

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: P300428

Luminaire Tested: **GLNA-AF-03-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-T4FT-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10428.2 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

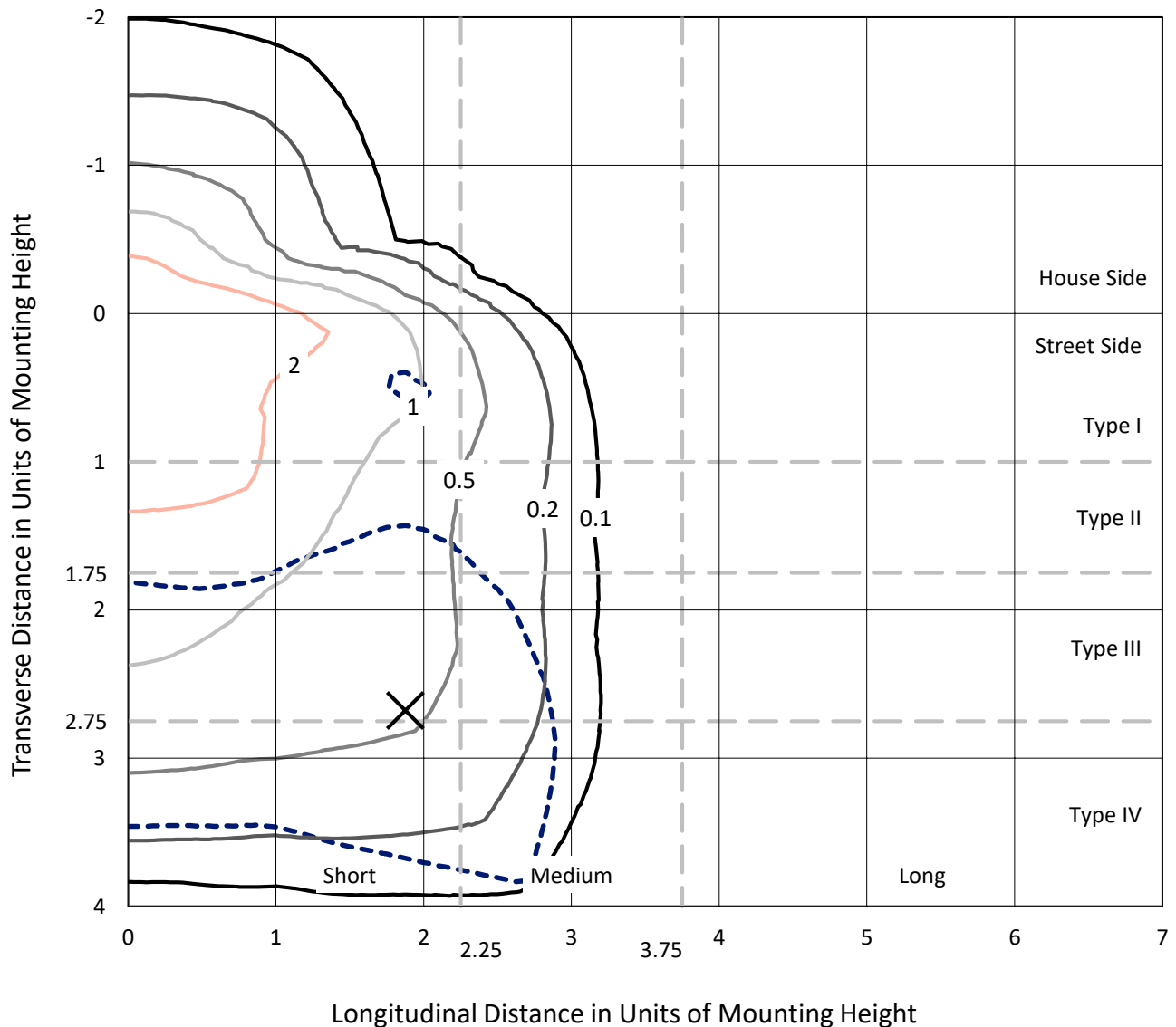
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

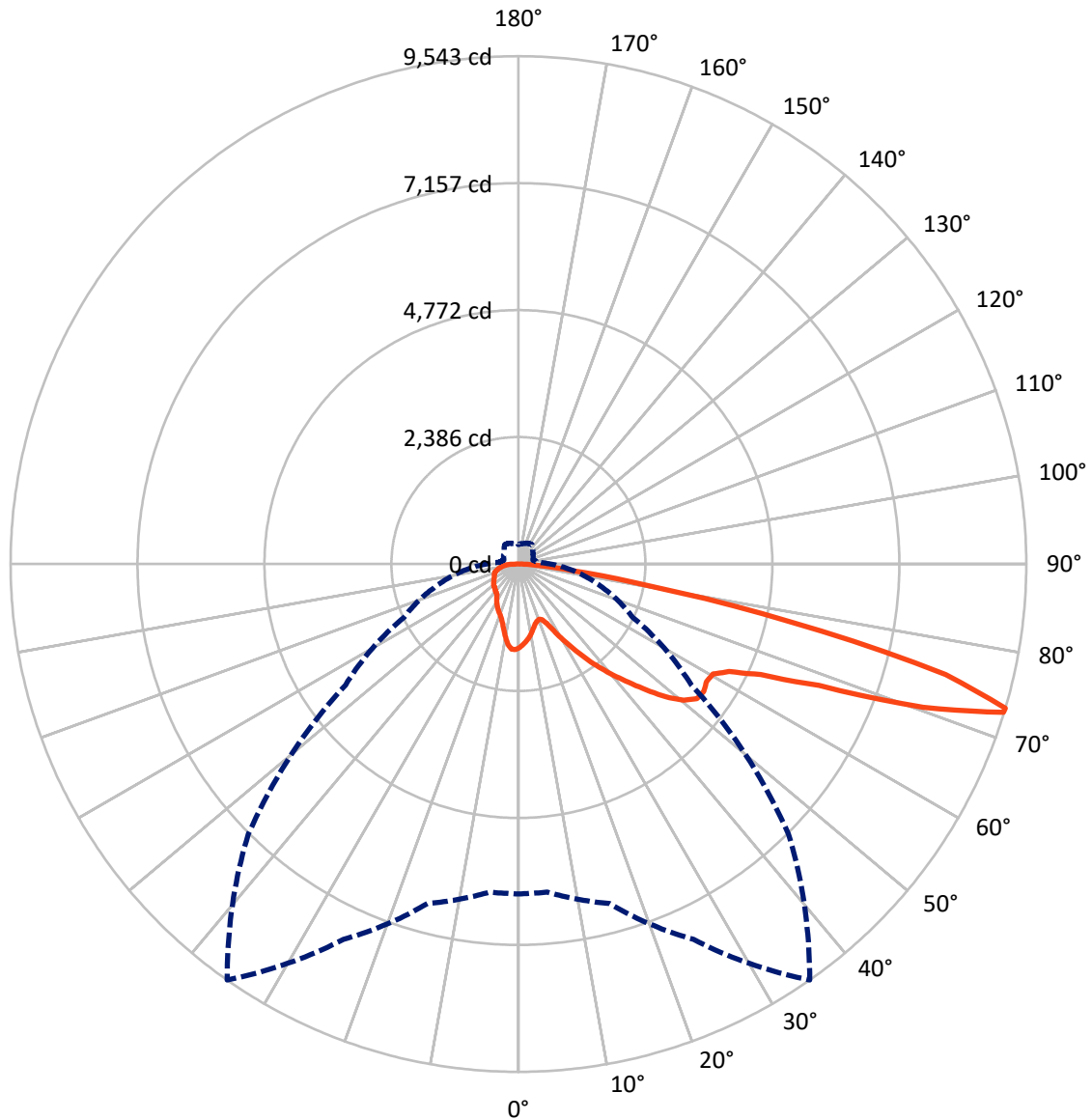
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1989.0	0.0	1989.0
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	8439.3	0.0	8439.3
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	10428.2	0.0	10428.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.5	1.4
10°-20°	355.6	3.4
20°-30°	574.9	5.5
30°-40°	964.1	9.2
40°-50°	1486.1	14.3
50°-60°	1993.7	19.1
60°-70°	2656.0	25.5
70°-80°	2025.7	19.4
80°-90°	229.6	2.2
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°	10428.2	100.0
0°-180°	10428.2	100.0



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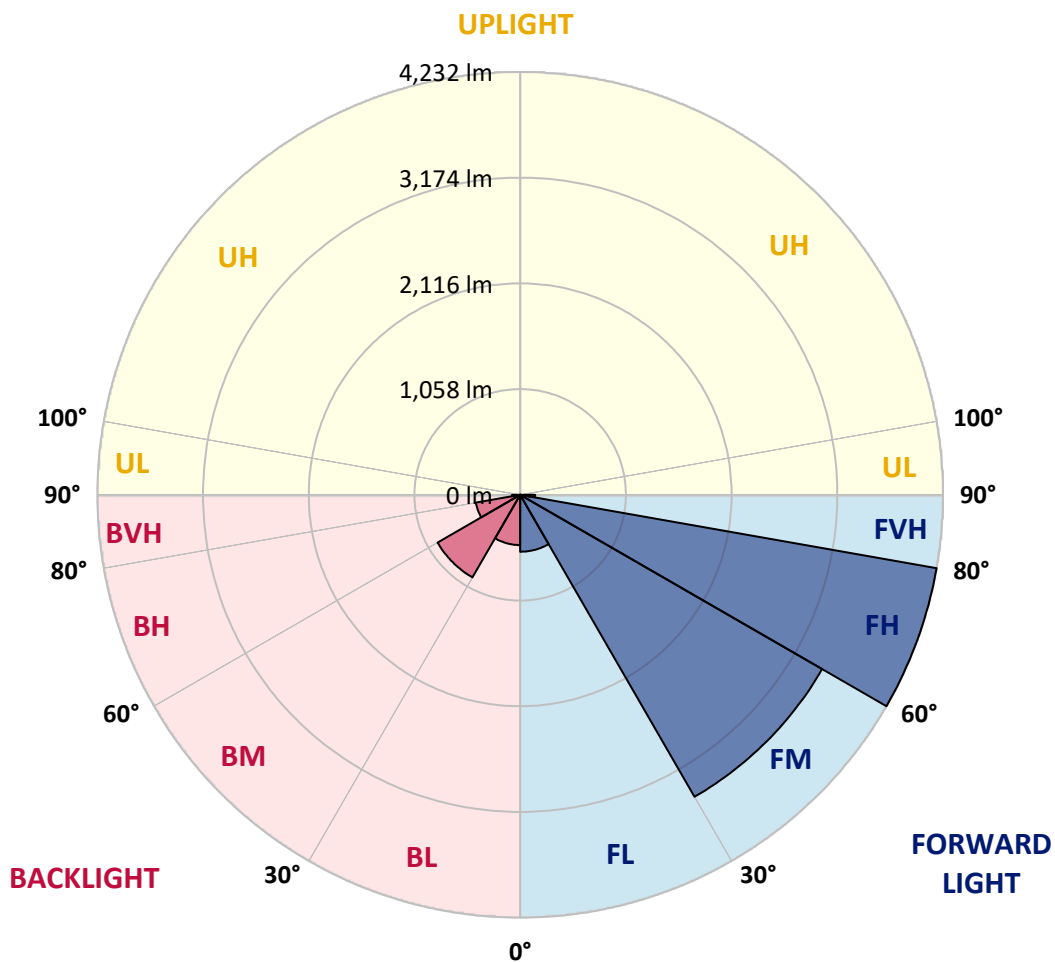
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	569.7	5.5			
FM	(30°-60°)	3489.3	33.5			
FH	(60°-80°)	4231.8	40.6			G2/5000
FVH	(80°-90°)	148.4	1.4			G2/225
BL	(0°-30°)	503.3	4.8	B2/1000		
BM	(30°-60°)	954.5	9.2	B1/1000		
BH	(60°-80°)	450.0	4.3	B1/500		G1/500
BVH	(80°-90°)	81.2	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9
