

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: P301140

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301140
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4457.1 lumens
Efficiency: N/A
Efficacy: 101.3 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

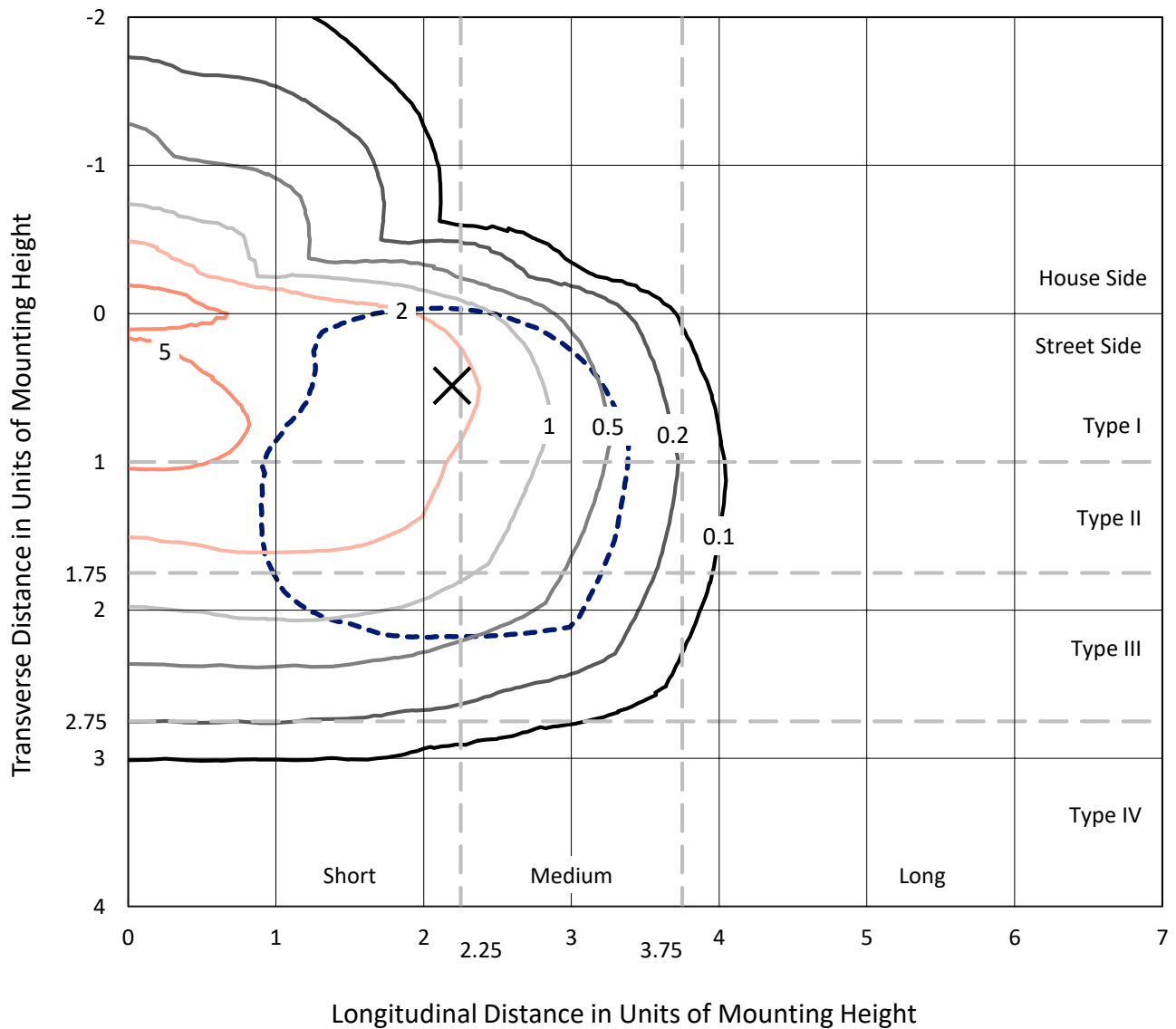
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

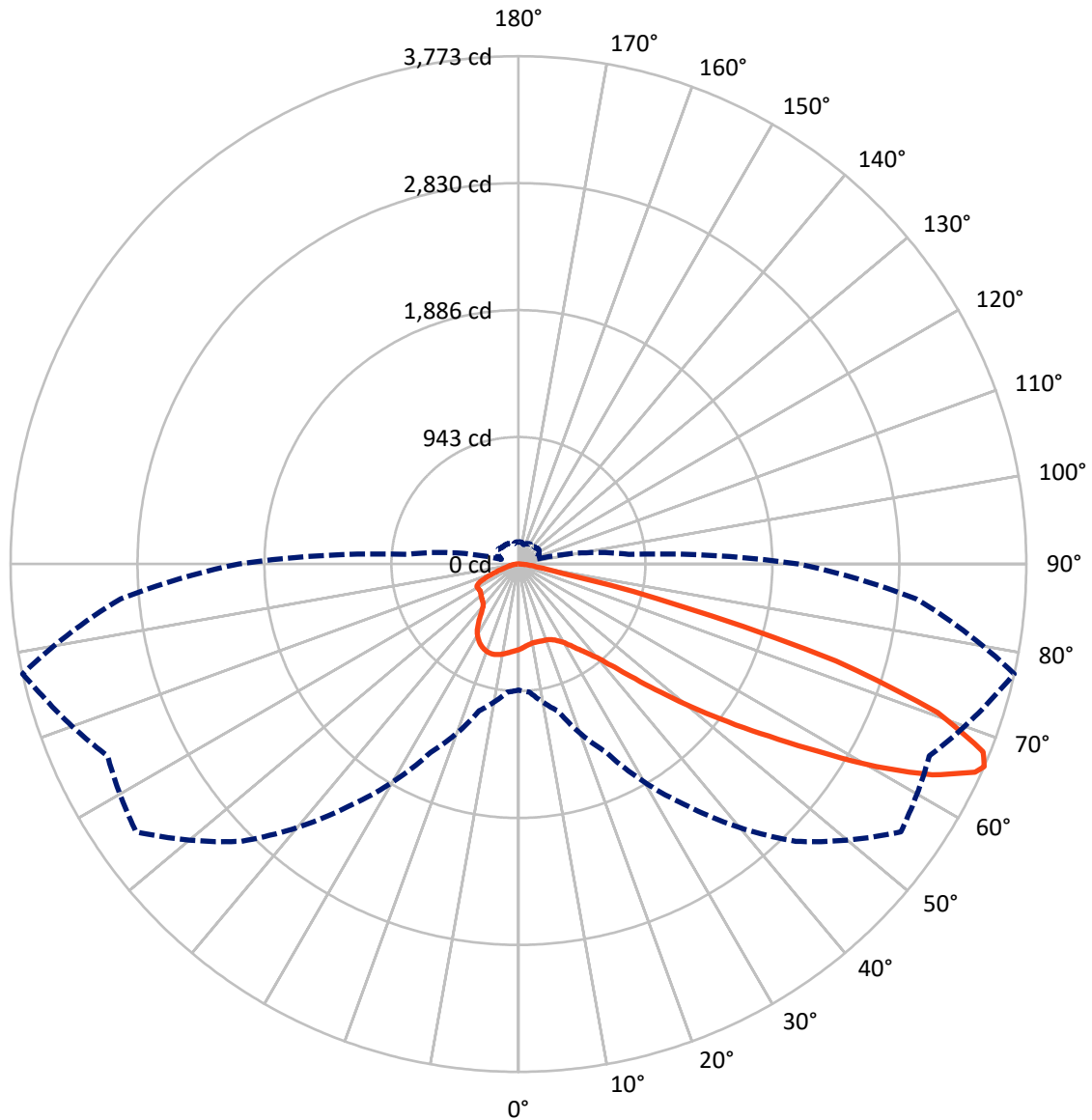
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.8 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
House Side	Lumens	761.5	0.0	761.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3695.6	0.0	3695.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	4457.1	0.0	4457.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.7	1.3
10°-20°	160.1	3.6
20°-30°	273.2	6.1
30°-40°	437.4	9.8
40°-50°	675.7	15.2
50°-60°	958.4	21.5
60°-70°	1282.0	28.8
70°-80°	556.8	12.5
80°-90°	56.8	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°	4457.1	100.0
0°-180°	4457.1	100.0



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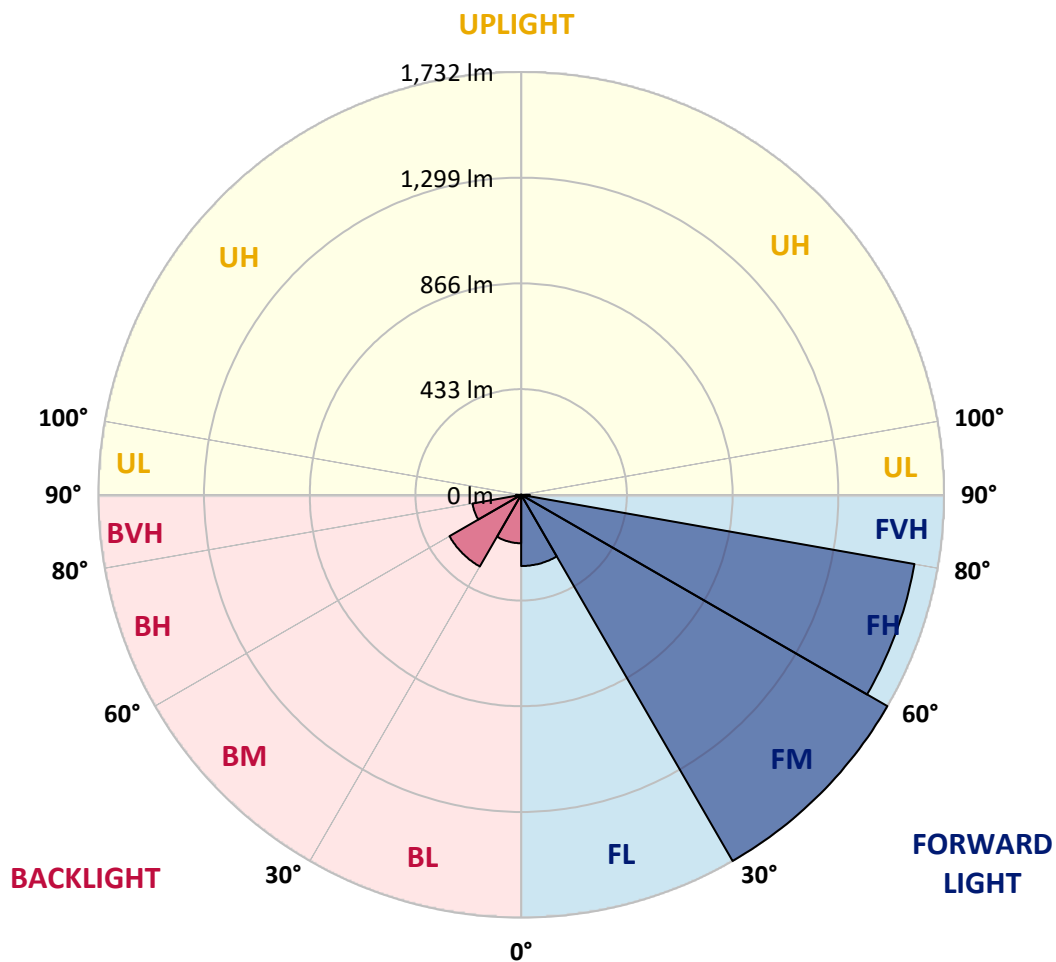
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	291.7	6.5			
FM	(30°-60°)	1732.2	38.9			
FH	(60°-80°)	1636.0	36.7			G1/1800
FVH	(80°-90°)	35.6	0.8			G1/100
BL	(0°-30°)	198.3	4.4	B1/500		
BM	(30°-60°)	339.2	7.6	B1/1000		
BH	(60°-80°)	202.8	4.6	B1/500		G1/500
