

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: P400362

Luminaire Tested: **ARCH-L-PA3-270-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400362  
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-PA3-270-740-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

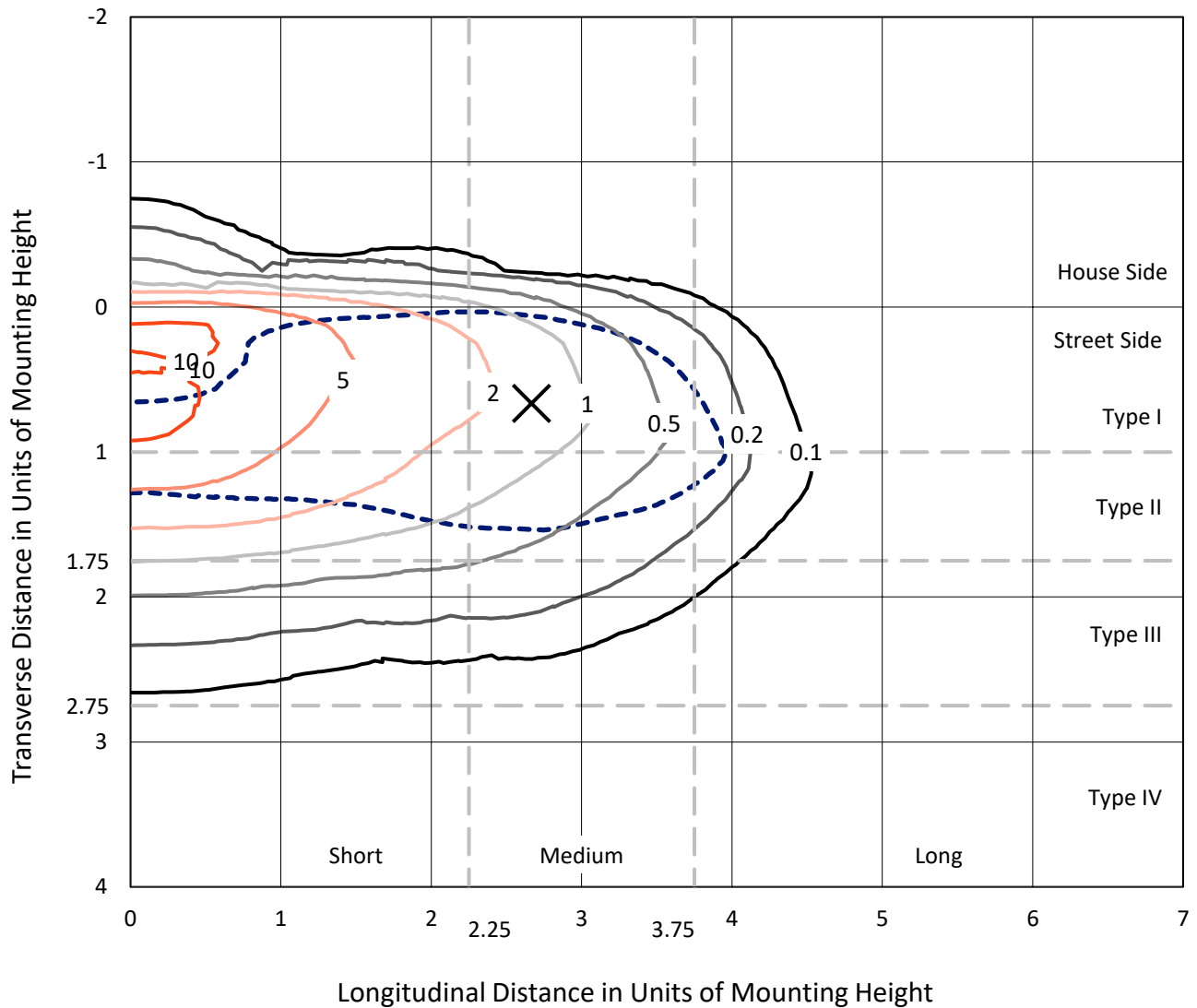
Lumens per Lamp: N/A  
Luminaire Lumens: 28166 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G4  
  
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): 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

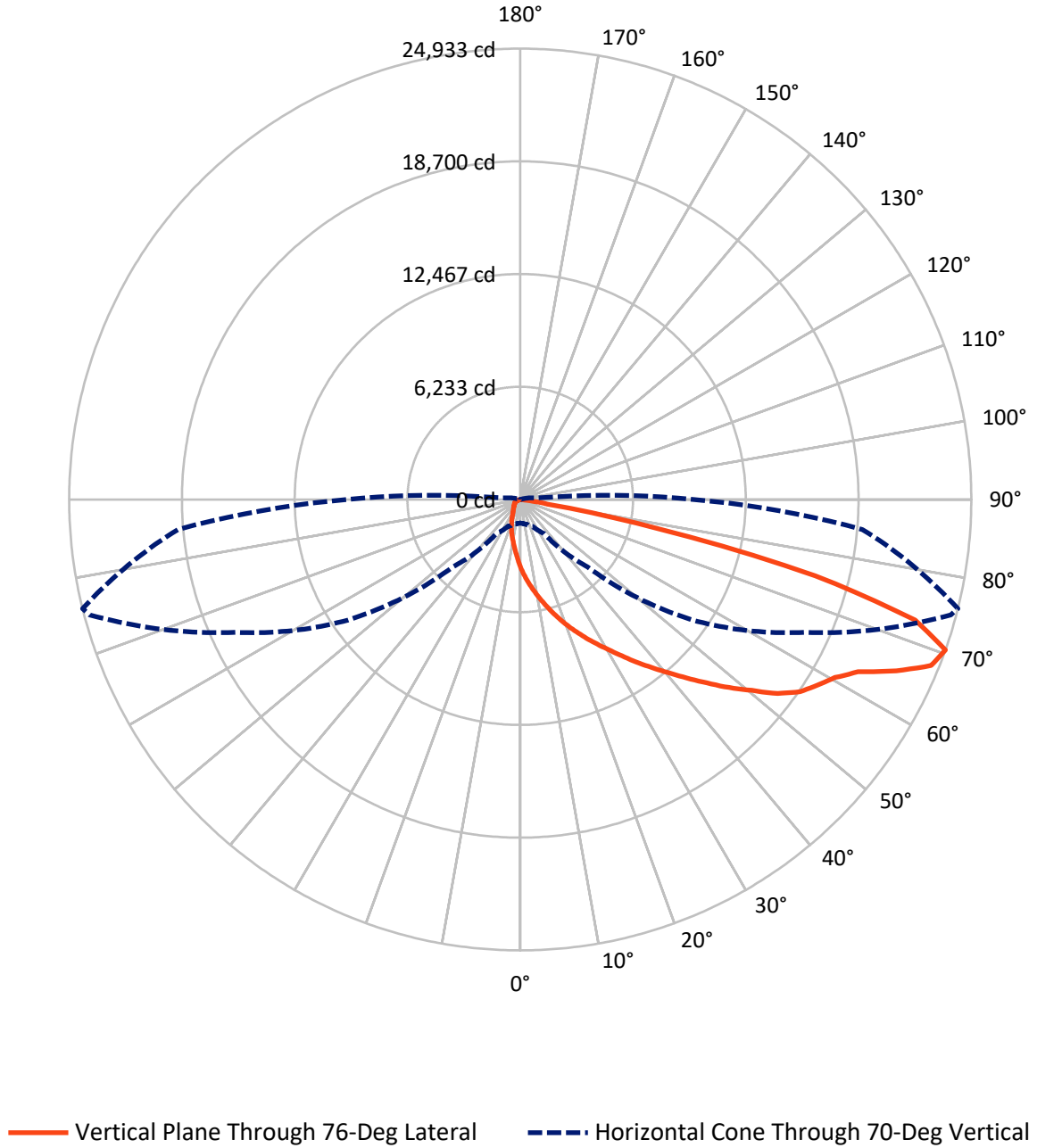
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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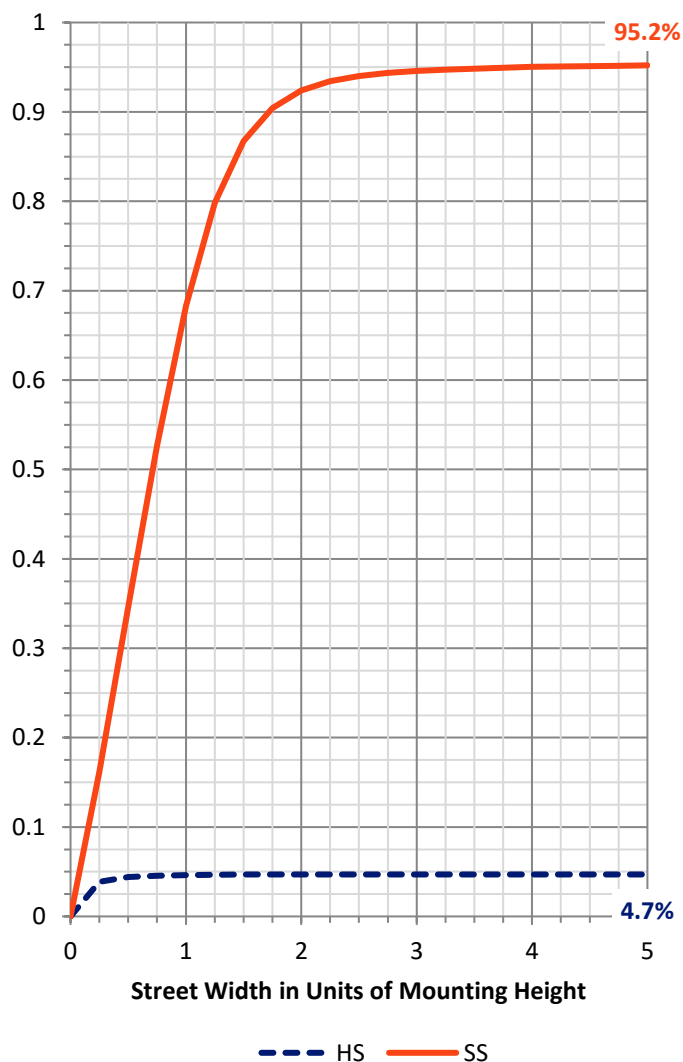
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1328.4	0.0	1328.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	26837.6	0.0	26837.6
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	28166.0	0.0	28166.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.2	1.3
10°-20°	1146.3	4.1
20°-30°	2134.9	7.6
30°-40°	3776.2	13.4
40°-50°	5774.7	20.5
50°-60°	6547.1	23.2
60°-70°	5612.5	19.9
70°-80°	2718.3	9.7
80°-90°	100.8	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°	28166.0	100.0
