

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: P399117

Luminaire Tested: **ARCH-L-PA3-100-722-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-100-722-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8866 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

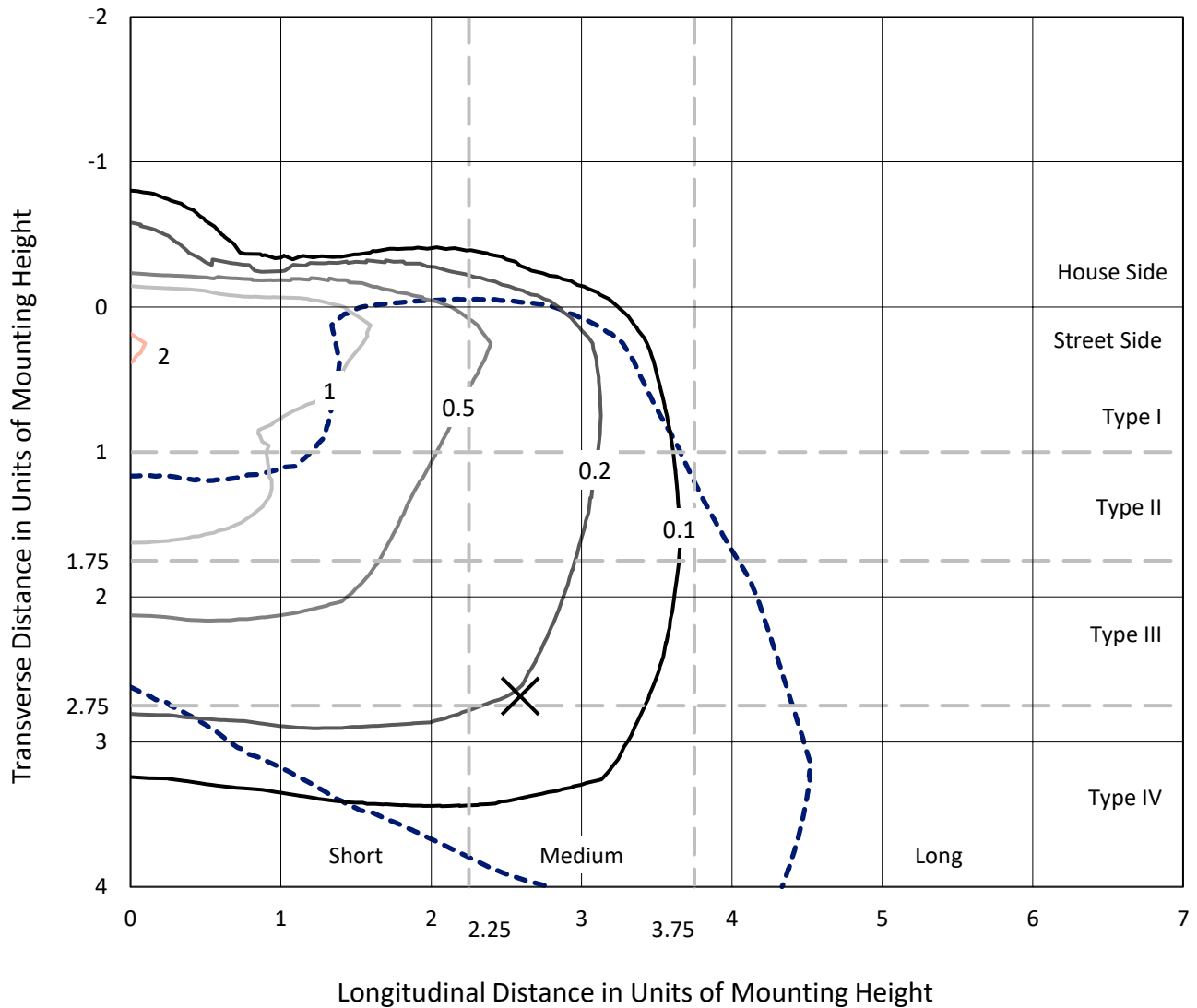
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399117  
 CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

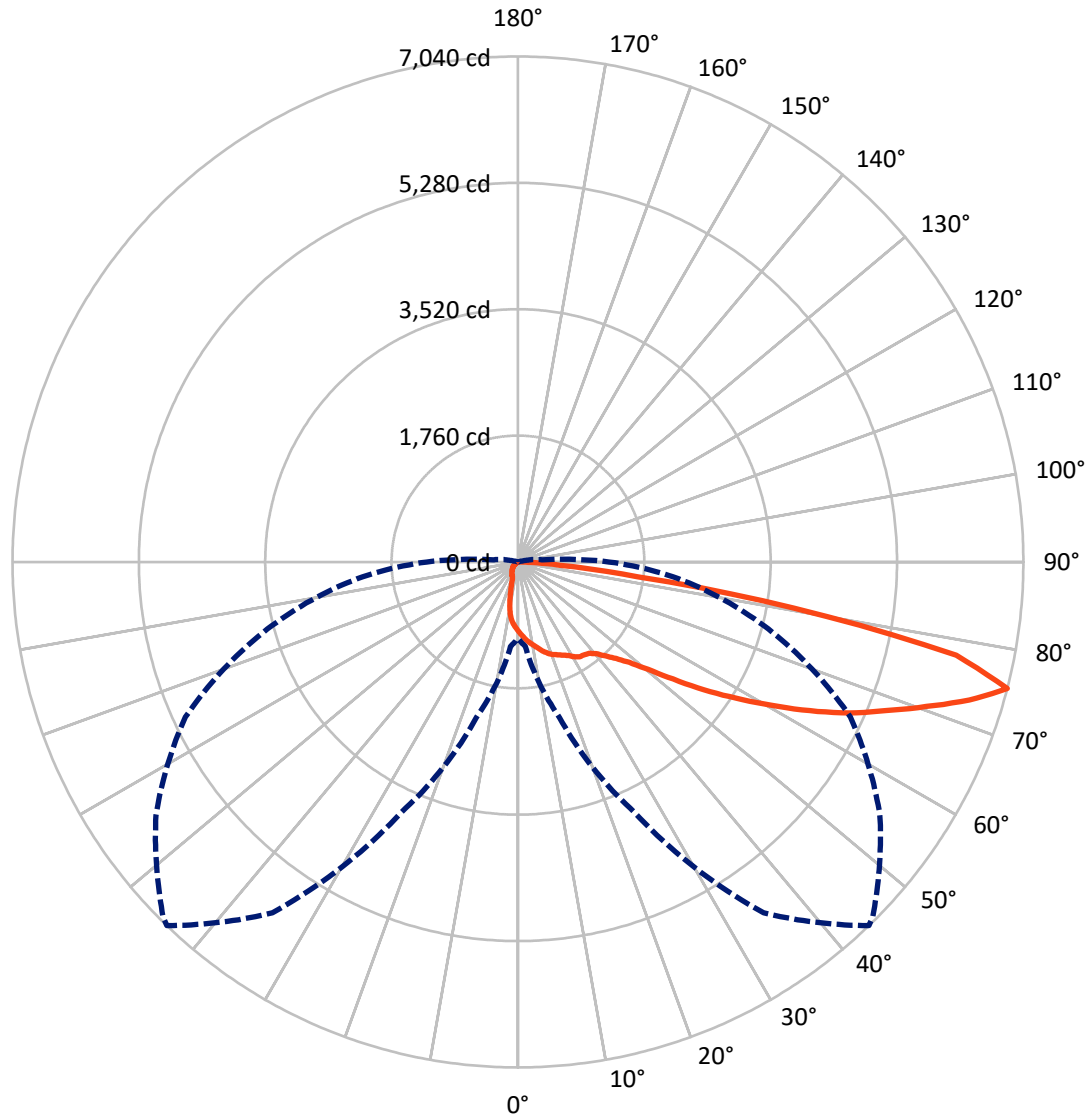
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399117  
CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399117  
 CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

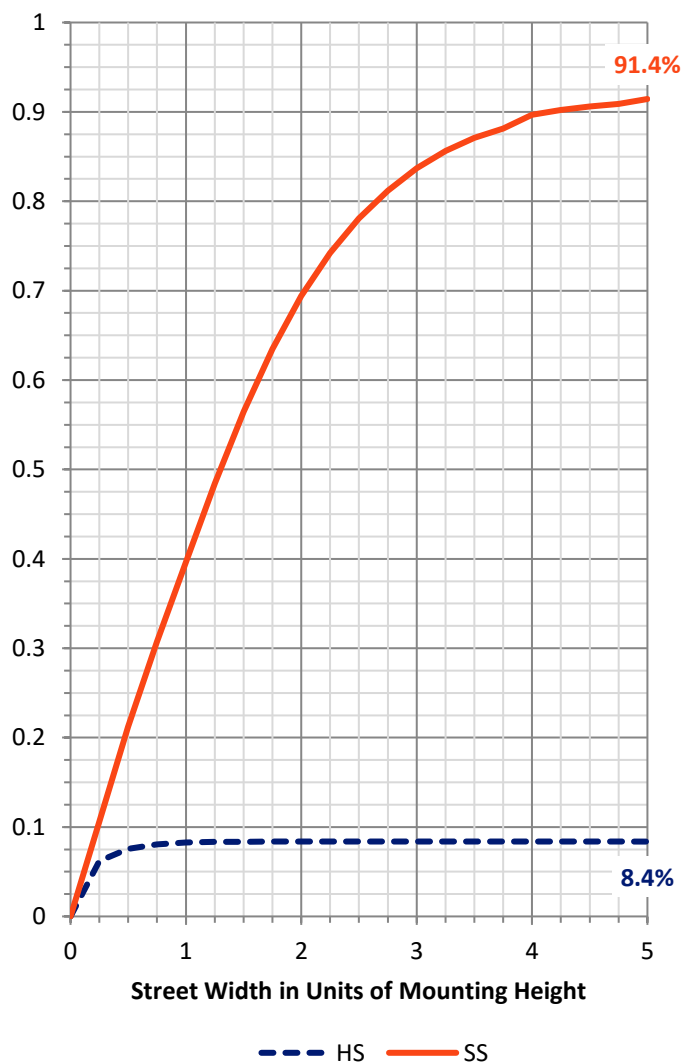
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	747.7	0.0	747.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	8118.3	0.0	8118.3
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	8866.0	0.0	8866.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.0	1.0
10°-20°	255.0	2.9
20°-30°	420.9	4.7
30°-40°	610.8	6.9
40°-50°	992.9	11.2
50°-60°	1750.4	19.7
60°-70°	2515.7	28.4
70°-80°	2014.5	22.7
80°-90°	214.6	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°	8866.0	100.0
