

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: P236947

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236947  
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-AF72-140-D-U-T2R-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 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: 14599.2 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

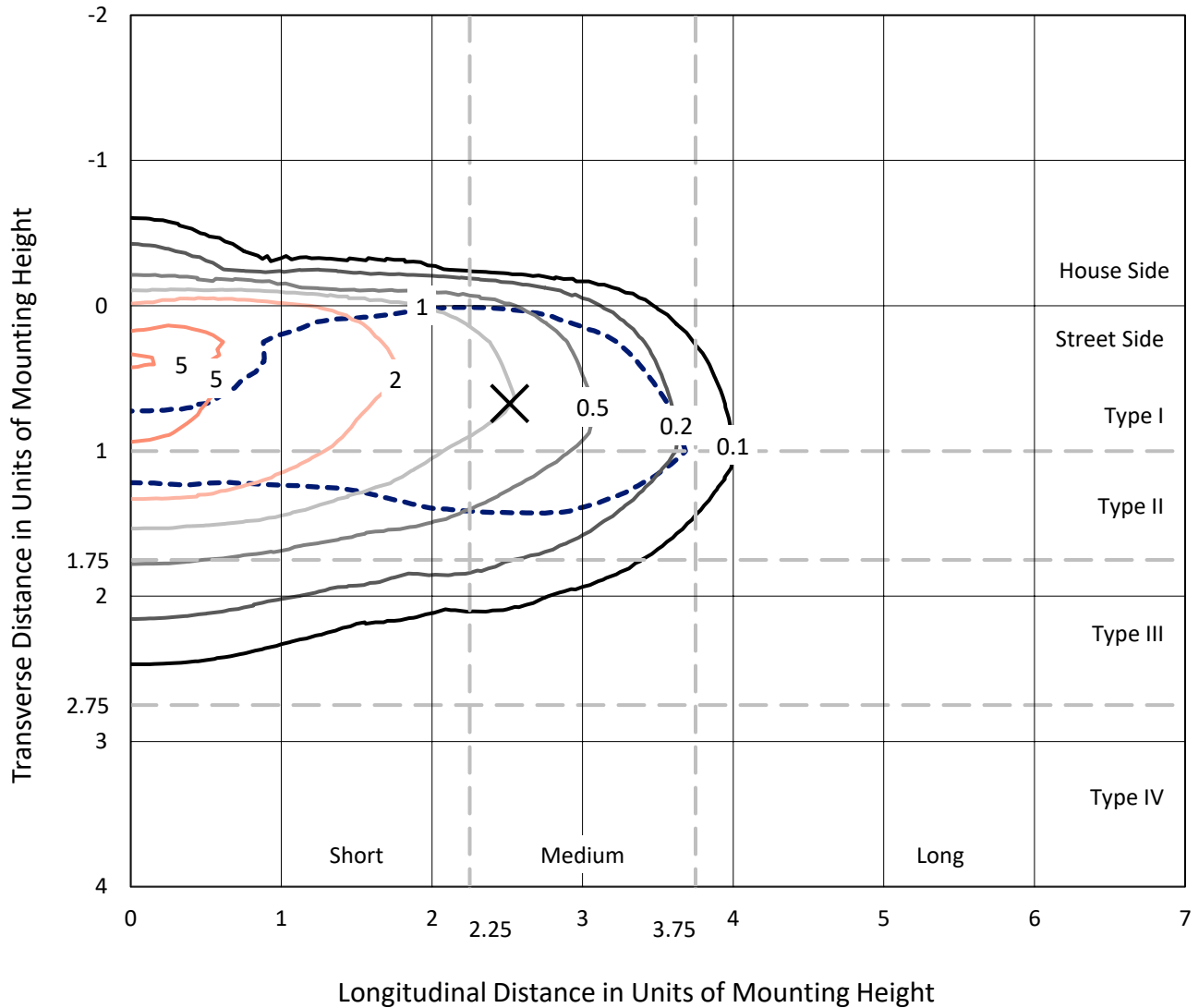
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

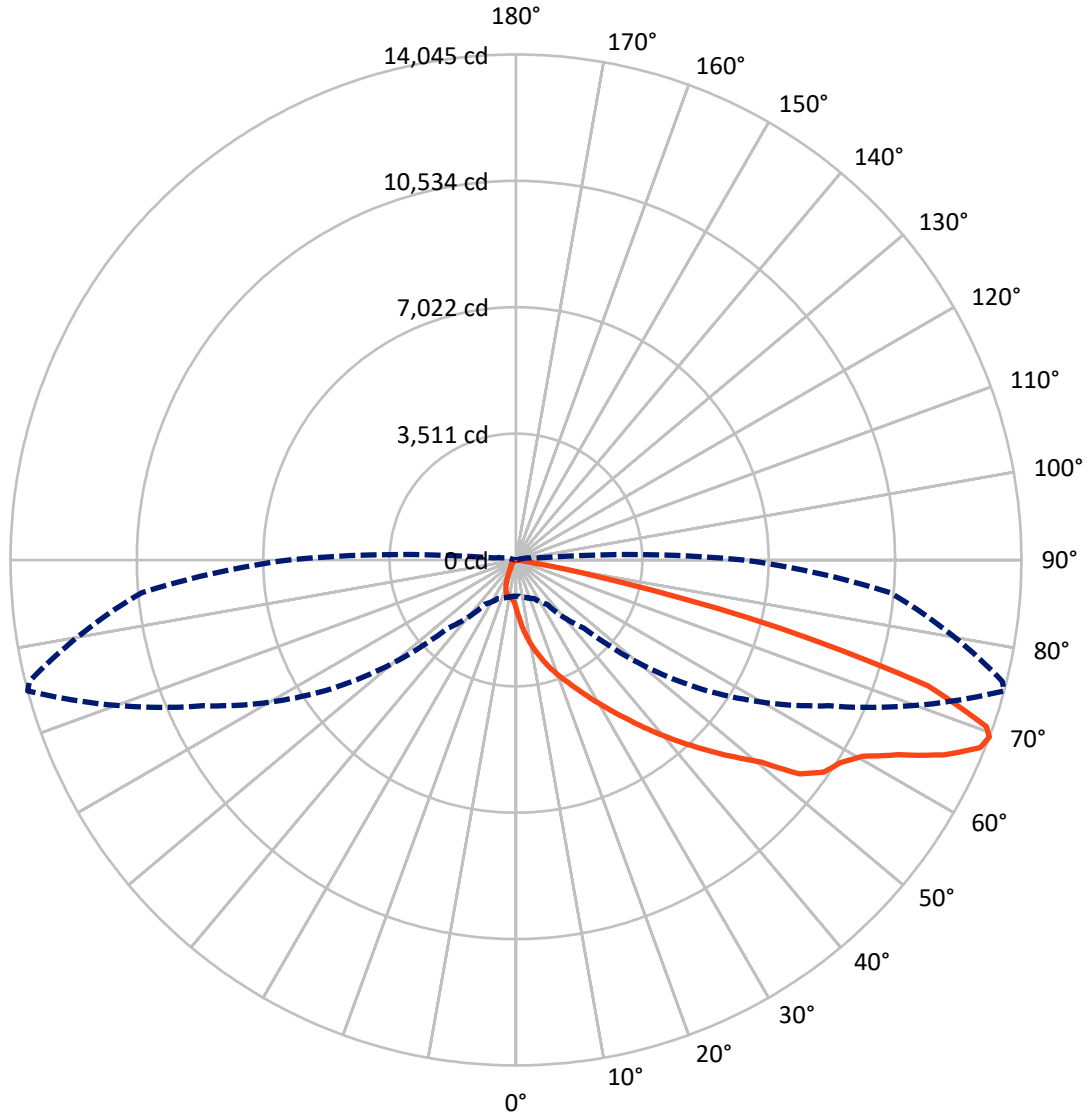
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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

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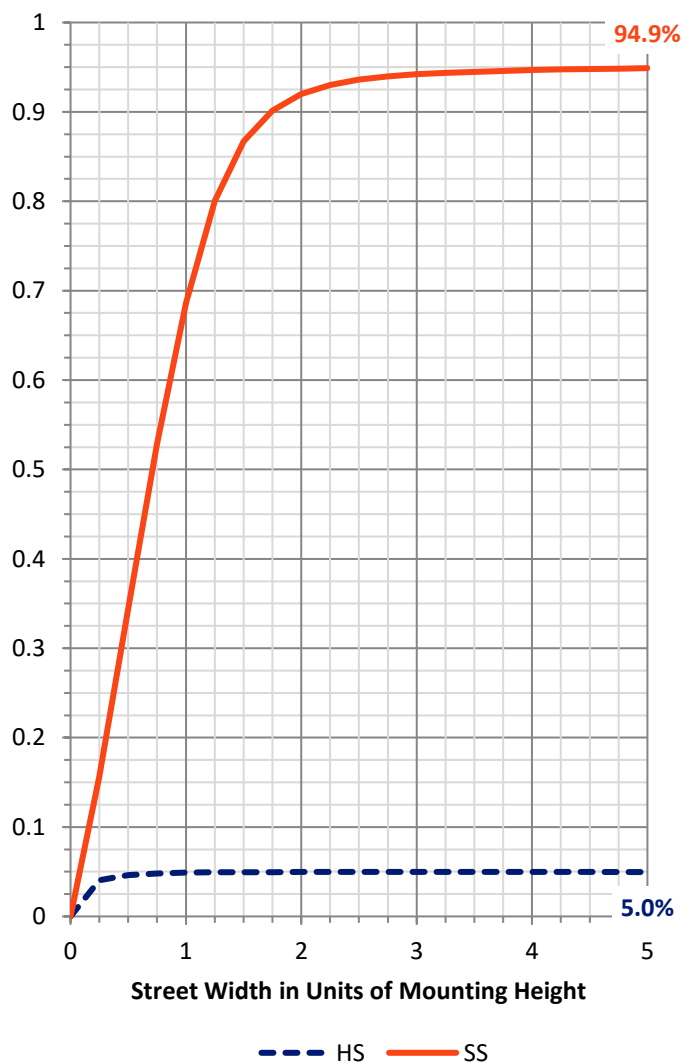
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	728.4	0.0	728.4
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	13870.8	0.0	13870.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	14599.2	0.0	14599.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.4	1.1
10°-20°	566.3	3.9
20°-30°	1081.1	7.4
30°-40°	1939.3	13.3
40°-50°	2971.2	20.4
50°-60°	3453.2	23.7
60°-70°	3057.9	20.9
70°-80°	1319.0	9.0
80°-90°	52.8	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°	14599.2	100.0
