

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: P397948

Luminaire Tested: **ARCH-S-PA1-60-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6598 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 64  
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

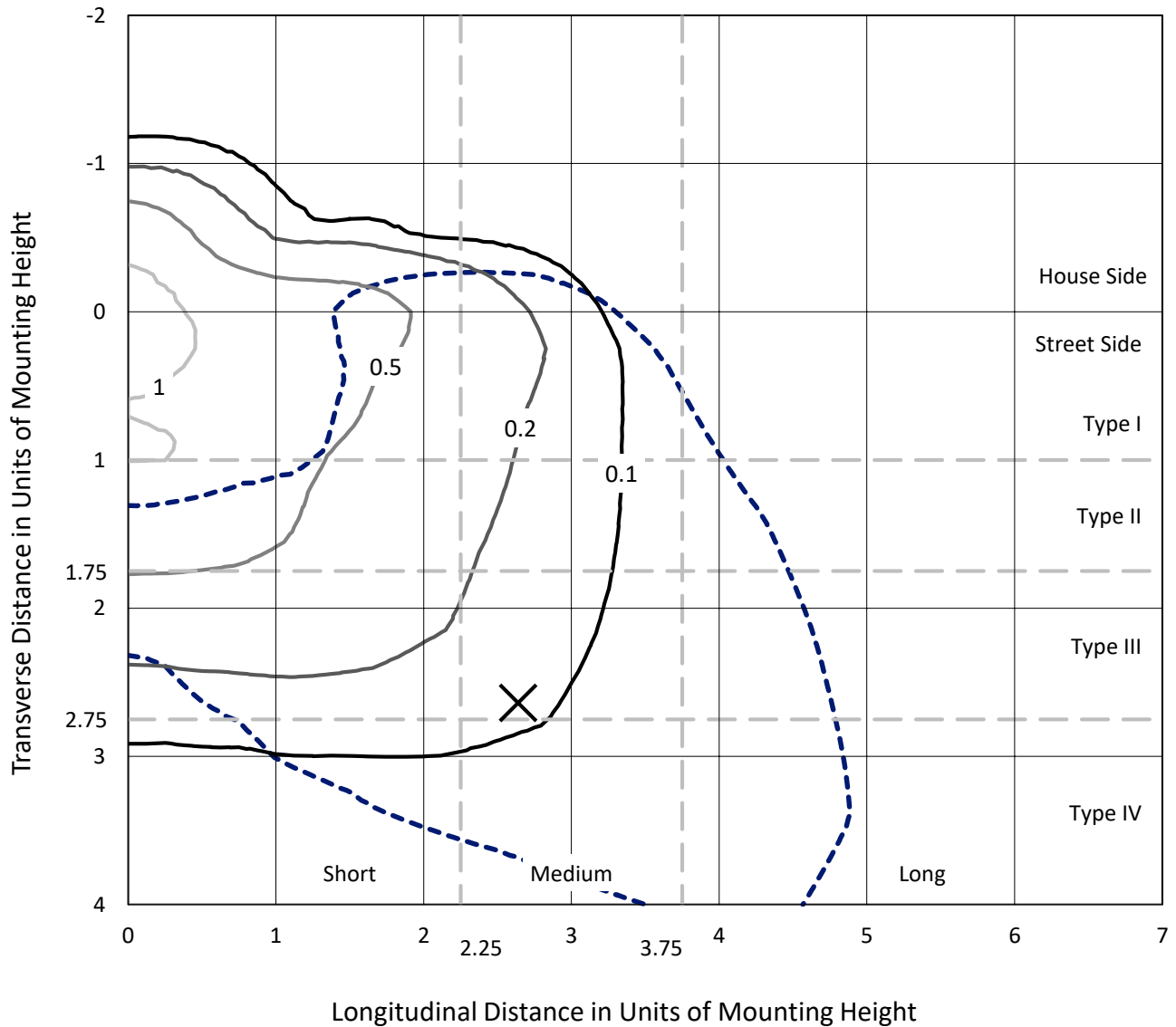


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

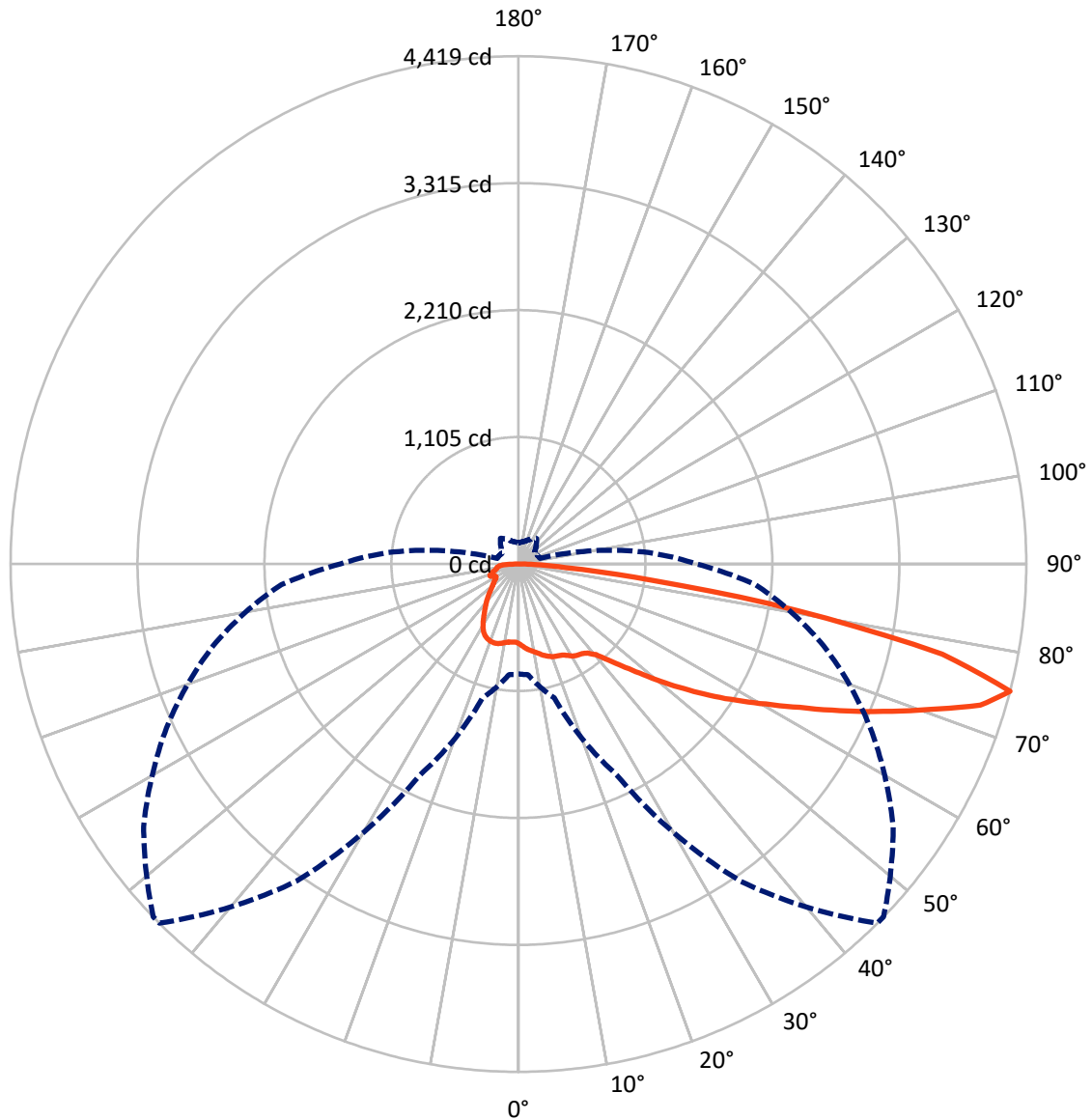


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1458.1	0.0	1458.1
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	5139.9	0.0	5139.9
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	6598.0	0.0	6598.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.5	1.0
10°-20°	218.1	3.3
20°-30°	371.8	5.6
30°-40°	520.9	7.9
40°-50°	765.3	11.6
50°-60°	1218.1	18.5
60°-70°	1732.7	26.3
70°-80°	1450.8	22.0
80°-90°	251.8	3.8
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°	6598.0	100.0
0°-180°	6598.0	100.0

**Coefficient of Utilization**



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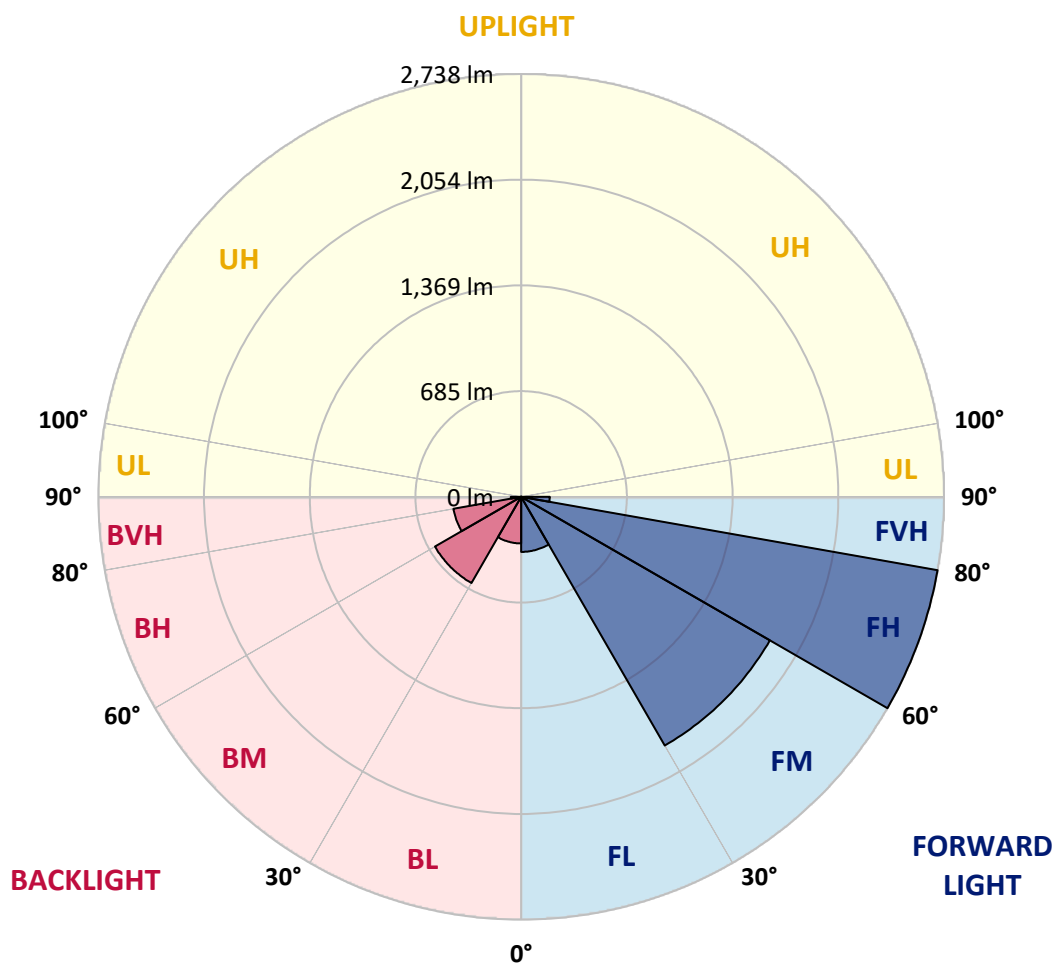
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.7	5.4			
FM	(30°-60°)	1859.8	28.2			
FH	(60°-80°)	2738.3	41.5			G2/5000
FVH	(80°-90°)	185.1	2.8			G2/225
BL	(0°-30°)	301.8	4.6	B1/500		
BM	(30°-60°)	644.6	9.8	B1/1000		
BH	(60°-80°)	445.1	6.7	B1/500		G1/500