0°-180°	8866.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399117

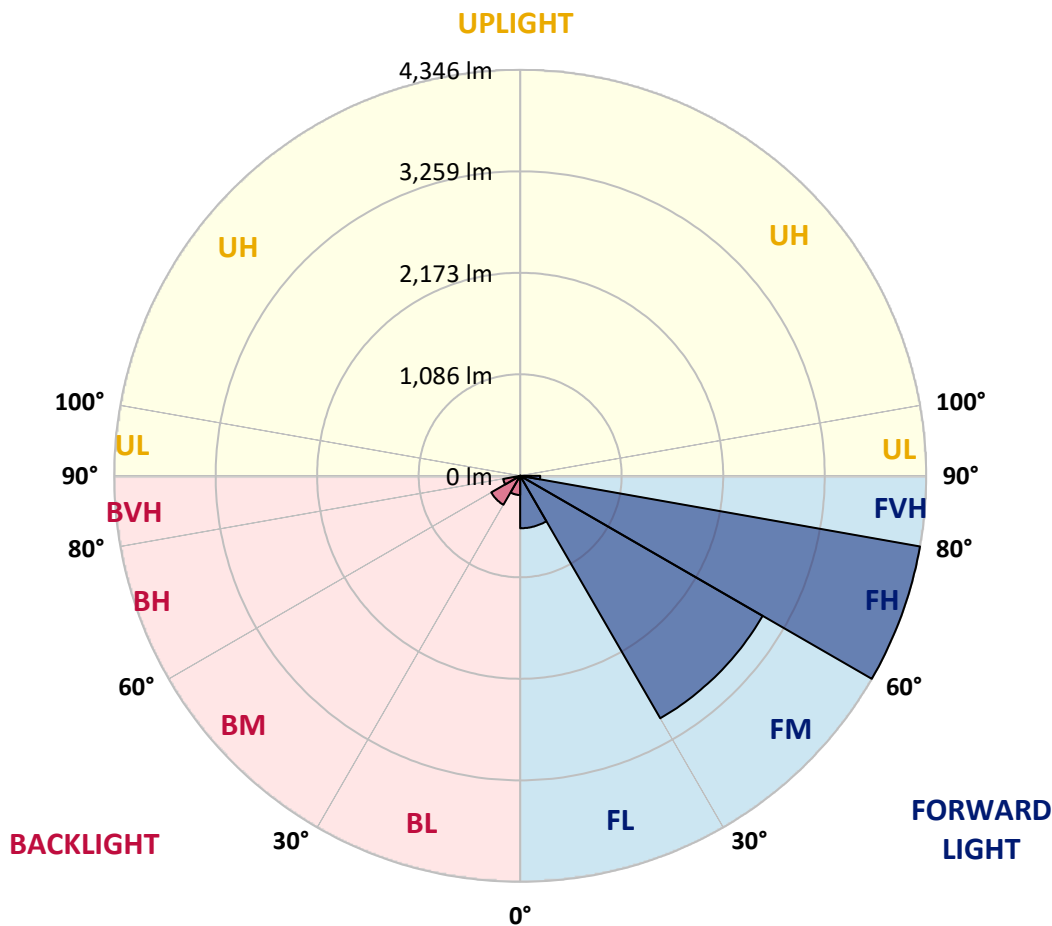
CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	561.5	6.3			
FM (30°-60°)	2996.8	33.8			
FH (60°-80°)	4346.0	49.0			G2/5000
FVH (80°-90°)	214.1	2.4			G2/225
BL (0°-30°)	205.4	2.3	B1/500		
BM (30°-60°)	357.4	4.0	B1/1000		
BH (60°-80°)	184.3	2.1	B1/500		G1/500
BVH (80°-90°)	0.5	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 IV Medium





REPORT NUMBER: P399117

CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0
2.5°	1051.7	1050.1	1045.2	1037.0	1028.8	1020.6	1019.0	1005.9	991.2	979.8	969.9
5°	1145.0	1143.3	1135.1	1117.1	1099.2	1077.9	1076.3	1045.2	1017.4	986.3	960.1
7.5°	1241.5	1238.2	1223.5	1195.7	1164.6	1131.9	1128.6	1082.8	1041.9	1001.0	963.4
10°	1316.7	1313.4	1292.2	1259.4	1216.9	1176.0	1171.1	1123.7	1082.8	1030.5	979.8
12.5°	1390.3	1383.8	1355.9	1320.0	1267.6	1228.4	1223.5	1174.4	1125.3	1071.3	1009.2
15°	1459.0	1450.8	1424.6	1378.8	1323.2	1285.6	1282.3	1230.0	1179.3	1117.1	1048.4
17.5°	1506.4	1503.2	1472.1	1421.4	1367.4	1336.3	1333.1	1279.1	1228.4	1162.9	1089.3
