

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: P299965

Luminaire Tested: **GLNA-AF-06-LED-E1-5WQ-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299965  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-5WQ-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21388.3 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 193  
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

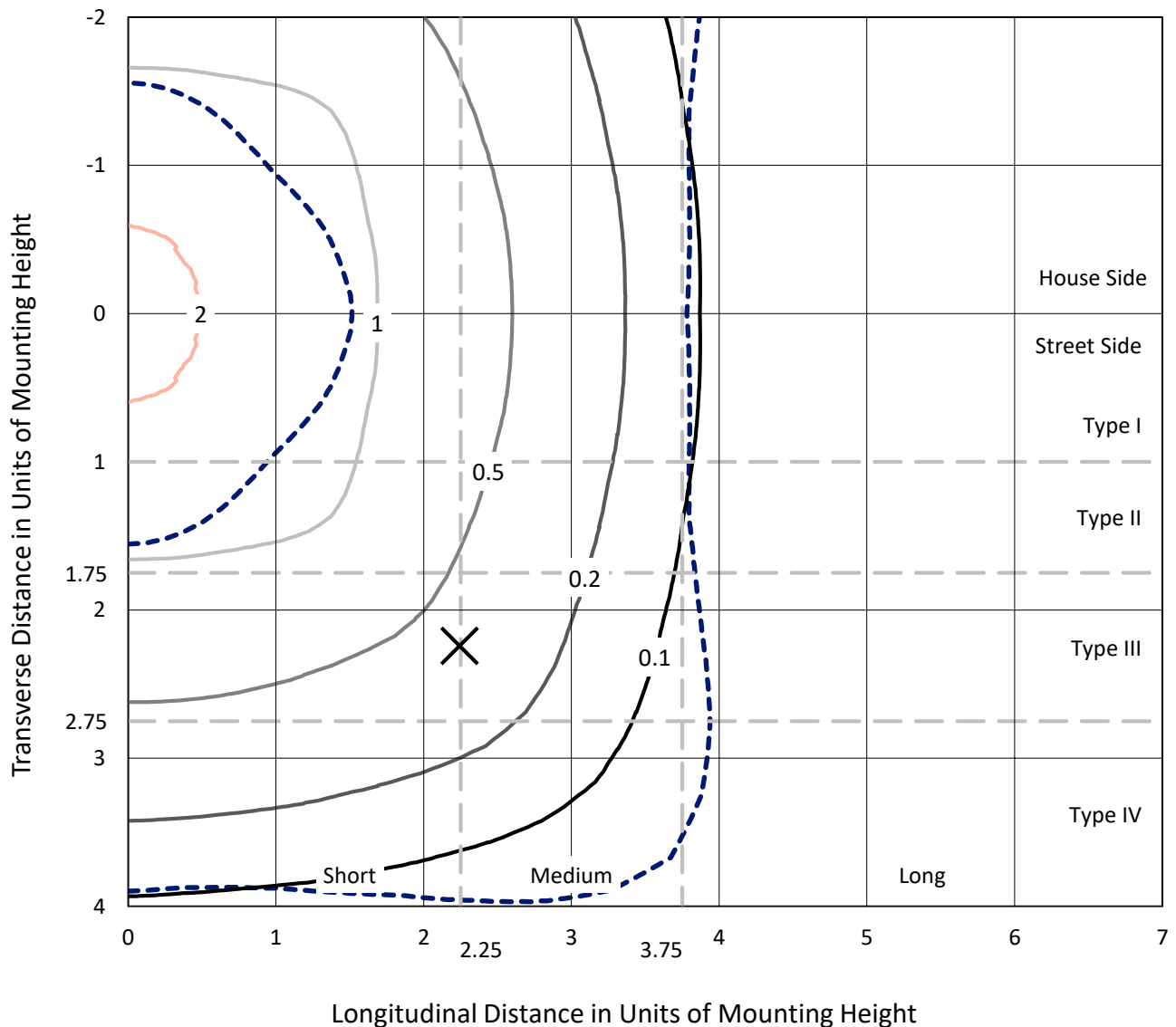


REPORT NUMBER: P299965

CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

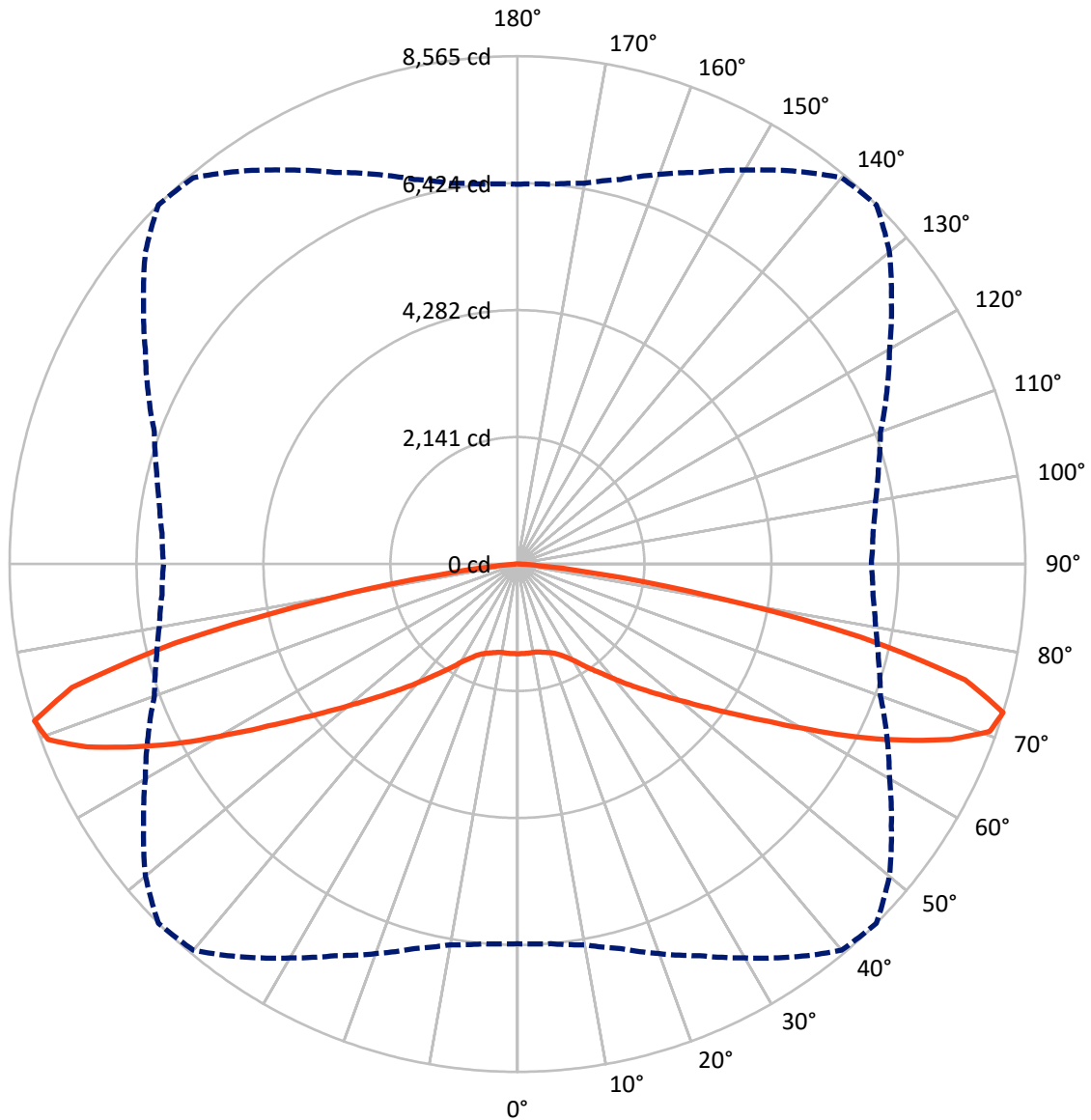


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299965

CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P299965

CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10694.2	0.0	10694.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10694.2	0.0	10694.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	21388.3	0.0	21388.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.6	0.7
10°-20°	439.3	2.1
20°-30°	802.7	3.8
30°-40°	1384.0	6.5
40°-50°	2365.9	11.1
50°-60°	3834.8	17.9
60°-70°	6361.9	29.7
70°-80°	5603.3	26.2
80°-90°	451.8	2.1
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°	21388.3	100.0
0°-180°	21388.3	100.0



