

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: P214884

Luminaire Tested: **ARCH-AF24-50-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214884
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-AF24-50-D-U-T4W-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6580 lumens
Efficiency: N/A
Efficacy: 121.9 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): 54
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

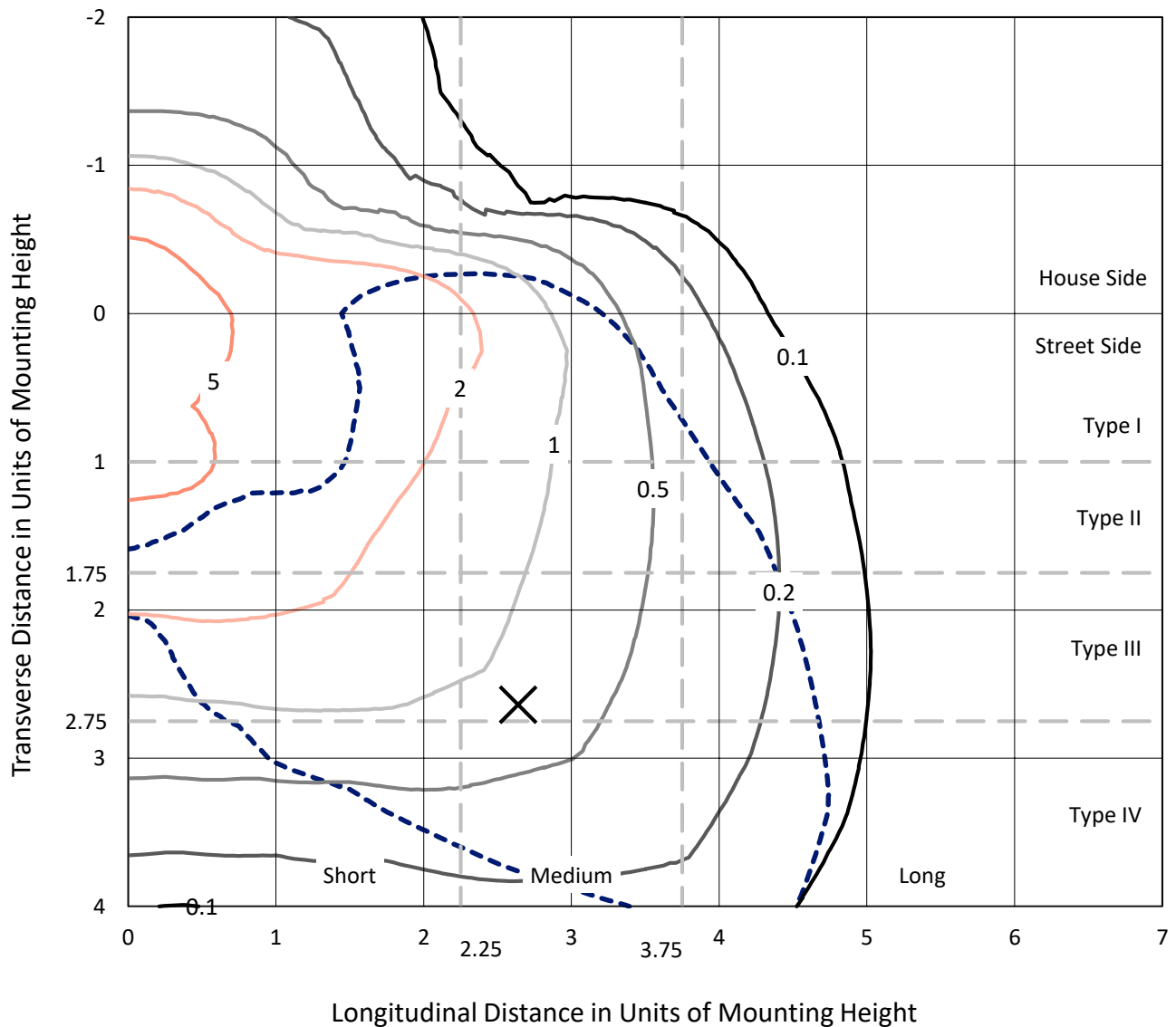


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

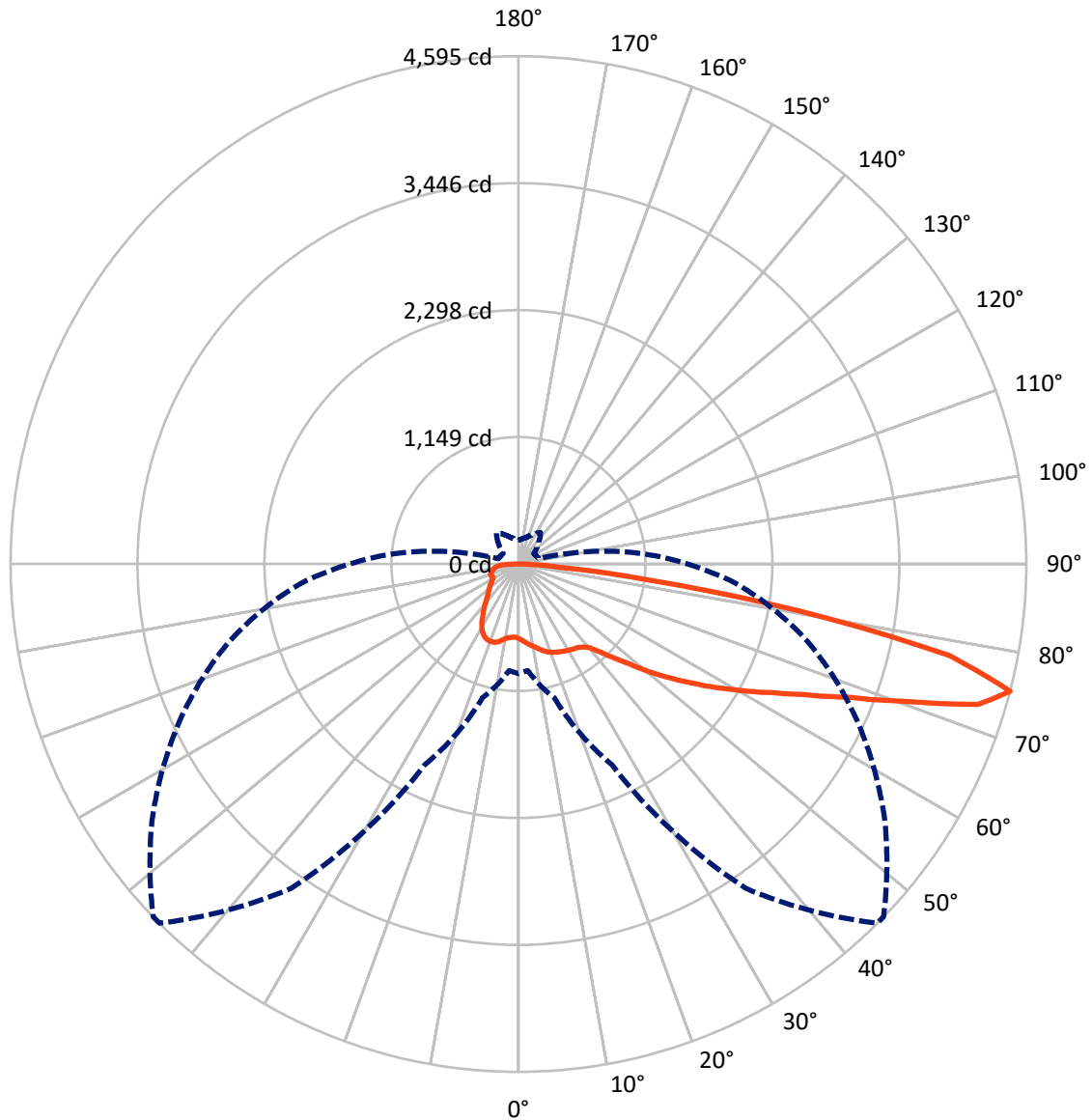


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type IV - Medium - Non-Cutoff

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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	1524.3	0.0	1524.3
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5055.7	0.0	5055.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	6580.0	0.0	6580.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	1.0
10°-20°	216.6	3.3
20°-30°	371.7	5.6
30°-40°	519.9	7.9
40°-50°	762.6	11.6
50°-60°	1188.0	18.1
60°-70°	1709.4	26.0
70°-80°	1489.1	22.6
80°-90°	255.7	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°	6580.0	100.0
0°-180°	6580.0	100.0



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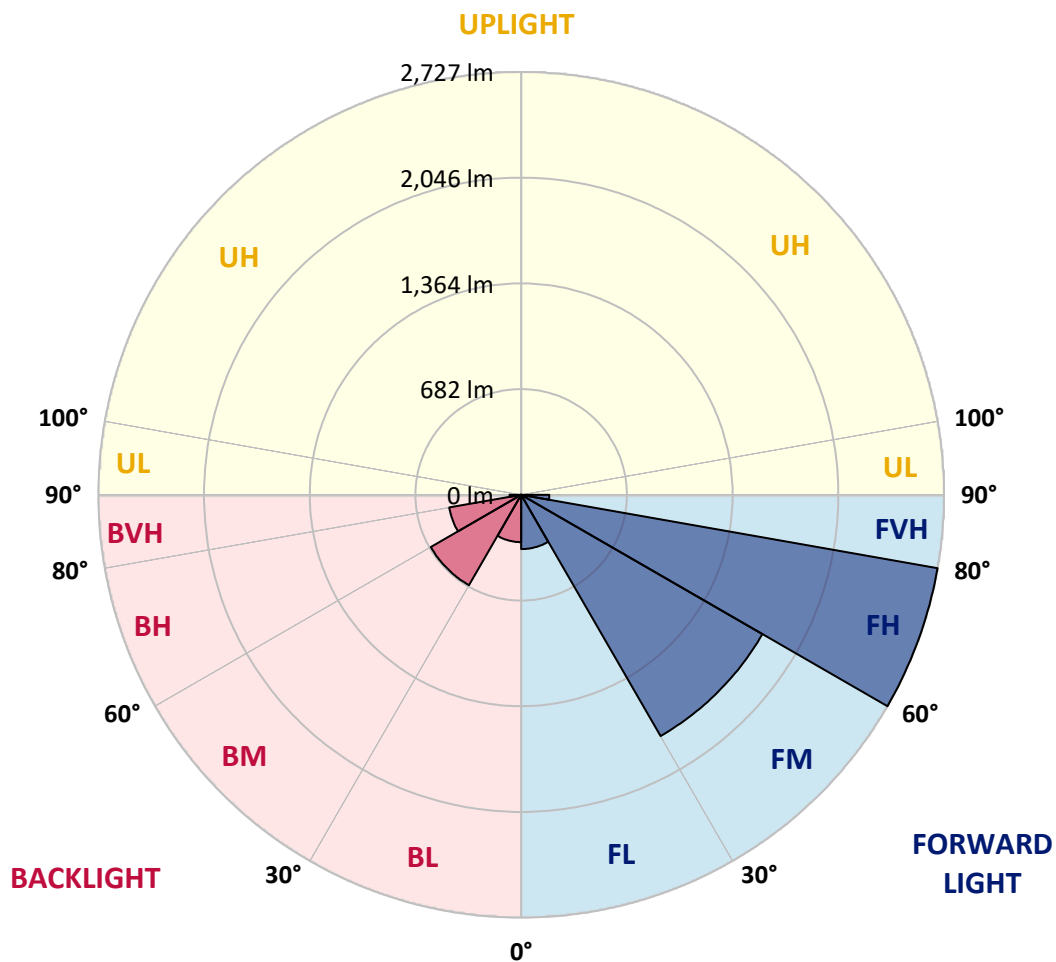
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	349.9	5.3			
