

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: P214642

Luminaire Tested: **ARCH-AF16-60-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214642  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF16-60-D-U-T2R-7030-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5027 lumens  
Efficiency: N/A  
Efficacy: 79.8 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): 63  
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

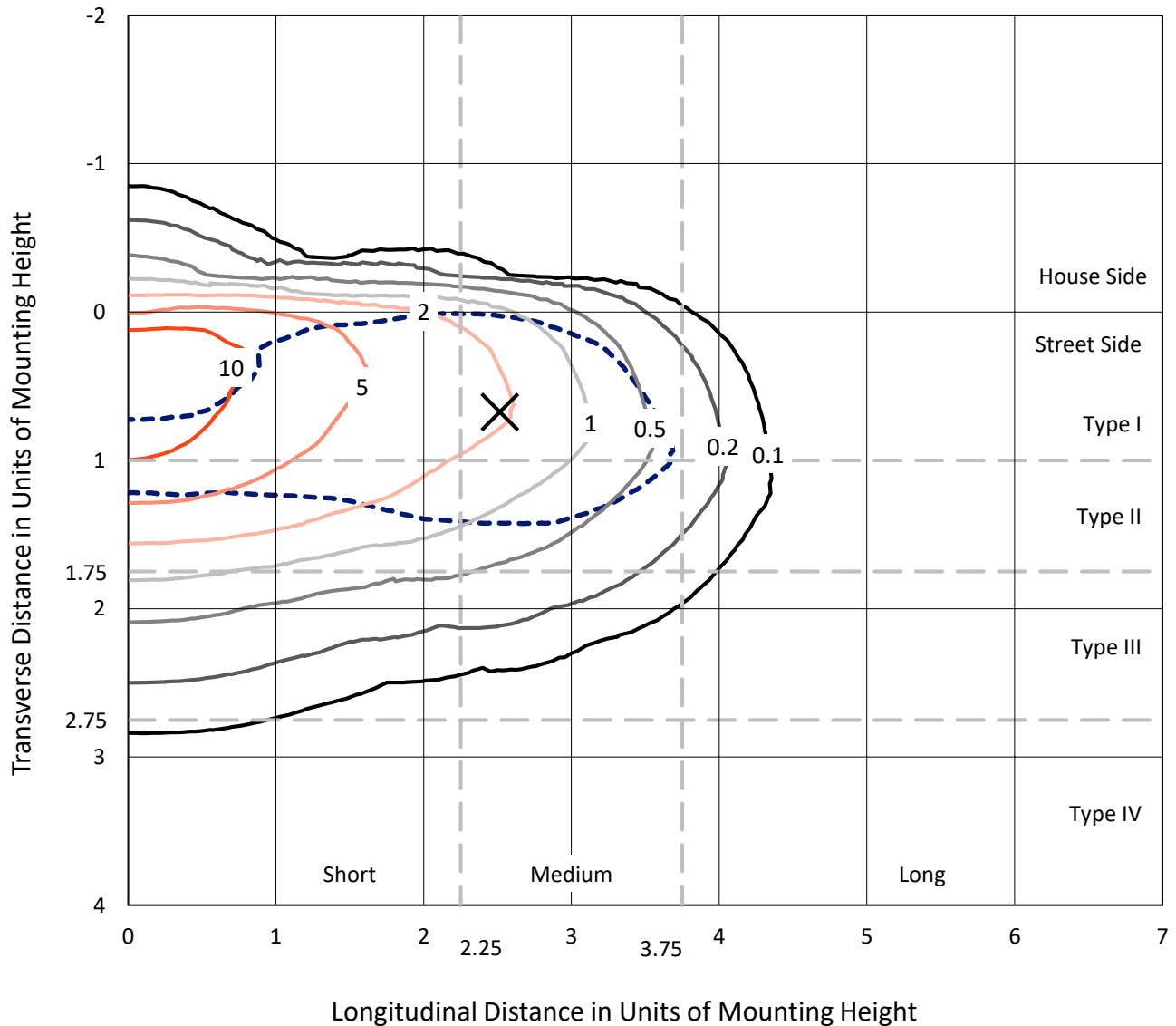


REPORT NUMBER: P214642

CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

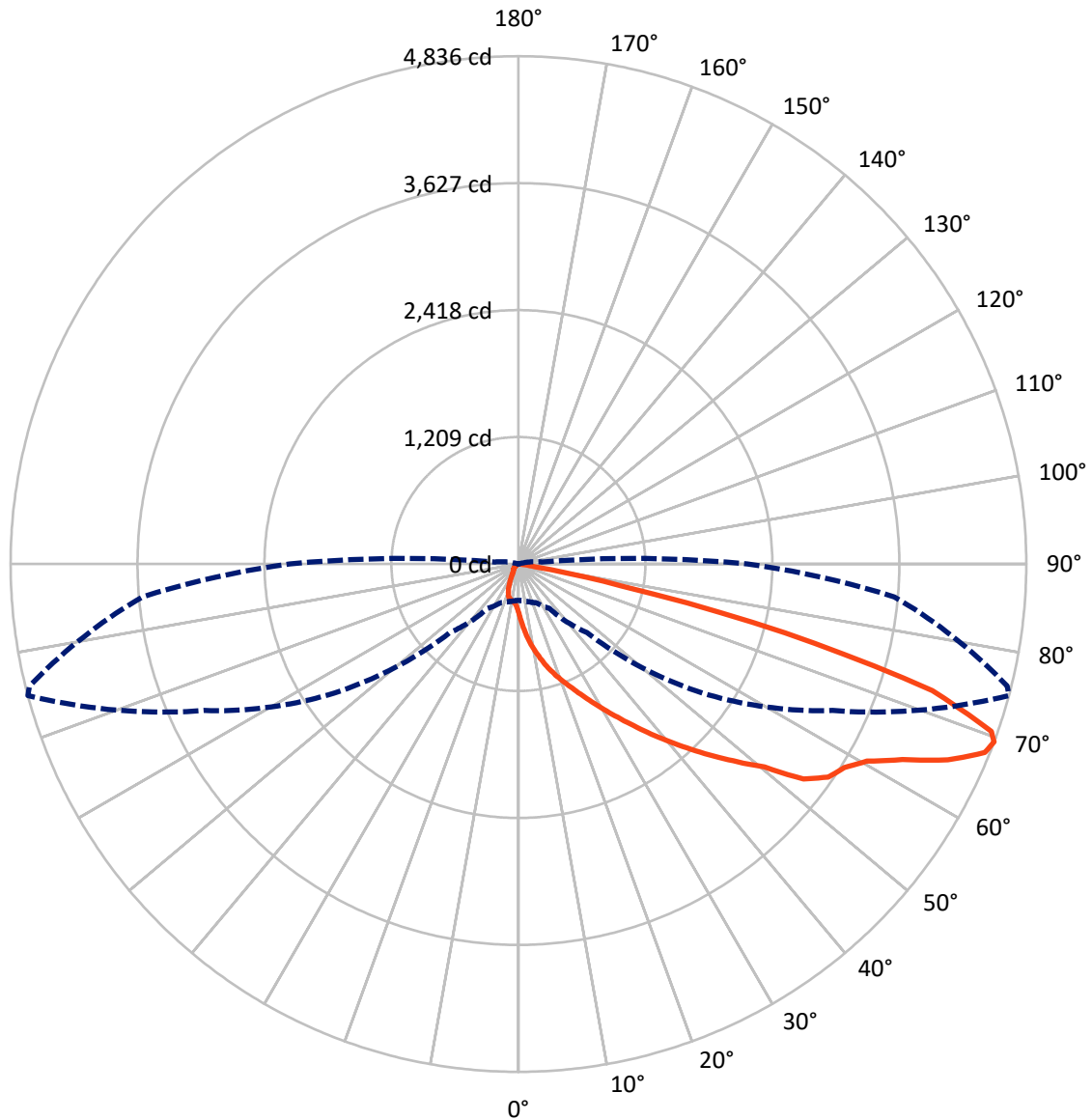


Based on 10 foot mounting height. Maximum calculated value = 12.8 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P214642

CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P214642

CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

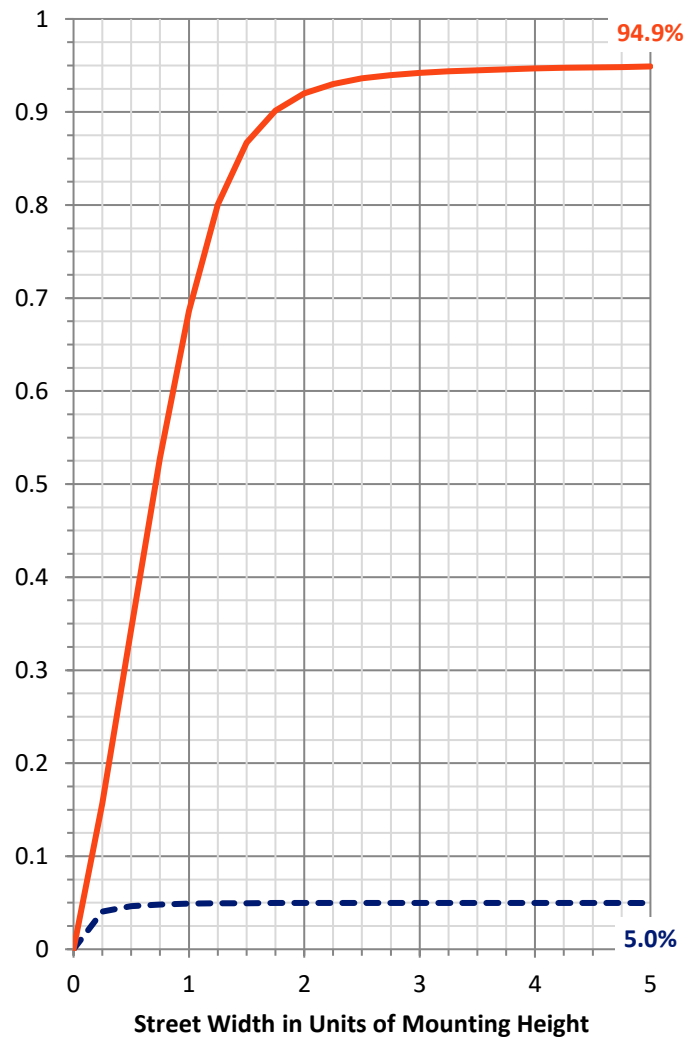
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	250.8	0.0	250.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4776.2	0.0	4776.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	5027.0	0.0	5027.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	1.1
10°-20°	195.0	3.9
20°-30°	372.3	7.4
30°-40°	667.8	13.3
40°-50°	1023.1	20.4
50°-60°	1189.1	23.7
60°-70°	1052.9	20.9
70°-80°	454.2	9.0
80°-90°	18.2	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°	5027.0	100.0
0°-180°	5027.0	100.0

