

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: P236970

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA 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: 17944.6 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

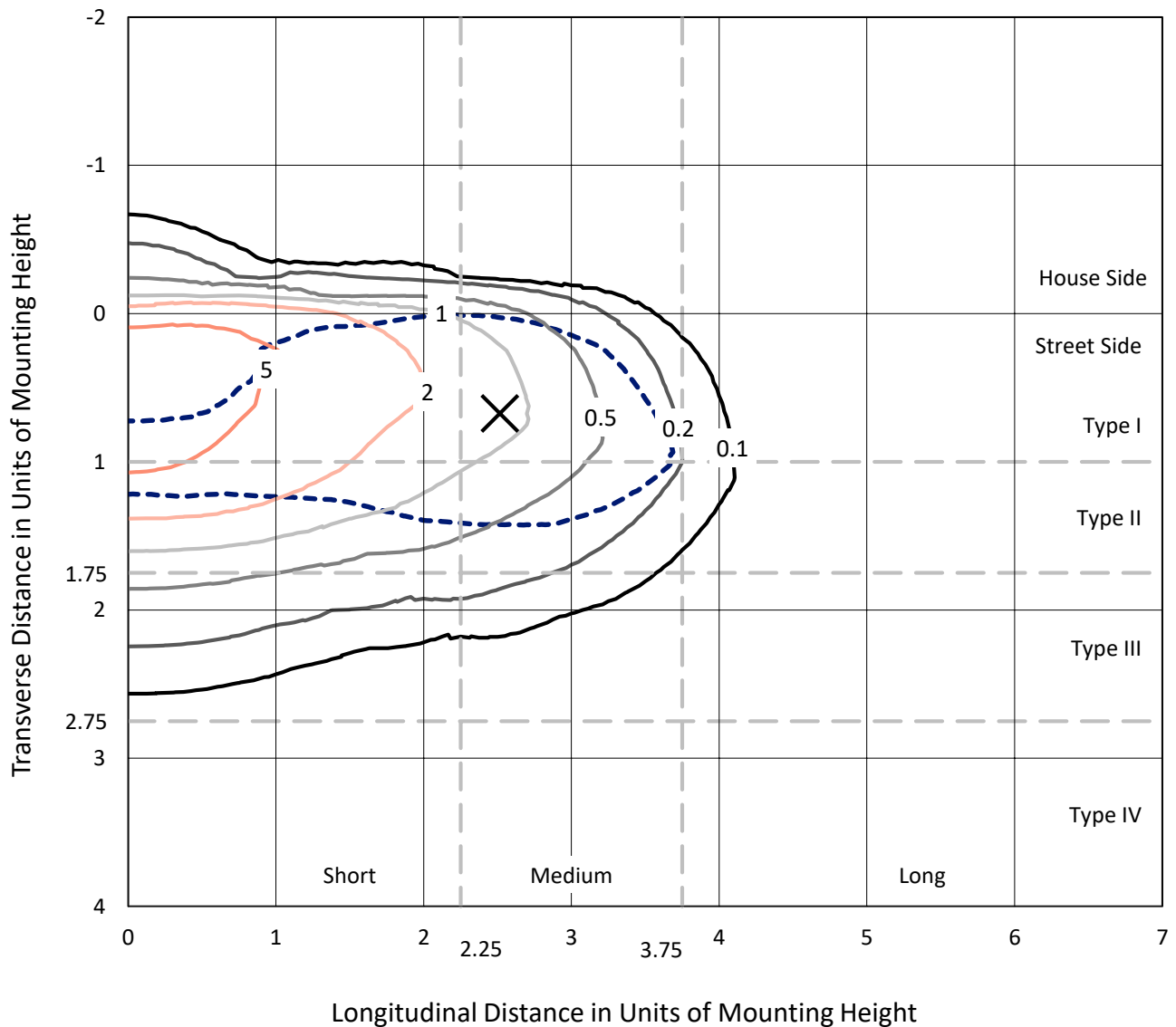
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

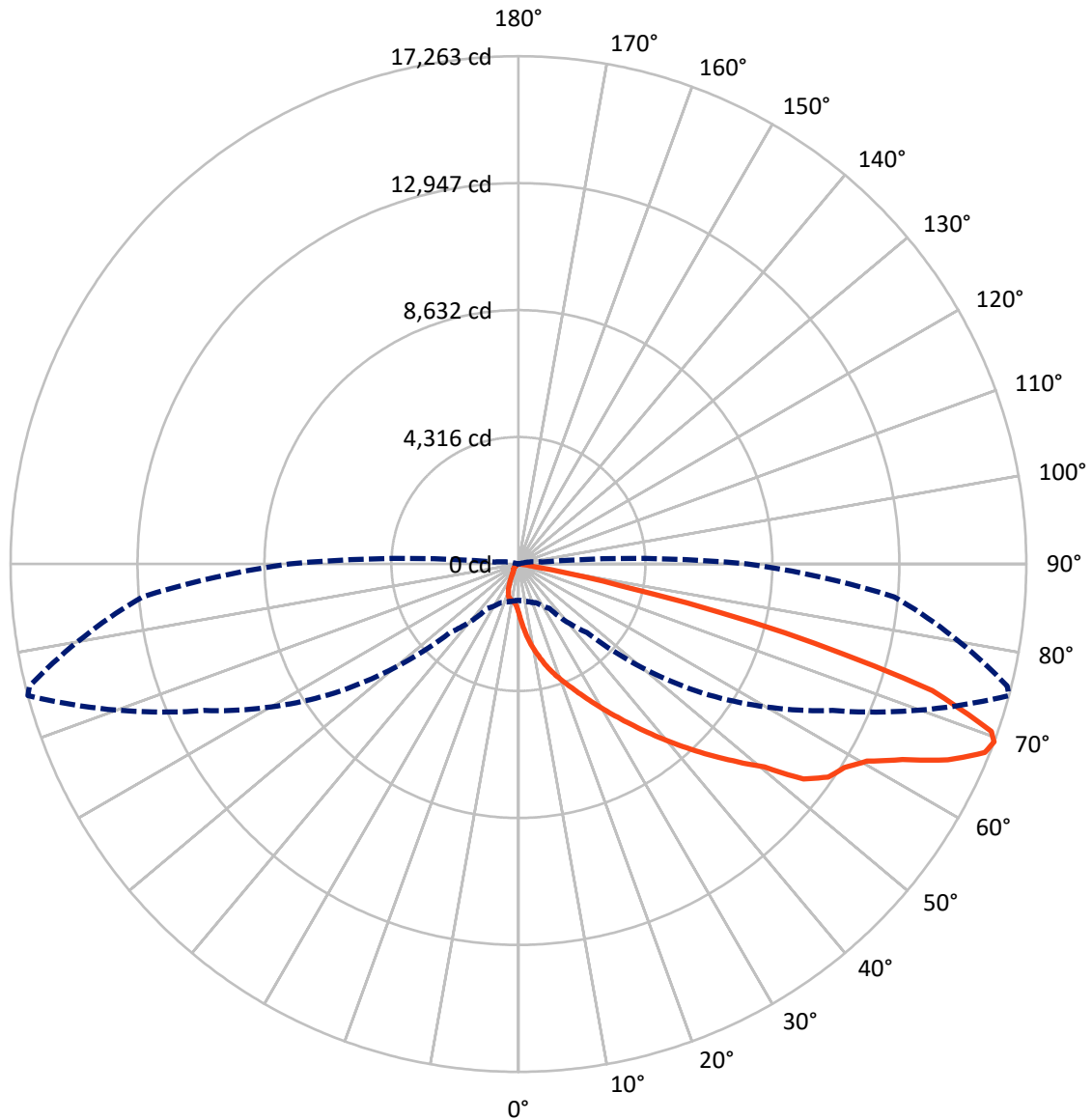
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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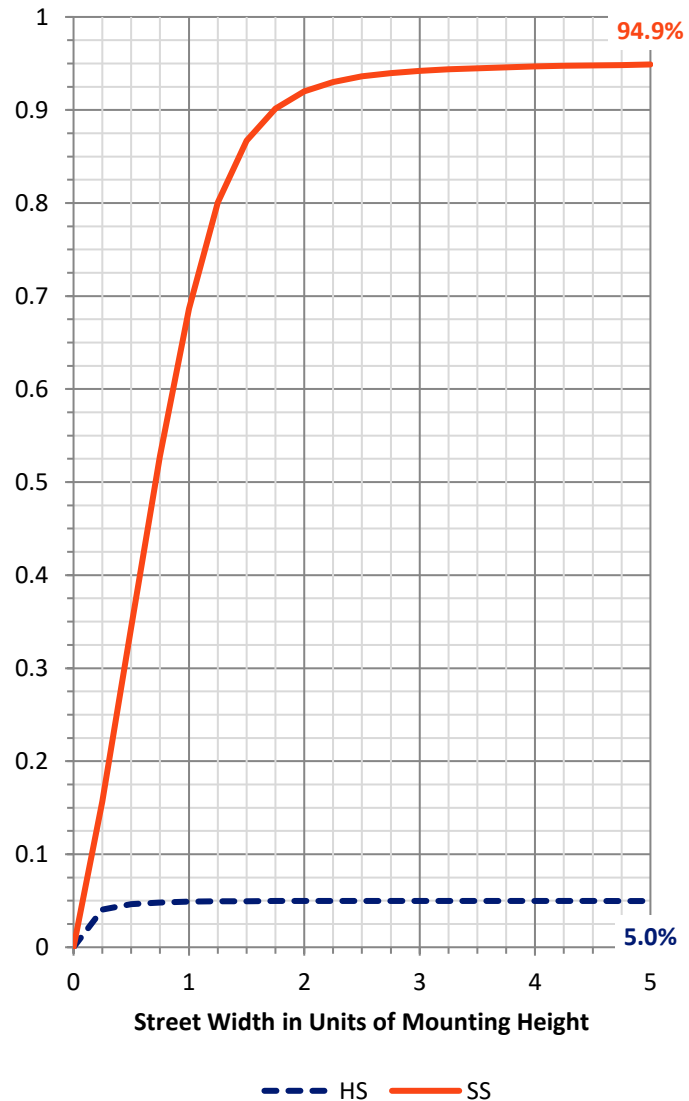
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	895.3	0.0	895.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	17049.3	0.0	17049.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	17944.6	0.0	17944.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	1.1
10°-20°	696.1	3.9
20°-30°	1328.8	7.4
30°-40°	2383.7	13.3
40°-50°	3652.0	20.4
50°-60°	4244.5	23.7
60°-70°	3758.6	20.9
70°-80°	1621.2	9.0
80°-90°	65.0	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°	17944.6	100.0
0°-180°	17944.6	100.0

Coefficient of Utilization



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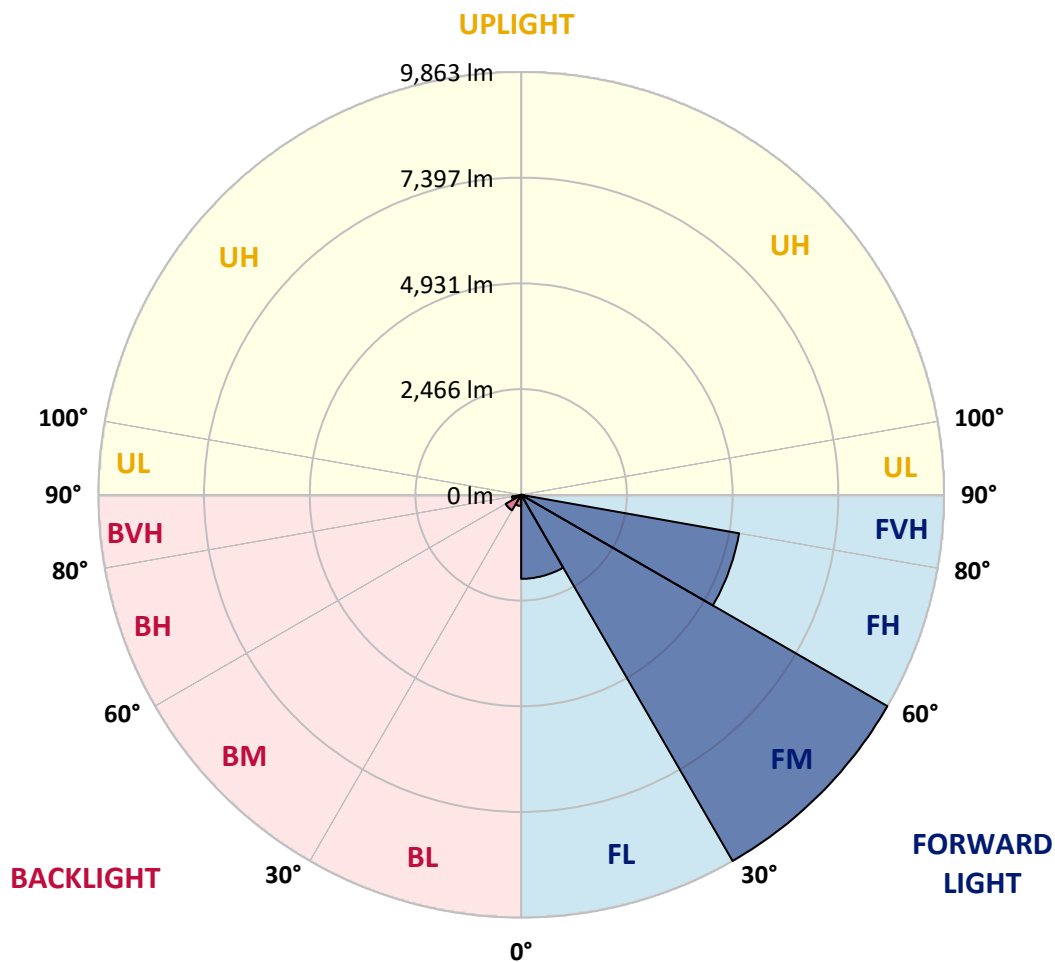
