

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: P397761

Luminaire Tested: **ARCH-S-PA1-40-730-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397761  
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-PA1-40-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 500mA 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: 4305 lumens  
Efficiency: N/A  
Efficacy: 107.6 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

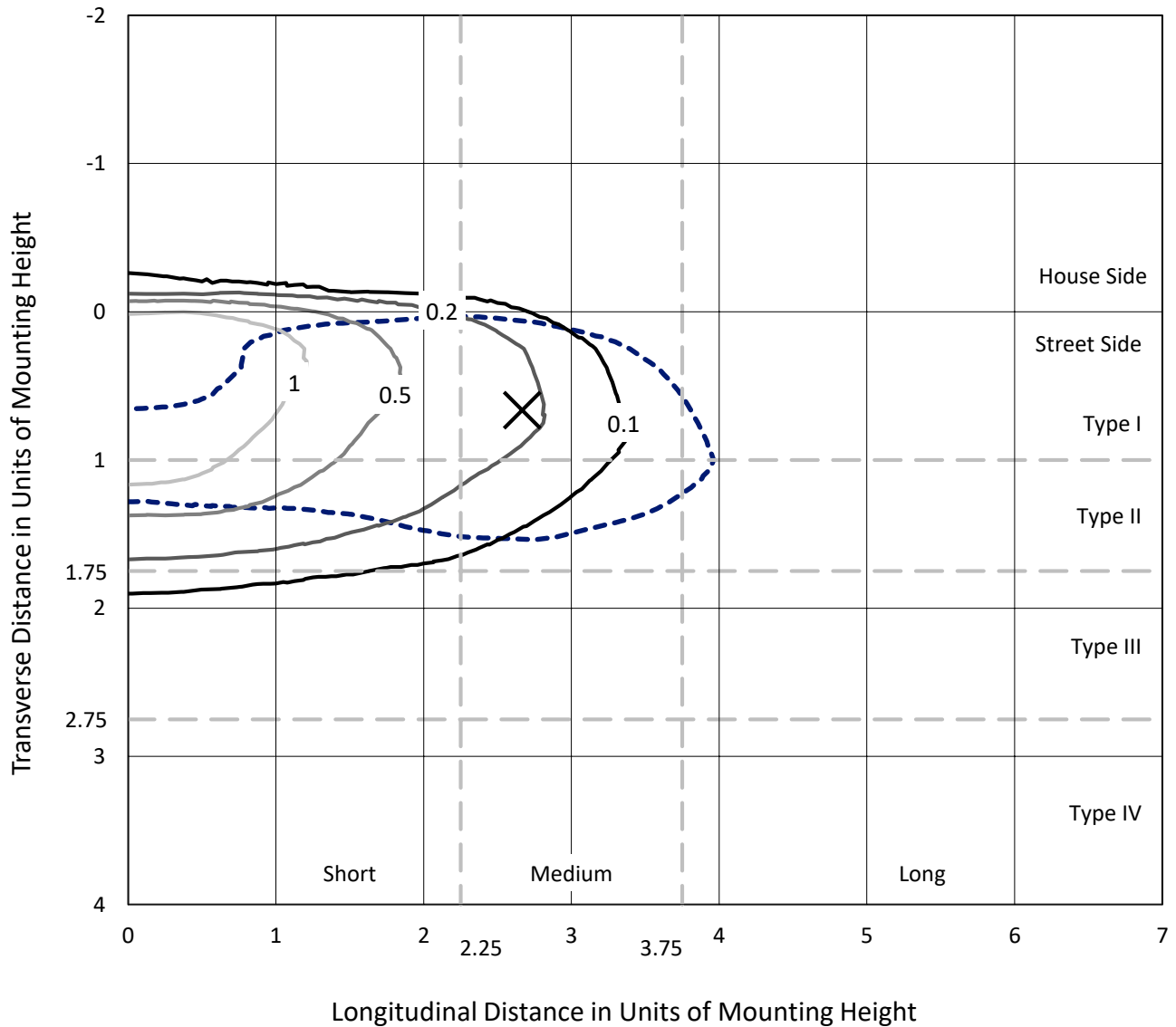
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

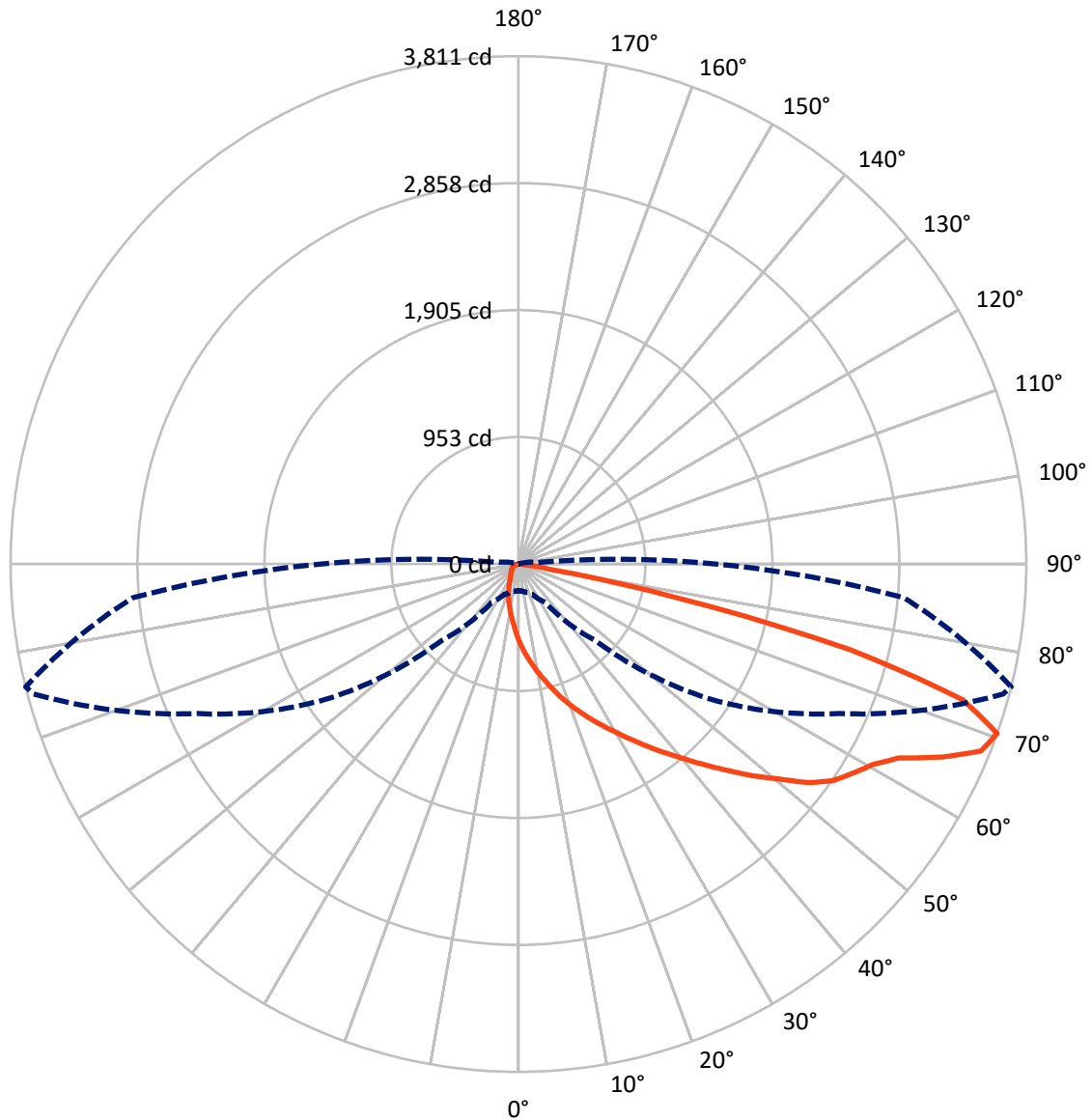
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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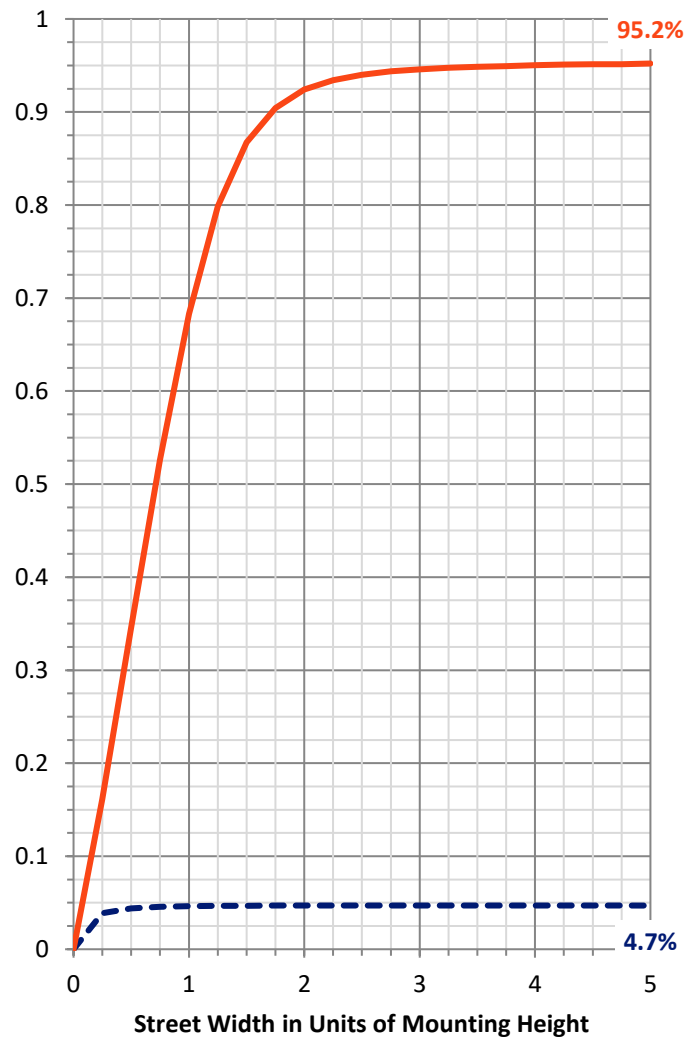
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	203.0	0.0	203.0
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	4102.0	0.0	4102.0
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	4305.0	0.0	4305.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	1.3
10°-20°	175.2	4.1
20°-30°	326.3	7.6
30°-40°	577.2	13.4
40°-50°	882.6	20.5
50°-60°	1000.7	23.2
60°-70°	857.8	19.9
