

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: P231275

Luminaire Tested: **ARCH-M-AF48-90-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231275
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-M-AF48-90-D-U-T4W-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10836 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

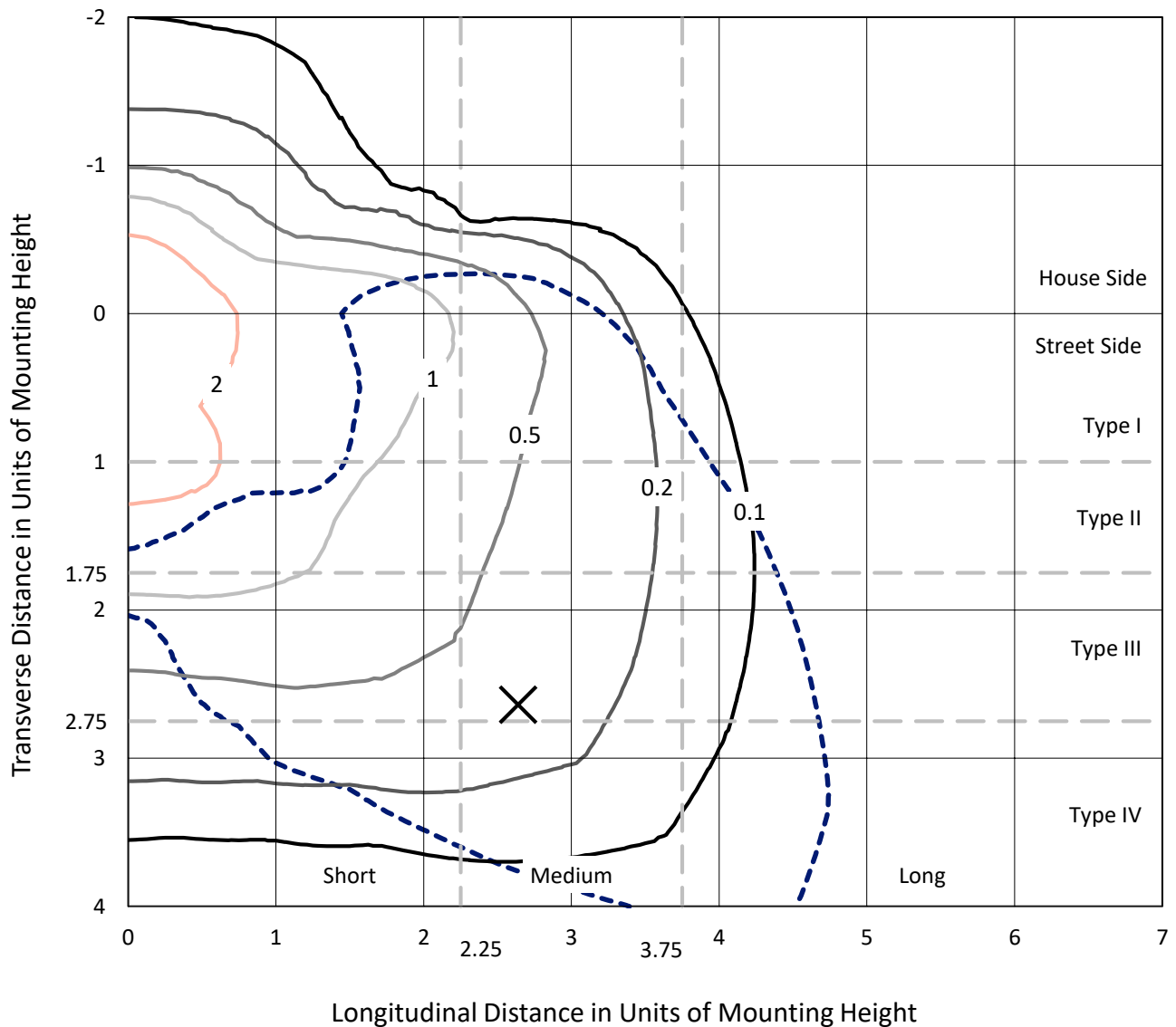
Input Watts (W): 92
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

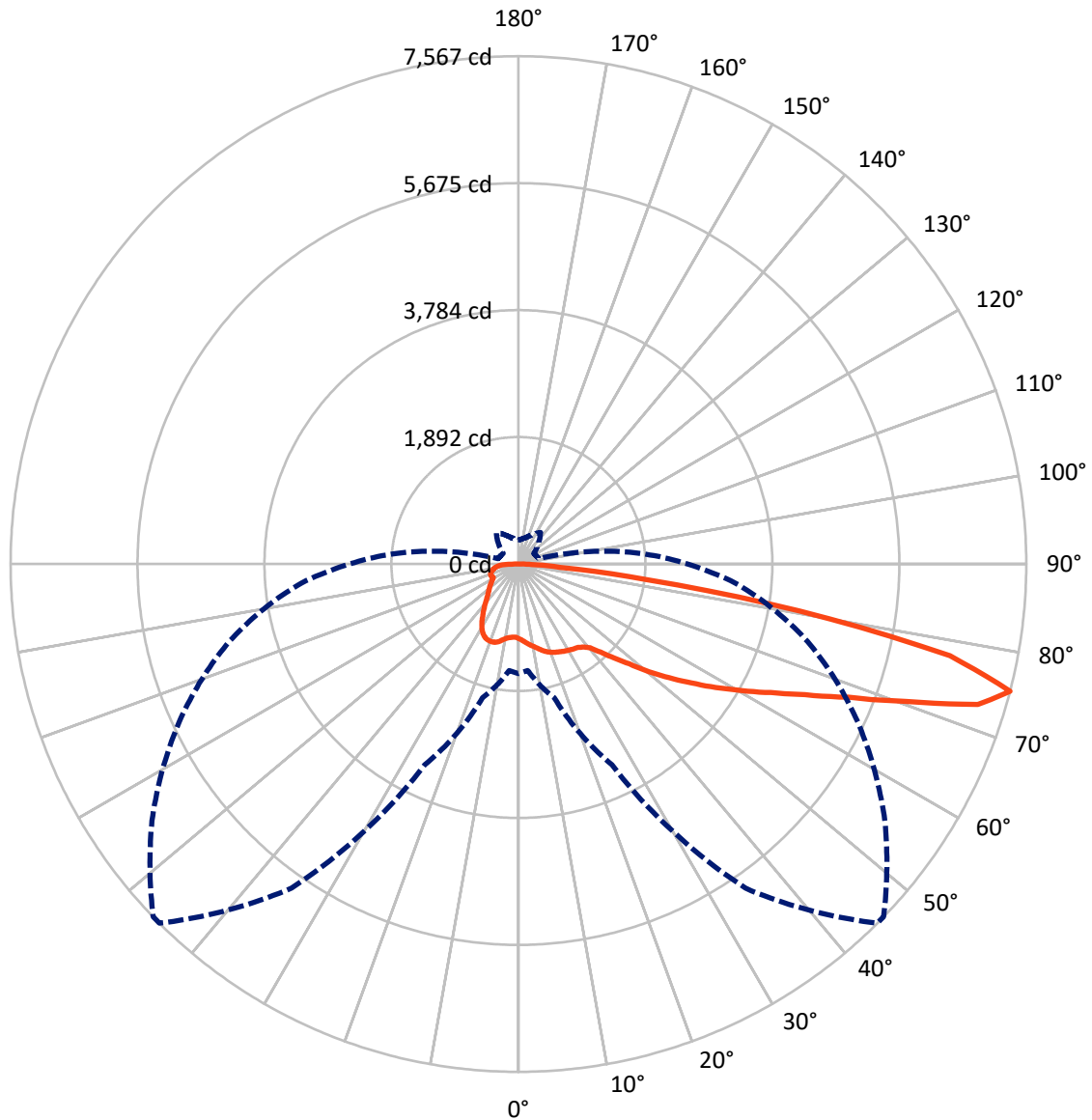
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.2 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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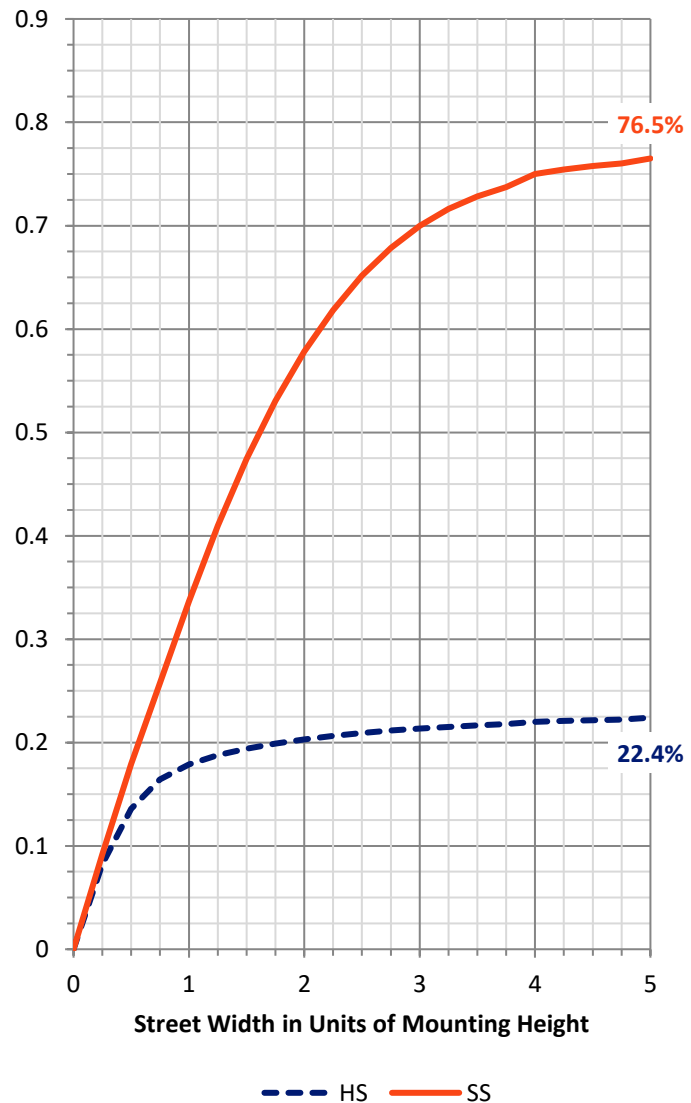
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2510.3	0.0	2510.3
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	8325.8	0.0	8325.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	10836.0	0.0	10836.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	1.0
10°-20°	356.7	3.3
20°-30°	612.2	5.6
30°-40°	856.2	7.9
40°-50°	1255.9	11.6
50°-60°	1956.4	18.1
60°-70°	2815.1	26.0
70°-80°	2452.3	22.6
80°-90°	421.1	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°	10836.0	100.0
0°-180°	10836.0	100.0



