

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: McGRAW-EDISON

Report Number: P299461

Luminaire Tested: **GLNA-AF-02-LED-E1-5NQ-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299461  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-5NQ-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7165.4 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

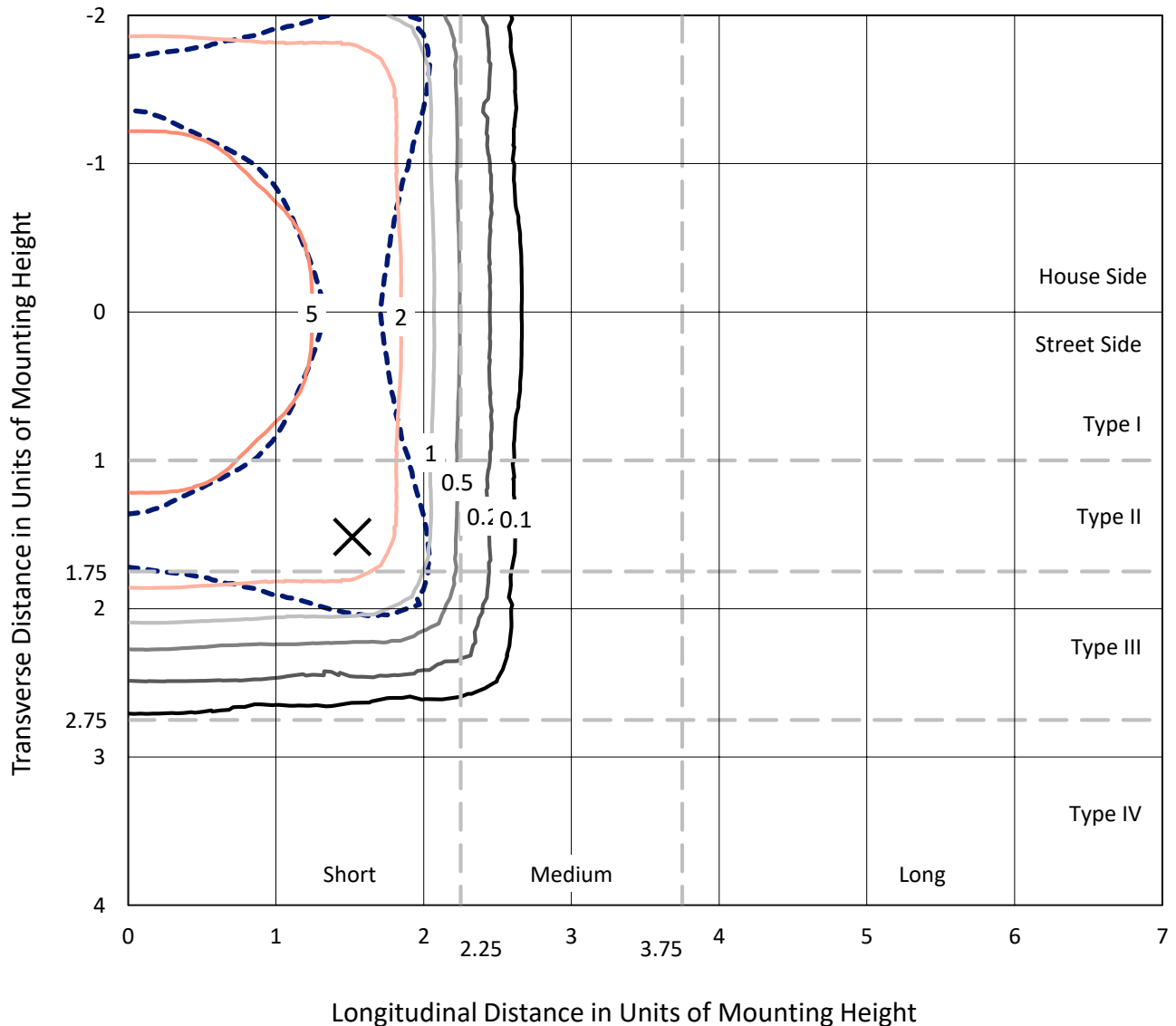
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

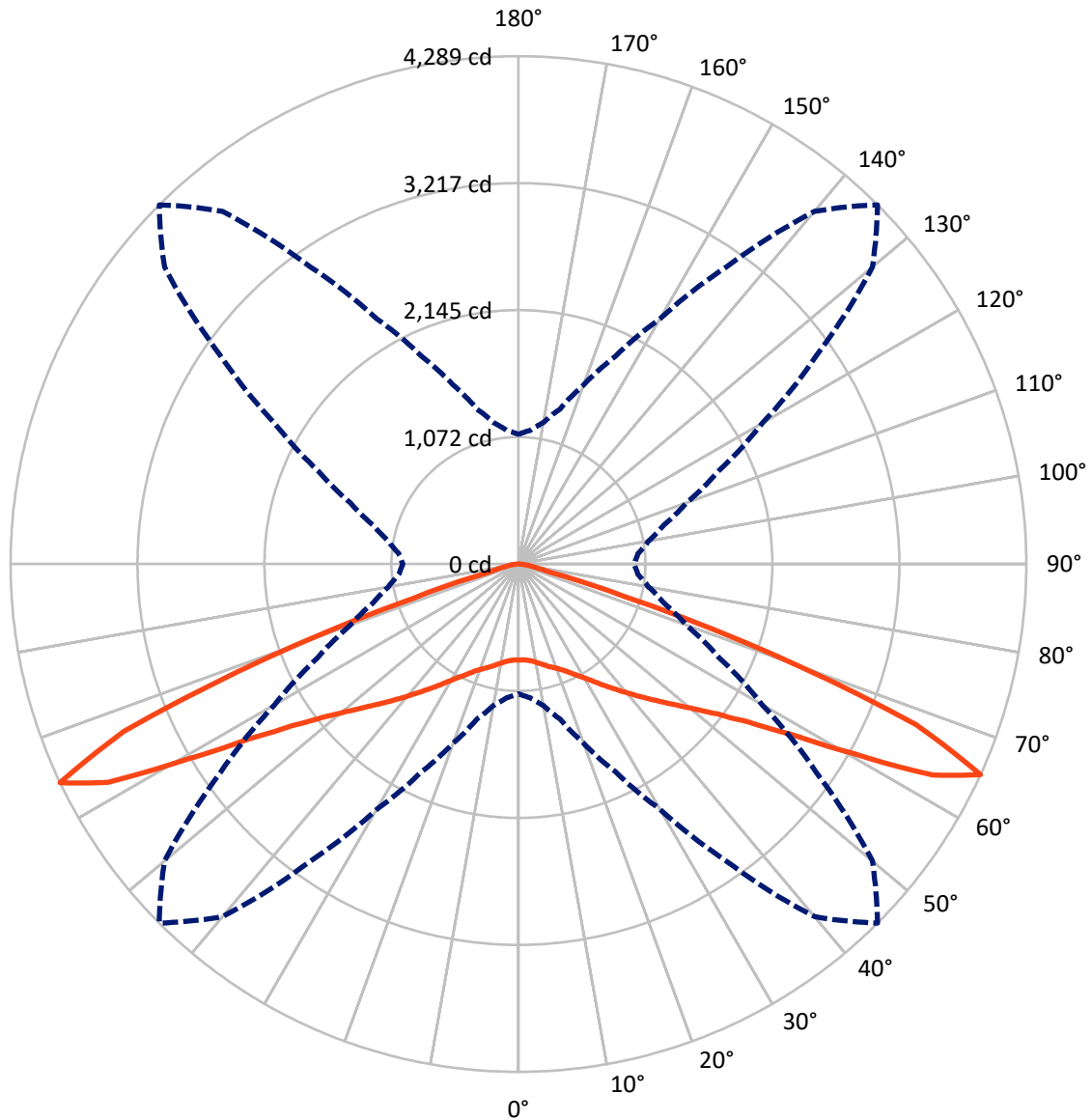


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3582.7	0.0	3582.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3582.7	0.0	3582.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	7165.4	0.0	7165.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	1.1
10°-20°	253.4	3.5
20°-30°	473.9	6.6
30°-40°	801.5	11.2
40°-50°	1310.5	18.3
50°-60°	2083.9	29.1
60°-70°	1883.7	26.3
70°-80°	238.4	3.3
80°-90°	41.0	0.6
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°	7165.4	100.0
0°-180°	7165.4	100.0



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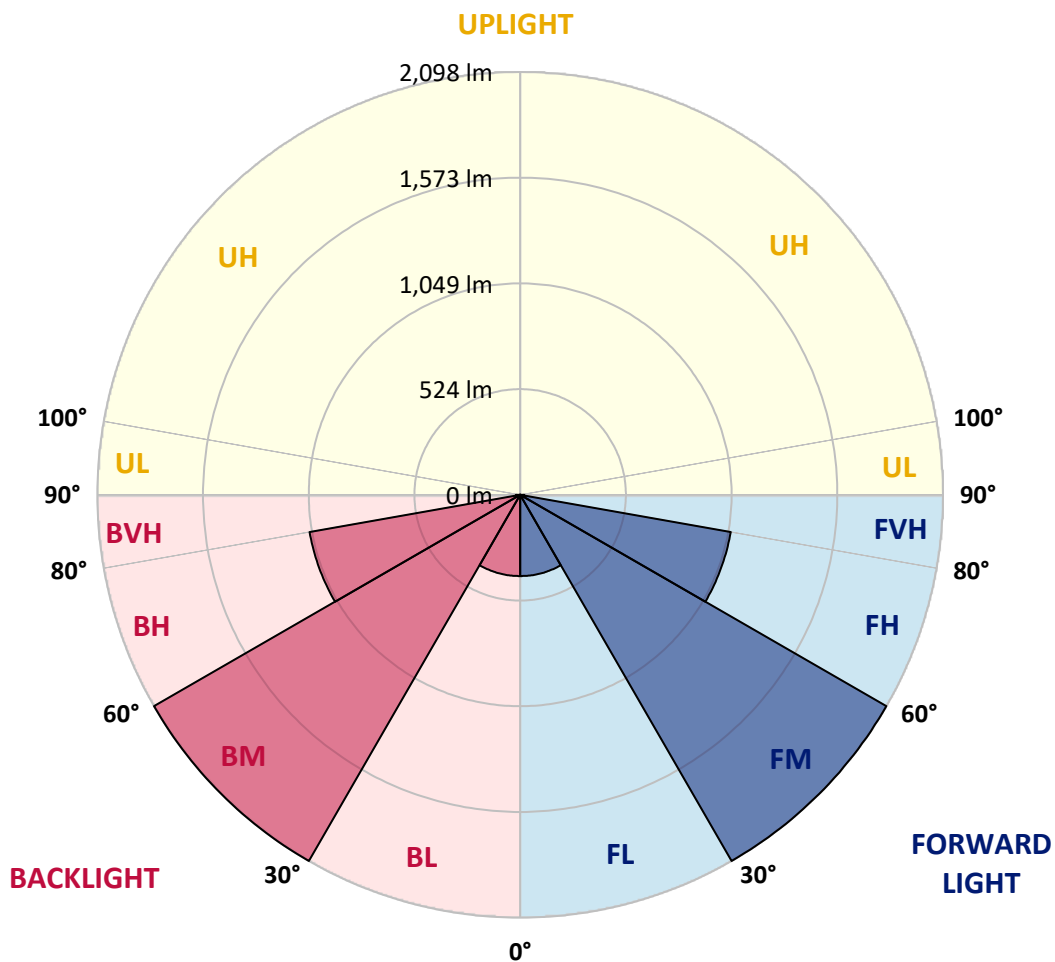
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	403.2	5.6			
FM	(30°-60°)	2098.0	29.3			
FH	(60°-80°)	1061.1	14.8			G1/1800
