

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: P573522

Luminaire Tested: **ARCH-S-PA2-80-830-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-80-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9403 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 83
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: 24 FT

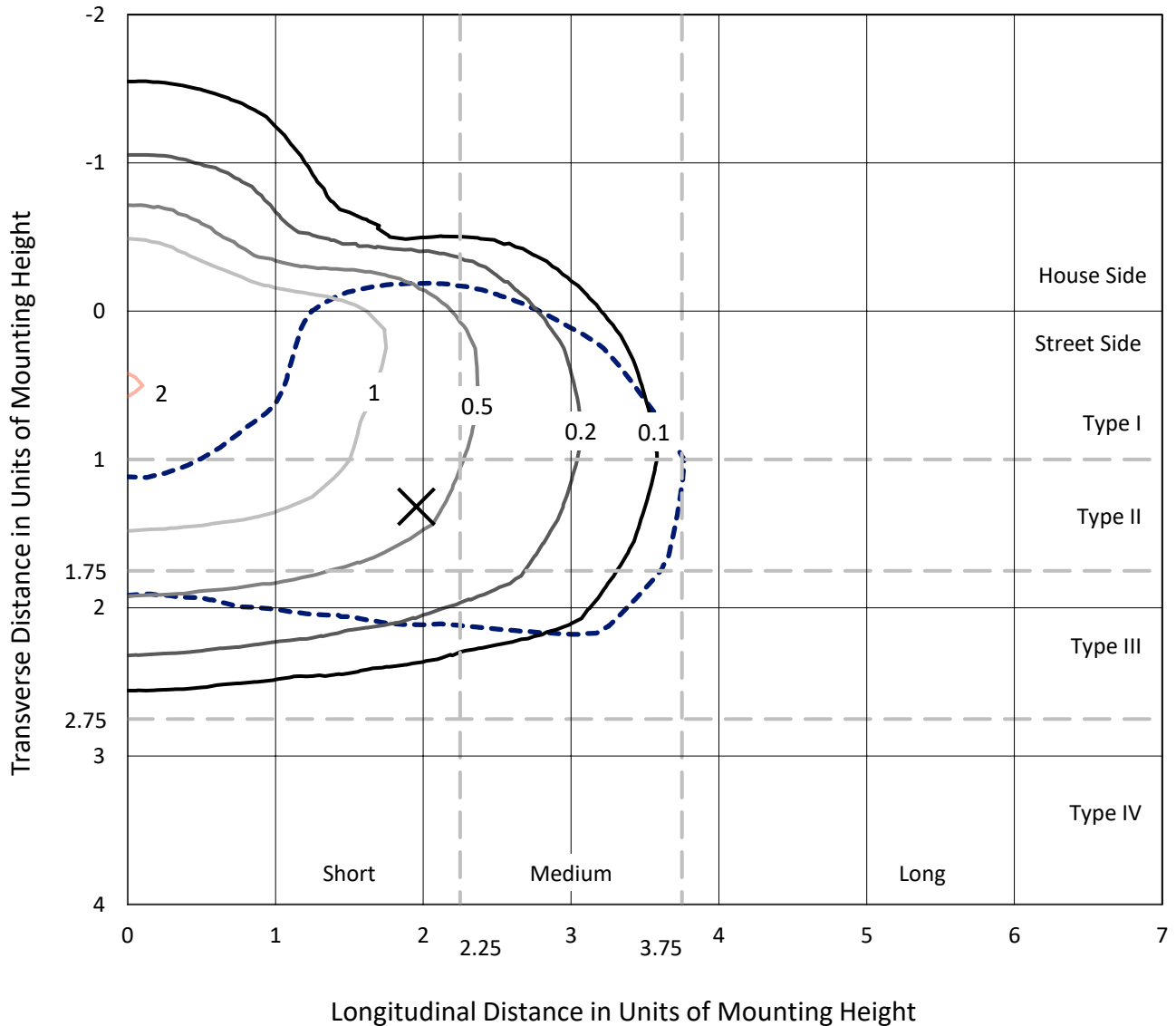




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Iso-Footcandle Lines of Horizontal Illumination

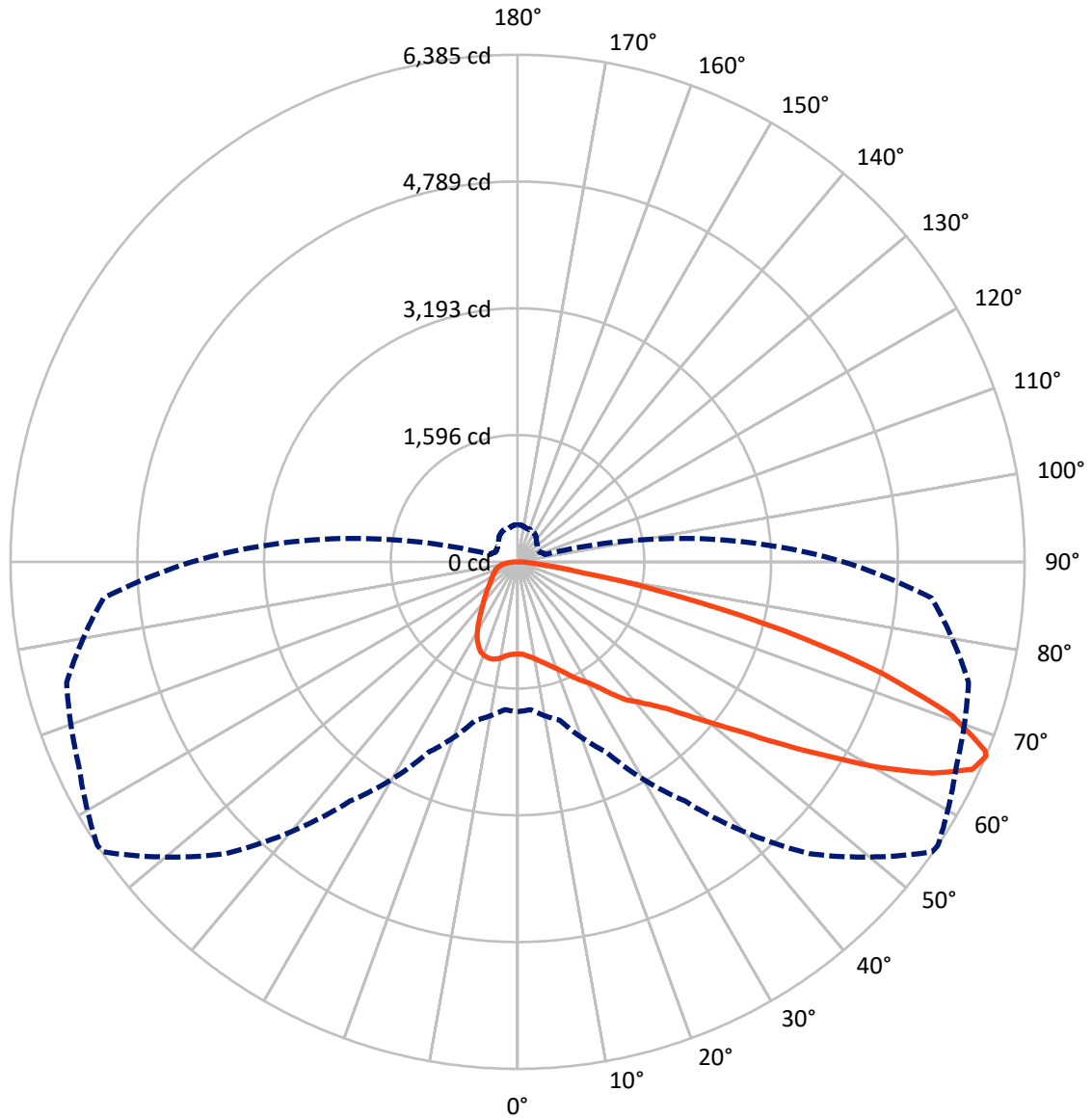
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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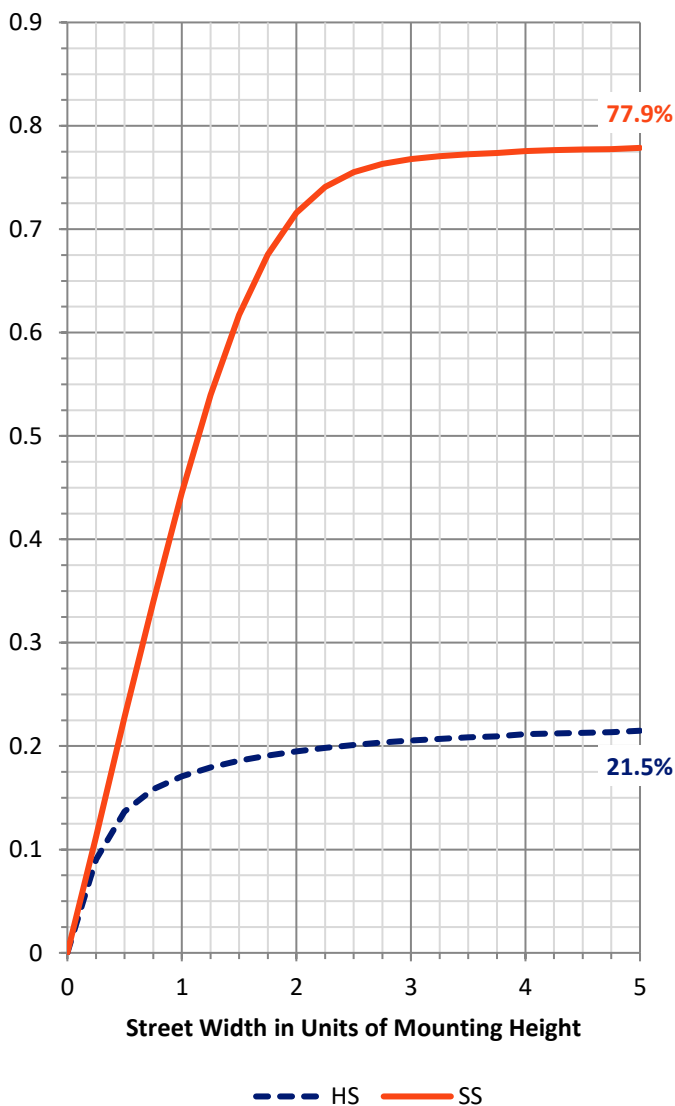
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2057.2	0.0	2057.2
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	7345.8	0.0	7345.8
	% Fixture	78.1	0.0	78.1
Total	Lumens	9403.0	0.0	9403.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	1.2
10°-20°	366.3	3.9
20°-30°	637.5	6.8
30°-40°	934.7	9.9
40°-50°	1367.5	14.5
50°-60°	2137.3	22.7
60°-70°	2540.3	27.0
70°-80°	1156.9	12.3
80°-90°	148.4	1.6
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°	9403.0	100.0
0°-180°	9403.0	100.0

Coefficient of Utilization



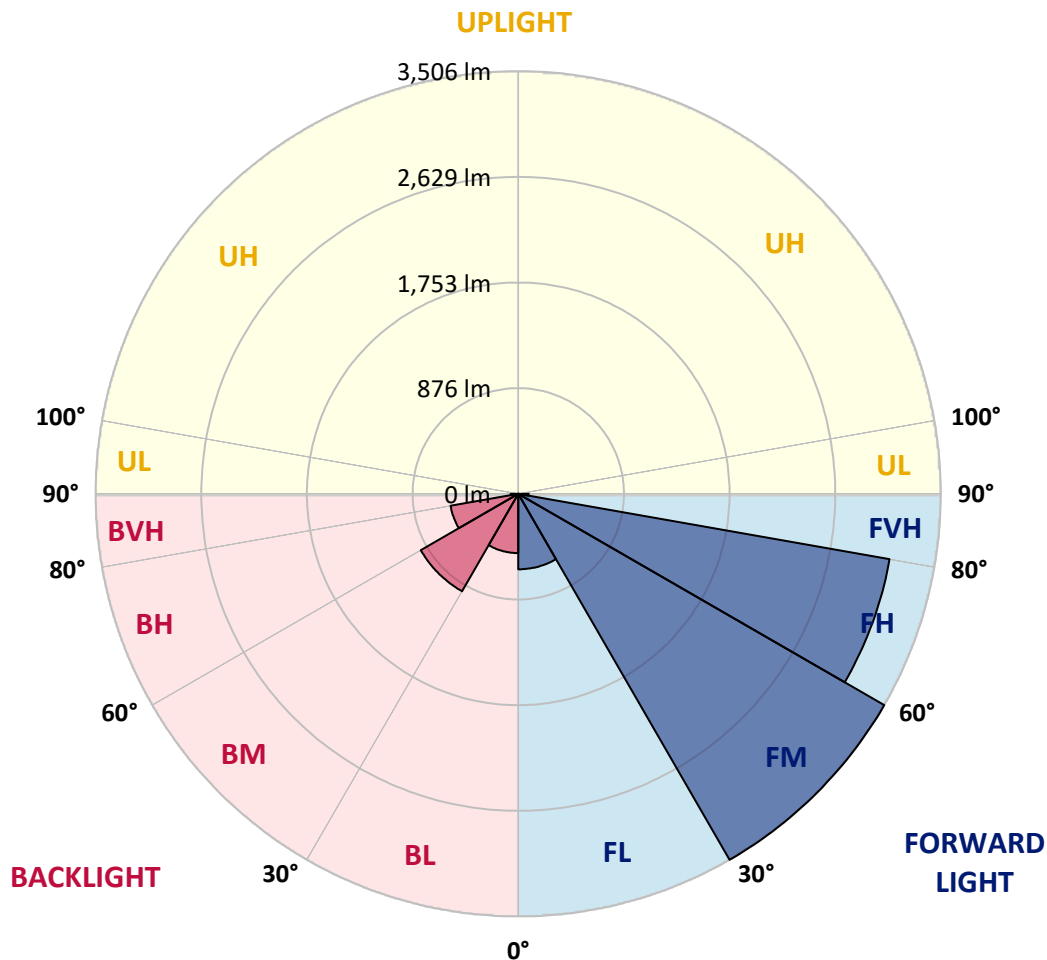
