

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: P301200

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301200  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)  
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-T3R-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3634.4 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

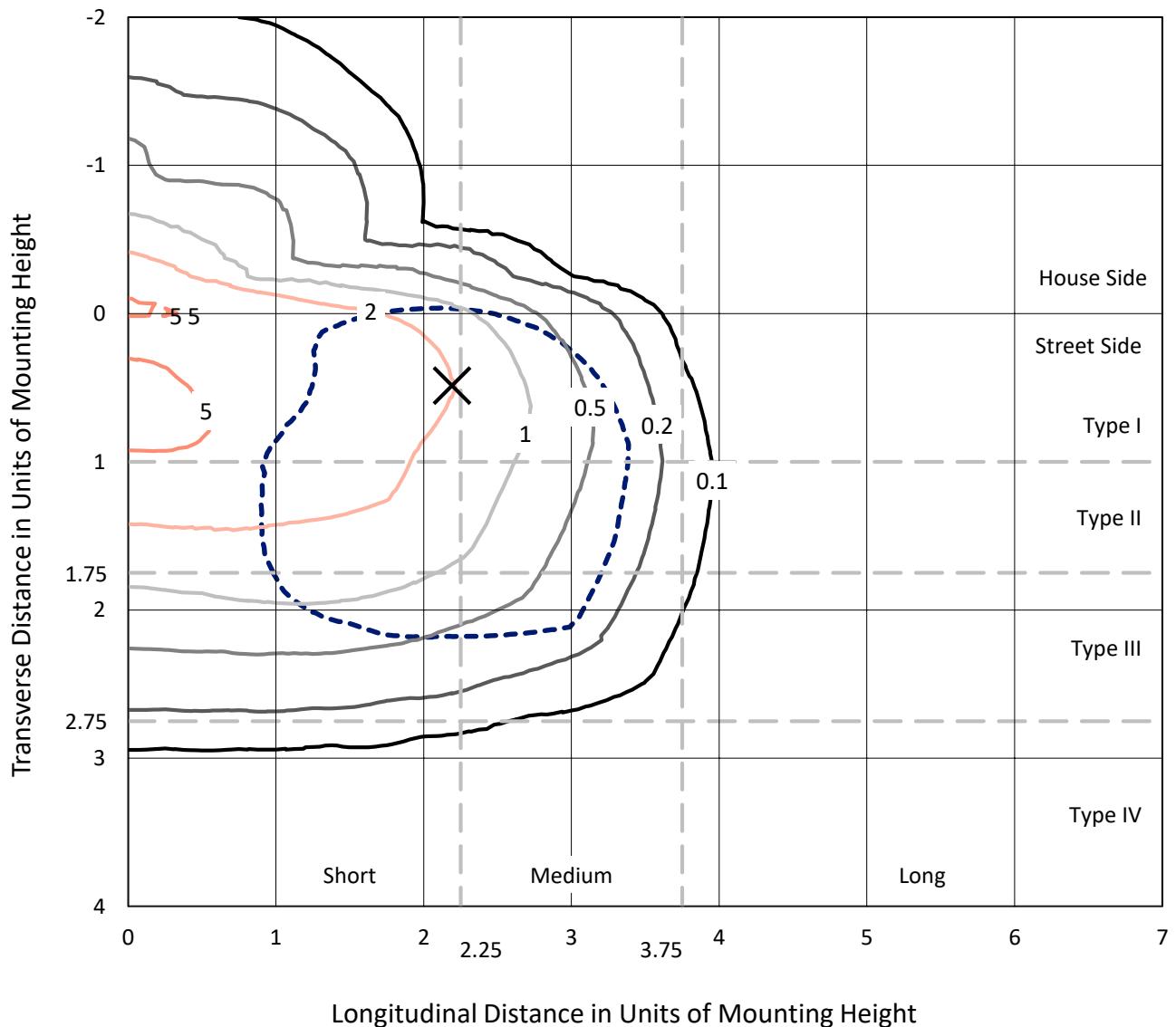
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

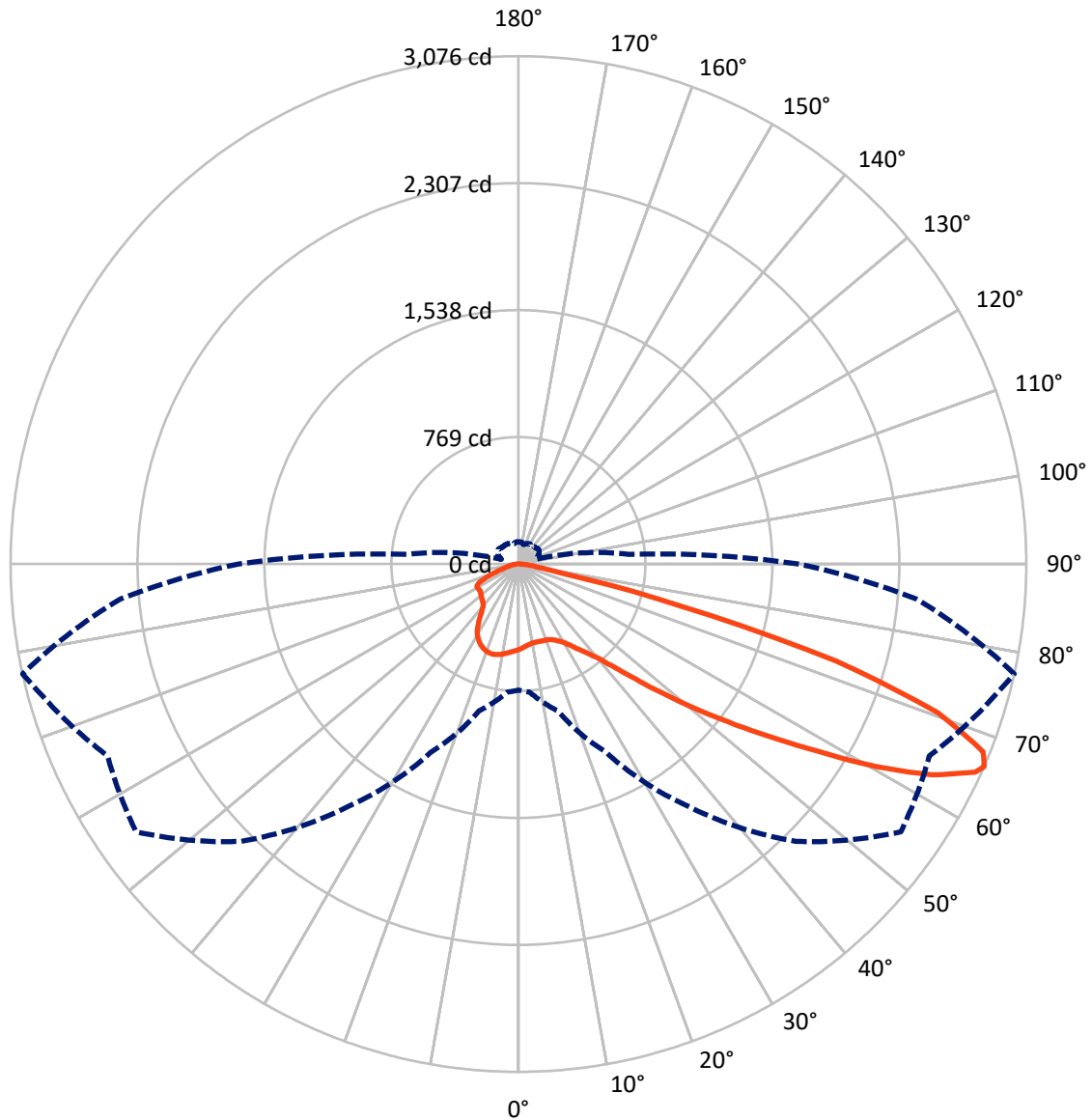
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	620.9	0.0	620.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	3013.5	0.0	3013.5
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	3634.4	0.0	3634.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.3	1.3
10°-20°	130.5	3.6
20°-30°	222.8	6.1
30°-40°	356.6	9.8
40°-50°	551.0	15.2
50°-60°	781.5	21.5
60°-70°	1045.4	28.8
70°-80°	454.0	12.5
80°-90°	46.3	1.3
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°	3634.4	100.0
0°-180°	3634.4	100.0



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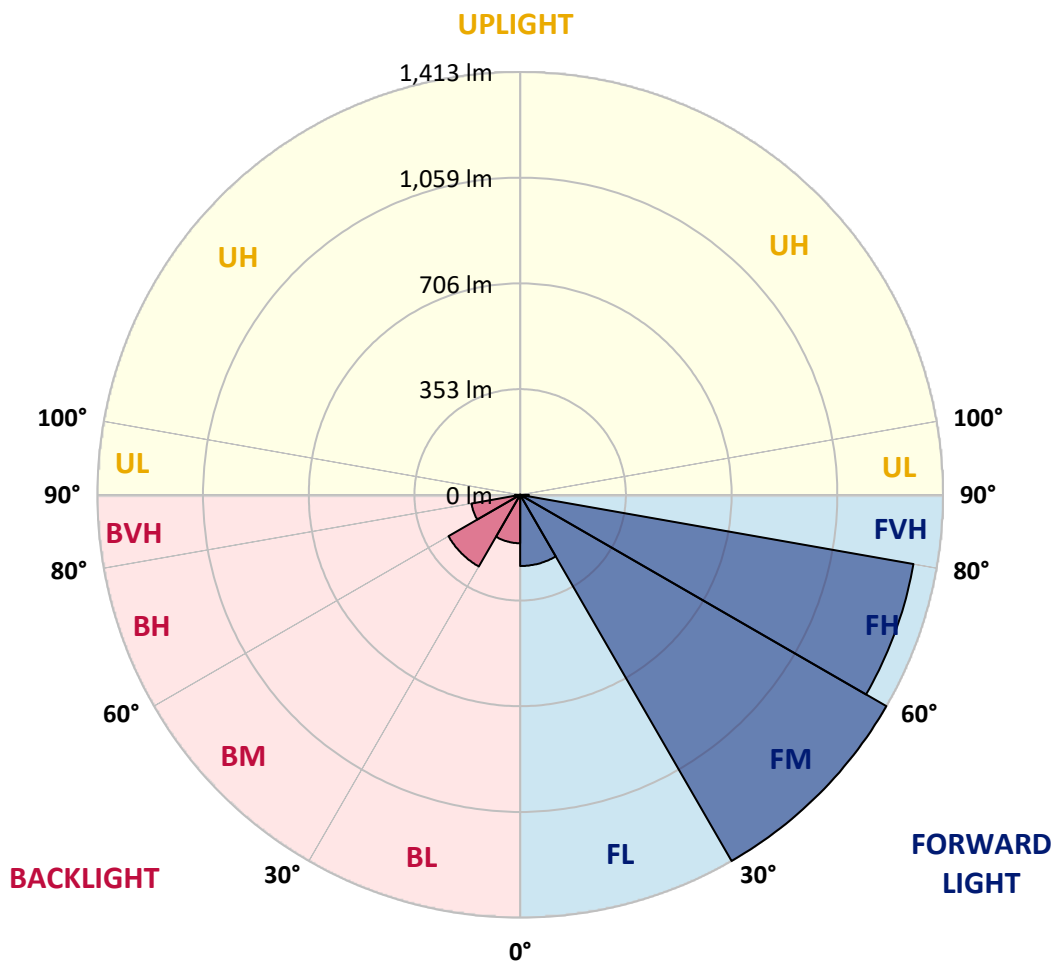
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	237.9	6.5			
FM	(30°-60°)	1412.5	38.9			
FH	(60°-80°)	1334.0	36.7			G1/1800
FVH	(80°-90°)	29.0	0.8			G1/100
BL	(0°-30°)	161.7	4.4	B1/500		
BM	(30°-60°)	276.6	7.6	B1/1000		
