

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: P231021

Luminaire Tested: **ARCH-M-AF48-150-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-150-D-U-T2R-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15884 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 151
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

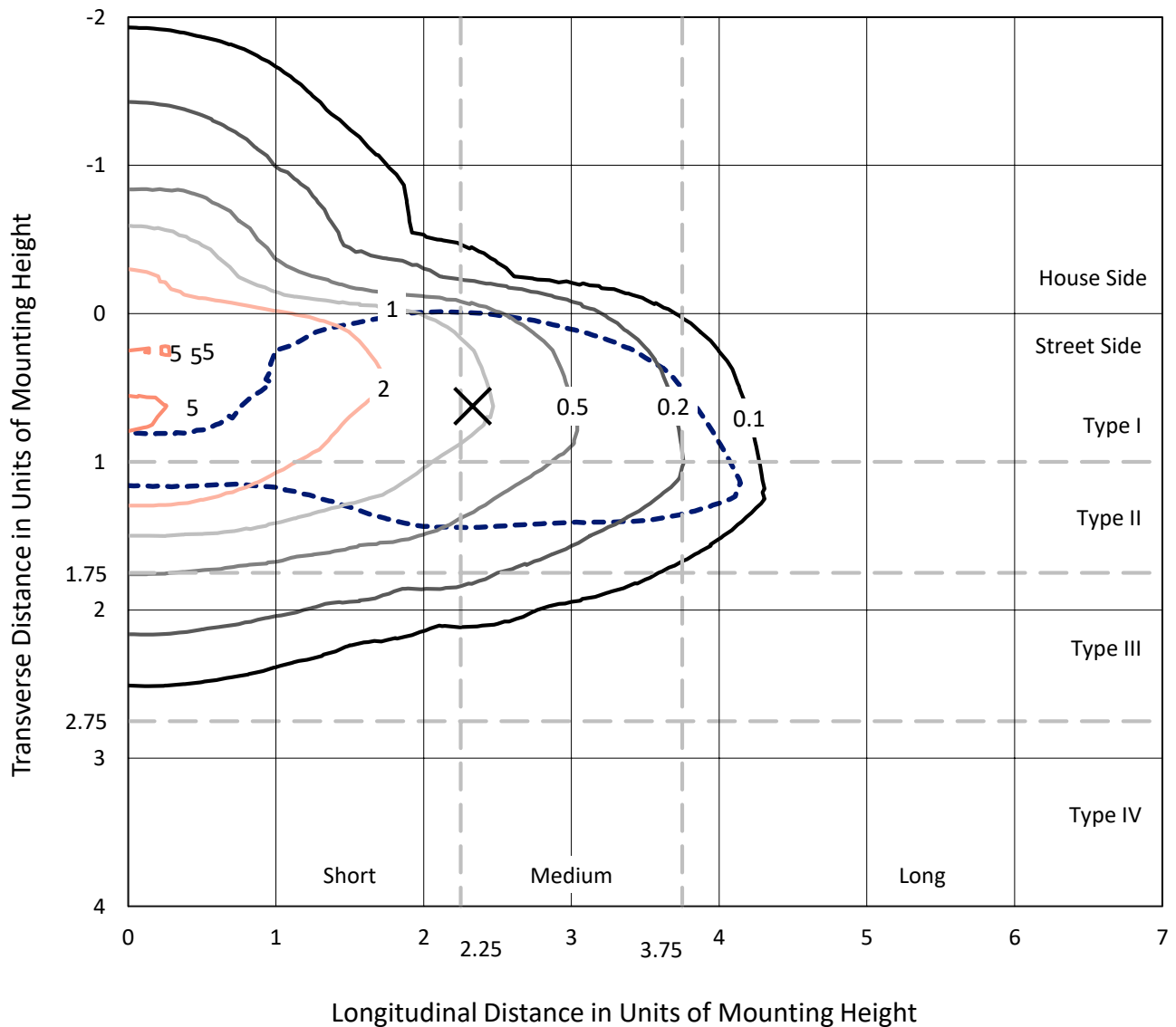


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

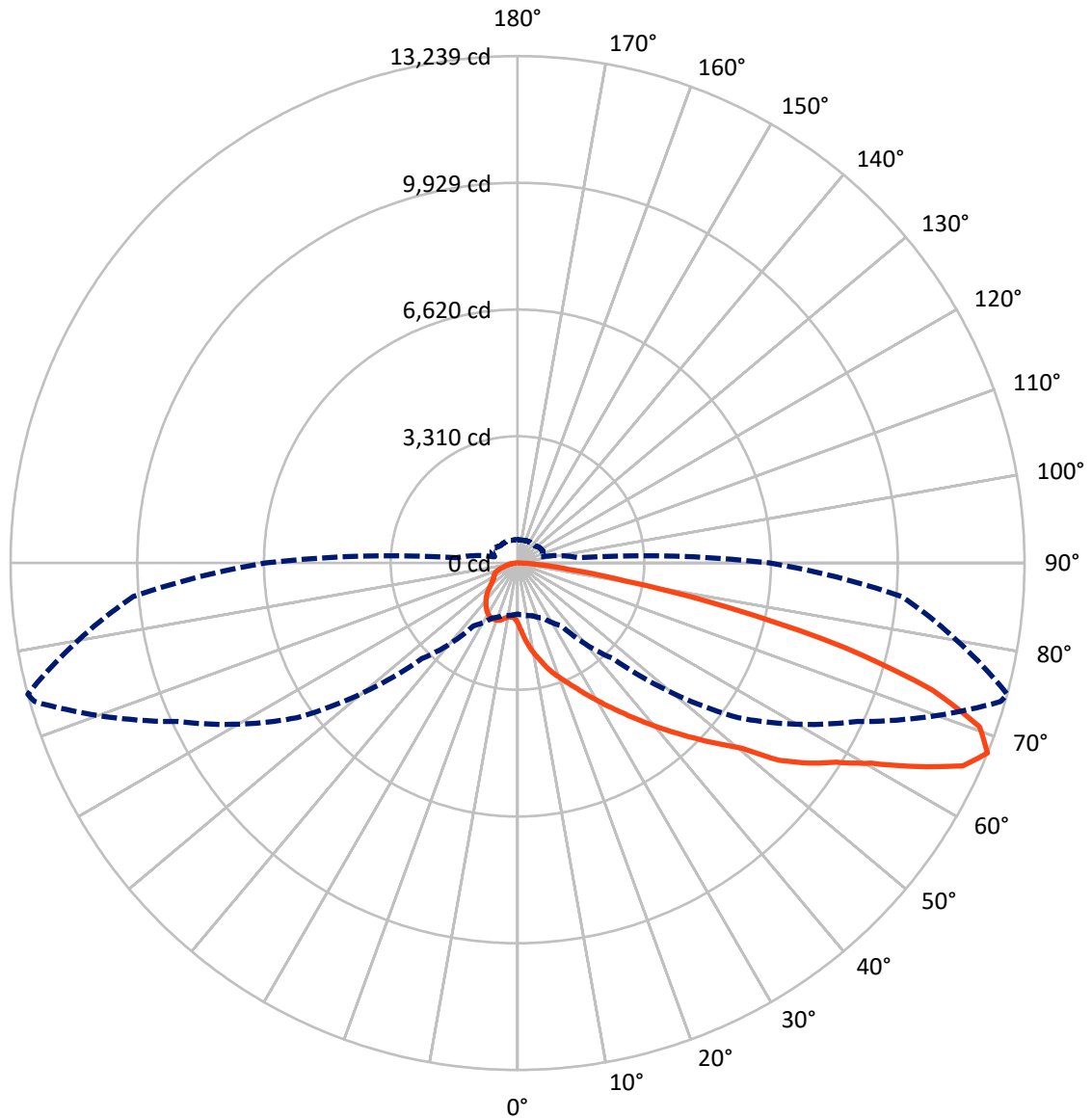


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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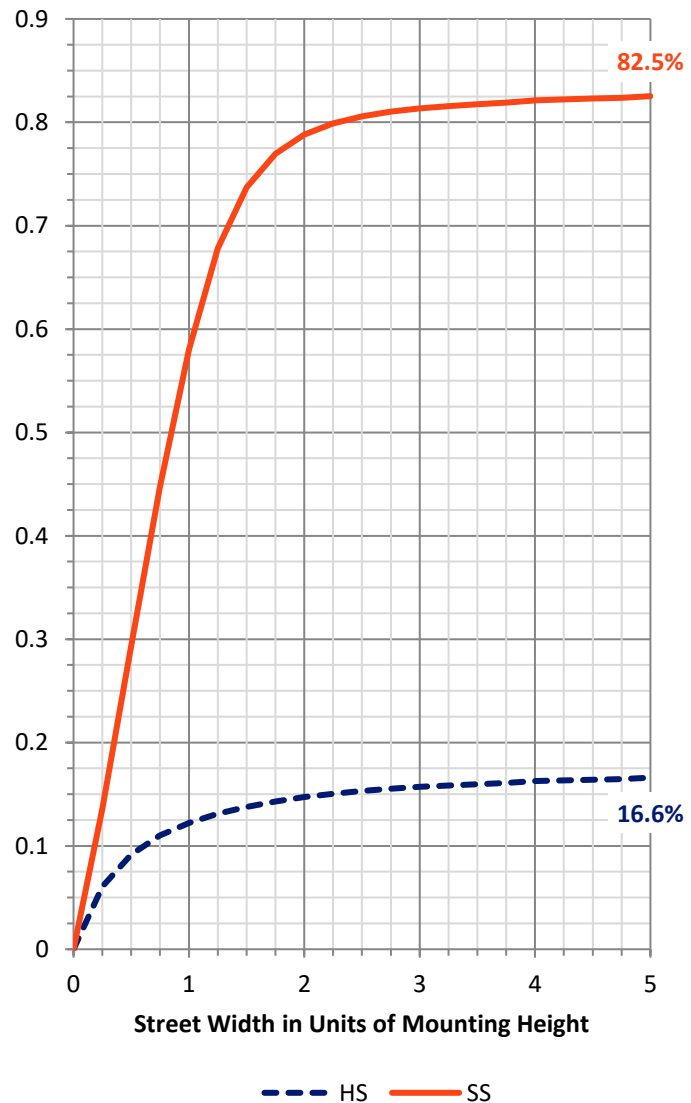
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2712.4	0.0	2712.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	13171.6	0.0	13171.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	15884.0	0.0	15884.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	1.2
10°-20°	668.2	4.2
20°-30°	1218.8	7.7
30°-40°	2000.5	12.6
40°-50°	2893.1	18.2
50°-60°	3409.5	21.5
60°-70°	3313.2	20.9
70°-80°	1841.7	11.6
80°-90°	354.1	2.2
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°	15884.0	100.0
0°-180°	15884.0	100.0

Coefficient of Utilization



