

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: P573121

Luminaire Tested: **ARCH-S-PA2-40-722-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573121  
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-PA2-40-722-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

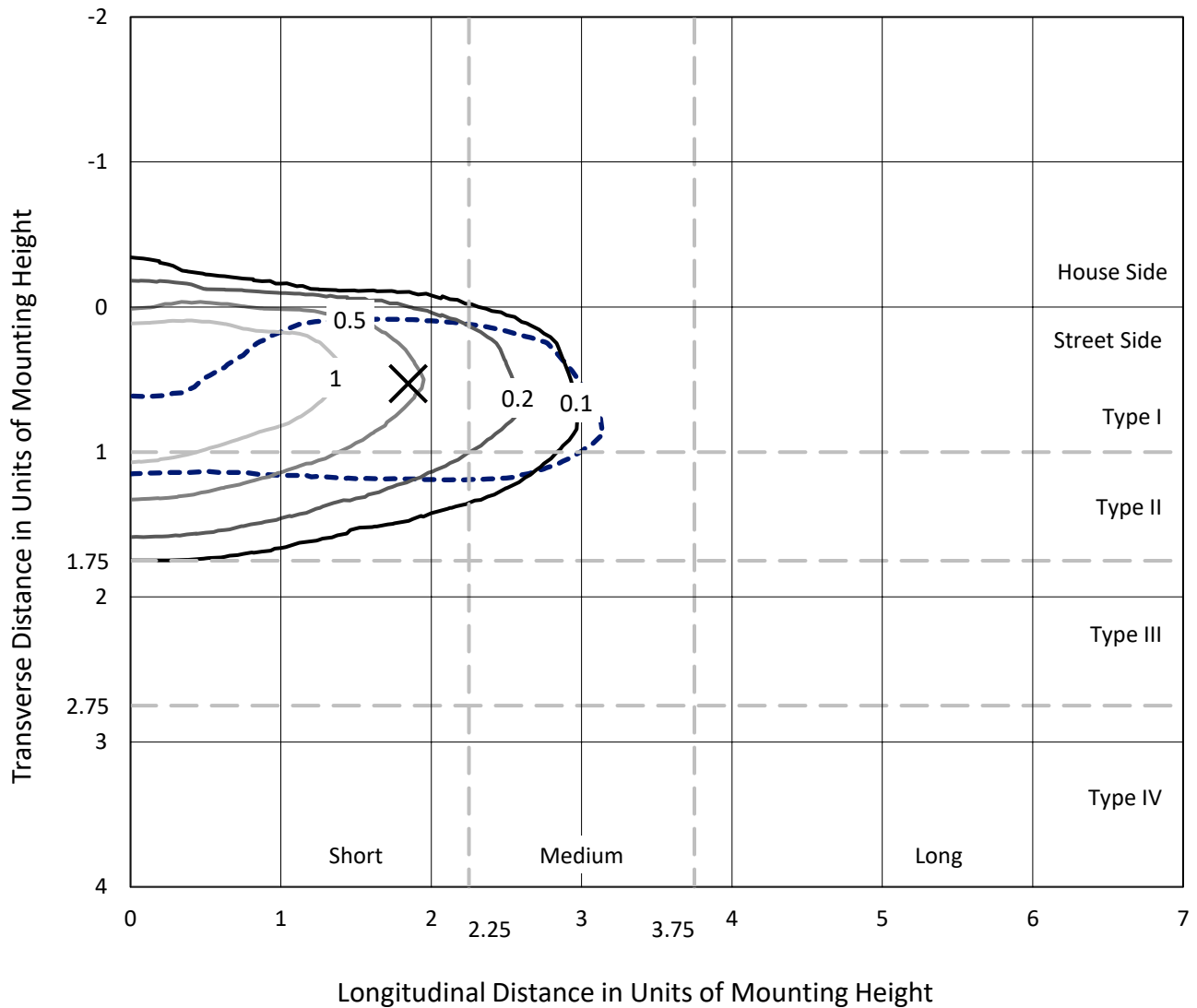
Lumens per Lamp: N/A  
Luminaire Lumens: 3789 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

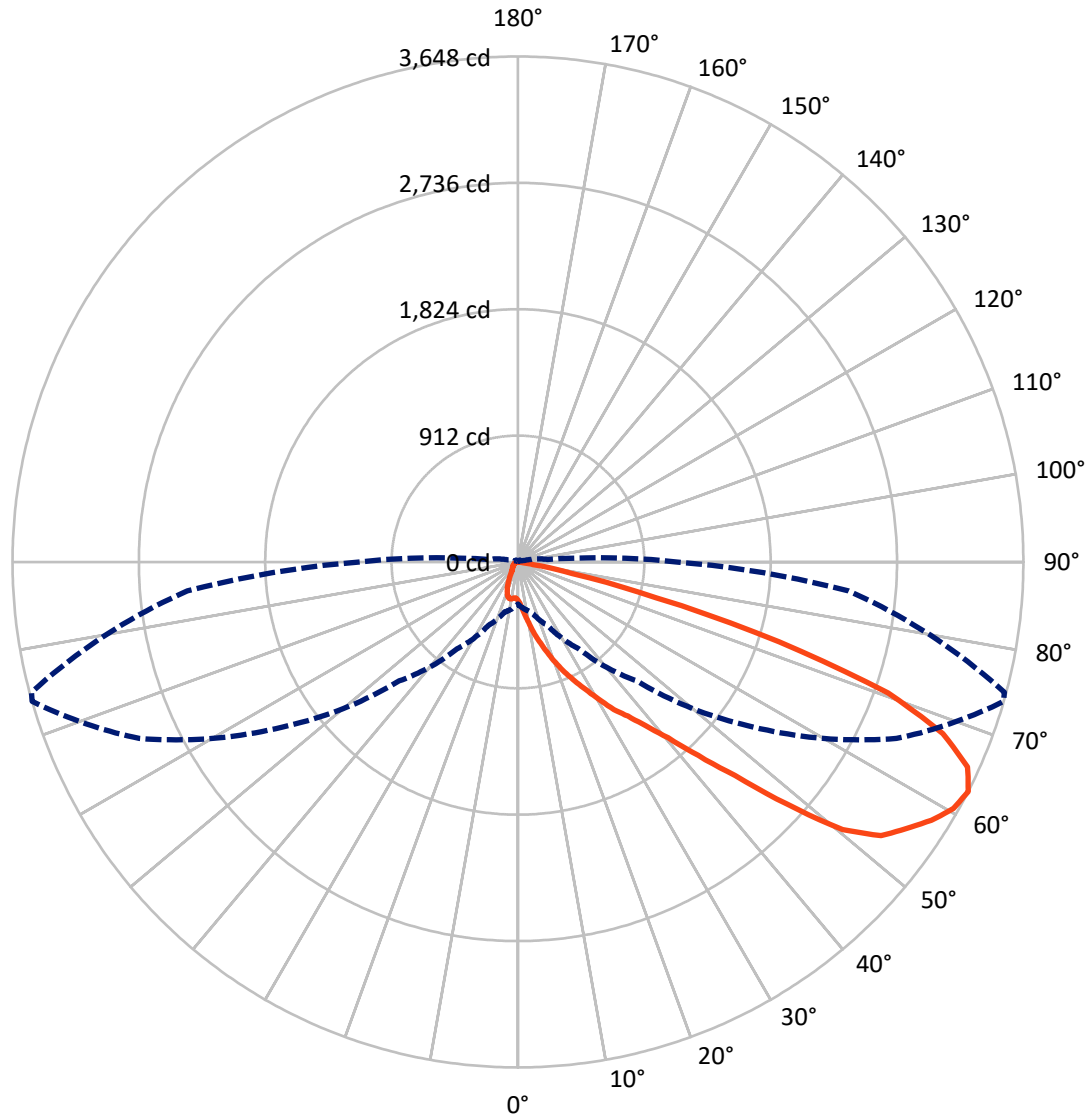
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type 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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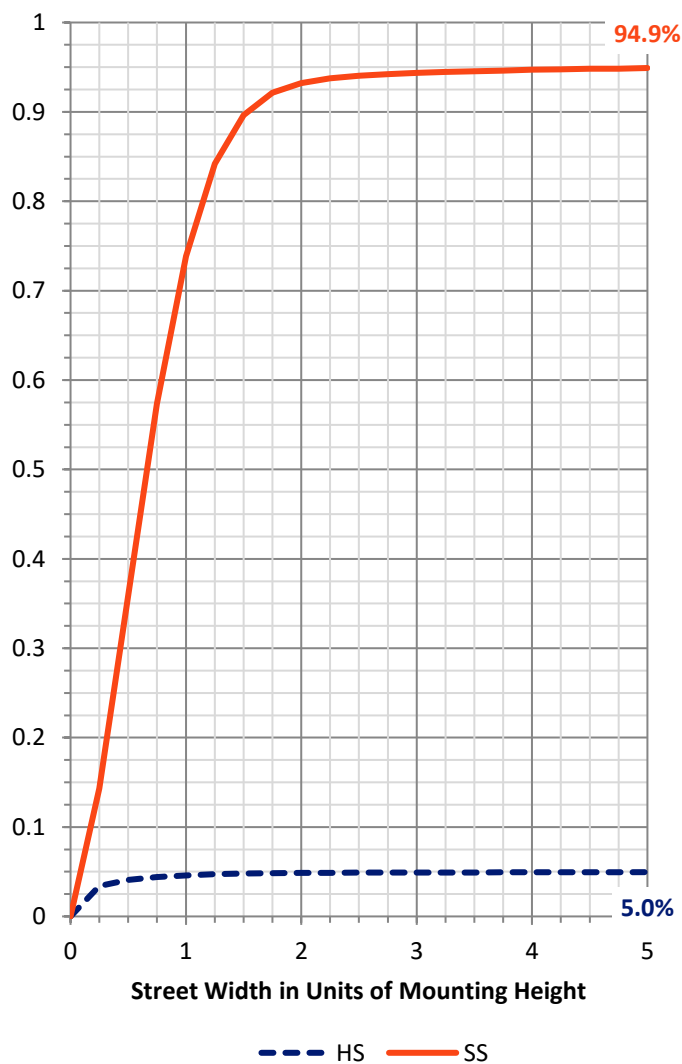
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	189.0	0.0	189.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	3600.0	0.0	3600.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	3789.0	0.0	3789.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.7	0.9
10°-20°	145.7	3.8
20°-30°	312.7	8.3
30°-40°	548.4	14.5
40°-50°	850.2	22.4
50°-60°	980.1	25.9
60°-70°	688.6	18.2
70°-80°	214.5	5.7
