

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: P348852

Luminaire Tested: **ARCH-N-PA1-40-830-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348852  
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-PA1-40-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3094 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 41  
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

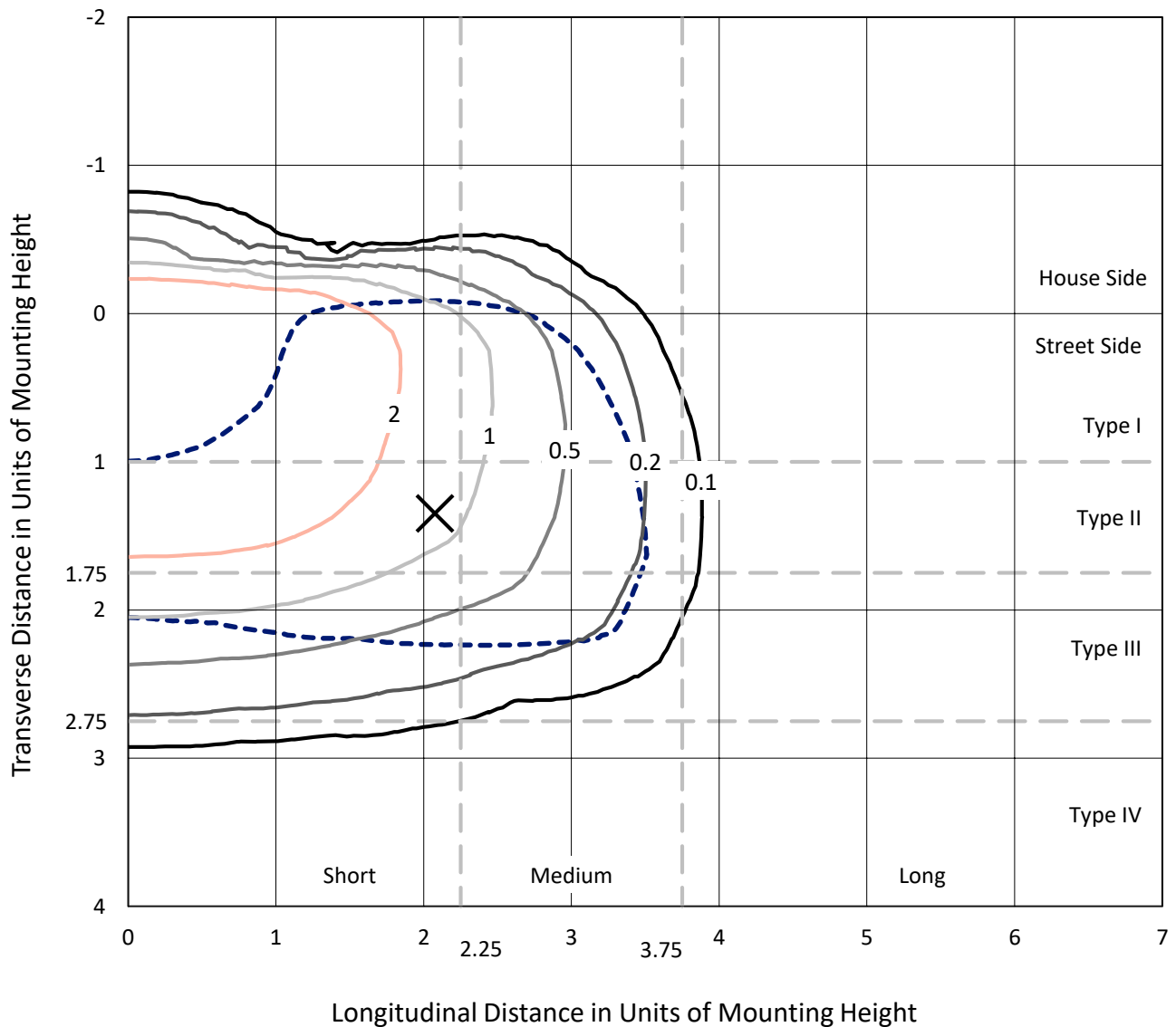


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

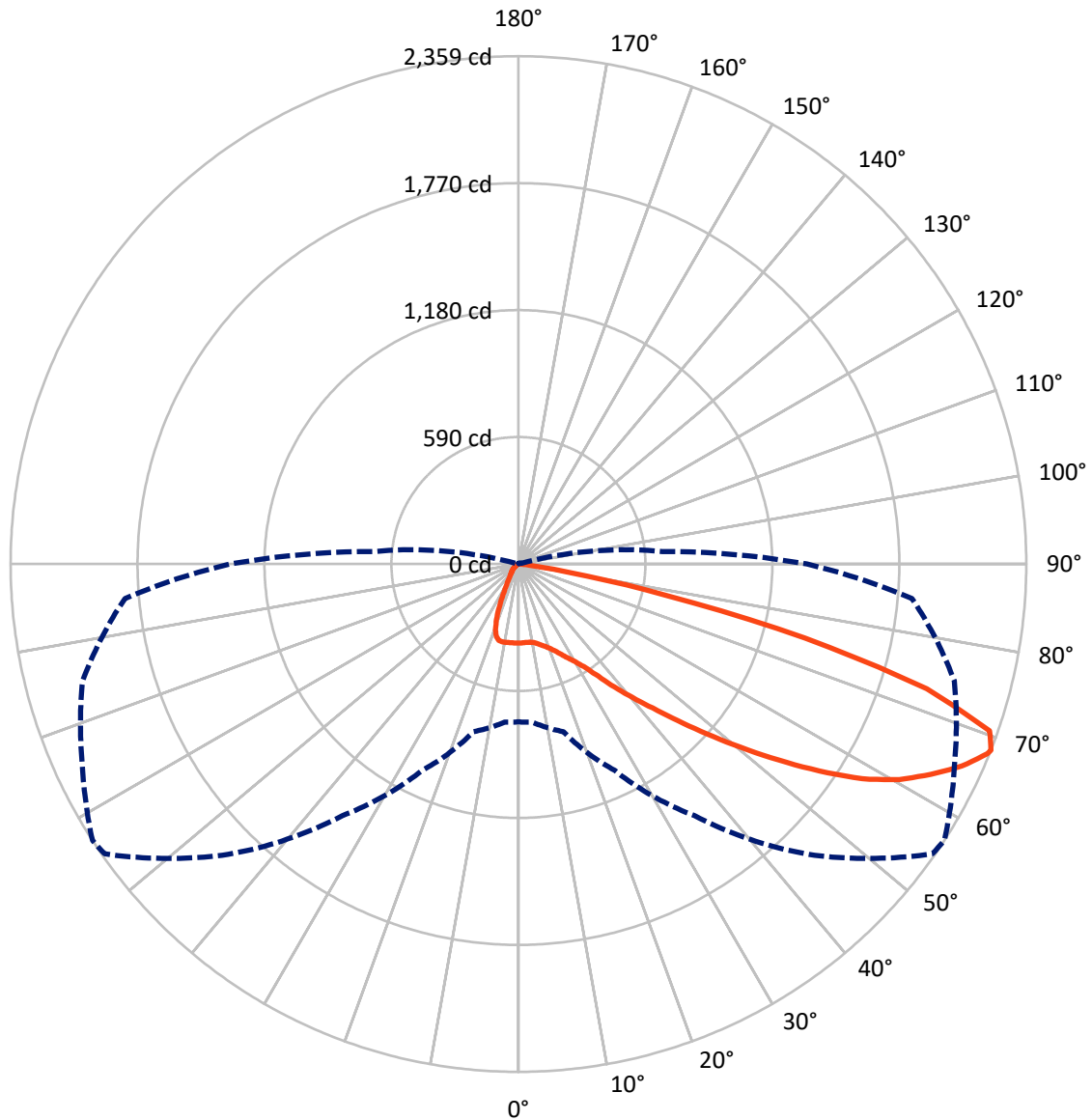


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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



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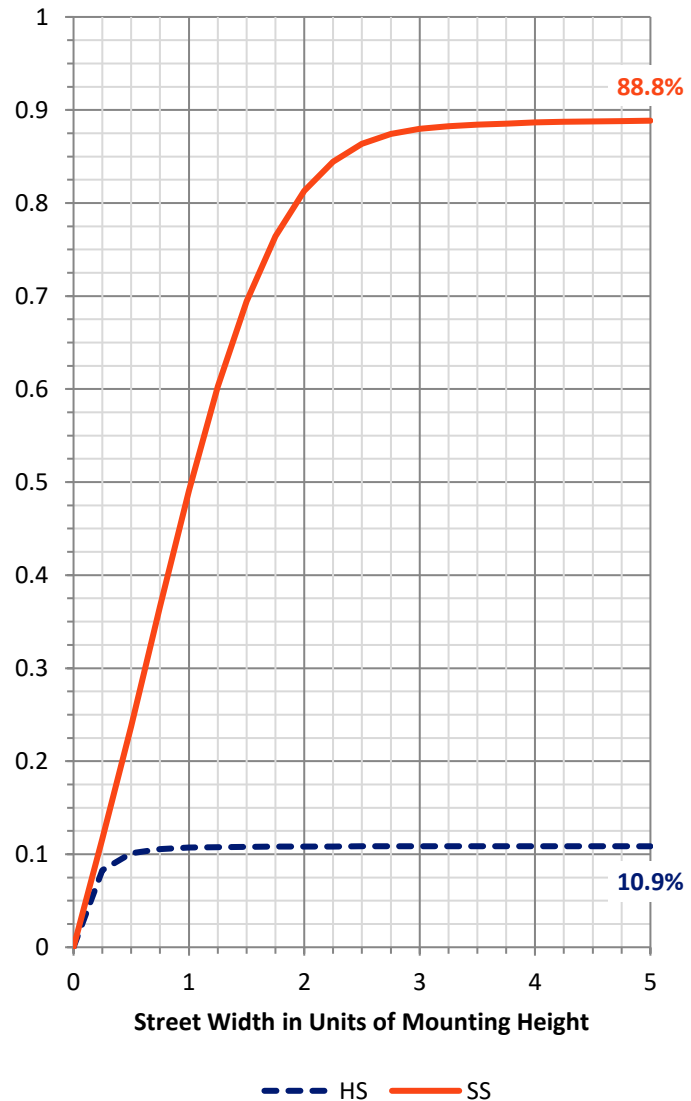
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	339.3	0.0	339.3
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	2754.7	0.0	2754.7
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	3094.0	0.0	3094.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.4	1.1
10°-20°	95.3	3.1
20°-30°	164.5	5.3
30°-40°	283.9	9.2
40°-50°	485.6	15.7
50°-60°	776.9	25.1