FVH	(80°-90°)	20.5	0.3			G1/100
BL	(0°-30°)	403.2	5.6	B1/500		
BM	(30°-60°)	2098.0	29.3	B2/2500		
BH	(60°-80°)	1061.1	14.8	B3/2500		G1/1800
BVH	(80°-90°)	20.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8
2.5°	811.4	812.1	812.8	812.1	812.8	811.8	811.1	812.1	811.1	810.1	810.8
5°	818.5	818.8	818.8	817.8	818.8	818.2	817.1	818.5	817.5	816.5	817.1
7.5°	830.2	831.6	830.6	829.6	830.2	829.6	828.9	829.2	828.9	827.9	828.2
10°	846.0	847.0	846.3	846.0	846.7	846.3	845.7	845.3	845.7	844.7	844.7
12.5°	865.1	864.8	864.5	864.8	865.8	865.8	865.5	865.8	866.5	866.8	866.1
15°	883.9	884.6	884.6	884.6	886.6	888.3	889.3	890.0	891.3	891.6	890.3
17.5°	907.4	907.4	907.1	907.4	909.4	912.1	913.1	914.5	915.8	916.8	915.1
20°	933.6	934.3	934.3	934.9	937.6	940.6	940.6	941.3	940.6	941.3	940.3
22.5°	965.5	967.5	967.5	967.8	970.5	974.2	973.2	974.2	972.5	973.9	972.5
25°	1007.1	1010.1	1009.4	1009.4	1011.4	1013.8	1014.1	1016.1	1015.8	1017.5	1016.5
27.5°	1054.1	1058.8	1060.1	1059.8	1061.1	1063.5	1064.1	1066.5	1065.1	1066.5	1065.8
30°	1110.4	1112.5	1115.1	1116.1	1117.8	1120.2	1120.2	1120.5	1118.8	1120.8	1121.9
32.5°	1168.8	1172.5	1175.2	1181.3	1184.3	1185.9	1185.6	1186.3	1184.6	1187.3	1189.3
35°	1246.0	1248.7	1253.1	1257.8	1261.8	1261.5	1260.4	1260.8	1260.8	1263.1	1265.1
