

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: P397680

Luminaire Tested: **ARCH-S-PA1-30-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397680  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3065 lumens  
Efficiency: N/A  
Efficacy: 98.9 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 - G1

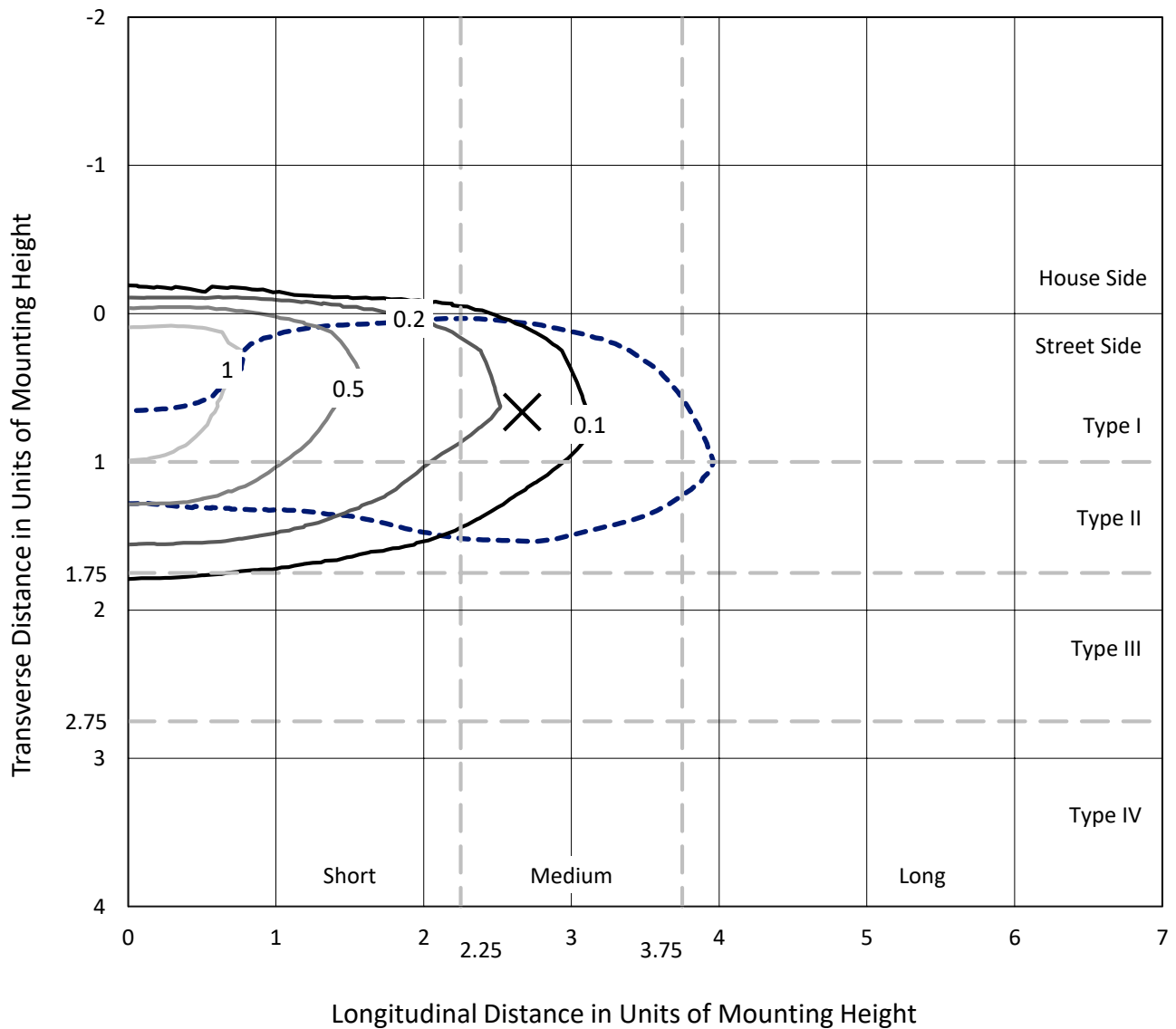
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

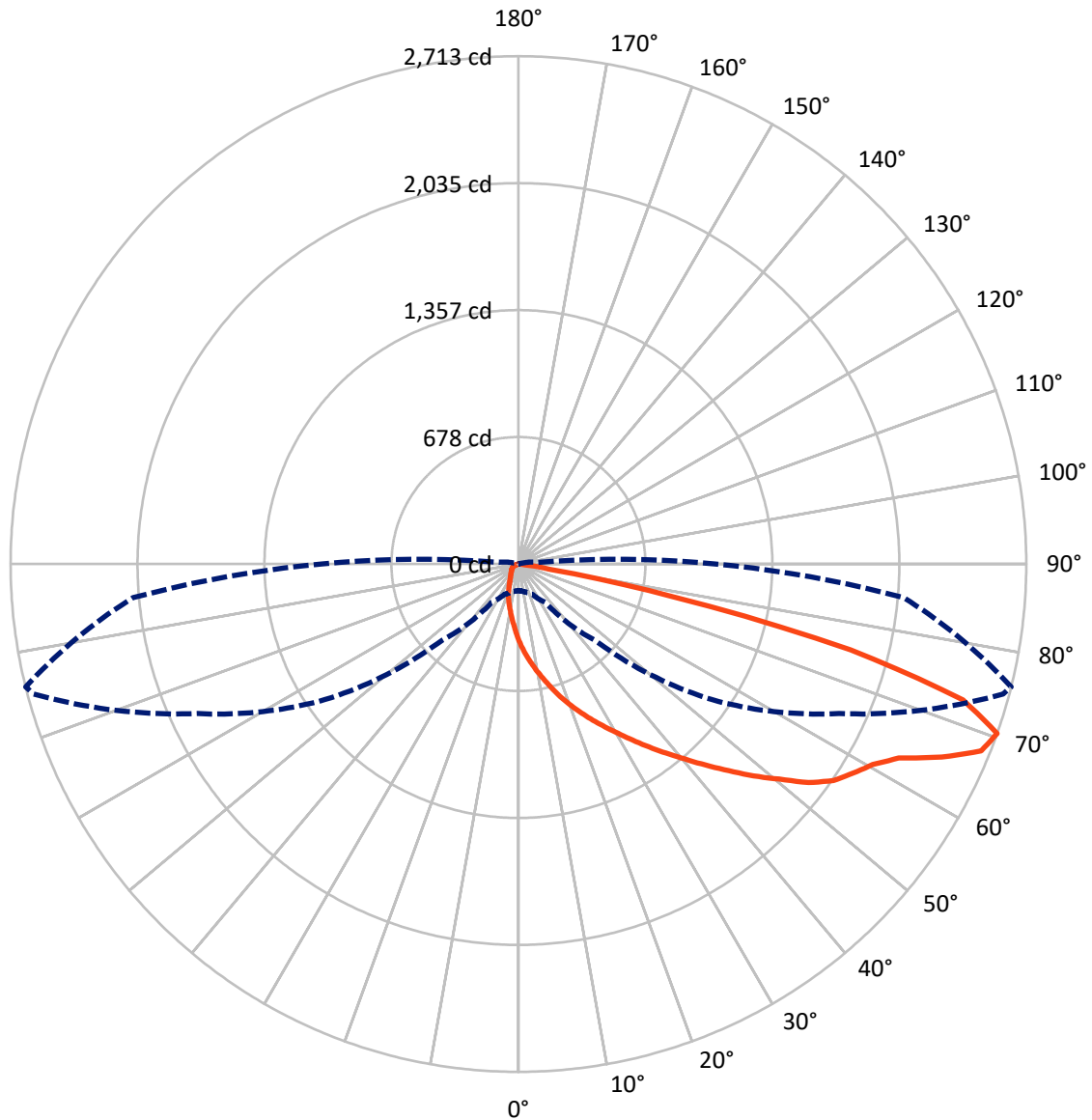
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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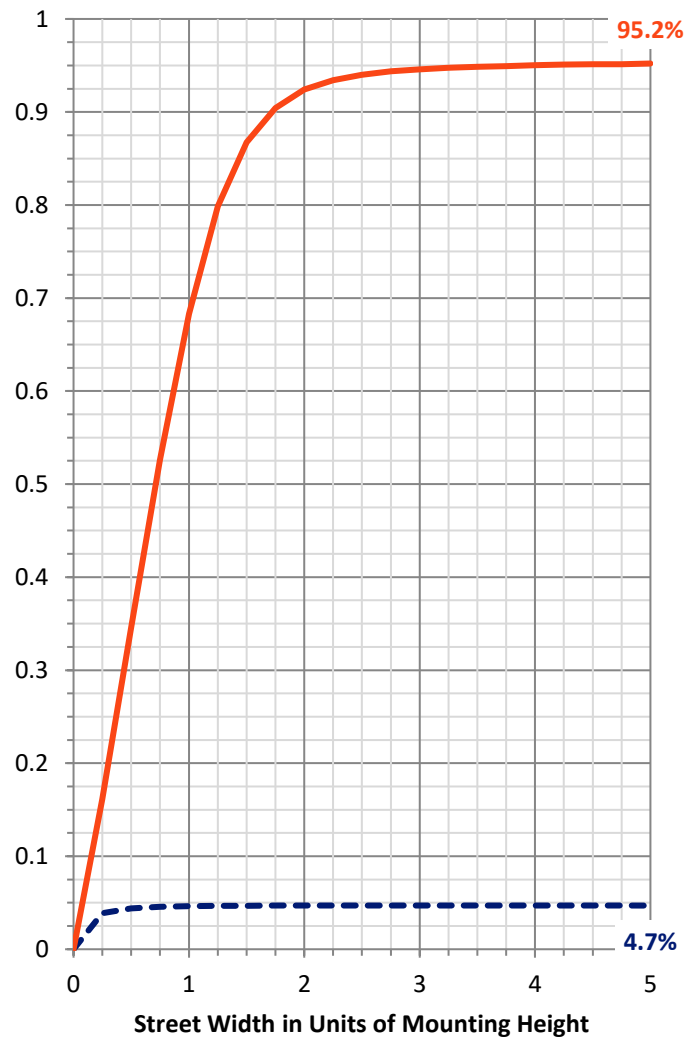
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	144.5	0.0	144.5
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	2920.4	0.0	2920.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	3065.0	0.0	3065.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	1.3
10°-20°	124.7	4.1
20°-30°	232.3	7.6
30°-40°	410.9	13.4
40°-50°	628.4	20.5
50°-60°	712.5	23.2
60°-70°	610.7	19.9
70°-80°	295.8	9.7
80°-90°	11.0	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°	3065.0	100.0
0°-180°	3065.0	100.0



--- HS    — SS

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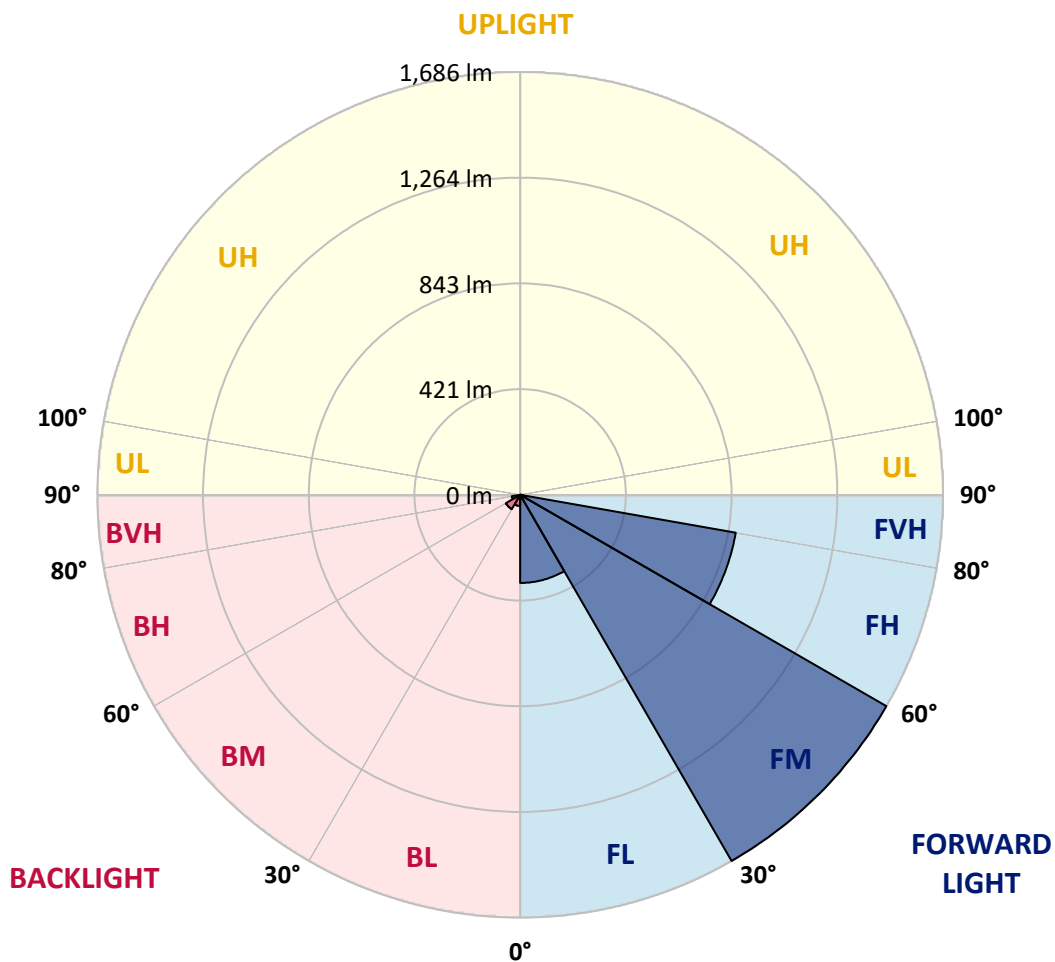
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	351.4	11.5			
