

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: P258085

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258085
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9035 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

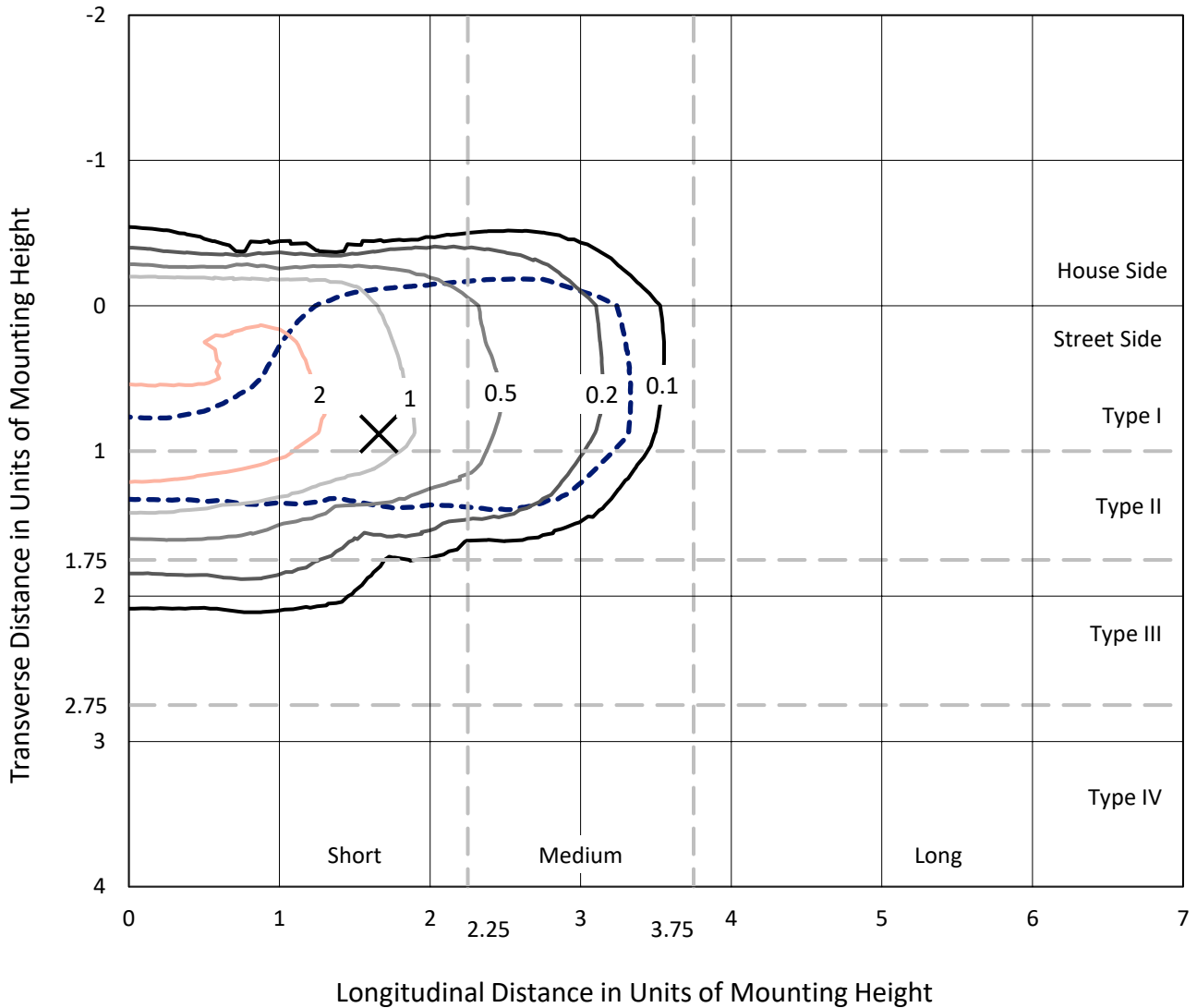
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

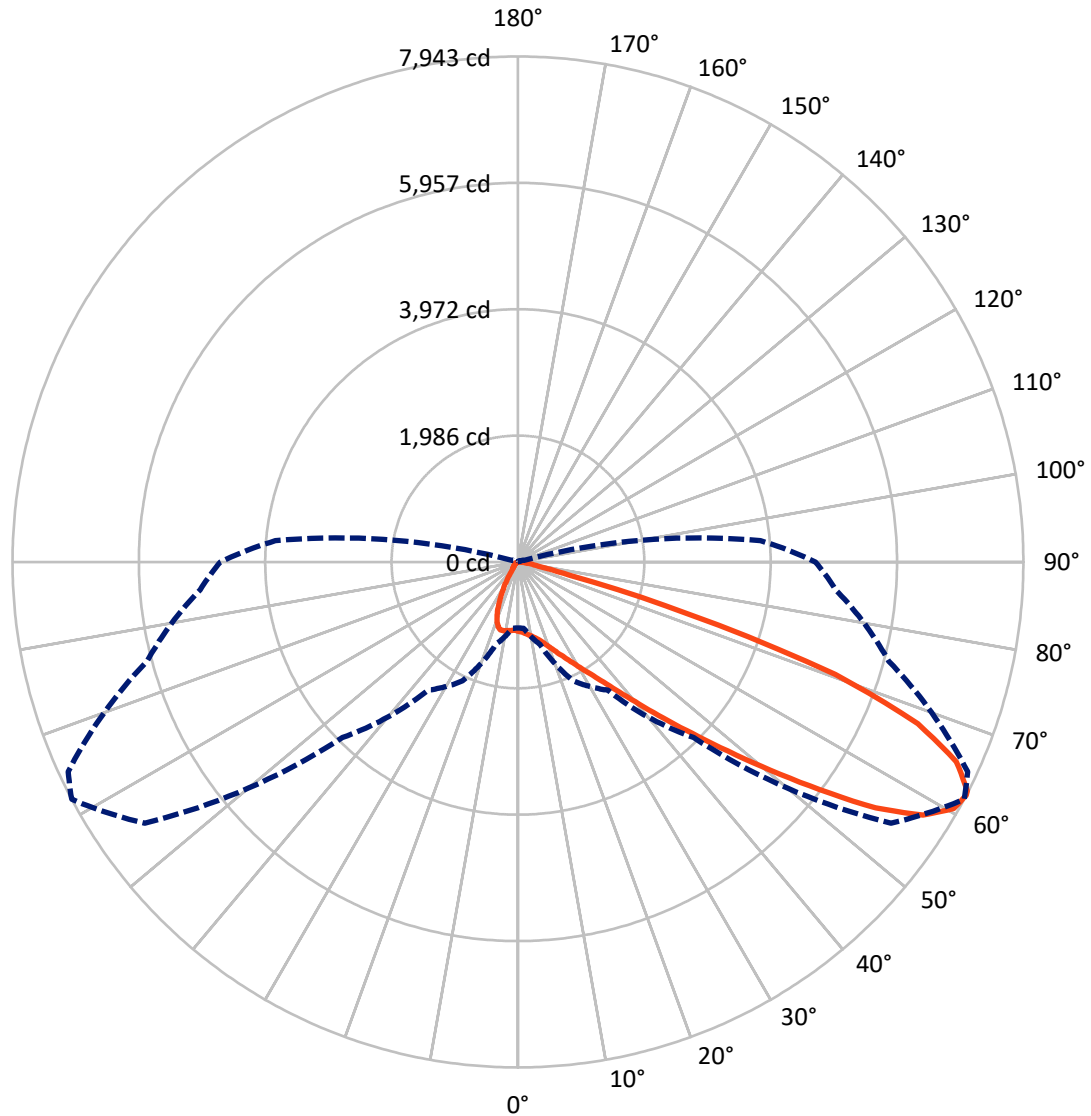
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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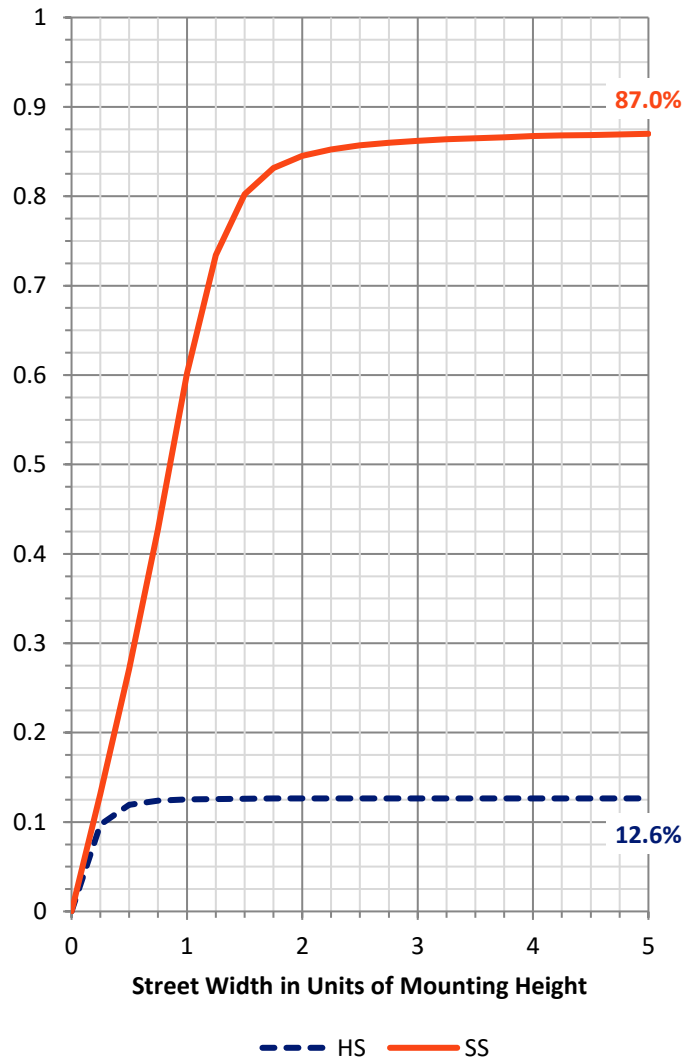
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1155.2	0.0	1155.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7879.8	0.0	7879.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	9035.0	0.0	9035.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	1.2
10°-20°	292.5	3.2
20°-30°	491.2	5.4
30°-40°	941.6	10.4
40°-50°	1923.3	21.3
50°-60°	2545.2	28.2
60°-70°	1977.2	21.9
70°-80°	713.7	7.9
80°-90°	45.5	0.5
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°	9035.0	100.0
0°-180°	9035.0	100.0

Coefficient of Utilization



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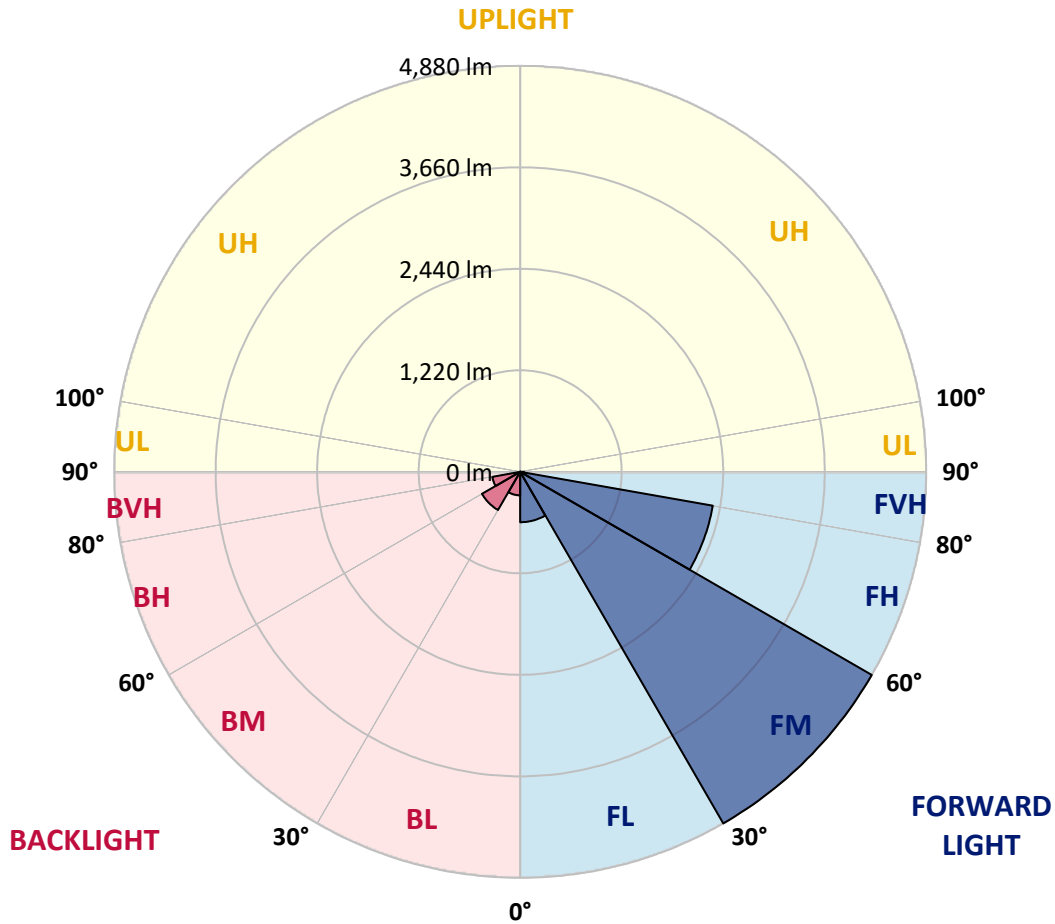
