

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: P399417

Luminaire Tested: **ARCH-L-PA3-140-730-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399417  
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-PA3-140-730-U-T2R-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: 16335 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

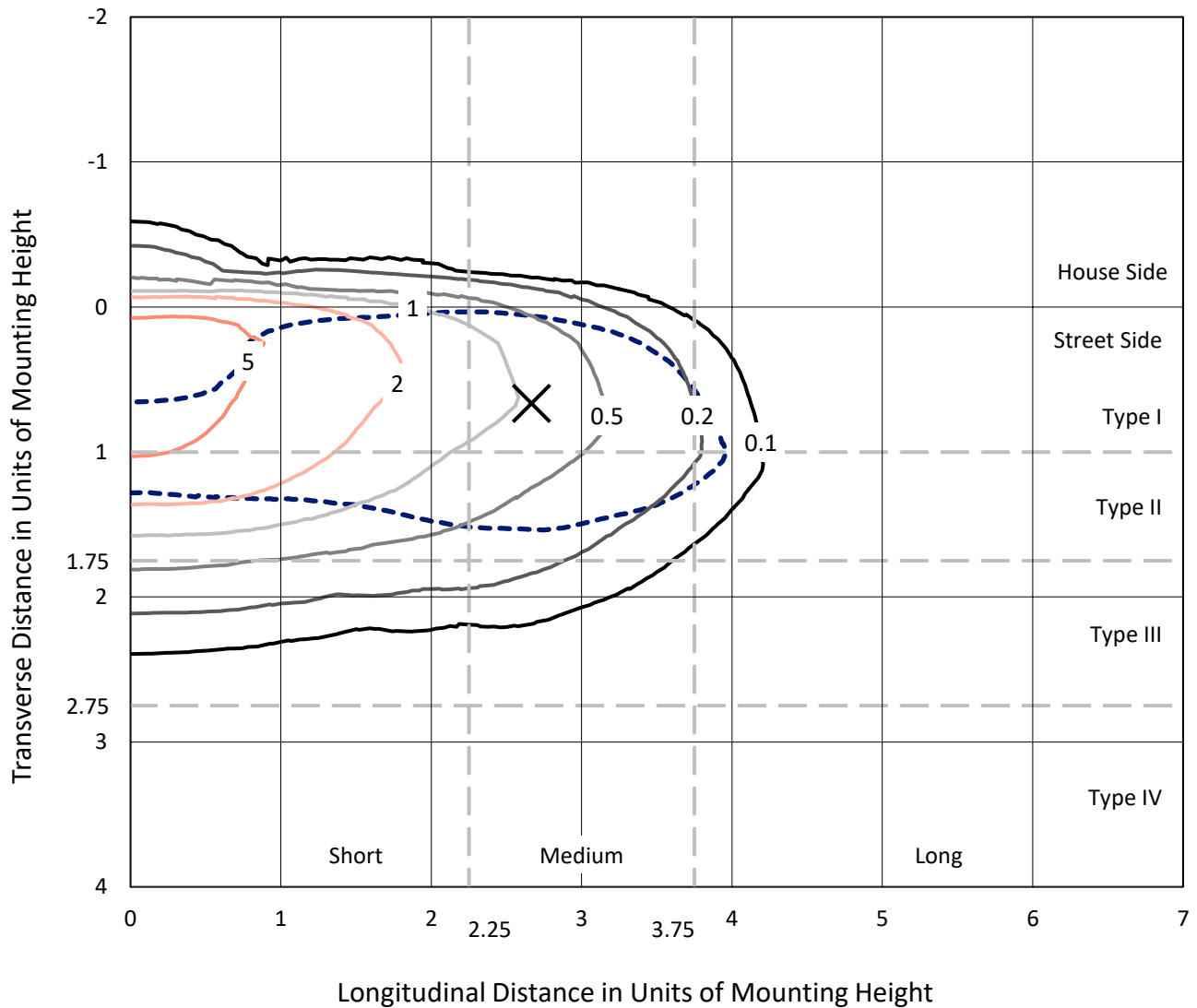
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

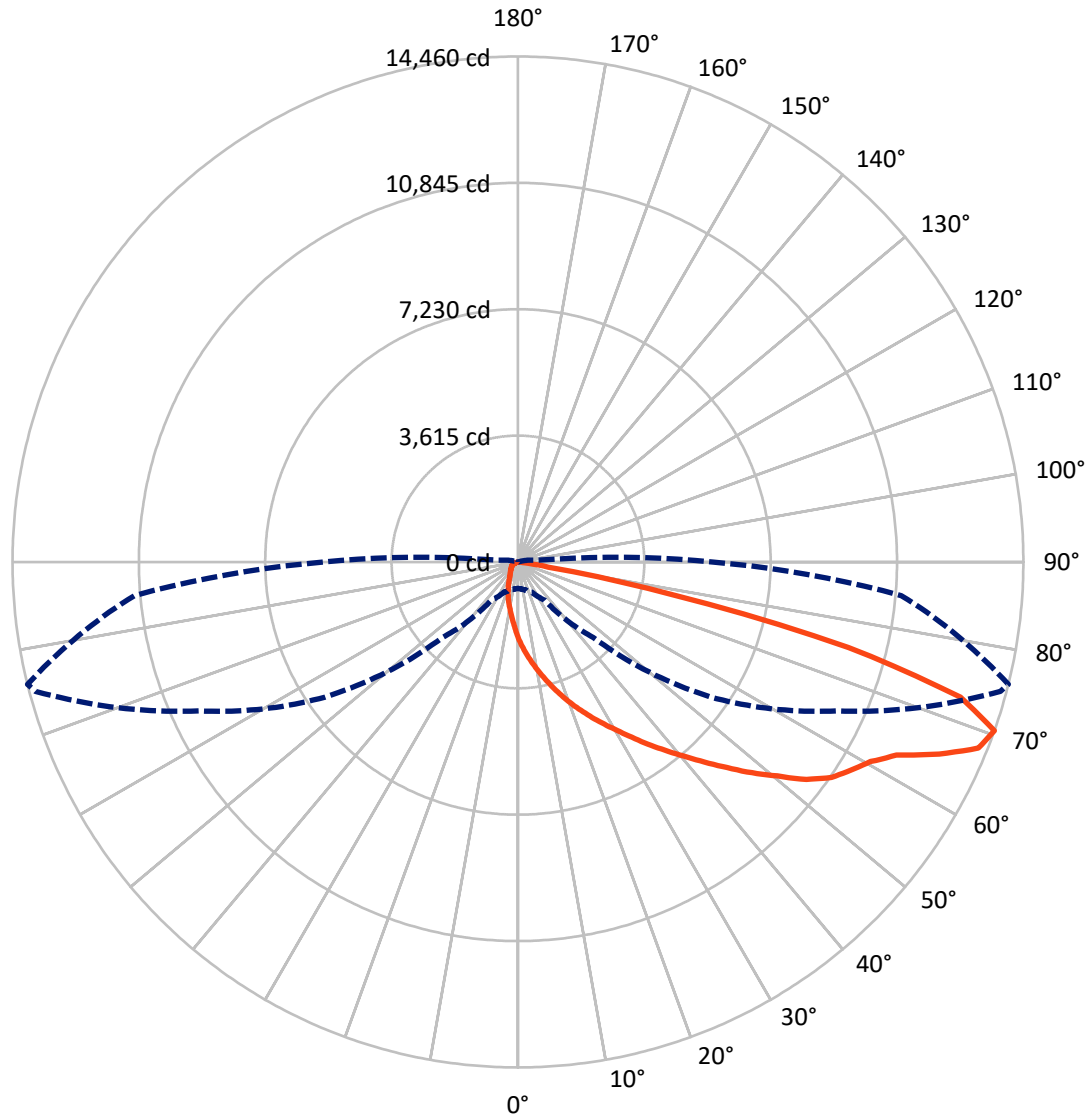
✕ Max cd  
 - - - 1/2 Max cd



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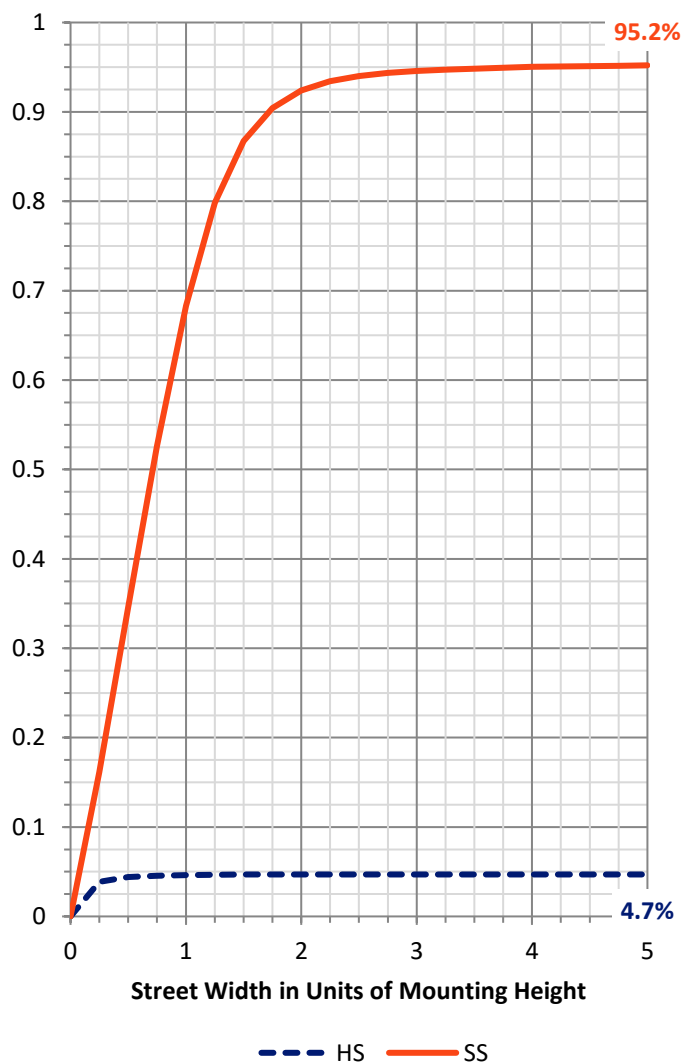
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	770.4	0.0	770.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	15564.6	0.0	15564.6
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	16335.0	0.0	16335.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.0	1.3
10°-20°	664.8	4.1
20°-30°	1238.2	7.6
30°-40°	2190.0	13.4
40°-50°	3349.0	20.5
50°-60°	3797.0	23.2
60°-70°	3255.0	19.9
70°-80°	1576.5	9.7
80°-90°	58.5	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°	16335.0	100.0
0°-180°	16335.0	100.0

