

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: P236850

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236850
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
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 22642 lumens
Efficiency: N/A
Efficacy: 130.9 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

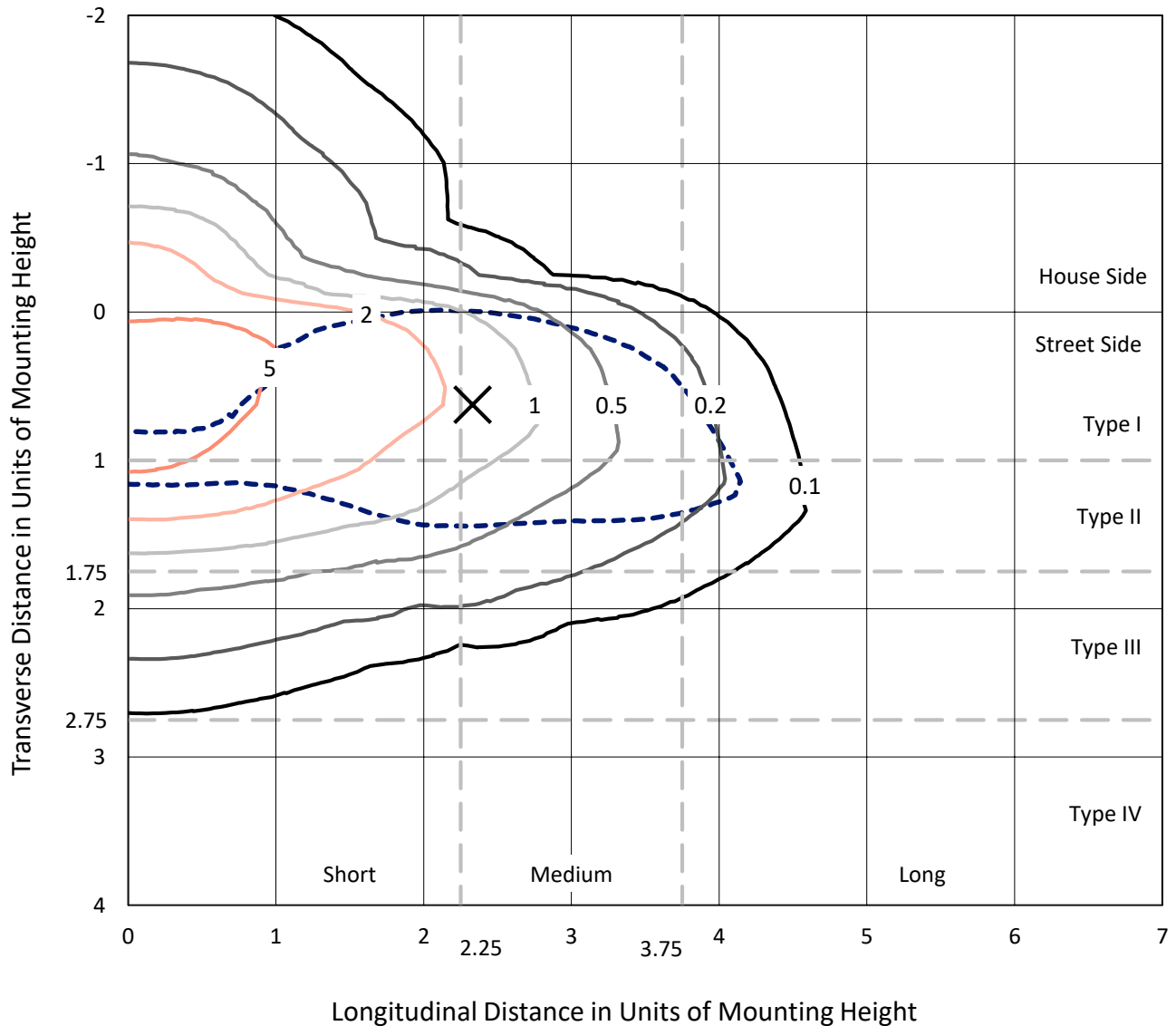
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P236850
 CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

