

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: P237101

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30834.8 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - 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

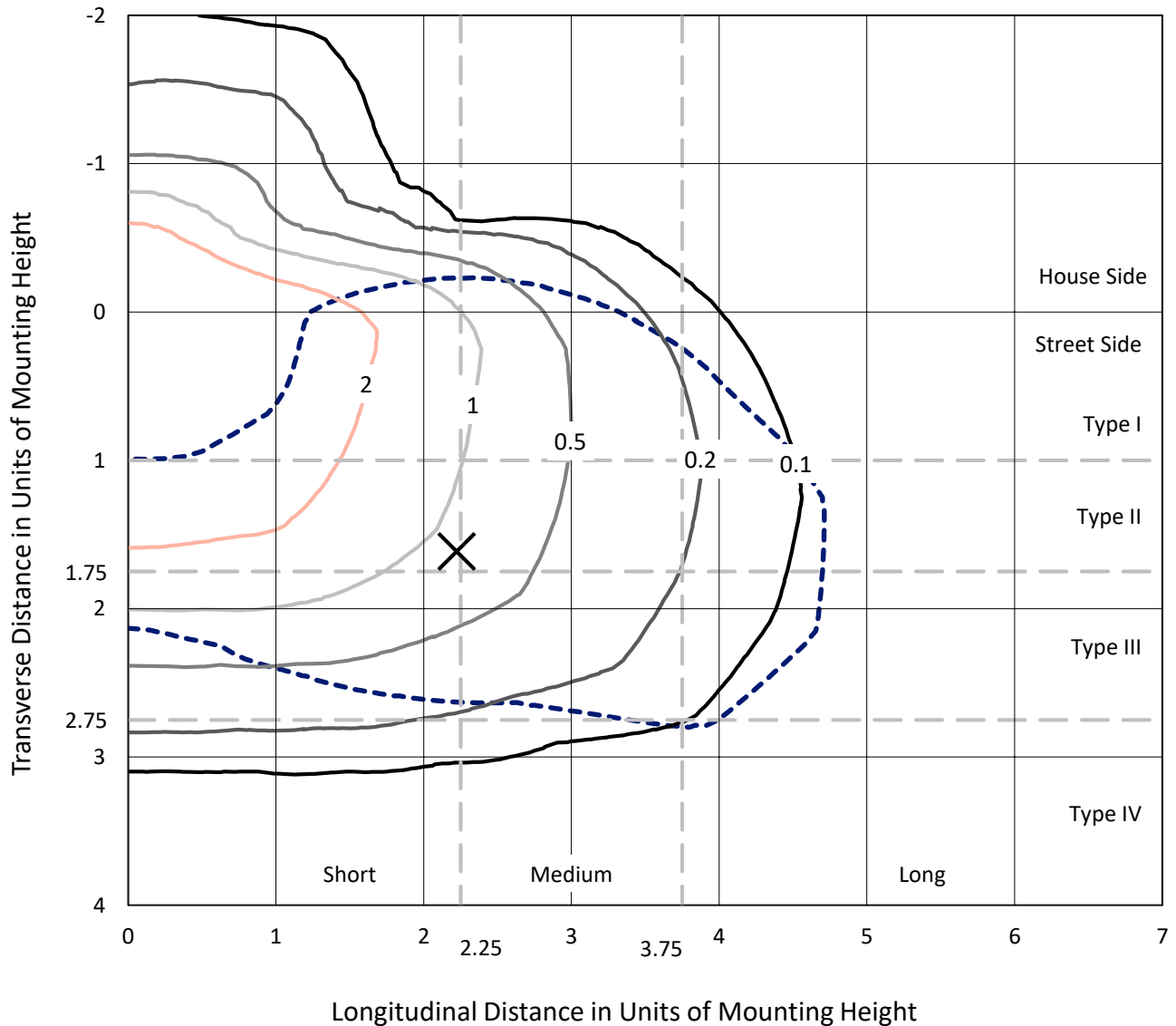


REPORT NUMBER: P237101

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

