

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: P348900

Luminaire Tested: **ARCH-N-PA1-30-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348900
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-PA1-30-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2287 lumens
Efficiency: N/A
Efficacy: 73.8 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

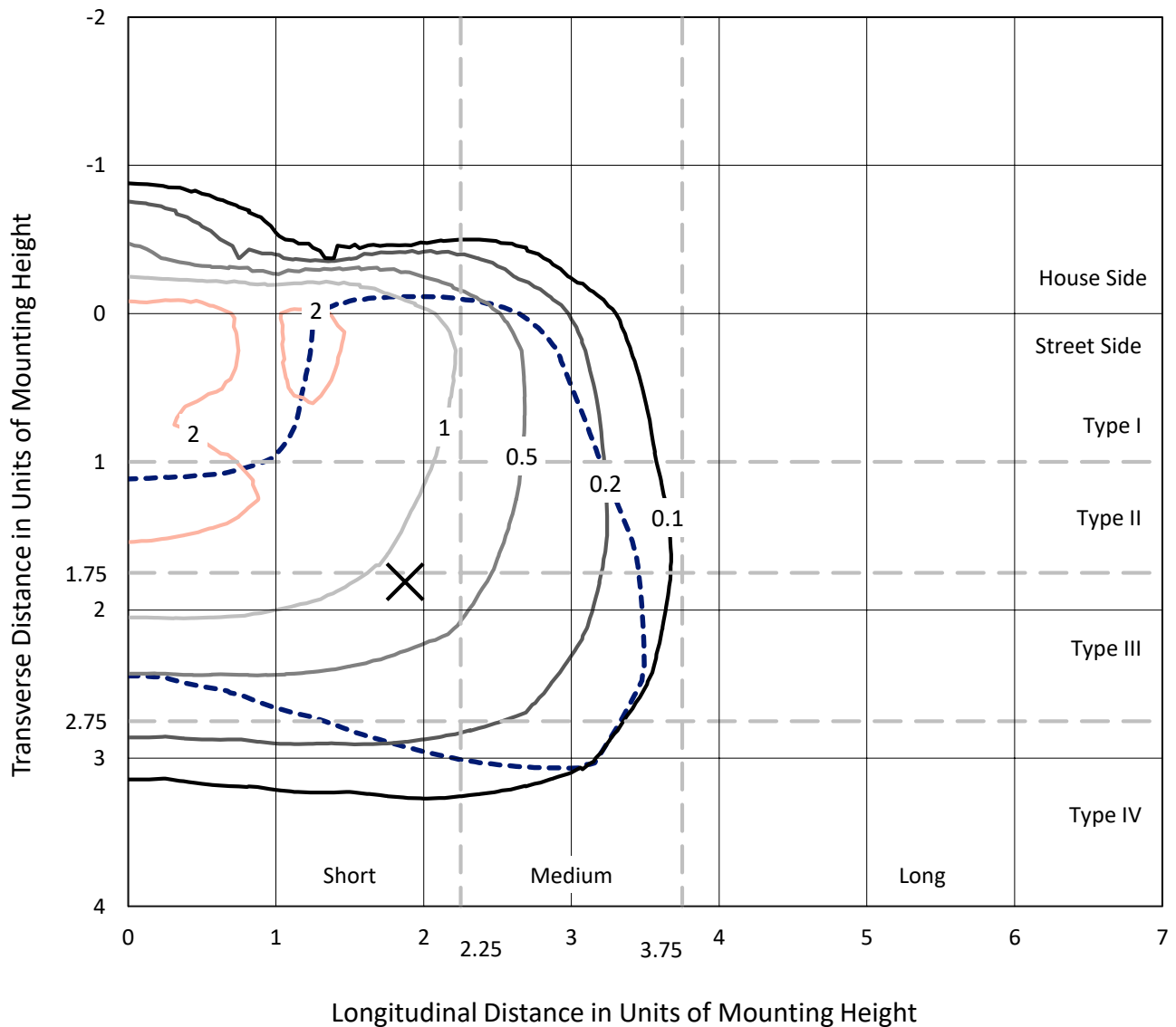


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

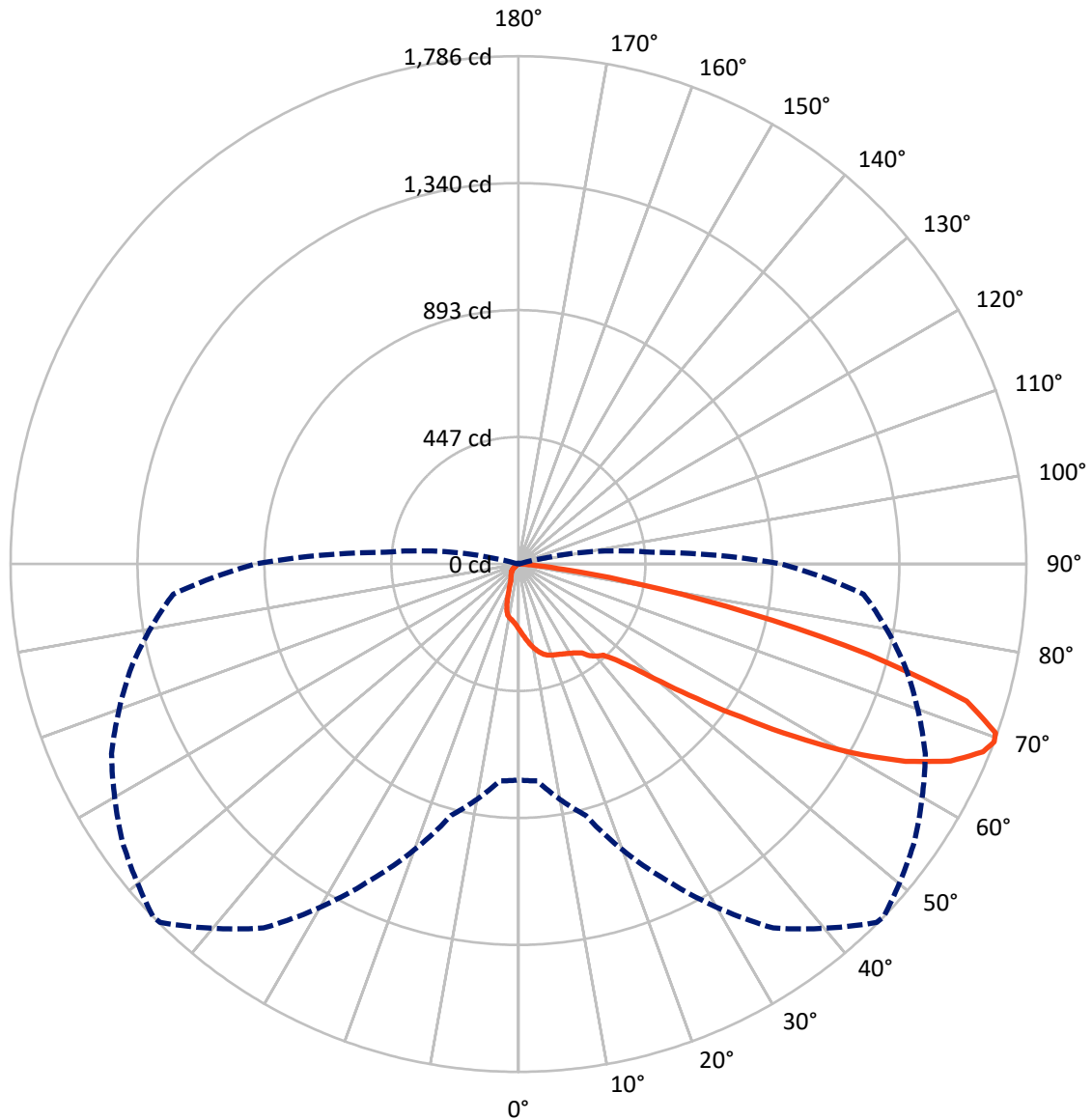


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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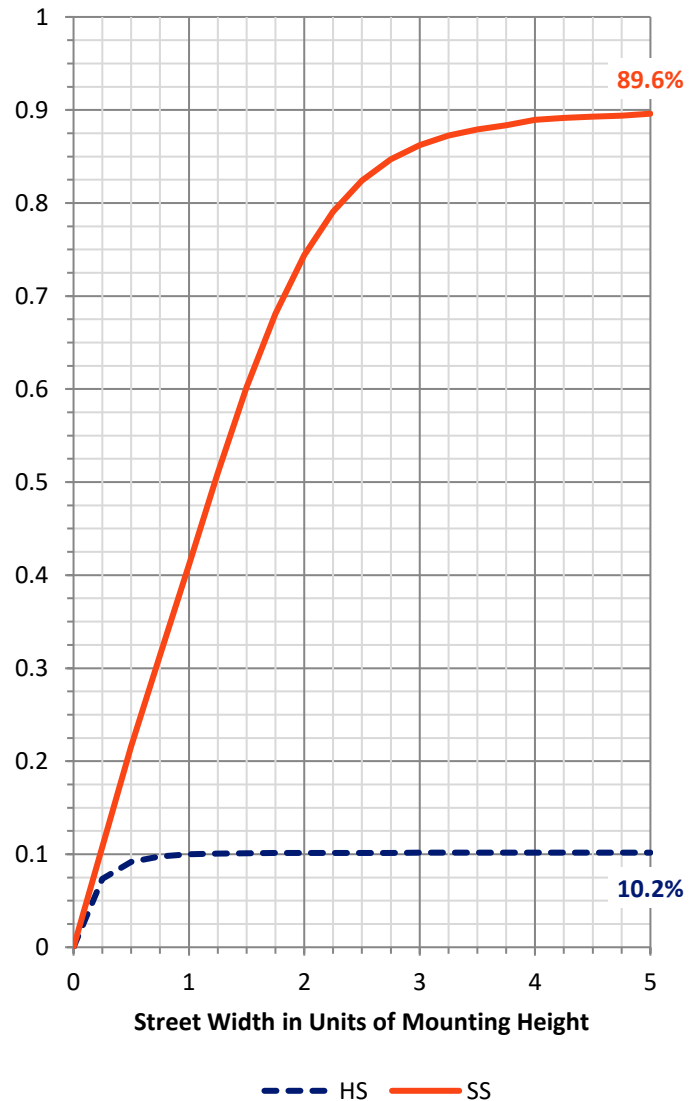
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	234.7	0.0	234.7
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	2052.3	0.0	2052.3
	% Fixture	89.7	0.0	89.7
Total	Lumens	2287.0	0.0	2287.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.8	1.0
10°-20°	69.2	3.0
20°-30°	108.8	4.8
30°-40°	156.1	6.8
40°-50°	269.7	11.8
50°-60°	532.8	23.3
60°-70°	744.7	32.6
70°-80°	359.8	15.7
