

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: P397987

Luminaire Tested: **ARCH-S-PA1-70-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-740-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10127 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 74
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: 28.75 FT

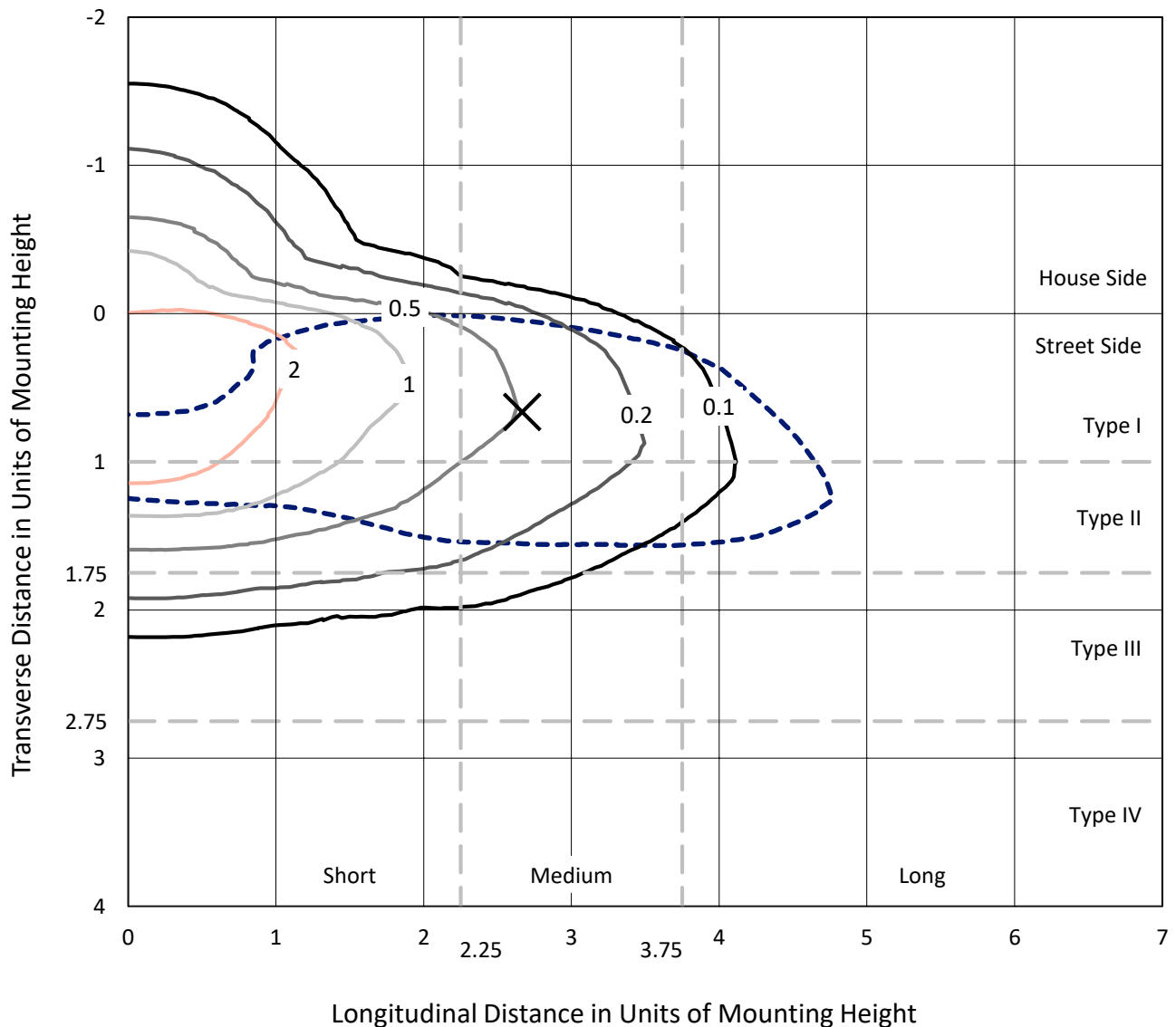


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

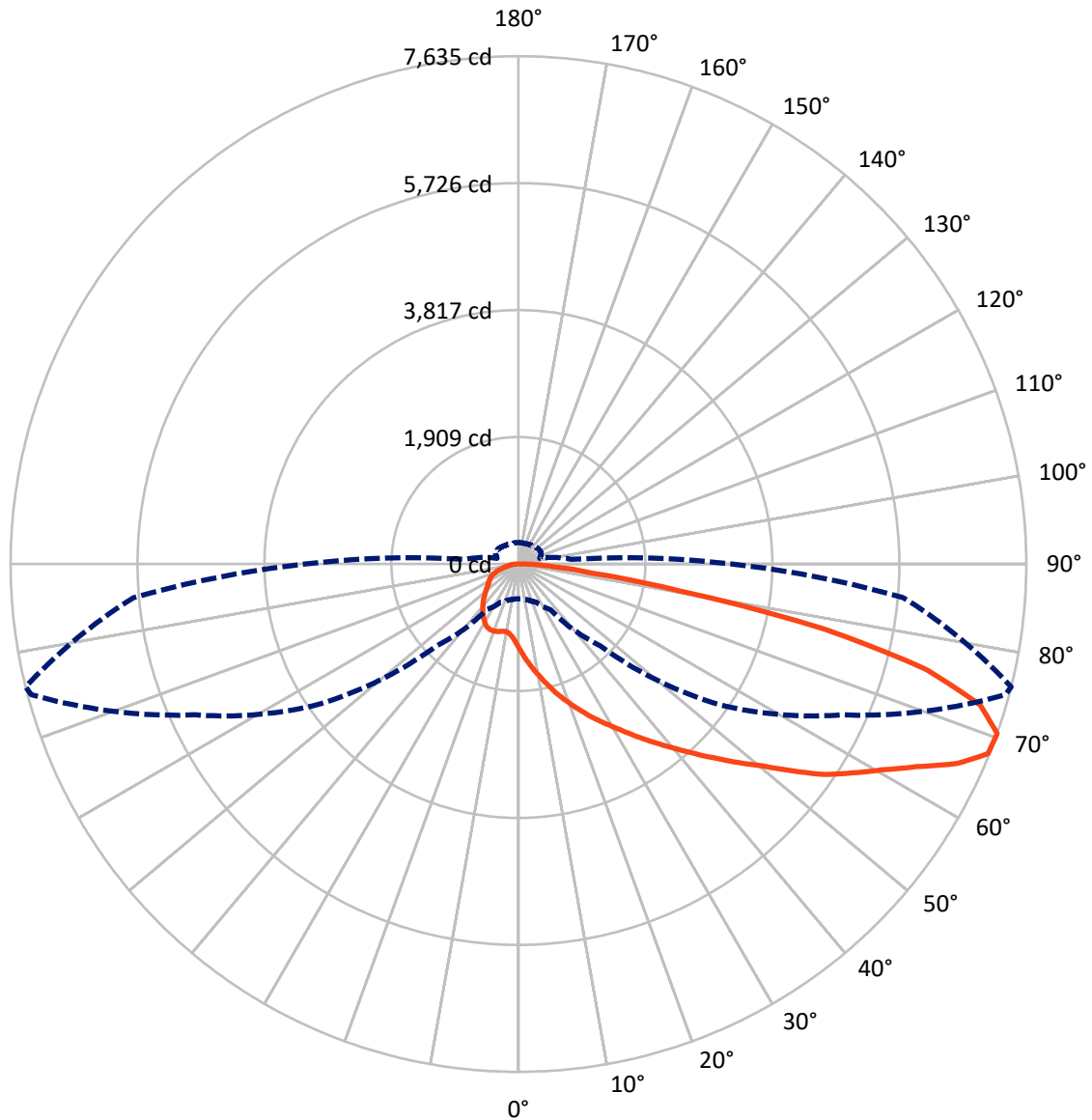


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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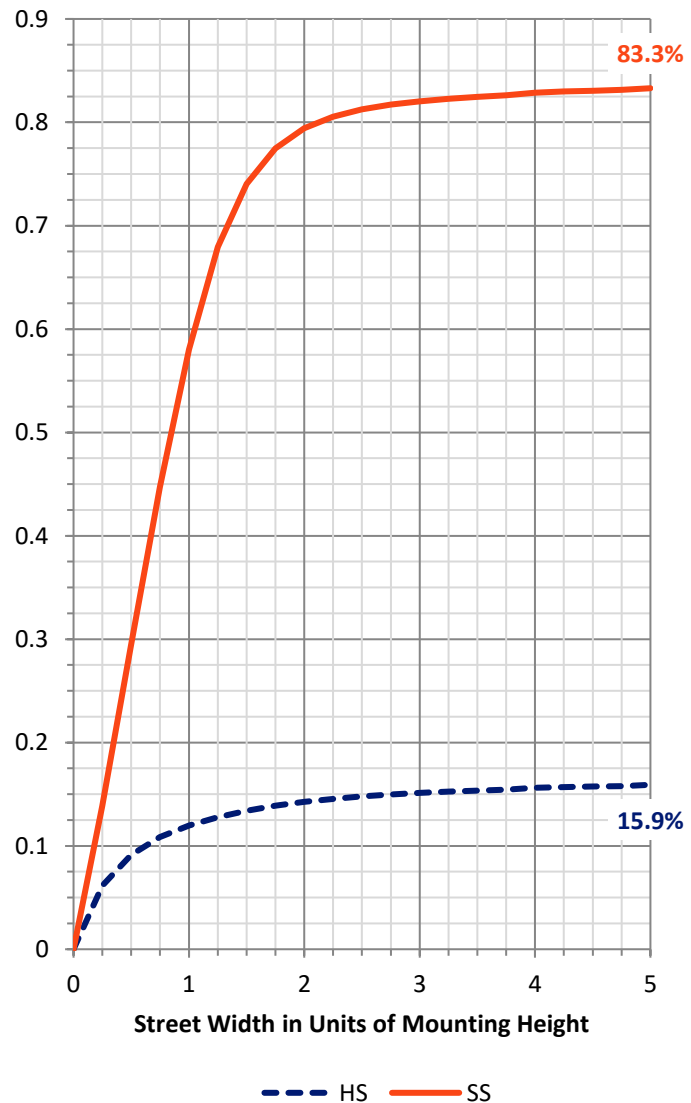
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1653.3	0.0	1653.3
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	8473.7	0.0	8473.7
	% Fixture	83.7	0.0	83.7
Total	Lumens	10127.0	0.0	10127.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	1.3
10°-20°	447.2	4.4
20°-30°	800.1	7.9
30°-40°	1294.3	12.8
40°-50°	1872.5	18.5
50°-60°	2143.1	21.2
60°-70°	1971.4	19.5
70°-80°	1219.1	12.0
80°-90°	247.6	2.4
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°	10127.0	100.0
0°-180°	10127.0	100.0



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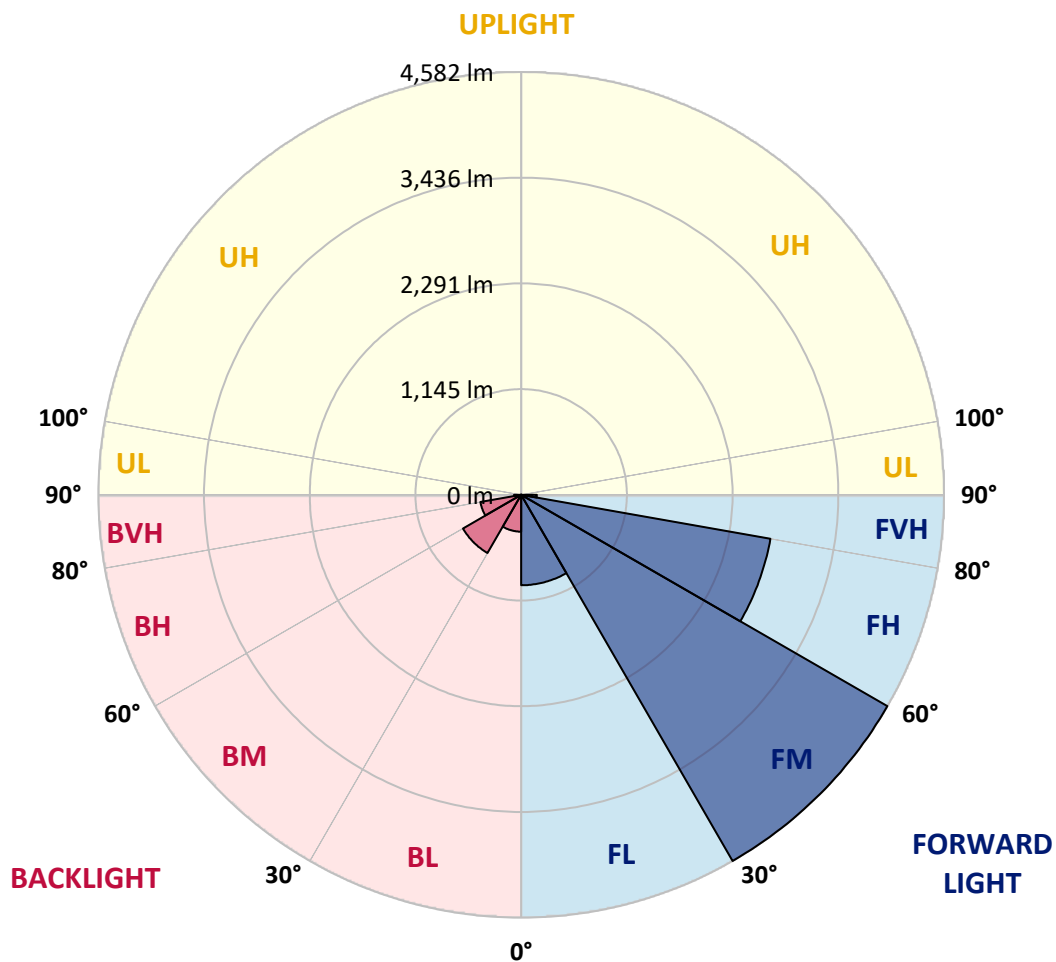
