

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: P397997

Luminaire Tested: **ARCH-S-PA1-70-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397997  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-750-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6872 lumens  
Efficiency: N/A  
Efficacy: 92.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

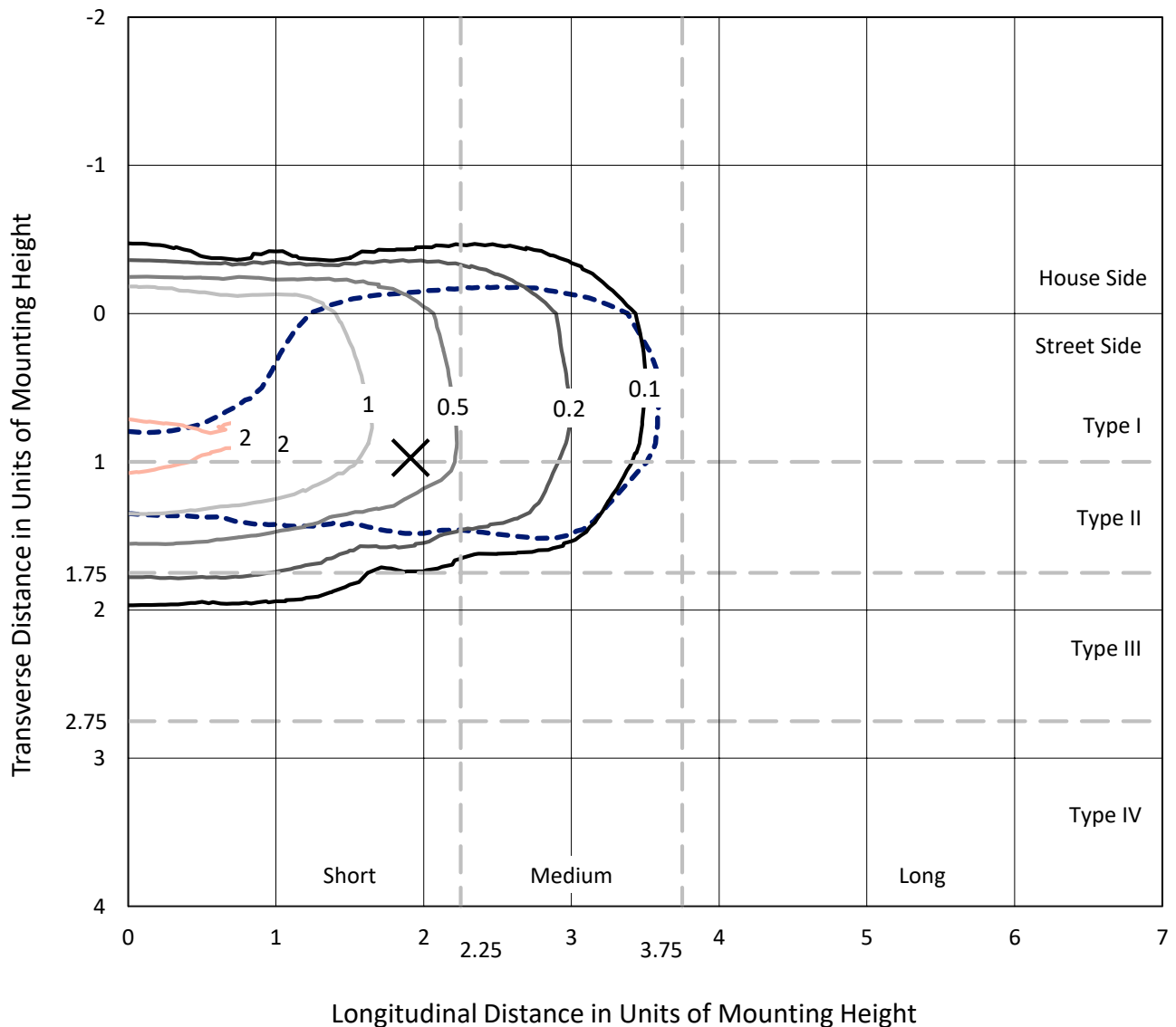
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

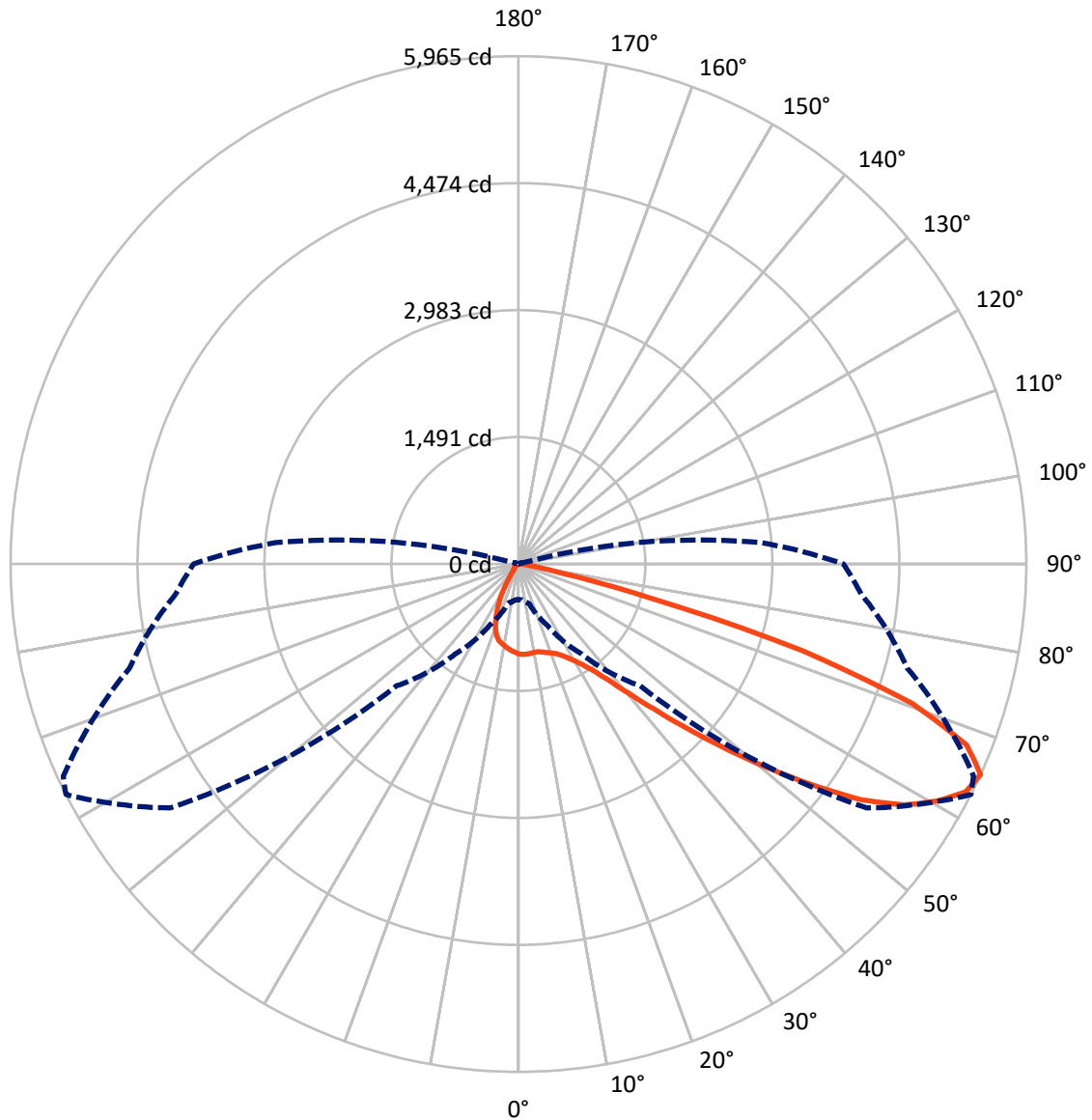
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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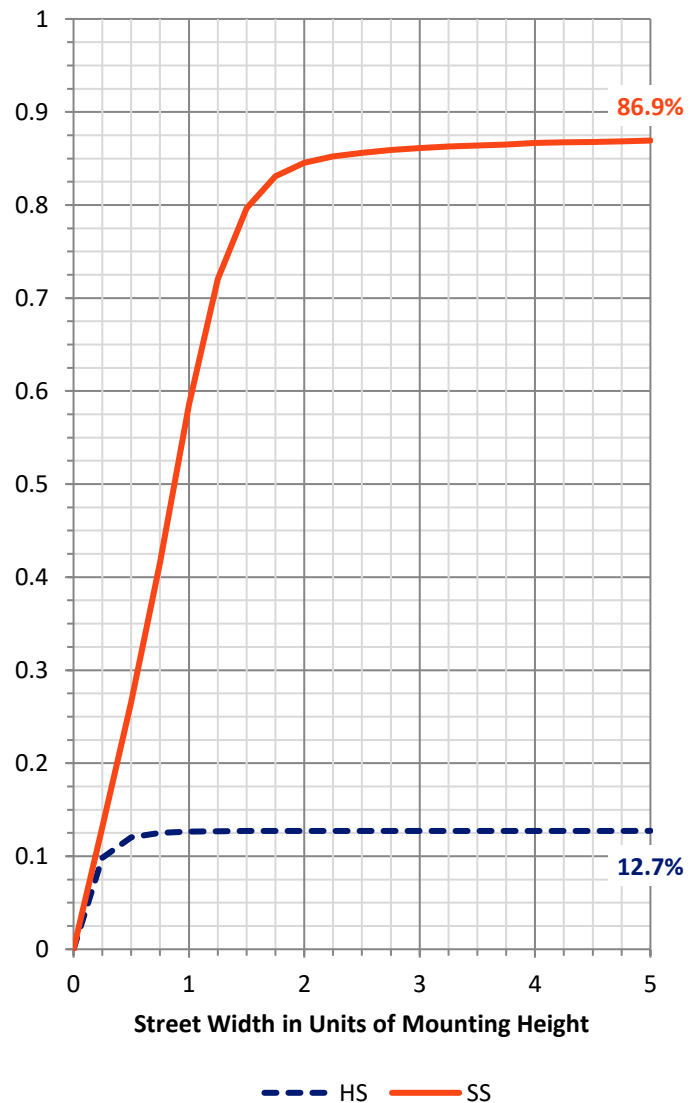
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	884.4	0.0	884.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	5987.6	0.0	5987.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	6872.0	0.0	6872.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.6	1.4
10°-20°	238.3	3.5
20°-30°	353.2	5.1
30°-40°	655.8	9.5
40°-50°	1389.3	20.2
50°-60°	1921.0	28.0
60°-70°	1537.8	22.4
70°-80°	638.9	9.3
80°-90°	41.0	0.6
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°	6872.0	100.0
