

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: P799811

Luminaire Tested: **ARCH2-50-750-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799811
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8128 lumens
Efficiency: N/A
Efficacy: 150.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 54
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



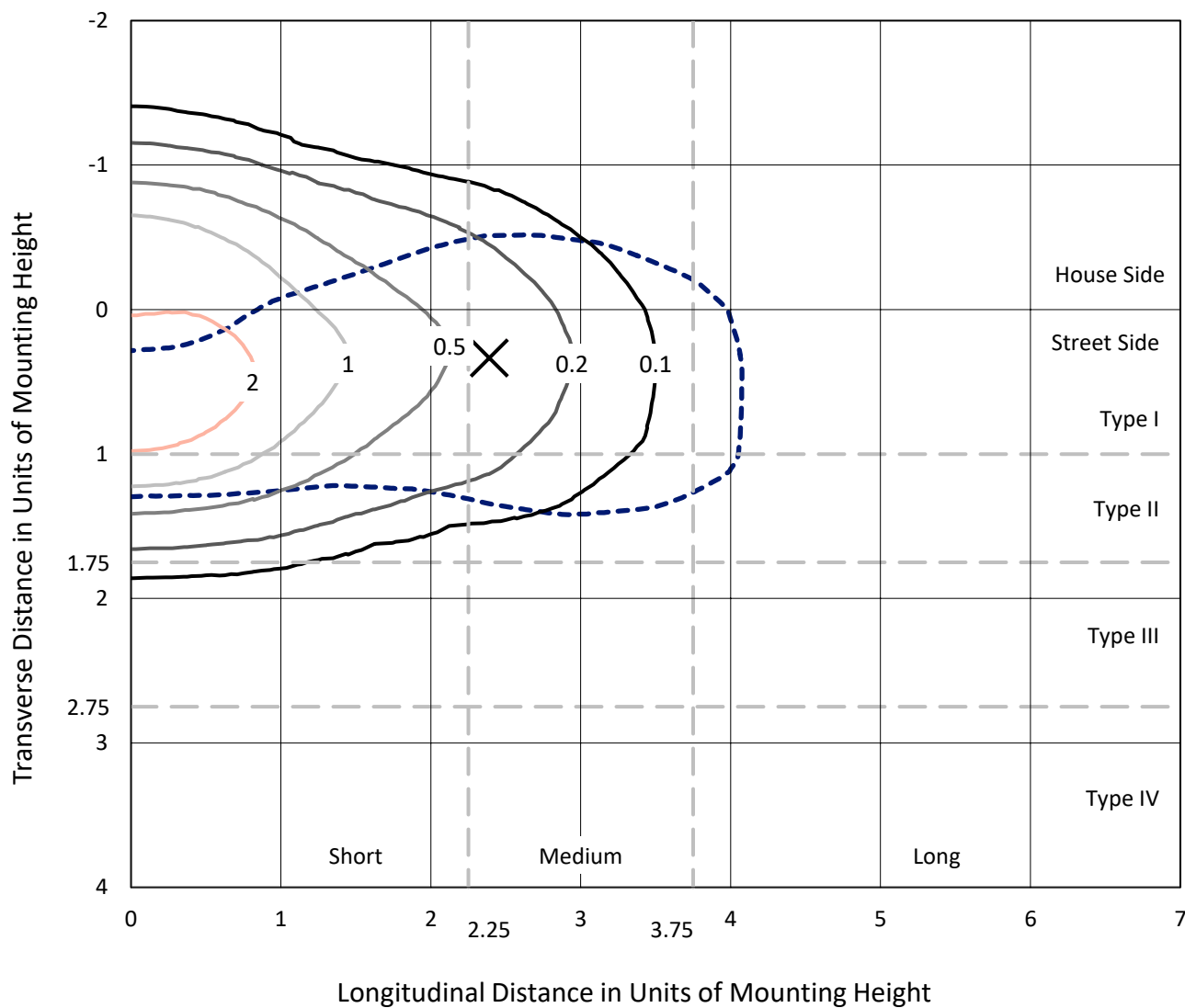
REPORT NUMBER: P799811

CATALOG NUMBER: ARCH2-50-750-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

