

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: P398029

Luminaire Tested: **ARCH-S-PA1-70-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-830-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7951 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 74  
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

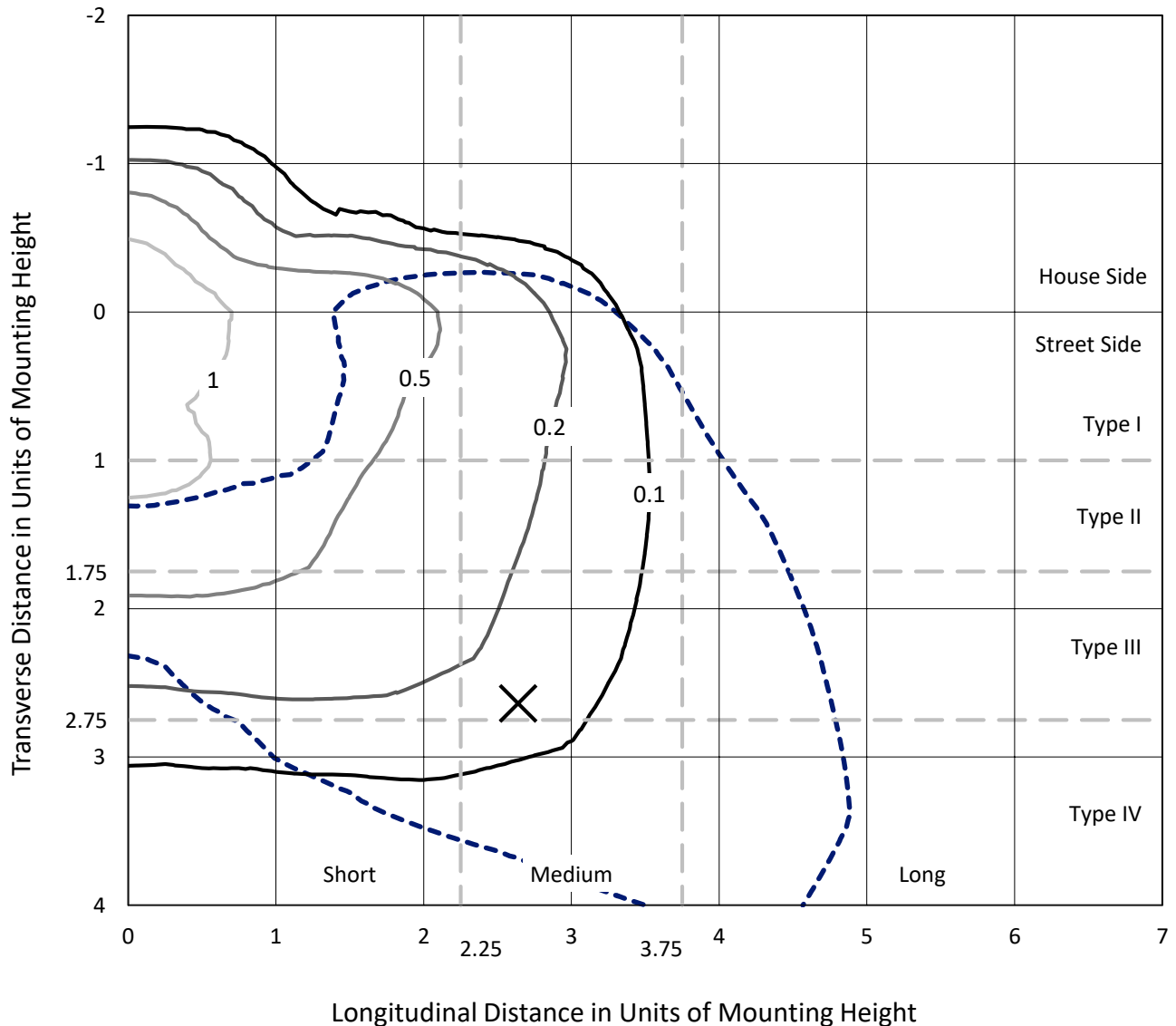


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

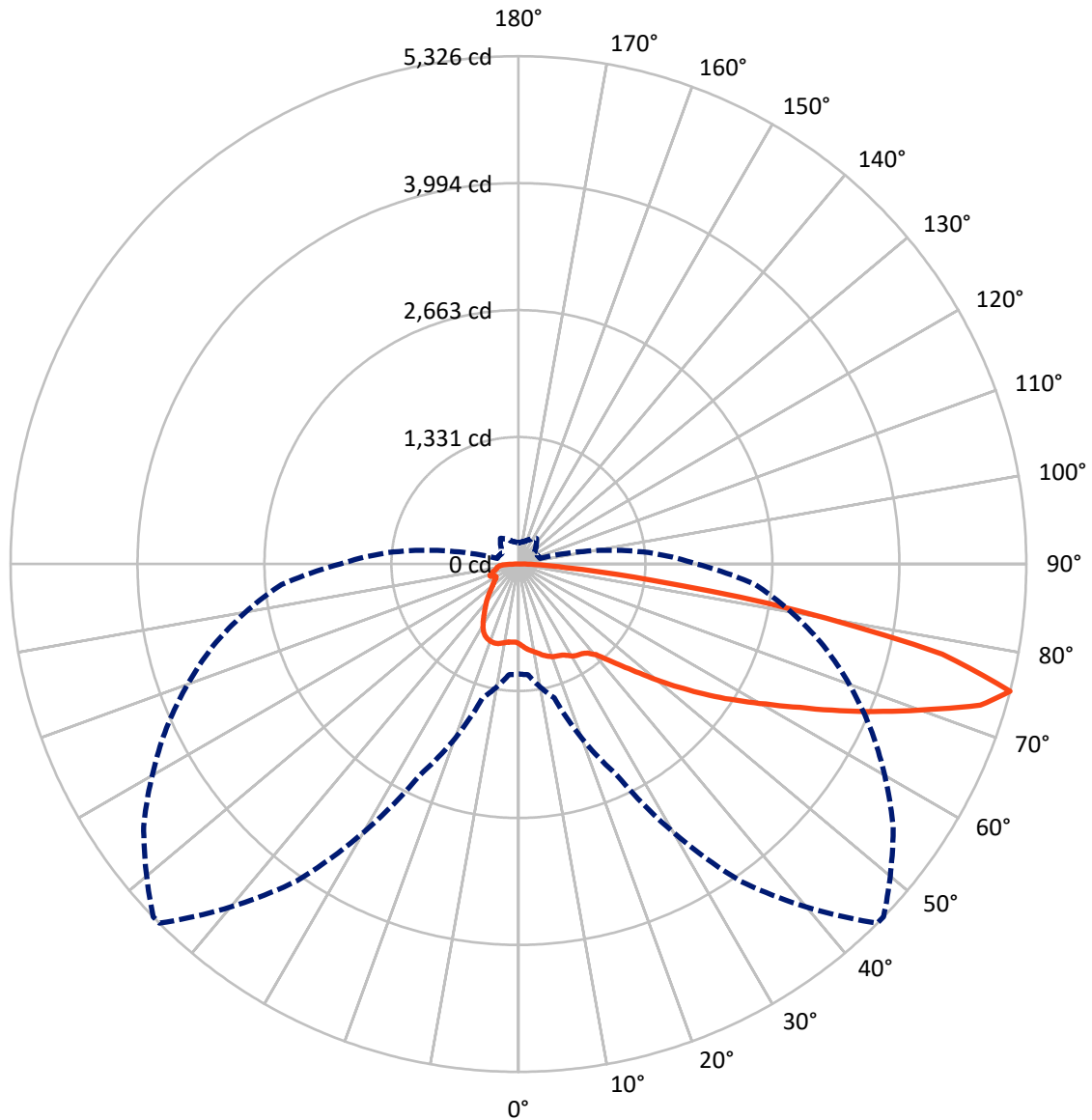


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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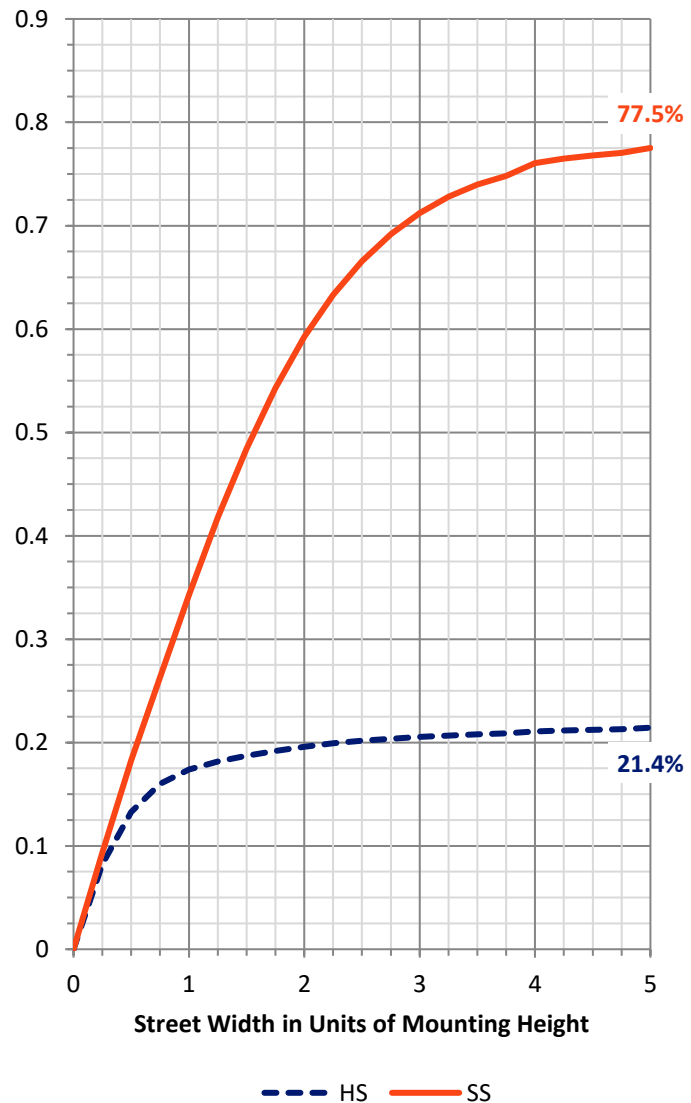
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1757.1	0.0	1757.1
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	6193.9	0.0	6193.9
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	7951.0	0.0	7951.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.6	1.0
10°-20°	262.8	3.3
20°-30°	448.0	5.6
30°-40°	627.8	7.9
40°-50°	922.3	11.6
50°-60°	1467.8	18.5
60°-70°	2088.0	26.3
70°-80°	1748.3	22.0
80°-90°	303.4	3.8
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°	7951.0	100.0
0°-180°	7951.0	100.0



