

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: P799238

Luminaire Tested: **ARCH2-100-727-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-100-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 760mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8490 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 103.3
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

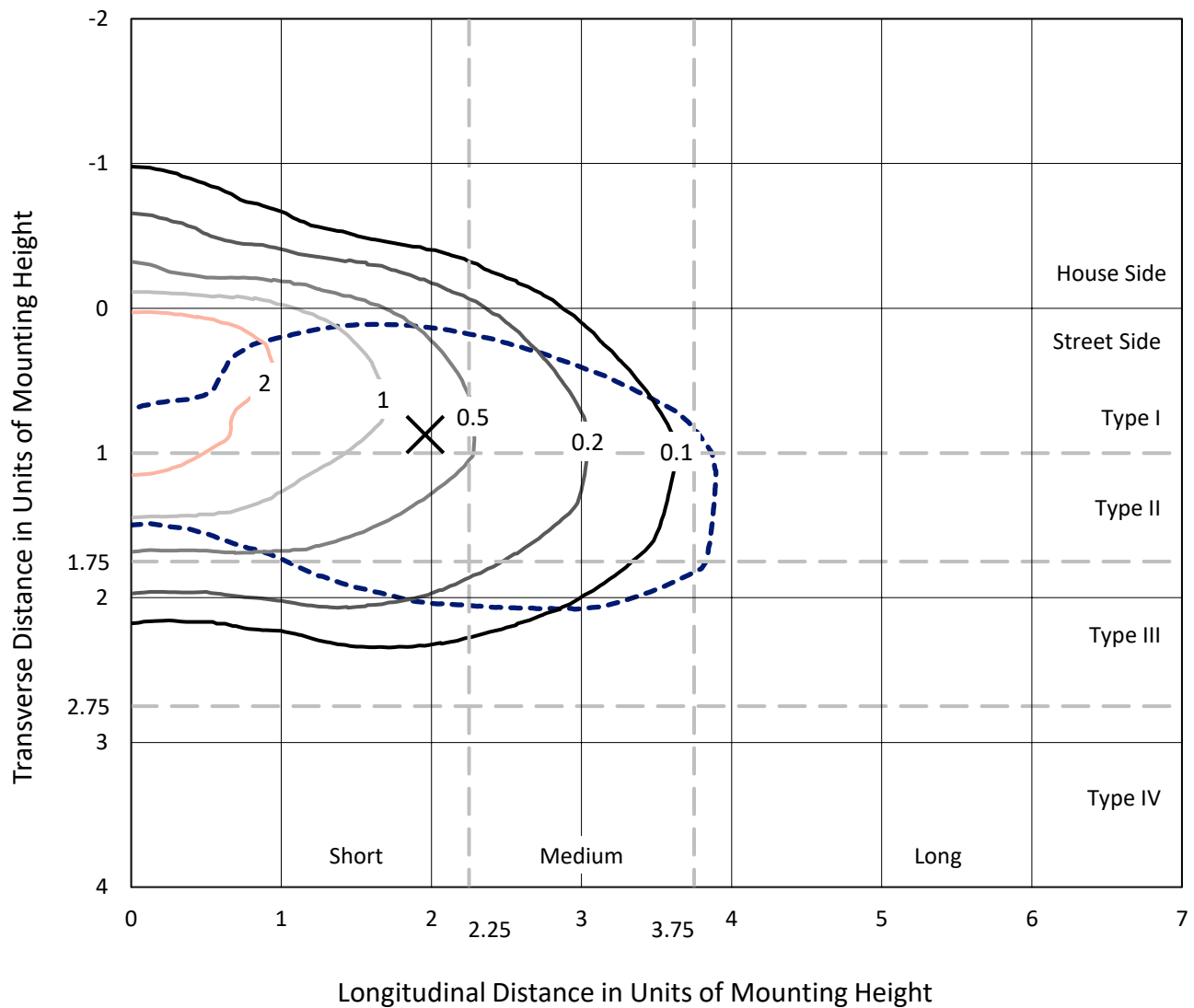


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

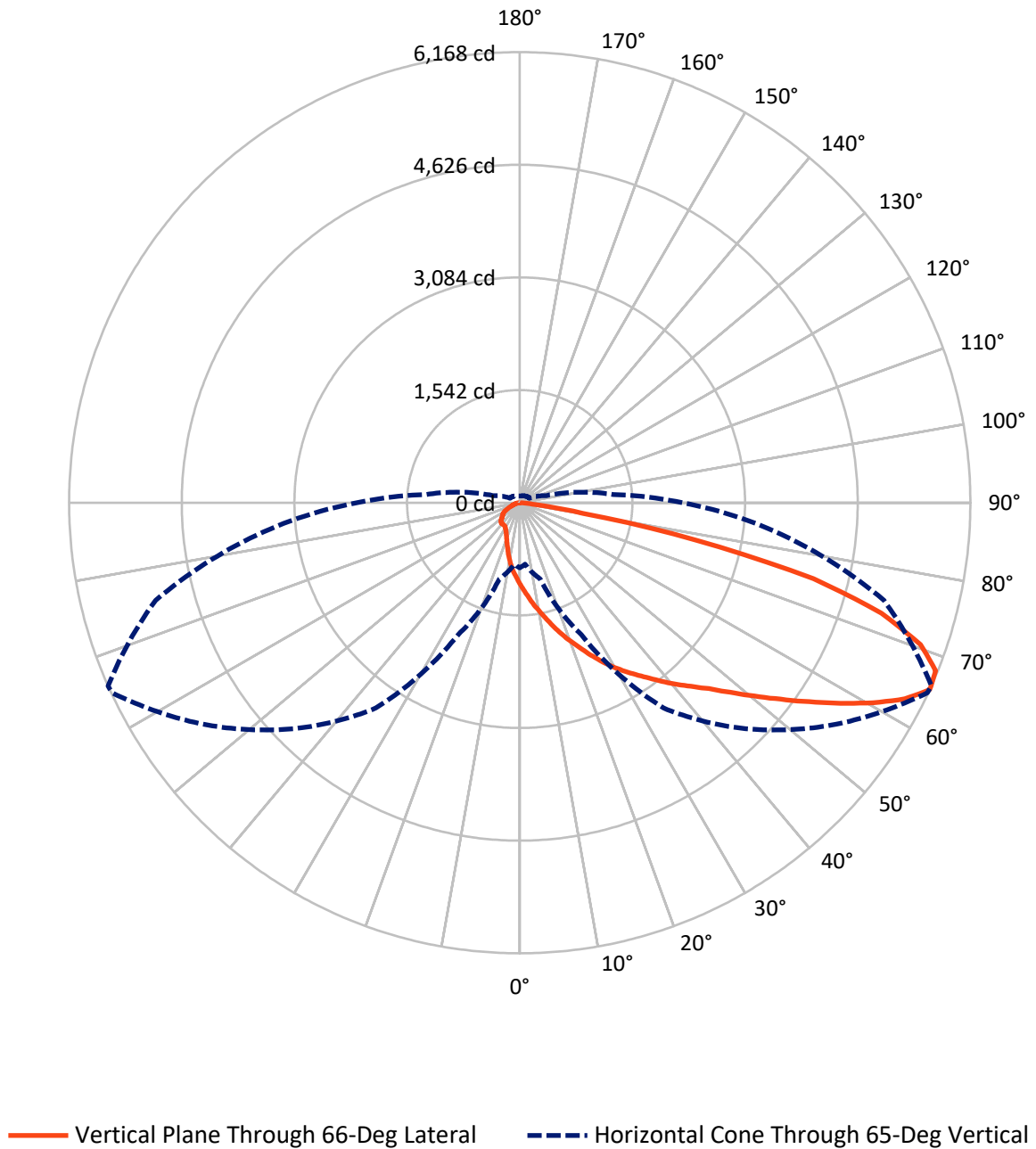


Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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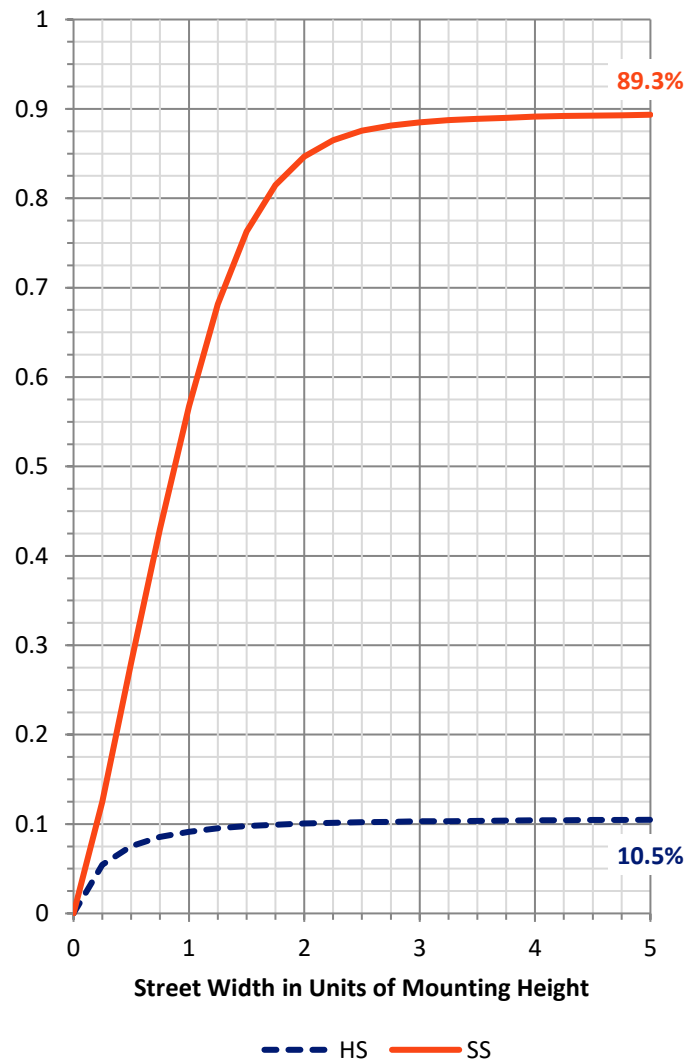
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	898.0	0.0	898.0
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7592.0	0.0	7592.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	8490.0	0.0	8490.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.9	1.3
10°-20°	361.5	4.3
20°-30°	654.0	7.7
30°-40°	1022.7	12.0
40°-50°	1551.4	18.3
50°-60°	1971.1	23.2
60°-70°	1841.8	21.7
70°-80°	915.3	10.8
80°-90°	61.5	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°	8490.0	100.0
