

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: P299224

Luminaire Tested: **GLNA-AF-02-LED-E1-T3-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7996.7 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

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

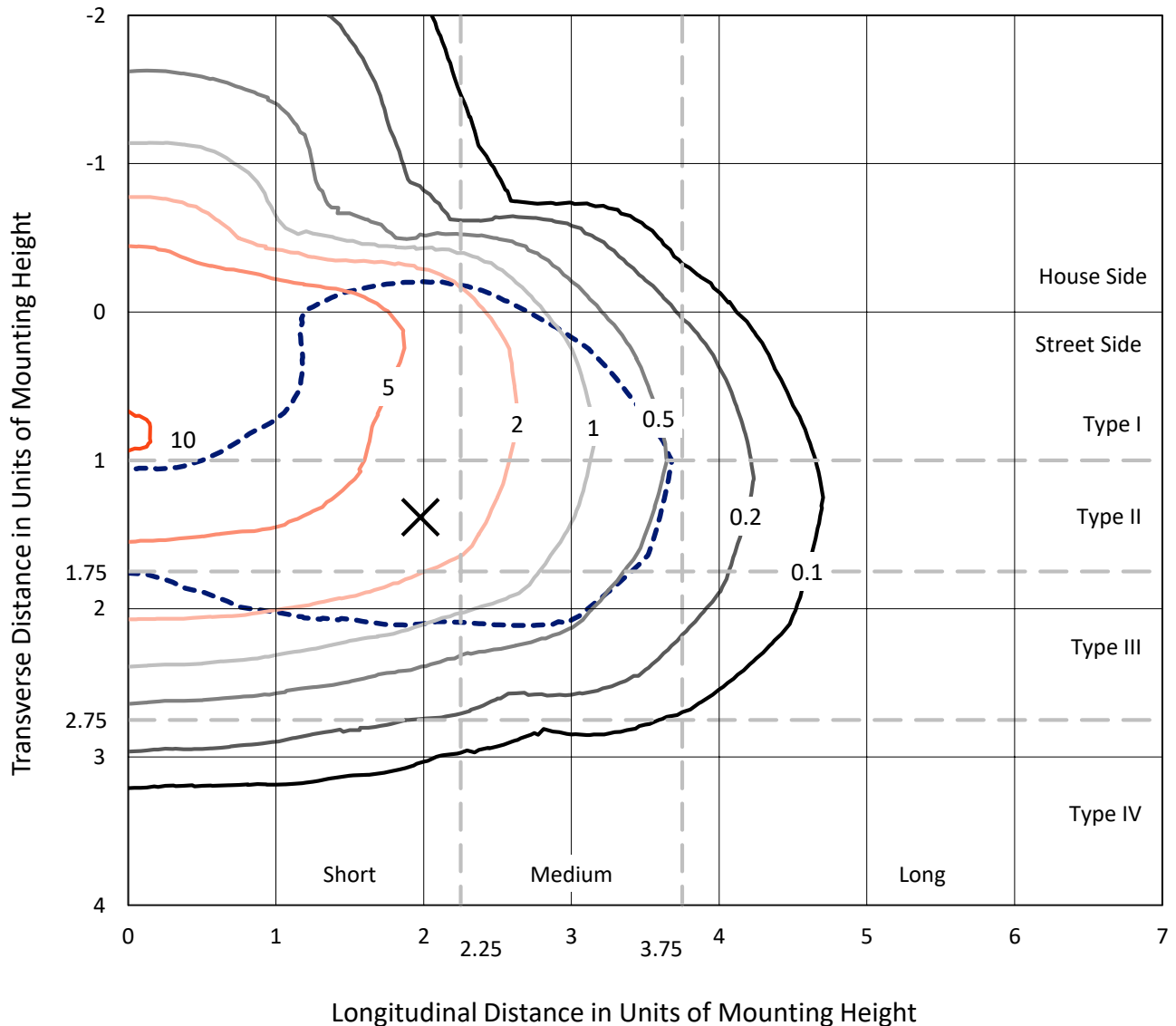


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Iso-Footcandle Lines of Horizontal Illumination

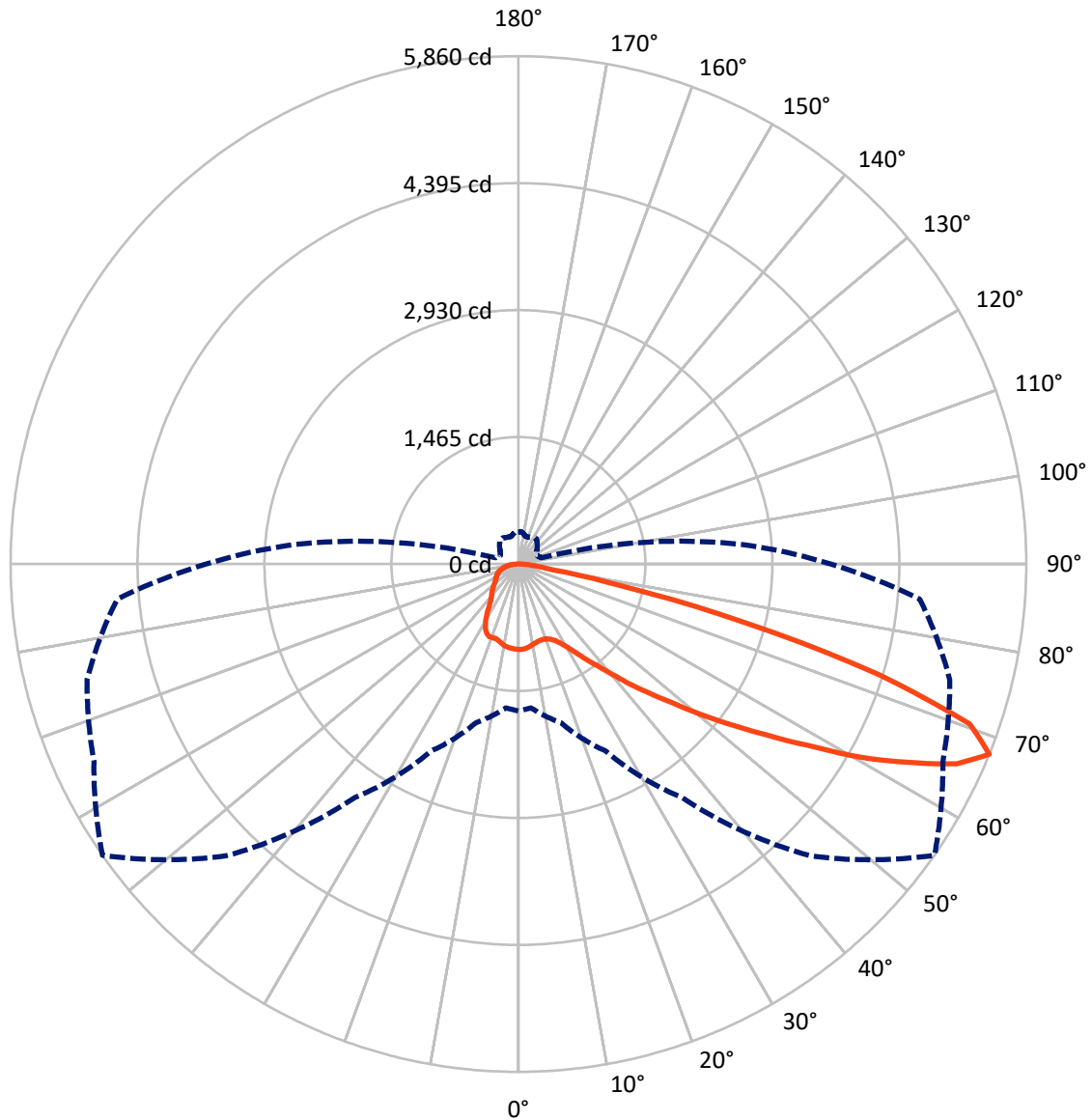
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1727.5	0.0	1727.5
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	6269.3	0.0	6269.3
	% Fixture	78.4	0.0	78.4
Total	Lumens	7996.7	0.0	7996.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.2
10°-20°	260.7	3.3
20°-30°	436.7	5.5
30°-40°	718.1	9.0
40°-50°	1208.7	15.1
50°-60°	1902.4	23.8
60°-70°	2270.3	28.4
70°-80°	974.9	12.2
80°-90°	132.9	1.7
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°	7996.7	100.0
0°-180°	7996.7	100.0



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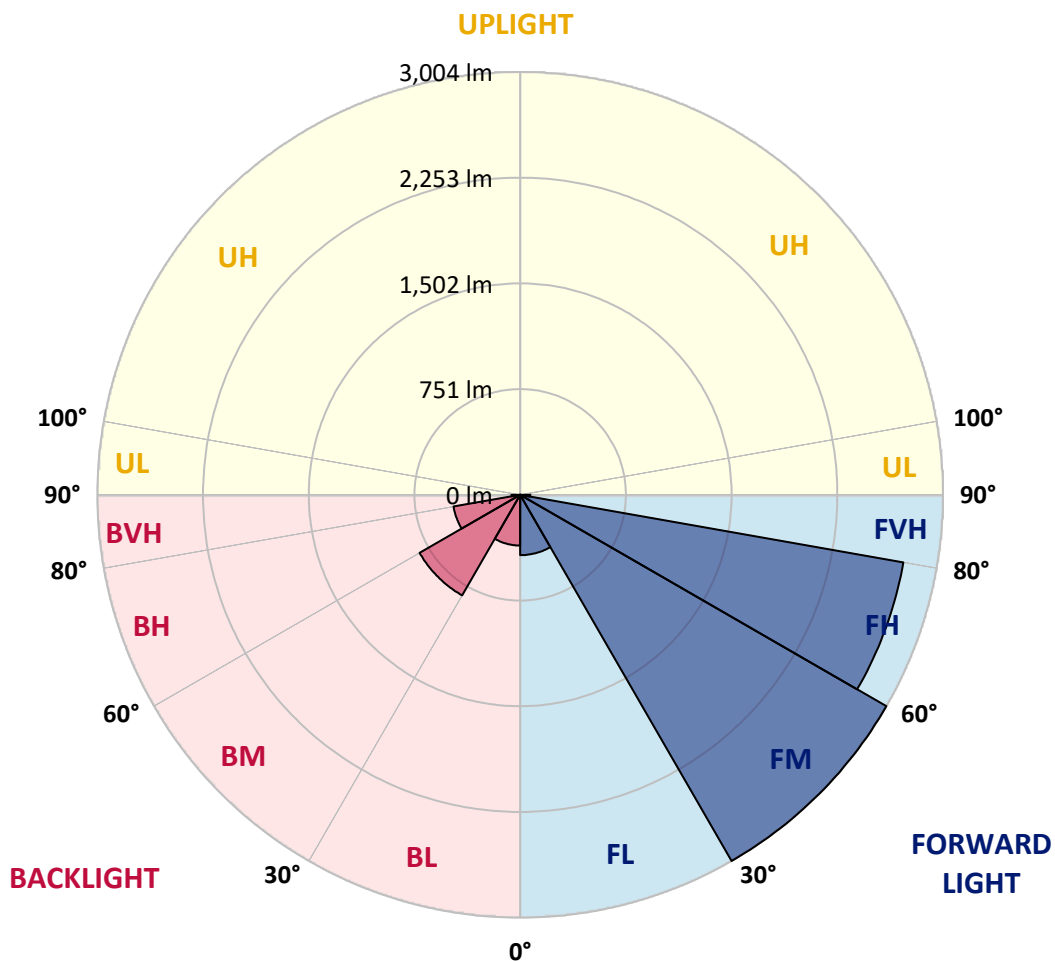
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	428.6	5.4			
FM	(30°-60°)	3004.2	37.6			
FH	(60°-80°)	2764.5	34.6			G2/5000
FVH	(80°-90°)	71.9	0.9			G1/100
BL	(0°-30°)	360.7	4.5	B1/500		
BM	(30°-60°)	825.0	10.3	B1/1000		
BH	(60°-80°)	480.7	6.0	B1/500		G1/500
