

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: P190793

Luminaire Tested: **GLEON-AF-05-LED-E1-5MQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190793
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: GLEON-AF-05-LED-E1-5MQ-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21063.6 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

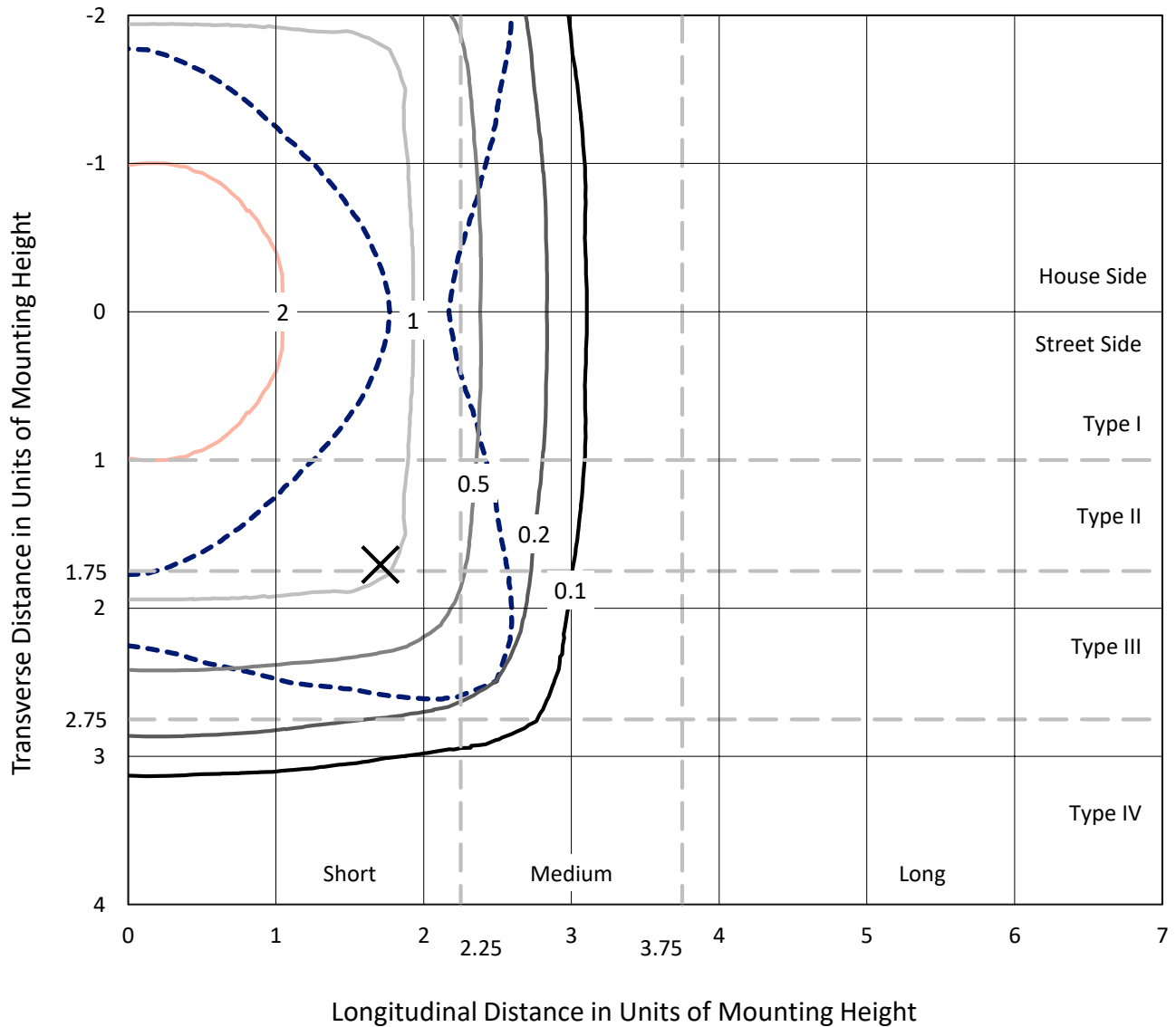
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

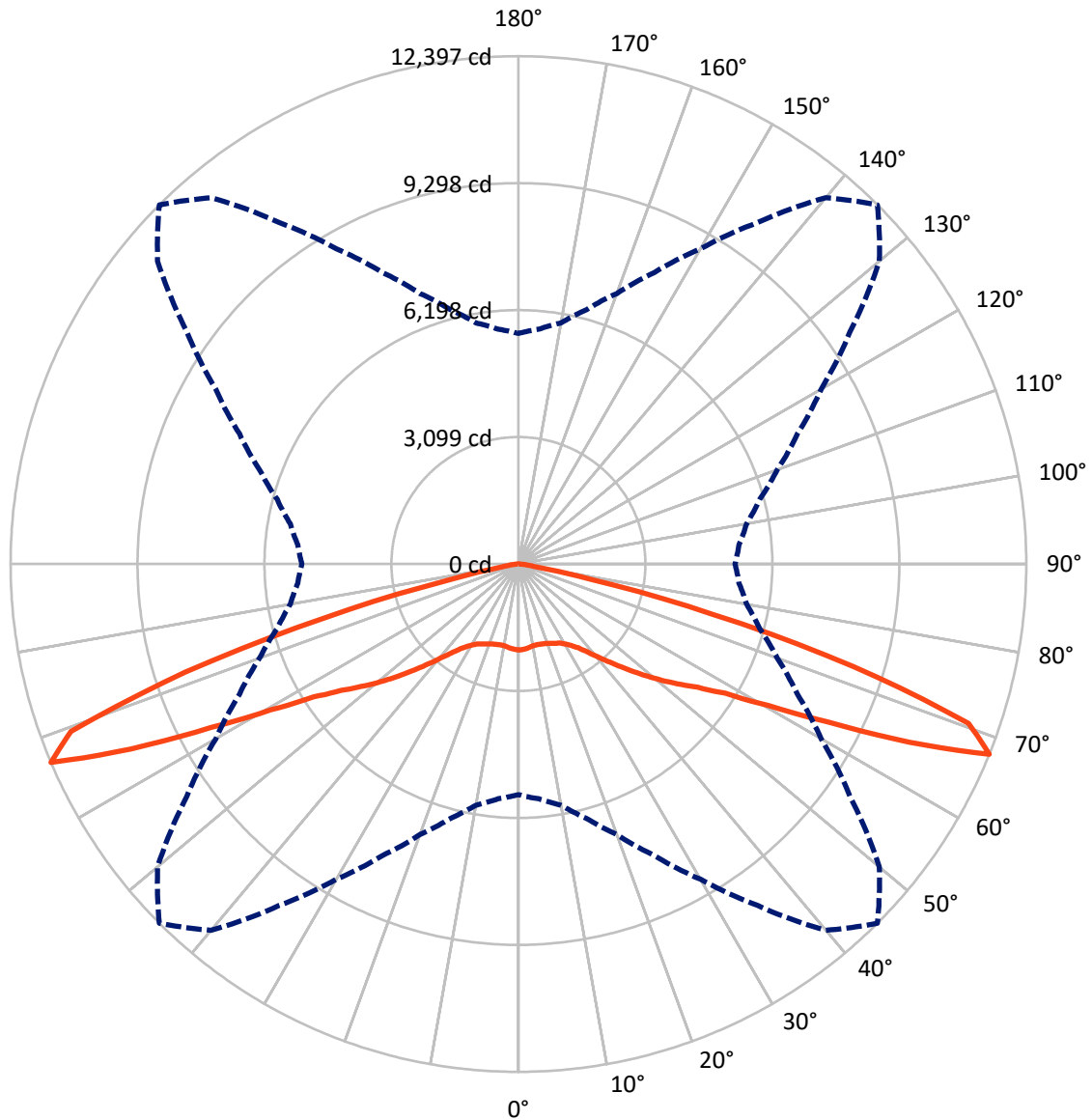
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10531.8	0.0	10531.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10531.8	0.0	10531.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	21063.6	0.0	21063.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.5	0.9
10°-20°	570.1	2.7
20°-30°	969.2	4.6
30°-40°	1584.3	7.5
40°-50°	2828.2	13.4
50°-60°	4768.5	22.6
60°-70°	7399.9	35.1
70°-80°	2600.0	12.3
80°-90°	146.9	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°	21063.6	100.0
0°-180°	21063.6	100.0



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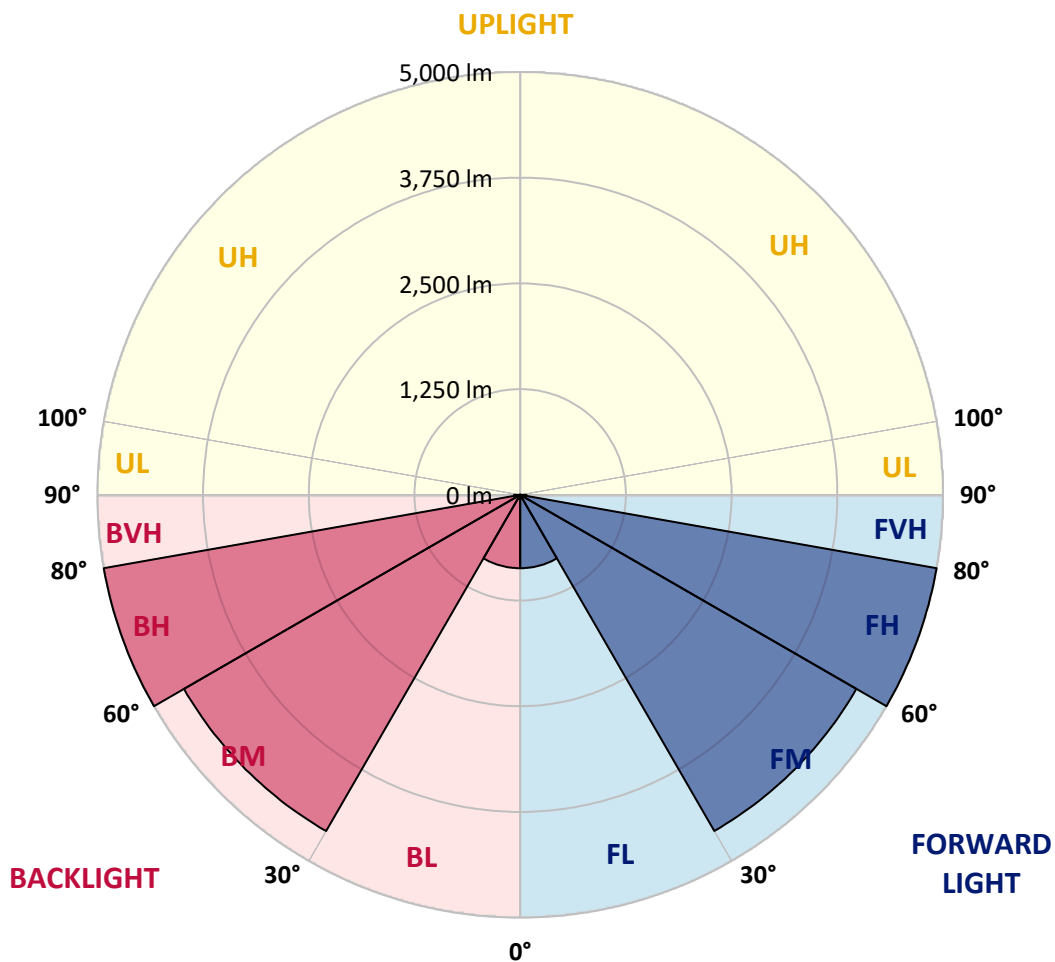
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	867.9	4.1			
FM	(30°-60°)	4590.5	21.8			
FH	(60°-80°)	5000.0	23.7			G2/5000
FVH	(80°-90°)	73.5	0.3			G1/100
BL	(0°-30°)	867.9	4.1	B2/1000		
