

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: P842442

Luminaire Tested: **ARCH4-50-722-U-T2R**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P842442  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-50-722-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8199 lumens  
Efficiency: N/A  
Efficacy: 154.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

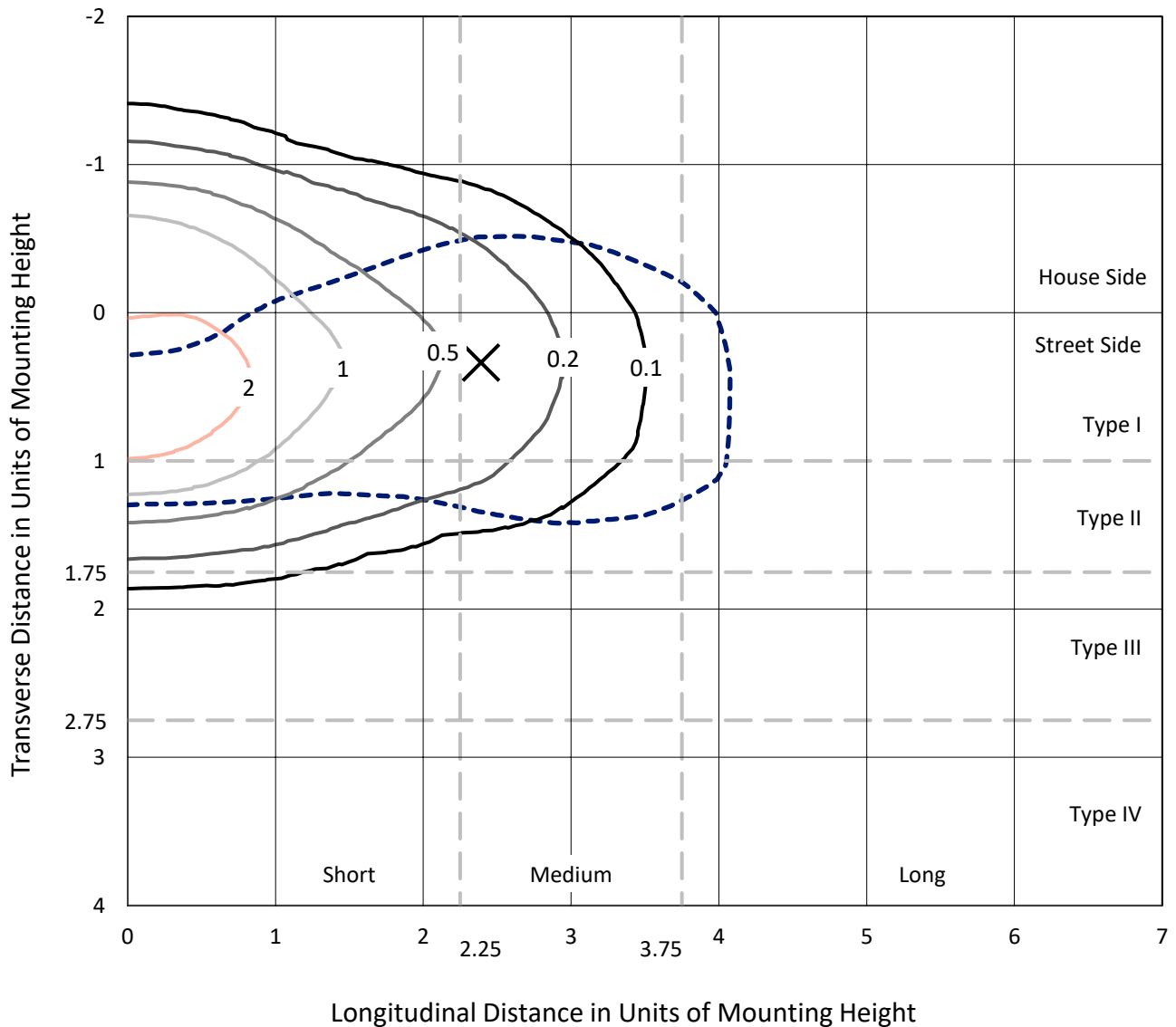
Input Watts (W): 53.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

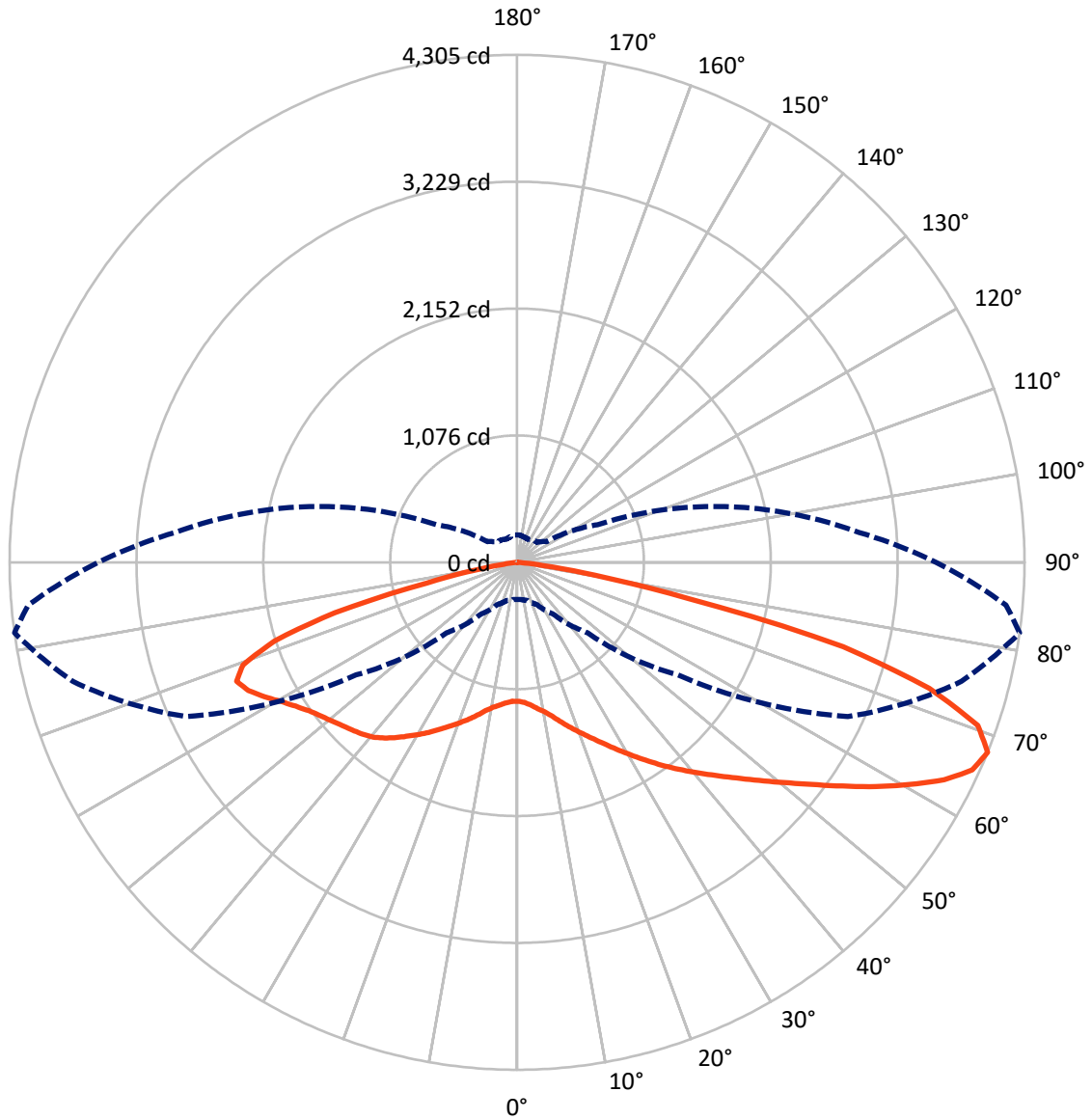
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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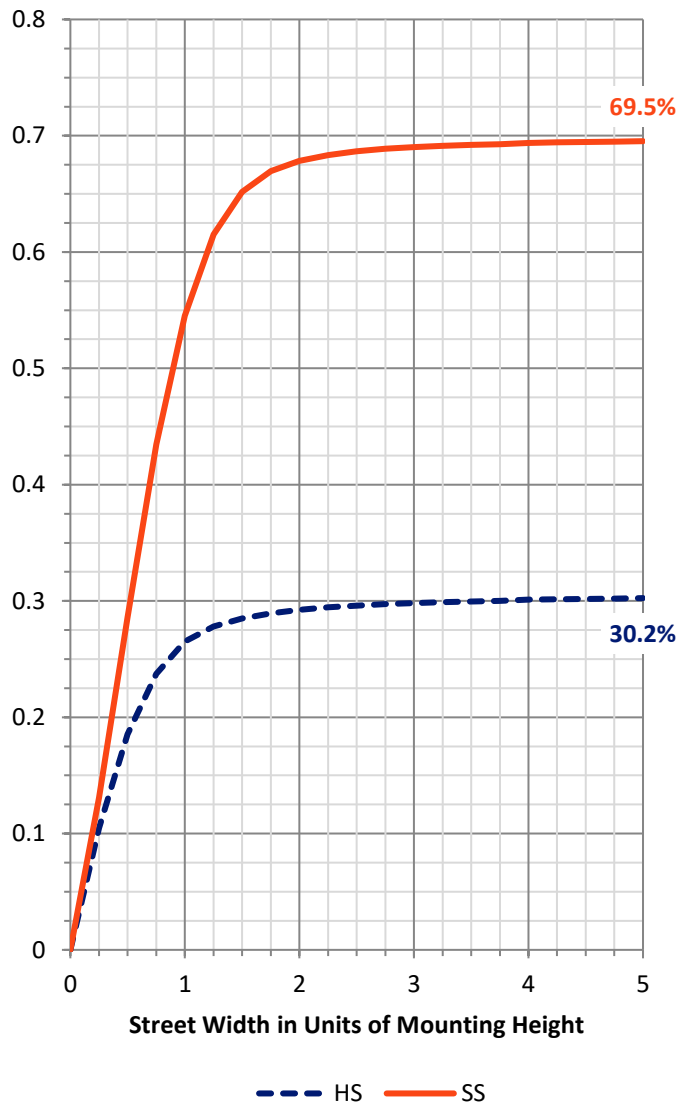
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2496.9	0.0	2496.9
	% Fixture	30.5	0.0	30.5
<b>Street Side</b>	Lumens	5702.1	0.0	5702.1
	% Fixture	69.5	0.0	69.5
<b>Total</b>	Lumens	8199.0	0.0	8199.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.8	1.5
10°-20°	438.7	5.4
20°-30°	881.8	10.8
30°-40°	1385.1	16.9
40°-50°	1687.4	20.6
50°-60°	1594.3	19.4
60°-70°	1316.6	16.1
70°-80°	716.9	8.7
80°-90°	56.4	0.7
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°	8199.0	100.0
0°-180°	8199.0	100.0

