

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: P400156

Luminaire Tested: **ARCH-L-PA3-240-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-240-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33030 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

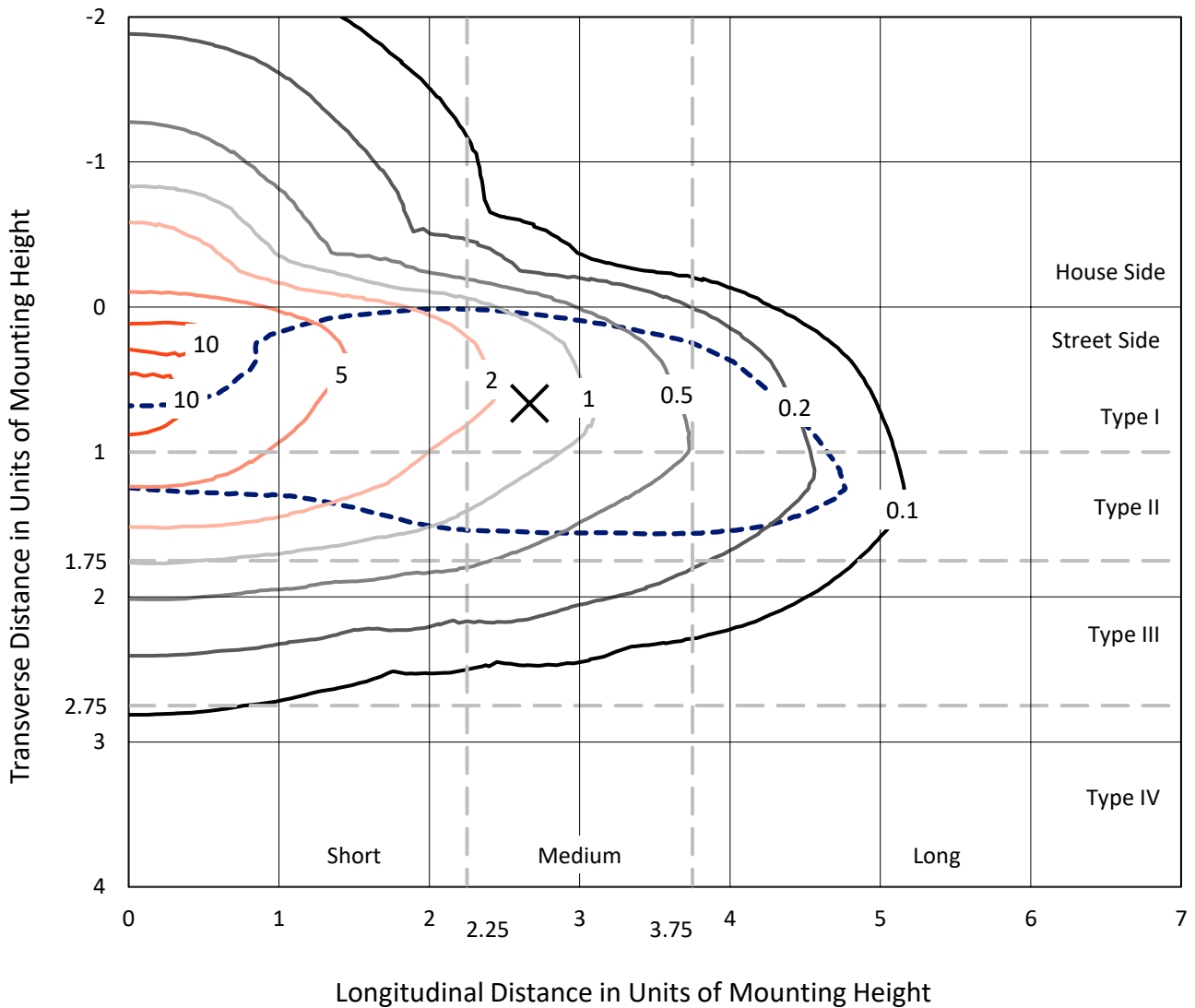
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

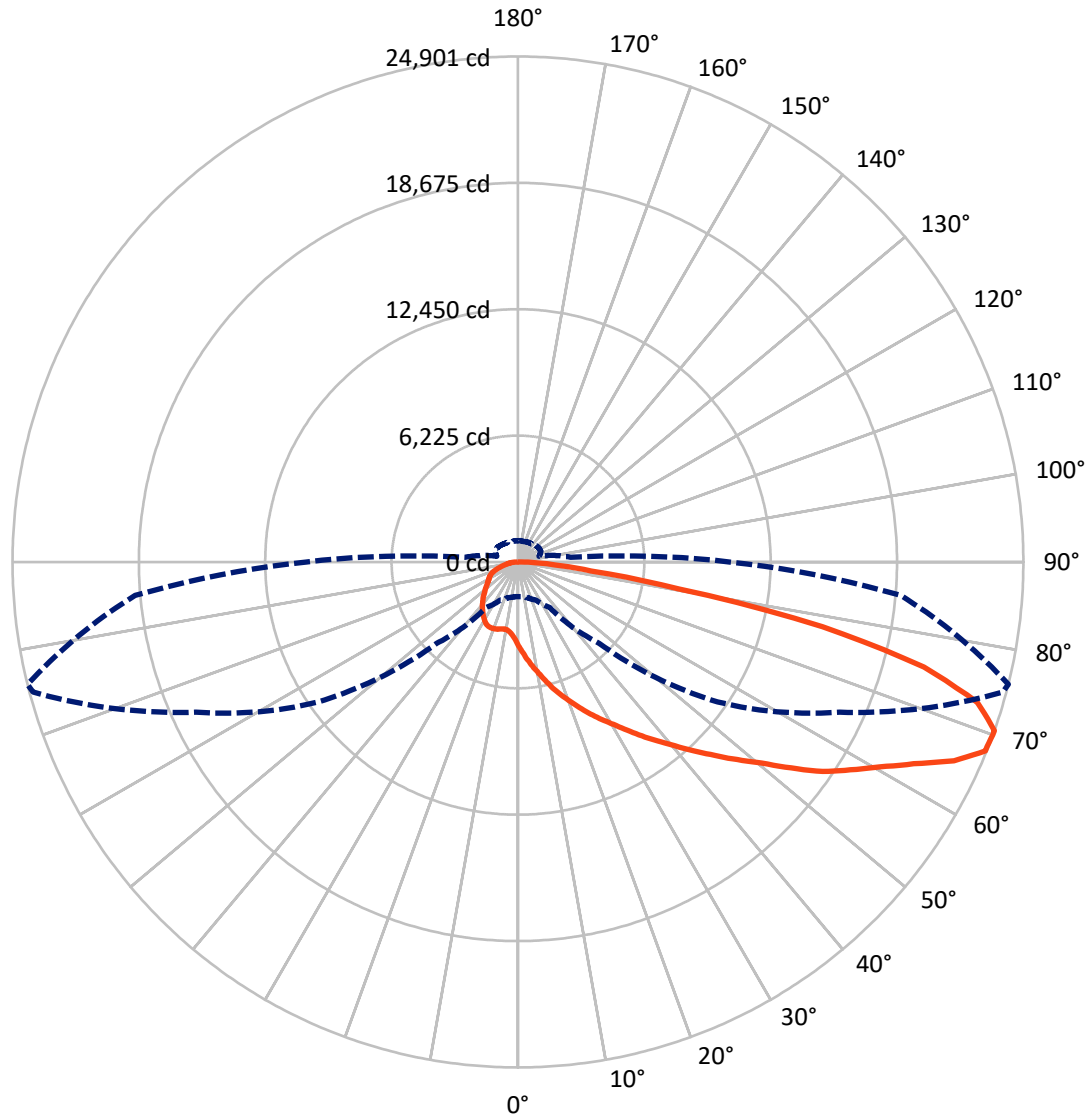
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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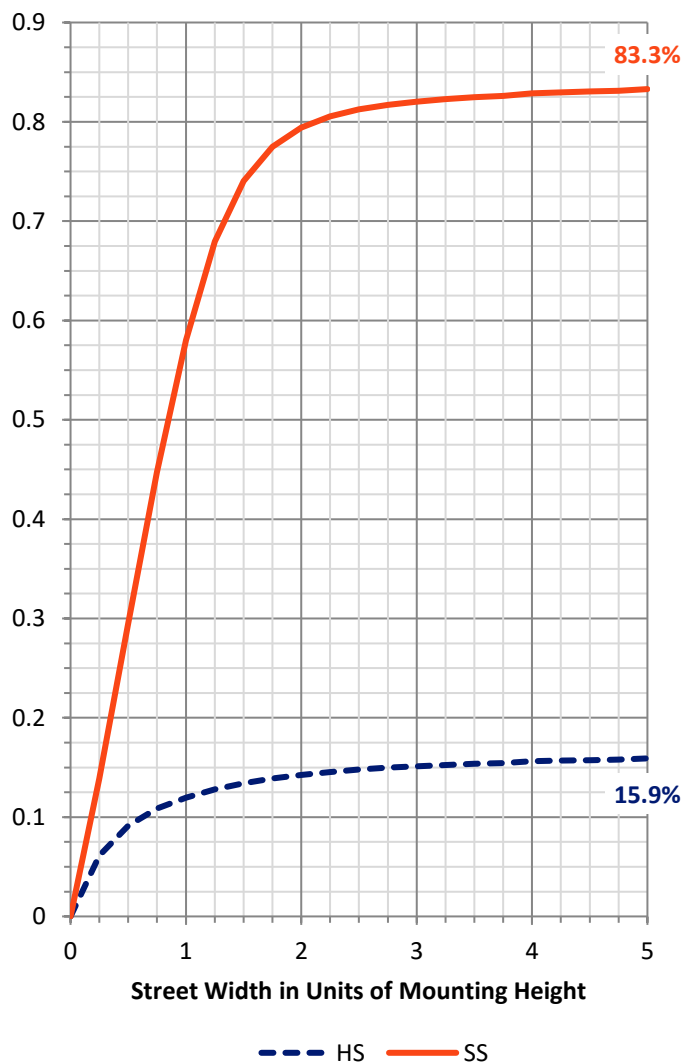
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5392.5	0.0	5392.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	27637.5	0.0	27637.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	33030.0	0.0	33030.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	429.2	1.3
10°-20°	1458.6	4.4
20°-30°	2609.7	7.9
30°-40°	4221.6	12.8
40°-50°	6107.2	18.5
50°-60°	6990.0	21.2
60°-70°	6430.0	19.5
70°-80°	3976.2	12.0
80°-90°	807.4	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°	33030.0	100.0
0°-180°	33030.0	100.0

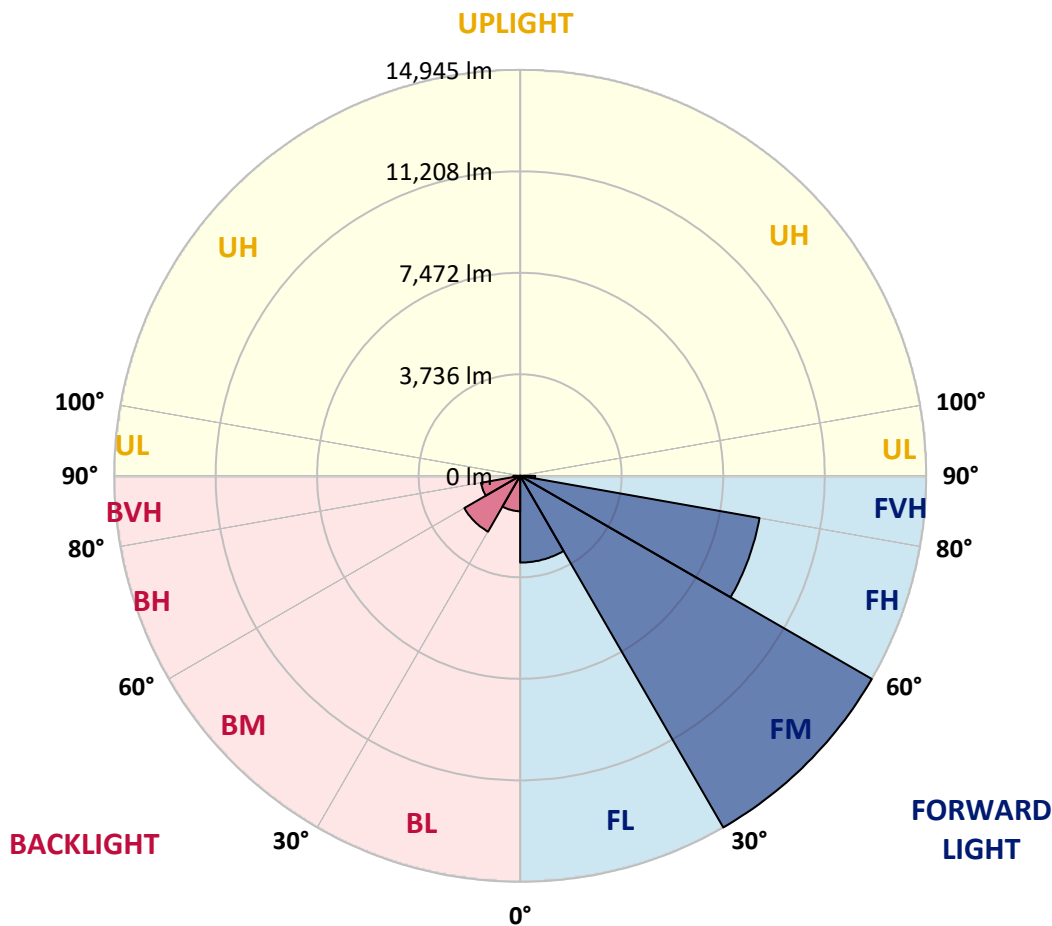


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3195.1	9.7			
FM (30°-60°)	14944.5	45.2			
FH (60°-80°)	8943.6	27.1			G4/12000
