

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: P573602

Luminaire Tested: **ARCH-S-PA2-90-830-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573602  
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-PA2-90-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 910mA 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: 7591 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

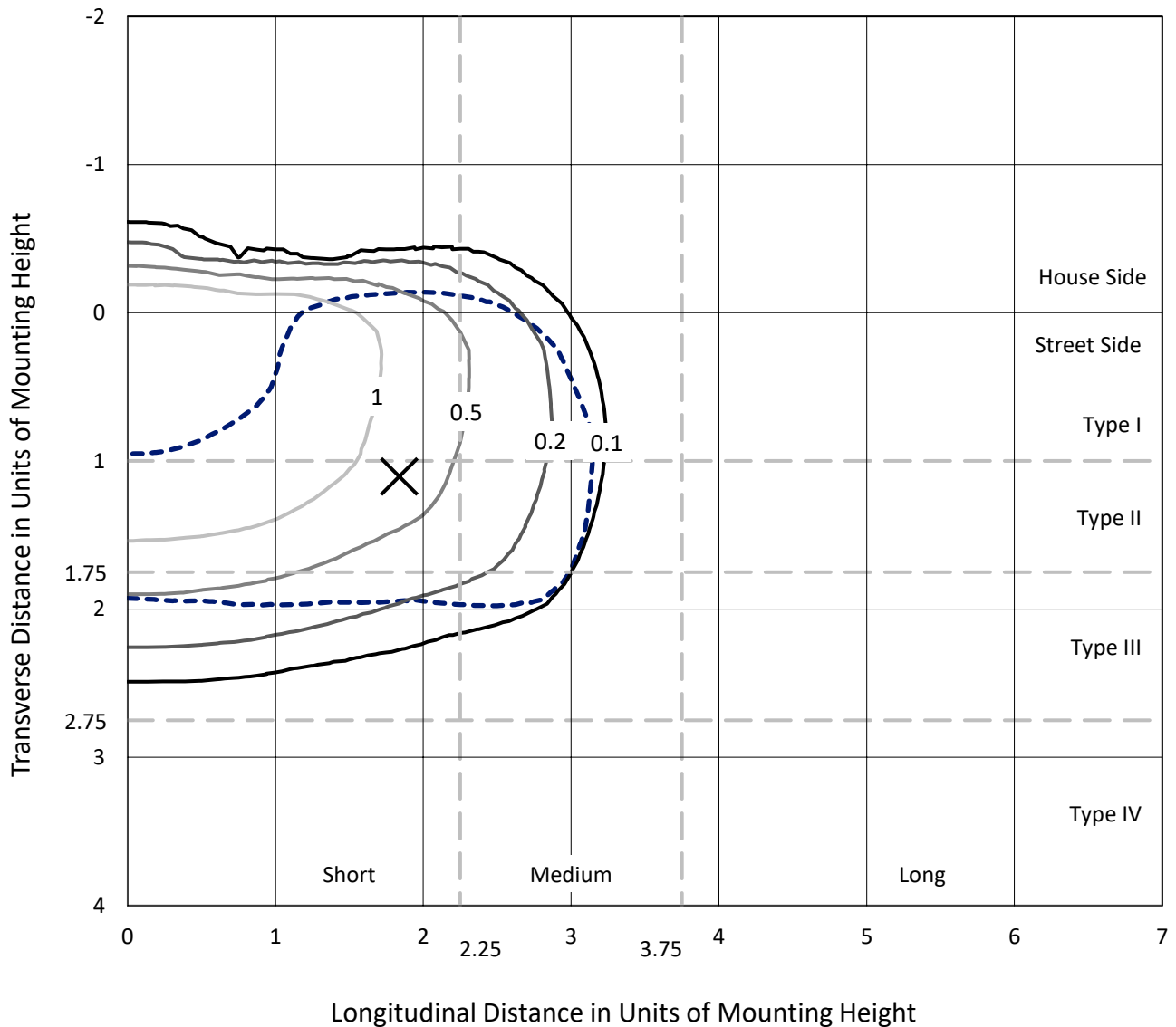
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

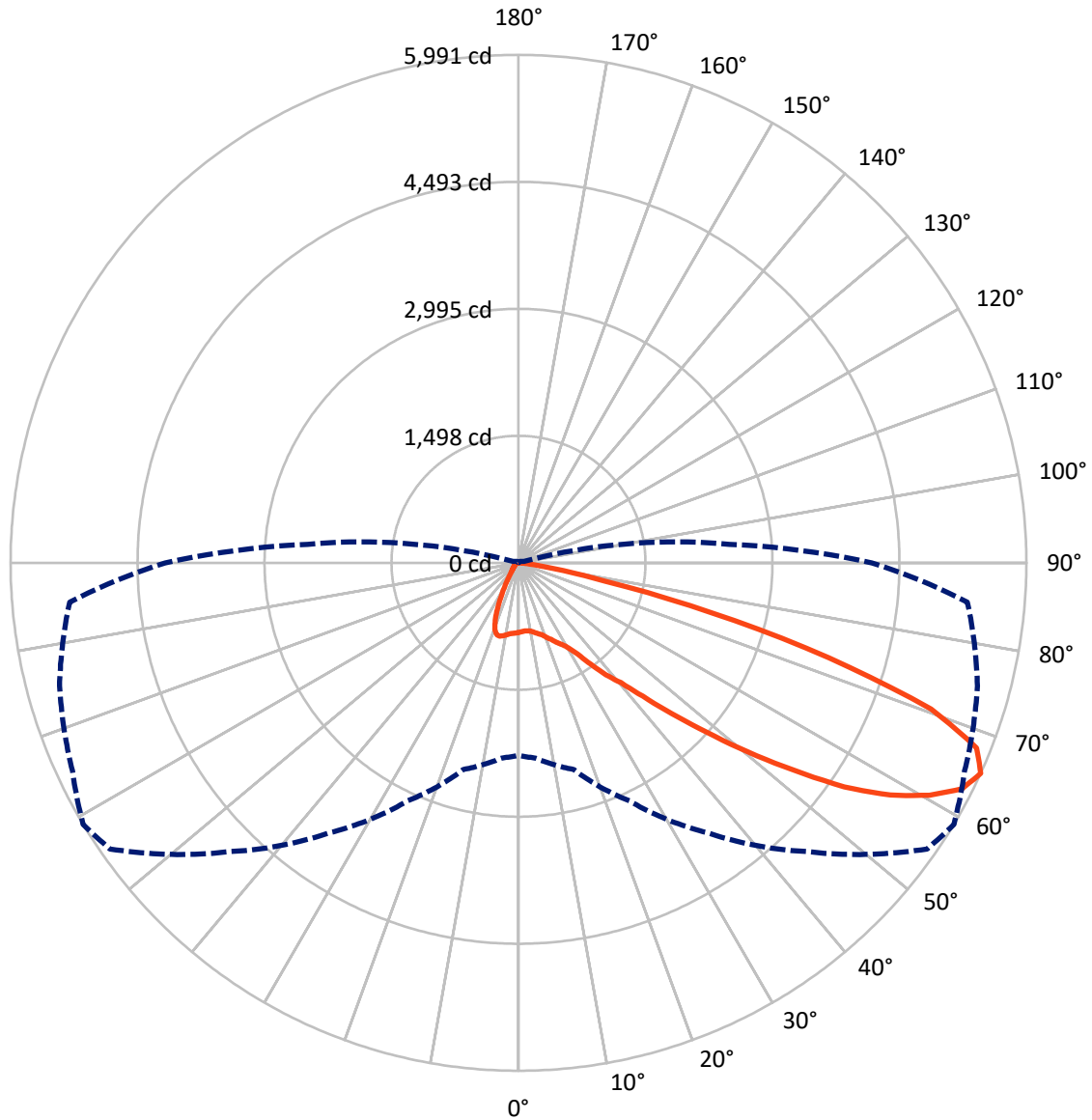
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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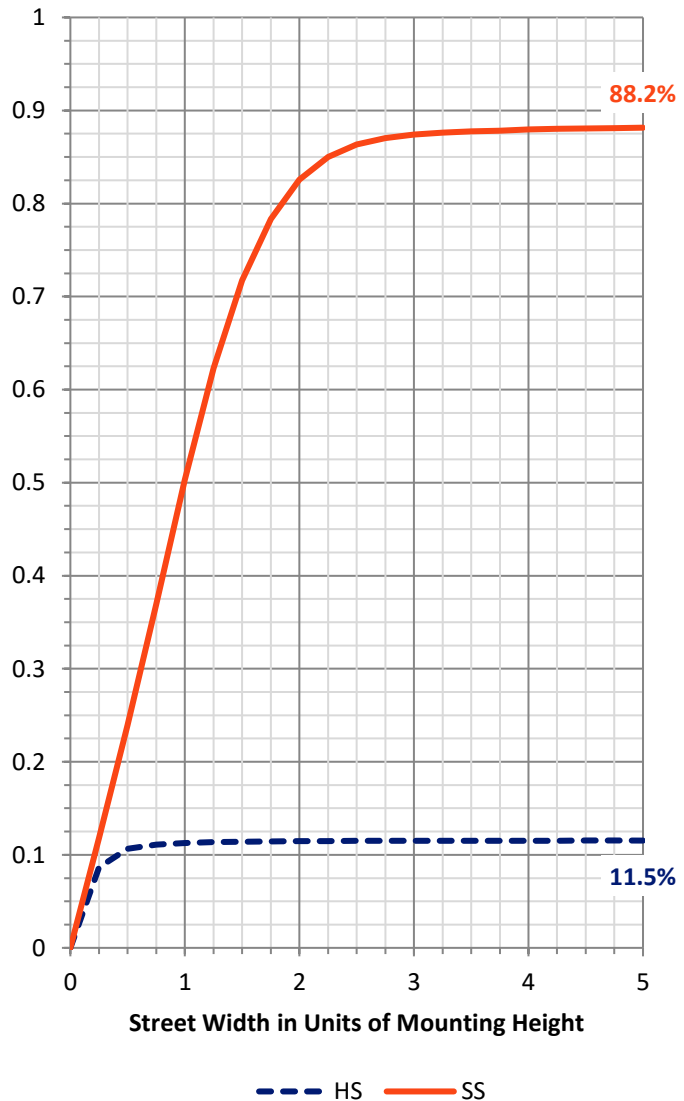
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	885.6	0.0	885.6
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	6705.4	0.0	6705.4
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	7591.0	0.0	7591.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.5	1.0
10°-20°	220.2	2.9
20°-30°	374.0	4.9
30°-40°	662.5	8.7
40°-50°	1249.8	16.5
50°-60°	2114.6	27.9
60°-70°	2198.5	29.0
