

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: P265983

Luminaire Tested: **ARCH-AF24-90-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265983
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-AF24-90-D-U-T4W-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8474.1 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): 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

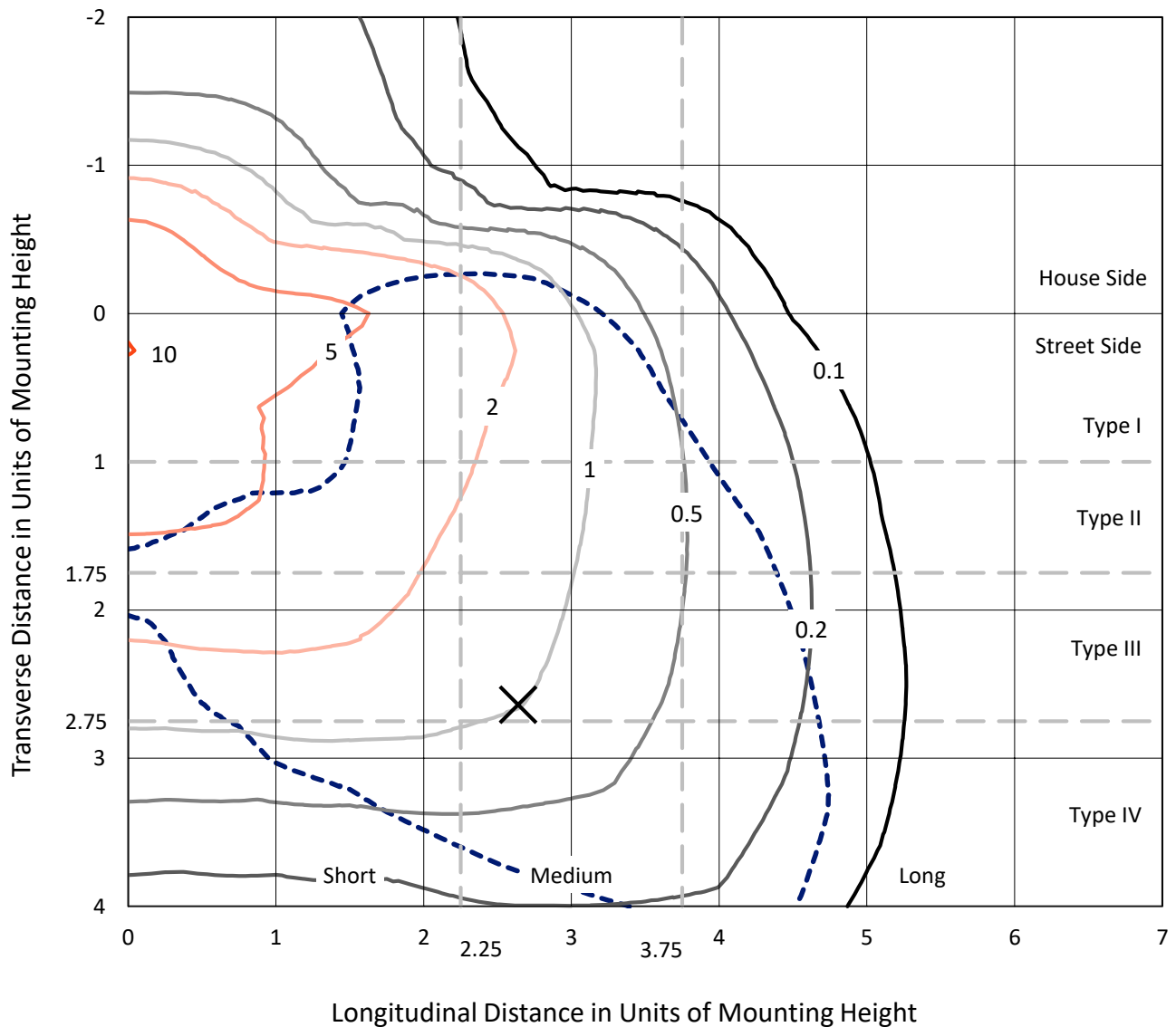


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

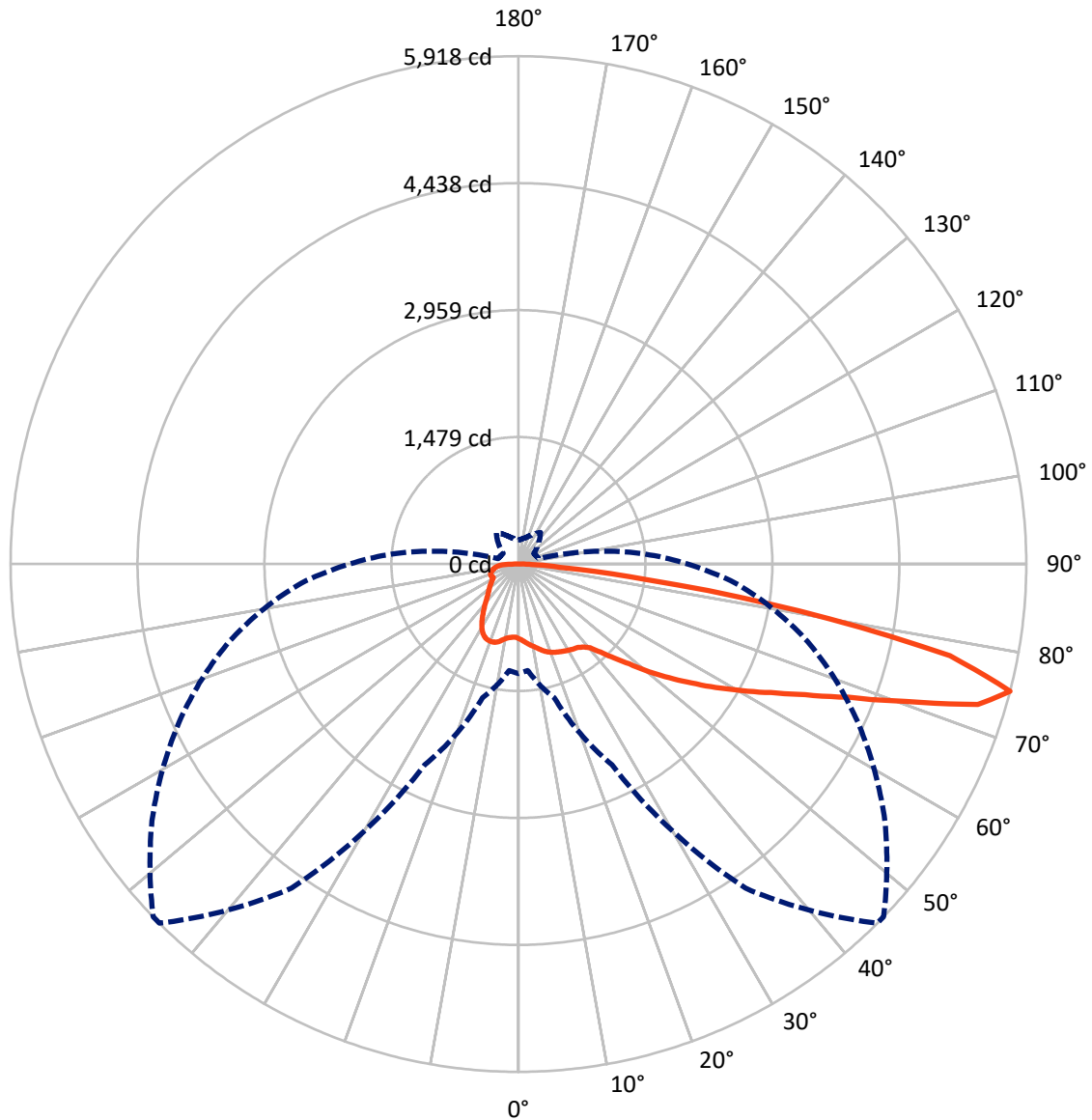


Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type IV - Medium - Non-Cutoff

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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	1963.1	0.0	1963.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	6511.0	0.0	6511.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	8474.1	0.0	8474.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	1.0
10°-20°	279.0	3.3
20°-30°	478.7	5.6
30°-40°	669.6	7.9
40°-50°	982.2	11.6
50°-60°	1530.0	18.1
60°-70°	2201.5	26.0
70°-80°	1917.7	22.6
80°-90°	329.4	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°	8474.1	100.0
0°-180°	8474.1	100.0

