

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: P348762

Luminaire Tested: **ARCH-N-PA1-50-730-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348762  
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-PA1-50-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4897 lumens  
Efficiency: N/A  
Efficacy: 94.2 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): 52  
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

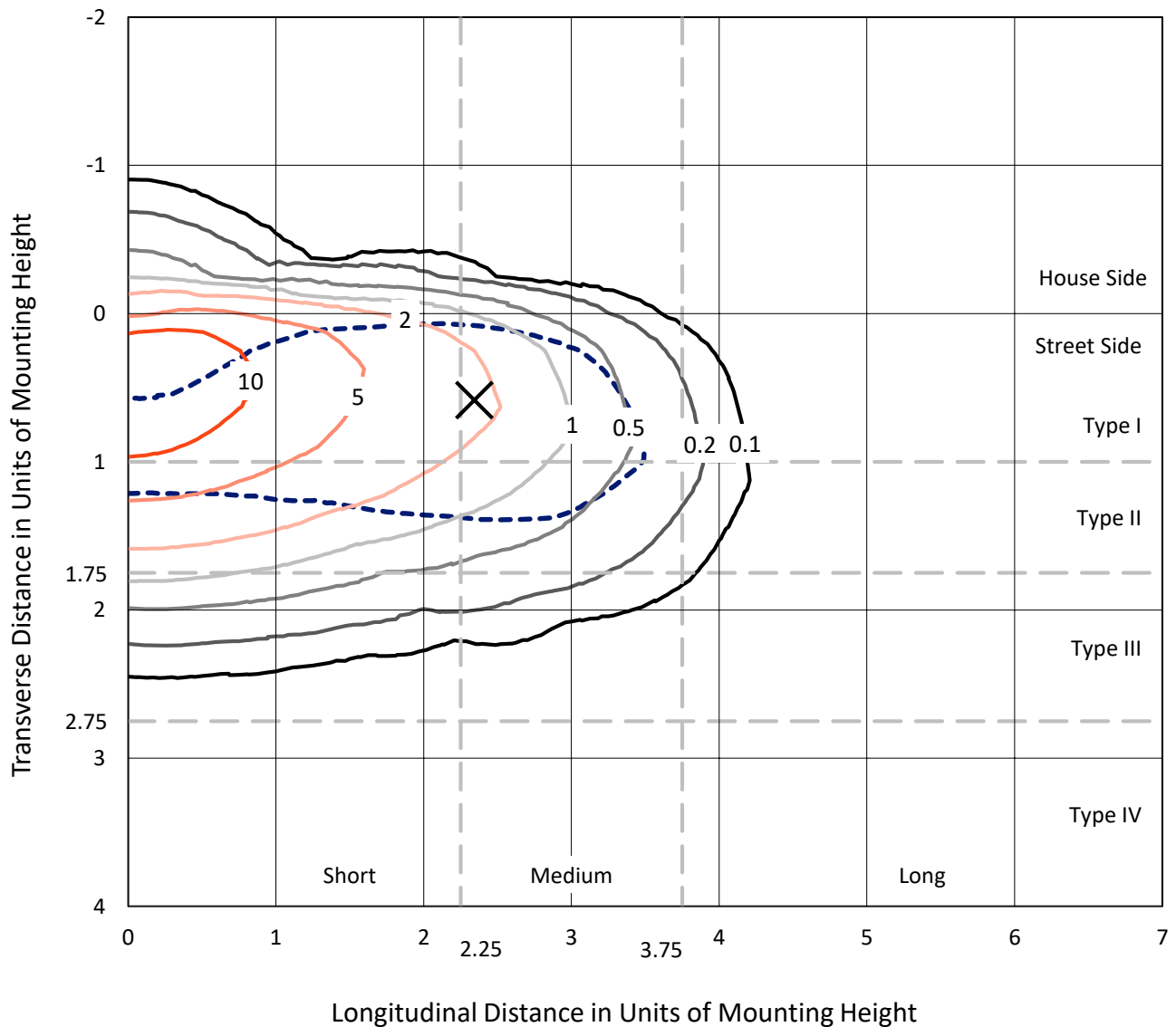


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### Iso-Footcandle Lines of Horizontal Illumination

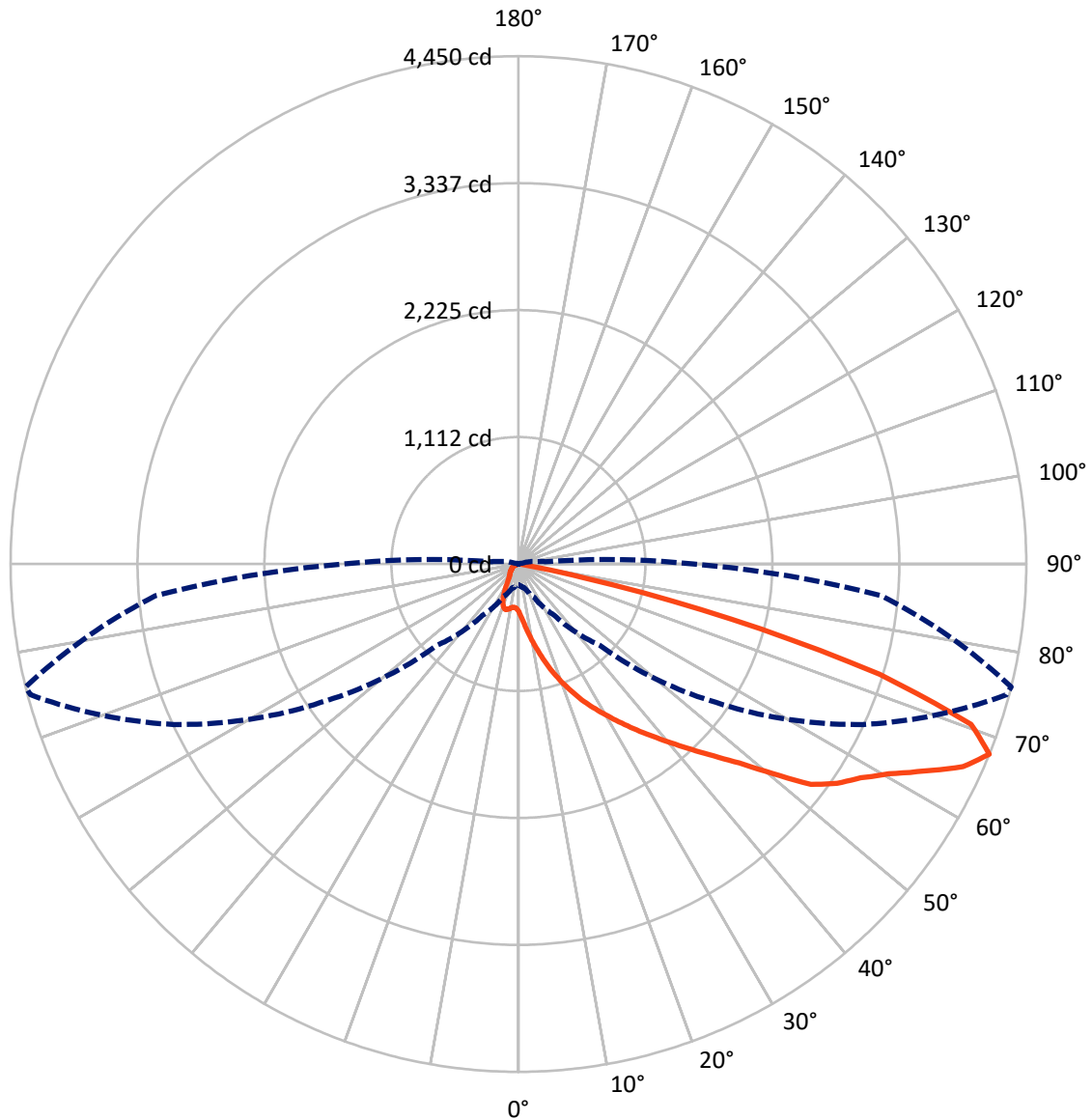
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.6 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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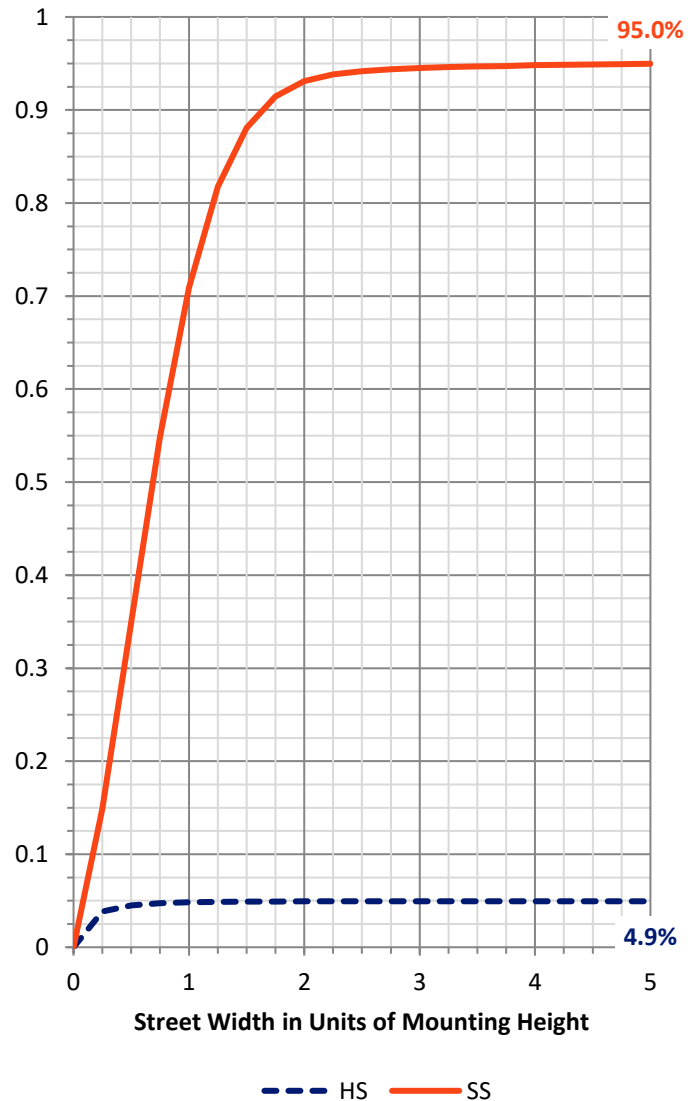
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	243.2	0.0	243.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4653.8	0.0	4653.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	4897.0	0.0	4897.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.7	1.1
10°-20°	204.8	4.2
20°-30°	416.6	8.5