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	626.3	6.7			
FM (30°-60°)	3505.7	37.3			
FH (60°-80°)	3127.3	33.3			G2/5000
FVH (80°-90°)	86.5	0.9			G1/100
BL (0°-30°)	491.6	5.2	B1/500		
BM (30°-60°)	933.8	9.9	B1/1000		
BH (60°-80°)	569.9	6.1	B2/1000		G2/1000
BVH (80°-90°)	61.8	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°	55°	56°	65°	75°	85°
0°	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9
2.5°	1178.7	1173.6	1171.1	1173.6	1171.1	1166.0	1168.5	1166.0	1163.4	1160.9	1160.9
5°	1194.0	1188.9	1186.4	1188.9	1191.5	1186.4	1186.4	1186.4	1178.7	1176.2	1171.1
7.5°	1204.2	1196.5	1196.5	1201.6	1206.7	1209.3	1214.4	1211.8	1204.2	1199.1	1188.9
10°	1237.3	1227.1	1227.1	1227.1	1232.2	1237.3	1242.4	1244.9	1242.4	1239.8	1232.2
12.5°	1288.2	1278.0	1278.0	1278.0	1278.0	1275.5	1283.1	1285.6	1290.7	1290.7	1278.0
15°	1356.9	1344.2	1339.1	1328.9	1326.4	1321.3	1331.5	1331.5	1339.1	1341.7	1328.9
17.5°	1423.1	1407.8	1402.8	1392.6	1382.4	1369.7	1379.8	1382.4	1397.7	1400.2	1379.8
20°	1491.9	1486.8	1479.1	1463.9	1446.0	1433.3	1443.5	1440.9	1453.7	1458.8	1433.3
22.5°	1581.0	1568.2	1563.1	1542.8	1522.4	1509.7	1509.7	1514.8	1527.5	1527.5	1489.3
25°	1687.9	1670.1	1657.3	1634.4	1609.0	1593.7	1596.2	1601.3	1619.2	1606.4	1547.9