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1959.6	10.9			
FM	(30°-60°)	9862.8	55.0			
FH	(60°-80°)	5162.9	28.8			G3/7500
FVH	(80°-90°)	64.0	0.4			G1/100
BL	(0°-30°)	260.0	1.4	B1/500		
BM	(30°-60°)	417.4	2.3	B1/1000		
BH	(60°-80°)	216.9	1.2	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8
2.5°	2750.6	2723.5	2696.4	2665.4	2595.6	2475.5	2324.5	2161.7	1960.3	1925.4	1762.7
5°	3339.5	3327.9	3300.8	3258.1	3180.7	3048.9	2878.5	2638.3	2301.2	2243.1	1898.3
7.5°	3754.0	3746.3	3723.0	3672.7	3602.9	3471.2	3293.0	3033.5	2642.2	2576.3	2068.8
10°	4126.0	4122.1	4102.6	4056.2	3986.4	3843.1	3653.3	3382.1	2967.6	2893.9	2266.3
12.5°	4462.9	4466.8	4459.0	4435.8	4385.5	4249.8	4033.0	3738.5	3281.3	3200.0	2502.6
15°	4660.6	4672.1	4703.1	4749.7	4765.1	4656.7	4431.9	4106.5	3602.9	3533.2	2773.8
17.5°	4594.7	4606.3	4703.1	4862.0	5013.1	5028.6	4827.1	4455.3	3920.6	3850.9	3041.1
20°	4435.8	4451.4	4552.0	4769.0	5063.5	5268.8	5187.4	4834.9	4222.7	4137.5	3296.9
22.5°	4614.0	4614.0	4645.0	4776.8	5044.1	5365.7	5474.1	5214.6	4532.7	4428.1	3552.5
25°	5226.2	5214.6	5148.7	5094.4	5179.7	5466.3	5691.1	5602.0	4896.9	4776.8	3823.8
