

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: P265911

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265911  
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-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 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: 5813.3 lumens  
Efficiency: N/A  
Efficacy: 92.3 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 (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

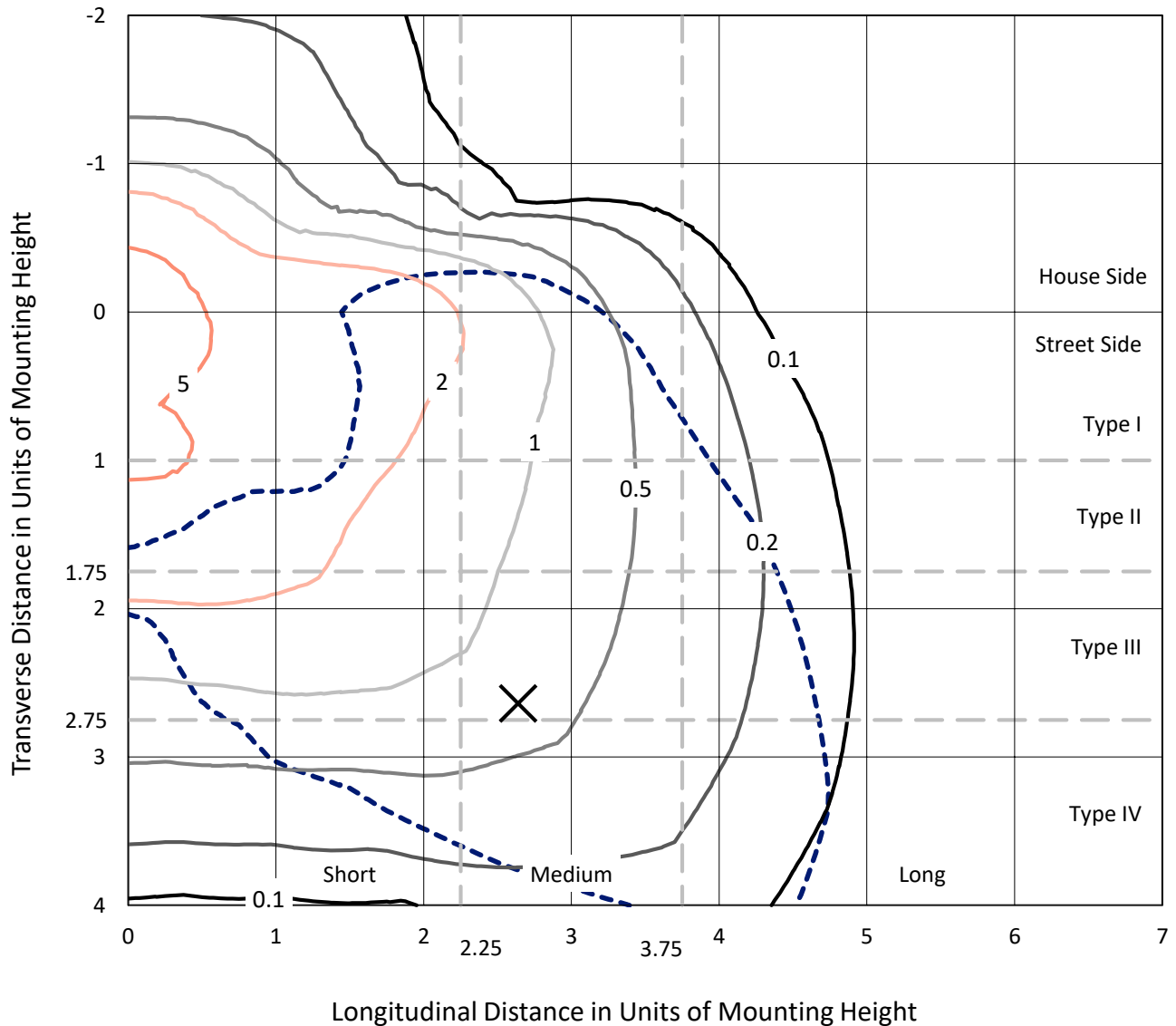


REPORT NUMBER: P265911

CATALOG NUMBER: ARCH-AF16-60-D-U-T4W-7027

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

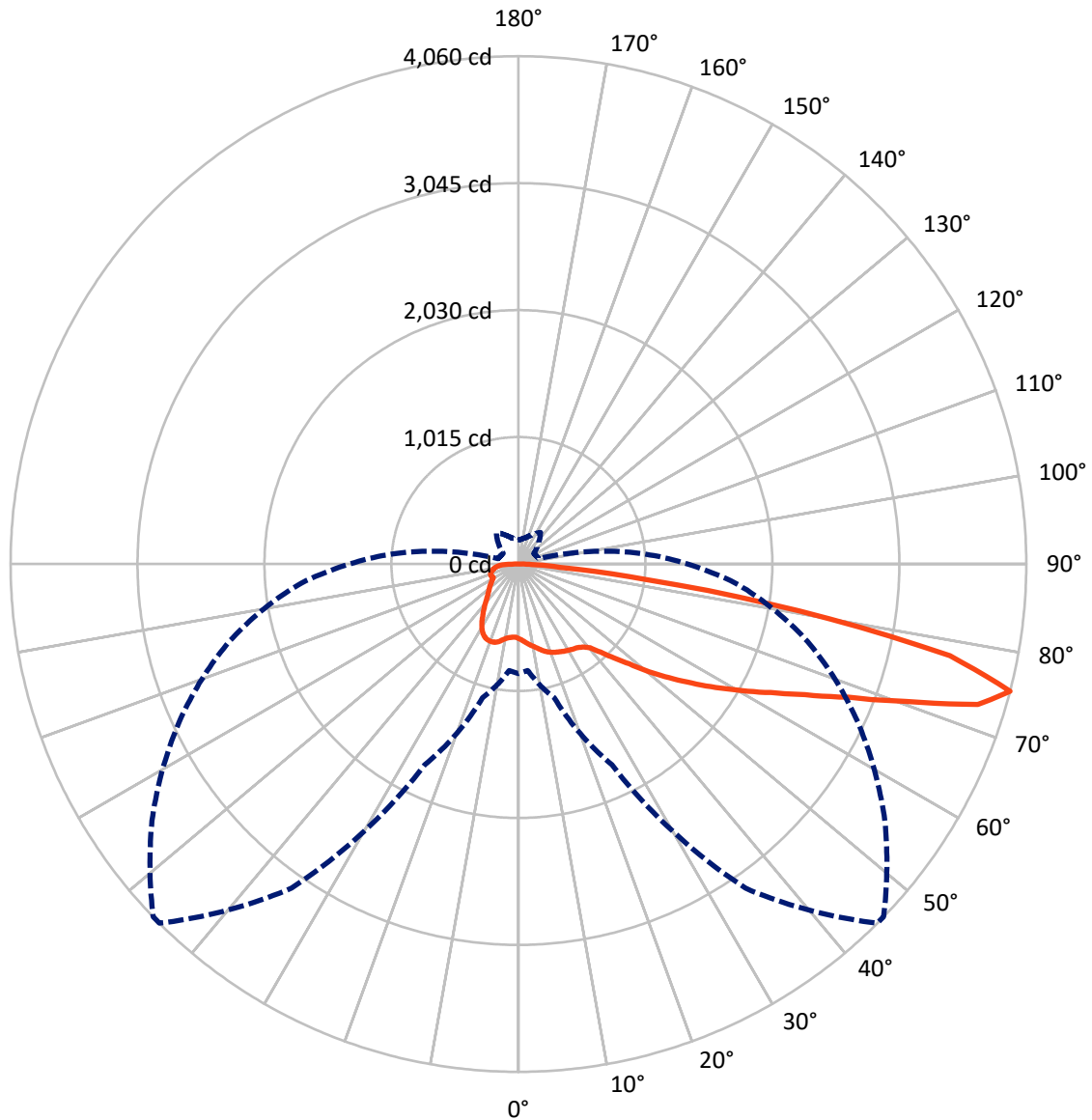


Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265911

CATALOG NUMBER: ARCH-AF16-60-D-U-T4W-7027

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P265911

CATALOG NUMBER: ARCH-AF16-60-D-U-T4W-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1346.7	0.0	1346.7
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	4466.6	0.0	4466.6
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	5813.3	0.0	5813.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	1.0
10°-20°	191.4	3.3
20°-30°	328.4	5.6
30°-40°	459.3	7.9
40°-50°	673.8	11.6
50°-60°	1049.6	18.1
60°-70°	1510.2	26.0
70°-80°	1315.6	22.6
80°-90°	225.9	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°	5813.3	100.0
0°-180°	5813.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265911

