

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: P400077

Luminaire Tested: **ARCH-L-PA3-230-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400077  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-230-740-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31633 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

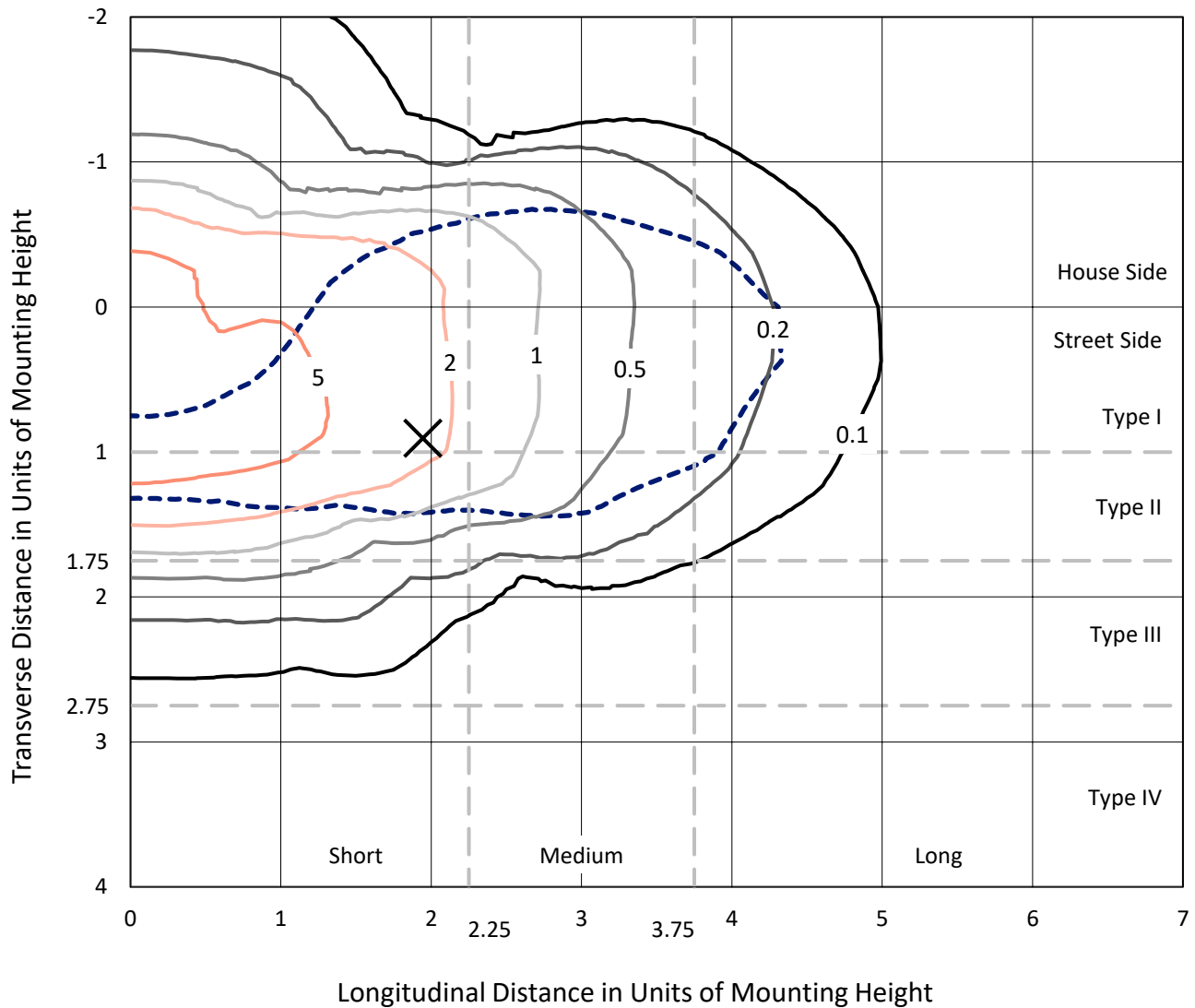
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

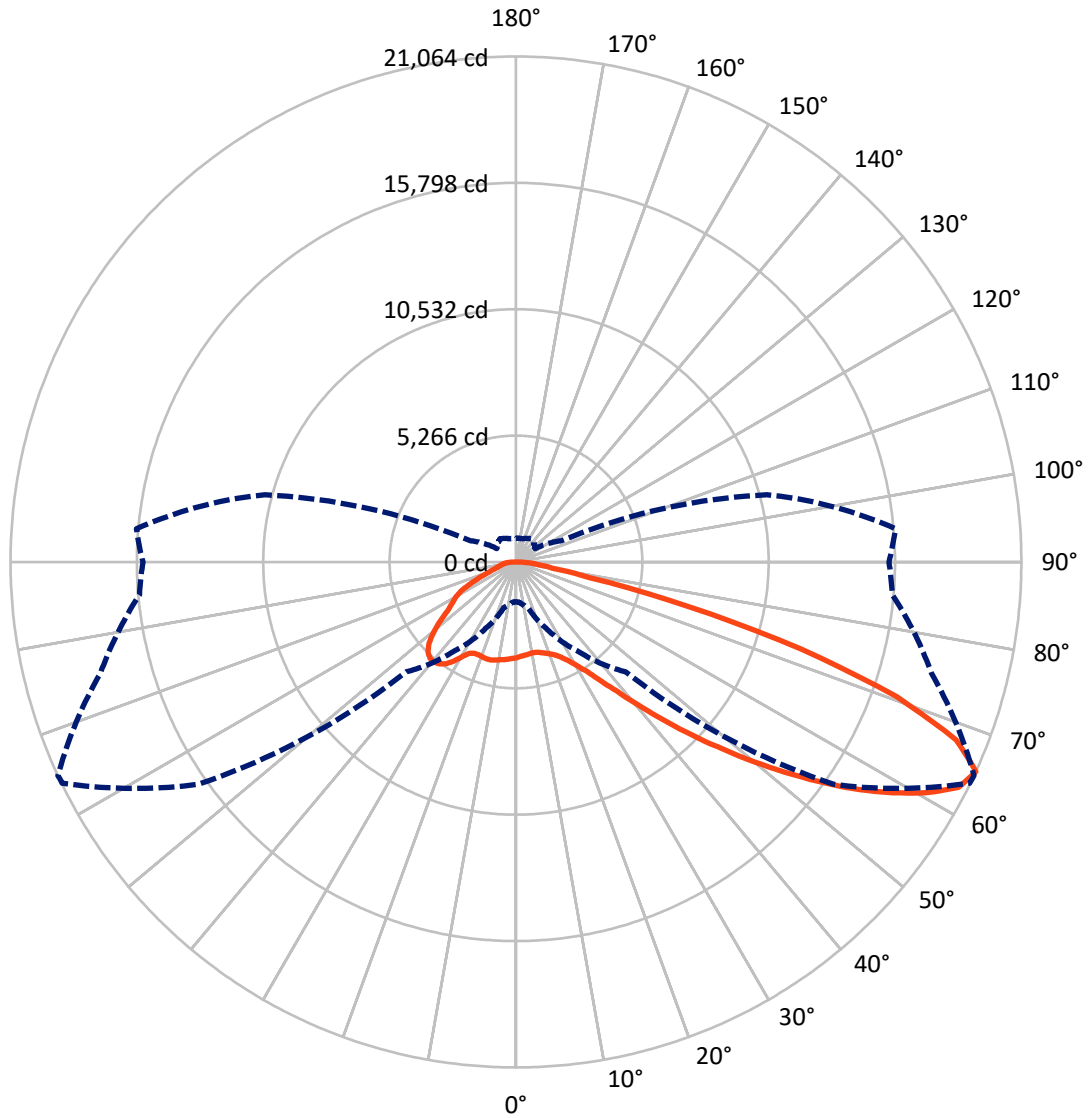
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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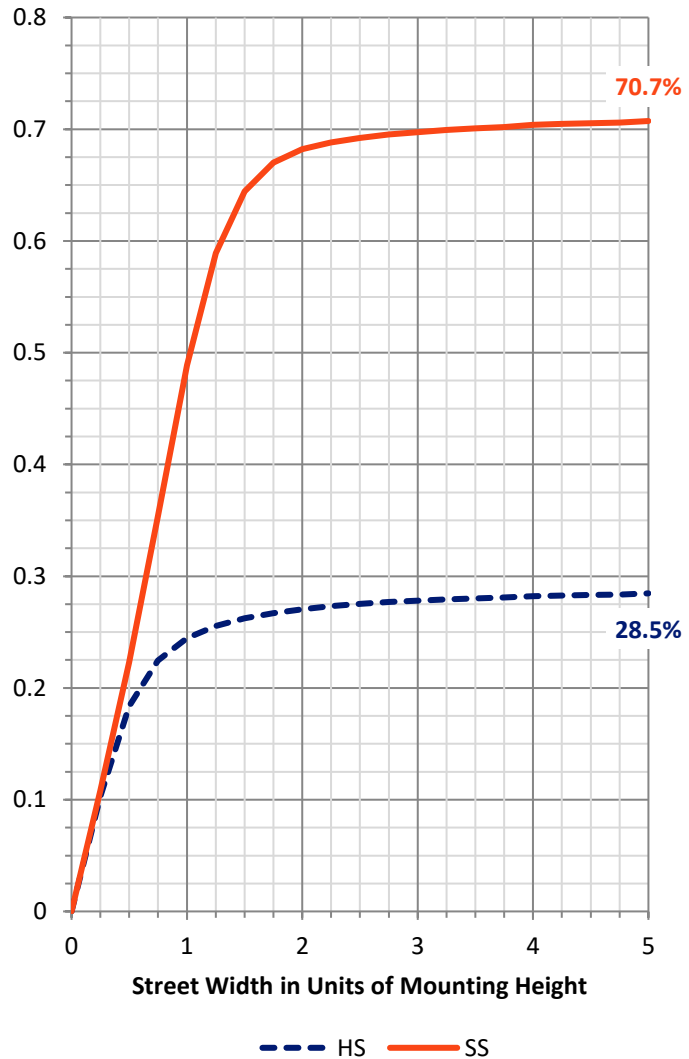
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9145.6	0.0	9145.6
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	22487.4	0.0	22487.4
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	31633.0	0.0	31633.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	380.8	1.2
10°-20°	1136.9	3.6
20°-30°	2019.6	6.4
30°-40°	3416.6	10.8
40°-50°	5947.6	18.8
50°-60°	7686.2	24.3
60°-70°	6725.9	21.3
70°-80°	3658.4	11.6
80°-90°	661.0	2.1
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°	31633.0	100.0
0°-180°	31633.0	100.0

**Coefficient of Utilization**



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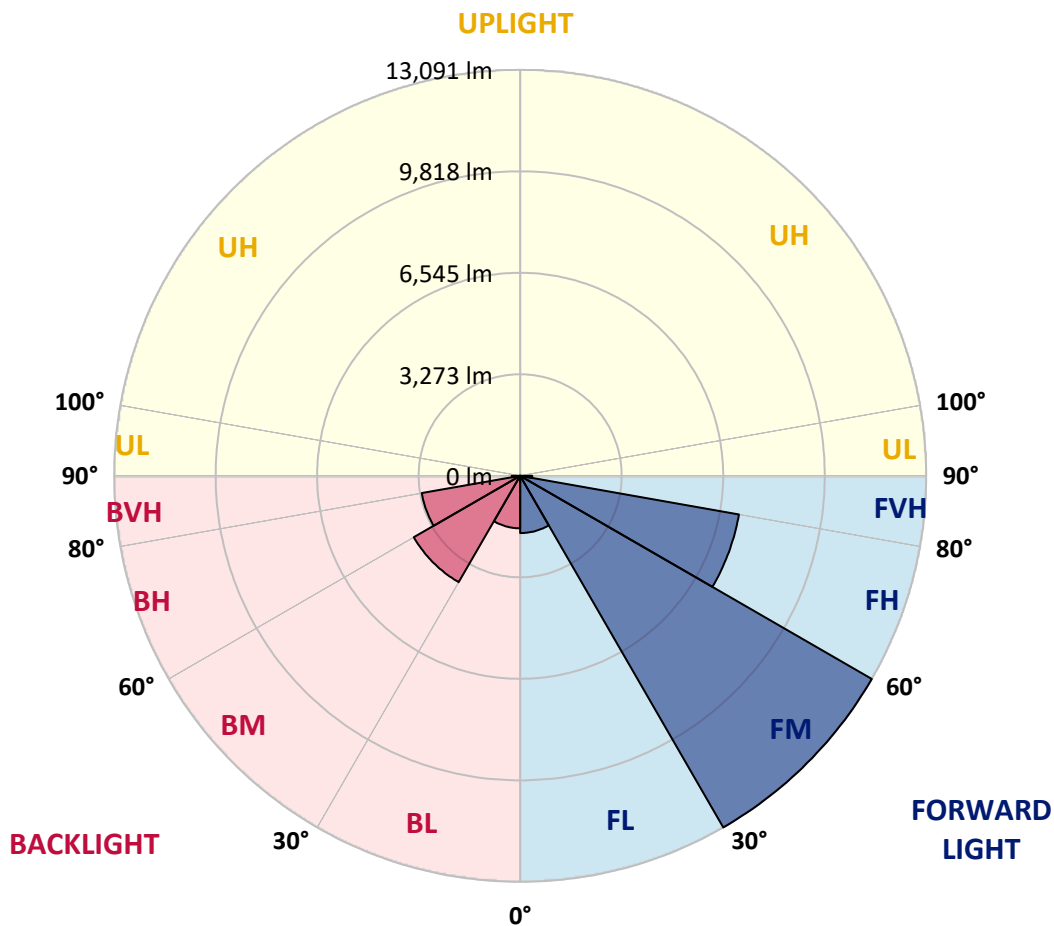
