

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: P400369

Luminaire Tested: **ARCH-L-PA3-270-740-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400369  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-270-740-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35148 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

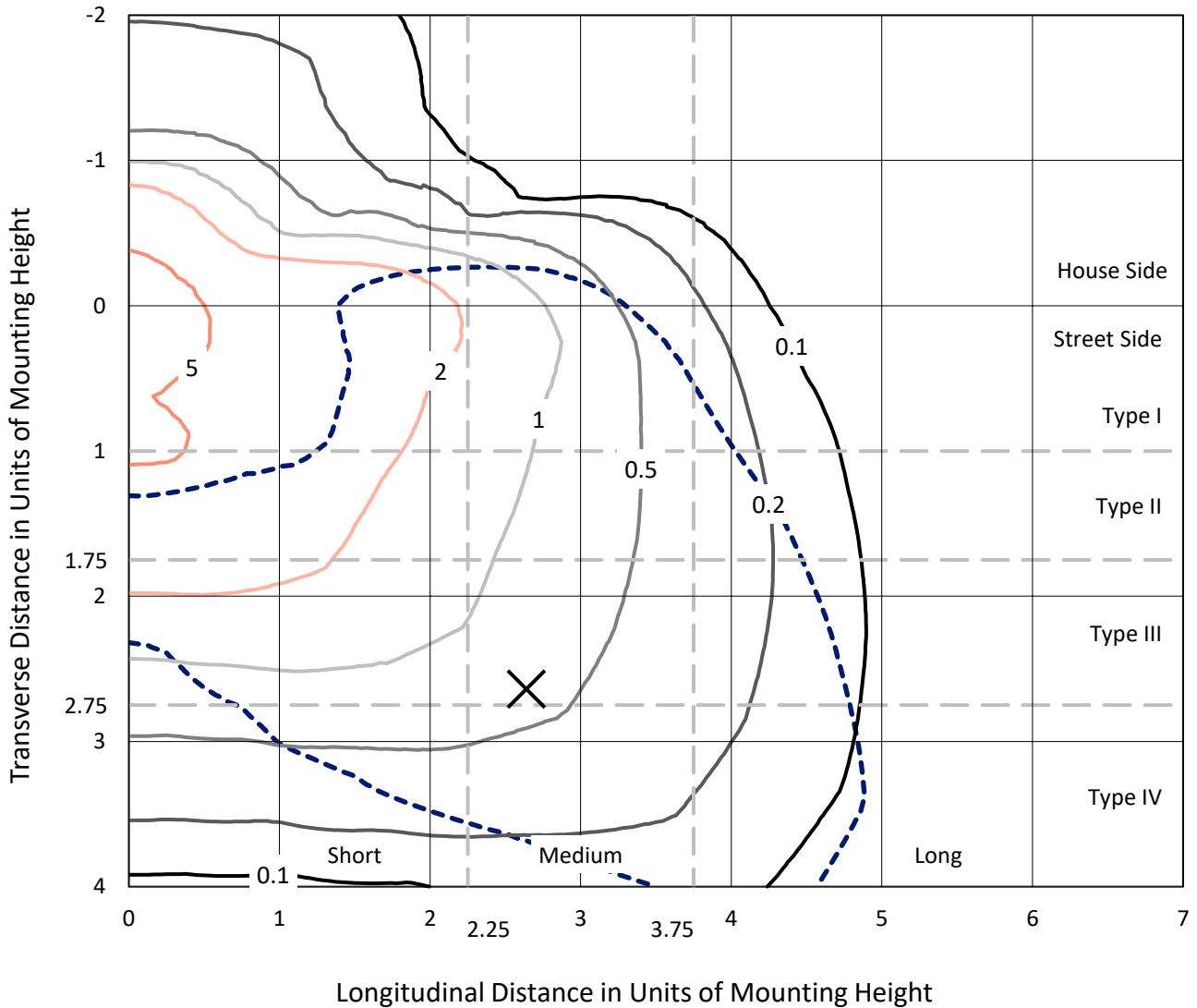
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400369  
 CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

