

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: P397584

Luminaire Tested: **ARCH-S-PA1-100-827-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-827-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8681 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

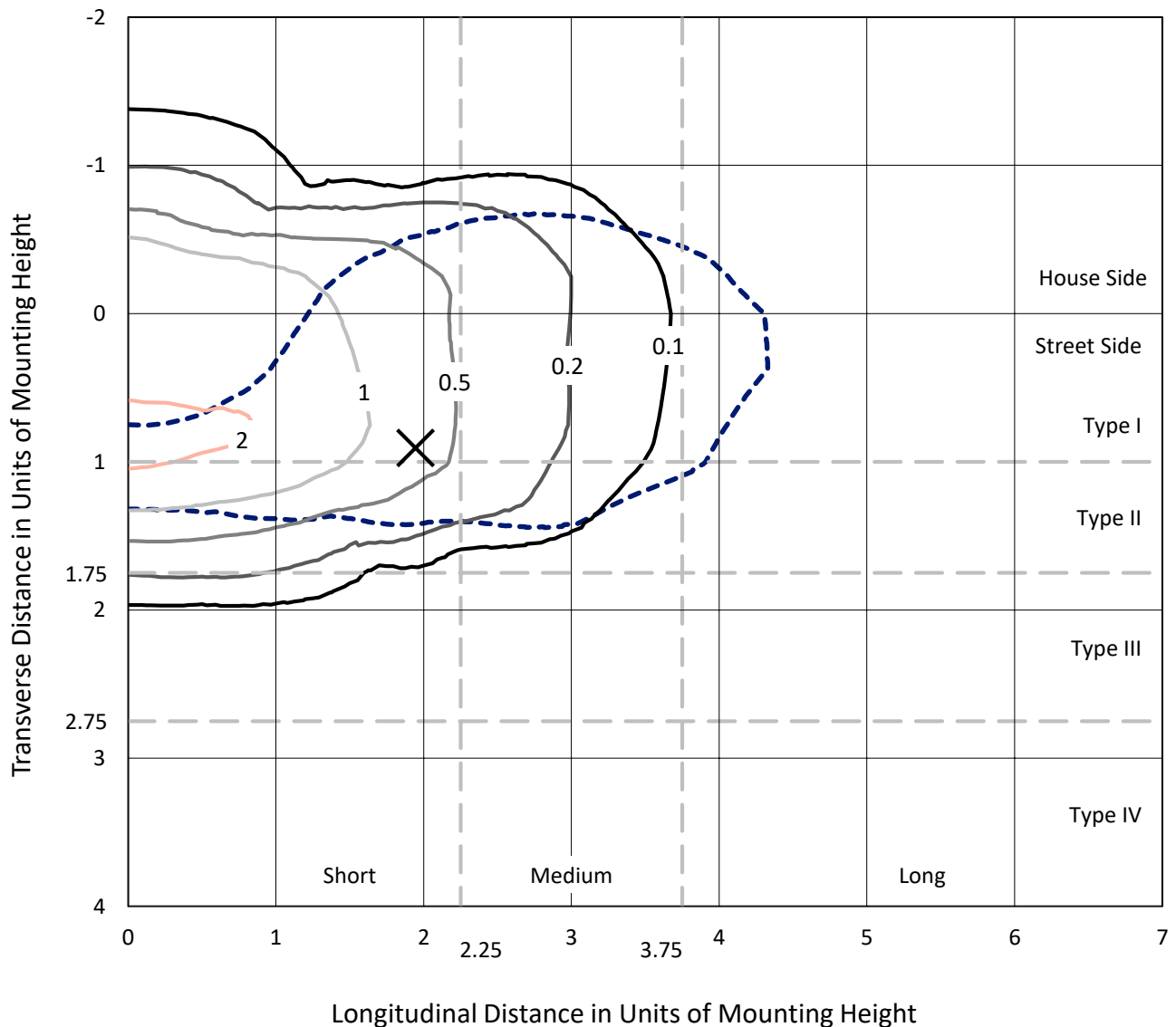
Input Watts (W): 96
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

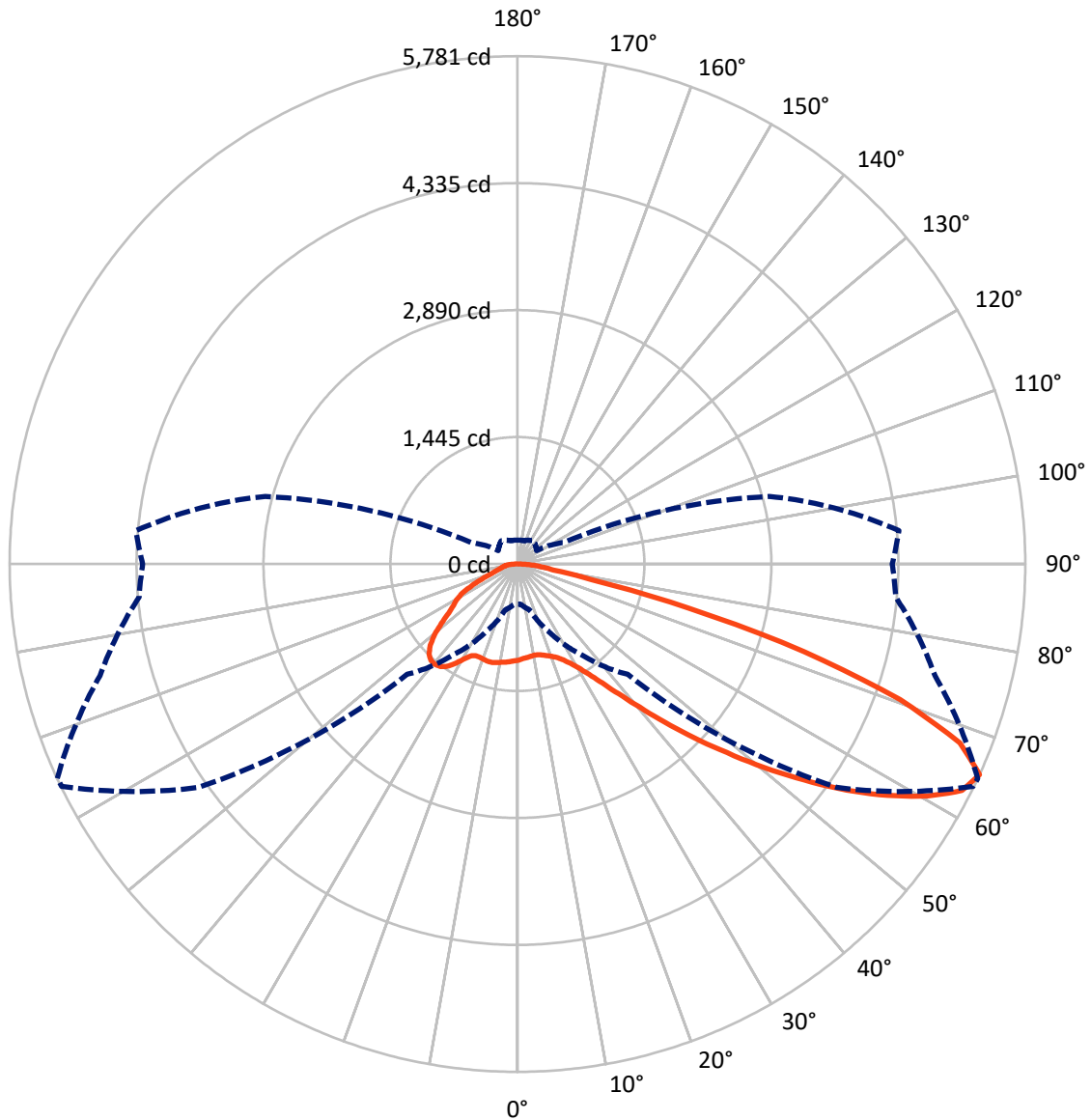
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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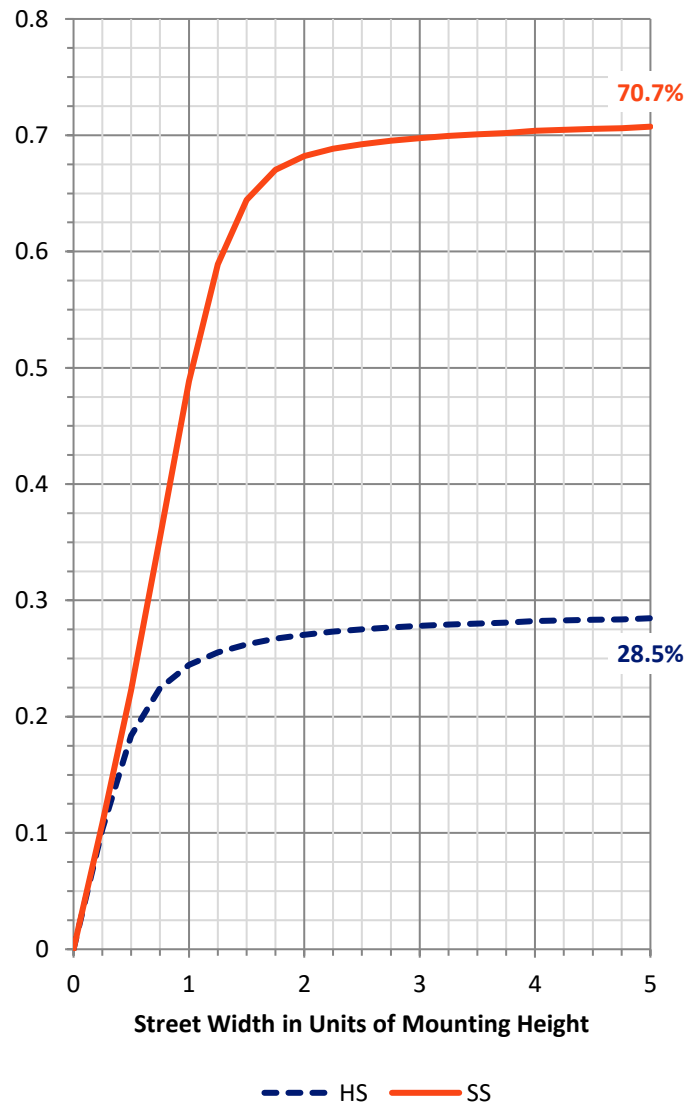
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2509.8	0.0	2509.8
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	6171.2	0.0	6171.2
	% Fixture	71.1	0.0	71.1
Total	Lumens	8681.0	0.0	8681.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	1.2
10°-20°	312.0	3.6
20°-30°	554.2	6.4
30°-40°	937.6	10.8
40°-50°	1632.2	18.8
50°-60°	2109.3	24.3
60°-70°	1845.8	21.3
70°-80°	1004.0	11.6
80°-90°	181.4	2.1
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°	8681.0	100.0
0°-180°	8681.0	100.0



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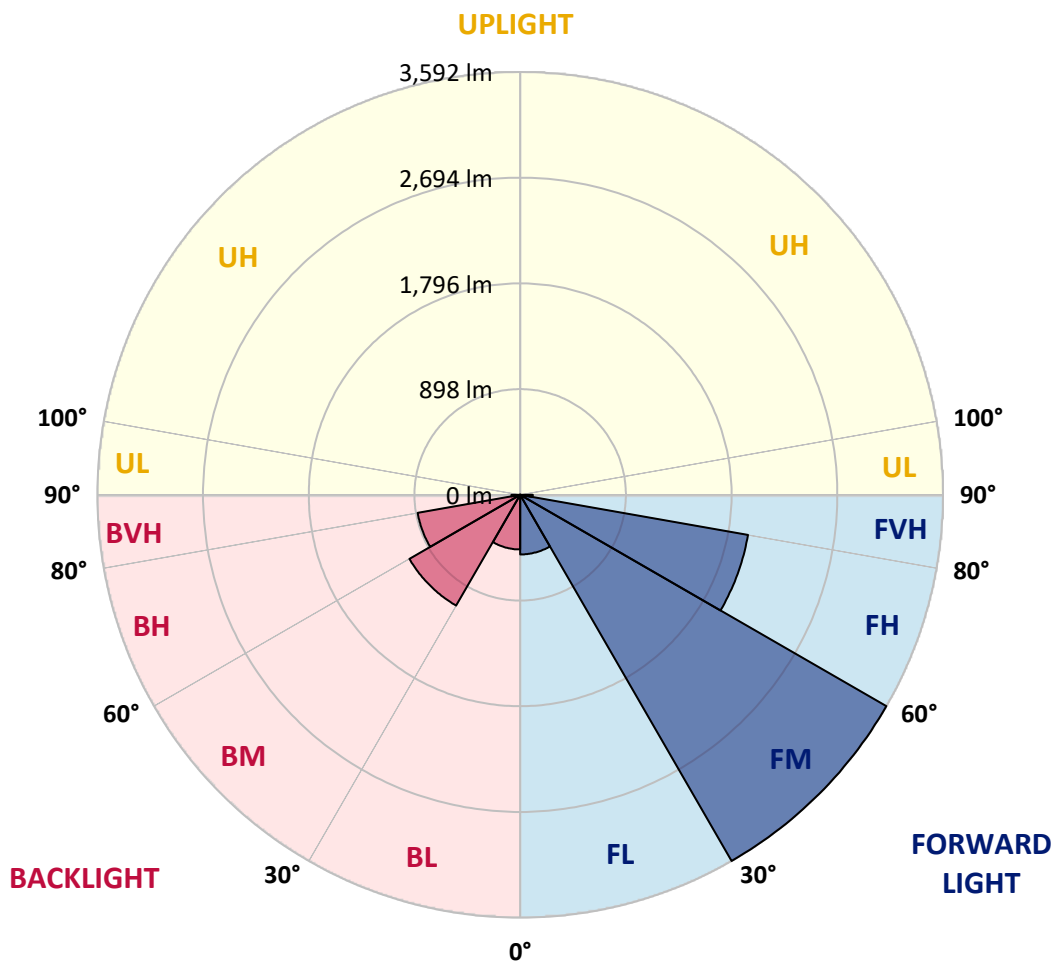
