

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: P399507

Luminaire Tested: **ARCH-L-PA3-150-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399507  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-150-750-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 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: 19003 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

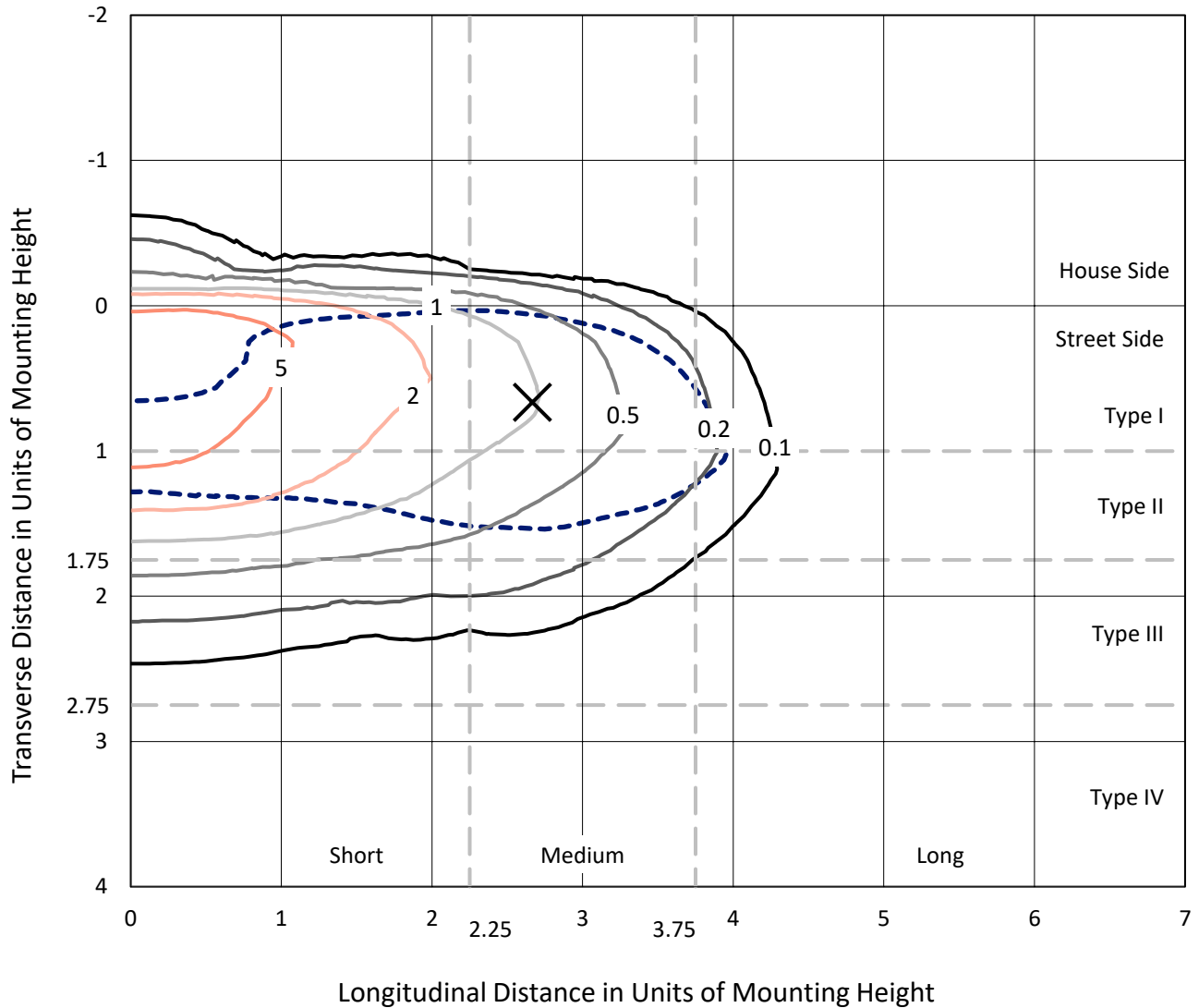
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

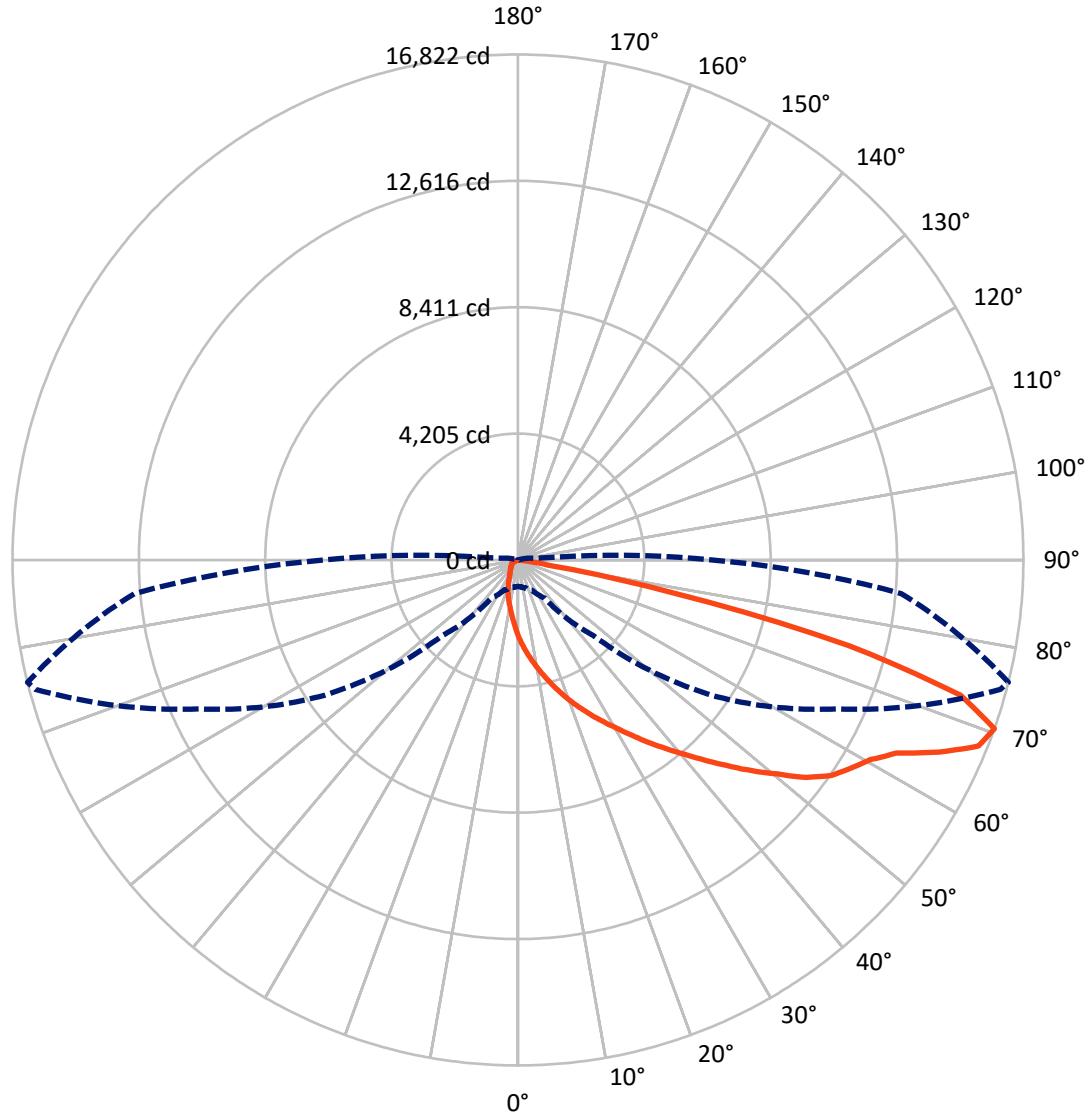
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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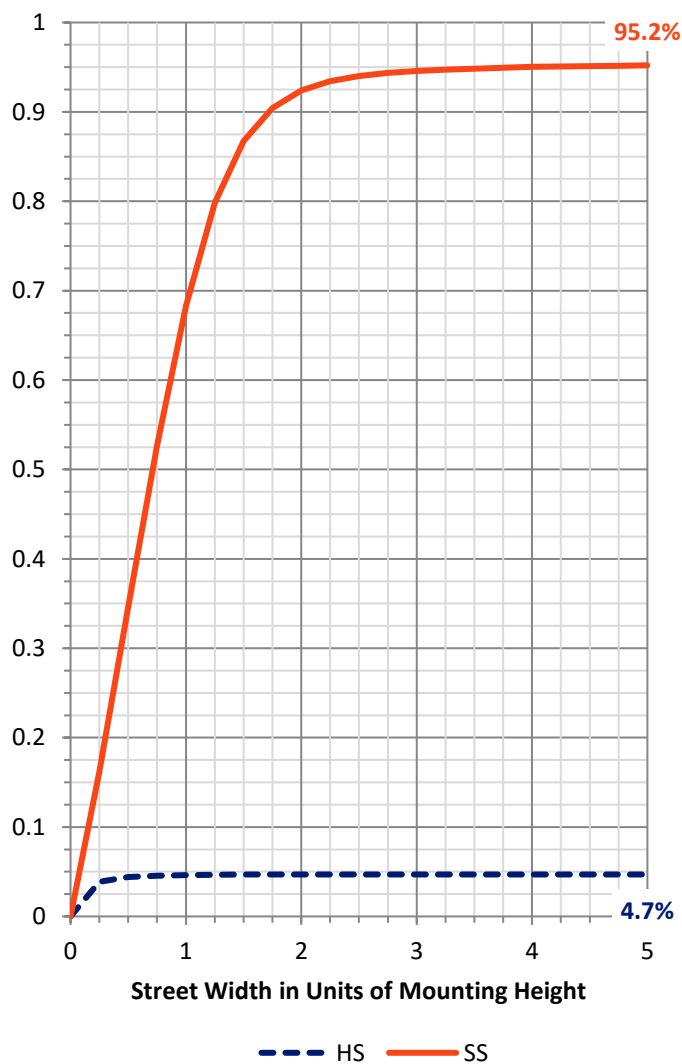
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	896.2	0.0	896.2
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	18106.8	0.0	18106.8
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	19003.0	0.0	19003.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.6	1.3
10°-20°	773.4	4.1
20°-30°	1440.4	7.6
30°-40°	2547.7	13.4
40°-50°	3896.0	20.5
50°-60°	4417.2	23.2
60°-70°	3786.6	19.9
70°-80°	1834.0	9.7
80°-90°	68.0	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°	19003.0	100.0
