

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: P265723

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265723
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA 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: 17687.3 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 251
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

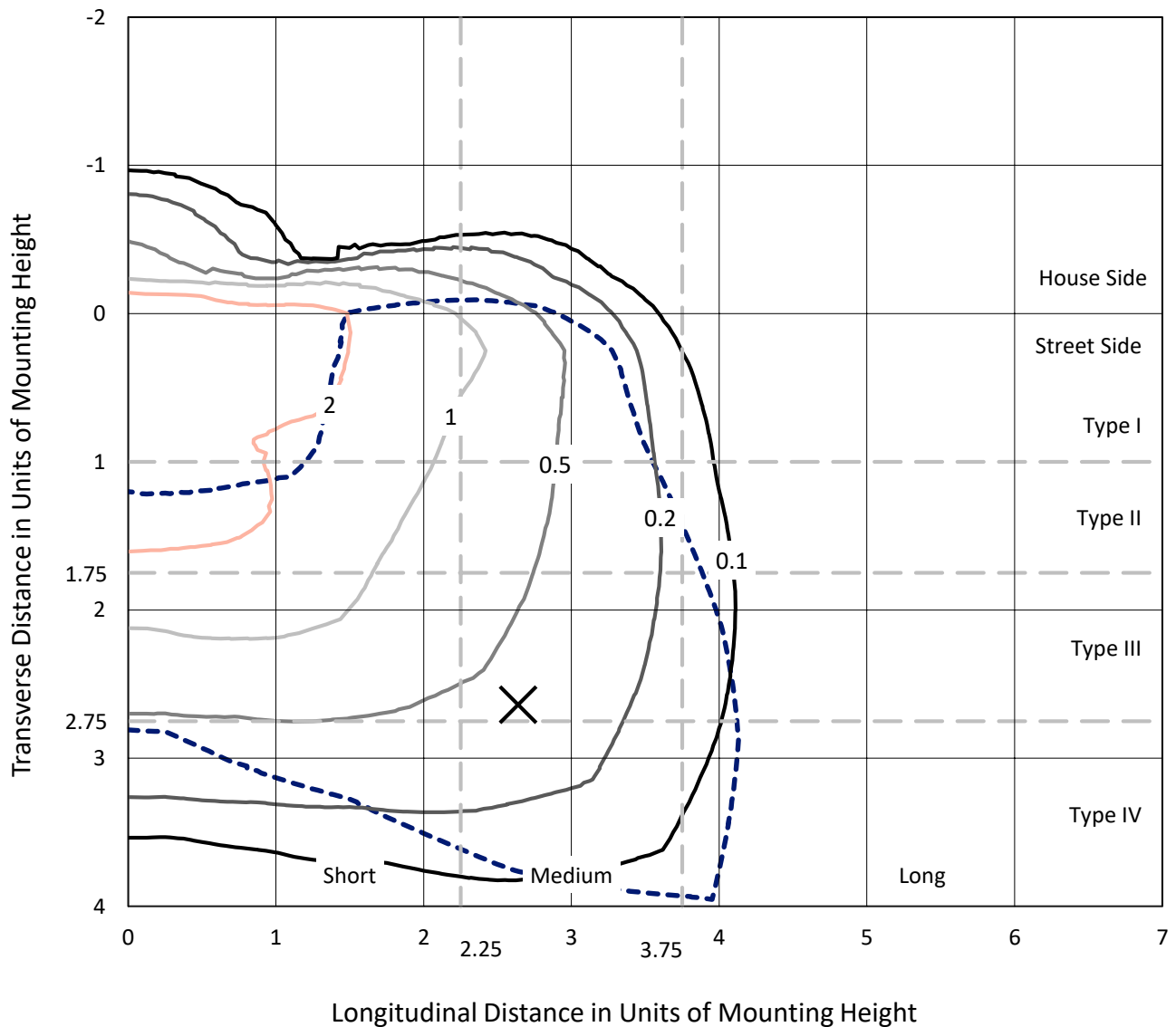


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

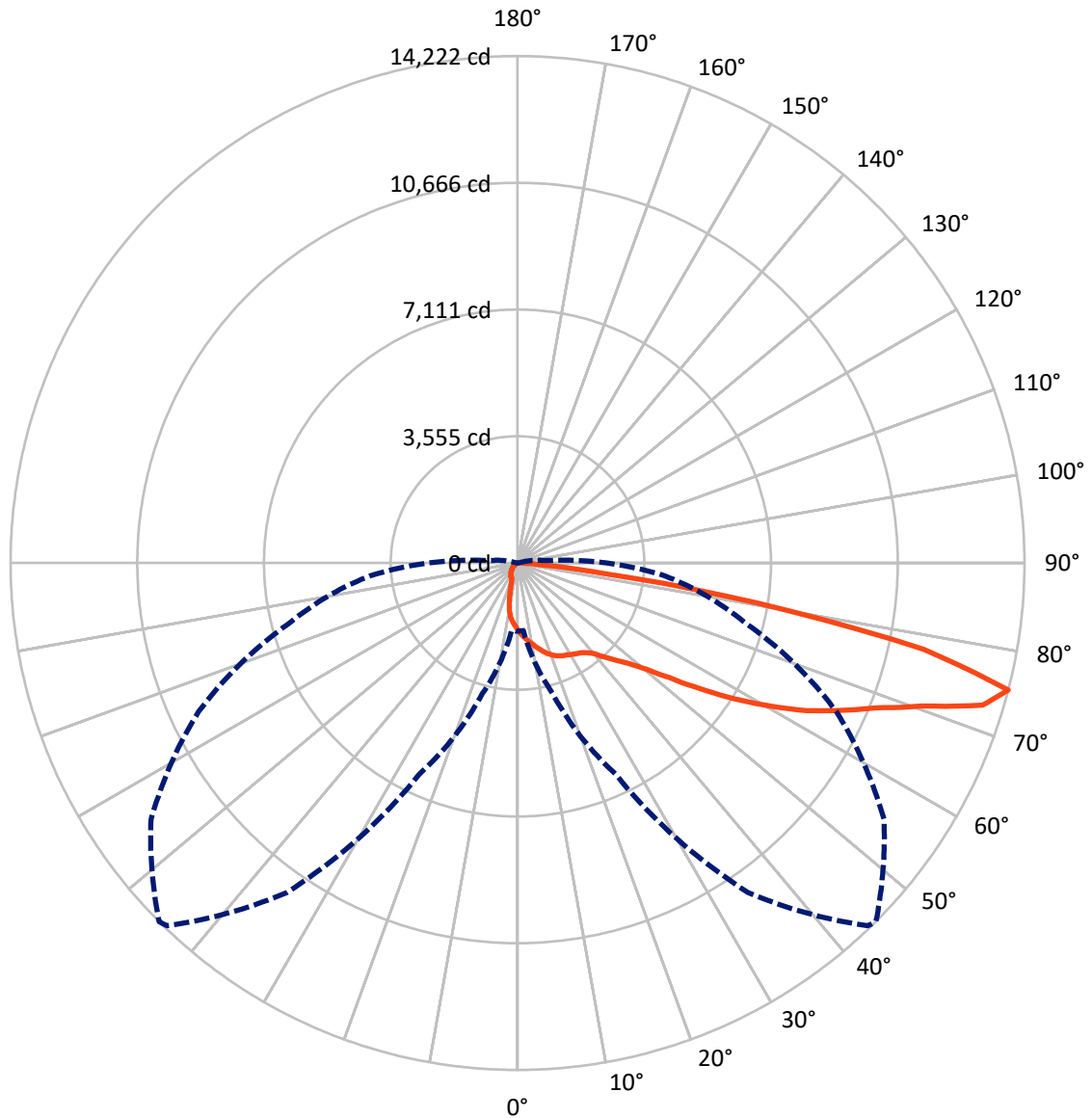


Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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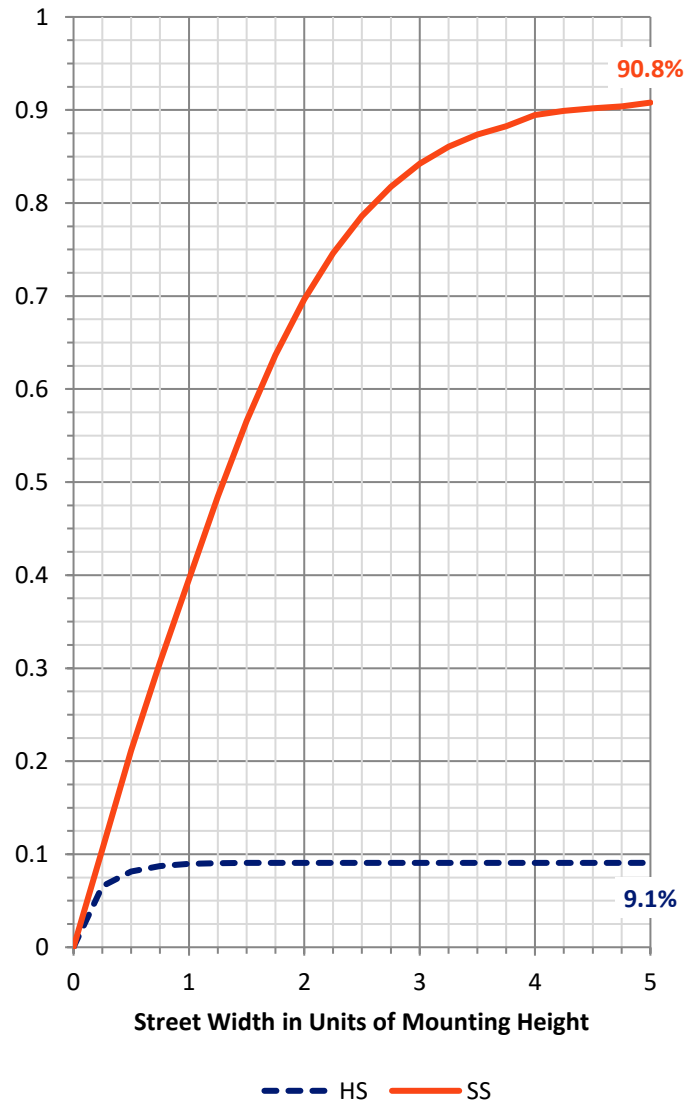
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1617.9	0.0	1617.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16069.4	0.0	16069.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	17687.3	0.0	17687.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.5	1.0
10°-20°	505.8	2.9
20°-30°	837.7	4.7
30°-40°	1212.3	6.9
40°-50°	1985.1	11.2
50°-60°	3537.1	20.0
60°-70°	5200.0	29.4
70°-80°	3922.9	22.2
80°-90°	307.8	1.7
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°	17687.3	100.0
0°-180°	17687.3	100.0



