

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: P348798

Luminaire Tested: **ARCH-N-PA1-60-830-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348798  
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-PA1-60-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4807 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

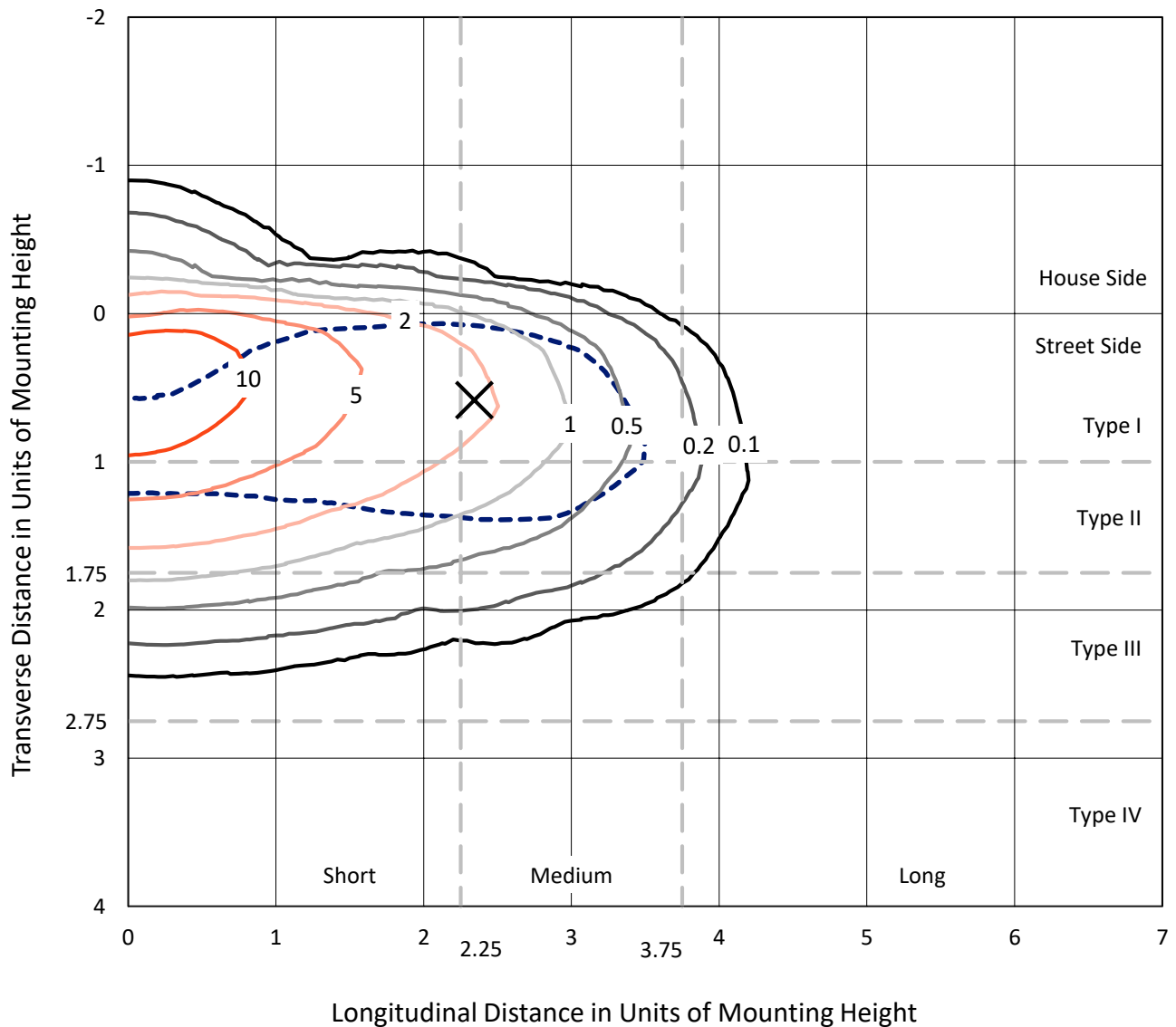
Input Watts (W): 62  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

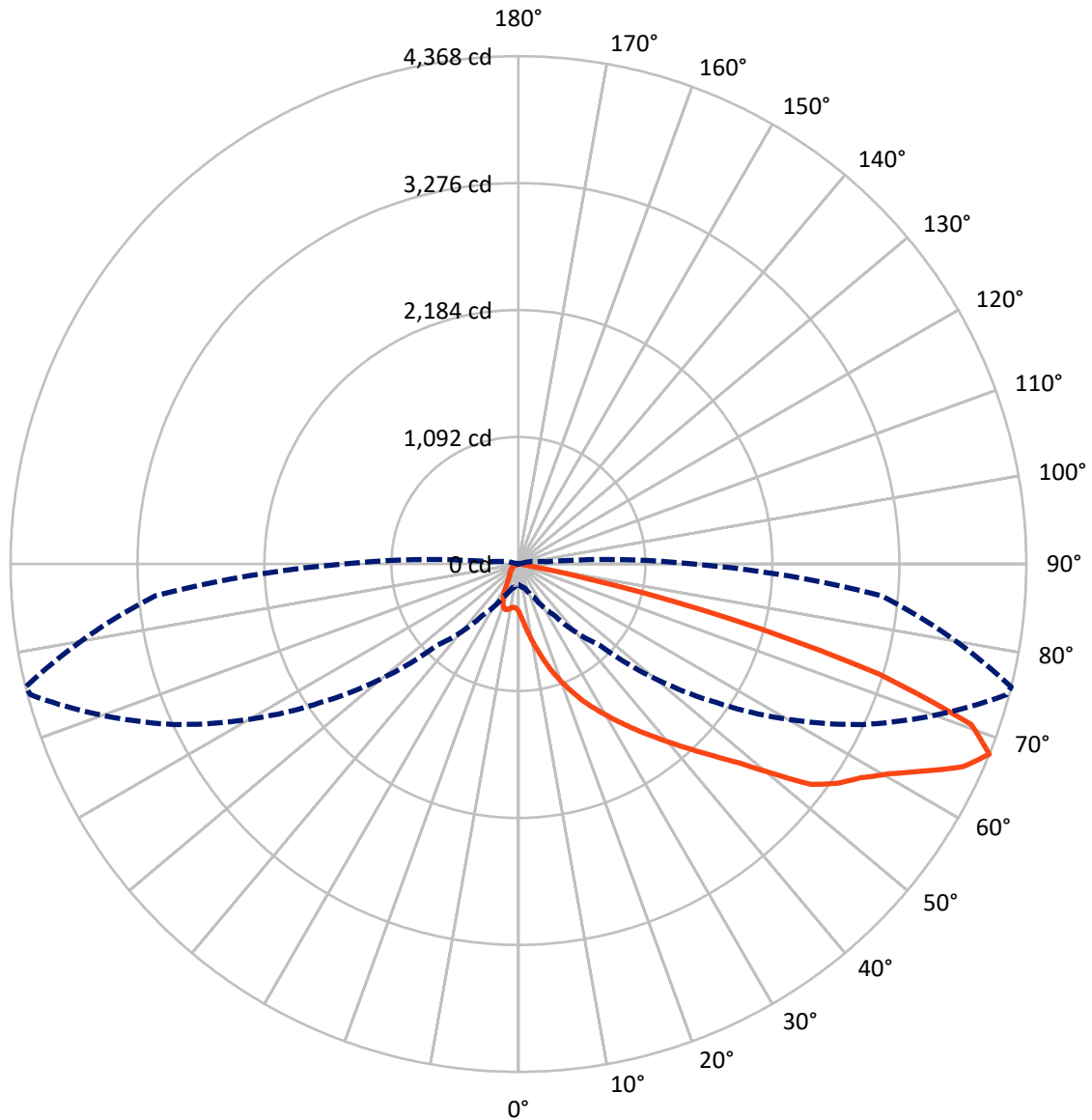
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.4 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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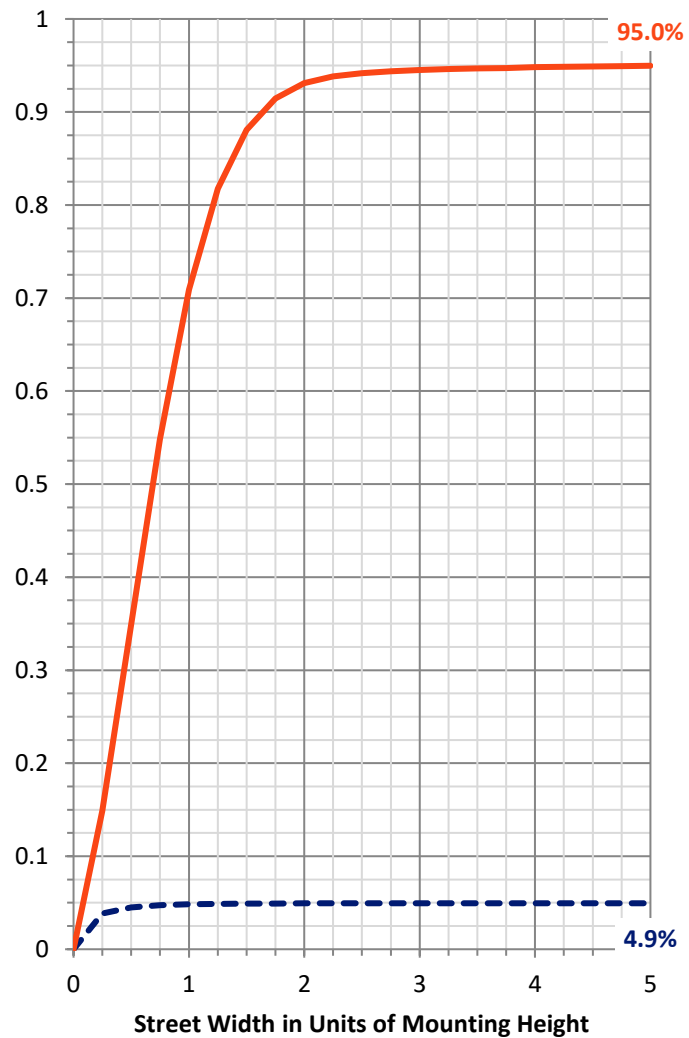
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	238.7	0.0	238.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4568.3	0.0	4568.3
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	4807.0	0.0	4807.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.7	1.1
10°-20°	201.0	4.2
20°-30°	409.0	8.5
30°-40°	709.9	14.8
40°-50°	1002.9	20.9
50°-60°	1137.4	23.7
60°-70°	943.4	19.6
70°-80°	341.7	7.1
