

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: P214745

Luminaire Tested: **ARCH-AF24-60-D-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214745
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7602 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

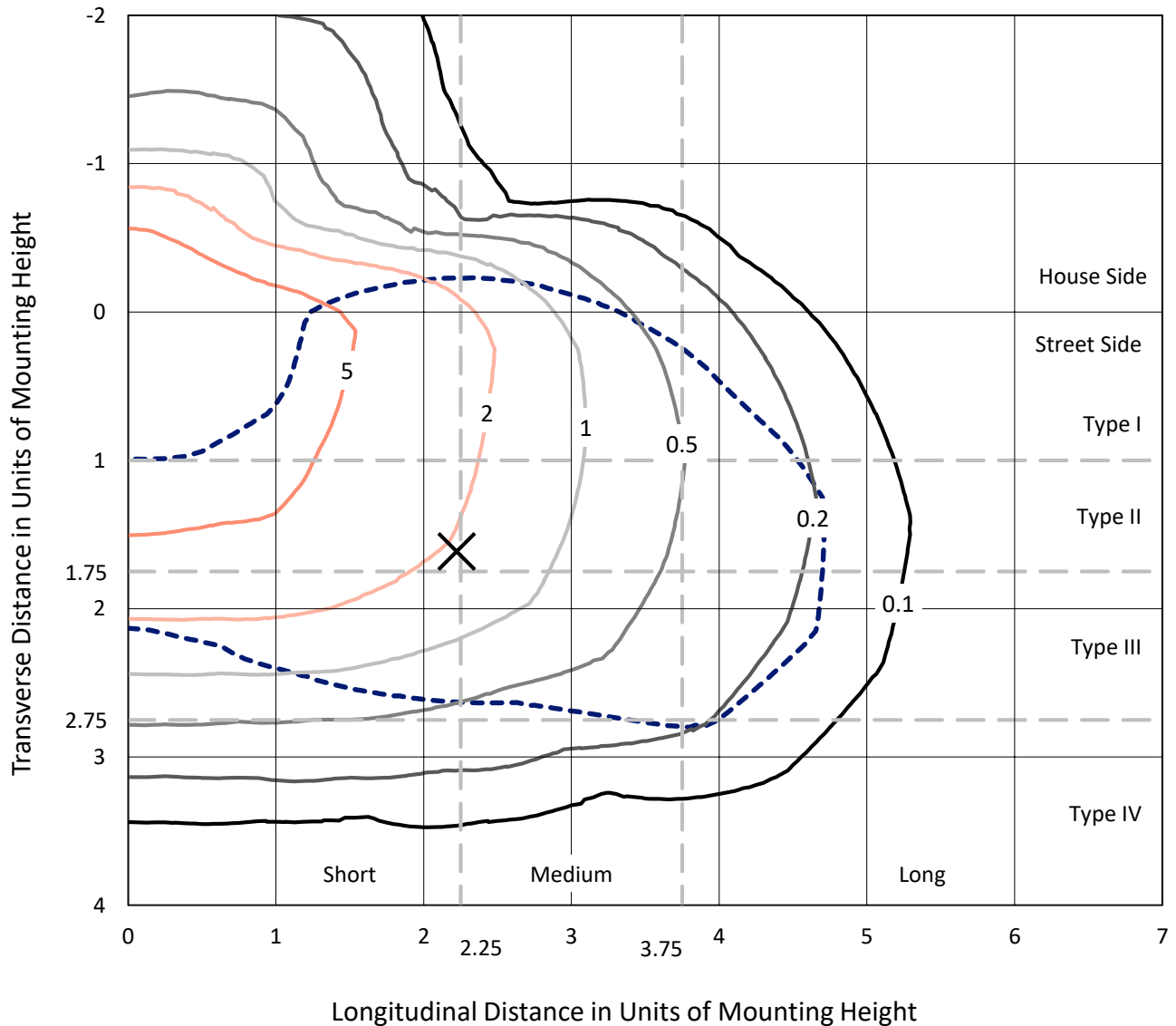
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

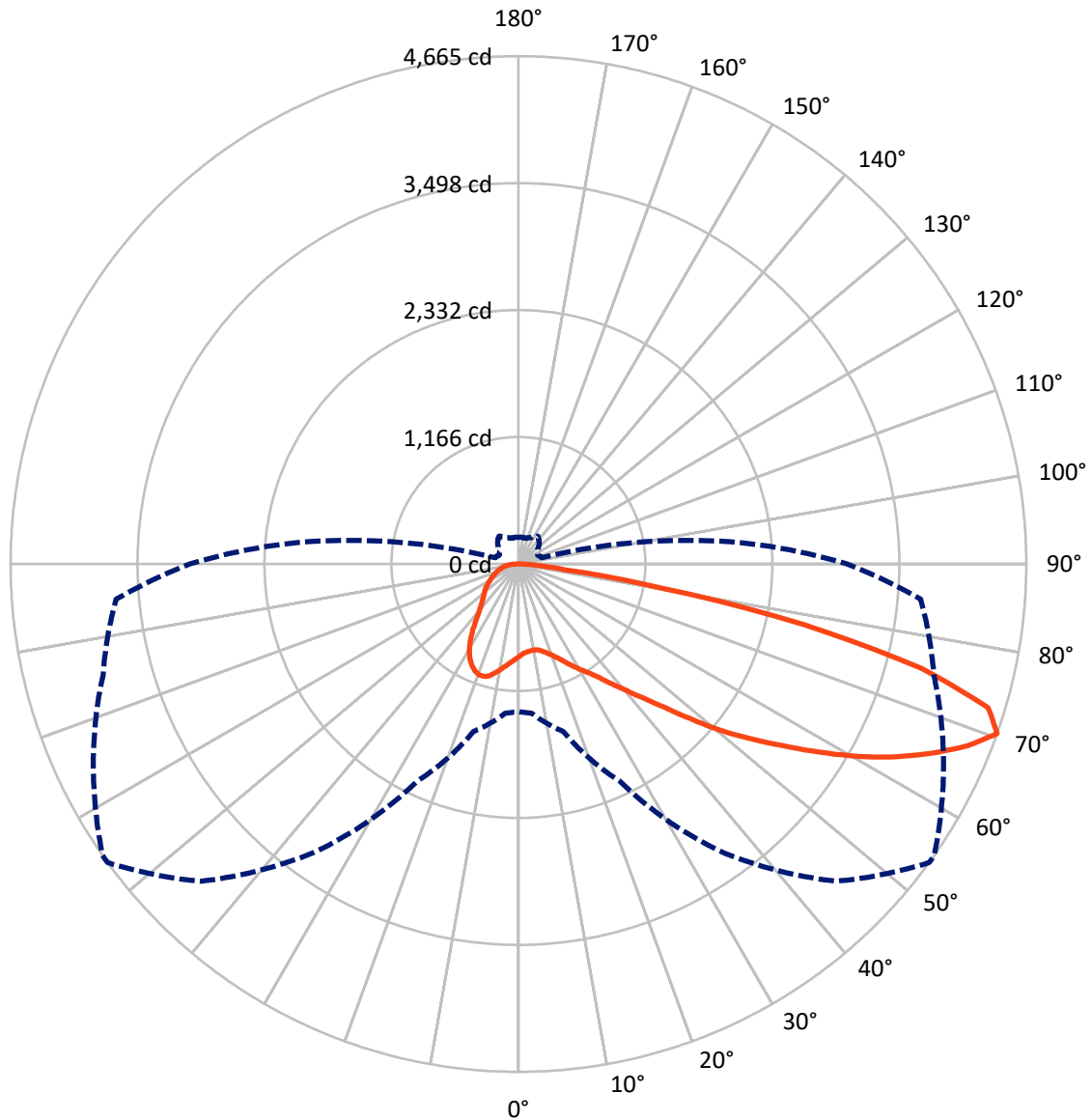
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1724.1	0.0	1724.1
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5877.9	0.0	5877.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	7602.0	0.0	7602.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	1.1
10°-20°	266.7	3.5
20°-30°	463.4	6.1
30°-40°	677.1	8.9
40°-50°	1062.7	14.0
50°-60°	1634.2	21.5
60°-70°	1996.6	26.3
70°-80°	1237.9	16.3
80°-90°	179.8	2.4
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°	7602.0	100.0
0°-180°	7602.0	100.0

Coefficient of Utilization



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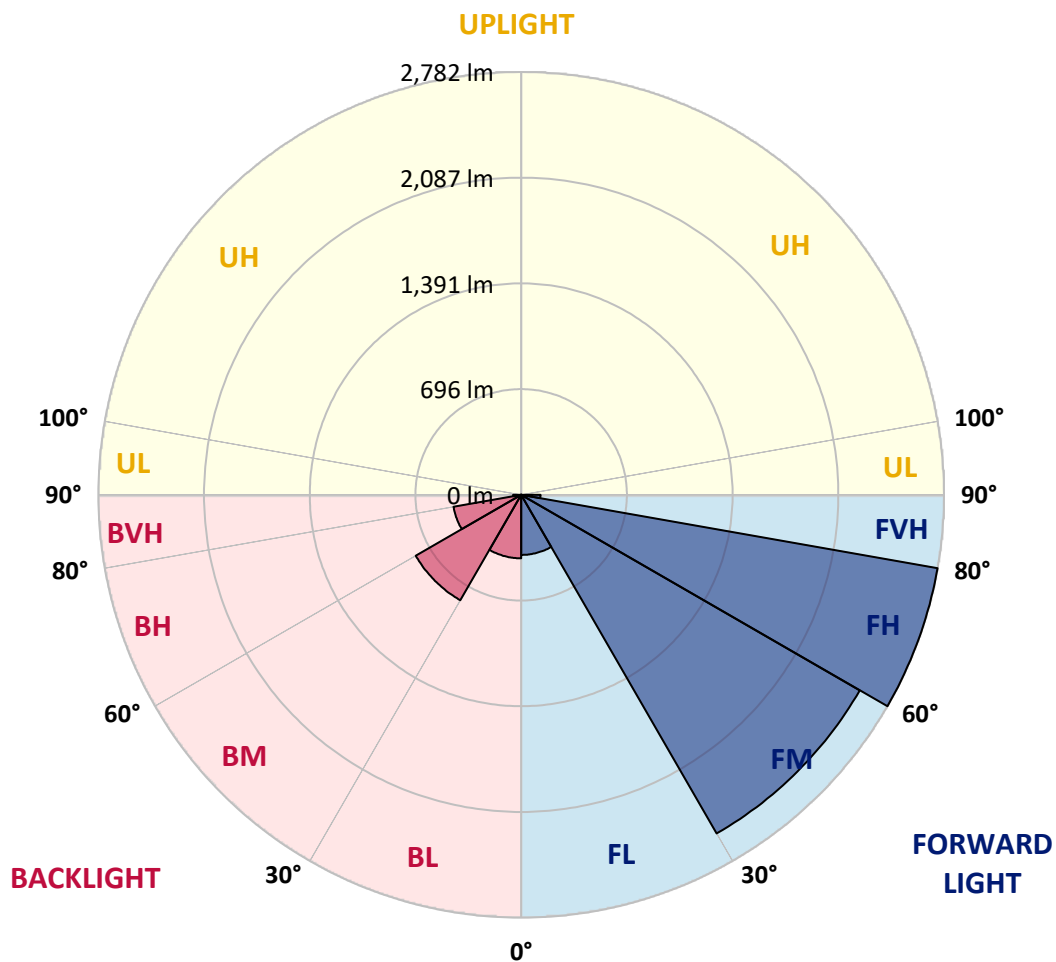
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	395.5	5.2			
FM	(30°-60°)	2572.9	33.8			
FH	(60°-80°)	2782.4	36.6			G2/5000
FVH	(80°-90°)	127.0	1.7			G2/225
BL	(0°-30°)	418.0	5.5	B1/500		
BM	(30°-60°)	801.2	10.5	B1/1000		
BH	(60°-80°)	452.1	5.9	B1/500		G1/500
BVH	(80°-90°)	52.9	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5
