

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: P400437

Luminaire Tested: **ARCH-L-PA3-280-740-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400437
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-PA3-280-740-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35709 lumens
Efficiency: N/A
Efficacy: 128.0 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

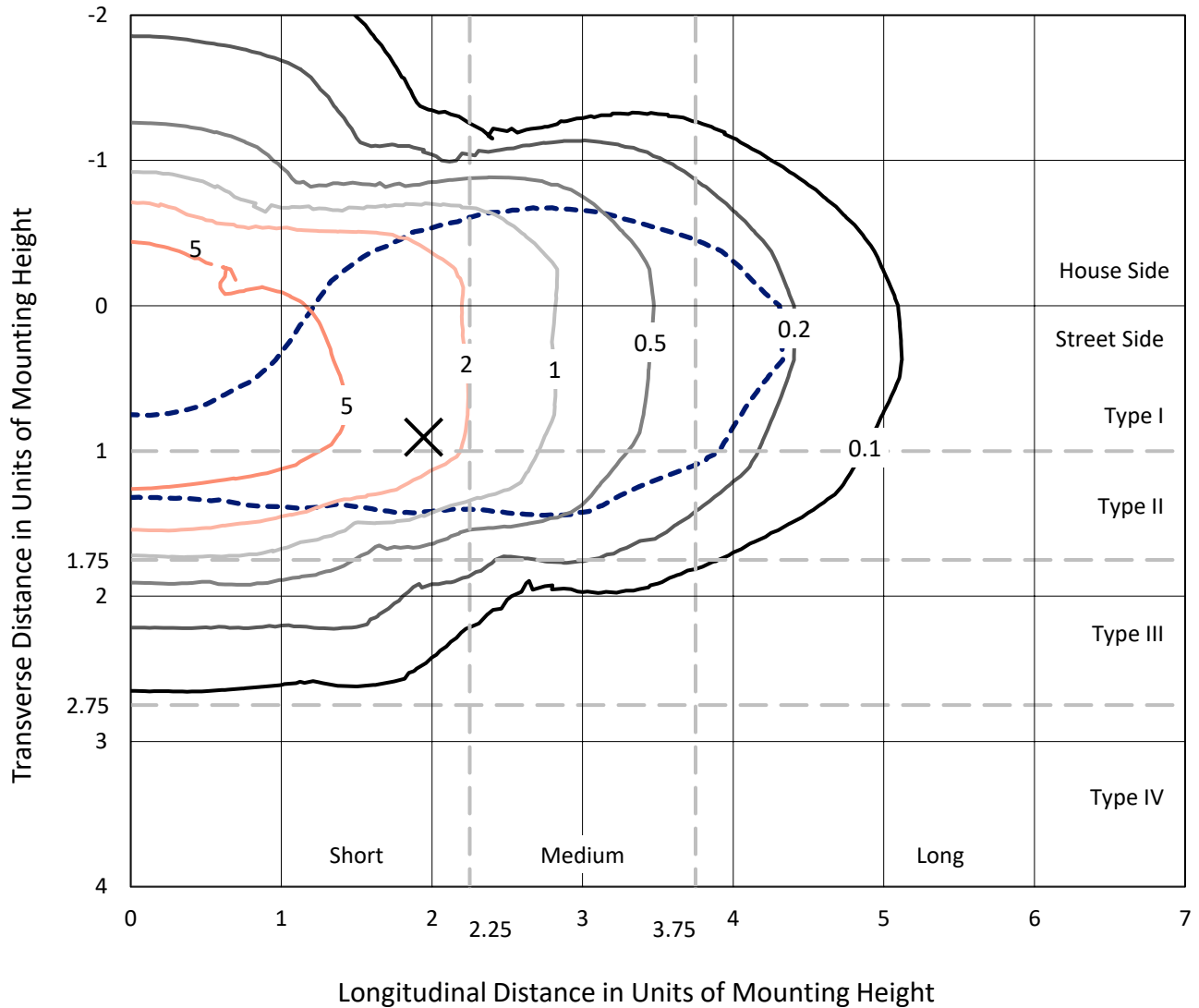
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400437
 CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

