

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: P400544

Luminaire Tested: **ARCH-L-PA3-90-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400544  
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-PA3-90-830-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 400mA 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: 8531 lumens  
Efficiency: N/A  
Efficacy: 91.7 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

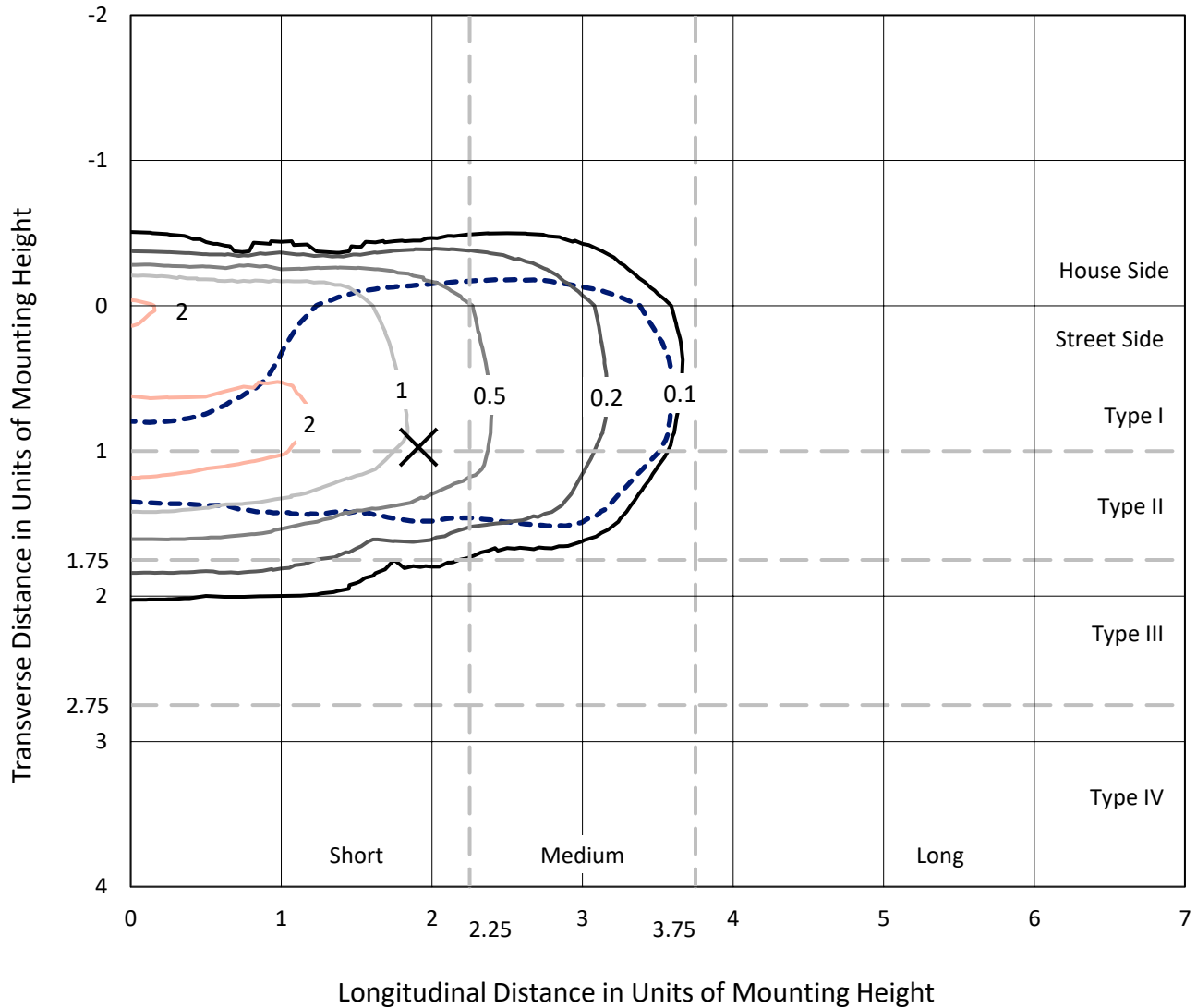
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

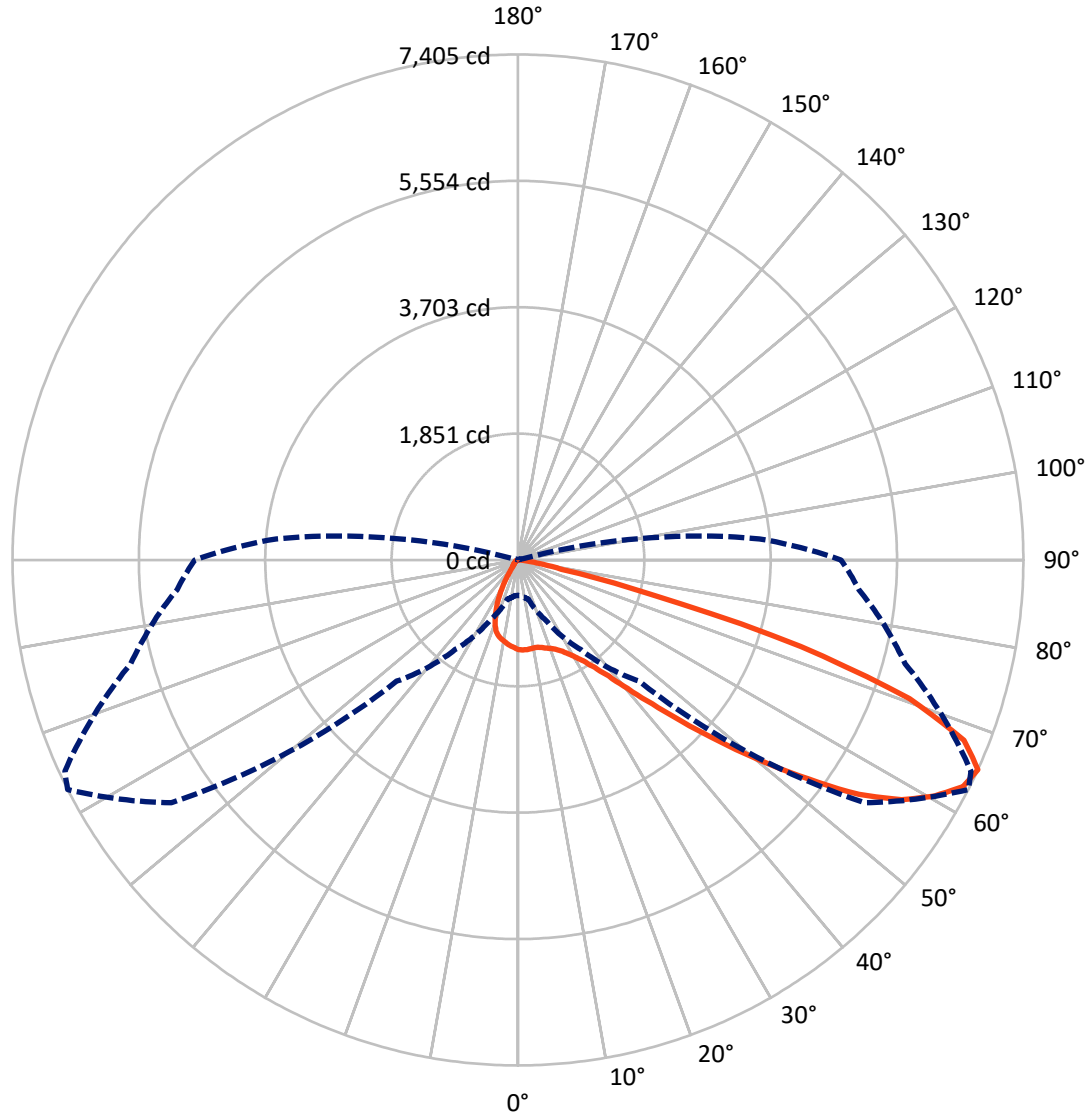
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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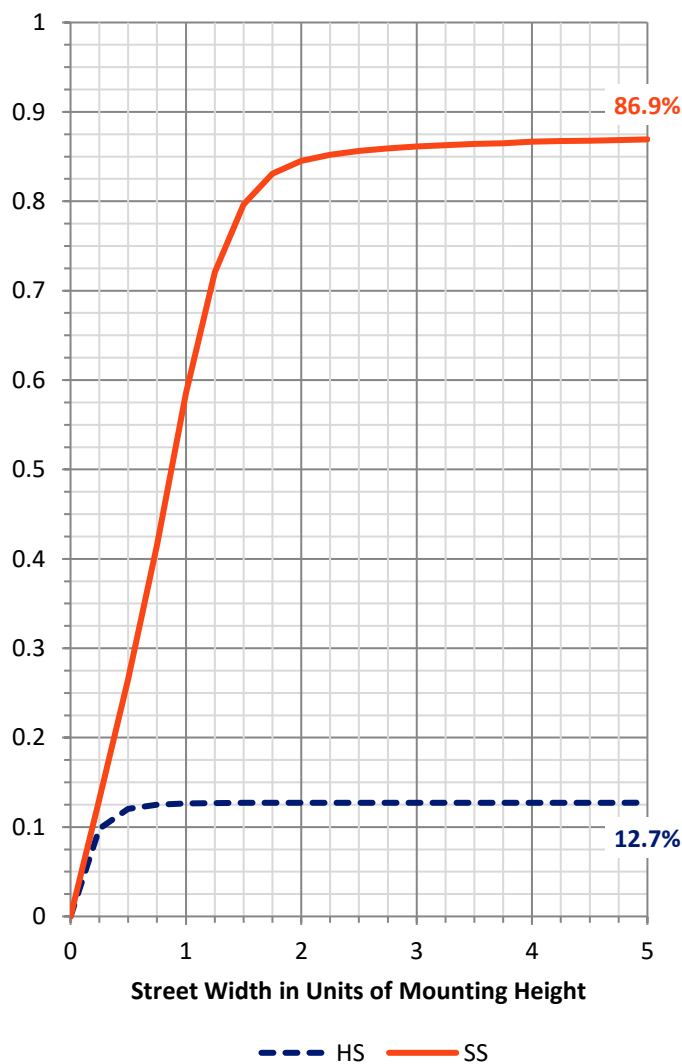
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1097.9	0.0	1097.9
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	7433.1	0.0	7433.1
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	8531.0	0.0	8531.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	1.4
10°-20°	295.8	3.5
20°-30°	438.5	5.1
30°-40°	814.1	9.5
40°-50°	1724.7	20.2
50°-60°	2384.8	28.0
60°-70°	1909.1	22.4
70°-80°	793.2	9.3
