

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: P573562

Luminaire Tested: **ARCH-S-PA2-90-740-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573562  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-90-740-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9876 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

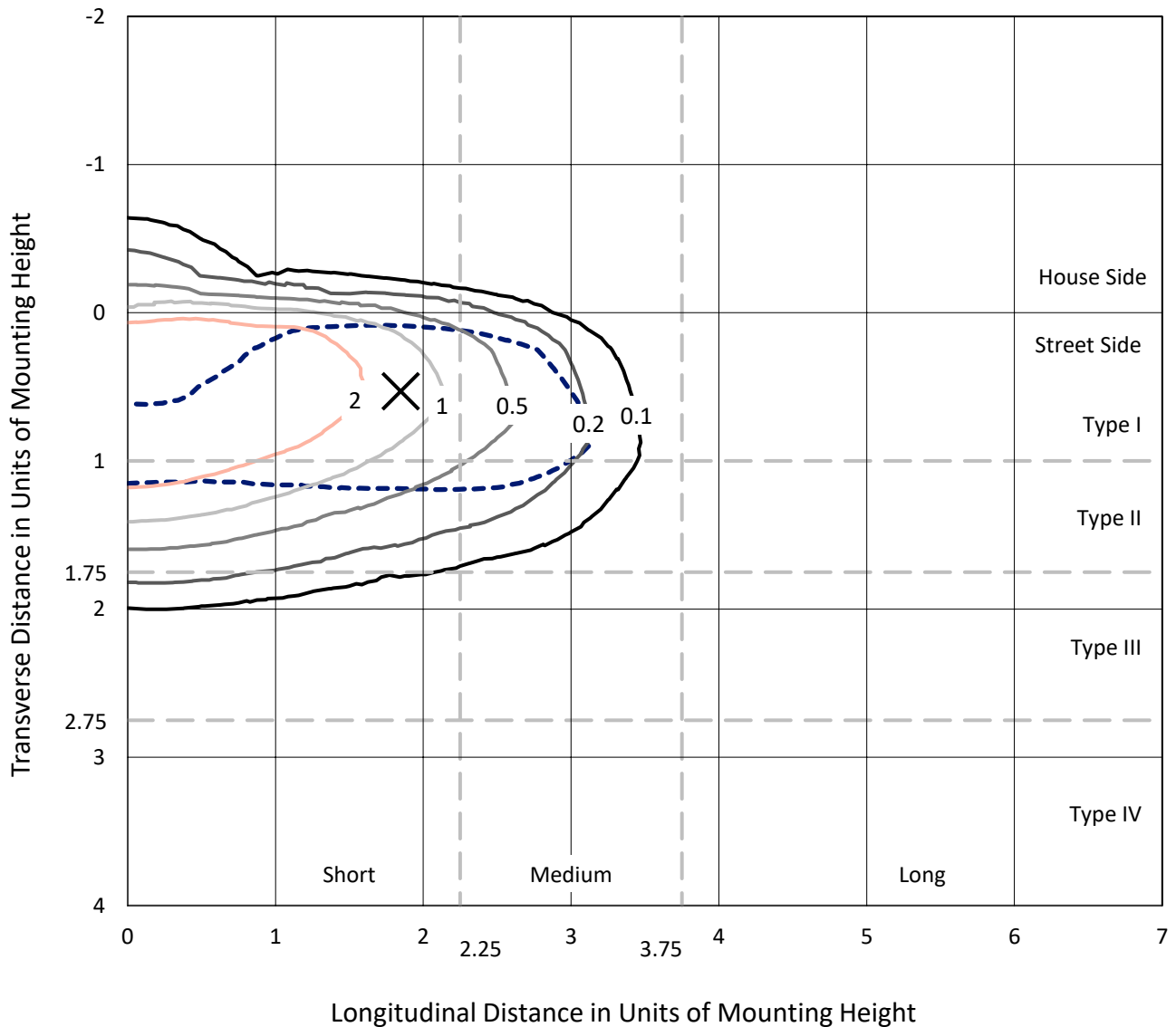
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

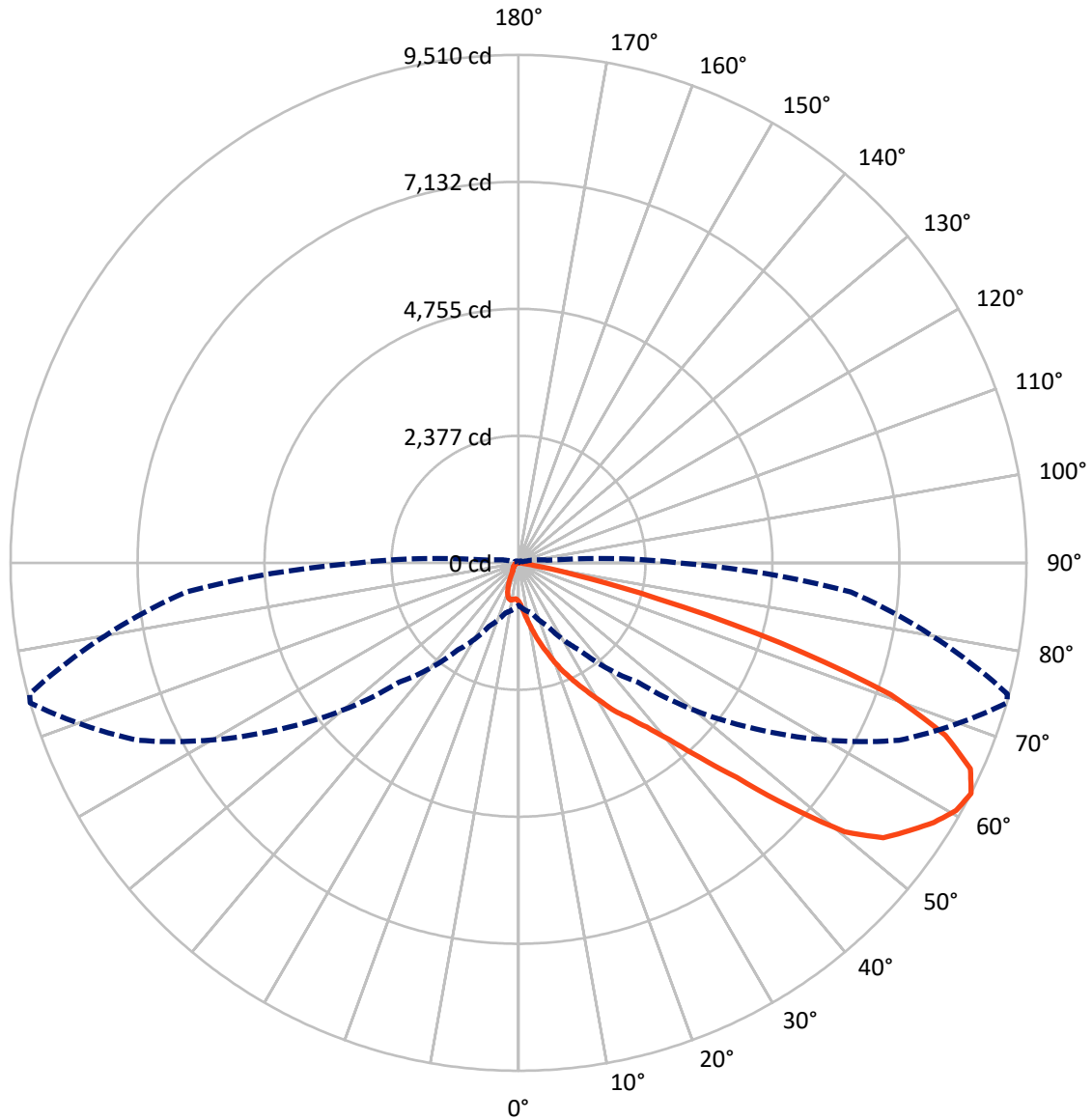
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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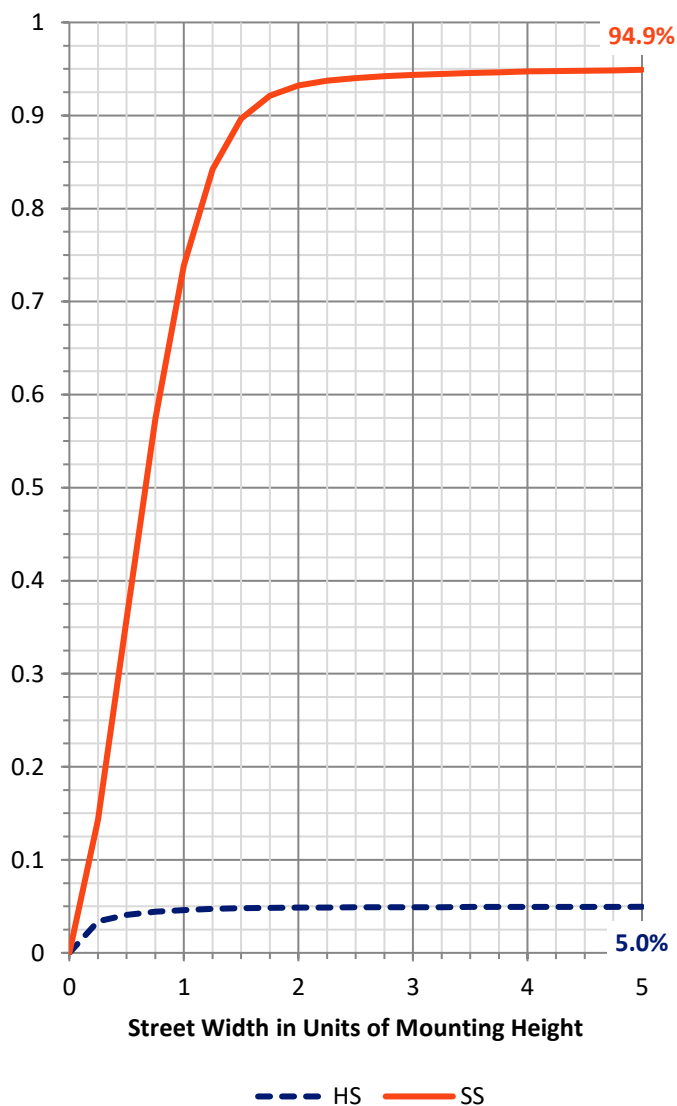
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	492.6	0.0	492.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	9383.4	0.0	9383.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	9876.0	0.0	9876.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.4	0.9
10°-20°	379.8	3.8
20°-30°	815.0	8.3
30°-40°	1429.4	14.5
40°-50°	2216.0	22.4
50°-60°	2554.7	25.9
60°-70°	1794.7	18.2
70°-80°	559.1	5.7
80°-90°	37.0	0.4
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°	9876.0	100.0
0°-180°	9876.0	100.0

