

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: P348866

Luminaire Tested: **ARCH-N-PA1-40-727-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3286 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 41  
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

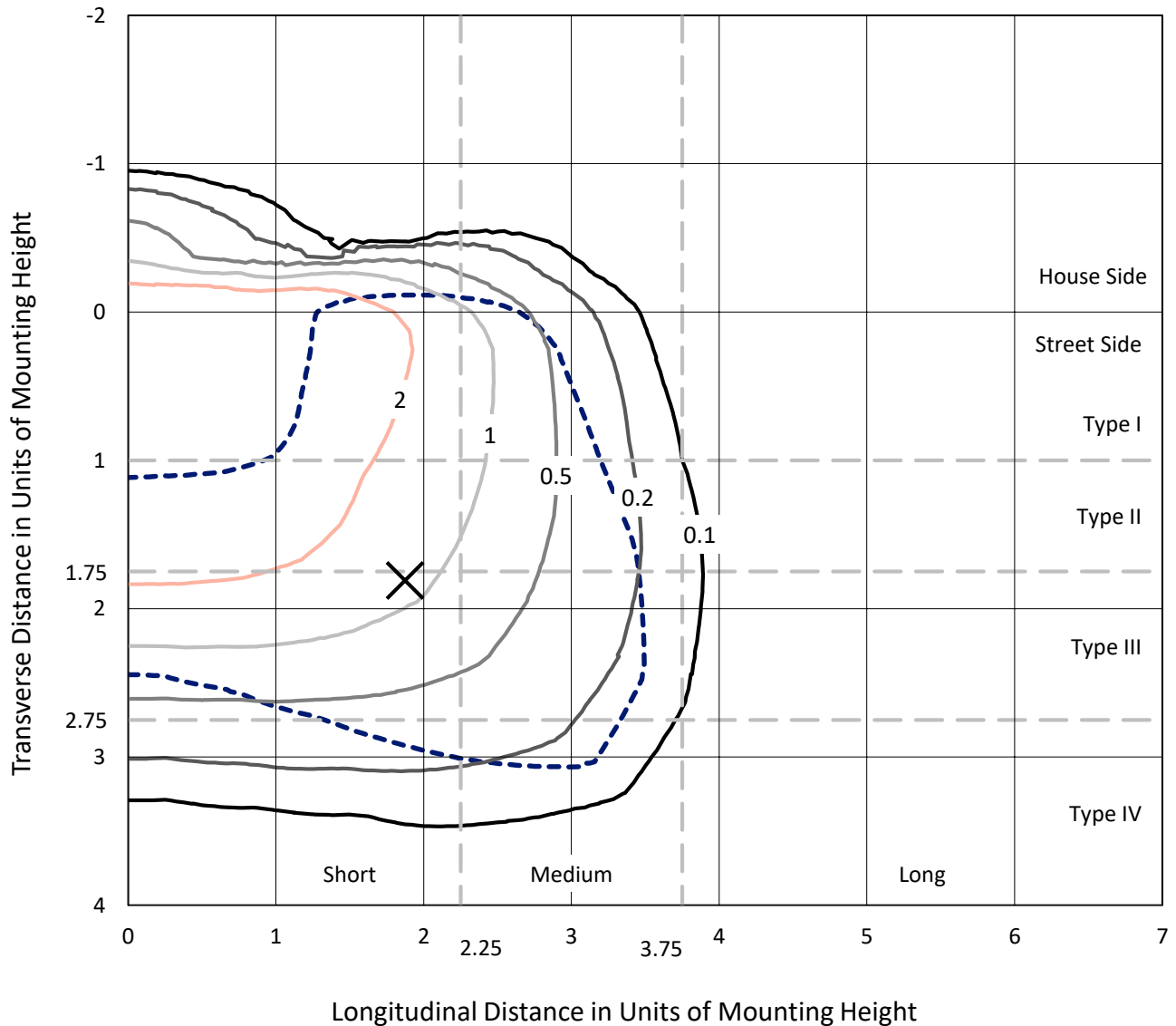


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### Iso-Footcandle Lines of Horizontal Illumination

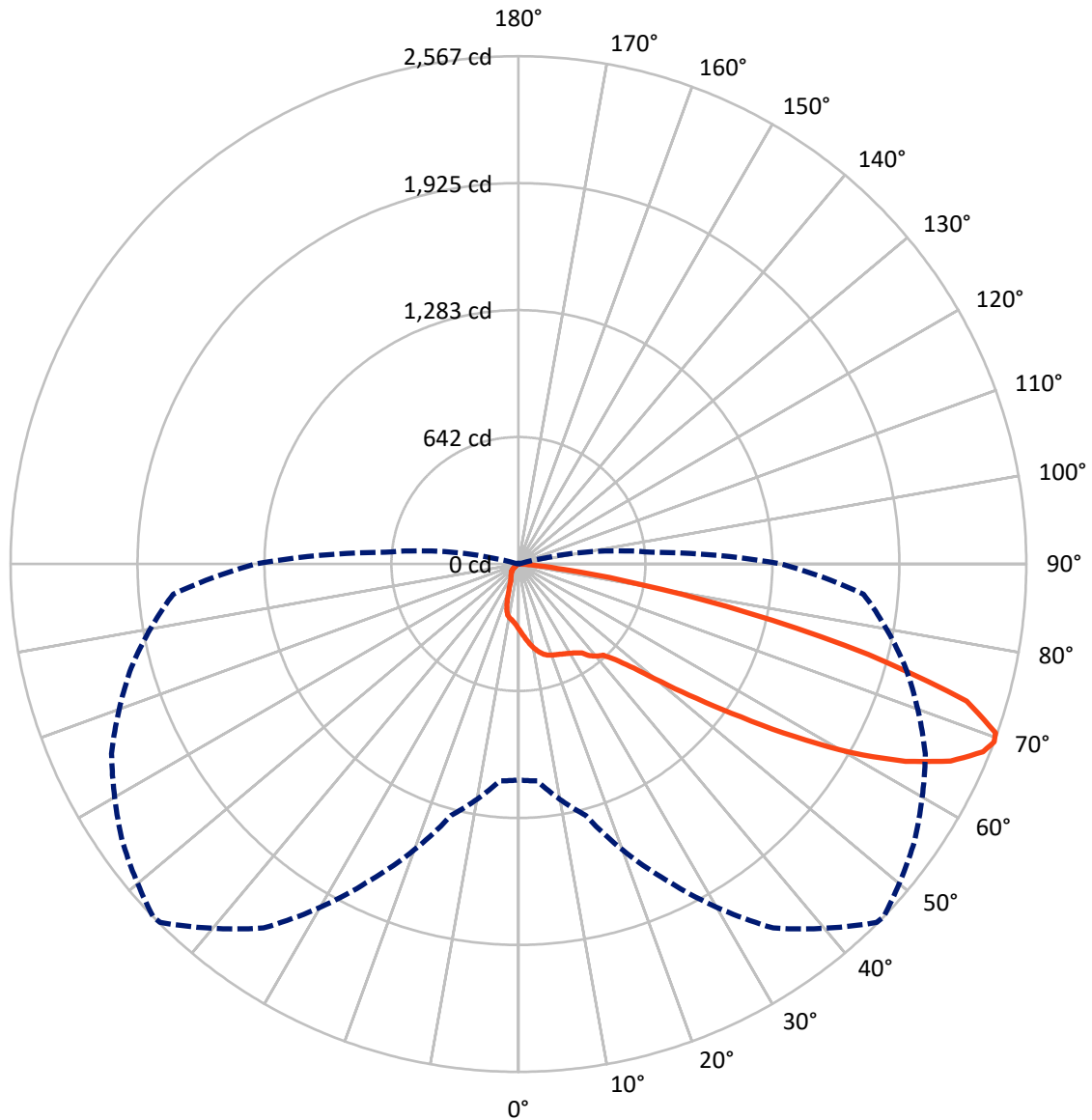
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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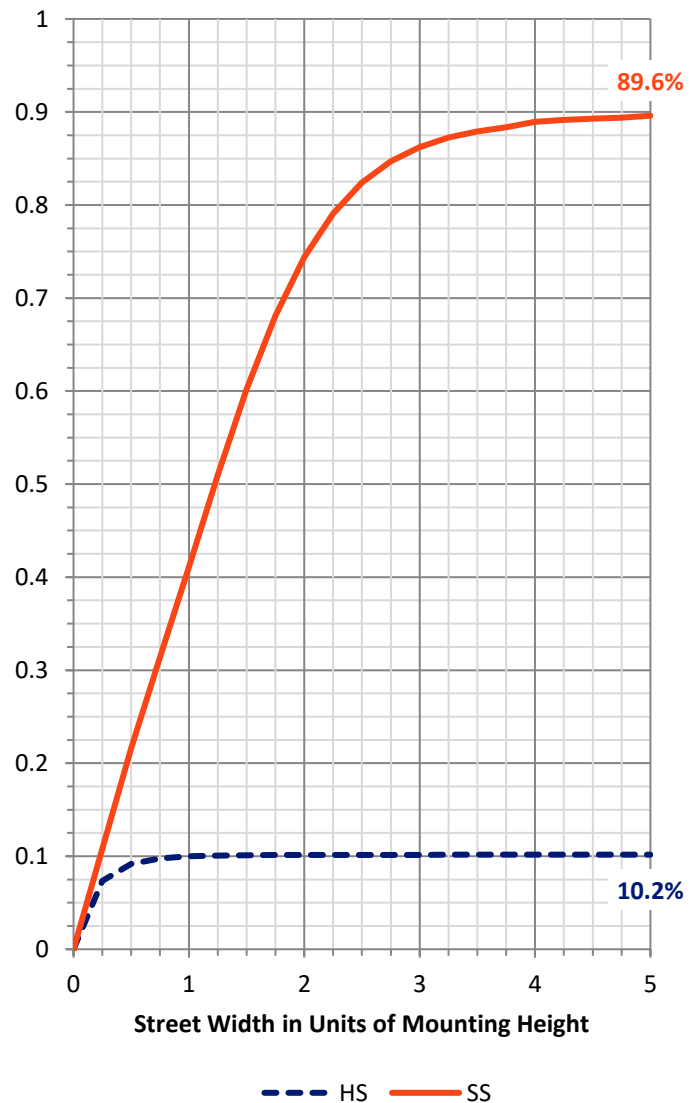
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	337.2	0.0	337.2
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	2948.8	0.0	2948.8
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	3286.0	0.0	3286.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.8	1.0
10°-20°	99.4	3.0
20°-30°	156.4	4.8
30°-40°	224.2	6.8
40°-50°	387.5	11.8
50°-60°	765.6	23.3
60°-70°	1070.0	32.6
70°-80°	516.9	15.7
80°-90°	33.2	1.0
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°	3286.0	100.0