70°-80°	659.3	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°	7591.0	100.0
0°-180°	7591.0	100.0

**Coefficient of Utilization**

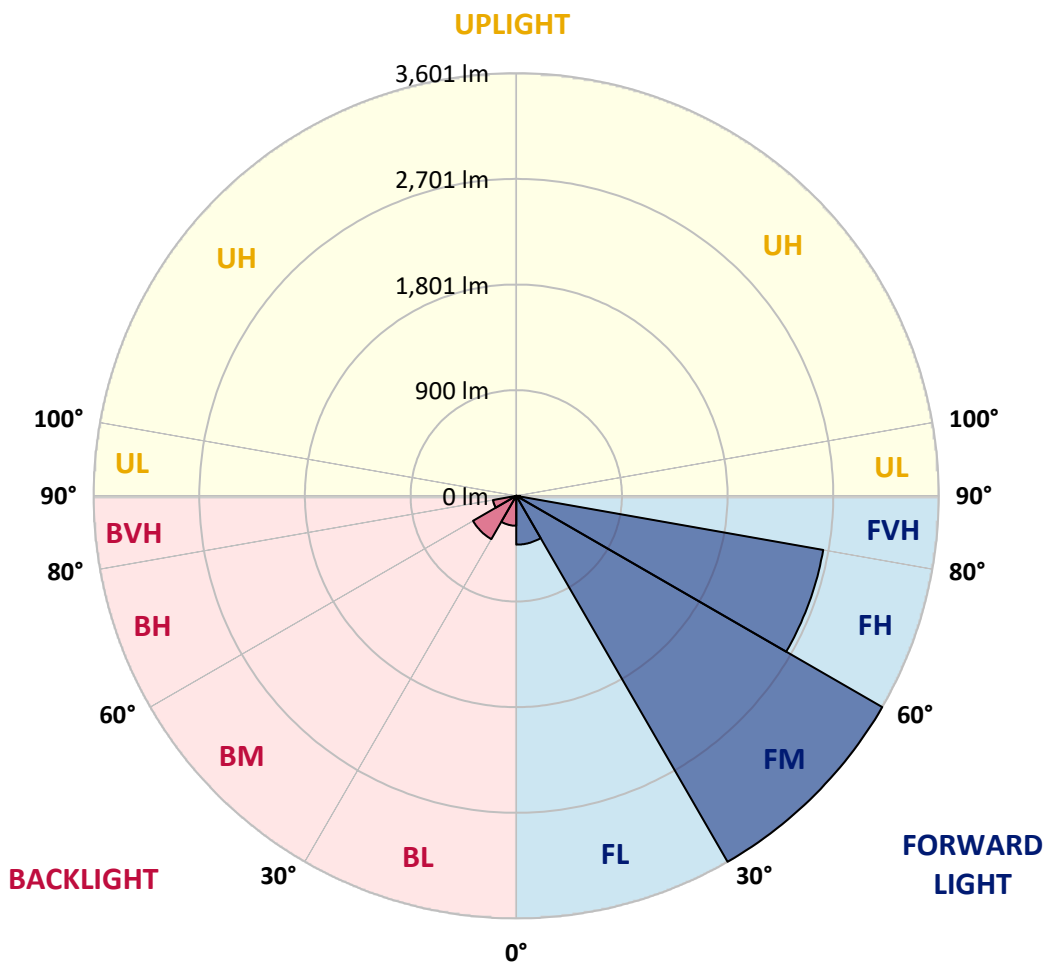


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	416.3	5.5			
FM (30°-60°)	3601.2	47.4			
FH (60°-80°)	2656.3	35.0			G2/5000
FVH (80°-90°)	31.7	0.4			G1/100
BL (0°-30°)	255.5	3.4	B1/500		
BM (30°-60°)	425.7	5.6	B1/1000		
BH (60°-80°)	201.5	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3
2.5°	798.2	795.4	795.4	800.9	803.7	806.5	812.0	812.0	812.0	817.5	820.3
5°	759.5	759.5	762.3	767.8	778.9	787.1	803.7	806.5	809.2	823.0	828.6
7.5°	734.7	734.7	737.4	748.5	762.3	781.6	803.7	809.2	817.5	836.9	850.7
10°	731.9	729.1	734.7	745.7	762.3	787.1	812.0	820.3	836.9	861.7	881.0
12.5°	740.2	737.4	742.9	754.0	770.6	795.4	828.6	842.4	861.7	894.9	922.5
15°	745.7	742.9	748.5	762.3	781.6	812.0	850.7	867.2	892.1	939.0	966.7
17.5°	762.3	759.5	762.3	773.3	792.7	825.8	875.5	892.1	933.5	986.0	1016.4
20°	836.9	834.1	817.5	812.0	814.8	845.1	908.7	936.3	986.0	1052.3	1074.4
22.5°	991.5	980.5	950.1	900.4	867.2	878.3	950.1	980.5	1046.8	1121.3	1137.9
