

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: P348811

Luminaire Tested: **ARCH-N-PA1-50-727-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348811  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3987 lumens  
Efficiency: N/A  
Efficacy: 76.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - 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

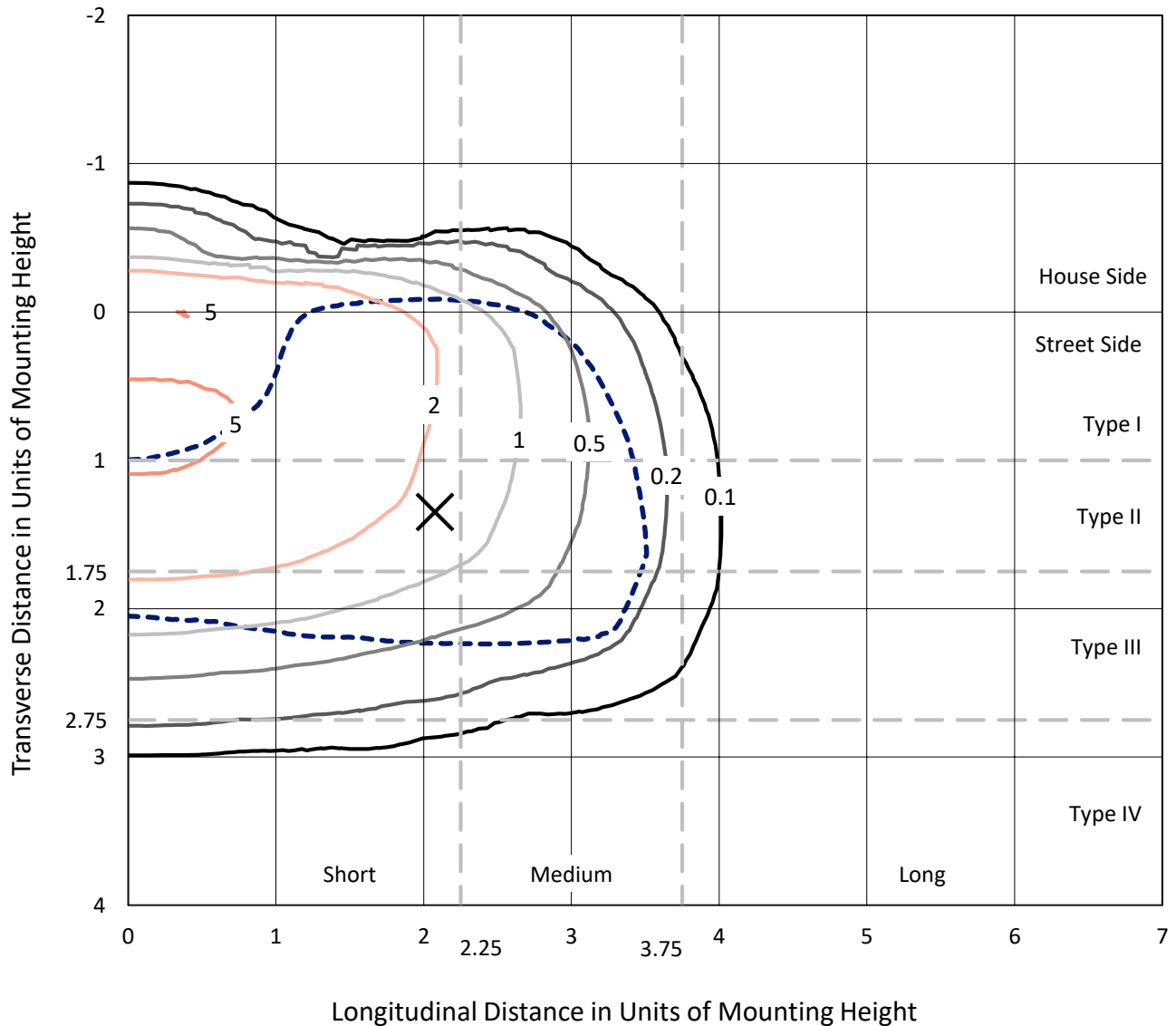


REPORT NUMBER: P348811

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

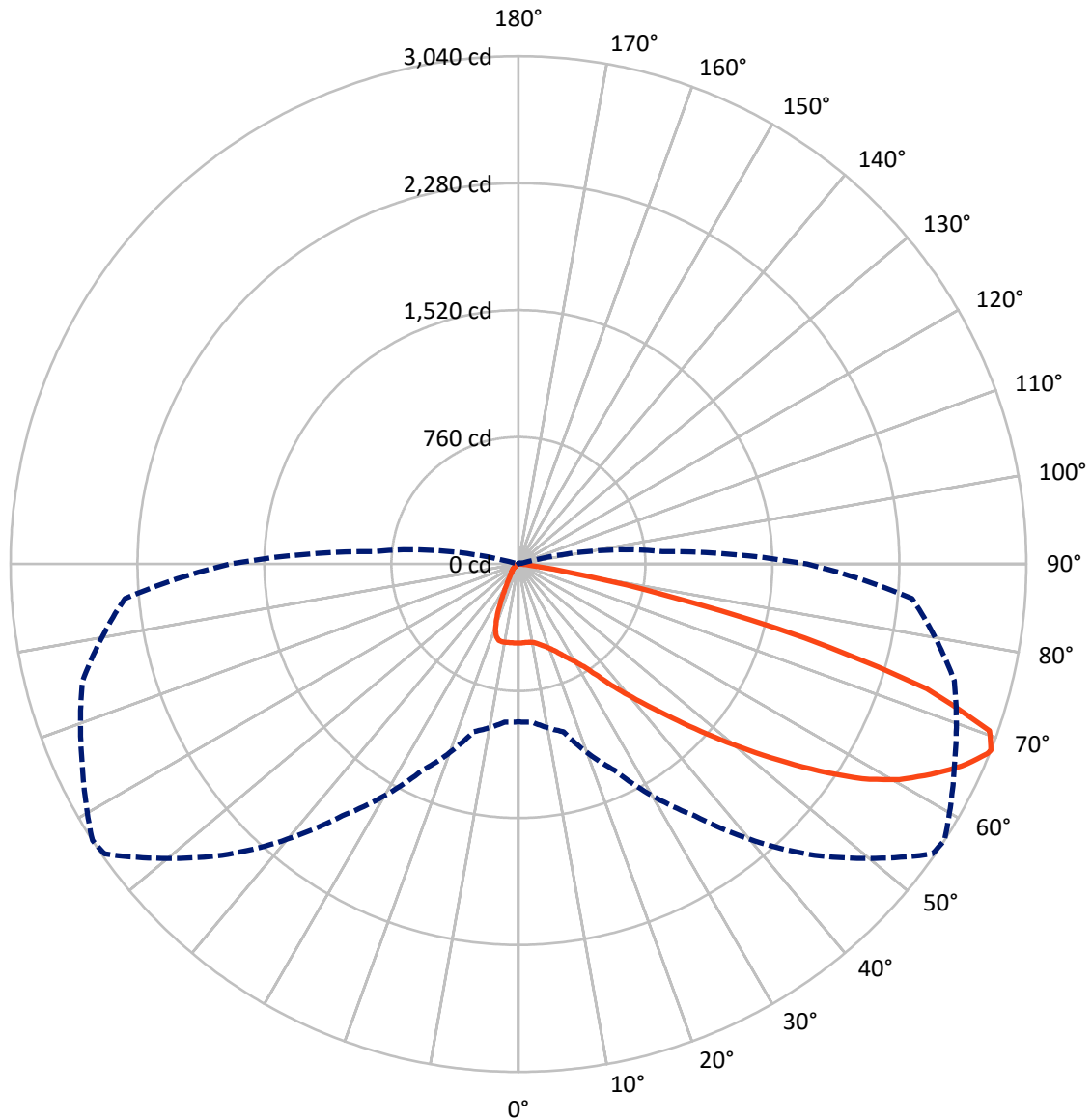


Based on 10 foot mounting height. Maximum calculated value = 6.1 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P348811