FM	(30°-60°)	1685.8	55.0			
FH	(60°-80°)	872.5	28.5			G1/1800
FVH	(80°-90°)	10.8	0.4			G1/100
BL	(0°-30°)	44.3	1.4	B0/110		
BM	(30°-60°)	66.0	2.2	B0/220		
BH	(60°-80°)	34.0	1.1	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3
2.5°	560.8	557.7	554.7	542.9	532.2	522.5	504.2	480.2	458.7	454.2	429.2
5°	658.8	655.2	650.6	638.9	625.1	608.8	581.7	545.0	507.2	499.1	452.6
7.5°	725.1	722.1	715.4	709.8	696.0	680.2	650.1	607.2	555.2	545.0	479.7
10°	770.5	768.5	767.5	762.9	752.7	739.9	709.8	664.9	603.7	591.9	508.2
12.5°	786.9	786.9	792.0	799.6	801.1	797.1	769.5	724.6	654.7	642.5	541.9
15°	764.9	767.5	778.7	803.2	828.7	845.5	828.2	786.4	710.8	697.6	581.7
17.5°	758.8	761.3	769.0	790.4	824.6	869.5	878.2	846.1	763.9	752.7	622.5
20°	776.1	778.7	785.3	803.7	829.7	875.1	911.4	903.7	820.0	808.3	663.9
22.5°	817.5	819.0	819.0	833.3	856.3	889.9	932.3	958.3	877.7	864.9	704.7
25°	906.3	903.2	891.0	883.8	898.6	926.2	958.8	1006.3	942.0	924.6	748.6
27.5°	1022.6	1032.8	1003.2	969.0	957.8	973.6	996.1	1048.6	1004.2	985.9	788.4
30°	1180.3	1176.2	1137.4	1088.4	1040.0	1034.3	1042.0	1084.9	1066.5	1049.1	832.8
32.5°	1309.9	1317.6	1276.7	1217.0	1144.6	1110.4	1102.2	1128.2	1132.8	1121.6	885.3
35°	1443.1	1451.3	1411.5	1345.1	1258.9	1201.7	1178.3	1181.8	1215.0	1200.7	940.5
