

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: P300677

Luminaire Tested: **GLNA-AF-04-LED-E1-RW-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-RW-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular
Wide Type I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16113.7 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

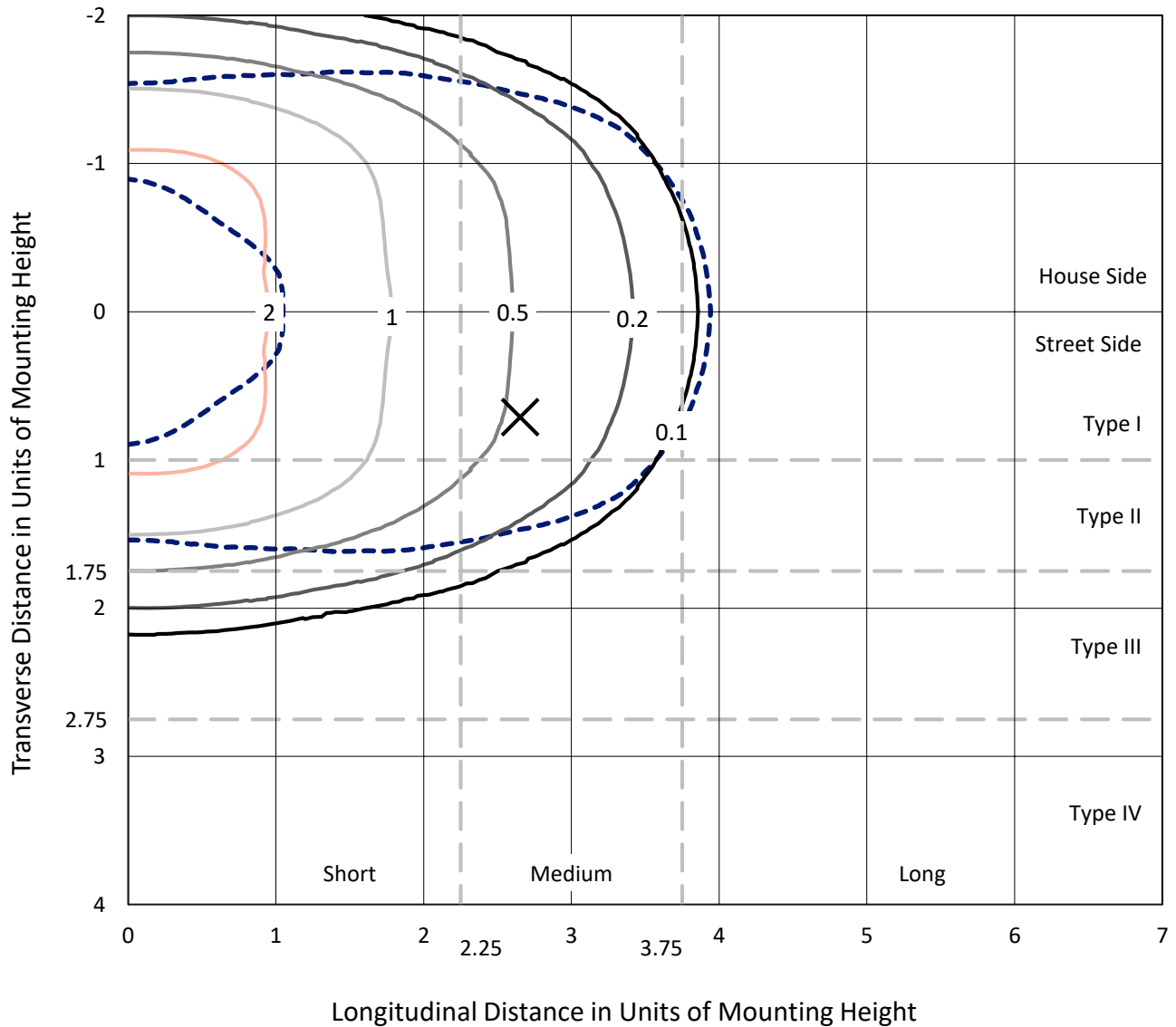
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

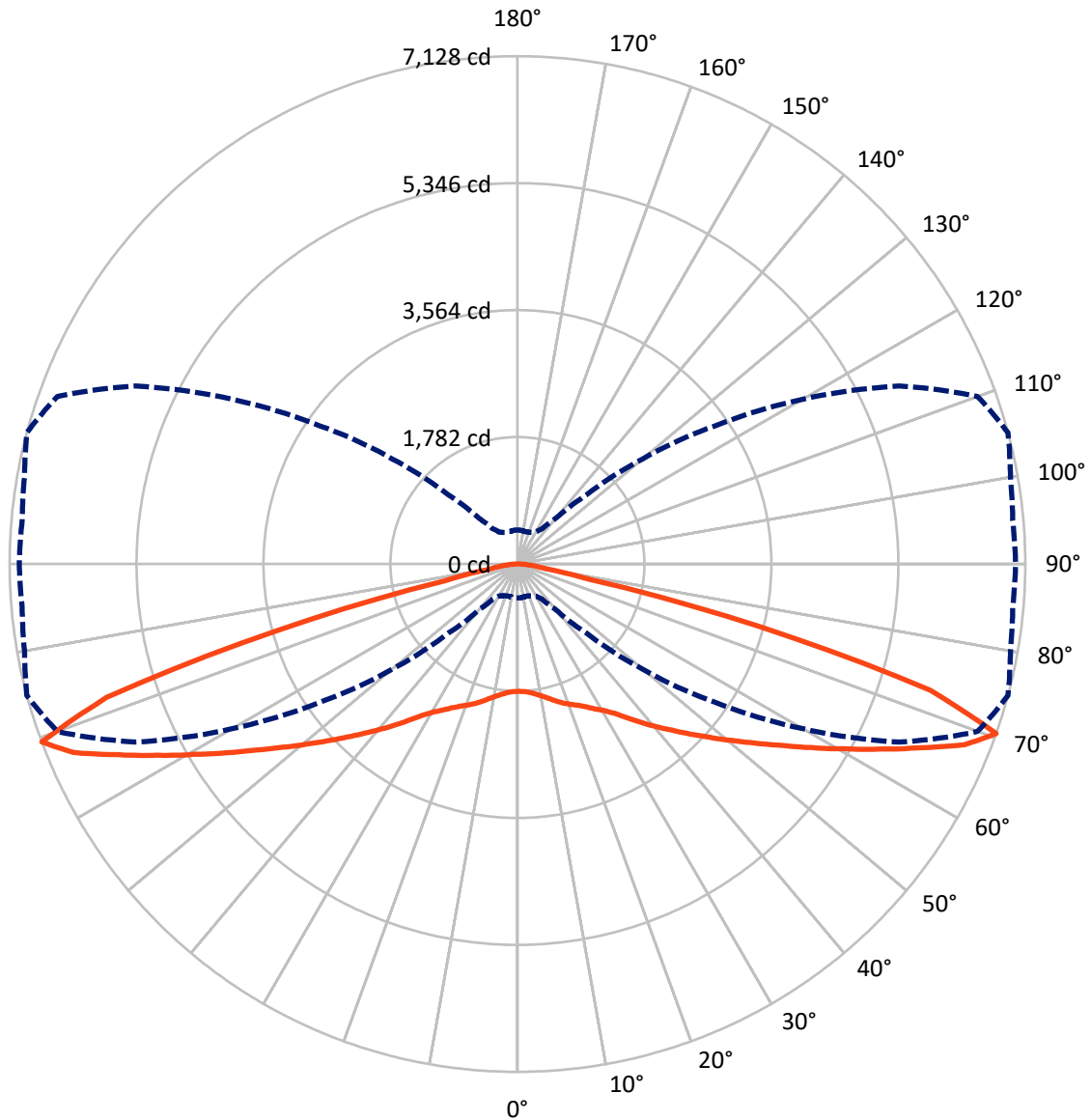
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8056.9	0.0	8056.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8056.9	0.0	8056.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	16113.7	0.0	16113.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.4	1.1
10°-20°	532.6	3.3
20°-30°	1002.5	6.2
30°-40°	1775.3	11.0
40°-50°	2968.8	18.4
50°-60°	4137.0	25.7
60°-70°	3836.4	23.8
70°-80°	1528.9	9.5
80°-90°	160.7	1.0
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°	16113.7	100.0
0°-180°	16113.7	100.0



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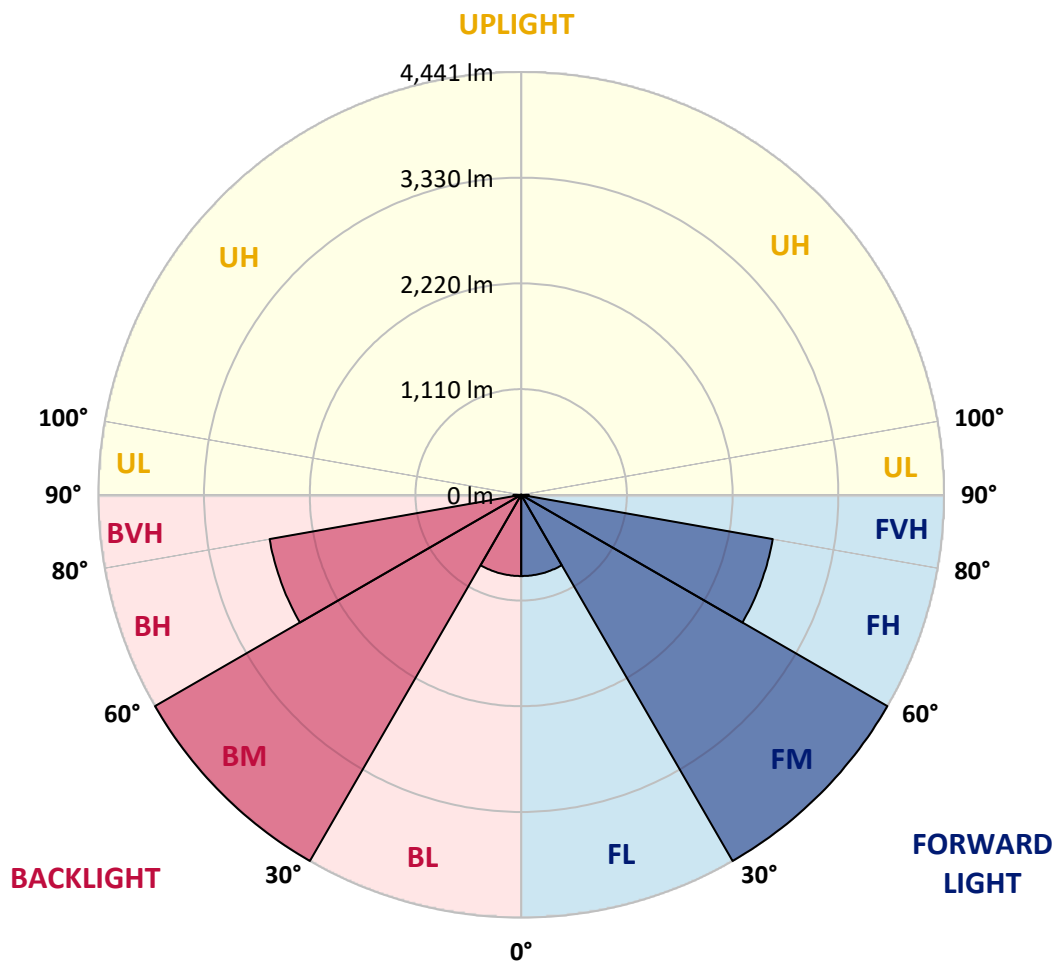
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	853.3	5.3			
FM	(30°-60°)	4440.5	27.6			
FH	(60°-80°)	2682.7	16.6			G2/5000
FVH	(80°-90°)	80.4	0.5			G1/100
BL	(0°-30°)	853.3	5.3	B2/1000		