2.5°	1511.8	1514.8	1511.3	1515.9	1523.4	1531.4	1536.9	1544.9	1553.9	1566.4	1569.4
5°	1440.7	1445.2	1445.2	1453.3	1467.8	1480.8	1492.8	1505.8	1524.9	1546.4	1554.9
7.5°	1362.6	1365.1	1369.6	1381.6	1402.7	1421.2	1438.2	1459.3	1485.3	1513.8	1528.9
10°	1268.5	1272.0	1279.0	1296.0	1324.6	1350.1	1374.6	1403.7	1436.7	1472.3	1491.3
12.5°	1201.9	1200.9	1203.9	1216.4	1241.4	1272.5	1308.0	1345.1	1385.6	1427.2	1450.2
15°	1179.3	1173.8	1162.3	1159.3	1172.8	1203.9	1244.9	1290.5	1339.1	1389.2	1417.7
17.5°	1193.4	1183.8	1152.3	1129.3	1127.2	1150.8	1194.4	1245.4	1301.5	1362.6	1398.2
20°	1281.5	1259.0	1181.3	1127.7	1109.2	1120.7	1158.8	1212.9	1279.0	1360.1	1405.7
22.5°	1492.3	1459.3	1294.5	1194.9	1132.3	1118.2	1146.8	1204.4	1281.5	1391.2	1449.2
25°	1799.3	1752.2	1488.8	1362.1	1232.9	1158.3	1164.8	1223.9	1317.0	1463.3	1533.4
27.5°	2041.7	2011.1	1742.7	1598.0	1416.2	1266.5	1223.4	1273.0	1389.7	1581.5	1653.1
30°	2185.9	2167.4	2014.1	1865.4	1650.1	1438.7	1335.6	1365.1	1503.3	1745.2	1804.3
32.5°	2353.1	2342.1	2267.0	2130.3	1902.4	1665.1	1513.3	1502.8	1655.6	1942.0	1969.1
35°	2526.4	2522.9	2478.8	2380.7	2173.4	1963.5	1749.2	1678.1	1821.3	2146.3	2129.3
37.5°	2687.7	2681.7	2656.1	2599.0	2456.8	2284.0	1989.6	1857.9	2000.1	2341.6	2266.0
40°	2984.6	2937.6	2849.9	2806.9	2743.3	2554.0	2180.4	2025.6	2185.4	2527.9	2384.2
42.5°	3346.7	3270.1	3106.8	3047.7	3038.7	2766.8	2310.6	2188.4	2372.2	2712.7	2500.4
