

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: P258066

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 9951.3 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

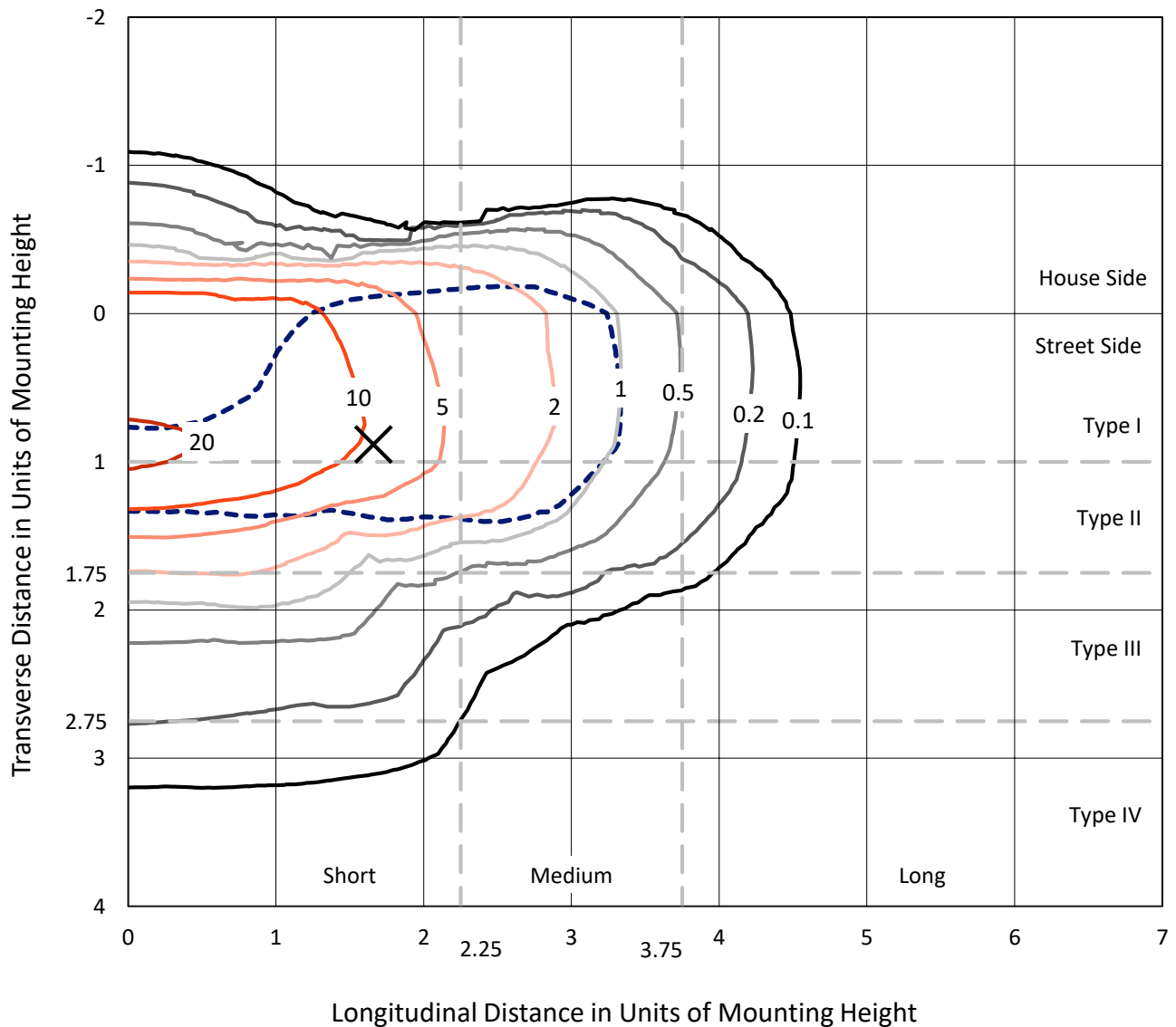
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

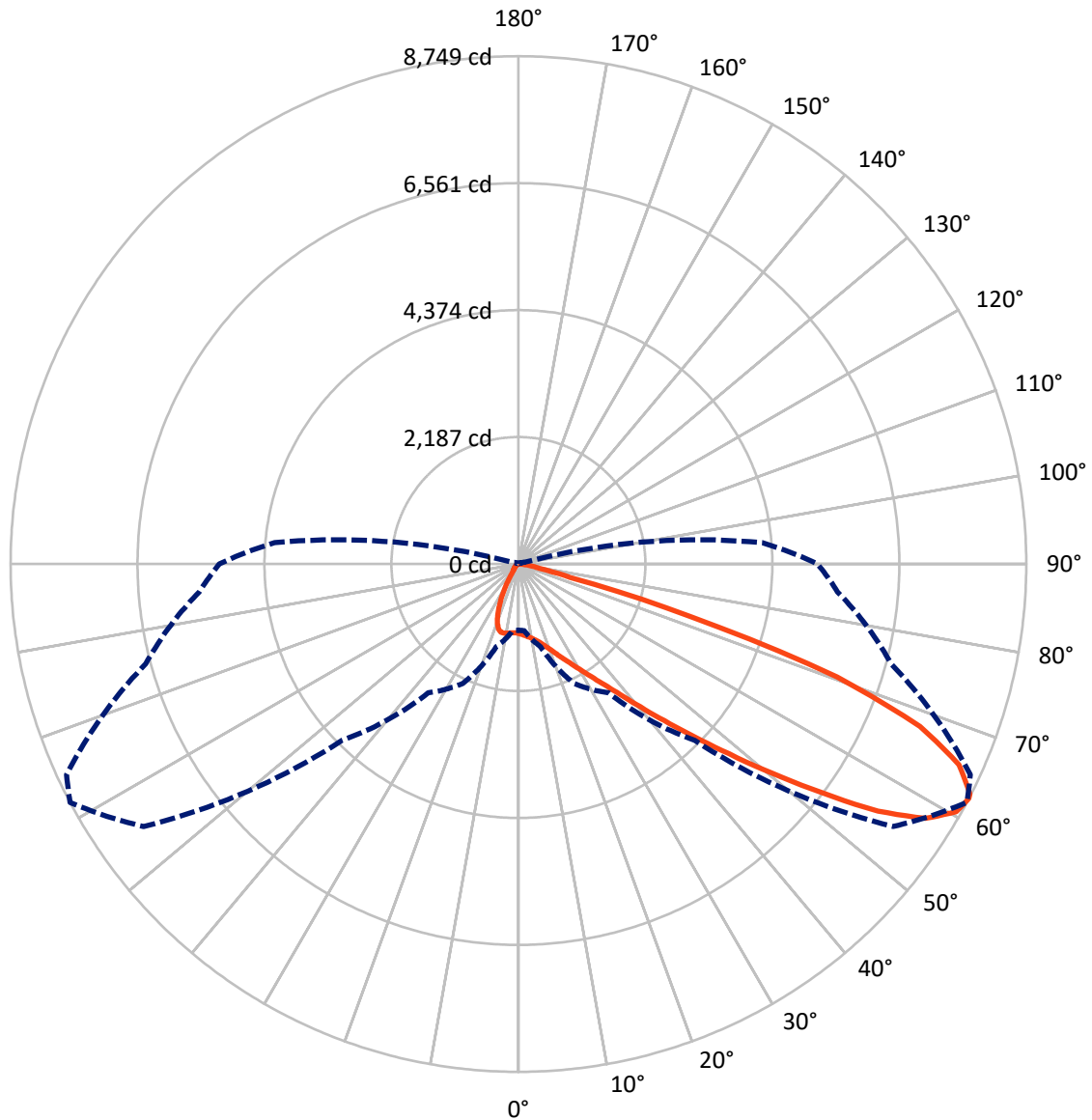
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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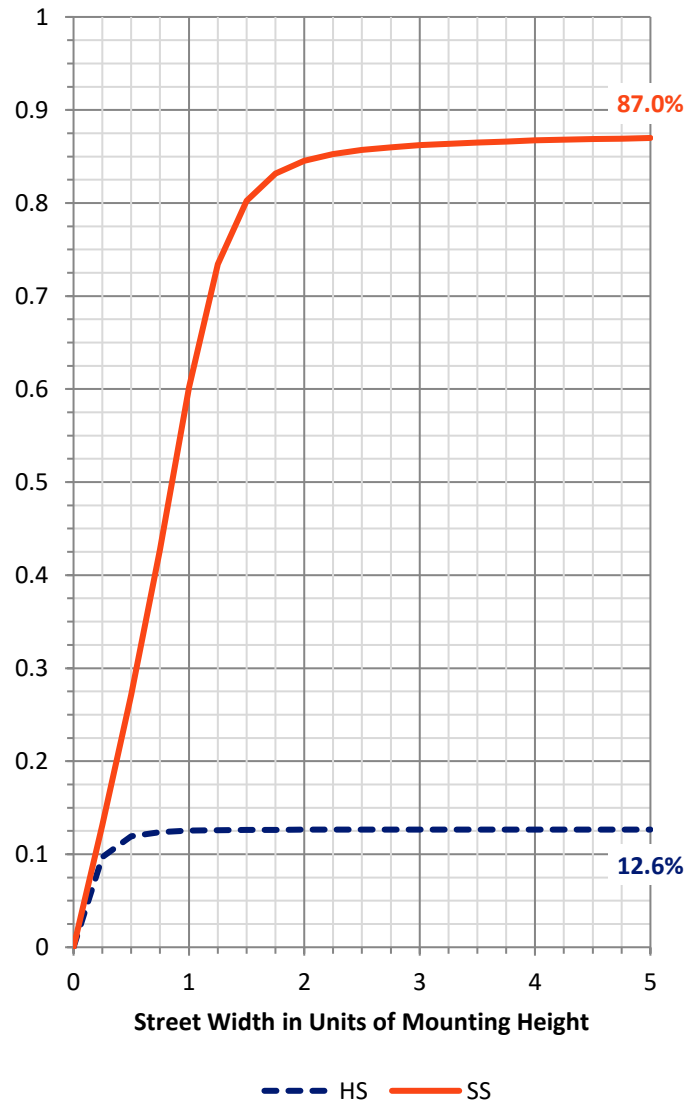
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1272.4	0.0	1272.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8678.9	0.0	8678.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	9951.3	0.0	9951.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.2
10°-20°	322.2	3.2
20°-30°	541.0	5.4
30°-40°	1037.1	10.4
40°-50°	2118.4	21.3
50°-60°	2803.3	28.2
60°-70°	2177.7	21.9
70°-80°	786.1	7.9
80°-90°	50.1	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°	9951.3	100.0
0°-180°	9951.3	100.0



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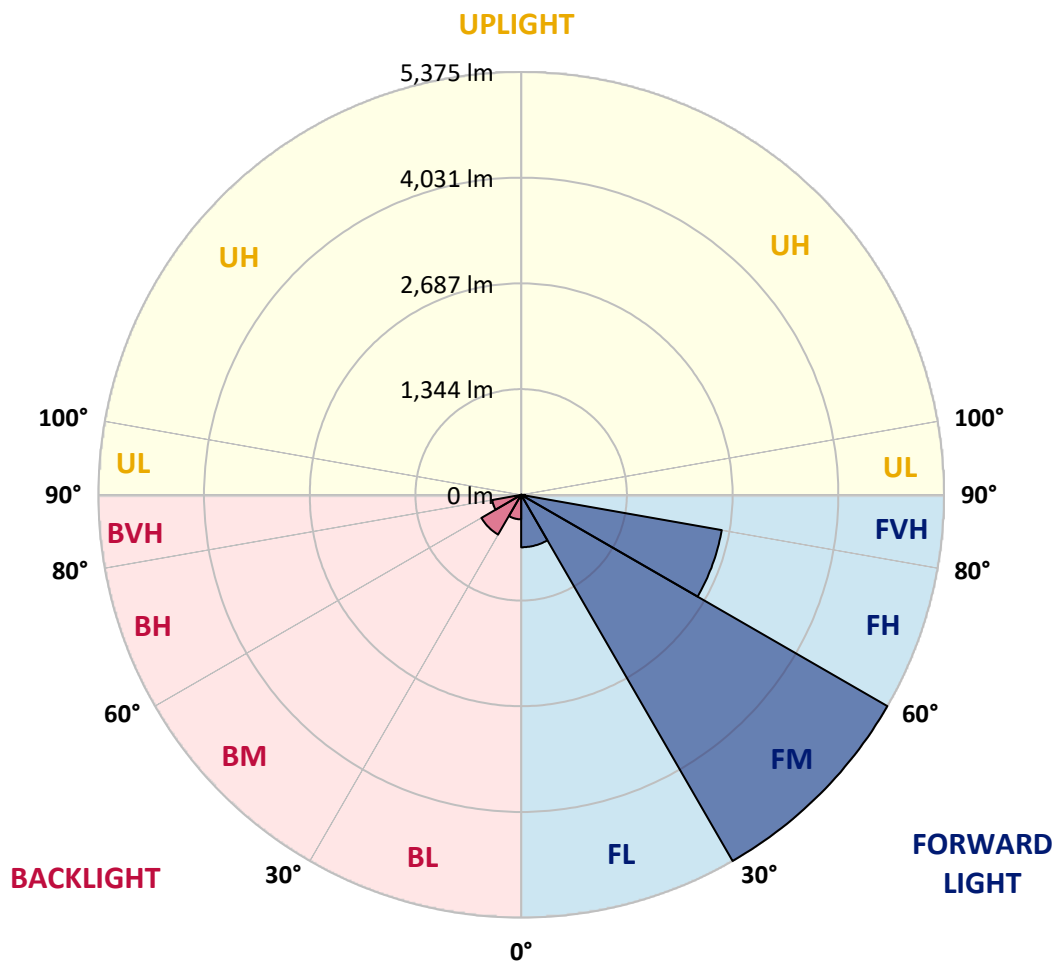
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	667.1	6.7			
