

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: P572702

Luminaire Tested: **ARCH-S-PA2-100-827-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572702  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-100-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7607 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

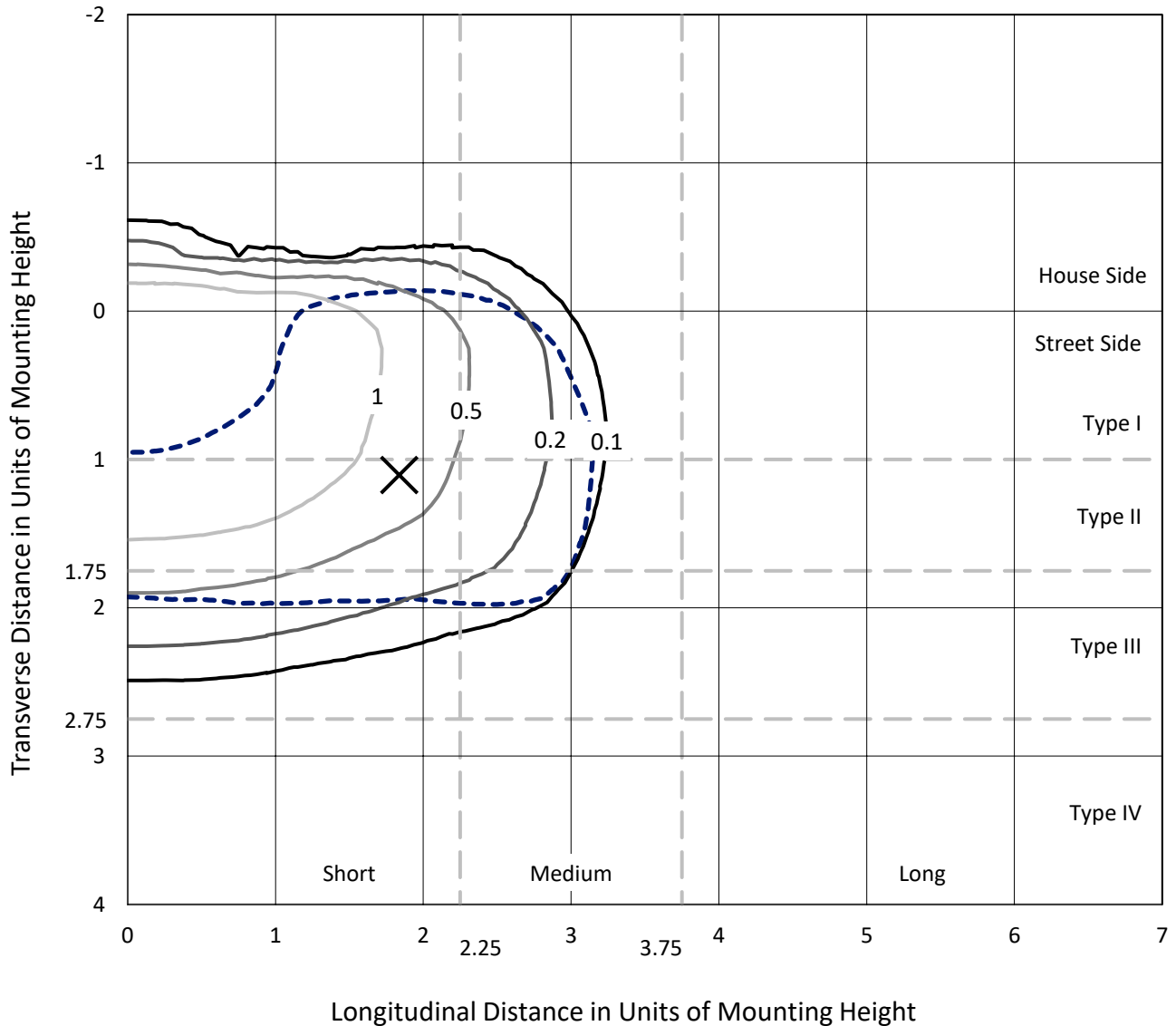
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P572702  
 CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