0°-180°	28166.0	100.0

**Coefficient of Utilization**

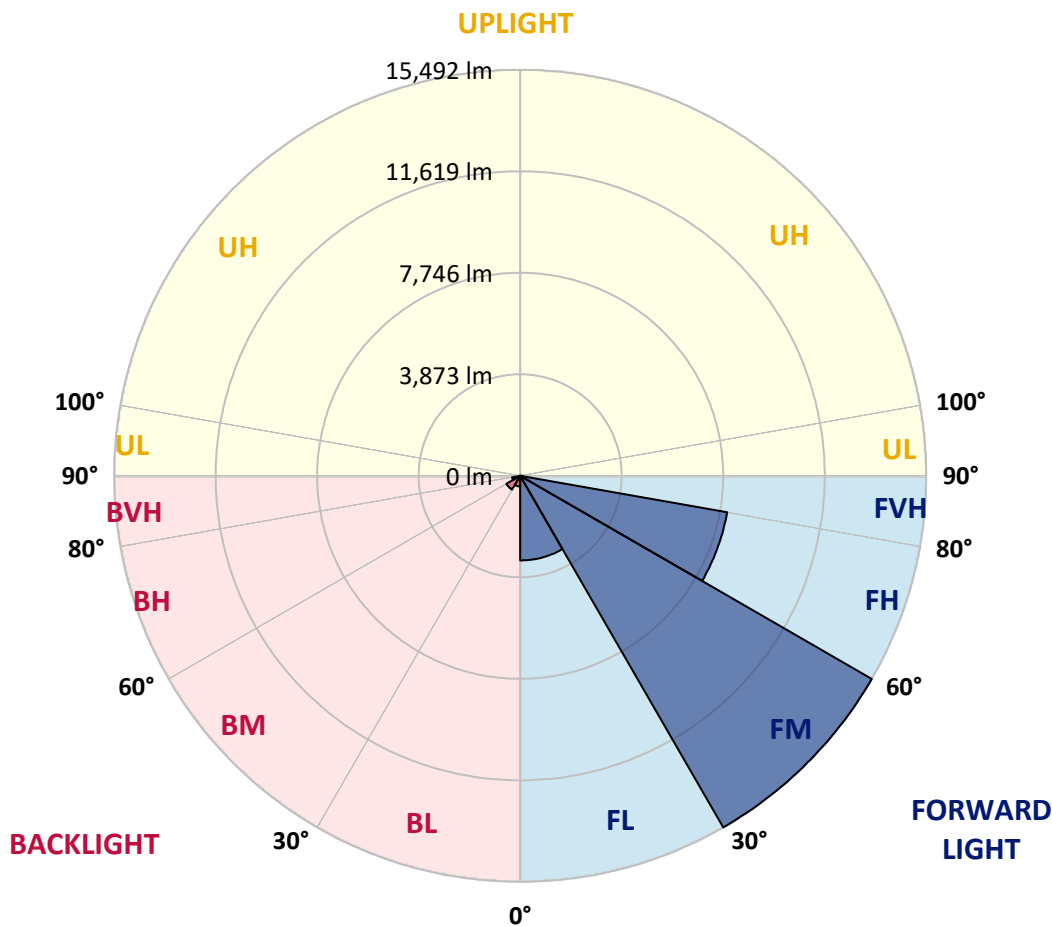


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3228.9	11.5			
FM (30°-60°)	15491.5	55.0			
FH (60°-80°)	8018.0	28.5			G4/12000
FVH (80°-90°)	99.1	0.4			G1/100
BL (0°-30°)	407.5	1.4	B1/500		
BM (30°-60°)	606.4	2.2	B1/1000		
BH (60°-80°)	312.8	1.1	B1/500		G1/500
BVH (80°-90°)	1.7	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-G4**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2
2.5°	5153.5	5125.4	5097.3	4989.4	4890.9	4801.8	4633.0	4412.6	4215.7	4173.5	3943.7
5°	6053.9	6021.1	5978.9	5871.0	5744.4	5594.3	5345.8	5008.2	4661.2	4586.1	4159.4
7.5°	6663.5	6635.4	6574.4	6522.8	6396.2	6250.8	5974.2	5580.3	5102.0	5008.2	4407.9
10°	7080.8	7062.1	7052.7	7010.5	6916.7	6799.5	6522.8	6110.2	5547.4	5439.6	4670.5
12.5°	7230.9	7230.9	7277.8	7348.1	7362.2	7324.7	7071.5	6658.8	6016.4	5903.8	4980.0
15°	7029.3	7052.7	7155.9	7381.0	7615.4	7770.2	7610.7	7226.2	6532.2	6410.3	5345.8
17.5°	6973.0	6996.4	7066.8	7263.7	7577.9	7990.6	8070.3	7774.9	7019.9	6916.7	5721.0
20°	7132.4	7155.9	7216.8	7385.7	7624.8	8042.2	8375.1	8304.8	7535.7	7427.9	6100.8
