

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: P214857

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-60-D-U-T4W-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 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: 6687 lumens  
Efficiency: N/A  
Efficacy: 104.5 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

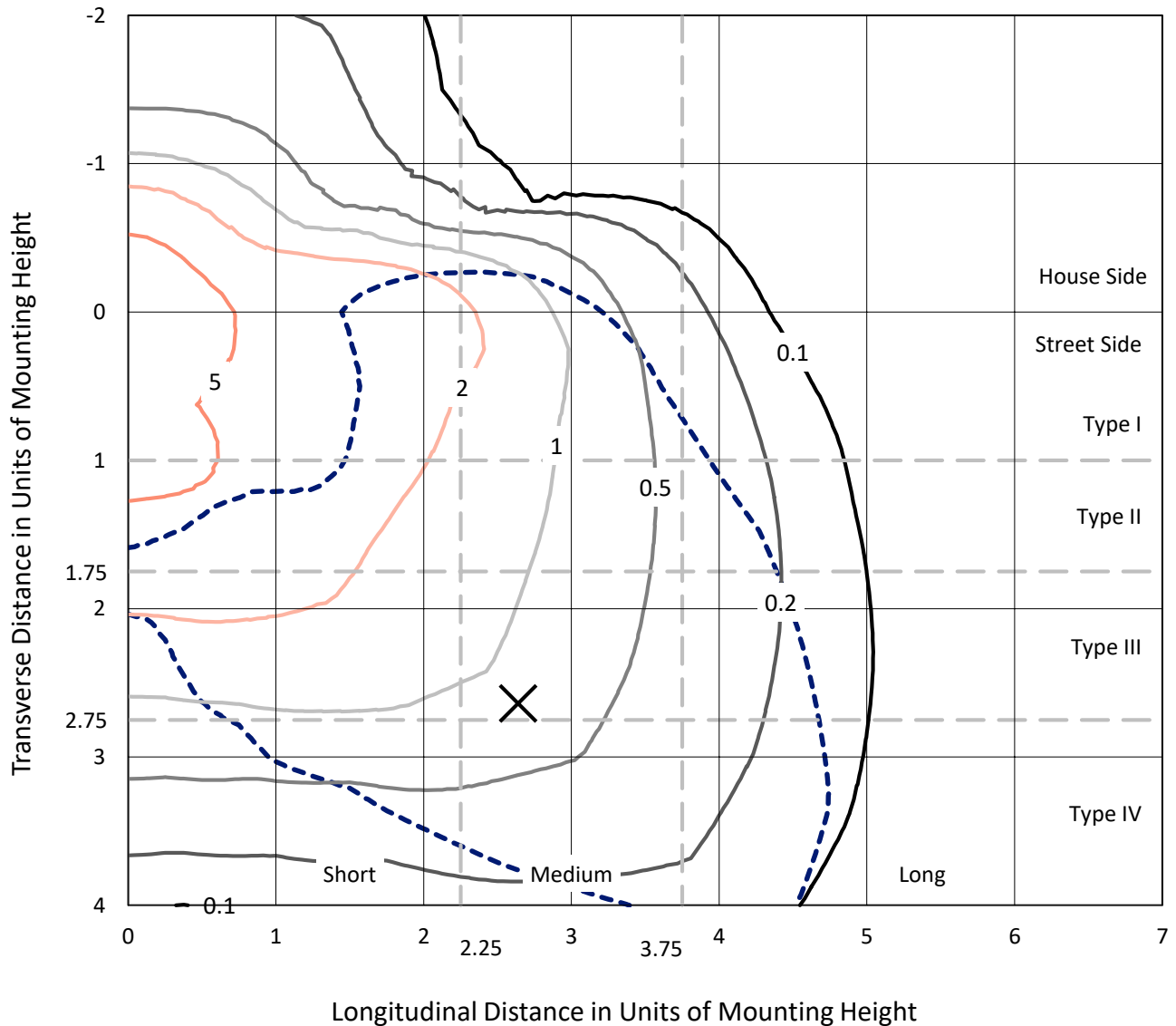


REPORT NUMBER: P214857

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

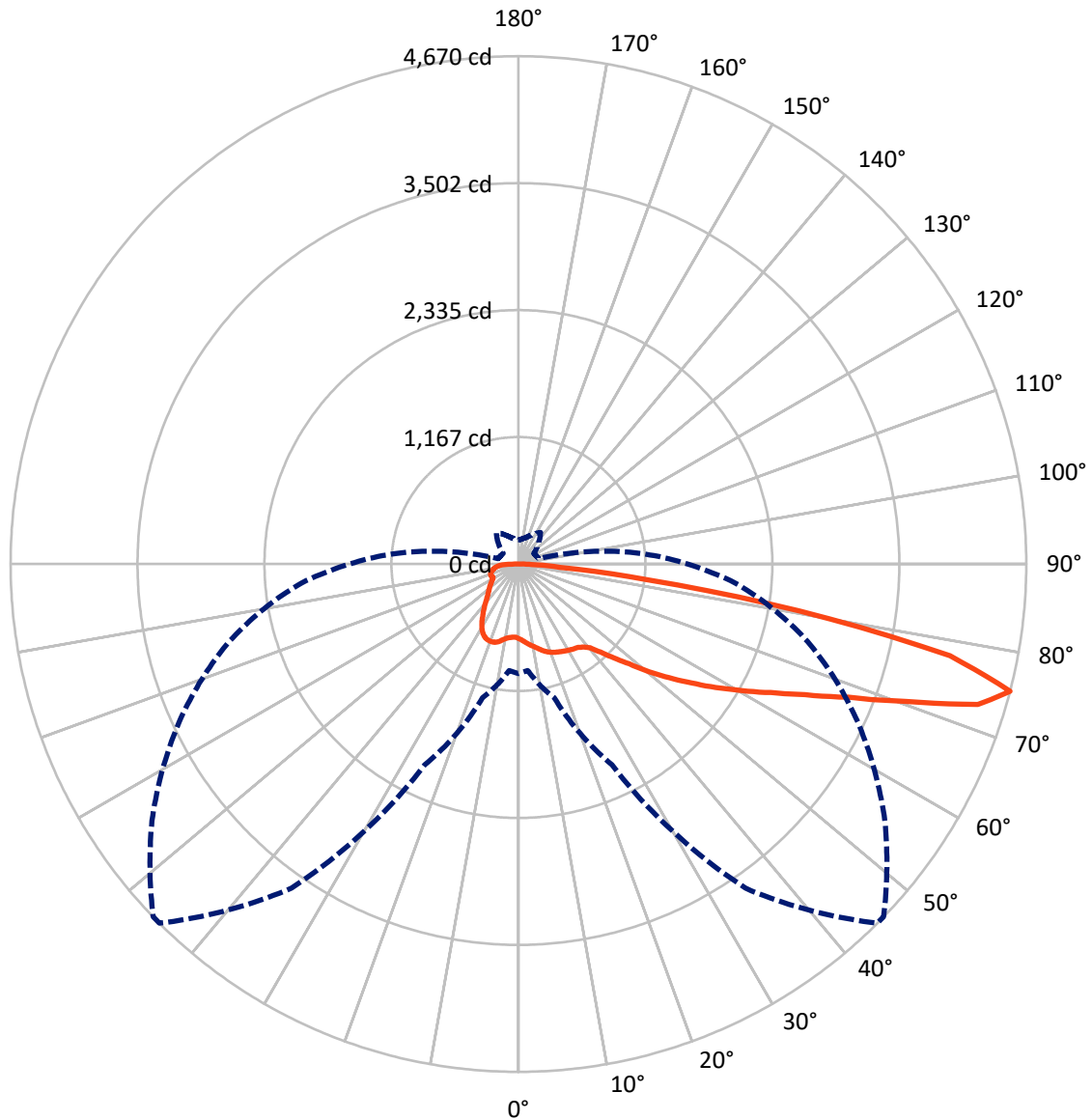


Based on 10 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214857

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P214857

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1549.1	0.0	1549.1
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	5137.9	0.0	5137.9
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	6687.0	0.0	6687.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.9	1.0
10°-20°	220.1	3.3
20°-30°	377.8	5.6
30°-40°	528.4	7.9
40°-50°	775.0	11.6
50°-60°	1207.3	18.1
60°-70°	1737.2	26.0
70°-80°	1513.3	22.6
80°-90°	259.9	3.9
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°	6687.0	100.0
0°-180°	6687.0	100.0