BVH	(80°-90°)	66.7	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9
2.5°	732.6	729.1	727.3	727.3	720.3	715.9	715.0	708.8	703.5	698.2	693.8
5°	774.9	772.3	767.0	762.6	752.9	740.5	738.8	725.6	712.3	700.0	689.4
7.5°	813.7	808.4	802.3	793.4	777.6	760.8	758.2	739.7	721.1	702.6	688.5
10°	846.3	841.0	832.2	819.9	799.6	779.3	776.7	757.3	737.9	715.9	695.6
12.5°	877.2	872.8	859.6	842.8	819.0	800.5	797.8	781.1	760.8	736.1	709.7
15°	903.6	899.2	885.1	865.7	838.4	824.3	820.8	804.9	784.6	758.2	730.8
17.5°	916.9	916.9	901.9	880.7	855.1	844.6	841.9	822.5	804.0	778.4	751.1
20°	921.3	923.0	912.5	886.9	864.8	860.4	857.8	841.9	820.8	796.1	770.5
22.5°	923.9	927.4	918.6	889.5	871.0	868.4	866.6	856.0	839.3	815.5	789.9
25°	932.7	932.7	926.6	893.9	879.0	878.1	878.1	871.9	860.4	840.2	814.6
27.5°	946.0	945.1	937.1	903.6	896.6	899.2	898.3	897.5	889.5	869.3	841.9
30°	968.0	968.0	959.2	923.0	918.6	930.1	931.0	932.7	920.4	888.6	866.6
32.5°	1001.5	998.0	989.2	942.4	935.4	946.0	947.7	946.8	936.3	906.3	895.7
35°	1104.6	1096.7	1065.0	985.6	950.4	956.5	957.4	961.8	963.6	939.8	934.5
37.5°	1285.4	1274.8	1226.3	1087.9	998.0	983.0	982.1	993.6	1003.3	982.1	982.1
40°	1482.0	1473.1	1444.9	1264.2	1086.1	1036.8	1033.2	1043.8	1056.2	1041.2	1045.6
42.5°	1651.2	1658.3	1660.9	1451.1	1218.4	1137.3	1127.6	1112.6	1132.0	1118.7	1136.4
