

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: P573160

Luminaire Tested: **ARCH-S-PA2-40-740-U-T2U**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573160  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-40-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6618 lumens  
Efficiency: N/A  
Efficacy: 152.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

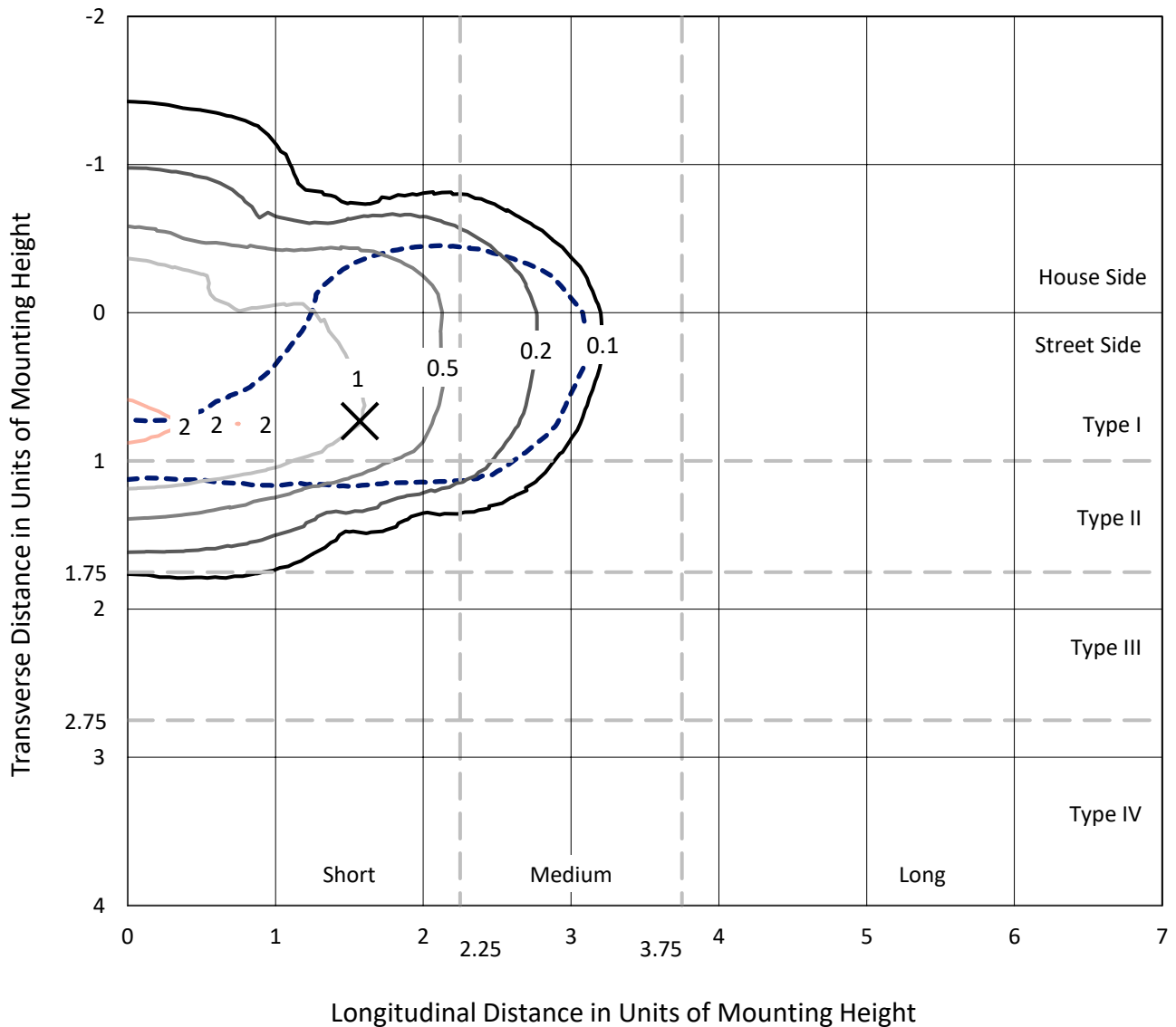
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

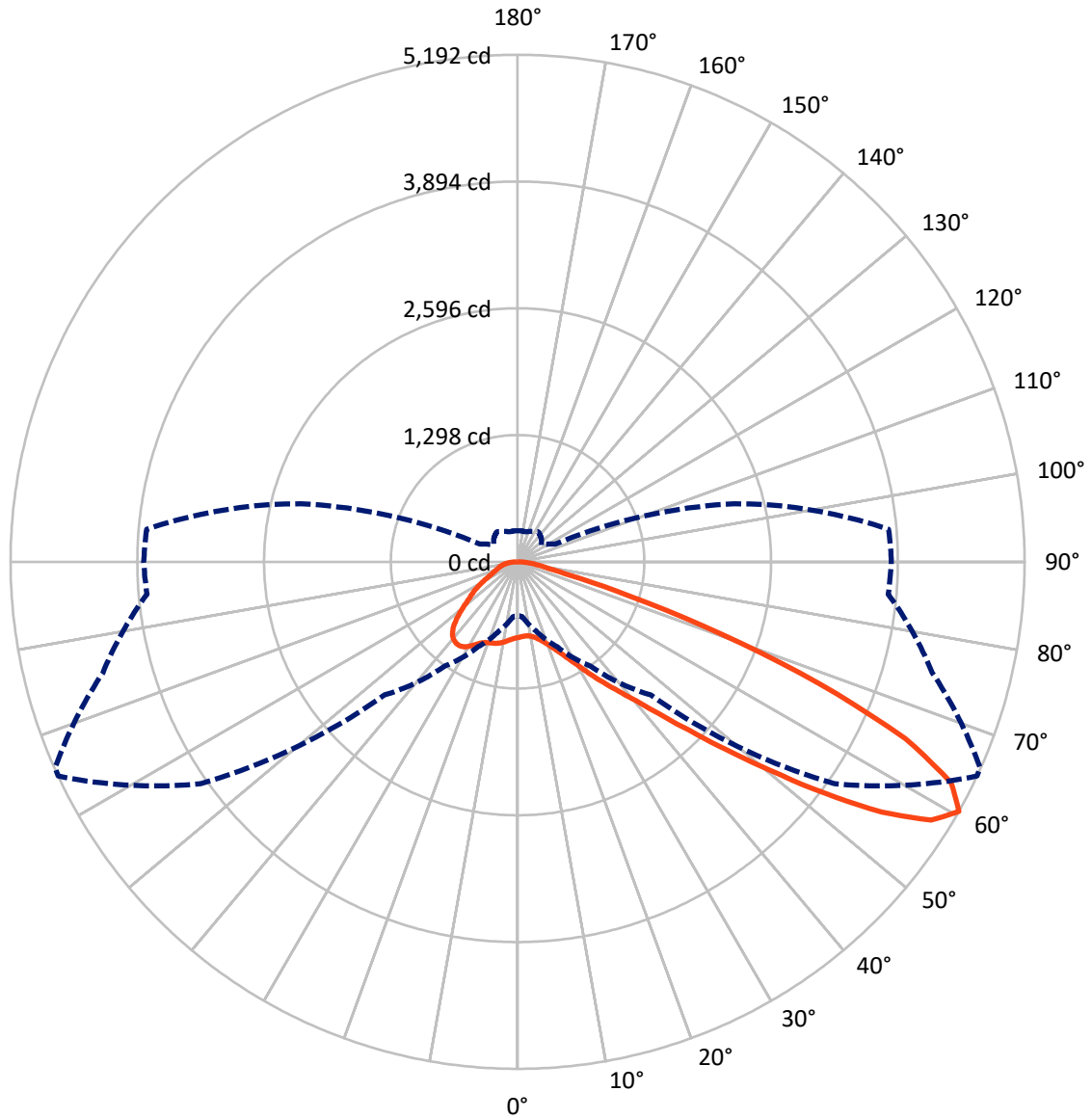
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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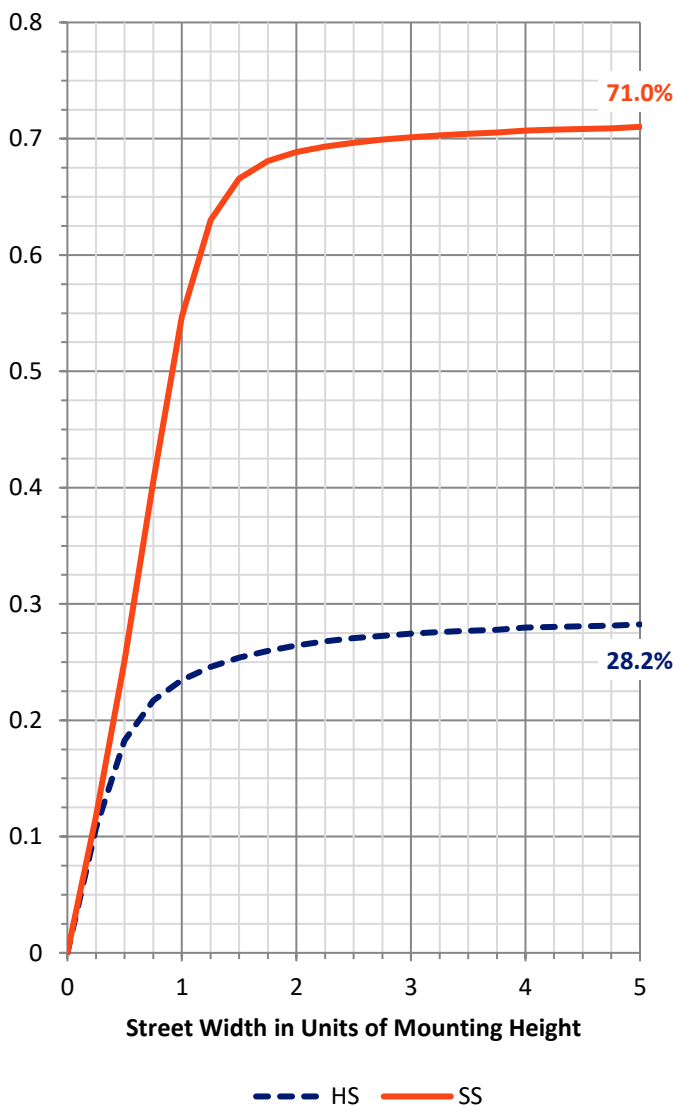
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1894.6	0.0	1894.6
	% Fixture	28.6	0.0	28.6
<b>Street Side</b>	Lumens	4723.5	0.0	4723.5
	% Fixture	71.4	0.0	71.4
<b>Total</b>	Lumens	6618.0	0.0	6618.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.0	1.1
10°-20°	241.4	3.6
20°-30°	462.9	7.0
30°-40°	803.9	12.1
40°-50°	1363.3	20.6
50°-60°	1697.6	25.7
60°-70°	1368.0	20.7
70°-80°	518.0	7.8
80°-90°	87.9	1.3
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°	6618.0	100.0
