

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: P317898

Luminaire Tested: **GLEON-SA4D-827-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317898  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23525 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

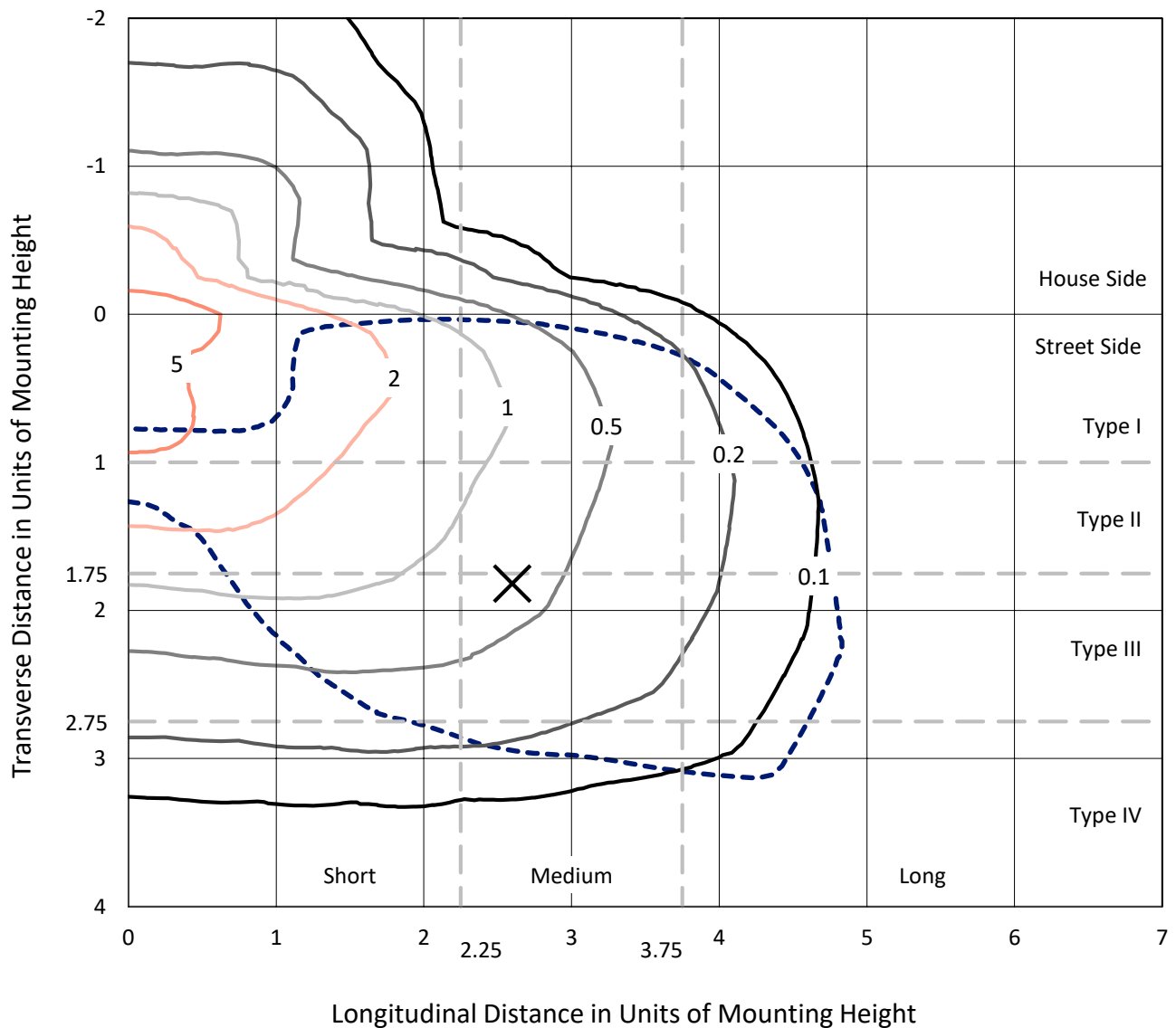
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P317898  
 CATALOG NUMBER: GLEON-SA4D-827-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

