

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: P190821

Luminaire Tested: **GLEON-AF-03-LED-E1-5MQ-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190821
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-03-LED-E1-5MQ-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21422.7 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

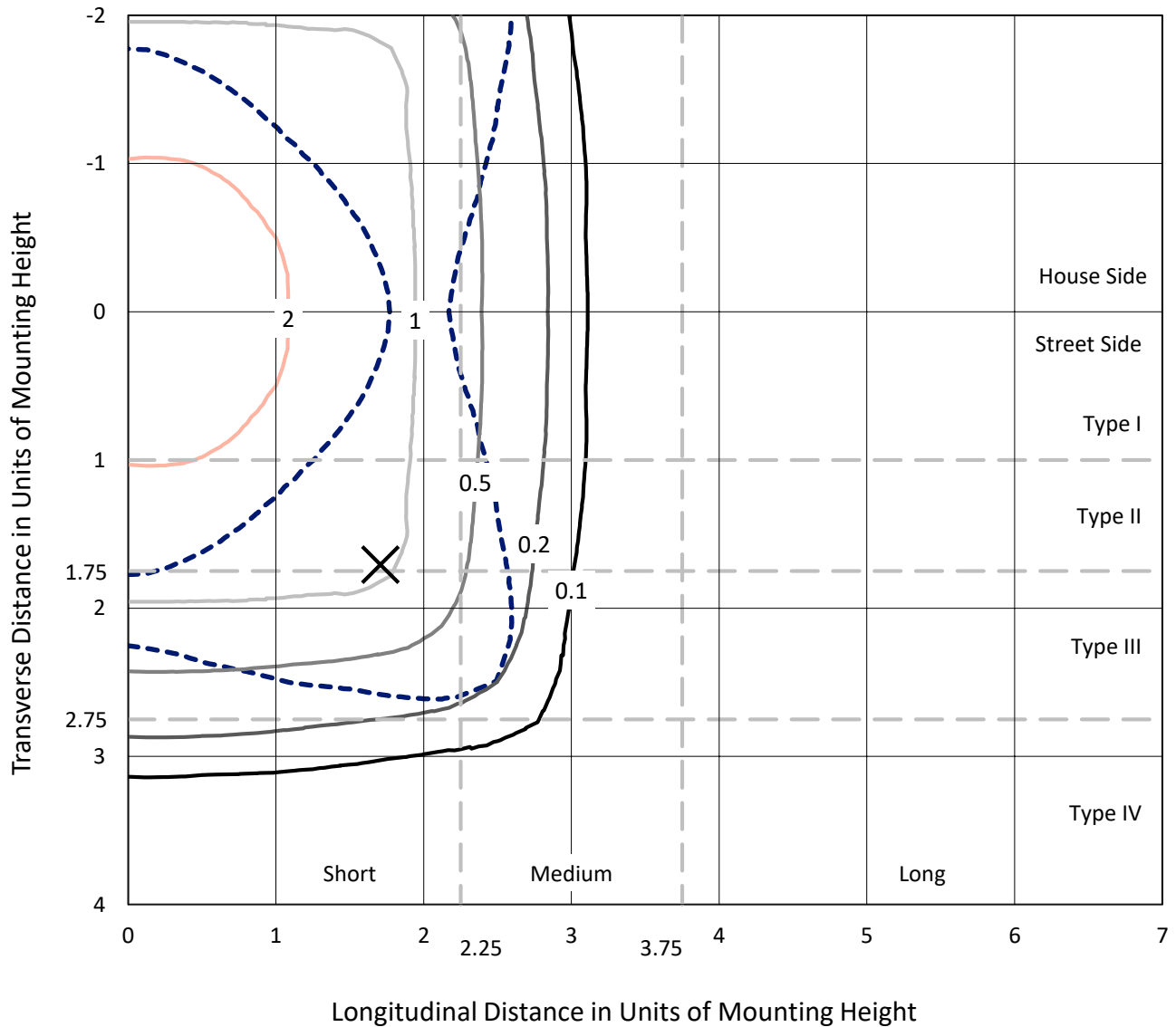
Input Watts (W): 191
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

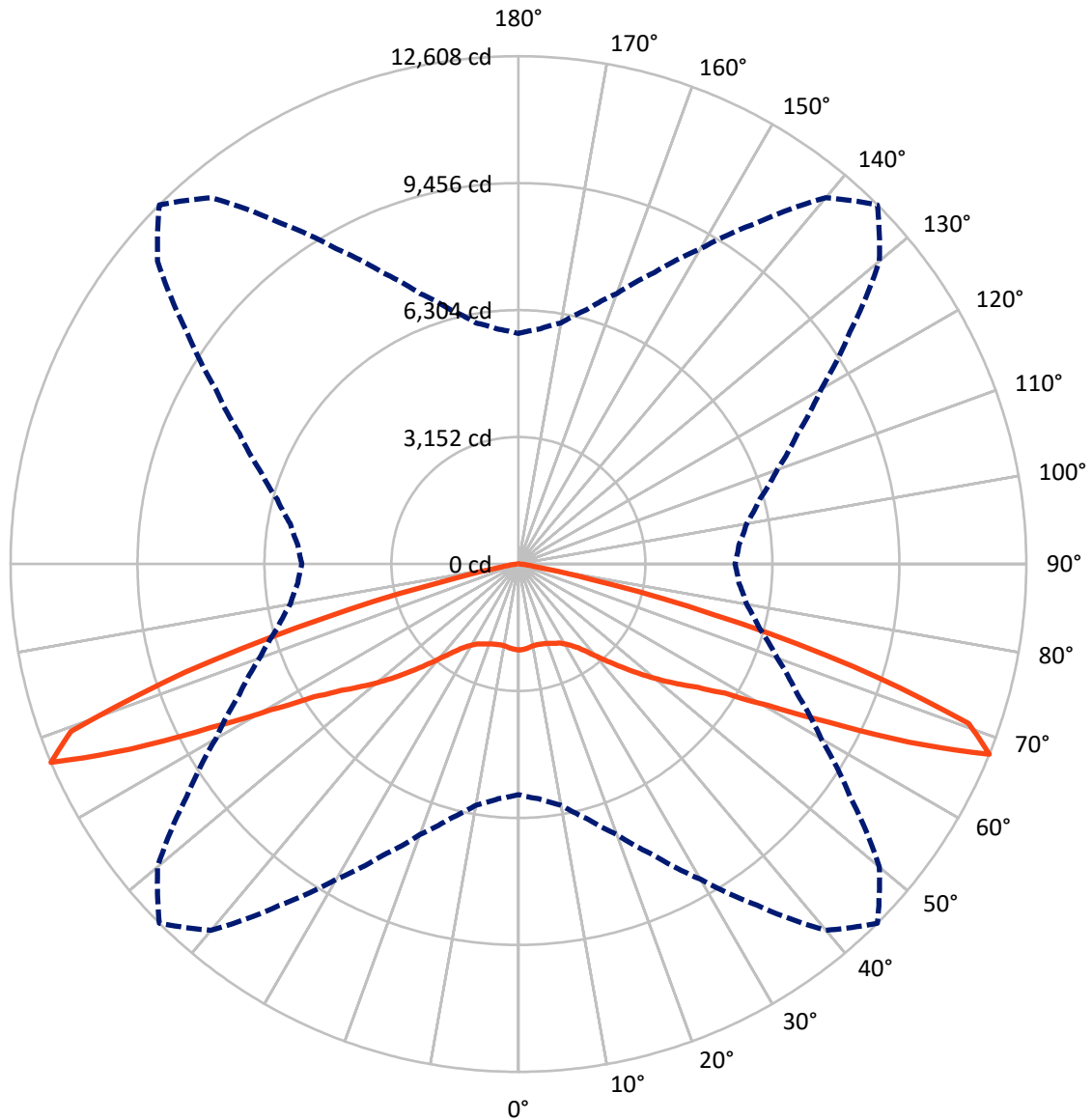
× Max cd
 - - - 1/2 Max cd



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	10711.3	0.0	10711.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10711.3	0.0	10711.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	21422.7	0.0	21422.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	0.9
10°-20°	579.8	2.7
20°-30°	985.7	4.6
30°-40°	1611.3	7.5
40°-50°	2876.4	13.4
50°-60°	4849.7	22.6
60°-70°	7526.1	35.1
70°-80°	2644.3	12.3
80°-90°	149.4	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°	21422.7	100.0
0°-180°	21422.7	100.0



REPORT NUMBER: P190821

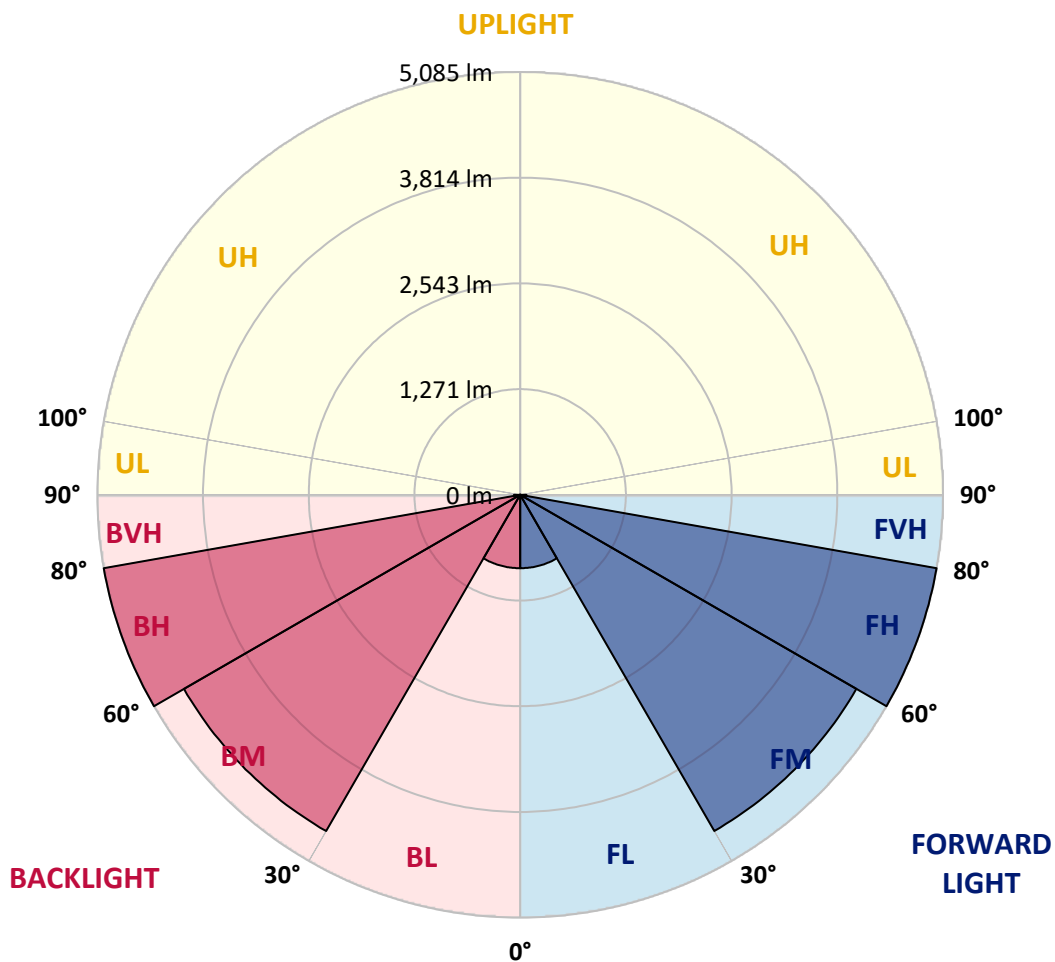
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	882.7	4.1			
FM	(30°-60°)	4668.7	21.8			
FH	(60°-80°)	5085.2	23.7			G3/7500
FVH	(80°-90°)	74.7	0.3			G1/100
BL	(0°-30°)	882.7	4.1	B2/1000		