0°-180°	3286.0	100.0



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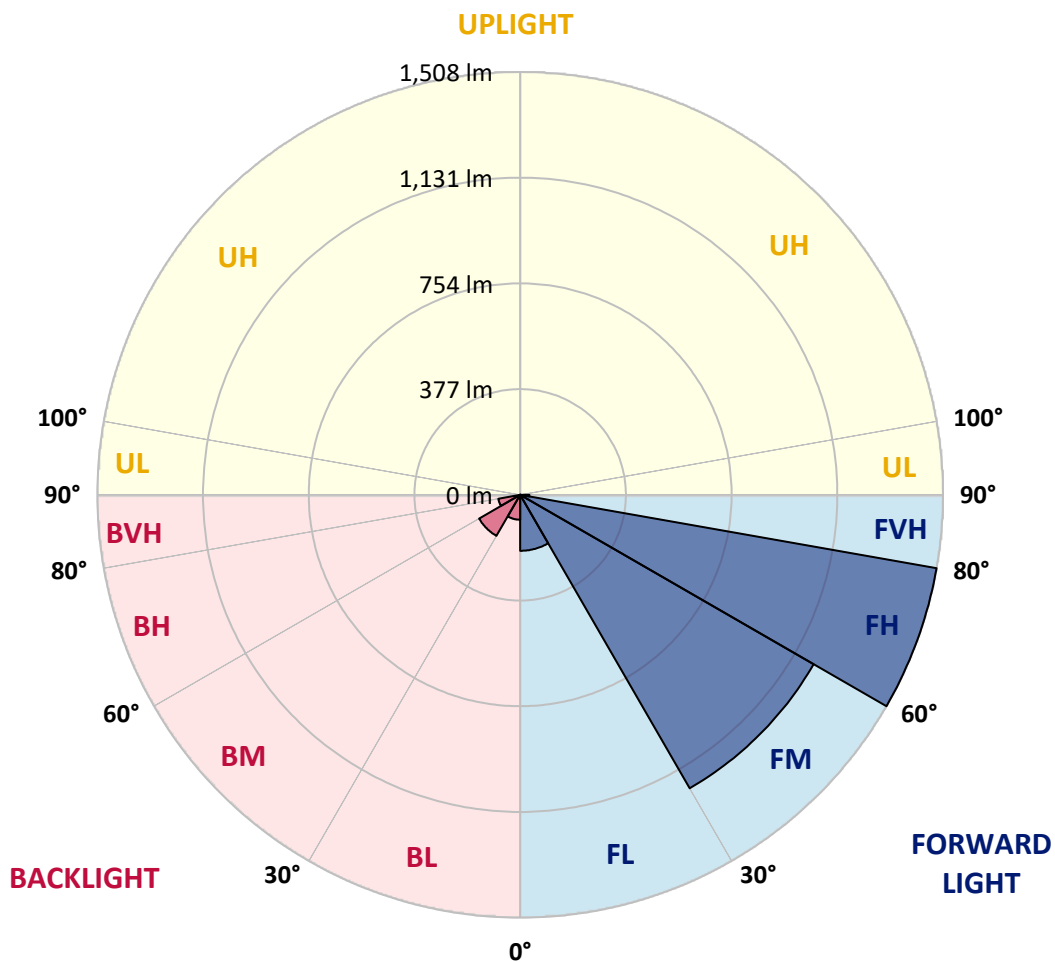
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	199.7	6.1			
FM	(30°-60°)	1208.3	36.8			
FH	(60°-80°)	1507.8	45.9			G1/1800
FVH	(80°-90°)	32.9	1.0			G1/100
BL	(0°-30°)	88.9	2.7	B0/110		
BM	(30°-60°)	169.0	5.1	B0/220		
BH	(60°-80°)	79.1	2.4	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2
2.5°	365.8	365.3	363.1	362.2	357.0	353.9	352.7	348.8	343.3	337.7	331.6
5°	407.4	407.2	403.2	399.3	389.5	380.2	378.5	369.6	357.1	345.4	333.7
7.5°	449.9	447.9	443.9	436.5	422.1	407.4	406.0	393.3	375.6	358.7	341.9
10°	485.9	484.7	479.5	468.2	451.4	434.6	432.9	417.4	397.3	376.5	355.1
12.5°	514.0	513.0	506.1	492.1	474.2	456.8	454.5	440.6	419.2	396.0	370.7
15°	531.1	530.6	522.1	507.2	489.6	474.5	472.5	460.4	440.5	416.1	387.6
17.5°	535.1	535.2	526.5	511.4	496.9	486.1	484.5	475.3	458.7	434.5	404.6
20°	526.1	528.0	520.1	507.0	498.1	492.4	491.2	485.6	471.6	448.8	418.1
22.5°	513.5	514.4	509.0	500.3	496.6	497.6	497.0	493.9	482.1	461.1	431.5