**Coefficient of Utilization**

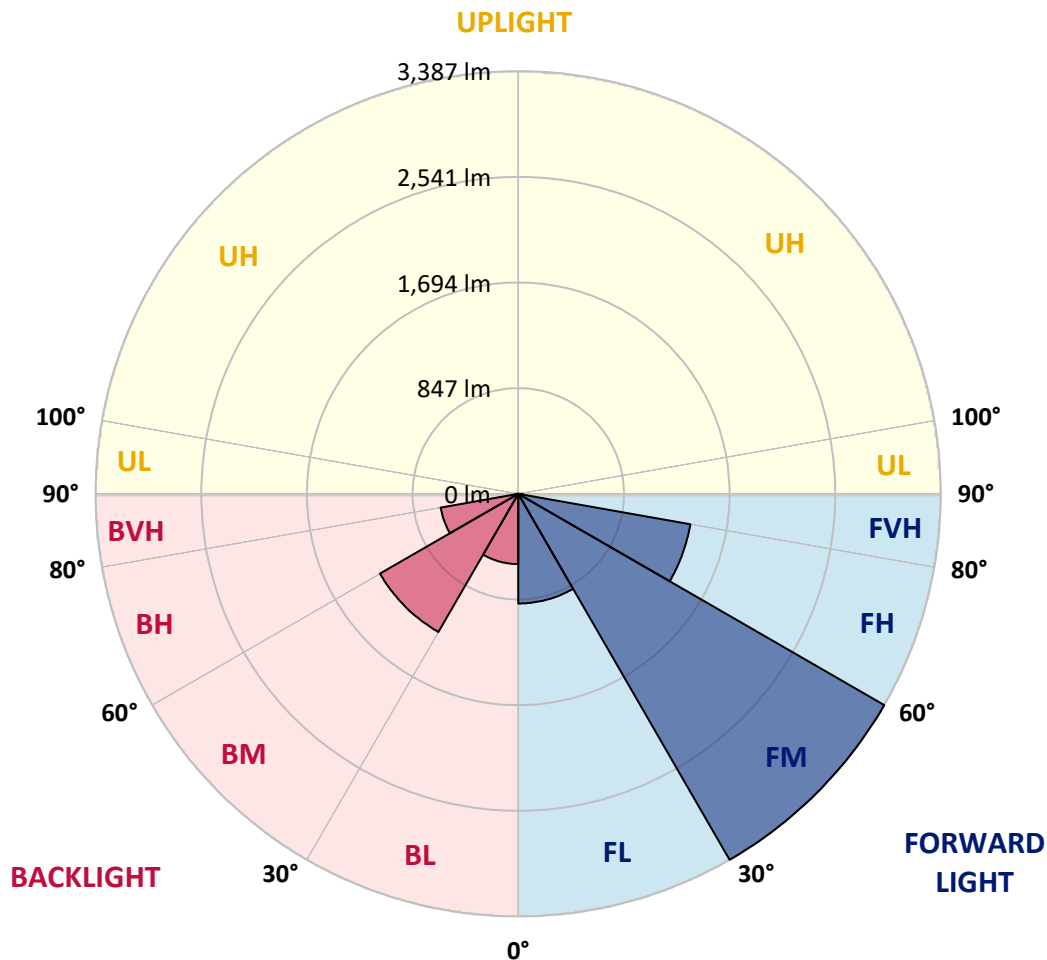


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	879.2	10.7			
FM (30°-60°)	3387.4	41.3			
FH (60°-80°)	1401.5	17.1			G1/1800
FVH (80°-90°)	34.0	0.4			G1/100
BL (0°-30°)	563.1	6.9	B2/1000		
BM (30°-60°)	1279.5	15.6	B2/2500		
BH (60°-80°)	632.0	7.7	B2/1000		G2/1000
BVH (80°-90°)	22.4	0.3			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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6
2.5°	1232.2	1232.2	1241.7	1241.7	1233.4	1220.3	1216.7	1202.4	1189.3	1189.3	1190.5
5°	1350.0	1348.8	1356.0	1346.5	1326.2	1300.0	1282.2	1251.2	1225.0	1216.7	1215.5
7.5°	1494.1	1492.9	1496.5	1481.0	1442.9	1400.0	1364.3	1314.3	1271.5	1253.6	1248.8
10°	1654.8	1653.6	1650.0	1623.9	1572.7	1506.0	1452.4	1383.4	1319.1	1290.5	1284.6
12.5°	1839.3	1837.0	1828.6	1790.5	1720.3	1634.6	1557.2	1467.9	1382.2	1342.9	1329.8
15°	2045.3	2041.7	2026.2	1979.8	1885.8	1777.4	1677.4	1563.1	1458.4	1407.2	1389.3
17.5°	2262.0	2262.0	2238.2	2169.1	2064.3	1929.8	1806.0	1660.8	1538.1	1475.0	1453.6
20°	2482.2	2481.0	2451.3	2367.9	2244.1	2089.3	1932.2	1772.7	1620.3	1544.1	1517.9
22.5°	2714.4	2712.0	2675.1	2579.8	2432.2	2257.2	2073.9	1883.4	1710.8	1619.1	1585.8
