

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: P265774

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265774  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-60-D-U-T3-7027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7580 lumens  
Efficiency: N/A  
Efficacy: 120.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 63  
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

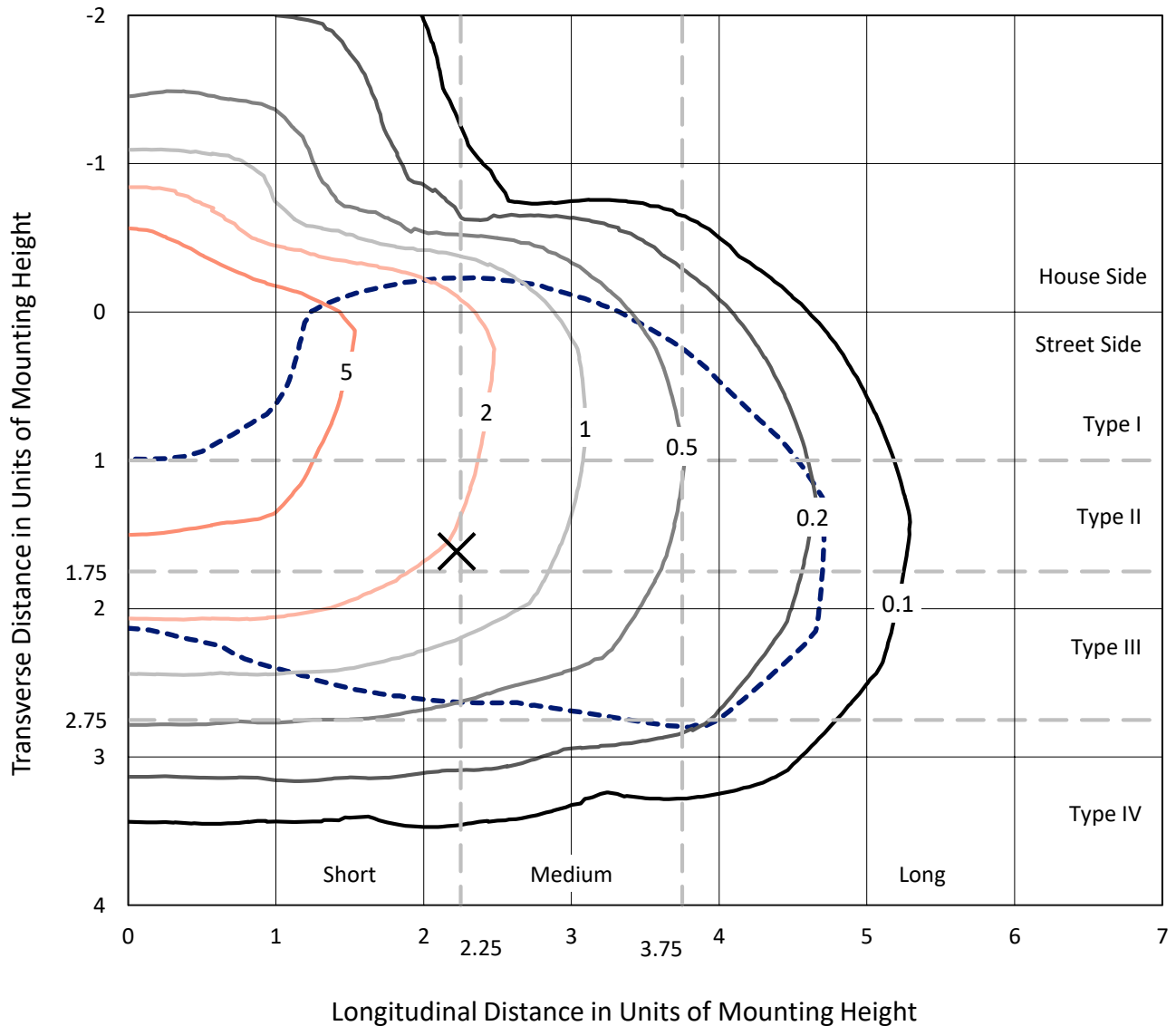


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

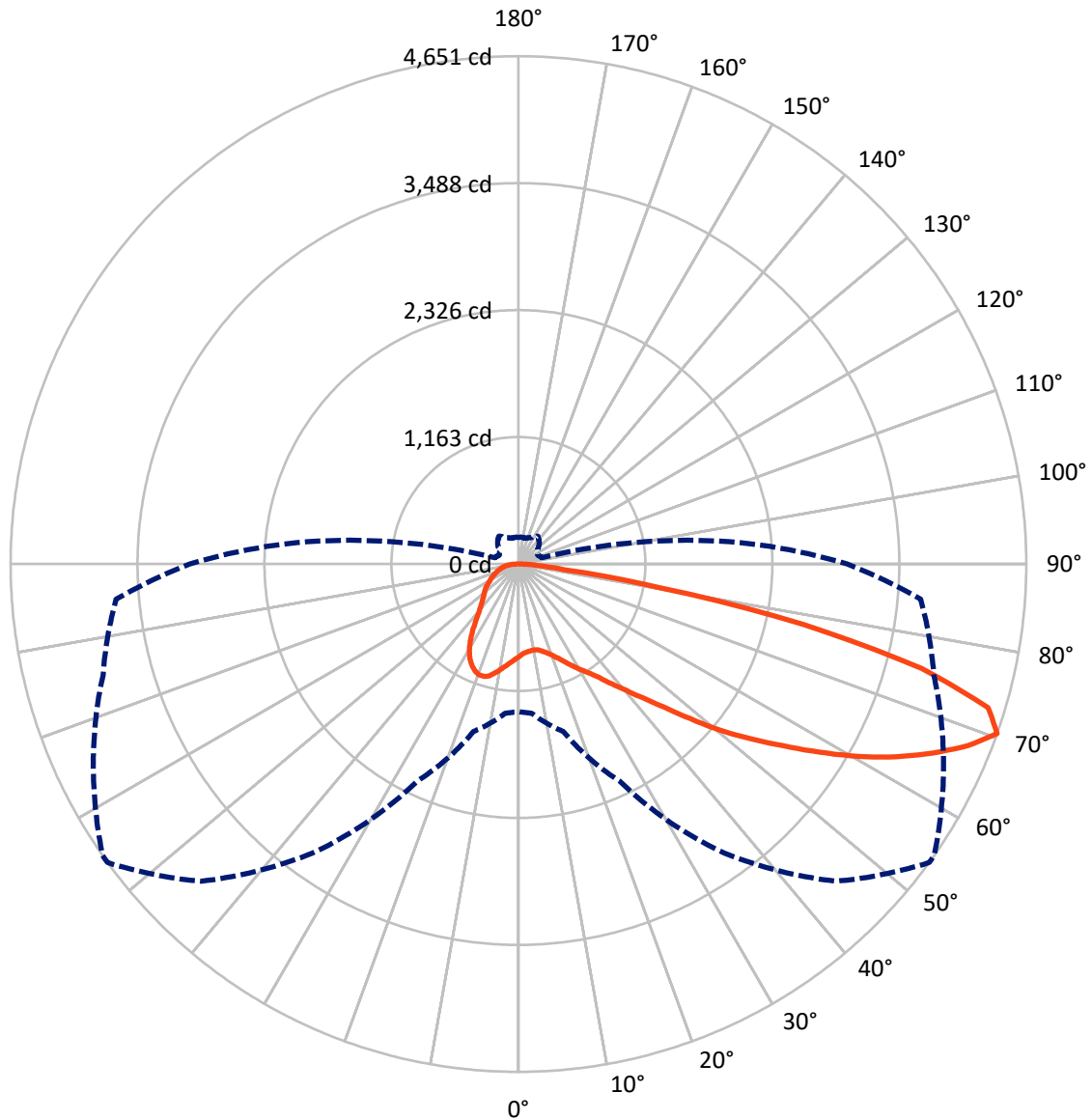


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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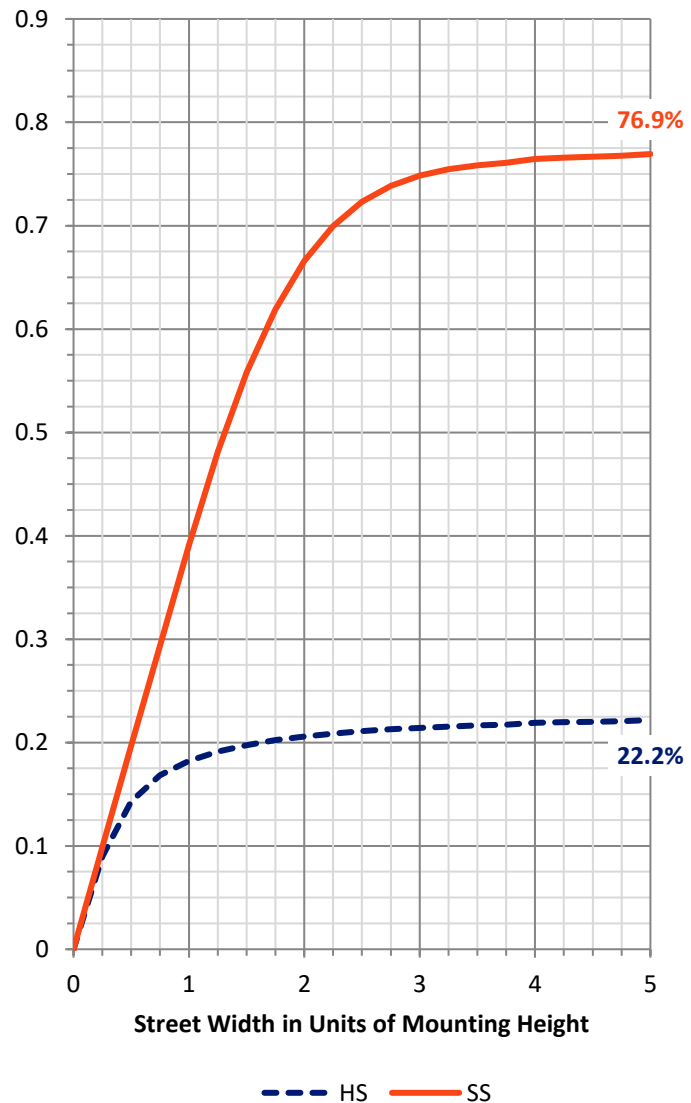
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1719.1	0.0	1719.1
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	5860.9	0.0	5860.9
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	7580.0	0.0	7580.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.2	1.1
10°-20°	265.9	3.5
20°-30°	462.0	6.1
30°-40°	675.2	8.9
40°-50°	1059.7	14.0
50°-60°	1629.5	21.5
60°-70°	1990.8	26.3
70°-80°	1234.3	16.3
80°-90°	179.3	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°	7580.0	100.0
