

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: P236967

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236967
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-AF72-140-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA 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: 15441.4 lumens
Efficiency: N/A
Efficacy: 108.0 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

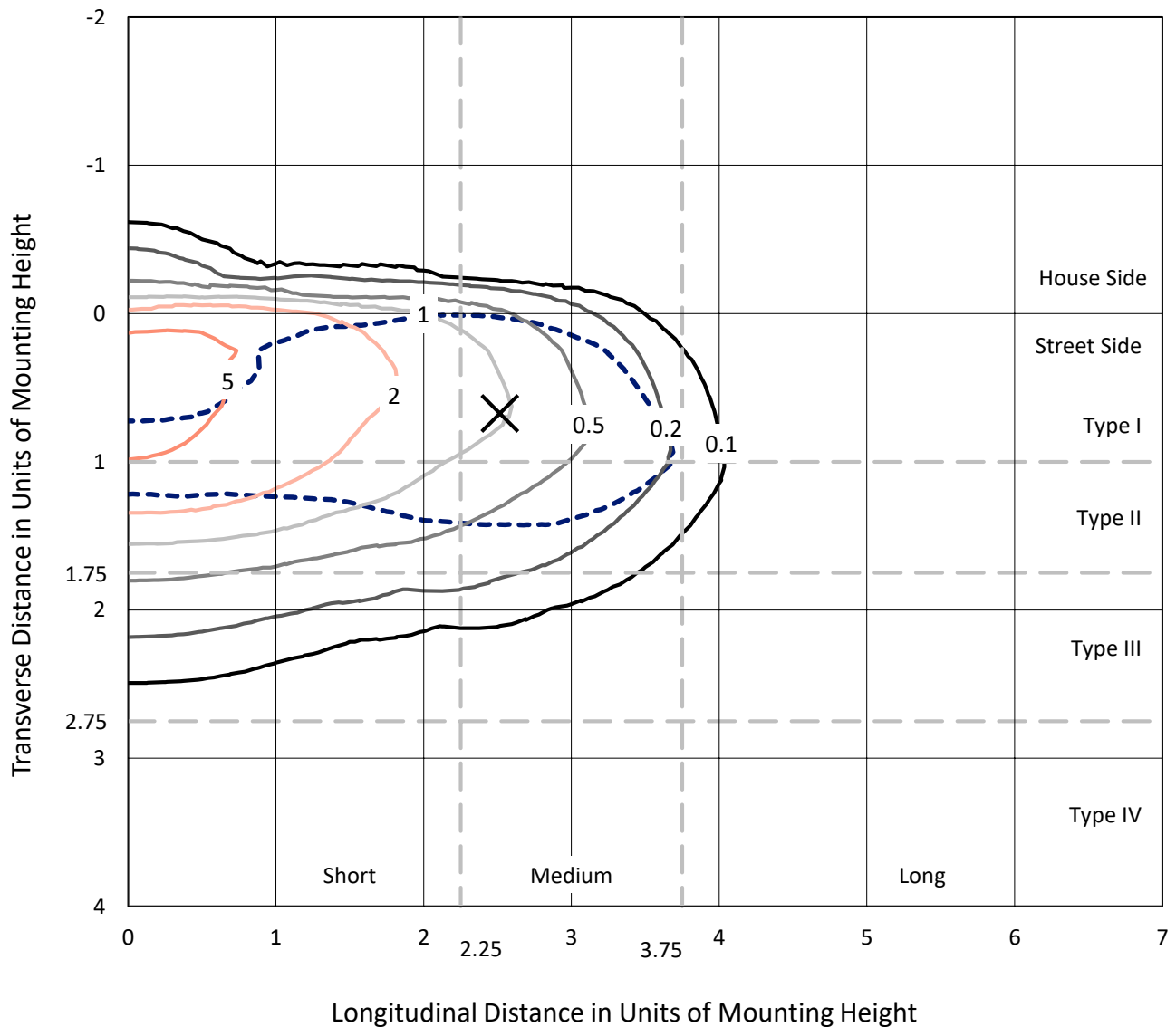
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

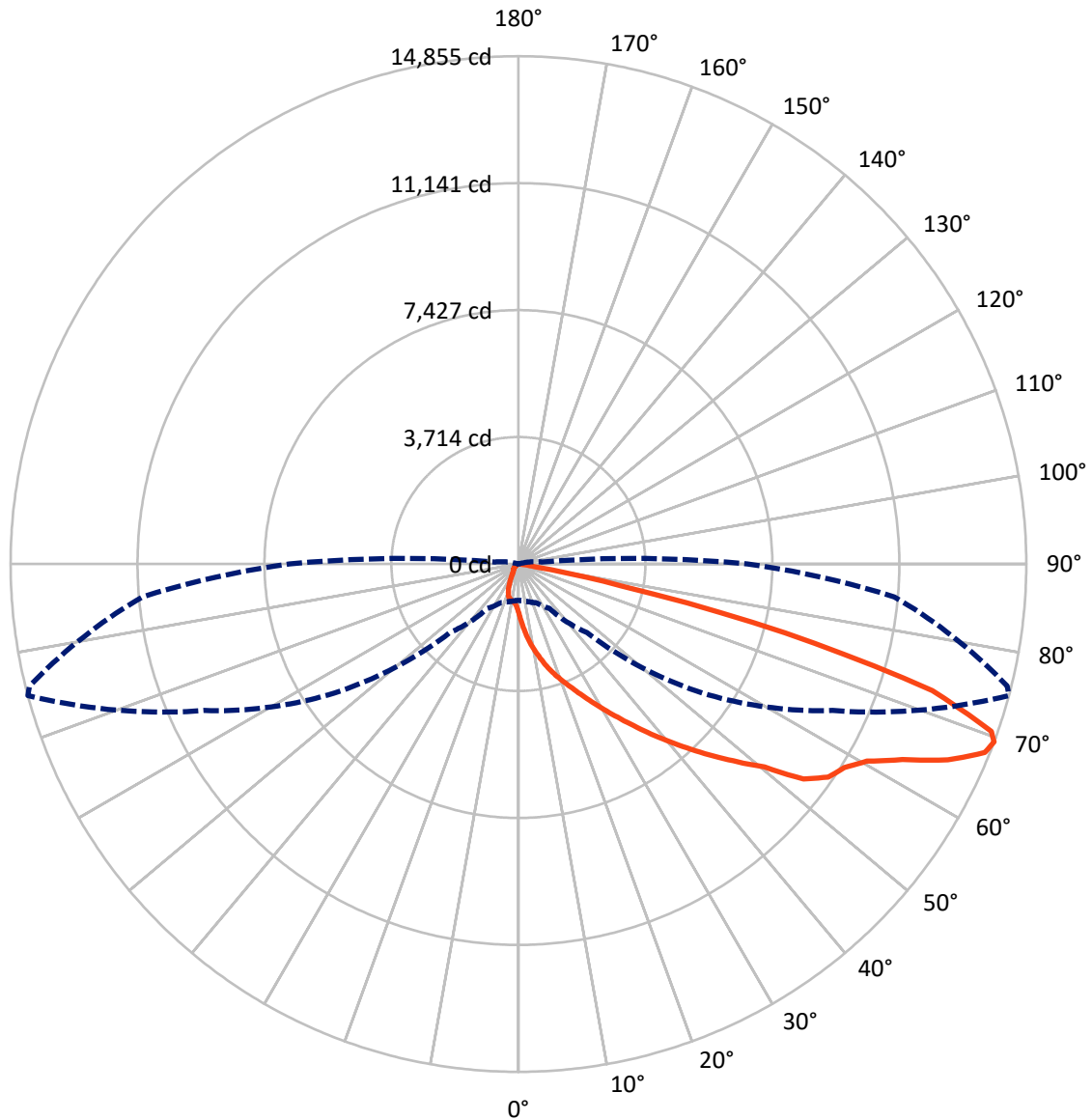
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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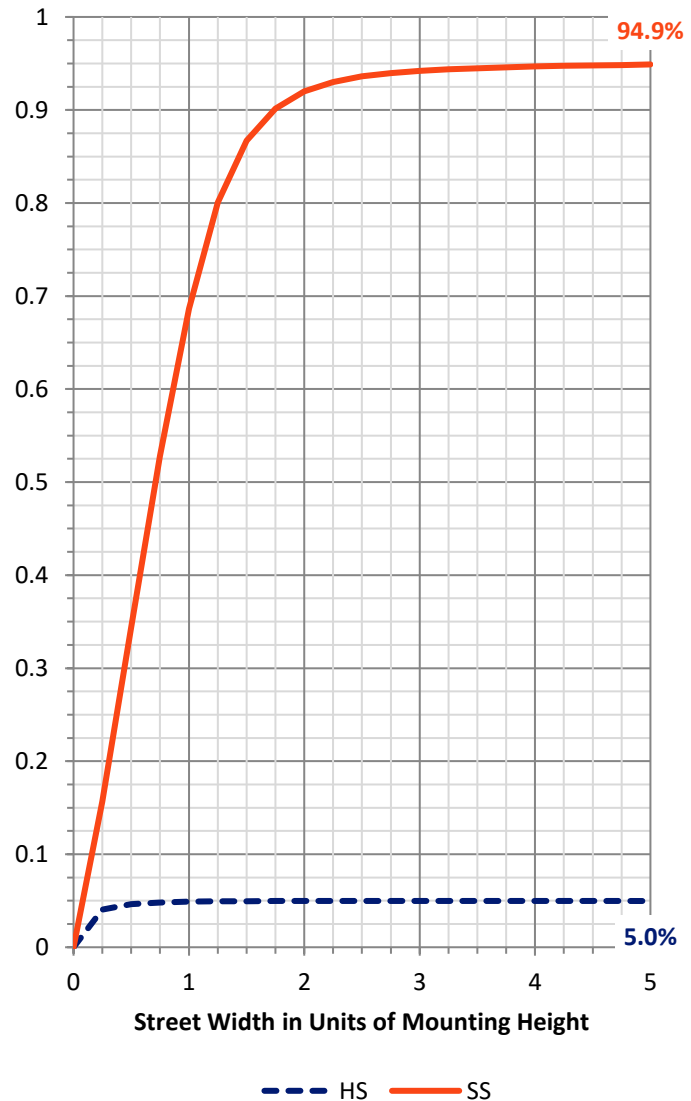
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	770.4	0.0	770.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	14671.0	0.0	14671.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	15441.4	0.0	15441.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	1.1
10°-20°	599.0	3.9
20°-30°	1143.5	7.4
30°-40°	2051.2	13.3
40°-50°	3142.6	20.4
50°-60°	3652.4	23.7
60°-70°	3234.3	20.9
70°-80°	1395.1	9.0
80°-90°	55.9	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°	15441.4	100.0