REPORT NUMBER: P214857

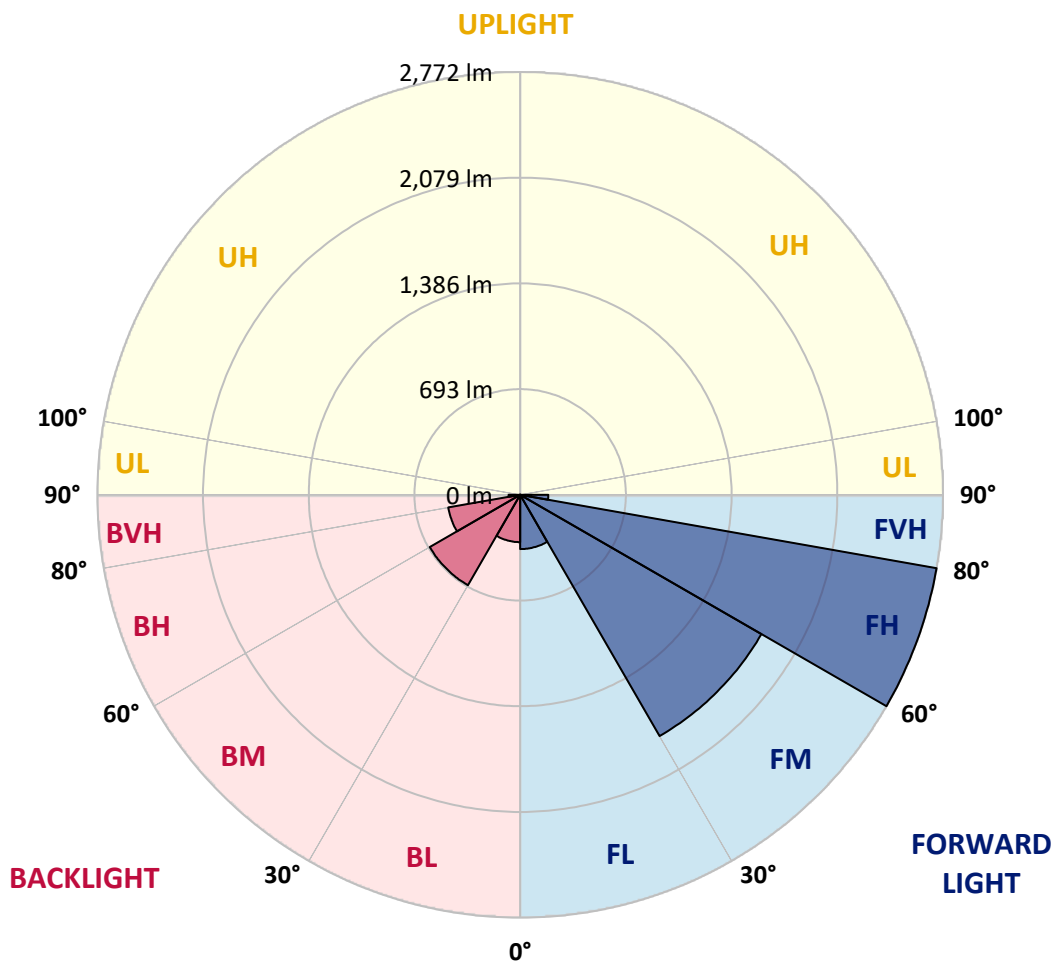
CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	355.6	5.3			
FM	(30°-60°)	1826.1	27.3			
FH	(60°-80°)	2771.8	41.5			G2/5000
FVH	(80°-90°)	184.4	2.8			G2/225
BL	(0°-30°)	310.3	4.6	B1/500		
BM	(30°-60°)	684.6	10.2	B1/1000		
BH	(60°-80°)	478.7	7.2	B1/500		G1/500
BVH	(80°-90°)	75.5	1.1			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





