

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: P265594

Luminaire Tested: **ARCH-L-AF72-110-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13370.7 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

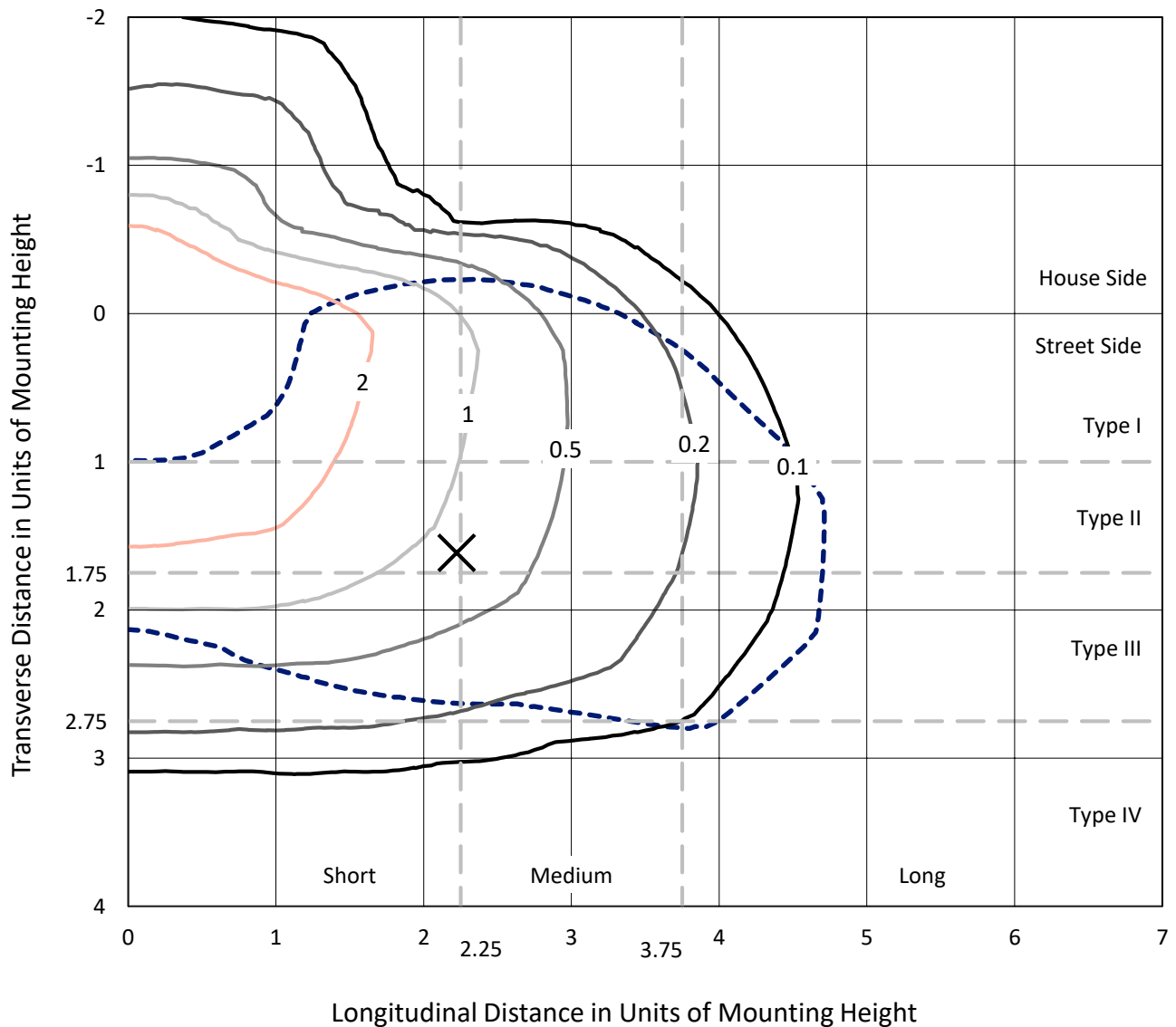
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

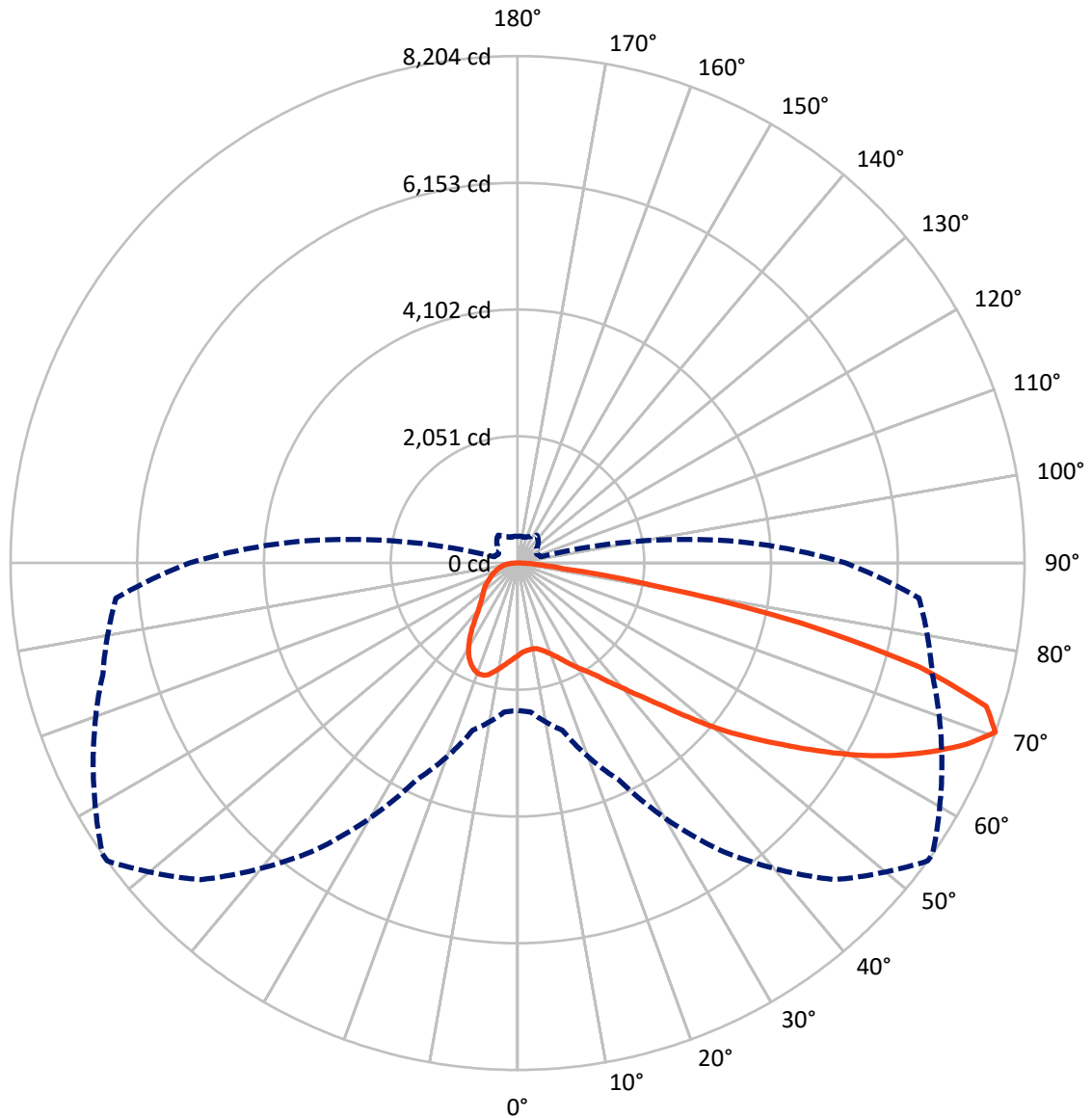
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3032.4	0.0	3032.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	10338.3	0.0	10338.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	13370.7	0.0	13370.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	1.1
10°-20°	469.1	3.5
20°-30°	815.0	6.1
30°-40°	1191.0	8.9
40°-50°	1869.2	14.0
50°-60°	2874.4	21.5
60°-70°	3511.8	26.3
70°-80°	2177.3	16.3
80°-90°	316.3	2.4
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°	13370.7	100.0
0°-180°	13370.7	100.0



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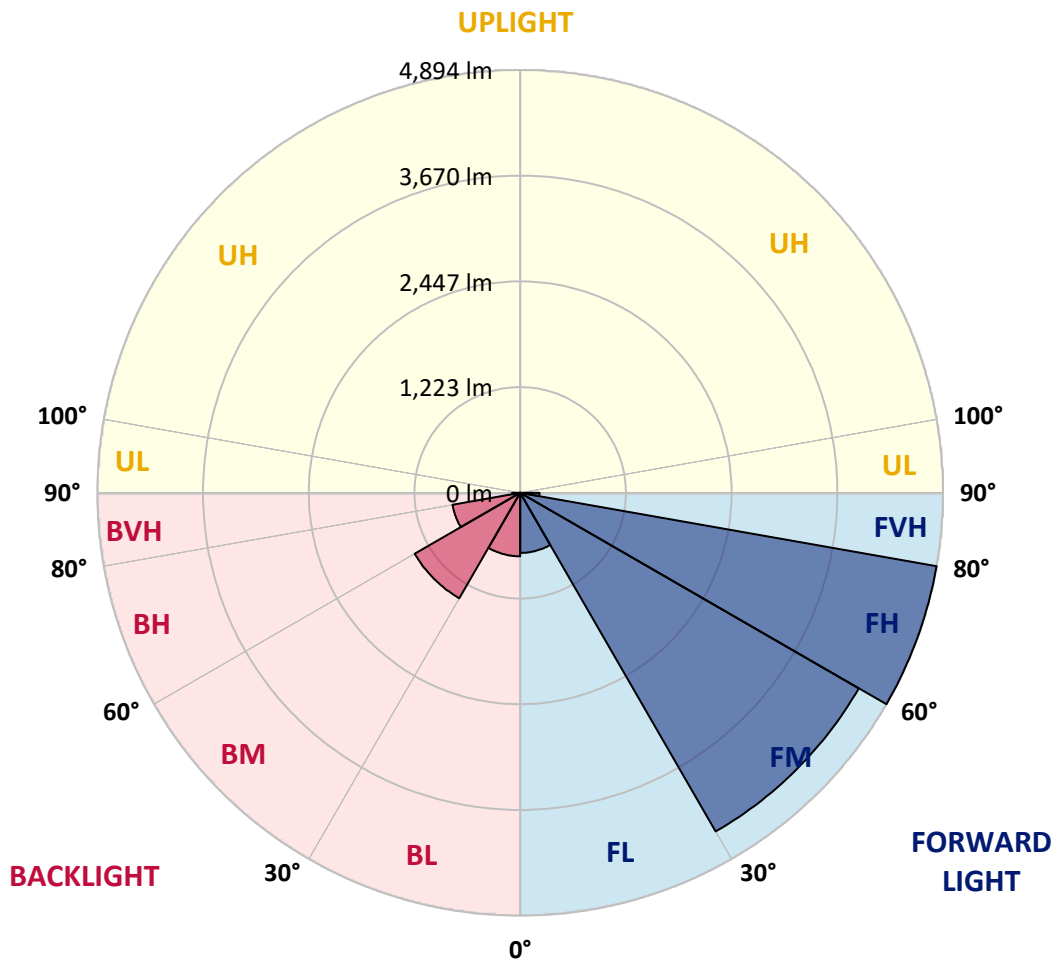
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	695.7	5.2			
FM	(30°-60°)	4525.4	33.8			
FH	(60°-80°)	4893.9	36.6			G2/5000
FVH	(80°-90°)	223.3	1.7			G2/225
BL	(0°-30°)	735.2	5.5	B2/1000		
BM	(30°-60°)	1409.1	10.5	B2/2500		
BH	(60°-80°)	795.2	5.9	B2/1000		G2/1000
BVH	(80°-90°)	93.0	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9
2.5°	1437.2	1432.3	1432.3	1439.7	1442.0	1449.3	1449.3	1451.8	1459.1	1471.5	1486.2