REPORT NUMBER: P299965

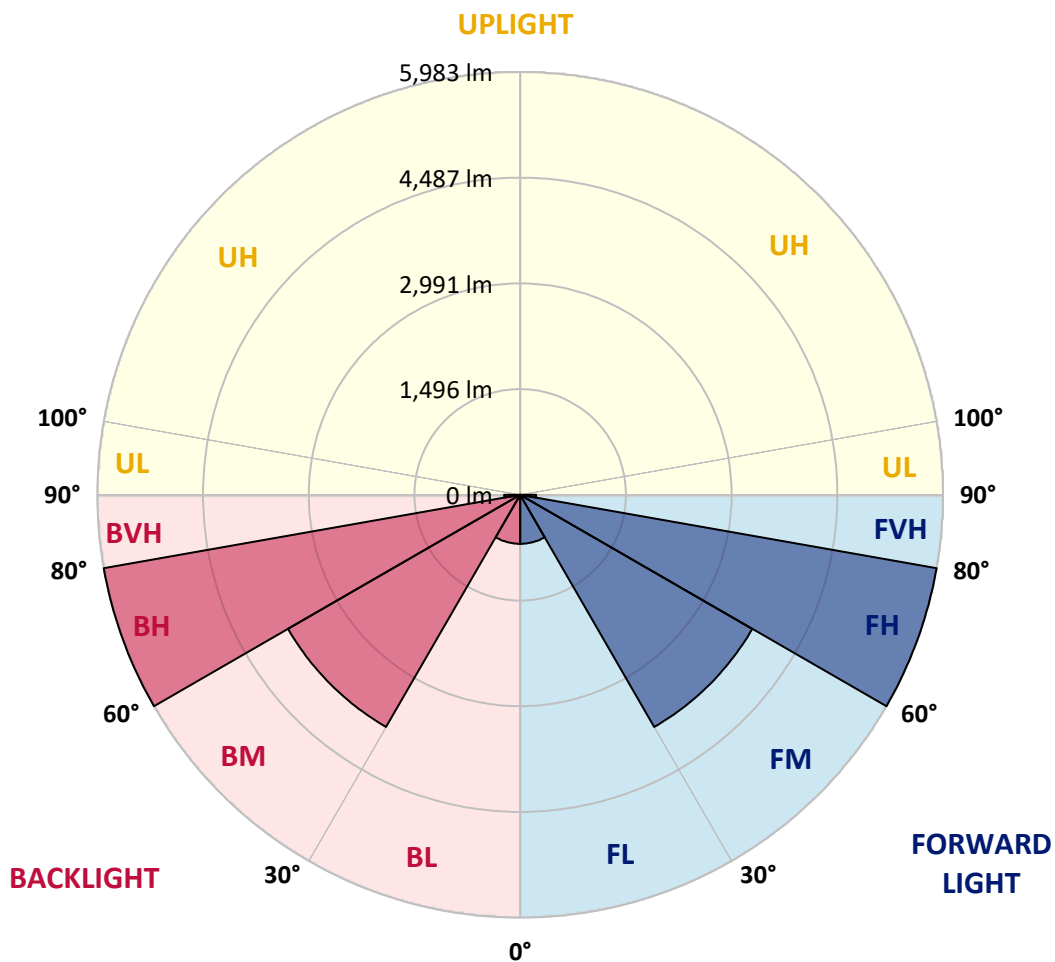
CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	693.3	3.2			
FM	(30°-60°)	3792.4	17.7			
FH	(60°-80°)	5982.6	28.0			G3/7500
FVH	(80°-90°)	225.9	1.1			G3/500
BL	(0°-30°)	693.3	3.2	B2/1000		
BM	(30°-60°)	3792.4	17.7	B3/5000		
BH	(60°-80°)	5982.6	28.0	B5		G3/7500
BVH	(80°-90°)	225.9	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type V Short