80°-90°	23.1	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°	2287.0	100.0
0°-180°	2287.0	100.0



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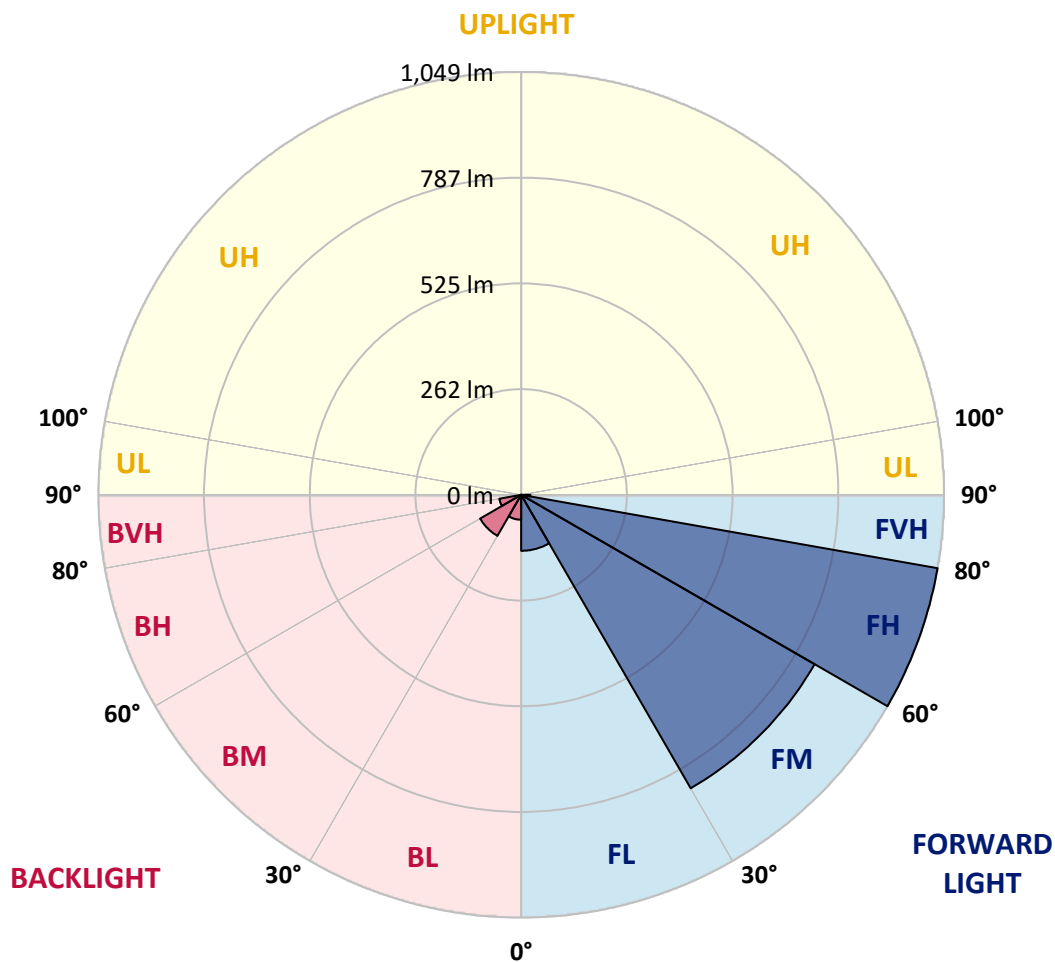
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	139.0	6.1			
FM	(30°-60°)	841.0	36.8			
FH	(60°-80°)	1049.4	45.9			G1/1800
FVH	(80°-90°)	22.9	1.0			G1/100
BL	(0°-30°)	61.9	2.7	B0/110		
BM	(30°-60°)	117.6	5.1	B0/220		
BH	(60°-80°)	55.0	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°	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1
2.5°	254.6	254.2	252.7	252.1	248.5	246.3	245.4	242.8	238.9	235.0	230.8
5°	283.5	283.4	280.6	277.9	271.1	264.6	263.5	257.2	248.6	240.4	232.3
7.5°	313.1	311.7	308.9	303.8	293.8	283.5	282.5	273.8	261.4	249.6	237.9
10°	338.2	337.3	333.7	325.9	314.2	302.5	301.3	290.5	276.5	262.1	247.2
12.5°	357.7	357.1	352.2	342.5	330.1	317.9	316.3	306.7	291.8	275.6	258.0
15°	369.6	369.3	363.4	353.0	340.8	330.3	328.9	320.4	306.6	289.6	269.8
17.5°	372.4	372.5	366.4	355.9	345.8	338.3	337.2	330.8	319.2	302.4	281.6
20°	366.2	367.5	362.0	352.9	346.7	342.7	341.8	338.0	328.2	312.4	291.0