80°-90°	14.2	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°	3789.0	100.0
0°-180°	3789.0	100.0

**Coefficient of Utilization**



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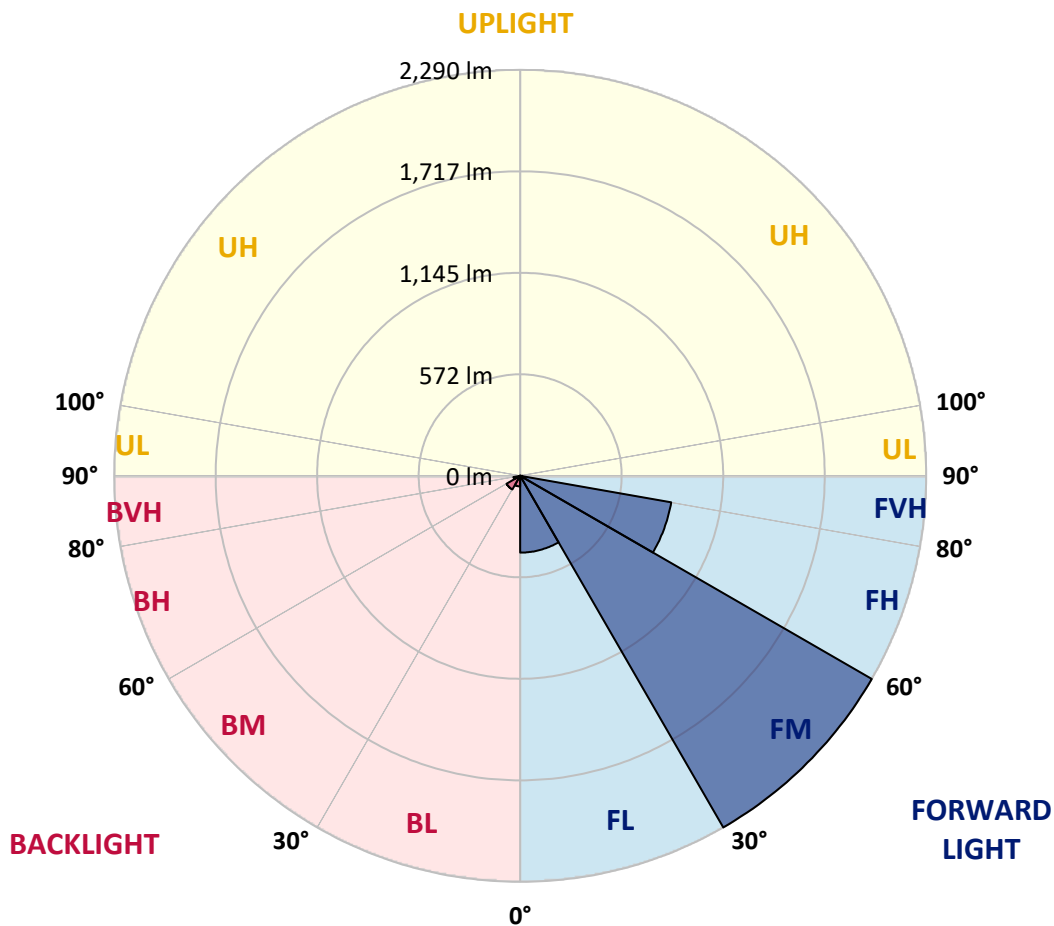
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	433.1	11.4			
FM (30°-60°)	2289.9	60.4			
FH (60°-80°)	864.8	22.8			G1/1800
FVH (80°-90°)	12.2	0.3			G1/100
BL (0°-30°)	60.0	1.6	B0/110		
BM (30°-60°)	88.8	2.3	B0/220		
BH (60°-80°)	38.2	1.0	B0/110		G0/110
BVH (80°-90°)	1.9	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°	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4
2.5°	385.4	378.7	370.7	364.0	350.7	341.4	329.4	316.0	301.4	300.0	288.0
5°	540.1	520.1	520.1	502.7	482.7	446.7	413.4	372.0	341.4	338.7	306.7
7.5°	698.7	682.7	673.4	646.7	614.7	574.7	521.4	452.1	396.0	386.7	334.7
10°	846.8	834.8	817.4	796.1	768.1	702.8	636.1	545.4	456.1	449.4	368.0
12.5°	961.4	946.8	938.8	929.4	893.4	841.4	754.8	640.1	533.4	518.7	401.4
15°	1048.1	1041.5	1033.5	1033.5	1014.8	964.1	874.8	741.4	608.1	590.7	444.1
17.5°	1117.5	1109.5	1108.1	1116.1	1110.8	1074.8	990.8	838.8	685.4	672.1	488.1
