

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: P398051

Luminaire Tested: **ARCH-S-PA1-80-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398051  
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-PA1-80-730-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1050mA 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: 6763 lumens  
Efficiency: N/A  
Efficacy: 81.5 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

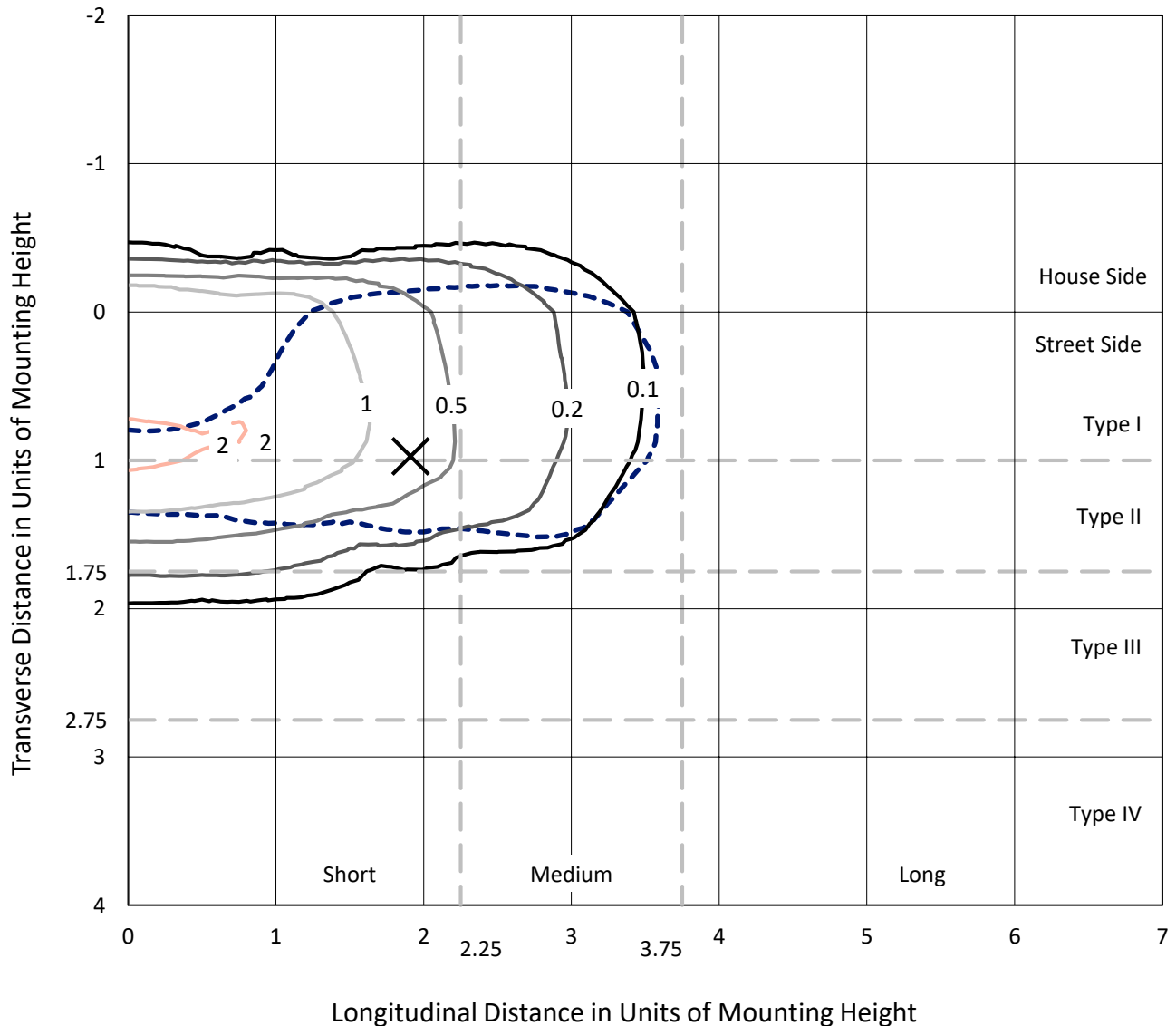
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P398051  
 CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

