

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: P348571

Luminaire Tested: **ARCH-N-PA1-30-830-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
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-T2R  
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: 3520 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

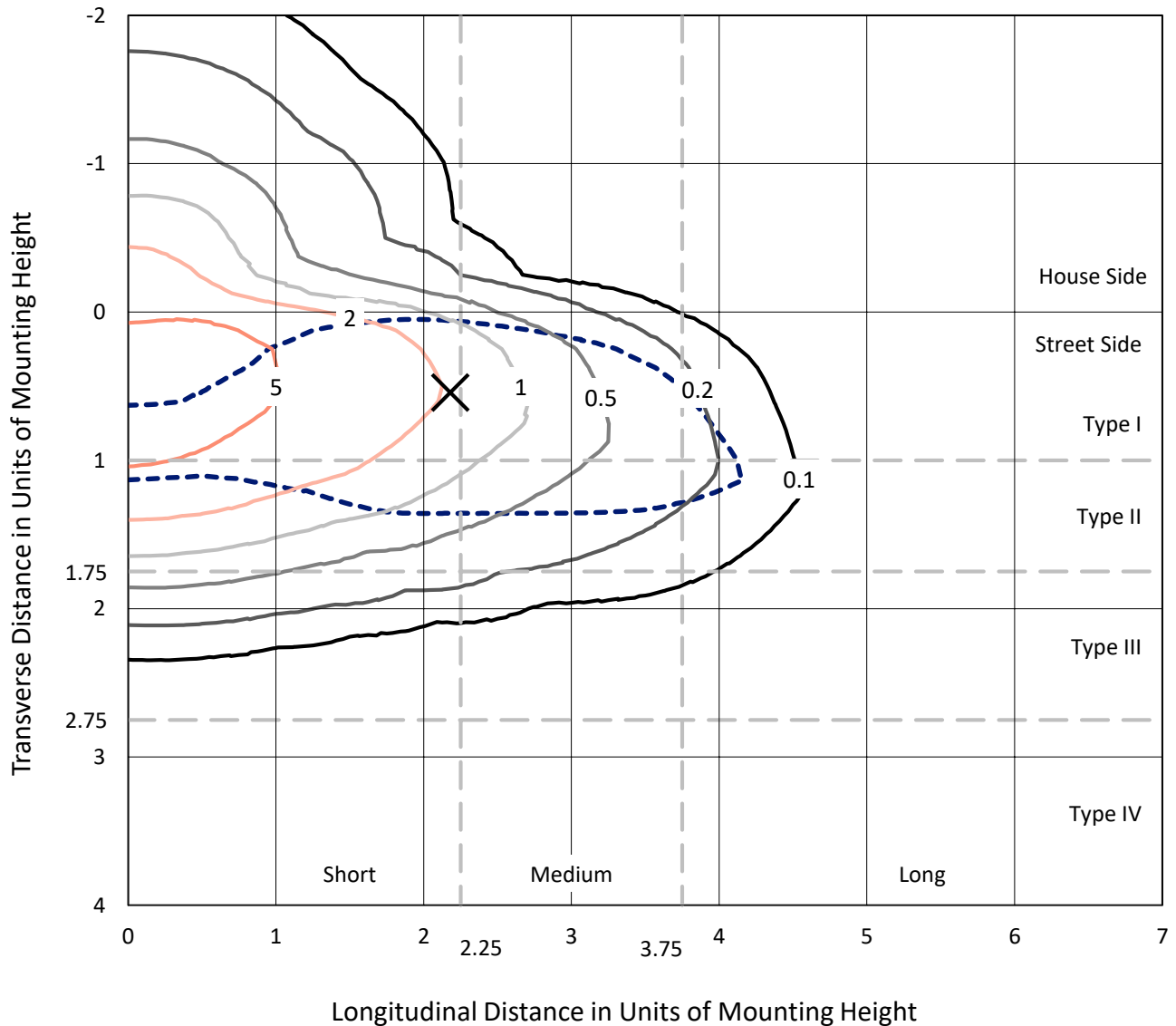
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

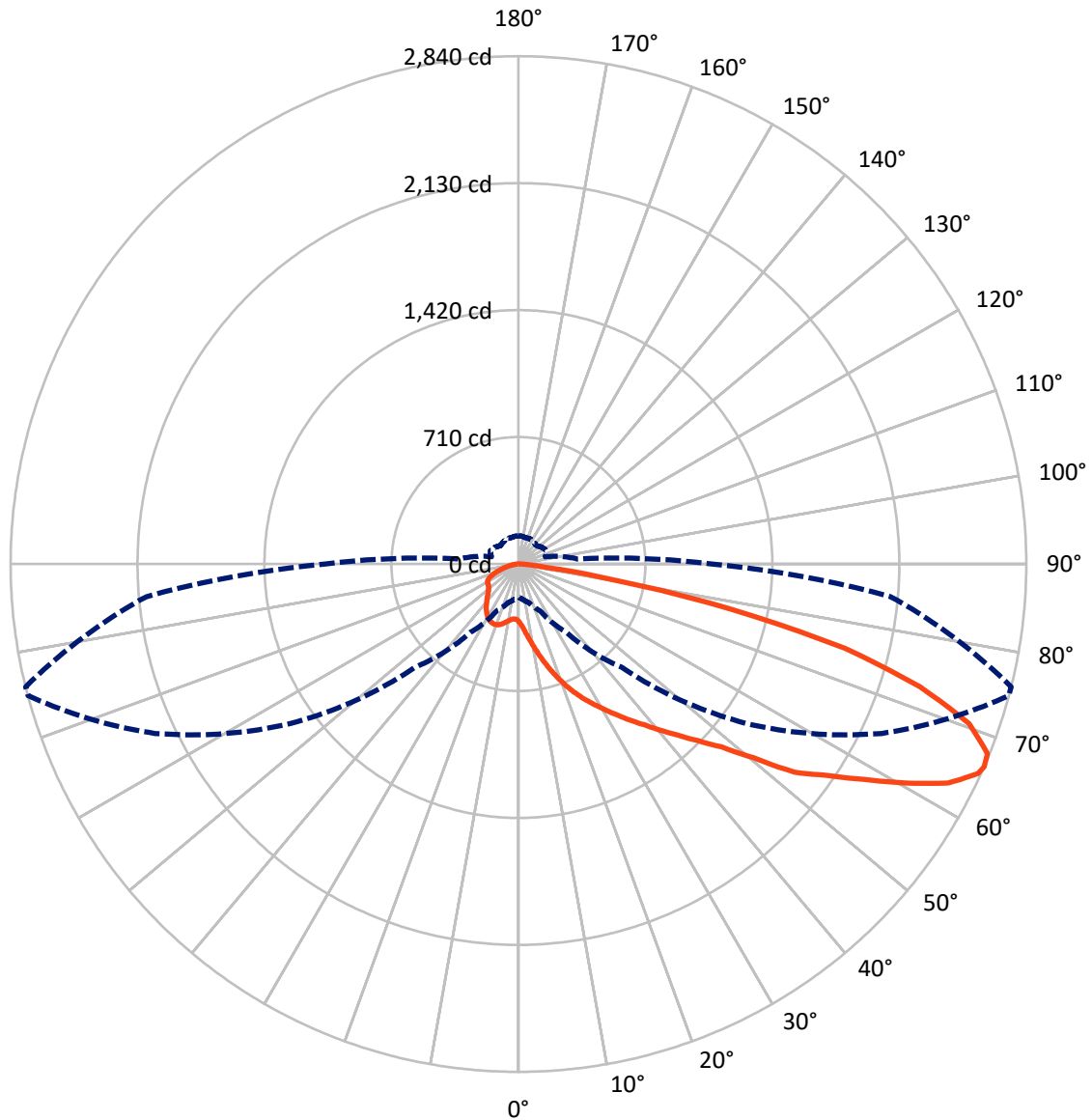
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical



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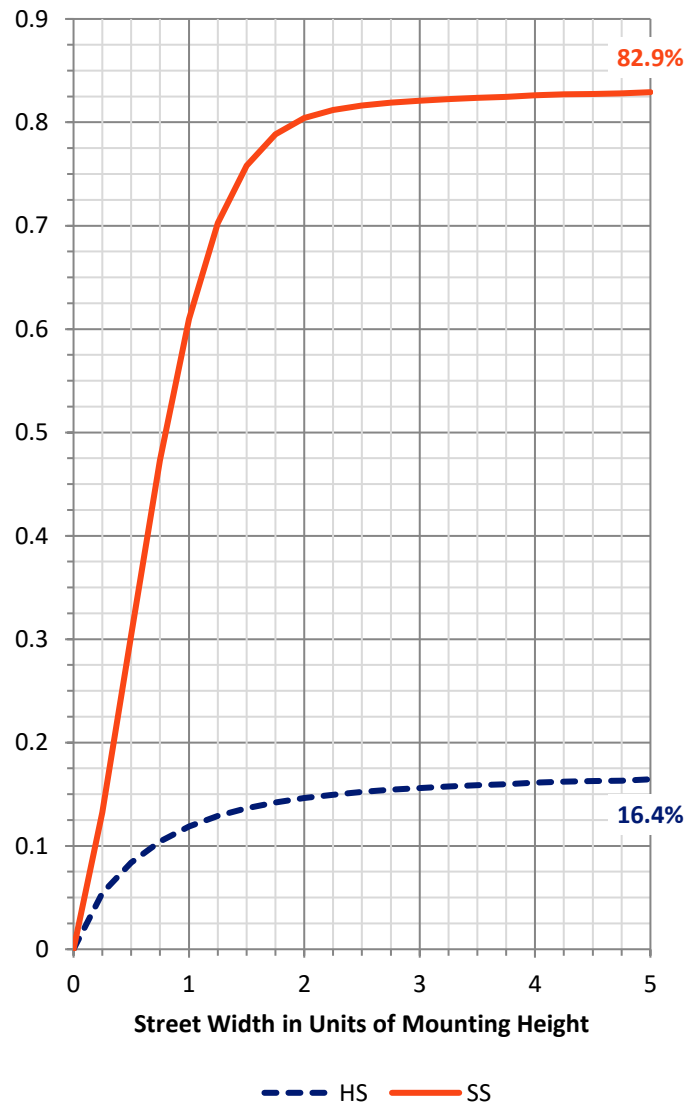
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	592.3	0.0	592.3
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	2927.7	0.0	2927.7
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	3520.0	0.0	3520.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.9	1.1
10°-20°	153.5	4.4
20°-30°	298.3	8.5
30°-40°	486.9	13.8
40°-50°	665.2	18.9
50°-60°	774.8	22.0
60°-70°	694.7	19.7
70°-80°	351.0	10.0
80°-90°	56.7	1.6
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°	3520.0	100.0
0°-180°	3520.0	100.0