37.5°	1562.5	1569.6	1530.3	1462.5	1376.2	1306.3	1272.7	1245.1	1294.6	1281.8	998.6
40°	1653.3	1654.3	1627.8	1567.1	1485.4	1413.0	1374.7	1320.6	1378.8	1370.1	1059.4
42.5°	1717.6	1719.7	1700.3	1648.2	1572.7	1505.3	1474.2	1409.9	1475.7	1468.1	1129.8
45°	1747.7	1751.3	1749.3	1701.3	1638.5	1580.4	1570.1	1504.8	1581.9	1574.7	1210.9
47.5°	1719.2	1719.2	1745.2	1738.5	1680.9	1642.1	1653.8	1603.8	1697.2	1690.6	1293.6
50°	1600.3	1601.8	1654.9	1730.9	1697.2	1688.5	1725.3	1700.8	1801.8	1805.9	1392.6
52.5°	1288.0	1285.4	1464.5	1610.5	1686.0	1709.5	1791.1	1799.8	1927.4	1939.6	1491.1
55°	962.4	960.9	1132.3	1397.2	1607.4	1698.7	1827.8	1888.1	2034.5	2042.2	1564.5
57.5°	761.9	757.8	852.2	1126.2	1429.8	1650.8	1829.4	1904.9	2094.2	2107.5	1636.0
60°	585.8	582.2	652.7	837.9	1178.3	1523.2	1785.5	1905.9	2151.9	2175.3	1731.9
62.5°	418.9	423.0	477.1	601.1	906.3	1343.1	1728.3	1920.2	2254.4	2281.0	1868.2
65°	282.7	280.7	325.6	409.2	644.5	1100.7	1640.6	1950.3	2439.2	2485.6	2031.4
67.5°	196.5	198.0	218.4	266.4	409.2	845.0	1494.6	1967.2	2630.0	2666.2	2145.8
70°	141.9	143.9	155.1	179.1	250.0	573.1	1263.5	1890.1	2681.6	2713.2	2066.1
72.5°	93.4	97.5	114.3	127.1	159.7	358.7	930.8	1628.3	2459.6	2483.1	1733.4
75°	50.5	51.5	73.5	94.9	113.8	223.5	555.2	1098.1	1840.1	1832.4	1143.0