25°	505.8	505.8	502.6	495.2	497.6	504.3	504.4	503.8	494.4	476.2	447.9
27.5°	505.5	504.6	500.9	495.3	502.1	512.3	512.9	517.1	511.2	494.6	468.2
30°	517.8	516.7	508.9	501.6	510.3	521.2	522.8	531.8	528.9	514.4	490.9
32.5°	546.6	542.8	525.4	513.5	520.0	533.1	535.1	549.6	554.2	538.9	512.7
35°	586.1	573.9	548.8	536.0	536.6	550.3	552.2	573.4	587.2	561.4	529.7
37.5°	640.5	634.5	593.6	559.4	562.2	583.0	588.4	611.5	607.6	573.8	548.9
40°	759.7	750.3	706.9	625.1	586.7	609.5	611.2	623.5	623.8	601.6	589.0
42.5°	922.1	918.2	872.5	744.2	634.9	627.2	630.3	651.1	674.4	660.5	659.9
45°	1101.9	1099.9	1051.4	902.2	732.4	685.3	689.1	717.0	761.6	764.6	784.2
47.5°	1246.6	1245.6	1217.8	1078.6	881.7	783.7	785.0	814.6	892.8	931.5	962.8
50°	1378.5	1382.9	1360.9	1269.5	1085.1	938.0	935.0	954.8	1080.5	1143.8	1182.6
52.5°	1561.8	1568.1	1506.3	1447.6	1298.5	1129.3	1127.0	1147.7	1306.0	1353.5	1360.4
55°	1723.7	1712.9	1664.1	1647.1	1558.7	1365.7	1365.0	1383.2	1524.2	1544.4	1557.2
57.5°	1795.2	1791.0	1814.6	1853.4	1831.3	1645.0	1643.6	1629.7	1719.4	1721.6	1760.9
60°	1840.4	1845.4	1917.7	2037.4	2092.7	1945.6	1936.6	1852.1	1905.8	1901.1	1943.1