**Coefficient of Utilization**

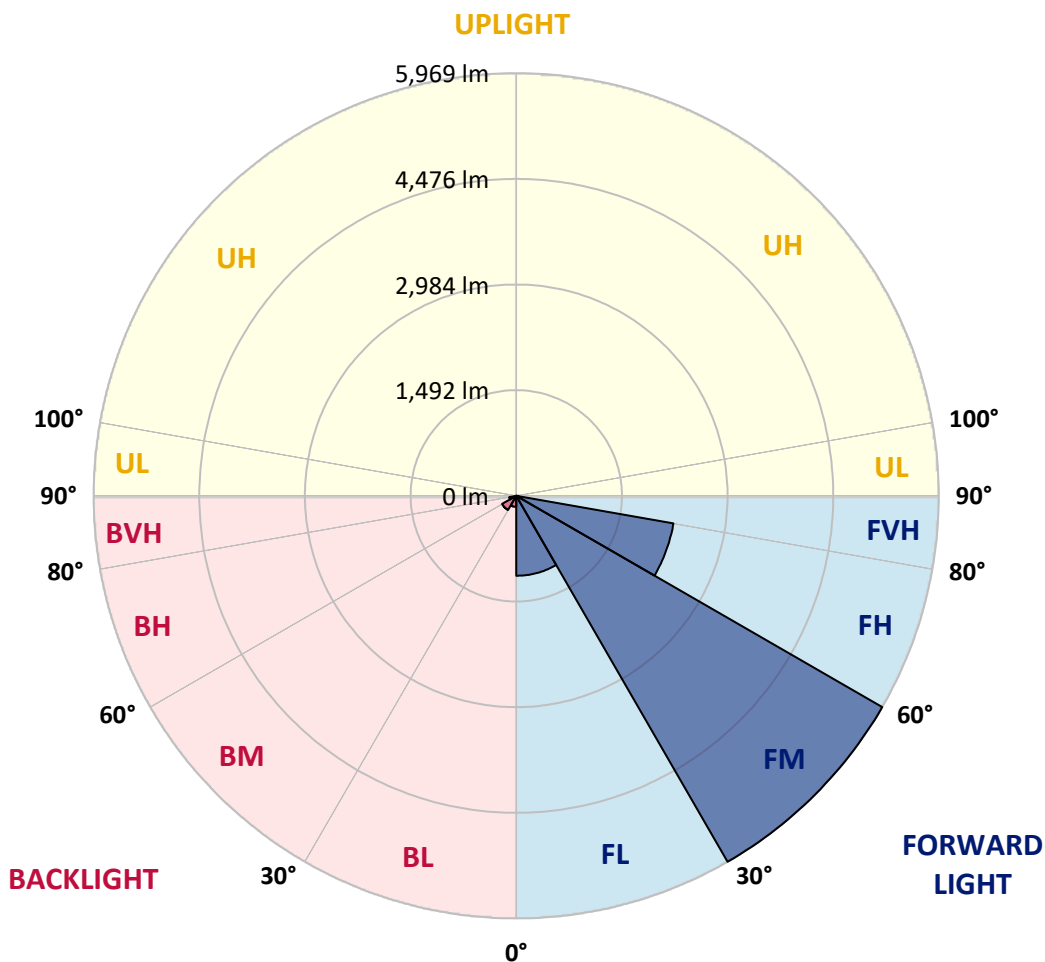


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1128.9	11.4			
FM (30°-60°)	5968.5	60.4			
FH (60°-80°)	2254.1	22.8			G2/5000
FVH (80°-90°)	31.9	0.3			G1/100
BL (0°-30°)	156.3	1.6	B1/500		
BM (30°-60°)	231.5	2.3	B1/1000		
BH (60°-80°)	99.7	1.0	B0/110		G0/110
BVH (80°-90°)	5.1	0.1			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°	65°	74°	75°	85°
0°	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0
2.5°	1004.5	987.1	966.3	948.9	914.1	889.8	858.5	823.7	785.5	782.0	750.8
5°	1407.7	1355.5	1355.5	1310.4	1258.2	1164.4	1077.5	969.7	889.8	882.8	799.4
7.5°	1821.3	1779.6	1755.2	1685.7	1602.3	1498.0	1359.0	1178.3	1032.3	1008.0	872.4
10°	2207.1	2175.8	2130.6	2075.0	2002.0	1831.7	1657.9	1421.6	1188.7	1171.3	959.3
12.5°	2506.0	2467.8	2446.9	2422.6	2328.7	2193.2	1967.3	1668.4	1390.3	1352.1	1046.2
15°	2731.9	2714.6	2693.7	2693.7	2645.0	2513.0	2280.1	1932.5	1584.9	1539.8	1157.4
17.5°	2912.7	2891.8	2888.3	2909.2	2895.3	2801.4	2582.5	2186.2	1786.5	1751.8	1272.1
20°	3114.3	3086.5	3086.5	3103.8	3100.4	3048.2	2857.1	2478.2	2022.9	1960.3	1404.2