**Coefficient of Utilization**

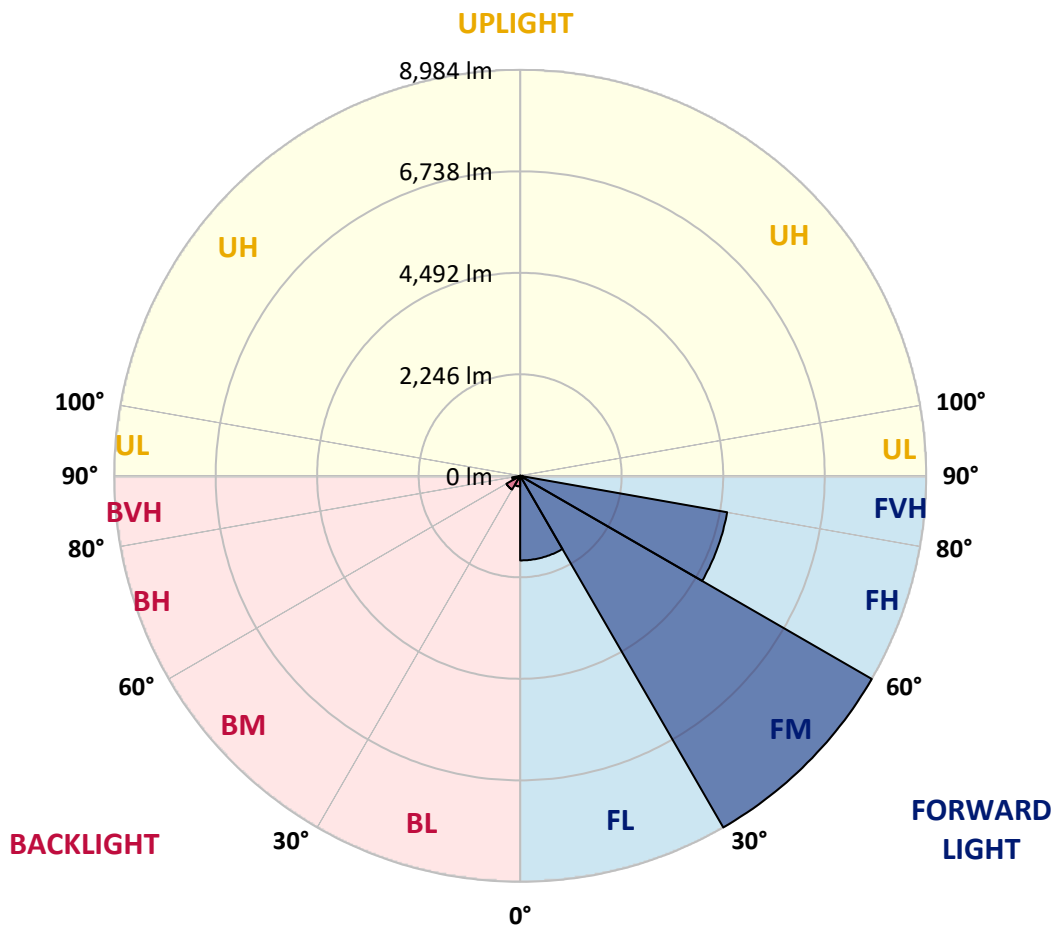


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1872.6	11.5			
FM (30°-60°)	8984.4	55.0			
FH (60°-80°)	4650.1	28.5			G2/5000
FVH (80°-90°)	57.5	0.4			G1/100
BL (0°-30°)	236.3	1.4	B1/500		
BM (30°-60°)	351.7	2.2	B1/1000		
BH (60°-80°)	181.4	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5
2.5°	2988.8	2972.5	2956.2	2893.6	2836.5	2784.9	2686.9	2559.1	2444.9	2420.4	2287.2
5°	3511.0	3491.9	3467.5	3404.9	3331.5	3244.5	3100.3	2904.5	2703.3	2659.8	2412.3
7.5°	3864.5	3848.2	3812.9	3782.9	3709.5	3625.2	3464.7	3236.3	2958.9	2904.5	2556.4
10°	4106.6	4095.7	4090.3	4065.8	4011.4	3943.4	3782.9	3543.6	3217.3	3154.7	2708.7
12.5°	4193.6	4193.6	4220.8	4261.6	4269.7	4248.0	4101.1	3861.8	3489.2	3424.0	2888.2
15°	4076.7	4090.3	4150.1	4280.6	4416.6	4506.3	4413.9	4190.9	3788.4	3717.7	3100.3
17.5°	4044.0	4057.6	4098.4	4212.6	4394.8	4634.2	4680.4	4509.1	4071.2	4011.4	3317.9
20°	4136.5	4150.1	4185.4	4283.3	4422.0	4664.1	4857.2	4816.4	4370.4	4307.8	3538.2
22.5°	4356.8	4364.9	4364.9	4441.1	4563.5	4743.0	4968.7	5107.4	4677.7	4609.7	3755.7