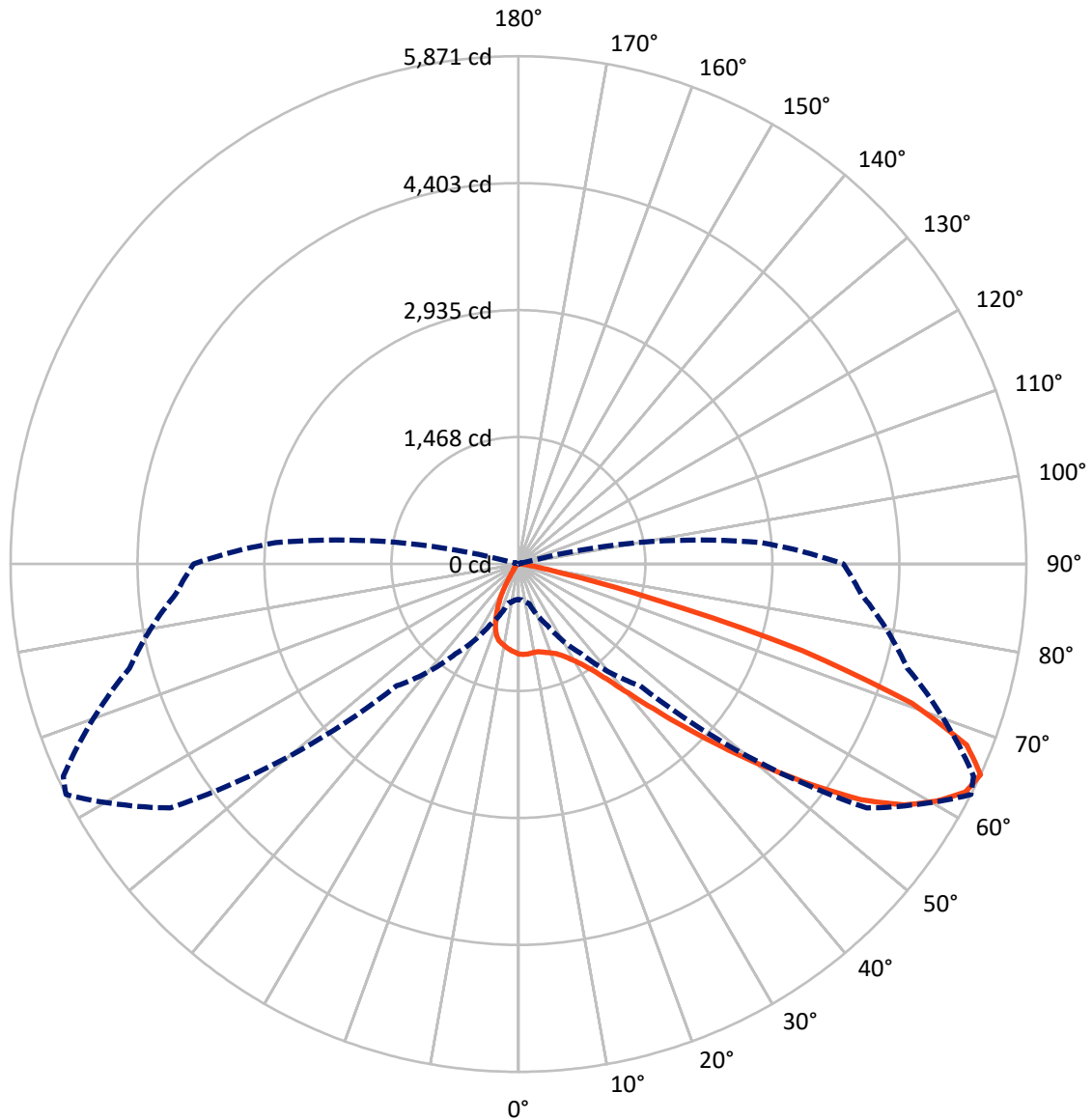
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P398051  
CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P398051