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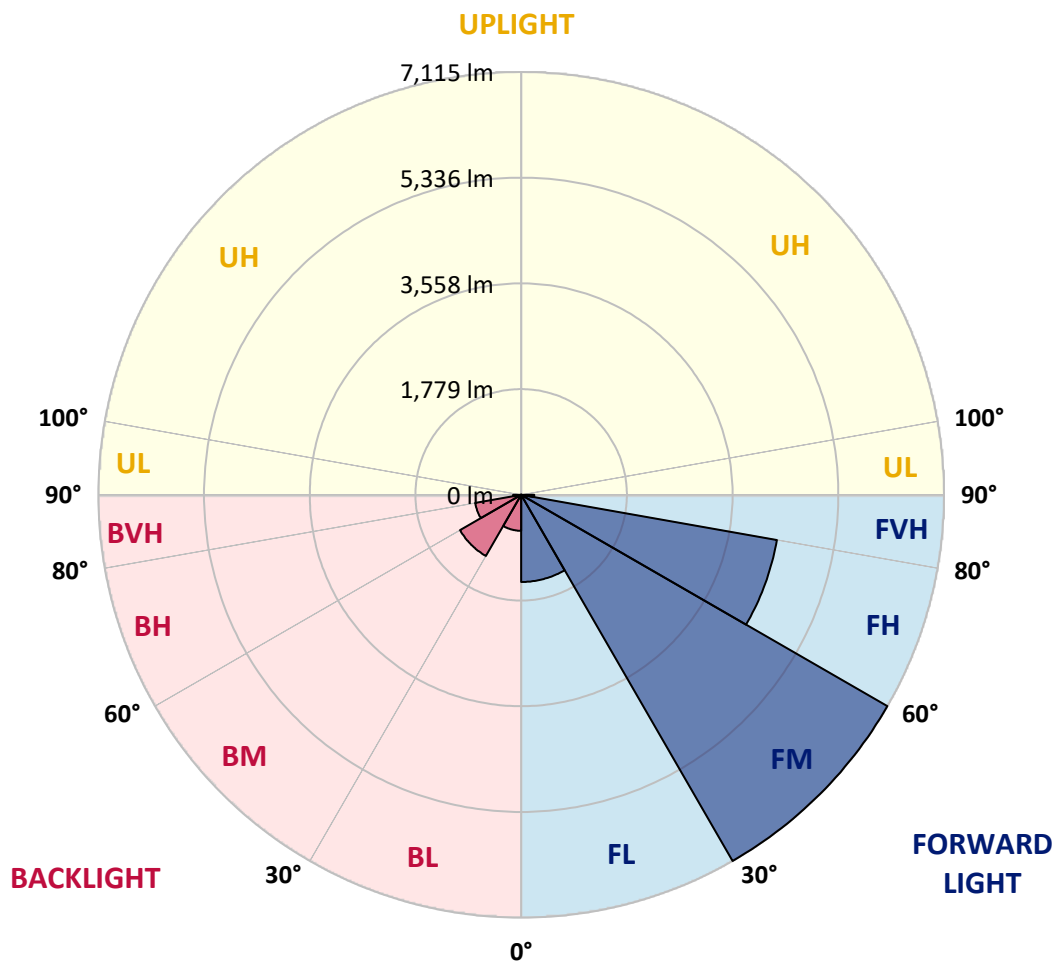
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1466.5	9.2			
FM (30°-60°)	7115.2	44.8			
FH (60°-80°)	4369.5	27.5			G2/5000
FVH (80°-90°)	220.4	1.4			G2/225
BL (0°-30°)	605.4	3.8	B2/1000		
BM (30°-60°)	1187.9	7.5	B2/2500		
BH (60°-80°)	785.4	4.9	B2/1000		G2/1000
BVH (80°-90°)	133.7	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9
2.5°	2231.4	2238.1	2224.8	2194.9	2151.7	2072.0	2002.3	1879.4	1769.9	1756.6	1640.4
5°	2623.2	2629.9	2613.3	2576.8	2530.3	2443.9	2347.6	2188.3	2012.3	1979.1	1733.3
7.5°	2892.2	2895.5	2875.6	2839.1	2802.6	2716.2	2619.9	2440.6	2224.8	2198.2	1852.9
10°	3121.3	3128.0	3101.4	3078.2	3038.3	2952.0	2852.4	2663.1	2440.6	2404.1	1975.7
12.5°	3333.8	3340.5	3323.9	3304.0	3290.7	3211.0	3101.4	2875.6	2636.5	2596.7	2121.8
15°	3476.6	3483.3	3486.6	3513.2	3529.8	3473.3	3363.7	3118.0	2849.0	2812.5	2294.5
17.5°	3436.8	3453.4	3503.2	3599.5	3702.4	3705.8	3616.1	3357.1	3058.2	3018.4	2470.5
20°	3320.6	3333.8	3393.6	3539.7	3742.3	3858.5	3851.9	3599.5	3254.2	3211.0	2633.2
22.5°	3416.9	3433.5	3433.5	3523.1	3722.4	3938.2	4024.5	3838.6	3450.1	3410.2	2795.9
25°	3828.6	3838.6	3768.8	3732.3	3805.4	4004.6	4167.3	4097.6	3689.1	3642.7	2971.9
