

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: P214885

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214885
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-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 7554 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - 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

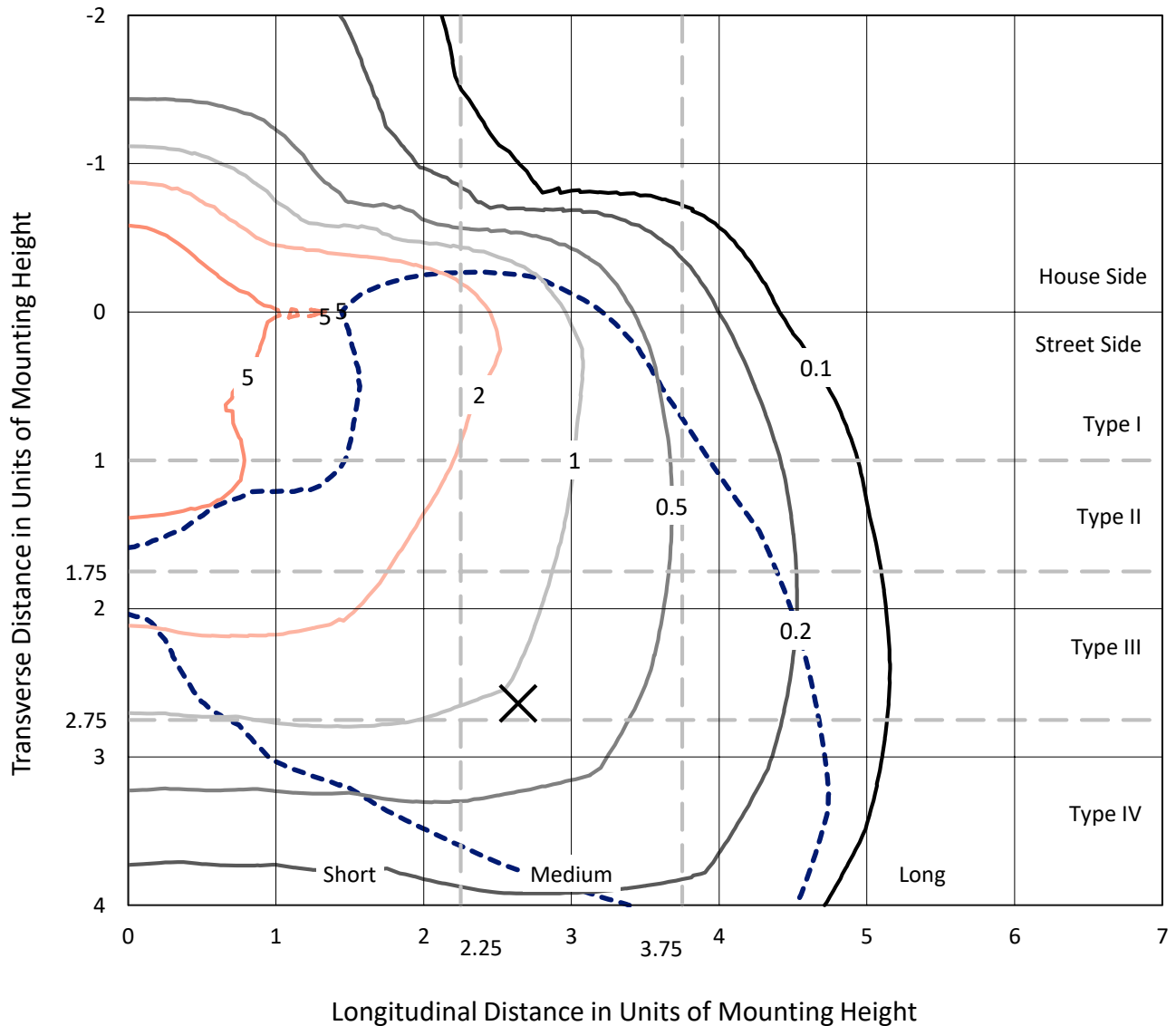


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

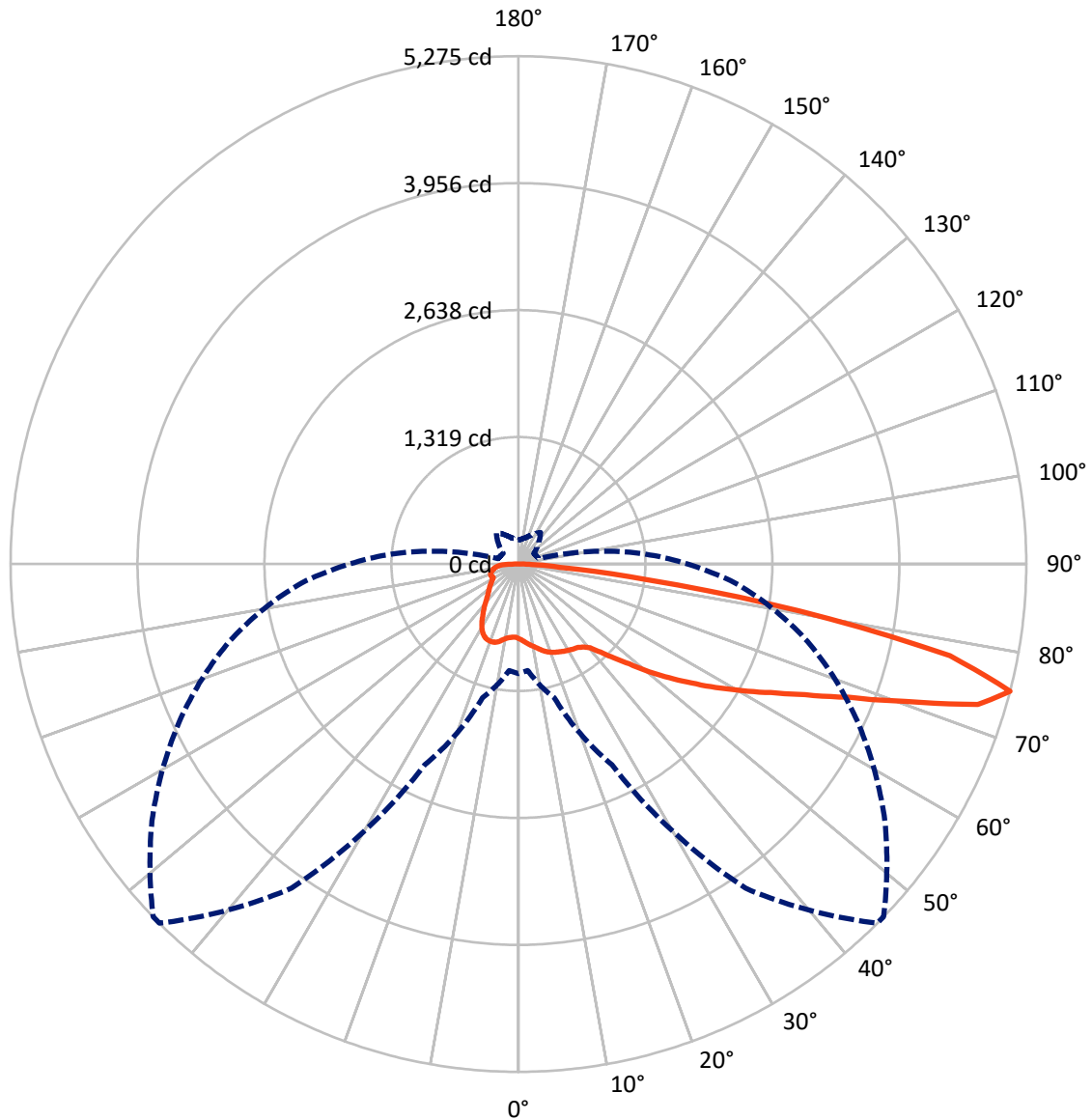


Based on 10 foot mounting height. Maximum calculated value = 9.1 fc
 Type IV - Medium - Non-Cutoff

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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
House Side	Lumens	1749.9	0.0	1749.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5804.0	0.0	5804.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	7554.0	0.0	7554.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	1.0
10°-20°	248.7	3.3
20°-30°	426.8	5.6
30°-40°	596.9	7.9
40°-50°	875.5	11.6
50°-60°	1363.8	18.1
60°-70°	1962.5	26.0
70°-80°	1709.5	22.6
80°-90°	293.6	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°	7554.0	100.0
0°-180°	7554.0	100.0

