

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: P214661

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6026.2 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 64
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



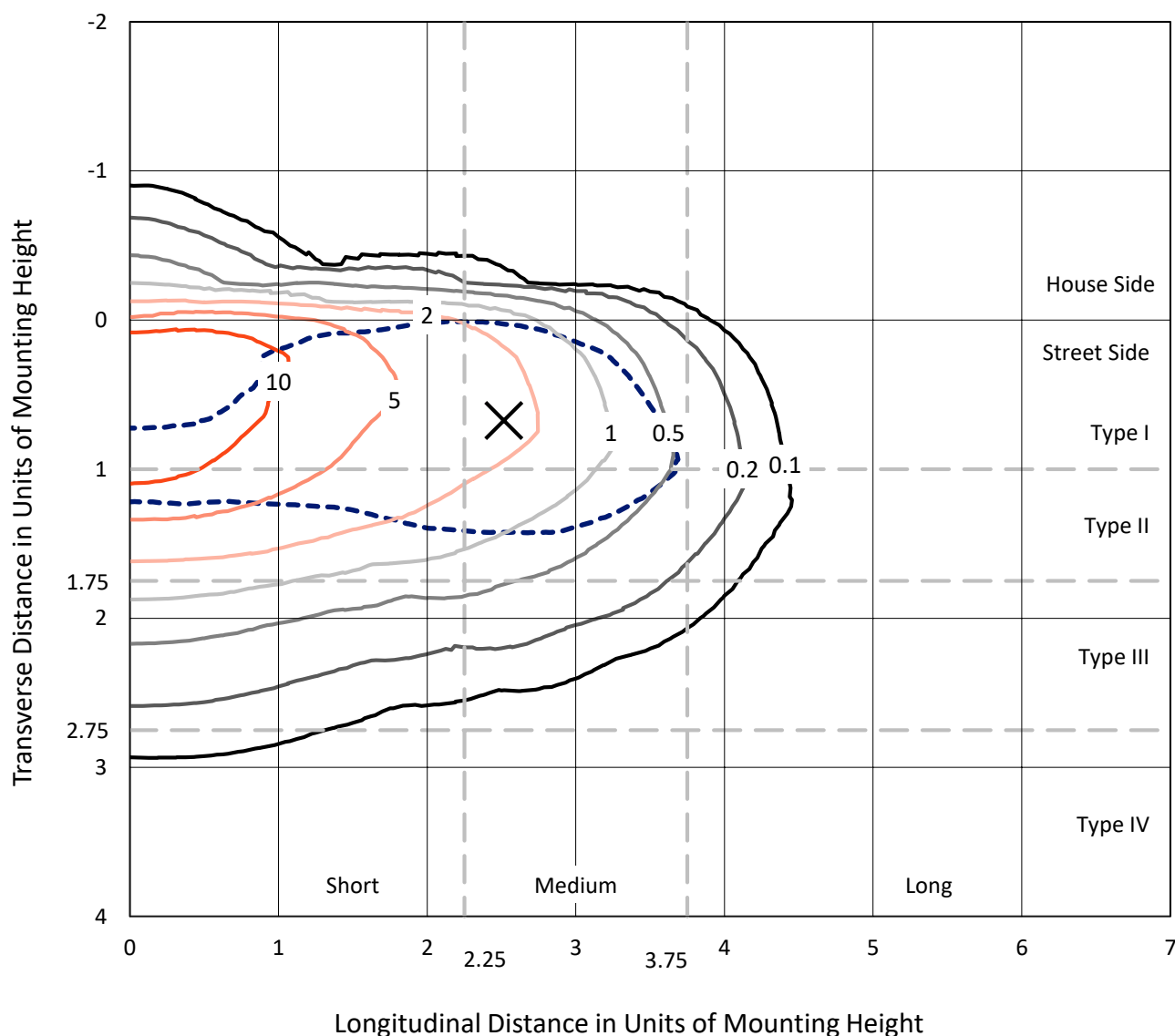
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

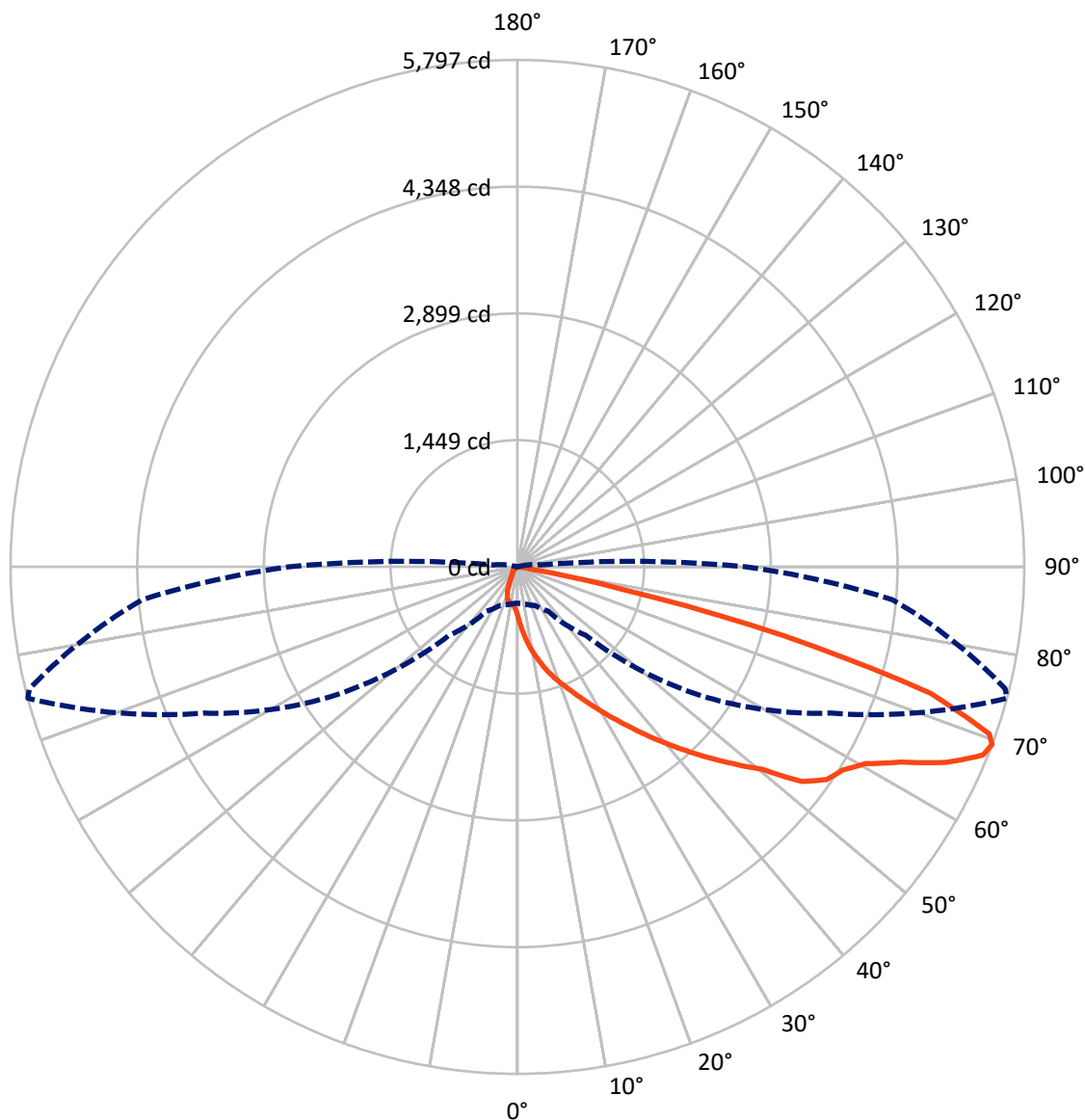


Based on 10 foot mounting height. Maximum calculated value = 15.4 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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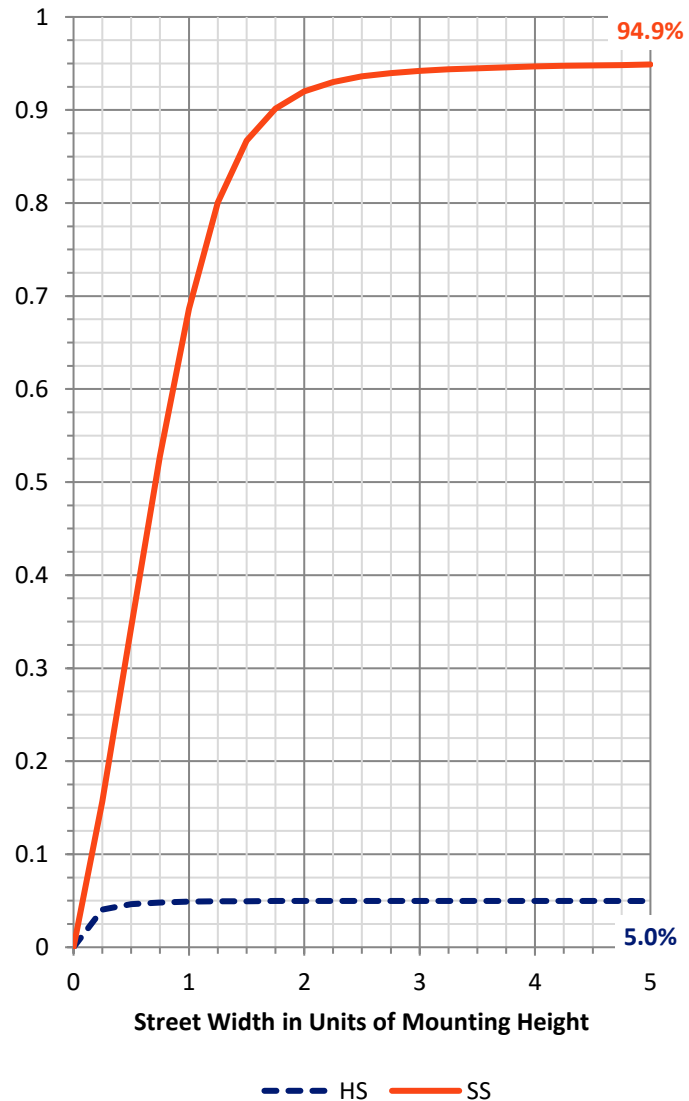
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	300.7	0.0	300.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	5725.5	0.0	5725.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	6026.2	0.0	6026.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	1.1
10°-20°	233.8	3.9
20°-30°	446.3	7.4
30°-40°	800.5	13.3
40°-50°	1226.4	20.4
50°-60°	1425.4	23.7
60°-70°	1262.2	20.9
70°-80°	544.4	9.0
80°-90°	21.8	0.4
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°	6026.2	100.0
0°-180°	6026.2	100.0

