

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: P300356

Luminaire Tested: **GLNA-AF-01-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300356
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4386 lumens
Efficiency: N/A
Efficacy: 99.7 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): 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

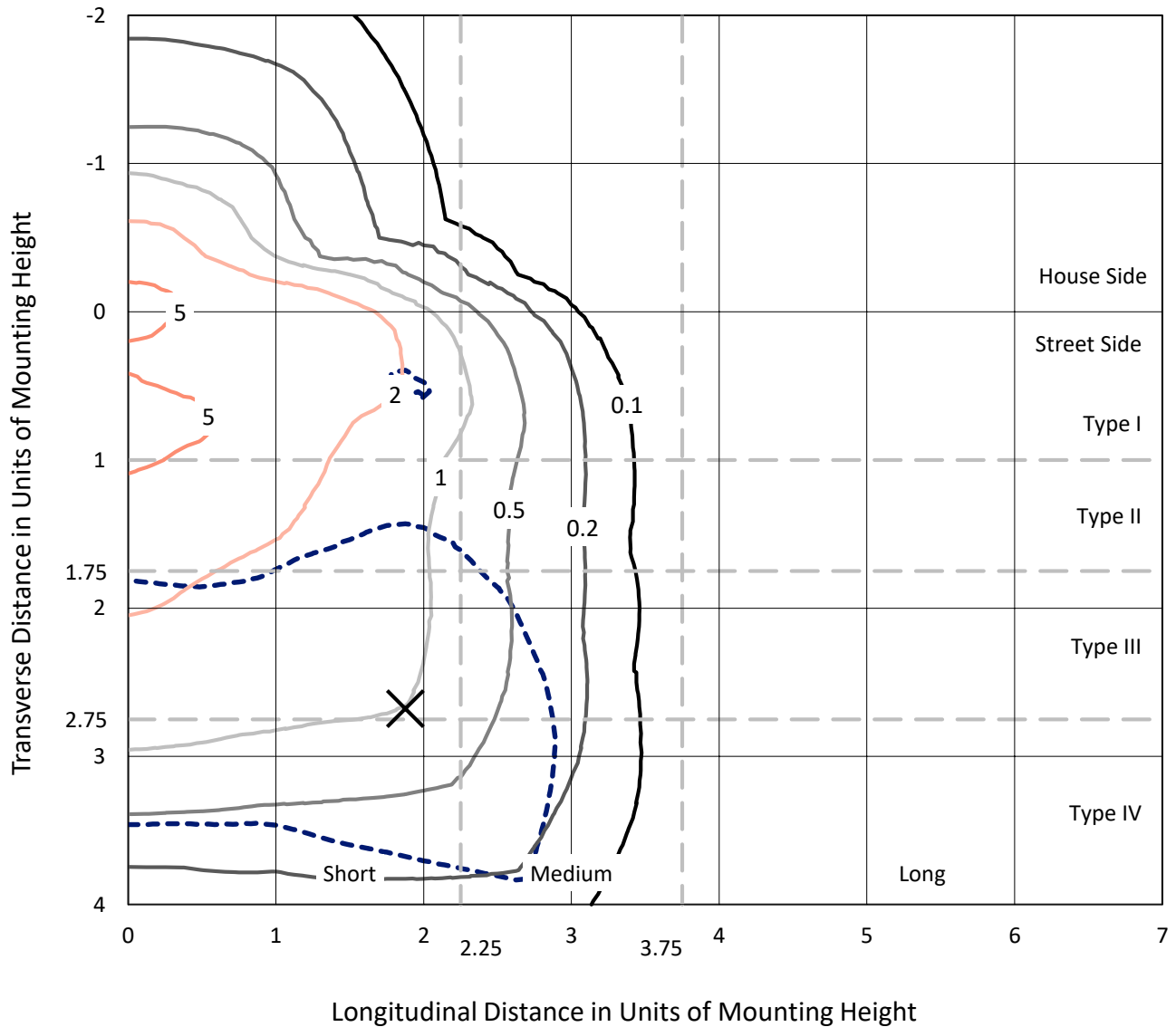


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Iso-Footcandle Lines of Horizontal Illumination

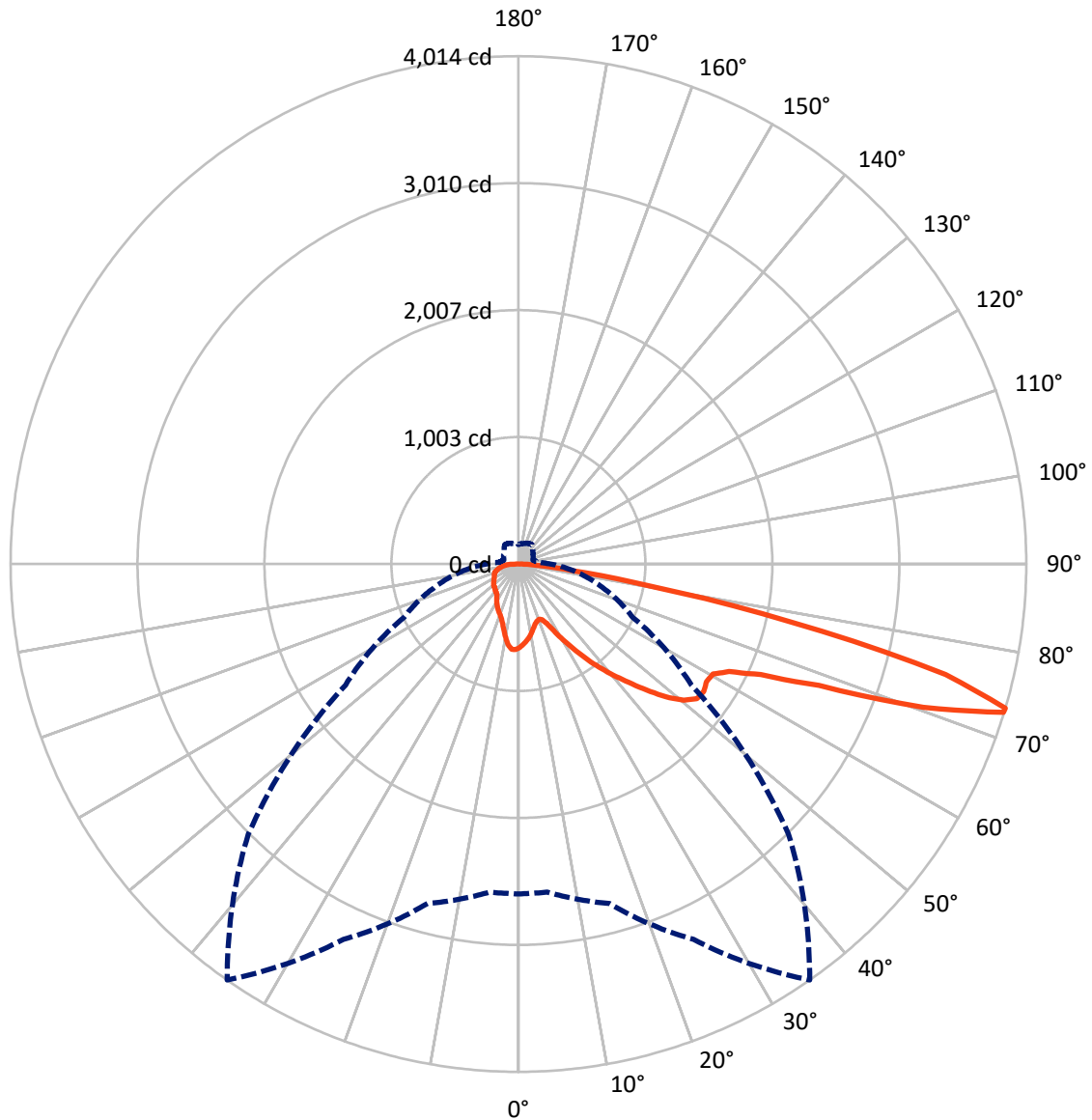
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.6 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
House Side	Lumens	836.5	0.0	836.5
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	3549.5	0.0	3549.5
	% Fixture	80.9	0.0	80.9
Total	Lumens	4386.0	0.0	4386.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	1.4
10°-20°	149.6	3.4
20°-30°	241.8	5.5
30°-40°	405.5	9.2
40°-50°	625.0	14.3
50°-60°	838.5	19.1
60°-70°	1117.1	25.5
70°-80°	852.0	19.4
80°-90°	96.6	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°	4386.0	100.0
0°-180°	4386.0	100.0



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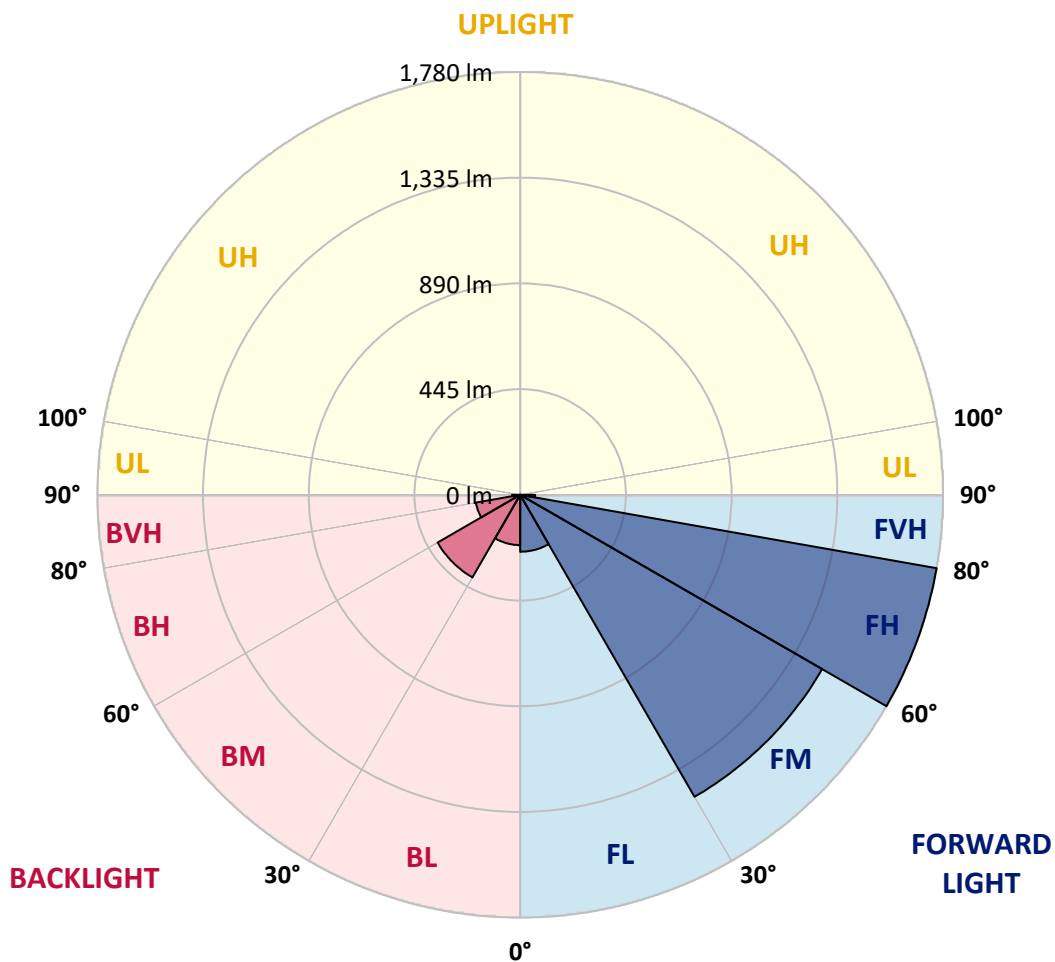
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	239.6	5.5			
FM	(30°-60°)	1467.6	33.5			
FH	(60°-80°)	1779.8	40.6			G1/1800