27.5°	4403.1	4386.5	4300.1	4154.0	4074.3	4127.5	4293.5	4343.3	3964.8	3908.3	3154.5
30°	4974.2	4964.2	4864.6	4668.7	4489.4	4376.5	4433.0	4562.5	4263.6	4197.2	3330.5
32.5°	5508.8	5492.2	5382.6	5153.5	4951.0	4741.8	4632.2	4761.7	4582.4	4506.0	3526.4
35°	6000.3	5957.1	5847.5	5608.4	5399.2	5200.0	4931.0	4951.0	4927.7	4848.0	3742.3
37.5°	6398.7	6365.5	6246.0	6023.5	5801.0	5611.8	5329.5	5166.8	5299.6	5223.3	3991.3
40°	6750.7	6714.2	6591.3	6368.8	6163.0	5983.7	5761.2	5429.1	5718.0	5631.7	4270.2
42.5°	7016.4	6989.8	6890.2	6671.0	6471.8	6309.1	6199.5	5761.2	6153.0	6070.0	4575.7
45°	7159.1	7132.6	7079.4	6903.5	6720.8	6594.6	6604.6	6156.3	6607.9	6538.2	4937.7
47.5°	6983.2	7003.1	7049.6	7016.4	6903.5	6843.7	6966.5	6564.8	7116.0	7049.6	5329.5
50°	6511.6	6531.6	6717.5	6946.6	6986.5	7059.5	7292.0	7036.3	7653.9	7600.8	5814.3
52.5°	5352.8	5462.3	5977.0	6524.9	6900.1	7202.3	7653.9	7736.9	8560.4	8560.4	6671.0
55°	4044.5	4140.7	4728.5	5684.8	6564.8	7215.6	7919.6	8211.8	9214.6	9227.9	7119.3
57.5°	3277.4	3337.2	3626.1	4605.6	5860.8	7049.6	8235.0	8620.2	9759.1	9818.9	7697.1
60°	2659.8	2693.0	2882.3	3563.0	4887.9	6601.3	8460.8	9204.6	10536.2	10619.2	8434.2
62.5°	2138.4	2171.7	2297.8	2706.3	3835.3	5761.2	8421.0	9812.3	11572.2	11708.3	9400.5
