

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: P348794

Luminaire Tested: **ARCH-N-PA1-20-830-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348794  
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-PA1-20-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2148 lumens  
Efficiency: N/A  
Efficacy: 89.5 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 - G0

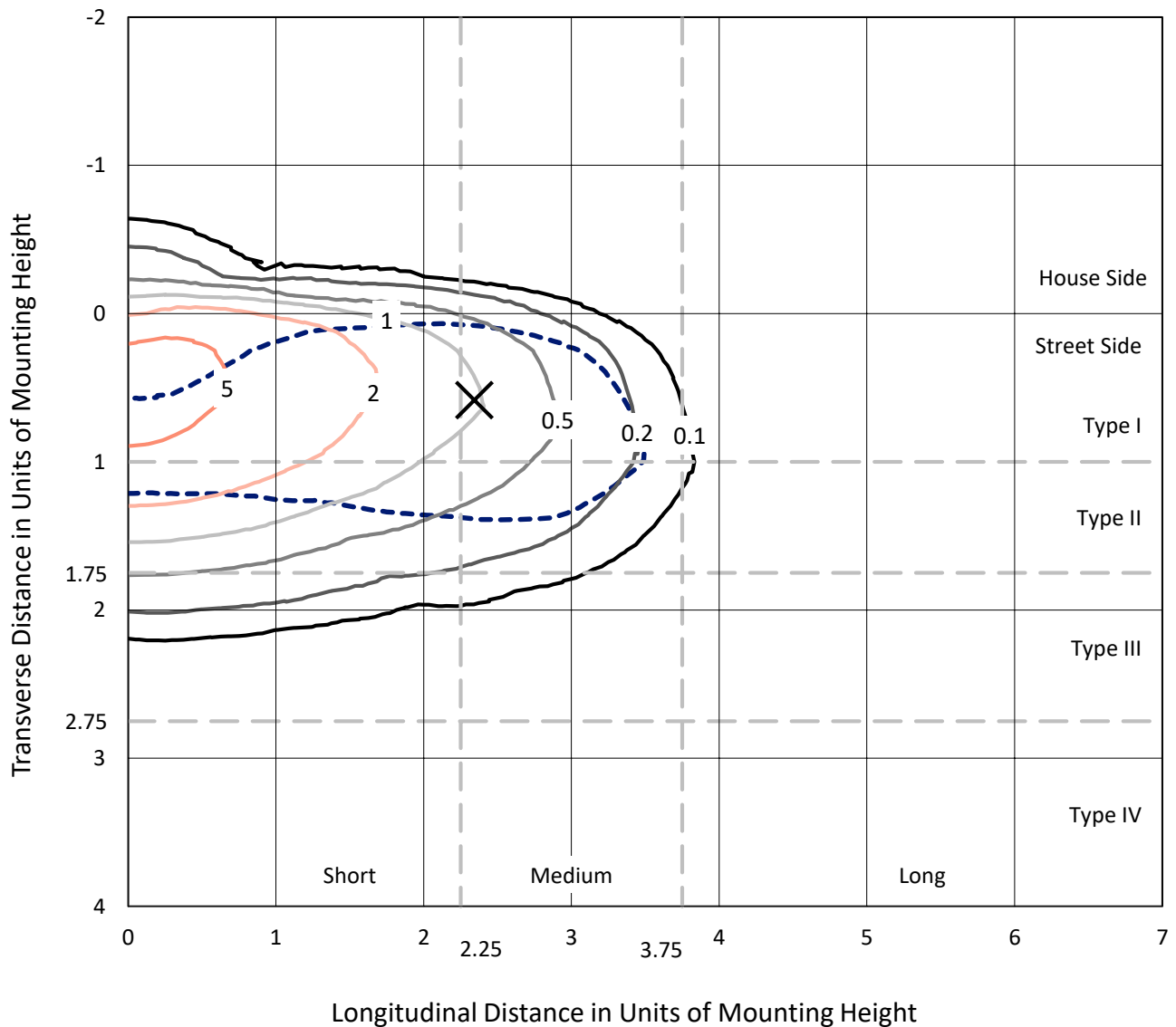
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

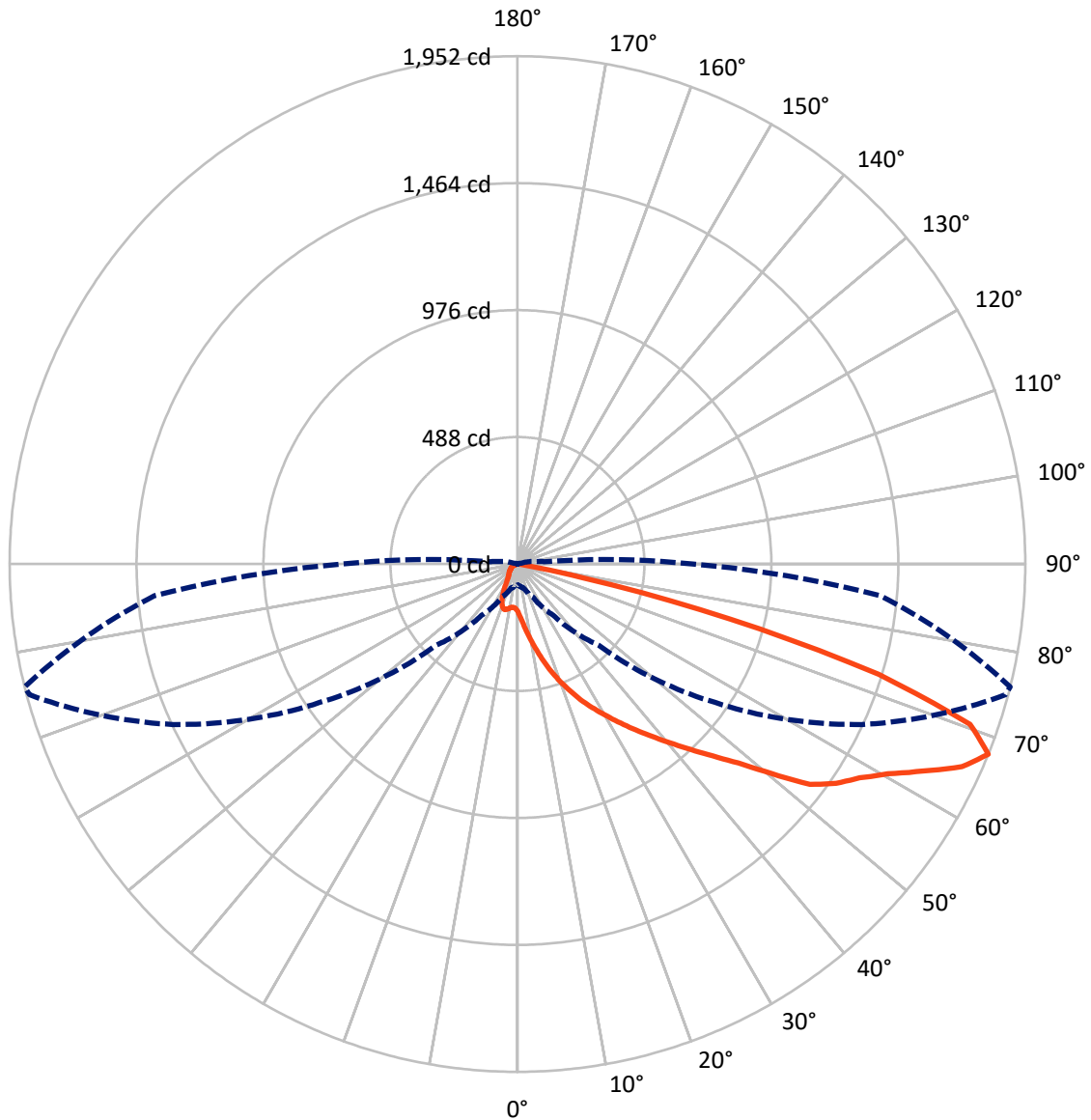
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 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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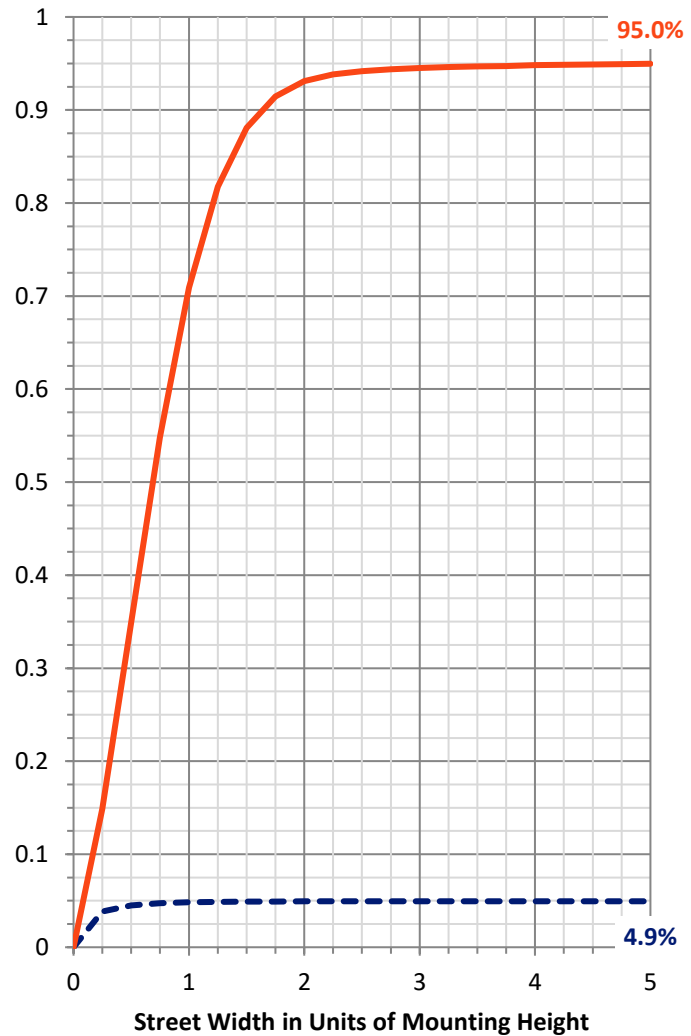
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	106.7	0.0	106.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	2041.3	0.0	2041.3
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	2148.0	0.0	2148.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.7	1.1
10°-20°	89.8	4.2
20°-30°	182.8	8.5
30°-40°	317.2	14.8
40°-50°	448.2	20.9
50°-60°	508.2	23.7
60°-70°	421.5	19.6
70°-80°	152.7	7.1
80°-90°	5.0	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°	2148.0	100.0
0°-180°	2148.0	100.0



--- HS    — SS