0°-180°	19003.0	100.0

**Coefficient of Utilization**



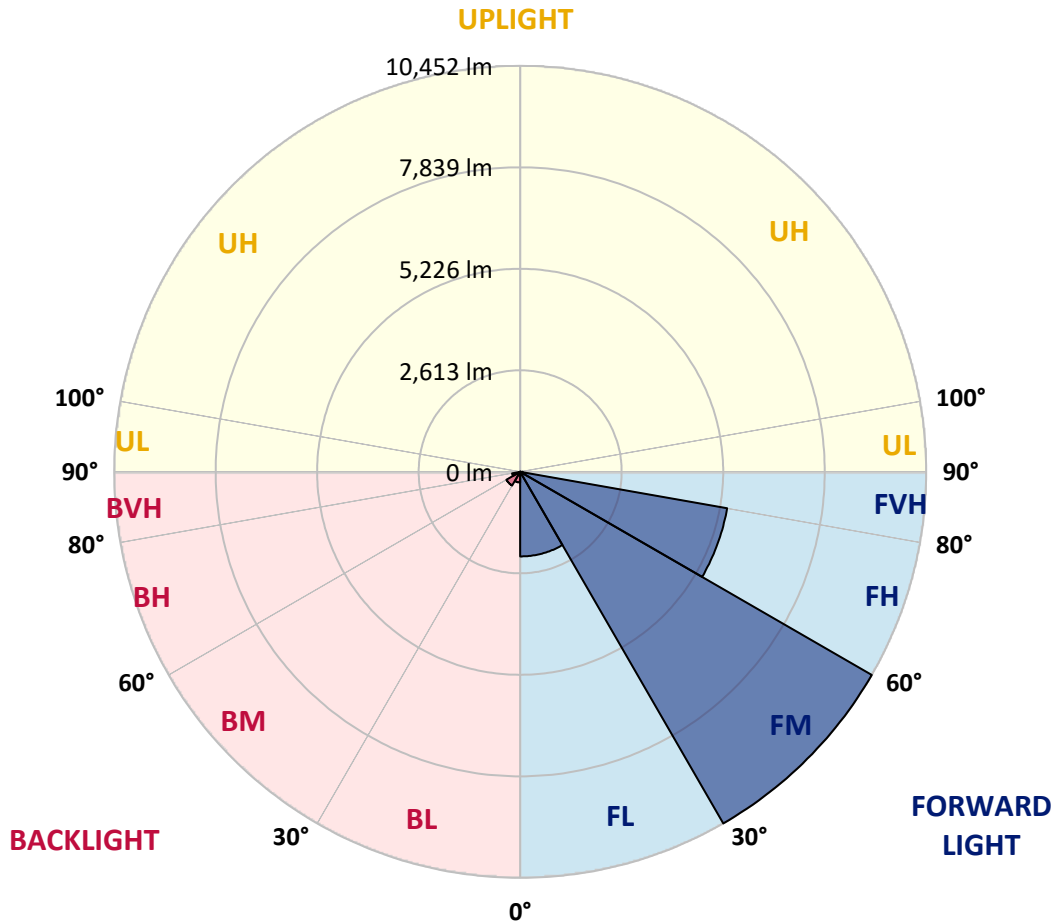
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2178.5	11.5			
FM (30°-60°)	10451.8	55.0			
FH (60°-80°)	5409.6	28.5			G3/7500
FVH (80°-90°)	66.9	0.4			G1/100
BL (0°-30°)	274.9	1.4	B1/500		
BM (30°-60°)	409.1	2.2	B1/1000		
BH (60°-80°)	211.0	1.1	B1/500		G1/500
BVH (80°-90°)	1.2	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°	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7
2.5°	3477.0	3458.0	3439.0	3366.3	3299.8	3239.7	3125.8	2977.1	2844.2	2815.8	2660.7
5°	4084.4	4062.3	4033.8	3961.0	3875.6	3774.4	3606.7	3378.9	3144.8	3094.2	2806.3
7.5°	4495.7	4476.7	4435.6	4400.8	4315.4	4217.3	4030.6	3764.9	3442.2	3378.9	2973.9
10°	4777.3	4764.6	4758.3	4729.8	4666.6	4587.5	4400.8	4122.4	3742.7	3670.0	3151.1
12.5°	4878.5	4878.5	4910.2	4957.6	4967.1	4941.8	4771.0	4492.6	4059.1	3983.2	3359.9
15°	4742.5	4758.3	4827.9	4979.8	5138.0	5242.4	5134.8	4875.4	4407.1	4324.9	3606.7
17.5°	4704.5	4720.3	4767.8	4900.7	5112.7	5391.1	5444.9	5245.5	4736.2	4666.6	3859.8
20°	4812.1	4827.9	4869.0	4982.9	5144.3	5425.9	5650.5	5603.0	5084.2	5011.4	4116.1
