

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: P397802

Luminaire Tested: **ARCH-S-PA1-40-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-827-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4486 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 40
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

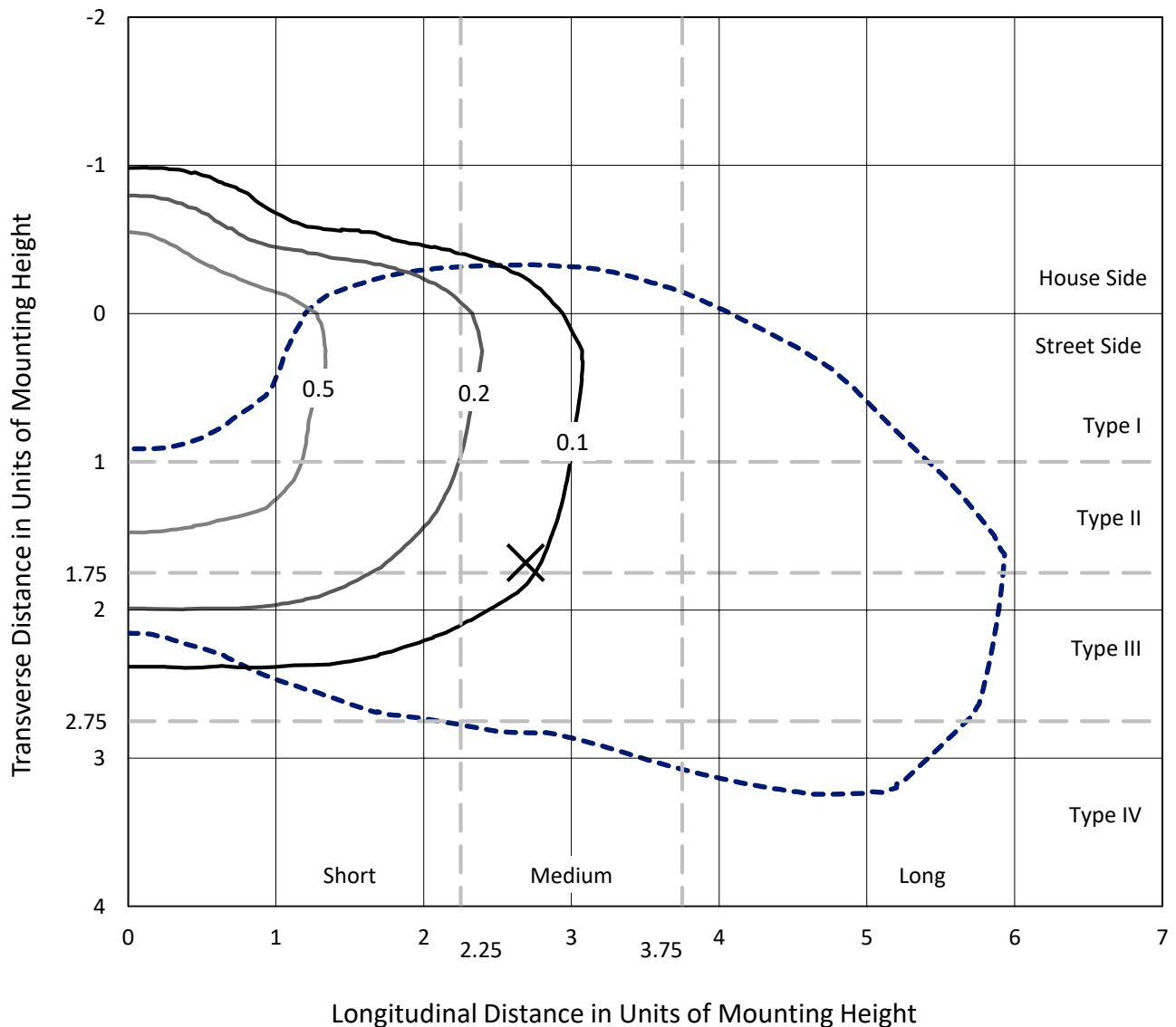


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

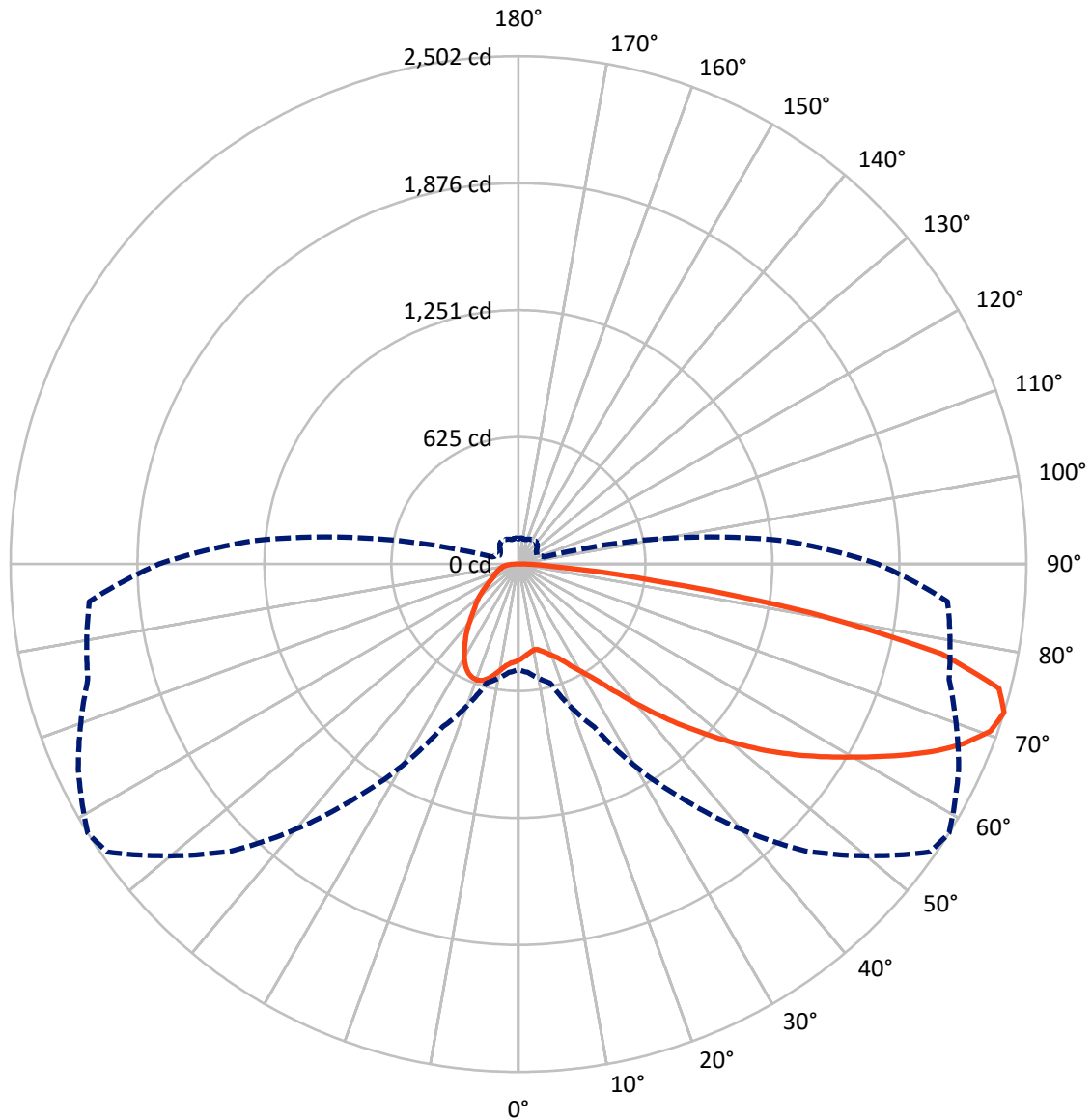


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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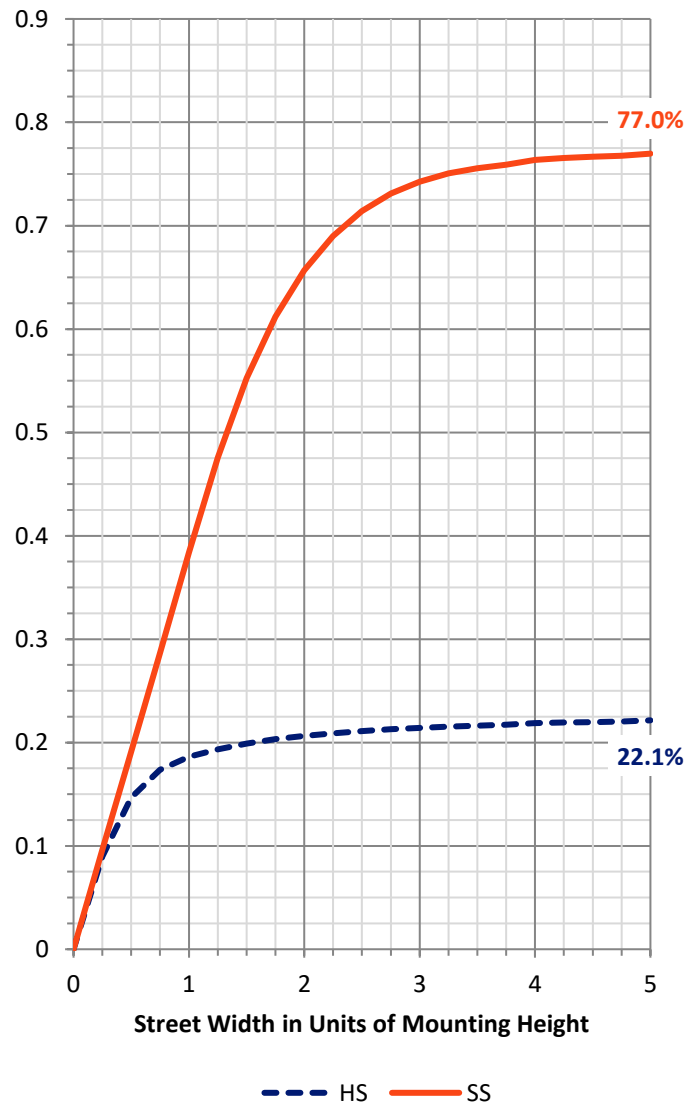
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1017.4	0.0	1017.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3468.6	0.0	3468.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	4486.0	0.0	4486.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.0
10°-20°	144.8	3.2
20°-30°	259.3	5.8
30°-40°	390.1	8.7
40°-50°	631.7	14.1
50°-60°	950.9	21.2
60°-70°	1119.1	24.9
70°-80°	793.5	17.7
80°-90°	151.2	3.4
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°	4486.0	100.0
0°-180°	4486.0	100.0



