

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: P190802

Luminaire Tested: **GLEON-AF-04-LED-E1-5MQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190802
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-04-LED-E1-5MQ-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20847.8 lumens
Efficiency: N/A
Efficacy: 121.9 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

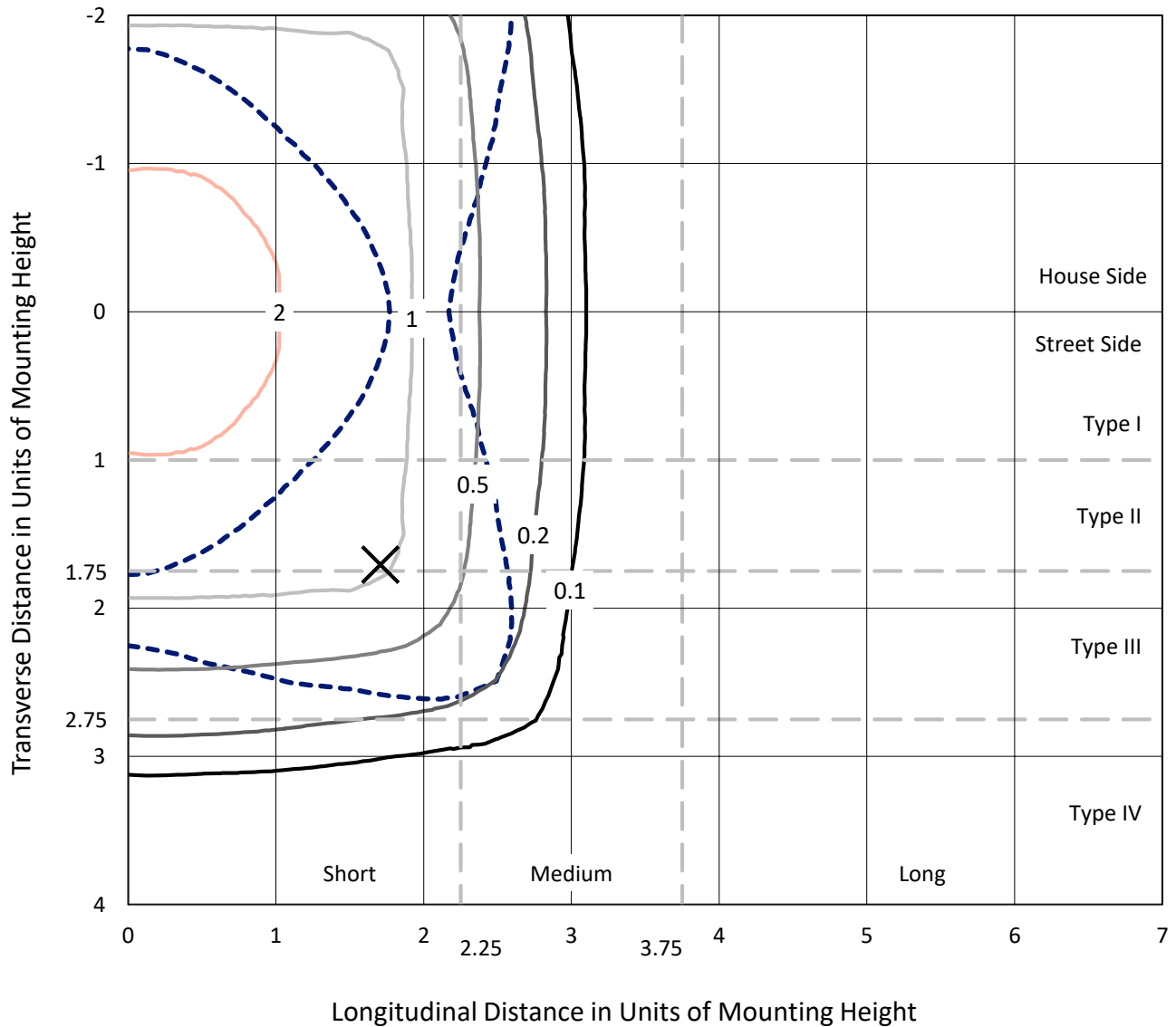
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

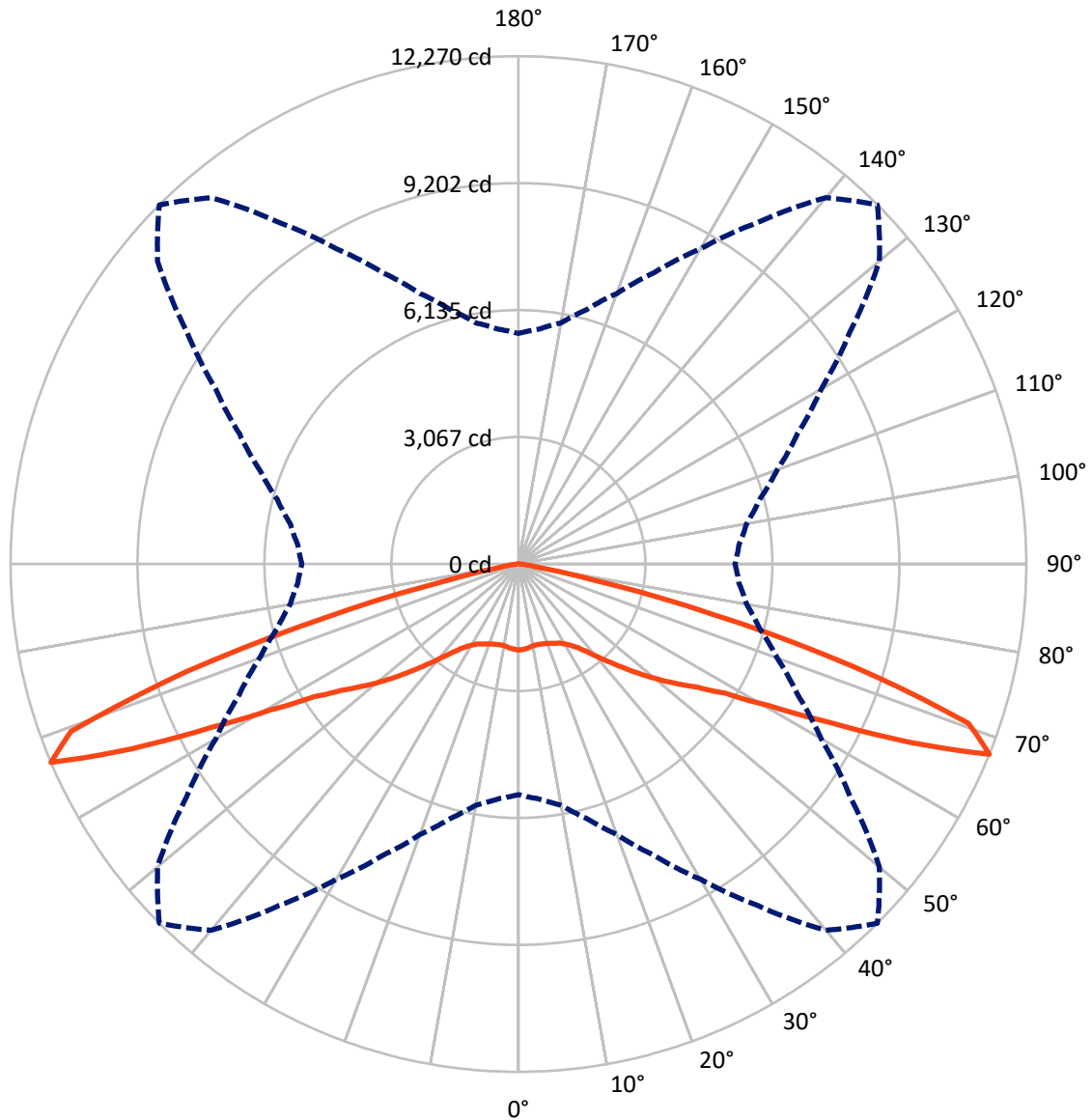
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	10423.9	0.0	10423.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10423.9	0.0	10423.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	20847.8	0.0	20847.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	0.9
10°-20°	564.3	2.7
20°-30°	959.2	4.6
30°-40°	1568.0	7.5
40°-50°	2799.2	13.4
50°-60°	4719.6	22.6
60°-70°	7324.1	35.1
70°-80°	2573.4	12.3
80°-90°	145.4	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°	20847.8	100.0
0°-180°	20847.8	100.0



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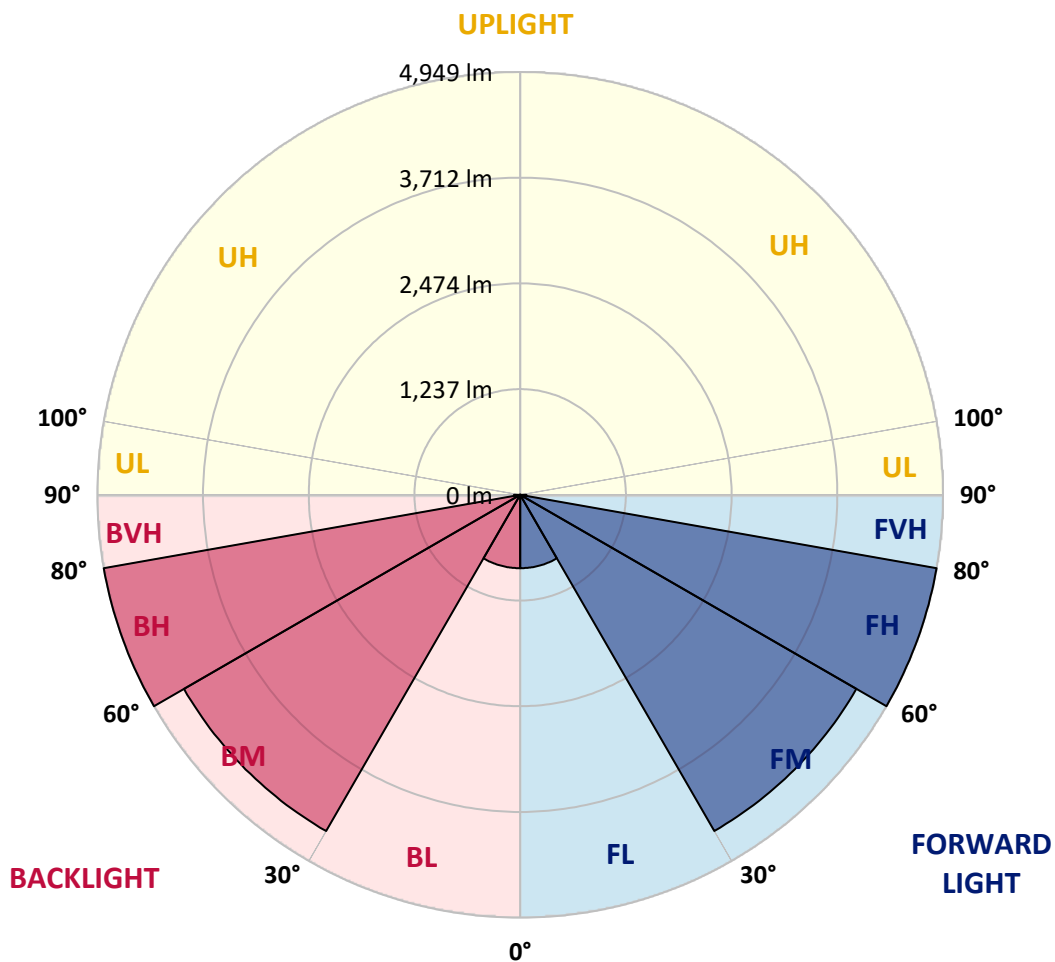
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	859.0	4.1			
FM	(30°-60°)	4543.4	21.8			
FH	(60°-80°)	4948.7	23.7			G2/5000
FVH	(80°-90°)	72.7	0.3			G1/100
BL	(0°-30°)	859.0	4.1	B2/1000		
