

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: P214732

Luminaire Tested: **ARCH-AF24-70-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214732
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-AF24-70-D-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8669.5 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 74
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

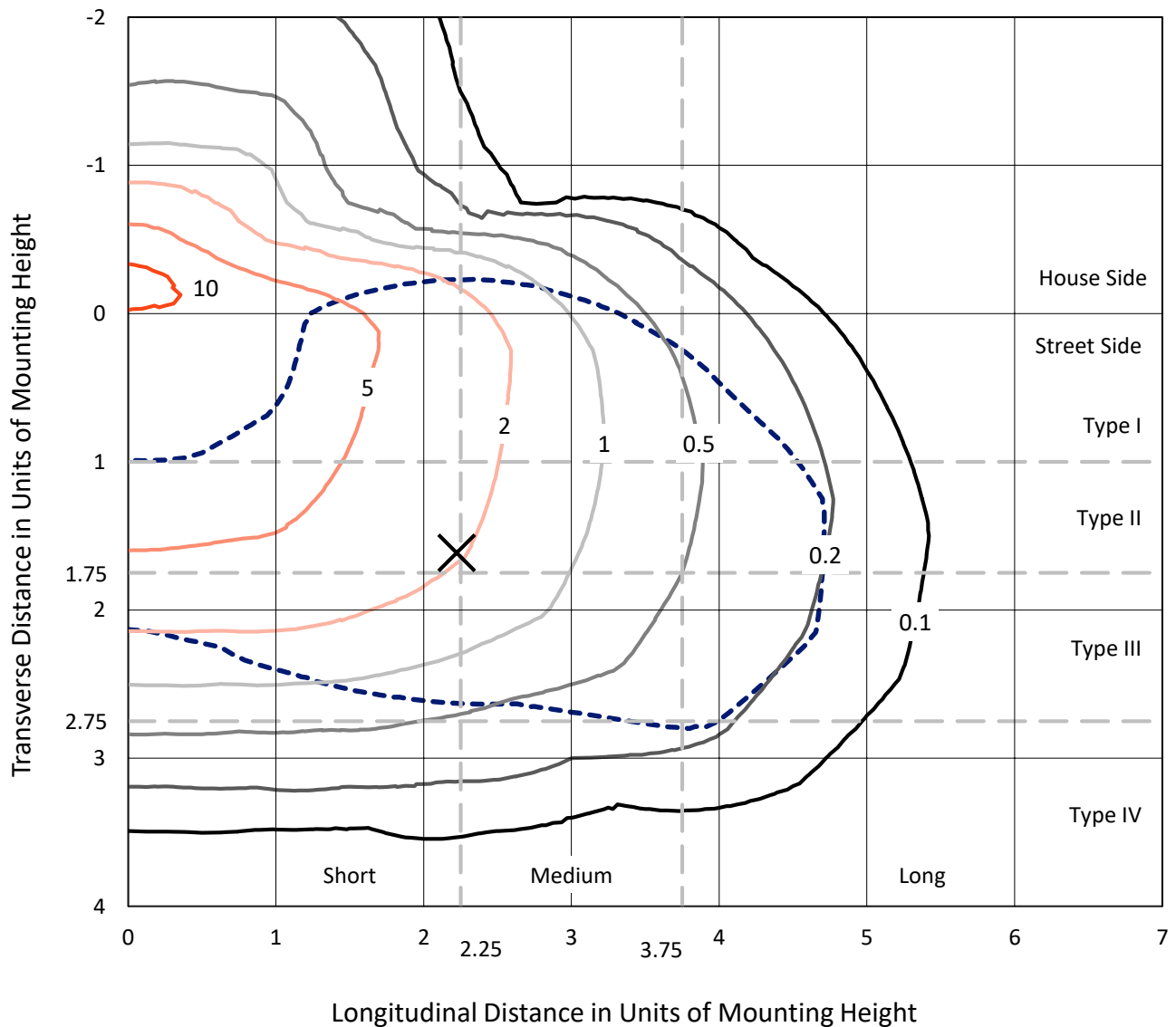


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

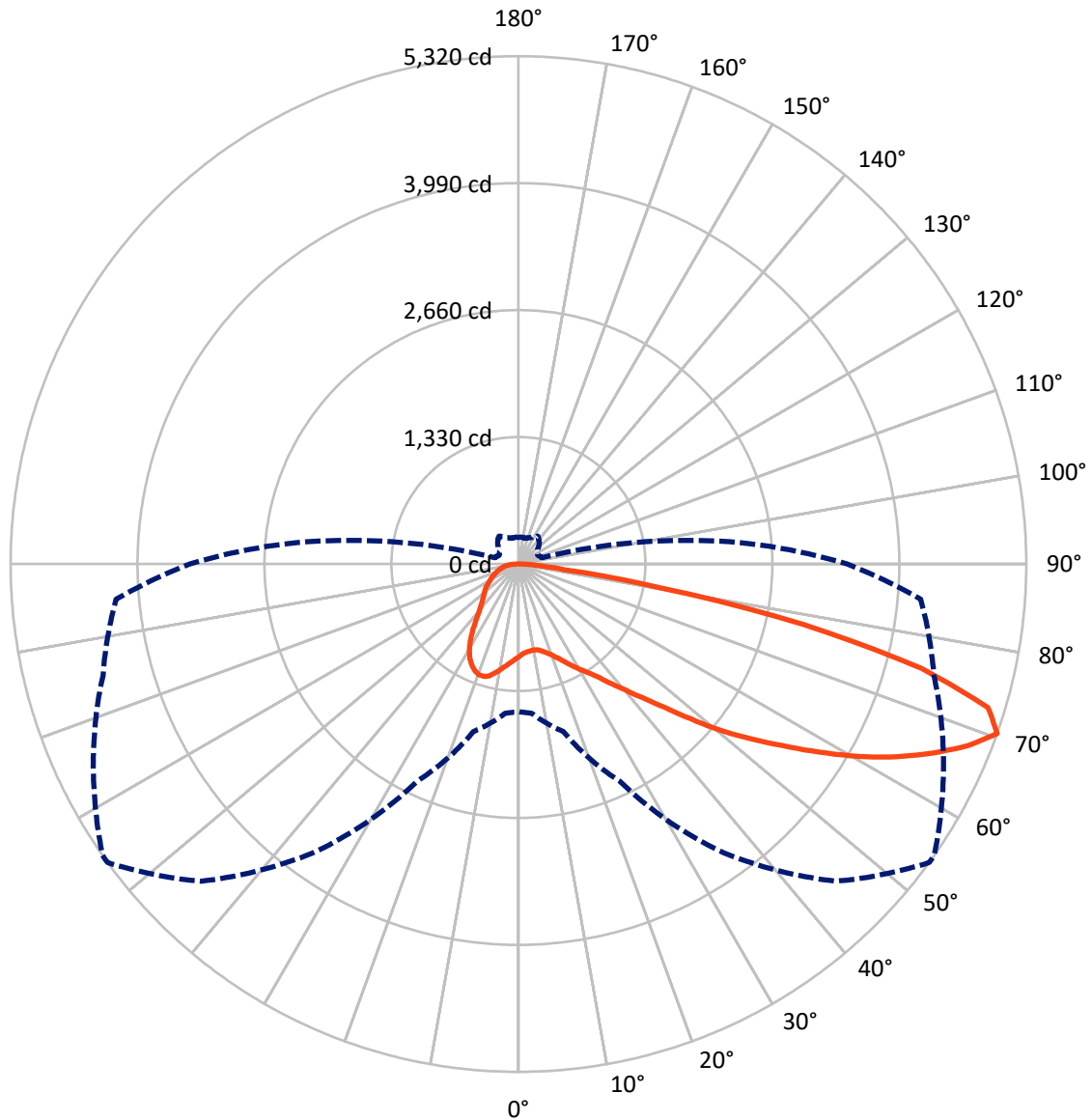


Based on 10 foot mounting height. Maximum calculated value = 11.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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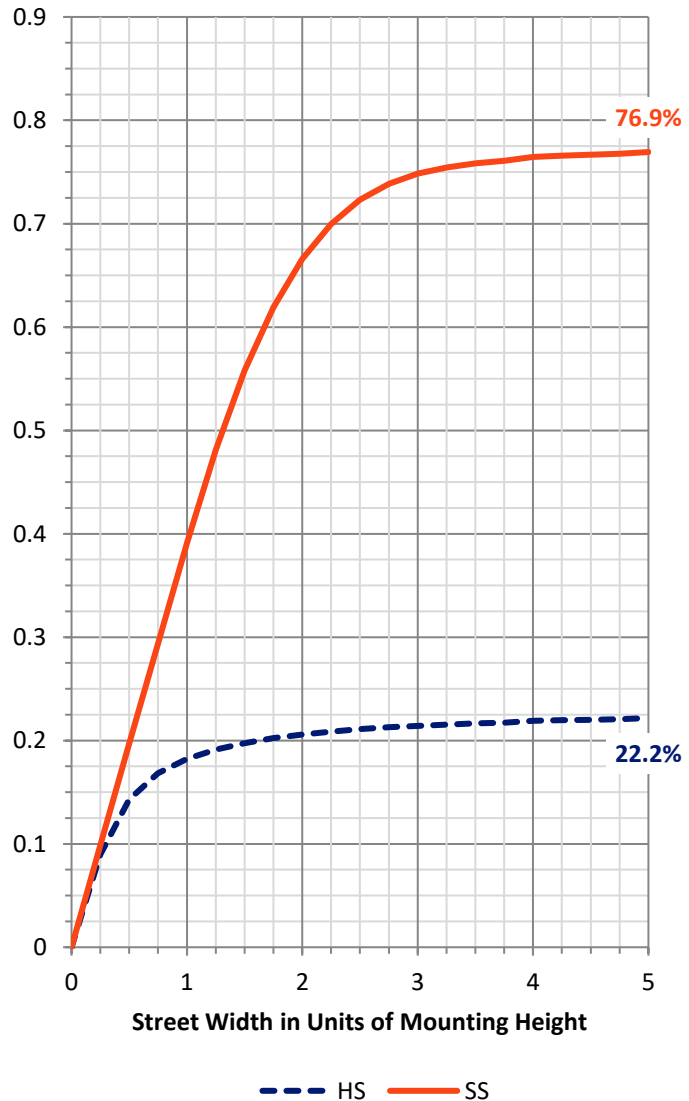
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1966.2	0.0	1966.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6703.3	0.0	6703.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	8669.5	0.0	8669.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	1.1
10°-20°	304.2	3.5
20°-30°	528.4	6.1
30°-40°	772.2	8.9
40°-50°	1212.0	14.0
50°-60°	1863.7	21.5
60°-70°	2277.0	26.3
70°-80°	1411.8	16.3
80°-90°	205.1	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°	8669.5	100.0