0°-180°	8490.0	100.0

Coefficient of Utilization



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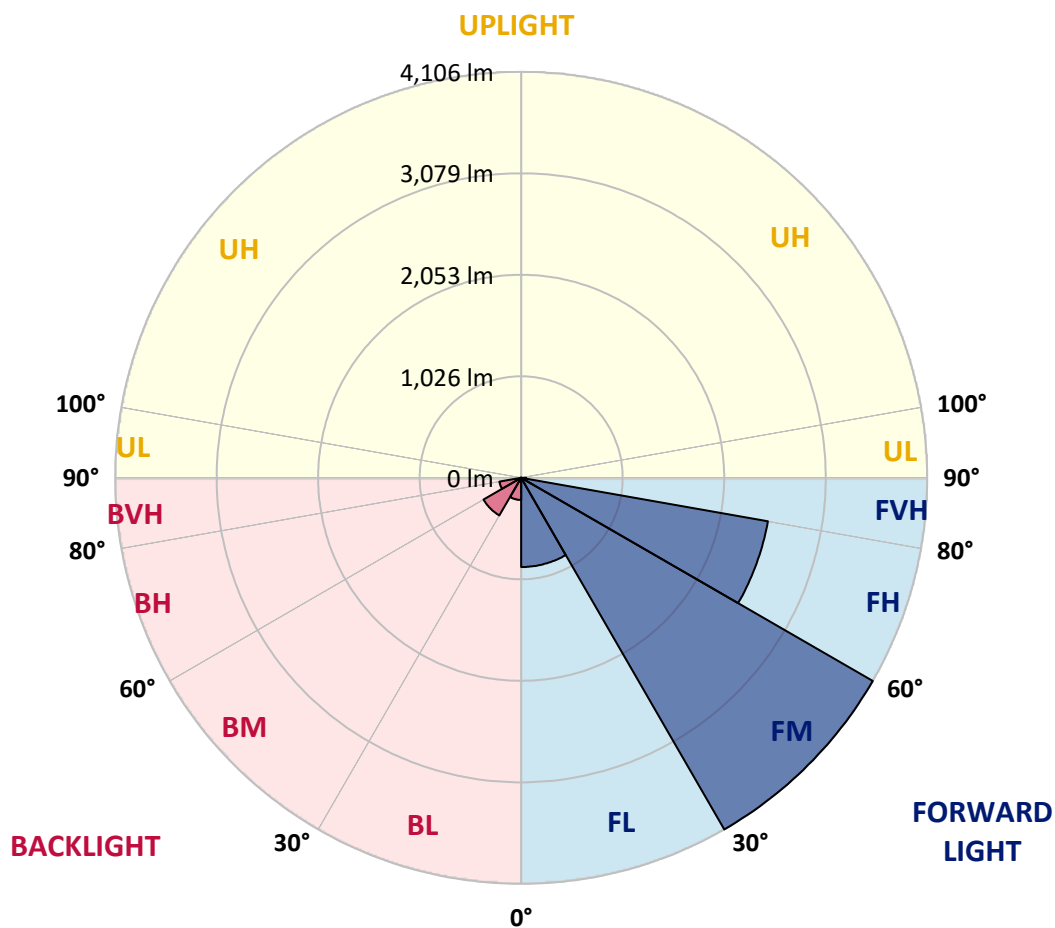
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	902.1	10.6			
FM	(30°-60°)	4105.9	48.4			
FH	(60°-80°)	2533.5	29.8			G2/5000
FVH	(80°-90°)	50.6	0.6			G1/100
BL	(0°-30°)	224.3	2.6	B1/500		
BM	(30°-60°)	439.2	5.2	B1/1000		
BH	(60°-80°)	223.6	2.6	B1/500		G1/500
BVH	(80°-90°)	10.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6
2.5°	1312.4	1323.0	1328.4	1330.2	1289.2	1271.4	1253.6	1212.6	1203.7	1180.6	1150.3
5°	1543.8	1558.1	1554.5	1547.4	1497.5	1440.6	1394.3	1317.7	1305.2	1250.0	1182.4
7.5°	1771.8	1784.2	1780.7	1754.0	1698.8	1618.6	1542.1	1429.9	1412.1	1323.0	1214.4
10°	1962.3	1973.0	1971.2	1944.5	1878.6	1780.7	1688.1	1538.5	1517.1	1390.7	1241.1
12.5°	2119.0	2133.2	2131.5	2113.7	2054.9	1948.1	1843.0	1663.1	1636.4	1472.6	1278.5
15°	2241.9	2259.7	2259.7	2252.6	2211.6	2122.6	2003.3	1800.3	1768.2	1567.0	1324.8
17.5°	2316.7	2330.9	2343.4	2355.8	2327.3	2259.7	2151.1	1937.4	1903.5	1659.6	1372.9
20°	2355.8	2370.1	2379.0	2405.7	2411.0	2377.2	2291.7	2072.7	2037.1	1764.6	1428.1
