

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: P451999

Luminaire Tested: **GALN-SA2D-830-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451999
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12100 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

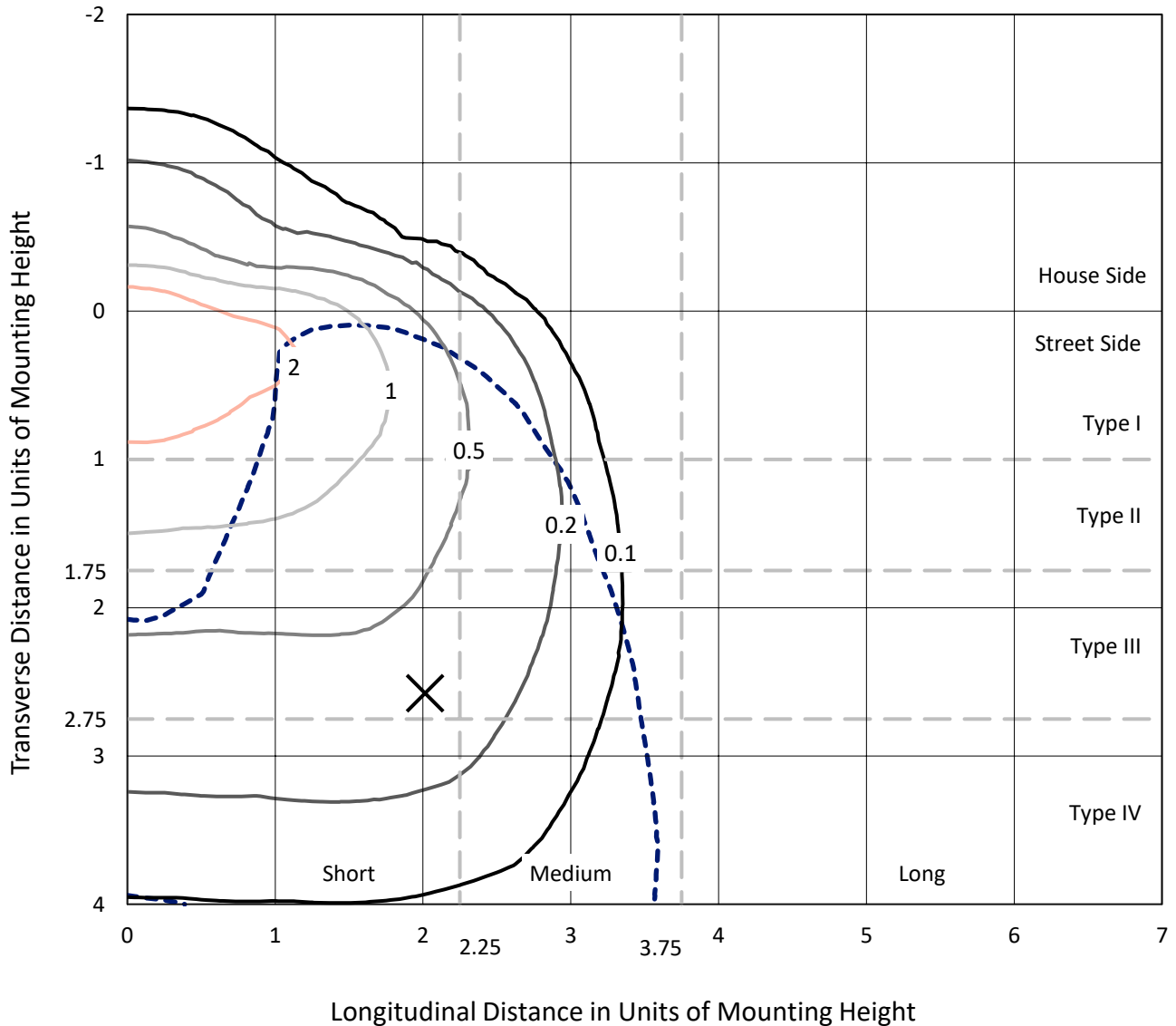
Input Watts (W): 125
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P451999
 CATALOG NUMBER: GALN-SA2D-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

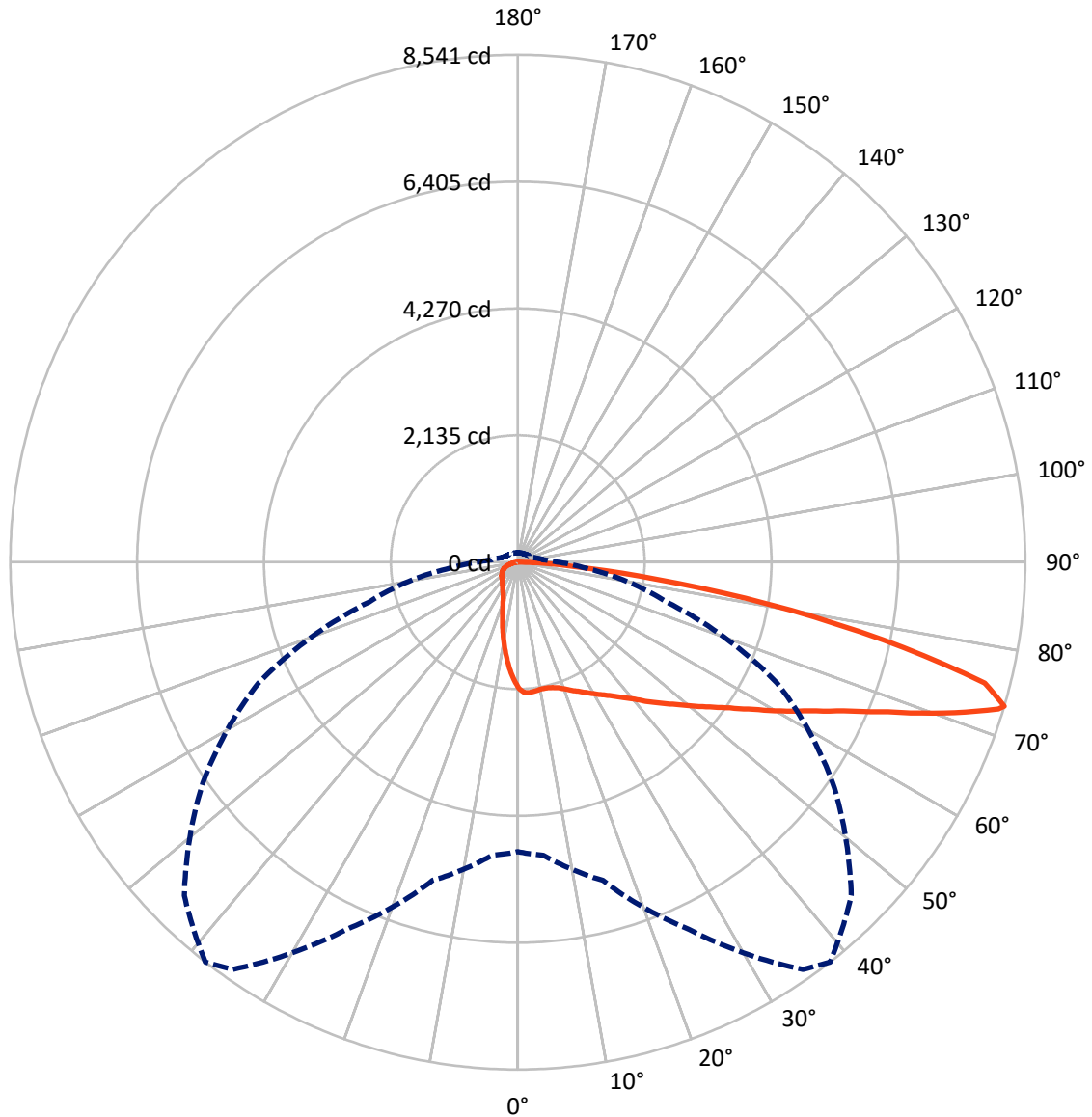
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P451999
CATALOG NUMBER: GALN-SA2D-830-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P451999

CATALOG NUMBER: GALN-SA2D-830-U-SL4

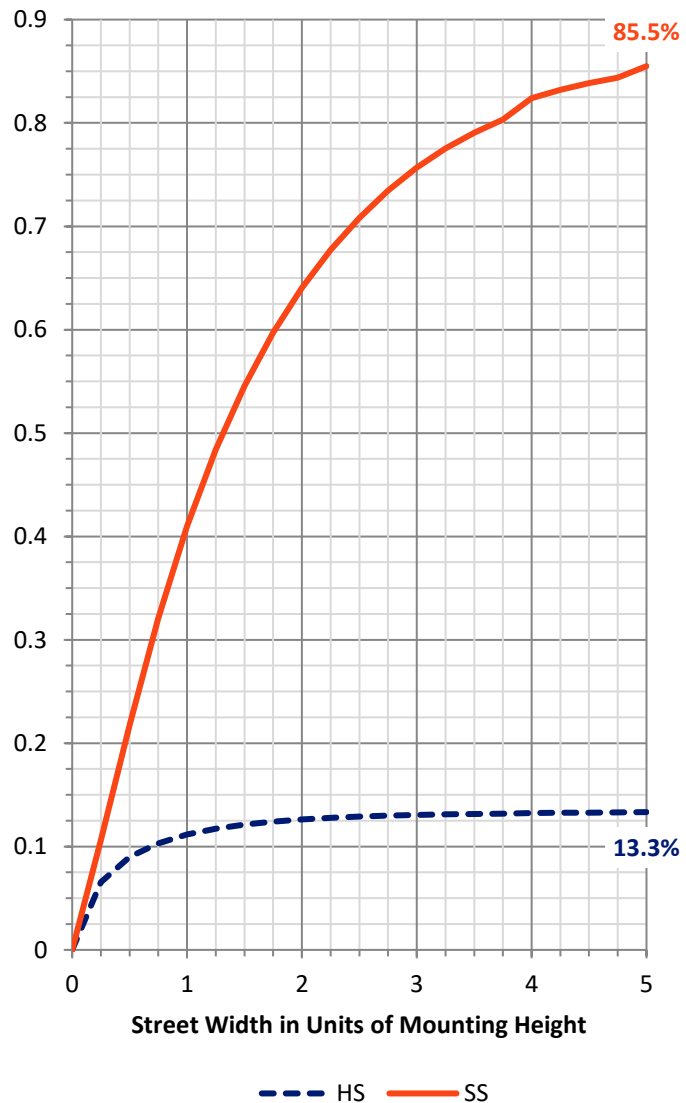
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1626.6	0.0	1626.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10473.4	0.0	10473.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	12100.0	0.0	12100.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.6	1.5
10°-20°	475.8	3.9
20°-30°	741.0	6.1
30°-40°	1086.8	9.0
40°-50°	1612.2	13.3
50°-60°	2284.1	18.9
60°-70°	2897.5	23.9
70°-80°	2411.9	19.9
80°-90°	405.2	3.3
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°	12100.0	100.0
