

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: P214888

Luminaire Tested: **ARCH-AF24-90-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214888
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-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 9754 lumens
Efficiency: N/A
Efficacy: 103.8 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 (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

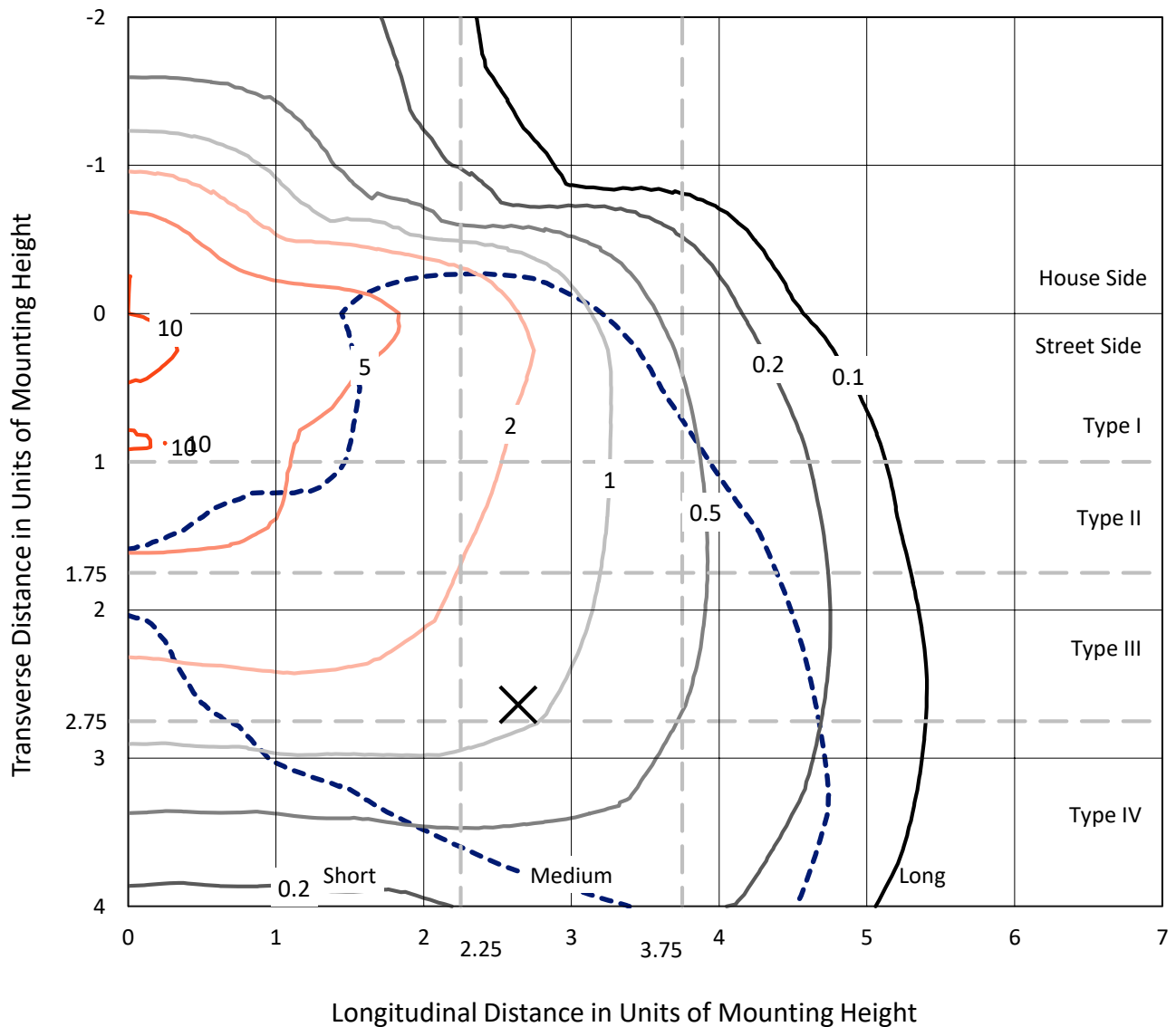


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

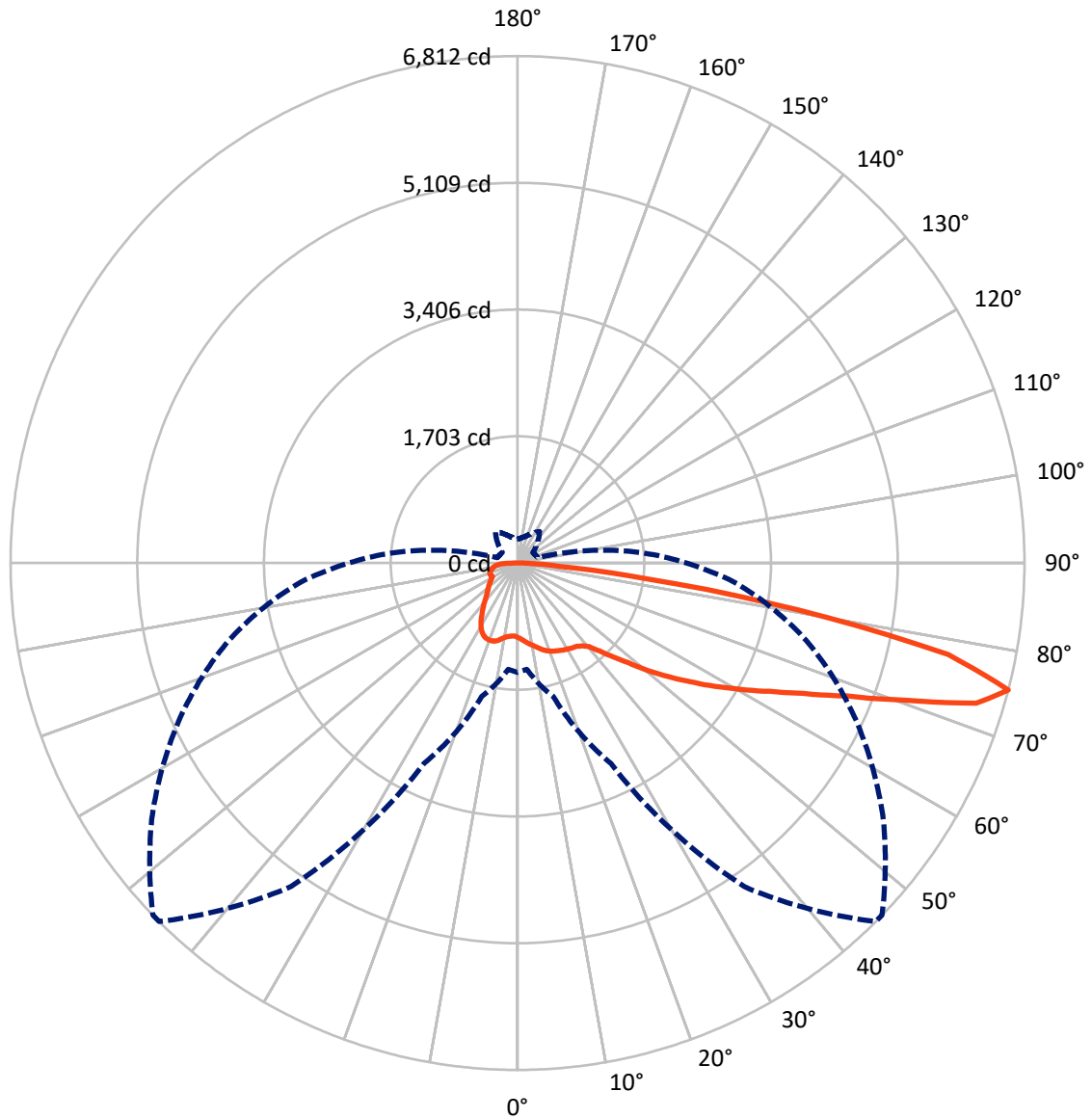


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
 Type IV - Medium - Non-Cutoff

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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	2259.6	0.0	2259.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	7494.4	0.0	7494.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	9754.0	0.0	9754.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	1.0
10°-20°	321.1	3.3
20°-30°	551.0	5.6
30°-40°	770.7	7.9
40°-50°	1130.5	11.6
50°-60°	1761.1	18.1
60°-70°	2534.0	26.0
70°-80°	2207.4	22.6
80°-90°	379.1	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°	9754.0	100.0
0°-180°	9754.0	100.0



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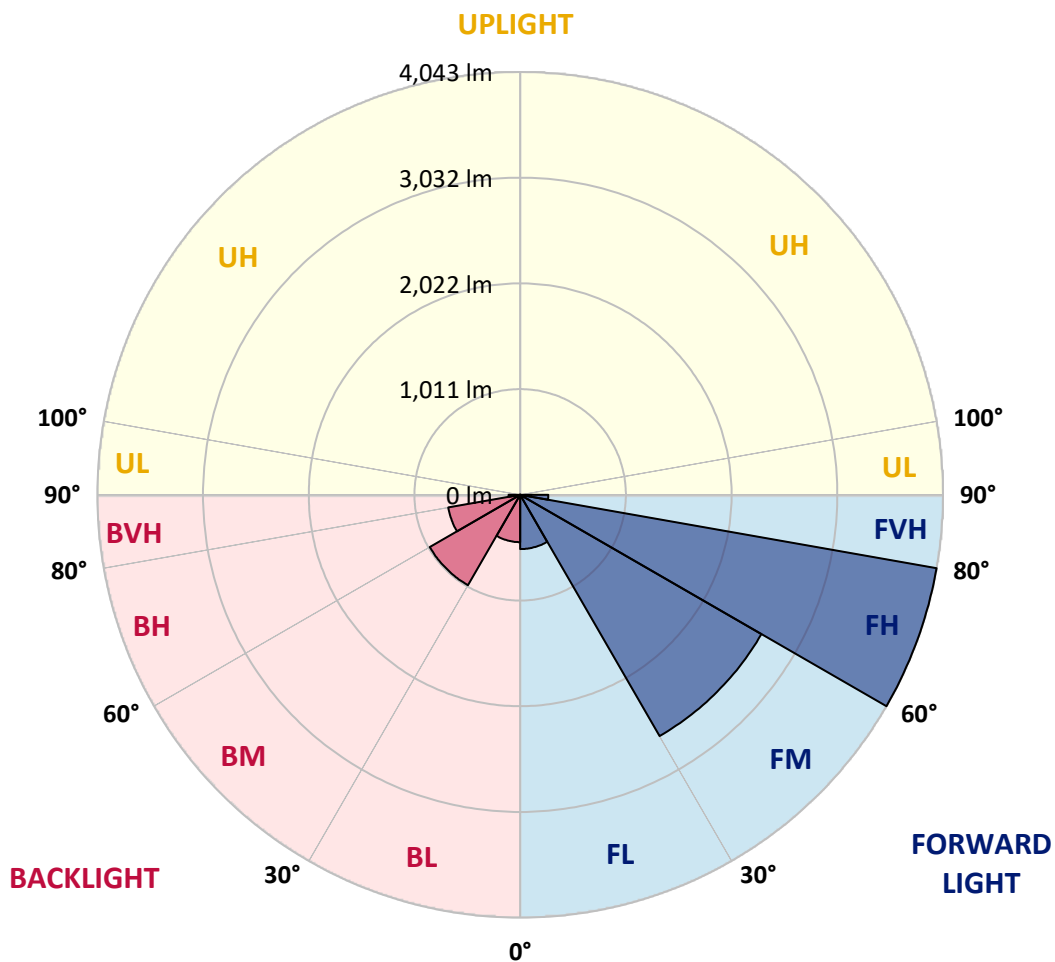
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	518.7	5.3			
FM	(30°-60°)	2663.6	27.3			
FH	(60°-80°)	4043.1	41.5			G2/5000
FVH	(80°-90°)	269.0	2.8			G3/500