25°	2981.0	2977.5	2932.2	2815.5	2640.5	2442.9	2233.4	2013.1	1814.3	1702.4	1663.1
27.5°	3264.4	3259.6	3206.0	3070.3	2878.6	2640.5	2409.6	2163.2	1928.6	1795.3	1751.2
30°	3516.8	3513.2	3454.9	3315.6	3095.3	2837.0	2577.4	2313.2	2048.9	1894.1	1839.3
32.5°	3707.2	3707.2	3654.9	3517.9	3289.4	3025.1	2746.5	2454.8	2173.9	2000.1	1935.8
35°	3822.7	3826.3	3781.1	3671.5	3456.0	3202.5	2921.5	2621.5	2307.2	2113.2	2044.1
37.5°	3839.4	3851.3	3825.1	3751.3	3571.5	3350.1	3092.9	2782.2	2445.3	2227.4	2150.1
40°	3762.0	3770.3	3771.5	3743.0	3619.1	3456.0	3244.1	2952.5	2591.7	2347.7	2258.4
42.5°	3607.2	3613.2	3623.9	3632.2	3584.6	3502.5	3359.6	3110.8	2747.7	2470.3	2365.5
45°	3407.2	3406.0	3423.9	3459.6	3457.2	3476.3	3423.9	3254.8	2909.6	2609.6	2484.6
47.5°	3108.4	3102.5	3165.6	3246.5	3287.0	3376.3	3425.1	3367.9	3085.8	2763.2	2620.3
50°	2640.5	2634.6	2772.7	2963.2	3082.2	3217.9	3359.6	3435.8	3270.3	2935.8	2767.9
52.5°	2071.5	2065.5	2240.5	2573.9	2833.4	3031.0	3227.5	3451.3	3445.3	3128.7	2934.6
55°	1540.5	1535.8	1706.0	2066.7	2487.0	2814.4	3065.6	3410.8	3609.6	3350.1	3137.0
57.5°	1085.7	1083.4	1231.0	1529.8	2041.7	2550.1	2909.6	3332.2	3760.8	3590.6	3365.6
60°	761.9	758.4	865.5	1096.5	1544.1	2151.2	2754.8	3227.5	3873.9	3827.5	3608.4
