

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: P265577

Luminaire Tested: **ARCH-L-AF72-90-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-90-D-U-T3-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8295.5 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 93  
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

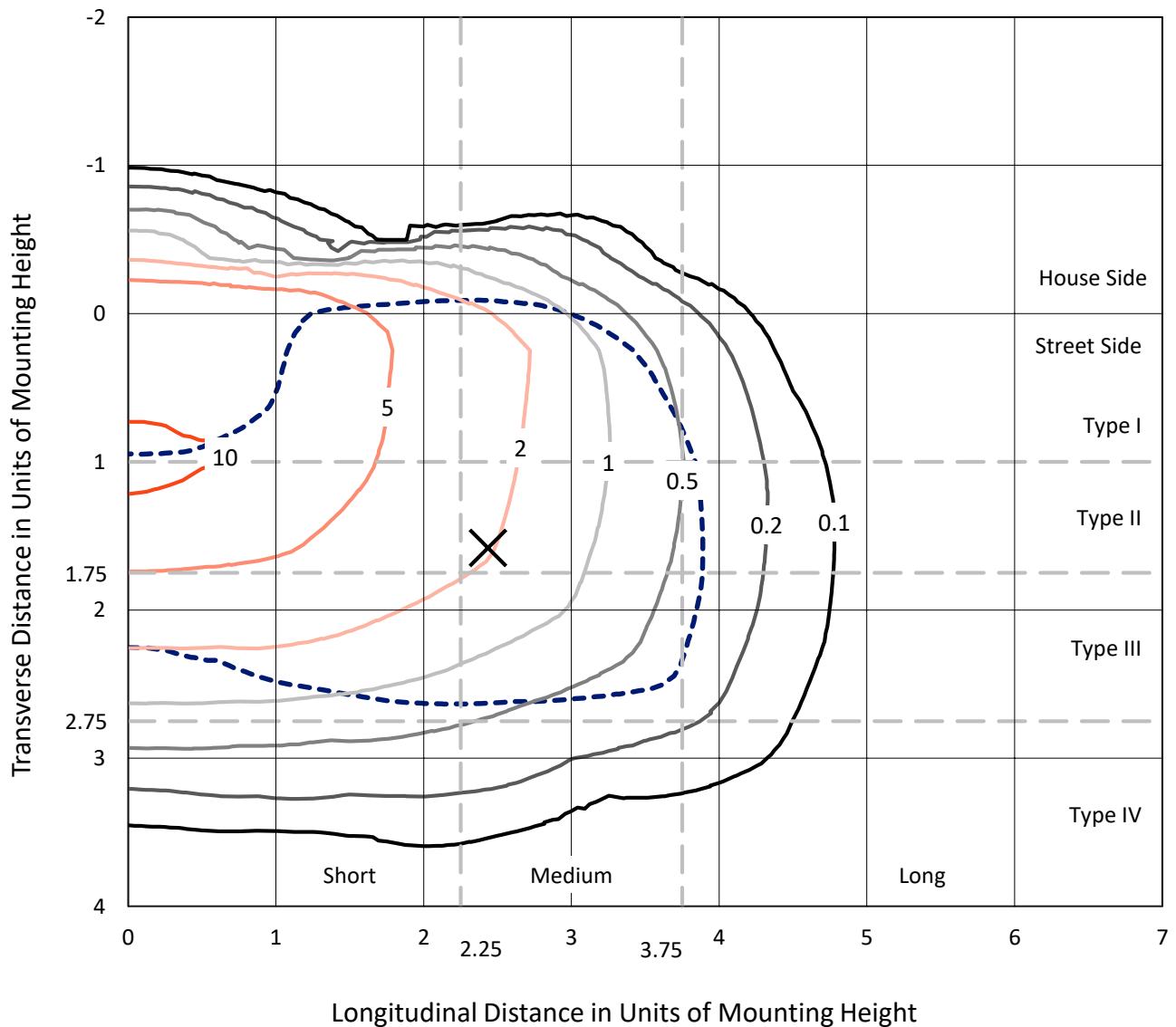


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

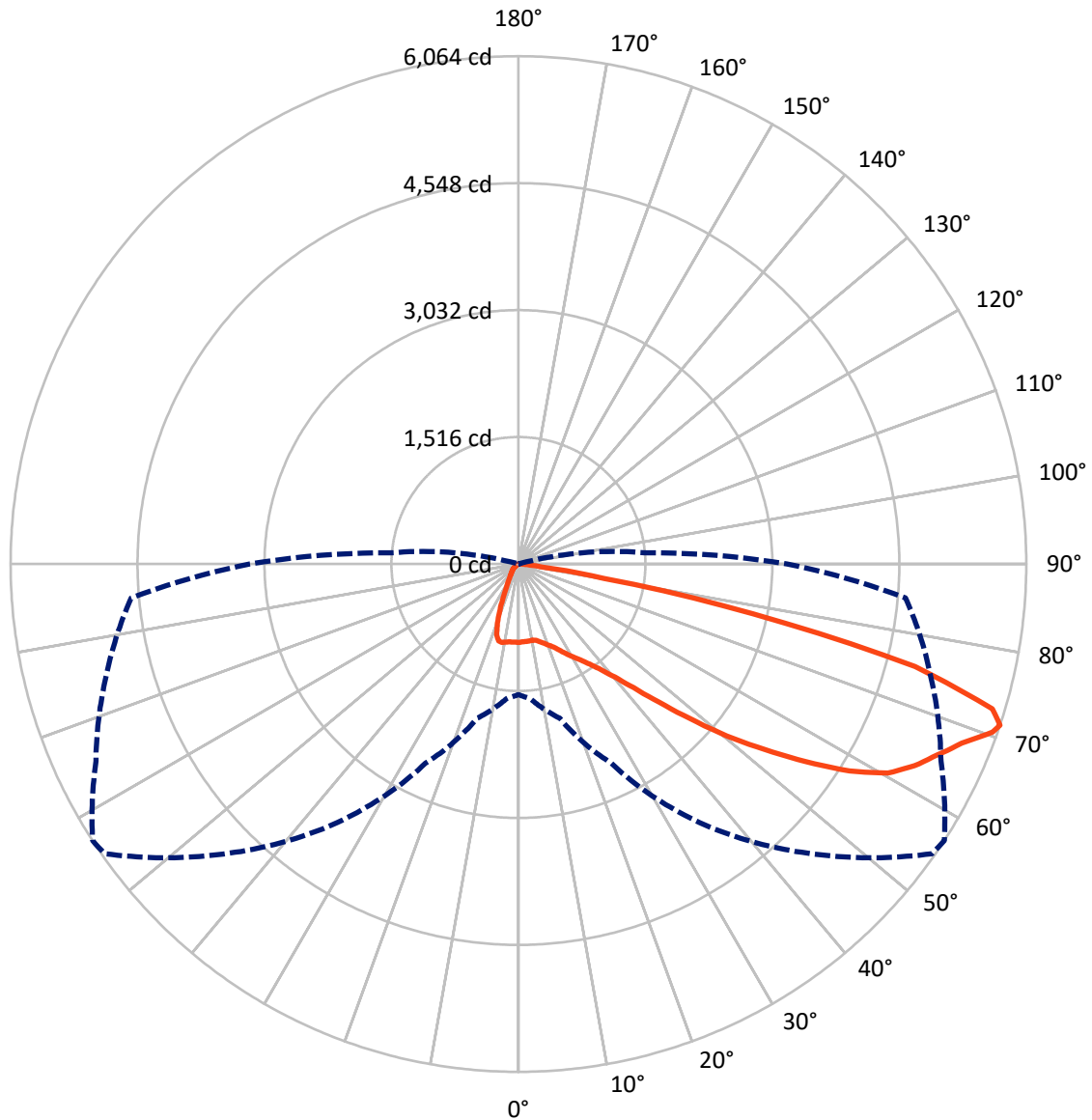


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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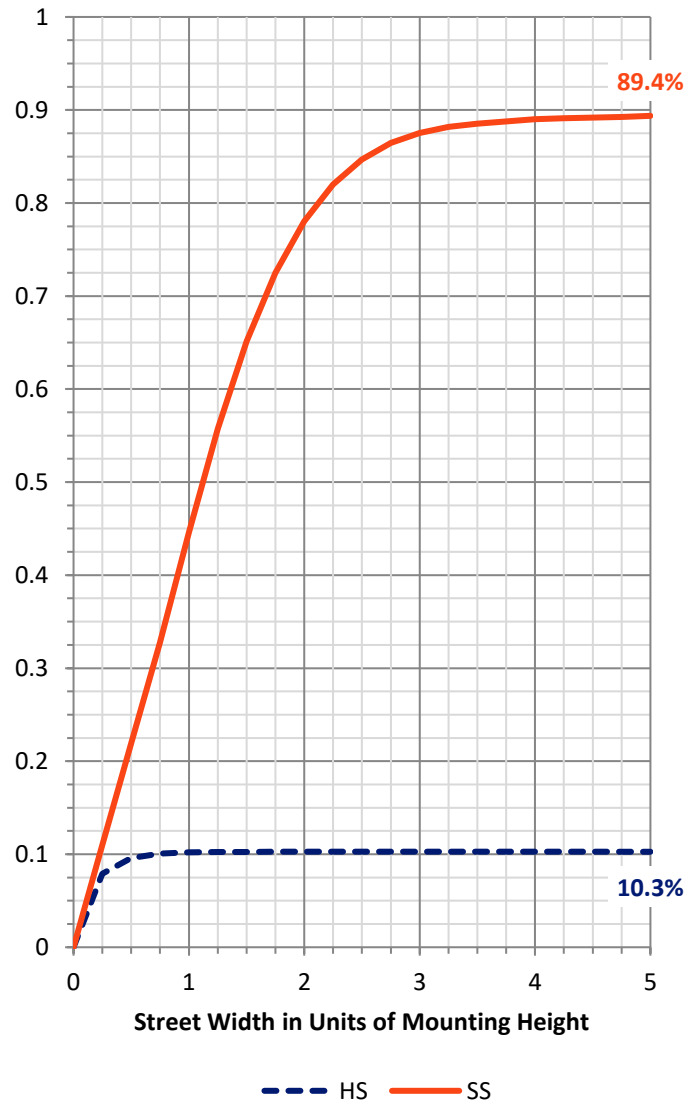
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	859.6	0.0	859.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	7435.8	0.0	7435.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	8295.5	0.0	8295.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	1.1
10°-20°	235.4	2.8
20°-30°	367.2	4.4
30°-40°	620.7	7.5
40°-50°	1205.6	14.5
50°-60°	2024.5	24.4
60°-70°	2416.0	29.1
70°-80°	1273.3	15.3
80°-90°	64.7	0.8
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°	8295.5	100.0
0°-180°	8295.5	100.0

