

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: P397533

Luminaire Tested: **ARCH-S-PA1-100-722-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397533  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-722-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2200K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6101 lumens  
Efficiency: N/A  
Efficacy: 63.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 96  
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

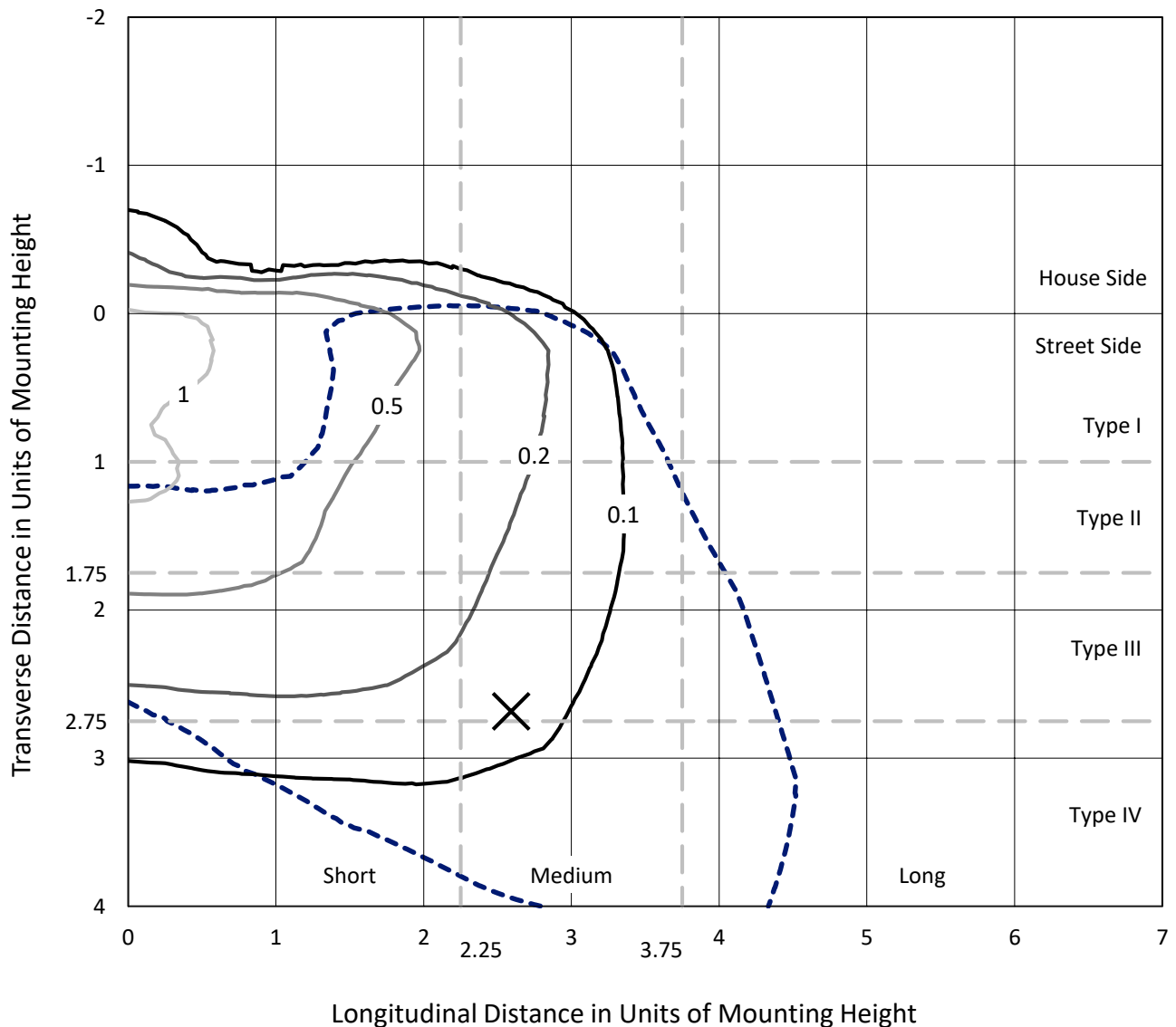


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

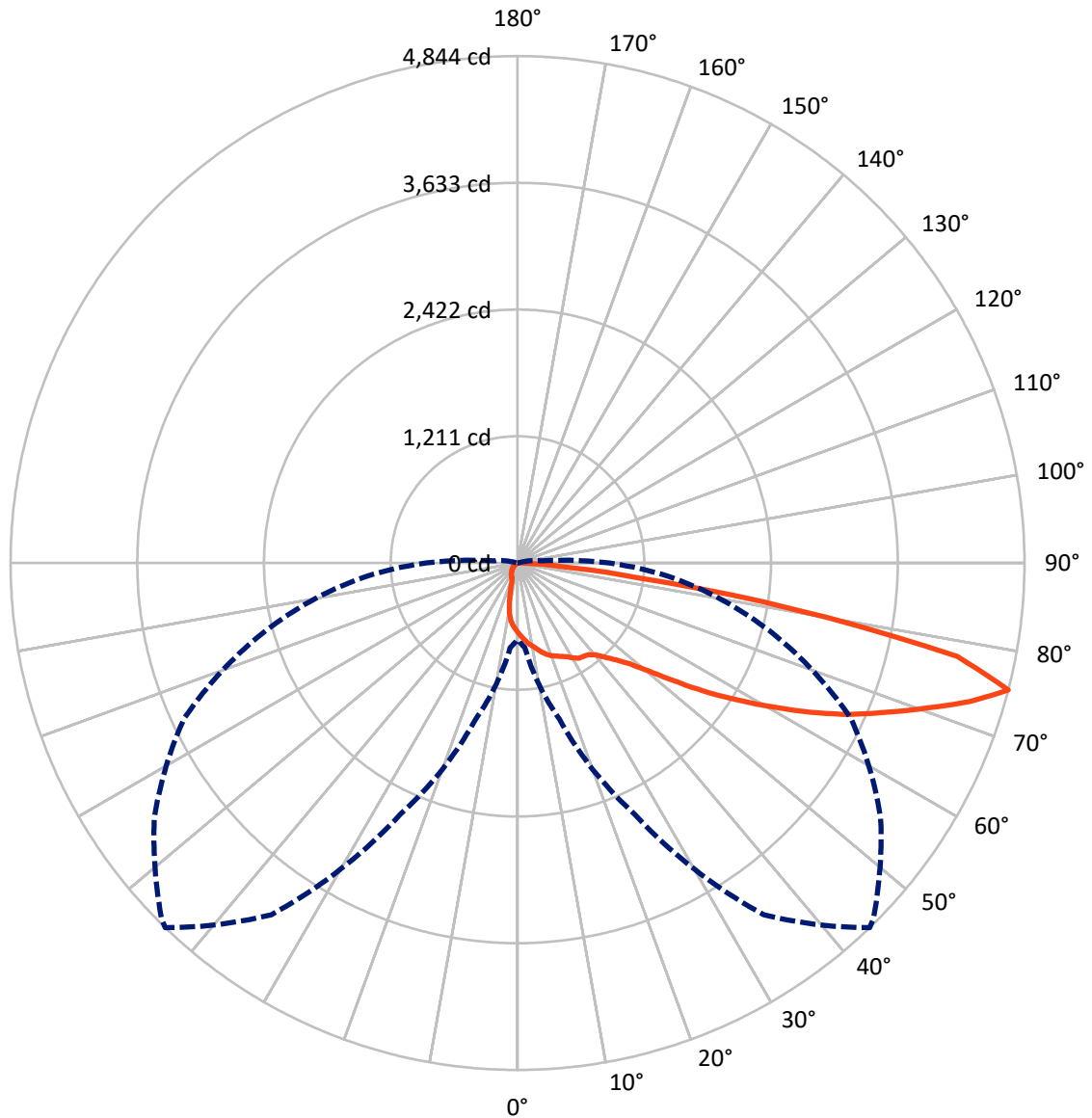


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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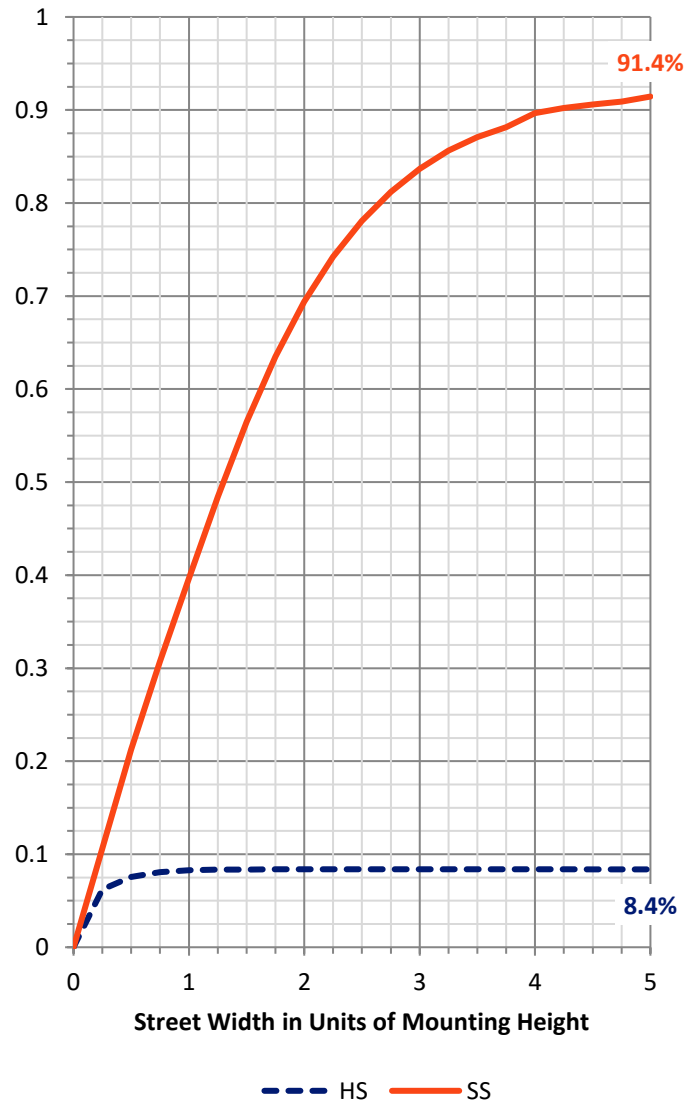
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	514.5	0.0	514.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	5586.5	0.0	5586.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	6101.0	0.0	6101.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	1.0
10°-20°	175.5	2.9
20°-30°	289.6	4.7
30°-40°	420.3	6.9
40°-50°	683.3	11.2