5°	1393.1	1390.7	1393.1	1402.9	1407.7	1422.5	1427.3	1429.8	1444.6	1464.1	1486.2
7.5°	1349.1	1346.6	1351.5	1366.1	1380.9	1402.9	1415.1	1417.5	1439.7	1466.6	1495.9
10°	1334.3	1331.8	1339.3	1351.5	1366.1	1390.7	1410.2	1412.7	1444.6	1476.4	1518.0
12.5°	1353.9	1351.5	1358.7	1371.1	1385.7	1402.9	1424.9	1427.3	1469.0	1510.6	1554.6
15°	1402.9	1402.9	1405.3	1412.7	1427.3	1442.0	1461.6	1464.1	1508.2	1557.1	1601.1
17.5°	1478.8	1473.8	1473.8	1471.5	1481.2	1488.6	1513.0	1515.5	1562.1	1606.1	1650.1
20°	1571.9	1569.3	1559.5	1547.3	1544.8	1549.8	1574.3	1576.7	1623.2	1660.0	1701.6
22.5°	1684.4	1686.8	1664.9	1637.9	1625.7	1632.9	1655.0	1657.6	1691.8	1723.6	1760.3
25°	1833.8	1826.4	1794.6	1755.5	1730.9	1730.9	1753.0	1753.0	1784.8	1804.3	1828.9
27.5°	1975.8	1961.1	1931.7	1875.4	1836.2	1843.6	1865.6	1865.6	1895.0	1902.3	1914.6
30°	2130.1	2115.2	2078.6	2007.6	1956.1	1951.3	1978.2	1975.8	2015.0	2012.6	2002.7
32.5°	2318.5	2311.2	2250.0	2159.3	2090.8	2073.6	2098.3	2100.6	2125.1	2117.8	2086.0
35°	2582.9	2580.6	2524.1	2365.1	2274.5	2242.7	2257.4	2257.4	2274.5	2254.8	2201.0
37.5°	2915.9	2920.7	2871.8	2636.9	2509.5	2455.6	2458.1	2455.6	2460.5	2438.4	2382.1
40°	3248.9	3261.1	3258.7	2974.6	2813.1	2720.1	2685.8	2680.9	2693.1	2683.3	2629.5
42.5°	3687.2	3716.5	3647.9	3390.9	3209.7	3053.0	2959.9	2947.8	2974.6	2987.0	2935.5
45°	4142.5	4132.7	4025.0	3838.9	3674.8	3474.1	3297.9	3278.3	3297.9	3334.6	3280.7
