

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: P236849

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236849
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-AF72-160-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21605.8 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

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

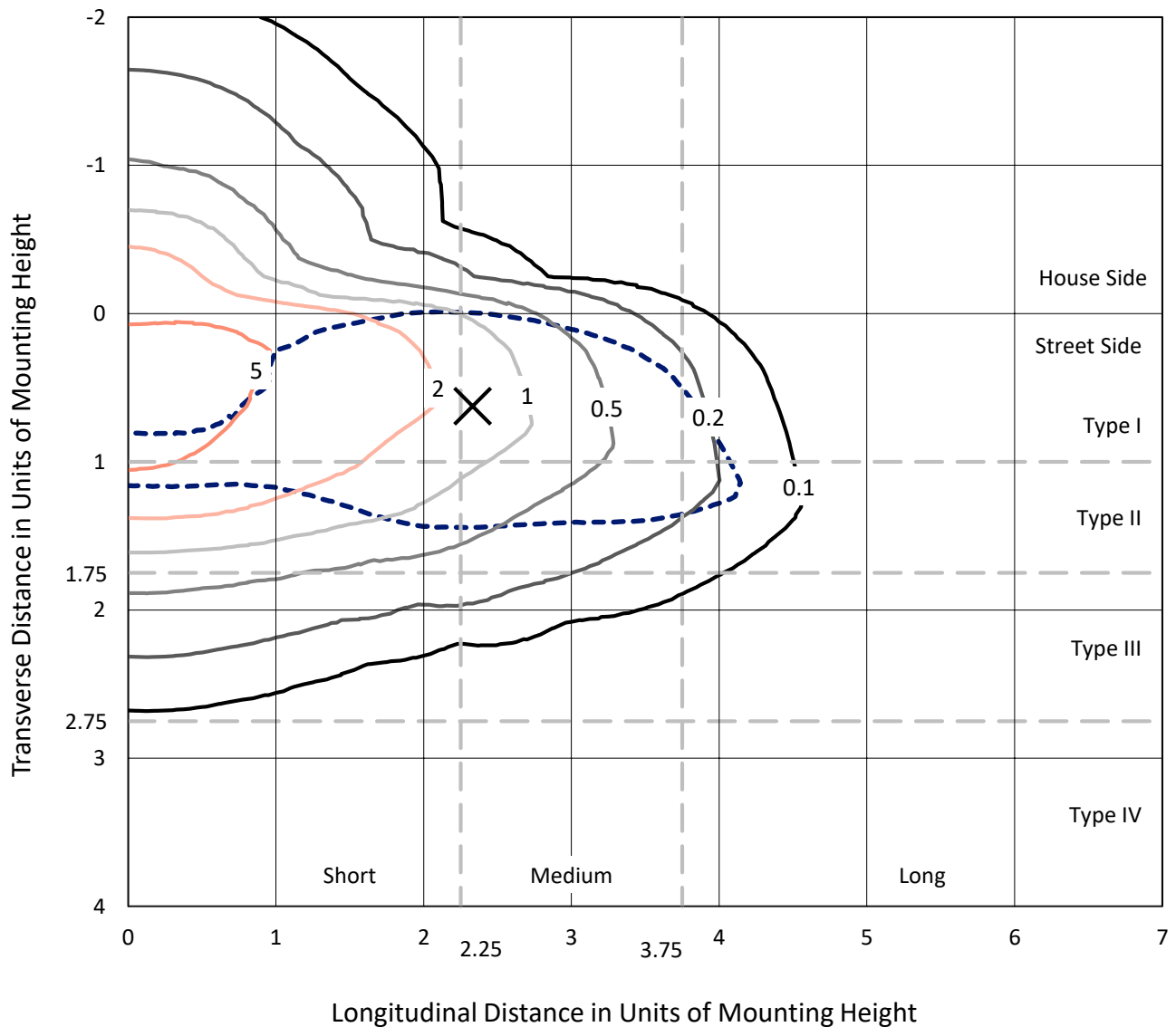


REPORT NUMBER: P236849

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

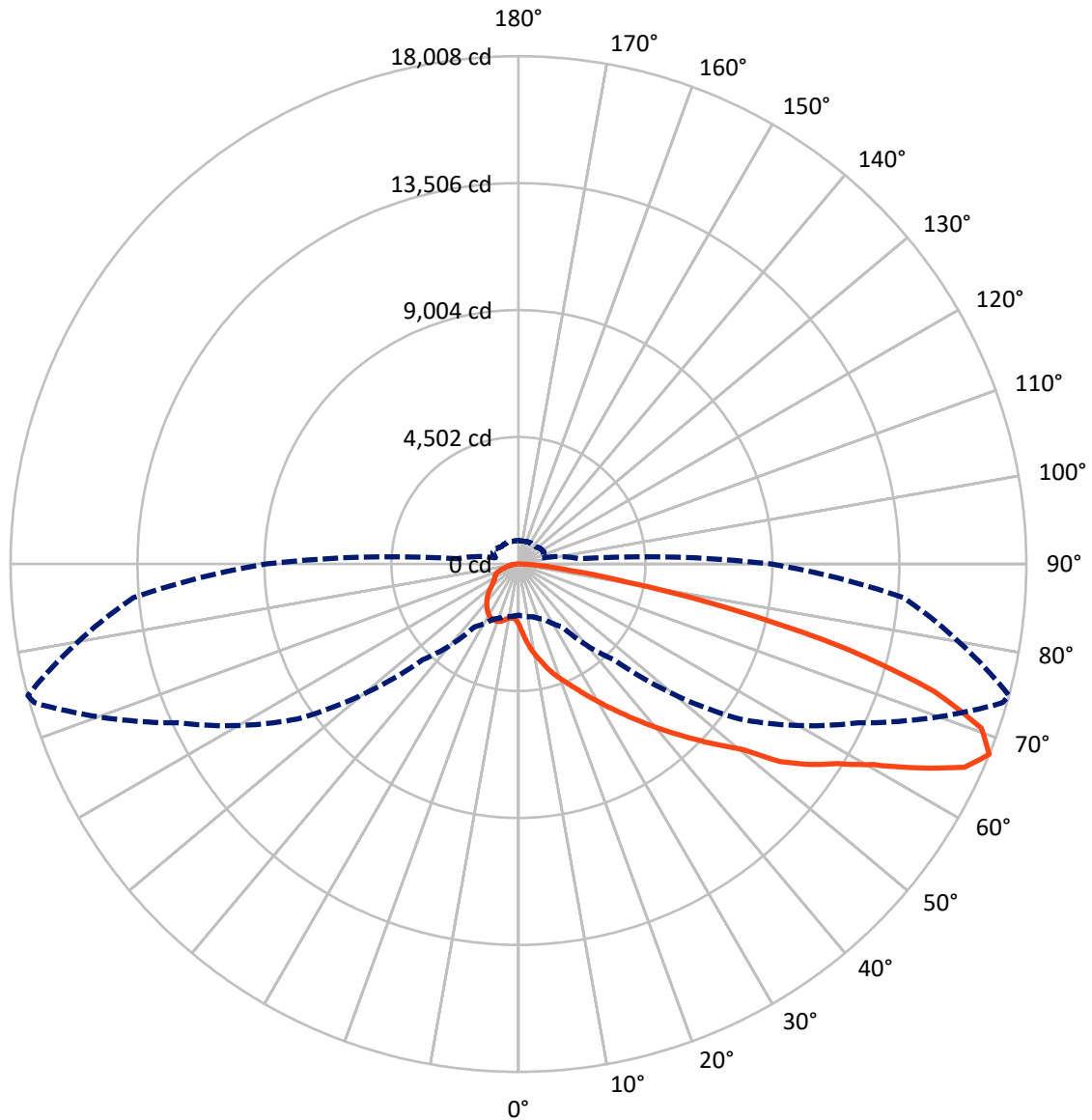


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P236849

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R

Luminous Intensity Polar Plot



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

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CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3689.5	0.0	3689.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	17916.3	0.0	17916.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	21605.8	0.0	21605.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.5	1.2
10°-20°	908.9	4.2
20°-30°	1657.8	7.7
30°-40°	2721.2	12.6
40°-50°	3935.2	18.2
50°-60°	4637.7	21.5
60°-70°	4506.7	20.9
70°-80°	2505.1	11.6
80°-90°	481.7	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°	21605.8	100.0
0°-180°	21605.8	100.0