27.5°	1820.3	1802.5	1784.6	1738.8	1713.3	1682.8	1680.3	1685.3	1713.3	1680.3	1603.9
30°	1945.0	1937.4	1922.1	1886.5	1845.7	1794.8	1771.9	1774.4	1794.8	1749.0	1652.2
32.5°	2051.9	2041.8	2034.1	2008.7	1980.7	1919.6	1889.0	1891.6	1889.0	1833.0	1710.8
35°	2179.2	2164.0	2158.9	2136.0	2100.3	2059.6	2046.9	2041.8	2026.5	1950.1	1787.2
37.5°	2301.4	2286.2	2278.5	2265.8	2237.8	2202.1	2202.1	2199.6	2169.1	2062.1	1863.6
40°	2446.6	2428.7	2405.8	2398.2	2375.3	2349.8	2329.4	2316.7	2263.2	2166.5	2011.2
42.5°	2622.2	2612.0	2599.3	2566.2	2530.6	2525.5	2466.9	2461.8	2423.6	2367.6	2220.0
45°	2874.3	2853.9	2836.1	2825.9	2782.6	2736.8	2655.3	2634.9	2634.9	2622.2	2464.4
47.5°	3128.8	3093.2	3118.7	3111.0	3100.8	3049.9	2892.1	2894.6	2889.5	2922.6	2823.3
50°	3299.4	3279.0	3350.3	3383.4	3454.7	3454.7	3228.1	3200.1	3220.5	3317.2	3189.9
52.5°	3431.8	3419.1	3500.5	3630.4	3841.7	3862.0	3627.8	3569.3	3597.3	3734.7	3683.8
55°	3538.7	3526.0	3620.2	3846.8	4185.4	4310.1	4088.6	4063.2	4007.1	4154.8	4170.1
57.5°	3602.4	3574.4	3716.9	4019.9	4465.4	4753.1	4628.3	4620.7	4490.9	4628.3	4697.1
60°	3505.6	3487.8	3683.8	4091.2	4692.0	5170.6	5262.2	5262.2	5030.6	5104.4	5188.4
62.5°	3192.5	3169.6	3375.8	3925.7	4720.0	5511.7	5891.1	5860.5	5549.9	5547.4	5473.6