22.5°	357.4	358.0	354.3	348.2	345.6	346.4	345.9	343.8	335.5	320.9	300.3
25°	352.0	352.0	349.8	344.6	346.4	351.0	351.1	350.6	344.1	331.4	311.7
27.5°	351.8	351.2	348.6	344.7	349.5	356.5	357.0	359.9	355.8	344.2	325.9
30°	360.4	359.6	354.2	349.1	355.1	362.8	363.8	370.2	368.1	358.0	341.6
32.5°	380.4	377.8	365.7	357.4	361.9	371.0	372.4	382.5	385.7	375.1	356.9
35°	407.9	399.4	382.0	373.1	373.5	383.0	384.3	399.1	408.7	390.7	368.7
37.5°	445.8	441.6	413.2	389.3	391.3	405.8	409.5	425.6	422.9	399.3	382.1
40°	528.7	522.2	492.0	435.0	408.3	424.2	425.4	434.0	434.2	418.7	409.9
42.5°	641.8	639.1	607.2	517.9	441.9	436.5	438.7	453.2	469.3	459.7	459.3
45°	766.9	765.5	731.7	627.9	509.8	477.0	479.6	499.0	530.0	532.2	545.8
47.5°	867.6	866.9	847.5	750.7	613.7	545.5	546.3	566.9	621.4	648.3	670.1
50°	959.4	962.5	947.2	883.6	755.2	652.8	650.8	664.5	752.0	796.1	823.1
52.5°	1087.0	1091.4	1048.4	1007.5	903.7	786.0	784.4	798.8	909.0	942.0	946.8
55°	1199.7	1192.2	1158.2	1146.4	1084.8	950.5	950.1	962.7	1060.8	1074.9	1083.8
57.5°	1249.4	1246.5	1262.9	1290.0	1274.5	1144.9	1143.9	1134.3	1196.7	1198.2	1225.5