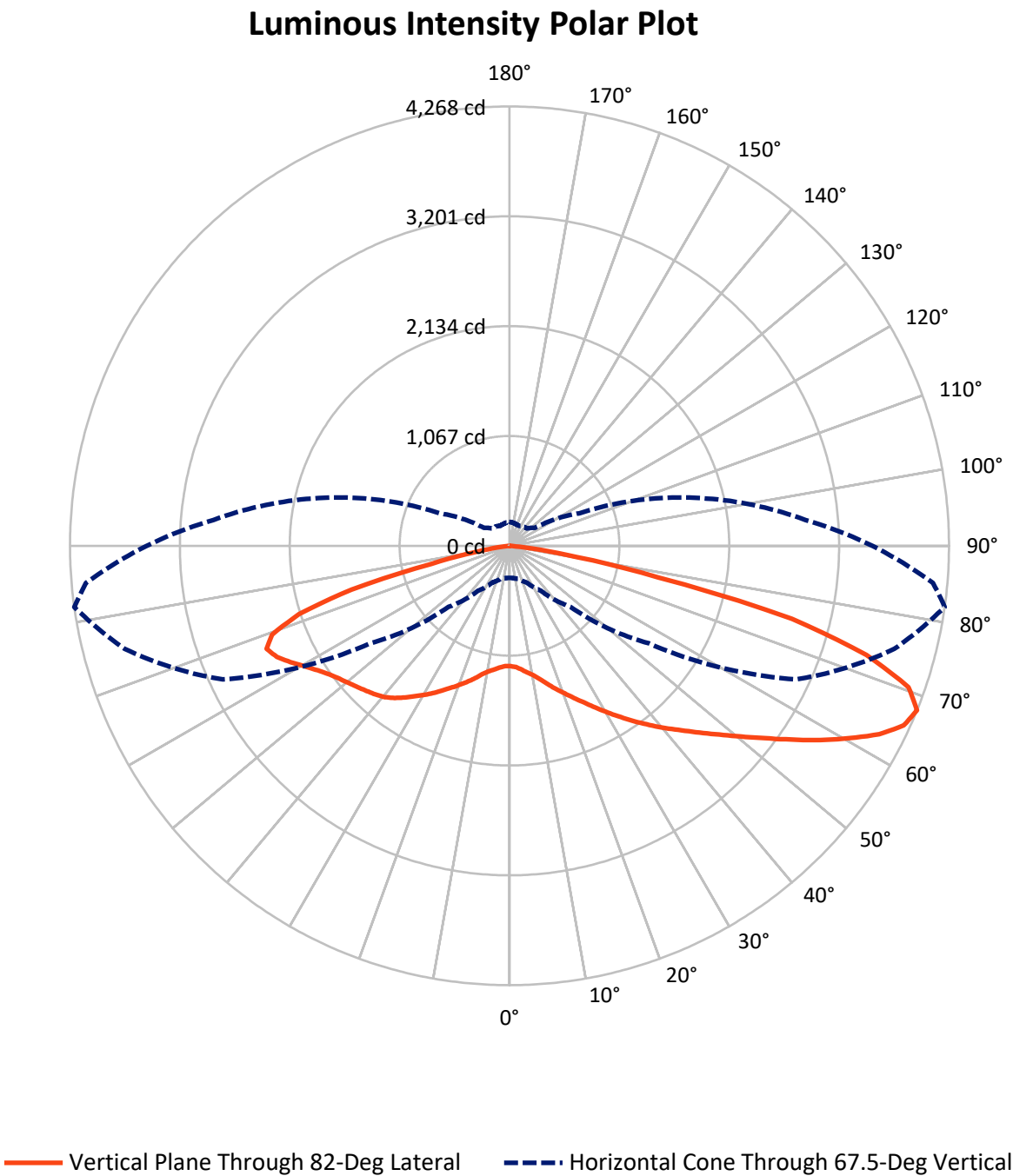
✕ Max cd

--- 1/2 Max cd



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

REPORT NUMBER: P799811
CATALOG NUMBER: ARCH2-50-750-U-T2R



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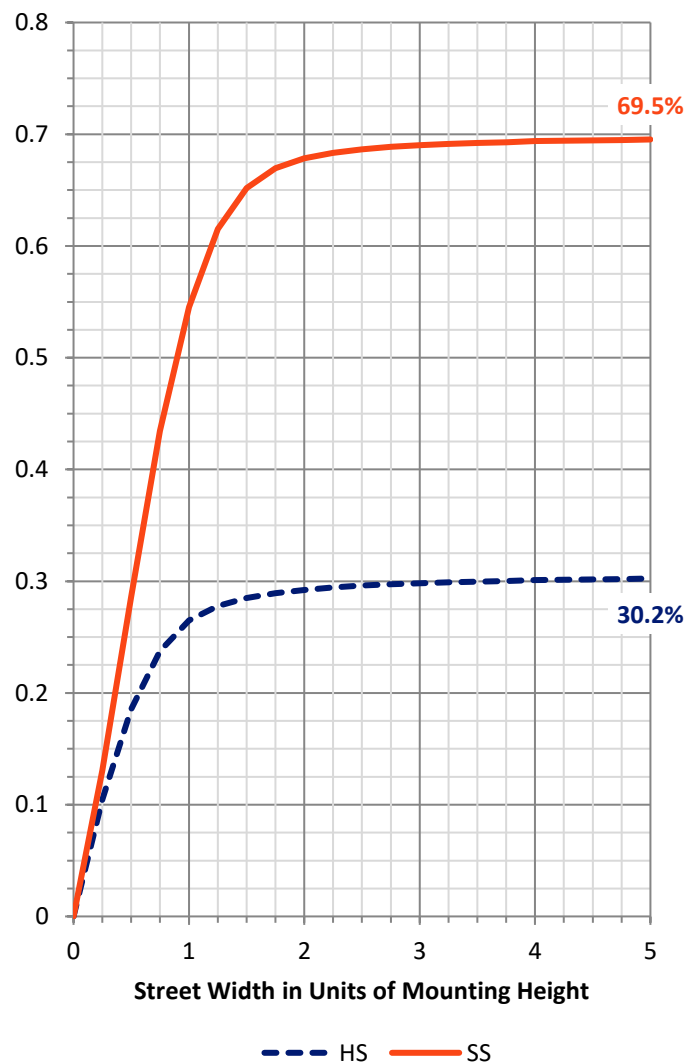
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2475.3	0.0	2475.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	5652.7	0.0	5652.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	8128.0	0.0	8128.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.5
10°-20°	434.9	5.4
20°-30°	874.1	10.8
30°-40°	1373.1	16.9
40°-50°	1672.7	20.6
50°-60°	1580.5	19.4
60°-70°	1305.2	16.1
70°-80°	710.7	8.7
80°-90°	55.9	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°	8128.0	100.0
0°-180°	8128.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799811

