

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: P400516

Luminaire Tested: **ARCH-L-PA3-90-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400516  
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-PA3-90-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15645 lumens  
Efficiency: N/A  
Efficacy: 168.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

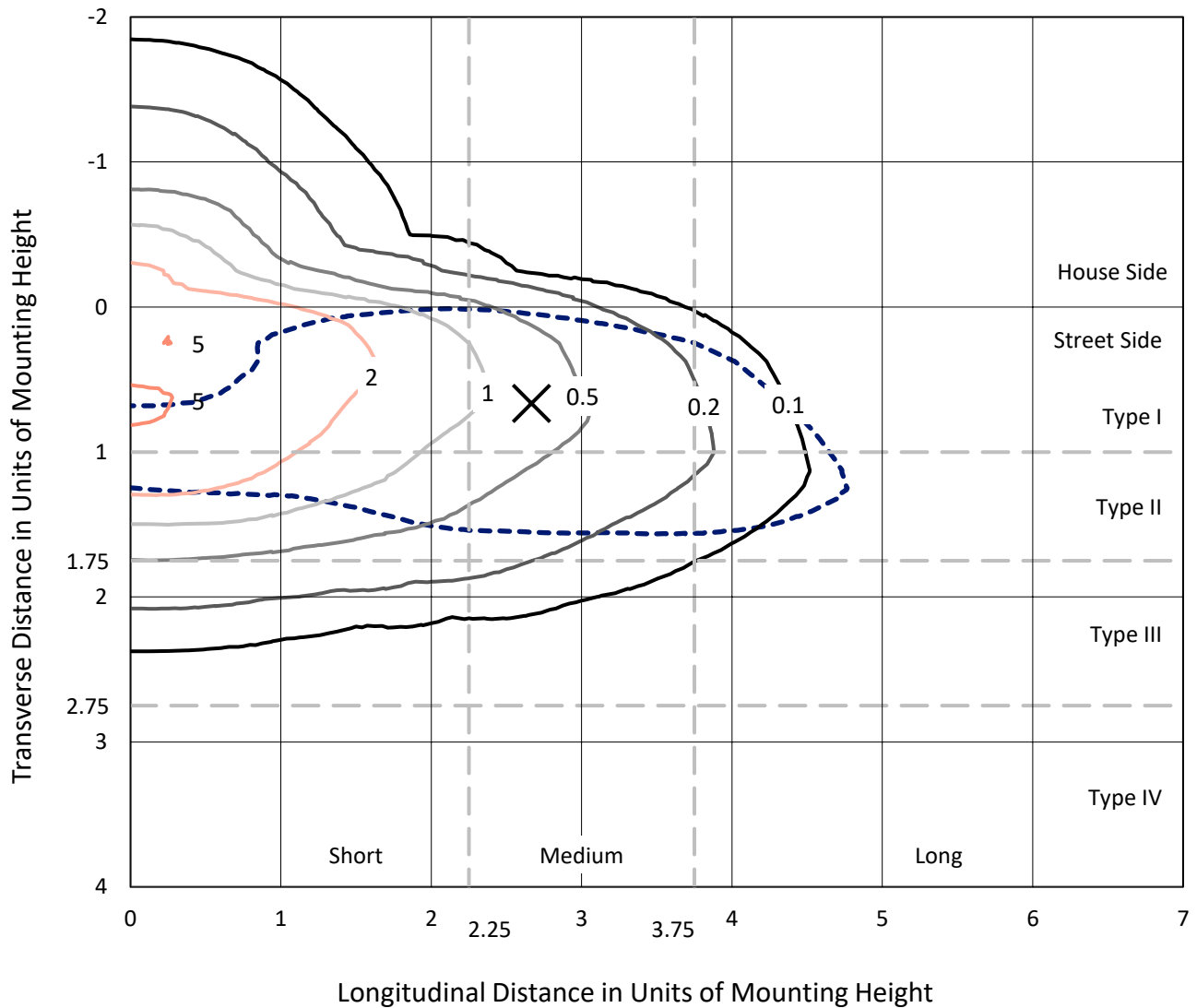
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

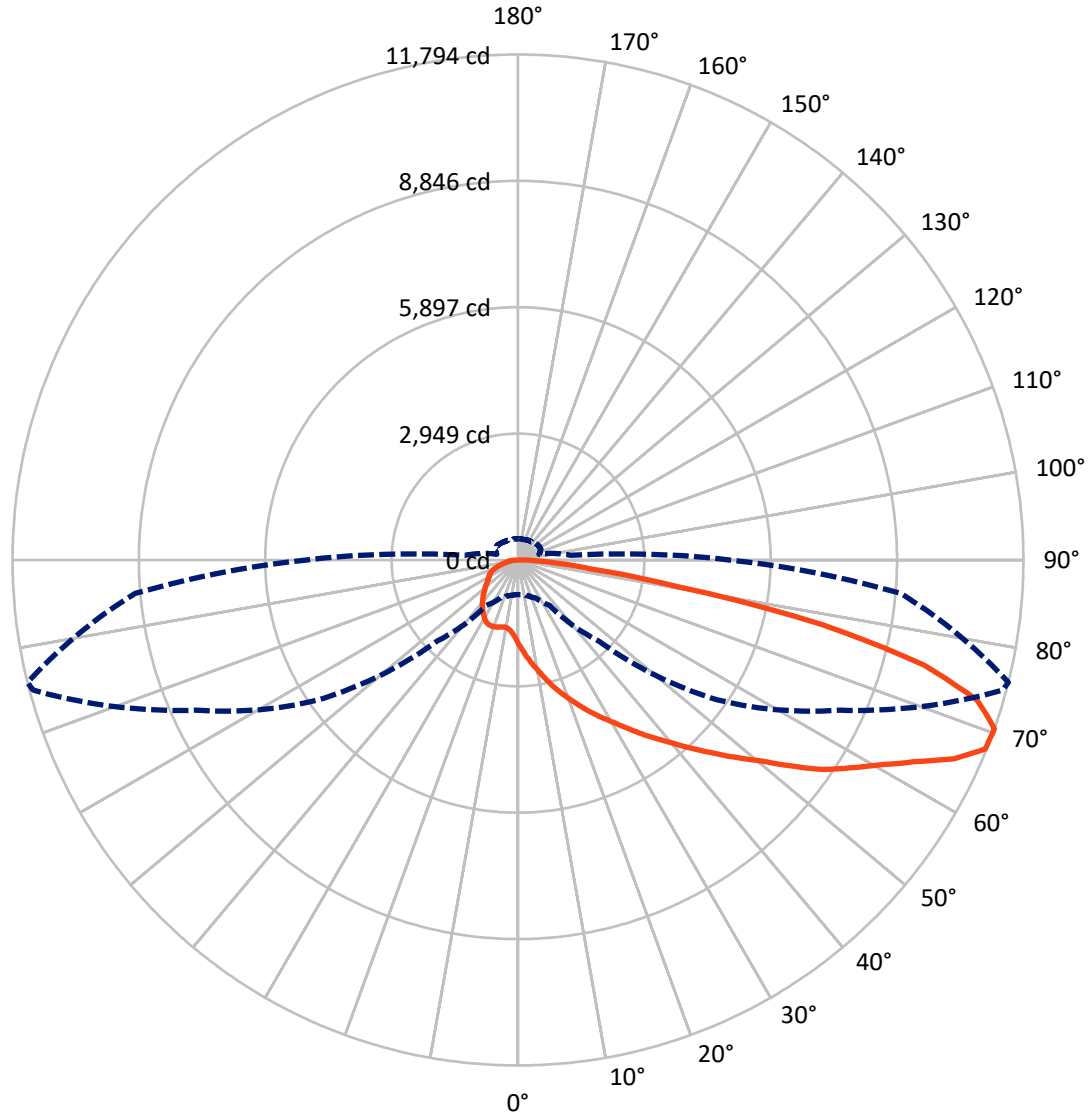
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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	2554.2	0.0	2554.2
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	13090.8	0.0	13090.8
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	15645.0	0.0	15645.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.3	1.3
10°-20°	690.9	4.4
20°-30°	1236.1	7.9
30°-40°	1999.6	12.8
40°-50°	2892.7	18.5
50°-60°	3310.9	21.2
60°-70°	3045.7	19.5
70°-80°	1883.4	12.0
80°-90°	382.5	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°	15645.0	100.0
0°-180°	15645.0	100.0

**Coefficient of Utilization**



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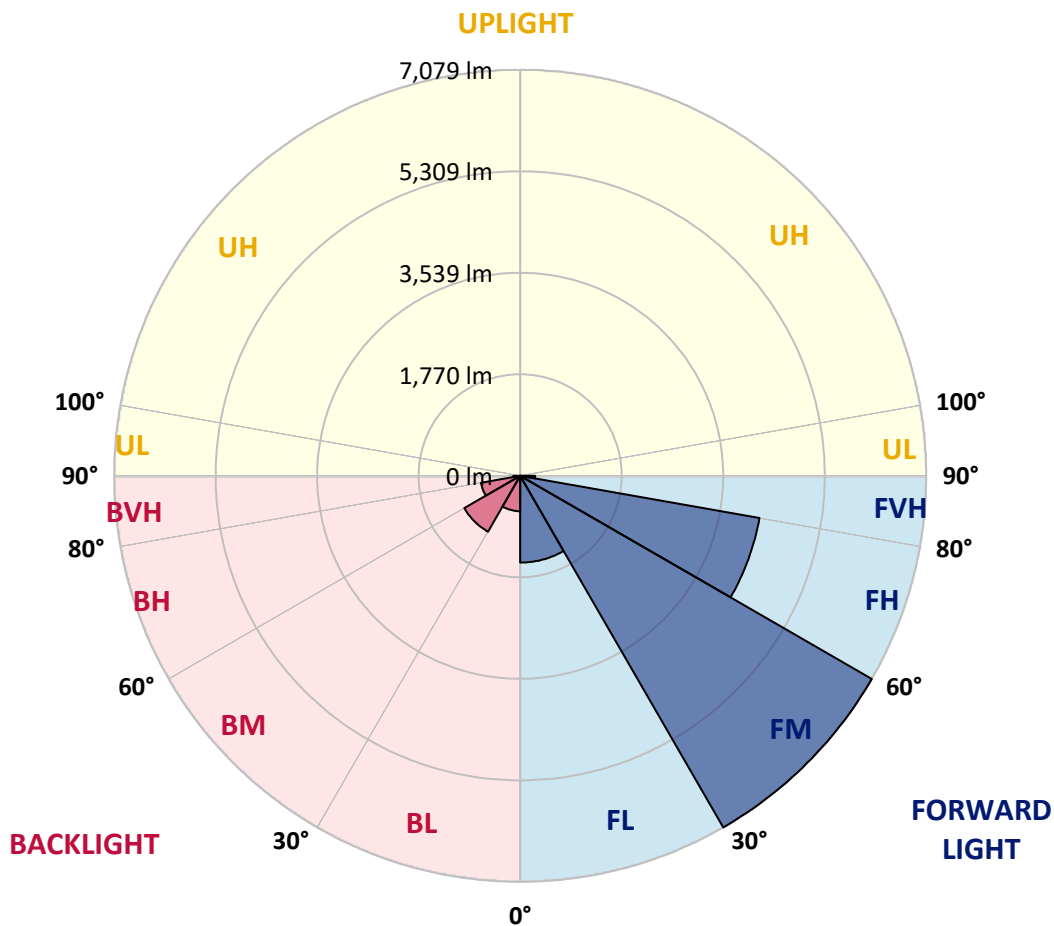
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1513.4	9.7			
FM (30°-60°)	7078.6	45.2			
FH (60°-80°)	4236.2	27.1			G2/5000
FVH (80°-90°)	262.6	1.7			G3/500
BL (0°-30°)	616.9	3.9	B2/1000		
BM (30°-60°)	1124.6	7.2	B2/2500		
