

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: P799812

Luminaire Tested: **ARCH2-50-750-U-T2U-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5416 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

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

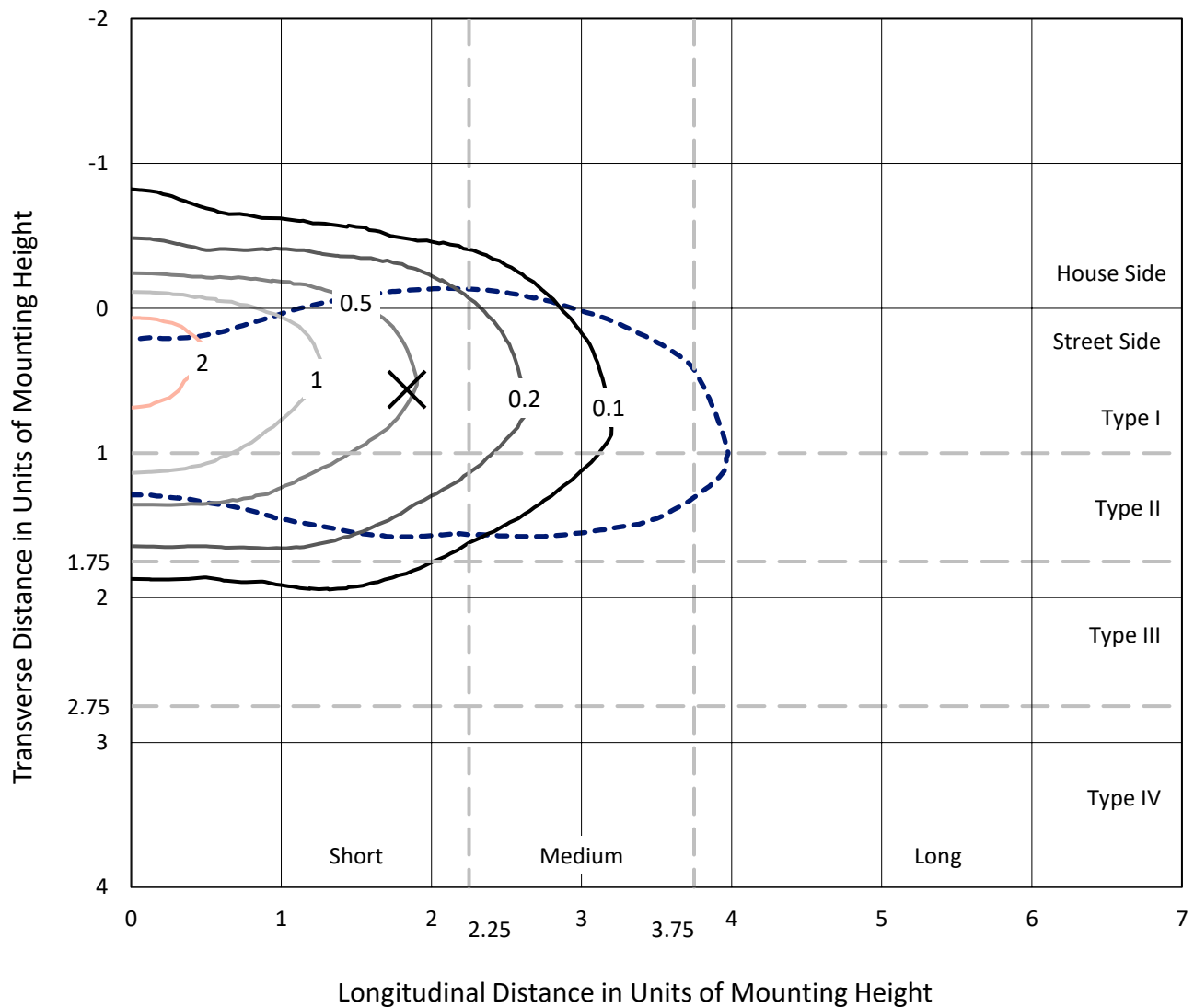


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

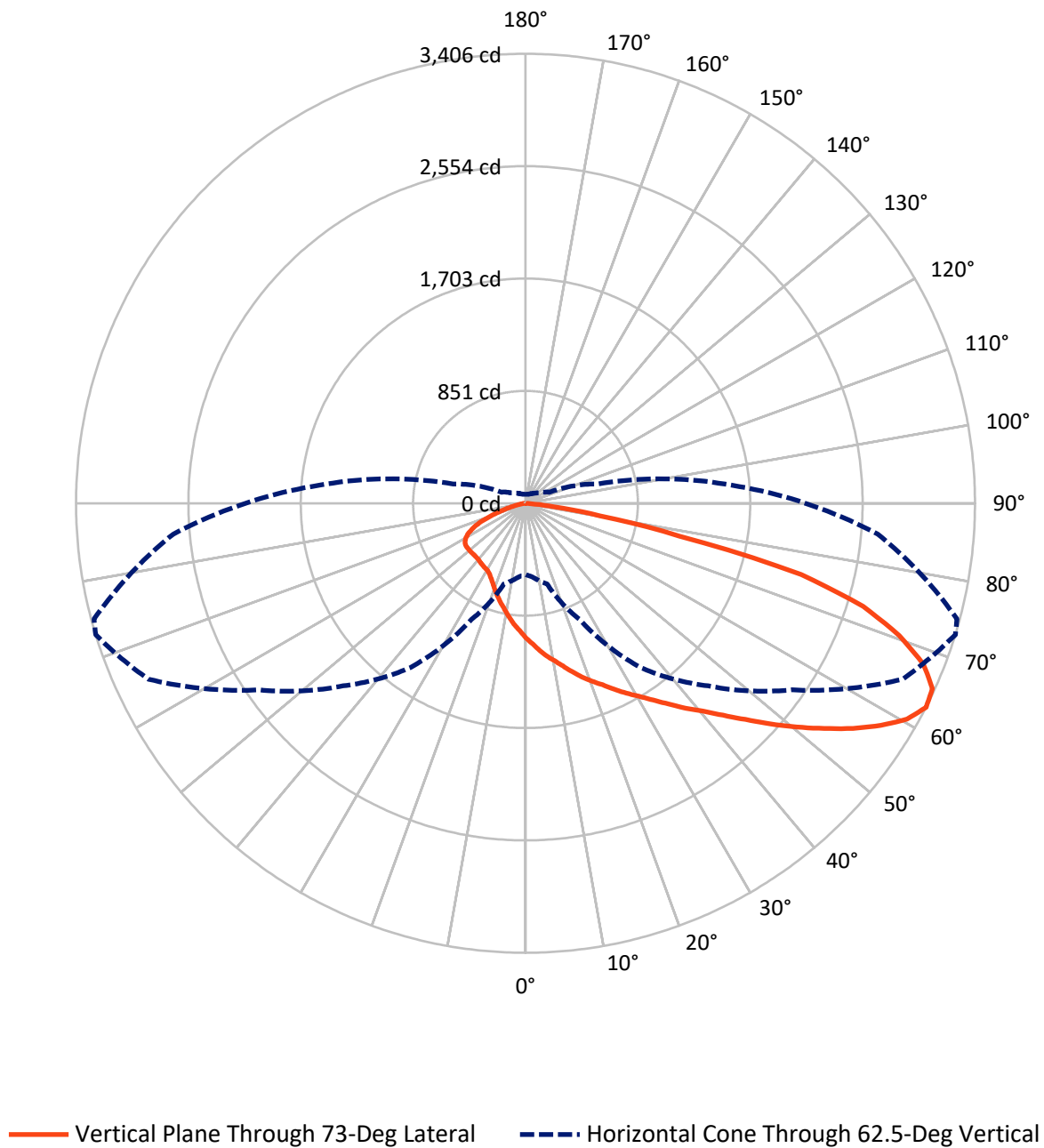


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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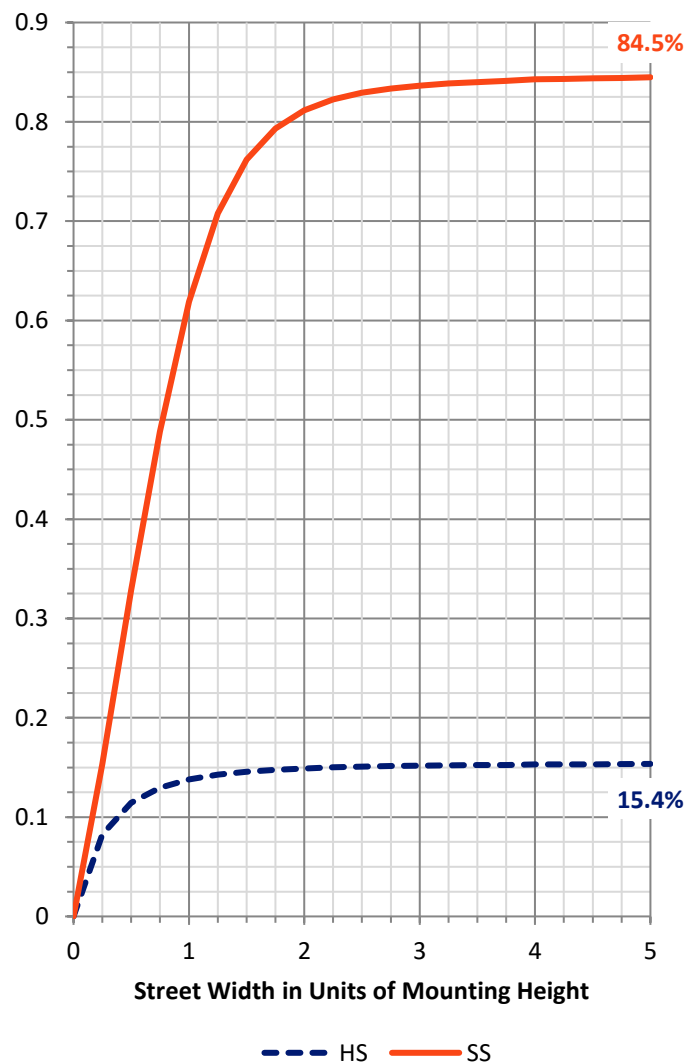
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	839.6	0.0	839.6
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	4576.4	0.0	4576.4
	% Fixture	84.5	0.0	84.5
Total	Lumens	5416.0	0.0	5416.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	1.8
10°-20°	299.0	5.5
20°-30°	497.6	9.2
30°-40°	750.8	13.9
40°-50°	1049.5	19.4
50°-60°	1159.2	21.4
60°-70°	1009.8	18.6
70°-80°	510.1	9.4
80°-90°	40.9	0.8
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°	5416.0	100.0
0°-180°	5416.0	100.0

Coefficient of Utilization



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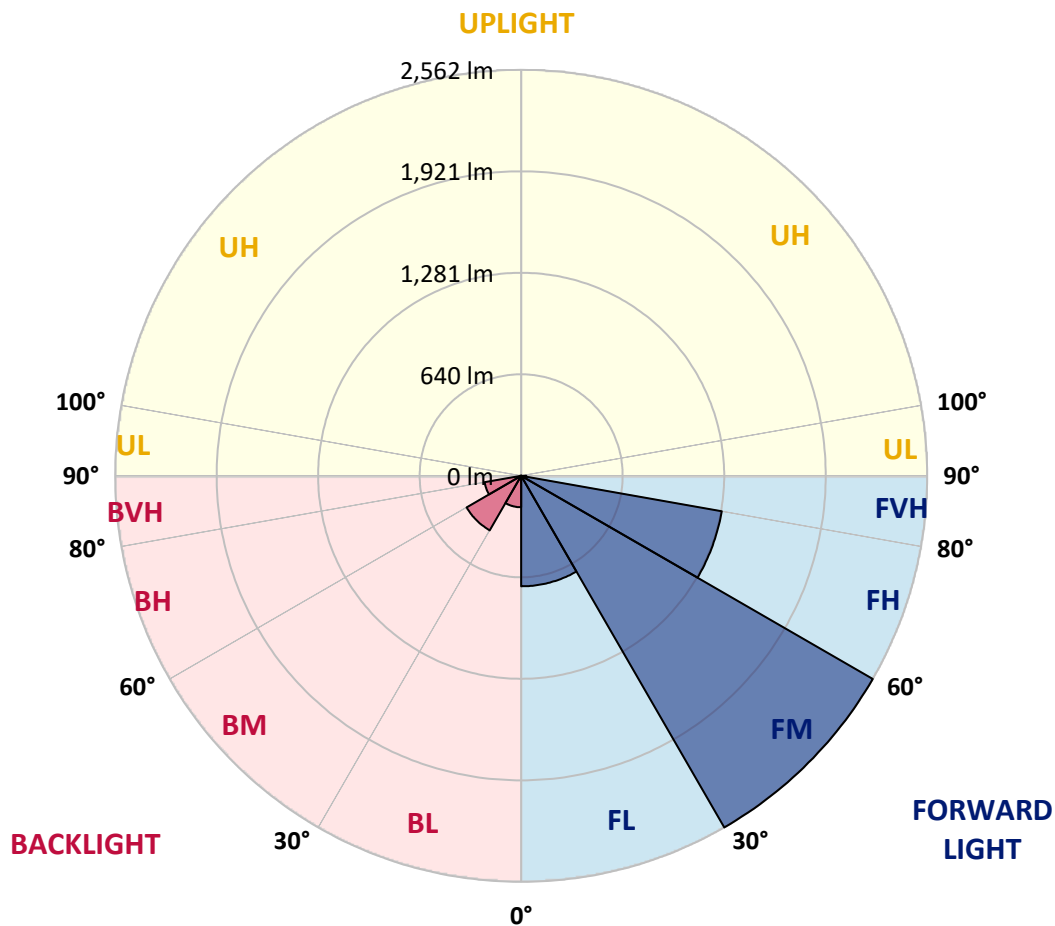
