

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: P573221

Luminaire Tested: **ARCH-S-PA2-50-730-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573221  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-730-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

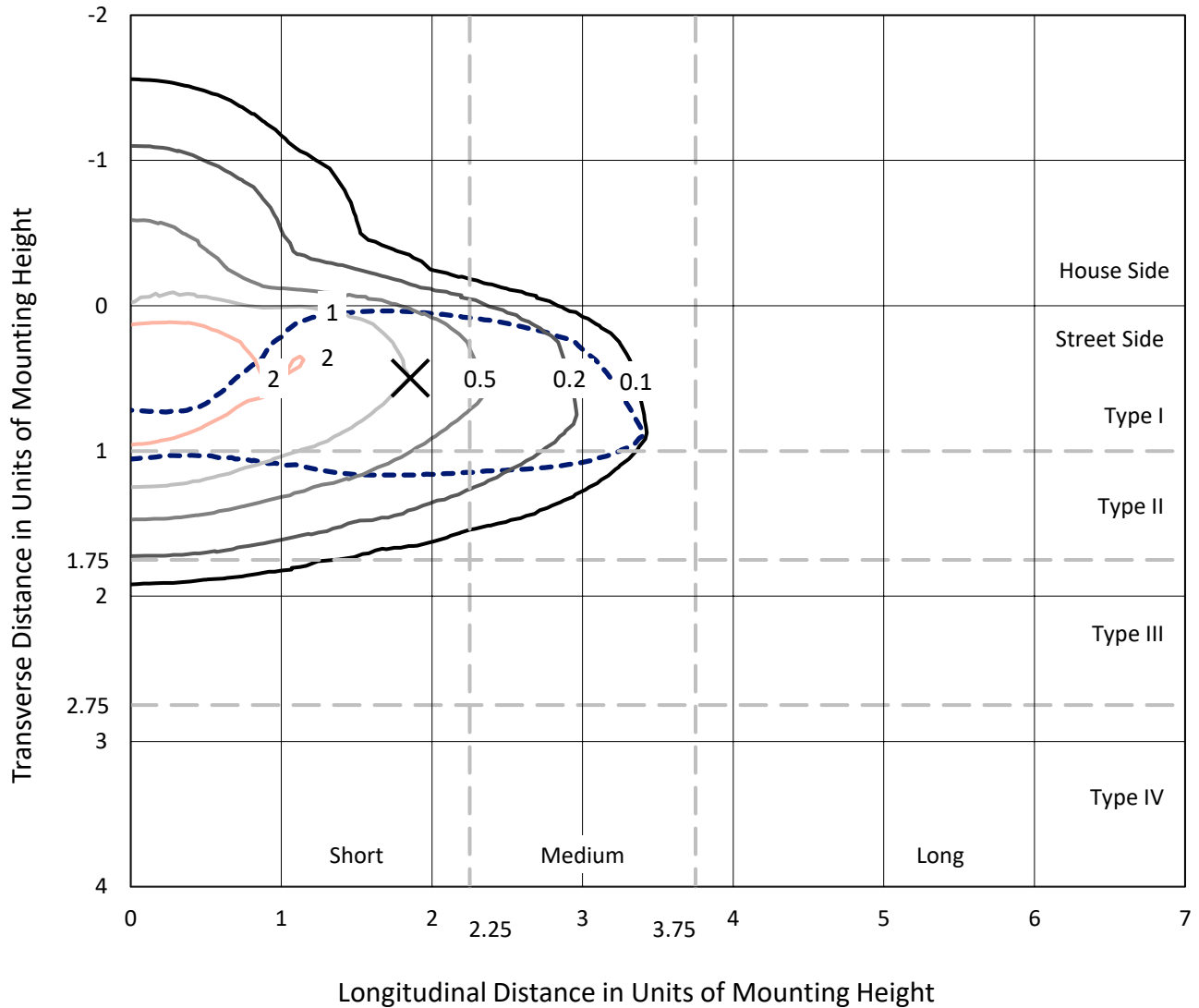
Lumens per Lamp: N/A  
Luminaire Lumens: 7325 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

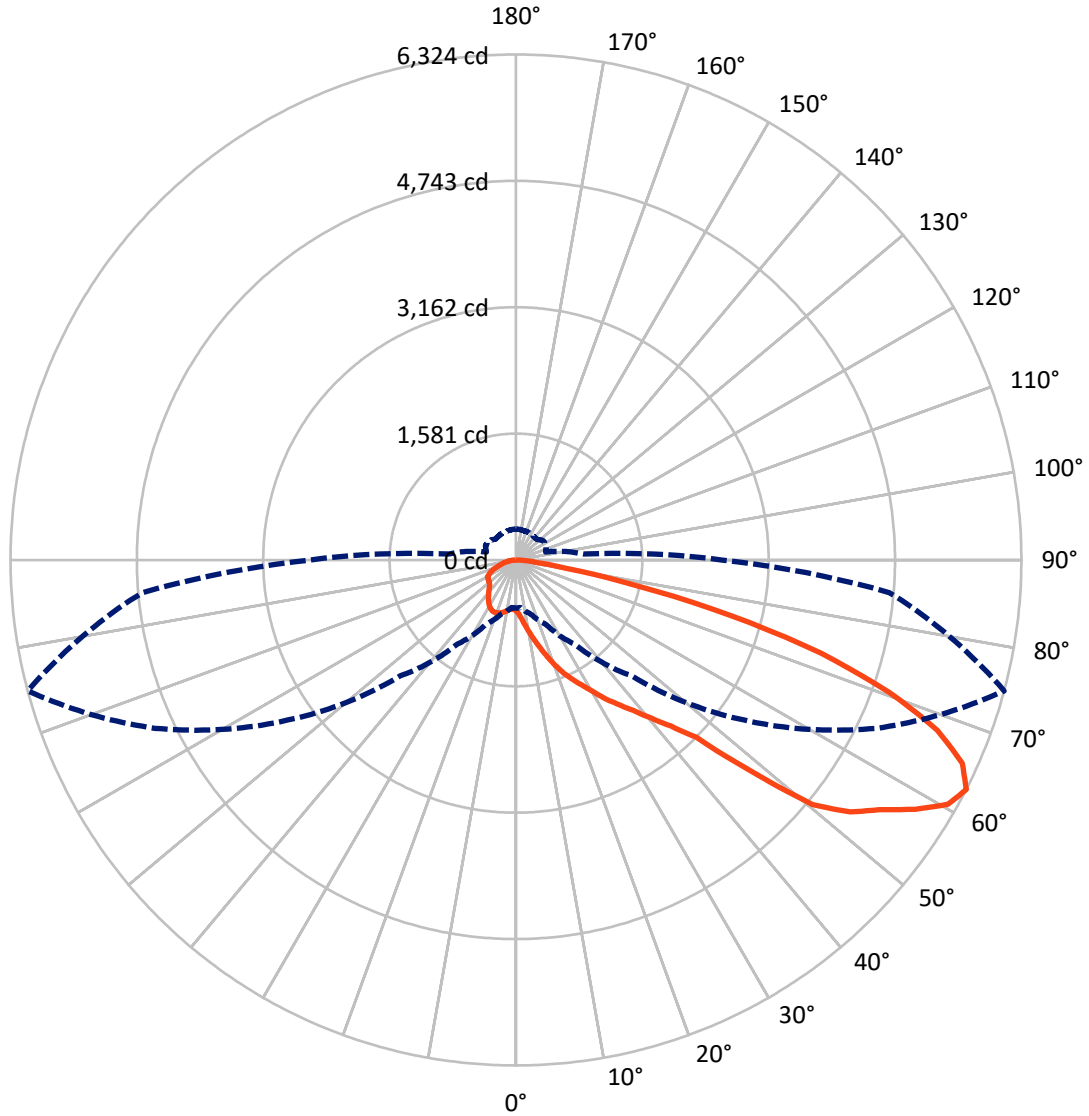
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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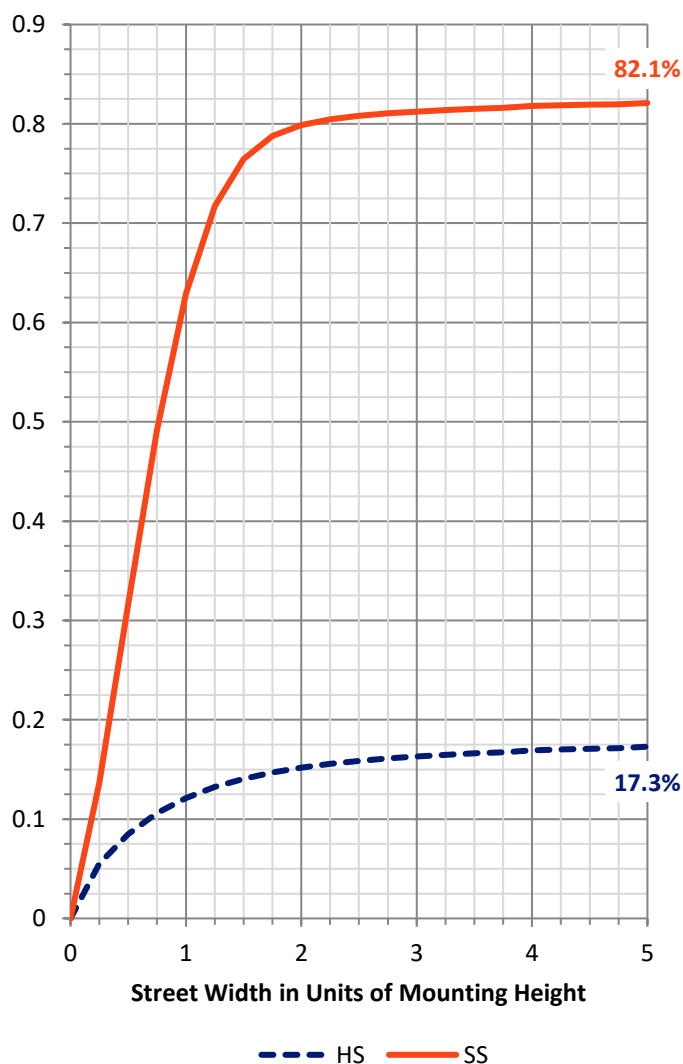
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1291.9	0.0	1291.9
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	6033.1	0.0	6033.1
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	7325.0	0.0	7325.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.7	1.0
10°-20°	303.1	4.1
20°-30°	599.7	8.2
30°-40°	999.6	13.6
40°-50°	1475.0	20.1
50°-60°	1773.0	24.2
60°-70°	1378.0	18.8
70°-80°	609.6	8.3
80°-90°	110.4	1.5
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°	7325.0	100.0
0°-180°	7325.0	100.0

