

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: P265656

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T2U-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13511.1 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 181
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

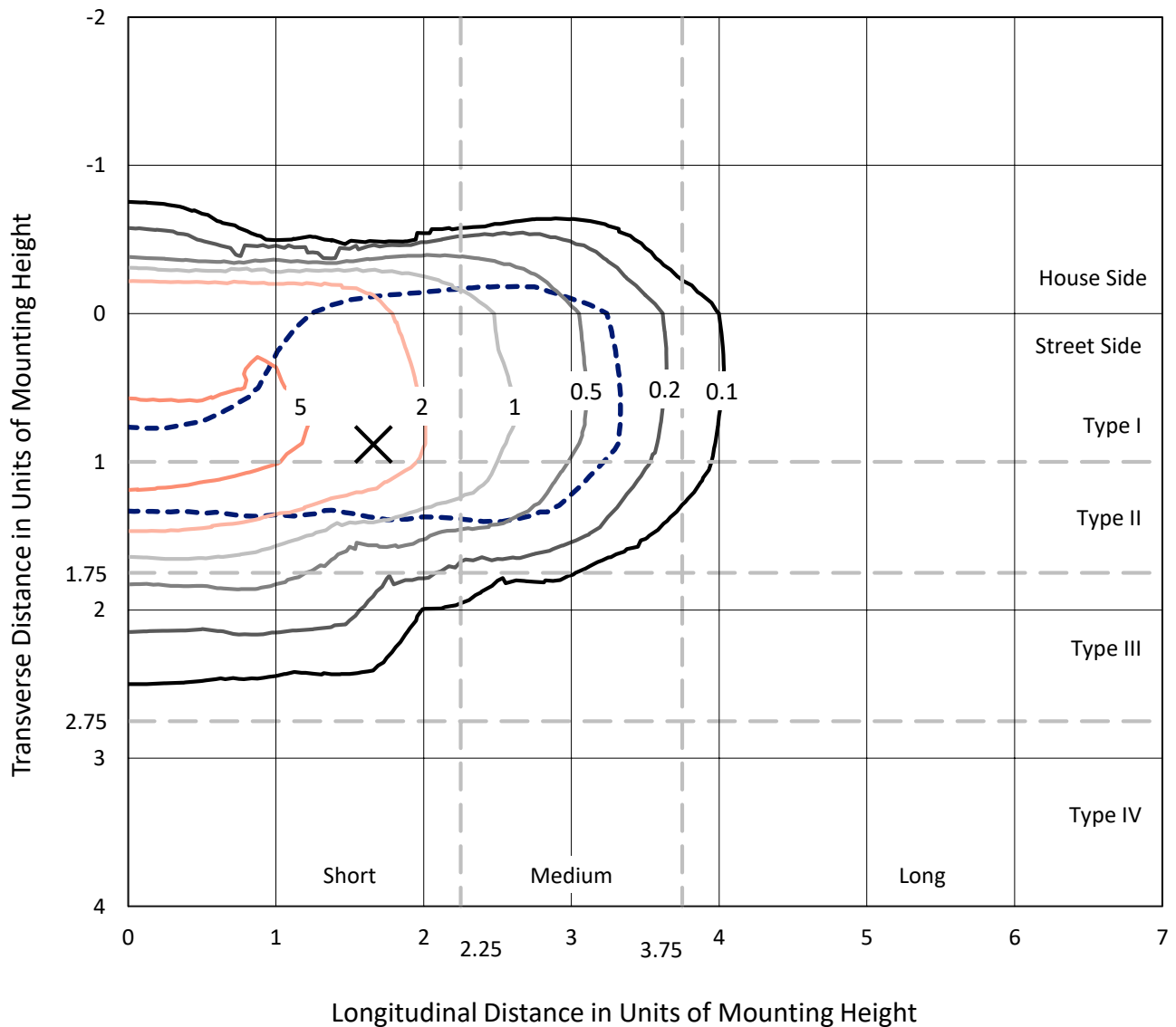


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

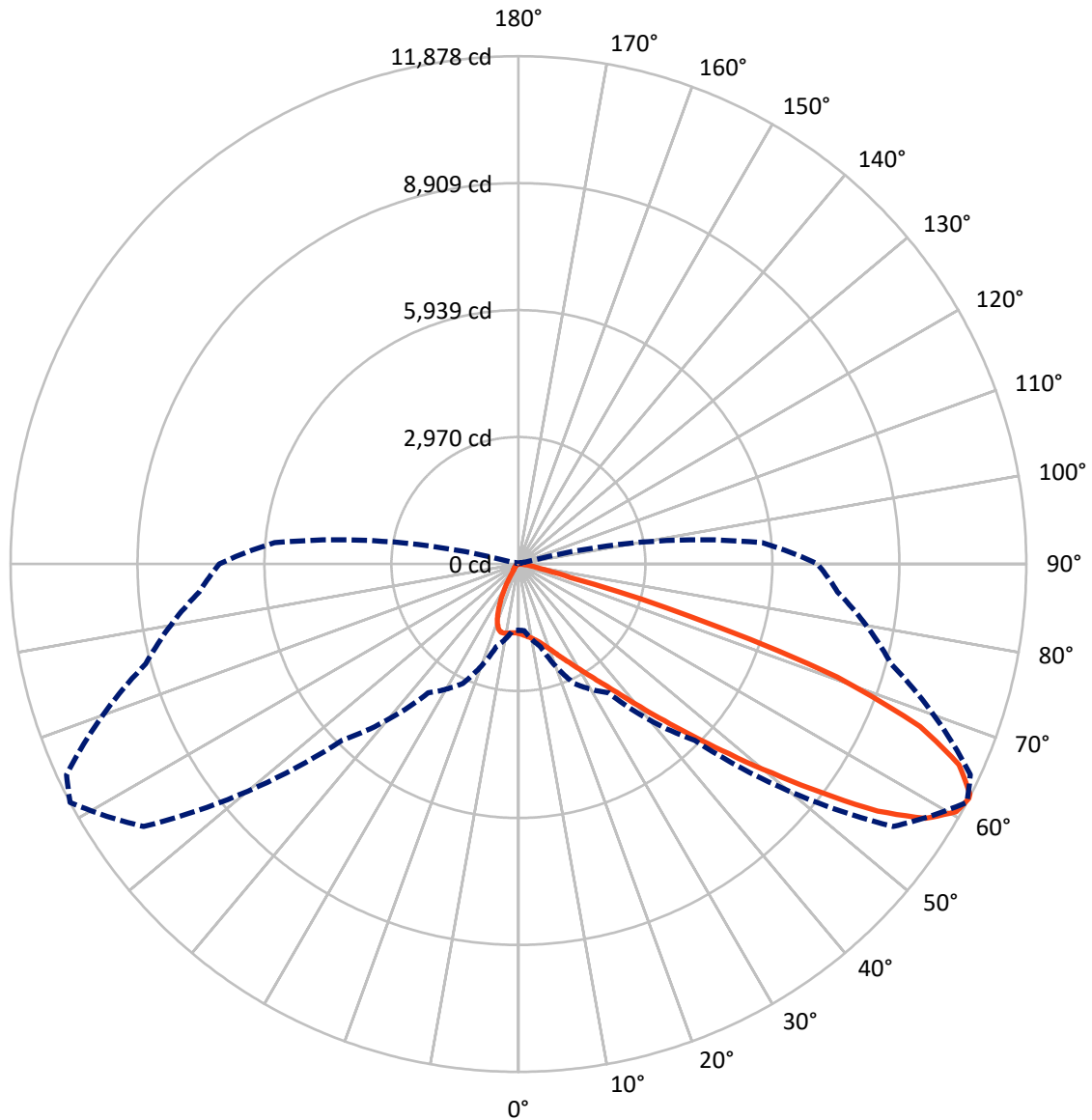


Based on 20 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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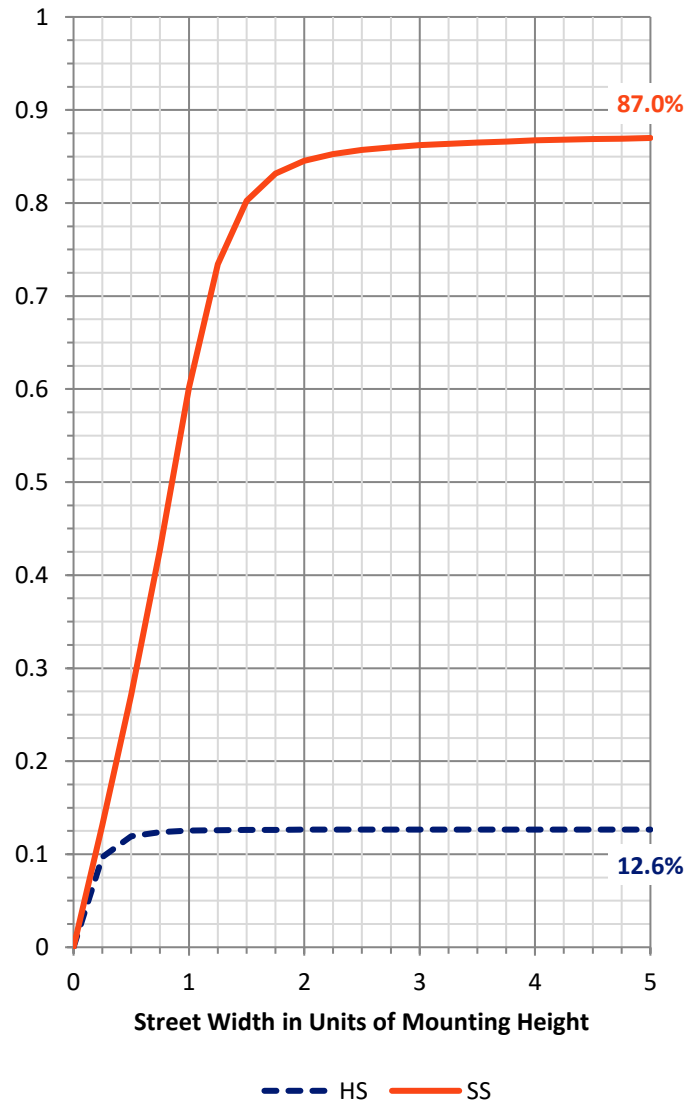
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1727.6	0.0	1727.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11783.5	0.0	11783.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	13511.1	0.0	13511.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	1.2
10°-20°	437.4	3.2
20°-30°	734.6	5.4
30°-40°	1408.1	10.4
40°-50°	2876.2	21.3
50°-60°	3806.2	28.2
60°-70°	2956.8	21.9
70°-80°	1067.2	7.9
80°-90°	68.0	0.5
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°	13511.1	100.0
0°-180°	13511.1	100.0

Coefficient of Utilization