**Coefficient of Utilization**



--- HS    — SS

REPORT NUMBER: P214642

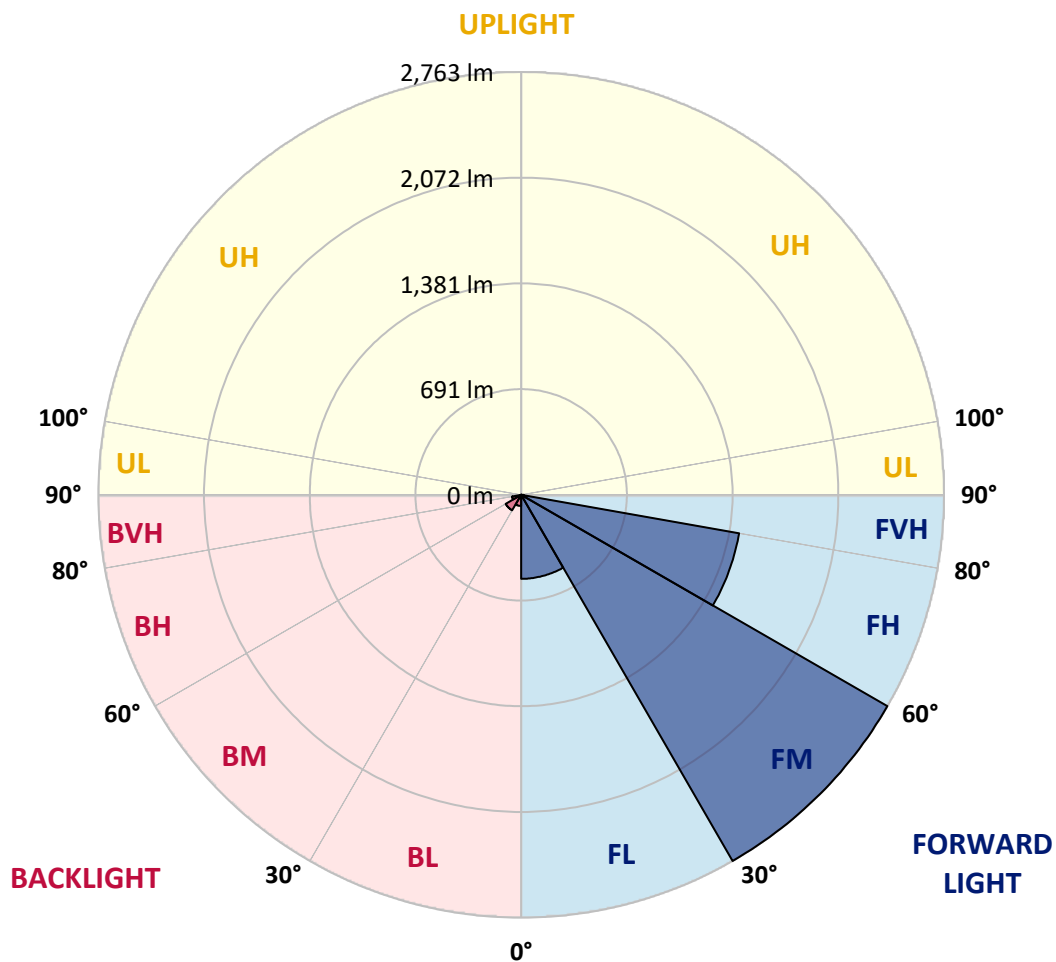
CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	549.0	10.9			
FM	(30°-60°)	2763.0	55.0			
FH	(60°-80°)	1446.3	28.8			G1/1800
FVH	(80°-90°)	17.9	0.4			G1/100
BL	(0°-30°)	72.8	1.4	B0/110		
BM	(30°-60°)	116.9	2.3	B0/220		
BH	(60°-80°)	60.8	1.2	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