50°-60°	1204.5	19.7
60°-70°	1731.2	28.4
70°-80°	1386.3	22.7
80°-90°	147.7	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°	6101.0	100.0
0°-180°	6101.0	100.0



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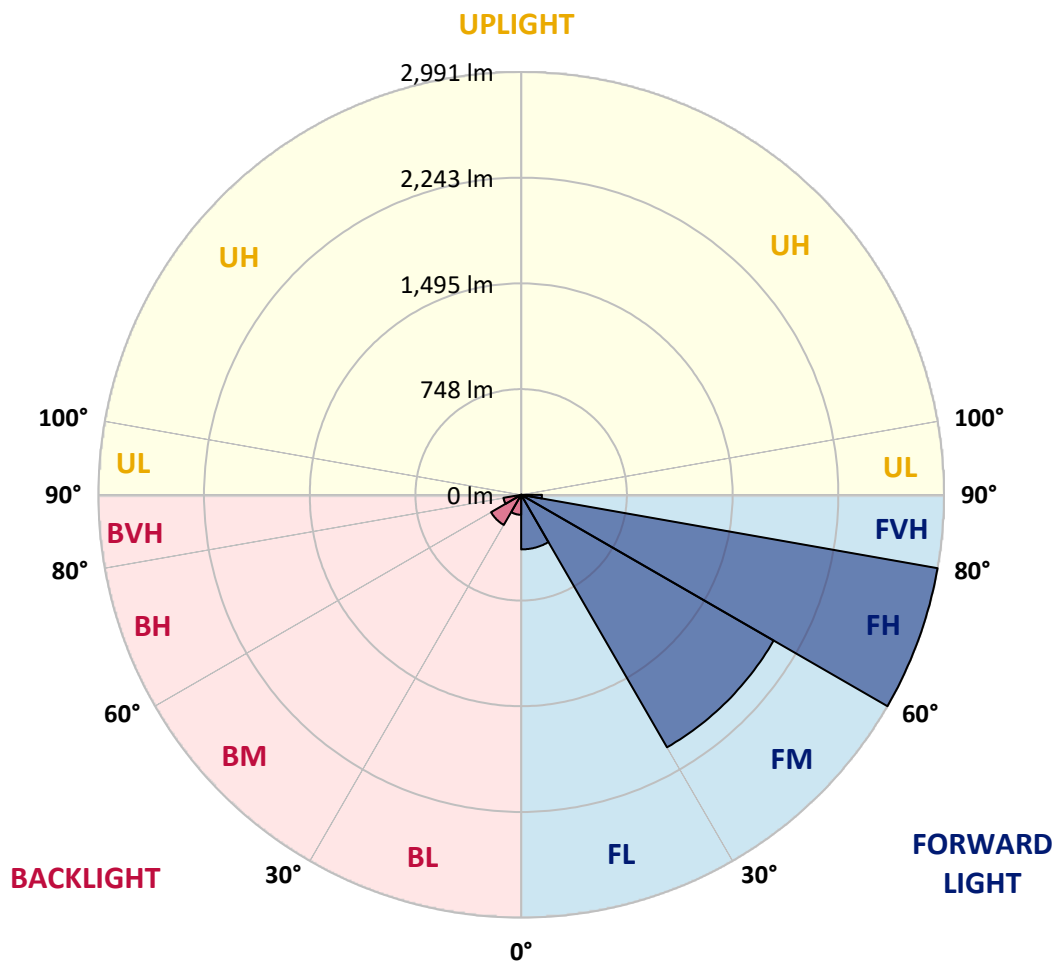
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	386.4	6.3			
FM	(30°-60°)	2062.2	33.8			
FH	(60°-80°)	2990.6	49.0			G2/5000
FVH	(80°-90°)	147.3	2.4			G2/225
BL	(0°-30°)	141.4	2.3	B1/500		
BM	(30°-60°)	245.9	4.0	B1/1000		
BH	(60°-80°)	126.8	2.1	B1/500		G1/500
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1
2.5°	723.7	722.6	719.2	713.6	708.0	702.3	701.2	692.2	682.1	674.2	667.4
5°	787.9	786.8	781.1	768.7	756.4	741.7	740.6	719.2	700.1	678.7	660.7
7.5°	854.3	852.0	841.9	822.8	801.4	778.9	776.6	745.1	717.0	688.8	662.9
10°	906.1	903.8	889.2	866.7	837.4	809.3	805.9	773.2	745.1	709.1	674.2
12.5°	956.7	952.2	933.1	908.3	872.3	845.3	841.9	808.1	774.4	737.2	694.5
15°	1004.0	998.4	980.3	948.8	910.6	884.7	882.4	846.4	811.5	768.7	721.5
17.5°	1036.6	1034.4	1013.0	978.1	941.0	919.6	917.3	880.2	845.3	800.3	749.6
20°	1053.5	1053.5	1033.2	995.0	961.2	946.6	943.2	908.3	874.5	831.8	778.9