20°	1194.8	1184.1	1184.1	1190.8	1189.5	1169.5	1096.1	950.8	776.1	752.1	538.7
22.5°	1304.2	1297.5	1292.2	1281.5	1273.5	1254.8	1190.8	1060.1	862.8	840.1	590.7
25°	1450.8	1442.8	1418.8	1400.2	1365.5	1337.5	1282.8	1157.5	950.8	925.4	641.4
27.5°	1593.5	1577.5	1554.9	1530.8	1492.2	1444.2	1376.2	1249.5	1042.8	1016.1	693.4
30°	1744.2	1732.2	1704.2	1665.5	1617.5	1564.2	1482.8	1360.2	1148.1	1118.8	749.4
32.5°	1864.2	1845.6	1820.2	1782.9	1733.5	1696.2	1608.2	1481.5	1269.5	1230.8	808.1
35°	1960.2	1945.6	1912.2	1876.2	1838.9	1828.2	1732.2	1580.2	1366.8	1330.8	870.8
37.5°	2021.6	2006.9	1978.9	1942.9	1928.2	1946.9	1884.2	1714.9	1497.5	1452.2	942.8
40°	2069.6	2052.2	2029.6	2013.6	2008.2	2060.2	2053.6	1889.6	1669.5	1642.9	1041.5
42.5°	2104.3	2086.9	2072.2	2070.9	2105.6	2206.9	2281.6	2133.6	1909.6	1854.9	1168.1
45°	2060.2	2045.6	2053.6	2100.3	2184.3	2344.3	2557.6	2479.0	2198.9	2160.3	1370.8
47.5°	1937.6	1928.2	1964.2	2049.6	2205.6	2428.3	2824.3	2857.7	2612.3	2553.6	1633.5
50°	1745.5	1744.2	1801.5	1917.6	2138.9	2460.3	2959.0	3221.7	3036.4	2976.4	1846.9
52.5°	1485.5	1480.2	1564.2	1725.5	1981.6	2400.3	2984.4	3367.1	3281.7	3211.0	1981.6
