

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: P236968

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236968
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-AF72-150-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 665mA 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: 16359 lumens
Efficiency: N/A
Efficacy: 106.9 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 - G2

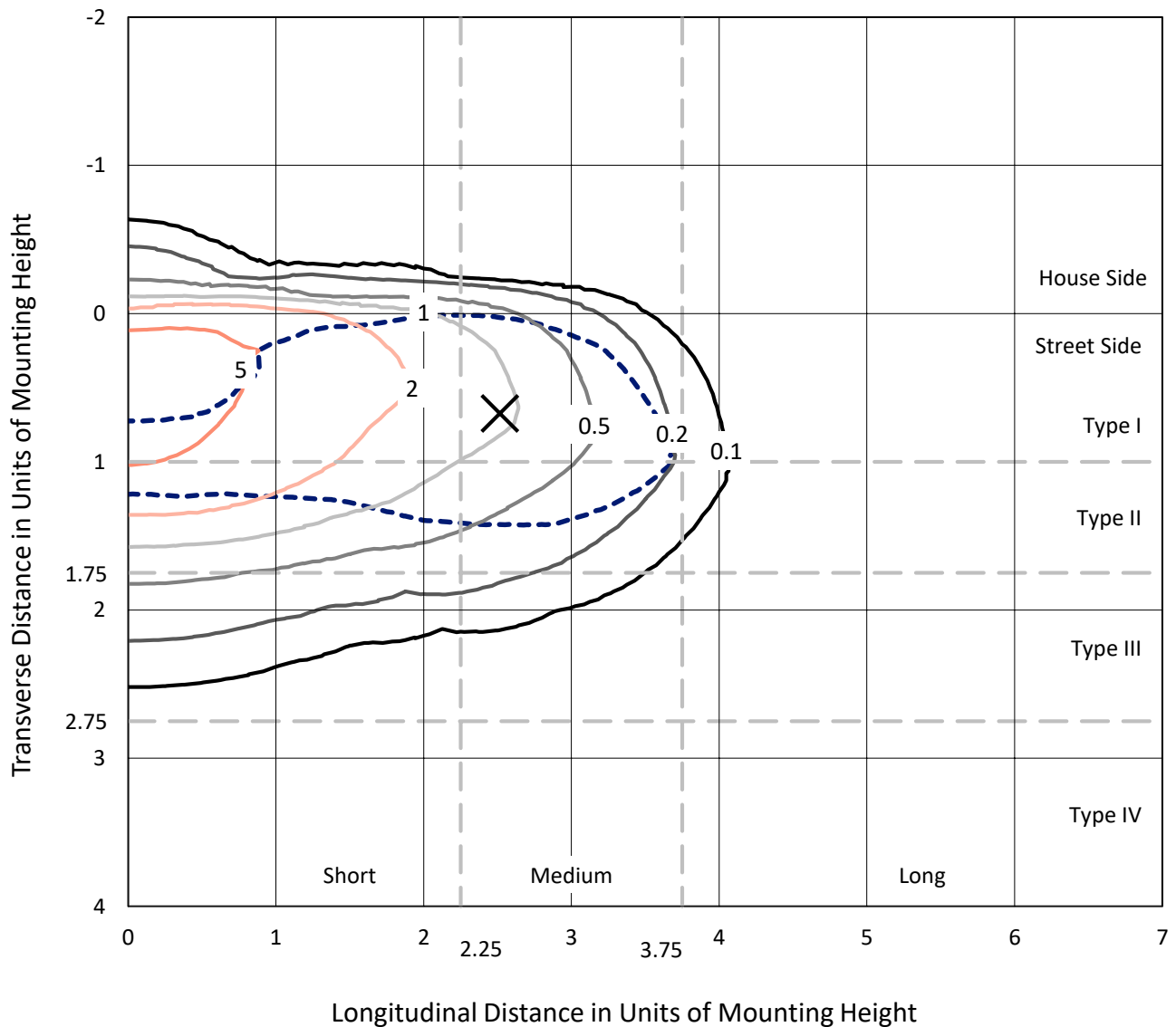
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

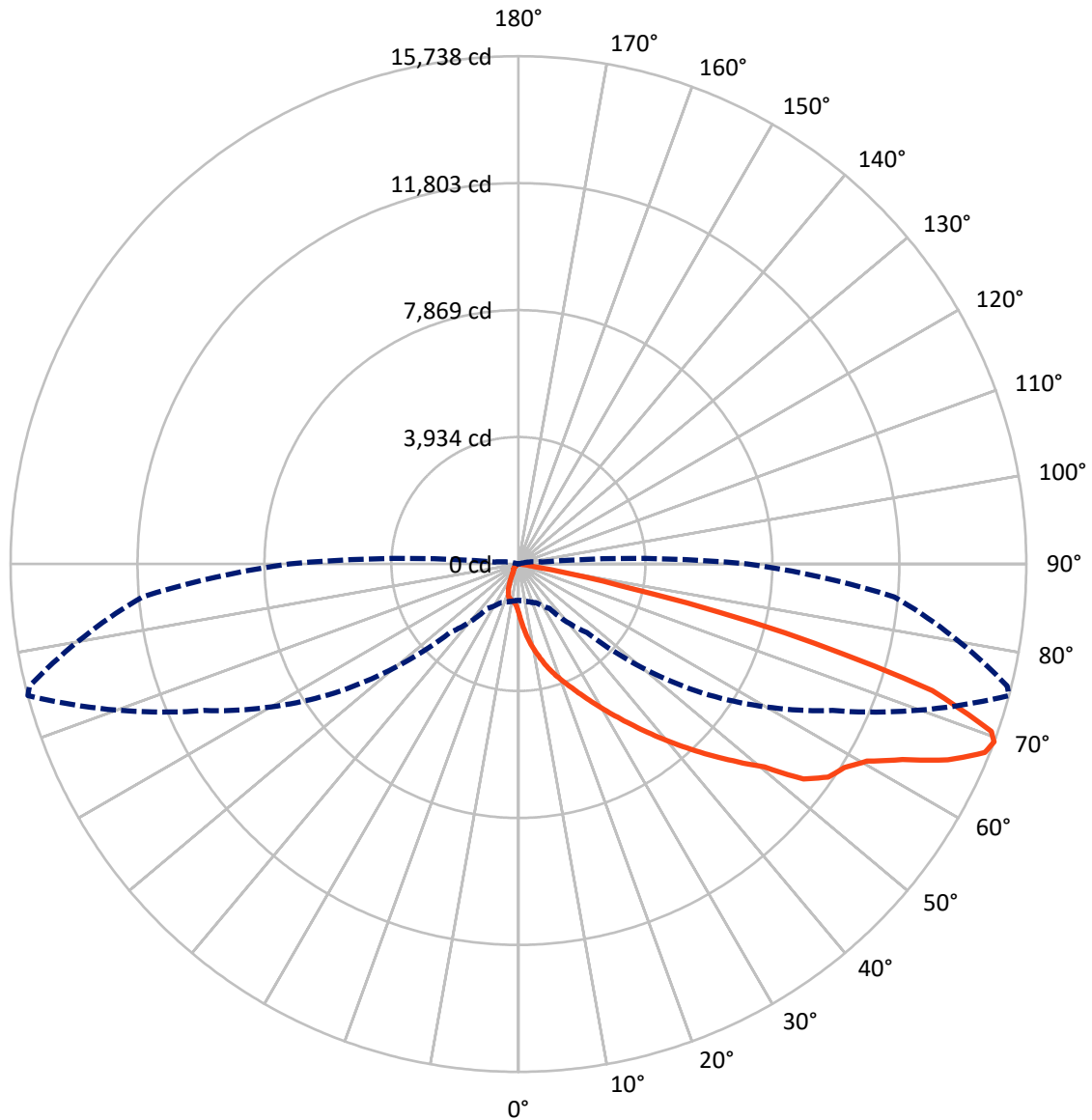
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 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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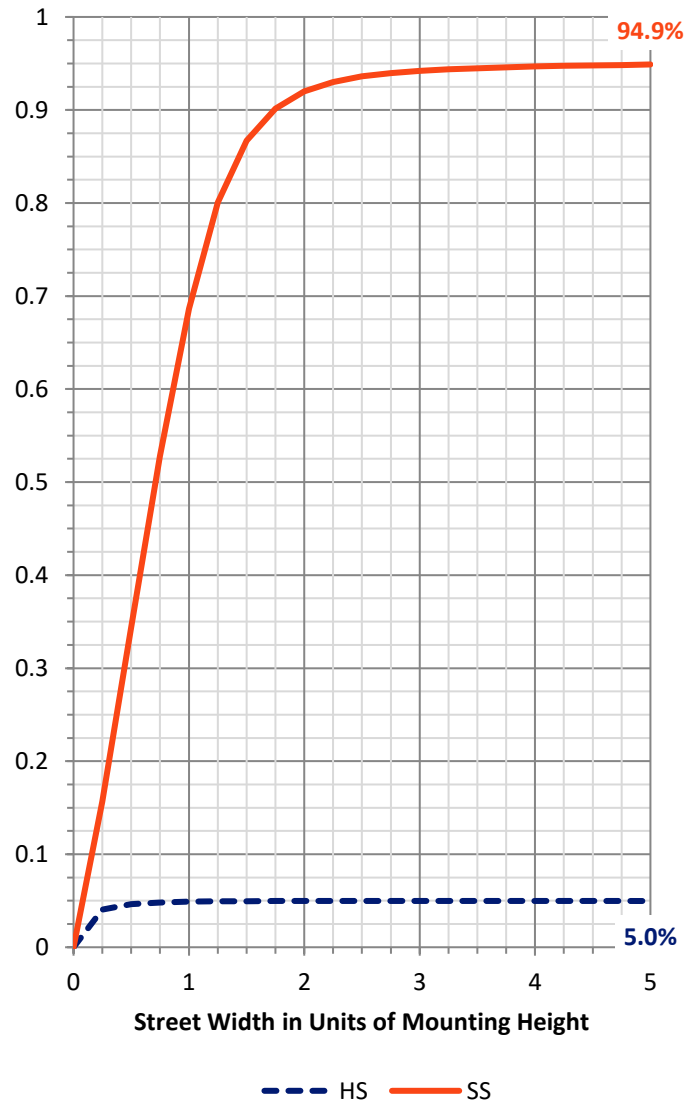
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	816.2	0.0	816.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	15542.8	0.0	15542.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	16359.0	0.0	16359.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	1.1
10°-20°	634.6	3.9
20°-30°	1211.4	7.4
30°-40°	2173.1	13.3
40°-50°	3329.3	20.4
50°-60°	3869.5	23.7
60°-70°	3426.5	20.9
70°-80°	1478.0	9.0
