

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: P348810

Luminaire Tested: **ARCH-N-PA1-40-727-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-727-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3256 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

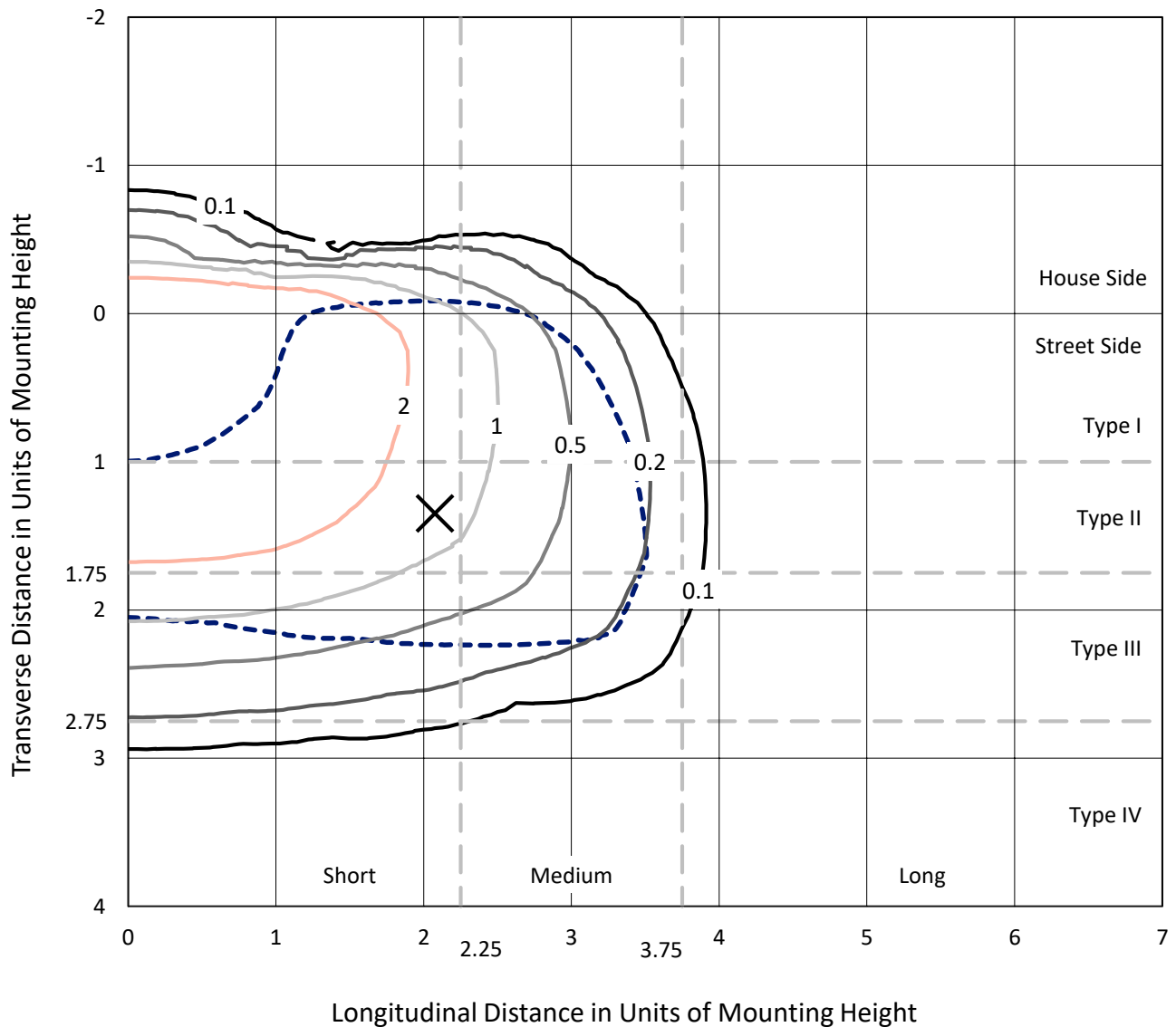
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P348810
 CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