0°-180°	12100.0	100.0



REPORT NUMBER: P451999

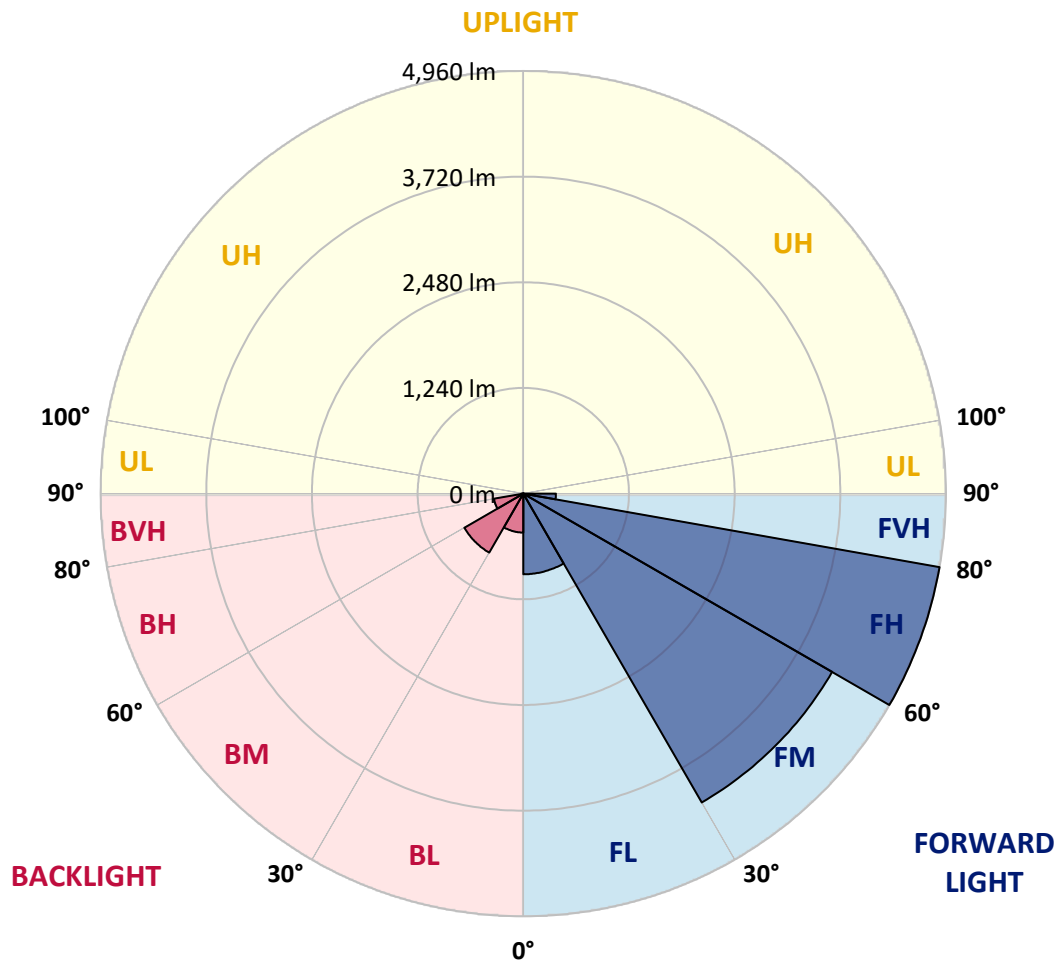
CATALOG NUMBER: GALN-SA2D-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	945.9	7.8			
FM (30°-60°)	4184.5	34.6			
FH (60°-80°)	4959.7	41.0			G2/5000
FVH (80°-90°)	383.3	3.2			G3/500
BL (0°-30°)	456.4	3.8	B1/500		
BM (30°-60°)	798.6	6.6	B1/1000		
BH (60°-80°)	349.6	2.9	B1/500		G1/500
BVH (80°-90°)	22.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





REPORT NUMBER: P451999

CATALOG NUMBER: GALN-SA2D-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8
2.5°	2211.2	2222.1	2216.6	2209.1	2204.3	2199.6	2192.7	2172.9	2157.2	2140.1	2113.5
5°	2227.6	2234.4	2229.6	2220.1	2209.1	2204.3	2191.4	2165.4	2140.1	2111.4	2071.8
7.5°	2218.0	2220.7	2215.3	2203.7	2194.1	2185.2	2170.2	2141.5	2110.7	2075.9	2024.0
10°	2183.8	2194.1	2194.1	2184.5	2175.0	2170.2	2155.1	2127.8	2099.8	2060.2	1998.7
12.5°	2155.8	2166.8	2175.6	2172.9	2172.2	2172.2	2160.6	2140.1	2107.3	2069.7	1996.6
15°	2136.7	2149.7	2168.8	2179.7	2186.6	2188.6	2183.8	2166.1	2132.6	2088.9	2004.8
17.5°	2132.6	2148.3	2183.2	2207.1	2224.8	2224.2	2222.8	2198.2	2161.3	2116.2	2015.1
20°	2151.0	2171.5	2220.1	2257.6	2283.6	2278.8	2271.3	2239.2	2196.1	2145.6	2024.6
22.5°	2206.4	2227.6	2280.9	2321.9	2347.2	2347.2	2324.6	2282.2	2236.5	2179.7	2037.6