30°-40°	723.1	14.8
40°-50°	1021.7	20.9
50°-60°	1158.7	23.7
60°-70°	961.0	19.6
70°-80°	348.1	7.1
80°-90°	11.3	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°	4897.0	100.0
0°-180°	4897.0	100.0



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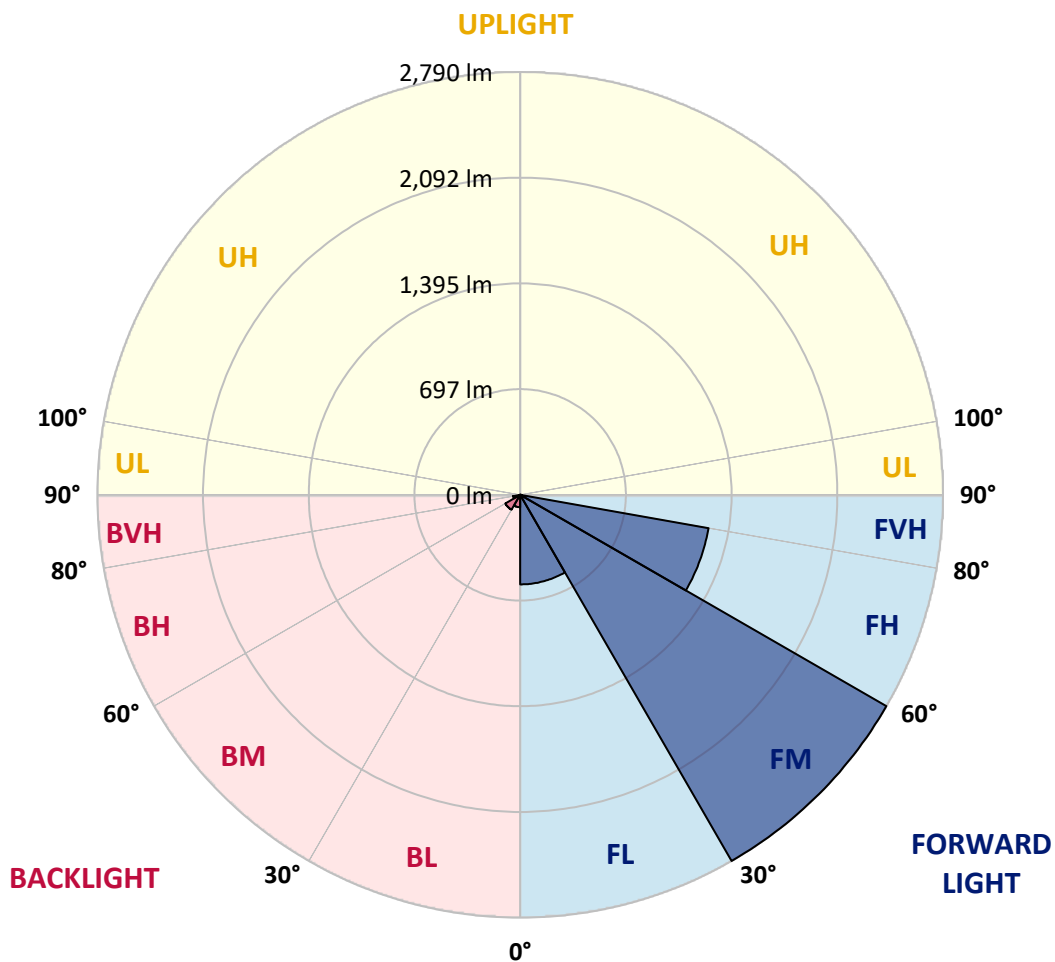
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	591.1	12.1			
FM	(30°-60°)	2789.7	57.0			
FH	(60°-80°)	1262.1	25.8			G1/1800
FVH	(80°-90°)	10.9	0.2			G1/100
BL	(0°-30°)	82.0	1.7	B0/110		
BM	(30°-60°)	113.8	2.3	B0/220		
BH	(60°-80°)	47.0	1.0	B0/110		G0/110
BVH	(80°-90°)	0.4	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°	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4
2.5°	620.1	606.2	609.4	600.4	584.1	550.6	522.0	495.0	463.5	462.4	436.4
5°	836.2	824.4	822.9	804.6	775.0	718.2	662.8	599.7	529.3	524.2	469.0
7.5°	1032.3	1022.9	1019.4	997.8	942.6	887.2	815.2	722.5	612.4	602.9	513.0
10°	1182.9	1178.4	1179.3	1163.8	1116.6	1065.1	970.5	852.3	706.6	692.0	565.8
12.5°	1297.1	1298.1	1305.9	1296.4	1270.0	1231.8	1130.8	990.7	810.9	790.9	626.1
15°	1381.0	1386.3	1400.5	1412.3	1410.4	1377.3	1284.6	1131.2	921.6	899.5	693.3
