

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: P400381

Luminaire Tested: **ARCH-L-PA3-270-760-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400381  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-270-760-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35538 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

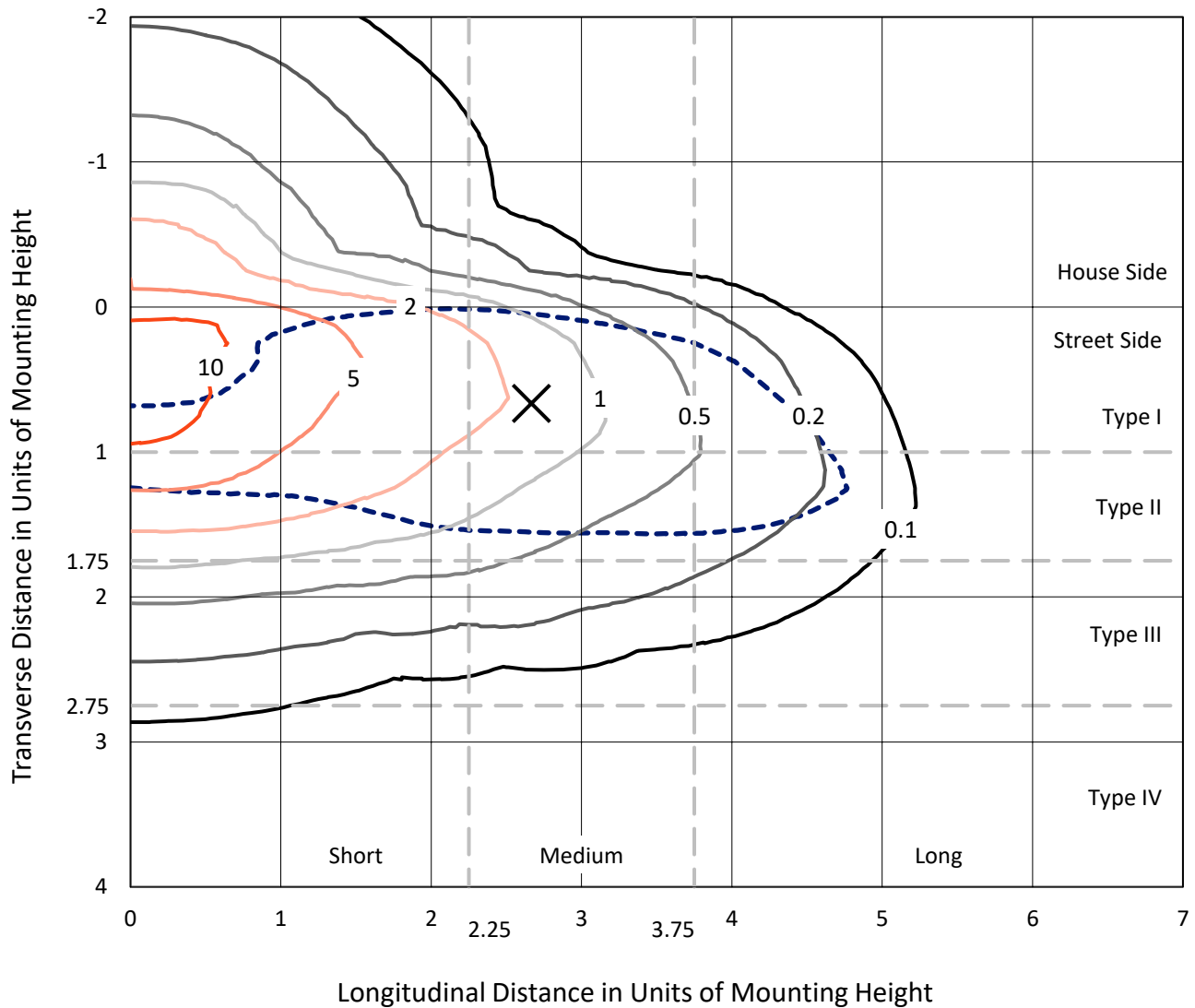
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

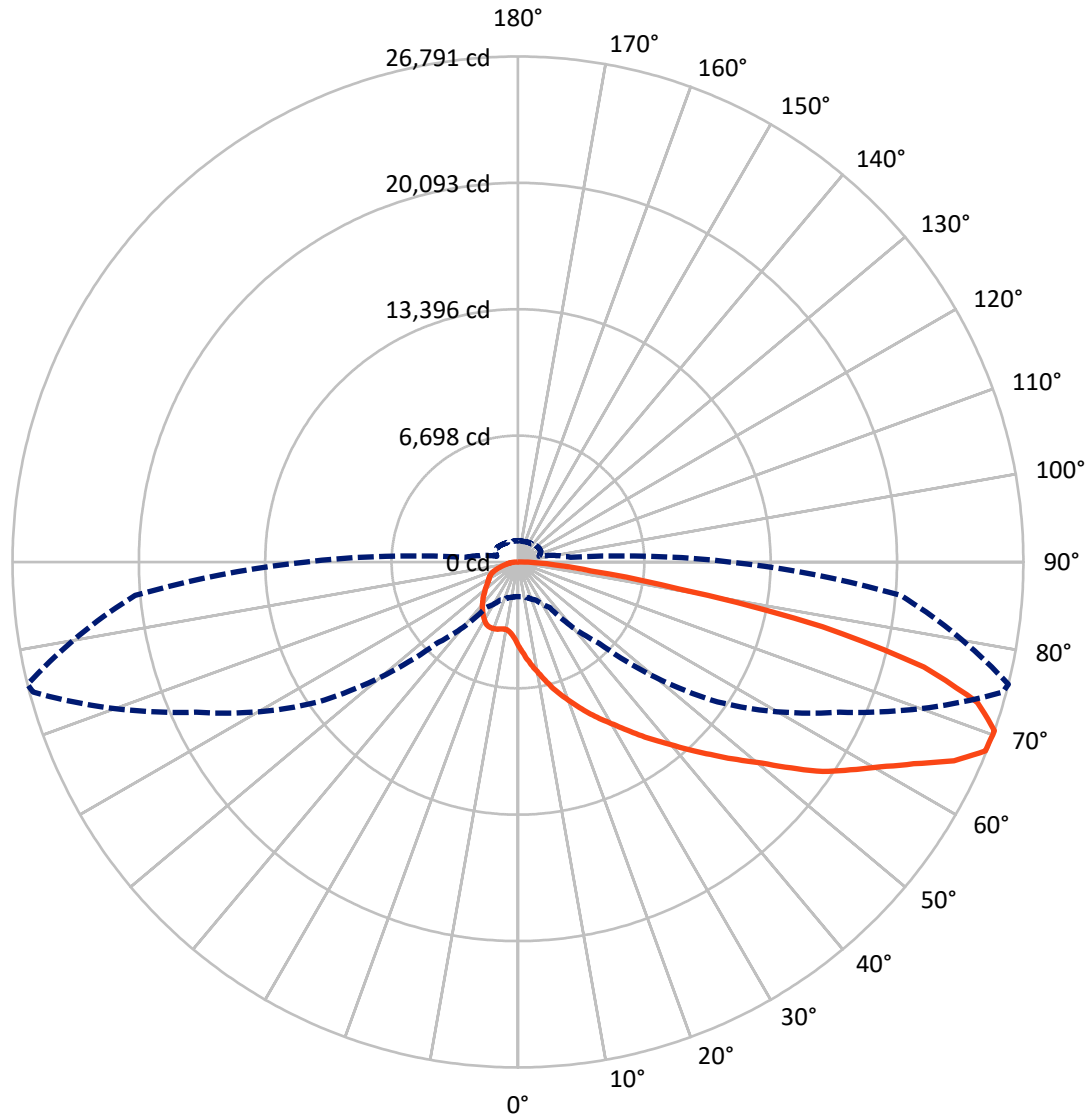
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5801.9	0.0	5801.9
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	29736.1	0.0	29736.1
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	35538.0	0.0	35538.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	461.8	1.3
10°-20°	1569.4	4.4
20°-30°	2807.9	7.9
30°-40°	4542.1	12.8
40°-50°	6570.9	18.5
50°-60°	7520.8	21.2
60°-70°	6918.3	19.5
70°-80°	4278.2	12.0
80°-90°	868.7	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°	35538.0	100.0
0°-180°	35538.0	100.0

**Coefficient of Utilization**



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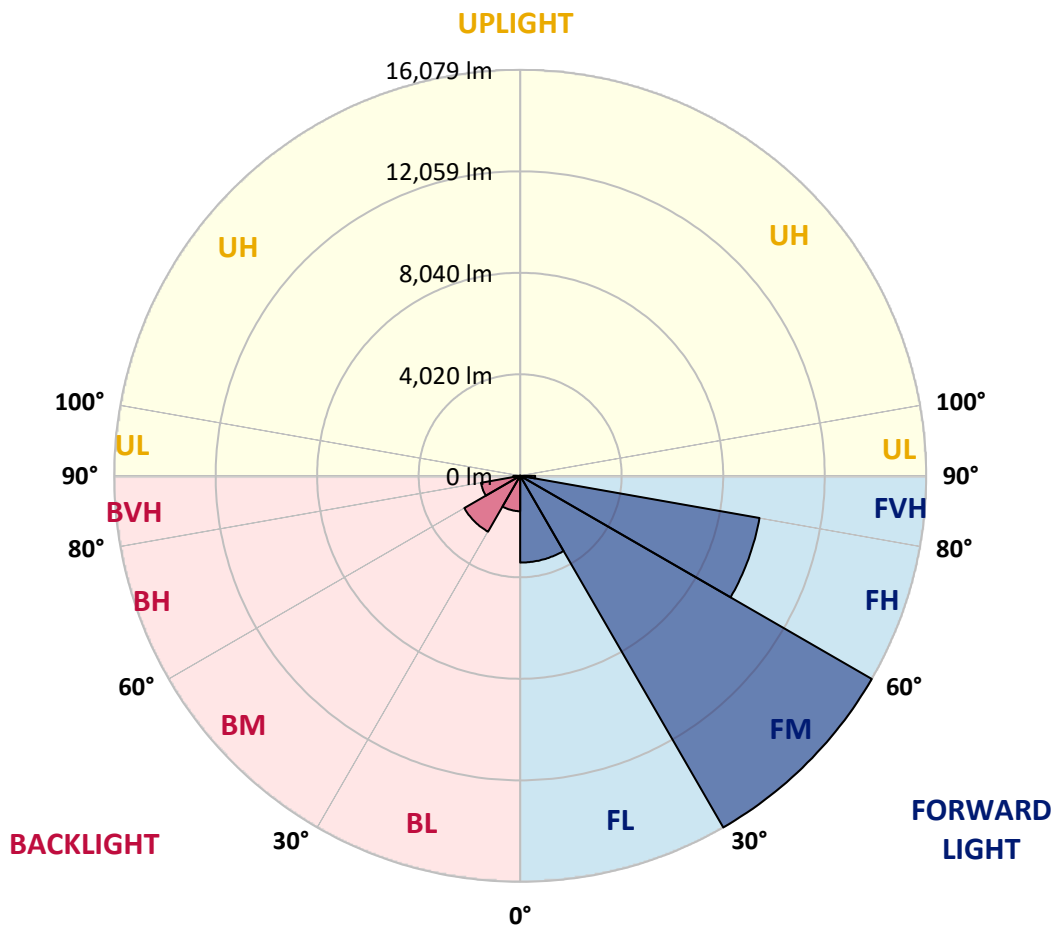
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3437.7	9.7			
FM (30°-60°)	16079.3	45.2			
FH (60°-80°)	9622.7	27.1			G4/12000
FVH (80°-90°)	596.4	1.7			G4/750
BL (0°-30°)	1401.4	3.9	B3/2500		
BM (30°-60°)	2554.5	7.2	B3/5000		
BH (60°-80°)	1573.7	4.4	B3/2500		G3/2500
BVH (80°-90°)	272.3	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2
