

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: P573511

Luminaire Tested: **ARCH-S-PA2-80-827-U-T2U**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-80-827-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8593 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

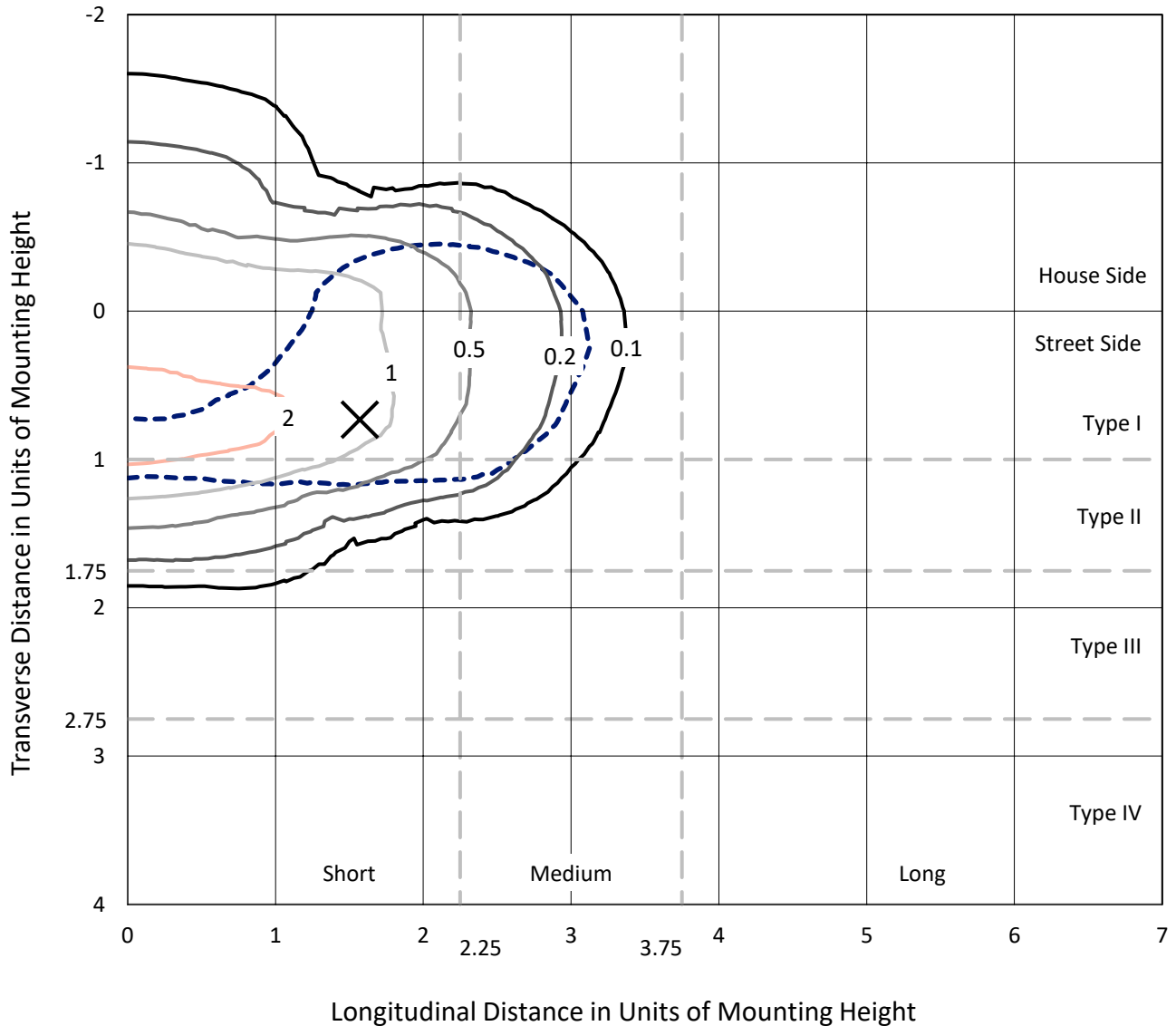
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

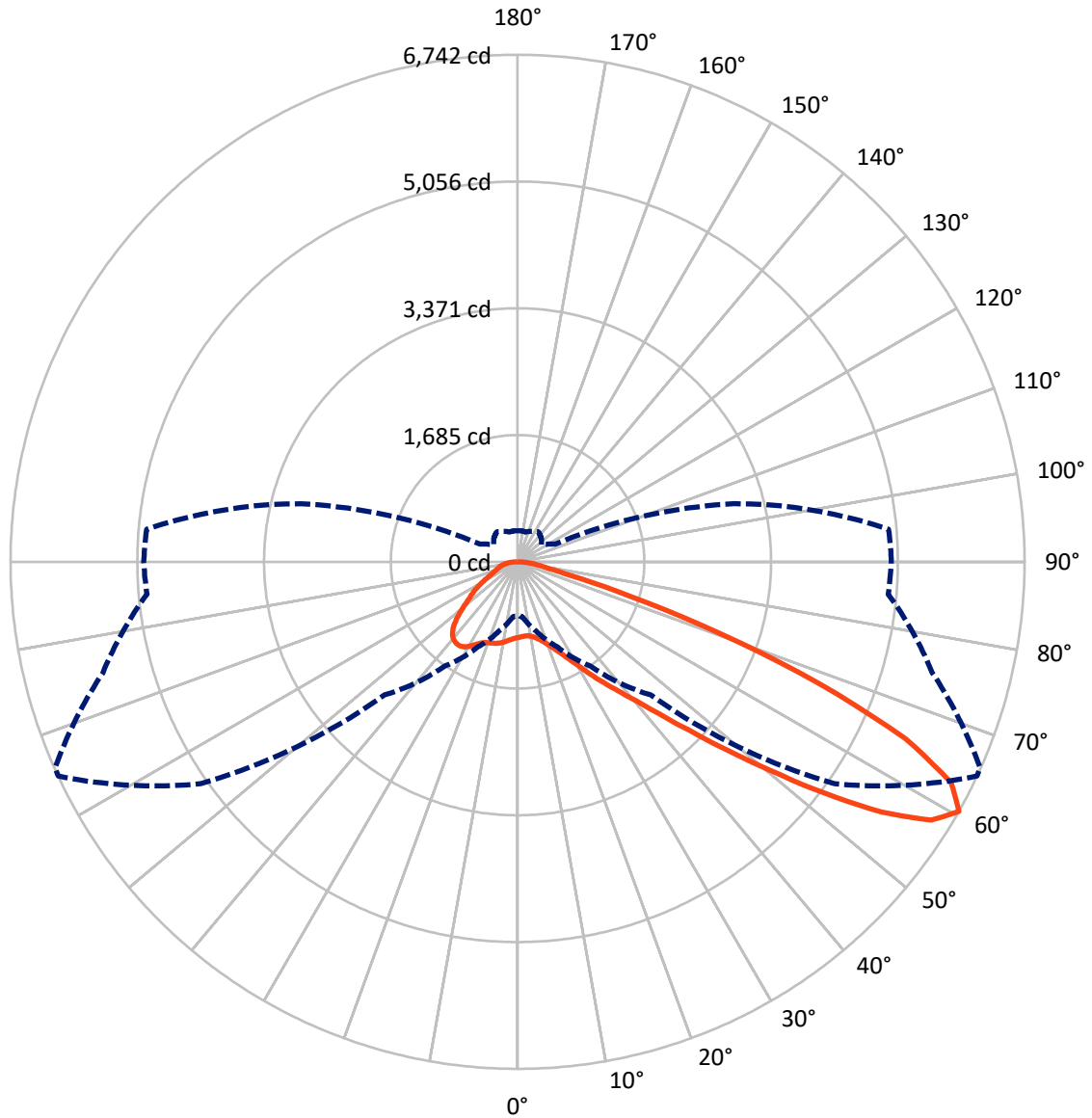
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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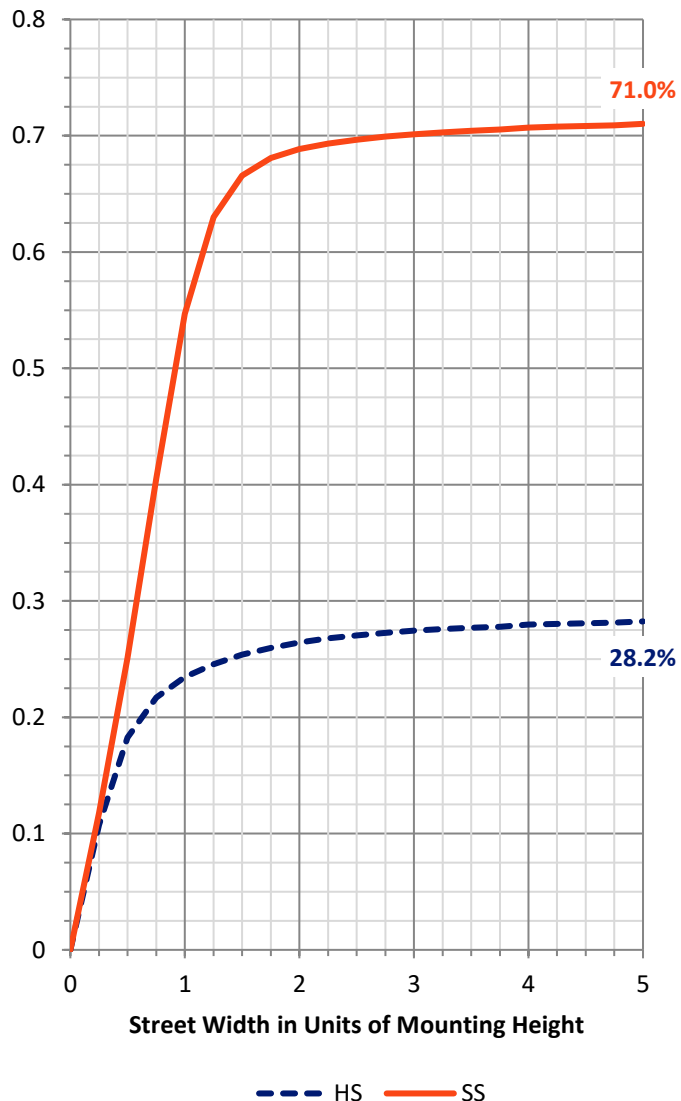
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2459.9	0.0	2459.9
	% Fixture	28.6	0.0	28.6
Street Side	Lumens	6133.1	0.0	6133.1
	% Fixture	71.4	0.0	71.4
Total	Lumens	8593.0	0.0	8593.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.4	1.1
10°-20°	313.5	3.6
20°-30°	601.0	7.0
30°-40°	1043.8	12.1
40°-50°	1770.2	20.6
50°-60°	2204.3	25.7
60°-70°	1776.2	20.7
70°-80°	672.6	7.8
80°-90°	114.1	1.3
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°	8593.0	100.0
0°-180°	8593.0	100.0

Coefficient of Utilization



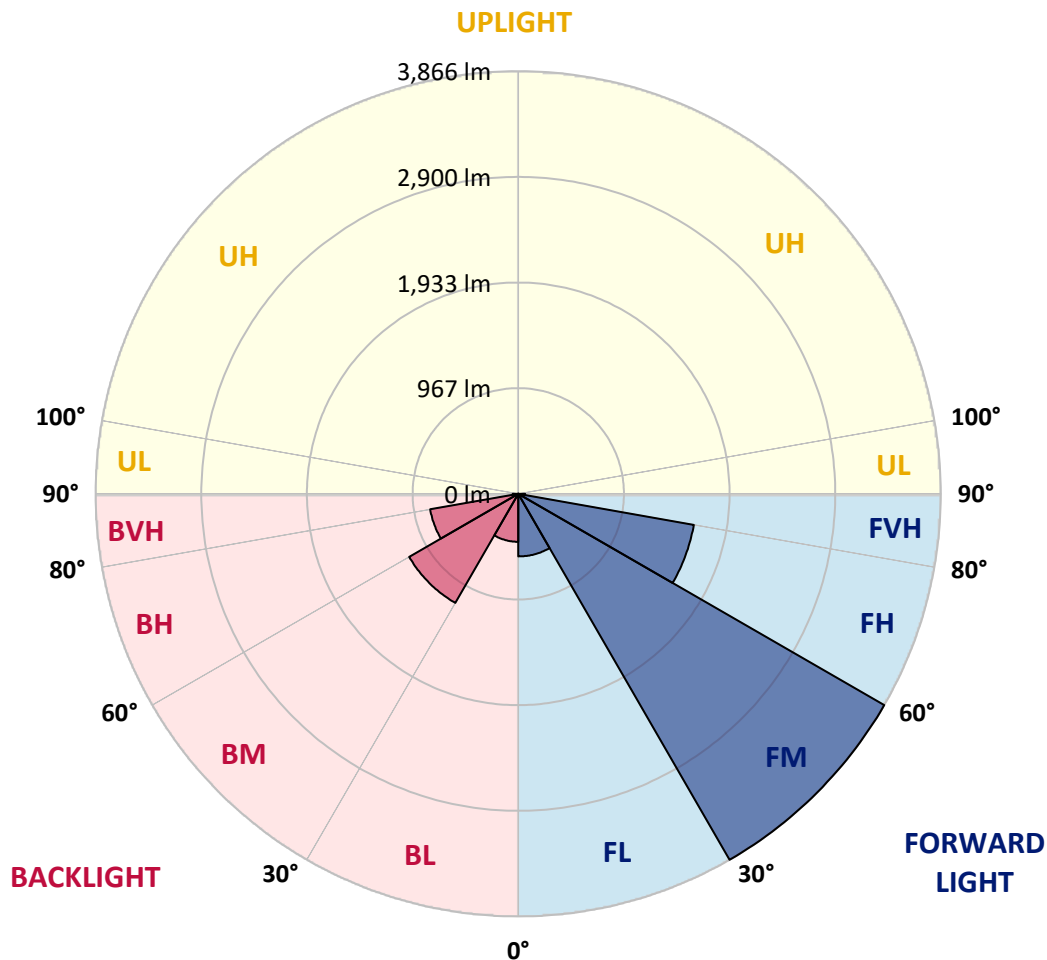
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	572.9	6.7			