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

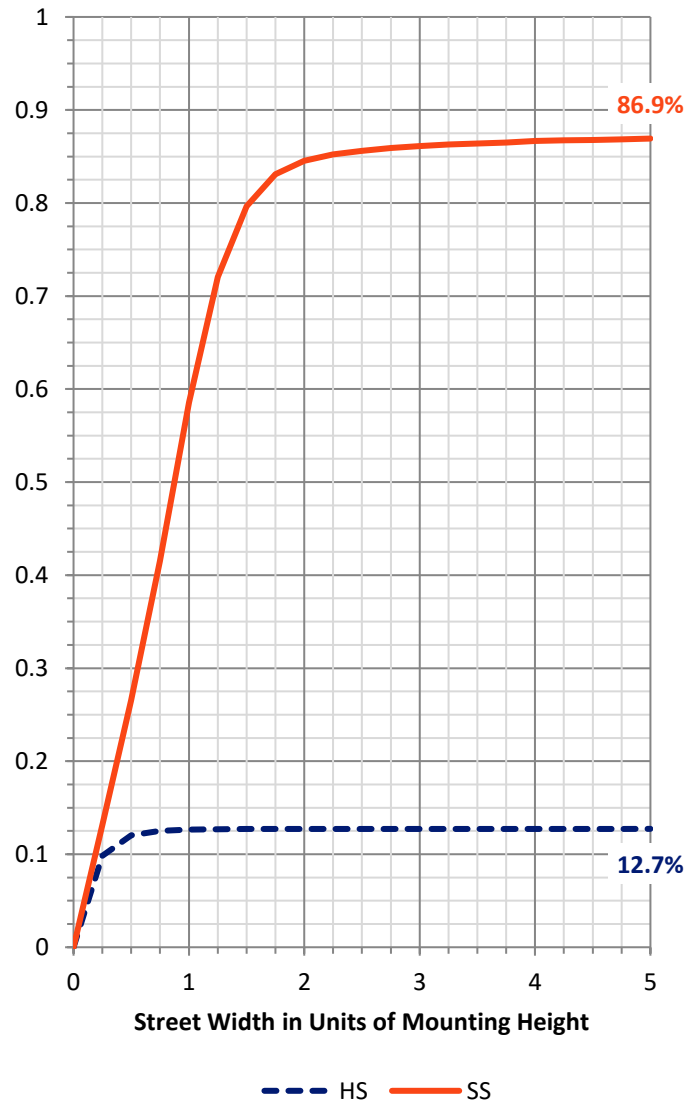
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	870.4	0.0	870.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	5892.6	0.0	5892.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	6763.0	0.0	6763.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	1.4
10°-20°	234.5	3.5
20°-30°	347.6	5.1
30°-40°	645.4	9.5
40°-50°	1367.3	20.2
50°-60°	1890.5	28.0
60°-70°	1513.4	22.4
70°-80°	628.8	9.3
80°-90°	40.4	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°	6763.0	100.0
0°-180°	6763.0	100.0



