

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: P572680

Luminaire Tested: **ARCH-S-PA2-100-750-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572680  
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-PA2-100-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1010mA 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: 10699 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

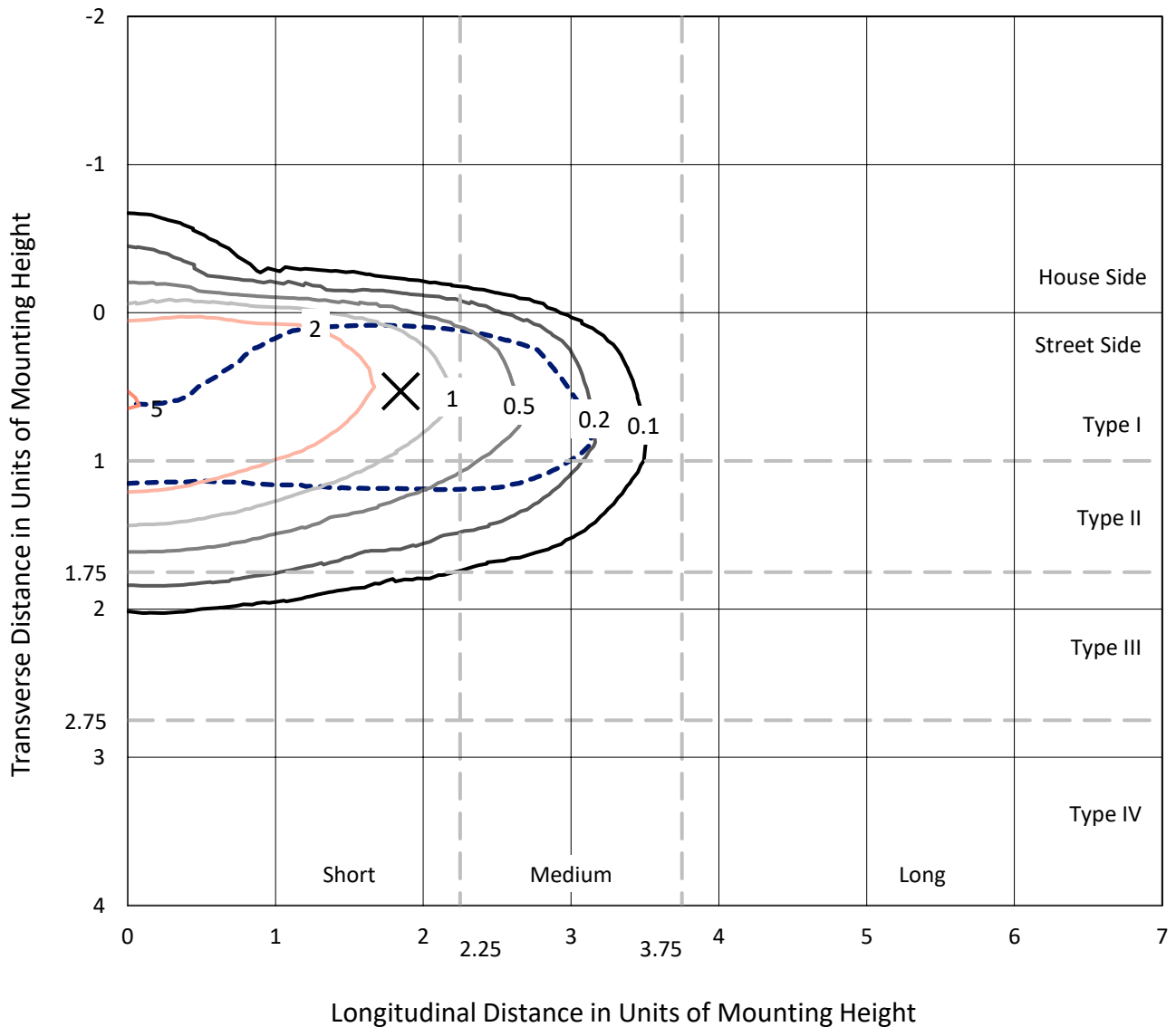
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

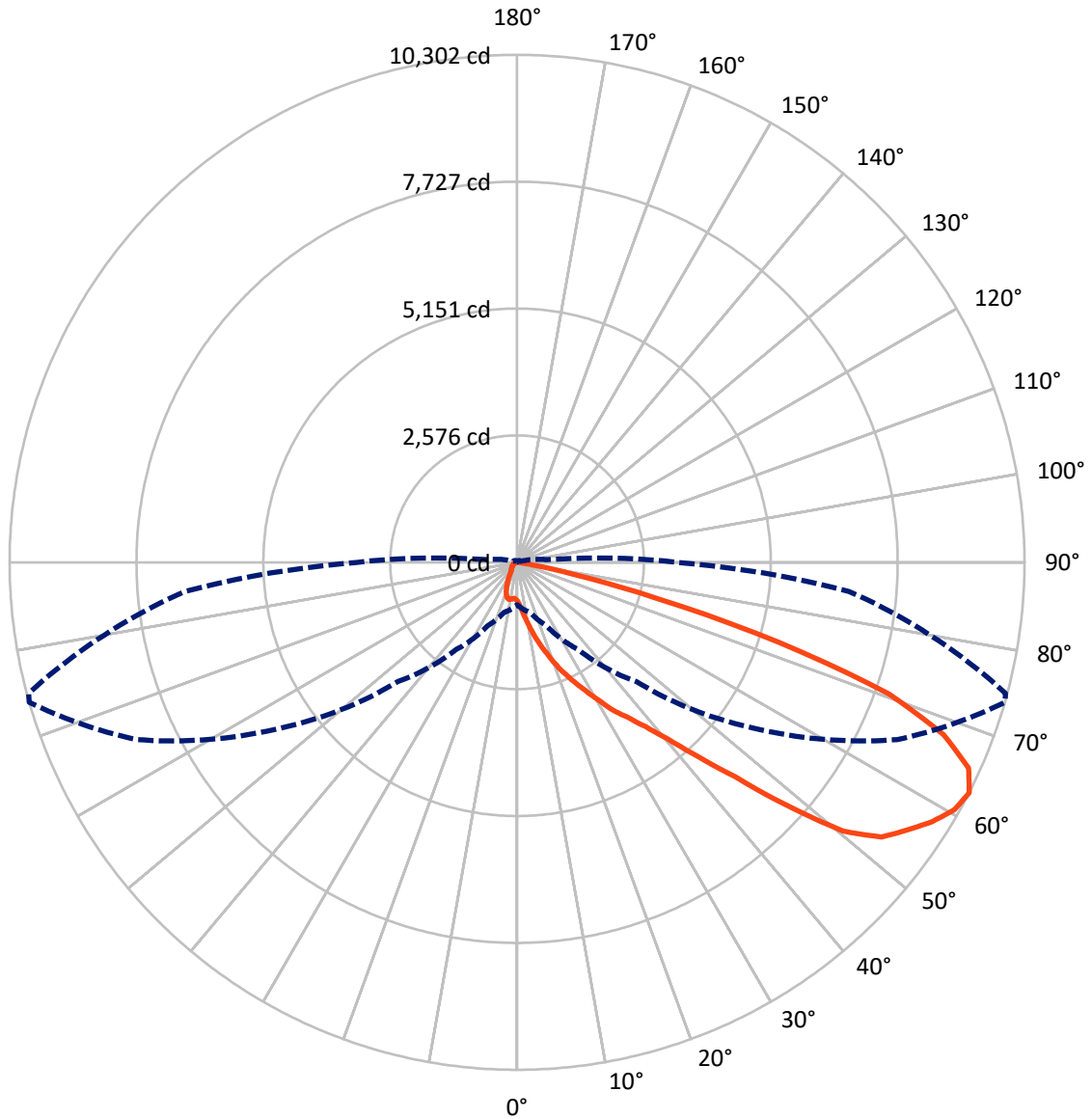
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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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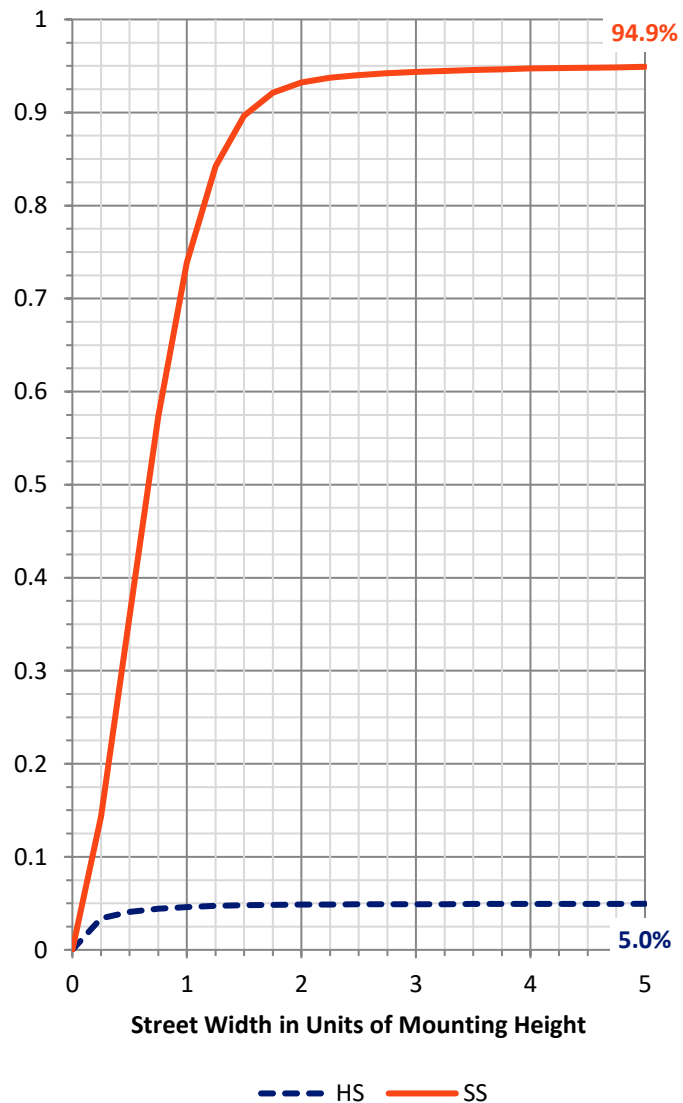
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	533.6	0.0	533.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	10165.4	0.0	10165.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	10699.0	0.0	10699.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.9	0.9
10°-20°	411.4	3.8
20°-30°	882.9	8.3
30°-40°	1548.5	14.5
40°-50°	2400.6	22.4
50°-60°	2767.5	25.9
60°-70°	1944.3	18.2
70°-80°	605.7	5.7