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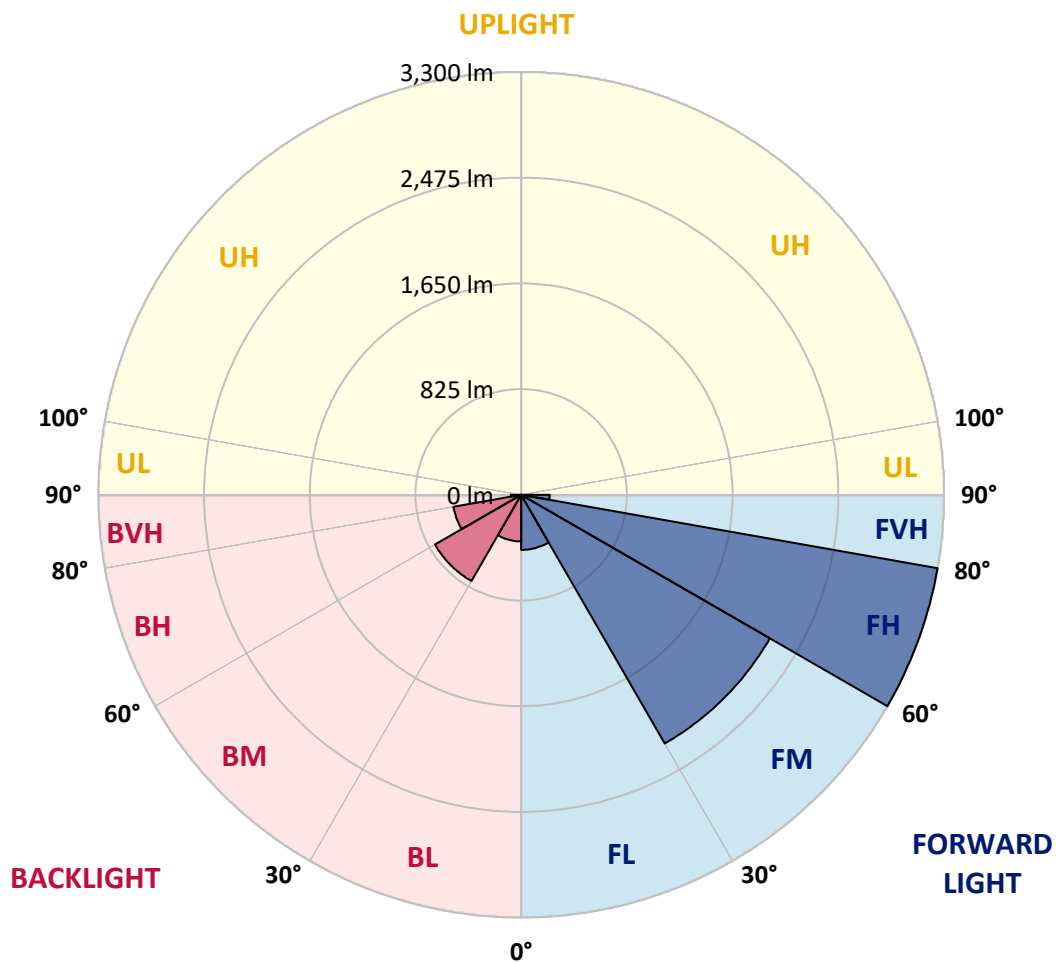
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	429.8	5.4			
FM (30°-60°)	2241.1	28.2			
FH (60°-80°)	3299.9	41.5			G2/5000
FVH (80°-90°)	223.1	2.8			G2/225
BL (0°-30°)	363.7	4.6	B1/500		
BM (30°-60°)	776.7	9.8	B1/1000		
BH (60°-80°)	536.4	6.7	B2/1000		G2/1000
BVH (80°-90°)	80.3	1.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0
2.5°	882.8	878.6	876.5	876.5	868.0	862.7	861.6	854.2	847.8	841.4	836.1
5°	933.8	930.6	924.3	919.0	907.3	892.4	890.3	874.3	858.4	843.5	830.8
7.5°	980.6	974.2	966.8	956.1	937.0	916.8	913.6	891.3	869.0	846.7	829.7
10°	1019.9	1013.5	1002.9	988.0	963.6	939.1	936.0	912.6	889.2	862.7	838.2
12.5°	1057.1	1051.8	1035.8	1015.6	986.9	964.6	961.5	941.3	916.8	887.1	855.2
15°	1088.9	1083.6	1066.6	1043.3	1010.3	993.3	989.1	970.0	945.5	913.6	880.7
17.5°	1104.9	1104.9	1086.8	1061.3	1030.5	1017.8	1014.6	991.2	968.9	938.1	905.1
20°	1110.2	1112.3	1099.6	1068.8	1042.2	1036.9	1033.7	1014.6	989.1	959.3	928.5
22.5°	1113.4	1117.6	1107.0	1071.9	1049.6	1046.4	1044.3	1031.6	1011.4	982.7	951.9
25°	1124.0	1124.0	1116.6	1077.3	1059.2	1058.1	1058.1	1050.7	1036.9	1012.4	981.6