FVH (80°-90°)	554.3	1.7			G4/750
BL (0°-30°)	1302.5	3.9	B3/2500		
BM (30°-60°)	2374.3	7.2	B2/2500		
BH (60°-80°)	1462.6	4.4	B3/2500		G3/2500
BVH (80°-90°)	253.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5
2.5°	5264.2	5225.1	5220.7	5159.9	5103.5	4951.4	4842.9	4651.7	4460.6	4456.3	4265.2
5°	6085.1	6046.0	6024.3	5950.4	5854.9	5655.1	5459.6	5164.3	4838.5	4816.8	4456.3
7.5°	6641.0	6606.3	6562.8	6532.4	6441.2	6263.1	6024.3	5672.4	5225.1	5181.6	4677.8
10°	7014.5	6992.8	6984.1	6962.4	6906.0	6762.6	6532.4	6158.9	5611.6	5563.9	4912.3
12.5°	7175.2	7166.6	7205.6	7266.5	7288.2	7231.7	7010.2	6658.4	6037.3	5985.2	5194.7
15°	6988.5	6997.2	7097.1	7305.5	7527.1	7648.7	7518.4	7175.2	6519.4	6445.6	5524.8
17.5°	6901.6	6914.6	6984.1	7183.9	7496.7	7874.5	7935.3	7666.0	6984.1	6879.9	5872.2
20°	7053.6	7071.0	7123.1	7279.5	7496.7	7900.6	8217.7	8135.1	7440.2	7331.6	6206.7
22.5°	7440.2	7461.9	7457.6	7557.5	7705.1	7983.1	8374.0	8578.2	7918.0	7796.3	6554.1
25°	8265.4	8248.1	8100.4	8052.6	8091.7	8269.8	8582.5	9003.8	8417.4	8295.8	6919.0
27.5°	9386.0	9364.3	9095.0	8851.8	8634.6	8712.8	8877.8	9346.9	8925.6	8786.6	7266.5
30°	10584.8	10558.7	10246.0	9850.8	9368.6	9255.7	9234.0	9646.6	9438.1	9290.5	7635.6