22.5°	7512.3	7526.3	7526.3	7657.6	7868.7	8178.1	8567.4	8806.5	8065.6	7948.4	6475.9
25°	8328.2	8300.1	8187.5	8121.9	8257.9	8511.1	8811.2	9247.3	8656.5	8497.0	6879.2
27.5°	9397.4	9491.2	9219.2	8905.0	8801.8	8947.2	9153.5	9636.5	9228.5	9059.7	7245.0
30°	10846.4	10808.8	10452.5	10002.3	9556.8	9505.2	9575.6	9969.5	9800.6	9641.2	7652.9
32.5°	12037.4	12107.8	11732.6	11184.0	10518.1	10203.9	10128.9	10368.0	10410.3	10307.1	8135.9
35°	13261.4	13336.4	12970.6	12361.0	11568.5	11043.3	10827.6	10860.4	11165.2	11033.9	8642.4
37.5°	14358.6	14424.3	14063.2	13439.5	12647.1	12004.6	11695.1	11441.9	11896.8	11779.5	9177.0
40°	15193.3	15202.7	14958.9	14400.9	13650.6	12984.7	12633.0	12135.9	12670.5	12590.8	9735.0
42.5°	15784.2	15803.0	15624.8	15146.5	14452.4	13833.4	13547.4	12956.5	13561.5	13491.1	10382.1
45°	16060.9	16093.7	16074.9	15634.1	15057.4	14522.8	14429.0	13828.8	14536.8	14471.2	11127.7
47.5°	15798.3	15798.3	16037.4	15976.5	15446.6	15090.2	15198.0	14738.5	15596.6	15535.7	11887.4
50°	14705.7	14719.7	15207.4	15906.1	15596.6	15516.9	15854.5	15629.4	16557.9	16595.4	12797.1
52.5°	11835.8	11812.4	13458.3	14799.4	15493.5	15709.2	16459.5	16539.2	17711.5	17824.0	13702.1