REPORT NUMBER: P299965

CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6
2.5°	1514.6	1515.6	1516.6	1515.6	1515.6	1514.6	1513.6	1514.6	1513.6	1511.7	1512.7
5°	1519.5	1521.5	1521.5	1519.5	1520.5	1519.5	1517.6	1518.5	1516.6	1513.6	1513.6
7.5°	1525.4	1526.4	1526.4	1524.4	1525.4	1523.5	1521.5	1520.5	1518.5	1514.6	1511.7
10°	1534.2	1535.2	1534.2	1532.3	1532.3	1529.3	1524.4	1522.5	1518.5	1512.7	1509.7
12.5°	1544.1	1545.0	1544.1	1542.1	1541.1	1536.2	1532.3	1529.3	1526.4	1521.5	1516.6
15°	1557.8	1559.8	1557.8	1553.9	1550.9	1547.0	1545.0	1546.0	1547.0	1543.1	1538.2
17.5°	1583.3	1584.3	1581.3	1572.5	1568.6	1564.7	1564.7	1566.6	1569.6	1567.6	1562.7
20°	1630.4	1627.4	1620.6	1609.8	1604.9	1598.0	1597.0	1598.0	1598.0	1597.0	1593.1
22.5°	1689.2	1687.3	1678.4	1664.7	1657.8	1653.9	1648.0	1643.1	1642.2	1639.2	1635.3
25°	1759.9	1758.9	1748.1	1736.3	1731.4	1726.5	1721.6	1714.7	1708.9	1702.0	1698.1
27.5°	1850.1	1846.2	1830.5	1824.6	1817.7	1814.8	1807.9	1800.1	1795.2	1786.4	1781.5
30°	1949.2	1949.2	1936.4	1934.5	1934.5	1927.6	1919.8	1906.0	1897.2	1888.4	1885.4
32.5°	2048.3	2049.3	2036.5	2040.4	2043.4	2048.3	2050.2	2045.3	2039.4	2038.5	2032.6
35°	2191.5	2187.6	2174.8	2177.8	2176.8	2175.8	2175.8	2186.6	2188.6	2190.5	2178.7
37.5°	2369.1	2369.1	2356.3	2356.3	2350.4	2344.5	2336.7	2343.5	2354.3	2357.3	2349.4
40°	2572.1	2579.0	2563.3	2562.3	2564.3	2545.6	2536.8	2547.6	2554.5	2566.2	2557.4
42.5°	2811.5	2806.6	2790.9	2788.9	2778.1	2772.2	2764.4	2773.2	2784.0	2791.9	2794.8
45°	3041.0	3037.1	3019.4	3019.4	3008.6	3003.7	3007.7	3022.4	3027.3	3038.1	3048.9
47.5°	3267.6	3262.7	3251.0	3255.9	3256.8	3265.7	3278.4	3292.2	3305.9	3320.6	3325.5
50°	3499.1	3500.1	3487.4	3499.1	3513.9	3538.4	3572.7	3595.3	3623.7	3642.4	3648.2
52.5°	3710.0	3714.0	3727.7	3755.2	3784.6	3832.7	3891.5	3946.5	3993.5	4024.9	4023.0
55°	3963.1	3969.0	4002.4	4049.5	4097.5	4170.1	4257.4	4354.5	4433.0	4478.2	4449.7
57.5°	4286.9	4299.6	4336.9	4400.7	4472.3	4566.4	4686.1	4832.3	4953.9	5014.7	4968.6
60°	4731.2	4739.1	4784.2	4854.8	4941.2	5057.9	5217.8	5414.0	5585.7	5666.1	5613.1
62.5°	5316.9	5331.6	5367.9	5439.5	5527.8	5660.2	5855.4	6100.7	6314.5	6426.4	6306.7
65°	6016.3	6063.4	6093.8	6166.4	6248.8	6389.1	6593.1	6856.0	7085.6	7159.2	7020.8
67.5°	6708.9	6750.1	6803.1	6886.4	6969.8	7127.8	7317.1	7572.1	7824.3	7891.0	7676.1
70°	7012.0	7035.6	7118.0	7231.7	7391.6	7578.0	7796.8	8083.2	8395.2	8450.1	8177.4
72.5°	6404.8	6428.3	6520.5	6713.8	6992.4	7288.6	7670.2	8091.1	8503.1	8564.9	8189.2
75°	4844.1	4805.8	4942.2	5198.2	5573.9	5986.9	6520.5	7123.8	7719.3	7796.8	7348.5
77.5°	2503.4	2498.5	2601.5	2919.4	3367.7	3837.6	4425.2	5107.0	5689.7	5925.1	5560.2
80°	705.3	713.2	762.2	920.2	1182.1	1521.5	1980.6	2619.2	3096.0	3339.2	3135.2
82.5°	276.6	298.2	316.9	346.3	380.6	430.6	574.9	855.4	1147.7	1371.4	1123.2
85°	99.1	105.9	150.1	177.6	180.5	190.3	216.8	253.1	305.1	363.9	299.2
87.5°	37.3	41.2	48.1	79.5	78.5	71.6	87.3	91.2	68.7	62.8	77.5
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: P299965

