

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: P348790

Luminaire Tested: **ARCH-N-PA1-50-827-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348790
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3953 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

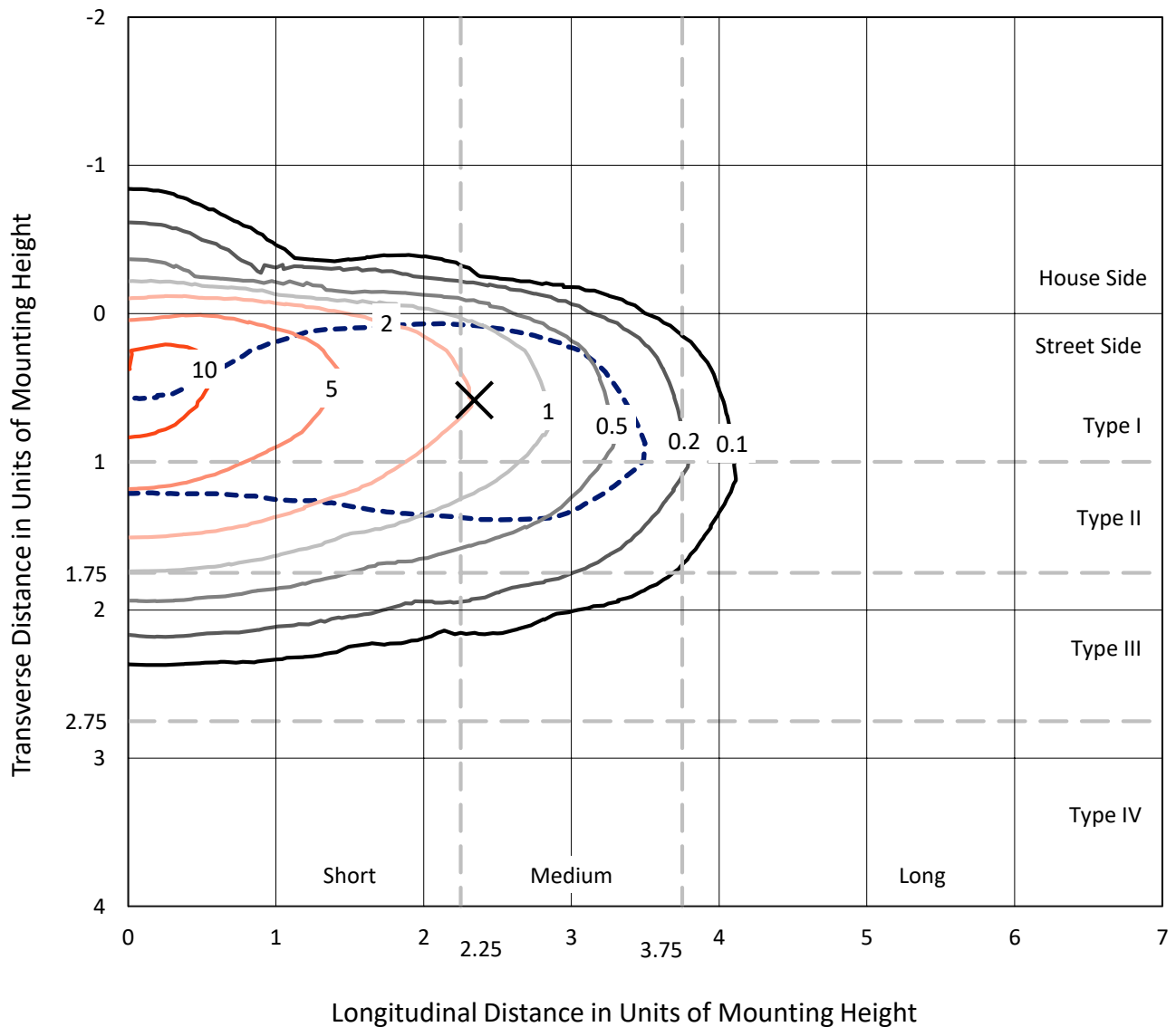
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

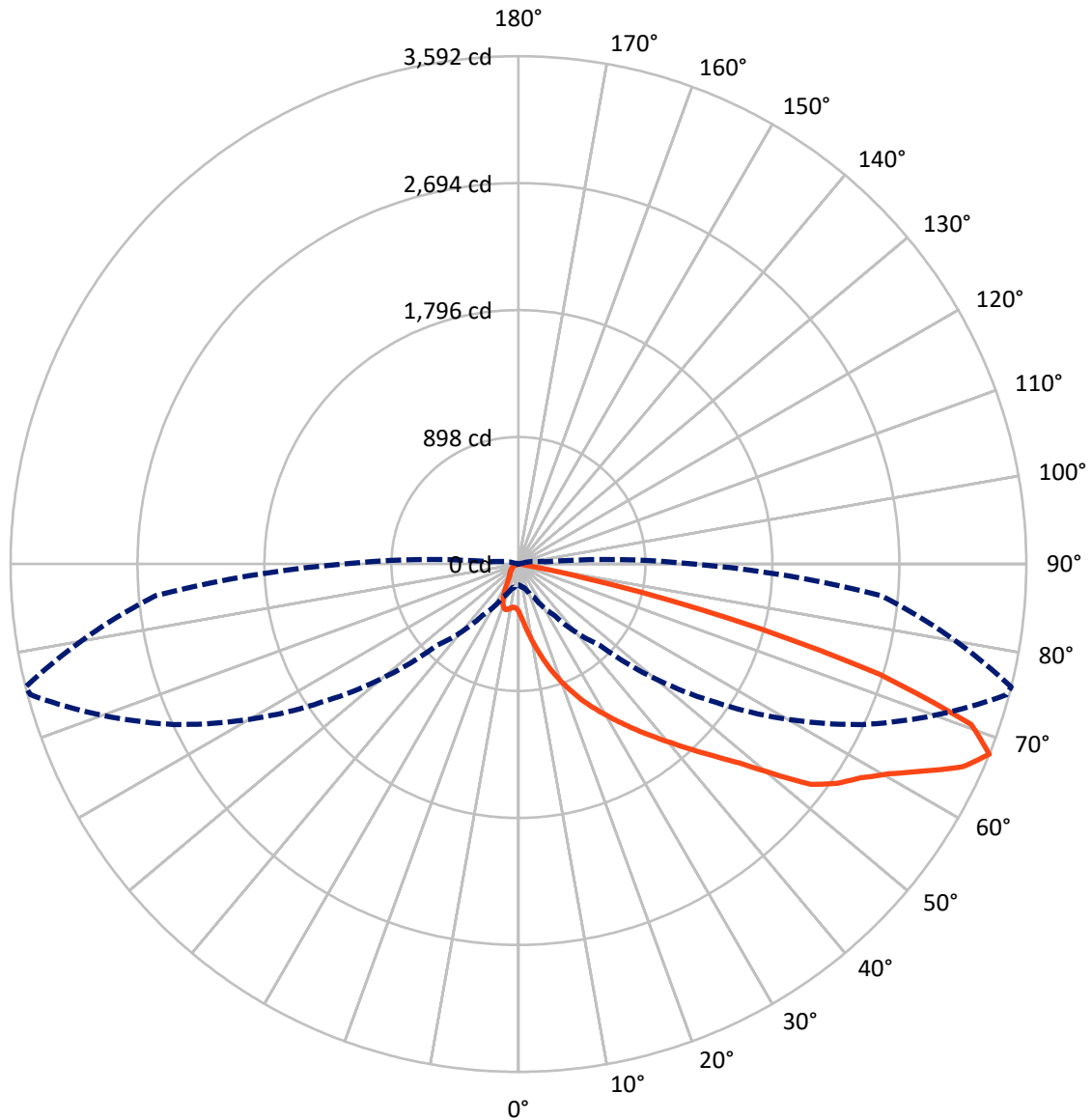
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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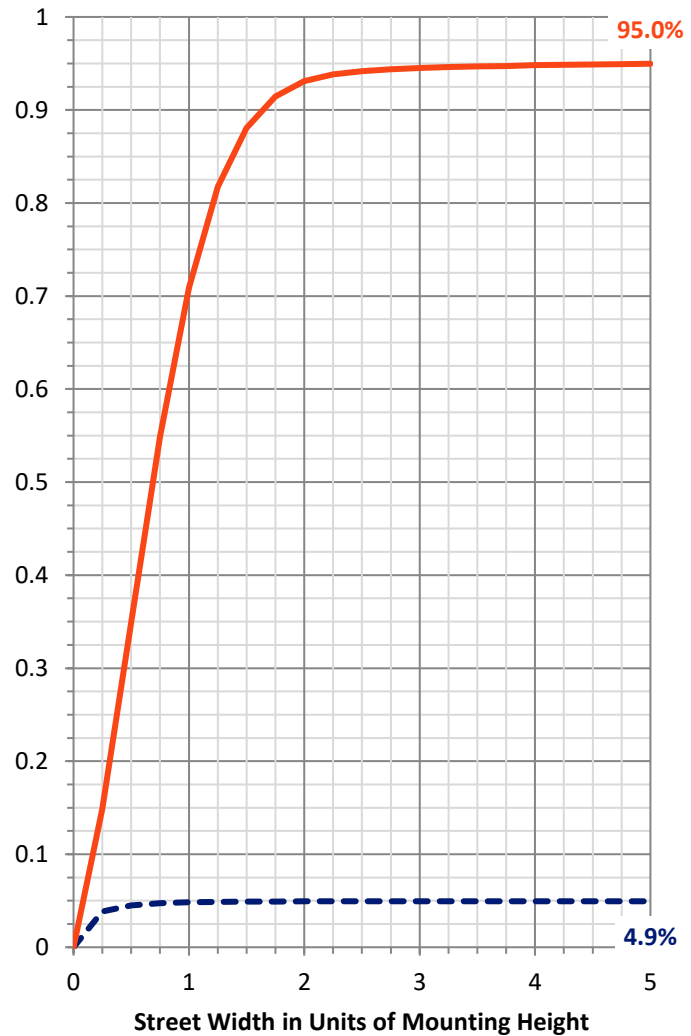
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	196.3	0.0	196.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	3756.7	0.0	3756.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	3953.0	0.0	3953.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	1.1
10°-20°	165.3	4.2
20°-30°	336.3	8.5
30°-40°	583.7	14.8
40°-50°	824.8	20.9
50°-60°	935.3	23.7
60°-70°	775.8	19.6
70°-80°	281.0	7.1
80°-90°	9.1	0.2
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°	3953.0	100.0
0°-180°	3953.0	100.0