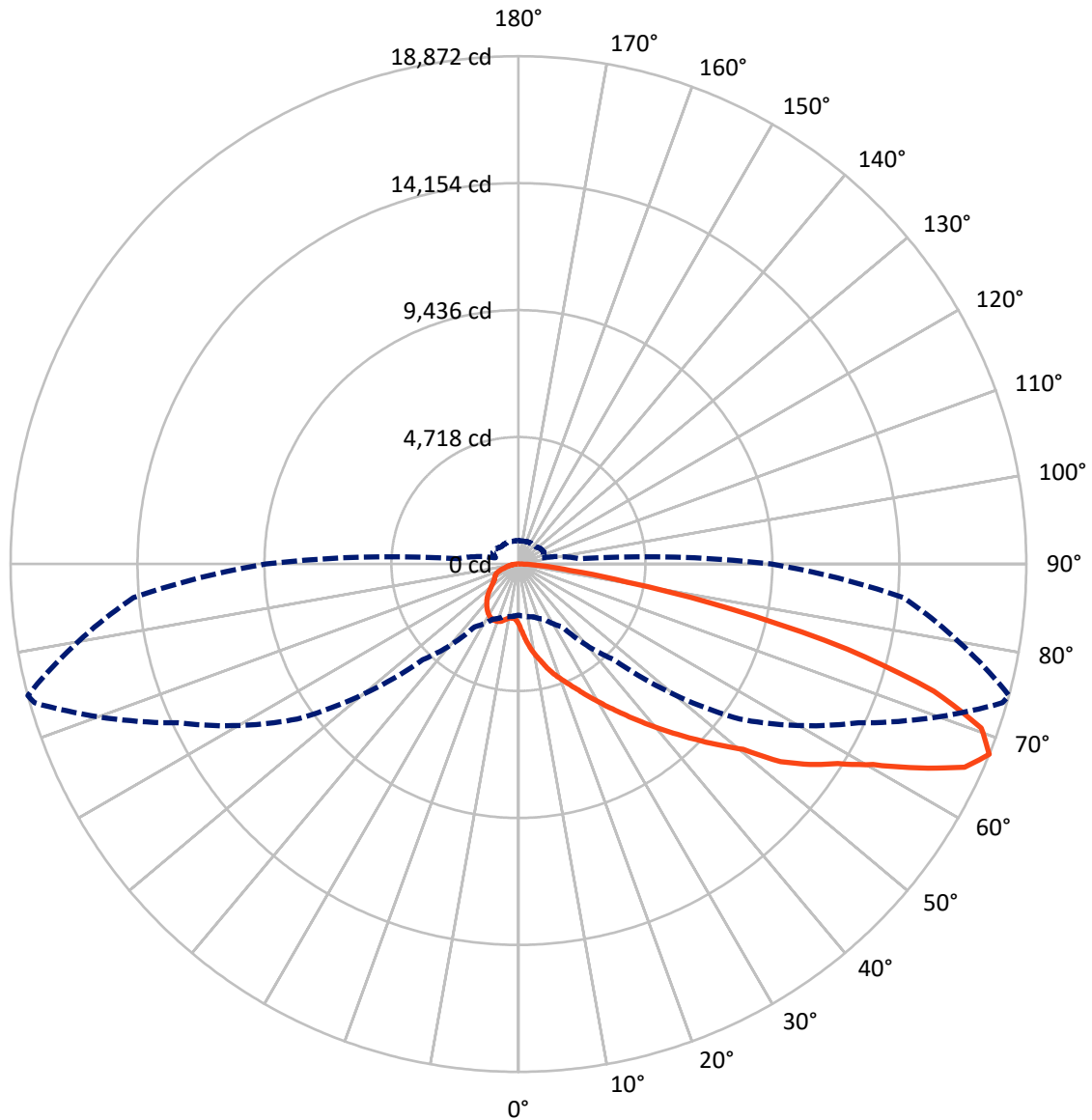
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P236850
CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

Luminous Intensity Polar Plot



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



REPORT NUMBER: P236850

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3866.4	0.0	3866.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	18775.6	0.0	18775.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	22642.0	0.0	22642.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.6	1.2
10°-20°	952.5	4.2
20°-30°	1737.3	7.7
30°-40°	2851.7	12.6
40°-50°	4123.9	18.2
50°-60°	4860.1	21.5
60°-70°	4722.8	20.9
70°-80°	2625.2	11.6
80°-90°	504.8	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°	22642.0	100.0
0°-180°	22642.0	100.0