BL	(0°-30°)	452.6	4.6	B1/500		
BM	(30°-60°)	998.6	10.2	B1/1000		
BH	(60°-80°)	698.3	7.2	B2/1000		G2/1000
BVH	(80°-90°)	110.1	1.1			G2/225
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°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9
2.5°	1049.3	1041.7	1041.7	1036.0	1036.0	1026.5	1022.7	1020.8	1011.3	1005.6	999.9
5°	1110.0	1100.5	1098.6	1085.3	1079.6	1058.7	1056.8	1043.6	1026.5	1009.4	996.1
7.5°	1165.0	1159.3	1149.8	1136.5	1119.5	1092.9	1091.0	1070.1	1041.7	1018.9	999.9
10°	1204.8	1201.0	1187.8	1170.7	1151.7	1125.2	1123.3	1100.5	1066.3	1039.8	1013.2
12.5°	1252.3	1246.6	1229.5	1206.7	1185.9	1161.2	1159.3	1140.3	1102.4	1068.2	1034.1
15°	1297.8	1290.2	1269.4	1246.6	1223.8	1202.9	1202.9	1182.1	1142.2	1102.4	1062.5
17.5°	1320.6	1316.8	1295.9	1271.2	1252.3	1237.1	1235.2	1216.2	1176.4	1134.6	1091.0
20°	1328.2	1330.1	1311.1	1284.5	1271.2	1263.7	1261.8	1248.5	1204.8	1165.0	1123.3
22.5°	1326.3	1332.0	1316.8	1288.3	1284.5	1284.5	1284.5	1269.4	1235.2	1195.4	1153.6
25°	1333.9	1341.5	1330.1	1295.9	1295.9	1303.5	1303.5	1295.9	1265.6	1231.4	1189.7
27.5°	1360.4	1366.1	1356.6	1309.2	1311.1	1322.5	1320.6	1322.5	1303.5	1271.2	1229.5
30°	1392.7	1400.3	1388.9	1330.1	1328.2	1339.6	1339.6	1349.0	1335.8	1301.6	1267.5
32.5°	1480.0	1478.1	1442.0	1352.8	1347.1	1358.5	1358.5	1368.0	1360.4	1333.9	1301.6
35°	1739.9	1711.4	1631.8	1426.8	1369.9	1375.6	1375.6	1392.7	1396.5	1375.6	1347.1
37.5°	2005.5	1996.1	1935.3	1624.2	1453.4	1411.7	1409.8	1434.4	1451.5	1434.4	1415.5