BH	(60°-80°)	165.4	4.5	B1/500		G1/500
BVH	(80°-90°)	17.3	0.5			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	458.2	461.2	463.8	466.2	471.0	478.9	488.0	495.4	506.1	508.1	513.8
5°	416.1	416.1	418.1	421.8	428.3	440.1	452.5	469.0	492.2	497.6	512.8
7.5°	395.7	395.8	397.0	400.1	405.8	416.6	430.1	449.6	481.0	490.1	515.8
10°	403.2	401.5	398.9	397.4	398.2	404.6	417.5	439.1	474.1	485.8	522.7
12.5°	445.4	442.2	433.3	421.4	410.1	405.5	413.0	434.1	471.2	484.8	531.8
15°	514.5	513.1	496.4	471.9	444.4	421.4	416.3	432.2	471.5	486.0	542.7
17.5°	601.1	599.1	577.2	541.5	496.6	451.8	427.8	433.8	472.7	488.0	553.1
20°	688.5	682.6	658.9	616.3	558.8	493.2	446.8	437.7	474.3	490.3	564.1
22.5°	753.7	748.9	727.6	686.2	619.9	541.1	472.4	444.6	479.3	496.8	577.7
25°	811.1	811.4	790.3	750.3	681.7	592.0	505.4	463.0	492.0	510.2	596.2
27.5°	882.0	877.9	858.1	818.4	742.9	643.3	545.2	488.2	510.9	529.2	620.6
30°	966.8	963.9	941.0	896.1	810.7	698.4	590.7	517.6	535.3	554.3	652.5
32.5°	1066.6	1065.2	1041.5	983.6	889.0	763.3	644.2	556.4	571.7	591.4	698.4
35°	1183.7	1183.9	1155.9	1086.3	974.7	838.9	704.7	606.4	616.0	636.6	753.0
37.5°	1255.8	1264.6	1254.1	1183.2	1071.7	923.4	783.4	672.6	666.5	687.3	811.6
40°	1271.3	1281.9	1315.0	1279.0	1180.3	1016.4	853.1	736.3	728.6	754.0	887.0
42.5°	1249.6	1264.4	1334.5	1359.9	1295.5	1131.1	946.9	831.0	821.2	855.4	980.7
