

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: P400057

Luminaire Tested: **ARCH-L-PA3-230-727-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400057  
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-PA3-230-727-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26719 lumens  
Efficiency: N/A  
Efficacy: 116.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

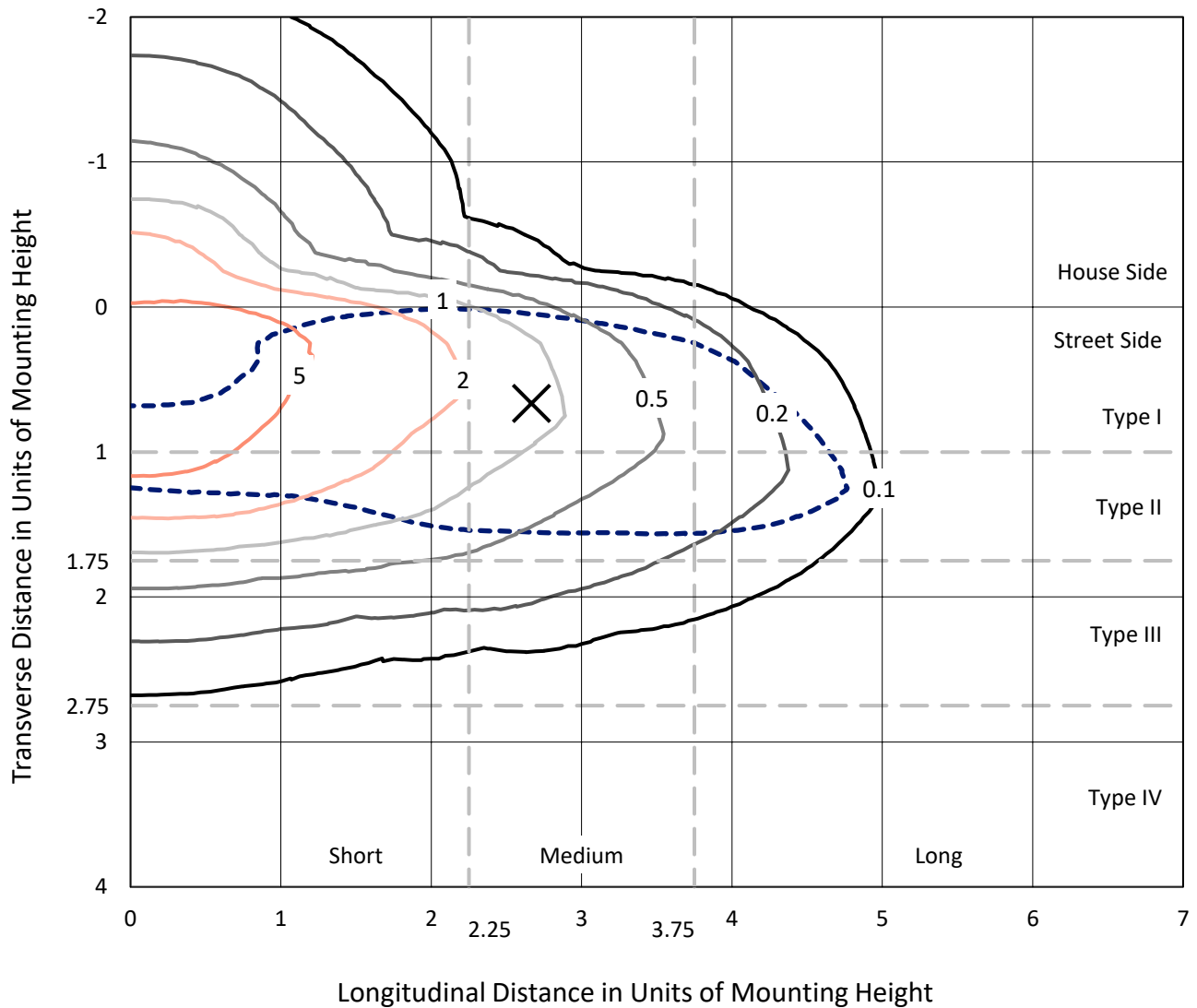
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

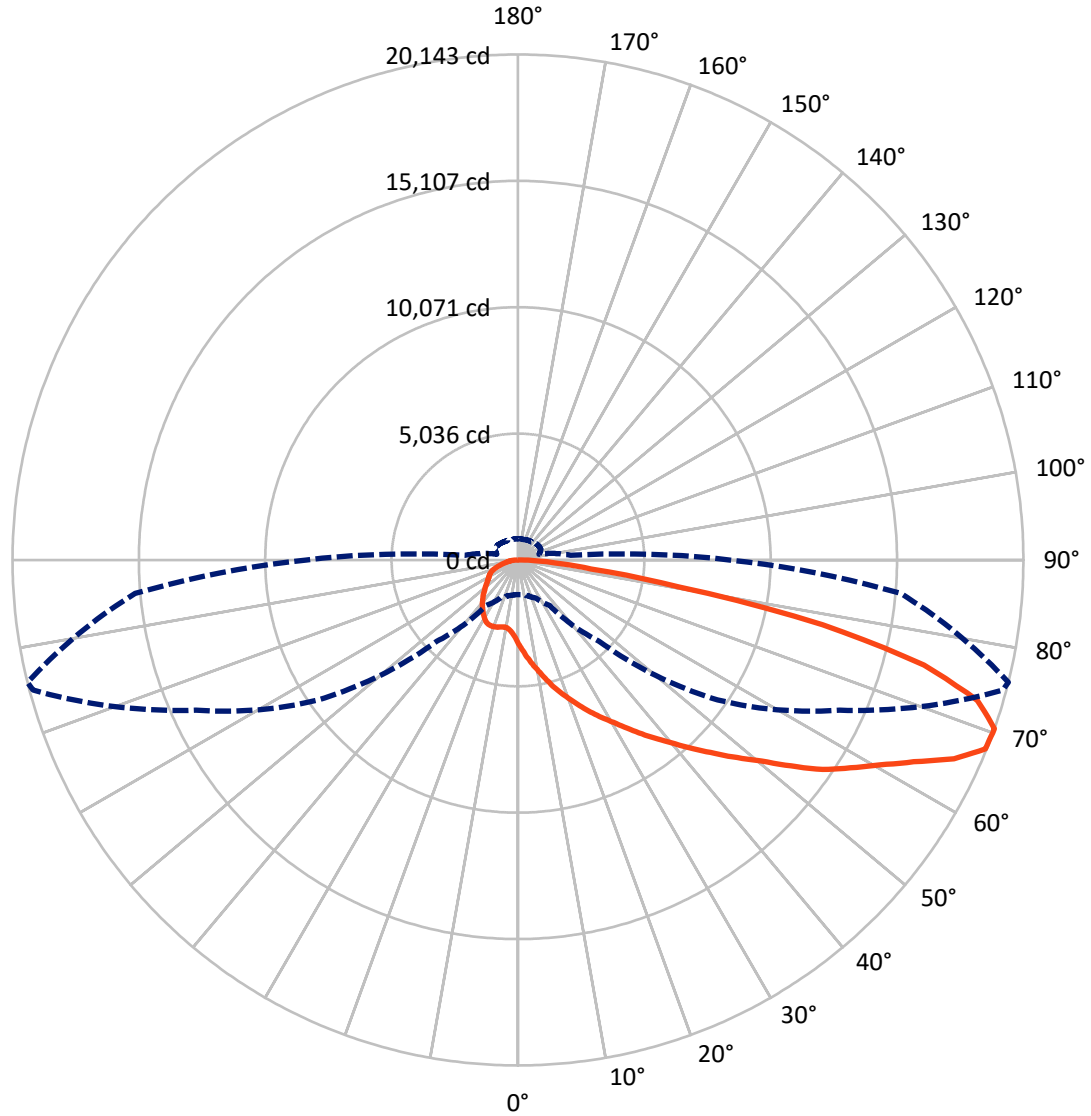
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 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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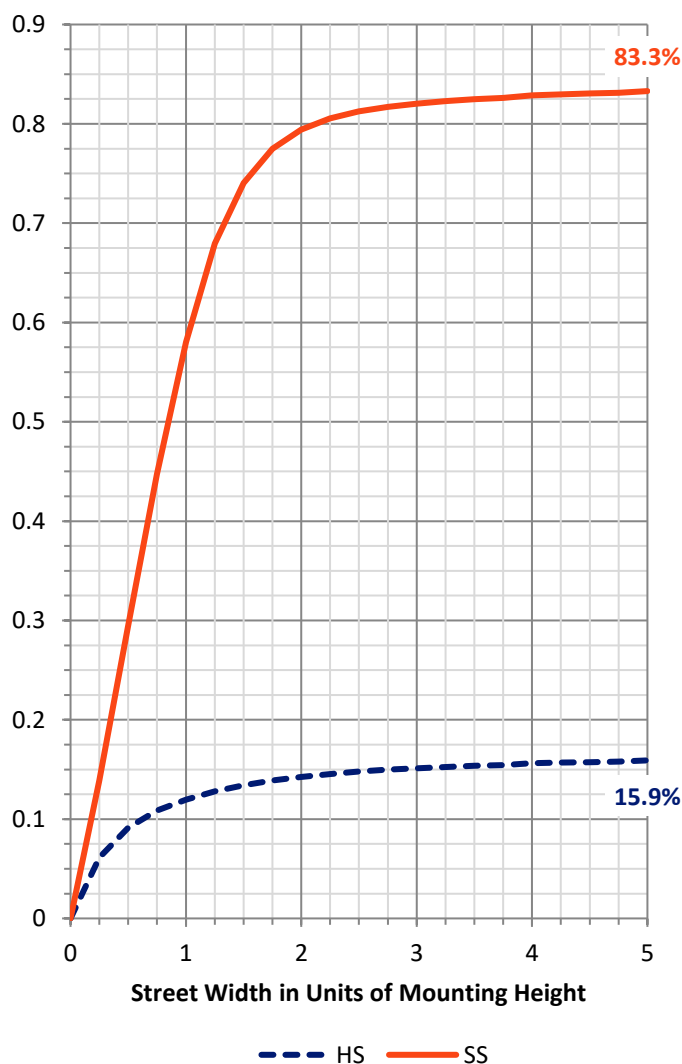
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4362.1	0.0	4362.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	22356.9	0.0	22356.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	26719.0	0.0	26719.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	347.2	1.3
10°-20°	1179.9	4.4
20°-30°	2111.1	7.9
30°-40°	3415.0	12.8
40°-50°	4940.3	18.5
50°-60°	5654.4	21.2
60°-70°	5201.4	19.5
70°-80°	3216.5	12.0
80°-90°	653.2	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°	26719.0	100.0
0°-180°	26719.0	100.0