**Coefficient of Utilization**



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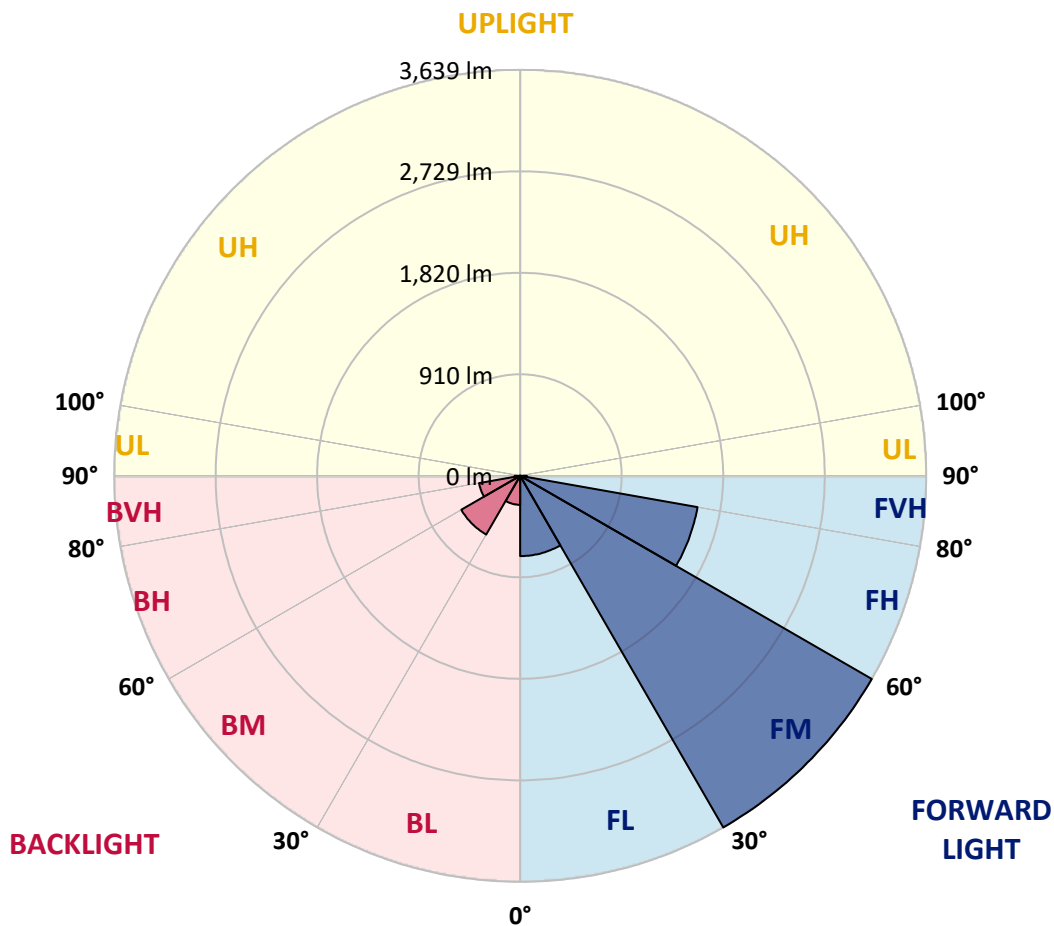
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	719.5	9.8			
FM (30°-60°)	3639.1	49.7			
FH (60°-80°)	1613.8	22.0			G1/1800
FVH (80°-90°)	60.7	0.8			G1/100
BL (0°-30°)	260.0	3.5	B1/500		
BM (30°-60°)	608.5	8.3	B1/1000		
BH (60°-80°)	373.8	5.1	B1/500		G1/500
BVH (80°-90°)	49.7	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5
2.5°	816.4	792.7	792.7	767.0	769.0	747.2	723.5	699.8	674.1	654.3	644.4
5°	1067.5	1049.7	1043.7	1014.1	966.6	913.3	855.9	796.6	735.4	687.9	664.2
7.5°	1302.7	1288.9	1280.9	1247.3	1182.1	1124.8	1033.9	925.1	820.4	731.4	695.8
10°	1476.6	1466.8	1450.9	1435.1	1387.7	1338.3	1225.6	1071.4	917.2	784.8	731.4
12.5°	1603.2	1589.3	1589.3	1587.3	1555.7	1510.3	1405.5	1239.4	1029.9	844.1	770.9
15°	1688.2	1686.2	1692.1	1704.0	1696.1	1666.4	1561.6	1393.6	1144.5	911.3	816.4
17.5°	1751.4	1743.5	1755.4	1787.0	1810.7	1798.9	1711.9	1541.9	1271.1	984.4	865.8
20°	1820.6	1804.8	1820.6	1860.1	1889.8	1907.6	1866.1	1684.2	1407.5	1063.5	913.3