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



REPORT NUMBER: P348811

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

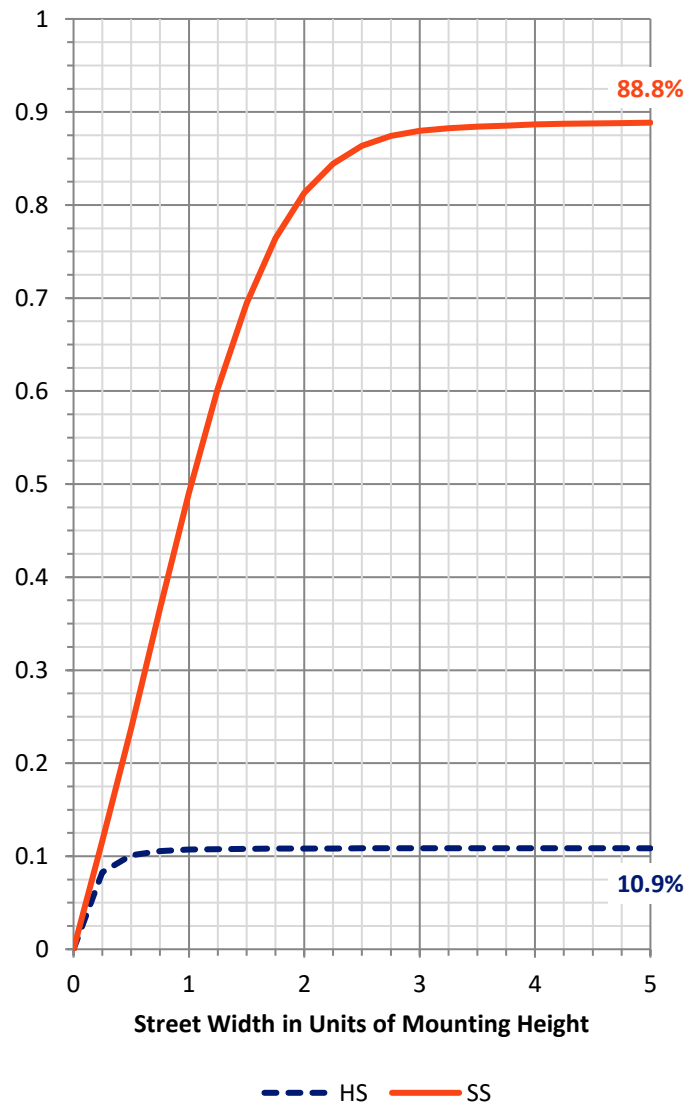
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	437.2	0.0	437.2
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	3549.8	0.0	3549.8
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	3987.0	0.0	3987.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.3	1.1
10°-20°	122.9	3.1
20°-30°	211.9	5.3
30°-40°	365.8	9.2
40°-50°	625.7	15.7
50°-60°	1001.1	25.1
60°-70°	1156.7	29.0
70°-80°	442.0	11.1
80°-90°	16.6	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°	3987.0	100.0
0°-180°	3987.0	100.0



