

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: P299970

Luminaire Tested: **GLNA-AF-06-LED-E1-5WQ-7060-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299970
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-7060-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 5700K 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: 24617.1 lumens
Efficiency: N/A
Efficacy: 127.5 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

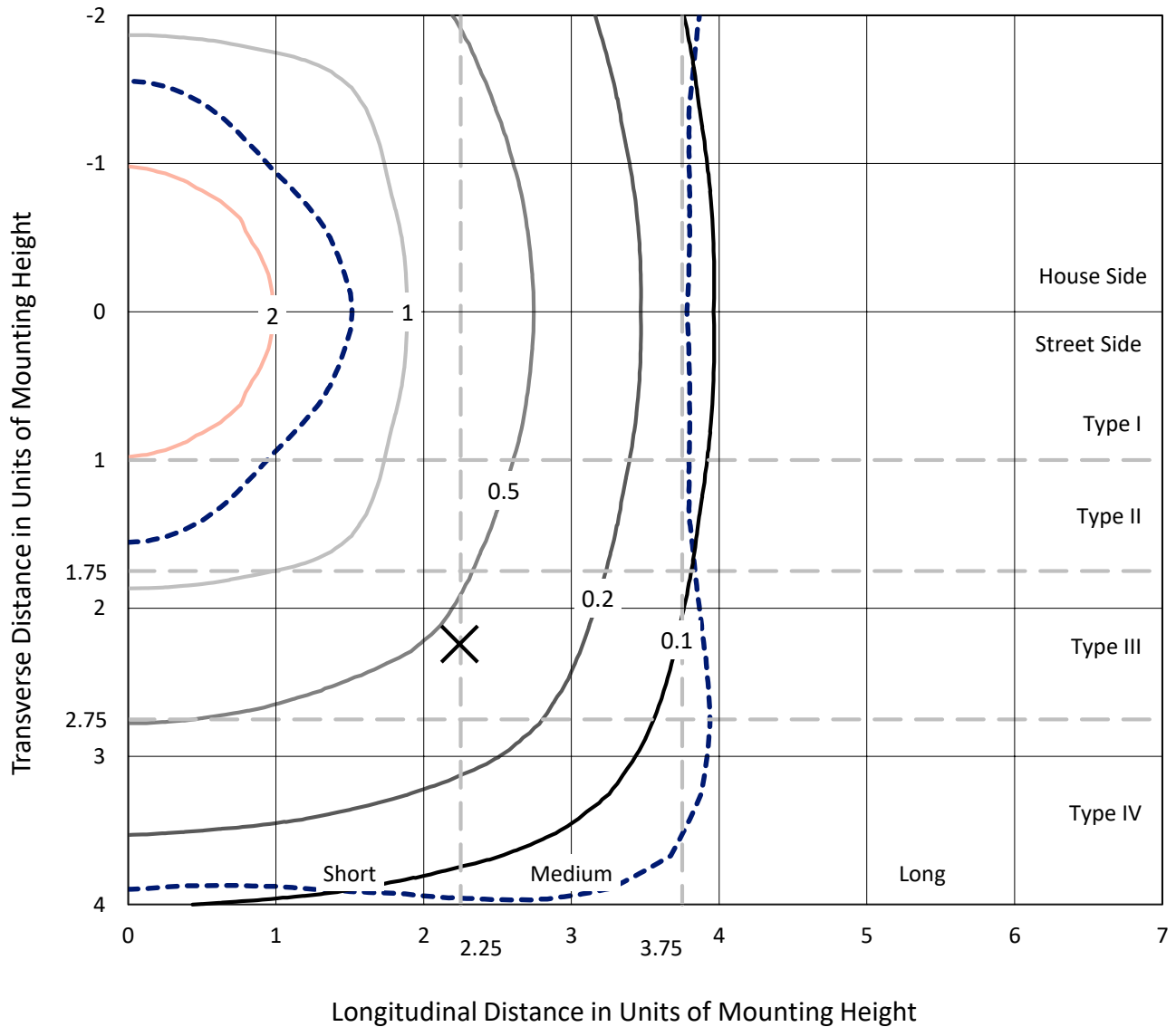


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

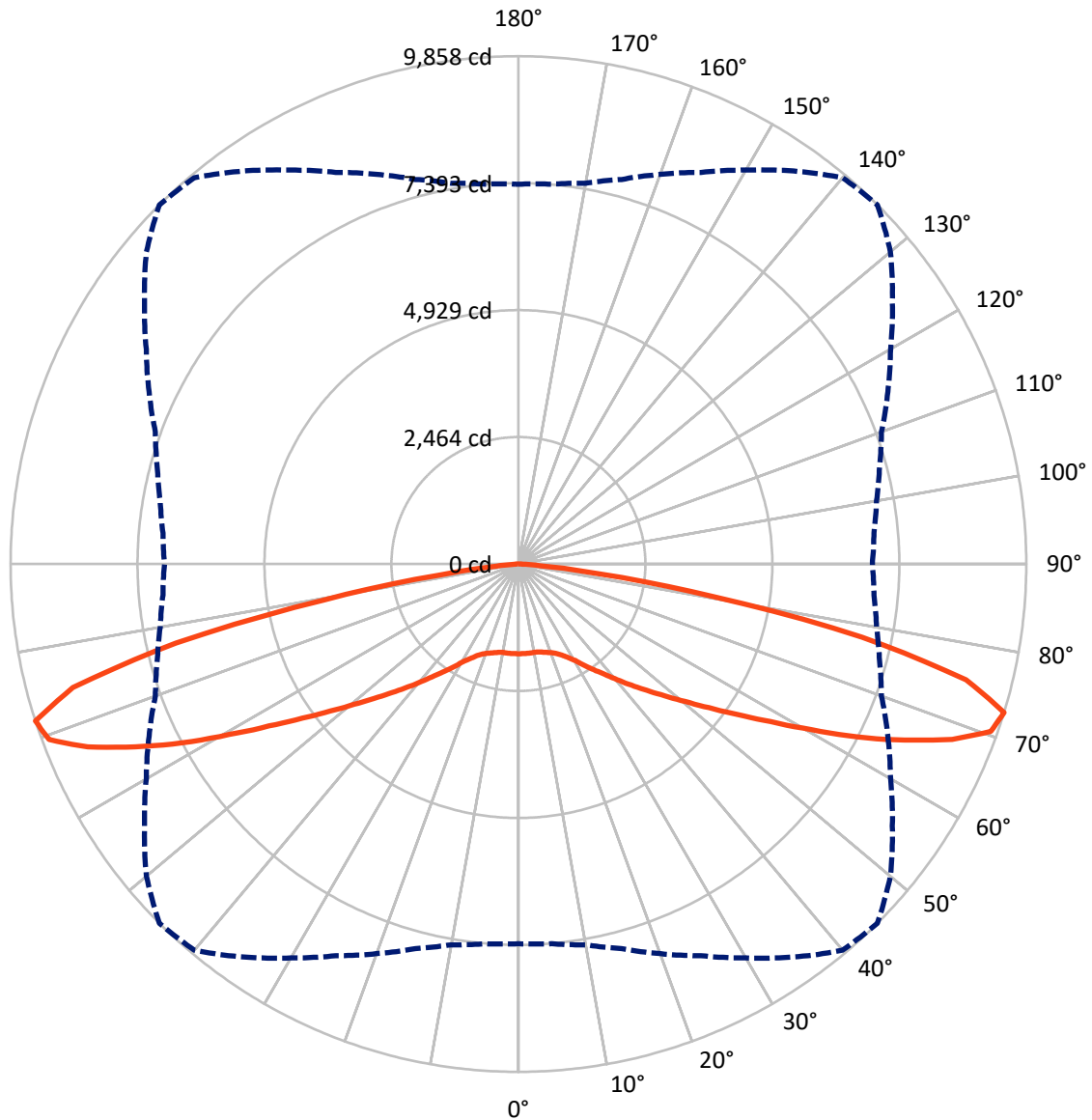


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12308.6	0.0	12308.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12308.6	0.0	12308.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	24617.1	0.0	24617.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.5	0.7
10°-20°	505.6	2.1
20°-30°	923.9	3.8
30°-40°	1592.9	6.5
40°-50°	2723.1	11.1
50°-60°	4413.8	17.9
60°-70°	7322.3	29.7
70°-80°	6449.2	26.2
80°-90°	520.0	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°	24617.1	100.0
0°-180°	24617.1	100.0



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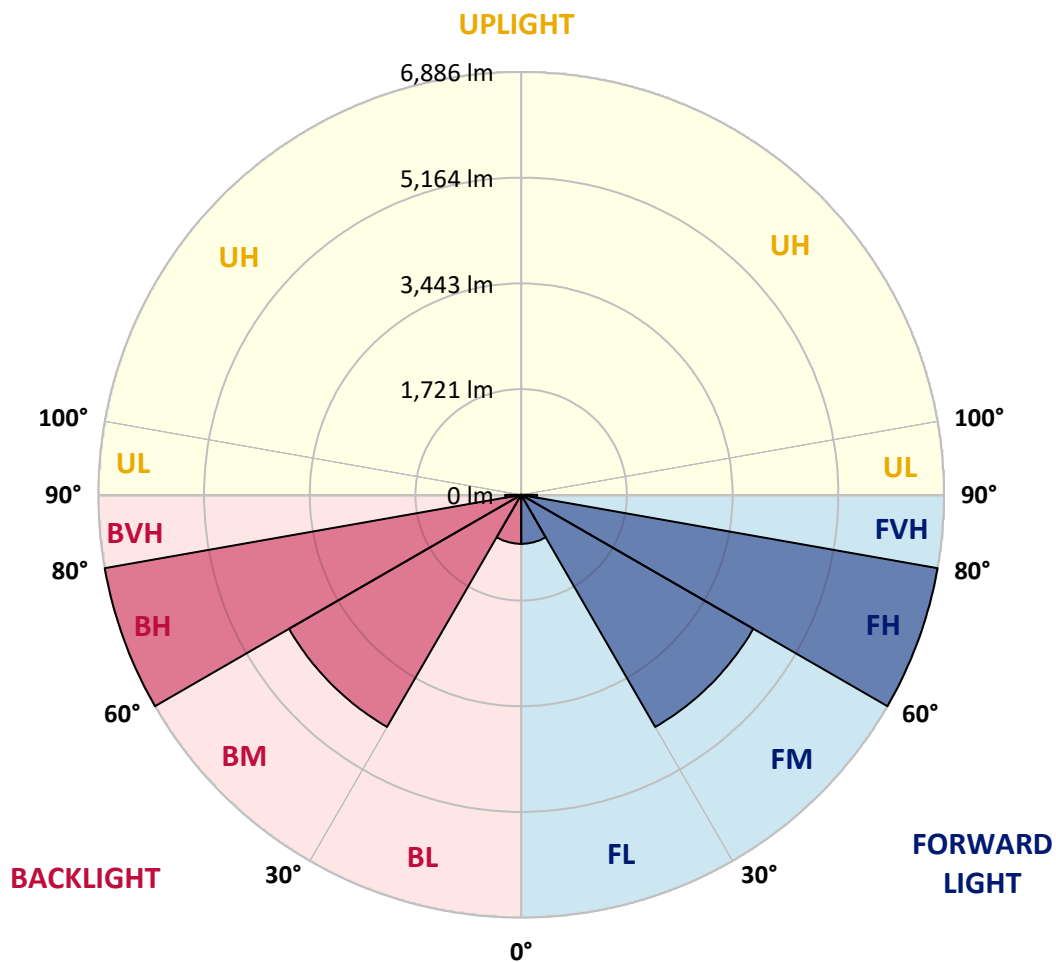
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	798.0	3.2			
FM	(30°-60°)	4364.9	17.7			