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	697.2	12.9			
FM	(30°-60°)	2562.0	47.3			
FH	(60°-80°)	1285.6	23.7			G1/1800
FVH	(80°-90°)	31.7	0.6			G1/100
BL	(0°-30°)	198.4	3.7	B1/500		
BM	(30°-60°)	397.5	7.3	B1/1000		
BH	(60°-80°)	234.3	4.3	B1/500		G1/500
BVH	(80°-90°)	9.3	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5
2.5°	1167.1	1180.1	1173.0	1177.8	1154.2	1138.8	1121.1	1086.9	1068.0	1065.7	1043.2
5°	1338.3	1352.4	1340.6	1337.1	1295.8	1260.4	1220.3	1160.1	1119.9	1112.9	1063.3
7.5°	1509.4	1522.4	1508.2	1497.6	1442.1	1379.6	1320.6	1232.1	1169.5	1157.7	1079.8
10°	1629.8	1641.6	1630.9	1620.3	1562.5	1498.8	1415.0	1299.3	1214.4	1195.5	1090.4
12.5°	1720.6	1727.7	1723.0	1713.5	1659.3	1590.8	1510.6	1374.8	1265.1	1241.5	1107.0
15°	1795.0	1806.8	1800.9	1793.8	1741.9	1673.4	1596.7	1453.9	1324.1	1294.6	1131.7
17.5°	1844.5	1852.8	1854.0	1854.0	1808.0	1740.7	1666.3	1525.9	1383.1	1345.3	1155.3
20°	1867.0	1876.4	1882.3	1891.7	1854.0	1796.2	1720.6	1587.3	1438.6	1396.1	1177.8
22.5°	1877.6	1885.8	1901.2	1922.4	1891.7	1843.4	1773.7	1643.9	1494.0	1449.2	1203.7