0°-180°	15441.4	100.0

Coefficient of Utilization



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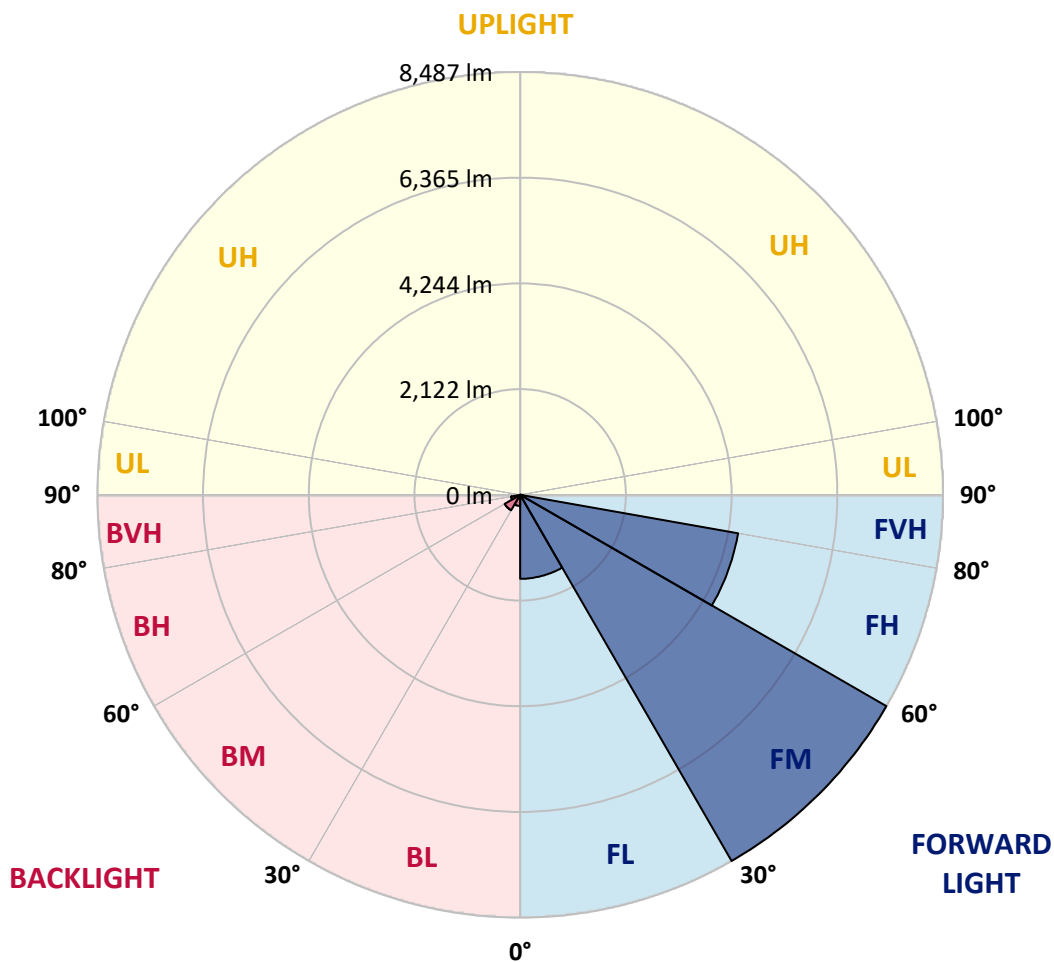
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1686.2	10.9			
FM	(30°-60°)	8487.0	55.0			
FH	(60°-80°)	4442.7	28.8			G2/5000
FVH	(80°-90°)	55.1	0.4			G1/100
BL	(0°-30°)	223.8	1.4	B1/500		
BM	(30°-60°)	359.2	2.3	B1/1000		
BH	(60°-80°)	186.7	1.2	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	2366.9	2343.6	2320.3	2293.6	2233.6	2130.2	2000.2	1860.2	1686.8	1656.9	1516.8
5°	2873.7	2863.6	2840.3	2803.6	2737.0	2623.7	2477.0	2270.2	1980.2	1930.2	1633.6
7.5°	3230.4	3223.7	3203.7	3160.3	3100.4	2987.0	2833.7	2610.3	2273.6	2216.9	1780.2
10°	3550.4	3547.1	3530.4	3490.4	3430.4	3307.0	3143.6	2910.3	2553.6	2490.3	1950.3
12.5°	3840.4	3843.7	3837.1	3817.0	3773.8	3657.0	3470.4	3217.0	2823.7	2753.6	2153.5
15°	4010.5	4020.4	4047.1	4087.1	4100.4	4007.1	3813.8	3533.7	3100.4	3040.3	2387.0
17.5°	3953.8	3963.7	4047.1	4183.8	4313.8	4327.1	4153.8	3833.7	3373.7	3313.6	2616.9
20°	3817.0	3830.4	3917.1	4103.8	4357.2	4533.8	4463.9	4160.4	3633.7	3560.4	2836.9
22.5°	3970.4	3970.4	3997.1	4110.4	4340.5	4617.2	4710.5	4487.2	3900.4	3810.4	3057.0