37.5°	1339.0	1339.6	1345.4	1352.1	1354.1	1352.1	1346.0	1344.7	1341.7	1344.7	1348.0
40°	1437.3	1439.6	1451.1	1455.4	1456.4	1452.7	1444.0	1439.0	1432.3	1436.0	1440.7
42.5°	1540.3	1545.0	1555.4	1563.1	1566.5	1564.2	1552.1	1544.4	1535.6	1537.6	1542.3
45°	1654.4	1660.1	1674.9	1682.3	1688.7	1685.0	1673.2	1661.5	1647.7	1648.7	1656.1
47.5°	1781.9	1787.6	1806.8	1819.2	1822.5	1821.9	1808.8	1792.7	1773.9	1773.2	1779.6
50°	1924.9	1930.6	1954.4	1973.6	1983.3	1982.3	1966.8	1944.0	1921.2	1921.5	1929.6
52.5°	2064.5	2071.6	2096.4	2129.3	2148.4	2162.2	2152.8	2131.3	2103.4	2104.1	2111.5
55°	2195.4	2207.1	2235.7	2280.3	2315.9	2354.4	2365.5	2364.9	2348.1	2352.8	2360.2
57.5°	2258.8	2276.3	2320.2	2390.7	2463.2	2541.7	2608.1	2657.8	2679.0	2710.8	2703.5
60°	2138.7	2166.5	2231.3	2335.0	2478.3	2642.0	2817.6	2989.0	3135.3	3245.8	3182.3
62.5°	1751.1	1787.3	1865.8	1998.7	2215.5	2477.6	2813.5	3218.9	3660.5	3927.0	3736.7
65°	1095.7	1133.3	1213.1	1355.4	1609.1	1935.0	2390.7	3062.5	3887.7	4289.4	3902.2
67.5°	427.2	447.7	491.0	581.9	772.5	1062.5	1519.9	2282.3	3269.2	3621.3	3208.5
70°	214.1	216.1	224.2	240.9	281.9	366.1	557.1	1058.1	1874.9	2264.5	1807.4
72.5°	154.7	155.0	159.1	166.4	179.5	198.3	234.6	323.8	609.8	931.9	571.5