2.5°	5663.9	5621.8	5617.1	5551.7	5491.0	5327.4	5210.6	5005.0	4799.3	4794.7	4589.0
5°	6547.1	6505.0	6481.7	6402.2	6299.4	6084.5	5874.2	5556.4	5205.9	5182.5	4794.7
7.5°	7145.3	7107.9	7061.2	7028.4	6930.3	6738.7	6481.7	6103.2	5621.8	5575.1	5033.0
10°	7547.2	7523.8	7514.4	7491.1	7430.3	7276.1	7028.4	6626.5	6037.7	5986.3	5285.3
12.5°	7720.1	7710.7	7752.8	7818.2	7841.6	7780.8	7542.5	7164.0	6495.7	6439.6	5589.1
15°	7519.1	7528.5	7635.9	7860.3	8098.6	8229.4	8089.2	7720.1	7014.4	6935.0	5944.3
17.5°	7425.7	7439.7	7514.4	7729.4	8065.9	8472.4	8537.9	8248.1	7514.4	7402.3	6318.1
20°	7589.2	7607.9	7664.0	7832.2	8065.9	8500.5	8841.6	8752.8	8005.1	7888.3	6678.0
22.5°	8005.1	8028.5	8023.8	8131.3	8290.2	8589.3	9009.9	9229.5	8519.2	8388.3	7051.8
25°	8893.0	8874.3	8715.5	8664.0	8706.1	8897.7	9234.2	9687.5	9056.6	8925.7	7444.4
27.5°	10098.7	10075.3	9785.6	9523.9	9290.2	9374.4	9551.9	10056.6	9603.4	9453.8	7818.2
30°	11388.5	11360.5	11024.0	10598.7	10080.0	9958.5	9935.1	10379.1	10154.8	9995.9	8215.4
32.5°	12645.6	12622.2	12262.4	11767.0	11052.0	10687.5	10463.2	10738.9	10781.0	10626.8	8650.0
35°	13790.5	13790.5	13482.1	12893.3	12084.8	11533.4	11164.2	11182.9	11500.7	11323.1	9145.4
37.5°	14809.3	14804.6	14468.1	13888.6	13112.9	12482.0	12024.1	11720.3	12187.6	12033.4	9664.1
40°	15617.7	15585.0	15337.3	14832.6	14052.2	13426.0	12963.4	12351.2	12954.0	12813.8	10215.5
42.5°	16206.5	16187.8	16019.6	15580.3	14837.3	14248.5	13930.7	13145.6	13823.2	13683.0	10860.4
45°	16435.5	16472.9	16472.9	16057.0	15468.2	14930.8	14790.6	14019.5	14762.5	14622.3	11552.1
