

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: P348907

Luminaire Tested: **ARCH-N-PA1-30-830-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348907  
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-PA1-30-830-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2472 lumens  
Efficiency: N/A  
Efficacy: 79.7 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

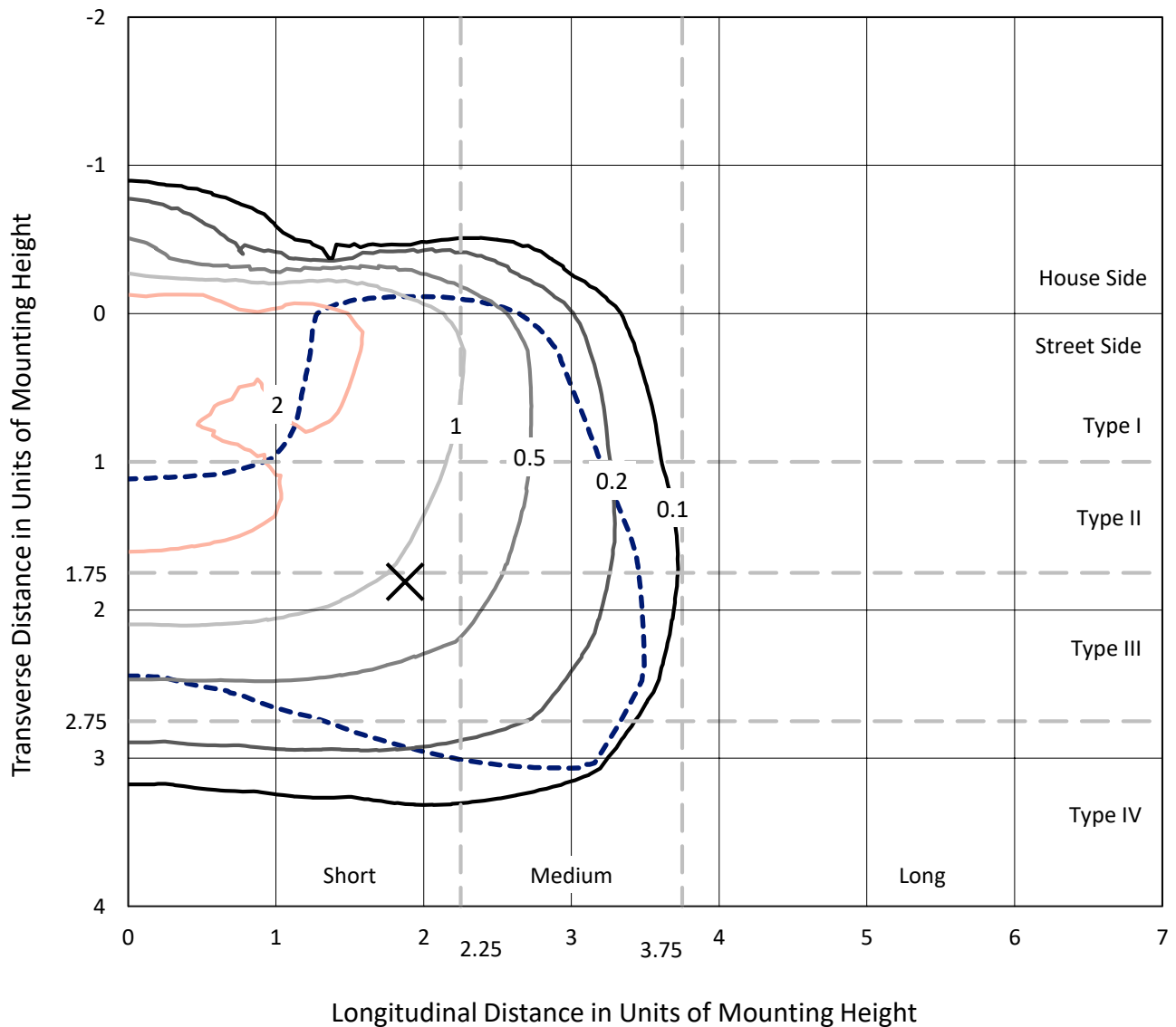


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### Iso-Footcandle Lines of Horizontal Illumination

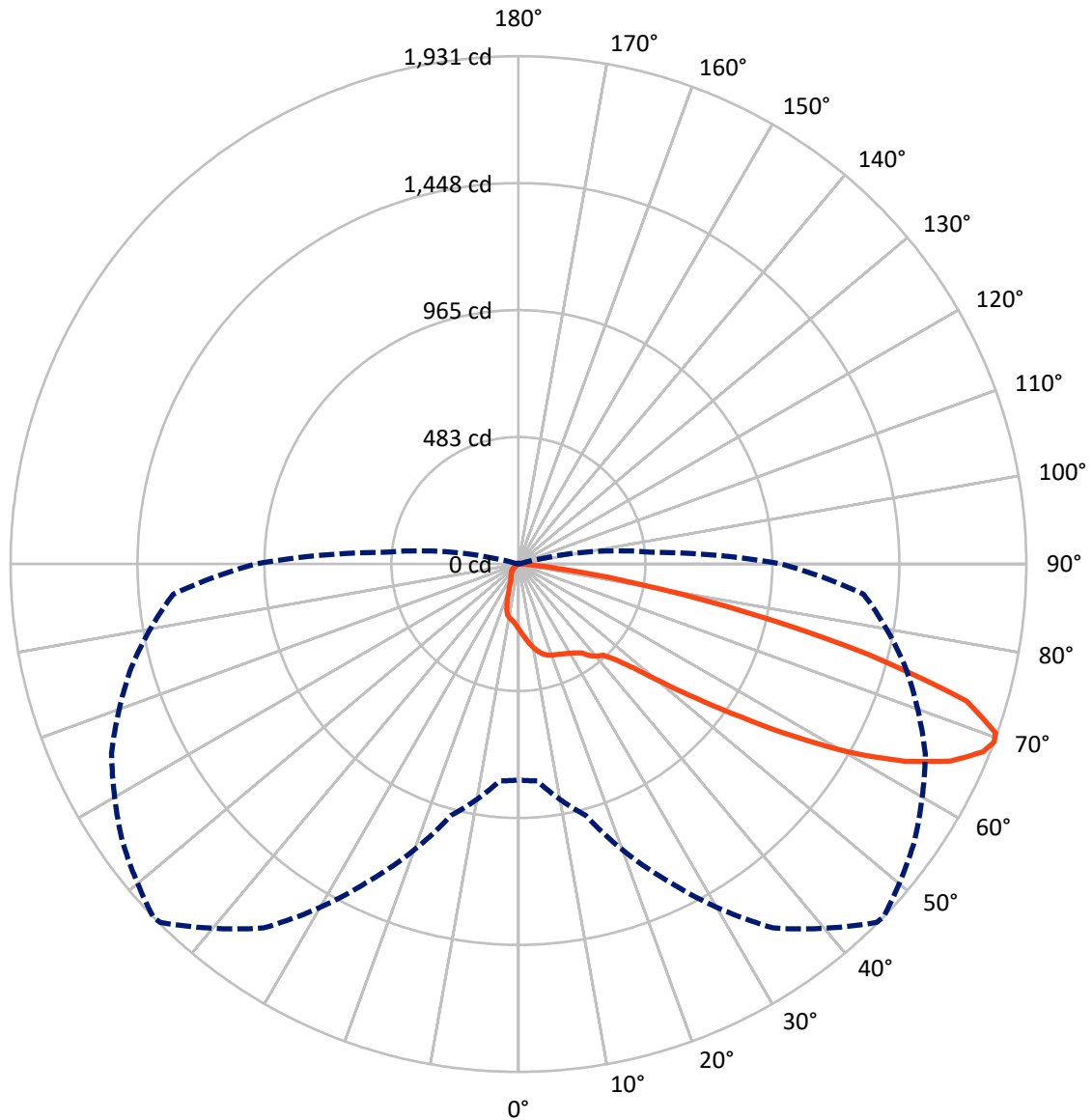
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 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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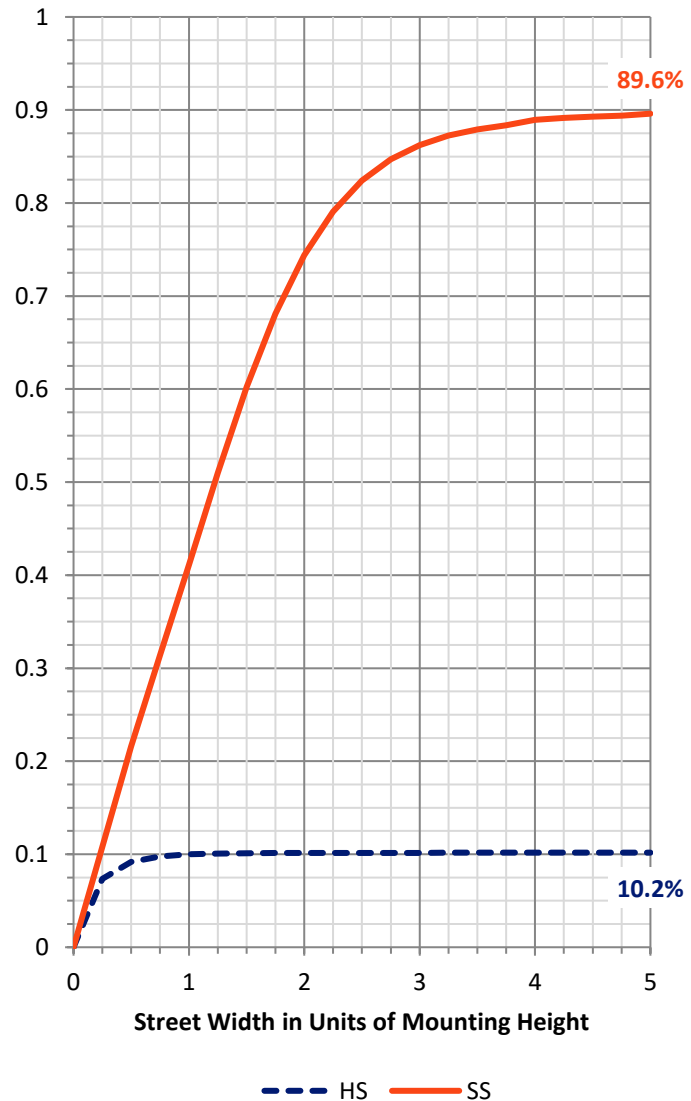
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	253.7	0.0	253.7
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	2218.3	0.0	2218.3
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2472.0	0.0	2472.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.7	1.0
10°-20°	74.8	3.0
20°-30°	117.6	4.8
30°-40°	168.7	6.8