**Coefficient of Utilization**



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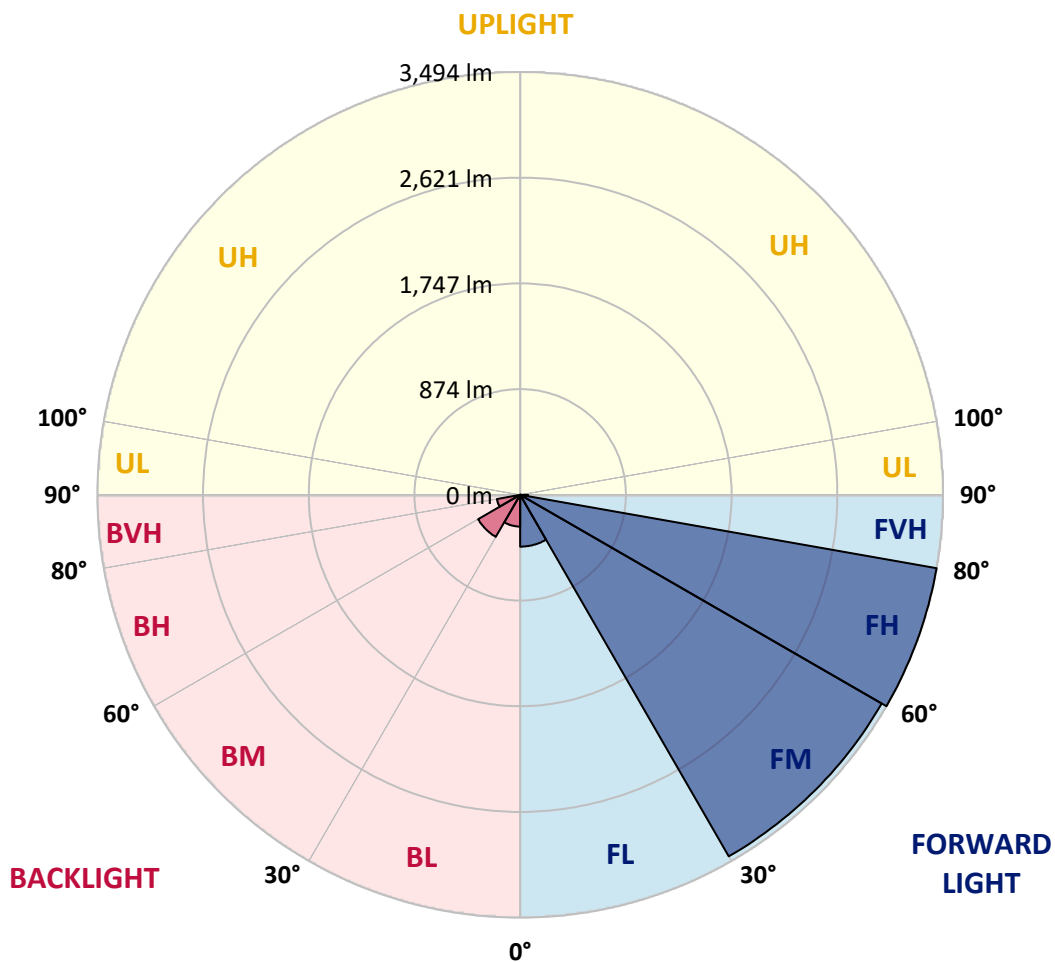
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	428.3	5.2			
FM	(30°-60°)	3449.3	41.6			
FH	(60°-80°)	3494.1	42.1			G2/5000
FVH	(80°-90°)	64.1	0.8			G1/100
BL	(0°-30°)	262.4	3.2	B1/500		
BM	(30°-60°)	401.4	4.8	B1/1000		
BH	(60°-80°)	195.2	2.4	B1/500		G1/500
BVH	(80°-90°)	0.6	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-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6
2.5°	923.9	923.9	923.9	926.0	927.9	927.9	931.7	929.7	929.7	929.7	933.7
5°	898.8	900.8	902.7	906.6	914.4	920.1	929.7	929.7	931.7	935.6	937.6
7.5°	864.1	866.0	871.7	879.5	895.0	908.5	923.9	927.9	933.7	943.3	947.3
10°	842.8	846.7	854.4	864.1	881.4	898.8	918.2	923.9	941.3	958.9	968.5
12.5°	837.0	838.9	846.7	862.2	883.5	904.7	929.7	935.6	960.6	987.7	1003.2
15°	846.7	848.5	852.4	869.9	895.0	922.0	954.9	962.7	993.5	1024.4	1043.8
17.5°	864.1	864.1	867.9	883.5	910.4	941.3	984.0	995.5	1030.3	1065.1	1086.4
20°	875.7	875.7	881.4	896.9	927.9	968.5	1018.7	1034.2	1072.8	1111.6	1130.8
22.5°	887.3	889.2	895.0	912.4	947.3	1003.2	1061.3	1076.7	1121.2	1161.8	1181.1
