

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: P399291

Luminaire Tested: **ARCH-L-PA3-120-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399291  
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-PA3-120-750-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 530mA 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: 15729 lumens  
Efficiency: N/A  
Efficacy: 127.9 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

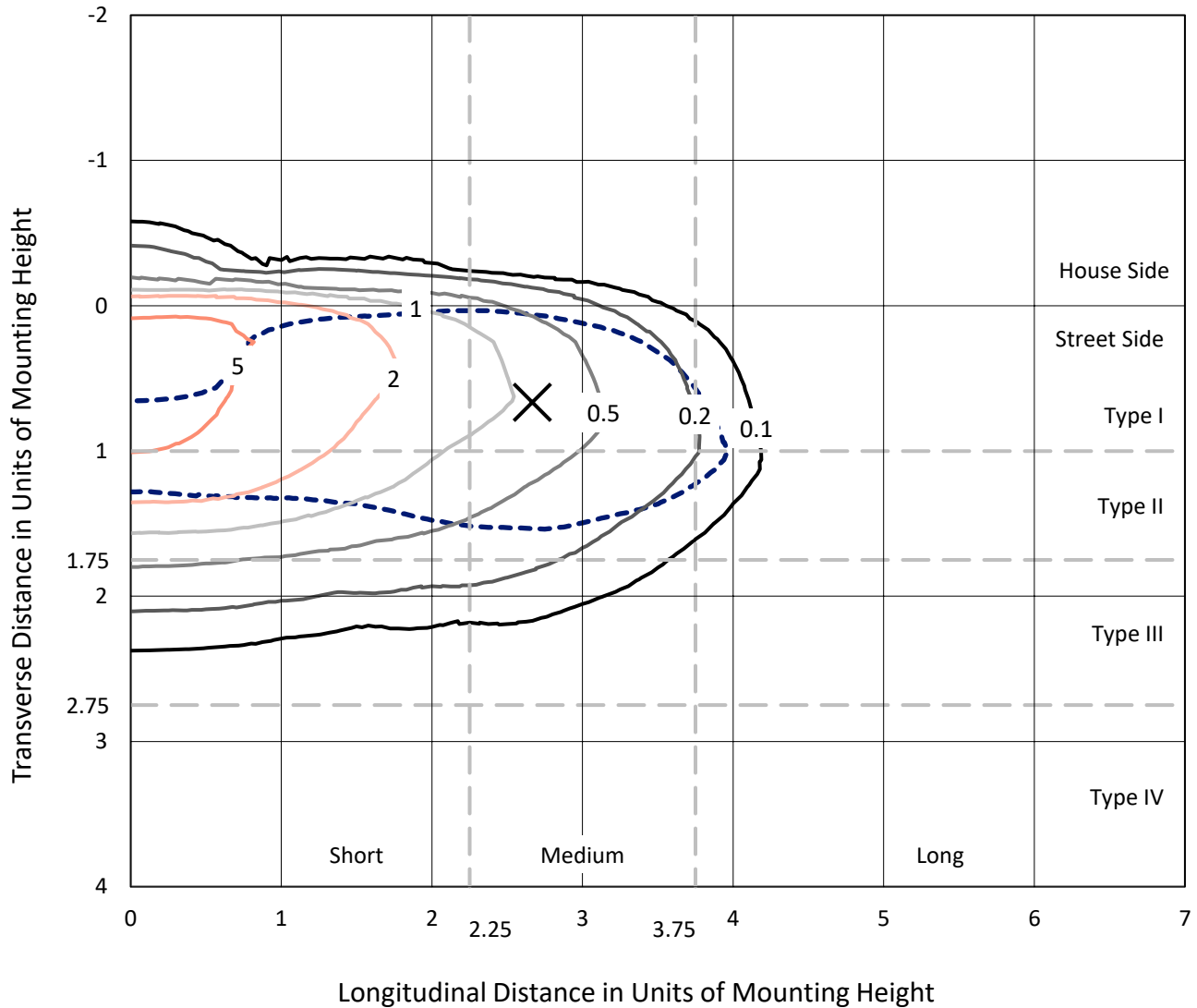
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399291  
 CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