45°	3631.6	3559.5	3418.8	3344.2	3377.2	2959.6	2441.3	2362.2	2564.5	2906.5	2620.1
47.5°	3935.6	3822.4	3636.1	3658.7	3730.8	3141.9	2574.5	2549.0	2775.3	3123.3	2768.8
50°	3946.6	3860.0	3778.4	3913.1	4025.2	3309.6	2741.2	2744.8	3033.2	3396.3	2966.6
52.5°	3717.8	3699.2	3828.9	4040.8	4202.5	3442.3	2931.0	2947.1	3363.2	3709.8	3183.9
55°	3637.6	3616.6	3766.3	3996.2	4226.6	3552.0	3136.9	3165.9	3762.3	4040.3	3395.8
57.5°	3832.9	3786.4	3796.4	3975.2	4168.0	3672.2	3361.2	3419.8	4196.0	4329.2	3532.0
60°	4378.8	4279.1	4089.8	4085.3	4199.5	3852.5	3620.6	3692.2	4646.7	4467.4	3478.9
62.5°	5144.5	5044.8	4690.3	4459.4	4442.4	4149.9	3939.1	3958.1	4907.1	4280.1	3154.9
65°	5973.3	5884.1	5488.0	5162.0	5004.8	4642.7	4309.2	4076.8	4822.0	3764.8	2588.0
67.5°	6979.3	6883.7	6543.1	6242.2	6090.9	5437.9	4569.1	3963.1	4281.6	2916.5	1860.4
70°	7682.9	7585.3	7451.1	7694.9	8065.0	6585.2	4602.6	3500.9	3198.0	1938.5	1119.7
72.5°	6765.0	6719.4	6964.3	7991.4	9532.8	7281.3	4160.4	2549.0	1857.4	1029.1	648.0
73°	6198.1	6188.1	6605.7	7783.6	9543.3	7174.1	3966.6	2369.2	1593.0	910.4	592.4
75°	2798.8	2879.5	3794.9	5945.2	8291.4	5911.7	2791.8	1359.1	899.9	629.0	447.2
77.5°	672.5	700.6	1187.3	2823.4	5236.1	3523.0	1265.0	672.0	575.4	444.2	326.5
80°	286.4	296.0	457.2	1043.1	2465.3	1418.7	582.9	450.2	398.1	310.0	228.9
82.5°	159.2	169.3	259.4	473.2	995.0	483.7	355.6	313.5	261.9	186.8	148.7