Coefficient of Utilization



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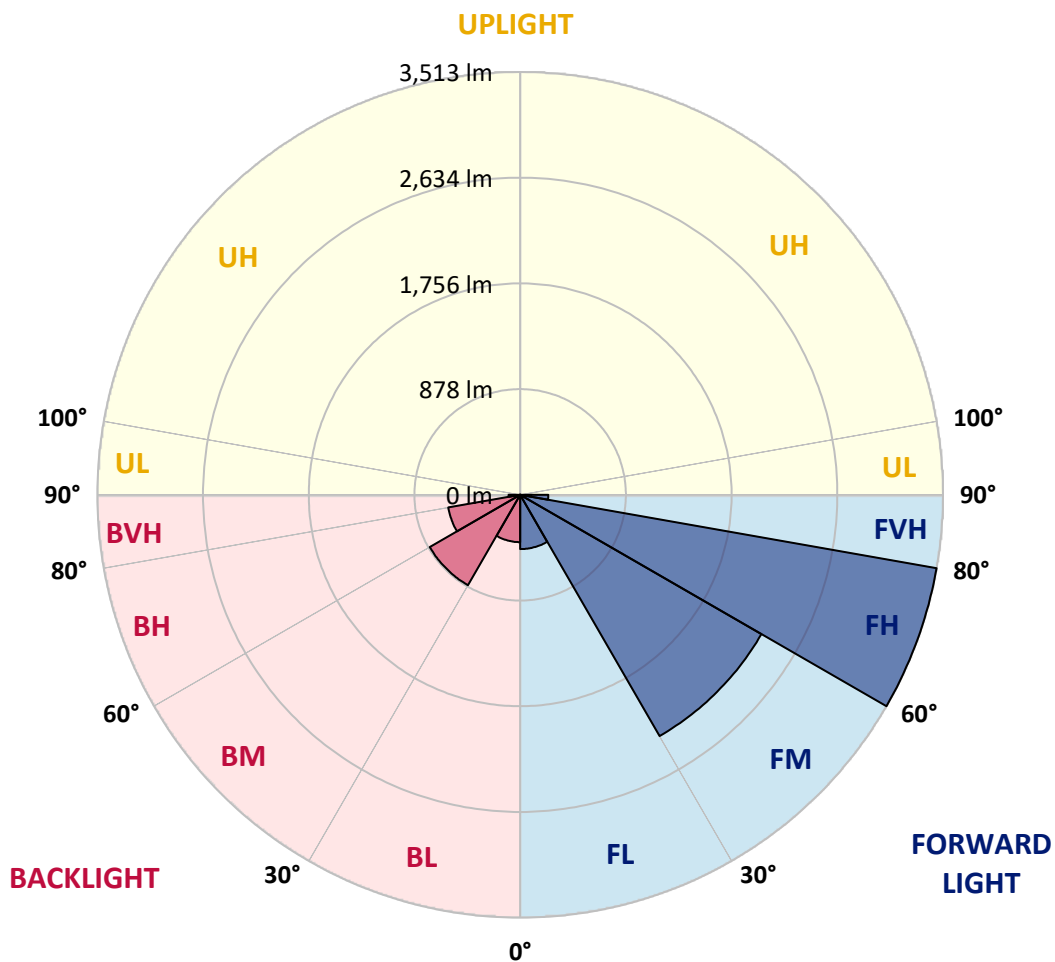
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	450.6	5.3			
FM	(30°-60°)	2314.1	27.3			
FH	(60°-80°)	3512.6	41.5			G2/5000
FVH	(80°-90°)	233.7	2.8			G3/500
BL	(0°-30°)	393.2	4.6	B1/500		
BM	(30°-60°)	867.6	10.2	B1/1000		
BH	(60°-80°)	606.7	7.2	B2/1000		G2/1000
BVH	(80°-90°)	95.7	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8
2.5°	911.6	905.0	905.0	900.0	900.0	891.7	888.6	886.8	878.6	873.6	868.8
5°	964.3	956.1	954.4	943.0	937.9	919.9	918.2	906.6	891.7	876.9	865.3
7.5°	1012.1	1007.2	998.9	987.3	972.5	949.5	947.8	929.7	905.0	885.2	868.8
10°	1046.7	1043.4	1032.0	1017.2	1000.6	977.5	975.9	956.1	926.4	903.3	880.2
12.5°	1087.9	1082.9	1068.2	1048.4	1030.3	1008.8	1007.2	990.7	957.8	928.0	898.3
15°	1127.6	1120.9	1102.8	1082.9	1063.2	1045.1	1045.1	1026.9	992.4	957.8	923.1
17.5°	1147.2	1144.0	1125.8	1104.5	1087.9	1074.7	1073.1	1056.6	1022.0	985.8	947.8
20°	1154.0	1155.5	1139.1	1116.0	1104.5	1097.9	1096.2	1084.7	1046.7	1012.1	975.9
22.5°	1152.3	1157.1	1144.0	1119.3	1116.0	1116.0	1116.0	1102.8	1073.1	1038.5	1002.1
25°	1158.9	1165.5	1155.5	1125.8	1125.8	1132.5	1132.5	1125.8	1099.4	1069.8	1033.6
27.5°	1181.9	1186.9	1178.7	1137.4	1139.1	1148.9	1147.2	1148.9	1132.5	1104.5	1068.2
30°	1209.9	1216.6	1206.7	1155.5	1154.0	1163.8	1163.8	1172.0	1160.5	1130.8	1101.1
32.5°	1285.7	1284.0	1252.7	1175.3	1170.4	1180.3	1180.3	1188.5	1181.9	1158.9	1130.8
35°	1511.6	1486.9	1417.6	1239.7	1190.2	1195.1	1195.1	1209.9	1213.3	1195.1	1170.4
37.5°	1742.4	1734.2	1681.4	1411.1	1262.7	1226.5	1224.7	1246.2	1261.0	1246.2	1229.7
40°	1974.8	1968.1	1956.7	1640.1	1414.3	1282.5	1277.5	1295.6	1322.0	1312.2	1302.3
42.5°	2190.7	2187.5	2199.1	1866.0	1607.2	1402.9	1388.1	1366.5	1404.5	1401.1	1401.1
45°	2360.6	2368.8	2375.4	2077.1	1816.6	1557.8	1539.7	1467.1	1518.1	1531.4	1541.3
47.5°	2456.1	2462.8	2485.8	2283.0	2025.9	1737.4	1724.2	1605.6	1673.2	1712.7	1740.7