25°	1885.8	1896.5	1918.9	1959.0	1937.8	1896.5	1836.3	1708.8	1560.1	1514.1	1241.5
27.5°	1908.3	1921.2	1942.5	1990.9	1964.9	1944.9	1902.4	1778.5	1629.8	1582.6	1287.5
30°	1986.2	1996.8	1995.6	2026.3	1994.4	1988.5	1959.0	1845.7	1697.0	1649.8	1341.8
32.5°	2127.8	2138.4	2112.4	2100.6	2031.0	2032.2	2020.4	1917.7	1777.3	1728.9	1404.4
35°	2280.0	2291.8	2257.6	2237.5	2120.7	2086.5	2092.4	2007.4	1867.0	1818.6	1482.2
37.5°	2415.7	2429.9	2400.4	2370.9	2252.9	2173.8	2172.6	2107.7	1969.6	1920.1	1568.4
40°	2490.1	2506.6	2524.3	2507.8	2383.9	2296.5	2258.8	2210.4	2071.1	2020.4	1661.6
42.5°	2525.5	2571.5	2603.4	2592.7	2491.2	2402.7	2357.9	2317.8	2195.0	2145.5	1772.6
45°	2426.3	2427.5	2494.8	2552.6	2533.7	2474.7	2466.5	2438.1	2336.7	2289.4	1897.6
47.5°	2302.4	2293.0	2340.2	2442.9	2496.0	2511.3	2559.7	2571.5	2498.3	2451.1	2025.1
50°	2005.0	2010.9	2164.4	2311.9	2415.7	2514.9	2625.8	2708.4	2664.7	2619.9	2159.6
52.5°	1630.9	1645.1	1820.9	2145.5	2309.5	2479.4	2664.7	2845.3	2834.7	2792.2	2294.2
55°	1307.6	1330.0	1516.5	1868.1	2173.8	2400.4	2681.3	2970.4	3010.5	2971.6	2426.3
57.5°	999.6	1023.2	1180.1	1541.2	2000.3	2271.7	2669.4	3080.1	3174.5	3149.8	2547.9