2.5°	817.1	814.3	814.3	818.5	819.9	824.1	824.1	825.5	829.6	836.6	844.9
5°	792.0	790.7	792.0	797.6	800.4	808.8	811.5	812.9	821.3	832.4	844.9
7.5°	767.0	765.6	768.4	776.7	785.1	797.6	804.6	806.0	818.5	833.8	850.5
10°	758.6	757.2	761.4	768.4	776.7	790.7	801.8	803.2	821.3	839.4	863.0
12.5°	769.8	768.4	772.6	779.5	787.9	797.6	810.1	811.5	835.2	858.9	883.9
15°	797.6	797.6	799.0	803.2	811.5	819.9	831.0	832.4	857.5	885.3	910.4
17.5°	840.8	838.0	838.0	836.6	842.2	846.3	860.3	861.6	888.1	913.2	938.2
20°	893.7	892.3	886.7	879.7	878.4	881.1	895.1	896.4	922.9	943.8	967.4
22.5°	957.7	959.1	946.6	931.2	924.3	928.5	941.0	942.4	961.9	980.0	1000.8
25°	1042.6	1038.4	1020.3	998.1	984.1	984.1	996.7	996.7	1014.8	1025.9	1039.8
27.5°	1123.3	1115.0	1098.3	1066.3	1044.0	1048.2	1060.7	1060.7	1077.4	1081.6	1088.5
30°	1211.0	1202.7	1181.8	1141.4	1112.2	1109.4	1124.7	1123.3	1145.6	1144.2	1138.7
32.5°	1318.2	1314.0	1279.2	1227.7	1188.8	1179.0	1192.9	1194.3	1208.3	1204.1	1186.0
35°	1468.6	1467.2	1435.1	1344.7	1293.2	1275.1	1283.4	1283.4	1293.2	1282.0	1251.4
37.5°	1657.9	1660.7	1632.8	1499.2	1426.8	1396.2	1397.6	1396.2	1399.0	1386.4	1354.4
40°	1847.2	1854.1	1852.7	1691.3	1599.4	1546.5	1527.0	1524.2	1531.2	1525.6	1495.0
42.5°	2096.3	2113.1	2074.1	1927.9	1824.9	1735.8	1682.9	1676.0	1691.3	1698.2	1669.0
45°	2355.3	2349.7	2288.4	2182.7	2089.4	1975.2	1875.0	1863.9	1875.0	1895.9	1865.3