80°-90°	50.9	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°	8531.0	100.0
0°-180°	8531.0	100.0

**Coefficient of Utilization**

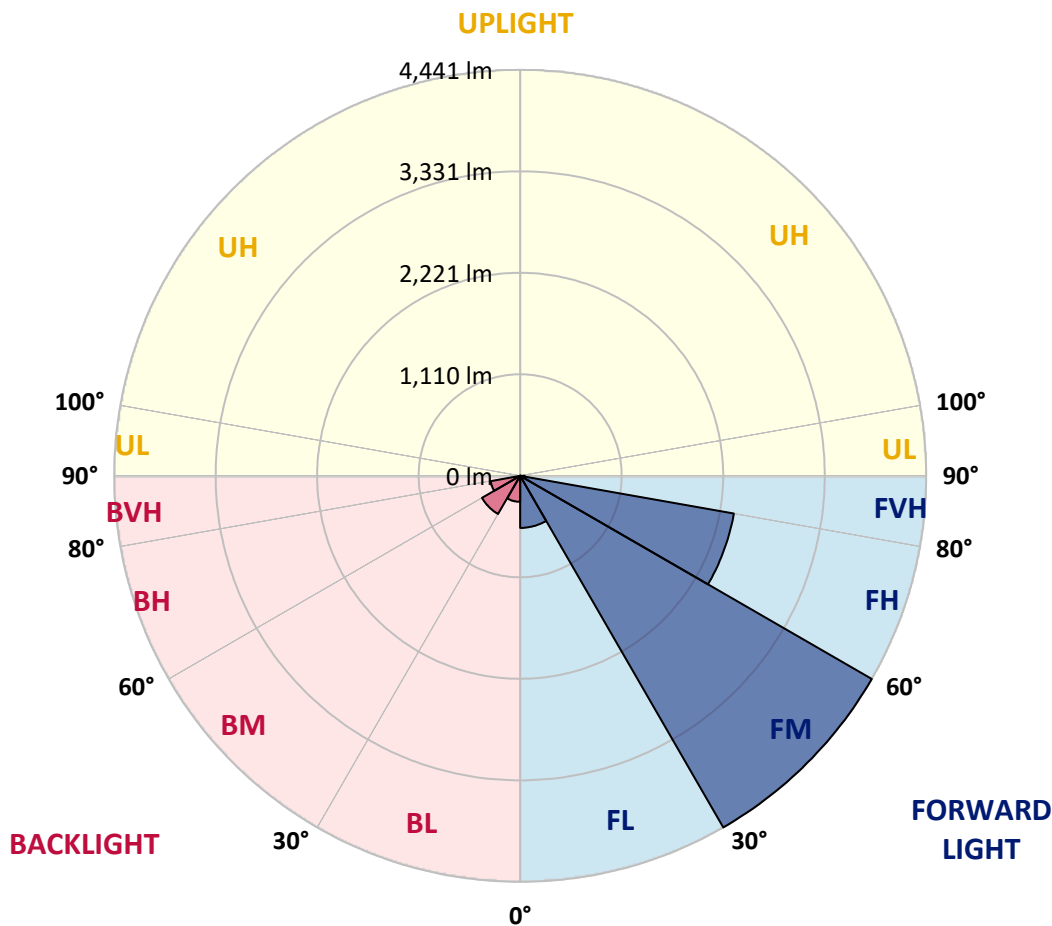


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	569.7	6.7			
FM (30°-60°)	4441.3	52.1			
FH (60°-80°)	2373.5	27.8			G2/5000
FVH (80°-90°)	48.6	0.6			G1/100
BL (0°-30°)	284.5	3.3	B1/500		
BM (30°-60°)	482.3	5.7	B1/1000		
BH (60°-80°)	328.8	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2
2.5°	1336.8	1333.5	1330.3	1328.7	1328.7	1327.1	1320.6	1319.0	1315.8	1312.6	1309.4
5°	1323.9	1319.0	1317.4	1319.0	1320.6	1323.9	1320.6	1320.6	1317.4	1314.2	1307.8
7.5°	1291.7	1288.4	1290.0	1294.9	1296.5	1307.8	1309.4	1314.2	1314.2	1311.0	1306.2
10°	1253.0	1251.4	1251.4	1259.4	1267.5	1283.6	1294.9	1307.8	1309.4	1309.4	1301.3
12.5°	1224.0	1222.4	1227.2	1236.9	1253.0	1273.9	1293.3	1312.6	1315.8	1317.4	1304.5
15°	1206.3	1206.3	1212.7	1232.1	1254.6	1283.6	1306.2	1331.9	1335.1	1333.5	1315.8
17.5°	1190.2	1191.8	1204.7	1236.9	1262.7	1301.3	1328.7	1357.7	1359.3	1357.7	1328.7
20°	1183.8	1187.0	1206.3	1248.2	1277.2	1320.6	1356.1	1385.1	1386.7	1380.2	1341.6
22.5°	1201.5	1203.1	1227.2	1272.3	1299.7	1348.0	1393.1	1420.5	1422.1	1412.4	1360.9
