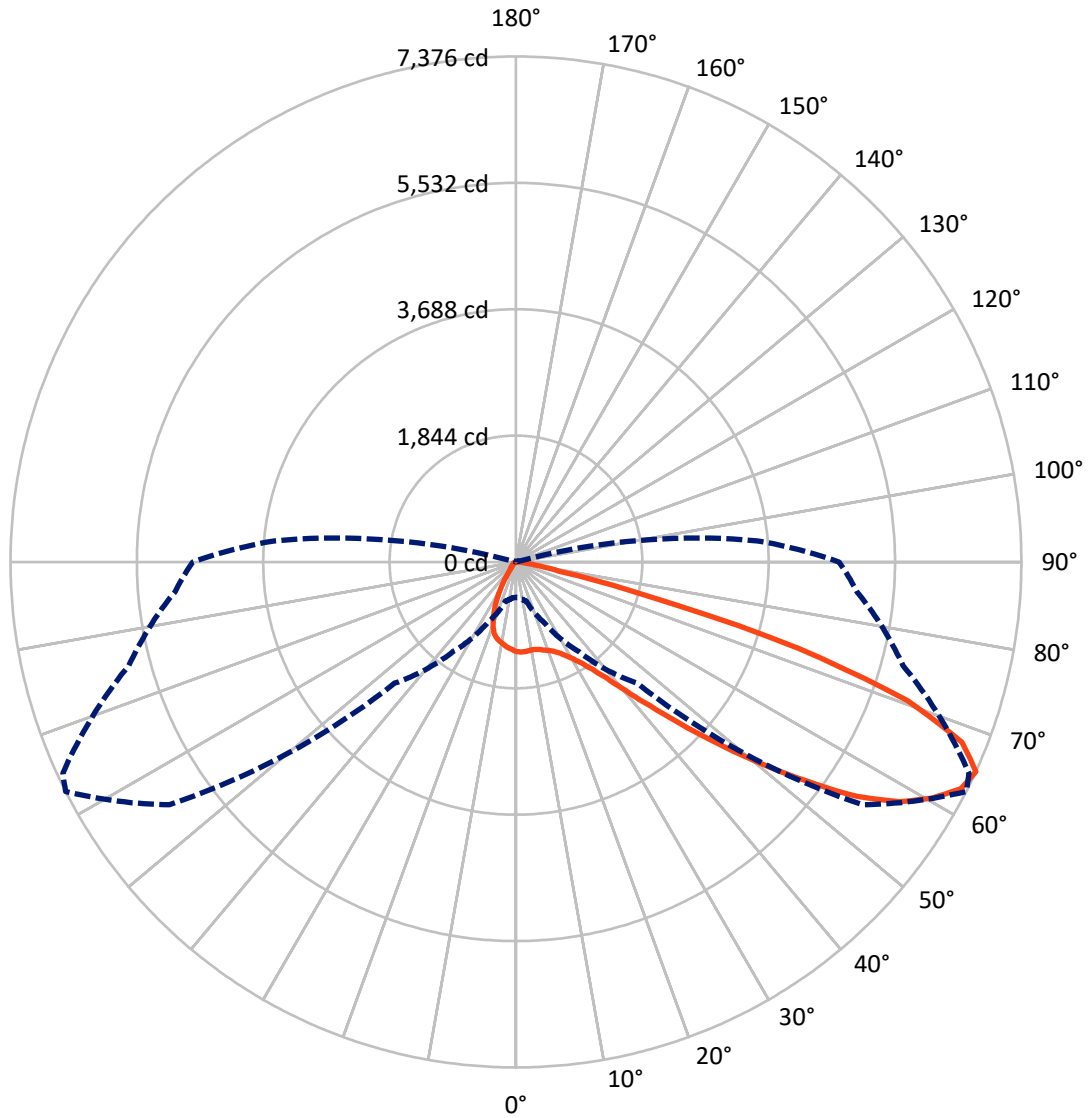
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P399167  
CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P399167  
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

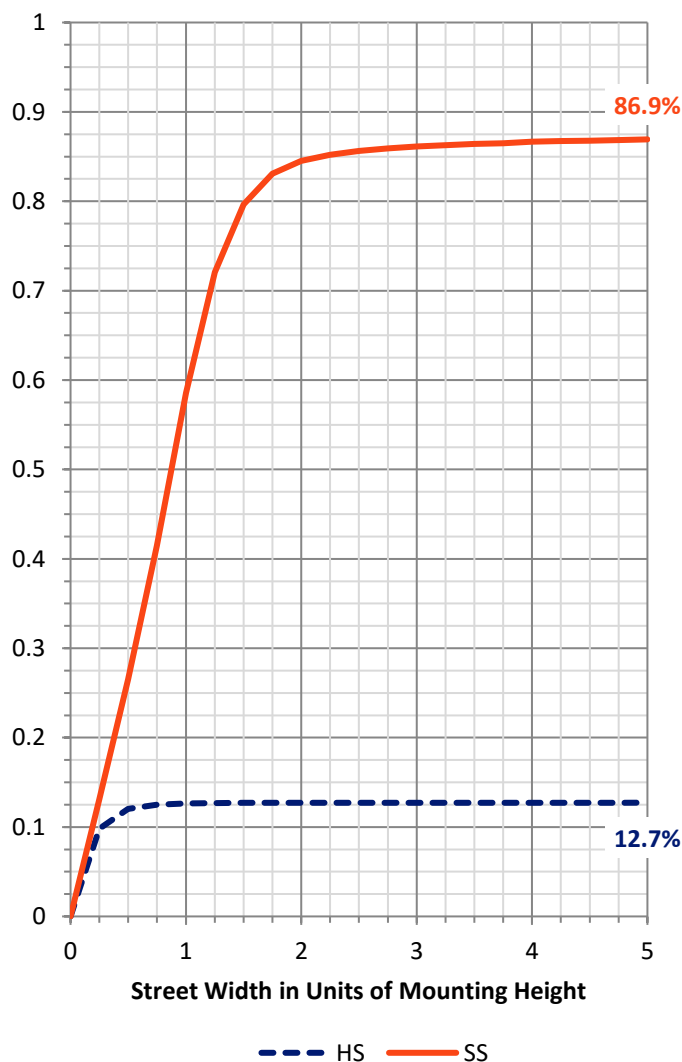
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1093.5	0.0	1093.5
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	7403.5	0.0	7403.5
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	8497.0	0.0	8497.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.4	1.4
10°-20°	294.6	3.5
20°-30°	436.7	5.1
30°-40°	810.9	9.5
40°-50°	1717.8	20.2
50°-60°	2375.3	28.0
60°-70°	1901.5	22.4
70°-80°	790.0	9.3
80°-90°	50.7	0.6
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°	8497.0	100.0
0°-180°	8497.0	100.0

**Coefficient of Utilization**

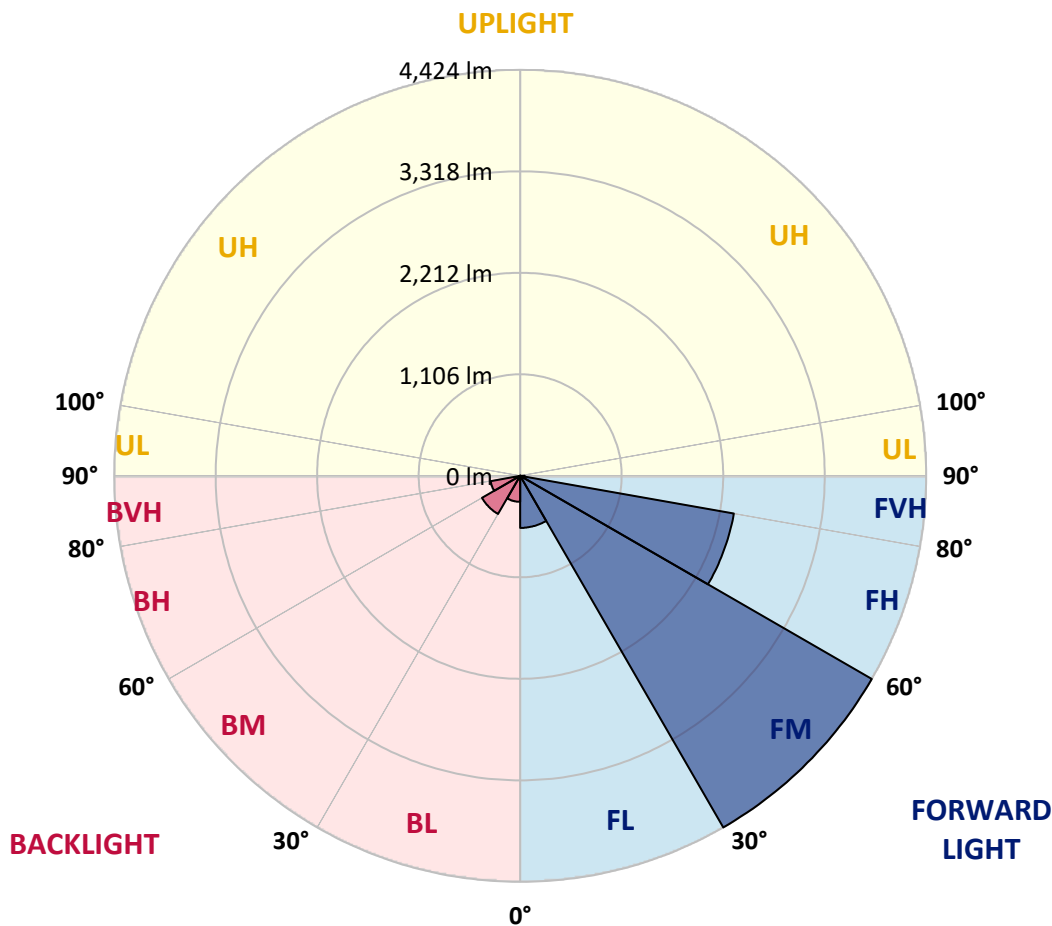


REPORT NUMBER: P399167  
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	567.4	6.7			
FM (30°-60°)	4423.6	52.1			
FH (60°-80°)	2364.1	27.8			G2/5000
FVH (80°-90°)	48.4	0.6			G1/100
BL (0°-30°)	283.4	3.3	B1/500		
BM (30°-60°)	480.4	5.7	B1/1000		
BH (60°-80°)	327.4	3.9	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Short





REPORT NUMBER: P399167

CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0