FM	(30°-60°)	5374.7	54.0			
FH	(60°-80°)	2589.1	26.0			G2/5000
FVH	(80°-90°)	47.9	0.5			G1/100
BL	(0°-30°)	311.4	3.1	B1/500		
BM	(30°-60°)	584.1	5.9	B1/1000		
BH	(60°-80°)	374.7	3.8	B1/500		G1/500
BVH	(80°-90°)	2.2	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°	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8
2.5°	1230.6	1228.2	1225.7	1223.2	1223.2	1220.8	1218.3	1213.4	1208.5	1203.6	1201.3
5°	1252.6	1250.1	1247.7	1250.1	1247.7	1247.7	1245.2	1240.3	1235.4	1228.2	1220.8
7.5°	1269.7	1267.2	1264.8	1267.2	1269.7	1272.1	1274.6	1269.7	1267.2	1257.5	1250.1
10°	1291.7	1289.3	1286.9	1291.7	1291.7	1304.0	1306.4	1304.0	1301.5	1294.1	1282.0
12.5°	1323.5	1325.9	1325.9	1330.9	1335.8	1350.4	1355.3	1347.9	1347.9	1338.2	1323.5
15°	1382.2	1382.2	1382.2	1387.1	1389.6	1409.1	1414.0	1406.7	1411.6	1394.5	1379.8
17.5°	1438.5	1440.9	1445.8	1455.7	1455.7	1472.7	1482.6	1482.6	1492.4	1470.3	1450.7
20°	1494.7	1497.2	1504.6	1526.5	1526.5	1548.6	1565.7	1573.1	1582.8	1560.8	1526.5
22.5°	1555.9	1555.9	1568.2	1602.5	1595.1	1639.1	1670.9	1683.2	1693.0	1663.6	1609.7
25°	1648.9	1639.1	1648.9	1680.7	1675.8	1737.0	1795.7	1808.0	1820.1	1785.9	1705.2