25°	2285.7	2308.9	2365.6	2407.3	2418.9	2410.0	2387.5	2336.2	2283.6	2228.9	2065.0
27.5°	2382.7	2410.7	2463.3	2498.2	2494.8	2487.9	2464.7	2399.1	2346.5	2296.6	2111.4
30°	2503.6	2524.1	2578.8	2587.0	2574.7	2573.3	2540.5	2474.9	2425.7	2387.5	2177.7
32.5°	2617.7	2636.2	2679.9	2683.3	2661.5	2664.2	2633.5	2573.3	2545.3	2531.6	2289.1
35°	2738.7	2748.3	2785.8	2781.7	2767.4	2765.3	2753.0	2695.6	2704.5	2729.1	2446.9
37.5°	2839.8	2859.0	2880.1	2883.6	2882.9	2889.7	2897.9	2870.6	2921.8	2999.0	2654.0
40°	2932.7	2949.1	2980.6	2991.5	3018.2	3031.8	3059.8	3060.5	3178.7	3305.8	2908.8
42.5°	2995.6	3023.6	3082.4	3102.2	3167.1	3208.1	3249.8	3294.2	3465.7	3629.0	3209.5
45°	3050.3	3087.2	3184.9	3246.4	3334.5	3384.4	3472.6	3565.5	3812.2	4026.0	3514.9
47.5°	3133.0	3165.8	3277.8	3386.5	3519.7	3577.1	3709.0	3847.7	4170.2	4404.6	3807.4
50°	3247.8	3267.6	3381.7	3558.7	3728.8	3802.6	3976.8	4177.0	4552.9	4778.4	4064.3
52.5°	3394.7	3402.9	3493.7	3729.5	3953.6	4045.2	4276.1	4509.8	4887.7	5102.9	4267.9
55°	3568.2	3554.6	3625.6	3910.6	4210.5	4330.1	4578.2	4846.7	5264.2	5365.3	4416.2
57.5°	3739.7	3718.6	3775.3	4130.6	4527.6	4671.8	4960.8	5193.8	5600.4	5610.6	4520.1
60°	3921.5	3905.8	3973.4	4388.9	4916.4	5087.2	5354.4	5553.9	5925.6	5781.5	4536.5
