

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: P399319

Luminaire Tested: **ARCH-L-PA3-120-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399319  
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-L-PA3-120-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15770 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

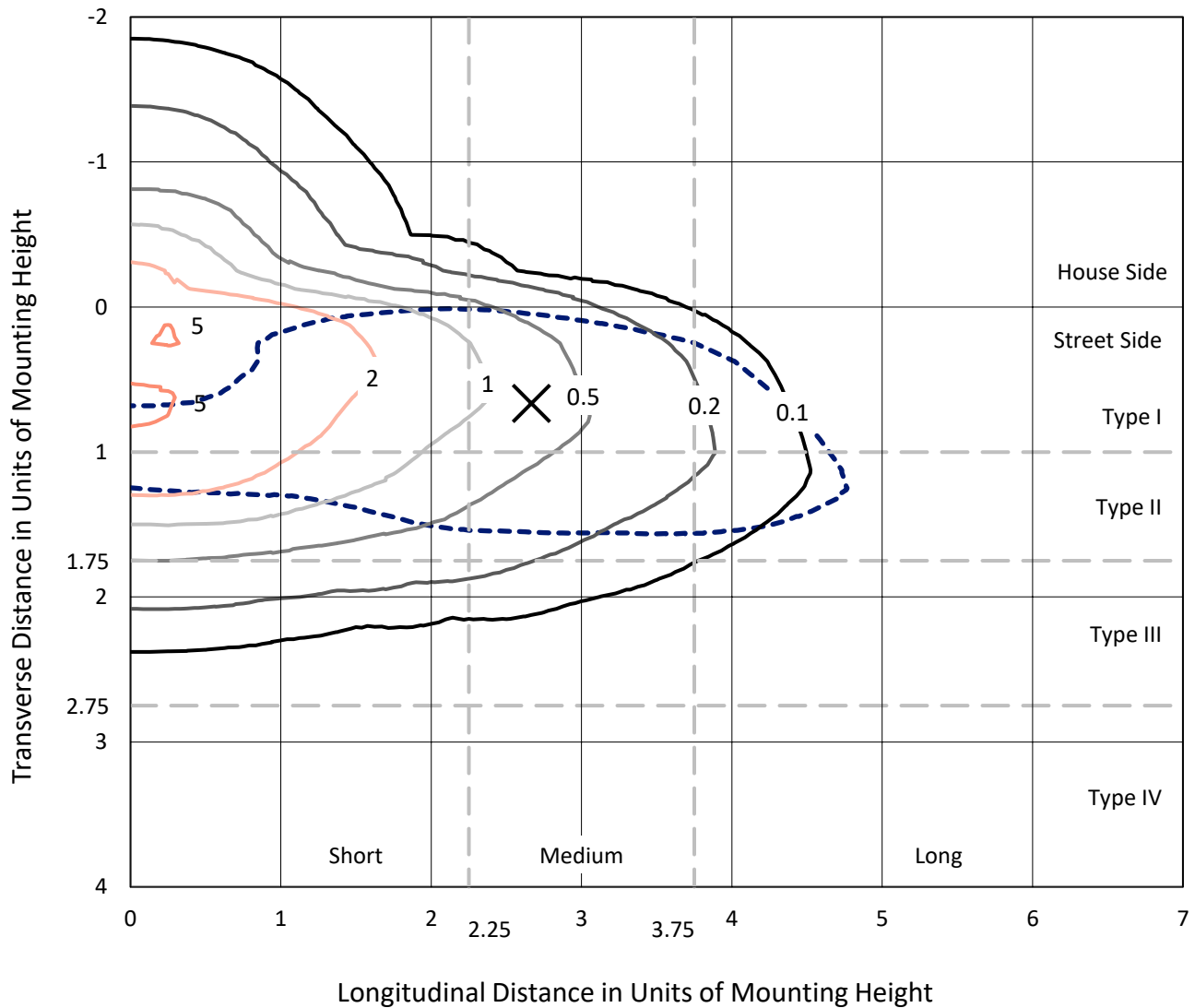
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

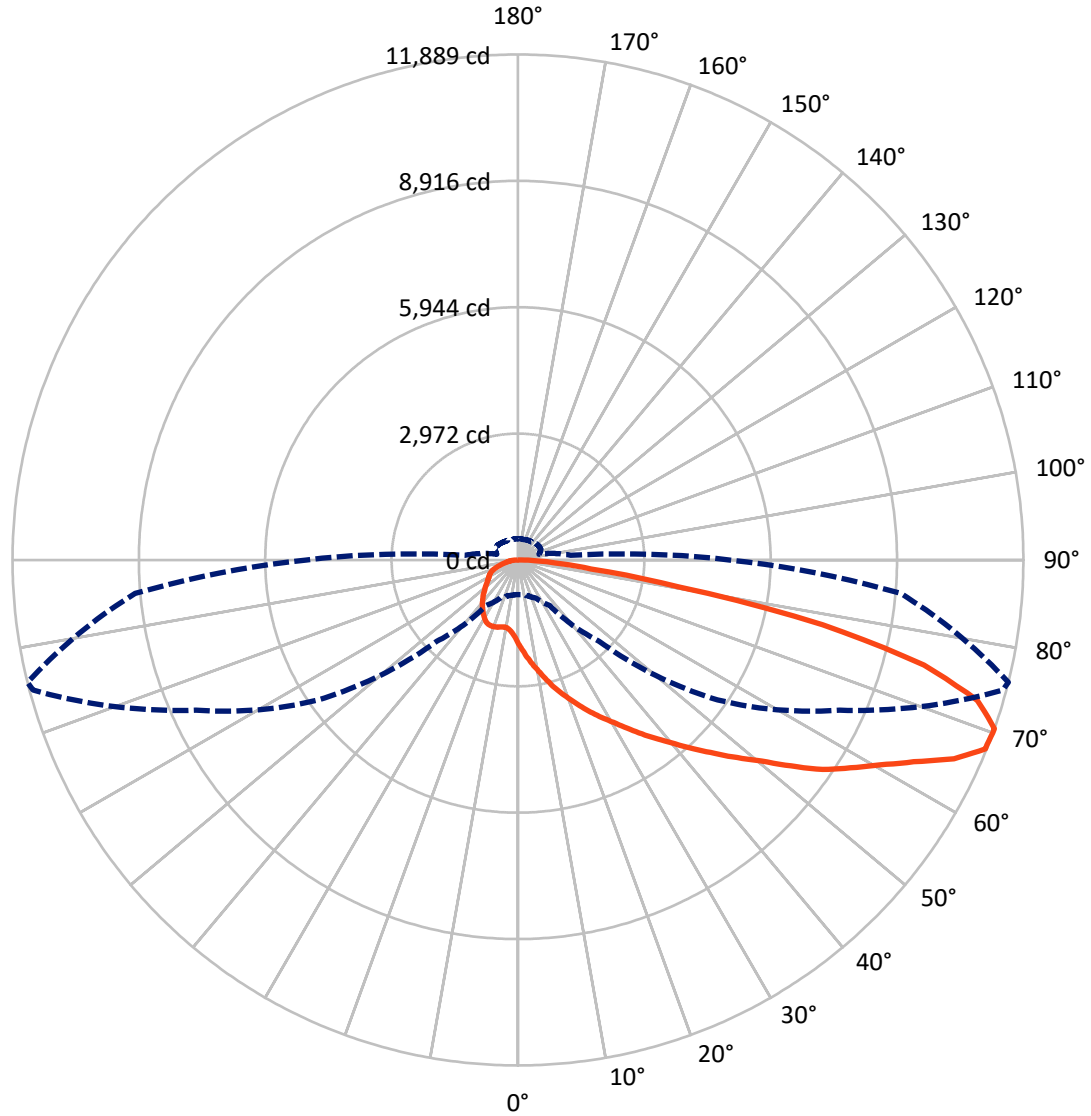
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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

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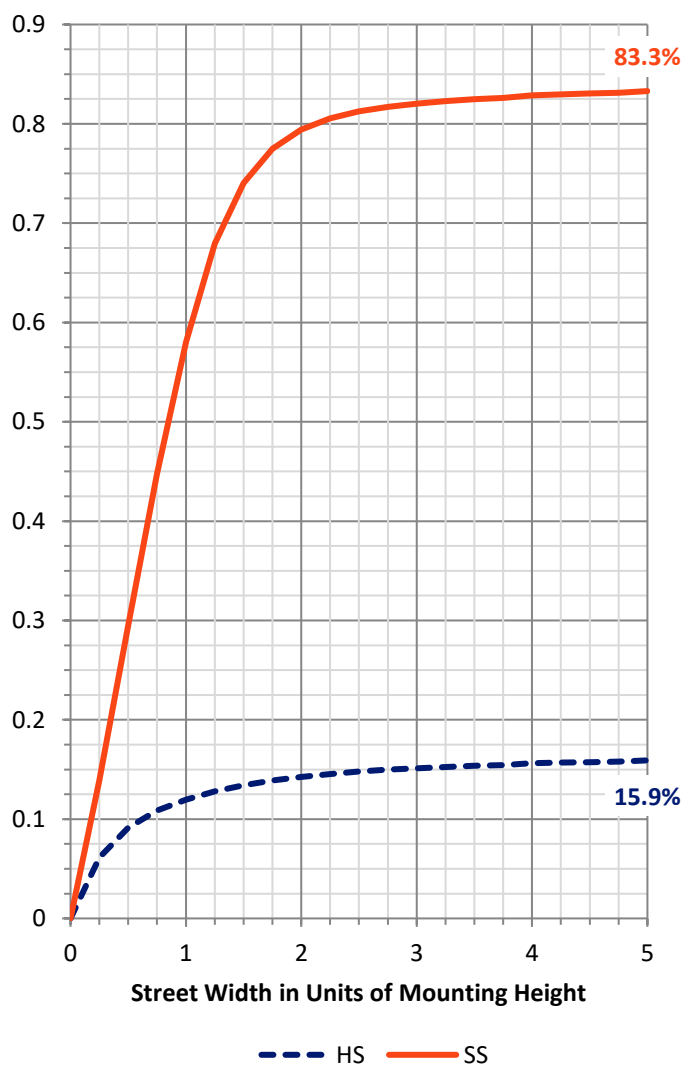
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2574.6	0.0	2574.6
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	13195.4	0.0	13195.4
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	15770.0	0.0	15770.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.9	1.3
10°-20°	696.4	4.4
20°-30°	1246.0	7.9
30°-40°	2015.6	12.8
40°-50°	2915.8	18.5
50°-60°	3337.3	21.2
60°-70°	3070.0	19.5
70°-80°	1898.4	12.0
80°-90°	385.5	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°	15770.0	100.0
0°-180°	15770.0	100.0