BM	(30°-60°)	4543.4	21.8	B3/5000		
BH	(60°-80°)	4948.7	23.7	B4/5000		G2/5000
BVH	(80°-90°)	72.7	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°	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6
2.5°	2069.9	2071.8	2071.8	2071.8	2070.9	2070.9	2068.9	2070.9	2069.9	2067.0	2068.0
5°	2052.7	2054.6	2054.6	2053.6	2056.4	2055.5	2052.7	2054.6	2053.6	2051.6	2052.7
7.5°	2027.7	2030.6	2030.6	2029.6	2032.5	2031.6	2029.6	2030.6	2030.6	2027.7	2027.7
10°	1999.9	2001.8	2001.8	2000.9	2005.7	2005.7	2004.7	2007.5	2008.6	2005.7	2003.8
12.5°	1974.0	1976.9	1976.9	1980.7	1985.5	1987.5	1992.2	1996.1	1999.9	1998.9	1995.2
15°	1958.6	1960.6	1964.5	1969.2	1976.9	1983.6	1991.3	1999.9	2007.5	2009.5	2003.8
17.5°	1949.1	1952.0	1957.7	1964.5	1975.0	1986.5	1998.0	2009.5	2020.0	2023.9	2017.2
20°	1946.3	1948.1	1953.9	1965.4	1979.8	1997.0	2013.4	2026.8	2041.1	2045.9	2041.1
22.5°	1952.0	1955.8	1962.5	1975.9	1995.2	2017.2	2036.4	2054.6	2072.8	2081.4	2074.6
25°	1977.9	1981.7	1990.4	2007.5	2028.7	2051.6	2073.7	2094.8	2111.2	2119.8	2115.0
27.5°	2025.7	2030.6	2041.1	2058.4	2081.4	2106.4	2130.3	2147.6	2161.0	2163.8	2158.1
30°	2097.7	2108.2	2120.7	2139.9	2166.7	2187.8	2211.8	2227.2	2243.4	2243.4	2238.6
32.5°	2209.9	2220.4	2233.8	2252.0	2273.1	2296.1	2317.3	2330.7	2347.9	2348.9	2337.3