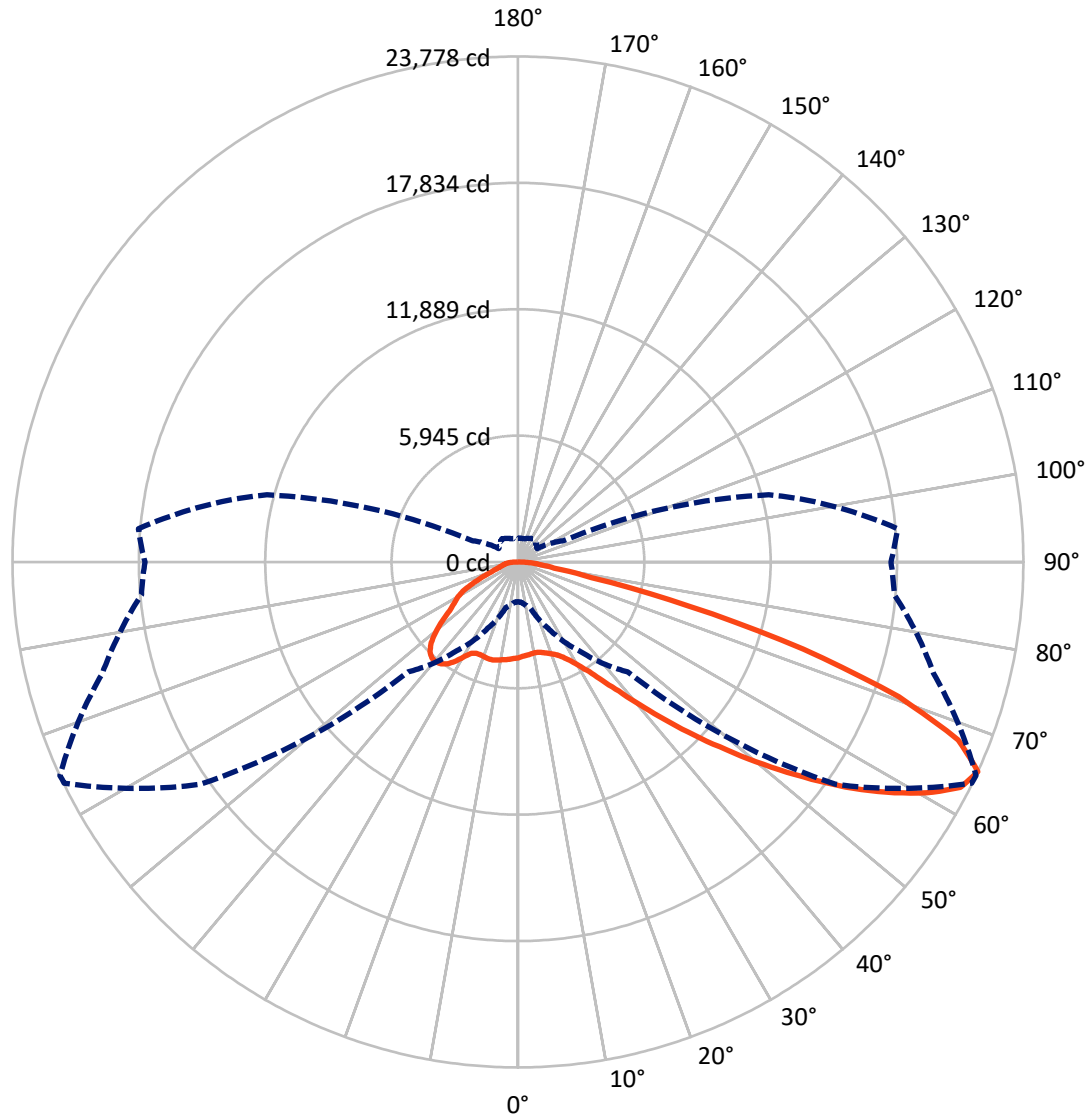
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - N/A

REPORT NUMBER: P400437
CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400437
 CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