60°-70°	897.6	29.0
70°-80°	343.0	11.1
80°-90°	12.9	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°	3094.0	100.0
0°-180°	3094.0	100.0

**Coefficient of Utilization**



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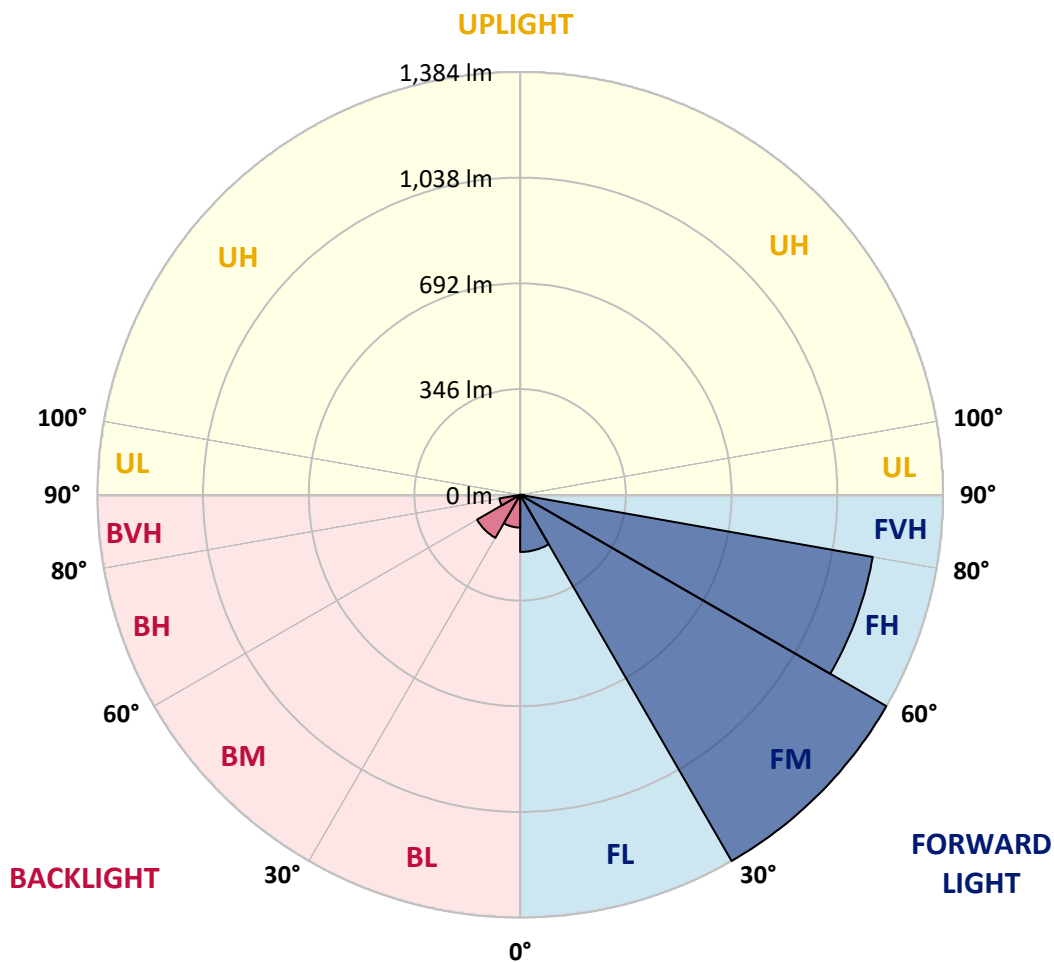
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	187.0	6.0			
FM	(30°-60°)	1383.6	44.7			
FH	(60°-80°)	1171.5	37.9			G1/1800
FVH	(80°-90°)	12.6	0.4			G1/100
BL	(0°-30°)	107.2	3.5	B0/110		
BM	(30°-60°)	162.7	5.3	B0/220		
BH	(60°-80°)	69.1	2.2	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6
2.5°	359.0	360.6	361.8	362.5	363.4	365.3	365.9	366.8	367.2	367.2	368.2
5°	344.8	346.6	349.1	351.1	355.2	360.5	364.3	365.7	368.4	370.7	372.0
7.5°	331.7	333.7	336.6	341.5	348.5	357.0	364.9	366.9	372.0	377.0	379.5
10°	323.2	324.8	328.6	335.5	344.7	356.5	367.6	370.1	378.9	387.3	391.9
12.5°	320.2	321.7	325.7	333.4	344.8	358.7	374.1	377.7	390.6	402.8	409.3
15°	324.5	324.8	329.0	336.3	347.6	364.1	384.8	389.2	405.4	421.2	429.4
17.5°	340.9	339.6	341.8	345.0	353.9	371.3	396.0	402.6	424.3	442.8	450.6
20°	381.8	381.8	376.9	368.1	368.2	382.4	411.2	418.7	445.2	466.7	473.7