47.5°	4380.0	4372.7	4345.7	4252.7	4228.2	3998.0	3731.2	3714.1	3677.3	3728.8	3665.2
50°	4771.7	4779.2	4668.9	4659.1	4761.9	4634.6	4220.9	4181.7	4115.7	4157.3	4103.4
52.5°	5055.8	5024.0	4955.4	5041.1	5361.9	5293.3	4681.2	4664.0	4602.8	4593.0	4568.5
55°	5170.9	5170.9	5183.1	5381.3	5839.3	5748.7	5180.6	5197.8	5114.5	5046.0	5077.8
57.5°	5205.0	5219.8	5325.1	5653.2	6399.9	6103.7	5731.5	5756.0	5636.0	5498.9	5599.2
60°	5036.2	5080.3	5332.3	5807.5	6715.6	6480.6	6311.8	6319.0	6145.2	5944.4	6120.7
62.5°	4602.8	4656.6	5107.1	5871.1	6664.3	6867.5	6860.1	6877.2	6639.8	6390.1	6610.4
65°	4071.6	4125.3	4605.3	5692.3	6625.1	7144.1	7362.1	7408.6	7102.4	6767.1	6916.5
67.5°	3290.5	3361.5	3816.9	5090.1	6434.1	7371.9	7832.1	7881.1	7460.0	6963.0	6889.6
70°	2384.6	2419.0	2800.8	3868.3	5655.5	7246.9	8204.3	8201.9	7577.6	6948.3	6522.2
72.5°	1148.3	1175.3	1505.6	2401.8	4044.6	6150.2	7935.0	7981.5	7415.9	6735.3	5682.5
75°	472.5	499.5	609.6	1013.6	2122.7	4064.2	6725.5	6835.7	6735.3	6044.9	4446.2
77.5°	293.7	303.5	357.4	523.9	969.5	1897.4	4708.0	4857.4	5337.3	4842.8	2935.5
80°	220.4	227.7	266.8	367.2	612.0	700.1	2338.1	2526.7	3234.2	2778.8	1329.4
82.5°	183.7	186.0	213.0	266.8	416.3	401.5	749.1	834.9	1508.2	1060.1	457.9
85°	171.3	176.2	191.0	191.0	264.5	252.2	311.0	325.6	438.3	362.3	159.1
87.5°	88.2	83.3	168.9	149.4	137.1	122.3	132.2	142.0	164.0	173.8	71.0