80°-90°	59.2	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°	16359.0	100.0
0°-180°	16359.0	100.0

Coefficient of Utilization



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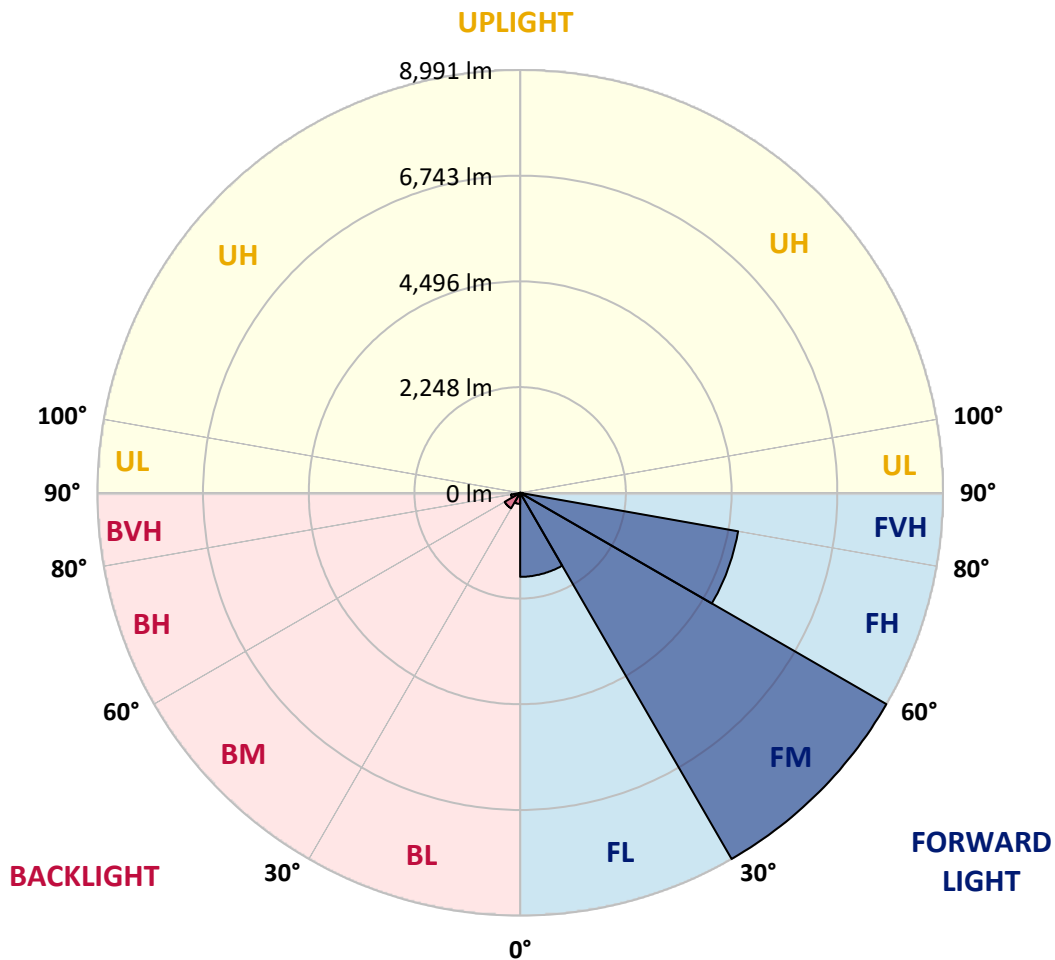
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1786.4	10.9			
FM	(30°-60°)	8991.3	55.0			
FH	(60°-80°)	4706.7	28.8			G2/5000
FVH	(80°-90°)	58.4	0.4			G1/100
BL	(0°-30°)	237.1	1.4	B1/500		
BM	(30°-60°)	380.6	2.3	B1/1000		
BH	(60°-80°)	197.8	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2
2.5°	2507.6	2482.8	2458.2	2429.9	2366.3	2256.8	2119.0	1970.7	1787.1	1755.3	1607.0
5°	3044.4	3033.8	3009.1	2970.2	2899.6	2779.6	2624.1	2405.2	2097.9	2044.9	1730.6
7.5°	3422.3	3415.2	3394.0	3348.1	3284.6	3164.5	3002.1	2765.3	2408.6	2348.6	1886.0
10°	3761.4	3757.8	3740.2	3697.8	3634.2	3503.5	3330.5	3083.3	2705.4	2638.3	2066.1
12.5°	4068.6	4072.2	4065.1	4043.9	3998.0	3874.3	3676.6	3408.2	2991.4	2917.3	2281.5
15°	4248.7	4259.4	4287.6	4329.9	4344.1	4245.2	4040.3	3743.7	3284.6	3221.0	2528.7
17.5°	4188.7	4199.3	4287.6	4432.4	4570.1	4584.3	4400.6	4061.5	3574.2	3510.6	2772.5
20°	4043.9	4058.0	4149.8	4347.6	4616.1	4803.3	4729.1	4407.7	3849.7	3771.9	3005.5