0°-180°	8669.5	100.0

Coefficient of Utilization



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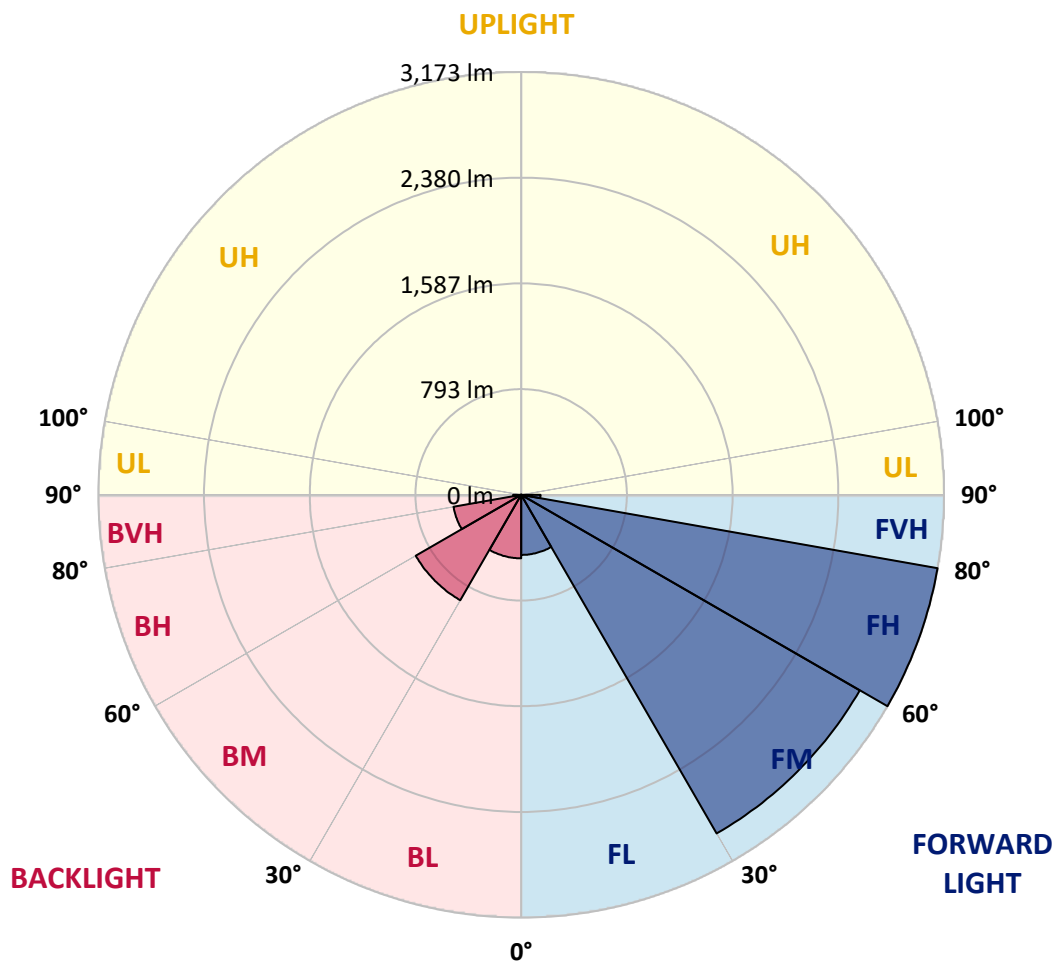
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.1	5.2			
FM	(30°-60°)	2934.2	33.8			
FH	(60°-80°)	3173.2	36.6			G2/5000
FVH	(80°-90°)	144.8	1.7			G2/225
BL	(0°-30°)	476.7	5.5	B1/500		
BM	(30°-60°)	913.7	10.5	B1/1000		
BH	(60°-80°)	515.6	5.9	B2/1000		G2/1000
BVH	(80°-90°)	60.3	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0
2.5°	931.8	928.6	928.6	933.4	935.0	939.8	939.8	941.3	946.1	954.1	963.6
5°	903.3	901.7	903.3	909.6	912.8	922.3	925.5	927.1	936.6	949.3	963.6
7.5°	874.7	873.1	876.3	885.8	895.3	909.6	917.6	919.1	933.4	950.9	970.0
10°	865.2	863.6	868.4	876.3	885.8	901.7	914.4	916.0	936.6	957.3	984.2
12.5°	877.9	876.3	881.1	888.9	898.5	909.6	923.9	925.5	952.5	979.5	1008.0
15°	909.6	909.6	911.2	916.0	925.5	935.0	947.8	949.3	977.8	1009.7	1038.2
17.5°	958.8	955.6	955.6	954.1	960.4	965.2	981.0	982.6	1012.8	1041.4	1069.9
20°	1019.2	1017.5	1011.2	1003.3	1001.7	1004.8	1020.7	1022.3	1052.5	1076.3	1103.3
22.5°	1092.2	1093.7	1079.5	1062.0	1054.0	1058.9	1073.2	1074.7	1096.9	1117.6	1141.4
