

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: P348922

Luminaire Tested: **ARCH-N-PA1-40-727-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348922  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)  
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-T2U  
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: 4632 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

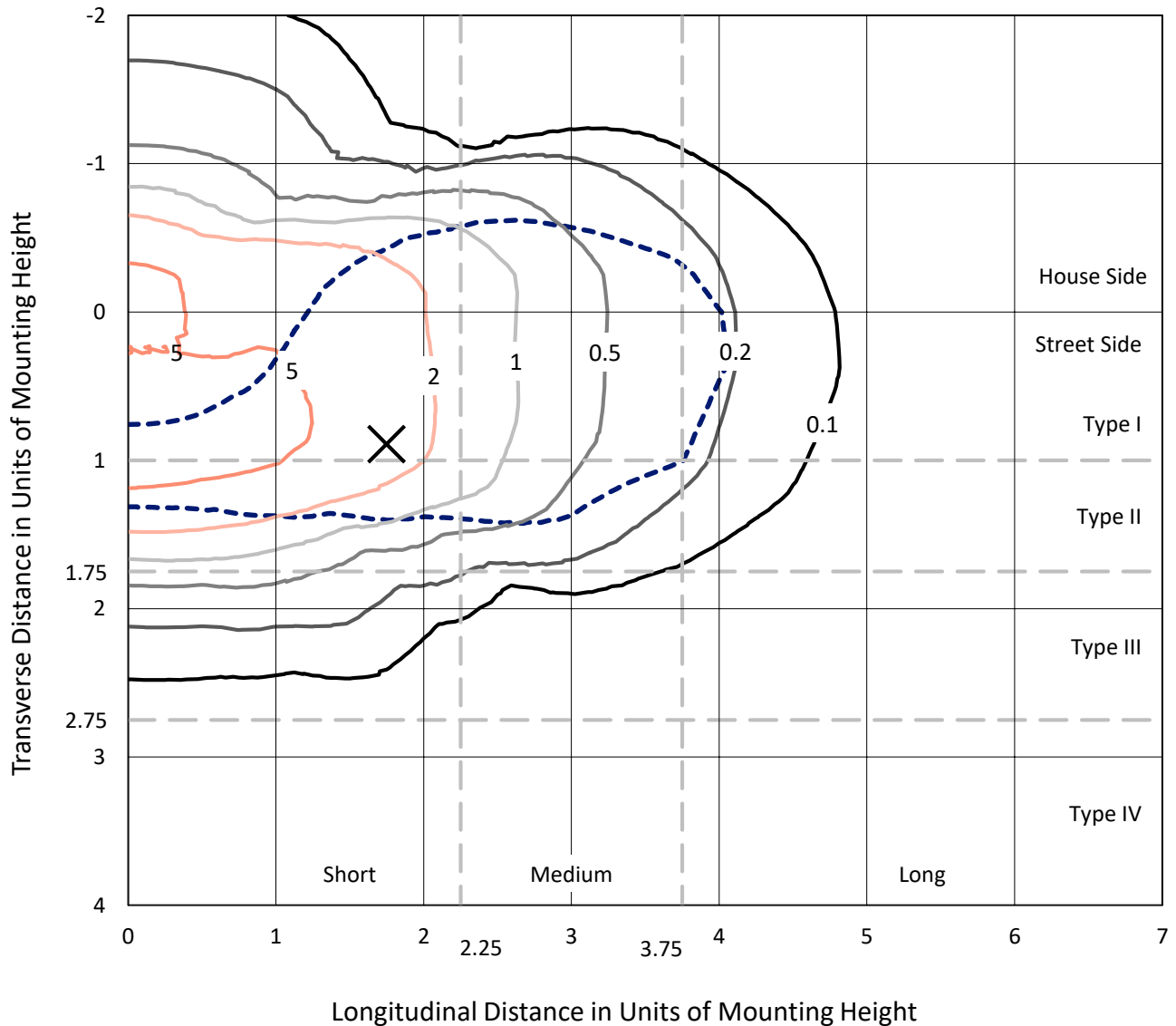
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P348922  
 CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