FM	(30°-60°)	1796.9	27.3			
FH	(60°-80°)	2727.5	41.5			G2/5000
FVH	(80°-90°)	181.4	2.8			G2/225
BL	(0°-30°)	305.3	4.6	B1/500		
BM	(30°-60°)	673.7	10.2	B1/1000		
BH	(60°-80°)	471.1	7.2	B1/500		G1/500
BVH	(80°-90°)	74.3	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5
2.5°	707.8	702.7	702.7	698.9	698.9	692.5	689.9	688.6	682.2	678.4	674.5
5°	748.8	742.4	741.1	732.1	728.3	714.2	712.9	704.0	692.5	680.9	672.0
7.5°	785.9	782.1	775.7	766.7	755.2	737.3	736.0	721.9	702.7	687.3	674.5
10°	812.8	810.2	801.3	789.7	776.9	759.0	757.7	742.4	719.3	701.4	683.5
12.5°	844.8	840.9	829.4	814.1	800.0	783.3	782.1	769.3	743.7	720.6	697.6
15°	875.5	870.4	856.3	840.9	825.6	811.5	811.5	797.4	770.5	743.7	716.8
17.5°	890.9	888.3	874.2	857.6	844.8	834.5	833.3	820.5	793.6	765.4	736.0
20°	896.0	897.3	884.5	866.5	857.6	852.5	851.2	842.2	812.8	785.9	757.7
22.5°	894.7	898.5	888.3	869.1	866.5	866.5	866.5	856.3	833.3	806.4	778.2
25°	899.8	904.9	897.3	874.2	874.2	879.3	879.3	874.2	853.7	830.7	802.5
27.5°	917.7	921.6	915.2	883.2	884.5	892.1	890.9	892.1	879.3	857.6	829.4
30°	939.5	944.6	936.9	897.3	896.0	903.7	903.7	910.1	901.1	878.1	855.0
32.5°	998.4	997.1	972.8	912.6	908.8	916.5	916.5	922.9	917.7	899.8	878.1
35°	1173.7	1154.5	1100.8	962.5	924.1	928.0	928.0	939.5	942.1	928.0	908.8
37.5°	1352.9	1346.5	1305.6	1095.7	980.5	952.3	951.0	967.7	979.2	967.7	954.9
40°	1533.4	1528.3	1519.3	1273.6	1098.2	995.8	992.0	1006.1	1026.5	1018.9	1011.2