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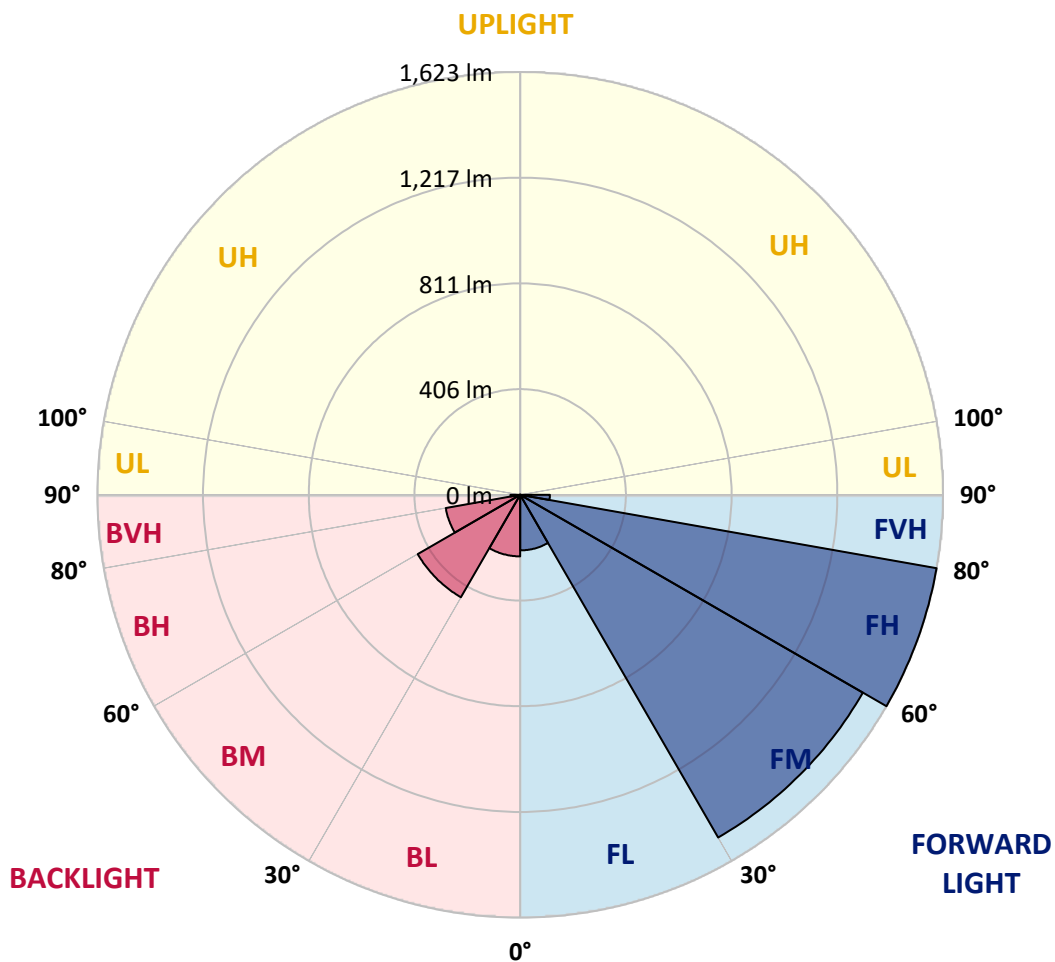
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	213.3	4.8			
FM	(30°-60°)	1518.6	33.9			
FH	(60°-80°)	1622.6	36.2			G1/1800
FVH	(80°-90°)	114.0	2.5			G2/225
BL	(0°-30°)	236.3	5.3	B1/500		
BM	(30°-60°)	453.9	10.1	B1/1000		
BH	(60°-80°)	290.0	6.5	B1/500		G1/500
BVH	(80°-90°)	37.1	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2
2.5°	455.4	453.0	453.6	453.6	456.0	457.2	457.8	459.6	460.7	463.7	467.8
5°	434.1	432.3	432.9	433.5	437.6	441.8	445.3	447.7	451.3	456.0	461.9
7.5°	418.7	417.5	418.1	419.3	422.8	427.6	433.5	437.1	442.4	451.3	461.3
10°	407.4	407.4	408.0	410.4	414.0	419.9	424.6	428.8	439.4	455.4	470.8
12.5°	398.6	398.6	400.3	405.1	411.0	416.9	428.2	432.9	447.1	469.0	487.4
15°	398.0	398.6	399.2	403.3	409.8	422.8	439.4	446.5	463.7	489.8	511.1
17.5°	407.4	408.0	405.7	406.8	414.5	432.9	454.8	463.1	485.0	513.4	535.4
20°	436.5	436.5	429.4	422.8	428.2	448.3	473.2	481.5	505.7	537.1	559.0
22.5°	495.7	498.6	482.1	467.8	459.6	470.8	493.3	502.2	529.4	563.2	585.1
25°	567.3	570.3	547.8	527.7	512.3	510.5	525.3	534.8	557.3	592.2	610.6