BM	(30°-60°)	4590.5	21.8	B3/5000		
BH	(60°-80°)	5000.0	23.7	B4/5000		G2/5000
BVH	(80°-90°)	73.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1
2.5°	2091.3	2093.3	2093.3	2093.3	2092.3	2092.3	2090.4	2092.3	2091.3	2088.5	2089.4
5°	2073.9	2075.9	2075.9	2074.9	2077.7	2076.8	2073.9	2075.9	2074.9	2072.9	2073.9
7.5°	2048.7	2051.6	2051.6	2050.6	2053.6	2052.6	2050.6	2051.6	2051.6	2048.7	2048.7
10°	2020.6	2022.6	2022.6	2021.6	2026.5	2026.5	2025.4	2028.4	2029.3	2026.5	2024.5
12.5°	1994.4	1997.4	1997.4	2001.2	2006.1	2008.1	2012.9	2016.7	2020.6	2019.6	2015.7
15°	1979.0	1980.9	1984.7	1989.6	1997.4	2004.2	2011.9	2020.6	2028.4	2030.3	2024.5
17.5°	1969.3	1972.1	1978.0	1984.7	1995.5	2007.0	2018.7	2030.3	2041.0	2044.9	2038.0
20°	1966.4	1968.3	1974.1	1985.8	2000.3	2017.7	2034.1	2047.7	2062.3	2067.1	2062.3
22.5°	1972.1	1976.0	1982.8	1996.4	2015.7	2038.0	2057.5	2075.9	2094.2	2103.0	2096.1
25°	1998.3	2002.2	2010.9	2028.4	2049.7	2072.9	2095.2	2116.5	2133.0	2141.6	2136.8
27.5°	2046.7	2051.6	2062.3	2079.7	2103.0	2128.1	2152.4	2169.8	2183.4	2186.3	2180.4
30°	2119.5	2130.1	2142.7	2162.0	2189.1	2210.5	2234.6	2250.2	2266.7	2266.7	2261.8
32.5°	2232.8	2243.4	2256.9	2275.3	2296.7	2320.0	2341.2	2354.8	2372.2	2373.2	2361.6
35°	2402.3	2407.1	2418.8	2430.3	2449.8	2470.1	2488.4	2497.2	2511.8	2512.7	2502.0