80°-90°	40.0	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°	10699.0	100.0
0°-180°	10699.0	100.0

**Coefficient of Utilization**

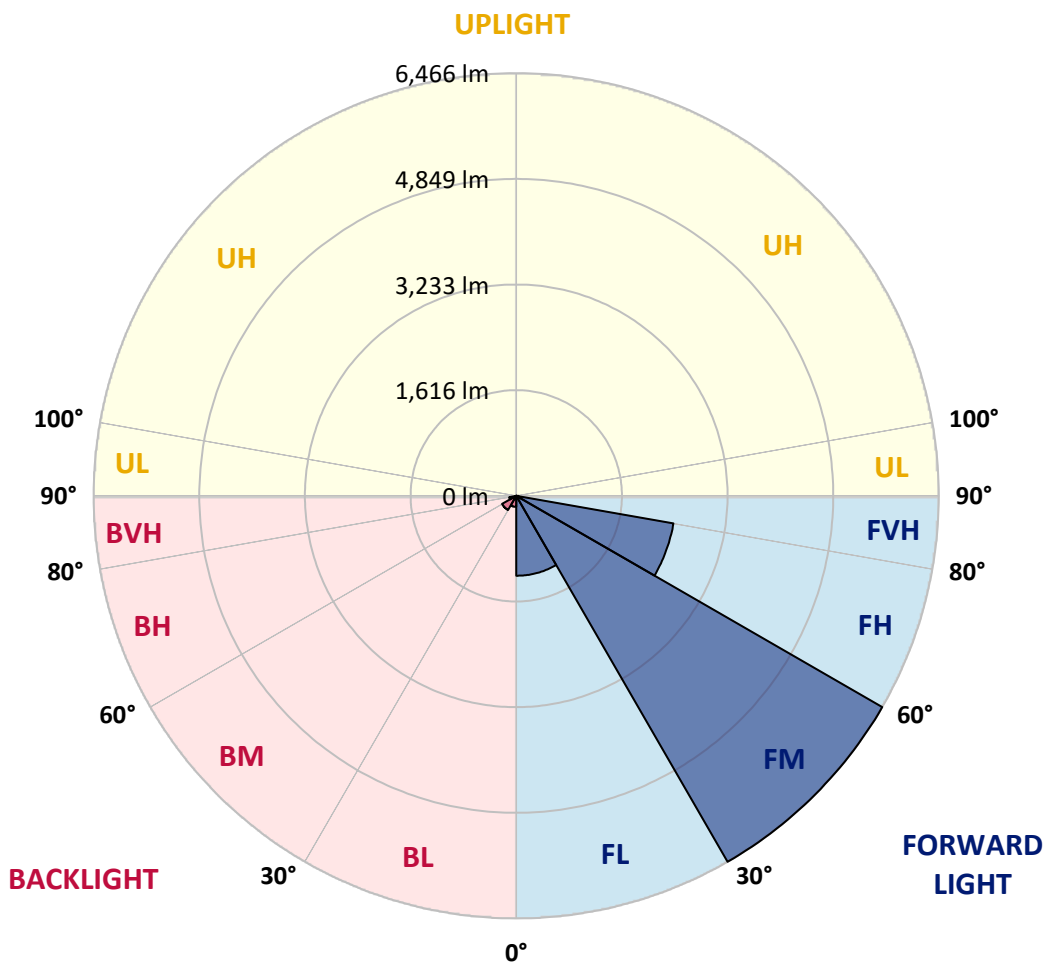


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1222.9	11.4			
FM (30°-60°)	6465.9	60.4			
FH (60°-80°)	2442.0	22.8			G2/5000
FVH (80°-90°)	34.5	0.3			G1/100
BL (0°-30°)	169.3	1.6	B1/500		
BM (30°-60°)	250.8	2.3	B1/1000		
BH (60°-80°)	108.0	1.0	B0/110		G0/110
BVH (80°-90°)	5.5	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°	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2
2.5°	1088.2	1069.4	1046.8	1027.9	990.3	963.9	930.0	892.4	851.0	847.2	813.3
5°	1525.0	1468.5	1468.5	1419.5	1363.1	1261.4	1167.3	1050.5	963.9	956.4	866.0
7.5°	1973.1	1927.9	1901.5	1826.2	1735.8	1622.9	1472.3	1276.5	1118.3	1092.0	945.1
10°	2391.0	2357.1	2308.2	2247.9	2168.9	1984.4	1796.1	1540.0	1287.8	1268.9	1039.2
12.5°	2714.8	2673.4	2650.8	2624.5	2522.8	2376.0	2131.2	1807.4	1506.2	1464.7	1133.4
15°	2959.6	2940.8	2918.2	2918.2	2865.5	2722.4	2470.1	2093.6	1717.0	1668.1	1253.9
17.5°	3155.4	3132.8	3129.0	3151.6	3136.6	3034.9	2797.7	2368.4	1935.4	1897.8	1378.1