REPORT NUMBER: P398051

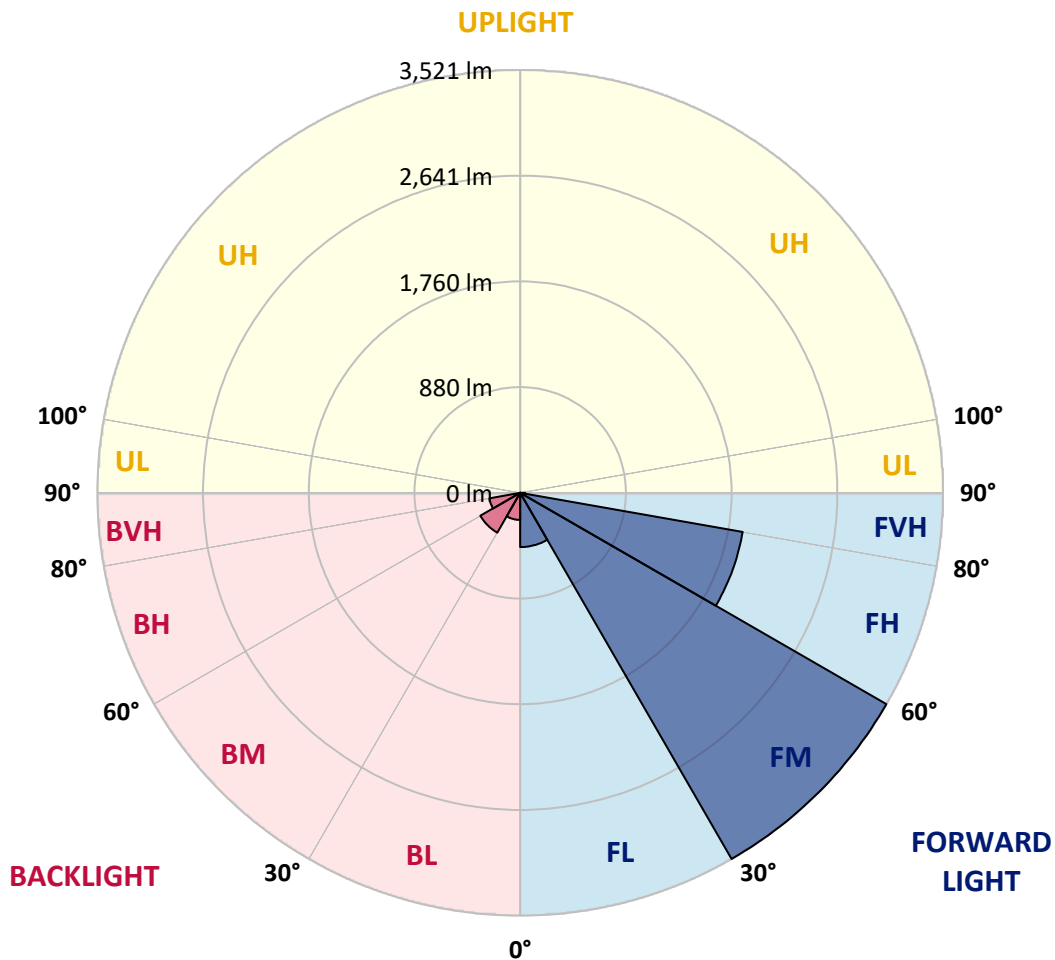
CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.6	6.7			
FM	(30°-60°)	3520.8	52.1			
FH	(60°-80°)	1881.6	27.8			G2/5000
FVH	(80°-90°)	38.5	0.6			G1/100
BL	(0°-30°)	225.6	3.3	B1/500		
BM	(30°-60°)	382.3	5.7	B1/1000		
BH	(60°-80°)	260.6	3.9	B1/500		G1/500
BVH	(80°-90°)	1.8	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