0°-180°	6872.0	100.0



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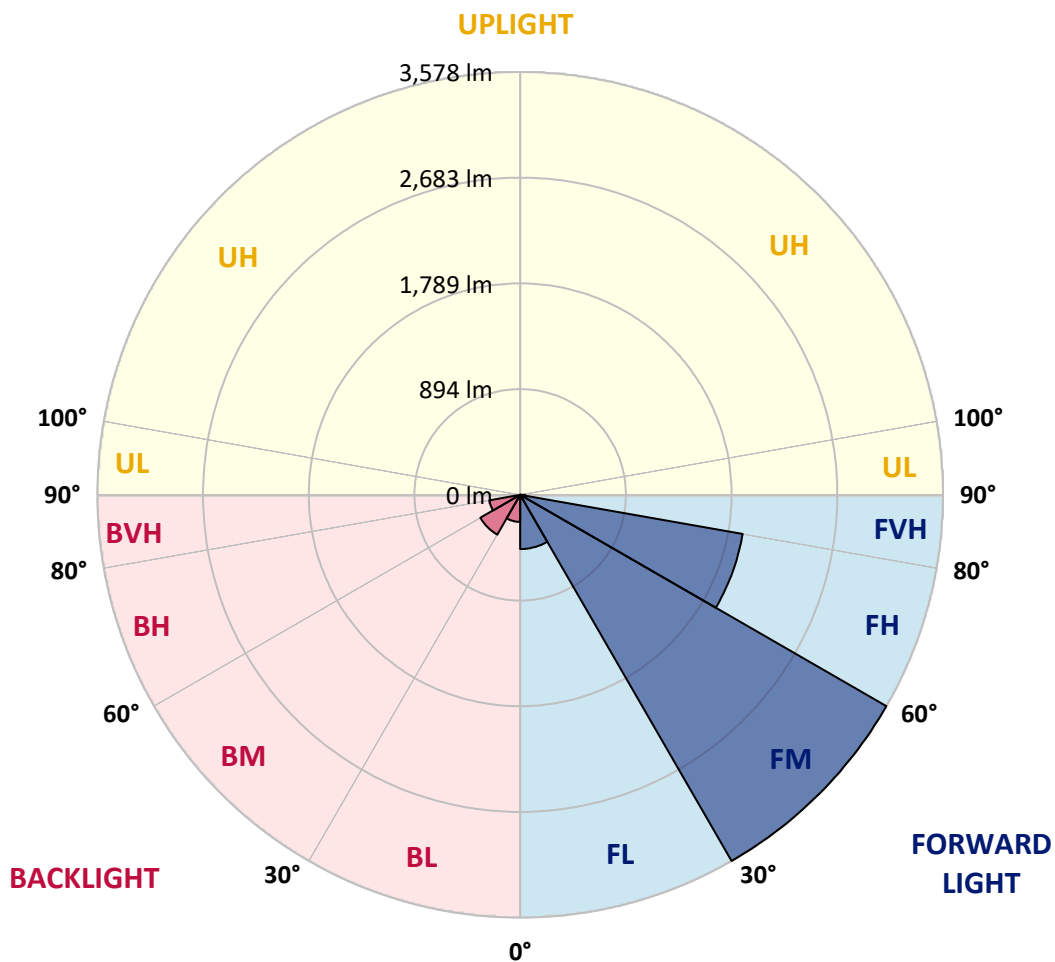
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	458.9	6.7			
FM (30°-60°)	3577.6	52.1			
FH (60°-80°)	1912.0	27.8			G2/5000
FVH (80°-90°)	39.2	0.6			G1/100
BL (0°-30°)	229.2	3.3	B1/500		
BM (30°-60°)	388.5	5.7	B1/1000		
BH (60°-80°)	264.8	3.9	B1/500		G1/500
BVH (80°-90°)	1.9	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6
2.5°	1076.8	1074.2	1071.6	1070.3	1070.3	1069.0	1063.8	1062.5	1059.9	1057.3	1054.7
5°	1066.4	1062.5	1061.2	1062.5	1063.8	1066.4	1063.8	1063.8	1061.2	1058.6	1053.4
7.5°	1040.5	1037.9	1039.2	1043.1	1044.4	1053.4	1054.7	1058.6	1058.6	1056.0	1052.1
10°	1009.3	1008.0	1008.0	1014.5	1021.0	1034.0	1043.1	1053.4	1054.7	1054.7	1048.3
12.5°	986.0	984.7	988.6	996.4	1009.3	1026.2	1041.8	1057.3	1059.9	1061.2	1050.9
15°	971.7	971.7	976.9	992.5	1010.6	1034.0	1052.1	1072.9	1075.5	1074.2	1059.9
17.5°	958.7	960.0	970.4	996.4	1017.1	1048.3	1070.3	1093.7	1095.0	1093.7	1070.3
20°	953.6	956.1	971.7	1005.4	1028.8	1063.8	1092.4	1115.7	1117.0	1111.8	1080.7
