

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: P300416

Luminaire Tested: **GLNA-AF-01-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300416  
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-01-LED-E1-T4FT-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

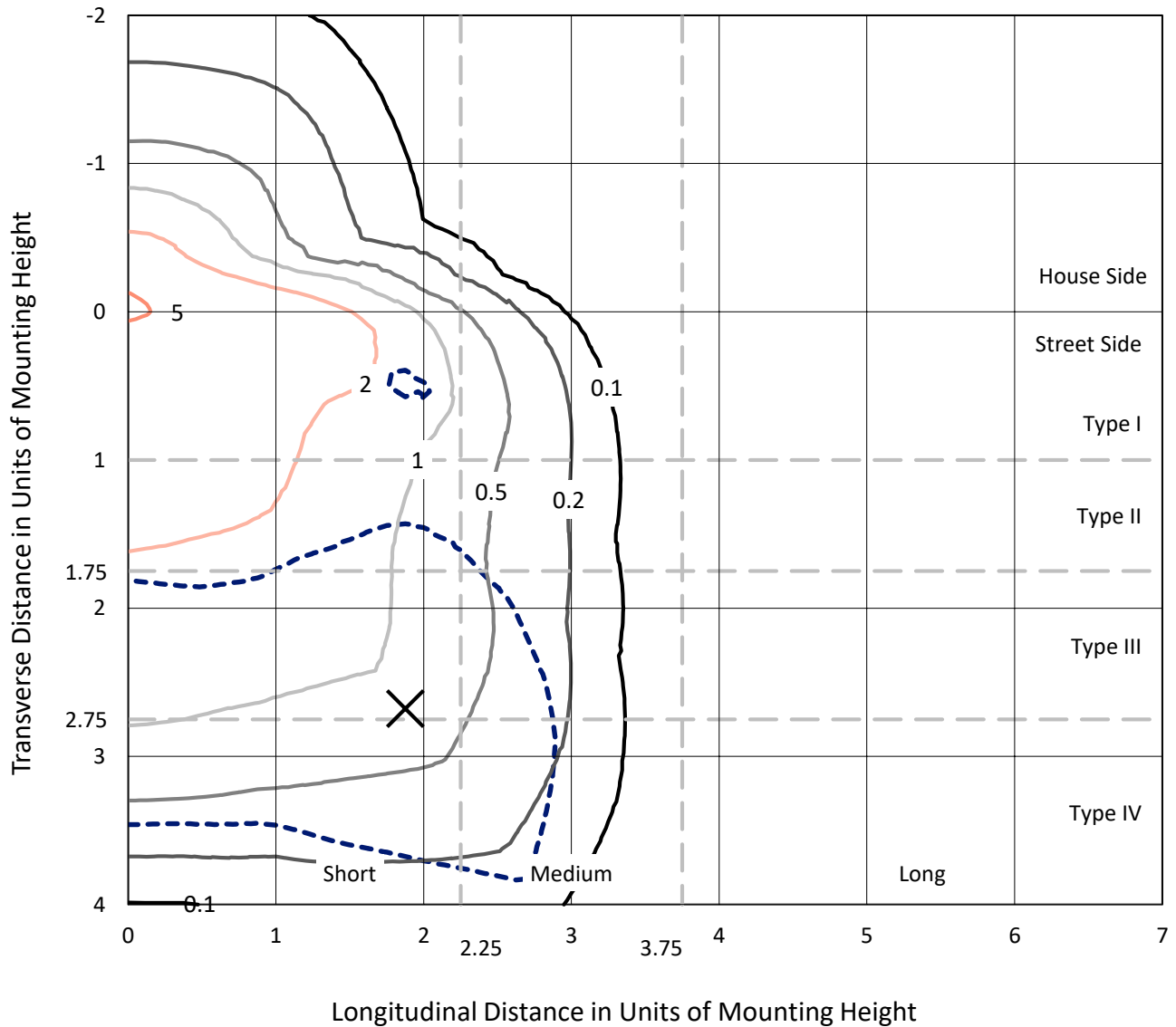
Lumens per Lamp: N/A  
Luminaire Lumens: 3576.5 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (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

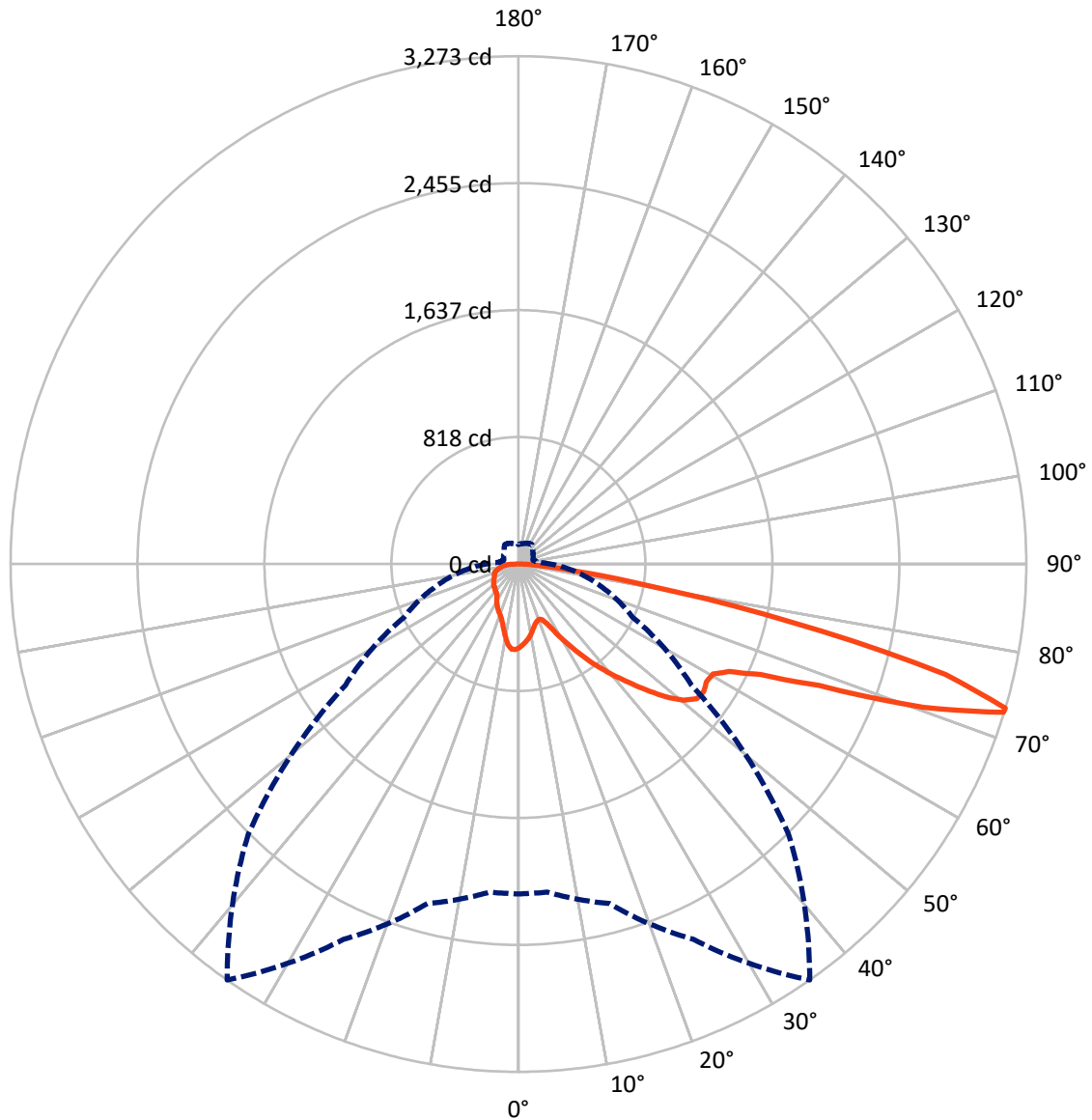
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 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	682.1	0.0	682.1
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	2894.3	0.0	2894.3
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	3576.5	0.0	3576.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.9	1.4
10°-20°	122.0	3.4
20°-30°	197.2	5.5
30°-40°	330.6	9.2
40°-50°	509.7	14.3
50°-60°	683.8	19.1
60°-70°	910.9	25.5
70°-80°	694.7	19.4
80°-90°	78.7	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°	3576.5	100.0
0°-180°	3576.5	100.0



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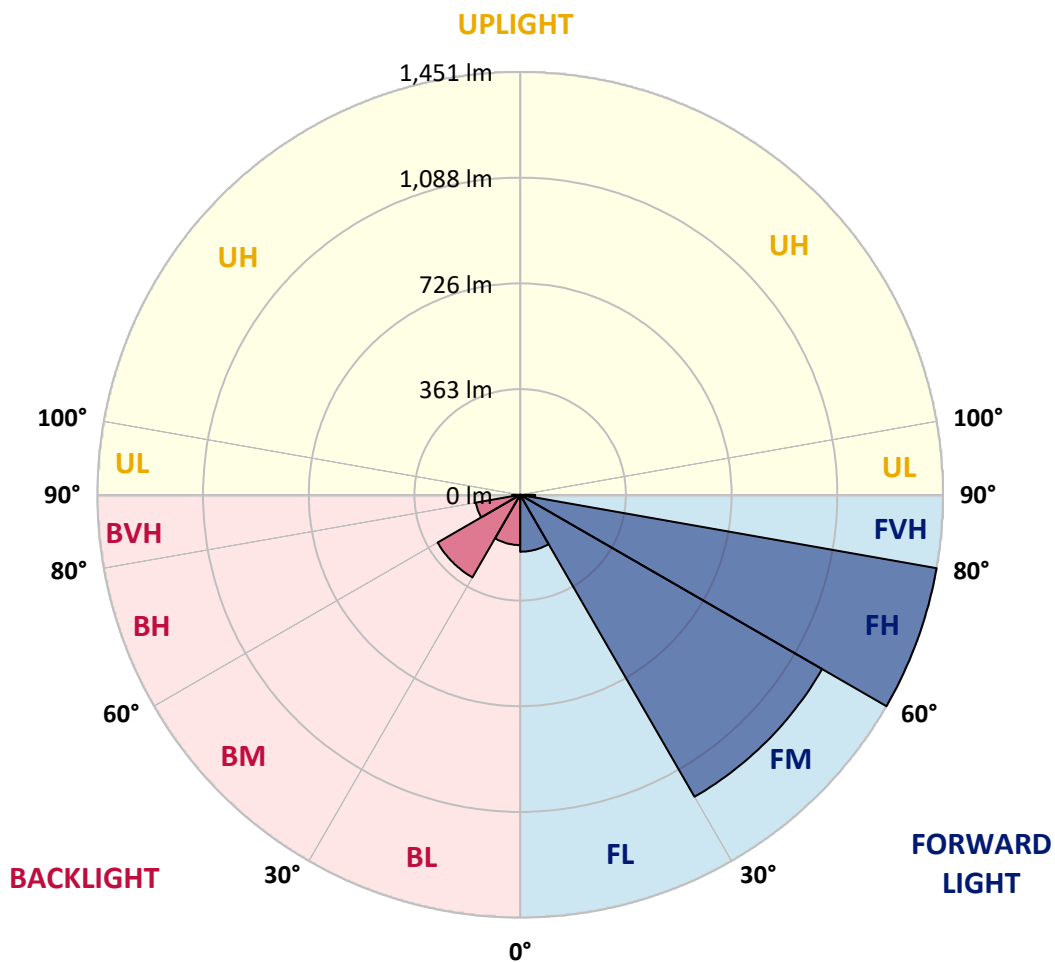
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	195.4	5.5			
FM (30°-60°)	1196.7	33.5			
FH (60°-80°)	1451.3	40.6			G1/1800