47.5°	16066.3	16164.5	16365.4	16393.5	15874.7	15510.2	15557.0	14898.0	15729.9	15655.1	12309.1
50°	14912.1	15094.3	15533.6	16328.0	16038.3	15954.2	16211.2	15795.3	16767.3	16743.9	13229.7
52.5°	11935.3	12379.2	13748.4	15173.8	15926.1	16159.8	16860.8	16804.7	18103.8	18141.2	14430.7
55°	9154.7	9323.0	10907.2	13332.5	15239.2	16094.4	17295.4	17790.7	19552.5	19599.2	15533.6
57.5°	7402.3	7514.4	8379.0	10907.2	13673.7	15739.2	17636.5	18365.5	20664.7	20786.2	16515.0
60°	5864.8	6028.4	6607.9	8346.3	11482.0	14884.0	17874.9	19005.8	21861.1	22043.3	17687.9
62.5°	4360.1	4439.5	4986.3	6182.6	9089.3	13346.6	17748.7	19702.1	23328.4	23548.1	19099.2
65°	3103.0	3173.1	3561.0	4397.4	6720.0	11267.0	17015.0	20220.8	25169.7	25394.0	20519.9
67.5°	2322.6	2350.6	2570.2	3074.9	4528.3	8752.8	15528.9	20132.0	26515.5	26716.5	21090.0
70°	1836.6	1845.9	1953.4	2224.4	2944.1	6093.8	12926.0	18828.2	26613.7	26791.2	20370.3
72.5°	1523.5	1518.8	1579.5	1710.4	2051.5	3855.4	9575.3	16407.5	25351.9	25473.4	18360.9
75°	1257.1	1266.4	1308.5	1383.3	1565.5	2542.2	6206.0	13089.5	22365.8	22234.9	15407.4
77.5°	1056.1	1051.5	1070.2	1135.6	1266.4	1827.2	3635.7	9458.5	16575.7	16510.3	10112.7
80°	850.5	859.9	887.9	944.0	1065.5	1392.6	2149.7	5902.2	8893.0	8654.7	4832.1
82.5°	570.1	658.9	715.0	780.4	920.6	1028.1	1364.6	3000.2	3976.9	3916.1	2191.7
85°	271.0	359.8	532.7	607.5	747.7	644.9	925.3	1430.0	1990.8	1967.4	789.8
87.5°	56.1	56.1	285.1	341.1	462.6	275.7	514.0	621.5	962.7	901.9	322.4