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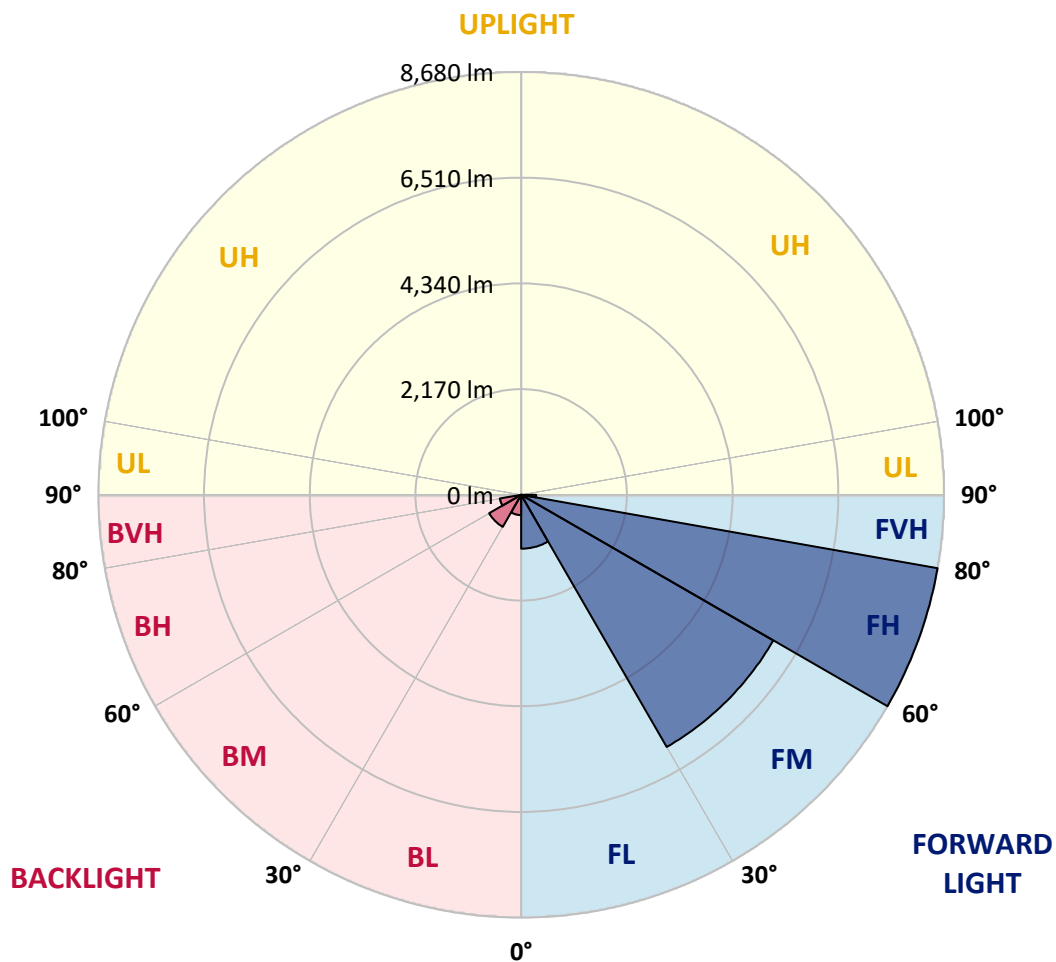
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1106.3	6.3			
FM	(30°-60°)	5976.4	33.8			
FH	(60°-80°)	8679.8	49.1			G4/12000
FVH	(80°-90°)	306.9	1.7			G3/500
BL	(0°-30°)	415.7	2.4	B1/500		
BM	(30°-60°)	758.1	4.3	B1/1000		
BH	(60°-80°)	443.1	2.5	B1/500		G1/500
BVH	(80°-90°)	0.9	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7
2.5°	2055.0	2055.0	2050.8	2046.6	2025.7	2004.7	2000.5	1987.9	1950.3	1925.2	1900.2
5°	2226.5	2230.8	2222.3	2201.4	2155.5	2109.4	2105.2	2071.8	2000.5	1950.3	1896.0
7.5°	2389.9	2398.1	2377.3	2339.5	2285.2	2218.3	2214.1	2151.3	2059.2	1987.9	1908.4
10°	2527.9	2527.9	2498.6	2452.6	2394.1	2322.8	2314.5	2243.2	2138.7	2050.8	1946.2
12.5°	2678.6	2674.4	2632.6	2569.8	2502.8	2435.8	2431.6	2343.8	2243.2	2130.3	2000.5
15°	2816.6	2808.3	2753.9	2695.4	2624.2	2553.1	2548.9	2460.9	2356.3	2222.3	2080.0
17.5°	2892.1	2887.8	2837.7	2779.0	2720.4	2666.0	2661.9	2569.8	2456.8	2318.6	2159.6
20°	2904.6	2908.8	2866.9	2816.6	2783.2	2753.9	2753.9	2670.2	2548.9	2402.3	2243.2
22.5°	2908.8	2921.4	2892.1	2825.1	2816.6	2820.9	2829.2	2762.3	2636.7	2498.6	2331.2
