

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: P397576

Luminaire Tested: **ARCH-S-PA1-100-760-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397576  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-760-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8453 lumens  
Efficiency: N/A  
Efficacy: 88.1 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

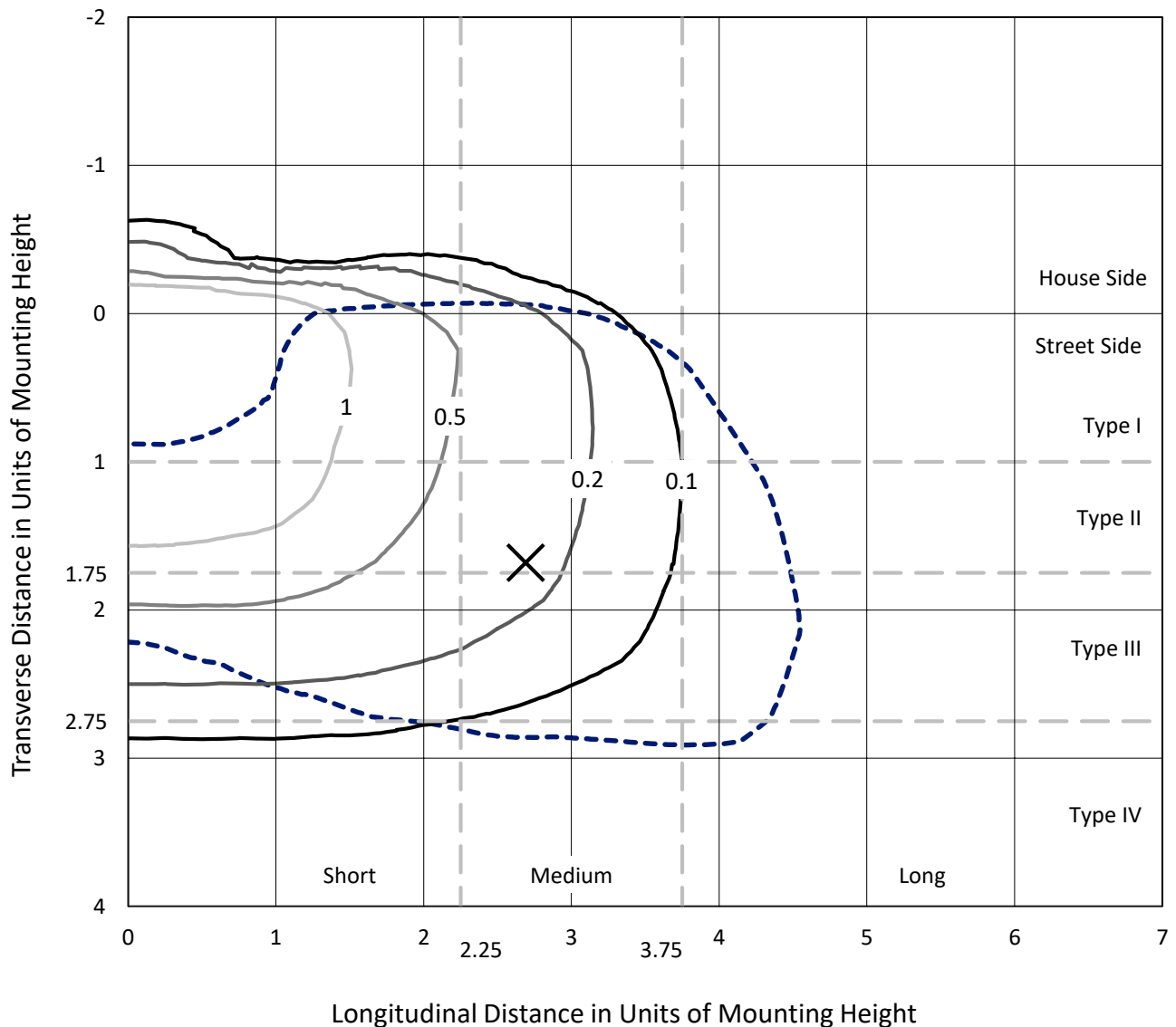
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

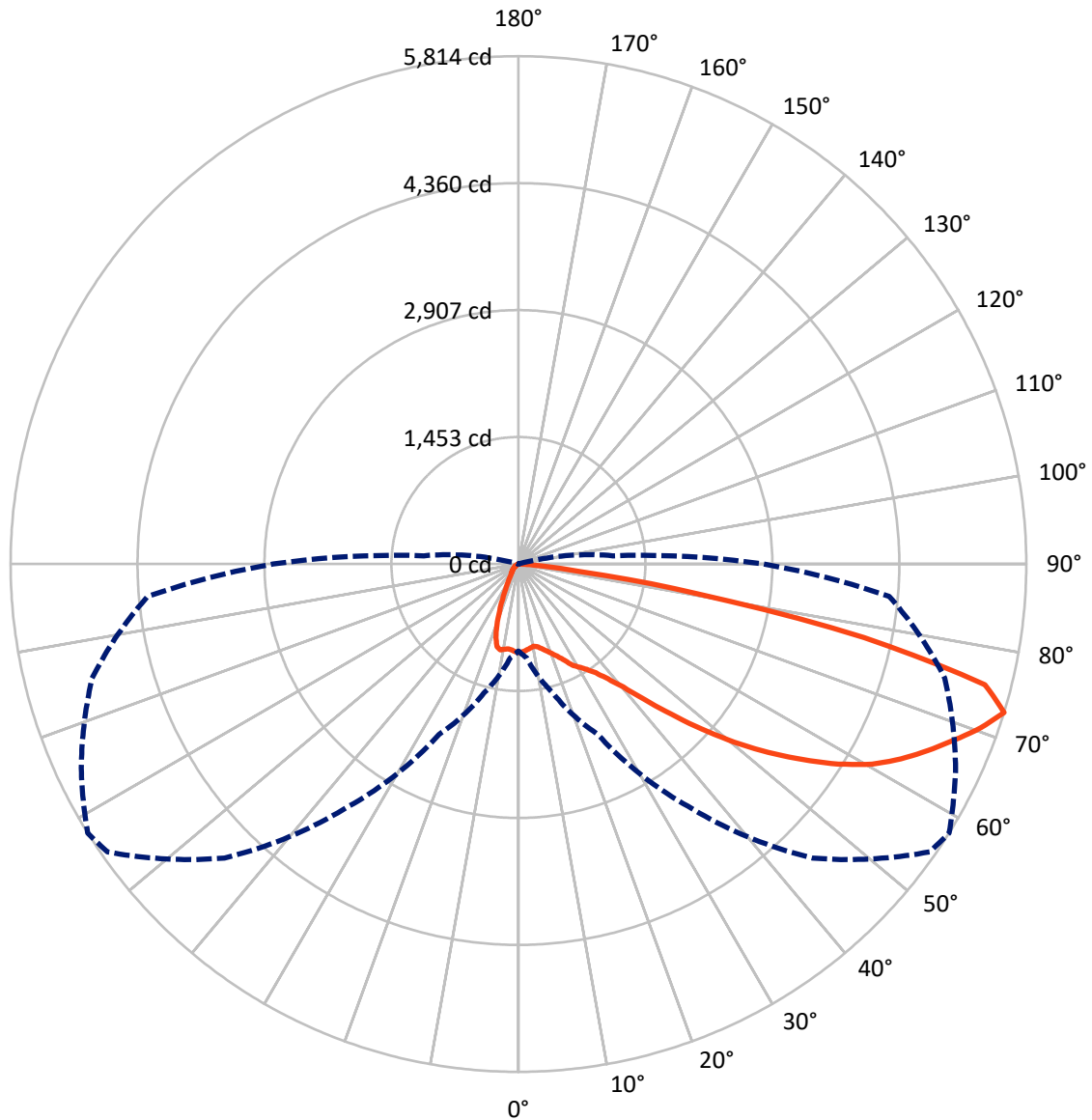
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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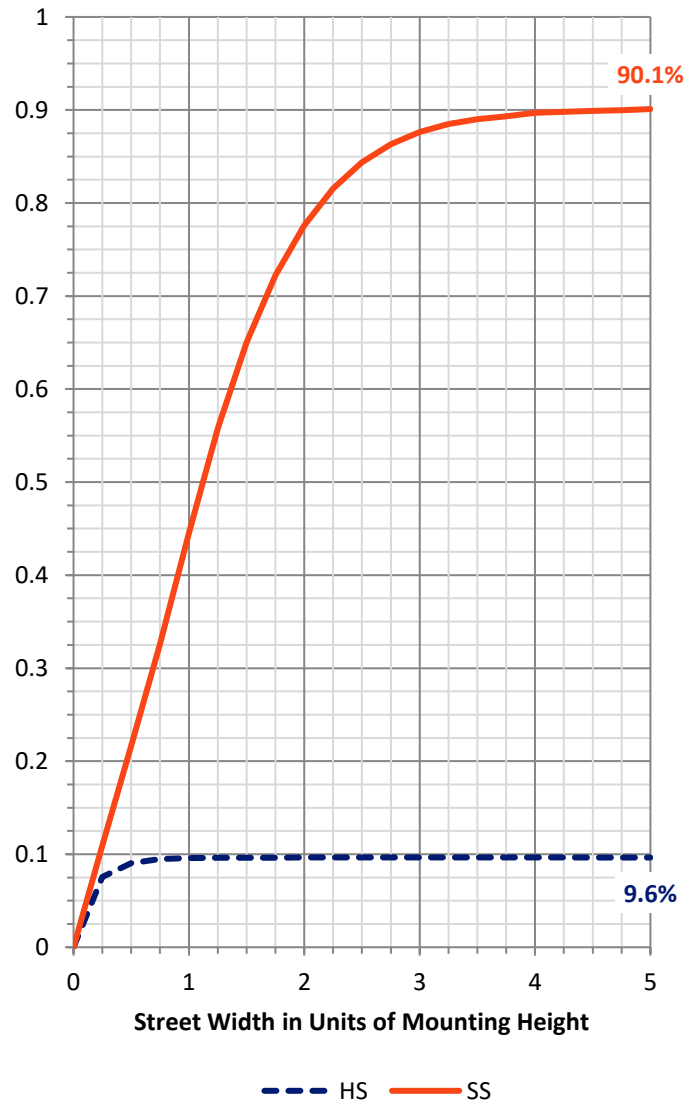
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	822.0	0.0	822.0
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	7631.0	0.0	7631.0
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	8453.0	0.0	8453.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	1.1
10°-20°	242.5	2.9
20°-30°	380.9	4.5
30°-40°	656.9	7.8
40°-50°	1249.7	14.8
50°-60°	1979.2	23.4
60°-70°	2309.5	27.3
70°-80°	1446.4	17.1
80°-90°	94.9	1.1
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°	8453.0	100.0
