

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: P573485

Luminaire Tested: **ARCH-S-PA2-80-740-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-80-740-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8805 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

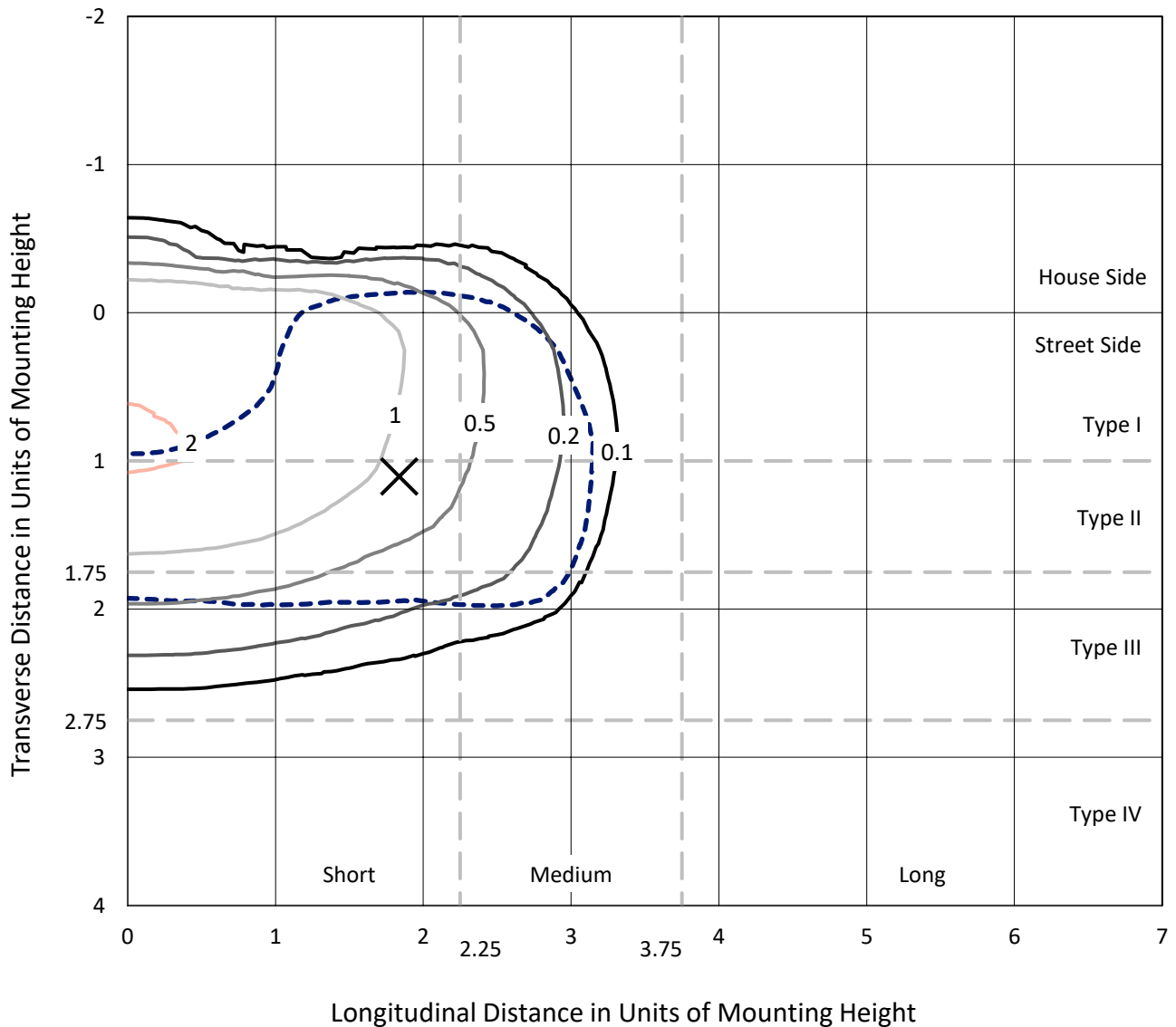
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

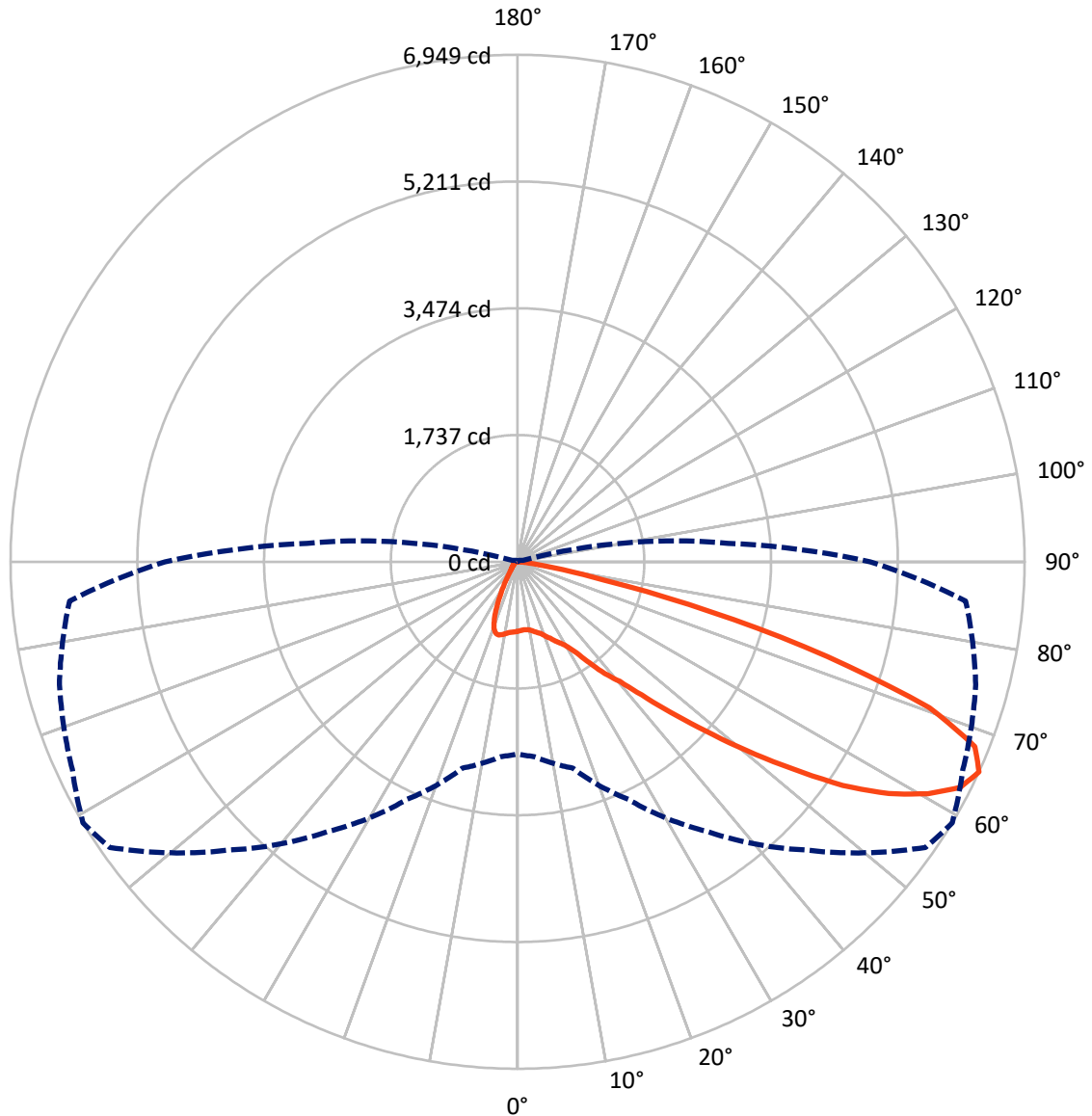
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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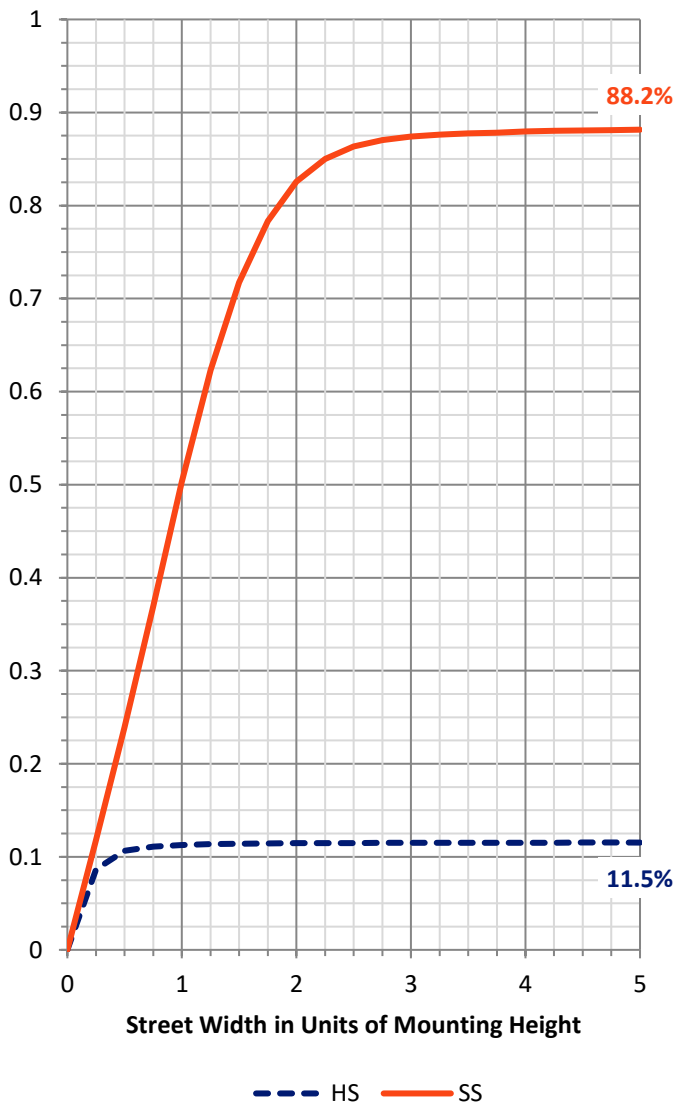
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1027.2	0.0	1027.2
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	7777.8	0.0	7777.8
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	8805.0	0.0	8805.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.9	1.0
10°-20°	255.4	2.9
20°-30°	433.8	4.9
30°-40°	768.5	8.7
40°-50°	1449.7	16.5
50°-60°	2452.8	27.9
60°-70°	2550.1	29.0
70°-80°	764.7	8.7
80°-90°	40.1	0.5
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°	8805.0	100.0
0°-180°	8805.0	100.0

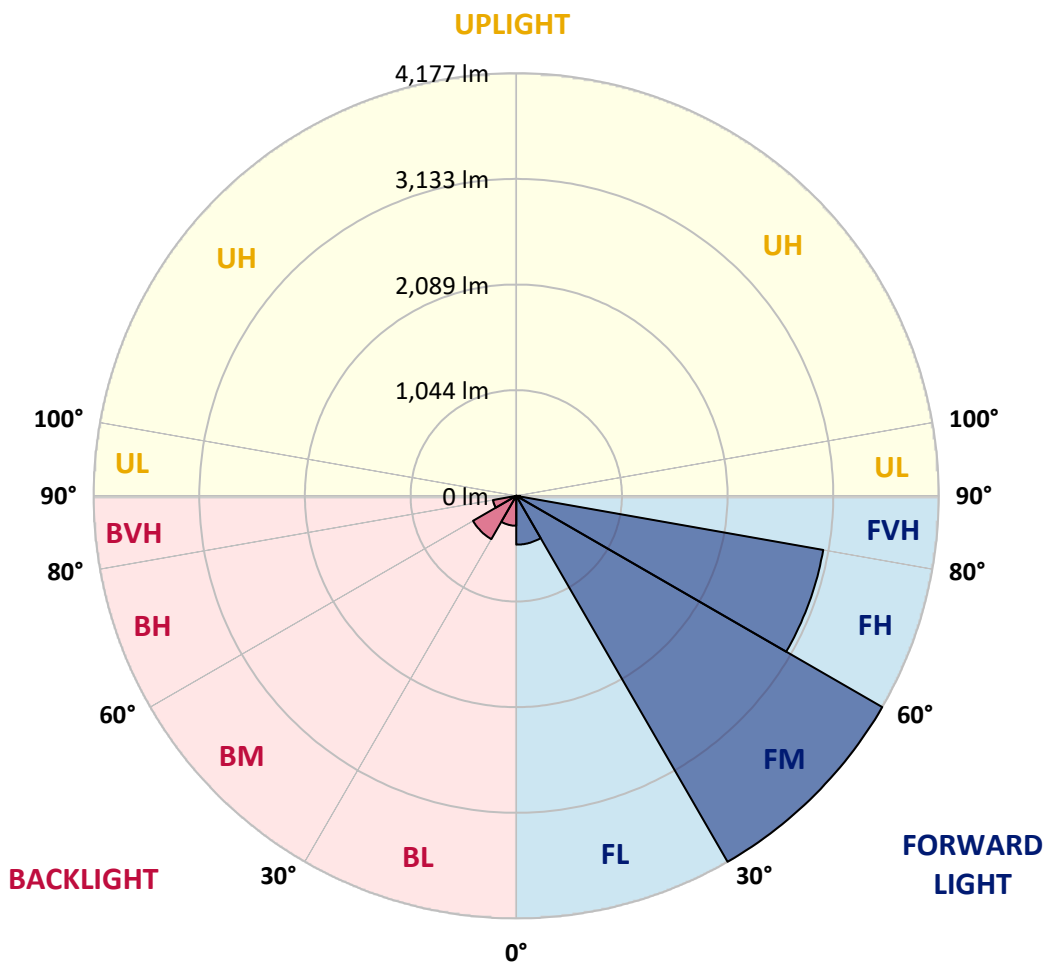