--- HS — SS

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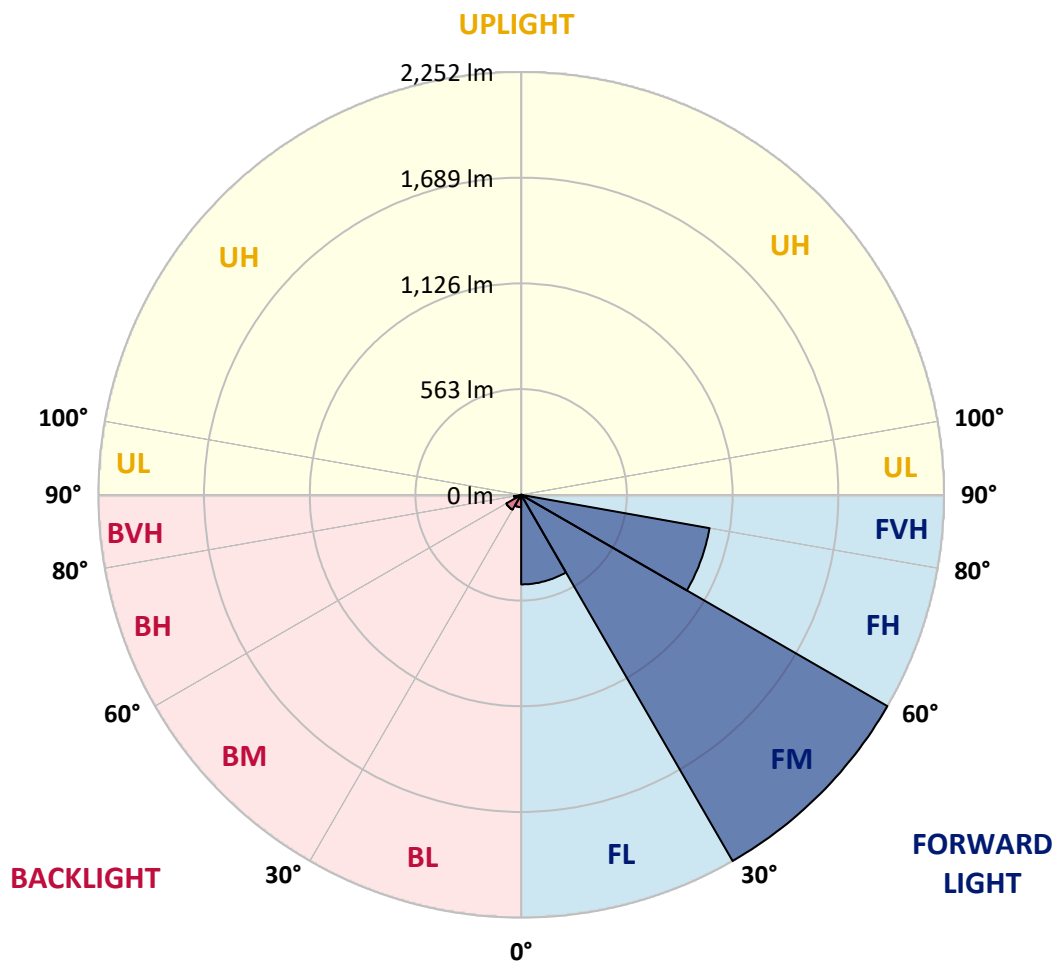
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	477.1	12.1			
FM	(30°-60°)	2251.9	57.0			
FH	(60°-80°)	1018.8	25.8			G1/1800
FVH	(80°-90°)	8.8	0.2			G0/10
BL	(0°-30°)	66.2	1.7	B0/110		
BM	(30°-60°)	91.9	2.3	B0/220		
BH	(60°-80°)	37.9	1.0	B0/110		G0/110
BVH	(80°-90°)	0.3	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3
2.5°	500.6	489.3	491.9	484.6	471.5	444.4	421.4	399.6	374.1	373.3	352.3
5°	675.0	665.5	664.2	649.5	625.6	579.7	535.0	484.1	427.3	423.1	378.6
7.5°	833.3	825.7	822.9	805.4	760.9	716.2	658.0	583.2	494.3	486.7	414.1
10°	954.9	951.3	951.9	939.5	901.4	859.8	783.4	688.0	570.4	558.6	456.7
12.5°	1047.0	1047.9	1054.1	1046.5	1025.2	994.4	912.8	799.7	654.5	638.4	505.4
15°	1114.8	1119.1	1130.5	1140.0	1138.5	1111.8	1037.0	913.1	743.9	726.1	559.6
17.5°	1158.6	1163.4	1180.1	1201.2	1220.6	1214.4	1156.9	1022.6	834.3	813.7	617.7
20°	1197.0	1202.7	1220.6	1248.5	1284.7	1292.5	1254.7	1128.8	924.6	899.5	677.6
