

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: P398068

Luminaire Tested: **ARCH-S-PA1-80-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398068  
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-S-PA1-80-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10943 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

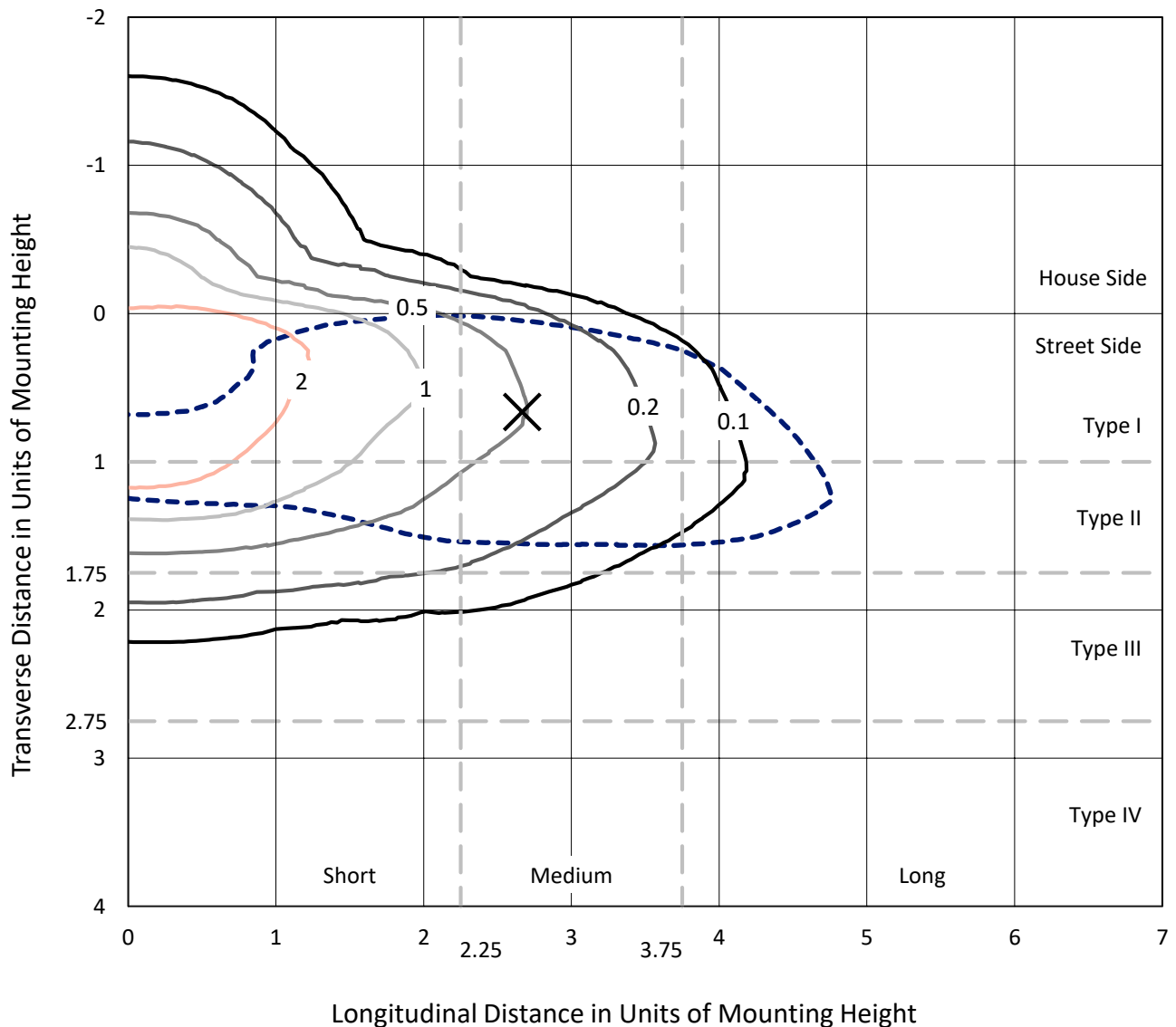
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

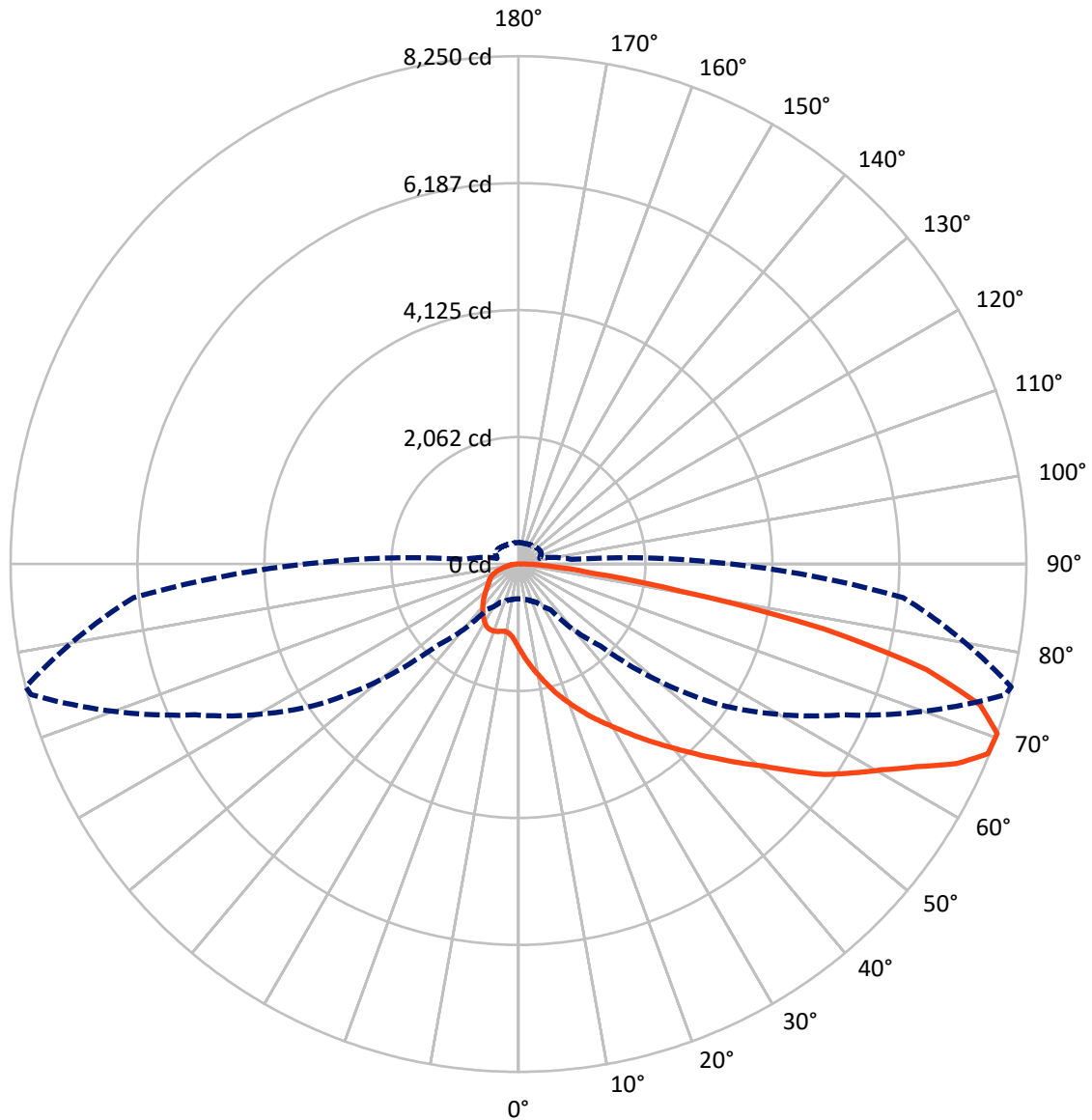


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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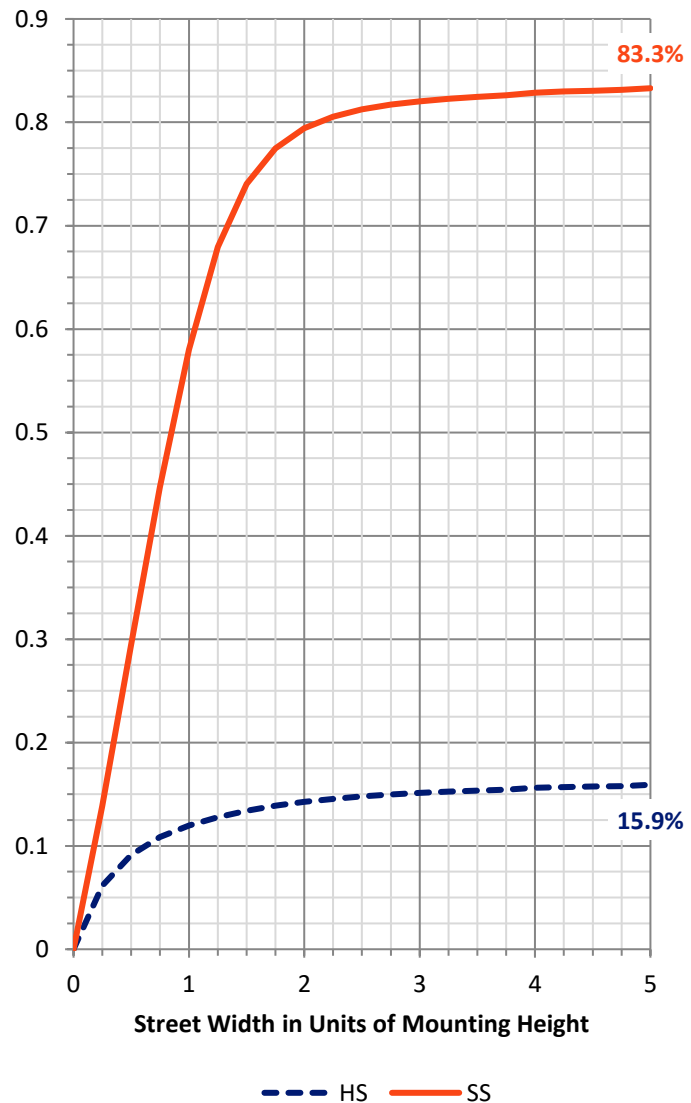
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1786.6	0.0	1786.6
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	9156.5	0.0	9156.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	10943.0	0.0	10943.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.2	1.3
10°-20°	483.3	4.4
20°-30°	864.6	7.9
30°-40°	1398.6	12.8
40°-50°	2023.3	18.5
50°-60°	2315.8	21.2
60°-70°	2130.3	19.5
70°-80°	1317.4	12.0
80°-90°	267.5	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°	10943.0	100.0
0°-180°	10943.0	100.0