FVH (80°-90°)	50.9	1.4			G1/100
BL (0°-30°)	172.6	4.8	B1/500		
BM (30°-60°)	327.4	9.2	B1/1000		
BH (60°-80°)	154.3	4.3	B1/500		G1/500
BVH (80°-90°)	27.8	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	518.5	519.5	518.3	519.9	522.5	525.2	527.1	529.8	532.9	537.2	538.3
5°	494.1	495.7	495.7	498.4	503.4	507.9	512.0	516.4	523.0	530.4	533.3
7.5°	467.3	468.2	469.7	473.8	481.1	487.4	493.3	500.5	509.4	519.2	524.3
10°	435.0	436.2	438.6	444.5	454.3	463.0	471.4	481.4	492.7	504.9	511.5
12.5°	412.2	411.8	412.9	417.2	425.8	436.4	448.6	461.3	475.2	489.5	497.4
15°	404.5	402.6	398.6	397.6	402.2	412.9	427.0	442.6	459.2	476.4	486.2
17.5°	409.3	406.0	395.2	387.3	386.6	394.7	409.6	427.1	446.4	467.3	479.5
20°	439.5	431.8	405.1	386.8	380.4	384.4	397.4	416.0	438.6	466.5	482.1
22.5°	511.8	500.5	444.0	409.8	388.3	383.5	393.3	413.0	439.5	477.1	497.0
25°	617.1	600.9	510.6	467.1	422.8	397.2	399.5	419.7	451.7	501.8	525.9
27.5°	700.2	689.7	597.7	548.0	485.7	434.3	419.6	436.6	476.6	542.4	566.9
30°	749.7	743.3	690.8	639.8	565.9	493.4	458.0	468.2	515.6	598.5	618.8
32.5°	807.0	803.3	777.5	730.6	652.5	571.1	519.0	515.4	567.8	666.0	675.3
35°	866.5	865.3	850.1	816.5	745.4	673.4	599.9	575.5	624.6	736.1	730.3
37.5°	921.8	919.7	910.9	891.4	842.6	783.3	682.3	637.2	686.0	803.1	777.2
40°	1023.6	1007.5	977.4	962.6	940.8	875.9	747.8	694.7	749.5	867.0	817.7
