

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: P258070

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258070
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-AF72-140-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA 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: 13369.9 lumens
Efficiency: N/A
Efficacy: 93.5 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

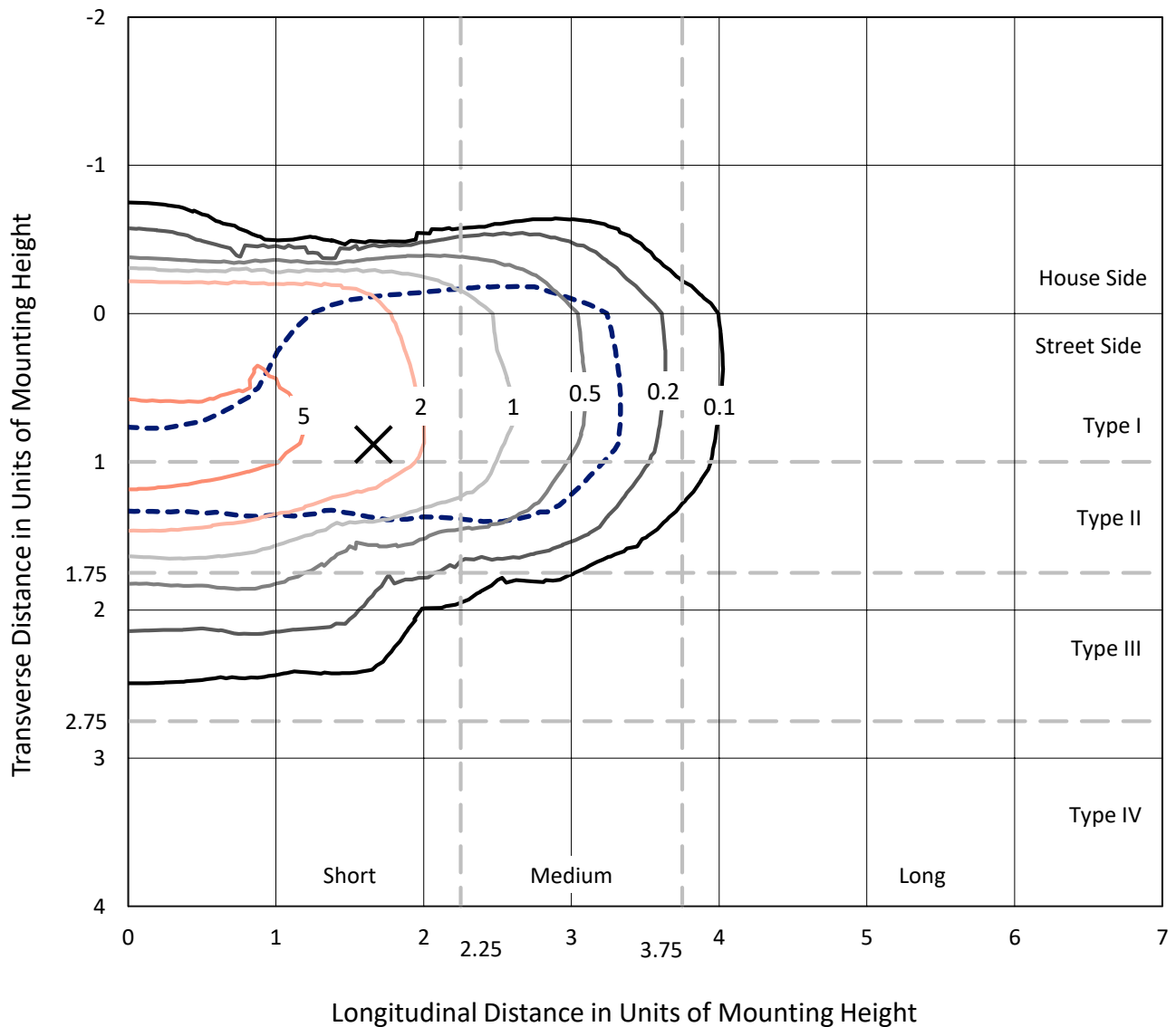
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

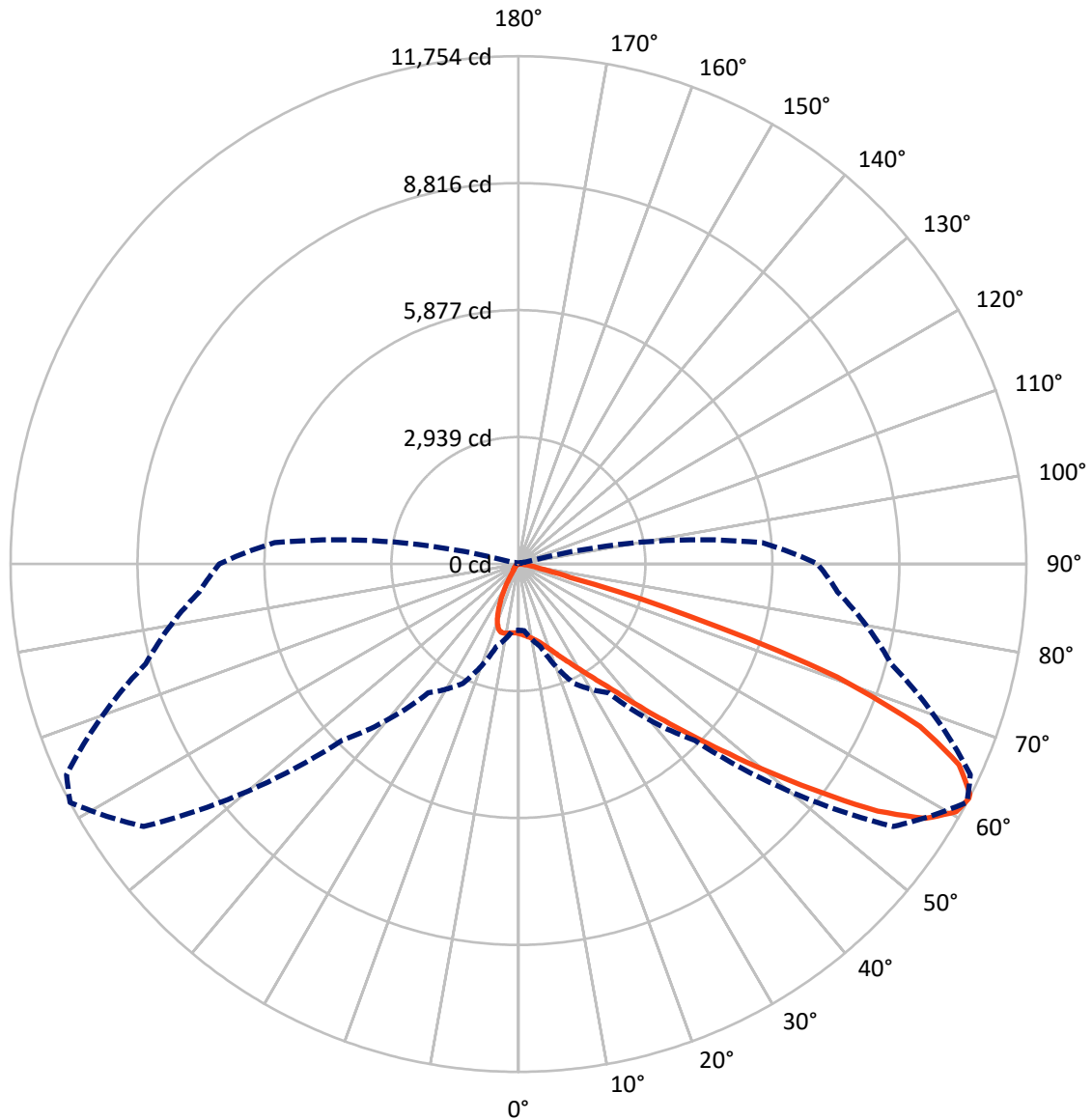
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 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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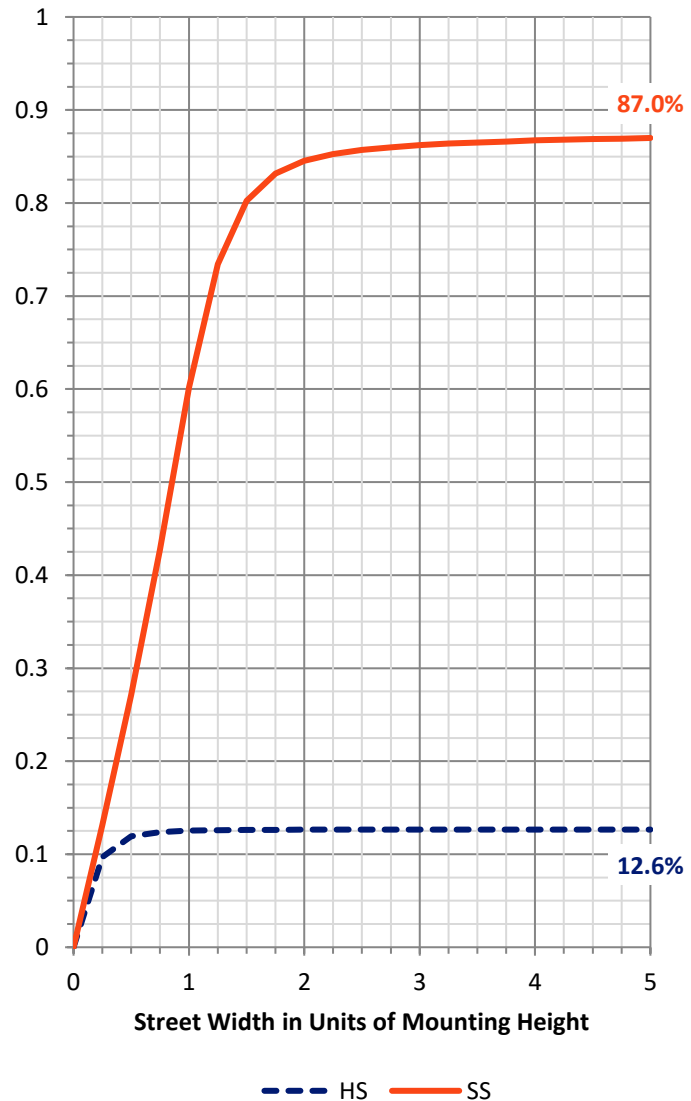
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1709.5	0.0	1709.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11660.4	0.0	11660.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	13369.9	0.0	13369.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	1.2
10°-20°	432.8	3.2
20°-30°	726.9	5.4
30°-40°	1393.4	10.4
40°-50°	2846.1	21.3
50°-60°	3766.4	28.2
60°-70°	2925.9	21.9
70°-80°	1056.1	7.9
80°-90°	67.3	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°	13369.9	100.0
