

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: P190902

Luminaire Tested: **GLEON-AF-04-LED-E1-5WQ-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
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-E1-5WQ-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28380.7 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

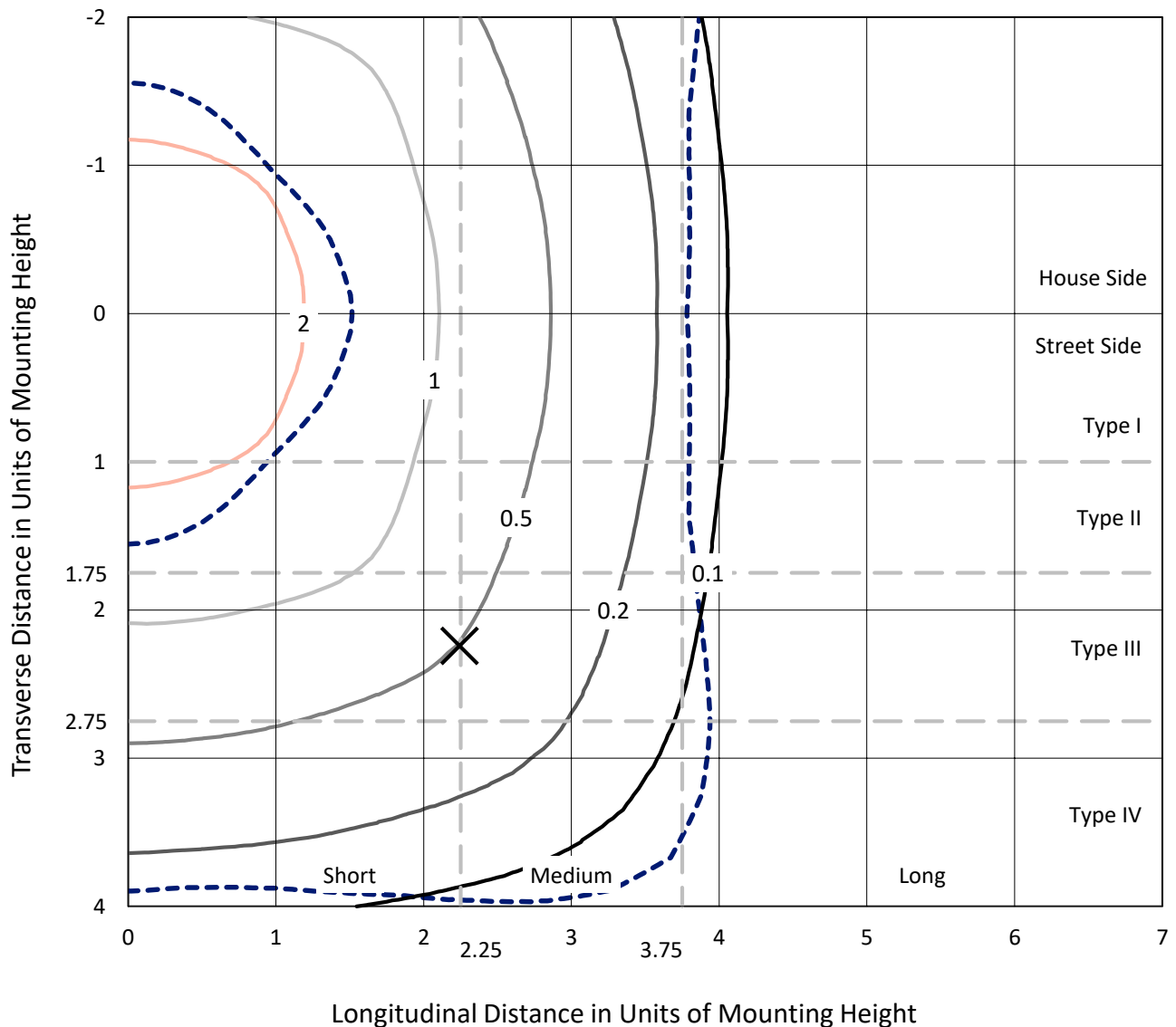
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P190902
 CATALOG NUMBER: GLEON-AF-04-LED-E1-5WQ-1200