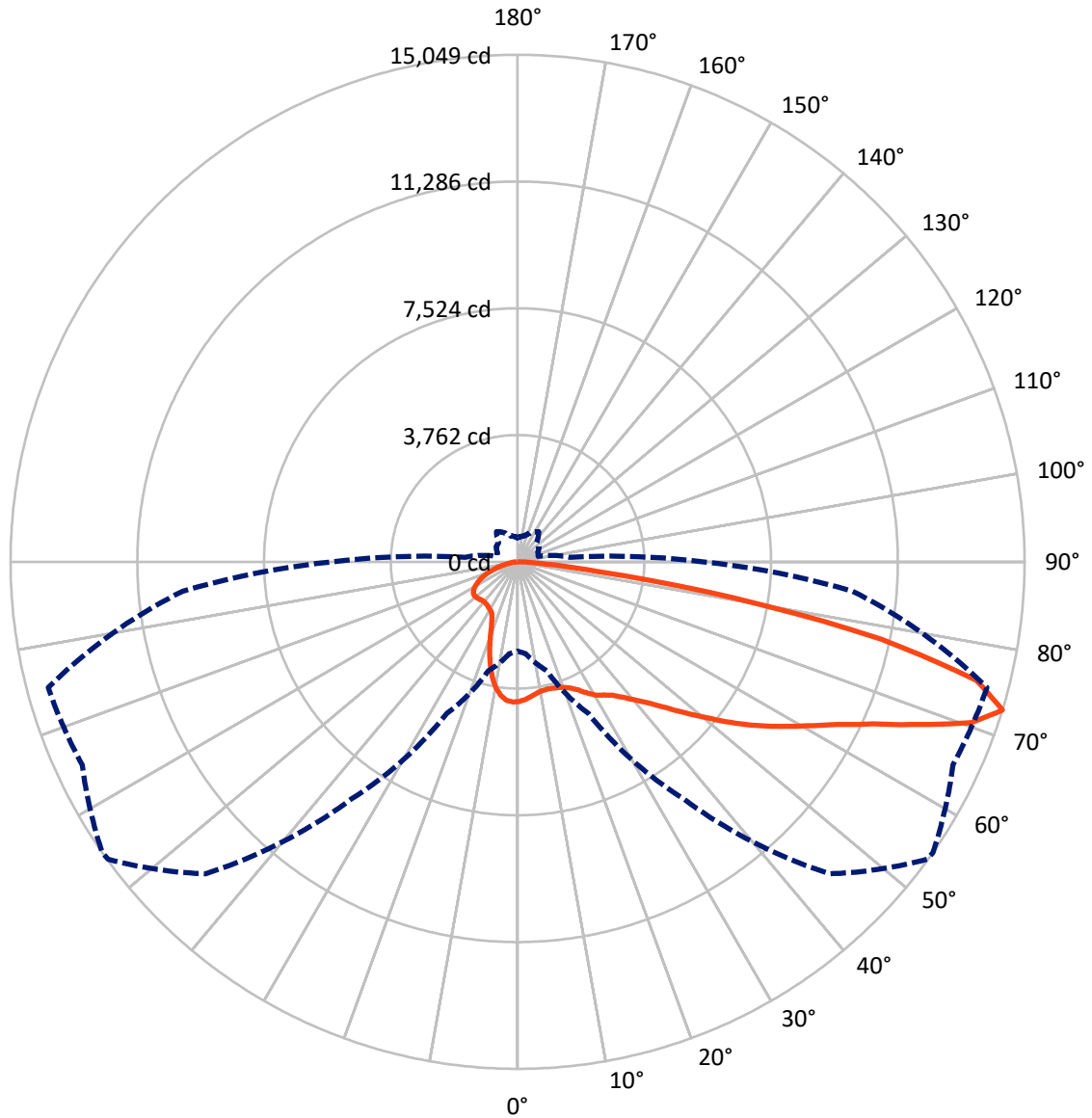
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P317898  
CATALOG NUMBER: GLEON-SA4D-827-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical



REPORT NUMBER: P317898  
 CATALOG NUMBER: GLEON-SA4D-827-U-T3R

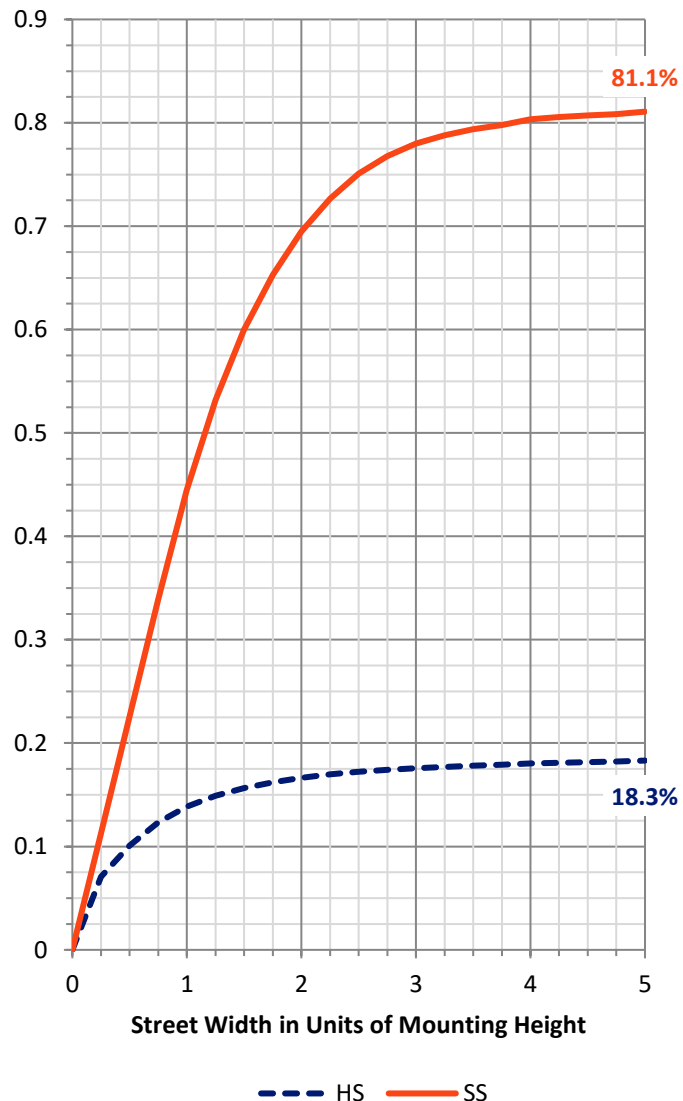
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4372.5	0.0	4372.5
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	19152.5	0.0	19152.5
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	23525.0	0.0	23525.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.5	1.6
10°-20°	999.6	4.2
20°-30°	1648.1	7.0
30°-40°	2438.0	10.4
40°-50°	3402.9	14.5
50°-60°	4430.7	18.8
60°-70°	5445.2	23.1
70°-80°	4268.4	18.1
80°-90°	516.5	2.2
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°	23525.0	100.0
0°-180°	23525.0	100.0