REPORT NUMBER: P214642

CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7
2.5°	770.6	762.9	755.4	746.7	727.1	693.5	651.1	605.7	549.1	539.4	493.9
5°	935.5	932.3	924.7	912.8	891.0	854.1	806.4	739.1	644.6	628.4	531.8
7.5°	1051.6	1049.4	1043.0	1028.9	1009.3	972.4	922.4	849.8	740.1	721.7	579.5
10°	1155.9	1154.8	1149.3	1136.3	1116.7	1076.6	1023.4	947.5	831.4	810.7	634.9
12.5°	1250.3	1251.3	1249.2	1242.8	1228.5	1190.6	1129.7	1047.4	919.2	896.5	701.1
15°	1305.6	1308.8	1317.5	1330.6	1334.9	1304.5	1241.6	1150.4	1009.3	989.8	777.1
17.5°	1287.2	1290.5	1317.5	1362.0	1404.4	1408.7	1352.3	1248.1	1098.3	1078.8	852.0
20°	1242.8	1246.9	1275.3	1336.0	1418.5	1476.0	1453.2	1354.5	1183.0	1159.1	923.6
22.5°	1292.5	1292.5	1301.3	1338.2	1413.0	1503.1	1533.6	1460.8	1269.8	1240.5	995.3
25°	1464.1	1460.8	1442.3	1427.2	1451.1	1531.4	1594.3	1569.3	1371.9	1338.2	1071.2
27.5°	1681.2	1696.4	1661.7	1606.2	1551.9	1586.7	1648.6	1676.8	1484.8	1450.0	1149.3
30°	1924.3	1930.7	1889.5	1815.7	1720.2	1686.5	1712.6	1769.0	1607.3	1569.3	1230.7
32.5°	2143.4	2137.9	2103.3	2026.2	1908.0	1835.2	1795.1	1842.8	1740.8	1697.5	1314.3
35°	2337.7	2342.1	2299.7	2210.8	2094.6	2017.6	1922.1	1926.4	1890.6	1840.7	1410.9
37.5°	2512.4	2504.9	2464.7	2375.8	2270.4	2186.9	2086.0	2013.2	2054.5	2002.4	1519.4
40°	2654.7	2647.1	2604.7	2517.9	2419.1	2350.7	2271.5	2129.4	2227.0	2167.3	1635.5
42.5°	2767.5	2758.8	2723.0	2639.4	2543.9	2483.1	2445.2	2272.6	2411.6	2351.8	1765.7
45°	2822.8	2815.3	2793.5	2730.6	2647.1	2593.9	2612.3	2437.6	2609.0	2559.2	1909.1
47.5°	2757.7	2754.4	2779.4	2768.6	2720.9	2692.5	2756.6	2617.8	2816.3	2767.5	2074.0
50°	2560.2	2565.6	2638.4	2728.4	2751.2	2784.9	2874.9	2807.6	3038.8	2986.7	2264.0
52.5°	2072.8	2109.8	2329.1	2546.1	2714.3	2841.3	3013.9	3079.0	3401.3	3350.3	2560.2
55°	1547.6	1562.9	1801.5	2172.7	2565.6	2836.9	3116.9	3238.6	3580.4	3528.3	2638.4
57.5°	1227.4	1232.9	1351.2	1730.0	2259.6	2739.2	3171.2	3296.1	3658.5	3615.2	2754.4
60°	963.7	970.2	1056.0	1316.5	1828.7	2475.6	3093.1	3345.9	3811.5	3776.9	2957.4
62.5°	749.9	756.4	808.5	961.6	1371.9	2069.7	2935.7	3426.3	4102.4	4086.2	3289.6
65°	580.6	582.8	618.6	690.3	969.1	1630.1	2743.6	3501.2	4495.3	4481.2	3558.7
67.5°	428.8	431.9	456.9	501.4	654.5	1171.0	2429.0	3443.7	4791.6	4750.4	3656.4
69°	346.3	349.4	371.2	407.0	516.6	922.4	2141.3	3301.5	4836.1	4797.0	3594.5
70°	296.3	298.5	320.1	350.5	440.7	783.6	1913.3	3178.8	4777.5	4739.4	3453.3
72.5°	189.9	200.8	222.5	242.0	291.9	518.8	1291.6	2636.2	4122.0	4056.8	2704.6
75°	105.3	108.5	147.6	171.4	194.3	337.5	718.5	1644.3	2622.1	2576.5	1446.7
77.5°	86.9	89.0	104.3	130.2	130.2	188.8	271.3	647.9	997.4	899.7	391.8
80°	60.7	63.0	79.2	85.8	93.3	106.3	88.0	142.1	154.2	136.8	58.6
82.5°	42.3	44.5	54.3	70.6	74.9	49.9	32.6	42.3	44.5	44.5	22.8
85°	7.6	10.8	40.2	58.6	44.5	15.2	18.5	15.2	14.1	15.2	5.5
87.5°	0.0	0.0	24.9	28.2	23.9	6.5	7.6	5.5	3.3	4.4	2.1
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: P214642