25°	1198.7	1190.4	1146.2	1060.6	966.7	939.0	997.0	1038.5	1118.6	1201.4	1195.9
27.5°	1433.4	1416.9	1375.4	1256.7	1129.6	1038.5	1055.0	1090.9	1179.3	1267.7	1240.1
30°	1637.8	1632.3	1585.3	1485.9	1336.8	1201.4	1143.4	1162.8	1242.9	1336.8	1303.6
32.5°	1825.6	1809.0	1770.4	1676.5	1538.4	1400.3	1284.3	1284.3	1350.6	1461.0	1411.3
35°	2032.8	2021.7	1974.8	1880.9	1748.3	1585.3	1480.4	1469.3	1524.6	1648.9	1541.1
37.5°	2245.4	2217.8	2195.7	2099.0	1966.5	1825.6	1698.6	1673.7	1701.3	1792.5	1659.9
40°	2510.6	2510.6	2460.8	2372.5	2248.2	2099.0	1922.3	1858.8	1850.5	1969.2	1867.0
42.5°	2819.9	2811.6	2770.2	2687.3	2568.6	2430.5	2206.8	2148.8	2143.2	2286.8	2165.3
45°	3176.2	3170.7	3120.9	3051.9	2969.0	2817.1	2596.2	2538.2	2505.0	2670.8	2527.1
47.5°	3502.1	3482.8	3466.2	3474.5	3427.5	3256.3	3049.1	2980.1	2977.3	3107.1	2922.1
50°	3725.8	3714.7	3772.7	3828.0	3916.4	3808.7	3562.8	3502.1	3455.1	3626.4	3333.6
52.5°	3872.2	3866.7	3982.7	4140.1	4322.4	4314.1	4095.9	4060.0	4021.3	4068.3	3700.9
55°	3930.2	3930.2	4068.3	4358.3	4678.7	4816.7	4714.6	4664.8	4529.5	4432.8	4104.2