FVH	(80°-90°)	62.4	1.4			G1/100
BL	(0°-30°)	211.7	4.8	B1/500		
BM	(30°-60°)	401.4	9.2	B1/1000		
BH	(60°-80°)	189.3	4.3	B1/500		G1/500
BVH	(80°-90°)	34.2	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0
2.5°	635.9	637.1	635.7	637.6	640.7	644.1	646.4	649.8	653.6	658.8	660.1
5°	606.0	607.9	607.9	611.2	617.3	622.8	627.9	633.3	641.3	650.4	654.0
7.5°	573.1	574.2	576.1	581.1	590.0	597.7	604.9	613.8	624.7	636.7	643.0
10°	533.5	535.0	537.9	545.1	557.1	567.8	578.2	590.4	604.3	619.2	627.2
12.5°	505.5	505.1	506.3	511.6	522.1	535.2	550.1	565.7	582.8	600.3	610.0
15°	496.0	493.7	488.9	487.6	493.3	506.3	523.6	542.8	563.2	584.3	596.3
17.5°	501.9	497.9	484.6	475.0	474.1	484.0	502.3	523.8	547.4	573.1	588.1
20°	539.0	529.5	496.9	474.3	466.5	471.4	487.4	510.1	537.9	572.1	591.2
22.5°	627.7	613.8	544.5	502.5	476.2	470.3	482.3	506.5	539.0	585.1	609.5
25°	756.8	737.0	626.2	572.9	518.6	487.2	489.9	514.8	553.9	615.4	644.9
27.5°	858.7	845.9	733.0	672.1	595.6	532.7	514.6	535.4	584.5	665.1	695.3
30°	919.4	911.6	847.1	784.6	694.0	605.1	561.7	574.2	632.3	734.0	758.9
32.5°	989.7	985.1	953.5	896.0	800.2	700.3	636.5	632.1	696.3	816.8	828.2
35°	1062.6	1061.1	1042.6	1001.3	914.1	825.9	735.7	705.8	766.0	902.7	895.6
37.5°	1130.4	1127.9	1117.1	1093.1	1033.3	960.6	836.8	781.4	841.2	984.9	953.1
40°	1255.3	1235.5	1198.7	1180.5	1153.8	1074.2	917.0	852.0	919.2	1063.2	1002.8