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	506.5	5.8			
FM (30°-60°)	3592.4	41.4			
FH (60°-80°)	1965.5	22.6			G2/5000
FVH (80°-90°)	106.7	1.2			G2/225
BL (0°-30°)	464.2	5.3	B1/500		
BM (30°-60°)	1086.7	12.5	B2/2500		
BH (60°-80°)	884.2	10.2	B2/1000		G2/1000
BVH (80°-90°)	74.7	0.9			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°	64°	65°	75°	85°
0°	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9
2.5°	1077.5	1076.4	1074.1	1076.4	1077.5	1079.8	1078.6	1080.9	1079.8	1083.2	1088.9
5°	1050.1	1047.8	1046.7	1052.4	1055.8	1061.5	1063.8	1071.8	1070.6	1076.4	1085.5
7.5°	1019.2	1019.2	1018.1	1024.9	1029.5	1039.8	1047.8	1061.5	1062.6	1072.9	1083.2
10°	995.2	996.4	995.2	1000.9	1007.8	1020.4	1034.1	1053.5	1054.7	1069.5	1079.8
12.5°	986.1	986.1	986.1	994.1	1003.2	1020.4	1036.4	1056.9	1059.2	1075.2	1084.4
15°	998.7	999.8	997.5	1005.5	1015.8	1036.4	1051.2	1072.9	1075.2	1090.1	1095.8
17.5°	1043.2	1047.8	1042.1	1046.7	1044.4	1060.4	1074.1	1095.8	1096.9	1109.5	1111.8
20°	1131.2	1135.8	1126.6	1120.9	1100.4	1099.2	1104.9	1122.1	1122.1	1130.1	1124.4
22.5°	1267.2	1271.8	1255.8	1234.0	1184.9	1160.9	1148.3	1156.3	1155.2	1158.6	1143.8
25°	1447.7	1446.6	1427.1	1387.2	1308.3	1250.0	1219.2	1206.6	1206.6	1199.8	1181.5
