

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: P573591

Luminaire Tested: **ARCH-S-PA2-90-827-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573591  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-90-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6483 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

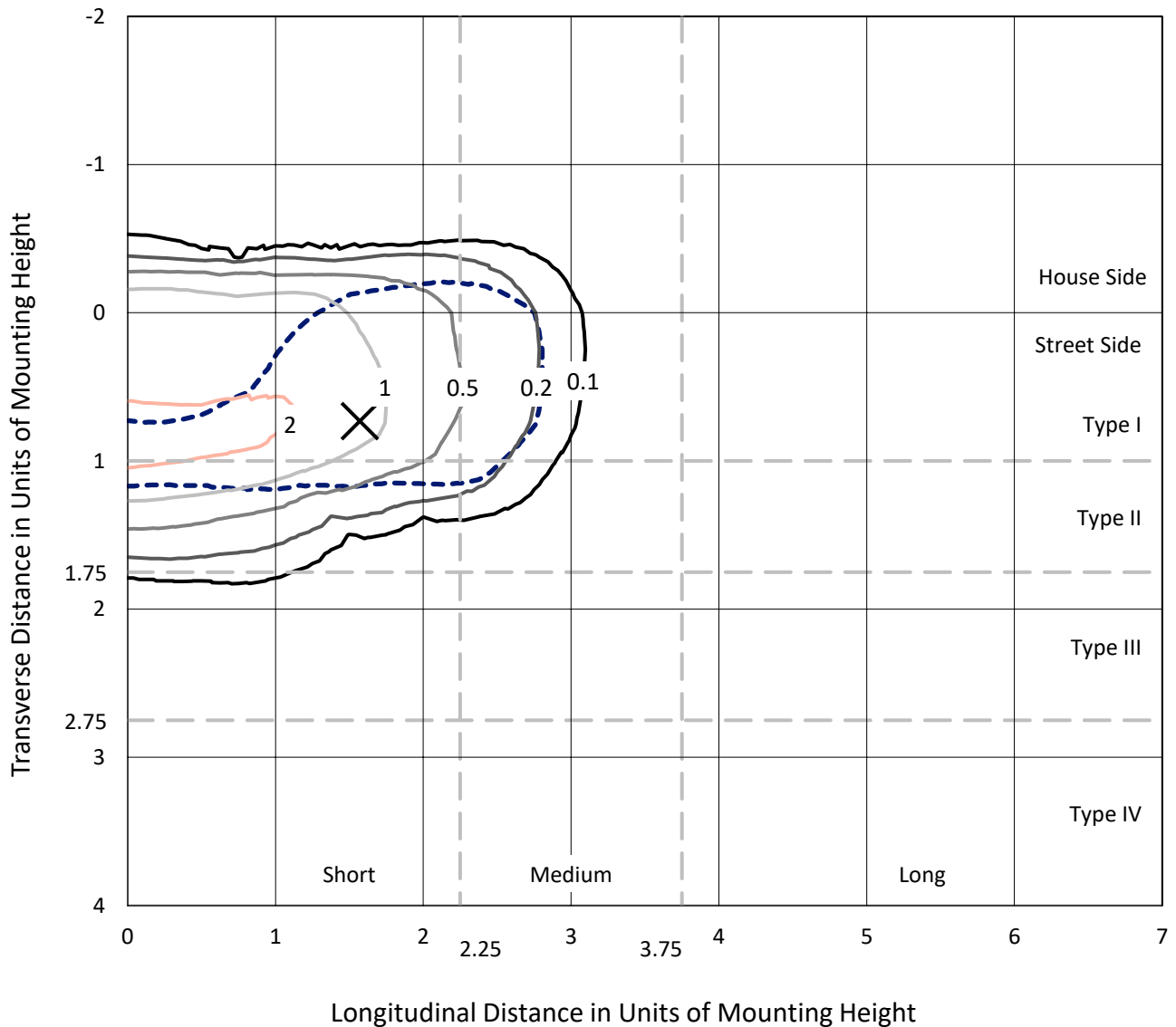
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

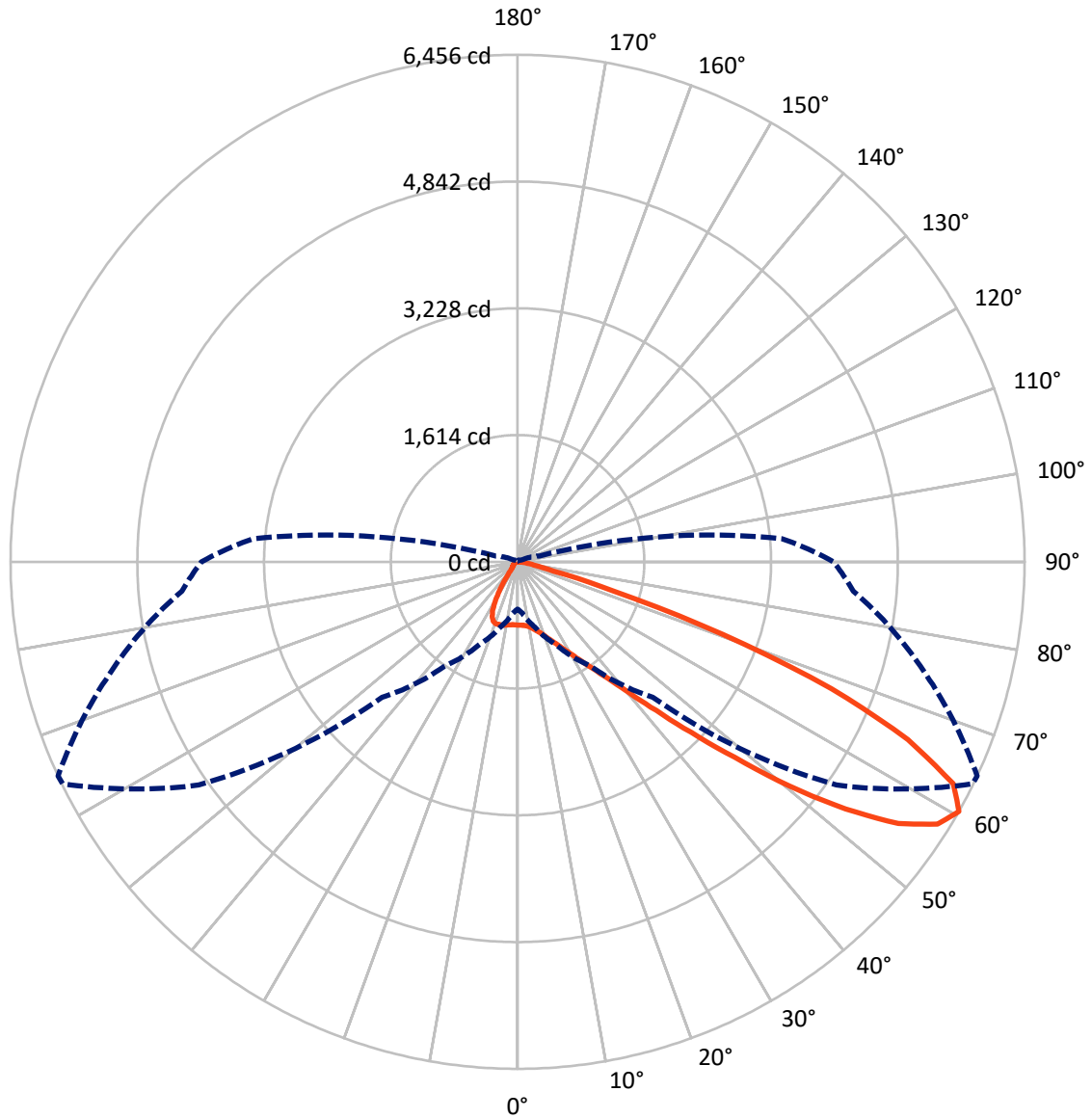
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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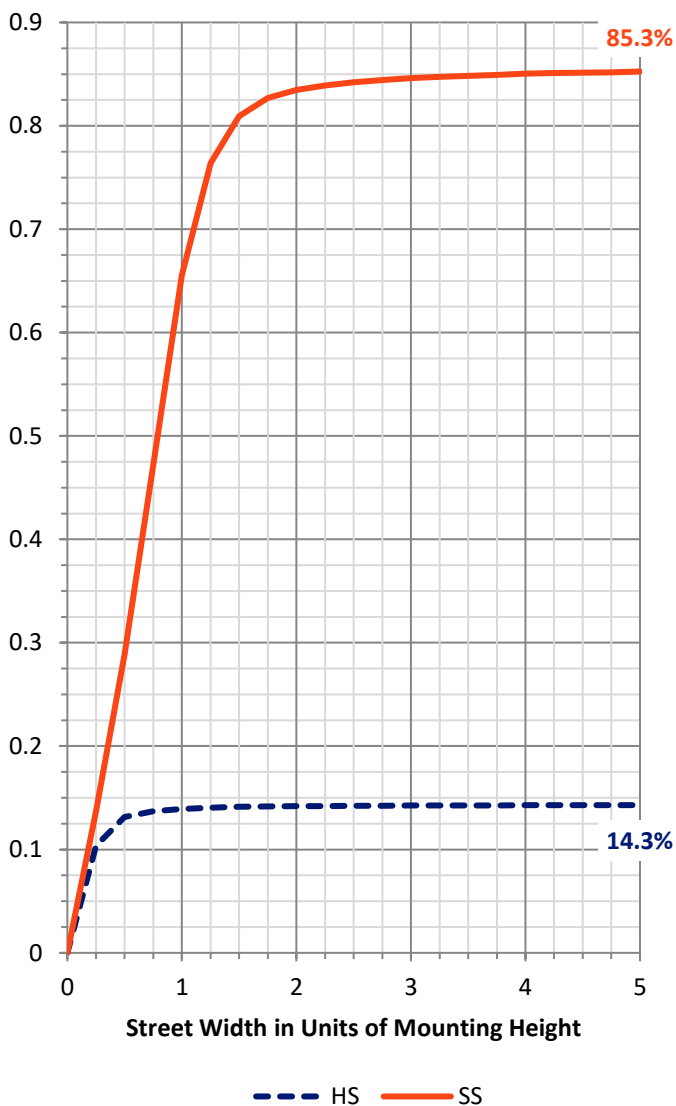
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	938.6	0.0	938.6
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	5544.4	0.0	5544.4
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	6483.0	0.0	6483.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	1.2
10°-20°	216.6	3.3
20°-30°	367.9	5.7
30°-40°	759.0	11.7
40°-50°	1526.5	23.5
50°-60°	1868.0	28.8
60°-70°	1321.5	20.4
70°-80°	318.5	4.9
80°-90°	28.8	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°	6483.0	100.0