Coefficient of Utilization



REPORT NUMBER: P236849

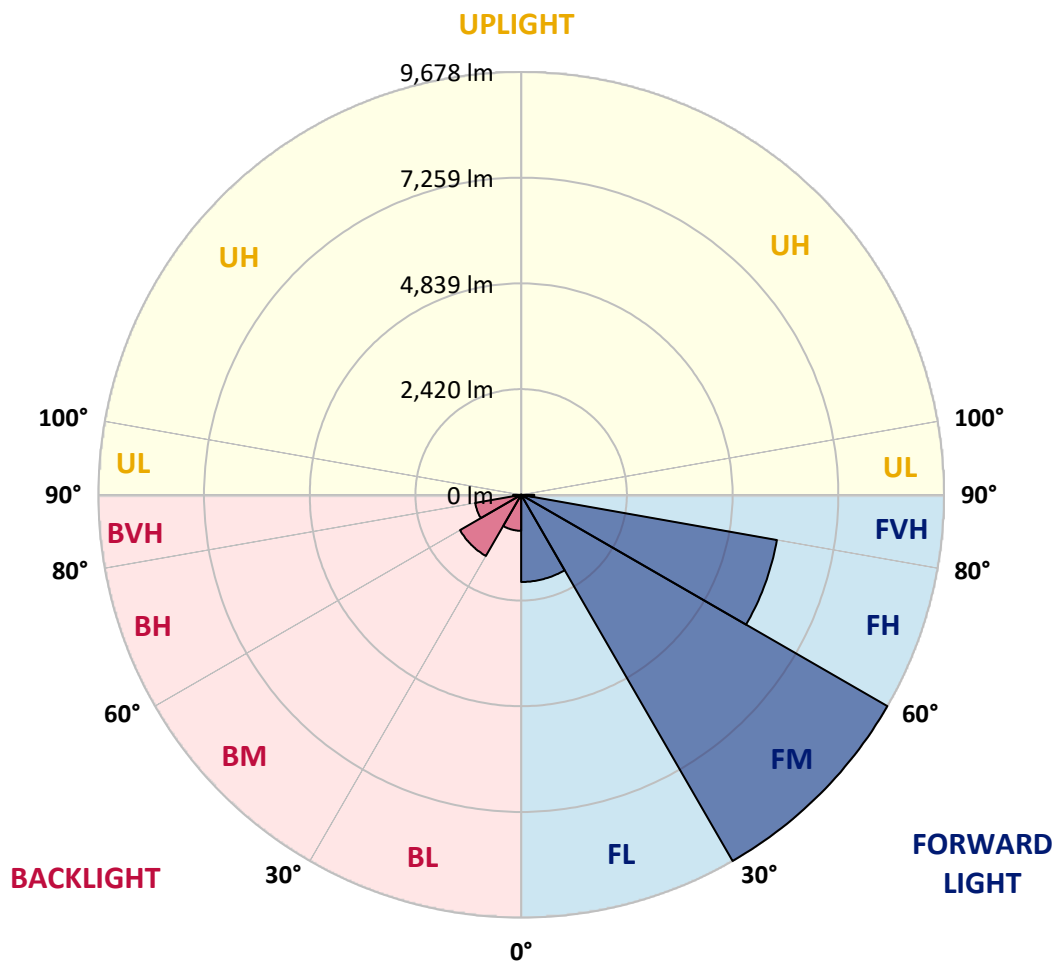
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1994.8	9.2			
FM	(30°-60°)	9678.2	44.8			
FH	(60°-80°)	5943.5	27.5			G3/7500
FVH	(80°-90°)	299.8	1.4			G3/500
BL	(0°-30°)	823.5	3.8	B2/1000		
BM	(30°-60°)	1615.8	7.5	B2/2500		
BH	(60°-80°)	1068.3	4.9	B3/2500		G3/2500
BVH	(80°-90°)	181.9	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