25°	1262.7	1262.7	1283.6	1322.3	1346.4	1394.7	1443.0	1475.3	1475.3	1464.0	1404.4
27.5°	1406.0	1393.1	1388.3	1399.6	1407.6	1459.2	1510.7	1551.0	1549.3	1533.2	1460.8
30°	1683.0	1650.8	1599.3	1541.3	1512.3	1547.7	1596.1	1647.6	1646.0	1620.2	1530.0
32.5°	2148.5	2101.8	1979.4	1826.4	1702.3	1662.1	1707.2	1763.5	1765.2	1734.6	1641.1
35°	2800.7	2726.7	2507.6	2295.0	2011.6	1858.6	1871.5	1932.7	1952.0	1935.9	1828.0
37.5°	3428.9	3361.2	3151.8	2857.1	2472.2	2159.7	2105.0	2158.1	2180.7	2180.7	2066.3
40°	4061.8	3982.9	3797.7	3501.3	3095.5	2630.0	2433.5	2477.0	2501.2	2506.0	2356.2
42.5°	4569.1	4517.6	4375.9	4145.5	3765.5	3454.6	2907.0	2882.9	2905.4	2887.7	2692.8
45°	4920.2	4880.0	4781.7	4694.7	4509.5	4353.3	3540.0	3377.3	3391.8	3330.6	3071.3
47.5°	4992.7	4947.6	4926.7	5047.4	5179.5	5218.2	4317.9	3965.2	3950.7	3815.4	3464.3
50°	4677.0	4681.9	4759.2	5103.8	5654.6	6002.5	5219.8	4628.7	4575.6	4274.4	3829.9
52.5°	3995.8	4073.1	4267.9	4826.8	5799.6	6572.6	6121.7	5332.5	5250.4	4720.5	4103.7
55°	3126.1	3225.9	3546.4	4189.0	5496.8	6827.1	6881.9	6063.7	5876.9	5055.5	4316.3
57.5°	2324.0	2354.6	2728.3	3314.5	4780.1	6577.5	7271.6	6627.4	6387.4	5322.9	4527.2