45°	1778.2	1774.7	1823.1	1642.4	1389.4	1263.3	1250.1	1209.5	1234.2	1233.4	1272.1
47.5°	1913.1	1906.9	1927.2	1822.3	1584.2	1417.6	1397.3	1337.4	1374.4	1400.0	1464.3
50°	2040.9	2042.7	2049.7	1964.2	1795.8	1605.4	1579.8	1499.6	1552.5	1606.3	1697.1
52.5°	2207.5	2195.2	2186.4	2129.9	2033.0	1801.1	1784.4	1692.7	1766.7	1830.2	1951.0
55°	2353.0	2345.0	2339.8	2337.1	2231.3	2017.1	1999.5	1904.2	2010.9	2055.9	2234.0
57.5°	2508.1	2503.7	2531.9	2576.9	2534.6	2236.6	2218.1	2126.4	2245.4	2277.2	2540.8
60°	2621.9	2624.5	2702.1	2816.7	2787.6	2474.6	2452.6	2371.5	2473.8	2502.0	2847.6
62.5°	2622.7	2649.2	2829.0	3034.5	3068.0	2748.8	2723.2	2635.1	2708.3	2708.3	3122.6
65°	2372.4	2402.3	2806.1	3088.2	3351.8	3075.0	3050.3	2911.9	2939.2	2902.2	3380.9
67.5°	2122.9	2158.1	2538.1	3092.6	3551.1	3424.1	3395.0	3188.7	3142.0	3048.6	3561.6
70°	1957.1	1981.8	2299.2	3035.3	3671.0	3789.1	3767.1	3451.4	3301.6	3171.1	3523.7
72.5°	1647.7	1638.9	1942.2	2762.9	3738.0	4203.4	4184.9	3737.1	3440.0	3112.9	3005.4
75°	956.5	967.1	1205.1	2024.1	3369.5	4419.4	4417.7	3981.3	3379.2	2749.7	2070.9
77.5°	275.9	283.9	395.8	889.5	2130.8	3769.7	3890.5	3641.0	2856.4	1959.8	1073.8
80°	120.8	126.9	171.9	296.2	917.7	2462.3	2568.1	2462.3	1722.6	899.2	421.4
82.5°	71.4	75.8	112.0	183.4	439.9	1171.6	1314.5	1147.8	743.2	381.7	174.6
85°	40.6	42.3	64.4	116.4	276.8	409.9	460.2	431.1	362.3	216.9	91.7