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°	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9	1495.9
2.5°	1490.9	1498.4	1510.6	1522.8	1537.4	1554.6	1564.5	1576.7	1586.4	1581.6	1579.2
5°	1498.4	1510.6	1537.4	1562.1	1591.3	1625.7	1647.8	1672.1	1691.8	1696.7	1689.4
7.5°	1510.6	1532.7	1569.3	1613.4	1652.6	1696.7	1730.9	1765.2	1789.8	1794.6	1794.6
10°	1540.0	1564.5	1613.4	1672.1	1718.6	1765.2	1804.3	1831.4	1853.4	1863.2	1863.2
12.5°	1581.6	1611.0	1669.7	1740.7	1792.2	1836.2	1858.2	1870.5	1880.3	1890.2	1892.5
15°	1630.6	1662.5	1733.4	1809.2	1863.2	1885.3	1885.3	1882.8	1882.8	1887.7	1892.5
17.5°	1679.6	1713.7	1787.3	1868.0	1902.3	1890.2	1873.0	1865.6	1860.7	1858.2	1865.6
20°	1730.9	1765.2	1838.7	1914.6	1904.8	1853.4	1828.9	1811.7	1797.1	1789.8	1799.6
22.5°	1787.3	1819.1	1895.0	1946.4	1873.0	1794.6	1748.1	1721.2	1696.7	1681.9	1691.8
25°	1853.4	1885.3	1958.7	1956.1	1816.6	1706.5	1632.9	1588.9	1562.1	1547.3	1547.3
27.5°	1931.7	1958.7	2029.6	1931.7	1738.3	1588.9	1481.2	1439.7	1432.3	1420.0	1420.0
30°	2012.6	2034.5	2095.7	1875.4	1630.6	1434.8	1317.2	1297.6	1300.0	1287.8	1290.2
32.5°	2095.7	2117.8	2134.9	1792.2	1490.9	1261.0	1182.4	1167.8	1165.5	1155.6	1145.8
35°	2213.2	2245.1	2139.9	1679.6	1322.0	1116.5	1060.1	1045.4	1030.7	996.5	996.5
37.5°	2391.9	2426.2	2127.5	1540.0	1148.3	1003.8	952.5	932.8	908.4	874.1	861.8
40°	2636.9	2636.9	2100.6	1383.3	1008.6	913.1	864.3	839.7	812.8	778.7	771.3
42.5°	2925.7	2857.1	2059.1	1224.1	905.9	852.0	807.9	780.9	749.1	710.0	705.1