BM	(30°-60°)	4440.5	27.6	B3/5000		
BH	(60°-80°)	2682.7	16.6	B4/5000		G4/5000
BVH	(80°-90°)	80.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1784.3	1782.8	1784.3	1783.6	1785.1	1785.1	1786.6	1789.7	1789.7	1792.0	1791.2
5°	1766.8	1766.1	1768.3	1770.6	1772.9	1777.5	1782.1	1788.9	1794.2	1798.0	1801.9
7.5°	1732.6	1732.6	1735.6	1740.9	1746.3	1756.2	1766.8	1780.5	1794.2	1805.7	1815.6
10°	1704.4	1705.9	1709.7	1718.8	1728.0	1743.2	1757.7	1777.5	1796.5	1815.6	1830.8
12.5°	1687.6	1689.9	1696.8	1710.5	1725.7	1746.3	1768.3	1793.5	1814.8	1837.7	1852.9
15°	1693.0	1694.5	1704.4	1721.1	1740.9	1766.8	1796.5	1826.2	1851.4	1875.7	1896.3
17.5°	1722.7	1724.9	1736.4	1755.4	1776.0	1806.4	1838.4	1871.9	1903.1	1930.6	1955.7
20°	1776.0	1778.2	1792.7	1813.3	1837.7	1868.9	1900.9	1935.9	1970.9	1999.9	2028.0
22.5°	1851.4	1855.2	1868.9	1889.4	1916.9	1950.4	1988.4	2025.8	2059.3	2085.9	2111.1
25°	1950.4	1958.7	1971.7	1994.5	2023.5	2053.9	2095.1	2133.1	2165.1	2190.3	2208.5
27.5°	2090.5	2101.9	2111.8	2133.9	2162.1	2191.0	2232.1	2265.6	2296.1	2320.5	2334.2
30°	2276.3	2287.7	2297.6	2319.0	2344.9	2372.3	2411.1	2440.8	2459.8	2478.9	2478.1
32.5°	2501.7	2513.9	2517.7	2540.6	2567.2	2596.9	2632.0	2648.7	2663.9	2666.2	2652.5
35°	2753.8	2759.9	2775.1	2805.6	2836.1	2860.4	2893.9	2902.3	2902.3	2890.9	2860.4