25°	4830.0	4813.7	4748.4	4710.3	4789.2	4936.0	5110.1	5363.0	5020.4	4927.9	3989.6
27.5°	5450.0	5504.4	5346.7	5164.5	5104.7	5189.0	5308.6	5588.7	5352.1	5254.2	4201.8
30°	6290.4	6268.6	6062.0	5800.9	5542.5	5512.6	5553.4	5781.8	5683.9	5591.5	4438.4
32.5°	6981.2	7022.0	6804.4	6486.2	6100.0	5917.8	5874.3	6013.0	6037.5	5977.6	4718.5
35°	7691.0	7734.5	7522.4	7168.8	6709.2	6404.6	6279.5	6298.6	6475.3	6399.2	5012.2
37.5°	8327.4	8365.4	8156.0	7794.3	7334.7	6962.1	6782.6	6635.8	6899.6	6831.6	5322.2
40°	8811.4	8816.9	8675.5	8351.8	7916.7	7530.5	7326.6	7038.3	7348.3	7302.1	5645.9
42.5°	9154.1	9165.0	9061.7	8784.3	8381.8	8022.8	7856.9	7514.2	7865.0	7824.2	6021.2
45°	9314.6	9333.6	9322.7	9067.1	8732.6	8422.5	8368.2	8020.0	8430.7	8392.6	6453.6
47.5°	9162.3	9162.3	9301.0	9265.6	8958.3	8751.6	8814.2	8547.6	9045.3	9010.0	6894.1
50°	8528.6	8536.8	8819.6	9224.8	9045.3	8999.1	9194.9	9064.4	9602.8	9624.6	7421.7
52.5°	6864.2	6850.6	7805.2	8583.0	8985.5	9110.6	9545.7	9592.0	10271.9	10337.1	7946.6
55°	5129.1	5121.0	6034.8	7446.2	8566.7	9053.5	9741.5	10062.5	10843.0	10883.8	8338.2
57.5°	4060.3	4038.6	4541.7	6002.1	7620.3	8797.9	9749.7	10152.2	11161.2	11231.9	8719.0
