

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: P299155

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299155
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-T3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4360.5 lumens
Efficiency: N/A
Efficacy: 99.1 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

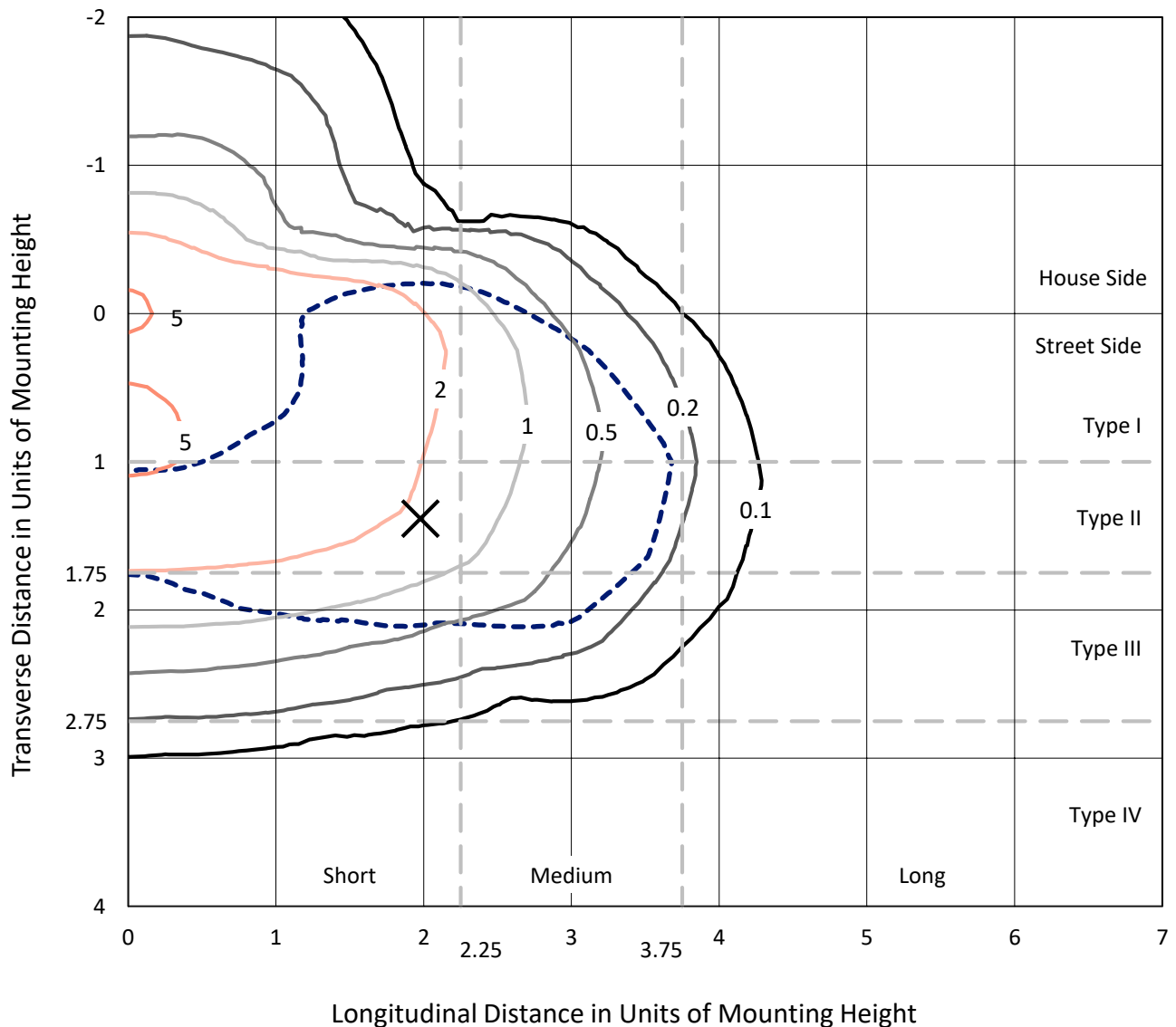
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299155
 CATALOG NUMBER: GLNA-AF-01-LED-E1-T3-7027-800