22.5°	4206.4	4206.4	4234.6	4354.7	4598.4	4891.5	4990.5	4753.8	4132.2	4036.9	3238.7
25°	4764.4	4753.8	4693.7	4644.3	4722.0	4983.3	5188.2	5107.0	4464.4	4354.7	3485.9
27.5°	5470.7	5520.1	5407.2	5227.1	5050.4	5163.4	5364.8	5456.6	4831.5	4718.5	3740.2
30°	6261.9	6283.1	6148.9	5908.7	5597.9	5488.4	5573.1	5756.9	5230.6	5107.0	4005.1
32.5°	6975.3	6957.6	6844.6	6593.8	6208.9	5972.3	5841.6	5996.9	5665.0	5523.7	4277.0
35°	7607.5	7621.6	7483.9	7194.2	6816.3	6565.6	6254.8	6268.9	6152.3	5989.9	4591.3
37.5°	8176.1	8151.4	8020.7	7731.1	7388.5	7116.6	6788.1	6551.5	6685.7	6516.2	4944.5
40°	8638.7	8614.1	8476.3	8193.7	7872.3	7649.8	7392.0	6929.4	7247.2	7052.9	5322.4
42.5°	9006.1	8977.8	8861.3	8589.3	8278.5	8080.7	7957.1	7395.5	7847.7	7653.4	5746.2
45°	9186.2	9161.4	9090.9	8886.0	8614.1	8441.0	8501.0	7932.4	8490.4	8327.9	6212.4
47.5°	8974.2	8963.7	9044.9	9009.6	8854.2	8762.4	8970.8	8518.7	9165.0	9006.1	6749.2
50°	8331.5	8349.1	8585.8	8878.9	8953.1	9062.5	9355.7	9136.8	9889.0	9719.5	7367.3
52.5°	6745.7	6865.8	7579.2	8285.6	8833.0	9246.2	9807.7	10019.7	11068.6	10902.6	8331.5
55°	5036.3	5085.8	5862.7	7070.6	8349.1	9232.1	10143.3	10538.8	11651.4	11481.8	8585.8