22.5°	1953.0	1951.1	1943.2	1955.0	1974.8	2006.4	1982.7	1828.5	1539.9	1142.6	968.6
25°	2190.3	2168.5	2146.8	2121.1	2099.3	2109.2	2089.4	1962.9	1660.5	1229.6	1016.1
27.5°	2455.1	2431.4	2391.9	2328.6	2269.3	2233.7	2192.2	2079.6	1777.1	1308.6	1061.5
30°	2698.3	2690.4	2631.1	2561.9	2459.1	2393.9	2314.8	2214.0	1917.5	1395.6	1109.0
32.5°	2925.6	2909.8	2850.5	2777.4	2656.8	2583.6	2474.9	2360.3	2077.6	1502.3	1158.4
35°	3121.3	3105.5	3036.3	2943.4	2838.6	2775.4	2650.8	2490.7	2223.9	1595.3	1199.9
37.5°	3269.6	3251.8	3186.6	3095.6	3002.7	2973.1	2866.3	2656.8	2389.9	1711.9	1251.3
40°	3352.6	3330.9	3287.4	3224.1	3147.0	3133.2	3087.7	2862.4	2599.5	1854.2	1326.4
42.5°	3362.5	3342.7	3319.0	3313.1	3307.1	3319.0	3340.7	3095.6	2838.6	2044.0	1437.1
45°	3275.5	3263.6	3265.6	3332.8	3425.7	3534.5	3664.9	3439.6	3160.9	2405.7	1686.2
47.5°	3089.7	3083.8	3127.2	3239.9	3447.5	3694.6	4064.2	4028.7	3923.9	2988.9	2006.4
50°	2789.2	2779.3	2872.2	3050.2	3346.7	3748.0	4333.1	4722.5	4809.5	3441.6	2216.0
52.5°	2358.3	2370.1	2514.5	2757.6	3115.4	3690.6	4443.8	5007.2	5236.5	3775.6	2376.1
55°	1917.5	1899.7	2030.1	2330.6	2773.4	3481.1	4465.5	5171.2	5513.2	4084.0	2532.2
