

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: P573220

Luminaire Tested: **ARCH-S-PA2-50-730-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573220  
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-PA2-50-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

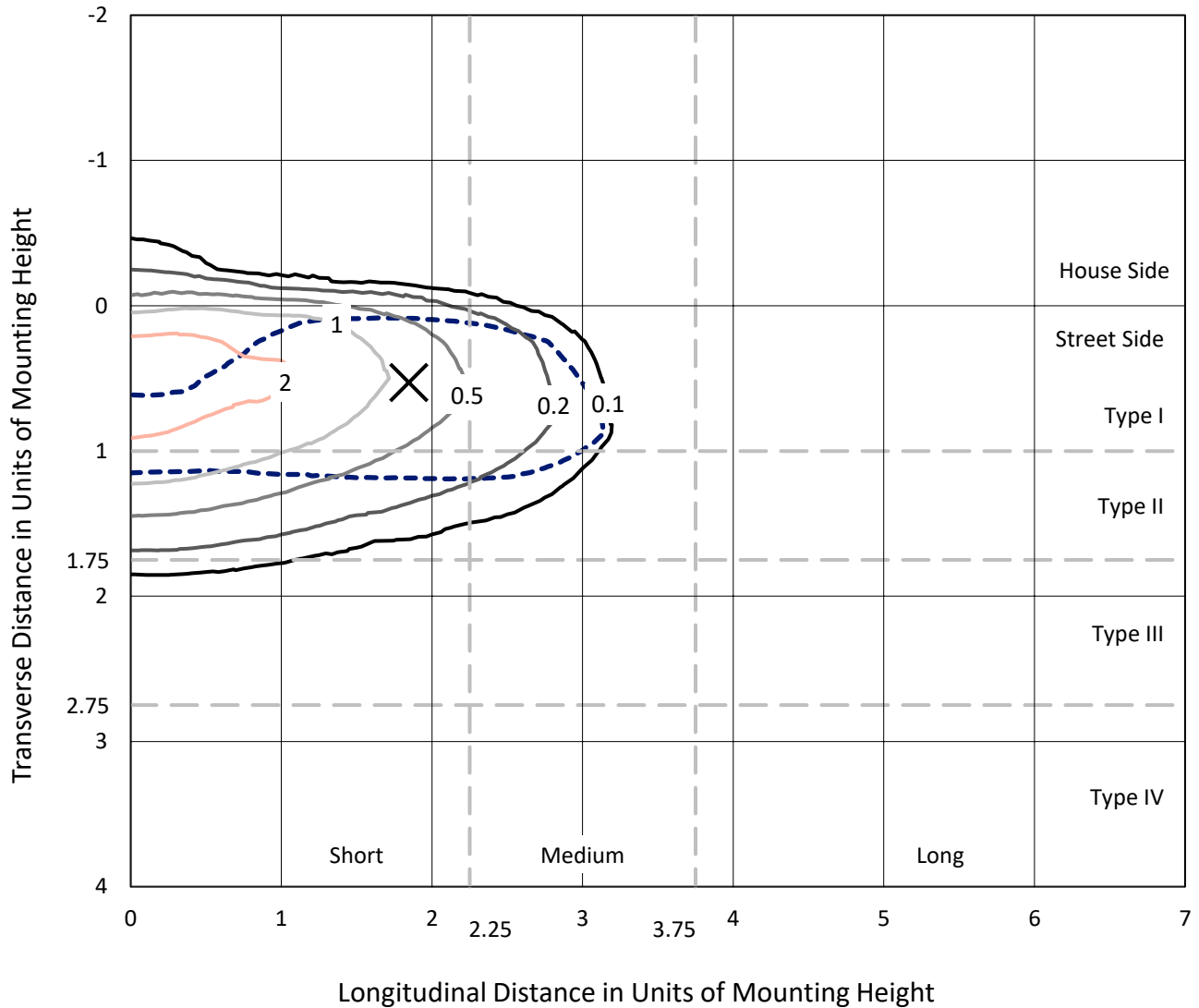
Lumens per Lamp: N/A  
Luminaire Lumens: 5615 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

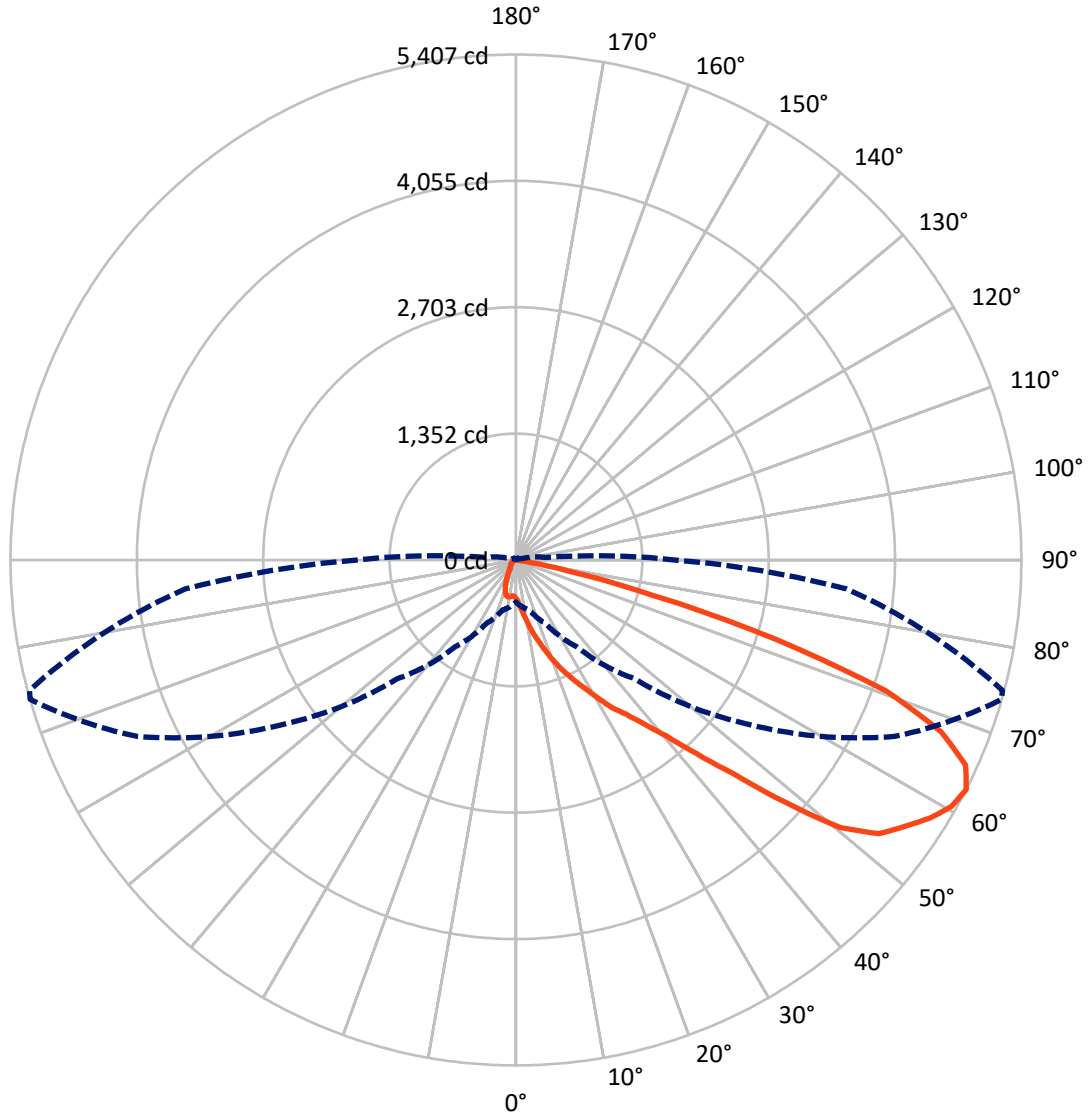
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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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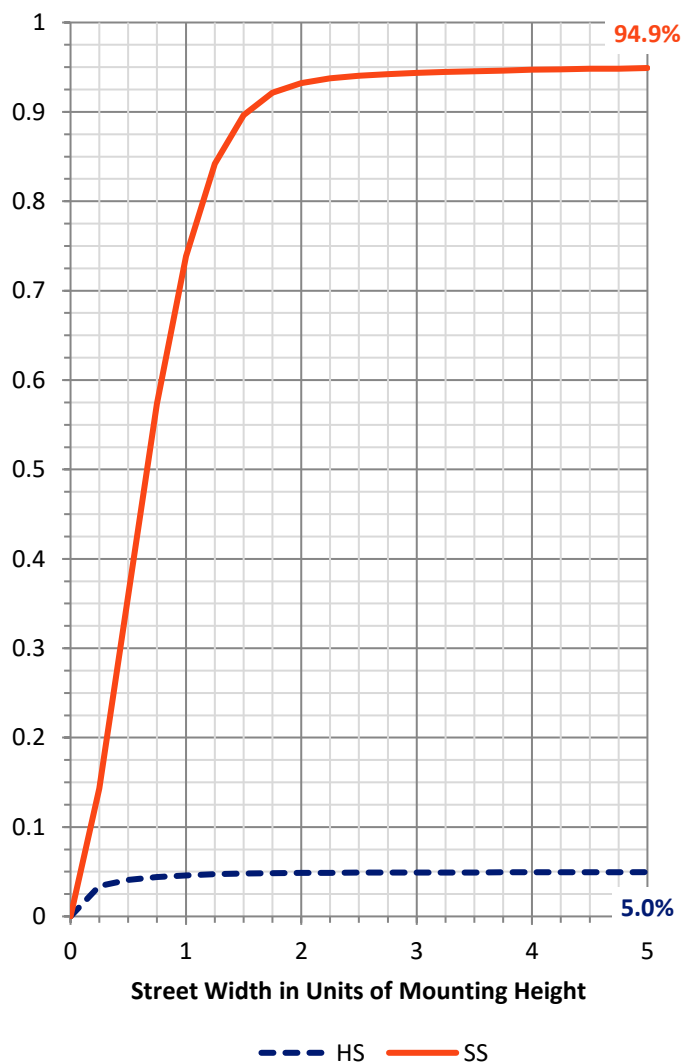
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	280.1	0.0	280.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	5334.9	0.0	5334.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	5615.0	0.0	5615.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	0.9
10°-20°	215.9	3.8
20°-30°	463.4	8.3
30°-40°	812.7	14.5
40°-50°	1259.9	22.4
50°-60°	1452.4	25.9
60°-70°	1020.4	18.2
70°-80°	317.9	5.7
80°-90°	21.0	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°	5615.0	100.0