BVH	(80°-90°)	61.0	0.8			G1/100
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°	65°	75°	85°	90°
0°	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1
2.5°	977.6	978.0	978.7	981.8	984.5	983.8	984.2	982.6	982.2	979.9	982.2
5°	965.2	966.4	966.8	971.8	974.9	975.7	974.5	972.6	970.2	967.9	969.1
7.5°	937.0	940.1	940.5	947.5	952.5	959.0	959.4	959.8	958.7	957.1	959.4
10°	919.3	920.0	919.6	924.7	928.5	935.9	940.1	947.5	950.5	951.3	952.9
12.5°	918.1	917.3	916.2	916.2	915.0	918.1	925.8	936.3	943.6	945.9	947.8
15°	930.5	930.1	926.2	920.4	913.1	910.8	917.3	928.9	938.6	943.6	945.5
17.5°	958.3	956.0	949.8	936.6	920.8	914.6	915.4	925.1	936.3	942.8	944.8
20°	1009.3	1009.3	996.1	971.4	943.2	928.5	921.6	927.4	938.2	947.1	949.8
22.5°	1097.3	1098.1	1076.1	1035.5	988.0	956.7	939.3	938.2	950.9	961.0	964.1
25°	1222.1	1219.0	1188.1	1130.2	1057.9	1006.2	976.0	969.1	979.9	991.1	995.0
27.5°	1367.3	1356.1	1319.4	1249.5	1156.0	1080.3	1034.0	1022.8	1033.2	1046.0	1049.8
30°	1511.0	1499.4	1455.8	1379.3	1275.4	1179.6	1113.2	1095.0	1109.7	1127.8	1130.2
32.5°	1654.7	1654.7	1606.0	1516.8	1403.6	1298.2	1218.6	1197.0	1221.3	1243.3	1248.3
35°	1826.6	1827.3	1780.2	1672.8	1551.2	1439.5	1351.9	1336.0	1372.7	1388.2	1400.1
37.5°	2037.8	2042.1	1981.4	1851.7	1718.4	1601.0	1496.7	1475.1	1511.8	1553.9	1592.5
40°	2266.1	2271.5	2204.7	2044.8	1911.5	1788.7	1675.9	1636.9	1697.9	1778.3	1828.1