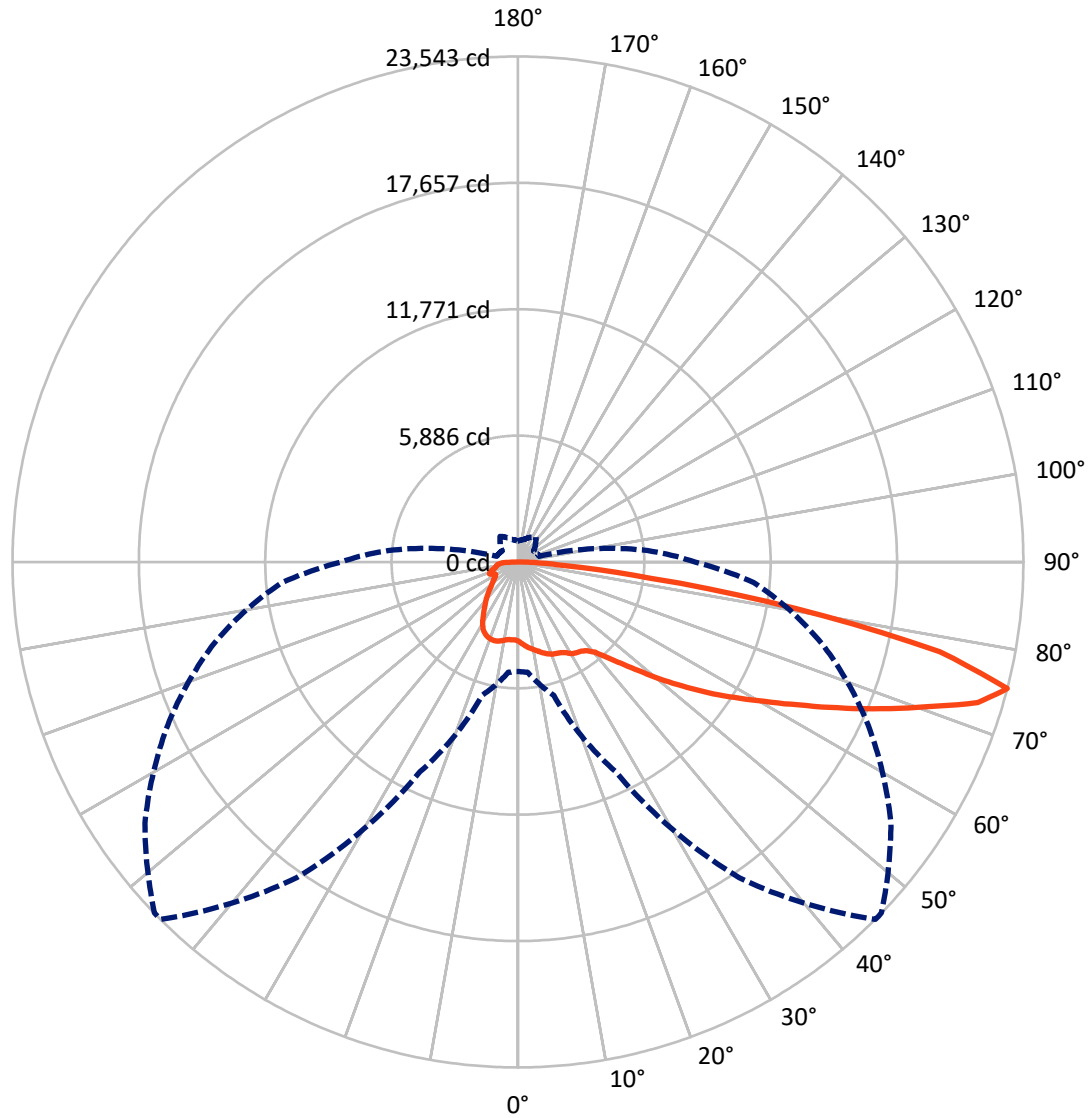
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P400369  
CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P400369  
 CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