0°-180°	5615.0	100.0

**Coefficient of Utilization**



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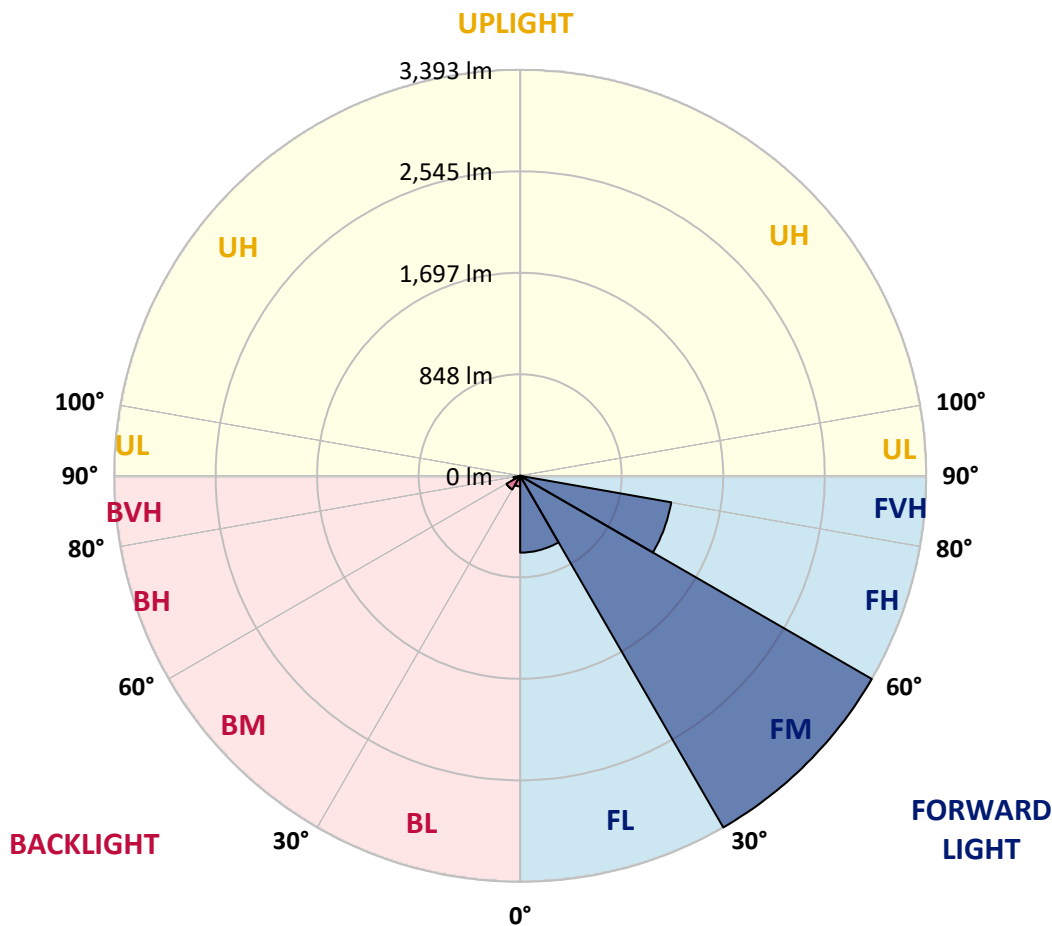
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	641.8	11.4			
FM (30°-60°)	3393.4	60.4			
FH (60°-80°)	1281.6	22.8			G1/1800
FVH (80°-90°)	18.1	0.3			G1/100
BL (0°-30°)	88.9	1.6	B0/110		
BM (30°-60°)	131.6	2.3	B0/220		
BH (60°-80°)	56.7	1.0	B0/110		G0/110
BVH (80°-90°)	2.9	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0
2.5°	571.1	561.2	549.4	539.5	519.7	505.9	488.1	468.3	446.6	444.6	426.8
5°	800.3	770.7	770.7	745.0	715.4	662.0	612.6	551.3	505.9	501.9	454.5
7.5°	1035.5	1011.8	997.9	958.4	911.0	851.7	772.7	669.9	586.9	573.1	496.0
10°	1254.8	1237.1	1211.4	1179.8	1138.3	1041.4	942.6	808.2	675.8	666.0	545.4
12.5°	1424.8	1403.1	1391.2	1377.4	1324.0	1246.9	1118.5	948.5	790.5	768.7	594.8
15°	1553.2	1543.4	1531.5	1531.5	1503.8	1428.7	1296.3	1098.7	901.1	875.4	658.1
17.5°	1656.0	1644.1	1642.2	1654.0	1646.1	1592.8	1468.3	1243.0	1015.7	996.0	723.3
20°	1770.6	1754.8	1754.8	1764.7	1762.7	1733.1	1624.4	1409.0	1150.1	1114.5	798.4
