

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: P399682

Luminaire Tested: **ARCH-L-PA3-170-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399682
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-830-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15156 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

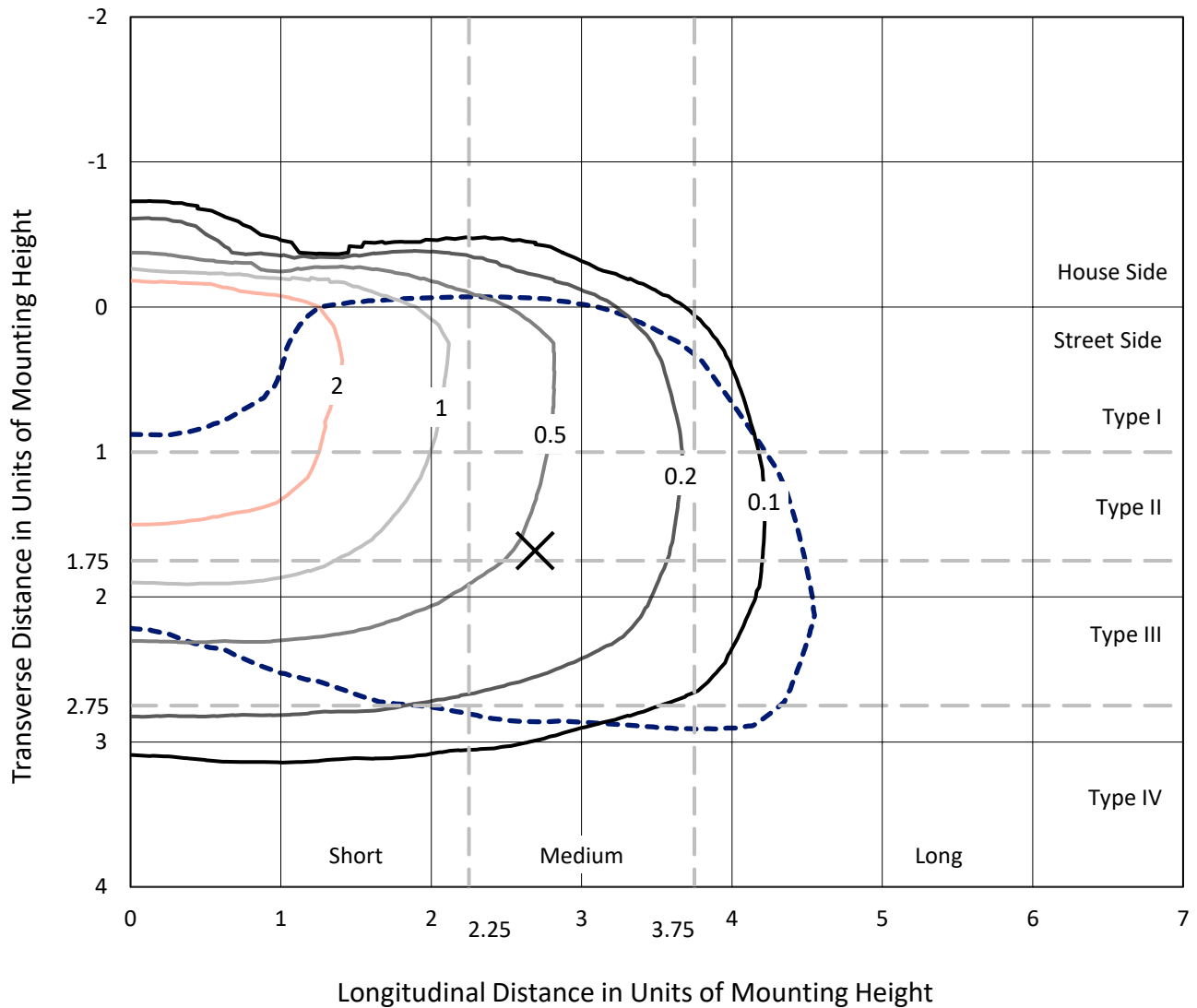
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399682
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

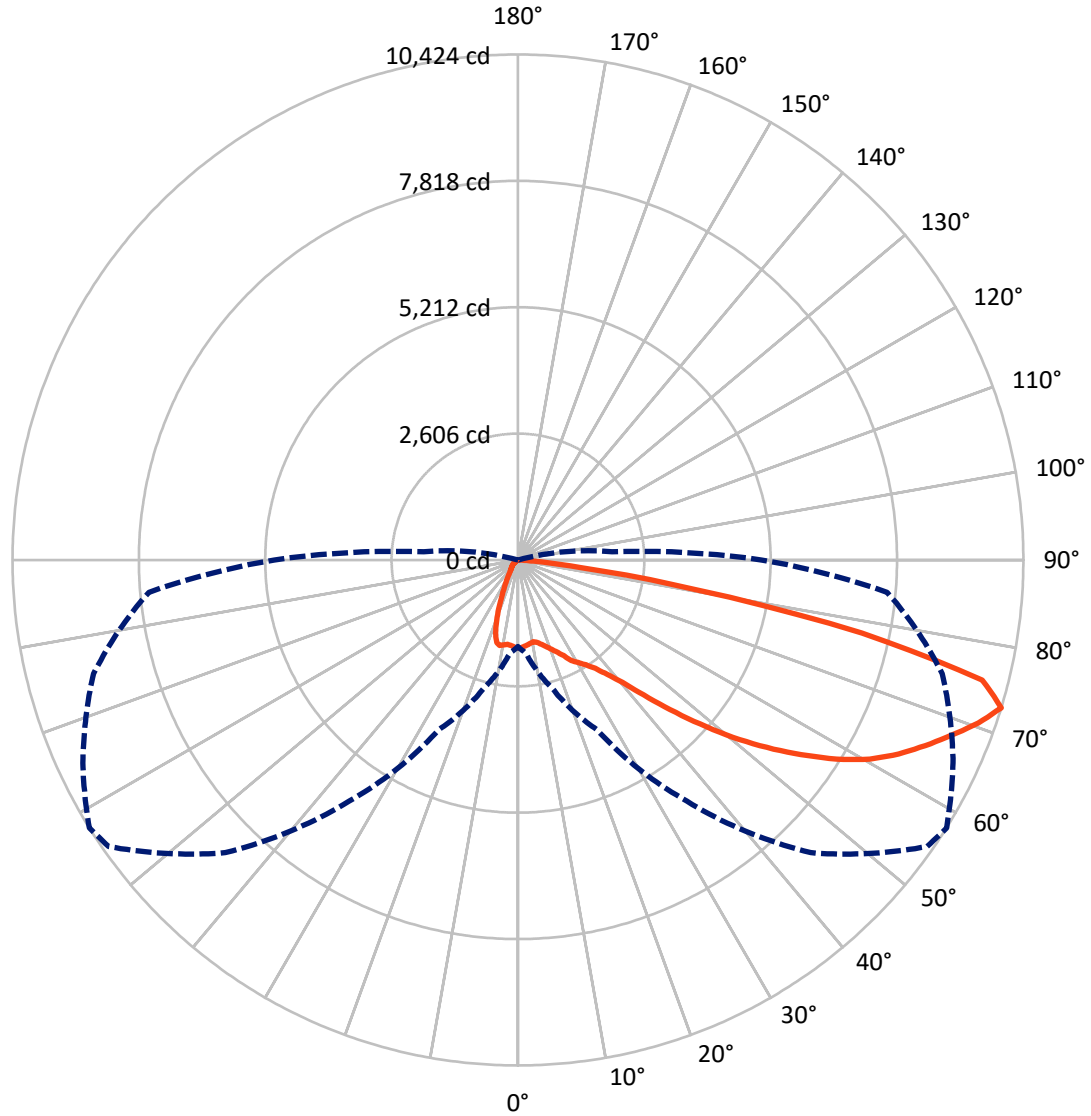
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399682
CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399682
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

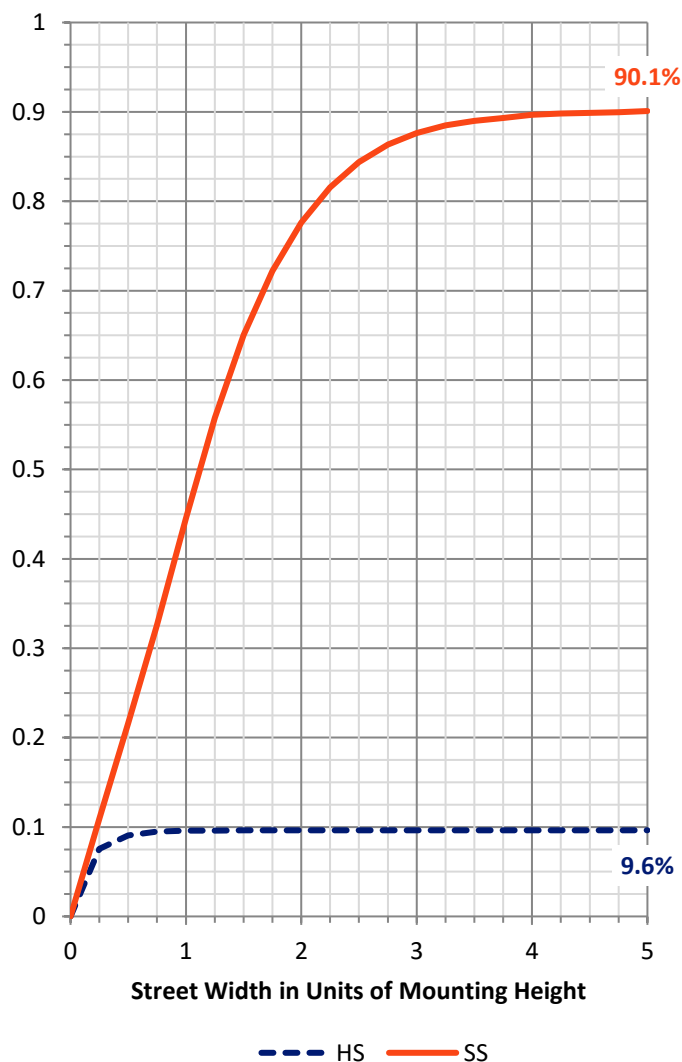
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1473.8	0.0	1473.8
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	13682.2	0.0	13682.2
	% Fixture	90.3	0.0	90.3
Total	Lumens	15156.0	0.0	15156.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	1.1
10°-20°	434.7	2.9
20°-30°	682.9	4.5
30°-40°	1177.7	7.8
40°-50°	2240.7	14.8
50°-60°	3548.6	23.4
60°-70°	4140.8	27.3
70°-80°	2593.4	17.1
80°-90°	170.2	1.1