27.5°	636.6	631.3	610.6	591.6	572.1	556.1	567.3	575.6	601.7	628.3	639.6
30°	691.1	687.0	666.8	653.2	634.9	614.1	607.6	616.5	637.8	662.7	668.6
32.5°	751.5	748.6	728.4	710.7	695.3	675.7	661.5	665.6	677.5	695.3	698.8
35°	828.5	835.0	813.7	777.6	760.4	741.4	731.4	732.6	741.4	752.7	746.8
37.5°	909.6	917.3	918.5	861.7	838.6	821.4	810.7	814.9	825.5	833.2	814.9
40°	1060.1	1052.4	1021.6	979.5	944.0	927.4	912.6	912.0	919.7	933.3	900.2
42.5°	1259.6	1252.5	1190.3	1135.9	1079.6	1060.7	1031.6	1019.2	1022.8	1039.9	993.7
45°	1450.9	1448.0	1398.2	1334.8	1267.3	1230.6	1164.3	1134.1	1131.1	1144.7	1089.7
47.5°	1620.9	1607.9	1571.7	1522.6	1515.5	1419.5	1297.5	1256.7	1242.5	1250.2	1188.6
50°	1802.7	1758.3	1708.5	1678.3	1729.9	1640.4	1432.0	1389.3	1354.4	1359.7	1295.8
52.5°	1899.2	1824.6	1792.0	1800.9	1870.2	1835.9	1578.2	1526.1	1469.9	1477.6	1402.4
55°	1816.3	1815.7	1829.9	1885.0	1981.5	1941.9	1717.4	1658.8	1597.2	1599.0	1524.9
57.5°	1702.6	1725.7	1799.1	1920.5	2119.5	2053.2	1854.2	1792.0	1735.8	1726.9	1664.1
60°	1599.0	1624.4	1731.0	1914.6	2167.5	2155.1	1984.5	1930.0	1884.4	1858.4	1810.4
62.5°	1441.4	1460.4	1611.4	1876.7	2127.2	2228.5	2116.6	2079.3	2044.9	1991.0	1967.9
