

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: P265644

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265644
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19230.2 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G3

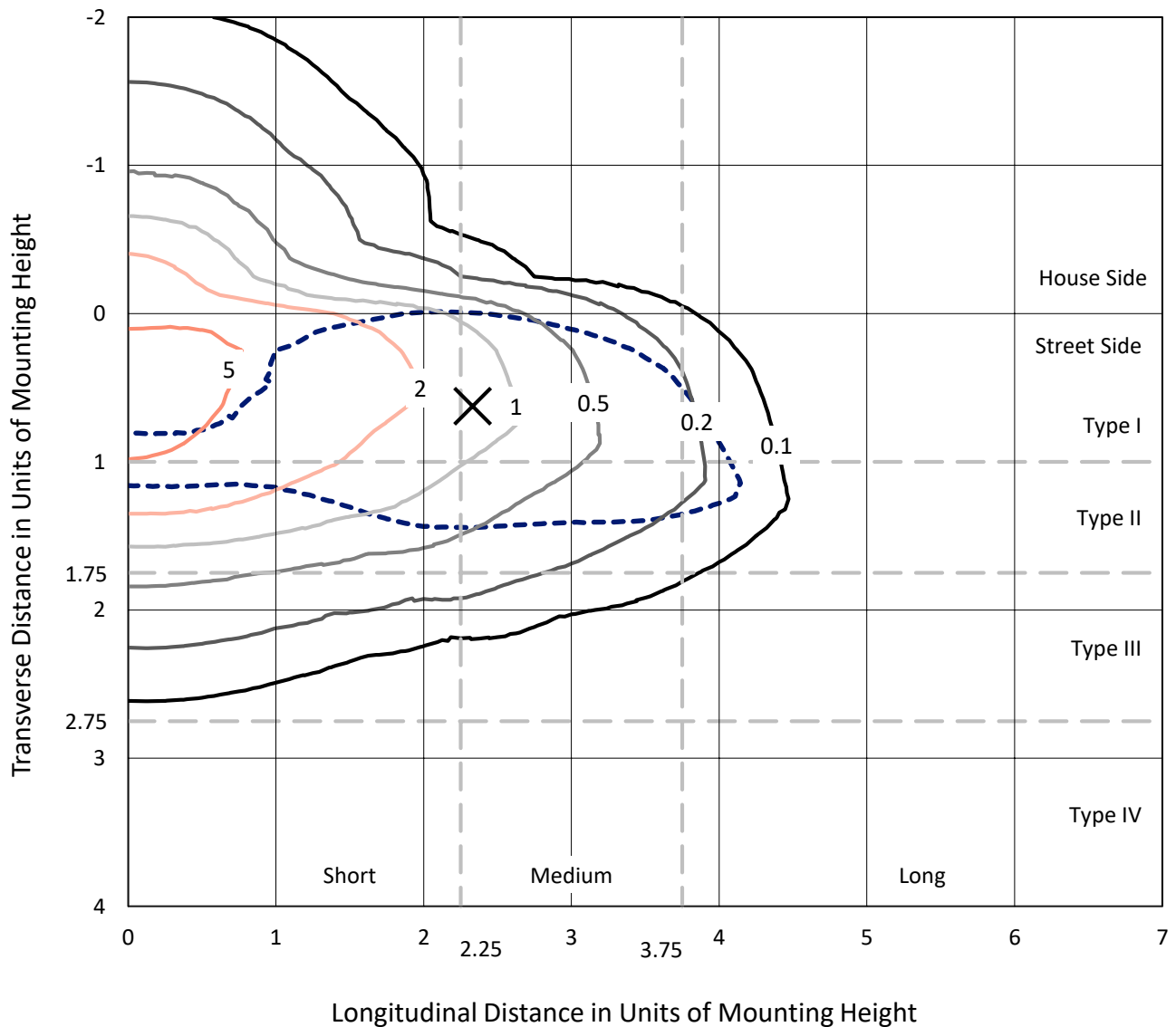
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

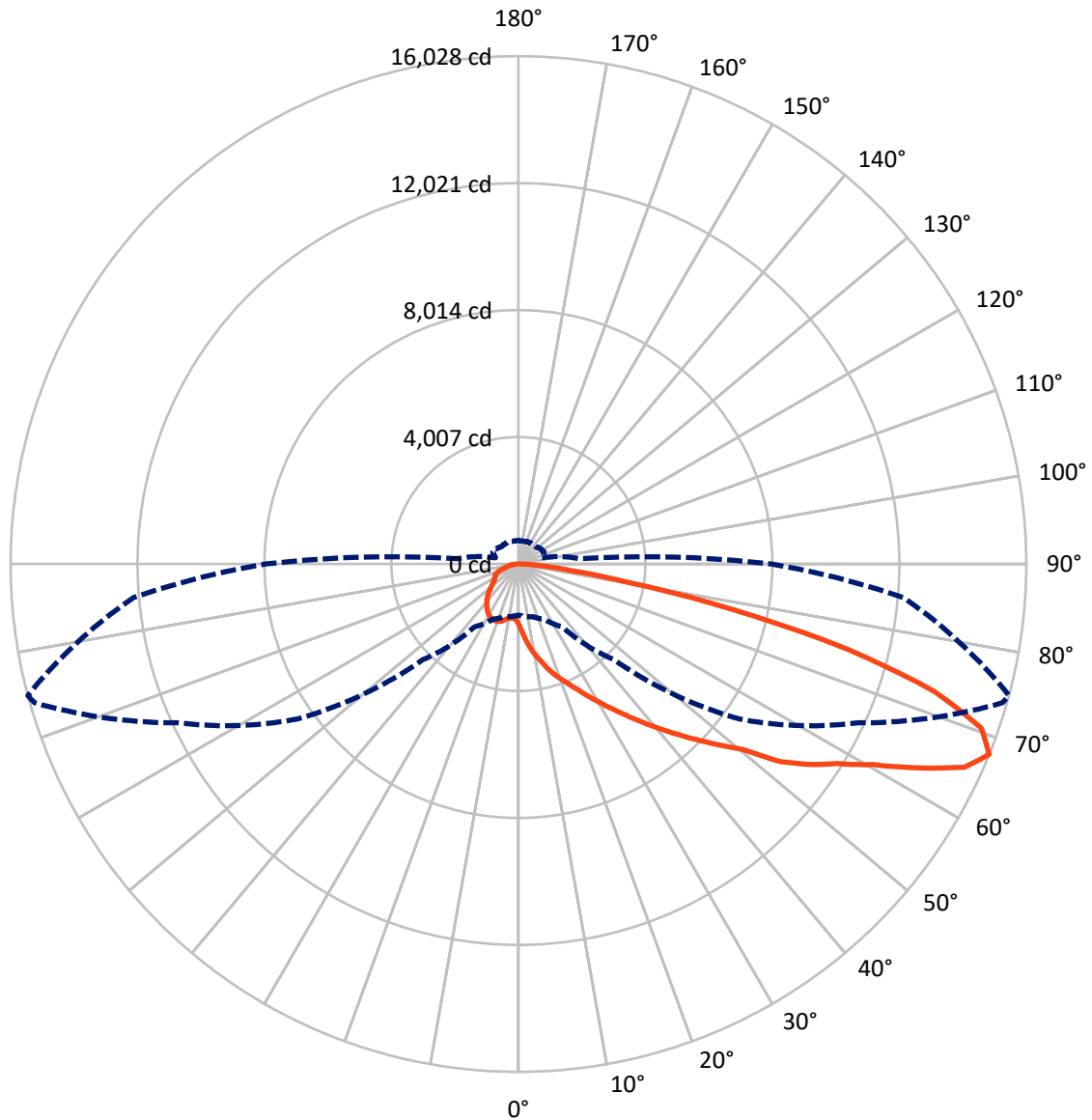
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3283.8	0.0	3283.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	15946.4	0.0	15946.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	19230.2	0.0	19230.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.9	1.2
10°-20°	809.0	4.2
20°-30°	1475.5	7.7
30°-40°	2422.0	12.6
40°-50°	3502.5	18.2
50°-60°	4127.7	21.5
60°-70°	4011.2	20.9
70°-80°	2229.6	11.6
80°-90°	428.7	2.2
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°	19230.2	100.0
0°-180°	19230.2	100.0



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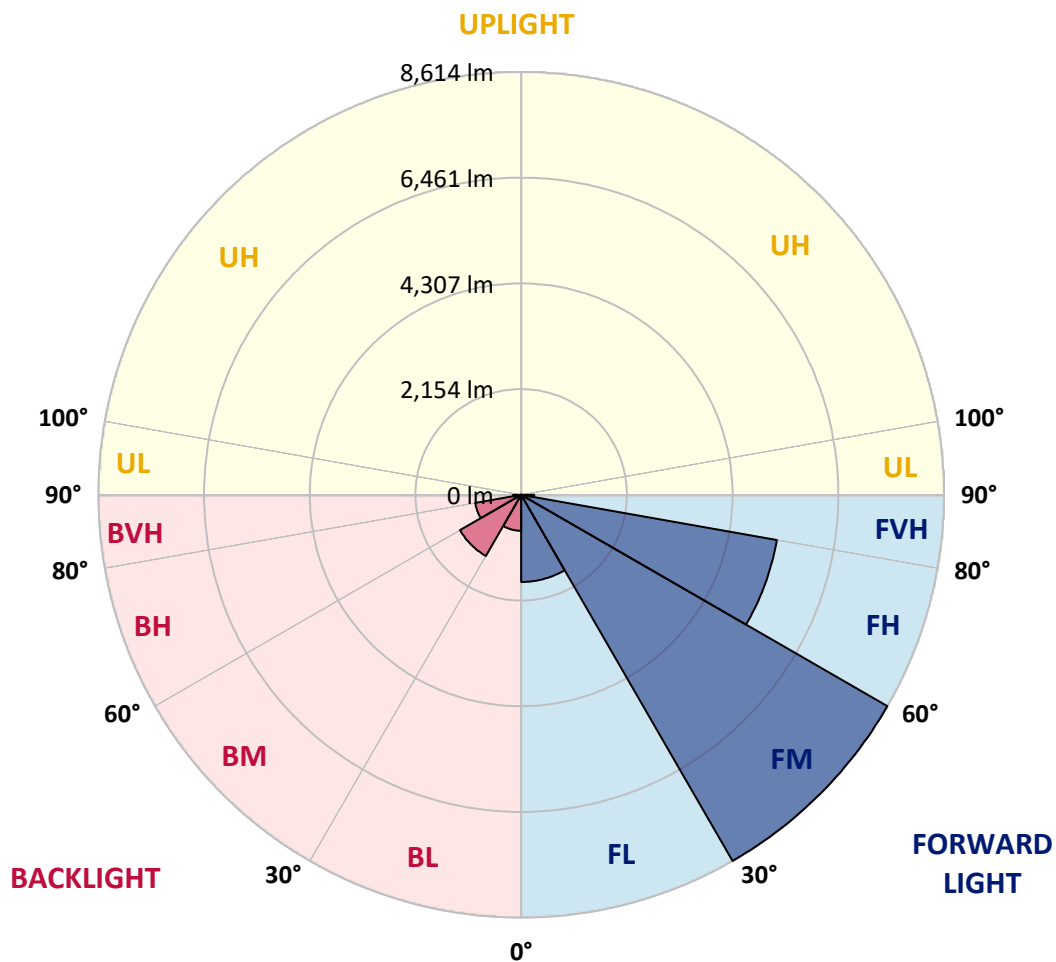
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1775.5	9.2			
FM	(30°-60°)	8614.1	44.8			
FH	(60°-80°)	5290.0	27.5			G3/7500
FVH	(80°-90°)	266.8	1.4			G3/500
BL	(0°-30°)	732.9	3.8	B2/1000		
BM	(30°-60°)	1438.1	7.5	B2/2500		
BH	(60°-80°)	950.8	4.9	B2/1000		G2/1000
BVH	(80°-90°)	161.9	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6
2.5°	2701.6	2709.6	2693.5	2657.2	2605.1	2508.5	2424.2	2275.3	2142.6	2126.6	1986.0