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°	15156.0	100.0
0°-180°	15156.0	100.0

Coefficient of Utilization



REPORT NUMBER: P399682

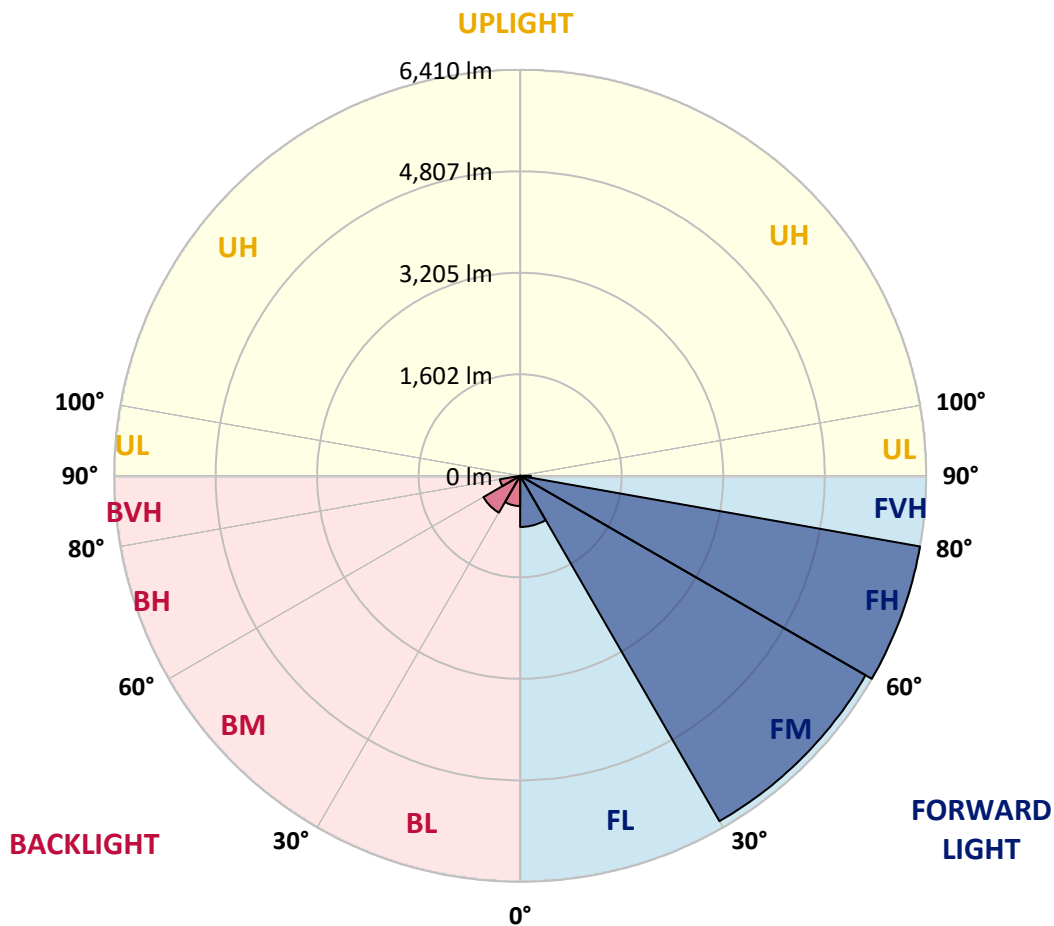
CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	807.3	5.3			
FM (30°-60°)	6296.4	41.5			
FH (60°-80°)	6409.9	42.3			G3/7500
FVH (80°-90°)	168.6	1.1			G2/225
BL (0°-30°)	477.3	3.1	B1/500		
BM (30°-60°)	670.6	4.4	B1/1000		
BH (60°-80°)	324.3	2.1	B1/500		G1/500
BVH (80°-90°)	1.6	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-G3

Type IV Medium





REPORT NUMBER: P399682
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6
2.5°	1810.5	1802.4	1799.7	1796.9	1799.7	1802.4	1794.2	1802.4	1796.9	1799.7	1805.1
5°	1745.4	1737.3	1734.6	1737.3	1745.4	1759.0	1764.4	1772.6	1772.6	1780.7	1783.4
7.5°	1672.3	1666.8	1664.1	1669.6	1685.8	1715.6	1731.9	1742.7	1753.6	1769.8	1786.1
10°	1631.6	1628.9	1626.2	1634.3	1650.6	1677.7	1699.4	1715.6	1756.3	1802.4	1832.2
12.5°	1604.5	1604.5	1609.9	1626.2	1647.9	1669.6	1721.1	1742.7	1805.1	1875.5	1916.2
15°	1582.8	1582.8	1591.0	1620.8	1650.6	1702.1	1778.0	1802.4	1875.5	1962.3	2016.5
17.5°	1566.6	1572.0	1577.4	1607.2	1664.1	1750.9	1840.3	1875.5	1965.0	2059.8	2119.5