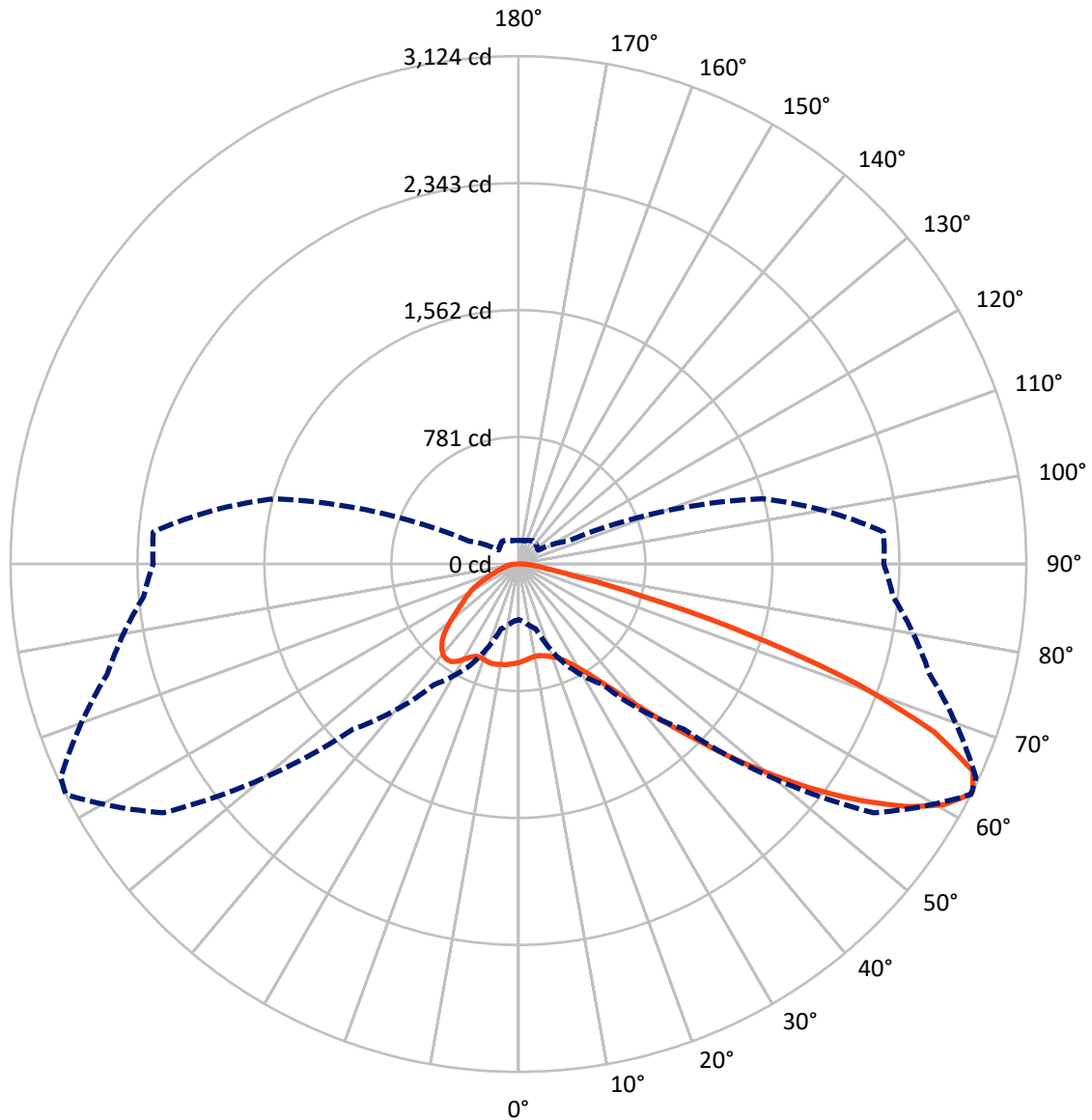


Based on 10 foot mounting height. Maximum calculated value = 8 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P348922