27.5°	1139.9	1138.9	1129.3	1088.9	1080.4	1083.6	1082.6	1081.5	1071.9	1047.5	1014.6
30°	1166.5	1166.5	1155.9	1112.3	1107.0	1120.8	1121.9	1124.0	1109.1	1070.9	1044.3
32.5°	1206.9	1202.6	1192.0	1135.7	1127.2	1139.9	1142.1	1141.0	1128.2	1092.1	1079.4
35°	1331.2	1321.6	1283.4	1187.7	1145.2	1152.7	1153.7	1159.1	1161.2	1132.5	1126.1
37.5°	1548.9	1536.2	1477.8	1311.0	1202.6	1184.6	1183.5	1197.3	1209.0	1183.5	1183.5
40°	1785.9	1775.2	1741.2	1523.4	1308.8	1249.4	1245.1	1257.9	1272.7	1254.7	1260.0
42.5°	1989.8	1998.3	2001.5	1748.7	1468.2	1370.5	1358.8	1340.7	1364.1	1348.2	1369.4
45°	2142.8	2138.6	2197.0	1979.2	1674.3	1522.4	1506.5	1457.6	1487.3	1486.3	1533.0
47.5°	2305.4	2297.9	2322.4	2195.9	1909.1	1708.3	1683.9	1611.6	1656.2	1687.1	1764.6
50°	2459.4	2461.5	2470.0	2367.0	2164.1	1934.6	1903.8	1807.1	1870.8	1935.7	2045.1
52.5°	2660.2	2645.3	2634.7	2566.7	2449.8	2170.4	2150.3	2039.8	2129.0	2205.5	2351.0
55°	2835.5	2825.9	2819.6	2816.4	2688.9	2430.7	2409.5	2294.7	2423.3	2477.5	2692.1
57.5°	3022.5	3017.2	3051.1	3105.3	3054.3	2695.3	2672.9	2562.5	2705.9	2744.1	3061.8
60°	3159.5	3162.7	3256.2	3394.3	3359.2	2982.1	2955.5	2857.8	2981.0	3015.0	3431.5
