

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: P237121

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T3-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30143 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

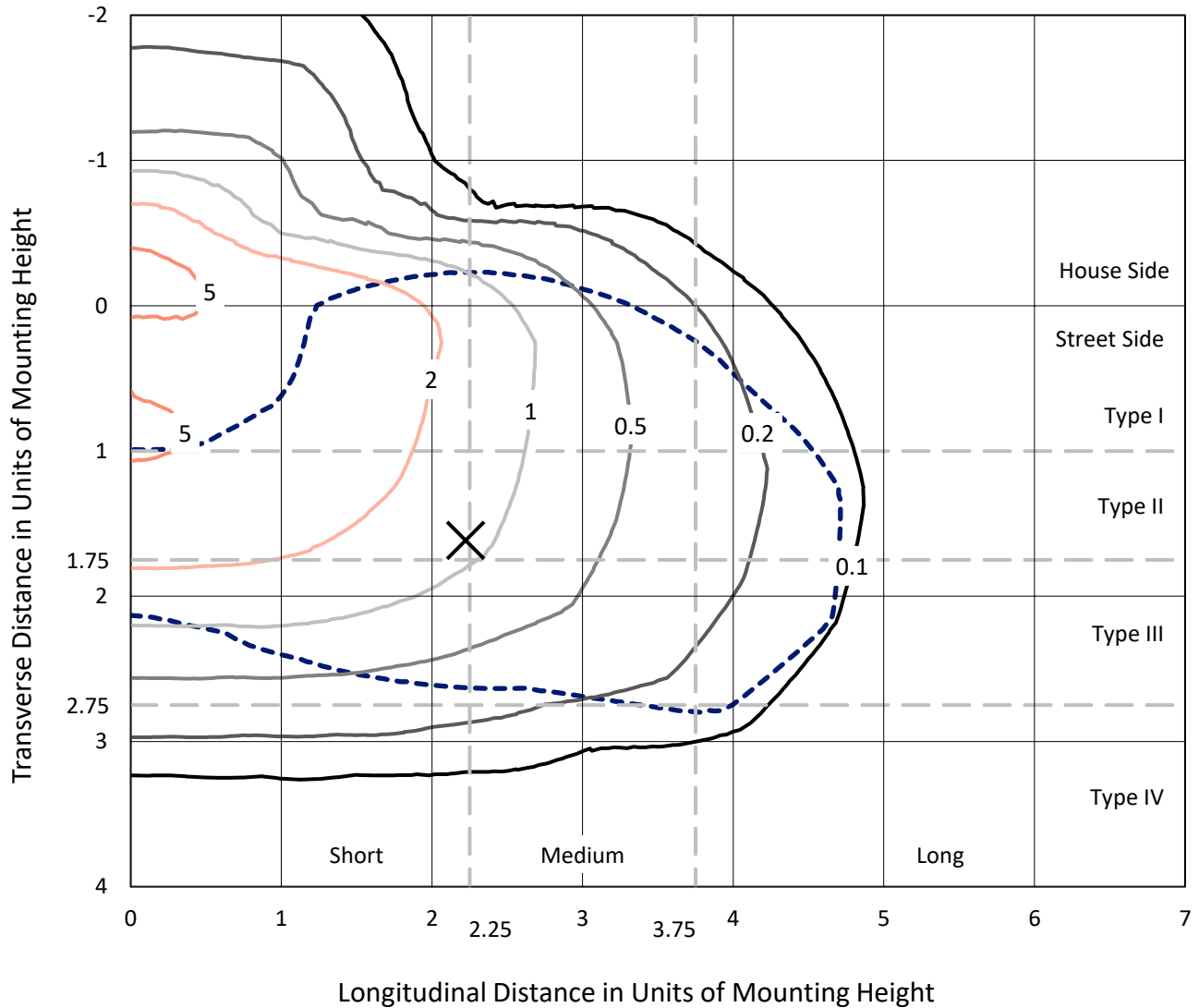
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

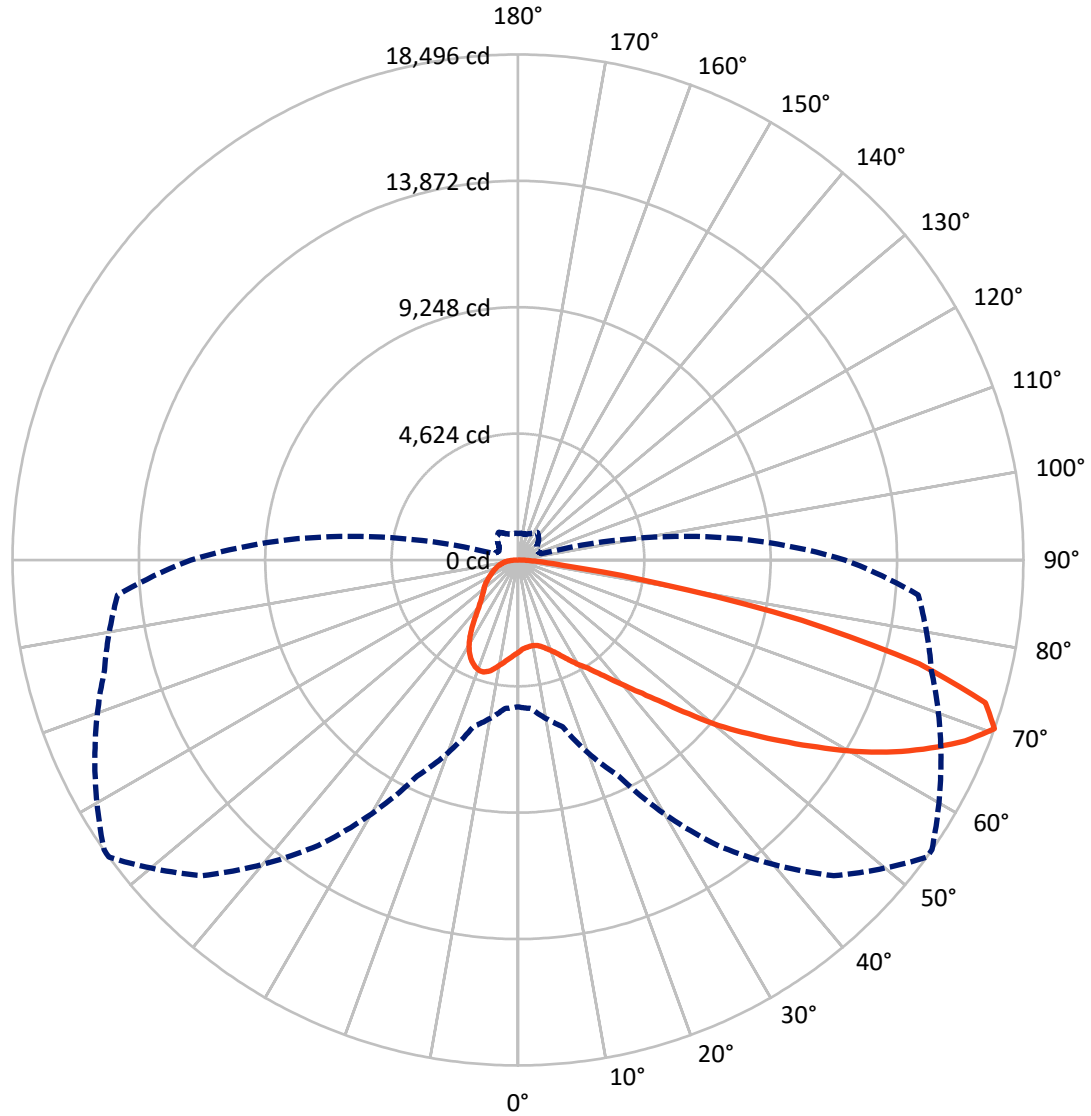
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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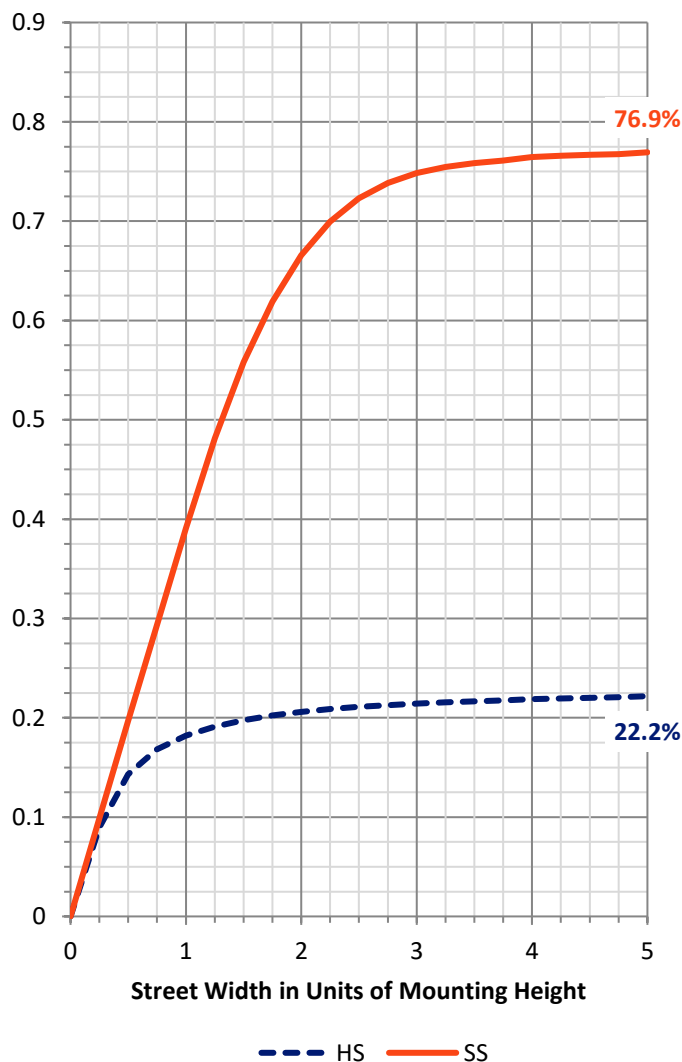
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6836.3	0.0	6836.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	23306.7	0.0	23306.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	30143.0	0.0	30143.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.0	1.1
10°-20°	1057.5	3.5
20°-30°	1837.3	6.1
30°-40°	2684.9	8.9
40°-50°	4213.9	14.0
50°-60°	6480.0	21.5
60°-70°	7916.9	26.3
70°-80°	4908.5	16.3
80°-90°	713.1	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°	30143.0	100.0
0°-180°	30143.0	100.0



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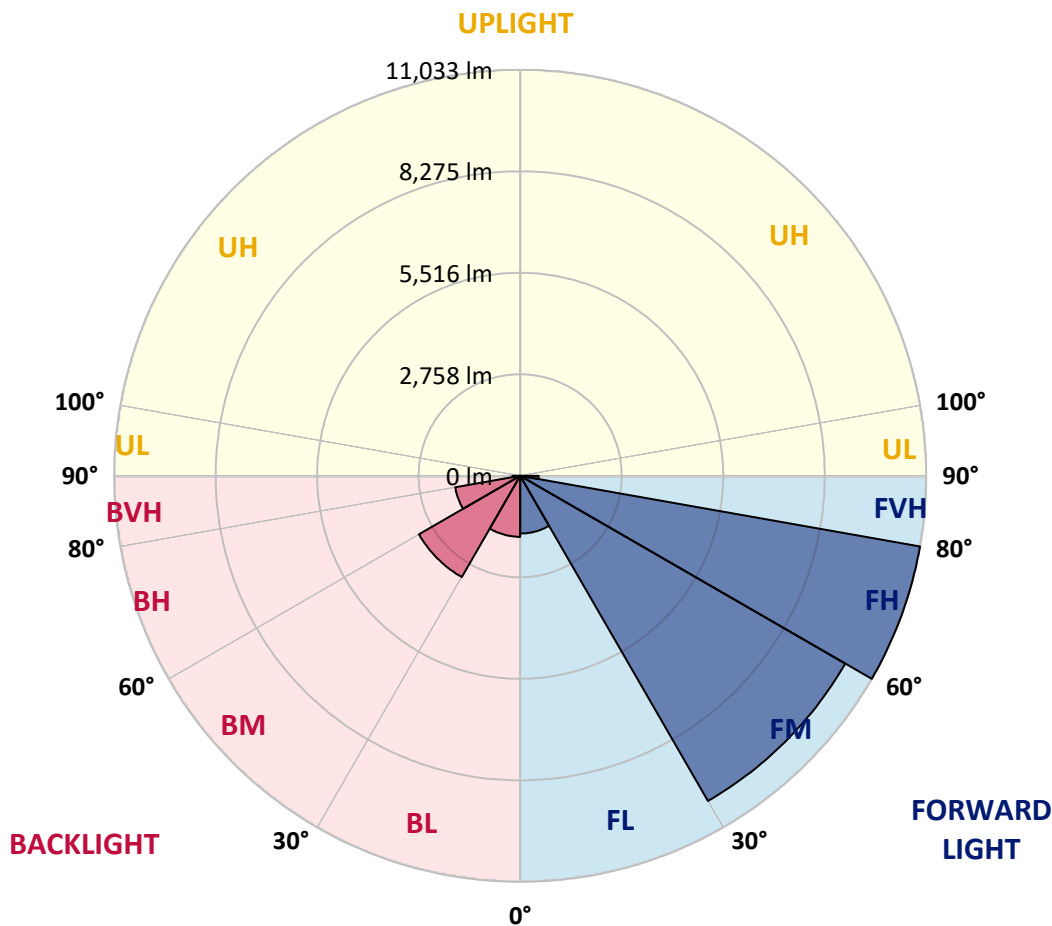
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1568.3	5.2			
FM (30°-60°)	10202.0	33.8			