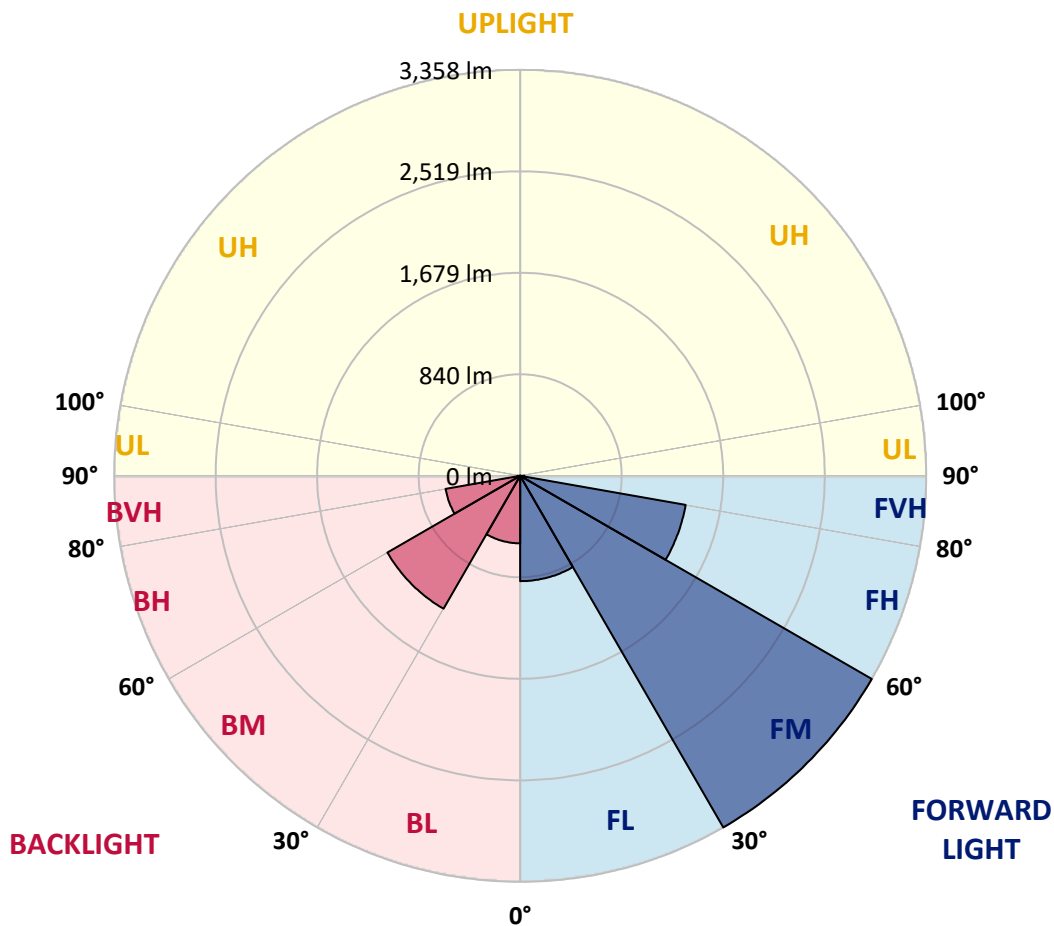
CATALOG NUMBER: ARCH2-50-750-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	871.6	10.7			
FM	(30°-60°)	3358.0	41.3			
FH	(60°-80°)	1389.4	17.1			G1/1800
FVH	(80°-90°)	33.7	0.4			G1/100
BL	(0°-30°)	558.2	6.9	B2/1000		
BM	(30°-60°)	1268.4	15.6	B2/2500		
BH	(60°-80°)	626.5	7.7	B2/1000		G2/1000
BVH	(80°-90°)	22.2	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