REPORT NUMBER: P348811

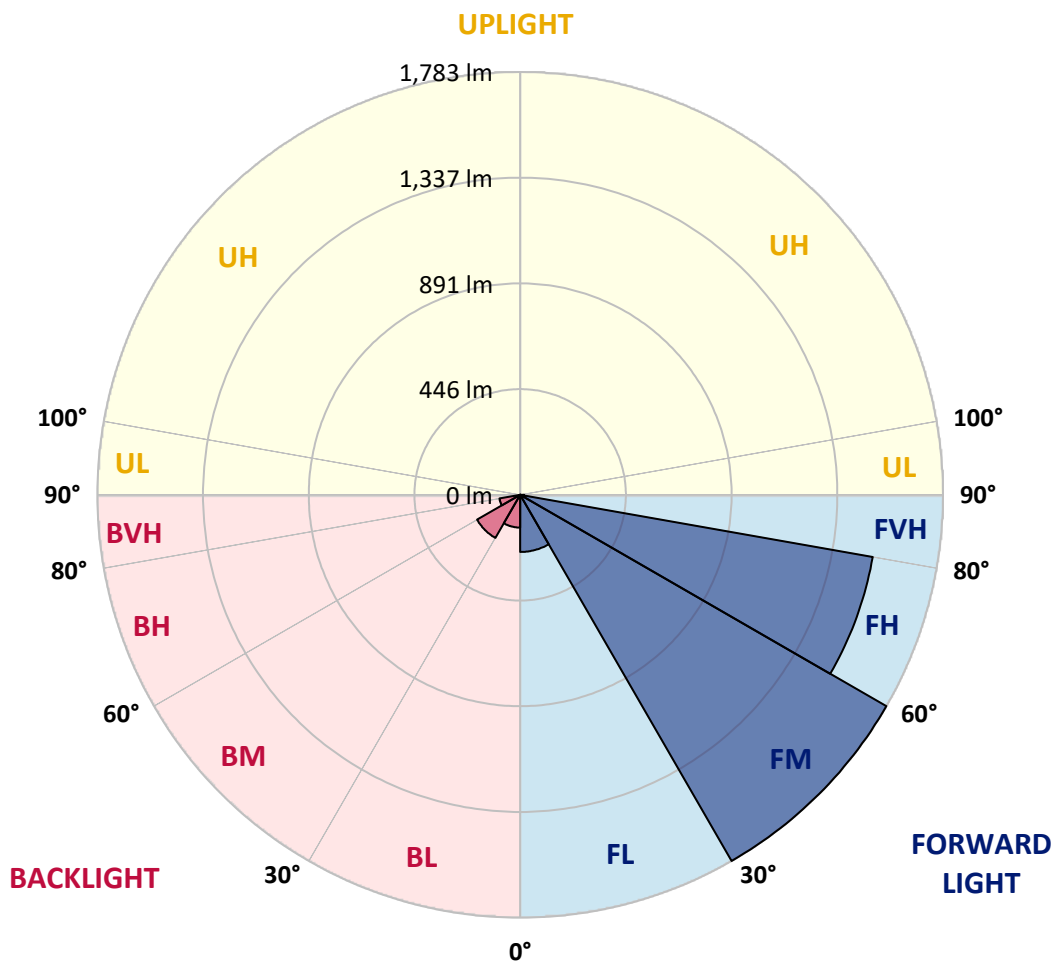
CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.0	6.0			
FM	(30°-60°)	1783.0	44.7			
FH	(60°-80°)	1509.6	37.9			G1/1800
FVH	(80°-90°)	16.3	0.4			G1/100
BL	(0°-30°)	138.2	3.5	B1/500		
BM	(30°-60°)	209.7	5.3	B0/220		
BH	(60°-80°)	89.0	2.2	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: B1-U0-G1**