57.5°	3861.1	3852.8	4032.4	4410.7	4899.6	5184.1	5228.3	5170.3	4957.6	4849.9	4551.6
60°	3568.4	3573.9	3786.6	4264.4	4883.0	5333.2	5617.7	5565.2	5352.6	5192.4	4927.2
62.5°	3021.5	3068.5	3292.2	3811.4	4529.5	5214.5	5841.4	5869.0	5639.8	5440.9	5261.4
65°	2270.3	2311.7	2524.4	3098.8	3886.0	4816.7	5882.8	5990.6	5805.5	5603.9	5313.9
67.5°	1380.9	1394.8	1654.4	2088.0	2861.3	4013.0	5592.8	5827.6	5695.0	5363.6	4794.7
70°	643.5	679.4	806.5	1140.7	1811.8	2955.2	4833.3	5164.7	5015.6	4604.1	3645.7
72.5°	251.3	262.4	342.5	527.5	961.1	1858.8	3607.0	3828.0	3725.8	3270.1	2173.6
75°	124.3	132.6	165.7	251.3	439.1	767.8	2204.0	2347.6	2179.1	1643.3	919.7
77.5°	91.1	91.1	110.5	154.7	240.3	284.5	928.0	1041.2	983.2	635.2	251.3
80°	60.8	66.3	77.3	105.0	151.9	138.1	350.8	417.0	348.0	196.1	88.4
82.5°	35.9	38.7	58.0	74.6	102.2	80.1	118.8	132.6	143.6	96.7	41.4
85°	19.3	19.3	38.7	55.2	55.2	35.9	41.4	47.0	55.2	58.0	22.1
87.5°	5.5	5.5	24.9	33.1	22.1	19.3	22.1	22.1	24.9	30.4	11.0
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°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3
2.5°	823.0	823.0	825.8	825.8	828.6	828.6	828.6	828.6	831.3	834.1	834.1