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	605.7	6.7			
FM (30°-60°)	4879.8	54.0			
FH (60°-80°)	2350.7	26.0			G2/5000
FVH (80°-90°)	43.5	0.5			G1/100
BL (0°-30°)	282.7	3.1	B1/500		
BM (30°-60°)	530.3	5.9	B1/1000		
BH (60°-80°)	340.2	3.8	B1/500		G1/500
BVH (80°-90°)	2.0	0.0			G0/10
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1117.3	1115.0	1112.8	1110.6	1110.6	1108.4	1106.2	1101.7	1097.3	1092.8	1090.6
5°	1137.2	1135.0	1132.8	1135.0	1132.8	1132.8	1130.6	1126.1	1121.7	1115.0	1108.4
7.5°	1152.8	1150.6	1148.4	1150.6	1152.8	1155.0	1157.2	1152.8	1150.6	1141.7	1135.0
10°	1172.8	1170.6	1168.3	1172.8	1172.8	1183.9	1186.1	1183.9	1181.7	1175.0	1163.9
12.5°	1201.7	1203.9	1203.9	1208.3	1212.8	1226.1	1230.5	1223.9	1223.9	1215.0	1201.7
15°	1255.0	1255.0	1255.0	1259.4	1261.6	1279.4	1283.8	1277.2	1281.6	1266.1	1252.8
17.5°	1306.1	1308.3	1312.7	1321.6	1321.6	1337.2	1346.0	1346.0	1354.9	1334.9	1317.2
20°	1357.1	1359.4	1366.0	1386.0	1386.0	1406.0	1421.6	1428.2	1437.1	1417.1	1386.0
22.5°	1412.7	1412.7	1423.8	1454.9	1448.2	1488.2	1517.1	1528.2	1537.1	1510.4	1461.5
25°	1497.1	1488.2	1497.1	1526.0	1521.5	1577.0	1630.4	1641.5	1652.6	1621.5	1548.2