22.5°	967.8	969.1	988.6	1024.9	1047.0	1085.9	1122.2	1144.3	1145.6	1137.8	1096.3
25°	1017.1	1017.1	1034.0	1065.1	1084.6	1123.5	1162.4	1188.4	1188.4	1179.3	1131.3
27.5°	1132.6	1122.2	1118.3	1127.4	1133.9	1175.4	1216.9	1249.3	1248.0	1235.1	1176.7
30°	1355.7	1329.8	1288.3	1241.6	1218.2	1246.8	1285.7	1327.2	1325.9	1305.1	1232.5
32.5°	1730.7	1693.0	1594.4	1471.2	1371.3	1338.9	1375.2	1420.6	1421.9	1397.2	1322.0
35°	2256.1	2196.4	2020.0	1848.7	1620.4	1497.1	1507.5	1556.8	1572.4	1559.4	1472.5
37.5°	2762.1	2707.6	2538.9	2301.5	1991.4	1739.7	1695.6	1738.4	1756.6	1756.6	1664.5
40°	3271.9	3208.3	3059.1	2820.4	2493.5	2118.6	1960.3	1995.3	2014.8	2018.7	1898.0
42.5°	3680.6	3639.1	3524.9	3339.4	3033.2	2782.8	2341.7	2322.3	2340.4	2326.1	2169.2
45°	3963.4	3931.0	3851.8	3781.8	3632.6	3506.7	2851.6	2720.5	2732.2	2682.9	2474.0
47.5°	4021.8	3985.5	3968.6	4065.9	4172.3	4203.4	3478.2	3194.1	3182.4	3073.4	2790.6
50°	3767.5	3771.4	3833.7	4111.3	4555.0	4835.2	4204.7	3728.6	3685.8	3443.2	3085.1
52.5°	3218.7	3281.0	3438.0	3888.1	4671.7	5294.5	4931.2	4295.5	4229.4	3802.5	3305.6
55°	2518.2	2598.6	2856.8	3374.4	4427.8	5499.5	5543.6	4884.5	4734.0	4072.4	3476.9