70°-80°	415.5	9.7
80°-90°	15.4	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°	4305.0	100.0
0°-180°	4305.0	100.0

**Coefficient of Utilization**



--- HS    — SS

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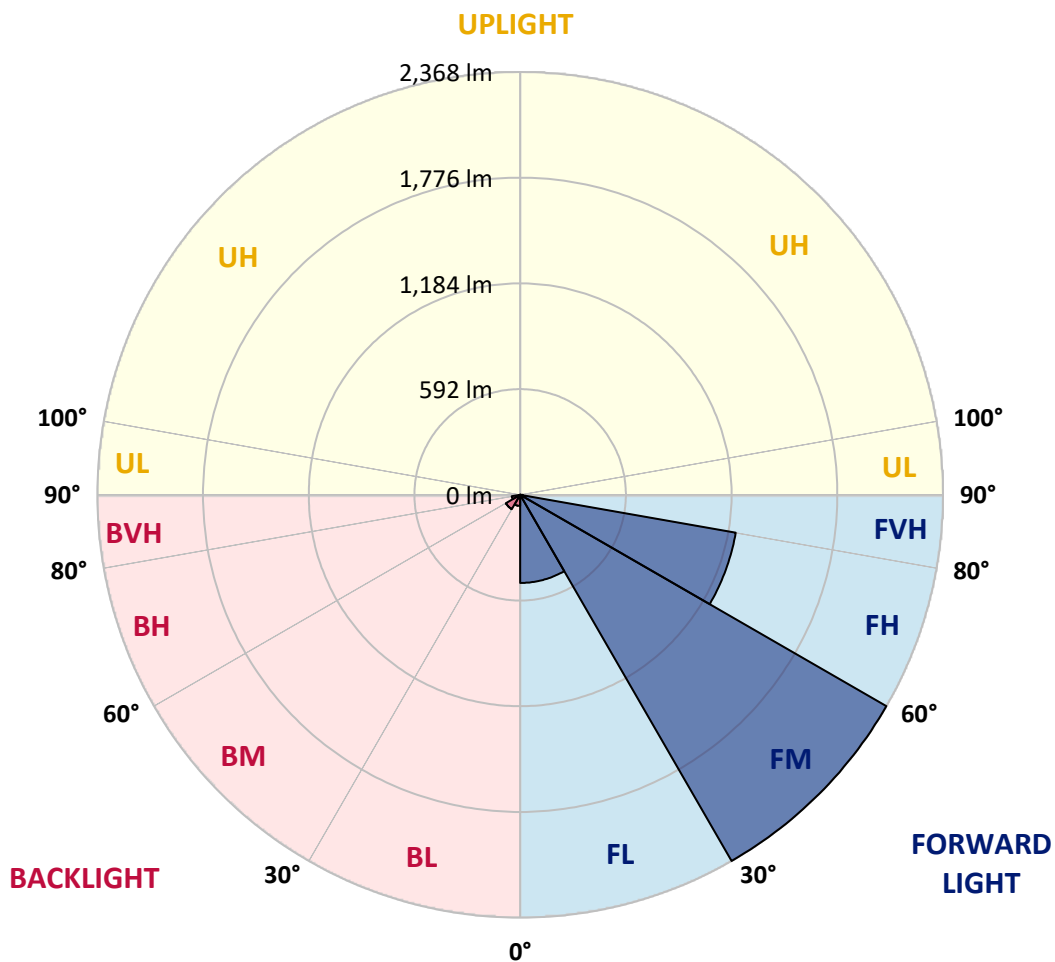
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	493.5	11.5			
FM	(30°-60°)	2367.8	55.0			
FH	(60°-80°)	1225.5	28.5			G1/1800
FVH	(80°-90°)	15.1	0.4			G1/100
BL	(0°-30°)	62.3	1.4	B0/110		
BM	(30°-60°)	92.7	2.2	B0/220		
BH	(60°-80°)	47.8	1.1	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3
2.5°	787.7	783.4	779.1	762.6	747.6	733.9	708.1	674.4	644.3	637.9	602.8
5°	925.3	920.3	913.8	897.3	878.0	855.1	817.1	765.5	712.4	701.0	635.7
7.5°	1018.5	1014.2	1004.9	997.0	977.6	955.4	913.1	852.9	779.8	765.5	673.7
10°	1082.3	1079.4	1078.0	1071.5	1057.2	1039.3	997.0	933.9	847.9	831.4	713.9
12.5°	1105.2	1105.2	1112.4	1123.1	1125.3	1119.5	1080.8	1017.8	919.6	902.4	761.2
15°	1074.4	1078.0	1093.7	1128.1	1164.0	1187.6	1163.3	1104.5	998.4	979.8	817.1
17.5°	1065.8	1069.4	1080.1	1110.2	1158.2	1221.3	1233.5	1188.3	1072.9	1057.2	874.4