Iso-Footcandle Lines of Horizontal Illumination

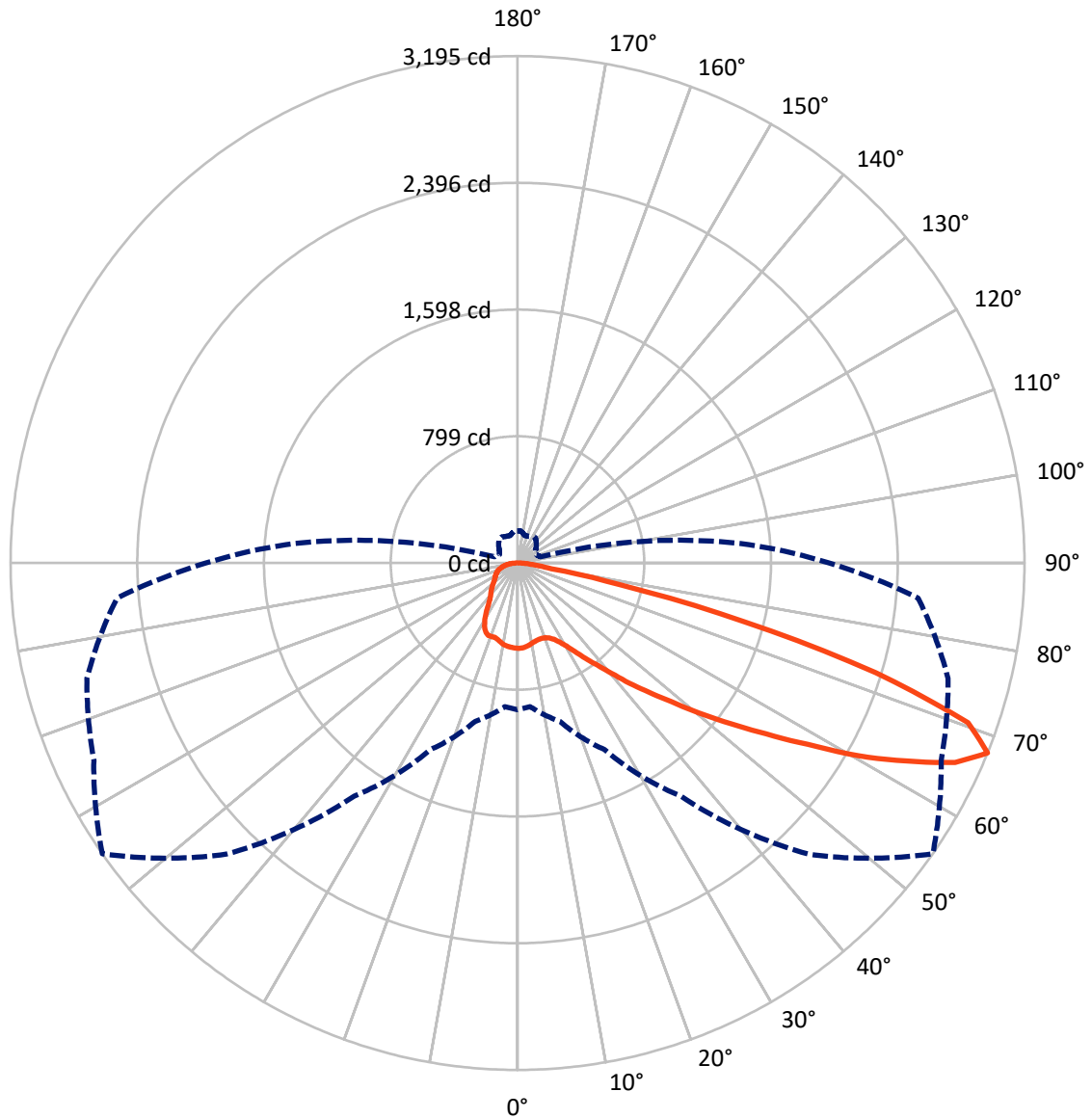
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P299155
CATALOG NUMBER: GLNA-AF-01-LED-E1-T3-7027-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299155

CATALOG NUMBER: GLNA-AF-01-LED-E1-T3-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	942.0	0.0	942.0
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	3418.5	0.0	3418.5
	% Fixture	78.4	0.0	78.4
Total	Lumens	4360.5	0.0	4360.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	1.2
10°-20°	142.1	3.3
20°-30°	238.1	5.5
30°-40°	391.5	9.0
40°-50°	659.1	15.1
50°-60°	1037.3	23.8
60°-70°	1238.0	28.4
70°-80°	531.6	12.2
80°-90°	72.5	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°	4360.5	100.0
0°-180°	4360.5	100.0