62.5°	4108.0	4082.8	4179.1	4679.3	5354.4	5509.5	5768.5	5936.6	6244.7	5845.0	4378.6
65°	4289.1	4277.5	4426.5	5024.3	5853.2	6029.5	6280.9	6395.1	6500.3	5749.3	3987.1
67.5°	4481.8	4505.0	4742.8	5484.9	6503.7	6725.1	6996.4	6889.1	6573.4	5296.3	3357.8
70°	4775.6	4790.7	5158.3	6088.3	7342.1	7609.3	7740.5	7064.7	6220.8	4436.0	2524.1
72.5°	4902.0	4968.3	5529.3	6721.7	8294.7	8458.0	7990.6	6673.2	5182.2	3013.4	1326.3
73°	4874.0	4953.3	5546.4	6818.0	8369.1	8540.6	7937.3	6471.6	4817.3	2595.2	1137.0
75°	4524.9	4622.6	5324.3	6737.4	8224.3	8121.8	7080.4	5515.6	3255.3	1180.1	517.9
77.5°	3570.3	3598.3	4218.7	5440.5	6476.4	6286.4	5299.0	3447.3	1329.7	438.7	293.8
80°	1790.9	1894.1	2377.9	3116.6	4330.8	4268.6	3344.8	1630.4	554.2	257.6	194.7
82.5°	861.6	934.8	1158.2	1519.7	2392.9	2336.2	1656.3	891.0	351.9	150.3	114.8
85°	554.8	609.5	737.3	725.0	984.0	939.5	744.1	674.4	208.4	78.6	79.9
87.5°	366.3	401.1	481.0	384.7	358.1	323.9	328.7	379.9	41.0	30.1	10.9
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: P451999
 CATALOG NUMBER: GALN-SA2D-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8	2125.8
2.5°	2102.5	2093.6	2064.3	2035.6	2008.2	1982.3	1965.2	1942.6	1927.6	1931.7	1937.9
5°	2049.9	2030.1	1978.2	1927.6	1879.8	1823.1	1777.3	1740.4	1712.4	1702.1	1700.1
