

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: P399430

Luminaire Tested: **ARCH-L-PA3-140-740-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399430  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-740-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16412 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

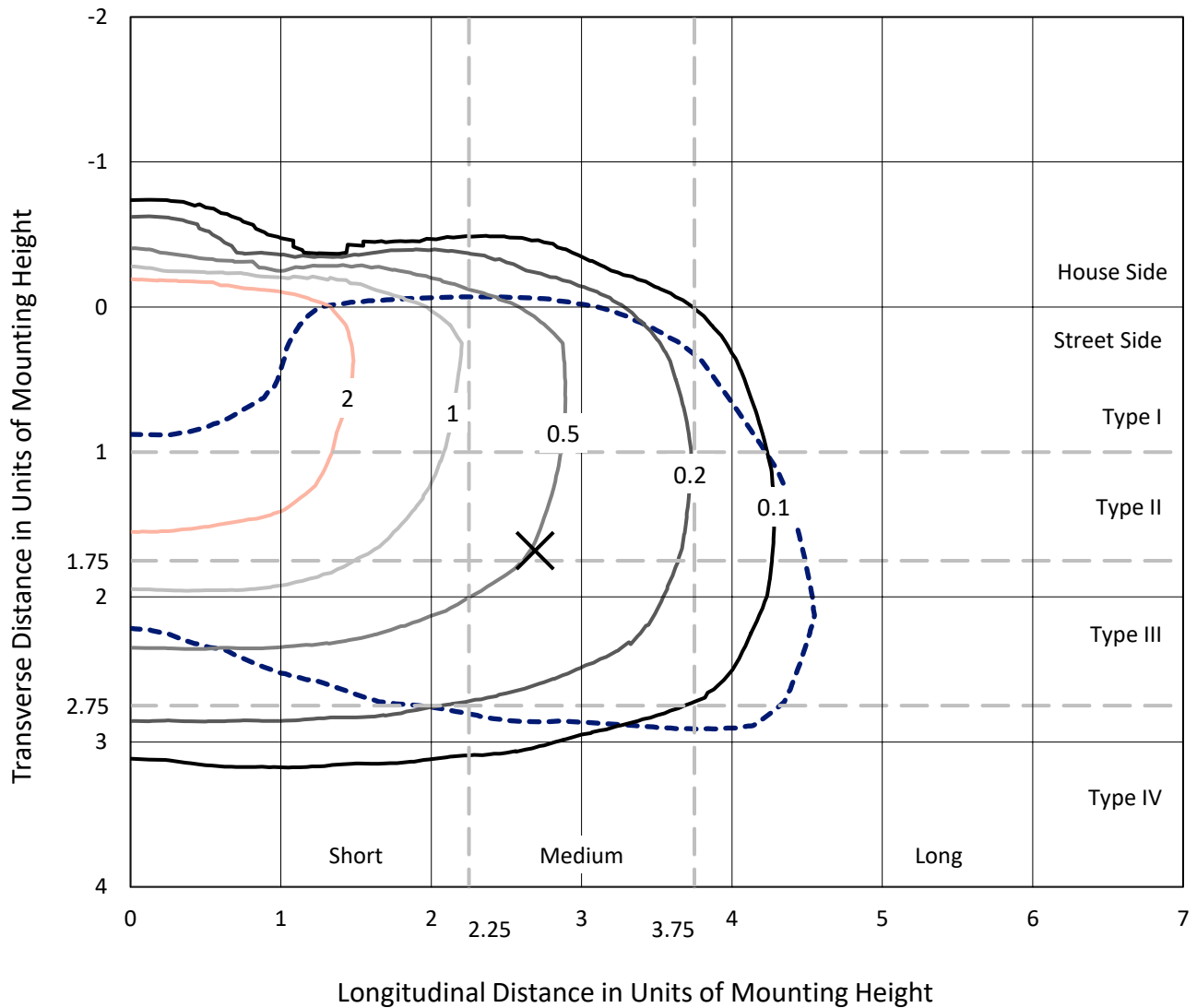
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399430  
 CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

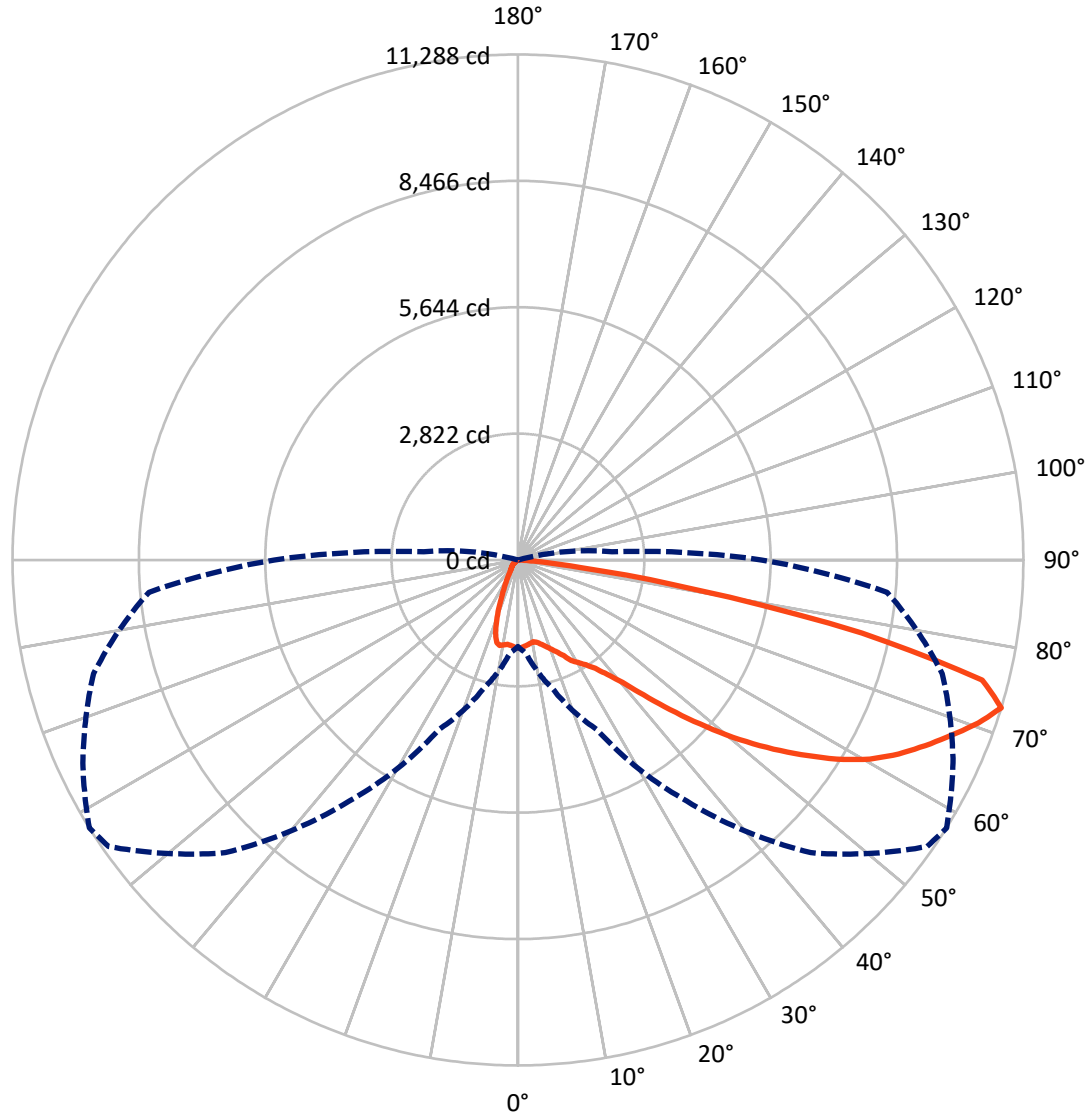
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399430  
CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399430  
 CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

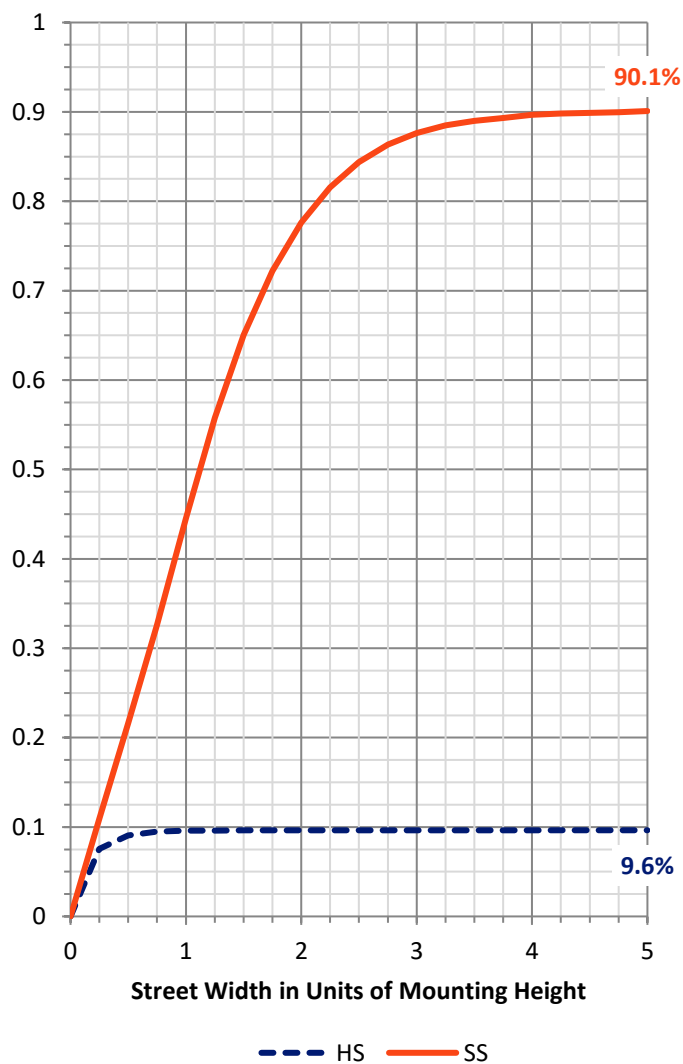
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1595.9	0.0	1595.9
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	14816.1	0.0	14816.1
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	16412.0	0.0	16412.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.7	1.1
10°-20°	470.7	2.9
20°-30°	739.5	4.5
30°-40°	1275.3	7.8
40°-50°	2426.4	14.8
50°-60°	3842.7	23.4
60°-70°	4484.0	27.3
70°-80°	2808.3	17.1
80°-90°	184.3	1.1
