

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: P399468

Luminaire Tested: **ARCH-L-PA3-140-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399468  
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-PA3-140-830-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 620mA 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: 12876 lumens  
Efficiency: N/A  
Efficacy: 90.0 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

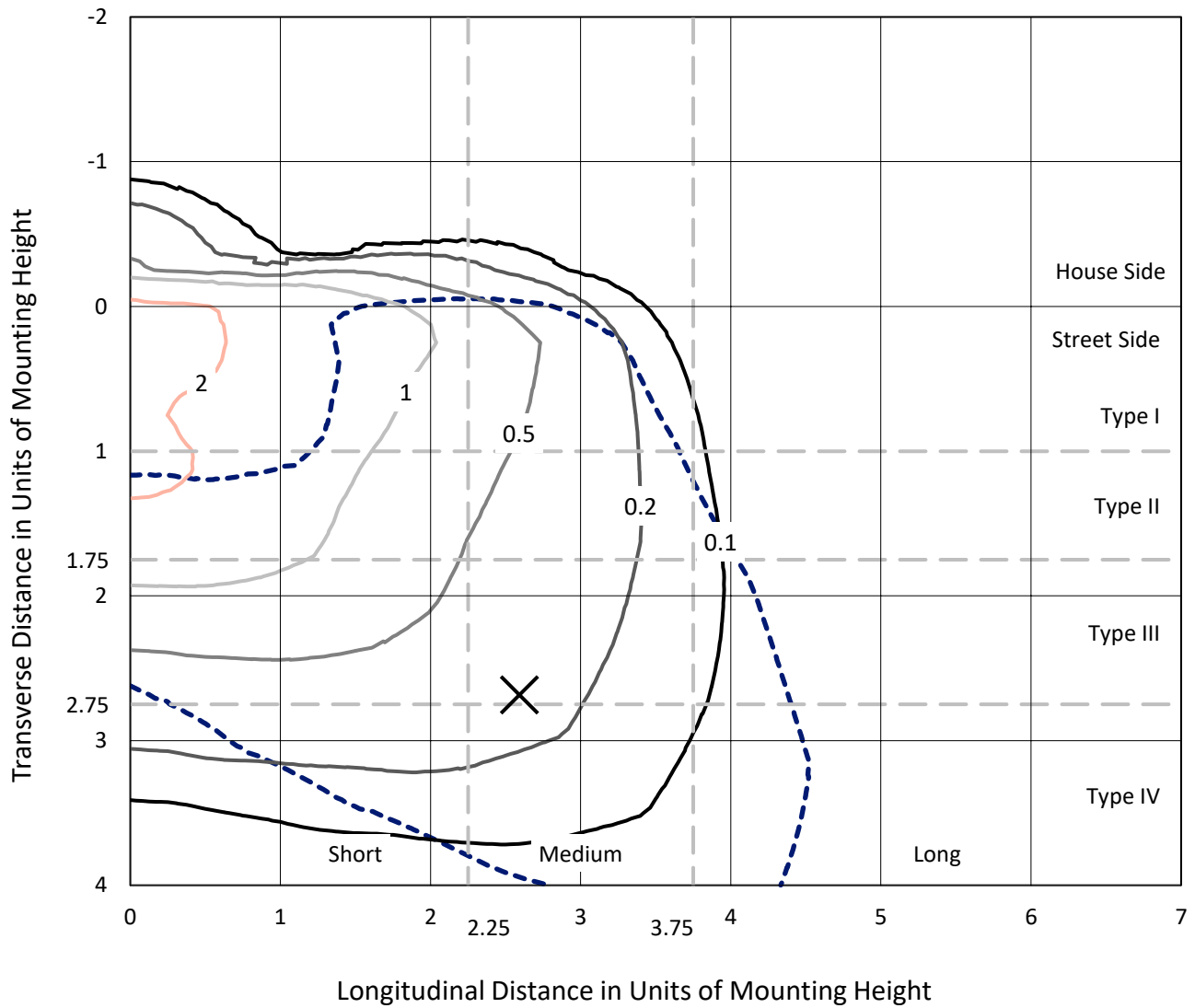
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

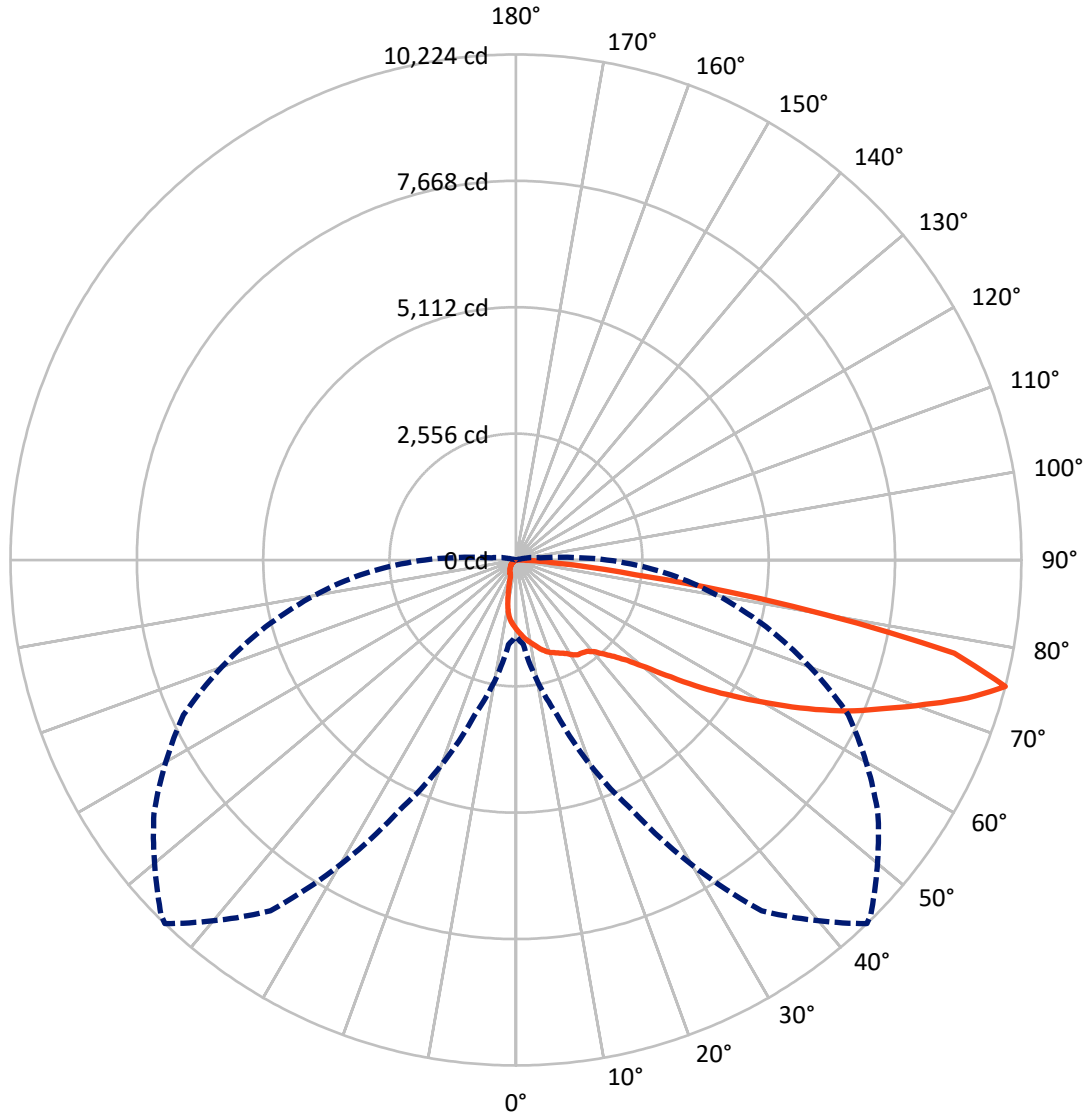
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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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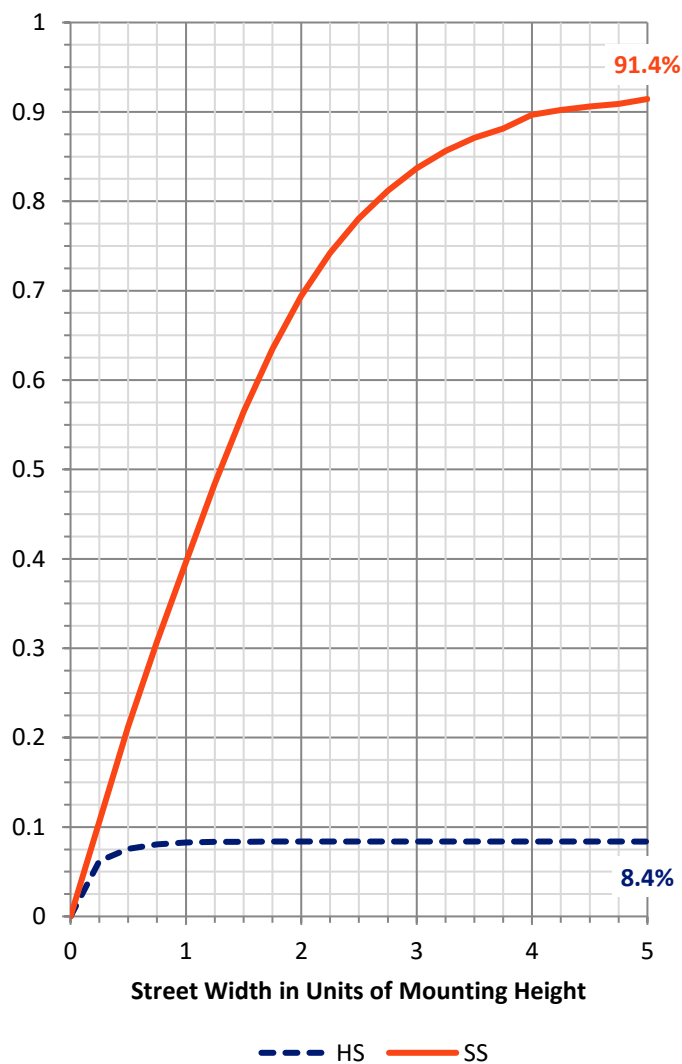
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1085.9	0.0	1085.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	11790.1	0.0	11790.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	12876.0	0.0	12876.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.2	1.0
10°-20°	370.4	2.9
20°-30°	611.2	4.7
30°-40°	887.1	6.9
40°-50°	1442.0	11.2
50°-60°	2542.1	19.7
60°-70°	3653.6	28.4