22.5°	1932.7	1922.8	1914.9	1899.1	1887.2	1859.5	1764.7	1571.0	1278.6	1245.0	875.4
25°	2150.0	2138.2	2102.6	2074.9	2023.6	1982.1	1901.0	1715.3	1409.0	1371.4	950.5
27.5°	2361.5	2337.8	2304.2	2268.6	2211.3	2140.1	2039.4	1851.6	1545.3	1505.8	1027.6
30°	2584.8	2567.0	2525.5	2468.2	2397.0	2318.0	2197.5	2015.7	1701.4	1658.0	1110.6
32.5°	2762.6	2735.0	2697.4	2642.1	2569.0	2513.6	2383.2	2195.5	1881.3	1824.0	1197.5
35°	2904.9	2883.2	2833.8	2780.4	2725.1	2709.3	2567.0	2341.7	2025.5	1972.2	1290.4
37.5°	2995.8	2974.1	2932.6	2879.2	2857.5	2885.2	2792.3	2541.3	2219.2	2152.0	1397.1
40°	3067.0	3041.3	3007.7	2984.0	2976.1	3053.1	3043.2	2800.2	2474.1	2434.6	1543.4
42.5°	3118.3	3092.6	3070.9	3068.9	3120.3	3270.5	3381.2	3161.8	2829.8	2748.8	1731.1
45°	3053.1	3031.4	3043.2	3112.4	3236.9	3474.0	3790.2	3673.6	3258.6	3201.3	2031.5
47.5°	2871.3	2857.5	2910.8	3037.3	3268.5	3598.5	4185.4	4234.8	3871.2	3784.3	2420.8
50°	2586.8	2584.8	2669.8	2841.7	3169.7	3646.0	4385.0	4774.3	4499.6	4410.7	2736.9
52.5°	2201.4	2193.5	2318.0	2557.1	2936.5	3557.0	4422.6	4989.7	4863.3	4758.5	2936.5