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°	16412.0	100.0
0°-180°	16412.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399430

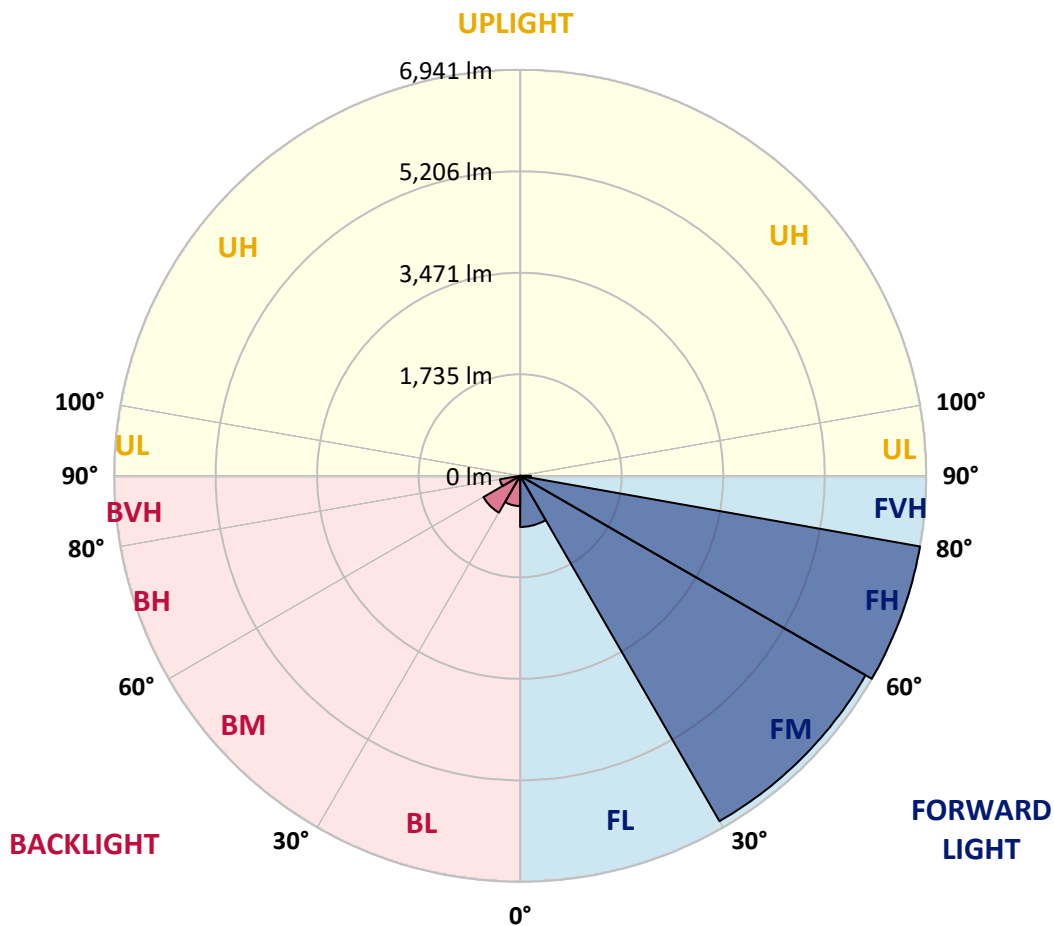
CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	874.2	5.3			
FM (30°-60°)	6818.2	41.5			
FH (60°-80°)	6941.1	42.3			G3/7500
FVH (80°-90°)	182.6	1.1			G2/225
BL (0°-30°)	516.8	3.1	B2/1000		
BM (30°-60°)	726.2	4.4	B1/1000		
BH (60°-80°)	351.2	2.1	B1/500		G1/500
BVH (80°-90°)	1.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





REPORT NUMBER: P399430

CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3
2.5°	1960.5	1951.7	1948.8	1945.9	1948.8	1951.7	1942.9	1951.7	1945.9	1948.8	1954.7
5°	1890.1	1881.3	1878.4	1881.3	1890.1	1904.8	1910.6	1919.4	1919.4	1928.3	1931.2
7.5°	1810.9	1805.0	1802.0	1807.9	1825.5	1857.8	1875.4	1887.2	1898.9	1916.5	1934.1
10°	1766.8	1763.9	1761.0	1769.8	1787.4	1816.7	1840.2	1857.8	1901.8	1951.7	1984.0
12.5°	1737.5	1737.5	1743.4	1761.0	1784.4	1807.9	1863.7	1887.2	1954.7	2031.0	2075.0
15°	1714.0	1714.0	1722.8	1755.1	1787.4	1843.1	1925.3	1951.7	2031.0	2124.9	2183.6
17.5°	1696.4	1702.3	1708.1	1740.4	1802.0	1896.0	1992.8	2031.0	2127.8	2230.5	2295.1