**Coefficient of Utilization**



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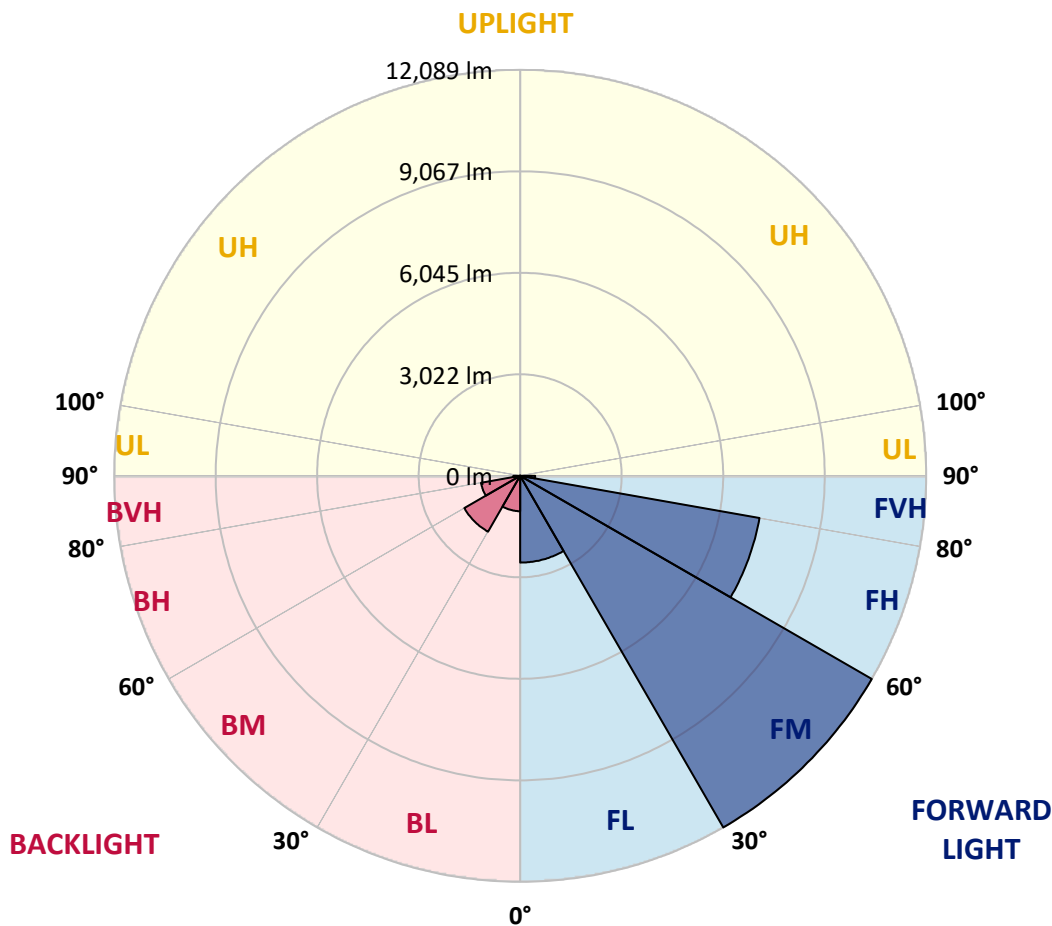
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2584.6	9.7			
FM (30°-60°)	12089.1	45.2			
FH (60°-80°)	7234.8	27.1			G3/7500
FVH (80°-90°)	448.4	1.7			G3/500
BL (0°-30°)	1053.6	3.9	B3/2500		
BM (30°-60°)	1920.6	7.2	B2/2500		
BH (60°-80°)	1183.2	4.4	B3/2500		G3/2500
BVH (80°-90°)	204.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3
2.5°	4258.3	4226.7	4223.2	4174.0	4128.3	4005.4	3917.5	3762.9	3608.4	3604.8	3450.2
5°	4922.4	4890.8	4873.2	4813.5	4736.2	4574.6	4416.5	4177.5	3914.0	3896.5	3604.8
7.5°	5372.1	5344.0	5308.9	5284.3	5210.5	5066.4	4873.2	4588.6	4226.7	4191.6	3784.0
10°	5674.3	5656.7	5649.7	5632.1	5586.4	5470.5	5284.3	4982.1	4539.4	4500.8	3973.8
12.5°	5804.3	5797.3	5828.9	5878.1	5895.6	5850.0	5670.8	5386.2	4883.7	4841.6	4202.1
15°	5653.2	5660.2	5741.0	5909.7	6088.9	6187.2	6081.8	5804.3	5273.7	5214.0	4469.2
17.5°	5582.9	5593.5	5649.7	5811.3	6064.3	6370.0	6419.1	6201.3	5649.7	5565.4	4750.2
20°	5705.9	5720.0	5762.1	5888.6	6064.3	6391.0	6647.5	6580.8	6018.6	5930.8	5020.8
22.5°	6018.6	6036.2	6032.7	6113.5	6232.9	6457.8	6774.0	6939.1	6405.1	6306.7	5301.9
25°	6686.2	6672.1	6552.7	6514.0	6545.6	6689.7	6942.6	7283.5	6809.1	6710.8	5597.0