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1845.7	5.8			
FM (30°-60°)	13090.6	41.4			
FH (60°-80°)	7162.2	22.6			G3/7500
FVH (80°-90°)	389.0	1.2			G3/500
BL (0°-30°)	1691.6	5.3	B3/2500		
BM (30°-60°)	3959.8	12.5	B3/5000		
BH (60°-80°)	3222.1	10.2	B4/5000		G4/5000
BVH (80°-90°)	272.0	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1
2.5°	3926.4	3922.2	3913.9	3922.2	3926.4	3934.7	3930.5	3938.8	3934.7	3947.2	3968.0
5°	3826.4	3818.1	3813.9	3834.8	3847.2	3868.1	3876.4	3905.5	3901.4	3922.2	3955.5
7.5°	3714.0	3714.0	3709.8	3734.8	3751.5	3789.0	3818.1	3868.1	3872.2	3909.7	3947.2
10°	3626.6	3630.7	3626.6	3647.4	3672.4	3718.2	3768.1	3838.9	3843.1	3897.2	3934.7
12.5°	3593.3	3593.3	3593.3	3622.4	3655.7	3718.2	3776.5	3851.4	3859.7	3918.0	3951.3
15°	3639.1	3643.2	3634.9	3664.0	3701.5	3776.5	3830.6	3909.7	3918.0	3972.2	3993.0
17.5°	3801.4	3818.1	3797.3	3813.9	3805.6	3863.9	3913.9	3993.0	3997.1	4042.9	4051.3
20°	4122.0	4138.7	4105.4	4084.6	4009.6	4005.5	4026.3	4088.7	4088.7	4117.9	4097.1
22.5°	4617.5	4634.2	4575.9	4496.8	4317.7	4230.3	4184.5	4213.6	4209.5	4222.0	4167.8
25°	5275.4	5271.2	5200.4	5054.7	4767.4	4555.1	4442.6	4396.8	4396.8	4371.9	4305.2
27.5°	6091.5	6029.0	5904.1	5729.2	5329.5	5033.9	4792.4	4675.8	4655.0	4580.0	4455.1