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	482.9	5.5			
FM (30°-60°)	4177.1	47.4			
FH (60°-80°)	3081.1	35.0			G2/5000
FVH (80°-90°)	36.7	0.4			G1/100
BL (0°-30°)	296.3	3.4	B1/500		
BM (30°-60°)	493.8	5.6	B1/1000		
BH (60°-80°)	233.7	2.7	B1/500		G1/500
BVH (80°-90°)	3.4	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5
2.5°	925.8	922.6	922.6	929.0	932.2	935.4	941.9	941.9	941.9	948.3	951.5
5°	881.0	881.0	884.2	890.6	903.4	913.0	932.2	935.4	938.7	954.7	961.1
7.5°	852.2	852.2	855.4	868.2	884.2	906.6	932.2	938.7	948.3	970.7	986.7
10°	849.0	845.7	852.2	865.0	884.2	913.0	941.9	951.5	970.7	999.5	1021.9
12.5°	858.6	855.4	861.8	874.6	893.8	922.6	961.1	977.1	999.5	1038.0	1070.0
15°	865.0	861.8	868.2	884.2	906.6	941.9	986.7	1005.9	1034.8	1089.2	1121.3
17.5°	884.2	881.0	884.2	897.0	919.4	957.9	1015.5	1034.8	1082.8	1143.7	1178.9
20°	970.7	967.5	948.3	941.9	945.1	980.3	1054.0	1086.0	1143.7	1220.6	1246.2
22.5°	1150.1	1137.3	1102.0	1044.4	1005.9	1018.7	1102.0	1137.3	1214.2	1300.7	1319.9
25°	1390.4	1380.7	1329.5	1230.2	1121.3	1089.2	1156.5	1204.6	1297.5	1393.6	1387.2