35°	2377.6	2382.5	2393.9	2405.5	2424.6	2444.8	2463.0	2471.6	2486.0	2486.9	2476.4
37.5°	2599.1	2600.0	2607.7	2611.6	2628.9	2650.9	2668.2	2673.9	2687.3	2685.3	2674.8
40°	2857.0	2861.8	2864.7	2870.4	2888.6	2909.8	2928.0	2930.9	2945.2	2942.3	2928.9
42.5°	3155.2	3157.1	3173.4	3182.0	3199.3	3209.8	3232.8	3235.7	3253.0	3245.3	3230.0
45°	3489.8	3507.0	3522.3	3539.6	3557.8	3570.3	3588.5	3584.7	3596.2	3584.7	3576.0
47.5°	3841.6	3854.1	3888.6	3915.4	3945.2	3955.8	3981.6	3970.1	3981.6	3965.3	3962.4
50°	4229.0	4251.0	4280.7	4311.4	4343.0	4360.3	4393.9	4379.5	4394.8	4379.5	4370.9
52.5°	4610.5	4616.3	4681.4	4726.5	4770.6	4790.8	4810.9	4804.2	4805.1	4804.2	4795.6
55°	4973.0	4986.4	5051.5	5112.9	5189.6	5246.2	5280.7	5276.9	5268.2	5259.6	5245.2
57.5°	5381.3	5394.7	5469.5	5545.3	5632.6	5713.1	5783.0	5855.0	5882.8	5890.5	5858.7
60°	5933.5	5932.6	6032.3	6124.4	6249.0	6368.8	6522.2	6678.5	6857.8	6941.2	6831.0
62.5°	6495.4	6518.4	6662.2	6825.2	7082.1	7332.3	7615.2	7893.2	8177.0	8408.0	8162.6
65°	6428.3	6516.5	6730.3	7099.4	7573.9	8137.7	8747.5	9392.6	9975.6	10376.3	9926.7
67.5°	5571.2	5696.8	5914.4	6363.1	6956.6	7769.5	8793.5	10069.5	11552.7	12269.8	11381.0
70°	4038.2	4180.1	4408.2	4846.3	5434.1	6206.9	7318.9	8851.0	10814.4	11537.4	10558.5
72.5°	2009.5	2086.2	2227.2	2506.1	2951.0	3578.0	4586.6	6059.1	7796.4	8459.8	7565.3