22.5°	5068.4	5077.9	5077.9	5166.4	5308.8	5517.6	5780.2	5941.6	5441.7	5362.6	4369.2
25°	5618.9	5599.9	5523.9	5479.7	5571.4	5742.2	5944.7	6239.0	5840.3	5732.8	4641.3
27.5°	6340.2	6403.5	6220.0	6008.0	5938.4	6036.5	6175.7	6501.6	6226.3	6112.4	4888.0
30°	7317.8	7292.5	7052.1	6748.3	6447.8	6413.0	6460.4	6726.2	6612.3	6504.7	5163.3
32.5°	8121.4	8168.9	7915.8	7545.6	7096.3	6884.4	6833.7	6995.1	7023.6	6954.0	5489.1
35°	8947.2	8997.8	8751.0	8339.7	7805.0	7450.7	7305.2	7327.3	7532.9	7444.4	5830.8
37.5°	9687.5	9731.8	9488.2	9067.4	8532.7	8099.3	7890.5	7719.6	8026.5	7947.4	6191.5
40°	10250.6	10257.0	10092.4	9715.9	9209.7	8760.5	8523.2	8187.8	8548.5	8494.7	6568.0
42.5°	10649.3	10661.9	10541.7	10219.0	9750.7	9333.1	9140.1	8741.5	9149.6	9102.2	7004.6
45°	10835.9	10858.1	10845.4	10548.0	10158.9	9798.2	9734.9	9330.0	9807.7	9763.4	7507.6
47.5°	10658.8	10658.8	10820.1	10779.0	10421.5	10181.0	10253.8	9943.7	10522.7	10481.6	8020.2
50°	9921.6	9931.1	10260.1	10731.5	10522.7	10468.9	10696.7	10544.9	11171.3	11196.6	8633.9
52.5°	7985.4	7969.5	9080.0	9984.9	10453.1	10598.6	11104.8	11158.6	11949.6	12025.5	9244.5
55°	5966.9	5957.4	7020.4	8662.4	9965.9	10532.2	11332.6	11706.0	12614.0	12661.4	9700.1