**Coefficient of Utilization**



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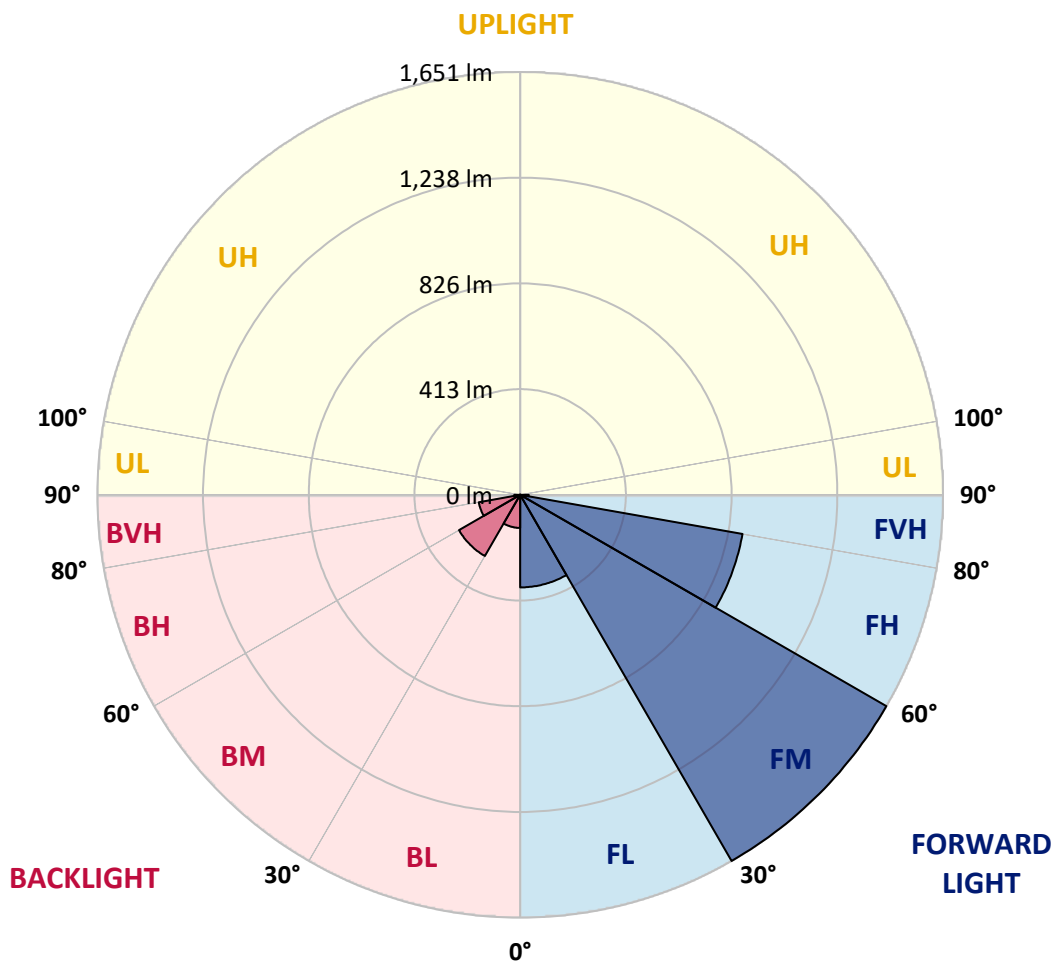
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	361.5	10.3			
FM	(30°-60°)	1651.1	46.9			
FH	(60°-80°)	881.6	25.0			G1/1800
FVH	(80°-90°)	33.5	1.0			G1/100
BL	(0°-30°)	129.2	3.7	B1/500		
BM	(30°-60°)	275.8	7.8	B1/1000		
BH	(60°-80°)	164.1	4.7	B1/500		G1/500
BVH	(80°-90°)	23.2	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5
2.5°	426.7	420.3	419.7	410.2	408.1	390.0	376.8	362.9	347.1	344.0	331.6
5°	548.1	547.5	539.3	523.9	511.8	481.0	450.5	418.3	382.9	377.1	349.2
7.5°	657.4	656.4	650.1	633.5	616.0	578.1	534.6	485.2	427.8	419.3	373.0
10°	740.3	739.9	737.8	725.6	710.8	674.5	626.4	558.9	480.0	468.4	402.7
12.5°	804.4	805.1	806.5	802.2	795.2	764.2	715.0	637.1	535.7	524.2	435.8
15°	847.7	849.9	857.3	863.4	867.1	848.1	800.4	717.0	598.1	584.4	472.5
17.5°	869.6	872.0	884.8	903.2	920.2	918.2	880.4	793.2	658.0	644.7	511.9
20°	888.5	890.3	904.6	926.7	956.7	970.0	948.7	866.6	723.6	707.8	553.8
22.5°	943.2	945.5	949.8	962.3	988.9	1013.2	1003.0	936.0	783.7	769.0	593.4
25°	1048.9	1051.6	1042.3	1031.6	1036.7	1053.6	1055.5	999.4	844.6	828.0	636.1