17.5°	1435.3	1441.3	1461.9	1488.0	1512.1	1504.3	1433.1	1266.8	1033.6	1008.0	765.2
20°	1482.9	1490.0	1512.1	1546.6	1591.5	1601.1	1554.3	1398.4	1145.4	1114.3	839.4
22.5°	1586.1	1585.9	1599.4	1619.6	1662.3	1687.2	1657.6	1520.4	1255.9	1223.5	915.1
25°	1772.8	1765.7	1761.0	1745.1	1754.5	1770.0	1753.5	1634.6	1367.0	1334.2	992.0
27.5°	1994.6	1998.9	1960.7	1918.0	1885.0	1869.1	1842.1	1740.4	1473.9	1437.8	1067.1
30°	2228.7	2230.0	2185.0	2130.5	2057.7	1997.4	1950.7	1841.4	1583.7	1544.5	1140.0
32.5°	2439.9	2431.5	2386.9	2312.6	2220.8	2153.0	2055.8	1954.3	1700.0	1662.1	1221.1
35°	2607.2	2597.4	2543.1	2475.5	2380.2	2312.0	2195.1	2067.0	1822.3	1785.2	1302.4
37.5°	2729.5	2718.0	2662.2	2592.6	2510.5	2470.8	2356.6	2189.5	1955.8	1915.9	1388.1
40°	2772.0	2761.9	2727.0	2676.1	2610.0	2601.0	2528.1	2330.4	2101.1	2058.6	1485.0
42.5°	2746.7	2736.8	2724.4	2707.2	2679.8	2688.3	2689.8	2491.2	2262.4	2220.6	1592.1
45°	2646.3	2637.5	2650.4	2675.5	2709.6	2752.1	2837.5	2663.9	2442.7	2398.0	1715.9
47.5°	2498.5	2492.0	2527.6	2590.3	2690.1	2807.2	2972.4	2845.4	2645.0	2603.6	1870.4
50°	2288.2	2287.1	2358.3	2472.7	2626.1	2833.8	3111.9	3051.8	2926.1	2882.5	2085.2