FM (30°-60°)	3866.0	45.0			
FH (60°-80°)	1630.9	19.0			G1/1800
FVH (80°-90°)	63.3	0.7			G1/100
BL (0°-30°)	439.0	5.1	B1/500		
BM (30°-60°)	1152.2	13.4	B2/2500		
BH (60°-80°)	817.9	9.5	B2/1000		G2/1000
BVH (80°-90°)	50.8	0.6			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2
2.5°	984.7	984.7	984.7	987.0	989.4	991.7	996.4	996.4	996.4	998.8	1003.5
5°	965.8	963.5	965.8	968.2	972.9	977.6	987.0	991.7	991.7	1001.2	1010.6
7.5°	968.2	963.5	963.5	965.8	970.5	975.2	984.7	991.7	994.1	1005.9	1022.4
10°	991.7	984.7	984.7	987.0	987.0	991.7	998.8	1008.2	1010.6	1022.4	1038.8
12.5°	1041.2	1034.1	1031.8	1024.7	1017.6	1022.4	1029.4	1031.8	1034.1	1041.2	1057.7
15°	1144.8	1133.1	1114.2	1100.1	1081.2	1069.5	1067.1	1069.5	1069.5	1071.8	1081.2
17.5°	1293.3	1279.1	1250.8	1220.2	1175.5	1137.8	1126.0	1116.6	1116.6	1109.5	1109.5
20°	1474.6	1453.4	1420.5	1375.7	1309.7	1241.4	1201.4	1180.2	1173.1	1161.3	1144.8
22.5°	1684.3	1670.2	1627.8	1559.4	1460.5	1368.6	1302.7	1255.6	1255.6	1227.3	1192.0
25°	1931.6	1905.7	1856.3	1776.2	1641.9	1510.0	1420.5	1352.1	1345.1	1300.3	1243.8
27.5°	2171.9	2155.4	2094.2	1988.2	1828.0	1674.9	1550.0	1469.9	1458.1	1387.5	1300.3
