

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: P349019

Luminaire Tested: **ARCH-N-PA1-30-830-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P349019  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-30-830-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2496 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B0 - U0 - G1

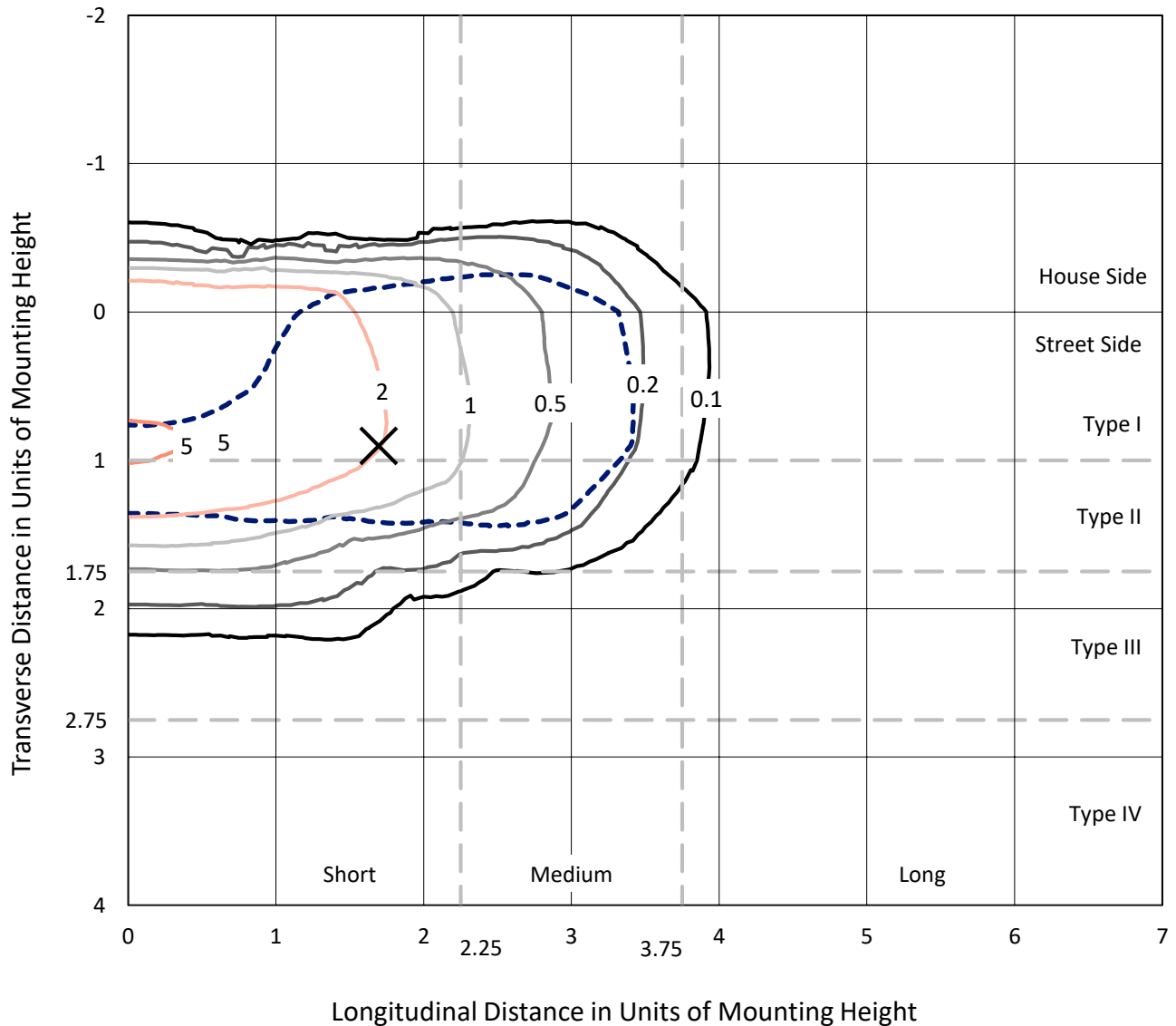
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

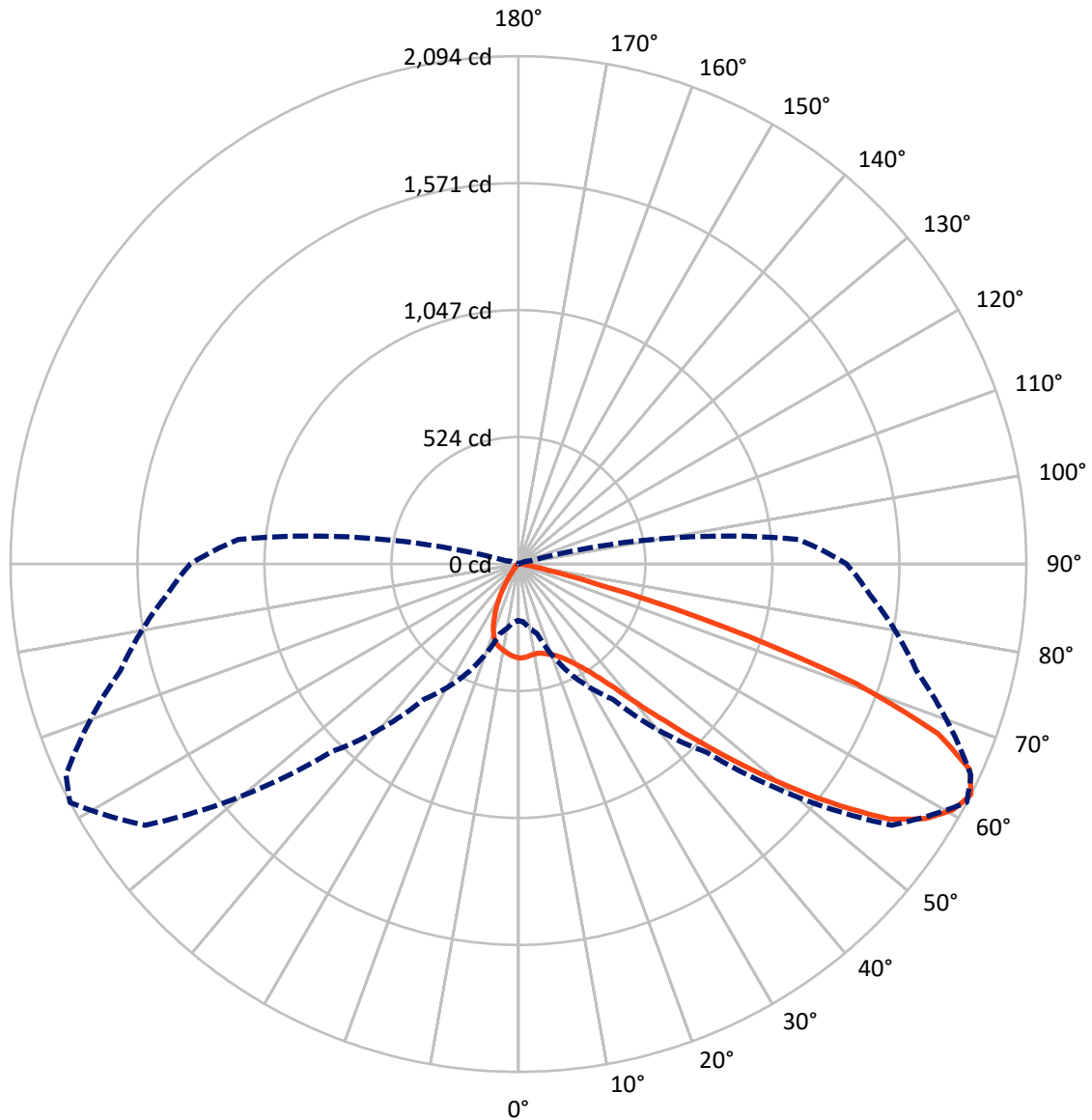
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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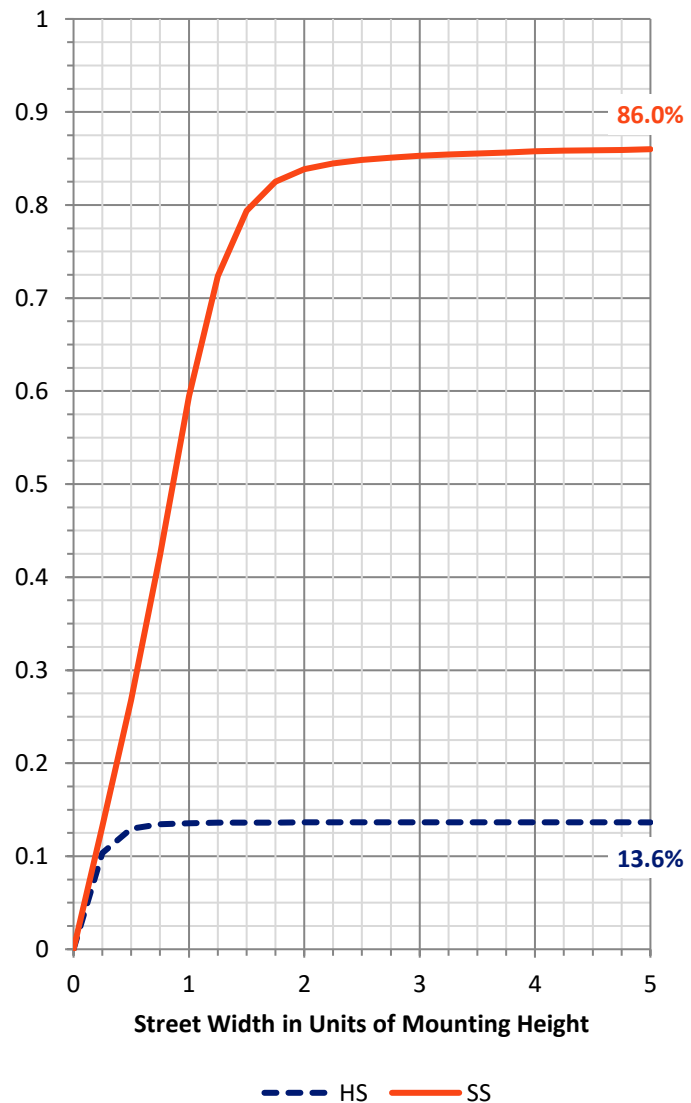
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	344.6	0.0	344.6
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	2151.4	0.0	2151.4
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	2496.0	0.0	2496.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	1.4
10°-20°	88.7	3.6
20°-30°	132.4	5.3
30°-40°	252.2	10.1
40°-50°	525.9	21.1
50°-60°	698.7	28.0
60°-70°	544.7	21.8
70°-80°	205.9	8.2
80°-90°	12.3	0.5
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°	2496.0	100.0
0°-180°	2496.0	100.0



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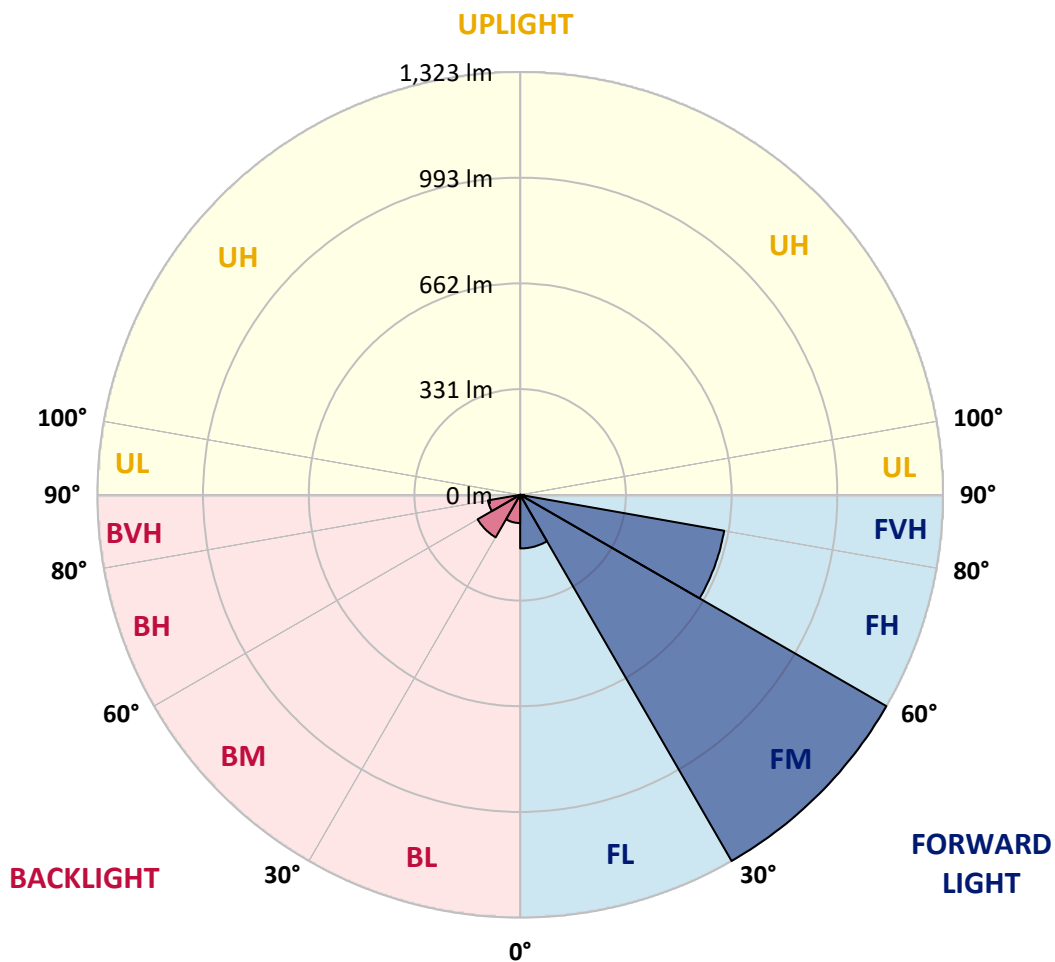
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	168.0	6.7			