80°-90°	11.1	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°	4807.0	100.0
0°-180°	4807.0	100.0



--- HS    — SS

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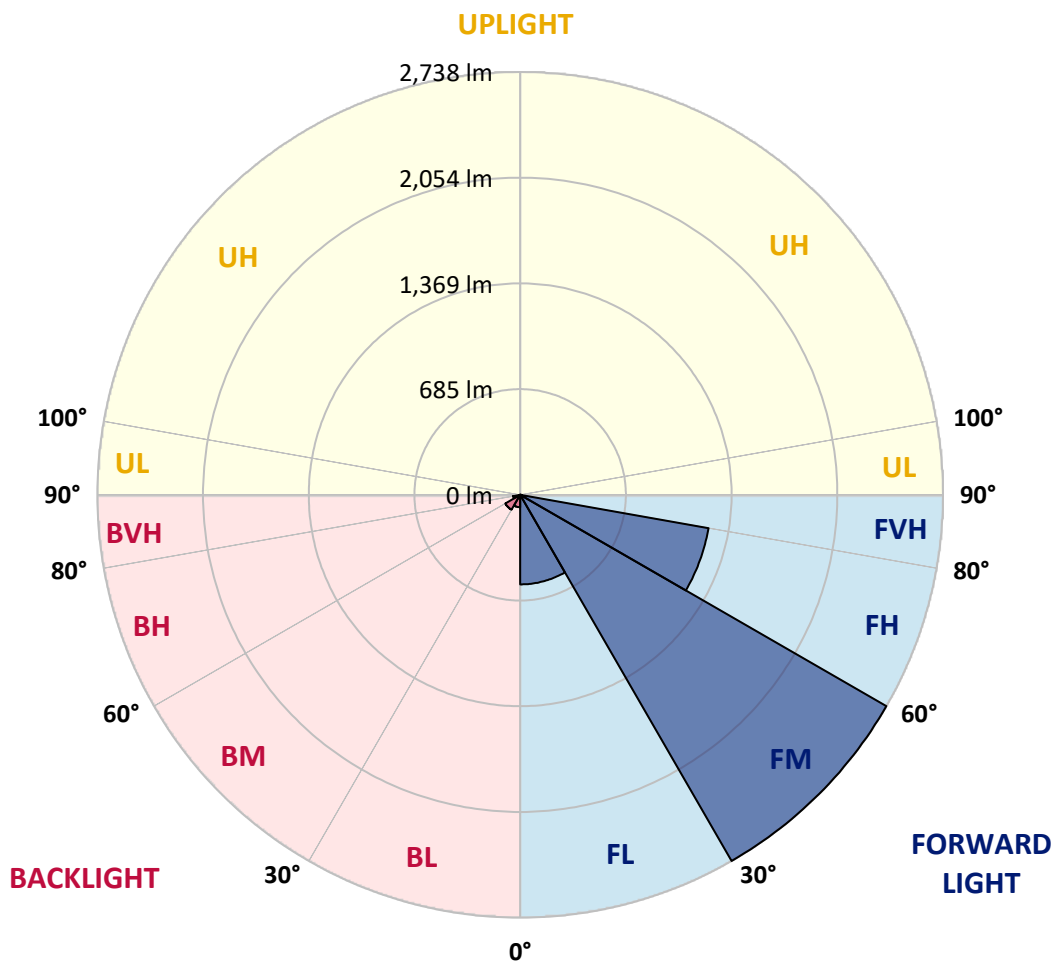
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	580.2	12.1			
FM	(30°-60°)	2738.5	57.0			
FH	(60°-80°)	1238.9	25.8			G1/1800
FVH	(80°-90°)	10.7	0.2			G1/100
BL	(0°-30°)	80.5	1.7	B0/110		
BM	(30°-60°)	111.7	2.3	B0/220		
BH	(60°-80°)	46.1	1.0	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8
2.5°	608.7	595.0	598.2	589.3	573.3	540.5	512.5	485.9	455.0	453.9	428.4
5°	820.8	809.2	807.8	789.8	760.8	705.0	650.6	588.7	519.6	514.6	460.4
7.5°	1013.3	1004.1	1000.7	979.4	925.3	870.9	800.2	709.2	601.1	591.9	503.6
10°	1161.2	1156.8	1157.6	1142.4	1096.1	1045.5	952.7	836.6	693.6	679.3	555.4
12.5°	1273.2	1274.3	1281.9	1272.6	1246.7	1209.2	1110.0	972.5	796.0	776.4	614.6
15°	1355.6	1360.9	1374.8	1386.3	1384.4	1352.0	1261.0	1110.4	904.6	882.9	680.5
17.5°	1408.9	1414.8	1435.0	1460.7	1484.3	1476.7	1406.8	1243.5	1014.6	989.5	751.1
20°	1455.6	1462.6	1484.3	1518.2	1562.2	1571.7	1525.8	1372.7	1124.3	1093.8	824.0