45°	1236.7	1247.8	1328.8	1402.0	1395.4	1260.8	1066.2	949.8	946.2	991.0	1088.9
47.5°	1214.4	1224.4	1302.4	1411.7	1454.2	1379.6	1209.6	1095.1	1102.1	1160.9	1211.0
50°	1226.4	1230.5	1272.8	1386.8	1471.2	1466.7	1369.8	1263.4	1287.4	1360.7	1349.2
52.5°	1224.7	1235.4	1269.4	1346.0	1473.4	1520.5	1527.6	1451.1	1501.7	1585.9	1502.6
55°	990.2	1009.7	1229.0	1335.7	1481.3	1573.1	1668.1	1648.9	1743.3	1841.4	1675.7
57.5°	945.5	957.9	1079.5	1357.3	1523.2	1673.8	1824.4	1866.6	2024.6	2138.5	1886.6
60°	936.7	952.0	1077.9	1383.8	1608.2	1837.8	2056.1	2130.3	2366.9	2491.6	2131.1
62.5°	909.4	925.9	1067.8	1380.3	1728.9	2064.6	2352.6	2410.5	2691.4	2812.7	2335.6
65°	822.9	838.4	985.2	1324.9	1810.3	2306.8	2703.6	2667.4	2947.7	3038.8	2437.6
66°	763.6	778.8	920.1	1259.6	1791.4	2375.5	2828.0	2746.9	3005.0	3076.4	2417.7
67.5°	655.3	667.1	793.7	1113.5	1691.0	2394.7	2932.5	2806.6	3011.0	3036.3	2303.9
70°	414.0	417.5	515.8	768.6	1280.0	2076.8	2773.3	2658.3	2762.7	2694.3	1931.4
72.5°	179.6	178.4	247.6	391.0	724.7	1393.5	2243.4	2193.4	2167.2	2011.2	1352.0
75°	99.9	101.3	128.6	181.5	294.5	684.5	1467.5	1404.4	1185.7	1011.8	613.1
77.5°	80.2	82.1	106.6	128.8	132.2	238.7	686.7	558.8	336.4	270.0	170.3
80°	63.4	66.8	93.1	100.3	89.1	98.4	221.9	177.4	133.1	122.1	88.3
82.5°	50.1	52.6	79.9	75.9	62.3	66.3	106.3	103.6	86.6	78.8	51.0
85°	36.1	40.5	65.6	57.2	40.9	44.7	70.6	67.6	49.6	40.5	22.5
