

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: P399270

Luminaire Tested: **ARCH-L-PA3-120-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-120-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11883 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

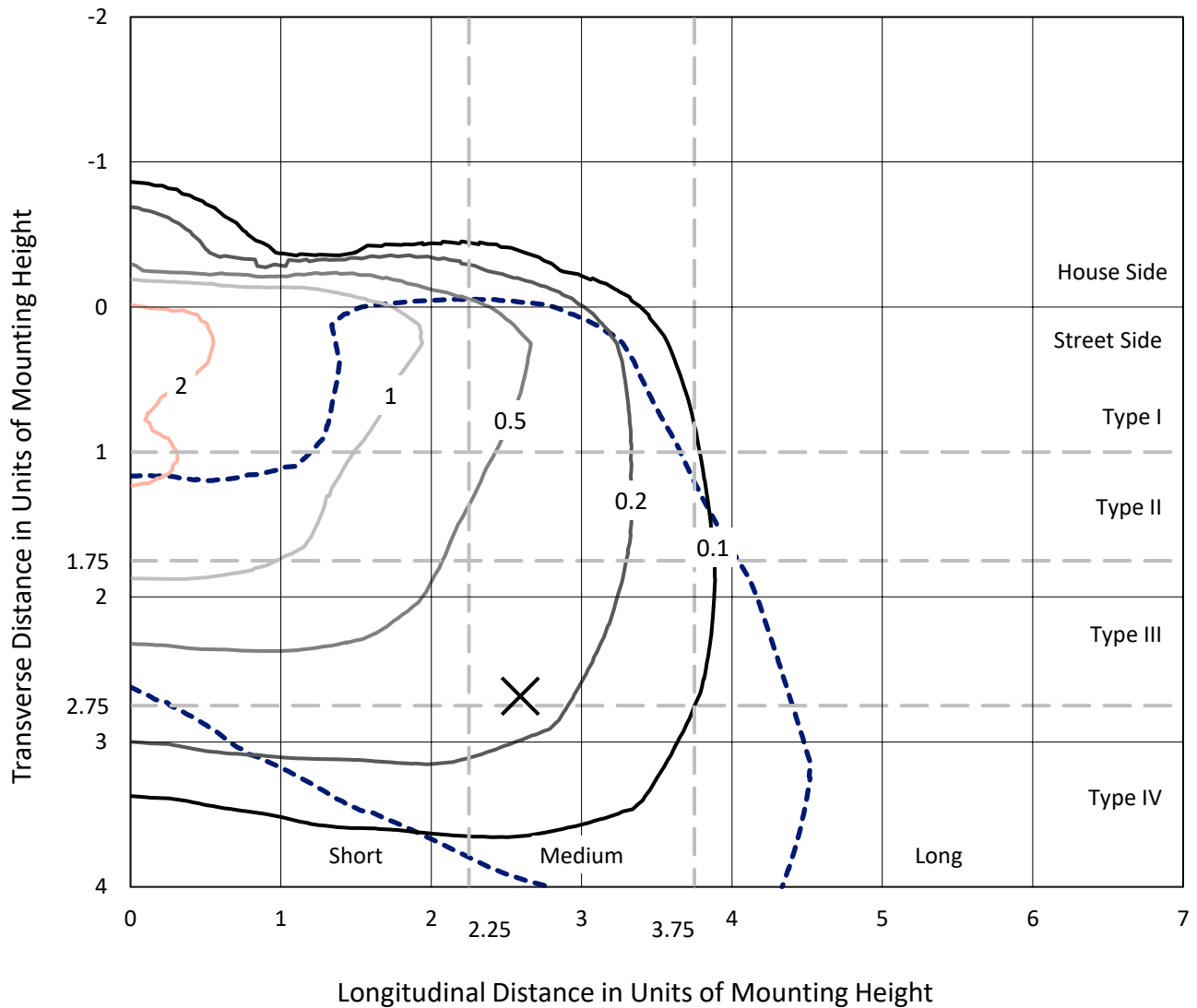
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

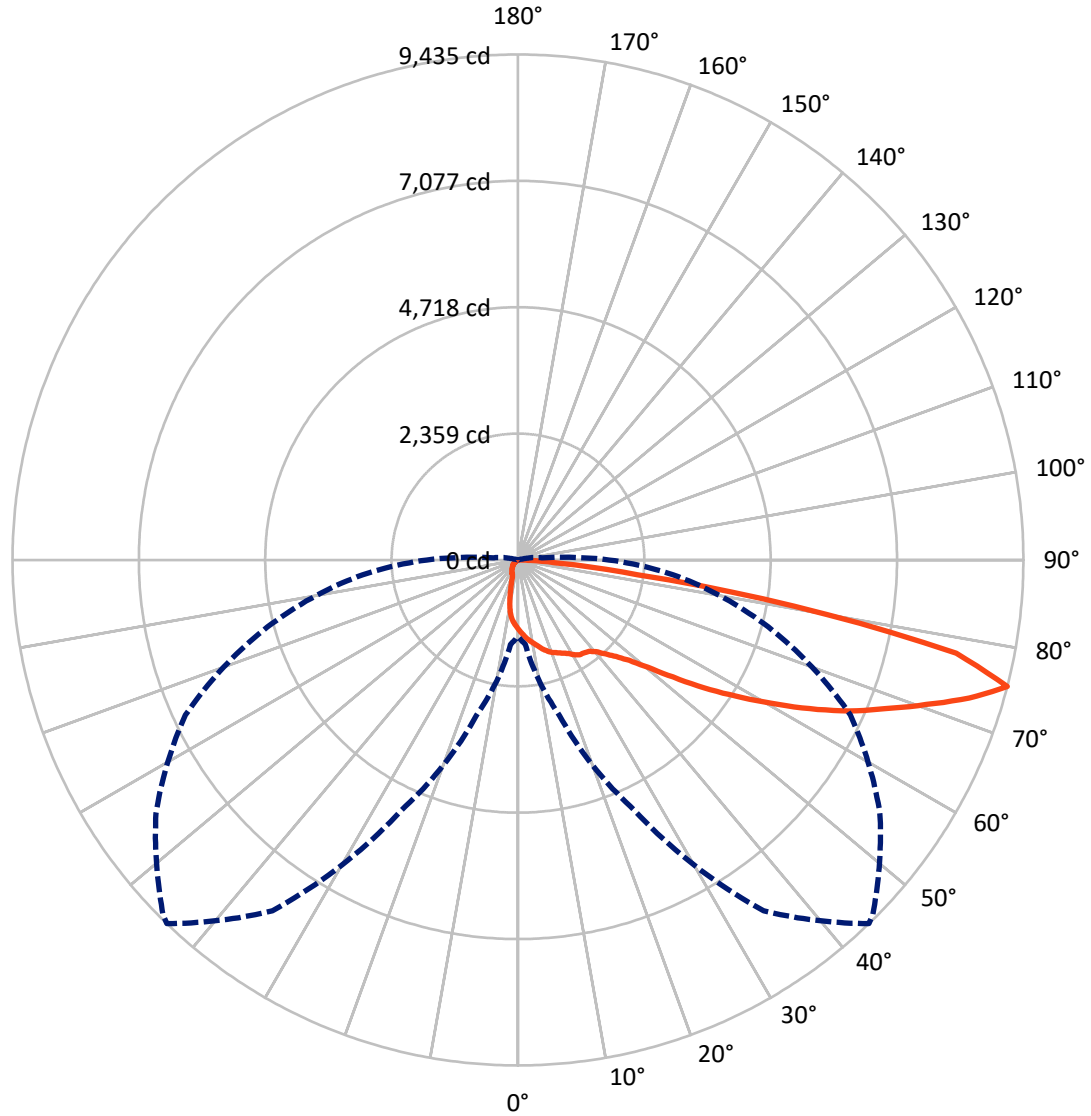
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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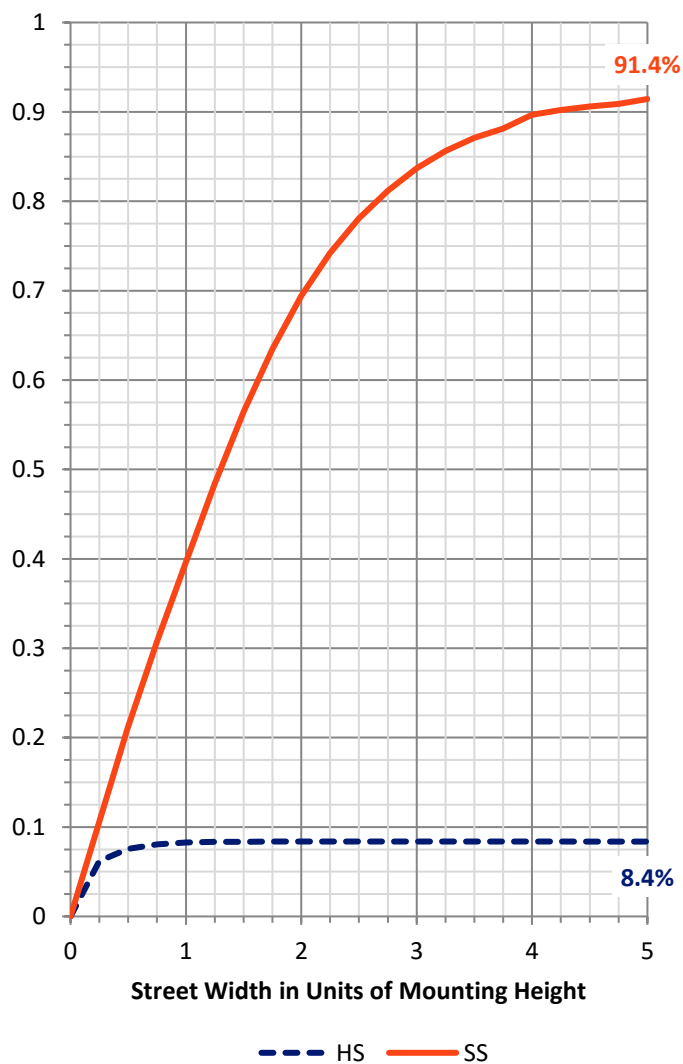
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1002.1	0.0	1002.1
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	10880.9	0.0	10880.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	11883.0	0.0	11883.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.0	1.0
10°-20°	341.8	2.9
20°-30°	564.1	4.7
30°-40°	818.7	6.9
40°-50°	1330.8	11.2
50°-60°	2346.1	19.7
60°-70°	3371.8	28.4
70°-80°	2700.1	22.7
80°-90°	287.7	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°	11883.0	100.0
0°-180°	11883.0	100.0

**Coefficient of Utilization**



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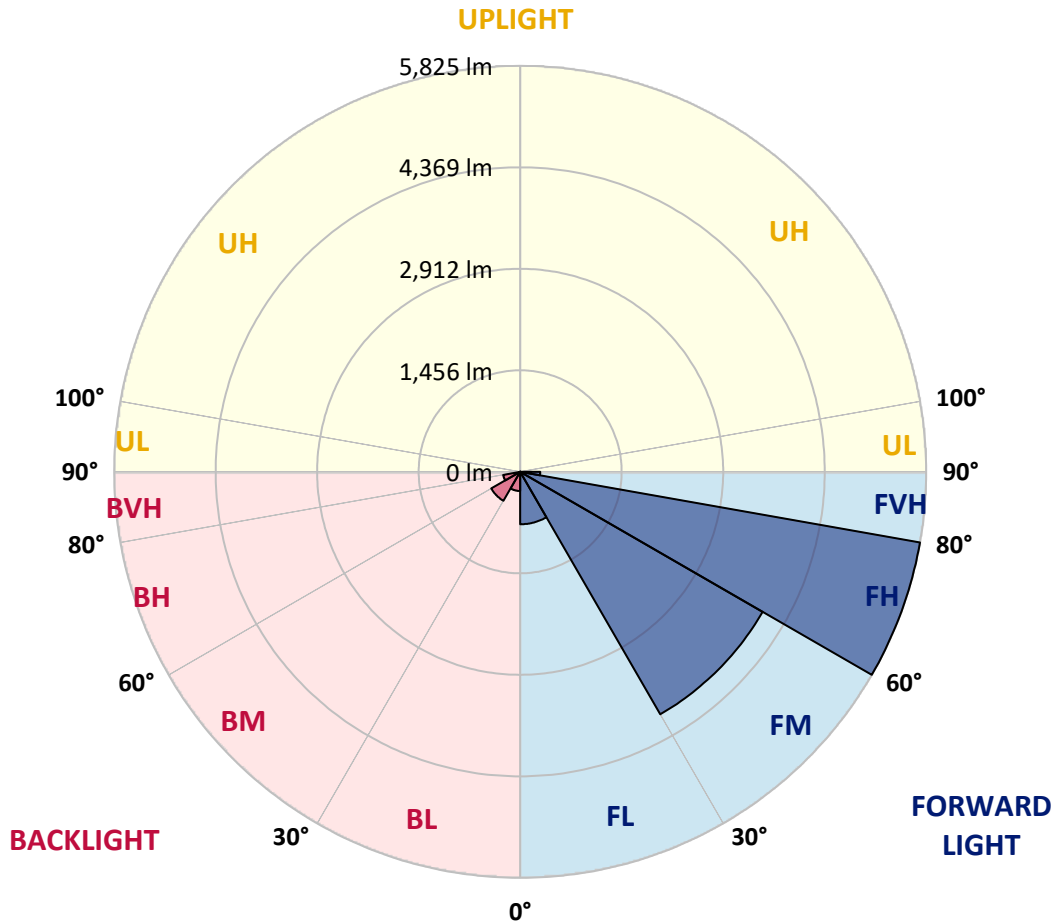