60°	752.9	776.5	876.8	1249.8	1783.2	2127.8	2610.4	3152.1	3322.1	3296.1	2636.4
62.5°	539.3	558.2	632.5	972.4	1518.8	1956.7	2465.3	3153.3	3405.8	3384.6	2678.9
65°	388.3	388.3	448.4	693.9	1271.0	1751.3	2245.8	3008.1	3388.1	3382.2	2649.4
67.5°	279.7	282.1	330.4	485.0	1013.7	1502.3	1961.4	2749.7	3251.3	3280.8	2543.2
70°	198.3	204.2	226.6	338.7	765.9	1186.0	1656.9	2411.0	3004.6	3056.5	2337.8
72.5°	153.4	157.0	172.3	236.0	559.4	881.6	1320.6	2033.4	2675.3	2734.4	2058.1
75°	118.0	121.6	133.4	173.5	401.2	618.4	938.2	1577.8	2157.3	2262.3	1653.4
77.5°	86.1	90.9	99.1	126.3	233.7	393.0	568.8	887.5	1190.7	1240.3	866.2
80°	40.1	46.0	57.8	81.4	126.3	185.3	201.8	342.2	572.4	598.3	469.7
82.5°	22.4	28.3	33.0	49.6	63.7	66.1	68.4	86.1	216.0	238.4	197.1
85°	10.6	14.2	15.3	21.2	21.2	18.9	22.4	16.5	35.4	42.5	41.3
87.5°	0.0	1.2	2.4	5.9	4.7	3.5	3.5	3.5	3.5	4.7	3.5
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°	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5	1025.5
2.5°	1032.6	1017.3	981.9	951.2	931.1	913.4	889.8	879.2	860.3	863.9	853.2
5°	1038.5	1010.2	947.6	889.8	847.3	809.6	768.3	744.7	718.7	716.3	708.1