Coefficient of Utilization



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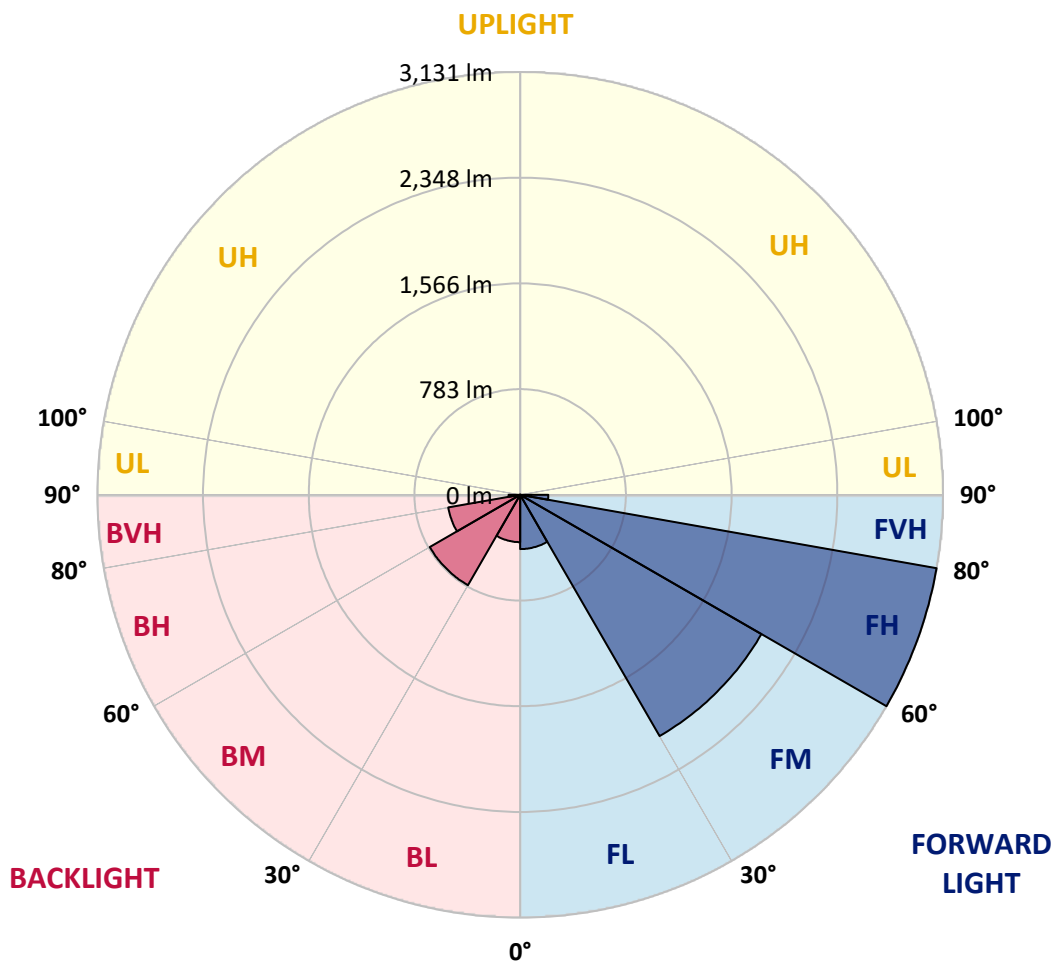
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	401.7	5.3			
FM	(30°-60°)	2062.8	27.3			
FH	(60°-80°)	3131.2	41.5			G2/5000
FVH	(80°-90°)	208.3	2.8			G2/225
BL	(0°-30°)	350.5	4.6	B1/500		
BM	(30°-60°)	773.4	10.2	B1/1000		
BH	(60°-80°)	540.8	7.2	B2/1000		G2/1000
BVH	(80°-90°)	85.3	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4
2.5°	812.6	806.7	806.7	802.3	802.3	795.0	792.0	790.6	783.2	778.8	774.4
5°	859.6	852.3	850.8	840.5	836.1	819.9	818.5	808.2	795.0	781.7	771.5
7.5°	902.2	897.8	890.5	880.2	867.0	846.4	844.9	828.8	806.7	789.1	774.4
10°	933.1	930.2	919.9	906.6	891.9	871.4	869.9	852.3	825.8	805.3	784.7
12.5°	969.8	965.4	952.2	934.6	918.4	899.3	897.8	883.1	853.7	827.3	800.8
15°	1005.1	999.2	983.1	965.4	947.8	931.6	931.6	915.5	884.6	853.7	822.9
17.5°	1022.7	1019.8	1003.6	984.5	969.8	958.1	956.6	941.9	911.0	878.7	844.9
20°	1028.6	1030.1	1015.4	994.8	984.5	978.6	977.2	966.9	933.1	902.2	869.9
22.5°	1027.1	1031.5	1019.8	997.7	994.8	994.8	994.8	983.1	956.6	925.7	893.4
25°	1033.0	1038.9	1030.1	1003.6	1003.6	1009.5	1009.5	1003.6	980.1	953.7	921.3
27.5°	1053.6	1058.0	1050.6	1013.9	1015.4	1024.2	1022.7	1024.2	1009.5	984.5	952.2
30°	1078.6	1084.4	1075.6	1030.1	1028.6	1037.4	1037.4	1044.8	1034.5	1008.0	981.6
32.5°	1146.2	1144.7	1116.8	1047.7	1043.3	1052.1	1052.1	1059.5	1053.6	1033.0	1008.0
35°	1347.5	1325.4	1263.7	1105.0	1060.9	1065.3	1065.3	1078.6	1081.5	1065.3	1043.3
37.5°	1553.2	1545.8	1498.8	1257.8	1125.6	1093.3	1091.8	1110.9	1124.1	1110.9	1096.2
40°	1760.4	1754.5	1744.2	1462.1	1260.8	1143.2	1138.8	1155.0	1178.5	1169.7	1160.9
42.5°	1952.9	1949.9	1960.2	1663.4	1432.7	1250.5	1237.3	1218.2	1252.0	1249.0	1249.0
45°	2104.2	2111.6	2117.5	1851.5	1619.3	1388.6	1372.5	1307.8	1353.3	1365.1	1373.9
47.5°	2189.5	2195.3	2215.9	2035.2	1805.9	1548.8	1537.0	1431.2	1491.5	1526.7	1551.7