40°	2273.1	2265.5	2252.2	1887.9	1628.0	1476.2	1470.5	1491.3	1521.7	1510.3	1498.9
42.5°	2521.6	2517.8	2531.1	2147.8	1850.0	1614.7	1597.6	1572.9	1616.6	1612.8	1612.8
45°	2717.1	2726.5	2734.1	2390.7	2090.9	1793.0	1772.2	1688.7	1747.5	1762.7	1774.1
47.5°	2827.1	2834.7	2861.3	2627.9	2331.9	1999.8	1984.7	1848.1	1925.8	1971.4	2003.6
50°	2984.6	2963.7	2986.5	2859.4	2622.2	2269.3	2227.5	2062.5	2161.1	2240.8	2316.7
52.5°	3136.4	3102.2	3121.2	3126.9	2952.3	2533.0	2489.4	2314.8	2438.1	2563.4	2698.1
55°	3273.0	3271.1	3290.1	3386.8	3271.1	2815.7	2766.4	2593.7	2772.1	2906.8	3134.5
57.5°	3383.0	3402.0	3485.5	3688.5	3639.2	3123.1	3068.1	2918.2	3128.8	3263.5	3641.1
60°	3512.1	3542.4	3680.9	3944.7	3975.0	3445.7	3388.7	3280.6	3495.0	3631.6	4227.4
62.5°	3555.7	3599.3	3884.0	4214.1	4326.0	3798.6	3747.3	3675.2	3880.2	4003.5	4811.8
65°	3265.4	3348.9	3995.9	4352.6	4703.6	4223.6	4179.9	4117.3	4263.4	4345.0	5208.3
67.5°	3185.7	3223.7	3777.7	4551.8	5058.4	4770.0	4726.4	4618.2	4622.0	4587.9	5337.4
70°	3073.8	3115.5	3553.8	4701.7	5566.9	5517.6	5464.5	5145.7	4950.3	4743.5	5083.1
72.5°	2618.4	2605.1	3062.4	4297.6	5811.7	6443.5	6380.9	5713.0	5193.2	4608.8	4290.0
75°	1470.5	1432.5	1857.5	2973.2	5307.0	6811.6	6809.7	5999.5	5022.4	4014.9	2920.1
77.5°	426.9	415.5	612.9	1246.6	3572.8	5918.0	5990.1	5411.4	4191.3	2884.0	1603.3
80°	201.1	204.9	263.7	411.7	1525.5	3819.4	4026.3	3563.3	2504.6	1330.1	662.2
82.5°	127.1	129.0	180.3	265.6	645.1	1734.2	1905.0	1603.3	992.3	574.9	292.2