20°	1569.3	1574.7	1577.4	1607.2	1688.5	1807.8	1921.6	1962.3	2065.3	2165.5	2225.2
22.5°	1585.5	1593.7	1596.4	1637.0	1731.9	1867.4	2013.8	2059.8	2171.0	2276.7	2322.7
25°	1653.3	1658.7	1642.5	1677.7	1794.2	1959.6	2133.0	2181.8	2292.9	2390.5	2428.5
27.5°	1883.7	1889.1	1799.7	1759.0	1843.0	2035.5	2279.4	2347.1	2485.4	2550.4	2555.8
30°	2382.4	2387.8	2211.6	2019.2	1959.6	2100.5	2360.7	2455.6	2634.4	2707.6	2675.1
32.5°	3024.7	3019.3	2778.1	2493.5	2236.0	2214.3	2477.2	2577.5	2772.7	2843.1	2818.7
35°	3669.8	3677.9	3471.9	3043.7	2675.1	2428.5	2626.3	2742.8	2978.6	3078.9	3035.6
37.5°	4111.6	4165.8	4076.3	3612.9	3214.4	2824.2	2867.5	2992.2	3287.6	3423.1	3331.0
40°	4734.9	4721.4	4504.6	4163.1	3810.7	3409.6	3257.8	3317.4	3656.2	3837.8	3694.2
42.5°	5572.4	5545.3	5176.7	4843.3	4450.4	4122.4	3813.4	3802.6	4079.0	4290.4	4081.7
45°	6331.3	6290.7	6038.6	5716.1	5285.1	4908.4	4491.0	4396.1	4588.6	4767.5	4523.5
47.5°	6935.7	6868.0	6689.1	6518.3	6412.6	5827.2	5201.1	5057.5	5155.0	5287.8	4943.6
50°	7651.2	7464.2	7204.0	7101.0	7320.6	6868.0	5884.1	5745.9	5740.5	5816.4	5377.3
52.5°	7976.5	7637.7	7491.3	7578.1	7965.6	7835.5	6621.3	6423.5	6344.9	6353.0	5781.1
55°	7583.5	7545.5	7624.1	7895.2	8402.0	8326.1	7328.7	7084.8	6968.2	6821.9	6168.7