57.5°	3994.4	4012.1	4397.1	5629.7	7353.2	8914.2	10319.9	10726.0	11905.7	11764.3	8963.7
60°	3136.3	3157.4	3436.4	4284.0	5951.0	8056.0	10065.6	10888.5	12403.7	12290.7	9624.1
62.5°	2440.5	2461.6	2631.2	3129.2	4464.2	6735.1	9553.5	11149.9	13350.1	13297.2	10704.9
65°	1889.5	1896.6	2013.2	2246.2	3153.9	5304.7	8928.3	11393.5	14628.7	14582.8	11580.7
67.5°	1395.1	1405.6	1486.9	1631.7	2129.7	3810.8	7904.1	11206.3	15592.8	15458.6	11898.6
69°	1126.7	1137.2	1207.9	1324.4	1681.1	3002.1	6968.2	10743.7	15737.7	15610.5	11697.3
70°	964.1	971.3	1041.9	1140.8	1433.9	2549.9	6226.5	10344.6	15546.9	15423.3	11238.1
72.5°	618.1	653.4	724.0	787.6	950.0	1688.2	4202.8	8578.7	13413.7	13201.8	8801.3
75°	342.6	353.2	480.3	558.0	632.2	1098.3	2338.1	5350.6	8532.8	8384.5	4707.9
77.5°	282.5	289.6	339.0	423.8	423.8	614.5	882.9	2108.5	3245.7	2927.9	1275.0
80°	197.7	204.8	257.8	279.1	303.7	346.2	286.1	462.7	501.6	445.0	190.7
82.5°	137.7	144.8	176.6	229.6	243.7	162.4	106.0	137.7	144.8	144.8	74.2
85°	24.8	35.3	130.6	190.7	144.8	49.4	60.0	49.4	45.9	49.4	17.7
87.5°	0.0	0.0	81.2	91.9	77.7	21.2	24.8	17.7	10.6	14.1	7.1
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°	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2	1522.2