REPORT NUMBER: P236850

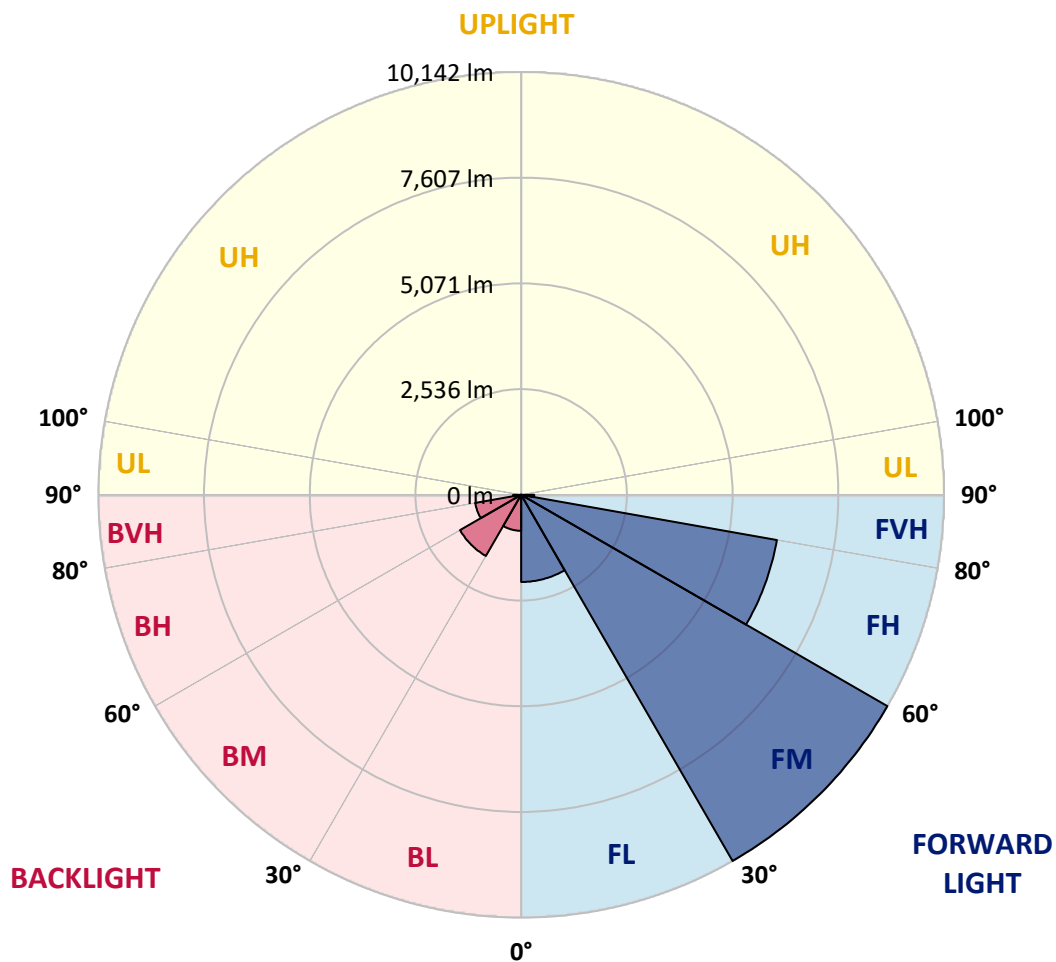
CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2090.5	9.2			
FM (30°-60°)	10142.4	44.8			
FH (60°-80°)	6228.5	27.5			G3/7500
FVH (80°-90°)	314.2	1.4			G3/500
BL (0°-30°)	863.0	3.8	B2/1000		
BM (30°-60°)	1693.3	7.5	B2/2500		
BH (60°-80°)	1119.5	4.9	B3/2500		G3/2500
BVH (80°-90°)	190.6	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: P236850

