

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: P348844

Luminaire Tested: **ARCH-N-PA1-30-827-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348844  
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-PA1-30-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2266 lumens  
Efficiency: N/A  
Efficacy: 73.1 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): 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

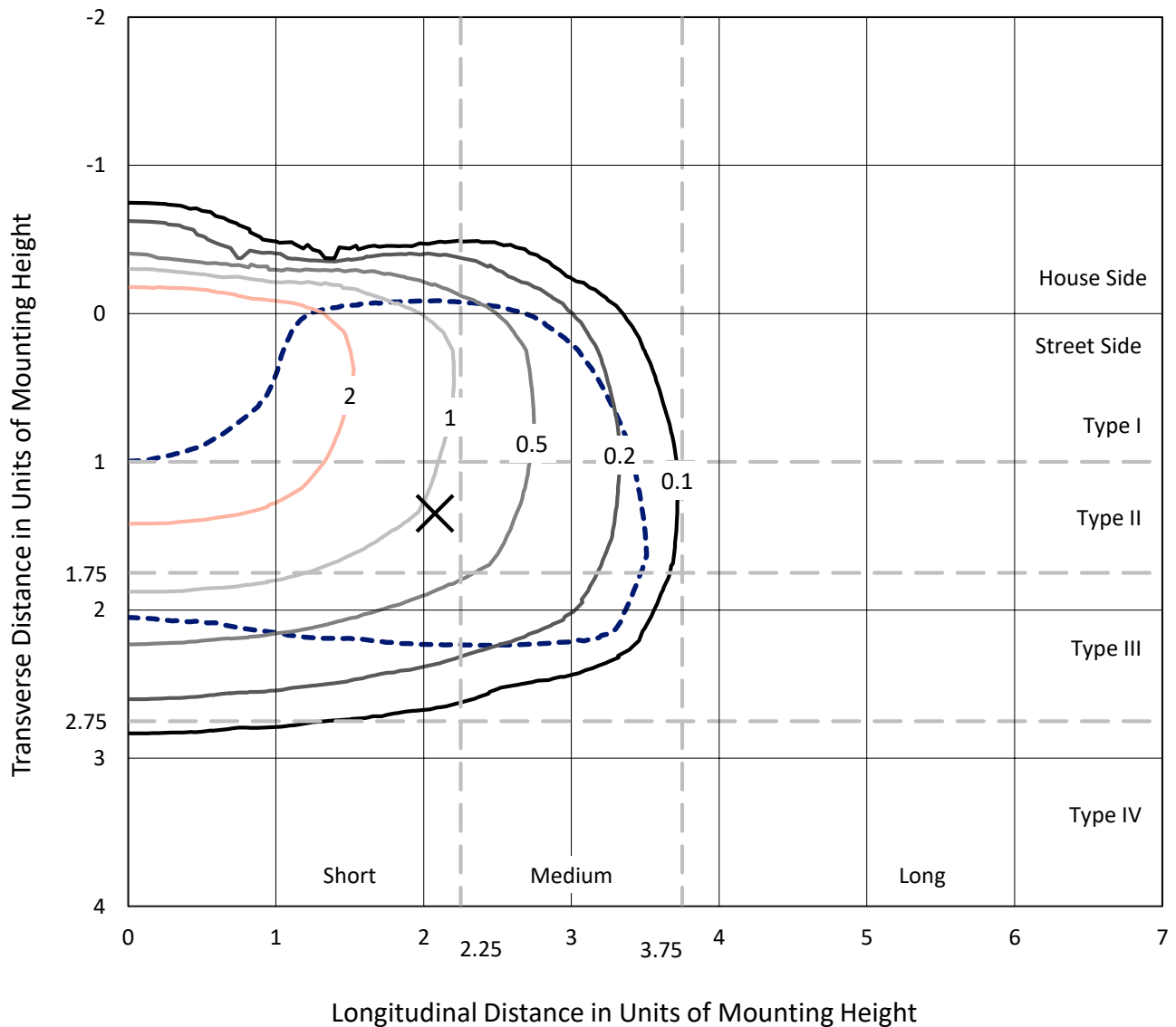


REPORT NUMBER: P348844

CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

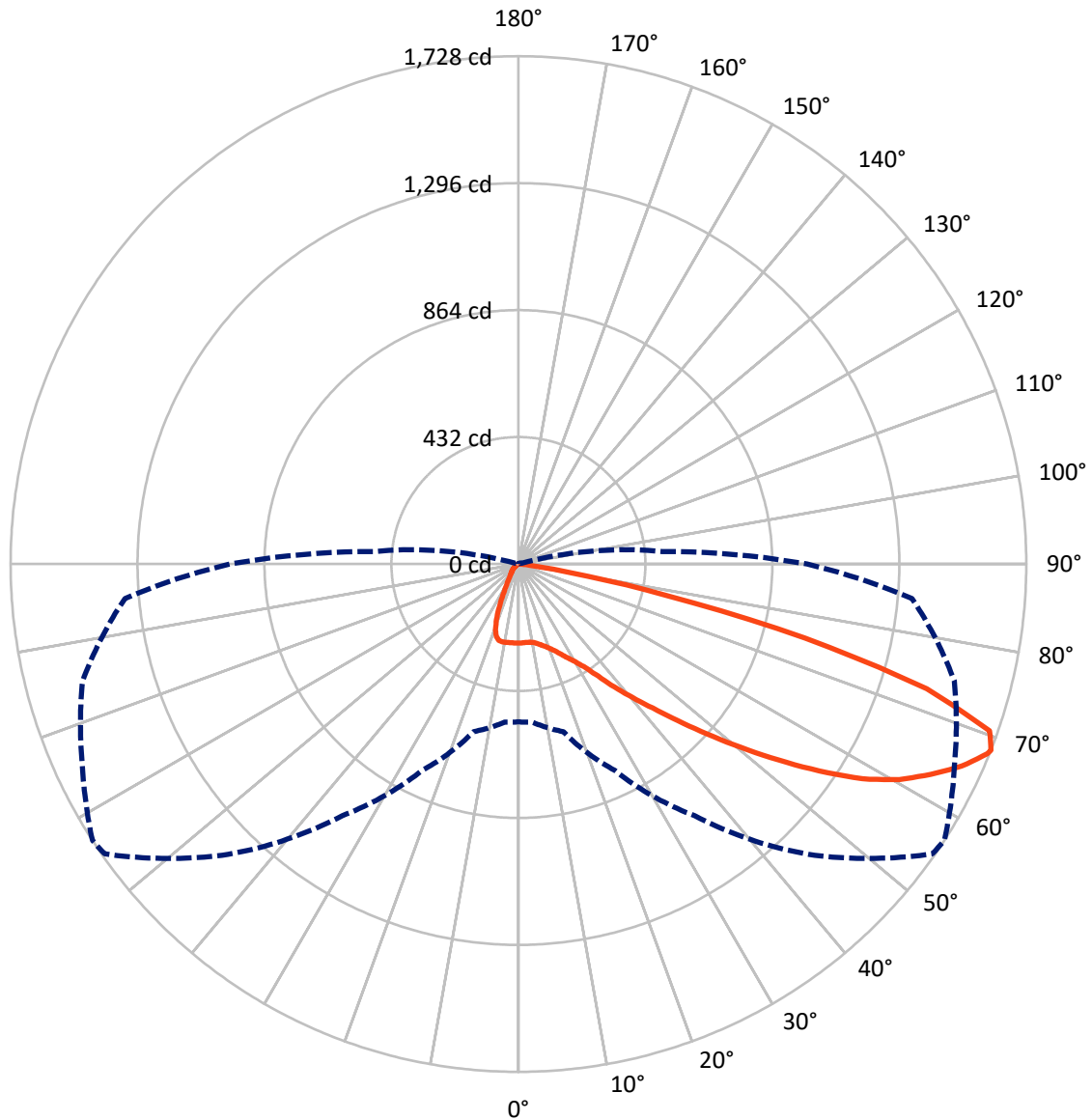


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P348844

CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P348844

CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

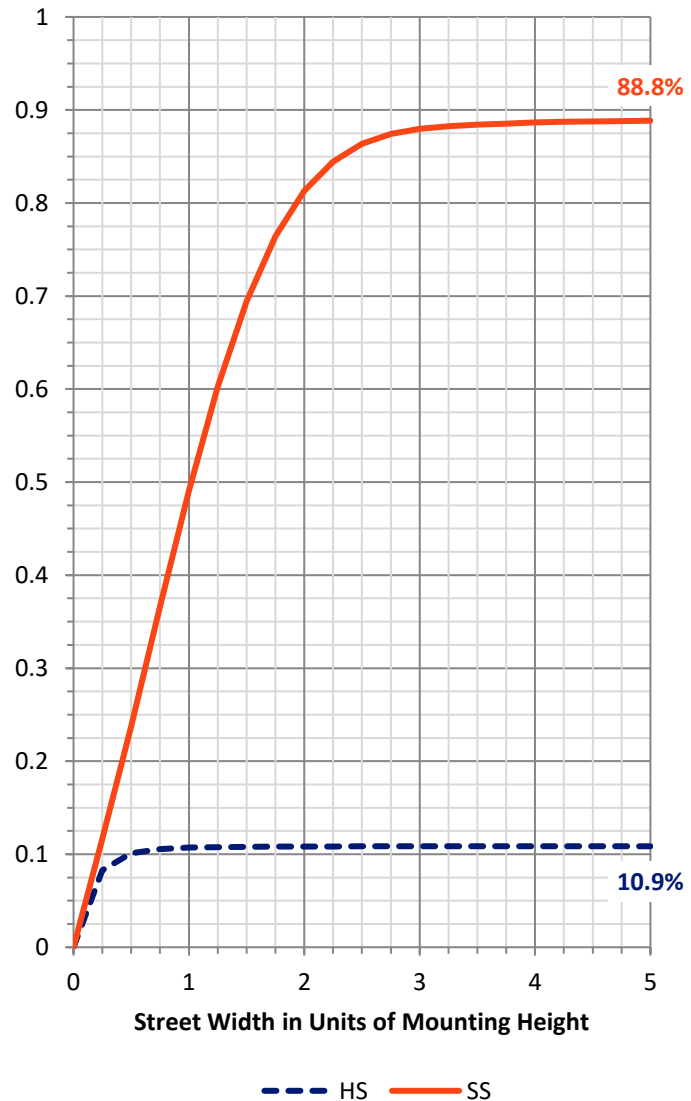
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	248.5	0.0	248.5
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	2017.5	0.0	2017.5
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	2266.0	0.0	2266.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.2	1.1
10°-20°	69.8	3.1
20°-30°	120.5	5.3
30°-40°	207.9	9.2
40°-50°	355.6	15.7
50°-60°	569.0	25.1
60°-70°	657.4	29.0
70°-80°	251.2	11.1
80°-90°	9.4	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°	2266.0	100.0
0°-180°	2266.0	100.0