REPORT NUMBER: P299155

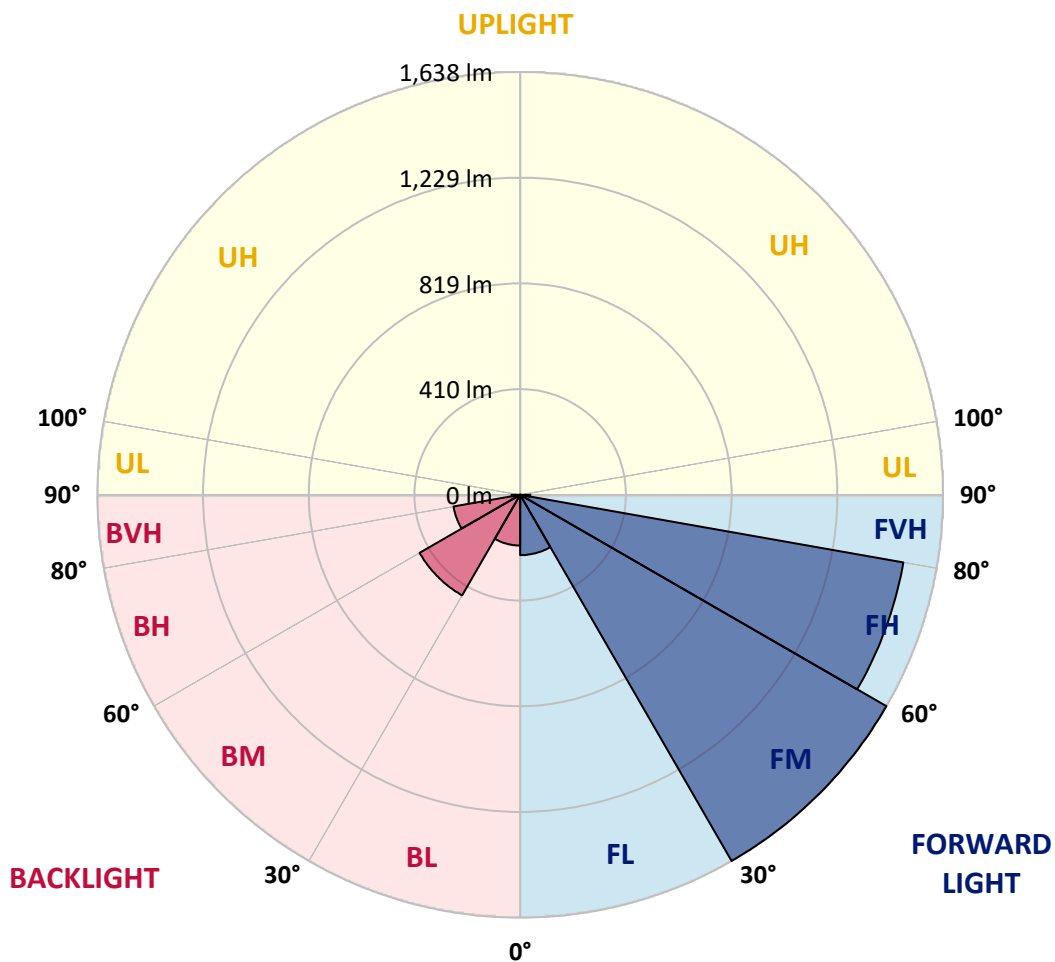
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	233.7	5.4			
FM	(30°-60°)	1638.1	37.6			
FH	(60°-80°)	1507.4	34.6			G1/1800
FVH	(80°-90°)	39.2	0.9			G1/100
BL	(0°-30°)	196.7	4.5	B1/500		
BM	(30°-60°)	449.9	10.3	B1/1000		
BH	(60°-80°)	262.1	6.0	B1/500		G1/500
BVH	(80°-90°)	33.2	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