2.5°	1532.8	1458.6	1331.5	1239.6	1162.0	1101.9	1077.2	1038.4	1010.1	1024.2	1006.6
5°	1575.1	1444.5	1239.6	1109.0	1017.1	939.5	875.9	826.4	787.6	780.5	773.5
7.5°	1642.2	1455.1	1186.7	1024.2	886.5	766.4	667.5	593.3	536.8	536.8	515.7
10°	1734.1	1483.4	1154.9	939.5	734.6	572.1	473.2	402.6	374.4	370.8	363.8
12.5°	1861.3	1536.4	1130.2	829.9	572.1	416.8	356.7	331.9	321.4	317.8	314.4
15°	2034.3	1614.0	1101.9	695.8	434.4	342.6	317.8	296.7	286.1	282.5	279.1
17.5°	2200.3	1684.7	1041.9	558.0	353.2	310.8	282.5	264.8	250.7	247.2	247.2
20°	2355.8	1744.7	939.5	434.4	317.8	279.1	250.7	229.6	215.4	212.0	212.0
22.5°	2518.2	1794.2	812.3	353.2	289.6	247.2	219.0	197.7	183.6	180.1	176.6
25°	2691.2	1829.4	667.5	314.4	261.4	219.0	187.2	169.5	159.0	155.4	151.9
27.5°	2878.4	1843.6	529.8	286.1	229.6	190.7	162.4	144.8	137.7	134.2	134.2
30°	3048.0	1829.4	409.7	254.3	201.3	166.0	141.3	127.2	120.1	116.5	116.5
32.5°	3224.5	1794.2	328.5	226.1	176.6	141.3	120.1	109.5	106.0	102.4	102.4
35°	3411.7	1748.2	282.5	201.3	151.9	123.6	106.0	98.9	95.3	91.9	91.9
37.5°	3630.7	1691.8	257.8	180.1	134.2	109.5	91.9	88.3	84.8	84.8	84.8
40°	3877.9	1621.1	240.2	162.4	120.1	95.3	81.2	77.7	74.2	74.2	74.2