Iso-Footcandle Lines of Horizontal Illumination

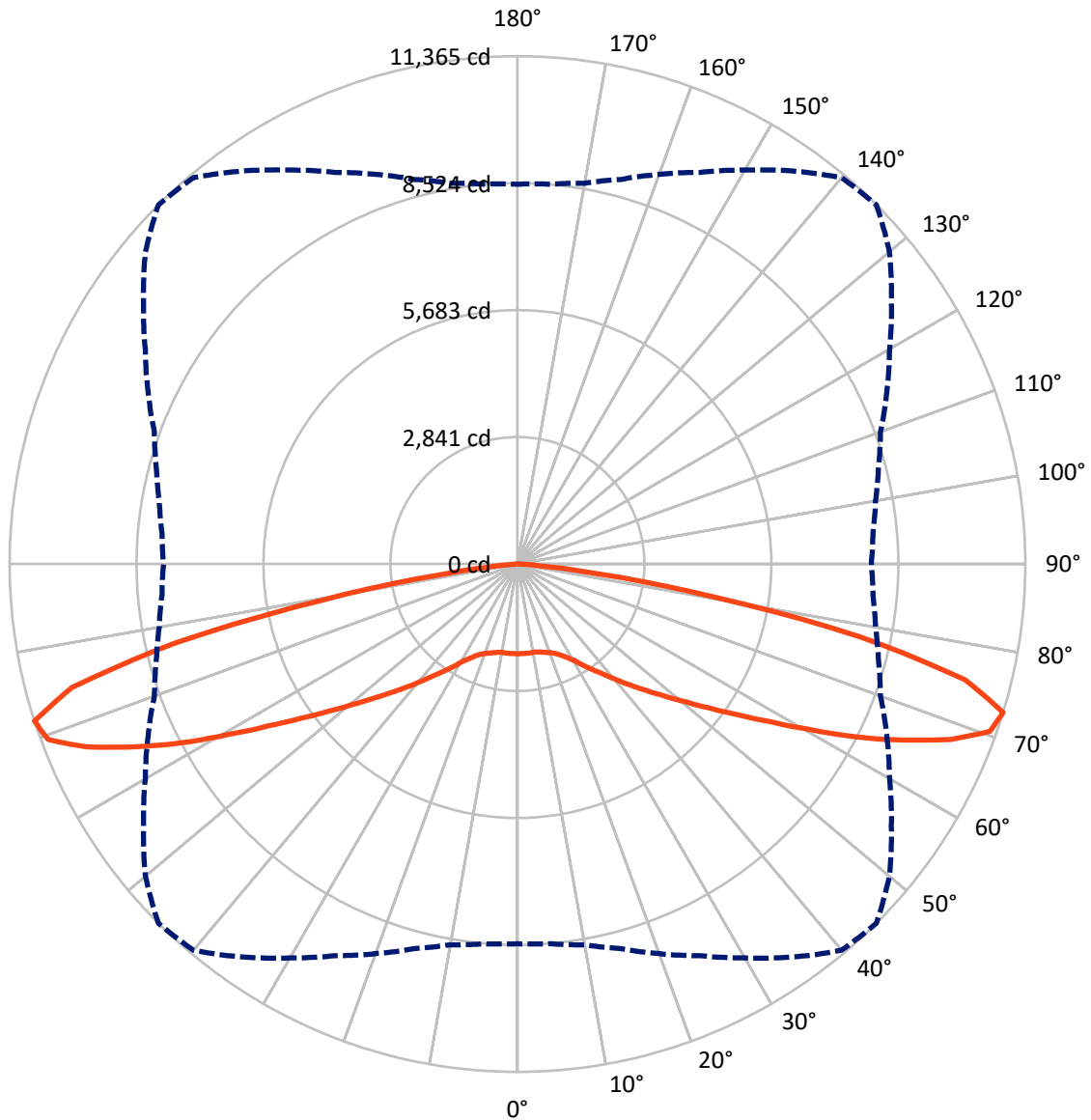
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P190902
CATALOG NUMBER: GLEON-AF-04-LED-E1-5WQ-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14190.4	0.0	14190.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14190.4	0.0	14190.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	28380.7	0.0	28380.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.9	0.7
10°-20°	582.9	2.1
20°-30°	1065.1	3.8
30°-40°	1836.5	6.5
40°-50°	3139.4	11.1
50°-60°	5088.6	17.9
60°-70°	8441.7	29.7
70°-80°	7435.2	26.2
80°-90°	599.5	2.1
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°	28380.7	100.0
0°-180°	28380.7	100.0