Coefficient of Utilization



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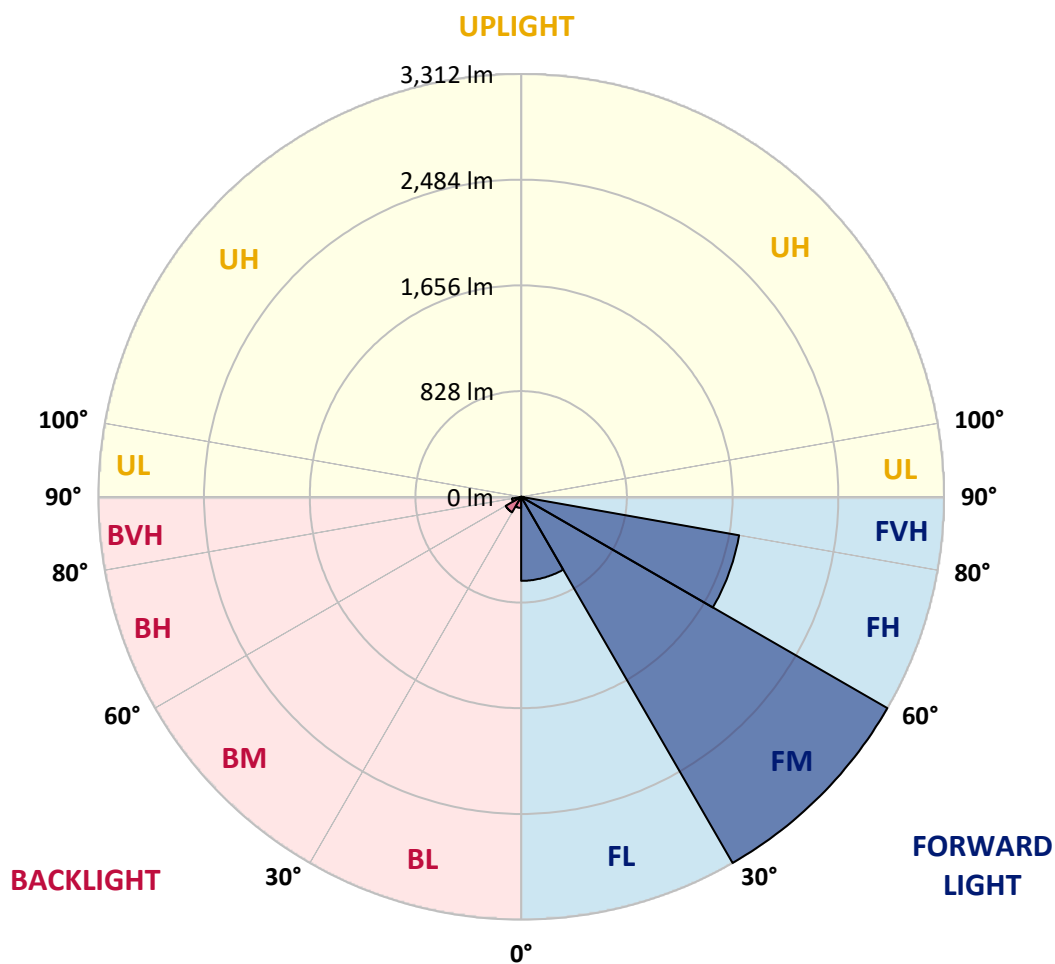
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	658.1	10.9			
FM	(30°-60°)	3312.2	55.0			
FH	(60°-80°)	1733.8	28.8			G1/1800
FVH	(80°-90°)	21.5	0.4			G1/100
BL	(0°-30°)	87.3	1.4	B0/110		
BM	(30°-60°)	140.2	2.3	B0/220		
BH	(60°-80°)	72.8	1.2	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8
2.5°	923.7	914.6	905.5	895.1	871.7	831.4	780.6	726.0	658.3	646.6	592.0
5°	1121.5	1117.6	1108.5	1094.1	1068.2	1023.9	966.7	886.0	772.8	753.3	637.5
7.5°	1260.7	1258.1	1250.3	1233.4	1209.9	1165.8	1105.8	1018.7	887.3	865.2	694.8
10°	1385.6	1384.3	1377.8	1362.2	1338.7	1290.6	1226.8	1135.8	996.6	971.9	761.1
12.5°	1498.7	1500.1	1497.5	1489.6	1472.7	1427.2	1354.4	1255.5	1101.9	1074.6	840.5
15°	1565.1	1569.0	1579.4	1595.1	1600.2	1563.8	1488.4	1379.0	1209.9	1186.5	931.5
17.5°	1543.0	1546.9	1579.4	1632.7	1683.5	1688.7	1621.1	1496.2	1316.6	1293.2	1021.3
20°	1489.6	1494.8	1528.7	1601.5	1700.5	1769.4	1742.1	1623.6	1418.1	1389.5	1107.1
22.5°	1549.5	1549.5	1559.9	1604.2	1693.9	1801.9	1838.3	1751.2	1522.2	1487.1	1193.1