FH (60°-80°)	11032.8	36.6			G4/12000
FVH (80°-90°)	503.5	1.7			G4/750
BL (0°-30°)	1657.4	5.5	B3/2500		
BM (30°-60°)	3176.7	10.5	B3/5000		
BH (60°-80°)	1792.7	5.9	B3/2500		G3/2500
BVH (80°-90°)	209.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4
2.5°	3239.9	3228.9	3228.9	3245.4	3251.0	3267.5	3267.5	3273.0	3289.6	3317.2	3350.3
5°	3140.6	3135.1	3140.6	3162.7	3173.7	3206.8	3217.8	3223.4	3256.5	3300.6	3350.3
7.5°	3041.2	3035.7	3046.7	3079.9	3113.0	3162.7	3190.3	3195.8	3245.4	3306.2	3372.4
10°	3008.1	3002.6	3019.1	3046.7	3079.9	3135.1	3179.2	3184.7	3256.5	3328.2	3422.1
12.5°	3052.3	3046.7	3063.3	3090.9	3124.0	3162.7	3212.3	3217.8	3311.7	3405.5	3504.9
15°	3162.7	3162.7	3168.2	3184.7	3217.8	3251.0	3295.1	3300.6	3400.0	3510.4	3609.7
17.5°	3333.8	3322.7	3322.7	3317.2	3339.3	3355.8	3411.0	3416.5	3521.4	3620.8	3720.1
20°	3543.5	3538.0	3515.9	3488.3	3482.8	3493.8	3549.0	3554.5	3659.4	3742.2	3836.0
22.5°	3797.4	3802.9	3753.2	3692.5	3664.9	3681.5	3731.2	3736.7	3814.0	3885.7	3968.5
25°	4134.1	4117.5	4045.8	3957.5	3902.3	3902.3	3951.9	3951.9	4023.7	4067.8	4123.0
27.5°	4454.2	4421.1	4354.9	4227.9	4139.6	4156.2	4205.8	4205.8	4272.1	4288.6	4316.2
30°	4801.9	4768.8	4686.0	4526.0	4410.1	4399.0	4459.7	4454.2	4542.5	4537.0	4514.9