27.5°	1176.1	1180.1	1164.2	1136.8	1112.9	1106.3	1104.1	1051.2	902.8	883.6	678.3
30°	1300.8	1307.6	1286.9	1251.4	1207.5	1176.7	1153.9	1102.0	960.2	941.8	718.1
32.5°	1422.5	1419.8	1389.8	1355.1	1303.7	1265.1	1209.9	1156.5	1024.7	1003.6	757.6
35°	1505.9	1506.9	1479.1	1437.9	1389.0	1359.3	1285.0	1215.3	1090.6	1071.1	802.6
37.5°	1576.9	1572.5	1541.0	1502.6	1460.4	1447.7	1372.8	1280.1	1161.9	1140.6	850.4
40°	1600.6	1595.4	1574.8	1547.2	1513.3	1512.3	1469.7	1353.5	1242.6	1221.5	904.3
42.5°	1586.2	1579.7	1571.2	1563.7	1553.3	1558.0	1560.8	1439.5	1331.2	1307.7	966.6
45°	1533.3	1523.4	1529.4	1545.7	1568.3	1595.3	1643.0	1534.7	1430.5	1410.8	1039.9
47.5°	1451.9	1443.0	1461.6	1496.6	1558.0	1626.4	1720.8	1639.9	1549.1	1529.5	1144.2
50°	1337.4	1340.1	1366.7	1430.4	1523.3	1640.7	1816.6	1779.1	1721.4	1703.1	1286.5
52.5°	1149.6	1150.1	1225.1	1329.7	1461.6	1633.3	1869.8	1957.1	1956.7	1934.6	1422.1
55°	975.1	985.8	1045.1	1184.1	1361.7	1603.7	1907.0	2043.6	2111.2	2085.3	1548.4
57.5°	804.7	810.9	867.2	1006.8	1219.1	1524.7	1945.1	2147.4	2289.3	2272.9	1705.4
60°	610.9	620.4	678.6	807.6	1036.8	1384.5	1948.7	2255.8	2502.1	2485.6	1880.7