65°	1706.8	1743.3	1826.3	2078.7	2842.4	4718.5	8012.5	10124.4	12644.7	12777.5	10041.4
67.5°	1331.5	1364.8	1421.2	1587.2	2002.3	3529.8	7046.2	9795.7	13126.2	13239.1	10074.6
70°	1006.1	1022.7	1069.2	1175.5	1431.2	2344.3	5515.5	8693.2	12694.5	12797.5	9410.5
72.5°	780.3	777.0	803.6	856.7	999.5	1613.8	3655.9	7069.5	11223.5	11329.8	8029.1
75°	637.5	634.2	650.8	667.4	723.9	1082.5	2158.4	5322.9	9058.5	8856.0	6023.5
77.5°	537.9	534.6	551.2	554.5	577.8	747.1	1228.6	3503.2	6043.4	5694.8	3393.6
80°	454.9	451.6	471.5	478.2	494.8	547.9	707.3	1896.0	3035.0	2875.6	1620.4
82.5°	342.0	355.3	391.8	408.4	428.4	405.1	438.3	836.8	1407.9	1344.8	704.0
85°	166.0	195.9	295.5	328.7	352.0	255.7	298.9	395.1	634.2	604.3	285.6
87.5°	56.4	49.8	176.0	209.2	229.1	116.2	166.0	219.2	262.3	239.1	89.7
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°	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9
2.5°	1590.6	1540.7	1467.7	1411.2	1374.7	1344.8	1331.5	1328.2	1321.6	1318.3	1318.3
5°	1623.8	1534.1	1421.2	1361.4	1344.8	1331.5	1338.2	1341.5	1341.5	1341.5	1341.5
7.5°	1673.6	1547.4	1411.2	1371.4	1368.1	1368.1	1388.0	1398.0	1404.6	1404.6	1404.6
10°	1740.0	1570.6	1427.8	1394.6	1404.6	1411.2	1434.5	1447.8	1454.4	1457.7	1461.0