37.5°	3030.3	3034.1	3055.4	3089.7	3120.9	3146.0	3168.9	3185.6	3177.2	3152.9	3101.8
40°	3333.4	3340.2	3370.7	3401.1	3436.2	3459.8	3484.1	3487.2	3478.8	3443.0	3373.7
42.5°	3622.8	3628.8	3659.3	3707.3	3753.0	3785.7	3808.6	3813.1	3786.5	3753.7	3667.7
45°	3871.8	3887.8	3927.4	3983.7	4050.0	4096.4	4127.7	4140.6	4117.0	4074.4	3974.6
47.5°	4069.0	4085.0	4141.4	4208.4	4290.6	4366.0	4417.8	4445.2	4439.1	4407.2	4298.3
50°	4213.7	4229.0	4289.9	4372.1	4468.1	4561.8	4650.1	4715.6	4738.4	4724.0	4624.2
52.5°	4230.5	4255.6	4327.2	4437.6	4562.5	4690.5	4816.1	4927.3	5002.7	5014.1	4940.3
55°	3996.7	4021.8	4120.8	4284.6	4470.4	4679.0	4880.1	5067.4	5215.9	5292.1	5253.3
57.5°	3445.3	3490.2	3594.6	3786.5	4059.9	4372.1	4692.7	5025.6	5327.9	5529.7	5568.5
60°	2640.3	2693.6	2798.7	3002.8	3307.5	3679.9	4107.9	4599.8	5133.7	5587.6	5858.7
62.5°	1693.7	1744.0	1854.4	2031.8	2280.1	2683.7	3143.0	3727.1	4444.5	5161.1	5806.9
65°	870.5	897.9	955.8	1063.1	1256.6	1558.2	1970.2	2552.8	3373.0	4257.1	5190.8
67.5°	551.4	556.7	569.6	584.9	634.4	738.7	930.6	1293.9	1968.6	2890.9	3983.7
70°	476.7	476.7	470.6	468.4	474.5	488.9	518.6	603.2	830.9	1372.3	2297.6
72.5°	436.4	431.8	421.1	412.8	411.2	411.2	417.3	430.3	466.8	559.0	899.4
75°	402.1	389.2	374.7	364.8	361.0	357.2	356.4	358.7	366.3	380.8	429.5