0°-180°	6618.0	100.0

**Coefficient of Utilization**



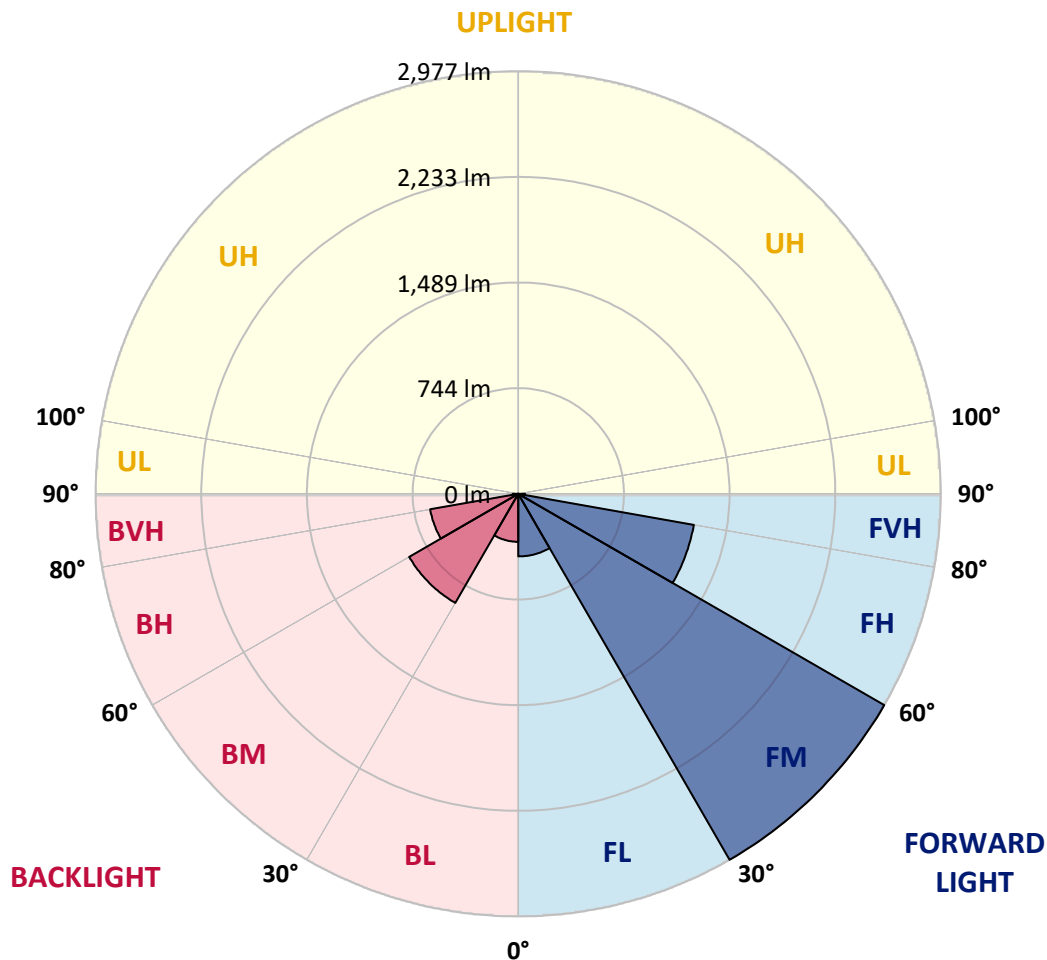
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	441.2	6.7			
FM (30°-60°)	2977.4	45.0			
FH (60°-80°)	1256.1	19.0			G1/1800
FVH (80°-90°)	48.7	0.7			G1/100
BL (0°-30°)	338.1	5.1	B1/500		
BM (30°-60°)	887.4	13.4	B1/1000		
BH (60°-80°)	629.9	9.5	B2/1000		G2/1000
BVH (80°-90°)	39.1	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5
2.5°	758.3	758.3	758.3	760.2	762.0	763.8	767.4	767.4	767.4	769.2	772.9
5°	743.8	742.0	743.8	745.6	749.3	752.9	760.2	763.8	763.8	771.0	778.3
7.5°	745.6	742.0	742.0	743.8	747.5	751.1	758.3	763.8	765.6	774.7	787.4
10°	763.8	758.3	758.3	760.2	760.2	763.8	769.2	776.5	778.3	787.4	800.1
12.5°	801.9	796.4	794.6	789.2	783.7	787.4	792.8	794.6	796.4	801.9	814.6
15°	881.7	872.6	858.1	847.2	832.7	823.7	821.8	823.7	823.7	825.5	832.7
17.5°	996.0	985.1	963.4	939.8	905.3	876.3	867.2	859.9	859.9	854.5	854.5
20°	1135.7	1119.4	1094.0	1059.5	1008.7	956.1	925.3	908.9	903.5	894.4	881.7
22.5°	1297.2	1286.3	1253.6	1201.0	1124.8	1054.1	1003.3	967.0	967.0	945.2	918.0
25°	1487.7	1467.7	1429.6	1367.9	1264.5	1162.9	1094.0	1041.4	1035.9	1001.5	957.9