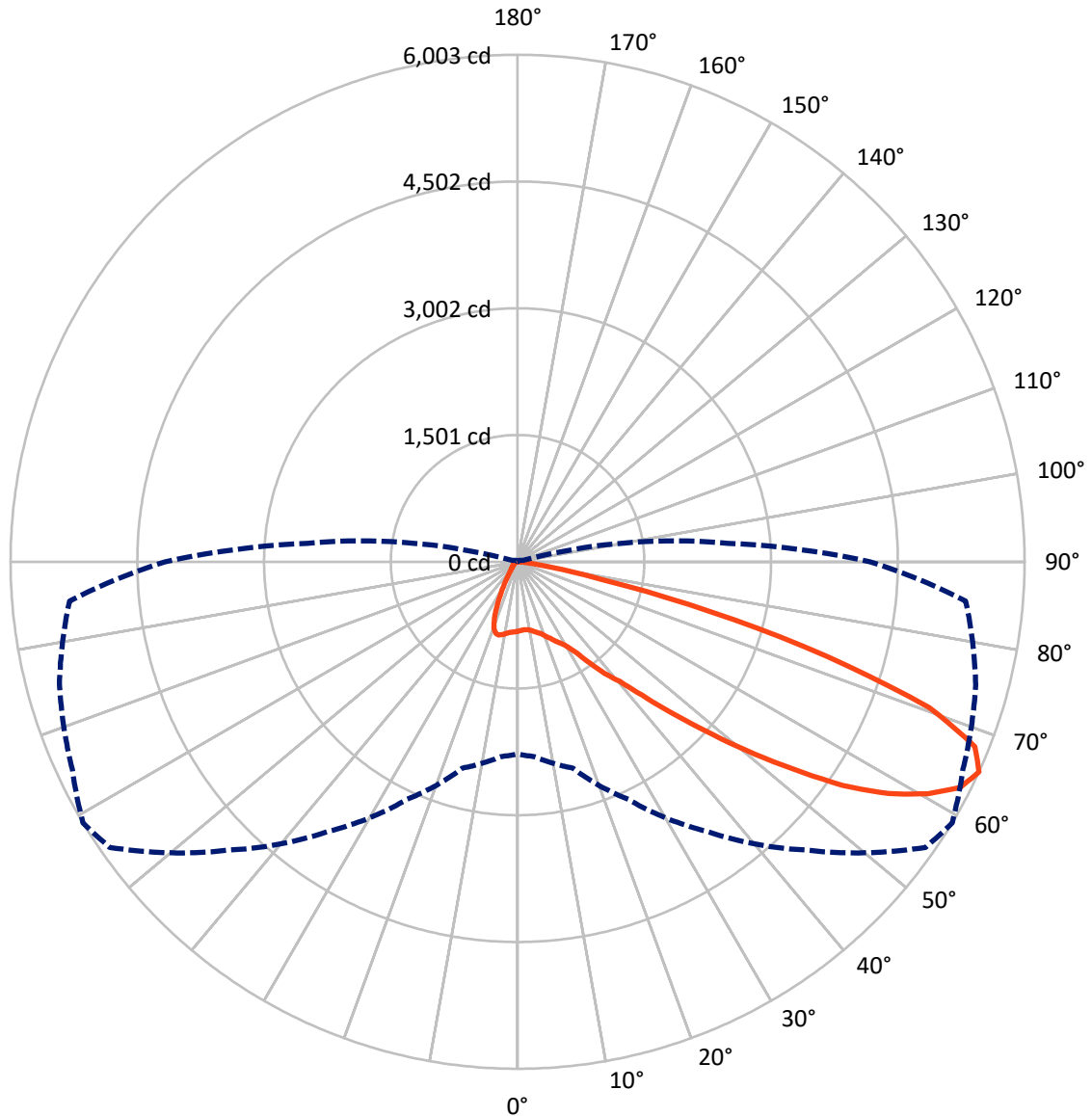
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type III - Short - N/A