REPORT NUMBER: P348844

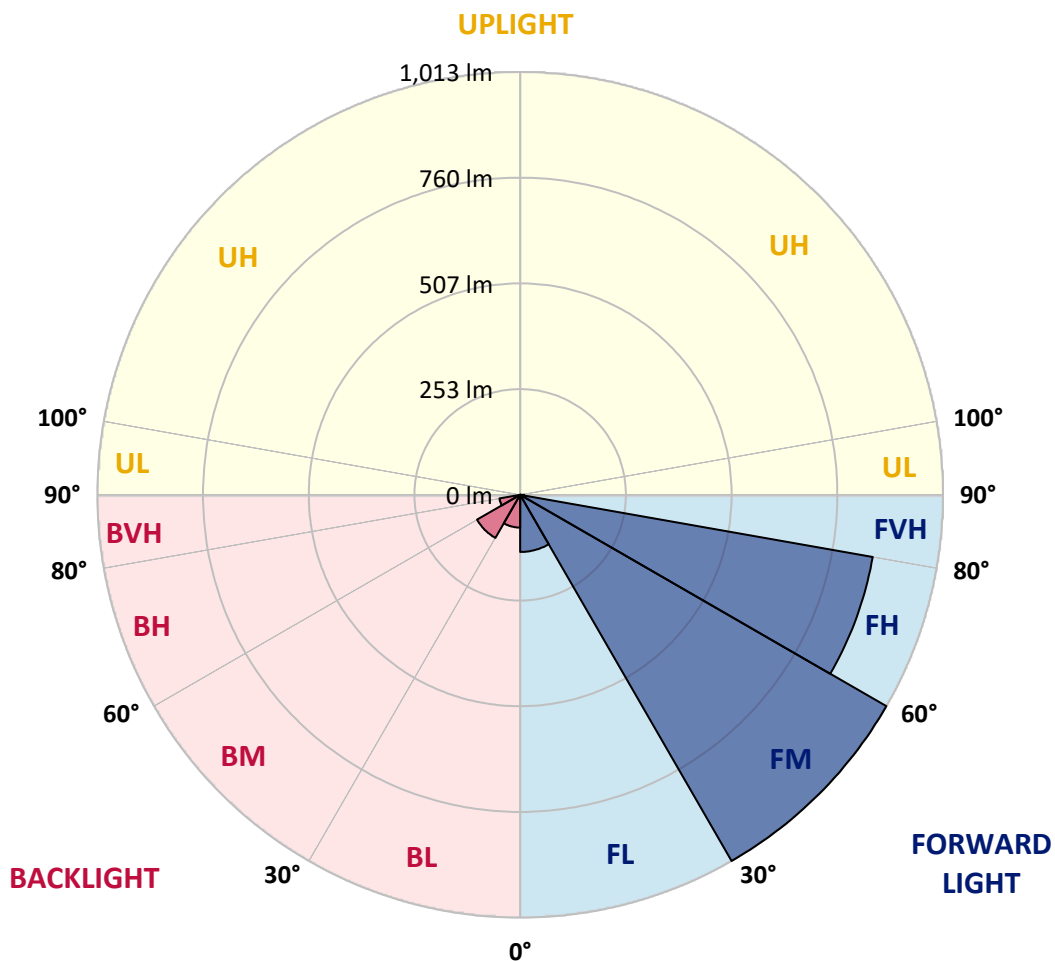
CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	137.0	6.0			
FM (30°-60°)	1013.3	44.7			
FH (60°-80°)	858.0	37.9			G1/1800
FVH (80°-90°)	9.2	0.4			G0/10
BL (0°-30°)	78.5	3.5	B0/110		
BM (30°-60°)	119.2	5.3	B0/220		
BH (60°-80°)	50.6	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