30°	2464.0	2445.2	2353.3	2204.9	2032.9	1858.6	1712.6	1608.9	1597.1	1500.5	1378.1
32.5°	2826.8	2763.2	2650.1	2480.5	2259.1	2063.5	1896.3	1785.6	1771.4	1660.7	1514.7
35°	3267.3	3213.1	3017.6	2838.6	2574.7	2318.0	2117.7	1971.7	1952.8	1820.9	1637.2
37.5°	3578.2	3552.3	3418.0	3276.7	2975.2	2628.9	2383.9	2181.3	2162.5	1988.2	1750.2
40°	3773.7	3747.8	3710.1	3670.1	3502.8	3111.8	2704.3	2428.7	2398.0	2233.2	1976.4
42.5°	3875.0	3853.8	3860.9	3941.0	3988.1	3926.9	3161.3	2758.5	2737.3	2537.0	2252.0
45°	3816.1	3802.0	3870.3	4082.3	4313.2	4765.5	3747.8	3191.9	3135.4	2897.4	2586.5
47.5°	3533.5	3491.1	3651.3	4011.7	4506.4	5165.9	4454.5	3726.6	3665.4	3323.8	2925.7
50°	2951.6	2939.8	3158.9	3615.9	4431.0	5323.8	5210.7	4357.9	4313.2	3783.2	3302.6
52.5°	2409.8	2405.1	2574.7	2994.0	3950.4	5213.0	5759.6	5109.4	4975.1	4244.9	3712.5
55°	1870.4	1868.0	2018.8	2332.1	3151.9	4692.5	6018.7	5875.0	5776.0	4749.0	4134.2
57.5°	1279.1	1262.6	1458.1	1696.1	2367.4	3717.2	5849.1	6480.4	6419.1	5283.7	4581.7
60°	711.4	735.0	951.7	1246.1	1693.7	2504.1	5142.4	6741.9	6732.4	5710.1	4946.9
62.5°	504.1	513.5	605.4	885.7	1114.2	1434.6	3966.9	6471.0	6546.3	5945.7	5154.2