FH	(60°-80°)	6885.7	28.0			G3/7500
FVH	(80°-90°)	260.0	1.1			G3/500
BL	(0°-30°)	798.0	3.2	B2/1000		
BM	(30°-60°)	4364.9	17.7	B3/5000		
BH	(60°-80°)	6885.7	28.0	B5		G3/7500
BVH	(80°-90°)	260.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1743.3	1744.4	1745.5	1744.4	1744.4	1743.3	1742.1	1743.3	1742.1	1739.9	1741.0
5°	1748.9	1751.2	1751.2	1748.9	1750.0	1748.9	1746.7	1747.8	1745.5	1742.1	1742.1
7.5°	1755.7	1756.8	1756.8	1754.6	1755.7	1753.4	1751.2	1750.0	1747.8	1743.3	1739.9
10°	1765.9	1767.0	1765.9	1763.6	1763.6	1760.2	1754.6	1752.3	1747.8	1741.0	1737.6
12.5°	1777.1	1778.3	1777.1	1774.9	1773.8	1768.1	1763.6	1760.2	1756.8	1751.2	1745.5
15°	1793.0	1795.2	1793.0	1788.4	1785.1	1780.5	1778.3	1779.4	1780.5	1776.0	1770.4
17.5°	1822.3	1823.4	1820.1	1809.9	1805.4	1800.9	1800.9	1803.1	1806.5	1804.2	1798.6
20°	1876.5	1873.1	1865.2	1852.8	1847.1	1839.2	1838.1	1839.2	1839.2	1838.1	1833.6
22.5°	1944.2	1942.0	1931.8	1916.0	1908.1	1903.6	1896.8	1891.2	1890.1	1886.7	1882.2
25°	2025.5	2024.4	2012.0	1998.4	1992.8	1987.2	1981.5	1973.6	1966.8	1958.9	1954.4
27.5°	2129.4	2124.9	2106.8	2100.1	2092.2	2088.8	2080.9	2071.8	2066.2	2056.0	2050.4
30°	2243.5	2243.5	2228.8	2226.5	2226.5	2218.6	2209.6	2193.8	2183.6	2173.4	2170.1
32.5°	2357.5	2358.6	2343.9	2348.5	2351.8	2357.5	2359.7	2354.1	2347.3	2346.2	2339.4