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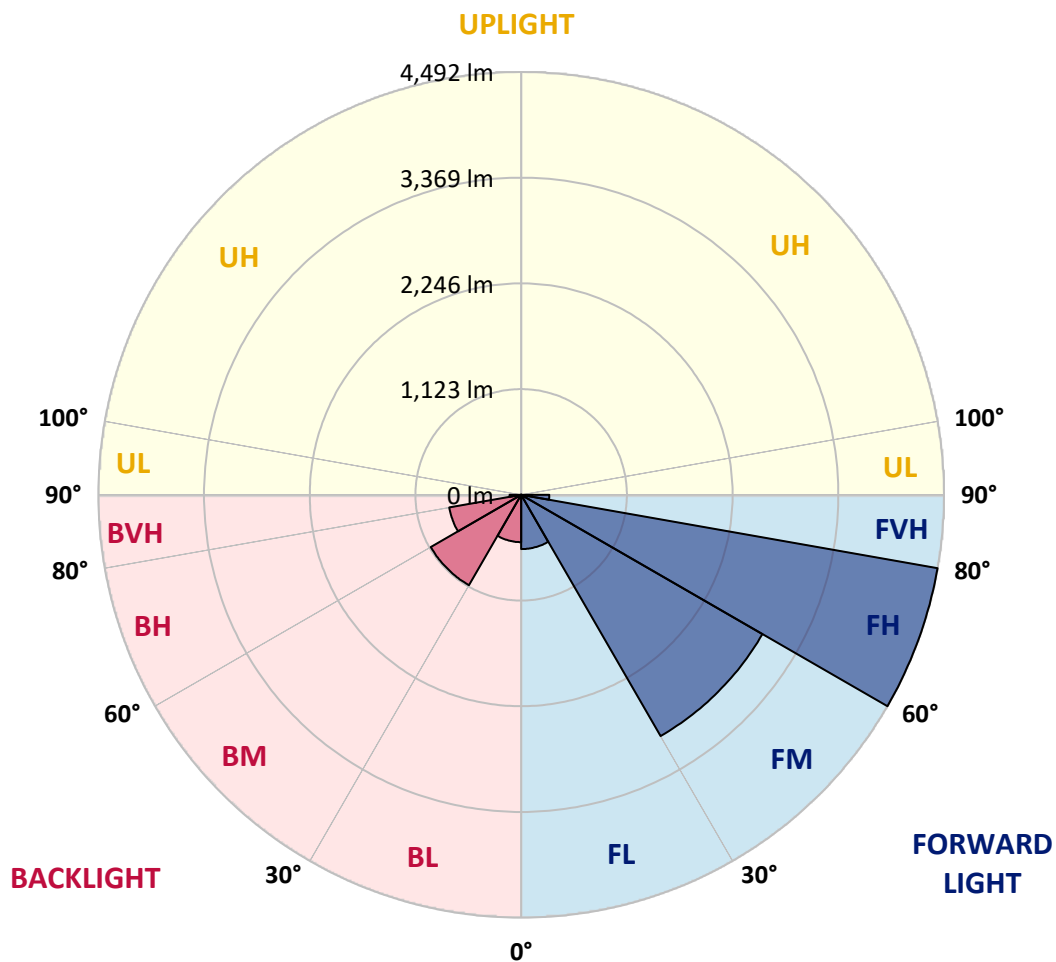
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	576.2	5.3			
FM (30°-60°)	2959.1	27.3			
FH (60°-80°)	4491.6	41.5			G2/5000
FVH (80°-90°)	298.8	2.8			G3/500
BL (0°-30°)	502.8	4.6	B2/1000		
BM (30°-60°)	1109.4	10.2	B2/2500		
BH (60°-80°)	775.7	7.2	B2/1000		G2/1000
BVH (80°-90°)	122.3	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°	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8
2.5°	1165.6	1157.2	1157.2	1150.9	1150.9	1140.4	1136.1	1134.0	1123.5	1117.2	1110.8
5°	1233.1	1222.6	1220.5	1205.7	1199.4	1176.2	1174.1	1159.3	1140.4	1121.4	1106.6
7.5°	1294.2	1287.9	1277.4	1262.6	1243.6	1214.1	1212.0	1188.8	1157.2	1131.9	1110.8
10°	1338.5	1334.3	1319.5	1300.6	1279.5	1250.0	1247.9	1222.6	1184.6	1155.1	1125.6
12.5°	1391.2	1384.9	1365.9	1340.6	1317.4	1290.0	1287.9	1266.8	1224.7	1186.7	1148.8
15°	1441.8	1433.3	1410.2	1384.9	1359.6	1336.4	1336.4	1313.2	1268.9	1224.7	1180.4
17.5°	1467.1	1462.9	1439.7	1412.3	1391.2	1374.3	1372.2	1351.1	1306.9	1260.5	1212.0
20°	1475.5	1477.6	1456.5	1427.0	1412.3	1403.8	1401.7	1387.0	1338.5	1294.2	1247.9
22.5°	1473.4	1479.7	1462.9	1431.2	1427.0	1427.0	1427.0	1410.2	1372.2	1328.0	1281.6