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6
2.5°	3180.8	3190.3	3171.4	3128.7	3067.2	2953.6	2854.2	2679.1	2522.9	2504.0	2338.3
5°	3739.3	3748.8	3725.2	3673.1	3606.8	3483.8	3346.5	3119.3	2868.4	2821.1	2470.8
7.5°	4122.7	4127.5	4099.1	4047.0	3994.9	3871.9	3734.6	3479.0	3171.4	3133.5	2641.2
10°	4449.3	4458.8	4420.9	4387.8	4331.0	4207.9	4065.9	3796.2	3479.0	3426.9	2816.3
12.5°	4752.2	4761.7	4738.1	4709.7	4690.7	4577.1	4420.9	4099.1	3758.2	3701.4	3024.6
15°	4955.8	4965.3	4970.0	5007.9	5031.5	4951.1	4794.9	4444.6	4061.2	4009.1	3270.8
17.5°	4899.0	4922.6	4993.6	5130.9	5277.7	5282.4	5154.6	4785.4	4359.4	4302.6	3521.6
20°	4733.3	4752.2	4837.4	5045.7	5334.5	5500.1	5490.7	5130.9	4638.7	4577.1	3753.5
22.5°	4870.6	4894.3	4894.3	5022.1	5306.0	5613.7	5736.8	5471.8	4917.9	4861.2	3985.4
25°	5457.5	5471.8	5372.3	5320.3	5424.4	5708.4	5940.4	5840.9	5258.7	5192.5	4236.3
27.5°	6276.4	6252.7	6129.6	5921.4	5807.8	5883.5	6120.2	6191.2	5651.6	5571.1	4496.7
30°	7090.5	7076.4	6934.4	6655.1	6399.5	6238.6	6319.0	6503.6	6077.6	5982.9	4747.5
32.5°	7852.6	7828.9	7672.7	7346.1	7057.4	6759.2	6603.0	6787.6	6532.0	6423.1	5026.8
35°	8553.1	8491.6	8335.4	7994.6	7696.4	7412.4	7029.0	7057.4	7024.3	6910.6	5334.5
37.5°	9121.1	9073.8	8903.4	8586.2	8269.1	7999.4	7597.0	7365.0	7554.4	7445.5	5689.4
40°	9622.9	9570.8	9395.7	9078.5	8785.1	8529.5	8212.4	7739.0	8150.8	8027.7	6087.1
42.5°	10001.5	9963.6	9821.7	9509.2	9225.3	8993.4	8837.2	8212.4	8770.9	8652.5	6522.5
45°	10205.1	10167.2	10091.5	9840.6	9580.2	9400.4	9414.6	8775.6	9419.3	9319.9	7038.5
47.5°	9954.2	9982.6	10048.9	10001.5	9840.6	9755.4	9930.5	9357.7	10143.6	10048.9	7597.0
50°	9282.1	9310.5	9575.5	9902.2	9958.9	10063.1	10394.4	10029.9	10910.3	10834.6	8288.0
52.5°	7630.1	7786.3	8520.0	9301.0	9835.9	10266.6	10910.3	11028.6	12202.6	12202.6	9509.2
55°	5765.2	5902.4	6740.2	8103.5	9357.7	10285.6	11289.0	11705.5	13135.0	13153.9	10148.3
57.5°	4671.8	4757.0	5168.8	6565.1	8354.3	10048.9	11738.7	12287.7	13911.3	13996.4	10971.9
60°	3791.4	3838.7	4108.6	5078.8	6967.4	9409.8	12060.5	13120.8	15018.9	15137.2	12022.6
62.5°	3048.3	3095.6	3275.5	3857.6	5467.0	8212.4	12003.7	13987.0	16495.7	16689.7	13400.0
65°	2432.9	2485.0	2603.3	2963.1	4051.7	6726.1	11421.6	14431.9	18024.5	18213.8	14313.6
67.5°	1898.1	1945.4	2025.9	2262.6	2854.2	5031.5	10044.1	13963.4	18710.9	18871.8	14360.9
70°	1434.2	1457.9	1524.1	1675.6	2040.1	3341.8	7862.1	12391.8	18095.5	18242.3	13414.3
72.5°	1112.4	1107.5	1145.5	1221.2	1424.8	2300.4	5211.4	10077.3	15998.6	16150.1	11445.2
75°	908.8	904.1	927.7	951.4	1031.9	1543.0	3076.6	7587.5	12912.5	12623.8	8586.2
77.5°	766.8	762.1	785.7	790.4	823.6	1065.0	1751.3	4993.6	8614.7	8117.6	4837.4
80°	648.4	643.7	672.2	681.6	705.2	781.0	1008.2	2702.7	4326.3	4099.1	2309.8
82.5°	487.5	506.5	558.5	582.2	610.6	577.5	624.8	1192.8	2006.9	1917.0	1003.5
85°	236.7	279.3	421.3	468.6	501.8	364.5	426.0	563.2	904.1	861.4	407.0
87.5°	80.5	71.0	250.8	298.2	326.6	165.6	236.7	312.4	373.9	340.8	127.8
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: P236850