62.5°	1806.5	1816.5	1946.5	2146.0	2288.4	2208.0	2195.3	2055.7	2065.1	2048.7	2087.8
65°	1626.5	1642.1	1855.1	2125.5	2385.4	2413.0	2400.2	2235.5	2191.6	2164.5	2142.8
67.5°	1320.7	1329.9	1552.4	1947.3	2341.7	2535.4	2532.7	2393.1	2287.2	2144.9	1976.4
69°	1091.4	1100.5	1314.7	1759.6	2245.4	2561.5	2566.6	2443.7	2269.0	2026.0	1751.1
70°	924.4	934.1	1133.6	1598.8	2133.7	2549.4	2558.5	2438.9	2216.9	1888.3	1553.5
72.5°	484.9	493.2	697.9	1101.4	1739.4	2340.9	2368.5	2232.8	1879.2	1371.4	918.6
75°	152.4	157.2	272.5	575.8	1191.0	1820.2	1826.5	1751.5	1334.4	754.3	382.6
77.5°	58.1	56.7	90.7	212.2	602.1	1146.1	1184.8	1094.5	700.2	266.7	88.3
80°	31.3	31.4	47.1	87.8	257.6	589.0	621.7	530.5	248.8	83.2	20.3
82.5°	13.6	14.2	26.5	46.5	118.3	217.2	233.6	194.4	95.1	55.9	7.5
85°	2.9	3.2	12.8	25.3	48.2	61.0	63.9	63.0	60.5	43.4	2.9
87.5°	0.0	0.0	5.7	9.1	12.2	13.9	12.2	15.9	33.4	29.3	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°	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2	329.2
2.5°	329.6	326.8	322.0	316.8	313.1	309.2	306.1	304.7	303.2	302.1	303.5