5°	831.3	834.1	834.1	834.1	834.1	828.6	825.8	823.0	823.0	825.8	825.8
7.5°	853.4	856.2	853.4	847.9	839.6	828.6	817.5	817.5	814.8	817.5	814.8
10°	886.6	886.6	883.8	870.0	856.2	834.1	812.0	795.4	784.4	781.6	776.1
12.5°	928.0	928.0	919.7	894.9	870.0	828.6	770.6	715.3	671.1	651.8	646.3
15°	969.4	969.4	958.4	922.5	872.8	773.3	651.8	535.8	469.5	441.9	425.3
17.5°	1019.1	1013.6	994.3	944.6	842.4	662.9	466.8	348.0	295.5	270.7	270.7
20°	1071.6	1066.1	1030.2	947.3	765.0	475.0	303.8	240.3	226.5	221.0	221.0
22.5°	1129.6	1115.8	1060.6	925.2	602.1	323.1	229.2	212.7	207.1	204.4	204.4
25°	1176.6	1154.5	1082.7	864.5	430.9	226.5	201.6	196.1	185.0	182.3	176.8
27.5°	1212.5	1179.3	1090.9	734.7	284.5	187.8	179.5	168.5	157.4	146.4	146.4
30°	1259.4	1218.0	1096.5	571.7	193.3	163.0	154.7	140.9	127.0	116.0	116.0
32.5°	1353.3	1292.6	1099.2	400.5	160.2	143.6	127.0	110.5	96.7	91.1	88.4
35°	1455.5	1372.7	1068.9	259.6	140.9	121.5	102.2	88.4	74.6	71.8	71.8
37.5°	1568.8	1491.4	1002.6	176.8	124.3	102.2	82.9	69.0	60.8	58.0	58.0
40°	1759.3	1668.2	892.1	140.9	107.7	85.6	69.0	58.0	52.5	49.7	49.7