47.5°	2490.3	2486.1	2470.8	2417.9	2404.0	2273.1	2121.4	2111.7	2090.8	2120.0	2083.8
50°	2713.0	2717.2	2654.5	2649.0	2707.4	2635.1	2399.8	2377.5	2339.9	2363.6	2333.0
52.5°	2874.5	2856.4	2817.4	2866.1	3048.5	3009.5	2661.5	2651.8	2617.0	2611.4	2597.5
55°	2939.9	2939.9	2946.9	3059.6	3319.9	3268.4	2945.5	2955.2	2907.9	2868.9	2887.0
57.5°	2959.4	2967.7	3027.6	3214.1	3638.7	3470.2	3258.7	3272.6	3204.4	3126.4	3183.5
60°	2863.3	2888.4	3031.8	3301.8	3818.2	3684.6	3588.6	3592.7	3493.9	3379.8	3480.0
62.5°	2617.0	2647.6	2903.7	3338.0	3789.0	3904.6	3900.4	3910.1	3775.1	3633.1	3758.4
65°	2314.9	2345.5	2618.3	3236.4	3766.7	4061.8	4185.7	4212.2	4038.2	3847.5	3932.4
67.5°	1870.8	1911.2	2170.1	2894.0	3658.2	4191.3	4453.0	4480.8	4241.4	3958.8	3917.1
70°	1355.8	1375.3	1592.4	2199.4	3215.5	4120.3	4664.6	4663.2	4308.2	3950.5	3708.3
72.5°	652.8	668.2	856.1	1365.5	2299.6	3496.7	4511.5	4537.9	4216.4	3829.4	3230.8
75°	268.7	284.0	346.6	576.3	1206.9	2310.7	3823.8	3886.5	3829.4	3436.8	2527.9
77.5°	167.0	172.6	203.2	297.9	551.2	1078.8	2676.8	2761.7	3034.6	2753.4	1669.0
80°	125.3	129.5	151.7	208.8	348.0	398.1	1329.4	1436.5	1838.8	1579.9	755.9
82.5°	104.4	105.8	121.1	151.7	236.6	228.3	426.0	474.7	857.5	602.7	260.3
85°	97.4	100.2	108.6	108.6	150.3	143.4	176.8	185.1	249.2	206.0	90.5
87.5°	50.1	47.3	96.0	84.9	78.0	69.6	75.2	80.7	93.3	98.8	40.4