55°	1190.8	1178.8	1278.8	1456.2	1749.5	2225.6	2916.3	3399.1	3399.1	3335.1	2081.6
57.5°	837.4	856.1	938.8	1152.1	1462.8	1964.2	2748.3	3369.7	3517.8	3463.1	2216.3
60°	528.1	536.1	626.7	798.8	1109.5	1614.9	2448.3	3243.1	3612.4	3580.4	2324.3
62.5°	304.0	329.4	374.7	505.4	765.4	1213.5	2077.6	3015.0	3648.4	3635.1	2395.0
65°	185.4	188.0	209.4	285.4	470.7	828.1	1662.9	2697.7	3567.1	3579.1	2381.6
67.5°	138.7	138.7	145.4	180.0	268.0	526.7	1226.8	2312.3	3307.1	3345.7	2256.3
70°	120.0	120.0	121.3	132.0	165.4	312.0	810.8	1864.2	2835.0	2831.0	1864.2
72.5°	94.7	98.7	106.7	112.0	125.3	182.7	474.7	1302.8	1969.6	2016.2	1200.1
75°	76.0	77.3	88.0	97.3	105.3	124.0	224.0	724.1	1033.5	1033.5	528.1
77.5°	58.7	61.3	68.0	77.3	88.0	88.0	93.3	280.0	400.0	386.7	156.0
80°	37.3	38.7	49.3	61.3	73.3	62.7	50.7	93.3	109.3	105.3	42.7
82.5°	22.7	24.0	32.0	49.3	49.3	34.7	32.0	38.7	34.7	32.0	17.3
85°	6.7	8.0	22.7	32.0	28.0	13.3	16.0	17.3	16.0	14.7	9.3
87.5°	1.3	1.3	6.7	8.0	6.7	6.7	5.3	6.7	6.7	6.7	4.0
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°	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4