7.5°	1994.6	1961.1	1886.6	1799.8	1718.5	1648.1	1566.8	1526.5	1479.4	1463.0	1457.5
10°	1961.1	1916.0	1811.4	1690.5	1568.2	1451.3	1363.2	1291.4	1226.5	1214.2	1208.1
12.5°	1951.5	1892.1	1751.3	1595.5	1432.9	1289.4	1158.9	1064.6	1001.7	987.4	966.2
15°	1946.1	1872.3	1695.3	1499.9	1293.5	1118.6	981.2	871.2	813.8	775.6	776.2
17.5°	1941.3	1849.7	1632.4	1395.3	1173.2	971.7	820.0	720.9	668.3	647.8	645.7
20°	1934.4	1823.1	1560.0	1285.3	1035.9	837.7	700.4	626.6	591.1	574.0	573.3
22.5°	1931.7	1797.1	1488.9	1173.2	914.3	734.6	621.1	569.2	546.6	535.0	535.0
25°	1938.5	1778.6	1414.4	1066.6	806.3	646.4	566.5	530.9	517.9	511.8	509.7
27.5°	1959.7	1770.4	1340.6	960.0	707.2	586.3	529.6	505.0	495.4	490.6	491.3
30°	2000.0	1769.8	1268.2	854.8	633.4	540.5	500.2	483.1	475.6	472.8	472.2
32.5°	2065.0	1784.8	1197.2	768.0	571.2	502.2	472.8	460.5	457.1	455.1	454.4
35°	2175.0	1827.2	1126.8	688.8	523.4	468.1	446.9	440.7	435.9	438.0	438.7
37.5°	2323.2	1900.3	1059.8	626.6	487.2	442.8	425.0	419.5	416.8	418.9	420.9
40°	2522.1	2005.5	1003.8	576.7	461.2	421.6	405.9	401.1	398.4	401.8	402.5
42.5°	2741.4	2127.1	957.3	537.8	440.0	403.8	388.8	383.3	381.3	383.3	384.0
45°	2966.9	2268.6	933.4	509.7	422.3	390.9	375.1	369.0	364.2	362.8	364.9