22.5°	3399.3	3381.9	3368.0	3340.2	3319.3	3270.7	3103.8	2763.2	2248.8	2189.7	1539.8
25°	3781.6	3760.7	3698.2	3649.5	3559.2	3486.2	3343.7	3016.9	2478.2	2412.2	1671.8
27.5°	4153.5	4111.8	4052.7	3990.1	3889.4	3764.2	3587.0	3256.8	2718.0	2648.5	1807.4
30°	4546.3	4515.0	4442.0	4341.2	4216.1	4077.0	3865.0	3545.3	2992.6	2916.1	1953.4
32.5°	4859.1	4810.4	4744.4	4647.1	4518.5	4421.1	4191.7	3861.5	3308.9	3208.1	2106.3
35°	5109.3	5071.1	4984.2	4890.4	4793.0	4765.2	4515.0	4118.7	3562.6	3468.8	2269.7
37.5°	5269.2	5231.0	5158.0	5064.1	5025.9	5074.6	4911.2	4469.8	3903.3	3785.1	2457.3
40°	5394.3	5349.2	5290.1	5248.4	5234.5	5370.0	5352.6	4925.1	4351.6	4282.1	2714.6
42.5°	5484.7	5439.5	5401.3	5397.8	5488.2	5752.3	5947.0	5561.2	4977.3	4834.8	3044.7
45°	5370.0	5331.8	5352.6	5474.3	5693.3	6110.3	6666.5	6461.4	5731.5	5630.7	3573.1
47.5°	5050.2	5025.9	5119.8	5342.2	5748.9	6329.3	7361.6	7448.5	6809.0	6656.0	4257.8
50°	4549.7	4546.3	4695.7	4998.1	5575.1	6412.7	7712.7	8397.4	7914.3	7757.8	4813.9
52.5°	3872.0	3858.1	4077.0	4497.6	5164.9	6256.3	7778.7	8776.2	8553.8	8369.6	5164.9
55°	3103.8	3072.6	3333.2	3795.5	4560.2	5801.0	7601.4	8859.7	8859.7	8692.8	5425.6