BH (60°-80°)	692.8	4.4	B2/1000		G2/1000
BVH (80°-90°)	119.9	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°	75°	76°	85°
0°	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5
2.5°	2493.4	2474.9	2472.9	2444.0	2417.3	2345.3	2293.9	2203.3	2112.8	2110.8	2020.2
5°	2882.3	2863.7	2853.4	2818.5	2773.2	2678.6	2586.0	2446.1	2291.8	2281.5	2110.8
7.5°	3145.6	3129.1	3108.6	3094.2	3050.9	2966.6	2853.4	2686.8	2474.9	2454.3	2215.7
10°	3322.5	3312.2	3308.1	3297.8	3271.1	3203.2	3094.2	2917.2	2658.0	2635.4	2326.8
12.5°	3398.6	3394.5	3413.0	3441.8	3452.1	3425.4	3320.5	3153.8	2859.6	2834.9	2460.5
15°	3310.2	3314.3	3361.6	3460.3	3565.3	3622.9	3561.2	3398.6	3088.0	3053.0	2616.9
17.5°	3269.0	3275.2	3308.1	3402.7	3550.9	3729.9	3758.7	3631.1	3308.1	3258.7	2781.4
20°	3341.0	3349.3	3373.9	3448.0	3550.9	3742.2	3892.4	3853.3	3524.1	3472.7	2939.9
22.5°	3524.1	3534.4	3532.4	3579.7	3649.6	3781.3	3966.4	4063.1	3750.4	3692.8	3104.4
25°	3915.0	3906.8	3836.8	3814.2	3832.7	3917.1	4065.2	4264.7	3987.0	3929.4	3277.2
27.5°	4445.8	4435.5	4307.9	4192.7	4089.9	4126.9	4205.1	4427.3	4227.7	4161.9	3441.8
30°	5013.6	5001.2	4853.1	4665.9	4437.6	4384.1	4373.8	4569.2	4470.5	4400.5	3616.7
32.5°	5567.0	5556.7	5398.3	5180.2	4865.5	4705.0	4606.3	4727.6	4746.1	4678.3	3808.0
35°	6071.0	6071.0	5935.3	5676.0	5320.1	5077.4	4914.8	4923.1	5063.0	4984.8	4026.1
37.5°	6519.5	6517.5	6369.3	6114.2	5772.7	5495.0	5293.4	5159.7	5365.4	5297.5	4254.5
40°	6875.4	6861.0	6752.0	6529.8	6186.2	5910.6	5706.9	5437.4	5702.8	5641.1	4497.2