55°	1764.7	1746.9	1895.1	2157.9	2592.7	3298.2	4321.8	5037.2	5037.2	4942.3	3084.7
57.5°	1241.0	1268.7	1391.2	1707.4	2167.8	2910.8	4072.8	4993.7	5213.0	5132.0	3284.3
60°	782.5	794.4	928.8	1183.7	1644.1	2393.1	3628.2	4806.0	5353.3	5305.9	3444.4
62.5°	450.6	488.1	555.3	749.0	1134.3	1798.3	3078.8	4468.0	5406.7	5386.9	3549.1
65°	274.7	278.6	310.3	422.9	697.6	1227.2	2464.2	3997.7	5286.1	5303.9	3529.4
67.5°	205.5	205.5	215.4	266.8	397.2	780.6	1818.0	3426.6	4900.8	4958.1	3343.6
70°	177.9	177.9	179.8	195.6	245.0	462.4	1201.5	2762.6	4201.3	4195.3	2762.6
72.5°	140.3	146.2	158.1	166.0	185.8	270.7	703.5	1930.7	2918.7	2987.9	1778.5
75°	112.6	114.6	130.4	144.3	156.1	183.8	332.0	1073.0	1531.5	1531.5	782.5
77.5°	86.9	90.9	100.8	114.6	130.4	130.4	138.3	415.0	592.8	573.1	231.2
80°	55.3	57.3	73.1	90.9	108.7	92.9	75.1	138.3	162.0	156.1	63.2
82.5°	33.6	35.6	47.4	73.1	73.1	51.4	47.4	57.3	51.4	47.4	25.7
85°	9.9	11.9	33.6	47.4	41.5	19.8	23.7	25.7	23.7	21.7	13.8
87.5°	2.0	2.0	9.9	11.9	9.9	9.9	7.9	9.9	9.9	9.9	5.9
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°	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0