20°	1531.0	1531.0	1501.5	1445.9	1396.8	1375.6	1370.7	1320.0	1270.9	1208.7	1131.9
22.5°	1535.9	1540.8	1517.9	1457.4	1421.4	1403.4	1400.1	1355.9	1308.5	1251.3	1179.3
25°	1545.7	1545.7	1534.2	1468.8	1442.6	1437.7	1436.1	1396.8	1354.3	1297.1	1226.7
27.5°	1557.1	1557.1	1549.0	1485.2	1475.4	1473.7	1472.1	1454.1	1419.7	1352.7	1282.3
30°	1586.6	1588.2	1581.7	1517.9	1511.3	1529.3	1532.6	1522.8	1480.3	1396.8	1339.6
32.5°	1660.2	1645.5	1627.5	1540.8	1552.2	1575.1	1576.8	1557.1	1511.3	1444.3	1408.3
35°	1845.0	1758.3	1676.5	1560.4	1565.3	1588.2	1591.5	1589.8	1562.0	1504.8	1486.8
37.5°	2016.8	1894.1	1777.9	1606.2	1589.8	1614.4	1620.9	1648.7	1627.5	1588.2	1593.1
40°	2116.5	2069.1	1987.3	1732.1	1638.9	1676.5	1683.1	1725.6	1717.4	1701.1	1732.1
42.5°	2424.0	2427.3	2339.0	1920.2	1728.9	1789.4	1797.6	1831.9	1843.4	1851.6	1926.8
45°	2780.6	2792.0	2770.8	2258.8	1899.0	1918.6	1930.1	1975.9	2018.4	2070.7	2208.1
47.5°	3209.1	3199.3	3120.8	2672.6	2195.0	2085.4	2093.6	2182.0	2255.6	2370.0	2566.3
50°	3588.6	3613.1	3464.3	3058.7	2612.1	2348.8	2340.6	2427.3	2559.8	2720.1	2967.1
52.5°	3971.3	3935.4	3734.2	3441.4	3106.1	2707.0	2682.5	2729.9	2916.4	3106.1	3359.6
55°	4072.8	4076.0	4007.3	3860.1	3518.3	3142.1	3101.2	3097.9	3330.2	3459.4	3771.8