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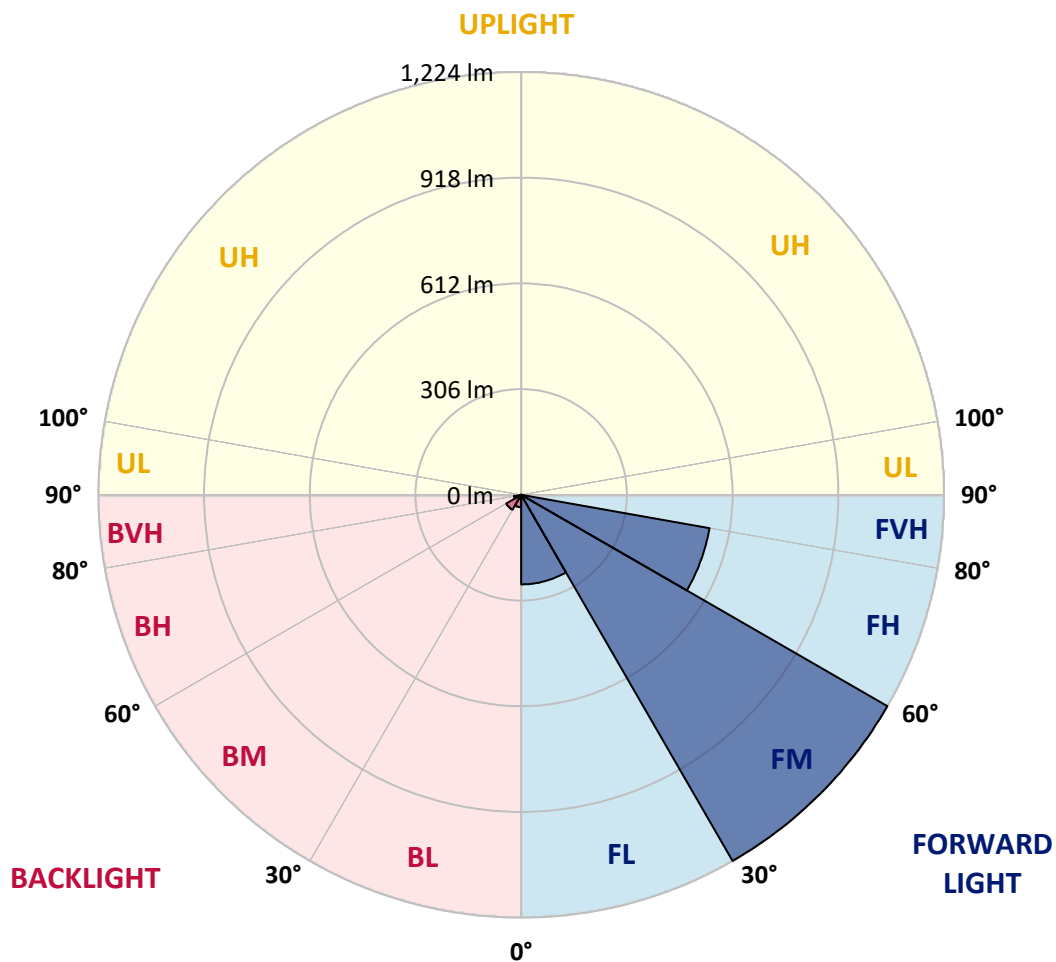
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	259.3	12.1			
FM	(30°-60°)	1223.7	57.0			
FH	(60°-80°)	553.6	25.8			G0/660
FVH	(80°-90°)	4.8	0.2			G0/10
BL	(0°-30°)	36.0	1.7	B0/110		
BM	(30°-60°)	49.9	2.3	B0/220		
BH	(60°-80°)	20.6	1.0	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-G0**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2
2.5°	272.0	265.9	267.3	263.3	256.2	241.5	229.0	217.1	203.3	202.8	191.4
5°	366.8	361.6	360.9	352.9	340.0	315.0	290.7	263.1	232.2	229.9	205.7
7.5°	452.8	448.7	447.2	437.6	413.5	389.2	357.6	316.9	268.6	264.5	225.0
10°	518.9	516.9	517.3	510.5	489.8	467.2	425.7	373.8	309.9	303.5	248.2
12.5°	568.9	569.4	572.8	568.7	557.1	540.3	496.0	434.5	355.7	346.9	274.6
15°	605.7	608.1	614.3	619.5	618.6	604.1	563.5	496.2	404.2	394.5	304.1
17.5°	629.6	632.2	641.2	652.7	663.3	659.9	628.6	555.7	453.4	442.2	335.6
20°	650.5	653.6	663.3	678.4	698.1	702.3	681.8	613.4	502.4	488.8	368.2
22.5°	695.7	695.6	701.6	710.4	729.1	740.1	727.1	666.9	550.9	536.7	401.4
25°	777.6	774.5	772.4	765.5	769.6	776.4	769.1	717.0	599.6	585.2	435.1
27.5°	874.9	876.8	860.1	841.3	826.8	819.9	808.0	763.4	646.5	630.7	468.0
30°	977.6	978.2	958.4	934.5	902.6	876.1	855.6	807.7	694.7	677.5	500.0