REPORT NUMBER: P190902

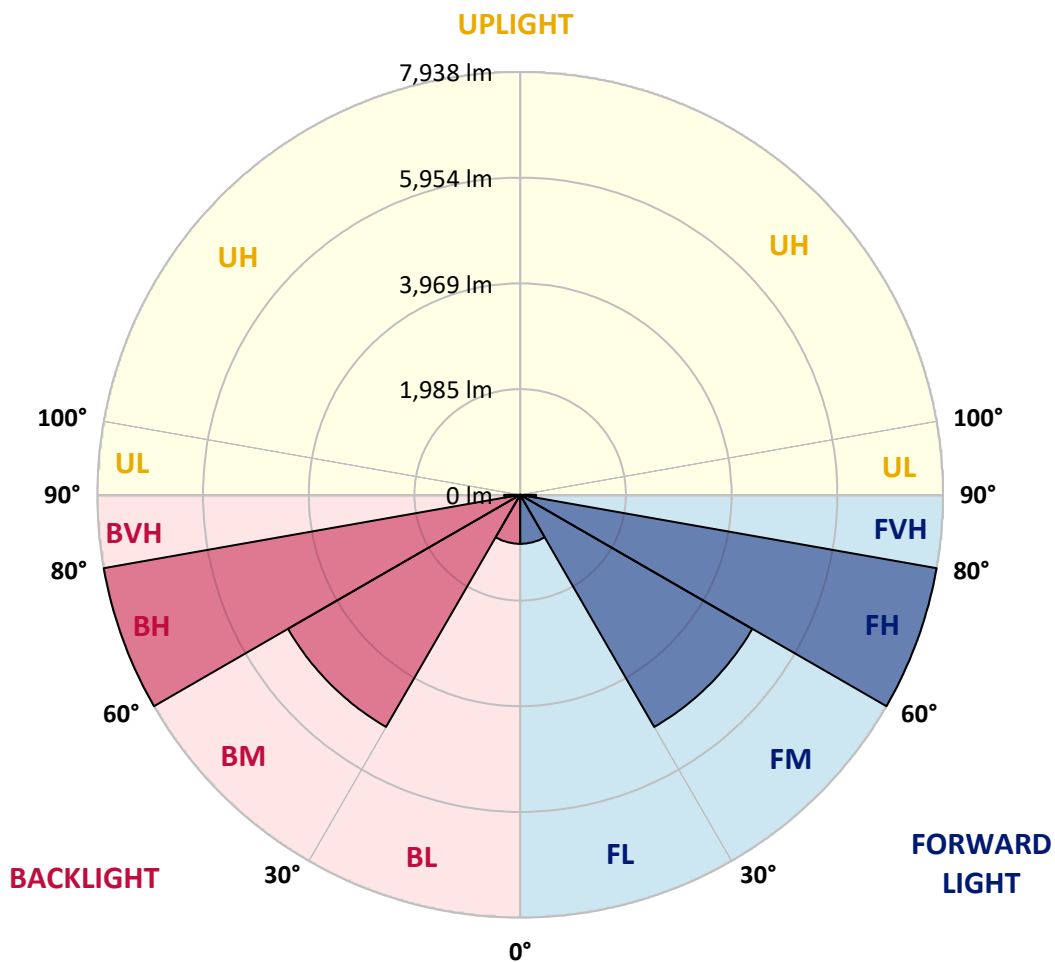
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	919.9	3.2			
FM	(30°-60°)	5032.2	17.7			
FH	(60°-80°)	7938.5	28.0			G4/12000
FVH	(80°-90°)	299.7	1.1			G3/500
BL	(0°-30°)	919.9	3.2	B2/1000		
BM	(30°-60°)	5032.2	17.7	B4/8500		
BH	(60°-80°)	7938.5	28.0	B5		G4/12000
BVH	(80°-90°)	299.7	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short





