

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: P236958

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1070mA LIGHT ENGINES 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: 21796.1 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

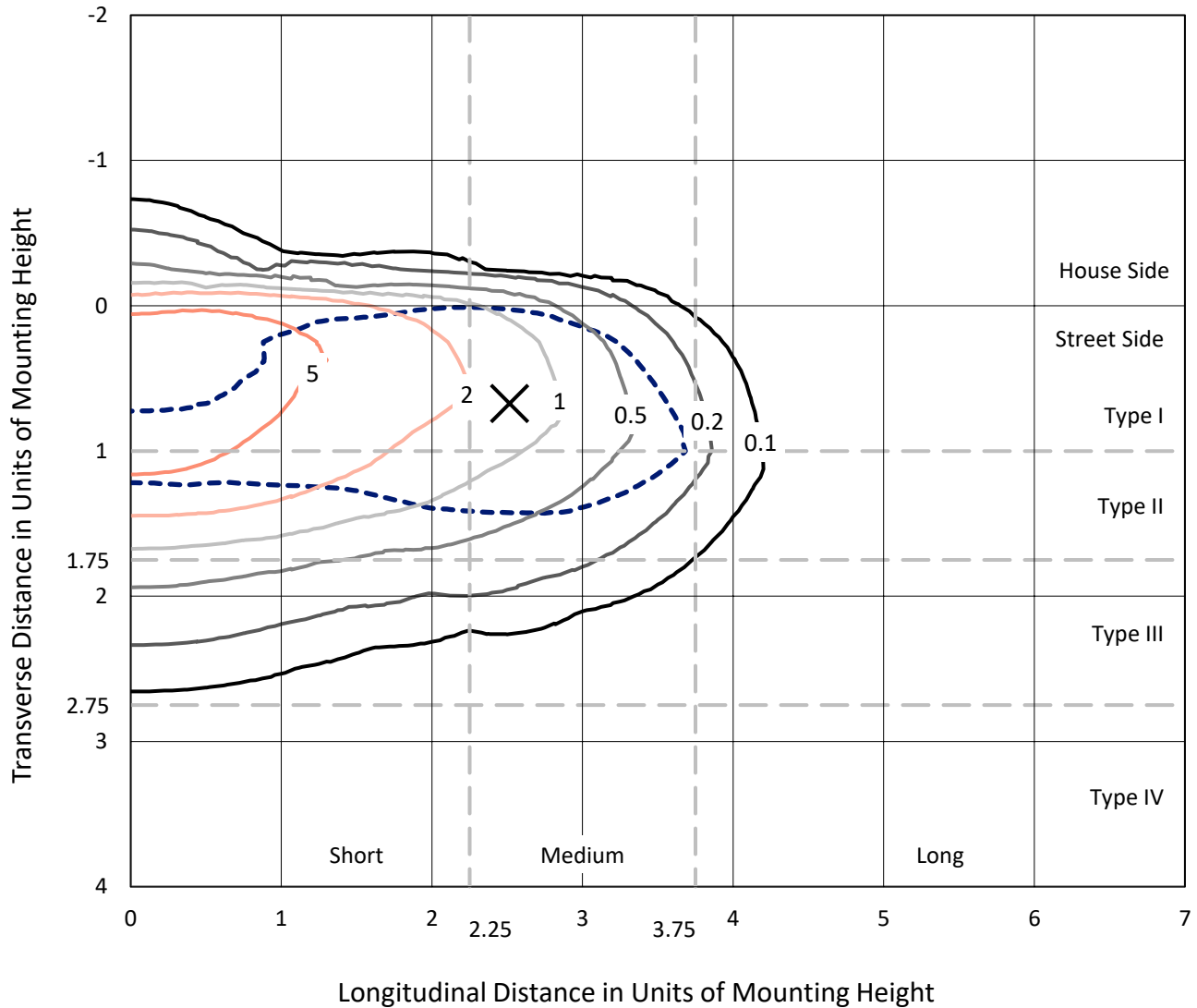
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

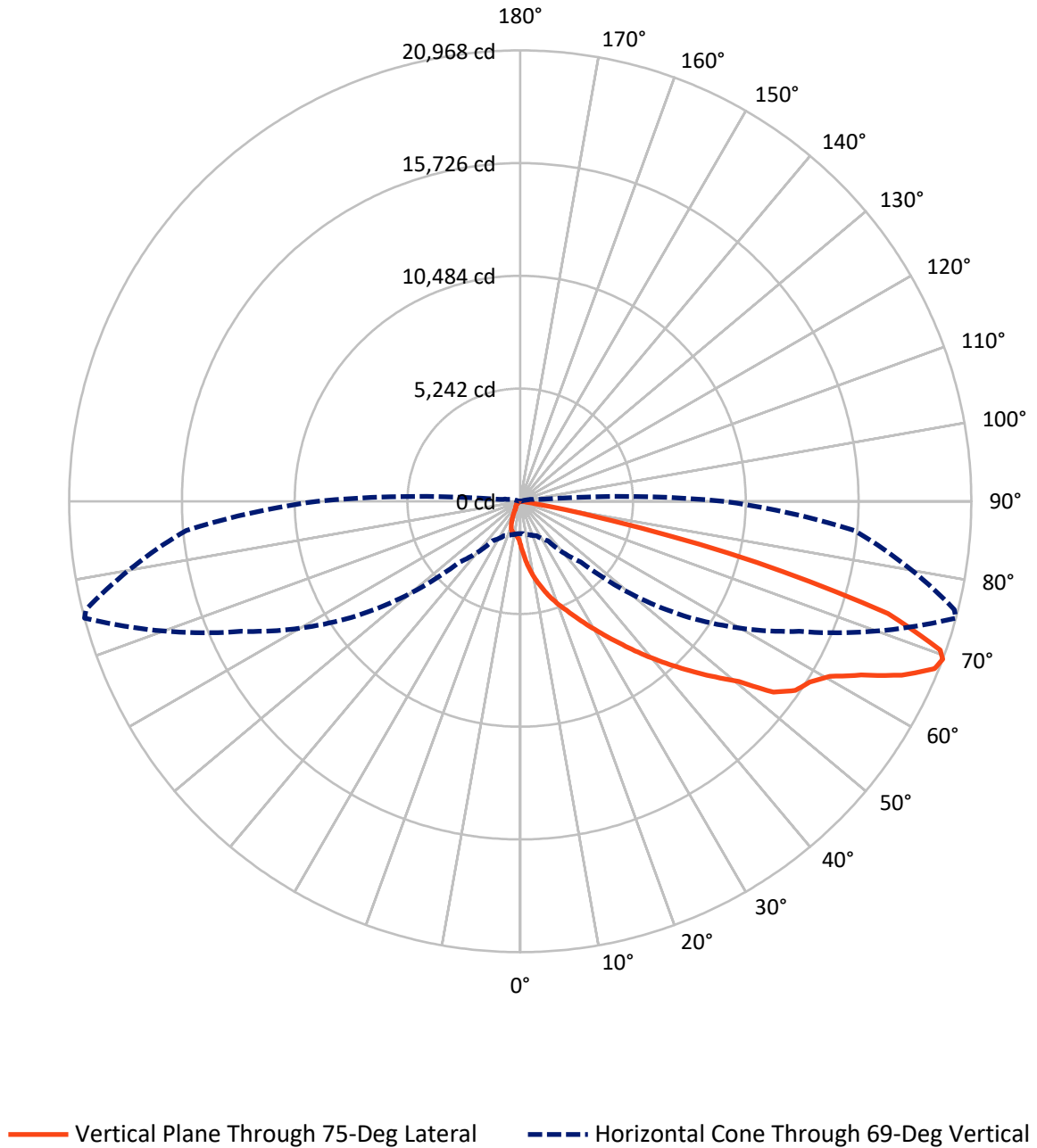
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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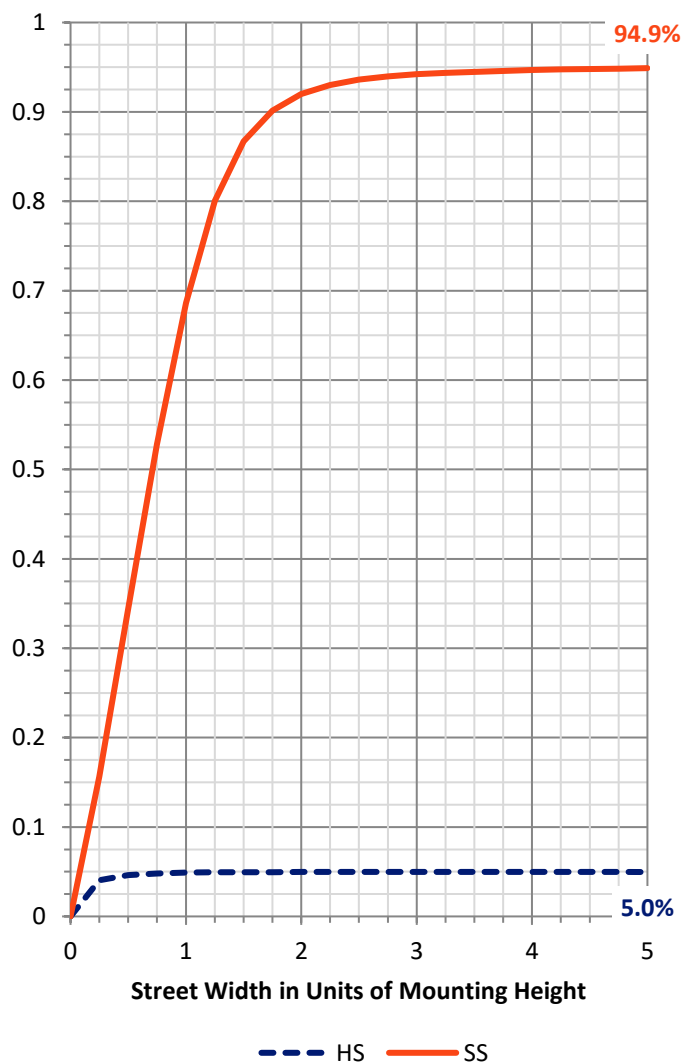
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1087.5	0.0	1087.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	20708.7	0.0	20708.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	21796.1	0.0	21796.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.5	1.1
10°-20°	845.5	3.9
20°-30°	1614.1	7.4
30°-40°	2895.3	13.3
40°-50°	4435.9	20.4
50°-60°	5155.5	23.7
60°-70°	4565.3	20.9
70°-80°	1969.2	9.0
80°-90°	78.9	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°	21796.1	100.0
0°-180°	21796.1	100.0

Coefficient of Utilization



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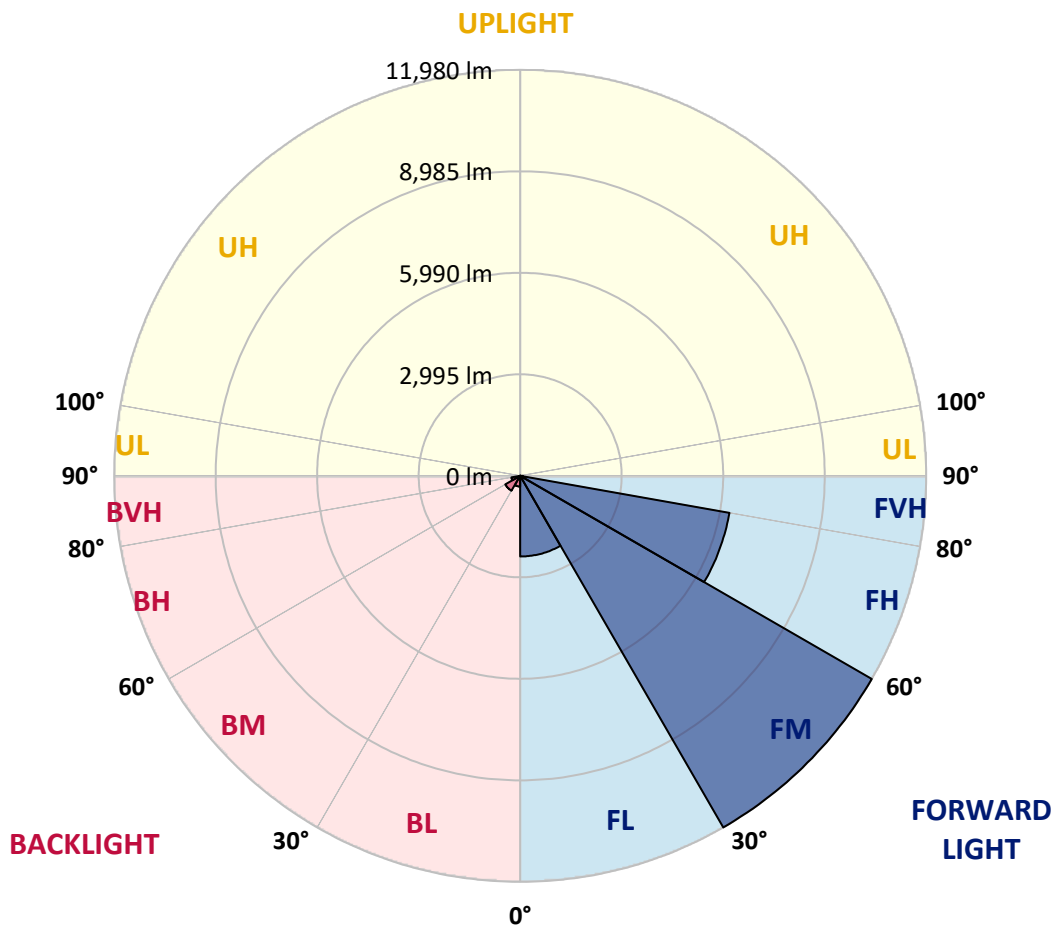