62.5°	3160.6	3192.4	3409.2	3656.7	3697.1	3312.5	3281.7	3175.4	3263.6	3263.6	3762.9
65°	2858.9	2895.0	3381.5	3721.5	4039.2	3705.6	3675.8	3509.0	3542.0	3497.3	4074.2
67.5°	2558.2	2600.7	3058.6	3726.8	4279.3	4126.3	4091.2	3842.6	3786.3	3673.7	4292.0
70°	2358.5	2388.2	2770.7	3657.8	4423.7	4566.1	4539.5	4159.2	3978.6	3821.4	4246.3
72.5°	1985.6	1975.0	2340.4	3329.5	4504.5	5065.4	5043.1	4503.4	4145.4	3751.3	3621.6
75°	1152.7	1165.4	1452.3	2439.2	4060.4	5325.7	5323.6	4797.7	4072.1	3313.6	2495.5
77.5°	332.5	342.1	477.0	1071.9	2567.8	4542.7	4688.3	4387.6	3442.1	2361.7	1294.0
80°	145.5	153.0	207.2	357.0	1105.9	2967.2	3094.7	2967.2	2075.9	1083.6	507.8
82.5°	86.1	91.4	134.9	221.0	530.1	1411.9	1584.0	1383.2	895.6	460.0	210.4
85°	48.9	51.0	77.6	140.2	333.6	494.0	554.6	519.5	436.6	261.3	110.5
87.5°	22.3	23.4	38.2	65.9	187.0	166.8	173.2	229.5	252.8	159.4	55.2
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°	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0	835.0
2.5°	834.0	830.8	824.4	822.3	819.1	820.2	821.2	821.2	822.3	819.1	819.1
5°	825.5	820.2	813.8	813.8	813.8	822.3	829.7	834.0	836.1	836.1	834.0
7.5°	822.3	815.9	808.5	810.6	812.7	823.3	837.2	851.0	855.2	855.2	853.1