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	979.6	9.7			
FM	(30°-60°)	4582.0	45.2			
FH	(60°-80°)	2742.1	27.1			G2/5000
FVH	(80°-90°)	169.9	1.7			G2/225
BL	(0°-30°)	399.3	3.9	B1/500		
BM	(30°-60°)	727.9	7.2	B1/1000		
BH	(60°-80°)	448.4	4.4	B1/500		G1/500
BVH	(80°-90°)	77.6	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4
2.5°	1614.0	1602.0	1600.7	1582.0	1564.7	1518.1	1484.8	1426.2	1367.6	1366.3	1307.7
5°	1865.7	1853.7	1847.0	1824.4	1795.1	1733.8	1673.9	1583.4	1483.5	1476.8	1366.3
7.5°	2036.1	2025.5	2012.2	2002.8	1974.9	1920.3	1847.0	1739.2	1602.0	1588.7	1434.2
10°	2150.7	2144.0	2141.3	2134.7	2117.4	2073.4	2002.8	1888.3	1720.5	1705.9	1506.1
12.5°	2199.9	2197.3	2209.3	2227.9	2234.6	2217.2	2149.3	2041.5	1851.0	1835.1	1592.7
15°	2142.7	2145.3	2176.0	2239.9	2307.8	2345.1	2305.1	2199.9	1998.8	1976.2	1693.9
17.5°	2116.0	2120.0	2141.3	2202.6	2298.5	2414.3	2433.0	2350.4	2141.3	2109.4	1800.4
20°	2162.6	2168.0	2184.0	2231.9	2298.5	2422.3	2519.5	2494.2	2281.2	2247.9	1903.0
22.5°	2281.2	2287.8	2286.5	2317.1	2362.4	2447.6	2567.5	2630.1	2427.6	2390.4	2009.5
25°	2534.2	2528.9	2483.6	2468.9	2480.9	2535.5	2631.4	2760.6	2580.8	2543.5	2121.4