42.5°	2483.9	2511.8	2447.2	2282.7	2139.4	2012.3	1898.0	1841.2	1917.7	2039.0	2082.2
45°	2798.7	2818.8	2706.4	2557.3	2422.5	2280.4	2129.0	2069.1	2176.1	2329.1	2337.9
47.5°	3008.5	2993.4	2936.2	2843.5	2758.2	2625.3	2397.4	2331.8	2473.9	2653.9	2604.1
50°	3120.1	3124.7	3117.0	3122.4	3125.5	3042.1	2726.5	2636.5	2806.1	3023.5	2908.8
52.5°	3224.4	3193.5	3219.0	3345.7	3498.6	3467.7	3084.6	2990.7	3162.2	3433.7	3230.9
55°	3222.1	3174.9	3258.0	3481.6	3813.4	3848.9	3486.6	3378.5	3538.8	3873.7	3572.4
57.5°	3108.1	3110.4	3238.3	3531.1	4032.8	4207.4	3953.2	3791.0	3938.2	4319.4	3884.1
60°	2951.3	2972.5	3156.8	3522.9	4208.5	4501.3	4525.6	4235.6	4329.4	4724.5	4142.1
62.5°	2698.3	2720.7	2974.9	3438.7	4181.9	4784.4	5043.2	4740.0	4738.5	4970.2	4217.8
65°	2299.3	2292.8	2559.6	3123.9	3958.2	4993.8	5557.3	5176.1	5046.7	4974.1	4065.6
67.5°	1695.6	1666.3	1895.3	2379.3	3290.0	4759.3	5859.7	5403.2	5151.7	4646.9	3600.6
70°	879.9	850.5	1035.9	1389.3	2163.7	3714.5	5524.8	5285.8	4919.6	3895.3	2820.7
72.5°	376.2	371.2	446.5	609.5	1046.7	2142.5	4332.1	4575.1	4221.3	2902.2	1939.3
75°	253.0	251.4	279.6	332.2	470.8	869.4	2711.1	3247.5	3088.4	1799.5	1090.8
77.5°	198.5	196.6	213.2	238.7	305.1	343.0	1203.2	1743.5	1613.7	783.3	477.4
80°	155.3	153.7	164.2	178.1	219.4	216.3	395.9	693.7	536.9	300.1	232.1