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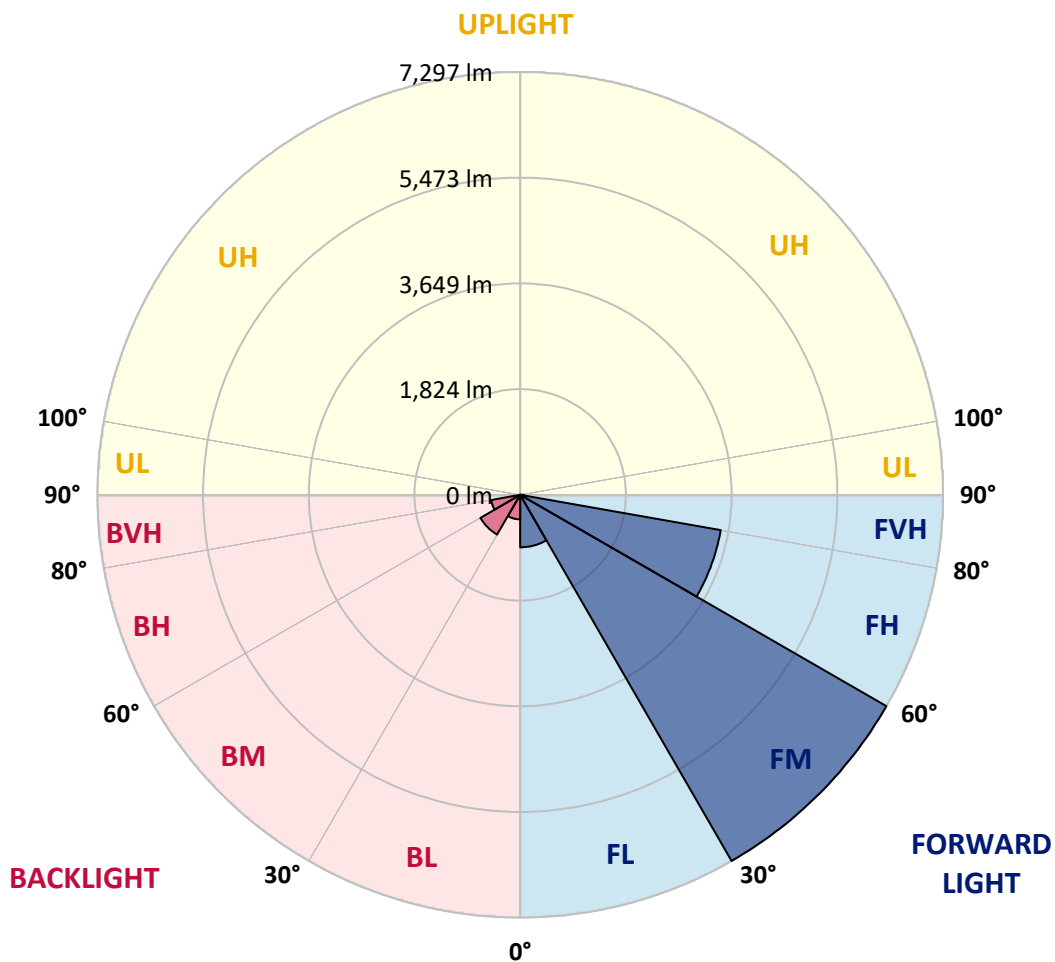
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	905.8	6.7			
FM	(30°-60°)	7297.4	54.0			
FH	(60°-80°)	3515.3	26.0			G2/5000
FVH	(80°-90°)	65.0	0.5			G1/100
BL	(0°-30°)	422.8	3.1	B1/500		
BM	(30°-60°)	793.1	5.9	B1/1000		
BH	(60°-80°)	508.7	3.8	B2/1000		G2/1000
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5
2.5°	1670.8	1667.4	1664.1	1660.7	1660.7	1657.6	1654.1	1647.5	1640.8	1634.2	1631.0
5°	1700.6	1697.3	1694.1	1697.3	1694.1	1694.1	1690.7	1684.1	1677.5	1667.4	1657.6
7.5°	1723.8	1720.7	1717.3	1720.7	1723.8	1727.3	1730.6	1723.8	1720.7	1707.3	1697.3
10°	1753.9	1750.4	1747.2	1753.9	1753.9	1770.4	1773.8	1770.4	1767.1	1757.2	1740.6
12.5°	1797.0	1800.4	1800.4	1806.9	1813.6	1833.5	1840.2	1830.1	1830.1	1816.9	1797.0
15°	1876.6	1876.6	1876.6	1883.3	1886.7	1913.2	1919.9	1909.9	1916.5	1893.3	1873.3
17.5°	1953.2	1956.4	1963.1	1976.4	1976.4	1999.5	2012.9	2012.9	2026.1	1996.3	1969.8
20°	2029.5	2032.9	2042.7	2072.7	2072.7	2102.6	2125.7	2135.8	2149.0	2119.2	2072.7
22.5°	2112.5	2112.5	2129.2	2175.7	2165.6	2225.6	2268.7	2285.3	2298.6	2258.7	2185.7
25°	2238.8	2225.6	2238.8	2282.0	2275.2	2358.3	2438.1	2454.7	2471.2	2424.7	2315.1
