

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: P400039

Luminaire Tested: **ARCH-L-PA3-220-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400039  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24767 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

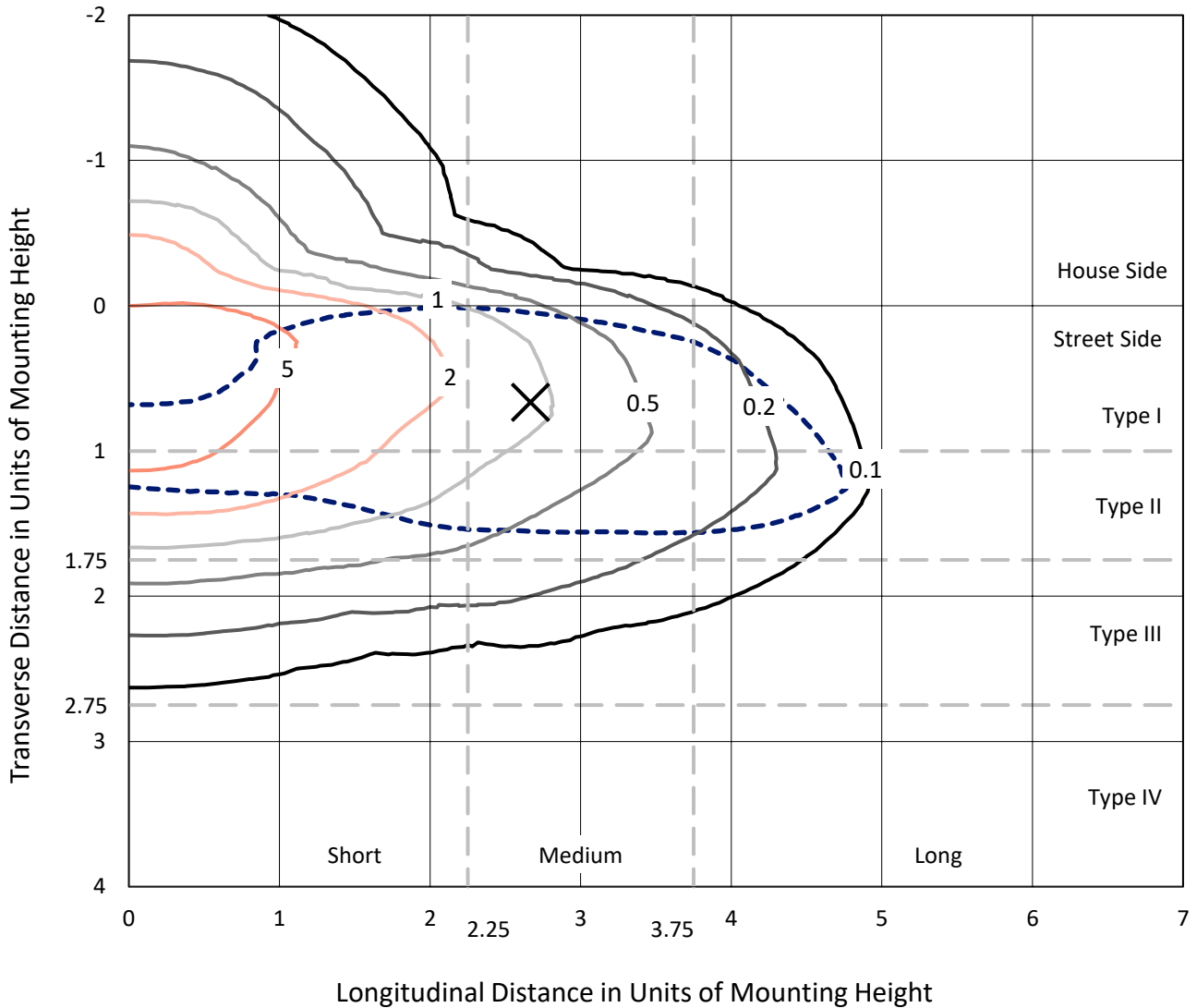
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