0°-180°	7580.0	100.0



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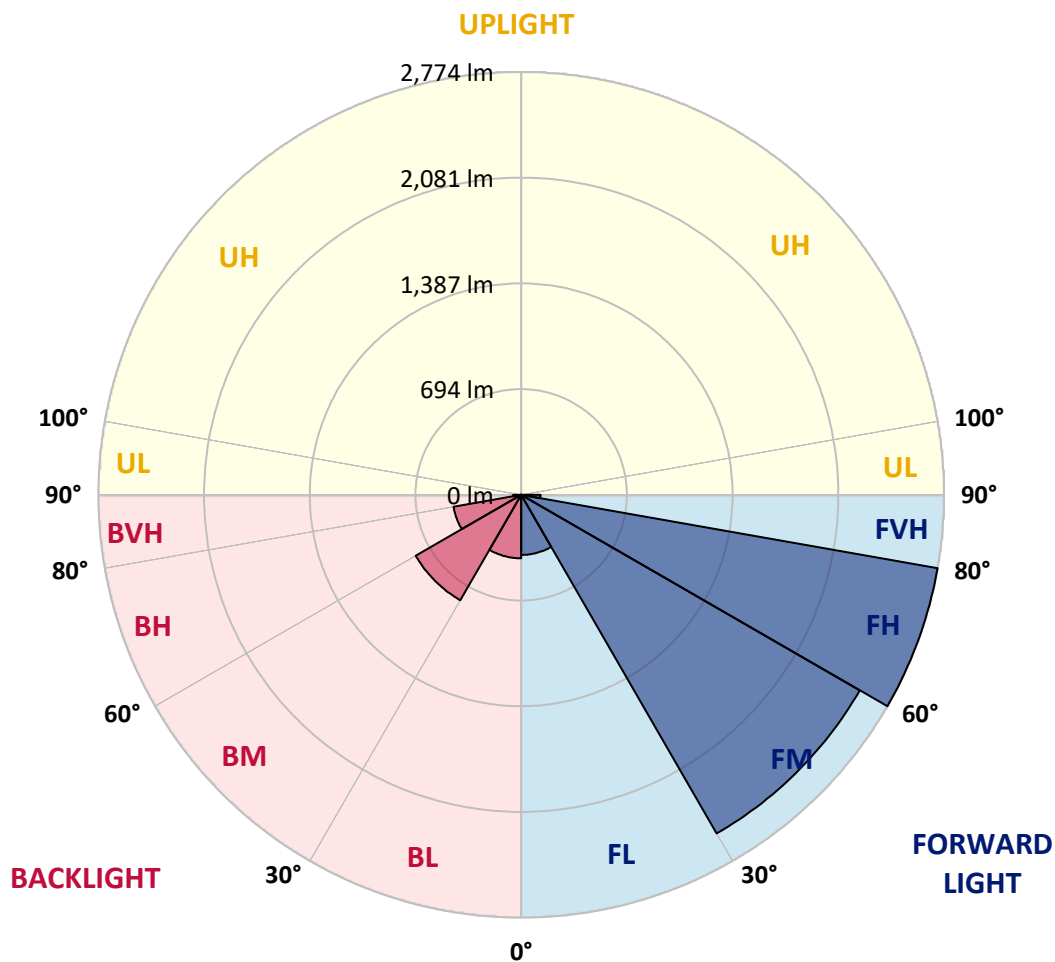
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.4	5.2			
FM	(30°-60°)	2565.5	33.8			
FH	(60°-80°)	2774.4	36.6			G2/5000
FVH	(80°-90°)	126.6	1.7			G2/225
BL	(0°-30°)	416.8	5.5	B1/500		
BM	(30°-60°)	798.8	10.5	B1/1000		
BH	(60°-80°)	450.8	5.9	B1/500		G1/500
BVH	(80°-90°)	52.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0
2.5°	814.8	812.0	812.0	816.1	817.5	821.7	821.7	823.0	827.2	834.2	842.5
5°	789.8	788.4	789.8	795.3	798.1	806.4	809.3	810.6	819.0	830.0	842.5
7.5°	764.7	763.4	766.2	774.5	782.9	795.3	802.2	803.7	816.1	831.4	848.0
10°	756.5	755.0	759.2	766.2	774.5	788.4	799.5	800.8	819.0	837.0	860.5
12.5°	767.5	766.2	770.3	777.3	785.6	795.3	807.8	809.3	832.8	856.4	881.3
15°	795.3	795.3	796.6	800.8	809.3	817.5	828.5	830.0	854.9	882.8	907.7
17.5°	838.3	835.6	835.6	834.2	839.7	843.9	857.7	859.1	885.5	910.5	935.5
20°	891.1	889.7	884.1	877.1	875.8	878.6	892.5	893.9	920.3	941.1	964.6
22.5°	954.9	956.3	943.8	928.6	921.7	925.8	938.3	939.6	959.1	977.1	997.9
25°	1039.6	1035.4	1017.4	995.1	981.3	981.3	993.7	993.7	1011.9	1022.9	1036.9
