

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: P397547

Luminaire Tested: **ARCH-S-PA1-100-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397547  
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-PA1-100-730-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1200mA 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: 7323 lumens  
Efficiency: N/A  
Efficacy: 76.3 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): 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

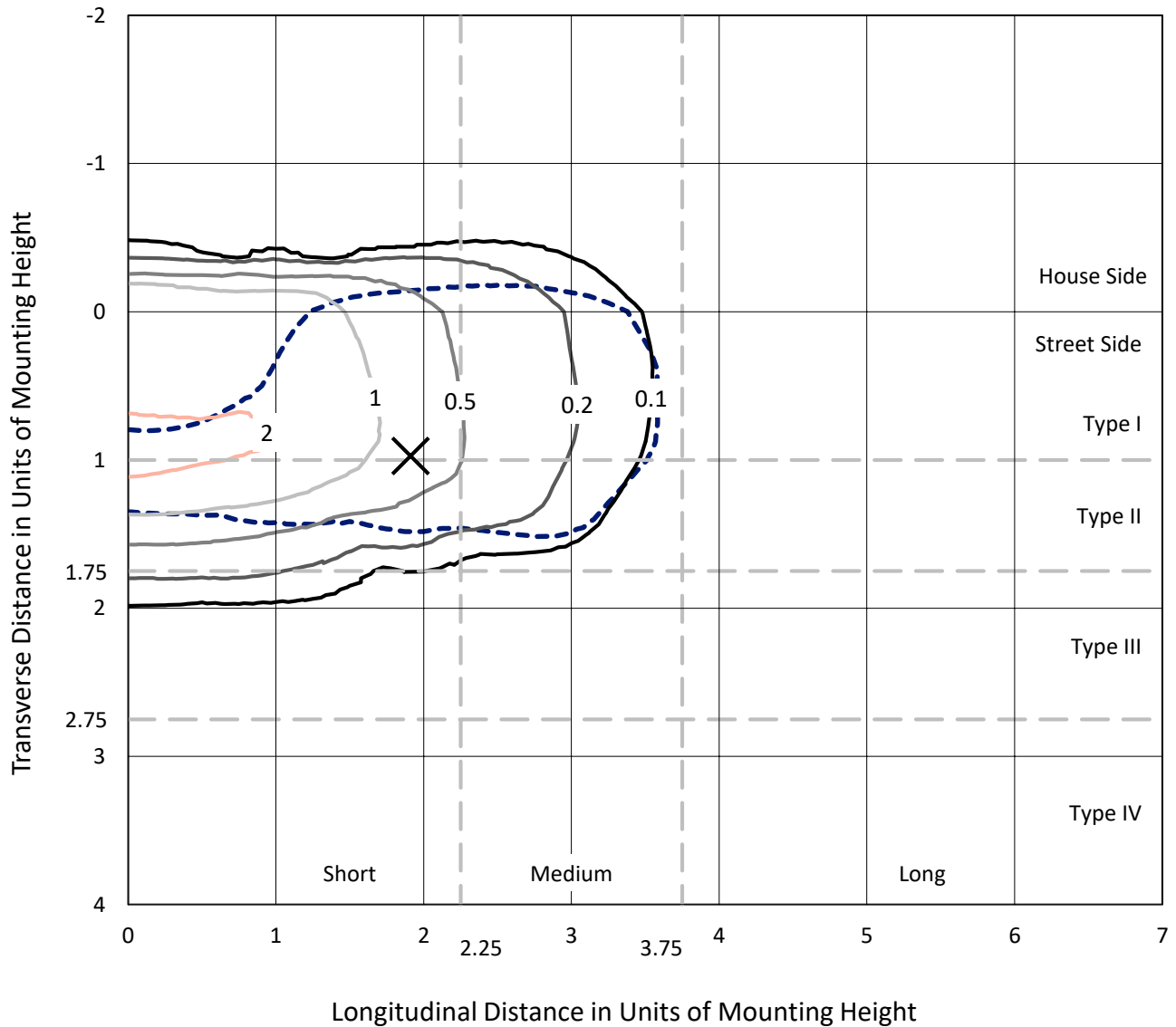


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

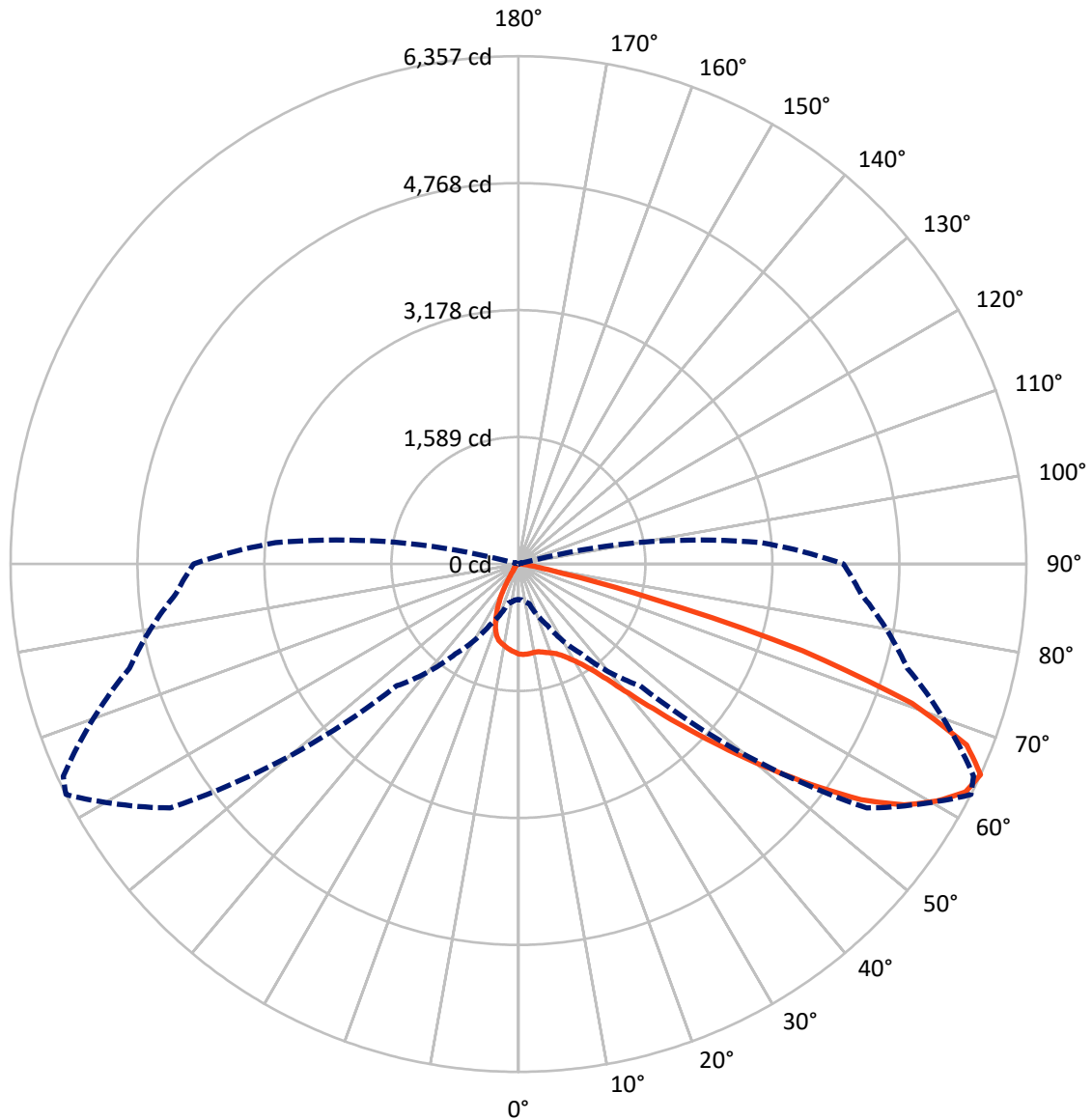


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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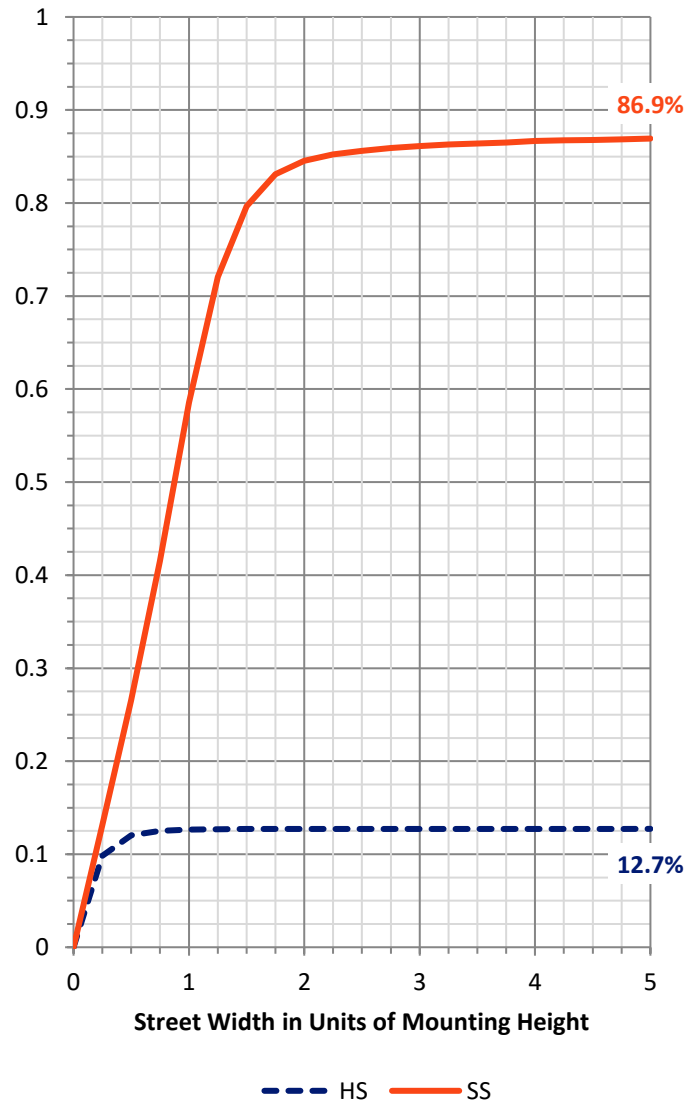
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	942.5	0.0	942.5
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	6380.5	0.0	6380.5
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	7323.0	0.0	7323.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.9	1.4
10°-20°	253.9	3.5
20°-30°	376.4	5.1
30°-40°	698.8	9.5
40°-50°	1480.5	20.2
50°-60°	2047.1	28.0
60°-70°	1638.8	22.4