27.5°	7592.6	7575.1	7357.2	7160.5	6984.8	7048.1	7181.6	7561.0	7220.2	7107.8	5878.1
30°	8562.4	8541.3	8288.3	7968.6	7578.6	7487.2	7469.7	7803.5	7634.8	7515.3	6176.7
32.5°	9507.5	9489.9	9219.4	8847.0	8309.4	8035.3	7866.7	8074.0	8105.6	7989.7	6503.5
35°	10368.3	10368.3	10136.4	9693.7	9085.9	8671.3	8393.7	8407.8	8646.7	8513.2	6875.9
37.5°	11134.2	11130.7	10877.8	10442.1	9858.8	9384.5	9040.2	8811.8	9163.2	9047.2	7265.9
40°	11742.1	11717.5	11531.3	11151.8	10565.1	10094.2	9746.4	9286.1	9739.4	9634.0	7680.5
42.5°	12184.8	12170.7	12044.2	11714.0	11155.3	10712.6	10473.7	9883.4	10392.9	10287.5	8165.3
45°	12356.9	12385.0	12385.0	12072.3	11629.6	11225.6	11120.2	10540.5	11099.1	10993.7	8685.3
47.5°	12079.4	12153.1	12304.2	12325.3	11935.3	11661.3	11696.4	11201.0	11826.4	11770.2	9254.5
50°	11211.5	11348.6	11678.8	12276.1	12058.3	11995.0	12188.3	11875.6	12606.4	12588.8	9946.7
52.5°	8973.4	9307.2	10336.7	11408.3	11974.0	12149.6	12676.7	12634.5	13611.2	13639.4	10849.6
55°	6882.9	7009.4	8200.5	10024.0	11457.5	12100.4	13003.4	13375.8	14700.4	14735.6	11678.8
57.5°	5565.4	5649.7	6299.7	8200.5	10280.5	11833.4	13259.9	13808.0	15536.6	15628.0	12416.7
60°	4409.4	4532.4	4968.1	6275.1	8632.6	11190.5	13439.1	14289.3	16436.1	16573.1	13298.5