60°	1447.9	1467.2	1861.8	2523.7	3620.5	5654.6	7271.6	7015.5	6786.8	5562.8	4720.5
62.5°	900.3	906.7	1054.9	1729.7	2460.9	4193.9	6970.4	7316.7	7133.1	5735.2	4886.4
65°	518.6	525.0	594.3	977.6	1600.9	2510.8	6200.6	7405.3	7323.2	5872.0	5015.2
67.5°	378.5	381.7	409.1	549.2	1046.9	1290.0	4657.7	7049.4	7152.4	5939.7	5012.0
70°	328.6	333.4	368.8	428.4	755.3	792.4	2370.7	6087.9	6376.1	5843.1	4862.2
72.5°	252.9	259.3	312.4	402.6	554.0	570.1	858.4	4332.4	4768.8	5239.1	4451.5
75°	173.9	180.4	233.5	331.8	457.4	426.8	471.9	1993.9	2515.7	3514.2	3388.6
77.5°	111.1	112.7	146.6	241.6	394.6	302.8	323.7	650.7	913.2	1589.6	1599.3
80°	74.1	75.7	90.2	156.2	270.6	280.2	199.7	301.2	330.2	463.8	322.1
82.5°	45.1	45.1	61.2	98.2	164.3	231.9	130.5	157.8	169.1	178.8	83.7
85°	17.7	17.7	37.0	64.4	103.1	107.9	82.1	91.8	96.6	104.7	38.7
87.5°	4.8	4.8	20.9	35.4	45.1	49.9	49.9	45.1	48.3	59.6	19.3
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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CATALOG NUMBER: ARCH-L-PA3-90-830-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2	1314.2
2.5°	1307.8	1302.9	1296.5	1290.0	1283.6	1278.8	1273.9	1273.9	1270.7	1265.9	1262.7