REPORT NUMBER: P799811

CATALOG NUMBER: ARCH2-50-750-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4
2.5°	1221.5	1221.5	1230.9	1230.9	1222.7	1209.7	1206.2	1192.0	1179.0	1179.0	1180.2
5°	1338.3	1337.2	1344.2	1334.8	1314.7	1288.8	1271.1	1240.4	1214.4	1206.2	1205.0
7.5°	1481.1	1480.0	1483.5	1468.2	1430.4	1387.9	1352.5	1302.9	1260.5	1242.7	1238.0
10°	1640.5	1639.3	1635.8	1609.8	1559.0	1493.0	1439.8	1371.4	1307.7	1279.3	1273.4
12.5°	1823.4	1821.0	1812.8	1775.0	1705.4	1620.4	1543.7	1455.2	1370.2	1331.3	1318.3
15°	2027.6	2024.0	2008.7	1962.7	1869.4	1762.0	1662.9	1549.6	1445.7	1395.0	1377.3
17.5°	2242.4	2242.4	2218.8	2150.3	2046.5	1913.1	1790.4	1646.4	1524.8	1462.3	1441.0
20°	2460.7	2459.5	2430.0	2347.4	2224.7	2071.2	1915.5	1757.3	1606.2	1530.7	1504.8
22.5°	2690.9	2688.5	2651.9	2557.5	2411.1	2237.7	2055.9	1867.1	1695.9	1605.1	1572.0
25°	2955.2	2951.7	2906.8	2791.2	2617.7	2421.8	2214.1	1995.7	1798.6	1687.7	1648.7
27.5°	3236.1	3231.4	3178.3	3043.7	2853.7	2617.7	2388.7	2144.4	1911.9	1779.7	1736.1
30°	3486.3	3482.8	3424.9	3286.9	3068.5	2812.4	2555.1	2293.1	2031.1	1877.7	1823.4
32.5°	3675.1	3675.1	3623.2	3487.5	3260.9	2998.9	2722.7	2433.6	2155.0	1982.7	1919.0
35°	3789.6	3793.2	3748.3	3639.7	3426.1	3174.7	2896.2	2598.8	2287.2	2094.9	2026.4
37.5°	3806.1	3817.9	3792.0	3718.8	3540.6	3321.1	3066.2	2758.1	2424.1	2208.2	2131.4
40°	3729.4	3737.7	3738.9	3710.5	3587.8	3426.1	3216.0	2926.9	2569.3	2327.4	2238.8
42.5°	3576.0	3581.9	3592.5	3600.8	3553.6	3472.1	3330.5	3083.9	2723.9	2448.9	2345.1
45°	3377.7	3376.5	3394.2	3429.7	3427.3	3446.2	3394.2	3226.7	2884.4	2587.0	2463.1
47.5°	3081.5	3075.6	3138.1	3218.4	3258.5	3347.0	3395.4	3338.8	3059.1	2739.2	2597.6
50°	2617.7	2611.8	2748.7	2937.5	3055.5	3190.1	3330.5	3406.1	3242.0	2910.4	2744.0
52.5°	2053.5	2047.6	2221.1	2551.6	2808.9	3004.8	3199.5	3421.4	3415.5	3101.6	2909.2
55°	1527.2	1522.5	1691.2	2048.8	2465.4	2790.0	3039.0	3381.3	3578.4	3321.1	3109.8
57.5°	1076.3	1074.0	1220.3	1516.6	2024.0	2528.0	2884.4	3303.4	3728.2	3559.5	3336.4
60°	755.3	751.8	858.0	1087.0	1530.7	2132.6	2731.0	3199.5	3840.4	3794.3	3577.2
62.5°	508.7	506.3	581.8	773.0	1087.0	1641.7	2498.5	3129.9	3904.1	4030.4	3820.3
65°	385.9	384.7	419.0	524.0	769.5	1179.0	2129.1	3121.6	3912.4	4207.4	4026.8
67.5°	311.6	312.8	331.6	391.8	532.3	837.9	1651.1	3069.7	3868.7	4267.6	4127.2
70°	254.9	254.9	263.2	303.3	393.0	565.3	1153.1	2833.7	3747.1	4110.6	4008.0
72.5°	194.7	195.9	221.9	245.5	296.2	396.5	738.8	2345.1	3460.3	3624.4	3546.5
75°	154.6	153.4	168.8	201.8	230.1	283.2	453.2	1681.8	2944.6	2832.5	2782.9
77.5°	110.9	109.8	121.6	149.9	174.7	200.6	270.3	848.6	1601.5	1471.7	1435.1
80°	75.5	73.2	83.8	103.9	115.7	118.0	132.2	325.7	698.7	658.6	650.3
82.5°	38.9	38.9	44.8	59.0	60.2	61.4	59.0	105.0	231.3	216.0	206.5
85°	15.3	15.3	16.5	20.1	20.1	21.2	21.2	27.1	24.8	23.6	22.4
87.5°	1.2	1.2	2.4	2.4	3.5	3.5	3.5	4.7	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P799811