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2380.2	10.9			
FM (30°-60°)	11979.7	55.0			
FH (60°-80°)	6271.0	28.8			G3/7500
FVH (80°-90°)	77.7	0.4			G1/100
BL (0°-30°)	315.8	1.4	B1/500		
BM (30°-60°)	507.0	2.3	B1/1000		
BH (60°-80°)	263.5	1.2	B1/500		G1/500
BVH (80°-90°)	1.1	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1
2.5°	3341.0	3308.1	3275.1	3237.5	3152.7	3007.0	2823.4	2625.7	2381.1	2338.7	2141.1
5°	4056.2	4042.1	4009.2	3957.5	3863.3	3703.4	3496.3	3204.6	2795.2	2724.6	2305.8
7.5°	4559.7	4550.3	4522.1	4460.9	4376.3	4216.2	3999.8	3684.6	3209.3	3129.1	2512.9
10°	5011.5	5006.8	4983.2	4926.8	4842.1	4668.0	4437.3	4108.0	3604.5	3515.1	2752.8
12.5°	5420.9	5425.6	5416.2	5387.9	5326.7	5162.1	4898.5	4541.0	3985.7	3886.8	3039.8
15°	5660.8	5674.9	5712.6	5769.1	5787.9	5656.2	5383.2	4987.9	4376.3	4291.4	3369.2
17.5°	5580.9	5594.9	5712.6	5905.6	6089.0	6107.9	5863.2	5411.5	4762.1	4677.4	3693.9
20°	5387.9	5406.8	5529.1	5792.6	6150.2	6399.7	6300.9	5872.5	5129.1	5025.6	4004.5
22.5°	5604.4	5604.4	5642.0	5802.0	6126.7	6517.4	6649.1	6333.8	5505.6	5378.5	4315.0
25°	6347.9	6333.8	6253.8	6187.9	6291.3	6639.5	6912.5	6804.3	5947.8	5802.0	4644.4
