

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: P265653

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265653  
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-AF72-180-D-U-T2R-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19689.5 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

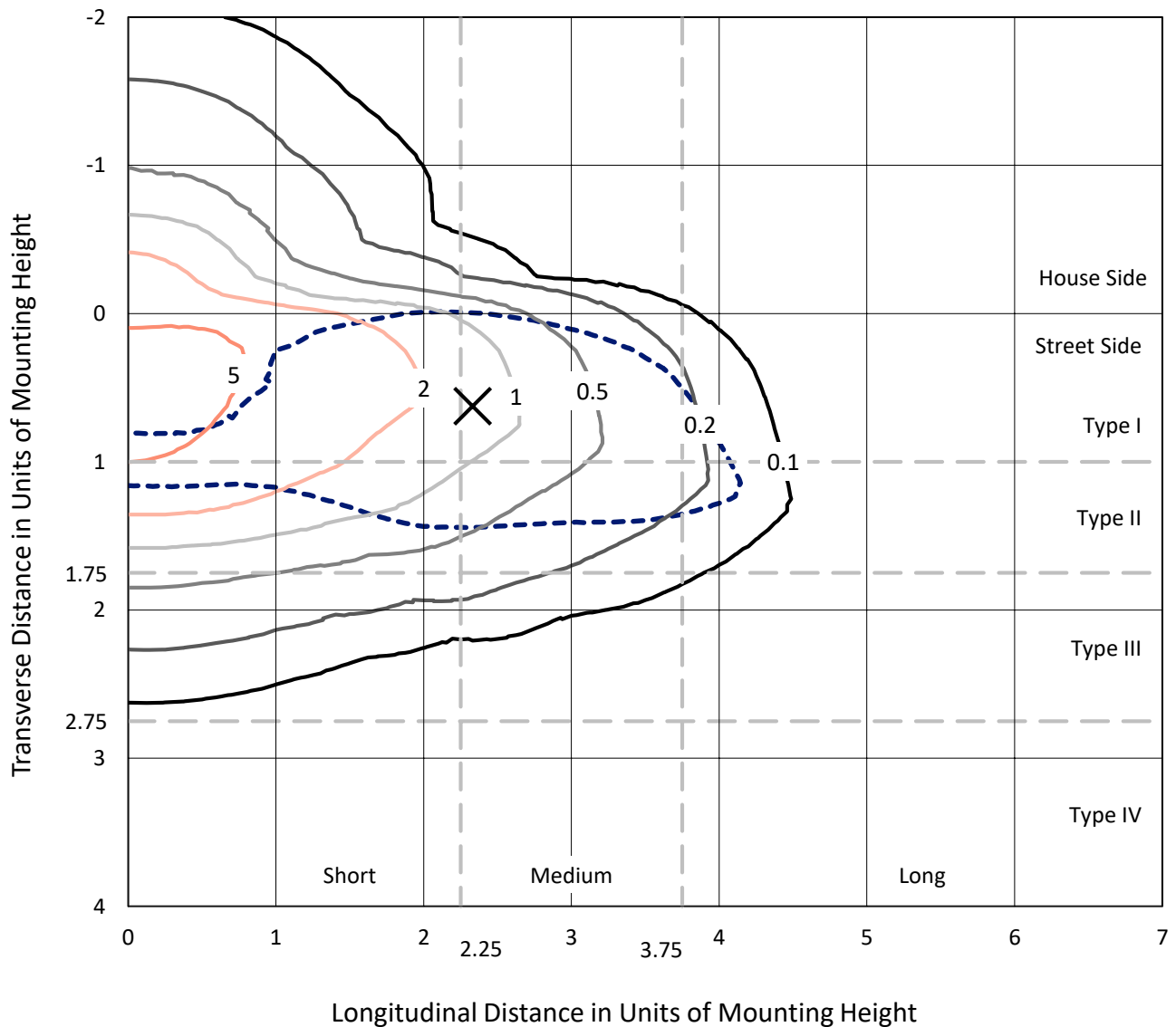
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

