

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: P214880

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214880  
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-AF16-60-D-U-T4W-7050  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6691 lumens  
Efficiency: N/A  
Efficacy: 106.2 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): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

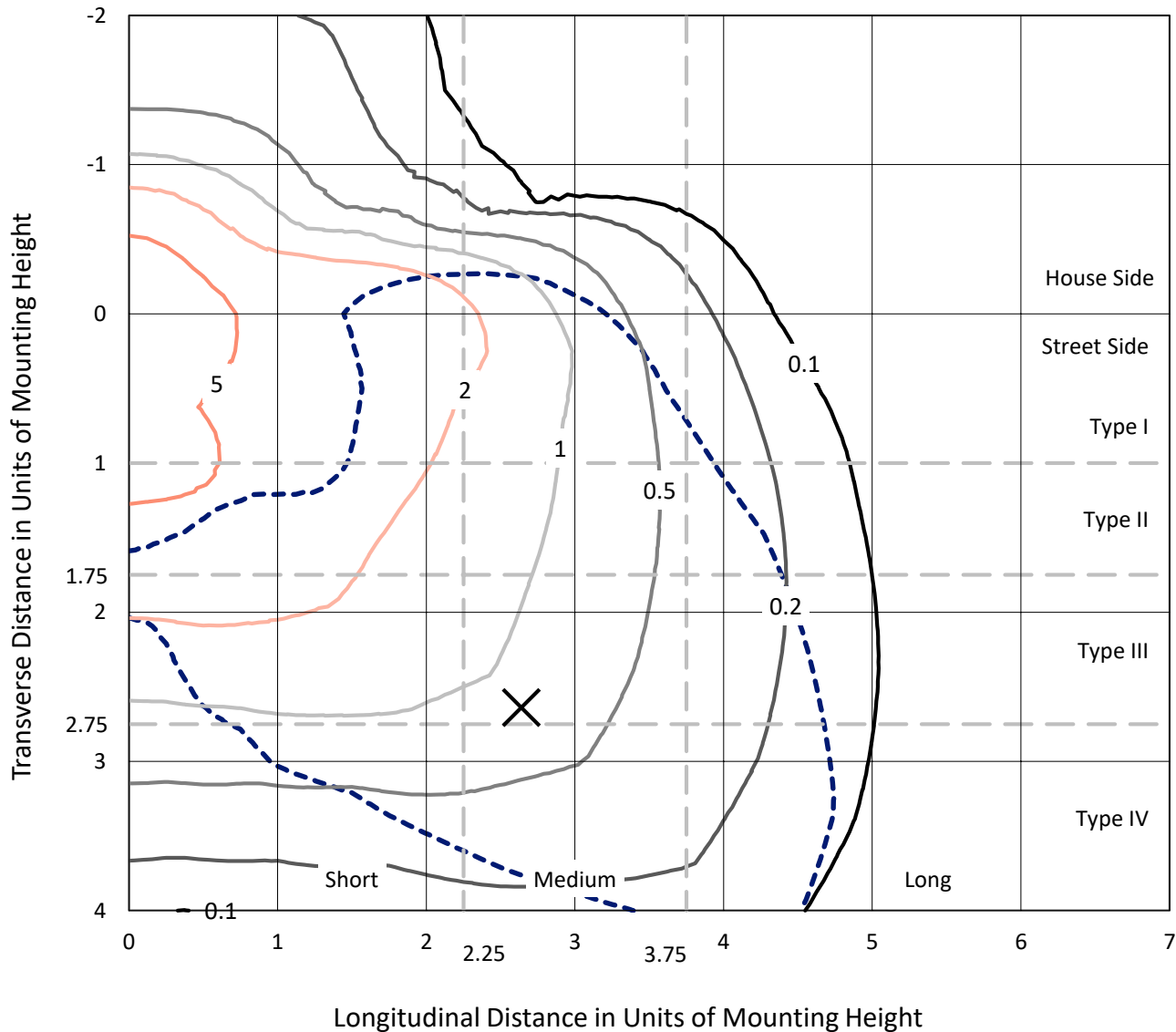


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

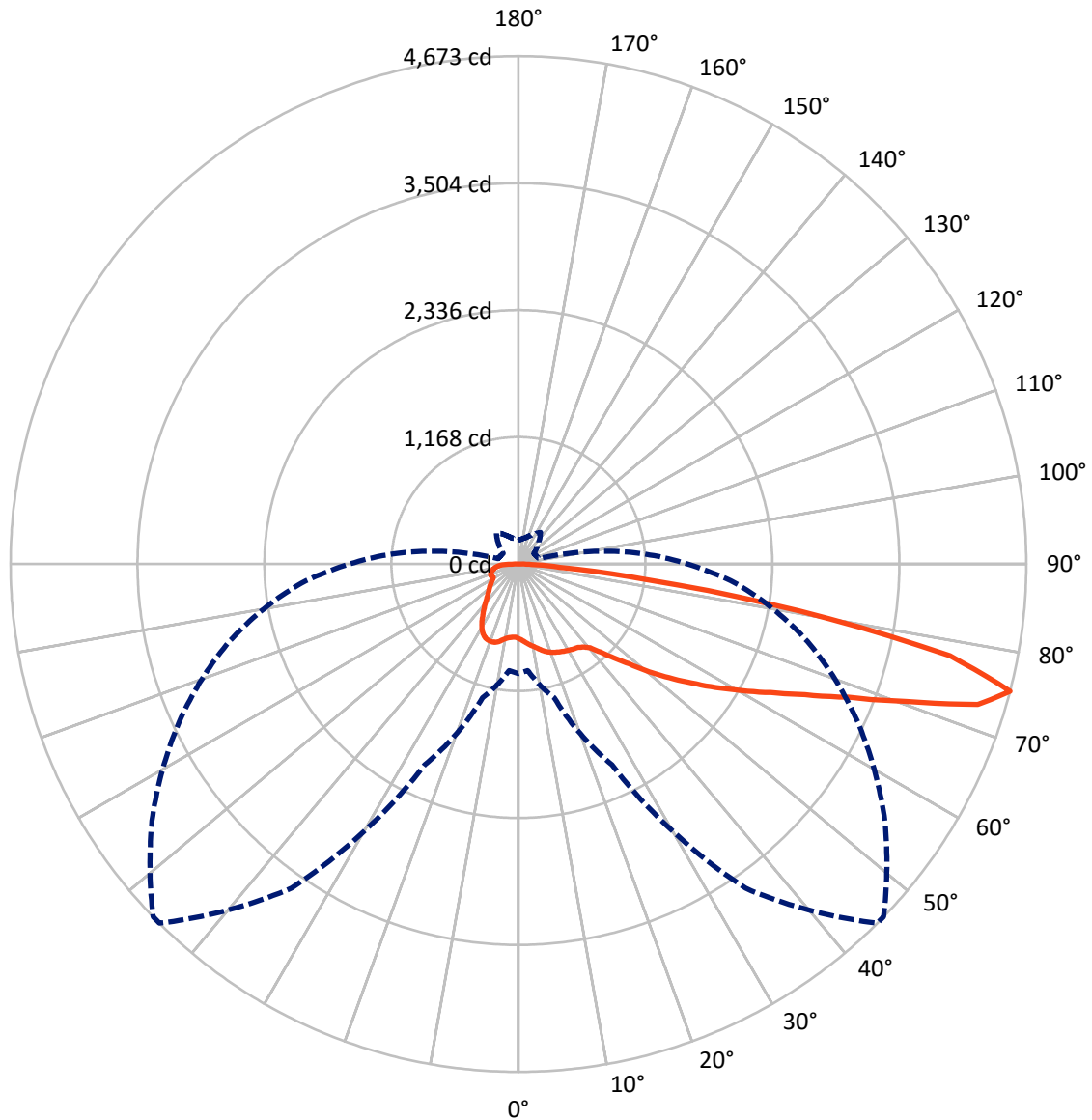


Based on 10 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Medium - Non-Cutoff

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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	1550.0	0.0	1550.0
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	5141.0	0.0	5141.0
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	6691.0	0.0	6691.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	1.0
10°-20°	220.3	3.3
20°-30°	378.0	5.6
30°-40°	528.7	7.9
40°-50°	775.5	11.6
50°-60°	1208.0	18.1
60°-70°	1738.3	26.0
70°-80°	1514.2	22.6
80°-90°	260.0	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°	6691.0	100.0
0°-180°	6691.0	100.0



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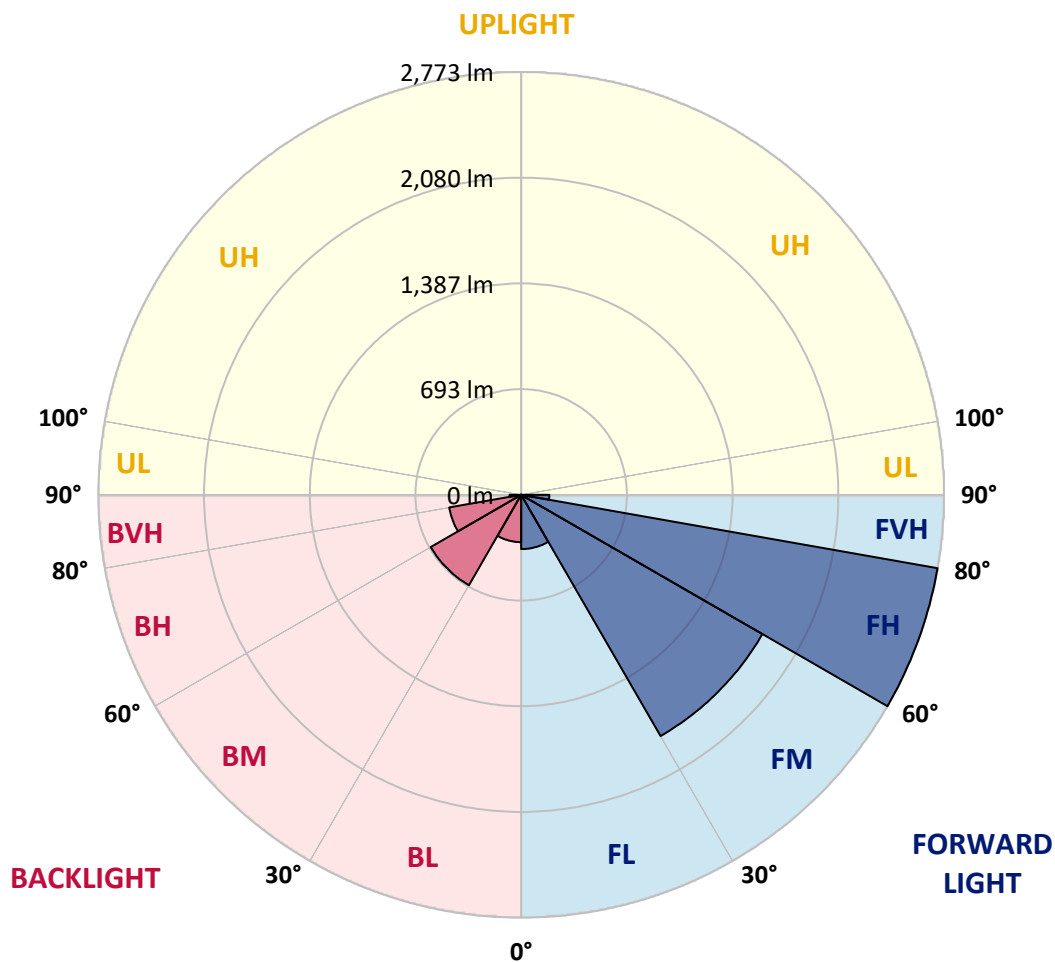
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	355.8	5.3			
FM	(30°-60°)	1827.2	27.3			
