

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: P399599

Luminaire Tested: **ARCH-L-PA3-160-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-827-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 705mA 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: 12660 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

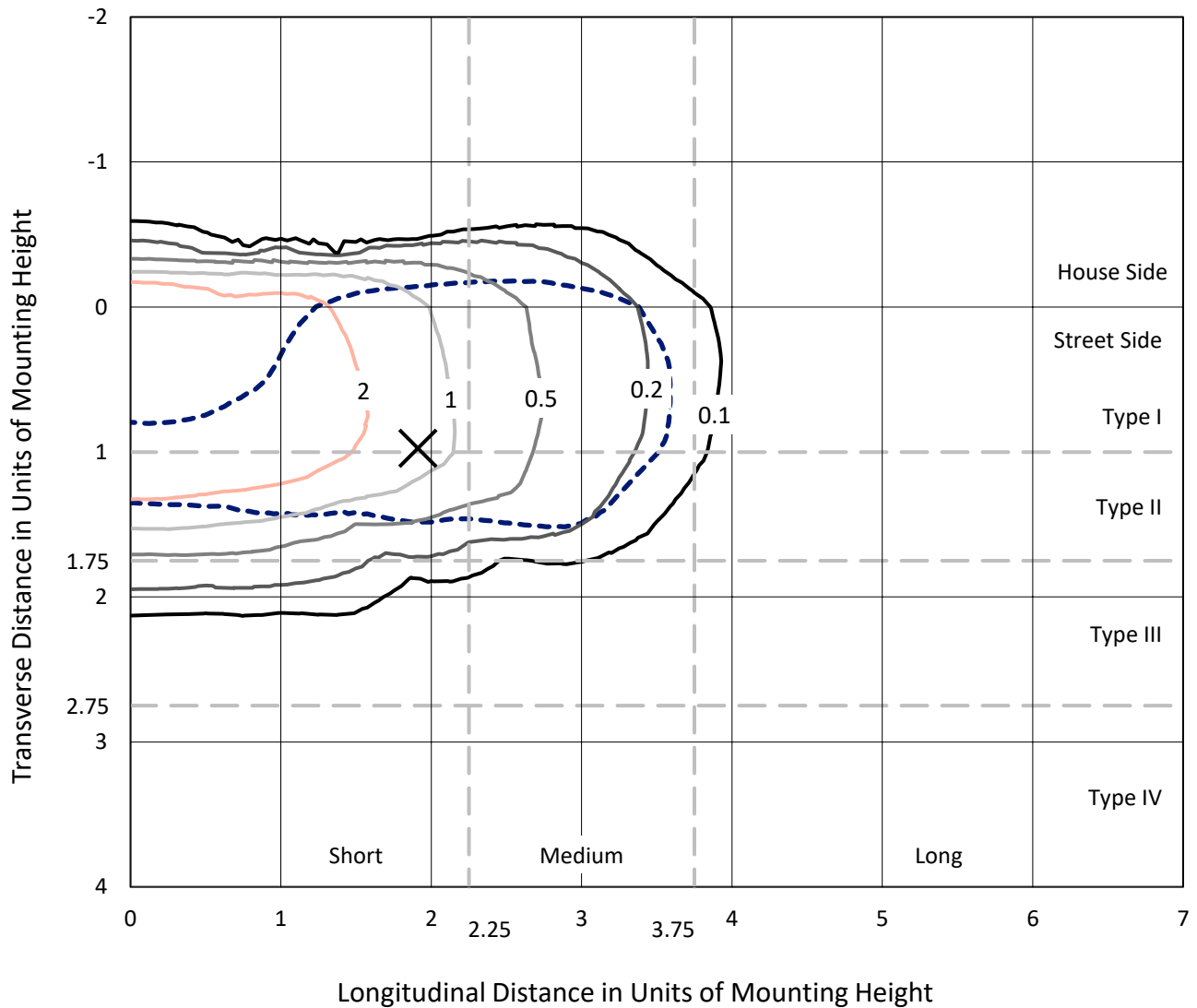
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399599
 CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