55°	8844.0	8830.0	10405.6	12839.3	14771.3	15610.7	16797.1	17350.4	18696.3	18766.6	14377.4
57.5°	7001.1	6963.6	7831.1	10349.3	13139.4	15169.9	16811.2	17505.2	19244.9	19366.8	15033.9
60°	5383.3	5350.5	5997.6	7699.8	10827.6	13997.6	16407.9	17514.5	19774.8	19990.5	15915.5
62.5°	3849.9	3887.4	4384.5	5524.0	8328.2	12342.2	15882.7	17645.8	20717.3	20961.2	17167.5
65°	2597.9	2579.1	2991.8	3760.8	5922.6	10114.8	15076.1	17922.5	22414.9	22841.6	18668.1
67.5°	1805.4	1819.4	2007.0	2447.8	3760.8	7765.5	13735.0	18077.3	24168.7	24501.6	19718.5
70°	1303.6	1322.4	1425.5	1645.9	2297.8	5266.1	11610.7	17369.2	24642.3	24933.0	18987.0
72.5°	858.1	895.7	1050.4	1167.6	1467.8	3296.6	8553.3	14963.6	22602.4	22818.2	15929.6
75°	464.2	473.6	675.3	872.2	1045.7	2053.9	5102.0	10091.4	16909.6	16839.3	10504.0
77.5°	361.1	375.1	417.3	623.7	703.4	1130.1	2016.4	4558.0	8009.3	7793.6	3582.6
80°	220.4	229.8	290.7	370.5	492.4	656.5	590.9	1238.0	1627.2	1524.0	525.2
82.5°	131.3	140.7	173.5	309.5	389.2	309.5	206.3	300.1	304.8	300.1	131.3
85°	23.4	23.4	121.9	215.7	206.3	89.1	121.9	98.5	89.1	93.8	28.1
87.5°	0.0	0.0	46.9	65.7	93.8	32.8	46.9	23.4	23.4	23.4	14.1
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°	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2	3770.2
