

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: P214793

Luminaire Tested: **ARCH-AF16-30-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF16-30-D-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2777.3 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

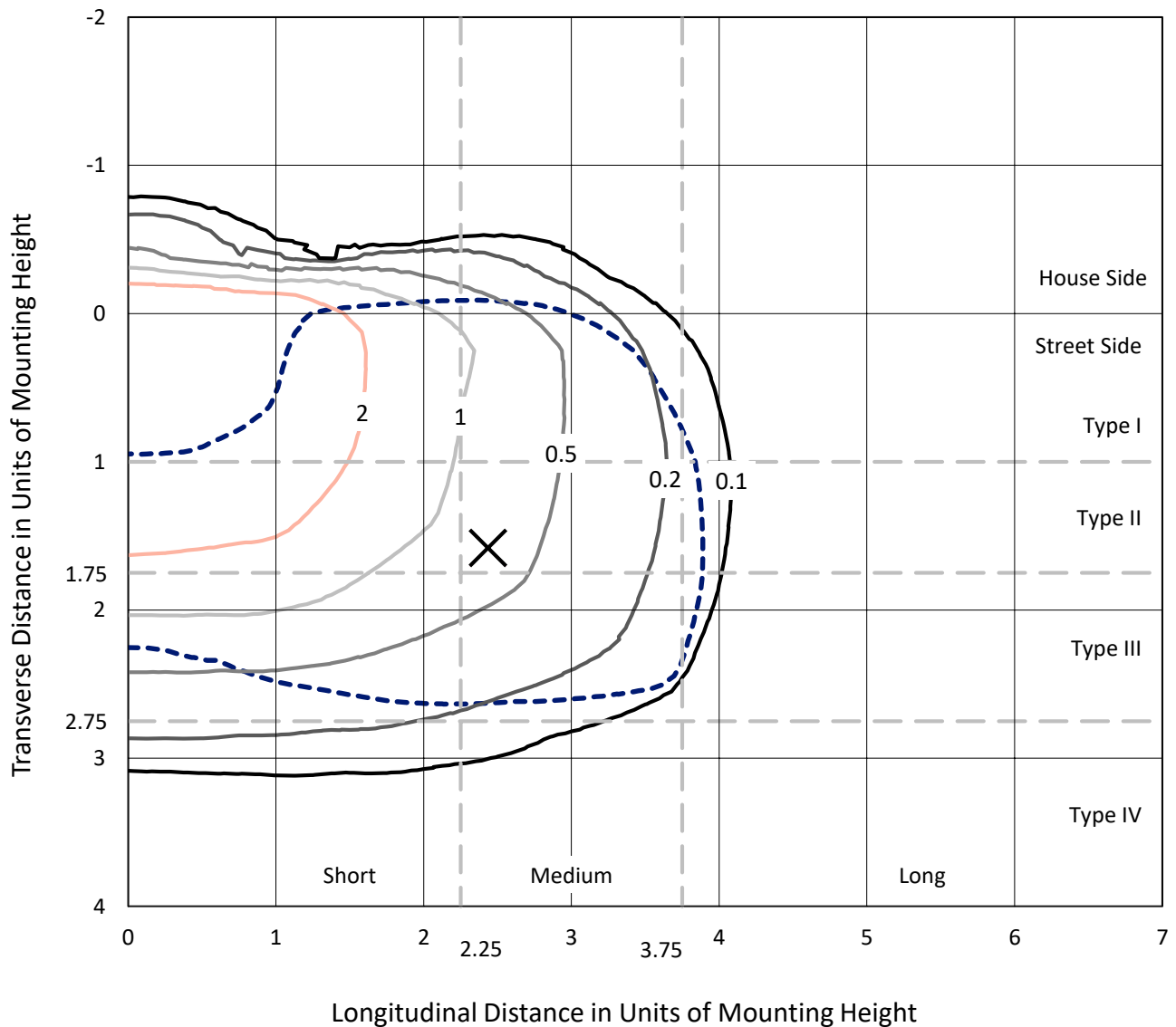
Input Watts (W): 32  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

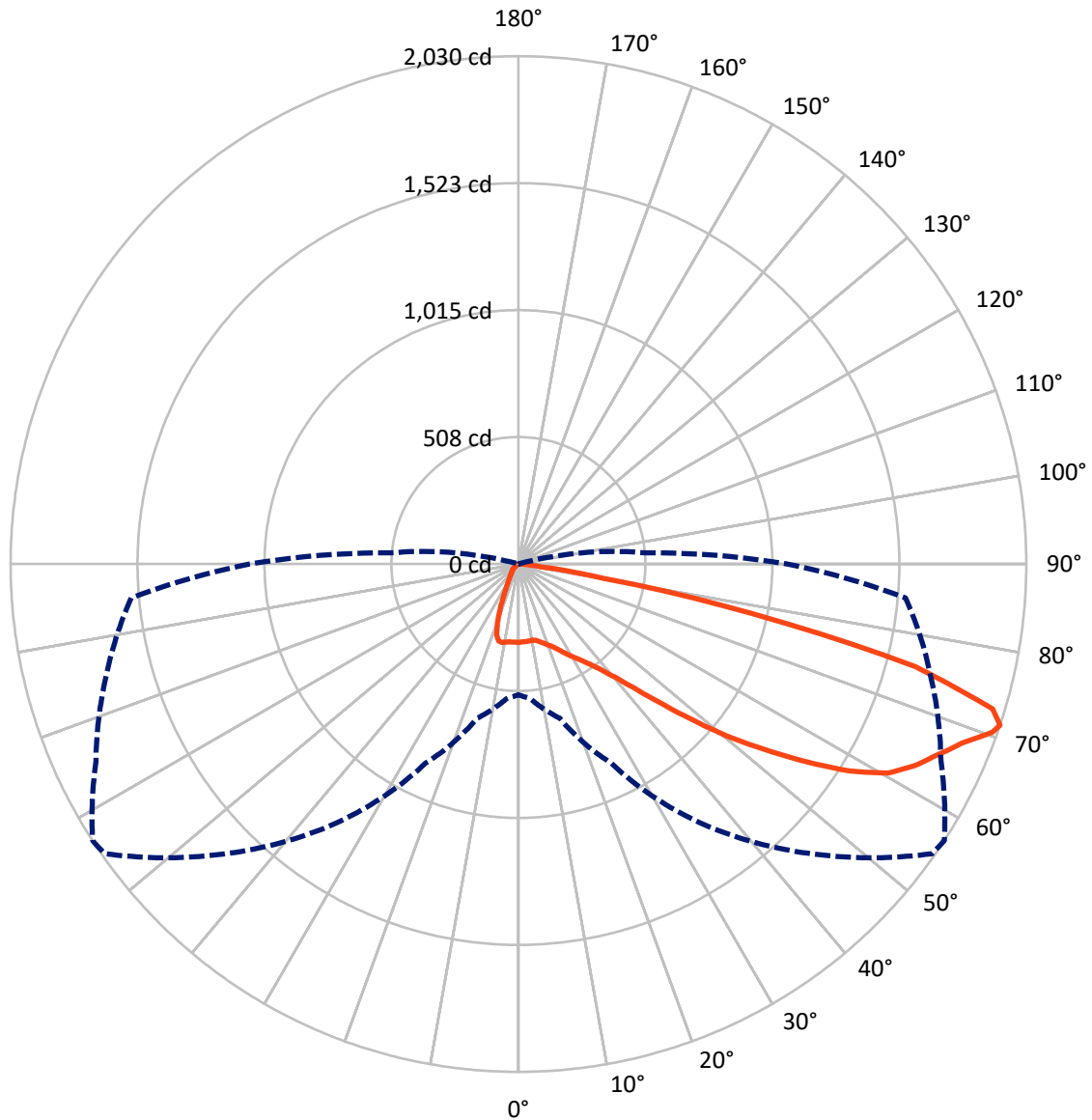


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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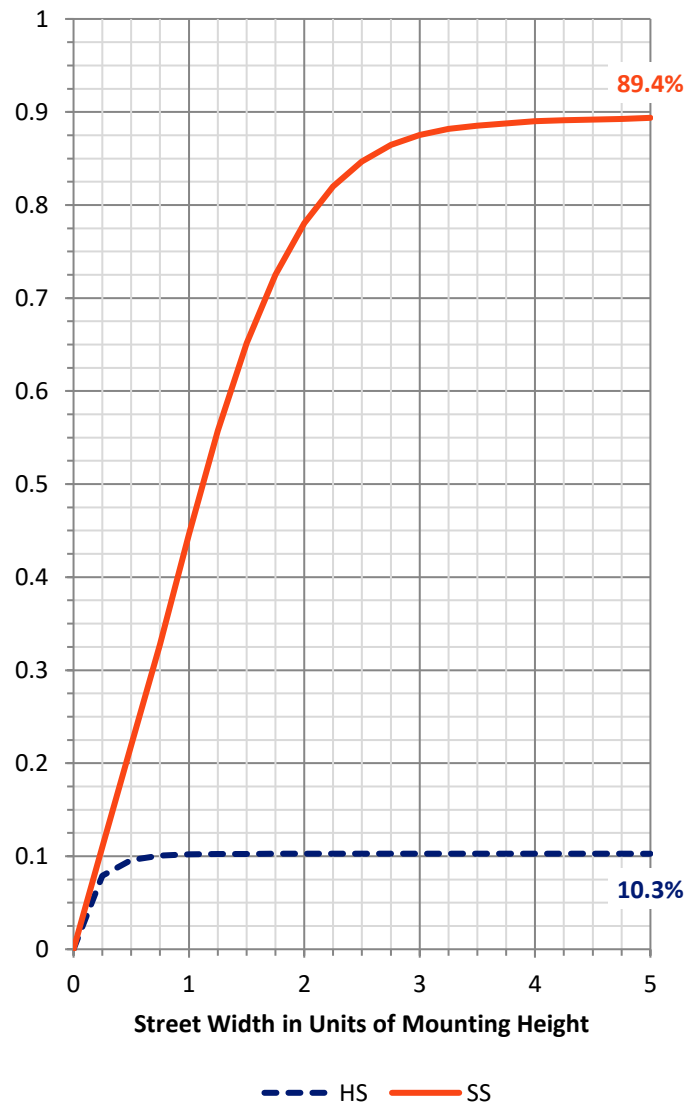
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	287.8	0.0	287.8
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	2489.5	0.0	2489.5
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	2777.3	0.0	2777.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.5	1.1
10°-20°	78.8	2.8
20°-30°	123.0	4.4
30°-40°	207.8	7.5
40°-50°	403.6	14.5
50°-60°	677.8	24.4
60°-70°	808.9	29.1
70°-80°	426.3	15.3
80°-90°	21.7	0.8
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°	2777.3	100.0
0°-180°	2777.3	100.0

**Coefficient of Utilization**



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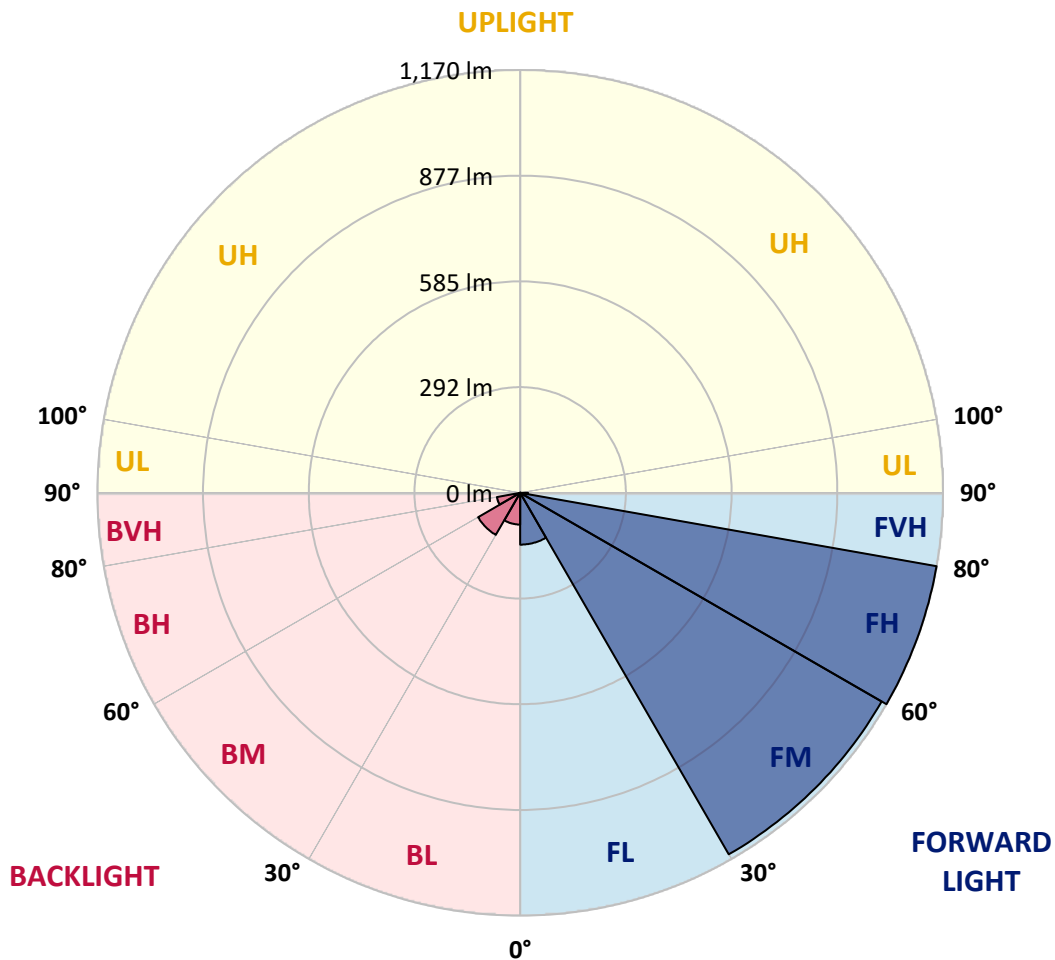
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	143.4	5.2			