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	752.5	6.3			
FM (30°-60°)	4016.6	33.8			
FH (60°-80°)	5824.8	49.0			G3/7500
FVH (80°-90°)	286.9	2.4			G3/500
BL (0°-30°)	275.3	2.3	B1/500		
BM (30°-60°)	479.0	4.0	B1/1000		
BH (60°-80°)	247.1	2.1	B1/500		G1/500
BVH (80°-90°)	0.7	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4
2.5°	1409.6	1407.4	1400.8	1389.9	1378.9	1368.0	1365.8	1348.2	1328.5	1313.1	1300.0
5°	1534.6	1532.4	1521.4	1497.3	1473.2	1444.7	1442.5	1400.8	1363.6	1321.9	1286.8
7.5°	1663.9	1659.5	1639.8	1602.5	1560.9	1517.0	1512.6	1451.3	1396.5	1341.6	1291.2
10°	1764.8	1760.4	1731.9	1688.0	1631.0	1576.2	1569.6	1506.1	1451.3	1381.1	1313.1
12.5°	1863.4	1854.6	1817.4	1769.1	1699.0	1646.4	1639.8	1574.0	1508.3	1435.9	1352.6
15°	1955.5	1944.5	1909.4	1848.1	1773.5	1723.1	1718.7	1648.6	1580.6	1497.3	1405.2
17.5°	2019.0	2014.7	1973.0	1905.1	1832.7	1791.1	1786.7	1714.3	1646.4	1558.7	1460.0
20°	2051.9	2051.9	2012.5	1937.9	1872.2	1843.7	1837.1	1769.1	1703.4	1620.1	1517.0
22.5°	2058.5	2065.1	2034.4	1953.3	1905.1	1880.9	1876.6	1817.4	1753.8	1677.1	1580.6