27.5°	1671.7	1654.5	1620.3	1572.3	1462.6	1381.4	1315.2	1283.2	1277.5	1256.9	1222.6
30°	1910.5	1897.9	1848.8	1779.1	1652.2	1548.3	1438.6	1374.6	1371.2	1326.6	1275.2
32.5°	2191.6	2171.0	2116.2	2032.7	1880.8	1734.5	1597.4	1500.3	1494.6	1423.7	1352.9
35°	2552.6	2535.5	2429.2	2345.8	2150.4	1958.5	1796.2	1667.1	1662.5	1575.7	1485.4
37.5°	2985.7	2941.1	2838.3	2681.8	2476.1	2248.7	2043.0	1880.8	1875.1	1779.1	1664.8
40°	3371.9	3331.9	3240.5	3096.5	2876.0	2623.5	2344.7	2148.2	2142.4	2025.9	1881.9
42.5°	3657.6	3630.1	3570.7	3487.3	3329.6	3176.5	2729.8	2471.5	2461.2	2310.4	2131.0
45°	3823.3	3801.5	3767.3	3787.8	3785.5	3757.0	3189.1	2856.6	2823.4	2628.1	2408.7
47.5°	3783.3	3763.8	3777.5	3937.5	4158.0	4323.7	3723.8	3250.8	3206.2	2951.4	2704.6
50°	3494.2	3502.2	3574.2	3880.4	4375.1	4743.1	4316.9	3699.8	3640.4	3277.1	2985.7
52.5°	2967.4	2986.8	3161.7	3590.2	4351.1	5015.0	4852.8	4163.8	4084.9	3594.7	3241.7
55°	2357.3	2406.4	2632.6	3082.8	4038.1	5034.4	5257.3	4630.0	4543.1	3893.0	3464.5
57.5°	1743.7	1816.8	2078.4	2492.1	3438.2	4727.1	5459.5	5075.6	4970.5	4188.9	3699.8
60°	1106.1	1150.6	1452.3	1940.2	2631.5	3975.2	5433.2	5454.9	5363.5	4483.7	3945.5
62.5°	706.1	727.9	879.8	1383.7	1839.6	2943.4	5146.4	5741.7	5680.0	4752.2	4178.6