REPORT NUMBER: P398051

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8
2.5°	1059.7	1057.2	1054.6	1053.3	1053.3	1052.1	1047.0	1045.7	1043.1	1040.6	1038.0
5°	1049.5	1045.7	1044.4	1045.7	1047.0	1049.5	1047.0	1047.0	1044.4	1041.8	1036.7
7.5°	1024.0	1021.4	1022.7	1026.5	1027.8	1036.7	1038.0	1041.8	1041.8	1039.3	1035.5
10°	993.3	992.0	992.0	998.4	1004.8	1017.6	1026.5	1036.7	1038.0	1038.0	1031.6
12.5°	970.3	969.1	972.9	980.6	993.3	1009.9	1025.2	1040.6	1043.1	1044.4	1034.2
15°	956.3	956.3	961.4	976.7	994.6	1017.6	1035.5	1055.9	1058.4	1057.2	1043.1
17.5°	943.5	944.8	955.0	980.6	1001.0	1031.6	1053.3	1076.3	1077.6	1076.3	1053.3
20°	938.4	941.0	956.3	989.5	1012.5	1047.0	1075.0	1098.0	1099.3	1094.2	1063.5
22.5°	952.5	953.7	972.9	1008.6	1030.4	1068.7	1104.4	1126.1	1127.4	1119.7	1078.9
25°	1001.0	1001.0	1017.6	1048.2	1067.4	1105.7	1144.0	1169.5	1169.5	1160.6	1113.3
27.5°	1114.6	1104.4	1100.6	1109.5	1115.9	1156.8	1197.6	1229.5	1228.3	1215.5	1158.0
30°	1334.2	1308.7	1267.8	1221.9	1198.9	1227.0	1265.3	1306.1	1304.9	1284.4	1212.9
32.5°	1703.2	1666.2	1569.1	1447.9	1349.5	1317.6	1353.4	1398.1	1399.3	1375.1	1301.0
35°	2220.3	2161.6	1987.9	1819.4	1594.7	1473.4	1483.6	1532.1	1547.4	1534.7	1449.1
37.5°	2718.2	2664.6	2498.6	2265.0	1959.8	1712.1	1668.7	1710.9	1728.7	1728.7	1638.1
40°	3220.0	3157.5	3010.6	2775.7	2454.0	2085.0	1929.2	1963.7	1982.8	1986.7	1867.9
42.5°	3622.2	3581.3	3469.0	3286.4	2985.1	2738.7	2304.6	2285.4	2303.3	2289.2	2134.8
45°	3900.5	3868.6	3790.7	3721.8	3575.0	3451.1	2806.3	2677.4	2688.9	2640.4	2434.8
47.5°	3958.0	3922.2	3905.6	4001.4	4106.1	4136.7	3423.0	3143.4	3131.9	3024.7	2746.3
50°	3707.7	3711.6	3772.9	4046.1	4482.7	4758.5	4138.0	3669.4	3627.3	3388.5	3036.2
52.5°	3167.7	3228.9	3383.4	3826.5	4597.6	5210.5	4853.0	4227.4	4162.3	3742.2	3253.2
55°	2478.2	2557.4	2811.4	3320.9	4357.6	5412.2	5455.6	4807.0	4658.9	4007.8	3421.7
57.5°	1842.4	1866.6	2162.8	2627.6	3789.5	5214.3	5764.6	5253.9	5063.7	4219.7	3589.0
60°	1147.8	1163.1	1475.9	2000.7	2870.2	4482.7	5764.6	5561.6	5380.3	4410.0	3742.2
62.5°	713.7	718.8	836.3	1371.3	1950.9	3324.7	5525.9	5800.4	5654.8	4546.6	3873.7
65°	411.1	416.2	471.1	775.0	1269.1	1990.5	4915.6	5870.6	5805.5	4655.1	3975.9
67.5°	300.0	302.6	324.3	435.4	829.9	1022.7	3692.4	5588.4	5670.1	4708.7	3973.3
70°	260.5	264.3	292.4	339.6	598.8	628.2	1879.4	4826.2	5054.7	4632.1	3854.6
72.5°	200.5	205.6	247.7	319.2	439.2	452.0	680.5	3434.5	3780.5	4153.3	3529.0
75°	137.9	143.0	185.1	263.0	362.6	338.3	374.1	1580.6	1994.3	2785.9	2686.3
77.5°	88.1	89.4	116.2	191.5	312.8	240.0	256.6	515.8	723.9	1260.2	1267.8
80°	58.7	60.0	71.5	123.8	214.5	222.2	158.3	238.8	261.7	367.7	255.4
82.5°	35.7	35.7	48.5	77.9	130.2	183.9	103.4	125.1	134.1	141.7	66.4
85°	14.0	14.0	29.4	51.1	81.7	85.5	65.1	72.8	76.6	83.0	30.6
87.5°	3.8	3.8	16.6	28.1	35.7	39.6	39.6	35.7	38.3	47.2	15.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P398051

