

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: P348865

Luminaire Tested: **ARCH-N-PA1-30-727-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348865  
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-PA1-30-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2601 lumens  
Efficiency: N/A  
Efficacy: 83.9 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): 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

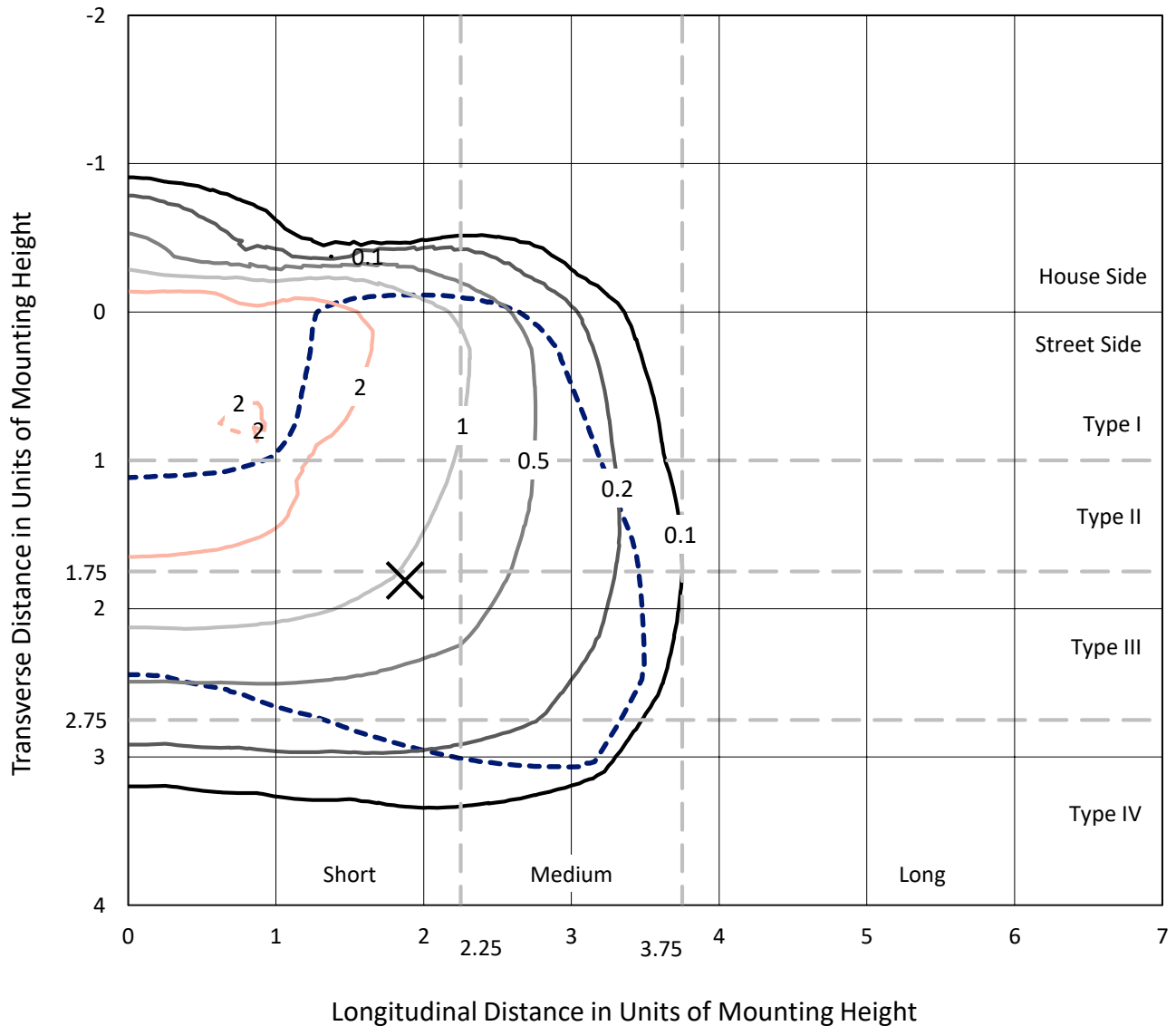


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

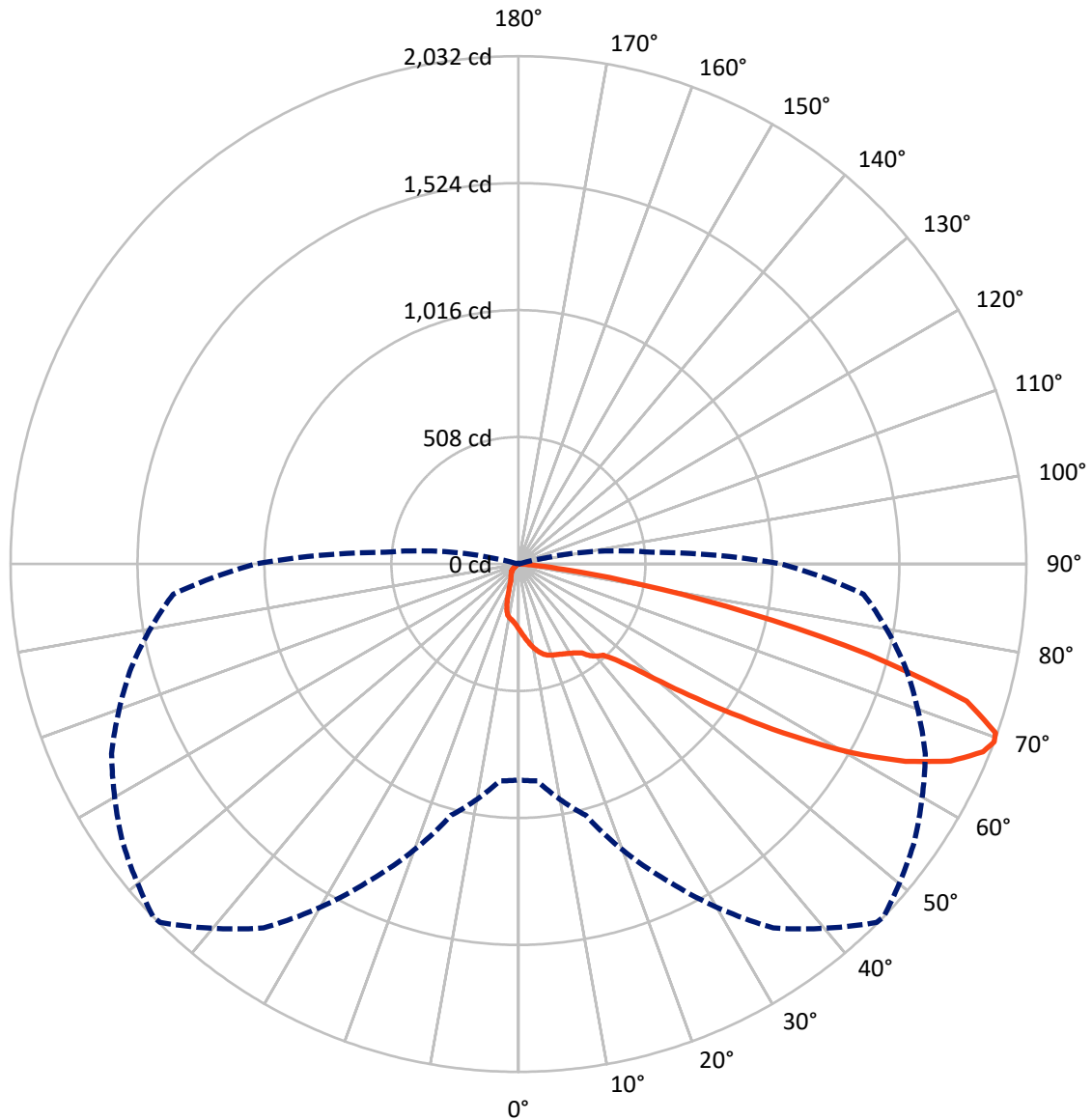


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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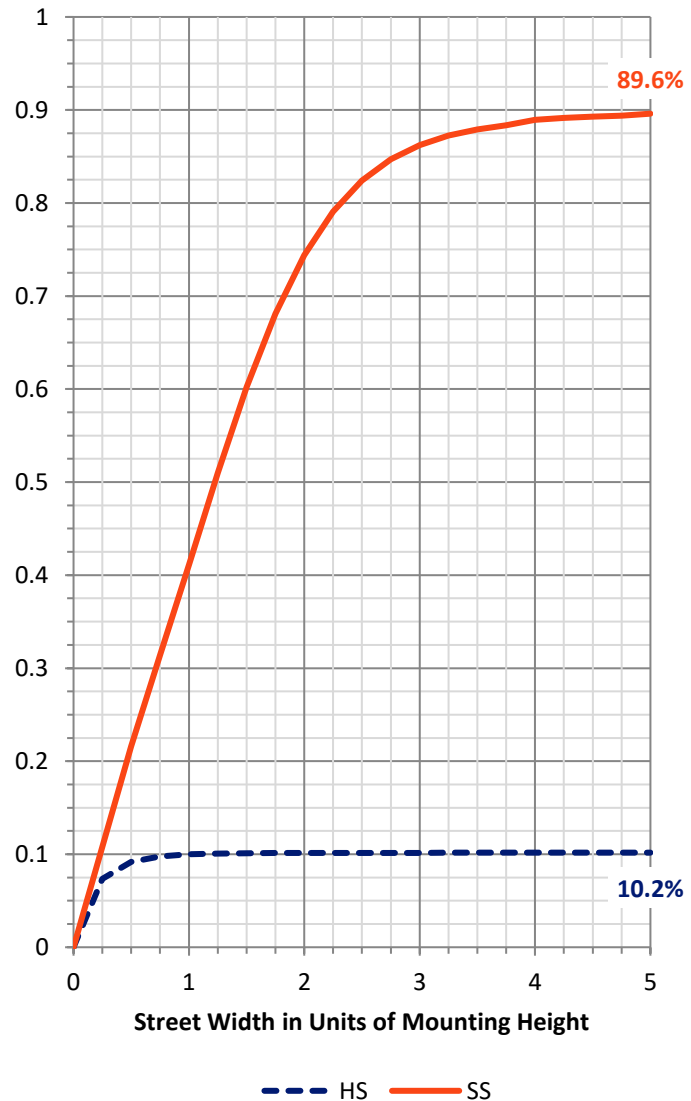
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	266.9	0.0	266.9
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	2334.1	0.0	2334.1
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2601.0	0.0	2601.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.9	1.0
10°-20°	78.7	3.0
20°-30°	123.8	4.8
30°-40°	177.5	6.8
40°-50°	306.7	11.8
50°-60°	606.0	23.3