65°	419.3	424.0	468.8	654.9	815.1	829.2	2473.4	5667.7	5766.6	5872.6	5198.9
67.5°	395.7	398.1	421.7	482.9	638.4	600.7	1104.8	4327.3	4537.0	5283.7	4906.8
70°	360.4	362.8	398.1	426.4	515.9	473.5	567.7	2873.9	3156.6	4176.6	4230.7
72.5°	308.6	315.7	343.9	400.5	419.3	393.4	438.2	1535.9	1816.2	2793.8	3267.3
75°	266.2	270.9	292.1	339.2	393.4	313.3	372.2	699.6	819.8	1639.5	2068.3
77.5°	214.4	216.7	247.3	278.0	329.8	254.4	289.7	419.3	440.5	800.9	935.2
80°	162.5	162.5	183.7	221.4	245.0	245.0	212.0	292.1	303.9	381.6	369.8
82.5°	124.8	122.5	139.0	155.5	176.7	204.9	160.2	193.2	197.9	230.9	197.9
85°	82.4	82.4	91.9	106.0	117.8	113.1	124.8	113.1	117.8	143.7	108.4
87.5°	35.3	35.3	49.5	47.1	51.8	54.2	61.2	54.2	54.2	66.0	49.5
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°	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2
2.5°	1005.9	1008.2	1012.9	1015.3	1022.4	1024.7	1024.7	1029.4	1029.4	1034.1	1034.1
5°	1012.9	1020.0	1027.1	1034.1	1041.2	1043.6	1048.3	1050.6	1050.6	1055.3	1053.0
7.5°	1027.1	1034.1	1048.3	1055.3	1064.8	1069.5	1067.1	1069.5	1067.1	1069.5	1069.5
10°	1045.9	1055.3	1071.8	1081.2	1088.3	1090.7	1083.6	1076.5	1067.1	1067.1	1067.1
