

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: P258087

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 485mA 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: 10634 lumens
Efficiency: N/A
Efficacy: 94.1 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

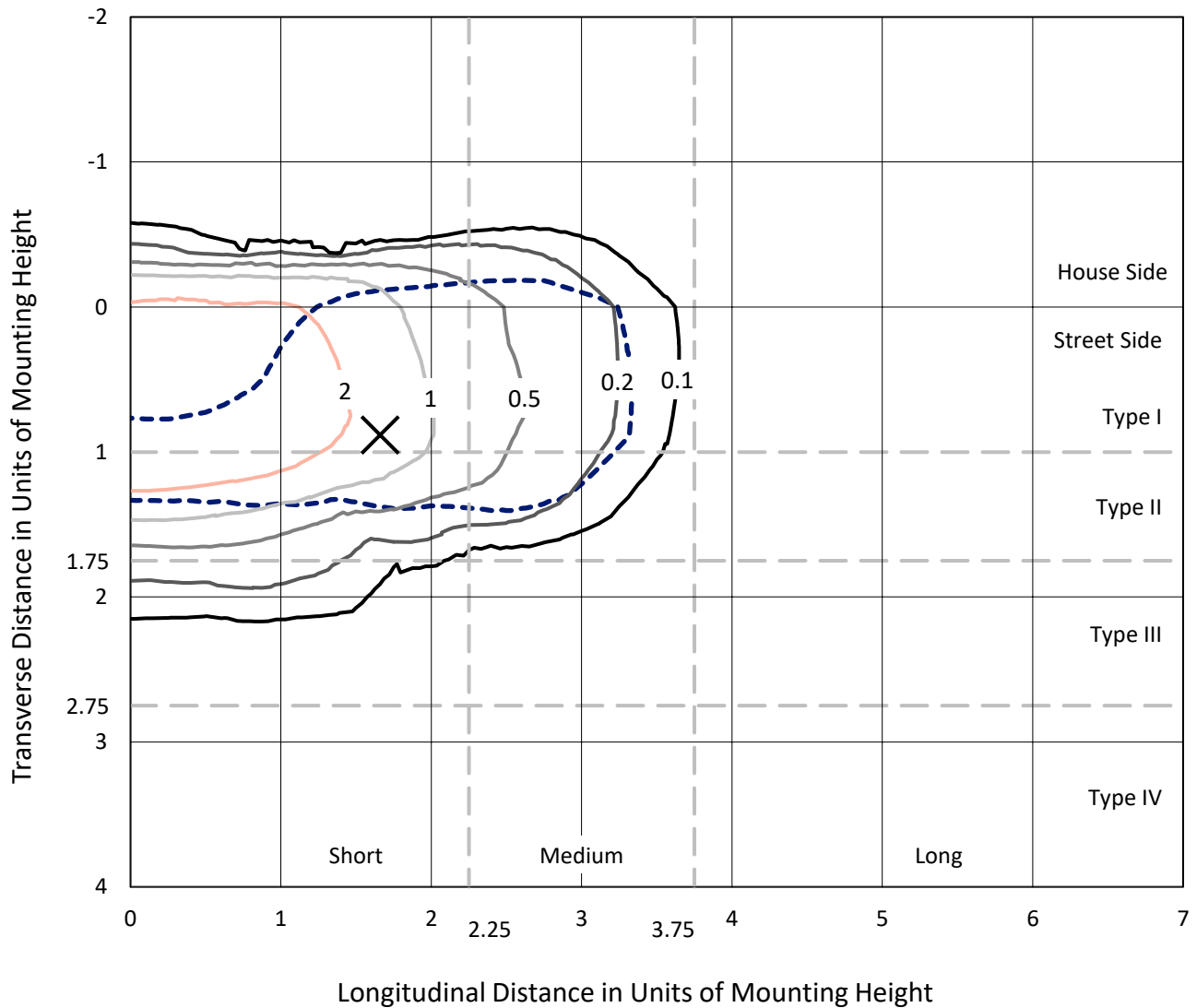
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

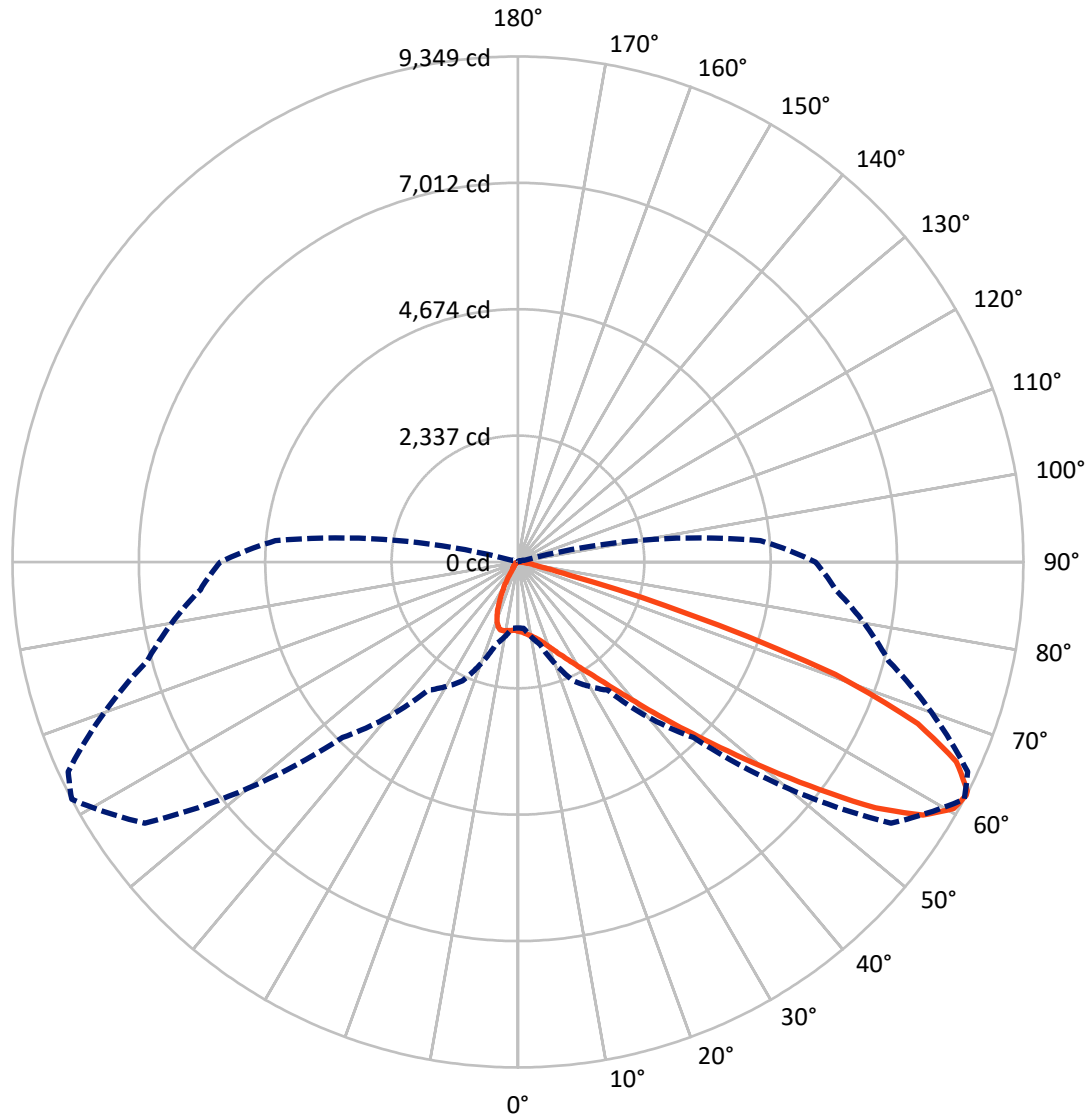
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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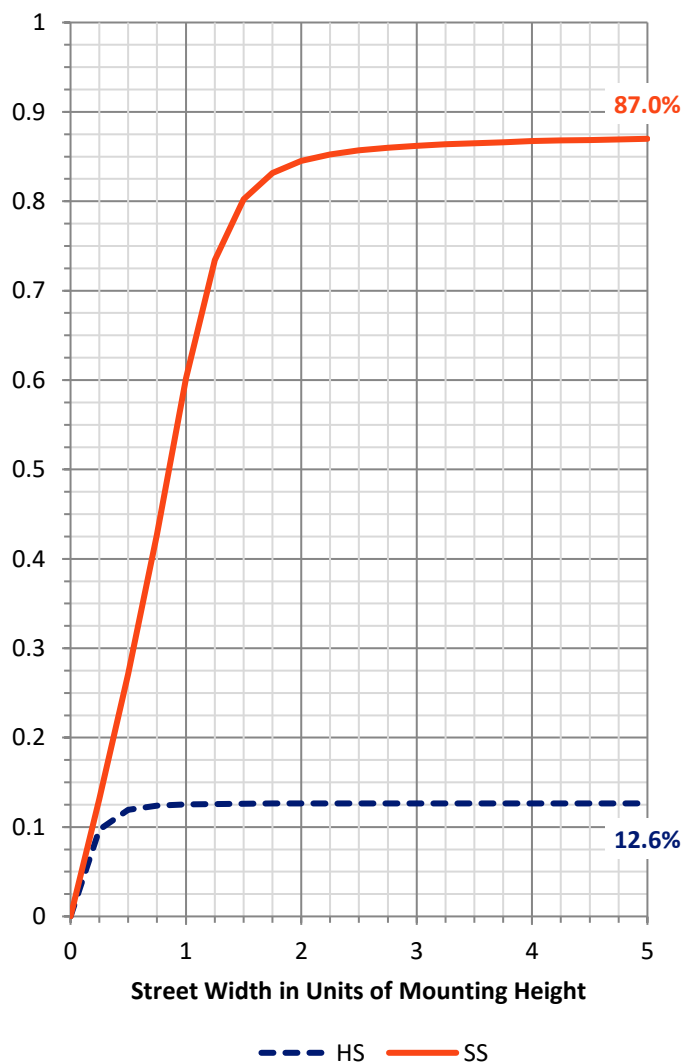
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1359.7	0.0	1359.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9274.3	0.0	9274.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	10634.0	0.0	10634.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	1.2
10°-20°	344.3	3.2
20°-30°	578.2	5.4
30°-40°	1108.3	10.4
40°-50°	2263.7	21.3
50°-60°	2995.7	28.2
60°-70°	2327.1	21.9
70°-80°	840.0	7.9
80°-90°	53.5	0.5
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°	10634.0	100.0
0°-180°	10634.0	100.0

Coefficient of Utilization