7.5°	1042.1	998.4	908.7	827.3	762.4	704.5	649.1	618.4	586.5	579.4	572.4
10°	1038.5	980.7	868.6	762.4	676.2	604.2	541.7	502.7	469.7	461.4	454.3
12.5°	1042.1	971.2	830.8	702.2	599.5	518.1	447.3	407.1	376.5	368.2	363.5
15°	1050.3	965.3	798.9	647.9	531.1	440.2	370.6	336.3	311.6	303.3	300.9
17.5°	1057.4	959.4	764.7	594.8	462.6	371.7	311.6	283.2	262.0	253.7	251.4
20°	1066.8	951.2	730.5	544.0	402.4	317.5	264.3	239.6	223.0	217.1	216.0
22.5°	1075.1	945.3	698.6	493.3	347.0	273.8	228.9	208.9	197.1	191.2	191.2
25°	1096.3	947.6	671.5	446.1	305.7	239.6	201.8	186.5	177.0	173.5	173.5
27.5°	1121.1	957.1	650.3	406.0	270.2	213.6	182.9	169.9	165.2	160.5	161.7
30°	1156.5	976.0	636.1	372.9	244.3	193.5	167.6	158.1	153.4	152.2	152.2
32.5°	1201.4	1006.6	634.9	351.7	225.4	178.2	157.0	148.7	146.3	145.2	145.2
35°	1254.5	1033.8	627.8	342.2	213.6	167.6	148.7	142.8	141.6	141.6	141.6
37.5°	1318.2	1078.6	623.1	329.3	207.7	161.7	142.8	138.1	138.1	138.1	138.1
40°	1384.3	1115.2	616.0	317.5	205.3	158.1	139.3	133.4	133.4	133.4	133.4
42.5°	1463.4	1168.3	613.7	311.6	201.8	155.8	134.5	127.5	128.6	128.6	129.8
45°	1558.9	1228.5	612.5	305.7	200.6	153.4	129.8	121.6	122.7	121.6	121.6