REPORT NUMBER: P214857

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5
2.5°	719.3	714.1	714.1	710.2	710.2	703.7	701.1	699.8	693.3	689.4	685.5
5°	761.0	754.5	753.2	744.0	740.1	725.8	724.5	715.4	703.7	692.0	682.9
7.5°	798.7	794.8	788.3	779.2	767.5	749.3	747.9	733.6	714.1	698.5	685.5
10°	826.0	823.4	814.3	802.6	789.6	771.4	770.1	754.5	731.0	712.8	694.6
12.5°	858.5	854.6	842.9	827.3	813.0	796.1	794.8	781.8	755.8	732.3	708.9
15°	889.7	884.5	870.2	854.6	839.0	824.7	824.7	810.4	783.1	755.8	728.4
17.5°	905.3	902.7	888.4	871.5	858.5	848.1	846.8	833.8	806.5	777.9	747.9
20°	910.5	911.8	898.8	880.6	871.5	866.3	865.0	855.9	826.0	798.7	770.1
22.5°	909.2	913.1	902.7	883.2	880.6	880.6	880.6	870.2	846.8	819.5	790.9
25°	914.5	919.7	911.8	888.4	888.4	893.6	893.6	888.4	867.6	844.2	815.6
27.5°	932.7	936.6	930.1	897.5	898.8	906.6	905.3	906.6	893.6	871.5	842.9
30°	954.8	960.0	952.2	911.8	910.5	918.4	918.4	924.9	915.8	892.3	868.9
32.5°	1014.6	1013.3	988.6	927.5	923.6	931.4	931.4	937.9	932.7	914.5	892.3
35°	1192.8	1173.3	1118.7	978.2	939.2	943.1	943.1	954.8	957.4	943.1	923.6
37.5°	1374.9	1368.4	1326.8	1113.5	996.4	967.8	966.5	983.4	995.1	983.4	970.4
40°	1558.3	1553.1	1544.0	1294.3	1116.1	1012.0	1008.1	1022.4	1043.2	1035.4	1027.6
42.5°	1728.7	1726.1	1735.2	1472.5	1268.3	1107.0	1095.3	1078.3	1108.3	1105.7	1105.7
45°	1862.7	1869.2	1874.4	1639.0	1433.5	1229.2	1214.9	1157.7	1198.0	1208.4	1216.2
47.5°	1938.2	1943.4	1961.6	1801.6	1598.7	1371.0	1360.6	1267.0	1320.3	1351.5	1373.6
50°	2046.1	2031.8	2047.4	1960.3	1797.7	1555.7	1527.1	1414.0	1481.6	1536.2	1588.3
52.5°	2150.2	2126.8	2139.8	2143.7	2024.0	1736.5	1706.6	1587.0	1671.5	1757.4	1849.7
55°	2243.8	2242.5	2255.6	2321.9	2242.5	1930.4	1896.5	1778.2	1900.4	1992.8	2148.9
57.5°	2319.3	2332.3	2389.5	2528.7	2494.9	2141.1	2103.4	2000.6	2145.0	2237.3	2496.2
60°	2407.7	2428.6	2523.5	2704.3	2725.1	2362.2	2323.2	2249.1	2396.0	2489.7	2898.1
62.5°	2437.7	2467.6	2662.7	2889.0	2965.8	2604.2	2569.0	2519.6	2660.1	2744.7	3298.8
65°	2238.6	2295.9	2739.4	2984.0	3224.6	2895.5	2865.6	2822.7	2922.9	2978.8	3570.6
67.5°	2184.0	2210.0	2589.9	3120.6	3467.9	3270.2	3240.2	3166.1	3168.7	3145.3	3659.1
70°	2107.3	2135.9	2436.4	3223.3	3816.5	3782.7	3746.3	3527.7	3393.7	3252.0	3484.8
72.5°	1795.1	1786.0	2099.5	2946.3	3984.3	4417.5	4374.5	3916.7	3560.2	3159.6	2941.1
75°	1008.1	982.1	1273.5	2038.3	3638.3	4669.8	4668.5	4113.1	3443.2	2752.5	2001.9
77.5°	292.7	284.9	420.2	854.6	2449.4	4057.1	4106.6	3709.8	2873.4	1977.2	1099.2
80°	137.9	140.5	180.8	282.3	1045.8	2618.5	2760.3	2442.9	1717.0	911.8	454.0
82.5°	87.2	88.5	123.6	182.1	442.3	1188.9	1306.0	1099.2	680.3	394.1	200.3
85°	54.6	54.6	81.9	119.7	264.1	379.8	412.3	374.6	291.4	214.6	109.3
87.5°	29.9	29.9	49.4	68.9	144.4	122.3	126.2	149.6	182.1	131.4	54.6
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: P214857

