

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: P299215

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299215  
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-01-LED-E1-T3-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3555.6 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

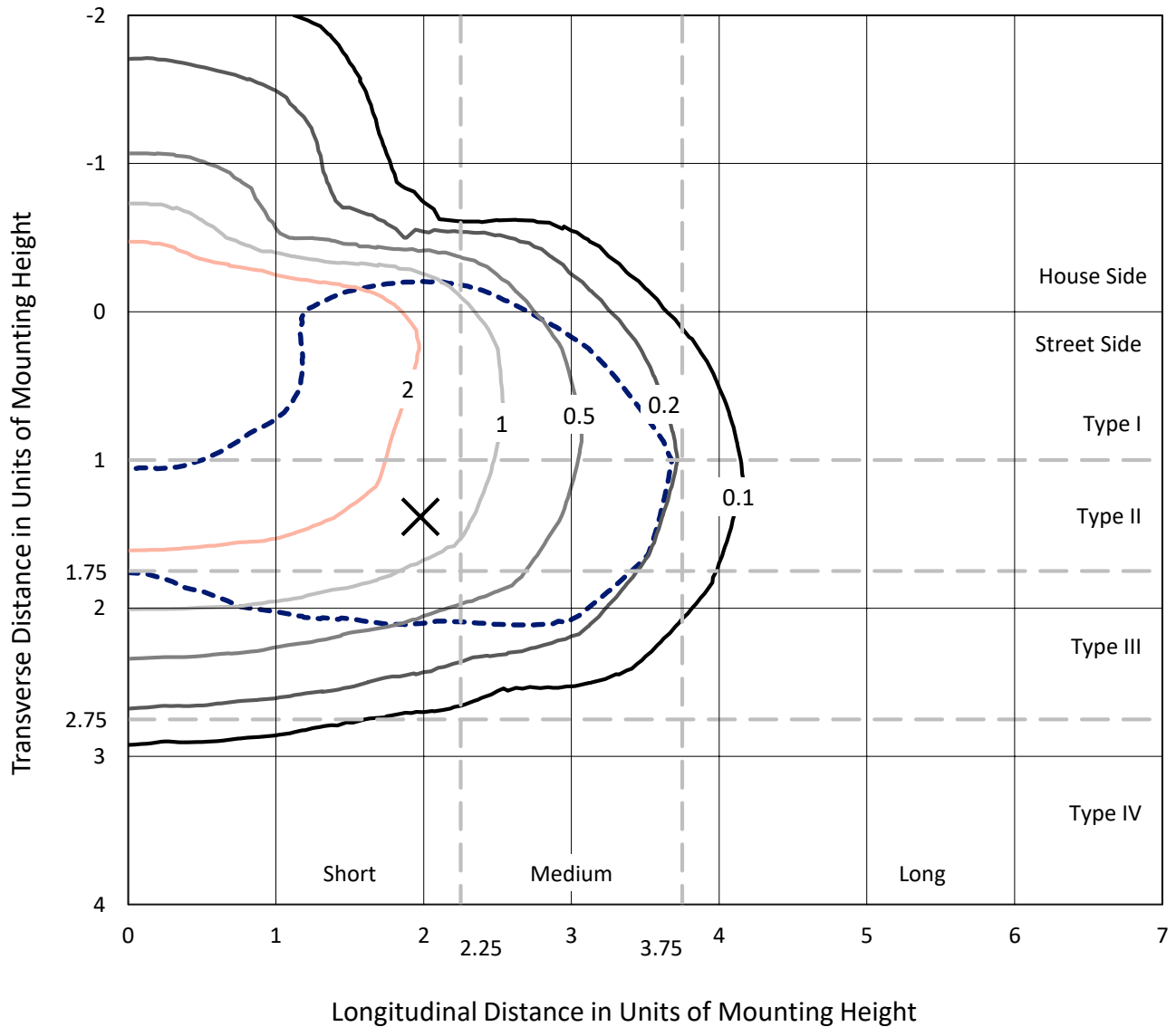


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### Iso-Footcandle Lines of Horizontal Illumination

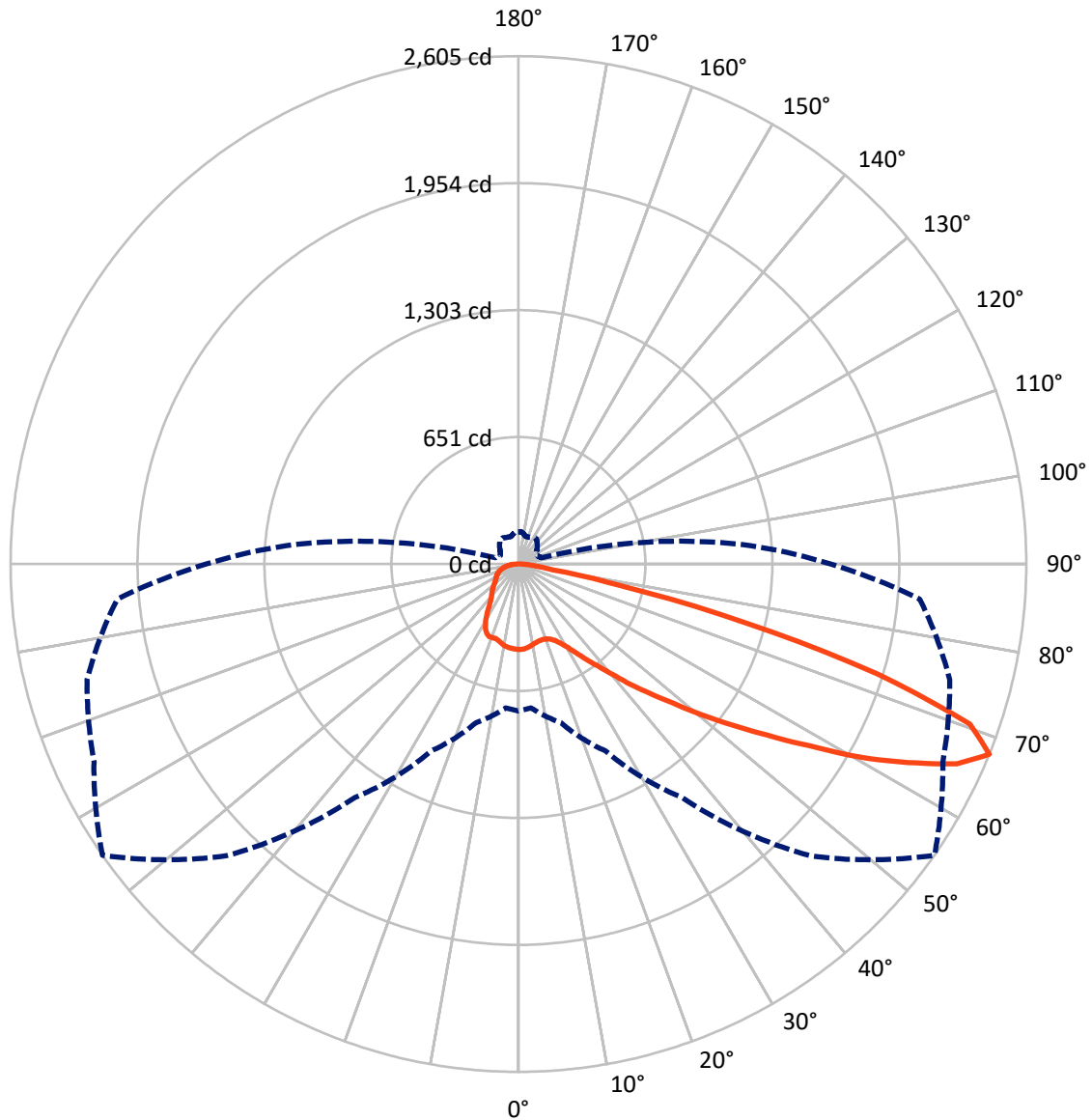
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 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
<b>House Side</b>	Lumens	768.1	0.0	768.1
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	2787.5	0.0	2787.5
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	3555.6	0.0	3555.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.9	1.2
10°-20°	115.9	3.3
20°-30°	194.2	5.5
30°-40°	319.3	9.0
40°-50°	537.4	15.1
50°-60°	845.9	23.8
60°-70°	1009.5	28.4
70°-80°	433.5	12.2
80°-90°	59.1	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°	3555.6	100.0
0°-180°	3555.6	100.0



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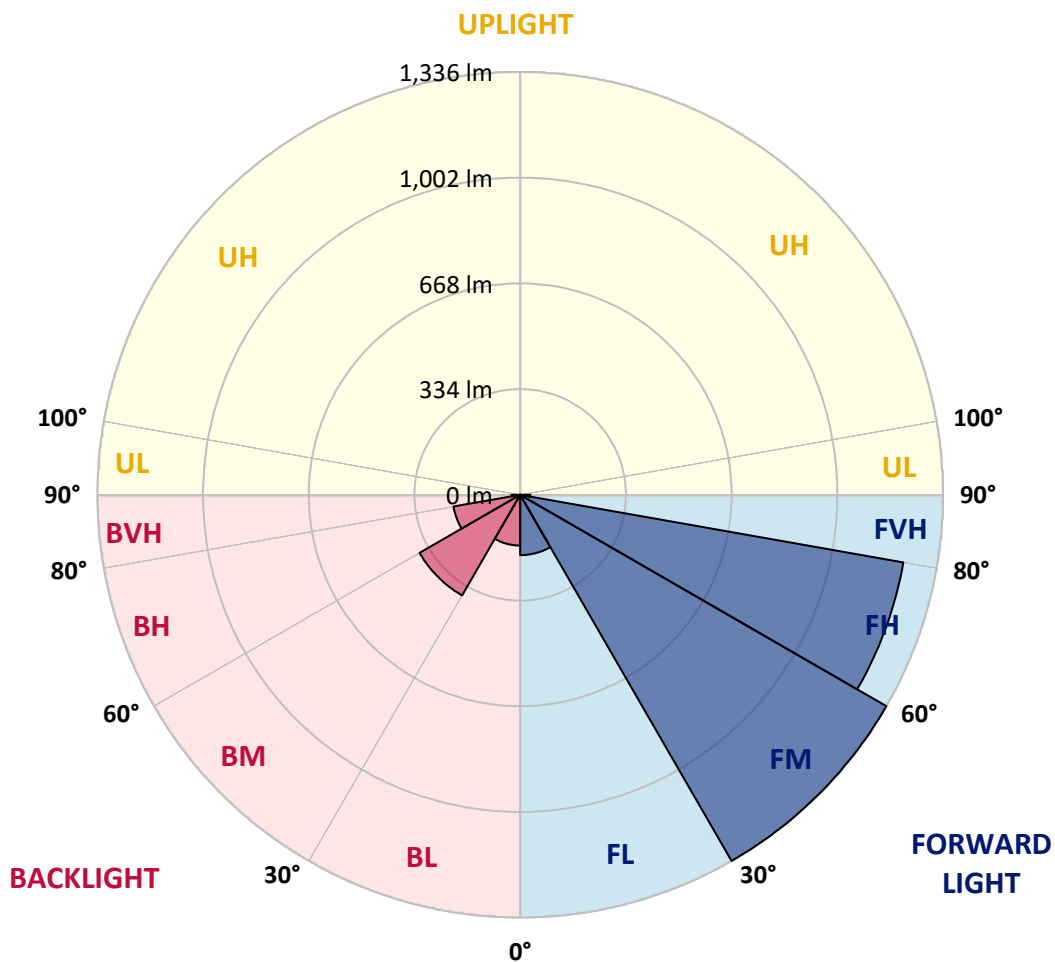
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	190.6	5.4			
FM	(30°-60°)	1335.8	37.6			
FH	(60°-80°)	1229.2	34.6			G1/1800