62.5°	3278.1	3337.8	3748.9	4648.3	6833.7	10034.5	13344.2	14812.9	17539.3	17704.5	14359.6
65°	2333.0	2385.7	2677.3	3306.2	5052.4	8471.0	12792.6	15202.9	18923.6	19092.3	15427.7
67.5°	1746.2	1767.3	1932.4	2311.9	3404.6	6580.8	11675.3	15136.1	19935.5	20086.6	15856.4
70°	1380.8	1387.8	1468.6	1672.4	2213.5	4581.6	9718.3	14155.8	20009.3	20142.8	15315.3
72.5°	1145.4	1141.9	1187.6	1285.9	1542.4	2898.6	7199.1	12335.8	19060.7	19152.0	13804.5
75°	945.1	952.2	983.8	1040.0	1177.0	1911.3	4665.9	9841.3	16815.5	16717.2	11584.0
77.5°	794.0	790.5	804.6	853.8	952.2	1373.8	2733.5	7111.3	12462.3	12413.1	7603.2
80°	639.5	646.5	667.6	709.7	801.1	1047.0	1616.2	4437.5	6686.2	6507.0	3632.9
82.5°	428.6	495.4	537.6	586.8	692.2	773.0	1025.9	2255.7	2990.0	2944.3	1647.8
85°	203.8	270.5	400.5	456.8	562.2	484.9	695.7	1075.1	1496.7	1479.2	593.8
87.5°	42.2	42.2	214.3	256.5	347.8	207.3	386.5	467.3	723.8	678.1	242.4
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°	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3	3341.3
2.5°	3358.9	3264.0	3074.3	2923.2	2768.6	2680.8	2571.9	2519.2	2508.6	2480.5	2501.6
5°	3418.6	3232.4	2874.0	2638.6	2480.5	2403.2	2364.6	2350.5	2347.0	2340.0	2340.0
7.5°	3499.4	3214.8	2747.5	2508.6	2406.7	2382.1	2392.7	2413.8	2417.3	2424.3	2420.8
10°	3597.8	3218.4	2677.3	2477.0	2427.8	2431.3	2466.5	2494.6	2508.6	2519.2	2515.7