5°	328.9	323.5	314.3	305.4	298.9	293.7	289.3	287.6	286.0	284.7	284.6
7.5°	334.3	326.8	312.6	299.5	289.5	282.4	276.6	274.1	272.1	271.2	270.4
10°	344.7	334.9	316.0	298.9	286.0	273.9	261.3	251.6	245.3	242.4	241.3
12.5°	358.1	345.9	322.5	302.1	283.3	260.2	233.4	210.3	195.4	190.4	187.5
15°	373.8	358.7	330.9	306.3	273.8	231.6	186.1	155.9	142.1	139.3	136.2
17.5°	388.9	372.2	341.1	307.1	252.8	185.0	136.4	115.9	110.5	112.3	112.8
20°	402.1	385.6	351.1	300.3	214.8	138.8	105.5	100.5	102.5	106.0	106.6
22.5°	415.5	398.6	360.4	282.4	166.1	105.4	95.1	96.3	98.3	101.8	102.5
25°	431.9	414.3	369.0	249.6	124.6	89.7	90.3	92.1	94.1	97.4	97.7
27.5°	450.7	434.2	374.7	206.9	92.4	82.4	84.4	87.2	89.2	92.3	92.9
30°	475.6	460.4	376.5	162.7	77.5	76.0	76.9	80.3	83.2	86.0	86.4
32.5°	499.0	486.2	370.4	122.8	71.8	69.9	69.9	72.0	75.3	78.0	78.6
35°	520.6	512.3	350.7	89.8	67.5	64.4	62.9	62.9	65.0	67.2	67.8
37.5°	549.1	548.8	318.8	71.6	63.3	59.8	56.5	54.1	53.3	53.8	54.1
40°	597.9	598.4	277.2	64.2	59.8	55.0	50.1	45.6	41.4	40.1	39.9
42.5°	674.2	667.3	233.6	60.7	56.7	50.1	42.7	36.7	30.2	28.2	28.0