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P348922

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

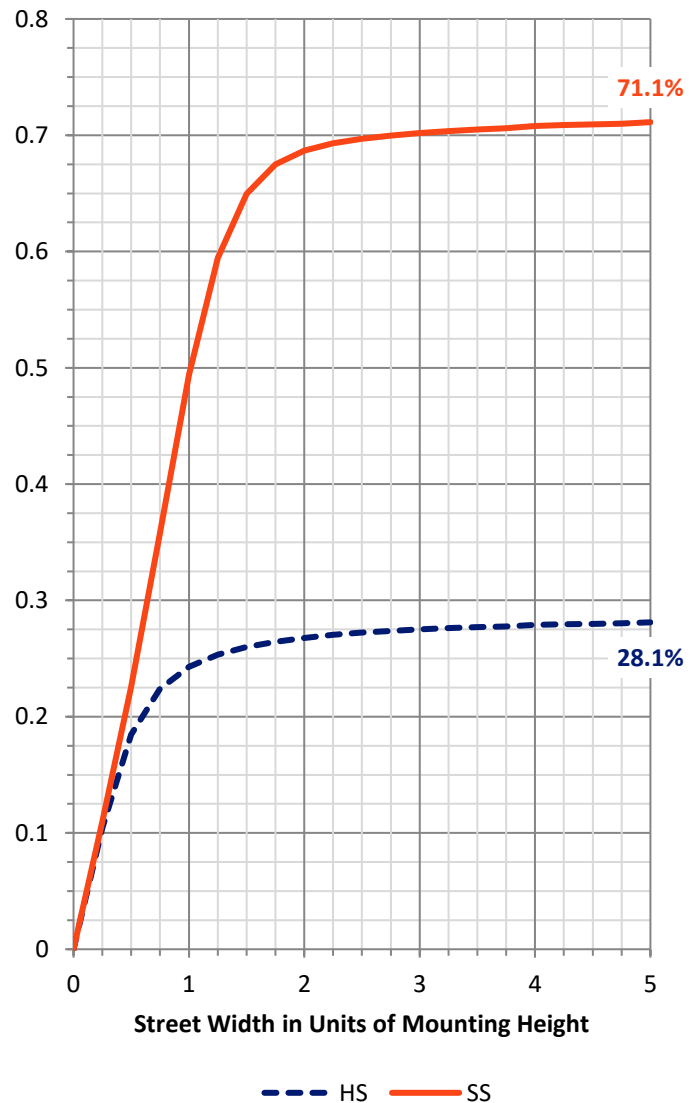
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1322.4	0.0	1322.4
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	3309.6	0.0	3309.6
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	4632.0	0.0	4632.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	1.2
10°-20°	169.8	3.7
20°-30°	298.2	6.4
30°-40°	502.6	10.9
40°-50°	880.4	19.0
50°-60°	1138.0	24.6
60°-70°	985.0	21.3
70°-80°	511.4	11.0
80°-90°	89.1	1.9
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°	4632.0	100.0
0°-180°	4632.0	100.0