12.5°	3734.8	3260.5	2666.7	2498.1	2477.0	2491.1	2526.2	2554.3	2568.4	2571.9	2571.9
15°	3914.0	3348.4	2691.3	2543.8	2526.2	2536.7	2557.8	2568.4	2571.9	2568.4	2568.4
17.5°	4110.8	3453.8	2726.5	2571.9	2543.8	2533.2	2526.2	2515.7	2494.6	2480.5	2480.5
20°	4300.5	3548.6	2744.0	2568.4	2519.2	2477.0	2434.8	2382.1	2347.0	2318.9	2318.9
22.5°	4490.2	3636.5	2744.0	2529.7	2452.4	2371.6	2283.8	2199.4	2146.7	2111.6	2111.6
25°	4690.5	3720.8	2723.0	2463.0	2347.0	2231.1	2111.6	2006.2	1953.5	1918.4	1911.3
27.5°	4859.2	3770.0	2666.7	2368.1	2217.0	2069.4	1932.4	1823.5	1784.9	1753.2	1753.2
30°	5038.3	3801.6	2561.3	2245.1	2069.4	1900.8	1760.3	1672.4	1630.3	1584.6	1581.1
32.5°	5238.6	3822.7	2441.9	2115.1	1918.4	1739.2	1619.7	1549.4	1458.1	1408.9	1401.9
35°	5470.5	3850.8	2315.4	1967.6	1767.3	1605.7	1535.4	1419.4	1331.6	1289.4	1285.9
37.5°	5716.4	3871.9	2178.4	1837.6	1630.3	1517.8	1447.6	1310.5	1233.2	1170.0	1163.0
40°	5976.4	3871.9	2037.8	1711.1	1521.3	1479.2	1345.7	1222.7	1092.7	1061.1	1054.0
42.5°	6264.5	3864.8	1897.3	1588.1	1419.4	1391.3	1285.9	1155.9	1089.2	1061.1	1054.0
45°	6570.2	3840.2	1763.8	1447.6	1314.0	1257.8	1177.0	1141.9	1113.8	1113.8	1113.8
47.5°	6918.1	3819.2	1612.7	1321.1	1236.7	1173.5	1113.8	1092.7	1089.2	1099.7	1110.3
