

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: P265623

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265623
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16365.2 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G3

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

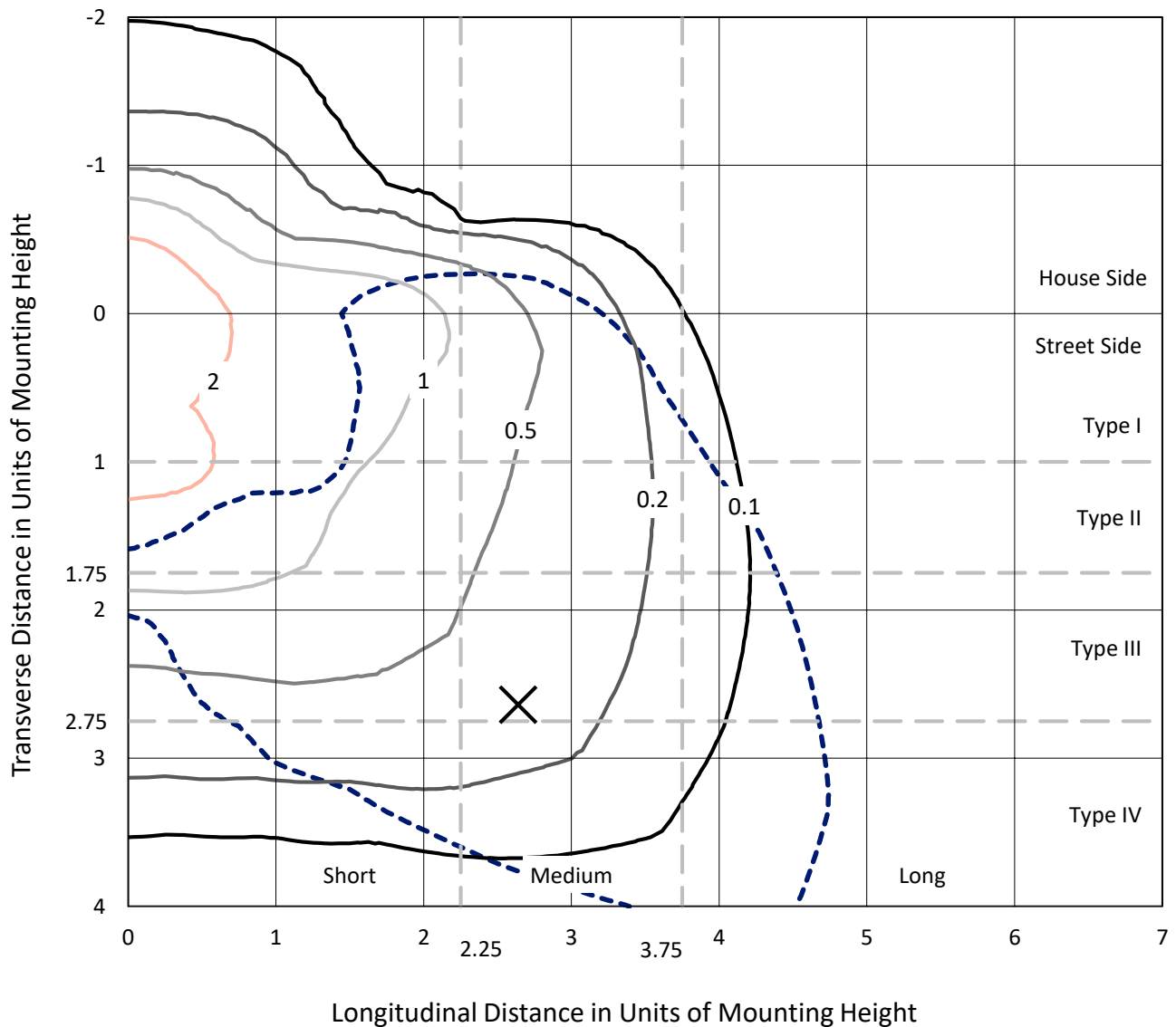


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

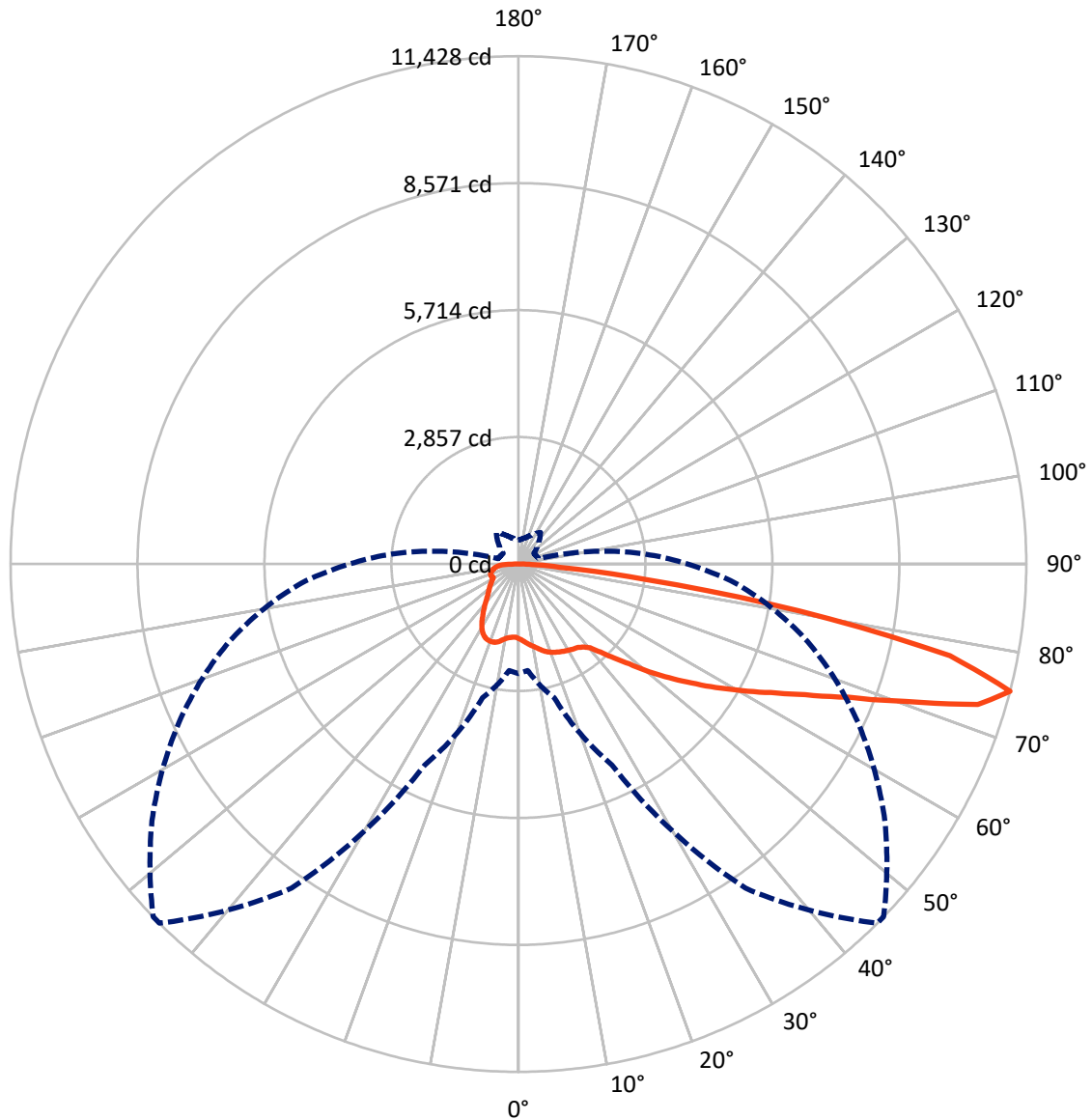


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3791.1	0.0	3791.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	12574.1	0.0	12574.1
	% Fixture	76.8	0.0	76.8
Total	Lumens	16365.2	0.0	16365.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	1.0
10°-20°	538.8	3.3
20°-30°	924.5	5.6
30°-40°	1293.0	7.9
40°-50°	1896.8	11.6
50°-60°	2954.7	18.1
60°-70°	4251.6	26.0
70°-80°	3703.6	22.6
80°-90°	636.0	3.9
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°	16365.2	100.0
0°-180°	16365.2	100.0



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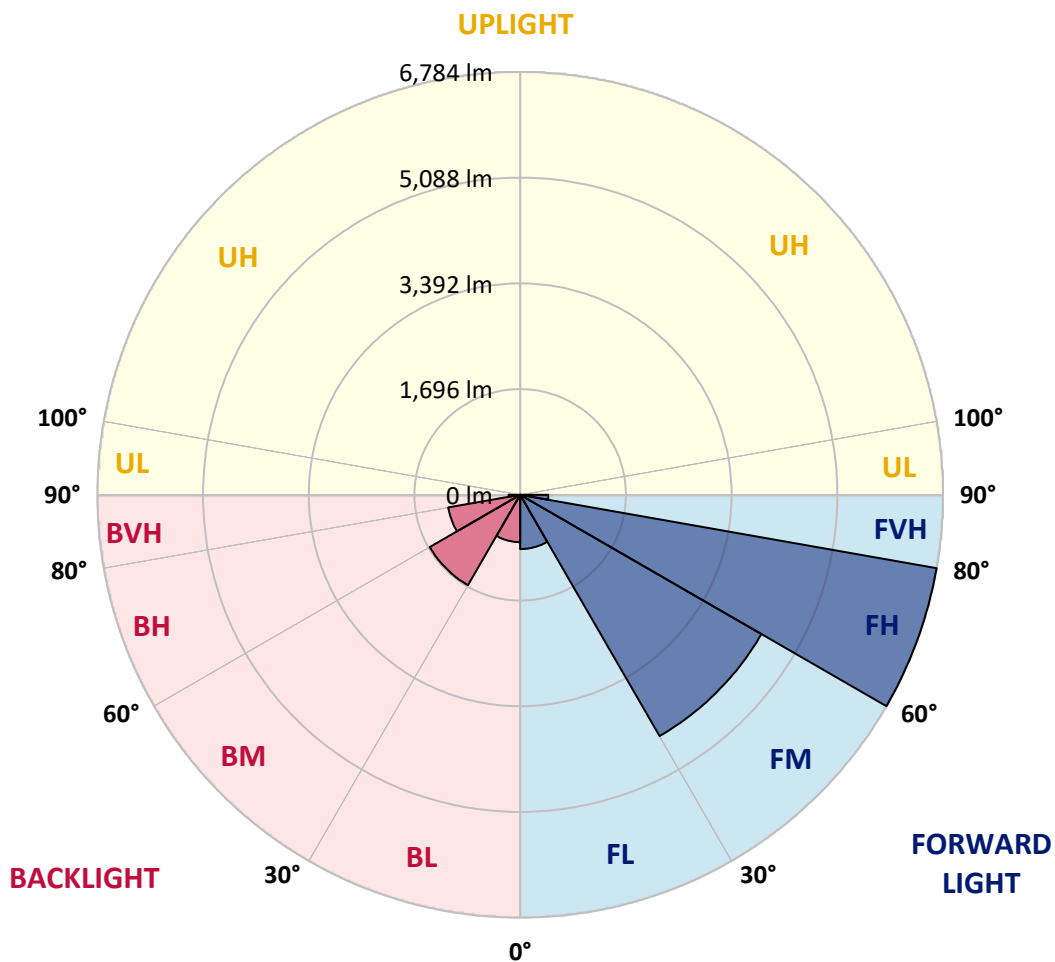
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	870.2	5.3			
FM	(30°-60°)	4469.0	27.3			
FH	(60°-80°)	6783.5	41.5			G3/7500
FVH	(80°-90°)	451.3	2.8			G3/500
BL	(0°-30°)	759.3	4.6	B2/1000		
BM	(30°-60°)	1675.5	10.2	B2/2500		
BH	(60°-80°)	1171.6	7.2	B3/2500		G3/2500
BVH	(80°-90°)	184.8	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1760.5	1747.7	1747.7	1738.1	1738.1	1722.2	1715.9	1712.7	1696.8	1687.2	1677.7