27.5°	1825.0	1810.4	1776.1	1778.6	1778.6	1849.5	1932.7	1949.8	1957.1	1927.8	1827.5
30°	2177.4	2177.4	2050.1	1964.5	1908.2	1971.8	2089.3	2118.6	2128.5	2084.4	1952.3
32.5°	2791.4	2791.4	2556.6	2338.8	2126.0	2126.0	2260.5	2314.3	2324.1	2272.8	2118.6
35°	3574.3	3569.4	3217.1	2918.6	2502.8	2346.1	2461.1	2551.6	2581.0	2512.5	2333.9
37.5°	4406.1	4374.2	3995.0	3652.5	3082.6	2698.4	2732.7	2852.6	2879.5	2823.2	2612.8
40°	5081.3	5044.6	4738.8	4452.5	3831.2	3261.1	3124.1	3234.2	3266.0	3187.7	2945.5
42.5°	5692.9	5602.4	5392.0	5186.5	4692.3	4234.8	3645.2	3689.3	3723.5	3640.3	3319.8
45°	6135.7	5996.2	5888.6	5825.0	5563.2	5303.9	4320.4	4232.4	4244.6	4141.8	3728.3
47.5°	6147.9	6050.0	6059.9	6226.2	6333.8	6324.1	5198.7	4885.5	4839.1	4667.8	4163.8
50°	5560.8	5617.0	5795.6	6270.3	6852.5	7204.7	6243.4	5658.7	5519.2	5210.9	4596.8
52.5°	4582.2	4670.3	5005.4	5805.5	6928.3	7784.6	7327.1	6541.8	6292.3	5749.2	4929.6
55°	3588.9	3593.8	3946.1	4760.8	6421.9	7889.8	8193.1	7513.1	7131.4	6157.8	5149.7
57.5°	2468.5	2603.0	3050.7	3598.7	5279.4	7366.3	8518.5	8266.6	7774.8	6409.7	5303.9
60°	1617.1	1624.4	2145.5	2779.2	3593.8	5993.8	8320.4	8665.3	8295.9	6559.0	5409.1