42.5°	1147.8	1121.5	1065.5	1045.2	1042.2	948.9	792.4	750.5	813.6	930.3	857.5
45°	1245.5	1220.8	1172.5	1146.9	1158.3	1015.0	837.3	810.1	879.5	996.8	898.6
47.5°	1349.8	1310.9	1247.0	1254.8	1279.5	1077.5	882.9	874.2	951.8	1071.2	949.6
50°	1353.5	1323.8	1295.8	1342.0	1380.5	1135.1	940.1	941.3	1040.3	1164.8	1017.4
52.5°	1275.0	1268.7	1313.2	1385.8	1441.3	1180.6	1005.2	1010.7	1153.4	1272.3	1092.0
55°	1247.6	1240.4	1291.7	1370.5	1449.5	1218.2	1075.8	1085.8	1290.3	1385.6	1164.6
57.5°	1314.5	1298.6	1302.0	1363.3	1429.4	1259.4	1152.8	1172.9	1439.1	1484.7	1211.3
60°	1501.7	1467.6	1402.7	1401.1	1440.3	1321.2	1241.7	1266.3	1593.6	1532.1	1193.1
62.5°	1764.3	1730.2	1608.6	1529.4	1523.6	1423.3	1351.0	1357.5	1682.9	1467.9	1082.0
65°	2048.6	2018.0	1882.2	1770.4	1716.4	1592.3	1477.9	1398.2	1653.7	1291.2	887.6
67.5°	2393.6	2360.8	2244.0	2140.8	2088.9	1865.0	1567.0	1359.2	1468.4	1000.2	638.0
70°	2634.9	2601.4	2555.4	2639.1	2766.0	2258.5	1578.5	1200.7	1096.8	664.8	384.0
72.5°	2320.1	2304.5	2388.5	2740.7	3269.4	2497.2	1426.9	874.2	637.0	352.9	222.2
73°	2125.7	2122.3	2265.5	2669.4	3273.0	2460.4	1360.4	812.5	546.3	312.2	203.2
75°	959.9	987.5	1301.5	2039.0	2843.6	2027.5	957.5	466.1	308.6	215.7	153.4
77.5°	230.7	240.3	407.2	968.3	1795.8	1208.2	433.8	230.5	197.3	152.3	112.0
80°	98.2	101.5	156.8	357.7	845.5	486.6	199.9	154.4	136.5	106.3	78.5