20°	1699.3	1705.2	1708.1	1740.4	1828.5	1957.6	2080.9	2124.9	2236.4	2345.0	2409.6
22.5°	1716.9	1725.7	1728.7	1772.7	1875.4	2022.2	2180.7	2230.5	2350.9	2465.3	2515.2
25°	1790.3	1796.2	1778.6	1816.7	1942.9	2122.0	2309.8	2362.6	2483.0	2588.6	2629.7
27.5°	2039.8	2045.6	1948.8	1904.8	1995.8	2204.1	2468.3	2541.7	2691.3	2761.8	2767.6
30°	2579.8	2585.7	2394.9	2186.5	2122.0	2274.6	2556.3	2659.0	2852.8	2932.0	2896.8
32.5°	3275.4	3269.5	3008.3	2700.1	2421.3	2397.8	2682.5	2791.1	3002.4	3078.7	3052.3
35°	3973.9	3982.7	3759.6	3295.9	2896.8	2629.7	2843.9	2970.2	3225.5	3334.1	3287.1
37.5°	4452.3	4511.0	4414.1	3912.3	3480.8	3058.2	3105.2	3240.2	3560.1	3706.8	3607.0
40°	5127.3	5112.7	4877.9	4508.1	4126.5	3692.1	3527.8	3592.4	3959.2	4155.9	4000.3
42.5°	6034.2	6004.9	5605.7	5244.7	4819.2	4464.0	4129.5	4117.7	4417.1	4646.0	4420.0
45°	6856.0	6812.0	6539.0	6189.8	5723.1	5315.2	4863.2	4760.5	4968.8	5162.5	4898.4
47.5°	7510.5	7437.1	7243.4	7058.5	6944.1	6310.1	5632.1	5476.6	5582.2	5726.1	5353.3
50°	8285.3	8082.8	7801.1	7689.5	7927.3	7437.1	6371.7	6222.1	6216.2	6298.4	5822.9
52.5°	8637.5	8270.6	8112.2	8206.1	8625.8	8484.9	7170.0	6955.8	6870.7	6879.5	6260.2
55°	8211.9	8170.9	8256.0	8549.5	9098.3	9016.1	7936.1	7671.9	7545.7	7387.2	6679.9