57.5°	7136.3	7252.8	7564.5	8082.2	8954.9	8838.4	8025.3	7748.8	7534.7	7198.6	6599.6
60°	6724.3	6843.6	7358.5	8125.6	9258.5	9331.6	8605.3	8342.4	8025.3	7583.5	7073.9
62.5°	6098.2	6190.4	6914.0	8063.2	9125.7	9618.9	9009.1	8811.3	8515.8	7949.4	7618.7
65°	5393.5	5453.2	6168.7	7564.5	8865.5	9586.4	9342.5	9231.4	8944.1	8331.5	8158.1
67.5°	4621.1	4691.6	5287.8	6667.4	8355.9	9434.6	9656.9	9646.0	9318.1	8754.3	8548.4
70°	3732.1	3737.5	4230.8	5529.1	7466.9	9131.1	10047.2	10071.6	9675.9	9071.5	8564.6
72.5°	1786.1	1932.5	2742.8	3859.5	6068.4	8534.8	10301.9	10423.9	9900.8	9060.6	7640.4
75°	409.3	422.8	799.5	1834.9	3558.7	6550.9	9665.0	9892.7	9353.3	7835.5	5382.7
77.5°	149.1	157.2	225.0	536.6	1368.7	3385.2	6916.7	7250.1	6914.0	5065.6	2545.0
80°	100.3	97.6	116.5	238.5	628.8	959.5	3537.0	3734.8	3409.6	1729.2	609.8
82.5°	51.5	54.2	81.3	132.8	422.8	333.4	1181.7	1284.7	1057.0	346.9	113.8
85°	24.4	24.4	46.1	84.0	178.9	116.5	262.9	317.1	284.6	151.8	37.9
87.5°	24.4	24.4	43.4	54.2	92.2	48.8	65.0	81.3	75.9	81.3	13.6
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: P399682
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6	1818.6
2.5°	1805.1	1802.4	1799.7	1805.1	1802.4	1807.8	1807.8	1813.2	1813.2	1807.8	1805.1