25°	2071.7	2071.7	2056.3	1968.6	1933.6	1927.0	1924.8	1872.2	1815.2	1738.4	1644.2
27.5°	2087.0	2087.0	2076.0	1990.6	1977.4	1975.2	1973.0	1948.9	1902.9	1813.0	1718.7
30°	2126.5	2128.7	2119.9	2034.4	2025.6	2049.7	2054.1	2041.0	1984.0	1872.2	1795.4
32.5°	2225.1	2205.4	2181.3	2065.1	2080.4	2111.1	2113.3	2087.0	2025.6	1935.7	1887.5
35°	2472.8	2356.7	2247.0	2091.4	2098.0	2128.7	2133.0	2130.9	2093.6	2016.9	1992.7
37.5°	2703.0	2538.6	2383.0	2152.8	2130.9	2163.7	2172.5	2209.8	2181.3	2128.7	2135.2
40°	2836.8	2773.2	2663.6	2321.6	2196.6	2247.0	2255.8	2312.8	2301.8	2279.9	2321.6
42.5°	3248.9	3253.3	3134.9	2573.7	2317.2	2398.3	2409.3	2455.3	2470.7	2481.6	2582.5
45°	3726.8	3742.1	3713.6	3027.5	2545.2	2571.5	2586.8	2648.2	2705.2	2775.4	2959.5
47.5°	4301.2	4288.0	4182.8	3582.1	2942.0	2795.1	2806.1	2924.4	3023.1	3176.6	3439.6
50°	4809.8	4842.7	4643.2	4099.5	3501.0	3148.1	3137.1	3253.3	3430.9	3645.7	3976.7
52.5°	5322.8	5274.5	5004.9	4612.5	4163.1	3628.2	3595.3	3658.8	3908.8	4163.1	4502.9
55°	5458.7	5463.1	5371.0	5173.7	4715.5	4211.3	4156.5	4152.1	4463.4	4636.6	5055.3
57.5°	5726.1	5737.1	5759.0	5798.5	5581.4	4794.4	4737.4	4676.0	4978.6	5079.4	5609.9