0°-180°	8453.0	100.0

**Coefficient of Utilization**



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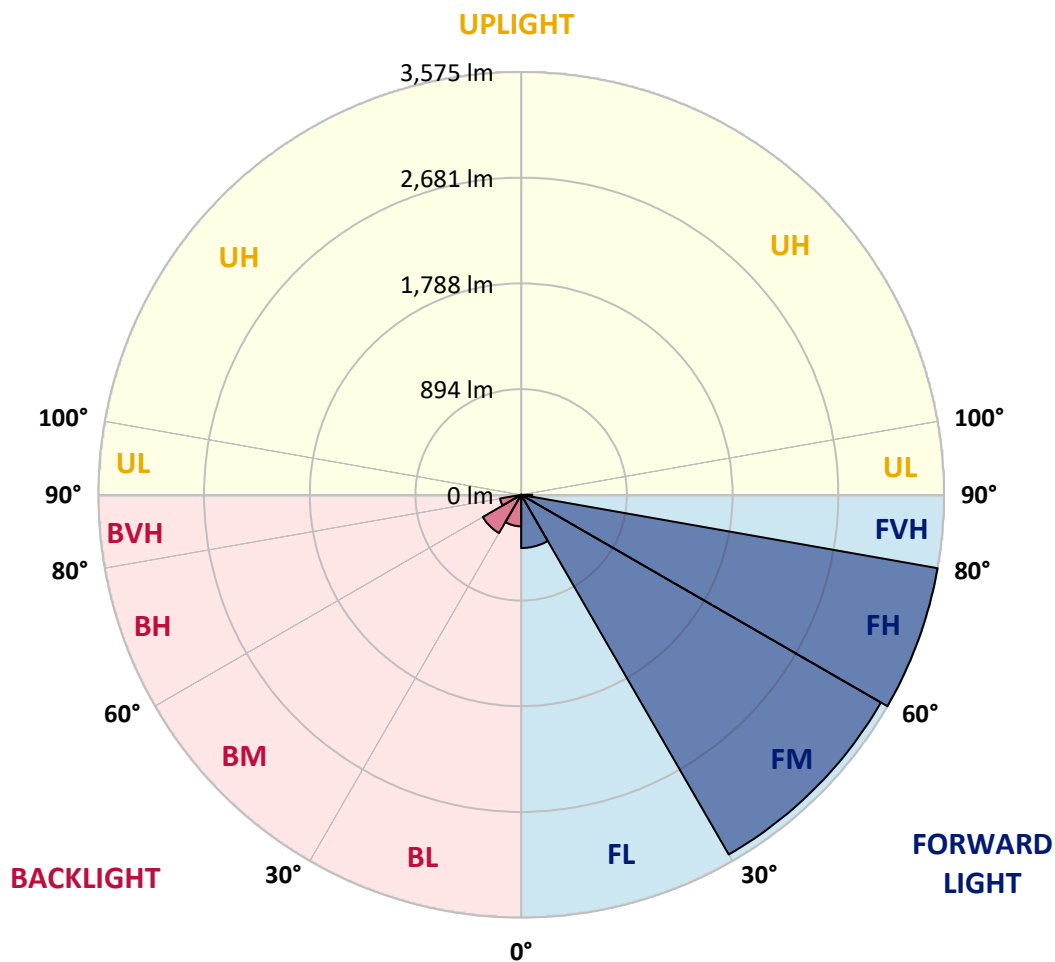
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	450.2	5.3			
FM	(30°-60°)	3511.7	41.5			
FH	(60°-80°)	3575.0	42.3			G2/5000
FVH	(80°-90°)	94.0	1.1			G1/100
BL	(0°-30°)	266.2	3.1	B1/500		
BM	(30°-60°)	374.0	4.4	B1/1000		
BH	(60°-80°)	180.9	2.1	B1/500		G1/500
BVH	(80°-90°)	0.9	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°	45°	55°	58°	65°	75°	85°
0°	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3
2.5°	1009.8	1005.2	1003.7	1002.2	1003.7	1005.2	1000.7	1005.2	1002.2	1003.7	1006.8
5°	973.5	969.0	967.4	969.0	973.5	981.1	984.1	988.6	988.6	993.1	994.7
7.5°	932.7	929.7	928.1	931.2	940.2	956.9	965.9	972.0	978.0	987.1	996.2
10°	910.0	908.5	907.0	911.5	920.6	935.7	947.8	956.9	979.5	1005.2	1021.9
12.5°	894.9	894.9	897.9	907.0	919.1	931.2	959.9	972.0	1006.8	1046.1	1068.7
15°	882.8	882.8	887.3	904.0	920.6	949.3	991.6	1005.2	1046.1	1094.4	1124.7
17.5°	873.7	876.7	879.8	896.4	928.1	976.5	1026.4	1046.1	1095.9	1148.8	1182.1
20°	875.2	878.3	879.8	896.4	941.7	1008.3	1071.8	1094.4	1151.9	1207.8	1241.1