30°	6961.7	6915.9	6736.8	6482.9	6020.7	5641.8	5242.1	5008.9	4996.4	4834.0	4646.7
32.5°	7985.9	7911.0	7711.1	7407.2	6853.4	6320.5	5820.8	5466.9	5446.1	5187.9	4929.8
35°	9301.7	9239.2	8852.0	8548.0	7836.0	7136.6	6545.3	6074.8	6058.2	5741.7	5412.8
37.5°	10879.7	10717.3	10342.6	9772.2	9022.7	8194.1	7444.7	6853.4	6832.6	6482.9	6066.5
40°	12287.0	12141.3	11808.2	11283.6	10480.0	9559.8	8543.9	7827.7	7806.9	7382.2	6857.6
42.5°	13327.9	13228.0	13011.5	12707.6	12133.0	11575.0	9947.0	9006.0	8968.6	8419.0	7765.3
45°	13931.7	13852.6	13727.7	13802.6	13794.3	13690.2	11620.8	10409.2	10288.5	9576.5	8777.0
47.5°	13785.9	13715.2	13765.1	14348.0	15151.6	15755.4	13569.4	11845.7	11683.3	10754.8	9855.4
50°	12732.5	12761.7	13024.0	14139.9	15942.7	17283.4	15730.4	13482.0	13265.5	11941.4	10879.7
52.5°	10813.1	10883.9	11520.9	13082.3	15855.3	18274.4	17683.2	15172.5	14885.2	13098.9	11812.4
55°	8589.7	8768.7	9593.1	11233.6	14714.5	18345.2	19157.1	16871.2	16554.8	14185.7	12624.3
57.5°	6353.8	6620.3	7573.7	9081.0	12528.5	17225.2	19894.1	18495.1	18112.0	15264.1	13482.0
60°	4030.4	4192.8	5292.0	7069.9	9589.0	14485.4	19798.3	19877.4	19544.3	16338.3	14377.2
62.5°	2573.2	2652.3	3206.0	5042.2	6703.5	10725.6	18753.2	20922.5	20697.7	17316.8	15226.6