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°	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2	4444.2
2.5°	4467.5	4341.4	4089.0	3888.1	3682.5	3565.6	3420.8	3350.7	3336.6	3299.3	3327.3
5°	4547.0	4299.3	3822.6	3509.5	3299.3	3196.4	3145.0	3126.3	3121.7	3112.3	3112.3
7.5°	4654.5	4275.9	3654.4	3336.6	3201.1	3168.4	3182.4	3210.5	3215.1	3224.5	3219.8
10°	4785.3	4280.6	3561.0	3294.6	3229.2	3233.8	3280.6	3317.9	3336.6	3350.7	3346.0
12.5°	4967.6	4336.7	3546.9	3322.6	3294.6	3313.3	3360.0	3397.4	3416.1	3420.8	3420.8
15°	5205.9	4453.5	3579.6	3383.4	3360.0	3374.0	3402.1	3416.1	3420.8	3416.1	3416.1
17.5°	5467.6	4593.7	3626.4	3420.8	3383.4	3369.4	3360.0	3346.0	3317.9	3299.3	3299.3
20°	5720.0	4719.9	3649.7	3416.1	3350.7	3294.6	3238.5	3168.4	3121.7	3084.3	3084.3
22.5°	5972.3	4836.7	3649.7	3364.7	3261.9	3154.4	3037.6	2925.4	2855.3	2808.6	2808.6
25°	6238.7	4948.9	3621.7	3275.9	3121.7	2967.5	2808.6	2668.4	2598.3	2551.5	2542.2
27.5°	6463.0	5014.3	3546.9	3149.7	2948.8	2752.5	2570.2	2425.4	2374.0	2331.9	2331.9
30°	6701.3	5056.4	3406.7	2986.2	2752.5	2528.2	2341.3	2224.4	2168.3	2107.6	2102.9
32.5°	6967.7	5084.4	3247.8	2813.2	2551.5	2313.2	2154.3	2060.9	1939.4	1873.9	1864.6
35°	7276.1	5121.8	3079.6	2617.0	2350.6	2135.6	2042.2	1888.0	1771.1	1715.1	1710.4
37.5°	7603.2	5149.8	2897.4	2444.1	2168.3	2018.8	1925.3	1743.1	1640.3	1556.2	1546.8
40°	7949.1	5149.8	2710.4	2275.8	2023.5	1967.4	1789.8	1626.3	1453.4	1411.3	1401.9
42.5°	8332.3	5140.5	2523.5	2112.3	1888.0	1850.6	1710.4	1537.5	1448.7	1411.3	1401.9