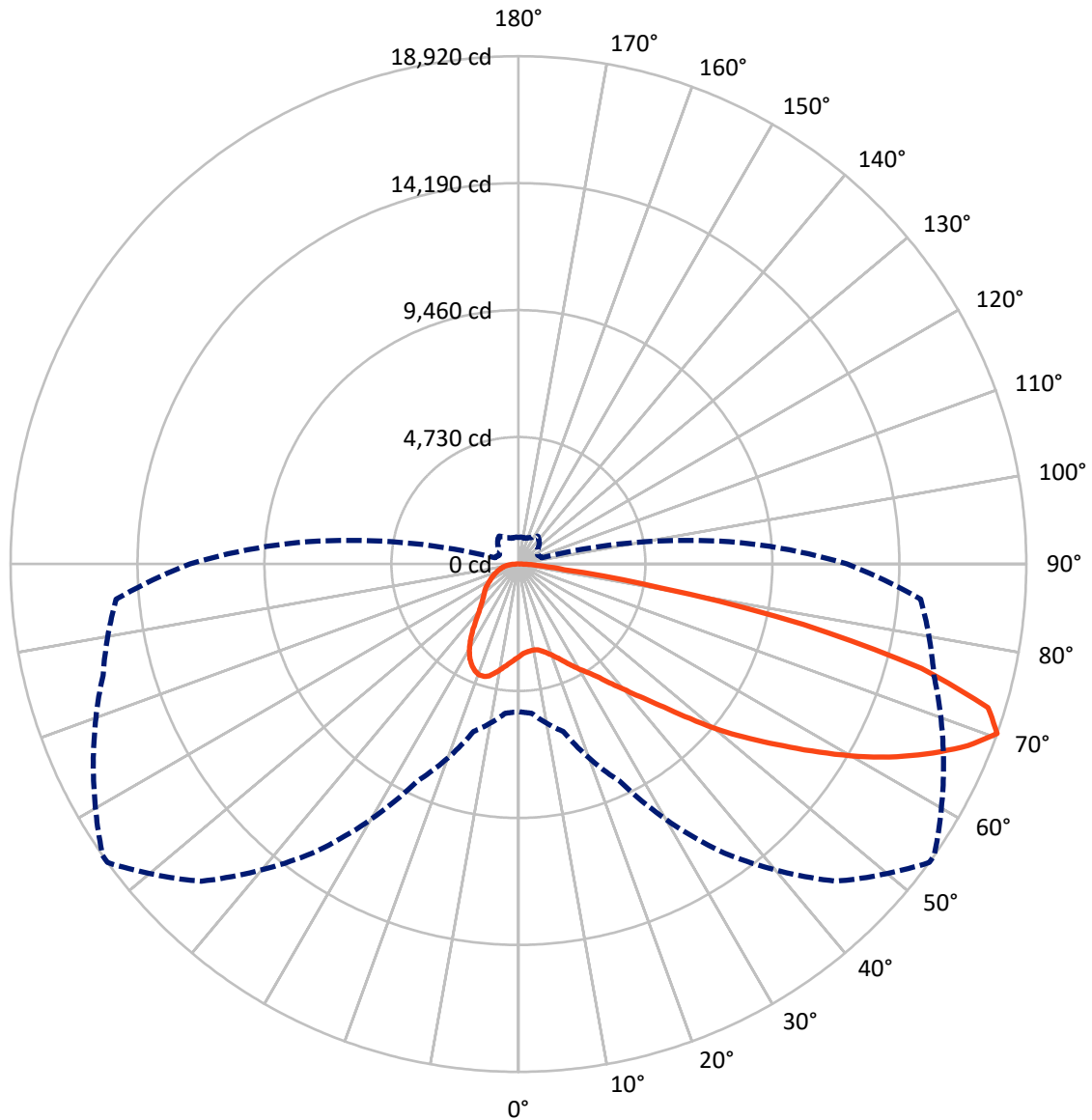


Based on 30 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P237101

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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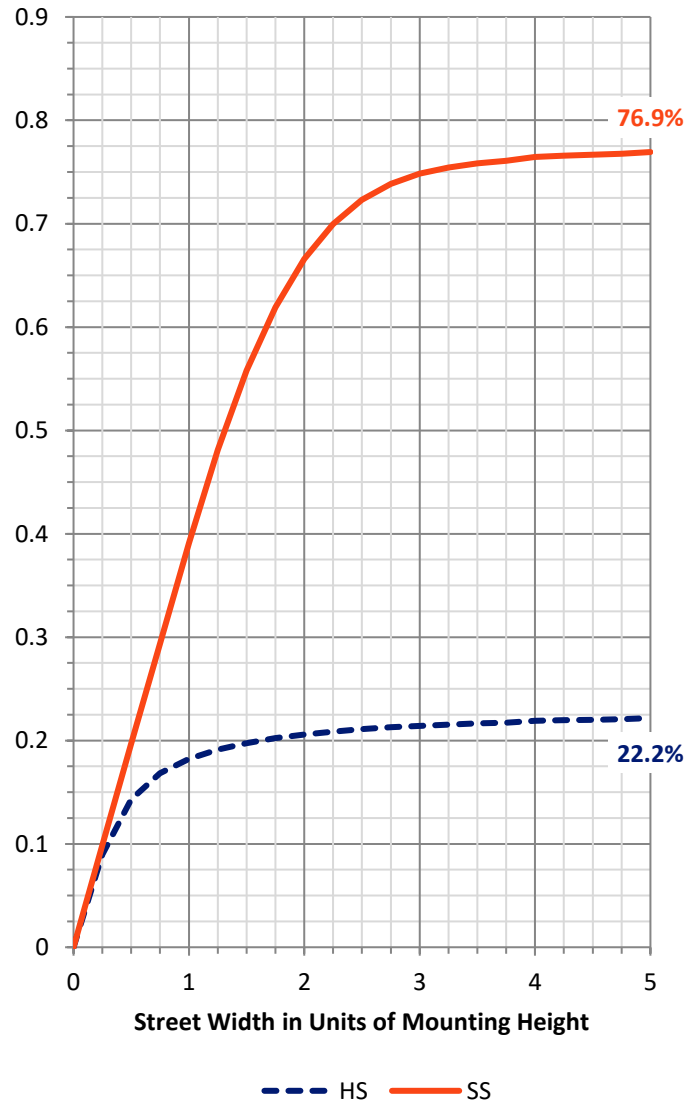
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6993.2	0.0	6993.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	23841.6	0.0	23841.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	30834.8	0.0	30834.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.6	1.1
10°-20°	1081.8	3.5
20°-30°	1879.4	6.1
30°-40°	2746.5	8.9
40°-50°	4310.6	14.0
50°-60°	6628.7	21.5
60°-70°	8098.6	26.3
70°-80°	5021.2	16.3
80°-90°	729.4	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°	30834.8	100.0
0°-180°	30834.8	100.0