2.5°	3803.0	3643.6	3315.3	3029.3	2743.2	2532.2	2372.8	2208.7	2152.4	2082.1	2044.5
5°	3868.7	3554.5	2902.7	2382.2	1941.4	1603.7	1388.0	1256.7	1172.3	1111.4	1097.3
7.5°	3967.2	3484.2	2569.7	1866.3	1383.3	1045.7	867.5	778.4	731.5	703.4	694.0
10°	4084.4	3423.2	2241.5	1453.7	975.4	736.2	637.7	600.2	581.5	572.1	567.4
12.5°	4248.5	3399.7	1964.8	1120.7	736.2	604.9	553.3	529.9	515.8	501.8	497.1
15°	4464.2	3409.1	1711.6	867.5	609.6	539.3	497.1	473.6	454.9	440.8	440.8
17.5°	4689.3	3423.2	1463.1	703.4	553.3	492.4	445.5	412.7	398.6	384.5	379.8
20°	4900.3	3418.5	1223.9	600.2	501.8	440.8	393.9	361.1	337.6	323.6	323.6
22.5°	5102.0	3390.4	998.8	539.3	459.6	389.2	337.6	304.8	286.0	272.0	272.0
25°	5317.7	3334.1	815.9	492.4	408.0	342.3	290.7	257.9	243.8	229.8	229.8
27.5°	5486.5	3240.3	665.9	450.2	361.1	295.4	248.5	220.4	206.3	197.0	197.0
30°	5669.4	3104.3	553.3	403.3	314.2	253.2	211.0	187.6	173.5	168.8	168.8
32.5°	5871.0	2954.3	473.6	356.4	267.3	215.7	178.2	164.1	150.1	145.4	145.4
35°	6105.5	2823.0	426.7	309.5	234.5	182.9	154.7	140.7	131.3	131.3	131.3
37.5°	6372.8	2687.0	384.5	272.0	201.6	154.7	131.3	126.6	121.9	117.2	117.2
40°	6663.5	2541.6	347.0	239.2	173.5	131.3	112.5	112.5	107.9	107.9	107.9