25°	1481.8	1490.3	1477.6	1439.7	1439.7	1448.1	1448.1	1439.7	1405.9	1368.0	1321.6
27.5°	1511.3	1517.7	1507.1	1454.4	1456.5	1469.2	1467.1	1469.2	1448.1	1412.3	1365.9
30°	1547.2	1555.6	1543.0	1477.6	1475.5	1488.2	1488.2	1498.7	1483.9	1446.0	1408.1
32.5°	1644.1	1642.0	1602.0	1502.9	1496.6	1509.2	1509.2	1519.8	1511.3	1481.8	1446.0
35°	1932.9	1901.3	1812.8	1585.1	1521.9	1528.2	1528.2	1547.2	1551.4	1528.2	1496.6
37.5°	2228.0	2217.5	2150.0	1804.3	1614.6	1568.3	1566.1	1593.5	1612.5	1593.5	1572.5
40°	2525.2	2516.8	2502.0	2097.3	1808.5	1639.9	1633.6	1656.8	1690.5	1677.9	1665.2
42.5°	2801.3	2797.1	2811.9	2386.1	2055.2	1793.8	1774.8	1747.4	1795.9	1791.7	1791.7
45°	3018.5	3029.0	3037.4	2655.9	2322.9	1991.9	1968.7	1876.0	1941.3	1958.2	1970.9
47.5°	3140.7	3149.1	3178.7	2919.4	2590.6	2221.7	2204.8	2053.1	2139.5	2190.1	2225.9
50°	3315.7	3292.5	3317.8	3176.5	2913.1	2521.0	2474.6	2291.2	2400.9	2489.4	2573.7
52.5°	3484.3	3446.4	3467.4	3473.8	3279.8	2814.0	2765.5	2571.6	2708.6	2847.7	2997.4
55°	3636.1	3634.0	3655.0	3762.5	3634.0	3128.1	3073.3	2881.4	3079.6	3229.2	3482.2
57.5°	3758.3	3779.4	3872.1	4097.7	4042.9	3469.5	3408.4	3241.9	3475.9	3625.5	4045.0
60°	3901.7	3935.4	4089.3	4382.2	4416.0	3827.9	3764.6	3644.5	3882.7	4034.4	4696.3