22.5°	2419.9	2432.4	2434.2	2457.3	2468.0	2476.9	2423.5	2206.3	2177.8	1880.4	1490.4
25°	2526.8	2541.0	2535.7	2546.4	2548.1	2558.8	2553.5	2359.4	2330.9	2012.2	1565.2
27.5°	2663.9	2681.7	2678.1	2667.4	2651.4	2642.5	2665.7	2514.3	2487.6	2143.9	1641.8
30°	2811.7	2833.1	2827.7	2806.3	2763.6	2726.2	2758.3	2660.3	2635.4	2279.3	1727.3
32.5°	2961.3	2986.2	2984.4	2948.8	2875.8	2811.7	2859.8	2797.4	2779.6	2425.3	1819.8
35°	3059.2	3091.2	3087.7	3066.3	2971.9	2916.7	2975.5	2938.1	2925.6	2603.3	1953.4
37.5°	3217.7	3251.5	3221.2	3167.8	3059.2	3030.7	3101.9	3096.6	3087.7	2792.1	2094.1
40°	3602.3	3652.2	3572.0	3353.0	3174.9	3150.0	3251.5	3272.9	3264.0	2979.1	2220.5
42.5°	4004.7	4079.5	3954.9	3652.2	3385.1	3294.2	3415.3	3445.6	3434.9	3139.3	2334.5
45°	4248.7	4280.7	4156.1	3921.0	3757.2	3468.8	3589.8	3639.7	3630.8	3331.6	2480.5
47.5°	4448.1	4435.7	4293.2	4134.7	4165.0	3714.5	3787.5	3885.4	3878.3	3543.5	2640.7
50°	4490.9	4462.4	4405.4	4305.7	4385.8	3963.8	3995.8	4165.0	4157.9	3778.6	2802.8
52.5°	4189.9	4152.5	4307.4	4391.1	4364.4	4145.4	4225.5	4471.3	4467.7	4033.2	2957.7
55°	3438.5	3408.2	3824.9	4257.6	4341.3	4273.6	4480.2	4790.0	4809.6	4303.9	3098.4
57.5°	2704.8	2672.8	3082.3	3922.8	4255.8	4391.1	4777.5	5155.0	5180.0	4597.7	3231.9