22.5°	884.3	888.8	890.4	913.0	965.9	1041.5	1123.1	1148.8	1210.8	1269.8	1295.5
25°	922.1	925.1	916.1	935.7	1000.7	1092.9	1189.7	1216.9	1278.8	1333.3	1354.4
27.5°	1050.6	1053.6	1003.7	981.1	1027.9	1135.2	1271.3	1309.1	1386.2	1422.5	1425.5
30°	1328.7	1331.8	1233.5	1126.2	1092.9	1171.5	1316.6	1369.5	1469.3	1510.1	1492.0
32.5°	1687.0	1684.0	1549.4	1390.7	1247.1	1235.0	1381.6	1437.6	1546.4	1585.7	1572.1
35°	2046.8	2051.3	1936.4	1697.6	1492.0	1354.4	1464.8	1529.8	1661.3	1717.2	1693.0
37.5°	2293.2	2323.4	2273.5	2015.0	1792.8	1575.1	1599.3	1668.8	1833.6	1909.2	1857.8
40°	2640.8	2633.3	2512.3	2321.9	2125.4	1901.6	1817.0	1850.2	2039.2	2140.5	2060.4
42.5°	3107.9	3092.8	2887.2	2701.3	2482.1	2299.2	2126.9	2120.8	2275.0	2392.9	2276.5
45°	3531.2	3508.5	3367.9	3188.0	2947.7	2737.6	2504.8	2451.9	2559.2	2659.0	2522.9
47.5°	3868.3	3830.5	3730.7	3635.5	3576.5	3250.0	2900.8	2820.7	2875.1	2949.2	2757.2
50°	4267.4	4163.0	4017.9	3960.5	4082.9	3830.5	3281.8	3204.7	3201.6	3244.0	2999.1
52.5°	4448.7	4259.8	4178.2	4226.5	4442.7	4370.1	3692.9	3582.6	3538.7	3543.3	3224.3
55°	4229.6	4208.4	4252.2	4403.4	4686.1	4643.7	4087.5	3951.4	3886.4	3804.8	3440.5