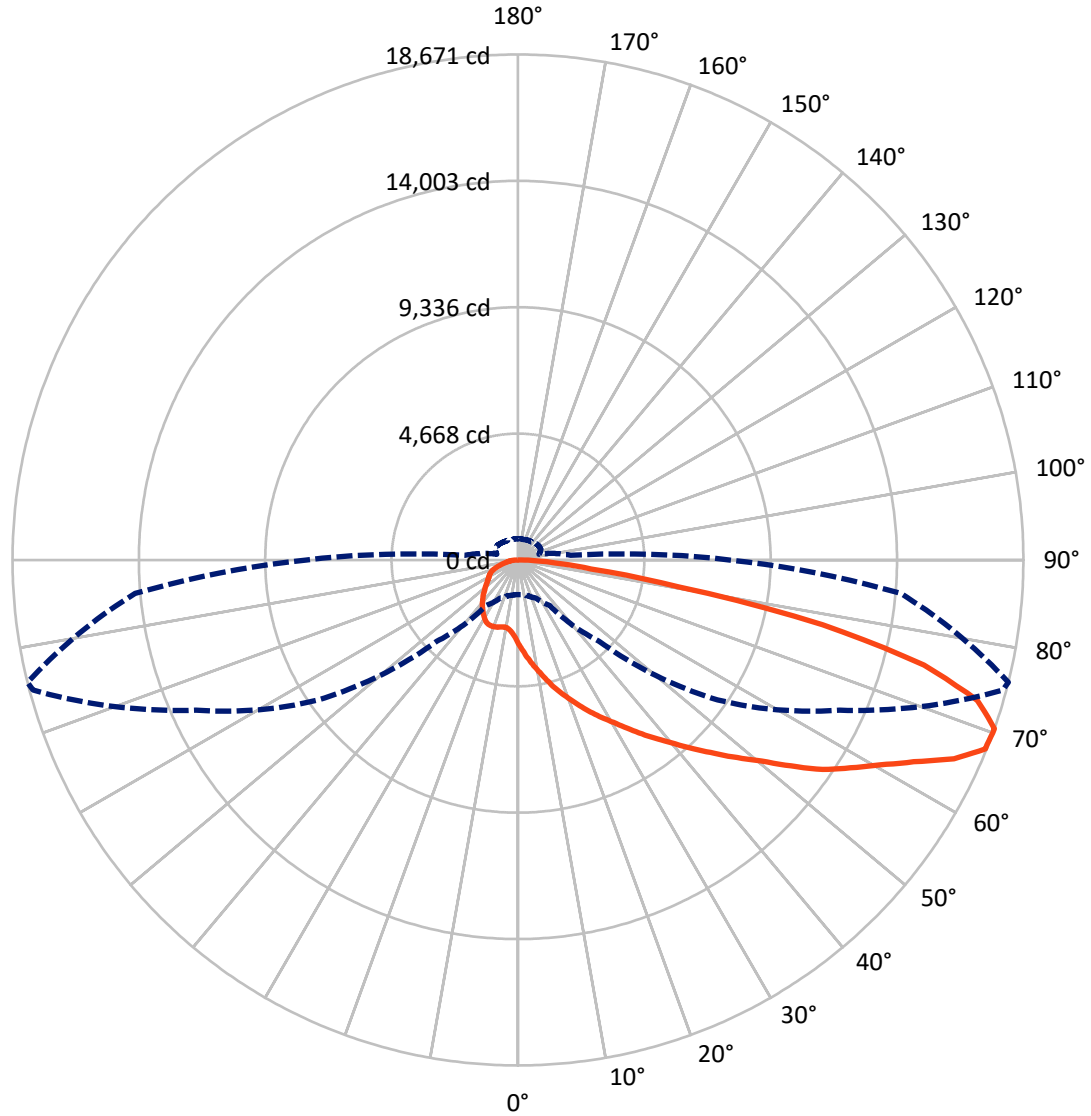
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4043.5	0.0	4043.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	20723.5	0.0	20723.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	24767.0	0.0	24767.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	321.8	1.3
10°-20°	1093.7	4.4
20°-30°	1956.9	7.9
30°-40°	3165.5	12.8
40°-50°	4579.4	18.5
50°-60°	5241.3	21.2
60°-70°	4821.5	19.5
70°-80°	2981.5	12.0
80°-90°	605.4	2.4
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°	24767.0	100.0
0°-180°	24767.0	100.0