22.5°	1557.0	1556.7	1570.0	1589.8	1631.7	1656.2	1627.1	1492.5	1232.8	1201.0	898.3
25°	1740.2	1733.2	1728.6	1713.0	1722.3	1737.5	1721.2	1604.6	1341.9	1309.7	973.7
27.5°	1958.0	1962.2	1924.7	1882.8	1850.4	1834.8	1808.2	1708.4	1446.8	1411.4	1047.4
30°	2187.8	2189.0	2144.8	2091.3	2019.9	1960.7	1914.8	1807.6	1554.6	1516.1	1119.1
32.5°	2395.0	2386.8	2343.0	2270.1	2180.0	2113.4	2018.0	1918.4	1668.8	1631.5	1198.7
35°	2559.3	2549.6	2496.3	2430.0	2336.5	2269.5	2154.7	2029.0	1788.9	1752.4	1278.5
37.5°	2679.4	2668.0	2613.2	2545.0	2464.3	2425.4	2313.3	2149.2	1919.9	1880.7	1362.5
40°	2721.1	2711.2	2676.9	2626.9	2562.1	2553.2	2481.6	2287.6	2062.5	2020.8	1457.7
42.5°	2696.2	2686.5	2674.3	2657.5	2630.5	2638.9	2640.4	2445.4	2220.8	2179.8	1562.8
45°	2597.7	2589.0	2601.7	2626.3	2659.8	2701.5	2785.3	2614.9	2397.8	2354.0	1684.4
47.5°	2452.5	2446.2	2481.2	2542.7	2640.6	2755.6	2917.8	2793.1	2596.4	2555.7	1836.0
50°	2246.1	2245.1	2315.0	2427.3	2577.9	2781.7	3054.7	2995.7	2872.3	2829.6	2046.9
52.5°	1924.7	1926.8	2064.3	2244.0	2467.7	2764.1	3142.8	3256.1	3193.3	3148.9	2229.5