12.5°	1067.1	1074.2	1095.4	1102.4	1107.2	1100.1	1081.2	1067.1	1060.0	1062.4	1060.0
15°	1088.3	1095.4	1111.9	1118.9	1118.9	1097.7	1081.2	1076.5	1074.2	1076.5	1076.5
17.5°	1109.5	1116.6	1130.7	1130.7	1123.6	1107.2	1090.7	1074.2	1062.4	1055.3	1055.3
20°	1137.8	1137.8	1142.5	1142.5	1140.1	1114.2	1074.2	1034.1	1010.6	996.4	994.1
22.5°	1175.5	1166.0	1156.6	1156.6	1166.0	1097.7	1020.0	958.7	921.1	916.3	906.9
25°	1215.5	1194.3	1170.8	1187.2	1170.8	1055.3	944.6	862.2	817.4	800.9	805.6
27.5°	1257.9	1224.9	1189.6	1236.7	1147.2	972.9	838.6	746.7	704.3	692.6	692.6
30°	1316.8	1267.3	1215.5	1288.5	1102.4	878.7	713.8	647.8	624.2	614.8	612.5
32.5°	1429.9	1354.5	1279.1	1335.7	1053.0	756.2	629.0	588.9	560.6	551.2	558.3
35°	1531.2	1425.2	1375.7	1356.9	975.2	657.2	577.1	541.8	518.2	506.5	506.5
37.5°	1623.0	1521.7	1484.1	1356.9	873.9	596.0	544.2	515.9	485.3	475.8	475.8
40°	1823.3	1689.0	1623.0	1338.0	749.1	565.4	527.7	494.7	468.8	459.4	457.0
42.5°	2098.9	1917.5	1766.7	1295.6	643.1	551.2	518.2	480.6	459.4	452.3	449.9
45°	2391.0	2230.8	1903.4	1220.2	574.8	537.1	515.9	475.8	449.9	442.9	440.5
47.5°	2744.3	2579.4	2061.2	1104.8	527.7	527.7	513.5	468.8	445.2	438.2	438.2