CATALOG NUMBER: ARCH-AF16-60-D-U-T2R-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7	467.7
2.5°	471.0	448.2	409.1	381.0	357.1	338.6	331.0	319.0	310.4	314.7	309.3
5°	484.0	443.9	381.0	340.8	312.6	288.7	269.1	253.9	242.0	239.9	237.6
7.5°	504.7	447.1	364.7	314.7	272.4	235.6	205.1	182.4	165.0	165.0	158.4
10°	532.8	455.8	354.9	288.7	225.7	175.8	145.5	123.7	115.0	113.9	111.8
12.5°	572.0	472.1	347.3	255.0	175.8	128.1	109.6	102.0	98.8	97.7	96.5
15°	625.2	495.9	338.6	213.8	133.6	105.3	97.7	91.1	88.0	86.9	85.8
17.5°	676.1	517.7	320.1	171.4	108.5	95.5	86.9	81.4	77.0	75.9	75.9
20°	723.9	536.1	288.7	133.6	97.7	85.8	77.0	70.6	66.2	65.1	65.1
22.5°	773.8	551.3	249.6	108.5	89.0	75.9	67.3	60.7	56.5	55.4	54.3
25°	827.0	562.1	205.1	96.5	80.3	67.3	57.5	52.1	48.8	47.7	46.7
27.5°	884.6	566.5	162.8	88.0	70.6	58.6	49.9	44.5	42.3	41.2	41.2
30°	936.6	562.1	125.8	78.1	61.8	51.1	43.3	39.2	36.9	35.8	35.8
32.5°	990.9	551.3	100.9	69.5	54.3	43.3	36.9	33.7	32.6	31.4	31.4
35°	1048.4	537.2	86.9	61.8	46.7	38.0	32.6	30.4	29.3	28.2	28.2
37.5°	1115.6	519.8	79.2	55.4	41.2	33.7	28.2	27.1	26.0	26.0	26.0
40°	1191.7	498.1	73.8	49.9	36.9	29.3	24.9	23.9	22.8	22.8	22.8
42.5°	1272.0	473.2	68.4	44.5	32.6	24.9	21.8	21.8	20.6	20.6	19.5
45°	1362.0	448.2	63.0	39.2	28.2	21.8	18.5	17.4	17.4	16.3	16.3
47.5°	1468.5	425.4	57.5	34.8	24.9	18.5	16.3	15.2	14.1	13.0	13.0
50°	1618.1	423.3	51.1	30.4	22.8	15.2	13.0	11.9	10.8	9.8	9.8
52.5°	1766.8	403.7	43.3	24.9	18.5	13.0	9.8	8.6	7.6	7.6	6.5
55°	1800.5	371.2	38.0	21.8	14.1	9.8	7.6	5.5	5.5	4.4	4.4
57.5°	1874.4	355.9	32.6	17.4	10.8	7.6	4.4	3.3	3.3	3.3	3.3
60°	2019.7	351.6	28.2	15.2	7.6	5.5	3.3	2.1	2.1	1.1	1.1
62.5°	2220.4	347.3	23.9	13.0	5.5	3.3	2.1	1.1	0.0	0.0	0.0
65°	2331.3	318.0	19.5	9.8	4.4	3.3	1.1	0.0	0.0	0.0	0.0
67.5°	2301.9	262.7	17.4	6.5	3.3	2.1	1.1	0.0	0.0	0.0	0.0
69°	2179.2	221.4	14.1	5.5	3.3	2.1	1.1	0.0	0.0	0.0	0.0
70°	2031.6	190.9	13.0	4.4	2.1	1.1	1.1	0.0	0.0	0.0	0.0
72.5°	1442.3	99.9	8.6	3.3	2.1	1.1	0.0	0.0	0.0	0.0	0.0
75°	674.0	44.5	5.5	2.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	148.7	20.6	3.3	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	28.2	7.6	2.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.8	3.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	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)