45°	8738.8	5107.8	2345.9	1925.3	1747.8	1673.0	1565.5	1518.8	1481.4	1481.4	1481.4
47.5°	9201.5	5079.7	2145.0	1757.1	1645.0	1560.8	1481.4	1453.4	1448.7	1462.7	1476.7
50°	9795.0	5070.4	1976.7	1635.6	1565.5	1467.4	1458.0	1434.7	1439.3	1439.3	1439.3
52.5°	10514.6	4986.3	1817.9	1546.8	1486.1	1369.2	1397.3	1420.6	1430.0	1425.3	1420.6
55°	11042.7	4836.7	1682.3	1486.1	1430.0	1331.9	1369.2	1406.6	1416.0	1401.9	1401.9
57.5°	11519.3	4626.4	1574.9	1439.3	1392.6	1308.5	1350.5	1387.9	1378.6	1373.9	1369.2
60°	12066.1	4425.5	1490.7	1416.0	1355.2	1299.1	1336.5	1359.9	1345.9	1336.5	1331.9
62.5°	12659.6	4229.2	1430.0	1416.0	1327.2	1294.5	1322.5	1331.9	1303.8	1294.5	1294.5
65°	12935.3	3920.8	1364.6	1416.0	1313.2	1285.1	1294.5	1285.1	1257.1	1257.1	1252.4
67.5°	12482.0	3411.4	1280.4	1397.3	1331.9	1271.1	1252.4	1238.4	1205.7	1205.7	1196.3
70°	11229.6	2803.9	1158.9	1336.5	1336.5	1266.4	1196.3	1163.6	1126.2	1140.3	1121.6
72.5°	9594.0	2224.4	1009.4	1233.7	1308.5	1261.8	1135.6	1084.2	1051.5	1065.5	1037.4
75°	7771.5	1724.4	831.8	1070.2	1238.4	1238.4	1074.8	1004.7	967.3	967.3	934.6
77.5°	4953.6	1275.8	677.6	887.9	1112.2	1205.7	1023.4	915.9	859.9	845.8	822.5
80°	2453.4	897.2	556.1	705.6	948.7	1130.9	986.0	813.1	733.7	705.6	663.6
82.5°	1303.8	621.5	444.0	551.4	757.1	1018.7	939.3	701.0	602.8	560.8	514.0
85°	584.1	383.2	355.2	420.6	574.8	836.5	845.8	574.8	462.6	551.4	406.6
87.5°	215.0	172.9	172.9	215.0	331.8	350.5	598.2	369.2	294.4	200.9	158.9
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)