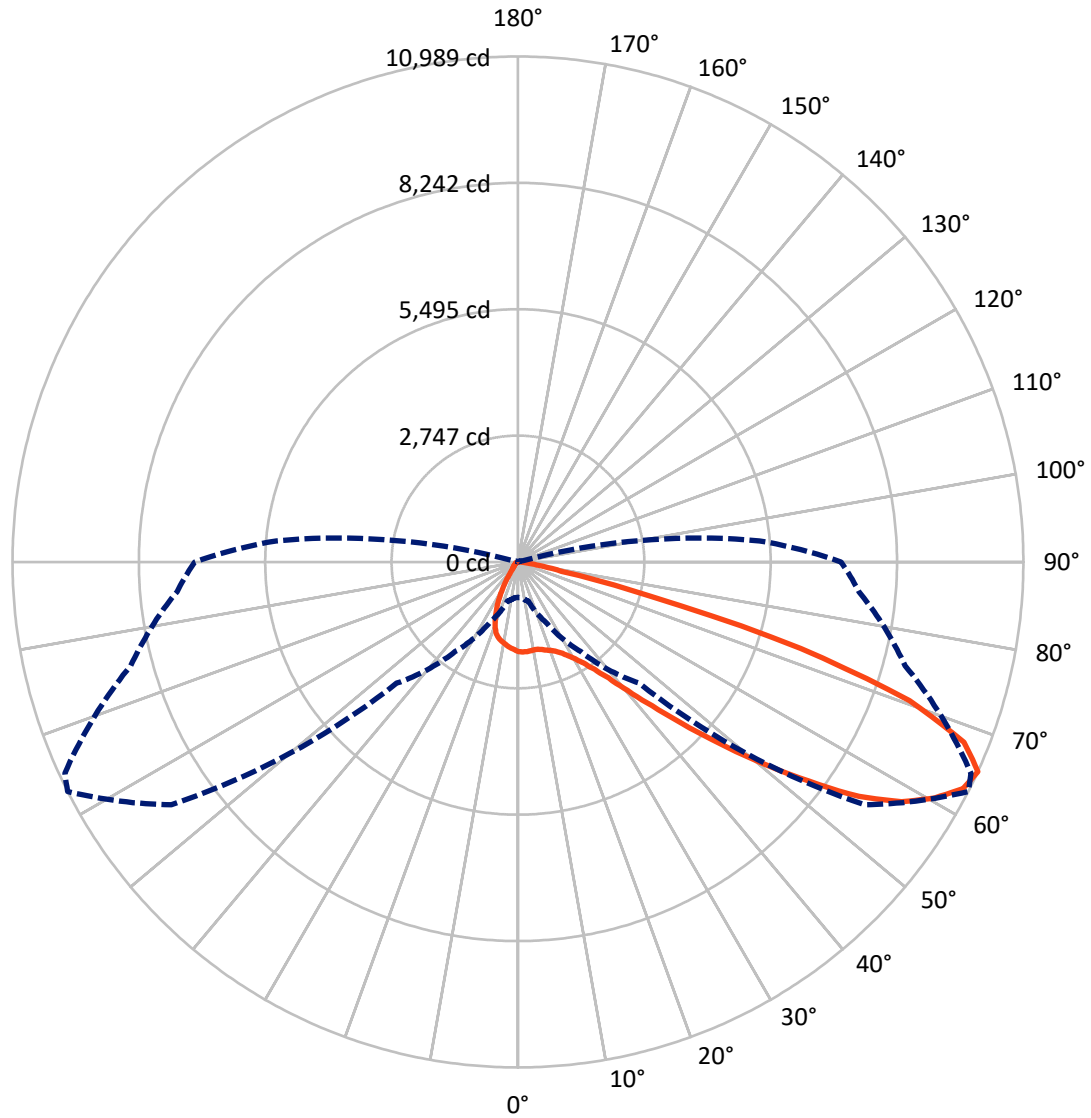
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type II - Short - N/A