27.5°	2478.0	2458.0	2411.5	2414.9	2414.9	2511.1	2624.0	2647.3	2657.2	2617.4	2481.3
30°	2956.2	2956.2	2783.5	2667.2	2590.8	2677.2	2836.7	2876.6	2889.8	2830.0	2650.7
32.5°	3789.9	3789.9	3471.1	3175.5	2886.4	2886.4	3069.1	3142.2	3155.6	3085.8	2876.6
35°	4852.9	4846.3	4367.9	3962.7	3398.0	3185.4	3341.5	3464.5	3504.3	3411.3	3168.9
37.5°	5982.3	5939.1	5424.1	4959.2	4185.3	3663.7	3710.2	3873.0	3909.6	3833.2	3547.4
40°	6899.0	6849.1	6433.9	6045.4	5201.6	4427.7	4241.6	4391.2	4434.4	4328.0	3999.3
42.5°	7729.3	7606.5	7320.7	7041.9	6370.8	5749.7	4949.2	5008.9	5055.5	4942.6	4507.4
45°	8330.6	8141.2	7995.0	7908.8	7553.3	7201.3	5865.9	5746.4	5762.9	5623.5	5062.0
47.5°	8347.2	8214.3	8227.5	8453.5	8599.7	8586.3	7058.4	6633.3	6570.2	6337.6	5653.4
50°	7550.1	7626.4	7868.9	8513.2	9303.8	9782.2	8476.8	7682.8	7493.5	7075.1	6241.3
52.5°	6221.3	6341.0	6795.9	7882.2	9406.8	10569.4	9948.2	8881.9	8543.2	7805.7	6693.0
55°	4872.8	4879.5	5357.8	6463.8	8719.2	10712.2	11124.0	10200.7	9682.6	8360.4	6992.0
57.5°	3351.4	3534.2	4142.1	4886.2	7168.0	10001.3	11565.8	11223.8	10556.1	8702.6	7201.3
60°	2195.5	2205.6	2913.1	3773.3	4879.5	8137.9	11296.7	11765.1	11263.6	8905.2	7344.1