42.5°	7134.7	7126.4	7052.4	6859.0	6531.9	6272.6	6132.8	5787.1	6085.4	6023.7	4781.1
45°	7235.5	7251.9	7251.9	7068.8	6809.6	6573.0	6511.3	6171.8	6499.0	6437.2	5085.6
47.5°	7072.9	7116.1	7204.6	7216.9	6988.6	6828.1	6848.7	6558.6	6924.8	6891.9	5418.9
50°	6564.8	6645.0	6838.4	7188.1	7060.6	7023.6	7136.7	6953.6	7381.5	7371.2	5824.2
52.5°	5254.3	5449.7	6052.5	6680.0	7011.2	7114.1	7422.7	7398.0	7969.9	7986.4	6352.9
55°	4030.2	4104.3	4801.7	5869.4	6708.8	7085.3	7614.0	7832.1	8607.7	8628.2	6838.4
57.5°	3258.7	3308.1	3688.7	4801.7	6019.6	6928.9	7764.2	8085.1	9097.3	9150.8	7270.4
60°	2581.9	2653.9	2909.0	3674.3	5054.7	6552.4	7869.1	8367.0	9624.0	9704.2	7786.8
62.5°	1919.4	1954.4	2195.1	2721.8	4001.4	5875.6	7813.6	8673.5	10269.9	10366.6	8408.1
65°	1366.0	1396.9	1567.6	1935.9	2958.4	4960.1	7490.6	8901.9	11080.5	11179.3	9033.5
67.5°	1022.5	1034.8	1131.5	1353.7	1993.5	3853.3	6836.3	8862.8	11673.0	11761.5	9284.5
70°	808.5	812.6	859.9	979.3	1296.1	2682.7	5690.4	8288.8	11716.2	11794.4	8967.7
72.5°	670.7	668.6	695.4	753.0	903.1	1697.3	4215.4	7223.1	11160.7	11214.2	8083.1
75°	553.4	557.5	576.0	609.0	689.2	1119.2	2732.1	5762.4	9846.1	9788.5	6782.9
77.5°	464.9	462.9	471.1	499.9	557.5	804.4	1600.6	4163.9	7297.2	7268.4	4452.0
80°	374.4	378.5	390.9	415.6	469.1	613.1	946.3	2598.3	3915.0	3810.1	2127.2
82.5°	251.0	290.1	314.8	343.6	405.3	452.6	600.7	1320.8	1750.7	1724.0	964.9
85°	119.3	158.4	234.5	267.4	329.2	283.9	407.3	629.5	876.4	866.1	347.7