0°-180°	13369.9	100.0



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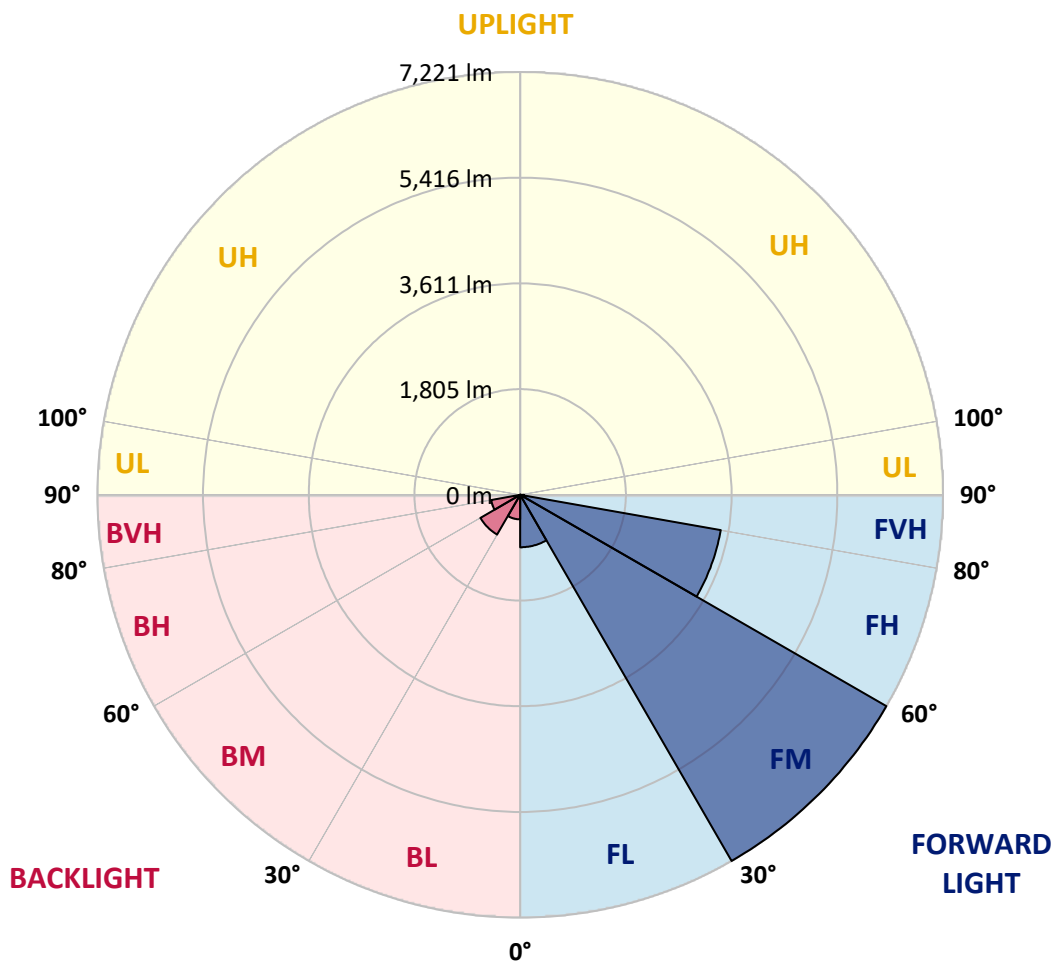
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	896.3	6.7			
FM	(30°-60°)	7221.2	54.0			
FH	(60°-80°)	3478.6	26.0			G2/5000
FVH	(80°-90°)	64.4	0.5			G1/100
BL	(0°-30°)	418.4	3.1	B1/500		
BM	(30°-60°)	784.8	5.9	B1/1000		
BH	(60°-80°)	503.4	3.8	B2/1000		G2/1000
BVH	(80°-90°)	2.9	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°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6
2.5°	1653.3	1650.0	1646.7	1643.5	1643.5	1640.2	1636.9	1630.3	1623.7	1617.2	1613.9
5°	1682.9	1679.6	1676.3	1679.6	1676.3	1676.3	1673.0	1666.5	1659.8	1650.0	1640.2
7.5°	1705.9	1702.6	1699.3	1702.6	1705.9	1709.1	1712.5	1705.9	1702.6	1689.5	1679.6
10°	1735.5	1732.2	1728.9	1735.5	1735.5	1751.9	1755.2	1751.9	1748.6	1738.8	1722.3
12.5°	1778.2	1781.5	1781.5	1788.1	1794.7	1814.4	1821.0	1811.1	1811.1	1797.9	1778.2
15°	1857.1	1857.1	1857.1	1863.7	1867.0	1893.3	1899.8	1890.0	1896.6	1873.5	1853.8
17.5°	1932.7	1936.0	1942.6	1955.7	1955.7	1978.7	1991.9	1991.9	2005.0	1975.4	1949.1
20°	2008.3	2011.6	2021.5	2051.0	2051.0	2080.6	2103.6	2113.5	2126.6	2097.0	2051.0