0°-180°	6483.0	100.0

**Coefficient of Utilization**

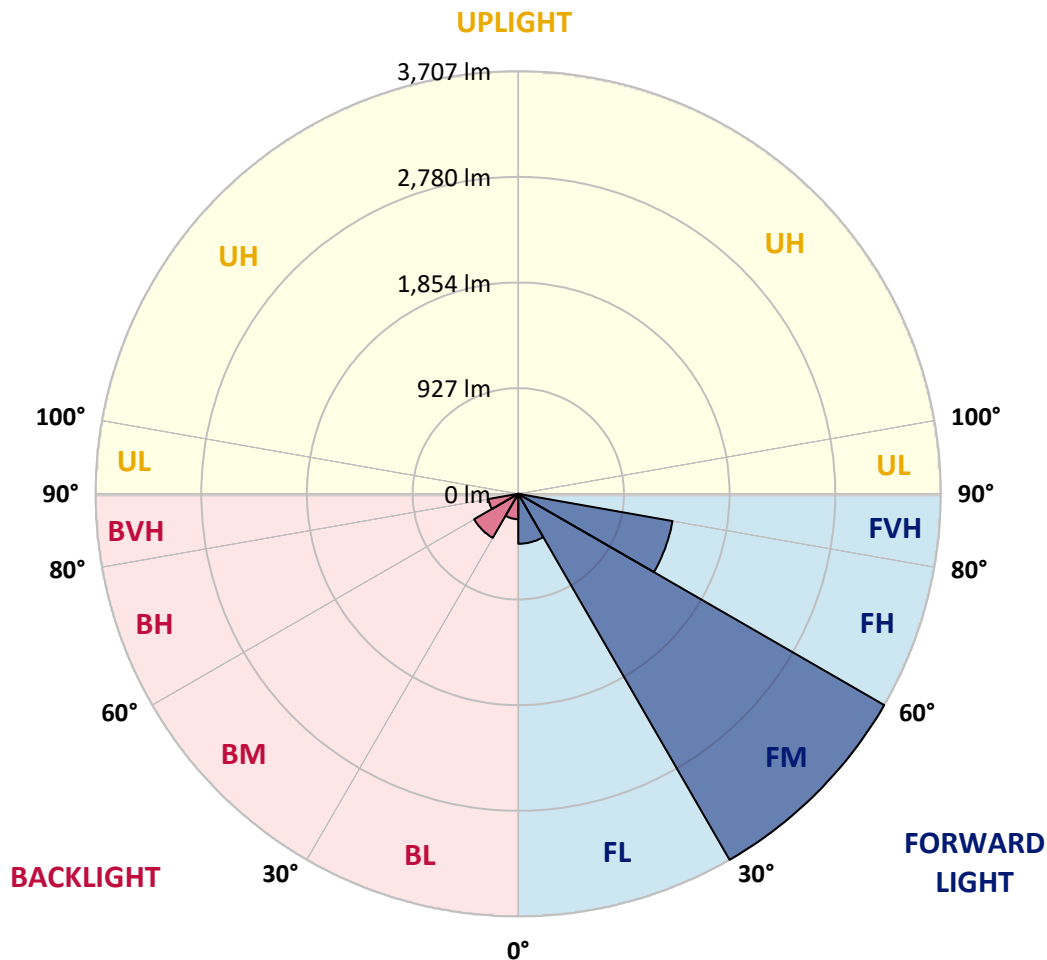


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	438.2	6.8			
FM (30°-60°)	3707.3	57.2			
FH (60°-80°)	1373.9	21.2			G1/1800
FVH (80°-90°)	25.0	0.4			G1/100
BL (0°-30°)	222.5	3.4	B1/500		
BM (30°-60°)	446.3	6.9	B1/1000		
BH (60°-80°)	266.0	4.1	B1/500		G1/500
BVH (80°-90°)	3.7	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6
2.5°	810.2	807.6	807.6	807.6	810.2	810.2	812.7	807.6	807.6	807.6	807.6
5°	805.1	802.5	802.5	805.1	807.6	807.6	812.7	812.7	812.7	815.3	815.3
7.5°	815.3	810.2	810.2	812.7	815.3	815.3	820.4	823.0	823.0	828.1	830.6
10°	828.1	825.5	825.5	830.6	835.7	835.7	843.4	843.4	843.4	848.5	851.1
12.5°	846.0	843.4	843.4	851.1	858.7	863.8	869.0	871.5	871.5	874.1	874.1
15°	871.5	869.0	869.0	876.6	886.8	899.6	907.3	907.3	912.4	909.9	899.6
17.5°	907.3	904.7	907.3	912.4	925.2	938.0	953.3	955.9	953.3	948.2	932.9
20°	966.1	958.4	963.5	976.3	976.3	984.0	1004.4	1012.1	1014.6	999.3	971.2
22.5°	1027.4	1027.4	1032.5	1047.9	1037.6	1047.9	1065.8	1078.5	1083.6	1070.9	1024.9