27.5°	1662.7	1643.4	1595.4	1457.6	1310.3	1204.6	1223.8	1265.4	1367.9	1470.5	1438.4
30°	1899.7	1893.3	1838.9	1723.5	1550.5	1393.6	1326.3	1348.7	1441.6	1550.5	1512.1
32.5°	2117.6	2098.4	2053.5	1944.6	1784.4	1624.2	1489.7	1489.7	1566.6	1694.7	1637.0
35°	2357.8	2345.0	2290.6	2181.6	2027.9	1838.9	1717.1	1704.3	1768.4	1912.5	1787.6
37.5°	2604.5	2572.5	2546.9	2434.7	2281.0	2117.6	1970.2	1941.4	1973.4	2079.1	1925.4
40°	2912.1	2912.1	2854.4	2751.9	2607.7	2434.7	2229.7	2156.0	2146.4	2284.2	2165.6
42.5°	3270.9	3261.3	3213.2	3117.1	2979.3	2819.2	2559.7	2492.4	2486.0	2652.6	2511.6
45°	3684.1	3677.7	3620.1	3540.0	3443.9	3267.7	3011.4	2944.1	2905.7	3097.9	2931.3
47.5°	4062.2	4039.7	4020.5	4030.1	3975.7	3777.0	3536.8	3456.7	3453.5	3604.0	3389.4
50°	4321.6	4308.8	4376.1	4440.2	4542.7	4417.8	4132.6	4062.2	4007.7	4206.3	3866.7
52.5°	4491.4	4485.0	4619.6	4802.2	5013.6	5004.0	4750.9	4709.3	4664.4	4718.9	4292.8
55°	4558.7	4558.7	4718.9	5055.3	5426.9	5587.1	5468.5	5410.9	5253.9	5141.8	4760.5
57.5°	4478.6	4469.0	4677.2	5116.1	5683.2	6013.1	6064.4	5997.1	5750.5	5625.5	5279.5