70°-80°	680.9	9.3
80°-90°	43.7	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°	7323.0	100.0
0°-180°	7323.0	100.0

**Coefficient of Utilization**



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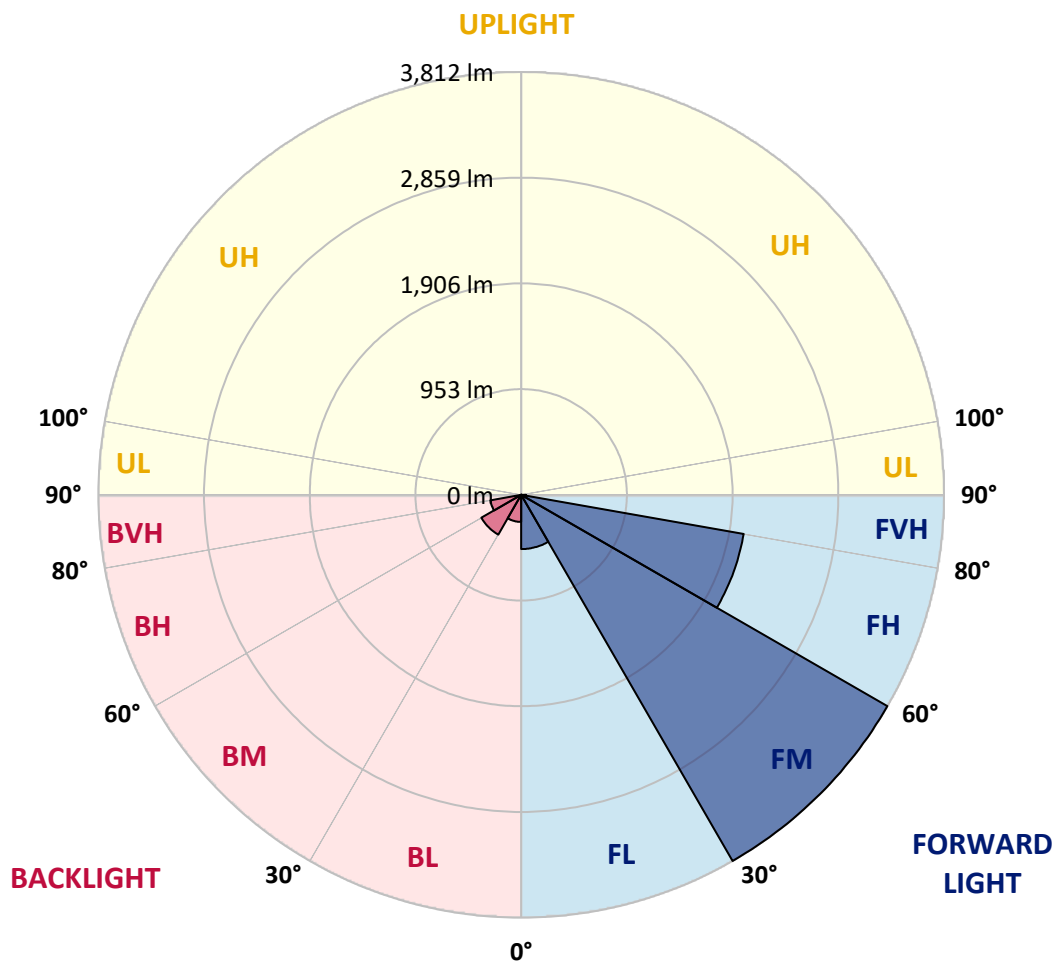
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	489.0	6.7			
FM	(30°-60°)	3812.4	52.1			
FH	(60°-80°)	2037.4	27.8			G2/5000
FVH	(80°-90°)	41.7	0.6			G1/100
BL	(0°-30°)	244.3	3.3	B1/500		
BM	(30°-60°)	414.0	5.7	B1/1000		
BH	(60°-80°)	282.2	3.9	B1/500		G1/500
BVH	(80°-90°)	2.0	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°	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1
2.5°	1147.5	1144.7	1141.9	1140.6	1140.6	1139.2	1133.6	1132.3	1129.5	1126.7	1124.0
5°	1136.4	1132.3	1130.9	1132.3	1133.6	1136.4	1133.6	1133.6	1130.9	1128.1	1122.6
7.5°	1108.8	1106.0	1107.4	1111.5	1112.9	1122.6	1124.0	1128.1	1128.1	1125.3	1121.2
10°	1075.6	1074.2	1074.2	1081.1	1088.0	1101.8	1111.5	1122.6	1124.0	1124.0	1117.1
12.5°	1050.7	1049.3	1053.5	1061.8	1075.6	1093.5	1110.1	1126.7	1129.5	1130.9	1119.8
15°	1035.5	1035.5	1041.0	1057.6	1077.0	1101.8	1121.2	1143.3	1146.1	1144.7	1129.5