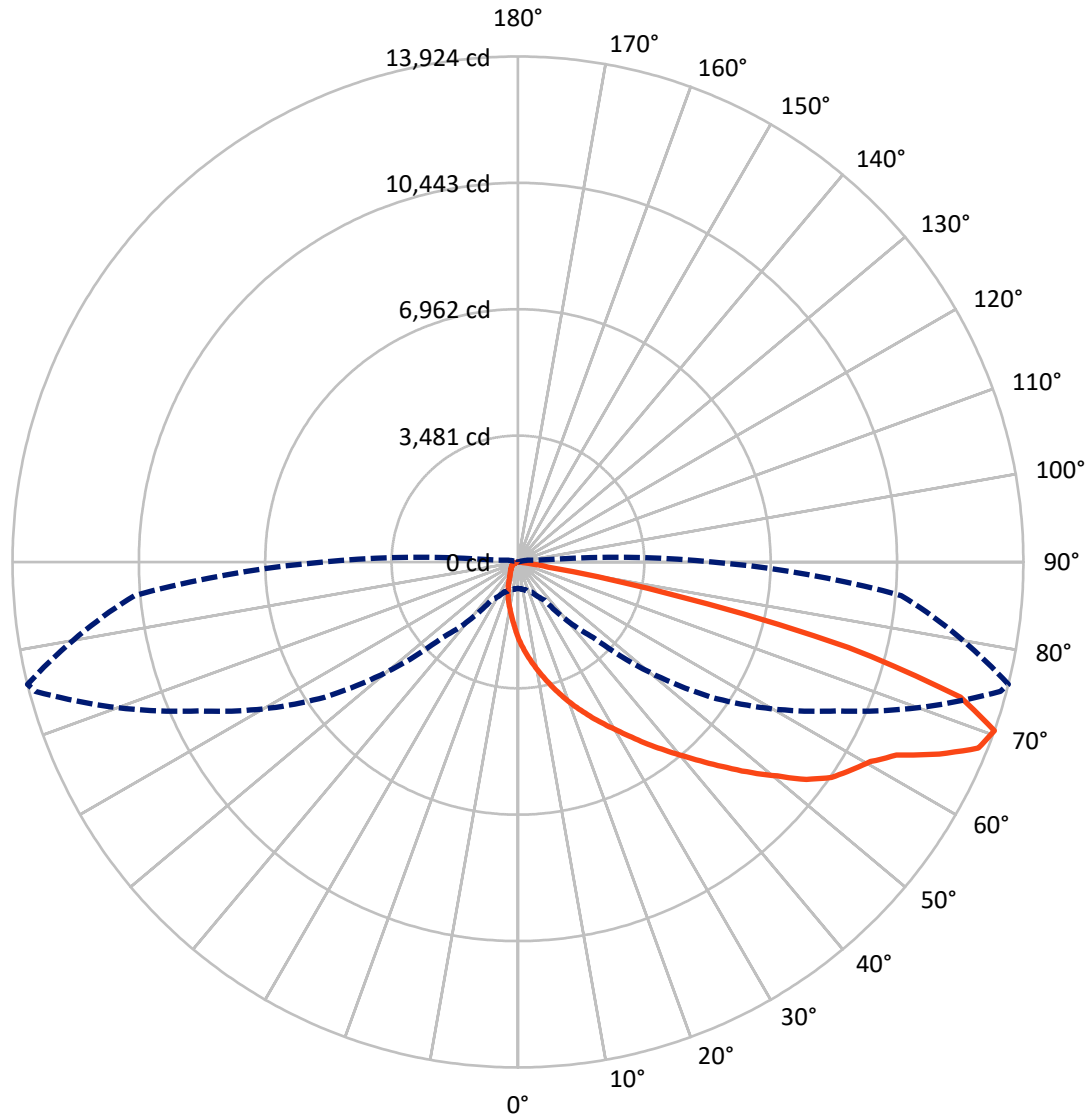
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc  
 Type II - Medium - N/A