25°	1189.0	1184.3	1163.6	1138.2	1122.4	1122.4	1136.6	1136.6	1157.3	1169.9	1185.8
27.5°	1281.0	1271.5	1252.5	1216.0	1190.6	1195.3	1209.6	1209.6	1228.7	1233.5	1241.4
30°	1381.1	1371.6	1347.7	1301.7	1268.4	1265.2	1282.7	1281.0	1306.5	1304.9	1298.5
32.5°	1503.3	1498.5	1458.9	1400.1	1355.7	1344.6	1360.4	1362.1	1377.9	1373.2	1352.5
35°	1674.8	1673.2	1636.7	1533.5	1474.8	1454.1	1463.6	1463.6	1474.8	1462.1	1427.1
37.5°	1890.7	1893.9	1862.1	1709.7	1627.1	1592.2	1593.9	1592.2	1595.4	1581.1	1544.7
40°	2106.6	2114.5	2112.9	1928.8	1824.0	1763.7	1741.5	1738.3	1746.2	1739.8	1705.0
42.5°	2390.7	2409.8	2365.4	2198.6	2081.2	1979.6	1919.3	1911.3	1928.8	1936.8	1903.4
45°	2686.0	2679.6	2609.8	2489.1	2382.8	2252.6	2138.3	2125.6	2138.3	2162.1	2127.2
47.5°	2840.0	2835.2	2817.7	2757.5	2741.5	2592.4	2419.3	2408.2	2384.4	2417.7	2376.4
50°	3094.0	3098.7	3027.3	3021.0	3087.7	3005.1	2736.8	2711.4	2668.6	2695.5	2660.6
52.5°	3278.1	3257.5	3213.0	3268.6	3476.6	3432.1	3035.2	3024.1	2984.5	2978.1	2962.3
55°	3352.7	3352.7	3360.7	3489.3	3786.1	3727.3	3359.1	3370.2	3316.2	3271.8	3292.4
57.5°	3374.9	3384.4	3452.8	3665.4	4149.6	3957.6	3716.3	3732.1	3654.4	3565.5	3630.6
60°	3265.5	3294.0	3457.5	3765.5	4354.4	4202.1	4092.5	4097.2	3984.5	3854.4	3968.6