57.5°	1397.6	1441.1	1579.4	1852.2	2332.6	3101.6	4339.0	5283.9	5884.8	4392.4	2676.5
60°	946.9	946.9	1069.4	1342.2	1802.8	2641.0	4001.0	5242.4	6209.0	4633.5	2708.2
62.5°	602.9	597.0	695.8	889.5	1290.8	2051.9	3494.9	4981.5	6323.7	4690.9	2575.7
65°	381.5	389.4	425.0	543.6	826.3	1456.9	2805.0	4461.6	6135.9	4558.4	2344.4
67.5°	306.4	308.4	326.2	375.6	508.0	935.0	2079.6	3744.0	5687.2	4224.4	2073.6
70°	270.8	274.8	278.7	296.5	347.9	591.1	1365.9	3014.6	4951.8	3643.2	1783.0
72.5°	247.1	251.0	255.0	259.0	286.6	385.5	806.5	2285.1	3995.1	2799.1	1360.0
75°	227.3	231.3	231.3	233.3	249.1	286.6	442.8	1575.5	2781.3	1741.5	848.0
77.5°	203.6	205.6	205.6	209.5	225.4	225.4	274.8	974.5	1543.9	788.7	429.0
80°	172.0	175.9	175.9	181.9	197.7	174.0	183.8	498.1	640.5	324.2	191.7
82.5°	126.5	134.4	138.4	148.3	158.1	132.4	132.4	251.0	270.8	144.3	102.8
85°	69.2	71.2	102.8	110.7	116.6	79.1	89.0	124.5	134.4	63.3	51.4
87.5°	19.8	21.7	49.4	61.3	55.3	33.6	37.6	47.4	47.4	17.8	13.8
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5
2.5°	636.5	620.7	606.9	597.0	587.1	581.2	579.2	575.2	575.2	577.2