57.5°	7727.7	7853.9	8191.4	8752.0	9697.0	9570.8	8690.3	8391.0	8159.1	7795.2	7146.6
60°	7281.6	7410.7	7968.3	8798.9	10025.7	10105.0	9318.4	9033.7	8690.3	8211.9	7660.2
62.5°	6603.6	6703.4	7487.0	8731.4	9881.9	10416.1	9755.7	9541.5	9221.6	8608.2	8250.1
65°	5840.5	5905.1	6679.9	8191.4	9600.2	10380.9	10116.7	9996.4	9685.3	9022.0	8834.1
67.5°	5004.1	5080.4	5726.1	7219.9	9048.4	10216.5	10457.2	10445.4	10090.3	9479.8	9256.8
70°	4041.4	4047.3	4581.4	5987.3	8085.7	9887.8	10879.8	10906.2	10477.7	9823.2	9274.4
72.5°	1934.1	2092.6	2970.2	4179.3	6571.3	9242.1	11155.7	11287.8	10721.3	9811.5	8273.6
75°	443.2	457.8	865.8	1986.9	3853.6	7093.7	10466.0	10712.5	10128.5	8484.9	5828.8
77.5°	161.4	170.2	243.6	581.1	1482.1	3665.7	7489.9	7850.9	7487.0	5485.4	2755.9
80°	108.6	105.7	126.2	258.3	680.9	1039.0	3830.1	4044.3	3692.1	1872.5	660.4
82.5°	55.8	58.7	88.0	143.8	457.8	361.0	1279.6	1391.2	1144.6	375.7	123.3
85°	26.4	26.4	49.9	91.0	193.7	126.2	284.7	343.4	308.2	164.4	41.1
87.5°	26.4	26.4	47.0	58.7	99.8	52.8	70.4	88.0	82.2	88.0	14.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399430

CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3	1969.3
2.5°	1954.7	1951.7	1948.8	1954.7	1951.7	1957.6	1957.6	1963.5	1963.5	1957.6	1954.7