0°-180°	14599.2	100.0

**Coefficient of Utilization**



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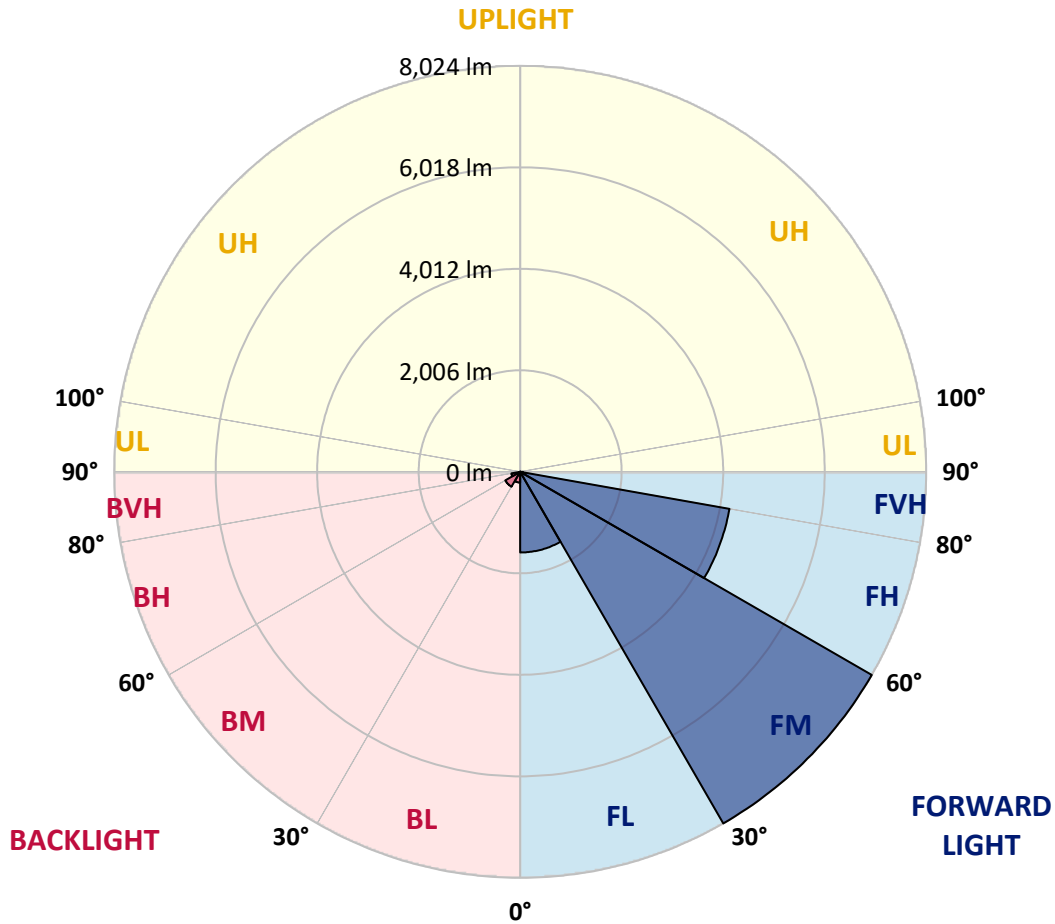
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1594.3	10.9			
FM (30°-60°)	8024.1	55.0			
FH (60°-80°)	4200.4	28.8			G2/5000
FVH (80°-90°)	52.1	0.4			G1/100
BL (0°-30°)	211.6	1.4	B1/500		
BM (30°-60°)	339.6	2.3	B1/1000		
BH (60°-80°)	176.5	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°	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4
2.5°	2237.8	2215.8	2193.7	2168.5	2111.8	2014.0	1891.2	1758.7	1594.8	1566.4	1434.1
5°	2717.0	2707.5	2685.4	2650.7	2587.7	2480.5	2341.9	2146.4	1872.1	1824.9	1544.4
7.5°	3054.2	3047.9	3028.8	2987.9	2931.2	2824.1	2679.0	2467.9	2149.5	2096.0	1683.1
10°	3356.8	3353.6	3337.9	3299.9	3243.3	3126.7	2972.2	2751.5	2414.3	2354.4	1843.9
12.5°	3630.9	3634.1	3627.9	3608.9	3567.9	3457.6	3281.0	3041.6	2669.6	2603.4	2036.1
15°	3791.8	3801.1	3826.4	3864.2	3876.7	3788.6	3605.8	3340.9	2931.2	2874.5	2256.8
17.5°	3738.1	3747.6	3826.4	3955.6	4078.5	4091.1	3927.3	3624.6	3189.8	3132.9	2474.1
20°	3608.9	3621.5	3703.5	3879.9	4119.5	4286.6	4220.3	3933.6	3435.5	3366.2	2682.2