60°-70°	846.9	32.6
70°-80°	409.2	15.7
80°-90°	26.3	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°	2601.0	100.0
0°-180°	2601.0	100.0



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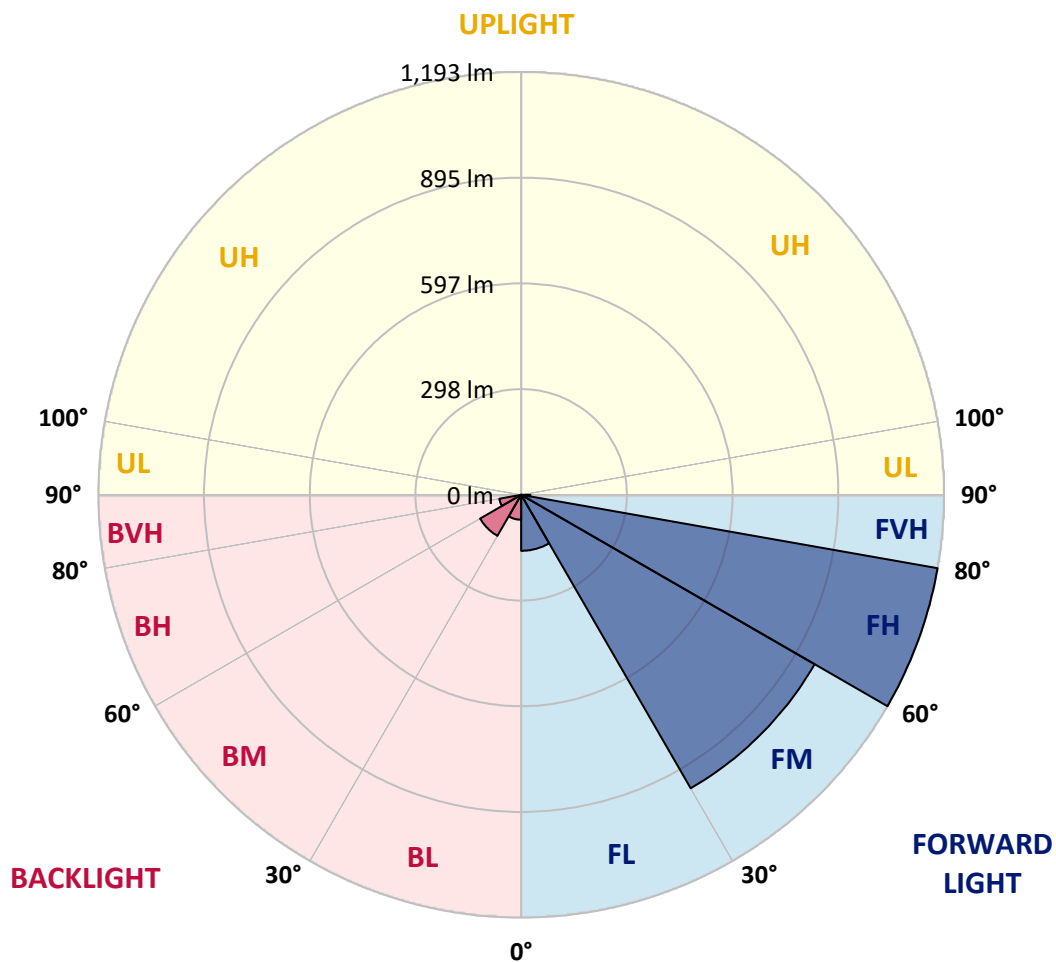
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	158.0	6.1			
FM	(30°-60°)	956.4	36.8			
FH	(60°-80°)	1193.5	45.9			G1/1800
FVH	(80°-90°)	26.1	1.0			G1/100
BL	(0°-30°)	70.4	2.7	B0/110		
BM	(30°-60°)	133.8	5.1	B0/220		
BH	(60°-80°)	62.6	2.4	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6
2.5°	289.5	289.1	287.4	286.7	282.6	280.1	279.1	276.1	271.7	267.3	262.4
5°	322.4	322.3	319.1	316.1	308.3	301.0	299.6	292.6	282.7	273.4	264.1
7.5°	356.1	354.5	351.3	345.5	334.1	322.4	321.3	311.3	297.3	283.9	270.6
10°	384.6	383.7	379.5	370.6	357.3	344.0	342.7	330.4	314.5	298.0	281.1
12.5°	406.8	406.1	400.6	389.5	375.4	361.6	359.8	348.8	331.8	313.4	293.4
15°	420.4	420.0	413.3	401.5	387.6	375.6	374.0	364.4	348.7	329.4	306.8
17.5°	423.5	423.7	416.7	404.8	393.3	384.8	383.5	376.2	363.0	343.9	320.2
20°	416.5	417.9	411.7	401.3	394.3	389.8	388.8	384.4	373.3	355.2	331.0