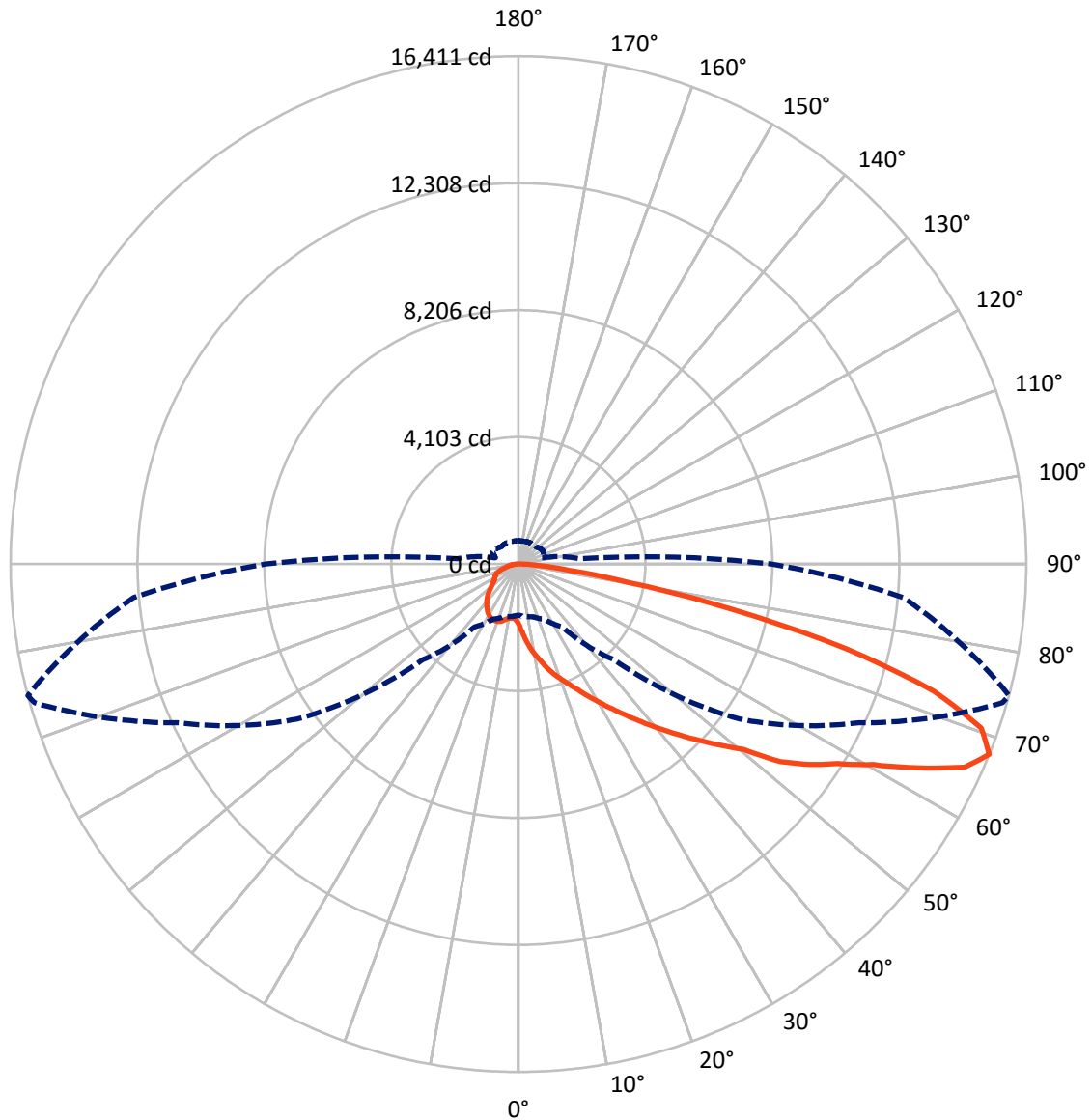
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265653  
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2R-7027

### 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
<b>House Side</b>	Lumens	3362.2	0.0	3362.2
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	16327.2	0.0	16327.2
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	19689.5	0.0	19689.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.2	1.2
10°-20°	828.3	4.2
20°-30°	1510.8	7.7
30°-40°	2479.8	12.6
40°-50°	3586.2	18.2
50°-60°	4226.3	21.5
60°-70°	4107.0	20.9
70°-80°	2282.9	11.6
80°-90°	439.0	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°	19689.5	100.0
0°-180°	19689.5	100.0