75°	682.6	718.1	742.0	833.1	974.1	1220.5	1721.8	2648.9	4041.1	4844.5	3983.5
77.5°	394.0	395.0	411.3	427.6	451.5	478.4	545.5	716.2	1238.7	1759.3	1281.9
80°	255.0	254.1	267.5	280.0	296.2	309.6	313.5	331.7	382.6	453.5	405.5
82.5°	132.3	148.6	178.3	194.7	225.3	231.1	223.4	216.7	229.1	237.7	243.6
85°	72.8	63.3	94.9	122.8	136.2	138.1	138.1	130.4	135.1	132.3	143.8
87.5°	33.6	30.7	37.4	60.4	64.2	54.6	57.5	50.8	36.4	35.5	40.3
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°	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6	2077.6
2.5°	2068.0	2068.9	2068.9	2071.8	2072.8	2074.6	2076.6	2077.6
5°	2051.6	2054.6	2052.7	2055.5	2055.5	2057.5	2057.5	2058.4
7.5°	2027.7	2030.6	2030.6	2030.6	2029.6	2032.5	2032.5	2032.5
10°	2002.7	2004.7	2003.8	2001.8	1999.9	2002.7	2001.8	2000.9
12.5°	1995.2	1990.4	1986.5	1984.5	1980.7	1981.7	1978.8	1978.8
15°	1999.9	1991.3	1984.5	1981.7	1977.9	1975.9	1974.0	1975.0
17.5°	2012.3	2001.8	1993.2	1988.4	1983.6	1980.7	1976.9	1977.9
20°	2034.4	2022.0	2009.5	1999.9	1991.3	1986.5	1983.6	1982.7
22.5°	2067.0	2048.8	2030.6	2016.2	2004.7	1998.0	1995.2	1993.2
25°	2104.4	2084.3	2063.2	2046.9	2035.4	2026.8	2021.0	2021.0
27.5°	2151.4	2135.1	2115.9	2096.7	2086.2	2077.6	2073.7	2071.8
30°	2230.0	2214.7	2199.3	2181.1	2167.7	2159.0	2152.4	2146.6
32.5°	2330.7	2318.2	2305.7	2292.3	2279.9	2268.4	2257.9	2253.0
