

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: P798984

Luminaire Tested: **ARCH1-50-727-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4358 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53
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

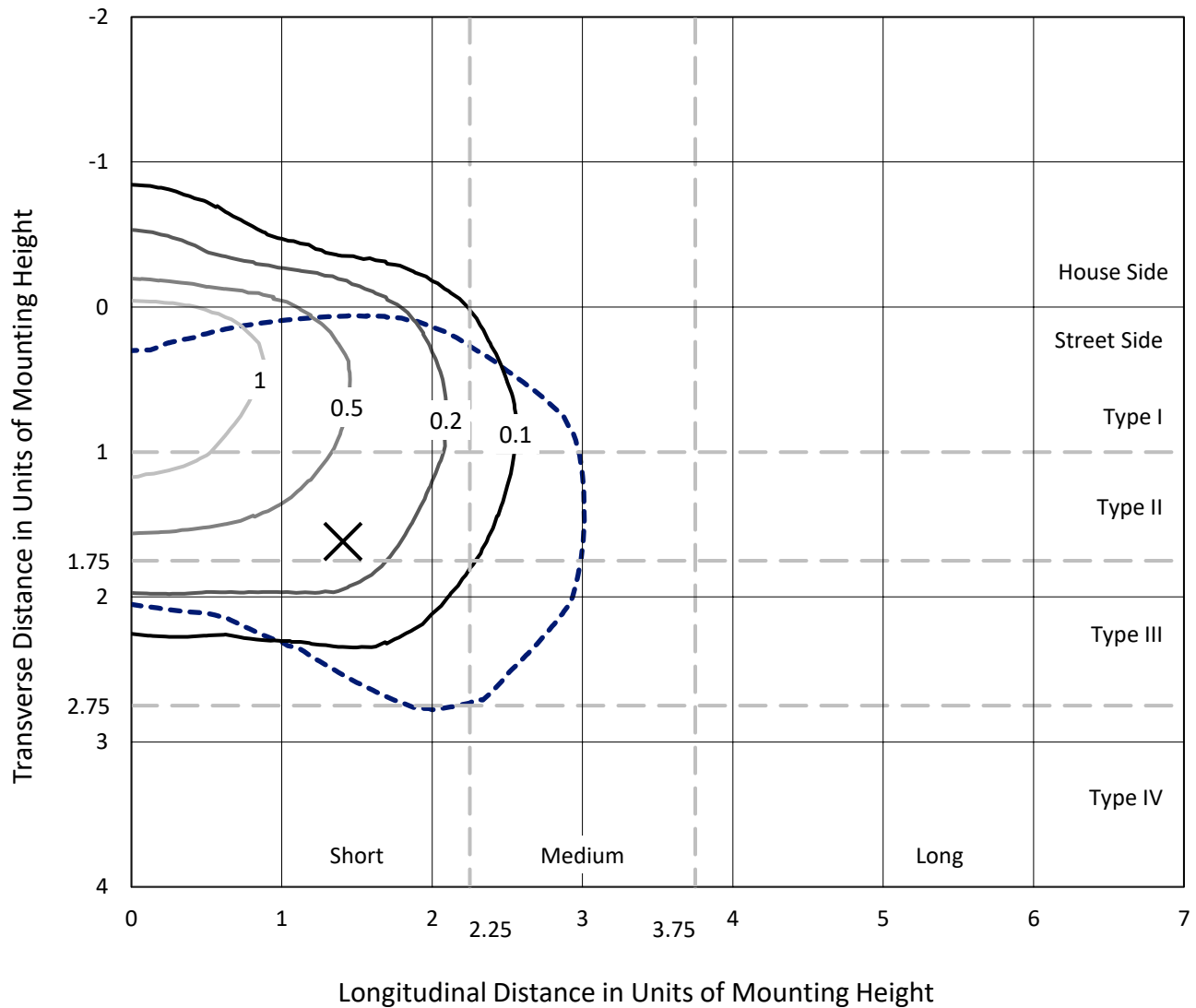


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Iso-Footcandle Lines of Horizontal Illumination

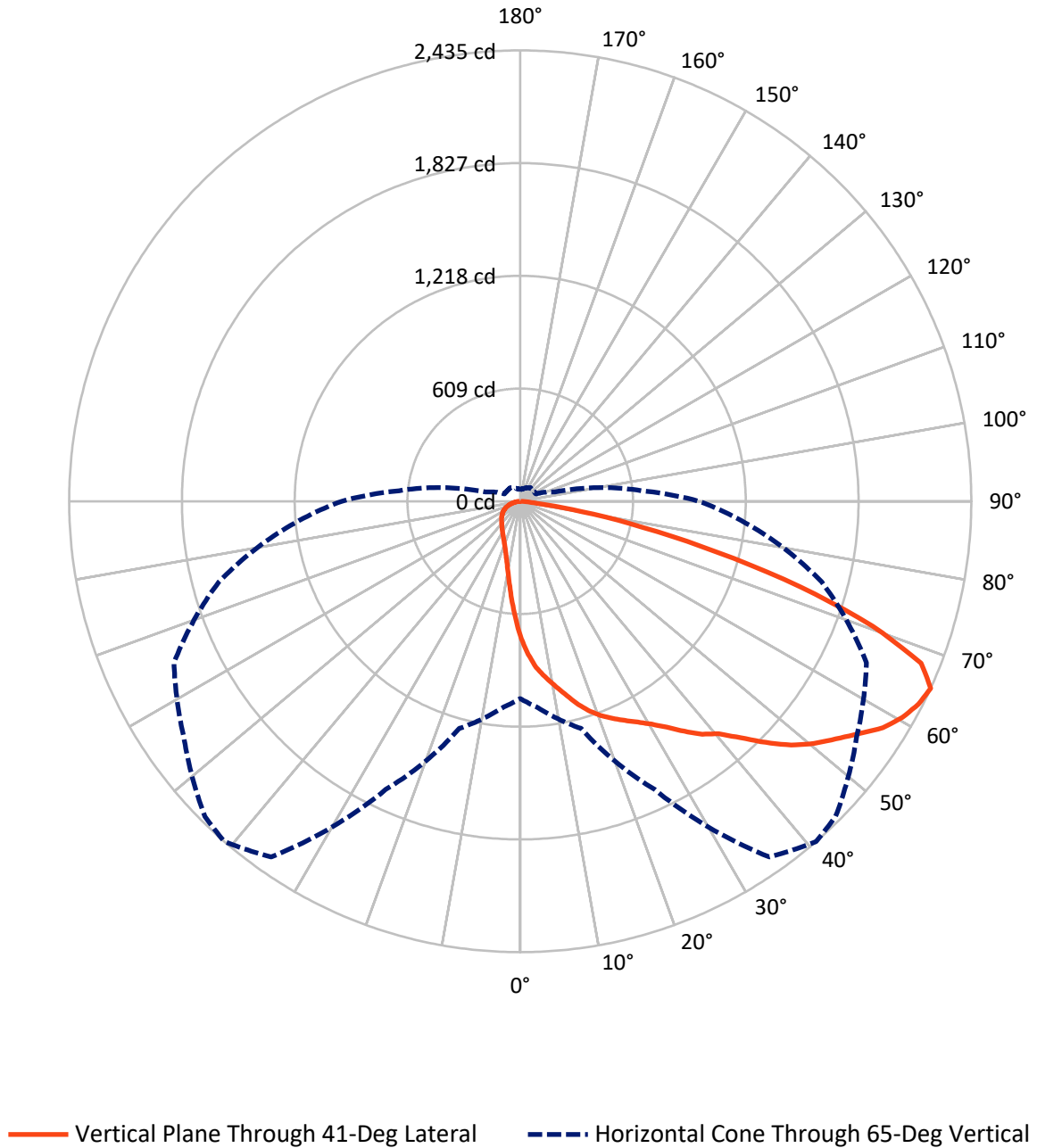
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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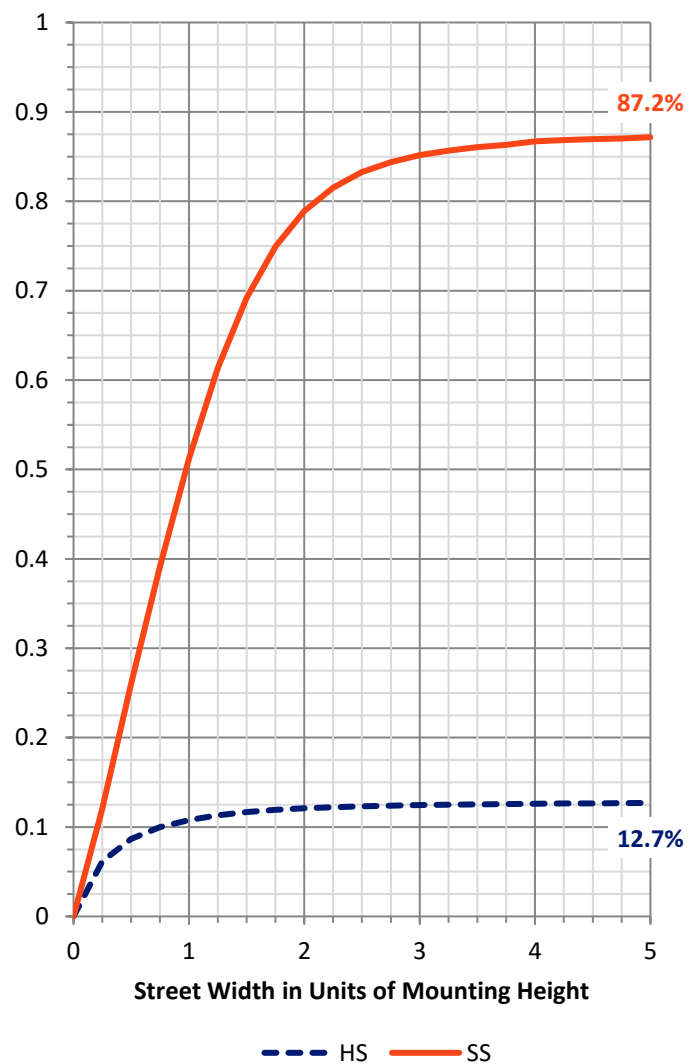
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	559.5	0.0	559.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3798.5	0.0	3798.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	4358.0	0.0	4358.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	1.6
10°-20°	207.5	4.8
20°-30°	356.9	8.2
30°-40°	541.3	12.4
40°-50°	793.1	18.2
50°-60°	1001.5	23.0
60°-70°	939.1	21.5
70°-80°	418.5	9.6
80°-90°	31.0	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°	4358.0	100.0
0°-180°	4358.0	100.0

Coefficient of Utilization



