

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: P299822

Luminaire Tested: **GAA-AF-02-LED-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299822  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-02-LED-U-5WQ-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

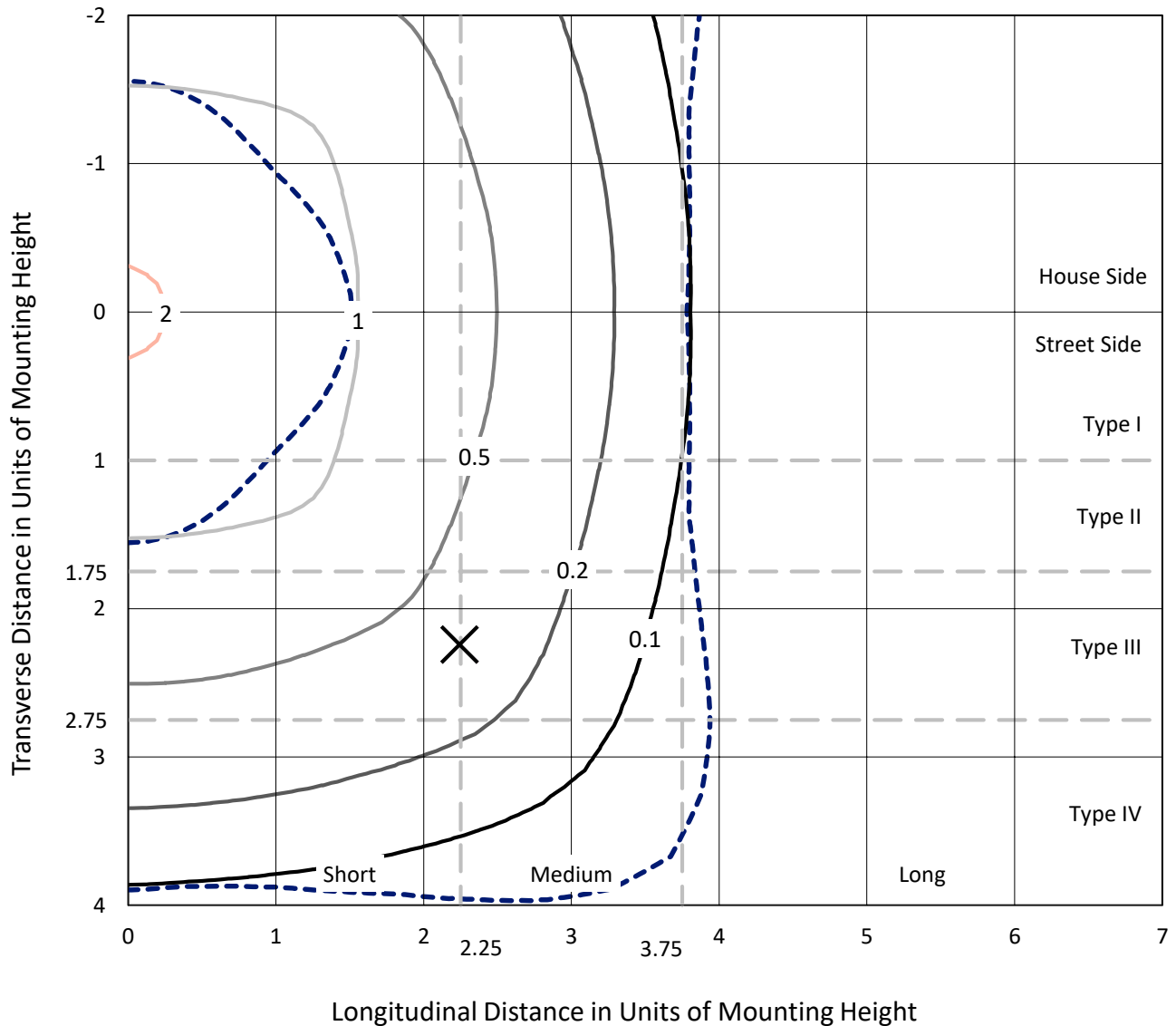
Lumens per Lamp: N/A  
Luminaire Lumens: 12364.5 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2  
  
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (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

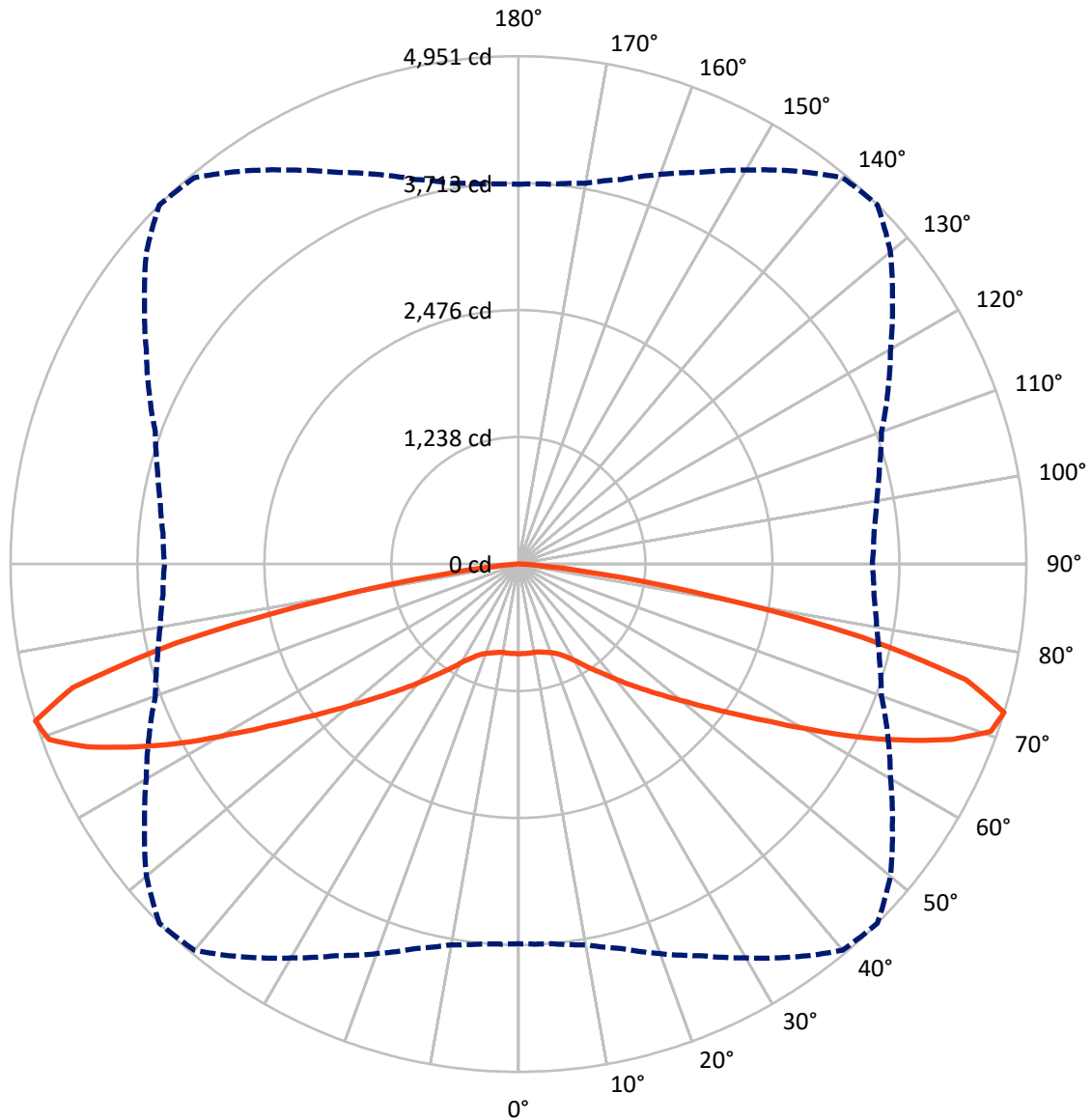
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6182.3	0.0	6182.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6182.3	0.0	6182.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12364.5	0.0	12364.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.6	0.7
10°-20°	253.9	2.1
20°-30°	464.0	3.8
30°-40°	800.1	6.5
40°-50°	1367.7	11.1
50°-60°	2216.9	17.9
60°-70°	3677.8	29.7
70°-80°	3239.3	26.2
80°-90°	261.2	2.1
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°	12364.5	100.0
0°-180°	12364.5	100.0



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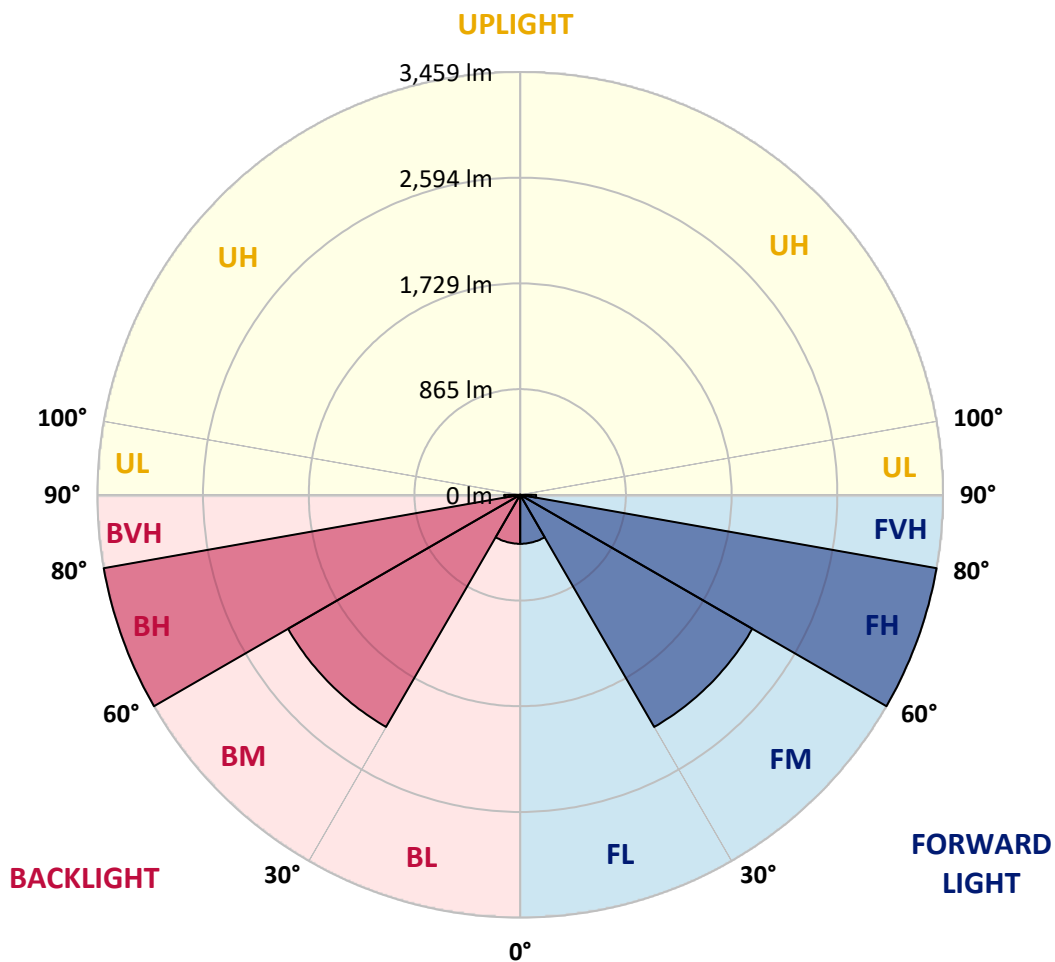
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	400.8	3.2			
FM	(30°-60°)	2192.4	17.7			