REPORT NUMBER: P299155

CATALOG NUMBER: GLNA-AF-01-LED-E1-T3-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7
2.5°	533.1	533.3	533.7	535.4	536.8	536.4	536.6	535.8	535.6	534.3	535.6
5°	526.3	527.0	527.2	529.9	531.6	532.0	531.4	530.3	529.1	527.8	528.4
7.5°	510.9	512.6	512.8	516.6	519.4	522.9	523.2	523.4	522.7	521.9	523.2
10°	501.3	501.7	501.5	504.2	506.3	510.3	512.6	516.6	518.3	518.7	519.6
12.5°	500.6	500.2	499.6	499.6	498.9	500.6	504.8	510.5	514.5	515.8	516.8
15°	507.4	507.2	505.0	501.9	497.9	496.6	500.2	506.5	511.8	514.5	515.6
17.5°	522.5	521.3	517.9	510.7	502.1	498.7	499.2	504.4	510.5	514.1	515.2
20°	550.3	550.3	543.2	529.7	514.3	506.3	502.5	505.7	511.6	516.4	517.9
22.5°	598.3	598.8	586.8	564.7	538.7	521.7	512.2	511.6	518.5	524.0	525.7
25°	666.4	664.7	647.8	616.3	576.9	548.6	532.2	528.4	534.3	540.4	542.5
27.5°	745.6	739.5	719.5	681.3	630.4	589.1	563.8	557.7	563.4	570.3	572.4
30°	823.9	817.6	793.8	752.1	695.4	643.2	607.0	597.1	605.1	615.0	616.3
32.5°	902.3	902.3	875.7	827.1	765.4	707.9	664.5	652.7	666.0	678.0	680.7
35°	996.0	996.4	970.7	912.2	845.8	785.0	737.1	728.5	748.5	756.9	763.5
37.5°	1111.2	1113.5	1080.4	1009.7	937.0	873.0	816.1	804.3	824.3	847.3	868.4
40°	1235.7	1238.6	1202.2	1115.0	1042.3	975.3	913.8	892.6	925.8	969.7	996.8
42.5°	1354.4	1369.6	1334.4	1244.7	1166.6	1097.3	1034.9	1004.0	1045.7	1111.8	1135.4
45°	1526.1	1537.0	1475.8	1394.5	1321.0	1243.5	1160.9	1128.2	1186.6	1270.0	1274.8
47.5°	1640.5	1632.2	1601.1	1550.5	1504.0	1431.5	1307.3	1271.5	1349.0	1447.1	1419.9
50°	1701.3	1703.8	1699.6	1702.6	1704.3	1658.8	1486.7	1437.6	1530.1	1648.7	1586.1
52.5°	1758.2	1741.3	1755.2	1824.3	1907.7	1890.9	1681.9	1630.8	1724.3	1872.3	1761.8
55°	1756.9	1731.2	1776.5	1898.5	2079.4	2098.7	1901.2	1842.2	1929.6	2112.2	1947.9
57.5°	1694.8	1696.1	1765.8	1925.4	2199.0	2294.2	2155.6	2067.2	2147.4	2355.3	2117.9
60°	1609.3	1620.9	1721.3	1921.0	2294.8	2454.5	2467.7	2309.6	2360.7	2576.2	2258.6
62.5°	1471.3	1483.5	1622.1	1875.1	2280.3	2608.8	2750.0	2584.6	2583.8	2710.2	2299.9
65°	1253.8	1250.2	1395.7	1703.4	2158.4	2723.0	3030.3	2822.4	2751.9	2712.3	2216.9
67.5°	924.6	908.6	1033.5	1297.4	1794.0	2595.2	3195.2	2946.2	2809.1	2533.9	1963.3
70°	479.8	463.8	564.9	757.6	1179.8	2025.5	3012.6	2882.2	2682.6	2124.0	1538.1
72.5°	205.1	202.4	243.5	332.3	570.8	1168.3	2362.2	2494.7	2301.8	1582.5	1057.5
75°	138.0	137.1	152.5	181.1	256.7	474.1	1478.3	1770.8	1684.1	981.2	594.8
77.5°	108.3	107.2	116.3	130.2	166.4	187.0	656.1	950.7	879.9	427.1	260.3
80°	84.7	83.8	89.5	97.1	119.6	117.9	215.9	378.3	292.8	163.6	126.6
82.5°	66.8	66.8	71.4	71.6	84.9	80.5	112.7	166.6	146.2	95.4	77.5
85°	61.1	61.1	65.9	53.5	55.4	50.8	69.9	98.8	92.7	39.2	33.7
87.5°	30.7	29.9	55.4	47.4	30.1	27.0	34.1	47.8	51.4	21.7	16.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299155