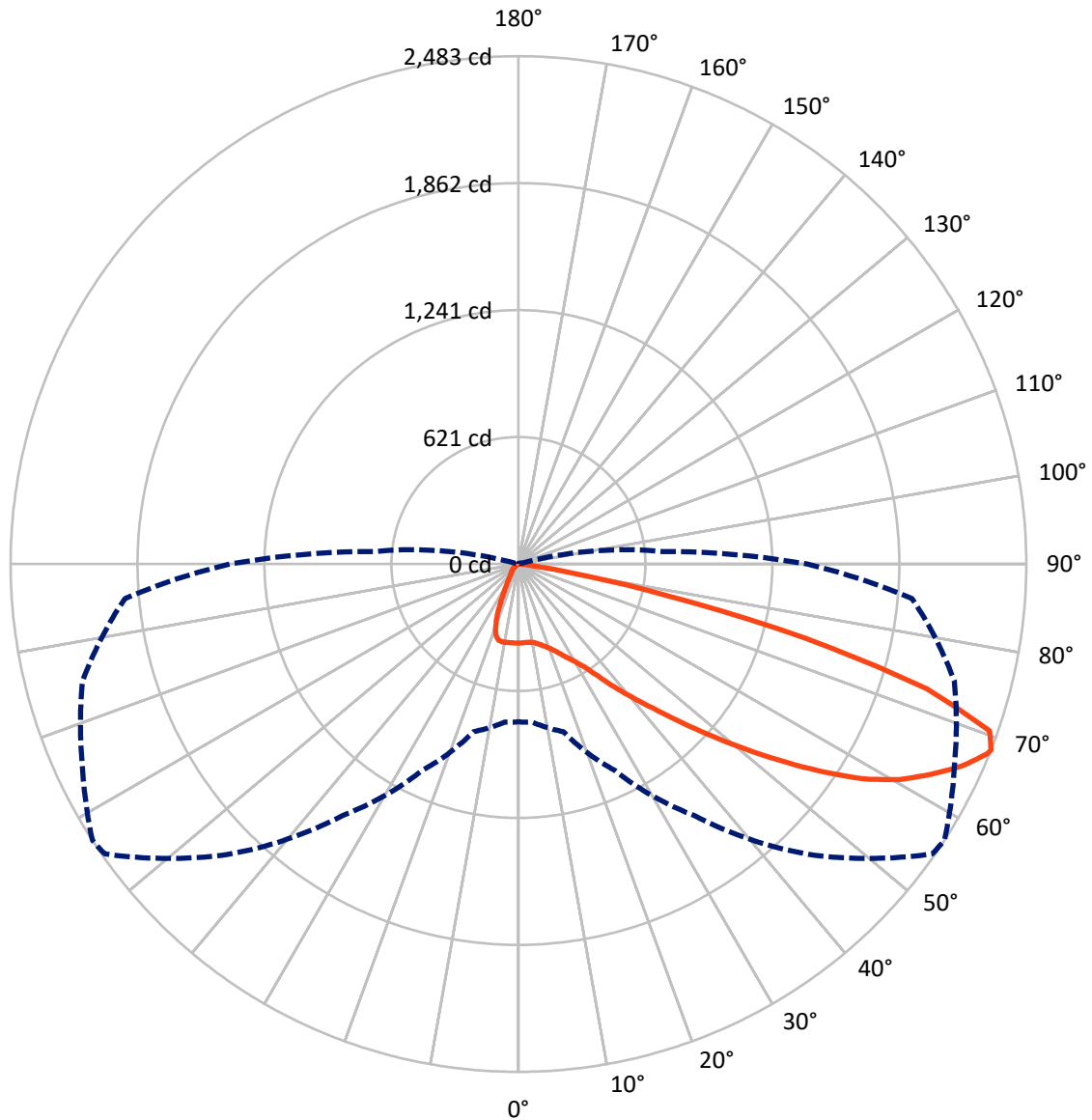


Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P348810

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P348810

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

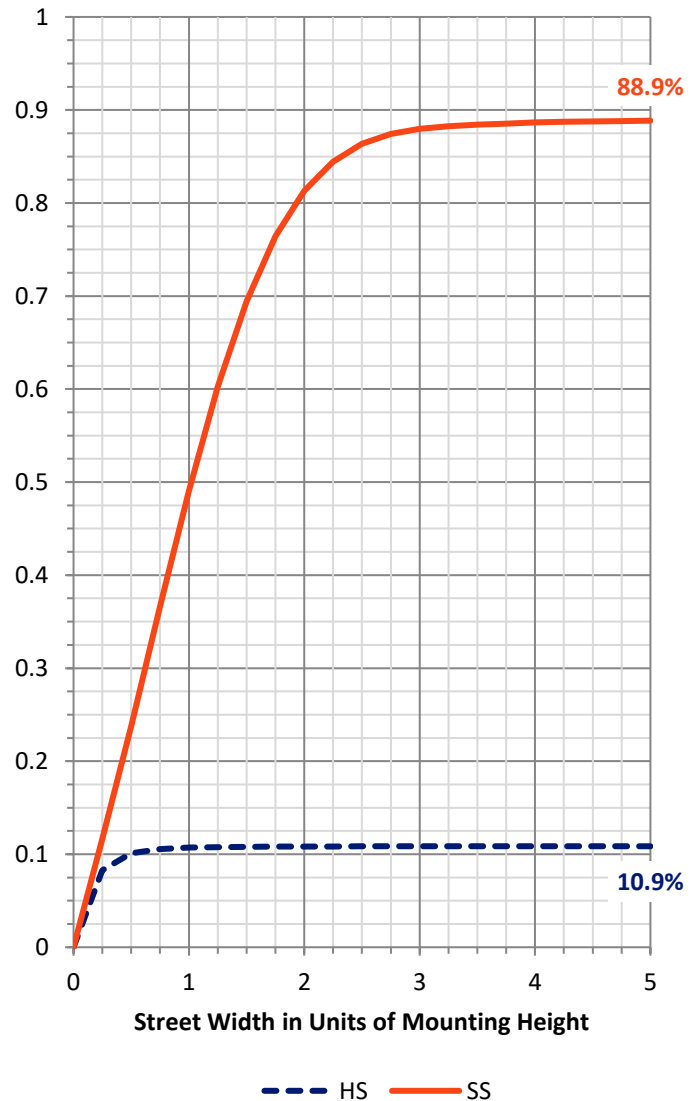
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	357.0	0.0	357.0
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	2899.0	0.0	2899.0
	% Fixture	89.0	0.0	89.0
Total	Lumens	3256.0	0.0	3256.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	1.1
10°-20°	100.3	3.1
20°-30°	173.1	5.3
30°-40°	298.7	9.2
40°-50°	511.0	15.7
50°-60°	817.6	25.1
60°-70°	944.6	29.0
70°-80°	360.9	11.1
80°-90°	13.5	0.4
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°	3256.0	100.0
0°-180°	3256.0	100.0