70°-80°	2925.7	22.7
80°-90°	311.7	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°	12876.0	100.0
0°-180°	12876.0	100.0

**Coefficient of Utilization**

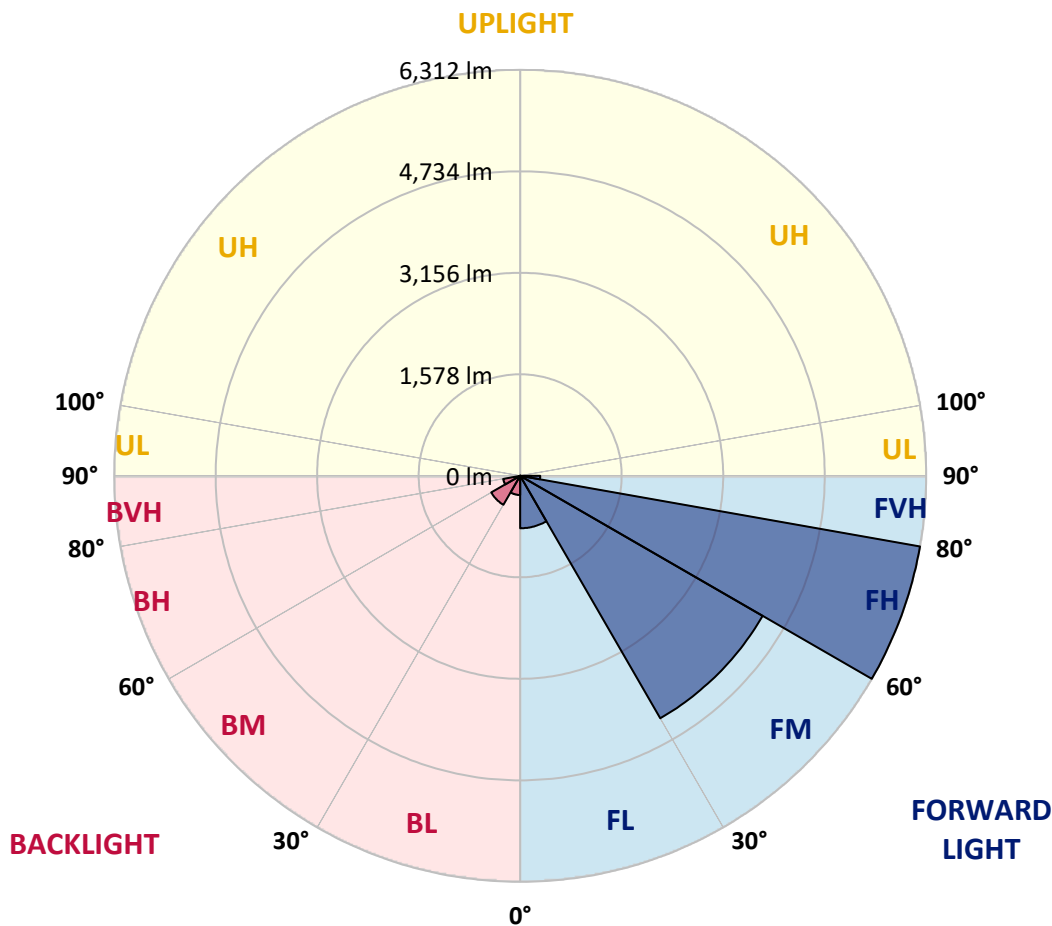


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	815.4	6.3			
FM (30°-60°)	4352.2	33.8			
FH (60°-80°)	6311.6	49.0			G3/7500
FVH (80°-90°)	310.9	2.4			G3/500
BL (0°-30°)	298.3	2.3	B1/500		
BM (30°-60°)	519.1	4.0	B1/1000		
BH (60°-80°)	267.7	2.1	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5
2.5°	1527.4	1525.0	1517.9	1506.0	1494.1	1482.3	1479.9	1460.9	1439.5	1422.9	1408.6
5°	1662.8	1660.4	1648.5	1622.4	1596.3	1565.4	1563.0	1517.9	1477.5	1432.4	1394.4
7.5°	1803.0	1798.2	1776.8	1736.4	1691.3	1643.8	1639.0	1572.5	1513.1	1453.8	1399.1
10°	1912.2	1907.5	1876.6	1829.1	1767.3	1707.9	1700.8	1631.9	1572.5	1496.5	1422.9
12.5°	2019.1	2009.6	1969.2	1917.0	1841.0	1783.9	1776.8	1705.6	1634.3	1555.9	1465.6
15°	2118.9	2107.0	2069.0	2002.5	1921.7	1867.1	1862.3	1786.3	1712.7	1622.4	1522.7
17.5°	2187.8	2183.0	2137.9	2064.2	1985.9	1940.7	1936.0	1857.6	1783.9	1688.9	1582.0
20°	2223.4	2223.4	2180.6	2099.9	2028.6	1997.7	1990.6	1917.0	1845.7	1755.4	1643.8