CATALOG NUMBER: GLNA-AF-01-LED-E1-T3-7027-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7
2.5°	535.2	535.0	535.4	535.6	537.3	539.6	540.6	542.1	543.0	542.5
5°	528.8	529.3	531.0	532.2	535.2	539.0	541.1	542.7	544.2	543.6
7.5°	523.6	524.6	527.2	528.2	529.9	531.0	530.7	531.4	532.6	531.2
10°	520.6	521.9	523.8	522.3	518.3	512.6	507.4	504.6	505.5	504.4
12.5°	517.7	519.4	517.9	510.9	499.8	492.4	488.4	488.8	490.7	491.1
15°	516.0	516.6	510.3	497.3	485.9	484.8	486.9	486.5	486.7	486.7
17.5°	516.0	514.3	502.5	489.5	484.6	482.7	476.2	468.0	464.4	463.1
20°	518.7	514.3	500.0	491.4	480.8	464.6	447.3	432.2	425.4	423.5
22.5°	527.0	519.4	507.2	492.2	462.3	435.1	407.7	389.6	377.4	375.3
25°	543.6	535.2	521.3	481.0	432.8	394.1	362.9	342.7	330.5	328.8
27.5°	572.7	567.2	528.8	456.4	393.6	352.1	323.3	307.7	298.6	298.0
30°	616.5	613.7	525.1	420.0	345.4	311.5	297.6	288.5	281.8	281.6
32.5°	686.4	664.3	512.6	375.5	301.4	282.6	277.0	271.5	266.2	266.2
35°	776.3	705.1	489.0	327.9	274.6	266.6	259.5	250.8	243.9	243.5
37.5°	882.0	730.4	446.7	289.6	262.0	255.9	245.4	232.5	220.3	218.2
40°	988.8	738.0	387.1	266.0	254.0	245.2	232.3	217.1	205.3	204.7
42.5°	1086.8	723.5	323.9	249.8	246.0	234.2	220.7	207.2	198.0	197.8
45°	1168.9	685.8	270.8	234.4	237.6	224.3	212.3	201.3	194.2	192.7
47.5°	1246.2	632.5	233.6	218.2	229.1	218.8	208.7	198.4	191.4	190.4
50°	1335.9	575.0	207.5	202.4	221.8	216.9	211.7	200.9	189.3	188.1
52.5°	1444.6	525.3	187.0	188.5	216.1	219.5	219.2	208.1	187.9	186.2
55°	1565.9	470.1	171.6	177.1	213.8	224.1	221.1	214.8	189.1	186.6
57.5°	1685.3	405.6	160.9	168.5	210.4	223.7	212.1	203.0	192.1	188.5
60°	1774.8	319.1	152.7	160.9	203.0	216.7	202.2	190.2	191.4	188.7
62.5°	1780.7	246.6	142.8	154.4	191.9	209.8	195.7	184.5	194.2	191.7
65°	1676.0	186.4	133.3	146.6	179.9	205.3	189.3	181.3	199.9	197.1
67.5°	1411.1	150.0	125.3	138.6	167.9	196.1	183.7	178.4	204.9	200.1
70°	1018.7	127.8	117.5	128.9	157.1	185.5	178.6	173.1	191.2	183.7
72.5°	627.2	110.8	108.7	116.0	148.9	174.6	171.0	163.2	172.3	166.2
75°	313.2	96.0	98.8	103.4	137.3	162.2	158.4	150.6	151.9	150.6
77.5°	150.0	82.1	87.2	90.8	122.4	148.1	144.1	136.1	134.6	134.8
80°	95.0	68.7	73.5	76.0	109.3	131.6	127.6	119.6	136.5	126.6
82.5°	59.4	55.8	57.1	61.7	95.2	114.6	109.3	102.1	123.0	97.3
85°	32.9	39.0	40.6	44.6	73.3	95.8	90.6	81.5	73.1	71.8
87.5°	19.6	23.2	23.8	26.7	49.3	69.3	61.3	58.1	48.2	48.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)