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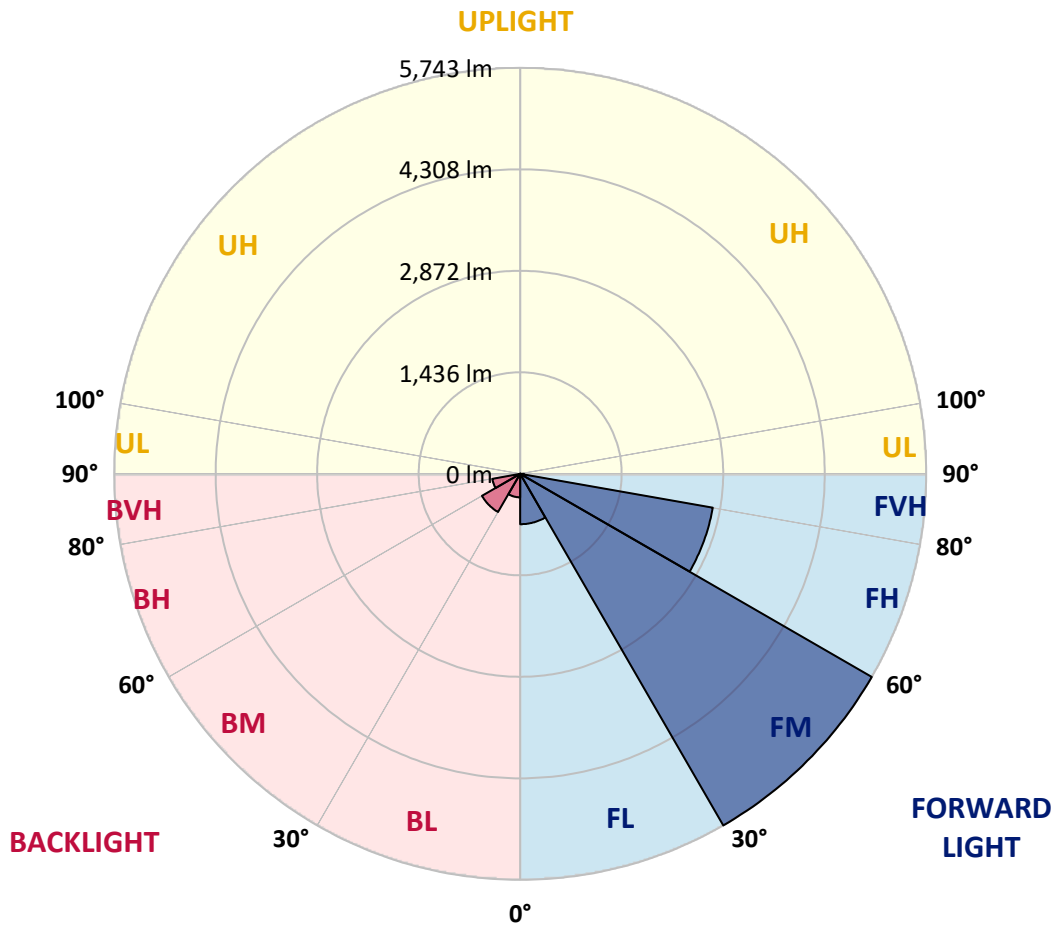
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	712.9	6.7			
FM (30°-60°)	5743.5	54.0			
FH (60°-80°)	2766.7	26.0			G2/5000
FVH (80°-90°)	51.2	0.5			G1/100
BL (0°-30°)	332.8	3.1	B1/500		
BM (30°-60°)	624.2	5.9	B1/1000		
BH (60°-80°)	400.4	3.8	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°	62°	65°	75°	85°
0°	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1315.0	1312.4	1309.8	1307.1	1307.1	1304.5	1301.9	1296.7	1291.5	1286.2	1283.6
5°	1338.5	1335.9	1333.3	1335.9	1333.3	1333.3	1330.7	1325.4	1320.2	1312.4	1304.5
7.5°	1356.8	1354.2	1351.6	1354.2	1356.8	1359.4	1362.0	1356.8	1354.2	1343.7	1335.9
10°	1380.3	1377.7	1375.1	1380.3	1380.3	1393.4	1396.0	1393.4	1390.8	1383.0	1369.9
12.5°	1414.3	1416.9	1416.9	1422.2	1427.4	1443.1	1448.3	1440.5	1440.5	1430.0	1414.3
15°	1477.1	1477.1	1477.1	1482.3	1484.9	1505.8	1511.1	1503.2	1508.4	1490.1	1474.5
17.5°	1537.2	1539.8	1545.0	1555.5	1555.5	1573.8	1584.3	1584.3	1594.7	1571.2	1550.3
20°	1597.3	1599.9	1607.8	1631.3	1631.3	1654.8	1673.1	1681.0	1691.4	1667.9	1631.3
22.5°	1662.7	1662.7	1675.8	1712.4	1704.5	1751.6	1785.6	1798.6	1809.1	1777.7	1720.2