FM (30°-60°)	1323.4	53.0			
FH (60°-80°)	648.3	26.0			G0/660
FVH (80°-90°)	11.7	0.5			G1/100
BL (0°-30°)	88.4	3.5	B0/110		
BM (30°-60°)	153.4	6.1	B0/220		
BH (60°-80°)	102.2	4.1	B0/110		G0/110
BVH (80°-90°)	0.6	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8
2.5°	386.5	385.8	387.4	387.4	387.1	387.8	387.1	386.8	386.5	385.8	385.2
5°	376.4	376.4	378.6	379.6	380.6	382.6	383.2	383.9	383.5	384.2	384.5
7.5°	364.6	365.3	367.9	369.2	370.8	374.7	377.0	379.6	379.9	382.2	383.5
10°	354.8	355.5	358.1	359.7	362.0	367.2	372.1	376.7	377.3	381.6	382.6
12.5°	348.3	349.0	351.6	353.9	358.7	365.3	372.1	377.3	379.0	384.2	384.2
15°	345.7	346.4	349.6	353.5	360.1	368.5	377.0	382.6	385.8	390.1	388.1
17.5°	344.7	346.0	351.6	357.4	364.6	373.7	384.2	390.1	393.3	397.9	393.6
20°	347.7	349.3	356.5	364.6	372.1	381.6	393.0	399.5	402.8	405.7	397.6
22.5°	358.1	360.7	366.9	376.0	381.9	393.3	404.7	412.2	415.8	415.5	404.7
25°	383.2	386.5	389.4	394.3	396.9	410.6	422.7	430.2	432.8	431.8	419.4
27.5°	442.6	446.8	436.4	425.6	419.7	432.5	445.8	453.7	455.9	454.0	435.1
30°	542.7	543.0	519.2	485.3	460.2	458.9	475.2	485.6	485.6	481.7	457.2
32.5°	688.5	678.0	648.0	588.0	531.3	501.6	514.0	524.1	524.1	519.2	491.2
35°	871.8	863.9	814.4	742.3	641.2	570.1	567.5	577.3	577.6	576.3	544.3
