

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: P348760

Luminaire Tested: **ARCH-N-PA1-30-730-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348760  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-30-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3166 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B0 - U0 - G1

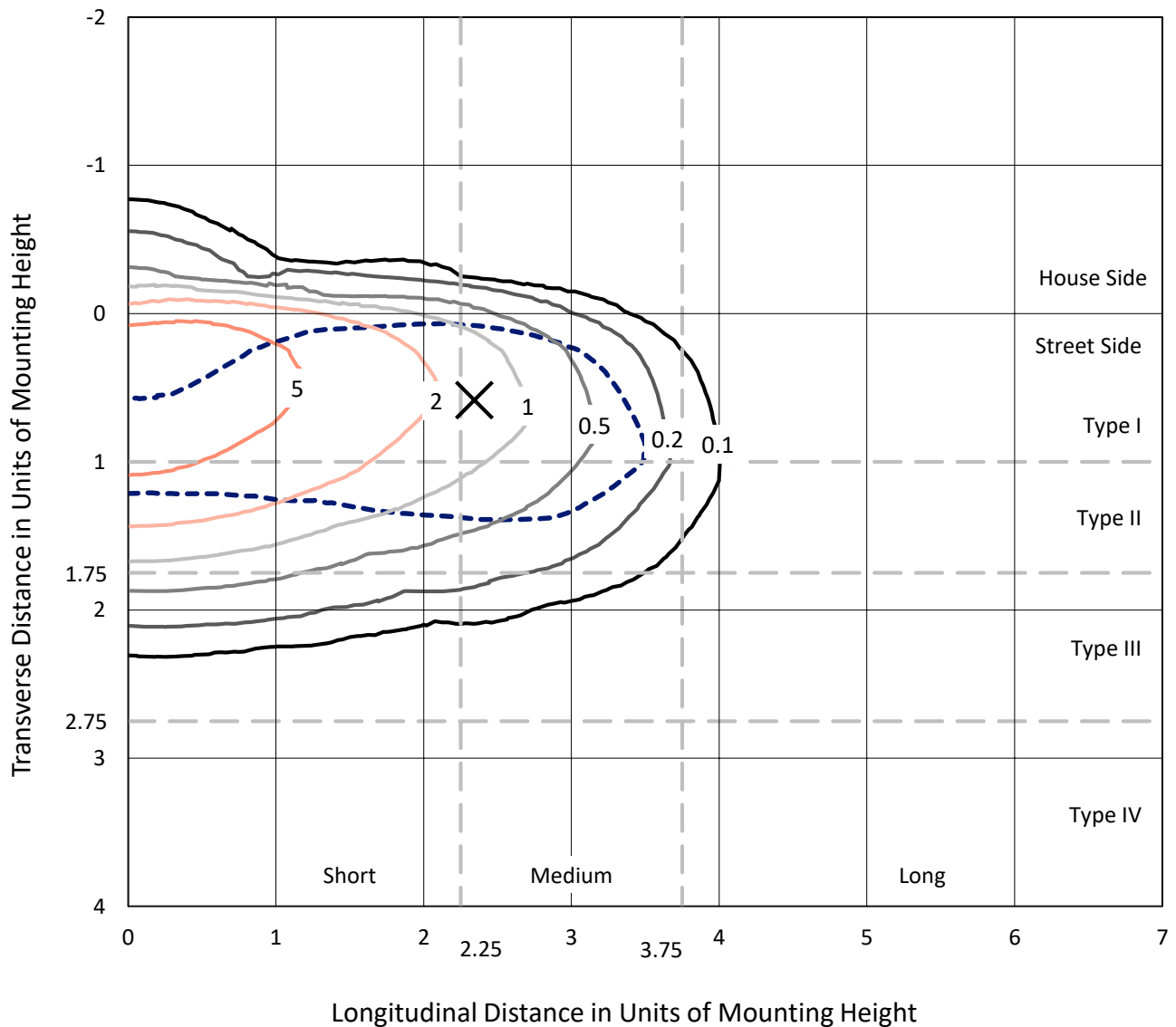
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

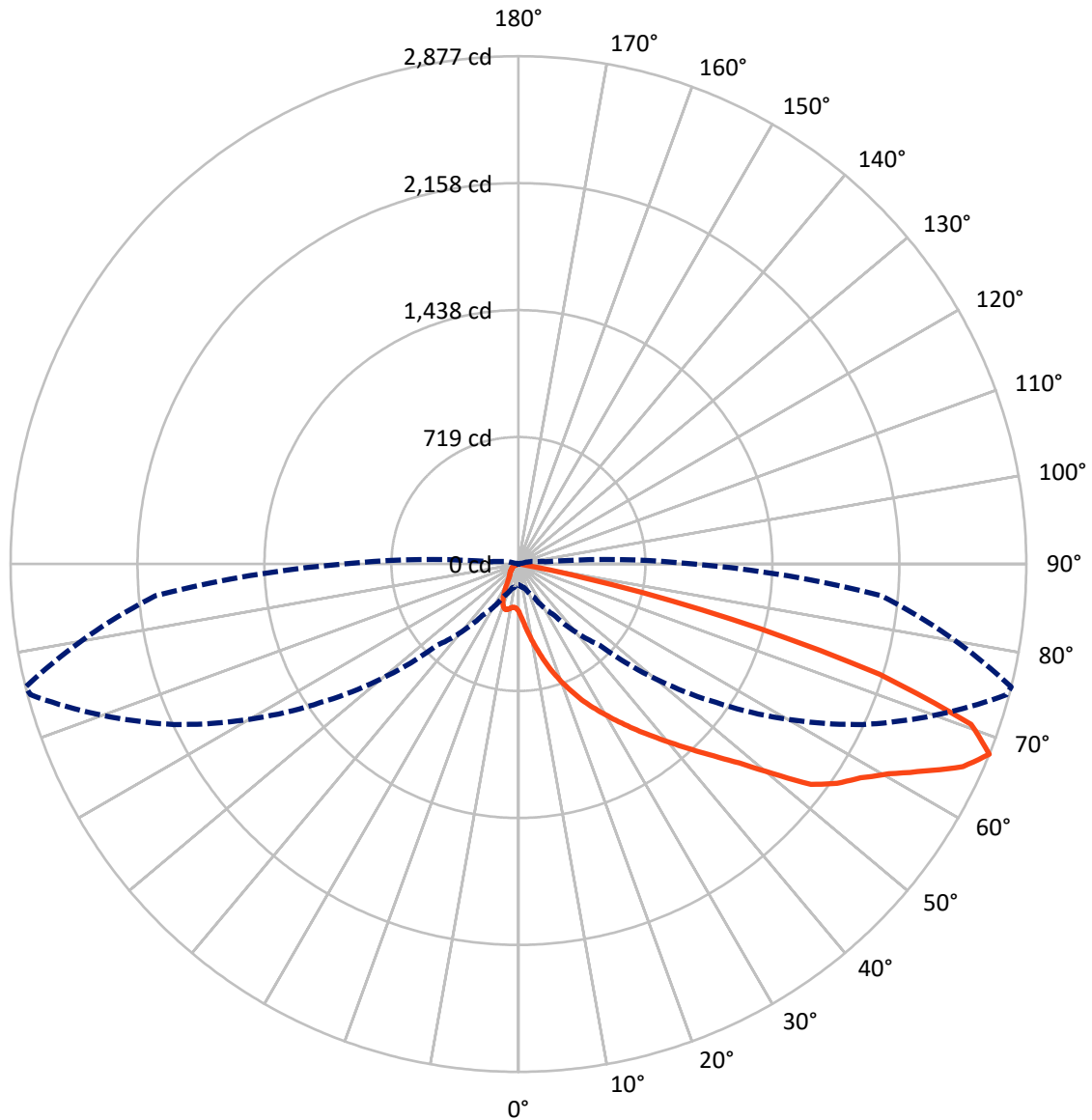
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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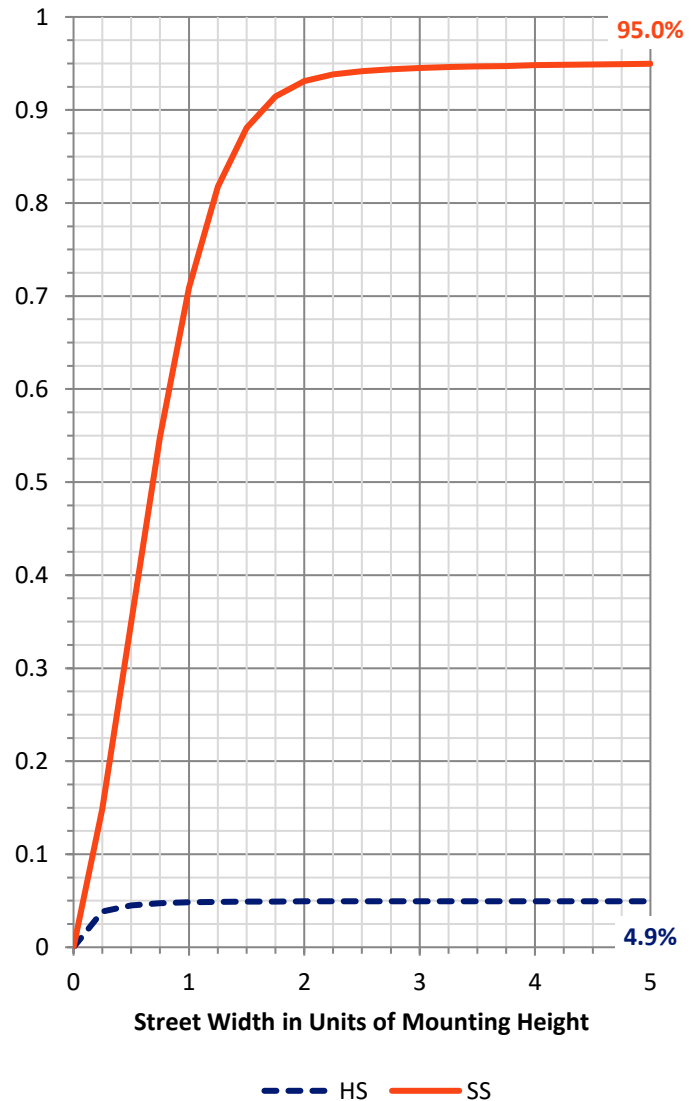
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	157.2	0.0	157.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	3008.8	0.0	3008.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	3166.0	0.0	3166.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.4	1.1
10°-20°	132.4	4.2
20°-30°	269.4	8.5
30°-40°	467.5	14.8
40°-50°	660.6	20.9
50°-60°	749.1	23.7
60°-70°	621.3	19.6
70°-80°	225.1	7.1
80°-90°	7.3	0.2