25°	1762.0	1751.6	1762.0	1796.0	1790.8	1856.1	1918.9	1932.0	1945.0	1908.4	1822.2
27.5°	1950.3	1934.6	1898.0	1900.6	1900.6	1976.4	2065.3	2083.6	2091.4	2060.1	1952.9
30°	2326.7	2326.7	2190.8	2099.3	2039.1	2107.1	2232.6	2264.0	2274.4	2227.4	2086.2
32.5°	2982.9	2982.9	2731.9	2499.3	2271.8	2271.8	2415.6	2473.1	2483.6	2428.7	2264.0
35°	3819.5	3814.3	3437.8	3118.9	2674.4	2507.1	2630.0	2726.7	2758.1	2684.9	2494.0
37.5°	4708.3	4674.4	4269.1	3903.1	3294.0	2883.6	2920.2	3048.3	3077.0	3016.9	2792.1
40°	5429.9	5390.7	5063.9	4758.0	4094.0	3484.9	3338.5	3456.1	3490.1	3406.4	3147.6
42.5°	6083.5	5986.7	5761.9	5542.3	5014.2	4525.3	3895.3	3942.4	3979.0	3890.1	3547.6
45°	6556.6	6407.6	6292.6	6224.6	5944.9	5667.8	4616.8	4522.7	4535.8	4426.0	3984.2
47.5°	6569.7	6465.1	6475.6	6653.4	6768.4	6757.9	5555.4	5220.7	5171.1	4988.1	4449.5
50°	5942.3	6002.4	6193.3	6700.4	7322.6	7699.1	6671.7	6046.9	5897.8	5568.4	4912.3
52.5°	4896.6	4990.7	5348.8	6203.7	7403.7	8318.7	7829.8	6990.6	6724.0	6143.6	5267.8
55°	3835.2	3840.4	4216.9	5087.4	6862.5	8431.1	8755.3	8028.5	7620.7	6580.2	5503.1
57.5°	2637.8	2781.6	3260.0	3845.6	5641.6	7871.6	9103.0	8833.7	8308.2	6849.4	5667.8