REPORT NUMBER: P399599
CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399599
 CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

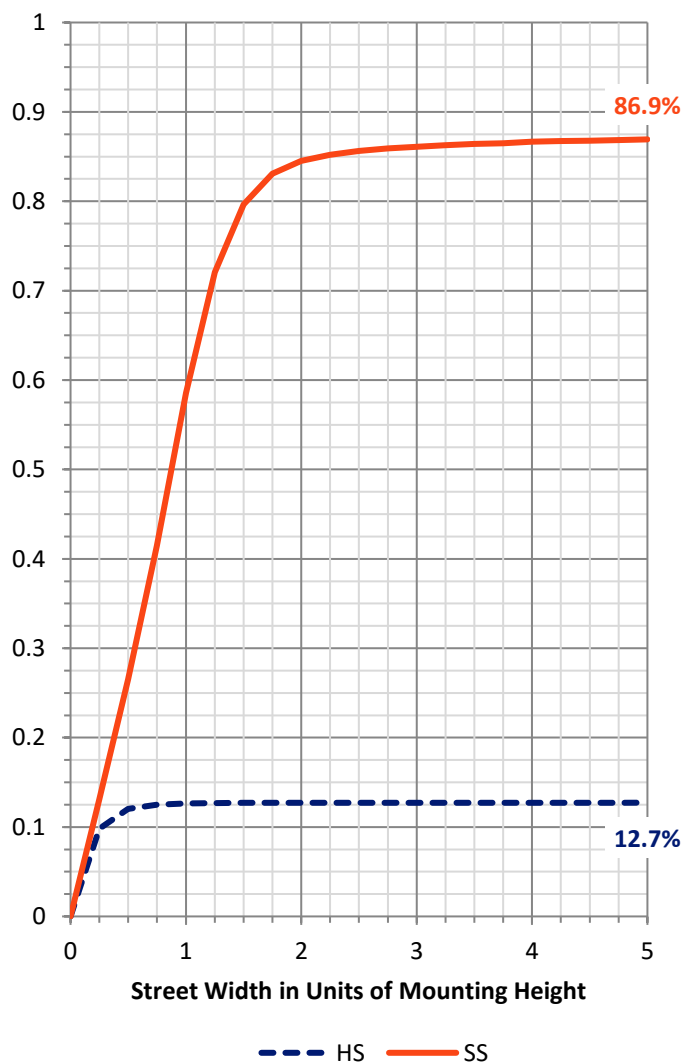
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1629.3	0.0	1629.3
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	11030.7	0.0	11030.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	12660.0	0.0	12660.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	1.4
10°-20°	439.0	3.5
20°-30°	650.7	5.1
30°-40°	1208.2	9.5
40°-50°	2559.4	20.2
50°-60°	3539.0	28.0
60°-70°	2833.1	22.4
70°-80°	1177.1	9.3
80°-90°	75.6	0.6
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°	12660.0	100.0
0°-180°	12660.0	100.0