60°	3122.1	3103.0	3478.3	4465.6	6279.5	8118.0	9515.8	10157.6	11468.5	11593.6	9230.3
62.5°	2232.8	2254.5	2542.8	3203.7	4830.0	7157.9	9211.2	10233.8	12015.1	12156.5	9956.4
65°	1506.6	1495.8	1735.1	2181.1	3434.8	5866.1	8743.5	10394.2	12999.6	13247.1	10826.7
67.5°	1047.0	1055.2	1164.0	1419.6	2181.1	4503.6	7965.7	10484.0	14016.7	14209.8	11435.8
70°	756.0	766.9	826.8	954.6	1332.6	3054.1	6733.7	10073.3	14291.4	14460.0	11011.6
72.5°	497.7	519.4	609.2	677.2	851.2	1911.9	4960.5	8678.2	13108.4	13233.5	9238.4
75°	269.2	274.7	391.6	505.8	606.5	1191.2	2958.9	5852.5	9806.8	9766.0	6091.9
77.5°	209.4	217.6	242.0	361.7	407.9	655.4	1169.4	2643.4	4645.0	4519.9	2077.8
80°	127.8	133.3	168.6	214.8	285.6	380.7	342.7	718.0	943.7	883.9	304.6
82.5°	76.1	81.6	100.6	179.5	225.7	179.5	119.7	174.1	176.8	174.1	76.1
85°	13.6	13.6	70.7	125.1	119.7	51.7	70.7	57.1	51.7	54.4	16.3
87.5°	0.0	0.0	27.2	38.1	54.4	19.0	27.2	13.6	13.6	13.6	8.2
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°	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5	2186.5
2.5°	2205.6	2113.1	1922.7	1756.9	1591.0	1468.6	1376.1	1280.9	1248.3	1207.5	1185.7