**Coefficient of Utilization**



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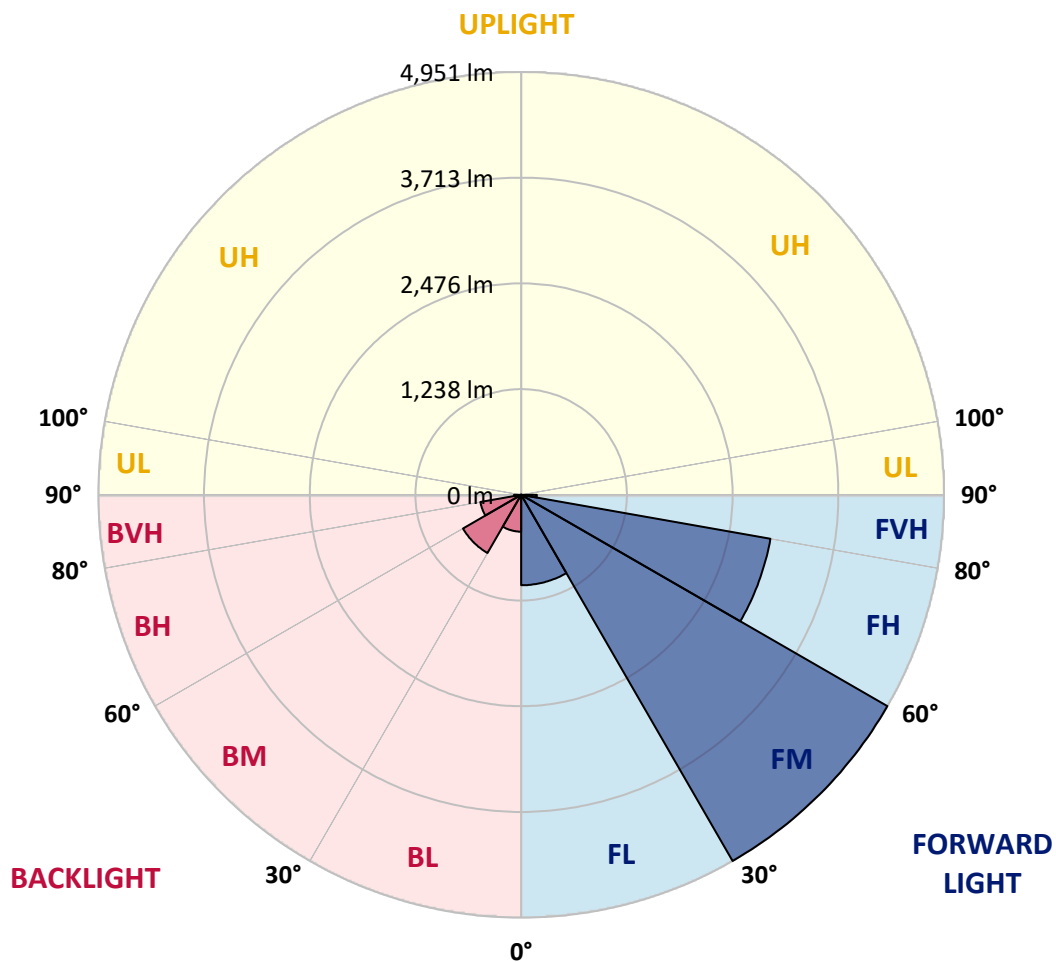
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1058.5	9.7			
FM (30°-60°)	4951.2	45.2			
FH (60°-80°)	2963.1	27.1			G2/5000
FVH (80°-90°)	183.6	1.7			G2/225
BL (0°-30°)	431.5	3.9	B1/500		
BM (30°-60°)	786.6	7.2	B1/1000		
BH (60°-80°)	484.6	4.4	B1/500		G1/500
BVH (80°-90°)	83.9	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5
2.5°	1744.0	1731.1	1729.7	1709.5	1690.8	1640.4	1604.5	1541.1	1477.8	1476.4	1413.1
5°	2016.0	2003.1	1995.9	1971.4	1939.7	1873.6	1808.8	1710.9	1603.0	1595.8	1476.4
7.5°	2200.2	2188.7	2174.3	2164.2	2134.0	2075.0	1995.9	1879.3	1731.1	1716.7	1549.8
10°	2324.0	2316.8	2313.9	2306.7	2288.0	2240.5	2164.2	2040.5	1859.2	1843.3	1627.5
12.5°	2377.2	2374.3	2387.3	2407.4	2414.6	2395.9	2322.5	2206.0	2000.2	1982.9	1721.0
15°	2315.3	2318.2	2351.3	2420.4	2493.8	2534.0	2490.9	2377.2	2159.9	2135.4	1830.4
17.5°	2286.5	2290.9	2313.9	2380.1	2483.7	2608.9	2629.0	2539.8	2313.9	2279.3	1945.5
20°	2336.9	2342.7	2359.9	2411.7	2483.7	2617.5	2722.5	2695.2	2465.0	2429.0	2056.3
22.5°	2465.0	2472.2	2470.7	2503.8	2552.7	2644.8	2774.4	2842.0	2623.3	2583.0	2171.4
25°	2738.4	2732.6	2683.7	2667.9	2680.8	2739.8	2843.4	2983.0	2788.7	2748.4	2292.3