60°	2156.4	2108.3	2421.7	3395.7	4095.5	4482.0	5064.2	5555.7	5559.3	4866.6	3313.8
62.5°	1465.5	1412.1	1759.3	2728.0	3826.7	4496.2	5285.0	5901.2	5915.4	5067.8	3328.1
65°	890.3	845.8	1080.9	1992.6	3429.6	4375.1	5288.6	6155.8	6168.3	5160.4	3242.6
67.5°	516.4	498.6	617.9	1241.1	2770.7	4049.3	5066.0	6116.6	6139.8	5121.2	3048.5
70°	300.9	299.2	343.7	614.3	1955.2	3402.9	4569.2	5787.2	5821.0	4916.4	2751.1
72.5°	220.8	224.4	242.2	329.4	1132.5	2450.2	3869.4	5124.8	5176.4	4515.8	2327.3
75°	174.5	176.3	192.3	224.4	594.7	1385.4	2898.9	4113.4	4154.3	3801.7	1818.1
77.5°	130.0	133.6	146.0	158.5	276.0	635.7	1631.1	2533.9	2466.2	2086.9	877.9
80°	94.4	103.3	108.6	114.0	146.0	245.7	489.7	883.2	876.1	911.7	414.9
82.5°	60.5	67.7	73.0	76.6	87.3	117.5	146.0	197.7	213.7	354.4	165.6
85°	26.7	30.3	33.8	41.0	37.4	41.0	60.5	39.2	33.8	53.4	30.3
87.5°	0.0	0.0	5.3	8.9	7.1	3.6	10.7	7.1	5.3	5.3	5.3
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°	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6
2.5°	1134.3	1114.7	1073.7	1034.6	1011.4	981.2	954.4	929.5	927.7	920.6	908.1
5°	1148.5	1111.1	1034.6	961.6	906.4	847.6	797.7	758.6	744.3	733.6	719.4