22.5°	3753.8	3753.8	3779.1	3886.3	4103.8	4365.4	4453.6	4242.4	3687.7	3602.6	2890.2
25°	4251.9	4242.4	4188.8	4144.8	4214.0	4447.3	4630.1	4557.6	3983.9	3886.3	3110.9
27.5°	4882.2	4926.4	4825.6	4664.8	4507.2	4608.0	4787.6	4869.5	4311.7	4210.9	3337.9
30°	5588.3	5607.1	5487.4	5273.1	4995.7	4898.0	4973.6	5137.5	4667.9	4557.6	3574.2
32.5°	6224.9	6209.2	6108.3	5884.4	5541.0	5329.7	5213.2	5351.8	5055.5	4929.6	3816.9
35°	6789.2	6801.7	6678.8	6420.3	6083.1	5859.3	5581.9	5594.5	5490.5	5345.5	4097.4
37.5°	7296.6	7274.5	7157.9	6899.4	6593.7	6351.0	6057.9	5846.7	5966.4	5815.3	4412.7
40°	7709.5	7687.4	7564.4	7312.2	7025.5	6826.9	6596.8	6184.0	6467.6	6294.3	4749.8
42.5°	8037.2	8012.0	7907.9	7665.3	7388.0	7211.4	7101.2	6600.1	7003.4	6830.2	5128.1
45°	8197.9	8176.0	8112.9	7930.0	7687.4	7533.0	7586.5	7079.1	7577.0	7432.2	5544.2
47.5°	8008.9	7999.4	8072.0	8040.4	7901.7	7819.8	8005.8	7602.3	8179.0	8037.2	6023.3
50°	7435.2	7451.1	7662.2	7923.8	7990.0	8087.7	8349.3	8153.9	8825.2	8673.9	6574.7
52.5°	6020.0	6127.3	6763.9	7394.2	7882.8	8251.6	8752.8	8941.8	9877.9	9729.7	7435.2
55°	4494.6	4538.6	5232.1	6310.0	7451.1	8238.9	9052.1	9405.1	10397.9	10246.7	7662.2