Type III Short





REPORT NUMBER: P348811

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8
2.5°	462.6	464.7	466.2	467.2	468.3	470.7	471.5	472.6	473.2	473.2	474.5
5°	444.4	446.6	449.8	452.5	457.7	464.5	469.4	471.3	474.7	477.7	479.4
7.5°	427.4	430.0	433.8	440.0	449.1	460.0	470.2	472.8	479.4	485.8	489.0
10°	416.4	418.5	423.4	432.3	444.2	459.4	473.8	477.0	488.3	499.0	505.1
12.5°	412.7	414.6	419.7	429.6	444.4	462.3	482.1	486.8	503.4	519.0	527.5
15°	418.1	418.5	424.0	433.4	447.9	469.2	495.8	501.5	522.4	542.8	553.3
17.5°	439.3	437.6	440.4	444.5	456.0	478.5	510.3	518.8	546.7	570.7	580.7
20°	492.0	492.0	485.6	474.3	474.5	492.8	529.9	539.6	573.7	601.4	610.4
22.5°	582.4	580.7	567.8	540.1	514.7	517.5	553.9	566.3	606.1	635.7	638.7
25°	690.9	688.9	669.1	630.0	585.9	557.5	586.3	600.6	644.8	671.0	664.7
27.5°	805.9	804.2	784.6	736.2	673.4	621.2	625.0	638.5	684.2	710.0	690.2
30°	917.4	917.9	898.5	848.7	777.7	702.4	674.0	681.9	722.4	748.6	720.4
32.5°	1023.3	1024.1	1007.3	951.7	885.3	796.9	741.8	739.8	766.9	792.7	760.3
35°	1117.8	1119.6	1108.1	1065.0	994.7	902.1	829.9	825.0	830.1	859.3	821.6
37.5°	1208.8	1209.9	1201.3	1164.9	1106.1	1017.7	941.1	934.1	923.2	945.6	902.5
40°	1308.5	1305.7	1295.7	1262.7	1212.2	1145.3	1060.6	1048.6	1029.5	1049.5	1008.8
42.5°	1401.3	1398.1	1399.8	1362.5	1319.9	1276.5	1200.0	1179.2	1168.1	1191.1	1139.3
45°	1517.2	1515.5	1521.2	1488.8	1454.3	1422.8	1359.6	1337.0	1332.1	1359.1	1297.0
47.5°	1631.7	1635.8	1653.4	1639.6	1625.6	1597.9	1528.7	1518.6	1521.6	1554.2	1463.5
50°	1727.1	1732.0	1780.0	1795.9	1816.1	1799.8	1730.5	1724.2	1736.1	1765.5	1642.6
52.5°	1796.1	1806.1	1865.8	1938.8	2012.3	2023.2	1954.1	1948.4	1964.4	1968.9	1781.0
55°	1844.0	1852.8	1920.5	2054.0	2203.7	2250.8	2207.8	2185.9	2182.9	2138.2	1926.5
57.5°	1852.4	1851.5	1948.8	2128.4	2353.7	2475.3	2448.2	2426.7	2364.8	2294.7	2093.4
60°	1804.6	1810.0	1922.9	2154.3	2448.0	2645.2	2647.3	2619.4	2523.0	2446.9	2255.1
62.5°	1657.1	1679.4	1793.4	2086.6	2446.9	2713.6	2793.2	2771.9	2656.7	2571.5	2419.1
65°	1418.1	1426.0	1534.8	1854.7	2281.5	2685.0	2924.6	2916.7	2777.1	2692.5	2503.4
67.5°	1035.6	1018.4	1132.7	1460.5	1931.6	2517.9	3018.8	3028.8	2870.1	2717.4	2413.7
68°	945.1	950.2	1039.1	1363.0	1840.0	2458.9	3025.1	3040.3	2879.3	2701.2	2364.7
70°	563.3	573.1	652.5	938.5	1399.8	2125.0	2957.9	2992.8	2824.3	2534.0	2045.3
72.5°	143.8	155.5	230.6	420.0	799.5	1497.3	2497.0	2556.0	2452.1	2055.7	1380.7
75°	59.2	62.2	82.4	138.4	297.9	674.5	1645.8	1772.1	1699.9	1230.7	624.0
77.5°	40.9	43.0	53.0	76.7	129.0	228.7	806.9	898.1	809.1	420.0	136.1
80°	29.4	31.1	37.9	51.1	74.1	81.6	263.0	304.1	241.5	92.2	33.7
82.5°	17.5	18.9	28.3	36.4	45.1	39.0	65.4	74.3	69.9	45.8	15.1
85°	8.7	10.2	19.0	26.0	24.3	16.4	20.0	22.2	27.5	27.9	8.1
87.5°	0.6	1.1	11.1	15.6	6.8	3.8	5.8	7.2	9.8	13.8	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348811

