

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: P191602

Luminaire Tested: **GLEON-AF-04-LED-E1-5MQ-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191602  
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-7050-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 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: 20380 lumens  
Efficiency: N/A  
Efficacy: 119.2 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

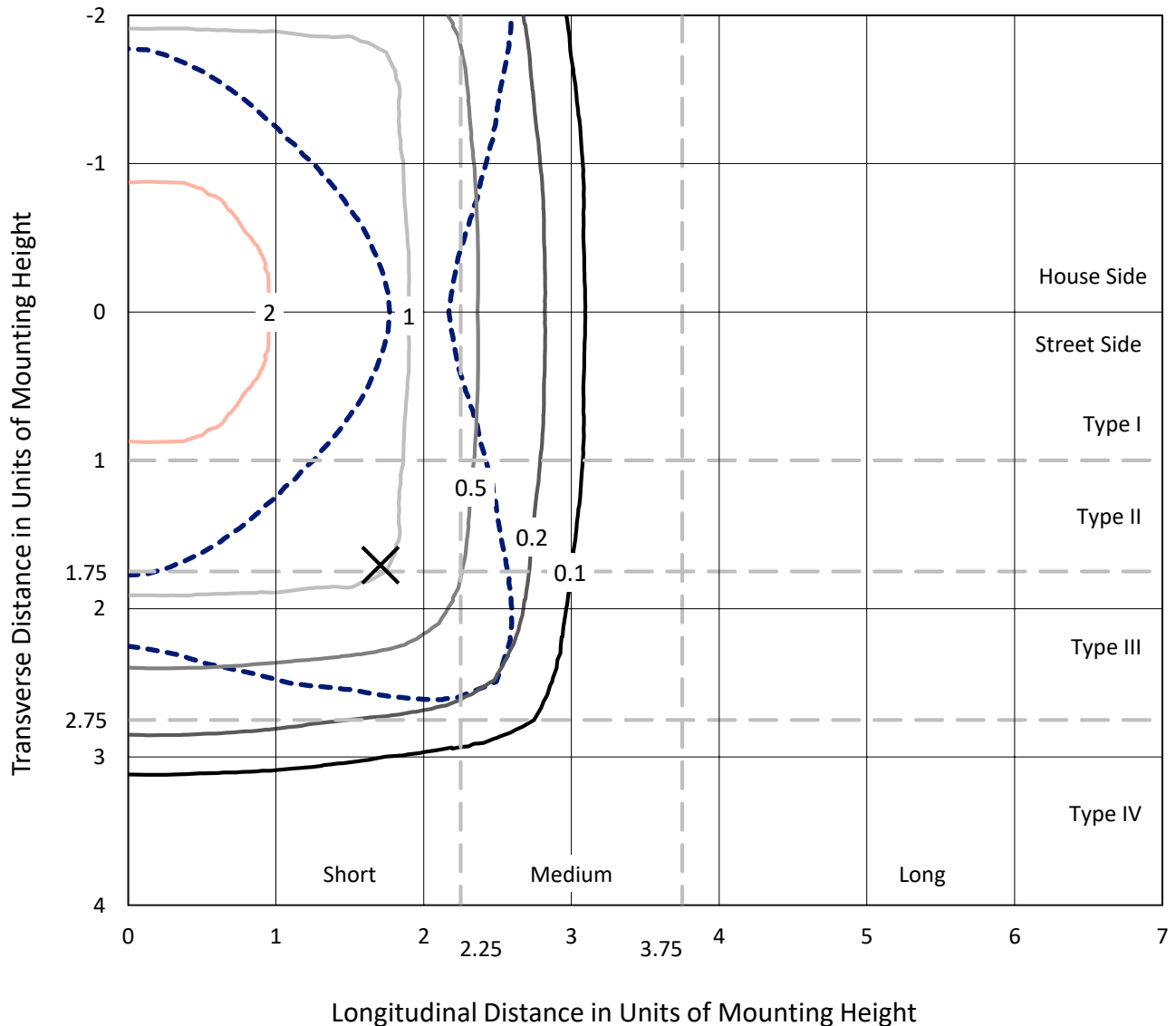


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### Iso-Footcandle Lines of Horizontal Illumination

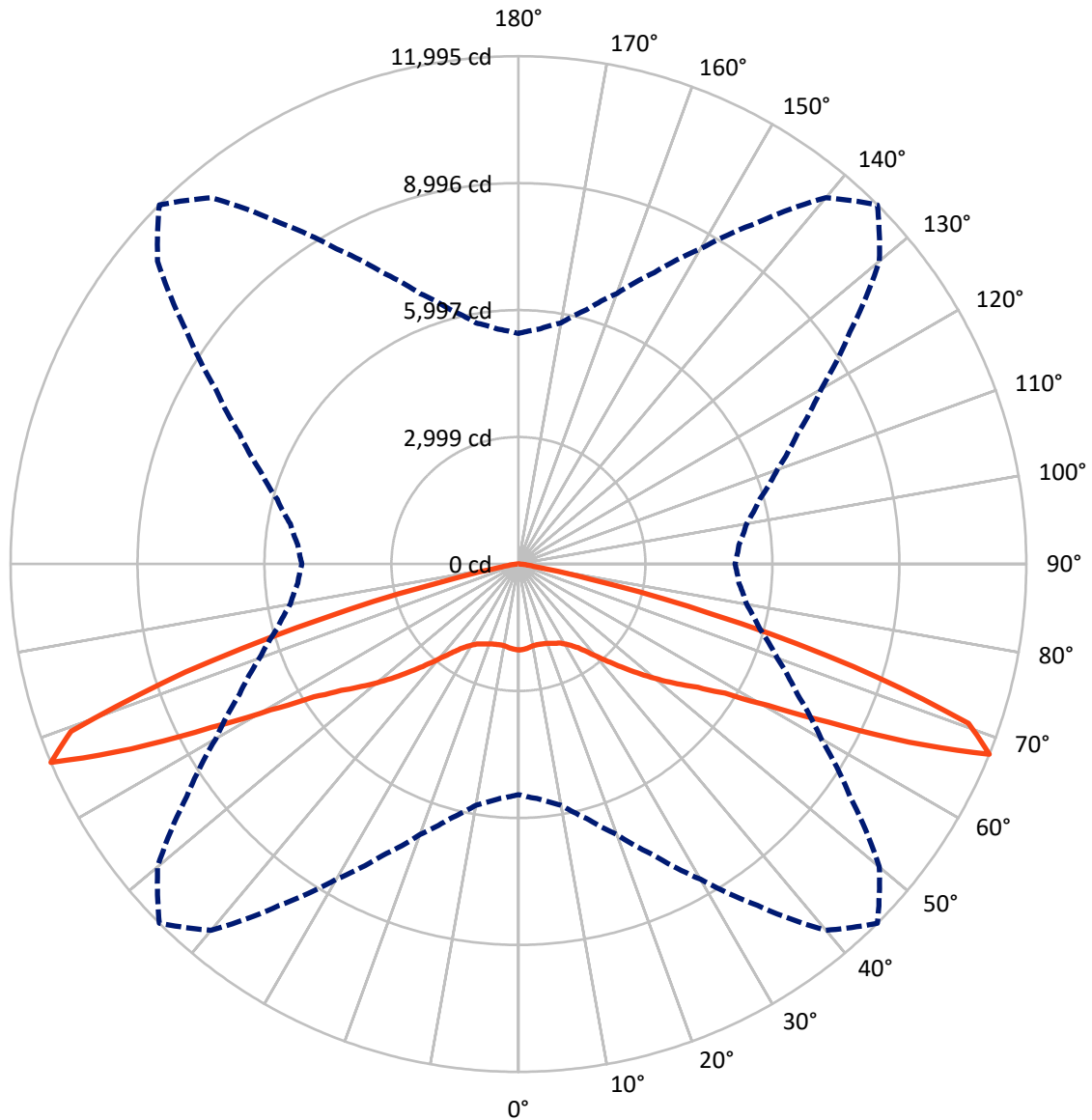
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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
<b>House Side</b>	Lumens	10190.0	0.0	10190.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10190.0	0.0	10190.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	20380.0	0.0	20380.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.1	0.9
10°-20°	551.6	2.7
20°-30°	937.7	4.6
30°-40°	1532.9	7.5
40°-50°	2736.4	13.4
50°-60°	4613.7	22.6
60°-70°	7159.8	35.1
70°-80°	2515.6	12.3
80°-90°	142.2	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°	20380.0	100.0
0°-180°	20380.0	100.0



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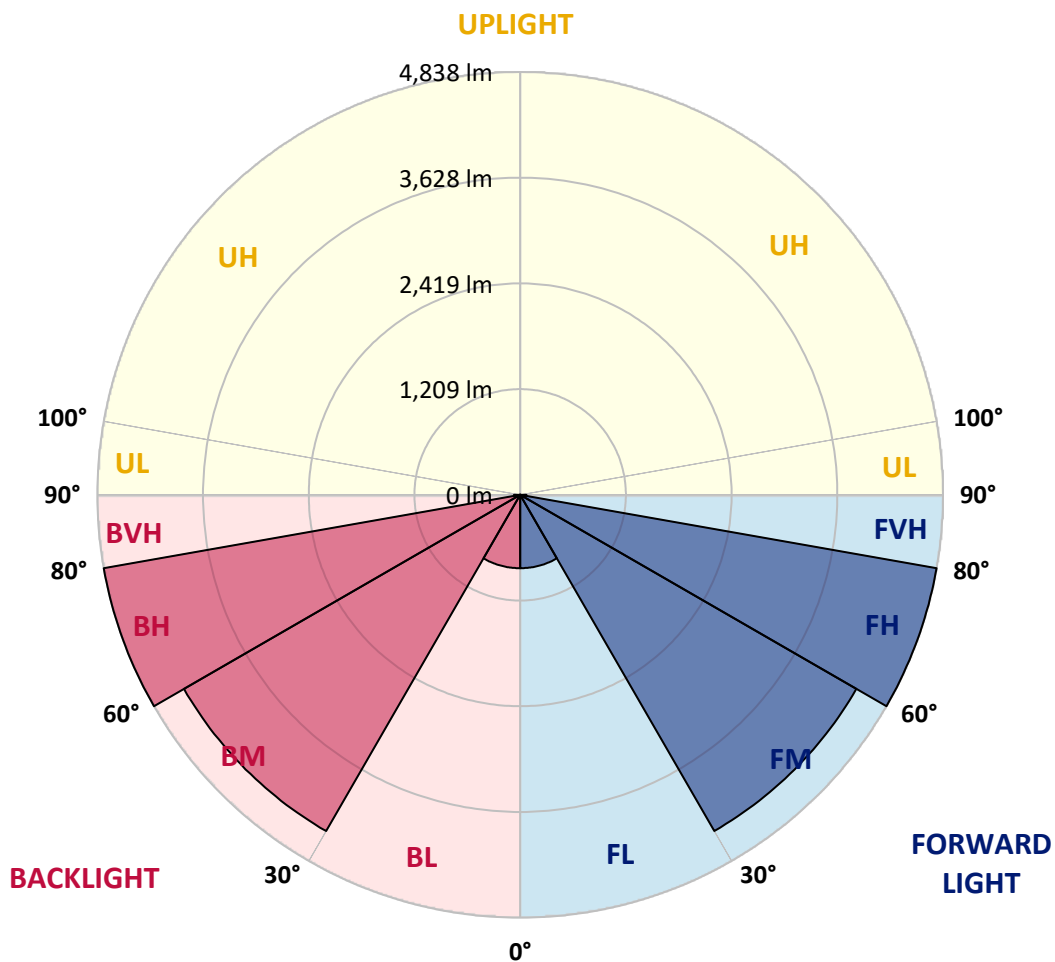