REPORT NUMBER: P572702  
CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P572702  
 CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

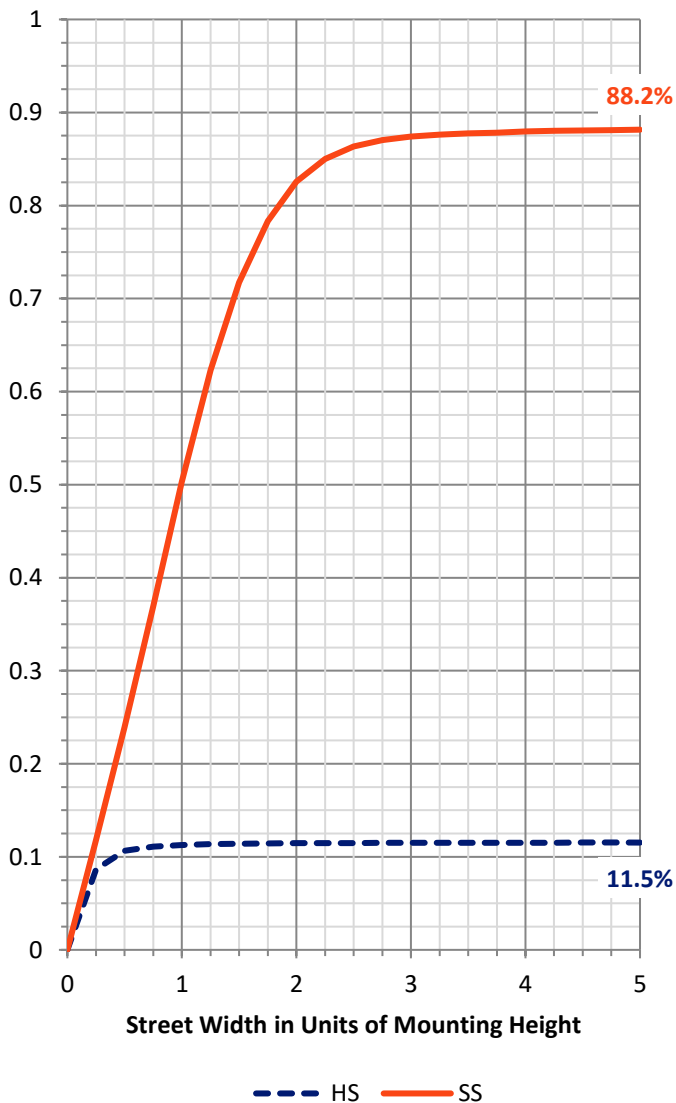
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	887.4	0.0	887.4
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	6719.6	0.0	6719.6
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	7607.0	0.0	7607.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	1.0
10°-20°	220.7	2.9
20°-30°	374.8	4.9
30°-40°	663.9	8.7
40°-50°	1252.4	16.5
50°-60°	2119.0	27.9
60°-70°	2203.1	29.0
70°-80°	660.7	8.7
80°-90°	34.6	0.5
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°	7607.0	100.0
0°-180°	7607.0	100.0