5°	3175.9	3184.0	3163.8	3119.5	3063.3	2958.7	2842.1	2649.2	2436.2	2396.0	2098.5
7.5°	3501.6	3505.5	3481.4	3437.2	3393.0	3288.4	3171.8	2954.7	2693.5	2661.3	2243.2
10°	3778.9	3787.0	3754.7	3726.6	3678.4	3573.8	3453.3	3224.0	2954.7	2910.6	2391.9
12.5°	4036.2	4044.2	4024.0	4000.1	3984.0	3887.4	3754.7	3481.4	3191.9	3143.7	2568.9
15°	4209.0	4217.1	4221.0	4253.3	4273.3	4205.1	4072.3	3774.9	3449.2	3405.0	2777.9
17.5°	4160.8	4180.9	4241.2	4357.8	4482.5	4486.4	4377.9	4064.3	3702.5	3654.2	2990.9
20°	4020.1	4036.2	4108.5	4285.5	4530.6	4671.4	4663.3	4357.8	3939.6	3887.4	3187.9
22.5°	4136.6	4156.7	4156.7	4265.3	4506.4	4767.8	4872.3	4647.2	4176.8	4128.6	3385.0
25°	4635.2	4647.2	4562.9	4518.6	4607.0	4848.2	5045.2	4960.8	4466.4	4410.0	3598.0
27.5°	5330.6	5310.5	5205.9	5029.2	4932.7	4996.9	5198.0	5258.3	4800.0	4731.6	3819.1
30°	6022.1	6010.0	5889.4	5652.2	5435.1	5298.5	5366.8	5523.6	5161.8	5081.4	4032.1
32.5°	6669.3	6649.3	6516.6	6239.2	5993.9	5740.7	5607.9	5764.9	5547.8	5455.2	4269.4
35°	7264.4	7212.0	7079.4	6789.8	6536.6	6295.4	5969.9	5993.9	5965.9	5869.3	4530.6
37.5°	7746.8	7706.5	7561.8	7292.4	7023.0	6793.9	6452.3	6255.3	6416.1	6323.6	4832.2
40°	8172.8	8128.7	7979.9	7710.5	7461.3	7244.2	6974.9	6572.9	6922.6	6818.0	5169.8
42.5°	8494.5	8462.3	8341.8	8076.3	7835.1	7638.2	7505.5	6974.9	7449.3	7348.8	5539.7
45°	8667.2	8635.1	8570.8	8357.8	8136.7	7983.9	7996.0	7453.2	7999.9	7915.5	5978.0