57.5°	1872.1	1896.7	2197.7	2669.9	3850.5	5298.4	5857.5	5338.6	5145.3	4287.7	3646.8
60°	1166.3	1181.9	1499.7	2032.9	2916.4	4555.0	5857.5	5651.2	5467.0	4481.0	3802.5
62.5°	725.2	730.4	849.8	1393.4	1982.3	3378.3	5614.9	5893.8	5746.0	4619.9	3936.2
65°	417.7	422.9	478.7	787.5	1289.6	2022.6	4994.8	5965.2	5899.0	4730.1	4039.9
67.5°	304.9	307.5	329.5	442.4	843.3	1039.2	3751.9	5678.5	5761.5	4784.6	4037.3
70°	264.7	268.6	297.1	345.1	608.5	638.3	1909.7	4904.0	5136.2	4706.8	3916.7
72.5°	203.7	208.9	251.7	324.3	446.3	459.3	691.5	3489.9	3841.4	4220.3	3585.9
75°	140.1	145.3	188.1	267.3	368.4	343.8	380.1	1606.1	2026.5	2830.8	2729.6
77.5°	89.5	90.8	118.1	194.6	317.9	243.9	260.8	524.1	735.6	1280.5	1288.3
80°	59.7	61.0	72.7	125.8	218.0	225.7	160.9	242.6	266.0	373.6	259.5
82.5°	36.3	36.3	49.3	79.1	132.3	186.8	105.1	127.1	136.2	144.0	67.5
85°	14.3	14.3	29.8	51.9	83.0	86.9	66.2	73.9	77.8	84.3	31.1
87.5°	3.9	3.9	16.9	28.5	36.3	40.2	40.2	36.3	38.9	48.0	15.6
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°	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6	1058.6
2.5°	1053.4	1049.6	1044.4	1039.2	1034.0	1030.1	1026.2	1026.2	1023.6	1019.7	1017.1