17.5°	1021.7	1023.0	1034.1	1061.8	1083.9	1117.1	1140.6	1165.4	1166.8	1165.4	1140.6
20°	1016.1	1018.9	1035.5	1071.4	1096.3	1133.6	1164.1	1188.9	1190.3	1184.8	1151.6
22.5°	1031.3	1032.7	1053.5	1092.2	1115.7	1157.1	1195.9	1219.4	1220.7	1212.4	1168.2
25°	1083.9	1083.9	1101.8	1135.0	1155.8	1197.2	1238.7	1266.4	1266.4	1256.7	1205.5
27.5°	1206.9	1195.9	1191.7	1201.4	1208.3	1252.5	1296.8	1331.3	1330.0	1316.1	1253.9
30°	1444.7	1417.1	1372.8	1323.0	1298.2	1328.6	1370.0	1414.3	1412.9	1390.8	1313.4
32.5°	1844.2	1804.1	1699.1	1567.7	1461.3	1426.7	1465.4	1513.8	1515.2	1488.9	1408.8
35°	2404.2	2340.6	2152.5	1970.0	1726.7	1595.4	1606.5	1659.0	1675.6	1661.8	1569.1
37.5°	2943.3	2885.3	2705.5	2452.5	2122.1	1853.9	1806.9	1852.5	1871.9	1871.9	1773.7
40°	3486.6	3418.9	3259.9	3005.5	2657.1	2257.6	2088.9	2126.3	2147.0	2151.2	2022.6
42.5°	3922.1	3877.9	3756.2	3558.5	3232.3	2965.4	2495.4	2474.7	2494.0	2478.8	2311.5
45°	4223.5	4188.9	4104.6	4030.0	3871.0	3736.9	3038.7	2899.1	2911.5	2859.0	2636.4
47.5°	4285.7	4247.0	4229.0	4332.7	4446.1	4479.3	3706.5	3403.7	3391.2	3275.1	2973.7
50°	4014.8	4018.9	4085.3	4381.1	4853.9	5152.5	4480.7	3973.3	3927.7	3669.1	3287.6
52.5°	3430.0	3496.3	3663.6	4143.3	4978.3	5641.9	5254.8	4577.4	4506.9	4052.1	3522.6