REPORT NUMBER: P348922

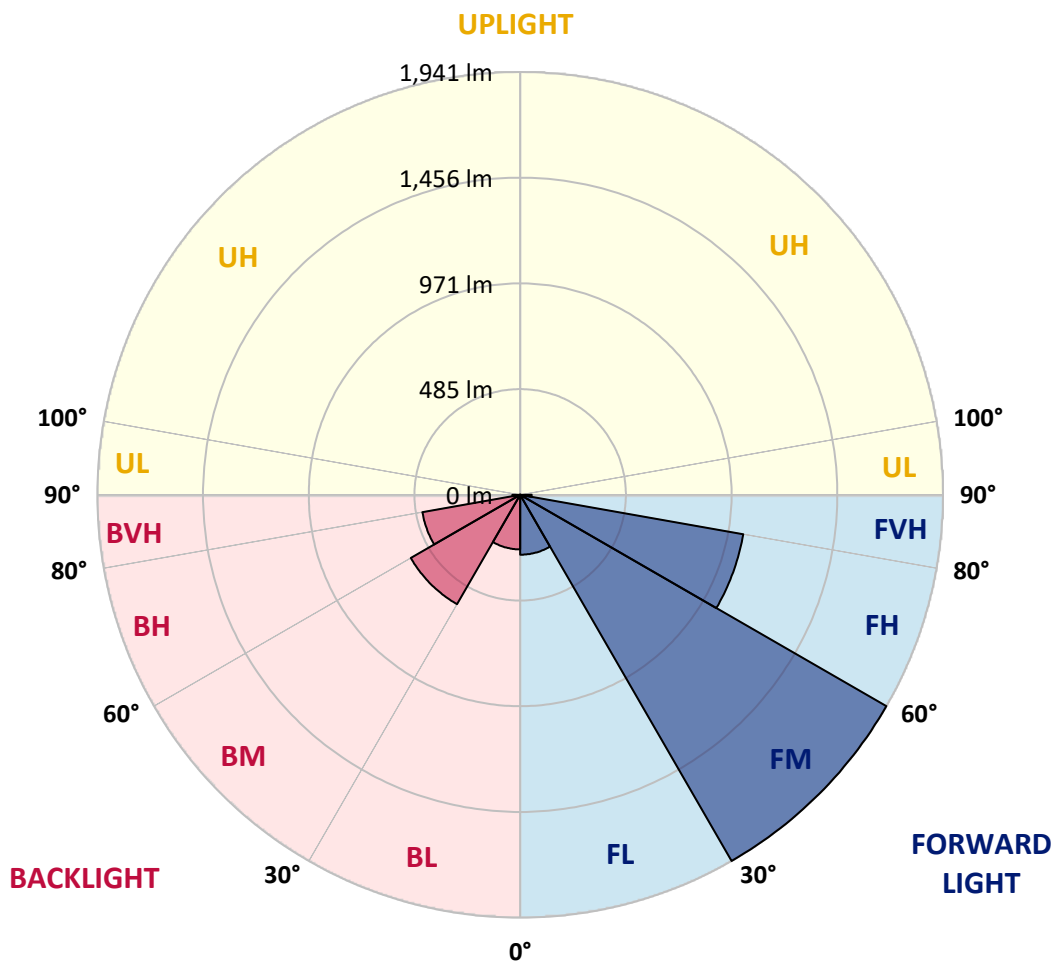
CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	275.0	5.9			
FM	(30°-60°)	1941.3	41.9			
FH	(60°-80°)	1040.2	22.5			G1/1800
FVH	(80°-90°)	53.1	1.1			G1/100
BL	(0°-30°)	250.5	5.4	B1/500		
BM	(30°-60°)	579.7	12.5	B1/1000		
BH	(60°-80°)	456.2	9.8	B1/500		G1/500
BVH	(80°-90°)	36.0	0.8			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