20°	3373.8	3343.7	3343.7	3362.5	3358.7	3302.2	3095.1	2684.7	2191.5	2123.7	1521.2
22.5°	3682.5	3663.7	3648.7	3618.5	3595.9	3543.2	3362.5	2993.5	2436.2	2372.2	1668.1
25°	4096.7	4074.1	4006.4	3953.7	3855.8	3776.7	3622.3	3268.4	2684.7	2613.2	1811.1
27.5°	4499.6	4454.4	4390.4	4322.7	4213.5	4077.9	3885.9	3528.2	2944.5	2869.2	1958.0
30°	4925.1	4891.2	4812.2	4703.0	4567.4	4416.8	4187.1	3840.7	3242.0	3159.2	2116.1
32.5°	5264.0	5211.3	5139.7	5034.3	4895.0	4789.6	4541.1	4183.3	3584.6	3475.4	2281.8
35°	5535.1	5493.7	5399.6	5297.9	5192.5	5162.3	4891.2	4462.0	3859.5	3757.9	2458.8
37.5°	5708.3	5666.9	5587.8	5486.2	5444.7	5497.5	5320.5	4842.3	4228.5	4100.5	2662.1
40°	5843.9	5794.9	5730.9	5685.7	5670.7	5817.5	5798.7	5335.5	4714.3	4639.0	2940.8
42.5°	5941.8	5892.8	5851.4	5847.6	5945.5	6231.7	6442.6	6024.6	5392.0	5237.6	3298.5
45°	5817.5	5776.1	5798.7	5930.5	6167.7	6619.5	7222.0	6999.8	6209.1	6099.9	3870.8
47.5°	5471.1	5444.7	5546.4	5787.4	6227.9	6856.8	7975.1	8069.2	7376.4	7210.7	4612.6
50°	4928.9	4925.1	5087.0	5414.6	6039.7	6947.1	8355.4	9097.2	8573.8	8404.3	5215.1
52.5°	4194.6	4179.6	4416.8	4872.4	5595.4	6777.7	8426.9	9507.6	9266.6	9067.0	5595.4