40°-50°	291.5	11.8
50°-60°	575.9	23.3
60°-70°	804.9	32.6
70°-80°	388.9	15.7
80°-90°	25.0	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°	2472.0	100.0
0°-180°	2472.0	100.0



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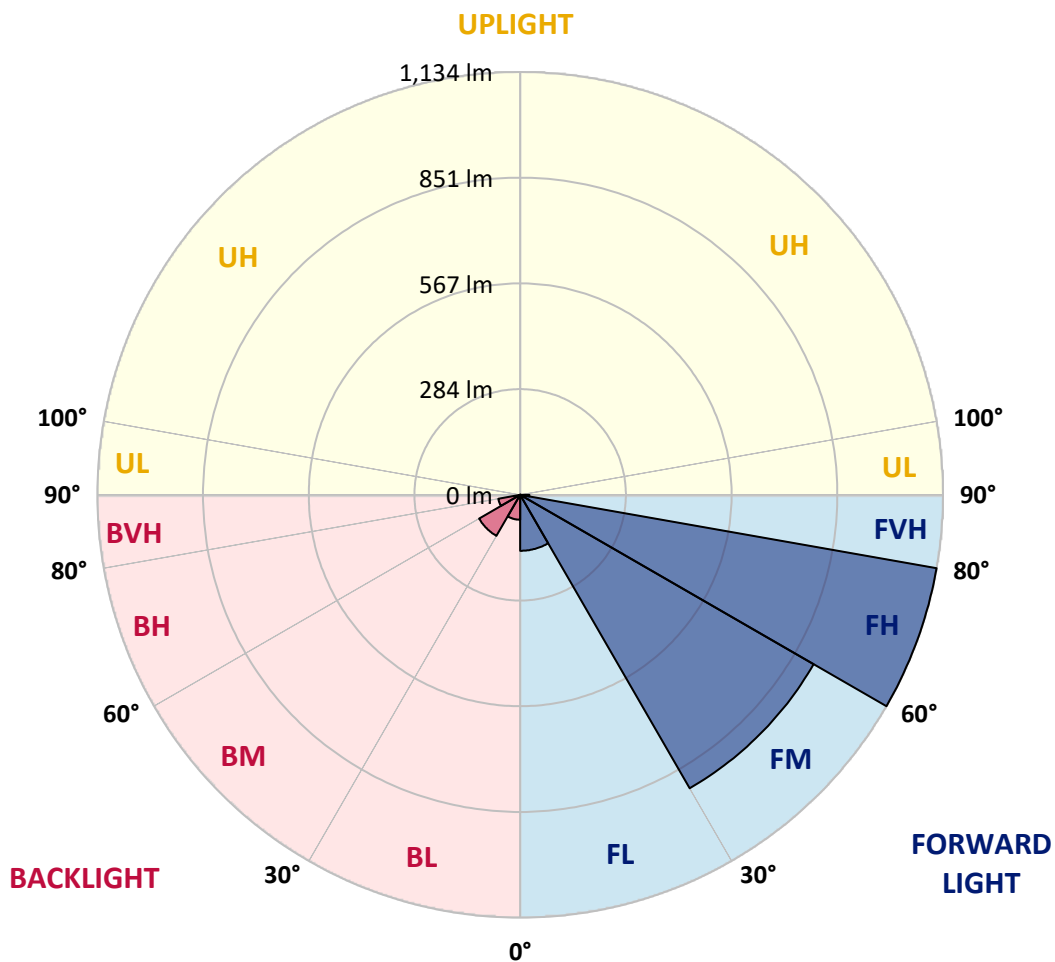
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	150.2	6.1			
FM	(30°-60°)	909.0	36.8			
FH	(60°-80°)	1134.3	45.9			G1/1800
FVH	(80°-90°)	24.8	1.0			G1/100
BL	(0°-30°)	66.9	2.7	B0/110		
BM	(30°-60°)	127.1	5.1	B0/220		
BH	(60°-80°)	59.5	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°	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7
2.5°	275.2	274.8	273.2	272.5	268.5	266.2	265.3	262.4	258.2	254.1	249.4
5°	306.4	306.3	303.3	300.4	293.0	286.0	284.8	278.1	268.7	259.9	251.0
7.5°	338.4	336.9	333.9	328.4	317.6	306.4	305.4	295.9	282.6	269.8	257.2
10°	365.6	364.6	360.7	352.2	339.6	327.0	325.7	314.0	298.9	283.3	267.2
12.5°	386.7	386.0	380.7	370.2	356.8	343.7	341.9	331.5	315.4	297.9	278.9
15°	399.5	399.2	392.8	381.6	368.3	357.0	355.5	346.3	331.4	313.1	291.6
17.5°	402.5	402.6	396.0	384.7	373.8	365.7	364.5	357.6	345.0	326.8	304.4