27.5°	2877.8	2871.1	2788.5	2714.0	2647.4	2671.3	2721.9	2865.8	2736.6	2694.0	2227.9
30°	3245.3	3237.3	3141.4	3020.2	2872.4	2837.8	2831.1	2957.7	2893.7	2848.5	2341.1
32.5°	3603.5	3596.9	3494.3	3353.2	3149.4	3045.5	2981.6	3060.2	3072.2	3028.2	2464.9
35°	3929.8	3929.8	3841.9	3674.1	3443.7	3286.6	3181.4	3186.7	3277.3	3226.7	2606.1
37.5°	4220.1	4218.8	4122.9	3957.7	3736.7	3556.9	3426.4	3339.8	3473.0	3429.1	2753.9
40°	4450.5	4441.1	4370.6	4226.7	4004.4	3825.9	3694.1	3519.6	3691.4	3651.5	2911.0
42.5°	4618.3	4612.9	4565.0	4439.8	4228.1	4060.3	3969.7	3746.0	3939.1	3899.1	3094.8
45°	4683.5	4694.2	4694.2	4575.6	4407.9	4254.7	4214.8	3995.0	4206.8	4166.8	3291.9
47.5°	4578.3	4606.3	4663.5	4671.5	4523.7	4419.8	4433.2	4245.4	4482.4	4461.1	3507.6
50°	4249.4	4301.3	4426.5	4652.9	4570.3	4546.3	4619.6	4501.1	4778.1	4771.4	3770.0
52.5°	3401.1	3527.6	3917.8	4324.0	4538.4	4604.9	4804.7	4788.7	5158.9	5169.6	4112.2
55°	2608.8	2656.7	3108.1	3799.3	4342.6	4586.3	4928.5	5069.7	5571.7	5585.1	4426.5
57.5°	2109.4	2141.3	2387.7	3108.1	3896.5	4485.1	5025.7	5233.5	5888.7	5923.3	4706.1
60°	1671.3	1717.9	1883.0	2378.4	3271.9	4241.4	5093.7	5415.9	6229.6	6281.5	5040.4