25°	4497.2	4487.2	4430.5	4383.8	4457.1	4703.8	4897.2	4820.6	4213.7	4110.4	3290.3
27.5°	5163.9	5210.6	5103.9	4933.9	4767.2	4873.8	5063.9	5150.6	4560.5	4453.8	3530.4
30°	5910.6	5930.7	5803.9	5577.2	5283.8	5180.5	5260.5	5433.9	4937.2	4820.6	3780.4
32.5°	6584.0	6567.3	6460.7	6224.0	5860.6	5637.3	5513.9	5660.6	5347.3	5213.9	4037.1
35°	7180.8	7194.1	7064.1	6790.8	6434.1	6197.3	5904.0	5917.3	5807.3	5654.0	4333.8
37.5°	7717.4	7694.1	7570.9	7297.4	6974.1	6717.4	6407.4	6184.0	6310.7	6150.7	4667.2
40°	8154.2	8130.8	8000.9	7734.1	7430.8	7220.8	6977.4	6540.7	6840.8	6657.4	5023.9
42.5°	8500.9	8474.2	8364.3	8107.5	7814.2	7627.5	7510.8	6980.7	7407.5	7224.1	5423.9
45°	8670.9	8647.6	8580.9	8387.6	8130.8	7967.6	8024.2	7487.5	8014.2	7860.9	5864.0
47.5°	8471.0	8460.9	8537.5	8504.2	8357.6	8270.9	8467.6	8040.9	8650.9	8500.9	6370.7
50°	7864.1	7880.8	8104.2	8380.9	8450.9	8554.2	8830.9	8624.3	9334.3	9174.3	6954.1
52.5°	6367.4	6480.7	7154.1	7820.9	8337.6	8727.6	9257.7	9457.7	10447.8	10291.1	7864.1
55°	4753.9	4800.5	5534.0	6674.0	7880.8	8714.3	9574.3	9947.7	10997.8	10837.9	8104.2
57.5°	3770.4	3787.1	4150.4	5313.9	6940.7	8414.3	9741.0	10124.5	11237.8	11104.5	8460.9