FVH	(80°-90°)	32.0	0.9			G1/100
BL	(0°-30°)	160.4	4.5	B1/500		
BM	(30°-60°)	366.8	10.3	B1/1000		
BH	(60°-80°)	213.8	6.0	B1/500		G1/500
BVH	(80°-90°)	27.1	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4
2.5°	434.7	434.8	435.2	436.6	437.8	437.4	437.6	436.9	436.7	435.7	436.7
5°	429.2	429.7	429.9	432.1	433.5	433.8	433.3	432.4	431.4	430.4	430.9
7.5°	416.6	418.0	418.2	421.3	423.5	426.4	426.6	426.8	426.3	425.6	426.6
10°	408.7	409.1	408.9	411.1	412.9	416.1	418.0	421.3	422.6	423.0	423.7
12.5°	408.2	407.9	407.4	407.4	406.8	408.2	411.7	416.3	419.6	420.6	421.4
15°	413.7	413.5	411.8	409.3	406.0	405.0	407.9	413.0	417.3	419.6	420.4
17.5°	426.1	425.1	422.3	416.5	409.4	406.7	407.0	411.3	416.3	419.2	420.1
20°	448.8	448.8	442.9	431.9	419.4	412.9	409.8	412.3	417.2	421.1	422.3
22.5°	487.9	488.2	478.5	460.4	439.3	425.4	417.7	417.2	422.8	427.3	428.7
25°	543.4	542.0	528.3	502.5	470.4	447.4	434.0	430.9	435.7	440.7	442.4
27.5°	608.0	603.0	586.7	555.6	514.0	480.3	459.7	454.8	459.4	465.1	466.8
30°	671.8	666.7	647.3	613.3	567.1	524.5	494.9	486.9	493.4	501.5	502.5
32.5°	735.7	735.7	714.1	674.4	624.1	577.2	541.8	532.2	543.0	552.8	555.1
35°	812.1	812.5	791.5	743.8	689.7	640.1	601.1	594.0	610.4	617.2	622.5
37.5°	906.1	908.0	881.0	823.3	764.1	711.9	665.5	655.9	672.2	690.9	708.1