57.5°	3980.1	4045.1	4219.0	4507.7	4994.4	4929.4	4476.0	4321.8	4202.4	4014.9	3680.8
60°	3750.4	3816.9	4104.1	4531.9	5163.8	5204.6	4799.4	4652.8	4476.0	4229.6	3945.4
62.5°	3401.2	3452.6	3856.2	4497.1	5089.7	5364.8	5024.7	4914.3	4749.6	4433.6	4249.2
65°	3008.2	3041.4	3440.5	4219.0	4944.6	5346.7	5210.6	5148.6	4988.4	4646.8	4550.0
67.5°	2577.3	2616.6	2949.2	3718.6	4660.4	5262.0	5386.0	5379.9	5197.0	4882.6	4767.7
70°	2081.5	2084.5	2359.7	3083.7	4164.6	5092.7	5603.6	5617.2	5396.5	5059.4	4776.8
72.5°	996.2	1077.8	1529.8	2152.6	3384.6	4760.1	5745.7	5813.8	5522.0	5053.4	4261.3
75°	228.3	235.8	445.9	1023.4	1984.8	3653.6	5390.5	5517.5	5216.7	4370.1	3002.1
77.5°	83.1	87.7	125.5	299.3	763.4	1888.0	3857.7	4043.6	3856.2	2825.2	1419.4
80°	55.9	54.4	65.0	133.0	350.7	535.1	1972.7	2083.0	1901.6	964.4	340.1
82.5°	28.7	30.2	45.3	74.1	235.8	185.9	659.1	716.5	589.5	193.5	63.5
85°	13.6	13.6	25.7	46.9	99.8	65.0	146.6	176.9	158.7	84.7	21.2
87.5°	13.6	13.6	24.2	30.2	51.4	27.2	36.3	45.3	42.3	45.3	7.6
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°	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3	1014.3