55°	1618.7	1631.3	1728.8	1987.9	2298.8	2698.3	3173.1	3377.6	3370.4	3328.3	2331.0
57.5°	1318.9	1341.9	1435.8	1677.9	2052.1	2546.9	3156.4	3430.3	3502.3	3470.1	2465.0
60°	994.2	1004.7	1113.0	1339.2	1735.6	2270.6	3035.8	3458.9	3682.6	3660.3	2659.4
62.5°	632.5	658.8	754.9	973.1	1351.4	1886.8	2832.3	3458.5	3908.2	3920.4	2910.2
65°	333.2	364.0	414.9	603.0	928.7	1458.2	2526.3	3426.0	4184.9	4202.0	3106.3
67.5°	179.7	188.5	215.5	313.0	538.6	987.8	2076.6	3266.0	4345.2	4367.8	3133.7
70°	131.4	136.3	146.4	173.1	271.1	573.7	1515.2	2903.1	4138.6	4130.2	2784.3
72.5°	100.9	108.5	116.1	126.8	155.9	306.3	943.4	2273.3	3302.2	3246.6	2081.2
75°	79.6	80.9	91.6	101.3	116.9	174.4	418.9	1324.0	2015.5	1883.8	1079.2
77.5°	63.6	64.5	70.8	79.2	93.9	114.6	129.7	520.9	643.5	574.2	234.2
80°	37.7	39.8	52.7	61.1	77.9	72.2	47.4	113.1	100.5	91.0	39.4
82.5°	21.1	22.7	29.7	48.2	54.3	34.5	23.6	30.5	23.6	23.0	11.2
85°	0.0	1.1	19.2	29.9	22.1	7.6	9.9	10.1	7.0	6.5	4.4
87.5°	0.0	0.0	5.9	5.7	0.8	1.3	2.3	3.4	2.7	2.7	2.3
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°	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8