65°	1653.0	1686.3	1969.4	3101.9	4563.4	6474.5	16150.9	21034.9	21064.1	17928.8	15751.2
67.5°	1344.9	1361.5	1465.6	1915.3	3226.9	3576.6	11250.3	19436.1	19790.0	17770.6	15572.2
70°	1224.1	1244.9	1353.2	1528.1	2498.2	2469.1	5446.1	16263.3	16842.1	16858.7	14776.9
72.5°	1032.6	1061.7	1207.5	1444.8	1931.9	1948.6	2306.7	11583.4	12436.9	15068.4	13581.9
75°	861.9	878.5	1003.4	1274.1	1636.3	1557.2	1619.7	6141.4	7373.9	12083.0	12312.0
77.5°	699.5	716.2	807.8	1015.9	1453.1	1211.6	1274.1	2544.0	3143.6	8202.5	10063.6
80°	499.6	516.3	620.4	791.1	1099.2	1090.9	945.2	1403.2	1523.9	4434.3	6537.0
82.5°	358.1	370.6	470.5	566.3	762.0	1095.0	712.0	953.5	999.3	1965.3	2635.6
85°	241.5	241.5	324.8	374.7	491.3	691.2	574.6	645.4	674.5	932.7	712.0
87.5°	104.1	104.1	174.9	191.5	258.1	320.6	428.9	324.8	333.1	503.8	291.5
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°	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1	3997.1
2.5°	3980.5	3984.6	3993.0	4018.0	4034.6	4059.6	4072.1	4088.7	4088.7	4080.4	4084.6
5°	3972.2	3984.6	4013.8	4059.6	4088.7	4134.5	4167.8	4192.8	4201.2	4192.8	4197.0
7.5°	3968.0	3988.8	4038.8	4105.4	4147.0	4205.3	4251.1	4280.3	4301.1	4292.8	4296.9
10°	3955.5	3988.8	4051.3	4134.5	4197.0	4255.3	4296.9	4309.4	4321.9	4313.6	4309.4