57.5°	4272.3	4280.5	4296.8	4326.3	4164.4	3577.2	3534.6	3488.8	3714.5	3789.8	4185.6
60°	4475.1	4484.9	4584.7	4743.4	4635.4	4046.6	4000.8	3892.8	4018.8	4120.2	4620.7
62.5°	4449.0	4517.7	4807.2	5122.8	5109.8	4561.8	4504.6	4244.5	4324.6	4413.0	5019.8
65°	4017.1	4090.7	4741.7	5227.5	5585.7	5070.5	4977.3	4607.6	4612.5	4718.8	5404.2
67.5°	3631.1	3711.3	4332.8	5183.4	5899.8	5526.8	5430.3	4972.4	4895.5	5072.1	5610.3
70°	3408.7	3488.8	4007.3	5046.0	5988.1	6032.3	5948.8	5389.4	5232.4	5394.4	5379.6
72.5°	2667.7	2793.7	3591.9	4784.3	6083.0	6573.7	6508.2	5917.8	5518.7	5057.4	4095.7
75°	1063.2	1179.3	2242.5	3850.3	5963.6	7039.8	6989.1	6154.9	5108.1	3611.5	2096.9
77.5°	320.6	343.5	623.2	1903.9	4372.1	6241.6	6225.3	5175.2	3614.8	1676.5	572.5
80°	106.3	117.8	191.4	525.0	1995.5	3899.4	3973.0	3297.5	1642.2	384.4	116.1
82.5°	44.2	49.1	96.5	211.0	706.6	1679.8	1655.3	1477.0	572.5	238.8	42.5
85°	11.4	14.7	44.2	121.0	258.4	579.0	608.5	495.6	323.9	197.9	13.1
87.5°	0.0	0.0	21.3	49.1	116.1	175.0	183.2	150.5	183.2	148.8	6.5
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: P399117

CATALOG NUMBER: ARCH-L-PA3-100-722-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0	965.0