42.5°	2032.8	1875.3	754.0	121.5	93.9	71.8	55.2	47.0	44.2	41.4	41.4
45°	2347.6	2107.3	593.8	110.5	82.9	60.8	47.0	41.4	38.7	35.9	35.9
47.5°	2709.4	2347.6	469.5	96.7	71.8	52.5	41.4	35.9	33.1	30.4	30.4
50°	3051.9	2535.4	353.5	85.6	63.5	44.2	35.9	33.1	30.4	27.6	27.6
52.5°	3333.6	2662.5	267.9	74.6	55.2	38.7	33.1	30.4	24.9	24.9	24.9
55°	3673.3	2761.9	204.4	66.3	49.7	35.9	30.4	24.9	22.1	19.3	19.3
57.5°	3968.8	2797.8	149.1	58.0	44.2	33.1	27.6	22.1	16.6	13.8	13.8
60°	4167.7	2767.4	107.7	49.7	38.7	27.6	22.1	16.6	11.0	8.3	8.3
62.5°	4308.6	2701.1	82.9	44.2	33.1	24.9	19.3	13.8	8.3	5.5	5.5
65°	4167.7	2496.8	66.3	38.7	27.6	22.1	13.8	11.0	5.5	2.8	2.8
67.5°	3604.3	2093.5	52.5	33.1	24.9	19.3	13.8	8.3	2.8	0.0	0.0
70°	2590.7	1494.2	44.2	30.4	22.1	16.6	11.0	5.5	2.8	0.0	0.0
72.5°	1444.5	770.6	41.4	27.6	22.1	16.6	11.0	5.5	2.8	0.0	0.0
75°	585.5	265.1	38.7	27.6	22.1	13.8	11.0	5.5	2.8	0.0	0.0
77.5°	171.2	91.1	33.1	24.9	22.1	16.6	11.0	5.5	2.8	0.0	0.0
80°	60.8	41.4	24.9	22.1	16.6	13.8	11.0	8.3	2.8	0.0	0.0
82.5°	27.6	16.6	11.0	8.3	8.3	8.3	8.3	5.5	2.8	0.0	0.0
85°	11.0	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)