45°	3263.6	3077.6	2000.3	1082.2	829.9	815.3	788.4	741.8	688.0	646.3	639.1
47.5°	3591.7	3275.8	1943.9	981.8	766.3	800.6	778.7	700.1	626.7	568.0	560.6
50°	3951.6	3452.0	1877.8	898.6	717.3	790.8	766.3	639.1	558.1	516.5	511.8
52.5°	4311.4	3630.8	1806.9	810.5	675.7	771.3	736.9	594.9	555.8	499.5	492.1
55°	4690.9	3838.9	1723.6	712.4	626.7	732.1	697.8	592.5	572.8	499.5	482.3
57.5°	5060.6	4069.1	1588.9	617.0	572.8	673.3	683.2	577.8	536.2	494.5	474.9
60°	5469.5	4313.9	1366.1	536.2	526.3	624.3	663.5	546.0	494.5	479.9	470.1
62.5°	5797.7	4534.3	1067.5	479.9	487.2	585.2	639.1	526.3	477.4	465.2	462.7
65°	5939.7	4539.1	766.3	430.8	448.1	548.4	614.5	509.2	462.7	457.9	455.4
67.5°	5790.2	4289.4	538.7	384.4	406.5	514.1	582.7	492.1	448.1	450.5	445.6
70°	5307.9	3763.0	394.1	340.3	367.2	477.4	548.4	470.1	430.8	435.8	428.4
72.5°	4441.2	2933.1	315.8	303.5	335.3	438.3	514.1	445.6	404.0	406.5	391.8
75°	3280.7	1943.9	264.5	271.7	298.6	401.5	470.1	413.8	374.7	364.8	355.0
77.5°	1951.3	998.9	217.8	237.5	266.8	357.4	421.1	374.7	342.8	325.6	318.3
80°	805.5	404.0	178.8	200.7	232.7	318.3	372.2	328.2	306.1	289.0	279.2
82.5°	320.8	198.3	142.0	164.0	195.9	276.7	325.6	289.0	266.8	254.6	227.7
85°	122.3	97.9	95.5	115.1	147.0	213.0	269.3	242.5	225.2	193.4	186.0
87.5°	49.0	44.0	44.0	56.4	83.3	134.7	193.4	168.9	176.2	139.5	142.0
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)