12.5°	3972.2	4009.6	4076.2	4176.2	4247.0	4292.8	4305.2	4284.4	4255.3	4238.6	4234.5
15°	4005.5	4042.9	4109.6	4213.6	4276.1	4292.8	4263.6	4197.0	4130.4	4092.9	4088.7
17.5°	4051.3	4076.2	4130.4	4222.0	4271.9	4251.1	4192.8	4113.7	4063.8	4034.6	4038.8
20°	4080.4	4080.4	4122.0	4192.8	4234.5	4217.8	4147.0	4059.6	3980.5	3943.0	3930.5
22.5°	4122.0	4101.2	4105.4	4167.8	4226.1	4201.2	4051.3	3897.2	3784.8	3743.1	3739.0
25°	4234.5	4176.2	4138.7	4176.2	4313.6	4109.6	3809.8	3630.7	3526.6	3489.2	3493.3
27.5°	4371.9	4292.8	4213.6	4276.1	4384.4	3901.4	3501.7	3297.6	3235.2	3206.0	3218.5
30°	4509.3	4405.2	4301.1	4525.9	4334.4	3576.6	3106.1	2906.2	2852.1	2831.3	2848.0
32.5°	4763.3	4592.5	4467.6	4859.0	4180.3	3206.0	2677.2	2494.0	2444.1	2419.1	2410.8
35°	5187.9	4971.4	4846.5	5150.5	3963.8	2793.8	2285.9	2156.8	2102.7	2048.5	2040.2
37.5°	5800.0	5537.7	5425.3	5317.0	3659.9	2385.8	1986.1	1898.6	1819.5	1736.3	1732.1
40°	6532.8	6191.4	6108.1	5392.0	3239.3	2002.7	1777.9	1694.6	1594.7	1515.6	1519.7
42.5°	7378.0	6940.9	6761.8	5371.1	2718.9	1798.7	1628.0	1536.4	1449.0	1378.2	1374.0
45°	8281.6	7786.1	7373.9	5225.4	2202.6	1657.1	1536.4	1428.1	1340.7	1261.6	1253.3
47.5°	9280.8	8727.1	7940.1	4942.3	1819.5	1557.2	1482.3	1328.2	1249.1	1199.1	1199.1
50°	10288.5	9626.4	8460.6	4513.4	1594.7	1482.3	1403.2	1274.1	1211.6	1170.0	1170.0