REPORT NUMBER: P399291  
CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P399291  
 CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

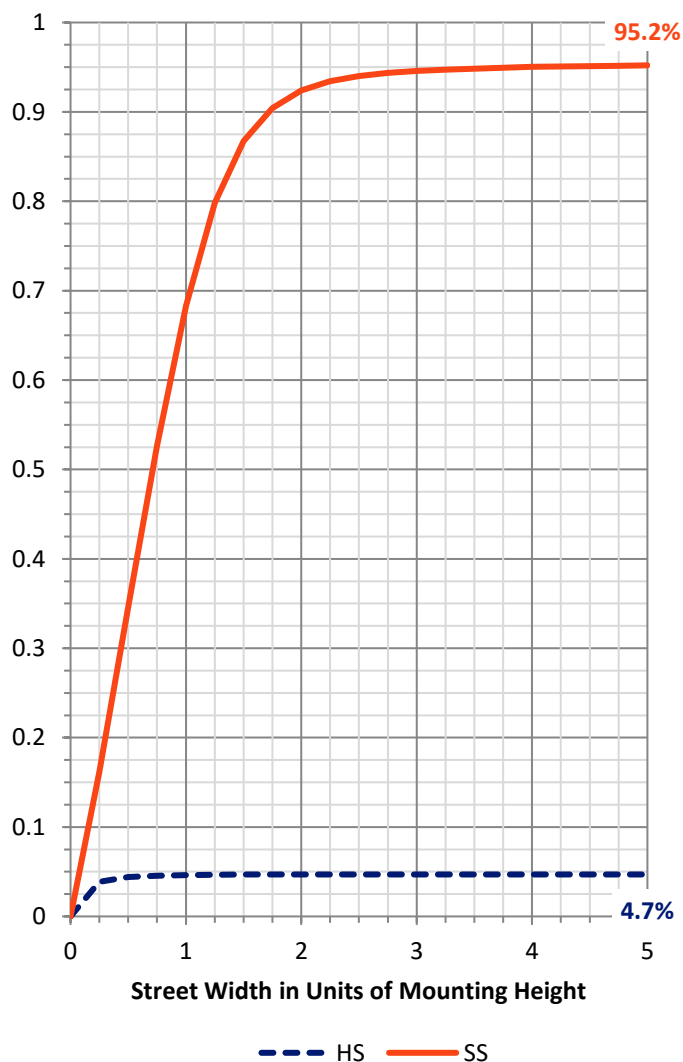
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	741.8	0.0	741.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	14987.2	0.0	14987.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	15729.0	0.0	15729.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.3	1.3
10°-20°	640.2	4.1
20°-30°	1192.2	7.6
30°-40°	2108.8	13.4
40°-50°	3224.8	20.5
50°-60°	3656.2	23.2
60°-70°	3134.2	19.9
70°-80°	1518.0	9.7
80°-90°	56.3	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°	15729.0	100.0
0°-180°	15729.0	100.0