65°	1256.1	1262.6	1421.9	1751.8	2076.9	2256.9	2248.0	2231.5	2198.3	2118.9	2123.7
67.5°	1055.3	1068.4	1208.1	1552.2	1966.7	2243.9	2349.9	2363.5	2324.4	2205.4	2223.2
70°	841.5	857.5	963.5	1276.2	1779.6	2187.6	2444.1	2466.0	2390.8	2233.8	2241.5
72.5°	520.6	536.0	607.0	886.5	1410.6	1998.7	2473.1	2501.5	2392.5	2195.9	2121.9
75°	180.0	181.8	237.5	425.2	837.4	1509.0	2378.3	2445.2	2317.3	2057.9	1846.5
77.5°	82.3	85.3	105.4	175.3	371.3	814.3	1963.8	2131.4	2088.7	1842.4	1421.3
80°	56.9	58.0	72.8	104.8	214.4	286.6	1239.5	1458.0	1532.6	1426.6	910.8
82.5°	42.6	43.8	56.3	71.1	154.6	139.2	472.0	677.5	842.1	826.7	380.8
85°	40.9	40.3	43.8	47.4	103.0	82.9	152.8	209.6	328.7	281.3	95.9
87.5°	17.8	19.5	45.0	26.6	53.9	38.5	66.3	77.6	100.1	87.1	34.3
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°	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2	473.2
2.5°	469.6	470.8	474.4	479.7	482.7	488.6	492.7	495.1	496.9	497.5	497.5
5°	465.5	467.8	475.5	484.4	492.7	505.2	516.4	522.9	527.7	529.4	530.0
7.5°	466.7	472.6	483.8	496.9	507.5	523.5	537.1	550.2	560.8	565.0	565.0
10°	477.9	486.2	501.6	518.8	532.4	549.0	563.2	574.4	586.9	594.0	595.2