85°	79.7	79.7	119.5	174.6	385.2	554.0	601.5	546.4	425.0	313.1	159.4
87.5°	43.6	43.6	72.1	100.6	210.6	178.4	184.0	218.2	265.6	191.6	79.7
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°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9
2.5°	998.0	994.2	988.5	986.6	984.7	982.8	984.7	988.5	984.7	984.7	986.6
5°	992.3	988.5	980.9	980.9	982.8	984.7	994.2	999.9	1001.8	1001.8	1001.8
7.5°	992.3	986.6	980.9	982.8	986.6	994.2	1009.4	1018.9	1026.5	1028.4	1028.4
10°	1001.8	994.2	990.4	994.2	1005.6	1011.3	1026.5	1041.7	1051.2	1054.9	1054.9
12.5°	1018.9	1011.3	1011.3	1018.9	1034.1	1041.7	1054.9	1066.3	1077.7	1083.4	1083.4
15°	1047.4	1037.9	1039.8	1053.1	1070.1	1077.7	1087.2	1091.0	1100.5	1108.1	1108.1
17.5°	1073.9	1064.4	1068.2	1083.4	1094.8	1098.6	1104.3	1102.4	1106.2	1111.9	1113.8
20°	1104.3	1094.8	1096.7	1106.2	1108.1	1104.3	1104.3	1098.6	1096.7	1106.2	1110.0
22.5°	1134.6	1125.2	1123.3	1117.6	1108.1	1098.6	1092.9	1087.2	1083.4	1092.9	1096.7
25°	1170.7	1157.4	1147.9	1123.3	1098.6	1081.5	1073.9	1070.1	1068.2	1077.7	1081.5
27.5°	1210.5	1197.3	1168.8	1115.7	1075.8	1047.4	1041.7	1041.7	1045.5	1051.2	1054.9
30°	1248.5	1235.2	1184.0	1098.6	1036.0	994.2	988.5	994.2	1003.7	1009.4	1015.1
32.5°	1286.4	1273.1	1193.5	1072.0	977.2	924.0	920.2	929.7	944.9	948.7	952.5
35°	1337.7	1324.4	1204.8	1034.1	903.2	846.2	842.4	848.1	861.4	867.1	872.8
37.5°	1409.8	1402.2	1221.9	992.3	834.9	772.2	760.9	757.1	764.6	762.7	770.3
40°	1504.6	1510.3	1252.3	937.3	768.4	703.9	679.3	667.9	660.3	645.1	652.7
