

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: P573604

Luminaire Tested: **ARCH-S-PA2-90-830-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-90-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7478 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

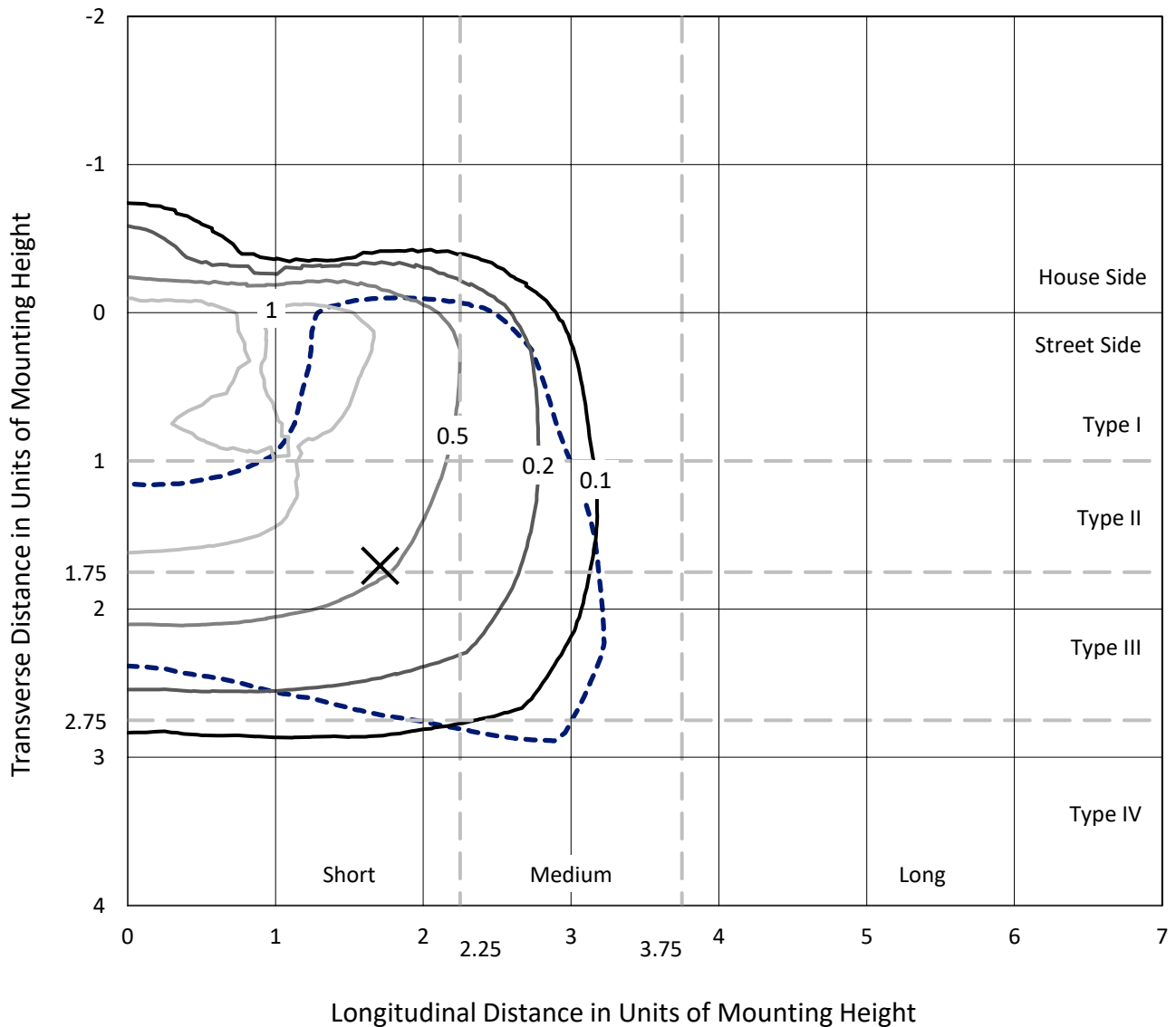
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P573604
 CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

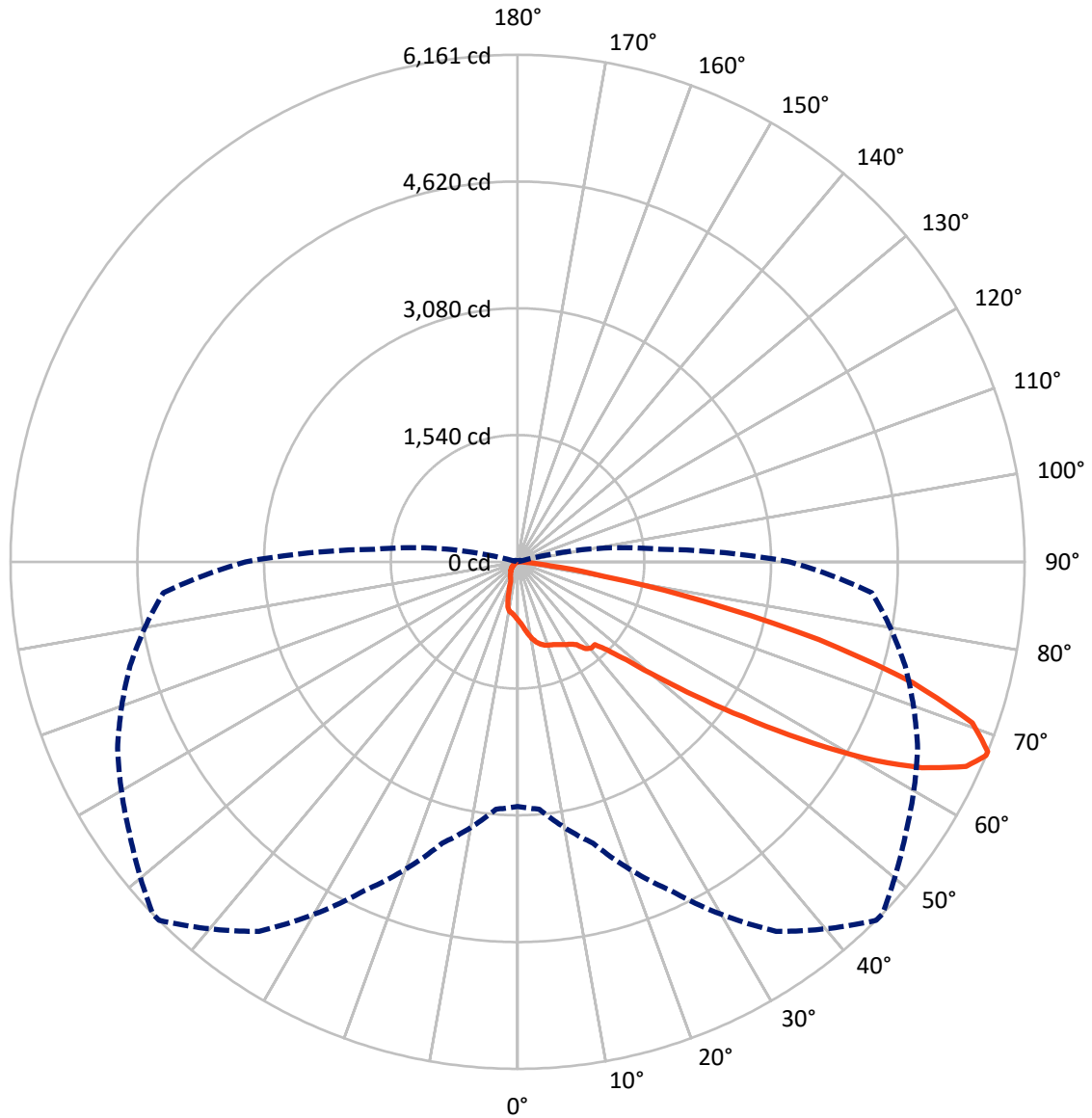
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

REPORT NUMBER: P573604
CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P573604
 CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

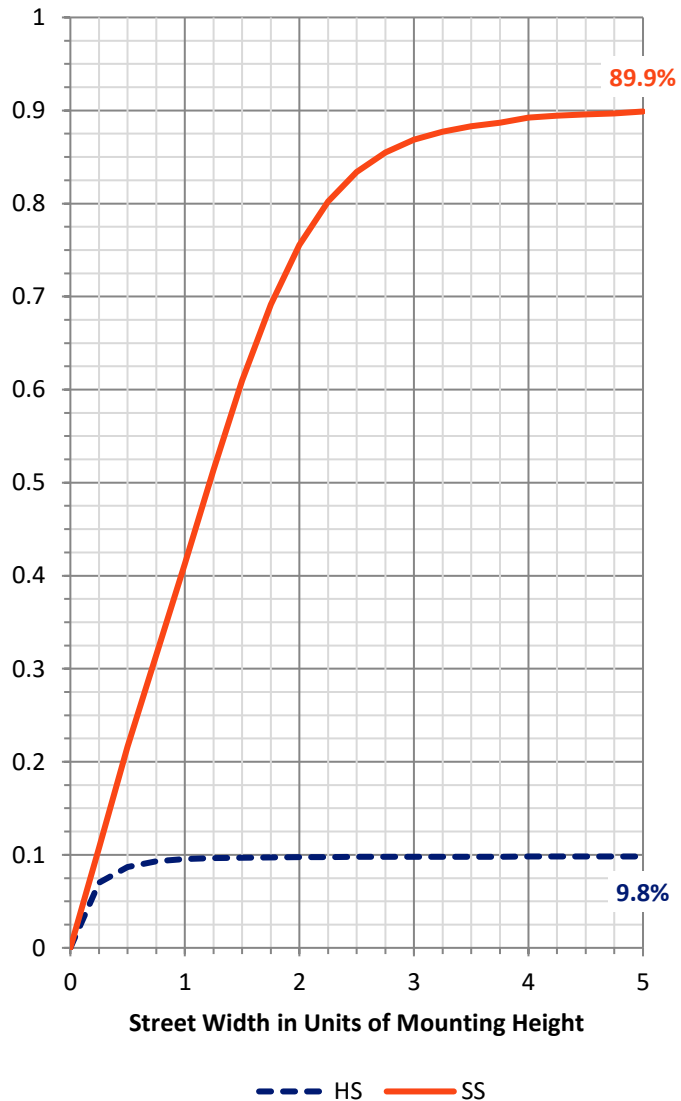
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	741.0	0.0	741.0
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	6737.0	0.0	6737.0
	% Fixture	90.1	0.0	90.1
Total	Lumens	7478.0	0.0	7478.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	0.9
10°-20°	214.6	2.9
20°-30°	343.2	4.6
30°-40°	494.0	6.6
40°-50°	866.7	11.6
50°-60°	1826.1	24.4
60°-70°	2525.2	33.8
70°-80°	1057.2	14.1
80°-90°	80.0	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°	7478.0	100.0