**Coefficient of Utilization**

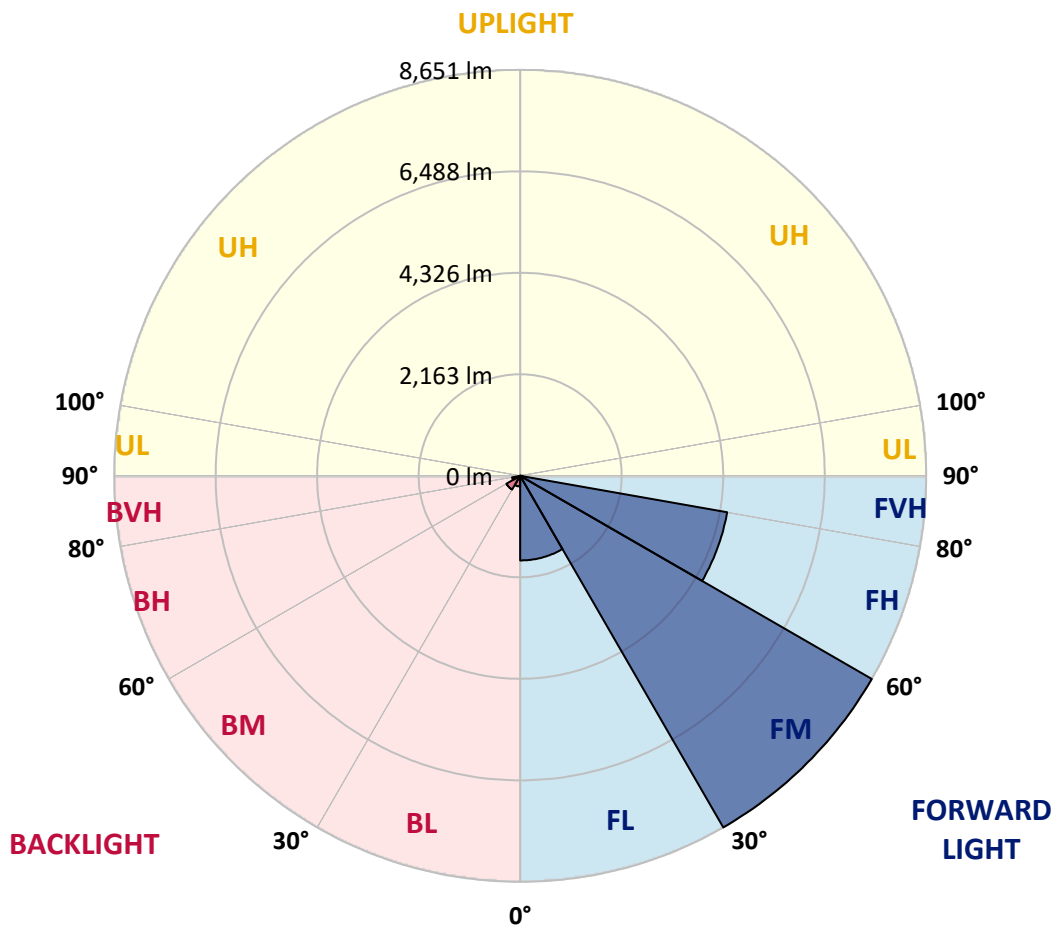


REPORT NUMBER: P399291  
 CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1803.2	11.5			
FM (30°-60°)	8651.1	55.0			
FH (60°-80°)	4477.6	28.5			G2/5000
FVH (80°-90°)	55.4	0.4			G1/100
BL (0°-30°)	227.6	1.4	B1/500		
BM (30°-60°)	338.6	2.2	B1/1000		
BH (60°-80°)	174.7	1.1	B1/500		G1/500
BVH (80°-90°)	1.0	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