52.5°	1960.7	1962.9	2103.0	2286.0	2513.9	2815.8	3201.6	3317.0	3253.1	3207.8	2271.2
55°	1649.0	1661.8	1761.2	2025.1	2341.8	2748.9	3232.5	3440.8	3433.5	3390.6	2374.6
57.5°	1343.6	1367.0	1462.7	1709.3	2090.6	2594.6	3215.5	3494.5	3567.9	3535.0	2511.1
60°	1012.8	1023.5	1133.8	1364.2	1768.1	2313.1	3092.6	3523.7	3751.5	3728.8	2709.2
62.5°	644.4	671.2	769.0	991.3	1376.7	1922.1	2885.3	3523.2	3981.3	3993.8	2964.7
65°	339.4	370.8	422.7	614.3	946.0	1485.5	2573.6	3490.2	4263.3	4280.7	3164.5
67.5°	183.0	192.0	219.5	318.9	548.7	1006.3	2115.4	3327.1	4426.6	4449.5	3192.4
70°	133.9	138.8	149.1	176.4	276.2	584.5	1543.6	2957.4	4216.1	4207.5	2836.4
72.5°	102.8	110.5	118.2	129.2	158.8	312.0	961.1	2315.9	3364.0	3307.4	2120.2
75°	81.1	82.4	93.3	103.2	119.1	177.7	426.8	1348.8	2053.2	1919.1	1099.5
77.5°	64.8	65.7	72.1	80.7	95.7	116.7	132.2	530.6	655.5	584.9	238.6
80°	38.4	40.6	53.6	62.2	79.4	73.6	48.3	115.2	102.3	92.7	40.1
82.5°	21.5	23.2	30.3	49.1	55.4	35.2	24.0	31.1	24.0	23.4	11.4
85°	0.0	1.1	19.5	30.5	22.5	7.7	10.1	10.3	7.1	6.7	4.5
87.5°	0.0	0.0	6.0	5.8	0.9	1.3	2.4	3.4	2.8	2.8	2.4