37.5°	2626.0	2627.0	2634.7	2638.6	2656.1	2678.3	2695.8	2701.6	2715.1	2713.2	2702.5
40°	2886.6	2891.5	2894.3	2900.2	2918.6	2939.9	2958.3	2961.1	2975.7	2972.8	2959.2
42.5°	3187.8	3189.8	3206.2	3214.9	3232.4	3243.1	3266.3	3269.2	3286.6	3278.9	3263.4
45°	3525.9	3543.3	3558.8	3576.2	3594.6	3607.2	3625.6	3621.8	3633.4	3621.8	3613.1
47.5°	3881.4	3894.0	3928.8	3956.0	3986.0	3996.7	4022.9	4011.2	4022.9	4006.4	4003.4
50°	4272.8	4295.1	4325.0	4356.0	4388.0	4405.4	4439.3	4424.8	4440.3	4424.8	4416.1
52.5°	4658.2	4664.0	4729.9	4775.4	4820.0	4840.4	4860.8	4853.9	4854.9	4853.9	4845.2
55°	5024.4	5037.9	5103.8	5165.8	5243.3	5300.5	5335.3	5331.5	5322.7	5314.0	5299.5
57.5°	5437.1	5450.6	5526.2	5602.7	5690.9	5772.2	5842.9	5915.6	5943.7	5951.4	5919.4
60°	5995.0	5994.1	6094.7	6187.7	6313.7	6434.8	6589.7	6747.7	6928.8	7013.0	6901.6
62.5°	6562.6	6585.9	6731.2	6895.8	7155.4	7408.3	7694.0	7974.9	8261.7	8495.1	8247.1
65°	6494.8	6583.9	6800.0	7172.9	7652.4	8222.0	8838.0	9489.9	10078.8	10483.7	10029.4
67.5°	5628.9	5755.7	5975.7	6428.9	7028.6	7850.0	8884.5	10173.8	11672.3	12396.8	11498.9
70°	4079.9	4223.4	4453.8	4896.6	5490.4	6271.1	7394.7	8942.6	10926.4	11656.8	10667.8
72.5°	2030.3	2107.8	2250.2	2532.1	2981.5	3615.0	4634.1	6121.8	7877.1	8547.4	7643.7
