

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: P348846

Luminaire Tested: **ARCH-N-PA1-50-827-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348846
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-PA1-50-827-U-T3-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: 3505 lumens
Efficiency: N/A
Efficacy: 67.4 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): 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

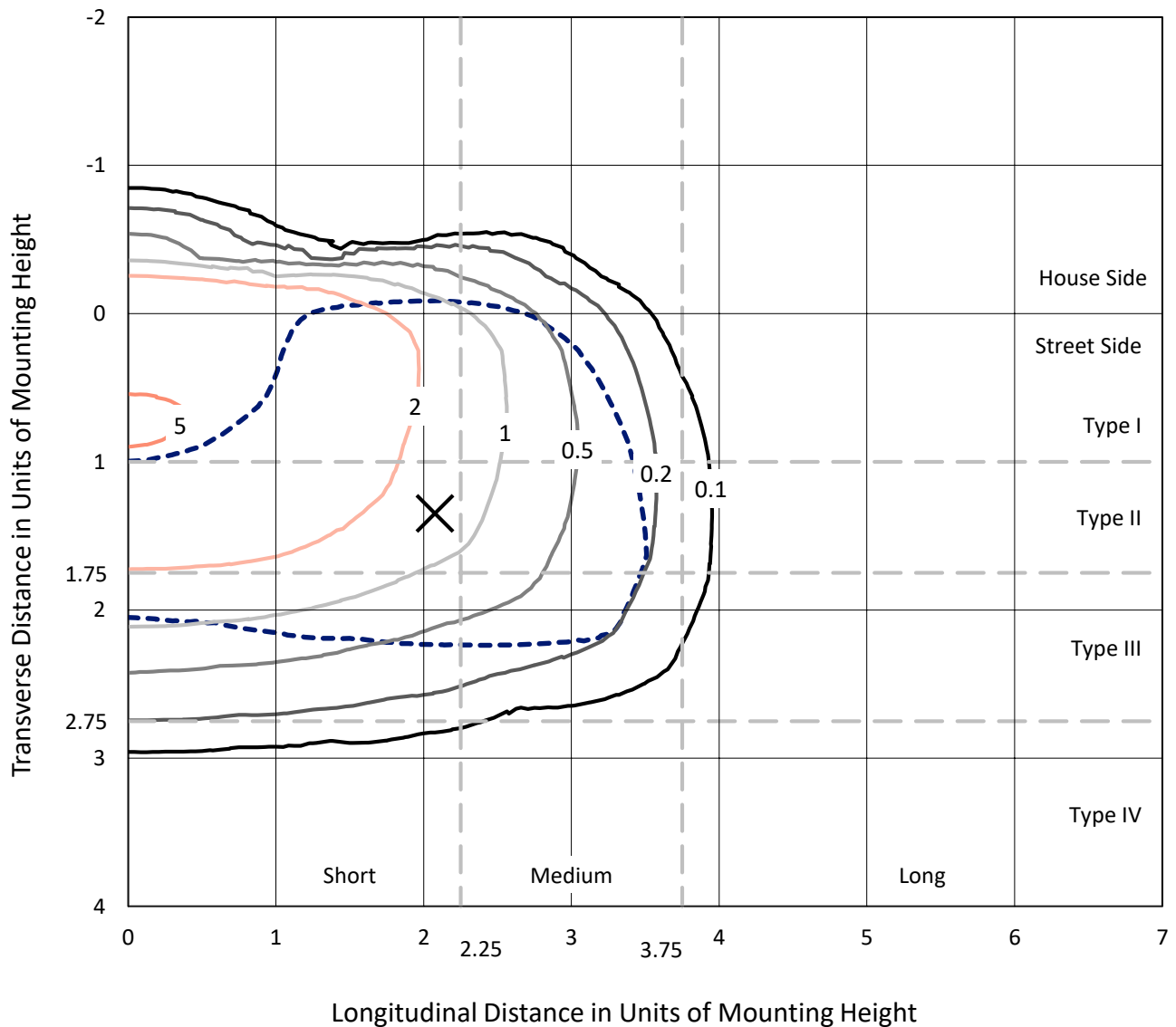


REPORT NUMBER: P348846

CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

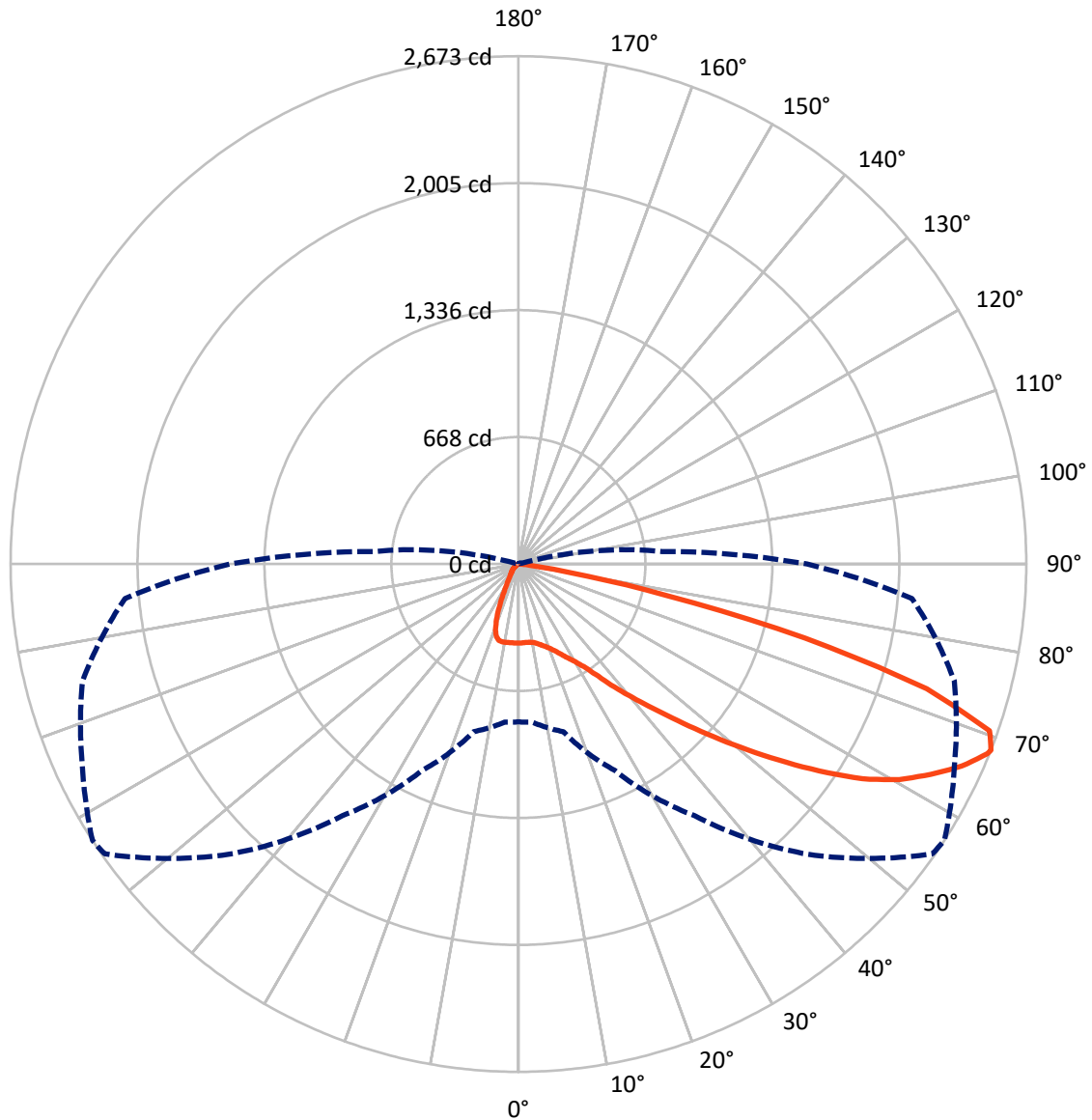


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P348846

CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P348846

CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

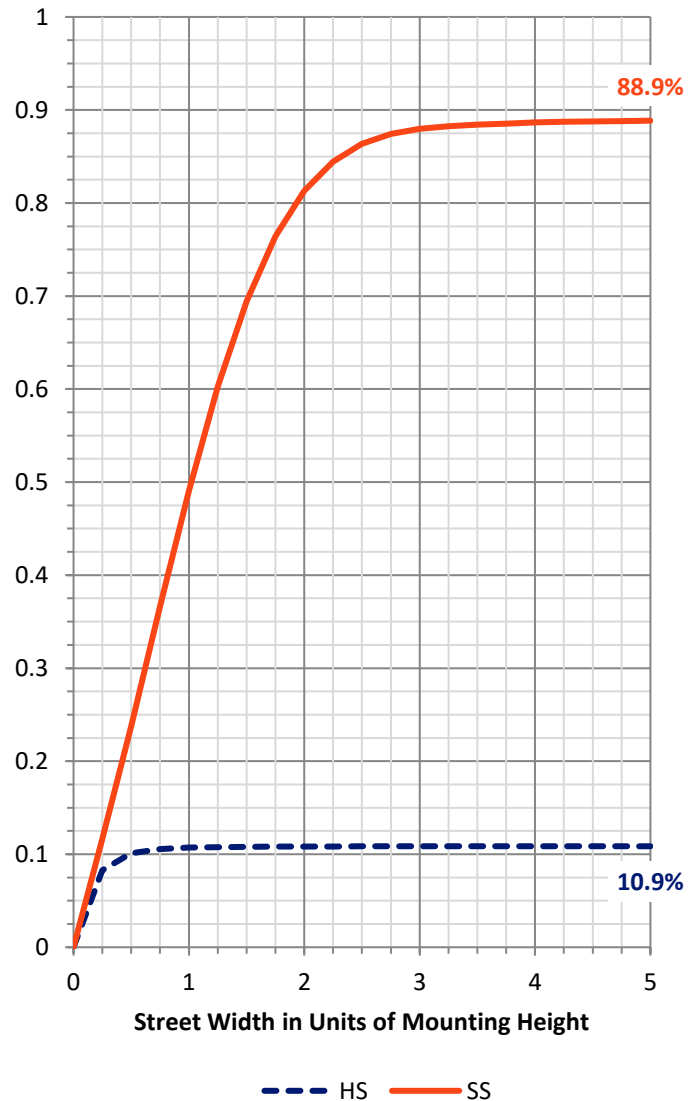
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	384.3	0.0	384.3
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	3120.7	0.0	3120.7
	% Fixture	89.0	0.0	89.0
Total	Lumens	3505.0	0.0	3505.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	1.1
10°-20°	108.0	3.1
20°-30°	186.3	5.3
30°-40°	321.6	9.2
40°-50°	550.1	15.7
50°-60°	880.1	25.1
60°-70°	1016.8	29.0
70°-80°	388.5	11.1
80°-90°	14.6	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°	3505.0	100.0
0°-180°	3505.0	100.0