2.5°	1006.8	1005.2	1003.7	1006.8	1005.2	1008.3	1008.3	1011.3	1011.3	1008.3	1006.8
5°	993.1	990.1	987.1	987.1	985.6	988.6	997.7	1005.2	1006.8	1002.2	1000.7
7.5°	994.7	994.7	991.6	985.6	975.0	975.0	975.0	984.1	988.6	985.6	984.1
10°	1021.9	1023.4	1015.8	1002.2	984.1	967.4	935.7	888.8	845.0	832.9	828.4
12.5°	1068.7	1070.2	1055.1	1030.9	993.1	894.9	774.0	662.1	575.9	551.7	547.2
15°	1124.7	1126.2	1099.0	1059.7	944.8	716.5	536.6	409.7	334.1	315.9	314.4
17.5°	1182.1	1179.1	1138.3	1062.7	801.2	507.9	326.5	261.5	241.9	237.3	238.8
20°	1238.0	1229.0	1173.0	1006.8	616.7	332.6	238.8	223.7	219.2	216.2	216.2
22.5°	1289.4	1271.3	1201.8	896.4	432.3	238.8	213.1	210.1	204.1	199.5	198.0
25°	1340.8	1315.1	1219.9	752.8	290.2	208.6	201.0	195.0	187.4	181.4	179.9
27.5°	1402.8	1366.5	1210.8	571.4	217.7	193.5	187.4	178.4	167.8	158.7	155.7
30°	1461.8	1420.9	1159.4	394.5	185.9	178.4	169.3	155.7	142.1	131.5	128.5
32.5°	1535.8	1489.0	1067.2	258.5	161.7	155.7	146.6	130.0	111.9	99.8	96.7
35°	1641.6	1588.7	949.3	181.4	142.1	131.5	119.4	101.3	81.6	72.6	71.0
37.5°	1789.8	1718.7	801.2	146.6	125.5	110.3	92.2	74.1	60.5	52.9	51.4
40°	1971.2	1862.3	636.4	130.0	111.9	92.2	69.5	52.9	43.8	37.8	37.8