40°	1007.6	1010.0	980.3	909.2	849.9	795.3	745.2	727.8	755.0	790.7	812.8
42.5°	1104.4	1116.8	1088.1	1015.0	951.3	894.8	843.9	818.7	852.7	906.6	925.8
45°	1244.4	1253.3	1203.4	1137.1	1077.1	1013.9	946.6	920.0	967.6	1035.6	1039.5
47.5°	1337.7	1331.0	1305.5	1264.3	1226.4	1167.3	1066.0	1036.8	1100.0	1180.0	1157.9
50°	1387.3	1389.4	1385.9	1388.3	1389.7	1352.6	1212.3	1172.3	1247.7	1344.4	1293.4
52.5°	1433.7	1419.9	1431.3	1487.6	1555.6	1541.9	1371.5	1329.8	1406.0	1526.7	1436.6
55°	1432.6	1411.7	1448.6	1548.0	1695.6	1711.4	1550.3	1502.2	1573.5	1722.4	1588.4
57.5°	1382.0	1383.0	1439.8	1570.0	1793.1	1870.7	1757.7	1685.6	1751.0	1920.5	1727.0
60°	1312.2	1321.7	1403.6	1566.4	1871.3	2001.4	2012.2	1883.3	1925.0	2100.7	1841.7
62.5°	1199.8	1209.7	1322.7	1529.0	1859.4	2127.3	2242.4	2107.6	2106.9	2209.9	1875.4
65°	1022.4	1019.4	1138.1	1389.0	1760.0	2220.4	2471.0	2301.5	2243.9	2211.6	1807.7
67.5°	753.9	740.9	842.7	1057.9	1462.9	2116.1	2605.4	2402.4	2290.6	2066.2	1600.9
70°	391.2	378.2	460.6	617.7	962.1	1651.6	2456.5	2350.2	2187.4	1732.0	1254.2
72.5°	167.3	165.0	198.5	271.0	465.4	952.6	1926.2	2034.2	1876.9	1290.4	862.3
75°	112.5	111.8	124.3	147.7	209.3	386.6	1205.4	1444.0	1373.2	800.1	485.0
77.5°	88.3	87.4	94.8	106.1	135.7	152.5	535.0	775.2	717.5	348.3	212.3
80°	69.0	68.4	73.0	79.2	97.5	96.2	176.0	308.4	238.7	133.4	103.2