25°	1142.4	1147.5	1139.9	1134.8	1109.2	1114.3	1137.3	1162.9	1162.9	1152.6	1086.2
27.5°	1395.4	1390.3	1336.7	1262.5	1196.1	1201.2	1224.2	1257.4	1260.0	1237.0	1147.5
30°	1758.4	1763.5	1658.7	1490.0	1344.3	1306.0	1331.6	1369.9	1375.0	1336.7	1226.8
32.5°	2325.7	2282.3	2088.1	1863.1	1589.7	1451.7	1461.9	1502.8	1518.1	1484.9	1352.0
35°	3059.2	2957.0	2665.7	2387.1	1990.9	1712.4	1633.1	1676.6	1684.2	1666.4	1507.9
37.5°	3496.3	3414.5	3225.4	2972.3	2507.2	2059.9	1858.0	1901.5	1893.8	1858.0	1663.8
40°	3767.2	3721.2	3619.0	3501.4	3204.9	2606.9	2228.6	2192.8	2195.4	2144.3	1916.8
42.5°	3920.5	3879.6	3841.3	3872.0	3785.1	3598.5	2765.3	2601.8	2586.4	2489.3	2210.7
45°	3928.2	3866.9	3912.9	4091.8	4229.8	4477.7	3465.6	3087.4	3095.0	2934.0	2576.2
47.5°	3634.3	3585.7	3718.6	4068.8	4526.2	5052.7	4280.9	3751.9	3716.1	3399.2	2946.8
50°	3054.1	3051.6	3227.9	3723.7	4526.2	5349.2	5155.0	4531.4	4493.0	3884.8	3284.2
52.5°	2417.7	2466.3	2586.4	3056.7	4109.7	5321.1	5799.0	5336.4	5229.1	4316.7	3565.3
55°	1881.0	1863.1	2008.8	2333.4	3258.6	4835.5	6008.6	5970.3	5880.8	4700.0	3813.2
57.5°	1155.2	1221.7	1418.4	1707.2	2371.7	3803.0	5707.0	6356.2	6302.5	5057.8	4071.3