CATALOG NUMBER: GLNA-AF-06-LED-E1-5WQ-7027-600

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6	1514.6
2.5°	1510.7	1511.7	1511.7	1512.7	1513.6	1513.6	1515.6	1515.6
5°	1511.7	1511.7	1509.7	1510.7	1509.7	1509.7	1510.7	1510.7
7.5°	1509.7	1508.7	1506.8	1505.8	1503.8	1503.8	1503.8	1503.8
10°	1506.8	1505.8	1503.8	1502.9	1501.9	1501.9	1501.9	1501.9
12.5°	1514.6	1511.7	1509.7	1508.7	1508.7	1508.7	1508.7	1508.7
15°	1535.2	1528.4	1523.5	1523.5	1524.4	1526.4	1526.4	1528.4
17.5°	1560.7	1552.9	1548.0	1544.1	1546.0	1549.0	1550.9	1552.9
20°	1591.1	1587.2	1580.4	1576.4	1576.4	1580.4	1582.3	1583.3
22.5°	1633.3	1630.4	1627.4	1622.5	1622.5	1624.5	1628.4	1628.4
25°	1696.1	1694.1	1692.2	1688.3	1687.3	1687.3	1689.2	1691.2
27.5°	1774.6	1775.6	1773.6	1772.6	1769.7	1768.7	1771.6	1770.7
30°	1879.5	1884.5	1889.4	1885.4	1880.5	1877.6	1874.6	1870.7
32.5°	2021.8	2015.9	2012.0	2005.1	1996.3	1988.4	1982.6	1975.7
35°	2156.2	2146.4	2142.4	2148.3	2147.4	2142.4	2135.6	2129.7
37.5°	2321.0	2319.0	2321.0	2331.8	2329.8	2334.7	2321.0	2320.0
40°	2529.0	2530.9	2544.6	2557.4	2564.3	2571.1	2563.3	2555.4
42.5°	2770.3	2769.3	2774.2	2791.9	2803.6	2811.5	2794.8	2792.8
45°	3025.3	3018.5	3022.4	3037.1	3048.9	3057.7	3039.1	3039.1
47.5°	3305.9	3294.1	3281.4	3298.0	3304.9	3310.8	3296.1	3291.2
50°	3618.8	3594.3	3566.8	3573.7	3573.7	3571.7	3553.1	3552.1
52.5°	3977.9	3932.7	3882.7	3864.1	3853.3	3841.5	3809.1	3793.4
55°	4390.8	4323.2	4244.7	4196.6	4171.1	4138.7	4084.8	4070.1
57.5°	4873.5	4767.5	4632.2	4573.3	4516.4	4463.4	4403.6	4386.9
60°	5445.4	5289.4	5109.9	5001.0	4939.2	4888.2	4826.4	4823.5
62.5°	6083.0	5836.8	5633.7	5535.6	5490.5	5445.4	5386.5	5394.4
65°	6731.4	6474.4	6284.1	6204.7	6162.5	6125.2	6066.3	6075.2
67.5°	7371.0	7134.6	6925.7	6844.3	6797.2	6750.1	6697.1	6705.9
70°	7830.1	7536.8	7301.4	7120.9	7008.1	6880.6	6798.2	6777.6
72.5°	7698.7	7246.5	6872.7	6514.7	6304.7	6134.0	6018.3	5968.3
75°	6662.8	6044.8	5564.1	5124.6	4877.4	4676.3	4530.1	4438.9
77.5°	4948.0	4253.5	3685.5	3179.3	2779.1	2510.3	2321.0	2198.4
80°	2708.5	2060.0	1505.8	1058.5	777.9	646.5	570.9	534.6
82.5°	843.6	544.4	401.2	346.3	321.8	308.0	285.5	249.2
85°	268.8	235.4	218.8	208.9	199.1	173.6	119.7	108.9
87.5°	104.0	106.9	105.9	100.1	102.0	73.6	58.9	52.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)