45°	795.3	754.2	187.3	57.5	53.5	44.5	35.3	27.1	21.9	20.3	20.3
47.5°	971.7	868.3	145.1	53.9	49.1	38.2	26.7	19.6	16.0	15.3	15.4
50°	1154.1	980.2	111.2	49.5	43.9	31.6	19.7	14.2	12.2	12.2	12.3
52.5°	1315.9	1062.1	86.7	44.7	37.4	24.8	14.9	11.1	10.2	10.0	10.2
55°	1467.4	1115.0	66.4	39.1	29.7	18.5	11.4	9.1	8.5	8.2	8.0
57.5°	1613.4	1141.2	49.8	31.6	21.6	13.4	9.1	7.7	7.1	6.6	6.5
60°	1710.6	1119.9	34.2	23.3	14.9	9.7	7.5	6.6	5.9	5.4	5.2
62.5°	1765.5	1061.8	22.0	16.8	10.6	7.2	6.0	5.5	4.5	4.0	4.0
65°	1743.3	966.0	15.4	12.0	7.7	5.4	4.5	4.5	3.2	2.6	2.5
67.5°	1544.8	816.1	11.7	8.9	5.5	4.0	3.4	3.9	2.0	1.2	1.2
69°	1329.2	676.4	10.0	7.4	4.6	3.2	2.9	3.5	1.4	0.9	0.8
70°	1155.2	583.5	9.1	6.5	3.9	2.8	2.6	3.4	1.4	0.8	0.6
72.5°	691.2	325.4	6.9	4.6	2.5	2.2	2.2	3.9	1.4	0.8	0.6
75°	279.3	114.6	5.1	3.2	1.8	1.8	2.6	4.9	1.2	0.6	0.5
77.5°	63.3	25.1	2.9	2.0	1.2	1.8	3.1	3.9	0.8	0.3	0.0
80°	15.4	6.2	1.8	1.2	0.8	1.4	2.3	2.2	0.2	0.0	0.0
82.5°	5.1	2.2	0.8	0.6	0.2	0.5	1.1	0.6	0.0	0.0	0.0
85°	2.2	1.2	0.3	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.4	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)