CATALOG NUMBER: ARCH-N-PA1-50-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8	473.8
2.5°	475.1	475.3	473.9	473.4	473.8	471.5	470.6	470.9	470.9	471.5	470.6
5°	479.8	479.8	477.5	474.5	472.8	468.5	465.7	464.9	464.3	464.0	463.2
7.5°	490.0	488.8	484.9	478.3	472.6	463.2	456.0	452.3	450.4	449.6	449.1
10°	506.4	504.3	497.7	485.4	472.4	455.7	440.0	428.9	419.7	415.9	413.6
12.5°	528.4	525.4	514.3	493.9	471.1	440.2	406.3	373.7	343.3	330.9	324.6
15°	553.9	549.5	532.0	501.1	463.4	405.3	331.6	274.5	232.5	216.6	209.8
17.5°	579.7	574.1	547.5	505.6	440.2	333.1	232.6	175.7	147.6	140.1	137.4
20°	605.7	597.4	560.9	502.2	387.8	240.2	153.5	128.4	120.3	118.0	117.3
22.5°	630.4	617.6	572.9	489.0	307.1	161.2	121.4	113.5	110.9	109.5	109.2
25°	651.9	634.0	583.5	448.3	217.4	121.8	109.3	106.7	103.3	100.9	101.0
27.5°	672.1	650.4	589.9	381.2	145.0	104.1	101.2	97.7	91.4	87.9	87.9
30°	696.4	672.3	594.6	293.3	106.7	92.0	89.7	84.3	75.8	71.1	71.1
32.5°	733.0	705.5	591.6	205.9	88.4	80.9	75.6	68.1	58.8	54.3	54.1
35°	789.0	756.7	570.1	135.0	78.0	70.3	61.8	52.6	44.5	40.7	40.5
37.5°	864.4	825.4	521.8	96.5	69.9	60.5	50.3	40.2	34.1	31.7	31.5
40°	962.2	905.1	452.8	78.2	62.4	51.1	38.8	31.1	27.0	25.1	25.3
42.5°	1079.7	990.5	370.1	67.5	55.0	42.0	30.4	24.5	21.9	20.5	20.2
45°	1210.1	1074.8	283.4	60.1	47.7	33.9	23.8	19.4	17.3	16.6	16.6
47.5°	1353.6	1156.8	207.4	53.7	39.8	26.2	19.0	15.8	14.1	13.6	13.4
50°	1483.9	1213.7	149.5	46.9	32.6	20.7	15.5	13.2	12.1	11.3	11.3
52.5°	1592.5	1231.6	110.1	39.6	26.4	16.6	12.8	11.3	10.2	9.6	9.6
55°	1688.0	1224.3	81.8	32.6	21.3	13.6	10.9	9.6	8.7	8.1	8.1
57.5°	1779.7	1200.5	61.1	26.6	17.2	10.9	9.2	8.1	7.2	6.8	6.8
60°	1854.5	1160.9	45.4	21.5	13.8	8.9	7.7	6.6	5.8	5.3	5.3
62.5°	1915.2	1117.2	33.4	17.7	10.9	7.0	6.0	5.5	4.3	3.8	3.8
65°	1915.6	1044.6	25.1	14.7	8.5	5.5	4.5	4.3	2.8	2.3	2.1
67.5°	1777.0	900.6	19.2	12.6	6.6	4.1	3.4	3.6	1.5	0.9	0.8
68°	1726.7	864.0	18.1	12.4	6.2	4.0	3.2	3.6	1.3	0.8	0.6
70°	1455.8	687.4	14.5	12.1	5.5	3.0	2.6	3.6	1.1	0.6	0.4
72.5°	931.1	398.9	10.7	9.6	4.1	2.3	1.7	3.2	1.1	0.4	0.2
75°	396.3	123.7	7.4	6.8	2.5	1.7	1.1	2.1	0.8	0.2	0.0
77.5°	83.5	27.9	4.3	4.1	1.7	1.1	0.8	0.6	0.2	0.0	0.0
80°	21.5	8.1	2.3	2.1	0.9	0.6	0.4	0.0	0.0	0.0	0.0
82.5°	6.8	3.2	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.9	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.6	0.2	0.0	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)