22.5°	1056.9	1060.3	1044.5	1002.9	978.1	965.7	963.5	933.1	900.4	861.0	811.5
25°	1063.6	1063.6	1055.8	1010.7	992.7	989.4	988.2	961.2	932.0	892.6	844.2
27.5°	1071.5	1071.5	1065.9	1022.0	1015.2	1014.1	1013.0	1000.6	977.0	930.8	882.4
30°	1091.8	1092.9	1088.4	1044.5	1040.0	1052.4	1054.6	1047.9	1018.6	961.2	921.8
32.5°	1142.4	1132.3	1119.9	1060.3	1068.1	1083.9	1085.0	1071.5	1040.0	993.9	969.1
35°	1269.6	1210.0	1153.7	1073.8	1077.1	1092.9	1095.2	1094.0	1074.9	1035.5	1023.1
37.5°	1387.8	1303.4	1223.5	1105.3	1094.0	1110.9	1115.4	1134.5	1119.9	1092.9	1096.3
40°	1456.5	1423.8	1367.5	1192.0	1127.8	1153.7	1158.2	1187.4	1181.8	1170.6	1192.0
42.5°	1668.1	1670.3	1609.5	1321.4	1189.7	1231.3	1237.0	1260.6	1268.5	1274.1	1325.9
45°	1913.4	1921.3	1906.7	1554.4	1306.8	1320.3	1328.1	1359.7	1388.9	1424.9	1519.5
47.5°	2208.3	2201.6	2147.5	1839.1	1510.5	1435.1	1440.7	1501.5	1552.1	1630.9	1766.0
50°	2469.4	2486.3	2383.9	2104.8	1797.5	1616.3	1610.7	1670.3	1761.5	1871.8	2041.7
52.5°	2732.8	2708.1	2569.6	2368.1	2137.4	1862.8	1845.9	1878.5	2006.8	2137.4	2311.9
55°	2802.6	2804.9	2757.6	2656.3	2421.0	2162.2	2134.0	2131.8	2291.6	2380.5	2595.5