57.5°	2182.8	2231.4	2446.9	3003.0	3812.9	5119.8	7163.5	8783.2	9169.0	9026.5	5776.7
60°	1376.4	1397.2	1633.6	2082.0	2891.8	4209.1	6381.5	8453.0	9415.8	9332.4	6058.2
62.5°	792.5	858.5	976.7	1317.3	1995.1	3162.9	5415.2	7858.6	9509.6	9474.9	6242.4
65°	483.1	490.1	545.7	743.8	1226.9	2158.4	4334.2	7031.4	9297.6	9328.9	6207.7
67.5°	361.5	361.5	378.9	469.2	698.6	1372.9	3197.7	6026.9	8619.8	8720.6	5880.9
70°	312.8	312.8	316.3	344.1	431.0	813.3	2113.2	4859.1	7389.4	7379.0	4859.1
72.5°	246.8	257.2	278.1	292.0	326.7	476.2	1237.4	3395.8	5133.7	5255.3	3128.2
75°	198.1	201.6	229.4	253.7	274.6	323.2	583.9	1887.3	2693.7	2693.7	1376.4
77.5°	152.9	159.9	177.3	201.6	229.4	229.4	243.3	729.9	1042.7	1008.0	406.7
80°	97.3	100.8	128.6	159.9	191.2	163.4	132.1	243.3	285.0	274.6	111.2
82.5°	59.1	62.6	83.4	128.6	128.6	90.4	83.4	100.8	90.4	83.4	45.2
85°	17.4	20.9	59.1	83.4	73.0	34.8	41.7	45.2	41.7	38.2	24.3
87.5°	3.5	3.5	17.4	20.9	17.4	17.4	13.9	17.4	17.4	17.4	10.4
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°	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0	723.0
2.5°	733.4	719.5	691.7	670.8	653.4	636.1	622.2	618.7	611.7	611.7	608.3