REPORT NUMBER: P348810

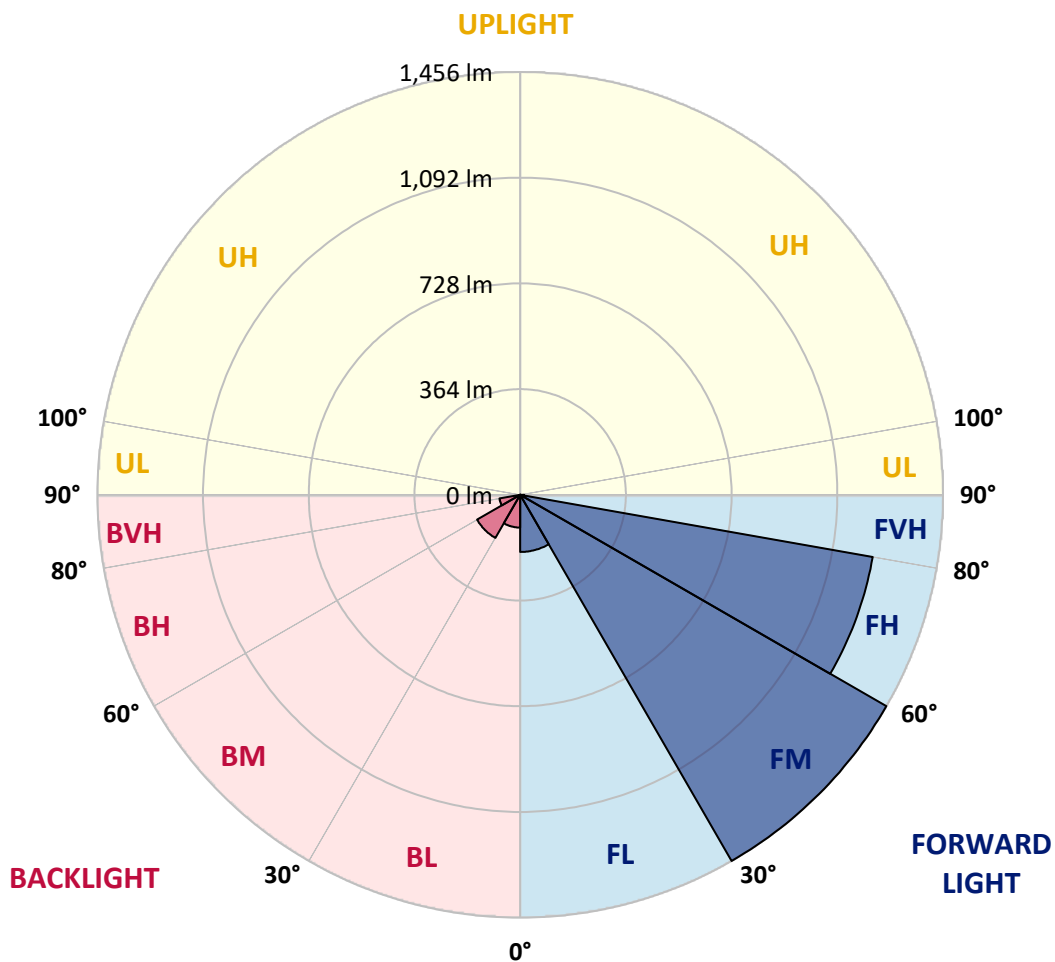
CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	196.8	6.0			
FM	(30°-60°)	1456.1	44.7			
FH	(60°-80°)	1232.8	37.9			G1/1800
FVH	(80°-90°)	13.3	0.4			G1/100
BL	(0°-30°)	112.8	3.5	B1/500		
BM	(30°-60°)	171.2	5.3	B0/220		
BH	(60°-80°)	72.7	2.2	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: B1-U0-G1