82.5°	54.4	54.4	58.2	58.4	69.2	65.6	91.9	135.8	119.2	77.8	63.2
85°	49.8	49.8	53.8	43.6	45.2	41.4	57.0	80.5	75.6	31.9	27.5
87.5°	25.1	24.4	45.2	38.6	24.6	22.0	27.8	39.0	41.9	17.7	13.7
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°	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4	438.4
2.5°	436.4	436.2	436.6	436.7	438.1	440.0	440.9	442.1	442.7	442.4
5°	431.2	431.6	433.0	434.0	436.4	439.5	441.2	442.6	443.8	443.3
7.5°	426.9	427.8	429.9	430.7	432.1	433.0	432.8	433.3	434.3	433.1
10°	424.5	425.6	427.1	425.9	422.6	418.0	413.7	411.5	412.2	411.3
12.5°	422.1	423.5	422.3	416.6	407.5	401.5	398.3	398.6	400.1	400.5
15°	420.8	421.3	416.1	405.5	396.2	395.3	397.1	396.7	396.9	396.9
17.5°	420.8	419.4	409.8	399.1	395.2	393.6	388.3	381.6	378.7	377.7
20°	423.0	419.4	407.7	400.7	392.1	378.9	364.8	352.4	346.9	345.4
22.5°	429.7	423.5	413.5	401.4	377.0	354.8	332.5	317.7	307.8	306.0
25°	443.3	436.4	425.1	392.2	352.9	321.3	295.9	279.4	269.5	268.1
27.5°	467.0	462.5	431.2	372.2	321.0	287.1	263.6	250.9	243.5	243.0
30°	502.7	500.4	428.1	342.4	281.6	254.0	242.7	235.3	229.8	229.6
32.5°	559.7	541.7	418.0	306.2	245.8	230.5	225.8	221.4	217.1	217.1
35°	633.0	575.0	398.8	267.4	223.9	217.4	211.6	204.5	198.9	198.5
37.5°	719.2	595.6	364.3	236.1	213.6	208.7	200.1	189.6	179.6	177.9