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°	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5	850.5
2.5°	847.7	851.9	858.9	865.8	874.2	883.9	889.5	896.4	902.0	899.2	897.8
5°	851.9	858.9	874.2	888.1	904.8	924.3	936.8	950.7	961.9	964.7	960.5
7.5°	858.9	871.4	892.3	917.3	939.6	964.7	984.1	1003.6	1017.5	1020.3	1020.3
10°	875.6	889.5	917.3	950.7	977.2	1003.6	1025.9	1041.2	1053.7	1059.3	1059.3
12.5°	899.2	915.9	949.3	989.7	1018.9	1044.0	1056.5	1063.5	1069.1	1074.6	1076.0
15°	927.1	945.2	985.5	1028.7	1059.3	1071.8	1071.8	1070.4	1070.4	1073.2	1076.0
17.5°	954.9	974.4	1016.2	1062.1	1081.6	1074.6	1064.9	1060.7	1057.9	1056.5	1060.7
20°	984.1	1003.6	1045.4	1088.5	1083.0	1053.7	1039.8	1030.1	1021.7	1017.5	1023.1
22.5°	1016.2	1034.3	1077.4	1106.6	1064.9	1020.3	993.9	978.6	964.7	956.3	961.9
25°	1053.7	1071.8	1113.6	1112.2	1032.9	970.2	928.5	903.4	888.1	879.7	879.7
27.5°	1098.3	1113.6	1154.0	1098.3	988.3	903.4	842.2	818.5	814.3	807.4	807.4
30°	1144.2	1156.7	1191.5	1066.3	927.1	815.7	748.9	737.8	739.2	732.2	733.6
32.5°	1191.5	1204.1	1213.8	1018.9	847.7	716.9	672.3	664.0	662.6	657.0	651.5
35°	1258.4	1276.5	1216.6	954.9	751.7	634.8	602.7	594.4	586.0	566.5	566.5
37.5°	1360.0	1379.5	1209.6	875.6	652.8	570.7	541.5	530.4	516.4	496.9	490.0
40°	1499.2	1499.2	1194.3	786.5	573.5	519.2	491.4	477.5	462.1	442.7	438.5
42.5°	1663.4	1624.5	1170.7	696.0	515.0	484.4	459.4	444.0	426.0	403.7	400.9