REPORT NUMBER: P348922

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5
2.5°	592.2	590.4	593.5	594.8	594.3	596.9	596.9	597.4	597.4	599.5	601.7
5°	574.8	574.0	577.0	579.2	580.9	584.8	587.4	588.7	590.0	593.0	598.2
7.5°	558.3	557.0	561.4	563.1	565.7	571.4	577.4	580.9	582.6	589.1	596.5
10°	544.9	544.5	547.9	549.7	552.7	560.9	569.6	577.0	578.3	587.0	593.9
12.5°	538.4	537.5	541.4	543.6	548.8	558.8	568.7	577.9	580.0	590.0	596.1
15°	543.6	544.5	547.9	548.4	554.4	564.8	576.1	585.2	587.4	597.4	601.7
17.5°	568.3	567.9	570.1	569.2	571.4	576.6	588.7	596.1	598.7	606.0	609.5
20°	613.0	611.7	613.4	607.8	598.2	595.6	603.0	611.2	612.1	616.4	614.3
22.5°	681.0	682.3	678.4	664.1	641.1	630.3	625.5	628.1	631.2	630.7	624.2
25°	769.9	774.2	766.9	741.7	703.1	678.0	660.7	656.8	658.9	652.8	642.9
27.5°	886.5	890.0	873.9	834.9	782.9	745.6	710.9	697.5	697.5	684.5	666.3
30°	1014.8	1017.0	991.4	942.0	881.7	826.2	775.1	749.1	746.9	721.3	692.7
32.5°	1170.9	1164.8	1134.5	1073.3	997.5	921.2	855.3	815.8	811.5	772.9	736.5
35°	1372.5	1372.5	1309.6	1239.8	1147.5	1050.4	963.7	902.5	898.2	854.4	807.2
37.5°	1591.4	1590.5	1533.7	1437.5	1326.9	1208.2	1092.4	1016.1	1006.1	959.3	906.4
40°	1809.4	1802.1	1756.1	1664.6	1546.7	1411.0	1251.5	1162.6	1157.9	1091.1	1024.8
42.5°	1968.9	1962.0	1940.3	1879.2	1801.6	1703.6	1458.3	1338.2	1331.3	1247.2	1166.1
45°	2056.9	2047.0	2043.9	2044.8	2053.5	2053.0	1713.6	1545.9	1521.6	1424.0	1316.1
47.5°	2037.0	2013.6	2044.8	2125.0	2259.8	2348.3	2011.0	1792.5	1747.4	1607.8	1476.1
50°	1876.2	1864.9	1931.7	2095.1	2372.1	2579.7	2338.3	2048.7	1985.0	1781.7	1627.4
52.5°	1594.0	1615.6	1698.0	1930.4	2351.7	2719.8	2635.7	2314.9	2226.4	1947.3	1758.7
55°	1268.8	1296.2	1412.3	1658.6	2163.2	2721.5	2850.3	2572.8	2493.9	2118.5	1893.1
57.5°	923.4	961.9	1107.2	1333.0	1832.4	2535.5	2956.0	2814.3	2724.1	2287.1	2024.4
60°	580.0	607.3	765.6	1027.4	1400.6	2125.0	2929.6	3007.6	2933.1	2446.2	2174.4
62.5°	373.7	386.7	455.2	733.5	976.7	1558.4	2734.1	3118.6	3086.5	2591.5	2287.6
63°	342.5	353.7	412.3	678.0	905.6	1435.7	2668.2	3124.2	3105.1	2618.8	2314.0
65°	244.9	257.1	287.4	466.0	668.5	963.2	2286.3	3071.8	3093.0	2664.3	2350.0
67.5°	193.3	197.2	211.1	283.1	474.2	547.1	1538.5	2758.4	2851.6	2615.7	2296.7
70°	173.0	176.0	191.6	217.2	358.9	354.6	802.4	2217.8	2410.7	2450.1	2162.3
72.5°	150.9	153.0	172.1	204.6	274.0	270.9	349.0	1491.2	1725.8	2146.7	1976.3
75°	124.8	127.0	143.1	181.6	231.9	214.1	218.5	779.4	989.2	1682.8	1733.1
77.5°	102.7	104.0	117.5	146.1	204.2	165.2	169.1	327.7	480.7	1147.0	1368.6
80°	74.6	75.0	87.6	111.0	156.1	149.1	125.7	178.6	218.0	628.6	860.9
82.5°	52.0	52.5	65.5	77.6	107.5	148.7	91.5	119.6	130.9	289.6	383.2
85°	36.4	35.5	44.7	51.2	68.1	90.2	69.8	76.7	81.1	125.3	103.2
87.5°	16.0	15.6	25.1	27.3	34.2	41.6	55.5	40.3	42.9	60.7	32.5
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: P348922