27.5°	1657.0	1643.7	1612.6	1614.8	1614.8	1679.2	1754.7	1770.3	1777.0	1750.3	1659.2
30°	1976.9	1976.9	1861.4	1783.6	1732.5	1790.3	1896.9	1923.6	1932.4	1892.5	1772.5
32.5°	2534.4	2534.4	2321.1	2123.5	1930.2	1930.2	2052.4	2101.2	2110.1	2063.5	1923.6
35°	3245.2	3240.7	2920.9	2649.9	2272.3	2130.1	2234.5	2316.7	2343.4	2281.2	2119.0
37.5°	4000.4	3971.5	3627.2	3316.2	2798.7	2450.0	2481.1	2589.9	2614.3	2563.3	2372.2
40°	4613.4	4580.1	4302.4	4042.6	3478.4	2960.8	2836.5	2936.4	2965.3	2894.2	2674.3
42.5°	5168.7	5086.5	4895.5	4708.9	4260.2	3844.9	3309.6	3349.6	3380.7	3305.1	3014.2
45°	5570.7	5444.1	5346.4	5288.7	5051.0	4815.5	3922.6	3842.7	3853.8	3760.5	3385.1
47.5°	5581.9	5493.0	5501.9	5652.9	5750.7	5741.8	4720.0	4435.7	4393.5	4238.0	3780.5
50°	5048.8	5099.9	5262.0	5692.9	6221.6	6541.4	5668.5	5137.6	5011.0	4731.1	4173.6
52.5°	4160.3	4240.3	4544.6	5270.9	6290.4	7067.8	6652.5	5939.5	5712.9	5219.8	4475.7
55°	3258.5	3262.9	3582.8	4322.4	5830.6	7163.3	7438.8	6821.3	6474.8	5590.7	4675.6
57.5°	2241.2	2363.3	2769.8	3267.4	4793.3	6688.0	7734.2	7505.4	7058.9	5819.5	4815.5
60°	1468.2	1474.9	1948.0	2523.3	3262.9	5441.9	7554.3	7867.5	7532.1	5955.0	4911.1