32.5°	11753.2	11731.4	11397.0	10936.6	10272.1	9933.3	9724.8	9981.1	10020.1	9876.8	8039.6
35°	12817.3	12817.3	12530.6	11983.4	11231.9	10719.4	10376.3	10393.7	10689.0	10524.0	8500.0
37.5°	13764.1	13759.8	13447.1	12908.5	12187.5	11601.1	11175.5	10893.2	11327.5	11184.2	8982.1
40°	14515.5	14485.1	14254.9	13785.8	13060.5	12478.5	12048.5	11479.5	12039.8	11909.5	9494.6
42.5°	15062.8	15045.4	14889.1	14480.8	13790.2	13242.9	12947.6	12217.9	12847.7	12717.4	10094.0
45°	15275.6	15310.4	15310.4	14923.8	14376.5	13877.1	13746.8	13030.1	13720.7	13590.4	10736.8
47.5°	14932.5	15023.7	15210.5	15236.5	14754.4	14415.6	14459.1	13846.7	14619.8	14550.3	11440.4
50°	13859.7	14029.1	14437.4	15175.7	14906.4	14828.3	15067.1	14680.6	15584.0	15562.3	12296.1
52.5°	11093.0	11505.6	12778.2	14102.9	14802.2	15019.4	15670.9	15618.8	16826.2	16861.0	13412.3
55°	8508.7	8665.0	10137.4	12391.6	14163.7	14958.6	16074.8	16535.2	18172.7	18216.1	14437.4
57.5°	6879.9	6984.1	7787.7	10137.4	12708.7	14628.5	16391.9	17069.4	19206.4	19319.3	15349.5
60°	5450.9	5602.9	6141.5	7757.3	10671.7	13833.6	16613.4	17664.5	20318.3	20487.7	16439.6
62.5°	4052.4	4126.2	4634.4	5746.3	8447.9	12404.7	16496.1	18311.6	21682.1	21886.2	17751.3
65°	2884.0	2949.1	3309.6	4087.1	6245.8	10471.9	15814.2	18793.8	23393.4	23601.9	19071.7