55°	3362.5	3328.6	3611.0	4111.8	4940.2	6284.4	8234.9	9598.0	9598.0	9417.2	5877.8
57.5°	2364.7	2417.4	2650.8	3253.3	4130.6	5546.4	7760.5	9515.1	9933.1	9778.7	6258.1
60°	1491.1	1513.7	1769.7	2255.5	3132.8	4559.9	6913.2	9157.4	10200.4	10110.1	6563.1
62.5°	858.5	930.0	1058.1	1427.1	2161.3	3426.5	5866.5	8513.5	10302.1	10264.4	6762.6
65°	523.4	530.9	591.2	805.8	1329.2	2338.3	4695.4	7617.4	10072.4	10106.3	6725.0
67.5°	391.6	391.6	410.4	508.3	756.8	1487.3	3464.2	6529.2	9338.1	9447.3	6371.0
70°	338.9	338.9	342.6	372.8	466.9	881.1	2289.4	5264.0	8005.2	7993.9	5264.0
72.5°	267.3	278.6	301.2	316.3	353.9	515.9	1340.5	3678.8	5561.5	5693.3	3388.8
75°	214.6	218.4	248.5	274.9	297.5	350.2	632.6	2044.6	2918.2	2918.2	1491.1
77.5°	165.7	173.2	192.0	218.4	248.5	248.5	263.6	790.7	1129.6	1092.0	440.5
80°	105.4	109.2	139.3	173.2	207.1	177.0	143.1	263.6	308.8	297.5	120.5
82.5°	64.0	67.8	90.4	139.3	139.3	97.9	90.4	109.2	97.9	90.4	48.9
85°	18.8	22.6	64.0	90.4	79.1	37.7	45.2	48.9	45.2	41.4	26.4
87.5°	3.8	3.8	18.8	22.6	18.8	18.8	15.1	18.8	18.8	18.8	11.3
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°	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2	783.2