25°	920.1	918.2	920.1	935.6	976.2	1045.7	1119.2	1138.5	1185.0	1229.4	1239.0
27.5°	1011.0	1007.1	981.9	972.3	1003.2	1090.3	1192.7	1212.1	1266.2	1310.5	1310.5
30°	1219.8	1212.1	1150.1	1070.9	1045.7	1130.8	1262.3	1289.3	1359.0	1397.6	1385.9
32.5°	1484.5	1467.1	1387.9	1252.5	1152.0	1185.0	1335.7	1366.6	1455.6	1488.4	1463.2
35°	1774.5	1772.5	1674.0	1500.0	1357.0	1297.1	1430.5	1467.1	1579.3	1608.2	1567.7
37.5°	2081.8	2089.5	2023.9	1784.2	1616.1	1480.6	1556.0	1598.7	1735.9	1770.6	1732.0
40°	2423.9	2422.1	2396.9	2112.9	1927.3	1741.6	1737.9	1776.5	1942.7	1996.8	1942.7
42.5°	2857.0	2853.1	2762.3	2507.1	2304.2	2081.8	2002.6	2016.2	2201.7	2290.6	2211.4
45°	3297.8	3270.6	3166.3	2945.9	2766.2	2503.2	2352.5	2352.5	2511.0	2632.8	2509.1
47.5°	3543.3	3516.1	3473.7	3351.8	3297.8	3003.9	2781.6	2754.6	2878.3	3002.0	2828.0
50°	3866.0	3866.0	3759.8	3713.4	3806.1	3599.2	3255.2	3228.1	3288.1	3386.7	3158.6
52.5°	4121.2	4074.8	3999.4	4039.9	4304.9	4210.1	3728.9	3676.7	3722.9	3748.1	3446.5
55°	4227.6	4183.0	4177.3	4326.1	4736.0	4604.4	4213.9	4167.5	4163.7	4039.9	3697.9
57.5°	4248.8	4210.1	4283.6	4544.5	5155.4	4927.3	4697.2	4662.5	4554.1	4244.9	3955.0