62.5°	1242.5	1265.1	1420.9	1761.8	2590.1	3803.3	5057.7	5614.3	6647.7	6710.3	5442.6
65°	884.2	904.2	1014.7	1253.1	1915.0	3210.7	4848.6	5762.2	7172.4	7236.3	5847.4
67.5°	661.8	669.8	732.4	876.2	1290.4	2494.2	4425.2	5736.9	7555.9	7613.2	6009.9
70°	523.3	526.0	556.6	633.9	839.0	1736.5	3683.4	5365.3	7583.9	7634.5	5804.8
72.5°	434.1	432.8	450.1	487.4	584.6	1098.6	2728.6	4675.5	7224.3	7259.0	5232.2
75°	358.2	360.9	372.9	394.2	446.1	724.4	1768.5	3730.0	6373.4	6336.1	4390.5
77.5°	301.0	299.6	305.0	323.6	360.9	520.7	1036.0	2695.3	4723.5	4704.8	2881.7
80°	242.4	245.0	253.0	269.0	303.6	396.8	612.6	1681.9	2534.2	2466.3	1377.0
82.5°	162.5	187.8	203.7	222.4	262.3	293.0	388.8	854.9	1133.3	1115.9	624.6
85°	77.2	102.5	151.8	173.1	213.1	183.8	263.7	407.5	567.3	560.6	225.1
87.5°	16.0	16.0	81.2	97.2	131.8	78.6	146.5	177.1	274.3	257.0	91.9
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°	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4	1266.4
2.5°	1273.1	1237.1	1165.2	1108.0	1049.4	1016.1	974.8	954.8	950.8	940.2	948.2
5°	1295.7	1225.1	1089.3	1000.1	940.2	910.9	896.2	890.9	889.6	886.9	886.9
7.5°	1326.4	1218.5	1041.4	950.8	912.2	902.9	906.9	914.9	916.2	918.9	917.5