**Coefficient of Utilization**



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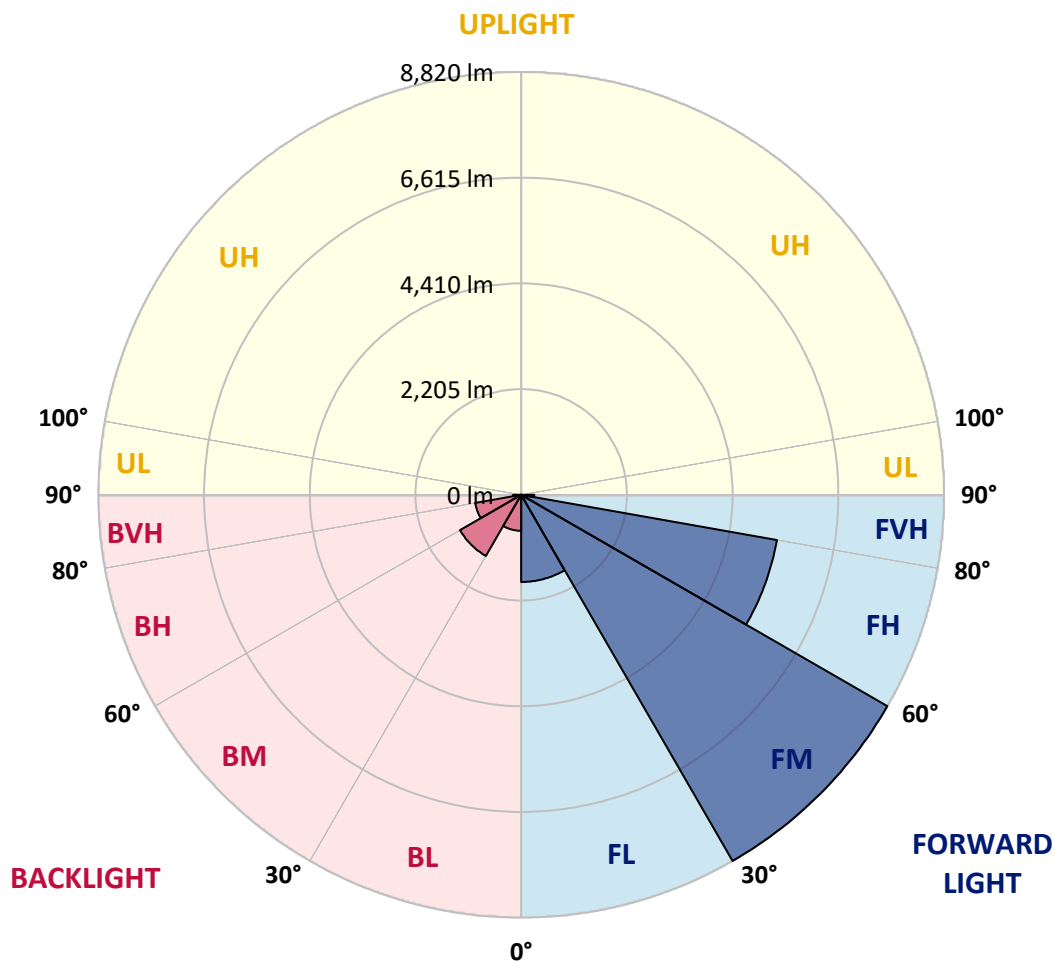
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1817.9	9.2			
FM	(30°-60°)	8819.8	44.8			
FH	(60°-80°)	5416.3	27.5			G3/7500
FVH	(80°-90°)	273.2	1.4			G3/500
BL	(0°-30°)	750.5	3.8	B2/1000		
BM	(30°-60°)	1472.5	7.5	B2/2500		
BH	(60°-80°)	973.5	4.9	B2/1000		G2/1000
BVH	(80°-90°)	165.8	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