60°	600.6	651.7	863.8	1165.4	1620.4	2438.2	4953.1	6445.6	6455.8	5346.6	4291.1
62.5°	378.3	375.7	472.8	817.8	1042.7	1369.9	3846.4	6128.7	6225.8	5569.0	4500.7
65°	283.7	286.2	324.6	541.8	707.9	715.6	2282.3	5300.6	5461.7	5627.8	4572.3
67.5°	263.2	265.8	283.7	355.3	531.6	477.9	1004.4	4086.7	4311.6	5086.0	4296.2
70°	235.1	237.7	265.8	293.9	401.3	350.1	452.4	2461.2	2773.0	3690.5	3437.5
72.5°	184.0	189.1	222.4	278.6	299.0	265.8	314.4	1088.8	1270.2	2029.3	1967.9
75°	135.5	138.0	168.7	214.7	263.2	189.1	242.8	431.9	472.8	761.6	649.2
77.5°	94.6	94.6	117.6	161.0	219.8	132.9	173.8	232.6	237.7	283.7	186.6
80°	58.8	61.3	74.1	109.9	135.5	127.8	107.3	155.9	155.9	148.2	76.7
82.5°	33.2	35.8	51.1	74.1	92.0	86.9	69.0	89.5	92.0	94.6	43.4
85°	15.3	17.9	30.7	46.0	53.7	40.9	40.9	46.0	46.0	61.3	25.6
87.5°	2.6	2.6	15.3	20.4	17.9	20.4	20.4	25.6	25.6	30.7	12.8
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°	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6	807.6
2.5°	805.1	805.1	805.1	802.5	802.5	800.0	794.8	794.8	794.8	794.8	797.4
5°	815.3	812.7	810.2	802.5	797.4	787.2	777.0	774.4	766.7	766.7	769.3