82.5°	122.4	122.4	130.9	131.3	155.7	147.5	206.6	305.5	268.1	175.0	142.1
85°	112.0	112.0	120.9	98.1	101.6	93.1	128.2	181.1	169.9	71.8	61.8
87.5°	56.4	54.8	101.6	86.9	55.2	49.4	62.6	87.7	94.2	39.8	30.9
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°	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1	986.1
2.5°	981.4	981.1	981.8	982.2	985.3	989.6	991.5	994.2	995.7	995.0
5°	969.9	970.6	973.7	976.0	981.4	988.4	992.3	995.4	998.1	996.9
7.5°	960.2	962.1	966.8	968.7	971.8	973.7	973.3	974.5	976.8	974.1
10°	954.8	957.1	960.6	957.9	950.5	940.1	930.5	925.4	927.0	925.1
12.5°	949.4	952.5	949.8	937.0	916.6	903.0	895.7	896.5	900.0	900.7
15°	946.3	947.5	935.9	911.9	891.1	889.1	893.0	892.2	892.6	892.6
17.5°	946.3	943.2	921.6	897.6	888.7	885.3	873.3	858.2	851.7	849.4
20°	951.3	943.2	916.9	901.1	881.8	852.1	820.4	792.6	780.2	776.7
22.5°	966.4	952.5	930.1	902.7	847.8	798.0	747.8	714.6	692.2	688.3
25°	996.9	981.4	956.0	882.2	793.7	722.7	665.5	628.4	606.0	602.9
27.5°	1050.2	1040.2	969.9	837.0	721.9	645.8	592.9	564.3	547.7	546.5
30°	1130.5	1125.5	962.9	770.2	633.4	571.3	545.8	529.2	516.8	516.4
32.5°	1258.8	1218.2	940.1	688.7	552.7	518.3	507.9	497.9	488.2	488.2
35°	1423.7	1293.1	896.9	601.4	503.7	489.0	475.9	460.0	447.3	446.5
37.5°	1617.6	1339.5	819.2	531.1	480.5	469.3	450.0	426.4	404.0	400.1
40°	1813.4	1353.4	709.9	487.8	465.8	449.6	426.0	398.2	376.6	375.4