77.5°	360.2	343.5	326.7	316.8	312.2	306.9	302.3	297.0	293.2	297.8	319.1
80°	310.0	290.9	278.0	271.9	267.3	259.7	249.8	240.7	232.3	230.8	243.7
82.5°	249.8	227.7	228.5	230.8	222.4	211.7	201.1	191.2	176.7	169.1	176.7
85°	201.8	190.4	185.1	199.5	187.3	171.4	154.6	137.1	114.2	96.0	104.3
87.5°	78.4	78.4	117.3	180.5	162.2	132.5	113.5	96.7	60.2	46.5	47.2
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°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1790.4	1792.0	1791.2	1790.4	1790.4	1789.7	1790.4	1790.4
5°	1804.1	1808.0	1808.0	1809.5	1809.5	1810.2	1811.0	1810.2
7.5°	1824.7	1831.6	1836.1	1841.5	1842.2	1843.0	1844.5	1843.0
10°	1845.3	1859.0	1868.9	1878.8	1883.3	1884.9	1886.4	1886.4
12.5°	1871.2	1890.2	1907.7	1925.2	1933.6	1938.2	1938.2	1941.2
15°	1913.8	1932.8	1953.4	1977.0	1991.5	1999.1	2001.4	2001.4
17.5°	1974.0	1990.7	2008.2	2031.1	2049.4	2059.3	2061.6	2060.8
20°	2044.0	2060.0	2069.9	2084.4	2100.4	2111.8	2114.9	2114.9
22.5°	2124.0	2133.1	2134.7	2139.2	2152.2	2167.4	2174.3	2175.8
25°	2212.3	2214.6	2208.5	2208.5	2216.9	2231.4	2238.2	2239.0
27.5°	2326.6	2315.2	2299.9	2294.6	2299.9	2316.7	2325.1	2328.1
30°	2469.0	2441.6	2406.5	2387.5	2384.5	2406.5	2421.8	2424.1
32.5°	2632.0	2592.4	2545.9	2507.1	2497.2	2510.9	2529.1	2528.4
35°	2825.4	2778.2	2721.8	2672.3	2649.5	2663.2	2689.1	2692.1