2.5°	281.4	276.0	265.4	257.4	250.7	244.0	238.7	237.4	234.7	234.7	233.4
5°	293.4	281.4	261.4	248.0	237.4	228.0	220.0	212.0	209.4	206.7	208.0
7.5°	312.0	293.4	265.4	245.4	226.7	205.4	188.0	173.4	162.7	160.0	156.0
10°	336.0	308.0	272.0	240.0	205.4	168.0	144.0	129.3	124.0	117.3	118.7
12.5°	360.0	325.4	277.4	225.4	169.4	132.0	112.0	102.7	98.7	97.3	98.7
15°	388.0	344.0	274.7	198.7	136.0	106.7	94.7	90.7	88.0	88.0	86.7
17.5°	416.0	360.0	265.4	164.0	109.3	90.7	85.3	81.3	78.7	77.3	77.3
20°	446.7	374.7	244.0	130.7	90.7	82.7	77.3	72.0	69.3	69.3	69.3
22.5°	478.7	385.4	216.0	104.0	81.3	73.3	68.0	64.0	61.3	61.3	61.3
25°	506.7	390.7	182.7	86.7	74.7	66.7	61.3	57.3	56.0	54.7	54.7
27.5°	533.4	389.4	148.0	76.0	66.7	60.0	54.7	52.0	49.3	49.3	49.3
30°	560.1	381.4	117.3	69.3	61.3	53.3	49.3	46.7	45.3	44.0	44.0
32.5°	582.7	368.0	92.0	64.0	56.0	48.0	44.0	41.3	41.3	40.0	40.0
35°	605.4	348.0	77.3	60.0	50.7	44.0	40.0	38.7	37.3	37.3	37.3
37.5°	629.4	322.7	68.0	54.7	45.3	40.0	37.3	36.0	34.7	33.3	33.3
40°	658.7	297.4	64.0	50.7	41.3	36.0	33.3	32.0	30.7	30.7	30.7
42.5°	705.4	276.0	60.0	45.3	37.3	33.3	30.7	28.0	28.0	26.7	26.7