50°	2593.0	2574.8	2594.7	2484.2	2278.1	1971.5	1935.3	1791.8	1877.5	1946.7	2012.7
52.5°	2724.7	2695.2	2711.7	2716.7	2564.9	2200.7	2162.7	2011.0	2118.3	2227.0	2344.0
55°	2843.6	2841.9	2858.3	2942.4	2841.9	2446.3	2403.3	2253.4	2408.4	2525.3	2723.2
57.5°	2939.2	2955.7	3028.1	3204.6	3161.7	2713.3	2665.5	2535.2	2718.2	2835.3	3163.3
60°	3051.3	3077.7	3198.0	3427.0	3453.4	2993.5	2944.0	2850.1	3036.5	3155.0	3672.7
62.5°	3089.1	3127.1	3374.4	3661.1	3758.4	3300.2	3255.6	3192.9	3371.0	3478.1	4180.4
65°	2836.9	2909.5	3471.6	3781.4	4086.4	3669.3	3631.5	3577.1	3704.0	3774.9	4524.9
67.5°	2767.7	2800.6	3282.0	3954.6	4394.7	4144.2	4106.2	4012.3	4015.6	3985.9	4637.1
70°	2670.4	2706.8	3087.5	4084.9	4836.5	4793.5	4747.5	4470.5	4300.7	4121.1	4416.1
72.5°	2274.8	2263.3	2660.5	3733.6	5049.2	5598.1	5543.6	4963.3	4511.6	4004.0	3727.1
75°	1277.5	1244.5	1613.8	2583.0	4610.6	5917.9	5916.1	5212.2	4363.3	3488.1	2537.0
77.5°	370.9	360.9	532.4	1082.9	3104.0	5141.4	5204.1	4701.3	3641.4	2505.6	1392.9
80°	174.7	178.0	229.2	357.7	1325.3	3318.2	3497.9	3095.6	2176.0	1155.5	575.4
82.5°	110.4	112.1	156.7	230.8	560.5	1506.6	1654.9	1392.9	862.2	499.5	253.9
85°	69.2	69.2	103.8	151.6	334.6	481.3	522.5	474.8	369.3	271.9	138.5
87.5°	37.9	37.9	62.6	87.3	183.0	155.0	159.9	189.5	230.8	166.5	69.2
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°	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8	868.8
2.5°	867.0	863.8	858.8	857.3	855.5	853.8	855.5	858.8	855.5	855.5	857.3
5°	862.2	858.8	852.2	852.2	853.8	855.5	863.8	868.8	870.4	870.4	870.4
7.5°	862.2	857.3	852.2	853.8	857.3	863.8	876.9	885.2	891.7	893.5	893.5
10°	870.4	863.8	860.4	863.8	873.6	878.6	891.7	905.0	913.2	916.5	916.5
12.5°	885.2	878.6	878.6	885.2	898.3	905.0	916.5	926.4	936.4	941.2	941.2
15°	910.0	901.7	903.3	914.8	929.7	936.4	944.6	947.8	956.1	962.7	962.7
17.5°	933.0	924.7	928.0	941.2	951.1	954.4	959.4	957.8	961.0	965.9	967.7
20°	959.4	951.1	952.8	961.0	962.7	959.4	959.4	954.4	952.8	961.0	964.3
22.5°	985.8	977.5	975.9	970.9	962.7	954.4	949.5	944.6	941.2	949.5	952.8