27.5°	3109.6	3102.4	3013.2	2932.6	2860.7	2886.6	2941.3	3096.7	2957.1	2911.1	2407.4
30°	3506.8	3498.2	3394.6	3263.6	3103.9	3066.5	3059.3	3196.0	3126.9	3078.0	2529.7
32.5°	3893.9	3886.7	3775.9	3623.3	3403.2	3290.9	3221.9	3306.8	3319.7	3272.2	2663.6
35°	4246.4	4246.4	4151.5	3970.1	3721.2	3551.4	3437.7	3443.5	3541.3	3486.6	2816.1
37.5°	4560.1	4558.7	4455.1	4276.6	4037.8	3843.5	3702.5	3609.0	3752.9	3705.4	2975.8
40°	4809.1	4799.0	4722.7	4567.3	4327.0	4134.2	3991.7	3803.2	3988.8	3945.7	3145.6
42.5°	4990.4	4984.6	4932.8	4797.6	4568.8	4387.4	4289.6	4047.8	4256.5	4213.3	3344.2
45°	5060.9	5072.4	5072.4	4944.3	4763.0	4597.5	4554.4	4316.9	4545.7	4502.6	3557.2
47.5°	4947.2	4977.4	5039.3	5047.9	4888.2	4776.0	4790.4	4587.5	4843.6	4820.6	3790.3
50°	4591.8	4647.9	4783.2	5027.8	4938.6	4912.7	4991.8	4863.7	5163.1	5155.9	4073.7
52.5°	3675.2	3811.9	4233.5	4672.4	4904.0	4976.0	5191.8	5174.6	5574.6	5586.1	4443.6
55°	2819.0	2870.8	3358.6	4105.4	4692.5	4955.8	5325.7	5478.2	6020.7	6035.1	4783.2
57.5°	2279.3	2313.9	2580.1	3358.6	4210.5	4846.5	5430.7	5655.2	6363.2	6400.6	5085.4
60°	1805.9	1856.3	2034.7	2570.0	3535.6	4583.1	5504.1	5852.3	6731.5	6787.7	5446.5