12.5°	495.1	505.2	525.3	544.2	559.6	572.7	585.7	594.0	599.9	605.2	606.4
15°	519.4	531.8	551.9	571.5	585.1	593.4	597.0	597.0	596.4	597.0	598.1
17.5°	543.7	555.5	575.6	595.2	601.7	597.0	592.8	591.6	591.0	589.8	590.4
20°	567.3	578.6	595.8	610.6	605.2	588.7	583.3	582.7	581.0	579.8	578.6
22.5°	591.0	599.3	613.5	618.9	597.5	573.9	567.3	563.8	561.4	558.5	555.5
25°	618.3	620.6	631.3	623.0	578.6	546.6	537.1	531.8	529.4	526.5	524.1
27.5°	643.7	643.7	645.5	616.5	550.8	510.5	496.3	486.8	486.2	485.6	485.0
30°	666.8	663.9	657.9	597.0	514.6	466.1	444.8	435.3	438.8	441.8	442.4
32.5°	694.1	688.2	671.6	570.3	471.4	416.3	390.3	386.1	390.3	393.8	391.5
35°	736.7	726.1	685.8	539.5	429.9	370.7	345.9	339.9	338.7	338.2	333.4
37.5°	797.7	779.4	697.0	506.3	389.1	330.5	312.1	299.7	288.4	276.6	274.8
40°	872.3	840.9	704.7	468.4	345.9	296.7	277.2	261.2	242.2	221.5	219.1
42.5°	954.1	907.3	708.3	426.4	308.0	268.9	244.6	224.4	203.1	187.1	184.2
45°	1042.3	978.9	705.3	386.1	277.2	245.2	217.9	196.0	178.8	167.6	165.2
47.5°	1128.2	1061.2	697.0	354.1	253.5	225.0	197.2	177.1	164.0	151.6	148.6
50°	1238.3	1140.0	687.0	329.3	227.4	204.9	184.2	162.9	148.1	142.1	140.9