27.5°	6000.9	6055.3	5931.3	5733.6	5540.0	5664.0	5884.7	5985.5	5299.8	5175.8	4102.6
30°	6868.8	6892.0	6744.8	6481.4	6140.5	6020.4	6113.4	6314.8	5737.5	5602.0	4393.3
32.5°	7651.4	7632.0	7508.0	7233.0	6810.7	6551.1	6407.8	6578.2	6214.0	6059.1	4691.6
35°	8344.8	8360.3	8209.2	7891.6	7477.1	7202.0	6861.0	6876.6	6748.7	6570.5	5036.3
37.5°	8968.5	8941.4	8798.1	8480.4	8104.6	7806.3	7446.1	7186.4	7333.6	7147.8	5423.8
40°	9476.1	9448.9	9297.8	8988.0	8635.3	8391.3	8108.5	7601.0	7949.7	7736.6	5838.3
42.5°	9878.9	9847.9	9720.1	9421.8	9080.9	8864.0	8728.3	8112.4	8608.2	8395.2	6303.1
45°	10076.6	10049.5	9971.9	9747.3	9448.9	9259.1	9325.0	8701.2	9313.4	9135.2	6814.6
47.5°	9844.1	9832.5	9921.6	9882.8	9712.4	9611.6	9840.2	9344.3	10053.3	9878.9	7403.4
50°	9139.0	9158.4	9417.9	9739.5	9820.8	9940.9	10262.5	10022.3	10847.5	10661.5	8081.4
52.5°	7399.5	7531.3	8313.8	9088.6	9689.1	10142.4	10758.4	10990.8	12141.4	11959.3	9139.0
55°	5524.4	5578.7	6431.0	7755.9	9158.4	10126.9	11126.4	11560.4	12780.6	12594.7	9417.9
57.5°	4381.6	4400.9	4823.2	6175.3	8065.9	9778.3	11320.2	11765.7	13059.6	12904.6	9832.5
60°	3440.2	3463.4	3769.5	4699.3	6527.9	8836.9	11041.2	11943.9	13605.9	13481.9	10557.0