60°	4069.1	4088.4	4266.2	4664.4	5402.8	5207.6	5105.1	5068.3	4819.0	4418.9	4241.1
62.5°	3699.8	3746.2	4078.7	4675.9	5311.9	5321.6	5331.4	5306.2	5024.0	4577.5	4529.1
65°	3263.0	3276.5	3676.7	4515.5	5153.4	5286.9	5497.4	5495.7	5180.4	4755.3	4853.8
67.5°	2688.8	2712.1	3058.0	3974.3	4836.5	5271.3	5715.9	5710.2	5358.3	4958.1	5047.0
70°	2000.6	2029.7	2309.9	3090.9	4128.9	5078.1	6002.0	6005.9	5545.9	5112.9	4913.8
71°	1559.9	1612.2	1905.9	2625.0	3767.4	4882.7	6029.1	6063.9	5567.1	5091.6	4639.2
72.5°	765.4	827.2	1196.5	1848.0	3100.6	4445.9	5851.3	5918.9	5433.7	4826.8	3966.6
75°	199.2	210.7	357.6	755.8	1662.5	2945.9	4718.4	4890.6	4442.1	3674.6	2423.9
77.5°	125.7	129.5	168.2	293.8	622.4	1119.2	2772.0	2857.0	2538.0	1861.5	854.4
80°	88.9	90.9	106.3	189.5	363.5	326.7	997.5	1034.2	918.2	492.9	152.7
82.5°	54.1	54.1	77.3	121.8	224.2	177.9	262.9	280.4	247.5	137.3	50.2
85°	30.9	32.9	48.2	83.2	106.3	87.0	98.5	104.5	106.3	90.9	21.3
87.5°	25.2	27.0	42.5	69.6	58.0	42.5	42.5	44.5	46.4	54.1	9.6
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°	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6	937.6
2.5°	933.7	933.7	935.6	933.7	933.7	933.7	935.6	935.6	935.6	939.4	941.3