**Coefficient of Utilization**



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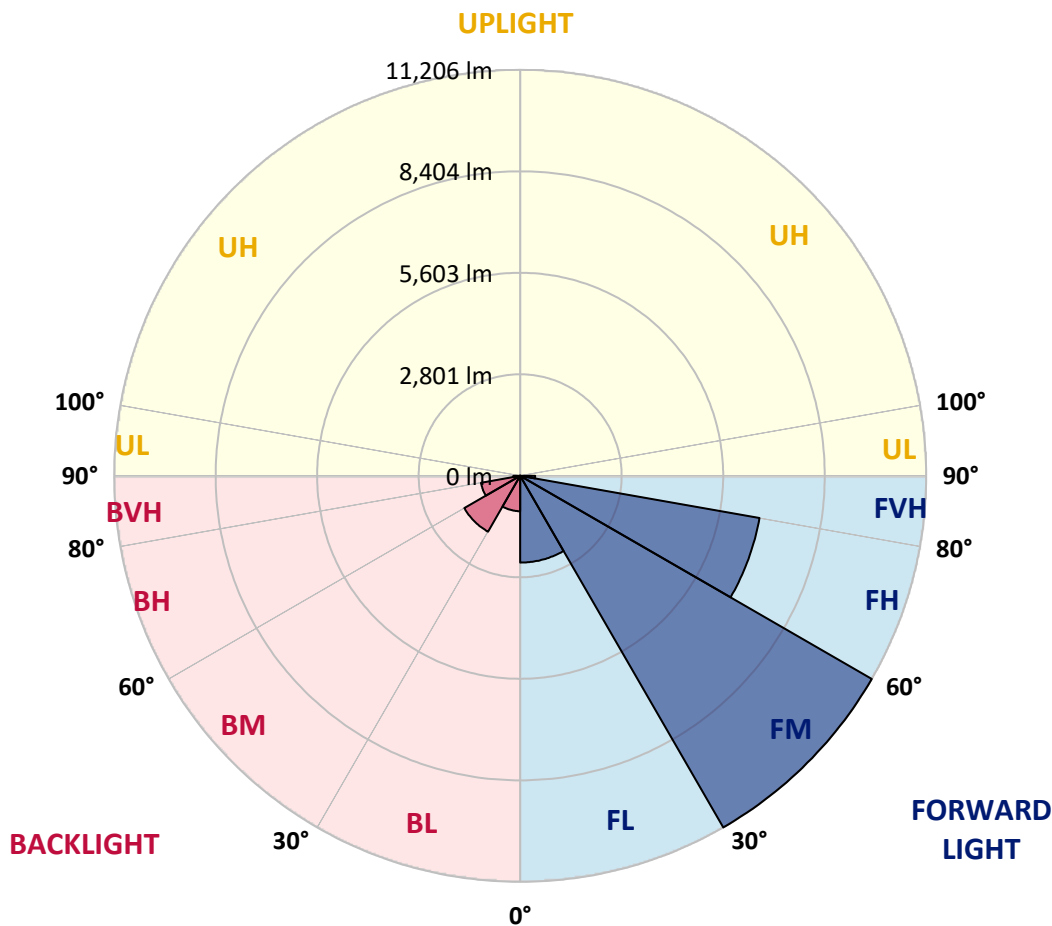
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2395.8	9.7			
FM (30°-60°)	11205.9	45.2			
FH (60°-80°)	6706.2	27.1			G3/7500
FVH (80°-90°)	415.6	1.7			G3/500
BL (0°-30°)	976.6	3.9	B2/1000		
BM (30°-60°)	1780.3	7.2	B2/2500		
BH (60°-80°)	1096.7	4.4	B3/2500		G3/2500
BVH (80°-90°)	189.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium





REPORT NUMBER: P400039

CATALOG NUMBER: ARCH-L-PA3-220-830-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2
2.5°	3947.2	3917.9	3914.7	3869.1	3826.7	3712.8	3631.3	3488.0	3344.7	3341.5	3198.2
5°	4562.8	4533.5	4517.2	4461.8	4390.2	4240.4	4093.8	3872.3	3628.1	3611.8	3341.5
7.5°	4979.7	4953.6	4921.0	4898.2	4829.8	4696.3	4517.2	4253.4	3917.9	3885.4	3507.6
10°	5259.7	5243.5	5236.9	5220.7	5178.3	5070.8	4898.2	4618.1	4207.8	4172.0	3683.4
12.5°	5380.2	5373.7	5403.0	5448.6	5464.9	5422.6	5256.5	4992.7	4527.0	4487.9	3895.1
15°	5240.2	5246.7	5321.6	5477.9	5644.0	5735.2	5637.5	5380.2	4888.5	4833.1	4142.7
17.5°	5175.1	5184.8	5236.9	5386.8	5621.2	5904.6	5950.2	5748.3	5236.9	5158.8	4403.2
20°	5289.0	5302.1	5341.2	5458.4	5621.2	5924.1	6161.9	6100.0	5578.9	5497.5	4654.0
22.5°	5578.9	5595.2	5591.9	5666.8	5777.6	5986.0	6279.1	6432.2	5937.2	5846.0	4914.5
25°	6197.7	6184.7	6073.9	6038.1	6067.4	6201.0	6435.4	6751.4	6311.7	6220.5	5188.1
27.5°	7038.0	7021.7	6819.7	6637.4	6474.5	6533.1	6656.9	7008.6	6692.7	6588.5	5448.6
30°	7936.8	7917.3	7682.8	7386.4	7024.9	6940.2	6924.0	7233.4	7077.0	6966.3	5725.5
32.5°	8812.9	8796.6	8545.9	8200.6	7702.3	7448.3	7292.0	7484.1	7513.4	7406.0	6028.3
35°	9610.8	9610.8	9395.9	8985.5	8422.1	8037.8	7780.5	7793.5	8015.0	7891.2	6373.6
37.5°	10320.8	10317.6	10083.1	9679.2	9138.6	8698.9	8379.8	8168.1	8493.7	8386.3	6735.1
40°	10884.2	10861.4	10688.8	10337.1	9793.2	9356.8	9034.4	8607.7	9027.9	8930.2	7119.4
42.5°	11294.6	11281.6	11164.3	10858.2	10340.3	9930.0	9708.5	9161.4	9633.6	9535.9	7568.8
45°	11454.2	11480.2	11480.2	11190.4	10780.0	10405.5	10307.8	9770.4	10288.2	10190.5	8050.8
47.5°	11196.9	11265.3	11405.3	11424.9	11063.4	10809.3	10841.9	10382.7	10962.4	10910.3	8578.4
50°	10392.5	10519.5	10825.6	11379.3	11177.3	11118.7	11297.8	11008.0	11685.4	11669.1	9220.0
52.5°	8317.9	8627.3	9581.5	10574.8	11099.2	11262.0	11750.5	11711.5	12616.9	12642.9	10057.0
55°	6380.1	6497.3	7601.4	9291.7	10620.4	11216.4	12053.4	12398.6	13626.5	13659.0	10825.6
57.5°	5158.8	5236.9	5839.4	7601.4	9529.4	10968.9	12291.2	12799.2	14401.6	14486.3	11509.5
60°	4087.3	4201.3	4605.1	5816.6	8002.0	10372.9	12457.3	13245.4	15235.3	15362.3	12327.0
62.5°	3038.6	3094.0	3475.0	4308.7	6334.5	9301.4	12369.3	13730.7	16258.0	16411.0	13310.6
65°	2162.5	2211.4	2481.7	3064.7	4683.3	7852.2	11858.0	14092.2	17541.1	17697.5	14300.6
67.5°	1618.6	1638.2	1791.2	2143.0	3155.8	6100.0	10822.4	14030.3	18479.1	18619.1	14698.0
70°	1279.9	1286.4	1361.3	1550.2	2051.8	4246.9	9008.3	13121.7	18547.5	18671.2	14196.4
72.5°	1061.7	1058.5	1100.8	1192.0	1429.7	2686.9	6673.2	11434.6	17668.2	17752.8	12796.0
75°	876.1	882.6	911.9	964.0	1091.0	1771.7	4325.0	9122.3	15587.1	15495.9	10737.7
77.5°	736.0	732.8	745.8	791.4	882.6	1273.4	2533.8	6591.8	11551.9	11506.3	7047.7
80°	592.7	599.3	618.8	657.9	742.6	970.5	1498.1	4113.3	6197.7	6031.6	3367.5
82.5°	397.3	459.2	498.3	543.9	641.6	716.5	951.0	2090.9	2771.5	2729.2	1527.4
85°	188.9	250.8	371.3	423.4	521.1	449.4	644.8	996.6	1387.4	1371.1	550.4
87.5°	39.1	39.1	198.7	237.7	322.4	192.2	358.2	433.2	670.9	628.6	224.7
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: P400039