5°	1862.2	1846.3	1843.2	1821.0	1811.3	1776.4	1773.2	1750.8	1722.2	1693.6	1671.2
7.5°	1954.6	1945.1	1929.2	1906.9	1878.3	1833.7	1830.4	1795.4	1747.7	1709.6	1677.7
10°	2021.5	2015.1	1992.8	1964.1	1932.3	1887.8	1884.6	1846.3	1789.1	1744.5	1700.0
12.5°	2101.0	2091.6	2062.9	2024.7	1989.7	1948.2	1945.1	1913.2	1849.6	1792.3	1734.9
15°	2177.5	2164.7	2129.7	2091.6	2053.3	2018.3	2018.3	1983.3	1916.4	1849.6	1782.7
17.5°	2215.7	2209.3	2174.3	2132.8	2101.0	2075.7	2072.4	2040.6	1973.8	1903.7	1830.4
20°	2228.3	2231.6	2199.8	2155.2	2132.8	2120.2	2116.9	2094.7	2021.5	1954.6	1884.6
22.5°	2225.2	2234.8	2209.3	2161.5	2155.2	2155.2	2155.2	2129.7	2072.4	2005.6	1935.5
25°	2237.9	2250.8	2231.6	2174.3	2174.3	2187.1	2187.1	2174.3	2123.4	2066.0	1996.0
27.5°	2282.6	2292.0	2276.1	2196.5	2199.8	2218.9	2215.7	2218.9	2187.1	2132.8	2062.9
30°	2336.6	2349.3	2330.3	2231.6	2228.3	2247.5	2247.5	2263.4	2241.1	2183.8	2126.6
32.5°	2483.1	2480.0	2419.4	2269.7	2260.2	2279.3	2279.3	2295.3	2282.6	2237.9	2183.8
35°	2919.2	2871.4	2737.8	2394.0	2298.5	2307.9	2307.9	2336.6	2343.0	2307.9	2260.2
37.5°	3365.0	3349.1	3247.2	2725.0	2438.4	2368.6	2365.2	2406.6	2435.3	2406.6	2374.8
40°	3813.8	3801.0	3778.7	3167.6	2731.3	2476.6	2467.1	2502.1	2553.2	2533.9	2515.0
42.5°	4230.7	4224.4	4246.6	3603.6	3103.9	2709.1	2680.5	2639.1	2712.3	2706.0	2706.0
45°	4558.7	4574.6	4587.4	4011.1	3508.2	3008.3	2973.3	2833.3	2932.0	2957.4	2976.5