65°	453.6	462.8	540.5	851.3	1252.3	1776.8	4432.3	5772.6	5780.6	4920.2	4322.6
67.5°	369.1	373.6	402.2	525.6	885.5	981.5	3087.4	5333.8	5430.9	4876.8	4273.4
70°	335.9	341.6	371.4	419.3	685.6	677.6	1494.6	4463.1	4622.0	4626.5	4055.2
72.5°	283.4	291.4	331.4	396.5	530.2	534.8	633.0	3178.8	3413.0	4135.2	3727.3
75°	236.5	241.1	275.4	349.6	449.1	427.3	444.5	1685.4	2023.6	3315.9	3378.8
77.5°	192.0	196.5	221.7	278.8	398.8	332.5	349.6	698.1	862.7	2251.0	2761.7
80°	137.1	141.7	170.3	217.1	301.7	299.4	259.4	385.1	418.2	1216.9	1793.9
82.5°	98.3	101.7	129.1	155.4	209.1	300.5	195.4	261.7	274.2	539.3	723.3
85°	66.3	66.3	89.1	102.8	134.8	189.7	157.7	177.1	185.1	255.9	195.4
87.5°	28.6	28.6	48.0	52.6	70.8	88.0	117.7	89.1	91.4	138.3	80.0
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°	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9	1096.9
2.5°	1092.4	1093.5	1095.8	1102.6	1107.2	1114.1	1117.5	1122.1	1122.1	1119.8	1120.9
5°	1090.1	1093.5	1101.5	1114.1	1122.1	1134.6	1143.8	1150.6	1152.9	1150.6	1151.8
7.5°	1088.9	1094.6	1108.4	1126.6	1138.1	1154.1	1166.6	1174.6	1180.3	1178.1	1179.2
10°	1085.5	1094.6	1111.8	1134.6	1151.8	1167.8	1179.2	1182.6	1186.1	1183.8	1182.6