2.5°	1331.4	1328.2	1325.0	1323.4	1323.4	1321.8	1315.4	1313.8	1310.6	1307.4	1304.2
5°	1318.6	1313.8	1312.2	1313.8	1315.4	1318.6	1315.4	1315.4	1312.2	1309.0	1302.6
7.5°	1286.5	1283.3	1284.9	1289.7	1291.3	1302.6	1304.2	1309.0	1309.0	1305.8	1300.9
10°	1248.0	1246.4	1246.4	1254.4	1262.4	1278.5	1289.7	1302.6	1304.2	1304.2	1296.1
12.5°	1219.1	1217.5	1222.3	1232.0	1248.0	1268.9	1288.1	1307.4	1310.6	1312.2	1299.3
15°	1201.5	1201.5	1207.9	1227.2	1249.6	1278.5	1300.9	1326.6	1329.8	1328.2	1310.6
17.5°	1185.4	1187.1	1199.9	1232.0	1257.6	1296.1	1323.4	1352.3	1353.9	1352.3	1323.4
20°	1179.0	1182.2	1201.5	1243.2	1272.1	1315.4	1350.7	1379.5	1381.2	1374.7	1336.2
22.5°	1196.7	1198.3	1222.3	1267.3	1294.5	1342.7	1387.6	1414.8	1416.4	1406.8	1355.5
25°	1257.6	1257.6	1278.5	1317.0	1341.0	1389.2	1437.3	1469.4	1469.4	1458.2	1398.8
27.5°	1400.4	1387.6	1382.8	1394.0	1402.0	1453.3	1504.7	1544.8	1543.2	1527.1	1454.9
30°	1676.3	1644.2	1592.9	1535.1	1506.3	1541.6	1589.7	1641.0	1639.4	1613.8	1523.9
32.5°	2139.9	2093.4	1971.5	1819.1	1695.6	1655.5	1700.4	1756.5	1758.1	1727.6	1634.6
35°	2789.6	2715.8	2497.6	2285.9	2003.6	1851.2	1864.0	1925.0	1944.2	1928.2	1820.7
37.5°	3415.2	3347.8	3139.3	2845.7	2462.3	2151.1	2096.6	2149.5	2172.0	2172.0	2058.1
40°	4045.6	3967.0	3782.5	3487.4	3083.1	2619.5	2423.8	2467.1	2491.2	2496.0	2346.8