5°	2243.7	2061.4	1683.4	1381.5	1125.9	930.1	805.0	728.8	679.9	644.5	636.4
7.5°	2300.8	2020.7	1490.3	1082.4	802.3	606.5	503.1	451.5	424.3	407.9	402.5
10°	2368.8	1985.3	1300.0	843.1	565.7	427.0	369.9	348.1	337.2	331.8	329.1
12.5°	2463.9	1971.7	1139.5	650.0	427.0	350.8	320.9	307.3	299.2	291.0	288.3
15°	2589.0	1977.1	992.6	503.1	353.5	312.8	288.3	274.7	263.8	255.6	255.6
17.5°	2719.6	1985.3	848.5	407.9	320.9	285.6	258.4	239.3	231.2	223.0	220.3
20°	2842.0	1982.6	709.8	348.1	291.0	255.6	228.4	209.4	195.8	187.7	187.7
22.5°	2958.9	1966.3	579.3	312.8	266.5	225.7	195.8	176.8	165.9	157.7	157.7
25°	3084.0	1933.6	473.2	285.6	236.6	198.5	168.6	149.6	141.4	133.3	133.3
27.5°	3181.9	1879.2	386.2	261.1	209.4	171.3	144.1	127.8	119.7	114.2	114.2
30°	3288.0	1800.4	320.9	233.9	182.2	146.9	122.4	108.8	100.6	97.9	97.9
32.5°	3404.9	1713.3	274.7	206.7	155.0	125.1	103.3	95.2	87.0	84.3	84.3
35°	3540.9	1637.2	247.5	179.5	136.0	106.1	89.7	81.6	76.1	76.1	76.1
37.5°	3695.9	1558.3	223.0	157.7	116.9	89.7	76.1	73.4	70.7	68.0	68.0
40°	3864.5	1474.0	201.2	138.7	100.6	76.1	65.3	65.3	62.6	62.6	62.6
42.5°	4054.9	1400.6	182.2	122.4	87.0	65.3	57.1	57.1	54.4	54.4	54.4