12.5°	1829.6	1620.4	1461.0	1434.5	1447.8	1451.1	1467.7	1474.3	1481.0	1484.3	1484.3
15°	1949.2	1693.5	1514.2	1481.0	1484.3	1481.0	1481.0	1474.3	1471.0	1471.0	1477.7
17.5°	2072.0	1763.2	1560.7	1514.2	1500.9	1474.3	1454.4	1437.8	1427.8	1421.2	1424.5
20°	2194.9	1826.3	1587.2	1520.8	1484.3	1441.1	1404.6	1381.4	1368.1	1354.8	1361.4
22.5°	2317.8	1886.1	1597.2	1500.9	1447.8	1384.7	1344.8	1308.3	1278.4	1258.5	1261.8
25°	2453.9	1952.5	1597.2	1477.7	1398.0	1331.5	1281.7	1222.0	1178.8	1162.2	1168.8
27.5°	2590.0	2008.9	1580.6	1434.5	1341.5	1275.1	1202.0	1132.3	1105.7	1095.8	1099.1
30°	2726.2	2052.1	1544.1	1381.4	1281.7	1208.7	1112.4	1065.9	1032.7	1006.1	1009.5
32.5°	2862.3	2082.0	1494.3	1314.9	1218.6	1125.7	1046.0	992.8	933.1	899.9	903.2
35°	3018.4	2105.2	1434.5	1248.5	1148.9	1052.6	992.8	906.5	843.4	816.9	810.2
37.5°	3181.1	2121.8	1371.4	1175.5	1079.2	999.5	939.7	833.5	773.7	737.2	733.8
40°	3357.1	2128.5	1295.0	1099.1	1012.8	966.3	870.0	790.3	687.4	664.1	664.1
42.5°	3566.3	2125.2	1218.6	1022.7	939.7	889.9	820.2	783.7	694.0	670.8	657.5
45°	3805.4	2125.2	1135.6	933.1	866.7	793.6	763.7	740.5	680.7	690.7	697.3
47.5°	4077.7	2118.5	1036.0	860.0	806.9	743.8	727.2	677.4	654.2	660.8	667.4