5°	764.7	733.4	681.2	646.5	618.7	594.4	573.5	552.6	545.7	538.7	542.2
7.5°	813.3	764.7	691.7	639.5	590.9	535.3	490.1	451.8	424.0	417.1	406.7
10°	875.9	802.9	709.1	625.6	535.3	437.9	375.4	337.1	323.2	305.9	309.3
12.5°	938.4	848.1	723.0	587.4	441.4	344.1	292.0	267.6	257.2	253.7	257.2
15°	1011.4	896.7	716.0	517.9	354.5	278.1	246.8	236.4	229.4	229.4	225.9
17.5°	1084.4	938.4	691.7	427.5	285.0	236.4	222.4	212.0	205.1	201.6	201.6
20°	1164.4	976.7	636.1	340.6	236.4	215.5	201.6	187.7	180.7	180.7	180.7
22.5°	1247.8	1004.5	563.1	271.1	212.0	191.2	177.3	166.8	159.9	159.9	159.9
25°	1320.8	1018.4	476.2	225.9	194.6	173.8	159.9	149.5	146.0	142.5	142.5
27.5°	1390.3	1014.9	385.8	198.1	173.8	156.4	142.5	135.6	128.6	128.6	128.6
30°	1459.8	994.1	305.9	180.7	159.9	139.0	128.6	121.7	118.2	114.7	114.7
32.5°	1518.9	959.3	239.8	166.8	146.0	125.1	114.7	107.7	107.7	104.3	104.3
35°	1578.0	907.2	201.6	156.4	132.1	114.7	104.3	100.8	97.3	97.3	97.3
37.5°	1640.5	841.1	177.3	142.5	118.2	104.3	97.3	93.8	90.4	86.9	86.9
40°	1717.0	775.1	166.8	132.1	107.7	93.8	86.9	83.4	79.9	79.9	79.9
42.5°	1838.7	719.5	156.4	118.2	97.3	86.9	79.9	73.0	73.0	69.5	69.5