62.5°	3950.1	3998.6	4314.8	4681.6	4805.9	4219.9	4163.0	4082.9	4310.6	4447.6	5345.5
65°	3627.6	3720.4	4439.2	4835.4	5225.4	4692.1	4643.6	4574.1	4736.4	4827.0	5786.1
67.5°	3539.1	3581.3	4196.8	5056.8	5619.6	5299.2	5250.7	5130.5	5134.8	5096.8	5929.4
70°	3414.7	3461.1	3948.0	5223.3	6184.5	6129.7	6070.6	5716.5	5499.4	5269.7	5647.0
72.5°	2908.9	2894.1	3402.1	4774.3	6456.4	7158.3	7088.7	6346.8	5769.2	5120.0	4765.9
75°	1633.6	1591.4	2063.6	3303.0	5895.7	7567.2	7565.1	6665.1	5579.5	4460.2	3244.0
77.5°	474.3	461.6	680.8	1384.9	3969.1	6574.4	6654.5	6011.6	4656.3	3204.0	1781.1
80°	223.4	227.6	293.0	457.4	1694.7	4243.1	4472.9	3958.6	2782.4	1477.6	735.6
82.5°	141.2	143.3	200.2	295.1	716.7	1926.6	2116.3	1781.1	1102.4	638.7	324.6
85°	88.5	88.5	132.8	193.9	427.9	615.5	668.2	607.1	472.2	347.8	177.1
87.5°	48.5	48.5	80.1	111.7	234.0	198.1	204.5	242.4	295.1	212.9	88.5
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°	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8	1110.8
2.5°	1108.7	1104.5	1098.2	1096.1	1094.0	1091.9	1094.0	1098.2	1094.0	1094.0	1096.1
5°	1102.4	1098.2	1089.8	1089.8	1091.9	1094.0	1104.5	1110.8	1113.0	1113.0	1113.0
7.5°	1102.4	1096.1	1089.8	1091.9	1096.1	1104.5	1121.4	1131.9	1140.4	1142.5	1142.5