67.5°	2158.7	2184.7	2388.9	2857.9	4208.7	8135.1	14433.0	18711.2	24644.3	24831.0	19601.6
70°	1706.9	1715.6	1815.5	2067.4	2736.3	5663.8	12013.8	17499.4	24735.5	24900.5	18932.7
72.5°	1415.9	1411.6	1468.1	1589.7	1906.7	3583.3	8899.6	15249.6	23562.8	23675.7	17065.1
75°	1168.4	1177.1	1216.1	1285.6	1455.0	2362.8	5768.0	12165.8	20787.4	20665.7	14320.1
77.5°	981.6	977.3	994.6	1055.4	1177.1	1698.3	3379.1	8791.0	15405.9	15345.1	9399.0
80°	790.5	799.2	825.2	877.4	990.3	1294.3	1997.9	5485.7	8265.4	8043.9	4491.0
82.5°	529.9	612.4	664.5	725.3	855.6	955.5	1268.3	2788.4	3696.2	3639.7	2037.0
85°	251.9	334.4	495.1	564.6	694.9	599.4	860.0	1329.1	1850.3	1828.6	734.0
87.5°	52.1	52.1	264.9	317.1	430.0	256.3	477.8	577.7	894.7	838.3	299.7
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°	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5
2.5°	4152.3	4035.0	3800.4	3613.7	3422.6	3314.0	3179.3	3114.2	3101.2	3066.4	3092.5
5°	4226.1	3995.9	3552.9	3261.9	3066.4	2970.9	2923.1	2905.7	2901.4	2892.7	2892.7
7.5°	4326.0	3974.2	3396.5	3101.2	2975.2	2944.8	2957.8	2983.9	2988.2	2996.9	2992.6
10°	4447.6	3978.5	3309.6	3062.1	3001.3	3005.6	3049.0	3083.8	3101.2	3114.2	3109.9
12.5°	4617.0	4030.6	3296.6	3088.1	3062.1	3079.4	3122.9	3157.6	3175.0	3179.3	3179.3