Type III Short





REPORT NUMBER: P348810

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	377.8	379.5	380.7	381.5	382.4	384.4	385.1	386.0	386.4	386.4	387.5
5°	362.9	364.7	367.3	369.5	373.8	379.4	383.4	384.9	387.7	390.1	391.5
7.5°	349.0	351.2	354.3	359.3	366.7	375.7	384.0	386.1	391.5	396.8	399.4
10°	340.1	341.8	345.8	353.0	362.7	375.2	386.9	389.5	398.8	407.5	412.5
12.5°	337.0	338.6	342.7	350.9	362.9	377.5	393.7	397.5	411.1	423.8	430.8
15°	341.5	341.8	346.3	354.0	365.8	383.2	404.9	409.5	426.6	443.2	451.9
17.5°	358.7	357.3	359.6	363.0	372.4	390.7	416.8	423.7	446.5	466.0	474.2
20°	401.8	401.8	396.6	387.4	387.5	402.4	432.8	440.6	468.5	491.1	498.5
22.5°	475.6	474.2	463.7	441.1	420.3	422.6	452.3	462.5	495.0	519.1	521.6
25°	564.3	562.6	546.4	514.5	478.5	455.3	478.8	490.5	526.5	547.9	542.9
27.5°	658.2	656.8	640.8	601.2	549.9	507.3	510.4	521.5	558.7	579.8	563.6
30°	749.2	749.6	733.8	693.1	635.1	573.7	550.4	556.9	590.0	611.4	588.3
32.5°	835.7	836.3	822.6	777.2	723.0	650.8	605.8	604.1	626.3	647.4	620.9
35°	912.8	914.4	905.0	869.7	812.3	736.7	677.7	673.7	677.9	701.7	671.0
37.5°	987.2	988.1	981.0	951.3	903.3	831.1	768.6	762.9	753.9	772.3	737.0
40°	1068.6	1066.3	1058.2	1031.2	990.0	935.3	866.2	856.3	840.8	857.1	823.8
42.5°	1144.4	1141.8	1143.1	1112.7	1077.9	1042.5	979.9	963.0	953.9	972.7	930.4
45°	1239.1	1237.7	1242.3	1215.8	1187.6	1161.9	1110.4	1091.9	1087.9	1109.9	1059.2
47.5°	1332.5	1335.9	1350.2	1339.0	1327.6	1305.0	1248.5	1240.1	1242.6	1269.2	1195.2
50°	1410.4	1414.4	1453.7	1466.6	1483.1	1469.8	1413.2	1408.1	1417.8	1441.8	1341.4
52.5°	1466.8	1474.9	1523.7	1583.3	1643.4	1652.3	1595.8	1591.2	1604.3	1607.9	1454.4
55°	1505.9	1513.1	1568.4	1677.4	1799.6	1838.1	1803.0	1785.2	1782.7	1746.2	1573.3
57.5°	1512.8	1512.0	1591.5	1738.2	1922.2	2021.5	1999.3	1981.8	1931.3	1874.0	1709.6
60°	1473.7	1478.2	1570.4	1759.3	1999.2	2160.2	2161.9	2139.1	2060.4	1998.2	1841.7
62.5°	1353.3	1371.5	1464.6	1704.0	1998.2	2216.1	2281.1	2263.7	2169.6	2100.0	1975.6
65°	1158.1	1164.5	1253.4	1514.6	1863.2	2192.7	2388.4	2381.9	2268.0	2198.8	2044.4
67.5°	845.7	831.7	925.0	1192.7	1577.5	2056.3	2465.3	2473.5	2343.9	2219.2	1971.1
68°	771.8	776.0	848.6	1113.1	1502.6	2008.1	2470.4	2482.9	2351.4	2205.9	1931.1
70°	460.0	468.0	532.9	766.4	1143.1	1735.4	2415.6	2444.1	2306.5	2069.4	1670.3
72.5°	117.5	127.0	188.3	343.0	652.9	1222.7	2039.2	2087.4	2002.5	1678.8	1127.6
75°	48.3	50.8	67.3	113.0	243.3	550.9	1344.1	1447.2	1388.2	1005.0	509.6
77.5°	33.4	35.1	43.3	62.7	105.3	186.8	658.9	733.5	660.8	343.0	111.2
80°	24.0	25.4	30.9	41.7	60.5	66.7	214.8	248.3	197.2	75.3	27.6
82.5°	14.3	15.4	23.1	29.7	36.8	31.9	53.4	60.7	57.1	37.4	12.3
85°	7.1	8.3	15.5	21.2	19.9	13.4	16.3	18.2	22.5	22.8	6.6
87.5°	0.5	0.9	9.1	12.8	5.5	3.1	4.8	5.9	8.0	11.2	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348810