62.5°	2677.0	2700.3	2886.3	3432.4	4896.9	7388.0	10479.4	12230.5	14644.2	14586.1	11742.5
65°	2072.6	2080.4	2208.2	2463.9	3459.6	5819.0	9793.7	12497.9	16046.5	15996.2	12703.2
67.5°	1530.2	1541.9	1631.0	1789.9	2336.1	4180.2	8670.2	12292.5	17104.1	16956.9	13051.8
69°	1235.8	1247.5	1324.9	1452.8	1844.1	3293.0	7643.6	11785.0	17263.0	17123.6	12831.1
70°	1057.6	1065.4	1142.8	1251.4	1572.9	2797.1	6830.0	11347.3	17053.8	16918.2	12327.4
72.5°	678.0	716.7	794.2	863.9	1042.2	1851.8	4610.1	9410.2	14713.8	14481.4	9654.3
75°	375.8	387.4	526.9	612.1	693.5	1204.8	2564.6	5869.3	9359.8	9197.1	5164.2
77.5°	310.0	317.6	371.9	464.9	464.9	674.1	968.5	2312.8	3560.3	3211.7	1398.6
80°	217.0	224.7	282.8	306.1	333.2	379.6	313.8	507.5	550.1	488.2	209.2
82.5°	151.1	158.9	193.7	251.9	267.3	178.2	116.2	151.1	158.9	158.9	81.3
85°	27.1	38.8	143.3	209.2	158.9	54.2	65.9	54.2	50.3	54.2	19.3
87.5°	0.0	0.0	89.1	100.8	85.2	23.2	27.1	19.3	11.7	15.4	7.8
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°	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8	1669.8
2.5°	1681.3	1600.0	1460.6	1359.8	1274.6	1208.7	1181.6	1139.0	1108.0	1123.5	1104.1