22.5°	2090.5	2090.5	2106.9	2152.9	2143.1	2202.2	2245.0	2261.4	2274.5	2235.1	2162.8
25°	2215.4	2202.2	2215.4	2258.1	2251.5	2333.7	2412.6	2429.0	2445.5	2399.4	2291.0
27.5°	2452.0	2432.3	2386.3	2389.6	2389.6	2485.0	2596.7	2619.7	2629.5	2590.1	2455.3
30°	2925.3	2925.3	2754.4	2639.4	2563.8	2649.2	2807.0	2846.5	2859.7	2800.4	2622.9
32.5°	3750.3	3750.3	3434.9	3142.3	2856.3	2856.3	3037.1	3109.5	3122.6	3053.5	2846.5
35°	4802.1	4795.6	4322.3	3921.3	3362.5	3152.1	3306.6	3428.2	3467.7	3375.6	3135.8
37.5°	5919.7	5877.0	5367.5	4907.4	4141.5	3625.4	3671.5	3832.6	3868.7	3793.1	3510.5
40°	6826.9	6777.7	6366.7	5982.2	5147.3	4381.5	4197.4	4345.3	4388.0	4282.9	3957.5
42.5°	7648.6	7527.1	7244.3	6968.2	6304.3	5689.7	4897.5	4956.7	5002.6	4890.9	4460.4
45°	8243.6	8056.2	7911.6	7826.2	7474.4	7126.0	5804.7	5686.4	5702.7	5564.8	5009.3
47.5°	8260.0	8128.6	8141.7	8365.2	8509.8	8496.6	6984.7	6564.0	6501.5	6271.4	5594.3
50°	7471.1	7546.7	7786.7	8424.3	9206.7	9680.0	8388.2	7602.7	7415.3	7001.1	6176.1
52.5°	6156.4	6274.7	6725.0	7799.8	9308.5	10459.0	9844.3	8789.2	8454.0	7724.2	6623.1
55°	4821.9	4828.4	5301.7	6396.3	8628.2	10600.3	11007.9	10094.1	9581.4	8273.1	6918.9
57.5°	3316.5	3497.3	4098.8	4835.1	7093.1	9896.8	11445.0	11106.5	10445.8	8611.7	7126.0