Coefficient of Utilization



REPORT NUMBER: P237101

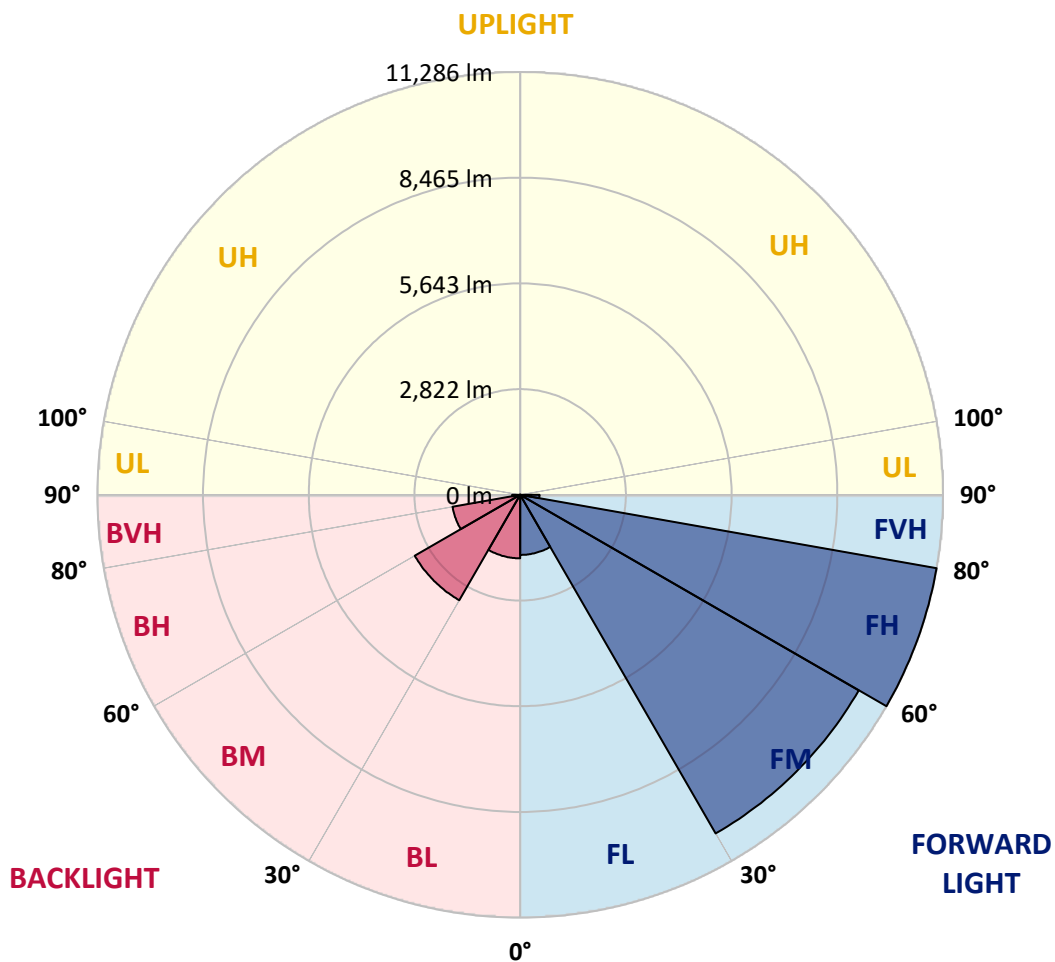
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1604.3	5.2			
FM	(30°-60°)	10436.2	33.8			
FH	(60°-80°)	11286.0	36.6			G4/12000
FVH	(80°-90°)	515.1	1.7			G4/750
BL	(0°-30°)	1695.4	5.5	B3/2500		
BM	(30°-60°)	3249.6	10.5	B3/5000		
BH	(60°-80°)	1833.8	5.9	B3/2500		G3/2500
BVH	(80°-90°)	214.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P237101