FH	(60°-80°)	2773.5	41.5			G2/5000
FVH	(80°-90°)	184.5	2.8			G2/225
BL	(0°-30°)	310.4	4.6	B1/500		
BM	(30°-60°)	685.0	10.2	B1/1000		
BH	(60°-80°)	479.0	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9
2.5°	719.8	714.6	714.6	710.7	710.7	704.1	701.5	700.2	693.7	689.8	685.9
5°	761.4	754.9	753.6	744.5	740.6	726.3	725.0	715.9	704.1	692.4	683.3
7.5°	799.2	795.3	788.7	779.6	767.9	749.7	748.4	734.1	714.6	698.9	685.9
10°	826.5	823.9	814.8	803.1	790.0	771.8	770.5	754.9	731.5	713.3	695.0
12.5°	859.0	855.1	843.4	827.8	813.5	796.6	795.3	782.2	756.2	732.8	709.4
15°	890.3	885.1	870.7	855.1	839.5	825.2	825.2	810.9	783.5	756.2	728.9
17.5°	905.9	903.3	889.0	872.0	859.0	848.6	847.3	834.3	807.0	778.3	748.4
20°	911.1	912.4	899.4	881.2	872.0	866.8	865.5	856.4	826.5	799.2	770.5
22.5°	909.8	913.7	903.3	883.8	881.2	881.2	881.2	870.7	847.3	820.0	791.3
25°	915.0	920.2	912.4	889.0	889.0	894.2	894.2	889.0	868.1	844.7	816.1
27.5°	933.2	937.1	930.6	898.1	899.4	907.2	905.9	907.2	894.2	872.0	843.4
30°	955.3	960.6	952.7	912.4	911.1	918.9	918.9	925.4	916.3	892.9	869.4
32.5°	1015.2	1013.9	989.2	928.0	924.1	931.9	931.9	938.4	933.2	915.0	892.9
35°	1193.5	1174.0	1119.3	978.8	939.7	943.6	943.6	955.3	957.9	943.6	924.1
37.5°	1375.7	1369.2	1327.6	1114.1	997.0	968.4	967.1	984.0	995.7	984.0	971.0
40°	1559.3	1554.1	1545.0	1295.1	1116.7	1012.6	1008.7	1023.0	1043.9	1036.0	1028.2