REPORT NUMBER: P348846

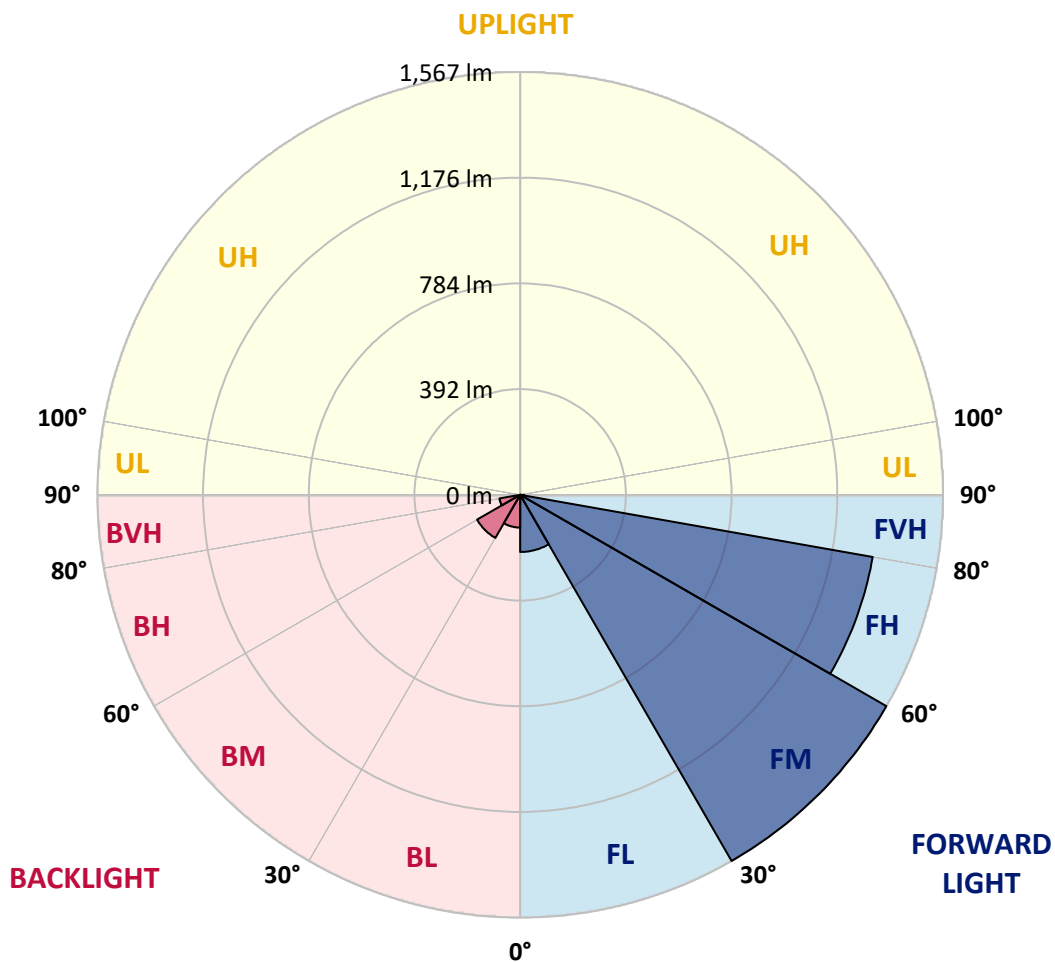
CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	211.8	6.0			
FM	(30°-60°)	1567.4	44.7			
FH	(60°-80°)	1327.1	37.9			G1/1800
FVH	(80°-90°)	14.3	0.4			G1/100
BL	(0°-30°)	121.5	3.5	B1/500		
BM	(30°-60°)	184.3	5.3	B0/220		
BH	(60°-80°)	78.3	2.2	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: B1-U0-G1