62°	1140.1	1152.3	1475.2	2270.3	2708.3	4296.0	7882.4	8748.5	8589.5	6647.0	5519.2
62.5°	1056.9	1066.6	1338.2	2143.1	2544.3	3853.1	7725.8	8728.9	8633.5	6676.4	5558.3
65°	775.5	775.5	875.9	1472.7	1864.2	2081.9	6546.7	8339.9	8574.8	6911.3	5705.1
67.5°	599.3	604.3	638.5	907.7	1406.7	1262.3	4178.5	7464.1	7963.2	7258.7	5788.3
70°	516.2	513.7	538.2	601.8	1015.3	839.1	1839.8	5825.0	6669.0	7170.6	5712.5
72.5°	381.7	384.1	440.4	528.5	707.1	545.5	831.8	3092.3	4325.3	5612.1	4895.3
75°	244.7	247.0	310.7	415.9	508.8	357.2	479.5	922.3	1771.2	3111.9	2994.5
77.5°	163.9	168.8	203.1	291.1	445.3	222.6	301.0	386.6	533.4	1167.0	1074.0
80°	110.1	110.1	129.7	195.7	281.3	186.0	161.4	256.9	276.4	362.1	181.1
82.5°	73.3	73.3	85.6	129.7	183.5	166.3	97.9	139.4	161.4	181.1	63.6
85°	44.0	44.0	58.7	80.7	119.9	93.0	63.6	78.3	83.2	115.0	34.3
87.5°	26.9	24.4	39.2	56.3	63.6	56.3	41.6	41.6	44.0	63.6	17.1
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°	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8
2.5°	1196.3	1193.9	1191.4	1186.5	1179.2	1174.2	1169.4	1164.5	1159.6	1159.6	1167.0
5°	1218.3	1211.0	1201.3	1191.4	1176.7	1167.0	1159.6	1149.8	1145.0	1145.0	1147.3