2.5°	794.5	779.4	749.3	726.7	707.9	689.1	674.0	670.2	662.7	662.7	658.9
5°	828.4	794.5	738.0	700.4	670.2	643.9	621.3	598.7	591.2	583.6	587.4
7.5°	881.1	828.4	749.3	692.8	640.1	579.9	530.9	489.5	459.4	451.8	440.5
10°	948.9	869.8	768.1	677.8	579.9	474.4	406.7	365.2	350.2	331.4	335.1
12.5°	1016.7	918.8	783.2	636.3	478.2	372.8	316.3	289.9	278.6	274.9	278.6
15°	1095.7	971.5	775.7	561.0	384.1	301.2	267.3	256.0	248.5	248.5	244.7
17.5°	1174.8	1016.7	749.3	463.1	308.8	256.0	241.0	229.7	222.2	218.4	218.4
20°	1261.4	1058.1	689.1	369.0	256.0	233.5	218.4	203.3	195.8	195.8	195.8
22.5°	1351.8	1088.2	610.0	293.7	229.7	207.1	192.0	180.7	173.2	173.2	173.2
25°	1430.8	1103.3	515.9	244.7	210.9	188.3	173.2	161.9	158.1	154.4	154.4
27.5°	1506.2	1099.5	418.0	214.6	188.3	169.4	154.4	146.8	139.3	139.3	139.3
30°	1581.5	1076.9	331.4	195.8	173.2	150.6	139.3	131.8	128.0	124.3	124.3
32.5°	1645.5	1039.2	259.8	180.7	158.1	135.6	124.3	116.7	116.7	113.0	113.0
35°	1709.5	982.8	218.4	169.4	143.1	124.3	113.0	109.2	105.4	105.4	105.4
37.5°	1777.3	911.2	192.0	154.4	128.0	113.0	105.4	101.7	97.9	94.1	94.1
40°	1860.1	839.7	180.7	143.1	116.7	101.7	94.1	90.4	86.6	86.6	86.6
42.5°	1991.9	779.4	169.4	128.0	105.4	94.1	86.6	79.1	79.1	75.3	75.3