60°	1280.9	1284.4	1334.7	1418.0	1456.5	1354.1	1347.9	1289.0	1326.4	1323.1	1352.4
62.5°	1257.3	1264.2	1354.7	1493.6	1592.7	1536.7	1527.9	1430.8	1437.3	1425.8	1453.1
65°	1132.0	1142.8	1291.1	1479.3	1660.2	1679.4	1670.5	1555.9	1525.3	1506.5	1491.3
67.5°	919.2	925.6	1080.4	1355.3	1629.8	1764.6	1762.7	1665.6	1591.8	1492.8	1375.5
69°	759.6	765.9	915.0	1224.7	1562.8	1782.8	1786.3	1700.8	1579.2	1410.1	1218.8
70°	643.4	650.1	789.0	1112.7	1485.0	1774.3	1780.6	1697.4	1542.9	1314.2	1081.2
72.5°	337.5	343.2	485.7	766.6	1210.6	1629.2	1648.4	1554.0	1307.9	954.4	639.3
75°	106.0	109.4	189.7	400.7	828.9	1266.8	1271.2	1219.0	928.7	525.0	266.3
77.5°	40.4	39.5	63.2	147.7	419.1	797.7	824.6	761.8	487.4	185.6	61.4
80°	21.8	21.9	32.8	61.1	179.3	409.9	432.7	369.2	173.2	57.9	14.2
82.5°	9.4	9.9	18.4	32.4	82.4	151.2	162.6	135.3	66.2	38.9	5.3
85°	2.0	2.3	8.9	17.6	33.6	42.5	44.5	43.9	42.1	30.2	2.0
87.5°	0.0	0.0	4.0	6.3	8.5	9.7	8.5	11.0	23.3	20.4	1.1
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°	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1