7.5°	1245.2	1237.9	1220.8	1203.6	1181.6	1164.5	1147.3	1125.3	1108.3	1100.9	1108.3
10°	1274.6	1264.8	1240.3	1213.4	1189.0	1145.0	1088.6	1020.2	961.5	934.6	946.7
12.5°	1311.3	1299.0	1269.7	1233.0	1176.7	1069.1	929.7	770.6	670.3	623.8	633.6
15°	1365.1	1347.9	1306.4	1250.1	1125.3	892.9	665.4	481.9	389.0	349.8	354.8
17.5°	1428.8	1406.7	1350.4	1245.2	993.3	643.4	396.3	281.3	242.2	232.4	232.4
20°	1497.2	1467.8	1394.5	1208.5	792.7	403.7	247.0	215.3	200.6	193.2	193.2
22.5°	1568.2	1529.0	1431.2	1122.9	565.2	252.0	203.1	181.1	163.9	156.6	156.6
25°	1653.8	1602.5	1467.8	973.6	359.7	203.1	173.7	151.7	134.5	124.8	127.3
27.5°	1754.1	1688.1	1499.6	787.8	232.4	176.2	144.3	122.3	107.6	102.7	102.7
30°	1859.3	1781.1	1507.0	589.6	188.4	151.7	119.9	100.4	90.5	85.6	85.6
32.5°	2003.7	1900.8	1485.0	391.4	159.1	127.3	100.4	83.2	75.8	73.3	73.3
35°	2194.4	2057.5	1433.7	242.2	134.5	105.2	83.2	73.3	66.1	63.6	63.6
37.5°	2436.7	2275.2	1343.1	166.3	115.0	85.6	71.0	63.6	58.7	56.3	56.3
40°	2759.6	2539.4	1225.7	144.3	97.9	73.3	61.2	56.3	51.4	51.4	51.4
42.5°	3102.1	2859.9	1074.0	127.3	83.2	63.6	53.8	48.9	46.4	44.0	44.0