**Coefficient of Utilization**

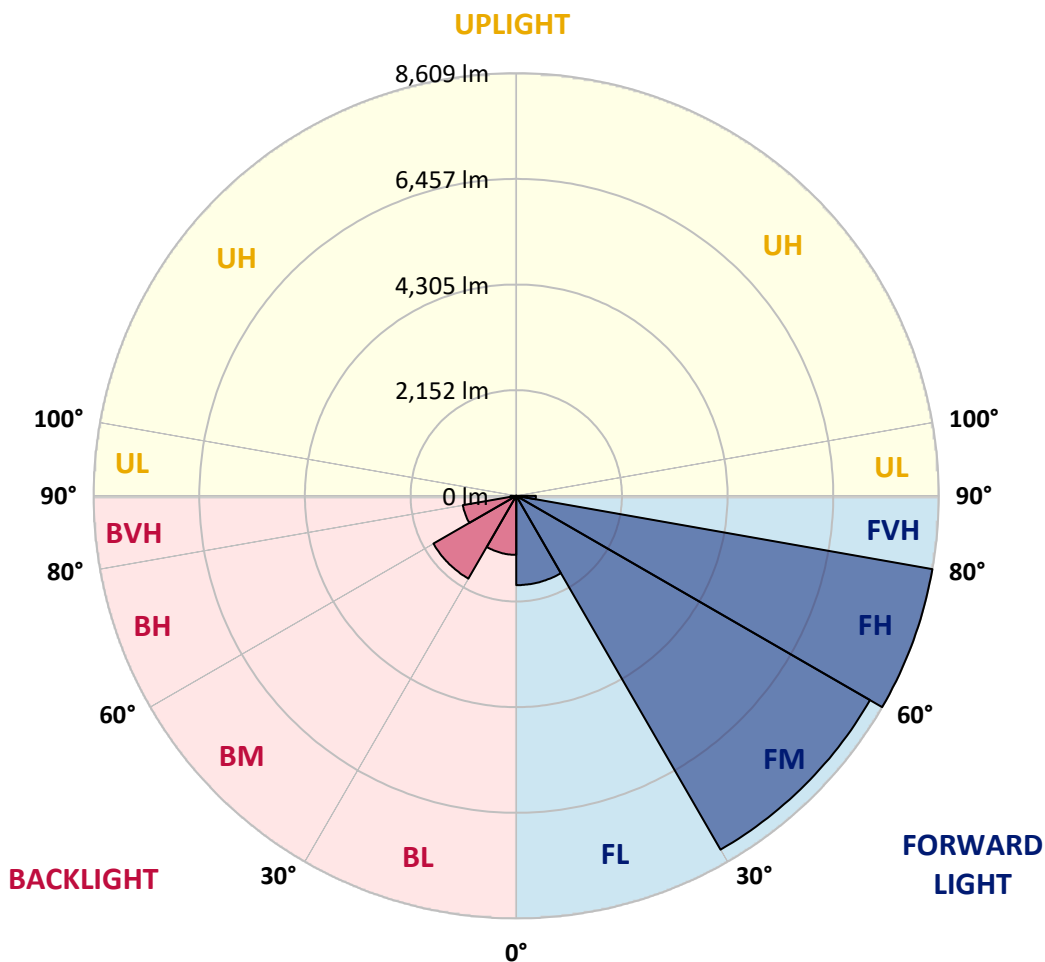


REPORT NUMBER: P317898  
 CATALOG NUMBER: GLEON-SA4D-827-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1820.1	7.7			
FM (30°-60°)	8323.6	35.4			
FH (60°-80°)	8609.4	36.6			G4/12000
FVH (80°-90°)	399.4	1.7			G3/500
BL (0°-30°)	1203.1	5.1	B3/2500		
BM (30°-60°)	1948.0	8.3	B2/2500		
BH (60°-80°)	1104.3	4.7	B3/2500		G3/2500
BVH (80°-90°)	117.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type IV Medium