25°	1755.1	1751.2	1729.1	1710.8	1739.4	1835.7	1911.2	1881.3	1644.5	1604.2	1284.1
27.5°	2015.3	2033.5	1991.9	1925.5	1860.4	1902.1	1976.2	2010.1	1779.8	1738.2	1377.8
30°	2306.7	2314.5	2265.0	2176.6	2062.1	2021.8	2053.0	2120.7	1926.8	1881.3	1475.3
32.5°	2569.4	2563.0	2521.4	2429.0	2287.2	2200.1	2151.9	2209.2	2086.8	2034.8	1575.5
35°	2802.4	2807.6	2756.9	2650.2	2510.9	2418.6	2304.1	2309.3	2266.3	2206.5	1691.3
37.5°	3011.9	3002.8	2954.6	2847.9	2721.8	2621.5	2500.5	2413.3	2462.9	2400.4	1821.5
40°	3182.3	3173.2	3122.5	3018.3	2900.0	2818.0	2723.0	2552.6	2669.7	2598.1	1960.6
42.5°	3317.5	3307.2	3264.2	3164.1	3049.6	2976.7	2931.2	2724.3	2890.9	2819.3	2116.8
45°	3383.9	3374.8	3348.8	3273.3	3173.2	3109.5	3131.6	2922.1	3127.7	3067.8	2288.4
47.5°	3305.9	3302.0	3331.9	3318.9	3261.7	3227.8	3304.5	3138.0	3376.1	3317.5	2486.3
50°	3069.1	3075.6	3162.8	3270.8	3298.1	3338.4	3446.4	3365.7	3642.8	3580.4	2713.9
52.5°	2485.0	2529.1	2791.9	3052.2	3253.8	3406.0	3613.0	3691.0	4077.4	4016.2	3069.1
55°	1855.2	1873.4	2159.7	2604.6	3075.6	3400.8	3736.5	3882.2	4292.0	4229.6	3162.8