57.5°	3564.8	3580.5	3924.0	5024.1	6562.2	7955.2	9209.8	9572.2	10624.9	10498.8	7999.4
60°	2798.9	2817.8	3066.8	3823.2	5310.9	7189.4	8982.8	9717.2	11069.4	10968.4	8588.9
62.5°	2178.0	2196.8	2348.1	2792.5	3983.9	6010.6	8525.8	9950.5	11914.0	11866.7	9553.3
65°	1686.2	1692.5	1796.5	2004.6	2814.6	4734.1	7967.9	10167.8	13055.1	13014.1	10335.0
67.5°	1245.0	1254.4	1327.0	1456.2	1900.6	3400.8	7053.9	10000.8	13915.5	13795.7	10618.6
69°	1005.4	1014.9	1078.0	1181.9	1500.2	2679.0	6218.6	9587.9	14044.7	13931.2	10438.9
70°	860.4	866.8	929.8	1018.1	1279.7	2275.7	5556.7	9231.8	13874.5	13764.2	10029.2
72.5°	551.5	583.1	646.2	702.9	847.9	1506.5	3750.8	7655.9	11970.8	11781.7	7854.4
75°	305.7	315.2	428.7	498.0	564.3	980.3	2086.6	4775.0	7615.0	7482.5	4201.4
77.5°	252.2	258.4	302.5	378.2	378.2	548.4	788.0	1881.7	2896.6	2612.9	1137.8
80°	176.5	182.8	230.1	249.0	271.1	308.8	255.3	412.9	447.5	397.1	170.2
82.5°	122.9	129.3	157.6	204.9	217.4	145.0	94.5	122.9	129.3	129.3	66.2
85°	22.1	31.4	116.6	170.2	129.3	44.1	53.5	44.1	41.0	44.1	15.8
87.5°	0.0	0.0	72.4	82.0	69.4	18.9	22.1	15.8	9.5	12.6	6.3
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°	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4	1358.4