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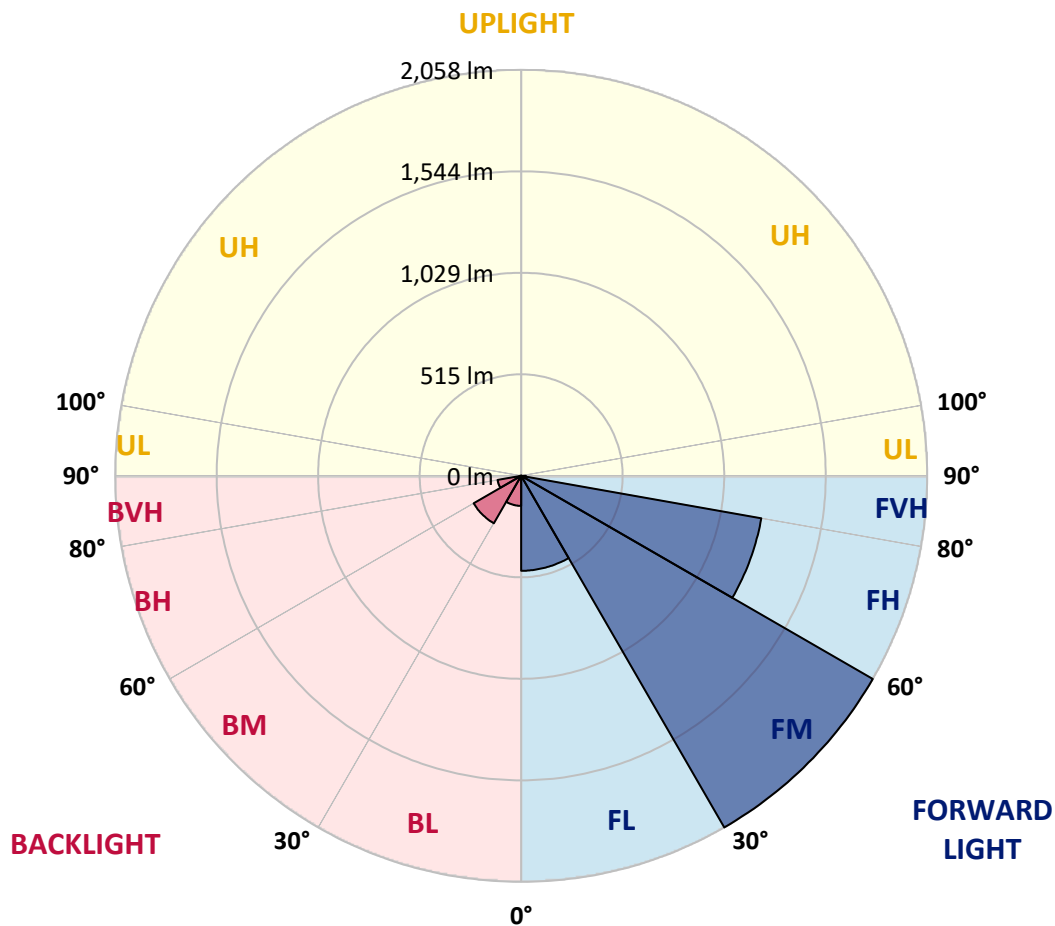
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	481.3	11.0			
FM	(30°-60°)	2058.0	47.2			
FH	(60°-80°)	1236.0	28.4			G1/1800
FVH	(80°-90°)	23.2	0.5			G1/100
BL	(0°-30°)	152.3	3.5	B1/500		
BM	(30°-60°)	277.8	6.4	B1/1000		
BH	(60°-80°)	121.5	2.8	B1/500		G1/500
BVH	(80°-90°)	7.9	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6
2.5°	856.5	853.8	851.9	841.8	841.8	828.1	829.0	816.1	800.5	775.7	749.0
5°	937.4	933.7	929.1	919.0	915.4	901.6	899.7	881.4	854.7	811.5	763.7
7.5°	1008.2	1004.5	998.1	983.4	973.3	956.7	952.1	928.2	898.8	845.5	778.4
10°	1072.5	1069.8	1061.5	1043.1	1029.3	1009.1	1000.8	968.7	931.9	873.1	790.4
12.5°	1137.8	1134.1	1123.1	1107.4	1090.9	1067.0	1056.9	1015.5	968.7	903.4	807.8
15°	1198.4	1192.9	1184.6	1168.1	1153.4	1130.4	1119.4	1070.7	1013.7	937.4	830.8
17.5°	1237.9	1233.3	1226.0	1216.8	1204.9	1187.4	1176.4	1128.6	1058.7	970.5	854.7
20°	1261.8	1260.0	1257.2	1251.7	1246.2	1234.3	1226.0	1181.0	1107.4	1002.7	877.7
22.5°	1280.2	1278.4	1277.5	1277.5	1278.4	1273.8	1268.3	1229.7	1154.3	1036.7	898.8