15°	4838.5	4139.2	3327.0	3144.6	3122.9	3135.9	3162.0	3175.0	3179.3	3175.0	3175.0
17.5°	5081.7	4269.5	3370.5	3179.3	3144.6	3131.6	3122.9	3109.9	3083.8	3066.4	3066.4
20°	5316.3	4386.8	3392.2	3175.0	3114.2	3062.1	3010.0	2944.8	2901.4	2866.6	2866.6
22.5°	5550.8	4495.4	3392.2	3127.2	3031.7	2931.8	2823.2	2718.9	2653.8	2610.4	2610.4
25°	5798.4	4599.6	3366.1	3044.7	2901.4	2758.0	2610.4	2480.1	2414.9	2371.5	2362.8
27.5°	6006.9	4660.4	3296.6	2927.4	2740.7	2558.2	2388.9	2254.2	2206.4	2167.3	2167.3
30°	6228.4	4699.5	3166.3	2775.4	2558.2	2349.8	2176.0	2067.4	2015.3	1958.9	1954.5
32.5°	6476.0	4725.6	3018.6	2614.7	2371.5	2150.0	2002.3	1915.4	1802.5	1741.7	1733.0
35°	6762.6	4760.3	2862.3	2432.3	2184.7	1984.9	1898.1	1754.7	1646.1	1594.0	1589.7
37.5°	7066.7	4786.4	2692.9	2271.6	2015.3	1876.3	1789.5	1620.1	1524.5	1446.3	1437.7
40°	7388.1	4786.4	2519.2	2115.2	1880.7	1828.6	1663.5	1511.5	1350.8	1311.7	1303.0
42.5°	7744.2	4777.7	2345.4	1963.2	1754.7	1720.0	1589.7	1429.0	1346.4	1311.7	1303.0
45°	8122.1	4747.3	2180.4	1789.5	1624.4	1554.9	1455.0	1411.6	1376.8	1376.8	1376.8
47.5°	8552.1	4721.2	1993.6	1633.1	1528.9	1450.7	1376.8	1350.8	1346.4	1359.5	1372.5
50°	9103.7	4712.6	1837.2	1520.2	1455.0	1363.8	1355.1	1333.4	1337.8	1337.8	1337.8