2.5°	1367.9	1301.8	1188.3	1106.2	1037.0	983.4	961.4	926.6	901.4	914.1	898.3
5°	1405.7	1289.1	1106.2	989.7	907.7	838.3	781.6	737.5	702.9	696.5	690.3
7.5°	1465.6	1298.5	1059.0	914.1	791.1	684.0	595.7	529.5	479.1	479.1	460.2
10°	1547.5	1323.7	1030.7	838.3	655.5	510.6	422.4	359.4	334.2	330.9	324.6
12.5°	1661.1	1371.1	1008.6	740.7	510.6	371.9	318.4	296.3	286.8	283.6	280.5
15°	1815.5	1440.4	983.4	620.9	387.7	305.7	283.6	264.7	255.3	252.2	249.0
17.5°	1963.6	1503.4	929.8	498.0	315.2	277.4	252.2	236.4	223.8	220.6	220.6
20°	2102.2	1557.1	838.3	387.7	283.6	249.0	223.8	204.9	192.3	189.1	189.1
22.5°	2247.3	1601.2	724.9	315.2	258.4	220.6	195.5	176.5	163.9	160.7	157.6
25°	2401.7	1632.7	595.7	280.5	233.3	195.5	167.0	151.4	141.8	138.6	135.5
27.5°	2568.8	1645.2	472.8	255.3	204.9	170.2	145.0	129.3	122.9	119.7	119.7
30°	2720.0	1632.7	365.6	226.9	179.6	148.1	126.0	113.5	107.2	104.1	104.1
32.5°	2877.7	1601.2	293.2	201.7	157.6	126.0	107.2	97.7	94.5	91.4	91.4
35°	3044.7	1560.2	252.2	179.6	135.5	110.4	94.5	88.3	85.1	82.0	82.0
37.5°	3240.1	1509.8	230.1	160.7	119.7	97.7	82.0	78.7	75.6	75.6	75.6
40°	3460.8	1446.7	214.3	145.0	107.2	85.1	72.4	69.4	66.2	66.2	66.2