**Coefficient of Utilization**



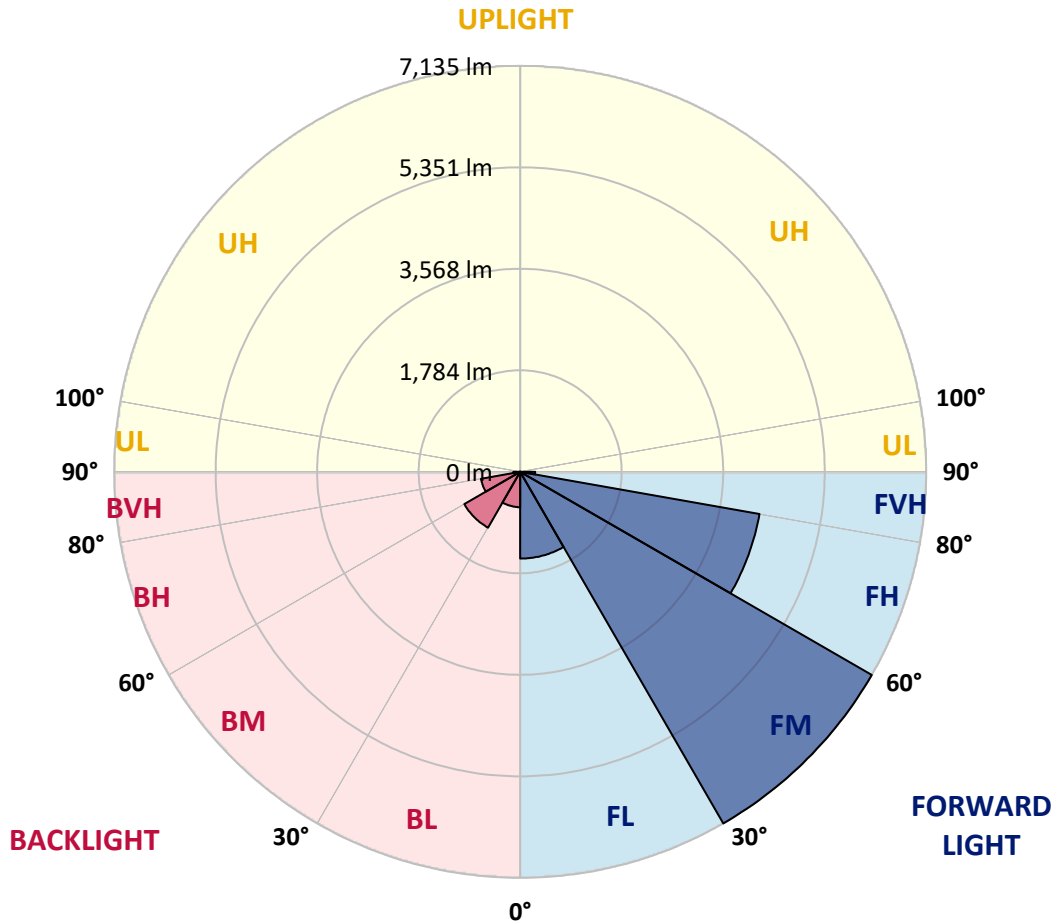
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 CATALOG NUMBER: ARCH-L-PA3-120-830-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1525.5	9.7			
FM (30°-60°)	7135.2	45.2			
FH (60°-80°)	4270.1	27.1			G2/5000
FVH (80°-90°)	264.6	1.7			G3/500
BL (0°-30°)	621.9	3.9	B2/1000		
BM (30°-60°)	1133.6	7.2	B2/2500		
BH (60°-80°)	698.3	4.4	B2/1000		G2/1000
BVH (80°-90°)	120.9	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1
2.5°	2513.3	2494.7	2492.6	2463.6	2436.6	2364.0	2312.2	2221.0	2129.7	2127.6	2036.4
5°	2905.3	2886.6	2876.2	2841.0	2795.4	2700.0	2606.7	2465.7	2310.1	2299.8	2127.6
7.5°	3170.7	3154.1	3133.4	3118.9	3075.3	2990.3	2876.2	2708.3	2494.7	2473.9	2233.4
10°	3349.1	3338.7	3334.5	3324.2	3297.2	3228.8	3118.9	2940.5	2679.2	2656.4	2345.4
12.5°	3425.8	3421.6	3440.3	3469.3	3479.7	3452.7	3347.0	3179.0	2882.5	2857.6	2480.2
15°	3336.6	3340.8	3388.5	3488.0	3593.8	3651.8	3589.6	3425.8	3112.7	3077.4	2637.8
17.5°	3295.1	3301.4	3334.5	3429.9	3579.2	3759.7	3788.7	3660.1	3334.5	3284.8	2803.7
20°	3367.7	3376.0	3400.9	3475.6	3579.2	3772.1	3923.5	3884.1	3552.3	3500.4	2963.3
22.5°	3552.3	3562.6	3560.6	3608.3	3678.8	3811.5	3998.1	4095.6	3780.4	3722.3	3129.2