5°	1928.3	1922.4	1916.5	1916.5	1913.6	1919.4	1937.1	1951.7	1954.7	1945.9	1942.9
7.5°	1931.2	1931.2	1925.3	1913.6	1893.0	1893.0	1893.0	1910.6	1919.4	1913.6	1910.6
10°	1984.0	1986.9	1972.3	1945.9	1910.6	1878.4	1816.7	1725.7	1640.6	1617.1	1608.3
12.5°	2075.0	2077.9	2048.6	2001.6	1928.3	1737.5	1502.7	1285.5	1118.2	1071.3	1062.4
15°	2183.6	2186.5	2133.7	2057.4	1834.3	1391.2	1041.9	795.4	648.6	613.4	610.5
17.5°	2295.1	2289.2	2210.0	2063.3	1555.5	986.1	633.9	507.7	469.6	460.8	463.7
20°	2403.7	2386.1	2277.5	1954.7	1197.5	645.7	463.7	434.4	425.6	419.7	419.7
22.5°	2503.5	2468.3	2333.3	1740.4	839.4	463.7	413.8	408.0	396.2	387.4	384.5
25°	2603.3	2553.4	2368.5	1461.6	563.5	405.0	390.3	378.6	363.9	352.2	349.3
27.5°	2723.6	2653.2	2350.9	1109.4	422.6	375.7	363.9	346.3	325.8	308.2	302.3
30°	2838.1	2758.8	2251.1	766.0	361.0	346.3	328.7	302.3	275.9	255.3	249.5
32.5°	2981.9	2890.9	2072.1	501.9	314.0	302.3	284.7	252.4	217.2	193.7	187.8
35°	3187.3	3084.6	1843.1	352.2	275.9	255.3	231.9	196.6	158.5	140.9	137.9
37.5°	3475.0	3337.0	1555.5	284.7	243.6	214.3	179.0	143.8	117.4	102.7	99.8
40°	3827.2	3615.8	1235.6	252.4	217.2	179.0	135.0	102.7	85.1	73.4	73.4