27.5°	7289.0	7354.9	7204.3	6964.3	6729.1	6879.6	7147.8	7270.2	6437.3	6286.7	4983.2
30°	8343.0	8371.3	8192.5	7872.4	7458.4	7312.5	7425.5	7670.1	6969.0	6804.3	5336.2
32.5°	9293.6	9270.1	9119.6	8785.4	8272.4	7957.3	7783.1	7990.1	7547.8	7359.6	5698.5
35°	10135.9	10154.8	9971.2	9585.4	9081.8	8747.8	8333.6	8352.5	8197.1	7980.8	6117.3
37.5°	10893.4	10860.6	10686.4	10300.6	9844.1	9481.8	9044.2	8728.9	8907.7	8681.8	6587.9
40°	11509.9	11477.0	11293.5	10917.0	10488.8	10192.4	9848.8	9232.4	9655.9	9397.2	7091.4
42.5°	11999.3	11961.7	11806.4	11444.1	11029.9	10766.4	10601.8	9853.5	10455.9	10197.0	7656.1
45°	12239.3	12206.3	12112.3	11839.4	11477.0	11246.4	11326.5	10568.8	11312.2	11095.9	8277.2
47.5°	11957.0	11942.9	12051.1	12004.0	11796.9	11674.7	11952.3	11350.0	12211.1	11999.3	8992.5
50°	11100.5	11124.1	11439.3	11829.9	11928.7	12074.6	12465.2	12173.4	13175.7	12949.9	9816.0
52.5°	8987.7	9147.7	10098.3	11039.3	11768.8	12319.3	13067.5	13349.9	14747.4	14526.2	11100.5
55°	6710.2	6776.0	7811.4	9420.7	11124.1	12300.5	13514.5	14041.6	15523.9	15297.9	11439.3
57.5°	5322.0	5345.6	5858.5	7500.7	9797.1	11877.0	13749.8	14291.0	15862.6	15674.5	11942.9