65°	2596.8	2568.8	2800.4	3380.9	4366.1	5552.5	6316.2	6298.4	5939.4	5837.6	5491.4
67°	1886.5	1868.6	2067.2	2642.6	3678.7	5198.6	6369.7	6385.0	6094.7	5878.3	5234.2
67.5°	1693.0	1690.4	1855.9	2426.2	3477.6	5068.8	6334.0	6349.3	6092.2	5845.2	5132.4
70°	789.2	824.9	980.1	1390.0	2344.7	3991.9	5748.5	5807.1	5766.3	5463.4	4322.8
72.5°	366.6	381.9	450.6	672.1	1260.2	2573.8	4658.9	4798.9	4977.1	4686.9	3424.2
75°	226.6	231.7	269.9	348.8	593.2	1237.3	3317.2	3470.0	3739.8	3526.0	2189.4
77.5°	178.2	180.8	206.2	249.5	346.2	532.1	1820.3	2011.2	2362.5	2085.0	1102.3
80°	132.4	137.5	157.8	193.5	244.4	272.4	773.9	845.2	1140.5	873.2	458.3
82.5°	96.7	101.8	122.2	140.0	170.6	173.1	315.7	333.5	488.8	353.9	198.6
85°	81.5	81.5	94.2	104.4	114.6	96.7	155.3	152.8	188.4	160.4	78.9
87.5°	38.2	40.7	89.1	66.2	56.0	40.7	45.8	48.4	58.6	63.6	30.6
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°	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9	1160.9
2.5°	1158.4	1158.4	1158.4	1160.9	1163.4	1163.4	1166.0	1166.0	1168.5	1171.1	1176.2
5°	1168.5	1168.5	1166.0	1168.5	1173.6	1176.2	1181.3	1186.4	1191.5	1196.5	1199.1
7.5°	1188.9	1186.4	1186.4	1186.4	1191.5	1196.5	1204.2	1209.3	1216.9	1219.5	1224.5
10°	1227.1	1222.0	1222.0	1224.5	1227.1	1219.5	1216.9	1214.4	1222.0	1227.1	1232.2