25°	3946.3	3938.0	3867.5	3844.7	3863.3	3948.4	4097.7	4298.8	4018.9	3960.8	3303.4
27.5°	4481.3	4470.9	4342.4	4226.2	4122.6	4159.9	4238.7	4462.6	4261.5	4195.1	3469.3
30°	5053.7	5041.2	4891.9	4703.2	4473.0	4419.1	4408.7	4605.7	4506.2	4435.7	3645.6
32.5°	5611.5	5601.1	5441.4	5221.6	4904.3	4742.6	4643.1	4765.4	4784.1	4715.6	3838.5
35°	6119.5	6119.5	5982.7	5721.4	5362.6	5117.9	4954.1	4962.4	5103.4	5024.6	4058.3
37.5°	6571.6	6569.5	6420.2	6163.1	5818.9	5538.9	5335.7	5200.9	5408.3	5339.8	4288.4
40°	6930.4	6915.9	6805.9	6582.0	6235.7	5957.8	5752.5	5480.8	5748.3	5686.1	4533.1
42.5°	7191.7	7183.4	7108.7	6913.8	6584.1	6322.8	6181.8	5833.4	6134.1	6071.8	4819.3
45°	7293.3	7309.9	7309.9	7125.3	6864.0	6625.5	6563.3	6221.2	6550.9	6488.7	5126.2
47.5°	7129.4	7173.0	7262.2	7274.6	7044.4	6882.7	6903.4	6611.0	6980.1	6947.0	5462.2
50°	6617.2	6698.1	6893.0	7245.6	7117.0	7079.7	7193.7	7009.2	7440.5	7430.1	5870.7
52.5°	5296.3	5493.3	6100.9	6733.4	7067.2	7170.9	7482.0	7457.1	8033.6	8050.2	6403.6
55°	4062.4	4137.1	4840.1	5916.3	6762.4	7141.9	7674.8	7894.6	8676.4	8697.2	6893.0
57.5°	3284.8	3334.5	3718.2	4840.1	6067.7	6984.3	7826.2	8149.7	9170.0	9223.9	7328.5
60°	2602.5	2675.1	2932.2	3703.7	5095.1	6604.8	7932.0	8433.8	9700.9	9781.7	7849.0