55°	2683.4	2769.1	3044.2	3595.9	4718.4	5860.4	5907.4	5205.1	5044.7	4339.6	3705.1
57.5°	1994.9	2021.2	2341.9	2845.2	4103.2	5646.1	6241.9	5688.9	5483.0	4569.1	3886.2
60°	1242.9	1259.4	1598.2	2166.4	3107.8	4853.9	6241.9	6022.1	5825.8	4775.1	4052.1
62.5°	772.8	778.3	905.5	1484.8	2112.4	3600.0	5983.4	6280.7	6123.0	4923.0	4194.5
65°	445.2	450.7	510.1	839.2	1374.2	2155.3	5322.6	6356.7	6286.2	5040.6	4305.1
67.5°	324.9	327.7	351.2	471.4	898.6	1107.4	3998.2	6051.2	6139.6	5098.6	4302.3
70°	282.0	286.2	316.6	367.7	648.4	680.2	2035.0	5225.8	5473.3	5015.7	4173.7
72.5°	217.1	222.6	268.2	345.6	475.6	489.4	736.9	3718.9	4093.6	4497.2	3821.2
75°	149.3	154.8	200.5	284.8	392.6	366.4	405.1	1711.5	2159.4	3016.6	2908.8
77.5°	95.4	96.8	125.8	207.4	338.7	259.9	277.9	558.5	783.9	1364.5	1372.8
80°	63.6	65.0	77.4	134.1	232.3	240.6	171.4	258.5	283.4	398.2	276.5
82.5°	38.7	38.7	52.5	84.3	141.0	199.1	112.0	135.5	145.2	153.5	71.9
85°	15.2	15.2	31.8	55.3	88.5	92.6	70.5	78.8	82.9	89.9	33.2
87.5°	4.1	4.1	18.0	30.4	38.7	42.9	42.9	38.7	41.5	51.2	16.6
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°	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1	1128.1