32.5°	5226.9	5210.4	5072.4	4868.2	4713.6	4675.0	4730.2	4735.7	4790.9	4774.3	4702.6
35°	5823.0	5817.5	5690.6	5331.8	5127.6	5055.8	5088.9	5088.9	5127.6	5083.4	4962.0
37.5°	6573.7	6584.7	6474.3	5944.5	5657.5	5536.0	5541.5	5536.0	5547.1	5497.4	5370.4
40°	7324.3	7351.9	7346.4	6706.1	6341.9	6132.1	6054.9	6043.8	6071.4	6049.3	5927.9
42.5°	8312.3	8378.5	8224.0	7644.5	7236.0	6882.8	6673.0	6645.4	6706.1	6733.7	6617.8
45°	9338.9	9316.9	9074.0	8654.5	8284.7	7832.1	7434.7	7390.6	7434.7	7517.5	7396.1
47.5°	9874.3	9857.8	9797.0	9587.3	9532.1	9013.3	8411.7	8373.0	8290.2	8406.1	8262.6
50°	10757.4	10774.0	10525.6	10503.5	10735.4	10448.3	9515.6	9427.2	9278.2	9372.1	9250.6
52.5°	11397.7	11325.9	11171.4	11364.6	12087.6	11933.1	10553.2	10514.6	10376.6	10354.5	10299.3
55°	11657.1	11657.1	11684.7	12131.8	13163.9	12959.7	11679.2	11717.8	11530.2	11375.6	11447.4
57.5°	11734.4	11767.5	12004.8	12744.4	14427.9	13760.0	12921.1	12976.3	12705.8	12396.7	12623.0
60°	11353.5	11452.9	12021.4	13092.2	15139.9	14610.0	14229.2	14245.7	13853.9	13401.3	13798.7
62.5°	10376.6	10498.0	11513.6	13235.7	15024.0	15482.1	15465.5	15504.2	14968.8	14405.8	14902.6
65°	9178.9	9300.3	10382.1	12832.8	14935.7	16105.8	16597.0	16701.9	16012.0	15255.8	15592.5