75°	689.7	725.5	749.7	841.8	984.2	1233.1	1739.7	2676.3	4082.9	4894.6	4024.8
77.5°	398.1	399.1	415.5	432.0	456.2	483.3	551.2	723.6	1251.5	1777.5	1295.1
80°	257.7	256.7	270.3	282.8	299.3	312.9	316.7	335.1	386.5	458.2	409.7
82.5°	133.7	150.2	180.1	196.6	227.6	233.4	225.7	218.9	231.5	240.2	246.0
85°	73.7	63.9	95.9	124.0	137.6	139.5	139.5	131.8	136.6	133.7	145.3
87.5°	33.9	31.0	37.7	61.1	64.9	55.2	58.1	51.4	36.8	35.8	40.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1	2099.1
2.5°	2089.4	2090.4	2090.4	2093.3	2094.2	2096.1	2098.1	2099.1
5°	2072.9	2075.9	2073.9	2076.8	2076.8	2078.7	2078.7	2079.7
7.5°	2048.7	2051.6	2051.6	2051.6	2050.6	2053.6	2053.6	2053.6
10°	2023.5	2025.4	2024.5	2022.6	2020.6	2023.5	2022.6	2021.6
12.5°	2015.7	2010.9	2007.0	2005.1	2001.2	2002.2	1999.3	1999.3
15°	2020.6	2011.9	2005.1	2002.2	1998.3	1996.4	1994.4	1995.5
17.5°	2033.2	2022.6	2013.9	2009.0	2004.2	2001.2	1997.4	1998.3
20°	2055.5	2042.9	2030.3	2020.6	2011.9	2007.0	2004.2	2003.1
22.5°	2088.5	2070.0	2051.6	2037.1	2025.4	2018.7	2015.7	2013.9
25°	2126.2	2105.8	2084.6	2068.1	2056.4	2047.7	2041.9	2041.9
27.5°	2173.7	2157.2	2137.9	2118.4	2107.8	2099.1	2095.2	2093.3
30°	2253.0	2237.6	2222.1	2203.6	2190.1	2181.4	2174.6	2168.9
32.5°	2354.8	2342.3	2329.6	2316.1	2303.5	2291.8	2281.2	2276.4
35°	2498.1	2488.4	2479.7	2464.3	2459.4	2452.6	2446.8	2442.0