REPORT NUMBER: P265653

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2R-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	2766.1	2774.2	2757.7	2720.7	2667.2	2568.4	2481.9	2329.8	2193.9	2177.4	2033.4
5°	3251.8	3259.9	3239.4	3194.2	3136.5	3029.4	2910.1	2712.5	2494.4	2453.2	2148.6
7.5°	3585.1	3589.3	3564.6	3519.3	3473.9	3366.9	3247.6	3025.3	2757.7	2724.9	2296.7
10°	3869.1	3877.4	3844.4	3815.6	3766.2	3659.2	3535.8	3301.1	3025.3	2980.0	2449.0
12.5°	4132.6	4140.7	4120.3	4095.6	4079.1	3980.3	3844.4	3564.6	3268.3	3218.7	2630.1
15°	4309.6	4317.9	4321.9	4354.9	4375.5	4305.4	4169.7	3865.0	3531.6	3486.3	2844.3
17.5°	4260.2	4280.8	4342.4	4461.9	4589.5	4593.7	4482.5	4161.4	3790.9	3741.5	3062.4
20°	4116.2	4132.6	4206.7	4387.9	4638.8	4782.9	4774.8	4461.9	4033.7	3980.3	3264.1
22.5°	4235.5	4256.1	4256.1	4367.2	4614.1	4881.7	4988.7	4758.2	4276.7	4227.2	3465.8
25°	4745.8	4758.2	4671.7	4626.5	4717.1	4964.0	5165.8	5079.2	4573.0	4515.4	3683.9
27.5°	5457.9	5437.4	5330.4	5149.3	5050.5	5116.3	5322.1	5383.9	4914.6	4844.6	3910.3
30°	6166.0	6153.6	6030.1	5787.2	5565.0	5425.0	5495.0	5655.5	5285.1	5202.8	4128.5
32.5°	6828.6	6808.1	6672.3	6388.1	6137.1	5877.8	5742.0	5902.6	5680.3	5585.7	4371.3
35°	7437.7	7384.2	7248.5	6952.2	6692.8	6445.8	6112.4	6137.1	6108.4	6009.5	4638.8
37.5°	7931.8	7890.6	7742.4	7466.6	7190.8	6956.2	6606.3	6404.6	6569.3	6474.7	4947.5
40°	8368.0	8322.7	8170.4	7894.8	7639.5	7417.2	7141.4	6729.8	7087.9	6980.9	5293.4
42.5°	8697.3	8664.4	8540.9	8269.3	8022.4	7820.6	7684.8	7141.4	7627.1	7524.3	5672.0
45°	8874.4	8841.4	8775.5	8557.4	8331.1	8174.5	8187.0	7631.3	8191.0	8104.6	6120.6
47.5°	8656.2	8681.0	8738.5	8697.3	8557.4	8483.4	8635.5	8137.6	8820.8	8738.5	6606.3
50°	8071.7	8096.5	8326.8	8611.0	8660.3	8750.8	9038.9	8722.1	9487.5	9421.8	7207.3
52.5°	6635.2	6771.1	7409.0	8088.2	8553.3	8927.9	9487.5	9590.6	10611.3	10611.3	8269.3
55°	5013.4	5132.7	5861.4	7046.8	8137.6	8944.3	9816.9	10179.1	11422.2	11438.7	8824.9
57.5°	4062.7	4136.6	4494.8	5709.1	7265.0	8738.5	10208.0	10685.3	12097.2	12171.3	9541.2
60°	3297.0	3338.2	3572.7	4416.5	6058.9	8182.8	10487.8	11409.8	13060.4	13163.4	10455.0
62.5°	2650.8	2692.0	2848.3	3354.6	4754.1	7141.4	10438.5	12163.1	14344.7	14513.3	11652.8
65°	2115.7	2161.0	2263.9	2576.7	3523.4	5849.0	9932.2	12550.0	15674.2	15838.7	12447.2
67.5°	1650.5	1691.7	1761.7	1967.5	2481.9	4375.5	8734.4	12142.5	16271.0	16411.0	12488.2
70°	1247.1	1267.8	1325.4	1457.1	1774.1	2905.9	6836.9	10776.0	15735.9	15863.4	11665.1
72.5°	967.3	963.2	996.1	1061.9	1238.9	2000.4	4531.8	8763.1	13912.5	14044.2	9952.7
75°	790.2	786.1	806.8	827.2	897.2	1341.9	2675.5	6598.1	11228.8	10977.6	7466.6
77.5°	666.8	662.7	683.3	687.5	716.2	926.2	1522.9	4342.4	7491.3	7059.2	4206.7
80°	563.9	559.9	584.4	592.7	613.4	679.2	876.7	2350.2	3762.1	3564.6	2008.7
82.5°	424.0	440.3	485.8	506.3	531.0	502.2	543.4	1037.3	1745.2	1667.1	872.7
85°	205.8	242.8	366.2	407.6	436.2	316.9	370.5	489.8	786.1	749.1	354.0
87.5°	70.0	61.8	218.2	259.3	284.0	144.1	205.8	271.6	325.1	296.4	111.1
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: P265653