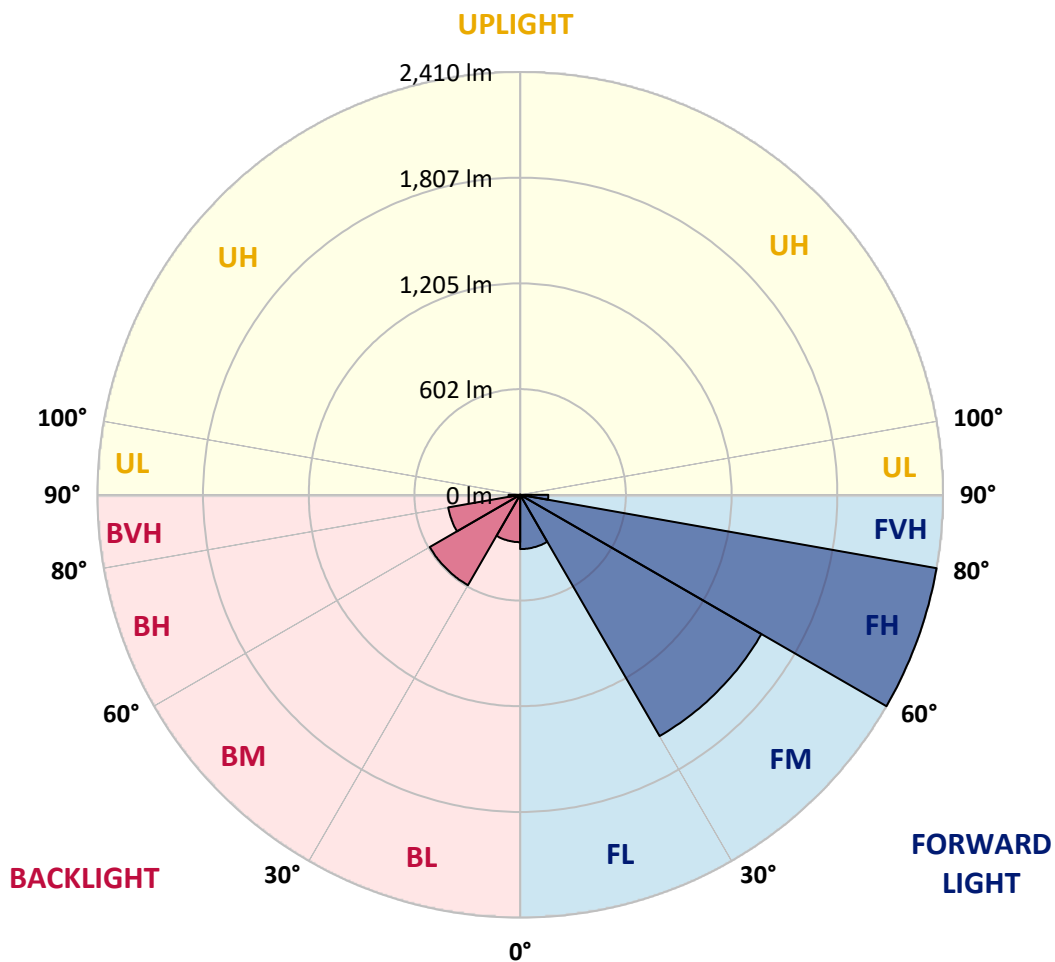
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	309.1	5.3			
FM	(30°-60°)	1587.5	27.3			
FH	(60°-80°)	2409.7	41.5			G2/5000
FVH	(80°-90°)	160.3	2.8			G2/225
BL	(0°-30°)	269.7	4.6	B1/500		
BM	(30°-60°)	595.2	10.2	B1/1000		
BH	(60°-80°)	416.2	7.2	B1/500		G1/500
BVH	(80°-90°)	65.6	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: P265911