5°	644.4	616.8	595.0	583.1	575.2	571.3	569.3	569.3	571.3	571.3
7.5°	664.2	622.7	602.9	593.0	585.1	581.2	581.2	579.2	581.2	581.2
10°	691.9	640.5	618.7	606.9	600.9	595.0	593.0	591.1	591.1	591.1
12.5°	721.5	660.2	636.5	622.7	612.8	604.9	600.9	597.0	595.0	595.0
15°	749.2	680.0	648.4	632.6	618.7	606.9	599.0	593.0	591.1	591.1
17.5°	778.8	693.8	656.3	634.5	616.8	600.9	591.1	583.1	579.2	579.2
20°	810.5	703.7	656.3	628.6	604.9	589.1	577.2	569.3	561.4	561.4
22.5°	836.2	707.7	648.4	614.8	591.1	571.3	559.4	549.5	543.6	543.6
25°	857.9	703.7	630.6	593.0	565.4	547.6	535.7	527.8	521.9	521.9
27.5°	871.8	687.9	608.8	569.3	543.6	525.8	517.9	510.0	506.1	506.1
30°	879.7	668.1	581.2	543.6	517.9	508.0	504.1	496.2	490.2	488.3
32.5°	883.6	638.5	553.5	517.9	500.1	496.2	496.2	486.3	478.4	476.4
35°	879.7	606.9	525.8	496.2	490.2	492.2	488.3	476.4	466.5	462.6
37.5°	873.7	569.3	496.2	480.4	486.3	490.2	478.4	462.6	446.7	442.8
40°	869.8	535.7	472.4	464.5	482.3	484.3	462.6	432.9	421.1	417.1
42.5°	889.5	502.1	450.7	452.7	472.4	474.4	434.9	421.1	413.1	411.2
45°	956.8	472.4	432.9	444.8	460.6	452.7	421.1	419.1	413.1	411.2