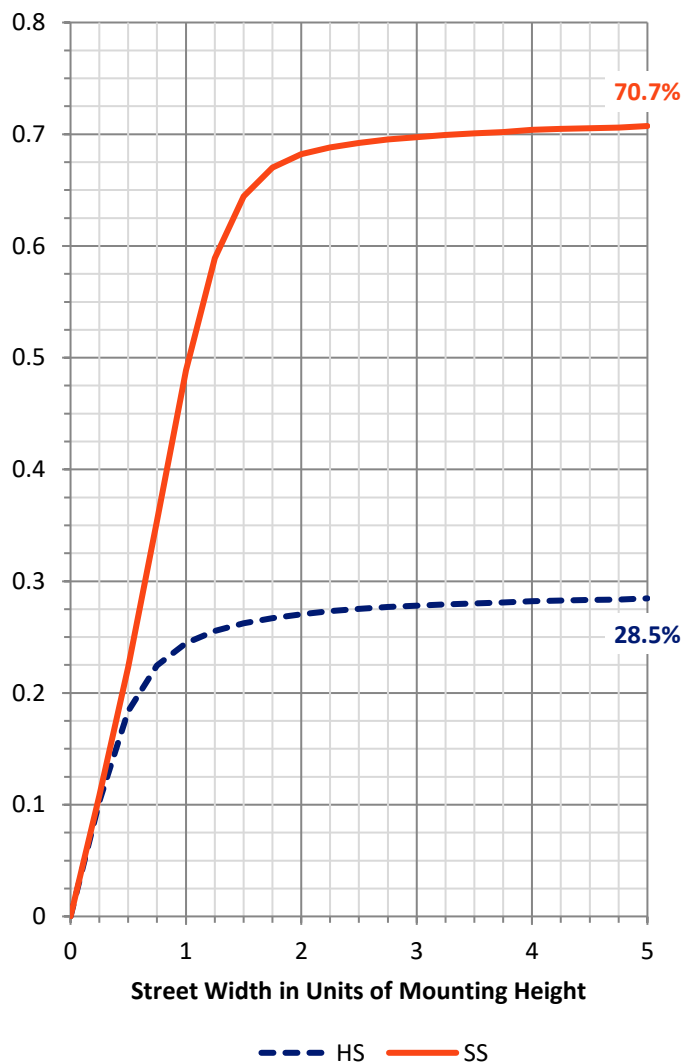
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10324.0	0.0	10324.0
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	25385.0	0.0	25385.0
	% Fixture	71.1	0.0	71.1
Total	Lumens	35709.0	0.0	35709.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.9	1.2
10°-20°	1283.5	3.6
20°-30°	2279.8	6.4
30°-40°	3856.8	10.8
40°-50°	6714.0	18.8
50°-60°	8676.6	24.3
60°-70°	7592.5	21.3
70°-80°	4129.8	11.6
80°-90°	746.2	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°	35709.0	100.0
0°-180°	35709.0	100.0



