

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: P299648

Luminaire Tested: **GLNA-AF-03-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-5MQ-7030-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14867 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 124
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

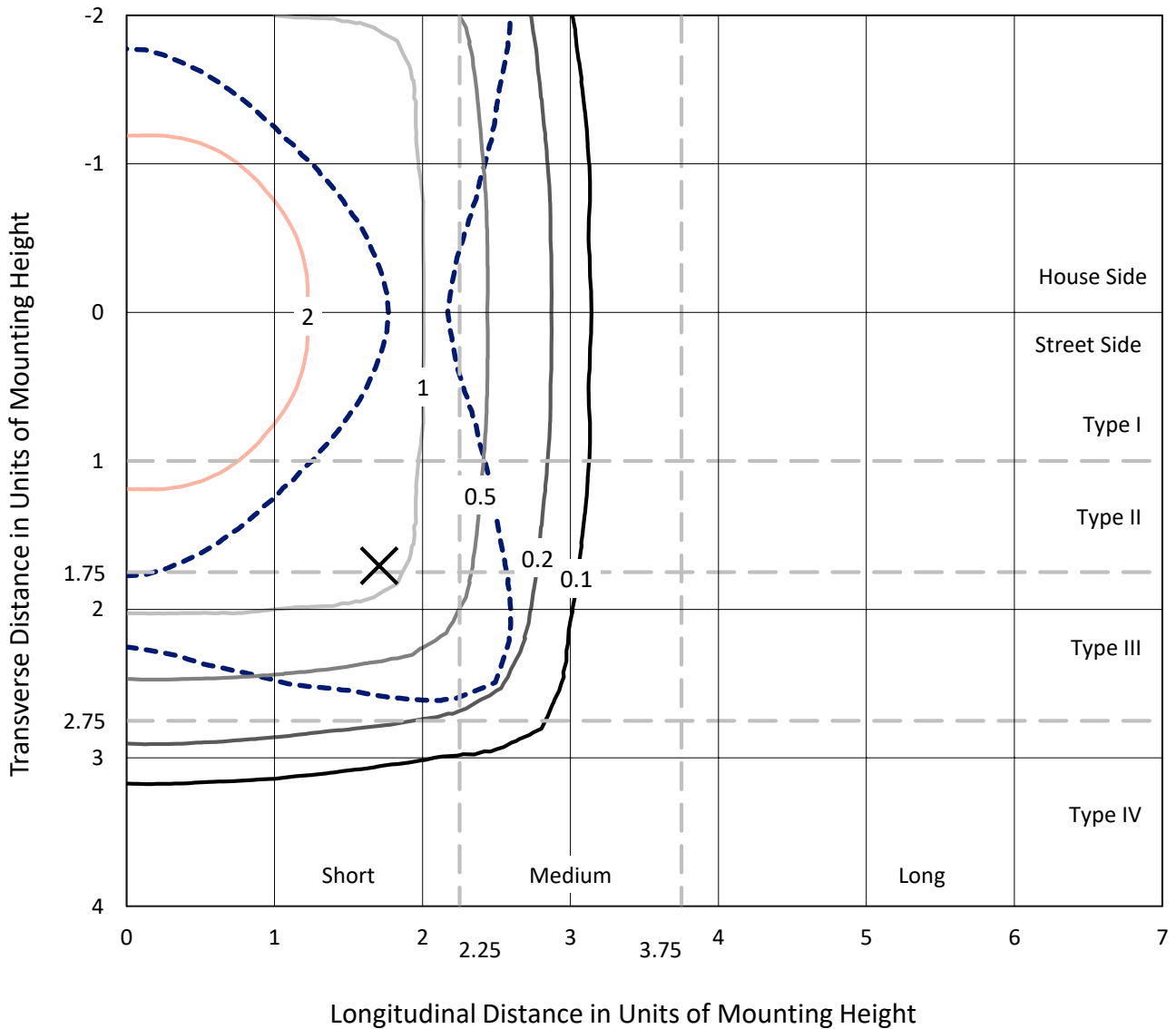


REPORT NUMBER: P299648

CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

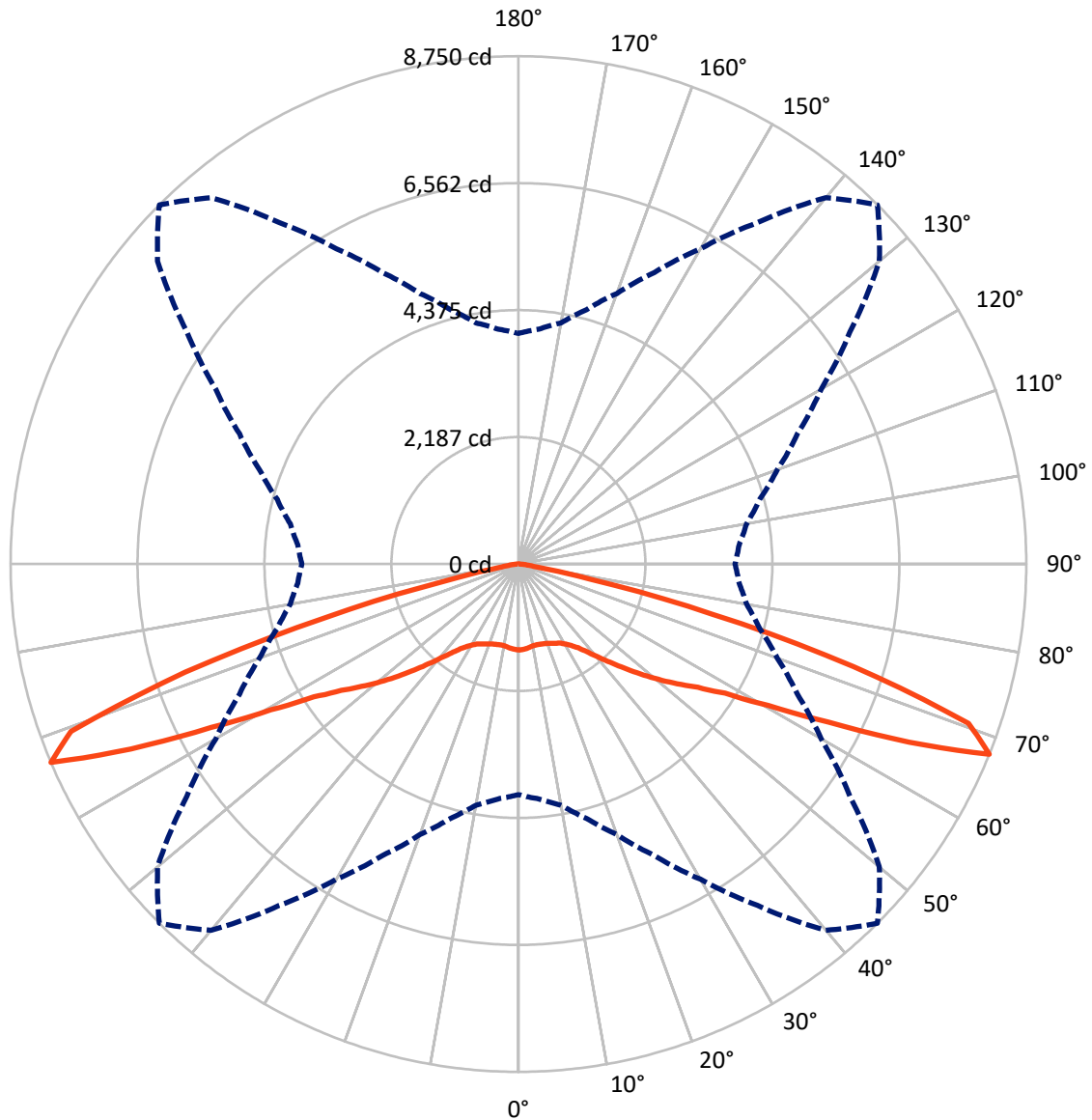


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299648

CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299648

CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7433.5	0.0	7433.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7433.5	0.0	7433.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	14867.0	0.0	14867.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	0.9
10°-20°	402.4	2.7
20°-30°	684.0	4.6
30°-40°	1118.2	7.5
40°-50°	1996.2	13.4
50°-60°	3365.7	22.6
60°-70°	5223.0	35.1
70°-80°	1835.1	12.3
80°-90°	103.7	0.7
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°	14867.0	100.0
0°-180°	14867.0	100.0