2.5°	961.8	953.6	938.9	929.0	916.0	912.7	906.1	898.0	896.3	888.2	889.8
5°	945.4	932.3	906.1	888.2	866.9	860.3	848.9	840.7	834.2	822.7	824.4
7.5°	942.1	922.5	886.5	852.2	817.8	793.3	758.9	731.1	708.2	683.7	688.6
10°	953.6	929.0	878.3	830.9	768.8	690.2	600.3	541.4	512.0	482.5	485.8
12.5°	976.5	947.0	881.6	809.6	683.7	549.6	425.3	345.1	323.9	310.8	312.4
15°	1010.8	974.8	891.4	768.8	569.2	397.5	283.0	248.6	256.8	261.7	261.7
17.5°	1046.8	1005.9	899.6	695.1	440.0	278.1	230.6	227.4	238.8	250.3	250.3
20°	1091.0	1038.6	901.2	601.9	317.3	225.7	217.5	217.5	225.7	238.8	238.8
22.5°	1133.5	1074.6	886.5	495.6	242.1	209.4	209.4	209.4	214.3	227.4	229.0
25°	1184.2	1118.8	855.4	382.7	207.7	199.5	199.5	201.2	204.5	215.9	217.5
27.5°	1238.2	1164.6	803.1	279.7	189.7	188.1	189.7	191.4	193.0	204.5	207.7
30°	1300.3	1215.3	736.0	209.4	173.4	173.4	178.3	181.6	181.6	191.4	194.6
32.5°	1372.3	1282.3	655.9	173.4	157.0	155.4	163.6	168.5	168.5	176.6	179.9
35°	1462.3	1351.0	559.4	153.8	143.9	140.7	143.9	152.1	155.4	161.9	163.6
37.5°	1581.7	1432.8	456.3	142.3	134.1	127.6	127.6	129.2	135.8	142.3	143.9
40°	1733.8	1522.8	354.9	134.1	124.3	117.8	112.9	111.2	109.6	114.5	117.8