82.5°	54.6	58.1	89.0	162.3	341.3	165.9	121.9	107.5	89.8	64.1	51.0
85°	30.9	32.8	52.0	90.7	144.6	66.6	73.0	71.4	50.7	33.0	25.1
87.5°	14.6	15.8	25.1	42.1	56.7	26.1	37.1	40.9	31.8	20.1	13.1
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°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	539.5	542.5	546.2	548.0	549.8	551.8	553.9	553.9	554.2	554.4
5°	535.7	542.0	547.7	550.1	550.6	550.6	550.1	547.4	545.0	546.0
7.5°	527.8	537.1	541.9	541.0	534.5	526.9	520.6	512.8	508.9	508.2
10°	516.4	527.1	527.9	519.4	503.2	487.1	473.7	460.6	454.4	452.9
12.5°	503.9	513.7	508.2	490.5	464.6	441.0	424.0	410.8	405.0	403.4
15°	493.8	500.5	486.6	458.7	426.1	401.2	387.1	377.3	373.2	372.0
17.5°	488.4	489.8	464.4	426.8	392.1	371.3	362.6	357.9	356.4	355.5
20°	491.0	481.4	443.3	397.1	364.3	349.7	347.6	346.4	346.1	345.6
22.5°	503.9	478.8	423.9	368.9	339.9	333.5	335.2	335.1	334.7	334.4
25°	526.9	481.1	405.0	342.1	319.4	318.1	321.2	321.2	319.8	319.8
27.5°	557.3	485.7	383.9	316.7	300.9	301.1	303.5	302.8	301.2	300.2
30°	594.4	488.6	359.1	293.9	283.6	282.9	283.6	280.6	276.0	275.7
32.5°	632.4	485.0	330.4	273.6	265.2	263.6	263.1	259.0	253.7	252.1
35°	666.7	471.8	301.2	257.4	247.7	244.2	246.6	245.3	240.4	239.2
37.5°	691.8	447.2	275.0	243.2	235.1	234.3	235.8	236.3	230.7	229.5
40°	708.6	413.9	252.5	231.2	232.7	229.5	224.3	220.7	219.0	218.5