87.5°	24.7	24.7	125.5	150.2	203.7	121.4	226.3	273.6	423.8	397.1	142.0
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°	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5
2.5°	1966.8	1911.2	1800.1	1711.7	1621.1	1569.7	1505.9	1475.1	1468.9	1452.4	1464.8
5°	2001.7	1892.7	1682.9	1545.0	1452.4	1407.2	1384.6	1376.3	1374.3	1370.1	1370.1
7.5°	2049.1	1882.4	1608.8	1468.9	1409.2	1394.8	1401.0	1413.4	1415.4	1419.5	1417.5
10°	2106.7	1884.5	1567.6	1450.4	1421.6	1423.6	1444.2	1460.7	1468.9	1475.1	1473.0
12.5°	2186.9	1909.2	1561.5	1462.7	1450.4	1458.6	1479.2	1495.6	1503.9	1505.9	1505.9
15°	2291.8	1960.6	1575.9	1489.5	1479.2	1485.4	1497.7	1503.9	1505.9	1503.9	1503.9
17.5°	2407.0	2022.3	1596.5	1505.9	1489.5	1483.3	1479.2	1473.0	1460.7	1452.4	1452.4
20°	2518.1	2077.9	1606.7	1503.9	1475.1	1450.4	1425.7	1394.8	1374.3	1357.8	1357.8
22.5°	2629.2	2129.3	1606.7	1481.2	1436.0	1388.7	1337.2	1287.9	1257.0	1236.4	1236.4
25°	2746.5	2178.7	1594.4	1442.2	1374.3	1306.4	1236.4	1174.7	1143.8	1123.3	1119.2
27.5°	2845.2	2207.5	1561.5	1386.6	1298.1	1211.7	1131.5	1067.7	1045.1	1026.6	1026.6
30°	2950.1	2226.0	1499.8	1314.6	1211.7	1113.0	1030.7	979.3	954.6	927.8	925.8
32.5°	3067.4	2238.3	1429.8	1238.5	1123.3	1018.4	948.4	907.3	853.8	825.0	820.9
35°	3203.2	2254.8	1355.7	1152.1	1034.8	940.2	899.0	831.1	779.7	755.0	753.0
37.5°	3347.2	2267.1	1275.5	1076.0	954.6	888.7	847.6	767.4	722.1	685.1	681.0
40°	3499.4	2267.1	1193.2	1001.9	890.8	866.1	787.9	715.9	639.8	621.3	617.2