42.5°	1925.2	1624.2	265.0	125.9	116.1	106.3	99.8	93.2	85.1	83.4	85.1
45°	2170.5	1748.5	196.3	119.4	111.2	96.5	85.1	73.6	58.9	54.0	55.6
47.5°	2460.0	1877.7	153.8	112.9	108.0	85.1	70.3	50.7	36.0	32.7	34.3
50°	2767.5	2002.0	130.9	104.7	101.4	73.6	50.7	31.1	21.3	21.3	22.9
52.5°	3029.2	2072.4	119.4	98.1	91.6	60.5	32.7	18.0	13.1	13.1	14.7
55°	3282.7	2110.0	111.2	91.6	78.5	42.5	18.0	11.4	8.2	8.2	8.2
57.5°	3544.4	2126.3	101.4	83.4	62.2	26.2	9.8	6.5	4.9	4.9	4.9
60°	3776.7	2095.3	86.7	68.7	40.9	13.1	4.9	4.9	3.3	1.6	1.6
62.5°	3971.3	2036.4	60.5	49.1	24.5	6.5	3.3	1.6	0.0	0.0	0.0
65°	4090.7	1941.5	39.3	32.7	14.7	4.9	1.6	0.0	0.0	0.0	0.0
67.5°	4056.4	1763.2	24.5	21.3	6.5	3.3	1.6	0.0	0.0	0.0	0.0
70°	3660.6	1445.9	18.0	13.1	4.9	1.6	0.0	0.0	0.0	0.0	0.0
72.5°	2638.3	978.1	13.1	8.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	1269.3	348.4	8.2	6.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	310.8	76.9	4.9	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.7	14.7	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	22.9	6.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	1.6	0.0	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)