27.5°	1672.7	1660.0	1612.9	1531.2	1407.8	1289.9	1193.8	1132.1	1123.0	1068.6	1001.5
30°	1897.7	1883.2	1812.4	1698.1	1565.7	1431.4	1318.9	1239.1	1230.0	1155.7	1061.3
32.5°	2177.1	2128.1	2041.0	1910.4	1739.8	1589.3	1460.5	1375.2	1364.3	1279.0	1166.5
35°	2516.3	2474.6	2324.0	2186.1	1983.0	1785.2	1631.0	1518.5	1504.0	1402.4	1260.9
37.5°	2755.8	2735.9	2632.4	2523.6	2291.4	2024.7	1836.0	1680.0	1665.5	1531.2	1348.0
40°	2906.4	2886.4	2857.4	2826.6	2697.8	2396.6	2082.7	1870.5	1846.9	1719.9	1522.1
42.5°	2984.4	2968.1	2973.5	3035.2	3071.5	3024.3	2434.7	2124.5	2108.1	1953.9	1734.4
45°	2939.1	2928.2	2980.8	3144.1	3321.9	3670.2	2886.4	2458.3	2414.7	2231.5	1992.0
47.5°	2721.3	2688.7	2812.1	3089.6	3470.6	3978.6	3430.7	2870.1	2822.9	2559.9	2253.3
50°	2273.2	2264.2	2432.9	2784.8	3412.6	4100.2	4013.1	3356.3	3321.9	2913.7	2543.6
52.5°	1856.0	1852.3	1983.0	2305.9	3042.5	4014.9	4435.8	3935.1	3831.7	3269.2	2859.2
55°	1440.5	1438.7	1554.8	1796.1	2427.4	3613.9	4635.4	4524.7	4448.5	3657.5	3184.0
57.5°	985.1	972.4	1123.0	1306.2	1823.3	2862.9	4504.7	4990.9	4943.8	4069.3	3528.7
60°	547.9	566.0	732.9	959.7	1304.4	1928.5	3960.5	5192.3	5185.1	4397.7	3809.9