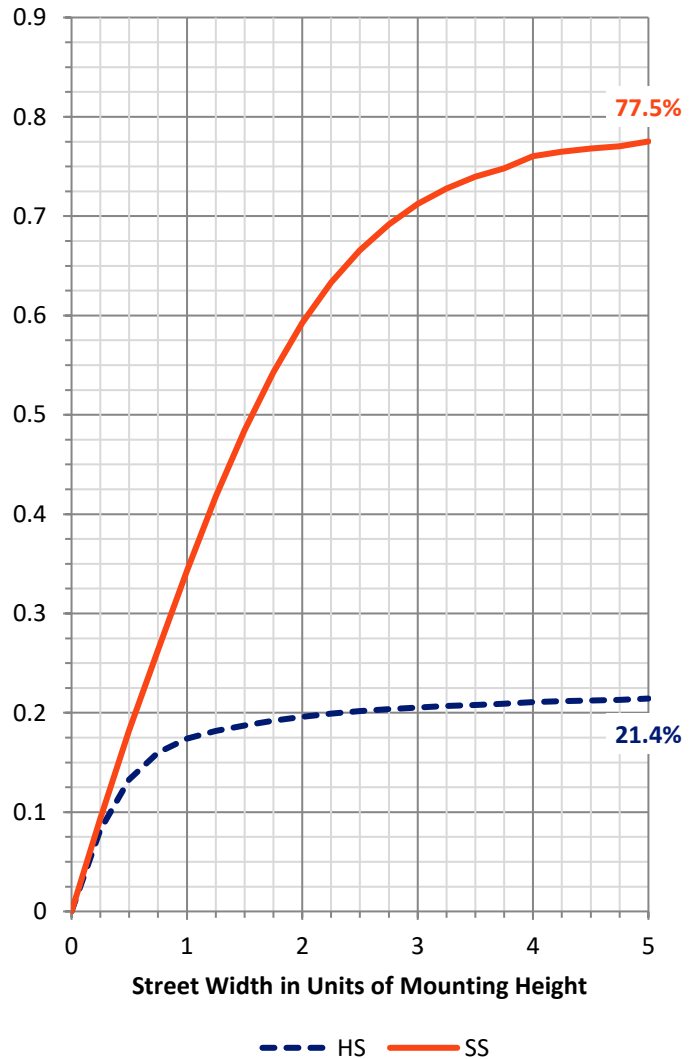
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7767.5	0.0	7767.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	27380.5	0.0	27380.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	35148.0	0.0	35148.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	365.2	1.0
10°-20°	1161.8	3.3
20°-30°	1980.6	5.6
30°-40°	2775.1	7.9
40°-50°	4077.0	11.6
50°-60°	6488.6	18.5
60°-70°	9230.1	26.3
70°-80°	7728.3	22.0
80°-90°	1341.3	3.8
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°	35148.0	100.0
0°-180°	35148.0	100.0