47.5°	3189.0	2391.6	932.7	492.7	407.9	379.2	362.2	355.3	349.2	345.8	345.1
50°	3370.1	2489.3	949.1	485.1	395.6	366.3	349.2	342.3	334.1	327.3	328.7
52.5°	3506.7	2552.8	956.6	481.7	388.8	352.6	335.5	329.4	319.8	310.9	310.9
55°	3594.9	2567.9	938.2	478.3	383.3	338.2	319.8	314.3	304.8	295.9	295.9
57.5°	3624.9	2521.4	871.9	470.1	377.9	325.9	304.1	299.3	291.8	282.9	281.5
60°	3555.2	2364.2	755.7	445.5	366.9	313.0	287.0	284.9	282.2	274.7	274.0
62.5°	3286.7	2030.8	629.3	413.4	348.5	299.3	271.3	274.7	276.7	272.6	272.0
65°	2839.8	1648.8	537.8	369.0	323.9	280.2	254.2	263.1	268.5	268.5	267.2
67.5°	2303.4	1266.2	453.0	330.7	293.1	254.2	235.1	241.9	246.0	244.6	248.0
70°	1637.2	857.5	369.0	287.0	254.2	224.8	210.5	210.5	207.7	206.4	206.4
72.5°	794.0	489.9	299.3	239.8	216.6	192.0	180.4	175.6	170.1	169.5	166.0
73°	663.5	439.4	285.6	231.0	207.7	187.2	174.2	166.7	163.3	160.6	159.9
75°	403.8	333.5	238.5	194.7	177.0	161.3	149.6	142.8	139.4	137.3	136.7
77.5°	265.8	248.7	185.2	149.0	135.3	125.7	120.9	114.1	112.1	109.3	109.3
80°	198.2	190.0	132.6	105.2	97.0	88.8	87.5	86.1	80.6	77.2	75.8
82.5°	127.8	135.3	90.2	70.4	61.5	54.7	55.3	57.4	51.9	47.1	45.8
85°	90.9	97.7	54.7	32.1	26.0	22.5	25.3	22.5	23.2	18.4	15.0
87.5°	15.0	26.0	9.6	4.1	2.0	1.4	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)