42.5°	1407.6	1375.4	1306.7	1281.8	1278.1	1163.7	971.8	920.4	997.7	1140.9	1051.6
45°	1527.4	1497.1	1437.9	1406.5	1420.4	1244.8	1026.8	993.5	1078.6	1222.5	1102.0
47.5°	1655.3	1607.7	1529.3	1538.8	1569.1	1321.4	1082.8	1072.1	1167.3	1313.7	1164.5
50°	1659.9	1623.5	1589.1	1645.8	1693.0	1392.0	1152.9	1154.4	1275.7	1428.4	1247.7
52.5°	1563.7	1555.9	1610.4	1699.5	1767.5	1447.8	1232.8	1239.5	1414.5	1560.3	1339.1
55°	1530.0	1521.1	1584.1	1680.8	1777.7	1493.9	1319.3	1331.6	1582.4	1699.3	1428.2
57.5°	1612.1	1592.5	1596.7	1671.9	1753.0	1544.5	1413.7	1438.3	1764.8	1820.8	1485.5
60°	1841.7	1799.8	1720.2	1718.3	1766.3	1620.3	1522.8	1552.9	1954.4	1879.0	1463.2
62.5°	2163.7	2121.8	1972.7	1875.6	1868.4	1745.4	1656.8	1664.8	2063.9	1800.2	1326.9
65°	2512.3	2474.8	2308.2	2171.1	2105.0	1952.7	1812.4	1714.7	2028.1	1583.5	1088.5
67.5°	2935.4	2895.2	2752.0	2625.4	2561.8	2287.1	1921.7	1666.9	1800.8	1226.7	782.5
70°	3231.4	3190.3	3133.9	3236.4	3392.1	2769.7	1935.8	1472.5	1345.0	815.3	471.0
72.5°	2845.3	2826.1	2929.1	3361.1	4009.4	3062.4	1749.9	1072.1	781.2	432.8	272.5
73°	2606.9	2602.7	2778.3	3273.7	4013.8	3017.4	1668.3	996.5	670.0	382.9	249.2
75°	1177.2	1211.1	1596.1	2500.5	3487.3	2486.4	1174.2	571.6	378.5	264.5	188.1
77.5°	282.9	294.7	499.4	1187.5	2202.3	1481.7	532.0	282.7	242.0	186.8	137.3
80°	120.5	124.5	192.3	438.7	1036.9	596.7	245.2	189.3	167.4	130.4	96.3