50°	7364.3	3812.1	1486.2	1229.7	1177.0	1103.2	1096.2	1078.6	1082.2	1082.2	1082.2
52.5°	7905.3	3748.9	1366.7	1163.0	1117.3	1029.5	1050.5	1068.1	1075.1	1071.6	1068.1
55°	8302.4	3636.5	1264.9	1117.3	1075.1	1001.3	1029.5	1057.6	1064.6	1054.0	1054.0
57.5°	8660.7	3478.4	1184.0	1082.2	1047.0	983.8	1015.4	1043.5	1036.5	1033.0	1029.5
60°	9071.8	3327.3	1120.8	1064.6	1018.9	976.7	1004.9	1022.4	1011.9	1004.9	1001.3
62.5°	9518.0	3179.7	1075.1	1064.6	997.8	973.2	994.3	1001.3	980.3	973.2	973.2
65°	9725.3	2947.8	1025.9	1064.6	987.3	966.2	973.2	966.2	945.1	945.1	941.6
67.5°	9384.5	2564.8	962.7	1050.5	1001.3	955.7	941.6	931.1	906.5	906.5	899.5
70°	8442.9	2108.1	871.3	1004.9	1004.9	952.2	899.5	874.9	846.8	857.3	843.2
72.5°	7213.2	1672.4	758.9	927.6	983.8	948.6	853.8	815.1	790.5	801.1	780.0
75°	5842.9	1296.5	625.4	804.6	931.1	931.1	808.1	755.4	727.3	727.3	702.7
77.5°	3724.3	959.2	509.5	667.6	836.2	906.5	769.5	688.6	646.5	635.9	618.4
80°	1844.6	674.6	418.1	530.5	713.2	850.3	741.3	611.3	551.6	530.5	498.9
82.5°	980.3	467.3	333.8	414.6	569.2	765.9	706.2	527.0	453.2	421.6	386.5
85°	439.2	288.1	267.0	316.2	432.2	628.9	635.9	432.2	347.8	414.6	305.7
87.5°	161.6	130.0	130.0	161.6	249.5	263.5	449.7	277.6	221.3	151.1	119.5
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)