2.5°	1122.6	1118.4	1112.9	1107.4	1101.8	1097.7	1093.5	1093.5	1090.8	1086.6	1083.9
5°	1119.8	1112.9	1100.5	1090.8	1075.6	1064.5	1056.2	1049.3	1045.2	1035.5	1034.1
7.5°	1115.7	1107.4	1089.4	1070.0	1045.2	1025.8	1006.5	992.6	978.8	967.7	965.0
10°	1108.8	1099.1	1072.8	1045.2	1010.6	974.7	929.0	876.5	828.1	800.5	792.2
12.5°	1108.8	1096.3	1061.8	1024.4	974.7	886.2	770.0	653.9	564.1	524.0	512.9
15°	1115.7	1099.1	1053.5	1002.3	909.7	730.0	541.9	388.5	290.3	259.9	253.0
17.5°	1122.6	1099.1	1041.0	971.9	790.8	529.5	308.3	204.6	172.8	165.9	165.9
20°	1125.3	1096.3	1024.4	915.2	631.8	329.0	183.9	153.5	141.0	136.9	136.9
22.5°	1136.4	1097.7	1012.0	833.6	459.0	193.5	145.2	128.6	116.1	112.0	112.0
25°	1164.1	1114.3	1014.7	730.0	294.5	146.5	123.0	106.5	94.0	88.5	88.5
27.5°	1208.3	1151.6	1030.0	609.7	185.3	125.8	103.7	85.7	76.0	70.5	70.5
30°	1258.1	1193.1	1036.9	471.4	138.2	106.5	84.3	67.7	60.8	56.7	55.3
32.5°	1345.2	1265.0	1031.3	323.5	113.4	89.9	67.7	53.9	48.4	47.0	47.0
35°	1484.8	1390.8	1020.3	203.2	94.0	71.9	53.9	44.2	40.1	38.7	37.3
37.5°	1674.2	1574.7	987.1	134.1	77.4	56.7	44.2	37.3	33.2	31.8	31.8
40°	1905.1	1784.8	923.5	102.3	66.4	45.6	37.3	31.8	29.0	27.6	27.6