62°	1035.1	1046.2	1339.4	2061.3	2458.9	3900.4	7156.7	7943.0	7798.6	6035.0	5011.0
62.5°	959.6	968.4	1215.0	1945.8	2310.0	3498.4	7014.5	7925.2	7838.6	6061.6	5046.5
65°	704.1	704.1	795.2	1337.2	1692.5	1890.2	5943.9	7572.0	7785.3	6274.9	5179.8
67.5°	544.2	548.6	579.7	824.1	1277.2	1146.1	3793.8	6776.9	7230.0	6590.3	5255.3
70°	468.7	466.5	488.7	546.4	921.8	761.9	1670.3	5288.7	6055.0	6510.3	5186.5
72.5°	346.5	348.7	399.8	479.8	641.9	495.3	755.2	2807.6	3927.1	5095.4	4444.6
75°	222.1	224.3	282.1	377.6	462.0	324.3	435.4	837.4	1608.1	2825.4	2718.7
77.5°	148.8	153.3	184.4	264.3	404.3	202.1	273.2	350.9	484.2	1059.5	975.1
80°	100.0	100.0	117.7	177.7	255.4	168.8	146.6	233.2	251.0	328.7	164.4
82.5°	66.6	66.6	77.7	117.7	166.6	151.0	88.8	126.6	146.6	164.4	57.8
85°	40.0	40.0	53.3	73.3	108.8	84.4	57.8	71.1	75.5	104.4	31.1
87.5°	24.4	22.2	35.5	51.1	57.8	51.1	37.8	37.8	40.0	57.8	15.5
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°	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1086.2	1083.9	1081.7	1077.3	1070.6	1066.2	1061.7	1057.3	1052.8	1052.8	1059.5
5°	1106.2	1099.5	1090.6	1081.7	1068.4	1059.5	1052.8	1044.0	1039.5	1039.5	1041.7