62.5°	1934.8	1970.0	2212.7	2743.5	4033.4	5922.5	7876.0	8742.8	10352.0	10449.5	8475.3
65°	1376.9	1408.1	1580.2	1951.4	2982.0	4999.7	7550.4	8973.0	11169.0	11268.6	9105.7
67.5°	1030.6	1043.1	1140.5	1364.5	2009.4	3884.1	6891.0	8933.6	11766.3	11855.4	9358.7
70°	815.0	819.1	866.8	987.1	1306.4	2704.1	5735.9	8355.0	11809.8	11888.6	9039.3
72.5°	676.0	674.0	700.9	759.0	910.4	1710.8	4249.0	7280.8	11249.9	11303.8	8147.6
75°	557.8	562.0	580.6	613.8	694.7	1128.1	2753.9	5808.5	9924.8	9866.8	6837.0
77.5°	468.7	466.6	474.9	503.9	562.0	810.8	1613.4	4197.2	7355.5	7326.4	4487.5
80°	377.4	381.6	394.0	418.9	472.8	618.0	953.9	2619.1	3946.3	3840.5	2144.2
82.5°	253.0	292.4	317.3	346.3	408.5	456.2	605.5	1331.3	1764.7	1737.8	972.6
85°	120.3	159.7	236.4	269.6	331.8	286.2	410.6	634.6	883.4	873.0	350.5
87.5°	24.9	24.9	126.5	151.4	205.3	122.3	228.1	275.8	427.2	400.2	143.1
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: P399319  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1	1972.1
2.5°	1982.5	1926.5	1814.5	1725.3	1634.1	1582.2	1518.0	1486.9	1480.6	1464.0	1476.5
5°	2017.7	1907.8	1696.3	1557.4	1464.0	1418.4	1395.6	1387.3	1385.2	1381.1	1381.1
7.5°	2065.4	1897.5	1621.6	1480.6	1420.5	1406.0	1412.2	1424.6	1426.7	1430.9	1428.8