FM	(30°-60°)	1154.8	41.6			
FH	(60°-80°)	1169.8	42.1			G1/1800
FVH	(80°-90°)	21.5	0.8			G1/100
BL	(0°-30°)	87.9	3.2	B0/110		
BM	(30°-60°)	134.4	4.8	B0/220		
BH	(60°-80°)	65.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8
2.5°	309.3	309.3	309.3	310.0	310.7	310.7	311.9	311.3	311.3	311.3	312.6
5°	301.0	301.6	302.2	303.5	306.1	308.0	311.3	311.3	311.9	313.2	313.8
7.5°	289.3	289.9	291.8	294.5	299.6	304.1	309.3	310.7	312.6	315.8	317.1
10°	282.1	283.5	286.0	289.3	295.1	301.0	307.4	309.3	315.2	321.0	324.3
12.5°	280.2	280.9	283.5	288.7	295.7	302.9	311.3	313.2	321.6	330.7	335.8
15°	283.5	284.1	285.4	291.2	299.6	308.7	319.7	322.3	332.7	343.0	349.4
17.5°	289.3	289.3	290.6	295.7	304.8	315.2	329.4	333.3	344.9	356.6	363.8
20°	293.2	293.2	295.1	300.3	310.7	324.3	341.1	346.3	359.2	372.1	378.6
22.5°	297.1	297.7	299.6	305.5	317.1	335.8	355.3	360.5	375.3	388.9	395.5
25°	308.0	307.4	308.0	313.2	326.8	350.2	374.7	381.2	396.7	411.6	414.8
27.5°	338.5	337.2	328.8	325.5	335.8	365.0	399.3	405.8	423.9	438.7	438.7
30°	408.4	405.8	385.0	358.5	350.2	378.6	422.6	431.7	455.0	467.9	464.0
32.5°	497.1	491.2	464.6	419.4	385.8	396.7	447.2	457.6	487.3	498.3	489.9
35°	594.1	593.4	560.5	502.2	454.3	434.2	478.9	491.2	528.8	538.5	524.9
37.5°	697.0	699.6	677.6	597.3	541.0	495.7	521.0	535.2	581.1	592.8	579.9