12.5°	1090.1	1100.4	1118.6	1146.1	1165.5	1178.1	1181.5	1175.8	1167.8	1163.2	1162.1
15°	1099.2	1109.5	1127.8	1156.3	1173.5	1178.1	1170.1	1151.8	1133.5	1123.2	1122.1
17.5°	1111.8	1118.6	1133.5	1158.6	1172.3	1166.6	1150.6	1128.9	1115.2	1107.2	1108.4
20°	1119.8	1119.8	1131.2	1150.6	1162.1	1157.5	1138.1	1114.1	1092.4	1082.1	1078.6
22.5°	1131.2	1125.5	1126.6	1143.8	1159.8	1152.9	1111.8	1069.5	1038.7	1027.2	1026.1
25°	1162.1	1146.1	1135.8	1146.1	1183.8	1127.8	1045.5	996.4	967.8	957.5	958.7
27.5°	1199.8	1178.1	1156.3	1173.5	1203.2	1070.6	961.0	905.0	887.8	879.8	883.3
30°	1237.5	1208.9	1180.3	1242.0	1189.5	981.5	852.4	797.6	782.7	777.0	781.6
32.5°	1307.2	1260.3	1226.0	1333.5	1147.2	879.8	734.7	684.4	670.7	663.9	661.6
35°	1423.7	1364.3	1330.0	1413.4	1087.8	766.7	627.3	591.9	577.0	562.2	559.9
37.5°	1591.7	1519.7	1488.9	1459.1	1004.4	654.7	545.0	521.0	499.3	476.5	475.3
40°	1792.8	1699.1	1676.2	1479.7	889.0	549.6	487.9	465.1	437.6	415.9	417.1
42.5°	2024.7	1904.8	1855.6	1474.0	746.1	493.6	446.8	421.6	397.6	378.2	377.1
45°	2272.7	2136.7	2023.6	1434.0	604.5	454.8	421.6	391.9	367.9	346.2	343.9
47.5°	2546.9	2395.0	2179.0	1356.3	499.3	427.3	406.8	364.5	342.8	329.1	329.1