REPORT NUMBER: P400437

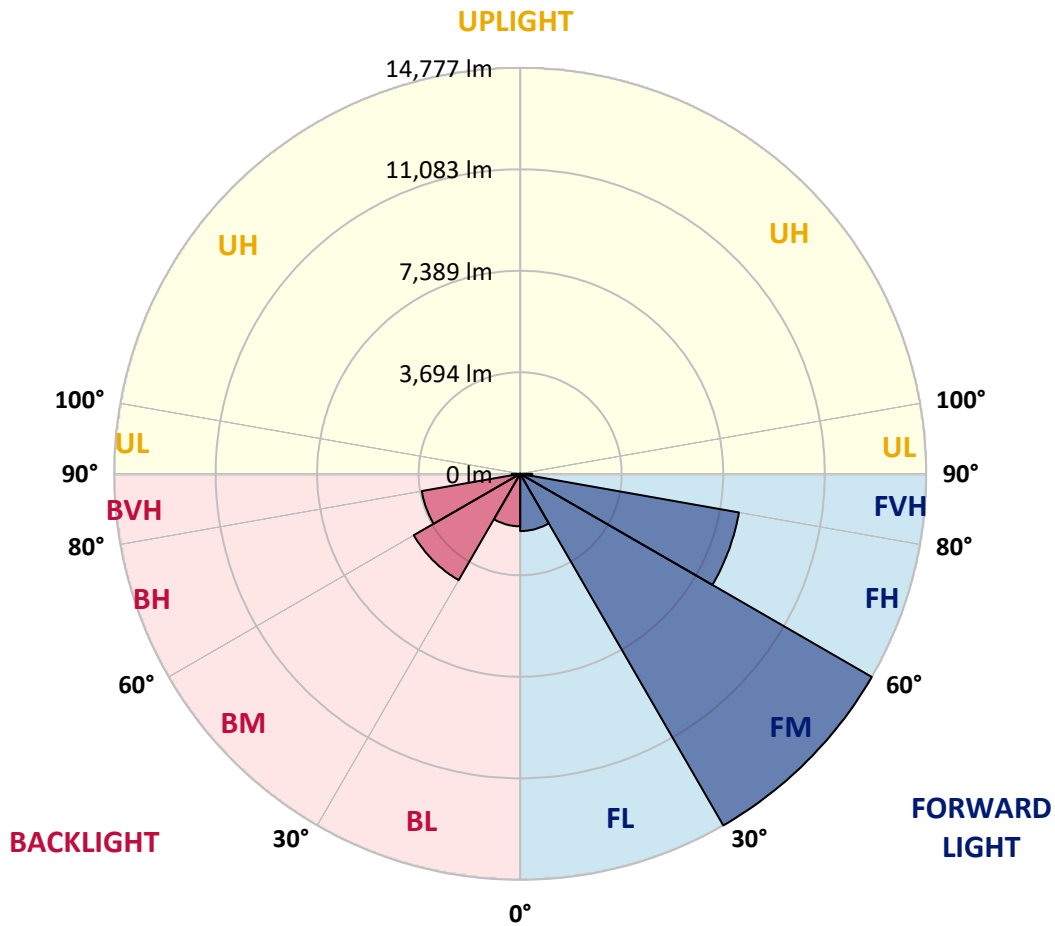
CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2083.5	5.8			
FM (30°-60°)	14777.4	41.4			
FH (60°-80°)	8085.0	22.6			G4/12000
FVH (80°-90°)	439.1	1.2			G3/500
BL (0°-30°)	1909.6	5.3	B3/2500		
BM (30°-60°)	4470.1	12.5	B3/5000		
BH (60°-80°)	3637.3	10.2	B4/5000		G4/5000
BVH (80°-90°)	307.1	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