77.5°	39.3	40.8	45.4	67.9	76.5	123.0	219.4	496.0	871.6	848.1	389.9
80°	24.0	25.0	31.6	40.3	53.6	71.4	64.3	134.7	177.1	165.8	57.2
82.5°	14.3	15.3	18.9	33.7	42.4	33.7	22.5	32.7	33.2	32.7	14.3
85°	2.6	2.6	13.3	23.5	22.5	9.7	13.3	10.7	9.7	10.2	3.1
87.5°	0.0	0.0	5.1	7.1	10.2	3.6	5.1	2.6	2.6	2.6	1.5
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°	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3	410.3
2.5°	413.8	396.5	360.8	329.6	298.5	275.6	258.2	240.3	234.2	226.6	222.5
5°	421.0	386.8	315.9	259.2	211.3	174.5	151.0	136.8	127.6	120.9	119.4
7.5°	431.7	379.1	279.6	203.1	150.5	113.8	94.4	84.7	79.6	76.5	75.5
10°	444.5	372.5	243.9	158.2	106.1	80.1	69.4	65.3	63.3	62.3	61.7
12.5°	462.3	370.0	213.8	122.0	80.1	65.8	60.2	57.7	56.1	54.6	54.1
15°	485.8	371.0	186.3	94.4	66.3	58.7	54.1	51.5	49.5	48.0	48.0
17.5°	510.3	372.5	159.2	76.5	60.2	53.6	48.5	44.9	43.4	41.8	41.3
20°	533.2	372.0	133.2	65.3	54.6	48.0	42.9	39.3	36.7	35.2	35.2
22.5°	555.2	368.9	108.7	58.7	50.0	42.4	36.7	33.2	31.1	29.6	29.6
25°	578.7	362.8	88.8	53.6	44.4	37.3	31.6	28.1	26.5	25.0	25.0
27.5°	597.0	352.6	72.5	49.0	39.3	32.1	27.0	24.0	22.5	21.4	21.4
30°	616.9	337.8	60.2	43.9	34.2	27.6	23.0	20.4	18.9	18.4	18.4
32.5°	638.9	321.5	51.5	38.8	29.1	23.5	19.4	17.9	16.3	15.8	15.8