42.5°	1729.8	1727.2	1736.3	1473.4	1269.0	1107.6	1095.9	1079.0	1108.9	1106.3	1106.3
45°	1863.8	1870.3	1875.5	1640.0	1434.3	1230.0	1215.7	1158.4	1198.7	1209.1	1217.0
47.5°	1939.3	1944.5	1962.8	1802.7	1599.6	1371.8	1361.4	1267.7	1321.1	1352.3	1374.4
50°	2047.4	2033.0	2048.7	1961.5	1798.8	1556.7	1528.0	1414.8	1482.5	1537.1	1589.2
52.5°	2151.5	2128.1	2141.1	2145.0	2025.2	1737.6	1707.6	1587.9	1672.5	1758.4	1850.8
55°	2245.2	2243.9	2256.9	2323.3	2243.9	1931.5	1897.7	1779.2	1901.6	1994.0	2150.2
57.5°	2320.7	2333.7	2391.0	2530.2	2496.4	2142.4	2104.6	2001.8	2146.3	2238.7	2497.7
60°	2409.2	2430.0	2525.0	2705.9	2726.8	2363.6	2324.6	2250.4	2397.5	2491.2	2899.9
62.5°	2439.1	2469.1	2664.3	2890.8	2967.6	2605.7	2570.6	2521.1	2661.7	2746.3	3300.8
65°	2240.0	2297.3	2741.1	2985.8	3226.6	2897.3	2867.3	2824.4	2924.6	2980.6	3572.8
67.5°	2185.3	2211.4	2591.4	3122.4	3470.0	3272.1	3242.2	3168.0	3170.6	3147.2	3661.3
70°	2108.5	2137.2	2437.8	3225.3	3818.8	3784.9	3748.5	3529.8	3395.8	3253.9	3486.9
72.5°	1796.2	1787.0	2100.7	2948.0	3986.7	4420.1	4377.1	3919.0	3562.4	3161.5	2942.8
75°	1008.7	982.7	1274.2	2039.5	3640.5	4672.6	4671.3	4115.5	3445.2	2754.1	2003.1
77.5°	292.9	285.0	420.4	855.1	2450.8	4059.6	4109.0	3712.1	2875.1	1978.4	1099.8
80°	138.0	140.6	180.9	282.4	1046.5	2620.0	2761.9	2444.3	1718.1	912.4	454.2
82.5°	87.2	88.5	123.6	182.2	442.5	1189.6	1306.8	1099.8	680.7	394.4	200.4