25°	2938.0	2954.9	2933.9	2854.4	2846.0	2875.2	2883.6	2854.4	2741.4	2603.3	2431.6
27.5°	2996.7	3013.5	2996.7	2896.2	2883.6	2912.9	2921.4	2938.0	2854.4	2703.7	2536.3
30°	3113.9	3118.0	3080.4	2954.9	2929.7	2967.5	2979.9	3026.0	2958.9	2799.9	2636.7
32.5°	3319.0	3277.0	3164.1	2996.7	2975.7	3017.5	3030.2	3080.4	3055.2	2892.1	2741.4
35°	3737.5	3519.7	3260.4	3055.2	3034.4	3076.2	3093.0	3164.1	3176.6	3021.8	2871.2
37.5°	3733.3	3536.5	3486.3	3168.2	3138.9	3168.2	3189.3	3277.0	3327.3	3193.4	3059.4
40°	3997.0	3913.2	3913.2	3381.7	3285.5	3327.3	3348.3	3436.1	3524.1	3419.4	3281.2
42.5°	4825.6	4771.3	4712.7	3791.8	3490.5	3607.8	3620.3	3674.6	3779.3	3745.8	3582.6
45°	5750.6	5700.4	5474.4	4486.7	3842.1	3863.0	3892.4	3980.2	4130.9	4193.6	4001.1
47.5°	6474.7	6424.4	6231.9	5323.6	4390.3	4206.3	4206.3	4377.8	4612.2	4771.3	4587.0
50°	7056.4	6997.7	6880.6	6215.2	5290.2	4700.1	4675.0	4875.9	5223.3	5470.1	5344.6
52.5°	7621.4	7449.9	7378.7	7136.0	6307.2	5415.7	5348.8	5491.1	5972.4	6278.0	6173.3
55°	7998.1	7972.9	7897.7	7981.4	7374.5	6286.2	6227.7	6257.1	6859.6	7064.8	6935.1
57.5°	8349.7	8345.4	8512.9	8902.2	8538.0	7282.4	7190.4	7144.3	7717.7	7667.5	7780.5