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°	3166.0	100.0
0°-180°	3166.0	100.0



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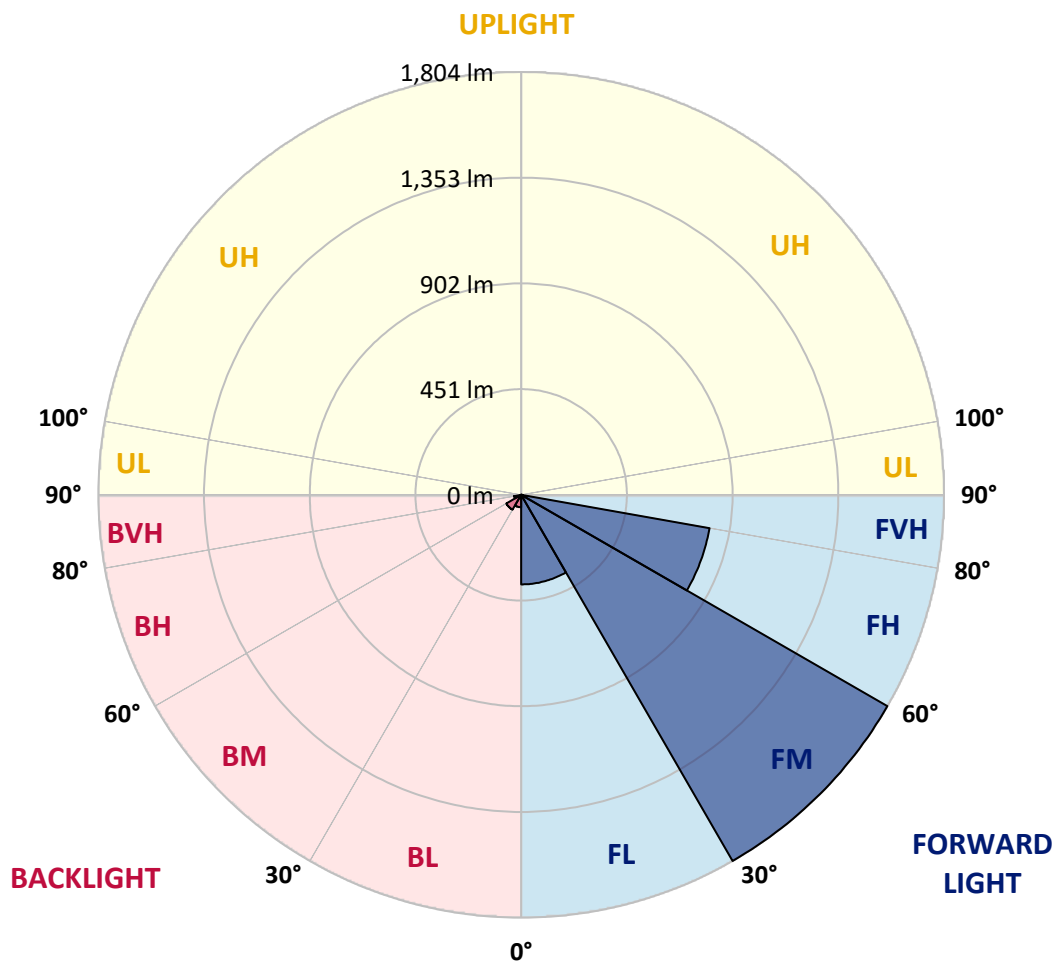
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	382.1	12.1			
FM	(30°-60°)	1803.6	57.0			
FH	(60°-80°)	816.0	25.8			G1/1800
FVH	(80°-90°)	7.1	0.2			G0/10
BL	(0°-30°)	53.0	1.7	B0/110		
BM	(30°-60°)	73.6	2.3	B0/220		
BH	(60°-80°)	30.4	1.0	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6
2.5°	400.9	391.9	394.0	388.1	377.6	356.0	337.5	320.0	299.6	298.9	282.2
5°	540.6	533.0	532.0	520.2	501.1	464.3	428.5	387.7	342.2	338.9	303.2
7.5°	667.4	661.3	659.1	645.1	609.4	573.6	527.0	467.1	395.9	389.8	331.7
10°	764.8	761.9	762.4	752.4	721.9	688.6	627.4	551.0	456.8	447.4	365.8
12.5°	838.6	839.3	844.3	838.2	821.1	796.4	731.1	640.5	524.2	511.3	404.8
15°	892.8	896.3	905.4	913.1	911.8	890.5	830.5	731.3	595.8	581.5	448.2
17.5°	927.9	931.8	945.1	962.0	977.6	972.6	926.5	819.0	668.2	651.7	494.7
20°	958.7	963.3	977.6	999.9	1028.9	1035.2	1004.9	904.1	740.5	720.4	542.7