62.5°	1342.6	1367.0	1535.4	1903.8	2798.8	4109.7	5465.2	6066.7	7183.4	7251.0	5881.1
65°	955.5	977.1	1096.5	1354.1	2069.3	3469.4	5239.3	6226.5	7750.3	7819.4	6318.6
67.5°	715.2	723.8	791.4	946.8	1394.4	2695.2	4781.7	6199.1	8164.8	8226.6	6494.1
70°	565.5	568.4	601.5	685.0	906.6	1876.4	3980.2	5797.6	8195.0	8249.7	6272.5
72.5°	469.1	467.7	486.4	526.7	631.7	1187.2	2948.5	5052.3	7806.5	7843.9	5653.7
75°	387.1	390.0	402.9	425.9	482.1	782.8	1911.0	4030.6	6887.0	6846.7	4744.3
77.5°	325.2	323.8	329.5	349.7	390.0	562.6	1119.5	2912.5	5104.1	5083.9	3114.0
80°	261.9	264.8	273.4	290.7	328.1	428.8	661.9	1817.4	2738.4	2665.0	1487.9
82.5°	175.6	202.9	220.2	240.3	283.5	316.6	420.2	923.8	1224.6	1205.9	674.9
85°	83.5	110.8	164.0	187.1	230.2	198.6	284.9	440.3	613.0	605.8	243.2
87.5°	17.3	17.3	87.8	105.0	142.5	84.9	158.3	191.4	296.4	277.7	99.3
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°	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5	1368.5
2.5°	1375.7	1336.8	1259.1	1197.2	1133.9	1097.9	1053.3	1031.7	1027.4	1015.9	1024.6
5°	1400.1	1323.9	1177.1	1080.7	1015.9	984.3	968.4	962.7	961.2	958.4	958.4
7.5°	1433.2	1316.7	1125.3	1027.4	985.7	975.6	979.9	988.6	990.0	992.9	991.5