60°	8785.0	8709.5	9098.8	9655.4	9605.2	8253.4	8148.7	8056.7	8374.8	8232.4	8793.2
62.5°	8805.8	8785.0	9575.9	10375.3	10664.0	9241.1	9119.8	8789.0	8948.1	8785.0	9760.1
65°	8006.5	8111.1	9776.9	10756.1	11551.3	10107.5	9960.9	9446.1	9458.8	9349.9	10898.4
67.5°	7826.6	7880.9	9224.3	11166.3	12191.7	10982.1	10844.1	10203.8	10053.0	10061.5	11572.3
70°	7378.7	7462.4	8538.0	11137.0	12698.3	12149.8	12011.7	11316.9	10952.9	10546.9	11053.4
72.5°	5637.7	5779.9	7194.5	9764.2	12560.0	13677.6	13639.9	12727.5	11312.9	9684.7	8362.2
75°	1908.4	1904.2	3779.3	6558.3	11283.5	14146.2	14221.5	12551.7	9868.9	6679.7	4151.7
77.5°	410.2	414.4	778.6	2657.6	7495.8	11358.9	11647.7	9467.1	6365.7	2975.7	950.0
80°	201.0	205.1	322.2	703.2	2996.7	6370.1	6822.0	4867.5	2352.1	594.3	159.0
82.5°	100.4	104.7	167.4	372.4	1109.0	2264.3	2419.0	1791.3	673.8	334.8	79.5
85°	37.6	37.6	83.7	221.8	506.5	531.5	652.9	519.0	405.9	272.0	20.9
87.5°	8.4	8.4	46.1	108.9	226.1	167.4	167.4	159.0	246.9	184.2	8.4
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°	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7	1891.7
2.5°	1887.6	1870.8	1841.5	1812.2	1791.3	1766.2	1753.6	1741.1	1737.0	1732.7	1741.1