47.5°	8454.3	8478.4	8534.6	8494.5	8357.8	8285.3	8434.1	7947.8	8615.0	8534.6	6452.3
50°	7883.3	7907.5	8132.6	8410.0	8458.4	8546.7	8828.2	8518.5	9266.2	9202.0	7039.2
52.5°	6480.5	6613.1	7236.1	7899.4	8353.8	8719.6	9266.2	9366.7	10363.7	10363.7	8076.3
55°	4896.5	5013.0	5724.5	6882.4	7947.8	8735.7	9587.9	9941.7	11155.7	11171.9	8619.1
57.5°	3967.9	4040.1	4389.9	5575.9	7095.4	8534.6	9969.7	10436.1	11815.0	11887.5	9318.6
60°	3220.1	3260.3	3489.5	4313.5	5917.6	7992.0	10243.2	11143.7	12755.8	12856.3	10211.0
62.5°	2588.9	2629.1	2782.0	3276.4	4643.2	6974.9	10195.0	11879.4	14010.0	14174.9	11380.8
65°	2066.3	2110.6	2211.1	2516.6	3441.1	5712.5	9700.4	12257.3	15308.5	15469.4	12156.8
67.5°	1612.1	1652.3	1720.7	1921.7	2424.2	4273.3	8530.7	11859.2	15891.3	16028.1	12196.9
70°	1218.1	1238.1	1294.5	1423.2	1732.7	2838.1	6677.5	10524.6	15368.8	15493.3	11392.9
72.5°	944.7	940.6	972.9	1037.3	1210.0	1953.8	4426.0	8558.8	13587.9	13716.5	9720.6
75°	771.9	767.8	788.0	808.0	876.3	1310.5	2613.1	6444.3	10966.8	10721.6	7292.4
77.5°	651.2	647.1	667.4	671.4	699.5	904.6	1487.5	4241.2	7316.5	6894.4	4108.5
80°	550.8	546.7	570.9	578.9	599.0	663.3	856.3	2295.4	3674.3	3481.4	1961.8
82.5°	414.1	430.2	474.3	494.4	518.6	490.5	530.7	1013.1	1704.5	1628.2	852.2
85°	201.0	237.2	357.7	397.9	426.2	309.6	361.7	478.3	767.8	731.7	345.8
87.5°	68.4	60.2	213.1	253.2	277.3	140.8	201.0	265.3	317.6	289.4	108.5