82.5°	67.0	71.2	109.1	199.0	418.5	203.5	149.5	131.8	110.2	78.6	62.6
85°	37.9	40.2	63.8	111.2	177.3	81.7	89.5	87.6	62.1	40.4	30.8
87.5°	17.9	19.4	30.8	51.6	69.5	32.0	45.5	50.1	39.0	24.6	16.0
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°	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0
2.5°	661.6	665.4	669.8	672.1	674.2	676.7	679.3	679.3	679.7	679.9
5°	656.9	664.7	671.7	674.6	675.3	675.3	674.6	671.3	668.3	669.6
7.5°	647.2	658.6	664.5	663.5	655.5	646.2	638.4	628.9	624.1	623.2
10°	633.3	646.4	647.5	636.9	617.1	597.3	580.9	564.9	557.3	555.4
12.5°	618.0	630.0	623.2	601.5	569.7	540.9	520.0	503.8	496.6	494.8
15°	605.5	613.8	596.7	562.6	522.6	492.0	474.7	462.7	457.7	456.2
17.5°	599.0	600.7	569.5	523.4	480.9	455.4	444.6	438.9	437.0	436.0
20°	602.2	590.4	543.6	487.0	446.7	428.8	426.3	424.8	424.4	423.8
22.5°	618.0	587.2	519.8	452.4	416.8	409.0	411.1	410.9	410.5	410.1
25°	646.2	590.0	496.6	419.6	391.8	390.1	393.9	393.9	392.2	392.2
27.5°	683.5	595.6	470.7	388.4	369.0	369.2	372.2	371.3	369.4	368.2
30°	729.0	599.2	440.4	360.4	347.7	346.9	347.7	344.2	338.5	338.0
32.5°	775.5	594.8	405.2	335.5	325.2	323.3	322.7	317.6	311.1	309.2
35°	817.6	578.6	369.4	315.7	303.7	299.5	302.5	300.8	294.9	293.4
37.5°	848.4	548.5	337.2	298.2	288.3	287.3	289.2	289.8	282.9	281.4
40°	869.0	507.6	309.6	283.5	285.4	281.4	275.1	270.6	268.5	267.9