62°	1547.9	1564.5	2003.0	3082.4	3677.0	5832.8	10702.1	11878.1	11662.2	9024.8	7493.5
62.5°	1435.0	1448.2	1816.9	2909.7	3454.4	5231.5	10489.6	11851.5	11722.0	9064.6	7546.8
65°	1053.0	1053.0	1189.1	1999.5	2531.1	2826.6	8888.5	11323.3	11642.3	9383.5	7745.9
67.5°	813.8	820.4	867.0	1232.4	1909.9	1714.0	5673.2	10134.1	10811.8	9855.1	7858.9
70°	700.9	697.5	730.7	817.1	1378.4	1139.3	2497.8	7908.8	9054.6	9735.7	7756.0
72.5°	518.1	521.5	597.9	717.4	960.0	740.7	1129.3	4198.5	5872.6	7619.8	6646.5
75°	332.2	335.4	421.8	564.7	690.8	484.9	651.0	1252.2	2404.9	4225.1	4065.6
77.5°	222.5	229.2	275.7	395.3	604.5	302.3	408.5	524.8	724.2	1584.4	1458.2
80°	149.5	149.5	176.1	265.7	382.0	252.5	219.2	348.7	375.3	491.6	245.7
82.5°	99.6	99.6	116.2	176.1	249.1	225.8	132.9	189.4	219.2	245.7	86.3
85°	59.7	59.7	79.7	109.7	162.8	126.2	86.3	106.3	112.9	156.1	46.5
87.5°	36.6	33.1	53.1	76.4	86.3	76.4	56.5	56.5	59.7	86.3	23.3
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°	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5	1627.5
2.5°	1624.2	1620.9	1617.6	1611.0	1601.0	1594.4	1587.8	1581.0	1574.4	1574.4	1584.4
5°	1654.1	1644.2	1631.0	1617.6	1597.6	1584.4	1574.4	1561.2	1554.4	1554.4	1557.8