62.5°	396.5	413.0	467.5	588.3	816.2	1182.9	1865.5	2326.7	2703.8	2698.0	2036.3
65°	227.9	240.3	278.2	371.4	563.1	929.8	1667.7	2299.4	2828.0	2824.6	2094.5
66°	186.2	193.9	223.0	290.3	464.6	816.5	1552.8	2241.9	2840.3	2840.4	2087.8
67.5°	148.9	152.4	165.4	207.8	342.8	647.2	1347.4	2115.2	2825.0	2829.2	2044.6
70°	123.2	125.0	129.1	139.3	187.1	390.3	956.4	1785.7	2671.4	2674.7	1876.3
72.5°	110.5	111.6	113.2	114.6	132.0	218.1	584.1	1428.5	2342.2	2346.4	1619.7
75°	100.1	100.7	100.5	100.6	110.8	139.0	301.9	1066.5	1893.8	1885.5	1240.8
77.5°	88.0	88.5	87.4	87.6	98.0	106.8	150.2	746.6	1278.1	1219.0	699.1
80°	74.3	74.8	74.3	75.2	85.3	80.7	87.4	420.0	565.1	534.5	248.6
82.5°	56.2	58.2	59.6	63.0	70.3	57.4	58.4	163.6	172.1	163.8	76.2
85°	24.6	30.0	44.9	48.2	52.8	34.4	38.4	66.7	70.0	67.9	27.7
87.5°	6.5	7.1	22.2	28.0	29.3	15.5	20.0	30.4	32.0	30.4	9.2
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°	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5	321.5
2.5°	325.0	319.2	308.7	299.3	292.3	287.5	282.7	280.3	278.9	277.5	277.7
5°	335.4	323.6	305.6	292.8	285.6	281.1	278.7	277.7	277.1	275.7	275.7
7.5°	351.1	334.4	309.5	296.4	290.7	287.3	285.8	285.4	284.6	283.0	283.2