REPORT NUMBER: P317898

CATALOG NUMBER: GLEON-SA4D-827-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3
2.5°	4014.2	4004.7	4016.6	4033.3	4051.6	4076.2	4090.5	4096.9	4121.5	4131.0	4151.7
5°	3828.3	3823.5	3843.4	3872.0	3912.5	3969.7	4015.8	4024.6	4089.7	4135.8	4177.9
7.5°	3693.2	3693.2	3716.3	3750.4	3795.7	3872.8	3937.9	3949.9	4060.3	4159.6	4237.5
10°	3585.9	3589.9	3616.9	3657.5	3710.7	3792.5	3879.1	3892.7	4052.4	4215.3	4339.2
12.5°	3514.4	3524.0	3548.6	3585.2	3651.1	3750.4	3860.1	3878.4	4069.1	4294.7	4461.6
15°	3559.7	3575.6	3578.0	3593.1	3629.6	3737.7	3871.2	3890.3	4104.8	4375.8	4600.6
17.5°	3758.4	3763.9	3739.3	3707.5	3690.0	3759.2	3904.6	3924.4	4147.7	4456.0	4734.1
20°	4060.3	4057.1	4003.9	3918.1	3829.1	3840.2	3959.4	3980.1	4205.7	4526.7	4867.6
22.5°	4441.7	4430.6	4348.7	4190.6	4038.9	3975.3	4055.5	4073.0	4293.1	4627.6	5010.6
25°	4904.2	4879.5	4771.5	4559.3	4336.0	4172.3	4200.2	4216.8	4420.3	4740.5	5141.7
27.5°	5392.0	5367.4	5229.9	4973.3	4676.1	4421.1	4399.6	4413.9	4564.9	4823.9	5238.7
30°	5902.2	5875.9	5750.4	5462.7	5036.9	4678.5	4585.5	4591.1	4666.6	4869.2	5318.1
32.5°	6414.7	6390.0	6249.4	5915.7	5428.6	4955.0	4719.8	4712.7	4727.8	4916.1	5407.9
35°	6934.3	6943.8	6779.4	6409.9	5862.4	5262.5	4878.7	4863.6	4830.3	5012.2	5535.1
37.5°	7490.5	7484.2	7271.2	6885.0	6316.1	5596.2	5106.8	5104.4	4989.2	5194.2	5734.5
40°	7862.4	7866.4	7736.8	7371.3	6774.6	5965.7	5399.2	5393.6	5242.6	5466.7	5995.9
42.5°	8007.8	8034.0	8067.4	7835.4	7254.5	6394.0	5748.0	5740.1	5596.2	5857.7	6303.4
45°	8018.1	8070.6	8277.2	8247.8	7740.8	6884.3	6193.8	6171.5	6068.2	6377.3	6670.5
47.5°	7929.1	7983.2	8326.4	8493.3	8175.4	7401.5	6715.0	6697.5	6608.5	7027.3	7067.8
50°	7734.5	7786.1	8224.7	8613.3	8533.0	7898.9	7315.7	7269.6	7221.9	7778.2	7522.3
52.5°	7369.7	7469.1	8088.8	8641.9	8746.8	8340.7	7947.4	7917.2	7943.4	8570.4	7977.6
55°	6506.0	6617.3	7738.4	8618.0	8904.9	8711.8	8579.1	8577.5	8713.4	9401.5	8466.3
57.5°	6022.1	6100.8	7024.9	8577.5	9092.4	9080.5	9204.4	9219.5	9484.1	10306.5	8978.0
60°	5748.8	5831.4	6663.4	8427.3	9383.2	9557.2	9842.5	9872.7	10267.6	11308.5	9593.8
62.5°	5500.1	5590.7	6439.3	8121.4	9725.7	10239.0	10606.9	10633.9	11097.1	12338.3	10188.9
65°	5075.0	5177.5	6111.1	7920.4	10037.2	11128.1	11578.6	11596.9	12049.8	13417.3	10644.2
67.5°	4474.3	4568.0	5492.1	7476.2	10267.6	12207.9	12870.6	12881.0	12994.6	14179.3	10877.0
70°	3772.7	3808.4	4610.2	6559.3	9995.0	13217.9	14286.6	14289.0	13855.9	14667.2	10838.9
72.5°	2650.7	2734.9	3346.8	4965.3	8589.4	13094.7	15021.6	15048.6	14256.4	14420.9	9972.8
75°	1625.7	1714.7	2099.3	3009.1	5449.2	10298.6	13879.0	14066.5	13505.5	12857.9	8146.8
77.5°	1087.0	1120.4	1369.9	1754.4	2468.8	5925.2	10670.4	11023.2	11219.5	9376.9	5210.1
80°	606.3	669.8	908.2	1090.2	1098.1	2354.3	6398.0	6480.6	6242.2	3733.7	1607.4
82.5°	321.0	356.0	606.3	640.4	599.1	788.2	2384.5	2386.9	1994.4	1001.2	477.5
85°	248.7	278.1	415.6	390.9	305.9	349.6	786.6	829.5	678.6	410.0	155.7
87.5°	124.0	154.1	282.1	247.9	120.0	100.1	281.3	300.4	267.8	160.5	56.4