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	388.0	388.1	387.1	386.6	386.9	385.1	384.3	384.6	384.6	385.1	384.3
5°	391.8	391.8	390.0	387.5	386.1	382.6	380.3	379.7	379.2	378.9	378.3
7.5°	400.1	399.2	396.0	390.6	386.0	378.3	372.4	369.3	367.8	367.2	366.7
10°	413.5	411.8	406.5	396.4	385.8	372.1	359.3	350.3	342.7	339.6	337.8
12.5°	431.5	429.1	420.0	403.4	384.7	359.5	331.8	305.1	280.4	270.2	265.1
15°	452.3	448.8	434.5	409.2	378.4	331.0	270.8	224.2	189.8	176.9	171.4
17.5°	473.4	468.8	447.1	412.9	359.5	272.0	190.0	143.5	120.5	114.4	112.2
20°	494.7	487.9	458.0	410.1	316.7	196.1	125.3	104.8	98.2	96.4	95.8
22.5°	514.8	504.4	467.9	399.4	250.8	131.6	99.1	92.7	90.5	89.5	89.1
25°	532.4	517.8	476.5	366.1	177.5	99.5	89.3	87.1	84.4	82.4	82.5
27.5°	548.9	531.2	481.7	311.3	118.4	85.0	82.7	79.8	74.7	71.7	71.7
30°	568.7	549.0	485.6	239.6	87.1	75.1	73.3	68.8	61.9	58.0	58.0
32.5°	598.6	576.1	483.1	168.1	72.2	66.0	61.7	55.6	48.0	44.3	44.2
35°	644.3	618.0	465.6	110.2	63.7	57.4	50.5	43.0	36.3	33.3	33.1
37.5°	705.9	674.0	426.2	78.8	57.1	49.4	41.1	32.8	27.9	25.9	25.7
40°	785.8	739.2	369.8	63.9	51.0	41.7	31.7	25.4	22.0	20.5	20.6
42.5°	881.7	808.9	302.2	55.1	45.0	34.3	24.8	20.0	17.9	16.8	16.5
45°	988.3	877.7	231.4	49.1	39.0	27.7	19.4	15.9	14.2	13.5	13.5
47.5°	1105.4	944.7	169.4	43.9	32.5	21.4	15.5	12.9	11.5	11.1	10.9
50°	1211.8	991.2	122.1	38.3	26.6	16.9	12.6	10.8	9.9	9.2	9.2
52.5°	1300.5	1005.8	89.9	32.3	21.6	13.5	10.5	9.2	8.3	7.9	7.9
55°	1378.5	999.8	66.8	26.6	17.4	11.1	8.9	7.9	7.1	6.6	6.6
57.5°	1453.4	980.4	49.9	21.7	14.0	8.9	7.5	6.6	5.9	5.5	5.5
60°	1514.5	948.1	37.1	17.6	11.2	7.2	6.3	5.4	4.8	4.3	4.3
62.5°	1564.1	912.4	27.3	14.5	8.9	5.7	4.9	4.5	3.5	3.1	3.1
65°	1564.4	853.1	20.5	12.0	6.9	4.5	3.7	3.5	2.3	1.8	1.7
67.5°	1451.2	735.5	15.7	10.3	5.4	3.4	2.8	2.9	1.2	0.8	0.6
68°	1410.1	705.6	14.8	10.2	5.1	3.2	2.6	2.9	1.1	0.6	0.5
70°	1188.9	561.3	11.9	9.9	4.5	2.5	2.2	2.9	0.9	0.5	0.3
72.5°	760.4	325.8	8.8	7.9	3.4	1.8	1.4	2.6	0.9	0.3	0.2
75°	323.6	101.0	6.0	5.5	2.0	1.4	0.9	1.7	0.6	0.2	0.0
77.5°	68.2	22.8	3.5	3.4	1.4	0.9	0.6	0.5	0.2	0.0	0.0
80°	17.6	6.6	1.8	1.7	0.8	0.5	0.3	0.0	0.0	0.0	0.0
82.5°	5.5	2.6	1.1	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.8	1.5	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.5	0.2	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)