60°	2960.3	2980.4	3243.7	4043.7	5617.2	7604.1	9501.1	10277.8	11707.9	11601.3	9084.3
62.5°	2303.6	2323.6	2483.6	2953.7	4213.7	6357.3	9017.6	10524.4	12601.3	12551.3	10104.4
65°	1783.5	1790.2	1900.2	2120.3	2977.0	5007.2	8427.6	10754.5	13808.1	13764.8	10931.2
67.5°	1316.8	1326.8	1403.5	1540.2	2010.2	3597.0	7460.8	10577.8	14718.2	14591.6	11231.2
69°	1063.5	1073.5	1140.1	1250.1	1586.8	2833.7	6577.4	10141.1	14854.9	14734.9	11041.2
70°	910.1	916.8	983.5	1076.8	1353.5	2406.9	5877.3	9764.4	14674.9	14558.2	10607.8
72.5°	583.4	616.7	683.4	743.4	896.7	1593.6	3967.1	8097.6	12661.4	12461.4	8307.6
75°	323.4	333.4	453.4	526.7	596.7	1036.8	2206.9	5050.5	8054.2	7914.2	4443.8
77.5°	266.7	273.3	320.1	400.1	400.1	580.0	833.4	1990.3	3063.6	2763.6	1203.5
80°	186.7	193.3	243.4	263.4	286.7	326.7	270.1	436.7	473.4	420.0	180.0
82.5°	130.0	136.7	166.6	216.7	230.1	153.3	100.0	130.0	136.7	136.7	70.0
85°	23.3	33.3	123.4	180.0	136.7	46.6	56.7	46.6	43.4	46.6	16.7
87.5°	0.0	0.0	76.7	86.6	73.3	20.0	23.3	16.7	10.0	13.3	6.6
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°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1446.9	1376.8	1256.8	1170.2	1096.8	1040.1	1016.8	980.1	953.4	966.8	950.1