42.5°	3668.1	2263.0	1110.9	929.9	831.1	814.7	753.0	676.8	637.8	621.3	617.2
45°	3847.1	2248.6	1032.8	847.6	769.4	736.5	689.2	668.6	652.2	652.2	652.2
47.5°	4050.8	2236.3	944.3	773.5	724.2	687.1	652.2	639.8	637.8	643.9	650.1
50°	4312.1	2232.1	870.2	720.0	689.2	646.0	641.9	631.6	633.6	633.6	633.6
52.5°	4628.9	2195.1	800.3	681.0	654.2	602.8	615.1	625.4	629.5	627.5	625.4
55°	4861.4	2129.3	740.6	654.2	629.5	586.3	602.8	619.2	623.4	617.2	617.2
57.5°	5071.2	2036.7	693.3	633.6	613.1	576.0	594.6	611.0	606.9	604.8	602.8
60°	5311.9	1948.2	656.3	623.4	596.6	571.9	588.4	598.7	592.5	588.4	586.3
62.5°	5573.2	1861.8	629.5	623.4	584.3	569.9	582.2	586.3	574.0	569.9	569.9
65°	5694.6	1726.1	600.7	623.4	578.1	565.8	569.9	565.8	553.4	553.4	551.4
67.5°	5495.0	1501.8	563.7	615.1	586.3	559.6	551.4	545.2	530.8	530.8	526.7
70°	4943.6	1234.4	510.2	588.4	588.4	557.5	526.7	512.3	495.8	502.0	493.7
72.5°	4223.6	979.3	444.4	543.1	576.0	555.5	499.9	477.3	462.9	469.1	456.7
75°	3421.3	759.1	366.2	471.1	545.2	545.2	473.2	442.3	425.9	425.9	411.5
77.5°	2180.7	561.6	298.3	390.9	489.6	530.8	450.5	403.2	378.5	372.4	362.1
80°	1080.1	395.0	244.8	310.6	417.6	497.9	434.1	358.0	323.0	310.6	292.1
82.5°	574.0	273.6	195.4	242.8	333.3	448.5	413.5	308.6	265.4	246.9	226.3
85°	257.2	168.7	156.4	185.2	253.0	368.3	372.4	253.0	203.7	242.8	179.0
87.5°	94.6	76.1	76.1	94.6	146.1	154.3	263.3	162.5	129.6	88.5	69.9
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)