0°-180°	7478.0	100.0

Coefficient of Utilization



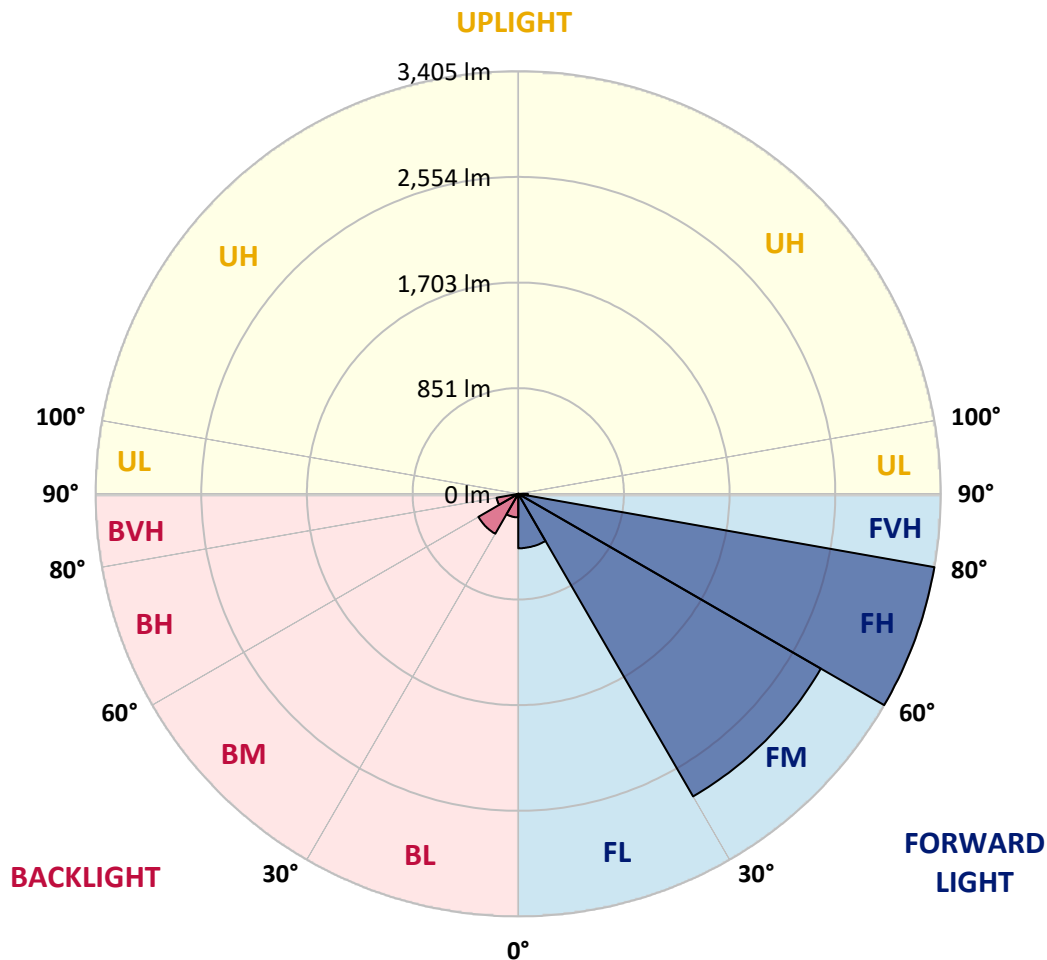
REPORT NUMBER: P573604
 CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	438.9	5.9			
FM (30°-60°)	2815.6	37.7			
FH (60°-80°)	3405.3	45.5			G2/5000
FVH (80°-90°)	77.2	1.0			G1/100
BL (0°-30°)	189.9	2.5	B1/500		
BM (30°-60°)	371.2	5.0	B1/1000		
BH (60°-80°)	177.1	2.4	B1/500		G1/500
BVH (80°-90°)	2.7	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 III Short





REPORT NUMBER: P573604

CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2
2.5°	787.3	773.5	770.8	768.0	759.7	748.7	751.4	743.1	729.3	721.0	712.7
5°	884.0	870.2	864.7	848.1	831.5	806.7	806.7	784.6	759.7	737.6	715.5
7.5°	983.5	972.4	961.4	936.5	911.6	878.5	875.7	842.6	803.9	770.8	734.8
10°	1066.4	1058.1	1044.3	1013.9	980.7	944.8	936.5	906.1	856.4	812.2	765.2
12.5°	1132.7	1124.4	1105.0	1074.6	1033.2	997.3	994.5	955.8	906.1	859.2	801.1
15°	1182.4	1168.6	1146.5	1113.3	1071.9	1038.7	1033.2	1000.0	953.1	900.6	831.5
17.5°	1190.7	1182.4	1163.0	1127.1	1091.2	1063.6	1060.8	1036.0	994.5	939.3	867.4
20°	1168.6	1165.8	1149.2	1121.6	1094.0	1080.2	1077.4	1060.8	1027.7	977.9	906.1