5°	1304.5	1296.5	1282.0	1270.7	1253.0	1240.1	1230.5	1222.4	1217.6	1206.3	1204.7
7.5°	1299.7	1290.0	1269.1	1246.6	1217.6	1195.0	1172.5	1156.4	1140.3	1127.4	1124.2
10°	1291.7	1280.4	1249.8	1217.6	1177.3	1135.4	1082.3	1021.1	964.7	932.5	922.8
12.5°	1291.7	1277.2	1236.9	1193.4	1135.4	1032.4	897.1	761.8	657.1	610.4	597.5
15°	1299.7	1280.4	1227.2	1167.6	1059.7	850.4	631.3	452.6	338.2	302.8	294.7
17.5°	1307.8	1280.4	1212.7	1132.2	921.2	616.8	359.2	238.4	201.3	193.3	193.3
20°	1311.0	1277.2	1193.4	1066.2	736.0	383.3	214.2	178.8	164.3	159.4	159.4
22.5°	1323.9	1278.8	1178.9	971.2	534.7	225.5	169.1	149.8	135.3	130.5	130.5
25°	1356.1	1298.1	1182.1	850.4	343.0	170.7	143.3	124.0	109.5	103.1	103.1
27.5°	1407.6	1341.6	1199.9	710.3	215.8	146.6	120.8	99.9	88.6	82.1	82.1
30°	1465.6	1389.9	1207.9	549.2	161.1	124.0	98.2	78.9	70.9	66.0	64.4
32.5°	1567.1	1473.6	1201.5	376.9	132.1	104.7	78.9	62.8	56.4	54.8	54.8
35°	1729.7	1620.2	1188.6	236.8	109.5	83.7	62.8	51.5	46.7	45.1	43.5
37.5°	1950.4	1834.4	1149.9	156.2	90.2	66.0	51.5	43.5	38.7	37.0	37.0
40°	2219.3	2079.2	1075.8	119.2	77.3	53.1	43.5	37.0	33.8	32.2	32.2