20°	395.8	397.2	391.3	381.4	374.7	370.4	369.5	365.3	354.8	337.6	314.6
22.5°	386.3	387.0	382.9	376.3	373.6	374.4	373.9	371.6	362.7	346.9	324.6
25°	380.5	380.5	378.1	372.5	374.4	379.4	379.5	379.0	371.9	358.3	336.9
27.5°	380.3	379.6	376.8	372.6	377.7	385.4	385.8	389.0	384.6	372.0	352.2
30°	389.6	388.7	382.8	377.4	383.9	392.1	393.3	400.1	397.9	387.0	369.3
32.5°	411.2	408.3	395.2	386.3	391.2	401.0	402.5	413.4	416.9	405.4	385.7
35°	440.9	431.7	412.8	403.2	403.7	414.0	415.4	431.4	441.7	422.4	398.5
37.5°	481.8	477.3	446.6	420.8	422.9	438.6	442.6	460.0	457.1	431.6	413.0
40°	571.5	564.4	531.8	470.2	441.4	458.5	459.8	469.1	469.3	452.6	443.1
42.5°	693.7	690.8	656.4	559.8	477.6	471.8	474.2	489.8	507.3	496.9	496.4
45°	828.9	827.4	790.9	678.7	551.0	515.5	518.4	539.4	572.9	575.2	589.9
47.5°	937.8	937.1	916.1	811.4	663.3	589.6	590.5	612.8	671.7	700.8	724.3
50°	1037.0	1040.3	1023.8	955.0	816.3	705.6	703.4	718.3	812.8	860.5	889.7
52.5°	1174.9	1179.7	1133.2	1089.0	976.8	849.6	847.8	863.4	982.5	1018.2	1023.4
55°	1296.7	1288.6	1251.9	1239.1	1172.6	1027.4	1026.9	1040.6	1146.6	1161.8	1171.4