62.5°	2984.5	3019.3	3311.5	3806.7	4321.0	4452.8	4448.1	4459.2	4305.2	4143.3	4286.2
65°	2639.9	2674.9	2986.0	3690.9	4295.7	4632.2	4773.5	4803.7	4605.2	4387.7	4484.6
67.5°	2133.6	2179.6	2474.8	3300.3	4171.9	4779.8	5078.3	5110.0	4837.0	4514.8	4467.1
70°	1546.2	1568.4	1816.0	2508.2	3667.1	4698.9	5319.7	5318.0	4913.2	4505.3	4229.0
72.5°	744.5	762.0	976.3	1557.3	2622.5	3987.8	5145.0	5175.1	4808.5	4367.1	3684.5
75°	306.4	323.9	395.3	657.2	1376.4	2635.2	4360.7	4432.2	4367.1	3919.4	2882.9
77.5°	190.5	196.8	231.8	339.7	628.6	1230.3	3052.7	3149.6	3460.6	3140.0	1903.4
80°	142.9	147.6	173.1	238.1	396.9	454.0	1516.0	1638.3	2097.0	1801.8	862.0
82.5°	119.1	120.6	138.1	173.1	269.9	260.3	485.8	541.3	977.8	687.4	296.9
85°	111.1	114.3	123.8	123.8	171.4	163.5	201.6	211.1	284.2	235.0	103.2
87.5°	57.2	54.0	109.6	96.9	88.9	79.4	85.7	92.1	106.4	112.7	46.0
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°	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0	970.0
2.5°	966.8	971.5	979.5	987.5	997.0	1008.0	1014.4	1022.3	1028.7	1025.5	1023.9
5°	971.5	979.5	997.0	1012.8	1031.9	1054.0	1068.4	1084.2	1096.9	1100.1	1095.4
7.5°	979.5	993.8	1017.5	1046.2	1071.5	1100.1	1122.4	1144.6	1160.4	1163.6	1163.6