57.5°	2939.9	2945.5	2956.8	2977.1	2865.6	2461.6	2432.3	2400.8	2556.1	2607.9	2880.3
60°	3079.5	3086.2	3154.9	3264.1	3189.8	2784.6	2753.1	2678.8	2765.5	2835.2	3179.7
62.5°	3061.5	3108.8	3308.0	3525.2	3516.2	3139.1	3099.7	2920.8	2975.9	3036.7	3454.3
65°	2764.3	2815.0	3263.0	3597.2	3843.7	3489.2	3425.0	3170.7	3174.0	3247.2	3718.8
67.5°	2498.7	2553.9	2981.6	3566.8	4059.8	3803.2	3736.8	3421.7	3368.8	3490.3	3860.6
70°	2345.6	2400.8	2757.6	3472.3	4120.6	4151.0	4093.6	3708.7	3600.6	3712.0	3701.9
72.5°	1835.8	1922.4	2471.7	3292.2	4185.9	4523.6	4478.5	4072.2	3797.6	3480.2	2818.4
75°	731.6	811.5	1543.1	2649.5	4103.7	4844.3	4809.4	4235.4	3515.1	2485.2	1442.9
77.5°	220.6	236.4	428.8	1310.1	3008.6	4295.1	4283.8	3561.2	2487.5	1153.7	393.9
80°	73.2	81.0	131.7	361.3	1373.2	2683.3	2733.9	2269.1	1130.0	264.5	79.9
82.5°	30.4	33.8	66.4	145.2	486.2	1155.9	1139.1	1016.4	393.9	164.3	29.3
85°	7.9	10.1	30.4	83.3	177.8	398.4	418.7	341.0	222.9	136.2	9.0
87.5°	0.0	0.0	14.6	33.8	79.9	120.4	126.1	103.6	126.1	102.4	4.5
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°	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1	664.1