22.5°	406.5	407.2	402.9	396.0	393.0	393.9	393.4	391.0	381.6	365.0	341.6
25°	400.4	400.4	397.8	392.0	393.9	399.1	399.3	398.8	391.3	377.0	354.5
27.5°	400.1	399.4	396.5	392.1	397.4	405.5	406.0	409.3	404.6	391.5	370.6
30°	409.9	409.0	402.8	397.1	403.9	412.6	413.8	421.0	418.7	407.2	388.5
32.5°	432.7	429.6	415.9	406.5	411.6	422.0	423.5	435.0	438.7	426.6	405.9
35°	463.9	454.3	434.4	424.3	424.8	435.6	437.1	453.9	464.8	444.4	419.3
37.5°	507.0	502.2	469.9	442.8	445.0	461.5	465.7	484.0	481.0	454.1	434.5
40°	601.3	593.9	559.5	494.8	464.4	482.4	483.8	493.5	493.8	476.2	466.2
42.5°	729.9	726.8	690.6	589.0	502.6	496.5	498.9	515.4	533.8	522.8	522.3
45°	872.2	870.6	832.2	714.1	579.8	542.4	545.5	567.6	602.8	605.2	620.7
47.5°	986.7	986.0	963.9	853.8	697.9	620.4	621.3	644.8	706.7	737.3	762.1
50°	1091.1	1094.6	1077.2	1004.9	858.9	742.4	740.1	755.7	855.2	905.4	936.1
52.5°	1236.2	1241.2	1192.3	1145.9	1027.8	893.9	892.1	908.4	1033.8	1071.3	1076.8
55°	1364.4	1355.9	1317.2	1303.8	1233.8	1081.0	1080.5	1094.9	1206.5	1222.4	1232.6
57.5°	1421.0	1417.7	1436.3	1467.1	1449.5	1302.1	1301.0	1290.0	1361.0	1362.7	1393.8