47.5°	4743.3	4756.0	4800.6	4409.1	3912.5	3355.3	3329.8	3100.7	3231.2	3307.6	3361.6
50°	5007.5	4972.5	5010.7	4797.4	4399.4	3807.3	3737.4	3460.5	3625.9	3759.6	3887.0
52.5°	5262.2	5204.9	5236.7	5246.3	4953.4	4249.9	4176.7	3883.8	4090.7	4300.8	4526.7
55°	5491.3	5488.3	5520.1	5682.4	5488.3	4724.1	4641.5	4351.7	4651.0	4877.0	5259.0
57.5°	5676.1	5707.9	5848.0	6188.7	6105.8	5240.0	5147.6	4896.1	5249.4	5475.4	6109.1
60°	5892.5	5943.5	6175.8	6618.4	6669.2	5781.1	5685.6	5504.2	5863.9	6093.1	7092.7
62.5°	5965.7	6038.9	6516.5	7070.4	7258.2	6373.2	6287.2	6166.2	6510.0	6717.0	8073.2
65°	5478.8	5618.8	6704.3	7302.9	7891.7	7086.3	7013.1	6908.1	7153.2	7290.0	8738.5
67.5°	5344.9	5408.6	6338.3	7637.0	8487.0	8003.1	7929.9	7748.5	7754.9	7697.5	8954.9
70°	5157.2	5227.1	5962.6	7888.6	9340.1	9257.5	9168.3	8633.5	8305.5	7958.5	8528.4
72.5°	4393.2	4370.9	5138.0	7210.4	9750.8	10810.9	10705.9	9585.4	8713.0	7732.5	7197.7
75°	2467.1	2403.4	3116.6	4988.5	8904.1	11428.4	11425.4	10066.0	8426.6	6736.1	4899.3
77.5°	716.3	697.2	1028.2	2091.6	5994.4	9929.1	10050.1	9079.1	7032.2	4838.8	2690.1
80°	337.5	343.8	442.4	690.7	2559.5	6408.2	6755.3	5978.5	4202.1	2231.6	1111.1
82.5°	213.3	216.5	302.4	445.6	1082.4	2909.7	3196.2	2690.1	1664.9	964.6	490.3
85°	133.7	133.7	200.5	292.8	646.2	929.6	1009.2	916.8	713.1	525.2	267.4
87.5°	73.2	73.2	121.0	168.7	353.4	299.2	308.7	366.1	445.6	321.6	133.7