45°	1855.5	1749.7	1137.3	615.3	471.9	463.5	448.2	421.8	391.2	367.5	363.3
47.5°	2042.1	1862.5	1105.2	558.2	435.7	455.2	442.7	398.1	356.4	322.9	318.8
50°	2246.7	1962.7	1067.7	510.9	407.9	449.6	435.7	363.3	317.4	293.7	290.9
52.5°	2451.3	2064.3	1027.3	460.8	384.2	438.5	419.0	338.3	316.0	284.0	279.8
55°	2667.1	2182.7	980.0	405.1	356.4	416.2	396.7	336.9	325.7	284.0	274.2
57.5°	2877.3	2313.5	903.4	350.8	325.7	382.8	388.4	328.5	304.8	281.2	270.0
60°	3109.7	2452.7	776.7	304.8	299.3	355.0	377.2	310.4	281.2	272.8	267.3
62.5°	3296.2	2578.0	606.9	272.8	277.0	332.7	363.3	299.3	271.4	264.5	263.1
65°	3377.0	2580.8	435.7	245.0	254.7	311.8	349.4	289.5	263.1	260.3	258.9
67.5°	3292.1	2438.8	306.2	218.5	231.1	292.3	331.3	279.8	254.7	256.1	253.3
70°	3017.8	2139.5	224.1	193.5	208.8	271.4	311.8	267.3	245.0	247.8	243.6
72.5°	2525.1	1667.6	179.6	172.6	190.7	249.2	292.3	253.3	229.7	231.1	222.7
75°	1865.3	1105.2	150.3	154.5	169.8	228.3	267.3	235.2	213.0	207.4	201.8
77.5°	1109.4	567.9	123.9	135.0	151.7	203.2	239.4	213.0	194.9	185.1	181.0
80°	458.0	229.7	101.6	114.1	132.2	181.0	211.6	186.5	174.0	164.3	158.7
82.5°	182.4	112.8	80.7	93.3	111.4	157.3	185.1	164.3	151.7	144.8	129.5
85°	69.6	55.7	54.3	65.4	83.5	121.1	153.1	137.8	128.1	110.0	105.8
87.5°	27.8	25.1	25.1	32.0	47.3	76.6	110.0	96.0	100.2	79.3	80.7
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)