2.5°	661.8	656.2	646.1	639.3	630.3	628.1	623.6	617.9	616.8	611.2	612.3
5°	650.6	641.6	623.6	611.2	596.5	592.0	584.2	578.5	574.0	566.1	567.3
7.5°	648.3	634.8	610.0	586.4	562.8	545.9	522.3	503.1	487.4	470.5	473.9
10°	656.2	639.3	604.4	571.8	529.0	475.0	413.1	372.6	352.3	332.0	334.3
12.5°	671.9	651.7	606.7	557.1	470.5	378.2	292.6	237.5	222.9	213.9	215.0
15°	695.6	670.8	613.4	529.0	391.7	273.5	194.7	171.1	176.7	180.1	180.1
17.5°	720.3	692.2	619.0	478.4	302.8	191.3	158.7	156.5	164.3	172.2	172.2
20°	750.7	714.7	620.2	414.2	218.4	155.3	149.7	149.7	155.3	164.3	164.3
22.5°	780.0	739.5	610.0	341.0	166.6	144.1	144.1	144.1	147.4	156.5	157.6
25°	814.9	769.9	588.7	263.4	142.9	137.3	137.3	138.4	140.7	148.6	149.7
27.5°	852.0	801.4	552.6	192.5	130.6	129.4	130.6	131.7	132.8	140.7	142.9
30°	894.8	836.3	506.5	144.1	119.3	119.3	122.7	124.9	124.9	131.7	133.9
32.5°	944.3	882.4	451.3	119.3	108.1	106.9	112.6	115.9	115.9	121.6	123.8
35°	1006.2	929.7	384.9	105.8	99.0	96.8	99.0	104.7	106.9	111.4	112.6
37.5°	1088.4	986.0	314.0	97.9	92.3	87.8	87.8	88.9	93.4	97.9	99.0