10°	998.5	1014.4	1046.2	1084.2	1114.4	1144.6	1169.9	1187.4	1201.8	1208.1	1208.1
12.5°	1025.5	1044.5	1082.7	1128.7	1162.1	1190.6	1204.9	1212.8	1219.2	1225.5	1227.1
15°	1057.2	1077.9	1123.9	1173.1	1208.1	1222.3	1222.3	1220.8	1220.8	1224.0	1227.1
17.5°	1089.0	1111.2	1158.9	1211.3	1233.5	1225.5	1214.4	1209.6	1206.5	1204.9	1209.6
20°	1122.4	1144.6	1192.1	1241.4	1235.0	1201.8	1185.8	1174.8	1165.2	1160.4	1166.8
22.5°	1158.9	1179.5	1228.7	1262.0	1214.4	1163.6	1133.4	1116.0	1100.1	1090.6	1096.9
25°	1201.8	1222.3	1270.0	1268.4	1177.9	1106.4	1058.9	1030.3	1012.8	1003.3	1003.3
27.5°	1252.5	1270.0	1316.0	1252.5	1127.1	1030.3	960.4	933.4	928.6	920.8	920.8
30°	1304.9	1319.2	1358.9	1216.0	1057.2	930.3	854.1	841.4	842.9	835.0	836.6
32.5°	1358.9	1373.2	1384.3	1162.1	966.8	817.5	766.7	757.2	755.7	749.3	743.0
35°	1435.1	1455.7	1387.4	1089.0	857.2	723.8	687.4	677.8	668.3	646.1	646.1
37.5°	1551.0	1573.2	1379.6	998.5	744.5	650.9	617.6	604.9	588.9	566.7	558.8
40°	1709.7	1709.7	1362.1	896.9	654.1	592.1	560.4	544.5	527.0	504.8	500.0
42.5°	1897.1	1852.6	1335.1	793.7	587.4	552.4	523.9	506.4	485.8	460.3	457.2
45°	2116.1	1995.5	1297.0	701.6	538.2	528.7	511.2	481.0	446.1	419.1	414.3
47.5°	2328.8	2124.1	1260.5	636.6	496.8	519.1	504.8	454.0	406.4	368.3	363.6