52.5°	1360.3	1218.8	675.1	297.9	201.9	188.9	175.9	156.9	152.2	140.9	139.2
55°	1492.4	1312.3	672.8	258.2	179.4	177.7	167.6	162.3	163.5	140.9	138.0
57.5°	1631.5	1412.4	678.1	218.5	161.1	167.6	171.1	167.0	165.2	143.9	138.0
60°	1776.6	1509.0	662.1	181.8	146.9	159.3	175.3	164.6	151.6	142.7	138.6
62.5°	1917.6	1590.1	592.8	155.8	136.2	156.9	172.9	155.8	140.9	140.9	139.2
65°	2020.0	1626.2	463.7	136.8	129.1	154.0	168.8	149.8	138.0	142.1	139.8
67.5°	2031.9	1588.9	311.5	122.0	123.2	148.6	159.3	144.5	135.0	145.7	142.1
70°	1959.0	1491.8	190.7	110.7	115.5	139.2	151.0	139.2	130.9	142.7	137.4
72.5°	1770.1	1310.6	134.4	101.3	107.2	130.3	143.3	134.4	125.0	129.1	123.8
75°	1452.1	1015.6	106.6	92.4	98.9	122.0	136.8	127.3	117.9	116.1	112.5
77.5°	1028.7	650.8	85.9	85.3	90.0	111.9	127.9	119.0	109.6	106.0	103.6
80°	591.6	319.2	74.0	77.0	81.7	101.9	117.3	109.6	100.7	95.3	91.8
82.5°	226.2	111.3	65.1	66.9	72.2	91.2	106.6	100.1	91.2	95.9	80.5
85°	73.4	61.0	53.3	55.1	60.4	75.8	94.2	88.8	78.8	69.9	64.6
87.5°	32.6	33.2	28.4	31.4	37.9	50.3	68.7	65.1	57.4	48.0	46.2
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)