57.5°	4723.5	4698.2	5283.5	6982.4	8864.9	10234.8	11342.1	11810.4	12984.1	13066.4	10143.1
60°	3632.0	3609.9	4046.5	5194.9	7305.2	9443.9	11070.0	11816.7	13341.6	13487.2	10737.8
62.5°	2597.5	2622.8	2958.1	3726.9	5618.9	8327.1	10715.7	11905.3	13977.5	14142.1	11582.6
65°	1752.7	1740.1	2018.5	2537.3	3995.8	6824.3	10171.5	12091.9	15122.8	15410.7	12595.0
67.5°	1218.1	1227.5	1354.1	1651.5	2537.3	5239.2	9266.7	12196.3	16306.1	16530.7	13303.7
70°	879.5	892.2	961.8	1110.5	1550.2	3552.9	7833.5	11718.6	16625.6	16821.8	12810.1
72.5°	579.0	604.3	708.7	787.8	990.3	2224.1	5770.7	10095.6	15249.4	15394.9	10747.3
75°	313.2	319.5	455.6	588.5	705.5	1385.7	3442.2	6808.4	11408.6	11361.1	7086.9
77.5°	243.6	253.1	281.6	420.8	474.6	762.5	1360.4	3075.2	5403.7	5258.2	2417.1
80°	148.7	155.0	196.2	249.9	332.2	442.9	398.6	835.2	1097.8	1028.2	354.3
82.5°	88.6	94.9	117.1	208.8	262.6	208.8	139.2	202.5	205.6	202.5	88.6
85°	15.8	15.8	82.3	145.5	139.2	60.1	82.3	66.4	60.1	63.3	19.0
87.5°	0.0	0.0	31.6	44.3	63.3	22.1	31.6	15.8	15.8	15.8	9.5
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°	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7	2543.7