5°	937.6	937.6	937.6	935.6	933.7	933.7	937.6	939.4	939.4	945.2	945.2
7.5°	947.3	947.3	943.3	939.4	935.6	929.7	931.7	933.7	931.7	933.7	933.7
10°	968.5	968.5	962.7	954.9	943.3	926.0	902.7	873.7	846.7	837.0	833.2
12.5°	1003.2	1001.3	989.8	976.2	951.0	891.1	804.2	701.7	616.6	593.4	585.8
15°	1041.9	1038.0	1024.4	1001.3	933.7	775.1	593.4	462.0	380.8	361.5	357.6
17.5°	1082.5	1076.7	1057.3	1011.0	854.4	576.1	382.8	290.0	245.4	241.6	243.6
20°	1124.9	1117.3	1090.3	991.5	690.1	384.7	247.5	224.2	220.4	220.4	222.3
22.5°	1173.4	1163.7	1127.0	922.0	502.6	255.2	212.5	210.7	208.8	206.8	206.8
25°	1229.4	1217.8	1161.8	796.3	345.9	208.8	202.9	197.2	193.2	189.5	187.4
27.5°	1297.1	1281.6	1188.7	641.7	237.7	195.2	191.3	181.6	174.0	166.2	166.2
30°	1364.7	1345.4	1181.1	483.3	193.2	181.6	174.0	162.4	150.7	143.0	141.2
32.5°	1436.2	1416.8	1130.8	324.7	175.9	166.2	156.6	139.1	125.7	116.1	114.1
35°	1542.6	1527.1	1032.2	214.5	158.6	147.0	133.4	116.1	98.5	88.9	87.0
37.5°	1701.1	1681.7	910.4	164.3	139.1	121.8	110.2	90.9	73.4	63.8	61.9
40°	1913.7	1855.7	765.4	144.9	121.8	100.5	85.1	65.8	52.2	46.4	46.4
42.5°	2161.1	2023.9	609.0	131.4	108.2	83.2	61.9	44.5	36.7	34.9	34.9