BM	(30°-60°)	4668.7	21.8	B3/5000		
BH	(60°-80°)	5085.2	23.7	B5		G3/7500
BVH	(80°-90°)	74.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9
2.5°	2127.0	2129.0	2129.0	2129.0	2127.9	2127.9	2126.0	2127.9	2127.0	2124.1	2125.0
5°	2109.2	2111.2	2111.2	2110.2	2113.2	2112.2	2109.2	2111.2	2110.2	2108.3	2109.2
7.5°	2083.6	2086.6	2086.6	2085.6	2088.6	2087.5	2085.6	2086.6	2086.6	2083.6	2083.6
10°	2055.1	2057.1	2057.1	2056.0	2060.9	2060.9	2060.0	2063.0	2063.9	2060.9	2059.0
12.5°	2028.4	2031.4	2031.4	2035.4	2040.3	2042.2	2047.1	2051.1	2055.1	2054.1	2050.1
15°	2012.7	2014.7	2018.6	2023.5	2031.4	2038.3	2046.2	2055.1	2063.0	2064.9	2059.0
17.5°	2002.8	2005.8	2011.7	2018.6	2029.4	2041.3	2053.1	2064.9	2075.8	2079.7	2072.8
20°	1999.9	2001.8	2007.7	2019.6	2034.3	2052.1	2068.8	2082.6	2097.5	2102.4	2097.5
22.5°	2005.8	2009.7	2016.6	2030.5	2050.1	2072.8	2092.4	2111.2	2129.9	2138.8	2131.9
25°	2032.4	2036.4	2045.2	2063.0	2084.6	2108.3	2130.9	2152.6	2169.4	2178.2	2173.3
27.5°	2081.7	2086.6	2097.5	2115.2	2138.8	2164.5	2189.0	2206.8	2220.5	2223.5	2217.7
30°	2155.6	2166.4	2179.2	2198.9	2226.5	2248.1	2272.8	2288.5	2305.3	2305.3	2300.4
32.5°	2270.8	2281.7	2295.4	2314.1	2335.8	2359.4	2381.1	2394.9	2412.6	2413.7	2401.8
35°	2443.2	2448.1	2460.0	2471.8	2491.5	2512.2	2530.9	2539.8	2554.5	2555.5	2544.7