10°	1473.5	1318.1	1096.5	1014.5	994.3	995.8	1010.2	1021.7	1027.4	1031.7	1030.3
12.5°	1529.6	1335.4	1092.2	1023.1	1014.5	1020.2	1034.6	1046.1	1051.9	1053.3	1053.3
15°	1603.0	1371.3	1102.3	1041.8	1034.6	1038.9	1047.6	1051.9	1053.3	1051.9	1051.9
17.5°	1683.6	1414.5	1116.6	1053.3	1041.8	1037.5	1034.6	1030.3	1021.7	1015.9	1015.9
20°	1761.3	1453.4	1123.8	1051.9	1031.7	1014.5	997.2	975.6	961.2	949.7	949.7
22.5°	1839.0	1489.3	1123.8	1036.1	1004.4	971.3	935.3	900.8	879.2	864.8	864.8
25°	1921.0	1523.9	1115.2	1008.7	961.2	913.8	864.8	821.7	800.1	785.7	782.8
27.5°	1990.1	1544.0	1092.2	969.9	908.0	847.6	791.4	746.8	731.0	718.1	718.1
30°	2063.5	1557.0	1049.0	919.5	847.6	778.5	720.9	685.0	667.7	649.0	647.5
32.5°	2145.5	1565.6	1000.1	866.3	785.7	712.3	663.4	634.6	597.2	577.0	574.2
35°	2240.5	1577.1	948.3	805.8	723.8	657.6	628.8	581.3	545.4	528.1	526.7
37.5°	2341.2	1585.8	892.2	752.6	667.7	621.6	592.9	536.7	505.1	479.2	476.3
40°	2447.7	1585.8	834.6	700.8	623.1	605.8	551.1	500.8	447.5	434.6	431.7
42.5°	2565.7	1582.9	777.0	650.4	581.3	569.8	526.7	473.4	446.1	434.6	431.7
45°	2690.9	1572.8	722.4	592.9	538.2	515.2	482.1	467.7	456.2	456.2	456.2
47.5°	2833.3	1564.2	660.5	541.1	506.5	480.6	456.2	447.5	446.1	450.4	454.7