42.5°	722.2	379.2	233.6	225.5	233.2	223.8	212.6	206.8	209.9	211.2
45°	737.8	345.4	217.8	218.5	230.7	217.3	204.5	198.9	200.1	200.4
47.5°	759.3	304.2	200.8	207.1	222.1	212.8	199.6	191.5	185.8	183.3
50°	789.0	255.4	183.1	194.4	213.7	209.5	191.8	183.3	172.8	170.4
52.5°	809.6	209.9	168.5	183.8	206.1	203.0	185.7	174.5	163.5	161.4
55°	798.4	174.3	155.8	171.9	196.1	194.9	180.5	165.6	157.0	155.3
57.5°	742.6	151.8	146.0	160.8	183.9	188.1	173.6	158.0	151.8	150.6
60°	636.1	137.7	139.8	153.2	174.0	181.2	166.8	153.9	149.8	148.9
62.5°	493.6	128.3	135.2	147.7	166.3	176.4	163.0	153.4	151.8	150.8
65°	353.6	120.7	130.2	142.2	159.2	171.9	161.6	152.7	153.0	152.2
67.5°	240.3	114.0	124.2	136.0	152.3	168.0	159.7	150.3	154.6	153.5
70°	168.1	107.5	117.1	128.1	143.8	162.5	156.3	146.7	146.3	142.2
72.5°	131.2	98.9	107.5	117.1	132.8	154.7	149.4	138.6	132.9	128.6
73°	125.2	96.9	105.1	114.7	130.4	152.9	147.5	136.4	130.0	126.1
75°	103.6	87.9	95.5	104.1	120.1	143.9	138.3	126.2	118.2	115.8
77.5°	81.4	75.2	82.4	90.2	105.8	130.9	124.5	113.0	108.5	106.5
80°	60.3	62.3	68.7	75.6	91.7	117.0	111.3	99.8	119.7	114.7
82.5°	42.4	47.2	53.1	59.3	76.9	103.4	96.5	84.7	87.6	72.8
85°	25.1	30.9	36.4	41.7	55.5	85.7	79.7	67.5	55.3	52.7
87.5°	14.6	17.2	18.7	24.2	38.1	64.6	56.2	50.0	28.7	19.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)