45°	2068.1	698.6	146.0	107.7	90.4	76.5	73.0	66.0	62.6	62.6	62.6
47.5°	2367.0	702.1	135.6	97.3	83.4	69.5	66.0	62.6	55.6	55.6	55.6
50°	2613.8	684.7	125.1	90.4	73.0	66.0	59.1	55.6	52.1	52.1	52.1
52.5°	2711.1	653.4	114.7	83.4	69.5	59.1	55.6	52.1	48.7	48.7	48.7
55°	2808.4	639.5	104.3	73.0	62.6	59.1	52.1	48.7	45.2	41.7	41.7
57.5°	2985.7	646.5	93.8	69.5	59.1	55.6	48.7	41.7	34.8	31.3	31.3
60°	3079.5	622.2	86.9	62.6	55.6	52.1	41.7	31.3	24.3	20.9	20.9
62.5°	2999.6	552.6	79.9	59.1	52.1	45.2	31.3	24.3	17.4	10.4	10.4
65°	2777.1	455.3	73.0	55.6	45.2	34.8	27.8	17.4	10.4	7.0	7.0
67.5°	2495.6	358.0	66.0	52.1	41.7	31.3	24.3	13.9	7.0	3.5	3.5
70°	2015.9	257.2	62.6	48.7	38.2	27.8	20.9	13.9	7.0	3.5	3.5
72.5°	1299.9	166.8	55.6	45.2	34.8	27.8	17.4	10.4	7.0	3.5	3.5
75°	601.3	111.2	52.1	41.7	34.8	24.3	17.4	13.9	7.0	3.5	3.5
77.5°	177.3	79.9	48.7	38.2	31.3	24.3	17.4	13.9	7.0	3.5	3.5
80°	73.0	55.6	38.2	34.8	31.3	24.3	17.4	13.9	7.0	3.5	3.5
82.5°	34.8	24.3	17.4	13.9	17.4	17.4	13.9	13.9	7.0	3.5	3.5
85°	17.4	10.4	7.0	7.0	7.0	3.5	3.5	7.0	7.0	3.5	3.5
87.5°	10.4	7.0	7.0	7.0	3.5	3.5	3.5	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)