**Coefficient of Utilization**

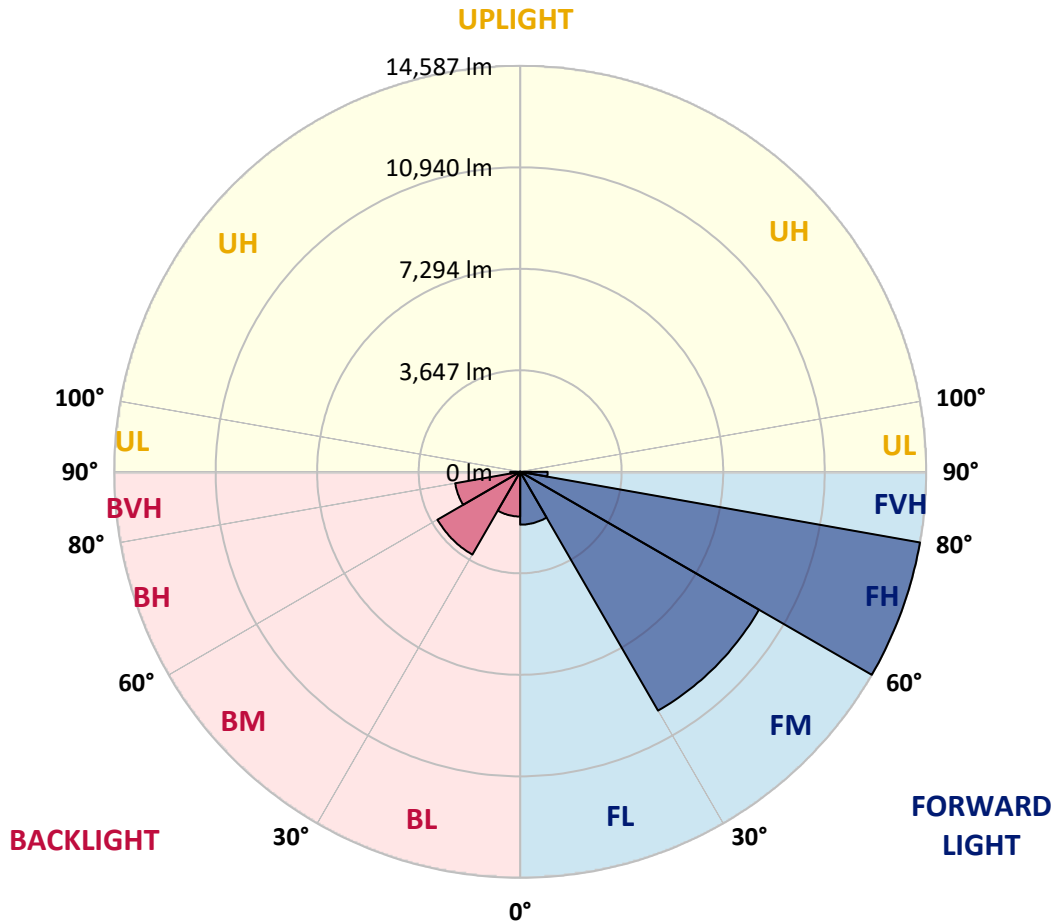


REPORT NUMBER: P400369  
 CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1900.0	5.4			
FM (30°-60°)	9907.2	28.2			
FH (60°-80°)	14587.3	41.5			G5
FVH (80°-90°)	986.0	2.8			G5
BL (0°-30°)	1607.6	4.6	B3/2500		
BM (30°-60°)	3433.6	9.8	B3/5000		
BH (60°-80°)	2371.1	6.7	B3/2500		G3/2500
BVH (80°-90°)	355.2	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type IV Medium