87.5°	14.8	19.2	46.4	38.0	22.8	20.8	35.2	33.1	23.5	17.2	11.2
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	517.4	521.5	526.9	530.1	531.8	533.0	534.9	534.8	535.3	535.4	536.1
5°	520.8	527.7	535.4	537.5	537.5	535.6	533.7	530.6	529.4	529.1	529.4
7.5°	529.8	537.3	544.0	541.6	536.5	528.9	519.1	510.5	505.9	504.3	504.0
10°	541.1	550.2	553.0	543.9	528.7	510.5	491.1	477.0	469.0	466.8	466.1
12.5°	554.8	563.4	559.7	540.4	512.4	483.1	456.2	433.8	416.9	411.6	411.3
15°	570.0	576.7	563.4	529.8	488.0	444.8	397.0	358.2	337.3	330.6	330.1
17.5°	584.1	587.5	561.2	511.2	452.1	382.1	318.7	288.8	281.7	283.4	283.7
20°	596.1	596.1	553.6	484.6	395.7	299.5	259.5	259.0	264.1	269.3	270.3
22.5°	609.3	601.4	540.4	447.0	315.6	245.0	239.2	244.0	249.8	255.5	256.4
25°	625.6	605.7	522.0	390.0	248.1	222.5	224.8	228.7	231.6	235.3	235.8
27.5°	643.8	611.1	497.8	311.5	215.4	208.5	210.2	211.6	211.2	212.6	212.9
30°	665.6	617.5	464.7	243.5	201.8	196.4	193.4	192.2	192.2	194.4	195.2
32.5°	694.8	626.9	417.1	208.7	195.2	187.9	177.9	173.5	175.2	182.7	184.4
35°	726.9	637.1	352.7	196.8	193.9	183.9	168.5	160.2	160.4	167.4	169.7
37.5°	761.9	650.0	282.1	194.6	197.0	184.1	163.5	152.1	147.5	147.5	148.4
40°	806.7	663.2	228.4	196.1	203.5	186.1	160.9	145.8	132.7	133.1	133.8
42.5°	865.1	674.5	199.6	199.3	211.4	188.9	160.7	137.4	126.0	133.8	140.8