22.5°	2230.5	2237.7	2204.4	2116.5	2064.2	2038.1	2033.4	1969.2	1900.3	1817.2	1712.7
25°	2244.8	2244.8	2228.2	2133.1	2095.1	2088.0	2085.6	2028.6	1966.9	1883.7	1781.6
27.5°	2261.4	2261.4	2249.5	2156.9	2142.6	2140.3	2137.9	2111.8	2061.9	1964.5	1862.3
30°	2304.2	2306.5	2297.0	2204.4	2194.9	2221.0	2225.8	2211.5	2149.8	2028.6	1945.5
32.5°	2411.1	2389.7	2363.6	2237.7	2254.3	2287.5	2289.9	2261.4	2194.9	2097.5	2045.2
35°	2679.5	2553.6	2434.8	2266.2	2273.3	2306.5	2311.3	2308.9	2268.5	2185.4	2159.3
37.5°	2928.9	2750.7	2582.1	2332.7	2308.9	2344.5	2354.1	2394.4	2363.6	2306.5	2313.7
40°	3073.8	3004.9	2886.1	2515.6	2380.2	2434.8	2444.3	2506.1	2494.2	2470.4	2515.6
42.5°	3520.4	3525.1	3396.9	2788.8	2510.8	2598.7	2610.6	2660.5	2677.1	2689.0	2798.3
45°	4038.2	4054.9	4024.0	3280.5	2757.9	2786.4	2803.0	2869.5	2931.3	3007.3	3206.8
47.5°	4660.6	4646.3	4532.3	3881.5	3187.8	3028.7	3040.6	3168.8	3275.7	3442.0	3727.0
50°	5211.7	5247.3	5031.2	4442.1	3793.6	3411.1	3399.2	3525.1	3717.5	3950.3	4309.0
52.5°	5767.5	5715.3	5423.1	4997.9	4510.9	3931.3	3895.7	3964.6	4235.4	4510.9	4879.1
55°	5914.8	5919.6	5819.8	5606.0	5109.6	4563.2	4503.8	4499.1	4836.4	5024.0	5477.7
57.5°	6204.6	6216.5	6240.3	6283.0	6047.8	5195.1	5133.3	5066.8	5394.6	5503.9	6078.7