**Coefficient of Utilization**

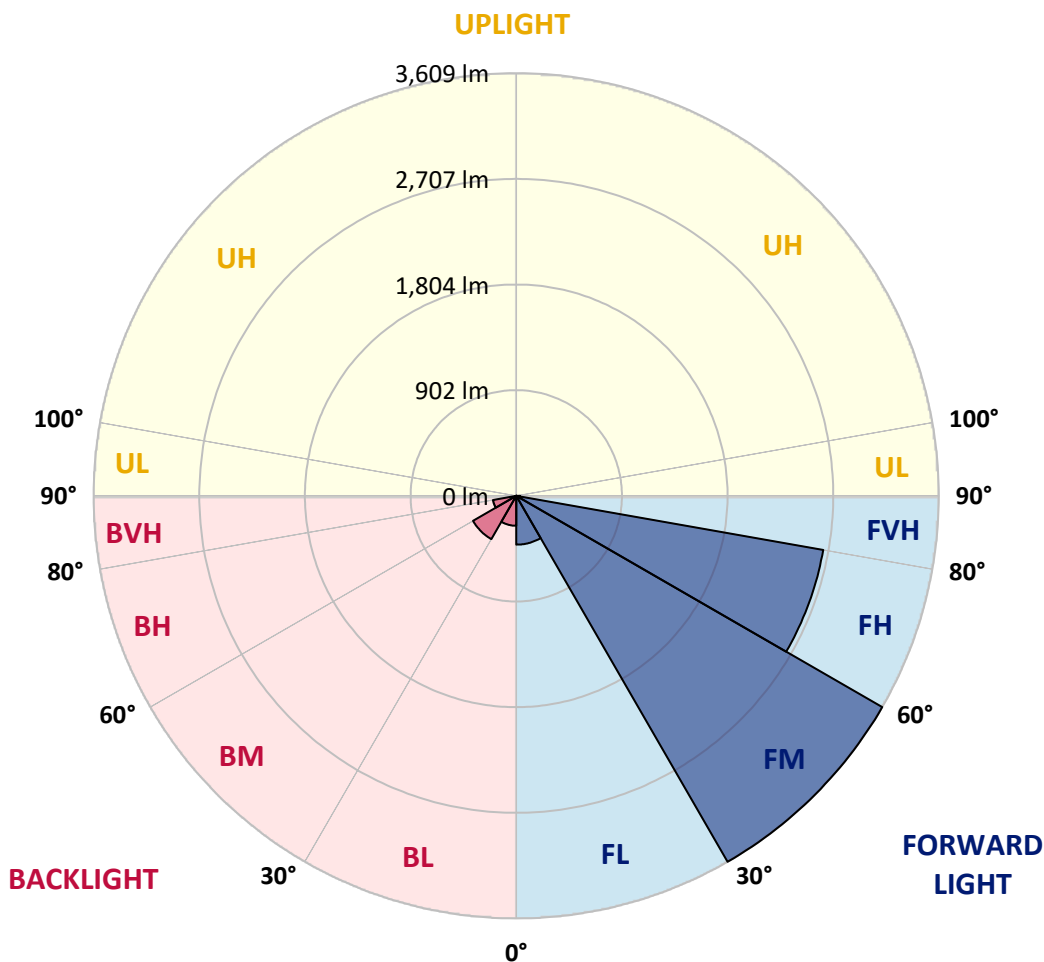


REPORT NUMBER: P572702  
 CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	417.2	5.5			
FM (30°-60°)	3608.8	47.4			
FH (60°-80°)	2661.9	35.0			G2/5000
FVH (80°-90°)	31.7	0.4			G1/100
BL (0°-30°)	256.0	3.4	B1/500		
BM (30°-60°)	426.6	5.6	B1/1000		
BH (60°-80°)	201.9	2.7	B1/500		G1/500
BVH (80°-90°)	2.9	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 III Short