45°	930.1	680.2	186.8	202.3	217.8	190.6	158.0	136.0	126.9	149.9	163.3
47.5°	1004.7	676.9	179.8	203.3	219.3	190.6	154.9	139.3	132.9	173.6	189.3
50°	1086.7	667.5	172.9	201.3	218.8	190.2	157.8	142.5	135.1	177.7	188.5
52.5°	1183.0	659.6	165.7	196.8	215.2	188.4	161.2	141.2	128.1	161.6	169.1
55°	1292.9	661.8	157.6	190.5	209.5	184.8	160.0	135.7	120.7	142.4	147.0
57.5°	1433.4	688.5	148.0	182.4	201.8	178.8	155.8	133.1	118.5	129.2	131.9
60°	1590.1	734.8	136.0	174.3	192.2	169.1	152.5	134.3	119.5	128.1	129.5
62.5°	1705.2	761.8	125.7	162.4	179.1	158.5	148.4	135.8	122.3	131.7	131.4
65°	1736.4	717.5	112.8	145.1	161.4	147.4	143.2	137.5	123.5	134.6	133.1
66°	1692.7	669.7	107.2	137.1	152.5	141.8	140.6	137.4	123.0	135.0	132.4
67.5°	1586.4	571.8	97.4	125.2	138.3	133.6	136.5	135.8	121.6	134.6	131.0
70°	1293.8	390.2	83.3	104.2	115.1	117.6	128.6	130.3	117.1	128.6	120.7
72.5°	904.0	237.7	73.7	80.9	93.1	100.3	117.8	122.8	111.1	112.3	104.8
75°	436.9	126.2	66.8	62.7	72.3	83.8	104.8	112.5	101.6	94.0	91.2
77.5°	136.2	77.1	56.7	50.5	56.7	67.6	87.6	98.6	90.5	78.7	77.6
80°	73.2	56.7	43.6	40.5	44.8	53.1	68.8	82.3	77.8	70.6	63.0
82.5°	48.3	36.8	32.3	31.4	34.2	40.5	51.2	68.2	68.2	60.5	44.0
85°	24.9	22.5	22.1	22.1	23.9	27.0	34.8	52.6	56.0	31.9	26.5
87.5°	12.4	12.9	12.0	12.5	13.4	13.2	16.6	26.5	31.6	19.4	16.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)