10°	1113.0	1104.5	1100.3	1104.5	1117.2	1123.5	1140.4	1157.2	1167.8	1172.0	1172.0
12.5°	1131.9	1123.5	1123.5	1131.9	1148.8	1157.2	1172.0	1184.6	1197.3	1203.6	1203.6
15°	1163.5	1153.0	1155.1	1169.9	1188.8	1197.3	1207.8	1212.0	1222.6	1231.0	1231.0
17.5°	1193.1	1182.5	1186.7	1203.6	1216.2	1220.5	1226.8	1224.7	1228.9	1235.2	1237.3
20°	1226.8	1216.2	1218.3	1228.9	1231.0	1226.8	1226.8	1220.5	1218.3	1228.9	1233.1
22.5°	1260.5	1250.0	1247.9	1241.5	1231.0	1220.5	1214.1	1207.8	1203.6	1214.1	1218.3
25°	1300.6	1285.8	1275.3	1247.9	1220.5	1201.5	1193.1	1188.8	1186.7	1197.3	1201.5
27.5°	1344.8	1330.1	1298.4	1239.4	1195.2	1163.5	1157.2	1157.2	1161.4	1167.8	1172.0
30°	1387.0	1372.2	1315.3	1220.5	1150.9	1104.5	1098.2	1104.5	1115.1	1121.4	1127.7
32.5°	1429.1	1414.4	1325.8	1190.9	1085.5	1026.5	1022.3	1032.9	1049.7	1053.9	1058.1
35°	1486.0	1471.3	1338.5	1148.8	1003.3	940.1	935.9	942.2	957.0	963.3	969.6
37.5°	1566.1	1557.7	1357.5	1102.4	927.5	857.9	845.3	841.0	849.5	847.4	855.8
40°	1671.5	1677.9	1391.2	1041.3	853.7	782.0	754.6	742.0	733.5	716.7	725.1
42.5°	1825.4	1829.6	1429.1	971.7	790.4	710.3	674.5	651.3	634.5	607.1	611.3
45°	2051.0	2015.1	1473.4	897.9	733.5	653.4	611.3	583.9	560.7	537.5	539.6
47.5°	2350.3	2240.7	1521.9	836.8	676.6	607.1	569.1	537.5	510.1	491.1	493.2