22.5°	1025.4	1025.3	1034.0	1047.1	1074.7	1090.8	1071.6	983.0	811.9	791.0	591.7
25°	1146.1	1141.6	1138.5	1128.2	1134.3	1144.3	1133.6	1056.8	883.8	862.6	641.3
27.5°	1289.6	1292.3	1267.7	1240.0	1218.7	1208.4	1190.9	1125.2	952.9	929.6	689.9
30°	1440.9	1441.8	1412.6	1377.4	1330.4	1291.4	1261.1	1190.5	1023.9	998.5	737.0
32.5°	1577.4	1572.0	1543.2	1495.2	1435.8	1392.0	1329.1	1263.5	1099.1	1074.6	789.5
35°	1685.6	1679.2	1644.1	1600.5	1538.9	1494.7	1419.1	1336.3	1178.2	1154.2	842.1
37.5°	1764.7	1757.2	1721.1	1676.2	1623.1	1597.4	1523.6	1415.5	1264.5	1238.7	897.4
40°	1792.2	1785.6	1763.0	1730.2	1687.4	1681.6	1634.4	1506.7	1358.4	1330.9	960.1
42.5°	1775.8	1769.4	1761.4	1750.3	1732.5	1738.1	1739.0	1610.6	1462.7	1435.6	1029.3
45°	1710.9	1705.2	1713.5	1729.7	1751.8	1779.3	1834.5	1722.3	1579.2	1550.4	1109.4
47.5°	1615.3	1611.1	1634.2	1674.7	1739.2	1814.9	1921.7	1839.6	1710.0	1683.3	1209.3
50°	1479.3	1478.7	1524.7	1598.6	1697.8	1832.1	2011.9	1973.1	1891.8	1863.6	1348.1
52.5°	1267.7	1269.0	1359.6	1478.0	1625.3	1820.5	2069.9	2144.5	2103.2	2073.9	1468.4