35°	2522.3	2517.8	2503.1	2506.5	2505.4	2504.3	2504.3	2516.7	2518.9	2521.2	2507.7
37.5°	2726.7	2726.7	2712.0	2712.0	2705.2	2698.5	2689.4	2697.3	2709.8	2713.1	2704.1
40°	2960.4	2968.3	2950.2	2949.1	2951.4	2929.9	2919.8	2932.2	2940.1	2953.6	2943.5
42.5°	3235.9	3230.3	3212.2	3209.9	3197.5	3190.7	3181.7	3191.9	3204.3	3213.3	3216.7
45°	3500.1	3495.6	3475.3	3475.3	3462.8	3457.2	3461.7	3478.6	3484.3	3496.7	3509.1
47.5°	3760.9	3755.3	3741.7	3747.4	3748.5	3758.7	3773.3	3789.1	3804.9	3821.9	3827.5
50°	4027.4	4028.5	4013.8	4027.4	4044.3	4072.5	4112.1	4138.0	4170.8	4192.2	4199.0
52.5°	4270.1	4274.6	4290.4	4322.1	4355.9	4411.3	4479.0	4542.2	4596.4	4632.6	4630.3
55°	4561.4	4568.2	4606.6	4660.8	4716.1	4799.7	4900.1	5011.9	5102.2	5154.2	5121.4
57.5°	4934.0	4948.7	4991.6	5065.0	5147.4	5255.8	5393.5	5561.8	5701.8	5771.8	5718.7
60°	5445.5	5454.5	5506.4	5587.7	5687.1	5821.5	6005.5	6231.3	6428.9	6521.5	6460.5
62.5°	6119.5	6136.5	6178.2	6260.7	6362.3	6514.7	6739.4	7021.7	7267.8	7396.5	7258.8
65°	6924.6	6978.7	7013.7	7097.3	7192.1	7353.6	7588.4	7891.0	8155.2	8239.9	8080.7
67.5°	7721.7	7769.1	7830.1	7926.0	8022.0	8203.8	8421.7	8715.2	9005.4	9082.2	8834.9
70°	8070.6	8097.6	8192.5	8323.5	8507.5	8722.0	8973.8	9303.5	9662.5	9725.8	9411.9
72.5°	7371.7	7398.8	7504.9	7727.3	8048.0	8388.9	8828.2	9312.5	9786.7	9857.9	9425.4