60°	4178.6	4206.8	4578.6	5707.9	7929.0	10733.5	13411.0	14507.5	16526.1	16375.6	12822.7
62.5°	3251.5	3279.9	3505.7	4169.3	5947.8	8973.6	12728.7	14855.7	17787.2	17716.6	14262.7
65°	2517.6	2526.9	2682.2	2992.7	4202.1	7067.9	11895.8	15180.4	19490.6	19429.5	15429.7
67.5°	1858.7	1872.8	1981.1	2174.0	2837.5	5077.4	10531.2	14931.0	20775.3	20596.5	15853.2
69°	1501.1	1515.2	1609.3	1764.6	2240.0	3999.8	9284.2	14314.5	20968.3	20798.8	15585.0
70°	1284.7	1294.0	1388.1	1519.9	1910.5	3397.4	8296.0	13782.7	20714.1	20549.5	14973.3
72.5°	823.5	870.6	964.6	1049.3	1265.8	2249.3	5599.6	11429.9	17872.0	17589.6	11726.4
75°	456.4	470.6	639.9	743.5	842.3	1463.4	3115.1	7129.0	11368.8	11171.1	6272.6
77.5°	376.4	385.9	451.8	564.7	564.7	818.8	1176.4	2809.3	4324.5	3901.0	1698.8
80°	263.6	272.9	343.5	371.7	404.7	461.2	381.2	616.4	668.2	592.9	254.1
82.5°	183.5	193.0	235.2	305.8	324.7	216.5	141.2	183.5	193.0	193.0	98.8
85°	32.9	47.1	174.2	254.1	193.0	65.9	80.0	65.9	61.1	65.9	23.5
87.5°	0.0	0.0	108.2	122.4	103.6	28.2	32.9	23.5	14.1	18.8	9.4
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°	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1	2028.1
2.5°	2042.3	1943.4	1774.1	1651.7	1548.1	1468.1	1435.2	1383.4	1345.8	1364.6	1341.0