62.5°	388.2	395.5	466.3	682.2	858.1	1104.9	3055.2	4983.7	5041.7	4579.1	3969.5
65°	322.9	326.6	361.0	504.4	627.7	638.6	1904.9	4365.0	4441.2	4522.9	4004.0
67.5°	304.8	306.6	324.7	371.9	491.7	462.6	850.9	3332.7	3494.2	4069.3	3779.0
70°	277.6	279.4	306.6	328.4	397.3	364.7	437.2	2213.4	2431.1	3216.6	3258.4
72.5°	237.7	243.1	264.9	308.4	322.9	303.0	337.4	1182.9	1398.8	2151.7	2516.3
75°	205.0	208.6	225.0	261.2	303.0	241.3	286.6	538.8	631.4	1262.7	1592.9
77.5°	165.1	166.9	190.5	214.1	254.0	195.9	223.2	322.9	339.3	616.8	720.2
80°	125.2	125.2	141.5	170.5	188.7	188.7	163.3	225.0	234.0	293.9	284.8
82.5°	96.2	94.3	107.0	119.7	136.1	157.8	123.4	148.8	152.4	177.8	152.4
85°	63.5	63.5	70.8	81.6	90.7	87.1	96.2	87.1	90.7	110.7	83.5
87.5°	27.2	27.2	38.1	36.3	39.9	41.7	47.2	41.7	41.7	50.8	38.1
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°	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5	776.5
2.5°	774.7	776.5	780.1	781.9	787.4	789.2	789.2	792.8	792.8	796.4	796.4
5°	780.1	785.6	791.0	796.4	801.9	803.7	807.3	809.1	809.1	812.8	811.0
7.5°	791.0	796.4	807.3	812.8	820.0	823.7	821.8	823.7	821.8	823.7	823.7
10°	805.5	812.8	825.5	832.7	838.2	840.0	834.5	829.1	821.8	821.8	821.8