32.5°	1070.2	1066.5	1047.0	1014.4	974.1	944.4	901.7	857.2	745.7	729.0	535.6
35°	1143.6	1139.3	1115.5	1085.8	1044.1	1014.1	962.8	906.6	799.3	783.1	571.3
37.5°	1197.3	1192.2	1167.7	1137.2	1101.2	1083.8	1033.7	960.4	857.9	840.4	608.8
40°	1215.9	1211.5	1196.1	1173.8	1144.9	1140.9	1108.9	1022.2	921.6	903.0	651.4
42.5°	1204.8	1200.5	1195.0	1187.5	1175.4	1179.2	1179.9	1092.7	992.4	974.0	698.4
45°	1160.8	1156.9	1162.5	1173.6	1188.5	1207.2	1244.6	1168.5	1071.4	1051.9	752.7
47.5°	1095.9	1093.1	1108.7	1136.2	1180.0	1231.3	1303.8	1248.1	1160.2	1142.0	820.4
50°	1003.7	1003.2	1034.5	1084.6	1151.9	1243.0	1365.0	1338.6	1283.5	1264.4	914.6
52.5°	860.1	861.0	922.5	1002.7	1102.7	1235.1	1404.3	1455.0	1426.9	1407.1	996.2
55°	723.3	728.9	772.5	888.3	1027.2	1205.7	1417.9	1509.3	1506.1	1487.3	1041.6
57.5°	589.4	599.6	641.6	749.7	917.0	1138.1	1410.5	1532.8	1565.0	1550.6	1101.5
60°	444.2	448.9	497.3	598.4	775.5	1014.6	1356.5	1545.6	1645.6	1635.6	1188.3
62.5°	282.6	294.4	337.3	434.8	603.9	843.1	1265.6	1545.4	1746.4	1751.8	1300.4
65°	148.9	162.6	185.4	269.5	415.0	651.6	1128.9	1530.9	1870.0	1877.7	1388.1
67.5°	80.3	84.2	96.3	139.9	240.7	441.4	927.9	1459.4	1941.7	1951.7	1400.3
70°	58.7	60.9	65.4	77.4	121.1	256.4	677.1	1297.2	1849.3	1845.6	1244.1
72.5°	45.1	48.5	51.9	56.7	69.6	136.8	421.6	1015.8	1475.6	1450.7	930.0