75°	118.5	119.8	122.2	126.2	133.2	142.6	155.7	186.6	231.2	268.1	225.5
77.5°	91.3	94.0	95.6	99.3	103.7	110.1	113.8	125.5	146.0	153.7	151.3
80°	69.5	71.8	75.5	78.5	81.5	84.6	83.2	88.6	99.3	105.7	102.4
82.5°	44.3	47.0	57.7	60.4	61.7	63.8	61.4	61.7	66.4	70.5	66.4
85°	28.5	30.2	36.6	39.9	40.3	41.6	40.6	38.3	38.3	34.9	39.3
87.5°	13.1	13.4	16.4	19.5	20.1	18.1	17.8	17.1	13.8	13.1	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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8
2.5°	810.4	811.1	811.4	812.4	812.8	812.8	813.1	813.8
5°	816.8	817.8	818.2	819.5	819.8	819.5	820.2	820.5
7.5°	828.2	829.9	830.6	831.9	830.9	832.2	832.6	832.6
10°	845.0	846.7	847.0	848.4	847.7	848.4	848.4	847.7
12.5°	867.1	867.5	866.5	867.5	866.1	866.8	865.8	865.1
15°	891.6	890.6	888.3	888.3	886.3	886.6	886.3	885.9
17.5°	915.5	913.5	911.8	911.1	909.4	909.1	908.1	908.1
20°	941.6	940.6	939.6	938.3	936.6	934.9	934.6	935.3
22.5°	973.2	972.9	972.9	972.2	969.8	968.2	967.1	967.1
25°	1015.5	1012.5	1012.5	1012.1	1011.1	1010.1	1008.1	1009.1
27.5°	1063.1	1061.4	1062.8	1062.5	1061.4	1061.4	1060.1	1060.1
30°	1121.9	1121.2	1123.2	1121.5	1118.2	1117.8	1116.5	1114.8
32.5°	1189.6	1189.0	1192.0	1190.0	1184.6	1181.6	1178.9	1177.6
35°	1265.1	1265.5	1269.2	1267.8	1261.8	1259.8	1255.1	1254.4