42.5°	1643.1	1646.9	1286.4	874.7	711.5	639.4	607.2	586.3	571.1	546.4	550.2
45°	1846.2	1813.9	1326.3	808.3	660.3	588.2	550.2	525.6	504.7	483.8	485.7
47.5°	2115.6	2016.9	1369.9	753.3	609.1	546.4	512.3	483.8	459.2	442.1	444.0
50°	2447.6	2269.3	1413.6	702.0	557.8	514.2	483.8	453.5	428.8	411.7	409.8
52.5°	2885.9	2572.9	1442.0	645.1	506.6	485.7	459.2	430.7	400.3	379.5	377.6
55°	3341.3	2925.8	1466.7	576.8	457.3	453.5	440.2	407.9	371.9	345.3	341.5
57.5°	3842.2	3303.4	1485.7	510.4	419.3	426.9	423.1	385.2	345.3	320.7	318.8
60°	4297.6	3694.2	1424.9	451.6	385.2	400.3	404.1	371.9	351.0	356.7	358.6
62.5°	4756.8	3995.9	1193.5	407.9	362.4	383.3	415.5	413.6	404.1	413.6	415.5
65°	4921.8	4058.5	846.2	371.9	339.6	390.9	451.6	447.8	404.1	387.1	383.3
67.5°	4828.9	3872.6	569.2	343.4	322.6	400.3	489.5	447.8	389.0	366.2	358.6
70°	4386.8	3415.3	417.4	315.0	307.4	398.5	510.4	445.9	381.4	356.7	347.2
72.5°	3498.8	2635.5	335.8	288.4	284.6	389.0	521.8	442.1	373.8	347.2	335.8
75°	2265.5	1639.3	282.7	261.8	250.5	373.8	516.1	430.7	364.3	330.1	322.6
77.5°	1051.2	705.8	241.0	231.5	218.2	351.0	499.0	407.9	343.4	311.2	301.7
80°	489.5	333.9	203.0	201.1	195.4	332.0	476.2	381.4	318.8	292.2	277.0
82.5°	261.8	201.1	165.1	165.1	170.8	309.3	447.8	349.1	286.5	273.2	233.4
85°	138.5	115.7	119.5	129.0	146.1	273.2	409.8	315.0	250.5	208.7	203.0
87.5°	70.2	74.0	74.0	87.3	111.9	222.0	337.7	259.9	212.5	170.8	167.0
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)