67.5°	7418.2	7578.2	8604.8	11475.0	14505.2	16619.1	17656.8	17767.2	16817.8	15697.4	15531.8
70°	5376.0	5453.2	6314.3	8720.8	12750.0	16337.6	18495.7	18490.2	17082.7	15664.2	14703.9
72.5°	2588.6	2649.3	3394.5	5414.6	9118.2	13864.9	17888.6	17993.5	16718.5	15184.0	12810.7
75°	1065.3	1126.0	1374.3	2285.1	4785.4	9162.3	15162.0	15410.3	15184.0	13627.6	10023.3
77.5°	662.3	684.4	805.8	1181.2	2185.7	4277.6	10613.9	10950.6	12032.4	10917.5	6617.8
80°	496.8	513.3	601.6	827.9	1379.9	1578.6	5271.1	5696.1	7291.2	6264.6	2997.1
82.5°	414.0	419.5	480.2	601.6	938.3	905.2	1689.0	1882.1	3400.0	2389.9	1032.1
85°	386.4	397.4	430.5	430.5	596.1	568.5	701.0	734.1	988.0	816.9	358.8
87.5°	198.7	187.7	380.8	336.7	309.1	276.0	298.1	320.1	369.8	391.9	160.1
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°	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4	3372.4
2.5°	3361.4	3377.9	3405.5	3433.1	3466.2	3504.9	3526.9	3554.5	3576.6	3565.6	3560.1
5°	3377.9	3405.5	3466.2	3521.4	3587.7	3664.9	3714.6	3769.8	3814.0	3825.0	3808.4
7.5°	3405.5	3455.2	3538.0	3637.3	3725.6	3825.0	3902.3	3979.5	4034.7	4045.8	4045.8
10°	3471.7	3526.9	3637.3	3769.8	3874.7	3979.5	4067.8	4128.6	4178.2	4200.3	4200.3
12.5°	3565.6	3631.8	3764.3	3924.3	4040.2	4139.6	4189.3	4216.9	4238.9	4261.0	4266.5