42.5°	1701.1	1698.5	1707.5	1448.9	1248.0	1089.3	1077.7	1061.1	1090.5	1088.0	1088.0
45°	1832.9	1839.3	1844.4	1612.8	1410.5	1209.6	1195.5	1139.2	1178.9	1189.1	1196.8
47.5°	1907.2	1912.3	1930.2	1772.8	1573.1	1349.1	1338.8	1246.7	1299.2	1329.9	1351.6
50°	2013.4	1999.3	2014.7	1928.9	1768.9	1530.8	1502.7	1391.3	1457.9	1511.6	1562.8
52.5°	2115.8	2092.7	2105.5	2109.4	1991.6	1708.8	1679.3	1561.6	1644.8	1729.2	1820.1
55°	2207.9	2206.7	2219.5	2284.7	2206.7	1899.5	1866.2	1749.7	1870.0	1960.9	2114.5
57.5°	2282.2	2295.0	2351.3	2488.3	2455.0	2106.8	2069.7	1968.6	2110.7	2201.5	2456.3
60°	2369.2	2389.7	2483.1	2661.1	2681.5	2324.4	2286.0	2213.1	2357.7	2449.9	2851.8
62.5°	2398.7	2428.1	2620.1	2842.8	2918.3	2562.5	2527.9	2479.3	2617.5	2700.7	3246.0
65°	2202.8	2259.1	2695.6	2936.2	3173.0	2849.2	2819.8	2777.5	2876.1	2931.1	3513.5
67.5°	2149.1	2174.7	2548.4	3070.6	3412.4	3217.8	3188.4	3115.4	3118.0	3095.0	3600.6
70°	2073.5	2101.7	2397.4	3171.8	3755.4	3722.1	3686.3	3471.3	3339.4	3199.9	3429.0
72.5°	1766.4	1757.4	2065.9	2899.1	3920.5	4346.8	4304.5	3854.0	3503.3	3109.0	2894.0
75°	992.0	966.4	1253.1	2005.7	3580.1	4595.1	4593.8	4047.3	3388.1	2708.4	1969.9
77.5°	288.0	280.3	413.4	840.9	2410.2	3992.2	4040.9	3650.5	2827.5	1945.6	1081.6
80°	135.7	138.2	177.9	277.8	1029.1	2576.6	2716.1	2403.8	1689.6	897.3	446.7
82.5°	85.8	87.0	121.6	179.2	435.2	1169.9	1285.1	1081.6	669.4	387.8	197.1