CATALOG NUMBER: ARCH2-50-750-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4	1168.4
2.5°	1177.8	1173.1	1157.8	1154.2	1151.9	1148.3	1149.5	1141.3	1137.7	1138.9	1134.2
5°	1199.1	1190.8	1171.9	1163.7	1161.3	1157.8	1161.3	1155.4	1149.5	1151.9	1149.5
7.5°	1228.6	1216.8	1193.2	1184.9	1183.7	1180.2	1184.9	1180.2	1175.5	1177.8	1173.1
10°	1259.3	1243.9	1218.0	1209.7	1209.7	1208.5	1213.2	1206.2	1201.4	1202.6	1200.3
12.5°	1304.1	1284.1	1255.7	1248.6	1245.1	1248.6	1249.8	1240.4	1232.1	1233.3	1229.8
15°	1358.4	1336.0	1305.3	1294.7	1292.3	1291.1	1286.4	1274.6	1264.0	1262.8	1259.3
17.5°	1417.4	1389.1	1352.5	1341.9	1331.3	1327.7	1315.9	1300.6	1284.1	1284.1	1279.3
20°	1474.1	1442.2	1398.5	1383.2	1367.8	1353.7	1333.6	1308.8	1287.6	1284.1	1279.3
22.5°	1535.4	1497.7	1446.9	1424.5	1397.4	1369.0	1334.8	1301.8	1274.6	1268.7	1265.2
25°	1603.9	1556.7	1496.5	1463.4	1419.8	1376.1	1325.4	1282.9	1251.0	1241.6	1239.2
27.5°	1679.4	1622.8	1549.6	1501.2	1437.5	1369.0	1304.1	1253.4	1214.4	1202.6	1199.1
30°	1756.1	1688.9	1598.0	1527.2	1437.5	1346.6	1265.2	1206.2	1161.3	1144.8	1142.4
32.5°	1832.8	1757.3	1641.7	1541.3	1423.3	1308.8	1214.4	1144.8	1094.0	1074.0	1078.7
35°	1924.9	1832.8	1681.8	1547.2	1399.7	1262.8	1156.6	1075.2	1023.2	1005.5	1009.1
37.5°	2020.5	1908.4	1713.6	1542.5	1366.7	1210.9	1091.7	1012.6	947.7	917.0	920.6
40°	2103.1	1976.8	1736.1	1526.0	1324.2	1151.9	1028.0	924.1	834.4	804.9	801.4
42.5°	2181.0	2027.6	1747.9	1501.2	1275.8	1083.4	937.1	803.7	714.0	677.4	678.6
45°	2262.4	2077.1	1743.2	1468.2	1215.6	1003.2	820.2	685.7	606.6	573.6	574.8
47.5°	2355.7	2130.3	1738.4	1432.8	1142.4	899.3	708.1	581.8	513.4	489.8	487.4
50°	2454.8	2189.3	1732.5	1389.1	1061.0	783.7	597.2	485.1	427.2	411.9	408.3
52.5°	2566.9	2253.0	1729.0	1337.2	963.0	660.9	498.0	400.1	361.1	350.5	349.3
55°	2701.5	2327.4	1733.7	1274.6	845.0	545.3	414.2	344.6	318.7	312.8	311.6
57.5°	2865.5	2422.9	1747.9	1201.4	721.1	444.9	352.9	310.4	293.9	289.1	289.1
60°	3043.7	2531.5	1773.8	1118.8	597.2	367.0	312.8	283.2	276.2	282.1	282.1
62.5°	3236.1	2659.0	1819.9	1018.5	481.5	310.4	280.9	260.8	256.1	267.9	269.1
65°	3414.3	2782.9	1849.4	898.1	382.4	269.1	256.1	238.4	240.8	252.6	251.4
67.5°	3524.1	2885.6	1808.1	747.1	303.3	238.4	230.1	214.8	220.7	230.1	231.3
70°	3456.8	2827.8	1603.9	564.1	237.2	207.7	201.8	192.4	197.1	208.9	213.6
72.5°	3127.5	2532.7	1247.5	381.2	191.2	174.7	177.0	172.3	178.2	188.8	199.5
75°	2538.6	1914.3	836.8	244.3	151.1	148.7	152.2	148.7	151.1	161.7	167.6
77.5°	1325.4	933.5	416.6	152.2	112.1	115.7	121.6	122.7	129.8	132.2	134.5
80°	618.4	420.2	173.5	85.0	74.4	81.4	93.2	94.4	96.8	100.3	101.5
82.5°	201.8	126.3	80.3	46.0	42.5	46.0	60.2	72.0	73.2	80.3	80.3
85°	21.2	13.0	17.7	18.9	16.5	20.1	27.1	26.0	11.8	7.1	7.1
87.5°	5.9	4.7	5.9	5.9	4.7	4.7	3.5	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)