12.5°	1272.9	1267.8	1265.3	1257.6	1247.5	1232.2	1219.5	1209.3	1211.8	1216.9	1224.5
15°	1321.3	1311.1	1306.0	1288.2	1262.7	1229.6	1209.3	1196.5	1196.5	1196.5	1204.2
17.5°	1372.2	1362.0	1341.7	1308.6	1260.2	1214.4	1188.9	1166.0	1155.8	1153.3	1158.4
20°	1420.6	1405.3	1372.2	1321.3	1244.9	1183.8	1150.7	1112.5	1097.3	1087.1	1092.2
22.5°	1466.4	1446.0	1400.2	1321.3	1219.5	1138.0	1079.4	1028.5	1003.1	998.0	1000.5
25°	1514.8	1489.3	1428.2	1306.0	1163.4	1069.3	987.8	934.3	901.2	896.1	903.8
27.5°	1563.1	1525.0	1451.1	1265.3	1099.8	975.1	888.5	837.6	819.8	809.6	812.1
30°	1603.9	1568.2	1474.0	1209.3	1013.2	865.6	786.7	763.8	751.0	745.9	745.9
32.5°	1657.3	1624.2	1489.3	1143.1	911.4	766.3	715.4	697.6	687.4	674.6	677.2
35°	1723.5	1693.0	1481.7	1059.1	814.7	700.1	659.4	633.9	611.0	593.2	590.6
37.5°	1812.6	1789.7	1443.5	957.2	725.6	651.7	611.0	577.9	544.8	516.8	511.7
40°	1960.3	1906.8	1387.5	845.2	664.5	613.5	565.2	524.4	483.7	453.2	445.5
42.5°	2148.7	2036.7	1311.1	730.7	613.5	572.8	524.4	471.0	432.8	404.8	404.8
45°	2367.6	2176.7	1219.5	644.1	560.1	532.1	473.5	427.7	404.8	387.0	384.4
47.5°	2627.3	2316.7	1102.3	575.4	516.8	496.4	437.9	409.9	394.6	379.3	376.8