60°	6499.2	6513.4	6658.3	6888.7	6732.0	5876.8	5810.3	5653.5	5836.4	5983.7	6710.6
62.5°	6461.2	6560.9	6981.4	7439.8	7420.8	6625.1	6541.9	6164.2	6280.6	6408.9	7290.2
65°	5834.1	5941.0	6886.4	7591.9	8112.1	7363.8	7228.4	6691.6	6698.7	6853.1	7848.4
67.5°	5273.5	5389.9	6292.5	7527.7	8568.2	8026.6	7886.4	7221.3	7109.7	7366.2	8147.7
70°	4950.4	5066.8	5819.8	7328.2	8696.4	8760.6	8639.4	7827.0	7599.0	7834.2	7812.8
72.5°	3874.3	4057.2	5216.4	6948.1	8834.2	9546.9	9451.8	8594.3	8014.7	7344.8	5948.1
75°	1544.0	1712.7	3256.7	5591.8	8660.8	10223.9	10150.2	8938.7	7418.5	5244.9	3045.3
77.5°	465.6	498.8	905.0	2765.0	6349.5	9064.6	9040.9	7515.9	5249.7	2434.8	831.4
80°	154.4	171.0	277.9	762.5	2898.0	5663.0	5769.9	4788.9	2384.9	558.2	168.7
82.5°	64.1	71.3	140.2	306.4	1026.2	2439.6	2403.9	2145.0	831.4	346.8	61.8
85°	16.6	21.4	64.1	175.8	375.3	840.9	883.7	719.8	470.3	287.4	19.0
87.5°	0.0	0.0	30.9	71.3	168.7	254.2	266.0	218.5	266.0	216.2	9.5
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°	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5	1401.5
2.5°	1396.8	1384.9	1363.5	1349.2	1330.2	1325.5	1316.0	1304.1	1301.7	1289.9	1292.2