5°	1866.7	1841.5	1787.1	1741.1	1699.2	1665.7	1640.7	1615.5	1602.9	1594.6	1598.8
7.5°	1866.7	1828.9	1749.4	1678.4	1611.3	1540.1	1469.1	1414.7	1372.8	1347.6	1351.9
10°	1887.6	1837.4	1732.7	1636.4	1510.9	1360.3	1205.3	1088.1	1008.6	962.7	962.7
12.5°	1933.6	1866.7	1737.0	1586.2	1372.8	1109.0	874.7	732.4	673.8	640.3	644.5
15°	1996.5	1916.9	1757.9	1519.3	1180.3	824.6	611.0	519.0	519.0	527.3	531.5
17.5°	2067.4	1979.7	1774.5	1418.9	933.2	590.1	481.3	473.0	485.5	506.5	506.5
20°	2138.7	2042.4	1783.0	1259.8	698.9	468.7	456.2	456.2	464.6	485.5	489.7
22.5°	2226.5	2121.9	1774.5	1063.1	523.2	443.7	439.5	439.5	439.5	464.6	464.6
25°	2318.6	2214.1	1741.1	853.7	443.7	427.0	422.7	418.5	418.5	439.5	443.7
27.5°	2423.3	2310.4	1661.5	652.9	418.5	410.2	405.9	397.6	397.6	414.4	414.4
30°	2527.9	2419.0	1540.1	493.9	397.6	393.4	385.1	376.7	368.3	385.1	385.1
32.5°	2640.8	2532.1	1381.1	393.4	368.3	368.3	364.2	351.5	343.2	351.5	355.8
35°	2791.7	2661.9	1201.2	343.2	330.7	330.7	330.7	326.4	309.7	318.1	318.1
37.5°	2992.4	2841.8	991.9	318.1	301.3	292.9	292.9	292.9	280.5	284.7	284.7
40°	3247.8	3051.1	791.0	297.2	280.5	259.5	251.2	255.3	246.9	246.9	242.7