REPORT NUMBER: P190902

CATALOG NUMBER: GLEON-AF-04-LED-E1-5WQ-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8
2.5°	2009.8	2011.1	2012.5	2011.1	2011.1	2009.8	2008.5	2009.8	2008.5	2005.9	2007.2
5°	2016.3	2018.9	2018.9	2016.3	2017.6	2016.3	2013.7	2015.0	2012.5	2008.5	2008.5
7.5°	2024.1	2025.4	2025.4	2022.8	2024.1	2021.6	2018.9	2017.6	2015.0	2009.8	2005.9
10°	2035.9	2037.1	2035.9	2033.2	2033.2	2029.3	2022.8	2020.2	2015.0	2007.2	2003.2
12.5°	2048.9	2050.2	2048.9	2046.2	2045.0	2038.4	2033.2	2029.3	2025.4	2018.9	2012.5
15°	2067.1	2069.6	2067.1	2061.9	2058.0	2052.8	2050.2	2051.4	2052.8	2047.5	2041.0
17.5°	2100.9	2102.3	2098.3	2086.6	2081.4	2076.2	2076.2	2078.7	2082.7	2080.1	2073.6
20°	2163.4	2159.4	2150.3	2136.0	2129.6	2120.5	2119.1	2120.5	2120.5	2119.1	2113.9
22.5°	2241.5	2238.9	2227.2	2209.0	2199.9	2194.6	2186.9	2180.3	2179.0	2175.1	2169.9
25°	2335.2	2334.0	2319.6	2304.0	2297.4	2291.0	2284.5	2275.3	2267.6	2258.4	2253.3
27.5°	2455.0	2449.8	2428.9	2421.1	2412.0	2408.1	2399.0	2388.6	2382.0	2370.4	2363.8
30°	2586.4	2586.4	2569.6	2566.9	2566.9	2557.8	2547.4	2529.1	2517.5	2505.7	2501.8
32.5°	2717.9	2719.2	2702.3	2707.5	2711.4	2717.9	2720.5	2714.0	2706.2	2704.9	2697.1
35°	2907.9	2902.7	2885.8	2889.7	2888.4	2887.2	2887.2	2901.5	2904.1	2906.6	2891.1
37.5°	3143.5	3143.5	3126.6	3126.6	3118.9	3111.0	3100.6	3109.8	3124.0	3128.0	3117.5
40°	3413.0	3422.1	3401.3	3400.0	3402.6	3377.9	3366.1	3380.4	3389.5	3405.2	3393.5
42.5°	3730.6	3724.2	3703.3	3700.7	3686.4	3678.5	3668.1	3679.9	3694.2	3704.6	3708.5
45°	4035.2	4030.0	4006.6	4006.6	3992.3	3985.7	3990.9	4010.5	4017.0	4031.3	4045.7
47.5°	4335.9	4329.4	4313.8	4320.3	4321.6	4333.3	4350.2	4368.4	4386.7	4406.2	4412.7
50°	4643.1	4644.4	4627.5	4643.1	4662.6	4695.1	4740.8	4770.6	4808.4	4833.1	4840.9
52.5°	4923.0	4928.2	4946.4	4982.8	5021.9	5085.7	5163.8	5236.7	5299.2	5340.8	5338.2
55°	5258.8	5266.6	5310.9	5373.4	5437.1	5533.4	5649.3	5778.1	5882.3	5942.2	5904.5
57.5°	5688.3	5705.3	5754.7	5839.3	5934.3	6059.3	6218.1	6412.1	6573.5	6654.2	6593.0
60°	6278.1	6288.4	6348.3	6442.0	6556.6	6711.5	6923.6	7184.0	7411.8	7518.5	7448.2
62.5°	7055.1	7074.6	7122.8	7217.8	7335.0	7510.7	7769.7	8095.1	8378.9	8527.3	8368.6
65°	7983.2	8045.7	8086.0	8182.4	8291.7	8477.8	8748.6	9097.4	9402.0	9499.6	9316.1
67.5°	8902.2	8956.9	9027.1	9137.8	9248.5	9458.0	9709.2	10047.7	10382.2	10470.7	10185.6
70°	9304.5	9335.7	9445.0	9596.0	9808.2	10055.5	10345.8	10725.8	11139.8	11212.7	10850.8
72.5°	8498.7	8529.9	8652.3	8908.7	9278.4	9671.5	10177.8	10736.3	11282.9	11365.0	10866.4
75°	6427.7	6377.0	6557.8	6897.7	7396.1	7944.1	8652.3	9452.8	10242.9	10345.8	9750.9
77.5°	3321.9	3315.4	3452.0	3873.8	4468.7	5092.1	5871.8	6776.5	7549.8	7862.2	7377.9
80°	935.9	946.3	1011.4	1221.0	1568.5	2018.9	2628.1	3475.5	4108.1	4430.9	4160.1
82.5°	367.0	395.7	420.4	459.5	505.0	571.4	762.8	1135.1	1523.0	1819.7	1490.4
85°	131.4	140.6	199.2	235.6	239.5	252.6	287.7	335.8	404.8	482.9	397.0
87.5°	49.5	54.6	63.8	105.5	104.1	95.0	115.9	121.0	91.1	83.3	102.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P190902