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8	1041.8
2.5°	1036.7	1032.9	1027.8	1022.7	1017.6	1013.8	1009.9	1009.9	1007.4	1003.5	1001.0
5°	1034.2	1027.8	1016.3	1007.4	993.3	983.1	975.5	969.1	965.2	956.3	955.0
7.5°	1030.4	1022.7	1006.1	988.2	965.2	947.4	929.5	916.7	904.0	893.7	891.2
10°	1024.0	1015.0	990.8	965.2	933.3	900.1	858.0	809.5	764.8	739.2	731.6
12.5°	1024.0	1012.5	980.6	946.1	900.1	818.4	711.2	603.9	520.9	483.9	473.7
15°	1030.4	1015.0	972.9	925.7	840.1	674.1	500.5	358.8	268.1	240.0	233.6
17.5°	1036.7	1015.0	961.4	897.6	730.3	489.0	284.7	189.0	159.6	153.2	153.2
20°	1039.3	1012.5	946.1	845.2	583.5	303.9	169.8	141.7	130.2	126.4	126.4
22.5°	1049.5	1013.8	934.6	769.9	423.9	178.7	134.1	118.7	107.2	103.4	103.4
25°	1075.0	1029.1	937.1	674.1	272.0	135.3	113.6	98.3	86.8	81.7	81.7
27.5°	1115.9	1063.5	951.2	563.1	171.1	116.2	95.8	79.2	70.2	65.1	65.1
30°	1161.9	1101.9	957.6	435.4	127.7	98.3	77.9	62.6	56.2	52.3	51.1
32.5°	1242.3	1168.2	952.5	298.8	104.7	83.0	62.6	49.8	44.7	43.4	43.4
35°	1371.3	1284.4	942.3	187.7	86.8	66.4	49.8	40.9	37.0	35.7	34.5
37.5°	1546.2	1454.2	911.6	123.8	71.5	52.3	40.9	34.5	30.6	29.4	29.4
40°	1759.4	1648.3	852.9	94.5	61.3	42.1	34.5	29.4	26.8	25.5	25.5
42.5°	2003.3	1864.1	759.7	81.7	51.1	35.7	29.4	24.3	23.0	21.7	21.7
45°	2270.1	2090.1	630.7	72.8	43.4	29.4	24.3	21.7	19.2	19.2	17.9
47.5°	2553.5	2317.3	485.2	63.8	37.0	25.5	21.7	17.9	16.6	15.3	15.3
50°	2826.8	2520.3	340.9	54.9	30.6	21.7	17.9	15.3	14.0	12.8	12.8
52.5°	3019.6	2642.9	241.3	47.2	25.5	19.2	14.0	11.5	10.2	10.2	10.2
55°	3174.0	2719.5	168.5	39.6	21.7	16.6	11.5	8.9	8.9	7.7	7.7
57.5°	3319.6	2769.3	123.8	33.2	17.9	12.8	8.9	6.4	6.4	5.1	5.1
60°	3470.3	2796.1	94.5	26.8	15.3	10.2	6.4	5.1	3.8	3.8	3.8
62.5°	3622.2	2812.7	72.8	21.7	12.8	7.7	5.1	3.8	2.6	1.3	1.3
65°	3755.0	2817.8	56.2	16.6	10.2	5.1	3.8	1.3	0.0	0.0	0.0
67.5°	3794.6	2759.1	43.4	12.8	7.7	3.8	2.6	0.0	0.0	0.0	0.0
70°	3687.3	2603.3	33.2	10.2	6.4	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	3272.4	2183.3	25.5	6.4	5.1	2.6	1.3	0.0	0.0	0.0	0.0
75°	2341.6	1164.4	17.9	5.1	3.8	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	1077.6	450.7	12.8	3.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0
80°	210.7	112.4	5.1	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.5	19.2	2.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.6	6.4	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	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)