5°	2098.7	1924.6	1651.7	1477.5	1355.3	1251.7	1167.0	1101.2	1049.3	1039.9	1030.6
7.5°	2188.1	1938.7	1581.1	1364.6	1181.1	1021.1	889.4	790.5	715.2	715.2	687.0
10°	2310.5	1976.4	1538.7	1251.7	978.8	762.3	630.5	536.5	498.8	494.1	484.7
12.5°	2479.8	2047.0	1505.8	1105.8	762.3	555.2	475.3	442.3	428.2	423.5	418.8
15°	2710.4	2150.4	1468.1	926.9	578.7	456.4	423.5	395.3	381.2	376.4	371.7
17.5°	2931.7	2244.6	1388.1	743.5	470.6	414.1	376.4	352.9	334.2	329.4	329.4
20°	3138.7	2324.6	1251.7	578.7	423.5	371.7	334.2	305.8	287.1	282.3	282.3
22.5°	3355.2	2390.5	1082.3	470.6	385.9	329.4	291.7	263.6	244.7	240.0	235.2
25°	3585.7	2437.5	889.4	418.8	348.2	291.7	249.4	225.8	211.8	207.0	202.3
27.5°	3835.1	2456.3	705.9	381.2	305.8	254.1	216.5	193.0	183.5	178.8	178.8
30°	4060.9	2437.5	545.9	338.8	268.2	221.1	188.3	169.4	159.9	155.2	155.2
32.5°	4296.2	2390.5	437.6	301.1	235.2	188.3	159.9	145.9	141.2	136.5	136.5
35°	4545.6	2329.3	376.4	268.2	202.3	164.7	141.2	131.7	127.1	122.4	122.4
37.5°	4837.4	2254.0	343.5	240.0	178.8	145.9	122.4	117.7	113.0	113.0	113.0
40°	5166.8	2159.8	320.0	216.5	159.9	127.1	108.2	103.6	98.8	98.8	98.8
42.5°	5515.0	2051.7	296.4	193.0	141.2	108.2	94.1	94.1	89.4	89.4	84.6