42.5°	2526.9	2351.4	958.3	103.1	64.4	45.1	37.0	30.6	29.0	27.4	27.4
45°	2863.5	2636.5	795.6	91.8	54.8	37.0	30.6	27.4	24.2	24.2	22.5
47.5°	3221.1	2923.1	612.0	80.5	46.7	32.2	27.4	22.5	20.9	19.3	19.3
50°	3565.7	3179.2	430.0	69.3	38.7	27.4	22.5	19.3	17.7	16.1	16.1
52.5°	3808.9	3333.8	304.4	59.6	32.2	24.2	17.7	14.5	12.9	12.9	12.9
55°	4003.8	3430.5	212.6	49.9	27.4	20.9	14.5	11.3	11.3	9.7	9.7
57.5°	4187.4	3493.3	156.2	41.9	22.5	16.1	11.3	8.1	8.1	6.4	6.4
60°	4377.5	3527.1	119.2	33.8	19.3	12.9	8.1	6.4	4.8	4.8	4.8
62.5°	4569.1	3548.0	91.8	27.4	16.1	9.7	6.4	4.8	3.2	1.6	1.6
65°	4736.6	3554.5	70.9	20.9	12.9	6.4	4.8	1.6	0.0	0.0	0.0
67.5°	4786.5	3480.4	54.8	16.1	9.7	4.8	3.2	0.0	0.0	0.0	0.0
70°	4651.3	3283.9	41.9	12.9	8.1	3.2	1.6	0.0	0.0	0.0	0.0
72.5°	4127.8	2754.0	32.2	8.1	6.4	3.2	1.6	0.0	0.0	0.0	0.0
75°	2953.7	1468.8	22.5	6.4	4.8	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	1359.3	568.5	16.1	4.8	3.2	1.6	0.0	0.0	0.0	0.0	0.0
80°	265.7	141.7	6.4	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.2	24.2	3.2	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.9	8.1	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	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)