REPORT NUMBER: P299648

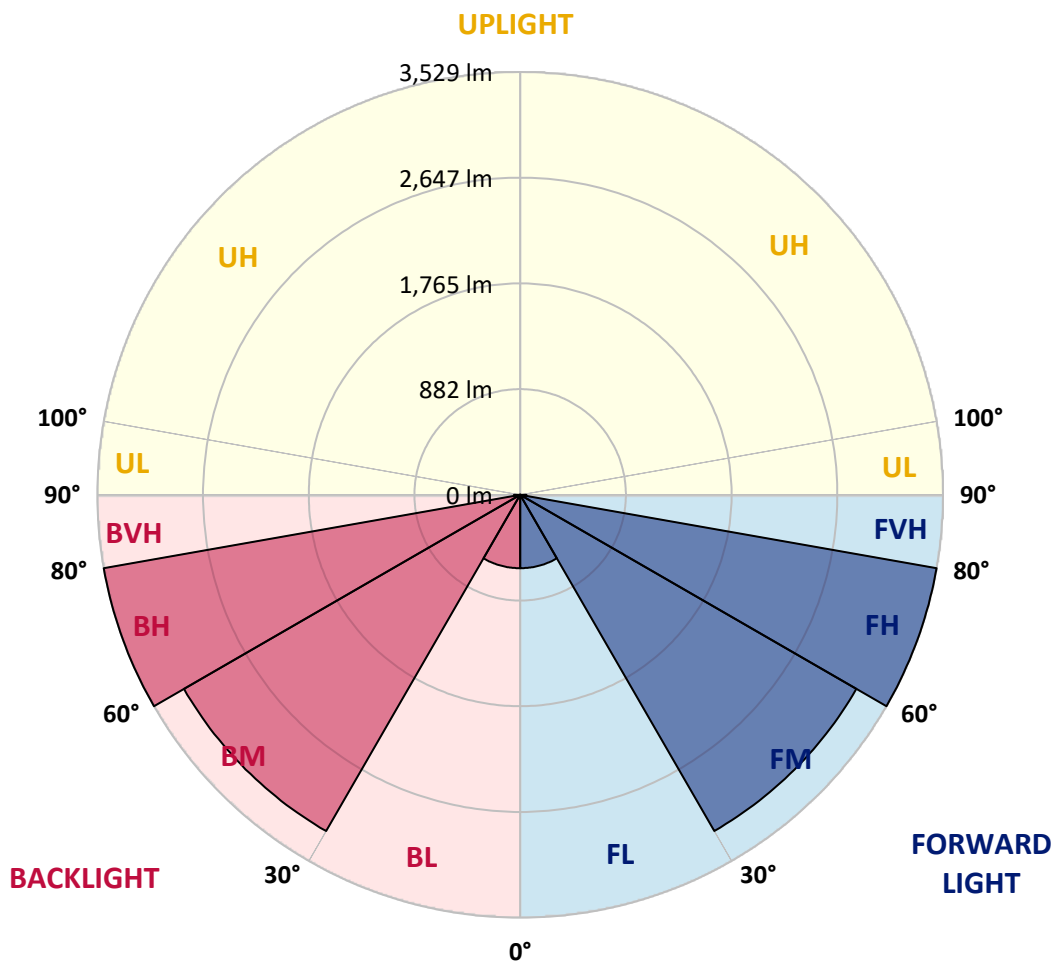
CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	612.6	4.1			
FM	(30°-60°)	3240.0	21.8			
FH	(60°-80°)	3529.1	23.7			G2/5000
FVH	(80°-90°)	51.9	0.3			G1/100
BL	(0°-30°)	612.6	4.1	B2/1000		
BM	(30°-60°)	3240.0	21.8	B3/5000		
BH	(60°-80°)	3529.1	23.7	B4/5000		G2/5000
BVH	(80°-90°)	51.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