87.5°	18.5	19.4	31.7	54.7	155.2	138.4	143.7	190.4	209.8	132.2	45.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9	692.9
2.5°	692.1	689.4	684.1	682.4	679.7	680.6	681.5	681.5	682.4	679.7	679.7
5°	685.0	680.6	675.3	675.3	675.3	682.4	688.5	692.1	693.8	693.8	692.1
7.5°	682.4	677.1	670.9	672.7	674.4	683.2	694.7	706.2	709.7	709.7	707.9
10°	687.6	682.4	677.9	680.6	685.0	692.1	700.9	711.4	720.3	721.1	720.3
12.5°	700.0	693.8	689.4	694.7	700.0	704.4	708.8	713.2	724.7	726.4	726.4
15°	720.3	714.1	708.8	713.2	715.0	715.0	715.0	715.0	726.4	728.2	728.2
17.5°	740.5	735.3	730.0	730.8	725.6	718.5	715.9	715.0	721.1	726.4	727.3
20°	759.9	755.5	750.2	741.4	728.2	715.0	710.6	710.6	714.1	722.0	722.0
22.5°	781.1	775.8	767.0	746.7	724.7	706.2	701.8	704.4	708.8	719.4	718.5
25°	804.9	797.8	782.9	744.9	713.2	691.2	692.1	700.0	707.9	719.4	719.4
27.5°	831.3	821.6	791.7	730.8	687.6	666.5	674.4	692.9	704.4	716.7	718.5
30°	860.4	851.6	798.7	706.2	646.2	626.8	646.2	676.2	693.8	705.3	707.9
32.5°	895.7	888.6	804.9	674.4	592.4	575.7	603.9	640.9	669.1	682.4	685.0
35°	939.8	932.7	812.8	638.3	542.2	524.5	550.1	588.0	625.1	641.8	647.1
37.5°	997.1	986.5	819.9	599.5	499.9	479.6	491.9	526.3	559.8	582.7	588.9
40°	1070.3	1053.5	826.1	555.4	462.8	439.9	444.3	461.1	480.5	500.7	508.7
42.5°	1173.4	1139.9	826.9	508.7	424.9	403.8	402.0	407.3	407.3	407.3	409.9