10°	370.8	347.4	317.8	305.0	299.8	296.0	294.0	293.3	291.9	290.0	290.3
12.5°	394.0	363.5	328.6	315.2	309.0	303.9	300.5	298.5	296.2	293.7	293.9
15°	419.3	381.1	340.3	324.4	316.0	308.8	303.4	299.9	296.4	293.3	293.1
17.5°	445.0	398.1	349.3	329.5	318.0	308.5	301.3	295.9	291.5	287.6	287.3
20°	472.7	413.4	354.3	329.0	314.2	302.9	293.3	286.6	281.7	277.8	277.2
22.5°	500.9	427.7	355.2	324.1	305.7	291.9	281.8	274.4	269.4	265.4	264.0
25°	526.8	438.8	351.7	314.6	293.9	279.0	269.1	261.6	257.5	252.9	251.4
27.5°	550.3	446.6	344.8	302.6	280.6	266.0	256.7	250.2	245.8	242.2	241.0
30°	571.4	450.8	333.4	288.2	267.0	253.7	245.8	241.4	237.6	233.0	232.2
32.5°	591.5	450.8	318.8	272.6	253.5	242.8	238.2	235.4	231.1	226.7	225.5
35°	611.6	448.0	301.6	256.2	241.0	235.1	234.8	231.6	225.0	219.0	217.5
37.5°	632.8	442.4	282.3	240.9	230.9	231.6	233.6	226.5	217.1	208.6	206.4
40°	656.7	434.6	262.2	227.6	222.4	230.0	230.4	219.0	200.9	193.1	191.1
42.5°	684.7	426.9	243.5	215.9	215.7	225.4	224.3	203.0	192.2	188.2	187.1
45°	721.7	422.4	225.9	204.8	210.4	217.8	213.9	194.2	189.6	187.4	186.4
47.5°	779.9	424.7	209.6	196.0	205.2	210.3	194.5	190.6	187.4	184.6	183.7
50°	852.8	423.4	196.5	189.9	199.2	202.4	185.8	185.9	184.3	181.2	179.7