Coefficient of Utilization

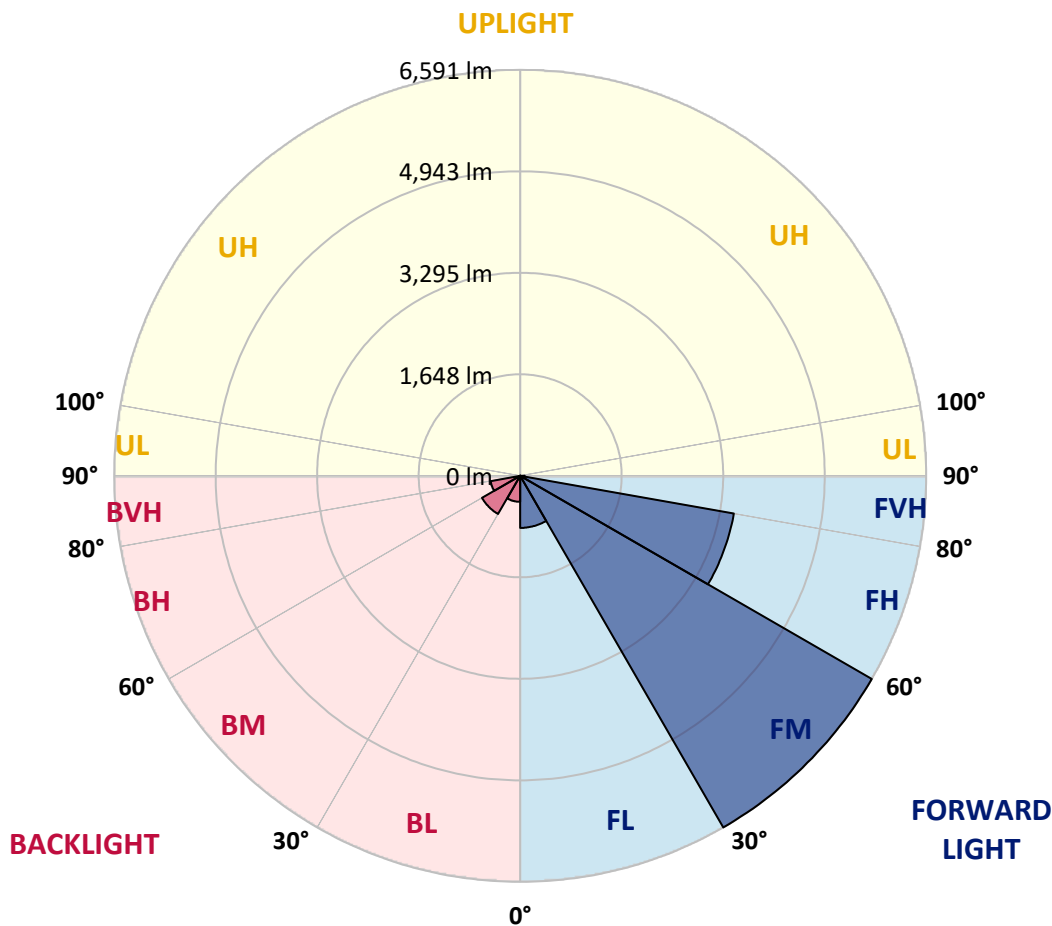


REPORT NUMBER: P399599
 CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	845.4	6.7			
FM (30°-60°)	6590.9	52.1			
FH (60°-80°)	3522.3	27.8			G2/5000
FVH (80°-90°)	72.1	0.6			G1/100
BL (0°-30°)	422.3	3.3	B1/500		
BM (30°-60°)	715.7	5.7	B1/1000		
BH (60°-80°)	487.9	3.9	B1/500		G1/500
BVH (80°-90°)	3.5	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-G2
 Type II Short