FH	(60°-80°)	3458.5	28.0			G2/5000
FVH	(80°-90°)	130.6	1.1			G2/225
BL	(0°-30°)	400.8	3.2	B1/500		
BM	(30°-60°)	2192.4	17.7	B2/2500		
BH	(60°-80°)	3458.5	28.0	B4/5000		G2/5000
BVH	(80°-90°)	130.6	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	875.6	875.6	875.6	875.6	875.6	875.6	875.6	875.6	875.6	875.6	875.6
2.5°	875.6	876.2	876.7	876.2	876.2	875.6	875.0	875.6	875.0	873.9	874.5
5°	878.4	879.6	879.6	878.4	879.0	878.4	877.3	877.9	876.7	875.0	875.0
7.5°	881.8	882.4	882.4	881.3	881.8	880.7	879.6	879.0	877.9	875.6	873.9
10°	886.9	887.5	886.9	885.8	885.8	884.1	881.3	880.1	877.9	874.5	872.8
12.5°	892.6	893.2	892.6	891.5	890.9	888.1	885.8	884.1	882.4	879.6	876.7
15°	900.6	901.7	900.6	898.3	896.6	894.3	893.2	893.7	894.3	892.0	889.2
17.5°	915.3	915.9	914.2	909.1	906.8	904.5	904.5	905.7	907.4	906.2	903.4
20°	942.5	940.8	936.8	930.6	927.8	923.8	923.2	923.8	923.8	923.2	921.0
22.5°	976.5	975.4	970.3	962.4	958.4	956.1	952.7	949.9	949.3	947.6	945.4
25°	1017.4	1016.8	1010.6	1003.8	1000.9	998.1	995.3	991.3	987.9	983.9	981.6
27.5°	1069.6	1067.3	1058.2	1054.8	1050.8	1049.1	1045.2	1040.6	1037.8	1032.7	1029.9
30°	1126.8	1126.8	1119.5	1118.3	1118.3	1114.4	1109.8	1101.9	1096.8	1091.7	1090.0
32.5°	1184.1	1184.7	1177.3	1179.6	1181.3	1184.1	1185.2	1182.4	1179.0	1178.4	1175.0