60°	4139.0	4145.5	4392.1	4946.4	5664.0	6186.1	6516.1	6455.2	6208.6	6022.8	5715.2
62.5°	3504.7	3559.2	3818.7	4421.0	5253.9	6048.4	6775.6	6807.6	6541.7	6311.1	6102.8
65°	2633.4	2681.4	2928.1	3594.4	4507.5	5587.1	6823.7	6948.6	6734.0	6500.1	6163.7
67.5°	1601.8	1617.8	1919.0	2421.9	3318.9	4654.8	6487.3	6759.6	6605.8	6221.4	5561.4
70°	746.4	788.1	935.4	1323.1	2101.6	3427.8	5606.3	5990.7	5817.7	5340.4	4228.7
72.5°	291.5	304.3	397.2	611.9	1114.9	2156.0	4183.9	4440.2	4321.6	3793.1	2521.2
75°	144.2	153.8	192.2	291.5	509.4	890.6	2556.5	2723.1	2527.6	1906.1	1066.8
77.5°	105.7	105.7	128.1	179.4	278.7	330.0	1076.4	1207.8	1140.5	736.8	291.5
80°	70.5	76.9	89.7	121.7	176.2	160.2	406.9	483.7	403.7	227.5	102.5
82.5°	41.6	44.9	67.3	86.5	118.5	92.9	137.8	153.8	166.6	112.1	48.1
85°	22.4	22.4	44.9	64.1	64.1	41.6	48.1	54.5	64.1	67.3	25.6
87.5°	6.4	6.4	28.8	38.4	25.6	22.4	25.6	25.6	28.8	35.2	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°	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5	951.5
2.5°	954.7	954.7	957.9	957.9	961.1	961.1	961.1	961.1	964.3	967.5	967.5
5°	964.3	967.5	967.5	967.5	967.5	961.1	957.9	954.7	954.7	957.9	957.9