85°	53.8	53.8	80.6	117.8	259.8	373.8	405.7	368.6	286.7	211.2	107.5
87.5°	29.4	29.4	48.6	67.8	142.1	120.3	124.2	147.2	179.2	129.3	53.8
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°	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5
2.5°	673.3	670.7	666.9	665.6	664.3	663.0	664.3	666.9	664.3	664.3	665.6
5°	669.4	666.9	661.7	661.7	663.0	664.3	670.7	674.5	675.8	675.8	675.8
7.5°	669.4	665.6	661.7	663.0	665.6	670.7	680.9	687.3	692.5	693.7	693.7
10°	675.8	670.7	668.1	670.7	678.4	682.2	692.5	702.7	709.1	711.7	711.7
12.5°	687.3	682.2	682.2	687.3	697.6	702.7	711.7	719.3	727.0	730.9	730.9
15°	706.5	700.1	701.4	710.4	721.9	727.0	733.4	736.0	742.4	747.5	747.5
17.5°	724.5	718.1	720.6	730.9	738.5	741.1	744.9	743.7	746.2	750.1	751.3
20°	744.9	738.5	739.8	746.2	747.5	744.9	744.9	741.1	739.8	746.2	748.8
22.5°	765.4	759.0	757.7	753.9	747.5	741.1	737.3	733.4	730.9	737.3	739.8
25°	789.7	780.8	774.4	757.7	741.1	729.6	724.5	721.9	720.6	727.0	729.6
27.5°	816.6	807.7	788.5	752.6	725.7	706.5	702.7	702.7	705.3	709.1	711.7
30°	842.2	833.3	798.7	741.1	698.9	670.7	666.9	670.7	677.1	680.9	684.8
32.5°	867.8	858.9	805.1	723.2	659.2	623.3	620.8	627.2	637.4	640.0	642.5
35°	902.4	893.4	812.8	697.6	609.3	570.9	568.3	572.1	581.1	584.9	588.8
37.5°	951.0	945.9	824.3	669.4	563.2	520.9	513.3	510.7	515.8	514.5	519.7
40°	1015.0	1018.9	844.8	632.3	518.4	474.9	458.2	450.5	445.4	435.2	440.3