42.5°	3693.9	1374.3	198.6	129.3	94.5	72.4	63.1	63.1	59.9	59.9	56.7
45°	3955.6	1301.8	182.8	113.5	82.0	63.1	53.5	50.5	50.5	47.3	47.3
47.5°	4264.5	1235.5	167.0	100.8	72.4	53.5	47.3	44.1	41.0	37.8	37.8
50°	4699.5	1229.2	148.1	88.3	66.2	44.1	37.8	34.6	31.4	28.4	28.4
52.5°	5131.3	1172.5	126.0	72.4	53.5	37.8	28.4	25.2	22.1	22.1	18.9
55°	5228.9	1078.0	110.4	63.1	41.0	28.4	22.1	15.8	15.8	12.6	12.6
57.5°	5443.3	1033.8	94.5	50.5	31.4	22.1	12.6	9.5	9.5	9.5	9.5
60°	5865.6	1021.2	82.0	44.1	22.1	15.8	9.5	6.3	6.3	3.2	3.2
62.5°	6448.7	1008.6	69.4	37.8	15.8	9.5	6.3	3.2	0.0	0.0	0.0
65°	6770.2	923.5	56.7	28.4	12.6	9.5	3.2	0.0	0.0	0.0	0.0
67.5°	6685.1	762.7	50.5	18.9	9.5	6.3	3.2	0.0	0.0	0.0	0.0
69°	6329.0	643.0	41.0	15.8	9.5	6.3	3.2	0.0	0.0	0.0	0.0
70°	5900.3	554.7	37.8	12.6	6.3	3.2	3.2	0.0	0.0	0.0	0.0
72.5°	4188.8	290.0	25.2	9.5	6.3	3.2	0.0	0.0	0.0	0.0	0.0
75°	1957.3	129.3	15.8	6.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	431.8	59.9	9.5	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	82.0	22.1	6.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.4	9.5	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	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)