37.5°	1058.3	1039.1	997.6	911.2	792.5	675.4	644.1	651.0	655.9	655.2	615.4
40°	1231.8	1212.6	1177.7	1094.5	978.4	830.7	755.7	755.7	756.0	752.7	704.8
42.5°	1368.1	1359.3	1333.2	1275.5	1185.8	1074.9	906.0	881.2	876.0	872.7	809.8
45°	1456.5	1447.4	1433.4	1421.3	1392.3	1352.5	1107.9	1043.0	1034.5	1002.5	925.9
47.5°	1461.4	1447.4	1456.8	1502.5	1568.1	1588.6	1357.0	1231.5	1209.0	1151.3	1042.3
50°	1352.5	1353.8	1390.6	1501.5	1678.6	1795.7	1621.2	1438.9	1403.4	1287.9	1145.1
52.5°	1152.2	1165.3	1222.4	1392.9	1683.8	1928.1	1851.1	1652.8	1582.4	1410.5	1217.5
55°	902.1	913.8	1007.1	1191.7	1557.0	1947.0	2018.4	1857.7	1764.4	1496.0	1282.4
57.5°	637.9	660.1	775.9	945.5	1315.0	1802.5	2064.1	1980.3	1889.9	1579.1	1343.3
60°	387.8	398.9	519.2	716.5	991.1	1500.2	2010.6	2058.6	1985.5	1651.2	1400.4
62.5°	233.2	239.7	297.4	493.4	681.9	1098.4	1878.2	2094.4	2058.6	1699.2	1455.2
65°	138.0	142.2	169.3	298.1	454.3	673.8	1592.2	2045.2	2074.2	1740.6	1487.2
67.5°	99.5	100.8	110.6	160.5	304.9	361.0	1107.2	1865.8	1974.4	1754.3	1468.3
70°	85.8	87.4	96.9	112.8	215.9	213.0	576.3	1476.7	1673.7	1682.9	1388.4
72.5°	64.9	67.8	83.5	106.0	154.9	151.3	217.2	880.6	1136.3	1381.5	1196.9
75°	44.0	45.7	62.0	90.0	121.0	112.8	113.8	353.5	555.7	866.2	822.5
77.5°	27.7	29.0	37.8	64.6	103.7	79.6	80.6	125.6	200.6	367.2	352.6