42.5°	1993.0	1326.8	594.0	458.1	451.1	429.5	404.8	380.1	363.1	362.7
45°	2143.7	1257.6	496.7	429.9	435.7	411.4	389.3	369.3	356.1	353.4
47.5°	2285.4	1159.9	428.3	400.1	420.2	401.3	382.8	363.8	351.1	349.2
50°	2450.0	1054.4	380.5	371.2	406.7	397.8	388.2	368.5	347.2	344.9
52.5°	2649.3	963.3	343.0	345.7	396.3	402.5	402.1	381.6	344.5	341.4
55°	2871.7	862.1	314.8	324.8	392.0	411.0	405.6	394.0	346.8	342.2
57.5°	3090.7	743.9	295.1	309.0	385.9	410.2	388.9	372.3	352.3	345.7
60°	3254.9	585.2	280.0	295.1	372.3	397.4	370.8	348.8	351.1	346.1
62.5°	3265.7	452.3	261.9	283.1	351.9	384.7	358.8	338.4	356.1	351.5
65°	3073.7	341.8	244.5	268.8	329.9	376.6	347.2	332.6	366.5	361.5
67.5°	2587.8	275.0	229.8	254.1	307.8	359.6	336.8	327.1	375.8	366.9
70°	1868.3	234.5	215.5	236.4	288.1	340.3	327.5	317.5	350.7	336.8
72.5°	1150.2	203.2	199.3	212.8	273.1	320.2	313.6	299.3	315.9	304.7
75°	574.3	176.1	181.1	189.6	251.8	297.4	290.5	276.2	278.5	276.2
77.5°	275.0	150.6	159.9	166.5	224.4	271.5	264.2	249.5	246.8	247.2
80°	174.2	125.9	134.8	139.4	200.5	241.4	234.1	219.4	250.3	232.1
82.5°	108.9	102.4	104.7	113.2	174.6	210.1	200.5	187.3	225.6	178.4
85°	60.3	71.5	74.5	81.9	134.4	175.7	166.1	149.5	134.0	131.7
87.5°	35.9	42.5	43.6	49.1	90.4	127.1	112.4	106.6	88.5	88.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)