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6	2243.6
2.5°	2267.3	2196.3	2092.1	2011.6	1959.6	1917.0	1898.1	1893.4	1883.9	1879.2	1879.2
5°	2314.6	2186.8	2025.9	1940.6	1917.0	1898.1	1907.5	1912.3	1912.3	1912.3	1912.3
7.5°	2385.6	2205.7	2011.6	1954.9	1950.2	1950.2	1978.5	1992.7	2002.2	2002.2	2002.2
10°	2480.2	2238.8	2035.4	1988.0	2002.2	2011.6	2044.8	2063.7	2073.2	2077.9	2082.6
12.5°	2608.1	2309.8	2082.6	2044.8	2063.7	2068.5	2092.1	2101.6	2111.1	2115.8	2115.8
15°	2778.4	2414.0	2158.4	2111.1	2115.8	2111.1	2111.1	2101.6	2096.8	2096.8	2106.4
17.5°	2953.6	2513.4	2224.7	2158.4	2139.5	2101.6	2073.2	2049.5	2035.4	2025.9	2030.6
20°	3128.7	2603.3	2262.6	2167.8	2115.8	2054.3	2002.2	1969.1	1950.2	1931.2	1940.6
22.5°	3303.8	2688.5	2276.8	2139.5	2063.7	1973.8	1917.0	1864.9	1822.3	1793.9	1798.7
25°	3498.0	2783.2	2276.8	2106.4	1992.7	1898.1	1827.1	1741.9	1680.3	1656.7	1666.2
27.5°	3692.0	2863.6	2253.0	2044.8	1912.3	1817.6	1713.4	1614.1	1576.2	1562.0	1566.8
30°	3886.1	2925.2	2201.0	1969.1	1827.1	1723.0	1585.7	1519.4	1472.0	1434.2	1438.9
32.5°	4080.1	2967.8	2130.0	1874.4	1737.2	1604.6	1491.0	1415.3	1330.0	1282.8	1287.5
35°	4302.6	3000.9	2044.8	1779.7	1637.7	1500.5	1415.3	1292.2	1202.3	1164.4	1154.9
37.5°	4534.5	3024.6	1954.9	1675.6	1538.3	1424.8	1339.6	1188.1	1102.8	1050.8	1046.1
40°	4785.4	3034.1	1846.0	1566.8	1443.7	1377.4	1240.1	1126.6	979.8	946.6	946.6
42.5°	5083.6	3029.4	1737.2	1457.9	1339.6	1268.6	1169.1	1117.1	989.3	956.2	937.2
45°	5424.4	3029.4	1618.8	1330.0	1235.4	1131.3	1088.6	1055.6	970.4	984.5	994.0
47.5°	5812.5	3019.9	1476.8	1225.9	1150.2	1060.3	1036.6	965.6	932.4	941.9	951.4
50°	6347.4	3034.1	1349.0	1140.7	1088.6	1012.9	984.5	946.6	932.4	937.2	932.4
52.5°	7090.5	2986.7	1225.9	1088.6	1041.4	941.9	941.9	937.2	941.9	937.2	937.2
55°	7497.6	2882.6	1136.0	1060.3	1008.2	908.8	927.7	937.2	946.6	941.9	941.9
57.5°	8075.1	2811.6	1065.0	1041.4	989.3	899.4	918.3	937.2	941.9	937.2	937.2
60°	8756.7	2764.2	1017.6	1046.1	975.1	899.4	923.0	937.2	932.4	927.7	927.7
62.5°	9547.1	2745.3	984.5	1060.3	960.9	904.1	923.0	937.2	918.3	913.5	913.5
65°	9845.3	2575.0	941.9	1069.7	970.4	904.1	918.3	923.0	899.4	894.6	889.9
67.5°	9386.2	2281.5	880.4	1050.8	998.7	904.1	904.1	899.4	870.9	866.2	856.7
70°	8359.0	1893.4	785.7	989.3	1017.6	908.8	885.2	861.4	833.1	833.1	814.2
72.5°	6844.4	1491.0	662.7	880.4	1003.5	923.0	847.3	814.2	781.0	781.0	762.1
75°	4932.2	1112.4	530.1	733.7	941.9	918.3	799.9	757.3	719.4	714.7	691.1
77.5°	2811.6	781.0	430.8	572.8	837.8	894.6	757.3	691.1	648.4	634.2	620.1
80°	1443.7	525.4	350.3	449.7	695.8	828.3	724.2	615.3	568.0	544.3	520.7
82.5°	686.3	350.3	269.8	331.3	525.4	724.2	681.6	530.1	478.0	449.7	421.3
85°	307.7	208.3	179.8	213.0	373.9	563.2	601.1	435.5	373.9	468.6	345.6
87.5°	99.4	94.6	94.6	99.4	179.8	246.1	440.2	321.8	298.2	246.1	208.3
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)