37.5°	3048.5	2986.8	2922.1	2859.7	2823.9	2827.7	2855.1	2864.2
40°	3297.6	3217.6	3136.1	3052.3	3001.3	2991.4	3024.9	3030.3
42.5°	3564.1	3461.3	3358.5	3254.9	3189.4	3174.2	3213.0	3210.7
45°	3848.2	3717.2	3596.9	3482.6	3404.9	3382.1	3414.1	3414.1
47.5°	4153.6	3992.1	3848.9	3719.5	3634.9	3602.2	3632.7	3634.9
50°	4477.2	4305.9	4137.6	3993.6	3892.3	3850.5	3890.1	3896.2
52.5°	4799.4	4632.6	4462.8	4298.3	4175.6	4124.6	4170.3	4190.1
55°	5126.1	4962.3	4800.1	4639.4	4494.0	4433.8	4482.6	4507.7
57.5°	5471.1	5319.5	5164.9	5002.7	4862.6	4768.9	4820.7	4854.2
60°	5875.5	5746.0	5585.3	5406.3	5264.7	5169.5	5199.2	5228.9
62.5°	6195.3	6245.6	6109.3	5902.1	5720.1	5598.2	5627.2	5658.4
65°	6040.7	6556.3	6677.4	6468.0	6215.9	6026.2	6014.1	6030.1
67.5°	5049.2	6050.6	6781.0	6980.5	6769.5	6506.0	6457.3	6480.9
70°	3377.5	4625.0	5913.5	6873.1	7128.2	7026.2	6978.2	6992.7
72.5°	1622.1	2693.6	4011.9	5287.5	6064.3	6420.7	6535.0	6590.6
75°	593.3	1069.2	1933.6	2913.7	3517.7	4072.1	4433.8	4581.6
77.5°	357.9	431.8	617.6	929.9	1053.2	1178.9	1130.2	1154.5
80°	265.0	299.3	338.9	380.8	394.5	394.5	379.3	367.1
82.5°	185.8	207.9	226.9	249.8	255.9	244.5	201.1	159.9
85°	119.6	129.5	137.8	152.3	148.5	141.7	95.2	84.5
87.5°	54.8	62.4	65.5	72.3	69.3	66.3	47.2	39.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)