75°	5575.3	5531.3	5688.2	5982.9	6415.3	6890.7	7504.9	8199.3	8884.6	8973.8	8457.8
77.5°	2881.4	2875.7	2994.3	3360.1	3876.1	4416.9	5093.2	5877.9	6548.6	6819.5	6399.5
80°	811.8	820.8	877.3	1059.1	1360.5	1751.2	2279.6	3014.6	3563.3	3843.3	3608.5
82.5°	318.4	343.2	364.7	398.6	438.1	495.7	661.6	984.5	1321.0	1578.4	1292.8
85°	114.0	121.9	172.7	204.4	207.7	219.0	249.5	291.3	351.1	418.9	344.4
87.5°	42.9	47.4	55.3	91.5	90.3	82.4	100.5	105.0	79.0	72.3	89.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1738.8	1739.9	1739.9	1741.0	1742.1	1742.1	1744.4	1744.4
5°	1739.9	1739.9	1737.6	1738.8	1737.6	1737.6	1738.8	1738.8
7.5°	1737.6	1736.5	1734.2	1733.1	1730.9	1730.9	1730.9	1730.9
10°	1734.2	1733.1	1730.9	1729.7	1728.6	1728.6	1728.6	1728.6
12.5°	1743.3	1739.9	1737.6	1736.5	1736.5	1736.5	1736.5	1736.5
15°	1767.0	1759.1	1753.4	1753.4	1754.6	1756.8	1756.8	1759.1
17.5°	1796.3	1787.3	1781.7	1777.1	1779.4	1782.8	1785.1	1787.3
20°	1831.3	1826.8	1818.9	1814.4	1814.4	1818.9	1821.2	1822.3
22.5°	1879.9	1876.5	1873.1	1867.5	1867.5	1869.7	1874.2	1874.2
25°	1952.2	1949.9	1947.6	1943.1	1942.0	1942.0	1944.2	1946.5
27.5°	2042.5	2043.6	2041.3	2040.2	2036.8	2035.7	2039.1	2038.0
30°	2163.3	2168.9	2174.6	2170.1	2164.4	2161.0	2157.6	2153.1
32.5°	2327.0	2320.2	2315.7	2307.8	2297.6	2288.6	2281.8	2273.9
35°	2481.7	2470.4	2465.9	2472.7	2471.5	2465.9	2458.0	2451.2