45°	2423.9	2180.5	452.3	121.8	94.7	65.8	44.5	30.9	27.0	25.2	25.2
47.5°	2694.6	2308.0	315.0	110.2	79.2	50.2	30.9	23.1	19.4	17.3	17.3
50°	2947.9	2391.2	222.3	98.5	67.6	36.7	23.1	17.3	13.6	13.6	13.6
52.5°	3123.8	2383.5	160.4	85.1	52.2	25.2	15.5	11.6	11.6	11.6	11.6
55°	3278.5	2354.4	125.7	73.4	40.7	17.3	11.6	9.6	9.6	7.7	7.7
57.5°	3409.8	2308.0	106.3	59.9	28.9	13.6	7.7	7.7	5.7	5.7	5.7
60°	3522.0	2250.1	88.9	50.2	19.4	9.6	5.7	3.9	3.9	1.9	3.9
62.5°	3674.6	2213.3	77.3	38.6	13.6	5.7	3.9	1.9	1.9	0.0	0.0
65°	3786.7	2143.7	65.8	27.0	7.7	3.9	1.9	1.9	0.0	0.0	0.0
67.5°	3790.7	2018.1	48.2	15.5	5.7	3.9	1.9	0.0	0.0	0.0	0.0
70°	3485.2	1720.3	30.9	7.7	3.9	1.9	1.9	0.0	0.0	0.0	0.0
71°	3205.0	1523.3	25.2	5.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0
72.5°	2640.5	1119.2	19.4	5.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0
75°	1455.6	405.9	9.6	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	465.9	123.6	5.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	79.2	19.4	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.0	7.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	1.9	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)