20°	1090.1	1093.7	1103.0	1128.9	1165.4	1229.2	1280.1	1269.3	1151.8	1135.3	932.5
22.5°	1148.2	1150.4	1150.4	1170.4	1202.7	1250.0	1309.5	1346.0	1232.8	1214.9	989.8
25°	1272.9	1268.6	1251.4	1241.4	1262.2	1300.9	1346.7	1413.4	1323.1	1298.7	1051.4
27.5°	1436.3	1450.7	1409.1	1361.1	1345.3	1367.5	1399.1	1472.9	1410.5	1384.7	1107.3
30°	1657.8	1652.1	1597.6	1528.8	1460.7	1452.8	1463.6	1523.8	1498.0	1473.6	1169.7
32.5°	1839.8	1850.6	1793.3	1709.4	1607.6	1559.6	1548.1	1584.7	1591.1	1575.4	1243.5
35°	2026.9	2038.4	1982.5	1889.3	1768.2	1687.9	1654.9	1659.9	1706.5	1686.5	1320.9
37.5°	2194.6	2204.7	2149.5	2054.2	1933.0	1834.8	1787.5	1748.8	1818.3	1800.4	1402.6
40°	2322.2	2323.6	2286.4	2201.1	2086.4	1984.6	1930.9	1854.9	1936.6	1924.4	1487.9
42.5°	2412.5	2415.4	2388.1	2315.0	2209.0	2114.4	2070.6	1980.3	2072.8	2062.0	1586.8
45°	2454.8	2459.8	2457.0	2389.6	2301.4	2219.7	2205.4	2113.6	2221.9	2211.8	1700.8
47.5°	2414.7	2414.7	2451.2	2441.9	2360.9	2306.4	2322.9	2252.7	2383.8	2374.5	1816.9
50°	2247.7	2249.8	2324.4	2431.2	2383.8	2371.7	2423.3	2388.9	2530.8	2536.5	1956.0