REPORT NUMBER: P572702

CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0
2.5°	799.9	797.1	797.1	802.6	805.4	808.2	813.7	813.7	813.7	819.2	822.0
5°	761.1	761.1	763.9	769.4	780.5	788.8	805.4	808.2	810.9	824.8	830.3
7.5°	736.2	736.2	739.0	750.1	763.9	783.3	805.4	810.9	819.2	838.6	852.5
10°	733.4	730.7	736.2	747.3	763.9	788.8	813.7	822.0	838.6	863.5	882.9
12.5°	741.7	739.0	744.5	755.6	772.2	797.1	830.3	844.2	863.5	896.7	924.4
15°	747.3	744.5	750.1	763.9	783.3	813.7	852.5	869.1	894.0	941.0	968.7
17.5°	763.9	761.1	763.9	775.0	794.3	827.5	877.4	894.0	935.5	988.1	1018.5
20°	838.6	835.9	819.2	813.7	816.5	846.9	910.6	938.3	988.1	1054.5	1076.6
22.5°	993.6	982.5	952.1	902.3	869.1	880.1	952.1	982.5	1049.0	1123.7	1140.3
25°	1201.2	1192.9	1148.6	1062.8	968.7	941.0	999.1	1040.7	1120.9	1204.0	1198.4
27.5°	1436.4	1419.8	1378.3	1259.3	1132.0	1040.7	1057.3	1093.2	1181.8	1270.4	1242.7
30°	1641.3	1635.7	1588.7	1489.0	1339.6	1204.0	1145.8	1165.2	1245.5	1339.6	1306.4
32.5°	1829.5	1812.9	1774.1	1680.0	1541.6	1403.2	1287.0	1287.0	1353.4	1464.1	1414.3
35°	2037.0	2026.0	1978.9	1884.8	1752.0	1588.7	1483.5	1472.4	1527.8	1652.3	1544.4
37.5°	2250.2	2222.5	2200.3	2103.5	1970.6	1829.5	1702.1	1677.2	1704.9	1796.2	1663.4
40°	2515.9	2515.9	2466.0	2377.5	2252.9	2103.5	1926.3	1862.7	1854.4	1973.4	1871.0
42.5°	2825.8	2817.5	2776.0	2693.0	2574.0	2435.6	2211.4	2153.3	2147.7	2291.7	2169.9
45°	3182.9	3177.3	3127.5	3058.3	2975.3	2823.1	2601.7	2543.5	2510.3	2676.4	2532.5
47.5°	3509.5	3490.1	3473.5	3481.8	3434.7	3263.1	3055.6	2986.4	2983.6	3113.7	2928.2
50°	3733.7	3722.6	3780.7	3836.1	3924.6	3816.7	3570.4	3509.5	3462.4	3634.0	3340.6
52.5°	3880.3	3874.8	3991.0	4148.8	4331.5	4323.2	4104.5	4068.5	4029.8	4076.8	3708.7
55°	3938.5	3938.5	4076.8	4367.5	4688.5	4826.9	4724.5	4674.7	4539.1	4442.2	4112.8
57.5°	3869.3	3861.0	4040.9	4420.0	4909.9	5195.0	5239.3	5181.2	4968.1	4860.1	4561.2
60°	3575.9	3581.4	3794.5	4273.4	4893.3	5344.5	5629.5	5576.9	5363.8	5203.3	4937.6
62.5°	3027.9	3074.9	3299.1	3819.4	4539.1	5225.4	5853.7	5881.4	5651.7	5452.4	5272.5
65°	2275.1	2316.6	2529.7	3105.4	3894.2	4826.9	5895.2	6003.2	5817.7	5615.7	5325.1
67.5°	1383.9	1397.7	1657.9	2092.4	2867.4	4021.5	5604.6	5839.9	5707.0	5374.9	4804.8
70°	644.9	680.9	808.2	1143.1	1815.6	2961.5	4843.5	5175.6	5026.2	4613.8	3653.4
72.5°	251.9	262.9	343.2	528.6	963.2	1862.7	3614.6	3836.1	3733.7	3277.0	2178.2
75°	124.5	132.9	166.1	251.9	440.1	769.4	2208.6	2352.6	2183.7	1646.8	921.6
77.5°	91.3	91.3	110.7	155.0	240.8	285.1	930.0	1043.4	985.3	636.6	251.9
80°	60.9	66.4	77.5	105.2	152.2	138.4	351.5	417.9	348.7	196.5	88.6
82.5°	36.0	38.7	58.1	74.7	102.4	80.3	119.0	132.9	143.9	96.9	41.5
85°	19.4	19.4	38.7	55.4	55.4	36.0	41.5	47.1	55.4	58.1	22.1
87.5°	5.5	5.5	24.9	33.2	22.1	19.4	22.1	22.1	24.9	30.4	11.1
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: P572702