7.5°	989.9	993.1	989.9	983.5	973.9	961.1	948.3	948.3	945.1	948.3	945.1
10°	1028.4	1028.4	1025.2	1009.1	993.1	967.5	941.9	922.6	909.8	906.6	900.2
12.5°	1076.4	1076.4	1066.8	1038.0	1009.1	961.1	893.8	829.7	778.5	756.0	749.6
15°	1124.5	1124.5	1111.6	1070.0	1012.3	897.0	756.0	621.5	544.6	512.6	493.4
17.5°	1182.1	1175.7	1153.3	1095.6	977.1	768.9	541.4	403.7	342.8	314.0	314.0
20°	1243.0	1236.6	1194.9	1098.8	887.4	551.0	352.4	278.7	262.7	256.3	256.3
22.5°	1310.3	1294.3	1230.2	1073.2	698.4	374.8	265.9	246.7	240.3	237.1	237.1
25°	1364.7	1339.1	1255.8	1002.7	499.8	262.7	233.9	227.5	214.6	211.4	205.0
27.5°	1406.4	1367.9	1265.4	852.2	330.0	217.8	208.2	195.4	182.6	169.8	169.8
30°	1460.8	1412.8	1271.8	663.1	224.3	189.0	179.4	163.4	147.4	134.6	134.6
32.5°	1569.8	1499.3	1275.0	464.5	185.8	166.6	147.4	128.1	112.1	105.7	102.5
35°	1688.3	1592.2	1239.8	301.1	163.4	141.0	118.5	102.5	86.5	83.3	83.3
37.5°	1819.6	1729.9	1162.9	205.0	144.2	118.5	96.1	80.1	70.5	67.3	67.3
40°	2040.7	1935.0	1034.8	163.4	124.9	99.3	80.1	67.3	60.9	57.7	57.7
42.5°	2357.8	2175.2	874.6	141.0	108.9	83.3	64.1	54.5	51.3	48.1	48.1