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	839.7	4.1			
FM	(30°-60°)	4441.5	21.8			
FH	(60°-80°)	4837.7	23.7			G2/5000
FVH	(80°-90°)	71.1	0.3			G1/100
BL	(0°-30°)	839.7	4.1	B2/1000		
BM	(30°-60°)	4441.5	21.8	B3/5000		
BH	(60°-80°)	4837.7	23.7	B4/5000		G2/5000
BVH	(80°-90°)	71.1	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°	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0
2.5°	2023.5	2025.3	2025.3	2025.3	2024.4	2024.4	2022.5	2024.4	2023.5	2020.6	2021.6
5°	2006.6	2008.5	2008.5	2007.5	2010.3	2009.4	2006.6	2008.5	2007.5	2005.6	2006.6
7.5°	1982.2	1985.0	1985.0	1984.1	1986.9	1986.0	1984.1	1985.0	1985.0	1982.2	1982.2
10°	1955.0	1956.9	1956.9	1956.0	1960.7	1960.7	1959.7	1962.5	1963.5	1960.7	1958.8
12.5°	1929.7	1932.5	1932.5	1936.3	1941.0	1942.9	1947.5	1951.3	1955.0	1954.1	1950.4
15°	1914.7	1916.6	1920.4	1925.0	1932.5	1939.1	1946.6	1955.0	1962.5	1964.4	1958.8
17.5°	1905.4	1908.2	1913.8	1920.4	1930.7	1941.9	1953.2	1964.4	1974.7	1978.5	1971.9
20°	1902.6	1904.4	1910.1	1921.3	1935.4	1952.2	1968.2	1981.3	1995.3	2000.0	1995.3
22.5°	1908.2	1911.9	1918.5	1931.6	1950.4	1971.9	1990.7	2008.5	2026.3	2034.7	2028.1
25°	1933.5	1937.2	1945.7	1962.5	1983.2	2005.6	2027.2	2047.8	2063.8	2072.2	2067.5
27.5°	1980.3	1985.0	1995.3	2012.2	2034.7	2059.1	2082.5	2099.4	2112.5	2115.3	2109.7
30°	2050.6	2060.9	2073.1	2091.9	2118.1	2138.7	2162.2	2177.2	2193.1	2193.1	2188.4