35°	1266.9	1264.6	1257.3	1259.0	1258.4	1257.8	1257.8	1264.1	1265.2	1266.3	1259.5
37.5°	1369.5	1369.5	1362.2	1362.2	1358.8	1355.4	1350.8	1354.8	1361.0	1362.7	1358.2
40°	1486.9	1490.9	1481.8	1481.3	1482.4	1471.6	1466.5	1472.8	1476.7	1483.5	1478.4
42.5°	1625.3	1622.5	1613.4	1612.3	1606.0	1602.6	1598.1	1603.2	1609.4	1614.0	1615.7
45°	1758.0	1755.7	1745.5	1745.5	1739.3	1736.5	1738.7	1747.2	1750.1	1756.3	1762.5
47.5°	1889.0	1886.2	1879.4	1882.2	1882.8	1887.9	1895.2	1903.2	1911.1	1919.6	1922.5
50°	2022.8	2023.4	2016.0	2022.8	2031.4	2045.5	2065.4	2078.4	2094.9	2105.6	2109.0
52.5°	2144.8	2147.0	2155.0	2170.9	2187.9	2215.7	2249.7	2281.4	2308.7	2326.8	2325.7
55°	2291.1	2294.5	2313.8	2341.0	2368.8	2410.7	2461.2	2517.4	2562.7	2588.8	2572.4
57.5°	2478.2	2485.6	2507.1	2544.0	2585.4	2639.8	2709.0	2793.5	2863.9	2899.0	2872.4
60°	2735.1	2739.7	2765.7	2806.6	2856.5	2924.0	3016.4	3129.8	3229.1	3275.6	3244.9
62.5°	3073.7	3082.2	3103.2	3144.6	3195.6	3272.2	3385.0	3526.8	3650.4	3715.1	3645.9
65°	3478.0	3505.2	3522.8	3564.8	3612.4	3693.5	3811.5	3963.5	4096.2	4138.7	4058.7
67.5°	3878.4	3902.2	3932.8	3981.0	4029.2	4120.5	4230.0	4377.4	4523.2	4561.8	4437.6
70°	4053.6	4067.2	4114.9	4180.7	4273.1	4380.8	4507.3	4672.9	4853.2	4885.0	4727.3
72.5°	3702.6	3716.2	3769.5	3881.2	4042.3	4213.6	4434.2	4677.4	4915.6	4951.3	4734.1