25°	1308.7	1307.8	1305.9	1304.1	1310.5	1311.5	1309.6	1283.0	1213.1	1081.7	925.5
27.5°	1348.2	1345.5	1341.8	1340.0	1346.4	1351.0	1354.7	1336.3	1275.6	1127.7	955.8
30°	1408.9	1400.6	1391.4	1385.0	1389.6	1396.9	1405.2	1394.2	1340.0	1184.6	987.0
32.5°	1480.6	1470.5	1449.3	1437.4	1449.3	1454.8	1461.3	1455.8	1407.0	1246.2	1018.3
35°	1567.9	1555.9	1533.9	1516.4	1537.5	1525.6	1522.8	1517.3	1470.5	1306.9	1053.2
37.5°	1713.1	1695.6	1660.7	1622.1	1622.1	1596.4	1586.3	1569.7	1527.4	1361.1	1087.2
40°	1881.3	1858.3	1813.3	1756.3	1703.9	1650.6	1644.2	1632.2	1594.5	1423.6	1125.8
42.5°	2066.0	2021.9	1959.4	1890.5	1805.9	1745.2	1730.5	1696.5	1659.8	1487.0	1164.4
45°	2270.9	2179.0	2088.0	2053.1	1913.4	1858.3	1830.7	1769.1	1727.8	1553.2	1204.9
47.5°	2304.0	2232.3	2171.7	2166.2	2013.6	1967.7	1936.4	1848.2	1801.3	1623.9	1247.1
50°	2285.6	2242.4	2248.9	2226.8	2087.1	2056.8	2032.9	1932.7	1873.9	1691.9	1285.7
52.5°	2208.4	2232.3	2269.1	2228.7	2157.0	2132.2	2120.2	2023.7	1941.9	1754.4	1320.7
55°	2116.5	2133.1	2212.1	2261.7	2237.9	2215.8	2204.8	2129.4	2009.0	1806.8	1352.8
57.5°	1982.4	1975.0	2062.3	2256.2	2322.4	2309.5	2297.6	2233.3	2071.5	1844.5	1373.0