47.5°	1008.2	450.7	425.0	438.8	450.7	423.0	419.1	417.1	411.2	409.2
50°	1025.9	436.9	423.0	434.9	436.9	409.2	415.1	415.1	409.2	407.2
52.5°	1027.9	429.0	427.0	432.9	415.1	403.3	411.2	411.2	405.2	403.3
55°	1035.8	425.0	429.0	432.9	391.4	395.4	403.3	405.2	399.3	397.3
57.5°	1020.0	419.1	432.9	434.9	381.5	387.4	395.4	395.4	395.4	395.4
60°	958.7	407.2	430.9	430.9	373.6	377.6	385.5	389.4	391.4	391.4
62.5°	846.1	383.5	419.1	419.1	365.7	369.7	379.5	379.5	385.5	385.5
65°	703.7	349.9	395.4	393.4	357.8	361.7	373.6	369.7	379.5	381.5
67.5°	587.1	308.4	359.8	363.7	349.9	359.8	367.7	353.8	373.6	373.6
70°	468.5	259.0	312.3	330.1	336.1	361.7	355.8	334.1	359.8	353.8
72.5°	363.7	219.4	257.0	288.6	320.2	359.8	330.1	306.4	322.2	312.3
75°	264.9	181.9	211.5	239.2	298.5	353.8	304.4	268.8	268.8	264.9
77.5°	185.8	148.3	170.0	189.8	276.7	338.0	272.8	231.3	221.4	219.4
80°	126.5	116.6	134.4	146.3	245.1	306.4	235.2	191.7	174.0	170.0
82.5°	83.0	83.0	90.9	98.8	189.8	255.0	183.8	142.3	183.8	175.9
85°	47.4	49.4	49.4	57.3	104.8	179.9	130.5	142.3	85.0	79.1
87.5°	15.8	15.8	15.8	15.8	21.7	73.1	55.3	51.4	19.8	17.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)