7.5°	828.1	828.1	820.4	807.6	794.8	777.0	759.1	746.3	733.5	730.9	728.4
10°	851.1	846.0	838.3	815.3	794.8	766.7	738.6	705.4	679.8	667.1	661.9
12.5°	869.0	866.4	851.1	825.5	792.3	748.8	684.9	608.3	546.9	513.7	513.7
15°	894.5	889.4	866.4	830.6	784.6	682.4	552.0	434.5	368.0	332.2	327.1
17.5°	920.1	909.9	881.7	833.2	751.4	562.3	385.9	278.6	232.6	214.7	209.6
20°	950.7	932.9	892.0	835.7	669.6	408.9	250.5	186.6	168.7	161.0	163.6
22.5°	991.6	961.0	902.2	820.4	546.9	265.8	176.3	150.8	140.6	132.9	132.9
25°	1042.7	999.3	920.1	777.0	396.1	178.9	140.6	125.2	115.0	109.9	107.3
27.5°	1088.8	1035.1	938.0	700.3	253.0	140.6	117.6	104.8	94.6	92.0	89.5
30°	1150.1	1076.0	955.9	577.6	166.1	115.0	99.7	86.9	79.2	76.7	76.7
32.5°	1254.9	1155.2	989.1	439.6	125.2	99.7	84.3	74.1	69.0	66.4	66.4
35°	1377.6	1252.3	1017.2	306.7	107.3	84.3	71.6	63.9	61.3	58.8	58.8
37.5°	1505.3	1367.3	1022.3	194.2	94.6	74.1	63.9	58.8	53.7	53.7	53.7
40°	1735.4	1569.2	999.3	130.3	81.8	66.4	56.2	53.7	48.6	48.6	48.6
42.5°	2003.7	1814.6	940.5	104.8	74.1	58.8	53.7	48.6	43.4	43.4	40.9