60°	1781.1	1765.5	1875.8	2145.9	2350.0	2370.2	2364.7	2302.2	2119.3	1843.6	1364.8
62.5°	1432.8	1471.4	1623.9	1965.8	2361.9	2413.4	2403.3	2307.7	2134.9	1790.3	1312.4
65°	1065.2	1120.3	1270.1	1717.7	2345.4	2435.4	2407.9	2217.6	2062.3	1684.6	1197.5
67.5°	767.4	816.1	925.5	1413.5	2186.4	2334.3	2302.2	2070.6	1895.1	1534.8	1038.5
70°	524.8	559.7	634.1	1029.3	1866.6	2018.2	1998.0	1850.9	1631.3	1356.5	843.7
72.5°	370.4	385.1	432.9	679.2	1418.1	1583.5	1559.6	1522.8	1310.5	1127.7	656.2
75°	277.5	286.7	312.5	439.3	956.7	1097.3	1075.3	1096.4	978.8	853.8	477.9
77.5°	104.8	114.0	177.4	280.3	566.1	673.7	651.6	664.5	544.1	431.0	238.0
80°	28.5	30.3	58.8	133.3	257.3	335.4	305.1	261.9	202.2	198.5	125.9
82.5°	11.9	13.8	26.7	71.7	91.9	91.9	77.2	95.6	77.2	92.8	60.7
85°	4.6	5.5	6.4	18.4	11.9	12.9	13.8	18.4	15.6	19.3	13.8
87.5°	0.0	0.0	0.0	0.9	0.9	1.8	0.9	1.8	2.8	2.8	2.8
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°	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6
2.5°	738.0	727.9	713.2	689.3	664.5	650.7	633.2	630.5	612.1	610.2	602.9
5°	742.6	721.4	683.8	637.8	592.8	557.9	532.1	518.3	491.7	491.7	484.3