15°	3676.0	3747.7	3907.8	4078.9	4200.3	4250.0	4250.0	4244.5	4244.5	4255.5	4266.5
17.5°	3786.4	3863.6	4029.2	4211.4	4288.6	4261.0	4222.4	4205.8	4194.8	4189.3	4205.8
20°	3902.3	3979.5	4145.1	4316.2	4294.1	4178.2	4123.0	4084.4	4051.3	4034.7	4056.8
22.5°	4029.2	4101.0	4272.1	4388.0	4222.4	4045.8	3940.9	3880.2	3825.0	3791.9	3814.0
25°	4178.2	4250.0	4415.6	4410.1	4095.4	3847.1	3681.5	3582.1	3521.4	3488.3	3488.3
27.5°	4354.9	4415.6	4575.6	4354.9	3918.8	3582.1	3339.3	3245.4	3228.9	3201.3	3201.3
30°	4537.0	4586.7	4724.7	4227.9	3676.0	3234.4	2969.5	2925.3	2930.8	2903.2	2908.8
32.5°	4724.7	4774.3	4813.0	4040.2	3361.4	2842.5	2665.9	2632.8	2627.3	2605.2	2583.1
35°	4989.6	5061.3	4824.0	3786.4	2980.5	2516.9	2389.9	2356.8	2323.7	2246.4	2246.4
37.5°	5392.5	5469.8	4796.4	3471.7	2588.6	2263.0	2147.1	2102.9	2047.7	1970.4	1942.9
40°	5944.5	5944.5	4735.7	3118.5	2274.0	2058.8	1948.4	1893.2	1832.5	1755.2	1738.6
42.5°	6595.8	6441.2	4641.9	2759.7	2042.2	1920.8	1821.4	1760.7	1689.0	1600.6	1589.6
45°	7357.4	6938.0	4509.4	2439.6	1871.1	1838.0	1777.3	1672.4	1551.0	1457.1	1440.6
47.5°	8097.1	7385.0	4382.5	2213.3	1727.6	1804.9	1755.2	1578.6	1413.0	1280.5	1264.0
50°	8908.4	7782.4	4233.4	2025.6	1617.2	1782.8	1727.6	1440.6	1258.4	1164.6	1153.6