45°	1317.1	1253.6	828.7	464.6	386.1	364.1	358.8	357.0	343.8	318.3	316.5
47.5°	1498.7	1402.6	836.6	427.6	345.6	326.2	319.1	312.1	287.4	261.0	255.7
50°	1731.5	1575.4	852.5	392.3	311.2	298.0	289.2	272.4	245.1	224.8	219.5
52.5°	1999.5	1780.8	867.5	355.3	285.6	276.8	266.2	246.0	216.9	204.5	202.8
55°	2307.1	2010.0	897.5	322.7	263.6	257.4	247.7	228.3	206.3	197.5	196.6
57.5°	2621.9	2266.6	939.8	293.6	242.4	238.9	238.9	222.2	208.1	204.5	204.5
60°	2925.1	2487.0	907.2	266.2	223.0	224.8	241.6	237.1	226.6	231.0	233.6
62.5°	3160.5	2616.6	736.1	244.2	208.9	224.8	268.0	268.0	255.7	253.9	253.9
65°	3261.0	2614.8	517.5	227.5	203.6	246.8	298.9	284.8	252.1	239.8	237.1
67.5°	3235.5	2500.2	357.0	216.0	201.9	269.8	313.0	273.3	236.3	225.7	217.8
70°	3010.6	2257.8	275.1	205.4	199.2	260.1	308.6	260.1	223.9	214.2	207.2
72.5°	2428.8	1810.8	228.3	194.8	188.7	240.7	293.6	247.7	214.2	203.6	196.6
75°	1549.0	1139.0	193.1	180.7	168.4	216.0	273.3	235.4	203.6	189.5	184.3
77.5°	744.9	491.0	168.4	164.0	151.6	200.1	253.0	219.5	189.5	178.1	174.6
80°	301.5	224.8	146.3	147.2	139.3	190.4	238.9	204.5	175.4	163.1	156.9
82.5°	156.9	130.5	123.4	126.9	126.9	181.6	228.3	192.2	163.1	157.8	137.5
85°	84.6	81.1	95.2	102.3	110.2	164.0	212.5	179.0	149.0	127.8	123.4
87.5°	41.4	52.9	53.8	61.7	76.7	131.4	179.0	149.9	124.3	103.1	101.4
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)