22.5°	451.9	450.6	440.7	419.1	399.4	401.6	429.8	439.5	470.4	493.3	495.7
25°	536.2	534.6	519.2	488.9	454.7	432.6	455.0	466.1	500.3	520.7	515.8
27.5°	625.4	624.1	608.9	571.3	522.6	482.1	485.0	495.5	530.9	551.0	535.6
30°	711.9	712.3	697.3	658.6	603.5	545.1	523.0	529.2	560.6	581.0	559.0
32.5°	794.1	794.7	781.7	738.5	687.0	618.4	575.7	574.1	595.1	615.2	590.0
35°	867.4	868.9	859.9	826.4	771.9	700.0	644.0	640.2	644.2	666.8	637.6
37.5°	938.1	938.9	932.2	904.0	858.3	789.7	730.3	724.9	716.4	733.8	700.3
40°	1015.5	1013.3	1005.5	979.9	940.7	888.8	823.1	813.7	798.9	814.4	782.8
42.5°	1087.4	1085.0	1086.3	1057.3	1024.2	990.6	931.2	915.1	906.5	924.3	884.1
45°	1177.4	1176.1	1180.5	1155.3	1128.5	1104.1	1055.1	1037.6	1033.7	1054.7	1006.5
47.5°	1266.2	1269.4	1283.0	1272.4	1261.5	1240.0	1186.3	1178.4	1180.8	1206.1	1135.7
50°	1340.2	1344.0	1381.4	1393.6	1409.3	1396.7	1342.9	1338.0	1347.3	1370.1	1274.7
52.5°	1393.8	1401.5	1447.9	1504.5	1561.6	1570.1	1516.4	1512.0	1524.4	1527.9	1382.1
55°	1430.9	1437.8	1490.3	1593.9	1710.1	1746.7	1713.3	1696.3	1694.0	1659.3	1495.0