42.5°	4550.9	4499.6	4358.4	4129.0	3750.4	3440.9	2895.4	2871.4	2893.8	2876.2	2682.1
45°	4900.6	4860.5	4762.7	4676.0	4491.6	4336.0	3525.9	3363.9	3378.3	3317.3	3059.1
47.5°	4972.8	4927.9	4907.0	5027.3	5158.9	5197.4	4300.7	3949.4	3934.9	3800.2	3450.5
50°	4658.4	4663.2	4740.2	5083.5	5632.1	5978.6	5199.0	4610.3	4557.3	4257.4	3814.6
52.5°	3979.8	4056.8	4250.9	4807.6	5776.5	6546.4	6097.3	5311.3	5229.5	4701.7	4087.3
55°	3113.6	3213.1	3532.3	4172.3	5474.9	6799.9	6854.4	6039.5	5853.5	5035.4	4299.1
57.5°	2314.8	2345.2	2717.4	3301.3	4761.0	6551.3	7242.6	6601.0	6362.0	5301.6	4509.2
60°	1442.1	1461.4	1854.4	2513.7	3606.1	5632.1	7242.6	6987.6	6759.8	5540.7	4701.7
62.5°	896.7	903.1	1050.7	1722.8	2451.1	4177.1	6942.7	7287.5	7104.7	5712.3	4866.9
65°	516.5	522.9	591.9	973.7	1594.5	2500.8	6175.9	7375.8	7294.0	5848.6	4995.3
67.5°	377.0	380.2	407.4	547.0	1042.7	1284.9	4639.1	7021.3	7123.9	5916.0	4992.0
70°	327.2	332.1	367.3	426.7	752.3	789.2	2361.3	6063.6	6350.7	5819.8	4842.9
72.5°	251.8	258.3	311.2	401.0	551.8	567.9	855.0	4315.1	4749.8	5218.2	4433.8
75°	173.2	179.7	232.6	330.5	455.6	425.1	470.0	1985.9	2505.6	3500.2	3375.1
77.5°	110.7	112.3	146.0	240.6	393.0	301.6	322.4	648.1	909.5	1583.3	1592.9
80°	73.8	75.4	89.8	155.6	269.5	279.1	198.9	300.0	328.8	462.0	320.8
82.5°	44.9	44.9	61.0	97.9	163.6	231.0	129.9	157.2	168.4	178.1	83.4