45°	2351.3	2093.2	840.8	92.0	66.4	53.7	48.6	43.4	40.9	38.3	38.3
47.5°	2678.4	2410.1	746.3	81.8	61.3	51.1	43.4	38.3	35.8	35.8	35.8
50°	2990.2	2652.9	636.4	76.7	56.2	48.6	40.9	35.8	33.2	30.7	30.7
52.5°	3215.1	2844.6	534.2	69.0	51.1	43.4	38.3	33.2	28.1	25.6	25.6
55°	3465.6	3038.8	442.1	61.3	48.6	40.9	33.2	28.1	23.0	20.4	20.4
57.5°	3746.7	3227.9	357.8	56.2	46.0	35.8	28.1	23.0	17.9	15.3	15.3
60°	4025.3	3378.7	286.2	51.1	40.9	33.2	25.6	17.9	12.8	10.2	10.2
62.5°	4303.9	3480.9	219.8	46.0	38.3	28.1	20.4	12.8	7.7	5.1	5.1
65°	4418.9	3452.8	163.6	40.9	33.2	23.0	17.9	12.8	7.7	5.1	5.1
67.5°	4099.4	3105.2	115.0	40.9	30.7	23.0	15.3	10.2	5.1	2.6	2.6
70°	3199.8	2397.3	84.3	40.9	30.7	23.0	15.3	10.2	5.1	2.6	2.6
72.5°	1814.6	1334.1	63.9	35.8	28.1	20.4	15.3	10.2	5.1	2.6	2.6
75°	646.6	429.4	48.6	33.2	25.6	17.9	15.3	10.2	5.1	2.6	2.6
77.5°	155.9	109.9	38.3	28.1	23.0	17.9	12.8	10.2	7.7	2.6	2.6
80°	63.9	46.0	30.7	23.0	17.9	15.3	12.8	10.2	5.1	2.6	2.6
82.5°	28.1	23.0	12.8	12.8	10.2	10.2	10.2	10.2	5.1	2.6	2.6
85°	12.8	10.2	5.1	5.1	2.6	2.6	2.6	5.1	5.1	2.6	2.6
87.5°	7.7	5.1	5.1	5.1	2.6	2.6	2.6	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)