37.5°	2695.8	2691.9	2691.9	2675.4	2671.5	2668.7	2662.8	2663.8
40°	2955.4	2959.2	2954.4	2948.6	2945.7	2937.9	2937.9	2944.7
42.5°	3262.4	3265.4	3276.0	3266.3	3276.9	3267.3	3261.5	3266.3
45°	3618.9	3629.5	3650.8	3641.2	3647.9	3631.5	3611.1	3612.1
47.5°	4019.0	4028.6	4037.4	4030.5	4031.6	4004.4	3977.3	3970.5
50°	4434.5	4438.4	4443.2	4433.6	4435.5	4405.4	4374.4	4375.4
52.5°	4845.2	4863.6	4883.0	4856.9	4851.0	4817.1	4773.5	4756.1
55°	5315.0	5341.1	5318.8	5273.3	5227.8	5182.3	5125.2	5115.5
57.5°	5894.2	5849.7	5780.0	5693.7	5630.8	5566.9	5508.7	5484.6
60°	6700.2	6532.6	6406.6	6278.8	6198.5	6120.0	6043.4	6031.8
62.5°	7839.3	7549.7	7298.9	7034.3	6818.4	6649.8	6515.2	6477.4
65°	9267.1	8582.3	7988.5	7434.4	6953.0	6589.7	6361.1	6260.5
67.5°	9881.3	8529.0	7510.9	6724.4	6094.7	5655.0	5408.0	5285.0
70°	8683.0	7073.1	5966.0	5178.4	4605.0	4136.2	3912.4	3780.6
72.5°	5973.7	4499.4	3557.8	2904.1	2445.9	2053.6	1898.6	1886.9
75°	2682.2	1776.6	1224.4	943.5	794.3	690.7	658.7	634.4
77.5°	750.7	555.1	495.0	463.0	432.0	396.2	382.6	385.6
80°	365.2	344.8	331.2	311.0	282.8	252.8	239.3	245.1
82.5°	242.1	239.3	248.0	233.4	192.7	163.7	137.6	125.9
85°	147.2	149.1	152.1	153.0	129.8	91.0	62.0	69.8
87.5°	58.1	66.8	72.6	75.6	70.7	43.6	34.9	35.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)