37.5°	2670.8	2671.7	2679.6	2683.6	2701.3	2724.0	2741.7	2747.6	2761.5	2759.4	2748.6
40°	2935.8	2940.7	2943.6	2949.6	2968.3	2990.0	3008.7	3011.7	3026.4	3023.4	3009.7
42.5°	3242.1	3244.2	3260.9	3269.8	3287.5	3298.3	3322.0	3324.9	3342.7	3334.8	3319.1
45°	3586.1	3603.8	3619.5	3637.2	3655.9	3668.7	3687.4	3683.5	3695.4	3683.5	3674.6
47.5°	3947.6	3960.4	3995.9	4023.5	4054.0	4064.8	4091.4	4079.5	4091.4	4074.6	4071.7
50°	4345.6	4368.2	4398.8	4430.3	4462.8	4480.5	4515.0	4500.3	4516.0	4500.3	4491.4
52.5°	4737.7	4743.6	4810.5	4856.9	4902.2	4922.8	4943.6	4936.7	4937.7	4936.7	4927.8
55°	5110.0	5123.9	5190.9	5253.9	5332.7	5390.8	5426.3	5422.4	5413.5	5404.7	5389.8
57.5°	5529.8	5543.6	5620.4	5698.2	5787.9	5870.6	5942.5	6016.4	6045.0	6052.9	6020.4
60°	6097.2	6096.2	6198.7	6293.2	6421.3	6544.4	6702.1	6862.7	7046.9	7132.6	7019.3
62.5°	6674.5	6698.2	6845.9	7013.4	7277.5	7534.5	7825.2	8110.9	8402.5	8639.9	8387.7
65°	6605.5	6696.1	6915.9	7295.2	7782.8	8362.1	8988.7	9651.6	10250.7	10662.4	10200.5
67.5°	5724.8	5853.8	6077.5	6538.6	7148.4	7983.8	9035.9	10347.2	11871.2	12608.2	11694.9
70°	4149.5	4295.4	4529.8	4980.0	5583.9	6378.0	7520.7	9095.1	11112.7	11855.5	10849.6
72.5°	2064.9	2143.7	2288.5	2575.2	3032.3	3676.7	4713.0	6226.3	8011.3	8693.1	7773.9
75°	701.4	737.9	762.5	856.1	1001.0	1254.1	1769.4	2722.0	4152.5	4978.1	4093.3