85°	54.7	54.7	82.0	119.7	264.2	380.1	412.6	374.8	291.5	214.8	109.3
87.5°	29.9	29.9	49.5	69.0	144.5	122.3	126.3	149.7	182.2	131.5	54.7
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°	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9	685.9
2.5°	684.6	682.0	678.1	676.8	675.5	674.2	675.5	678.1	675.5	675.5	676.8
5°	680.7	678.1	672.9	672.9	674.2	675.5	682.0	685.9	687.2	687.2	687.2
7.5°	680.7	676.8	672.9	674.2	676.8	682.0	692.4	698.9	704.1	705.4	705.4
10°	687.2	682.0	679.4	682.0	689.8	693.7	704.1	714.6	721.1	723.7	723.7
12.5°	698.9	693.7	693.7	698.9	709.4	714.6	723.7	731.5	739.3	743.2	743.2
15°	718.5	712.0	713.3	722.4	734.1	739.3	745.8	748.4	754.9	760.1	760.1
17.5°	736.7	730.2	732.8	743.2	751.0	753.6	757.5	756.2	758.8	762.7	764.0
20°	757.5	751.0	752.3	758.8	760.1	757.5	757.5	753.6	752.3	758.8	761.4
22.5°	778.3	771.8	770.5	766.6	760.1	753.6	749.7	745.8	743.2	749.7	752.3
25°	803.1	794.0	787.4	770.5	753.6	741.9	736.7	734.1	732.8	739.3	741.9
27.5°	830.4	821.3	801.8	765.3	738.0	718.5	714.6	714.6	717.2	721.1	723.7
30°	856.4	847.3	812.2	753.6	710.7	682.0	678.1	682.0	688.5	692.4	696.3
32.5°	882.5	873.3	818.7	735.4	670.3	633.9	631.3	637.8	648.2	650.8	653.4
35°	917.6	908.5	826.5	709.4	619.5	580.5	577.9	581.8	590.9	594.8	598.7
37.5°	967.1	961.9	838.2	680.7	572.7	529.7	521.9	519.3	524.5	523.2	528.4
40°	1032.1	1036.0	859.0	643.0	527.1	482.9	466.0	458.1	452.9	442.5	447.7