32.5°	2160.3	2170.6	2183.7	2201.5	2222.1	2244.6	2265.3	2278.4	2295.2	2296.2	2284.9
35°	2324.3	2329.0	2340.2	2351.5	2370.2	2389.9	2407.7	2416.1	2430.2	2431.1	2420.8
37.5°	2540.8	2541.7	2549.2	2553.0	2569.9	2591.4	2608.3	2613.9	2627.0	2625.1	2614.8
40°	2792.9	2797.6	2800.4	2806.0	2823.8	2844.5	2862.3	2865.1	2879.1	2876.3	2863.2
42.5°	3084.4	3086.3	3102.2	3110.6	3127.5	3137.8	3160.3	3163.1	3180.0	3172.5	3157.5
45°	3411.5	3428.3	3443.3	3460.2	3478.0	3490.2	3508.0	3504.3	3515.5	3504.3	3495.8
47.5°	3755.4	3767.6	3801.4	3827.6	3856.7	3867.0	3892.3	3881.0	3892.3	3876.3	3873.5
50°	4134.1	4155.6	4184.7	4214.7	4245.6	4262.5	4295.3	4281.2	4296.2	4281.2	4272.8
52.5°	4507.1	4512.7	4576.4	4620.5	4663.6	4683.3	4703.0	4696.4	4697.3	4696.4	4688.0
55°	4861.4	4874.5	4938.2	4998.2	5073.2	5128.5	5162.2	5158.5	5150.0	5141.6	5127.5
57.5°	5260.6	5273.7	5346.8	5420.9	5506.2	5584.9	5653.3	5723.6	5750.8	5758.3	5727.3
60°	5800.4	5799.5	5897.0	5987.0	6108.8	6225.9	6375.9	6528.7	6703.9	6785.5	6677.7
62.5°	6349.7	6372.2	6512.7	6672.1	6923.2	7167.8	7444.3	7716.1	7993.5	8219.4	7979.5
65°	6284.1	6370.3	6579.3	6940.1	7404.0	7955.1	8551.2	9181.9	9751.8	10143.5	9704.0
67.5°	5446.2	5569.0	5781.7	6220.3	6800.5	7595.2	8596.2	9843.6	11293.5	11994.5	11125.7
70°	3947.6	4086.3	4309.3	4737.6	5312.2	6067.6	7154.7	8652.4	10571.8	11278.5	10321.6