2.5°	415.8	404.4	382.9	361.9	344.2	329.6	316.6	311.3	307.1	306.5	303.1
5°	434.3	411.4	370.3	336.6	314.0	298.0	284.3	275.9	269.4	266.9	264.5
7.5°	462.3	427.6	368.6	329.8	302.9	275.9	250.6	223.3	206.2	199.7	195.9
10°	496.4	449.1	374.9	327.9	280.8	223.9	182.0	147.2	133.1	128.5	127.2
12.5°	536.3	475.8	385.9	316.2	233.6	159.0	125.5	113.7	110.6	109.1	109.1
15°	582.0	505.1	393.7	282.0	172.7	120.3	108.7	103.2	99.8	97.9	98.2
17.5°	628.7	533.7	389.9	232.5	127.4	107.0	98.4	92.5	87.8	85.9	85.5
20°	675.9	560.3	368.8	173.1	107.8	97.1	87.4	80.9	76.2	74.4	73.9
22.5°	724.8	582.8	331.7	127.0	96.9	86.1	76.7	70.1	65.7	64.0	63.2
25°	772.4	601.1	279.9	102.8	86.6	75.8	66.8	60.7	56.7	55.0	54.8
27.5°	816.8	612.7	219.9	90.8	77.5	66.6	58.3	52.9	49.5	48.2	48.0
30°	856.8	613.8	162.6	81.9	69.5	58.6	51.0	46.1	43.2	41.9	41.5
32.5°	897.3	604.9	118.4	73.9	62.1	51.6	44.2	40.4	38.3	37.3	37.3
35°	935.4	584.5	92.3	67.0	55.0	44.9	39.0	36.2	35.0	33.9	33.9
37.5°	972.7	555.2	78.4	60.9	48.2	39.2	34.3	32.6	31.6	30.5	30.5
40°	1010.6	518.4	71.2	55.2	42.8	34.8	30.5	29.1	28.0	27.2	27.0