5°	1727.9	1584.6	1359.8	1216.5	1115.7	1030.5	960.8	906.5	863.9	856.2	848.4
7.5°	1801.4	1596.1	1301.7	1123.5	972.4	840.7	732.2	650.8	588.9	588.9	565.6
10°	1902.2	1627.1	1266.8	1030.5	805.8	627.6	519.1	441.6	410.6	406.8	399.1
12.5°	2041.6	1685.2	1239.7	910.4	627.6	457.2	391.3	364.2	352.5	348.6	344.8
15°	2231.5	1770.4	1208.7	763.2	476.5	375.8	348.6	325.4	313.8	310.0	306.1
17.5°	2413.6	1848.0	1142.8	612.1	387.4	340.9	310.0	290.5	275.1	271.2	271.2
20°	2584.1	1913.8	1030.5	476.5	348.6	306.1	275.1	251.9	236.3	232.4	232.4
22.5°	2762.3	1968.1	891.1	387.4	317.6	271.2	240.2	217.0	201.4	197.5	193.7
25°	2952.0	2006.8	732.2	344.8	286.7	240.2	205.3	186.0	174.3	170.4	166.5
27.5°	3157.4	2022.3	581.1	313.8	251.9	209.2	178.2	158.9	151.1	147.2	147.2
30°	3343.3	2006.8	449.4	279.0	220.9	182.1	155.0	139.4	131.8	127.9	127.9
32.5°	3537.1	1968.1	360.3	248.0	193.7	155.0	131.8	120.1	116.2	112.3	112.3
35°	3742.4	1917.7	310.0	220.9	166.5	135.6	116.2	108.4	104.6	100.8	100.8
37.5°	3982.6	1855.7	282.8	197.5	147.2	120.1	100.8	96.9	93.0	93.0	93.0
40°	4253.7	1778.2	263.4	178.2	131.8	104.6	89.1	85.2	81.3	81.3	81.3
42.5°	4540.5	1689.1	244.1	158.9	116.2	89.1	77.4	77.4	73.7	73.7	69.8