37.5°	2671.4	2669.1	2671.4	2683.8	2681.5	2687.2	2671.4	2670.2
40°	2910.7	2913.0	2928.8	2943.5	2951.4	2959.3	2950.2	2941.2
42.5°	3188.5	3187.3	3193.0	3213.3	3226.9	3235.9	3216.7	3214.4
45°	3482.0	3474.1	3478.6	3495.6	3509.1	3519.3	3497.8	3497.8
47.5°	3804.9	3791.4	3776.7	3795.9	3803.8	3810.6	3793.7	3788.0
50°	4165.1	4136.9	4105.3	4113.2	4113.2	4110.9	4089.5	4088.3
52.5°	4578.4	4526.4	4468.8	4447.4	4435.0	4421.4	4384.2	4366.1
55°	5053.7	4975.8	4885.5	4830.1	4800.8	4763.5	4701.4	4684.5
57.5°	5609.2	5487.3	5331.4	5263.7	5198.2	5137.2	5068.4	5049.2
60°	6267.4	6087.9	5881.3	5756.0	5684.8	5626.1	5555.0	5551.6
62.5°	7001.3	6717.9	6484.2	6371.3	6319.4	6267.4	6199.7	6208.7
65°	7747.6	7451.8	7232.8	7141.3	7092.8	7049.9	6982.1	6992.3
67.5°	8483.8	8211.7	7971.2	7877.5	7823.3	7769.1	7708.1	7718.3
70°	9012.2	8674.6	8403.6	8195.9	8066.0	7919.3	7824.4	7800.7
72.5°	8860.9	8340.4	7910.2	7498.1	7256.5	7060.0	6926.8	6869.2
75°	7668.6	6957.3	6404.1	5898.2	5613.7	5382.2	5214.0	5109.0
77.5°	5695.0	4895.6	4241.9	3659.3	3198.6	2889.3	2671.4	2530.2
80°	3117.3	2371.0	1733.1	1218.3	895.3	744.1	657.1	615.3
82.5°	971.0	626.6	461.8	398.6	370.3	354.5	328.6	286.8
85°	309.4	271.0	251.8	240.5	229.2	199.8	137.7	125.3
87.5°	119.7	123.1	121.9	115.2	117.4	84.7	67.7	59.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)