50°	2823.4	2641.8	2321.8	1238.6	437.6	406.8	385.1	349.6	332.5	321.1	321.1
52.5°	3060.0	2898.9	2439.5	1098.1	398.8	389.6	370.2	342.8	324.5	314.2	313.1
55°	3289.6	3137.7	2544.6	958.7	366.8	366.8	366.8	337.1	316.5	307.4	306.2
57.5°	3518.2	3389.1	2654.3	867.3	338.2	347.4	359.9	330.2	309.7	301.7	300.5
60°	3776.4	3690.7	2781.2	803.3	313.1	326.8	350.8	322.2	298.2	291.4	290.2
62.5°	4050.6	4050.6	2896.6	713.0	290.2	309.7	337.1	311.9	287.9	282.2	281.1
65°	4265.5	4358.0	2970.8	578.2	267.4	292.5	321.1	298.2	274.2	273.1	270.8
67.5°	4290.6	4435.7	2924.0	436.5	246.8	274.2	305.1	283.4	260.5	260.5	257.1
70°	4110.1	4257.5	2777.7	326.8	232.0	255.9	284.5	265.1	243.4	245.7	240.0
72.5°	3808.4	3845.0	2414.4	258.2	214.8	236.5	259.4	244.5	225.1	225.1	217.1
75°	3410.8	3207.4	1753.9	216.0	194.2	213.7	234.2	221.7	204.5	198.8	194.2
77.5°	2714.9	2324.1	1019.2	186.2	177.1	192.0	205.7	196.5	181.7	169.1	169.1
80°	1654.5	1362.0	450.2	161.1	156.5	168.0	177.1	166.8	154.3	141.7	138.3
82.5°	629.6	525.6	218.2	138.3	137.1	144.0	150.8	140.5	131.4	125.7	108.6
85°	172.5	158.8	149.7	115.4	113.1	112.0	120.0	115.4	102.8	84.6	75.4
87.5°	65.1	74.3	81.1	70.8	75.4	69.7	80.0	73.1	65.1	42.3	37.7
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)