22.5°	1135.4	1132.7	1121.6	1107.8	1096.7	1094.0	1094.0	1088.5	1069.1	1022.2	955.8
25°	1113.3	1110.6	1105.0	1096.7	1096.7	1113.3	1116.1	1121.6	1105.0	1069.1	997.3
27.5°	1116.1	1110.6	1105.0	1096.7	1107.8	1138.2	1140.9	1154.8	1140.9	1107.8	1044.3
30°	1154.8	1146.5	1129.9	1110.6	1124.4	1165.8	1168.6	1185.1	1174.1	1157.5	1096.7
32.5°	1215.5	1210.0	1176.9	1143.7	1152.0	1193.4	1199.0	1229.3	1243.2	1218.3	1143.7
35°	1303.9	1284.6	1243.2	1210.0	1204.5	1234.9	1243.2	1292.9	1328.8	1268.0	1171.3
37.5°	1375.8	1359.2	1292.9	1240.4	1270.8	1339.8	1342.6	1403.4	1373.0	1273.5	1215.5
40°	1618.9	1616.1	1500.1	1334.3	1301.2	1378.5	1389.6	1400.6	1386.8	1337.1	1312.2
42.5°	2011.1	1978.0	1848.2	1594.0	1367.5	1375.8	1381.3	1439.3	1511.1	1489.0	1497.3
45°	2436.6	2409.0	2262.5	1942.1	1594.0	1524.9	1530.5	1624.4	1762.5	1790.1	1834.3
47.5°	2828.9	2784.7	2701.8	2378.6	1980.8	1779.1	1790.1	1903.4	2132.7	2193.5	2262.5
50°	3160.4	3130.0	3052.6	2839.9	2455.9	2179.7	2190.7	2284.6	2583.0	2679.7	2768.1
52.5°	3641.1	3599.6	3450.4	3351.0	3060.9	2701.8	2676.9	2776.4	3118.9	3182.5	3301.3
55°	4083.1	3997.4	3909.0	3867.6	3746.0	3326.1	3317.8	3337.2	3621.7	3654.9	3867.6
57.5°	4270.9	4254.4	4328.9	4467.1	4494.7	4061.0	4025.1	3950.5	4174.2	4171.5	4420.1