57.5°	1437.5	1436.8	1512.3	1651.7	1826.5	1920.9	1899.8	1883.2	1835.2	1780.7	1624.5
60°	1400.4	1404.6	1492.2	1671.8	1899.7	2052.7	2054.3	2032.7	1957.9	1898.8	1750.0
62.5°	1286.0	1303.2	1391.7	1619.2	1898.8	2105.8	2167.6	2151.0	2061.6	1995.5	1877.3
65°	1100.5	1106.6	1191.0	1439.3	1770.5	2083.6	2269.5	2263.4	2155.1	2089.4	1942.7
67.5°	803.6	790.3	879.0	1133.4	1499.0	1954.0	2342.7	2350.4	2227.3	2108.8	1873.1
68°	733.4	737.3	806.4	1057.7	1427.9	1908.2	2347.5	2359.4	2234.4	2096.2	1835.0
70°	437.1	444.7	506.3	728.3	1086.3	1649.1	2295.4	2322.5	2191.7	1966.4	1587.2
72.5°	111.6	120.7	178.9	326.0	620.5	1161.9	1937.7	1983.5	1902.9	1595.2	1071.5
75°	45.9	48.3	63.9	107.4	231.2	523.5	1277.2	1375.2	1319.2	955.0	484.2
77.5°	31.7	33.4	41.1	59.5	100.1	177.5	626.2	697.0	627.9	326.0	105.6
80°	22.8	24.1	29.4	39.6	57.5	63.3	204.1	236.0	187.4	71.5	26.2
82.5°	13.6	14.6	21.9	28.2	35.0	30.3	50.8	57.6	54.3	35.6	11.7
85°	6.7	7.9	14.8	20.2	18.9	12.7	15.5	17.3	21.4	21.7	6.3
87.5°	0.4	0.9	8.6	12.1	5.3	2.9	4.5	5.6	7.6	10.7	2.6
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°	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6	367.6