40°	811.5	810.9	802.5	707.4	645.3	583.1	581.9	594.7	650.4	668.5	650.4
42.5°	956.6	955.2	924.8	839.3	771.4	697.0	670.4	675.0	737.1	766.9	740.4
45°	1104.1	1095.0	1060.1	986.3	926.1	838.1	787.6	787.6	840.7	881.5	840.0
47.5°	1186.3	1177.2	1163.0	1122.2	1104.1	1005.7	931.3	922.2	963.6	1005.0	946.8
50°	1294.3	1294.3	1258.7	1243.2	1274.3	1205.0	1089.9	1080.7	1100.8	1133.8	1057.5
52.5°	1379.8	1364.2	1339.0	1352.5	1441.2	1409.5	1248.4	1230.9	1246.5	1254.9	1153.9
55°	1415.4	1400.5	1398.6	1448.4	1585.6	1541.6	1410.9	1395.3	1394.0	1352.5	1238.1
57.5°	1422.5	1409.5	1434.2	1521.5	1726.0	1649.6	1572.6	1561.0	1524.7	1421.2	1324.1
60°	1362.3	1368.8	1428.3	1561.6	1808.9	1743.5	1709.1	1696.9	1613.4	1479.4	1419.9
62.5°	1238.7	1254.2	1365.5	1565.5	1778.4	1781.7	1784.9	1776.5	1682.0	1532.5	1516.3
65°	1092.4	1096.9	1230.9	1511.8	1725.3	1770.0	1840.6	1839.9	1734.4	1592.0	1625.1
67.5°	900.2	908.0	1023.9	1330.6	1619.2	1764.8	1913.7	1911.8	1793.9	1660.0	1689.8
70°	669.8	679.5	773.4	1034.8	1382.3	1700.1	2009.5	2010.7	1856.8	1711.8	1645.1
71°	522.3	539.7	638.1	878.8	1261.3	1634.8	2018.5	2030.1	1863.8	1704.6	1553.2
72.5°	256.2	277.0	400.6	618.7	1038.1	1488.5	1959.0	1981.7	1819.2	1616.0	1328.0
75°	66.7	70.6	119.7	253.1	556.6	986.3	1579.7	1637.3	1487.2	1230.3	811.5
77.5°	42.0	43.4	56.3	98.4	208.4	374.7	928.0	956.6	849.8	623.2	286.0