60°	2172.6	2182.5	2882.6	3734.0	4828.4	8053.0	11178.8	11642.2	11145.9	8812.2	7267.3
62°	1531.7	1548.1	1982.0	3050.2	3638.6	5771.8	10590.4	11754.0	11540.3	8930.6	7415.3
62.5°	1420.0	1433.1	1797.9	2879.3	3418.4	5176.8	10380.1	11727.7	11599.5	8969.9	7467.8
65°	1042.0	1042.0	1176.7	1978.7	2504.6	2797.2	8795.7	11205.1	11520.7	9285.5	7665.1
67.5°	805.3	811.9	857.8	1219.5	1890.0	1696.1	5614.1	10028.4	10698.9	9752.3	7776.9
70°	693.6	690.3	723.1	808.5	1364.1	1127.4	2471.8	7826.2	8960.1	9633.9	7674.9
72.5°	512.8	516.1	591.7	709.9	949.9	732.9	1117.6	4154.6	5811.3	7540.2	6577.1
75°	328.7	331.9	417.5	558.7	683.6	479.9	644.3	1239.2	2379.7	4180.9	4023.2
77.5°	220.2	226.8	272.8	391.2	598.2	299.1	404.3	519.4	716.6	1567.9	1443.0
80°	147.9	147.9	174.2	263.0	378.0	249.8	217.0	345.1	371.4	486.4	243.3
82.5°	98.6	98.6	115.1	174.2	246.5	223.5	131.4	187.4	217.0	243.3	85.4
85°	59.1	59.1	78.9	108.4	161.0	124.9	85.4	105.2	111.7	154.5	46.0
87.5°	36.1	32.8	52.6	75.6	85.4	75.6	55.9	55.9	59.1	85.4	23.0
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°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6
2.5°	1607.3	1604.0	1600.7	1594.2	1584.2	1577.7	1571.2	1564.6	1558.0	1558.0	1567.9