Type III Short





REPORT NUMBER: P348846

CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5
2.5°	406.7	408.5	409.9	410.7	411.7	413.8	414.5	415.5	416.0	416.0	417.1
5°	390.6	392.6	395.4	397.8	402.4	408.4	412.7	414.3	417.3	420.0	421.5
7.5°	375.7	378.0	381.4	386.8	394.8	404.4	413.3	415.7	421.5	427.1	429.9
10°	366.1	367.9	372.2	380.0	390.5	403.9	416.5	419.3	429.2	438.7	444.0
12.5°	362.8	364.4	368.9	377.7	390.6	406.4	423.8	427.9	442.5	456.3	463.7
15°	367.6	367.9	372.7	381.0	393.8	412.5	435.9	440.8	459.2	477.1	486.4
17.5°	386.2	384.7	387.2	390.8	400.9	420.6	448.6	456.1	480.6	501.7	510.5
20°	432.6	432.6	426.9	417.0	417.1	433.2	465.9	474.3	504.3	528.7	536.6
22.5°	511.9	510.5	499.2	474.8	452.5	454.9	486.9	497.9	532.8	558.9	561.5
25°	607.4	605.6	588.2	553.9	515.1	490.1	515.4	528.0	566.8	589.8	584.4
27.5°	708.5	707.0	689.8	647.2	592.0	546.1	549.4	561.3	601.4	624.1	606.7
30°	806.5	807.0	789.9	746.1	683.6	617.5	592.5	599.5	635.1	658.1	633.3
32.5°	899.6	900.3	885.5	836.6	778.3	700.6	652.2	650.3	674.2	696.9	668.4
35°	982.6	984.3	974.2	936.2	874.4	793.0	729.6	725.2	729.7	755.4	722.3
37.5°	1062.7	1063.7	1056.0	1024.1	972.4	894.6	827.3	821.2	811.6	831.3	793.4
40°	1150.4	1147.9	1139.1	1110.1	1065.7	1006.8	932.4	921.8	905.1	922.6	886.8
42.5°	1231.9	1229.1	1230.6	1197.8	1160.3	1122.2	1054.9	1036.7	1026.9	1047.1	1001.5
45°	1333.8	1332.3	1337.3	1308.8	1278.5	1250.8	1195.3	1175.4	1171.1	1194.8	1140.2
47.5°	1434.4	1438.1	1453.5	1441.4	1429.1	1404.8	1343.9	1335.0	1337.6	1366.3	1286.6
50°	1518.3	1522.6	1564.8	1578.8	1596.5	1582.3	1521.3	1515.8	1526.2	1552.1	1444.0
52.5°	1578.9	1587.7	1640.3	1704.4	1769.0	1778.6	1717.8	1712.8	1726.9	1730.9	1565.7
55°	1621.0	1628.8	1688.3	1805.7	1937.3	1978.7	1940.9	1921.7	1919.0	1879.7	1693.6
57.5°	1628.5	1627.7	1713.2	1871.1	2069.2	2176.1	2152.2	2133.3	2079.0	2017.3	1840.3
60°	1586.4	1591.2	1690.5	1893.8	2152.0	2325.4	2327.2	2302.7	2218.0	2151.0	1982.5
62.5°	1456.8	1476.3	1576.6	1834.3	2151.0	2385.6	2455.5	2436.8	2335.5	2260.6	2126.7
65°	1246.6	1253.6	1349.2	1630.5	2005.7	2360.4	2571.0	2564.1	2441.4	2367.0	2200.8
67.5°	910.4	895.3	995.7	1283.9	1698.1	2213.5	2653.9	2662.7	2523.1	2388.9	2121.9
68°	830.8	835.3	913.5	1198.2	1617.6	2161.7	2659.3	2672.8	2531.2	2374.6	2078.8
70°	495.2	503.8	573.6	825.0	1230.6	1868.1	2600.3	2631.0	2482.8	2227.6	1798.0
72.5°	126.5	136.7	202.7	369.3	702.9	1316.2	2195.1	2247.0	2155.7	1807.1	1213.8
75°	52.0	54.7	72.4	121.6	261.9	593.0	1446.8	1557.9	1494.4	1081.9	548.6
77.5°	36.0	37.8	46.6	67.5	113.4	201.0	709.3	789.6	711.3	369.3	119.7
80°	25.9	27.3	33.3	44.9	65.1	71.8	231.2	267.3	212.3	81.0	29.7
82.5°	15.4	16.6	24.9	32.0	39.6	34.3	57.5	65.3	61.5	40.3	13.3
85°	7.6	8.9	16.7	22.9	21.4	14.4	17.6	19.6	24.2	24.5	7.1
87.5°	0.5	1.0	9.8	13.8	6.0	3.3	5.1	6.3	8.6	12.1	3.0
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: P348846