77.5°	404.9	405.9	422.7	439.4	464.0	491.6	560.6	735.9	1272.9	1807.8	1317.2
80°	262.1	261.1	274.9	287.7	304.4	318.2	322.1	340.8	393.1	466.0	416.8
82.5°	136.0	152.7	183.2	200.0	231.5	237.4	229.6	222.7	235.5	244.3	250.2
85°	74.9	65.1	97.5	126.1	139.9	141.9	141.9	134.0	138.9	136.0	147.8
87.5°	34.5	31.5	38.5	62.1	66.0	56.2	59.1	52.2	37.4	36.4	41.3
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°	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9	2134.9
2.5°	2125.0	2126.0	2126.0	2129.0	2129.9	2131.9	2133.9	2134.9
5°	2108.3	2111.2	2109.2	2112.2	2112.2	2114.1	2114.1	2115.2
7.5°	2083.6	2086.6	2086.6	2086.6	2085.6	2088.6	2088.6	2088.6
10°	2058.0	2060.0	2059.0	2057.1	2055.1	2058.0	2057.1	2056.0
12.5°	2050.1	2045.2	2041.3	2039.3	2035.4	2036.4	2033.4	2033.4
15°	2055.1	2046.2	2039.3	2036.4	2032.4	2030.5	2028.4	2029.4
17.5°	2067.9	2057.1	2048.2	2043.2	2038.3	2035.4	2031.4	2032.4
20°	2090.5	2077.7	2064.9	2055.1	2046.2	2041.3	2038.3	2037.3
22.5°	2124.1	2105.3	2086.6	2071.8	2060.0	2053.1	2050.1	2048.2
25°	2162.4	2141.8	2120.1	2103.3	2091.5	2082.6	2076.7	2076.7
27.5°	2210.7	2193.9	2174.3	2154.5	2143.7	2134.9	2130.9	2129.0
30°	2291.5	2275.8	2260.0	2241.3	2227.5	2218.6	2211.7	2205.8
32.5°	2394.9	2382.1	2369.4	2355.5	2342.8	2330.9	2320.1	2315.1
35°	2540.7	2530.9	2522.0	2506.2	2501.3	2494.5	2488.5	2483.6