37.5°	1347.7	1353.1	1359.4	1360.8	1355.8	1354.4	1349.4	1346.7
40°	1444.7	1451.7	1461.5	1463.8	1458.4	1457.4	1450.4	1446.7
42.5°	1548.0	1560.1	1572.2	1574.2	1568.8	1563.5	1556.8	1554.1
45°	1663.5	1677.9	1693.7	1697.7	1689.7	1683.3	1674.6	1674.6
47.5°	1793.0	1811.1	1828.9	1840.0	1832.6	1825.9	1815.5	1808.8
50°	1946.0	1970.9	1994.0	2005.4	1993.7	1980.9	1962.8	1956.8
52.5°	2138.0	2164.8	2185.0	2178.9	2160.8	2143.0	2123.2	2115.2
55°	2383.0	2392.0	2392.0	2369.2	2333.0	2303.1	2271.9	2261.5
57.5°	2689.4	2654.5	2600.8	2532.6	2447.1	2372.6	2322.2	2298.4
60°	3049.4	2881.6	2692.0	2505.8	2352.8	2226.6	2151.8	2117.5
62.5°	3289.4	2850.4	2470.6	2171.6	1951.4	1799.4	1696.0	1655.8
65°	3074.3	2377.3	1868.5	1510.8	1270.9	1116.1	1013.8	976.2
67.5°	2251.8	1489.7	995.0	713.1	522.5	416.8	374.8	357.4
70°	1010.8	524.5	321.5	251.0	216.5	198.7	190.9	188.3
72.5°	304.7	220.5	185.9	167.8	154.0	145.3	138.9	138.3
75°	183.9	153.0	135.9	125.2	116.4	109.4	106.0	105.0
77.5°	128.5	112.4	104.4	96.6	89.9	84.6	81.5	79.2
80°	90.3	82.6	78.9	74.5	70.1	65.1	60.7	58.7
82.5°	60.4	58.7	58.7	56.0	52.4	47.7	38.9	36.9
85°	38.9	38.6	39.3	38.3	35.6	30.5	25.2	23.8
87.5°	18.1	18.5	20.5	20.1	19.5	16.1	12.8	12.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)