CATALOG NUMBER: ARCH-AF16-60-D-U-T4W-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9
2.5°	625.3	620.8	620.8	617.5	617.5	611.7	609.5	608.4	602.8	599.3	595.9
5°	661.5	655.9	654.8	646.8	643.5	631.0	629.9	621.9	611.7	601.7	593.7
7.5°	694.3	690.9	685.2	677.3	667.3	651.4	650.3	637.7	620.8	607.3	595.9
10°	718.0	715.8	708.0	697.8	686.5	670.6	669.4	655.9	635.6	619.7	603.9
12.5°	746.3	743.0	732.7	719.3	706.7	692.1	690.9	679.7	657.0	636.7	616.2
15°	773.5	768.9	756.6	743.0	729.3	716.9	716.9	704.5	680.7	657.0	633.2
17.5°	787.0	784.8	772.4	757.7	746.3	737.2	736.3	724.8	701.0	676.2	650.3
20°	791.5	792.8	781.3	765.5	757.7	753.0	752.1	744.1	718.0	694.3	669.4
22.5°	790.5	793.8	784.8	767.8	765.5	765.5	765.5	756.6	736.3	712.4	687.6
25°	795.0	799.5	792.8	772.4	772.4	776.9	776.9	772.4	754.2	733.9	709.0
27.5°	810.8	814.3	808.6	780.3	781.3	788.3	787.0	788.3	776.9	757.7	732.7
30°	830.0	834.5	827.8	792.8	791.5	798.4	798.4	804.1	796.1	775.7	755.4
32.5°	882.0	880.9	859.4	806.3	802.8	809.7	809.7	815.3	810.8	795.0	775.7
35°	1037.0	1020.0	972.5	850.3	816.5	819.9	819.9	830.0	832.3	819.9	802.8
37.5°	1195.3	1189.6	1153.5	968.1	866.2	841.4	840.3	854.8	865.1	854.8	843.6
40°	1354.7	1350.2	1342.2	1125.1	970.3	879.8	876.3	888.9	906.8	900.1	893.4
42.5°	1502.9	1500.6	1508.6	1280.2	1102.6	962.4	952.2	937.4	963.4	961.1	961.1
45°	1619.4	1625.0	1629.5	1424.8	1246.2	1068.7	1056.1	1006.5	1041.5	1050.6	1057.3
47.5°	1685.0	1689.4	1705.3	1566.3	1389.8	1192.0	1182.9	1101.4	1147.8	1175.0	1194.1
50°	1778.9	1766.3	1779.9	1704.2	1562.8	1352.5	1327.5	1229.2	1288.0	1335.5	1380.8
52.5°	1869.3	1848.9	1860.2	1863.7	1759.6	1509.6	1483.6	1379.5	1453.1	1527.7	1608.1
55°	1950.7	1949.5	1960.9	2018.5	1949.5	1678.2	1648.7	1545.9	1652.2	1732.4	1868.1
57.5°	2016.2	2027.6	2077.3	2198.3	2169.0	1861.4	1828.6	1739.2	1864.7	1945.0	2170.0
60°	2093.2	2111.2	2193.8	2351.0	2369.1	2053.5	2019.7	1955.3	2083.0	2164.3	2519.4
62.5°	2119.2	2145.2	2314.8	2511.7	2578.2	2263.9	2233.4	2190.3	2312.5	2386.1	2867.7
65°	1946.2	1995.9	2381.5	2594.1	2803.3	2517.2	2491.2	2453.9	2540.9	2589.6	3104.2
67.5°	1898.7	1921.3	2251.5	2712.8	3014.8	2842.9	2816.8	2752.4	2754.7	2734.4	3181.0
70°	1832.0	1856.8	2118.1	2802.3	3317.9	3288.4	3256.7	3066.9	2950.4	2827.1	3029.5
72.5°	1560.5	1552.6	1825.1	2561.3	3463.8	3840.3	3803.0	3404.9	3095.1	2746.7	2556.8
75°	876.3	853.7	1107.2	1771.9	3162.9	4059.7	4058.5	3575.7	2993.3	2392.8	1740.3
77.5°	254.4	247.7	365.3	743.0	2129.3	3527.0	3570.0	3225.2	2497.9	1718.8	955.5
80°	119.8	122.1	157.3	245.3	909.2	2276.3	2399.6	2123.8	1492.8	792.8	394.6
82.5°	75.7	76.8	107.4	158.3	384.5	1033.6	1135.4	955.5	591.4	342.7	174.1
85°	47.5	47.5	71.2	104.1	229.5	330.1	358.5	325.6	253.3	186.6	95.0
87.5°	26.1	26.1	42.9	59.9	125.6	106.3	109.8	130.1	158.3	114.3	47.5
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: P265911