7.5°	1690.7	1680.6	1657.6	1634.2	1604.4	1581.0	1557.8	1527.9	1504.8	1494.7	1504.8
10°	1730.6	1717.3	1684.1	1647.5	1614.3	1554.4	1478.2	1385.0	1305.3	1268.9	1285.5
12.5°	1780.4	1763.7	1723.8	1674.1	1597.6	1451.5	1262.2	1046.3	910.2	847.0	860.2
15°	1853.5	1830.1	1773.8	1697.3	1527.9	1212.4	903.4	654.3	528.2	475.1	481.6
17.5°	1939.8	1909.9	1833.5	1690.7	1348.5	873.6	538.2	382.0	328.8	315.6	315.6
20°	2032.9	1993.0	1893.3	1640.8	1076.2	548.1	335.4	292.3	272.4	262.5	262.5
22.5°	2129.2	2076.1	1943.2	1524.7	767.3	342.2	275.7	245.7	222.5	212.5	212.5
25°	2245.5	2175.7	1993.0	1321.9	488.3	275.7	235.9	205.9	182.6	169.4	172.7
27.5°	2381.5	2291.8	2036.2	1069.5	315.6	239.2	196.0	166.0	146.2	139.4	139.4
30°	2524.3	2418.1	2046.1	800.5	255.7	205.9	162.8	136.3	122.9	116.2	116.2
32.5°	2720.3	2580.9	2016.2	531.4	216.0	172.7	136.3	112.9	102.9	99.6	99.6
35°	2979.5	2793.5	1946.4	328.8	182.6	142.8	112.9	99.6	89.7	86.3	86.3
37.5°	3308.3	3089.1	1823.6	225.8	156.1	116.2	96.3	86.3	79.7	76.4	76.4
40°	3746.8	3447.9	1664.1	196.0	132.9	99.6	83.1	76.4	69.8	69.8	69.8
42.5°	4211.9	3883.0	1458.2	172.7	112.9	86.3	73.1	66.5	63.2	59.7	59.7
45°	4720.1	4328.0	1202.4	152.8	96.3	76.4	66.5	56.5	53.1	53.1	53.1