50°	3135.4	2998.7	2261.4	972.9	492.3	520.6	508.8	468.8	442.9	435.8	433.4
52.5°	3535.8	3472.2	2471.1	843.3	457.0	511.2	506.5	468.8	438.2	431.1	431.1
55°	4044.6	3992.8	2713.7	746.7	428.7	492.3	506.5	464.1	431.1	426.4	426.4
57.5°	4544.0	4525.2	2902.2	661.9	407.5	468.8	499.4	457.0	424.0	421.7	421.7
60°	4970.4	4951.6	2982.3	555.9	386.3	445.2	485.3	445.2	412.2	414.6	414.6
62.5°	5234.2	5125.9	2923.4	459.4	365.1	424.0	468.8	431.1	400.5	407.5	405.2
65°	5281.4	5029.3	2694.9	384.0	341.6	400.5	449.9	414.6	384.0	400.5	398.1
67.5°	4935.1	4515.8	2266.1	334.5	318.0	374.5	428.7	391.0	365.1	388.7	381.6
70°	4186.0	3667.7	1677.2	296.8	294.5	343.9	400.5	362.8	339.2	351.0	341.6
72.5°	3116.5	2647.7	1086.0	268.5	268.5	308.6	360.4	327.4	303.9	306.2	296.8
75°	1943.4	1627.8	617.2	242.6	242.6	273.3	320.4	287.4	270.9	261.5	273.3
77.5°	883.4	716.1	325.1	216.7	219.1	233.2	275.6	245.0	226.1	212.0	219.1
80°	327.4	292.1	212.0	186.1	190.8	193.2	221.4	195.5	179.0	169.6	164.9
82.5°	169.6	157.8	143.7	148.4	155.5	148.4	172.0	146.1	127.2	120.1	101.3
85°	84.8	82.4	87.2	98.9	108.4	91.9	103.6	94.2	77.7	56.5	56.5
87.5°	33.0	35.3	33.0	44.8	49.5	42.4	47.1	33.0	23.6	11.8	9.4
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)