55°	1066.1	1074.4	1138.6	1309.3	1514.0	1777.2	2089.9	2224.6	2219.9	2192.1	1535.3
57.5°	868.7	883.8	945.7	1105.1	1351.6	1677.4	2078.9	2259.2	2306.7	2285.5	1623.5
60°	654.8	661.7	733.0	882.0	1143.1	1495.4	1999.4	2278.1	2425.4	2410.7	1751.5
62.5°	416.6	433.9	497.2	640.9	890.0	1242.7	1865.4	2277.8	2574.0	2582.1	1916.7
65°	219.5	239.7	273.3	397.2	611.6	960.4	1663.8	2256.5	2756.3	2767.5	2045.9
67.5°	118.3	124.2	141.9	206.1	354.7	650.6	1367.7	2151.0	2861.9	2876.7	2063.9
70°	86.6	89.8	96.4	114.0	178.5	377.9	998.0	1912.0	2725.8	2720.2	1833.8
72.5°	66.4	71.4	76.4	83.5	102.7	201.7	621.3	1497.2	2174.9	2138.3	1370.7
75°	52.4	53.3	60.3	66.7	77.0	114.9	275.9	872.0	1327.4	1240.7	710.8
77.5°	41.9	42.4	46.6	52.2	61.9	75.5	85.5	343.1	423.8	378.2	154.3
80°	24.8	26.2	34.7	40.2	51.3	47.6	31.2	74.5	66.2	59.9	25.9
82.5°	13.9	15.0	19.6	31.8	35.8	22.8	15.5	20.1	15.5	15.1	7.4
85°	0.0	0.7	12.6	19.7	14.6	5.0	6.5	6.7	4.6	4.3	2.9
87.5°	0.0	0.0	3.9	3.7	0.6	0.8	1.5	2.2	1.8	1.8	1.5
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°	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6	268.6