42.5°	4139.3	1539.8	222.5	144.8	106.0	81.2	70.7	70.7	67.1	67.1	63.5
45°	4432.4	1458.6	204.8	127.2	91.9	70.7	60.0	56.5	56.5	53.0	53.0
47.5°	4778.5	1384.5	187.2	113.0	81.2	60.0	53.0	49.4	45.9	42.4	42.4
50°	5265.9	1377.4	166.0	98.9	74.2	49.4	42.4	38.9	35.3	31.8	31.8
52.5°	5749.8	1313.8	141.3	81.2	60.0	42.4	31.8	28.2	24.8	24.8	21.2
55°	5859.3	1207.9	123.6	70.7	45.9	31.8	24.8	17.7	17.7	14.1	14.1
57.5°	6099.4	1158.4	106.0	56.5	35.3	24.8	14.1	10.6	10.6	10.6	10.6
60°	6572.7	1144.3	91.9	49.4	24.8	17.7	10.6	7.1	7.1	3.6	3.6
62.5°	7226.0	1130.2	77.7	42.4	17.7	10.6	7.1	3.6	0.0	0.0	0.0
65°	7586.3	1034.8	63.5	31.8	14.1	10.6	3.6	0.0	0.0	0.0	0.0
67.5°	7491.0	854.7	56.5	21.2	10.6	7.1	3.6	0.0	0.0	0.0	0.0
69°	7091.8	720.5	45.9	17.7	10.6	7.1	3.6	0.0	0.0	0.0	0.0
70°	6611.5	621.5	42.4	14.1	7.1	3.6	3.6	0.0	0.0	0.0	0.0
72.5°	4693.7	324.9	28.2	10.6	7.1	3.6	0.0	0.0	0.0	0.0	0.0
75°	2193.2	144.8	17.7	7.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	483.9	67.1	10.6	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.9	24.8	7.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.8	10.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	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)