35°	2472.6	2463.0	2454.4	2439.0	2434.2	2427.5	2421.7	2416.9
37.5°	2668.2	2664.3	2664.3	2648.0	2644.1	2641.3	2635.5	2636.6
40°	2925.1	2928.9	2924.1	2918.4	2915.5	2907.8	2907.8	2914.5
42.5°	3229.0	3231.9	3242.4	3232.8	3243.4	3233.8	3228.0	3232.8
45°	3581.8	3592.4	3613.5	3603.9	3610.6	3594.2	3574.2	3575.1
47.5°	3977.7	3987.4	3996.0	3989.3	3990.2	3963.4	3936.5	3929.9
50°	4389.1	4392.9	4397.7	4388.2	4390.0	4360.3	4329.6	4330.6
52.5°	4795.6	4813.8	4832.9	4807.1	4801.3	4767.8	4724.6	4707.3
55°	5260.5	5286.4	5264.4	5219.3	5174.3	5129.2	5072.6	5063.1
57.5°	5833.9	5789.8	5720.8	5635.4	5573.1	5509.8	5452.3	5428.3
60°	6631.5	6465.7	6341.1	6214.5	6134.9	6057.2	5981.5	5970.0
62.5°	7759.0	7472.3	7224.0	6962.3	6748.5	6581.7	6448.4	6411.0
65°	9172.2	8494.4	7906.6	7358.3	6881.8	6522.2	6296.0	6196.2
67.5°	9780.0	8441.6	7434.0	6655.5	6032.3	5597.1	5352.6	5230.9
70°	8594.0	7000.7	5904.8	5125.4	4557.8	4093.7	3872.3	3742.0
72.5°	5912.5	4453.3	3521.4	2874.3	2420.8	2032.5	1879.1	1867.6
75°	2654.8	1758.4	1211.8	933.9	786.1	683.5	651.9	628.0
77.5°	743.0	549.3	489.9	458.3	427.6	392.1	378.7	381.6
80°	361.4	341.3	327.9	307.7	280.0	250.2	236.8	242.5
82.5°	239.7	236.8	245.4	231.1	190.8	162.0	136.2	124.6
85°	145.8	147.6	150.5	151.5	128.5	90.1	61.4	69.0
87.5°	57.5	66.2	71.9	74.8	70.0	43.2	34.5	35.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)