57.5°	1350.5	1347.4	1365.1	1394.3	1377.6	1237.5	1236.5	1226.0	1293.5	1295.1	1324.7
60°	1384.5	1388.3	1442.6	1532.7	1574.3	1463.6	1456.9	1393.3	1433.7	1430.1	1461.8
62.5°	1359.0	1366.5	1464.3	1614.4	1721.5	1661.0	1651.5	1546.5	1553.6	1541.2	1570.6
65°	1223.6	1235.3	1395.6	1599.0	1794.5	1815.3	1805.7	1681.8	1648.7	1628.3	1612.0
67.5°	993.5	1000.5	1167.8	1464.9	1761.6	1907.3	1905.3	1800.3	1720.6	1613.6	1486.8
69°	821.1	827.9	989.0	1323.7	1689.2	1927.0	1930.8	1838.3	1706.9	1524.1	1317.4
70°	695.4	702.7	852.8	1202.7	1605.1	1917.9	1924.7	1834.7	1667.7	1420.5	1168.7
72.5°	364.7	371.0	525.0	828.6	1308.5	1761.0	1781.8	1679.7	1413.7	1031.7	691.0
75°	114.6	118.2	205.0	433.1	895.9	1369.3	1374.0	1317.6	1003.8	567.5	287.8
77.5°	43.7	42.7	68.3	159.6	452.9	862.2	891.3	823.4	526.8	200.6	66.4
80°	23.5	23.6	35.5	66.1	193.8	443.1	467.7	399.1	187.2	62.6	15.3
82.5°	10.2	10.7	19.9	35.0	89.0	163.4	175.7	146.3	71.5	42.1	5.7
85°	2.2	2.4	9.6	19.0	36.3	45.9	48.1	47.4	45.5	32.7	2.2
87.5°	0.0	0.0	4.3	6.8	9.2	10.4	9.2	11.9	25.2	22.0	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°	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7