REPORT NUMBER: P399291

CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4
2.5°	2877.9	2862.2	2846.5	2786.3	2731.3	2681.5	2587.3	2464.2	2354.2	2330.6	2202.3
5°	3380.7	3362.4	3338.8	3278.6	3207.9	3124.1	2985.3	2796.8	2603.0	2561.1	2322.8
7.5°	3721.2	3705.4	3671.4	3642.6	3571.9	3490.7	3336.2	3116.2	2849.1	2796.8	2461.6
10°	3954.2	3943.7	3938.5	3914.9	3862.6	3797.1	3642.6	3412.2	3097.9	3037.7	2608.2
12.5°	4038.0	4038.0	4064.2	4103.5	4111.3	4090.4	3949.0	3718.5	3359.8	3296.9	2781.0
15°	3925.4	3938.5	3996.1	4121.8	4252.8	4339.2	4250.1	4035.4	3647.8	3579.8	2985.3
17.5°	3894.0	3907.1	3946.4	4056.4	4231.8	4462.2	4506.8	4341.8	3920.2	3862.6	3194.8
20°	3983.0	3996.1	4030.2	4124.4	4258.0	4491.1	4677.0	4637.7	4208.2	4148.0	3406.9
22.5°	4195.1	4203.0	4203.0	4276.3	4394.2	4567.0	4784.3	4917.9	4504.1	4438.7	3616.4
25°	4650.8	4635.1	4572.2	4535.6	4611.5	4752.9	4920.5	5164.1	4834.1	4745.1	3841.6
27.5°	5247.9	5300.2	5148.3	4972.9	4915.3	4996.5	5111.7	5381.4	5153.6	5059.3	4045.9
30°	6057.0	6036.1	5837.1	5585.7	5336.9	5308.1	5347.4	5567.3	5473.1	5384.0	4273.7
32.5°	6722.2	6761.5	6552.0	6245.6	5873.7	5698.3	5656.4	5789.9	5813.5	5755.9	4543.4
35°	7405.7	7447.6	7243.3	6902.9	6460.3	6167.0	6046.6	6064.9	6235.1	6161.8	4826.2
37.5°	8018.4	8055.1	7853.5	7505.2	7062.6	6703.8	6531.0	6389.6	6643.6	6578.2	5124.8
40°	8484.6	8489.8	8353.6	8042.0	7623.0	7251.2	7054.8	6777.2	7075.7	7031.2	5436.4
42.5°	8814.5	8825.0	8725.5	8458.4	8070.8	7725.1	7565.4	7235.4	7573.3	7534.0	5797.8
45°	8969.0	8987.3	8976.9	8730.7	8408.6	8110.1	8057.7	7722.5	8117.9	8081.3	6214.2
47.5°	8822.4	8822.4	8955.9	8921.9	8626.0	8426.9	8487.2	8230.5	8709.8	8675.7	6638.4
50°	8212.2	8220.1	8492.4	8882.6	8709.8	8665.2	8853.8	8728.1	9246.6	9267.5	7146.4
52.5°	6609.6	6596.5	7515.6	8264.6	8652.2	8772.6	9191.6	9236.1	9890.8	9953.6	7651.8
55°	4938.9	4931.0	5810.9	7170.0	8248.9	8717.6	9380.2	9689.2	10440.7	10480.0	8028.9
57.5°	3909.7	3888.8	4373.2	5779.5	7337.6	8471.5	9388.0	9775.6	10747.1	10815.2	8395.5
60°	3006.3	2987.9	3349.3	4299.9	6046.6	7816.8	9162.8	9780.8	11043.0	11163.5	8887.8
62.5°	2149.9	2170.9	2448.5	3084.8	4650.8	6892.4	8869.5	9854.1	11569.4	11705.5	9587.0
65°	1450.8	1440.3	1670.7	2100.2	3307.4	5648.5	8419.1	10008.6	12517.3	12755.6	10425.0
67.5°	1008.2	1016.1	1120.8	1367.0	2100.2	4336.6	7670.1	10095.1	13496.7	13682.7	11011.6
70°	728.0	738.5	796.1	919.2	1283.2	2940.8	6483.9	9699.6	13761.2	13923.6	10603.1
72.5°	479.2	500.2	586.6	652.1	819.7	1840.9	4776.5	8356.2	12622.1	12742.6	8895.7
75°	259.3	264.5	377.1	487.1	584.0	1147.0	2849.1	5635.4	9443.0	9403.7	5865.9
77.5°	201.6	209.5	233.1	348.3	392.8	631.1	1126.0	2545.4	4472.7	4352.3	2000.7
80°	123.1	128.3	162.4	206.9	275.0	366.6	330.0	691.3	908.7	851.1	293.3
82.5°	73.3	78.6	96.9	172.8	217.4	172.8	115.2	167.6	170.2	167.6	73.3
85°	13.1	13.1	68.1	120.5	115.2	49.8	68.1	55.0	49.8	52.4	15.7
87.5°	0.0	0.0	26.2	36.7	52.4	18.3	26.2	13.1	13.1	13.1	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399291