50°	4452.9	2128.5	946.4	800.3	763.7	710.6	690.7	664.1	654.2	657.5	654.2
52.5°	4974.2	2095.3	860.0	763.7	730.5	660.8	660.8	657.5	660.8	657.5	657.5
55°	5259.8	2022.2	796.9	743.8	707.3	637.5	650.8	657.5	664.1	660.8	660.8
57.5°	5664.9	1972.4	747.1	730.5	694.0	630.9	644.2	657.5	660.8	657.5	657.5
60°	6143.0	1939.2	713.9	733.8	684.0	630.9	647.5	657.5	654.2	650.8	650.8
62.5°	6697.6	1925.9	690.7	743.8	674.1	634.2	647.5	657.5	644.2	640.9	640.9
65°	6906.8	1806.4	660.8	750.4	680.7	634.2	644.2	647.5	630.9	627.6	624.3
67.5°	6584.7	1600.5	617.6	737.2	700.6	634.2	634.2	630.9	611.0	607.7	601.0
70°	5864.1	1328.2	551.2	694.0	713.9	637.5	620.9	604.3	584.4	584.4	571.1
72.5°	4801.5	1046.0	464.9	617.6	704.0	647.5	594.4	571.1	547.9	547.9	534.6
75°	3460.0	780.3	371.9	514.7	660.8	644.2	561.2	531.3	504.7	501.4	484.8
77.5°	1972.4	547.9	302.2	401.8	587.7	627.6	531.3	484.8	454.9	445.0	435.0
80°	1012.8	368.6	245.7	315.5	488.1	581.1	508.0	431.7	398.5	381.9	365.3
82.5°	481.5	245.7	189.3	232.4	368.6	508.0	478.2	371.9	335.4	315.5	295.5
85°	215.8	146.1	126.2	149.4	262.3	395.1	421.7	305.5	262.3	328.7	242.4
87.5°	69.7	66.4	66.4	69.7	126.2	172.7	308.8	225.8	209.2	172.7	146.1
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)