7.5°	746.3	713.2	652.5	584.5	522.9	476.1	441.1	426.4	402.5	400.7	395.2
10°	747.2	703.1	618.5	530.3	454.9	407.1	373.1	356.6	335.4	333.6	329.9
12.5°	754.5	697.5	588.2	483.4	406.2	354.7	321.7	307.9	291.3	289.5	285.8
15°	766.5	697.5	562.4	443.9	363.0	315.2	286.7	273.9	261.9	260.1	258.2
17.5°	778.4	695.7	536.7	407.1	327.2	284.0	259.2	249.1	239.9	238.9	237.1
20°	789.5	694.8	511.0	375.9	299.6	258.2	238.9	229.8	222.4	222.4	221.5
22.5°	800.5	693.0	486.2	346.5	275.7	238.9	222.4	212.3	206.8	206.8	205.9
25°	817.0	693.0	463.2	321.7	256.4	224.2	207.7	200.3	195.8	194.8	194.8
27.5°	836.3	698.5	443.0	299.6	239.9	209.5	196.7	189.3	183.8	182.0	182.9
30°	857.5	703.1	424.6	280.3	224.2	198.5	184.7	177.4	171.9	170.0	170.9
32.5°	878.6	708.6	408.1	262.8	208.6	188.4	174.6	166.3	160.8	159.9	159.9
35°	901.6	714.1	391.5	248.1	195.8	178.3	165.4	156.2	152.6	150.7	151.6
37.5°	924.5	723.3	375.9	234.4	186.6	169.1	157.2	148.0	145.2	144.3	144.3
40°	952.1	737.1	369.5	225.2	178.3	160.8	150.7	141.5	138.8	138.8	138.8
42.5°	975.1	748.1	363.9	215.1	171.9	153.5	144.3	136.9	135.1	134.2	135.1
45°	998.1	758.2	356.6	205.9	163.6	146.1	138.8	131.4	129.6	129.6	129.6