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°	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1674.5	1668.2	1658.6	1655.3	1652.3	1649.0	1652.3	1658.6	1652.3	1652.3	1655.3
5°	1664.9	1658.6	1645.9	1645.9	1649.0	1652.3	1668.2	1677.7	1680.9	1680.9	1680.9
7.5°	1664.9	1655.3	1645.9	1649.0	1655.3	1668.2	1693.6	1709.6	1722.2	1725.5	1725.5
10°	1680.9	1668.2	1661.8	1668.2	1687.2	1696.8	1722.2	1747.7	1763.6	1770.0	1770.0
12.5°	1709.6	1696.8	1696.8	1709.6	1734.9	1747.7	1770.0	1789.1	1808.2	1817.7	1817.7
15°	1757.3	1741.4	1744.5	1766.7	1795.4	1808.2	1824.1	1830.4	1846.3	1859.1	1859.1
17.5°	1801.8	1785.9	1792.3	1817.7	1836.9	1843.2	1852.8	1849.6	1856.0	1865.5	1868.7
20°	1852.8	1836.9	1840.0	1856.0	1859.1	1852.8	1852.8	1843.2	1840.0	1856.0	1862.2
22.5°	1903.7	1887.8	1884.6	1875.0	1859.1	1843.2	1833.7	1824.1	1817.7	1833.7	1840.0
25°	1964.1	1941.9	1926.0	1884.6	1843.2	1814.5	1801.8	1795.4	1792.3	1808.2	1814.5
27.5°	2031.0	2008.7	1961.0	1871.9	1805.1	1757.3	1747.7	1747.7	1754.1	1763.6	1770.0
30°	2094.7	2072.4	1986.4	1843.2	1738.1	1668.2	1658.6	1668.2	1684.1	1693.6	1703.1
32.5°	2158.4	2136.1	2002.4	1798.6	1639.4	1550.4	1543.9	1559.8	1585.4	1591.6	1598.1
35°	2244.3	2222.0	2021.5	1734.9	1515.4	1419.9	1413.5	1422.9	1445.3	1454.8	1464.3
37.5°	2365.2	2352.5	2050.1	1664.9	1400.6	1295.6	1276.5	1270.3	1282.9	1279.7	1292.5
40°	2524.4	2533.9	2101.0	1572.7	1289.2	1181.0	1139.7	1120.5	1107.8	1082.4	1095.2