REPORT NUMBER: P400437

CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2
2.5°	4432.3	4427.6	4418.2	4427.6	4432.3	4441.7	4437.0	4446.4	4441.7	4455.8	4479.3
5°	4319.5	4310.1	4305.4	4328.9	4343.0	4366.5	4375.9	4408.8	4404.1	4427.6	4465.2
7.5°	4192.6	4192.6	4187.9	4216.1	4234.9	4277.2	4310.1	4366.5	4371.2	4413.5	4455.8
10°	4093.9	4098.6	4093.9	4117.4	4145.6	4197.3	4253.7	4333.6	4338.3	4399.4	4441.7
12.5°	4056.3	4056.3	4056.3	4089.2	4126.8	4197.3	4263.1	4347.7	4357.1	4422.9	4460.5
15°	4108.0	4112.7	4103.3	4136.2	4178.5	4263.1	4324.2	4413.5	4422.9	4484.0	4507.5
17.5°	4291.3	4310.1	4286.6	4305.4	4296.0	4361.8	4418.2	4507.5	4512.2	4563.9	4573.3
20°	4653.2	4672.0	4634.4	4610.9	4526.3	4521.6	4545.1	4615.6	4615.6	4648.5	4625.0
22.5°	5212.5	5231.3	5165.5	5076.2	4874.1	4775.4	4723.7	4756.6	4751.9	4766.0	4704.9
25°	5955.1	5950.4	5870.5	5706.0	5381.7	5142.0	5015.1	4963.4	4963.4	4935.2	4860.0
27.5°	6876.4	6805.9	6664.9	6467.5	6016.2	5682.5	5409.9	5278.3	5254.8	5170.2	5029.2
30°	7858.7	7807.0	7604.9	7318.2	6796.5	6368.7	5917.5	5654.3	5640.2	5456.9	5245.4
32.5°	9015.0	8930.3	8704.7	8361.6	7736.5	7134.9	6570.9	6171.3	6147.8	5856.4	5565.0
35°	10500.2	10429.7	9992.6	9649.5	8845.7	8056.1	7388.7	6857.6	6838.8	6481.6	6110.2
37.5°	12281.6	12098.3	11675.3	11031.3	10185.3	9250.0	8403.9	7736.5	7713.0	7318.2	6848.2
40°	13870.2	13705.7	13329.7	12737.5	11830.4	10791.6	9644.8	8836.3	8812.8	8333.4	7741.2
42.5°	15045.3	14932.5	14688.1	14345.0	13696.3	13066.5	11228.7	10166.5	10124.2	9503.8	8765.8
45°	15726.8	15637.5	15496.5	15581.1	15571.7	15454.2	13118.2	11750.5	11614.2	10810.4	9908.0
47.5°	15562.3	15482.4	15538.8	16196.8	17104.0	17785.5	15317.9	13372.0	13188.7	12140.6	11125.3
50°	14373.2	14406.1	14702.2	15961.8	17997.0	19510.5	17757.3	15219.2	14974.8	13480.1	12281.6
52.5°	12206.4	12286.3	13005.4	14768.0	17898.3	20629.1	19961.7	17127.5	16803.2	14786.8	13334.4
55°	9696.5	9898.6	10829.2	12681.1	16610.4	20709.0	21625.5	19045.1	18687.9	16013.5	14251.0
57.5°	7172.5	7473.3	8549.6	10251.1	14142.9	19444.7	22457.5	20878.2	20445.8	17230.9	15219.2
60°	4549.8	4733.1	5973.9	7980.9	10824.5	16351.9	22349.4	22438.7	22062.7	18443.5	16229.7
62.5°	2904.7	2994.0	3619.1	5691.9	7567.3	12107.7	21169.6	23618.4	23364.6	19548.1	17188.6
65°	1866.0	1903.6	2223.2	3501.6	5151.4	7308.8	18232.0	23745.3	23778.2	20239.0	17780.8
67.5°	1518.2	1537.0	1654.5	2162.1	3642.6	4037.5	12699.9	21940.5	22340.0	20060.4	17578.7
70°	1381.9	1405.4	1527.6	1725.0	2820.1	2787.2	6147.8	18358.9	19012.2	19031.0	16681.0
72.5°	1165.6	1198.5	1363.1	1631.0	2180.9	2199.7	2603.9	13075.9	14039.4	17010.0	15332.0
75°	972.9	991.7	1132.7	1438.3	1847.2	1757.9	1828.4	6932.8	8324.0	13639.9	13898.4
77.5°	789.6	808.4	911.8	1146.8	1640.4	1367.8	1438.3	2871.8	3548.6	9259.4	11360.3
80°	564.0	582.8	700.3	893.0	1240.8	1231.4	1066.9	1584.0	1720.3	5005.7	7379.3
82.5°	404.2	418.3	531.1	639.2	860.1	1236.1	803.7	1076.3	1128.0	2218.5	2975.2
85°	272.6	272.6	366.6	423.0	554.6	780.2	648.6	728.5	761.4	1052.8	803.7
87.5°	117.5	117.5	197.4	216.2	291.4	361.9	484.1	366.6	376.0	568.7	329.0
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: P400437