42.5°	2167.7	1996.9	468.6	119.4	98.3	75.6	51.4	37.8	31.7	28.7	27.2
45°	2370.2	2116.3	315.9	110.3	86.2	57.4	36.3	25.7	21.2	21.2	19.7
47.5°	2580.4	2196.4	204.1	99.8	72.6	42.3	24.2	18.1	15.1	15.1	15.1
50°	2789.0	2238.7	145.1	90.7	59.0	28.7	18.1	13.6	12.1	12.1	12.1
52.5°	2940.1	2211.5	116.4	78.6	45.3	21.2	13.6	10.6	9.1	9.1	9.1
55°	3071.6	2164.7	101.3	68.0	33.3	15.1	10.6	9.1	7.6	7.6	7.6
57.5°	3206.2	2104.2	90.7	57.4	24.2	10.6	7.6	6.0	6.0	6.0	6.0
60°	3328.6	2001.4	78.6	45.3	16.6	7.6	6.0	4.5	4.5	4.5	4.5
62.5°	3448.0	1913.7	68.0	34.8	12.1	6.0	3.0	3.0	1.5	1.5	1.5
65°	3516.1	1795.8	54.4	22.7	7.6	4.5	1.5	1.5	0.0	0.0	0.0
67.5°	3494.9	1655.2	37.8	13.6	4.5	3.0	1.5	0.0	0.0	0.0	0.0
70°	3348.3	1466.3	22.7	7.6	4.5	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	2804.1	1085.4	13.6	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0
75°	1872.9	498.8	7.6	4.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	857.1	149.7	4.5	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	172.3	39.3	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.3	7.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	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)