CATALOG NUMBER: ARCH-AF16-60-D-U-T4W-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9	595.9
2.5°	594.8	592.5	589.2	588.0	587.0	585.8	587.0	589.2	587.0	587.0	588.0
5°	591.4	589.2	584.6	584.6	585.8	587.0	592.5	595.9	597.1	597.1	597.1
7.5°	591.4	588.0	584.6	585.8	588.0	592.5	601.7	607.3	611.7	613.0	613.0
10°	597.1	592.5	590.2	592.5	599.3	602.8	611.7	620.8	626.5	628.8	628.8
12.5°	607.3	602.8	602.8	607.3	616.2	620.8	628.8	635.6	642.3	645.7	645.7
15°	624.2	618.6	619.7	627.6	637.7	642.3	647.9	650.3	655.9	660.4	660.4
17.5°	640.0	634.5	636.7	645.7	652.4	654.8	658.2	657.0	659.3	662.7	663.8
20°	658.2	652.4	653.6	659.3	660.4	658.2	658.2	654.8	653.6	659.3	661.5
22.5°	676.2	670.6	669.4	666.1	660.4	654.8	651.4	647.9	645.7	651.4	653.6
25°	697.8	689.8	684.1	669.4	654.8	644.5	640.0	637.7	636.7	642.3	644.5
27.5°	721.5	713.6	696.5	664.9	641.2	624.2	620.8	620.8	623.1	626.5	628.8
30°	744.1	736.3	705.7	654.8	617.5	592.5	589.2	592.5	598.2	601.7	605.0
32.5°	766.8	758.8	711.3	639.0	582.5	550.8	548.4	554.2	563.1	565.5	567.6
35°	797.2	789.3	718.0	616.2	538.3	504.4	502.2	505.4	513.4	516.7	520.2
37.5°	840.3	835.8	728.3	591.4	497.7	460.2	453.5	451.2	455.7	454.6	459.2
40°	896.8	900.1	746.3	558.7	458.0	419.6	404.9	398.0	393.5	384.5	389.0
42.5°	979.3	981.6	766.8	521.2	424.1	381.2	361.8	349.4	340.4	325.6	327.9
45°	1100.3	1081.1	790.5	481.8	393.5	350.6	327.9	313.2	300.8	288.4	289.6
47.5°	1261.0	1202.1	816.5	449.0	362.9	325.6	305.3	288.4	273.7	263.6	264.6
50°	1458.8	1352.5	842.5	418.4	332.5	306.4	288.4	270.3	255.6	245.3	244.2
52.5°	1720.0	1533.3	859.4	384.5	301.9	289.6	273.7	256.6	238.6	226.2	225.0
55°	1991.5	1743.7	874.1	343.8	272.5	270.3	262.3	243.1	221.6	205.8	203.6
57.5°	2289.9	1968.7	885.4	304.2	249.9	254.4	252.2	229.5	205.8	191.1	190.0
60°	2561.3	2201.7	849.3	269.1	229.5	238.6	240.8	221.6	209.2	212.5	213.7
62.5°	2835.1	2381.5	711.3	243.1	216.0	228.3	247.7	246.6	240.8	246.6	247.7
65°	2933.3	2418.9	504.4	221.6	202.4	232.9	269.1	266.8	240.8	230.7	228.3
67.5°	2878.0	2308.0	339.2	204.6	192.2	238.6	291.8	266.8	231.9	218.3	213.7
70°	2614.4	2035.5	248.8	187.7	183.3	237.5	304.2	265.8	227.4	212.5	206.9
72.5°	2085.2	1570.7	200.1	171.8	169.6	231.9	311.0	263.6	222.8	206.9	200.1
75°	1350.2	977.0	168.5	156.0	149.3	222.8	307.6	256.6	217.1	196.8	192.2
77.5°	626.5	420.6	143.5	138.0	130.1	209.2	297.3	243.1	204.6	185.5	179.8
80°	291.8	199.1	121.0	119.8	116.5	197.8	283.9	227.4	190.0	174.1	165.1
82.5°	156.0	119.8	98.4	98.4	101.8	184.3	266.8	208.0	170.8	162.9	139.1
85°	82.6	69.0	71.2	76.8	87.0	162.9	244.2	187.7	149.3	124.3	121.0
87.5°	41.9	44.0	44.0	52.0	66.7	132.3	201.3	154.9	126.7	101.8	99.5
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)