REPORT NUMBER: P399599

CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3
2.5°	1983.7	1979.0	1974.2	1971.8	1971.8	1969.4	1959.8	1957.4	1952.7	1947.9	1943.1
5°	1964.6	1957.4	1955.1	1957.4	1959.8	1964.6	1959.8	1959.8	1955.1	1950.3	1940.7
7.5°	1916.8	1912.0	1914.4	1921.6	1924.0	1940.7	1943.1	1950.3	1950.3	1945.5	1938.3
10°	1859.5	1857.1	1857.1	1869.0	1881.0	1904.9	1921.6	1940.7	1943.1	1943.1	1931.2
12.5°	1816.4	1814.0	1821.2	1835.6	1859.5	1890.5	1919.2	1947.9	1952.7	1955.1	1935.9
15°	1790.1	1790.1	1799.7	1828.4	1861.8	1904.9	1938.3	1976.6	1981.4	1979.0	1952.7
17.5°	1766.2	1768.6	1787.8	1835.6	1873.8	1931.2	1971.8	2014.8	2017.2	2014.8	1971.8
20°	1756.7	1761.5	1790.1	1852.3	1895.3	1959.8	2012.4	2055.4	2057.8	2048.3	1990.9
22.5°	1783.0	1785.4	1821.2	1888.1	1928.8	2000.5	2067.4	2108.0	2110.4	2096.1	2019.6
25°	1873.8	1873.8	1904.9	1962.2	1998.1	2069.8	2141.5	2189.3	2189.3	2172.6	2084.1
27.5°	2086.5	2067.4	2060.2	2077.0	2088.9	2165.4	2241.9	2301.6	2299.2	2275.3	2167.8
30°	2497.6	2449.8	2373.3	2287.3	2244.3	2296.8	2368.5	2445.0	2442.6	2404.4	2270.5
32.5°	3188.3	3119.0	2937.4	2710.3	2526.3	2466.5	2533.5	2617.1	2619.5	2574.1	2435.5
35°	4156.3	4046.4	3721.3	3405.8	2985.2	2758.1	2777.2	2868.1	2896.7	2872.8	2712.7
37.5°	5088.4	4988.0	4677.3	4239.9	3668.7	3205.1	3123.8	3202.7	3236.1	3236.1	3066.4
40°	6027.7	5910.6	5635.7	5196.0	4593.7	3902.9	3611.4	3675.9	3711.7	3718.9	3496.6
42.5°	6780.6	6704.1	6493.8	6152.0	5587.9	5126.7	4314.0	4278.2	4311.6	4285.4	3996.2
45°	7301.6	7241.8	7096.1	6967.0	6692.1	6460.3	5253.3	5011.9	5033.4	4942.6	4557.8
47.5°	7409.2	7342.2	7311.2	7490.4	7686.4	7743.8	6407.7	5884.3	5862.8	5662.0	5141.0
50°	6940.7	6947.9	7062.6	7574.1	8391.5	8907.7	7746.1	6869.0	6790.1	6343.2	5683.5
52.5°	5929.7	6044.4	6333.6	7163.0	8606.6	9753.8	9084.6	7913.5	7791.6	7005.2	6089.8
55°	4639.1	4787.3	5262.9	6216.5	8157.2	10131.4	10212.7	8998.5	8721.3	7502.4	6405.3
57.5°	3448.8	3494.3	4048.7	4918.7	7093.7	9761.0	10791.1	9835.1	9478.9	7899.1	6718.4
60°	2148.7	2177.3	2762.9	3745.2	5372.8	8391.5	10791.1	10411.1	10071.7	8255.2	7005.2
62.5°	1336.0	1345.6	1565.5	2566.9	3652.0	6223.7	10344.1	10858.0	10585.5	8511.0	7251.4
65°	769.6	779.2	881.9	1450.8	2375.7	3726.1	9201.7	10989.4	10867.6	8714.1	7442.6
67.5°	561.7	566.4	607.1	815.0	1553.5	1914.4	6912.0	10461.2	10614.2	8814.5	7437.8
70°	487.6	494.7	547.3	635.8	1120.9	1175.9	3518.2	9034.4	9462.2	8671.1	7215.6
72.5°	375.2	384.8	463.7	597.5	822.2	846.1	1273.9	6429.2	7076.9	7774.8	6606.1
75°	258.1	267.7	346.6	492.4	678.8	633.4	700.3	2958.9	3733.3	5215.1	5028.7
77.5°	164.9	167.3	217.5	358.5	585.6	449.3	480.4	965.6	1355.2	2359.0	2373.3
80°	109.9	112.3	133.8	231.8	401.5	415.9	296.4	446.9	490.0	688.3	478.0
82.5°	66.9	66.9	90.8	145.8	243.8	344.2	193.6	234.2	251.0	265.3	124.3
85°	26.3	26.3	55.0	95.6	153.0	160.1	121.9	136.2	143.4	155.4	57.4
87.5°	7.2	7.2	31.1	52.6	66.9	74.1	74.1	66.9	71.7	88.4	28.7
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: P399599