5°	1780.7	1775.3	1769.8	1769.8	1767.1	1772.6	1788.8	1802.4	1805.1	1796.9	1794.2
7.5°	1783.4	1783.4	1778.0	1767.1	1748.2	1748.2	1748.2	1764.4	1772.6	1767.1	1764.4
10°	1832.2	1834.9	1821.3	1796.9	1764.4	1734.6	1677.7	1593.7	1515.1	1493.4	1485.3
12.5°	1916.2	1918.9	1891.8	1848.4	1780.7	1604.5	1387.7	1187.1	1032.6	989.3	981.1
15°	2016.5	2019.2	1970.4	1899.9	1694.0	1284.7	962.2	734.5	599.0	566.5	563.7
17.5°	2119.5	2114.1	2040.9	1905.4	1436.5	910.7	585.4	468.9	433.7	425.5	428.2
20°	2219.8	2203.5	2103.2	1805.1	1105.8	596.3	428.2	401.1	393.0	387.6	387.6
22.5°	2311.9	2279.4	2154.7	1607.2	775.2	428.2	382.2	376.7	365.9	357.8	355.1
25°	2404.1	2358.0	2187.2	1349.7	520.4	374.0	360.5	349.6	336.1	325.2	322.5
27.5°	2515.2	2450.1	2171.0	1024.5	390.3	346.9	336.1	319.8	300.8	284.6	279.2
30°	2620.9	2547.7	2078.8	707.4	333.4	319.8	303.6	279.2	254.8	235.8	230.4
32.5°	2753.7	2669.7	1913.5	463.5	290.0	279.2	262.9	233.1	200.6	178.9	173.5
35°	2943.4	2848.6	1702.1	325.2	254.8	235.8	214.1	181.6	146.4	130.1	127.4
37.5°	3209.0	3081.6	1436.5	262.9	225.0	197.9	165.3	132.8	108.4	94.9	92.2
40°	3534.3	3339.1	1141.0	233.1	200.6	165.3	124.7	94.9	78.6	67.8	67.8