CATALOG NUMBER: ARCH-S-PA2-100-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0	822.0
2.5°	824.8	824.8	827.5	827.5	830.3	830.3	830.3	830.3	833.1	835.9	835.9
5°	833.1	835.9	835.9	835.9	835.9	830.3	827.5	824.8	824.8	827.5	827.5
7.5°	855.2	858.0	855.2	849.7	841.4	830.3	819.2	819.2	816.5	819.2	816.5
10°	888.4	888.4	885.7	871.8	858.0	835.9	813.7	797.1	786.0	783.3	777.7
12.5°	930.0	930.0	921.6	896.7	871.8	830.3	772.2	716.8	672.6	653.2	647.6
15°	971.5	971.5	960.4	924.4	874.6	775.0	653.2	536.9	470.5	442.8	426.2
17.5°	1021.3	1015.8	996.4	946.6	844.2	664.3	467.7	348.7	296.1	271.2	271.2
20°	1073.9	1068.3	1032.4	949.3	766.7	476.0	304.4	240.8	227.0	221.4	221.4
22.5°	1132.0	1118.2	1062.8	927.2	603.4	323.8	229.7	213.1	207.6	204.8	204.8
25°	1179.0	1156.9	1084.9	866.3	431.8	227.0	202.0	196.5	185.4	182.7	177.1
27.5°	1215.0	1181.8	1093.2	736.2	285.1	188.2	179.9	168.8	157.8	146.7	146.7
30°	1262.1	1220.6	1098.8	572.9	193.7	163.3	155.0	141.2	127.3	116.2	116.2
32.5°	1356.2	1295.3	1101.6	401.3	160.5	143.9	127.3	110.7	96.9	91.3	88.6
35°	1458.6	1375.6	1071.1	260.2	141.2	121.8	102.4	88.6	74.7	72.0	72.0
37.5°	1572.1	1494.6	1004.7	177.1	124.5	102.4	83.0	69.2	60.9	58.1	58.1
40°	1763.0	1671.7	894.0	141.2	107.9	85.8	69.2	58.1	52.6	49.8	49.8
42.5°	2037.0	1879.3	755.6	121.8	94.1	72.0	55.4	47.1	44.3	41.5	41.5
45°	2352.6	2111.8	595.1	110.7	83.0	60.9	47.1	41.5	38.7	36.0	36.0
47.5°	2715.1	2352.6	470.5	96.9	72.0	52.6	41.5	36.0	33.2	30.4	30.4
50°	3058.3	2540.8	354.3	85.8	63.7	44.3	36.0	33.2	30.4	27.7	27.7
52.5°	3340.6	2668.1	268.5	74.7	55.4	38.7	33.2	30.4	24.9	24.9	24.9
55°	3681.1	2767.7	204.8	66.4	49.8	36.0	30.4	24.9	22.1	19.4	19.4
57.5°	3977.2	2803.7	149.5	58.1	44.3	33.2	27.7	22.1	16.6	13.8	13.8
60°	4176.5	2773.3	107.9	49.8	38.7	27.7	22.1	16.6	11.1	8.3	8.3
62.5°	4317.6	2706.8	83.0	44.3	33.2	24.9	19.4	13.8	8.3	5.5	5.5
65°	4176.5	2502.0	66.4	38.7	27.7	22.1	13.8	11.1	5.5	2.8	2.8
67.5°	3611.9	2097.9	52.6	33.2	24.9	19.4	13.8	8.3	2.8	0.0	0.0
70°	2596.1	1497.3	44.3	30.4	22.1	16.6	11.1	5.5	2.8	0.0	0.0
72.5°	1447.5	772.2	41.5	27.7	22.1	16.6	11.1	5.5	2.8	0.0	0.0
75°	586.8	265.7	38.7	27.7	22.1	13.8	11.1	5.5	2.8	0.0	0.0
77.5°	171.6	91.3	33.2	24.9	22.1	16.6	11.1	5.5	2.8	0.0	0.0
80°	60.9	41.5	24.9	22.1	16.6	13.8	11.1	8.3	2.8	0.0	0.0
82.5°	27.7	16.6	11.1	8.3	8.3	8.3	8.3	5.5	2.8	0.0	0.0
85°	11.1	8.3	5.5	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	2.8	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)