50°	2311.4	2295.3	2312.9	2214.4	2030.8	1757.4	1725.1	1597.3	1673.7	1735.4	1794.2
52.5°	2429.0	2402.5	2417.2	2421.6	2286.4	1961.7	1927.9	1792.7	1888.2	1985.2	2089.5
55°	2534.8	2533.3	2548.0	2622.9	2533.3	2180.6	2142.4	2008.7	2146.8	2251.2	2427.5
57.5°	2620.0	2634.7	2699.4	2856.6	2818.4	2418.7	2376.1	2260.0	2423.1	2527.4	2819.8
60°	2719.9	2743.4	2850.7	3055.0	3078.5	2668.5	2624.4	2540.7	2706.7	2812.5	3273.9
62.5°	2753.7	2787.5	3007.9	3263.6	3350.3	2941.8	2902.1	2846.3	3005.0	3100.5	3726.5
65°	2528.9	2593.6	3094.6	3370.9	3642.7	3271.0	3237.2	3188.7	3301.8	3365.0	4033.6
67.5°	2467.2	2496.6	2925.6	3525.2	3917.5	3694.2	3660.4	3576.6	3579.5	3553.1	4133.5
70°	2380.5	2412.8	2752.3	3641.3	4311.3	4273.1	4232.0	3985.1	3833.8	3673.6	3936.6
72.5°	2027.8	2017.5	2371.7	3328.3	4500.9	4990.2	4941.7	4424.5	4021.8	3569.3	3322.4
75°	1138.8	1109.4	1438.6	2302.6	4110.0	5275.3	5273.8	4646.4	3889.6	3109.3	2261.5
77.5°	330.6	321.8	474.6	965.4	2766.9	4583.2	4639.0	4190.8	3246.0	2233.5	1241.7
80°	155.8	158.7	204.3	318.9	1181.4	2958.0	3118.1	2759.6	1939.7	1030.1	512.8
82.5°	98.5	99.9	139.6	205.7	499.6	1343.1	1475.3	1241.7	768.5	445.2	226.3
85°	61.7	61.7	92.6	135.2	298.3	429.1	465.8	423.2	329.2	242.5	123.4
87.5°	33.8	33.8	55.8	77.9	163.1	138.1	142.5	169.0	205.7	148.4	61.7
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°	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4	774.4
2.5°	772.9	770.0	765.6	764.1	762.6	761.2	762.6	765.6	762.6	762.6	764.1
5°	768.5	765.6	759.7	759.7	761.2	762.6	770.0	774.4	775.9	775.9	775.9
7.5°	768.5	764.1	759.7	761.2	764.1	770.0	781.7	789.1	795.0	796.4	796.4
10°	775.9	770.0	767.0	770.0	778.8	783.2	795.0	806.7	814.1	817.0	817.0
12.5°	789.1	783.2	783.2	789.1	800.8	806.7	817.0	825.8	834.6	839.0	839.0
15°	811.1	803.8	805.3	815.5	828.8	834.6	842.0	844.9	852.3	858.1	858.1
17.5°	831.7	824.4	827.3	839.0	847.9	850.8	855.2	853.7	856.7	861.1	862.6
20°	855.2	847.9	849.3	856.7	858.1	855.2	855.2	850.8	849.3	856.7	859.6
22.5°	878.7	871.4	869.9	865.5	858.1	850.8	846.4	842.0	839.0	846.4	849.3