5°	1636.9	1627.0	1613.9	1600.7	1581.0	1567.9	1558.0	1544.9	1538.3	1538.3	1541.6
7.5°	1673.0	1663.2	1640.2	1617.2	1587.6	1564.6	1541.6	1512.0	1489.0	1479.1	1489.0
10°	1712.5	1699.3	1666.5	1630.3	1597.4	1538.3	1462.7	1370.7	1291.8	1255.6	1272.0
12.5°	1761.8	1745.4	1705.9	1656.6	1581.0	1436.4	1249.0	1035.3	900.6	838.2	851.3
15°	1834.0	1811.1	1755.2	1679.6	1512.0	1199.7	894.1	647.5	522.6	470.0	476.6
17.5°	1919.6	1890.0	1814.4	1673.0	1334.4	864.5	532.4	378.0	325.4	312.3	312.3
20°	2011.6	1972.1	1873.5	1623.7	1065.0	542.4	331.9	289.3	269.5	259.6	259.6
22.5°	2106.9	2054.3	1922.8	1508.6	759.2	338.6	272.8	243.3	220.2	210.3	210.3
25°	2222.0	2152.9	1972.1	1308.1	483.1	272.8	233.3	203.8	180.8	167.7	170.9
27.5°	2356.7	2268.0	2014.9	1058.3	312.3	236.6	194.0	164.4	144.6	138.1	138.1
30°	2498.0	2392.9	2024.7	792.2	253.1	203.8	161.0	134.7	121.6	115.1	115.1
32.5°	2692.0	2553.9	1995.2	525.9	213.7	170.9	134.7	111.7	101.9	98.6	98.6
35°	2948.3	2764.3	1926.1	325.4	180.8	141.4	111.7	98.6	88.8	85.4	85.4
37.5°	3273.7	3056.8	1804.5	223.5	154.5	115.1	95.3	85.4	78.9	75.6	75.6
40°	3707.7	3411.8	1646.7	194.0	131.4	98.6	82.1	75.6	69.0	69.0	69.0
42.5°	4167.8	3842.4	1443.0	170.9	111.7	85.4	72.3	65.8	62.5	59.1	59.1