2.5°	247.9	245.8	242.2	238.3	235.5	232.6	230.3	229.3	228.1	227.3	228.3
5°	247.5	243.4	236.4	229.7	224.9	220.9	217.7	216.4	215.1	214.2	214.1
7.5°	251.5	245.8	235.2	225.3	217.8	212.5	208.0	206.2	204.7	204.0	203.4
10°	259.3	252.0	237.7	224.9	215.1	206.1	196.6	189.3	184.5	182.3	181.5
12.5°	269.4	260.2	242.6	227.3	213.1	195.8	175.6	158.2	147.0	143.3	141.1
15°	281.2	269.8	249.0	230.4	206.0	174.2	140.0	117.3	106.9	104.8	102.5
17.5°	292.5	280.0	256.6	231.0	190.2	139.2	102.6	87.2	83.1	84.5	84.8
20°	302.5	290.1	264.1	225.9	161.6	104.4	79.4	75.6	77.1	79.7	80.2
22.5°	312.6	299.8	271.1	212.5	124.9	79.3	71.5	72.4	73.9	76.6	77.1
25°	324.9	311.7	277.6	187.8	93.8	67.5	67.9	69.3	70.8	73.3	73.5
27.5°	339.0	326.6	281.9	155.7	69.5	62.0	63.5	65.6	67.1	69.4	69.9
30°	357.8	346.3	283.3	122.4	58.3	57.1	57.8	60.4	62.6	64.7	65.0
32.5°	375.4	365.8	278.6	92.4	54.0	52.6	52.6	54.1	56.7	58.6	59.1
35°	391.6	385.4	263.8	67.6	50.8	48.4	47.3	47.3	48.9	50.5	51.0
37.5°	413.1	412.8	239.8	53.9	47.6	45.0	42.5	40.7	40.1	40.5	40.7
40°	449.8	450.2	208.5	48.3	45.0	41.4	37.7	34.3	31.2	30.1	30.0