REPORT NUMBER: P348844

CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3
2.5°	262.9	264.1	265.0	265.5	266.2	267.5	268.0	268.6	268.9	268.9	269.7
5°	252.5	253.8	255.7	257.2	260.2	264.0	266.8	267.9	269.8	271.5	272.5
7.5°	242.9	244.4	246.5	250.1	255.2	261.4	267.2	268.7	272.5	276.1	277.9
10°	236.7	237.9	240.7	245.7	252.4	261.1	269.3	271.1	277.5	283.6	287.0
12.5°	234.5	235.6	238.5	244.2	252.5	262.7	274.0	276.7	286.1	295.0	299.8
15°	237.7	237.9	241.0	246.3	254.6	266.7	281.8	285.0	296.9	308.5	314.5
17.5°	249.7	248.7	250.3	252.7	259.2	271.9	290.0	294.9	310.7	324.3	330.0
20°	279.7	279.7	276.0	269.6	269.7	280.1	301.2	306.7	326.0	341.8	346.9
22.5°	331.0	330.0	322.7	307.0	292.5	294.1	314.8	321.9	344.5	361.3	363.0
25°	392.7	391.5	380.3	358.1	333.0	316.8	333.2	341.4	366.4	381.3	377.8
27.5°	458.1	457.1	445.9	418.4	382.7	353.0	355.2	362.9	388.8	403.5	392.3
30°	521.4	521.7	510.7	482.4	442.0	399.2	383.1	387.6	410.6	425.5	409.4
32.5°	581.6	582.0	572.5	540.9	503.2	452.9	421.6	420.4	435.9	450.6	432.1
35°	635.3	636.3	629.8	605.3	565.3	512.7	471.7	468.9	471.8	488.4	466.9
37.5°	687.0	687.7	682.7	662.1	628.6	578.4	534.9	530.9	524.7	537.4	512.9
40°	743.7	742.1	736.4	717.7	689.0	650.9	602.8	596.0	585.1	596.5	573.3
42.5°	796.4	794.6	795.6	774.4	750.1	725.5	682.0	670.2	663.9	677.0	647.5
45°	862.3	861.4	864.6	846.1	826.5	808.6	772.7	759.9	757.1	772.4	737.2
47.5°	927.4	929.7	939.7	931.9	923.9	908.2	868.9	863.1	864.8	883.3	831.8
50°	981.6	984.4	1011.7	1020.7	1032.1	1022.9	983.5	980.0	986.7	1003.4	933.6
52.5°	1020.8	1026.5	1060.4	1101.9	1143.7	1149.9	1110.6	1107.4	1116.5	1119.0	1012.2
55°	1048.0	1053.0	1091.5	1167.4	1252.4	1279.2	1254.8	1242.4	1240.7	1215.3	1094.9
57.5°	1052.8	1052.3	1107.6	1209.7	1337.7	1406.8	1391.4	1379.2	1344.1	1304.2	1189.8
60°	1025.6	1028.7	1092.9	1224.4	1391.3	1503.4	1504.6	1488.7	1433.9	1390.7	1281.7
62.5°	941.8	954.5	1019.3	1185.9	1390.7	1542.3	1587.5	1575.4	1509.9	1461.5	1374.9
65°	806.0	810.5	872.3	1054.1	1296.7	1526.0	1662.2	1657.7	1578.4	1530.3	1422.8
67.5°	588.6	578.8	643.7	830.1	1097.8	1431.1	1715.7	1721.4	1631.2	1544.4	1371.8
68°	537.1	540.0	590.6	774.7	1045.8	1397.5	1719.3	1728.0	1636.5	1535.2	1343.9
70°	320.2	325.7	370.8	533.4	795.6	1207.8	1681.1	1701.0	1605.2	1440.2	1162.4
72.5°	81.8	88.4	131.0	238.7	454.4	851.0	1419.2	1452.7	1393.7	1168.3	784.7
75°	33.6	35.4	46.8	78.6	169.3	383.4	935.4	1007.2	966.1	699.5	354.7
77.5°	23.3	24.4	30.1	43.6	73.3	130.0	458.6	510.4	459.9	238.7	77.4
80°	16.7	17.7	21.5	29.0	42.1	46.4	149.5	172.8	137.3	52.4	19.2
82.5°	10.0	10.7	16.1	20.7	25.6	22.2	37.2	42.2	39.8	26.0	8.6
85°	4.9	5.8	10.8	14.8	13.8	9.3	11.4	12.6	15.6	15.9	4.6
87.5°	0.3	0.6	6.3	8.9	3.9	2.1	3.3	4.1	5.6	7.8	1.9
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: P348844