CATALOG NUMBER: ARCH-L-PA3-280-740-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2	4512.2
2.5°	4493.4	4498.1	4507.5	4535.7	4554.5	4582.7	4596.8	4615.6	4615.6	4606.2	4610.9
5°	4484.0	4498.1	4531.0	4582.7	4615.6	4667.3	4704.9	4733.1	4742.5	4733.1	4737.8
7.5°	4479.3	4502.8	4559.2	4634.4	4681.4	4747.2	4798.9	4831.8	4855.3	4845.9	4850.6
10°	4465.2	4502.8	4573.3	4667.3	4737.8	4803.6	4850.6	4864.7	4878.8	4869.4	4864.7
12.5°	4484.0	4526.3	4601.5	4714.3	4794.2	4845.9	4860.0	4836.5	4803.6	4784.8	4780.1
15°	4521.6	4563.9	4639.1	4756.6	4827.1	4845.9	4813.0	4737.8	4662.6	4620.3	4615.6
17.5°	4573.3	4601.5	4662.6	4766.0	4822.4	4798.9	4733.1	4643.8	4587.4	4554.5	4559.2
20°	4606.2	4606.2	4653.2	4733.1	4780.1	4761.3	4681.4	4582.7	4493.4	4451.1	4437.0
22.5°	4653.2	4629.7	4634.4	4704.9	4770.7	4742.5	4573.3	4399.4	4272.5	4225.5	4220.8
25°	4780.1	4714.3	4672.0	4714.3	4869.4	4639.1	4300.7	4098.6	3981.1	3938.8	3943.5
27.5°	4935.2	4845.9	4756.6	4827.1	4949.3	4404.1	3952.9	3722.5	3652.0	3619.1	3633.2
30°	5090.3	4972.8	4855.3	5109.1	4892.9	4037.5	3506.3	3280.7	3219.6	3196.1	3214.9
32.5°	5377.0	5184.3	5043.3	5485.1	4719.0	3619.1	3022.2	2815.4	2759.0	2730.8	2721.4
35°	5856.4	5612.0	5471.0	5814.1	4474.6	3153.8	2580.4	2434.7	2373.6	2312.5	2303.1
37.5°	6547.4	6251.2	6124.3	6002.1	4131.5	2693.2	2242.0	2143.3	2054.0	1960.0	1955.3
40°	7374.6	6989.2	6895.2	6086.7	3656.7	2260.8	2007.0	1913.0	1800.2	1710.9	1715.6
42.5°	8328.7	7835.2	7633.1	6063.2	3069.2	2030.5	1837.8	1734.4	1635.7	1555.8	1551.1
45°	9348.7	8789.3	8324.0	5898.7	2486.4	1870.7	1734.4	1612.2	1513.5	1424.2	1414.8
47.5°	10476.7	9851.6	8963.2	5579.1	2054.0	1757.9	1673.3	1499.4	1410.1	1353.7	1353.7
50°	11614.2	10866.8	9550.8	5095.0	1800.2	1673.3	1584.0	1438.3	1367.8	1320.8	1320.8
52.5°	12587.1	11924.4	10034.9	4516.9	1640.4	1602.8	1522.9	1410.1	1334.9	1292.6	1287.9
55°	13531.8	12906.7	10467.3	3943.5	1508.8	1508.8	1508.8	1386.6	1302.0	1264.3	1259.6
57.5°	14471.9	13940.7	10918.5	3567.4	1391.3	1428.9	1480.6	1358.4	1273.7	1240.8	1236.1
60°	15534.1	15181.6	11440.2	3304.2	1287.9	1344.3	1443.0	1325.5	1226.7	1198.5	1193.8
62.5°	16662.2	16662.2	11915.0	2932.9	1193.8	1273.7	1386.6	1283.2	1184.4	1160.9	1156.2
65°	17545.8	17926.5	12220.5	2378.3	1099.8	1203.2	1320.8	1226.7	1128.0	1123.3	1113.9
67.5°	17649.2	18246.1	12027.8	1795.5	1015.2	1128.0	1254.9	1165.6	1071.6	1071.6	1057.5
70°	16906.6	17512.9	11426.1	1344.3	954.1	1052.8	1170.3	1090.4	1001.1	1010.5	987.0
72.5°	15665.7	15816.1	9931.5	1062.2	883.6	972.9	1066.9	1005.8	925.9	925.9	893.0
75°	14030.0	13193.4	7214.8	888.3	799.0	878.9	963.5	911.8	841.3	817.8	799.0
77.5°	11167.6	9560.2	4192.6	766.1	728.5	789.6	846.0	808.4	747.3	695.6	695.6
80°	6805.9	5602.6	1851.9	662.7	643.9	690.9	728.5	686.2	634.5	582.8	568.7
82.5°	2589.8	2162.1	897.7	568.7	564.0	592.2	620.4	578.1	540.5	517.0	446.5
85°	709.7	653.3	615.7	474.7	465.3	460.6	493.5	474.7	423.0	347.8	310.2
87.5°	267.9	305.5	333.7	291.4	310.2	286.7	329.0	300.8	267.9	173.9	155.1
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)