62.5°	513.1	510.7	586.9	779.8	1096.5	1656.0	2520.3	3157.2	3938.2	4065.6	3853.7
65°	389.3	388.1	422.6	528.6	776.2	1189.3	2147.7	3148.9	3946.5	4244.2	4062.0
67.5°	314.3	315.5	334.5	395.2	536.9	845.3	1665.5	3096.5	3902.5	4304.9	4163.2
70°	257.1	257.1	265.5	306.0	396.4	570.3	1163.1	2858.4	3779.9	4146.5	4043.0
72.5°	196.4	197.6	223.8	247.6	298.8	400.0	745.3	2365.5	3490.6	3656.0	3577.5
75°	156.0	154.8	170.2	203.6	232.1	285.7	457.2	1696.5	2970.3	2857.2	2807.2
77.5°	111.9	110.7	122.6	151.2	176.2	202.4	272.6	856.0	1615.5	1484.6	1447.7
80°	76.2	73.8	84.5	104.8	116.7	119.1	133.3	328.6	704.8	664.3	656.0
82.5°	39.3	39.3	45.2	59.5	60.7	61.9	59.5	106.0	233.3	217.9	208.3
85°	15.5	15.5	16.7	20.2	20.2	21.4	21.4	27.4	25.0	23.8	22.6
87.5°	1.2	1.2	2.4	2.4	3.6	3.6	3.6	4.8	6.0	6.0	6.0
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°	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6	1178.6
2.5°	1188.1	1183.4	1167.9	1164.3	1161.9	1158.4	1159.6	1151.2	1147.6	1148.8	1144.1
5°	1209.6	1201.2	1182.2	1173.8	1171.5	1167.9	1171.5	1165.5	1159.6	1161.9	1159.6
7.5°	1239.3	1227.4	1203.6	1195.3	1194.1	1190.5	1195.3	1190.5	1185.7	1188.1	1183.4
10°	1270.3	1254.8	1228.6	1220.3	1220.3	1219.1	1223.8	1216.7	1211.9	1213.1	1210.7