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°	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4
2.5°	423.6	412.0	390.1	368.6	350.6	335.8	322.5	317.1	312.8	312.2	308.8
5°	442.4	419.1	377.2	342.9	319.9	303.6	289.7	281.1	274.4	271.9	269.5
7.5°	471.0	435.6	375.5	336.0	308.6	281.1	255.3	227.4	210.1	203.4	199.6
10°	505.7	457.5	381.9	334.1	286.0	228.1	185.4	150.0	135.6	130.9	129.6
12.5°	546.3	484.7	393.1	322.1	238.0	162.0	127.9	115.9	112.6	111.1	111.1
15°	592.9	514.5	401.0	287.3	175.9	122.5	110.7	105.1	101.7	99.8	100.0
17.5°	640.5	543.7	397.2	236.9	129.8	109.0	100.2	94.2	89.5	87.5	87.1
20°	688.6	570.8	375.7	176.4	109.9	98.9	89.0	82.4	77.7	75.7	75.3
22.5°	738.3	593.7	337.9	129.4	98.7	87.8	78.1	71.5	66.9	65.2	64.4
25°	786.8	612.4	285.2	104.7	88.2	77.2	68.0	61.8	57.7	56.0	55.8
27.5°	832.1	624.2	224.0	92.5	79.0	67.8	59.4	53.9	50.4	49.1	48.9
30°	872.9	625.3	165.6	83.5	70.8	59.7	51.9	47.0	44.0	42.7	42.3
32.5°	914.1	616.2	120.6	75.3	63.3	52.6	45.1	41.2	39.1	38.0	38.0
35°	952.9	595.4	94.0	68.2	56.0	45.7	39.7	36.9	35.6	34.5	34.5
37.5°	990.9	565.6	79.8	62.0	49.1	39.9	35.0	33.3	32.2	31.1	31.1
40°	1029.5	528.1	72.5	56.2	43.6	35.4	31.1	29.6	28.5	27.7	27.5