60°	1456.7	1460.7	1517.9	1612.7	1656.5	1540.0	1532.9	1466.0	1508.5	1504.8	1538.1
62.5°	1429.9	1437.8	1540.7	1698.7	1811.3	1747.7	1737.7	1627.2	1634.6	1621.6	1652.6
65°	1287.4	1299.8	1468.4	1682.4	1888.2	1910.0	1899.9	1769.5	1734.8	1713.3	1696.1
67.5°	1045.4	1052.7	1228.8	1541.3	1853.5	2006.8	2004.8	1894.3	1810.4	1697.8	1564.4
69°	863.9	871.1	1040.6	1392.8	1777.3	2027.6	2031.6	1934.3	1796.0	1603.7	1386.1
70°	731.7	739.4	897.3	1265.5	1688.9	2017.9	2025.1	1930.5	1754.8	1494.6	1229.6
72.5°	383.8	390.4	552.4	871.8	1376.8	1852.9	1874.8	1767.3	1487.4	1085.5	727.1
75°	120.6	124.4	215.7	455.7	942.7	1440.7	1445.7	1386.3	1056.2	597.1	302.8
77.5°	46.0	44.9	71.8	167.9	476.6	907.2	937.8	866.3	554.3	211.1	69.9
80°	24.8	24.9	37.3	69.5	203.9	466.2	492.1	419.9	197.0	65.9	16.1
82.5°	10.7	11.2	21.0	36.8	93.7	172.0	184.9	153.9	75.2	44.3	6.0
85°	2.3	2.6	10.1	20.0	38.2	48.3	50.6	49.9	47.9	34.4	2.3
87.5°	0.0	0.0	4.5	7.2	9.6	11.0	9.6	12.6	26.5	23.2	1.2
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°	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6