27.5°	1120.0	1111.7	1095.2	1063.1	1041.0	1045.2	1057.7	1057.7	1074.4	1078.4	1085.4
30°	1207.5	1199.1	1178.3	1138.2	1109.0	1106.3	1121.4	1120.0	1142.3	1140.8	1135.4
32.5°	1314.4	1310.3	1275.6	1224.2	1185.4	1175.6	1189.4	1190.9	1204.7	1200.6	1182.6
35°	1464.2	1462.9	1431.0	1340.8	1289.3	1271.5	1279.6	1279.6	1289.3	1278.3	1247.7
37.5°	1653.2	1655.8	1628.1	1494.8	1422.6	1392.2	1393.5	1392.2	1394.9	1382.4	1350.5
40°	1841.9	1848.8	1847.4	1686.4	1594.9	1542.0	1522.5	1519.8	1526.8	1521.2	1490.6
42.5°	2090.3	2107.0	2068.1	1922.4	1819.6	1730.8	1678.0	1671.0	1686.4	1693.3	1664.2
45°	2348.3	2342.9	2281.9	2176.4	2083.3	1969.5	1869.6	1858.6	1869.6	1890.5	1859.9
47.5°	2483.1	2479.0	2463.6	2411.0	2396.9	2266.6	2115.2	2105.5	2084.7	2113.9	2077.8
50°	2705.2	2709.3	2646.9	2641.2	2699.5	2627.5	2392.8	2370.6	2333.2	2356.8	2326.3
52.5°	2866.1	2848.0	2809.2	2857.8	3039.7	3000.8	2653.9	2644.2	2609.3	2603.8	2590.0
55°	2931.3	2931.3	2938.4	3050.7	3310.3	3259.0	2936.9	2946.6	2899.5	2860.7	2878.7
57.5°	2950.8	2959.1	3018.8	3204.9	3628.2	3460.2	3249.2	3263.2	3195.1	3117.4	3174.3
60°	2855.1	2880.1	3022.9	3292.3	3807.1	3674.0	3578.2	3582.4	3483.7	3370.0	3470.0
62.5°	2609.3	2639.8	2895.2	3328.3	3778.0	3893.3	3889.1	3898.9	3764.2	3622.5	3747.5