52.5°	1809.0	1805.4	2057.0	2262.0	2368.1	2401.0	2515.7	2527.9	2707.1	2724.3	2094.3
55°	1351.8	1349.6	1590.4	1962.4	2257.7	2386.0	2567.3	2651.9	2857.6	2868.4	2197.5
57.5°	1070.1	1064.3	1196.9	1581.8	2008.3	2318.6	2569.5	2675.6	2941.5	2960.1	2297.8
60°	822.8	817.8	916.7	1176.9	1654.9	2139.4	2507.8	2677.0	3022.5	3055.4	2432.6
62.5°	588.4	594.2	670.1	844.3	1272.9	1886.4	2427.6	2697.1	3166.5	3203.8	2624.0
65°	397.1	394.2	457.3	574.8	905.2	1546.0	2304.3	2739.3	3426.0	3491.2	2853.3
67.5°	275.9	278.1	306.8	374.1	574.8	1186.9	2099.3	2763.0	3694.0	3744.9	3013.9
70°	199.3	202.1	217.9	251.6	351.2	804.9	1774.6	2654.8	3766.4	3810.9	2902.0
72.5°	131.2	136.9	160.5	178.5	224.3	503.9	1307.3	2287.1	3454.6	3487.6	2434.7
75°	71.0	72.4	103.2	133.3	159.8	313.9	779.8	1542.4	2584.5	2573.8	1605.5
77.5°	55.2	57.3	63.8	95.3	107.5	172.7	308.2	696.7	1224.2	1191.2	547.6
80°	33.7	35.1	44.4	56.6	75.3	100.3	90.3	189.2	248.7	232.9	80.3
82.5°	20.1	21.5	26.5	47.3	59.5	47.3	31.5	45.9	46.6	45.9	20.1
85°	3.6	3.6	18.6	33.0	31.5	13.6	18.6	15.1	13.6	14.3	4.3
87.5°	0.0	0.0	7.2	10.0	14.3	5.0	7.2	3.6	3.6	3.6	2.2
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°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3