10°	1363.6	1219.8	1014.7	938.8	920.2	921.5	934.8	945.5	950.8	954.8	953.5
12.5°	1415.6	1235.8	1010.7	946.8	938.8	944.2	957.5	968.1	973.5	974.8	974.8
15°	1483.5	1269.1	1020.1	964.1	957.5	961.5	969.5	973.5	974.8	973.5	973.5
17.5°	1558.1	1309.0	1033.4	974.8	964.1	960.1	957.5	953.5	945.5	940.2	940.2
20°	1630.0	1345.0	1040.0	973.5	954.8	938.8	922.9	902.9	889.6	878.9	878.9
22.5°	1701.9	1378.3	1040.0	958.8	929.5	898.9	865.6	833.6	813.7	800.3	800.3
25°	1777.8	1410.2	1032.0	933.5	889.6	845.6	800.3	760.4	740.4	727.1	724.4
27.5°	1841.7	1428.9	1010.7	897.6	840.3	784.4	732.4	691.1	676.5	664.5	664.5
30°	1909.6	1440.9	970.8	850.9	784.4	720.4	667.2	633.9	617.9	600.6	599.3
32.5°	1985.5	1448.9	925.5	801.7	727.1	659.2	613.9	587.3	552.6	534.0	531.3
35°	2073.4	1459.5	877.6	745.7	669.8	608.6	581.9	538.0	504.7	488.7	487.4
37.5°	2166.6	1467.5	825.6	696.5	617.9	575.3	548.7	496.7	467.4	443.4	440.8
40°	2265.2	1467.5	772.4	648.5	576.6	560.6	510.0	463.4	414.2	402.2	399.5
42.5°	2374.4	1464.8	719.1	601.9	538.0	527.3	487.4	438.1	412.8	402.2	399.5
45°	2490.2	1455.5	668.5	548.7	498.0	476.7	446.1	432.8	422.1	422.1	422.1
47.5°	2622.1	1447.5	611.2	500.7	468.8	444.8	422.1	414.2	412.8	416.8	420.8