2.5°	417.0	409.1	393.3	381.4	371.5	361.6	353.7	351.8	347.8	347.8	345.8
5°	434.7	417.0	387.3	367.6	351.8	337.9	326.1	314.2	310.3	306.3	308.3
7.5°	462.4	434.7	393.3	363.6	335.9	304.3	278.6	256.9	241.1	237.1	231.2
10°	498.0	456.5	403.1	355.7	304.3	249.0	213.4	191.7	183.8	173.9	175.9
12.5°	533.6	482.2	411.0	334.0	251.0	195.6	166.0	152.2	146.2	144.3	146.2
15°	575.1	509.8	407.1	294.4	201.6	158.1	140.3	134.4	130.4	130.4	128.4
17.5°	616.6	533.6	393.3	243.1	162.0	134.4	126.5	120.5	116.6	114.6	114.6
20°	662.0	555.3	361.6	193.7	134.4	122.5	114.6	106.7	102.8	102.8	102.8
22.5°	709.4	571.1	320.1	154.1	120.5	108.7	100.8	94.9	90.9	90.9	90.9
25°	750.9	579.0	270.7	128.4	110.7	98.8	90.9	85.0	83.0	81.0	81.0
27.5°	790.5	577.0	219.4	112.6	98.8	88.9	81.0	77.1	73.1	73.1	73.1
30°	830.0	565.2	173.9	102.8	90.9	79.0	73.1	69.2	67.2	65.2	65.2
32.5°	863.6	545.4	136.4	94.9	83.0	71.1	65.2	61.3	61.3	59.3	59.3
35°	897.2	515.8	114.6	88.9	75.1	65.2	59.3	57.3	55.3	55.3	55.3
37.5°	932.7	478.2	100.8	81.0	67.2	59.3	55.3	53.4	51.4	49.4	49.4
40°	976.2	440.7	94.9	75.1	61.3	53.4	49.4	47.4	45.5	45.5	45.5
42.5°	1045.4	409.1	88.9	67.2	55.3	49.4	45.5	41.5	41.5	39.5	39.5