50°	2562.2	2238.3	1217.6	582.6	465.1	512.7	496.8	414.3	361.9	334.9	331.7
52.5°	2795.5	2354.2	1171.6	525.5	438.1	500.0	477.8	385.8	360.4	323.9	319.1
55°	3041.5	2489.1	1117.6	462.0	406.4	474.6	452.5	384.1	371.4	323.9	312.7
57.5°	3281.3	2638.4	1030.3	400.1	371.4	436.6	442.9	374.6	347.7	320.7	308.0
60°	3546.4	2797.2	885.8	347.7	341.3	404.8	430.3	354.0	320.7	311.2	304.8
62.5°	3759.1	2940.0	692.1	311.2	315.9	379.4	414.3	341.3	309.5	301.7	300.0
65°	3851.2	2943.1	496.8	279.4	290.5	355.6	398.4	330.2	300.0	296.9	295.2
67.5°	3754.3	2781.2	349.2	249.2	263.5	333.4	377.8	319.1	290.5	292.1	288.9
70°	3441.6	2439.9	255.5	220.7	238.1	309.5	355.6	304.8	279.4	282.5	277.8
72.5°	2879.7	1901.8	204.8	196.8	217.5	284.2	333.4	288.9	262.0	263.5	254.0
75°	2127.2	1260.5	171.4	176.3	193.6	260.3	304.8	268.3	242.8	236.5	230.2
77.5°	1265.2	647.7	141.3	154.0	173.1	231.8	273.0	242.8	222.3	211.1	206.3
80°	522.3	262.0	115.9	130.2	150.8	206.3	241.3	212.7	198.5	187.3	181.0
82.5°	208.0	128.6	92.1	106.4	126.9	179.4	211.1	187.3	173.1	165.1	147.6
85°	79.4	63.5	61.9	74.6	95.2	138.1	174.6	157.1	146.1	125.4	120.6
87.5°	31.7	28.5	28.5	36.5	54.0	87.4	125.4	109.6	114.3	90.5	92.1
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)