85°	17.6	17.6	36.9	64.2	102.7	107.5	81.8	91.4	96.2	104.3	38.5
87.5°	4.8	4.8	20.9	35.3	44.9	49.7	49.7	44.9	48.1	59.4	19.2
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: P399167

CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0	1309.0
2.5°	1302.6	1297.7	1291.3	1284.9	1278.5	1273.7	1268.9	1268.9	1265.7	1260.8	1257.6
5°	1299.3	1291.3	1276.9	1265.7	1248.0	1235.2	1225.6	1217.5	1212.7	1201.5	1199.9
7.5°	1294.5	1284.9	1264.1	1241.6	1212.7	1190.3	1167.8	1151.8	1135.7	1122.9	1119.7
10°	1286.5	1275.3	1244.8	1212.7	1172.6	1130.9	1078.0	1017.0	960.9	928.8	919.2
12.5°	1286.5	1272.1	1232.0	1188.7	1130.9	1028.2	893.5	758.8	654.5	608.0	595.1
15°	1294.5	1275.3	1222.3	1163.0	1055.5	847.0	628.8	450.8	336.9	301.6	293.6
17.5°	1302.6	1275.3	1207.9	1127.7	917.6	614.4	357.7	237.4	200.5	192.5	192.5
20°	1305.8	1272.1	1188.7	1061.9	733.1	381.8	213.3	178.1	163.6	158.8	158.8
22.5°	1318.6	1273.7	1174.2	967.3	532.6	224.6	168.4	149.2	134.7	129.9	129.9
25°	1350.7	1292.9	1177.4	847.0	341.7	170.0	142.8	123.5	109.1	102.7	102.7
27.5°	1402.0	1336.2	1195.1	707.4	215.0	146.0	120.3	99.5	88.2	81.8	81.8
30°	1459.8	1384.4	1203.1	547.0	160.4	123.5	97.9	78.6	70.6	65.8	64.2
32.5°	1560.8	1467.8	1196.7	375.4	131.5	104.3	78.6	62.6	56.1	54.5	54.5
35°	1722.8	1613.8	1183.8	235.8	109.1	83.4	62.6	51.3	46.5	44.9	43.3
37.5°	1942.6	1827.1	1145.3	155.6	89.8	65.8	51.3	43.3	38.5	36.9	36.9