42.5°	3595.1	3277.0	594.3	280.5	263.7	234.4	217.6	213.4	205.1	201.0	201.0
45°	4093.1	3553.3	427.0	263.7	251.2	205.1	188.4	175.8	154.9	142.3	142.3
47.5°	4737.8	3867.3	318.1	246.9	238.6	180.0	159.0	133.9	104.7	96.3	96.3
50°	5524.5	4218.8	267.9	221.8	217.6	159.0	125.6	87.9	58.6	50.2	54.3
52.5°	6290.6	4549.3	238.6	196.6	192.5	138.1	92.0	46.1	25.2	25.2	25.2
55°	6935.1	4783.7	217.6	175.8	167.4	108.9	50.2	20.9	12.5	12.5	12.5
57.5°	7516.7	4917.7	196.6	154.9	133.9	75.4	20.9	8.4	8.4	4.2	4.2
60°	8048.4	4997.2	171.5	133.9	104.7	41.9	8.4	4.2	4.2	0.0	0.0
62.5°	8571.4	5055.8	146.5	108.9	79.5	16.8	4.2	4.2	0.0	0.0	0.0
65°	8969.0	5034.9	117.1	87.9	50.2	8.4	4.2	0.0	0.0	0.0	0.0
67.5°	8956.6	4750.2	87.9	67.0	25.2	4.2	0.0	0.0	0.0	0.0	0.0
70°	8010.6	4001.1	58.6	41.9	8.4	4.2	0.0	0.0	0.0	0.0	0.0
72.5°	5683.7	2565.6	37.6	25.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	2502.8	778.6	20.9	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	489.7	180.0	12.5	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	117.1	20.9	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	50.2	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.4	4.2	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)