60°	5998.0	6011.1	6144.8	6357.5	6212.8	5423.6	5362.2	5217.5	5386.3	5522.2	6193.1
62.5°	5962.9	6055.0	6443.0	6866.1	6848.5	6114.1	6037.4	5688.9	5796.3	5914.7	6728.0
65°	5384.1	5482.8	6355.3	7006.4	7486.5	6795.9	6671.0	6175.5	6182.1	6324.6	7243.1
67.5°	4866.8	4974.2	5807.2	6947.2	7907.4	7407.6	7278.2	6664.4	6561.4	6798.1	7519.4
70°	4568.6	4676.0	5371.0	6763.0	8025.8	8085.0	7973.2	7223.4	7013.0	7230.0	7210.3
72.5°	3575.5	3744.3	4814.2	6412.3	8152.9	8810.6	8722.9	7931.5	7396.6	6778.4	5489.4
75°	1425.0	1580.6	3005.6	5160.5	7992.9	9435.4	9367.4	8249.4	6846.4	4840.5	2810.4
77.5°	429.7	460.4	835.2	2551.8	5859.8	8365.6	8343.7	6936.2	4844.8	2247.0	767.3
80°	142.5	157.8	256.5	703.7	2674.5	5226.3	5324.9	4419.5	2201.0	515.2	155.6
82.5°	59.2	65.8	129.3	282.8	947.0	2251.4	2218.5	1979.6	767.3	320.1	57.0
85°	15.3	19.7	59.2	162.2	346.4	776.1	815.5	664.2	434.1	265.3	17.5
87.5°	0.0	0.0	28.5	65.8	155.6	234.6	245.5	201.7	245.5	199.5	8.8
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°	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4	1293.4
2.5°	1289.0	1278.1	1258.3	1245.2	1227.7	1223.3	1214.5	1203.5	1201.3	1190.4	1192.6