40°	806.3	601.8	315.7	216.9	207.1	199.9	189.4	177.1	167.4	166.9
42.5°	886.2	589.9	264.1	203.7	200.6	191.0	180.0	169.0	161.4	161.3
45°	953.1	559.2	220.9	191.1	193.7	182.9	173.1	164.2	158.3	157.1
47.5°	1016.2	515.7	190.5	177.9	186.9	178.4	170.2	161.8	156.1	155.3
50°	1089.3	468.8	169.2	165.0	180.8	176.9	172.6	163.8	154.4	153.4
52.5°	1177.9	428.3	152.5	153.7	176.2	179.0	178.8	169.7	153.2	151.8
55°	1276.9	383.3	140.0	144.4	174.3	182.7	180.3	175.2	154.2	152.2
57.5°	1374.2	330.8	131.2	137.4	171.6	182.4	172.9	165.6	156.6	153.7
60°	1447.2	260.2	124.5	131.2	165.6	176.7	164.9	155.1	156.1	153.9
62.5°	1452.0	201.1	116.4	125.9	156.5	171.1	159.5	150.4	158.3	156.3
65°	1366.7	152.0	108.7	119.5	146.7	167.4	154.4	147.9	163.0	160.7
67.5°	1150.6	122.3	102.2	113.0	136.9	159.9	149.8	145.5	167.1	163.2
70°	830.7	104.2	95.8	105.1	128.1	151.3	145.6	141.2	155.9	149.8
72.5°	511.4	90.3	88.6	94.6	121.4	142.4	139.5	133.1	140.5	135.5
75°	255.4	78.3	80.5	84.3	112.0	132.2	129.1	122.8	123.8	122.8
77.5°	122.3	67.0	71.1	74.0	99.8	120.7	117.5	110.9	109.7	109.9
80°	77.5	56.0	59.9	62.0	89.1	107.3	104.1	97.5	111.3	103.2
82.5°	48.4	45.5	46.5	50.3	77.6	93.4	89.1	83.3	100.3	79.3
85°	26.8	31.8	33.1	36.4	59.8	78.1	73.8	66.5	59.6	58.6
87.5°	16.0	18.9	19.4	21.8	40.2	56.5	50.0	47.4	39.3	39.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)