42.5°	3886.6	3580.3	840.2	214.1	176.2	135.5	92.2	67.8	56.9	51.5	48.8
45°	4249.8	3794.5	566.5	197.9	154.5	103.0	65.0	46.1	37.9	37.9	35.2
47.5°	4626.5	3938.1	365.9	178.9	130.1	75.9	43.4	32.5	27.1	27.1	27.1
50°	5000.5	4014.0	260.2	162.6	105.7	51.5	32.5	24.4	21.7	21.7	21.7
52.5°	5271.6	3965.2	208.7	140.9	81.3	37.9	24.4	19.0	16.3	16.3	16.3
55°	5507.4	3881.2	181.6	122.0	59.6	27.1	19.0	16.3	13.6	13.6	13.6
57.5°	5748.6	3772.8	162.6	103.0	43.4	19.0	13.6	10.8	10.8	10.8	10.8
60°	5968.1	3588.5	140.9	81.3	29.8	13.6	10.8	8.1	8.1	8.1	8.1
62.5°	6182.2	3431.3	122.0	62.3	21.7	10.8	5.4	5.4	2.7	2.7	2.7
65°	6304.2	3219.9	97.6	40.7	13.6	8.1	2.7	2.7	0.0	0.0	0.0
67.5°	6266.3	2967.8	67.8	24.4	8.1	5.4	2.7	0.0	0.0	0.0	0.0
70°	6003.4	2629.0	40.7	13.6	8.1	5.4	2.7	0.0	0.0	0.0	0.0
72.5°	5027.7	1946.0	24.4	10.8	5.4	2.7	0.0	0.0	0.0	0.0	0.0
75°	3358.1	894.4	13.6	8.1	2.7	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	1536.8	268.3	8.1	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	309.0	70.5	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	65.0	13.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.6	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	2.7	0.0	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)