7.5°	1130.6	1123.9	1108.4	1092.8	1072.8	1057.3	1041.7	1021.7	1006.2	999.5	1006.2
10°	1157.2	1148.4	1126.1	1101.7	1079.5	1039.5	988.4	926.2	872.9	848.5	859.6
12.5°	1190.6	1179.5	1152.8	1119.5	1068.4	970.7	844.1	699.7	608.6	566.4	575.3
15°	1239.4	1223.9	1186.1	1135.0	1021.7	810.7	604.2	437.6	353.2	317.6	322.1
17.5°	1297.2	1277.2	1226.1	1130.6	901.8	584.2	359.8	255.4	219.9	211.0	211.0
20°	1359.4	1332.7	1266.1	1097.3	719.7	366.5	224.3	195.5	182.1	175.5	175.5
22.5°	1423.8	1388.2	1299.4	1019.5	513.1	228.8	184.4	164.4	148.8	142.2	142.2
25°	1501.5	1454.9	1332.7	884.0	326.5	184.4	157.7	137.7	122.2	113.3	115.5
27.5°	1592.6	1532.6	1361.6	715.2	211.0	159.9	131.1	111.1	97.7	93.3	93.3
30°	1688.1	1617.0	1368.3	535.3	171.0	137.7	108.8	91.1	82.2	77.7	77.7
32.5°	1819.2	1725.9	1348.3	355.4	144.4	115.5	91.1	75.5	68.9	66.6	66.6
35°	1992.4	1868.0	1301.6	219.9	122.2	95.5	75.5	66.6	60.0	57.8	57.8
37.5°	2212.3	2065.7	1219.4	151.0	104.4	77.7	64.4	57.8	53.3	51.1	51.1
40°	2505.5	2305.6	1112.8	131.1	88.8	66.6	55.5	51.1	46.6	46.6	46.6
42.5°	2816.5	2596.6	975.1	115.5	75.5	57.8	48.9	44.4	42.2	40.0	40.0
45°	3156.3	2894.2	804.1	102.2	64.4	51.1	44.4	37.8	35.5	35.5	35.5