10°	2123.5	1899.5	1580.2	1462.0	1432.9	1435.0	1455.8	1472.3	1480.6	1486.9	1484.8
12.5°	2204.4	1924.4	1574.0	1474.4	1462.0	1470.3	1491.0	1507.6	1515.9	1518.0	1518.0
15°	2310.1	1976.3	1588.5	1501.4	1491.0	1497.2	1509.7	1515.9	1518.0	1515.9	1515.9
17.5°	2426.3	2038.5	1609.2	1518.0	1501.4	1495.2	1491.0	1484.8	1472.3	1464.0	1464.0
20°	2538.2	2094.5	1619.6	1515.9	1486.9	1462.0	1437.1	1406.0	1385.2	1368.7	1368.7
22.5°	2650.2	2146.3	1619.6	1493.1	1447.5	1399.8	1347.9	1298.1	1267.0	1246.3	1246.3
25°	2768.4	2196.1	1607.1	1453.7	1385.2	1316.8	1246.3	1184.1	1153.0	1132.3	1128.1
27.5°	2868.0	2225.1	1574.0	1397.7	1308.5	1221.4	1140.5	1076.3	1053.4	1034.8	1034.8
30°	2973.7	2243.8	1511.7	1325.1	1221.4	1121.9	1038.9	987.1	962.2	935.2	933.2
32.5°	3091.9	2256.2	1441.2	1248.4	1132.3	1026.5	956.0	914.5	860.6	831.6	827.4
35°	3228.8	2272.8	1366.6	1161.3	1043.1	947.7	906.2	837.8	785.9	761.1	759.0
37.5°	3373.9	2285.2	1285.7	1084.6	962.2	895.8	854.4	773.5	727.9	690.5	686.4
40°	3527.4	2285.2	1202.8	1009.9	897.9	873.0	794.2	721.7	644.9	626.3	622.1
42.5°	3697.4	2281.1	1119.8	937.3	837.8	821.2	759.0	682.3	642.9	626.3	622.1
45°	3877.9	2266.6	1041.0	854.4	775.6	742.4	694.7	674.0	657.4	657.4	657.4
47.5°	4083.2	2254.1	951.8	779.7	729.9	692.6	657.4	644.9	642.9	649.1	655.3