57.5°	1471.4	1478.0	1619.7	2073.8	2708.7	3283.8	3801.6	3951.1	4385.7	4333.6	3302.0
60°	1155.3	1163.1	1265.9	1578.1	2192.2	2967.6	3707.9	4011.0	4569.1	4527.5	3545.2
62.5°	899.0	906.8	969.2	1152.7	1644.5	2481.1	3519.3	4107.2	4917.8	4898.3	3943.4
65°	696.0	698.7	741.5	827.5	1161.8	1954.1	3289.0	4197.1	5388.8	5371.9	4266.0
67.5°	513.9	517.8	547.7	601.1	784.5	1403.8	2911.6	4128.1	5744.0	5694.6	4383.1
69°	415.0	418.9	445.0	487.8	619.3	1105.8	2566.9	3957.7	5797.3	5750.5	4309.0
70°	355.2	357.8	383.8	420.2	528.3	939.4	2293.7	3810.7	5727.1	5681.5	4139.8
72.5°	227.7	240.7	266.7	290.1	350.0	621.9	1548.2	3160.2	4941.3	4863.2	3242.1
75°	126.2	130.1	177.0	205.5	232.9	404.6	861.2	1971.0	3143.2	3088.6	1734.2
77.5°	104.0	106.7	124.9	156.1	156.1	226.4	325.3	776.7	1195.6	1078.5	469.6
80°	72.8	75.5	94.9	102.8	111.9	127.5	105.4	170.4	184.7	163.9	70.3
82.5°	50.7	53.3	65.1	84.6	89.8	59.8	39.1	50.7	53.3	53.3	27.3
85°	9.1	13.0	48.2	70.3	53.3	18.2	22.1	18.2	16.9	18.2	6.5
87.5°	0.0	0.0	30.0	33.9	28.6	7.8	9.1	6.5	3.9	5.2	2.6
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°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8