10°	828.7	822.3	817.0	820.2	825.5	834.0	844.6	857.3	868.0	869.0	868.0
12.5°	843.5	836.1	830.8	837.2	843.5	848.8	854.2	859.5	873.3	875.4	875.4
15°	868.0	860.5	854.2	859.5	861.6	861.6	861.6	861.6	875.4	877.5	877.5
17.5°	892.4	886.0	879.6	880.7	874.3	865.8	862.7	861.6	869.0	875.4	876.5
20°	915.8	910.5	904.1	893.5	877.5	861.6	856.3	856.3	860.5	870.1	870.1
22.5°	941.3	934.9	924.3	899.8	873.3	851.0	845.7	848.8	854.2	866.9	865.8
25°	970.0	961.5	943.4	897.7	859.5	832.9	834.0	843.5	853.1	866.9	866.9
27.5°	1001.8	990.1	954.0	880.7	828.7	803.2	812.7	835.0	848.8	863.7	865.8
30°	1036.9	1026.3	962.5	851.0	778.7	755.4	778.7	814.8	836.1	849.9	853.1
32.5°	1079.4	1070.9	970.0	812.7	713.9	693.7	727.7	772.3	806.3	822.3	825.5
35°	1132.5	1124.0	979.5	769.2	653.4	632.1	662.9	708.6	753.2	773.4	779.8
37.5°	1201.5	1188.8	988.0	722.4	602.4	577.9	592.8	634.2	674.6	702.2	709.7
40°	1289.7	1269.5	995.4	669.3	557.7	530.1	535.4	555.6	579.0	603.4	613.0
42.5°	1414.0	1373.7	996.5	613.0	512.1	486.6	484.4	490.8	490.8	490.8	494.0
45°	1587.2	1510.7	998.6	559.9	465.3	438.8	432.4	430.3	414.3	383.5	381.4
47.5°	1806.0	1690.2	1008.2	515.3	416.5	393.1	384.6	376.1	346.3	314.5	308.1
50°	2086.5	1898.5	1027.3	472.8	375.0	359.1	348.5	328.3	295.3	270.9	264.5