42.5°	2756.9	2763.2	2158.4	1467.7	1193.8	1072.8	1018.7	983.6	958.2	916.8	923.2
45°	3097.4	3043.4	2225.2	1356.1	1107.8	986.9	923.2	881.7	846.8	811.8	814.9
47.5°	3549.6	3383.9	2298.5	1263.8	1021.9	916.8	859.5	811.8	770.3	741.7	745.0
50°	4106.6	3807.3	2371.6	1177.9	935.9	862.7	811.8	760.9	719.5	690.7	687.7
52.5°	4842.0	4316.7	2419.4	1082.4	849.9	814.9	770.3	722.6	671.8	636.7	633.6
55°	5606.1	4908.9	2460.7	967.7	767.2	760.9	738.5	684.5	624.0	579.3	572.9
57.5°	6446.4	5542.4	2492.6	856.4	703.6	716.3	709.9	646.2	579.3	538.1	534.9
60°	7210.4	6198.1	2390.7	757.7	646.2	671.8	678.1	624.0	588.8	598.5	601.7
62.5°	7980.8	6704.3	2002.4	684.5	608.1	643.0	697.2	694.0	678.1	694.0	697.2
65°	8257.8	6809.3	1419.9	624.0	569.9	655.9	757.7	751.3	678.1	649.5	643.0
67.5°	8101.9	6497.4	955.0	576.3	541.1	671.8	821.3	751.3	652.6	614.4	601.7
70°	7360.2	5730.2	700.4	528.5	515.6	668.5	856.4	748.1	639.9	598.5	582.6
72.5°	5870.2	4421.7	563.4	483.8	477.4	652.6	875.5	741.7	627.1	582.6	563.4
75°	3801.0	2750.5	474.3	439.4	420.1	627.1	865.8	722.6	611.2	554.0	541.1
77.5°	1763.6	1184.2	404.2	388.3	366.1	588.8	837.2	684.5	576.3	522.0	506.1
80°	821.3	560.4	340.6	337.5	327.9	557.0	799.0	639.9	534.9	490.3	464.9
82.5°	439.4	337.5	276.9	276.9	286.5	519.0	751.3	585.8	480.8	458.5	391.5
85°	232.4	194.3	200.5	216.5	245.1	458.5	687.7	528.5	420.1	350.2	340.6
87.5°	117.8	124.1	124.1	146.5	187.8	372.4	566.7	436.1	356.5	286.5	280.1
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)