12.5°	1315.5	1295.3	1266.7	1259.6	1256.0	1259.6	1260.7	1251.2	1242.9	1244.1	1240.5
15°	1370.3	1347.7	1316.7	1306.0	1303.6	1302.4	1297.7	1285.7	1275.0	1273.8	1270.3
17.5°	1429.8	1401.2	1364.3	1353.6	1342.9	1339.3	1327.4	1311.9	1295.3	1295.3	1290.5
20°	1486.9	1454.8	1410.8	1395.3	1379.8	1365.5	1345.3	1320.3	1298.8	1295.3	1290.5
22.5°	1548.8	1510.8	1459.6	1436.9	1409.6	1381.0	1346.5	1313.1	1285.7	1279.8	1276.2
25°	1617.9	1570.3	1509.6	1476.2	1432.2	1388.1	1336.9	1294.1	1261.9	1252.4	1250.0
27.5°	1694.1	1636.9	1563.1	1514.3	1450.0	1381.0	1315.5	1264.3	1225.0	1213.1	1209.6
30°	1771.5	1703.6	1611.9	1540.5	1450.0	1358.4	1276.2	1216.7	1171.5	1154.8	1152.4
32.5°	1848.9	1772.7	1656.0	1554.8	1435.8	1320.3	1225.0	1154.8	1103.6	1083.4	1088.1
35°	1941.7	1848.9	1696.5	1560.8	1411.9	1273.8	1166.7	1084.6	1032.2	1014.3	1017.9
37.5°	2038.1	1925.0	1728.6	1556.0	1378.6	1221.5	1101.2	1021.5	956.0	925.0	928.6
40°	2121.5	1994.1	1751.2	1539.3	1335.7	1161.9	1036.9	932.2	841.7	811.9	808.4
42.5°	2200.1	2045.3	1763.1	1514.3	1286.9	1092.9	945.3	810.7	720.3	683.4	684.5
45°	2282.2	2095.3	1758.4	1481.0	1226.2	1011.9	827.4	691.7	611.9	578.6	579.8
47.5°	2376.3	2148.9	1753.6	1445.3	1152.4	907.2	714.3	586.9	517.9	494.1	491.7