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°	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6	1905.6
2.5°	1925.6	1865.3	1776.8	1708.5	1664.3	1628.2	1612.1	1608.1	1600.1	1596.0	1596.0
5°	1965.9	1857.2	1720.7	1648.2	1628.2	1612.1	1620.2	1624.1	1624.1	1624.1	1624.1
7.5°	2026.1	1873.3	1708.5	1660.2	1656.2	1656.2	1680.4	1692.4	1700.5	1700.5	1700.5
10°	2106.5	1901.5	1728.7	1688.5	1700.5	1708.5	1736.7	1752.8	1760.8	1764.8	1768.9
12.5°	2215.1	1961.8	1768.9	1736.7	1752.8	1756.7	1776.8	1784.9	1792.9	1797.0	1797.0
15°	2359.8	2050.2	1833.1	1792.9	1797.0	1792.9	1792.9	1784.9	1780.9	1780.9	1789.0
17.5°	2508.5	2134.6	1889.4	1833.1	1817.1	1784.9	1760.8	1740.6	1728.7	1720.7	1724.7
20°	2657.2	2211.1	1921.7	1841.2	1797.0	1744.7	1700.5	1672.4	1656.2	1640.1	1648.2
22.5°	2806.0	2283.4	1933.6	1817.1	1752.8	1676.3	1628.2	1583.9	1547.7	1523.6	1527.7
25°	2970.9	2363.8	1933.6	1789.0	1692.4	1612.1	1551.7	1479.4	1427.1	1407.0	1415.1
27.5°	3135.7	2432.2	1913.6	1736.7	1624.1	1543.6	1455.3	1370.9	1338.7	1326.6	1330.7
30°	3300.6	2484.4	1869.4	1672.4	1551.7	1463.2	1346.6	1290.4	1250.3	1218.1	1222.1
32.5°	3465.3	2520.6	1809.0	1591.9	1475.3	1362.8	1266.3	1202.0	1129.7	1089.5	1093.4
35°	3654.2	2548.8	1736.7	1511.6	1390.9	1274.3	1202.0	1097.5	1021.2	988.9	980.9
37.5°	3851.3	2568.9	1660.2	1423.2	1306.6	1210.0	1137.8	1009.1	936.8	892.5	888.5
40°	4064.3	2576.9	1567.8	1330.7	1226.1	1169.9	1053.3	956.8	832.2	804.1	804.1