45°	4862.0	1600.0	224.7	139.4	100.8	77.4	65.9	62.0	62.0	58.1	58.1
47.5°	5241.7	1518.7	205.3	124.0	89.1	65.9	58.1	54.2	50.3	46.4	46.4
50°	5776.3	1510.9	182.1	108.4	81.3	54.2	46.4	42.7	38.8	34.9	34.9
52.5°	6307.0	1441.1	155.0	89.1	65.9	46.4	34.9	31.0	27.1	27.1	23.2
55°	6427.1	1324.9	135.6	77.4	50.3	34.9	27.1	19.3	19.3	15.4	15.4
57.5°	6690.6	1270.7	116.2	62.0	38.8	27.1	15.4	11.7	11.7	11.7	11.7
60°	7209.8	1255.2	100.8	54.2	27.1	19.3	11.7	7.8	7.8	3.9	3.9
62.5°	7926.4	1239.7	85.2	46.4	19.3	11.7	7.8	3.9	0.0	0.0	0.0
65°	8321.6	1135.1	69.8	34.9	15.4	11.7	3.9	0.0	0.0	0.0	0.0
67.5°	8217.0	937.5	62.0	23.2	11.7	7.8	3.9	0.0	0.0	0.0	0.0
69°	7779.2	790.3	50.3	19.3	11.7	7.8	3.9	0.0	0.0	0.0	0.0
70°	7252.3	681.8	46.4	15.4	7.8	3.9	3.9	0.0	0.0	0.0	0.0
72.5°	5148.7	356.4	31.0	11.7	7.8	3.9	0.0	0.0	0.0	0.0	0.0
75°	2405.8	158.9	19.3	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0
77.5°	530.7	73.7	11.7	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	100.8	27.1	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.9	11.7	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	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)