7.5°	1162.8	1104.0	990.1	883.2	796.0	714.1	655.3	601.9	585.8	571.6	562.7
10°	1168.1	1091.6	938.4	796.0	682.0	594.7	532.4	493.2	479.0	471.9	466.5
12.5°	1184.1	1084.4	890.3	714.1	582.3	502.1	457.6	434.5	429.1	423.8	418.5
15°	1205.5	1084.4	842.3	633.9	503.9	439.8	413.1	397.1	393.5	391.7	388.2
17.5°	1228.7	1084.4	796.0	566.3	446.9	398.9	379.3	370.4	368.6	366.8	365.0
20°	1260.7	1086.2	746.1	507.5	406.0	368.6	352.6	341.9	340.1	338.3	338.3
22.5°	1292.8	1089.8	698.0	463.0	379.3	345.5	325.9	315.2	311.6	311.6	311.6
25°	1333.7	1100.5	653.5	425.6	356.1	324.1	299.2	290.2	288.5	288.5	286.7
27.5°	1381.8	1112.9	614.3	397.1	333.0	299.2	274.2	265.3	261.8	261.8	260.0
30°	1433.4	1125.4	582.3	375.7	309.8	274.2	251.1	240.4	236.8	238.6	236.8
32.5°	1490.4	1143.2	557.4	361.5	288.5	252.9	231.5	219.0	217.2	217.2	215.5
35°	1586.6	1193.1	553.8	354.4	270.7	236.8	215.5	203.0	201.2	201.2	199.4
37.5°	1689.9	1250.0	569.8	350.8	256.4	222.6	203.0	190.5	188.8	188.8	188.8
40°	1777.1	1292.8	587.6	350.8	247.5	210.1	192.3	181.6	181.6	181.6	181.6
42.5°	1835.9	1296.3	584.1	350.8	240.4	201.2	185.2	174.5	174.5	176.3	174.5
45°	1923.1	1314.1	569.8	345.5	235.0	194.1	178.1	169.2	167.4	169.2	169.2