CATALOG NUMBER: ARCH-N-PA1-30-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3	269.3
2.5°	270.0	270.1	269.4	269.0	269.3	268.0	267.4	267.7	267.7	268.0	267.4
5°	272.7	272.7	271.4	269.7	268.7	266.3	264.7	264.2	263.9	263.7	263.3
7.5°	278.5	277.8	275.6	271.8	268.6	263.3	259.2	257.0	256.0	255.5	255.2
10°	287.8	286.6	282.9	275.9	268.5	259.0	250.1	243.8	238.5	236.4	235.1
12.5°	300.3	298.6	292.3	280.7	267.8	250.2	230.9	212.4	195.1	188.0	184.5
15°	314.8	312.3	302.4	284.8	263.4	230.4	188.5	156.0	132.1	123.1	119.3
17.5°	329.5	326.3	311.2	287.4	250.2	189.3	132.2	99.9	83.9	79.6	78.1
20°	344.3	339.5	318.8	285.4	220.4	136.5	87.2	73.0	68.4	67.1	66.6
22.5°	358.3	351.0	325.6	277.9	174.5	91.6	69.0	64.5	63.0	62.3	62.0
25°	370.5	360.3	331.6	254.8	123.5	69.2	62.1	60.6	58.7	57.3	57.4
27.5°	382.0	369.7	335.3	216.7	82.4	59.1	57.5	55.5	52.0	49.9	49.9
30°	395.8	382.1	337.9	166.7	60.6	52.3	51.0	47.9	43.1	40.4	40.4
32.5°	416.6	400.9	336.2	117.0	50.3	46.0	43.0	38.7	33.4	30.9	30.8
35°	448.4	430.1	324.0	76.7	44.4	40.0	35.1	29.9	25.3	23.1	23.0
37.5°	491.3	469.1	296.6	54.9	39.8	34.4	28.6	22.8	19.4	18.0	17.9
40°	546.9	514.4	257.4	44.5	35.5	29.0	22.1	17.7	15.3	14.3	14.4
42.5°	613.6	563.0	210.3	38.4	31.3	23.9	17.3	13.9	12.4	11.7	11.5
45°	687.8	610.8	161.0	34.2	27.1	19.3	13.5	11.0	9.9	9.4	9.4
47.5°	769.3	657.5	117.9	30.5	22.6	14.9	10.8	9.0	8.0	7.7	7.6
50°	843.4	689.8	85.0	26.7	18.5	11.8	8.8	7.5	6.9	6.4	6.4
52.5°	905.1	700.0	62.6	22.5	15.0	9.4	7.3	6.4	5.8	5.5	5.5
55°	959.4	695.8	46.5	18.5	12.1	7.7	6.2	5.5	4.9	4.6	4.6
57.5°	1011.5	682.3	34.7	15.1	9.8	6.2	5.3	4.6	4.1	3.9	3.9
60°	1054.0	659.8	25.8	12.2	7.8	5.0	4.4	3.8	3.3	3.0	3.0
62.5°	1088.5	635.0	19.0	10.1	6.2	4.0	3.4	3.1	2.5	2.1	2.1
65°	1088.7	593.7	14.3	8.4	4.8	3.1	2.6	2.5	1.6	1.3	1.2
67.5°	1010.0	511.8	10.9	7.2	3.8	2.4	1.9	2.0	0.9	0.5	0.4
68°	981.4	491.1	10.3	7.1	3.5	2.3	1.8	2.0	0.8	0.4	0.3
70°	827.4	390.7	8.3	6.9	3.1	1.7	1.5	2.0	0.6	0.3	0.2
72.5°	529.2	226.7	6.1	5.5	2.4	1.3	1.0	1.8	0.6	0.2	0.1
75°	225.2	70.3	4.2	3.9	1.4	1.0	0.6	1.2	0.4	0.1	0.0
77.5°	47.5	15.9	2.5	2.4	1.0	0.6	0.4	0.3	0.1	0.0	0.0
80°	12.2	4.6	1.3	1.2	0.5	0.3	0.2	0.0	0.0	0.0	0.0
82.5°	3.9	1.8	0.8	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	1.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.3	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)