45°	5905.6	1943.4	272.9	169.4	122.4	94.1	80.0	75.3	75.3	70.6	70.6
47.5°	6366.7	1844.7	249.4	150.6	108.2	80.0	70.6	65.9	61.1	56.5	56.5
50°	7016.1	1835.2	221.1	131.7	98.8	65.9	56.5	51.8	47.1	42.4	42.4
52.5°	7660.7	1750.5	188.3	108.2	80.0	56.5	42.4	37.7	32.9	32.9	28.2
55°	7806.6	1609.3	164.7	94.1	61.1	42.4	32.9	23.5	23.5	18.8	18.8
57.5°	8126.6	1543.4	141.2	75.3	47.1	32.9	18.8	14.1	14.1	14.1	14.1
60°	8757.1	1524.6	122.4	65.9	32.9	23.5	14.1	9.4	9.4	4.7	4.7
62.5°	9627.7	1505.8	103.6	56.5	23.5	14.1	9.4	4.7	0.0	0.0	0.0
65°	10107.7	1378.8	84.6	42.4	18.8	14.1	4.7	0.0	0.0	0.0	0.0
67.5°	9980.7	1138.8	75.3	28.2	14.1	9.4	4.7	0.0	0.0	0.0	0.0
69°	9448.8	960.0	61.1	23.5	14.1	9.4	4.7	0.0	0.0	0.0	0.0
70°	8808.9	828.1	56.5	18.8	9.4	4.7	4.7	0.0	0.0	0.0	0.0
72.5°	6253.8	432.8	37.7	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
75°	2922.1	193.0	23.5	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	644.6	89.4	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	122.4	32.9	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.4	14.1	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	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)