50°	3016.1	1561.3	608.7	503.6	482.1	451.8	449.0	441.8	443.2	443.2	443.2
52.5°	3237.7	1535.4	559.8	476.3	457.6	421.6	430.3	437.4	440.3	438.9	437.4
55°	3400.3	1489.3	518.0	457.6	440.3	410.1	421.6	433.1	436.0	431.7	431.7
57.5°	3547.1	1424.6	484.9	443.2	428.8	402.9	415.9	427.4	424.5	423.1	421.6
60°	3715.4	1362.7	459.0	436.0	417.3	400.0	411.5	418.7	414.4	411.5	410.1
62.5°	3898.2	1302.3	440.3	436.0	408.7	398.6	407.2	410.1	401.5	398.6	398.6
65°	3983.1	1207.3	420.2	436.0	404.4	395.7	398.6	395.7	387.1	387.1	385.6
67.5°	3843.5	1050.5	394.3	430.3	410.1	391.4	385.6	381.3	371.3	371.3	368.4
70°	3457.9	863.4	356.9	411.5	411.5	390.0	368.4	358.3	346.8	351.1	345.4
72.5°	2954.2	685.0	310.8	379.9	402.9	388.5	349.7	333.8	323.8	328.1	319.5
75°	2393.0	531.0	256.1	329.5	381.3	381.3	331.0	309.4	297.9	297.9	287.8
77.5°	1525.3	392.8	208.7	273.4	342.5	371.3	315.1	282.0	264.8	260.5	253.3
80°	755.5	276.3	171.2	217.3	292.1	348.2	303.6	250.4	225.9	217.3	204.3
82.5°	401.5	191.4	136.7	169.8	233.1	313.7	289.2	215.8	185.6	172.7	158.3
85°	179.9	118.0	109.4	129.5	177.0	257.6	260.5	177.0	142.5	169.8	125.2
87.5°	66.2	53.2	53.2	66.2	102.2	107.9	184.2	113.7	90.7	61.9	48.9
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)