2.5°	581.3	556.9	506.7	463.0	419.3	387.0	362.7	337.6	329.0	318.2	312.5
5°	591.3	543.3	443.7	364.1	296.7	245.1	212.2	192.1	179.2	169.9	167.7
7.5°	606.4	532.5	392.8	285.3	211.4	159.8	132.6	119.0	111.8	107.5	106.1
10°	624.3	523.2	342.6	222.2	149.1	112.5	97.5	91.7	88.9	87.4	86.7
12.5°	649.4	519.6	300.3	171.3	112.5	92.5	84.6	81.0	78.8	76.7	76.0
15°	682.3	521.1	261.6	132.6	93.2	82.4	76.0	72.4	69.5	67.4	67.4
17.5°	716.7	523.2	223.6	107.5	84.6	75.3	68.1	63.1	60.9	58.8	58.1
20°	749.0	522.5	187.1	91.7	76.7	67.4	60.2	55.2	51.6	49.5	49.5
22.5°	779.8	518.2	152.7	82.4	70.2	59.5	51.6	46.6	43.7	41.6	41.6
25°	812.8	509.6	124.7	75.3	62.4	52.3	44.4	39.4	37.3	35.1	35.1
27.5°	838.6	495.3	101.8	68.8	55.2	45.2	38.0	33.7	31.5	30.1	30.1
30°	866.5	474.5	84.6	61.6	48.0	38.7	32.3	28.7	26.5	25.8	25.8
32.5°	897.3	451.5	72.4	54.5	40.9	33.0	27.2	25.1	22.9	22.2	22.2
35°	933.2	431.5	65.2	47.3	35.8	28.0	23.7	21.5	20.1	20.1	20.1
37.5°	974.0	410.7	58.8	41.6	30.8	23.7	20.1	19.4	18.6	17.9	17.9
40°	1018.5	388.5	53.0	36.6	26.5	20.1	17.2	17.2	16.5	16.5	16.5