5°	1050.9	1044.4	1032.7	1023.6	1009.3	999.0	991.2	984.7	980.8	971.7	970.4
7.5°	1047.0	1039.2	1022.3	1004.1	980.8	962.6	944.5	931.5	918.5	908.1	905.5
10°	1040.5	1031.4	1006.7	980.8	948.4	914.6	871.8	822.5	777.1	751.2	743.4
12.5°	1040.5	1028.8	996.4	961.3	914.6	831.6	722.6	613.6	529.3	491.7	481.3
15°	1047.0	1031.4	988.6	940.6	853.7	685.0	508.6	364.6	272.4	243.9	237.4
17.5°	1053.4	1031.4	976.9	912.0	742.1	496.9	289.3	192.0	162.2	155.7	155.7
20°	1056.0	1028.8	961.3	858.8	592.9	308.8	172.5	144.0	132.3	128.4	128.4
22.5°	1066.4	1030.1	949.7	782.3	430.7	181.6	136.2	120.7	109.0	105.1	105.1
25°	1092.4	1045.7	952.3	685.0	276.3	137.5	115.5	99.9	88.2	83.0	83.0
27.5°	1133.9	1080.7	966.5	572.1	173.8	118.1	97.3	80.4	71.4	66.2	66.2
30°	1180.6	1119.6	973.0	442.4	129.7	99.9	79.1	63.6	57.1	53.2	51.9
32.5°	1262.3	1187.1	967.8	303.6	106.4	84.3	63.6	50.6	45.4	44.1	44.1
35°	1393.4	1305.1	957.4	190.7	88.2	67.5	50.6	41.5	37.6	36.3	35.0
37.5°	1571.1	1477.7	926.3	125.8	72.7	53.2	41.5	35.0	31.1	29.8	29.8
40°	1787.7	1674.9	866.6	96.0	62.3	42.8	35.0	29.8	27.2	25.9	25.9
42.5°	2035.5	1894.1	771.9	83.0	51.9	36.3	29.8	24.6	23.4	22.1	22.1