45°	2723.1	2444.3	688.8	128.1	96.1	70.5	54.5	48.1	44.9	41.6	41.6
47.5°	3142.7	2723.1	544.6	112.1	83.3	60.9	48.1	41.6	38.4	35.2	35.2
50°	3540.0	2940.9	410.1	99.3	73.7	51.3	41.6	38.4	35.2	32.0	32.0
52.5°	3866.7	3088.3	310.7	86.5	64.1	44.9	38.4	35.2	28.8	28.8	28.8
55°	4260.8	3203.6	237.1	76.9	57.7	41.6	35.2	28.8	25.6	22.4	22.4
57.5°	4603.6	3245.2	173.0	67.3	51.3	38.4	32.0	25.6	19.2	16.0	16.0
60°	4834.2	3210.0	124.9	57.7	44.9	32.0	25.6	19.2	12.8	9.6	9.6
62.5°	4997.6	3133.1	96.1	51.3	38.4	28.8	22.4	16.0	9.6	6.4	6.4
65°	4834.2	2896.0	76.9	44.9	32.0	25.6	16.0	12.8	6.4	3.2	3.2
67.5°	4180.7	2428.3	60.9	38.4	28.8	22.4	16.0	9.6	3.2	0.0	0.0
70°	3005.0	1733.1	51.3	35.2	25.6	19.2	12.8	6.4	3.2	0.0	0.0
72.5°	1675.5	893.8	48.1	32.0	25.6	19.2	12.8	6.4	3.2	0.0	0.0
75°	679.2	307.5	44.9	32.0	25.6	16.0	12.8	6.4	3.2	0.0	0.0
77.5°	198.6	105.7	38.4	28.8	25.6	19.2	12.8	6.4	3.2	0.0	0.0
80°	70.5	48.1	28.8	25.6	19.2	16.0	12.8	9.6	3.2	0.0	0.0
82.5°	32.0	19.2	12.8	9.6	9.6	9.6	9.6	6.4	3.2	0.0	0.0
85°	12.8	9.6	6.4	3.2	3.2	3.2	3.2	3.2	3.2	0.0	0.0
87.5°	9.6	6.4	3.2	3.2	3.2	3.2	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)