65°	2308.1	2338.6	2610.7	3227.0	3755.9	4050.1	4173.6	4199.9	4026.6	3836.3	3921.0
67.5°	1865.4	1905.7	2163.8	2885.5	3647.6	4179.2	4440.1	4467.9	4229.1	3947.4	3905.7
70°	1351.9	1371.4	1587.8	2193.0	3206.2	4108.4	4651.1	4649.6	4295.8	3939.1	3697.6
72.5°	650.9	666.3	853.6	1361.7	2293.0	3486.6	4498.4	4524.8	4204.2	3818.2	3221.4
75°	267.9	283.1	345.6	574.6	1203.4	2304.1	3812.8	3875.2	3818.2	3426.9	2520.6
77.5°	166.5	172.1	202.7	297.0	549.7	1075.7	2669.0	2753.8	3025.9	2745.4	1664.2
80°	125.0	129.0	151.3	208.1	346.9	397.0	1325.4	1432.3	1833.5	1575.4	753.7
82.5°	104.2	105.6	120.7	151.3	236.0	227.6	424.7	473.2	854.9	601.0	259.5
85°	97.1	99.9	108.2	108.2	149.8	143.0	176.2	184.6	248.4	205.4	90.2
87.5°	49.9	47.3	95.8	84.7	77.8	69.3	75.0	80.5	93.0	98.5	40.2
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°	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0	848.0
2.5°	845.2	849.4	856.4	863.4	871.6	881.3	886.8	893.9	899.5	896.6	895.3
5°	849.4	856.4	871.6	885.5	902.2	921.7	934.1	948.0	959.1	961.8	957.8
7.5°	856.4	868.9	889.7	914.7	936.9	961.8	981.3	1000.7	1014.5	1017.4	1017.4
10°	873.1	886.8	914.7	948.0	974.3	1000.7	1022.9	1038.3	1050.7	1056.2	1056.2