50°	2719.1	2521.0	1570.4	779.9	619.7	571.2	537.5	503.8	476.4	457.4	455.3
52.5°	3206.1	2858.3	1602.0	716.7	562.8	539.6	510.1	478.5	444.8	421.6	419.5
55°	3711.9	3250.3	1629.4	640.8	508.0	503.8	489.0	453.2	413.1	383.6	379.4
57.5°	4268.4	3669.8	1650.5	567.0	465.8	474.3	470.1	427.9	383.6	356.2	354.1
60°	4774.3	4104.0	1583.0	501.7	427.9	444.8	449.0	413.1	390.0	396.3	398.4
62.5°	5284.4	4439.2	1325.8	453.2	402.6	425.8	461.6	459.5	449.0	459.5	461.6
65°	5467.8	4508.7	940.1	413.1	377.3	434.2	501.7	497.5	449.0	430.0	425.8
67.5°	5364.5	4302.1	632.4	381.5	358.3	444.8	543.8	497.5	432.1	406.8	398.4
70°	4873.4	3794.2	463.7	349.9	341.5	442.7	567.0	495.3	423.7	396.3	385.7
72.5°	3886.9	2927.8	373.1	320.4	316.2	432.1	579.7	491.1	415.2	385.7	373.1
75°	2516.8	1821.2	314.1	290.9	278.2	415.2	573.3	478.5	404.7	366.8	358.3
77.5°	1167.8	784.1	267.7	257.2	242.4	390.0	554.4	453.2	381.5	345.7	335.2
80°	543.8	371.0	225.5	223.4	217.1	368.9	529.1	423.7	354.1	324.6	307.7
82.5°	290.9	223.4	183.4	183.4	189.7	343.6	497.5	387.8	318.3	303.5	259.3
85°	153.9	128.6	132.8	143.3	162.3	303.5	455.3	349.9	278.2	231.9	225.5
87.5°	78.0	82.2	82.2	97.0	124.4	246.6	375.2	288.8	236.1	189.7	185.5
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)