2.5°	260.9	258.7	254.9	250.7	247.8	244.8	242.3	241.2	240.0	239.1	240.2
5°	260.4	256.1	248.8	241.7	236.6	232.4	229.0	227.7	226.3	225.4	225.2
7.5°	264.6	258.7	247.4	237.1	229.1	223.5	218.9	217.0	215.4	214.6	214.0
10°	272.8	265.1	250.1	236.6	226.3	216.8	206.8	199.1	194.1	191.8	191.0
12.5°	283.4	273.8	255.2	239.1	224.3	206.0	184.8	166.5	154.6	150.7	148.4
15°	295.9	283.9	262.0	242.4	216.7	183.3	147.3	123.4	112.4	110.2	107.8
17.5°	307.8	294.6	270.0	243.0	200.1	146.5	107.9	91.7	87.4	88.9	89.3
20°	318.3	305.2	277.9	237.7	170.0	109.9	83.5	79.5	81.1	83.9	84.4
22.5°	328.9	315.5	285.2	223.5	131.5	83.4	75.2	76.2	77.8	80.6	81.1
25°	341.8	327.9	292.1	197.6	98.7	71.0	71.5	72.9	74.5	77.1	77.3
27.5°	356.7	343.7	296.6	163.8	73.2	65.2	66.8	69.0	70.6	73.0	73.5
30°	376.5	364.4	298.0	128.8	61.3	60.1	60.9	63.5	65.9	68.0	68.4
32.5°	395.0	384.9	293.2	97.2	56.8	55.4	55.4	57.0	59.6	61.7	62.2
35°	412.1	405.5	277.6	71.1	53.4	51.0	49.8	49.8	51.5	53.2	53.7
37.5°	434.6	434.4	252.3	56.7	50.1	47.3	44.8	42.8	42.2	42.6	42.8
40°	473.3	473.7	219.4	50.9	47.3	43.5	39.6	36.1	32.8	31.7	31.6
42.5°	533.7	528.2	184.9	48.0	44.9	39.6	33.8	29.0	23.9	22.3	22.2