25°	906.6	896.4	889.0	869.9	850.8	837.6	831.7	828.8	827.3	834.6	837.6
27.5°	937.5	927.2	905.2	864.0	833.2	811.1	806.7	806.7	809.7	814.1	817.0
30°	966.9	956.6	916.9	850.8	802.3	770.0	765.6	770.0	777.3	781.7	786.1
32.5°	996.3	986.0	924.3	830.2	756.8	715.6	712.7	720.0	731.8	734.7	737.7
35°	1036.0	1025.7	933.1	800.8	699.5	655.4	652.4	656.8	667.1	671.5	675.9
37.5°	1091.8	1085.9	946.3	768.5	646.6	598.1	589.2	586.3	592.2	590.7	596.6
40°	1165.3	1169.7	969.8	725.9	595.1	545.2	526.1	517.2	511.4	499.6	505.5
42.5°	1272.5	1275.5	996.3	677.4	551.0	495.2	470.2	454.1	442.3	423.2	426.1
45°	1429.8	1404.8	1027.1	626.0	511.4	455.5	426.1	407.0	390.9	374.7	376.2
47.5°	1638.4	1562.0	1060.9	583.4	471.7	423.2	396.7	374.7	355.6	342.4	343.8
50°	1895.6	1757.4	1094.7	543.7	432.0	398.2	374.7	351.2	332.1	318.9	317.4
52.5°	2235.0	1992.6	1116.8	499.6	392.3	376.2	355.6	333.6	310.1	293.9	292.4
55°	2587.7	2265.9	1135.9	446.7	354.1	351.2	340.9	315.9	288.0	267.4	264.5
57.5°	2975.6	2558.3	1150.6	395.3	324.7	330.6	327.7	298.3	267.4	248.3	246.9
60°	3328.3	2861.0	1103.5	349.7	298.3	310.1	313.0	288.0	271.8	276.3	277.7
62.5°	3683.9	3094.6	924.3	315.9	280.7	296.8	321.8	320.3	313.0	320.3	321.8
65°	3811.7	3143.1	655.4	288.0	263.0	302.7	349.7	346.8	313.0	299.8	296.8
67.5°	3739.7	2999.1	440.8	266.0	249.8	310.1	379.1	346.8	301.2	283.6	277.7
70°	3397.3	2645.0	323.3	243.9	238.0	308.6	395.3	345.3	295.4	276.3	268.9
72.5°	2709.6	2041.0	260.1	223.4	220.4	301.2	404.1	342.4	289.5	268.9	260.1
75°	1754.5	1269.6	218.9	202.8	194.0	289.5	399.7	333.6	282.1	255.7	249.8
77.5°	814.1	546.6	186.6	179.3	169.0	271.8	386.5	315.9	266.0	241.0	233.6
80°	379.1	258.6	157.2	155.8	151.4	257.2	368.8	295.4	246.9	226.3	214.5
82.5°	202.8	155.8	127.8	127.8	132.2	239.5	346.8	270.4	221.9	211.6	180.7
85°	107.3	89.6	92.6	99.9	113.1	211.6	317.4	243.9	194.0	161.6	157.2
87.5°	54.4	57.3	57.3	67.6	86.7	171.9	261.6	201.3	164.6	132.2	129.3
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)