42.5°	4208.7	3877.0	909.8	231.9	190.8	146.7	99.8	73.4	61.6	55.8	52.8
45°	4602.0	4108.9	613.4	214.3	167.3	111.5	70.4	49.9	41.1	41.1	38.2
47.5°	5009.9	4264.5	396.2	193.7	140.9	82.2	47.0	35.2	29.3	29.3	29.3
50°	5415.0	4346.6	281.8	176.1	114.5	55.8	35.2	26.4	23.5	23.5	23.5
52.5°	5708.4	4293.8	226.0	152.6	88.0	41.1	26.4	20.5	17.6	17.6	17.6
55°	5963.8	4202.8	196.6	132.1	64.6	29.3	20.5	17.6	14.7	14.7	14.7
57.5°	6225.0	4085.4	176.1	111.5	47.0	20.5	14.7	11.7	11.7	11.7	11.7
60°	6462.7	3885.9	152.6	88.0	32.3	14.7	11.7	8.8	8.8	8.8	8.8
62.5°	6694.6	3715.6	132.1	67.5	23.5	11.7	5.9	5.9	2.9	2.9	2.9
65°	6826.7	3486.7	105.7	44.0	14.7	8.8	2.9	2.9	0.0	0.0	0.0
67.5°	6785.6	3213.8	73.4	26.4	8.8	5.9	2.9	0.0	0.0	0.0	0.0
70°	6500.9	2846.9	44.0	14.7	8.8	5.9	2.9	0.0	0.0	0.0	0.0
72.5°	5444.3	2107.3	26.4	11.7	5.9	2.9	0.0	0.0	0.0	0.0	0.0
75°	3636.4	968.5	14.7	8.8	2.9	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	1664.1	290.6	8.8	5.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	334.6	76.3	5.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	70.4	14.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.7	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.9	2.9	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)