42.5°	1108.5	1111.0	867.8	590.1	480.0	431.3	409.6	395.5	385.3	368.6	371.2
45°	1245.4	1223.6	894.7	545.3	445.4	396.8	371.2	354.6	340.5	326.4	327.7
47.5°	1427.2	1360.6	924.1	508.1	410.9	368.6	345.6	326.4	309.8	298.2	299.5
50°	1651.2	1530.8	953.6	473.6	376.3	346.9	326.4	305.9	289.3	277.8	276.5
52.5°	1946.8	1735.6	972.8	435.2	341.8	327.7	309.8	290.6	270.1	256.0	254.7
55°	2254.0	1973.7	989.4	389.1	308.5	305.9	297.0	275.2	250.9	233.0	230.4
57.5°	2591.9	2228.4	1002.2	344.3	282.9	288.0	285.4	259.8	233.0	216.3	215.0
60°	2899.1	2492.1	961.3	304.6	259.8	270.1	272.6	250.9	236.8	240.6	241.9
62.5°	3208.9	2695.6	805.1	275.2	244.5	258.6	280.3	279.0	272.6	279.0	280.3
65°	3320.2	2737.9	570.9	250.9	229.1	263.7	304.6	302.1	272.6	261.1	258.6
67.5°	3257.5	2612.4	384.0	231.7	217.6	270.1	330.2	302.1	262.4	247.0	241.9
70°	2959.3	2303.9	281.6	212.5	207.4	268.8	344.3	300.8	257.3	240.6	234.2
72.5°	2360.3	1777.9	226.6	194.6	192.0	262.4	352.0	298.2	252.2	234.2	226.6
75°	1528.3	1105.9	190.7	176.6	169.0	252.2	348.2	290.6	245.8	222.7	217.6
77.5°	709.1	476.1	162.6	156.2	147.2	236.8	336.6	275.2	231.7	209.9	203.5
80°	330.2	225.3	137.0	135.7	131.8	224.0	321.3	257.3	215.0	197.1	186.9
82.5°	176.6	135.7	111.4	111.4	115.2	208.6	302.1	235.5	193.3	184.3	157.4
85°	93.4	78.1	80.6	87.0	98.6	184.3	276.5	212.5	169.0	140.8	137.0
87.5°	47.4	49.9	49.9	58.9	75.5	149.8	227.8	175.4	143.4	115.2	112.6
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)