22.5°	1280.3	1280.2	1291.1	1307.4	1341.8	1361.9	1338.0	1227.3	1013.8	987.6	738.7
25°	1431.0	1425.3	1421.5	1408.7	1416.3	1428.8	1415.4	1319.5	1103.5	1077.0	800.7
27.5°	1610.1	1613.6	1582.8	1548.3	1521.6	1508.8	1487.0	1404.9	1189.8	1160.7	861.4
30°	1799.1	1800.1	1763.8	1719.8	1661.1	1612.4	1574.6	1486.5	1278.4	1246.7	920.2
32.5°	1969.5	1962.8	1926.8	1866.8	1792.7	1738.0	1659.5	1577.6	1372.3	1341.7	985.7
35°	2104.6	2096.7	2052.9	1998.3	1921.4	1866.3	1771.9	1668.5	1471.0	1441.1	1051.4
37.5°	2203.4	2194.0	2149.0	2092.9	2026.5	1994.5	1902.3	1767.4	1578.8	1546.6	1120.5
40°	2237.7	2229.5	2201.3	2160.2	2106.9	2099.6	2040.7	1881.2	1696.0	1661.7	1198.8
42.5°	2217.2	2209.3	2199.2	2185.4	2163.2	2170.1	2171.3	2010.9	1826.3	1792.5	1285.2
45°	2136.2	2129.1	2139.5	2159.7	2187.3	2221.6	2290.5	2150.4	1971.8	1935.8	1385.1
47.5°	2016.8	2011.6	2040.4	2091.0	2171.5	2266.1	2399.4	2296.9	2135.1	2101.7	1509.8
50°	1847.1	1846.2	1903.7	1996.0	2119.9	2287.5	2512.0	2463.5	2362.0	2326.9	1683.2
52.5°	1582.8	1584.5	1697.6	1845.3	2029.3	2273.0	2584.4	2677.6	2626.0	2589.4	1833.4