2.5°	229.4	227.4	224.1	220.5	217.9	215.2	213.1	212.1	211.0	210.3	211.2
5°	228.9	225.2	218.7	212.5	208.0	204.4	201.4	200.2	199.0	198.2	198.1
7.5°	232.7	227.4	217.6	208.5	201.5	196.6	192.5	190.8	189.4	188.7	188.2
10°	239.9	233.1	219.9	208.0	199.0	190.7	181.9	175.1	170.7	168.7	167.9
12.5°	249.2	240.7	224.4	210.3	197.2	181.1	162.5	146.4	136.0	132.5	130.5
15°	260.1	249.6	230.3	213.2	190.5	161.2	129.5	108.5	98.9	96.9	94.8
17.5°	270.6	259.1	237.4	213.7	176.0	128.8	94.9	80.6	76.9	78.2	78.5
20°	279.9	268.4	244.4	209.0	149.5	96.6	73.5	69.9	71.3	73.8	74.2
22.5°	289.2	277.4	250.8	196.6	115.6	73.3	66.2	67.0	68.4	70.9	71.3
25°	300.6	288.3	256.8	173.7	86.7	62.4	62.8	64.1	65.5	67.8	68.0
27.5°	313.6	302.2	260.8	144.0	64.3	57.4	58.8	60.7	62.1	64.2	64.7
30°	331.0	320.4	262.1	113.2	53.9	52.9	53.5	55.9	57.9	59.8	60.2
32.5°	347.3	338.4	257.8	85.5	50.0	48.7	48.7	50.1	52.4	54.3	54.7
35°	362.3	356.5	244.1	62.5	47.0	44.8	43.7	43.7	45.3	46.8	47.2
37.5°	382.2	382.0	221.9	49.9	44.1	41.6	39.4	37.6	37.1	37.4	37.6
40°	416.2	416.5	192.9	44.7	41.6	38.3	34.8	31.7	28.8	27.9	27.8