40°	2210.5	2070.9	1071.6	118.7	77.0	52.9	43.3	36.9	33.7	32.1	32.1
42.5°	2516.9	2342.0	954.5	102.7	64.2	44.9	36.9	30.5	28.9	27.3	27.3
45°	2852.1	2626.0	792.4	91.4	54.5	36.9	30.5	27.3	24.1	24.1	22.5
47.5°	3208.3	2911.5	609.6	80.2	46.5	32.1	27.3	22.5	20.9	19.2	19.2
50°	3551.5	3166.5	428.3	69.0	38.5	27.3	22.5	19.2	17.6	16.0	16.0
52.5°	3793.8	3320.5	303.2	59.4	32.1	24.1	17.6	14.4	12.8	12.8	12.8
55°	3987.9	3416.8	211.7	49.7	27.3	20.9	14.4	11.2	11.2	9.6	9.6
57.5°	4170.7	3479.4	155.6	41.7	22.5	16.0	11.2	8.0	8.0	6.4	6.4
60°	4360.0	3513.0	118.7	33.7	19.2	12.8	8.0	6.4	4.8	4.8	4.8
62.5°	4550.9	3533.9	91.4	27.3	16.0	9.6	6.4	4.8	3.2	1.6	1.6
65°	4717.7	3540.3	70.6	20.9	12.8	6.4	4.8	1.6	0.0	0.0	0.0
67.5°	4767.5	3466.5	54.5	16.0	9.6	4.8	3.2	0.0	0.0	0.0	0.0
70°	4632.7	3270.8	41.7	12.8	8.0	3.2	1.6	0.0	0.0	0.0	0.0
72.5°	4111.4	2743.1	32.1	8.0	6.4	3.2	1.6	0.0	0.0	0.0	0.0
75°	2942.0	1463.0	22.5	6.4	4.8	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	1353.9	566.3	16.0	4.8	3.2	1.6	0.0	0.0	0.0	0.0	0.0
80°	264.7	141.2	6.4	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.0	24.1	3.2	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.9	8.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.0	3.2	1.6	0.0	0.0	0.0	0.0	0.0	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)