BVH	(80°-90°)	21.2	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°	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1
2.5°	561.9	565.6	568.8	571.8	577.6	587.3	598.5	607.5	620.6	623.2	630.1
5°	510.3	510.3	512.8	517.2	525.2	539.8	554.9	575.1	603.6	610.3	628.8
7.5°	485.2	485.4	486.9	490.7	497.6	510.9	527.5	551.4	589.9	601.0	632.6
10°	494.5	492.4	489.2	487.3	488.4	496.1	512.0	538.5	581.5	595.7	641.1
12.5°	546.3	542.3	531.3	516.8	502.9	497.2	506.5	532.4	577.9	594.5	652.2
15°	630.9	629.3	608.8	578.7	545.1	516.8	510.5	530.1	578.3	596.0	665.5
17.5°	737.1	734.7	707.8	664.0	609.1	554.1	524.6	532.0	579.7	598.5	678.3
20°	844.3	837.1	808.1	755.9	685.3	604.8	548.0	536.8	581.7	601.2	691.8
22.5°	924.3	918.4	892.3	841.6	760.3	663.6	579.4	545.2	587.8	609.3	708.4
25°	994.6	995.0	969.1	920.1	836.1	725.9	619.8	567.8	603.3	625.6	731.2
27.5°	1081.6	1076.6	1052.4	1003.7	911.1	788.9	668.6	598.7	626.5	649.0	761.1
30°	1185.6	1182.0	1154.1	1098.9	994.2	856.5	724.4	634.7	656.4	679.8	800.2
32.5°	1308.0	1306.3	1277.2	1206.3	1090.2	936.1	790.0	682.3	701.1	725.3	856.5
35°	1451.6	1451.8	1417.5	1332.2	1195.3	1028.8	864.3	743.6	755.4	780.7	923.5
37.5°	1540.1	1550.8	1538.0	1451.0	1314.3	1132.4	960.7	824.9	817.3	842.8	995.3
40°	1559.0	1572.1	1612.7	1568.5	1447.4	1246.5	1046.2	903.0	893.6	924.7	1087.7
42.5°	1532.5	1550.6	1636.6	1667.7	1588.7	1387.2	1161.2	1019.1	1007.1	1049.0	1202.7