55°	1331.1	1341.5	1421.7	1634.7	1890.4	2219.0	2609.4	2777.5	2771.7	2737.0	1916.9
57.5°	1084.6	1103.5	1180.8	1379.8	1687.6	2094.4	2595.7	2820.9	2880.1	2853.6	2027.0
60°	817.5	826.2	915.2	1101.3	1427.2	1867.2	2496.4	2844.4	3028.4	3010.0	2186.9
62.5°	520.1	541.8	620.8	800.2	1111.3	1551.6	2329.1	2844.1	3213.9	3223.9	2393.2
65°	274.0	299.3	341.2	495.9	763.7	1199.1	2077.4	2817.4	3441.5	3455.5	2554.5
67.5°	147.7	155.0	177.2	257.4	442.9	812.3	1707.6	2685.7	3573.3	3591.8	2577.0
70°	108.1	112.1	120.4	142.4	222.9	471.8	1246.1	2387.3	3403.3	3396.4	2289.6
72.5°	83.0	89.2	95.4	104.3	128.2	251.8	775.8	1869.4	2715.5	2669.8	1711.5
75°	65.5	66.5	75.3	83.3	96.1	143.4	344.5	1088.8	1657.4	1549.2	887.5
77.5°	52.3	53.0	58.2	65.1	77.3	94.2	106.7	428.3	529.1	472.2	192.6
80°	31.0	32.7	43.3	50.2	64.1	59.4	39.0	93.0	82.6	74.8	32.4
82.5°	17.3	18.7	24.4	39.7	44.7	28.4	19.4	25.1	19.4	18.9	9.2
85°	0.0	0.9	15.8	24.6	18.2	6.2	8.1	8.3	5.7	5.4	3.6
87.5°	0.0	0.0	4.8	4.7	0.7	1.0	1.9	2.8	2.3	2.3	1.9
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°	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3	335.3