2.5°	2565.8	2458.3	2236.8	2043.8	1850.8	1708.4	1600.9	1490.1	1452.2	1404.7	1379.4
5°	2610.1	2398.1	1958.4	1607.2	1309.8	1082.0	936.5	847.9	790.9	749.8	740.3
7.5°	2676.6	2350.7	1733.7	1259.2	933.3	705.5	585.3	525.2	493.5	474.6	468.2
10°	2755.6	2309.6	1512.3	980.8	658.1	496.7	430.3	405.0	392.3	386.0	382.8
12.5°	2866.4	2293.7	1325.6	756.1	496.7	408.1	373.3	357.5	348.0	338.5	335.4
15°	3011.9	2300.1	1154.8	585.3	411.3	363.8	335.4	319.5	306.9	297.4	297.4
17.5°	3163.8	2309.6	987.1	474.6	373.3	332.2	300.6	278.4	268.9	259.4	256.3
20°	3306.1	2306.4	825.7	405.0	338.5	297.4	265.8	243.6	227.8	218.3	218.3
22.5°	3442.2	2287.4	673.9	363.8	310.0	262.6	227.8	205.6	193.0	183.5	183.5
25°	3587.7	2249.4	550.5	332.2	275.2	231.0	196.2	174.0	164.5	155.0	155.0
27.5°	3701.6	2186.2	449.3	303.7	243.6	199.3	167.7	148.7	139.2	132.9	132.9
30°	3825.0	2094.4	373.3	272.1	212.0	170.8	142.4	126.6	117.1	113.9	113.9
32.5°	3961.0	1993.2	319.5	240.4	180.3	145.5	120.2	110.7	101.2	98.1	98.1
35°	4119.2	1904.6	287.9	208.8	158.2	123.4	104.4	94.9	88.6	88.6	88.6
37.5°	4299.6	1812.8	259.4	183.5	136.0	104.4	88.6	85.4	82.3	79.1	79.1
40°	4495.7	1714.8	234.1	161.4	117.1	88.6	75.9	75.9	72.8	72.8	72.8