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: P317898  
 CATALOG NUMBER: GLEON-SA4D-827-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3	4149.3
2.5°	4159.6	4166.8	4175.5	4166.0	4162.8	4150.1	4128.6	4123.9	4112.8	4113.5	4119.9
5°	4196.2	4208.1	4203.3	4166.8	4123.1	4061.9	3998.3	3944.3	3908.5	3906.2	3903.8
7.5°	4266.1	4274.1	4236.7	4132.6	4010.3	3868.8	3735.3	3618.5	3547.8	3530.3	3526.4
10°	4375.8	4374.2	4271.7	4061.9	3818.0	3565.3	3350.7	3188.7	3094.1	3066.3	3059.1
12.5°	4498.1	4479.8	4283.6	3933.2	3546.2	3195.8	2924.1	2743.7	2645.2	2613.4	2605.4
15°	4624.5	4579.2	4254.2	3740.9	3212.5	2797.7	2512.5	2345.6	2292.4	2274.9	2271.7
17.5°	4742.1	4654.7	4170.0	3480.3	2831.9	2401.2	2178.7	2112.0	2124.7	2147.8	2148.5
20°	4857.3	4705.5	4034.9	3151.3	2430.6	2074.7	1999.2	2048.4	2108.8	2155.7	2162.1
22.5°	4970.9	4741.3	3860.9	2771.5	2071.5	1891.1	1944.3	2034.1	2103.3	2154.1	2162.9
25°	5066.3	4750.0	3620.9	2366.3	1822.0	1822.0	1918.1	2003.1	2071.5	2121.5	2130.3
27.5°	5101.2	4691.2	3282.4	1991.2	1696.4	1790.2	1881.6	1952.3	2010.3	2063.5	2073.1
30°	5114.7	4582.4	2891.5	1690.1	1644.8	1756.0	1832.3	1892.7	1947.5	1997.6	2006.3
32.5°	5117.1	4451.2	2476.7	1519.2	1609.0	1720.3	1771.1	1824.4	1883.2	1903.0	1906.2
35°	5132.2	4296.3	2039.7	1431.8	1575.7	1686.9	1727.4	1765.6	1670.2	1677.4	1683.7
37.5°	5175.9	4142.9	1674.2	1382.6	1554.2	1669.4	1717.9	1579.6	1504.9	1487.5	1485.1
40°	5257.7	3979.3	1403.2	1342.8	1546.3	1678.2	1656.7	1474.7	1346.0	1249.9	1235.6
42.5°	5371.4	3802.9	1230.0	1316.6	1551.8	1720.3	1571.7	1373.8	1160.1	1098.1	1090.2
45°	5499.3	3617.7	1136.3	1298.3	1570.9	1752.8	1554.2	1239.5	1073.5	1026.6	1022.6
47.5°	5623.3	3391.3	1087.8	1290.4	1597.1	1726.6	1480.3	1198.2	1032.2	1007.5	1009.9
50°	5765.5	3187.1	1058.4	1281.7	1620.2	1709.9	1396.9	1176.8	1016.3	1046.5	1078.2
52.5°	5885.5	2975.7	1032.2	1264.2	1628.9	1680.5	1375.4	1180.7	1016.3	1074.3	1104.5
55°	6027.7	2816.0	1002.0	1227.6	1612.2	1597.1	1360.3	1204.6	1028.2	991.6	994.8
57.5°	6211.2	2763.6	968.6	1170.4	1556.6	1475.5	1353.2	1227.6	1021.0	998.0	1005.9
60°	6465.5	2819.2	955.1	1095.7	1470.0	1380.2	1354.0	1215.7	971.0	931.2	932.0
62.5°	6707.9	2881.2	954.3	1048.8	1363.5	1295.2	1335.7	1176.8	945.6	922.5	931.2
65°	6787.3	2818.4	916.2	996.4	1243.5	1193.5	1302.3	1135.5	926.5	891.5	889.9
67.5°	6680.8	2623.7	839.1	911.4	1106.1	1075.1	1258.6	1086.2	896.3	867.7	862.9
70°	6364.6	2189.1	743.7	799.3	949.5	941.6	1189.5	1029.0	855.8	831.1	810.5
72.5°	5513.6	1559.8	626.9	665.1	773.1	798.6	1094.1	954.3	798.6	745.3	713.5
75°	4528.3	1154.5	514.9	522.8	587.2	656.3	963.0	866.9	731.0	640.4	615.8
77.5°	2773.1	706.4	410.0	413.2	421.1	523.6	793.0	769.2	645.2	534.0	516.5
80°	897.9	385.4	296.4	311.5	287.6	383.8	613.4	654.7	553.8	446.6	427.5
82.5°	341.7	224.9	200.2	210.6	199.4	257.4	447.3	524.4	453.7	367.1	298.8
85°	165.3	127.1	118.4	132.7	123.2	131.9	286.0	386.2	344.1	239.2	222.5
87.5°	58.8	56.4	45.3	61.2	52.4	46.9	87.4	194.7	227.3	164.5	147.0
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)