2.5°	341.9	332.6	314.9	297.6	283.0	271.1	260.3	256.0	252.5	252.0	249.2
5°	357.2	338.3	304.5	276.8	258.3	245.1	233.8	226.9	221.5	219.5	217.5
7.5°	380.2	351.6	303.1	271.2	249.1	226.9	206.1	183.6	169.6	164.2	161.1
10°	408.2	369.3	308.3	269.7	230.9	184.1	149.7	121.1	109.5	105.7	104.6
12.5°	441.0	391.3	317.3	260.0	192.1	130.8	103.2	93.5	90.9	89.7	89.7
15°	478.6	415.4	323.7	231.9	142.0	98.9	89.4	84.9	82.1	80.5	80.7
17.5°	517.0	438.9	320.6	191.2	104.8	88.0	80.9	76.0	72.2	70.7	70.3
20°	555.8	460.7	303.3	142.4	88.7	79.8	71.9	66.5	62.7	61.1	60.8
22.5°	596.0	479.3	272.8	104.4	79.7	70.8	63.0	57.7	54.0	52.7	52.0
25°	635.2	494.3	230.2	84.5	71.2	62.4	54.9	49.9	46.6	45.2	45.0
27.5°	671.7	503.9	180.8	74.7	63.7	54.7	48.0	43.5	40.7	39.7	39.5
30°	704.6	504.7	133.7	67.4	57.2	48.2	41.9	37.9	35.5	34.5	34.1
32.5°	737.9	497.5	97.3	60.8	51.1	42.4	36.4	33.3	31.5	30.7	30.7
35°	769.2	480.6	75.9	55.1	45.2	36.9	32.0	29.8	28.8	27.9	27.9
37.5°	799.9	456.6	64.4	50.1	39.7	32.2	28.2	26.8	26.0	25.1	25.1
40°	831.0	426.3	58.5	45.4	35.2	28.6	25.1	23.9	23.0	22.3	22.2
42.5°	869.3	391.3	54.7	41.1	31.2	25.3	22.2	20.8	20.1	19.4	19.1