52.5°	9772.6	4634.4	1689.6	1437.7	1381.2	1272.6	1298.7	1320.4	1329.1	1324.7	1320.4
55°	10263.4	4495.4	1563.6	1381.2	1329.1	1237.9	1272.6	1307.4	1316.0	1303.0	1303.0
57.5°	10706.4	4299.9	1463.7	1337.8	1294.3	1216.1	1255.2	1290.0	1281.3	1277.0	1272.6
60°	11214.6	4113.2	1385.5	1316.0	1259.6	1207.5	1242.2	1263.9	1250.9	1242.2	1237.9
62.5°	11766.2	3930.7	1329.1	1316.0	1233.5	1203.1	1229.2	1237.9	1211.8	1203.1	1203.1
65°	12022.4	3644.1	1268.3	1316.0	1220.5	1194.4	1203.1	1194.4	1168.4	1168.4	1164.0
67.5°	11601.1	3170.7	1190.1	1298.7	1237.9	1181.4	1164.0	1151.0	1120.6	1120.6	1111.9
70°	10437.1	2606.0	1077.2	1242.2	1242.2	1177.1	1111.9	1081.5	1046.8	1059.8	1042.4
72.5°	8916.9	2067.4	938.2	1146.6	1216.1	1172.7	1055.4	1007.7	977.3	990.3	964.2
75°	7223.0	1602.7	773.1	994.6	1151.0	1151.0	999.0	933.8	899.1	899.1	868.7
77.5°	4604.0	1185.7	629.8	825.2	1033.7	1120.6	951.2	851.3	799.2	786.1	764.4
80°	2280.3	833.9	516.9	655.8	881.7	1051.1	916.5	755.7	681.9	655.8	616.8
82.5°	1211.8	577.7	412.6	512.5	703.6	946.9	873.0	651.5	560.3	521.2	477.8
85°	542.9	356.2	330.1	390.9	534.2	777.5	786.1	534.2	430.0	512.5	377.9
87.5°	199.8	160.7	160.7	199.8	308.4	325.8	556.0	343.1	273.6	186.8	147.7
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)