2.5°	273.8	266.3	252.2	238.3	226.7	217.1	208.5	205.0	202.3	201.8	199.6
5°	286.0	270.9	243.9	221.7	206.8	196.3	187.3	181.7	177.4	175.8	174.2
7.5°	304.5	281.6	242.8	217.2	199.5	181.7	165.1	147.0	135.8	131.5	129.0
10°	327.0	295.8	246.9	216.0	184.9	147.5	119.9	97.0	87.7	84.6	83.8
12.5°	353.2	313.4	254.1	208.2	153.8	104.7	82.7	74.9	72.8	71.9	71.9
15°	383.3	332.7	259.3	185.8	113.8	79.2	71.6	68.0	65.8	64.5	64.6
17.5°	414.1	351.5	256.8	153.2	83.9	70.5	64.8	60.9	57.8	56.6	56.3
20°	445.2	369.0	242.9	114.0	71.0	64.0	57.6	53.3	50.2	49.0	48.7
22.5°	477.3	383.8	218.5	83.7	63.8	56.7	50.5	46.2	43.3	42.2	41.6
25°	508.7	395.9	184.4	67.7	57.0	49.9	44.0	40.0	37.3	36.2	36.1
27.5°	538.0	403.5	144.8	59.8	51.1	43.8	38.4	34.8	32.6	31.8	31.6
30°	564.3	404.2	107.1	54.0	45.8	38.6	33.6	30.4	28.4	27.6	27.3
32.5°	591.0	398.4	78.0	48.7	40.9	34.0	29.1	26.6	25.2	24.6	24.6
35°	616.1	385.0	60.8	44.1	36.2	29.5	25.7	23.9	23.0	22.3	22.3
37.5°	640.6	365.7	51.6	40.1	31.8	25.8	22.6	21.5	20.8	20.1	20.1
40°	665.6	341.4	46.9	36.3	28.2	22.9	20.1	19.1	18.5	17.9	17.8