50°	2976.1	2505.1	1015.8	516.8	473.5	455.7	427.7	404.8	389.5	379.3	376.8
52.5°	3375.8	2747.0	954.7	471.0	437.9	430.2	425.2	407.3	392.1	384.4	381.9
55°	3808.6	3044.8	896.1	432.8	409.9	420.1	430.2	412.4	402.2	392.1	387.0
57.5°	4215.9	3296.9	801.9	399.7	389.5	407.3	427.7	415.0	402.2	394.6	392.1
60°	4493.4	3424.2	672.1	369.1	369.1	389.5	420.1	402.2	389.5	392.1	392.1
62.5°	4582.5	3375.8	532.1	341.1	348.8	369.1	397.2	387.0	381.9	394.6	394.6
65°	4450.1	3179.8	425.2	318.2	328.4	343.7	384.4	394.6	409.9	437.9	440.4
67°	4103.9	2864.1	359.0	300.4	310.6	336.1	399.7	435.3	435.3	465.9	465.9
67.5°	4002.1	2757.1	348.8	295.3	308.0	336.1	407.3	445.5	435.3	471.0	471.0
70°	3253.6	2169.1	295.3	280.0	297.9	353.9	440.4	448.1	425.2	458.3	455.7
72.5°	2413.5	1568.2	269.9	264.8	277.5	333.5	437.9	430.2	397.2	407.3	399.7
75°	1491.9	908.9	249.5	244.4	252.0	295.3	404.8	392.1	353.9	346.2	338.6
77.5°	720.5	460.8	213.9	221.5	229.1	257.1	356.4	343.7	310.6	292.8	290.2
80°	313.1	236.8	183.3	196.0	198.6	218.9	295.3	280.0	249.5	221.5	221.5
82.5°	155.3	132.4	145.1	162.9	157.8	175.7	231.7	206.2	183.3	152.8	147.7
85°	71.3	76.4	106.9	122.2	106.9	109.5	157.8	145.1	114.6	86.6	89.1
87.5°	25.5	35.6	61.1	73.8	53.5	50.9	84.0	61.1	35.6	10.2	12.7
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)