47.5°	2026.4	1346.2	555.6	324.1	233.3	187.0	172.7	162.0	160.3	162.0	160.3
50°	2124.3	1374.7	548.4	295.6	229.7	179.8	165.6	154.9	153.1	154.9	153.1
52.5°	2206.3	1387.1	536.0	276.0	220.8	172.7	158.5	147.8	144.2	146.0	146.0
55°	2272.1	1383.6	518.2	260.0	204.8	165.6	149.6	140.7	135.3	135.3	133.6
57.5°	2332.7	1385.4	502.1	244.0	187.0	154.9	142.5	131.8	124.6	122.9	121.1
60°	2355.8	1376.5	473.7	222.6	169.2	146.0	133.6	121.1	114.0	112.2	110.4
62.5°	2323.8	1344.4	436.3	185.2	153.1	135.3	124.6	112.2	105.1	103.3	101.5
65°	2233.0	1283.9	379.3	146.0	138.9	122.9	114.0	105.1	96.2	92.6	90.8
67.5°	2078.0	1196.6	308.1	117.5	122.9	112.2	106.8	96.2	85.5	81.9	80.1
70°	1857.2	1080.9	231.5	99.7	108.6	99.7	96.2	85.5	76.6	73.0	71.2
72.5°	1547.4	893.9	162.0	85.5	94.4	87.3	83.7	76.6	67.7	62.3	62.3
75°	1169.9	641.0	106.8	73.0	78.3	74.8	69.4	64.1	58.8	55.2	53.4
77.5°	503.9	249.3	65.9	55.2	64.1	62.3	55.2	51.6	49.9	46.3	46.3
80°	217.2	101.5	41.0	41.0	46.3	44.5	42.7	39.2	39.2	37.4	35.6
82.5°	80.1	41.0	24.9	30.3	33.8	30.3	30.3	30.3	30.3	28.5	28.5
85°	19.6	12.5	12.5	17.8	19.6	17.8	19.6	17.8	17.8	17.8	16.0
87.5°	5.3	5.3	7.1	7.1	7.1	7.1	7.1	5.3	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)