60°	1728.0	1735.9	2292.7	2969.8	3840.4	6405.0	8891.2	9259.8	8865.1	7008.9	5780.2
62°	1218.3	1231.3	1576.4	2426.1	2894.0	4590.7	8423.3	9348.7	9178.8	7103.0	5897.8
62.5°	1129.4	1139.8	1430.0	2290.1	2718.9	4117.5	8255.9	9327.8	9225.8	7134.4	5939.7
65°	828.7	828.7	935.9	1573.8	1992.1	2224.8	6995.8	8912.1	9163.1	7385.4	6096.5
67.5°	640.5	645.7	682.3	969.9	1503.2	1349.0	4465.2	7976.2	8509.5	7756.6	6185.4
70°	551.6	549.0	575.1	643.1	1084.9	896.7	1965.9	6224.6	7126.6	7662.5	6104.4
72.5°	407.8	410.4	470.6	564.7	755.5	583.0	888.9	3304.5	4622.1	5997.2	5231.2
75°	261.4	264.0	332.0	444.4	543.8	381.7	512.4	985.6	1892.7	3325.4	3199.9
77.5°	175.2	180.4	217.0	311.1	475.8	237.9	321.6	413.1	569.9	1247.0	1147.7
80°	117.6	117.6	138.6	209.1	300.6	198.7	172.5	274.5	295.4	386.9	193.5
82.5°	78.4	78.4	91.5	138.6	196.1	177.8	104.6	149.0	172.5	193.5	68.0
85°	47.1	47.1	62.7	86.3	128.1	99.3	68.0	83.7	88.9	122.9	36.6
87.5°	28.8	26.1	41.8	60.1	68.0	60.1	44.4	44.4	47.1	68.0	18.3
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1278.4	1275.8	1273.2	1267.9	1260.1	1254.9	1249.6	1244.4	1239.2	1239.2	1247.0
5°	1301.9	1294.1	1283.6	1273.2	1257.5	1247.0	1239.2	1228.7	1223.5	1223.5	1226.1