50°	4346.5	2250.0	877.2	725.8	694.7	651.1	647.0	636.6	638.7	638.7	638.7
52.5°	4665.9	2212.7	806.7	686.4	659.4	607.6	620.0	630.4	634.6	632.5	630.4
55°	4900.2	2146.3	746.5	659.4	634.6	591.0	607.6	624.2	628.3	622.1	622.1
57.5°	5111.7	2053.0	698.8	638.7	618.0	580.6	599.3	615.9	611.7	609.7	607.6
60°	5354.3	1963.8	661.5	628.3	601.4	576.5	593.1	603.5	597.2	593.1	591.0
62.5°	5617.7	1876.7	634.6	628.3	588.9	574.4	586.9	591.0	578.6	574.4	574.4
65°	5740.1	1739.8	605.5	628.3	582.7	570.3	574.4	570.3	557.8	557.8	555.8
67.5°	5538.9	1513.8	568.2	620.0	591.0	564.1	555.8	549.5	535.0	535.0	530.9
70°	4983.1	1244.2	514.3	593.1	593.1	562.0	530.9	516.4	499.8	506.0	497.7
72.5°	4257.3	987.1	447.9	547.5	580.6	559.9	503.9	481.1	466.6	472.8	460.4
75°	3448.6	765.2	369.1	474.9	549.5	549.5	477.0	445.8	429.3	429.3	414.7
77.5°	2198.1	566.1	300.7	394.0	493.5	535.0	454.1	406.4	381.6	375.3	365.0
80°	1088.7	398.2	246.8	313.1	421.0	501.8	437.6	360.8	325.6	313.1	294.5
82.5°	578.6	275.8	197.0	244.7	335.9	452.1	416.8	311.1	267.5	248.8	228.1
85°	259.2	170.0	157.6	186.6	255.1	371.2	375.3	255.1	205.3	244.7	180.4
87.5°	95.4	76.7	76.7	95.4	147.2	155.5	265.4	163.8	130.6	89.2	70.5
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)