75°	2800.3	2778.2	2857.0	3005.1	3222.3	3461.0	3769.5	4118.3	4462.5	4507.3	4248.1
77.5°	1447.2	1444.4	1503.9	1687.7	1946.9	2218.5	2558.2	2952.3	3289.2	3425.3	3214.3
80°	407.7	412.3	440.6	531.9	683.4	879.6	1145.0	1514.2	1789.8	1930.4	1812.5
82.5°	159.9	172.4	183.2	200.2	220.0	249.0	332.3	494.5	663.5	792.8	649.3
85°	57.3	61.2	86.8	102.6	104.3	110.0	125.3	146.3	176.4	210.4	173.0
87.5°	21.5	23.8	27.8	45.9	45.4	41.4	50.5	52.7	39.7	36.3	44.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	875.6	875.6	875.6	875.6	875.6	875.6	875.6	875.6
2.5°	873.3	873.9	873.9	874.5	875.0	875.0	876.2	876.2
5°	873.9	873.9	872.8	873.3	872.8	872.8	873.3	873.3
7.5°	872.8	872.2	871.1	870.5	869.4	869.4	869.4	869.4
10°	871.1	870.5	869.4	868.8	868.2	868.2	868.2	868.2
12.5°	875.6	873.9	872.8	872.2	872.2	872.2	872.2	872.2
15°	887.5	883.5	880.7	880.7	881.3	882.4	882.4	883.5
17.5°	902.3	897.7	894.9	892.6	893.7	895.5	896.6	897.7
20°	919.8	917.6	913.6	911.3	911.3	913.6	914.7	915.3
22.5°	944.2	942.5	940.8	938.0	938.0	939.1	941.4	941.4
25°	980.5	979.4	978.2	976.0	975.4	975.4	976.5	977.7
27.5°	1025.9	1026.5	1025.3	1024.7	1023.0	1022.5	1024.2	1023.6
30°	1086.6	1089.4	1092.2	1090.0	1087.1	1085.4	1083.7	1081.5
32.5°	1168.8	1165.4	1163.1	1159.2	1154.0	1149.5	1146.1	1142.1
35°	1246.5	1240.8	1238.5	1241.9	1241.4	1238.5	1234.6	1231.2