47.5°	3493.9	3200.7	617.5	88.8	55.5	44.4	37.8	33.3	31.1	28.9	28.9
50°	3840.4	3478.4	453.1	77.7	48.9	40.0	33.3	28.9	24.4	22.2	22.2
52.5°	4091.4	3645.0	331.0	66.6	42.2	33.3	26.7	22.2	17.8	15.5	15.5
55°	4275.8	3747.1	242.1	55.5	37.8	28.9	22.2	17.8	13.3	13.3	11.1
57.5°	4420.2	3796.0	182.1	48.9	33.3	24.4	17.8	13.3	11.1	8.9	8.9
60°	4531.2	3798.2	135.5	40.0	28.9	20.0	13.3	8.9	6.7	6.7	6.7
62°	4677.8	3827.1	111.1	33.3	26.7	17.8	11.1	6.7	4.4	2.2	2.2
62.5°	4720.0	3838.2	106.6	33.3	24.4	15.5	8.9	6.7	4.4	2.2	2.2
65°	4915.5	3858.2	82.2	26.7	20.0	13.3	6.7	4.4	0.0	0.0	0.0
67.5°	5093.2	3827.1	60.0	20.0	15.5	8.9	6.7	2.2	0.0	0.0	0.0
70°	5075.4	3613.9	42.2	13.3	11.1	6.7	4.4	0.0	0.0	0.0	0.0
72.5°	4182.5	2705.4	28.9	11.1	6.7	4.4	2.2	0.0	0.0	0.0	0.0
75°	2525.5	1183.9	20.0	6.7	6.7	4.4	2.2	0.0	0.0	0.0	0.0
77.5°	828.5	428.7	13.3	4.4	4.4	2.2	2.2	0.0	0.0	0.0	0.0
80°	135.5	71.1	6.7	4.4	4.4	2.2	2.2	0.0	0.0	0.0	0.0
82.5°	42.2	17.8	4.4	4.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0
85°	15.5	6.7	4.4	4.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0
87.5°	6.7	4.4	4.4	4.4	2.2	2.2	0.0	0.0	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)