42.5°	469.2	464.4	162.6	42.2	39.5	34.8	29.7	25.5	21.0	19.6	19.5
45°	553.5	524.9	130.4	40.0	37.2	31.0	24.6	18.9	15.2	14.2	14.2
47.5°	676.3	604.3	101.0	37.5	34.2	26.6	18.6	13.6	11.2	10.6	10.7
50°	803.3	682.2	77.4	34.4	30.6	22.0	13.7	9.9	8.5	8.5	8.6
52.5°	915.8	739.2	60.4	31.1	26.1	17.3	10.4	7.7	7.1	7.0	7.1
55°	1021.3	776.0	46.2	27.2	20.7	12.9	7.9	6.3	5.9	5.7	5.6
57.5°	1122.9	794.2	34.6	22.0	15.0	9.3	6.3	5.4	4.9	4.6	4.5
60°	1190.6	779.4	23.8	16.2	10.4	6.8	5.3	4.6	4.1	3.8	3.6
62.5°	1228.7	739.0	15.3	11.7	7.4	5.0	4.2	3.9	3.1	2.8	2.8
65°	1213.3	672.3	10.7	8.4	5.4	3.8	3.1	3.1	2.3	1.8	1.7
67.5°	1075.2	568.0	8.1	6.2	3.9	2.8	2.4	2.7	1.4	0.9	0.9
69°	925.1	470.7	7.0	5.1	3.2	2.3	2.0	2.5	1.0	0.6	0.5
70°	804.0	406.1	6.3	4.5	2.7	1.9	1.8	2.4	1.0	0.5	0.4
72.5°	481.0	226.5	4.8	3.2	1.7	1.5	1.5	2.7	1.0	0.5	0.4
75°	194.4	79.8	3.5	2.3	1.3	1.3	1.8	3.4	0.9	0.4	0.3
77.5°	44.1	17.5	2.0	1.4	0.9	1.3	2.1	2.7	0.5	0.2	0.0
80°	10.7	4.3	1.3	0.9	0.5	1.0	1.6	1.5	0.1	0.0	0.0
82.5°	3.5	1.5	0.5	0.4	0.1	0.3	0.8	0.4	0.0	0.0	0.0
85°	1.5	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)