45°	4670.7	4282.9	1189.9	151.2	95.3	75.6	65.8	55.9	52.6	52.6	52.6
47.5°	5170.3	4736.5	913.8	131.4	82.1	65.8	55.9	49.3	46.0	42.8	42.8
50°	5683.1	5147.3	670.5	115.1	72.3	59.1	49.3	42.8	36.1	32.8	32.8
52.5°	6054.5	5393.8	489.8	98.6	62.5	49.3	39.5	32.8	26.3	23.0	23.0
55°	6327.3	5545.0	358.2	82.1	55.9	42.8	32.8	26.3	19.7	19.7	16.5
57.5°	6541.0	5617.3	269.5	72.3	49.3	36.1	26.3	19.7	16.5	13.2	13.2
60°	6705.3	5620.6	200.5	59.1	42.8	29.6	19.7	13.2	9.8	9.8	9.8
62°	6922.2	5663.4	164.4	49.3	39.5	26.3	16.5	9.8	6.5	3.3	3.3
62.5°	6984.7	5679.8	157.7	49.3	36.1	23.0	13.2	9.8	6.5	3.3	3.3
65°	7273.9	5709.4	121.6	39.5	29.6	19.7	9.8	6.5	0.0	0.0	0.0
67.5°	7536.9	5663.4	88.8	29.6	23.0	13.2	9.8	3.3	0.0	0.0	0.0
70°	7510.6	5347.8	62.5	19.7	16.5	9.8	6.5	0.0	0.0	0.0	0.0
72.5°	6189.3	4003.4	42.8	16.5	9.8	6.5	3.3	0.0	0.0	0.0	0.0
75°	3737.2	1751.9	29.6	9.8	9.8	6.5	3.3	0.0	0.0	0.0	0.0
77.5°	1226.0	634.3	19.7	6.5	6.5	3.3	3.3	0.0	0.0	0.0	0.0
80°	200.5	105.2	9.8	6.5	6.5	3.3	3.3	0.0	0.0	0.0	0.0
82.5°	62.5	26.3	6.5	6.5	3.3	3.3	0.0	0.0	0.0	0.0	0.0
85°	23.0	9.8	6.5	6.5	3.3	3.3	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	6.5	6.5	6.5	3.3	3.3	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)