50°	2791.2	1444.9	563.3	466.1	446.1	418.1	415.5	408.8	410.2	410.2	410.2
52.5°	2996.3	1420.9	518.0	440.8	423.5	390.2	398.2	404.8	407.5	406.2	404.8
55°	3146.8	1378.3	479.4	423.5	407.5	379.5	390.2	400.8	403.5	399.5	399.5
57.5°	3282.6	1318.4	448.8	410.2	396.8	372.9	384.9	395.5	392.8	391.5	390.2
60°	3438.4	1261.1	424.8	403.5	386.2	370.2	380.9	387.5	383.5	380.9	379.5
62.5°	3607.5	1205.2	407.5	403.5	378.2	368.9	376.9	379.5	371.5	368.9	368.9
65°	3686.1	1117.3	388.8	403.5	374.2	366.2	368.9	366.2	358.2	358.2	356.9
67.5°	3556.9	972.1	364.9	398.2	379.5	362.2	356.9	352.9	343.6	343.6	340.9
70°	3200.0	799.0	330.3	380.9	380.9	360.9	340.9	331.6	320.9	324.9	319.6
72.5°	2733.9	633.9	287.6	351.6	372.9	359.6	323.6	308.9	299.6	303.6	295.6
75°	2214.6	491.4	237.0	305.0	352.9	352.9	306.3	286.3	275.7	275.7	266.3
77.5°	1411.6	363.5	193.1	253.0	316.9	343.6	291.6	261.0	245.0	241.0	234.4
80°	699.1	255.7	158.5	201.1	270.3	322.3	281.0	231.7	209.1	201.1	189.1
82.5°	371.5	177.1	126.5	157.1	215.7	290.3	267.7	199.8	171.8	159.8	146.5
85°	166.5	109.2	101.2	119.9	163.8	238.4	241.0	163.8	131.8	157.1	115.9
87.5°	61.3	49.3	49.3	61.3	94.5	99.9	170.5	105.2	83.9	57.3	45.3
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)