5°	1267.1	1249.6	1214.5	1190.4	1161.9	1153.1	1137.8	1126.8	1118.0	1102.7	1104.9
7.5°	1262.7	1236.4	1188.2	1142.2	1096.1	1063.2	1017.2	979.9	949.2	916.4	922.9
10°	1278.1	1245.2	1177.2	1113.7	1030.4	925.1	804.6	725.6	686.2	646.7	651.1
12.5°	1308.8	1269.3	1181.6	1085.2	916.4	736.6	570.0	462.6	434.1	416.5	418.7
15°	1354.8	1306.6	1194.8	1030.4	762.9	532.7	379.3	333.2	344.2	350.8	350.8
17.5°	1403.0	1348.2	1205.7	931.7	589.7	372.7	309.1	304.7	320.1	335.4	335.4
20°	1462.2	1392.1	1207.9	806.7	425.3	302.5	291.6	291.6	302.5	320.1	320.1
22.5°	1519.2	1440.3	1188.2	664.2	324.5	280.6	280.6	280.6	287.2	304.7	306.9
25°	1587.2	1499.5	1146.5	513.0	278.4	267.5	267.5	269.6	274.0	289.4	291.6
27.5°	1659.5	1560.9	1076.4	374.9	254.3	252.1	254.3	256.5	258.7	274.0	278.4
30°	1742.8	1628.8	986.5	280.6	232.4	232.4	239.0	243.3	243.3	256.5	260.9
32.5°	1839.3	1718.7	879.1	232.4	210.5	208.3	219.2	225.8	225.8	236.8	241.1
35°	1959.9	1810.8	749.7	206.1	192.9	188.5	192.9	203.9	208.3	217.0	219.2
37.5°	2119.9	1920.4	611.6	190.7	179.8	171.0	171.0	173.2	182.0	190.7	192.9
40°	2323.8	2041.0	475.7	179.8	166.6	157.8	151.3	149.1	146.9	153.5	157.8
42.5°	2580.3	2176.9	355.1	168.8	155.6	142.5	133.7	125.0	114.0	111.8	114.0