CATALOG NUMBER: ARCH-L-PA3-160-827-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3	1950.3
2.5°	1940.7	1933.5	1924.0	1914.4	1904.9	1897.7	1890.5	1890.5	1885.7	1878.6	1873.8
5°	1935.9	1924.0	1902.5	1885.7	1859.5	1840.3	1826.0	1814.0	1806.9	1790.1	1787.8
7.5°	1928.8	1914.4	1883.4	1849.9	1806.9	1773.4	1740.0	1716.1	1692.2	1673.0	1668.3
10°	1916.8	1900.1	1854.7	1806.9	1747.1	1685.0	1606.1	1515.3	1431.6	1383.8	1369.5
12.5°	1916.8	1895.3	1835.6	1771.0	1685.0	1532.0	1331.3	1130.5	975.1	905.8	886.7
15°	1928.8	1900.1	1821.2	1732.8	1572.7	1261.9	936.9	671.6	501.9	449.3	437.4
17.5°	1940.7	1900.1	1799.7	1680.2	1367.1	915.4	533.0	353.7	298.8	286.8	286.8
20°	1945.5	1895.3	1771.0	1582.2	1092.3	568.8	317.9	265.3	243.8	236.6	236.6
22.5°	1964.6	1897.7	1749.5	1441.2	793.5	334.6	251.0	222.3	200.8	193.6	193.6
25°	2012.4	1926.4	1754.3	1261.9	509.1	253.3	212.7	184.0	162.5	153.0	153.0
27.5°	2088.9	1990.9	1780.6	1054.0	320.3	217.5	179.3	148.2	131.5	121.9	121.9
30°	2174.9	2062.6	1792.5	815.0	239.0	184.0	145.8	117.1	105.2	98.0	95.6
32.5°	2325.5	2186.9	1783.0	559.3	196.0	155.4	117.1	93.2	83.7	81.3	81.3
35°	2566.9	2404.4	1763.9	351.3	162.5	124.3	93.2	76.5	69.3	66.9	64.5
37.5°	2894.3	2722.3	1706.5	231.8	133.8	98.0	76.5	64.5	57.4	55.0	55.0
40°	3293.5	3085.6	1596.6	176.9	114.7	78.9	64.5	55.0	50.2	47.8	47.8
42.5°	3750.0	3489.5	1422.1	153.0	95.6	66.9	55.0	45.4	43.0	40.6	40.6
45°	4249.5	3912.5	1180.7	136.2	81.3	55.0	45.4	40.6	35.9	35.9	33.5
47.5°	4780.1	4337.9	908.2	119.5	69.3	47.8	40.6	33.5	31.1	28.7	28.7
50°	5291.6	4718.0	638.1	102.8	57.4	40.6	33.5	28.7	26.3	23.9	23.9
52.5°	5652.5	4947.4	451.7	88.4	47.8	35.9	26.3	21.5	19.1	19.1	19.1
55°	5941.7	5090.8	315.5	74.1	40.6	31.1	21.5	16.7	16.7	14.3	14.3
57.5°	6214.1	5184.0	231.8	62.1	33.5	23.9	16.7	12.0	12.0	9.6	9.6
60°	6496.2	5234.2	176.9	50.2	28.7	19.1	12.0	9.6	7.2	7.2	7.2
62.5°	6780.6	5265.3	136.2	40.6	23.9	14.3	9.6	7.2	4.8	2.4	2.4
65°	7029.1	5274.8	105.2	31.1	19.1	9.6	7.2	2.4	0.0	0.0	0.0
67.5°	7103.2	5164.9	81.3	23.9	14.3	7.2	4.8	0.0	0.0	0.0	0.0
70°	6902.5	4873.3	62.1	19.1	12.0	4.8	2.4	0.0	0.0	0.0	0.0
72.5°	6125.7	4087.0	47.8	12.0	9.6	4.8	2.4	0.0	0.0	0.0	0.0
75°	4383.3	2179.7	33.5	9.6	7.2	2.4	0.0	0.0	0.0	0.0	0.0
77.5°	2017.2	843.7	23.9	7.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0
80°	394.4	210.3	9.6	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	90.8	35.9	4.8	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	31.1	12.0	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.0	4.8	2.4	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)