45°	2306.7	2123.8	640.9	73.9	44.1	29.8	24.6	22.1	19.5	19.5	18.2
47.5°	2594.7	2354.7	493.0	64.9	37.6	25.9	22.1	18.2	16.9	15.6	15.6
50°	2872.3	2561.0	346.4	55.8	31.1	22.1	18.2	15.6	14.3	13.0	13.0
52.5°	3068.2	2685.5	245.2	48.0	25.9	19.5	14.3	11.7	10.4	10.4	10.4
55°	3225.2	2763.3	171.2	40.2	22.1	16.9	11.7	9.1	9.1	7.8	7.8
57.5°	3373.1	2813.9	125.8	33.7	18.2	13.0	9.1	6.5	6.5	5.2	5.2
60°	3526.2	2841.2	96.0	27.2	15.6	10.4	6.5	5.2	3.9	3.9	3.9
62.5°	3680.6	2858.1	73.9	22.1	13.0	7.8	5.2	3.9	2.6	1.3	1.3
65°	3815.5	2863.2	57.1	16.9	10.4	5.2	3.9	1.3	0.0	0.0	0.0
67.5°	3855.7	2803.6	44.1	13.0	7.8	3.9	2.6	0.0	0.0	0.0	0.0
70°	3746.7	2645.3	33.7	10.4	6.5	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	3325.1	2218.5	25.9	6.5	5.2	2.6	1.3	0.0	0.0	0.0	0.0
75°	2379.3	1183.2	18.2	5.2	3.9	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	1095.0	458.0	13.0	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
80°	214.1	114.2	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	49.3	19.5	2.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.9	6.5	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	2.6	1.3	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)