45°	1516.7	1530.2	1629.6	1719.3	1711.3	1546.2	1307.6	1164.8	1160.4	1215.3	1335.4
47.5°	1489.3	1501.6	1597.1	1731.3	1783.3	1691.9	1483.5	1343.0	1351.6	1423.6	1485.1
50°	1504.1	1509.1	1560.9	1700.8	1804.2	1798.7	1679.9	1549.3	1578.8	1668.8	1654.7
52.5°	1502.0	1515.0	1556.7	1650.6	1806.9	1864.6	1873.4	1779.5	1841.7	1944.9	1842.7
55°	1214.3	1238.3	1507.2	1638.0	1816.6	1929.2	2045.7	2022.1	2137.9	2258.2	2055.0
57.5°	1159.5	1174.7	1323.8	1664.5	1868.0	2052.7	2237.3	2289.2	2482.9	2622.5	2313.6
60°	1148.8	1167.5	1321.9	1697.0	1972.2	2253.8	2521.5	2612.5	2902.6	3055.5	2613.5
62.5°	1115.3	1135.5	1309.4	1692.7	2120.3	2532.0	2885.2	2956.1	3300.7	3449.4	2864.3
65°	1009.2	1028.1	1208.2	1624.8	2220.1	2828.9	3315.6	3271.2	3614.9	3726.7	2989.4
66°	936.5	955.1	1128.4	1544.7	2196.9	2913.2	3468.1	3368.7	3685.2	3772.8	2964.9
67.5°	803.6	818.1	973.4	1365.5	2073.7	2936.8	3596.3	3442.0	3692.5	3723.5	2825.4
70°	507.7	512.0	632.6	942.6	1569.8	2546.9	3401.1	3260.0	3388.1	3304.2	2368.6
72.5°	220.3	218.8	303.7	479.5	888.7	1709.0	2751.2	2689.9	2657.7	2466.5	1658.0
75°	122.6	124.3	157.8	222.6	361.2	839.4	1799.7	1722.3	1454.1	1240.8	751.8
77.5°	98.3	100.7	130.8	157.9	162.2	292.7	842.2	685.3	412.6	331.1	208.9
80°	77.7	81.9	114.1	123.0	109.3	120.6	272.1	217.6	163.2	149.7	108.3
82.5°	61.5	64.5	97.9	93.1	76.5	81.3	130.3	127.0	106.2	96.7	62.6