47.5°	1021.0	763.7	346.5	196.7	156.2	139.7	133.3	126.8	125.0	125.0	125.0
50°	1039.4	768.3	331.8	186.6	148.0	134.2	127.7	121.3	119.5	119.5	119.5
52.5°	1057.8	769.2	316.1	174.6	139.7	127.7	122.2	115.8	114.0	113.0	113.0
55°	1074.4	768.3	297.8	160.8	130.5	120.4	115.8	110.3	106.6	102.9	104.8
57.5°	1086.3	767.4	276.6	147.0	121.3	113.0	111.2	103.9	96.5	87.3	89.1
60°	1081.7	757.3	253.7	129.6	111.2	105.7	105.7	95.6	82.7	78.1	79.0
62.5°	1052.3	728.8	229.8	111.2	101.1	98.3	97.4	86.4	76.3	71.7	72.6
65°	964.1	657.1	194.8	94.7	91.0	90.1	90.1	80.0	70.8	65.3	66.2
67.5°	829.9	551.4	159.0	80.0	80.9	82.7	82.7	73.5	64.3	58.8	59.7
70°	665.4	431.0	126.8	68.9	69.8	72.6	74.4	66.2	57.9	52.4	52.4
72.5°	500.9	327.2	102.0	57.9	62.5	62.5	65.3	58.8	50.5	45.0	46.0
75°	363.0	234.4	80.9	48.7	54.2	53.3	53.3	49.6	43.2	39.5	39.5
77.5°	171.9	123.2	64.3	34.9	42.3	41.4	42.3	39.5	36.8	33.1	34.0
80°	84.6	60.7	41.4	24.8	29.4	30.3	33.1	31.2	30.3	27.6	27.6
82.5°	40.4	23.9	19.3	17.5	20.2	21.1	23.0	23.0	23.9	22.1	22.1
85°	11.0	6.4	8.3	11.0	12.9	13.8	15.6	16.5	16.5	15.6	16.5
87.5°	2.8	2.8	3.7	5.5	6.4	7.4	8.3	8.3	3.7	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)