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2R-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1971.6	1909.8	1819.2	1749.4	1704.1	1667.1	1650.5	1646.5	1638.1	1634.0	1634.0
5°	2012.8	1901.6	1761.7	1687.6	1667.1	1650.5	1658.8	1662.9	1662.9	1662.9	1662.9
7.5°	2074.5	1918.2	1749.4	1700.0	1695.8	1695.8	1720.6	1732.9	1741.2	1741.2	1741.2
10°	2156.8	1946.9	1769.9	1728.8	1741.2	1749.4	1778.1	1794.6	1802.9	1807.0	1811.2
12.5°	2268.0	2008.7	1811.2	1778.1	1794.6	1798.8	1819.2	1827.5	1835.7	1839.9	1839.9
15°	2416.1	2099.2	1877.0	1835.7	1839.9	1835.7	1835.7	1827.5	1823.4	1823.4	1831.6
17.5°	2568.4	2185.7	1934.6	1877.0	1860.5	1827.5	1802.9	1782.2	1769.9	1761.7	1765.8
20°	2720.7	2263.9	1967.5	1885.2	1839.9	1786.4	1741.2	1712.3	1695.8	1679.4	1687.6
22.5°	2873.0	2338.0	1979.9	1860.5	1794.6	1716.4	1667.1	1621.7	1584.7	1559.9	1564.0
25°	3041.8	2420.3	1979.9	1831.6	1732.9	1650.5	1588.8	1514.7	1461.3	1440.6	1448.8
27.5°	3210.5	2490.2	1959.3	1778.1	1662.9	1580.6	1490.0	1403.6	1370.6	1358.2	1362.4
30°	3379.3	2543.8	1914.0	1712.3	1588.8	1498.3	1378.9	1321.2	1280.2	1247.1	1251.2
32.5°	3548.0	2580.8	1852.2	1630.0	1510.6	1395.3	1296.6	1230.7	1156.7	1115.4	1119.6
35°	3741.5	2609.7	1778.1	1547.7	1424.2	1304.8	1230.7	1123.7	1045.4	1012.6	1004.3
37.5°	3943.2	2630.1	1700.0	1457.1	1337.8	1238.9	1164.8	1033.1	959.0	913.8	909.7
40°	4161.4	2638.4	1605.4	1362.4	1255.4	1197.8	1078.4	979.6	852.0	823.2	823.2
42.5°	4420.6	2634.3	1510.6	1267.8	1164.8	1103.1	1016.7	971.3	860.2	831.4	815.0
45°	4717.1	2634.3	1407.7	1156.7	1074.4	983.7	946.8	917.9	843.8	856.2	864.3
47.5°	5054.7	2626.0	1284.2	1066.1	1000.3	922.0	901.4	839.6	810.9	819.2	827.2
50°	5519.6	2638.4	1173.0	992.0	946.8	880.9	856.2	823.2	810.9	815.0	810.9
52.5°	6166.0	2597.3	1066.1	946.8	905.5	819.2	819.2	815.0	819.2	815.0	815.0
55°	6519.9	2506.7	987.9	922.0	876.7	790.2	806.8	815.0	823.2	819.2	819.2
57.5°	7022.1	2444.9	926.2	905.5	860.2	782.1	798.6	815.0	819.2	815.0	815.0
60°	7614.8	2403.9	885.0	909.7	847.9	782.1	802.6	815.0	810.9	806.8	806.8
62.5°	8302.1	2387.3	856.2	922.0	835.6	786.1	802.6	815.0	798.6	794.5	794.5
65°	8561.4	2239.1	819.2	930.3	843.8	786.1	798.6	802.6	782.1	777.9	773.8
67.5°	8162.3	1983.9	765.5	913.8	868.5	786.1	786.1	782.1	757.5	753.3	745.1
70°	7269.1	1646.5	683.3	860.2	885.0	790.2	769.7	749.1	724.5	724.5	708.0
72.5°	5951.9	1296.6	576.3	765.5	872.7	802.6	736.8	708.0	679.2	679.2	662.7
75°	4289.0	967.3	461.0	637.9	819.2	798.6	695.6	658.5	625.7	621.5	601.0
77.5°	2444.9	679.2	374.6	498.0	728.5	777.9	658.5	601.0	563.9	551.6	539.3
80°	1255.4	456.9	304.5	391.0	605.1	720.4	629.7	535.1	494.0	473.3	452.7
82.5°	596.8	304.5	234.5	288.1	456.9	629.7	592.7	461.0	415.7	391.0	366.2
85°	267.5	181.1	156.5	185.2	325.1	489.8	522.8	378.6	325.1	407.6	300.5
87.5°	86.4	82.4	82.4	86.4	156.5	214.1	382.8	279.9	259.3	214.1	181.1
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)