50°	2476.3	2208.4	1747.7	1401.2	1070.3	790.5	602.4	489.3	431.0	415.5	411.9
52.5°	2589.4	2272.7	1744.1	1348.8	971.5	666.7	502.4	403.6	364.3	353.6	352.4
55°	2725.1	2347.7	1748.9	1285.7	852.4	550.0	417.9	347.6	321.4	315.5	314.3
57.5°	2890.6	2444.1	1763.1	1211.9	727.4	448.8	356.0	313.1	296.4	291.7	291.7
60°	3070.3	2553.6	1789.3	1128.6	602.4	370.2	315.5	285.7	278.6	284.5	284.5
62.5°	3264.4	2682.2	1835.8	1027.4	485.7	313.1	283.3	263.1	258.3	270.2	271.4
65°	3444.1	2807.2	1865.5	906.0	385.7	271.4	258.3	240.5	242.9	254.8	253.6
67.5°	3554.9	2910.8	1823.9	753.6	306.0	240.5	232.1	216.7	222.6	232.1	233.3
70°	3487.0	2852.5	1617.9	569.1	239.3	209.5	203.6	194.1	198.8	210.7	215.5
72.5°	3154.8	2554.8	1258.4	384.5	192.9	176.2	178.6	173.8	179.8	190.5	201.2
75°	2560.8	1931.0	844.1	246.4	152.4	150.0	153.6	150.0	152.4	163.1	169.1
77.5°	1336.9	941.7	420.2	153.6	113.1	116.7	122.6	123.8	131.0	133.3	135.7
80°	623.8	423.8	175.0	85.7	75.0	82.1	94.1	95.2	97.6	101.2	102.4
82.5°	203.6	127.4	81.0	46.4	42.9	46.4	60.7	72.6	73.8	81.0	81.0
85°	21.4	13.1	17.9	19.0	16.7	20.2	27.4	26.2	11.9	7.1	7.1
87.5°	6.0	4.8	6.0	6.0	4.8	4.8	3.6	1.2	0.0	0.0	0.0
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)