2.5°	564.7	537.4	490.5	456.6	428.0	405.9	396.8	382.5	372.0	377.3	370.8
5°	580.2	532.1	456.6	408.6	374.7	346.1	322.6	304.4	290.1	287.6	284.9
7.5°	605.0	536.0	437.1	377.3	326.5	282.3	245.9	218.6	197.7	197.7	190.0
10°	638.8	546.5	425.4	346.1	270.6	210.7	174.3	148.3	137.9	136.6	134.0
12.5°	685.7	565.9	416.3	305.8	210.7	153.5	131.4	122.3	118.4	117.1	115.8
15°	749.4	594.5	405.9	256.2	160.0	126.2	117.1	109.3	105.4	104.0	102.8
17.5°	810.5	620.6	383.8	205.5	130.1	114.5	104.0	97.6	92.4	91.0	91.0
20°	867.8	642.7	346.1	160.0	117.1	102.8	92.4	84.6	79.4	78.1	78.1
22.5°	927.6	660.9	299.2	130.1	106.7	91.0	80.7	72.8	67.6	66.4	65.1
25°	991.3	673.9	245.9	115.8	96.3	80.7	68.9	62.4	58.5	57.3	56.0
27.5°	1060.3	679.1	195.2	105.4	84.6	70.3	59.8	53.3	50.7	49.4	49.4
30°	1122.8	673.9	150.9	93.7	74.2	61.2	52.1	46.9	44.2	43.0	43.0
32.5°	1187.9	660.9	121.0	83.3	65.1	52.1	44.2	40.3	39.1	37.7	37.7
35°	1256.8	644.0	104.0	74.2	56.0	45.5	39.1	36.4	35.1	33.9	33.9
37.5°	1337.4	623.2	94.9	66.4	49.4	40.3	33.9	32.5	31.2	31.2	31.2
40°	1428.6	597.2	88.5	59.8	44.2	35.1	30.0	28.6	27.3	27.3	27.3
42.5°	1524.8	567.2	81.9	53.3	39.1	30.0	26.0	26.0	24.8	24.8	23.4