REPORT NUMBER: P236849

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9
2.5°	3035.2	3044.3	3026.2	2985.6	2926.9	2818.4	2723.6	2556.5	2407.4	2389.3	2231.3
5°	3568.2	3577.3	3554.7	3504.9	3441.7	3324.3	3193.3	2976.5	2737.1	2692.0	2357.7
7.5°	3934.1	3938.6	3911.5	3861.7	3812.1	3694.7	3563.7	3319.8	3026.2	2990.1	2520.3
10°	4245.7	4254.8	4218.6	4186.9	4132.8	4015.4	3879.8	3622.4	3319.8	3270.1	2687.4
12.5°	4534.7	4543.8	4521.2	4494.1	4476.0	4367.7	4218.6	3911.5	3586.3	3532.0	2886.2
15°	4729.0	4738.0	4742.5	4778.7	4801.2	4724.5	4575.5	4241.2	3875.3	3825.6	3121.0
17.5°	4674.8	4697.4	4765.1	4896.1	5036.1	5040.6	4918.7	4566.4	4159.9	4105.7	3360.4
20°	4516.7	4534.7	4616.1	4814.8	5090.3	5248.5	5239.3	4896.1	4426.4	4367.7	3581.8
22.5°	4647.7	4670.3	4670.3	4792.2	5063.2	5356.8	5474.2	5221.3	4692.9	4638.7	3803.0
25°	5207.7	5221.3	5126.4	5076.8	5176.1	5447.1	5668.5	5573.6	5018.1	4954.9	4042.5
27.5°	5989.2	5966.6	5849.1	5650.4	5542.0	5614.3	5840.1	5907.8	5392.9	5316.2	4290.9
30°	6766.0	6752.5	6617.0	6350.5	6106.6	5953.1	6029.8	6205.9	5799.4	5709.1	4530.2
32.5°	7493.2	7470.6	7321.6	7009.9	6734.4	6449.8	6300.8	6476.9	6233.0	6129.2	4796.7
35°	8161.7	8103.0	7954.0	7628.8	7344.2	7073.2	6707.3	6734.4	6702.8	6594.4	5090.3
37.5°	8703.7	8658.6	8495.9	8193.3	7890.6	7633.3	7249.3	7028.0	7208.6	7104.8	5429.1
40°	9182.4	9132.8	8965.7	8663.1	8383.0	8139.1	7836.5	7384.8	7777.8	7660.4	5808.5
42.5°	9543.8	9507.6	9372.2	9074.1	8803.1	8581.7	8432.7	7836.5	8369.5	8256.5	6224.0
45°	9738.0	9701.9	9629.6	9390.2	9141.8	8970.2	8983.8	8374.0	8988.3	8893.4	6716.4
47.5°	9498.6	9525.7	9588.9	9543.8	9390.2	9309.0	9476.0	8929.5	9679.3	9588.9	7249.3
50°	8857.2	8884.3	9137.3	9448.9	9503.1	9602.5	9918.6	9570.9	10411.0	10338.8	7908.7
52.5°	7281.0	7430.0	8130.1	8875.3	9385.7	9796.7	10411.0	10523.9	11644.0	11644.0	9074.1
55°	5501.3	5632.4	6431.8	7732.6	8929.5	9814.8	10772.4	11169.8	12533.8	12551.9	9683.8
57.5°	4458.0	4539.2	4932.3	6264.7	7972.0	9588.9	11201.4	11725.4	13274.6	13355.9	10469.7
60°	3617.9	3663.1	3920.5	4846.4	6648.6	8979.3	11508.6	12520.3	14331.5	14444.4	11472.4
62.5°	2908.8	2954.0	3125.5	3681.1	5216.7	7836.5	11454.4	13346.8	15740.8	15925.9	12786.8
65°	2321.6	2371.3	2484.2	2827.4	3866.3	6418.2	10898.8	13771.5	17199.6	17380.2	13658.5
67.5°	1811.2	1856.3	1933.2	2158.9	2723.6	4801.2	9584.4	13324.2	17854.5	18008.1	13703.7
70°	1368.6	1391.1	1454.3	1598.9	1946.7	3188.7	7502.2	11824.7	17267.3	17407.3	12800.4
72.5°	1061.4	1056.9	1093.0	1165.3	1359.5	2195.2	4972.9	9616.0	15266.4	15411.0	10921.4
75°	867.3	862.7	885.3	907.9	984.7	1472.4	2935.9	7240.2	12321.5	12046.1	8193.3
77.5°	731.7	727.2	749.8	754.3	785.9	1016.3	1671.2	4765.1	8220.4	7746.2	4616.1
80°	618.8	614.3	641.4	650.4	673.0	745.2	962.1	2579.1	4128.2	3911.5	2204.2
82.5°	465.2	483.2	533.0	555.6	582.7	551.1	596.2	1138.2	1915.1	1829.2	957.6
85°	225.9	266.5	402.0	447.1	478.7	347.8	406.5	537.5	862.7	822.0	388.4
87.5°	76.8	67.7	239.4	284.6	311.7	158.0	225.9	298.1	356.8	325.2	121.9