5°	1486.9	1363.5	1170.2	1046.8	960.1	886.8	826.7	780.1	743.4	736.7	730.1
7.5°	1550.2	1373.5	1120.1	966.8	836.8	723.4	630.0	560.1	506.8	506.8	486.7
10°	1636.8	1400.1	1090.2	886.8	693.5	540.0	446.7	380.0	353.3	350.1	343.4
12.5°	1756.8	1450.1	1066.7	783.4	540.0	393.3	336.7	313.3	303.4	300.0	296.7
15°	1920.2	1523.5	1040.1	656.7	410.0	323.4	300.0	280.0	270.1	266.7	263.4
17.5°	2076.9	1590.2	983.5	526.7	333.4	293.4	266.7	250.0	236.7	233.3	233.3
20°	2223.6	1646.8	886.8	410.0	300.0	263.4	236.7	216.7	203.4	200.0	200.0
22.5°	2376.9	1693.5	766.7	333.4	273.3	233.3	206.7	186.7	173.4	170.0	166.6
25°	2540.3	1726.8	630.0	296.7	246.7	206.7	176.7	160.0	150.1	146.7	143.3
27.5°	2717.0	1740.1	500.0	270.1	216.7	180.0	153.3	136.7	130.0	126.6	126.6
30°	2876.9	1726.8	386.7	240.0	190.1	156.7	133.4	120.0	113.3	110.0	110.0
32.5°	3043.7	1693.5	310.1	213.4	166.6	133.4	113.3	103.3	100.0	96.7	96.7
35°	3220.4	1650.2	266.7	190.1	143.3	116.7	100.0	93.3	90.0	86.6	86.6
37.5°	3427.0	1596.8	243.4	170.0	126.6	103.3	86.6	83.4	80.0	80.0	80.0
40°	3660.4	1530.1	226.7	153.3	113.3	90.0	76.7	73.3	70.0	70.0	70.0