80°	18.9	19.6	22.8	41.7	70.1	69.1	51.9	65.6	74.7	113.2	76.0
82.5°	11.4	11.4	15.0	24.8	42.4	54.8	32.6	36.2	39.8	42.1	17.3
85°	3.9	4.2	9.1	15.3	26.1	27.4	18.6	21.5	22.5	24.5	8.2
87.5°	1.6	1.3	4.9	8.5	11.1	12.7	10.8	9.8	10.8	14.3	3.6
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°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8
2.5°	385.5	384.2	384.2	383.9	381.9	380.9	379.9	377.3	379.0	377.0	375.7
5°	383.5	382.6	380.9	379.3	374.7	370.8	369.2	365.9	365.6	363.0	361.7
7.5°	383.2	380.9	378.3	372.8	365.9	359.7	354.2	348.6	346.4	343.4	341.8
10°	381.6	378.6	373.7	364.9	354.8	345.0	332.7	317.3	305.9	299.4	298.4
12.5°	381.9	378.6	371.1	358.1	344.7	323.2	289.9	255.0	226.3	214.3	212.3
15°	384.5	380.9	369.5	351.9	329.1	281.8	220.8	167.3	130.1	116.8	113.8
17.5°	387.8	381.6	365.9	343.1	299.1	218.5	138.9	87.7	66.9	59.4	58.1
20°	389.7	381.3	360.1	329.7	253.4	146.1	75.7	51.5	45.3	43.7	43.0
22.5°	394.6	382.2	355.2	308.8	196.0	88.1	47.9	40.1	36.5	34.6	34.2
25°	404.7	388.8	355.5	281.8	137.3	53.2	38.8	32.6	29.4	27.4	26.7
27.5°	419.4	400.5	361.7	248.2	84.8	40.1	32.3	26.4	22.8	21.2	20.9
30°	438.0	414.8	368.9	204.5	52.8	33.6	26.1	20.5	17.9	17.0	16.6
32.5°	467.4	439.6	375.1	153.0	36.5	27.7	20.5	16.3	14.7	13.7	13.7