REPORT NUMBER: P299648

CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6
2.5°	1476.1	1477.5	1477.5	1477.5	1476.8	1476.8	1475.4	1476.8	1476.1	1474.0	1474.7
5°	1463.8	1465.2	1465.2	1464.5	1466.5	1465.8	1463.8	1465.2	1464.5	1463.1	1463.8
7.5°	1446.0	1448.1	1448.1	1447.4	1449.4	1448.7	1447.4	1448.1	1448.1	1446.0	1446.0
10°	1426.2	1427.5	1427.5	1426.9	1430.3	1430.3	1429.6	1431.7	1432.3	1430.3	1428.9
12.5°	1407.7	1409.8	1409.8	1412.5	1415.9	1417.3	1420.7	1423.4	1426.2	1425.5	1422.8
15°	1396.8	1398.2	1400.9	1404.3	1409.8	1414.6	1420.0	1426.2	1431.7	1433.0	1428.9
17.5°	1389.9	1392.0	1396.1	1400.9	1408.4	1416.6	1424.8	1433.0	1440.5	1443.3	1438.5
20°	1387.9	1389.3	1393.4	1401.6	1411.8	1424.1	1435.8	1445.3	1455.6	1459.0	1455.6
22.5°	1392.0	1394.7	1399.5	1409.1	1422.8	1438.5	1452.2	1465.2	1478.1	1484.3	1479.5
25°	1410.5	1413.2	1419.3	1431.7	1446.7	1463.1	1478.8	1493.9	1505.5	1511.6	1508.2
27.5°	1444.6	1448.1	1455.6	1467.9	1484.3	1502.1	1519.2	1531.5	1541.0	1543.1	1539.0
30°	1495.9	1503.4	1512.3	1526.0	1545.1	1560.2	1577.3	1588.2	1599.8	1599.8	1596.4
32.5°	1575.9	1583.4	1593.0	1606.0	1621.0	1637.4	1652.5	1662.1	1674.4	1675.0	1666.8
35°	1695.6	1699.0	1707.2	1715.4	1729.1	1743.4	1756.4	1762.6	1772.8	1773.5	1766.0
37.5°	1853.5	1854.2	1859.6	1862.4	1874.7	1890.4	1902.7	1906.8	1916.4	1915.0	1907.5
40°	2037.4	2040.8	2042.9	2047.0	2060.0	2075.0	2088.0	2090.0	2100.3	2098.3	2088.7
42.5°	2250.0	2251.4	2263.0	2269.2	2281.5	2289.0	2305.4	2307.5	2319.8	2314.3	2303.4
45°	2488.6	2500.9	2511.9	2524.2	2537.2	2546.1	2559.1	2556.3	2564.5	2556.3	2550.2
47.5°	2739.6	2748.4	2773.1	2792.2	2813.4	2820.9	2839.4	2831.2	2839.4	2827.8	2825.7
50°	3015.8	3031.5	3052.7	3074.6	3097.1	3109.4	3133.4	3123.1	3134.0	3123.1	3117.0
52.5°	3287.9	3292.0	3338.5	3370.6	3402.1	3416.4	3430.8	3426.0	3426.7	3426.0	3419.8
55°	3546.3	3555.9	3602.4	3646.1	3700.8	3741.2	3765.8	3763.0	3756.9	3750.7	3740.5
57.5°	3837.6	3847.1	3900.5	3954.5	4016.7	4074.1	4124.0	4175.3	4195.1	4200.6	4178.0
60°	4231.4	4230.7	4301.8	4367.4	4456.3	4541.8	4651.2	4762.6	4890.5	4949.9	4871.3
62.5°	4632.0	4648.4	4751.0	4867.2	5050.4	5228.9	5430.6	5628.8	5831.2	5996.0	5821.0
65°	4584.2	4647.1	4799.5	5062.7	5401.2	5803.2	6238.0	6698.1	7113.8	7399.6	7079.0
67.5°	3972.9	4062.5	4217.7	4537.7	4960.9	5540.6	6270.8	7180.8	8238.5	8749.9	8116.1
70°	2879.7	2980.9	3143.6	3456.1	3875.2	4426.2	5219.3	6311.8	7712.1	8227.6	7529.5
72.5°	1433.0	1487.7	1588.2	1787.2	2104.4	2551.5	3270.8	4320.9	5559.8	6032.9	5395.0
75°	486.8	512.1	529.2	594.1	694.6	870.3	1227.9	1889.0	2881.8	3454.7	2840.7
77.5°	281.0	281.7	293.3	304.9	322.0	341.2	389.0	510.7	883.3	1254.6	914.1
80°	181.9	181.2	190.8	199.6	211.3	220.8	223.6	236.6	272.8	323.4	289.2
82.5°	94.3	106.0	127.2	138.8	160.7	164.8	159.3	154.5	163.4	169.6	173.7
85°	52.0	45.1	67.7	87.5	97.1	98.5	98.5	93.0	96.4	94.3	102.6
87.5°	23.9	21.9	26.7	43.1	45.8	39.0	41.0	36.2	26.0	25.3	28.7
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: P299648