45°	2240.4	756.8	158.1	116.7	97.9	82.8	79.1	71.5	67.8	67.8	67.8
47.5°	2564.2	760.6	146.8	105.4	90.4	75.3	71.5	67.8	60.2	60.2	60.2
50°	2831.6	741.8	135.6	97.9	79.1	71.5	64.0	60.2	56.5	56.5	56.5
52.5°	2937.0	707.9	124.3	90.4	75.3	64.0	60.2	56.5	52.7	52.7	52.7
55°	3042.4	692.8	113.0	79.1	67.8	64.0	56.5	52.7	48.9	45.2	45.2
57.5°	3234.5	700.4	101.7	75.3	64.0	60.2	52.7	45.2	37.7	33.9	33.9
60°	3336.1	674.0	94.1	67.8	60.2	56.5	45.2	33.9	26.4	22.6	22.6
62.5°	3249.5	598.7	86.6	64.0	56.5	48.9	33.9	26.4	18.8	11.3	11.3
65°	3008.5	493.3	79.1	60.2	48.9	37.7	30.1	18.8	11.3	7.5	7.5
67.5°	2703.5	387.8	71.5	56.5	45.2	33.9	26.4	15.1	7.5	3.8	3.8
70°	2183.9	278.6	67.8	52.7	41.4	30.1	22.6	15.1	7.5	3.8	3.8
72.5°	1408.3	180.7	60.2	48.9	37.7	30.1	18.8	11.3	7.5	3.8	3.8
75°	651.4	120.5	56.5	45.2	37.7	26.4	18.8	15.1	7.5	3.8	3.8
77.5°	192.0	86.6	52.7	41.4	33.9	26.4	18.8	15.1	7.5	3.8	3.8
80°	79.1	60.2	41.4	37.7	33.9	26.4	18.8	15.1	7.5	3.8	3.8
82.5°	37.7	26.4	18.8	15.1	18.8	18.8	15.1	15.1	7.5	3.8	3.8
85°	18.8	11.3	7.5	7.5	7.5	3.8	3.8	7.5	7.5	3.8	3.8
87.5°	11.3	7.5	7.5	7.5	3.8	3.8	3.8	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)