85°	90.1	95.6	151.7	264.4	421.7	194.3	212.8	208.3	147.7	96.1	73.1
87.5°	42.6	46.1	73.1	122.7	165.3	76.1	108.2	119.2	92.6	58.6	38.1
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9	1573.9
2.5°	1572.9	1582.0	1592.5	1598.0	1603.0	1609.0	1615.0	1615.0	1616.0	1616.5
5°	1561.9	1580.5	1597.0	1604.0	1605.5	1605.5	1604.0	1596.0	1589.0	1592.0
7.5°	1538.9	1565.9	1579.9	1577.4	1558.4	1536.4	1517.9	1495.3	1483.8	1481.8
10°	1505.8	1536.9	1539.4	1514.3	1467.3	1420.2	1381.1	1343.1	1325.1	1320.5
12.5°	1469.3	1497.8	1481.8	1430.2	1354.6	1286.0	1236.4	1197.9	1180.8	1176.3
15°	1439.7	1459.3	1418.7	1337.6	1242.4	1169.8	1128.7	1100.2	1088.2	1084.7
17.5°	1424.2	1428.2	1354.1	1244.4	1143.3	1082.7	1057.1	1043.6	1039.1	1036.6
20°	1431.7	1403.7	1292.5	1157.8	1062.1	1019.6	1013.6	1010.1	1009.1	1007.6
22.5°	1469.3	1396.2	1235.9	1075.7	991.0	972.5	977.5	977.0	976.0	975.0
25°	1536.4	1402.7	1180.8	997.5	931.4	927.4	936.5	936.5	932.4	932.4
27.5°	1625.0	1416.2	1119.2	923.4	877.4	877.9	884.9	882.9	878.4	875.4
30°	1733.2	1424.7	1047.1	856.8	826.8	824.8	826.8	818.3	804.7	803.7
32.5°	1843.9	1414.2	963.5	797.7	773.2	768.7	767.2	755.2	739.6	735.1
35°	1944.0	1375.6	878.4	750.7	722.1	712.1	719.1	715.1	701.1	697.6
37.5°	2017.1	1304.0	801.7	709.1	685.6	683.1	687.6	689.1	672.5	669.0
40°	2066.2	1206.9	736.1	674.0	678.6	669.0	654.0	643.5	638.5	637.0