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2	3097.2
2.5°	3113.5	3025.6	2849.7	2709.7	2566.4	2484.9	2384.0	2335.1	2325.4	2299.3	2318.8
5°	3168.9	2996.3	2664.1	2445.9	2299.3	2227.7	2191.8	2178.8	2175.5	2169.0	2169.0
7.5°	3243.8	2980.0	2546.8	2325.4	2230.9	2208.1	2217.9	2237.4	2240.7	2247.2	2243.9
10°	3335.0	2983.2	2481.7	2296.0	2250.5	2253.7	2286.3	2312.3	2325.4	2335.1	2331.9
12.5°	3462.0	3022.3	2471.9	2315.6	2296.0	2309.1	2341.6	2367.7	2380.7	2384.0	2384.0
15°	3628.1	3103.7	2494.7	2357.9	2341.6	2351.4	2371.0	2380.7	2384.0	2380.7	2380.7
17.5°	3810.5	3201.4	2527.3	2384.0	2357.9	2348.2	2341.6	2331.9	2312.3	2299.3	2299.3
20°	3986.3	3289.4	2543.6	2380.7	2335.1	2296.0	2257.0	2208.1	2175.5	2149.5	2149.5
22.5°	4162.2	3370.8	2543.6	2344.9	2273.2	2198.3	2116.9	2038.8	1989.9	1957.3	1957.3
25°	4347.8	3449.0	2524.0	2283.0	2175.5	2068.1	1957.3	1859.6	1810.8	1778.2	1771.7
27.5°	4504.2	3494.5	2471.9	2195.1	2055.0	1918.3	1791.2	1690.3	1654.5	1625.1	1625.1
30°	4670.3	3523.9	2374.2	2081.1	1918.3	1761.9	1631.7	1550.2	1511.2	1468.8	1465.6
32.5°	4855.9	3543.4	2263.5	1960.6	1778.2	1612.1	1501.4	1436.2	1351.6	1306.0	1299.5
35°	5070.8	3569.5	2146.2	1823.8	1638.2	1488.4	1423.2	1315.7	1234.3	1195.2	1192.0
37.5°	5298.8	3589.0	2019.2	1703.3	1511.2	1406.9	1341.8	1214.8	1143.1	1084.5	1078.0
40°	5539.8	3589.0	1888.9	1586.1	1410.2	1371.1	1247.4	1133.4	1012.9	983.6	977.0
42.5°	5806.9	3582.5	1758.7	1472.1	1315.7	1289.7	1192.0	1071.5	1009.6	983.6	977.0
45°	6090.2	3559.7	1634.9	1341.8	1218.0	1165.9	1091.0	1058.5	1032.4	1032.4	1032.4
47.5°	6412.6	3540.1	1494.9	1224.6	1146.4	1087.8	1032.4	1012.9	1009.6	1019.4	1029.1
50°	6826.3	3533.6	1377.6	1139.9	1091.0	1022.6	1016.1	999.8	1003.1	1003.1	1003.1
52.5°	7327.8	3475.0	1266.9	1078.0	1035.7	954.2	973.8	990.1	996.6	993.3	990.1
55°	7695.8	3370.8	1172.4	1035.7	996.6	928.2	954.2	980.3	986.8	977.0	977.0
57.5°	8028.0	3224.2	1097.5	1003.1	970.5	911.9	941.2	967.3	960.8	957.5	954.2
60°	8409.1	3084.2	1038.9	986.8	944.5	905.4	931.4	947.7	938.0	931.4	928.2
62.5°	8822.7	2947.4	996.6	986.8	924.9	902.1	921.7	928.2	908.6	902.1	902.1
65°	9014.8	2732.5	951.0	986.8	915.2	895.6	902.1	895.6	876.1	876.1	872.8
67.5°	8698.9	2377.5	892.4	973.8	928.2	885.9	872.8	863.1	840.3	840.3	833.7
70°	7826.1	1954.1	807.7	931.4	931.4	882.6	833.7	810.9	784.9	794.7	781.6
72.5°	6686.2	1550.2	703.5	859.8	911.9	879.3	791.4	755.6	732.8	742.6	723.0
75°	5416.1	1201.8	579.7	745.8	863.1	863.1	749.1	700.2	674.2	674.2	651.4
77.5°	3452.2	889.1	472.2	618.8	775.1	840.3	713.2	638.3	599.3	589.5	573.2
80°	1709.8	625.3	387.6	491.8	661.1	788.1	687.2	566.7	511.3	491.8	462.5
82.5°	908.6	433.2	309.4	384.3	527.6	710.0	654.6	488.5	420.1	390.8	358.2
85°	407.1	267.1	247.5	293.1	400.6	583.0	589.5	400.6	322.4	384.3	283.3
87.5°	149.8	120.5	120.5	149.8	231.2	244.3	416.9	257.3	205.2	140.0	110.7
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)