42.5°	1057.1	475.8	66.6	49.9	37.9	30.8	27.0	25.3	24.4	23.6	23.2
45°	1111.1	439.2	62.8	44.7	33.9	27.4	23.4	21.7	20.4	19.4	19.2
47.5°	1188.8	412.6	57.7	39.0	30.1	23.8	20.2	18.3	16.4	15.4	15.2
50°	1288.0	390.7	51.2	33.9	26.3	20.2	16.9	14.5	12.8	11.8	11.8
52.5°	1337.3	362.1	45.3	29.5	22.1	17.1	13.7	11.0	10.1	9.1	9.1
55°	1357.1	340.2	39.4	25.1	18.3	14.1	10.7	8.4	7.8	7.2	7.0
57.5°	1412.7	333.8	34.3	21.3	15.2	11.2	8.2	6.3	5.9	5.1	5.1
60°	1502.2	337.0	29.7	18.1	12.2	8.6	6.1	4.8	4.4	3.6	3.6
62.5°	1598.9	333.0	25.1	15.6	9.5	6.3	4.2	3.6	3.6	2.1	1.9
65°	1617.4	296.6	21.5	12.8	7.4	4.6	2.7	2.3	3.2	0.4	0.0
67.5°	1501.1	230.0	18.5	9.9	5.5	3.6	2.1	1.1	2.7	0.0	0.0
70°	1200.4	146.2	15.0	7.2	4.2	2.9	1.7	0.4	2.1	0.0	0.0
72.5°	848.8	84.9	11.8	5.1	3.6	2.3	1.3	0.0	1.3	0.0	0.0
75°	429.3	45.3	7.4	3.8	2.7	1.7	0.8	0.0	0.2	0.0	0.0
77.5°	92.9	21.1	4.6	2.7	1.9	1.1	0.4	0.0	0.0	0.0	0.0
80°	20.2	9.3	2.9	1.7	1.1	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	7.4	4.8	1.5	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	2.5	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.8	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)