REPORT NUMBER: P400369

CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3
2.5°	3902.6	3883.9	3874.5	3874.5	3836.9	3813.4	3808.7	3775.8	3747.7	3719.5	3696.0
5°	4128.1	4114.0	4085.8	4062.3	4010.7	3944.9	3935.5	3865.1	3794.6	3728.9	3672.5
7.5°	4334.7	4306.5	4273.7	4226.7	4142.2	4052.9	4038.8	3940.2	3841.6	3743.0	3667.8
10°	4508.5	4480.3	4433.3	4367.6	4259.6	4151.5	4137.5	4034.1	3930.8	3813.4	3705.4
12.5°	4672.8	4649.4	4578.9	4489.7	4362.9	4264.3	4250.2	4160.9	4052.9	3921.4	3780.5
15°	4813.7	4790.2	4715.1	4611.8	4466.2	4391.1	4372.3	4287.7	4179.7	4038.8	3893.3
17.5°	4884.2	4884.2	4804.3	4691.6	4555.4	4499.1	4485.0	4381.7	4283.0	4146.9	4001.3
20°	4907.7	4917.0	4860.7	4724.5	4607.1	4583.6	4569.5	4485.0	4372.3	4240.8	4104.6
22.5°	4921.7	4940.5	4893.6	4738.6	4640.0	4625.9	4616.5	4560.1	4470.9	4344.1	4207.9
25°	4968.7	4968.7	4935.8	4762.1	4682.2	4677.5	4677.5	4644.7	4583.6	4475.6	4339.4
27.5°	5039.2	5034.5	4992.2	4813.7	4776.2	4790.2	4785.6	4780.9	4738.6	4630.6	4485.0
30°	5156.6	5156.6	5109.6	4917.0	4893.6	4954.6	4959.3	4968.7	4903.0	4733.9	4616.5
32.5°	5335.0	5316.2	5269.3	5020.4	4982.8	5039.2	5048.5	5043.8	4987.5	4827.8	4771.5
35°	5884.5	5842.2	5673.2	5250.5	5062.6	5095.5	5100.2	5123.7	5133.1	5006.3	4978.1
37.5°	6847.2	6790.9	6532.6	5795.3	5316.2	5236.4	5231.7	5292.8	5344.4	5231.7	5231.7
40°	7894.5	7847.6	7697.3	6734.5	5785.9	5522.9	5504.1	5560.4	5626.2	5546.4	5569.8
42.5°	8796.2	8833.8	8847.9	7730.1	6490.3	6058.3	6006.6	5926.8	6030.1	5959.6	6053.6
45°	9472.5	9453.7	9712.0	8749.2	7401.4	6729.8	6659.4	6443.4	6574.9	6570.2	6776.8
47.5°	10191.0	10158.1	10266.2	9707.3	8439.3	7551.7	7443.7	7124.3	7321.6	7457.8	7800.6
50°	10872.0	10881.4	10918.9	10463.4	9566.4	8552.0	8415.8	7988.4	8270.2	8556.7	9040.4
52.5°	11759.6	11693.8	11646.9	11346.3	10829.7	9594.6	9505.4	9016.9	9411.4	9749.6	10393.0
55°	12534.5	12492.2	12464.0	12449.9	11886.4	10745.2	10651.3	10144.1	10712.3	10951.8	11900.5
57.5°	13361.0	13337.6	13487.8	13727.3	13501.9	11914.6	11815.9	11327.5	11961.5	12130.6	13534.8
60°	13966.9	13981.0	14394.2	15004.7	14849.8	13182.6	13065.2	12633.1	13177.9	13328.2	15169.1
62.5°	13971.6	14112.4	15070.5	16164.7	16343.2	14643.1	14506.9	14037.3	14427.1	14427.1	16634.4
65°	12637.8	12797.5	14948.4	16451.2	17855.4	16380.8	16249.3	15512.0	15657.5	15460.3	18010.4
67.5°	11308.7	11496.6	13520.7	16474.7	18916.8	18240.5	18085.5	16986.6	16737.7	16239.9	18973.1
70°	10425.8	10557.3	12248.0	16169.4	19555.5	20184.8	20067.4	18386.1	17587.7	16892.7	18771.2
72.5°	8777.4	8730.5	10346.0	14718.3	19912.4	22392.1	22293.4	19907.7	18325.0	16582.7	16009.8
75°	5095.5	5151.9	6419.9	10782.8	17949.3	23542.7	23533.3	21208.6	18001.0	14647.8	11031.7
77.5°	1469.9	1512.2	2108.6	4738.6	11351.0	20081.5	20724.9	19395.8	15216.1	10439.9	5720.1
80°	643.4	676.3	915.8	1578.0	4888.9	13116.8	13680.4	13116.8	9176.6	4790.2	2244.8
82.5°	380.4	403.9	596.4	976.8	2343.5	6241.4	7002.2	6114.6	3959.0	2033.5	929.9
85°	216.0	225.4	342.8	619.9	1474.6	2183.8	2451.5	2296.5	1930.2	1155.3	488.4
87.5°	98.6	103.3	169.1	291.2	826.6	737.3	765.5	1014.4	1117.7	704.4	244.2
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: P400369