42.5°	507.2	502.0	175.7	45.7	42.7	37.7	32.1	27.6	22.7	21.2	21.1
45°	598.3	567.3	140.9	43.2	40.2	33.5	26.5	20.4	16.5	15.3	15.3
47.5°	731.0	653.2	109.2	40.6	37.0	28.7	20.1	14.7	12.1	11.5	11.6
50°	868.2	737.4	83.7	37.2	33.0	23.8	14.8	10.7	9.2	9.2	9.3
52.5°	989.9	799.0	65.3	33.6	28.2	18.7	11.2	8.3	7.6	7.5	7.6
55°	1103.9	838.8	50.0	29.4	22.4	13.9	8.6	6.8	6.4	6.1	6.0
57.5°	1213.7	858.5	37.4	23.8	16.2	10.1	6.8	5.8	5.3	5.0	4.9
60°	1286.9	842.5	25.7	17.5	11.2	7.3	5.7	5.0	4.4	4.1	3.9
62.5°	1328.1	798.8	16.6	12.6	8.0	5.4	4.5	4.2	3.4	3.0	3.0
65°	1311.4	726.7	11.6	9.0	5.8	4.1	3.4	3.4	2.4	2.0	1.9
67.5°	1162.2	613.9	8.8	6.7	4.2	3.0	2.5	2.9	1.5	0.9	0.9
69°	999.9	508.8	7.5	5.6	3.5	2.4	2.2	2.7	1.0	0.7	0.6
70°	869.0	438.9	6.8	4.9	2.9	2.1	2.0	2.5	1.0	0.6	0.5
72.5°	519.9	244.8	5.2	3.5	1.9	1.6	1.6	2.9	1.0	0.6	0.5
75°	210.1	86.2	3.8	2.4	1.4	1.4	2.0	3.7	0.9	0.5	0.3
77.5°	47.6	18.9	2.2	1.5	0.9	1.4	2.3	2.9	0.6	0.2	0.0
80°	11.6	4.6	1.4	0.9	0.6	1.0	1.7	1.6	0.1	0.0	0.0
82.5°	3.8	1.6	0.6	0.5	0.1	0.3	0.8	0.5	0.0	0.0	0.0
85°	1.6	0.9	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	1.0	0.3	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)