42.5°	6991.8	2415.0	314.2	211.0	150.1	112.5	98.5	98.5	93.8	93.8	93.8
45°	7348.1	2297.8	286.0	187.6	131.3	98.5	89.1	84.4	79.7	79.7	79.7
47.5°	7770.2	2232.1	262.6	164.1	112.5	84.4	75.0	70.3	65.7	61.0	61.0
50°	8309.4	2260.2	239.2	136.0	98.5	70.3	61.0	56.3	51.6	46.9	46.9
52.5°	8736.2	2246.2	206.3	117.2	79.7	56.3	46.9	42.2	37.5	32.8	32.8
55°	9045.7	2189.9	178.2	98.5	61.0	46.9	37.5	28.1	23.4	23.4	23.4
57.5°	9350.5	2133.6	150.1	79.7	46.9	32.8	23.4	18.8	18.8	18.8	18.8
60°	9824.1	2053.9	131.3	65.7	37.5	23.4	14.1	14.1	9.4	9.4	9.4
62.5°	10400.9	1955.4	107.9	56.3	28.1	18.8	9.4	9.4	0.0	0.0	0.0
65°	11033.9	1781.9	89.1	42.2	23.4	14.1	9.4	0.0	0.0	0.0	0.0
67.5°	10888.6	1430.2	75.0	28.1	18.8	9.4	4.7	0.0	0.0	0.0	0.0
70°	9631.8	966.0	61.0	23.4	14.1	9.4	4.7	0.0	0.0	0.0	0.0
72.5°	7545.1	572.1	42.2	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0
75°	4830.0	286.0	28.1	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	1617.8	140.7	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	229.8	46.9	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.6	18.8	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	4.7	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)