42.5°	1068.6	369.1	48.0	32.3	22.9	17.2	15.1	15.1	14.3	14.3	14.3
45°	1123.1	351.2	43.7	28.7	20.1	15.1	13.6	12.9	12.2	12.2	12.2
47.5°	1187.6	341.2	40.1	25.1	17.2	12.9	11.5	10.8	10.0	9.3	9.3
50°	1270.0	345.5	36.6	20.8	15.1	10.8	9.3	8.6	7.9	7.2	7.2
52.5°	1335.3	343.3	31.5	17.9	12.2	8.6	7.2	6.5	5.7	5.0	5.0
55°	1382.6	334.7	27.2	15.1	9.3	7.2	5.7	4.3	3.6	3.6	3.6
57.5°	1429.2	326.1	22.9	12.2	7.2	5.0	3.6	2.9	2.9	2.9	2.9
60°	1501.6	313.9	20.1	10.0	5.7	3.6	2.2	2.2	1.4	1.4	1.4
62.5°	1589.7	298.9	16.5	8.6	4.3	2.9	1.4	1.4	0.0	0.0	0.0
65°	1686.5	272.4	13.6	6.5	3.6	2.2	1.4	0.0	0.0	0.0	0.0
67.5°	1664.2	218.6	11.5	4.3	2.9	1.4	0.7	0.0	0.0	0.0	0.0
70°	1472.2	147.6	9.3	3.6	2.2	1.4	0.7	0.0	0.0	0.0	0.0
72.5°	1153.2	87.4	6.5	2.9	1.4	0.7	0.0	0.0	0.0	0.0	0.0
75°	738.2	43.7	4.3	2.2	1.4	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	247.3	21.5	2.9	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.1	7.2	1.4	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.9	2.9	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.9	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.7	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)