85°	44.3	49.7	80.5	70.1	50.1	54.8	86.5	83.0	60.8	49.7	27.6
87.5°	18.1	23.6	56.9	46.5	28.0	25.5	43.2	40.6	28.8	21.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1	635.1
2.5°	634.5	639.5	646.1	650.1	652.2	653.7	656.0	655.8	656.4	656.6	657.5
5°	638.7	647.1	656.6	659.2	659.2	656.8	654.5	650.7	649.2	648.9	649.2
7.5°	649.7	658.9	667.2	664.2	657.9	648.6	636.6	626.1	620.4	618.5	618.1
10°	663.6	674.7	678.1	667.0	648.4	626.1	602.3	585.0	575.1	572.4	571.6
12.5°	680.4	690.9	686.4	662.8	628.4	592.4	559.5	532.0	511.3	504.8	504.4
15°	699.0	707.2	690.9	649.7	598.5	545.4	486.9	439.3	413.6	405.4	404.8
17.5°	716.3	720.5	688.2	626.9	554.5	468.6	390.9	354.2	345.4	347.5	347.9
20°	731.0	731.0	679.0	594.3	485.2	367.3	318.2	317.6	323.9	330.2	331.5
22.5°	747.2	737.5	662.8	548.2	387.0	300.5	293.4	299.2	306.4	313.3	314.4
25°	767.2	742.8	640.2	478.3	304.3	272.9	275.6	280.5	284.1	288.5	289.2
27.5°	789.5	749.5	610.5	382.0	264.1	255.7	257.8	259.5	259.0	260.7	261.1
30°	816.2	757.3	569.9	298.6	247.5	240.9	237.1	235.7	235.7	238.4	239.4
32.5°	852.1	768.9	511.5	255.9	239.4	230.4	218.2	212.7	214.8	224.1	226.2
35°	891.5	781.3	432.6	241.3	237.8	225.5	206.6	196.5	196.7	205.3	208.1
37.5°	934.4	797.1	346.0	238.6	241.5	225.8	200.5	186.6	180.9	180.9	182.0
40°	989.4	813.3	280.1	240.5	249.6	228.3	197.3	178.8	162.8	163.2	164.1
42.5°	1061.0	827.2	244.7	244.5	259.3	231.7	197.1	168.5	154.6	164.1	172.7