CATALOG NUMBER: GLNA-AF-03-LED-E1-5MQ-7030-800

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6	1481.6
2.5°	1474.7	1475.4	1475.4	1477.5	1478.1	1479.5	1480.9	1481.6
5°	1463.1	1465.2	1463.8	1465.8	1465.8	1467.2	1467.2	1467.9
7.5°	1446.0	1448.1	1448.1	1448.1	1447.4	1449.4	1449.4	1449.4
10°	1428.2	1429.6	1428.9	1427.5	1426.2	1428.2	1427.5	1426.9
12.5°	1422.8	1419.3	1416.6	1415.2	1412.5	1413.2	1411.1	1411.1
15°	1426.2	1420.0	1415.2	1413.2	1410.5	1409.1	1407.7	1408.4
17.5°	1435.1	1427.5	1421.4	1418.0	1414.6	1412.5	1409.8	1410.5
20°	1450.8	1441.9	1433.0	1426.2	1420.0	1416.6	1414.6	1413.9
22.5°	1474.0	1461.1	1448.1	1437.8	1429.6	1424.8	1422.8	1421.4
25°	1500.7	1486.3	1471.3	1459.7	1451.5	1445.3	1441.2	1441.2
27.5°	1534.2	1522.6	1508.9	1495.2	1487.7	1481.6	1478.8	1477.5
30°	1590.3	1579.3	1568.4	1555.4	1545.8	1539.7	1534.9	1530.8
32.5°	1662.1	1653.2	1644.3	1634.7	1625.8	1617.6	1610.1	1606.7
35°	1763.2	1756.4	1750.3	1739.3	1735.9	1731.1	1727.0	1723.6
37.5°	1902.7	1900.0	1900.0	1888.4	1885.6	1883.6	1879.5	1880.2
40°	2085.9	2088.7	2085.3	2081.2	2079.1	2073.6	2073.6	2078.4
42.5°	2302.7	2304.7	2312.2	2305.4	2312.9	2306.1	2302.0	2305.4
45°	2554.3	2561.8	2576.8	2570.0	2574.8	2563.2	2548.8	2549.5
47.5°	2836.6	2843.5	2849.6	2844.8	2845.5	2826.4	2807.2	2802.5
50°	3129.9	3132.7	3136.1	3129.3	3130.6	3109.4	3087.6	3088.2
52.5°	3419.8	3432.8	3446.5	3428.0	3423.9	3400.0	3369.2	3356.9
55°	3751.4	3769.9	3754.2	3722.0	3689.9	3657.8	3617.4	3610.6
57.5°	4160.3	4128.8	4079.6	4018.7	3974.3	3929.2	3888.2	3871.1
60°	4729.1	4610.8	4521.9	4431.7	4374.9	4319.6	4265.6	4257.4
62.5°	5533.1	5328.7	5151.6	4965.0	4812.5	4693.5	4598.5	4571.9
65°	6540.9	6057.5	5638.4	5247.3	4907.5	4651.2	4489.8	4418.7
67.5°	6974.3	6019.9	5301.4	4746.2	4301.8	3991.4	3817.1	3730.2
70°	6128.6	4992.3	4210.9	3655.0	3250.3	2919.4	2761.4	2668.5
72.5°	4216.3	3175.8	2511.2	2049.7	1726.3	1449.4	1340.0	1331.8
75°	1893.1	1253.9	864.2	665.9	560.6	487.5	464.9	447.8
77.5°	529.9	391.8	349.4	326.8	304.9	279.6	270.1	272.1
80°	257.8	243.4	233.8	219.5	199.6	178.4	168.9	173.0
82.5°	170.9	168.9	175.0	164.8	136.1	115.5	97.1	88.9
85°	103.9	105.3	107.3	108.0	91.6	64.3	43.8	49.2
87.5°	41.0	47.2	51.3	53.3	49.9	30.8	24.6	25.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)