52.5°	9719.8	8185.4	4073.4	1826.9	1523.4	1738.6	1661.4	1341.2	1252.9	1126.0	1109.4
55°	10575.3	8654.5	3885.7	1606.2	1413.0	1650.3	1573.0	1335.7	1291.6	1126.0	1087.3
57.5°	11408.7	9173.4	3582.1	1390.9	1291.6	1517.9	1539.9	1302.6	1208.8	1114.9	1070.8
60°	12330.5	9725.3	3079.9	1208.8	1186.7	1407.5	1495.8	1230.8	1114.9	1081.8	1059.7
62.5°	13070.1	10222.0	2406.5	1081.8	1098.4	1319.2	1440.6	1186.7	1076.3	1048.7	1043.2
65°	13390.2	10233.1	1727.6	971.4	1010.1	1236.4	1385.4	1148.0	1043.2	1032.1	1026.6
67.5°	13053.5	9670.1	1214.3	866.6	916.2	1159.1	1313.6	1109.4	1010.1	1015.6	1004.5
70°	11966.2	8483.4	888.6	767.2	827.9	1076.3	1236.4	1059.7	971.4	982.5	965.9
72.5°	10012.3	6612.3	712.0	684.4	756.2	988.0	1159.1	1004.5	910.7	916.2	883.1
75°	7396.1	4382.5	596.1	612.7	673.4	905.2	1059.7	932.8	844.5	822.4	800.3
77.5°	4399.0	2251.9	491.2	535.4	601.6	805.8	949.3	844.5	772.7	734.1	717.5
80°	1815.9	910.7	402.9	452.6	524.3	717.5	839.0	739.6	689.9	651.3	629.2
82.5°	723.0	447.1	320.1	369.8	441.6	623.7	734.1	651.3	601.6	574.0	513.3
85°	276.0	220.8	215.3	259.4	331.2	480.2	607.1	546.4	507.8	436.0	419.5
87.5°	110.4	99.4	99.4	126.9	187.7	303.6	436.0	380.8	397.4	314.6	320.1
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)