60°	4389.7	4389.7	4588.6	4931.2	5152.2	4845.5	4795.8	4563.8	4643.9	4646.6	4875.9
62.5°	4315.1	4334.5	4643.9	5160.5	5605.3	5511.3	5478.2	5088.7	5083.1	5019.6	5099.7
65°	3853.8	3886.9	4384.2	5033.4	5771.0	5992.0	5978.2	5536.2	5376.0	5143.9	4964.3
67°	3143.8	3204.6	3806.8	4574.8	5583.2	6157.8	6160.5	5729.6	5378.7	4936.7	4486.4
67.5°	2972.5	3016.7	3538.9	4409.1	5480.9	6160.5	6160.5	5754.4	5362.1	4873.2	4320.7
70°	1895.1	1906.2	2475.3	3411.8	4682.6	5862.2	5884.3	5566.6	4884.2	3944.9	3033.3
72.5°	936.5	911.6	1306.7	2196.2	3514.0	5016.8	5074.8	4754.4	3864.8	2577.5	1602.3
75°	367.4	392.3	569.1	1168.6	2201.8	3782.0	3826.2	3458.7	2486.3	1328.8	632.6
77.5°	163.0	163.0	243.1	524.9	1157.5	2320.6	2342.7	2110.6	1312.2	547.0	193.4
80°	88.4	93.9	127.1	229.3	582.9	1066.4	1163.0	1047.0	594.0	240.3	66.3
82.5°	44.2	47.0	77.4	129.8	292.8	403.3	425.4	444.8	273.5	149.2	27.6
85°	16.6	19.3	41.4	74.6	132.6	135.4	135.4	174.0	149.2	113.3	13.8
87.5°	2.8	5.5	19.3	30.4	52.5	47.0	41.4	55.3	82.9	71.8	8.3
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: P573604
 CATALOG NUMBER: ARCH-S-PA2-90-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2	707.2