CATALOG NUMBER: ARCH-L-PA3-120-750-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4	2105.4
2.5°	2123.8	2034.7	1851.4	1691.7	1531.9	1414.1	1325.1	1233.4	1202.0	1162.7	1141.7
5°	2160.4	1985.0	1621.0	1330.3	1084.1	895.6	775.1	701.8	654.7	620.6	612.8
7.5°	2215.4	1945.7	1435.0	1042.2	772.5	584.0	484.5	434.7	408.5	392.8	387.6
10°	2280.9	1911.6	1251.7	811.8	544.7	411.1	356.1	335.2	324.7	319.5	316.9
12.5°	2372.5	1898.6	1097.2	625.9	411.1	337.8	309.0	295.9	288.1	280.2	277.6
15°	2493.0	1903.8	955.8	484.5	340.4	301.1	277.6	264.5	254.0	246.2	246.2
17.5°	2618.7	1911.6	817.0	392.8	309.0	275.0	248.8	230.4	222.6	214.7	212.1
20°	2736.5	1909.0	683.5	335.2	280.2	246.2	220.0	201.6	188.5	180.7	180.7
22.5°	2849.1	1893.3	557.8	301.1	256.6	217.4	188.5	170.2	159.7	151.9	151.9
25°	2969.6	1861.9	455.7	275.0	227.8	191.2	162.4	144.0	136.2	128.3	128.3
27.5°	3063.9	1809.5	371.9	251.4	201.6	165.0	138.8	123.1	115.2	110.0	110.0
30°	3166.0	1733.6	309.0	225.2	175.5	141.4	117.8	104.7	96.9	94.3	94.3
32.5°	3278.6	1649.8	264.5	199.0	149.3	120.5	99.5	91.7	83.8	81.2	81.2
35°	3409.5	1576.5	238.3	172.8	130.9	102.1	86.4	78.6	73.3	73.3	73.3
37.5°	3558.8	1500.5	214.7	151.9	112.6	86.4	73.3	70.7	68.1	65.5	65.5
40°	3721.2	1419.3	193.8	133.6	96.9	73.3	62.8	62.8	60.2	60.2	60.2
42.5°	3904.5	1348.6	175.5	117.8	83.8	62.8	55.0	55.0	52.4	52.4	52.4
45°	4103.5	1283.2	159.7	104.7	73.3	55.0	49.8	47.1	44.5	44.5	44.5
47.5°	4339.2	1246.5	146.6	91.7	62.8	47.1	41.9	39.3	36.7	34.0	34.0
50°	4640.3	1262.2	133.6	75.9	55.0	39.3	34.0	31.4	28.8	26.2	26.2
52.5°	4878.6	1254.4	115.2	65.5	44.5	31.4	26.2	23.6	20.9	18.3	18.3
55°	5051.5	1222.9	99.5	55.0	34.0	26.2	20.9	15.7	13.1	13.1	13.1
57.5°	5221.7	1191.5	83.8	44.5	26.2	18.3	13.1	10.5	10.5	10.5	10.5
60°	5486.2	1147.0	73.3	36.7	20.9	13.1	7.9	7.9	5.2	5.2	5.2
62.5°	5808.3	1092.0	60.2	31.4	15.7	10.5	5.2	5.2	0.0	0.0	0.0
65°	6161.8	995.1	49.8	23.6	13.1	7.9	5.2	0.0	0.0	0.0	0.0
67.5°	6080.6	798.7	41.9	15.7	10.5	5.2	2.6	0.0	0.0	0.0	0.0
70°	5378.8	539.5	34.0	13.1	7.9	5.2	2.6	0.0	0.0	0.0	0.0
72.5°	4213.5	319.5	23.6	10.5	5.2	2.6	0.0	0.0	0.0	0.0	0.0
75°	2697.3	159.7	15.7	7.9	5.2	2.6	0.0	0.0	0.0	0.0	0.0
77.5°	903.4	78.6	10.5	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	128.3	26.2	5.2	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.8	10.5	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	2.6	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)