80°	29.8	30.4	35.6	63.4	121.6	109.4	333.9	346.3	307.4	165.0	51.1
82.5°	18.1	18.1	25.9	40.8	75.1	59.5	88.0	93.8	82.9	45.9	16.8
85°	10.3	11.0	16.2	27.8	35.6	29.2	33.0	35.0	35.6	30.4	7.2
87.5°	8.4	9.1	14.2	23.3	19.4	14.2	14.2	14.9	15.5	18.1	3.3
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°	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8	313.8
2.5°	312.6	312.6	313.2	312.6	312.6	312.6	313.2	313.2	313.2	314.6	315.2
5°	313.8	313.8	313.8	313.2	312.6	312.6	313.8	314.6	314.6	316.5	316.5
7.5°	317.1	317.1	315.8	314.6	313.2	311.3	311.9	312.6	311.9	312.6	312.6
10°	324.3	324.3	322.3	319.7	315.8	310.0	302.2	292.6	283.5	280.2	279.0
12.5°	335.8	335.2	331.3	326.8	318.4	298.4	269.2	235.0	206.4	198.7	196.1
15°	348.8	347.5	343.0	335.2	312.6	259.5	198.7	154.7	127.5	121.0	119.7
17.5°	362.4	360.5	354.0	338.5	286.0	192.8	128.2	97.1	82.1	80.9	81.5
20°	376.7	374.1	365.0	332.0	231.1	128.8	82.9	75.1	73.8	73.8	74.5
22.5°	392.8	389.6	377.3	308.7	168.3	85.4	71.2	70.6	69.9	69.3	69.3
25°	411.6	407.7	388.9	266.7	115.8	69.9	67.9	66.0	64.8	63.4	62.8
27.5°	434.2	429.0	398.0	214.8	79.6	65.4	64.0	60.9	58.2	55.6	55.6
30°	457.0	450.4	395.5	161.8	64.8	60.9	58.2	54.3	50.4	47.9	47.3
32.5°	480.9	474.3	378.6	108.7	58.9	55.6	52.4	46.6	42.0	38.9	38.2
35°	516.5	511.3	345.6	71.8	53.1	49.2	44.7	38.9	33.0	29.8	29.2