75°	35.6	36.1	40.9	45.3	52.2	77.9	187.2	591.6	900.6	841.8	482.3
77.5°	28.4	28.8	31.6	35.4	42.0	51.2	58.0	232.8	287.5	256.6	104.7
80°	16.8	17.8	23.5	27.3	34.8	32.3	21.2	50.5	44.9	40.7	17.6
82.5°	9.4	10.2	13.3	21.6	24.3	15.4	10.5	13.6	10.5	10.3	5.0
85°	0.0	0.5	8.6	13.4	9.9	3.4	4.4	4.5	3.1	2.9	2.0
87.5°	0.0	0.0	2.6	2.5	0.4	0.6	1.0	1.5	1.2	1.2	1.0
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°	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2	182.2
2.5°	185.8	180.7	171.1	161.7	153.8	147.3	141.5	139.1	137.2	136.9	135.4
5°	194.1	183.8	165.5	150.4	140.3	133.2	127.1	123.3	120.4	119.2	118.2
7.5°	206.6	191.1	164.7	147.4	135.3	123.3	112.0	99.8	92.1	89.2	87.5
10°	221.8	200.7	167.5	146.5	125.5	100.0	81.3	65.8	59.5	57.4	56.8
12.5°	239.6	212.6	172.4	141.3	104.4	71.1	56.1	50.8	49.4	48.8	48.8
15°	260.0	225.7	175.9	126.0	77.2	53.7	48.6	46.1	44.6	43.8	43.9
17.5°	280.9	238.5	174.2	103.9	56.9	47.8	44.0	41.3	39.2	38.4	38.2
20°	302.0	250.4	164.8	77.4	48.2	43.4	39.1	36.1	34.1	33.2	33.0
22.5°	323.9	260.4	148.2	56.8	43.3	38.5	34.3	31.3	29.4	28.6	28.2
25°	345.1	268.6	125.1	45.9	38.7	33.9	29.8	27.1	25.3	24.6	24.5
27.5°	365.0	273.8	98.3	40.6	34.6	29.7	26.1	23.6	22.1	21.6	21.5
30°	382.9	274.3	72.7	36.6	31.1	26.2	22.8	20.6	19.3	18.7	18.5
32.5°	400.9	270.3	52.9	33.0	27.8	23.1	19.8	18.1	17.1	16.7	16.7