45°	4261.6	1332.6	165.9	108.8	76.1	57.1	51.7	49.0	46.2	46.2	46.2
47.5°	4506.3	1294.5	152.3	95.2	65.3	49.0	43.5	40.8	38.1	35.4	35.4
50°	4819.1	1310.8	138.7	78.9	57.1	40.8	35.4	32.6	29.9	27.2	27.2
52.5°	5066.6	1302.7	119.7	68.0	46.2	32.6	27.2	24.5	21.8	19.0	19.0
55°	5246.1	1270.0	103.3	57.1	35.4	27.2	21.8	16.3	13.6	13.6	13.6
57.5°	5422.8	1237.4	87.0	46.2	27.2	19.0	13.6	10.9	10.9	10.9	10.9
60°	5697.5	1191.2	76.1	38.1	21.8	13.6	8.2	8.2	5.4	5.4	5.4
62.5°	6032.0	1134.1	62.6	32.6	16.3	10.9	5.4	5.4	0.0	0.0	0.0
65°	6399.2	1033.4	51.7	24.5	13.6	8.2	5.4	0.0	0.0	0.0	0.0
67.5°	6314.9	829.5	43.5	16.3	10.9	5.4	2.7	0.0	0.0	0.0	0.0
70°	5586.0	560.2	35.4	13.6	8.2	5.4	2.7	0.0	0.0	0.0	0.0
72.5°	4375.8	331.8	24.5	10.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0
75°	2801.2	165.9	16.3	8.2	5.4	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	938.3	81.6	10.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	133.3	27.2	5.4	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.9	10.9	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	2.7	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)