72.5°	1964.4	2039.4	2177.2	2449.9	2884.8	3497.7	4483.7	5923.2	7621.5	8270.0	7395.6
75°	667.3	702.0	725.4	814.4	952.2	1193.1	1683.2	2589.5	3950.4	4735.8	3894.1
77.5°	385.2	386.1	402.1	418.0	441.4	467.7	533.3	700.1	1210.9	1719.8	1253.1
80°	249.3	248.4	261.5	273.7	289.6	302.7	306.5	324.3	374.0	443.3	396.4
82.5°	129.3	145.3	174.3	190.3	220.2	225.9	218.4	211.8	224.0	232.4	238.1
85°	71.2	61.9	92.8	120.0	133.1	135.0	135.0	127.5	132.1	129.3	140.6
87.5°	32.8	30.0	36.6	59.0	62.8	53.4	56.2	49.7	35.6	34.7	39.4
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°	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0	2031.0
2.5°	2021.6	2022.5	2022.5	2025.3	2026.3	2028.1	2030.0	2031.0
5°	2005.6	2008.5	2006.6	2009.4	2009.4	2011.3	2011.3	2012.2
7.5°	1982.2	1985.0	1985.0	1985.0	1984.1	1986.9	1986.9	1986.9
10°	1957.8	1959.7	1958.8	1956.9	1955.0	1957.8	1956.9	1956.0
12.5°	1950.4	1945.7	1941.9	1940.0	1936.3	1937.2	1934.4	1934.4
15°	1955.0	1946.6	1940.0	1937.2	1933.5	1931.6	1929.7	1930.7
17.5°	1967.2	1956.9	1948.5	1943.8	1939.1	1936.3	1932.5	1933.5
20°	1988.8	1976.6	1964.4	1955.0	1946.6	1941.9	1939.1	1938.2
22.5°	2020.6	2002.8	1985.0	1971.0	1959.7	1953.2	1950.4	1948.5
25°	2057.2	2037.5	2016.9	2001.0	1989.7	1981.3	1975.7	1975.7
27.5°	2103.1	2087.2	2068.4	2049.7	2039.4	2031.0	2027.2	2025.3
30°	2180.0	2165.0	2150.0	2132.2	2119.1	2110.6	2104.1	2098.4
32.5°	2278.4	2266.2	2254.0	2240.9	2228.7	2217.5	2207.2	2202.5