37.5°	2741.7	2737.8	2737.8	2721.0	2717.1	2714.1	2708.3	2709.2
40°	3005.7	3009.7	3004.7	2998.9	2995.9	2988.0	2988.0	2994.9
42.5°	3318.0	3321.0	3331.9	3322.0	3332.8	3323.0	3317.0	3322.0
45°	3680.6	3691.4	3713.1	3703.3	3710.1	3693.4	3672.7	3673.7
47.5°	4087.5	4097.3	4106.1	4099.3	4100.3	4072.7	4045.1	4038.2
50°	4510.1	4514.1	4519.0	4509.1	4511.1	4480.5	4449.0	4450.0
52.5°	4927.8	4946.5	4966.2	4939.6	4933.7	4899.2	4854.9	4837.1
55°	5405.6	5432.2	5409.6	5363.2	5317.0	5270.7	5212.5	5202.6
57.5°	5994.7	5949.4	5878.5	5790.8	5726.8	5661.7	5602.6	5578.0
60°	6814.4	6644.0	6515.9	6385.9	6304.0	6224.2	6146.5	6134.6
62.5°	7973.0	7678.4	7423.2	7154.3	6934.6	6763.1	6626.3	6587.8
65°	9425.1	8728.5	8124.7	7561.1	7071.6	6702.1	6469.6	6367.2
67.5°	10049.7	8674.4	7639.0	6839.0	6198.7	5751.4	5500.2	5375.1
70°	8831.0	7193.7	6067.6	5266.7	4683.5	4206.7	3979.1	3845.1
72.5°	6075.5	4576.1	3618.5	2953.6	2487.5	2088.6	1930.9	1919.1
75°	2727.9	1806.8	1245.2	959.5	807.8	702.5	669.9	645.3
77.5°	763.5	564.5	503.4	470.9	439.4	402.9	389.1	392.1
80°	371.4	350.8	337.0	316.2	287.7	257.2	243.4	249.3
82.5°	246.3	243.4	252.2	237.4	196.0	166.5	139.9	128.1
85°	149.8	151.7	154.7	155.7	132.1	92.6	63.0	70.9
87.5°	59.1	68.0	73.9	76.8	71.9	44.3	35.5	36.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)