42.5°	2169.1	2018.4	822.6	88.5	55.3	38.7	31.8	26.3	24.9	23.5	23.5
45°	2458.1	2263.1	683.0	78.8	47.0	31.8	26.3	23.5	20.7	20.7	19.4
47.5°	2765.0	2509.2	525.3	69.1	40.1	27.6	23.5	19.4	18.0	16.6	16.6
50°	3060.8	2729.0	369.1	59.4	33.2	23.5	19.4	16.6	15.2	13.8	13.8
52.5°	3269.6	2861.8	261.3	51.2	27.6	20.7	15.2	12.4	11.1	11.1	11.1
55°	3436.9	2944.7	182.5	42.9	23.5	18.0	12.4	9.7	9.7	8.3	8.3
57.5°	3594.5	2998.6	134.1	35.9	19.4	13.8	9.7	6.9	6.9	5.5	5.5
60°	3757.6	3027.7	102.3	29.0	16.6	11.1	6.9	5.5	4.1	4.1	4.1
62.5°	3922.1	3045.6	78.8	23.5	13.8	8.3	5.5	4.1	2.8	1.4	1.4
65°	4065.9	3051.2	60.8	18.0	11.1	5.5	4.1	1.4	0.0	0.0	0.0
67.5°	4108.8	2987.6	47.0	13.8	8.3	4.1	2.8	0.0	0.0	0.0	0.0
70°	3992.6	2818.9	35.9	11.1	6.9	2.8	1.4	0.0	0.0	0.0	0.0
72.5°	3543.3	2364.1	27.6	6.9	5.5	2.8	1.4	0.0	0.0	0.0	0.0
75°	2535.5	1260.8	19.4	5.5	4.1	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	1166.8	488.0	13.8	4.1	2.8	1.4	0.0	0.0	0.0	0.0	0.0
80°	228.1	121.7	5.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.5	20.7	2.8	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.0	6.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	2.8	1.4	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)