2.5°	368.7	368.8	367.8	367.4	367.6	365.9	365.2	365.5	365.5	365.9	365.2
5°	372.3	372.3	370.6	368.2	366.9	363.6	361.4	360.8	360.3	360.0	359.5
7.5°	380.2	379.4	376.3	371.2	366.8	359.5	353.9	351.0	349.5	348.9	348.5
10°	393.0	391.3	386.2	376.7	366.6	353.6	341.5	332.8	325.7	322.7	321.0
12.5°	410.1	407.7	399.1	383.3	365.6	341.6	315.3	290.0	266.4	256.8	251.9
15°	429.8	426.5	412.9	388.9	359.6	314.5	257.3	213.0	180.4	168.1	162.8
17.5°	449.9	445.5	424.9	392.4	341.6	258.5	180.5	136.4	114.6	108.7	106.7
20°	470.1	463.6	435.2	389.7	300.9	186.4	119.1	99.6	93.3	91.6	91.0
22.5°	489.2	479.3	444.6	379.5	238.3	125.1	94.2	88.1	86.0	85.0	84.7
25°	505.9	492.0	452.8	347.9	168.7	94.5	84.9	82.8	80.2	78.3	78.4
27.5°	521.6	504.7	457.8	295.8	112.5	80.8	78.6	75.8	71.0	68.2	68.2
30°	540.4	521.7	461.4	227.6	82.8	71.4	69.6	65.4	58.8	55.2	55.2
32.5°	568.8	547.4	459.1	159.8	68.6	62.8	58.7	52.8	45.6	42.1	42.0
35°	612.3	587.2	442.4	104.7	60.6	54.6	48.0	40.8	34.5	31.6	31.5
37.5°	670.8	640.5	405.0	74.9	54.3	47.0	39.1	31.2	26.5	24.6	24.4
40°	746.7	702.4	351.4	60.7	48.4	39.6	30.1	24.1	20.9	19.5	19.6
42.5°	837.9	768.7	287.2	52.4	42.7	32.6	23.6	19.0	17.0	15.9	15.7