2.5°	707.2	701.7	690.6	682.4	676.8	671.3	665.8	665.8	663.0	663.0	665.8
5°	707.2	696.2	674.1	660.3	649.2	640.9	635.4	635.4	632.6	635.4	638.2
7.5°	721.0	704.5	674.1	649.2	635.4	621.6	616.1	613.3	613.3	616.1	613.3
10°	743.1	721.0	682.4	649.2	629.9	610.5	580.1	552.5	527.7	516.6	513.8
12.5°	770.8	743.1	696.2	657.5	627.1	560.8	477.9	425.4	392.3	375.7	370.2
15°	801.1	768.0	712.7	668.5	585.7	461.3	353.6	295.6	276.3	279.0	281.8
17.5°	834.3	798.4	737.6	663.0	502.8	342.6	259.7	245.9	254.2	262.4	262.4
20°	867.4	828.8	762.5	621.6	395.0	254.2	232.1	234.8	243.1	251.4	251.4
22.5°	911.6	870.2	787.3	549.8	292.8	221.0	221.0	226.5	232.1	240.3	240.3
25°	958.6	917.2	803.9	461.3	218.2	207.2	210.0	215.5	221.0	229.3	229.3
27.5°	1008.3	966.9	801.1	356.4	190.6	190.6	193.4	201.7	207.2	215.5	215.5
30°	1063.6	1027.7	770.8	259.7	176.8	174.0	174.0	182.3	190.6	196.1	198.9
32.5°	1110.6	1080.2	718.3	196.1	165.8	160.2	157.5	160.2	168.5	174.0	176.8
35°	1149.2	1138.2	640.9	168.5	154.7	146.4	140.9	138.1	140.9	140.9	143.7
37.5°	1221.1	1223.8	549.8	157.5	146.4	135.4	124.3	116.0	110.5	107.7	105.0
40°	1356.4	1353.7	453.1	149.2	138.1	124.3	107.7	96.7	82.9	77.4	77.4
42.5°	1547.0	1505.6	345.3	140.9	129.8	113.3	91.2	74.6	60.8	58.0	58.0