45°	1632.7	537.4	75.5	46.9	33.9	26.0	22.1	20.8	20.8	19.5	19.5
47.5°	1760.3	510.0	68.9	41.6	30.0	22.1	19.5	18.2	16.9	15.7	15.7
50°	1939.8	507.4	61.2	36.4	27.3	18.2	15.7	14.3	13.0	11.7	11.7
52.5°	2118.0	484.0	52.1	30.0	22.1	15.7	11.7	10.4	9.1	9.1	7.8
55°	2158.4	445.0	45.5	26.0	16.9	11.7	9.1	6.5	6.5	5.2	5.2
57.5°	2246.8	426.8	39.1	20.8	13.0	9.1	5.2	3.9	3.9	3.9	3.9
60°	2421.2	421.6	33.9	18.2	9.1	6.5	3.9	2.6	2.6	1.3	1.3
62.5°	2661.8	416.3	28.6	15.7	6.5	3.9	2.6	1.3	0.0	0.0	0.0
65°	2794.6	381.2	23.4	11.7	5.2	3.9	1.3	0.0	0.0	0.0	0.0
67.5°	2759.4	314.9	20.8	7.8	3.9	2.6	1.3	0.0	0.0	0.0	0.0
69°	2612.4	265.5	16.9	6.5	3.9	2.6	1.3	0.0	0.0	0.0	0.0
70°	2435.5	228.9	15.7	5.2	2.6	1.3	1.3	0.0	0.0	0.0	0.0
72.5°	1729.1	119.7	10.4	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
75°	807.9	53.3	6.5	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	178.2	24.8	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	33.9	9.1	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.7	3.9	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.0	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)