7.5°	1330.7	1322.8	1304.5	1286.2	1262.7	1244.4	1226.1	1202.6	1184.3	1176.4	1184.3
10°	1362.0	1351.6	1325.4	1296.7	1270.5	1223.5	1163.4	1090.2	1027.4	998.7	1011.7
12.5°	1401.3	1388.2	1356.8	1317.6	1257.5	1142.4	993.4	823.5	716.3	666.6	677.1
15°	1458.8	1440.5	1396.0	1335.9	1202.6	954.2	711.1	515.0	415.7	373.8	379.1
17.5°	1526.7	1503.2	1443.1	1330.7	1061.4	687.6	423.5	300.6	258.8	248.4	248.4
20°	1599.9	1568.6	1490.1	1291.5	847.0	431.4	264.0	230.1	214.4	206.5	206.5
22.5°	1675.8	1633.9	1529.4	1200.0	603.9	269.3	217.0	193.5	175.2	167.3	167.3
25°	1767.3	1712.4	1568.6	1040.5	384.3	217.0	185.6	162.1	143.8	133.3	135.9
27.5°	1874.4	1803.9	1602.6	841.8	248.4	188.2	154.2	130.7	115.0	109.8	109.8
30°	1986.9	1903.2	1610.4	630.0	201.3	162.1	128.1	107.2	96.7	91.5	91.5
32.5°	2141.1	2031.3	1586.9	418.3	169.9	135.9	107.2	88.9	81.0	78.4	78.4
35°	2345.0	2198.6	1532.0	258.8	143.8	112.4	88.9	78.4	70.6	68.0	68.0
37.5°	2603.8	2431.3	1435.2	177.8	122.9	91.5	75.8	68.0	62.7	60.1	60.1
40°	2948.9	2713.6	1309.8	154.2	104.6	78.4	65.4	60.1	54.9	54.9	54.9
42.5°	3314.9	3056.1	1147.7	135.9	88.9	68.0	57.5	52.3	49.7	47.1	47.1