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5	685.5
2.5°	684.2	681.6	677.7	676.4	675.1	673.8	675.1	677.7	675.1	675.1	676.4
5°	680.3	677.7	672.5	672.5	673.8	675.1	681.6	685.5	686.8	686.8	686.8
7.5°	680.3	676.4	672.5	673.8	676.4	681.6	692.0	698.5	703.7	705.0	705.0
10°	686.8	681.6	679.0	681.6	689.4	693.3	703.7	714.1	720.6	723.2	723.2
12.5°	698.5	693.3	693.3	698.5	708.9	714.1	723.2	731.0	738.8	742.7	742.7
15°	718.0	711.5	712.8	721.9	733.6	738.8	745.3	747.9	754.5	759.7	759.7
17.5°	736.2	729.7	732.3	742.7	750.6	753.2	757.1	755.8	758.4	762.3	763.6
20°	757.1	750.6	751.9	758.4	759.7	757.1	757.1	753.2	751.9	758.4	761.0
22.5°	777.9	771.4	770.1	766.2	759.7	753.2	749.3	745.3	742.7	749.3	751.9
25°	802.6	793.5	787.0	770.1	753.2	741.4	736.2	733.6	732.3	738.8	741.4
27.5°	829.9	820.8	801.3	764.9	737.5	718.0	714.1	714.1	716.7	720.6	723.2
30°	855.9	846.8	811.7	753.2	710.2	681.6	677.7	681.6	688.1	692.0	695.9
32.5°	881.9	872.8	818.2	734.9	669.9	633.5	630.9	637.4	647.8	650.4	653.0
35°	917.1	907.9	826.0	708.9	619.2	580.1	577.5	581.4	590.6	594.5	598.4
37.5°	966.5	961.3	837.7	680.3	572.3	529.4	521.6	519.0	524.2	522.9	528.1
40°	1031.5	1035.4	858.5	642.6	526.8	482.6	465.7	457.9	452.7	442.3	447.5
42.5°	1126.5	1129.1	881.9	599.7	487.8	438.4	416.3	401.9	391.5	374.6	377.2
45°	1265.7	1243.5	909.2	554.1	452.7	403.2	377.2	360.3	346.0	331.7	333.0
47.5°	1450.4	1382.7	939.2	516.4	417.6	374.6	351.2	331.7	314.8	303.1	304.4
50°	1678.0	1555.7	969.1	481.3	382.4	352.5	331.7	310.9	294.0	282.3	281.0
52.5°	1978.5	1763.9	988.6	442.3	347.3	333.0	314.8	295.3	274.5	260.2	258.9
55°	2290.7	2005.8	1005.5	395.4	313.5	310.9	301.8	279.7	255.0	236.7	234.1
57.5°	2634.1	2264.7	1018.5	349.9	287.5	292.7	290.1	264.1	236.7	219.8	218.5
60°	2946.3	2532.6	976.9	309.6	264.1	274.5	277.1	255.0	240.6	244.5	245.8
62.5°	3261.1	2739.4	818.2	279.7	248.4	262.8	284.9	283.6	277.1	283.6	284.9
65°	3374.2	2782.4	580.1	255.0	232.8	268.0	309.6	307.0	277.1	265.4	262.8
67.5°	3310.5	2654.9	390.2	235.4	221.1	274.5	335.6	307.0	266.7	251.1	245.8
70°	3007.4	2341.4	286.2	215.9	210.7	273.2	349.9	305.7	261.5	244.5	238.0
72.5°	2398.6	1806.8	230.2	197.7	195.1	266.7	357.7	303.1	256.3	238.0	230.2
75°	1553.1	1123.9	193.8	179.5	171.7	256.3	353.8	295.3	249.8	226.3	221.1
77.5°	720.6	483.9	165.2	158.7	149.6	240.6	342.1	279.7	235.4	213.3	206.8
80°	335.6	228.9	139.2	137.9	134.0	227.6	326.5	261.5	218.5	200.3	189.9
82.5°	179.5	137.9	113.2	113.2	117.1	212.0	307.0	239.3	196.4	187.3	160.0
85°	95.0	79.3	81.9	88.5	100.2	187.3	281.0	215.9	171.7	143.1	139.2
87.5°	48.1	50.7	50.7	59.8	76.7	152.2	231.5	178.2	145.7	117.1	114.5
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)