45°	3476.4	3187.7	885.6	112.5	71.0	56.3	48.9	41.6	39.2	39.2	39.2
47.5°	3848.2	3525.3	680.2	97.9	61.2	48.9	41.6	36.7	34.3	31.8	31.8
50°	4229.9	3831.2	499.1	85.6	53.8	44.0	36.7	31.8	26.9	24.4	24.4
52.5°	4506.4	4014.7	364.5	73.3	46.4	36.7	29.4	24.4	19.5	17.1	17.1
55°	4709.5	4127.2	266.7	61.2	41.6	31.8	24.4	19.5	14.6	14.6	12.3
57.5°	4868.4	4181.0	200.6	53.8	36.7	26.9	19.5	14.6	12.3	9.8	9.8
60°	4990.8	4183.5	149.2	44.0	31.8	22.0	14.6	9.8	7.4	7.4	7.4
62°	5152.2	4215.3	122.3	36.7	29.4	19.5	12.3	7.4	4.9	2.5	2.5
62.5°	5198.7	4227.4	117.4	36.7	26.9	17.1	9.8	7.4	4.9	2.5	2.5
65°	5414.0	4249.4	90.5	29.4	22.0	14.6	7.4	4.9	0.0	0.0	0.0
67.5°	5609.7	4215.3	66.1	22.0	17.1	9.8	7.4	2.5	0.0	0.0	0.0
70°	5590.1	3980.4	46.4	14.6	12.3	7.4	4.9	0.0	0.0	0.0	0.0
72.5°	4606.7	2979.8	31.8	12.3	7.4	4.9	2.5	0.0	0.0	0.0	0.0
75°	2781.6	1304.0	22.0	7.4	7.4	4.9	2.5	0.0	0.0	0.0	0.0
77.5°	912.6	472.2	14.6	4.9	4.9	2.5	2.5	0.0	0.0	0.0	0.0
80°	149.2	78.3	7.4	4.9	4.9	2.5	2.5	0.0	0.0	0.0	0.0
82.5°	46.4	19.5	4.9	4.9	2.5	2.5	0.0	0.0	0.0	0.0	0.0
85°	17.1	7.4	4.9	4.9	2.5	2.5	0.0	0.0	0.0	0.0	0.0
87.5°	7.4	4.9	4.9	4.9	2.5	2.5	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)