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°	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9	2140.9
2.5°	2163.5	2095.7	1996.4	1919.6	1870.0	1829.2	1811.2	1806.6	1797.6	1793.1	1793.1
5°	2208.7	2086.7	1933.2	1851.8	1829.2	1811.2	1820.2	1824.7	1824.7	1824.7	1824.7
7.5°	2276.4	2104.8	1919.6	1865.4	1860.8	1860.8	1888.0	1901.6	1910.6	1910.6	1910.6
10°	2366.8	2136.4	1942.2	1897.1	1910.6	1919.6	1951.2	1969.3	1978.3	1982.8	1987.4
12.5°	2488.7	2204.2	1987.4	1951.2	1969.3	1973.8	1996.4	2005.4	2014.5	2019.0	2019.0
15°	2651.3	2303.5	2059.6	2014.5	2019.0	2014.5	2014.5	2005.4	2000.9	2000.9	2009.9
17.5°	2818.4	2398.4	2122.8	2059.6	2041.5	2005.4	1978.3	1955.8	1942.2	1933.2	1937.7
20°	2985.6	2484.2	2158.9	2068.6	2019.0	1960.3	1910.6	1879.0	1860.8	1842.8	1851.8
22.5°	3152.6	2565.5	2172.5	2041.5	1969.3	1883.5	1829.2	1779.6	1738.9	1711.8	1716.3
25°	3337.9	2655.8	2172.5	2009.9	1901.6	1811.2	1743.4	1662.2	1603.5	1580.9	1589.9
27.5°	3523.0	2732.6	2149.9	1951.2	1824.7	1734.4	1635.1	1540.2	1504.0	1490.5	1495.0
30°	3708.2	2791.3	2100.2	1879.0	1743.4	1644.1	1513.0	1449.8	1404.7	1368.6	1373.1
32.5°	3893.4	2831.9	2032.5	1788.6	1657.6	1531.2	1422.7	1350.5	1269.2	1224.1	1228.6
35°	4105.7	2863.5	1951.2	1698.3	1562.8	1431.8	1350.5	1233.1	1147.2	1111.1	1102.0
37.5°	4327.0	2886.2	1865.4	1598.9	1467.9	1359.5	1278.2	1133.7	1052.4	1002.7	998.2
40°	4566.4	2895.3	1761.5	1495.0	1377.6	1314.4	1183.3	1075.0	935.0	903.4	903.4
42.5°	4850.9	2890.7	1657.6	1391.1	1278.2	1210.5	1115.6	1065.9	944.0	912.4	894.3
45°	5176.1	2890.7	1544.8	1269.2	1178.8	1079.5	1038.8	1007.2	926.0	939.5	948.5
47.5°	5546.5	2881.7	1409.2	1169.8	1097.5	1011.7	989.2	921.4	889.8	898.9	907.9
50°	6056.9	2895.3	1287.3	1088.5	1038.8	966.6	939.5	903.4	889.8	894.3	889.8
52.5°	6766.0	2850.0	1169.8	1038.8	993.7	898.9	898.9	894.3	898.9	894.3	894.3
55°	7154.4	2750.7	1084.0	1011.7	962.1	867.3	885.3	894.3	903.4	898.9	898.9
57.5°	7705.5	2682.9	1016.3	993.7	944.0	858.2	876.3	894.3	898.9	894.3	894.3
60°	8355.9	2637.8	971.1	998.2	930.5	858.2	880.8	894.3	889.8	885.3	885.3
62.5°	9110.2	2619.7	939.5	1011.7	916.9	862.7	880.8	894.3	876.3	871.8	871.8
65°	9394.8	2457.1	898.9	1020.8	926.0	862.7	876.3	880.8	858.2	853.7	849.2
67.5°	8956.7	2177.0	840.1	1002.7	953.0	862.7	862.7	858.2	831.0	826.5	817.5
70°	7976.5	1806.6	749.8	944.0	971.1	867.3	844.7	822.0	794.9	794.9	776.8
72.5°	6531.1	1422.7	632.4	840.1	957.6	880.8	808.5	776.8	745.2	745.2	727.2
75°	4706.4	1061.4	505.8	700.1	898.9	876.3	763.3	722.7	686.5	682.0	659.4
77.5°	2682.9	745.2	411.0	546.6	799.4	853.7	722.7	659.4	618.8	605.3	591.7
80°	1377.6	501.3	334.2	429.1	664.0	790.4	691.1	587.2	542.0	519.5	496.8
82.5°	654.9	334.2	257.5	316.2	501.3	691.1	650.4	505.8	456.2	429.1	402.0
85°	293.6	198.8	171.7	203.3	356.8	537.5	573.7	415.5	356.8	447.1	329.7
87.5°	94.8	90.3	90.3	94.8	171.7	234.9	420.0	307.1	284.6	234.9	198.8
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)