12.5°	896.6	913.2	946.6	986.9	1016.1	1041.0	1053.4	1060.4	1066.0	1071.5	1072.8
15°	924.4	942.4	982.7	1025.8	1056.2	1068.8	1068.8	1067.4	1067.4	1070.2	1072.8
17.5°	952.2	971.5	1013.2	1059.0	1078.4	1071.5	1061.7	1057.7	1054.9	1053.4	1057.7
20°	981.3	1000.7	1042.4	1085.4	1079.9	1050.7	1036.9	1027.1	1018.8	1014.5	1020.1
22.5°	1013.2	1031.3	1074.4	1103.5	1061.7	1017.4	991.0	975.6	961.8	953.6	959.1
25°	1050.7	1068.8	1110.3	1109.0	1029.8	967.5	925.8	900.8	885.5	877.1	877.1
27.5°	1095.2	1110.3	1150.5	1095.2	985.4	900.8	839.7	816.1	812.0	805.1	805.1
30°	1140.8	1153.5	1188.1	1063.1	924.4	813.3	746.8	735.6	737.0	730.1	731.5
32.5°	1188.1	1200.6	1210.2	1016.1	845.2	714.8	670.3	662.1	660.7	655.1	649.6
35°	1254.8	1272.8	1213.2	952.2	749.5	632.9	601.0	592.6	584.3	564.9	564.9
37.5°	1356.0	1375.5	1206.2	873.1	650.9	569.0	539.9	528.8	515.0	495.5	488.6
40°	1494.8	1494.8	1190.9	784.2	571.9	517.8	489.9	476.1	460.8	441.3	437.2
42.5°	1658.6	1619.7	1167.3	694.0	513.6	483.0	458.0	442.8	424.7	402.5	399.7
45°	1850.1	1744.7	1134.0	613.5	470.5	462.2	446.9	420.5	390.0	366.4	362.2
47.5°	2036.2	1857.1	1102.0	556.6	434.4	453.9	441.3	397.0	355.3	322.0	317.8