45°	2909.1	2343.5	263.1	160.0	149.1	129.3	114.0	98.7	78.9	72.3	74.5
47.5°	3297.1	2516.7	206.1	151.3	144.7	114.0	94.3	68.0	48.2	43.8	46.0
50°	3709.3	2683.3	175.4	140.3	135.9	98.7	68.0	41.7	28.5	28.5	30.7
52.5°	4060.0	2777.6	160.0	131.5	122.8	81.1	43.8	24.1	17.5	17.5	19.7
55°	4399.8	2828.0	149.1	122.8	105.2	57.0	24.1	15.3	11.0	11.0	11.0
57.5°	4750.6	2849.9	135.9	111.8	83.3	35.1	13.2	8.8	6.6	6.6	6.6
60°	5061.9	2808.3	116.2	92.1	54.8	17.5	6.6	6.6	4.4	2.2	2.2
62.5°	5322.8	2729.3	81.1	65.8	32.9	8.8	4.4	2.2	0.0	0.0	0.0
65°	5482.8	2602.2	52.6	43.8	19.7	6.6	2.2	0.0	0.0	0.0	0.0
67.5°	5436.7	2363.2	32.9	28.5	8.8	4.4	2.2	0.0	0.0	0.0	0.0
70°	4906.2	1937.9	24.1	17.5	6.6	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3536.1	1311.0	17.5	11.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1701.2	466.9	11.0	8.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	416.5	103.0	6.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	92.1	19.7	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.7	8.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	2.2	0.0	0.0	0.0	0.0	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)