45°	629.5	597.0	148.3	45.5	42.3	35.2	27.9	21.5	17.3	16.1	16.1
47.5°	769.1	687.3	114.9	42.7	38.9	30.2	21.1	15.5	12.7	12.1	12.2
50°	913.5	775.9	88.0	39.1	34.8	25.0	15.6	11.2	9.6	9.6	9.8
52.5°	1041.6	840.7	68.7	35.4	29.6	19.6	11.8	8.8	8.0	7.9	8.0
55°	1161.5	882.6	52.6	31.0	23.5	14.6	9.0	7.2	6.7	6.5	6.3
57.5°	1277.1	903.3	39.4	25.0	17.1	10.6	7.2	6.1	5.6	5.2	5.1
60°	1354.0	886.5	27.1	18.4	11.8	7.7	6.0	5.2	4.6	4.3	4.1
62.5°	1397.4	840.5	17.4	13.3	8.4	5.7	4.8	4.4	3.5	3.2	3.2
65°	1379.9	764.6	12.2	9.5	6.1	4.3	3.5	3.5	2.6	2.1	2.0
67.5°	1222.8	646.0	9.3	7.1	4.4	3.2	2.7	3.0	1.6	1.0	1.0
69°	1052.1	535.4	7.9	5.9	3.7	2.6	2.3	2.8	1.1	0.7	0.6
70°	914.4	461.8	7.2	5.1	3.0	2.2	2.1	2.7	1.1	0.6	0.5
72.5°	547.1	257.6	5.5	3.7	2.0	1.7	1.7	3.0	1.1	0.6	0.5
75°	221.1	90.7	4.0	2.6	1.5	1.5	2.1	3.9	1.0	0.5	0.4
77.5°	50.1	19.9	2.3	1.6	1.0	1.5	2.4	3.0	0.6	0.2	0.0
80°	12.2	4.9	1.5	1.0	0.6	1.1	1.8	1.7	0.1	0.0	0.0
82.5°	4.0	1.7	0.6	0.5	0.1	0.4	0.9	0.5	0.0	0.0	0.0
85°	1.7	1.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	1.1	0.4	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)