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8
2.5°	3314.3	3303.0	3303.0	3319.9	3325.6	3342.5	3342.5	3348.1	3365.1	3393.3	3427.2
5°	3212.7	3207.1	3212.7	3235.3	3246.5	3280.4	3291.7	3297.4	3331.2	3376.4	3427.2
7.5°	3111.0	3105.4	3116.6	3150.6	3184.4	3235.3	3263.5	3269.1	3319.9	3382.1	3449.8
10°	3077.1	3071.5	3088.4	3116.6	3150.6	3207.1	3252.2	3257.8	3331.2	3404.6	3500.6
12.5°	3122.4	3116.6	3133.6	3161.8	3195.7	3235.3	3286.0	3291.7	3387.7	3483.7	3585.3
15°	3235.3	3235.3	3240.9	3257.8	3291.7	3325.6	3370.7	3376.4	3478.0	3591.0	3692.5
17.5°	3410.3	3399.0	3399.0	3393.3	3415.9	3432.8	3489.3	3494.9	3602.2	3703.9	3805.5
20°	3624.8	3619.2	3596.6	3568.4	3562.7	3574.0	3630.5	3636.1	3743.4	3828.1	3924.0
22.5°	3884.6	3890.2	3839.3	3777.2	3749.0	3766.0	3816.8	3822.5	3901.5	3974.9	4059.6
25°	4229.0	4212.0	4138.7	4048.3	3991.9	3991.9	4042.6	4042.6	4116.0	4161.2	4217.6
27.5°	4556.4	4522.6	4454.8	4324.9	4234.6	4251.6	4302.3	4302.3	4370.1	4387.0	4415.3
30°	4912.1	4878.2	4793.5	4629.9	4511.3	4500.0	4562.1	4556.4	4646.8	4641.1	4618.5
32.5°	5346.9	5330.0	5188.8	4979.9	4821.8	4782.3	4838.8	4844.4	4900.9	4883.9	4810.5
35°	5956.6	5951.0	5821.2	5454.2	5245.3	5171.8	5205.7	5205.7	5245.3	5200.1	5075.9
37.5°	6724.6	6735.8	6622.9	6080.9	5787.3	5663.1	5668.7	5663.1	5674.4	5623.6	5493.7
40°	7492.4	7520.6	7515.0	6860.0	6487.5	6272.8	6193.9	6182.5	6210.7	6188.1	6064.0
42.5°	8503.1	8570.8	8412.7	7819.9	7402.1	7040.8	6826.2	6797.9	6860.0	6888.2	6769.7
45°	9553.2	9530.7	9282.3	8853.1	8474.8	8011.9	7605.3	7560.2	7605.3	7690.0	7565.8
47.5°	10100.9	10084.0	10021.8	9807.3	9750.9	9220.2	8604.8	8565.2	8480.5	8599.0	8452.2
50°	11004.3	11021.3	10767.2	10744.6	10981.8	10688.1	9734.0	9643.6	9491.1	9587.2	9462.9
52.5°	11659.3	11585.8	11427.8	11625.4	12365.0	12207.0	10795.4	10755.9	10614.8	10592.1	10535.7
55°	11924.6	11924.6	11952.9	12410.2	13466.0	13257.1	11947.2	11986.7	11794.8	11636.7	11710.1
57.5°	12003.7	12037.6	12280.3	13036.9	14759.0	14075.8	13217.6	13274.1	12997.4	12681.2	12912.7
60°	11614.1	11715.8	12297.3	13392.7	15487.4	14945.3	14555.8	14572.7	14171.9	13708.9	14115.4
62.5°	10614.8	10738.9	11777.8	13539.5	15368.8	15837.4	15820.4	15860.0	15312.3	14736.4	15244.6
65°	9389.6	9513.7	10620.4	13127.3	15278.5	16475.4	16977.9	17085.2	16379.5	15605.9	15950.4
67.5°	7588.5	7752.1	8802.3	11738.4	14838.1	17000.5	18062.0	18175.0	17203.8	16057.7	15888.3
70°	5499.4	5578.4	6459.2	8920.9	13042.6	16712.6	18920.2	18914.6	17474.8	16023.7	15041.4
72.5°	2648.0	2710.1	3472.4	5538.9	9327.5	14183.1	18299.2	18406.5	17102.2	15532.5	13104.7
75°	1089.7	1151.8	1405.8	2337.5	4895.2	9372.6	15510.0	15764.0	15532.5	13940.4	10253.3
77.5°	677.5	700.1	824.3	1208.3	2235.9	4375.8	10857.5	11201.9	12308.6	11168.1	6769.7
80°	508.2	525.1	615.4	846.9	1411.6	1614.8	5392.1	5826.8	7458.5	6408.4	3065.9
82.5°	423.5	429.1	491.2	615.4	959.8	926.0	1727.8	1925.3	3478.0	2444.8	1055.8
85°	395.3	406.5	440.4	440.4	609.8	581.5	717.1	750.9	1010.7	835.6	367.0
87.5°	203.3	192.0	389.5	344.4	316.2	282.3	304.9	327.4	378.3	400.9	163.8
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: P237101