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8	2009.8
2.5°	2004.6	2005.9	2005.9	2007.2	2008.5	2008.5	2011.1	2011.1
5°	2005.9	2005.9	2003.2	2004.6	2003.2	2003.2	2004.6	2004.6
7.5°	2003.2	2002.0	1999.4	1998.1	1995.5	1995.5	1995.5	1995.5
10°	1999.4	1998.1	1995.5	1994.1	1992.9	1992.9	1992.9	1992.9
12.5°	2009.8	2005.9	2003.2	2002.0	2002.0	2002.0	2002.0	2002.0
15°	2037.1	2028.0	2021.6	2021.6	2022.8	2025.4	2025.4	2028.0
17.5°	2071.0	2060.5	2054.1	2048.9	2051.4	2055.3	2058.0	2060.5
20°	2111.4	2106.2	2097.0	2091.8	2091.8	2097.0	2099.6	2100.9
22.5°	2167.3	2163.4	2159.4	2153.0	2153.0	2155.6	2160.8	2160.8
25°	2250.6	2248.0	2245.4	2240.2	2238.9	2238.9	2241.5	2244.1
27.5°	2354.7	2356.1	2353.4	2352.2	2348.3	2347.0	2350.8	2349.5
30°	2494.1	2500.5	2507.0	2501.8	2495.3	2491.4	2487.5	2482.3
32.5°	2682.8	2674.9	2669.8	2660.6	2648.9	2638.5	2630.7	2621.6
35°	2861.1	2848.1	2842.9	2850.7	2849.4	2842.9	2833.8	2825.9
37.5°	3079.8	3077.1	3079.8	3094.1	3091.5	3098.0	3079.8	3078.5
40°	3355.7	3358.3	3376.6	3393.5	3402.6	3411.7	3401.3	3390.9
42.5°	3676.0	3674.6	3681.2	3704.6	3720.2	3730.6	3708.5	3705.8
45°	4014.4	4005.3	4010.5	4030.0	4045.7	4057.3	4032.6	4032.6
47.5°	4386.7	4371.1	4354.1	4376.3	4385.4	4393.2	4373.6	4367.2
50°	4801.9	4769.4	4732.9	4742.0	4742.0	4739.4	4714.7	4713.3
52.5°	5278.3	5218.5	5152.1	5127.3	5113.0	5097.4	5054.4	5033.6
55°	5826.3	5736.5	5632.4	5568.6	5534.8	5491.8	5420.2	5400.7
57.5°	6466.8	6326.1	6146.5	6068.5	5993.0	5922.7	5843.3	5821.1
60°	7225.6	7018.7	6780.4	6636.0	6553.9	6486.3	6404.3	6400.4
62.5°	8071.7	7745.0	7475.5	7345.4	7285.6	7225.6	7147.6	7158.0
65°	8932.1	8591.2	8338.6	8233.1	8177.2	8127.8	8049.6	8061.4
67.5°	9780.8	9467.1	9189.9	9081.9	9019.4	8956.9	8886.6	8898.3
70°	10390.0	10000.8	9688.5	9448.9	9299.2	9130.0	9020.7	8993.4
72.5°	10215.6	9615.5	9119.6	8644.4	8365.9	8139.4	7985.9	7919.5
75°	8841.1	8021.0	7383.1	6800.0	6472.0	6205.1	6011.2	5890.2
77.5°	6565.7	5644.1	4890.4	4218.8	3687.6	3331.0	3079.8	2917.0
80°	3593.9	2733.5	1998.1	1404.5	1032.3	857.8	757.6	709.4
82.5°	1119.4	722.4	532.3	459.5	427.0	408.8	378.8	330.6
85°	356.7	312.4	290.3	277.2	264.2	230.4	158.8	144.4
87.5°	138.0	141.9	140.6	132.8	135.3	97.6	78.1	68.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)