12.5°	821.8	827.3	843.6	849.1	852.7	847.2	832.7	821.8	816.4	818.2	816.4
15°	838.2	843.6	856.3	861.8	861.8	845.4	832.7	829.1	827.3	829.1	829.1
17.5°	854.5	859.9	870.8	870.8	865.4	852.7	840.0	827.3	818.2	812.8	812.8
20°	876.3	876.3	879.9	879.9	878.1	858.1	827.3	796.4	778.3	767.4	765.6
22.5°	905.3	898.0	890.8	890.8	898.0	845.4	785.6	738.4	709.4	705.7	698.5
25°	936.1	919.8	901.7	914.4	901.7	812.8	727.5	664.0	629.5	616.8	620.5
27.5°	968.8	943.4	916.2	952.5	883.5	749.3	645.9	575.1	542.5	533.4	533.4
30°	1014.2	976.1	936.1	992.4	849.1	676.7	549.7	498.9	480.8	473.5	471.7
32.5°	1101.2	1043.2	985.1	1028.7	811.0	582.4	484.4	453.6	431.8	424.5	430.0
35°	1179.2	1097.6	1059.5	1045.0	751.1	506.2	444.5	417.3	399.1	390.1	390.1
37.5°	1250.0	1172.0	1143.0	1045.0	673.1	459.0	419.1	397.3	373.7	366.5	366.5
40°	1404.2	1300.8	1250.0	1030.5	576.9	435.4	406.4	381.0	361.0	353.8	352.0
42.5°	1616.5	1476.8	1360.7	997.8	495.3	424.5	399.1	370.1	353.8	348.3	346.5
45°	1841.4	1718.1	1465.9	939.8	442.7	413.6	397.3	366.5	346.5	341.1	339.3
47.5°	2113.6	1986.6	1587.5	850.9	406.4	406.4	395.5	361.0	342.9	337.4	337.4
50°	2414.7	2309.5	1741.7	749.3	379.2	400.9	391.9	361.0	341.1	335.6	333.8