45°	3714.9	3406.4	946.4	120.3	75.8	60.1	52.3	44.4	41.8	41.8	41.8
47.5°	4112.3	3767.2	726.8	104.6	65.4	52.3	44.4	39.2	36.6	34.0	34.0
50°	4520.1	4094.0	533.3	91.5	57.5	47.1	39.2	34.0	28.8	26.1	26.1
52.5°	4815.5	4290.1	389.5	78.4	49.7	39.2	31.4	26.1	20.9	18.3	18.3
55°	5032.5	4410.3	285.0	65.4	44.4	34.0	26.1	20.9	15.7	15.7	13.1
57.5°	5202.4	4467.8	214.4	57.5	39.2	28.8	20.9	15.7	13.1	10.5	10.5
60°	5333.2	4470.4	159.5	47.1	34.0	23.5	15.7	10.5	7.8	7.8	7.8
62°	5505.7	4504.4	130.7	39.2	31.4	20.9	13.1	7.8	5.2	2.6	2.6
62.5°	5555.4	4517.5	125.5	39.2	28.8	18.3	10.5	7.8	5.2	2.6	2.6
65°	5785.4	4541.0	96.7	31.4	23.5	15.7	7.8	5.2	0.0	0.0	0.0
67.5°	5994.6	4504.4	70.6	23.5	18.3	10.5	7.8	2.6	0.0	0.0	0.0
70°	5973.7	4253.5	49.7	15.7	13.1	7.8	5.2	0.0	0.0	0.0	0.0
72.5°	4922.7	3184.2	34.0	13.1	7.8	5.2	2.6	0.0	0.0	0.0	0.0
75°	2972.5	1393.4	23.5	7.8	7.8	5.2	2.6	0.0	0.0	0.0	0.0
77.5°	975.1	504.6	15.7	5.2	5.2	2.6	2.6	0.0	0.0	0.0	0.0
80°	159.5	83.7	7.8	5.2	5.2	2.6	2.6	0.0	0.0	0.0	0.0
82.5°	49.7	20.9	5.2	5.2	2.6	2.6	0.0	0.0	0.0	0.0	0.0
85°	18.3	7.8	5.2	5.2	2.6	2.6	0.0	0.0	0.0	0.0	0.0
87.5°	7.8	5.2	5.2	5.2	2.6	2.6	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)