35°	2417.1	2407.7	2399.3	2384.3	2379.6	2373.0	2367.4	2362.7
37.5°	2608.3	2604.5	2604.5	2588.6	2584.8	2582.0	2576.4	2577.4
40°	2859.5	2863.2	2858.5	2852.9	2850.1	2842.6	2842.6	2849.1
42.5°	3156.6	3159.4	3169.7	3160.3	3170.6	3161.2	3155.6	3160.3
45°	3501.4	3511.8	3532.4	3523.0	3529.6	3513.6	3494.0	3494.9
47.5°	3888.5	3897.9	3906.3	3899.8	3900.7	3874.5	3848.2	3841.7
50°	4290.6	4294.3	4299.0	4289.7	4291.5	4262.5	4232.5	4233.4
52.5°	4688.0	4705.8	4724.5	4699.2	4693.6	4660.8	4618.6	4601.7
55°	5142.5	5167.8	5146.3	5102.2	5058.2	5014.1	4958.8	4949.5
57.5°	5703.0	5659.9	5592.4	5509.0	5448.1	5386.2	5330.0	5306.5
60°	6482.7	6320.6	6198.8	6075.1	5997.3	5921.3	5847.3	5836.1
62.5°	7584.9	7304.7	7061.9	6806.1	6597.1	6434.0	6303.7	6267.2
65°	8966.4	8303.8	7729.2	7193.2	6727.4	6375.9	6154.7	6057.2
67.5°	9560.6	8252.2	7267.2	6506.2	5897.0	5471.5	5232.5	5113.5
70°	8401.2	6843.6	5772.3	5010.4	4455.5	4001.9	3785.4	3658.0
72.5°	5779.8	4353.4	3442.4	2809.8	2366.5	1986.9	1836.9	1825.7
75°	2595.2	1718.9	1184.6	912.9	768.5	668.2	637.3	613.9
77.5°	726.3	537.0	478.9	448.0	418.0	383.3	370.2	373.0
80°	353.3	333.6	320.5	300.8	273.7	244.6	231.5	237.1
82.5°	234.3	231.5	239.9	225.9	186.5	158.4	133.1	121.8
85°	142.5	144.3	147.1	148.1	125.6	88.1	60.0	67.5
87.5°	56.2	64.7	70.3	73.1	68.4	42.2	33.7	34.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)