45°	913.7	361.1	51.6	36.7	27.9	22.5	19.2	17.8	16.8	15.9	15.8
47.5°	977.6	339.3	47.5	32.0	24.8	19.6	16.6	15.1	13.5	12.6	12.5
50°	1059.2	321.3	42.1	27.9	21.7	16.6	13.9	12.0	10.6	9.7	9.7
52.5°	1099.7	297.7	37.2	24.2	18.2	14.0	11.3	9.0	8.3	7.4	7.4
55°	1116.0	279.7	32.4	20.6	15.1	11.6	8.8	6.9	6.4	5.9	5.7
57.5°	1161.7	274.5	28.2	17.5	12.5	9.2	6.8	5.2	4.8	4.2	4.2
60°	1235.3	277.1	24.4	14.9	10.0	7.1	5.0	4.0	3.6	2.9	2.9
62.5°	1314.8	273.8	20.6	12.8	7.8	5.2	3.5	2.9	2.9	1.7	1.6
65°	1330.1	243.9	17.7	10.6	6.1	3.8	2.3	1.9	2.6	0.3	0.0
67.5°	1234.4	189.1	15.2	8.1	4.5	2.9	1.7	0.9	2.3	0.0	0.0
70°	987.1	120.2	12.3	5.9	3.5	2.4	1.4	0.3	1.7	0.0	0.0
72.5°	698.0	69.8	9.7	4.2	2.9	1.9	1.0	0.0	1.0	0.0	0.0
75°	353.0	37.2	6.1	3.1	2.3	1.4	0.7	0.0	0.2	0.0	0.0
77.5°	76.4	17.3	3.8	2.3	1.6	0.9	0.3	0.0	0.0	0.0	0.0
80°	16.6	7.6	2.4	1.4	0.9	0.5	0.0	0.0	0.0	0.0	0.0
82.5°	6.1	4.0	1.2	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	2.1	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.7	0.2	0.2	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)