42.5°	4317.6	2572.8	1475.3	1238.1	1137.8	1077.3	992.9	948.7	840.3	812.1	796.0
45°	4607.0	2572.8	1374.9	1129.7	1049.2	960.7	924.6	896.5	824.1	836.2	844.1
47.5°	4936.6	2564.8	1254.3	1041.1	976.8	900.6	880.3	820.2	791.9	800.0	808.0
50°	5391.0	2576.9	1145.7	968.8	924.6	860.2	836.2	804.1	791.9	796.0	791.9
52.5°	6022.1	2536.6	1041.1	924.6	884.4	800.0	800.0	796.0	800.0	796.0	796.0
55°	6367.8	2448.2	964.8	900.6	856.3	771.9	788.0	796.0	804.1	800.0	800.0
57.5°	6858.3	2388.0	904.6	884.4	840.3	763.7	779.9	796.0	800.0	796.0	796.0
60°	7437.2	2347.7	864.3	888.5	828.1	763.7	784.0	796.0	791.9	788.0	788.0
62.5°	8108.6	2331.6	836.2	900.6	816.1	767.8	784.0	796.0	779.9	775.9	775.9
65°	8361.8	2187.0	800.0	908.5	824.1	767.8	779.9	784.0	763.7	759.7	755.7
67.5°	7971.7	1937.6	747.7	892.5	848.2	767.8	767.8	763.7	739.8	735.7	727.6
70°	7099.5	1608.1	667.4	840.3	864.3	771.9	751.7	731.7	707.5	707.5	691.4
72.5°	5813.0	1266.3	562.8	747.7	852.2	784.0	719.6	691.4	663.3	663.3	647.1
75°	4188.9	944.7	450.2	623.2	800.0	779.9	679.4	643.1	611.0	607.1	587.0
77.5°	2388.0	663.3	365.8	486.4	711.5	759.7	643.1	587.0	550.8	538.8	526.6
80°	1226.1	446.2	297.5	381.9	590.9	703.6	615.1	522.6	482.4	462.3	442.2
82.5°	582.9	297.5	229.2	281.3	446.2	615.1	578.9	450.2	406.0	381.9	357.7
85°	261.2	176.8	152.7	180.9	317.6	478.3	510.5	369.8	317.6	397.9	293.4
87.5°	84.4	80.4	80.4	84.4	152.7	209.0	373.9	273.4	253.2	209.0	176.8
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)