42.5°	1076.9	484.7	67.8	50.9	38.6	31.3	27.5	25.7	24.9	24.0	23.6
45°	1131.9	447.4	63.9	45.5	34.5	27.9	23.8	22.1	20.8	19.7	19.5
47.5°	1211.0	420.3	58.8	39.7	30.7	24.2	20.6	18.7	16.7	15.7	15.4
50°	1312.1	398.0	52.1	34.5	26.8	20.6	17.2	14.8	13.1	12.0	12.0
52.5°	1362.3	368.8	46.1	30.0	22.5	17.4	13.9	11.2	10.3	9.2	9.2
55°	1382.5	346.5	40.1	25.5	18.7	14.4	10.9	8.6	7.9	7.3	7.1
57.5°	1439.1	340.1	35.0	21.7	15.4	11.4	8.4	6.4	6.0	5.1	5.1
60°	1530.3	343.3	30.3	18.5	12.4	8.8	6.2	4.9	4.5	3.6	3.6
62.5°	1628.8	339.2	25.5	15.9	9.7	6.4	4.3	3.6	3.6	2.1	1.9
65°	1647.7	302.1	21.9	13.1	7.5	4.7	2.8	2.4	3.2	0.4	0.0
67.5°	1529.2	234.3	18.9	10.1	5.6	3.6	2.1	1.1	2.8	0.0	0.0
70°	1222.8	148.9	15.2	7.3	4.3	3.0	1.7	0.4	2.1	0.0	0.0
72.5°	864.7	86.5	12.0	5.1	3.6	2.4	1.3	0.0	1.3	0.0	0.0
75°	437.3	46.1	7.5	3.9	2.8	1.7	0.9	0.0	0.2	0.0	0.0
77.5°	94.6	21.5	4.7	2.8	1.9	1.1	0.4	0.0	0.0	0.0	0.0
80°	20.6	9.4	3.0	1.7	1.1	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	7.5	4.9	1.5	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	2.6	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.9	0.2	0.2	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)