35°	664.4	307.2	46.4	33.7	25.5	19.9	16.8	15.3	14.3	14.3	14.3
37.5°	693.5	292.4	41.8	29.6	21.9	16.8	14.3	13.8	13.3	12.8	12.8
40°	725.1	276.6	37.8	26.0	18.9	14.3	12.2	12.2	11.7	11.7	11.7
42.5°	760.8	262.8	34.2	23.0	16.3	12.2	10.7	10.7	10.2	10.2	10.2
45°	799.6	250.0	31.1	20.4	14.3	10.7	9.7	9.2	8.7	8.7	8.7
47.5°	845.5	242.9	28.6	17.9	12.2	9.2	8.2	7.7	7.1	6.6	6.6
50°	904.2	246.0	26.0	14.8	10.7	7.7	6.6	6.1	5.6	5.1	5.1
52.5°	950.7	244.4	22.5	12.8	8.7	6.1	5.1	4.6	4.1	3.6	3.6
55°	984.3	238.3	19.4	10.7	6.6	5.1	4.1	3.1	2.6	2.6	2.6
57.5°	1017.5	232.2	16.3	8.7	5.1	3.6	2.6	2.0	2.0	2.0	2.0
60°	1069.0	223.5	14.3	7.1	4.1	2.6	1.5	1.5	1.0	1.0	1.0
62.5°	1131.8	212.8	11.7	6.1	3.1	2.0	1.0	1.0	0.0	0.0	0.0
65°	1200.7	193.9	9.7	4.6	2.6	1.5	1.0	0.0	0.0	0.0	0.0
67.5°	1184.9	155.6	8.2	3.1	2.0	1.0	0.5	0.0	0.0	0.0	0.0
70°	1048.1	105.1	6.6	2.6	1.5	1.0	0.5	0.0	0.0	0.0	0.0
72.5°	821.1	62.3	4.6	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
75°	525.6	31.1	3.1	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	176.0	15.3	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	25.0	5.1	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.6	2.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	0.0	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)