37.5°	569.5	563.0	304.8	55.0	46.6	40.8	36.9	30.4	24.6	21.4	20.7
40°	640.7	621.2	256.2	48.5	40.8	33.7	28.4	22.0	17.5	15.5	15.5
42.5°	723.5	677.6	203.9	44.0	36.2	27.8	20.7	14.9	12.3	11.7	11.7
45°	811.5	730.0	151.4	40.8	31.7	22.0	14.9	10.3	9.1	8.4	8.4
47.5°	902.1	772.7	105.5	36.9	26.5	16.8	10.3	7.8	6.4	5.8	5.8
50°	986.9	800.6	74.5	33.0	22.6	12.3	7.8	5.8	4.5	4.5	4.5
52.5°	1045.9	798.0	53.7	28.4	17.5	8.4	5.2	3.9	3.9	3.9	3.9
55°	1097.6	788.3	42.0	24.6	13.6	5.8	3.9	3.3	3.3	2.6	2.6
57.5°	1141.6	772.7	35.6	20.0	9.7	4.5	2.6	2.6	1.9	1.9	1.9
60°	1179.2	753.3	29.8	16.8	6.4	3.3	1.9	1.3	1.3	0.6	1.3
62.5°	1230.3	741.0	25.9	13.0	4.5	1.9	1.3	0.6	0.6	0.0	0.0
65°	1267.8	717.7	22.0	9.1	2.6	1.3	0.6	0.6	0.0	0.0	0.0
67.5°	1269.1	675.7	16.2	5.2	1.9	1.3	0.6	0.0	0.0	0.0	0.0
70°	1166.9	576.0	10.3	2.6	1.3	0.6	0.6	0.0	0.0	0.0	0.0
71°	1073.0	509.9	8.4	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	884.0	374.7	6.4	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0
75°	487.3	136.0	3.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	156.0	41.4	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	26.5	6.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.1	2.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	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)