45°	1175.8	397.2	83.0	61.3	51.4	43.5	41.5	37.5	35.6	35.6	35.6
47.5°	1345.7	399.2	77.1	55.3	47.4	39.5	37.5	35.6	31.6	31.6	31.6
50°	1486.1	389.3	71.1	51.4	41.5	37.5	33.6	31.6	29.6	29.6	29.6
52.5°	1541.4	371.5	65.2	47.4	39.5	33.6	31.6	29.6	27.7	27.7	27.7
55°	1596.7	363.6	59.3	41.5	35.6	33.6	29.6	27.7	25.7	23.7	23.7
57.5°	1697.5	367.6	53.4	39.5	33.6	31.6	27.7	23.7	19.8	17.8	17.8
60°	1750.9	353.7	49.4	35.6	31.6	29.6	23.7	17.8	13.8	11.9	11.9
62.5°	1705.4	314.2	45.5	33.6	29.6	25.7	17.8	13.8	9.9	5.9	5.9
65°	1578.9	258.9	41.5	31.6	25.7	19.8	15.8	9.9	5.9	4.0	4.0
67.5°	1418.9	203.5	37.5	29.6	23.7	17.8	13.8	7.9	4.0	2.0	2.0
70°	1146.2	146.2	35.6	27.7	21.7	15.8	11.9	7.9	4.0	2.0	2.0
72.5°	739.1	94.9	31.6	25.7	19.8	15.8	9.9	5.9	4.0	2.0	2.0
75°	341.9	63.2	29.6	23.7	19.8	13.8	9.9	7.9	4.0	2.0	2.0
77.5°	100.8	45.5	27.7	21.7	17.8	13.8	9.9	7.9	4.0	2.0	2.0
80°	41.5	31.6	21.7	19.8	17.8	13.8	9.9	7.9	4.0	2.0	2.0
82.5°	19.8	13.8	9.9	7.9	9.9	9.9	7.9	7.9	4.0	2.0	2.0
85°	9.9	5.9	4.0	4.0	4.0	2.0	2.0	4.0	4.0	2.0	2.0
87.5°	5.9	4.0	4.0	4.0	2.0	2.0	2.0	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)