42.5°	2105.8	1105.7	681.1	657.5	680.1	652.5	620.0	602.9	611.9	616.0
45°	2151.3	1007.1	635.0	637.0	672.5	633.5	596.4	579.9	583.4	584.4
47.5°	2213.9	886.9	585.4	603.9	647.5	620.5	581.9	558.4	541.8	534.3
50°	2300.6	744.7	533.8	566.9	623.0	610.9	559.4	534.3	503.8	496.8
52.5°	2360.7	611.9	491.3	535.8	600.9	591.9	541.3	508.8	476.7	470.7
55°	2328.1	508.3	454.2	501.3	571.9	568.4	526.3	482.7	457.7	452.7
57.5°	2165.4	442.7	425.7	468.7	536.3	548.4	506.3	460.7	442.7	439.2
60°	1854.9	401.6	407.6	446.7	507.3	528.3	486.3	448.7	436.7	434.2
62.5°	1439.2	374.1	394.1	430.7	484.8	514.3	475.2	447.2	442.7	439.7
65°	1031.1	352.0	379.6	414.6	464.2	501.3	471.2	445.2	446.2	443.7
67.5°	700.6	332.5	362.1	396.6	444.2	489.8	465.7	438.2	450.7	447.7
70°	490.3	313.5	341.5	373.6	419.1	473.7	455.7	427.7	426.7	414.6
72.5°	382.6	288.4	313.5	341.5	387.1	451.2	435.7	404.1	387.6	375.1
73°	365.1	282.4	306.5	334.5	380.1	445.7	430.2	397.6	379.1	367.6
75°	302.0	256.4	278.4	303.5	350.0	419.7	403.1	368.1	344.5	337.5
77.5°	237.4	219.3	240.4	262.9	308.5	381.6	363.1	329.5	316.5	310.5
80°	175.8	181.8	200.3	220.3	267.4	341.0	324.5	291.0	349.0	334.5
82.5°	123.7	137.7	154.7	172.8	224.3	301.5	281.4	246.9	255.4	212.3
85°	73.1	90.1	106.2	121.7	161.8	249.9	232.4	196.8	161.2	153.7
87.5°	42.6	50.1	54.6	70.6	111.2	188.3	163.8	145.7	83.6	56.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)