42.5°	4717.2	1629.3	212.0	142.4	101.2	75.9	66.4	66.4	63.3	63.3	63.3
45°	4957.6	1550.2	193.0	126.6	88.6	66.4	60.1	56.9	53.8	53.8	53.8
47.5°	5242.4	1506.0	177.2	110.7	75.9	56.9	50.6	47.5	44.3	41.1	41.1
50°	5606.2	1524.9	161.4	91.7	66.4	47.5	41.1	38.0	34.8	31.6	31.6
52.5°	5894.1	1515.4	139.2	79.1	53.8	38.0	31.6	28.5	25.3	22.1	22.1
55°	6102.9	1477.5	120.2	66.4	41.1	31.6	25.3	19.0	15.8	15.8	15.8
57.5°	6308.6	1439.5	101.2	53.8	31.6	22.1	15.8	12.7	12.7	12.7	12.7
60°	6628.1	1385.7	88.6	44.3	25.3	15.8	9.5	9.5	6.3	6.3	6.3
62.5°	7017.2	1319.3	72.8	38.0	19.0	12.7	6.3	6.3	0.0	0.0	0.0
65°	7444.4	1202.2	60.1	28.5	15.8	9.5	6.3	0.0	0.0	0.0	0.0
67.5°	7346.3	965.0	50.6	19.0	12.7	6.3	3.2	0.0	0.0	0.0	0.0
70°	6498.4	651.7	41.1	15.8	9.5	6.3	3.2	0.0	0.0	0.0	0.0
72.5°	5090.5	386.0	28.5	12.7	6.3	3.2	0.0	0.0	0.0	0.0	0.0
75°	3258.7	193.0	19.0	9.5	6.3	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	1091.5	94.9	12.7	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	155.0	31.6	6.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.8	12.7	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	3.2	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)