47.5°	1655.7	1298.1	616.0	302.1	199.4	151.1	126.3	115.7	115.7	114.5	114.5
50°	1757.2	1361.9	618.4	298.6	197.1	146.3	120.4	110.9	108.6	106.2	107.4
52.5°	1852.8	1420.9	619.6	292.7	190.0	139.3	115.7	105.0	101.5	98.0	99.1
55°	1948.4	1477.5	621.9	285.6	180.6	132.2	109.8	99.1	94.4	89.7	89.7
57.5°	2034.5	1527.1	616.0	267.9	169.9	125.1	103.9	92.0	85.0	80.2	80.2
60°	2093.5	1562.5	598.3	241.9	155.8	116.8	98.0	85.0	76.7	73.2	73.2
62.5°	2121.9	1568.4	566.5	199.4	138.1	108.6	90.9	77.9	70.8	68.4	68.4
65°	2094.7	1542.4	516.9	149.9	119.2	99.1	83.8	72.0	64.9	59.0	59.0
67.5°	2000.3	1469.3	448.4	113.3	101.5	89.7	76.7	66.1	57.8	53.1	53.1
70°	1810.3	1317.0	347.0	90.9	86.1	77.9	69.6	59.0	51.9	46.0	46.0
72.5°	1561.3	1116.4	244.3	73.2	73.2	66.1	59.0	51.9	44.8	40.1	40.1
75°	1197.8	826.1	164.0	59.0	60.2	55.5	48.4	42.5	37.8	34.2	34.2
77.5°	653.8	408.3	100.3	43.7	44.8	42.5	37.8	34.2	31.9	28.3	28.3
80°	317.5	179.4	57.8	30.7	31.9	30.7	28.3	24.8	24.8	22.4	22.4
82.5°	133.4	67.3	30.7	21.2	21.2	18.9	17.7	17.7	17.7	16.5	16.5
85°	33.0	13.0	13.0	11.8	11.8	11.8	10.6	10.6	10.6	8.3	9.4
87.5°	4.7	4.7	4.7	4.7	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)