25°	1017.2	1005.6	997.3	975.9	954.4	939.5	933.0	929.7	928.0	936.4	939.5
27.5°	1051.6	1040.1	1015.4	969.4	934.6	910.0	905.0	905.0	908.2	913.2	916.5
30°	1084.7	1073.1	1028.6	954.4	900.0	863.8	858.8	863.8	872.1	876.9	881.9
32.5°	1117.6	1106.2	1036.9	931.4	849.0	802.7	799.5	807.8	821.0	824.3	827.5
35°	1162.1	1150.5	1046.7	898.3	784.7	735.3	731.8	736.8	748.4	753.3	758.3
37.5°	1224.7	1218.2	1061.5	862.2	725.3	670.9	661.1	657.6	664.2	662.7	669.2
40°	1307.3	1312.2	1087.9	814.4	667.6	611.6	590.1	580.2	573.7	560.5	567.1
42.5°	1427.5	1430.8	1117.6	760.0	618.2	555.5	527.5	509.3	496.1	474.8	478.1
45°	1604.0	1575.8	1152.3	702.2	573.7	511.0	478.1	456.6	438.6	420.3	422.1
47.5°	1838.0	1752.2	1190.2	654.4	529.1	474.8	445.1	420.3	398.8	384.0	385.7
50°	2126.5	1971.5	1228.1	609.9	484.6	446.7	420.3	393.9	372.5	357.7	356.1
52.5°	2507.3	2235.3	1252.7	560.5	440.1	422.1	398.8	374.2	347.9	329.7	328.1
55°	2902.9	2541.8	1274.2	501.2	397.3	393.9	382.4	354.4	323.1	300.0	296.7
57.5°	3338.0	2869.8	1290.8	443.5	364.4	370.9	367.5	334.6	300.0	278.6	276.9
60°	3733.6	3209.5	1238.0	392.3	334.6	347.9	351.1	323.1	305.0	309.8	311.5
62.5°	4132.7	3471.6	1036.9	354.4	314.9	333.0	360.9	359.3	351.1	359.3	360.9
65°	4276.0	3525.9	735.3	323.1	295.1	339.6	392.3	389.1	351.1	336.2	333.0
67.5°	4195.3	3364.4	494.5	298.3	280.2	347.9	425.3	389.1	337.9	318.1	311.5
70°	3811.1	2967.1	362.6	273.7	267.1	346.1	443.5	387.3	331.4	309.8	301.7
72.5°	3039.7	2289.7	291.8	250.5	247.3	337.9	453.4	384.0	324.7	301.7	291.8
75°	1968.1	1424.3	245.5	227.5	217.6	324.7	448.3	374.2	316.6	286.7	280.2
77.5°	913.2	613.3	209.3	201.1	189.5	305.0	433.5	354.4	298.3	270.3	262.0
80°	425.3	290.2	176.3	174.7	169.8	288.4	413.8	331.4	276.9	253.9	240.7
82.5°	227.5	174.7	143.4	143.4	148.4	268.8	389.1	303.3	248.9	237.4	202.7
85°	120.4	100.6	103.8	112.1	126.9	237.4	356.1	273.7	217.6	181.3	176.3
87.5°	60.9	64.3	64.3	75.8	97.2	192.9	293.4	225.8	184.6	148.4	145.0
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)