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8	3449.8
2.5°	3438.5	3455.4	3483.7	3511.9	3545.8	3585.3	3607.8	3636.1	3658.7	3647.4	3641.8
5°	3455.4	3483.7	3545.8	3602.2	3670.0	3749.0	3799.9	3856.3	3901.5	3912.8	3895.8
7.5°	3483.7	3534.5	3619.2	3720.8	3811.1	3912.8	3991.9	4070.8	4127.3	4138.7	4138.7
10°	3551.4	3607.8	3720.8	3856.3	3963.6	4070.8	4161.2	4223.4	4274.1	4296.7	4296.7
12.5°	3647.4	3715.2	3850.7	4014.4	4132.9	4234.6	4285.4	4313.7	4336.2	4358.8	4364.4
15°	3760.4	3833.7	3997.5	4172.5	4296.7	4347.5	4347.5	4341.9	4341.9	4353.2	4364.4
17.5°	3873.3	3952.3	4121.7	4308.1	4387.0	4358.8	4319.3	4302.3	4291.1	4285.4	4302.3
20°	3991.9	4070.8	4240.2	4415.3	4392.7	4274.1	4217.6	4178.1	4144.3	4127.3	4149.9
22.5°	4121.7	4195.1	4370.1	4488.7	4319.3	4138.7	4031.3	3969.3	3912.8	3878.9	3901.5
25°	4274.1	4347.5	4516.9	4511.3	4189.4	3935.4	3766.0	3664.3	3602.2	3568.4	3568.4
27.5°	4454.8	4516.9	4680.6	4454.8	4008.7	3664.3	3415.9	3319.9	3303.0	3274.8	3274.8
30°	4641.1	4692.0	4833.1	4324.9	3760.4	3308.6	3037.7	2992.4	2998.1	2969.8	2975.6
32.5°	4833.1	4883.9	4923.5	4132.9	3438.5	2907.7	2727.1	2693.2	2687.6	2665.0	2642.4
35°	5104.1	5177.5	4934.7	3873.3	3048.9	2574.7	2444.8	2410.9	2377.0	2298.0	2298.0
37.5°	5516.3	5595.3	4906.5	3551.4	2648.0	2314.9	2196.4	2151.2	2094.7	2015.6	1987.5
40°	6080.9	6080.9	4844.4	3190.1	2326.2	2106.1	1993.1	1936.7	1874.6	1795.5	1778.5
42.5°	6747.2	6589.0	4748.4	2823.0	2089.1	1964.9	1863.2	1801.1	1727.8	1637.3	1626.1
45°	7526.3	7097.2	4612.9	2495.6	1914.0	1880.2	1818.1	1710.8	1586.6	1490.5	1473.7
47.5°	8282.9	7554.5	4483.1	2264.1	1767.2	1846.3	1795.5	1614.8	1445.4	1309.9	1293.0
50°	9112.9	7961.0	4330.6	2072.1	1654.3	1823.7	1767.2	1473.7	1287.3	1191.3	1180.1
52.5°	9942.9	8373.3	4166.9	1868.8	1558.4	1778.5	1699.5	1372.0	1281.7	1151.8	1134.9
55°	10818.0	8853.1	3974.9	1643.1	1445.4	1688.2	1609.1	1366.4	1321.2	1151.8	1112.3
57.5°	11670.5	9383.9	3664.3	1422.8	1321.2	1552.7	1575.2	1332.5	1236.5	1140.5	1095.4
60°	12613.5	9948.5	3150.6	1236.5	1213.9	1439.8	1530.1	1259.0	1140.5	1106.6	1084.0
62.5°	13370.1	10456.6	2461.7	1106.6	1123.6	1349.5	1473.7	1213.9	1101.0	1072.8	1067.1
65°	13697.5	10468.0	1767.2	993.7	1033.3	1264.8	1417.2	1174.3	1067.1	1055.8	1050.2
67.5°	13353.1	9892.0	1242.2	886.5	937.2	1185.7	1343.7	1134.9	1033.3	1038.9	1027.6
70°	12240.8	8678.1	909.0	784.8	846.9	1101.0	1264.8	1084.0	993.7	1005.0	988.1
72.5°	10242.1	6764.1	728.3	700.1	773.6	1010.7	1185.7	1027.6	931.6	937.2	903.4
75°	7565.8	4483.1	609.8	626.8	688.9	926.0	1084.0	954.2	863.9	841.3	818.7
77.5°	4500.0	2303.6	502.5	547.7	615.4	824.3	971.1	863.9	790.4	750.9	734.0
80°	1857.6	931.6	412.1	463.0	536.3	734.0	858.3	756.6	705.7	666.2	643.6
82.5°	739.6	457.4	327.4	378.3	451.7	638.0	750.9	666.2	615.4	587.2	525.1
85°	282.3	225.9	220.2	265.4	338.8	491.2	621.0	558.9	519.5	446.0	429.1
87.5°	112.9	101.7	101.7	129.8	192.0	310.6	446.0	389.5	406.5	321.8	327.4
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)