47.5°	5224.9	4786.3	923.4	132.9	83.1	66.5	56.5	49.9	46.5	43.2	43.2
50°	5743.0	5201.6	677.6	116.2	73.1	59.7	49.9	43.2	36.6	33.1	33.1
52.5°	6118.4	5450.7	495.0	99.6	63.2	49.9	39.9	33.1	26.6	23.3	23.3
55°	6394.0	5603.5	362.0	83.1	56.5	43.2	33.1	26.6	19.9	19.9	16.6
57.5°	6610.0	5676.6	272.4	73.1	49.9	36.6	26.6	19.9	16.6	13.2	13.2
60°	6776.1	5680.0	202.6	59.7	43.2	30.0	19.9	13.2	10.1	10.1	10.1
62°	6995.3	5723.1	166.0	49.9	39.9	26.6	16.6	10.1	6.6	3.4	3.4
62.5°	7058.4	5739.7	159.4	49.9	36.6	23.3	13.2	10.1	6.6	3.4	3.4
65°	7350.7	5769.6	122.9	39.9	30.0	19.9	10.1	6.6	0.0	0.0	0.0
67.5°	7616.4	5723.1	89.7	30.0	23.3	13.2	10.1	3.4	0.0	0.0	0.0
70°	7589.9	5404.3	63.2	19.9	16.6	10.1	6.6	0.0	0.0	0.0	0.0
72.5°	6254.5	4045.6	43.2	16.6	10.1	6.6	3.4	0.0	0.0	0.0	0.0
75°	3776.7	1770.4	30.0	10.1	10.1	6.6	3.4	0.0	0.0	0.0	0.0
77.5°	1238.9	641.1	19.9	6.6	6.6	3.4	3.4	0.0	0.0	0.0	0.0
80°	202.6	106.3	10.1	6.6	6.6	3.4	3.4	0.0	0.0	0.0	0.0
82.5°	63.2	26.6	6.6	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0
85°	23.3	10.1	6.6	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	6.6	6.6	6.6	3.4	3.4	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)