50°	2240.2	1957.0	1064.6	509.3	406.7	448.3	434.4	362.2	316.5	292.8	290.2
52.5°	2444.2	2058.3	1024.2	459.5	383.0	437.2	417.8	337.3	315.0	283.1	279.0
55°	2659.3	2176.4	977.1	403.9	355.3	414.9	395.6	335.8	324.7	283.1	273.4
57.5°	2868.9	2306.8	900.8	349.8	324.7	381.7	387.2	327.5	303.9	280.5	269.2
60°	3100.7	2445.5	774.5	303.9	298.3	353.9	376.1	309.6	280.5	272.0	266.4
62.5°	3286.7	2570.5	605.2	272.0	276.1	331.7	362.2	298.3	270.7	263.7	262.3
65°	3367.1	2573.3	434.4	244.2	254.0	311.0	348.5	288.6	262.3	259.5	258.2
67.5°	3282.5	2431.7	305.3	217.8	230.3	291.5	330.3	279.0	254.0	255.4	252.7
70°	3009.1	2133.4	223.5	193.0	208.1	270.7	311.0	266.4	244.2	247.0	242.9
72.5°	2517.8	1662.9	179.0	172.1	190.1	248.4	291.5	252.7	229.0	230.3	222.2
75°	1859.9	1102.0	149.8	154.1	169.3	227.6	266.4	234.5	212.4	206.8	201.3
77.5°	1106.3	566.3	123.5	134.7	151.3	202.7	238.7	212.4	194.4	184.6	180.4
80°	456.7	229.0	101.2	113.8	131.8	180.4	211.0	185.9	173.6	163.9	158.2
82.5°	181.8	112.4	80.5	93.0	111.0	156.8	184.6	163.9	151.3	144.4	129.0
85°	69.3	55.5	54.2	65.2	83.3	120.7	152.7	137.4	127.6	109.7	105.6
87.5°	27.8	25.1	25.1	31.9	47.3	76.4	109.7	95.8	99.9	79.1	80.5
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)