37.5°	1341.8	1340.6	1341.8	1348.0	1346.9	1349.7	1341.8	1341.2
40°	1462.0	1463.1	1471.1	1478.4	1482.4	1486.4	1481.8	1477.3
42.5°	1601.5	1600.9	1603.8	1614.0	1620.8	1625.3	1615.7	1614.5
45°	1748.9	1745.0	1747.2	1755.7	1762.5	1767.6	1756.9	1756.9
47.5°	1911.1	1904.3	1896.9	1906.6	1910.6	1914.0	1905.5	1902.6
50°	2092.0	2077.9	2062.0	2065.9	2065.9	2064.8	2054.0	2053.5
52.5°	2299.6	2273.5	2244.6	2233.8	2227.6	2220.8	2202.0	2193.0
55°	2538.3	2499.2	2453.8	2426.1	2411.3	2392.6	2361.4	2352.9
57.5°	2817.4	2756.1	2677.8	2643.8	2610.9	2580.3	2545.7	2536.1
60°	3148.0	3057.8	2954.0	2891.1	2855.3	2825.9	2790.1	2788.4
62.5°	3516.6	3374.2	3256.9	3200.1	3174.1	3148.0	3113.9	3118.5
65°	3891.4	3742.9	3632.8	3586.9	3562.5	3541.0	3506.9	3512.0
67.5°	4261.2	4124.5	4003.7	3956.7	3929.4	3902.2	3871.6	3876.7
70°	4526.6	4357.0	4220.9	4116.6	4051.4	3977.6	3930.0	3918.1
72.5°	4450.6	4189.2	3973.1	3766.1	3644.7	3546.1	3479.2	3450.2
75°	3851.7	3494.5	3216.6	2962.5	2819.6	2703.4	2618.9	2566.1
77.5°	2860.5	2458.9	2130.6	1838.0	1606.6	1451.2	1341.8	1270.9
80°	1565.8	1190.9	870.5	611.9	449.7	373.7	330.1	309.1
82.5°	487.7	314.7	231.9	200.2	186.0	178.1	165.0	144.0
85°	155.4	136.1	126.5	120.8	115.1	100.4	69.2	62.9
87.5°	60.1	61.8	61.2	57.8	59.0	42.5	34.0	30.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)