45°	1889.6	1718.3	259.7	135.4	121.6	99.5	74.6	55.3	47.0	44.2	44.2
47.5°	2268.1	1964.2	207.2	127.1	113.3	88.4	58.0	44.2	35.9	35.9	35.9
50°	2685.2	2199.0	174.0	118.8	99.5	74.6	47.0	35.9	33.2	30.4	33.2
52.5°	3141.0	2384.1	151.9	107.7	85.6	60.8	38.7	33.2	27.6	27.6	27.6
55°	3549.9	2508.4	127.1	93.9	71.8	49.7	35.9	27.6	24.9	22.1	19.3
57.5°	3920.1	2574.7	102.2	80.1	55.3	41.4	30.4	22.1	19.3	13.8	13.8
60°	4110.7	2513.9	80.1	63.5	44.2	33.2	24.9	19.3	13.8	8.3	8.3
62.5°	4141.1	2356.5	63.5	49.7	38.7	27.6	19.3	13.8	8.3	5.5	5.5
65°	3875.9	2080.2	52.5	41.4	30.4	22.1	16.6	11.1	5.5	2.8	2.8
67°	3400.7	1790.1	47.0	35.9	27.6	19.3	13.8	8.3	5.5	2.8	0.0
67.5°	3306.8	1737.7	44.2	35.9	27.6	19.3	13.8	8.3	5.5	2.8	0.0
70°	2171.4	1201.7	41.4	33.2	24.9	16.6	11.1	8.3	2.8	0.0	0.0
72.5°	1185.1	605.0	38.7	30.4	22.1	16.6	11.1	5.5	2.8	0.0	0.0
75°	433.7	229.3	33.2	27.6	19.3	16.6	11.1	5.5	2.8	0.0	0.0
77.5°	146.4	80.1	30.4	27.6	22.1	16.6	11.1	5.5	2.8	0.0	0.0
80°	49.7	35.9	24.9	22.1	16.6	13.8	11.1	5.5	2.8	0.0	0.0
82.5°	19.3	11.1	8.3	8.3	8.3	11.1	11.1	8.3	2.8	0.0	0.0
85°	8.3	5.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0.0	0.0
87.5°	8.3	5.5	2.8	2.8	2.8	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)