5°	1373.0	1354.0	1316.0	1289.9	1259.0	1249.5	1232.8	1221.0	1211.5	1194.8	1197.2
7.5°	1368.2	1339.7	1287.5	1237.6	1187.7	1152.1	1102.2	1061.8	1028.6	992.9	1000.1
10°	1384.9	1349.2	1275.6	1206.7	1116.5	1002.4	871.8	786.3	743.5	700.8	705.5
12.5°	1418.1	1375.4	1280.4	1175.8	992.9	798.1	617.6	501.2	470.3	451.3	453.7
15°	1468.0	1415.8	1294.6	1116.5	826.6	577.2	410.9	361.1	372.9	380.1	380.1
17.5°	1520.3	1460.9	1306.5	1009.6	639.0	403.8	334.9	330.2	346.8	363.4	363.4
20°	1584.4	1508.4	1308.9	874.2	460.8	327.8	315.9	315.9	327.8	346.8	346.8
22.5°	1646.2	1560.7	1287.5	719.8	351.6	304.1	304.1	304.1	311.2	330.2	332.6
25°	1719.8	1624.8	1242.3	555.9	301.7	289.8	289.8	292.2	296.9	313.6	315.9
27.5°	1798.2	1691.3	1166.3	406.2	275.5	273.2	275.5	277.9	280.3	296.9	301.7
30°	1888.5	1764.9	1068.9	304.1	251.8	251.8	258.9	263.7	263.7	277.9	282.7
32.5°	1993.0	1862.3	952.5	251.8	228.0	225.7	237.5	244.7	244.7	256.5	261.3
35°	2123.6	1962.1	812.4	223.3	209.0	204.3	209.0	220.9	225.7	235.2	237.5
37.5°	2297.0	2080.9	662.7	206.7	194.8	185.3	185.3	187.7	197.2	206.7	209.0
40°	2518.0	2211.5	515.5	194.8	180.5	171.0	163.9	161.5	159.2	166.3	171.0
42.5°	2795.9	2358.8	384.8	182.9	168.7	154.4	144.9	135.4	123.5	121.1	123.5