45°	939.1	834.0	219.9	46.7	37.0	26.3	18.4	15.1	13.5	12.9	12.9
47.5°	1050.4	897.7	160.9	41.7	30.9	20.3	14.8	12.3	11.0	10.5	10.4
50°	1151.5	941.9	116.0	36.4	25.3	16.1	12.0	10.2	9.4	8.8	8.8
52.5°	1235.8	955.8	85.4	30.7	20.5	12.9	9.9	8.8	7.9	7.5	7.5
55°	1310.0	950.1	63.5	25.3	16.5	10.5	8.5	7.5	6.7	6.3	6.3
57.5°	1381.1	931.6	47.4	20.6	13.3	8.5	7.2	6.3	5.6	5.3	5.3
60°	1439.1	900.9	35.3	16.7	10.7	6.9	6.0	5.1	4.5	4.1	4.1
62.5°	1486.2	867.0	25.9	13.8	8.5	5.4	4.7	4.2	3.4	2.9	2.9
65°	1486.5	810.6	19.5	11.4	6.6	4.2	3.5	3.4	2.2	1.8	1.6
67.5°	1379.0	698.9	14.9	9.8	5.1	3.2	2.6	2.8	1.2	0.7	0.6
68°	1340.0	670.5	14.0	9.7	4.8	3.1	2.5	2.8	1.0	0.6	0.4
70°	1129.7	533.4	11.3	9.4	4.2	2.3	2.0	2.8	0.9	0.4	0.3
72.5°	722.6	309.6	8.3	7.5	3.2	1.8	1.3	2.5	0.9	0.3	0.1
75°	307.5	96.0	5.7	5.3	1.9	1.3	0.9	1.6	0.6	0.1	0.0
77.5°	64.8	21.7	3.4	3.2	1.3	0.9	0.6	0.4	0.1	0.0	0.0
80°	16.7	6.3	1.8	1.6	0.7	0.4	0.3	0.0	0.0	0.0	0.0
82.5°	5.3	2.5	1.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.5	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.4	0.1	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)