52.5°	2723.2	2674.2	1903.1	649.5	352.0	393.7	390.1	361.0	337.4	332.0	332.0
55°	3115.0	3075.1	2090.0	575.1	330.2	379.2	390.1	357.4	332.0	328.4	328.4
57.5°	3499.6	3485.1	2235.1	509.8	313.9	361.0	384.6	352.0	326.6	324.7	324.7
60°	3828.0	3813.5	2296.8	428.2	297.5	342.9	373.7	342.9	317.5	319.3	319.3
62.5°	4031.2	3947.8	2251.5	353.8	281.2	326.6	361.0	332.0	308.4	313.9	312.0
65°	4067.5	3873.4	2075.5	295.7	263.1	308.4	346.5	319.3	295.7	308.4	306.6
67.5°	3800.8	3477.9	1745.3	257.6	244.9	288.5	330.2	301.2	281.2	299.3	293.9
70°	3223.9	2824.8	1291.7	228.6	226.8	264.9	308.4	279.4	261.2	270.3	263.1
72.5°	2400.2	2039.2	836.4	206.8	206.8	237.7	277.6	252.2	234.0	235.8	228.6
75°	1496.7	1253.6	475.3	186.9	186.9	210.5	246.7	221.3	208.6	201.4	210.5
77.5°	680.3	551.5	250.4	166.9	168.7	179.6	212.3	188.7	174.2	163.3	168.7
80°	252.2	225.0	163.3	143.3	147.0	148.8	170.5	150.6	137.9	130.6	127.0
82.5°	130.6	121.6	110.7	114.3	119.7	114.3	132.4	112.5	98.0	92.5	78.0
85°	65.3	63.5	67.1	76.2	83.5	70.8	79.8	72.6	59.9	43.5	43.5
87.5°	25.4	27.2	25.4	34.5	38.1	32.7	36.3	25.4	18.1	9.1	7.3
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)