45°	3152.2	2539.3	285.1	173.4	161.5	140.2	123.5	106.9	85.5	78.4	80.8
47.5°	3572.6	2727.0	223.3	163.9	156.8	123.5	102.1	73.6	52.3	47.5	49.9
50°	4019.2	2907.5	190.0	152.0	147.3	106.9	73.6	45.1	30.9	30.9	33.3
52.5°	4399.3	3009.7	173.4	142.5	133.0	87.9	47.5	26.1	19.0	19.0	21.4
55°	4767.5	3064.3	161.5	133.0	114.0	61.8	26.1	16.6	11.9	11.9	11.9
57.5°	5147.6	3088.1	147.3	121.1	90.3	38.0	14.3	9.5	7.1	7.1	7.1
60°	5484.9	3042.9	125.9	99.8	59.4	19.0	7.1	7.1	4.8	2.4	2.4
62.5°	5767.5	2957.4	87.9	71.3	35.6	9.5	4.8	2.4	0.0	0.0	0.0
65°	5941.0	2819.6	57.0	47.5	21.4	7.1	2.4	0.0	0.0	0.0	0.0
67.5°	5891.1	2560.7	35.6	30.9	9.5	4.8	2.4	0.0	0.0	0.0	0.0
70°	5316.2	2099.9	26.1	19.0	7.1	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3831.6	1420.5	19.0	11.9	4.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1843.3	506.0	11.9	9.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	451.3	111.6	7.1	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	99.8	21.4	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.3	9.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.9	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	2.4	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)