42.5°	3907.1	1453.5	210.0	136.7	100.0	76.7	66.7	66.7	63.3	63.3	60.0
45°	4183.8	1376.8	193.3	120.0	86.6	66.7	56.7	53.3	53.3	50.0	50.0
47.5°	4510.5	1306.8	176.7	106.7	76.7	56.7	50.0	46.6	43.4	40.0	40.0
50°	4970.5	1300.2	156.7	93.3	70.0	46.6	40.0	36.6	33.3	30.0	30.0
52.5°	5427.3	1240.1	133.4	76.7	56.7	40.0	30.0	26.7	23.3	23.3	20.0
55°	5530.6	1140.1	116.7	66.7	43.4	30.0	23.3	16.7	16.7	13.3	13.3
57.5°	5757.3	1093.4	100.0	53.3	33.3	23.3	13.3	10.0	10.0	10.0	10.0
60°	6204.0	1080.1	86.6	46.6	23.3	16.7	10.0	6.6	6.6	3.4	3.4
62.5°	6820.7	1066.7	73.3	40.0	16.7	10.0	6.6	3.4	0.0	0.0	0.0
65°	7160.8	976.8	60.0	30.0	13.3	10.0	3.4	0.0	0.0	0.0	0.0
67.5°	7070.7	806.8	53.3	20.0	10.0	6.6	3.4	0.0	0.0	0.0	0.0
69°	6694.1	680.1	43.4	16.7	10.0	6.6	3.4	0.0	0.0	0.0	0.0
70°	6240.7	586.8	40.0	13.3	6.6	3.4	3.4	0.0	0.0	0.0	0.0
72.5°	4430.5	306.7	26.7	10.0	6.6	3.4	0.0	0.0	0.0	0.0	0.0
75°	2070.2	136.7	16.7	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	456.7	63.3	10.0	6.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	86.6	23.3	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.0	10.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	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)