42.5°	1127.2	1129.8	882.5	600.0	488.1	438.6	416.5	402.2	391.8	374.8	377.5
45°	1266.4	1244.3	909.8	554.5	452.9	403.5	377.5	360.5	346.2	331.9	333.2
47.5°	1451.2	1383.6	939.7	516.7	417.8	374.8	351.4	331.9	315.0	303.3	304.6
50°	1679.0	1556.7	969.7	481.6	382.7	352.7	331.9	311.1	294.2	282.4	281.1
52.5°	1979.7	1764.9	989.2	442.5	347.5	333.2	315.0	295.5	274.6	260.3	259.0
55°	2292.0	2007.0	1006.1	395.7	313.7	311.1	302.0	279.8	255.1	236.9	234.3
57.5°	2635.7	2266.0	1019.1	350.1	287.6	292.9	290.2	264.2	236.9	220.0	218.7
60°	2948.0	2534.1	977.5	309.8	264.2	274.6	277.2	255.1	240.8	244.7	246.0
62.5°	3263.0	2741.1	818.7	279.8	248.6	262.9	285.0	283.7	277.2	283.7	285.0
65°	3376.2	2784.0	580.5	255.1	233.0	268.1	309.8	307.2	277.2	265.5	262.9
67.5°	3312.5	2656.5	390.5	235.6	221.3	274.6	335.8	307.2	266.8	251.2	246.0
70°	3009.2	2342.8	286.3	216.1	210.9	273.3	350.1	305.9	261.6	244.7	238.2
72.5°	2400.1	1807.9	230.4	197.8	195.2	266.8	357.9	303.3	256.4	238.2	230.4
75°	1554.1	1124.5	193.9	179.6	171.8	256.4	354.0	295.5	249.9	226.5	221.3
77.5°	721.1	484.2	165.3	158.8	149.7	240.8	342.3	279.8	235.6	213.5	206.9
80°	335.8	229.1	139.3	138.0	134.1	227.8	326.7	261.6	218.7	200.4	190.0
82.5°	179.6	138.0	113.2	113.2	117.1	212.2	307.2	239.5	196.5	187.4	160.1
85°	95.0	79.4	82.0	88.5	100.2	187.4	281.1	216.1	171.8	143.2	139.3
87.5°	48.2	50.8	50.8	59.9	76.8	152.3	231.7	178.3	145.8	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)