52.5°	907.6	413.1	188.0	186.4	193.9	188.5	180.3	181.4	180.6	176.0	174.5
55°	960.5	404.3	183.7	185.1	190.1	171.0	173.9	176.5	175.7	171.2	170.5
57.5°	1026.4	402.6	181.0	185.5	186.9	162.3	167.7	171.1	170.5	168.6	168.3
60°	1107.0	403.1	178.7	186.1	183.3	155.8	161.8	166.2	166.6	166.2	166.0
62.5°	1151.4	390.0	172.7	184.4	177.0	150.2	155.7	162.2	162.3	163.0	162.9
65°	1113.7	351.1	161.6	178.5	166.3	145.6	150.5	157.5	155.7	158.9	158.9
66°	1077.2	328.6	156.1	174.7	161.8	143.8	148.8	155.1	152.8	157.3	157.3
67.5°	1002.5	290.7	146.1	166.6	155.4	141.2	146.9	151.2	148.1	154.6	154.2
70°	866.0	224.9	126.2	148.2	144.7	137.5	144.2	143.3	138.7	148.8	146.9
72.5°	730.1	170.9	101.3	124.0	128.6	132.9	140.5	133.2	127.5	134.6	130.4
75°	566.6	128.5	80.1	96.4	108.6	125.6	136.1	121.7	113.4	112.7	110.4
77.5°	306.3	88.2	63.5	73.6	86.3	116.5	133.1	109.2	96.8	93.9	92.1
80°	121.3	57.4	46.1	55.8	60.3	103.4	126.0	94.8	79.8	77.0	74.2
82.5°	50.1	33.9	29.8	37.4	39.3	88.4	113.0	77.7	61.7	85.3	90.6
85°	21.5	18.6	17.7	19.4	22.2	62.0	90.0	59.3	66.6	59.4	47.2
87.5°	6.5	7.9	7.5	7.4	8.1	14.8	47.9	33.0	48.9	18.5	13.9
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)