CATALOG NUMBER: ARCH-L-PA3-270-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3	3691.3
2.5°	3686.6	3672.5	3644.3	3635.0	3620.9	3625.6	3630.3	3630.3	3635.0	3620.9	3620.9
5°	3649.0	3625.6	3597.4	3597.4	3597.4	3635.0	3667.8	3686.6	3696.0	3696.0	3686.6
7.5°	3635.0	3606.8	3573.9	3583.3	3592.7	3639.6	3700.7	3761.8	3780.5	3780.5	3771.1
10°	3663.1	3635.0	3611.5	3625.6	3649.0	3686.6	3733.6	3789.9	3836.9	3841.6	3836.9
12.5°	3728.9	3696.0	3672.5	3700.7	3728.9	3752.4	3775.8	3799.3	3860.4	3869.8	3869.8
15°	3836.9	3804.0	3775.8	3799.3	3808.7	3808.7	3808.7	3808.7	3869.8	3879.2	3879.2
17.5°	3944.9	3916.7	3888.6	3893.3	3865.1	3827.5	3813.4	3808.7	3841.6	3869.8	3874.5
20°	4048.2	4024.7	3996.6	3949.6	3879.2	3808.7	3785.2	3785.2	3804.0	3846.3	3846.3
22.5°	4160.9	4132.8	4085.8	3977.8	3860.4	3761.8	3738.3	3752.4	3775.8	3832.2	3827.5
25°	4287.7	4250.2	4170.3	3968.4	3799.3	3681.9	3686.6	3728.9	3771.1	3832.2	3832.2
27.5°	4428.6	4377.0	4217.3	3893.3	3663.1	3550.4	3592.7	3691.3	3752.4	3818.1	3827.5
30°	4583.6	4536.6	4254.9	3761.8	3442.4	3339.1	3442.4	3602.1	3696.0	3757.1	3771.1
32.5°	4771.5	4733.9	4287.7	3592.7	3155.9	3066.7	3217.0	3414.2	3564.5	3635.0	3649.0
35°	5006.3	4968.7	4330.0	3400.1	2888.2	2794.3	2930.5	3132.4	3329.7	3418.9	3447.1
37.5°	5311.5	5255.2	4367.6	3193.5	2662.8	2554.8	2620.5	2803.7	2982.2	3104.3	3137.1
40°	5701.3	5612.1	4400.5	2958.7	2465.6	2343.5	2366.9	2456.2	2559.5	2667.5	2709.8
42.5°	6250.8	6072.3	4405.2	2709.8	2263.6	2150.9	2141.5	2169.7	2169.7	2169.7	2183.8
45°	7016.3	6678.2	4414.5	2475.0	2057.0	1939.6	1911.4	1902.0	1831.6	1695.4	1686.0
47.5°	7983.7	7471.8	4456.8	2277.7	1841.0	1737.6	1700.1	1662.5	1531.0	1390.1	1361.9
50°	9223.6	8392.3	4541.3	2089.9	1657.8	1587.4	1540.4	1451.2	1305.6	1197.6	1169.4
52.5°	10651.3	9486.6	4621.2	1892.6	1521.6	1474.6	1418.3	1310.3	1155.3	1089.5	1080.2
55°	12290.3	10707.6	4780.9	1718.9	1404.2	1371.3	1319.7	1216.3	1098.9	1052.0	1047.3
57.5°	13966.9	12074.2	5006.3	1563.9	1291.5	1272.7	1272.7	1183.5	1108.3	1089.5	1089.5
60°	15582.4	13248.3	4832.5	1418.3	1188.2	1197.6	1286.8	1263.3	1207.0	1230.4	1244.5
62.5°	16836.3	13938.7	3921.4	1300.9	1113.0	1197.6	1427.7	1427.7	1361.9	1352.5	1352.5
65°	17371.7	13929.3	2756.7	1211.7	1084.9	1315.0	1592.1	1516.9	1343.1	1277.4	1263.3
67.5°	17235.5	13318.8	1902.0	1150.6	1075.5	1437.1	1667.2	1455.9	1258.6	1202.3	1160.0
70°	16037.9	12027.3	1465.3	1094.2	1061.4	1385.4	1643.7	1385.4	1192.9	1141.2	1103.6
72.5°	12938.4	9646.2	1216.3	1037.9	1005.0	1282.1	1563.9	1319.7	1141.2	1084.9	1047.3
75°	8251.4	6067.6	1028.5	962.7	897.0	1150.6	1455.9	1253.9	1084.9	1009.7	981.5
77.5°	3968.4	2615.9	897.0	873.5	807.8	1066.1	1347.8	1169.4	1009.7	948.7	929.9
80°	1606.1	1197.6	779.6	784.3	742.0	1014.4	1272.7	1089.5	934.6	868.8	835.9
82.5°	835.9	695.1	657.5	676.3	676.3	967.4	1216.3	1023.8	868.8	840.6	732.6
85°	450.8	432.1	507.2	544.8	587.0	873.5	1131.8	953.4	793.7	681.0	657.5
87.5°	220.7	281.8	286.5	328.7	408.6	699.8	953.4	798.4	662.2	549.5	540.1
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)