42.5°	696.3	313.4	43.8	32.9	25.0	20.3	17.8	16.6	16.1	15.5	15.3
45°	731.8	289.2	41.3	29.4	22.3	18.0	15.4	14.3	13.5	12.8	12.6
47.5°	783.0	271.8	38.0	25.7	19.8	15.7	13.3	12.1	10.8	10.1	10.0
50°	848.3	257.3	33.7	22.3	17.3	13.3	11.1	9.6	8.5	7.8	7.8
52.5°	880.8	238.5	29.8	19.4	14.6	11.2	9.0	7.2	6.7	6.0	6.0
55°	893.8	224.0	25.9	16.5	12.1	9.3	7.1	5.5	5.1	4.7	4.6
57.5°	930.4	219.9	22.6	14.0	10.0	7.4	5.4	4.2	3.9	3.3	3.3
60°	989.4	222.0	19.6	11.9	8.0	5.7	4.0	3.2	2.9	2.4	2.4
62.5°	1053.0	219.3	16.5	10.3	6.2	4.2	2.8	2.4	2.4	1.4	1.2
65°	1065.3	195.3	14.1	8.5	4.9	3.1	1.8	1.5	2.1	0.3	0.0
67.5°	988.7	151.5	12.2	6.5	3.6	2.4	1.4	0.7	1.8	0.0	0.0
70°	790.6	96.3	9.8	4.7	2.8	1.9	1.1	0.3	1.4	0.0	0.0
72.5°	559.1	55.9	7.8	3.3	2.4	1.5	0.8	0.0	0.8	0.0	0.0
75°	282.7	29.8	4.9	2.5	1.8	1.1	0.6	0.0	0.1	0.0	0.0
77.5°	61.2	13.9	3.1	1.8	1.2	0.7	0.3	0.0	0.0	0.0	0.0
80°	13.3	6.1	1.9	1.1	0.7	0.4	0.0	0.0	0.0	0.0	0.0
82.5°	4.9	3.2	1.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.7	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.6	0.1	0.1	0.0	0.0	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)