CATALOG NUMBER: ARCH-N-PA1-50-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5
2.5°	417.6	417.8	416.7	416.2	416.5	414.5	413.7	414.0	414.0	414.5	413.7
5°	421.8	421.8	419.8	417.1	415.7	411.8	409.4	408.7	408.2	407.9	407.2
7.5°	430.7	429.7	426.3	420.5	415.5	407.2	400.9	397.6	395.9	395.3	394.8
10°	445.2	443.3	437.5	426.8	415.3	400.6	386.8	377.0	368.9	365.6	363.6
12.5°	464.5	461.9	452.1	434.2	414.2	387.0	357.2	328.5	301.8	290.9	285.4
15°	486.9	483.1	467.7	440.5	407.4	356.3	291.5	241.3	204.3	190.4	184.5
17.5°	509.6	504.7	481.3	444.5	387.0	292.8	204.5	154.5	129.8	123.1	120.8
20°	532.5	525.2	493.1	441.5	340.9	211.1	134.9	112.9	105.7	103.7	103.1
22.5°	554.2	542.9	503.7	429.9	270.0	141.7	106.7	99.8	97.5	96.3	96.0
25°	573.1	557.4	512.9	394.1	191.1	107.1	96.1	93.8	90.8	88.7	88.8
27.5°	590.8	571.8	518.6	335.1	127.4	91.5	89.0	85.8	80.4	77.2	77.2
30°	612.2	591.0	522.7	257.9	93.8	80.9	78.9	74.1	66.6	62.5	62.5
32.5°	644.4	620.2	520.1	181.0	77.7	71.1	66.5	59.8	51.7	47.7	47.6
35°	693.6	665.3	501.2	118.7	68.6	61.8	54.4	46.2	39.1	35.8	35.6
37.5°	759.9	725.6	458.7	84.9	61.5	53.2	44.3	35.3	30.0	27.8	27.7
40°	845.9	795.7	398.1	68.8	54.9	44.9	34.1	27.3	23.7	22.0	22.2
42.5°	949.2	870.8	325.3	59.3	48.4	37.0	26.7	21.5	19.2	18.1	17.7
45°	1063.8	944.8	249.1	52.9	41.9	29.8	20.9	17.1	15.2	14.6	14.6
47.5°	1190.0	1016.9	182.3	47.2	35.0	23.0	16.7	13.9	12.4	11.9	11.8
50°	1304.5	1067.0	131.4	41.3	28.7	18.2	13.6	11.6	10.6	9.9	9.9
52.5°	1399.9	1082.7	96.8	34.8	23.2	14.6	11.3	9.9	8.9	8.5	8.5
55°	1484.0	1076.3	71.9	28.7	18.7	11.9	9.6	8.5	7.6	7.1	7.1
57.5°	1564.5	1055.4	53.7	23.4	15.1	9.6	8.1	7.1	6.3	6.0	6.0
60°	1630.3	1020.6	39.9	18.9	12.1	7.8	6.8	5.8	5.1	4.6	4.6
62.5°	1683.7	982.1	29.3	15.6	9.6	6.1	5.3	4.8	3.8	3.3	3.3
65°	1684.0	918.3	22.0	12.9	7.5	4.8	4.0	3.8	2.5	2.0	1.8
67.5°	1562.2	791.7	16.9	11.1	5.8	3.6	3.0	3.1	1.3	0.8	0.7
68°	1517.9	759.6	15.9	10.9	5.5	3.5	2.8	3.1	1.2	0.7	0.5
70°	1279.8	604.3	12.8	10.6	4.8	2.7	2.3	3.1	1.0	0.5	0.3
72.5°	818.6	350.7	9.4	8.5	3.6	2.0	1.5	2.8	1.0	0.3	0.2
75°	348.4	108.7	6.5	6.0	2.2	1.5	1.0	1.8	0.7	0.2	0.0
77.5°	73.4	24.5	3.8	3.6	1.5	1.0	0.7	0.5	0.2	0.0	0.0
80°	18.9	7.1	2.0	1.8	0.8	0.5	0.3	0.0	0.0	0.0	0.0
82.5°	6.0	2.8	1.2	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	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)