45°	1140.6	834.2	229.1	248.1	267.0	233.8	193.8	166.8	155.6	183.8	200.3
47.5°	1232.2	830.1	220.5	249.3	269.0	233.8	190.0	170.8	163.0	212.9	232.1
50°	1332.7	818.6	212.1	246.8	268.3	233.3	193.5	174.8	165.7	217.9	231.2
52.5°	1450.8	808.9	203.2	241.3	263.9	231.0	197.7	173.1	157.1	198.2	207.4
55°	1585.5	811.6	193.3	233.6	256.9	226.6	196.3	166.4	148.1	174.6	180.3
57.5°	1757.8	844.3	181.5	223.7	247.5	219.2	191.0	163.2	145.3	158.4	161.8
60°	1950.1	901.1	166.8	213.7	235.7	207.4	187.0	164.7	146.6	157.1	158.8
62.5°	2091.2	934.2	154.2	199.2	219.7	194.4	182.0	166.6	150.0	161.5	161.1
65°	2129.5	879.9	138.4	178.0	198.0	180.7	175.6	168.7	151.4	165.1	163.2
66°	2075.8	821.3	131.4	168.1	187.0	173.9	172.5	168.5	150.8	165.5	162.3
67.5°	1945.5	701.3	119.4	153.5	169.5	163.9	167.4	166.6	149.1	165.1	160.7
70°	1586.6	478.5	102.1	127.8	141.1	144.2	157.8	159.9	143.6	157.8	148.1
72.5°	1108.6	291.5	90.4	99.2	114.1	123.0	144.5	150.5	136.3	137.7	128.5
75°	535.7	154.8	81.9	76.9	88.6	102.8	128.5	137.9	124.7	115.2	111.8
77.5°	167.0	94.6	69.5	61.9	69.5	83.0	107.4	120.9	111.0	96.5	95.2
80°	89.7	69.5	53.5	49.7	55.0	65.1	84.4	100.9	95.4	86.5	77.3
82.5°	59.2	45.1	39.6	38.5	41.9	49.7	62.7	83.6	83.6	74.2	53.9
85°	30.5	27.6	27.2	27.2	29.3	33.1	42.7	64.5	68.7	39.2	32.5
87.5°	15.2	15.8	14.7	15.4	16.5	16.2	20.4	32.5	38.8	23.8	19.8
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)