35°	418.0	261.2	41.2	29.9	24.6	20.0	17.4	16.2	15.6	15.2	15.2
37.5°	434.6	248.1	35.0	27.2	21.6	17.5	15.3	14.6	14.1	13.6	13.6
40°	451.6	231.6	31.8	24.7	19.1	15.5	13.6	13.0	12.5	12.1	12.0
42.5°	472.4	212.6	29.7	22.3	16.9	13.7	12.0	11.3	10.9	10.5	10.4
45°	496.5	196.2	28.0	20.0	15.2	12.2	10.4	9.7	9.1	8.7	8.6
47.5°	531.2	184.4	25.8	17.4	13.5	10.6	9.0	8.2	7.3	6.9	6.8
50°	575.5	174.6	22.9	15.2	11.8	9.0	7.5	6.5	5.7	5.3	5.3
52.5°	597.6	161.8	20.2	13.2	9.9	7.6	6.1	4.9	4.5	4.0	4.0
55°	606.4	152.0	17.6	11.2	8.2	6.3	4.8	3.8	3.5	3.2	3.1
57.5°	631.2	149.2	15.3	9.5	6.8	5.0	3.7	2.8	2.6	2.3	2.3
60°	671.3	150.6	13.3	8.1	5.5	3.9	2.7	2.2	2.0	1.6	1.6
62.5°	714.5	148.8	11.2	7.0	4.2	2.8	1.9	1.6	1.6	0.9	0.8
65°	722.7	132.5	9.6	5.7	3.3	2.1	1.2	1.0	1.4	0.2	0.0
67.5°	670.8	102.8	8.3	4.4	2.4	1.6	0.9	0.5	1.2	0.0	0.0
70°	536.4	65.3	6.7	3.2	1.9	1.3	0.8	0.2	0.9	0.0	0.0
72.5°	379.3	37.9	5.3	2.3	1.6	1.0	0.6	0.0	0.6	0.0	0.0
75°	191.8	20.2	3.3	1.7	1.2	0.8	0.4	0.0	0.1	0.0	0.0
77.5°	41.5	9.4	2.1	1.2	0.8	0.5	0.2	0.0	0.0	0.0	0.0
80°	9.0	4.1	1.3	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0
82.5°	3.3	2.2	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	1.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.4	0.1	0.1	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)