45°	793.4	268.0	56.0	41.3	34.7	29.3	28.0	25.3	24.0	24.0	24.0
47.5°	908.1	269.4	52.0	37.3	32.0	26.7	25.3	24.0	21.3	21.3	21.3
50°	1002.8	262.7	48.0	34.7	28.0	25.3	22.7	21.3	20.0	20.0	20.0
52.5°	1040.1	250.7	44.0	32.0	26.7	22.7	21.3	20.0	18.7	18.7	18.7
55°	1077.5	245.4	40.0	28.0	24.0	22.7	20.0	18.7	17.3	16.0	16.0
57.5°	1145.5	248.0	36.0	26.7	22.7	21.3	18.7	16.0	13.3	12.0	12.0
60°	1181.5	238.7	33.3	24.0	21.3	20.0	16.0	12.0	9.3	8.0	8.0
62.5°	1150.8	212.0	30.7	22.7	20.0	17.3	12.0	9.3	6.7	4.0	4.0
65°	1065.5	174.7	28.0	21.3	17.3	13.3	10.7	6.7	4.0	2.7	2.7
67.5°	957.4	137.3	25.3	20.0	16.0	12.0	9.3	5.3	2.7	1.3	1.3
70°	773.4	98.7	24.0	18.7	14.7	10.7	8.0	5.3	2.7	1.3	1.3
72.5°	498.7	64.0	21.3	17.3	13.3	10.7	6.7	4.0	2.7	1.3	1.3
75°	230.7	42.7	20.0	16.0	13.3	9.3	6.7	5.3	2.7	1.3	1.3
77.5°	68.0	30.7	18.7	14.7	12.0	9.3	6.7	5.3	2.7	1.3	1.3
80°	28.0	21.3	14.7	13.3	12.0	9.3	6.7	5.3	2.7	1.3	1.3
82.5°	13.3	9.3	6.7	5.3	6.7	6.7	5.3	5.3	2.7	1.3	1.3
85°	6.7	4.0	2.7	2.7	2.7	1.3	1.3	2.7	2.7	1.3	1.3
87.5°	4.0	2.7	2.7	2.7	1.3	1.3	1.3	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)