35°	515.9	482.4	385.2	102.4	29.0	22.2	16.6	13.4	12.1	11.4	11.4
37.5°	584.4	543.3	390.1	63.6	23.8	17.3	13.4	11.1	10.1	9.5	9.5
40°	667.9	617.4	383.2	39.5	19.9	14.0	11.1	9.5	8.5	8.2	8.2
42.5°	764.1	702.5	361.7	28.0	16.6	11.4	9.5	8.2	7.5	7.2	7.2
45°	871.8	795.8	322.9	23.5	14.0	9.8	8.2	6.8	6.5	6.2	6.2
47.5°	979.1	890.3	272.6	20.2	11.7	8.2	6.8	5.9	5.5	5.2	5.2
50°	1072.7	973.2	219.5	17.6	9.8	7.2	5.9	4.9	4.6	4.2	4.2
52.5°	1126.1	1022.4	169.9	14.7	8.5	6.2	4.6	3.9	3.6	3.3	3.3
55°	1183.9	1063.5	126.9	12.4	6.8	5.2	3.6	2.9	2.6	2.3	2.3
57.5°	1237.7	1100.4	94.3	10.1	5.9	3.9	2.9	2.3	2.0	1.6	1.6
60°	1289.9	1131.7	69.8	8.2	4.9	3.3	2.3	1.6	1.3	1.0	1.0
62.5°	1353.5	1160.4	51.2	6.5	4.2	2.3	1.6	1.0	0.7	0.3	0.3
65°	1400.7	1175.1	38.5	4.9	3.6	1.6	1.0	0.7	0.0	0.0	0.0
67.5°	1400.4	1146.7	28.0	3.6	2.6	1.3	0.7	0.0	0.0	0.0	0.0
70°	1334.9	1060.6	19.6	2.9	2.0	1.0	0.3	0.0	0.0	0.0	0.0
72.5°	1144.7	838.8	12.7	2.0	1.6	0.7	0.3	0.0	0.0	0.0	0.0
75°	772.6	425.9	7.5	1.6	1.3	0.7	0.3	0.0	0.0	0.0	0.0
77.5°	330.4	167.3	3.9	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0
80°	69.1	40.4	1.6	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	11.7	5.9	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.9	1.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.7	0.3	0.3	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)