52.5°	2409.5	2146.0	1045.4	428.1	344.2	333.6	320.8	296.4	261.3	246.5	244.3
55°	2780.2	2422.2	1081.5	388.8	317.7	310.2	298.5	275.2	248.6	238.0	236.9
57.5°	3159.5	2731.4	1132.5	353.8	292.2	287.9	287.9	267.7	250.7	246.5	246.5
60°	3525.0	2997.0	1093.2	320.8	268.8	270.9	291.1	285.8	273.0	278.3	281.5
62.5°	3808.6	3153.1	887.1	294.3	251.8	270.9	323.0	323.0	308.1	306.0	306.0
65°	3929.7	3151.0	623.6	274.1	245.4	297.5	360.1	343.1	303.8	289.0	285.8
67.5°	3898.9	3012.9	430.3	260.3	243.3	325.1	377.1	329.3	284.7	272.0	262.4
70°	3628.0	2720.7	331.5	247.5	240.1	313.4	371.8	313.4	269.8	258.2	249.7
72.5°	2926.9	2182.1	275.2	234.8	227.3	290.0	353.8	298.5	258.2	245.4	236.9
75°	1866.6	1372.6	232.7	217.8	202.9	260.3	329.3	283.7	245.4	228.4	222.0
77.5°	897.7	591.7	202.9	197.6	182.7	241.2	304.9	264.5	228.4	214.6	210.4
80°	363.3	270.9	176.4	177.4	167.9	229.5	287.9	246.5	211.4	196.5	189.1
82.5°	189.1	157.2	148.7	153.0	153.0	218.8	275.2	231.6	196.5	190.2	165.7
85°	102.0	97.7	114.7	123.2	132.8	197.6	256.0	215.7	179.5	154.0	148.7
87.5°	49.9	63.7	64.8	74.4	92.4	158.3	215.7	180.6	149.8	124.3	122.2
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)