40°	1193.1	1047.9	244.2	92.3	85.5	81.0	77.7	76.5	75.4	78.8	81.0
42.5°	1324.8	1117.7	182.3	86.7	79.9	73.2	68.7	64.2	58.5	57.4	58.5
45°	1493.6	1203.2	135.1	82.2	76.5	66.4	58.5	50.6	40.5	37.1	38.3
47.5°	1692.8	1292.1	105.8	77.7	74.3	58.5	48.4	34.9	24.8	22.5	23.6
50°	1904.4	1377.7	90.0	72.0	69.8	50.6	34.9	21.4	14.6	14.6	15.8
52.5°	2084.5	1426.1	82.2	67.5	63.0	41.6	22.5	12.4	9.0	9.0	10.1
55°	2259.0	1452.0	76.5	63.0	54.0	29.3	12.4	7.9	5.6	5.6	5.6
57.5°	2439.1	1463.2	69.8	57.4	42.8	18.0	6.8	4.5	3.4	3.4	3.4
60°	2598.9	1441.8	59.7	47.3	28.1	9.0	3.4	3.4	2.3	1.1	1.1
62.5°	2732.8	1401.3	41.6	33.8	16.9	4.5	2.3	1.1	0.0	0.0	0.0
65°	2815.0	1336.0	27.0	22.5	10.1	3.4	1.1	0.0	0.0	0.0	0.0
67.5°	2791.3	1213.3	16.9	14.6	4.5	2.3	1.1	0.0	0.0	0.0	0.0
70°	2519.0	995.0	12.4	9.0	3.4	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1815.5	673.1	9.0	5.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	873.4	239.7	5.6	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	213.9	52.9	3.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	47.3	10.1	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.8	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)