42.5°	885.7	465.1	286.4	276.5	286.0	274.4	260.8	253.6	257.4	259.1
45°	904.8	423.6	267.1	267.9	282.9	266.4	250.9	243.9	245.4	245.8
47.5°	931.2	373.0	246.2	254.0	272.3	261.0	244.7	234.8	227.9	224.7
50°	967.6	313.2	224.5	238.4	262.0	257.0	235.3	224.7	211.9	208.9
52.5°	992.9	257.4	206.6	225.4	252.7	249.0	227.7	214.0	200.5	198.0
55°	979.2	213.8	191.0	210.8	240.5	239.1	221.4	203.0	192.5	190.4
57.5°	910.7	186.2	179.0	197.1	225.6	230.6	212.9	193.8	186.2	184.7
60°	780.1	168.9	171.4	187.9	213.4	222.2	204.5	188.7	183.7	182.6
62.5°	605.3	157.3	165.8	181.1	203.9	216.3	199.9	188.1	186.2	184.9
65°	433.7	148.1	159.7	174.4	195.2	210.8	198.2	187.2	187.7	186.6
67.5°	294.7	139.9	152.3	166.8	186.8	206.0	195.9	184.3	189.6	188.3
70°	206.2	131.8	143.6	157.1	176.3	199.2	191.7	179.9	179.5	174.4
72.5°	160.9	121.3	131.8	143.6	162.8	189.8	183.2	170.0	163.0	157.8
73°	153.5	118.8	128.9	140.7	159.9	187.5	180.9	167.2	159.4	154.6
75°	127.0	107.8	117.1	127.6	147.2	176.5	169.6	154.8	144.9	142.0
77.5°	99.8	92.3	101.1	110.6	129.7	160.5	152.7	138.6	133.1	130.6
80°	73.9	76.5	84.2	92.7	112.5	143.4	136.5	122.4	146.8	140.7
82.5°	52.0	57.9	65.1	72.7	94.4	126.8	118.4	103.8	107.4	89.3
85°	30.8	37.9	44.7	51.2	68.0	105.1	97.7	82.8	67.8	64.7
87.5°	17.9	21.1	23.0	29.7	46.8	79.2	68.9	61.3	35.2	23.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)