CATALOG NUMBER: ARCH-N-PA1-40-727-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5	606.5
2.5°	602.1	603.9	606.5	610.4	613.4	614.7	617.3	617.7	621.6	618.2	618.6
5°	601.3	603.4	609.1	616.0	620.8	624.2	630.7	632.9	636.8	635.1	634.6
7.5°	600.0	603.9	612.1	622.1	629.4	635.1	641.1	645.0	648.9	648.1	647.2
10°	598.2	603.0	614.7	624.7	635.1	641.1	645.5	645.9	647.2	646.3	644.2
12.5°	599.5	604.7	618.2	628.1	639.0	643.3	642.0	635.5	629.9	625.1	624.2
15°	603.9	609.9	622.5	631.6	640.3	637.7	629.9	615.6	605.2	599.1	599.5
17.5°	608.2	613.4	622.9	630.3	634.6	626.8	614.7	602.6	597.8	593.0	592.2
20°	612.1	613.0	619.0	625.5	625.1	619.0	607.8	593.0	583.5	575.7	576.1
22.5°	618.2	614.7	615.1	619.0	623.8	618.2	591.7	566.1	551.8	542.7	542.3
25°	632.0	624.7	617.7	619.9	638.1	602.1	557.5	524.1	511.5	503.3	504.2
27.5°	651.1	641.1	627.3	639.0	648.9	570.5	508.5	474.2	465.6	456.9	459.1
30°	671.9	657.6	640.7	680.2	636.8	520.2	447.8	416.6	408.8	400.6	402.3
32.5°	709.2	688.0	665.9	729.6	608.6	459.1	384.1	355.9	350.7	345.5	345.9
35°	771.2	746.1	722.2	767.3	572.2	395.4	326.9	306.9	302.6	296.5	296.5
37.5°	862.7	823.2	810.6	787.2	522.4	336.0	284.8	271.4	262.3	254.0	254.0
40°	968.9	922.1	912.1	793.3	457.3	286.5	255.3	243.6	231.5	219.4	220.2
42.5°	1098.1	1034.8	1011.8	785.1	378.4	254.9	234.5	221.1	209.4	199.0	197.2
45°	1243.7	1163.5	1105.4	761.2	306.9	235.4	221.1	205.0	190.3	181.2	179.5
47.5°	1392.4	1303.1	1188.2	713.5	256.6	221.5	212.0	189.4	179.0	173.0	172.1
50°	1534.6	1441.4	1256.7	638.5	227.6	211.5	198.5	182.1	173.4	168.2	167.8
52.5°	1660.7	1572.7	1314.4	560.9	208.1	203.3	192.5	178.6	169.5	164.7	163.9
55°	1780.8	1705.8	1371.6	491.6	191.2	189.4	189.4	175.1	165.2	160.8	160.0
57.5°	1912.6	1857.1	1429.2	440.9	176.0	179.5	185.5	171.2	160.4	156.5	156.1
60°	2064.8	2032.2	1489.9	396.2	162.6	168.6	179.9	166.0	154.8	151.7	150.9
62.5°	2220.4	2221.2	1542.4	342.5	151.3	160.4	173.4	161.3	149.6	147.4	147.0
63°	2247.7	2255.5	1549.8	330.8	148.7	158.7	171.7	159.5	148.3	146.1	145.7
65°	2314.9	2349.1	1555.8	281.3	139.2	152.2	165.2	153.9	142.6	142.2	141.3
67.5°	2298.8	2354.8	1518.1	220.7	128.3	143.1	156.1	145.7	135.7	135.7	134.0
70°	2179.2	2215.6	1402.4	170.4	120.1	133.5	145.2	137.0	126.6	127.4	124.0
72.5°	1995.8	1955.9	1153.5	133.1	110.1	122.7	132.7	125.7	116.6	115.7	111.8
75°	1727.1	1595.7	826.2	107.5	98.0	108.4	118.8	113.6	105.3	100.6	99.7
77.5°	1316.1	1132.7	495.1	91.0	87.6	96.2	102.7	98.8	92.3	86.7	87.1
80°	783.8	653.3	223.3	77.2	75.9	82.4	87.6	84.5	80.2	73.3	71.5
82.5°	317.3	252.7	100.1	62.4	64.2	68.9	73.7	71.1	67.6	65.9	55.9
85°	82.4	79.3	58.5	46.8	49.4	51.6	58.1	58.1	55.1	45.1	41.6
87.5°	23.4	31.2	32.5	29.5	33.4	33.8	40.3	40.3	41.2	27.7	25.1
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)