52.5°	11150.3	10563.3	8889.5	4001.3	1453.1	1419.8	1349.0	1249.1	1182.5	1145.0	1140.8
55°	11987.2	11433.5	9272.5	3493.3	1336.5	1336.5	1336.5	1228.3	1153.3	1120.0	1115.9
57.5°	12820.0	12349.5	9672.2	3160.2	1232.4	1265.8	1311.6	1203.3	1128.4	1099.2	1095.0
60°	13761.0	13448.7	10134.4	2927.1	1140.8	1190.8	1278.3	1174.2	1086.7	1061.7	1057.6
62.5°	14760.3	14760.3	10554.9	2598.1	1057.6	1128.4	1228.3	1136.7	1049.2	1028.4	1024.3
65°	15543.0	15880.3	10825.6	2106.8	974.3	1065.9	1170.0	1086.7	999.3	995.1	986.8
67.5°	15634.6	16163.4	10654.9	1590.5	899.4	999.3	1111.7	1032.6	949.3	949.3	936.8
70°	14976.8	15513.9	10121.9	1190.8	845.2	932.7	1036.8	966.0	886.9	895.2	874.4
72.5°	13877.6	14010.8	8797.9	941.0	782.8	861.9	945.2	891.0	820.2	820.2	791.1
75°	12428.6	11687.5	6391.3	786.9	707.8	778.6	853.6	807.8	745.3	724.5	707.8
77.5°	9892.9	8468.9	3714.0	678.7	645.4	699.5	749.5	716.2	662.0	616.2	616.2
80°	6029.0	4963.1	1640.5	587.1	570.4	612.1	645.4	607.9	562.1	516.3	503.8
82.5°	2294.2	1915.3	795.3	503.8	499.6	524.6	549.6	512.1	478.8	458.0	395.5
85°	628.7	578.8	545.4	420.5	412.2	408.0	437.2	420.5	374.7	308.1	274.8
87.5°	237.3	270.6	295.6	258.1	274.8	254.0	291.5	266.5	237.3	154.1	137.4
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)